



March 17, 2020

Melissa L. Sweet
Project Manager
Remedial Section C, Remedial Bureau A
Division of Environmental Remediation
625 Broadway-12th Floor
Albany, New York 12233-7015

Re: SMP Sampling Results
Site # 130193
Elks Plaza
Freeport, New York

Dear Ms. Sweet:

Seacliff Environmental Geology PC (Seacliff) has prepared this report to document the soil vapor and indoor air sampling at the above referenced property in accordance with the Site Management Plan (SMP) approved by the NYSDEC on May 1, 2015.

Background

As per the June 2014 Final Engineering Report (FER), engineering controls have been employed at the site since June 2012 to maintain acceptable indoor air quality. The initial control was a soil vapor extraction system (SVES) installed in June 2012 and operated as such until January 2013. In January 2013, the SVES was converted to a sub-slab depressurization system (SSDS).

As per the May 2014 SMP, "...remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10". In addition, the SMP states "Operation of the SSD system will be terminated when the following are demonstrated in accordance with Indoor Air Matrix 2 of the NYSDOH's 2006 Guidance document:

- Indoor air concentrations of PCE in the laundromat are less than 3 ug/m³; and,
- Sub-slab vapor concentration of PCE below the laundromat is less than 100 ug/m³.

This is demonstrated during the winter heating season, to represent the worst-case scenario, and after the SSDS has been turned off for a period of 30 days.

P.O. Box 2085, Miller Place, New York 11764
Tel: (631) 828-5994 Cell: (631) 742-6948 e-mail: seacliffenvironmental@aol.com

169 Commack Road, Suite H173 • Commack, NY 11725 • 631-629-5373 • www.tyllengineering.com

Methodology

The SSDS was shut off on December 16, 2019. After the 30-day temporary SSDS shut down, sampling was conducted on January 15, 2020. Sub-slab vapor samples and co-located indoor air samples were sampled at the 2010 Supplemental Soil Vapor Investigation baseline locations along with an outdoor ambient air sample (Figure 1). The samples were collected in 6L Summa Canisters over an eight-hour period to simulate the exposure scenario for a workplace with a single shift.

Indoor air samples were collected in Units 171, 181A, and 179A. Sub-slab soil vapor samples were also collected in Units 179A and 181A. One ambient outdoor sample was collected outside of Unit 181A. Sampling procedures described in the SMP were followed.

Stainless steel vapor implants were installed below the slab in Units 179A and 181A. These two units comprise the northern and southern portions of the laundromat. There were no PID readings recorded nor was there any odor in the soils removed from below the slab. The points were sealed tightly to prevent indoor air from contaminating the implant samples.

Summa canisters were hooked up to the implants and sampling began early the morning of January 15. One indoor air sampling canister was co-located with each sub slab implant. Sampling logs are included as Attachment A and representative photos are included in Attachment B. The laundromat was continually busy with the most customers late morning to late afternoon. Laundry detergents are dispensed through machines and were free that day. Very few customers brought their own detergents. Some customers did bring bleach. The doors to the inside enclosed mall and outside parking lot were constantly in motion with the number of customers entering and exiting.

The outside (ambient air) canister was set on an empty detergent drum outside of the laundromat. This location borders the Woodward School. It was noted that school buses were periodically lined up and idling in place and this may affect air quality at that location. No PID readings were recorded but there was a persistent odor of engine exhaust especially in the afternoon hours.

A canister was set up on a small step ladder in Unit 171 occupied by the hair products beauty supply store. The store has no basement. Many photographs were taken of the product inventory. This store opens into the enclosed mall area, but customer foot traffic was sporadic during the testing period. No PID readings were recorded throughout the day.

The SSDS was turned back on after the samples were collected. The samples were picked up by lab courier and brought to Alpha Analytical Laboratories, Mansfield, MA (NYSDOH ELAP #11148). EPA Method TO-15 low level sim was used to analyze the air samples.

Elks Plaza
Freeport, New York
March 2020

Results

The results are reported in ug/m^3 on Table 1 and the laboratory report is provided in Attachment C.

There were very low detections of PCE in the outdoor air sample ($0.441 \text{ ug}/\text{m}^3$), the unit 171 indoor air sample ($0.319 \text{ ug}/\text{m}^3$), the Unit 179A indoor air sample ($0.373 \text{ ug}/\text{m}^3$), and the Unit 181A indoor air sample ($0.427 \text{ ug}/\text{m}^3$).

PCE was not detected in the sub-slab sample in laundromat Unit 179A (less than $1.36 \text{ ug}/\text{m}^3$). PCE was detected in the laundromat Unit 181A sub-slab vapor sample at $922 \text{ ug}/\text{m}^3$.

Although the Unit 181A sub slab vapor concentration is greater than $100 \text{ ug}/\text{m}^3$, the three indoor sample concentrations and other laundromat sub slab vapor concentration are all below $0.5 \text{ ug}/\text{m}^3$. It is hoped that based on these concentrations the SSDS can be permanently shut down

Data validation services for the groundwater samples were provided by Environmental Data Services of Virginia Beach, Virginia. The Data Usability Report (DUSR) is included in Attachment D. The laboratory data were deemed acceptable.

Please call or email me if you have any questions.

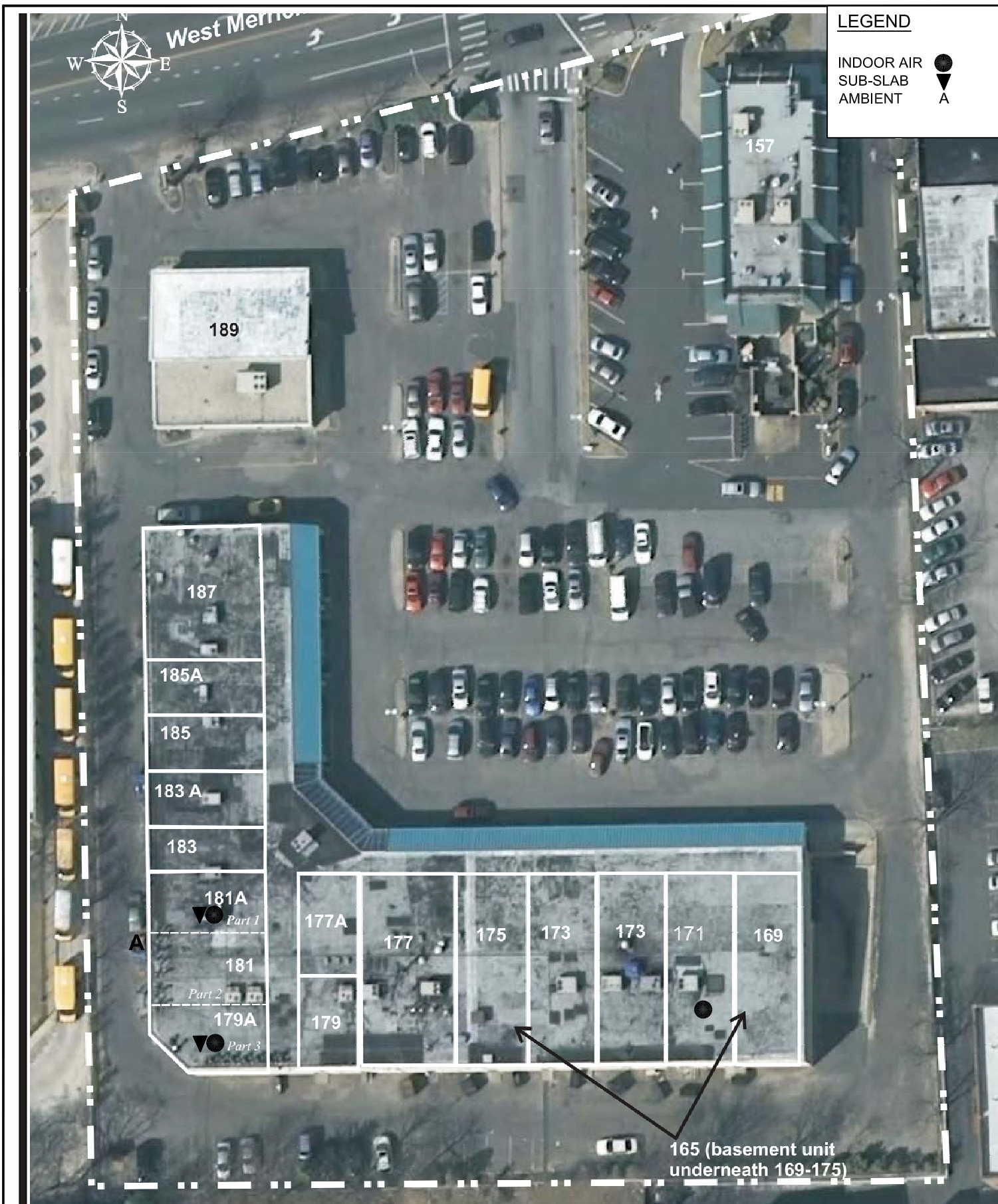
Very Truly Yours,

James M. DeMartinis

James M. DeMartinis PG
Senior Geologist

CC Lois Reisman, Elks Plaza LLC
Karen Tyll PE, Tyll Engineering

Figure



PREPARED BY:



TYLL ENGINEERING & CONSULTING PC

169 Commack Road, Suite H173, Commack, NY 11725
PHONE: (631) 829-5373 Info@tyllengineering.com

TITLE:

SVI SAMPLE MAP

ELKS PLAZA
FREEPORT, NY

DWN:

-

SCALE:

NTS

DATE:

2-4-2002

PROJECT NO.:

ELK1901

CHKD:

KT

APPD:

KT

REV.:

-

NOTES:

-

FIGURE NO.:

1

Tables



Table 1
Elks Plaza, Freeport, NY
Volatile Organic Compounds in Air
by EPA Method TO-15

Analytes	Location:	OA	171 IA	179A IA	181A IA	179A SSV	181A SSV
	Sampling Date:	1/15/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020
	Units:						
1,1,1-Trichloroethane	ug/m3	<0.109	<0.109	<0.109	<0.109	<1.09	<2.18
1,1,2,2-Tetrachloroethane	ug/m3	<1.37	<1.37	<1.37	<1.37	<1.37	<2.75
1,1,2-Trichloroethane	ug/m3	<1.09	<1.09	<1.09	<1.09	<1.09	<2.18
1,1-Dichloroethane	ug/m3	<0.809	<0.809	<0.809	<0.809	<0.809	<1.62
1,1-Dichloroethene	ug/m3	<0.079	<0.079	<0.079	<0.079	<0.793	<1.59
1,2,4-Trichlorobenzene	ug/m3	<1.48	<1.48	<1.48	<1.48	<1.48	<2.97
1,2,4-Trimethylbenzene	ug/m3	<0.983	1.2	1.21	1.37	3.3	24.1
1,2-Dibromoethane	ug/m3	<1.54	<1.54	<1.54	<1.54	<1.54	<3.07
1,2-Dichlorobenzene	ug/m3	<1.20	<1.20	<1.20	<1.20	<1.20	<2.40
1,2-Dichloroethane	ug/m3	<0.809	<0.809	<0.809	<0.809	<0.809	<1.62
1,2-Dichloropropane	ug/m3	<0.924	<0.924	<0.924	<0.924	<0.924	<1.85
1,3,5-Trimethylbenzene	ug/m3	<0.983	<0.983	<0.983	<0.983	<0.983	6.54
1,3-Butadiene	ug/m3	<0.442	<0.442	<0.442	<0.442	<0.442	1.38
1,3-Dichlorobenzene	ug/m3	<1.20	<1.20	<1.20	<1.20	<1.20	<2.40
1,4-Dichlorobenzene	ug/m3	<1.20	<1.20	<1.20	<1.20	<1.20	<2.40
1,4-Dioxane	ug/m3	<0.721	<0.721	<0.721	<0.721	<0.721	<1.44
2,2,4-Trimethylpentane	ug/m3	<0.934	<0.934	<0.934	<0.934	1.44	<1.87
2-Butanone	ug/m3	1.51	<1.47	<1.47	1.52	3.63	6.81
2-Hexanone	ug/m3	<0.820	<0.820	<0.820	<0.820	<0.820	<1.64
3-Chloropropene	ug/m3	<0.626	<0.626	<0.626	<0.626	<0.626	<1.25
4-Ethyltoluene	ug/m3	<0.983	<0.983	<0.983	<0.983	<0.983	4.65
4-Methyl-2-pentanone	ug/m3	<2.05	<2.05	<2.05	<2.05	<2.05	<4.10
Acetone	ug/m3	16	49.4	88.1	105	116	137
Benzene	ug/m3	0.757	1.5	2.15	2.12	2.66	3.55
Benzyl chloride	ug/m3	<1.04	<1.04	<1.04	<1.04	<1.04	<2.07
Bromodichloromethane	ug/m3	<1.34	<1.34	<1.34	<1.34	<1.34	<2.68
Bromoform	ug/m3	<2.07	<2.07	<2.07	<2.07	<2.07	<4.14
Bromomethane	ug/m3	<0.777	<0.777	<0.777	<0.777	<0.777	<1.55
Carbon disulfide	ug/m3	<0.623	<0.623	<0.623	<0.623	<0.623	1.83
Carbon tetrachloride	ug/m3	0.384	0.421	0.484	0.434	<1.26	<2.52
Chlorobenzene	ug/m3	<0.921	<0.921	<0.921	<0.921	<0.921	<1.84
Chloroethane	ug/m3	<0.528	<0.528	<0.528	<0.528	<0.528	<1.06
Chloroform	ug/m3	<0.977	<0.977	1.5	1.63	3.28	2.58
Chloromethane	ug/m3	1.07	1.06	1.33	1.25	1.35	<0.826
cis-1,2-Dichloroethene	ug/m3	<0.079	<0.079	<0.079	<0.079	<0.793	<1.59
cis-1,3-Dichloropropene	ug/m3	<0.908	<0.908	<0.908	<0.908	<0.908	<1.82
Cyclohexane	ug/m3	<0.688	<0.688	<0.688	<0.688	1.22	3.44
Dibromochloromethane	ug/m3	<1.70	<1.70	<1.70	<1.70	<1.70	<3.41
Dichlorodifluoromethane	ug/m3	2.12	2.34	2.34	2.25	2.42	2.45
Ethanol	ug/m3	25.1	626	535	686	452	124
Ethyl Acetate	ug/m3	<1.80	7.1	5.51	6.96	4.29	<3.60
Ethylbenzene	ug/m3	<0.869	<0.869	<0.869	<0.869	1.33	10
Freon-113	ug/m3	<1.53	<1.53	<1.53	<1.53	<1.53	<3.07
Freon-114	ug/m3	<1.40	<1.40	<1.40	<1.40	<1.40	<2.80



Table 1
Elks Plaza, Freeport, NY
Volatile Organic Compounds in Air
by EPA Method TO-15

Analytes	Location: Sampling Date:	OA	171 IA	179A IA	181A IA	179A SSV	181A SSV
		1/15/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020	1/15/2020
	Units:						
Heptane	ug/m3	<0.820	<0.820	<0.820	0.947	1.91	5.98
Hexachlorobutadiene	ug/m3	<2.13	<2.13	<2.13	<2.13	<2.13	<4.27
Isopropanol	ug/m3	1.54	65.9	88.5	104	71.8	11.4
Methyl tert butyl ether	ug/m3	<0.721	<0.721	<0.721	<0.721	<0.721	<1.44
Methylene chloride	ug/m3	<1.74	<1.74	<1.74	<1.74	<1.74	<3.47
n-Hexane	ug/m3	<0.705	1.02	1.13	1.15	3.15	6.91
o-Xylene	ug/m3	<0.869	<0.869	<0.869	<0.869	2.06	17.9
p/m-Xylene	ug/m3	<1.74	<1.74	<1.74	<1.74	4.78	41.6
Styrene	ug/m3	<0.852	<0.852	<0.852	<0.852	<0.852	<1.70
Tertiary butyl Alcohol	ug/m3	<1.52	<1.52	<1.52	<1.52	<1.52	<3.03
Tetrachloroethene	ug/m3	0.441	0.319	0.373	0.427	<1.36	922
Tetrahydrofuran	ug/m3	<1.47	<1.47	<1.47	<1.47	<1.47	<2.95
Toluene	ug/m3	1.44	3.21	3.19	3.75	6.07	23.1
trans-1,2-Dichloroethene	ug/m3	<0.793	<0.793	<0.793	<0.793	<0.793	<1.59
trans-1,3-Dichloropropene	ug/m3	<0.908	<0.908	<0.908	<0.908	<0.908	<1.82
Trichloroethene	ug/m3	<0.107	<0.107	<0.107	<0.107	<1.07	3.47
Trichlorofluoromethane	ug/m3	<1.12	2.39	2.46	2.73	2.35	4.74
Vinyl bromide	ug/m3	<0.874	<0.874	<0.874	<0.874	<0.874	<1.75
Vinyl chloride	ug/m3	<0.051	<0.051	<0.051	<0.051	<0.511	<1.02

Attachment A



Seacliff Environmental Geology, PC.
P.O. Box 2085
Miller Place, NY 11764

Office # (631) 828-5994
Cell # (631) 742-6948

CANISTER FIELD SAMPLING RECORD

Project: Elks Plaza NYSDC Site # C152196

Site Location: 157-189 West Merrick Rd, Freeport

Sample ID OA Canister ID 1827

Sampler JMD Canister Volume 6 L

Location Outside back door laundry Flow Controller ID 0904

Height 4 feet Flow Controller Setting 10.0

Sample Type (sub-slab, soil gas, amb, indoor) Ambient (outdoor)

READING	DATE	TIME	VACUUM
Initial Canister Vacuum	1/15/20	735	30.20
Final Canister Vacuum	1/15/20	335	1.68

Weather or Ambient Conditions: 43-56 °F

Purge Data: PID 0.0 Start PID 0.0 4 hrs

Check Data: PID 0.0 Finish

Comments: _____

Bus exhaust
30 minutes
Woodward School

Buses lined up
with motors
running



Seacliff Environmental Geology, PC.
P.O. Box 2085
Miller Place, NY 11764

Office # (631) 828-5994
Cell # (631) 742-6948

CANISTER FIELD SAMPLING RECORD

Project: Elks Plaza NYSDEC Site # C152196

Site Location: 157-189 West Merrick Rd, Freeport

Sample ID 171 IA Canister ID 3321

Sampler JMD Canister Volume _____

Location Ebony Beauty Supply Flow Controller ID 01617

Height 3 feet (step stool) Flow Controller Setting _____

Sample Type (sub-slab, soil gas, amb, indoor) Indoor Air

READING	DATE	TIME	VACUUM
Initial Canister Vacuum	1/15/20	7:30	30.06
Final Canister Vacuum	1/15/20	3:30	0.90

Weather or Ambient Conditions: 68-72°

Purge Data: PID 0.0 Start PID 4 hours 0.0

Check Data: PID finish 0.0

Comments: _____



Seacliff Environmental Geology, PC.
P.O. Box 2085
Miller Place, NY 11764

Office # (631) 828-5994
Cell # (631) 742-6948

CANISTER FIELD SAMPLING RECORD

Project:

Elks Plaza NYSDC Site # C152196

Site Location:

157-189 West Merrick Rd, Freeport

Sample ID

179A IA

Canister ID

1050

Sampler

JMD

Canister Volume

6 L

Location

Unit 179A Laundry

Flow Controller ID

01406

Height

Table

Flow Controller Setting

10.0

Sample Type (sub-slab, soil gas, amb, indoor)

Indoor Air

READING	DATE	TIME	VACUUM
Initial Canister Vacuum	<u>1/15/20</u>	<u>7:44</u>	<u>30.47</u>
Final Canister Vacuum	<u>1/15/20</u>	<u>3:45</u>	<u>0.45</u>

Weather or Ambient Conditions:

70° - Doors periodically opened
by customers

Purge Data:

Check Data:

PID start 0.0 finish 0.0.

Comments:



Seacliff Environmental Geology, PC.
P.O. Box 2085
Miller Place, NY 11764

Office # (631) 828-5994
Cell # (631) 742-6948

CANISTER FIELD SAMPLING RECORD

Project:

Elks Plaza NYSDEC site # C152196

Site Location:

157-189 West Merrick Rd, Freeport

Sample ID

179A SSV

Canister ID

1820

Sampler

JMD

Canister Volume

6L

Location

Unit 179A (Laundry)

Flow Controller ID

01644

Height

Ground

Flow Controller Setting

10.0

Sample Type (sub-slab, soil gas, amb, indoor)

Sub-slab

READING	DATE	TIME	VACUUM
Initial Canister Vacuum	<u>1/15/20</u>	<u>7:55</u>	<u>29.92</u>
Final Canister Vacuum	<u>1/15/20</u>	<u>3:55</u>	<u>0.52</u>

Weather or Ambient Conditions:

70°

Purge Data:

PID ~~inter~~ 0.0 Start PID 0.0 Finish

Check Data:

Comments:



Seacliff Environmental Geology, PC.
P.O. Box 2085
Miller Place, NY 11764

Office # (631) 828-5994
Cell # (631) 742-6948

CANISTER FIELD SAMPLING RECORD

Project:

Elks Plaza NYSDEC Site # C152196

Site Location:

157-189 West Merrick Rd, Freeport

Sample ID

181A IA

Canister ID

3320

Sampler

JMD

Canister Volume

6L

Location

Unit 181A (Laundry)

Flow Controller ID

0246

Height

Table

Flow Controller Setting

10.0

Sample Type (sub-slab, soil gas, amb, indoor)

Indoor Air

READING	DATE	TIME	VACUUM
Initial Canister Vacuum	1/15/20	7:58	30.25
Final Canister Vacuum	1/15/20	3:59	0.84

Weather or Ambient Conditions:

70° in laundry - consistent

Purge Data:

PID 0.0 start, 4 hours, Finish

Check Data:

Comments:



Seacliff Environmental Geology, PC.
P.O. Box 2085
Miller Place, NY 11764

Office # (631) 828-5994
Cell # (631) 742-6948

CANISTER FIELD SAMPLING RECORD

Project: Elks Plaza NYSDEC Site # C152196
Site Location: 157-189 West Merrick Road, Freeport

Sample ID 181A SSV Canister ID 3122
Sampler JMD Canister Volume 6L
Location Unit 181A (laundry) Flow Controller ID 0843
Height Ground Flow Controller Setting 10
Sample Type (sub-slab, soil gas, amb, indoor) Sub-slab

READING	DATE	TIME	VACUUM
Initial Canister Vacuum	1/15/20	7:59	30.5
Final Canister Vacuum	1/15/20	4:00	0.86

Weather or Ambient Conditions: 70° indoors

Purge Data: PID Start 0.0 Finish 0.0

Check Data: _____

Comments: _____

Attachment B

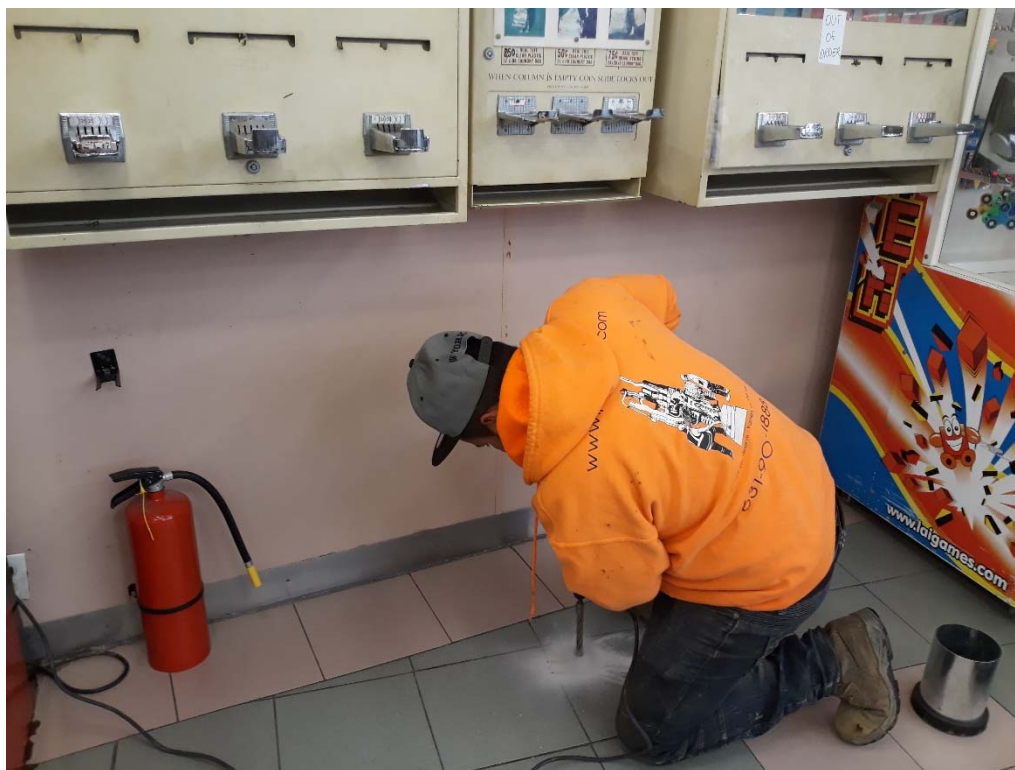


Photo 1 Installing sub slab vapor implant in Unit 179A (laundromat).



Photo 2 Co-located indoor air sampling canister in Unit 179A.



Photo 3- Sub slab vapor sampling point in Unit 181A (laundromat).



Photo 4- Co-located indoor air sample in Unit 181A.



Photo 5- Indoor air sampling canister in Unit 171.

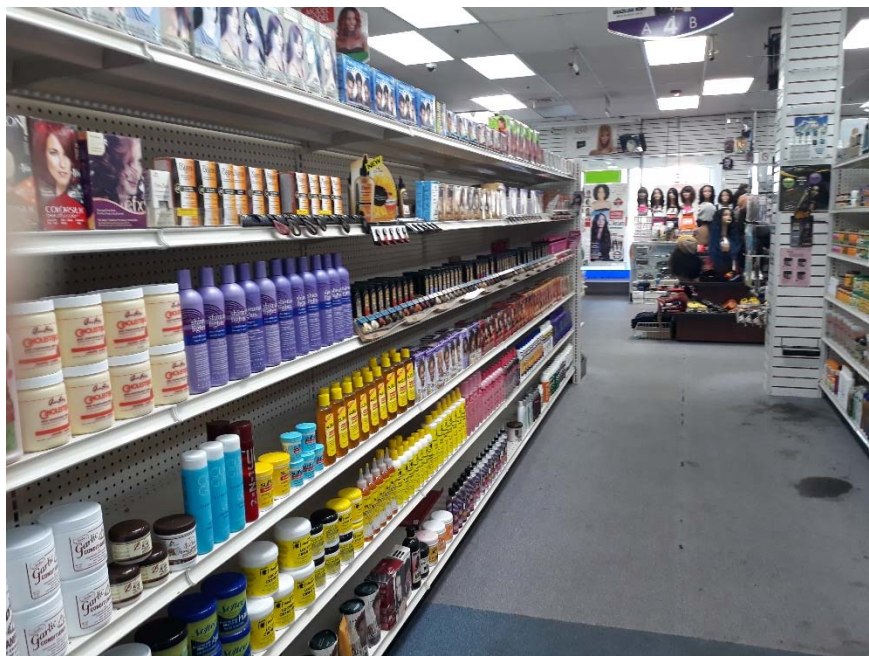


Photo 6- Hair supply store inventory.



Photo 7 – Hair products in Unit 171.



Photo 8- Hair and beauty products in Unit 171.



Photo 9- Outdoor air sampling canister.



Photo 10- Interior view of laundromat.

Attachment C



www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2002033

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.

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Project Name: ELKS PLAZA
Project Number: Not Specified

Lab Number: L2002033
Report Date: 01/22/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2002033-01	OA	AIR	FREEPORT, NY	01/15/20 03:35	01/15/20
L2002033-02	171 IA	AIR	FREEPORT, NY	01/15/20 03:30	01/15/20
L2002033-03	179A IA	AIR	FREEPORT, NY	01/15/20 03:45	01/15/20
L2002033-04	179A SSV	SOIL_VAPOR	FREEPORT, NY	01/15/20 03:55	01/15/20
L2002033-05	181A IA	AIR	FREEPORT, NY	01/15/20 03:59	01/15/20
L2002033-06	181A SSV	SOIL_VAPOR	FREEPORT, NY	01/15/20 04:00	01/15/20

Project Name: ELKS PLAZA
Project Number: Not Specified

Lab Number: L2002033
Report Date: 01/22/20

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: ELKS PLAZA
Project Number: Not Specified

Lab Number: L2002033
Report Date: 01/22/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on January 14, 2020. The canister certification results are provided as an addendum.

L2002033-06: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG1332350-3 LCS recoveries for 1,2,4-trichlorobenzene (154%) and hexachlorobutadiene (134%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

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: 01/22/20

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: ELKS PLAZA
Project Number: Not Specified

Lab Number: L2002033
Report Date: 01/22/20

- 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: ELKS PLAZA
Project Number: Not Specified

Lab Number: L2002033
Report Date: 01/22/20

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.



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 : L2002033

Received : 15-JAN-2020

Reviewer : Alycia Mogayzel

Account Name : Tyll Engineering and Consulting PC

Project Number :

Project Name : ELKS PLAZA

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

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

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?	NO
5) Are samples in appropriate containers for requested analysis? Please refer to information noted in Question 3 above.	NO
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
Jan 22 2020, 04:11 pm

Login Number: L2002033

Account: TYLLENGINEER Tyll Engineering and Consulting PC

Received: 15JAN20 Due Date: 22JAN20

Sample # Client ID Mat PR Collected

L2002033-01 0A 10 S0 15JAN20 03:35

Need SIM for 7 NYS DMCs ASP-B Package Due Date: 01/22/20

ASP-B, CAN-RENT, FLOW-RENT, T015-LL, T015-SIM

L2002033-02 171 IA 10 S0 15JAN20 03:30

Need SIM for 7 NYS DMCs Package Due Date: 01/22/20

CAN-RENT, FLOW-RENT, T015-LL, T015-SIM

L2002033-03 179A IA 10 S0 15JAN20 03:45

Need SIM for 7 NYS DMCs Package Due Date: 01/22/20

CAN-RENT, FLOW-RENT, T015-LL, T015-SIM

L2002033-04 179A SSV 11 S0 15JAN20 03:55

Need SIM for 7 NYS DMCs Package Due Date: 01/22/20

CAN-RENT, FLOW-RENT, T015-LL

L2002033-05 181A IA 10 S0 15JAN20 03:59

Need SIM for 7 NYS DMCs Package Due Date: 01/22/20

CAN-RENT, FLOW-RENT, T015-LL, T015-SIM

L2002033-06 181A SSV 11 S0 15JAN20 04:00

Need SIM for 7 NYS DMCs Package Due Date: 01/22/20

CAN-RENT, FLOW-RENT, T015-LL

Page 1

Logged By: Chris Anderson



AIR ANALYSIS

CHAIN OF CUSTODY

PAGE 1 OF 1

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Ty11 Engineering
Address: 169 Commack Road
Suite H173, Commack 11725
Phone: 631 664-6477
Fax:
Email: Karen@ty11engineering.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:
Project-Specific Target Compound List: ☐

Project Information

Project Name: ELKs Plaza
Project Location: Freeport, NY
Project #:
Project Manager: Karen Ty11
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Date Rec'd in Lab: 1/16/20

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☒ EMAIL (standard pdf report)
☒ Additional Deliverables: CAT B
Report to: (if different than Project Manager)

ALPHA Job #: L2002033

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	Columns Below Must Be Filled Out										TO-15	TO-15 SIM	APH	Fixed Gas	Sulfides & Mercaptans	Sample Comments (i.e. PID)
		COLLECTION			Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller						
02033-01	0A	1/15/20	7:35	3:35	30.20	1.68	A	JMD	1827	1827	0904	X					
02	171 IA	1/15/20	7:30	3:30	30.06	0.90	A	JMD		3321	01617	X					
03	179A IA	1/15/20	7:44	3:45	30.47	0.95	A	JMD		1050	01406	X					
04	179A SSV	1/15/20	7:55	3:55	29.92	0.52	SV	JMD		1820	01644	X					
05	181A IA	1/15/20	7:58	3:59	30.20	0.84	A	JMD		3320	0246	X					
06	181A SSV	1/15/20	7:59	4:00	30.50	0.86	SV	JMD		3122	0843	X					

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Relinquished By:

James H. DeNest
uppose Dendel

Date/Time

1/15/20 4:15
1/15/20 18:18

Received By:

James H. DeNest
uppose Dendel
ML

Date/Time:

1/15/20 16:15
1/16/20 0300

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Supporting Documentation

Project Name: ELKS PLAZA

Lab Number: L2002033

Project Number:

Report Date: 01/22/20

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
L2002033-01	OA	0904	Flow 4	01/14/20	311698		-	-	-	Pass	10.0	10.9	9
L2002033-01	OA	1827	6.0L Can	01/14/20	311698	L2000888-10	Pass	-29.1	0.0	-	-	-	-
L2002033-02	171 IA	01617	Flow 4	01/14/20	311698		-	-	-	Pass	10.0	8.7	14
L2002033-02	171 IA	3321	6.0L Can	01/14/20	311698	L2000888-10	Pass	-29.8	0.0	-	-	-	-
L2002033-03	179A IA	01406	Flow 5	01/14/20	311698		-	-	-	Pass	10.0	9.2	8
L2002033-03	179A IA	1050	6.0L Can	01/14/20	311698	L2000888-09	Pass	-29.8	0.0	-	-	-	-
L2002033-04	179A SSV	01644	Flow 5	01/14/20	311698		-	-	-	Pass	10.0	7.8	25
L2002033-04	179A SSV	1820	6.0L Can	01/14/20	311698	L2000888-10	Pass	-29.9	0.0	-	-	-	-
L2002033-05	181A IA	0246	Flow 5	01/14/20	311698		-	-	-	Pass	10.0	8.9	12
L2002033-05	181A IA	3320	6.0L Can	01/14/20	311698	L2000888-10	Pass	-29.9	0.0	-	-	-	-
L2002033-06	181A SSV	0843	Flow 5	01/14/20	311698		-	-	-	Pass	10.0	8.5	16
L2002033-06	181A SSV	3122	6.0L Can	01/14/20	311698	L2000888-10	Pass	-29.9	0.0	-	-	-	-

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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09
 Client ID: CAN 1972 SHELF 32
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 01/09/20 22:11
 Analyst: TS

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09
 Client ID: CAN 1972 SHELF 32
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09
 Client ID: CAN 1972 SHELF 32
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09
 Client ID: CAN 1972 SHELF 32
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09
Client ID: CAN 1972 SHELF 32
Sample Location:

Date Collected: 01/09/20 09:00
Date Received: 01/09/20
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	88		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	87		60-140



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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09
 Client ID: CAN 1972 SHELF 32
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/09/20 22:11
 Analyst: TS

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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
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
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1



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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09
 Client ID: CAN 1972 SHELF 32
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
1,4-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
1,1,2,2-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
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-09 Date Collected: 01/09/20 09:00
 Client ID: CAN 1972 SHELF 32 Date Received: 01/09/20
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
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	86		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	86		60-140



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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10
 Client ID: CAN 1591 SHELF 33
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 01/09/20 22:49
 Analyst: TS

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10
 Client ID: CAN 1591 SHELF 33
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10
 Client ID: CAN 1591 SHELF 33
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10
 Client ID: CAN 1591 SHELF 33
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10 Date Collected: 01/09/20 09:00
Client ID: CAN 1591 SHELF 33 Date Received: 01/09/20
Sample Location: 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	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	87		60-140



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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10
 Client ID: CAN 1591 SHELF 33
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/09/20 22:49
 Analyst: TS

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 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
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
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1



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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10
 Client ID: CAN 1591 SHELF 33
 Sample Location:

Date Collected: 01/09/20 09:00
 Date Received: 01/09/20
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
1,4-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
1,1,2,2-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
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



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

Lab Number: L2000888
Report Date: 01/22/20

Air Canister Certification Results

Lab ID: L2000888-10
Client ID: CAN 1591 SHELF 33
Sample Location:

Date Collected: 01/09/20 09:00
Date Received: 01/09/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
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	90		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	86		60-140



Organics

Volatile Organics in Air TO-15 Low Level

Volatiles QC Summary

Lab Duplicate Sample Summary

Form 3

Air Volatiles

Client	: Tyll Engineering and Consulting PC	Lab Number	: L2002033
Project Name	: ELKS PLAZA	Project Number	:
Client Sample ID	: 171 IA	Matrix	: AIR
Lab Sample ID	: L2002033-02	Analysis Date	: 01/21/20 21:30
Lab File ID	: R47419	DUP File ID	: r47420
Dup Sample ID	: WG1332350-5	DUP Analysis Date	: 01/21/20 22:09

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Dichlorodifluoromethane	0.474	0.450	5	25
Chloromethane	0.514	0.491	5	25
Freon-114	ND	ND	NC	25
1,3-Butadiene	ND	ND	NC	25
Bromomethane	ND	ND	NC	25
Chloroethane	ND	ND	NC	25
Ethanol	332	278	18	25
Vinyl bromide	ND	ND	NC	25
Acetone	20.8	19.9	4	25
Trichlorofluoromethane	0.426	0.404	5	25
Isopropanol	26.8	25.2	6	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	ND	ND	NC	25
Ethyl Acetate	1.97	1.78	10	25
Chloroform	ND	ND	NC	25
Tetrahydrofuran	ND	ND	NC	25
1,2-Dichloroethane	ND	ND	NC	25
n-Hexane	0.288	0.323	11	25

Lab Duplicate Sample Summary

Form 3

Air Volatiles

Client	: Tyll Engineering and Consulting PC	Lab Number	: L2002033
Project Name	: ELKS PLAZA	Project Number	:
Client Sample ID	: 171 IA	Matrix	: AIR
Lab Sample ID	: L2002033-02	Analysis Date	: 01/21/20 21:30
Lab File ID	: R47419	DUP File ID	: r47420
Dup Sample ID	: WG1332350-5	DUP Analysis Date	: 01/21/20 22:09

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzene	0.469	0.475	1	25
Cyclohexane	ND	ND	NC	25
1,2-Dichloropropane	ND	ND	NC	25
Bromodichloromethane	ND	ND	NC	25
1,4-Dioxane	ND	ND	NC	25
2,2,4-Trimethylpentane	ND	ND	NC	25
Heptane	ND	ND	NC	25
cis-1,3-Dichloropropene	ND	ND	NC	25
4-Methyl-2-pentanone	ND	ND	NC	25
trans-1,3-Dichloropropene	ND	ND	NC	25
1,1,2-Trichloroethane	ND	ND	NC	25
Toluene	0.853	0.851	0	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	ND	ND	NC	25
p/m-Xylene	ND	ND	NC	25
Bromoform	ND	ND	NC	25
Styrene	ND	ND	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	NC	25
o-Xylene	ND	ND	NC	25
4-Ethyltoluene	ND	ND	NC	25
1,3,5-Trimethylbenzene	ND	ND	NC	25
1,2,4-Trimethylbenzene	0.244	0.238	2	25

Lab Duplicate Sample Summary

Form 3

Air Volatiles

Client	: Tyll Engineering and Consulting PC	Lab Number	: L2002033
Project Name	: ELKS PLAZA	Project Number	:
Client Sample ID	: 171 IA	Matrix	: AIR
Lab Sample ID	: L2002033-02	Analysis Date	: 01/21/20 21:30
Lab File ID	: R47419	DUP File ID	: r47420
Dup Sample ID	: WG1332350-5	DUP Analysis Date	: 01/21/20 22:09

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

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Tyll Engineering and Consulting PC Lab Number : L2002033
 Project Name : ELKS PLAZA Project Number :
 Matrix : AIR
 LCS Sample ID : WG1332350-3 Analysis Date : 01/21/20 12:33 File ID : r47409
 LCSD Sample ID : 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			
Dichlorodifluoromethane	10	9.33	93				-	70-130	-
Chloromethane	10	10.7	107				-	70-130	-
Freon-114	10	10.3	103				-	70-130	-
Vinyl chloride	10	10.0	100				-	70-130	-
1,3-Butadiene	10	11.0	110				-	70-130	-
Bromomethane	10	10.2	102				-	70-130	-
Chloroethane	10	9.94	99				-	70-130	-
Ethanol	50	47.8	96				-	40-160	-
Vinyl bromide	10	9.97	100				-	70-130	-
Acetone	50	40.3	81				-	40-160	-
Trichlorofluoromethane	10	8.10	81				-	70-130	-
Isopropanol	25	22.5	90				-	40-160	-
1,1-Dichloroethene	10	8.81	88				-	70-130	-
Tertiary butyl Alcohol	10	8.65	86				-	70-130	-
Methylene chloride	10	10.2	102				-	70-130	-
3-Chloropropene	10	9.58	96				-	70-130	-
Carbon disulfide	10	9.53	95				-	70-130	-
Freon-113	10	9.72	97				-	70-130	-
trans-1,2-Dichloroethene	10	8.58	86				-	70-130	-
1,1-Dichloroethane	10	8.94	89				-	70-130	-
Methyl tert butyl ether	10	9.36	94				-	70-130	-
2-Butanone	10	9.05	90				-	70-130	-
cis-1,2-Dichloroethene	10	8.77	88				-	70-130	-
Ethyl Acetate	10	9.58	96				-	70-130	-
Chloroform	10	8.73	87				-	70-130	-
Tetrahydrofuran	10	11.2	112				-	70-130	-



Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Tyll Engineering and Consulting PC Lab Number : L2002033
 Project Name : ELKS PLAZA Project Number :
 Matrix : AIR
 LCS Sample ID : WG1332350-3 Analysis Date : 01/21/20 12:33 File ID : r47409
 LCSD Sample ID : 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			
1,2-Dichloroethane	10	8.99	90				-	70-130	-
n-Hexane	10	8.17	82				-	70-130	-
1,1,1-Trichloroethane	10	8.86	89				-	70-130	-
Benzene	10	9.63	96				-	70-130	-
Carbon tetrachloride	10	9.04	90				-	70-130	-
Cyclohexane	10	9.42	94				-	70-130	-
1,2-Dichloropropane	10	9.77	98				-	70-130	-
Bromodichloromethane	10	9.07	91				-	70-130	-
1,4-Dioxane	10	10.1	101				-	70-130	-
Trichloroethene	10	10.3	103				-	70-130	-
2,2,4-Trimethylpentane	10	9.78	98				-	70-130	-
Heptane	10	10.4	104				-	70-130	-
cis-1,3-Dichloropropene	10	10.6	106				-	70-130	-
4-Methyl-2-pentanone	10	10.4	104				-	70-130	-
trans-1,3-Dichloropropene	10	8.88	89				-	70-130	-
1,1,2-Trichloroethane	10	10.4	104				-	70-130	-
Toluene	10	10.7	107				-	70-130	-
2-Hexanone	10	12.2	122				-	70-130	-
Dibromochloromethane	10	11.3	113				-	70-130	-
1,2-Dibromoethane	10	11.0	110				-	70-130	-
Tetrachloroethene	10	11.7	117				-	70-130	-
Chlorobenzene	10	11.1	111				-	70-130	-
Ethylbenzene	10	11.5	115				-	70-130	-
p/m-Xylene	20	22.7	114				-	70-130	-
Bromoform	10	12.5	125				-	70-130	-
Styrene	10	11.6	116				-	70-130	-

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Tyll Engineering and Consulting PC Lab Number : L2002033
 Project Name : ELKS PLAZA Project Number :
 Matrix : AIR
 LCS Sample ID : WG1332350-3 Analysis Date : 01/21/20 12:33 File ID : r47409
 LCSD Sample ID : 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	11.4	114				-	70-130	-
o-Xylene	10	11.6	116				-	70-130	-
4-Ethyltoluene	10	11.4	114				-	70-130	-
1,3,5-Trimethylbenzene	10	11.6	116				-	70-130	-
1,2,4-Trimethylbenzene	10	12.2	122				-	70-130	-
Benzyl chloride	10	10.0	100				-	70-130	-
1,3-Dichlorobenzene	10	10.5	105				-	70-130	-
1,4-Dichlorobenzene	10	12.2	122				-	70-130	-
1,2-Dichlorobenzene	10	12.3	123				-	70-130	-
1,2,4-Trichlorobenzene	10	15.4	154 Q				-	70-130	-
Hexachlorobutadiene	10	13.4	134 Q				-	70-130	-

Method Blank Summary
Form 4
Air Volatiles

Client	: Tyll Engineering and Consulting PC	Lab Number	: L2002033
Project Name	: ELKS PLAZA	Project Number	:
Lab Sample ID	: WG1332350-4	Lab File ID	: r47411
Instrument ID	: AIRPIANO4		
Matrix	: AIR	Analysis Date	: 01/21/20 14:34

Client Sample No.	Lab Sample ID	Analysis Date
WG1332350-3LCS	WG1332350-3	01/21/20 12:33
OA	L2002033-01	01/21/20 17:33
171 IA	L2002033-02	01/21/20 21:30
171 IADUP	WG1332350-5	01/21/20 22:09
179A IA	L2002033-03	01/21/20 22:48
181A IA	L2002033-05	01/21/20 23:28
179A SSV	L2002033-04	01/22/20 02:04
181A SSV	L2002033-06D	01/22/20 02:41

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Tyll Engineering and Consulting PC	Lab Number : L2002033
Project Name : ELKS PLAZA	Project Number :
Instrument ID : AIRPIANO4	Analysis Date : 01/15/20 13:38
Tune Standard : WG1330812-1	Tune File ID : r47285_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	15
75	30.0 - 66.0% of mass 95	39
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4 (.6)1
174	50.0 - 120.0% of mass 95	70.4
175	4.0 - 9.0% of mass 174	4.9 (7)1
176	93.0 - 101% of mass 174	68.7 (97.7)1
177	5.0 - 9.0% of mass 176	4.5 (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
STD0.2	R1275254-1	R47289	01/15/20 16:16
STD0.5	R1275254-2	R47290	01/15/20 16:55
STD1.0	R1275254-3	R47291	01/15/20 17:37
STD5.0	R1275254-4	R47292	01/15/20 18:17
STD010	R1275254-5	R47293	01/15/20 18:58
STD020	R1275254-6	R47294	01/15/20 19:37
STD050	R1275254-7	R47295	01/15/20 20:16
STD100	R1275254-8	R47299	01/16/20 09:41
ICV QUANT	R1275254-9	R47302	01/16/20 11:46

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Tyll Engineering and Consulting PC	Lab Number : L2002033
Project Name : ELKS PLAZA	Project Number :
Instrument ID : AIRPIANO4	Analysis Date : 01/21/20 11:09
Tune Standard : WG1332350-1	Tune File ID : r47407_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	13.5
75	30.0 - 66.0% of mass 95	35.6
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	72.5
175	4.0 - 9.0% of mass 174	4.9 (6.7)1
176	93.0 - 101% of mass 174	70.8 (97.7)1
177	5.0 - 9.0% of mass 176	4.5 (6.3)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
WG1332350-2CCAL	WG1332350-2	R47409	01/21/20 12:33
WG1332350-3LCS	WG1332350-3	R47409	01/21/20 12:33
WG1332350-4BLANK	WG1332350-4	R47411	01/21/20 14:34
OA	L2002033-01	R47413	01/21/20 17:33
171 IA	L2002033-02	R47419	01/21/20 21:30
WG1332350-5DUP	WG1332350-5	R47420	01/21/20 22:09
179A IA	L2002033-03	R47421	01/21/20 22:48
181A IA	L2002033-05	R47422	01/21/20 23:28
179A SSV	L2002033-04	R47426	01/22/20 02:04
181A SSV	L2002033-06D	R47427	01/22/20 02:41

Internal Standard Area and RT Summary

Form 8a

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Sample No : WG1332350-2

Lab Number : L2002033
 Project Number :
 Analysis Date : 01/21/20 12:33
 Lab File ID : R47409

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1332350-2	206855	9.54	664478	11.81	106395	16.53
Upper Limit	289597	9.87	930269	12.14	148953	16.86
Lower Limit	124113	9.21	398687	11.48	63837	16.20
Sample ID						
WG1332350-3 LCS	206855	9.54	664478	11.81	106395	16.53
WG1332350-4 BLANK	240385	9.54	641505	11.80	100696	16.53
OA	176853	9.53	566678	11.80	91751	16.53
171 IA	192372	9.53	539368	11.80	104638	16.53
171 IA DUP	206469	9.53	550760	11.80	105540	16.53
179A IA	208584	9.54	544106	11.80	107121	16.53
181A IA	216165	9.54	554463	11.80	106978	16.53
179A SSV	207066	9.54	572289	11.80	110643	16.53
181A SSV	211285	9.54	608191	11.80	116553	16.53

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: 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)
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File: PM7756-1
Page: 2

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			

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Created By: Jason Hebert
File: PM7756-1
Page: 3

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	

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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-01
 Client ID : OA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47413
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:35
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 17:33
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.429	0.200	--	2.12	0.989	--	
74-87-3	Chloromethane	0.516	0.200	--	1.07	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	13.3	5.00	--	25.1	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	6.73	1.00	--	16.0	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	0.625	0.500	--	1.54	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	0.512	0.500	--	1.51	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	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	0.237	0.200	--	0.757	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-01
 Client ID : OA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47413
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:35
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 17:33
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
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	0.383	0.200	--	1.44	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	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
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



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-01
 Client ID : OA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47413
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:35
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 17:33
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-02
 Client ID : 171 IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47419
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 21:30
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.474	0.200	--	2.34	0.989	--	
74-87-3	Chloromethane	0.514	0.200	--	1.06	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	332	5.00	--	626	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	20.8	1.00	--	49.4	2.38	--	
75-69-4	Trichlorofluoromethane	0.426	0.200	--	2.39	1.12	--	
67-63-0	Isopropanol	26.8	0.500	--	65.9	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	1.97	0.500	--	7.10	1.80	--	
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	0.288	0.200	--	1.02	0.705	--	
71-43-2	Benzene	0.469	0.200	--	1.50	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-02
 Client ID : 171 IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47419
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 21:30
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
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	0.853	0.200	--	3.21	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	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
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	0.244	0.200	--	1.20	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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-02
 Client ID : 171 IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47419
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 21:30
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-03
 Client ID : 179A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47421
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:45
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:48
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.473	0.200	--	2.34	0.989	--	
74-87-3	Chloromethane	0.645	0.200	--	1.33	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	284	5.00	--	535	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	37.1	1.00	--	88.1	2.38	--	
75-69-4	Trichlorofluoromethane	0.438	0.200	--	2.46	1.12	--	
67-63-0	Isopropanol	36.0	0.500	--	88.5	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	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	1.53	0.500	--	5.51	1.80	--	
67-66-3	Chloroform	0.307	0.200	--	1.50	0.977	--	
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	0.322	0.200	--	1.13	0.705	--	
71-43-2	Benzene	0.672	0.200	--	2.15	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-03
 Client ID : 179A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47421
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:45
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:48
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
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	0.847	0.200	--	3.19	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	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
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	0.246	0.200	--	1.21	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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-03
 Client ID : 179A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47421
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:45
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:48
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-04
 Client ID : 179A SSV
 Sample Location : FREEPORT, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R47426
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:55
 Date Received : 01/15/20
 Date Analyzed : 01/22/20 02:04
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.490	0.200	--	2.42	0.989	--	
74-87-3	Chloromethane	0.653	0.200	--	1.35	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	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	240	5.00	--	452	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	48.9	1.00	--	116	2.38	--	
75-69-4	Trichlorofluoromethane	0.418	0.200	--	2.35	1.12	--	
67-63-0	Isopropanol	29.2	0.500	--	71.8	1.23	--	
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	1.23	0.500	--	3.63	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	1.19	0.500	--	4.29	1.80	--	
67-66-3	Chloroform	0.671	0.200	--	3.28	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-04
 Client ID : 179A SSV
 Sample Location : FREEPORT, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R47426
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:55
 Date Received : 01/15/20
 Date Analyzed : 01/22/20 02:04
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.895	0.200	--	3.15	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	0.834	0.200	--	2.66	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.355	0.200	--	1.22	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
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	0.309	0.200	--	1.44	0.934	--	
142-82-5	Heptane	0.466	0.200	--	1.91	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	1.61	0.200	--	6.07	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
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	0.306	0.200	--	1.33	0.869	--	
179601-23-1	p/m-Xylene	1.10	0.400	--	4.78	1.74	--	
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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-04
 Client ID : 179A SSV
 Sample Location : FREEPORT, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R47426
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:55
 Date Received : 01/15/20
 Date Analyzed : 01/22/20 02:04
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.474	0.200	--	2.06	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	0.671	0.200	--	3.30	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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-05
 Client ID : 181A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47422
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:59
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 23:28
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.456	0.200	--	2.25	0.989	--	
74-87-3	Chloromethane	0.607	0.200	--	1.25	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	364	5.00	--	686	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	44.4	1.00	--	105	2.38	--	
75-69-4	Trichlorofluoromethane	0.485	0.200	--	2.73	1.12	--	
67-63-0	Isopropanol	42.5	0.500	--	104	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	0.517	0.500	--	1.52	1.47	--	
141-78-6	Ethyl Acetate	1.93	0.500	--	6.96	1.80	--	
67-66-3	Chloroform	0.334	0.200	--	1.63	0.977	--	
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	0.327	0.200	--	1.15	0.705	--	
71-43-2	Benzene	0.665	0.200	--	2.12	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-05
 Client ID : 181A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47422
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:59
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 23:28
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.231	0.200	--	0.947	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	0.996	0.200	--	3.75	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	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
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	0.279	0.200	--	1.37	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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-05
 Client ID : 181A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47422
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:59
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 23:28
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-06D
 Client ID : 181A SSV
 Sample Location : FREEPORT, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R47427
 Sample Amount : 125 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 04:00
 Date Received : 01/15/20
 Date Analyzed : 01/22/20 02:41
 Dilution Factor : 2
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.496	0.400	--	2.45	1.98	--	
74-87-3	Chloromethane	ND	0.400	--	ND	0.826	--	U
76-14-2	Freon-114	ND	0.400	--	ND	2.80	--	U
75-01-4	Vinyl chloride	ND	0.400	--	ND	1.02	--	U
106-99-0	1,3-Butadiene	0.626	0.400	--	1.38	0.885	--	
74-83-9	Bromomethane	ND	0.400	--	ND	1.55	--	U
75-00-3	Chloroethane	ND	0.400	--	ND	1.06	--	U
64-17-5	Ethanol	66.0	10.0	--	124	18.8	--	
593-60-2	Vinyl bromide	ND	0.400	--	ND	1.75	--	U
67-64-1	Acetone	57.6	2.00	--	137	4.75	--	
75-69-4	Trichlorofluoromethane	0.844	0.400	--	4.74	2.25	--	
67-63-0	Isopropanol	4.63	1.00	--	11.4	2.46	--	
75-35-4	1,1-Dichloroethene	ND	0.400	--	ND	1.59	--	U
75-65-0	Tertiary butyl Alcohol	ND	1.00	--	ND	3.03	--	U
75-09-2	Methylene chloride	ND	1.00	--	ND	3.47	--	U
107-05-1	3-Chloropropene	ND	0.400	--	ND	1.25	--	U
75-15-0	Carbon disulfide	0.588	0.400	--	1.83	1.25	--	
76-13-1	Freon-113	ND	0.400	--	ND	3.07	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--	U
75-34-3	1,1-Dichloroethane	ND	0.400	--	ND	1.62	--	U
1634-04-4	Methyl tert butyl ether	ND	0.400	--	ND	1.44	--	U
78-93-3	2-Butanone	2.31	1.00	--	6.81	2.95	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--	U
141-78-6	Ethyl Acetate	ND	1.00	--	ND	3.60	--	U
67-66-3	Chloroform	0.528	0.400	--	2.58	1.95	--	
109-99-9	Tetrahydrofuran	ND	1.00	--	ND	2.95	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-06D
 Client ID : 181A SSV
 Sample Location : FREEPORT, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R47427
 Sample Amount : 125 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 04:00
 Date Received : 01/15/20
 Date Analyzed : 01/22/20 02:41
 Dilution Factor : 2
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.400	--	ND	1.62	--	U
110-54-3	n-Hexane	1.96	0.400	--	6.91	1.41	--	
71-55-6	1,1,1-Trichloroethane	ND	0.400	--	ND	2.18	--	U
71-43-2	Benzene	1.11	0.400	--	3.55	1.28	--	
56-23-5	Carbon tetrachloride	ND	0.400	--	ND	2.52	--	U
110-82-7	Cyclohexane	1.00	0.400	--	3.44	1.38	--	
78-87-5	1,2-Dichloropropane	ND	0.400	--	ND	1.85	--	U
75-27-4	Bromodichloromethane	ND	0.400	--	ND	2.68	--	U
123-91-1	1,4-Dioxane	ND	0.400	--	ND	1.44	--	U
79-01-6	Trichloroethene	0.646	0.400	--	3.47	2.15	--	
540-84-1	2,2,4-Trimethylpentane	ND	0.400	--	ND	1.87	--	U
142-82-5	Heptane	1.46	0.400	--	5.98	1.64	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.00	--	ND	4.10	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.400	--	ND	2.18	--	U
108-88-3	Toluene	6.12	0.400	--	23.1	1.51	--	
591-78-6	2-Hexanone	ND	0.400	--	ND	1.64	--	U
124-48-1	Dibromochloromethane	ND	0.400	--	ND	3.41	--	U
106-93-4	1,2-Dibromoethane	ND	0.400	--	ND	3.07	--	U
127-18-4	Tetrachloroethene	136	0.400	--	922	2.71	--	
108-90-7	Chlorobenzene	ND	0.400	--	ND	1.84	--	U
100-41-4	Ethylbenzene	2.31	0.400	--	10.0	1.74	--	
179601-23-1	p/m-Xylene	9.57	0.800	--	41.6	3.47	--	
75-25-2	Bromoform	ND	0.400	--	ND	4.14	--	U
100-42-5	Styrene	ND	0.400	--	ND	1.70	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-06D
 Client ID : 181A SSV
 Sample Location : FREEPORT, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R47427
 Sample Amount : 125 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 04:00
 Date Received : 01/15/20
 Date Analyzed : 01/22/20 02:41
 Dilution Factor : 2
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.400	--	ND	2.75	--	U
95-47-6	o-Xylene	4.12	0.400	--	17.9	1.74	--	
622-96-8	4-Ethyltoluene	0.946	0.400	--	4.65	1.97	--	
108-67-8	1,3,5-Trimethylbenzene	1.33	0.400	--	6.54	1.97	--	
95-63-6	1,2,4-Trimethylbenzene	4.91	0.400	--	24.1	1.97	--	
100-44-7	Benzyl chloride	ND	0.400	--	ND	2.07	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.400	--	ND	2.40	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.400	--	ND	2.40	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.400	--	ND	2.40	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.400	--	ND	2.97	--	U
87-68-3	Hexachlorobutadiene	ND	0.400	--	ND	4.27	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332350-4
 Client ID : WG1332350-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47411
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/21/20 14:34
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332350-4
 Client ID : WG1332350-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47411
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/21/20 14:34
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332350-4
 Client ID : WG1332350-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47411
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/21/20 14:34
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332350-5
 Client ID : 171 IADUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47420
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:09
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.450	0.200	--	2.23	0.989	--	
74-87-3	Chloromethane	0.491	0.200	--	1.01	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	278	5.00	--	524	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	19.9	1.00	--	47.3	2.38	--	
75-69-4	Trichlorofluoromethane	0.404	0.200	--	2.27	1.12	--	
67-63-0	Isopropanol	25.2	0.500	--	61.9	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	1.78	0.500	--	6.41	1.80	--	
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	0.323	0.200	--	1.14	0.705	--	
71-43-2	Benzene	0.475	0.200	--	1.52	0.639	--	

Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332350-5
 Client ID : 171 IADUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47420
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:09
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
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	0.851	0.200	--	3.21	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	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
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	0.238	0.200	--	1.17	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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332350-5
 Client ID : 171 IADUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47420
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:09
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47413.D
 Acq On : 21 Jan 2020 5:33 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-01,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:42:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

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

Internal Standards						
1) bromochloromethane	9.533	49	176853	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =	85.50%		
43) 1,4-difluorobenzene	11.800	114	566678	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =	85.28%		
67) chlorobenzene-D5	16.525	54	91751	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =	86.24%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.000	85	5937	0.429	ppbV	100
6) chloromethane	4.180	50	4064	0.516	ppbV	100
7) Freon-114	4.300		0	N.D.		
10) 1,3-butadiene	4.594		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.290	31	79595	13.282	ppbV	98
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.860	43	105342M6	6.729	ppbV	
21) trichlorofluoromethane	6.067	101	2463	0.182	ppbV	97
22) isopropyl alcohol	6.187	45	12284	0.625	ppbV	99
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	7.000	49	1792	0.162	ppbV	92
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.288		0	N.D.		
31) Freon 113	7.324	101	987	0.062	ppbV	96
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	8.850	43	13159	0.512	ppbV	96
38) Ethyl Acetate	9.658	61	290	0.074	ppbV	64
39) chloroform	9.700		0	N.D.		
40) Tetrahydrofuran	10.167	42	3929	0.216	ppbV	95
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	9.608	57	3759	0.176	ppbV #	51
50) benzene	11.360	78	9239	0.237	ppbV	98
53) cyclohexane	11.673	56	1911	0.077	ppbV	89

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47413.D
 Acq On : 21 Jan 2020 5:33 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-01,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:42:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

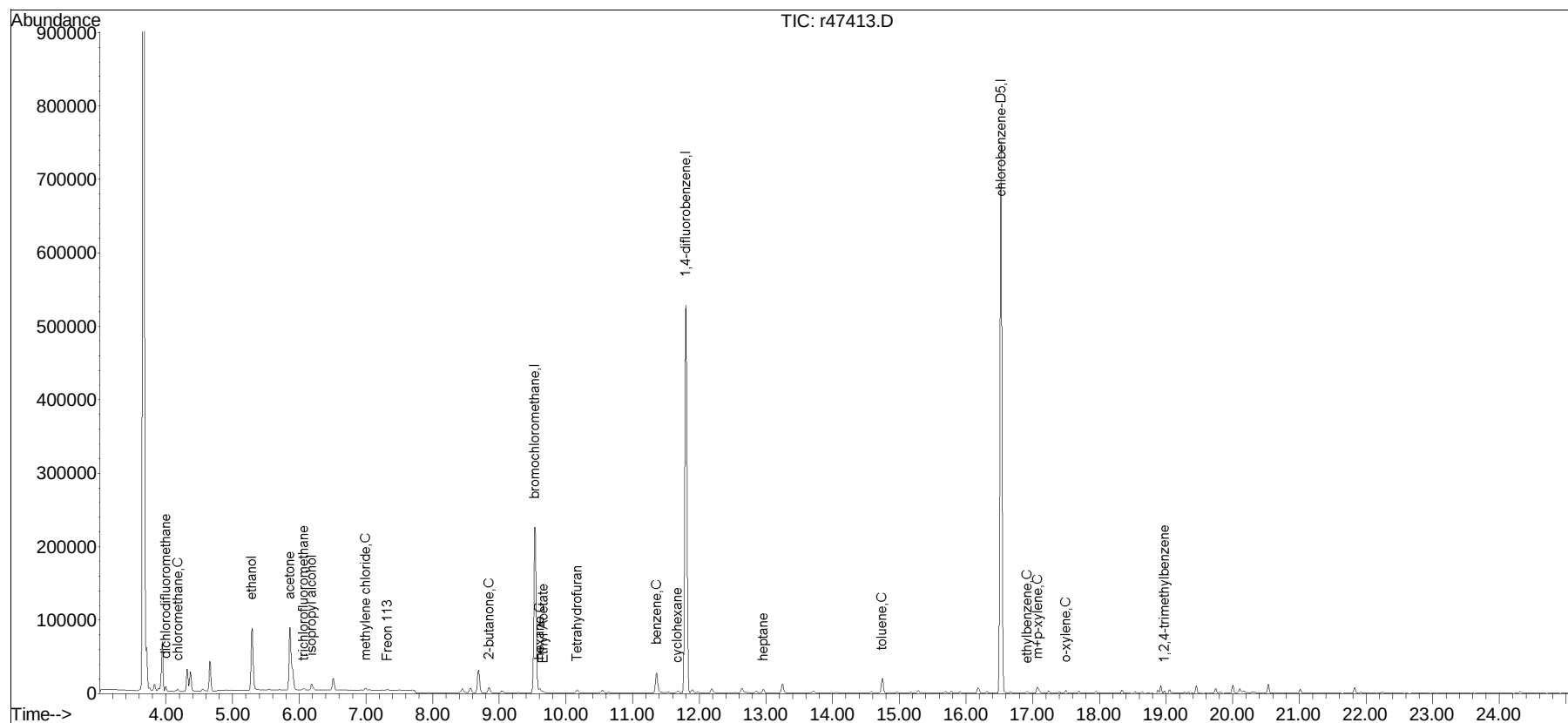
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	0.000		0	N.D.	d	
62) heptane	12.960	43	2990	0.089	ppbV	96
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	13.667		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	14.742	91	17105	0.383	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.		
81) ethylbenzene	16.917	91	3163	0.058	ppbV	99
83) m+p-xylene	17.075	91	8112	0.179	ppbV	97
84) bromoform	0.000		0	N.D.		
85) styrene	17.408		0	N.D.		
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87) o-xylene	17.500	91	3098	0.070	ppbV	94
96) 4-ethyl toluene	0.000		0	N.D.	d	
97) 1,3,5-trimethylbenzene	18.633		0	N.D.		
99) 1,2,4-trimethylbenzene	18.975	105	2873	0.059	ppbV #	54
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	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	0.000		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

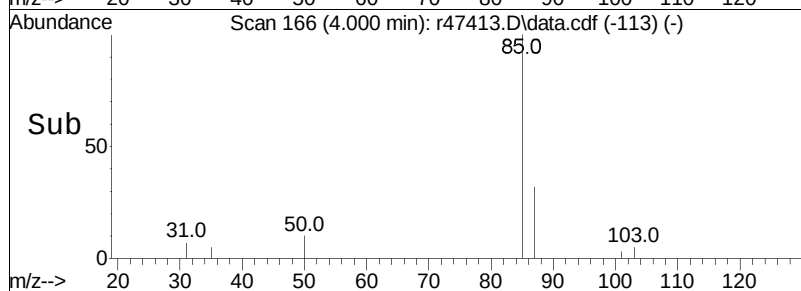
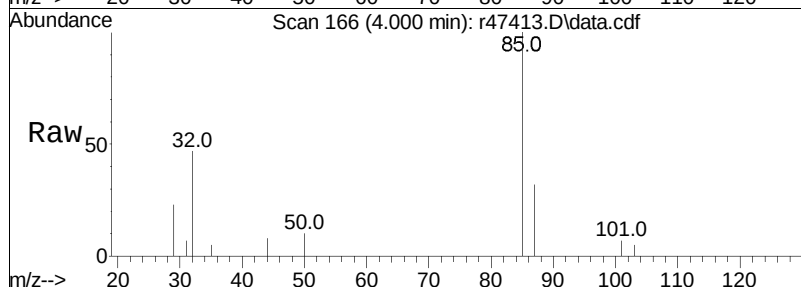
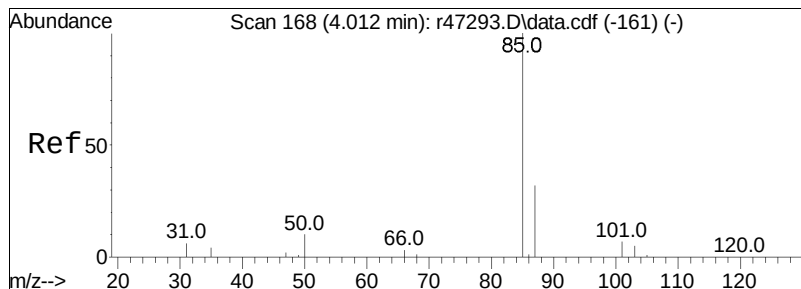
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airpiano4\2020\01\200121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File : r47413.D
Acq On : 21 Jan 2020 5:33 PM
Operator : AIRPIANO4:EW
Sample : L2002033-01,3,250,250
Misc : WG1332350,ICAL16438
ALS Vial : 0 Sample Multiplier: 1

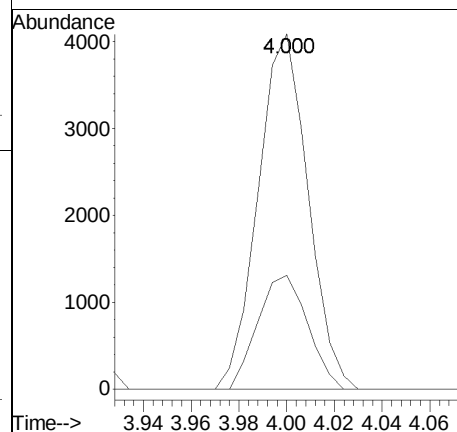
Quant Time: Jan 22 08:42:14 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

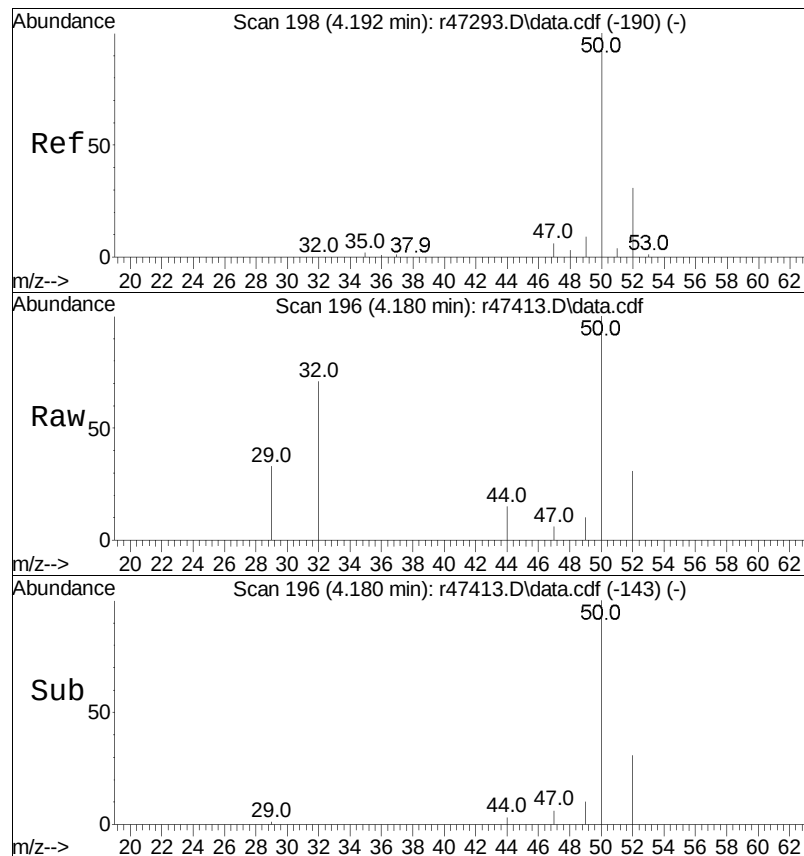




#5
dichlorodifluoromethane
Concen: 0.43 ppbV
RT: 4.000 min Scan# 166
Delta R.T. -0.012 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

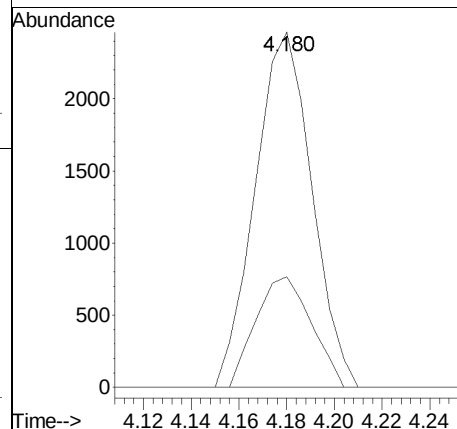
Tgt Ion: 85 Resp: 5937
Ion Ratio Lower Upper
85 100
87 32.1 25.8 38.6

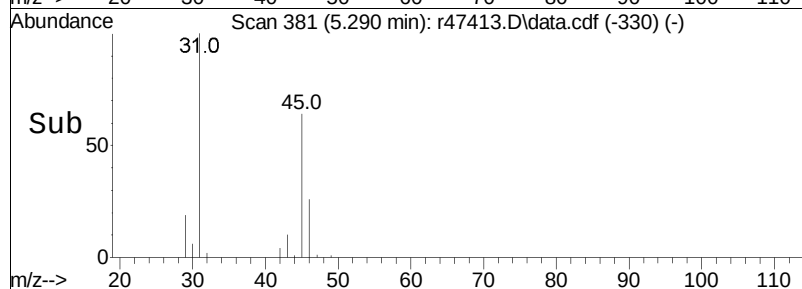
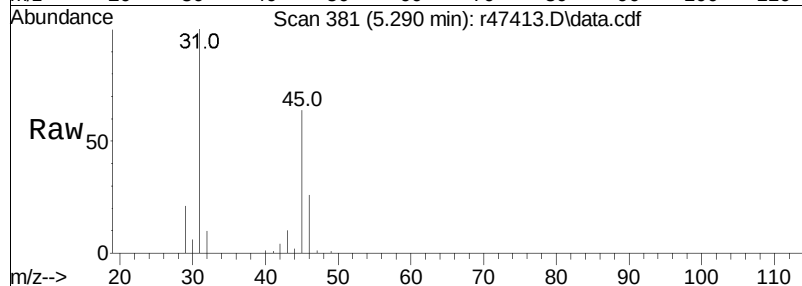
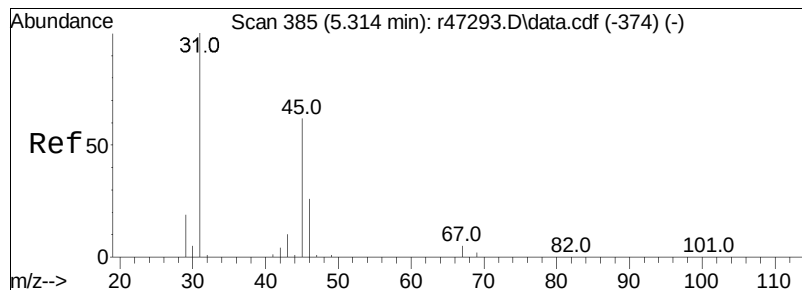




#6
 chloromethane
 Concen: 0.52 ppbV
 RT: 4.180 min Scan# 196
 Delta R.T. -0.012 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

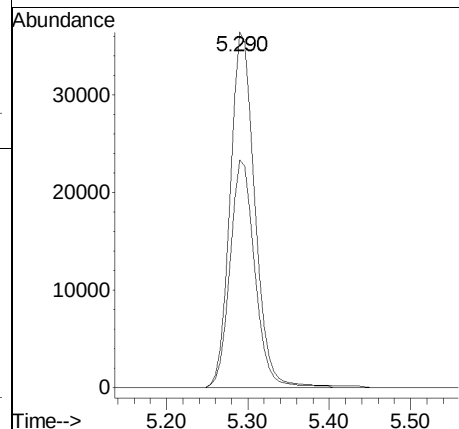
Tgt	Ion: 50	Resp:	4064
Ion	Ratio	Lower	Upper
50	100		
52	31.2	24.9	37.3

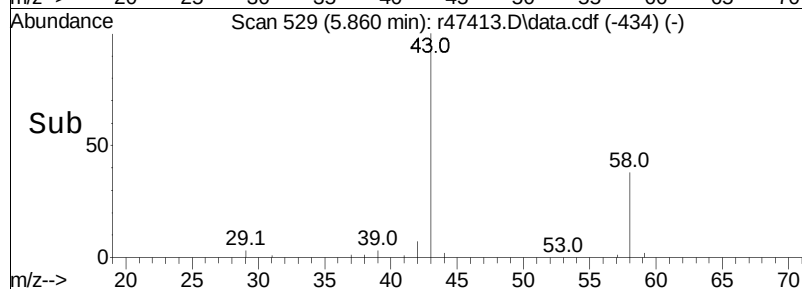
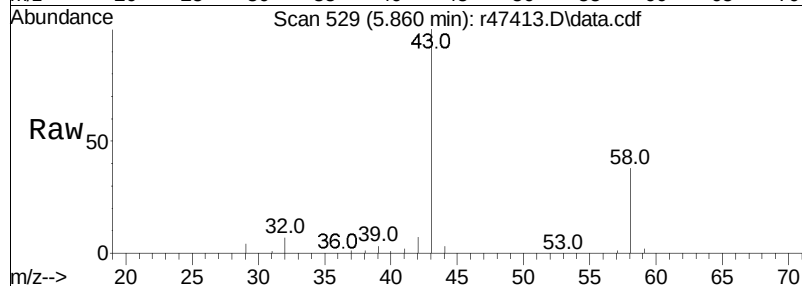
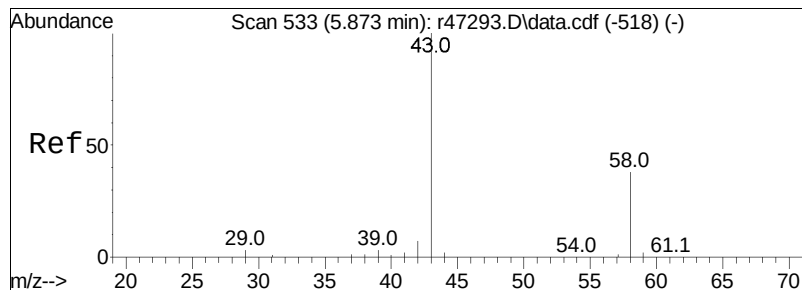




#15
ethanol
Concen: 13.28 ppbV
RT: 5.290 min Scan# 381
Delta R.T. -0.024 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

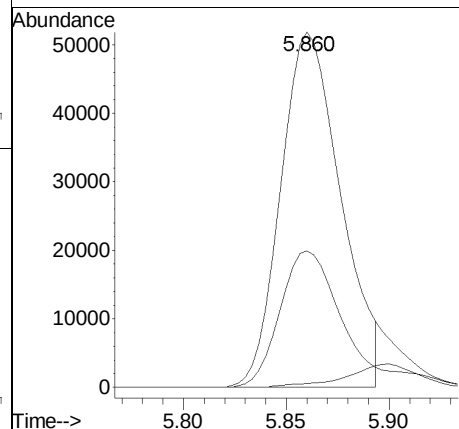
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	64.0		49.7	74.5

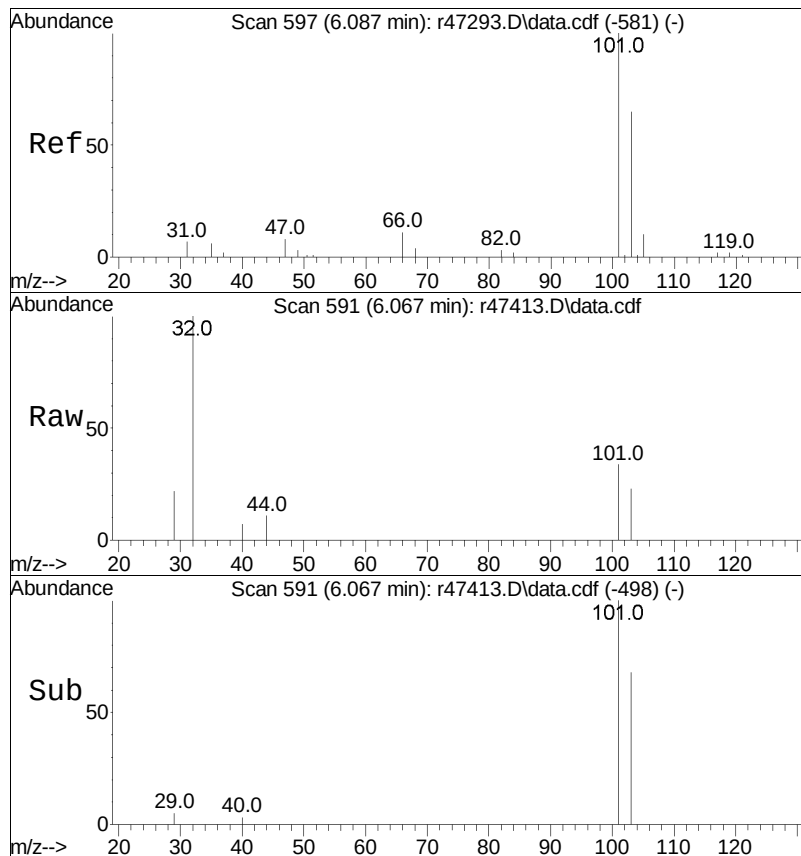




#19
acetone
Concen: 6.73 ppbV m
RT: 5.860 min Scan# 529
Delta R.T. -0.013 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

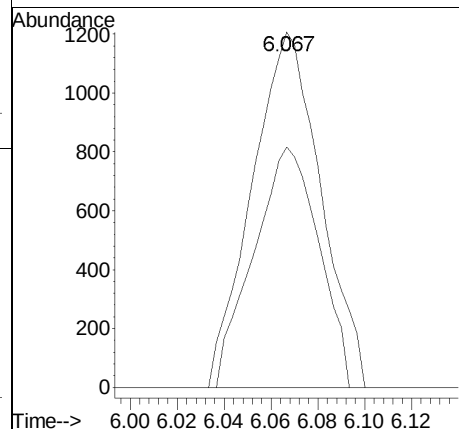
Tgt Ion:	43	Resp:	105342
Ion Ratio	100	Lower	Upper
43	100		
58	38.4	30.2	45.2
57	1.1	0.7	1.1#

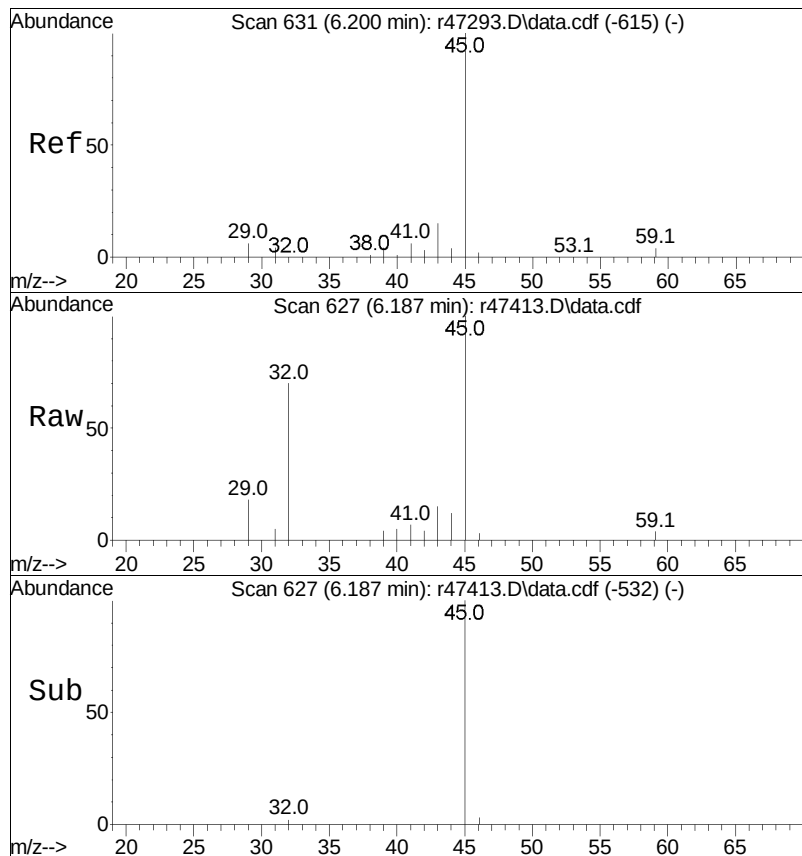




#21
trichlorofluoromethane
Concen: 0.18 ppbV
RT: 6.067 min Scan# 591
Delta R.T. -0.020 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

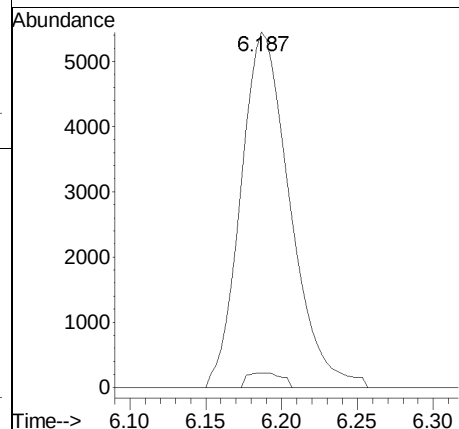
Tgt Ion	Ratio	Lower	Upper
101	100		
103	67.7	52.2	78.4

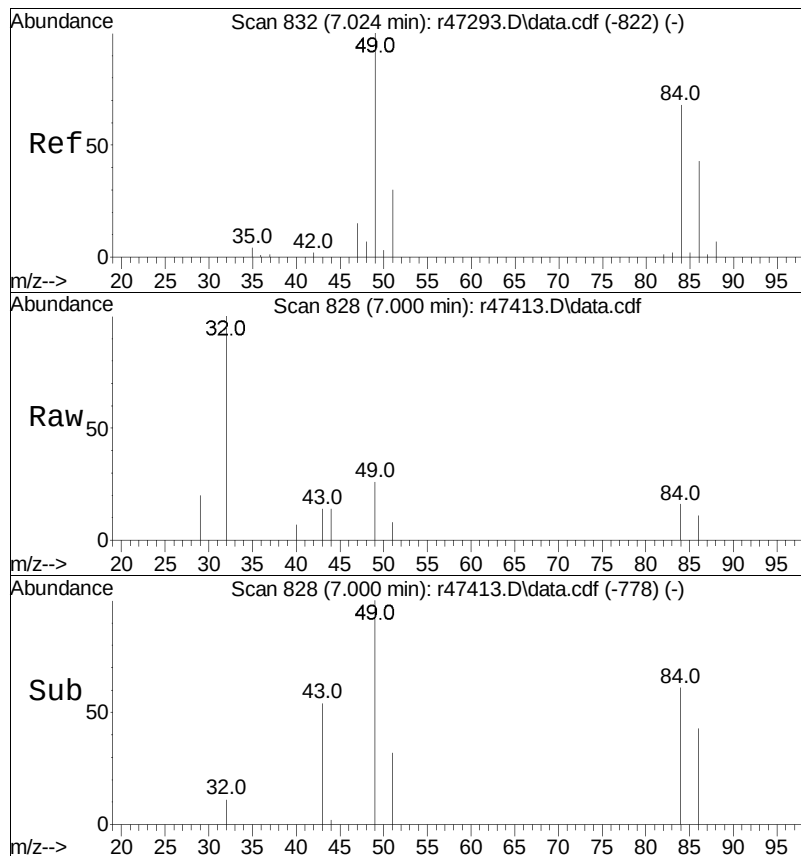




#22
 isopropyl alcohol
 Concen: 0.62 ppbV
 RT: 6.187 min Scan# 627
 Delta R.T. -0.013 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

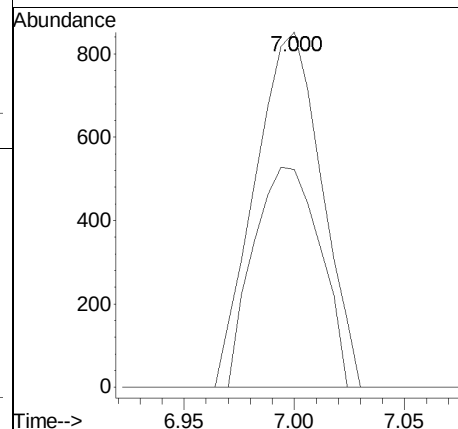
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.1	3.0	4.6

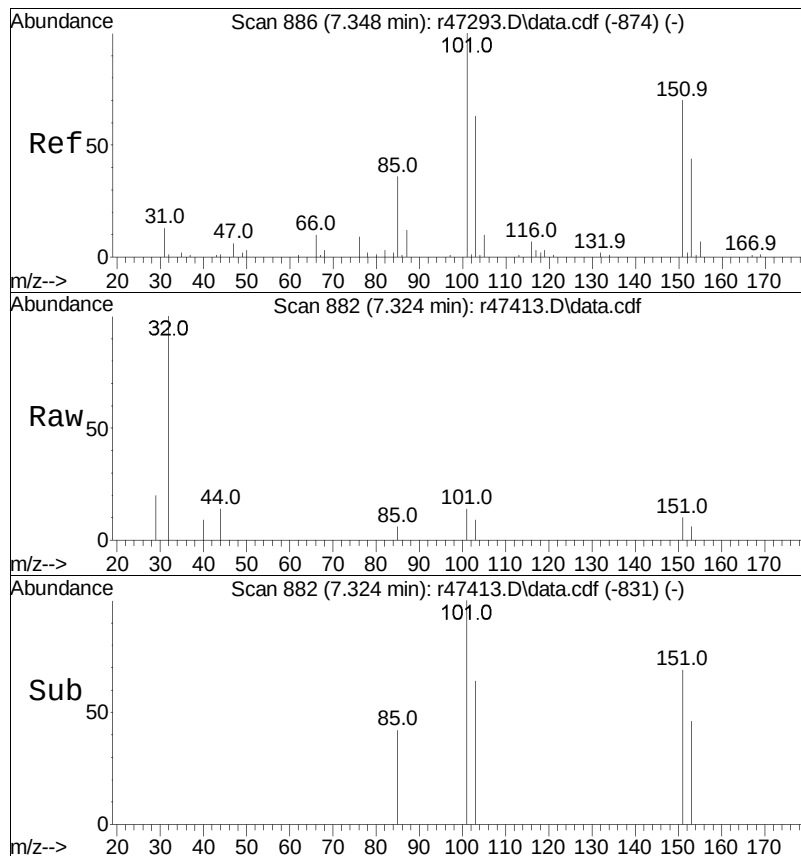




#28
 methylene chloride
 Concen: 0.16 ppbV
 RT: 7.000 min Scan# 828
 Delta R.T. -0.024 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

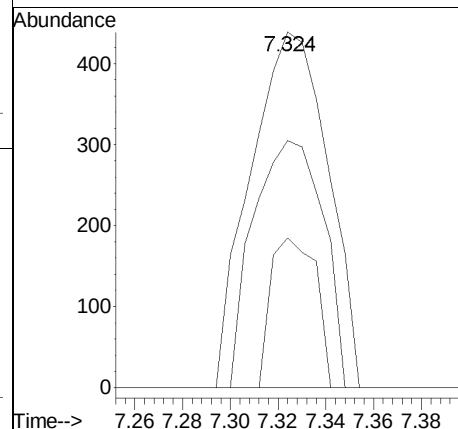
Tgt Ion:	49	84	Ratio	100	61.3	Resp:	1792	Lower	Upper
								54.1	81.1

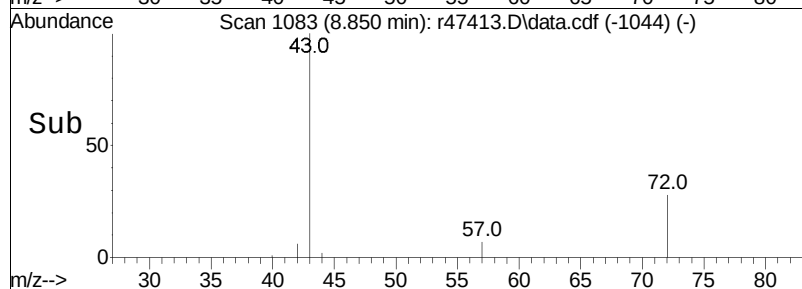
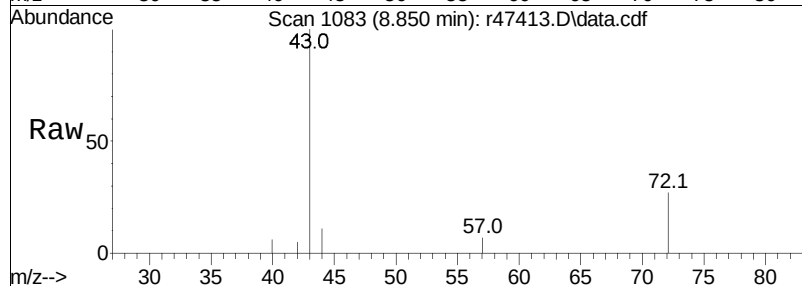
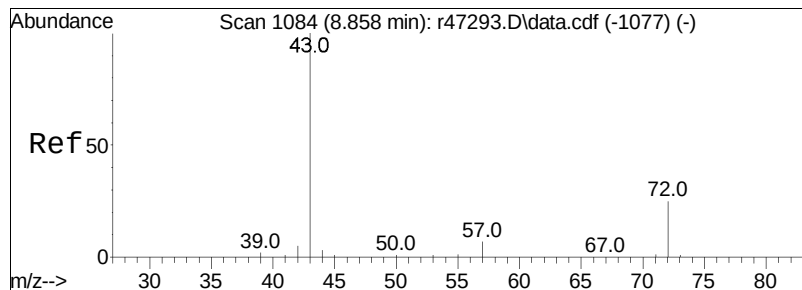




#31
 Freon 113
 Concen: 0.06 ppbV
 RT: 7.324 min Scan# 882
 Delta R.T. -0.024 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

Tgt	Ion:101	Resp:	987
Ion	Ratio	Lower	Upper
101	100		
85	42.1	28.8	43.2
151	69.5	56.3	84.5





#36

2-butanone

Concen: 0.51 ppbV

RT: 8.850 min Scan# 1083

Delta R.T. -0.008 min

Lab File: r47413.D

Acq: 21 Jan 2020 5:33 PM

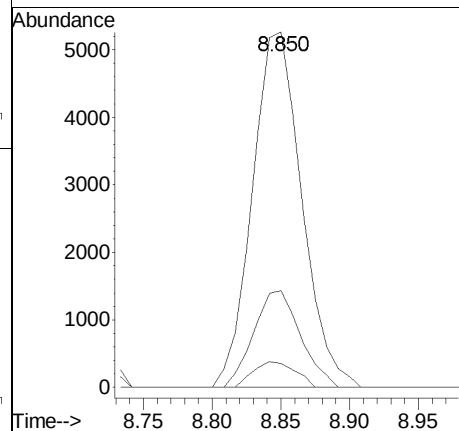
Tgt Ion: 43 Resp: 13159

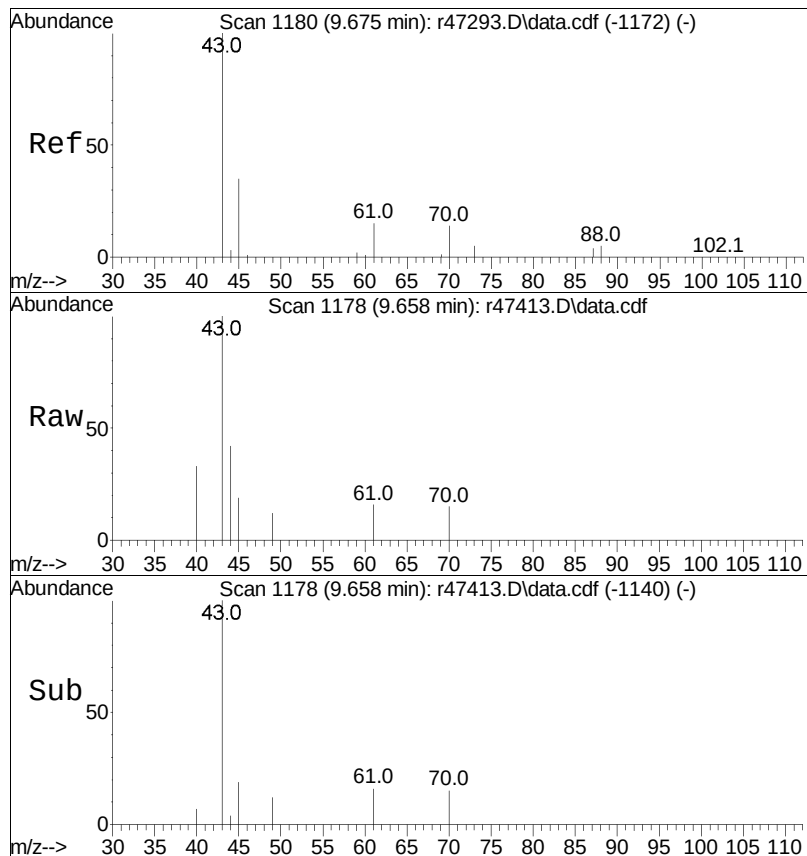
Ion Ratio Lower Upper

43 100

72 27.2 19.8 29.6

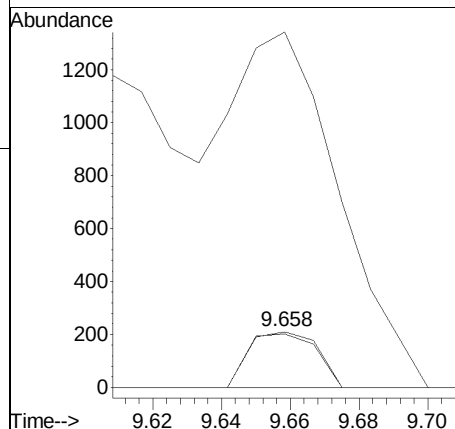
57 6.7 5.5 8.3

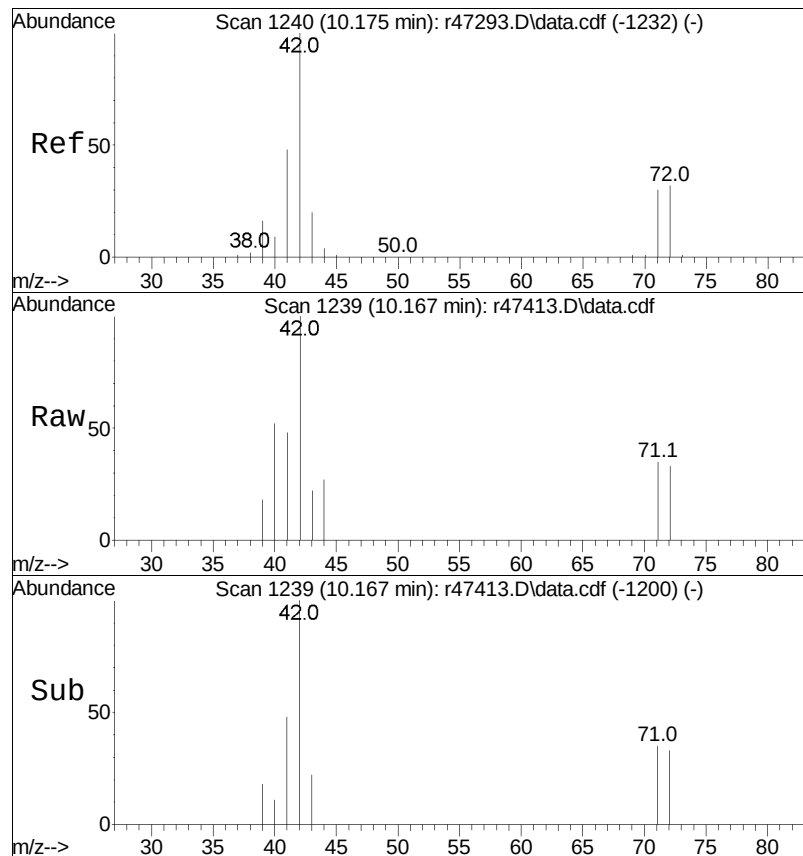




#38
 Ethyl Acetate
 Concen: 0.07 ppbV
 RT: 9.658 min Scan# 1178
 Delta R.T. -0.017 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

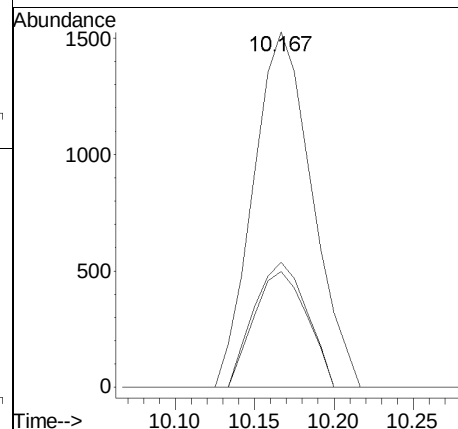
Tgt Ion:	61	Resp:	290
Ion Ratio	Lower	Upper	
61	100		
70	96.2	77.3	115.9
43	639.0	633.3	949.9

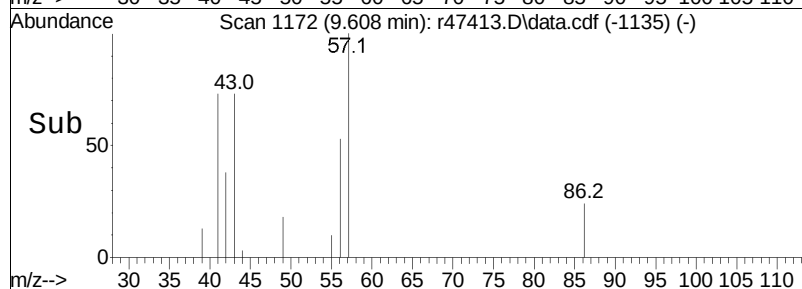
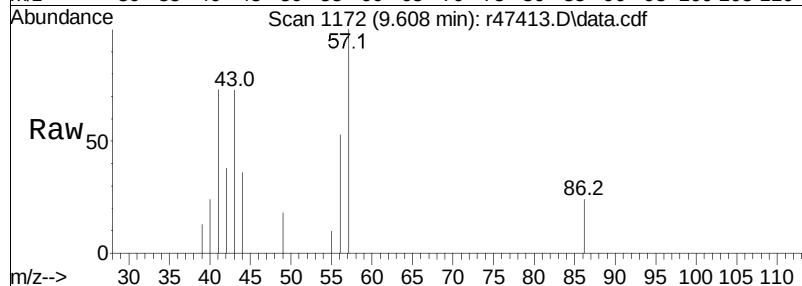
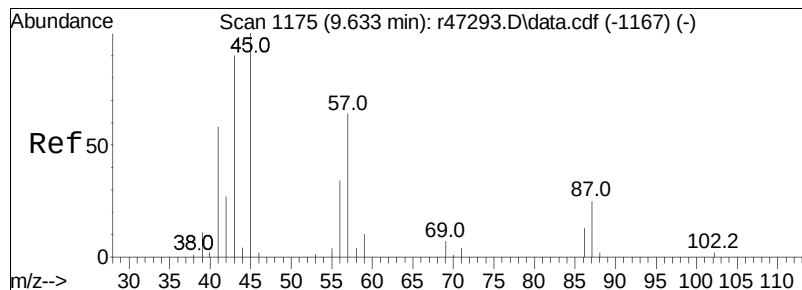




#40
 Tetrahydrofuran
 Concen: 0.22 ppbV
 RT: 10.167 min Scan# 1239
 Delta R.T. -0.008 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

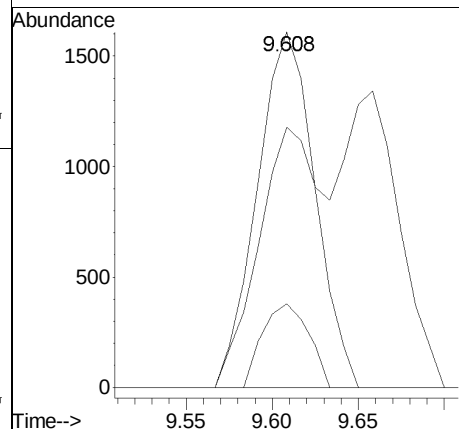
Tgt Ion	Ratio	Lower	Upper
42	100		
71	35.2	24.2	36.2
72	32.6	25.6	38.4

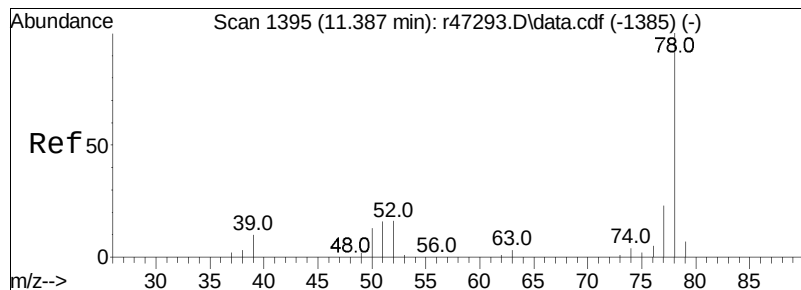




#44
hexane
Concen: 0.18 ppbV
RT: 9.608 min Scan# 1172
Delta R.T. -0.025 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

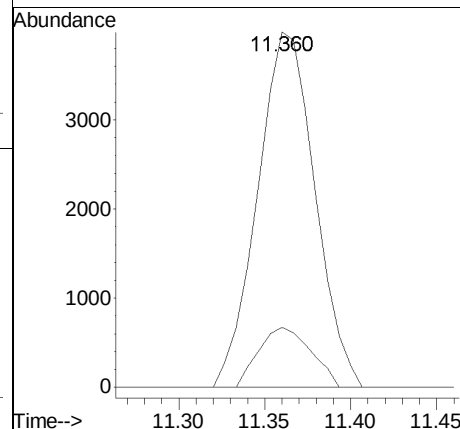
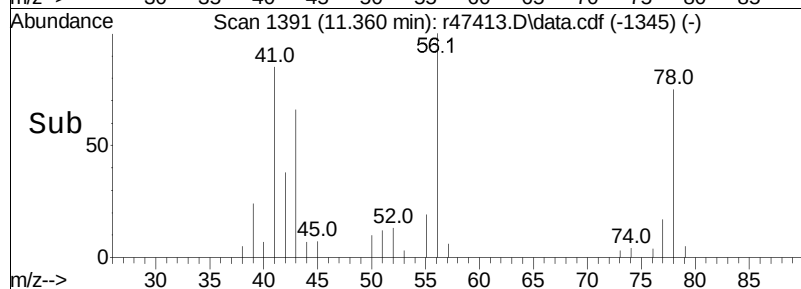
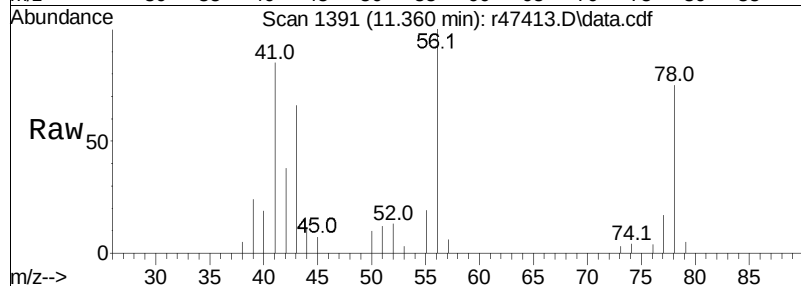
Tgt Ion:	57	Resp:	3759
Ion Ratio	Lower	Upper	
57	100		
43	73.2	111.8	167.8#
86	23.6	15.8	23.6

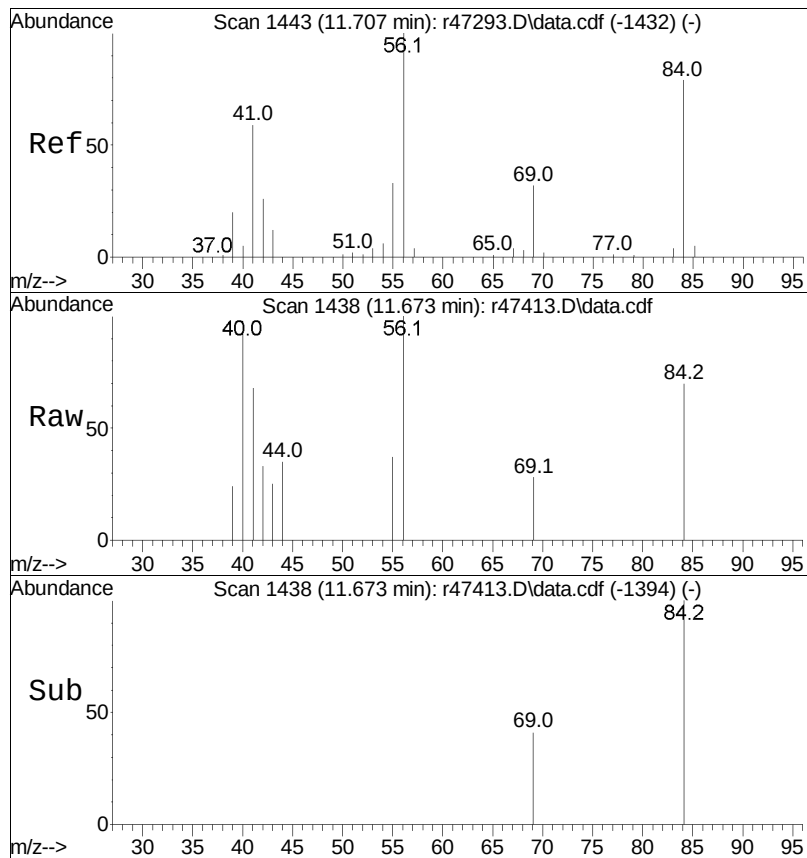




#50
benzene
Concen: 0.24 ppbV
RT: 11.360 min Scan# 1391
Delta R.T. -0.027 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

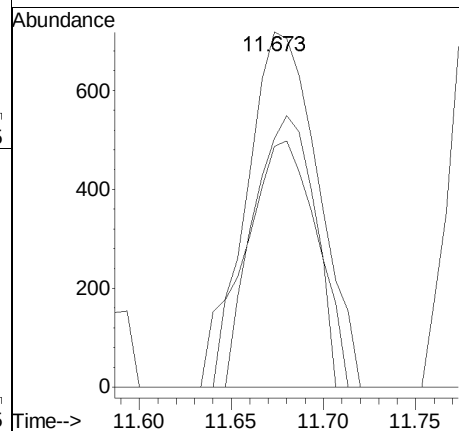
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.9	13.0	19.4

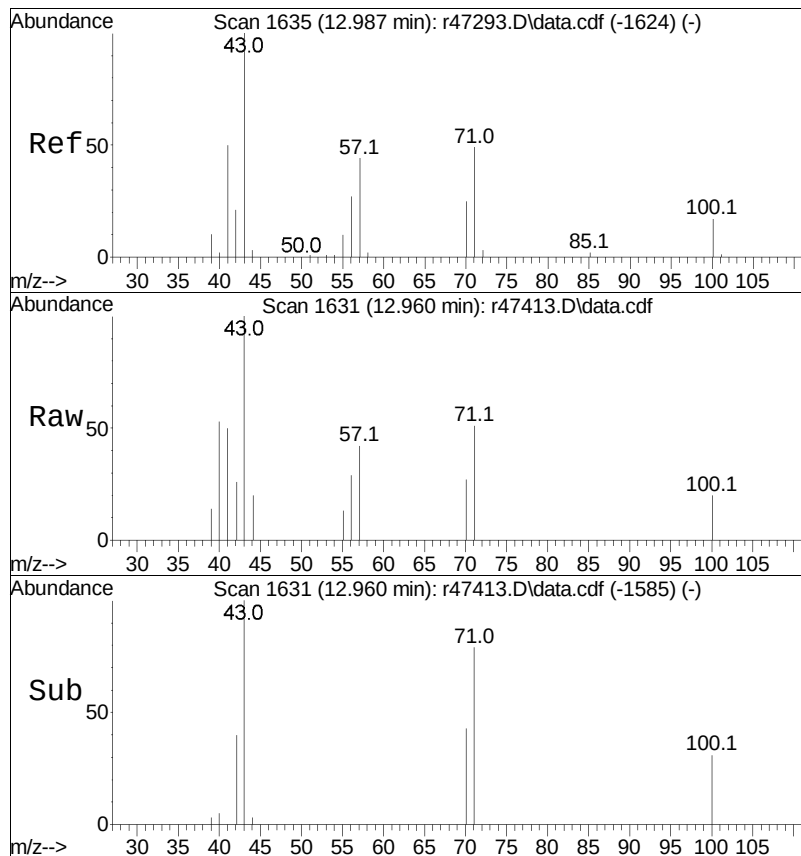




#53
cyclohexane
Concen: 0.08 ppbV
RT: 11.673 min Scan# 1438
Delta R.T. -0.033 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

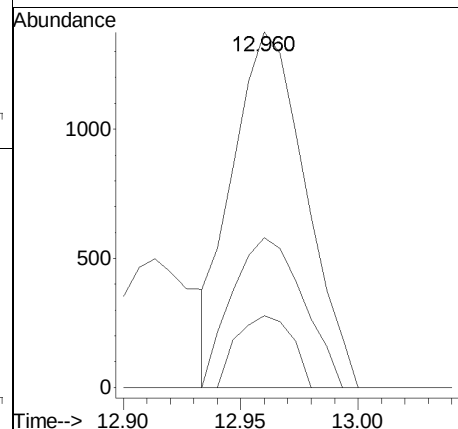
Tgt	Ion	Resp	Lower	Upper
56	100	1911		
84	70.1	63.0	94.6	
41	67.8	46.8	70.2	

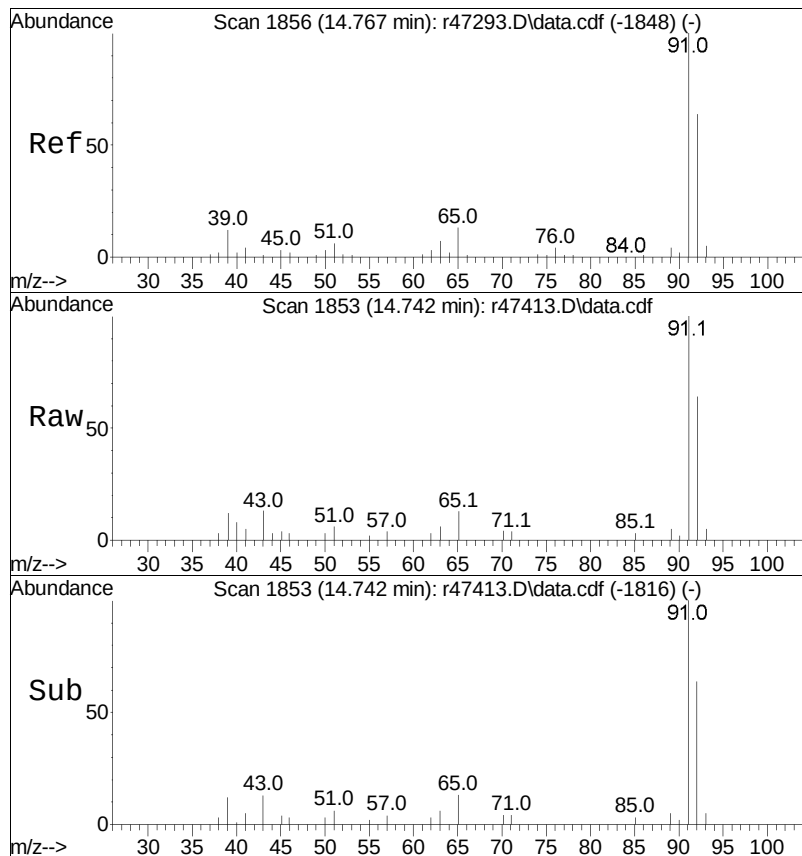




#62
 heptane
 Concen: 0.09 ppbV
 RT: 12.960 min Scan# 1631
 Delta R.T. -0.027 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

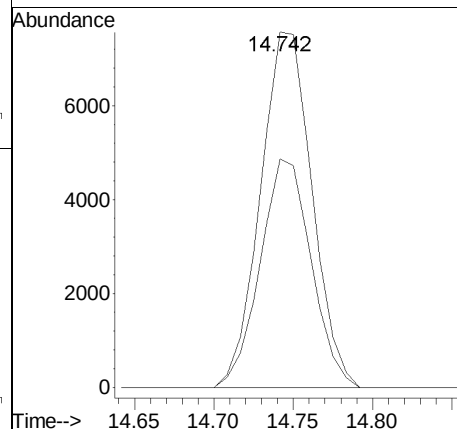
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	42.2	35.2	52.8	
100	20.2	13.7	20.5	

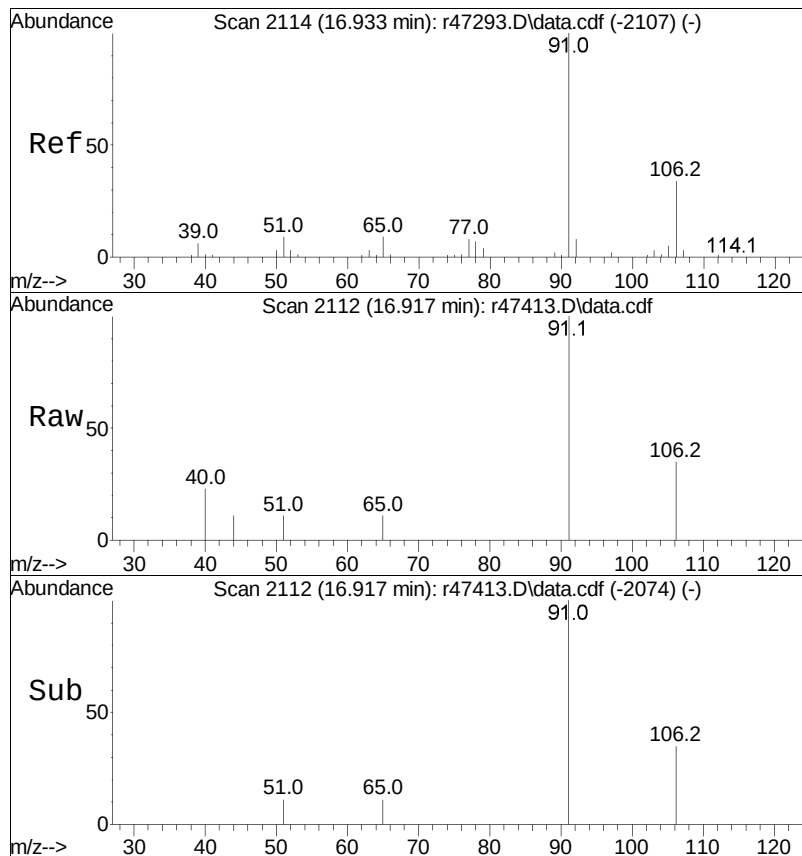




#68
toluene
Concen: 0.38 ppbV
RT: 14.742 min Scan# 1853
Delta R.T. -0.025 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

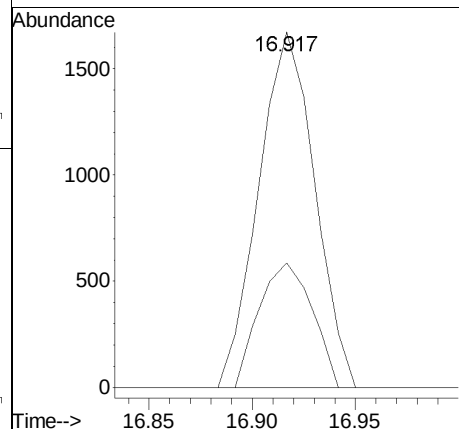
Tgt Ion:	91	Resp:	17105
Ion Ratio	Lower	Upper	
91	100		
92	64.3	51.1	76.7

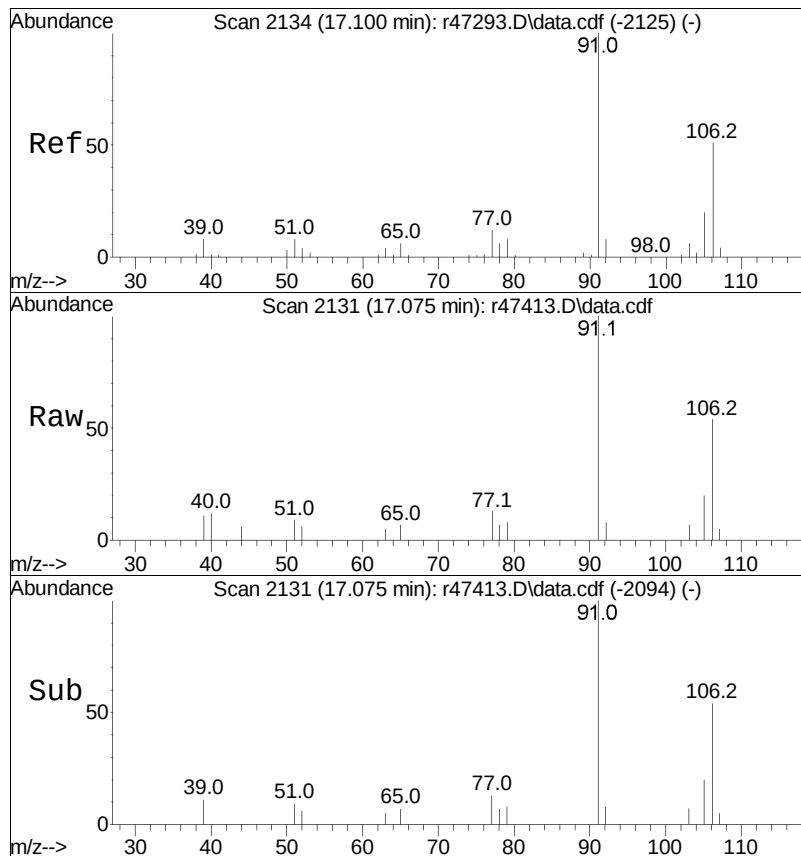




#81
ethylbenzene
Concen: 0.06 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47413.D
Acq: 21 Jan 2020 5:33 PM

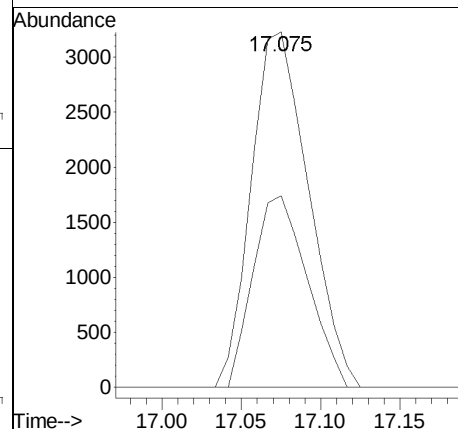
Tgt	Ion	Resp	Lower	Upper
91	100	3163		
106	35.1	27.6	41.4	

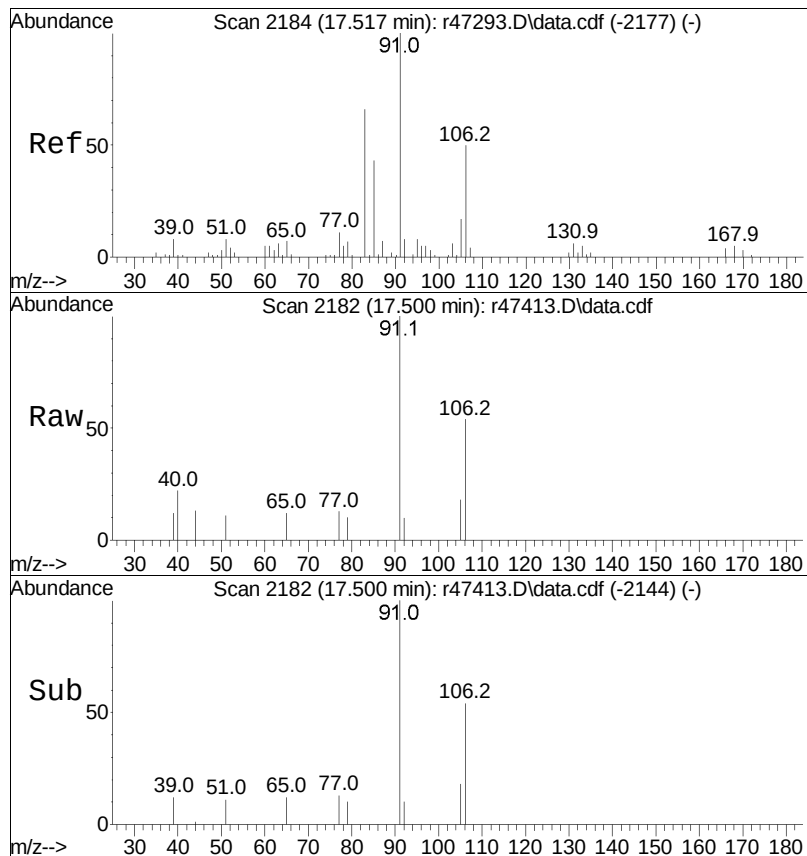




#83
 m+p-xylene
 Concen: 0.18 ppbV
 RT: 17.075 min Scan# 2131
 Delta R.T. -0.025 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

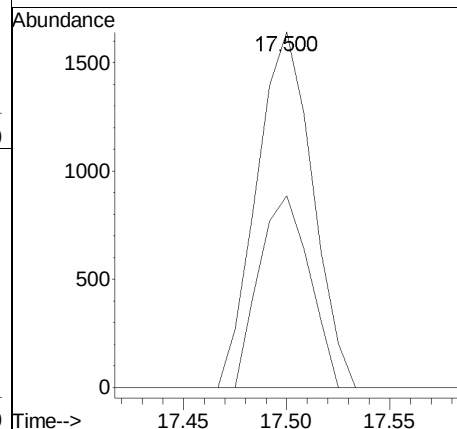
Tgt	Ion	Resp	Lower	Upper
91	100	8112		
106	53.9	41.2	61.8	

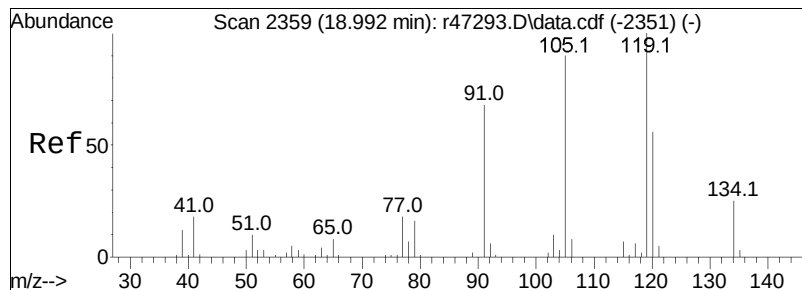




#87
 o-xylene
 Concen: 0.07 ppbV
 RT: 17.500 min Scan# 2182
 Delta R.T. -0.017 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

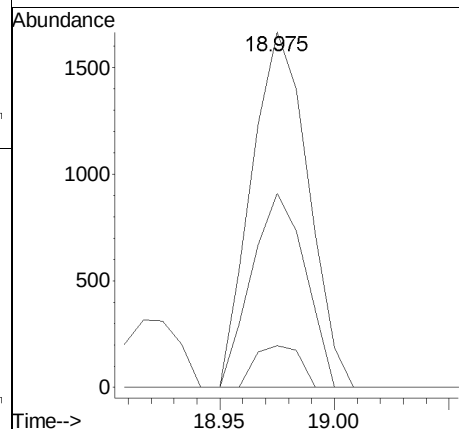
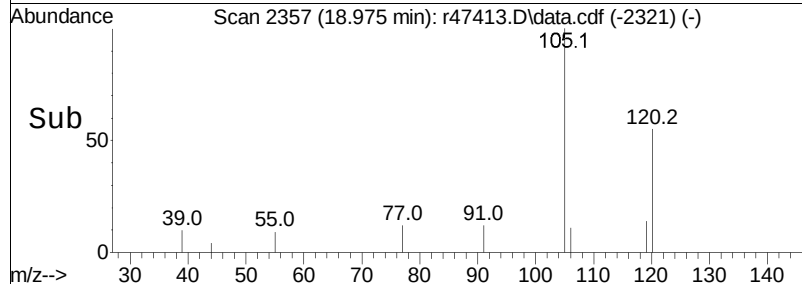
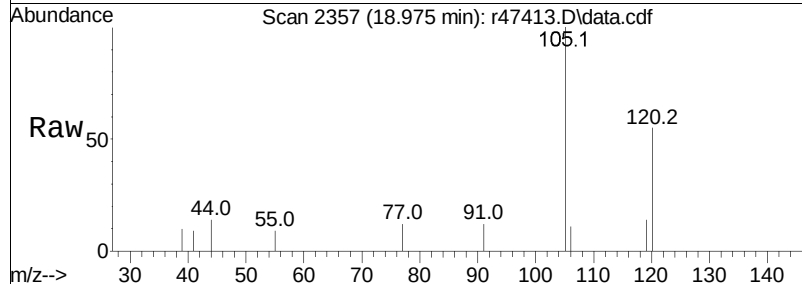
Tgt	Ion	Resp	Lower	Upper
91	100	3098		
106	54.0	40.1	60.1	





#99
 1,2,4-trimethylbenzene
 Concen: 0.06 ppbV
 RT: 18.975 min Scan# 2357
 Delta R.T. -0.017 min
 Lab File: r47413.D
 Acq: 21 Jan 2020 5:33 PM

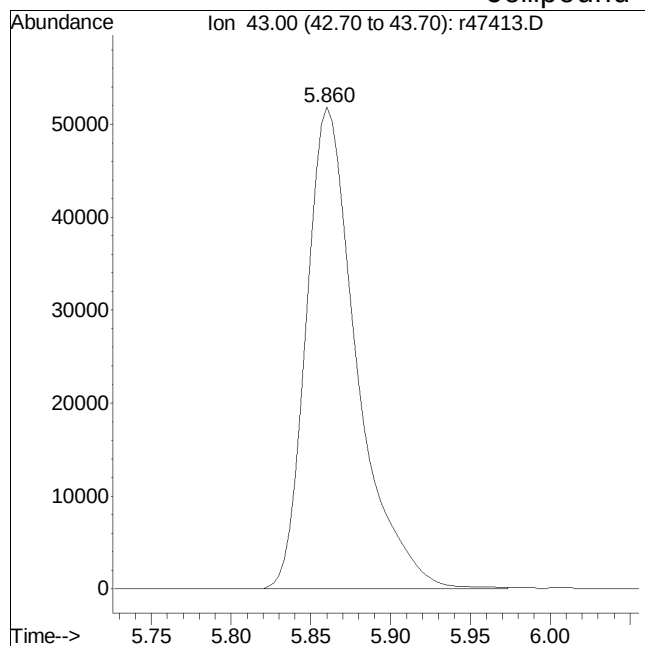
Tgt Ion	Ratio	Lower	Upper
105	100		
120	54.6	50.2	75.4
91	11.8	61.0	91.6#



Manual Integration Report

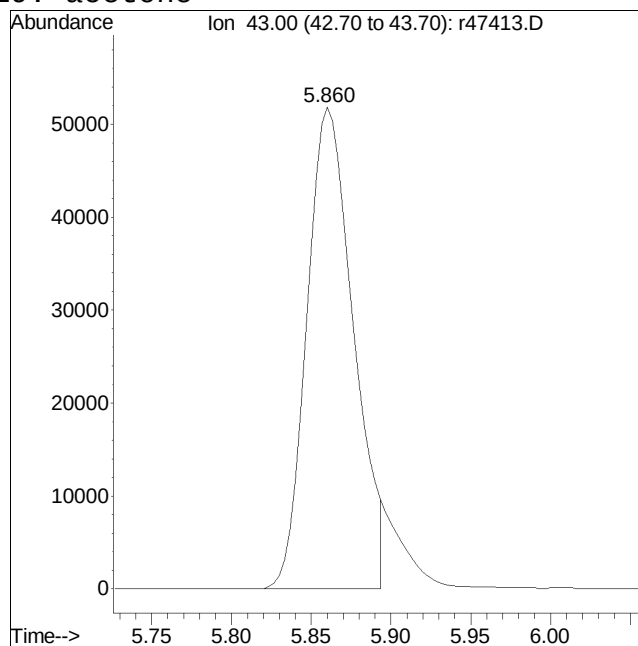
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47413.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:5: 3 Instrument :
Sample : L2002033-01,3,250,250 Quant Date : 1/22/2020 5:32 am

Compound #19: acetone



Original Peak Response = 114237

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



Manual Peak Response = 105342 M6

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47419.D
 Acq On : 21 Jan 2020 9:30 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-02,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:46:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.533	49	192372	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =		93.00%	
43) 1,4-difluorobenzene	11.800	114	539368	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =		81.17%	
67) chlorobenzene-D5	16.525	54	104638	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =		98.35%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.994	85	7134	0.474	ppbV	99
6) chloromethane	4.174	50	4405	0.514	ppbV	96
7) Freon-114	0.000		0	N.D.	d	
10) 1,3-butadiene	4.594	54	521	0.060	ppbV	86
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.296	31	2163384	331.892	ppbV	95
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.853	43	353481M6	20.758	ppbV	
21) trichlorofluoromethane	6.063	101	6257	0.426	ppbV	96
22) isopropyl alcohol	6.180	45	573471	26.803	ppbV	100
27) tertiary butyl alcohol	6.922	59	1700	0.088	ppbV #	48
28) methylene chloride	6.994	49	3933	0.327	ppbV	96
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.288		0	N.D.		
31) Freon 113	7.324	101	1068	0.061	ppbV #	91
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	8.842	43	13231	0.473	ppbV	96
38) Ethyl Acetate	9.650	61	8422	1.967	ppbV	83
39) chloroform	9.700	83	1407	0.082	ppbV #	86
40) Tetrahydrofuran	10.167	42	1890	0.096	ppbV	92
42) 1,2-dichloroethane	10.542	62	1299	0.101	ppbV #	88
44) hexane	9.608	57	5853	0.288	ppbV #	62
50) benzene	11.360	78	17381	0.469	ppbV	99
53) cyclohexane	11.680	56	2157	0.092	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47419.D
 Acq On : 21 Jan 2020 9:30 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-02,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:46:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

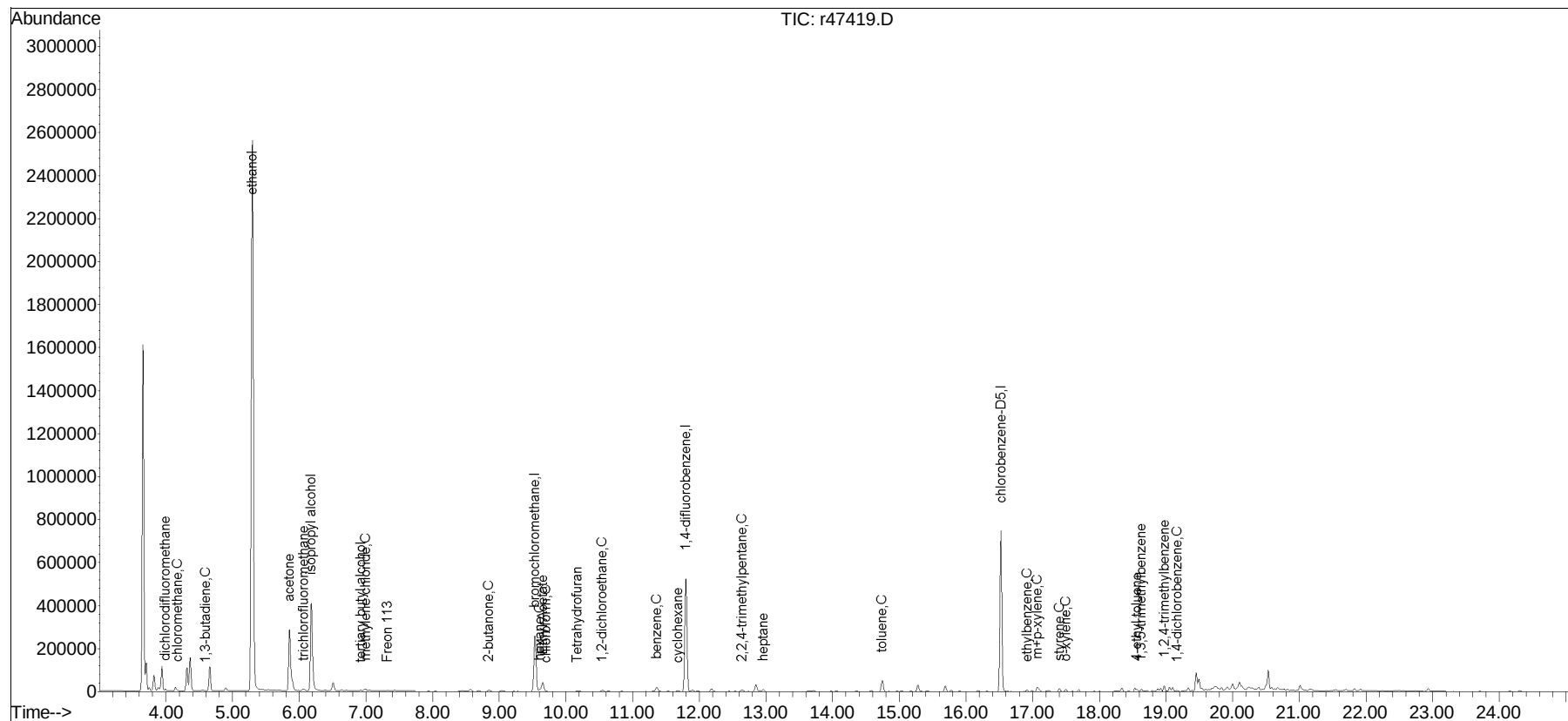
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	12.640	57	8852	0.121	ppbV	93
62) heptane	12.960	43	5691	0.178	ppbV	98
63) cis-1,3-dichloropropene	0.000		0	N.D.		
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	14.742	91	43448	0.853	ppbV	97
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	16.917	91	7054	0.114	ppbV	99
83) m+p-xylene	17.067	91	17409	0.336	ppbV	99
84) bromoform	0.000		0	N.D.		
85) styrene	17.400	104	5711	0.143	ppbV	98
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87) o-xylene	17.500	91	7445	0.146	ppbV	98
96) 4-ethyl toluene	18.567	105	5340M6	0.073	ppbV	
97) 1,3,5-trimethylbenzene	18.625	105	3960	0.067	ppbV #	94
99) 1,2,4-trimethylbenzene	18.975	105	13620	0.244	ppbV #	50
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	146	1967	0.058	ppbV #	88
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	0.000		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

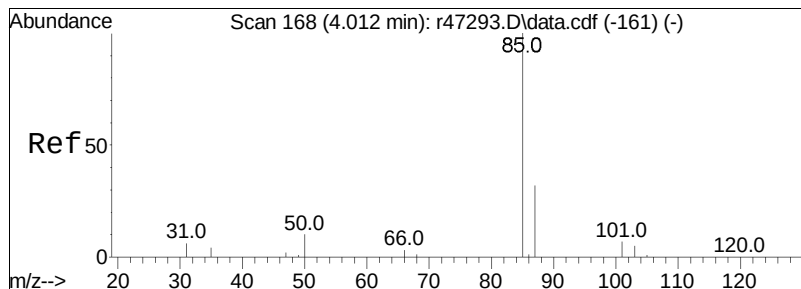
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airpiano4\2020\01\200121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File : r47419.D
Acq On : 21 Jan 2020 9:30 PM
Operator : AIRPIANO4:EW
Sample : L2002033-02,3,250,250
Misc : WG1332350,ICAL16438
ALS Vial : 0 Sample Multiplier: 1

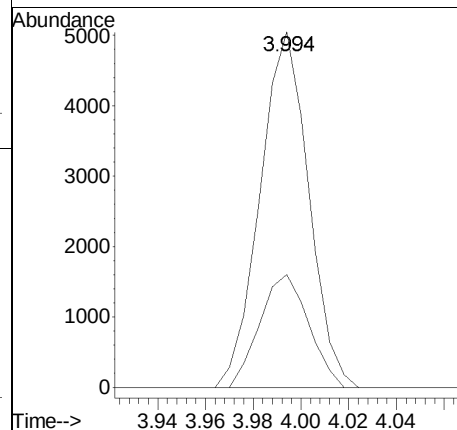
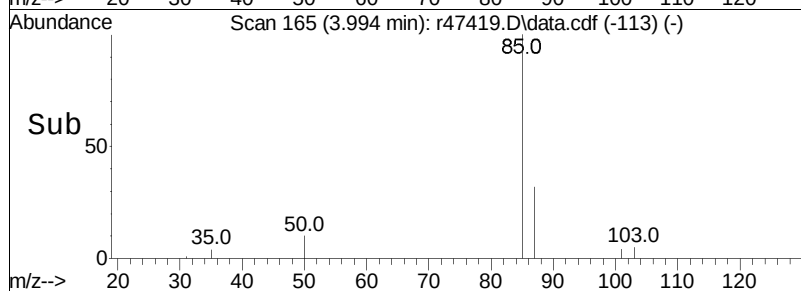
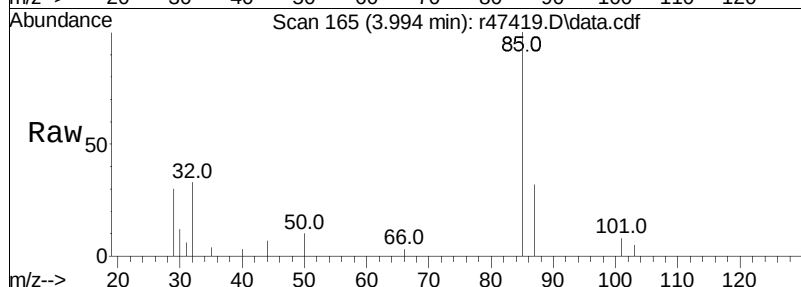
Quant Time: Jan 22 08:46:37 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

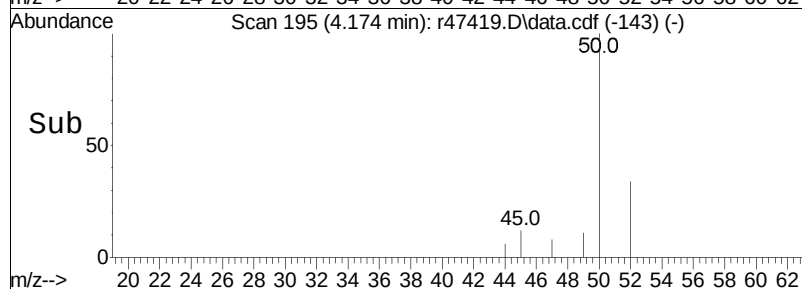
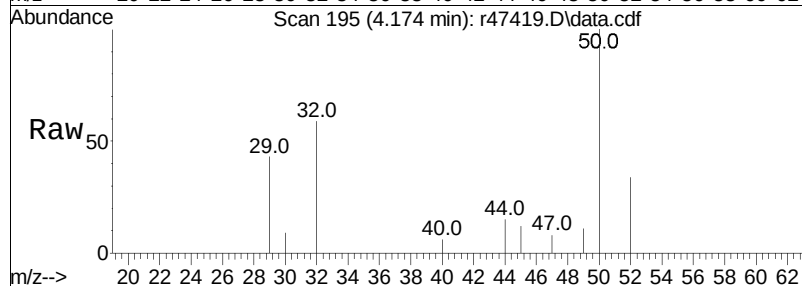
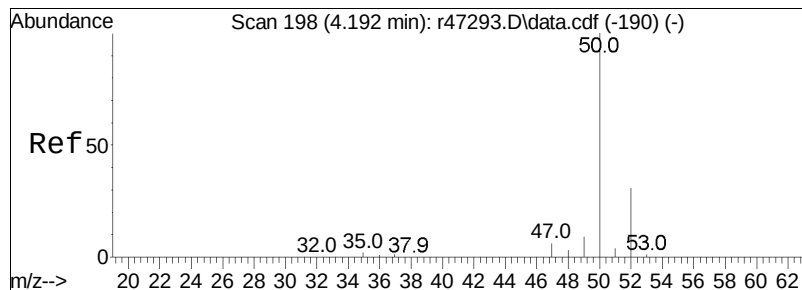




#5
dichlorodifluoromethane
Concen: 0.47 ppbV
RT: 3.994 min Scan# 165
Delta R.T. -0.018 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

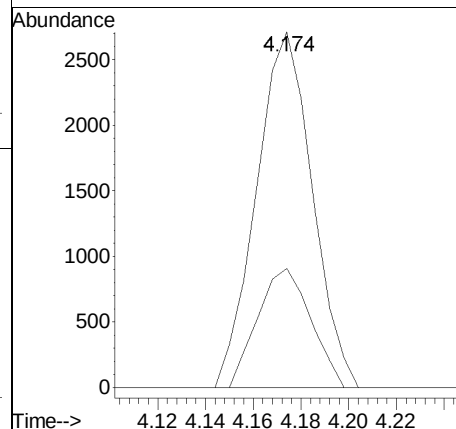
Tgt Ion: 85 Resp: 7134
Ion Ratio Lower Upper
85 100
87 31.8 25.8 38.6

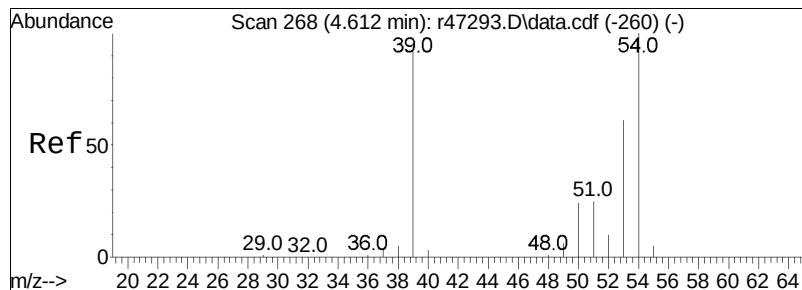




#6
 chloromethane
 Concen: 0.51 ppbV
 RT: 4.174 min Scan# 195
 Delta R.T. -0.018 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

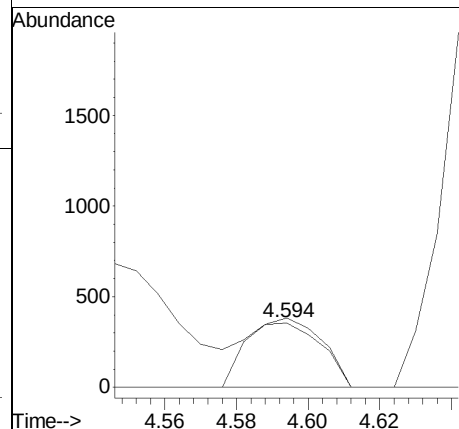
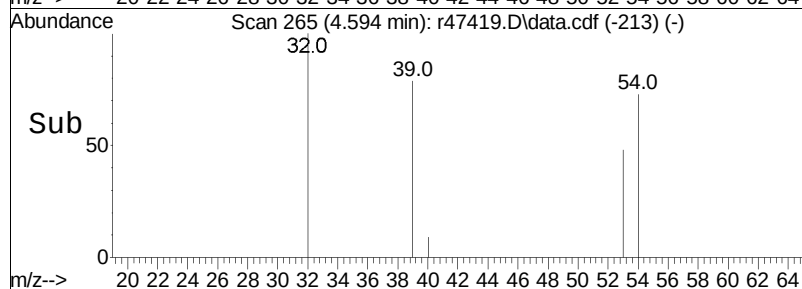
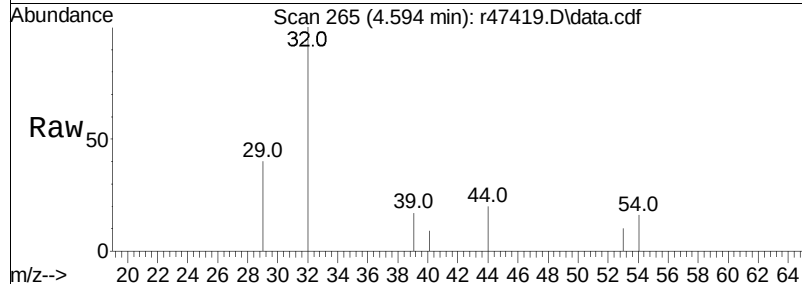
Tgt Ion	Ratio	Lower	Upper
50	100		
52	33.5	24.9	37.3

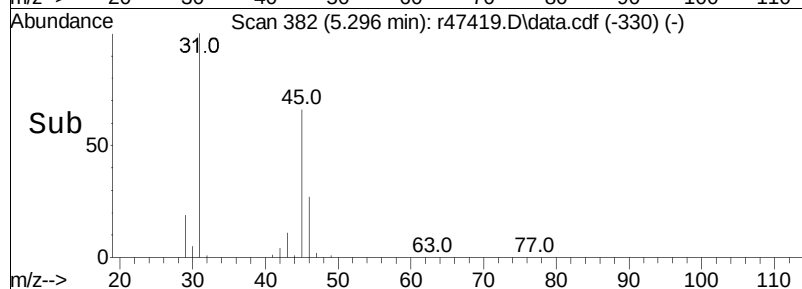
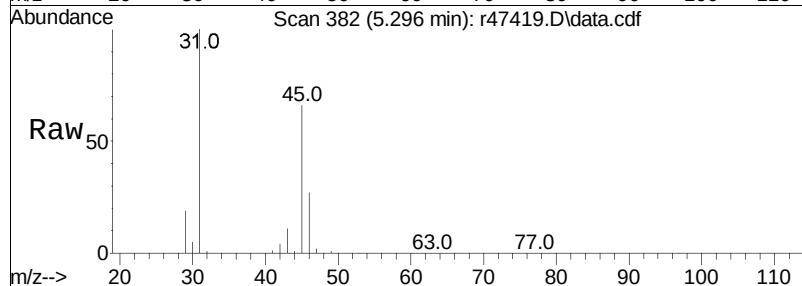
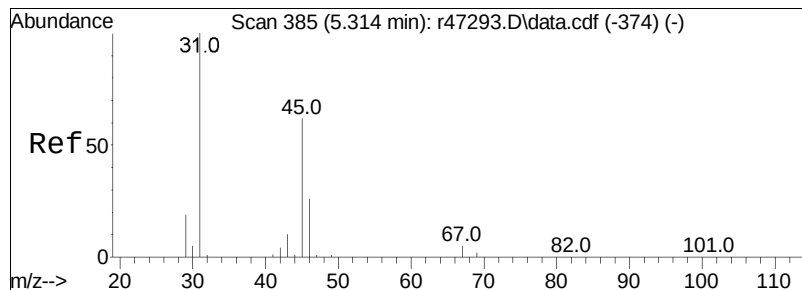




#10
 1,3-butadiene
 Concen: 0.06 ppbV
 RT: 4.594 min Scan# 265
 Delta R.T. -0.018 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

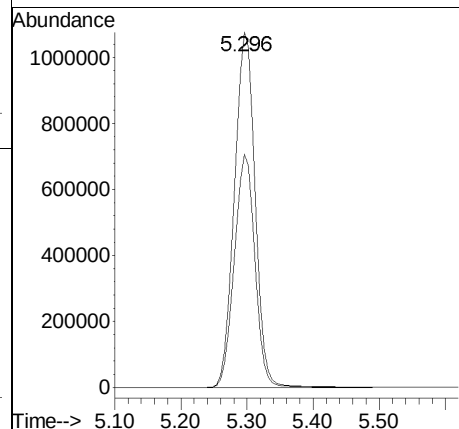
Tgt Ion	Ratio	Lower	Upper
54	100		
39	107.9	75.5	113.3

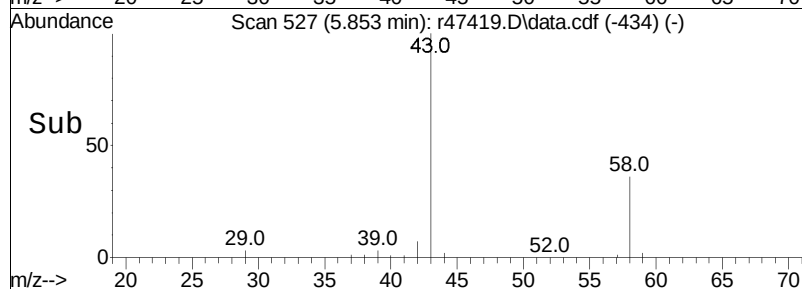
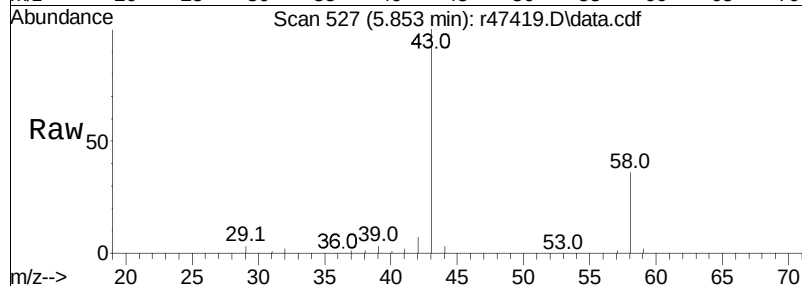
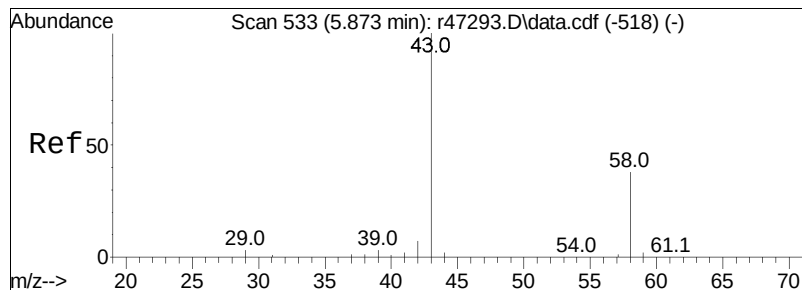




#15
ethanol
Concen: 331.89 ppbV
RT: 5.296 min Scan# 382
Delta R.T. -0.018 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

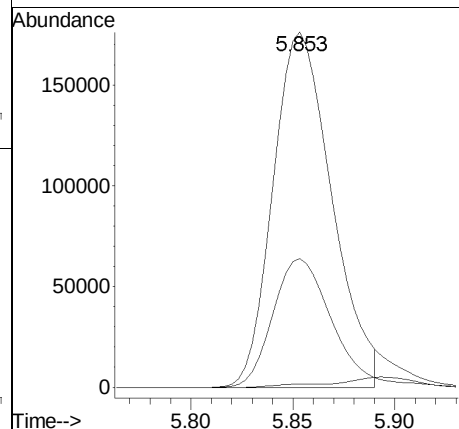
Tgt Ion: 31 Resp: 2163384
Ion Ratio Lower Upper
31 100
45 65.6 49.7 74.5

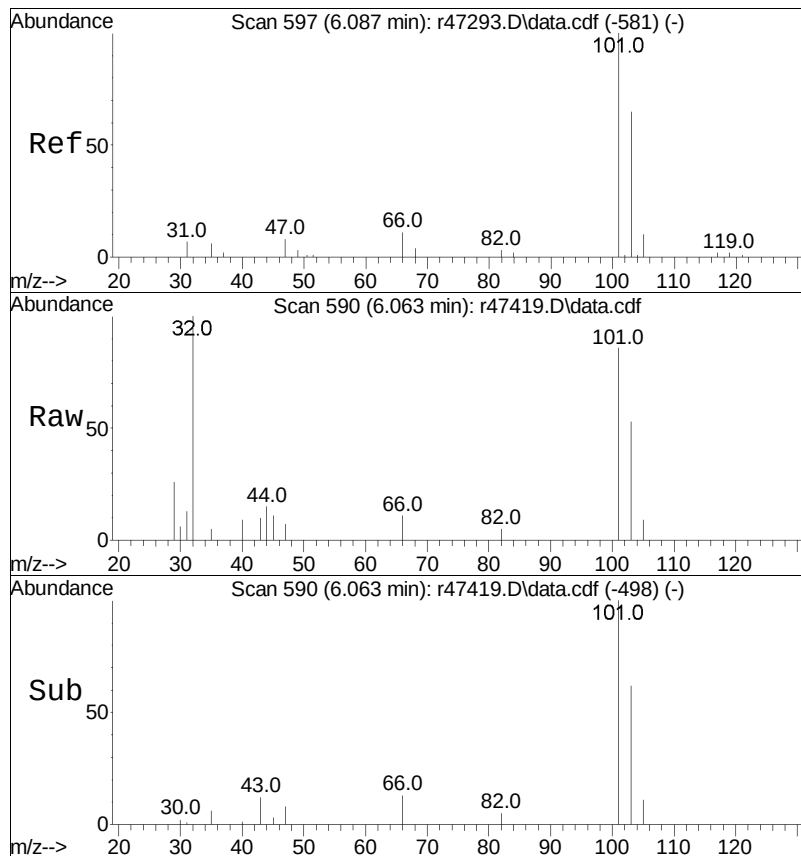




#19
acetone
Concen: 20.76 ppbV m
RT: 5.853 min Scan# 527
Delta R.T. -0.020 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

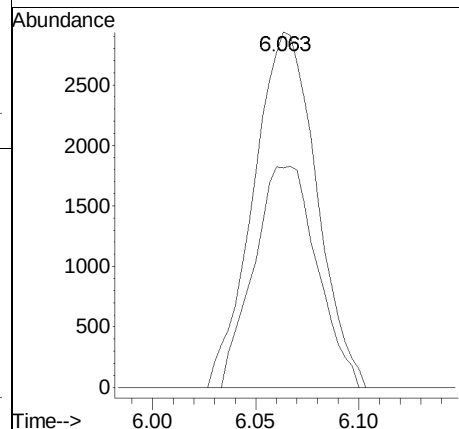
Tgt Ion:	43	58	57	Ratio	Lower	Upper
Ion	43	58	57	100	36.3	0.9
Resp:	353481				30.2	0.7
					45.2	1.1

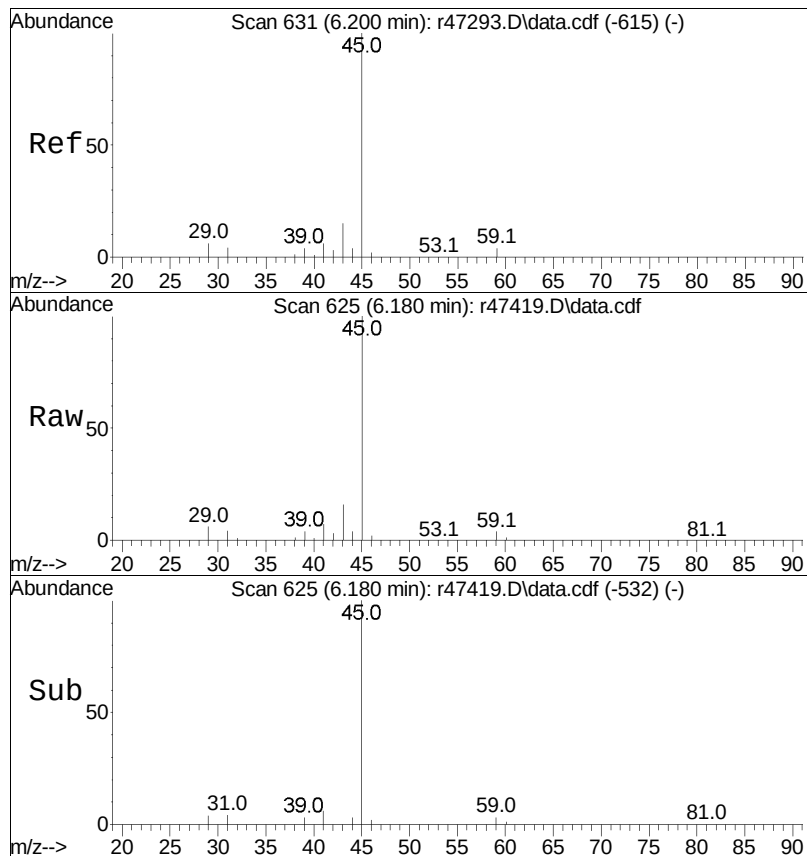




#21
trichlorofluoromethane
Concen: 0.43 ppbV
RT: 6.063 min Scan# 590
Delta R.T. -0.023 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

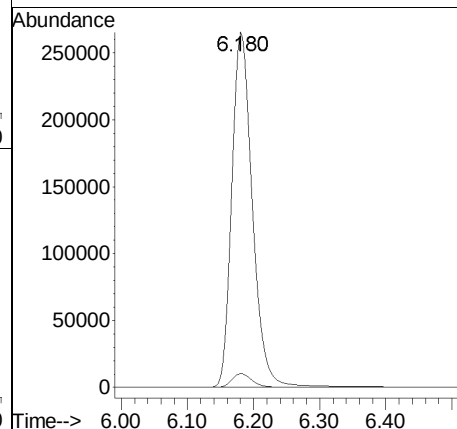
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	61.8	52.2	78.4	

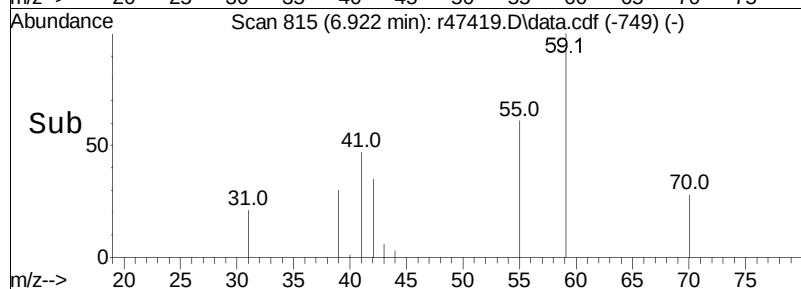
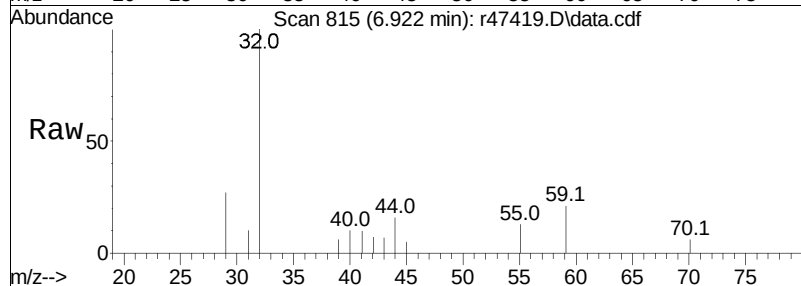
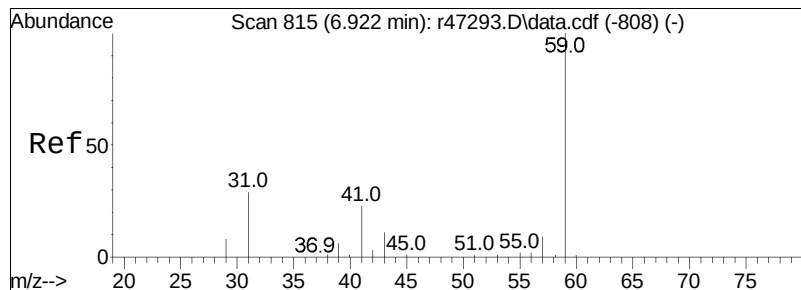




#22
 isopropyl alcohol
 Concen: 26.80 ppbV
 RT: 6.180 min Scan# 625
 Delta R.T. -0.020 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

Tgt Ion:	45	59	Ratio	100	3.9	Resp:	573471	Lower	3.0	Upper	4.6
45	100										
59		3.9									





#27

tertiary butyl alcohol

Concen: 0.09 ppbV

RT: 6.922 min Scan# 815

Delta R.T. 0.000 min

Lab File: r47419.D

Acq: 21 Jan 2020 9:30 PM

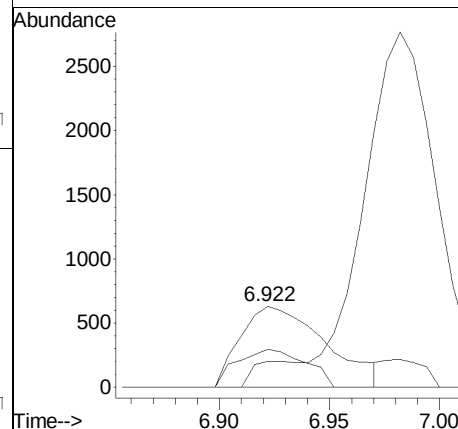
Tgt Ion: 59 Resp: 1700

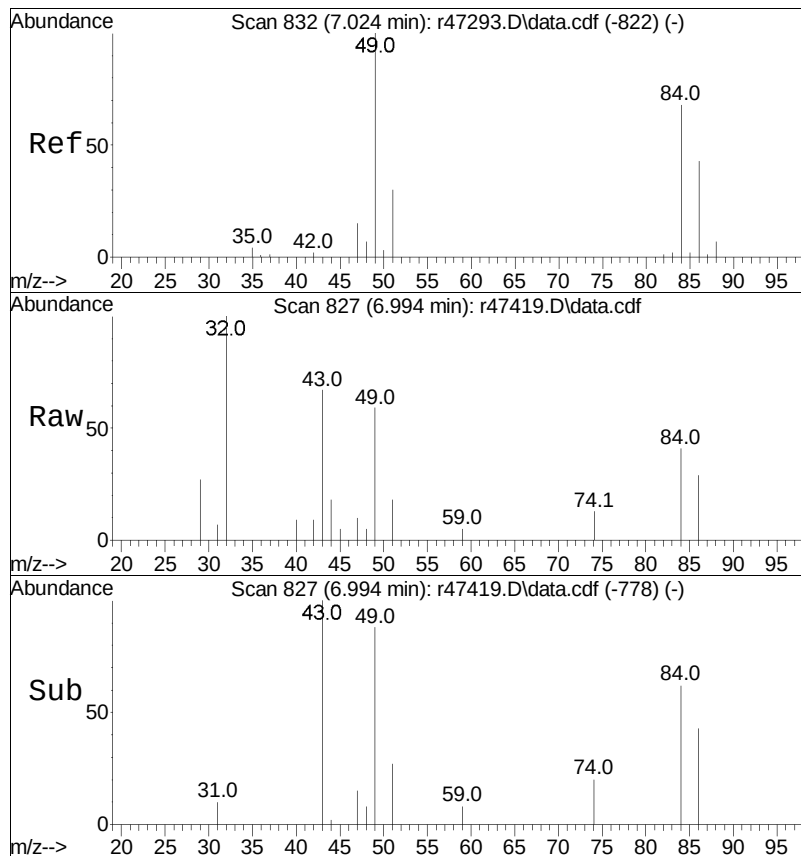
Ion Ratio Lower Upper

59 100

41 47.1 18.1 27.1#

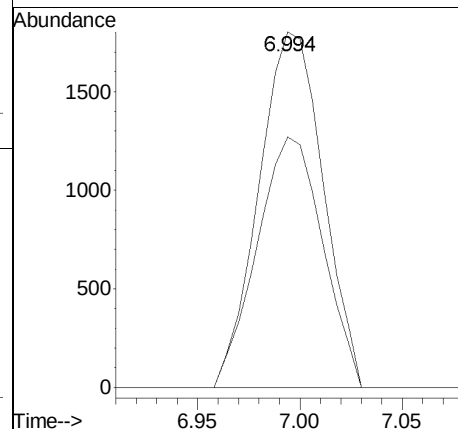
43 32.4 9.0 13.4#

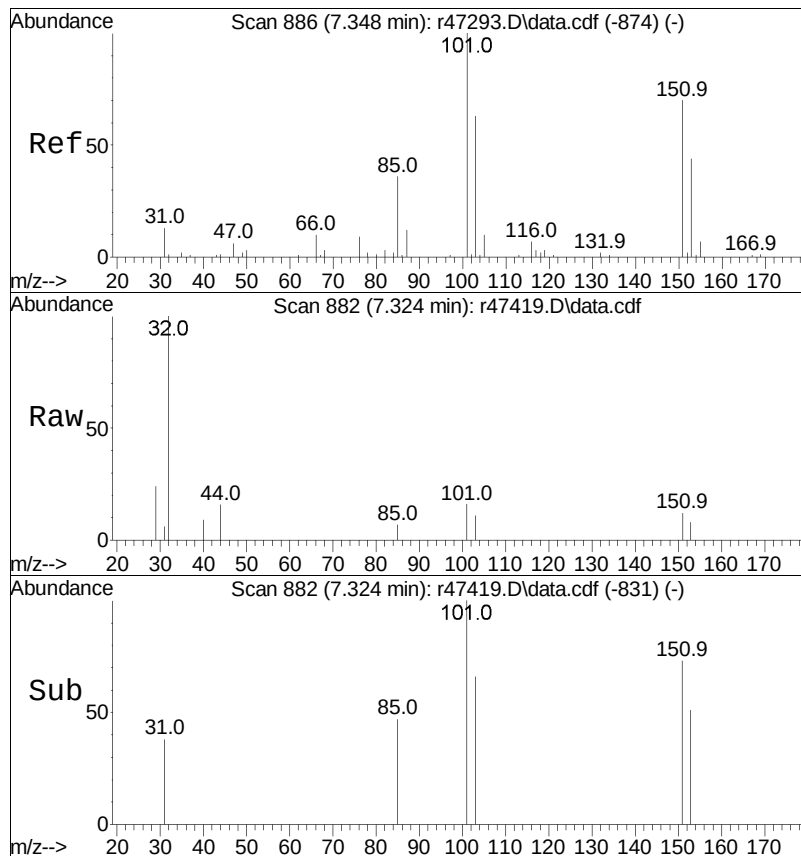




#28
 methylene chloride
 Concen: 0.33 ppbV
 RT: 6.994 min Scan# 827
 Delta R.T. -0.030 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

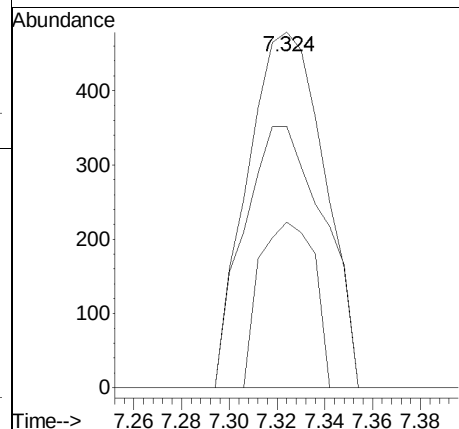
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	3933				
Ion Ratio	100	70.5			
		54.1		81.1	

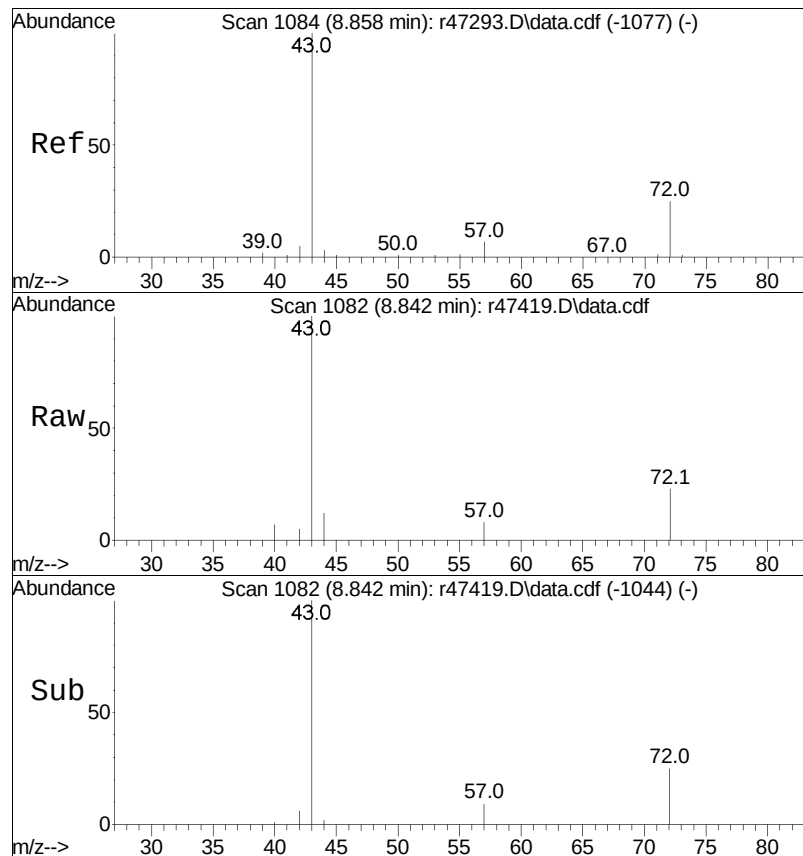




#31
 Freon 113
 Concen: 0.06 ppbV
 RT: 7.324 min Scan# 882
 Delta R.T. -0.024 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

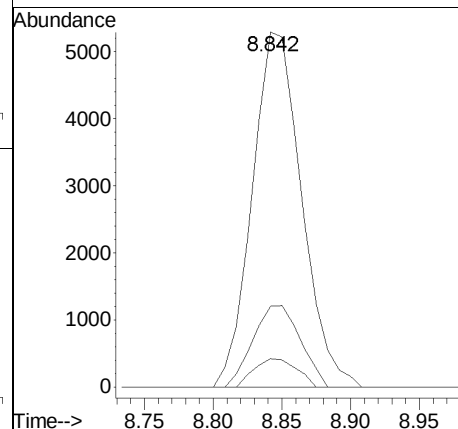
Tgt Ion:	101	Resp:	1068
Ion Ratio	Lower	Upper	
101	100		
85	46.6	28.8	43.2#
151	73.5	56.3	84.5

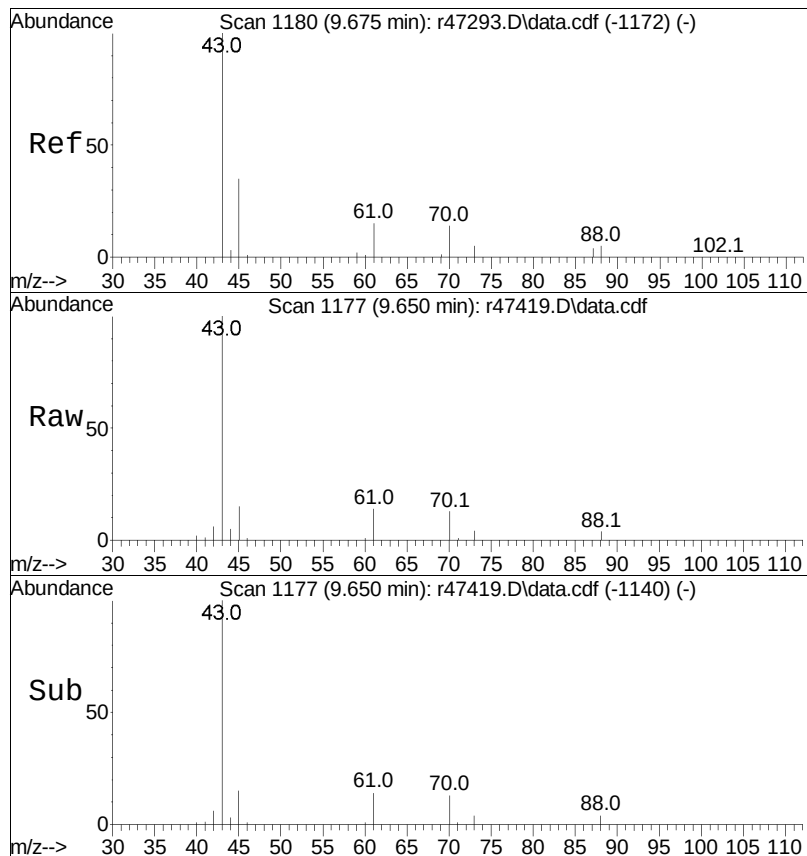




#36
 2-butanone
 Concen: 0.47 ppbV
 RT: 8.842 min Scan# 1082
 Delta R.T. -0.017 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

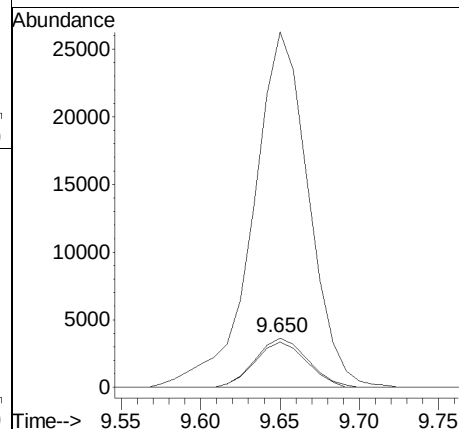
Tgt Ion:	43	Resp:	13231
Ion Ratio	Lower	Upper	
43	100		
72	22.8	19.8	29.6
57	8.1	5.5	8.3

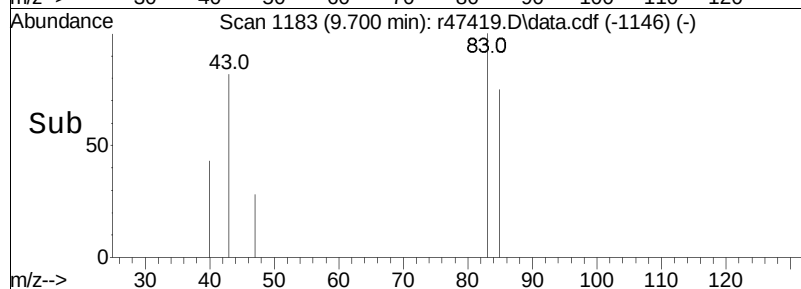
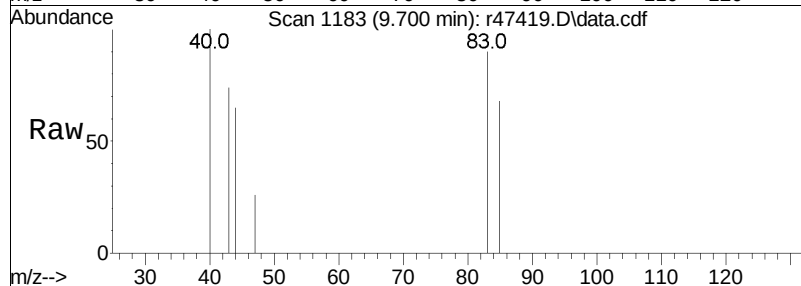
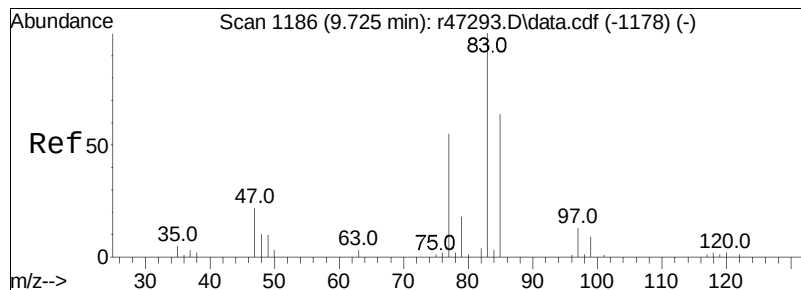




#38
 Ethyl Acetate
 Concen: 1.97 ppbV
 RT: 9.650 min Scan# 1177
 Delta R.T. -0.025 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

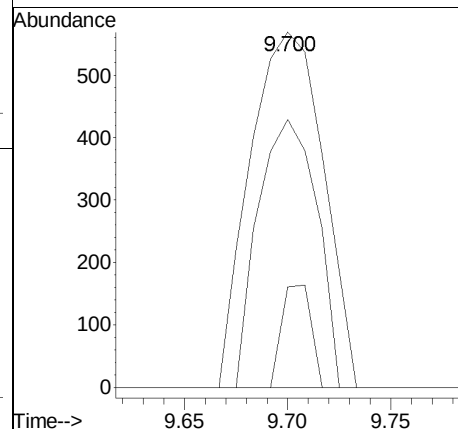
Tgt Ion:	61	Resp:	8422
Ion Ratio	Lower	Upper	
61	100		
70	92.2	77.3	115.9
43	721.6	633.3	949.9

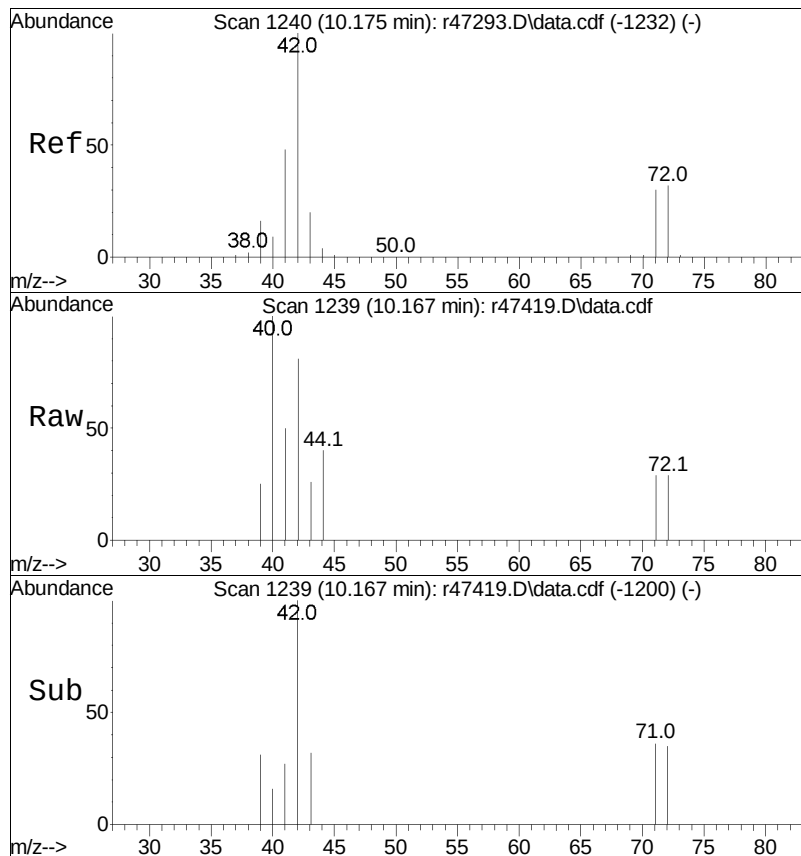




#39
chloroform
Concen: 0.08 ppbV
RT: 9.700 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

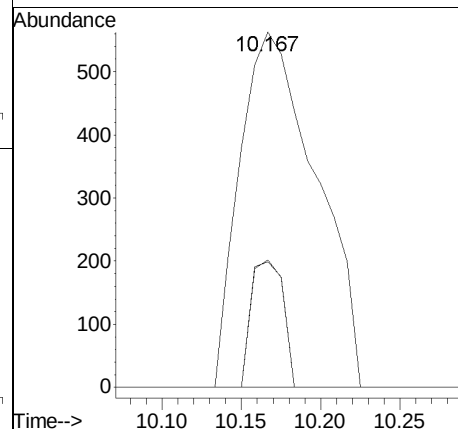
Tgt Ion	Ratio	Lower	Upper
83	100		
85	75.4	51.3	76.9
47	28.3	17.8	26.8

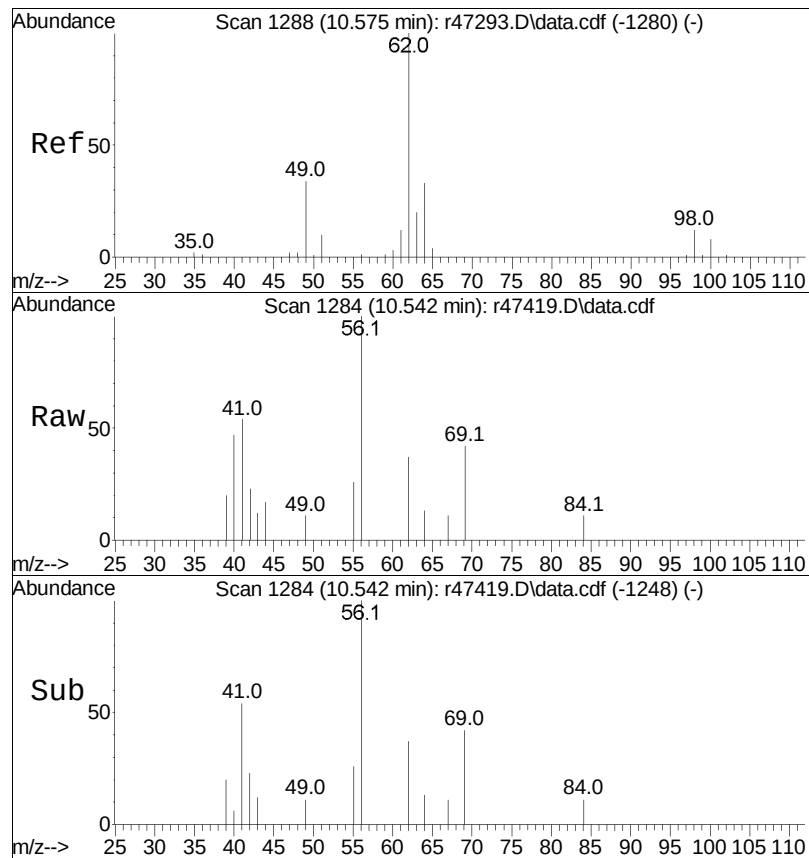




#40
 Tetrahydrofuran
 Concen: 0.10 ppbV
 RT: 10.167 min Scan# 1239
 Delta R.T. -0.008 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

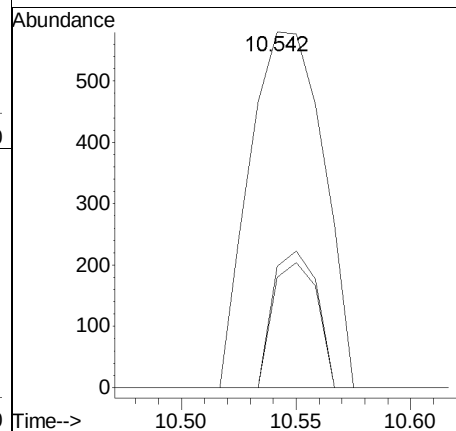
Tgt Ion	Ratio	Lower	Upper
42	100		
71	35.9	24.2	36.2
72	35.3	25.6	38.4

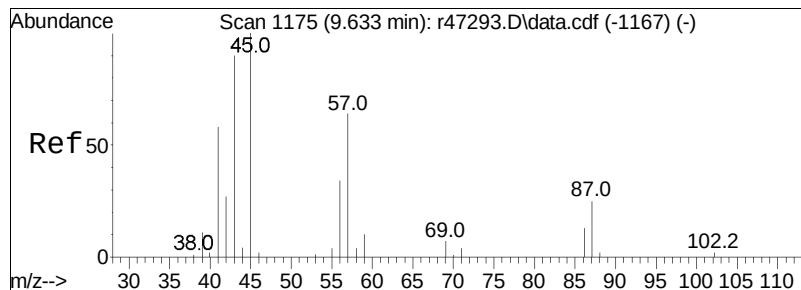




#42
 1,2-dichloroethane
 Concen: 0.10 ppbV
 RT: 10.542 min Scan# 1284
 Delta R.T. -0.033 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

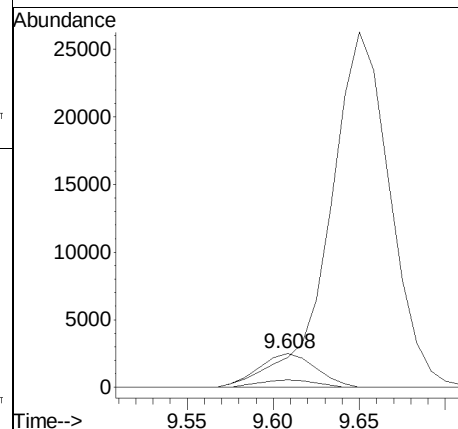
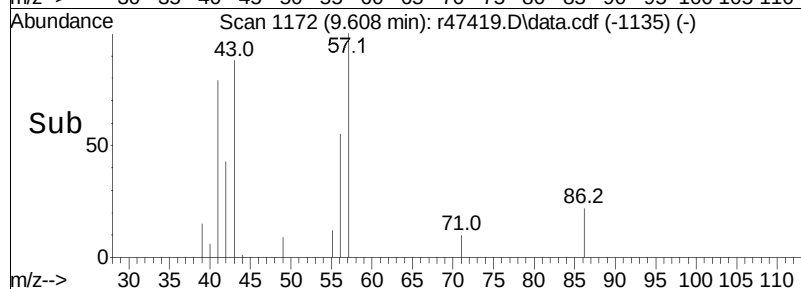
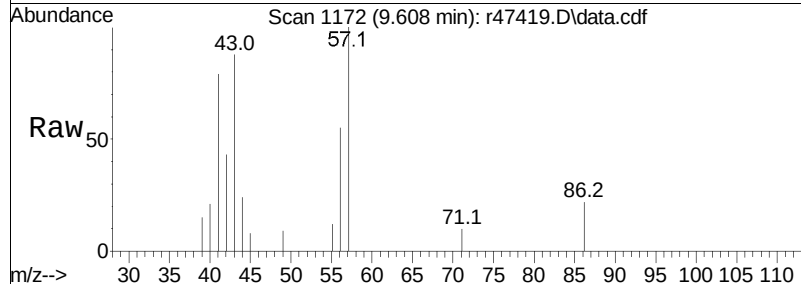
Tgt Ion:	62	Resp:	1299
Ion Ratio	Lower	Upper	
62	100		
64	34.1	26.2	39.4
49	31.0	26.9	40.3
63	0.0	15.6	23.4#

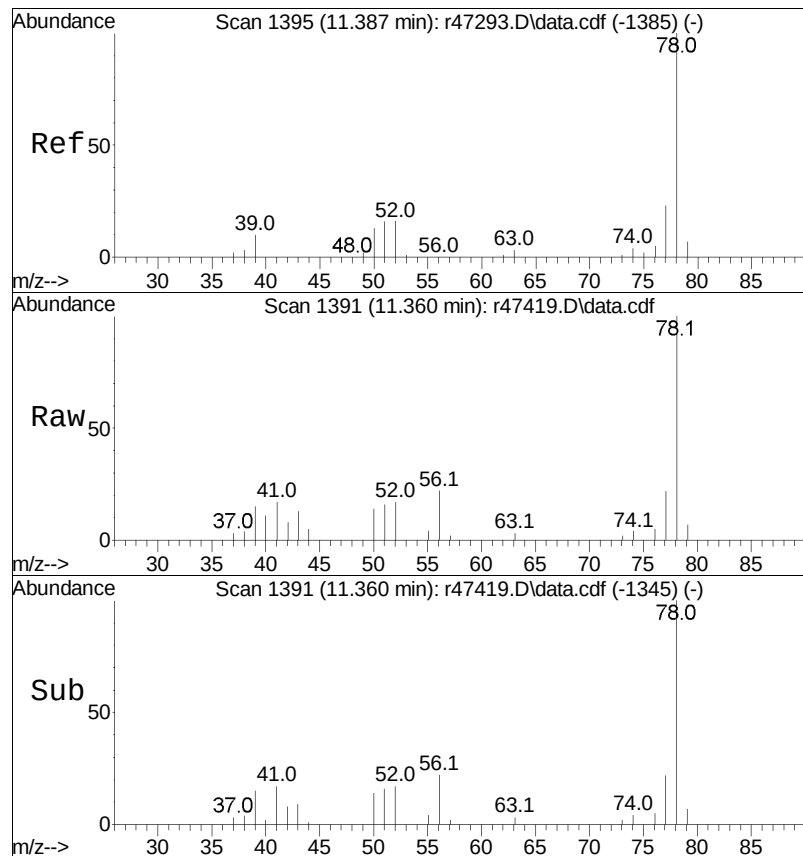




#44
hexane
Concen: 0.29 ppbV
RT: 9.608 min Scan# 1172
Delta R.T. -0.025 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

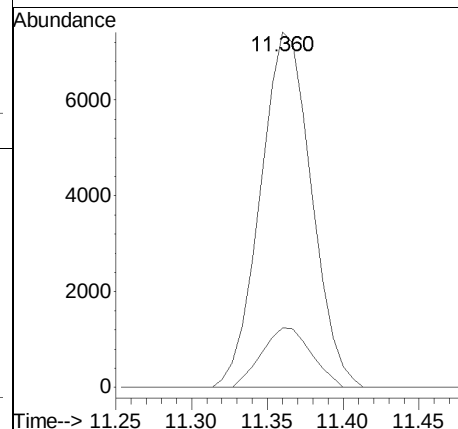
Tgt Ion	Ratio	Lower	Upper
57	100		
43	88.3	111.8	167.8#
86	22.2	15.8	23.6

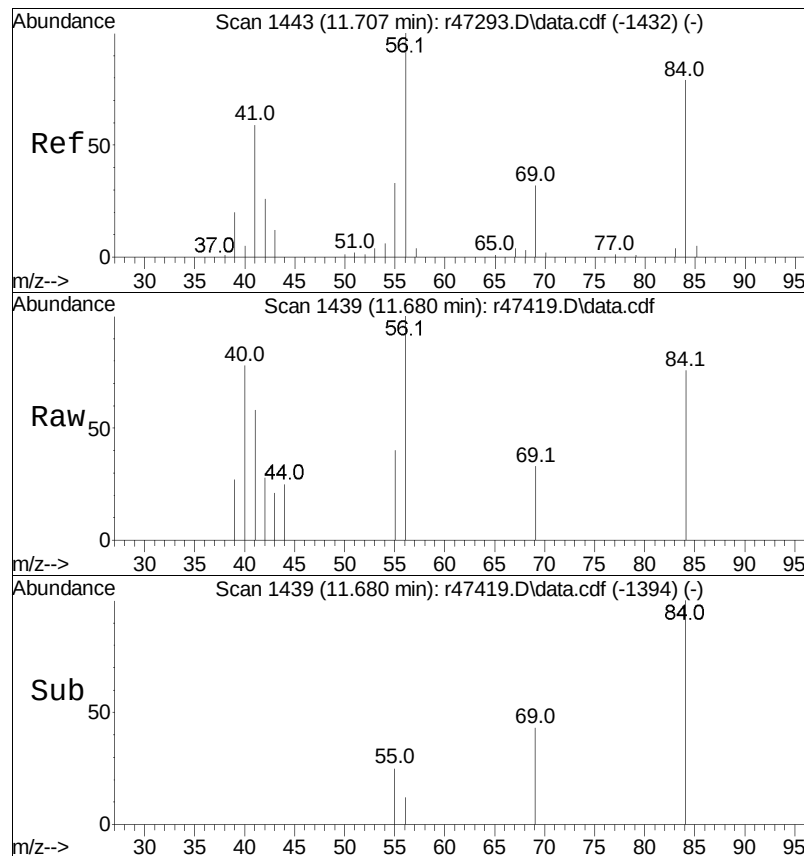




#50
benzene
Concen: 0.47 ppbV
RT: 11.360 min Scan# 1391
Delta R.T. -0.027 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

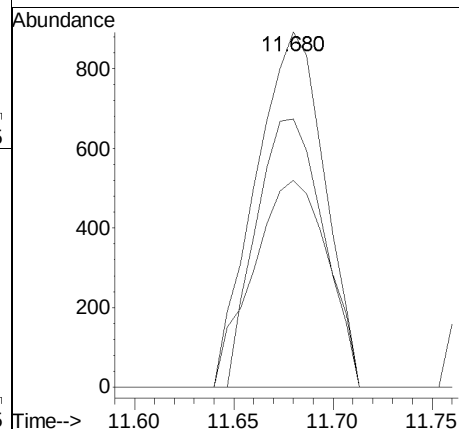
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.8	13.0	19.4

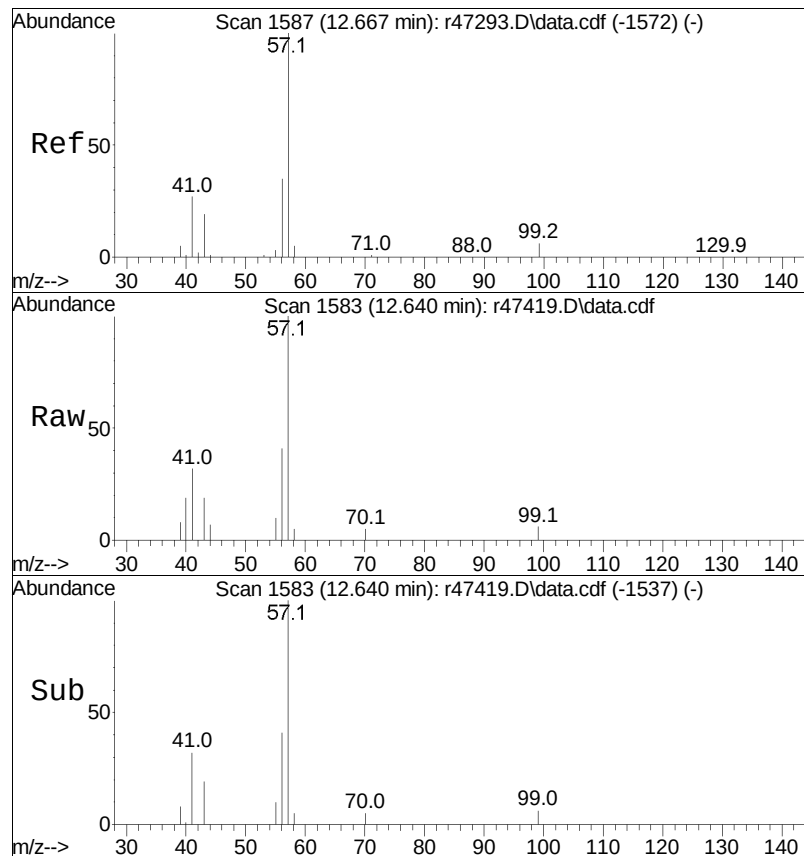




#53
cyclohexane
Concen: 0.09 ppbV
RT: 11.680 min Scan# 1439
Delta R.T. -0.027 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

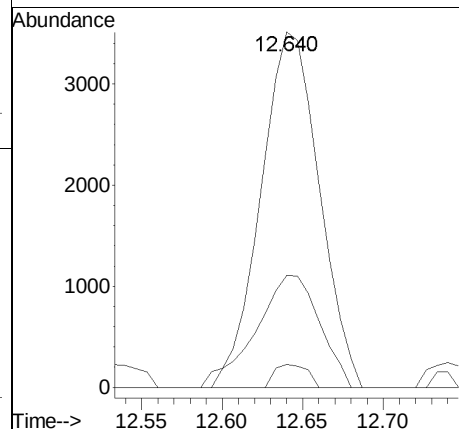
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	75.6	63.0	94.6	
41	58.3	46.8	70.2	

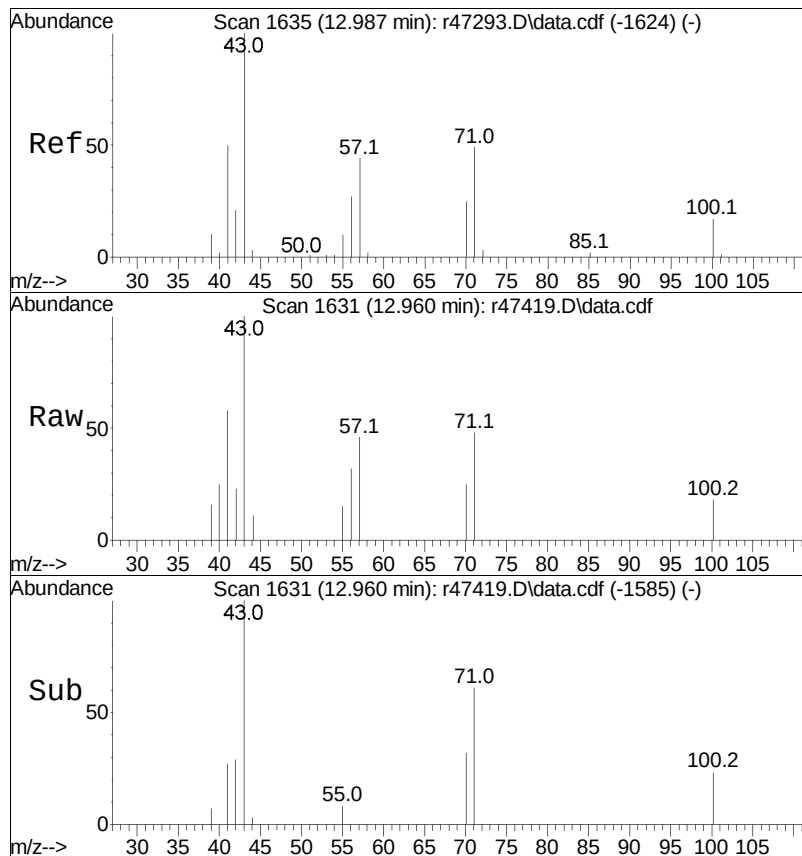




#60
 2,2,4-trimethylpentane
 Concen: 0.12 ppbV
 RT: 12.640 min Scan# 1583
 Delta R.T. -0.027 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

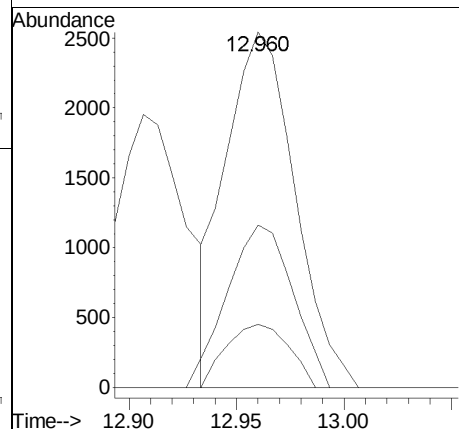
Tgt	Ion	Ratio	Lower	Upper
57	100			
99	6.5	4.8	7.2	
41	31.5	21.8	32.8	

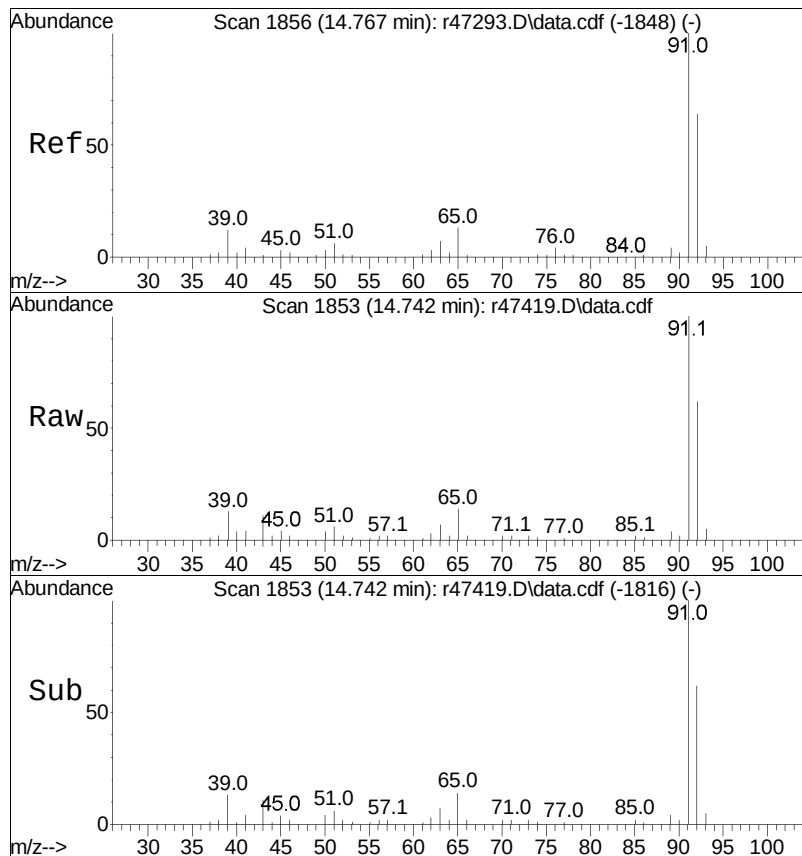




#62
 heptane
 Concen: 0.18 ppbV
 RT: 12.960 min Scan# 1631
 Delta R.T. -0.027 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

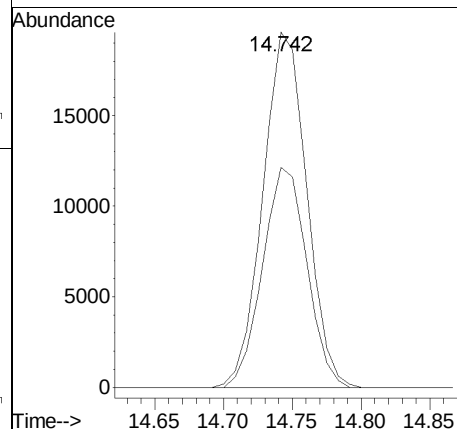
Tgt Ion:	43	Resp:	5691
Ion Ratio	Lower	Upper	
43	100		
57	45.7	35.2	52.8
100	17.8	13.7	20.5

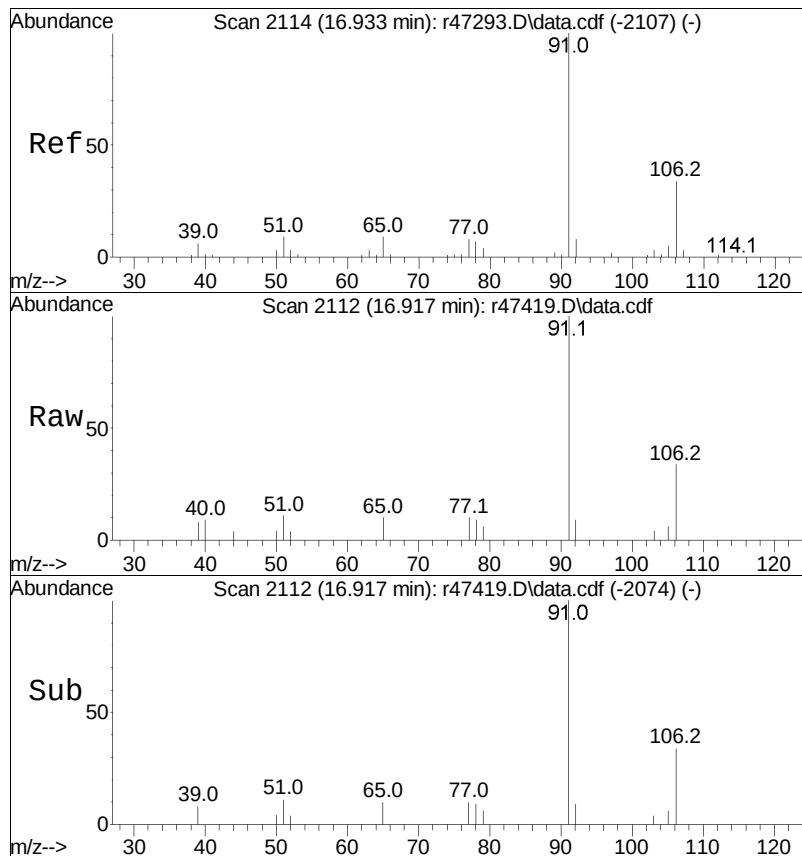




#68
 toluene
 Concen: 0.85 ppbV
 RT: 14.742 min Scan# 1853
 Delta R.T. -0.025 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

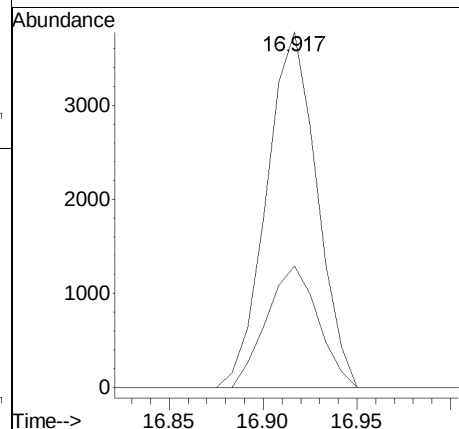
Tgt Ion:	91	Resp:	43448
Ion Ratio	Lower	Upper	
91	100		
92	61.9	51.1	76.7

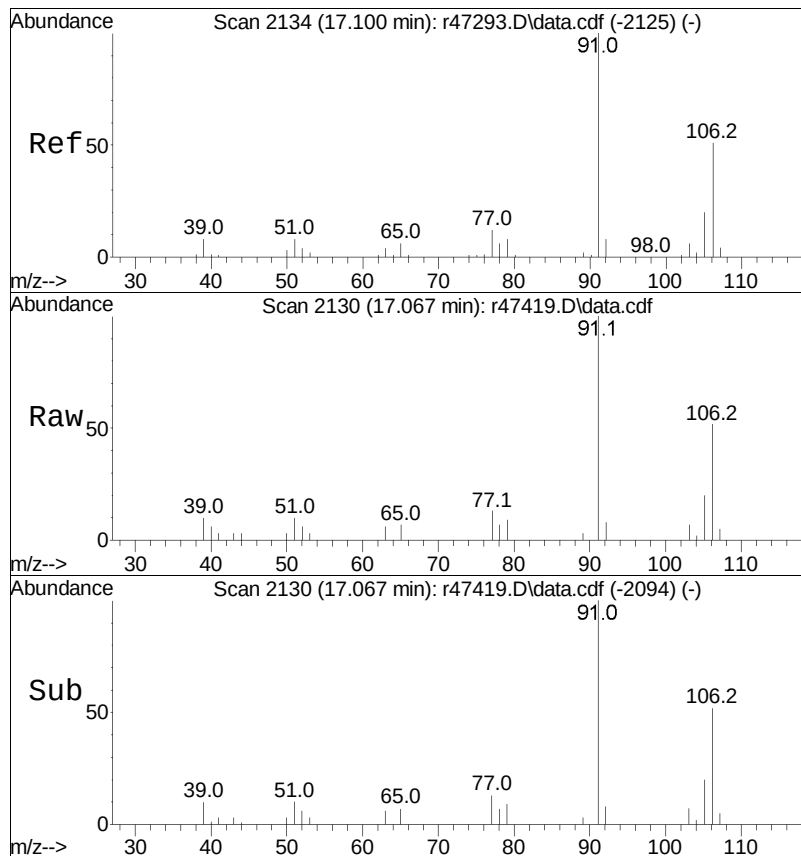




#81
ethylbenzene
Concen: 0.11 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

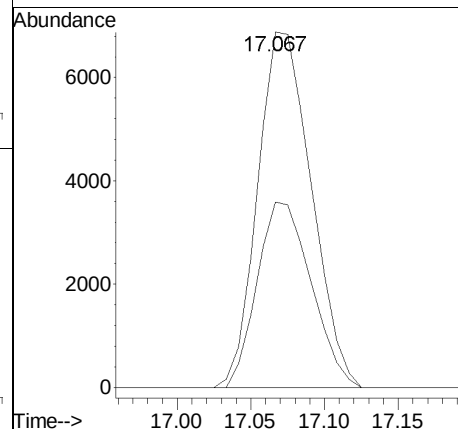
Tgt	Ion	Resp	Lower	Upper
91	100	7054		
106	34.2	27.6	41.4	

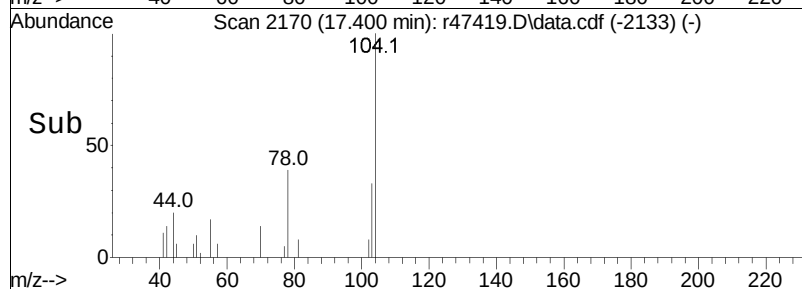
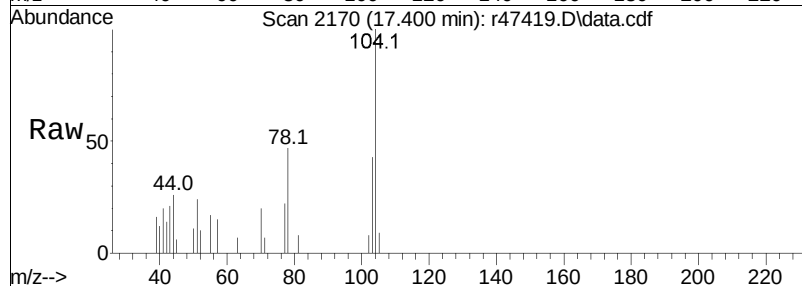
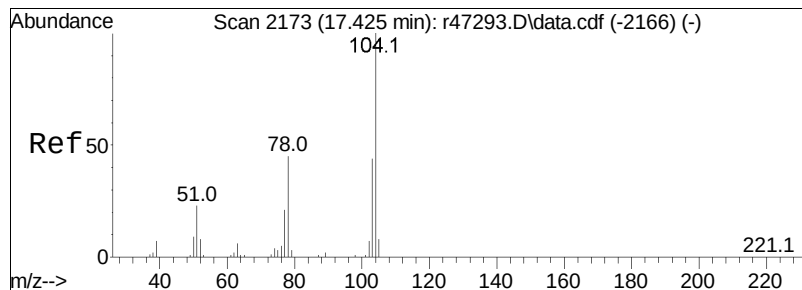




#83
 m+p-xylene
 Concen: 0.34 ppbV
 RT: 17.067 min Scan# 2130
 Delta R.T. -0.033 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

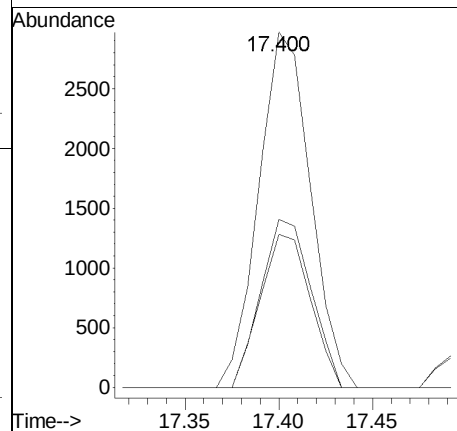
Tgt	Ion	Resp	Lower	Upper
91	100	17409		
106	52.2	41.2	61.8	

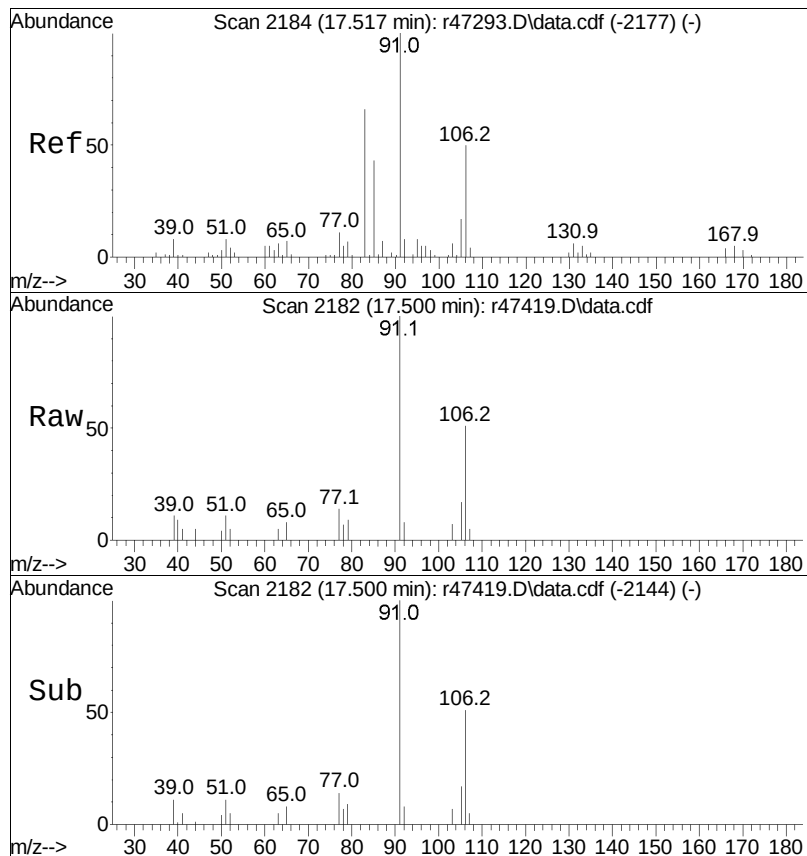




#85
styrene
Concen: 0.14 ppbV
RT: 17.400 min Scan# 2170
Delta R.T. -0.025 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

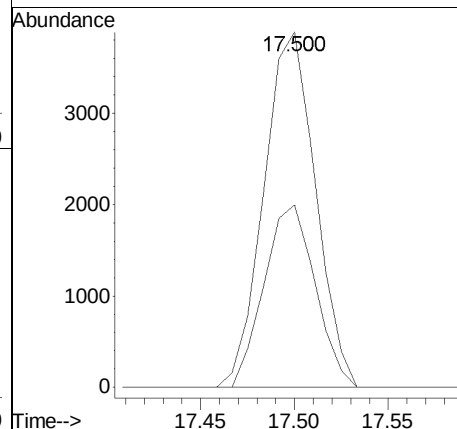
Tgt Ion	Ratio	Lower	Upper
104	100		
103	43.1	35.0	52.4
78	47.3	36.2	54.4

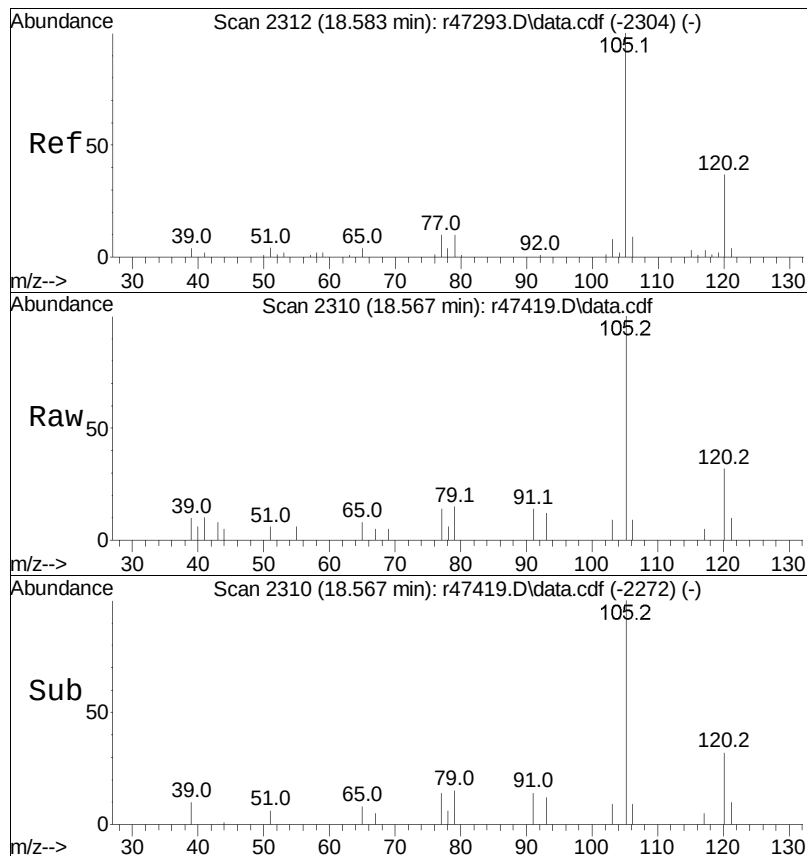




#87
o-xylene
Concen: 0.15 ppbV
RT: 17.500 min Scan# 2182
Delta R.T. -0.017 min
Lab File: r47419.D
Acq: 21 Jan 2020 9:30 PM

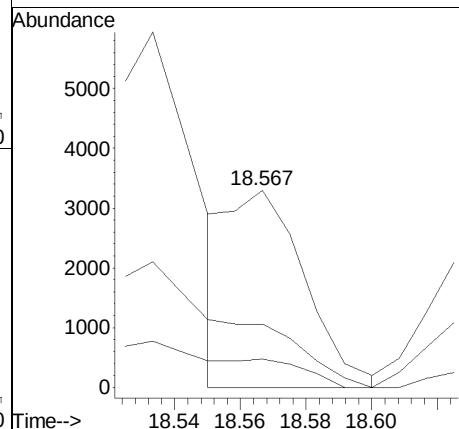
Tgt Ion:	91	Resp:	7445
Ion Ratio	Lower	Upper	
91	100		
106	51.4	40.1	60.1

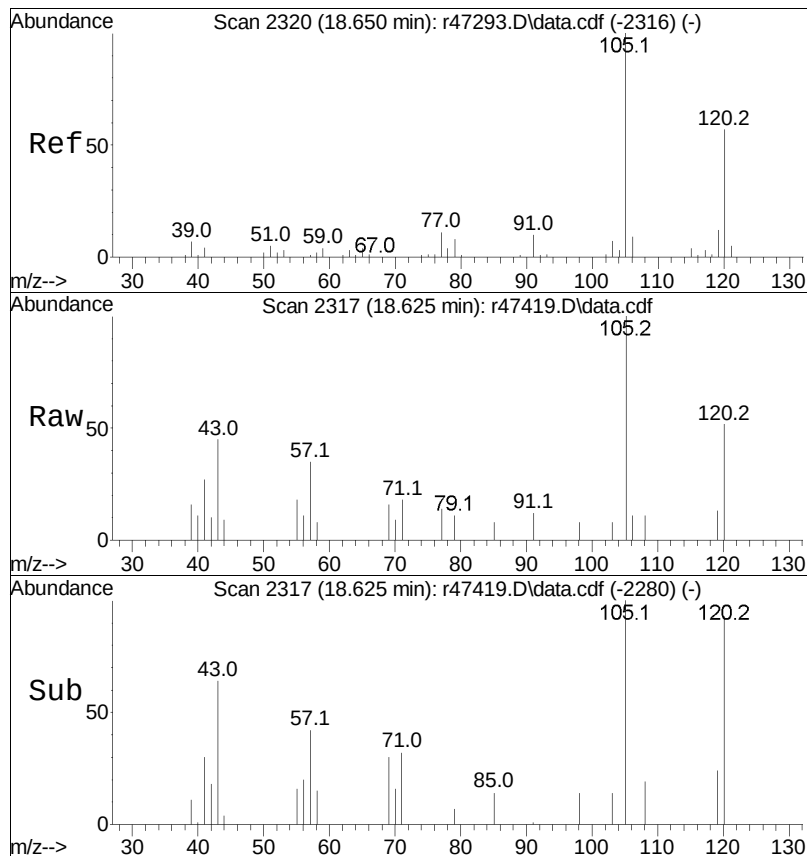




#96
 4-ethyl toluene
 Concen: 0.07 ppbV m
 RT: 18.567 min Scan# 2310
 Delta R.T. -0.017 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

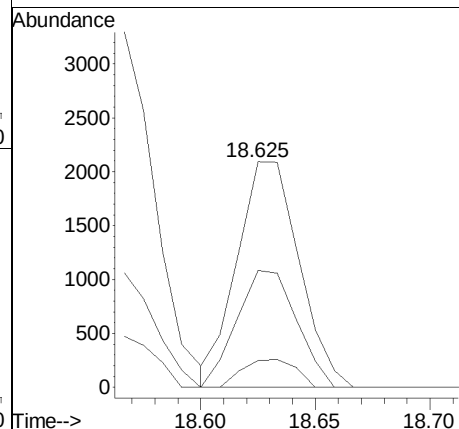
Tgt Ion	Ratio	Lower	Upper
105	100		
120	32.2	29.4	44.2
91	14.4	8.2	12.4

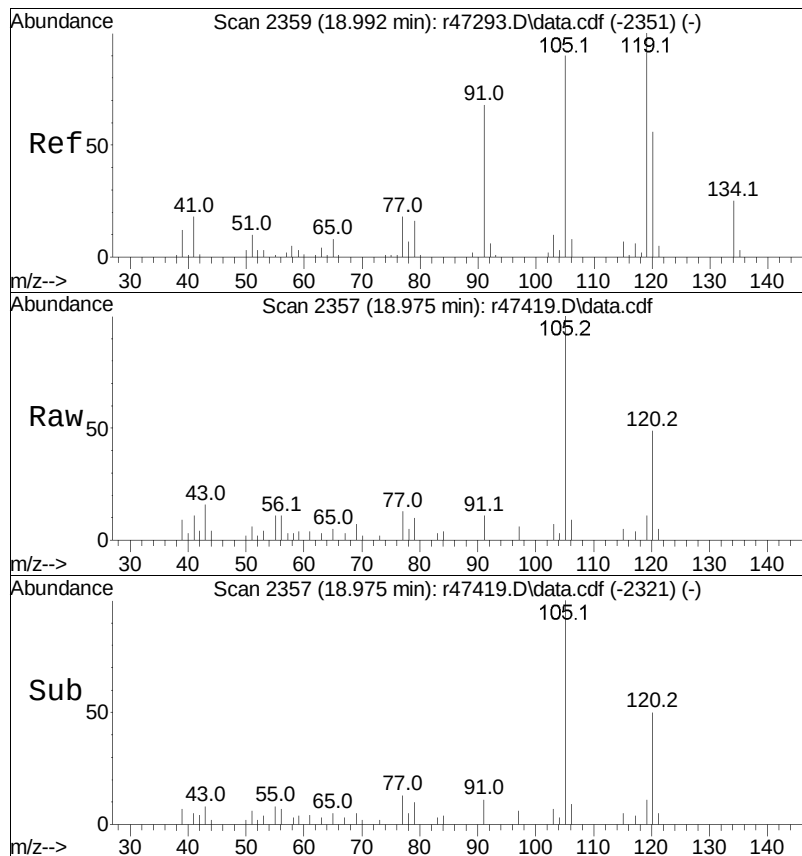




#97
 1,3,5-trimethylbenzene
 Concen: 0.07 ppbV
 RT: 18.625 min Scan# 2317
 Delta R.T. -0.025 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

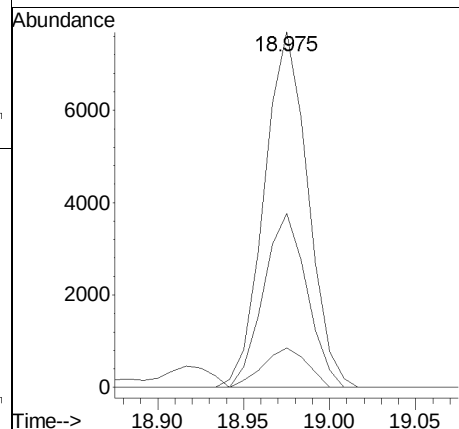
Tgt Ion	Ratio	Lower	Upper
105	100		
120	51.8	45.2	67.8
91	11.9	7.8	11.6

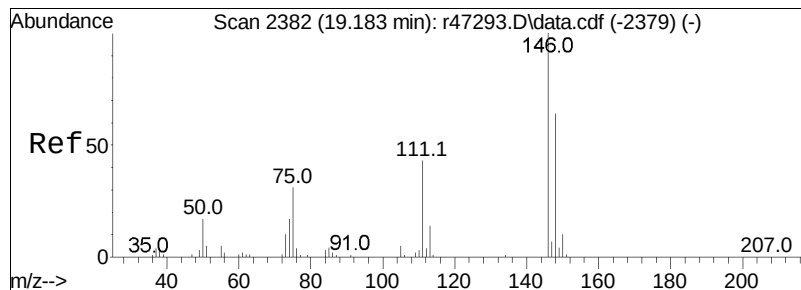




#99
 1,2,4-trimethylbenzene
 Concen: 0.24 ppbV
 RT: 18.975 min Scan# 2357
 Delta R.T. -0.017 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

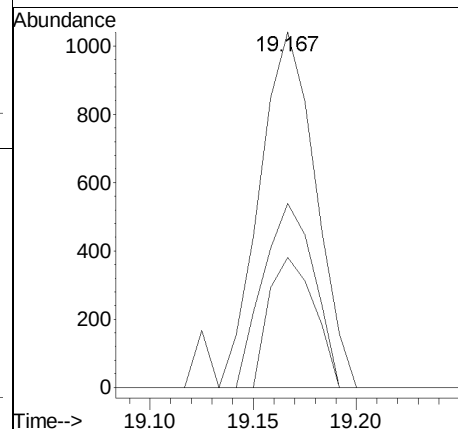
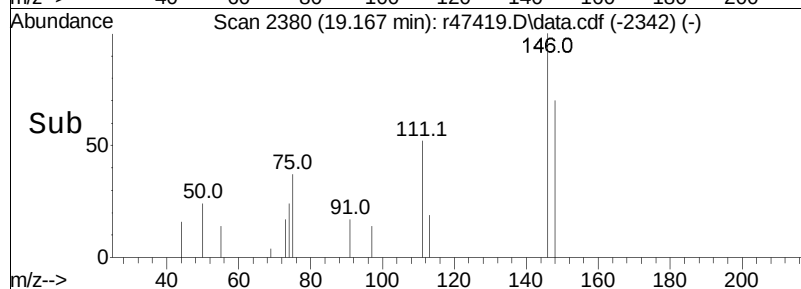
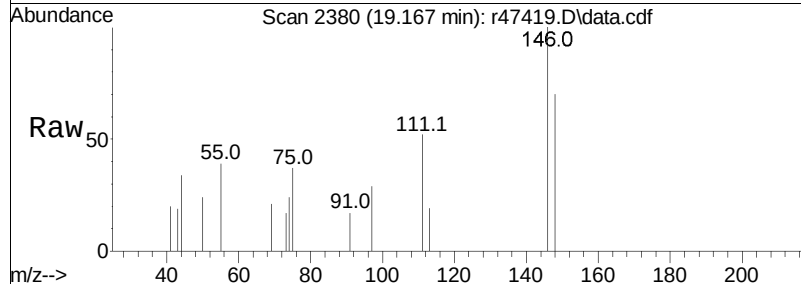
Tgt Ion:	105	Resp:	13620
Ion Ratio	Lower	Upper	
105	100		
120	48.9	50.2	75.4#
91	11.1	61.0	91.6#





#103
 1,4-dichlorobenzene
 Concen: 0.06 ppbV
 RT: 19.167 min Scan# 2380
 Delta R.T. -0.017 min
 Lab File: r47419.D
 Acq: 21 Jan 2020 9:30 PM

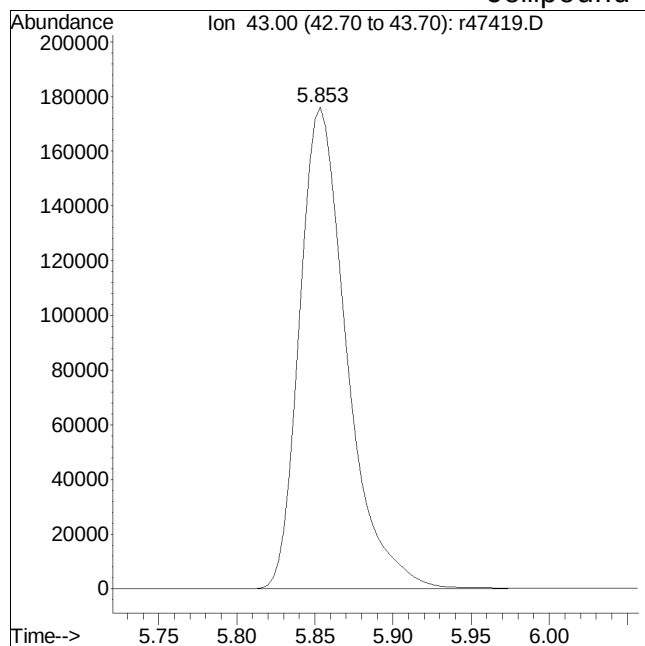
Tgt Ion	Ratio	Lower	Upper
146	100		
111	51.8	34.4	51.6#
75	36.6	24.6	36.8



Manual Integration Report

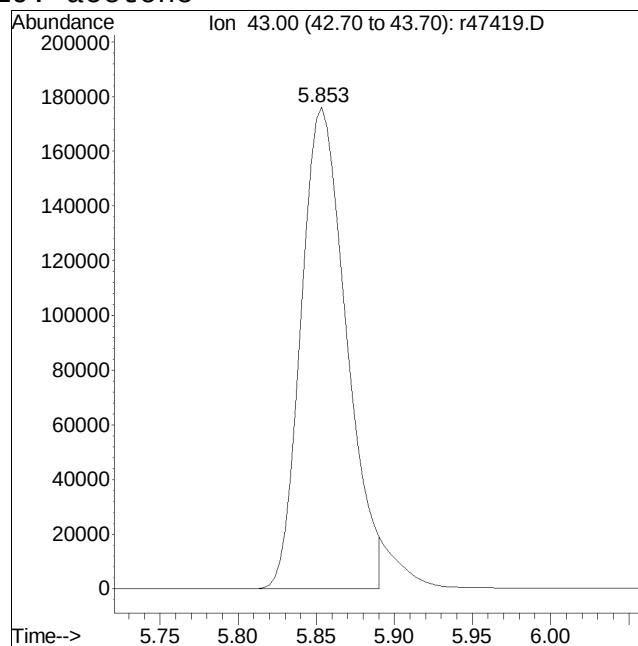
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47419.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:9: 0 Instrument :
Sample : L2002033-02,3,250,250 Quant Date : 1/22/2020 5:36 am

Compound #19: acetone



Original Peak Response = 370505

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

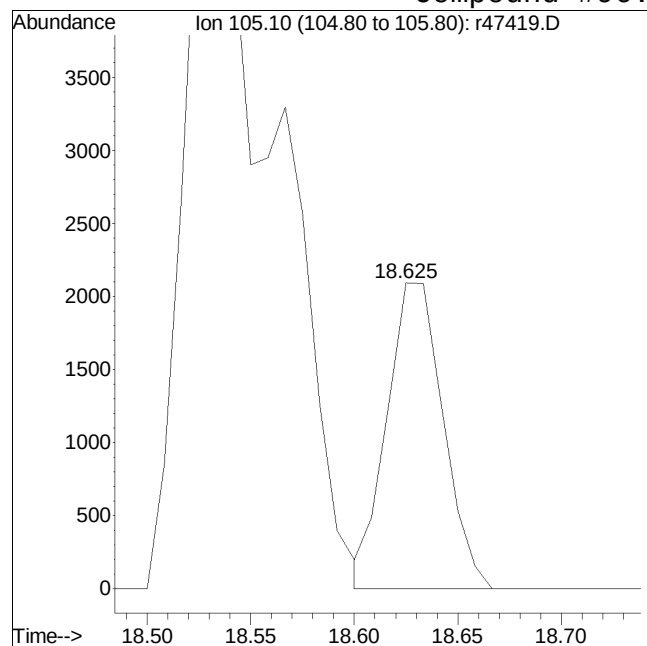


Manual Peak Response = 353481 M6

Manual Integration Report

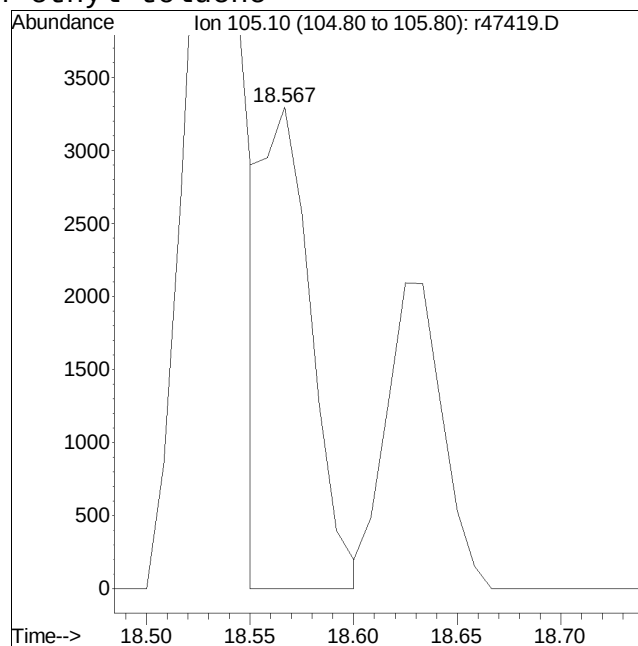
Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47419.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:9: 0 Instrument :
Sample : L2002033-02,3,250,250 Quant Date : 1/22/2020 5:36 am

Compound #96: 4-ethyl toluene



Original Peak Response = 3960

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



Manual Peak Response = 5340 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47421.D
 Acq On : 21 Jan 2020 10:48 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-03,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:49:10 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

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

Internal Standards						
1) bromochloromethane	9.542	49	208584	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =	100.84%		
43) 1,4-difluorobenzene	11.800	114	544106	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =	81.88%		
67) chlorobenzene-D5	16.525	54	107121	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =	100.68%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.994	85	7717	0.473	ppbV	99
6) chloromethane	4.174	50	5993	0.645	ppbV	94
7) Freon-114	0.000		0	N.D.	d	
10) 1,3-butadiene	4.594	54	844	0.089	ppbV	82
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.296	31	2007024	283.973	ppbV	94
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.850	43	684442M6	37.070	ppbV	
21) trichlorofluoromethane	6.063	101	6975	0.438	ppbV	99
22) isopropyl alcohol	6.180	45	836060	36.039	ppbV	100
27) tertiary butyl alcohol	6.922	59	4251	0.204	ppbV #	81
28) methylene chloride	6.994	49	2064	0.158	ppbV	90
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.288		0	N.D.		
31) Freon 113	7.324	101	1148	0.061	ppbV #	92
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	8.842	43	14953	0.493	ppbV	98
38) Ethyl Acetate	9.650	61	7105	1.530	ppbV	85
39) chloroform	9.700	83	5708	0.307	ppbV	99
40) Tetrahydrofuran	10.167	42	2276	0.106	ppbV	99
42) 1,2-dichloroethane	10.550	62	1290	0.093	ppbV #	88
44) hexane	9.608	57	6592	0.322	ppbV #	59
50) benzene	11.360	78	25108	0.672	ppbV	98
53) cyclohexane	11.680	56	3394	0.143	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47421.D
 Acq On : 21 Jan 2020 10:48 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-03,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:49:10 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

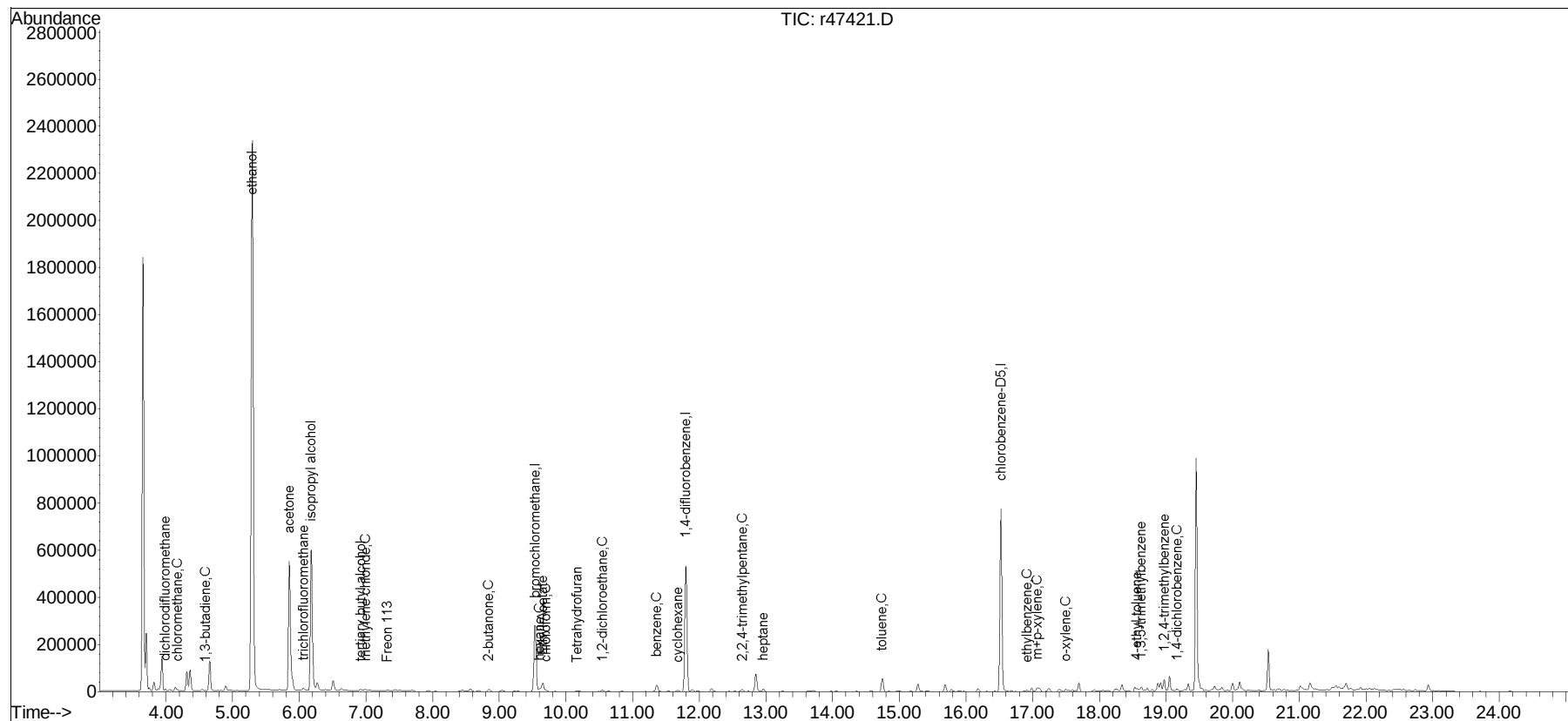
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	12.607		0	N.D.		
60) 2,2,4-trimethylpentane	12.647	57	9578	0.130	ppbV	96
62) heptane	12.960	43	6351	0.197	ppbV	96
63) cis-1,3-dichloropropene	0.000		0	N.D.		
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	14.742	91	44148	0.847	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	16.917	91	5355	0.084	ppbV	99
83) m+p-xylene	17.067	91	14077	0.265	ppbV	98
84) bromoform	0.000		0	N.D.		
85) styrene	17.400		0	N.D.		
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d	
87) o-xylene	17.500	91	5752	0.111	ppbV	98
96) 4-ethyl toluene	18.567	105	5271M3	0.071	ppbV	
97) 1,3,5-trimethylbenzene	18.625	105	4015	0.066	ppbV #	97
99) 1,2,4-trimethylbenzene	18.975	105	14098	0.246	ppbV #	49
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	146	2626	0.076	ppbV	89
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	0.000		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

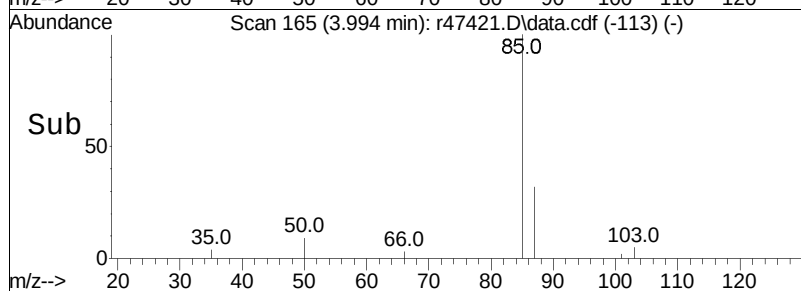
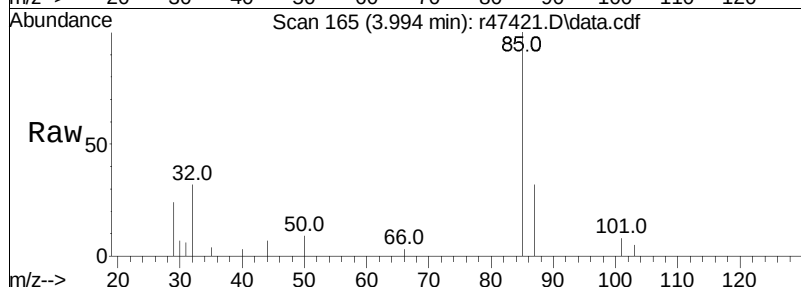
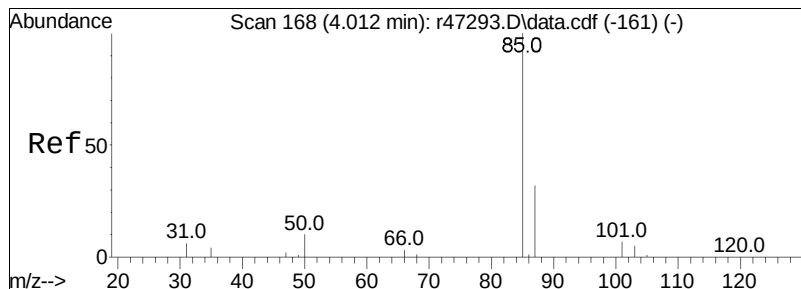
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airpiano4\2020\01\200121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File : r47421.D
Acq On : 21 Jan 2020 10:48 PM
Operator : AIRPIANO4:EW
Sample : L2002033-03,3,250,250
Misc : WG1332350,ICAL16438
ALS Vial : 0 Sample Multiplier: 1

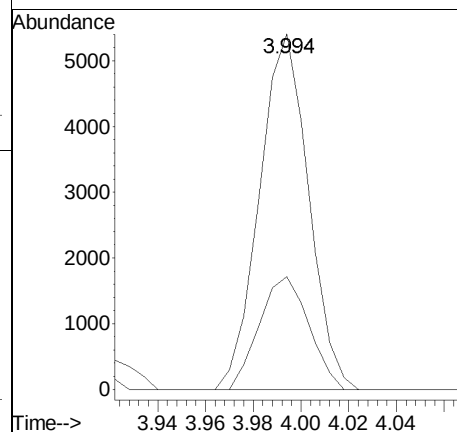
Quant Time: Jan 22 08:49:10 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

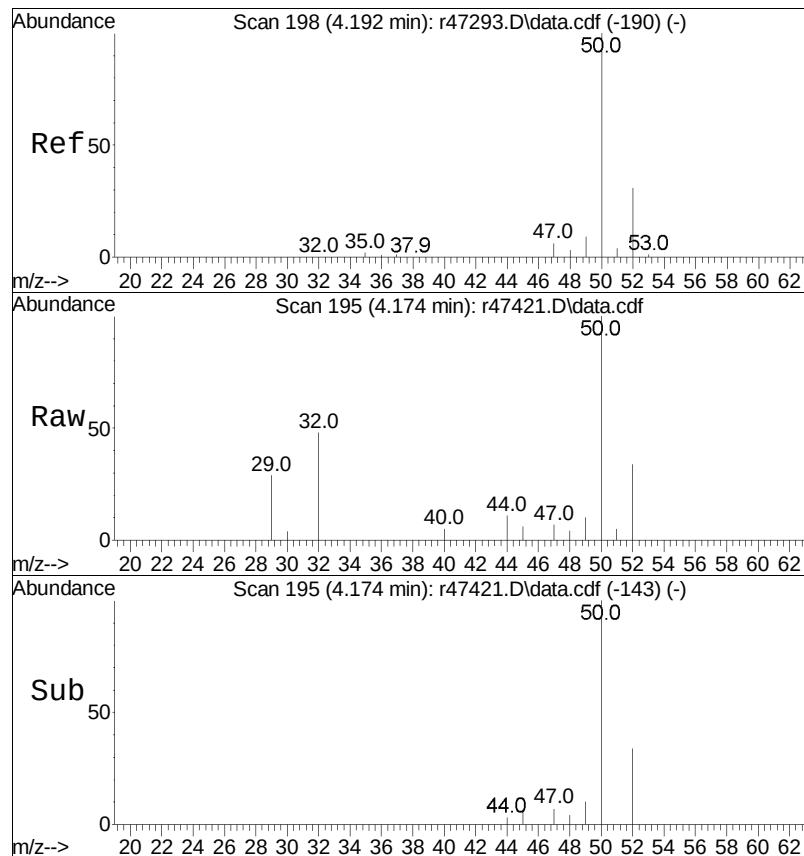




#5
dichlorodifluoromethane
Concen: 0.47 ppbV
RT: 3.994 min Scan# 165
Delta R.T. -0.018 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

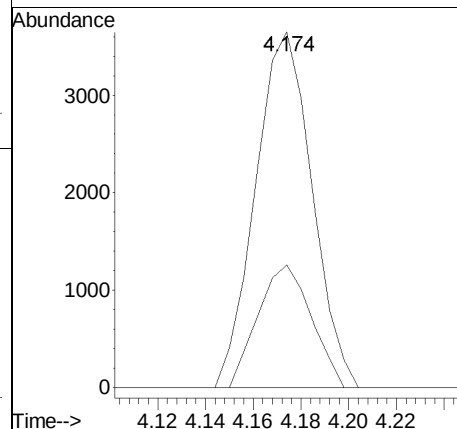
Tgt Ion: 85 Resp: 7717
Ion Ratio Lower Upper
85 100
87 31.7 25.8 38.6

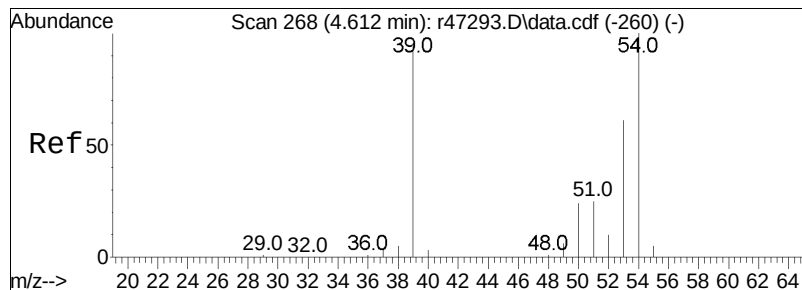




#6
 chloromethane
 Concen: 0.65 ppbV
 RT: 4.174 min Scan# 195
 Delta R.T. -0.018 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

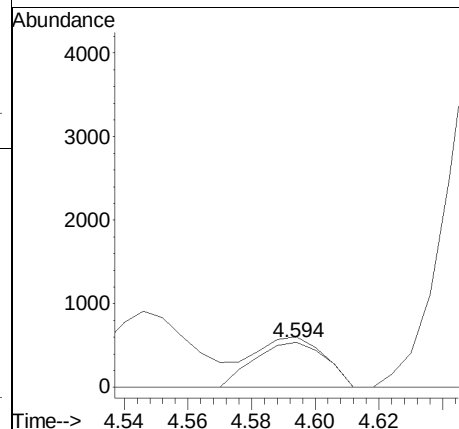
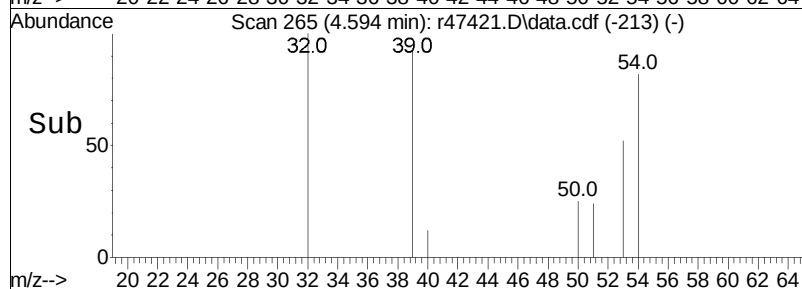
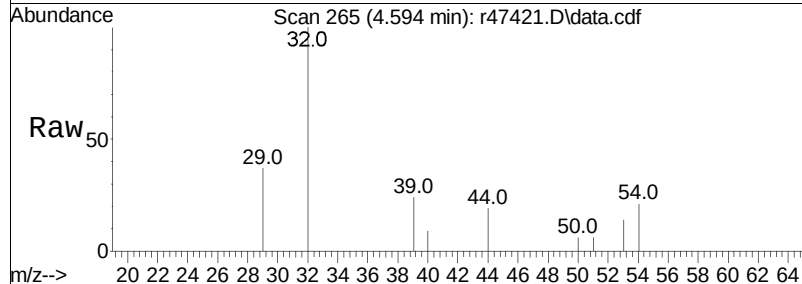
Tgt	Ion: 50	Resp:	5993
Ion	Ratio	Lower	Upper
50	100		
52	34.4	24.9	37.3

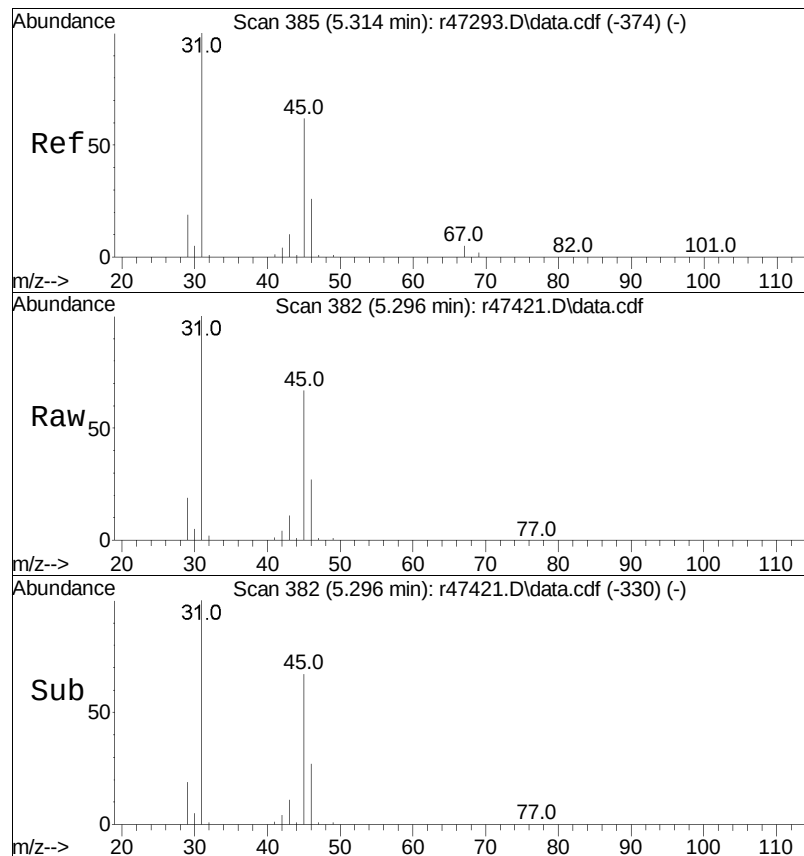




#10
 1,3-butadiene
 Concen: 0.09 ppbV
 RT: 4.594 min Scan# 265
 Delta R.T. -0.018 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

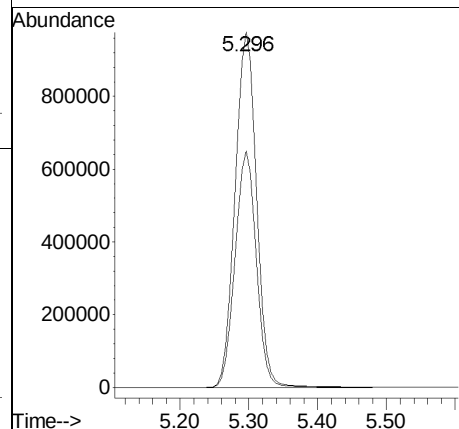
Tgt Ion	Ratio	Lower	Upper
54	100		
39	112.2	75.5	113.3

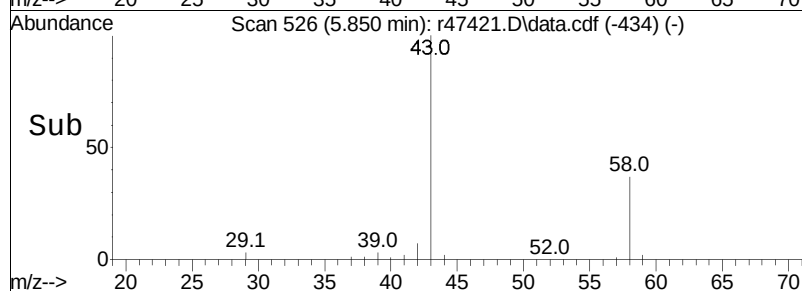
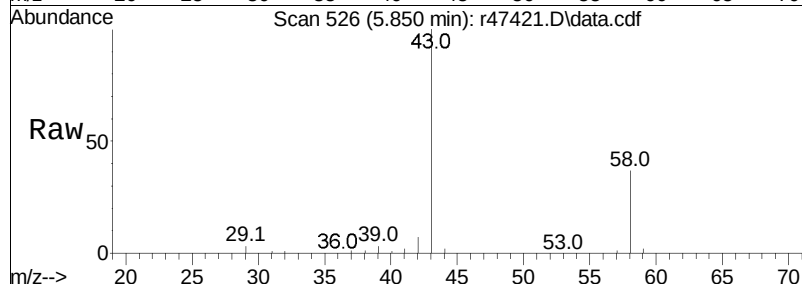
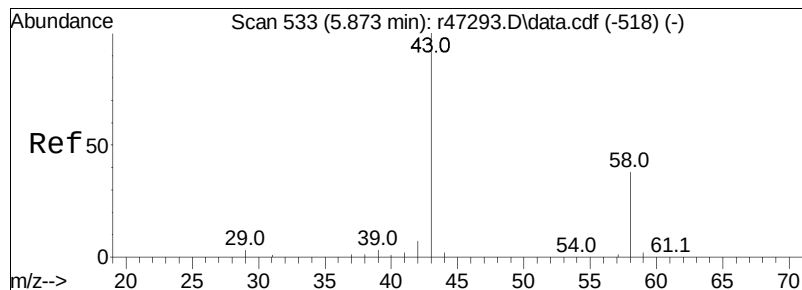




#15
 ethanol
 Concen: 283.97 ppbV
 RT: 5.296 min Scan# 382
 Delta R.T. -0.018 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

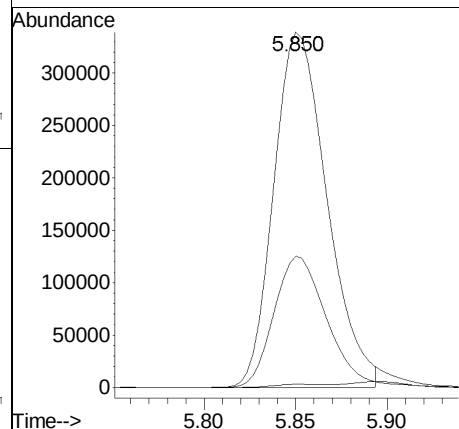
Tgt Ion:	31	Resp:	2007024
Ion Ratio	Lower	Upper	
31	100		
45	66.6	49.7	74.5

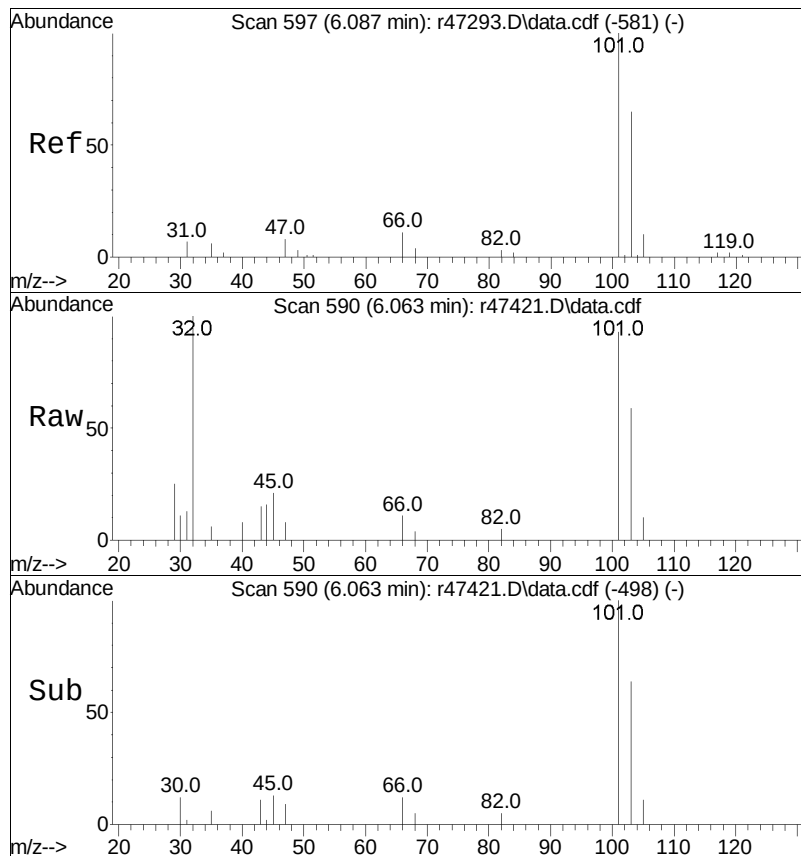




#19
acetone
Concen: 37.07 ppbV m
RT: 5.850 min Scan# 526
Delta R.T. -0.023 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

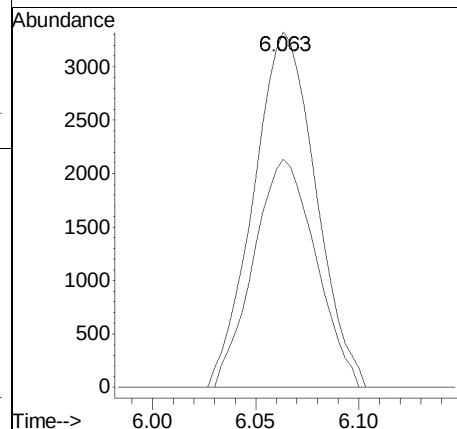
Tgt Ion:	43	58	57	Ratio	Lower	Upper	Resp:
43	100						684442
58	37.0				30.2	45.2	
57	0.9				0.7	1.1	

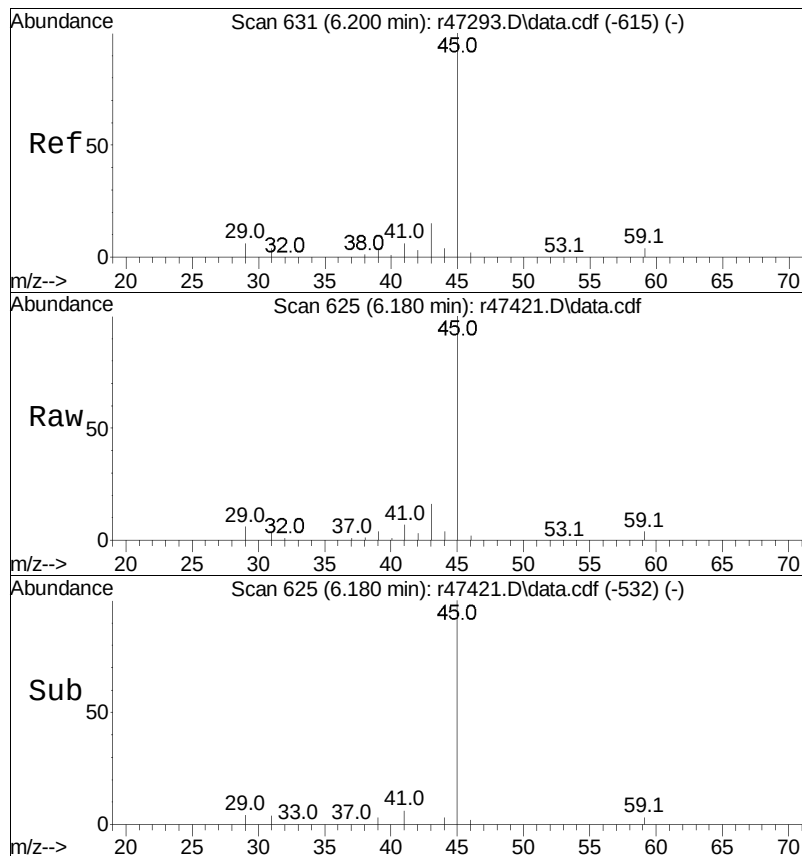




#21
trichlorofluoromethane
Concen: 0.44 ppbV
RT: 6.063 min Scan# 590
Delta R.T. -0.023 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

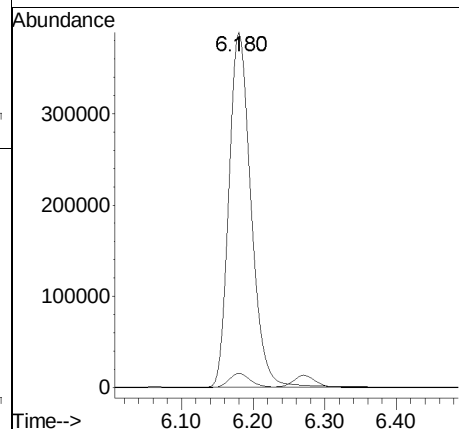
Tgt Ion	Ratio	Lower	Upper
101	100		
103	64.2	52.2	78.4

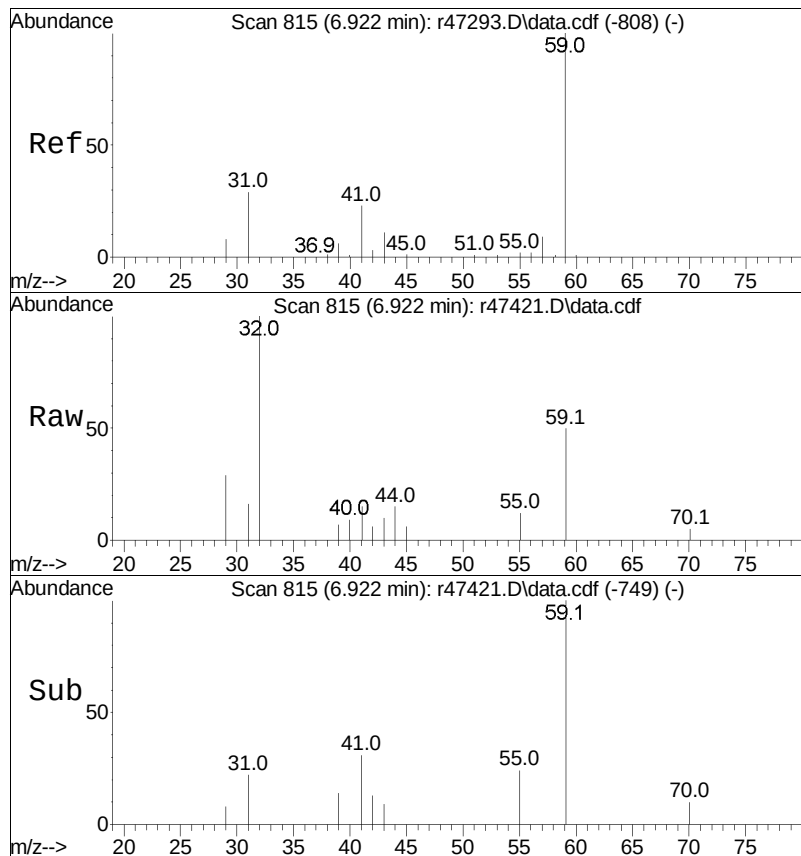




#22
 isopropyl alcohol
 Concen: 36.04 ppbV
 RT: 6.180 min Scan# 625
 Delta R.T. -0.020 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

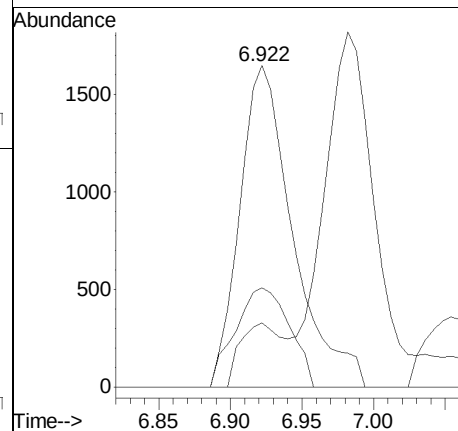
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.9	3.0	4.6

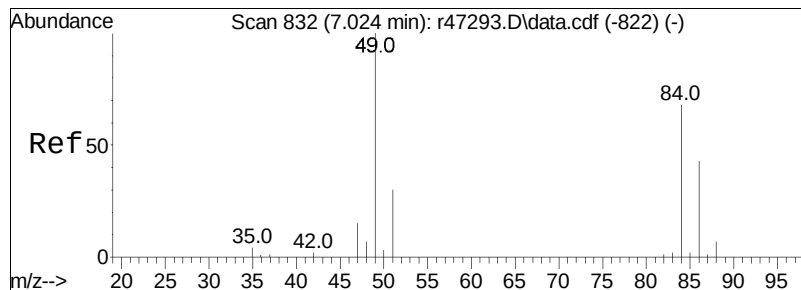




#27
 tertiary butyl alcohol
 Concen: 0.20 ppbV
 RT: 6.922 min Scan# 815
 Delta R.T. 0.000 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

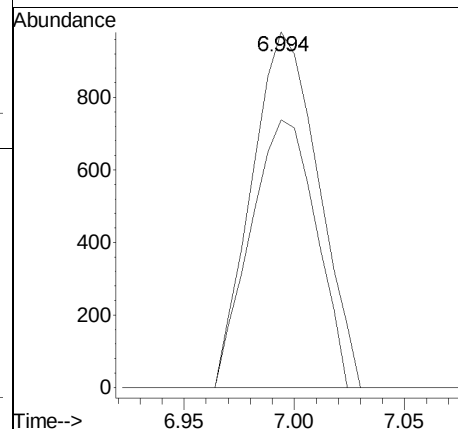
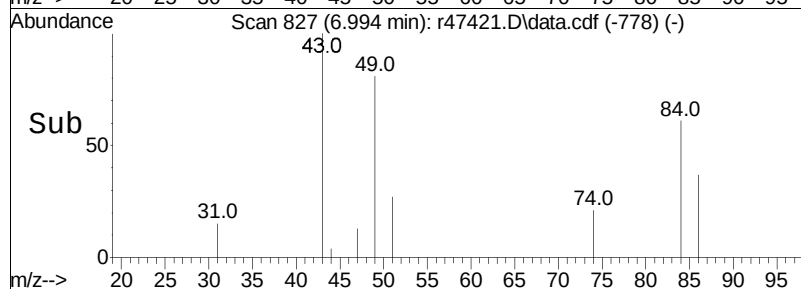
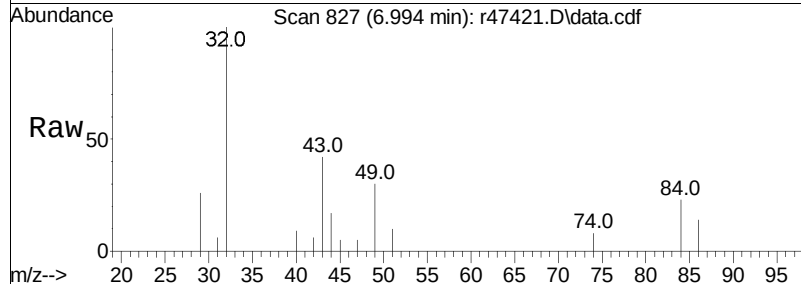
Tgt Ion:	59	Resp:	4251
Ion Ratio	Lower	Upper	
59	100		
41	30.9	18.1	27.1#
43	20.0	9.0	13.4#

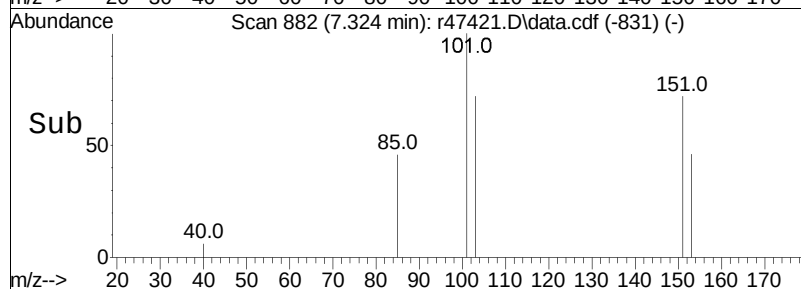
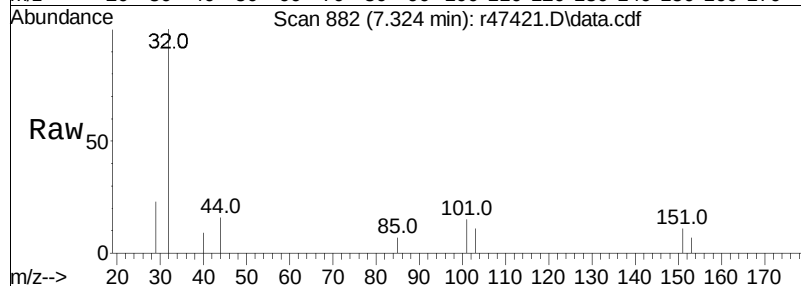
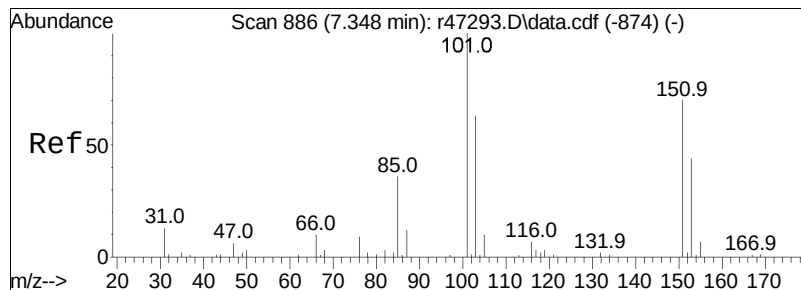




#28
 methylene chloride
 Concen: 0.16 ppbV
 RT: 6.994 min Scan# 827
 Delta R.T. -0.030 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

Tgt Ion	Ratio	Lower	Upper
49	100		
84	75.3	54.1	81.1





#31

Freon 113

Concen: 0.06 ppbV

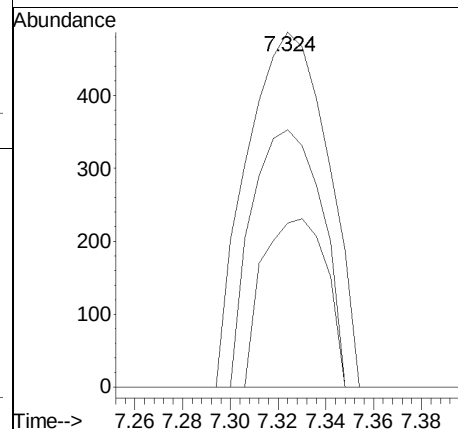
RT: 7.324 min Scan# 882

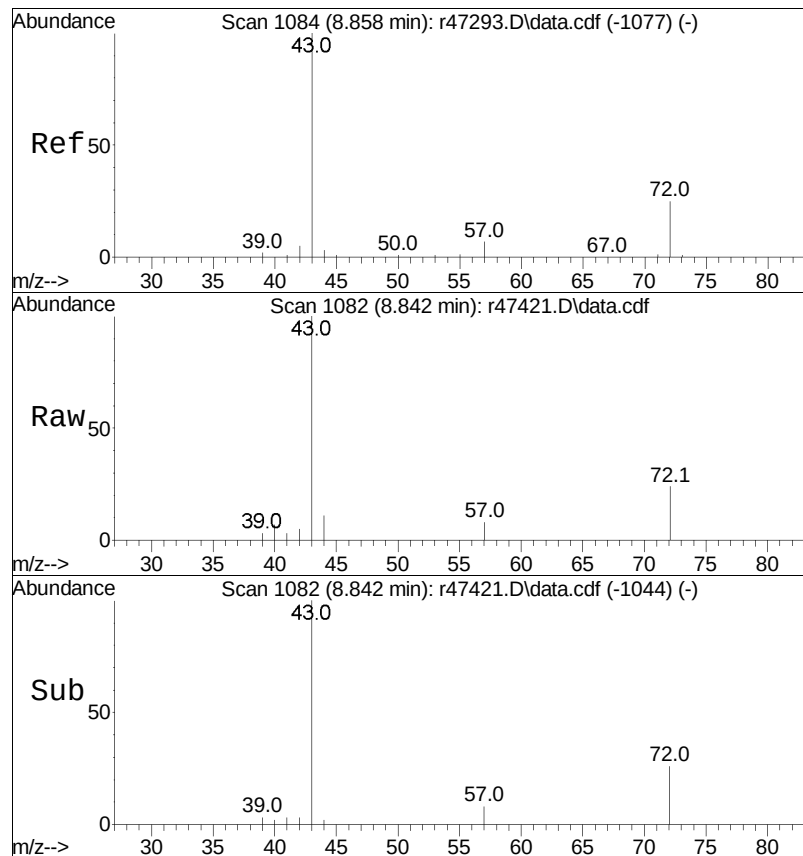
Delta R.T. -0.024 min

Lab File: r47421.D

Acq: 21 Jan 2020 10:48 PM

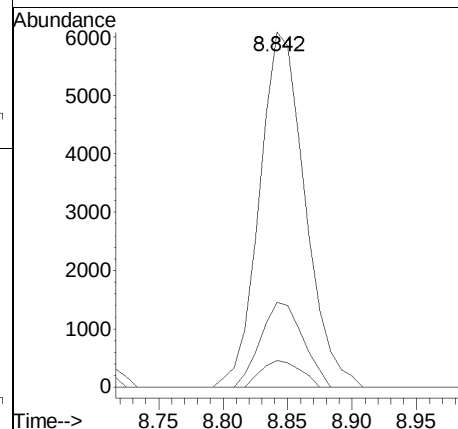
Tgt Ion:	101	Resp:	1148
Ion Ratio	Lower	Upper	
101	100		
85	46.2	28.8	43.2#
151	72.5	56.3	84.5

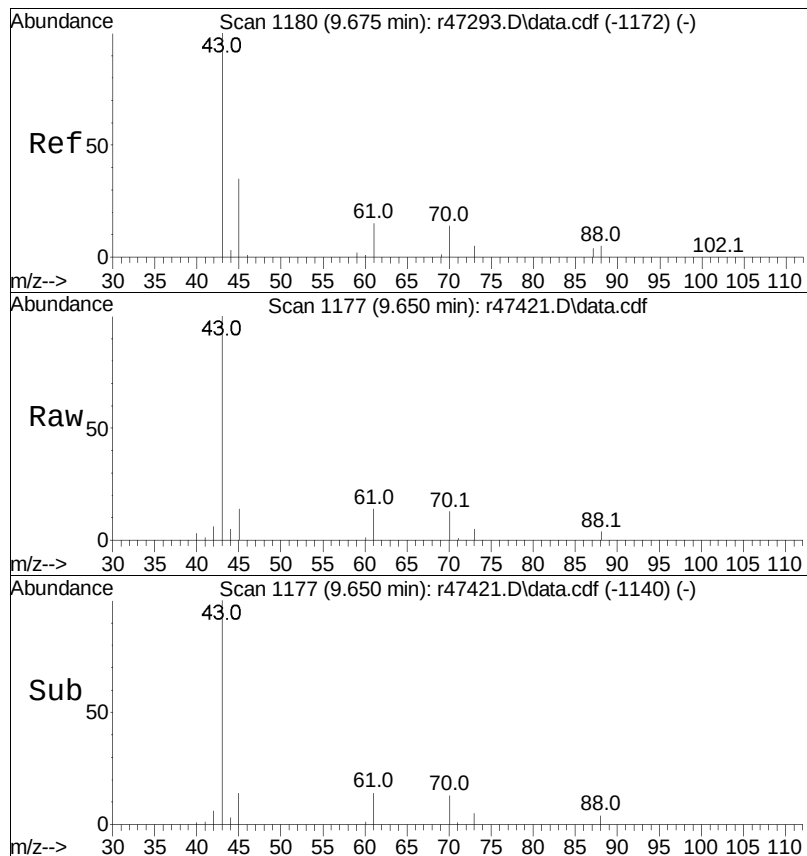




#36
 2-butanone
 Concen: 0.49 ppbV
 RT: 8.842 min Scan# 1082
 Delta R.T. -0.017 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

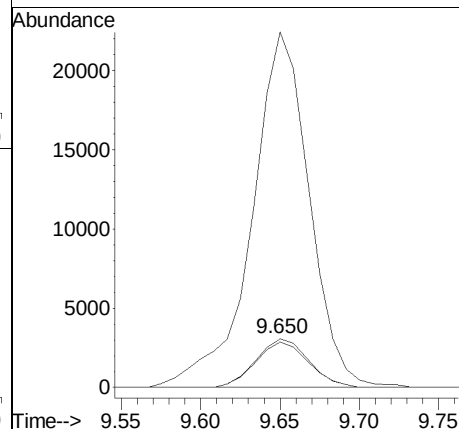
Tgt Ion:	43	Resp:	14953
Ion Ratio	Lower	Upper	
43	100		
72	23.9	19.8	29.6
57	7.6	5.5	8.3

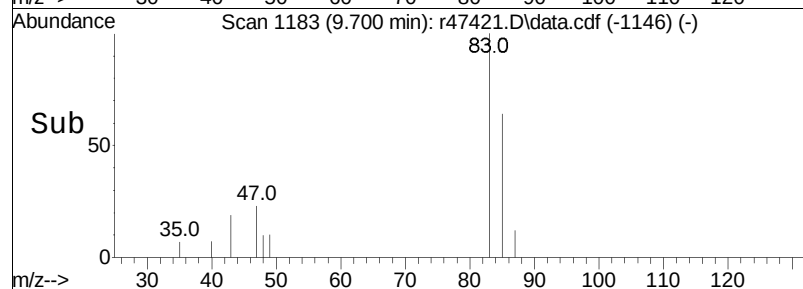
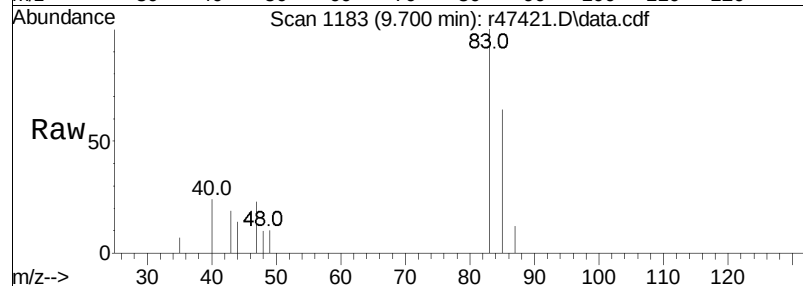
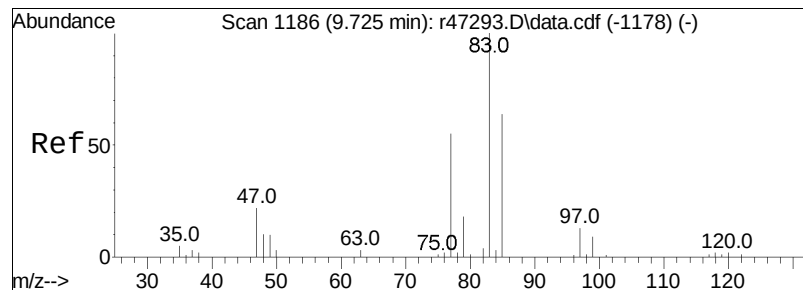




#38
 Ethyl Acetate
 Concen: 1.53 ppbV
 RT: 9.650 min Scan# 1177
 Delta R.T. -0.025 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

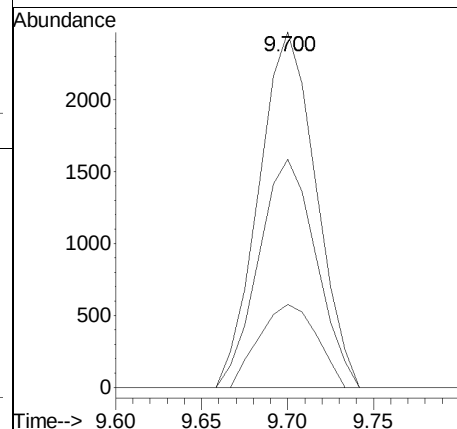
Tgt Ion:	61	Resp:	7105
Ion Ratio	Lower	Upper	
61	100		
70	93.3	77.3	115.9
43	730.8	633.3	949.9

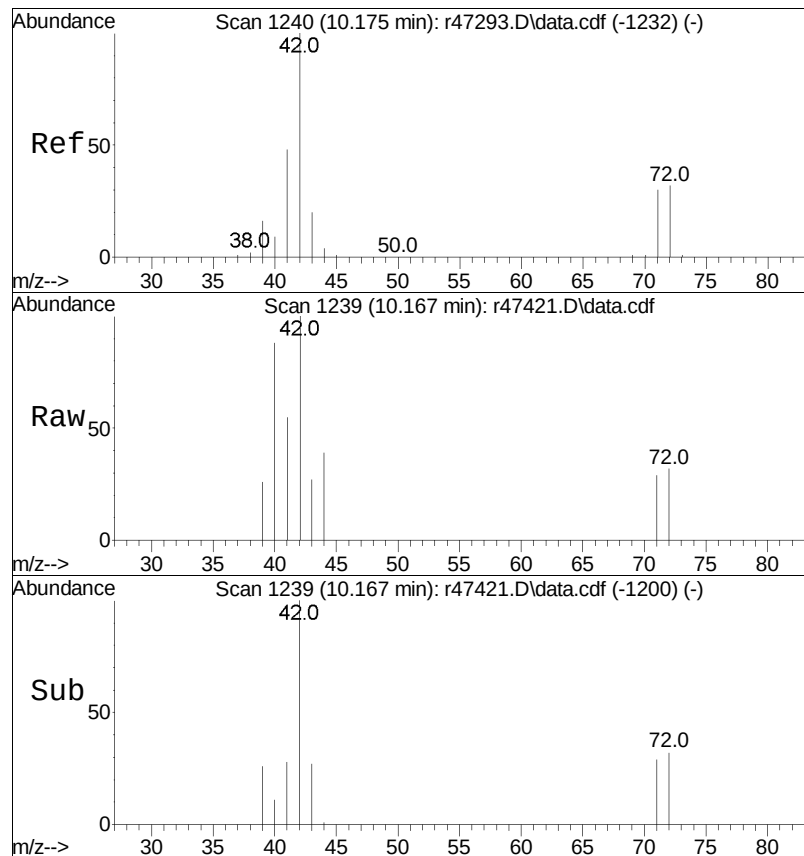




#39
chloroform
Concen: 0.31 ppbV
RT: 9.700 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

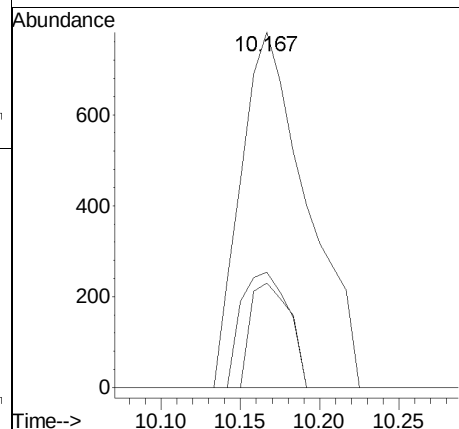
Tgt Ion	Ratio	Lower	Upper
83	100		
85	64.2	51.3	76.9
47	23.4	17.8	26.8

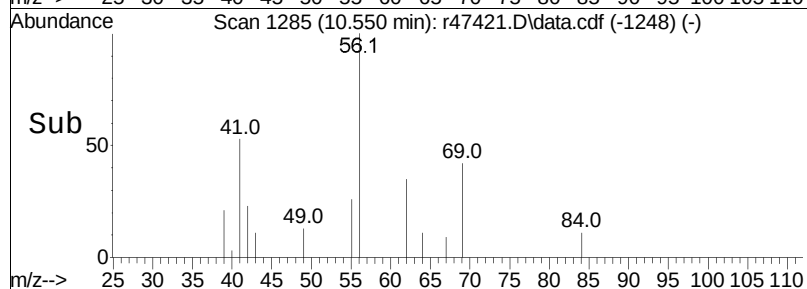
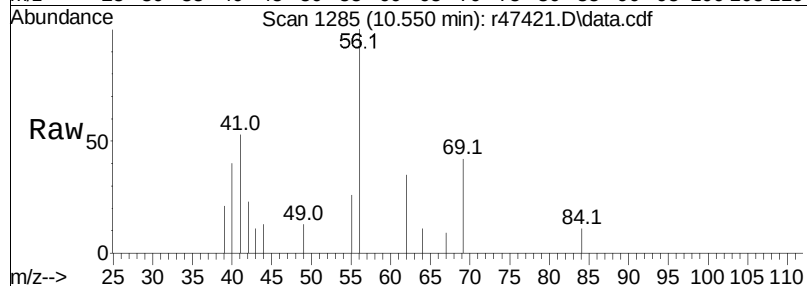
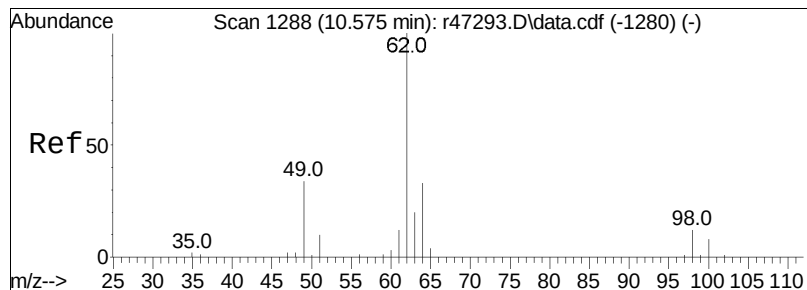




#40
 Tetrahydrofuran
 Concen: 0.11 ppbV
 RT: 10.167 min Scan# 1239
 Delta R.T. -0.008 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

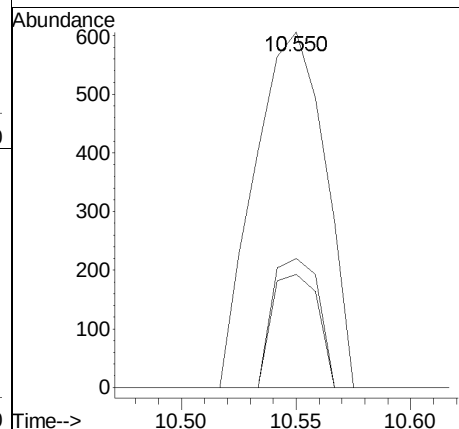
Tgt Ion	Ratio	Lower	Upper
42	100		
71	29.4	24.2	36.2
72	32.5	25.6	38.4

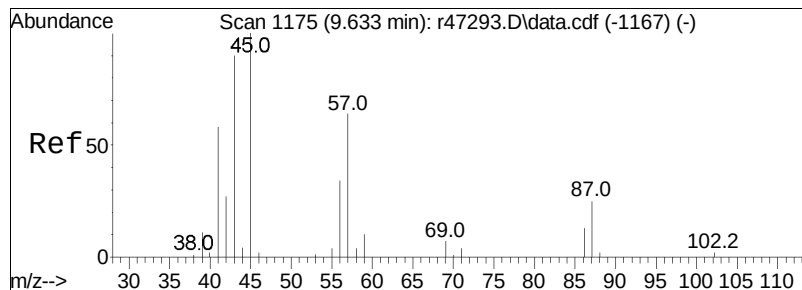




#42
 1,2-dichloroethane
 Concen: 0.09 ppbV
 RT: 10.550 min Scan# 1285
 Delta R.T. -0.025 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

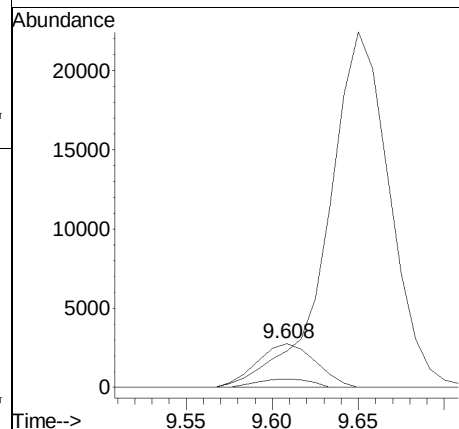
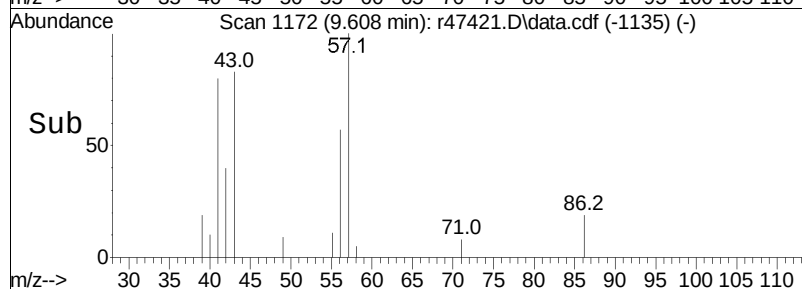
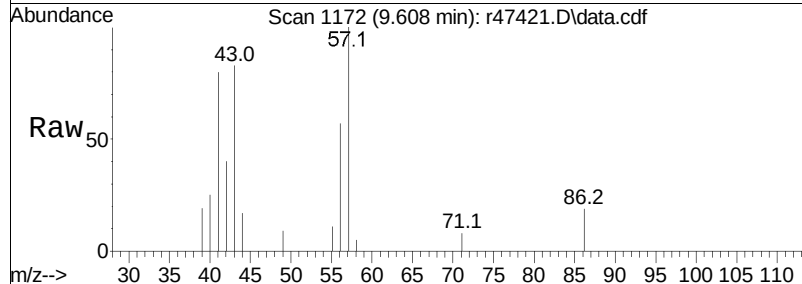
Tgt Ion:	62	Resp:	1290
Ion Ratio	Lower	Upper	
62	100		
64	31.8	26.2	39.4
49	36.3	26.9	40.3
63	0.0	15.6	23.4#

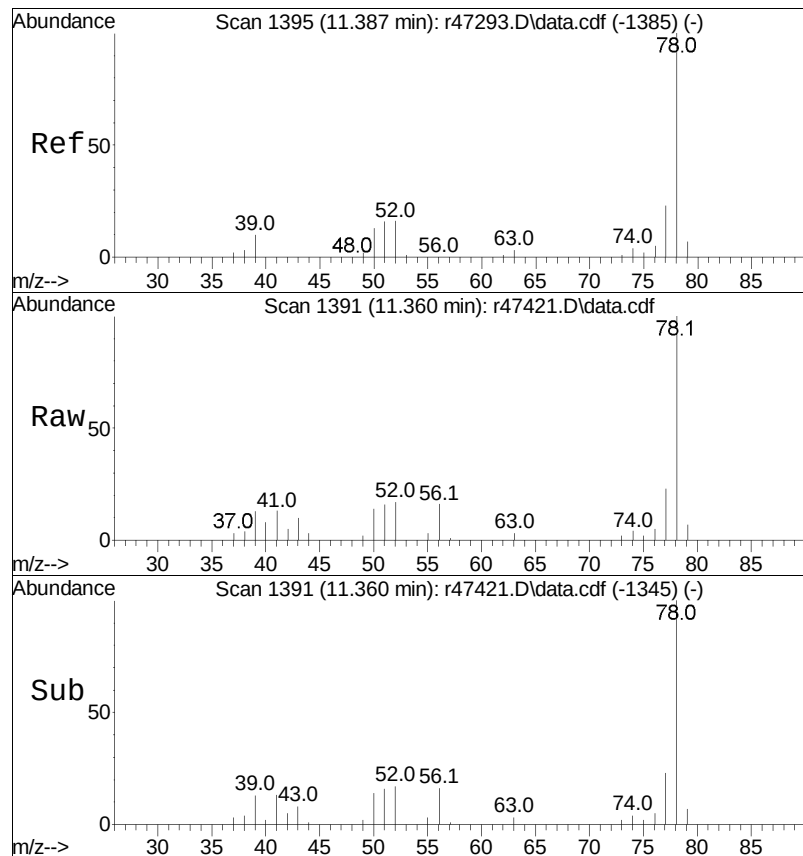




#44
hexane
Concen: 0.32 ppbV
RT: 9.608 min Scan# 1172
Delta R.T. -0.025 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

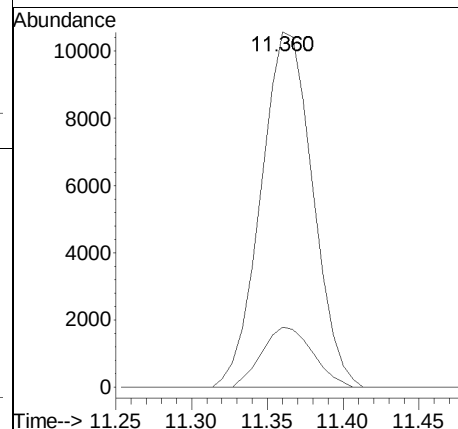
Tgt Ion	Ratio	Lower	Upper
57	100		
43	83.0	111.8	167.8#
86	19.4	15.8	23.6

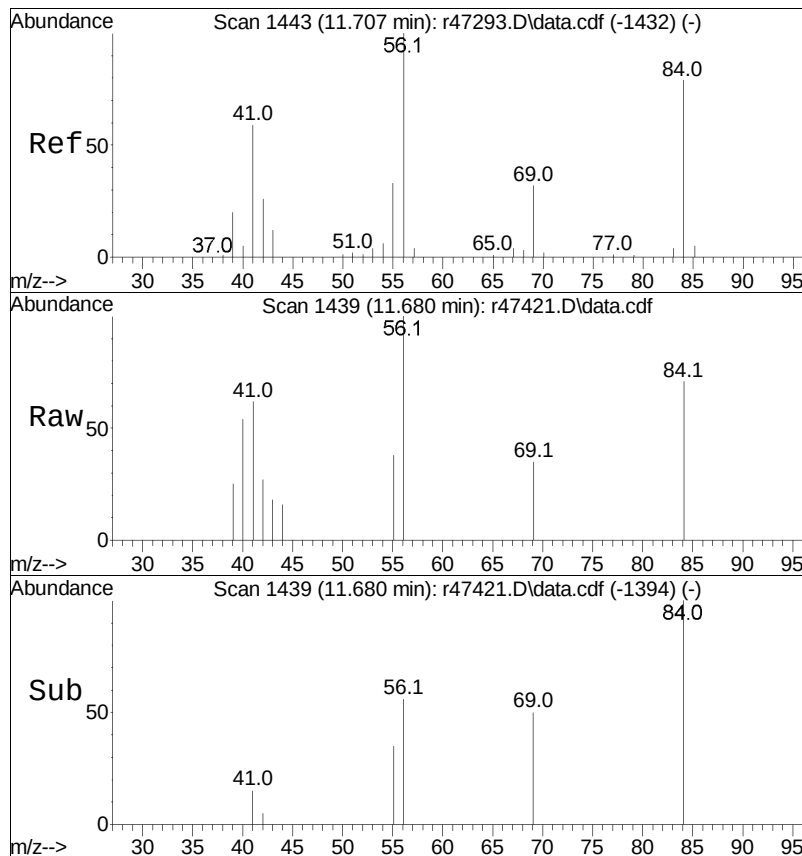




#50
benzene
Concen: 0.67 ppbV
RT: 11.360 min Scan# 1391
Delta R.T. -0.027 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

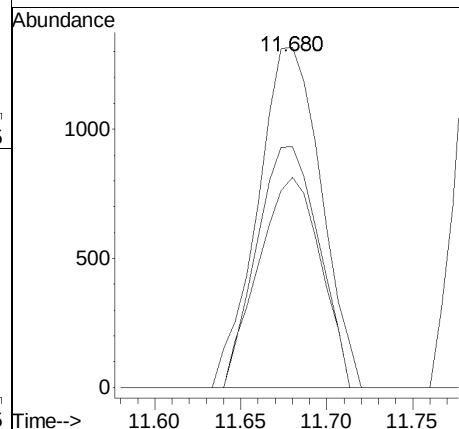
Tgt Ion	Ratio	Lower	Upper
78	100		
52	17.0	13.0	19.4

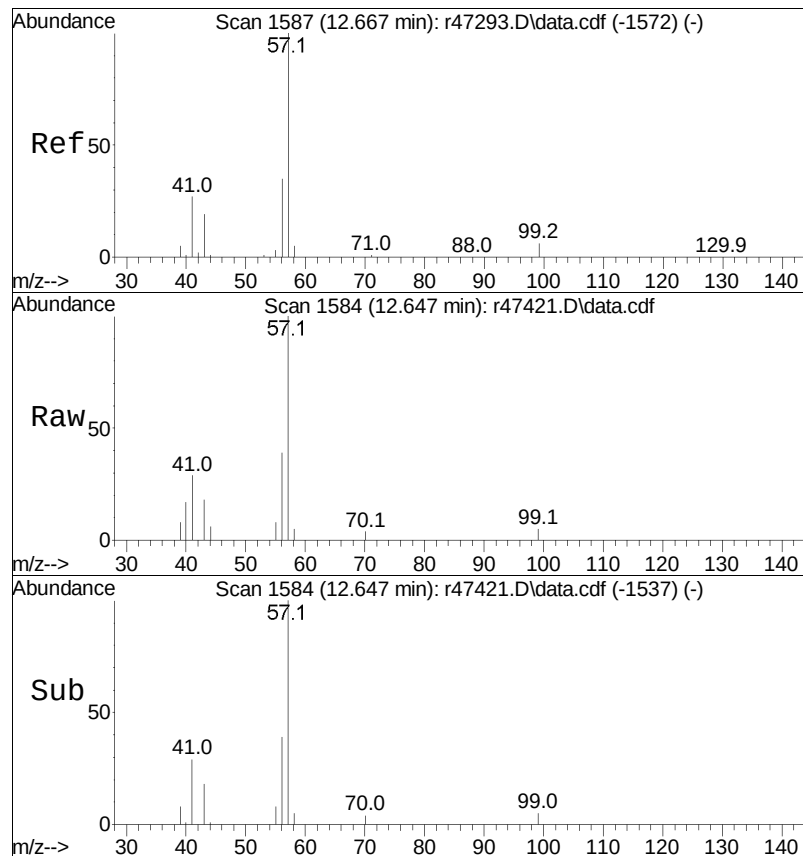




#53
cyclohexane
Concen: 0.14 ppbV
RT: 11.680 min Scan# 1439
Delta R.T. -0.027 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

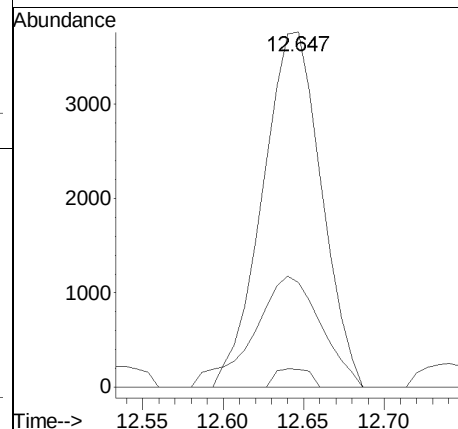
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	70.7	63.0	94.6	
41	61.7	46.8	70.2	

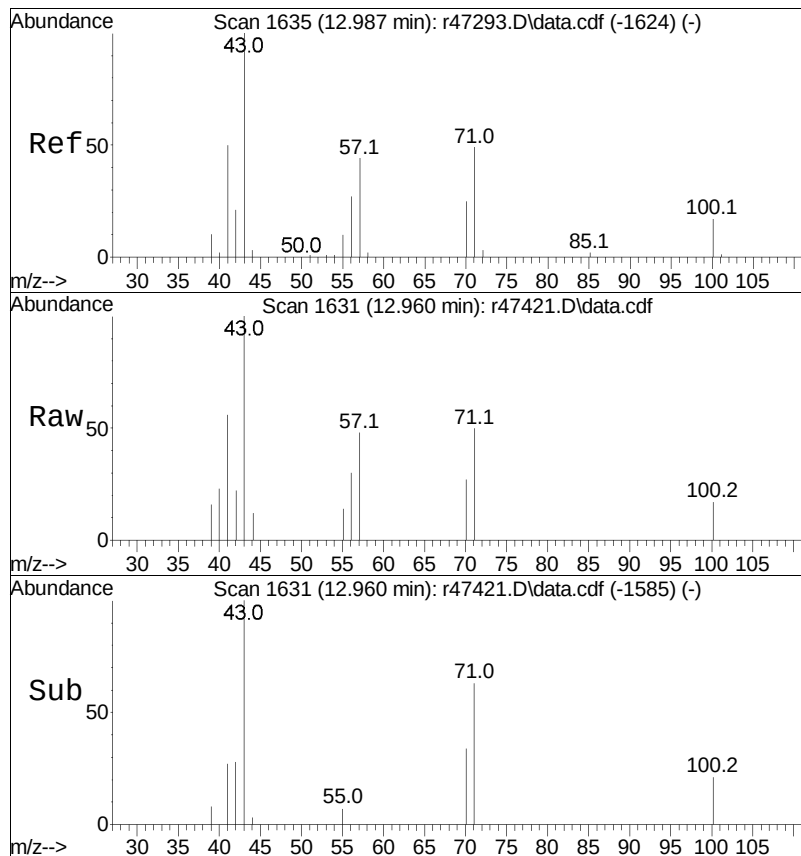




#60
 2,2,4-trimethylpentane
 Concen: 0.13 ppbV
 RT: 12.647 min Scan# 1584
 Delta R.T. -0.020 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

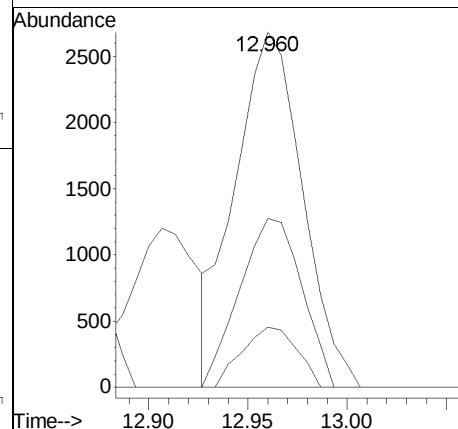
Tgt Ion	Ratio	Lower	Upper
57	100		
99	5.1	4.8	7.2
41	29.5	21.8	32.8

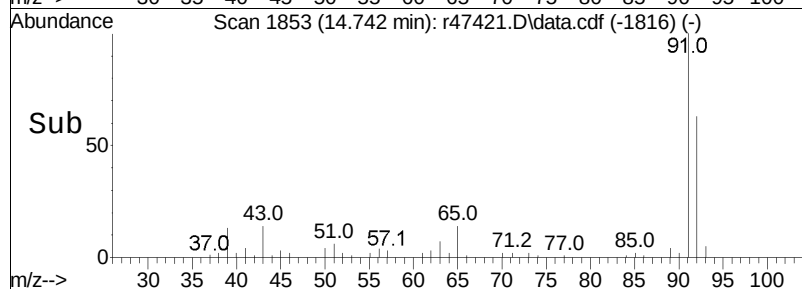
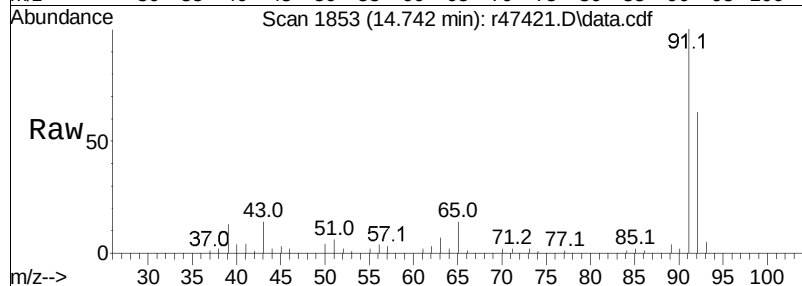
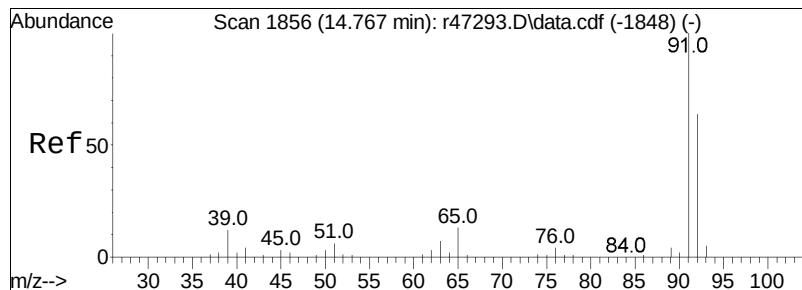




#62
heptane
Concen: 0.20 ppbV
RT: 12.960 min Scan# 1631
Delta R.T. -0.027 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

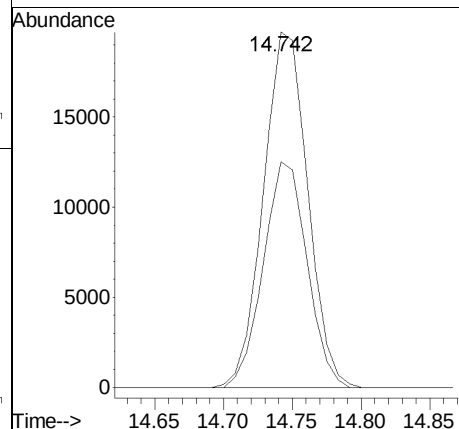
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	47.5	35.2	52.8	
100	17.0	13.7	20.5	

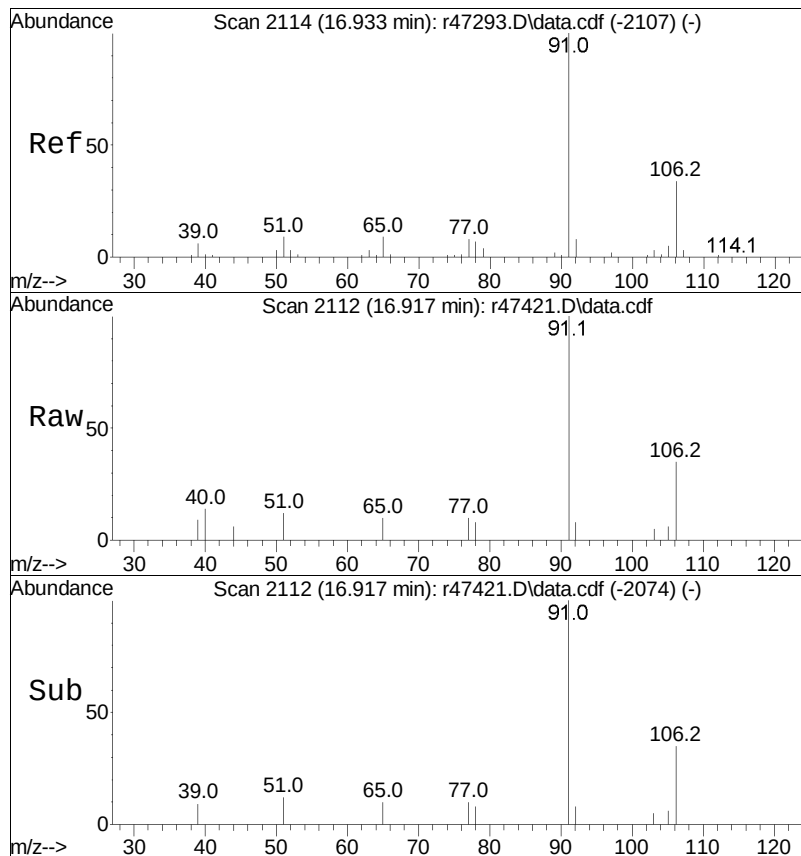




#68
toluene
Concen: 0.85 ppbV
RT: 14.742 min Scan# 1853
Delta R.T. -0.025 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

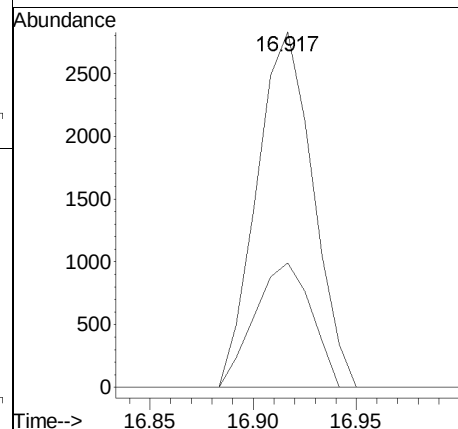
Tgt	Ion	Resp	Lower	Upper
91	100			
92	63.5		51.1	76.7

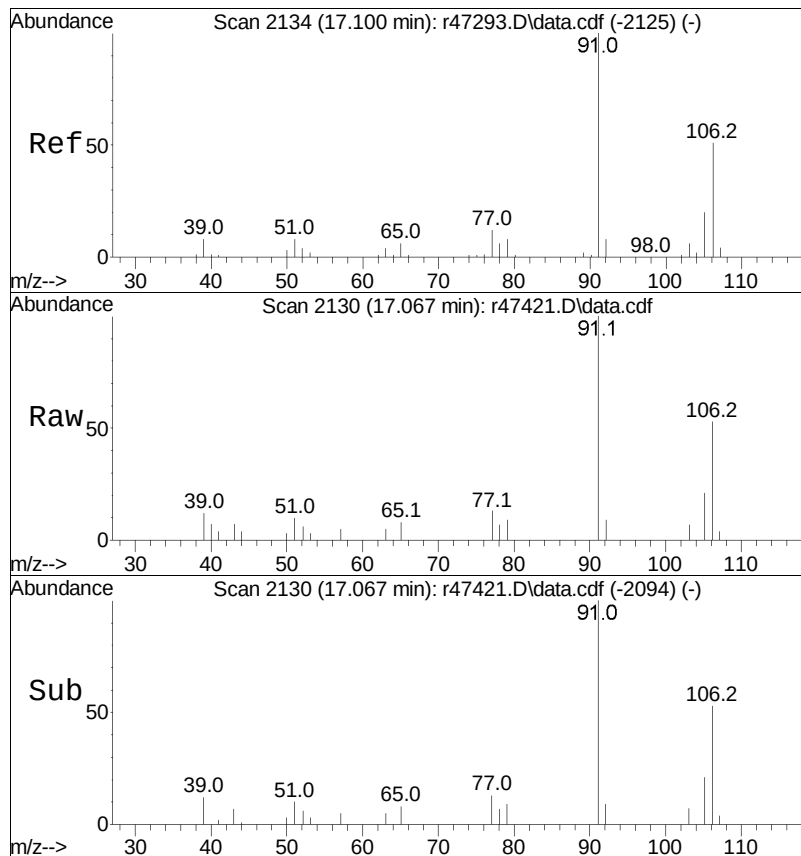




#81
ethylbenzene
Concen: 0.08 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47421.D
Acq: 21 Jan 2020 10:48 PM

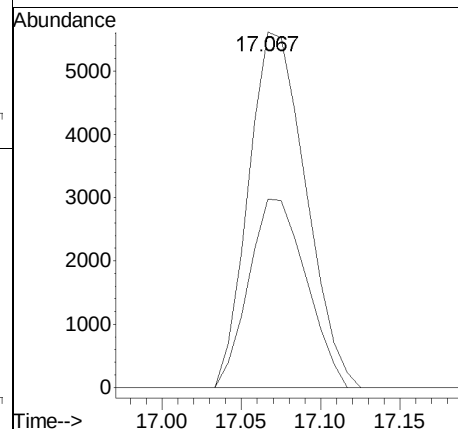
Tgt	Ion	Resp	Lower	Upper
91	100	5355		
106	35.0	27.6	41.4	

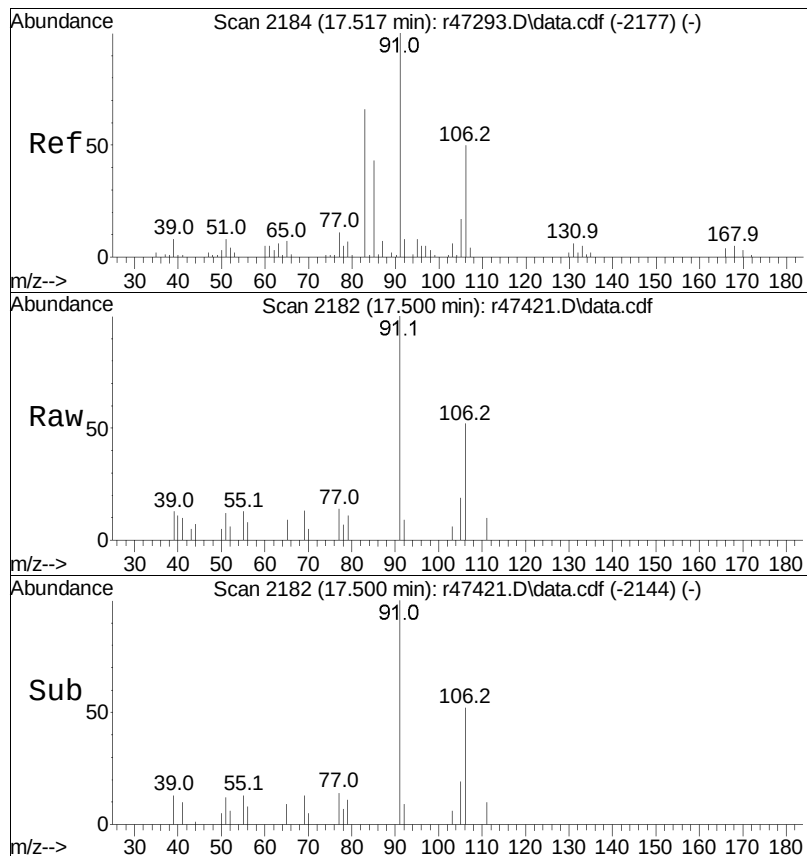




#83
 m+p-xylene
 Concen: 0.27 ppbV
 RT: 17.067 min Scan# 2130
 Delta R.T. -0.033 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

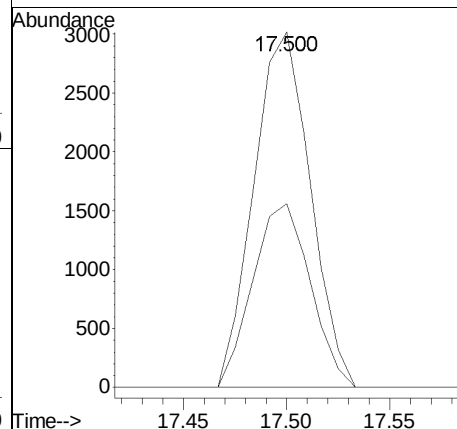
Tgt	Ion	Resp	Lower	Upper
91	100	14077		
106	53.0	41.2	61.8	

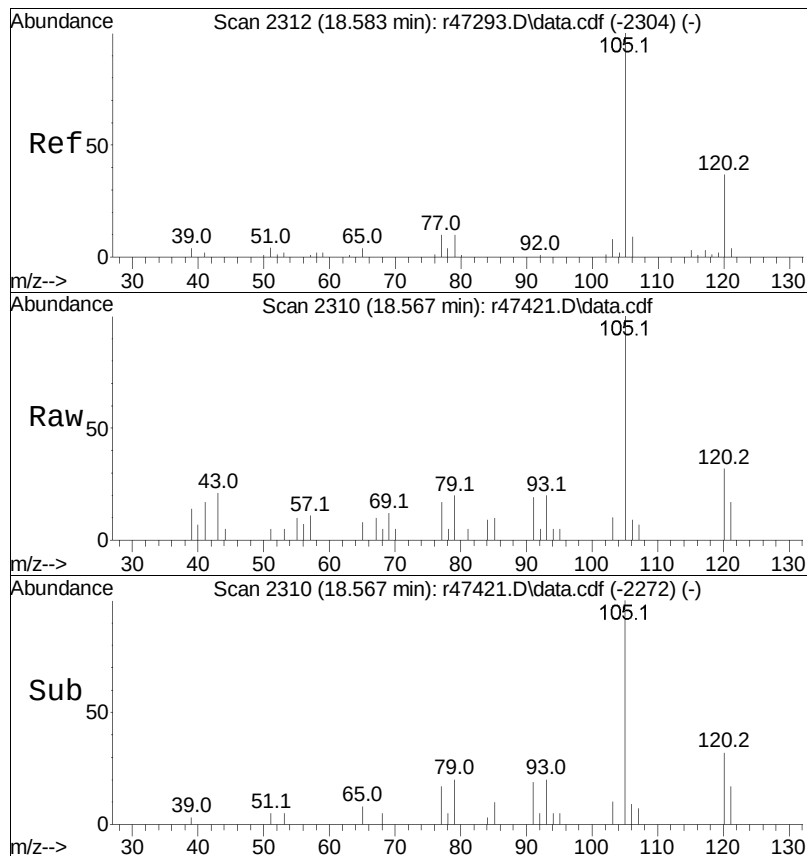




#87
 o-xylene
 Concen: 0.11 ppbV
 RT: 17.500 min Scan# 2182
 Delta R.T. -0.017 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

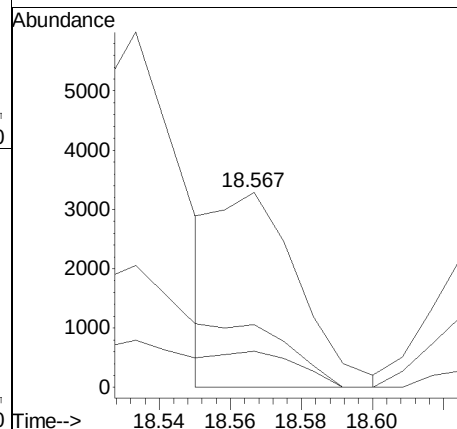
Tgt Ion:	91	Resp:	5752
Ion Ratio	Lower	Upper	
91	100		
106	51.7	40.1	60.1

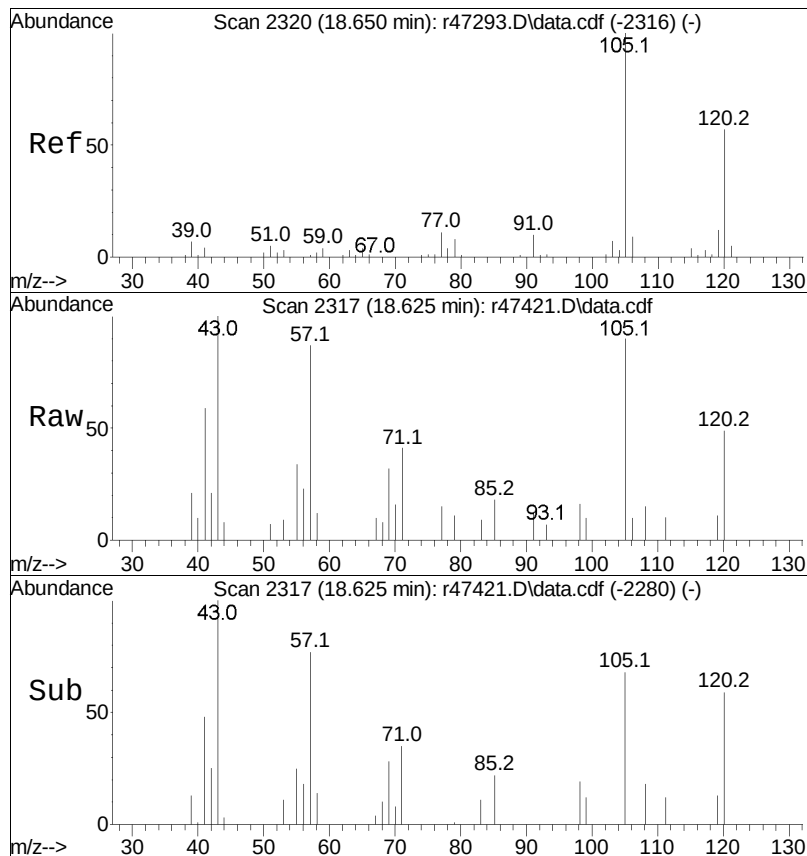




#96
 4-ethyl toluene
 Concen: 0.07 ppbV m
 RT: 18.567 min Scan# 2310
 Delta R.T. -0.017 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

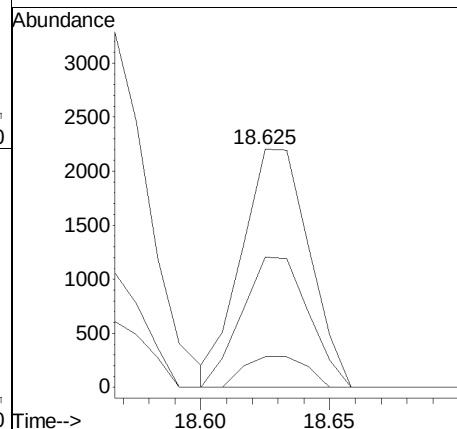
Tgt Ion	Ratio	Lower	Upper
105	100		
120	32.2	29.4	44.2
91	18.6	8.2	12.4

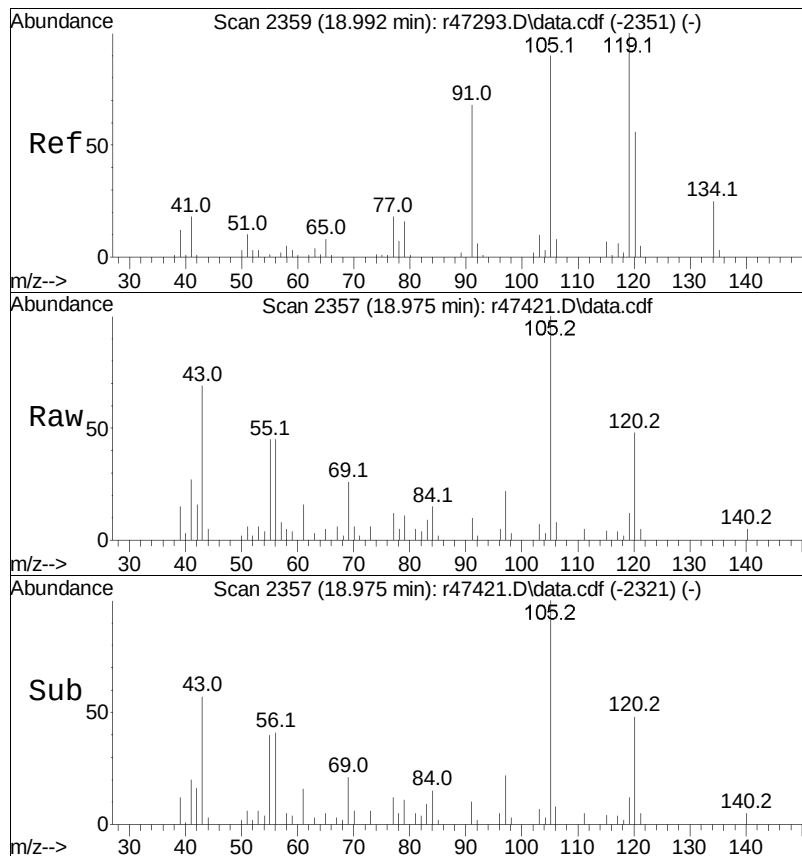




#97
 1,3,5-trimethylbenzene
 Concen: 0.07 ppbV
 RT: 18.625 min Scan# 2317
 Delta R.T. -0.025 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

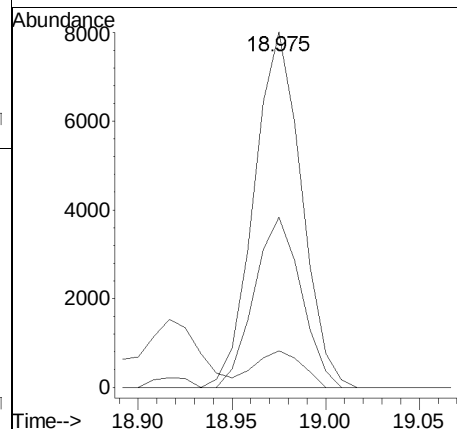
Tgt Ion	Ratio	Lower	Upper
105	100		
120	54.7	45.2	67.8
91	12.9	7.8	11.6

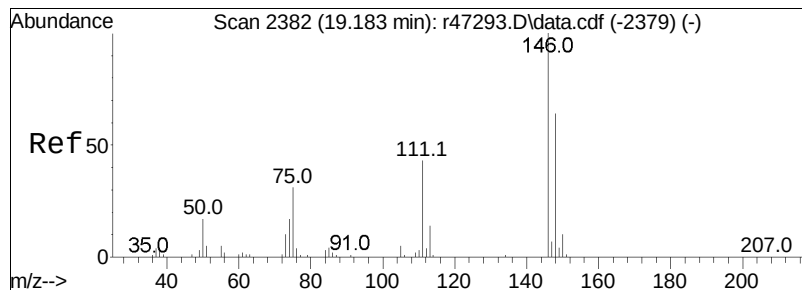




#99
 1,2,4-trimethylbenzene
 Concen: 0.25 ppbV
 RT: 18.975 min Scan# 2357
 Delta R.T. -0.017 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

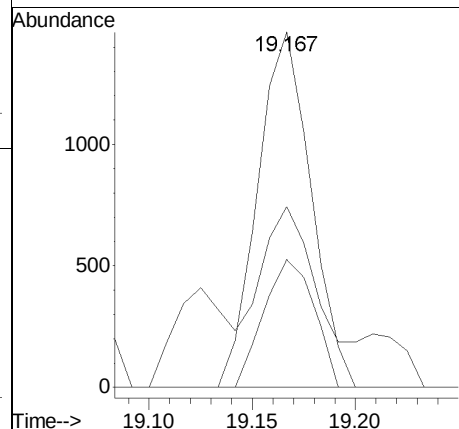
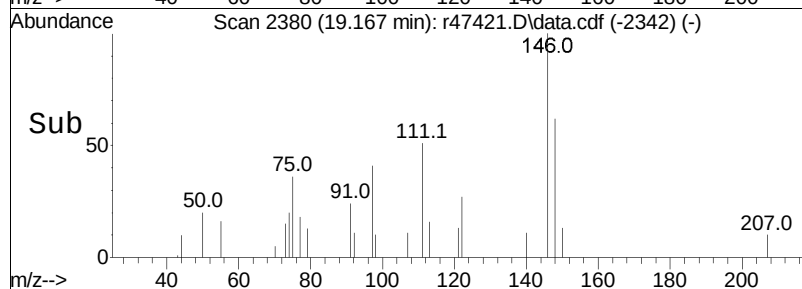
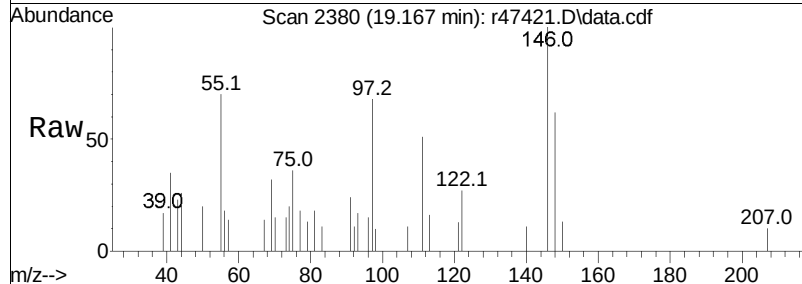
Tgt Ion:	105	Resp:	14098
Ion Ratio	Lower	Upper	
105	100		
120	47.9	50.2	75.4#
91	10.3	61.0	91.6#





#103
 1,4-dichlorobenzene
 Concen: 0.08 ppbV
 RT: 19.167 min Scan# 2380
 Delta R.T. -0.017 min
 Lab File: r47421.D
 Acq: 21 Jan 2020 10:48 PM

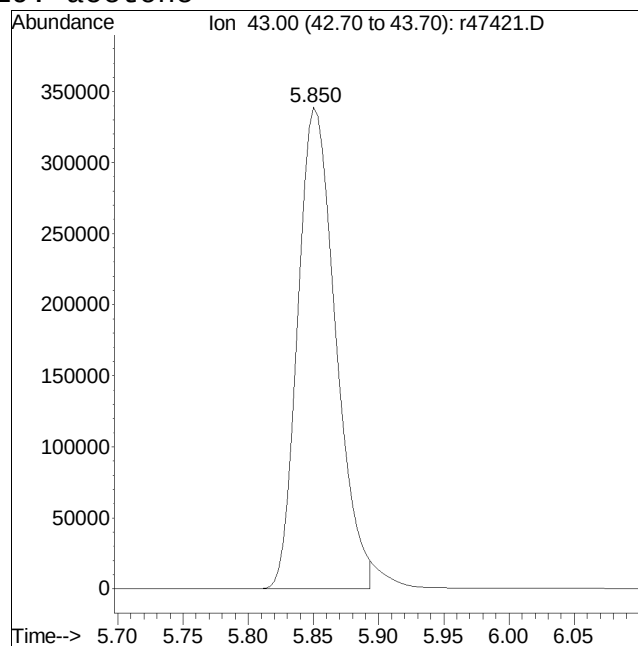
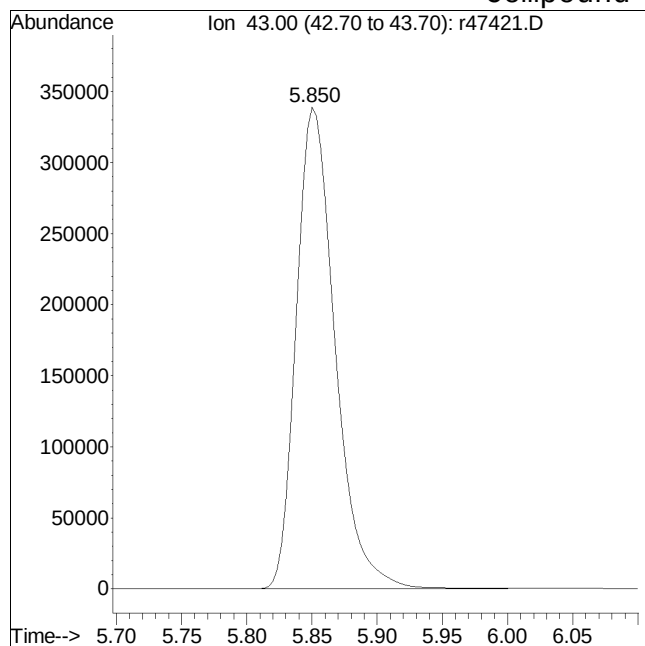
Tgt Ion	Ratio	Lower	Upper
146	100		
111	50.9	34.4	51.6
75	36.0	24.6	36.8



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47421.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:0: 8 Instrument :
Sample : L2002033-03,3,250,250 Quant Date : 1/22/2020 5:37 am

Compound #19: acetone



Original Peak Response = 702763

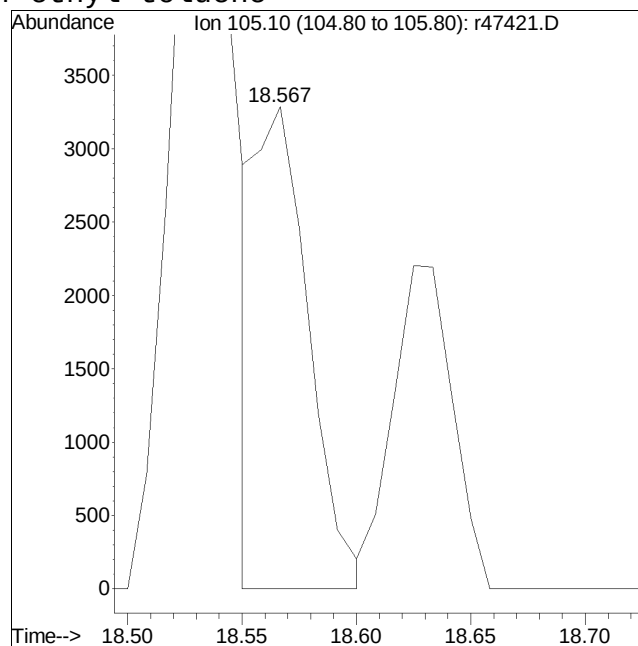
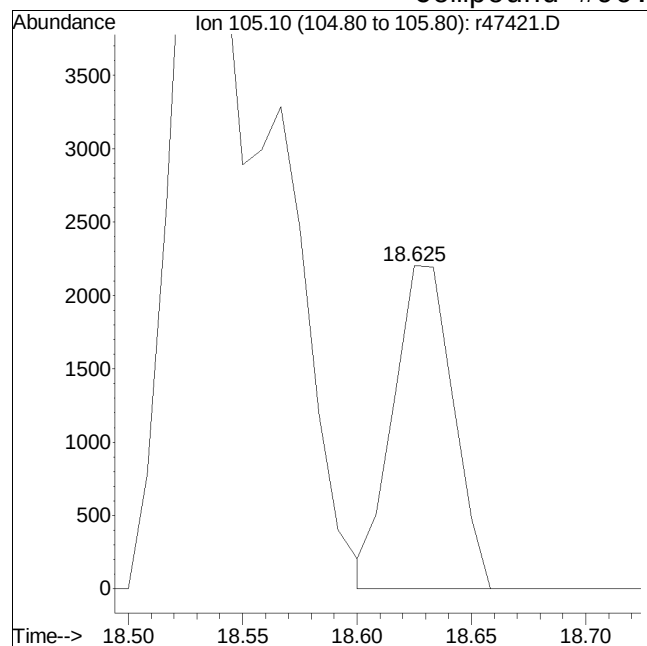
Manual Peak Response = 684442 M6

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

Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47421.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:0: 8 Instrument :
Sample : L2002033-03,3,250,250 Quant Date : 1/22/2020 5:37 am

Compound #96: 4-ethyl toluene



Original Peak Response = 4015

Manual Peak Response = 5271 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\Airpiano4\2020\01\200121T\
 Data File : r47422.D
 Acq On : 21 Jan 2020 11:28 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-05,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:51:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.542	49	216165	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =	104.50%		
43) 1,4-difluorobenzene	11.800	114	554463	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =	83.44%		
67) chlorobenzene-D5	16.525	54	106978	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =	100.55%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.994	85	7710	0.456	ppbV	98
6) chloromethane	4.174	50	5846	0.607	ppbV	97
7) Freon-114	4.300		0	N.D.		
10) 1,3-butadiene	4.594	54	947M4	0.097	ppbV	
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.302	31	2667104	364.132	ppbV	95
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.853	43	849673M6	44.406	ppbV	
21) trichlorofluoromethane	6.067	101	8012	0.485	ppbV	99
22) isopropyl alcohol	6.183	45	1021870	42.503	ppbV	100
27) tertiary butyl alcohol	6.922	59	5963	0.276	ppbV #	88
28) methylene chloride	6.994	49	2543	0.188	ppbV	92
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.288		0	N.D.		
31) Freon 113	7.330	101	1087	0.056	ppbV #	88
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	8.850	43	16268	0.517	ppbV	99
38) Ethyl Acetate	9.650	61	9281	1.929	ppbV	85
39) chloroform	9.700	83	6435	0.334	ppbV	97
40) Tetrahydrofuran	10.167	42	2989	0.135	ppbV #	88
42) 1,2-dichloroethane	10.550	62	1536	0.106	ppbV	94
44) hexane	9.608	57	6821	0.327	ppbV #	58
50) benzene	11.367	78	25335	0.665	ppbV	99
53) cyclohexane	11.680	56	4230	0.175	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47422.D
 Acq On : 21 Jan 2020 11:28 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-05,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:51:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

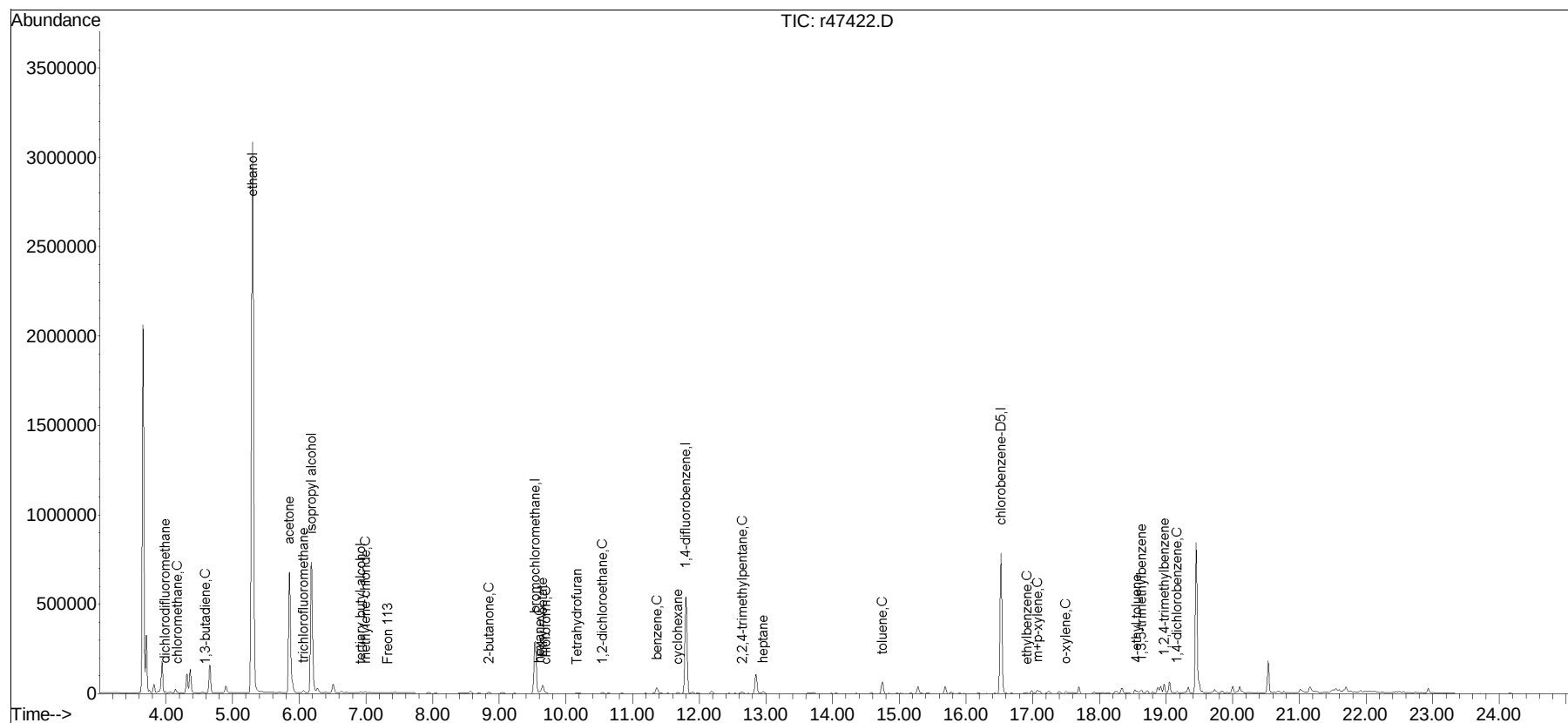
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.	d	
60) 2,2,4-trimethylpentane	12.647	57	10268	0.137	ppbV	94
62) heptane	12.960	43	7584	0.231	ppbV	94
63) cis-1,3-dichloropropene	0.000		0	N.D.		
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	14.750	91	51858	0.996	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	16.917	91	5947	0.094	ppbV	100
83) m+p-xylene	17.075	91	15164	0.286	ppbV	97
84) bromoform	0.000		0	N.D.		
85) styrene	17.400		0	N.D.		
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d	
87) o-xylene	17.500	91	6375	0.123	ppbV	96
96) 4-ethyl toluene	18.567	105	4396M6	0.059	ppbV	
97) 1,3,5-trimethylbenzene	18.633	105	4633	0.076	ppbV #	86
99) 1,2,4-trimethylbenzene	18.975	105	15957	0.279	ppbV #	51
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	146	2838	0.082	ppbV	91
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	0.000		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

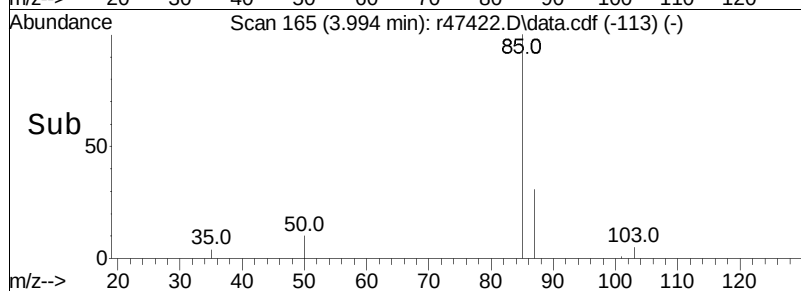
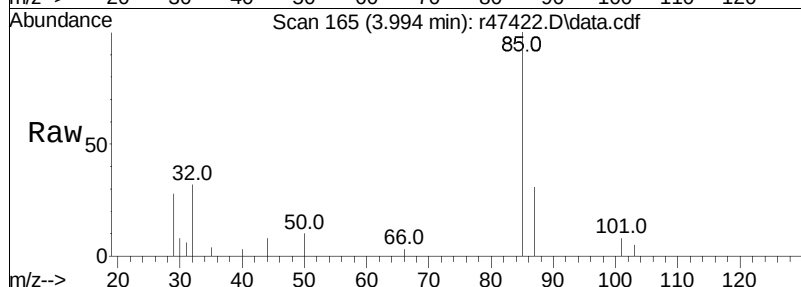
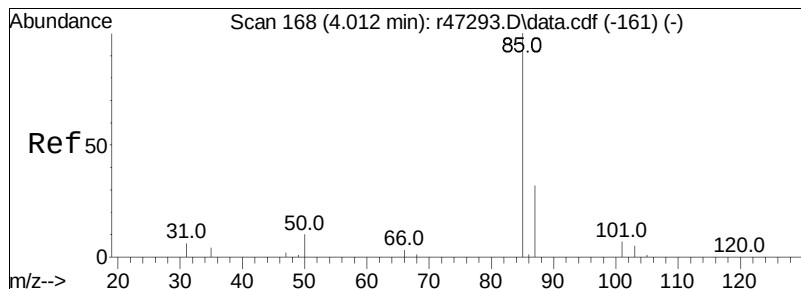
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airpiano4\2020\01\200121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File : r47422.D
Acq On : 21 Jan 2020 11:28 PM
Operator : AIRPIANO4:EW
Sample : L2002033-05,3,250,250
Misc : WG1332350,ICAL16438
ALS Vial : 0 Sample Multiplier: 1

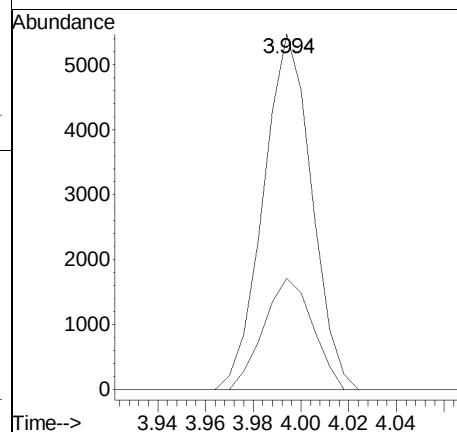
Quant Time: Jan 22 08:51:37 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

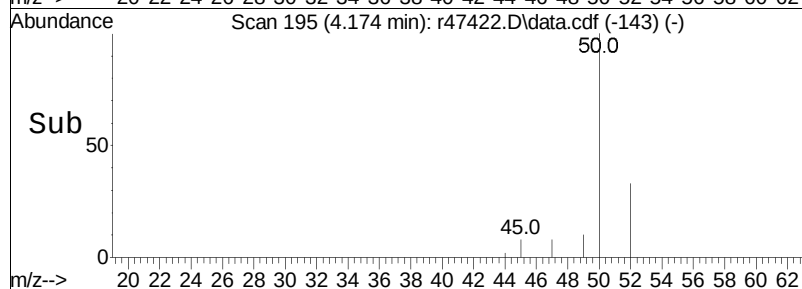
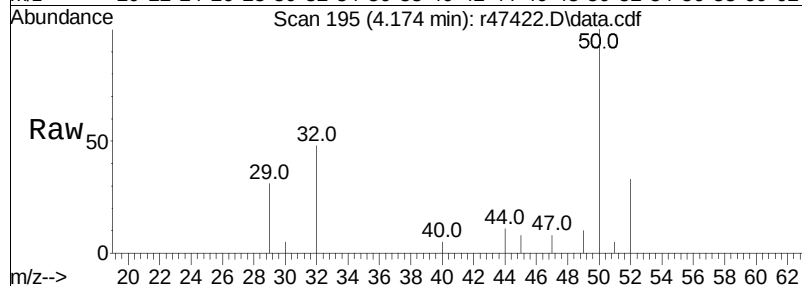
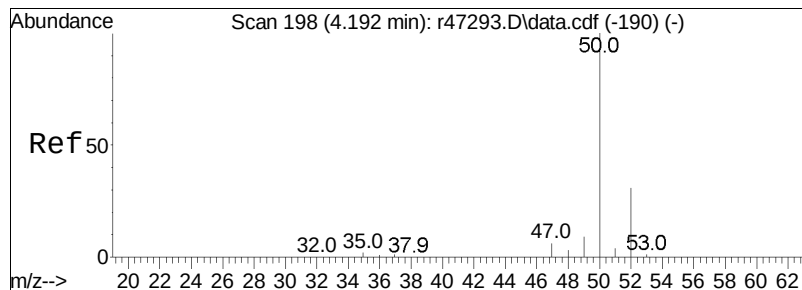




#5
dichlorodifluoromethane
Concen: 0.46 ppbV
RT: 3.994 min Scan# 165
Delta R.T. -0.018 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

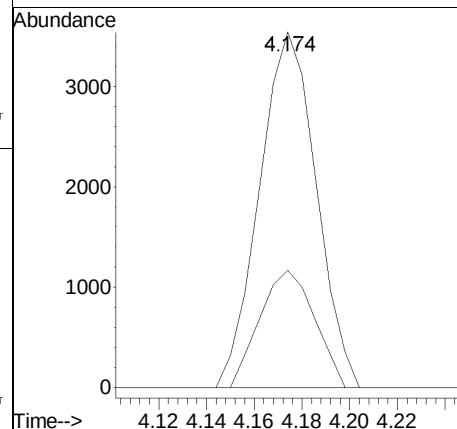
Tgt Ion: 85 Resp: 7710
Ion Ratio Lower Upper
85 100
87 31.3 25.8 38.6

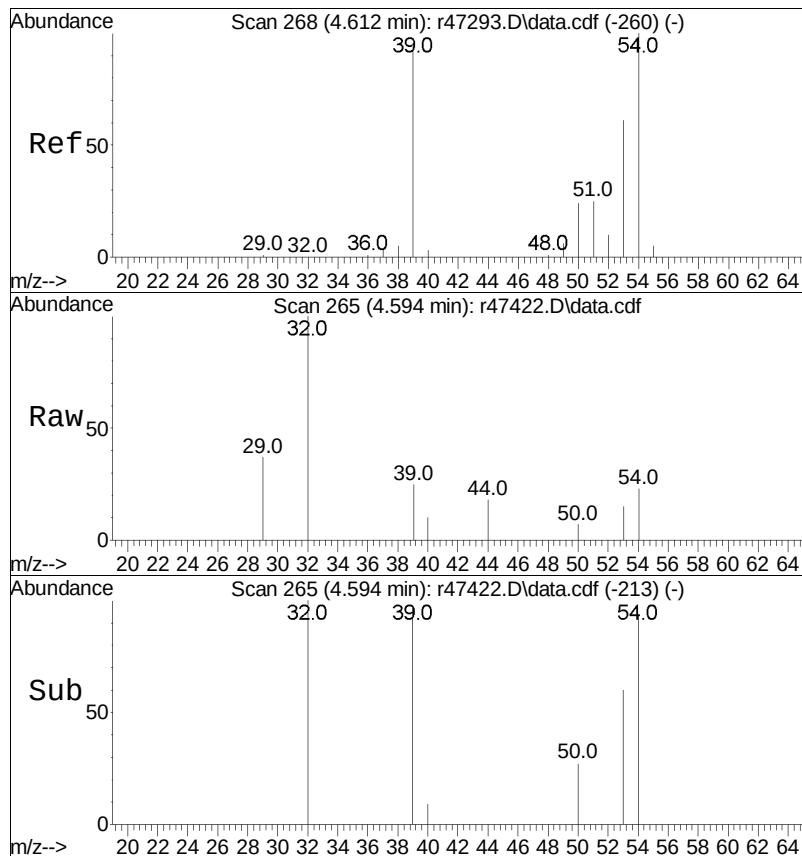




#6
 chloromethane
 Concen: 0.61 ppbV
 RT: 4.174 min Scan# 195
 Delta R.T. -0.018 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

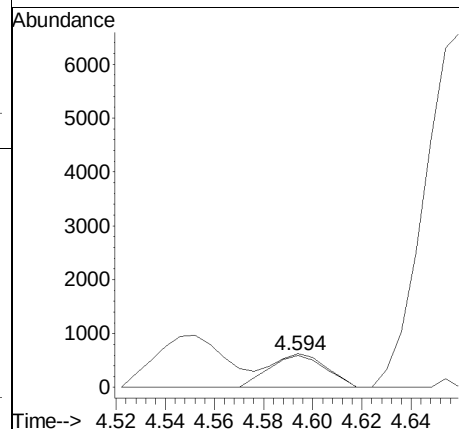
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	32.9		24.9	37.3

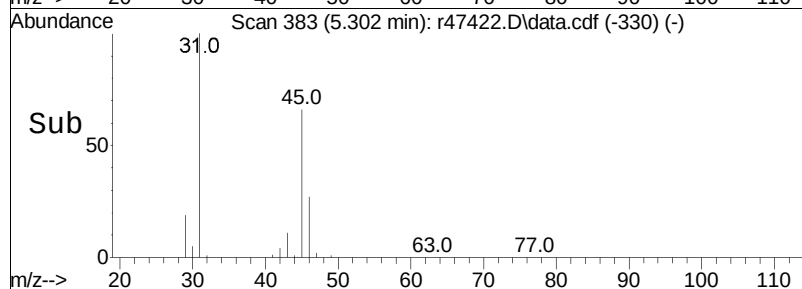
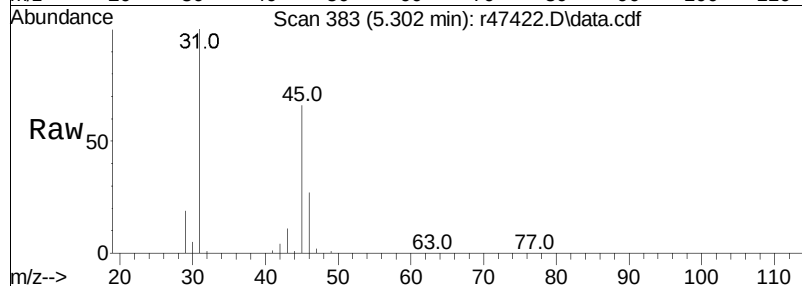
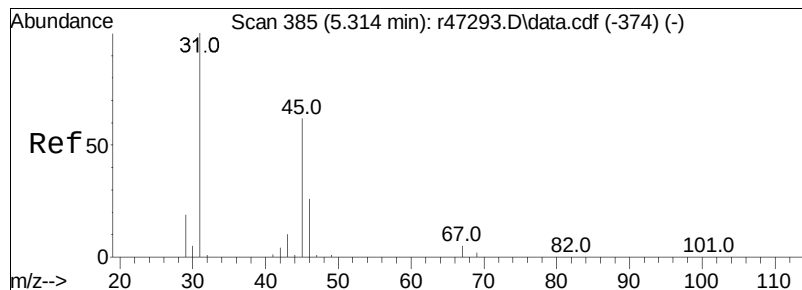




#10
 1,3-butadiene
 Concen: 0.10 ppbV m
 RT: 4.594 min Scan# 265
 Delta R.T. -0.018 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

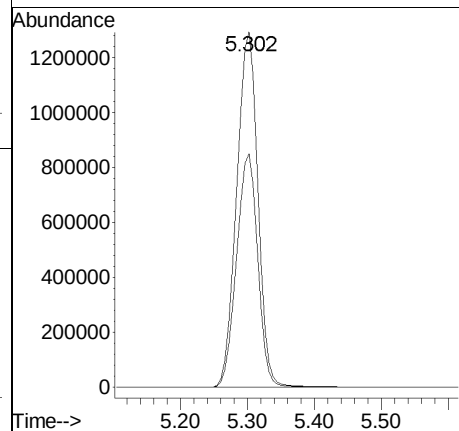
Tgt Ion	Ratio	Lower	Upper
54	100		
39	105.5	75.5	113.3

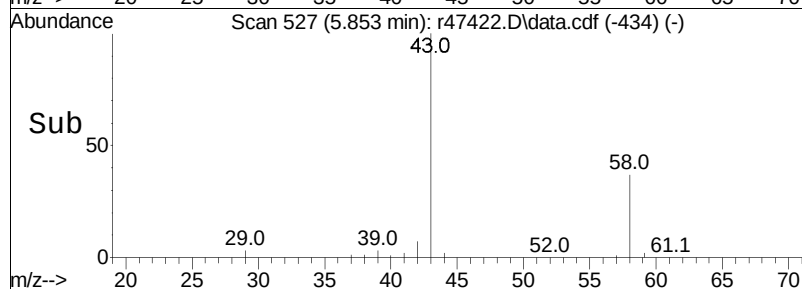
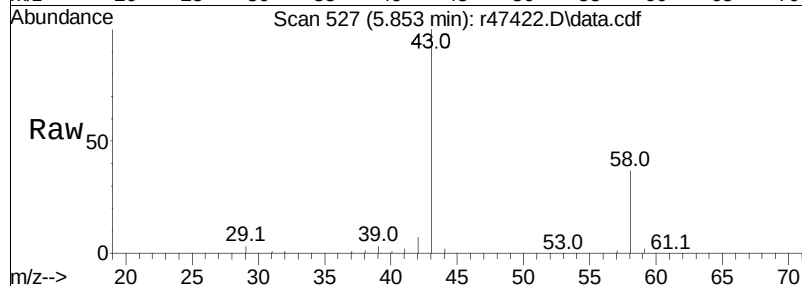
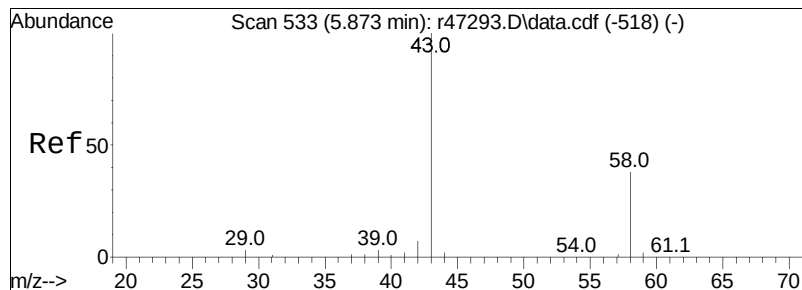




#15
ethanol
Concen: 364.13 ppbV
RT: 5.302 min Scan# 383
Delta R.T. -0.012 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

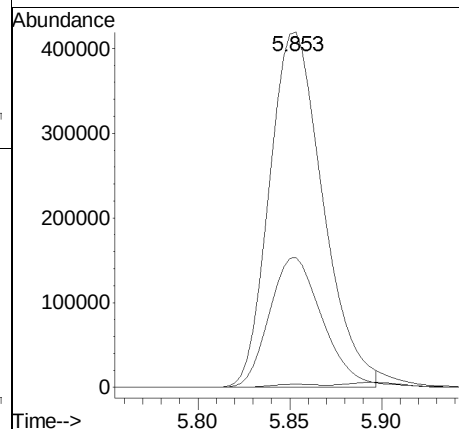
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	65.7	49.7	74.5	

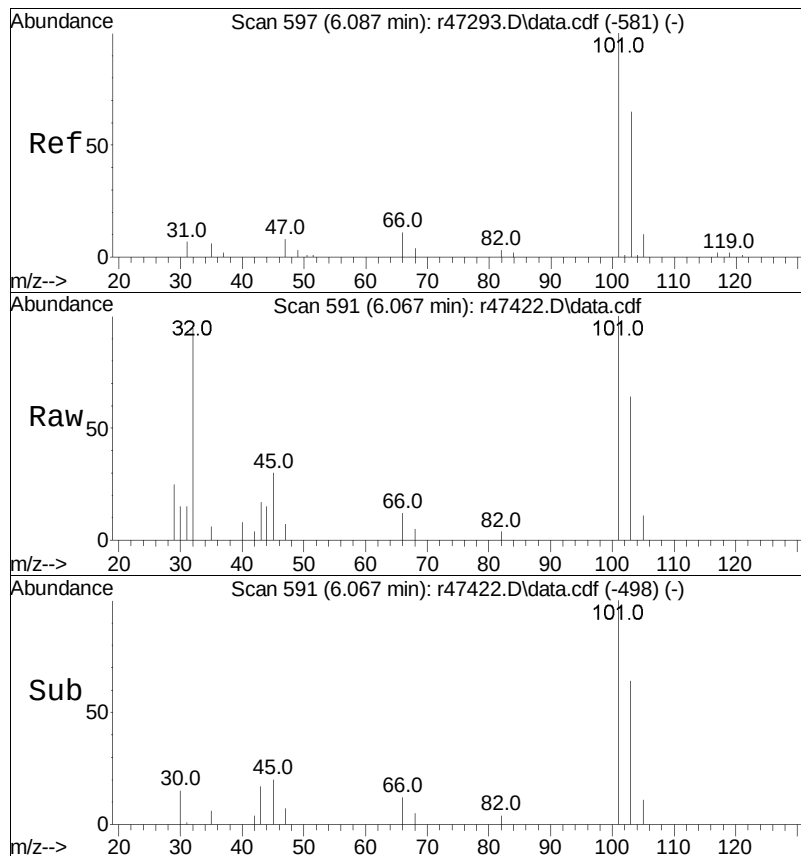




#19
acetone
Concen: 44.41 ppbV m
RT: 5.853 min Scan# 527
Delta R.T. -0.020 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

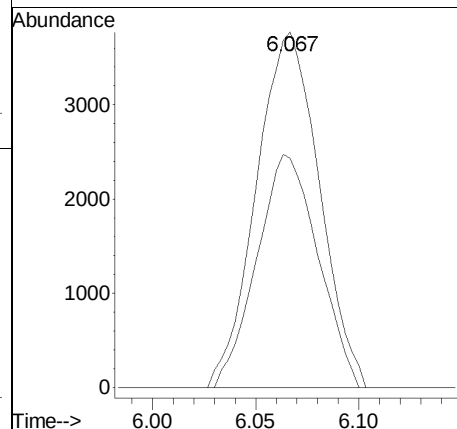
Tgt Ion	Ratio	Lower	Upper
43	100		
58	36.6	30.2	45.2
57	0.9	0.7	1.1

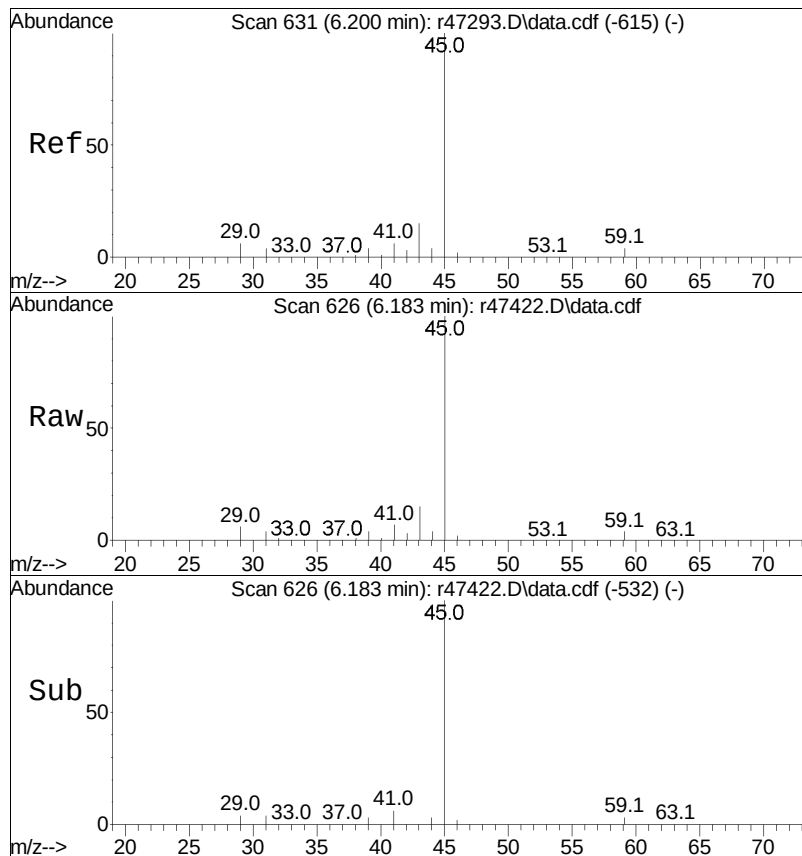




#21
trichlorofluoromethane
Concen: 0.49 ppbV
RT: 6.067 min Scan# 591
Delta R.T. -0.020 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

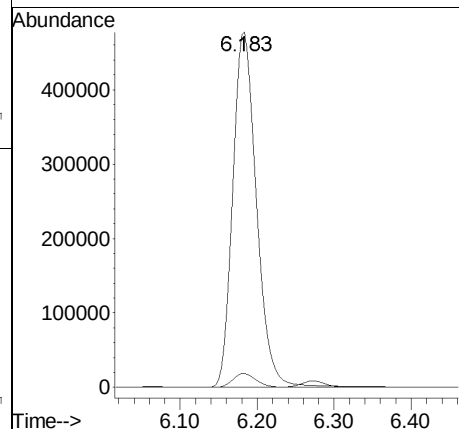
Tgt	Ion	Ratio	Resp	Lower	Upper
101	100		8012		
103	64.4	52.2		78.4	

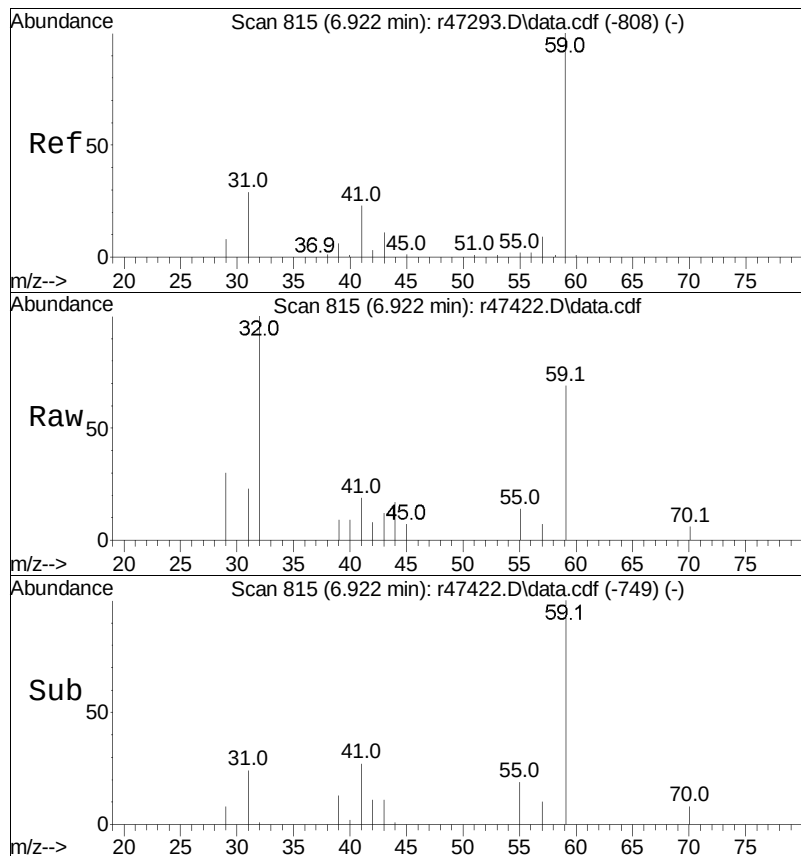




#22
 isopropyl alcohol
 Concen: 42.50 ppbV
 RT: 6.183 min Scan# 626
 Delta R.T. -0.017 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

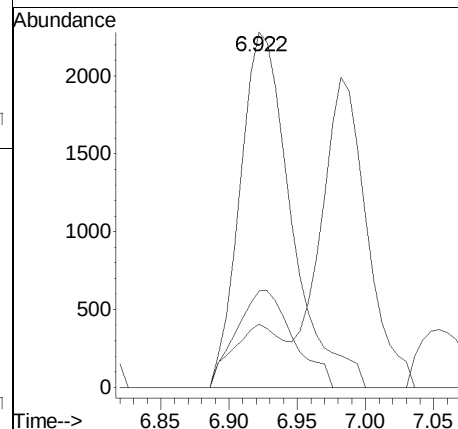
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.9	3.0	4.6

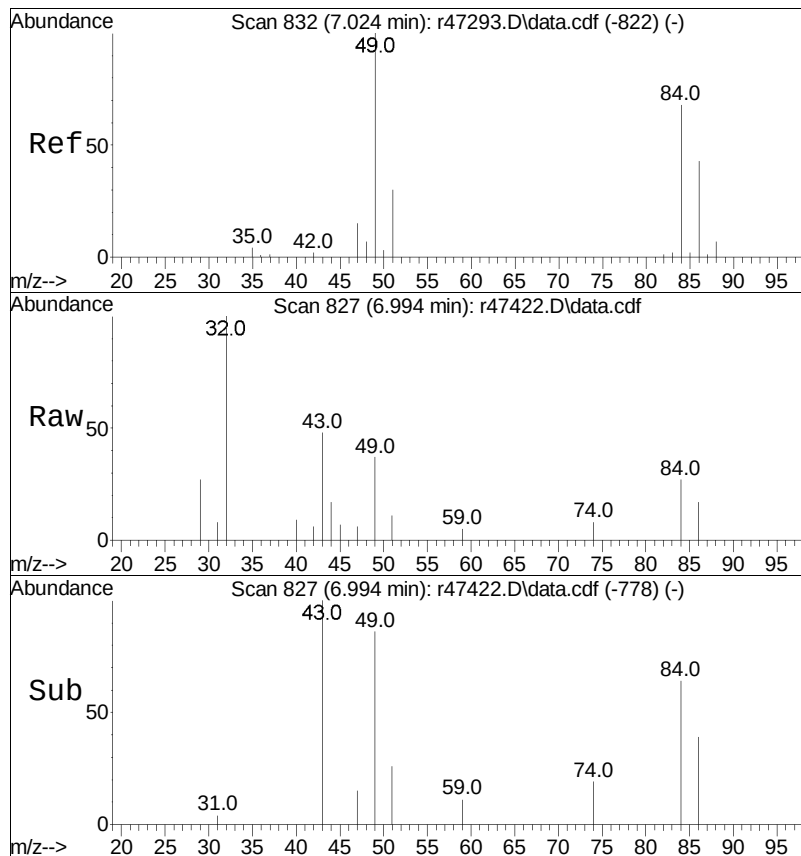




#27
 tertiary butyl alcohol
 Concen: 0.28 ppbV
 RT: 6.922 min Scan# 815
 Delta R.T. 0.000 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

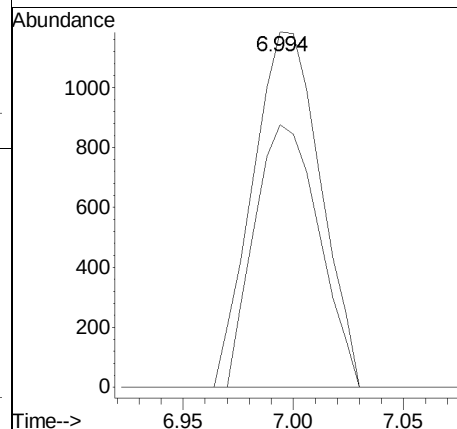
Tgt Ion:	59	Resp:	5963
Ion Ratio	Lower	Upper	
59	100		
41	27.2	18.1	27.1#
43	17.8	9.0	13.4#

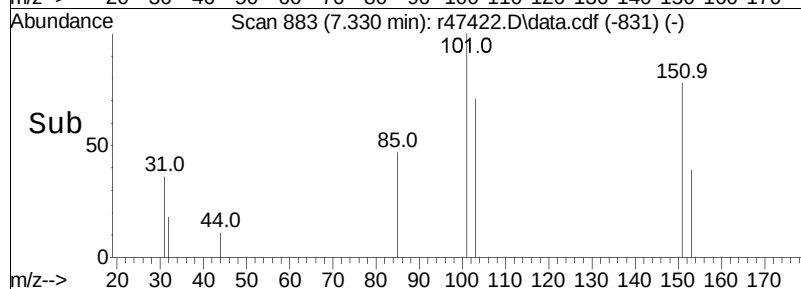
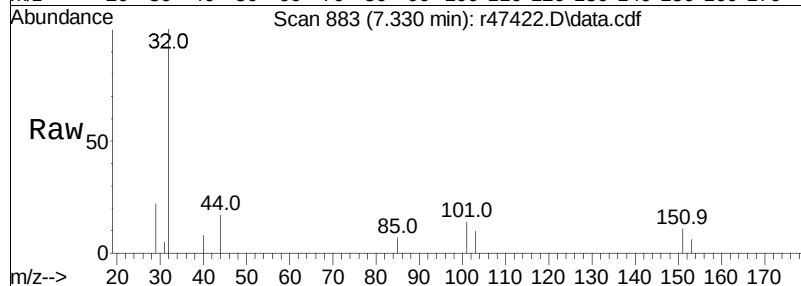
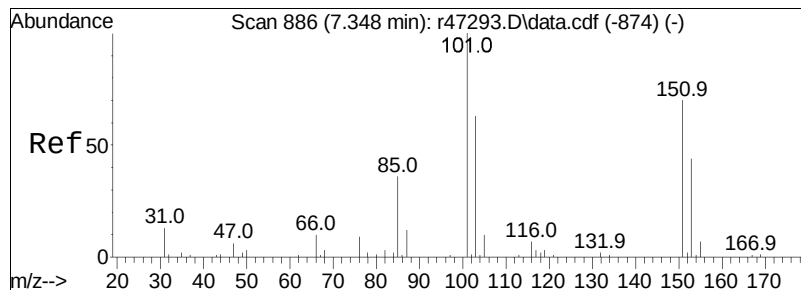




#28
 methylene chloride
 Concen: 0.19 ppbV
 RT: 6.994 min Scan# 827
 Delta R.T. -0.030 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	2543				
Ion Ratio	100	73.9			
			54.1	81.1	





#31

Freon 113

Concen: 0.06 ppbV

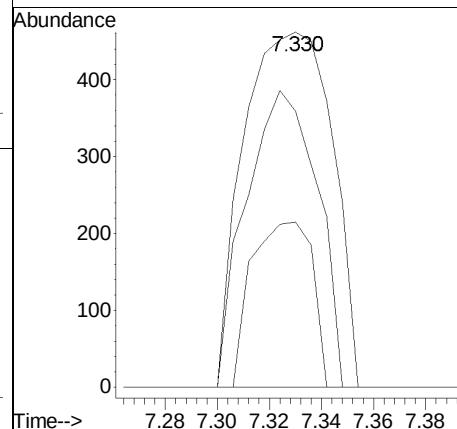
RT: 7.330 min Scan# 883

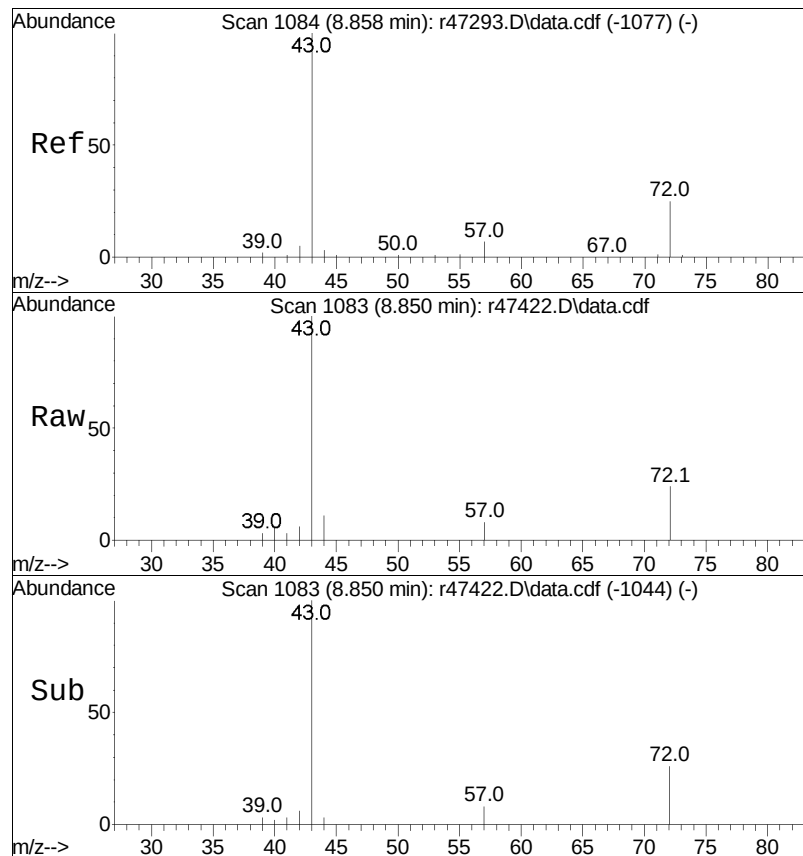
Delta R.T. -0.018 min

Lab File: r47422.D

Acq: 21 Jan 2020 11:28 PM

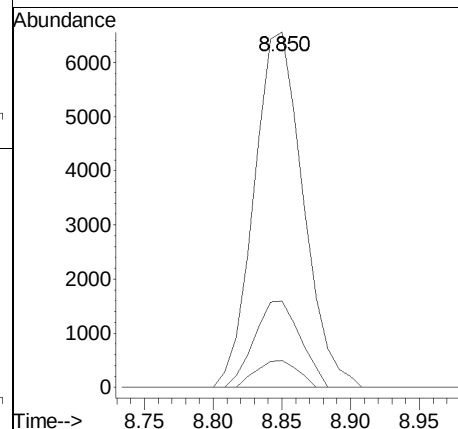
Tgt Ion:	101	Resp:	1087
Ion Ratio	Lower	Upper	
101	100		
85	46.5	28.8	43.2#
151	77.7	56.3	84.5

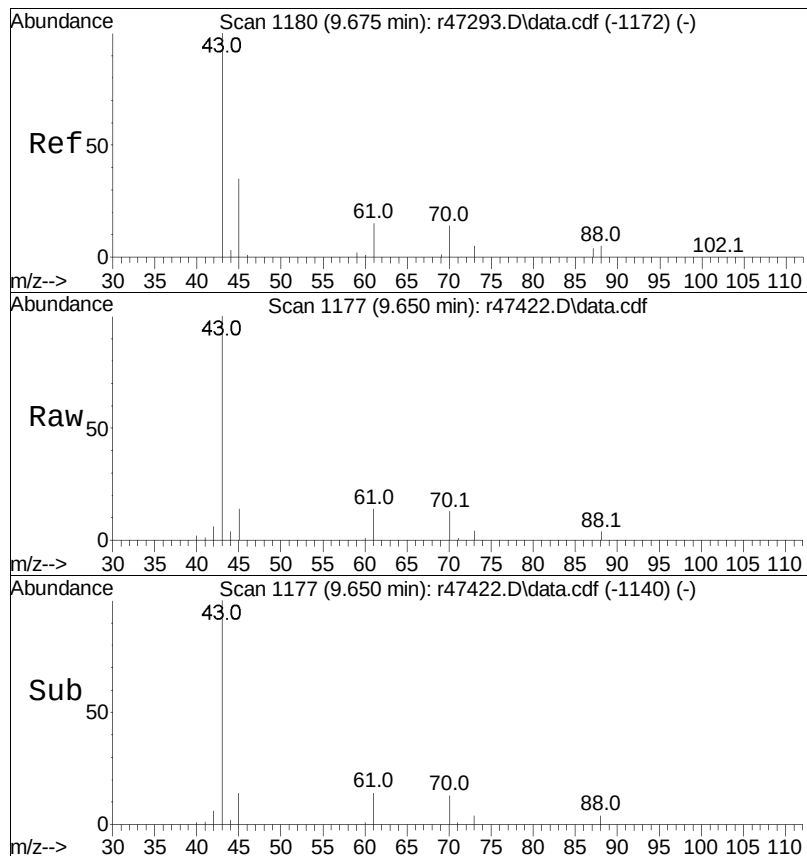




#36
 2-butanone
 Concen: 0.52 ppbV
 RT: 8.850 min Scan# 1083
 Delta R.T. -0.008 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

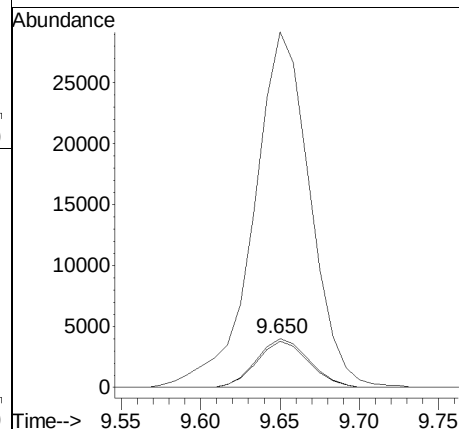
Tgt Ion:	43	Resp:	16268
Ion Ratio	Lower	Upper	
43	100		
72	24.3	19.8	29.6
57	7.6	5.5	8.3

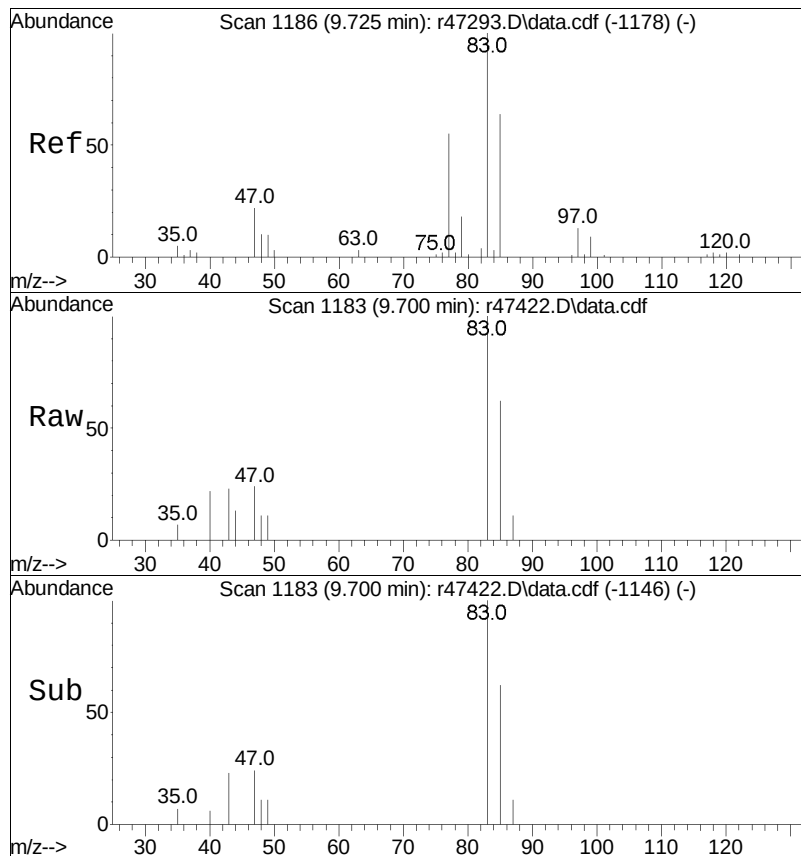




#38
 Ethyl Acetate
 Concen: 1.93 ppbV
 RT: 9.650 min Scan# 1177
 Delta R.T. -0.025 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

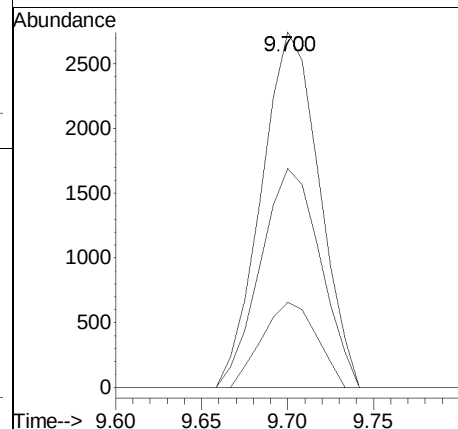
Tgt Ion:	61	Resp:	9281
Ion Ratio	Lower	Upper	
61	100		
70	94.8	77.3	115.9
43	728.0	633.3	949.9

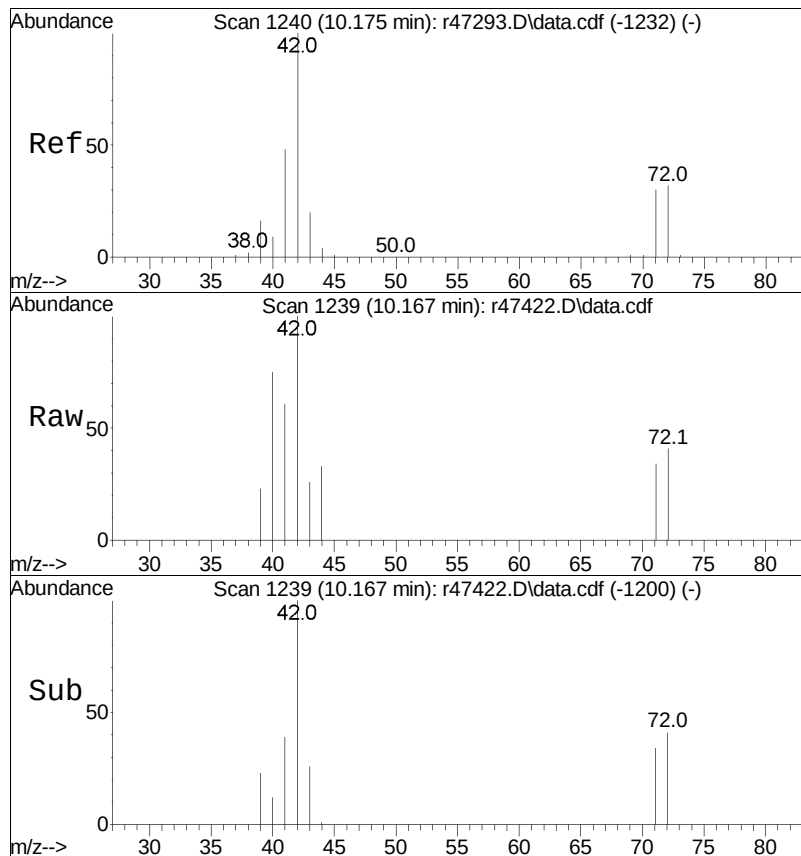




#39
chloroform
Concen: 0.33 ppbV
RT: 9.700 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

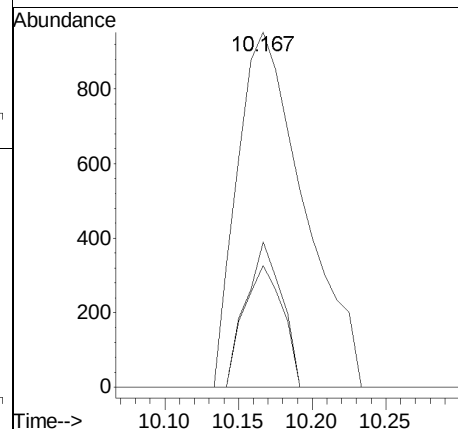
Tgt	Ion	Ratio	Resp	Lower	Upper
83	100		6435		
85	61.6	51.3		76.9	
47	24.0	17.8		26.8	

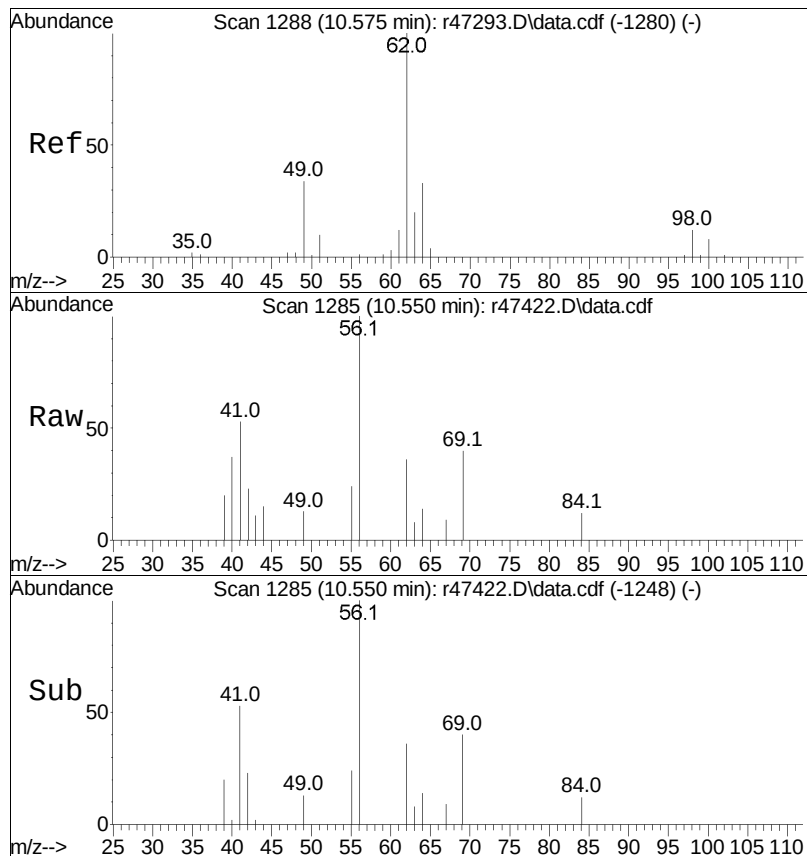




#40
Tetrahydrofuran
Concen: 0.13 ppbV
RT: 10.167 min Scan# 1239
Delta R.T. -0.008 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

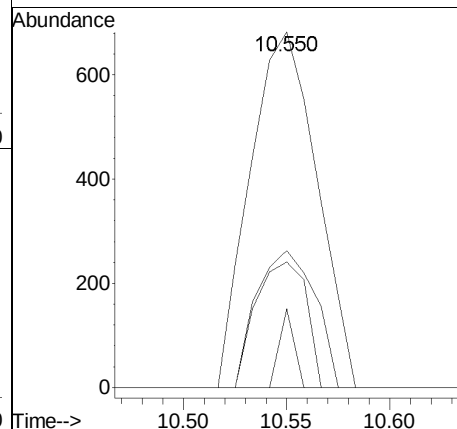
Tgt Ion	Ratio	Lower	Upper
42	100		
71	34.3	24.2	36.2
72	40.9	25.6	38.4

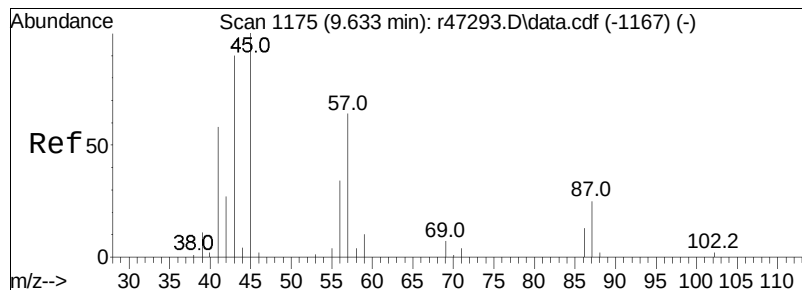




#42
 1,2-dichloroethane
 Concen: 0.11 ppbV
 RT: 10.550 min Scan# 1285
 Delta R.T. -0.025 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

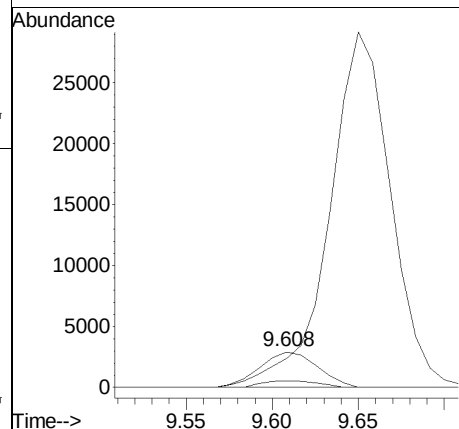
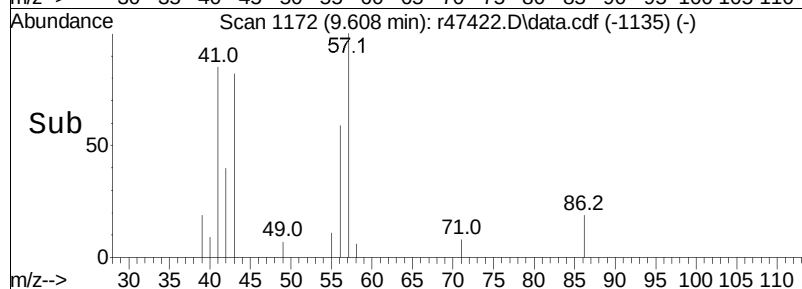
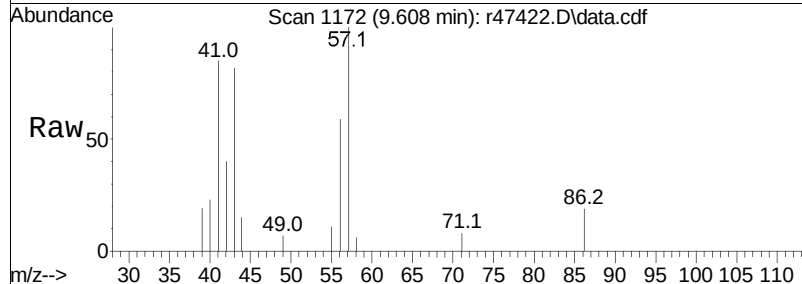
Tgt Ion:	62	Resp:	1536
Ion Ratio	Lower	Upper	
62	100		
64	38.6	26.2	39.4
49	35.3	26.9	40.3
63	22.1	15.6	23.4

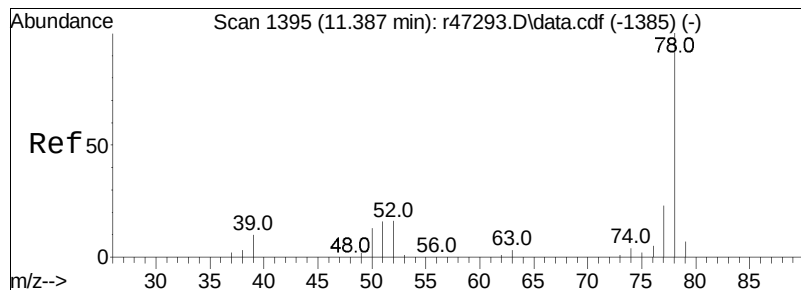




#44
hexane
Concen: 0.33 ppbV
RT: 9.608 min Scan# 1172
Delta R.T. -0.025 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

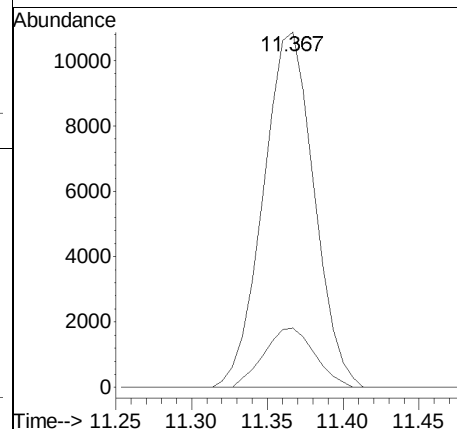
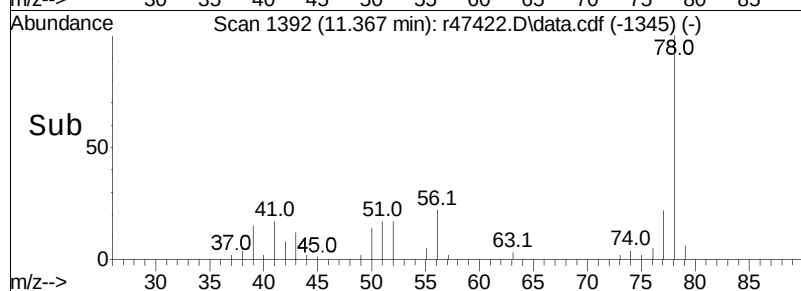
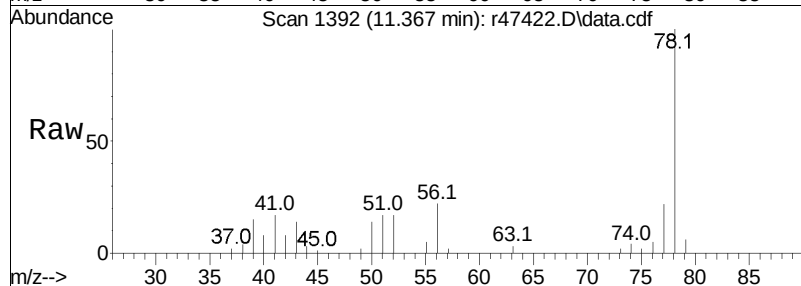
Tgt Ion	Ratio	Lower	Upper
57	100		
43	82.0	111.8	167.8#
86	18.9	15.8	23.6

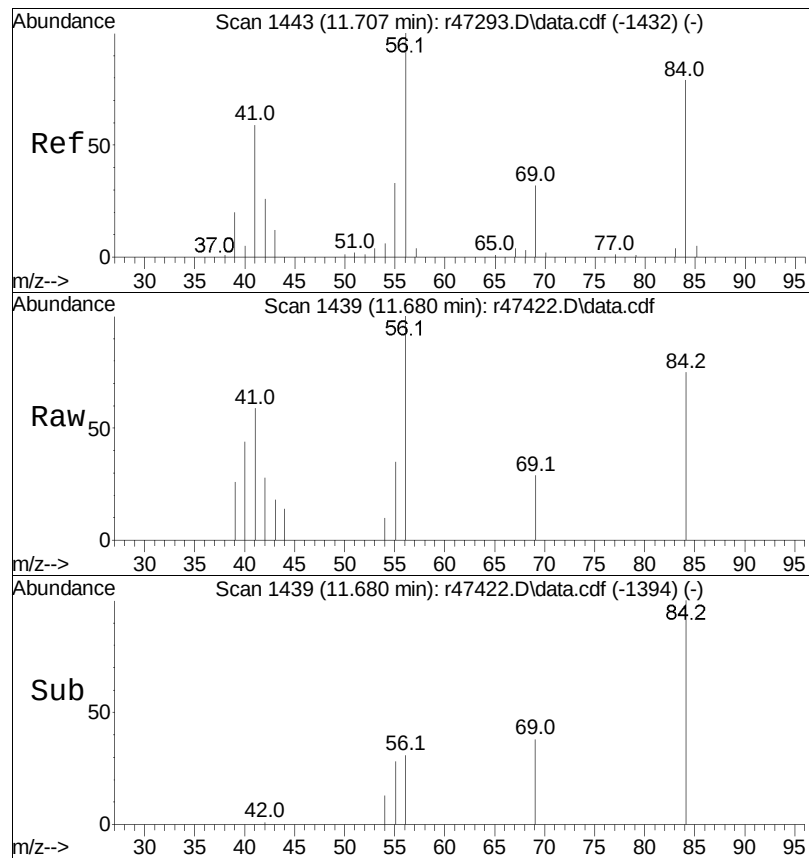




#50
benzene
Concen: 0.67 ppbV
RT: 11.367 min Scan# 1392
Delta R.T. -0.020 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

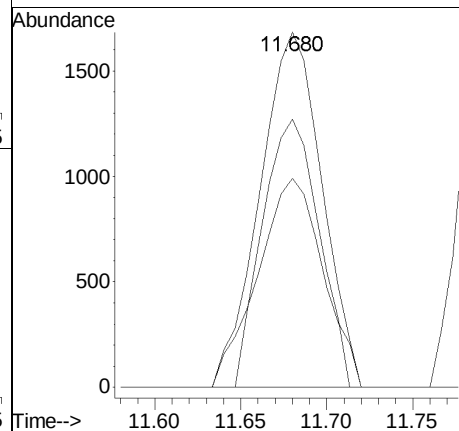
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.7	13.0	19.4

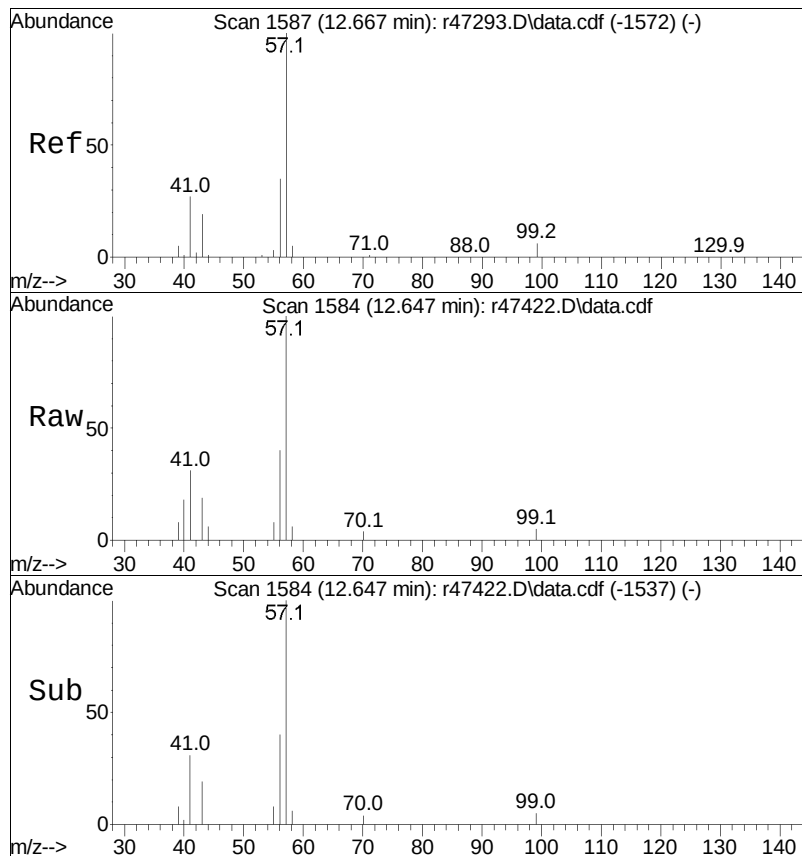




#53
cyclohexane
Concen: 0.18 ppbV
RT: 11.680 min Scan# 1439
Delta R.T. -0.027 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

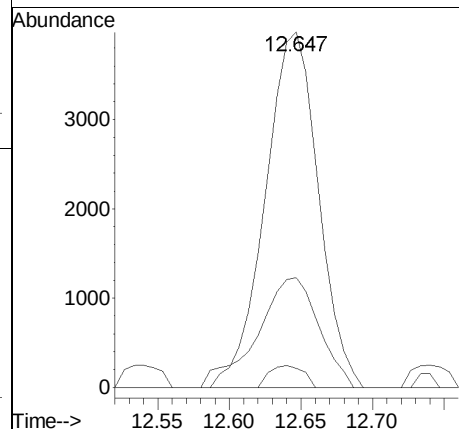
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	75.5	63.0	94.6	
41	58.8	46.8	70.2	

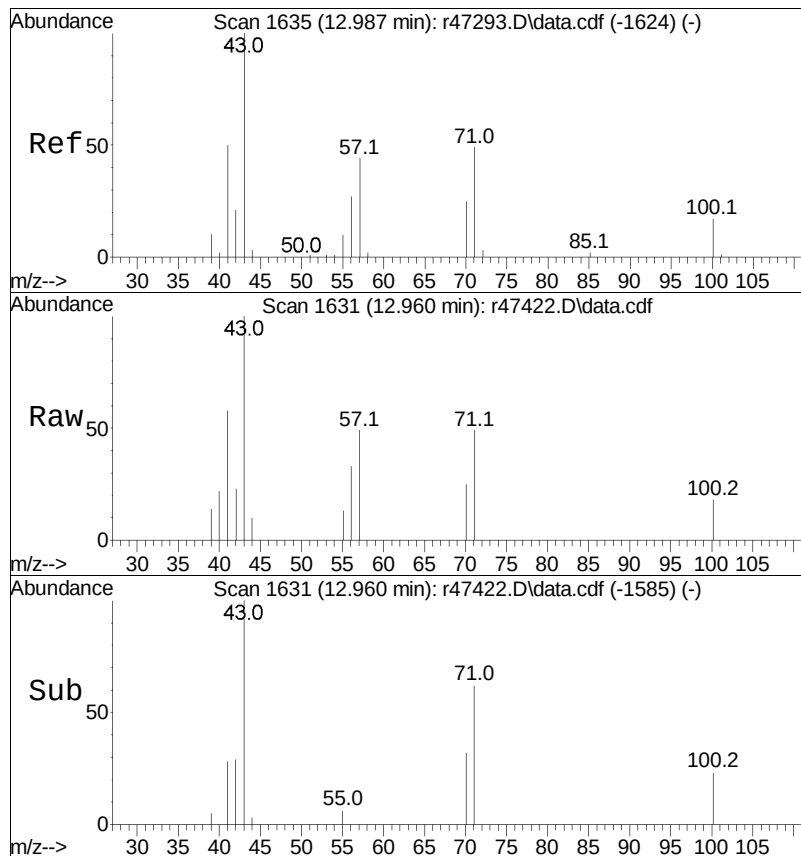




#60
 2,2,4-trimethylpentane
 Concen: 0.14 ppbV
 RT: 12.647 min Scan# 1584
 Delta R.T. -0.020 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

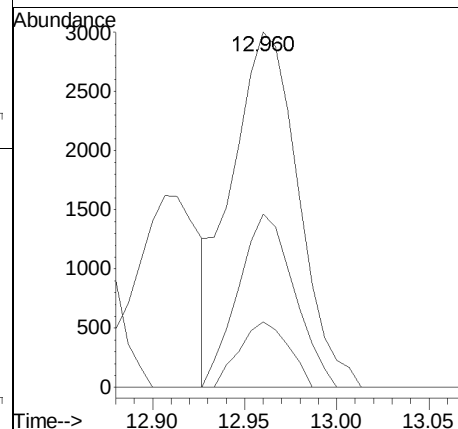
Tgt Ion	Ratio	Lower	Upper
57	100		
99	5.4	4.8	7.2
41	30.9	21.8	32.8

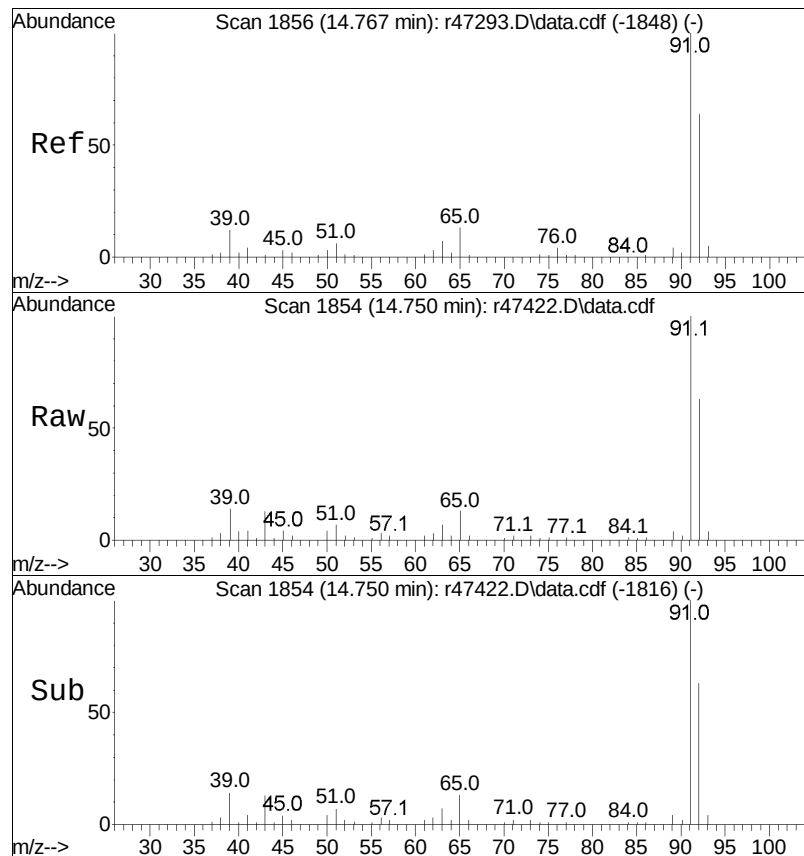




#62
 heptane
 Concen: 0.23 ppbV
 RT: 12.960 min Scan# 1631
 Delta R.T. -0.027 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

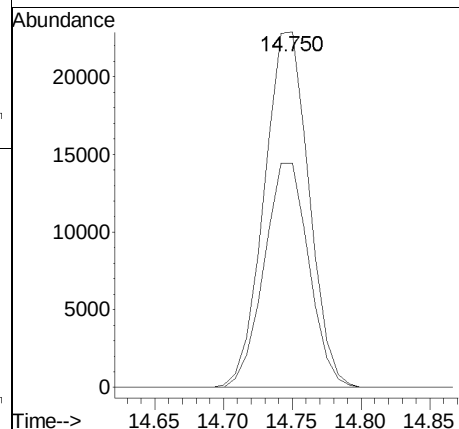
Tgt Ion:	43	Resp:	7584
Ion Ratio	Lower	Upper	
43	100		
57	48.8	35.2	52.8
100	18.5	13.7	20.5

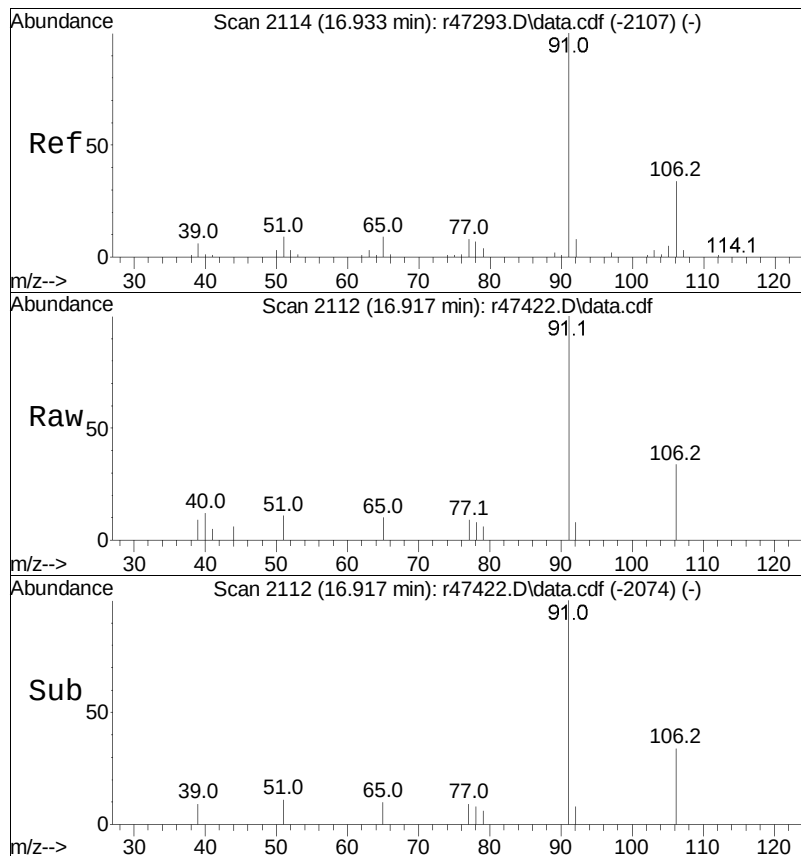




#68
 toluene
 Concen: 1.00 ppbV
 RT: 14.750 min Scan# 1854
 Delta R.T. -0.017 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

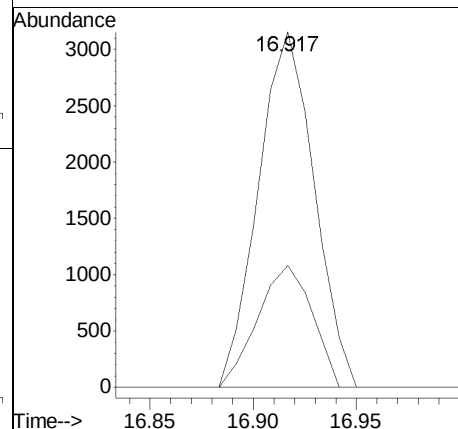
Tgt Ion:	91	Resp:	51858
Ion Ratio	Lower	Upper	
91	100		
92	63.1	51.1	76.7

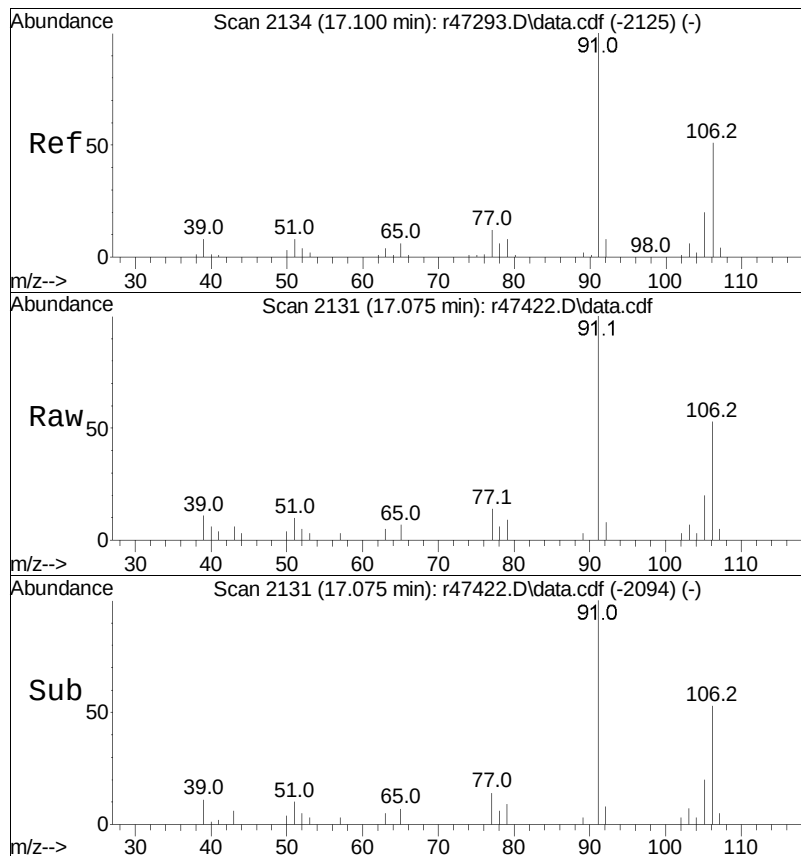




#81
ethylbenzene
Concen: 0.09 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47422.D
Acq: 21 Jan 2020 11:28 PM

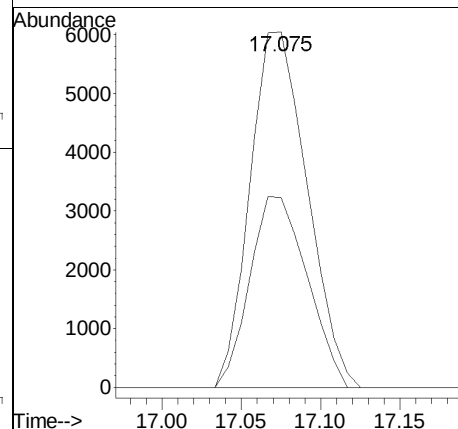
Tgt	Ion	Resp	Lower	Upper
91	100	5947		
106	34.3	27.6	41.4	

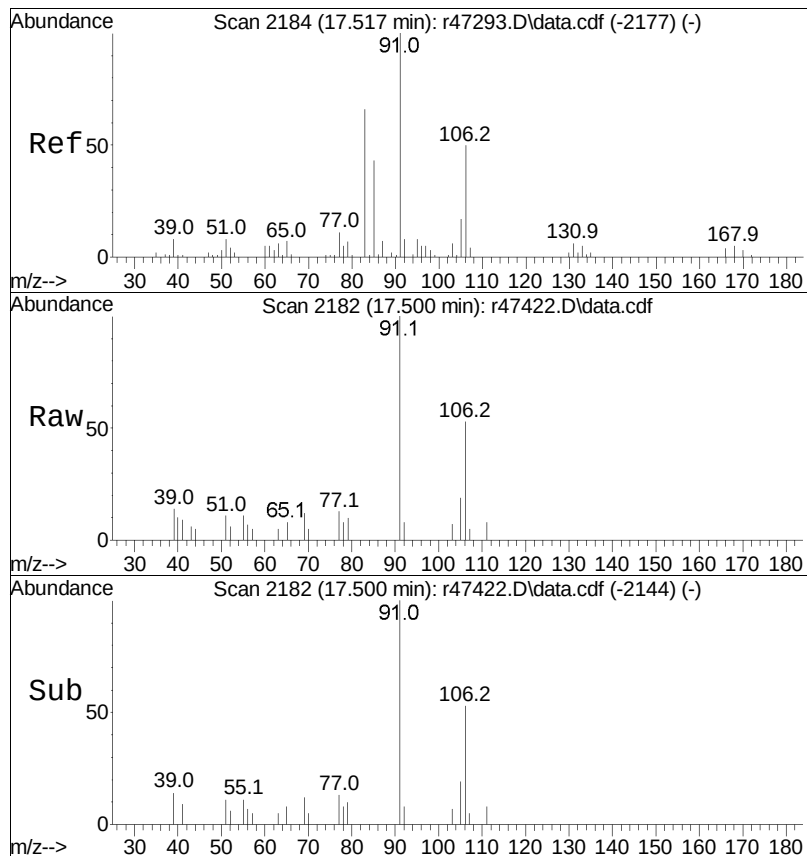




#83
 m+p-xylene
 Concen: 0.29 ppbV
 RT: 17.075 min Scan# 2131
 Delta R.T. -0.025 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

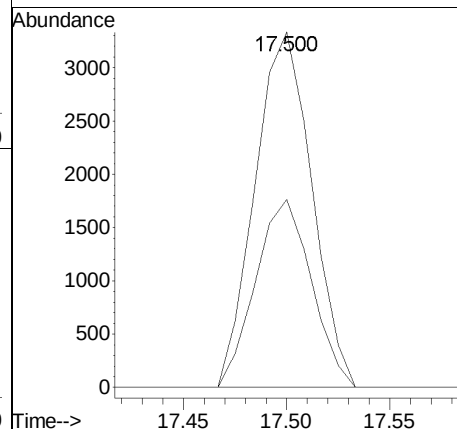
Tgt	Ion	Resp	Lower	Upper
91	100	15164		
106	53.4	41.2	61.8	

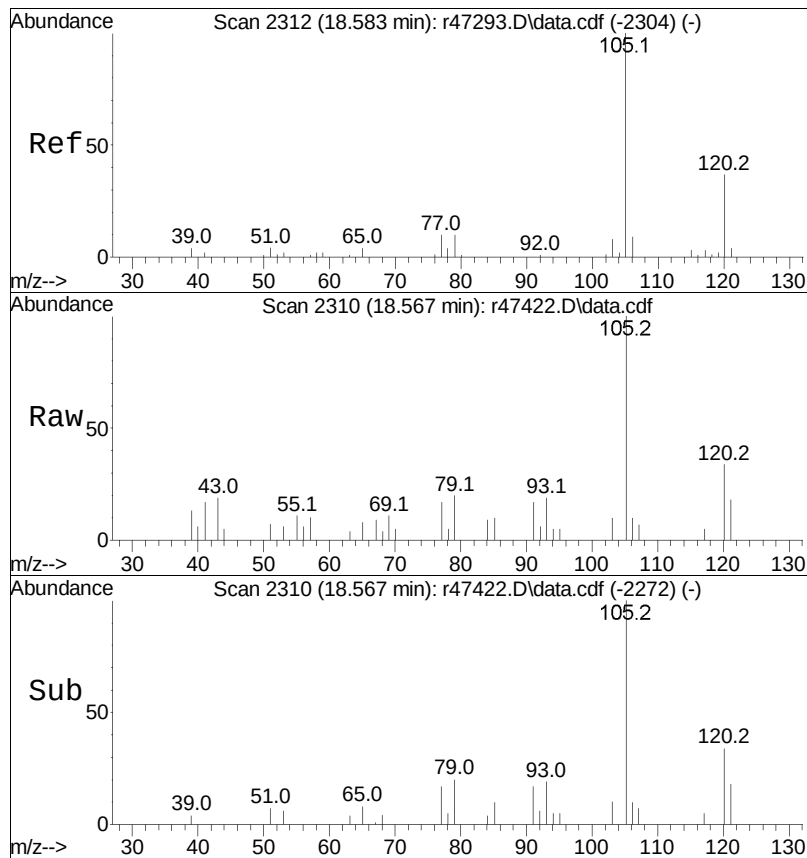




#87
 o-xylene
 Concen: 0.12 ppbV
 RT: 17.500 min Scan# 2182
 Delta R.T. -0.017 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

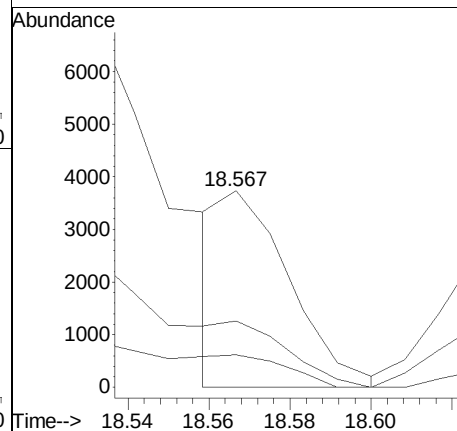
Tgt Ion:	91	Resp:	6375
Ion Ratio	Lower	Upper	
91	100		
106	52.9	40.1	60.1

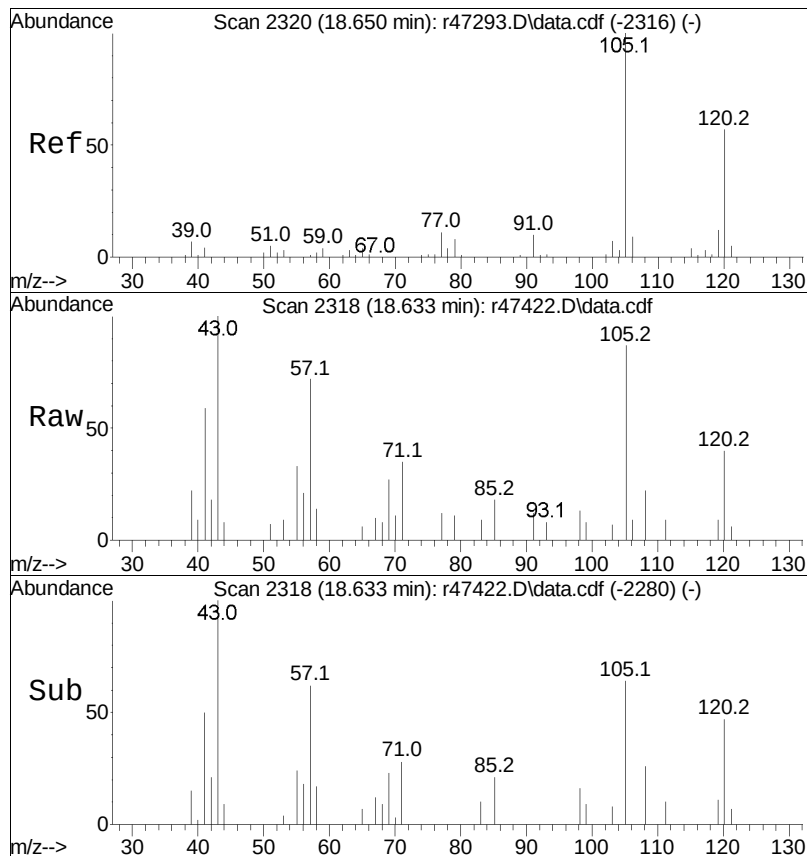




#96
 4-ethyl toluene
 Concen: 0.06 ppbV m
 RT: 18.567 min Scan# 2310
 Delta R.T. -0.017 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

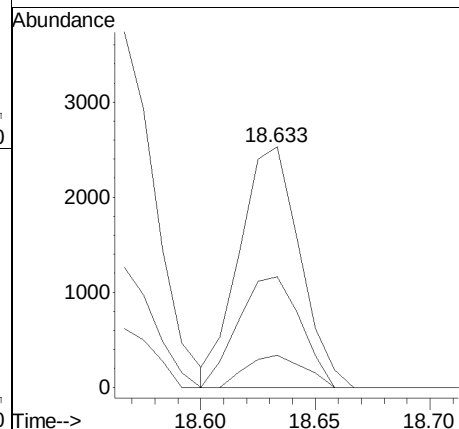
Tgt Ion:	105	Resp:	4396
Ion Ratio	Lower	Upper	
105	100		
120	33.8	29.4	44.2
91	16.5	8.2	12.4#

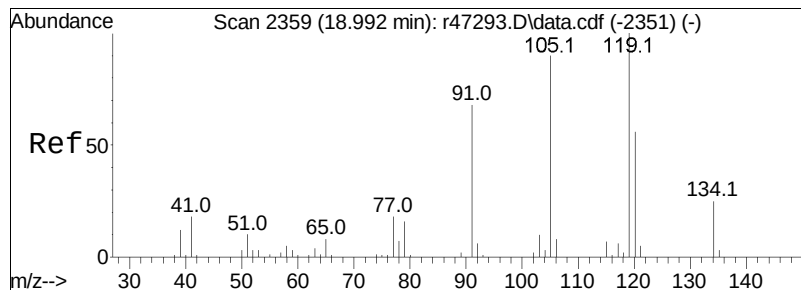




#97
 1,3,5-trimethylbenzene
 Concen: 0.08 ppbV
 RT: 18.633 min Scan# 2318
 Delta R.T. -0.017 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.0	45.2	67.8
91	13.4	7.8	11.6





#99

1,2,4-trimethylbenzene

Concen: 0.28 ppbV

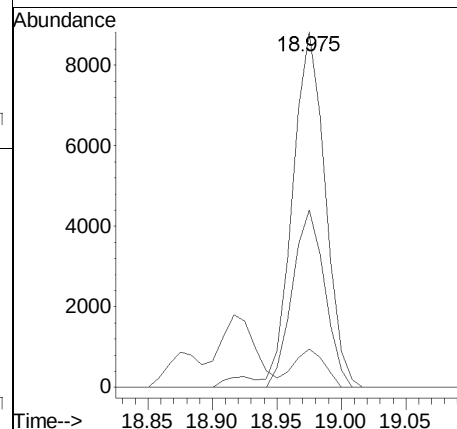
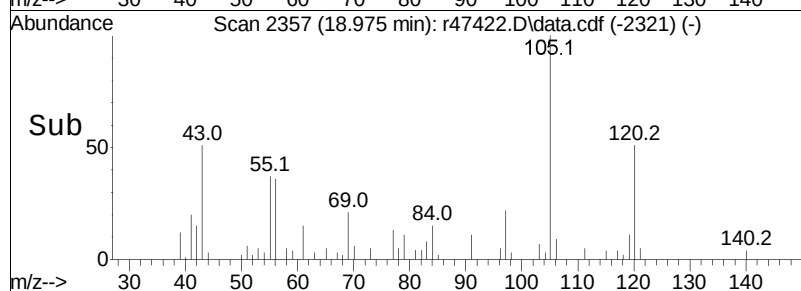
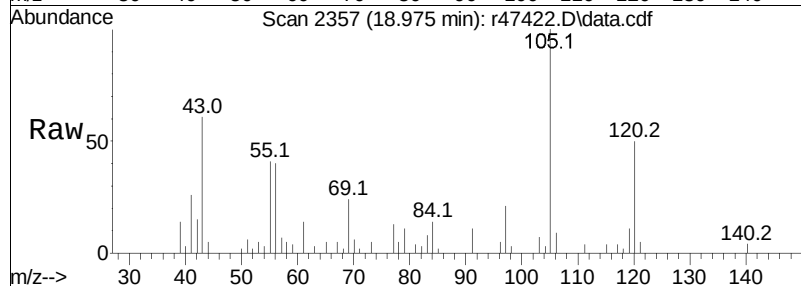
RT: 18.975 min Scan# 2357

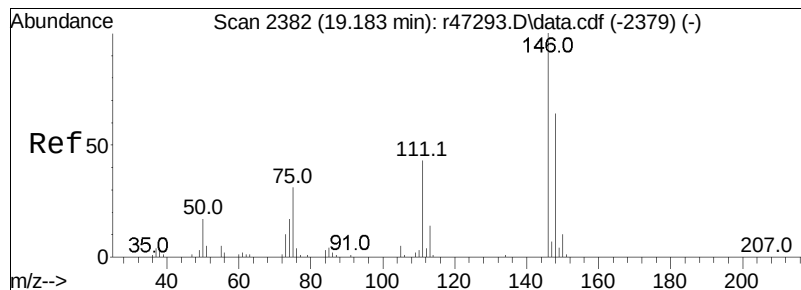
Delta R.T. -0.017 min

Lab File: r47422.D

Acq: 21 Jan 2020 11:28 PM

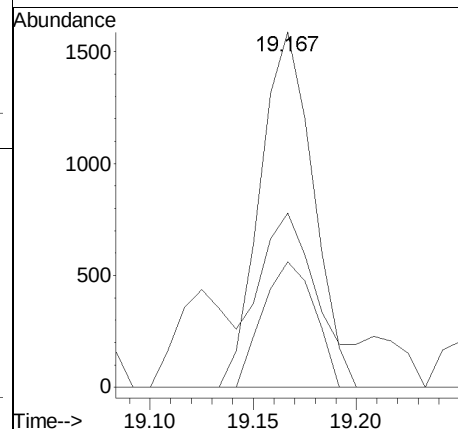
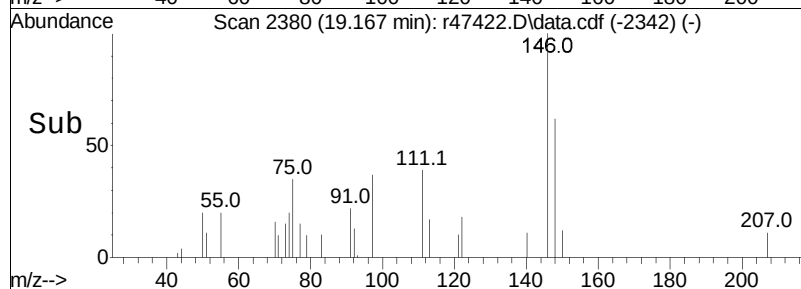
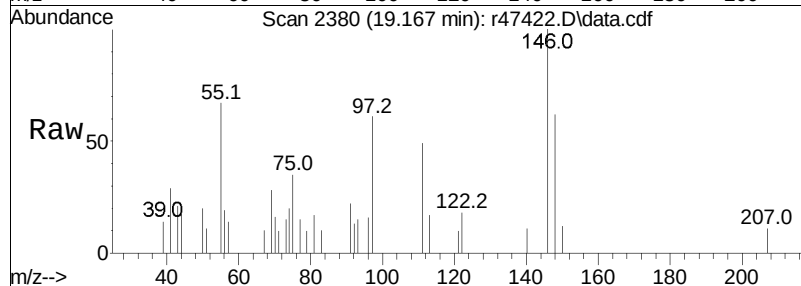
Tgt	Ion:105	Resp:	15957
Ion	Ratio	Lower	Upper
105	100		
120	49.9	50.2	75.4#
91	10.8	61.0	91.6#





#103
 1,4-dichlorobenzene
 Concen: 0.08 ppbV
 RT: 19.167 min Scan# 2380
 Delta R.T. -0.017 min
 Lab File: r47422.D
 Acq: 21 Jan 2020 11:28 PM

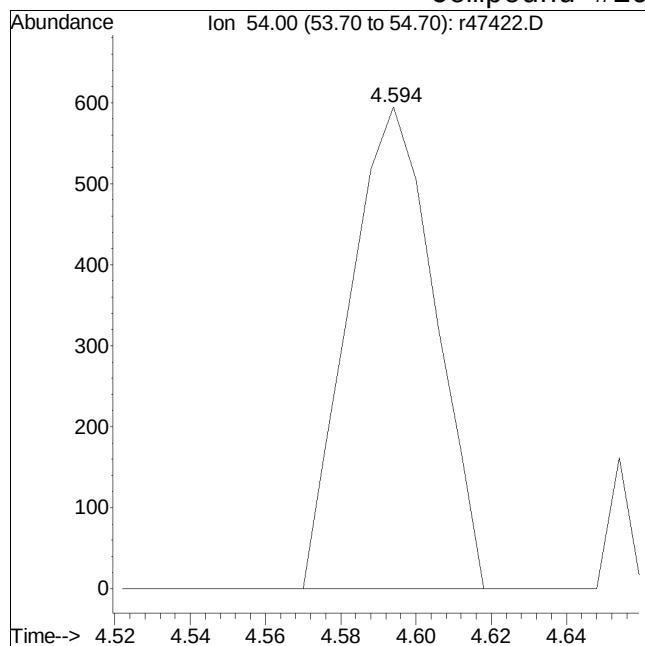
Tgt Ion	Ratio	Lower	Upper
146	100		
111	49.1	34.4	51.6
75	35.3	24.6	36.8



Manual Integration Report

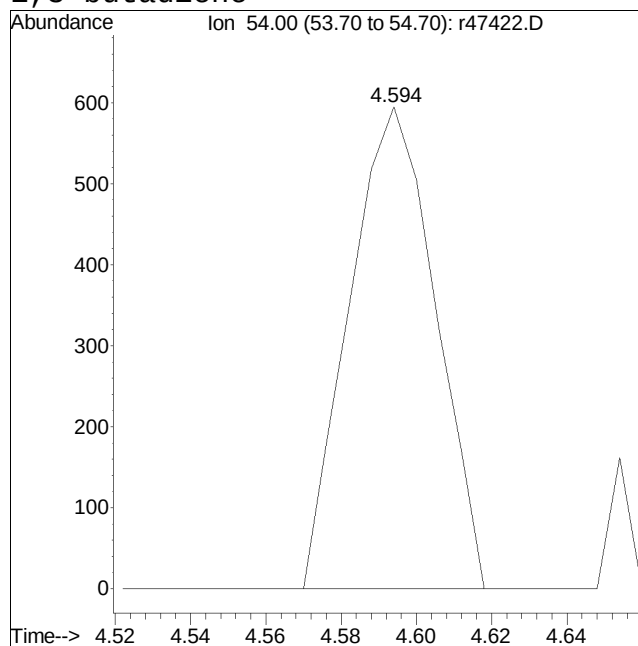
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47422.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:1: 8 Instrument :
Sample : L2002033-05,3,250,250 Quant Date : 1/22/2020 5:38 am

Compound #10: 1,3-butadiene



Original Peak Response = 947

M4 = Poor automated baseline construction.

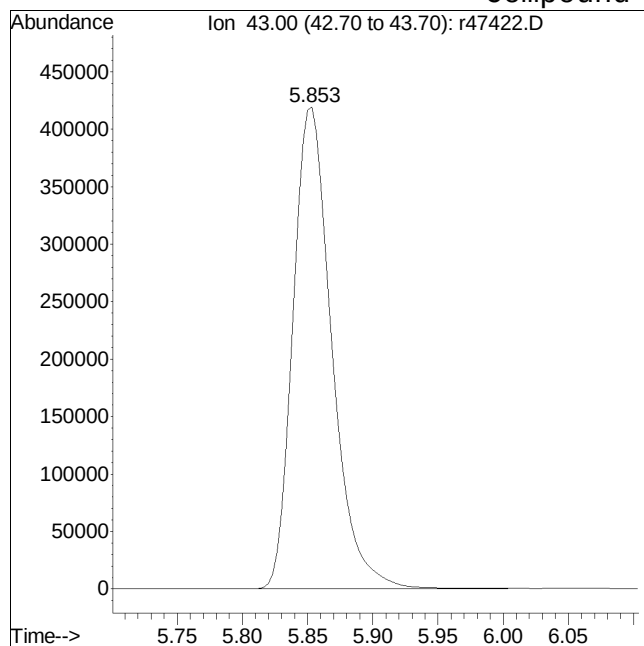


Manual Peak Response = 947 M4

Manual Integration Report

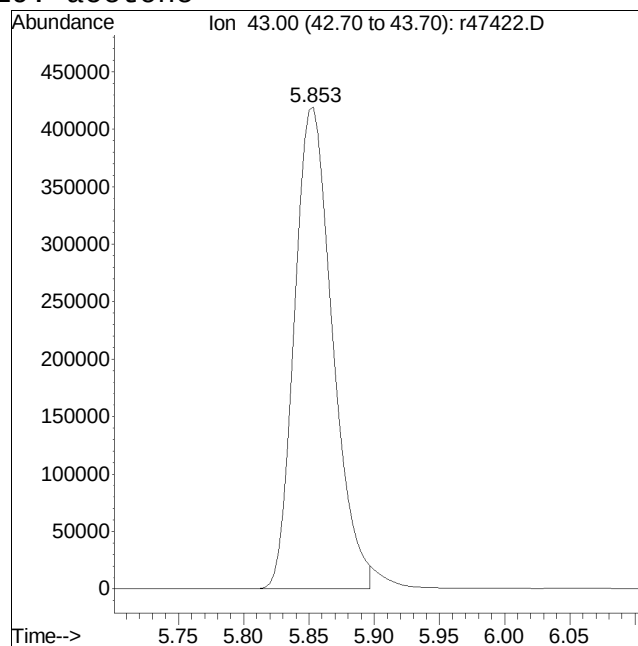
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47422.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:1: 8 Instrument :
Sample : L2002033-05,3,250,250 Quant Date : 1/22/2020 5:38 am

Compound #19: acetone



Original Peak Response = 868208

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

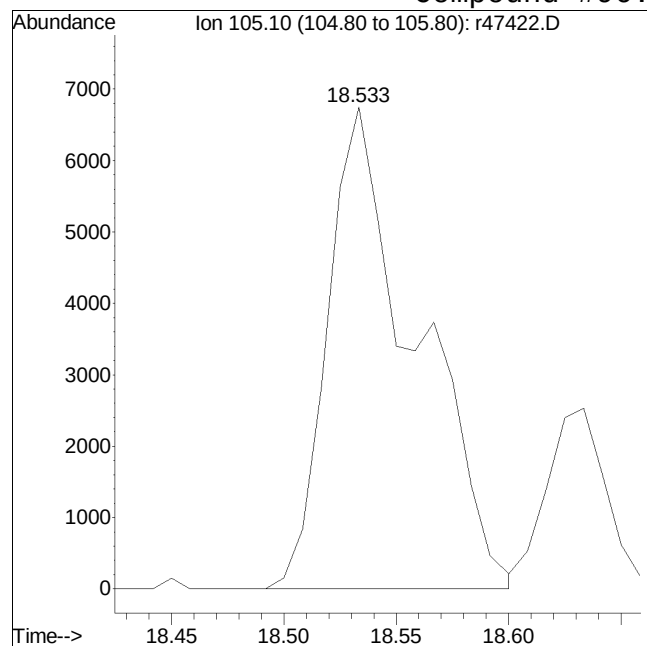


Manual Peak Response = 849673 M6

Manual Integration Report

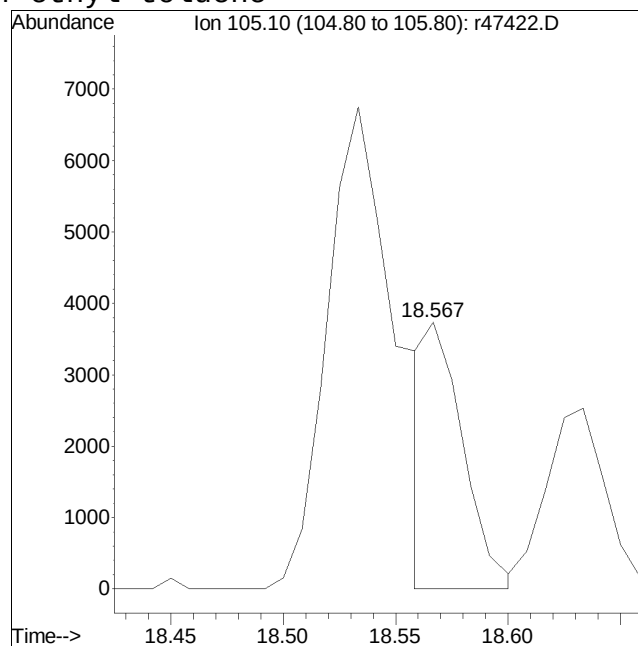
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47422.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:1: 8 Instrument :
Sample : L2002033-05,3,250,250 Quant Date : 1/22/2020 5:38 am

Compound #96: 4-ethyl toluene



Original Peak Response = 18460

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



Manual Peak Response = 4396 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47426.D
 Acq On : 22 Jan 2020 2:04 AM
 Operator : AIRPIAN04:EW
 Sample : L2002033-04,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:03:19 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY - .

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

Internal Standards						
1) bromochloromethane	9.542	49	207066	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =	100.10%		
43) 1,4-difluorobenzene	11.800	114	572289	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =	86.13%		
67) chlorobenzene-D5	16.525	54	110643	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =	103.99%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.994	85	7927	0.490	ppbV	98
6) chloromethane	4.174	50	6025	0.653	ppbV	99
7) Freon-114	0.000		0	N.D.	d	
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	4.594	54	1350	0.144	ppbV	84
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.296	31	1680552	239.523	ppbV	95
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.853	43	895845M6	48.876	ppbV	
21) trichlorofluoromethane	6.067	101	6609	0.418	ppbV	96
22) isopropyl alcohol	6.180	45	672992	29.222	ppbV	100
26) 1,1-dichloroethene	0.000		0	N.D.		
27) tertiary butyl alcohol	6.922	59	7201	0.347	ppbV #	71
28) methylene chloride	7.000	49	2063	0.159	ppbV	99
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.288	76	1999	0.059	ppbV #	1
31) Freon 113	7.330	101	1610	0.086	ppbV	94
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	8.842	43	37131	1.233	ppbV	99
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	9.650	61	5484	1.190	ppbV	82
39) chloroform	9.700	83	12369	0.671	ppbV	99
40) Tetrahydrofuran	10.167	42	8034	0.378	ppbV	96
42) 1,2-dichloroethane	10.550	62	900	0.065	ppbV #	81

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47426.D
 Acq On : 22 Jan 2020 2:04 AM
 Operator : AIRPIAN04:EW
 Sample : L2002033-04,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:03:19 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.608	57	19291	0.895	ppbV	#	51
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	11.367	78	32767	0.834	ppbV		98
52) carbon tetrachloride	0.000		0	N.D.	d		
53) cyclohexane	11.680	56	8847	0.355	ppbV		96
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	0.000		0	N.D.			
60) 2,2,4-trimethylpentane	12.647	57	23878	0.309	ppbV	#	90
62) heptane	12.960	43	15774	0.466	ppbV		97
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	13.667	43	5104	0.132	ppbV		97
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.			
68) toluene	14.750	91	86882	1.614	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.			
78) tetrachloroethene	15.908	166	1105	0.052	ppbV		94
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	16.917	91	20076	0.306	ppbV		100
83) m+p-xylene	17.067	91	60015	1.096	ppbV		98
84) bromoform	0.000		0	N.D.			
85) styrene	17.408	104	2531	0.060	ppbV		89
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	17.500	91	25463	0.474	ppbV		100
96) 4-ethyl toluene	18.567	105	9817M3	0.127	ppbV		
97) 1,3,5-trimethylbenzene	18.633	105	10939	0.174	ppbV	#	97
99) 1,2,4-trimethylbenzene	18.975	105	39666	0.671	ppbV	#	53
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	146	2376	0.067	ppbV	#	75
107) 1,2-dichlorobenzene	0.000		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\Airpiano4\2020\01\200121T\
 Data File : r47426.D
 Acq On : 22 Jan 2020 2:04 AM
 Operator : AIRPIAN04:EW
 Sample : L2002033-04,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:03:19 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

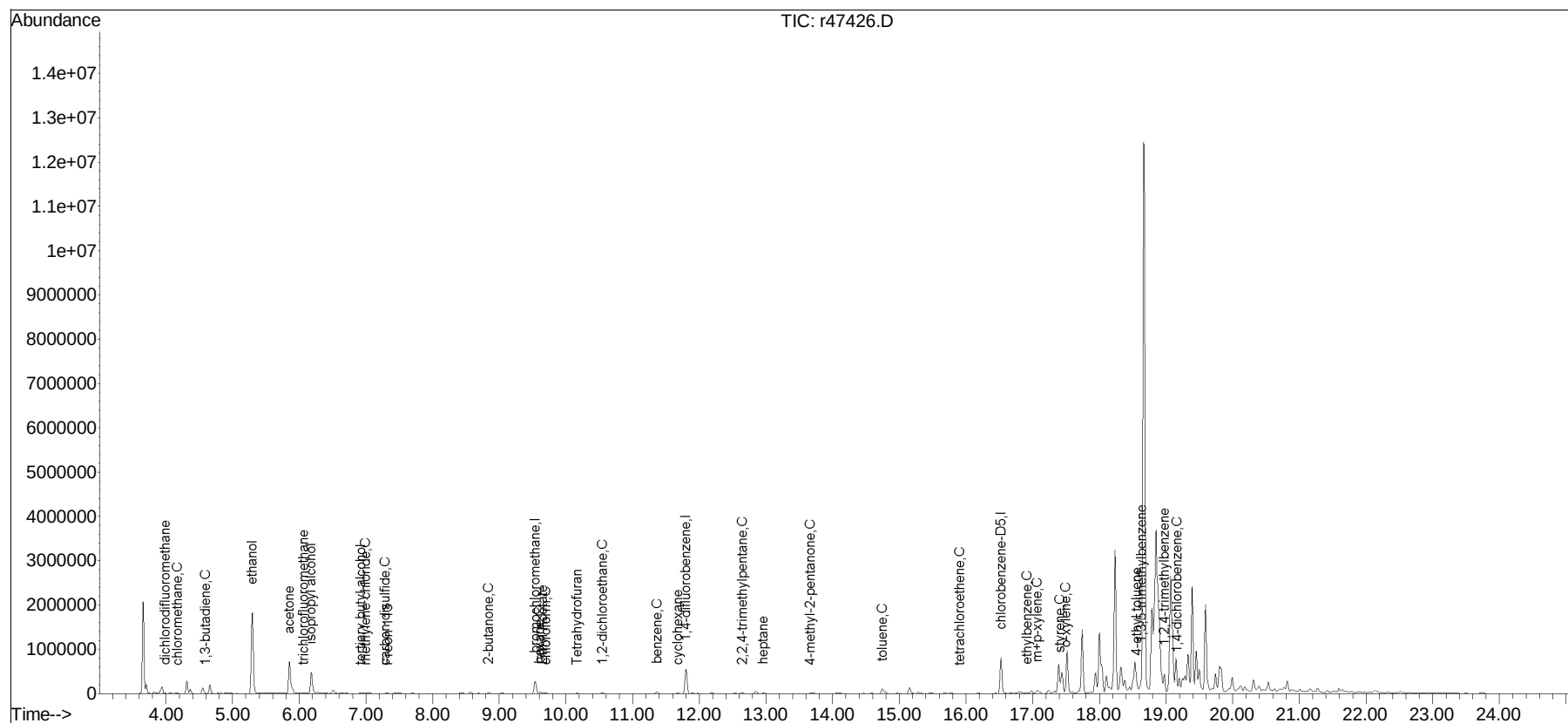
CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY - .

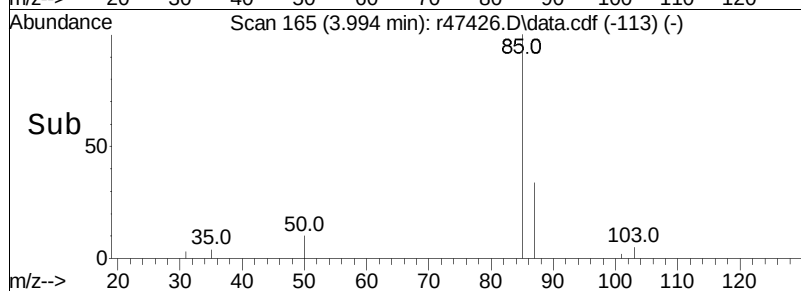
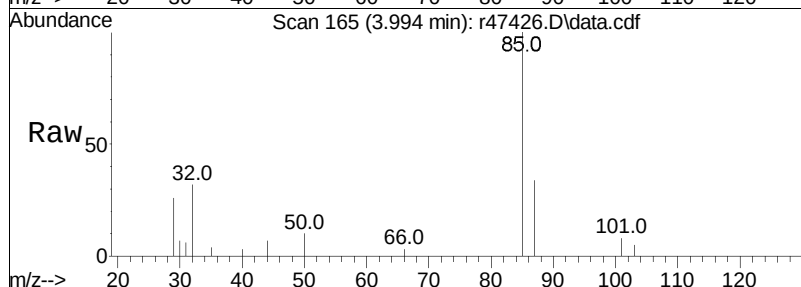
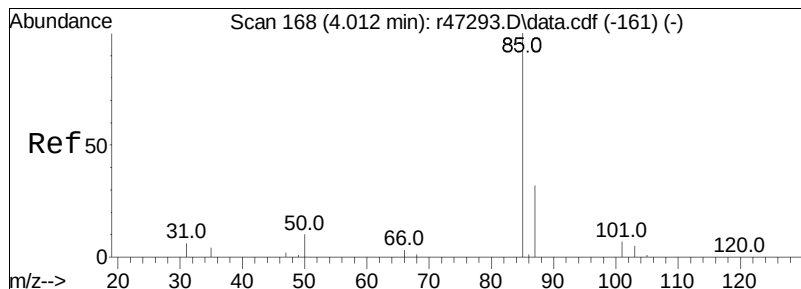
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airpiano4\2020\01\200121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File : r47426.D
Acq On : 22 Jan 2020 2:04 AM
Operator : AIRPIANO4:EW
Sample : L2002033-04,3,250,250
Misc : WG1332350,ICAL16438
ALS Vial : 0 Sample Multiplier: 1

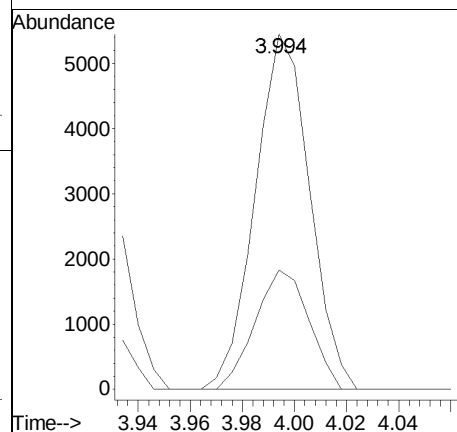
Quant Time: Jan 22 09:03:19 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

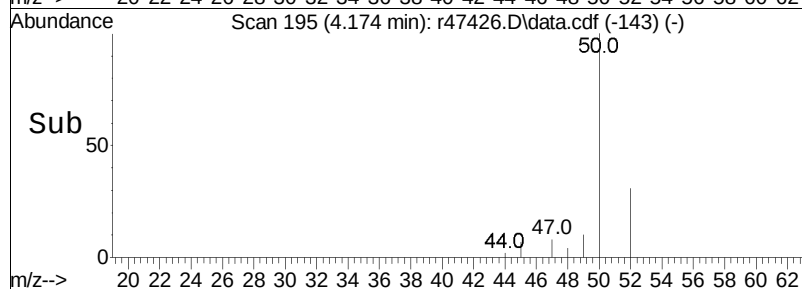
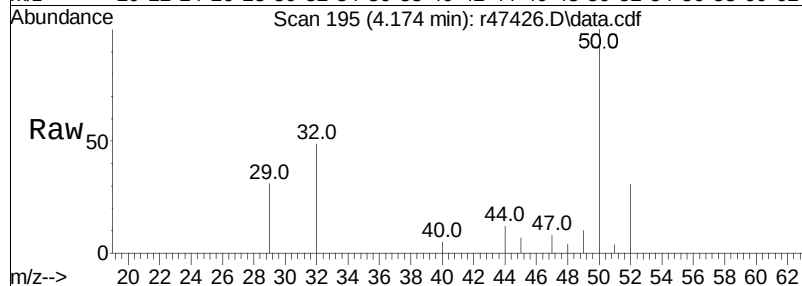
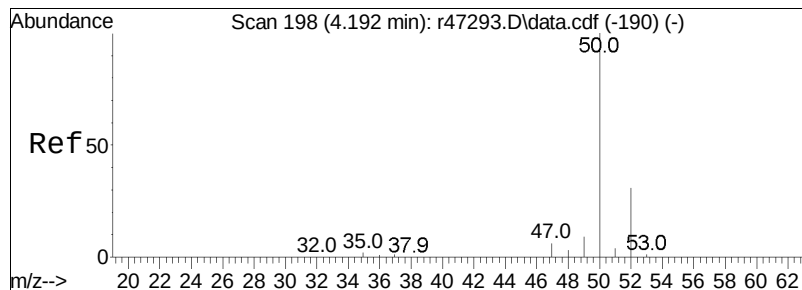




#5
dichlorodifluoromethane
Concen: 0.49 ppbV
RT: 3.994 min Scan# 165
Delta R.T. -0.018 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

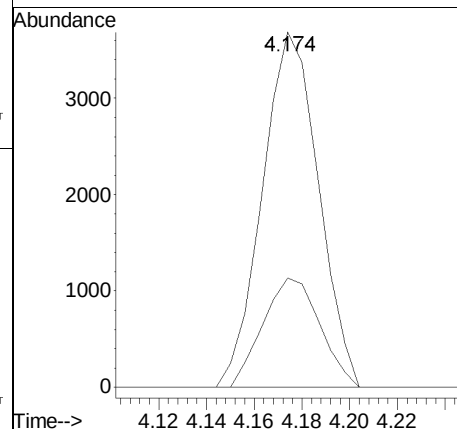
Tgt Ion	85	87	Ratio	100	Resp	7927	Lower	Upper
	85	87	33.6	25.8	38.6			

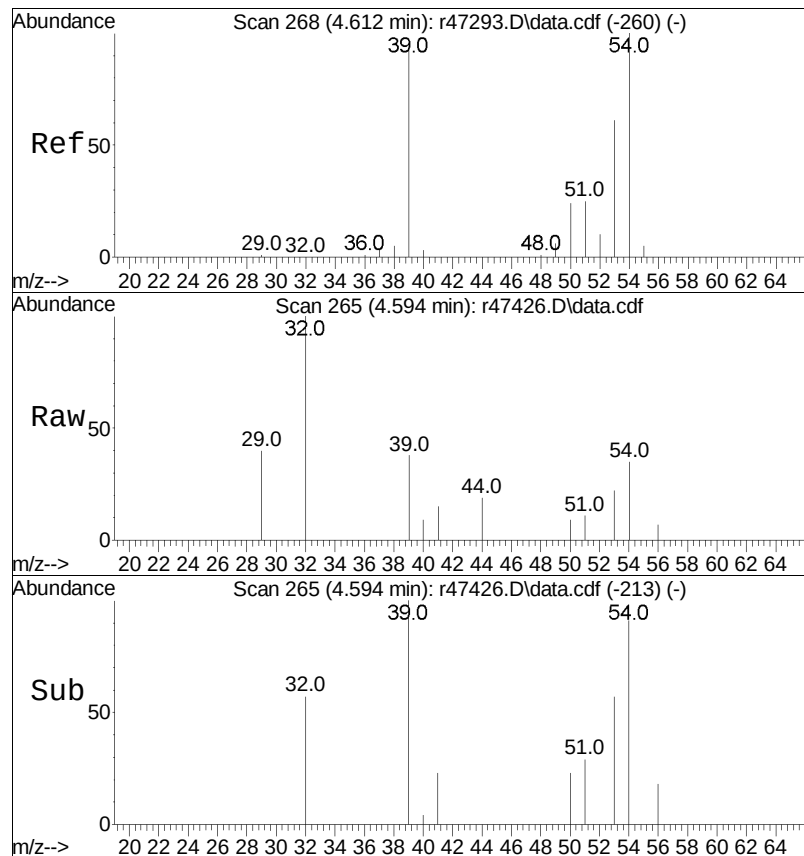




#6
chloromethane
Concen: 0.65 ppbV
RT: 4.174 min Scan# 195
Delta R.T. -0.018 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

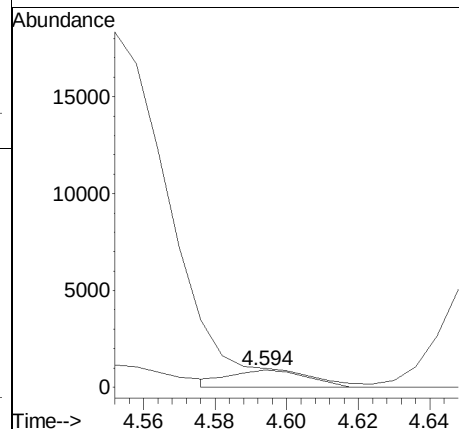
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	30.8	24.9	37.3	

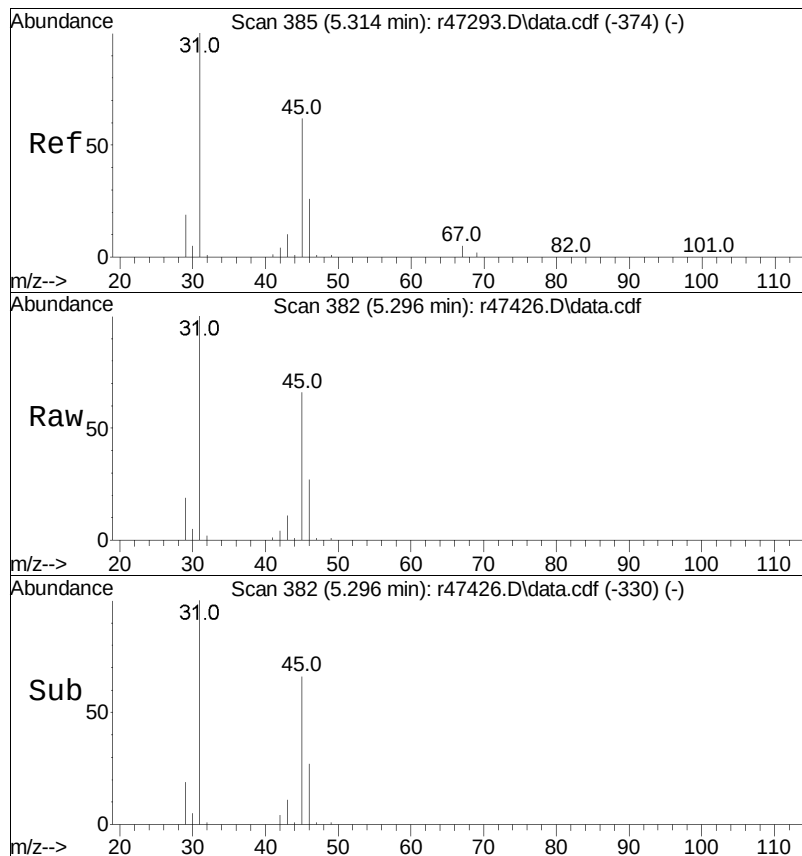




#10
 1,3-butadiene
 Concen: 0.14 ppbV
 RT: 4.594 min Scan# 265
 Delta R.T. -0.018 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

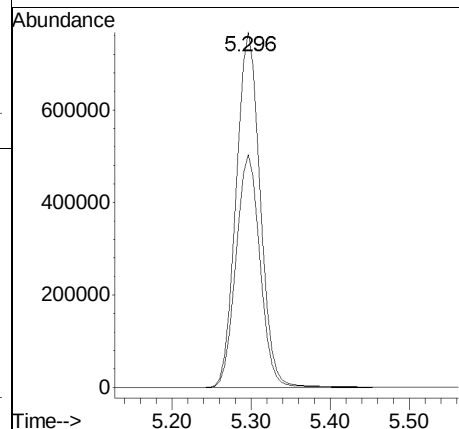
Tgt Ion:	54	Resp:	1350
Ion Ratio	Lower	Upper	
54	100		
39	109.8	75.5	113.3

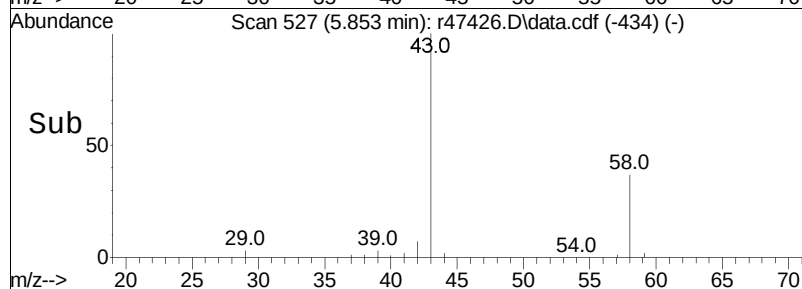
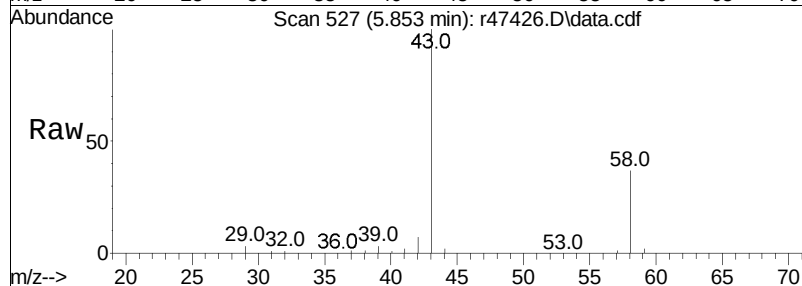
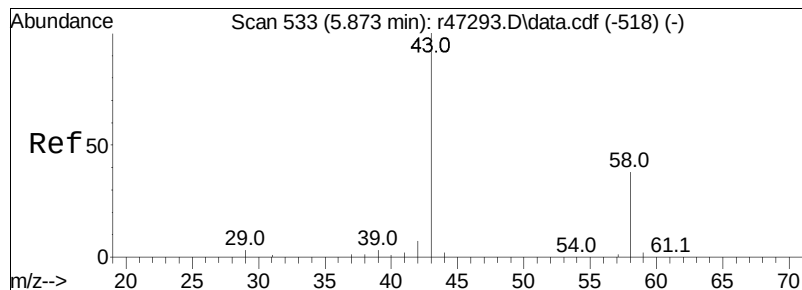




#15
 ethanol
 Concen: 239.52 ppbV
 RT: 5.296 min Scan# 382
 Delta R.T. -0.018 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

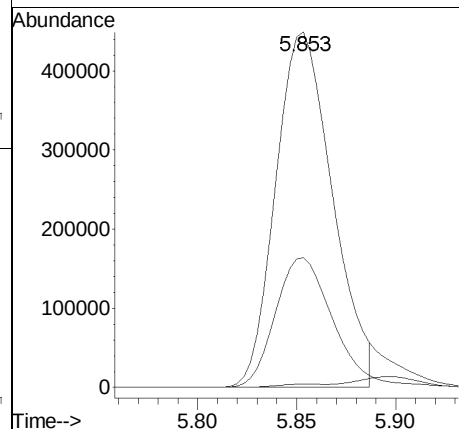
Tgt Ion	Ratio	Lower	Upper
31	100		
45	65.6	49.7	74.5

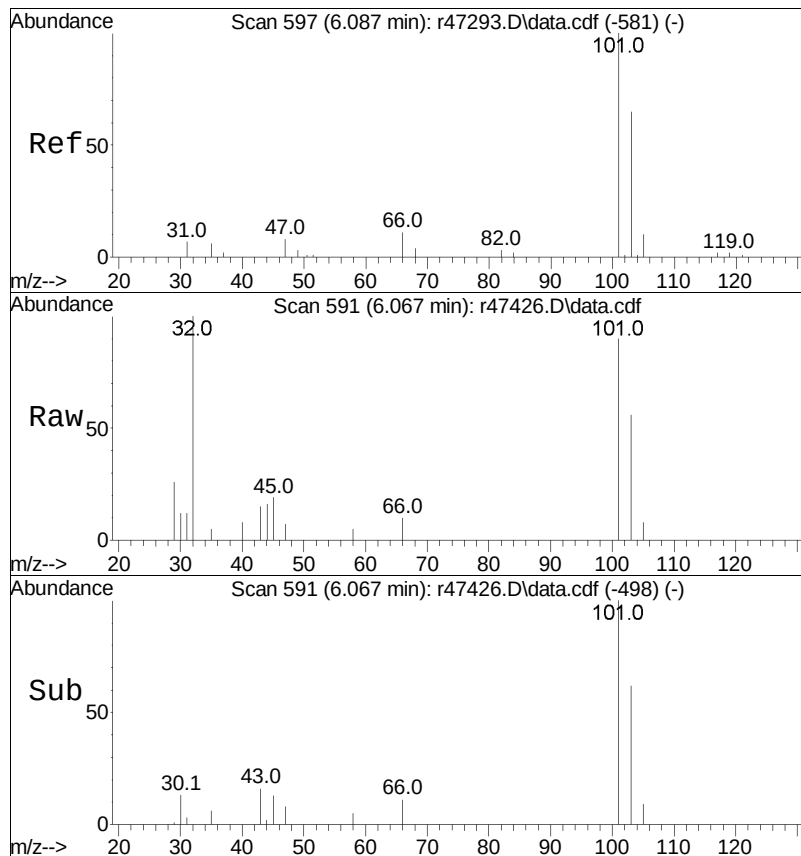




#19
acetone
Concen: 48.88 ppbV m
RT: 5.853 min Scan# 527
Delta R.T. -0.020 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

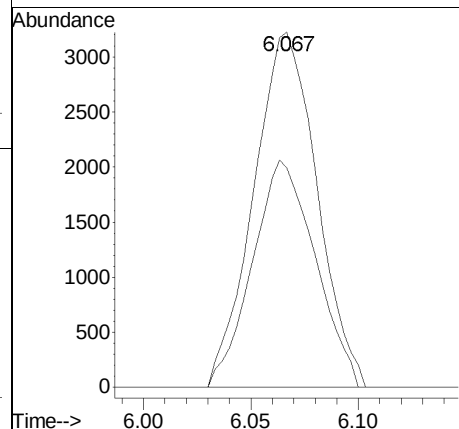
Tgt Ion:	43	58	57	Ratio	Lower	Upper
Resp:	895845					
Ion Ratio	100	36.5	0.9			
		30.2	0.7			
		45.2	1.1			

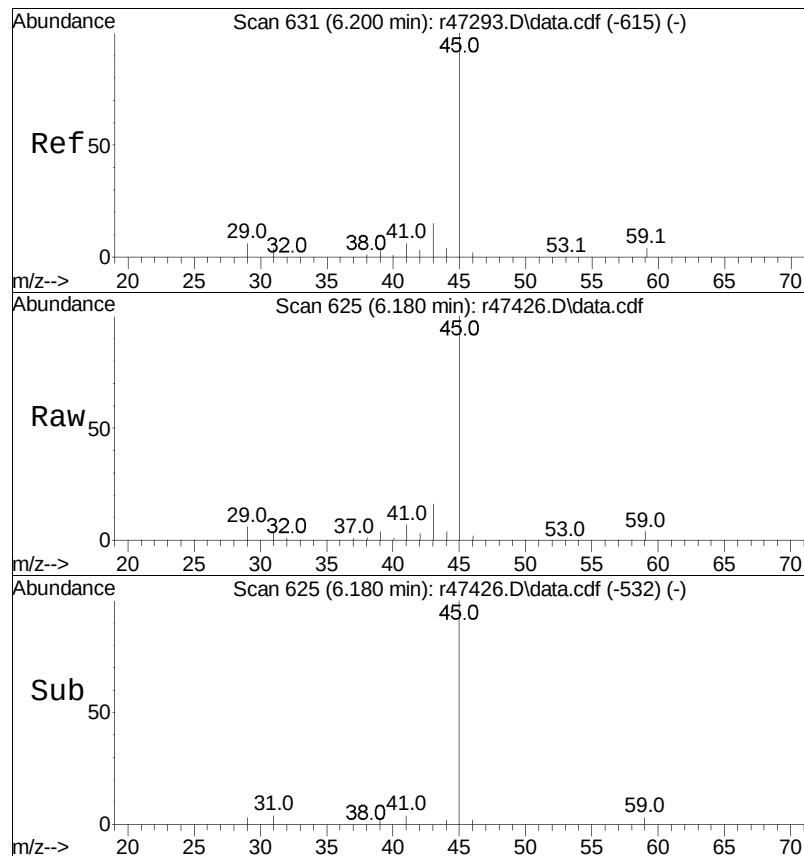




#21
trichlorofluoromethane
Concen: 0.42 ppbV
RT: 6.067 min Scan# 591
Delta R.T. -0.020 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

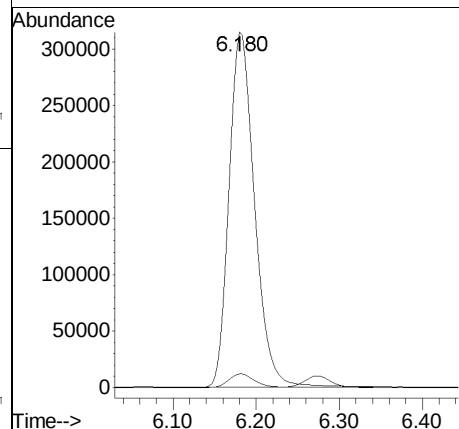
Tgt Ion	Ratio	Lower	Upper
101	100		
103	61.8	52.2	78.4

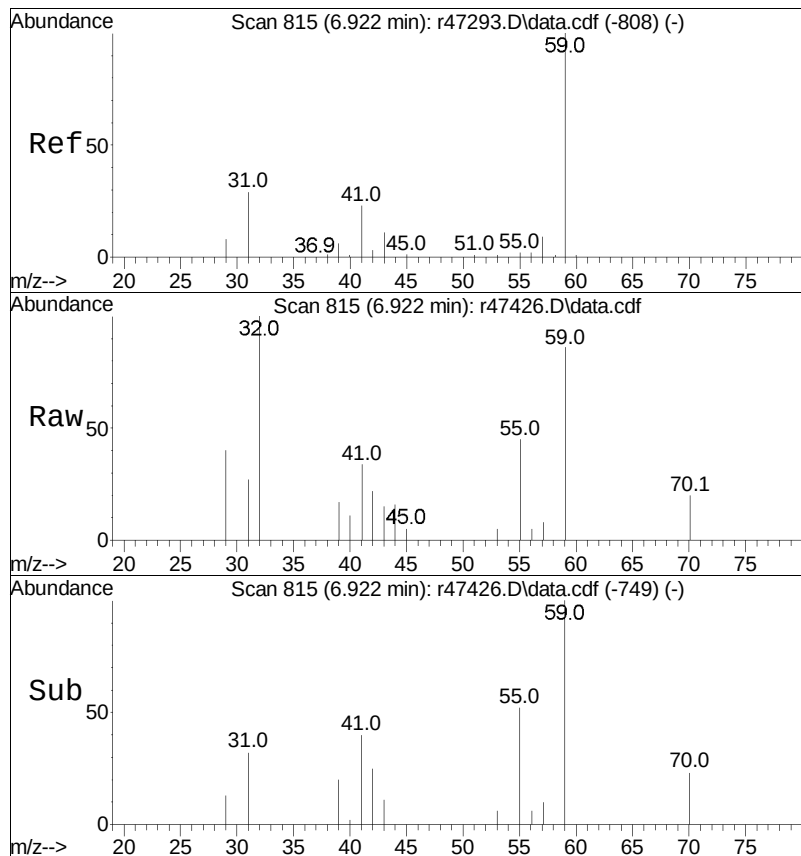




#22
 isopropyl alcohol
 Concen: 29.22 ppbV
 RT: 6.180 min Scan# 625
 Delta R.T. -0.020 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

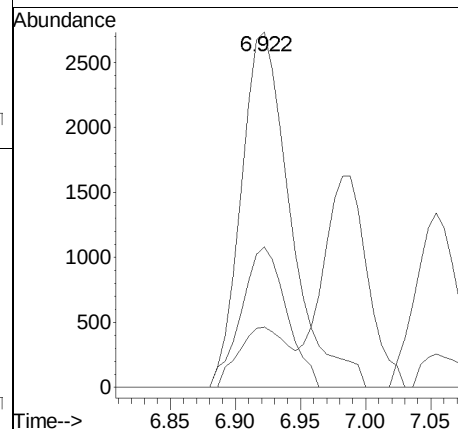
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.8	3.0	4.6

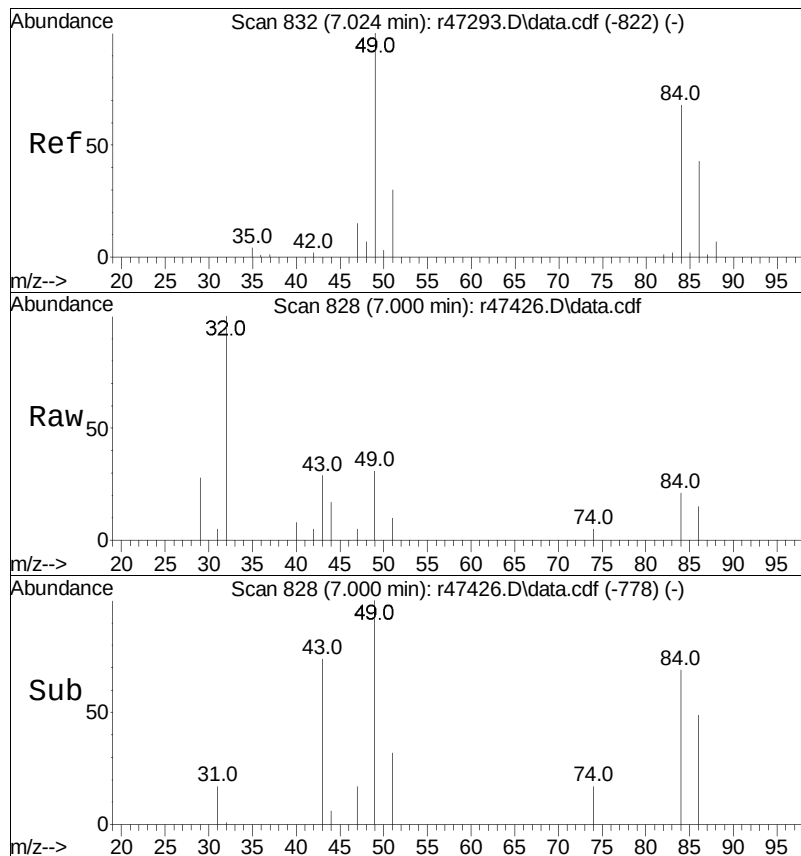




#27
 tertiary butyl alcohol
 Concen: 0.35 ppbV
 RT: 6.922 min Scan# 815
 Delta R.T. 0.000 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

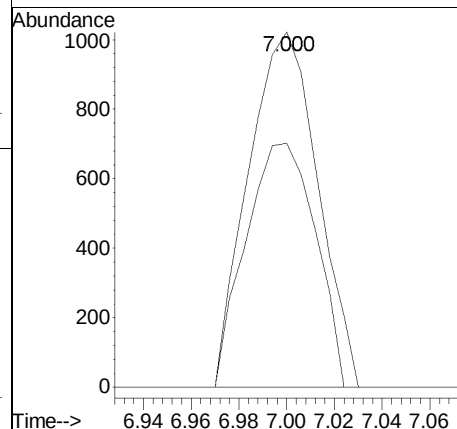
Tgt Ion	Ratio	Lower	Upper
59	100		
41	39.5	18.1	27.1#
43	17.0	9.0	13.4#

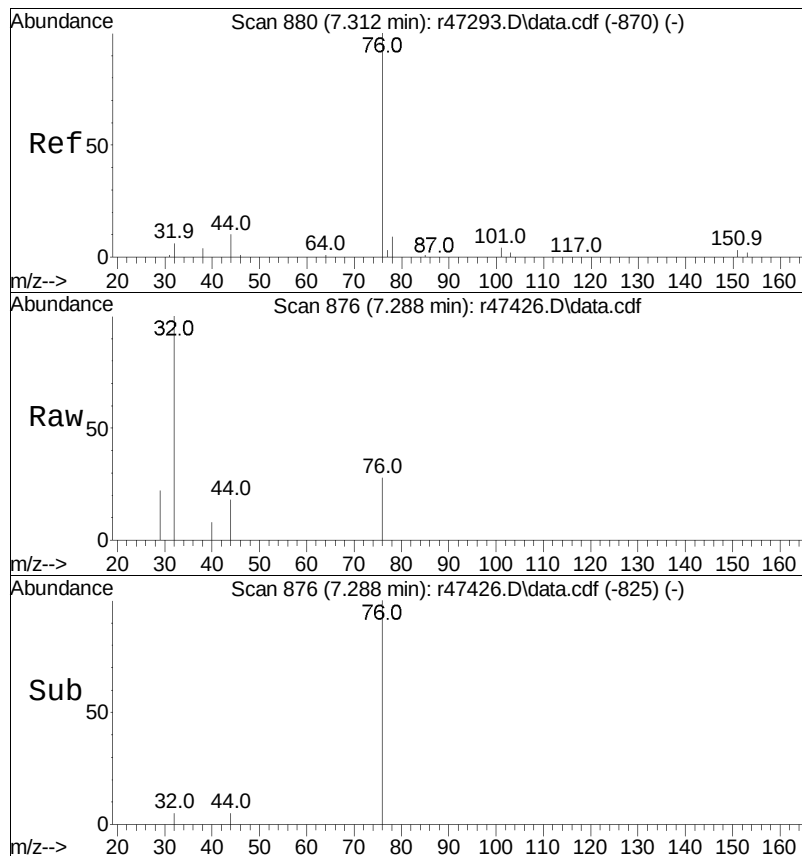




#28
 methylene chloride
 Concen: 0.16 ppbV
 RT: 7.000 min Scan# 828
 Delta R.T. -0.024 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

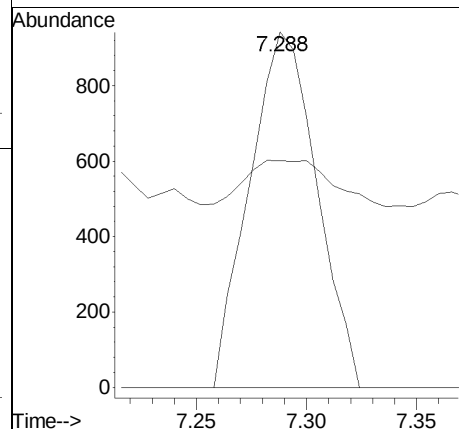
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	2063				
Ion Ratio	100	68.7			
		54.1		81.1	

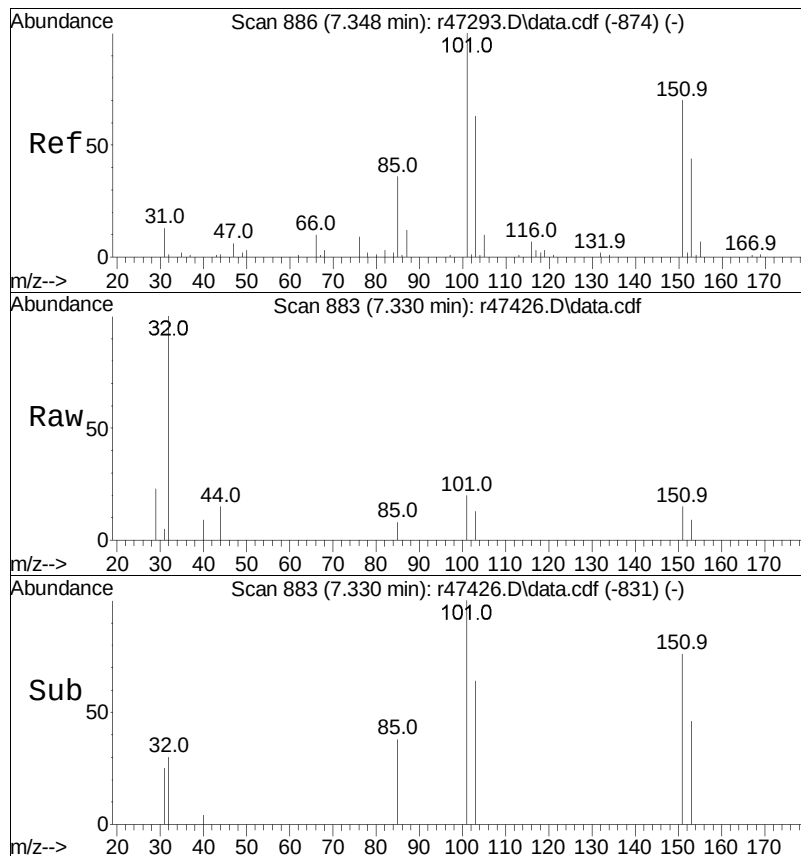




#30
 carbon disulfide
 Concen: 0.06 ppbV
 RT: 7.288 min Scan# 876
 Delta R.T. -0.024 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

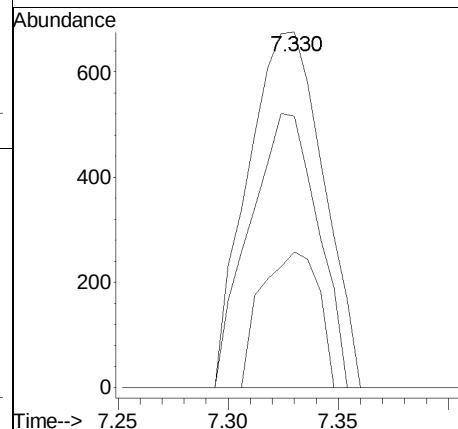
Tgt Ion	Ratio	Lower	Upper
76	100		
44	63.8	8.7	13.1#

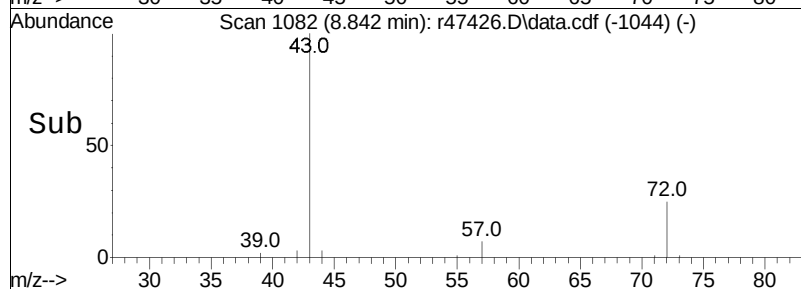
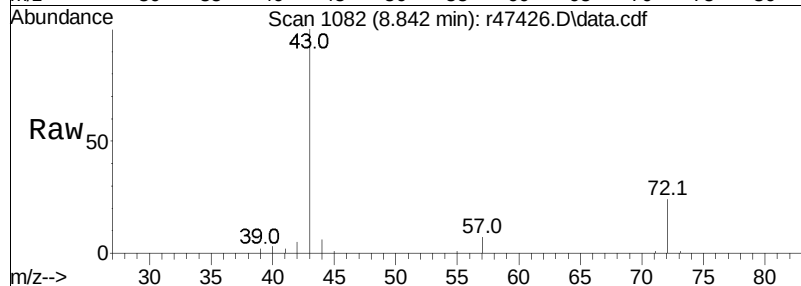
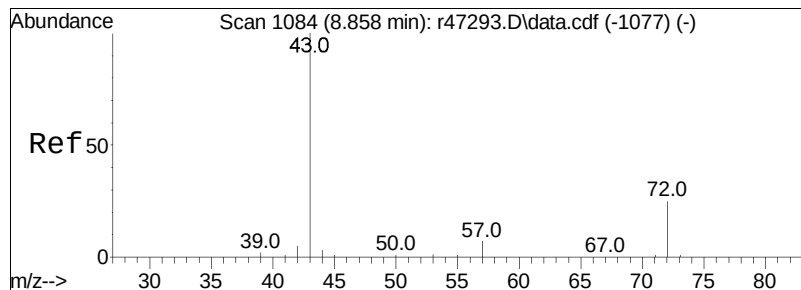




#31
 Freon 113
 Concen: 0.09 ppbV
 RT: 7.330 min Scan# 883
 Delta R.T. -0.018 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

Tgt	Ion:101	Resp:	1610
Ion	Ratio	Lower	Upper
101	100		
85	38.2	28.8	43.2
151	76.3	56.3	84.5





#36

2-butanone

Concen: 1.23 ppbV

RT: 8.842 min Scan# 1082

Delta R.T. -0.017 min

Lab File: r47426.D

Acq: 22 Jan 2020 2:04 AM

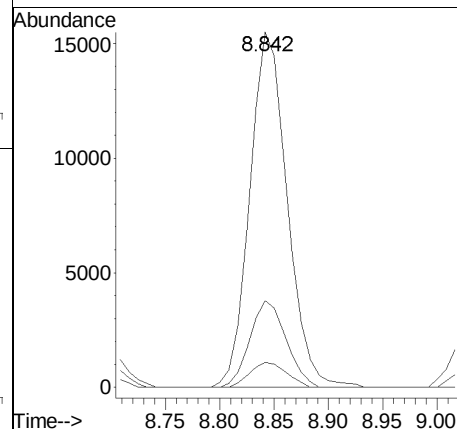
Tgt Ion: 43 Resp: 37131

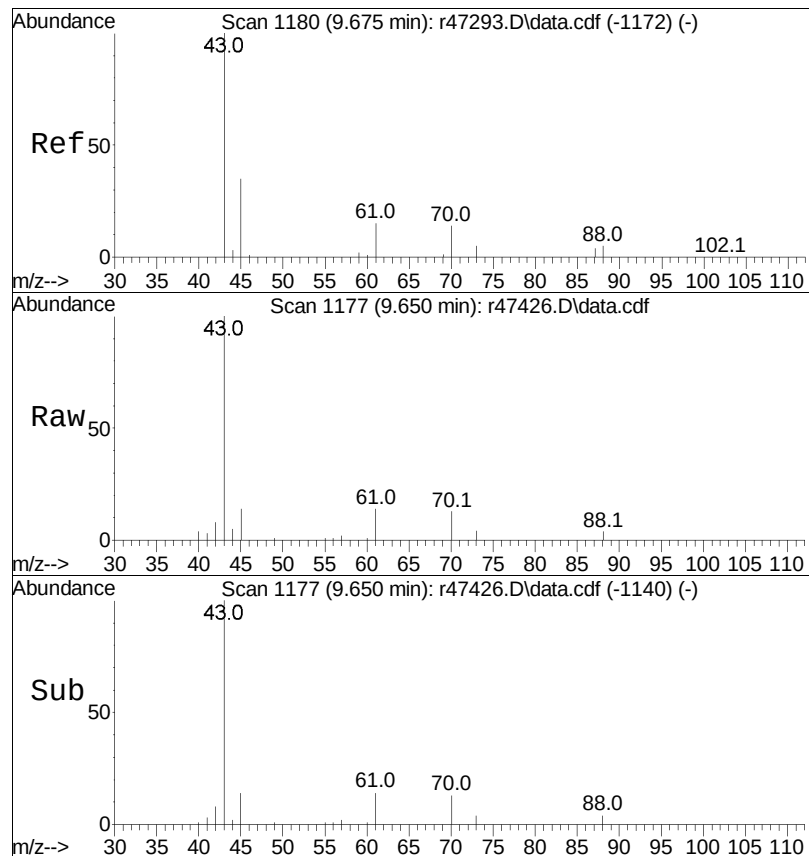
Ion Ratio Lower Upper

43 100

72 24.4 19.8 29.6

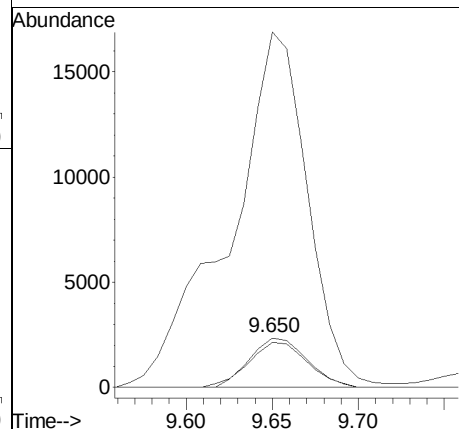
57 7.0 5.5 8.3

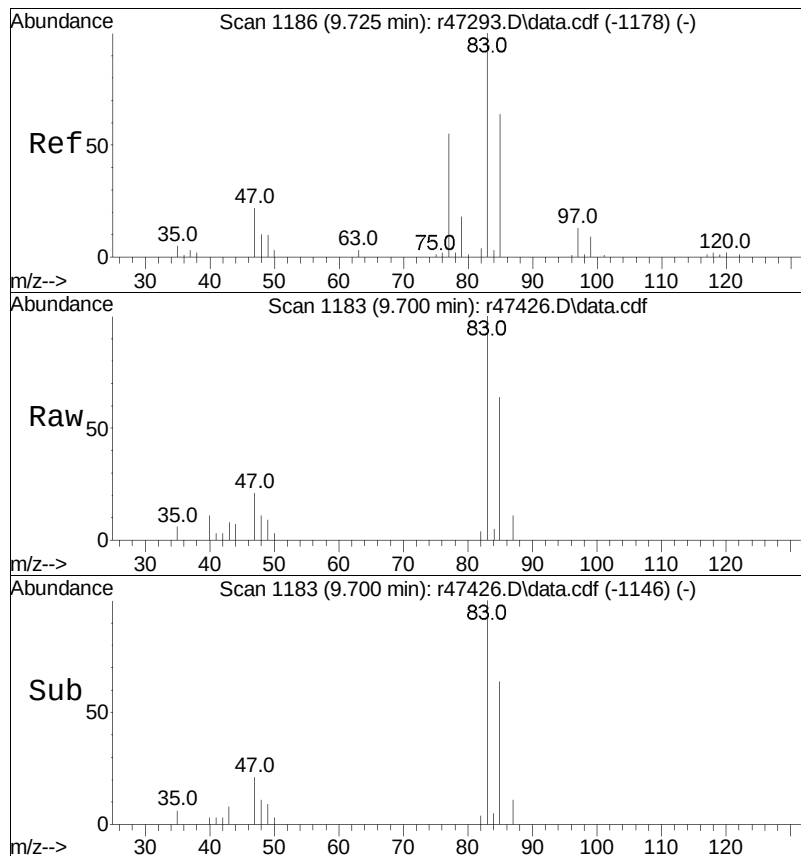




#38
 Ethyl Acetate
 Concen: 1.19 ppbV
 RT: 9.650 min Scan# 1177
 Delta R.T. -0.025 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

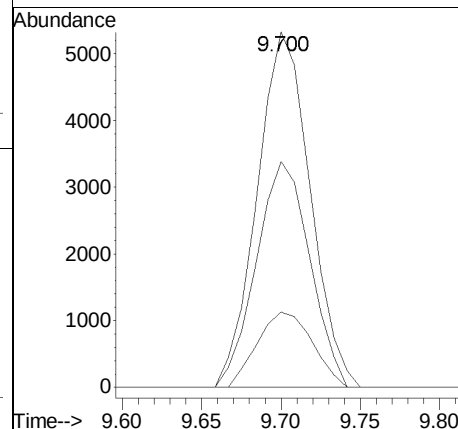
Tgt	Ion	Ratio	Lower	Upper
61	100			
70	91.1	77.3	115.9	
43	719.0	633.3	949.9	

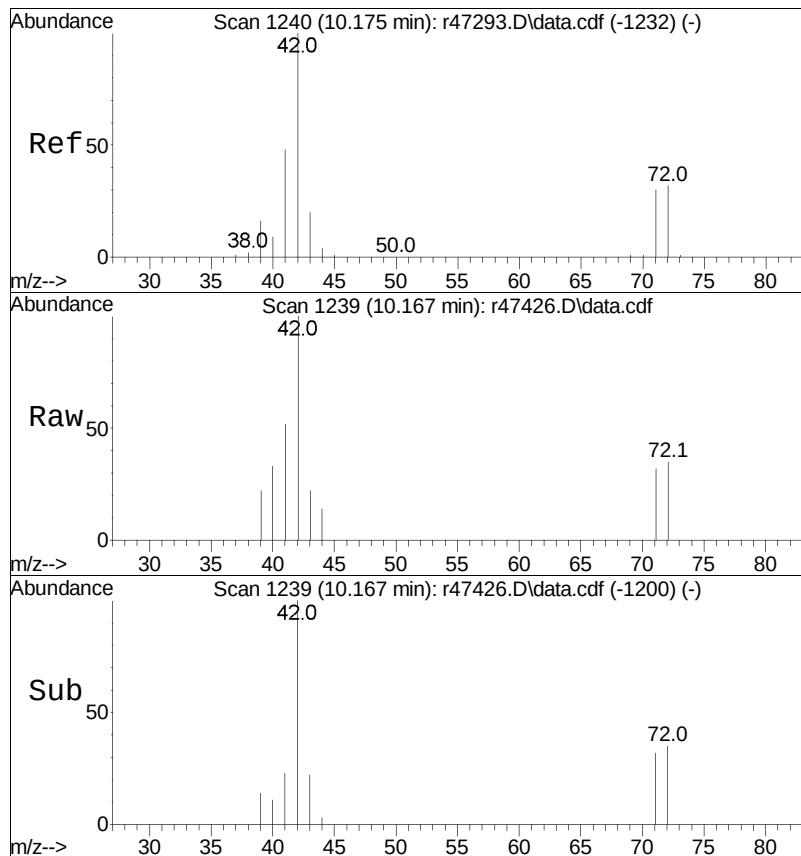




#39
chloroform
Concen: 0.67 ppbV
RT: 9.700 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

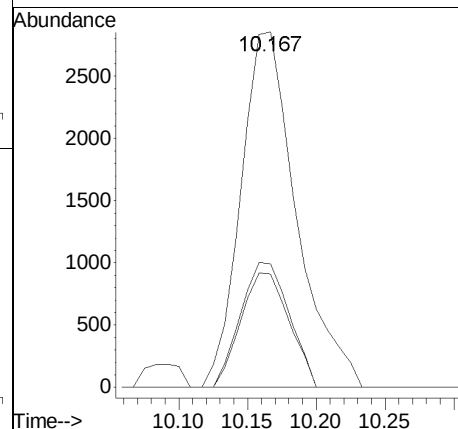
Tgt	Ion	Ratio	Resp	Lower	Upper
83	100		12369		
85	63.5	51.3		76.9	
47	21.2	17.8		26.8	

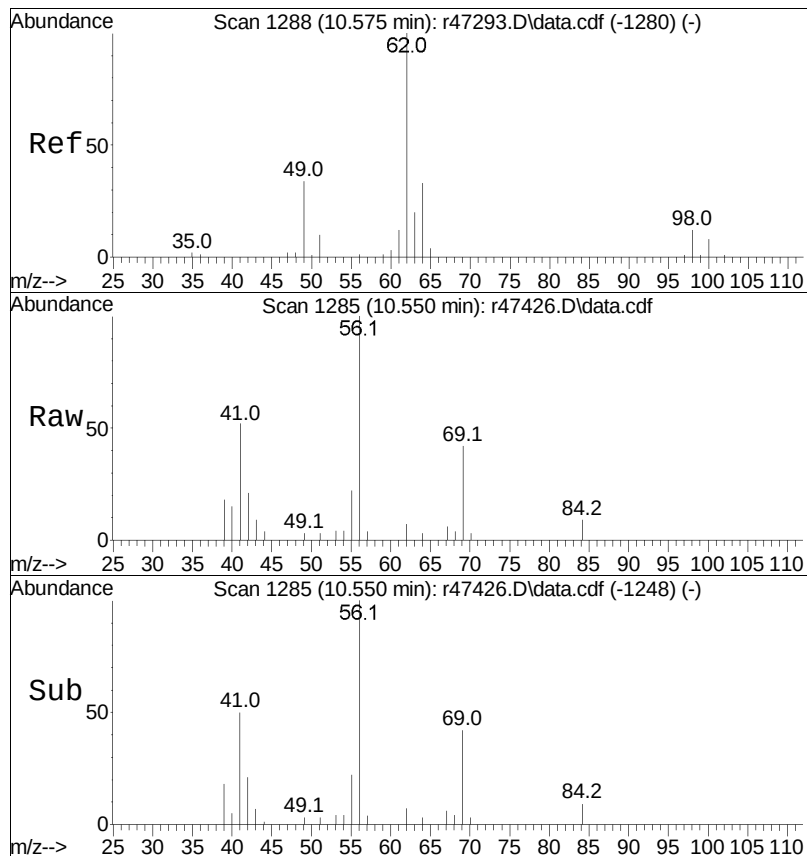




#40
Tetrahydrofuran
Concen: 0.38 ppbV
RT: 10.167 min Scan# 1239
Delta R.T. -0.008 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

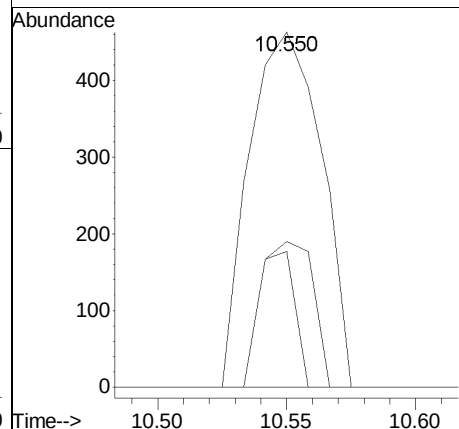
Tgt Ion	Ratio	Lower	Upper
42	100		
71	31.9	24.2	36.2
72	34.8	25.6	38.4

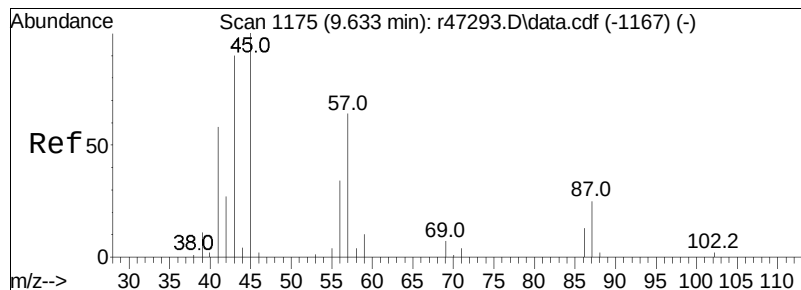




#42
 1,2-dichloroethane
 Concen: 0.07 ppbV
 RT: 10.550 min Scan# 1285
 Delta R.T. -0.025 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

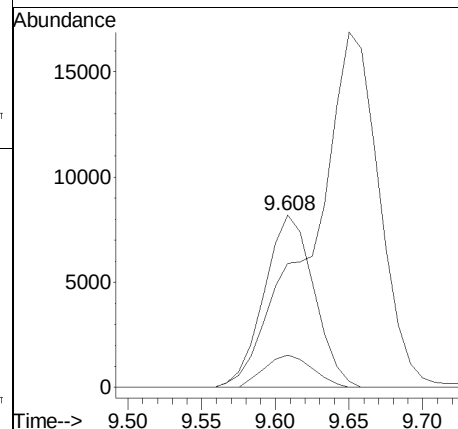
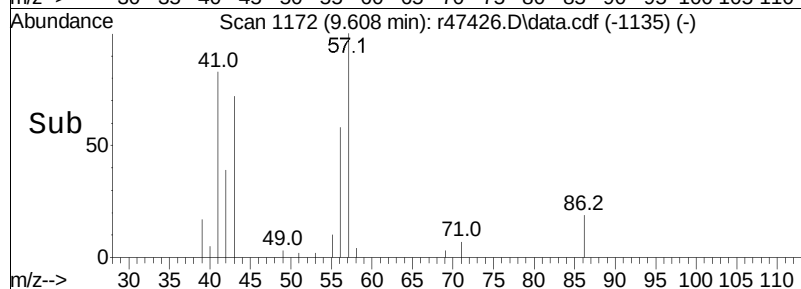
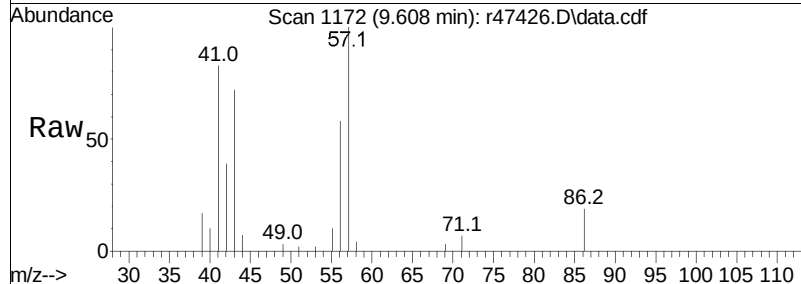
Tgt Ion:	62	Resp:	900
Ion Ratio	Lower	Upper	
62	100		
64	38.2	26.2	39.4
49	41.0	26.9	40.3#
63	0.0	15.6	23.4#

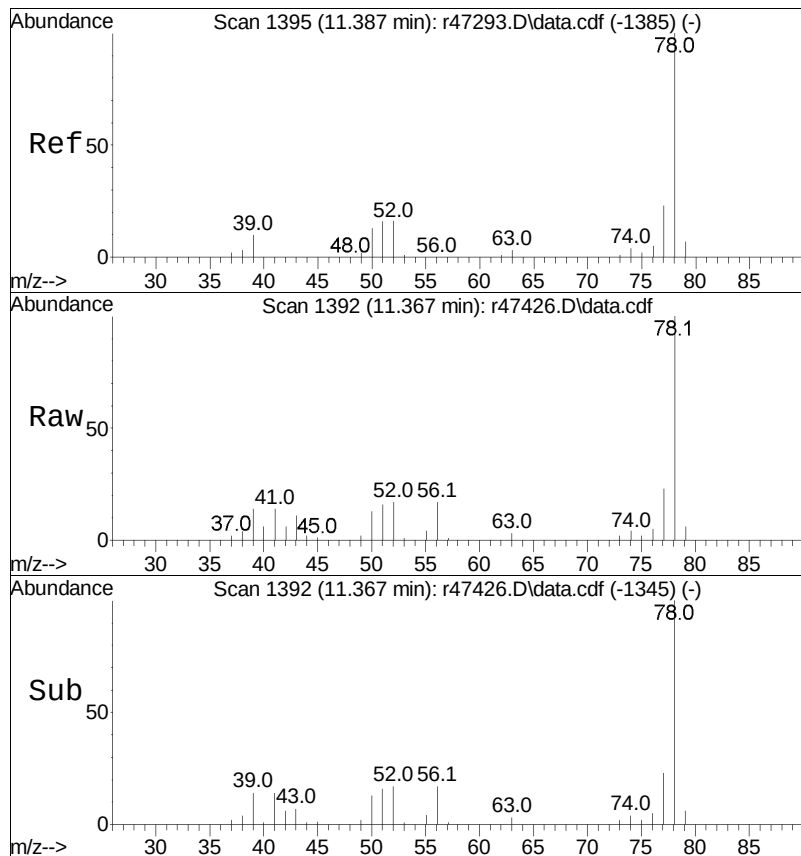




#44
hexane
Concen: 0.90 ppbV
RT: 9.608 min Scan# 1172
Delta R.T. -0.025 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

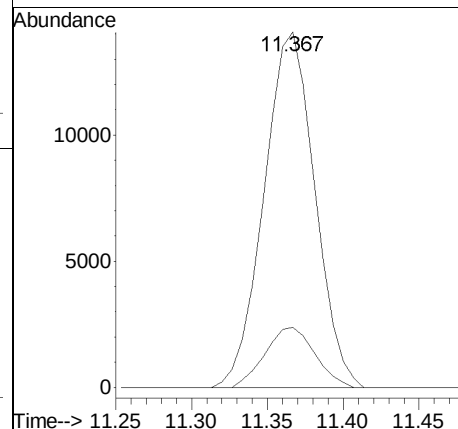
Tgt Ion	Ratio	Lower	Upper
57	100		
43	72.0	111.8	167.8#
86	18.8	15.8	23.6

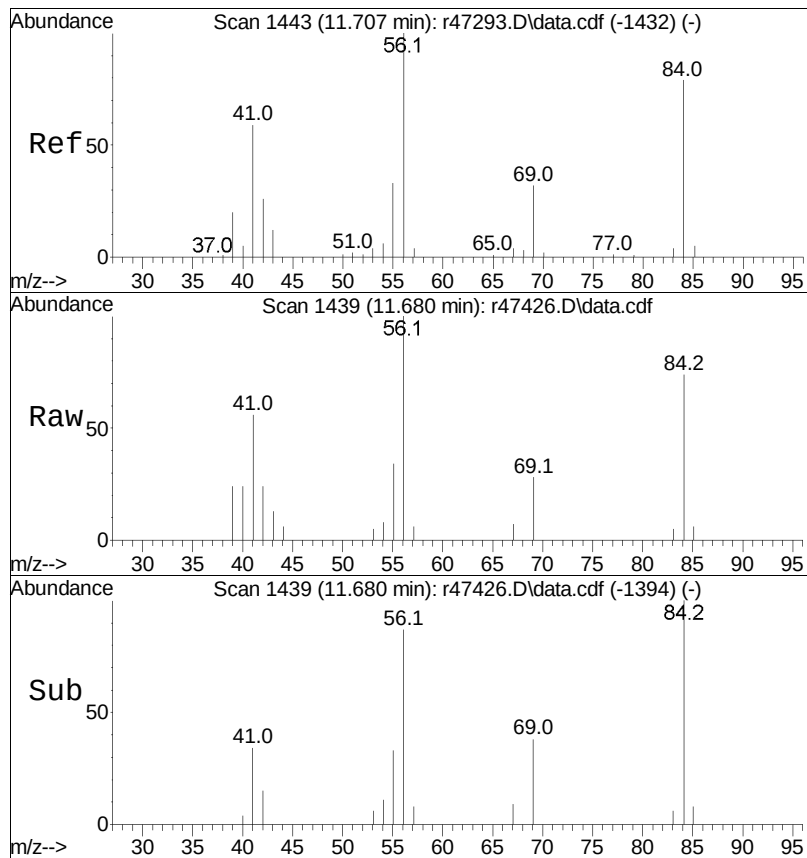




#50
benzene
Concen: 0.83 ppbV
RT: 11.367 min Scan# 1392
Delta R.T. -0.020 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

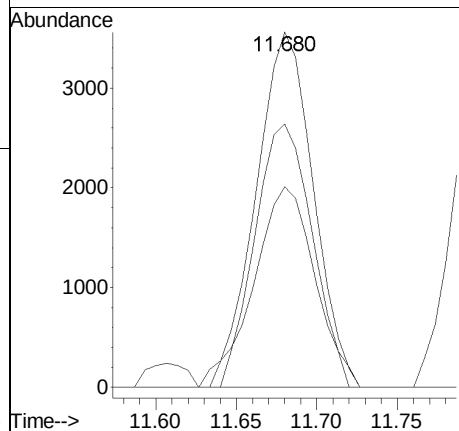
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.9	13.0	19.4

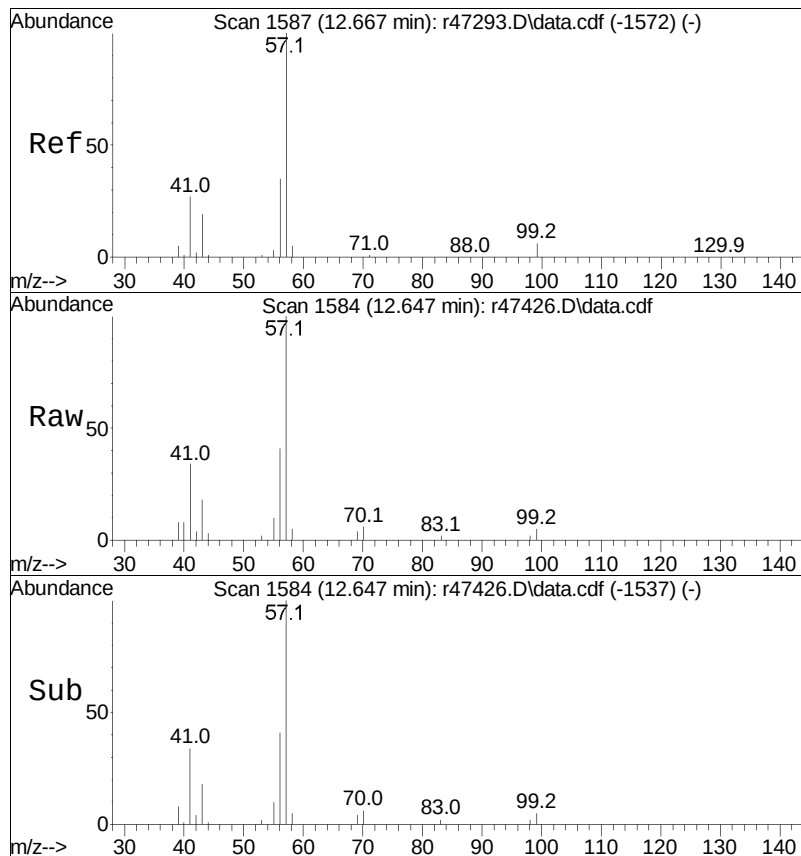




#53
cyclohexane
Concen: 0.35 ppbV
RT: 11.680 min Scan# 1439
Delta R.T. -0.027 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

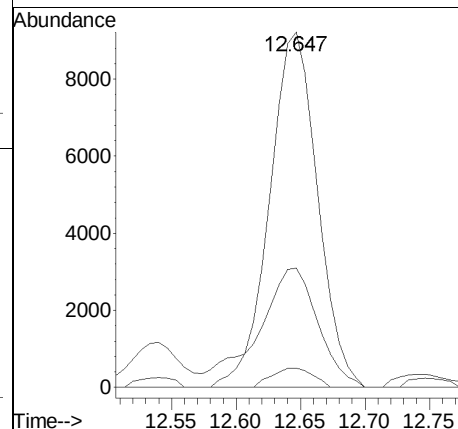
Tgt	Ion: 56	Resp:	8847
Ion	Ratio	Lower	Upper
56	100		
84	74.1	63.0	94.6
41	56.4	46.8	70.2

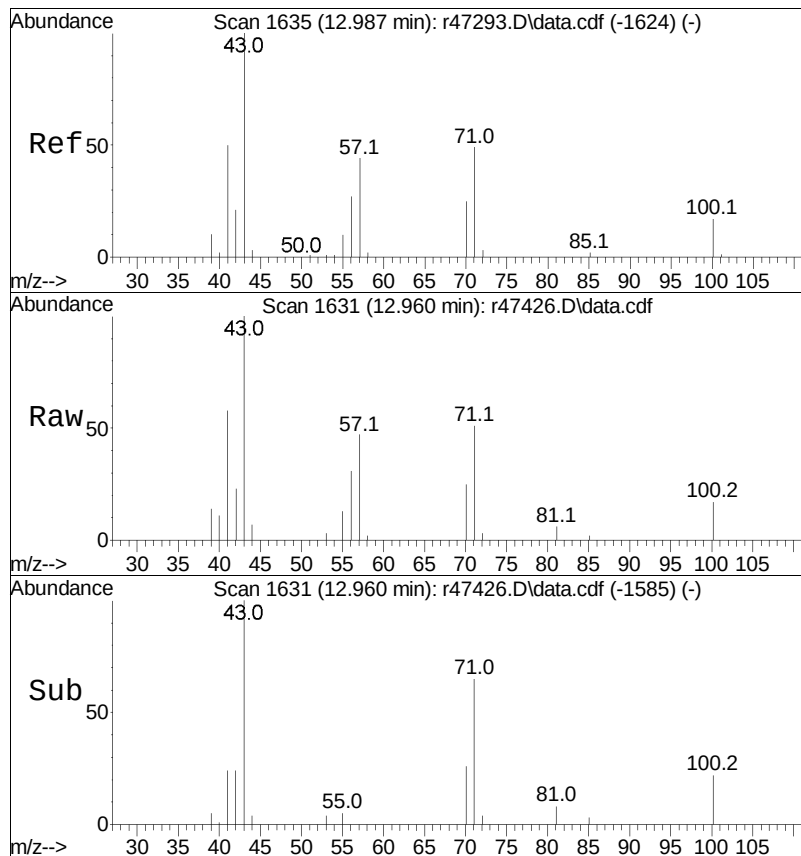




#60
 2,2,4-trimethylpentane
 Concen: 0.31 ppbV
 RT: 12.647 min Scan# 1584
 Delta R.T. -0.020 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

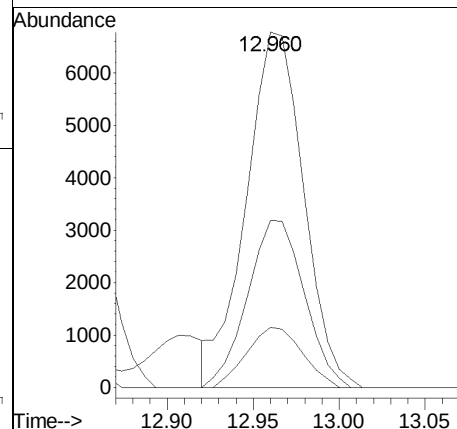
Tgt Ion:	57	Resp:	23878
Ion Ratio	Lower	Upper	
57	100		
99	5.5	4.8	7.2
41	33.6	21.8	32.8#

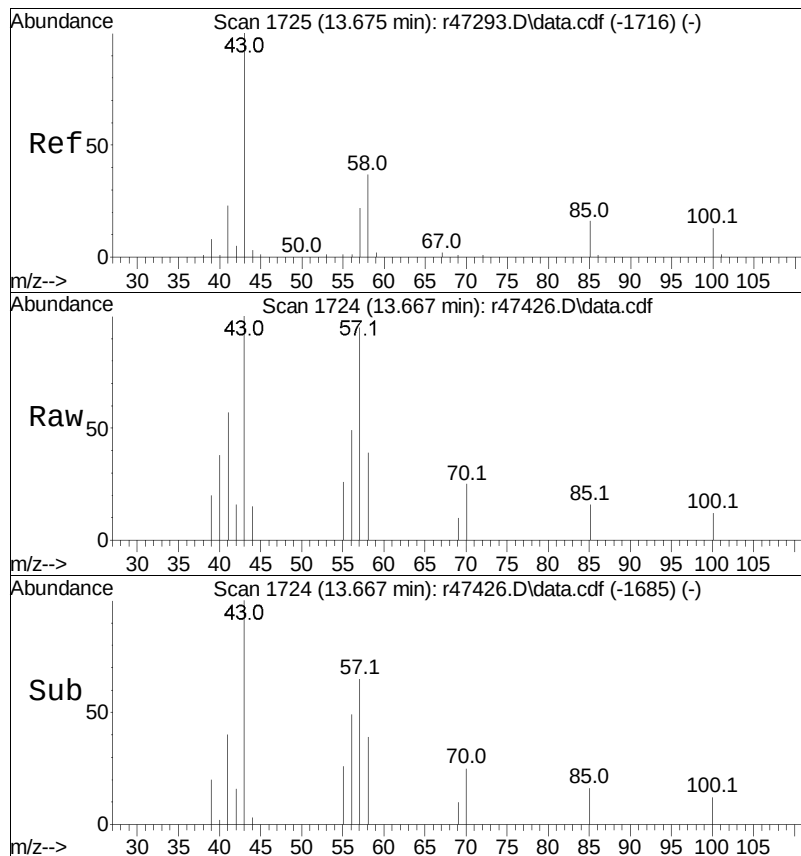




#62
heptane
Concen: 0.47 ppbV
RT: 12.960 min Scan# 1631
Delta R.T. -0.027 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

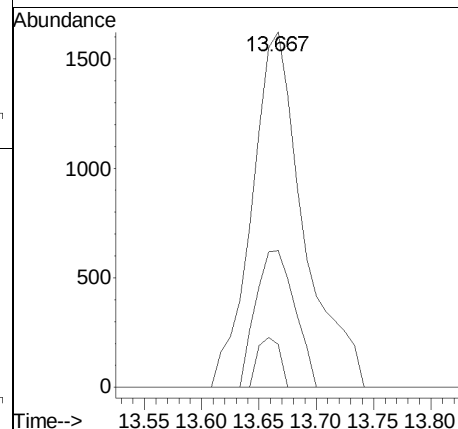
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	47.0	35.2	52.8	
100	16.9	13.7	20.5	

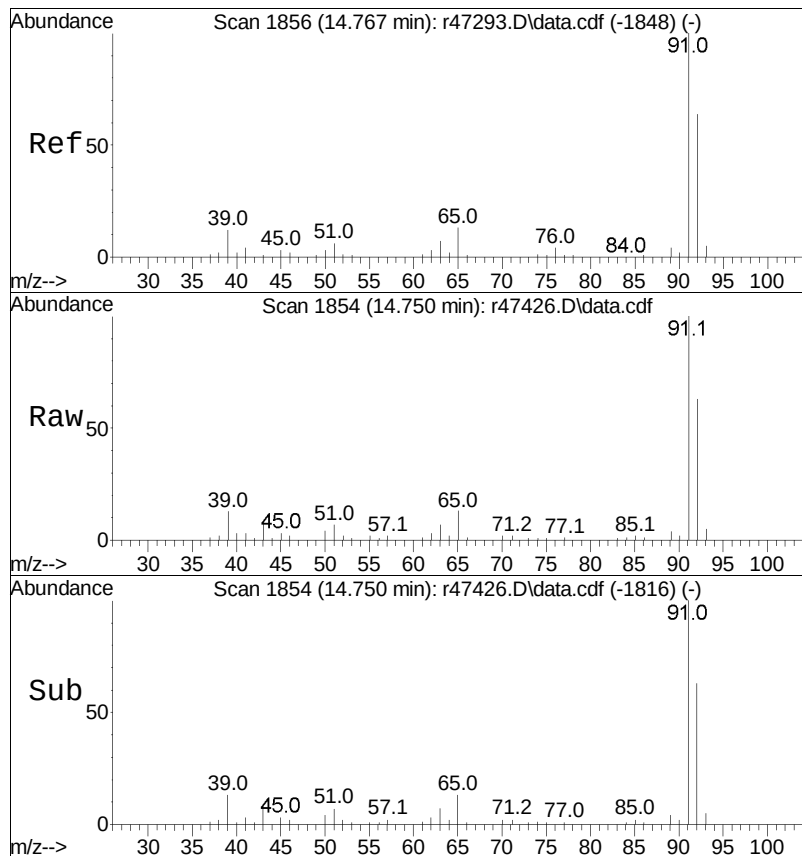




#64
 4-methyl-2-pentanone
 Concen: 0.13 ppbV
 RT: 13.667 min Scan# 1724
 Delta R.T. -0.008 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

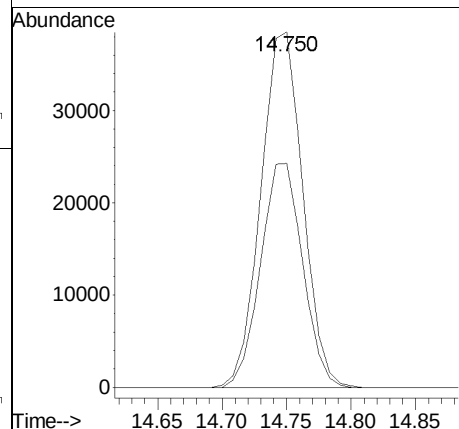
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	38.5	29.3	43.9	
100	12.1	10.7	16.1	

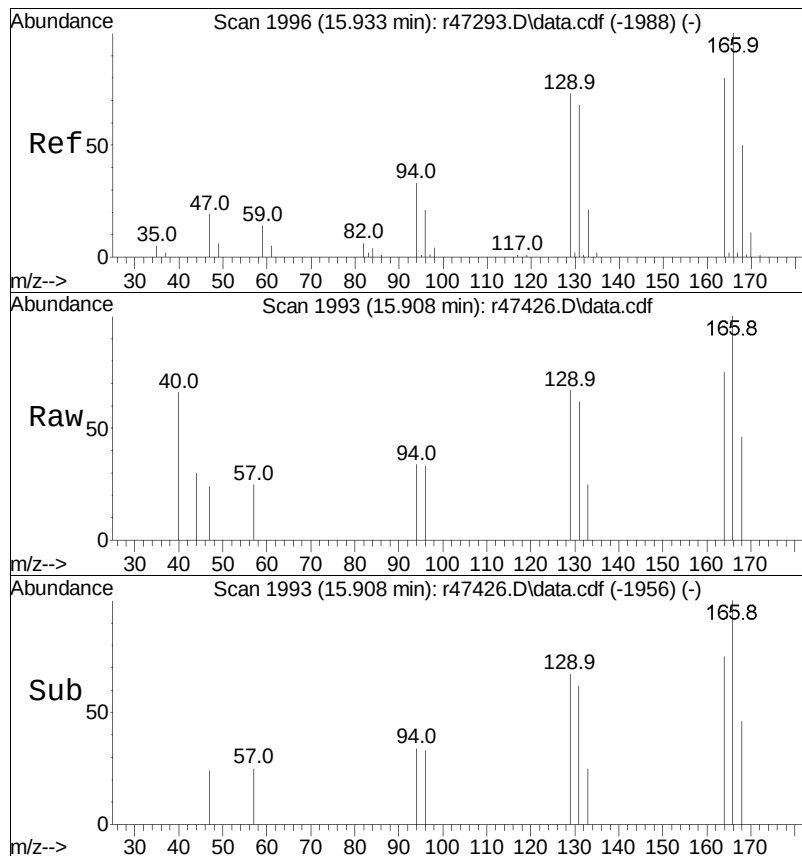




#68
 toluene
 Concen: 1.61 ppbV
 RT: 14.750 min Scan# 1854
 Delta R.T. -0.017 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

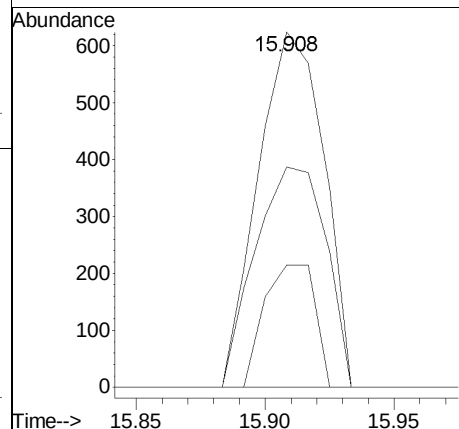
Tgt Ion	Ratio	Lower	Upper
91	100		
92	63.0	51.1	76.7

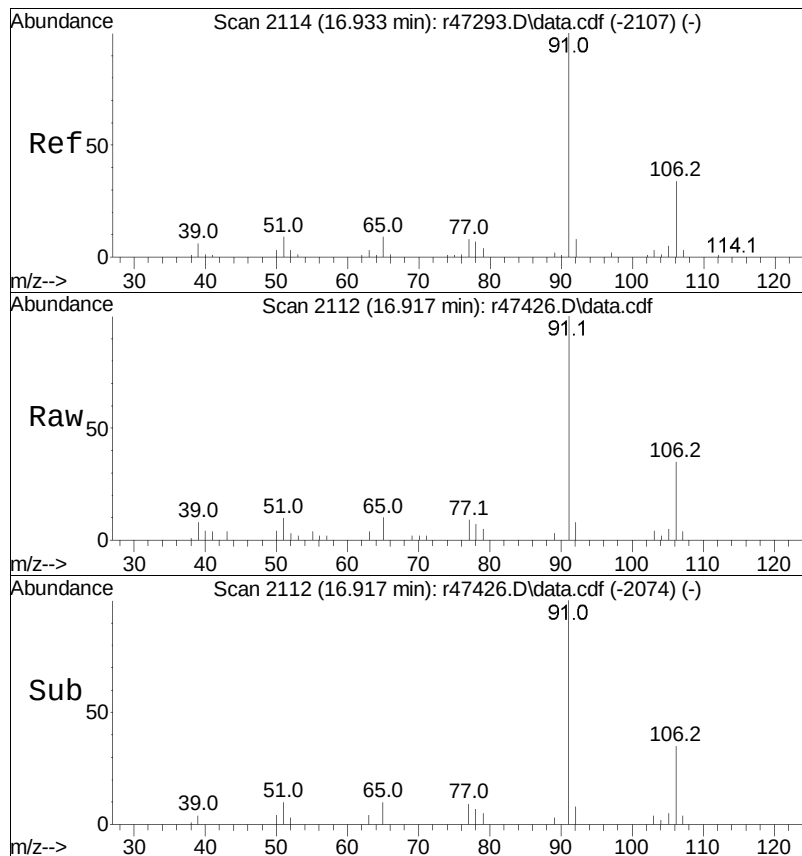




#78
 tetrachloroethene
 Concen: 0.05 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

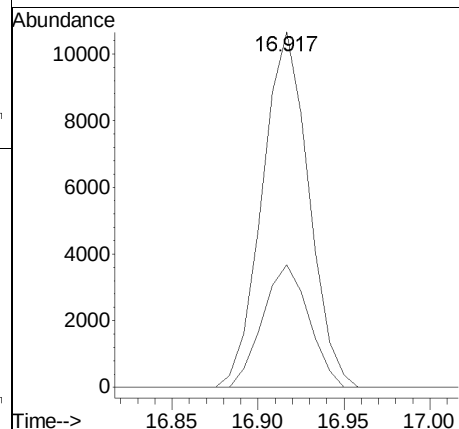
Tgt	Ion:166	Resp:	1105
Ion	Ratio	Lower	Upper
166	100		
131	62.0	54.5	81.7
94	34.5	26.3	39.5

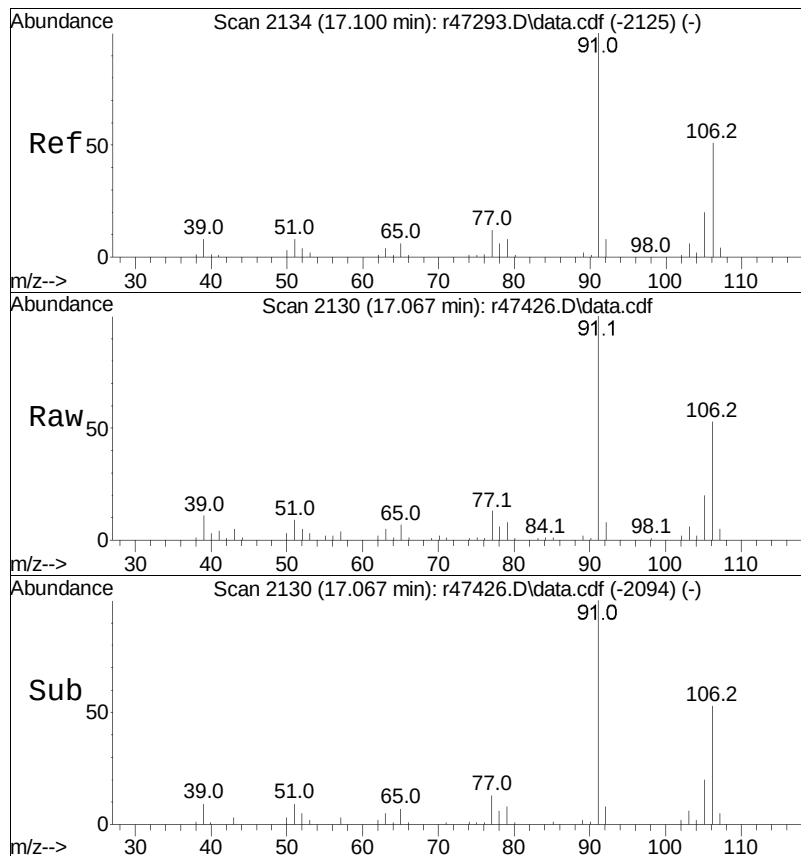




#81
ethylbenzene
Concen: 0.31 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

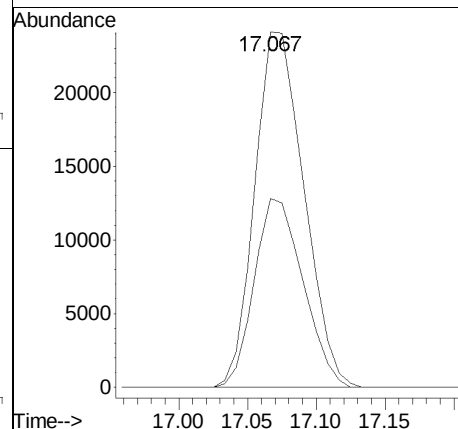
Tgt Ion	Ratio	Lower	Upper
91	100		
106	34.5	27.6	41.4

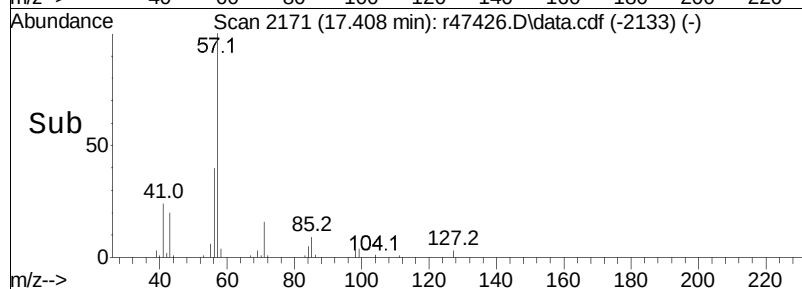
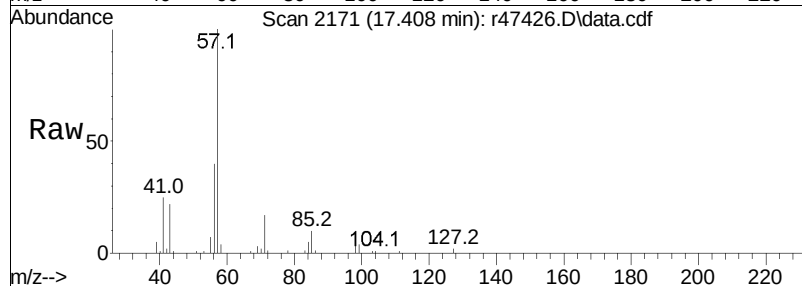
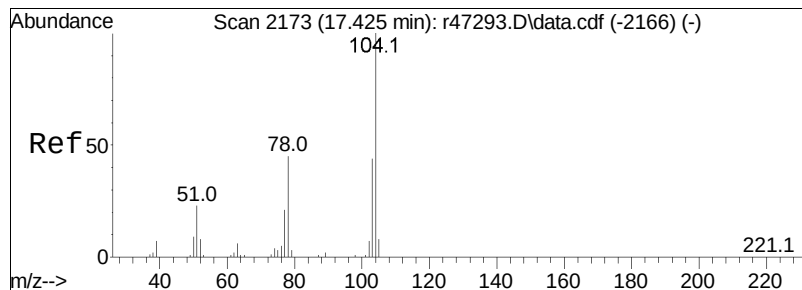




#83
 m+p-xylene
 Concen: 1.10 ppbV
 RT: 17.067 min Scan# 2130
 Delta R.T. -0.033 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

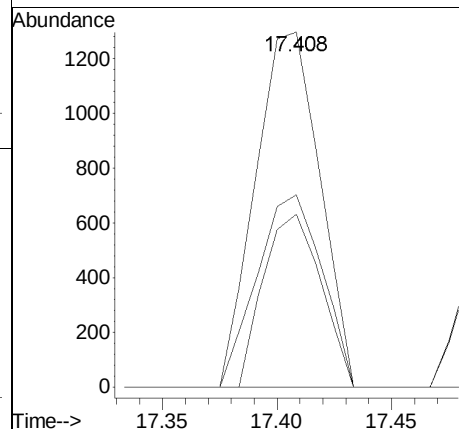
Tgt Ion	Ratio	Lower	Upper
91	100		
106	53.2	41.2	61.8

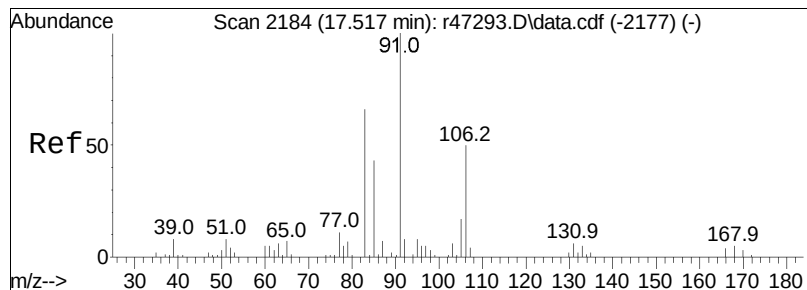




#85
styrene
Concen: 0.06 ppbV
RT: 17.408 min Scan# 2171
Delta R.T. -0.017 min
Lab File: r47426.D
Acq: 22 Jan 2020 2:04 AM

Tgt Ion	Ratio	Lower	Upper
104	100		
103	48.7	35.0	52.4
78	54.2	36.2	54.4





#87

o-xylene

Concen: 0.47 ppbV

RT: 17.500 min Scan# 2182

Delta R.T. -0.017 min

Lab File: r47426.D

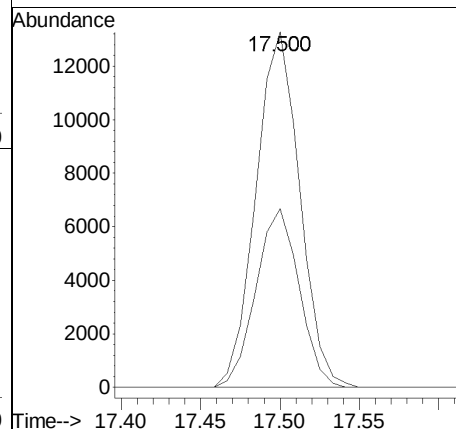
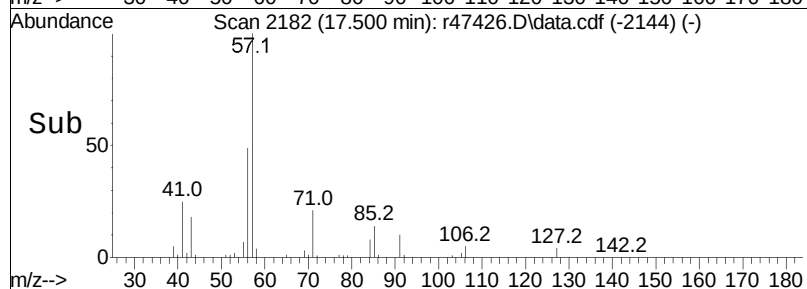
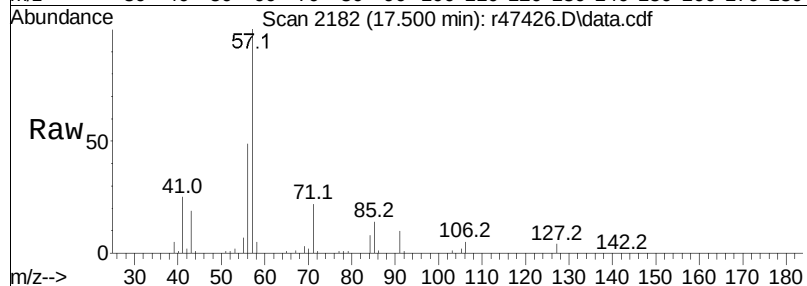
Acq: 22 Jan 2020 2:04 AM

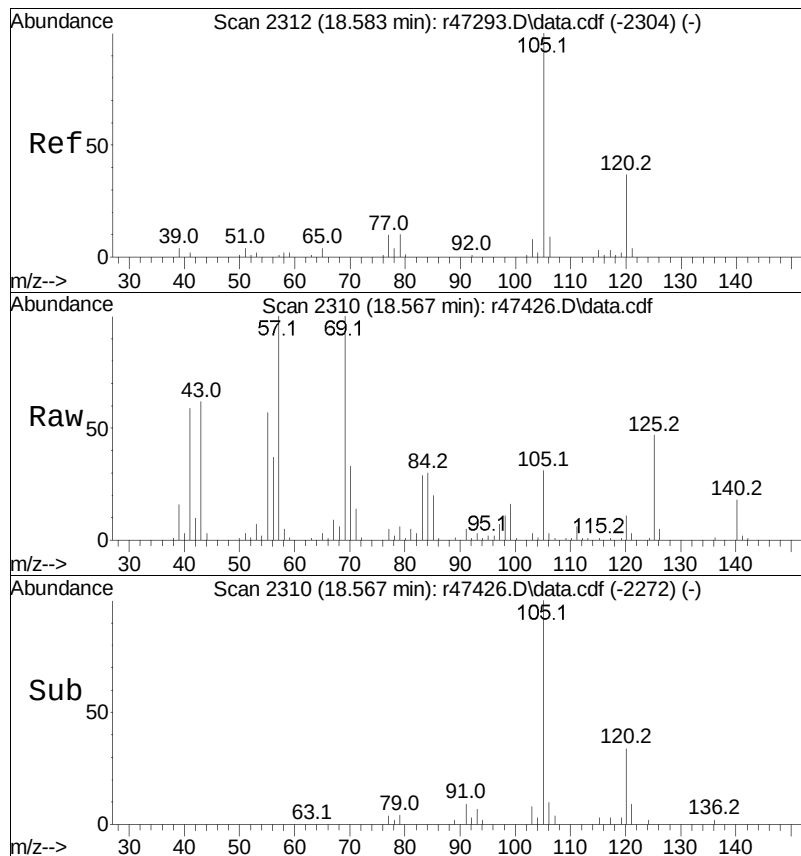
Tgt Ion: 91 Resp: 25463

Ion Ratio Lower Upper

91 100

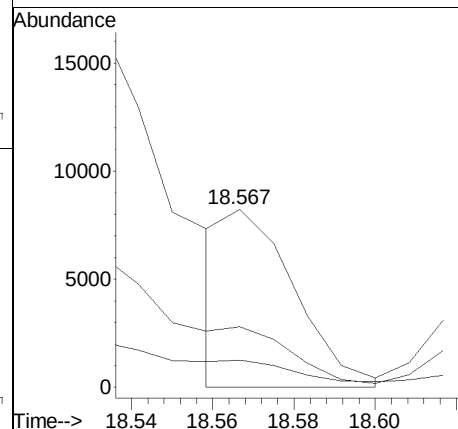
106 50.3 40.1 60.1

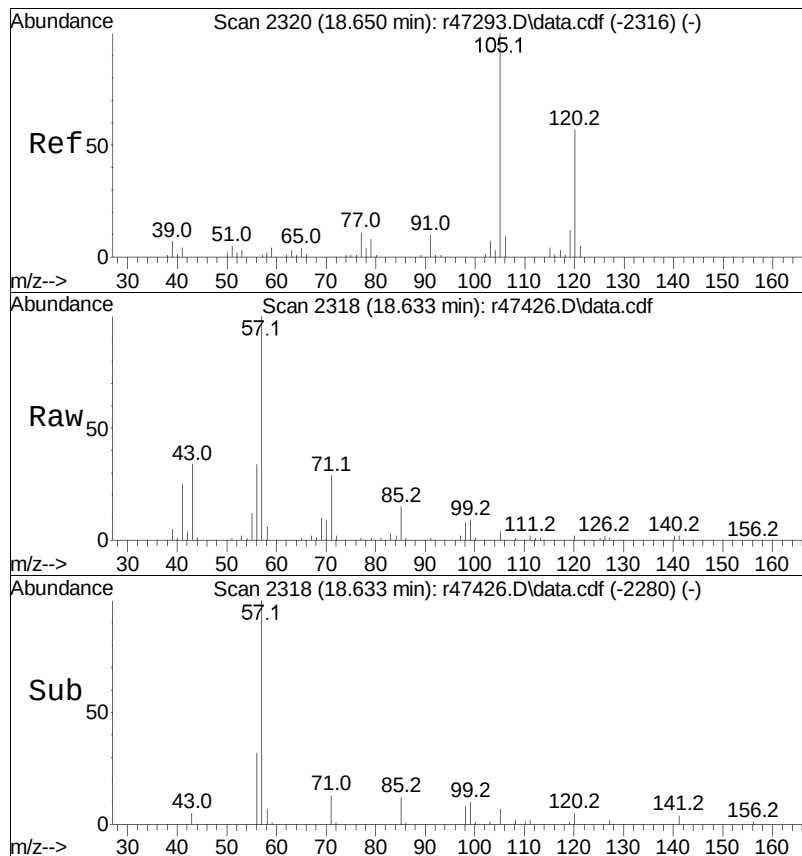




#96
 4-ethyl toluene
 Concen: 0.13 ppbV m
 RT: 18.567 min Scan# 2310
 Delta R.T. -0.017 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

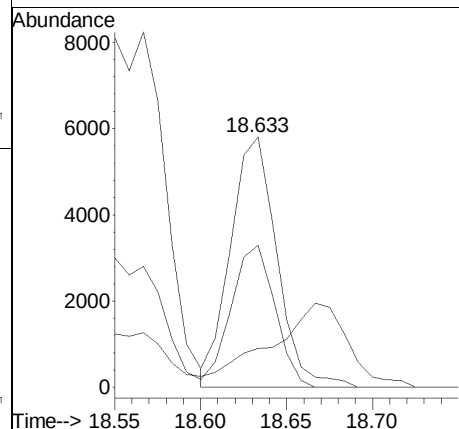
Tgt Ion	Ratio	Lower	Upper
105	100		
120	34.0	29.4	44.2
91	15.4	8.2	12.4

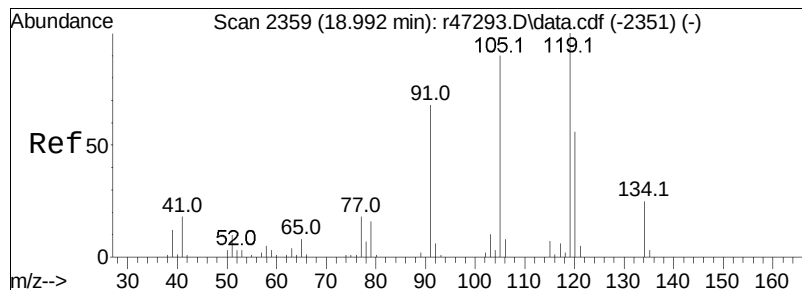




#97
 1,3,5-trimethylbenzene
 Concen: 0.17 ppbV
 RT: 18.633 min Scan# 2318
 Delta R.T. -0.017 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

Tgt Ion	Ratio	Lower	Upper
105	100		
120	56.7	45.2	67.8
91	15.5	7.8	11.6





#99

1,2,4-trimethylbenzene

Concen: 0.67 ppbV

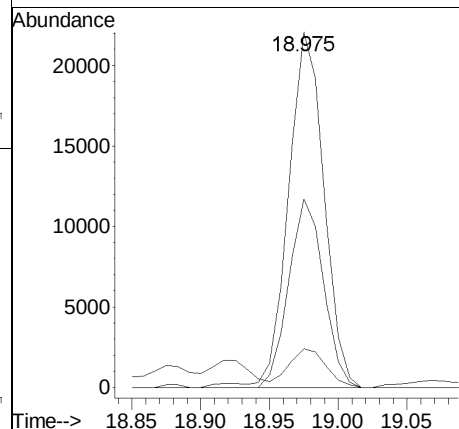
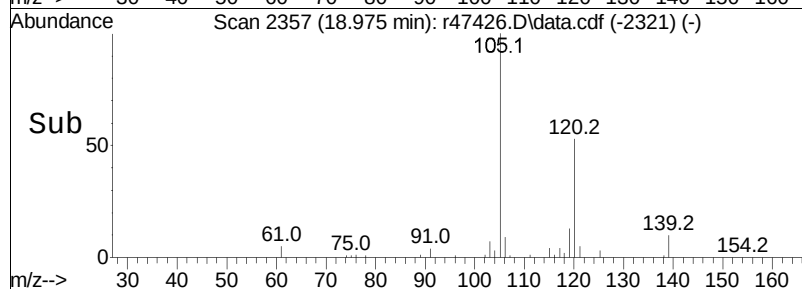
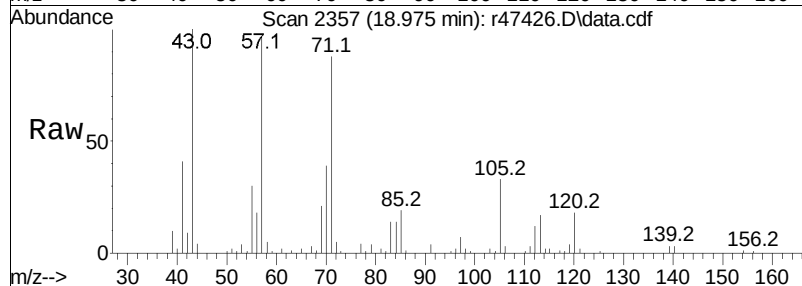
RT: 18.975 min Scan# 2357

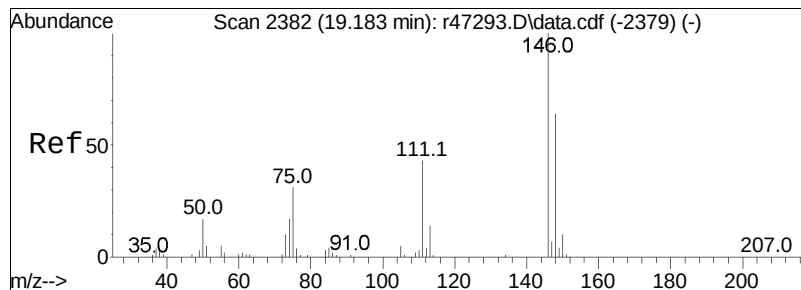
Delta R.T. -0.017 min

Lab File: r47426.D

Acq: 22 Jan 2020 2:04 AM

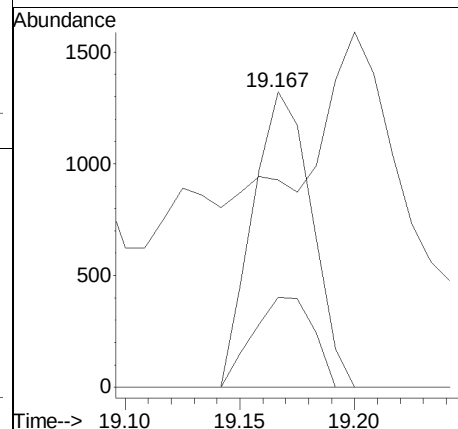
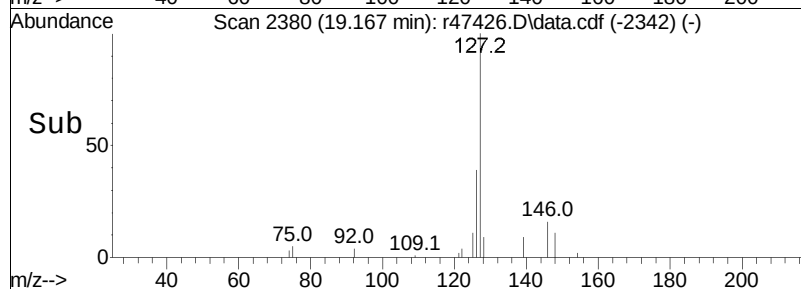
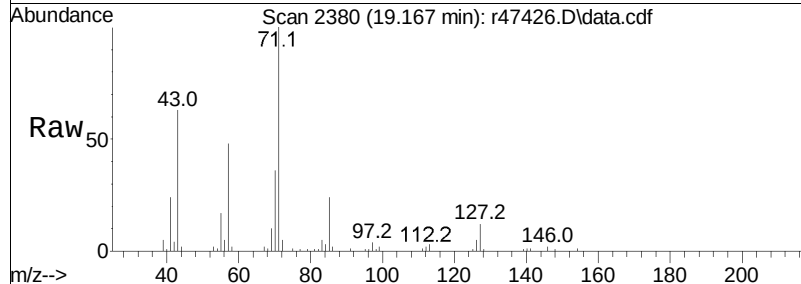
Tgt	Ion:105	Resp:	39666
Ion	Ratio	Lower	Upper
105	100		
120	53.1	50.2	75.4
91	10.9	61.0	91.6#





#103
 1,4-dichlorobenzene
 Concen: 0.07 ppbV
 RT: 19.167 min Scan# 2380
 Delta R.T. -0.017 min
 Lab File: r47426.D
 Acq: 22 Jan 2020 2:04 AM

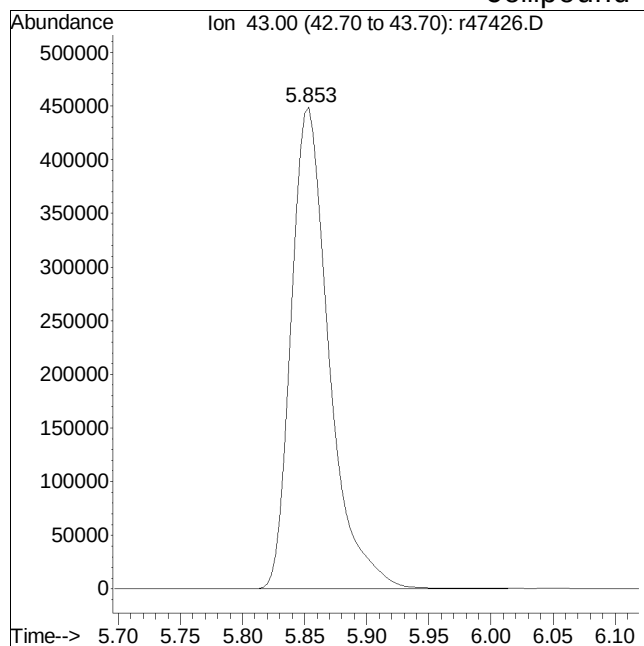
Tgt Ion	Ratio	Lower	Upper
146	100		
111	70.1	34.4	51.6#
75	30.5	24.6	36.8



Manual Integration Report

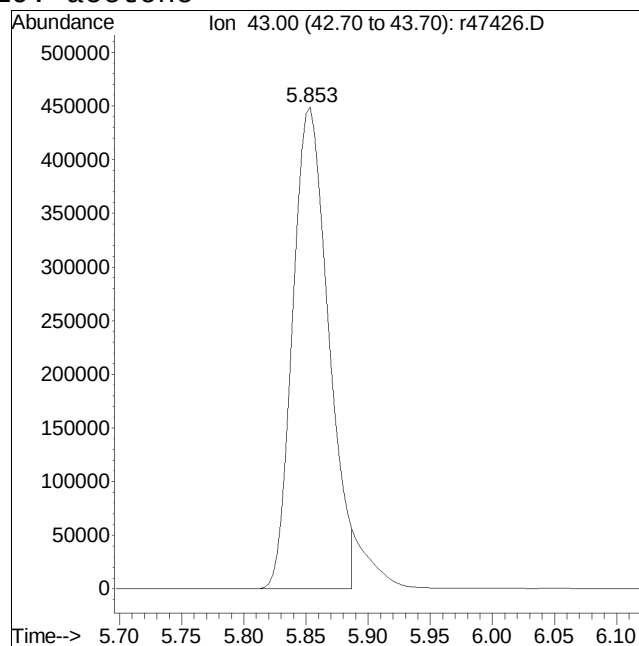
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47426.D Operator : AIRPIAN04:EW
Date Inj'd : 1/22/2020 0:2: 4 Instrument :
Sample : L2002033-04,3,250,250 Quant Date : 1/22/2020 5:39 am

Compound #19: acetone



Original Peak Response = 951789

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



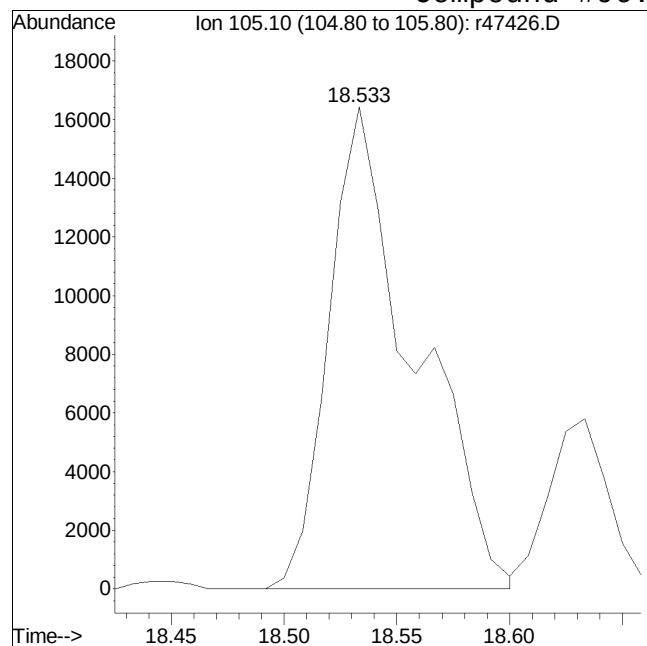
Manual Peak Response = 895845 M6

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

Manual Integration Report

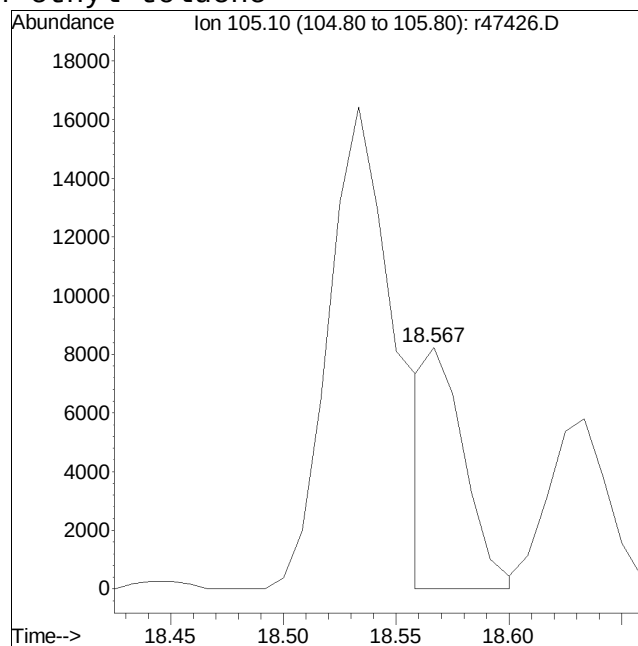
Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47426.D Operator : AIRPIAN04:EW
Date Inj'd : 1/22/2020 0:2: 4 Instrument :
Sample : L2002033-04,3,250,250 Quant Date : 1/22/2020 5:39 am

Compound #96: 4-ethyl toluene



Original Peak Response = 43241

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 = 9817 M3

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47427.D
 Acq On : 22 Jan 2020 2:41 AM
 Operator : AIRPIAN04:EW
 Sample : L2002033-06D, 3, 125, 250
 Misc : WG1332350, ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:10:15 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY - .

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

Internal Standards						
1) bromochloromethane	9.542	49	211285	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =	102.14%		
43) 1,4-difluorobenzene	11.800	114	608191	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =	91.53%		
67) chlorobenzene-D5	16.525	54	116553	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =	109.55%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.994	85	4093	0.248	ppbV	98
6) chloromethane	4.174	50	1232	0.131	ppbV	95
7) Freon-114	0.000		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	4.594	54	2997	0.313	ppbV	98
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.290	31	236387	33.019	ppbV	96
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.853	43	539123M6	28.826	ppbV	
21) trichlorofluoromethane	6.067	101	6813	0.422	ppbV	98
22) isopropyl alcohol	6.183	45	54392	2.315	ppbV	98
26) 1,1-dichloroethene	0.000		0	N.D.	d	
27) tertiary butyl alcohol	6.916	59	8639	0.408	ppbV #	86
28) methylene chloride	6.994		0	N.D.		
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.288	76	10146	0.294	ppbV #	70
31) Freon 113	0.000		0	N.D.	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	8.842	43	35462	1.154	ppbV	100
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.	d	
39) chloroform	9.700	83	4969	0.264	ppbV	98
40) Tetrahydrofuran	0.000		0	N.D.	d	
42) 1,2-dichloroethane	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47427.D
 Acq On : 22 Jan 2020 2:41 AM
 Operator : AIRPIAN04:EW
 Sample : L2002033-06D, 3, 125, 250
 Misc : WG1332350, ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:10:15 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.608	57	22458	0.981	ppbV	#	51
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	11.367	78	23185	0.555	ppbV		99
52) carbon tetrachloride	0.000		0	N.D.	d		
53) cyclohexane	11.680	56	13273	0.501	ppbV		98
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.	d		
59) trichloroethene	12.600	130	5156	0.323	ppbV		99
60) 2,2,4-trimethylpentane	0.000		0	N.D.	d		
62) heptane	12.960	43	26283	0.731	ppbV		96
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	13.658	43	18758	0.456	ppbV		98
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.	d		
68) toluene	14.742	91	173597	3.061	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.			
78) tetrachloroethene	15.908	166	1508664	67.801	ppbV		92
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	16.917	91	80036	1.157	ppbV		100
83) m+p-xylene	17.067	91	276047	4.785	ppbV		99
84) bromoform	0.000		0	N.D.			
85) styrene	17.400	104	6342	0.142	ppbV		97
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	17.500	91	116666	2.061	ppbV		100
96) 4-ethyl toluene	18.567	105	38489M3	0.473	ppbV		
97) 1,3,5-trimethylbenzene	18.633	105	43984	0.664	ppbV	#	99
99) 1,2,4-trimethylbenzene	18.983	105	152676	2.453	ppbV	#	53
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	0.000		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\Airpiano4\2020\01\200121T\
 Data File : r47427.D
 Acq On : 22 Jan 2020 2:41 AM
 Operator : AIRPIAN04:EW
 Sample : L2002033-06D,3,125,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:10:15 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

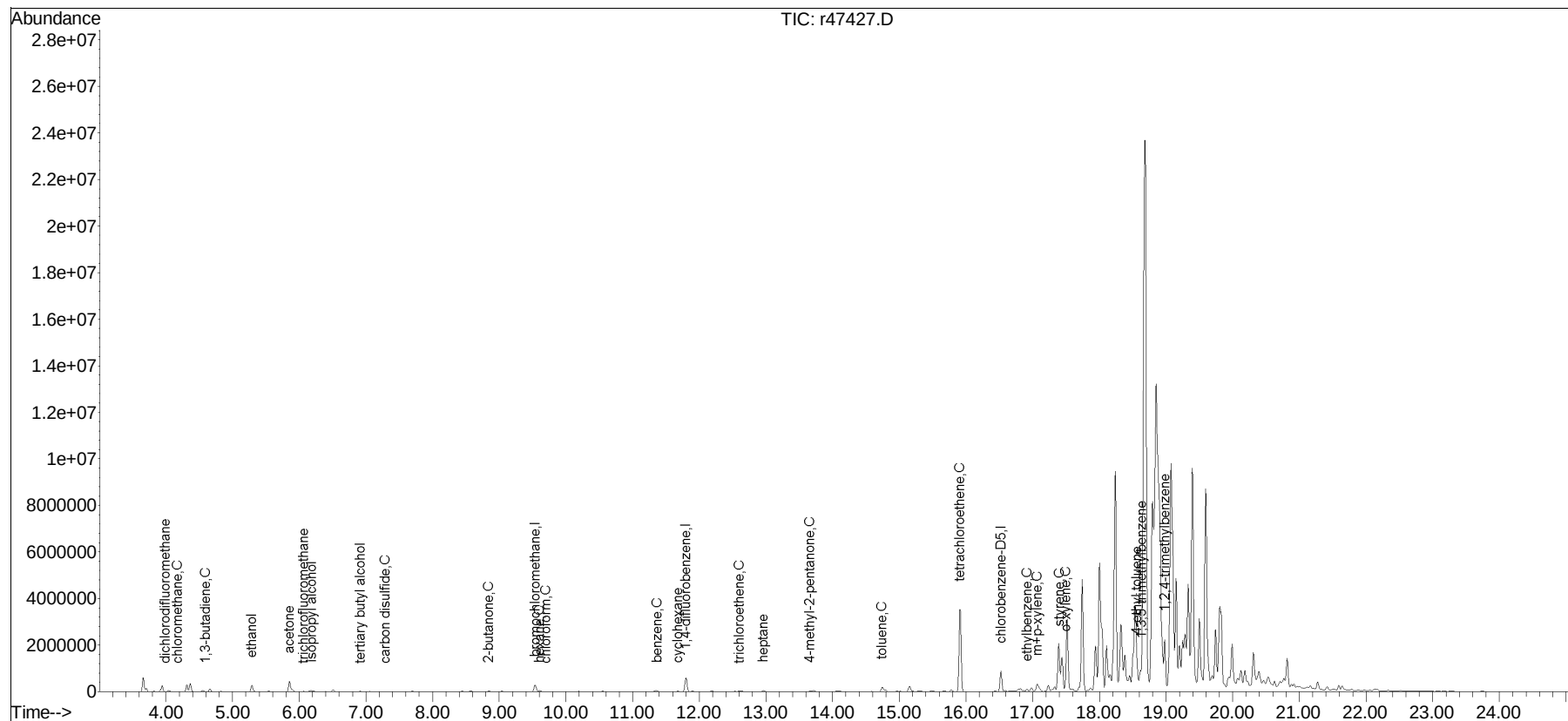
CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY - .

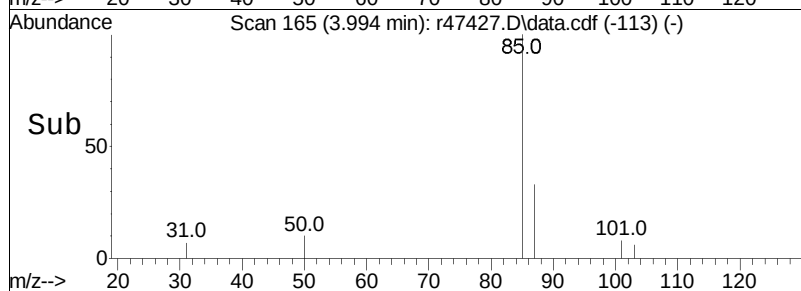
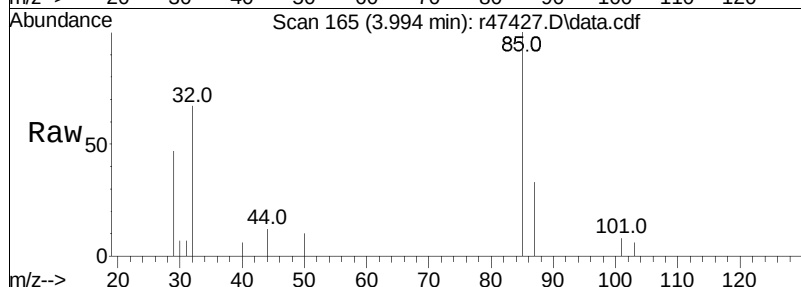
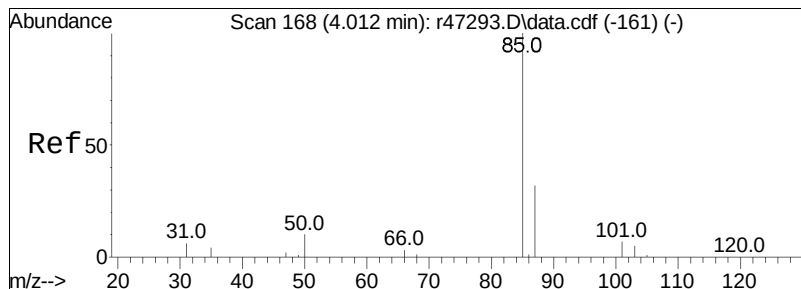
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airpiano4\2020\01\200121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File : r47427.D
Acq On : 22 Jan 2020 2:41 AM
Operator : AIRPIANO4:EW
Sample : L2002033-06D,3,125,250
Misc : WG1332350,ICAL16438
ALS Vial : 0 Sample Multiplier: 1

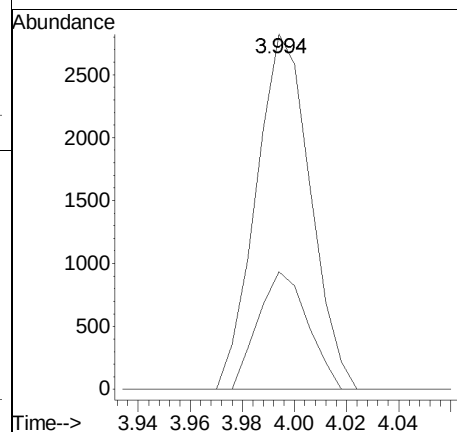
Quant Time: Jan 22 09:10:15 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

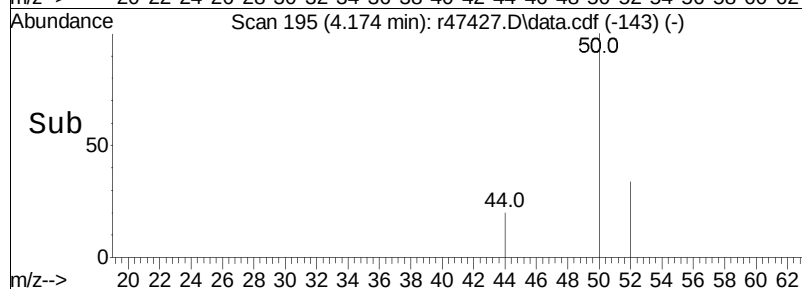
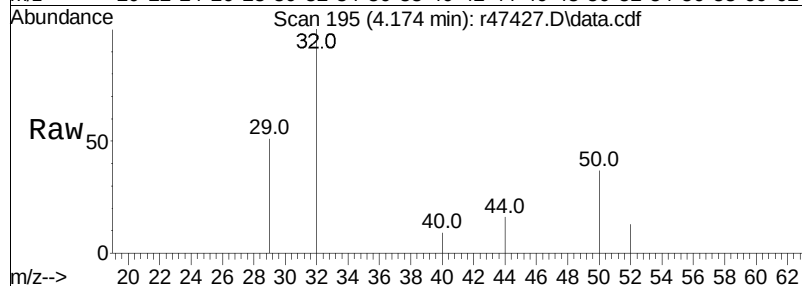
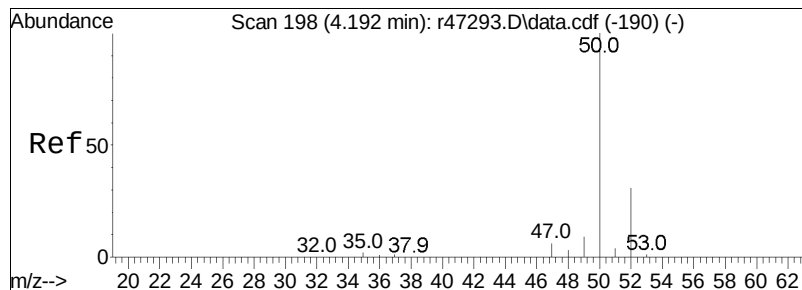




#5
dichlorodifluoromethane
Concen: 0.25 ppbV
RT: 3.994 min Scan# 165
Delta R.T. -0.018 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

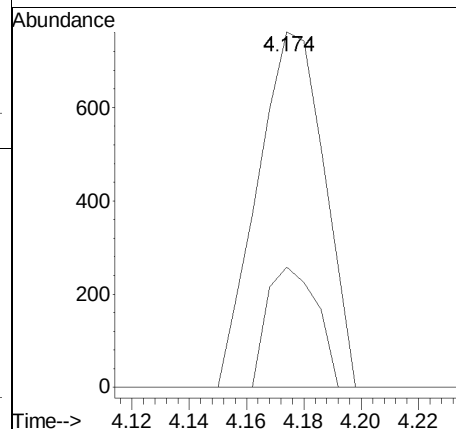
Tgt Ion: 85 Resp: 4093
Ion Ratio Lower Upper
85 100
87 33.1 25.8 38.6

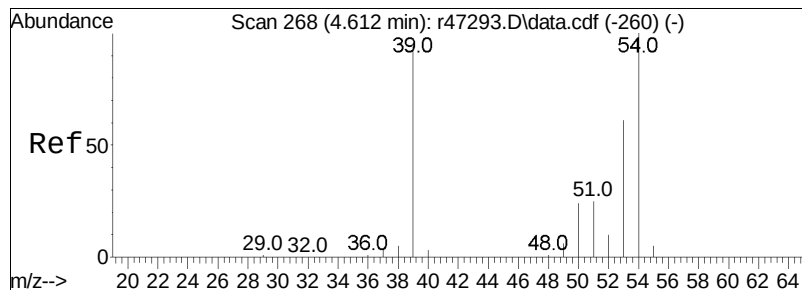




#6
 chloromethane
 Concen: 0.13 ppbV
 RT: 4.174 min Scan# 195
 Delta R.T. -0.018 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

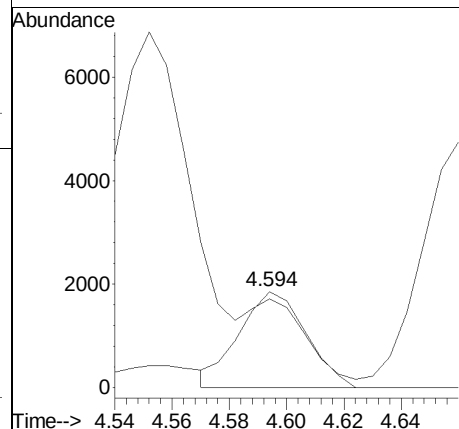
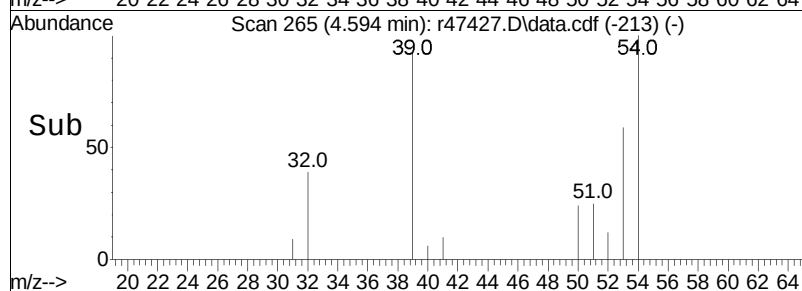
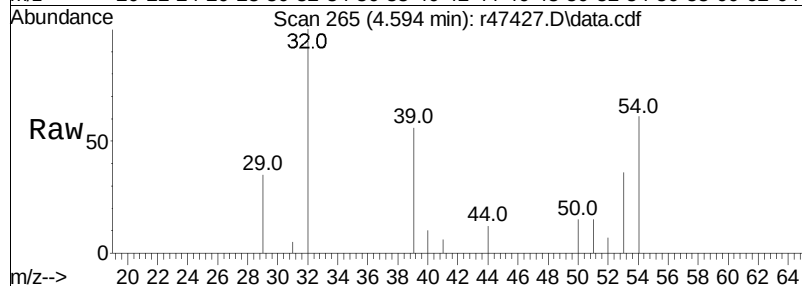
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	33.9		24.9	37.3

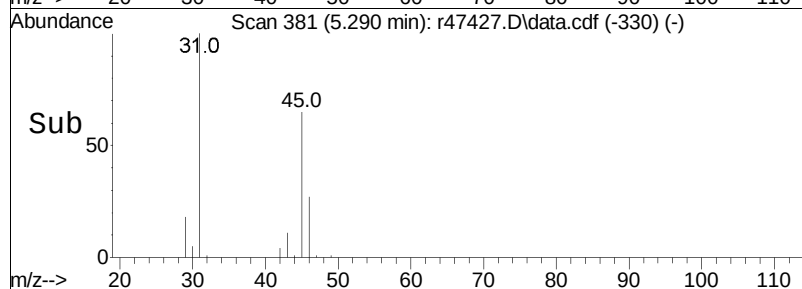
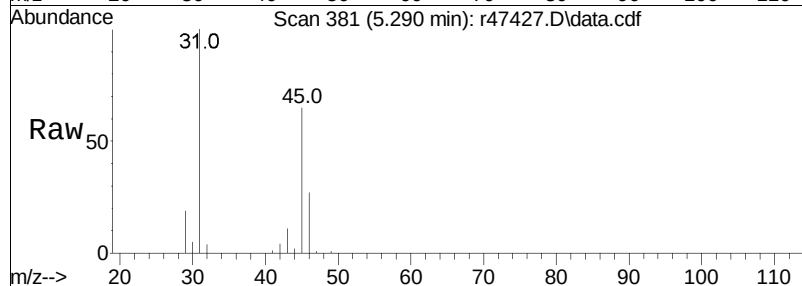
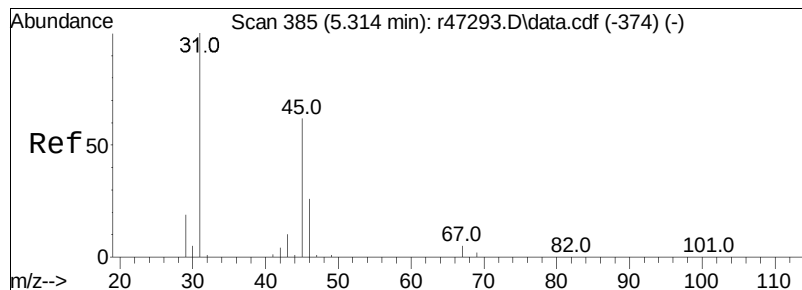




#10
 1,3-butadiene
 Concen: 0.31 ppbV
 RT: 4.594 min Scan# 265
 Delta R.T. -0.018 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

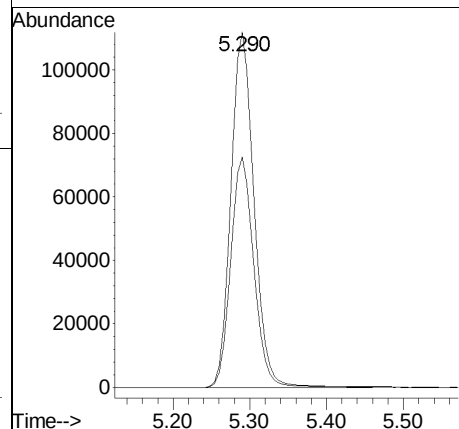
Tgt Ion	Ratio	Lower	Upper
54	100		
39	92.7	75.5	113.3

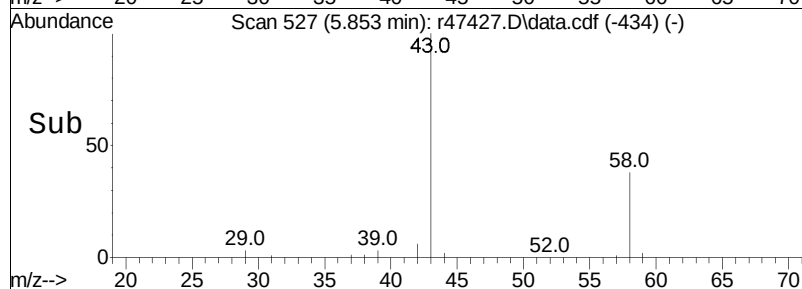
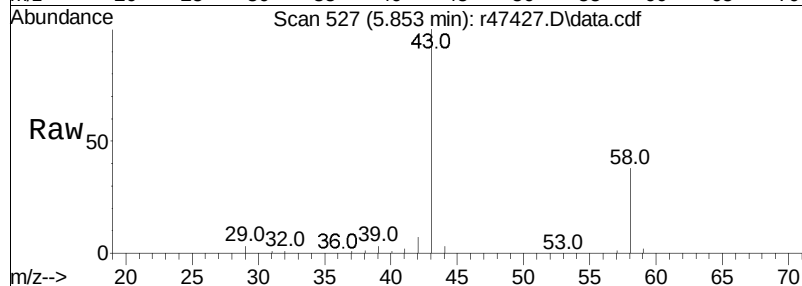
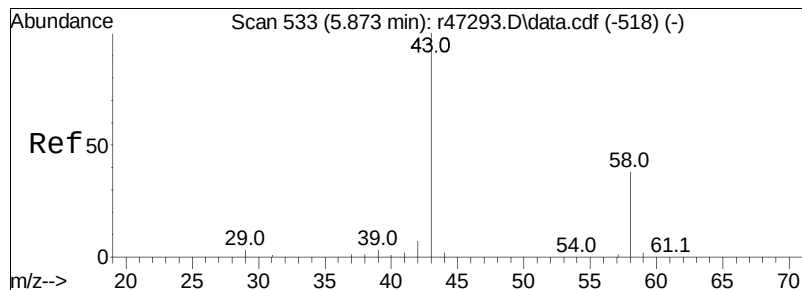




#15
ethanol
Concen: 33.02 ppbV
RT: 5.290 min Scan# 381
Delta R.T. -0.024 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

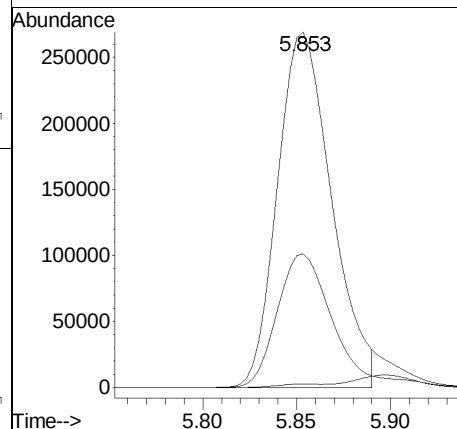
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	64.8	49.7	74.5	

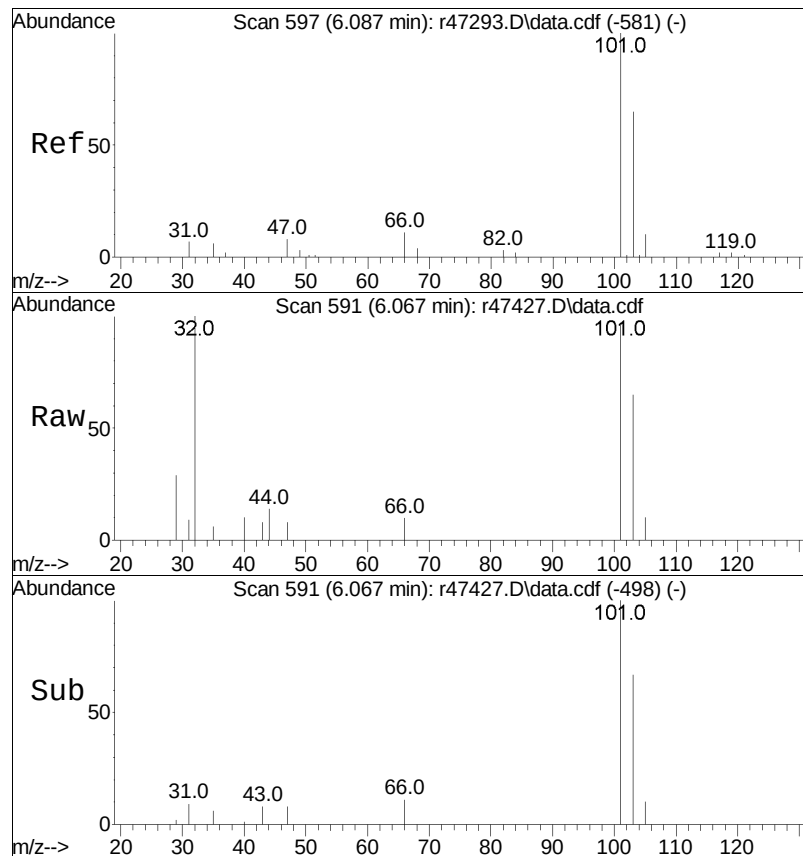




#19
acetone
Concen: 28.83 ppbV m
RT: 5.853 min Scan# 527
Delta R.T. -0.020 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

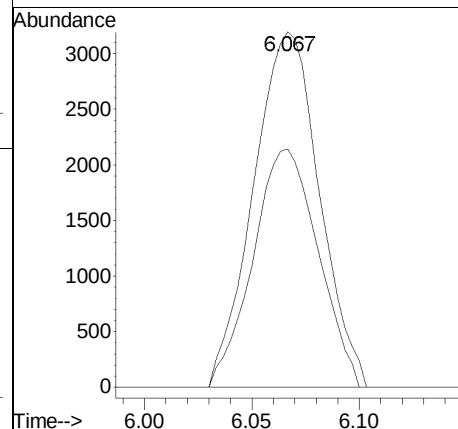
Tgt Ion	Ratio	Lower	Upper
43	100		
58	37.6	30.2	45.2
57	0.9	0.7	1.1

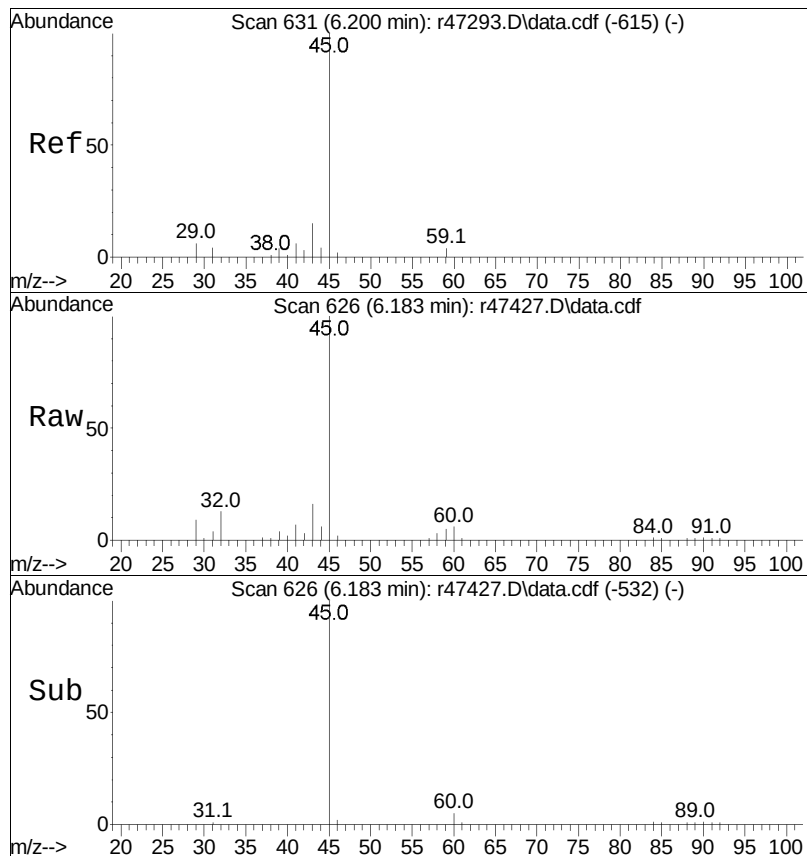




#21
trichlorofluoromethane
Concen: 0.42 ppbV
RT: 6.067 min Scan# 591
Delta R.T. -0.020 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

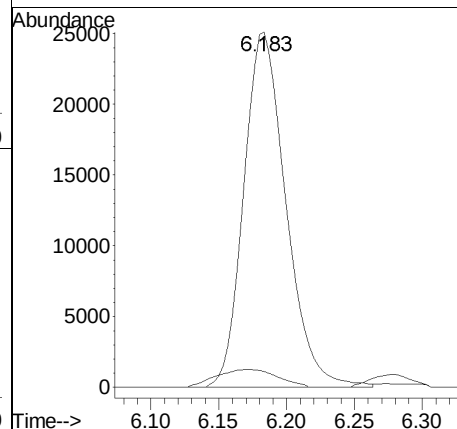
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	67.1	52.2	78.4	

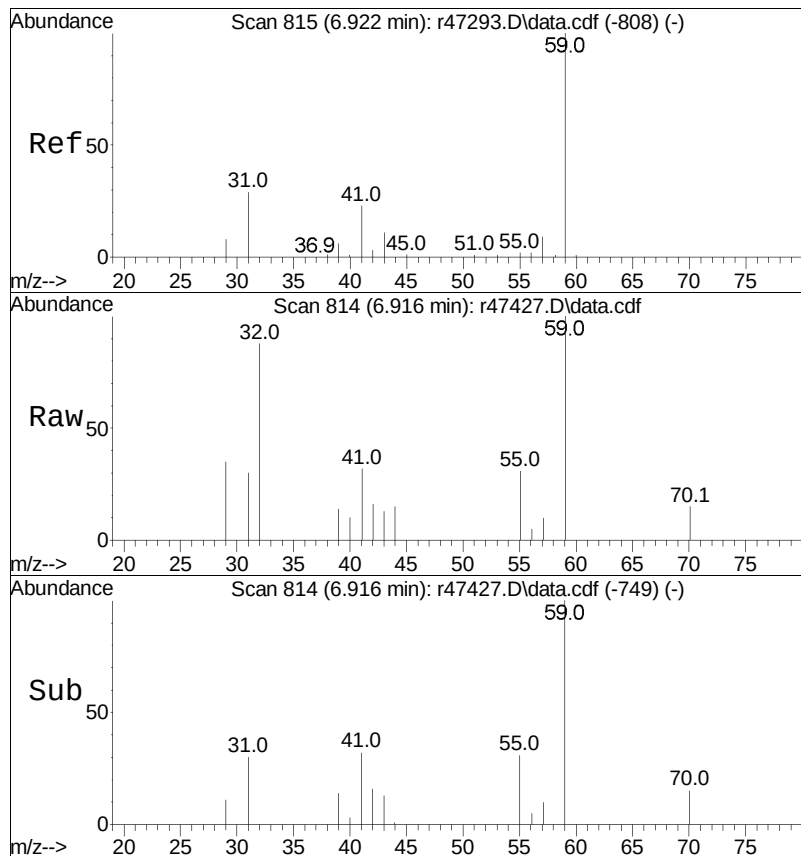




#22
 isopropyl alcohol
 Concen: 2.31 ppbV
 RT: 6.183 min Scan# 626
 Delta R.T. -0.017 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

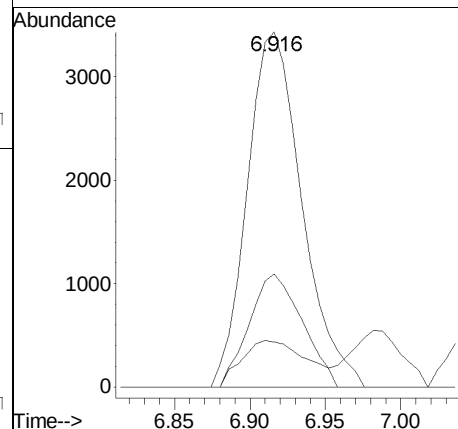
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.5	3.0	4.6

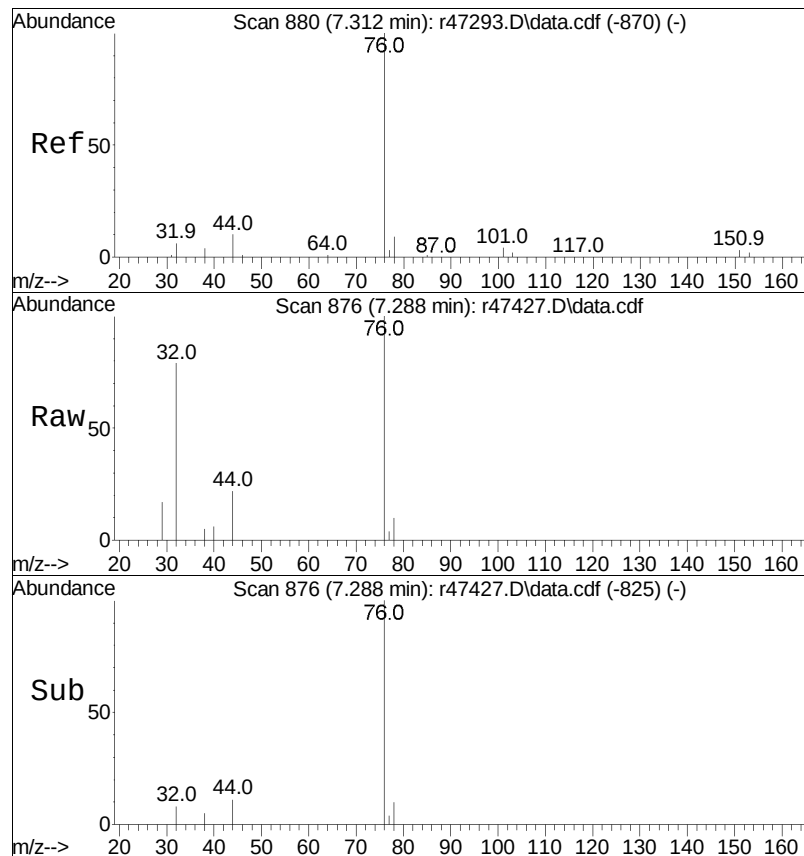




#27
 tertiary butyl alcohol
 Concen: 0.41 ppbV
 RT: 6.916 min Scan# 814
 Delta R.T. -0.006 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

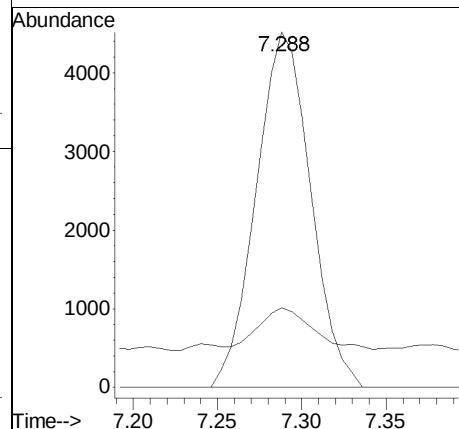
Tgt Ion:	59	Resp:	8639
Ion Ratio	Lower	Upper	
59	100		
41	31.9	18.1	27.1#
43	12.8	9.0	13.4

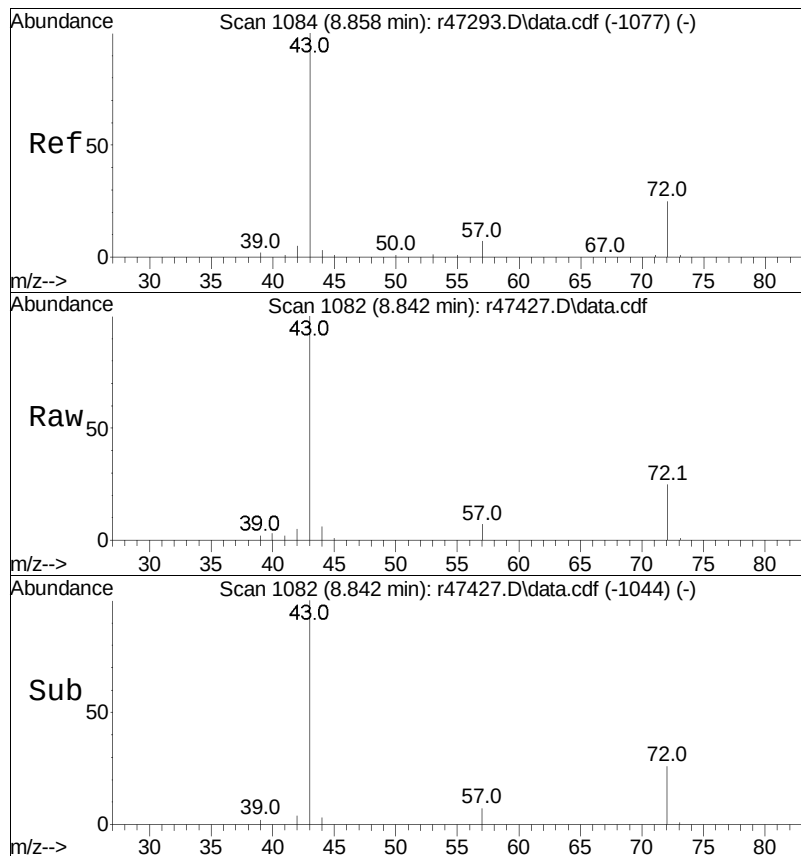




#30
carbon disulfide
Concen: 0.29 ppbV
RT: 7.288 min Scan# 876
Delta R.T. -0.024 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

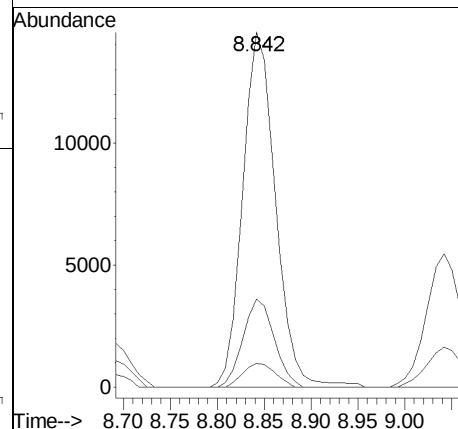
Tgt Ion	Ratio	Lower	Upper
76	100		
44	22.4	8.7	13.1#

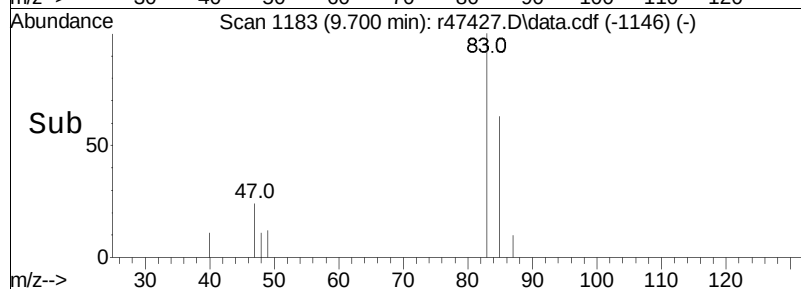
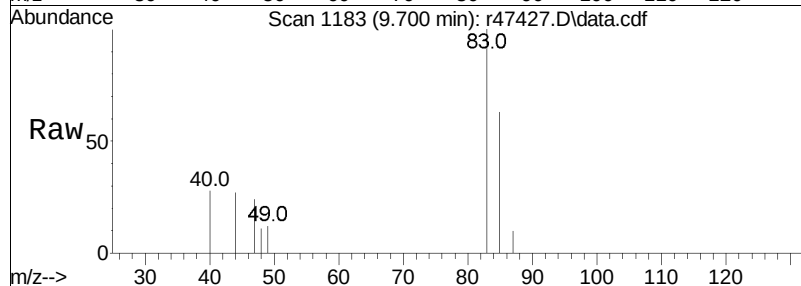
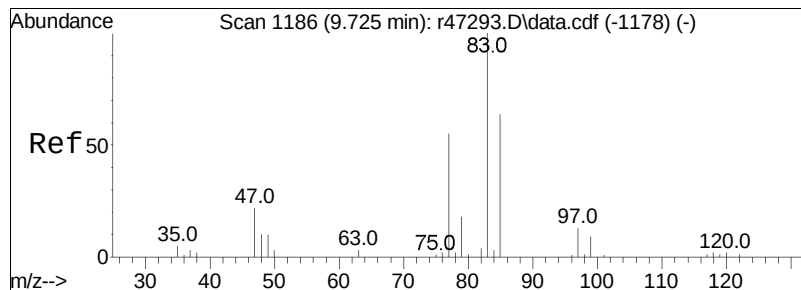




#36
 2-butanone
 Concen: 1.15 ppbV
 RT: 8.842 min Scan# 1082
 Delta R.T. -0.017 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

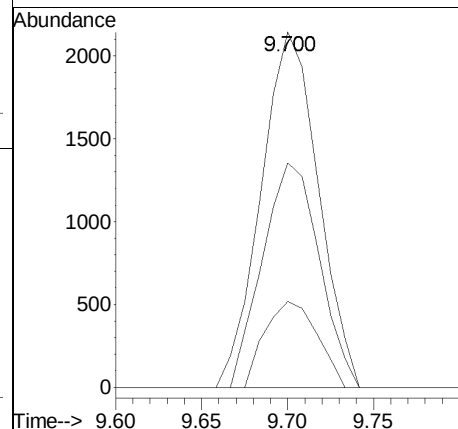
Tgt Ion:	43	Resp:	35462
Ion Ratio	Lower	Upper	
43	100		
72	24.8	19.8	29.6
57	6.8	5.5	8.3

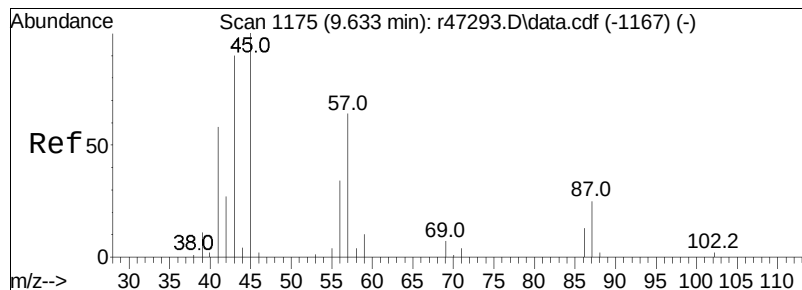




#39
chloroform
Concen: 0.26 ppbV
RT: 9.700 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

Tgt Ion	Ratio	Resp	Lower	Upper
83	100	4969		
85	63.2		51.3	76.9
47	24.2		17.8	26.8





#44

hexane

Concen: 0.98 ppbV

RT: 9.608 min Scan# 1172

Delta R.T. -0.025 min

Lab File: r47427.D

Acq: 22 Jan 2020 2:41 AM

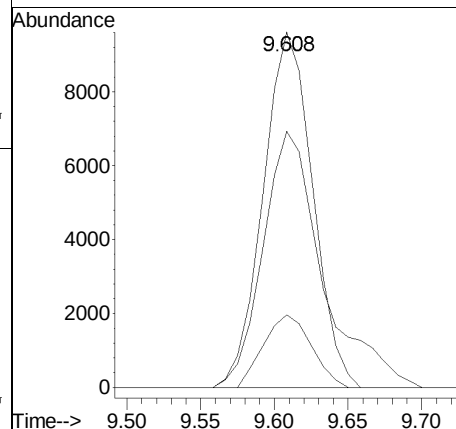
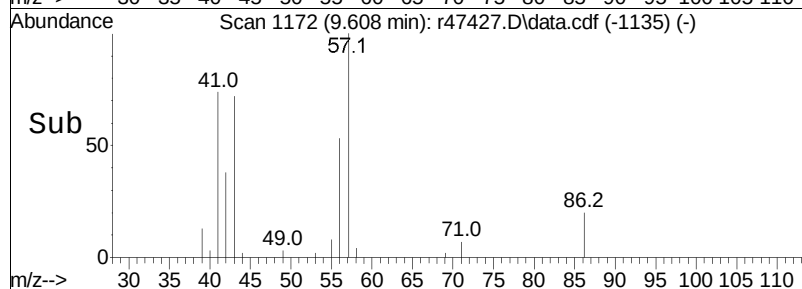
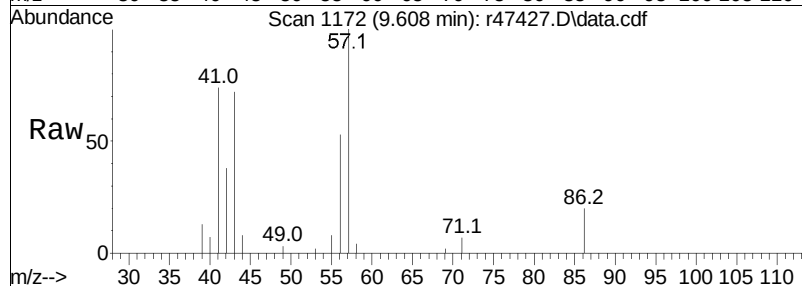
Tgt Ion: 57 Resp: 22458

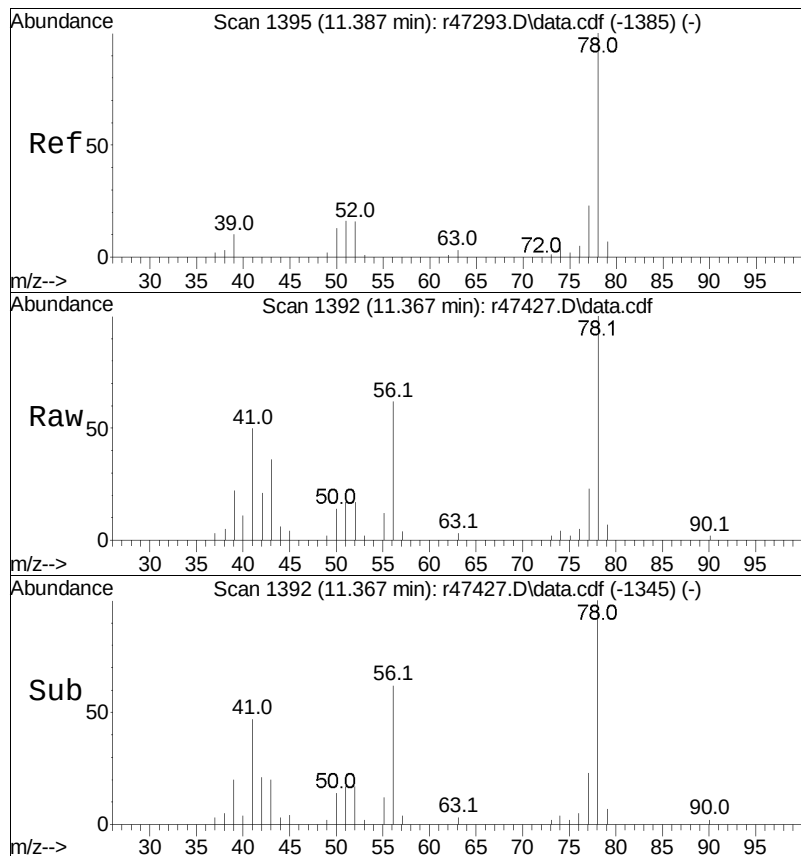
Ion Ratio Lower Upper

57 100

43 72.1 111.8 167.8#

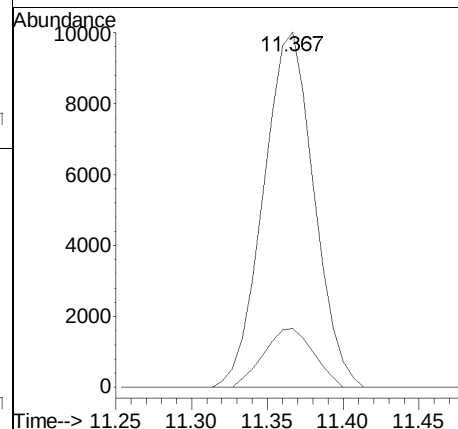
86 20.4 15.8 23.6

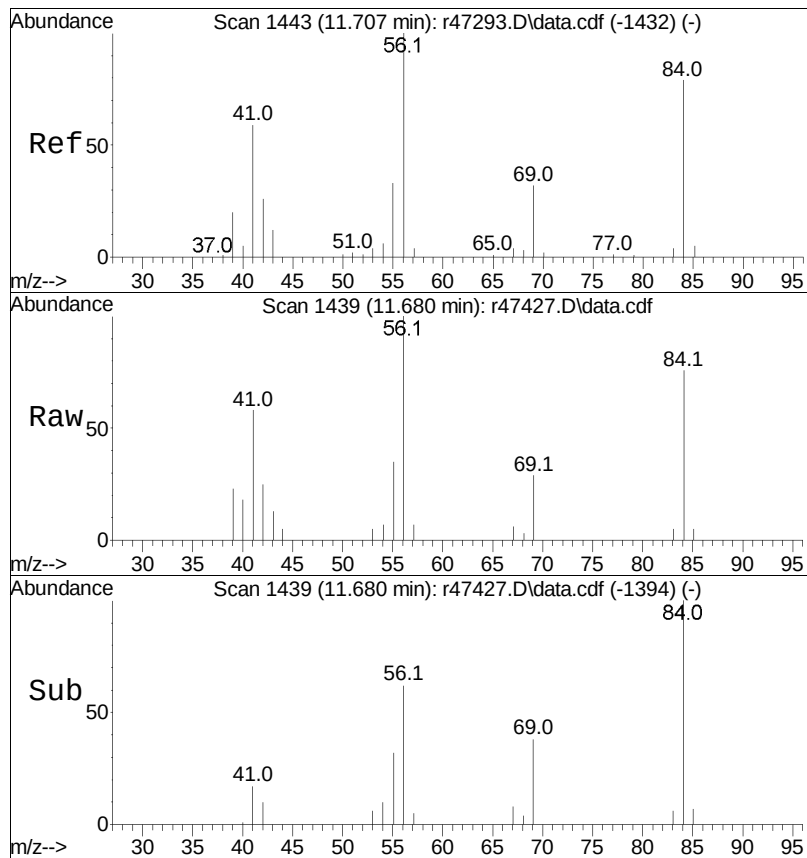




#50
benzene
Concen: 0.56 ppbV
RT: 11.367 min Scan# 1392
Delta R.T. -0.020 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

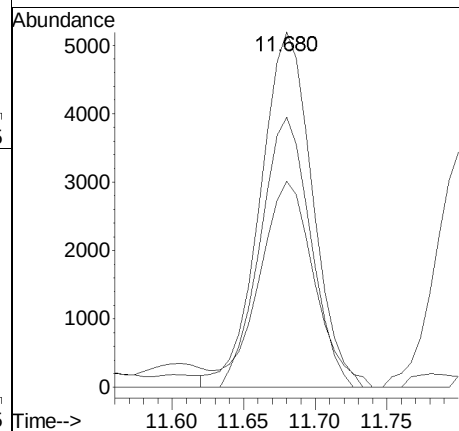
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.6	13.0	19.4

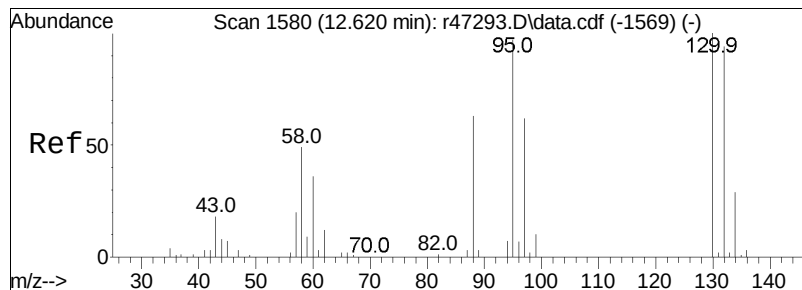




#53
cyclohexane
Concen: 0.50 ppbV
RT: 11.680 min Scan# 1439
Delta R.T. -0.027 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

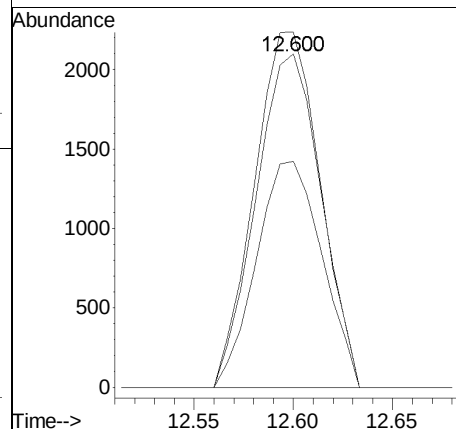
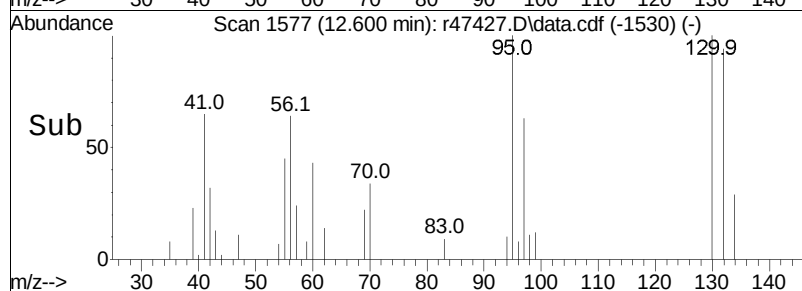
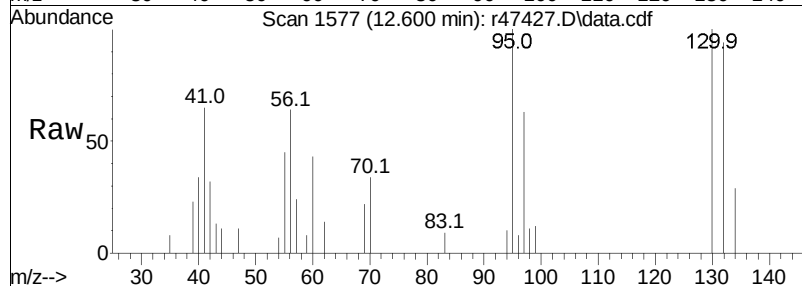
Tgt Ion:	56	Resp:	13273
Ion Ratio	Lower	Upper	
56	100		
84	76.0	63.0	94.6
41	58.0	46.8	70.2

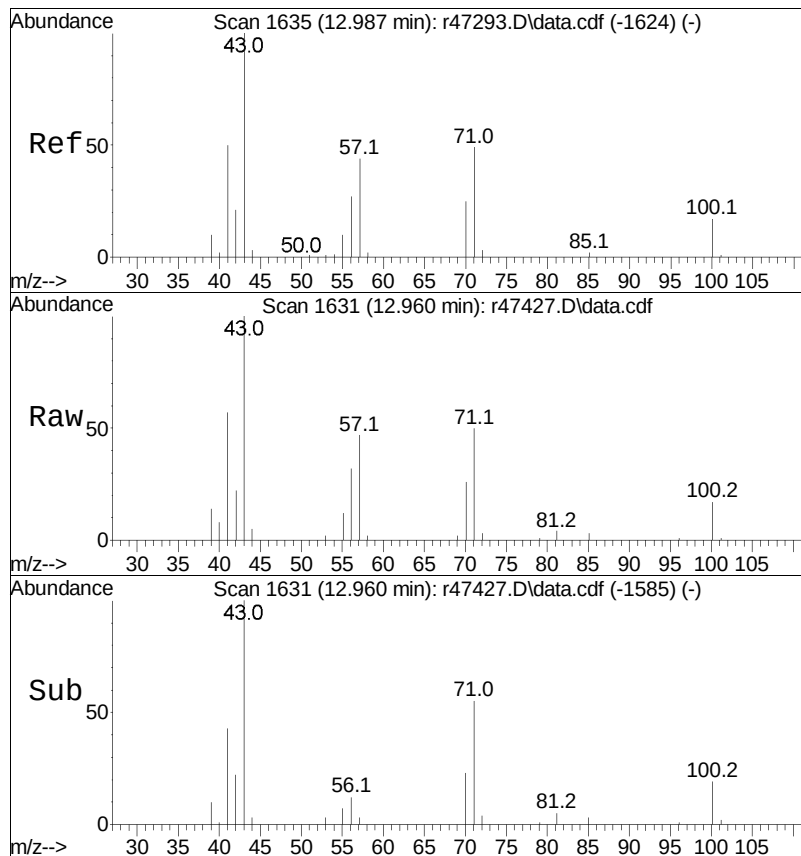




#59
trichloroethene
Concen: 0.32 ppbV
RT: 12.600 min Scan# 1577
Delta R.T. -0.020 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

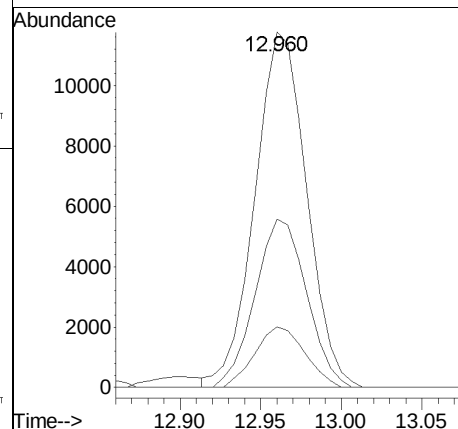
Tgt Ion	Ratio	Lower	Upper
130	100		
132	93.9	75.0	112.4
97	63.6	49.4	74.0

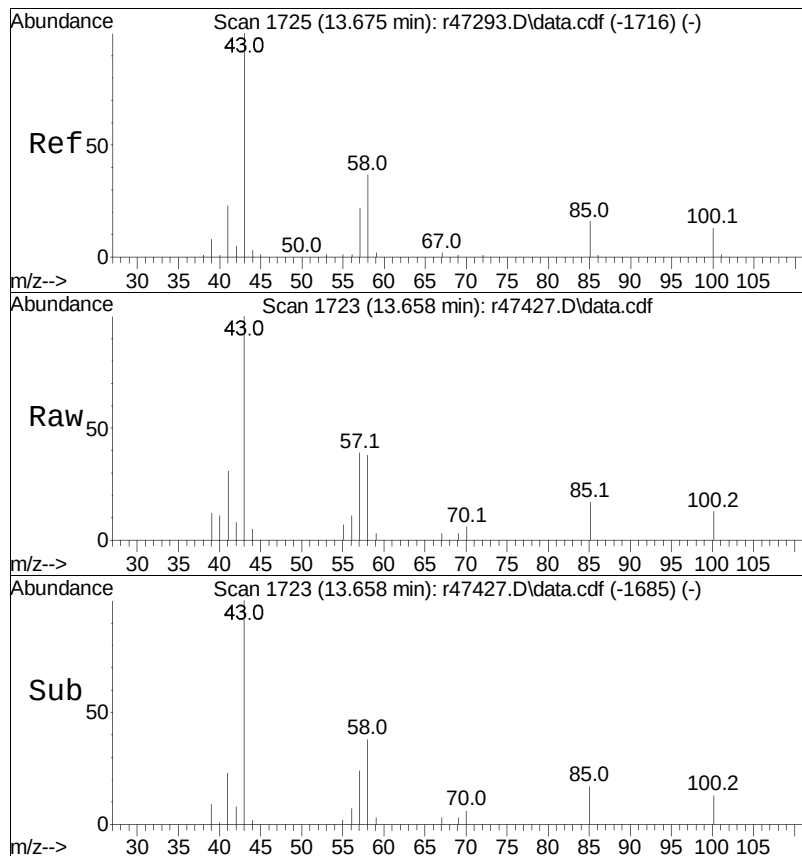




#62
 heptane
 Concen: 0.73 ppbV
 RT: 12.960 min Scan# 1631
 Delta R.T. -0.027 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

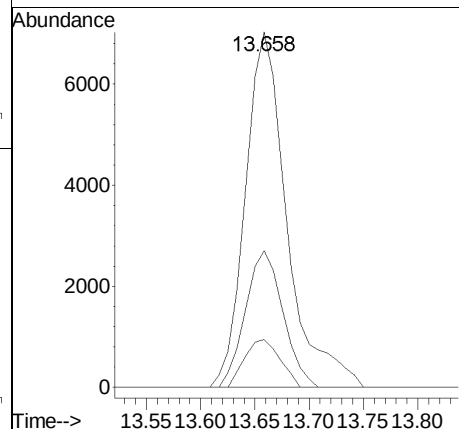
Tgt Ion:	43	Resp:	26283
Ion Ratio	Lower	Upper	
43	100		
57	47.4	35.2	52.8
100	17.1	13.7	20.5

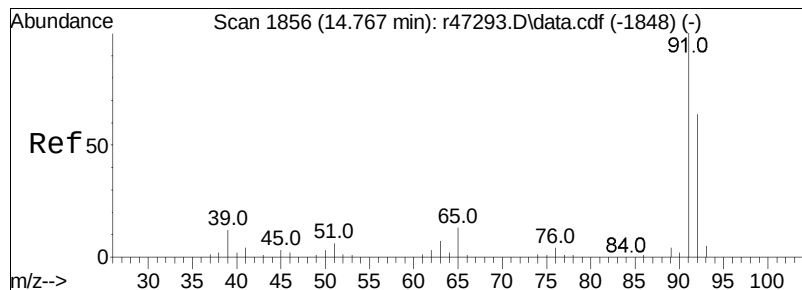




#64
 4-methyl-2-pentanone
 Concen: 0.46 ppbV
 RT: 13.658 min Scan# 1723
 Delta R.T. -0.017 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

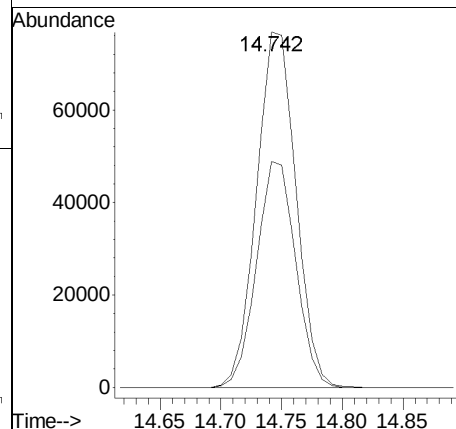
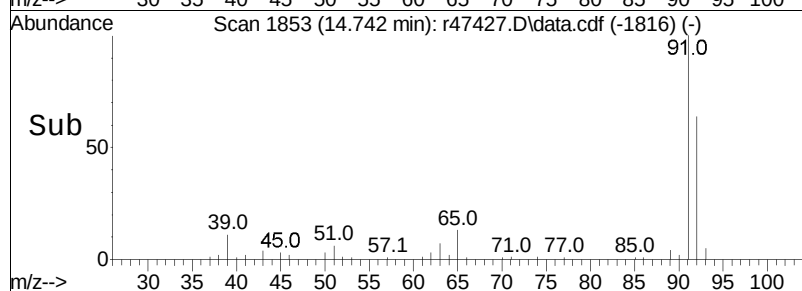
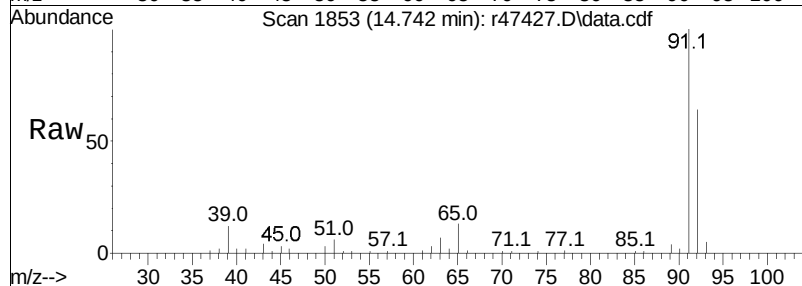
Tgt Ion:	43	Resp:	18758
Ion Ratio	Lower	Upper	
43	100		
58	38.5	29.3	43.9
100	13.5	10.7	16.1

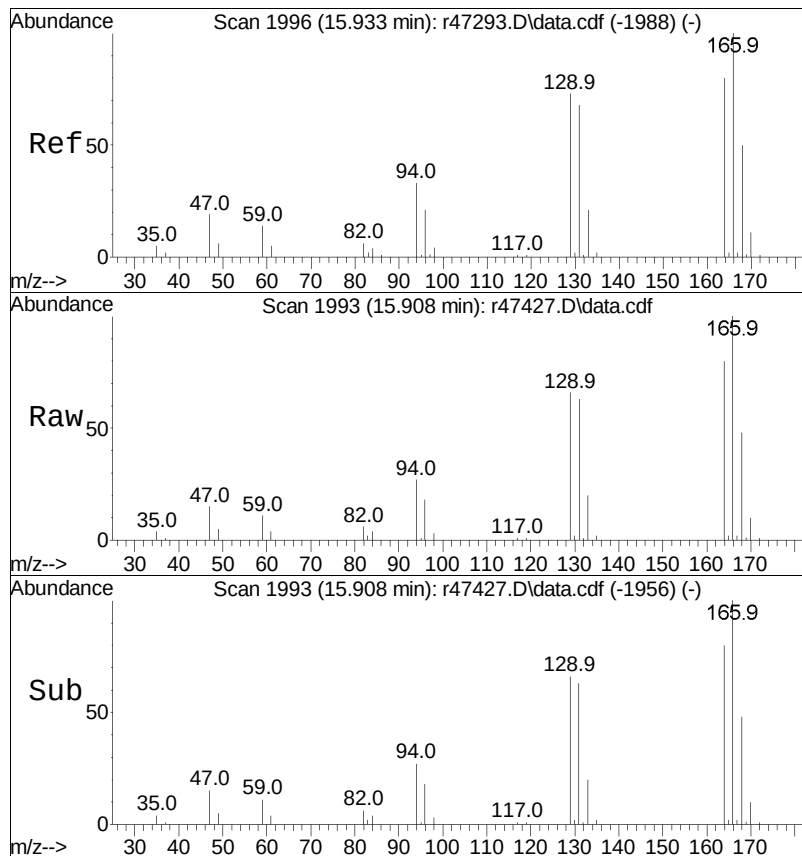




#68
toluene
Concen: 3.06 ppbV
RT: 14.742 min Scan# 1853
Delta R.T. -0.025 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

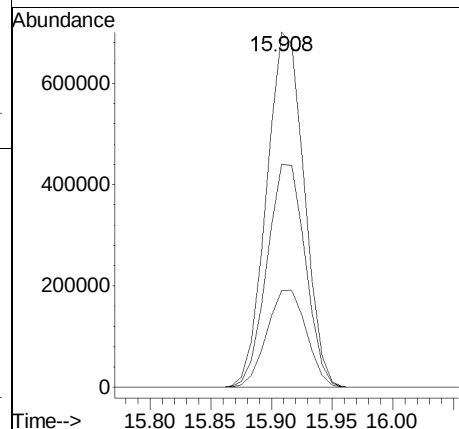
Tgt	Ion	Resp	Lower	Upper
91	100	173597		
92	63.6	51.1	76.7	

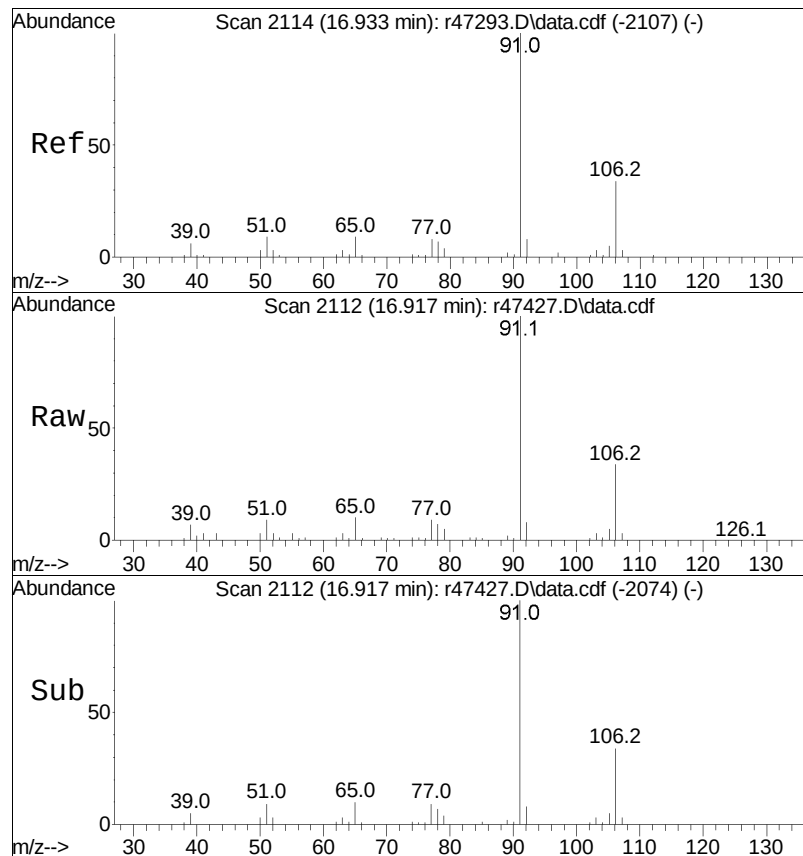




#78
 tetrachloroethene
 Concen: 67.80 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

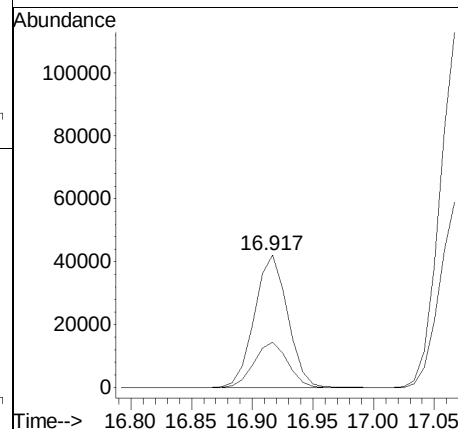
Tgt Ion	Ratio	Lower	Upper
166	100		
131	62.9	54.5	81.7
94	27.2	26.3	39.5

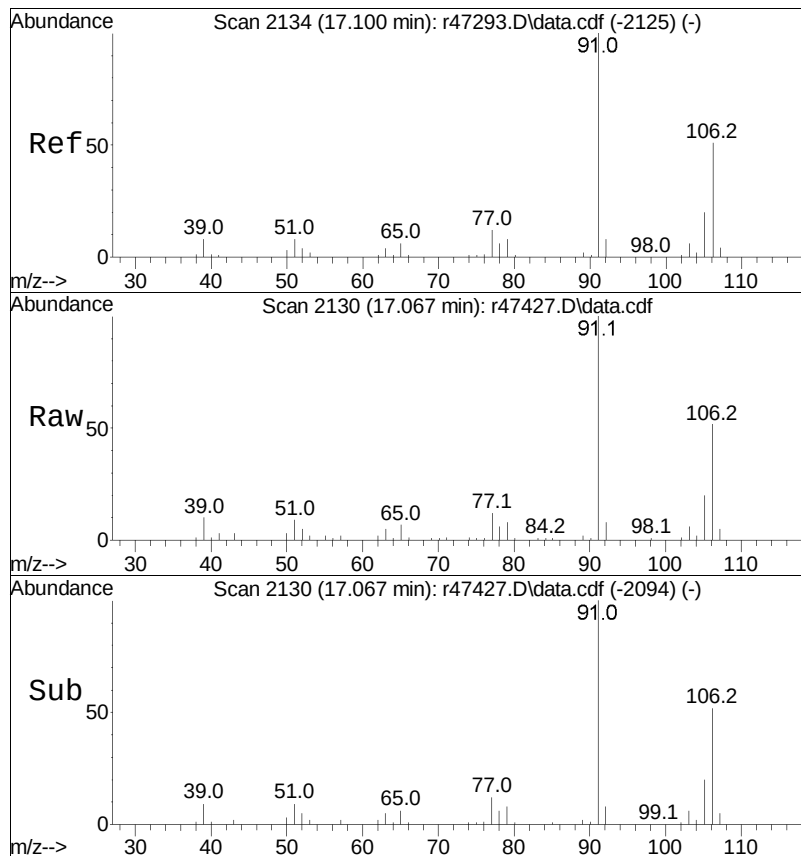




#81
ethylbenzene
Concen: 1.16 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

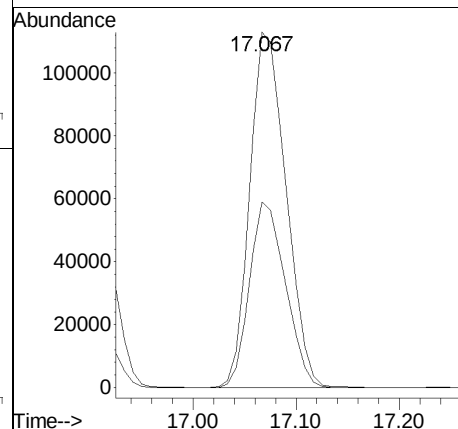
Tgt	Ion	Resp	Lower	Upper
91	100	80036		
106	34.2	27.6	41.4	

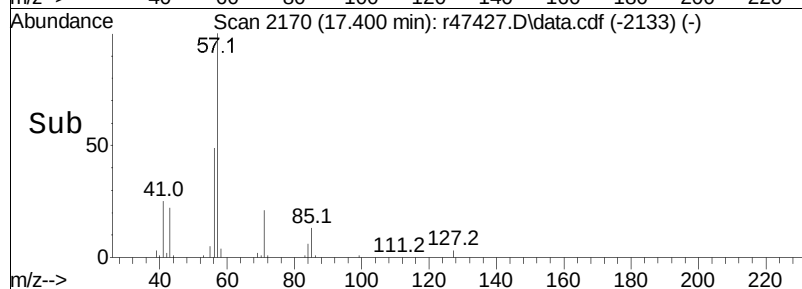
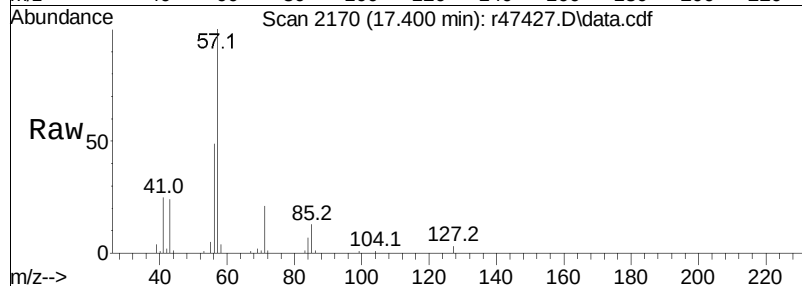
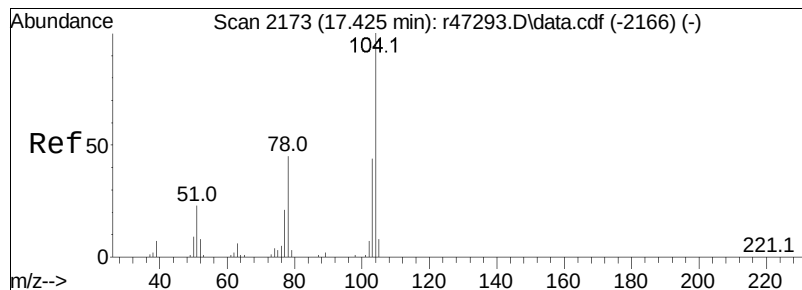




#83
 m+p-xylene
 Concen: 4.78 ppbV
 RT: 17.067 min Scan# 2130
 Delta R.T. -0.033 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

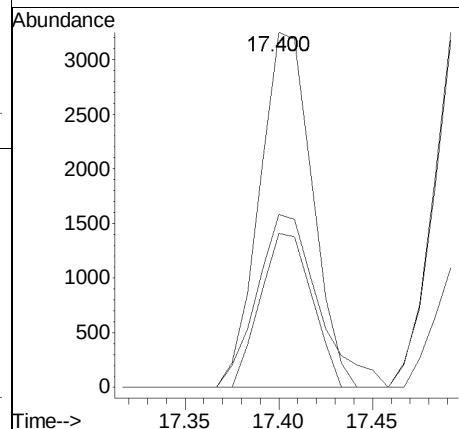
Tgt Ion	Ratio	Lower	Upper
91	100		
106	52.2	41.2	61.8

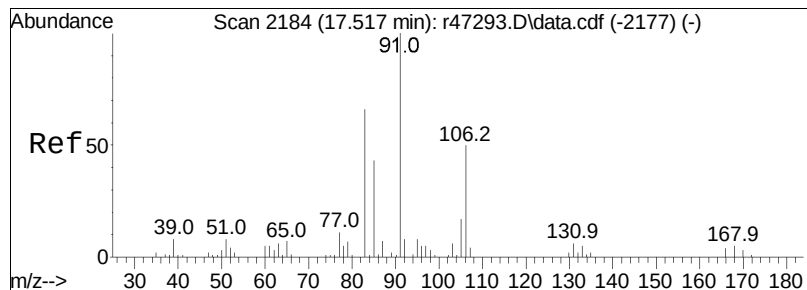




#85
styrene
Concen: 0.14 ppbV
RT: 17.400 min Scan# 2170
Delta R.T. -0.025 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

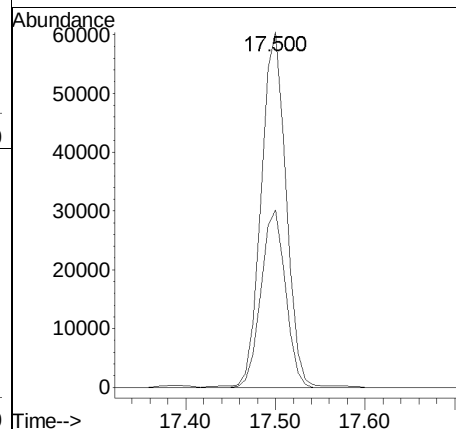
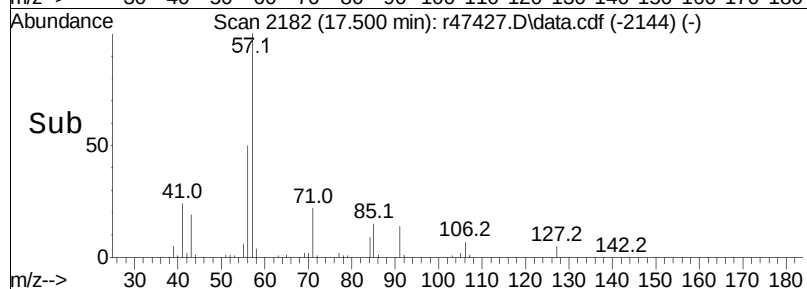
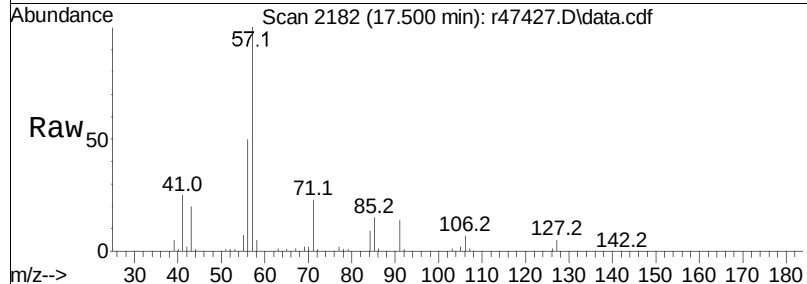
Tgt Ion	Ratio	Lower	Upper
104	100		
103	43.4	35.0	52.4
78	48.7	36.2	54.4

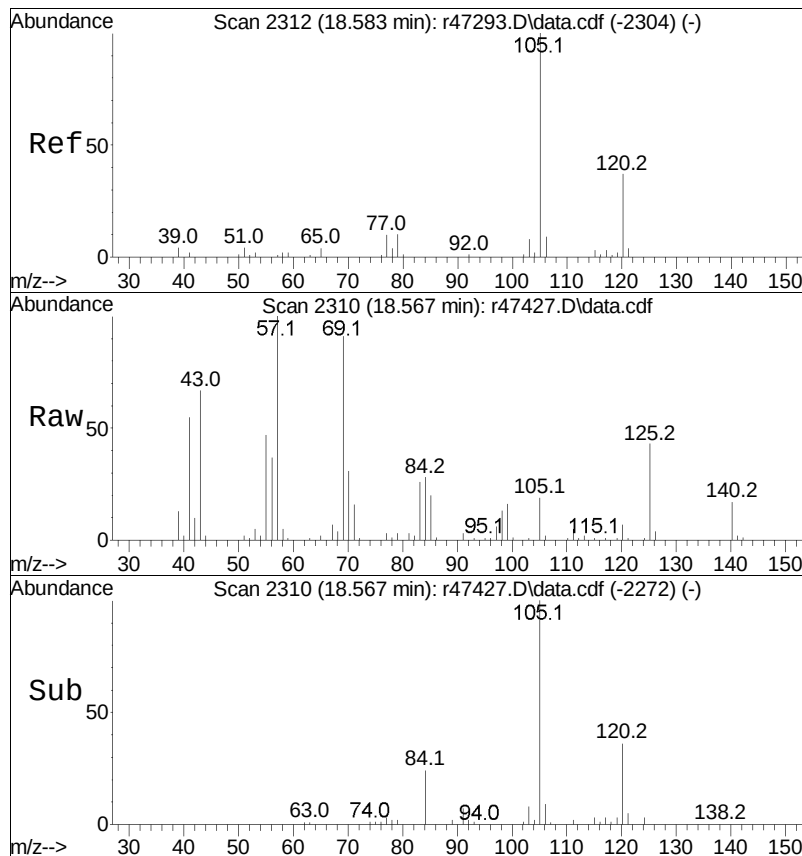




#87
o-xylene
Concen: 2.06 ppbV
RT: 17.500 min Scan# 2182
Delta R.T. -0.017 min
Lab File: r47427.D
Acq: 22 Jan 2020 2:41 AM

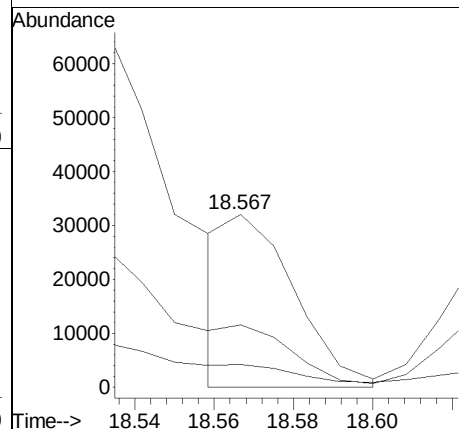
Tgt Ion	Ratio	Lower	Upper
91	100		
106	49.9	40.1	60.1

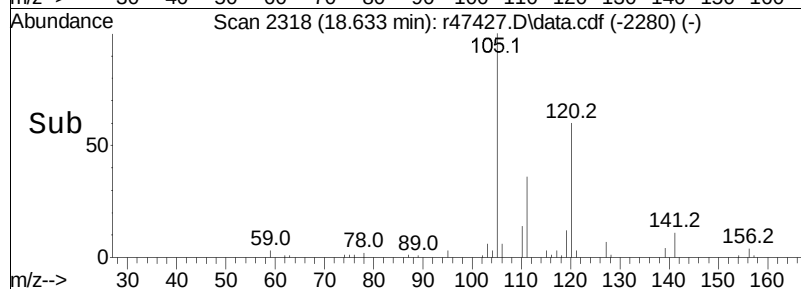
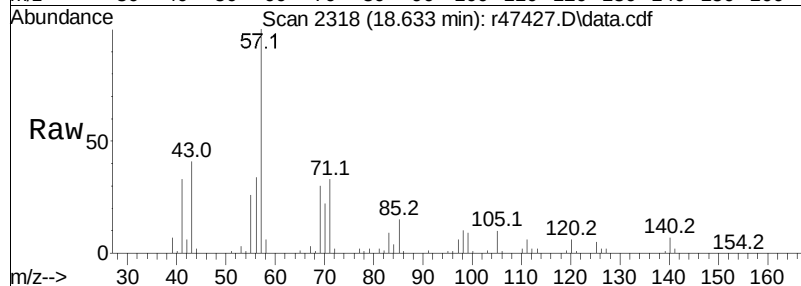
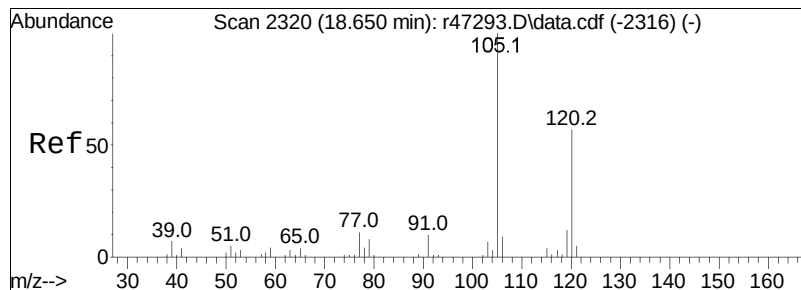




#96
 4-ethyl toluene
 Concen: 0.47 ppbV m
 RT: 18.567 min Scan# 2310
 Delta R.T. -0.017 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

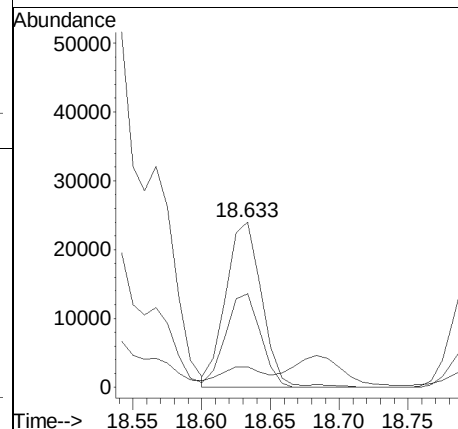
Tgt Ion	Ratio	Lower	Upper
105	100		
120	36.1	29.4	44.2
91	13.2	8.2	12.4

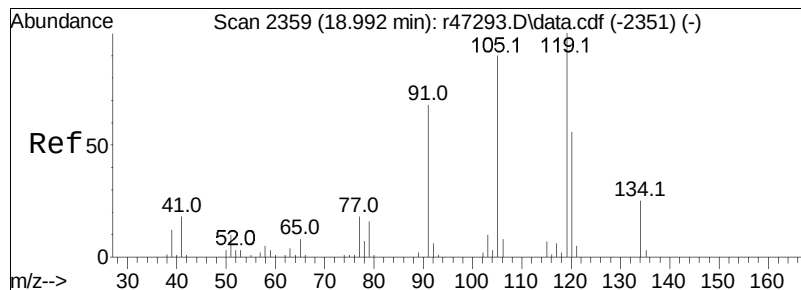




#97
 1,3,5-trimethylbenzene
 Concen: 0.66 ppbV
 RT: 18.633 min Scan# 2318
 Delta R.T. -0.017 min
 Lab File: r47427.D
 Acq: 22 Jan 2020 2:41 AM

Tgt Ion	Ratio	Lower	Upper
105	100		
120	56.6	45.2	67.8
91	12.5	7.8	11.6





#99

1,2,4-trimethylbenzene

Concen: 2.45 ppbV

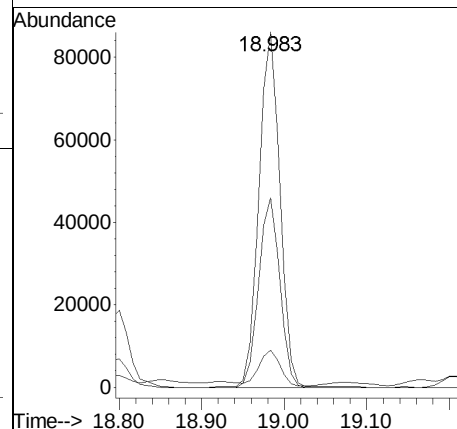
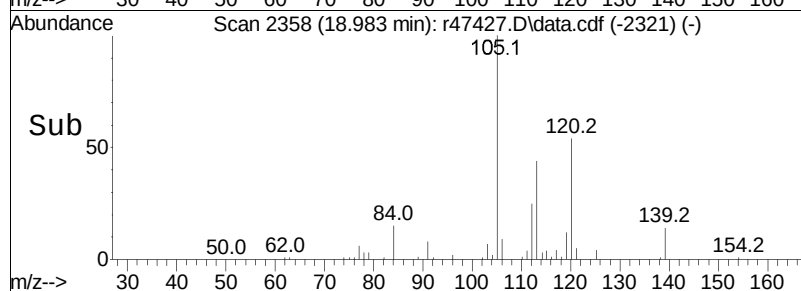
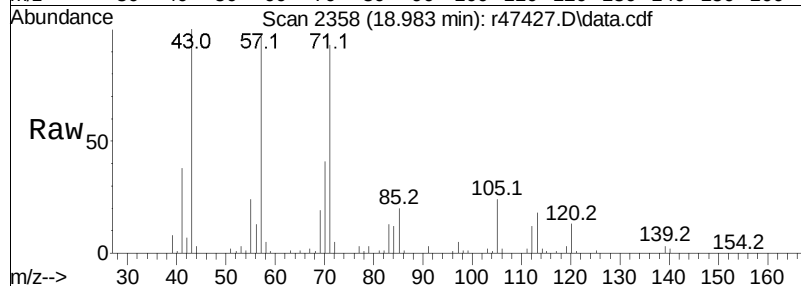
RT: 18.983 min Scan# 2358

Delta R.T. -0.008 min

Lab File: r47427.D

Acq: 22 Jan 2020 2:41 AM

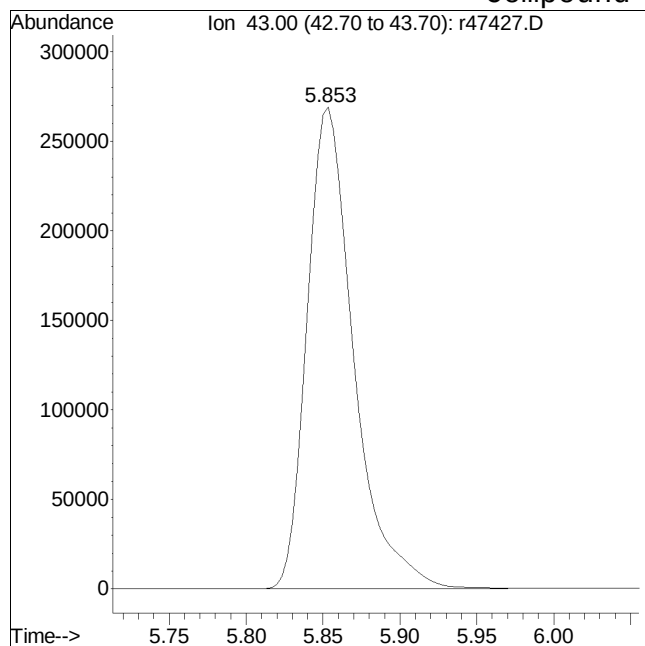
Tgt Ion:	105	Resp:	152676
Ion Ratio	Lower	Upper	
105	100		
120	53.4	50.2	75.4
91	10.5	61.0	91.6#



Manual Integration Report

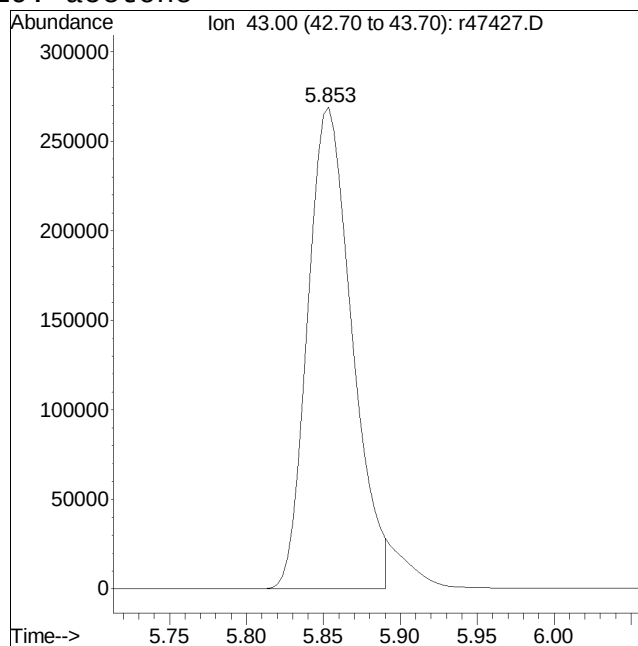
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47427.D Operator : AIRPIAN04:EW
Date Inj'd : 1/22/2020 0:2: 1 Instrument :
Sample : L2002033-06D,3,125,250 Quant Date : 1/22/2020 5:39 am

Compound #19: acetone



Original Peak Response = 567434

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

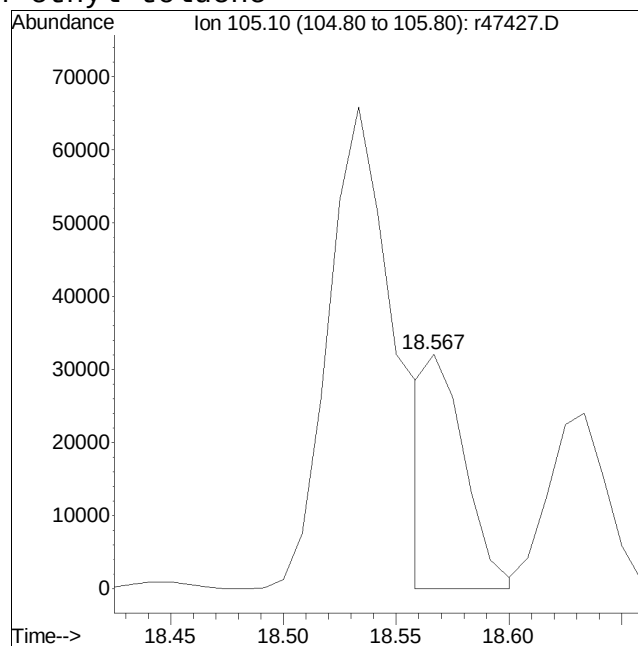
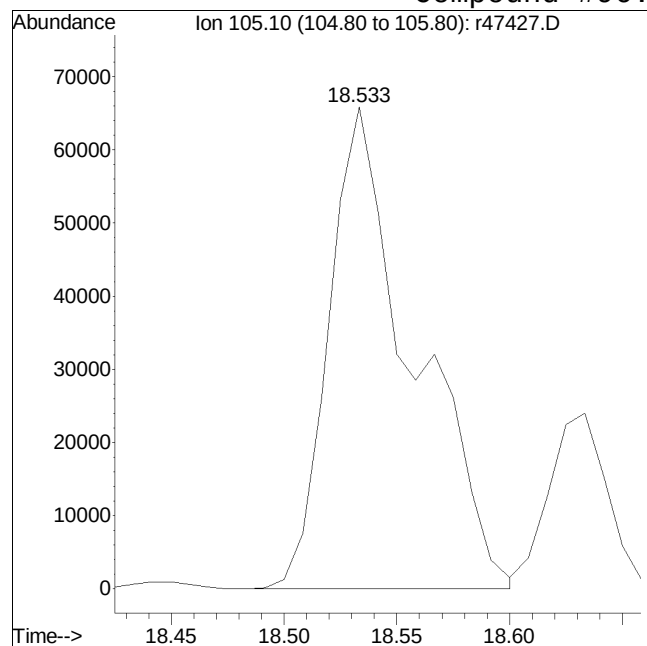


Manual Peak Response = 539123 M6

Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47427.D Operator : AIRPIAN04:EW
Date Inj'd : 1/22/2020 0:2: 1 Instrument :
Sample : L2002033-06D,3,125,250 Quant Date : 1/22/2020 5:39 am

Compound #96: 4-ethyl toluene



Original Peak Response = 171710

Manual Peak Response = 38489 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.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Calibration dates : 01/15/20 16:16 01/16/20 09:41

Lab Number : L2002033
 Project Number :
 Ical Ref : ICAL16438

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
 100 =r47299.D

Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1) I bromochloromethane	-----ISTD-----									
2) chlorodifluoromethane	0.854	0.781	0.778	0.715	0.703	0.702	0.607	0.519	0.7071	14.86
3) propylene		0.653	0.660	0.624	0.608	0.596	0.503	0.422	0.5809	14.98
4) propane		0.623	0.631	0.577	0.574	0.568	0.495	0.421	0.5555	13.35
5) dichlorodifluoromethane	1.011	0.928	0.923	0.825	0.774	0.742	0.587	0.464	0.7819	23.51
6) C chloromethane	0.545	0.497	0.485	0.454	0.441	0.440	0.380	0.322	0.4454	15.57
7) Freon-114	1.339	1.251	1.225	1.108	1.047	0.999	0.798	0.608	1.0469	23.38
8) C methanol			0.216	0.204	0.197	0.190	0.162	0.133	0.1838	16.74
9) C vinyl chloride	0.630	0.609	0.590	0.551	0.526	0.519	0.430	0.349	0.5256	18.08
10) C 1,3-butadiene	0.536	0.504	0.506	0.473	0.460	0.448	0.381	0.316	0.4529	16.03
11) butane	1.178	1.100	1.078	0.988	0.947	0.908	0.747	0.591	0.9420	20.60
12) C acetaldehyde		0.289	0.274	0.287	0.271	0.224	0.185	0.142	0.2388	23.87
13) C bromomethane	0.507	0.467	0.461	0.418	0.398	0.390	0.328	0.264	0.4041	19.58
14) C chloroethane	0.370	0.341	0.334	0.302	0.290	0.287	0.243	0.199	0.2956	18.72
15) ethanol			0.432	0.383	0.400	0.366	0.259	0.194	0.3388	27.20
16) dichlorofluoromethane	1.177	1.070	1.049	0.961	0.905	0.866	0.737	0.504	0.9088	23.35
17) C vinyl bromide	0.521	0.490	0.489	0.460	0.439	0.472	0.359	0.285	0.4392	17.94
18) C acrolein		0.269	0.266	0.247	0.241	0.269	0.206	0.177	0.2392	14.86
19) acetone	1.133	1.020	0.990	0.996	0.918	1.014	0.583	0.426	0.8852	27.75
20) C acetonitrile	0.667	0.592	0.590	0.546	0.520	0.647	0.410	0.327	0.5375	21.70
21) trichlorofluoromethane	0.957	0.897	0.872	0.801	0.737	0.879	0.552	0.411	0.7635	24.83
22) isopropyl alcohol	1.452	1.252	1.195	1.201	1.138	1.206	0.818	0.636	1.1122	23.37
23) C acrylonitrile	0.530	0.498	0.491	0.464	0.446	0.487	0.382	0.329	0.4534	14.73
24) pentane	1.399	1.357	1.326	1.237	1.170	1.399	0.919	0.899	1.2132	16.79
25) ethyl ether	0.908	0.861	0.832	0.805	0.781	0.970	0.651	0.728	0.8171	12.28
26) C 1,1-dichloroethene	0.867	0.810	0.789	0.737	0.696	0.851	0.714	0.433	0.7370	18.66
27) tertiary butyl alcohol		1.110	1.106	1.039	0.991	1.144	0.987	0.631	1.0012	17.41
28) C methylene chloride		0.711	0.710	0.639	0.614	0.675	0.597	0.428	0.6249	15.63
29) C 3-chloropropene	1.068	1.042	1.004	0.934	0.896	1.080	0.937	0.572	0.9416	17.42
30) C carbon disulfide	1.906	1.795	1.789	1.681	1.615	1.729	1.511	1.055	1.6351	16.12
31) Freon 113	1.085	1.018	1.005	0.921	0.878	0.956	0.828	0.530	0.9030	18.98
32) trans-1,2-dichloroethene	0.982	0.919	0.877	0.827	0.785	0.924	0.794	0.497	0.8256	18.08
33) C 1,1-dichloroethane	1.187	1.084	1.092	1.009	0.963	1.112	0.962	0.616	1.0029	17.41
34) C MTBE	1.744	1.657	1.655	1.568	1.527	1.657	1.455	0.961	1.5279	16.12
35) C vinyl acetate			1.585	1.524	1.505	1.763	1.581	0.991	1.4915	17.55
36) C 2-butanone		1.556	1.534	1.425	1.384	1.622	1.425	1.234	1.4543	8.87

Initial Calibration Summary

Form 6

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Calibration dates : 01/15/20 16:16 01/16/20 09:41

Lab Number : L2002033
 Project Number :
 Ical Ref : ICAL16438

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
 100 =r47299.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)	cis-1,2-dichloroethene	0.818	0.776	0.756	0.700	0.667	0.810	0.692	0.571	0.7239	11.45
38)	Ethyl Acetate	0.253	0.238	0.226	0.220	0.214	0.239	0.210	0.182	0.2226	9.86
39) C	chloroform	1.039	0.970	0.955	0.880	0.840	0.968	0.816	0.654	0.8902	13.60
40)	Tetrahydrofuran	1.119	1.085	1.070	1.067	1.070	1.049	0.932	0.823	1.0269	9.63
41)	2,2-dichloropropane	0.889	0.810	0.802	0.755	0.721	0.818	0.688	0.545	0.7536	13.92
42) C	1,2-dichloroethane	0.828	0.787	0.767	0.711	0.686	0.643	0.526	0.397	0.6679	21.61
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.425	0.386	0.378	0.361	0.346	0.433	0.373	0.311	0.3764	10.57
45)	diisopropyl ether	0.209	0.202	0.200	0.187	0.181	0.220	0.189	0.161	0.1935	9.43
46)	tert-butyl ethyl ether	0.802	0.740	0.739	0.735	0.713	0.752	0.651	0.538	0.7086	11.39
47) s	1,2-dichloroethane-D4	0.218	0.215	0.221	0.214	0.211	0.203	0.189	0.164	0.2044	9.42
48) C	1,1,1-trichloroethane	0.362	0.343	0.334	0.314	0.306	0.326	0.281	0.245	0.3140	11.81
49)	1,1-dichloropropene	0.325	0.300	0.299	0.293	0.289	0.311	0.283	0.251	0.2938	7.34
50) C	benzene	0.779	0.717	0.709	0.676	0.661	0.714	0.647	0.590	0.6867	8.22
51)	thiophene	1.708	1.631	1.651	1.581	1.501	1.562	1.301	1.010	1.4930	15.46
52) C	carbon tetrachloride	0.321	0.297	0.299	0.283	0.275	0.285	0.228	0.164	0.2690	18.59
53)	cyclohexane	0.483	0.452	0.452	0.439	0.430	0.458	0.408	0.362	0.4355	8.45
54)	tert-amyl methyl ether	0.676	0.637	0.644	0.638	0.636	0.689	0.631	0.556	0.6384	6.17
55)	dibromomethane	0.239	0.211	0.210	0.196	0.193	0.202	0.175	0.144	0.1963	14.24
56) C	1,2-dichloropropane	0.309	0.284	0.279	0.261	0.256	0.286	0.256	0.217	0.2686	10.34
57)	bromodichloromethane	0.457	0.425	0.422	0.400	0.391	0.411	0.358	0.296	0.3951	12.45
58) C	1,4-dioxane	0.187	0.173	0.178	0.175	0.174	0.185	0.169	0.142	0.1728	7.97
59) C	trichloroethene	0.286	0.272	0.267	0.260	0.258	0.289	0.255	0.209	0.2621	9.47
60) C	2,2,4-trimethylpentane	1.510	1.429	1.444	1.400	1.352	1.433	1.218	1.028	1.3517	11.57
61)	methyl methacrylate		0.417	0.429	0.510	0.511	0.477	0.419	0.353	0.4451	12.94
62)	heptane	0.633	0.593	0.607	0.609	0.602	0.646	0.567	0.473	0.5912	9.00
63) C	cis-1,3-dichloropropene	0.360	0.341	0.337	0.336	0.335	0.374	0.344	0.312	0.3424	5.37
64) C	4-methyl-2-pentanone		0.672	0.686	0.707	0.698	0.746	0.664	0.558	0.6758	8.64
65)	trans-1,3-dichloropropene	0.331	0.313	0.321	0.320	0.323	0.362	0.332	0.292	0.3242	6.16
66) C	1,1,2-trichloroethane	0.280	0.259	0.258	0.246	0.244	0.272	0.249	0.218	0.2532	7.45
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	5.689	5.087	4.935	4.758	4.636	5.070	4.573	4.175	4.8655	9.19
69) s	toluene-D8	4.069	4.061	4.122	4.094	4.176	4.290	4.507	5.021	4.2924	7.69
70)	2-methylthiophene	1.535	1.478	1.484	1.453	1.388	1.417	1.085	0.833	1.3343	18.38
71)	1,3-dichloropropane	2.417	2.256	2.278	2.211	2.144	2.315	2.141	1.996	2.2197	5.76
72)	2-hexanone	3.485	3.527	3.622	3.775	3.651	3.516	2.720	2.085	3.2975	17.74

Initial Calibration Summary

Form 6

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Calibration dates : 01/15/20 16:16 01/16/20 09:41

Lab Number : L2002033
 Project Number :
 Ical Ref : ICAL16438

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
 100 =r47299.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)	3-methylthiophene	1.565	1.525	1.543	1.510	1.442	1.447	1.068	0.819	1.3649	19.91
74)	dibromochloromethane	2.083	1.975	1.988	2.042	2.037	2.246	1.973	1.682	2.0033	7.84
75) C	1,2-dibromoethane	2.267	2.104	2.077	2.041	1.998	2.259	2.089	1.919	2.0944	5.71
76)	butyl acetate		0.510	0.555	0.649	0.671	0.755	0.764	0.759	0.6660	15.39
77)	octane	1.966	1.928	1.999	2.001	1.972	2.116	1.922	1.772	1.9595	4.93
78) C	tetrachloroethene	2.040	1.959	1.962	1.895	1.842	2.082	1.868	1.624	1.9091	7.41
79)	1,1,1,2-tetrachloroethane	1.550	1.496	1.473	1.499	1.501	1.637	1.421	1.140	1.4647	9.91
80) C	chlorobenzene	4.051	3.748	3.642	3.539	3.441	3.873	3.506	2.993	3.5989	8.83
81) C	ethylbenzene	6.338	6.001	6.045	5.995	5.885	6.500	5.800	4.919	5.9354	7.94
82)	2-ethylthiophene	1.696	1.678	1.707	1.666	1.586	1.563	1.110	0.820	1.4784	22.33
83) C	m+p-xylene	5.617	5.335	5.273	5.054	4.967	5.369	4.468	3.515	4.9498	13.61
84) C	bromoform	1.850	1.814	1.821	1.961	2.031	2.242	1.921	1.609	1.9060	9.69
85) C	styrene	3.697	3.602	3.685	3.785	3.813	4.353	4.065	3.629	3.8286	6.72
86) C	1,1,2,2-tetrachloroethane	3.771	3.650	3.574	3.410	3.324	3.647	3.139	2.571	3.3856	11.44
87) C	o-xylene	5.458	5.159	5.239	5.106	4.987	5.343	4.269	3.293	4.8567	14.98
88)	1,2,3-trichloropropane	2.786	2.665	2.622	2.613	2.584	2.794	2.639	2.455	2.6448	4.14
89)	nonane	4.631	4.611	4.751	4.907	4.816	5.171	4.451	3.651	4.6236	9.71
90) s	bromofluorobenzene	2.748	2.848	2.906	2.855	2.963	3.075	3.336	3.734	3.0581	10.69
91) C	isopropylbenzene	6.662	6.356	6.300	6.348	6.292	6.834	6.030	4.999	6.2279	8.89
92)	bromobenzene	3.653	3.548	3.518	3.515	3.462	3.739	3.426	3.019	3.4850	6.14
93)	2-chlorotoluene	1.813	1.722	1.746	1.825	1.844	2.031	1.873	1.612	1.8082	6.77
94)	n-propylbenzene	2.156	2.082	2.192	2.238	2.229	2.431	2.227	1.798	2.1691	8.29
95)	4-chlorotoluene	1.761	1.615	1.652	1.718	1.747	1.944	1.851	1.584	1.7341	6.98
96)	4-ethyl toluene	6.896	6.942	7.209	7.299	7.208	7.823	6.835	5.596	6.9761	9.17
97)	1,3,5-trimethylbenzene	5.896	5.839	6.007	5.759	5.660	6.324	5.586	4.407	5.6849	9.93
98)	tert-butylbenzene	6.336	6.392	6.448	6.558	6.338	6.557	5.105	3.860	5.9494	16.27
99)	1,2,4-trimethylbenzene	5.564	5.624	5.795	5.726	5.622	6.144	4.751	3.495	5.3402	15.77
100)	decane	5.390	5.332	5.394	5.409	5.006	5.532	4.770	3.892	5.0906	10.72
101) C	Benzyl Chloride	3.038	3.197	3.427	4.061	3.868	5.329	4.627	3.603	3.8937	19.76
102)	1,3-dichlorobenzene	3.253	2.998	2.970	2.857	3.021	3.868	3.312	2.673	3.1190	11.69
103) C	1,4-dichlorobenzene	3.191	3.160	3.185	3.251	3.227	3.751	3.379	2.652	3.2246	9.35
104)	sec-butylbenzene	8.587	8.385	8.477	8.550	8.426	8.960	7.593	5.873	8.1063	12.09
105)	1,2,3-trimethylbenzene	5.317	5.164	5.320	6.048	5.966	5.554	4.380	3.244	5.1240	17.94
106)	p-isopropyltoluene	7.551	7.611	7.823	8.236	7.952	7.972	6.238	4.588	7.2464	17.02
107)	1,2-dichlorobenzene	3.152	3.160	3.163	3.166	3.148	3.589	3.329	2.783	3.1862	7.02
108)	n-butylbenzene	6.010	6.034	6.418	6.996	6.945	7.170	6.062	4.781	6.3020	12.28

Initial Calibration Summary

Form 6

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Calibration dates : 01/15/20 16:16 01/16/20 09:41

Lab Number : L2002033
 Project Number :
 Ical Ref : ICAL16438

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
 100 =r47299.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)	indan	5.356	5.537	5.619	6.605	6.539	6.287	5.482	4.401	5.7283	12.77
110)	indene	3.774	4.038	4.261	5.169	5.153	5.034	4.594	3.906	4.4913	12.81
111) C	1,2-dibromo-3-chloropropane	1.340	1.317	1.373	1.568	1.593	1.630	1.486	1.217	1.4407	10.40
112)	undecane	5.471	5.538	5.854	6.294	6.061	6.045	5.197	4.112	5.5714	12.41
113)	1,2,4,5-tetramethylbenzene	4.920	4.944	5.276	6.515	6.469	6.001	5.230	4.100	5.4319	15.42
114)	dodecane	4.781	5.170	5.563	6.824	6.712	5.881	5.161	4.054	5.5182	17.06
115) C	1,2,4-trichlorobenzene	1.549	1.694	1.980	2.309	2.463	2.660	2.672	2.156	2.1852	19.29
116)	naphthalene	4.679	4.897	5.402	7.156	7.686	7.398	6.938	5.476	6.2039	19.53
117)	1,2,3-trichlorobenzene	2.031	2.105	2.245	2.860	3.023	2.792	2.727	2.170	2.4943	15.82
118)	benzothiophene	2.748	2.969	3.574	3.543	3.966	5.415	5.615	4.712	4.0679	26.45
119) C	hexachlorobutadiene	2.768	2.723	2.751	2.771	2.766	2.793	2.329	1.690	2.5737	15.09
120)	2-methylnaphthalene			0.714	0.917	1.101	1.489	1.783	1.690	1.2824	33.98#
121)	1-methylnaphthalene			2.221	2.469	2.717	3.413	3.589	3.079	2.9148	18.47

Response Factor Report

Method Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Method File : TFS4_200115.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Jan 16 10:52:02 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
 100 =r47299.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
-----		-----									
1) I	bromochloromethane	-----ISTD-----									
2)	chlorodifluoromethane	0.854	0.781	0.778	0.715	0.703	0.702	0.607	0.519	0.7071	14.86
3)	propylene		0.653	0.660	0.624	0.608	0.596	0.503	0.422	0.5809	14.98
4)	propane		0.623	0.631	0.577	0.574	0.568	0.495	0.421	0.5555	13.35
5)	dichlorodifluoromethane	1.011	0.928	0.923	0.825	0.774	0.742	0.587	0.464	0.7819	23.51
6) C	chloromethane	0.545	0.497	0.485	0.454	0.441	0.440	0.380	0.322	0.4454	15.57
7)	Freon-114	1.339	1.251	1.225	1.108	1.047	0.999	0.798	0.608	1.0469	23.38
8) C	methanol			0.216	0.204	0.197	0.190	0.162	0.133	0.1838	16.74
9) C	vinyl chloride	0.630	0.609	0.590	0.551	0.526	0.519	0.430	0.349	0.5256	18.08
10) C	1,3-butadiene	0.536	0.504	0.506	0.473	0.460	0.448	0.381	0.316	0.4529	16.03
11)	butane	1.178	1.100	1.078	0.988	0.947	0.908	0.747	0.591	0.9420	20.60
12) C	acetaldehyde		0.289	0.274	0.287	0.271	0.224	0.185	0.142	0.2388	23.87
13) C	bromomethane	0.507	0.467	0.461	0.418	0.398	0.390	0.328	0.264	0.4041	19.58
14) C	chloroethane	0.370	0.341	0.334	0.302	0.290	0.287	0.243	0.199	0.2956	18.72
15)	ethanol			0.432	0.383	0.400	0.366	0.259	0.194	0.3388	27.20
16)	dichlorofluoromethane	1.177	1.070	1.049	0.961	0.905	0.866	0.737	0.504	0.9088	23.35
17) C	vinyl bromide	0.521	0.490	0.489	0.460	0.439	0.472	0.359	0.285	0.4392	17.94
18) C	acrolein		0.269	0.266	0.247	0.241	0.269	0.206	0.177	0.2392	14.86
19)	acetone	1.133	1.020	0.990	0.996	0.918	1.014	0.583	0.426	0.8852	27.75
20) C	acetonitrile	0.667	0.592	0.590	0.546	0.520	0.647	0.410	0.327	0.5375	21.70
21)	trichlorofluoromethane	0.957	0.897	0.872	0.801	0.737	0.879	0.552	0.411	0.7635	24.83
22)	isopropyl alcohol	1.452	1.252	1.195	1.201	1.138	1.206	0.818	0.636	1.1122	23.37
23) C	acrylonitrile	0.530	0.498	0.491	0.464	0.446	0.487	0.382	0.329	0.4534	14.73
24)	pentane	1.399	1.357	1.326	1.237	1.170	1.399	0.919	0.899	1.2132	16.79
25)	ethyl ether	0.908	0.861	0.832	0.805	0.781	0.970	0.651	0.728	0.8171	12.28
26) C	1,1-dichloroethene	0.867	0.810	0.789	0.737	0.696	0.851	0.714	0.433	0.7370	18.66
27)	tertiary butyl alcohol		1.110	1.106	1.039	0.991	1.144	0.987	0.631	1.0012	17.41
28) C	methylene chloride		0.711	0.710	0.639	0.614	0.675	0.597	0.428	0.6249	15.63
29) C	3-chloropropene	1.068	1.042	1.004	0.934	0.896	1.080	0.937	0.572	0.9416	17.42
30) C	carbon disulfide	1.906	1.795	1.789	1.681	1.615	1.729	1.511	1.055	1.6351	16.12
31)	Freon 113	1.085	1.018	1.005	0.921	0.878	0.956	0.828	0.530	0.9030	18.98

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Method File : TFS4_200115.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Thu Jan 16 10:52:02 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
100 =r47299.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)	trans-1,2-dichloroethene	0.982	0.919	0.877	0.827	0.785	0.924	0.794	0.497	0.8256	18.08
33) C	1,1-dichloroethane	1.187	1.084	1.092	1.009	0.963	1.112	0.962	0.616	1.0029	17.41
34) C	MTBE	1.744	1.657	1.655	1.568	1.527	1.657	1.455	0.961	1.5279	16.12
35) C	vinyl acetate			1.585	1.524	1.505	1.763	1.581	0.991	1.4915	17.55
36) C	2-butanone		1.556	1.534	1.425	1.384	1.622	1.425	1.234	1.4543	8.87
37)	cis-1,2-dichloroethene	0.818	0.776	0.756	0.700	0.667	0.810	0.692	0.571	0.7239	11.45
38)	Ethyl Acetate	0.253	0.238	0.226	0.220	0.214	0.239	0.210	0.182	0.2226	9.86
39) C	chloroform	1.039	0.970	0.955	0.880	0.840	0.968	0.816	0.654	0.8902	13.60
40)	Tetrahydrofuran	1.119	1.085	1.070	1.067	1.070	1.049	0.932	0.823	1.0269	9.63
41)	2,2-dichloropropane	0.889	0.810	0.802	0.755	0.721	0.818	0.688	0.545	0.7536	13.92
42) C	1,2-dichloroethane	0.828	0.787	0.767	0.711	0.686	0.643	0.526	0.397	0.6679	21.61
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.425	0.386	0.378	0.361	0.346	0.433	0.373	0.311	0.3764	10.57
45)	diisopropyl ether	0.209	0.202	0.200	0.187	0.181	0.220	0.189	0.161	0.1935	9.43
46)	tert-butyl ethyl ether	0.802	0.740	0.739	0.735	0.713	0.752	0.651	0.538	0.7086	11.39
47) s	1,2-dichloroethane-D4	0.218	0.215	0.221	0.214	0.211	0.203	0.189	0.164	0.2044	9.42
48) C	1,1,1-trichloroethane	0.362	0.343	0.334	0.314	0.306	0.326	0.281	0.245	0.3140	11.81
49)	1,1-dichloropropene	0.325	0.300	0.299	0.293	0.289	0.311	0.283	0.251	0.2938	7.34
50) C	benzene	0.779	0.717	0.709	0.676	0.661	0.714	0.647	0.590	0.6867	8.22
51)	thiophene	1.708	1.631	1.651	1.581	1.501	1.562	1.301	1.010	1.4930	15.46
52) C	carbon tetrachloride	0.321	0.297	0.299	0.283	0.275	0.285	0.228	0.164	0.2690	18.59
53)	cyclohexane	0.483	0.452	0.452	0.439	0.430	0.458	0.408	0.362	0.4355	8.45
54)	tert-amyl methyl ether	0.676	0.637	0.644	0.638	0.636	0.689	0.631	0.556	0.6384	6.17
55)	dibromomethane	0.239	0.211	0.210	0.196	0.193	0.202	0.175	0.144	0.1963	14.24
56) C	1,2-dichloropropane	0.309	0.284	0.279	0.261	0.256	0.286	0.256	0.217	0.2686	10.34
57)	bromodichloromethane	0.457	0.425	0.422	0.400	0.391	0.411	0.358	0.296	0.3951	12.45
58) C	1,4-dioxane	0.187	0.173	0.178	0.175	0.174	0.185	0.169	0.142	0.1728	7.97
59) C	trichloroethene	0.286	0.272	0.267	0.260	0.258	0.289	0.255	0.209	0.2621	9.47
60) C	2,2,4-trimethylpentane	1.510	1.429	1.444	1.400	1.352	1.433	1.218	1.028	1.3517	11.57
61)	methyl methacrylate		0.417	0.429	0.510	0.511	0.477	0.419	0.353	0.4451	12.94
62)	heptane	0.633	0.593	0.607	0.609	0.602	0.646	0.567	0.473	0.5912	9.00

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Method File : TFS4_200115.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Thu Jan 16 10:52:02 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
100 =r47299.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63) C	cis-1,3-dichloropropene	0.360	0.341	0.337	0.336	0.335	0.374	0.344	0.312	0.3424	5.37
64) C	4-methyl-2-pentanone		0.672	0.686	0.707	0.698	0.746	0.664	0.558	0.6758	8.64
65)	trans-1,3-dichloropropene	0.331	0.313	0.321	0.320	0.323	0.362	0.332	0.292	0.3242	6.16
66) C	1,1,2-trichloroethane	0.280	0.259	0.258	0.246	0.244	0.272	0.249	0.218	0.2532	7.45
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	5.689	5.087	4.935	4.758	4.636	5.070	4.573	4.175	4.8655	9.19
69) s	toluene-D8	4.069	4.061	4.122	4.094	4.176	4.290	4.507	5.021	4.2924	7.69
70)	2-methylthiophene	1.535	1.478	1.484	1.453	1.388	1.417	1.085	0.833	1.3343	18.38
71)	1,3-dichloropropane	2.417	2.256	2.278	2.211	2.144	2.315	2.141	1.996	2.2197	5.76
72)	2-hexanone	3.485	3.527	3.622	3.775	3.651	3.516	2.720	2.085	3.2975	17.74
73)	3-methylthiophene	1.565	1.525	1.543	1.510	1.442	1.447	1.068	0.819	1.3649	19.91
74)	dibromochloromethane	2.083	1.975	1.988	2.042	2.037	2.246	1.973	1.682	2.0033	7.84
75) C	1,2-dibromoethane	2.267	2.104	2.077	2.041	1.998	2.259	2.089	1.919	2.0944	5.71
76)	butyl acetate		0.510	0.555	0.649	0.671	0.755	0.764	0.759	0.6660	15.39
77)	octane	1.966	1.928	1.999	2.001	1.972	2.116	1.922	1.772	1.9595	4.93
78) C	tetrachloroethene	2.040	1.959	1.962	1.895	1.842	2.082	1.868	1.624	1.9091	7.41
79)	1,1,1,2-tetrachloroethane	1.550	1.496	1.473	1.499	1.501	1.637	1.421	1.140	1.4647	9.91
80) C	chlorobenzene	4.051	3.748	3.642	3.539	3.441	3.873	3.506	2.993	3.5989	8.83
81) C	ethylbenzene	6.338	6.001	6.045	5.995	5.885	6.500	5.800	4.919	5.9354	7.94
82)	2-ethylthiophene	1.696	1.678	1.707	1.666	1.586	1.563	1.110	0.820	1.4784	22.33
83) C	m+p-xylene	5.617	5.335	5.273	5.054	4.967	5.369	4.468	3.515	4.9498	13.61
84) C	bromoform	1.850	1.814	1.821	1.961	2.031	2.242	1.921	1.609	1.9060	9.69
85) C	styrene	3.697	3.602	3.685	3.785	3.813	4.353	4.065	3.629	3.8286	6.72
86) C	1,1,2,2-tetrachloroethane	3.771	3.650	3.574	3.410	3.324	3.647	3.139	2.571	3.3856	11.44
87) C	o-xylene	5.458	5.159	5.239	5.106	4.987	5.343	4.269	3.293	4.8567	14.98
88)	1,2,3-trichloropropane	2.786	2.665	2.622	2.613	2.584	2.794	2.639	2.455	2.6448	4.14
89)	nonane	4.631	4.611	4.751	4.907	4.816	5.171	4.451	3.651	4.6236	9.71
90) s	bromofluorobenzene	2.748	2.848	2.906	2.855	2.963	3.075	3.336	3.734	3.0581	10.69
91) C	isopropylbenzene	6.662	6.356	6.300	6.348	6.292	6.834	6.030	4.999	6.2279	8.89
92)	bromobenzene	3.653	3.548	3.518	3.515	3.462	3.739	3.426	3.019	3.4850	6.14
93)	2-chlorotoluene	1.813	1.722	1.746	1.825	1.844	2.031	1.873	1.612	1.8082	6.77

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Method File : TFS4_200115.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Jan 16 10:52:02 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r47289.D 0.5 =r47290.D 1.0 =r47291.D 5.0 =r47292.D 10 =r47293.D 20 =r47294.D 50 =r47295.D
100 =r47299.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)	n-propylbenzene	2.156	2.082	2.192	2.238	2.229	2.431	2.227	1.798	2.1691	8.29
95)	4-chlorotoluene	1.761	1.615	1.652	1.718	1.747	1.944	1.851	1.584	1.7341	6.98
96)	4-ethyl toluene	6.896	6.942	7.209	7.299	7.208	7.823	6.835	5.596	6.9761	9.17
97)	1,3,5-trimethylbenzene	5.896	5.839	6.007	5.759	5.660	6.324	5.586	4.407	5.6849	9.93
98)	tert-butylbenzene	6.336	6.392	6.448	6.558	6.338	6.557	5.105	3.860	5.9494	16.27
99)	1,2,4-trimethylbenzene	5.564	5.624	5.795	5.726	5.622	6.144	4.751	3.495	5.3402	15.77
100)	decane	5.390	5.332	5.394	5.409	5.006	5.532	4.770	3.892	5.0906	10.72
101) C	Benzyl Chloride	3.038	3.197	3.427	4.061	3.868	5.329	4.627	3.603	3.8937	19.76
102)	1,3-dichlorobenzene	3.253	2.998	2.970	2.857	3.021	3.868	3.312	2.673	3.1190	11.69
103) C	1,4-dichlorobenzene	3.191	3.160	3.185	3.251	3.227	3.751	3.379	2.652	3.2246	9.35
104)	sec-butylbenzene	8.587	8.385	8.477	8.550	8.426	8.960	7.593	5.873	8.1063	12.09
105)	1,2,3-trimethylbenzene	5.317	5.164	5.320	6.048	5.966	5.554	4.380	3.244	5.1240	17.94
106)	p-isopropyltoluene	7.551	7.611	7.823	8.236	7.952	7.972	6.238	4.588	7.2464	17.02
107)	1,2-dichlorobenzene	3.152	3.160	3.163	3.166	3.148	3.589	3.329	2.783	3.1862	7.02
108)	n-butylbenzene	6.010	6.034	6.418	6.996	6.945	7.170	6.062	4.781	6.3020	12.28
109)	indan	5.356	5.537	5.619	6.605	6.539	6.287	5.482	4.401	5.7283	12.77
110)	indene	3.774	4.038	4.261	5.169	5.153	5.034	4.594	3.906	4.4913	12.81
111) C	1,2-dibromo-3-chloropropane	1.340	1.317	1.373	1.568	1.593	1.630	1.486	1.217	1.4407	10.40
112)	undecane	5.471	5.538	5.854	6.294	6.061	6.045	5.197	4.112	5.5714	12.41
113)	1,2,4,5-tetramethylbenzene	4.920	4.944	5.276	6.515	6.469	6.001	5.230	4.100	5.4319	15.42
114)	dodecane	4.781	5.170	5.563	6.824	6.712	5.881	5.161	4.054	5.5182	17.06
115) C	1,2,4-trichlorobenzene	1.549	1.694	1.980	2.309	2.463	2.660	2.672	2.156	2.1852	19.29
116)	naphthalene	4.679	4.897	5.402	7.156	7.686	7.398	6.938	5.476	6.2039	19.53
117)	1,2,3-trichlorobenzene	2.031	2.105	2.245	2.860	3.023	2.792	2.727	2.170	2.4943	15.82
118)	benzothiophene	2.748	2.969	3.574	3.543	3.966	5.415	5.615	4.712	4.0679	26.45
119) C	hexachlorobutadiene	2.768	2.723	2.751	2.771	2.766	2.793	2.329	1.690	2.5737	15.09
120)	2-methylnaphthalene			0.714	0.917	1.101	1.489	1.783	1.690	1.2824	33.98#
121)	1-methylnaphthalene			2.221	2.469	2.717	3.413	3.589	3.079	2.9148	18.47

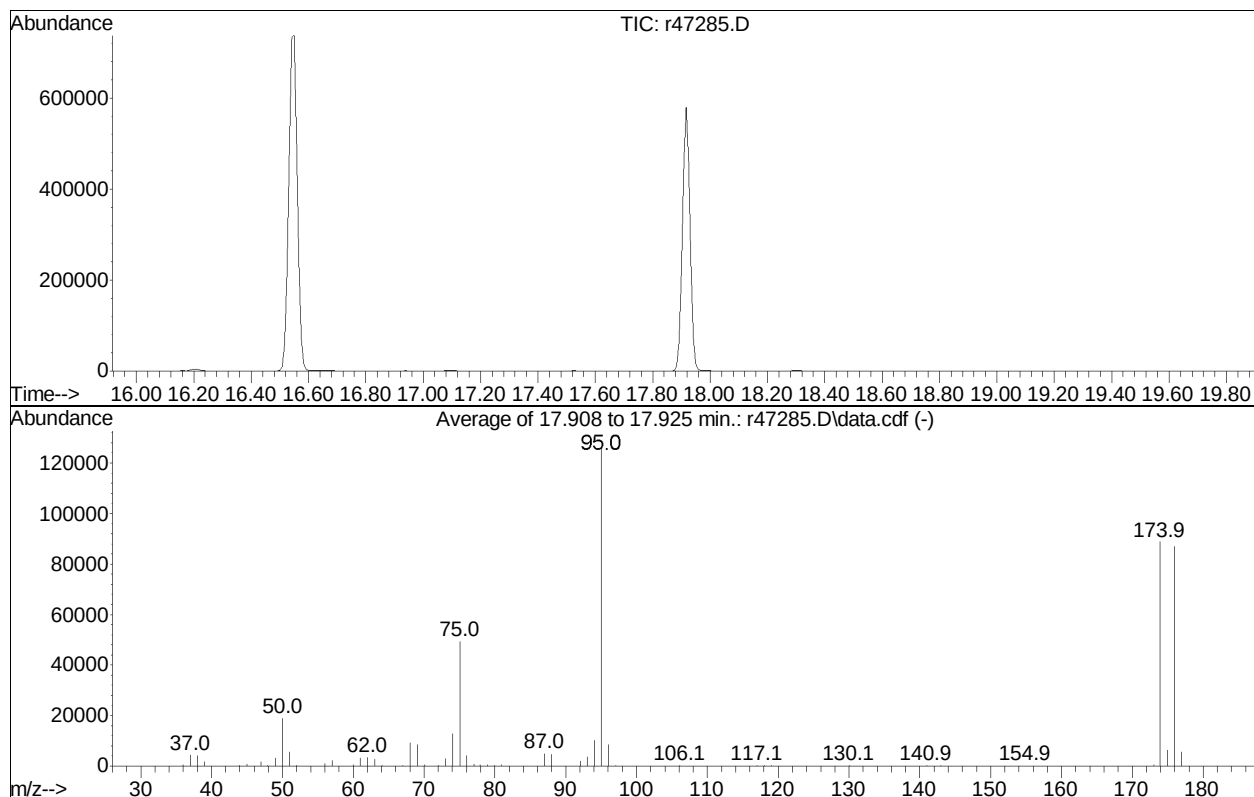
(#) = Out of Range

BFB

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47285.D
 Acq On : 15 Jan 2020 1:38 PM
 Operator : AIRPIAN04:RY
 Sample : WG1330812-1,3,250,250
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Jan 16 10:52:02 2020



Spectrum Information: Average of 17.908 to 17.925 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.0	18979	PASS
75	95	30	66	39.0	49271	PASS
95	95	100	100	100.0	126497	PASS
96	95	5	9	6.7	8413	PASS
173	174	0.00	2	0.6	550	PASS
174	95	50	120	70.4	88994	PASS
175	174	4	9	7.0	6231	PASS
176	174	93	101	97.7	86917	PASS
177	176	5	9	6.6	5708	PASS

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47289.D
 Acq On : 15 Jan 2020 4:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:40:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.57	49	196915	10.000	ppbV	0.00
Standard Area = 207093			Recovery =	95.09%		
43) 1,4-difluorobenzene	11.83	114	565402	10.000	ppbV	0.00
Standard Area = 612436			Recovery =	92.32%		
67) chlorobenzene-D5	16.54	54	102479	10.000	ppbV	0.00
Standard Area = 109807			Recovery =	93.33%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.45	65	123252	10.310	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	103.10%		
69) toluene-D8	14.66	98	417024	9.746	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.46%		
90) bromofluorobenzene	17.92	95	281580	9.272	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.72%		
Target Compounds						Qvalue
2) chlorodifluoromethane	3.90	51	3362	0.243	ppbV #	94
3) propylene	3.93	41	2852M4	0.238	ppbV	
4) propane	3.96	29	2680	0.237	ppbV	93
5) dichlorodifluoromethane	4.01	85	3982	0.261	ppbV	100
6) chloromethane	4.19	50	2146	0.247	ppbV	98
7) Freon-114	4.32	85	5274	0.256	ppbV	97
8) methanol	4.38	31	4902	1.261	ppbV #	32
9) vinyl chloride	4.45	62	2483	0.240	ppbV	95
10) 1,3-butadiene	4.62	54	2110	0.233	ppbV	88
11) butane	4.68	43	4639	0.249	ppbV	97
12) acetaldehyde	4.34	29	6460	1.211	ppbV	91
13) bromomethane	4.93	94	1996	0.254	ppbV	98
14) chloroethane	5.15	64	1459	0.255	ppbV #	86
15) ethanol	5.32	31	9756	1.238	ppbV	99
16) dichlorofluoromethane	5.29	67	4636	0.260	ppbV	97
17) vinyl bromide	5.58	106	2051	0.237	ppbV	96
18) acrolein	5.73	56	1155	0.243	ppbV #	26
19) acetone	5.89	43	22316	1.234	ppbV #	96
20) acetonitrile	5.57	41	2626	0.257	ppbV #	83
21) trichlorofluoromethane	6.09	101	3770	0.260	ppbV	99
22) isopropyl alcohol	6.21	45	14299	0.638	ppbV	99
23) acrylonitrile	6.46	53	2086	0.237	ppbV	97
24) pentane	6.54	43	5509M4	0.239	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47289.D
 Acq On : 15 Jan 2020 4:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:40:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.58	31	3577	0.233	ppbV	96
26) 1,1-dichloroethene	6.86	61	3413	0.249	ppbV	96
27) tertiary butyl alcohol	6.95	59	4648	0.238	ppbV #	94
28) methylene chloride	7.02	49	3144	0.260	ppbV	98
29) 3-chloropropene	7.16	41	4207	0.238	ppbV	95
30) carbon disulfide	7.32	76	7508	0.236	ppbV #	54
31) Freon 113	7.35	101	4275	0.247	ppbV	97
32) trans-1,2-dichloroethene	8.15	61	3866	0.250	ppbV	96
33) 1,1-dichloroethane	8.38	63	4673	0.246	ppbV	96
34) MTBE	8.47	73	6869	0.228	ppbV	94
35) vinyl acetate	8.61	43	6850	0.231	ppbV	98
36) 2-butanone	8.88	43	6982	0.256	ppbV	98
37) cis-1,2-dichloroethene	9.38	61	3223	0.245	ppbV	97
38) Ethyl Acetate	9.68	61	996	0.237	ppbV	73
39) chloroform	9.72	83	4092	0.248	ppbV	96
40) Tetrahydrofuran	10.19	42	4408	0.209	ppbV	96
41) 2,2-dichloropropane	9.74	77	3502	0.247	ppbV	90
42) 1,2-dichloroethane	10.57	62	3259	0.241	ppbV	98
44) hexane	9.64	57	4801	0.246	ppbV	99
45) diisopropyl ether	9.66	87	2364	0.232	ppbV	88
46) tert-butyl ethyl ether	10.28	59	9067	0.225	ppbV	99
48) 1,1,1-trichloroethane	10.87	97	4095	0.237	ppbV	93
49) 1,1-dichloropropene	11.23	75	3671	0.225	ppbV	94
50) benzene	11.39	78	8810	0.236	ppbV	97
51) thiophene	11.54	84	19309	0.228	ppbV	98
52) carbon tetrachloride	11.56	117	3626	0.233	ppbV	94
53) cyclohexane	11.71	56	5460	0.224	ppbV	98
54) tert-amyl methyl ether	12.11	73	7645	0.213	ppbV	94
55) dibromomethane	12.31	93	2700	0.248	ppbV	97
56) 1,2-dichloropropane	12.35	63	3499	0.242	ppbV	96
57) bromodichloromethane	12.58	83	5168	0.234	ppbV	99
58) 1,4-dioxane	12.64	88	2110	0.214	ppbV	85
59) trichloroethene	12.63	130	3236	0.222	ppbV	98
60) 2,2,4-trimethylpentane	12.67	57	17070	0.223	ppbV	98
61) methyl methacrylate	12.88	41	4884	0.169	ppbV	98
62) heptane	12.99	43	7154	0.210	ppbV	98
63) cis-1,3-dichloropropene	13.64	75	4070	0.215	ppbV	90
64) 4-methyl-2-pentanone	13.69	43	8084	0.205	ppbV	99
65) trans-1,3-dichloropropene	14.26	75	3748	0.205	ppbV	94
66) 1,1,2-trichloroethane	14.46	97	3165	0.230	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47289.D
 Acq On : 15 Jan 2020 4:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:40:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.77	91	11661	0.245	ppbV	98
70) 2-methylthiophene	14.84	97	31470	0.221	ppbV	98
71) 1,3-dichloropropane	14.80	76	4954	0.225	ppbV	98
72) 2-hexanone	15.07	43	7142	0.191	ppbV #	92
73) 3-methylthiophene	15.03	97	32079	0.217	ppbV	99
74) dibromochloromethane	15.22	129	4269	0.205	ppbV	95
75) 1,2-dibromoethane	15.47	107	4647	0.227	ppbV	97
76) butyl acetate	15.71	73	969	0.141	ppbV	91
77) octane	15.80	85	4030	0.199	ppbV	97
78) tetrachloroethene	15.93	166	4182	0.222	ppbV	98
79) 1,1,1,2-tetrachloroethane	16.57	131	3176	0.207	ppbV	97
80) chlorobenzene	16.58	112	8302	0.235	ppbV	98
81) ethylbenzene	16.93	91	12990	0.215	ppbV	98
82) 2-ethylthiophene	16.98	97	34760	0.214	ppbV	99
83) m+p-xylene	17.10	91	23027	0.452	ppbV	100
84) bromoform	17.17	173	3791	0.182	ppbV	98
85) styrene	17.43	104	7577	0.194	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.52	83	7729	0.227	ppbV	98
87) o-xylene	17.52	91	11187	0.219	ppbV	98
88) 1,2,3-trichloropropane	17.63	75	5711	0.216	ppbV	97
89) nonane	17.72	43	9491	0.192	ppbV	95
91) isopropylbenzene	18.03	105	13655	0.212	ppbV	97
92) bromobenzene	18.11	77	7488	0.211	ppbV	99
93) 2-chlorotoluene	18.43	126	3716	0.197	ppbV	100
94) n-propylbenzene	18.47	120	4419	0.193	ppbV	99
95) 4-chlorotoluene	18.49	126	3610	0.202	ppbV	99
96) 4-ethyl toluene	18.58	105	14134	0.191	ppbV	99
97) 1,3,5-trimethylbenzene	18.65	105	12085	0.208	ppbV	99
98) tert-butylbenzene	18.99	119	12987	0.200	ppbV	98
99) 1,2,4-trimethylbenzene	18.99	105	11404	0.198	ppbV	95
100) decane	19.07	57	11047	0.215	ppbV	95
101) Benzyl Chloride	19.12	91	6227	0.157	ppbV	99
102) 1,3-dichlorobenzene	19.13	146	6667	0.215	ppbV	99
103) 1,4-dichlorobenzene	19.18	146	6540	0.198	ppbV	96
104) sec-butylbenzene	19.22	105	17600	0.204	ppbV	97
105) 1,2,3-trimethylbenzene	19.35	105	10898	0.178	ppbV	98
106) p-isopropyltoluene	19.35	119	15477	0.190	ppbV	99
107) 1,2-dichlorobenzene	19.48	146	6460	0.200	ppbV	98
108) n-butylbenzene	19.71	91	12317	0.173	ppbV	98
109) indan	19.52	117	10977	0.164	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47289.D
 Acq On : 15 Jan 2020 4:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:40:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.61	115	7736	0.146	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.86	75	2747	0.168	ppbV	90
112) undecane	20.13	57	11213	0.181	ppbV	92
113) 1,2,4,5-tetramethylben...	20.35	119	10084	0.152	ppbV	98
114) dodecane	21.03	57	9799	0.142	ppbV	94
115) 1,2,4-trichlorobenzene	20.98	180	3174	0.126	ppbV	97
116) naphthalene	21.10	128	9590	0.122	ppbV	98
117) 1,2,3-trichlorobenzene	21.35	180	4163	0.134	ppbV	99
118) benzothiophene	21.17	134	5633	0.139	ppbV #	96
119) hexachlorobutadiene	21.42	225	5673	0.200	ppbV	94
120) 2-methylnaphthalene	22.21	142	965	0.085	ppbV #	77
121) 1-methylnaphthalene	22.41	142	3212	0.115	ppbV	98

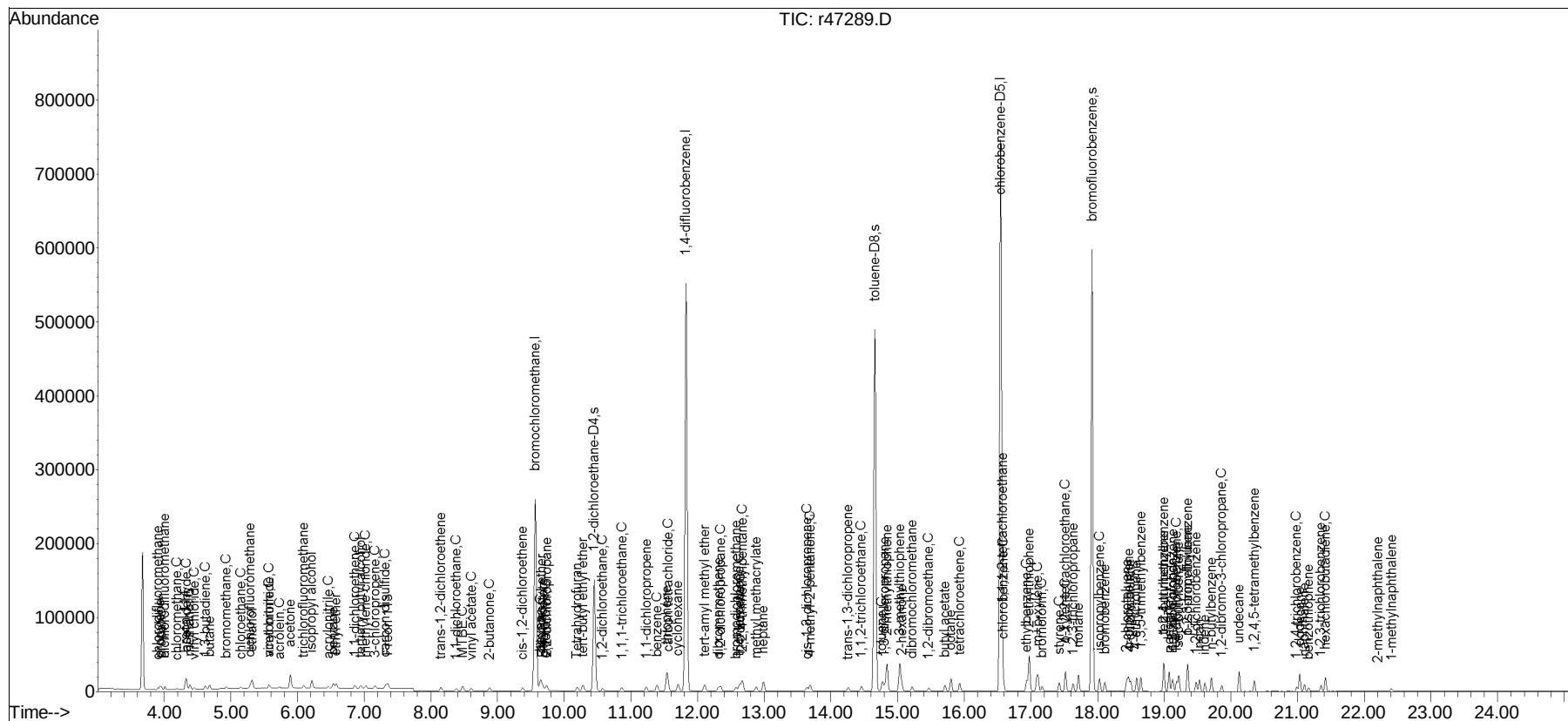
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Data File   : r47289.D
Acq On      : 15 Jan 2020    4:16 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD0.2
Misc        : WG1330812
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Jan 16 10:40:38 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:36:24 2020
Response via : Initial Calibration

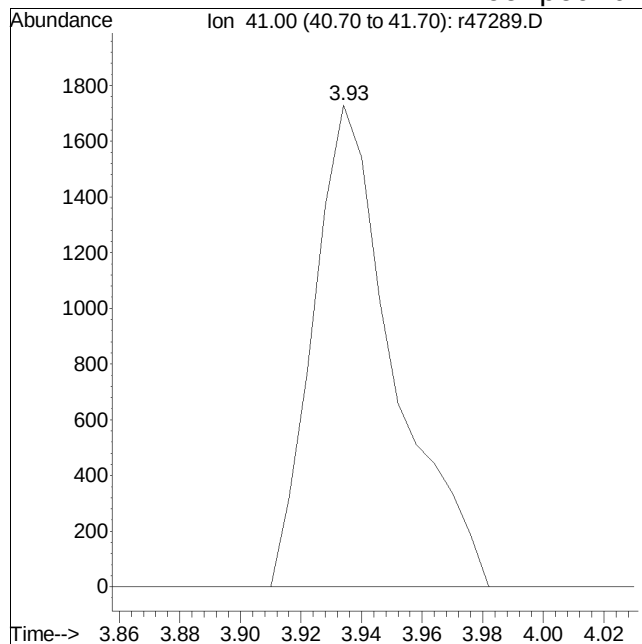
Sub List : Default - All compounds listed20\01\200115T_I\r47293.D



Manual Integration/Negative Proof Report

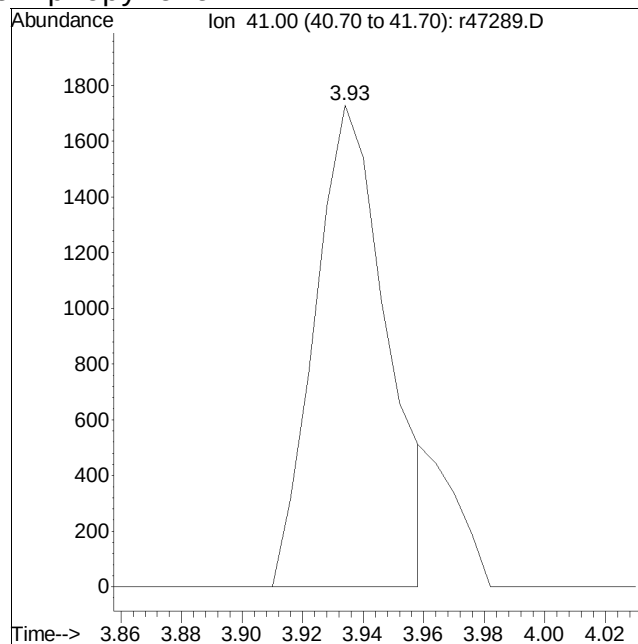
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Data File : r47289.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:4: 6 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 1/16/2020 10:36 am

Compound #3: propylene



Original Peak Response = 3199

M4 = Poor automated baseline construction.

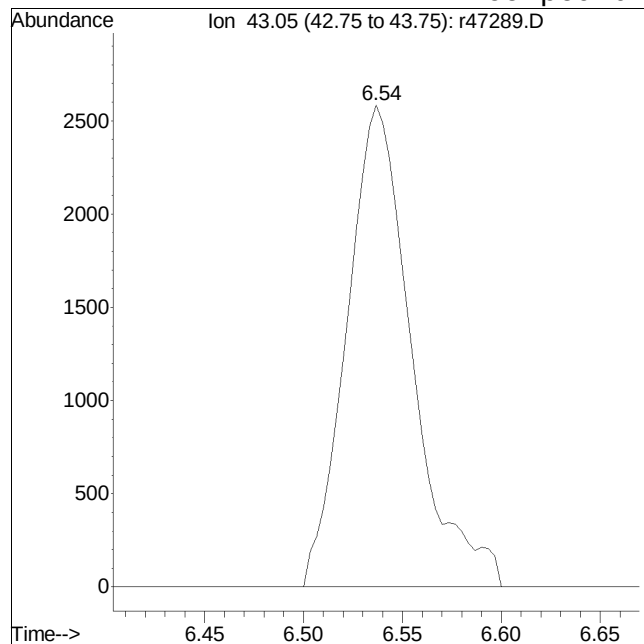


Manual Peak Response = 2852 M4

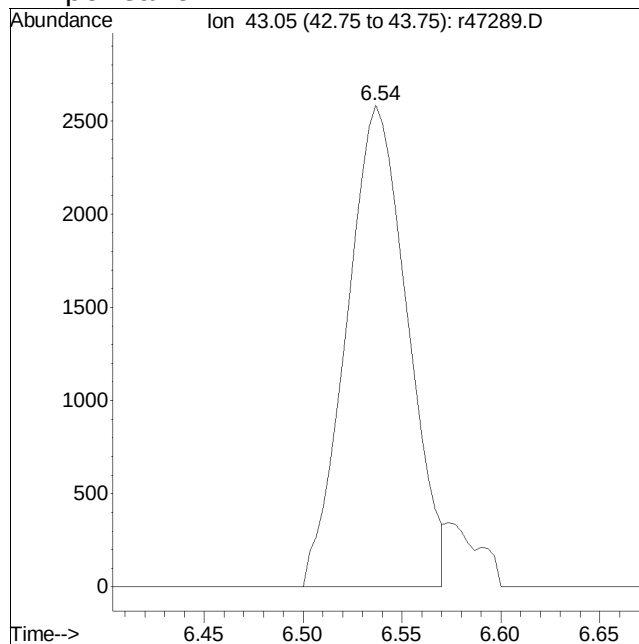
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47289.D Operator : AIRPIANO4:RY
Date Inj'd : 1/15/2020 0:4: 6 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 1/16/2020 10:36 am

Compound #24: pentane



Original Peak Response = 5908



Manual Peak Response = 5509 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47290.D
 Acq On : 15 Jan 2020 4:55 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:41:53 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.57	49	195908	10.000	ppbV	0.00
Standard Area = 207093			Recovery =		94.60%	
43) 1,4-difluorobenzene	11.83	114	569258	10.000	ppbV	0.00
Standard Area = 612436			Recovery =		92.95%	
67) chlorobenzene-D5	16.54	54	102641	10.000	ppbV	0.00
Standard Area = 109807			Recovery =		93.47%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.45	65	122607	10.186	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.86%	
69) toluene-D8	14.66	98	416830	9.726	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		97.26%	
90) bromofluorobenzene	17.92	95	292297	9.610	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		96.10%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.90	51	7646	0.555	ppbV	96
3) propylene	3.93	41	6398M4	0.537	ppbV	
4) propane	3.96	29	6099	0.542	ppbV	93
5) dichlorodifluoromethane	4.01	85	9094	0.600	ppbV	98
6) chloromethane	4.20	50	4865	0.564	ppbV	99
7) Freon-114	4.32	85	12258	0.597	ppbV	99
8) methanol	4.38	31	11081	2.866	ppbV #	75
9) vinyl chloride	4.46	62	5968	0.579	ppbV	100
10) 1,3-butadiene	4.62	54	4940	0.548	ppbV	93
11) butane	4.68	43	10776	0.581	ppbV	98
12) acetaldehyde	4.34	29	14141	2.663	ppbV	95
13) bromomethane	4.94	94	4574	0.586	ppbV	99
14) chloroethane	5.15	64	3336	0.587	ppbV	100
15) ethanol	5.32	31	21815	2.783	ppbV	100
16) dichlorofluoromethane	5.29	67	10479	0.591	ppbV	100
17) vinyl bromide	5.58	106	4802	0.559	ppbV	98
18) acrolein	5.73	56	2638	0.559	ppbV #	65
19) acetone	5.89	43	49979	2.778	ppbV	95
20) acetonitrile	5.57	41	5803	0.570	ppbV	90
21) trichlorofluoromethane	6.09	101	8790	0.608	ppbV	100
22) isopropyl alcohol	6.21	45	30648	1.375	ppbV	100
23) acrylonitrile	6.46	53	4878	0.558	ppbV	95
24) pentane	6.54	43	13297	0.580	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47290.D
 Acq On : 15 Jan 2020 4:55 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:41:53 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.58	31	8430	0.551	ppbV	98
26) 1,1-dichloroethene	6.86	61	7933	0.582	ppbV	98
27) tertiary butyl alcohol	6.94	59	10868	0.560	ppbV #	92
28) methylene chloride	7.02	49	6965	0.579	ppbV	97
29) 3-chloropropene	7.16	41	10204	0.581	ppbV	97
30) carbon disulfide	7.32	76	17584	0.556	ppbV #	79
31) Freon 113	7.35	101	9976	0.580	ppbV	100
32) trans-1,2-dichloroethene	8.15	61	8999	0.585	ppbV	98
33) 1,1-dichloroethane	8.38	63	10615	0.563	ppbV	98
34) MTBE	8.47	73	16232	0.542	ppbV	97
35) vinyl acetate	8.60	43	15492	0.526	ppbV	97
36) 2-butanone	8.88	43	15243	0.562	ppbV	99
37) cis-1,2-dichloroethene	9.38	61	7604	0.582	ppbV	98
38) Ethyl Acetate	9.68	61	2329	0.556	ppbV	98
39) chloroform	9.72	83	9504	0.578	ppbV	98
40) Tetrahydrofuran	10.19	42	10628	0.507	ppbV	100
41) 2,2-dichloropropane	9.74	77	7938	0.562	ppbV	97
42) 1,2-dichloroethane	10.57	62	7705	0.573	ppbV	99
44) hexane	9.64	57	10974	0.558	ppbV	97
45) diisopropyl ether	9.65	87	5737	0.558	ppbV	93
46) tert-butyl ethyl ether	10.28	59	21057	0.519	ppbV	99
48) 1,1,1-trichloroethane	10.87	97	9772	0.561	ppbV	96
49) 1,1-dichloropropene	11.23	75	8535	0.519	ppbV	97
50) benzene	11.39	78	20414	0.543	ppbV	99
51) thiophene	11.54	84	46433	0.544	ppbV	99
52) carbon tetrachloride	11.57	117	8467	0.541	ppbV	100
53) cyclohexane	11.71	56	12874	0.526	ppbV	99
54) tert-amyl methyl ether	12.10	73	18135	0.501	ppbV	99
55) dibromomethane	12.31	93	6007	0.547	ppbV	99
56) 1,2-dichloropropane	12.35	63	8096	0.555	ppbV	98
57) bromodichloromethane	12.57	83	12104	0.543	ppbV	100
58) 1,4-dioxane	12.63	88	4937	0.498	ppbV	90
59) trichloroethene	12.62	130	7756	0.528	ppbV	99
60) 2,2,4-trimethylpentane	12.67	57	40686	0.529	ppbV	97
61) methyl methacrylate	12.88	41	11878	0.408	ppbV	98
62) heptane	12.99	43	16866	0.492	ppbV	98
63) cis-1,3-dichloropropene	13.64	75	9710	0.510	ppbV	96
64) 4-methyl-2-pentanone	13.68	43	19135	0.481	ppbV	98
65) trans-1,3-dichloropropene	14.26	75	8898	0.484	ppbV	95
66) 1,1,2-trichloroethane	14.46	97	7366	0.531	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47290.D
 Acq On : 15 Jan 2020 4:55 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:41:53 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	14.77	91	26106	0.549	ppbV	98
70)	2-methylthiophene	14.84	97	75848	0.533	ppbV	99
71)	1,3-dichloropropane	14.80	76	11580	0.526	ppbV	99
72)	2-hexanone	15.06	43	18101	0.483	ppbV	97
73)	3-methylthiophene	15.03	97	78243	0.529	ppbV	99
74)	dibromochloromethane	15.22	129	10137	0.485	ppbV	98
75)	1,2-dibromoethane	15.47	107	10798	0.526	ppbV	98
76)	butyl acetate	15.71	73	2616	0.380	ppbV	97
77)	octane	15.80	85	9893	0.489	ppbV	97
78)	tetrachloroethene	15.93	166	10052	0.532	ppbV	99
79)	1,1,1,2-tetrachloroethane	16.57	131	7677	0.498	ppbV	99
80)	chlorobenzene	16.58	112	19234	0.545	ppbV	99
81)	ethylbenzene	16.93	91	30795	0.510	ppbV	99
82)	2-ethylthiophene	16.98	97	86135	0.529	ppbV	98
83)	m+p-xylene	17.10	91	54757	1.074	ppbV	99
84)	bromoform	17.17	173	9308	0.446	ppbV	99
85)	styrene	17.43	104	18485	0.472	ppbV	98
86)	1,1,2,2-tetrachloroethane	17.52	83	18733	0.549	ppbV	99
87)	o-xylene	17.52	91	26477	0.517	ppbV	99
88)	1,2,3-trichloropropane	17.63	75	13677	0.516	ppbV	98
89)	nonane	17.71	43	23666	0.479	ppbV	97
91)	isopropylbenzene	18.02	105	32621	0.505	ppbV	98
92)	bromobenzene	18.11	77	18211	0.512	ppbV	95
93)	2-chlorotoluene	18.43	126	8838	0.467	ppbV	92
94)	n-propylbenzene	18.46	120	10685	0.467	ppbV	89
95)	4-chlorotoluene	18.49	126	8290	0.462	ppbV	95
96)	4-ethyl toluene	18.58	105	35629	0.482	ppbV	99
97)	1,3,5-trimethylbenzene	18.65	105	29968	0.516	ppbV	98
98)	tert-butylbenzene	18.99	119	32803	0.504	ppbV	99
99)	1,2,4-trimethylbenzene	18.99	105	28864	0.500	ppbV	97
100)	decane	19.07	57	27365	0.533	ppbV	94
101)	Benzyl Chloride	19.12	91	16406	0.413	ppbV	99
102)	1,3-dichlorobenzene	19.13	146	15386	0.496	ppbV	98
103)	1,4-dichlorobenzene	19.18	146	16219	0.490	ppbV	97
104)	sec-butylbenzene	19.22	105	43033	0.498	ppbV	97
105)	1,2,3-trimethylbenzene	19.35	105	26502	0.433	ppbV	99
106)	p-isopropyltoluene	19.35	119	39059	0.479	ppbV	96
107)	1,2-dichlorobenzene	19.48	146	16219	0.502	ppbV	98
108)	n-butylbenzene	19.71	91	30969	0.434	ppbV	99
109)	indan	19.52	117	28417	0.423	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47290.D
 Acq On : 15 Jan 2020 4:55 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:41:53 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

110)	indene	19.61	115	20722	0.392	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.86	75	6760	0.413	ppbV	89
112)	undecane	20.13	57	28419	0.457	ppbV	94
113)	1,2,4,5-tetramethylben...	20.35	119	25372	0.382	ppbV	98
114)	dodecane	21.03	57	26534	0.385	ppbV	96
115)	1,2,4-trichlorobenzene	20.98	180	8694	0.344	ppbV	99
116)	naphthalene	21.10	128	25130	0.319	ppbV	99
117)	1,2,3-trichlorobenzene	21.35	180	10804	0.348	ppbV	97
118)	benzothiophene	21.17	134	15237	0.374	ppbV	97
119)	hexachlorobutadiene	21.42	225	13974	0.492	ppbV	94
120)	2-methylnaphthalene	22.21	142	3045	0.269	ppbV	93
121)	1-methylnaphthalene	22.40	142	10163	0.364	ppbV	97

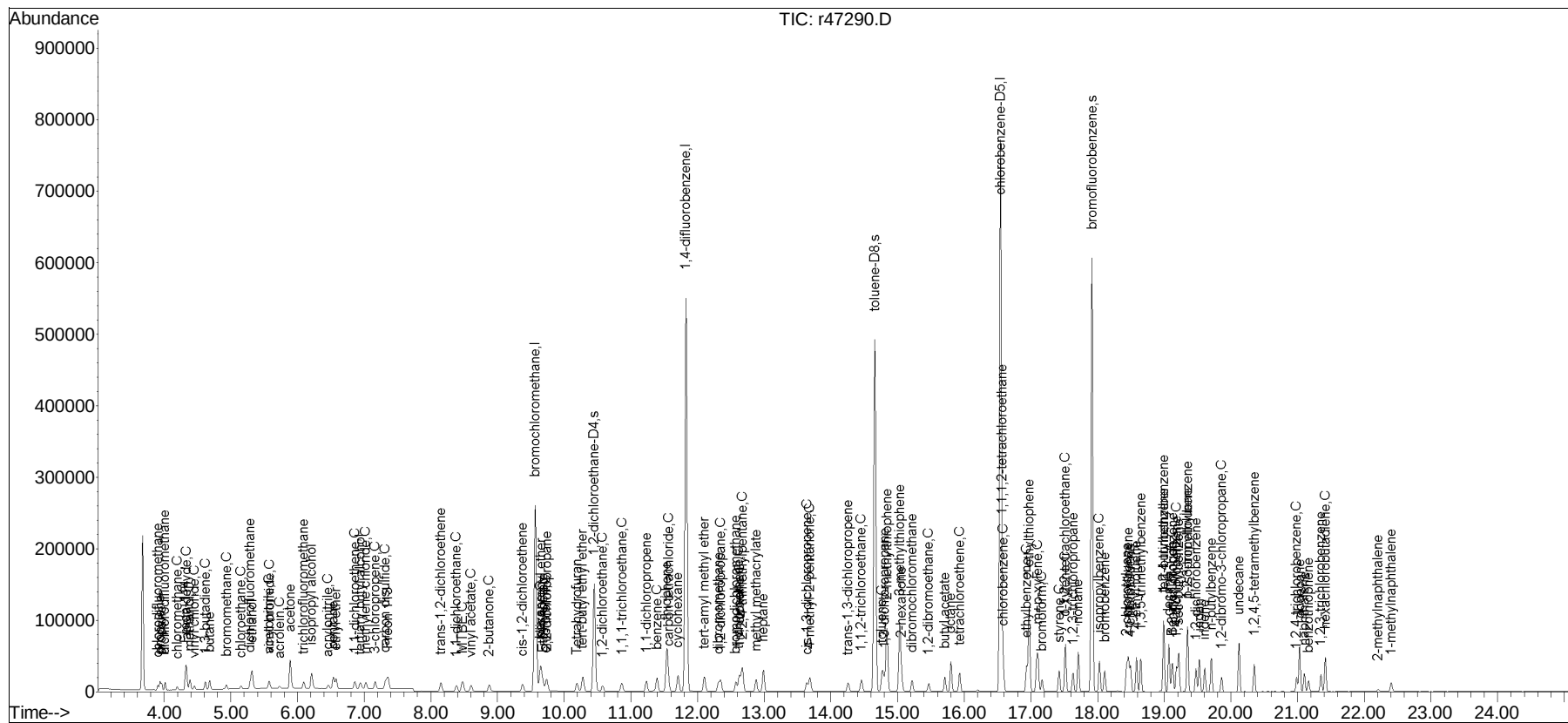
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Data File   : r47290.D
Acq On      : 15 Jan 2020    4:55 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD0.5
Misc        : WG1330812
ALS Vial    : 0    Sample Multiplier: 1
```

Quant Time: Jan 16 10:41:53 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:36:24 2020
Response via : Initial Calibration

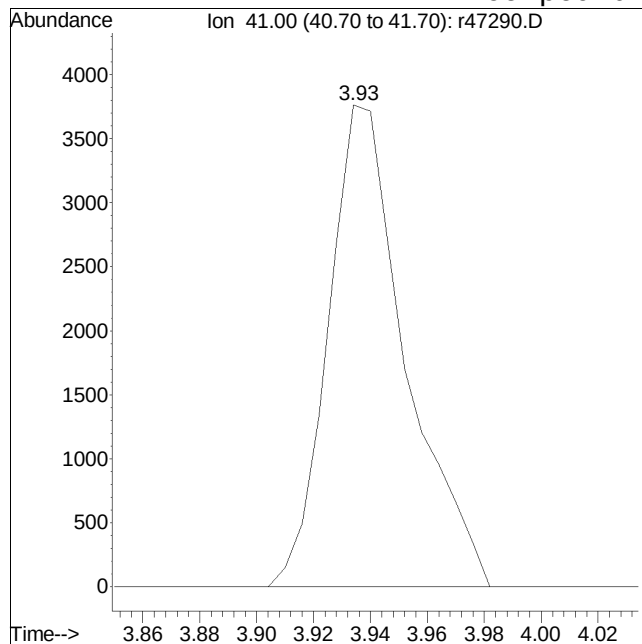
Sub List : Default - All compounds listed20\01\200115T_I\r47293.D



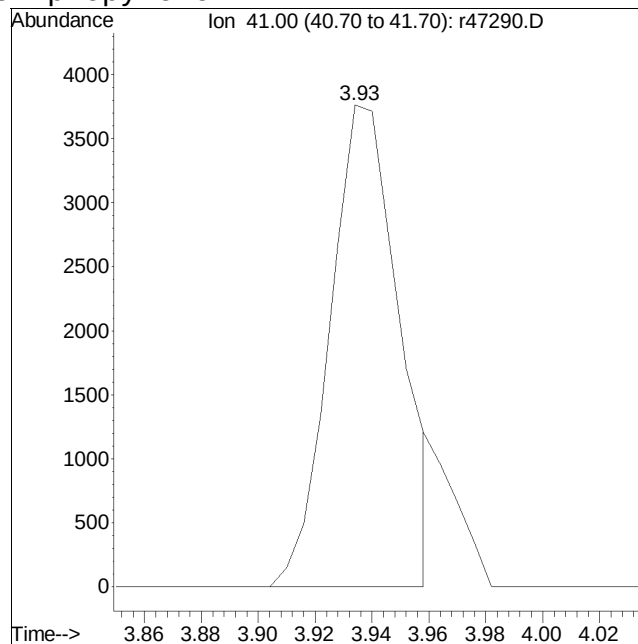
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47290.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:4: 5 Instrument :
Sample : IT015-SIMSTD0.5 Quant Date : 1/16/2020 10:36 am

Compound #3: propylene



Original Peak Response = 7105



Manual Peak Response = 6398 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47291.D
 Acq On : 15 Jan 2020 5:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:43:22 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.57	49	197785	10.000	ppbV	0.00
Standard Area = 207093			Recovery =		95.51%	
43) 1,4-difluorobenzene	11.83	114	575250	10.000	ppbV	0.00
Standard Area = 612436			Recovery =		93.93%	
67) chlorobenzene-D5	16.54	54	104536	10.000	ppbV	0.00
Standard Area = 109807			Recovery =		95.20%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.45	65	126967	10.438	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		104.38%	
69) toluene-D8	14.66	98	430884	9.872	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.72%	
90) bromofluorobenzene	17.92	95	303817	9.808	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.08%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.90	51	15380	1.107	ppbV	99
3) propylene	3.93	41	13049M4	1.085	ppbV	
4) propane	3.96	29	12484	1.100	ppbV	96
5) dichlorodifluoromethane	4.01	85	18265	1.193	ppbV	100
6) chloromethane	4.19	50	9591	1.101	ppbV	100
7) Freon-114	4.32	85	24220	1.169	ppbV	99
8) methanol	4.38	31	21371	5.475	ppbV #	86
9) vinyl chloride	4.45	62	11676	1.121	ppbV	100
10) 1,3-butadiene	4.62	54	10011	1.101	ppbV	96
11) butane	4.68	43	21315	1.138	ppbV	98
12) acetaldehyde	4.34	29	27066	5.050	ppbV	98
13) bromomethane	4.93	94	9123	1.158	ppbV	100
14) chloroethane	5.15	64	6597	1.150	ppbV	99
15) ethanol	5.31	31	42697	5.395	ppbV	99
16) dichlorofluoromethane	5.29	67	20756	1.159	ppbV	100
17) vinyl bromide	5.57	106	9666	1.114	ppbV	98
18) acrolein	5.73	56	5260	1.103	ppbV #	86
19) acetone	5.88	43	97897	5.390	ppbV	96
20) acetonitrile	5.57	41	11677	1.136	ppbV	97
21) trichlorofluoromethane	6.09	101	17253	1.183	ppbV	95
22) isopropyl alcohol	6.20	45	59093	2.625	ppbV	100
23) acrylonitrile	6.46	53	9720	1.101	ppbV	99
24) pentane	6.53	43	26223	1.133	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47291.D
 Acq On : 15 Jan 2020 5:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:43:22 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.57	31	16465	1.066	ppbV	98
26) 1,1-dichloroethene	6.86	61	15609	1.134	ppbV	99
27) tertiary butyl alcohol	6.93	59	21884	1.116	ppbV	98
28) methylene chloride	7.02	49	14048	1.156	ppbV	99
29) 3-chloropropene	7.16	41	19860	1.120	ppbV	98
30) carbon disulfide	7.31	76	35391	1.108	ppbV #	90
31) Freon 113	7.35	101	19887	1.145	ppbV	99
32) trans-1,2-dichloroethene	8.15	61	17340	1.117	ppbV	99
33) 1,1-dichloroethane	8.38	63	21604	1.134	ppbV	100
34) MTBE	8.47	73	32726	1.083	ppbV	99
35) vinyl acetate	8.60	43	31352	1.054	ppbV	99
36) 2-butanone	8.87	43	30338	1.108	ppbV	100
37) cis-1,2-dichloroethene	9.38	61	14946	1.133	ppbV	97
38) Ethyl Acetate	9.68	61	4467	1.056	ppbV	93
39) chloroform	9.72	83	18883	1.137	ppbV	99
40) Tetrahydrofuran	10.18	42	21162	1.000	ppbV	99
41) 2,2-dichloropropane	9.74	77	15870	1.114	ppbV	96
42) 1,2-dichloroethane	10.57	62	15177	1.118	ppbV	98
44) hexane	9.63	57	21748	1.094	ppbV	94
45) diisopropyl ether	9.65	87	11480	1.105	ppbV	91
46) tert-butyl ethyl ether	10.28	59	42497	1.036	ppbV	99
48) 1,1,1-trichloroethane	10.86	97	19195	1.090	ppbV	99
49) 1,1-dichloropropene	11.23	75	17187	1.035	ppbV	98
50) benzene	11.39	78	40775	1.072	ppbV	99
51) thiophene	11.54	84	94990	1.100	ppbV	100
52) carbon tetrachloride	11.56	117	17178	1.087	ppbV	98
53) cyclohexane	11.71	56	25974	1.050	ppbV	98
54) tert-amyl methyl ether	12.10	73	37056	1.013	ppbV	98
55) dibromomethane	12.31	93	12063	1.088	ppbV	96
56) 1,2-dichloropropane	12.35	63	16043	1.089	ppbV	96
57) bromodichloromethane	12.57	83	24252	1.077	ppbV	99
58) 1,4-dioxane	12.63	88	10238	1.022	ppbV	95
59) trichloroethene	12.62	130	15335	1.033	ppbV	99
60) 2,2,4-trimethylpentane	12.67	57	83068	1.068	ppbV	100
61) methyl methacrylate	12.87	41	24675	0.840	ppbV	99
62) heptane	12.99	43	34920	1.008	ppbV	97
63) cis-1,3-dichloropropene	13.63	75	19367	1.006	ppbV	98
64) 4-methyl-2-pentanone	13.68	43	39455	0.982	ppbV	99
65) trans-1,3-dichloropropene	14.26	75	18486	0.996	ppbV	95
66) 1,1,2-trichloroethane	14.46	97	14816	1.056	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47291.D
 Acq On : 15 Jan 2020 5:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:43:22 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.77	91	51592	1.065	ppbV	100
70) 2-methylthiophene	14.84	97	155167	1.070	ppbV	99
71) 1,3-dichloropropane	14.80	76	23810	1.062	ppbV	100
72) 2-hexanone	15.06	43	37859	0.992	ppbV	96
73) 3-methylthiophene	15.03	97	161275	1.070	ppbV	99
74) dibromochloromethane	15.22	129	20782	0.976	ppbV	98
75) 1,2-dibromoethane	15.47	107	21717	1.040	ppbV	98
76) butyl acetate	15.71	73	5805	0.828	ppbV	92
77) octane	15.80	85	20896	1.014	ppbV	97
78) tetrachloroethene	15.93	166	20513	1.065	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.57	131	15400	0.982	ppbV	97
80) chlorobenzene	16.58	112	38071	1.059	ppbV	99
81) ethylbenzene	16.93	91	63191	1.027	ppbV	98
82) 2-ethylthiophene	16.98	97	178478	1.076	ppbV	97
83) m+p-xylene	17.10	91	110243	2.123	ppbV	100
84) bromoform	17.17	173	19034	0.896	ppbV	97
85) styrene	17.43	104	38521	0.966	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.52	83	37359	1.075	ppbV	100
87) o-xylene	17.52	91	54765	1.051	ppbV	98
88) 1,2,3-trichloropropane	17.63	75	27411	1.015	ppbV	98
89) nonane	17.71	43	49666	0.986	ppbV	97
91) isopropylbenzene	18.02	105	65860	1.001	ppbV	98
92) bromobenzene	18.11	77	36775	1.016	ppbV	95
93) 2-chlorotoluene	18.43	126	18254	0.947	ppbV	93
94) n-propylbenzene	18.46	120	22916	0.984	ppbV	99
95) 4-chlorotoluene	18.49	126	17266	0.946	ppbV	93
96) 4-ethyl toluene	18.58	105	75365	1.000	ppbV	98
97) 1,3,5-trimethylbenzene	18.65	105	62795	1.061	ppbV	97
98) tert-butylbenzene	18.99	119	67407	1.017	ppbV	99
99) 1,2,4-trimethylbenzene	18.99	105	60574	1.031	ppbV	99
100) decane	19.07	57	56384	1.077	ppbV	94
101) Benzyl Chloride	19.12	91	35825	0.886	ppbV	98
102) 1,3-dichlorobenzene	19.13	146	31045	0.983	ppbV	99
103) 1,4-dichlorobenzene	19.18	146	33295	0.987	ppbV	99
104) sec-butylbenzene	19.22	105	88619	1.006	ppbV	98
105) 1,2,3-trimethylbenzene	19.35	105	55616	0.892	ppbV	100
106) p-isopropyltoluene	19.35	119	81776	0.984	ppbV	98
107) 1,2-dichlorobenzene	19.48	146	33061	1.005	ppbV	98
108) n-butylbenzene	19.71	91	67087	0.924	ppbV	98
109) indan	19.52	117	58741	0.859	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47291.D
 Acq On : 15 Jan 2020 5:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:43:22 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.61	115	44546	0.827	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.86	75	14349	0.861	ppbV	92
112) undecane	20.13	57	61198	0.966	ppbV	94
113) 1,2,4,5-tetramethylben...	20.35	119	55149	0.816	ppbV	97
114) dodecane	21.03	57	58151	0.829	ppbV	96
115) 1,2,4-trichlorobenzene	20.98	180	20694	0.804	ppbV	100
116) naphthalene	21.10	128	56467	0.703	ppbV	99
117) 1,2,3-trichlorobenzene	21.35	180	23473	0.743	ppbV	99
118) benzothiophene	21.16	134	37361	0.901	ppbV	99
119) hexachlorobutadiene	21.42	225	28753	0.994	ppbV	97
120) 2-methylnaphthalene	22.21	142	7461	0.648	ppbV	99
121) 1-methylnaphthalene	22.40	142	23216	0.817	ppbV	98

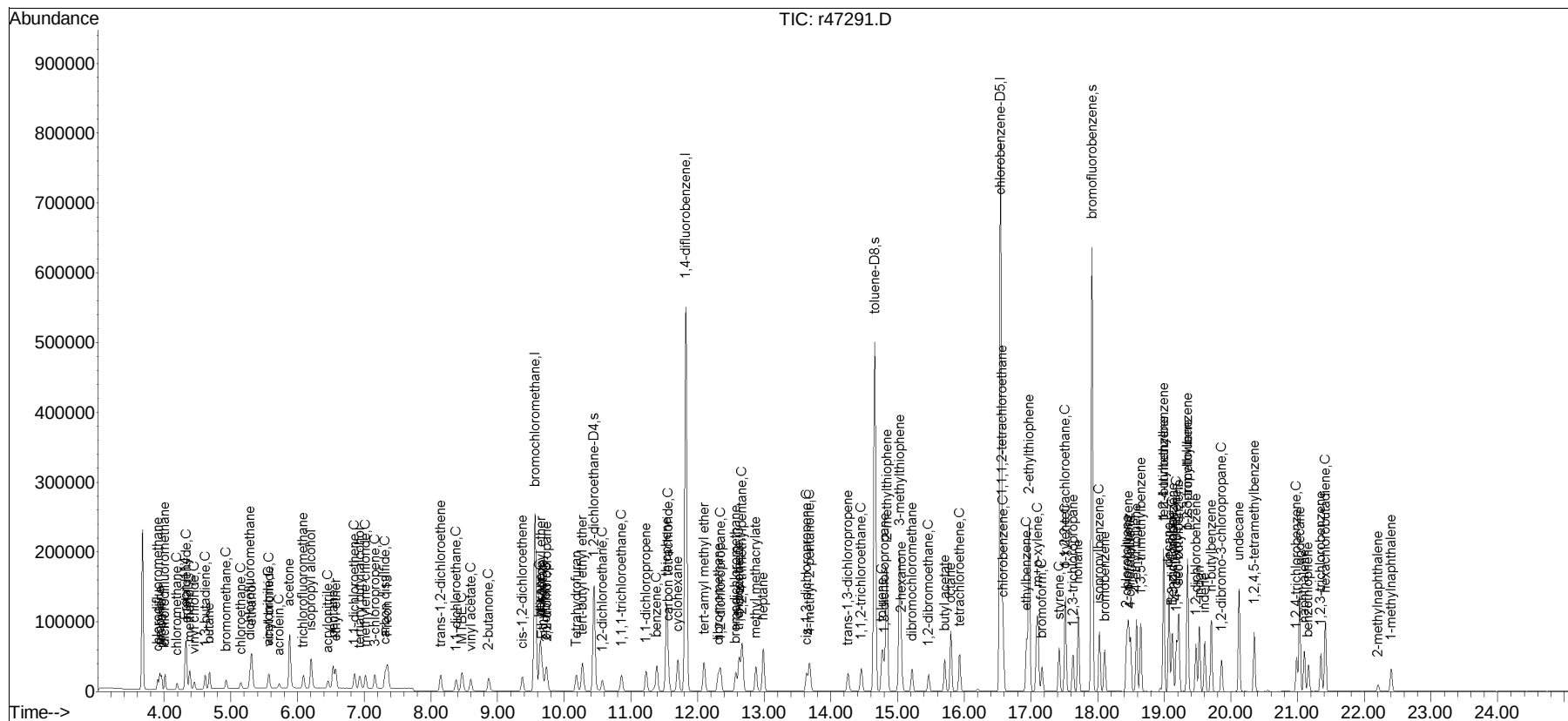
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Data File   : r47291.D
Acq On      : 15 Jan 2020    5:37 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD1.0
Misc        : WG1330812
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Jan 16 10:43:22 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:36:24 2020
Response via : Initial Calibration

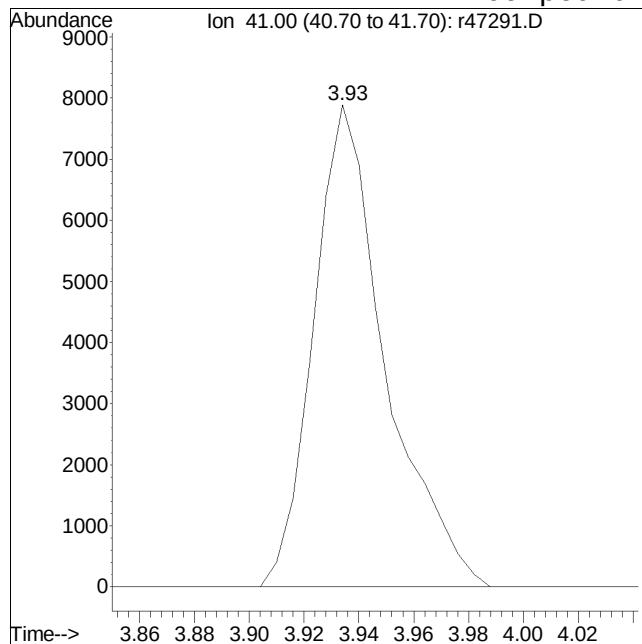
Sub List : Default - All compounds listed20\01\200115T_I\r47293.D



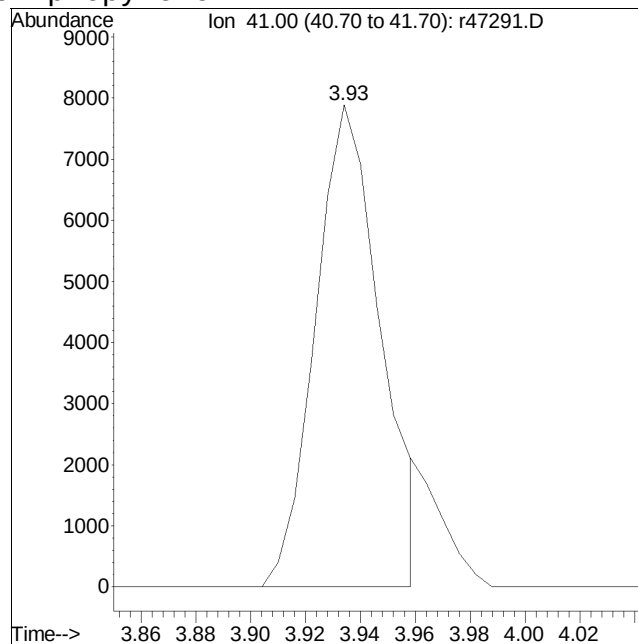
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47291.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:5: 7 Instrument :
Sample : IT015-SIMSTD1.0 Quant Date : 1/16/2020 10:37 am

Compound #3: propylene



Original Peak Response = 14333



Manual Peak Response = 13049 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47292.D
 Acq On : 15 Jan 2020 6:17 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:44:46 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.56	49	201958	10.000	ppbV	0.00
Standard Area = 207093			Recovery =		97.52%	
43) 1,4-difluorobenzene	11.82	114	591878	10.000	ppbV	0.00
Standard Area = 612436			Recovery =		96.64%	
67) chlorobenzene-D5	16.54	54	106729	10.000	ppbV	0.00
Standard Area = 109807			Recovery =		97.20%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.45	65	126730	10.126	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.26%	
69) toluene-D8	14.66	98	436907	9.804	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.04%	
90) bromofluorobenzene	17.92	95	304729	9.635	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		96.35%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.90	51	72170	5.086	ppbV	99
3) propylene	3.93	41	63021M4	5.132	ppbV	
4) propane	3.96	29	58252	5.025	ppbV	99
5) dichlorodifluoromethane	4.01	85	83322	5.330	ppbV	99
6) chloromethane	4.19	50	45819	5.149	ppbV	100
7) Freon-114	4.32	85	111872	5.289	ppbV	100
8) methanol	4.38	31	103094	25.865	ppbV	98
9) vinyl chloride	4.45	62	55657	5.235	ppbV	99
10) 1,3-butadiene	4.61	54	47773	5.145	ppbV	97
11) butane	4.68	43	99762	5.218	ppbV	99
12) acetaldehyde	4.33	29	144857	26.467	ppbV	99
13) bromomethane	4.93	94	42255	5.252	ppbV	98
14) chloroethane	5.15	64	30448	5.198	ppbV	99
15) ethanol	5.31	31	193308	23.919	ppbV	100
16) dichlorofluoromethane	5.28	67	97030	5.306	ppbV	99
17) vinyl bromide	5.57	106	46427	5.239	ppbV	100
18) acrolein	5.72	56	24903	5.115	ppbV	97
19) acetone	5.87	43	502759	27.108	ppbV	99
20) acetonitrile	5.56	41	55180	5.258	ppbV	100
21) trichlorofluoromethane	6.09	101	80904	5.432	ppbV	99
22) isopropyl alcohol	6.20	45	303127	13.188	ppbV	100
23) acrylonitrile	6.45	53	46809	5.191	ppbV	98
24) pentane	6.53	43	124874	5.283	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47292.D
 Acq On : 15 Jan 2020 6:17 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:44:46 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.57	31	81245	5.150	ppbV	99
26) 1,1-dichloroethene	6.86	61	74391	5.294	ppbV	99
27) tertiary butyl alcohol	6.92	59	104916	5.242	ppbV	99
28) methylene chloride	7.02	49	64486	5.199	ppbV	99
29) 3-chloropropene	7.16	41	94305	5.210	ppbV	100
30) carbon disulfide	7.31	76	169711	5.205	ppbV	99
31) Freon 113	7.35	101	93044	5.247	ppbV	99
32) trans-1,2-dichloroethene	8.14	61	83550	5.270	ppbV	100
33) 1,1-dichloroethane	8.38	63	101851	5.236	ppbV	100
34) MTBE	8.46	73	158292	5.131	ppbV	99
35) vinyl acetate	8.60	43	153878	5.064	ppbV	99
36) 2-butanone	8.86	43	143895	5.148	ppbV	100
37) cis-1,2-dichloroethene	9.38	61	70676	5.245	ppbV	99
38) Ethyl Acetate	9.68	61	22187	5.139	ppbV	100
39) chloroform	9.72	83	88870	5.242	ppbV	99
40) Tetrahydrofuran	10.18	42	107696	4.982	ppbV	100
41) 2,2-dichloropropane	9.74	77	76247	5.240	ppbV	98
42) 1,2-dichloroethane	10.57	62	71754	5.177	ppbV	99
44) hexane	9.63	57	106808	5.222	ppbV	97
45) diisopropyl ether	9.64	87	55293	5.174	ppbV	95
46) tert-butyl ethyl ether	10.27	59	217381	5.149	ppbV	100
48) 1,1,1-trichloroethane	10.86	97	93054	5.136	ppbV	100
49) 1,1-dichloropropene	11.23	75	86669	5.072	ppbV	98
50) benzene	11.39	78	199960	5.111	ppbV	99
51) thiophene	11.53	84	467744	5.267	ppbV	99
52) carbon tetrachloride	11.56	117	83825	5.155	ppbV	99
53) cyclohexane	11.71	56	129904	5.102	ppbV	99
54) tert-amyl methyl ether	12.09	73	188936	5.021	ppbV	99
55) dibromomethane	12.31	93	58145	5.096	ppbV	99
56) 1,2-dichloropropane	12.34	63	77255	5.096	ppbV	99
57) bromodichloromethane	12.57	83	118500	5.116	ppbV	100
58) 1,4-dioxane	12.62	88	51700	5.014	ppbV	96
59) trichloroethene	12.62	130	76871	5.034	ppbV	99
60) 2,2,4-trimethylpentane	12.67	57	414269	5.176	ppbV	100
61) methyl methacrylate	12.87	41	151034	4.995	ppbV	100
62) heptane	12.99	43	180134	5.054	ppbV	99
63) cis-1,3-dichloropropene	13.63	75	99493	5.022	ppbV	99
64) 4-methyl-2-pentanone	13.68	43	209166	5.060	ppbV	100
65) trans-1,3-dichloropropene	14.26	75	94657	4.955	ppbV	98
66) 1,1,2-trichloroethane	14.46	97	72865	5.048	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47292.D
 Acq On : 15 Jan 2020 6:17 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:44:46 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.77	91	253918	5.132	ppbV	99
70) 2-methylthiophene	14.83	97	775639	5.237	ppbV	99
71) 1,3-dichloropropane	14.80	76	117968	5.155	ppbV	99
72) 2-hexanone	15.05	43	201431	5.169	ppbV	98
73) 3-methylthiophene	15.03	97	805978	5.237	ppbV	99
74) dibromochloromethane	15.22	129	108953	5.012	ppbV	99
75) 1,2-dibromoethane	15.47	107	108922	5.107	ppbV	99
76) butyl acetate	15.70	73	34628	4.838	ppbV	99
77) octane	15.80	85	106782	5.073	ppbV	98
78) tetrachloroethene	15.93	166	101142	5.145	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.57	131	80008	4.995	ppbV	99
80) chlorobenzene	16.58	112	188850	5.143	ppbV	100
81) ethylbenzene	16.93	91	319908	5.093	ppbV	99
82) 2-ethylthiophene	16.98	97	888822	5.250	ppbV	98
83) m+p-xylene	17.10	91	539424	10.176	ppbV	99
84) bromoform	17.17	173	104633	4.826	ppbV	99
85) styrene	17.43	104	201979	4.963	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.52	83	181947	5.129	ppbV	99
87) o-xylene	17.52	91	272484	5.120	ppbV	99
88) 1,2,3-trichloropropane	17.63	75	139424	5.056	ppbV	99
89) nonane	17.71	43	261845	5.094	ppbV	99
91) isopropylbenzene	18.02	105	338782	5.044	ppbV	100
92) bromobenzene	18.11	77	187555	5.076	ppbV	99
93) 2-chlorotoluene	18.43	126	97384	4.949	ppbV	93
94) n-propylbenzene	18.46	120	119449	5.022	ppbV	97
95) 4-chlorotoluene	18.49	126	91702	4.919	ppbV	98
96) 4-ethyl toluene	18.58	105	389525	5.063	ppbV	99
97) 1,3,5-trimethylbenzene	18.65	105	307334	5.088	ppbV	100
98) tert-butylbenzene	18.99	119	349951	5.173	ppbV	99
99) 1,2,4-trimethylbenzene	18.99	105	305564	5.093	ppbV	99
100) decane	19.07	57	288675	5.403	ppbV	97
101) Benzyl Chloride	19.11	91	216733	5.250	ppbV	100
102) 1,3-dichlorobenzene	19.13	146	152476	4.728	ppbV	99
103) 1,4-dichlorobenzene	19.18	146	173502	5.038	ppbV	97
104) sec-butylbenzene	19.22	105	456271	5.074	ppbV	99
105) 1,2,3-trimethylbenzene	19.35	105	322740	5.069	ppbV	99
106) p-isopropyltoluene	19.35	119	439506	5.178	ppbV	97
107) 1,2-dichlorobenzene	19.48	146	168965	5.030	ppbV	99
108) n-butylbenzene	19.71	91	373327	5.036	ppbV	99
109) indan	19.52	117	352455	5.051	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47292.D
 Acq On : 15 Jan 2020 6:17 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:44:46 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

110)	indene	19.61	115	275865	5.015	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.86	75	83695	4.921	ppbV	95
112)	undecane	20.13	57	335864	5.192	ppbV	98
113)	1,2,4,5-tetramethylben...	20.35	119	347671	5.036	ppbV	99
114)	dodecane	21.03	57	364152	5.083	ppbV	100
115)	1,2,4-trichlorobenzene	20.98	180	123208	4.687	ppbV	100
116)	naphthalene	21.10	128	381890	4.656	ppbV	99
117)	1,2,3-trichlorobenzene	21.35	180	152648	4.731	ppbV	99
118)	benzothiophene	21.16	134	189057	4.466	ppbV	100
119)	hexachlorobutadiene	21.42	225	147848	5.008	ppbV	98
120)	2-methylnaphthalene	22.21	142	48941	4.163	ppbV	99
121)	1-methylnaphthalene	22.40	142	131766	4.543	ppbV	100

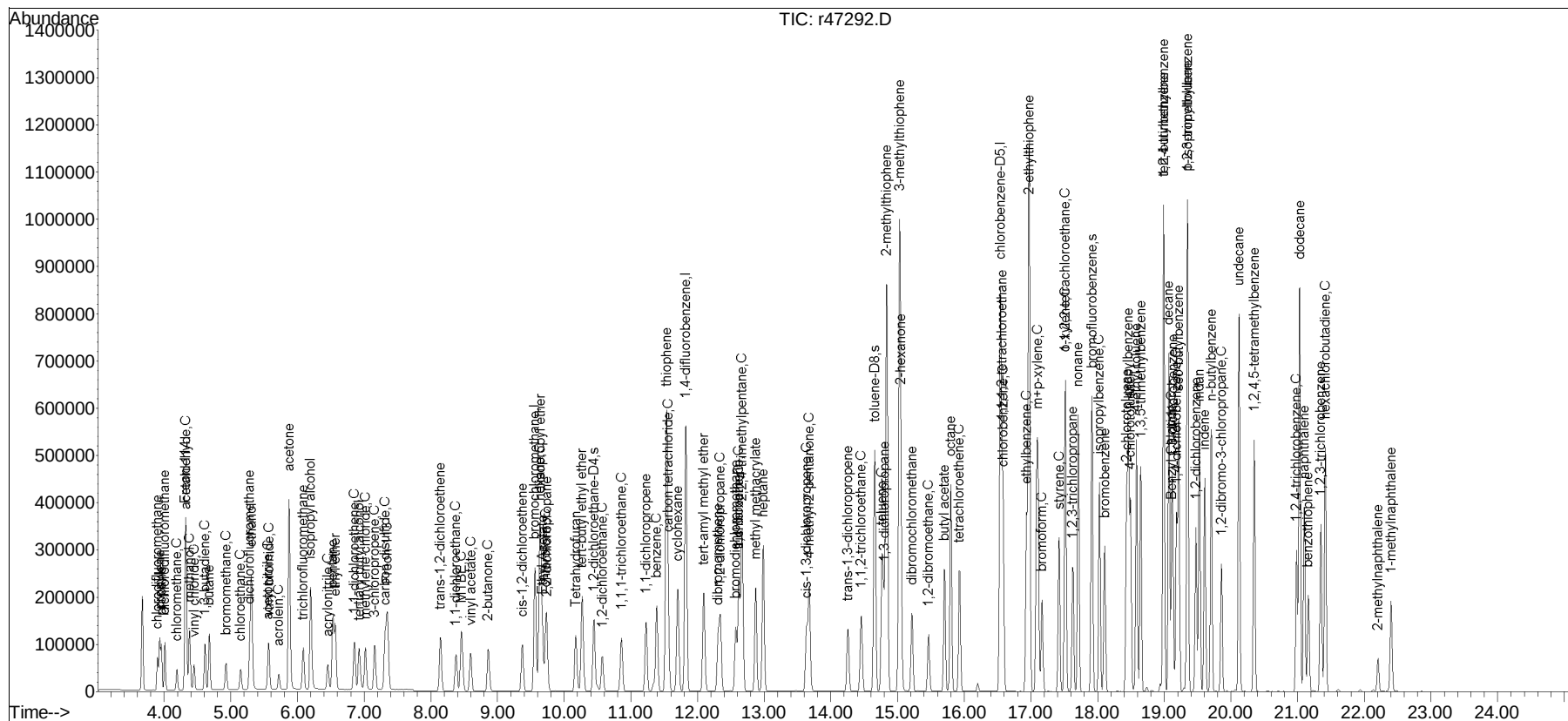
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Data File   : r47292.D
Acq On      : 15 Jan 2020    6:17 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD5.0
Misc        : WG1330812
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Jan 16 10:44:46 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:36:24 2020
Response via : Initial Calibration

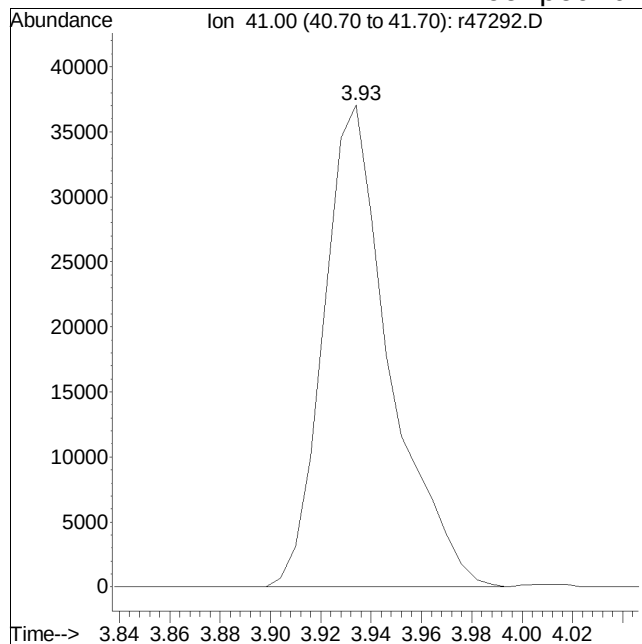
Sub List : Default - All compounds listed20\01\200115T_I\r47293.D



Manual Integration/Negative Proof Report

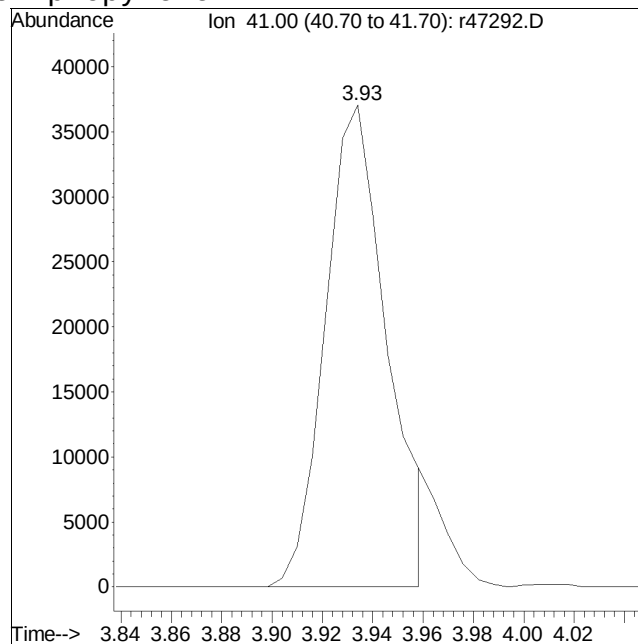
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47292.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:6: 7 Instrument :
Sample : IT015-SIMSTD5.0 Quant Date : 1/16/2020 10:37 am

Compound #3: propylene



Original Peak Response = 67833

M4 = Poor automated baseline construction.



Manual Peak Response = 63021 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47293.D
 Acq On : 15 Jan 2020 6:58 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:36:11 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 08:56:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.57	49	207093	10.000	ppbV	0.00
Standard Area = 207093			Recovery =	100.00%		
43) 1,4-difluorobenzene	11.83	114	612436	10.000	ppbV	0.00
Standard Area = 612436			Recovery =	100.00%		
67) chlorobenzene-D5	16.54	54	109807	10.000	ppbV	0.00
Standard Area = 109807			Recovery =	100.00%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.45	65	129497	10.269	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.69%		
69) toluene-D8	14.66	98	458501	9.781	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.81%		
90) bromofluorobenzene	17.92	95	325398	9.737	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.37%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.90	51	145503	9.908	ppbV	100
3) propylene	3.93	41	125923M4	9.645	ppbV	
4) propane	3.96	29	118863	10.292	ppbV	100
5) dichlorodifluoromethane	4.01	85	160293	9.876	ppbV	100
6) chloromethane	4.19	50	91243	9.857	ppbV	100
7) Freon-114	4.32	85	216887	9.972	ppbV	100
8) methanol	4.38	31	204360	53.254	ppbV	100
9) vinyl chloride	4.45	62	109018	9.971	ppbV	100
10) 1,3-butadiene	4.61	54	95208	10.106	ppbV	100
11) butane	4.68	43	196053	10.015	ppbV	100
12) acetaldehyde	4.33	29	280618	56.450	ppbV	100
13) bromomethane	4.93	94	82495	9.825	ppbV	100
14) chloroethane	5.15	64	60065	9.777	ppbV	100
15) ethanol	5.31	31	414368	57.976	ppbV	100
16) dichlorofluoromethane	5.29	67	187505	9.854	ppbV	100
17) vinyl bromide	5.57	106	90874	9.958	ppbV	100
18) acrolein	5.72	56	49928	10.044	ppbV	100
19) acetone	5.87	43	950899	51.744	ppbV	100
20) acetonitrile	5.56	41	107613	9.641	ppbV	100
21) trichlorofluoromethane	6.09	101	152728	9.615	ppbV	100
22) isopropyl alcohol	6.20	45	589232	25.505	ppbV	100
23) acrylonitrile	6.46	53	92460	9.809	ppbV	100
24) pentane	6.53	43	242365	9.692	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47293.D
 Acq On : 15 Jan 2020 6:58 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:36:11 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 08:56:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.57	31	161755	9.800	ppbV	100
26) 1,1-dichloroethene	6.86	61	144086	9.408	ppbV	100
27) tertiary butyl alcohol	6.92	59	205248	9.852	ppbV	100
28) methylene chloride	7.02	49	127197	9.797	ppbV	100
29) 3-chloropropene	7.16	41	185611	9.496	ppbV	100
30) carbon disulfide	7.31	76	334362	9.841	ppbV	100
31) Freon 113	7.35	101	181830	9.697	ppbV	100
32) trans-1,2-dichloroethene	8.15	61	162565	9.481	ppbV	100
33) 1,1-dichloroethane	8.38	63	199472	9.572	ppbV	100
34) MTBE	8.46	73	316321	9.962	ppbV	100
35) vinyl acetate	8.60	43	311600	10.054	ppbV	100
36) 2-butanone	8.86	43	286650	9.516	ppbV	100
37) cis-1,2-dichloroethene	9.38	61	138166	9.191	ppbV	100
38) Ethyl Acetate	9.68	61	44275	9.587	ppbV	100
39) chloroform	9.72	83	173860	9.402	ppbV	100
40) Tetrahydrofuran	10.18	42	221670	10.433	ppbV	100
41) 2,2-dichloropropane	9.74	77	149211	9.527	ppbV	100
42) 1,2-dichloroethane	10.57	62	142114	10.227	ppbV	100
44) hexane	9.63	57	211649	9.141	ppbV	100
45) diisopropyl ether	9.64	87	110578	9.295	ppbV	100
46) tert-butyl ethyl ether	10.27	59	436864	10.025	ppbV	100
48) 1,1,1-trichloroethane	10.86	97	187483	9.770	ppbV	100
49) 1,1-dichloropropene	11.23	75	176826	9.791	ppbV	100
50) benzene	11.39	78	404806	9.606	ppbV	100
51) thiophene	11.54	84	918996	10.019	ppbV	100
52) carbon tetrachloride	11.56	117	168251	10.152	ppbV	100
53) cyclohexane	11.71	56	263448	9.852	ppbV	100
54) tert-amyl methyl ether	12.09	73	389346	9.925	ppbV	100
55) dibromomethane	12.31	93	118056	9.794	ppbV	100
56) 1,2-dichloropropane	12.34	63	156865	9.510	ppbV	100
57) bromodichloromethane	12.57	83	239669	9.861	ppbV	100
58) 1,4-dioxane	12.61	88	106696	10.042	ppbV	100
59) trichloroethene	12.62	130	158006	9.806	ppbV	100
60) 2,2,4-trimethylpentane	12.67	57	828230	9.972	ppbV	100
61) methyl methacrylate	12.87	41	312876	11.450	ppbV	100
62) heptane	12.99	43	368795	10.173	ppbV	100
63) cis-1,3-dichloropropene	13.63	75	204978	9.755	ppbV	100
64) 4-methyl-2-pentanone	13.68	43	427759	10.309	ppbV	100
65) trans-1,3-dichloropropene	14.26	75	197671	9.914	ppbV	100
66) 1,1,2-trichloroethane	14.46	97	149372	9.609	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47293.D
 Acq On : 15 Jan 2020 6:58 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:36:11 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 08:56:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.77	91	509049	9.524	ppbV	100
70) 2-methylthiophene	14.84	97	1523687	10.390	ppbV	100
71) 1,3-dichloropropane	14.80	76	235458	9.674	ppbV	100
72) 2-hexanone	15.05	43	400926	11.059	ppbV	100
73) 3-methylthiophene	15.03	97	1583272	10.556	ppbV	100
74) dibromochloromethane	15.22	129	223645	10.160	ppbV	100
75) 1,2-dibromoethane	15.47	107	219410	9.546	ppbV	100
76) butyl acetate	15.70	73	73643	10.097	ppbV	100
77) octane	15.80	85	216549	10.087	ppbV	100
78) tetrachloroethene	15.93	166	202267	9.665	ppbV	100
79) 1,1,1,2-tetrachloroethane	16.57	131	164791	10.248	ppbV	100
80) chlorobenzene	16.58	112	377795	9.563	ppbV	100
81) ethylbenzene	16.93	91	646262	9.913	ppbV	100
82) 2-ethylthiophene	16.98	97	1741691	10.714	ppbV	100
83) m+p-xylene	17.10	91	1090783	20.043	ppbV	100
84) bromoform	17.17	173	223042	10.669	ppbV	100
85) styrene	17.43	104	418680	9.970	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.52	83	364946	9.810	ppbV	100
87) o-xylene	17.52	91	547583	10.254	ppbV	100
88) 1,2,3-trichloropropane	17.63	75	283725	9.785	ppbV	100
89) nonane	17.71	43	528867	10.421	ppbV	100
91) isopropylbenzene	18.02	105	690956	10.108	ppbV	100
92) bromobenzene	18.11	77	380166	9.931	ppbV	100
93) 2-chlorotoluene	18.43	126	202466	10.216	ppbV	100
94) n-propylbenzene	18.46	120	244734	10.261	ppbV	100
95) 4-chlorotoluene	18.49	126	191784	10.055	ppbV	100
96) 4-ethyl toluene	18.58	105	791542	10.330	ppbV	100
97) 1,3,5-trimethylbenzene	18.65	105	621464	9.965	ppbV	100
98) tert-butylbenzene	18.99	119	696007	10.632	ppbV	100
99) 1,2,4-trimethylbenzene	18.99	105	617314	10.521	ppbV	100
100) decane	19.07	57	549734	9.818	ppbV	100
101) Benzyl Chloride	19.12	91	424716	9.917	ppbV	100
102) 1,3-dichlorobenzene	19.13	146	331781	9.684	ppbV	100
103) 1,4-dichlorobenzene	19.18	146	354297	10.026	ppbV	100
104) sec-butylbenzene	19.22	105	925219	10.388	ppbV	100
105) 1,2,3-trimethylbenzene	19.35	105	655094	11.635	ppbV	100
106) p-isopropyltoluene	19.35	119	873232	10.956	ppbV	100
107) 1,2-dichlorobenzene	19.48	146	345632	9.880	ppbV	100
108) n-butylbenzene	19.71	91	762663	10.997	ppbV	100
109) indan	19.52	117	717984	11.385	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47293.D
 Acq On : 15 Jan 2020 6:58 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:36:11 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 08:56:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

110)	indene	19.61	115	565890	11.462	ppbV	100
111)	1,2-dibromo-3-chloropr...	19.86	75	174966	11.014	ppbV	100
112)	undecane	20.12	57	665574	10.849	ppbV	100
113)	1,2,4,5-tetramethylben...	20.35	119	710322	11.873	ppbV	100
114)	dodecane	21.02	57	737016	12.105	ppbV	100
115)	1,2,4-trichlorobenzene	20.98	180	270461	11.213	ppbV	100
116)	naphthalene	21.10	128	843951	12.295	ppbV	100
117)	1,2,3-trichlorobenzene	21.35	180	331936	12.022	ppbV	100
118)	benzothiophene	21.16	134	435523	9.656	ppbV	100
119)	hexachlorobutadiene	21.42	225	303753	10.703	ppbV	100
120)	2-methylnaphthalene	22.20	142	120944	8.412	ppbV	100
121)	1-methylnaphthalene	22.40	142	298385	9.210	ppbV	100

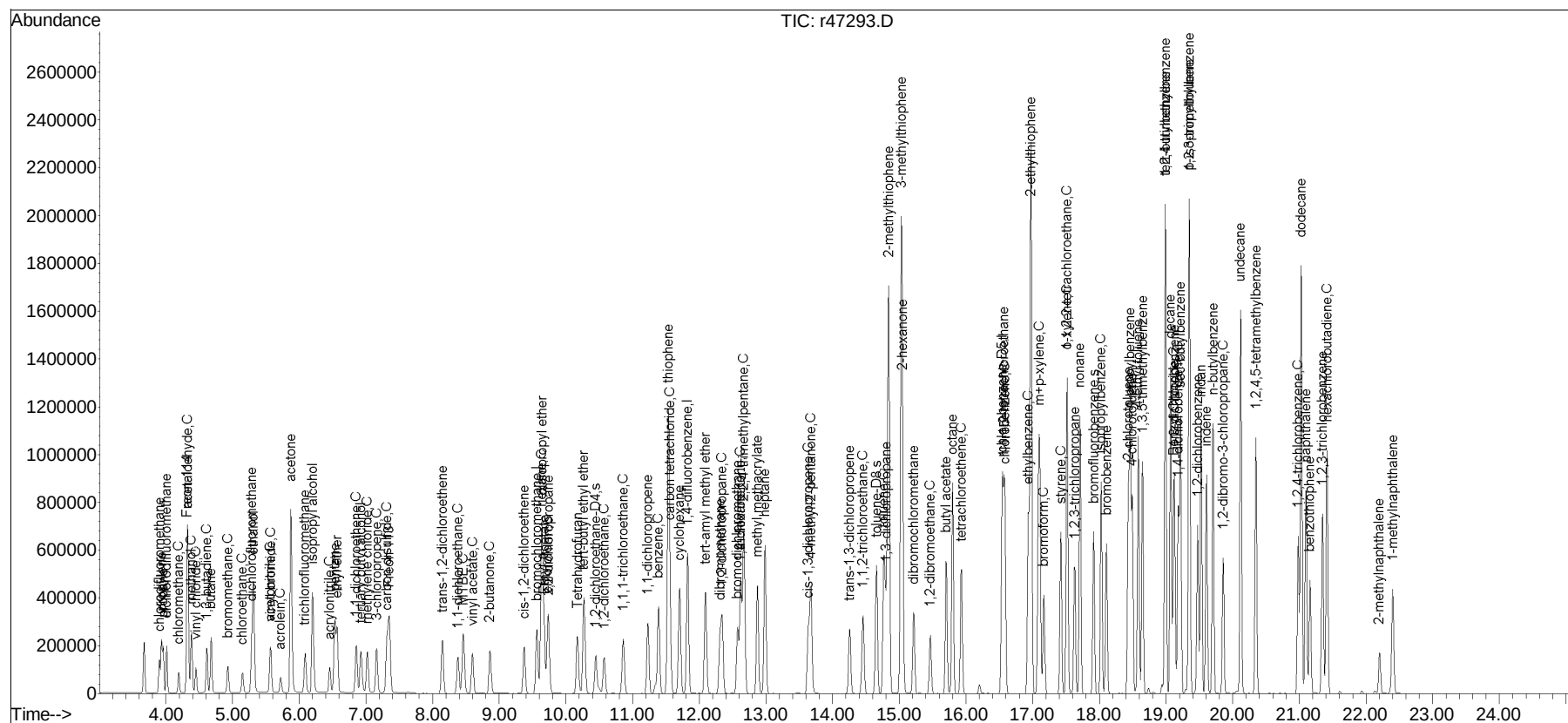
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Data File  : r47293.D
Acq On     : 15 Jan 2020    6:58 PM
Operator   : AIRPIANO4:RY
Sample     : IT015-SIMSTD010
Misc       : WG1330812
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Jan 16 10:36:11 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 08:56:11 2020
Response via : Initial Calibration

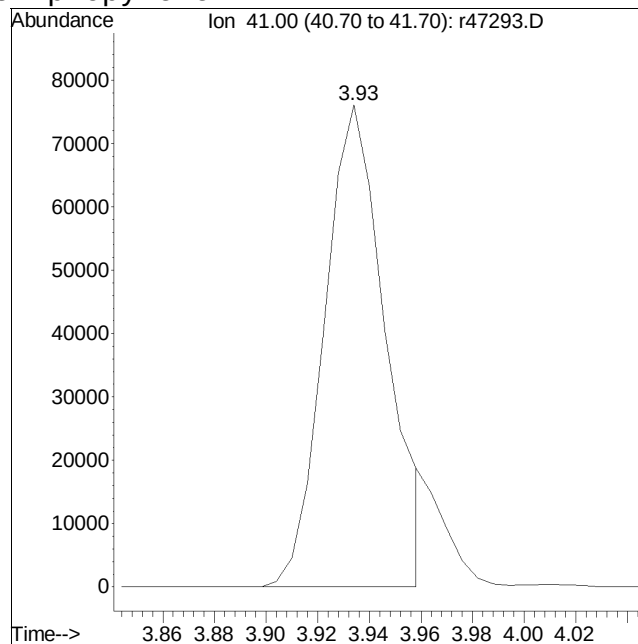
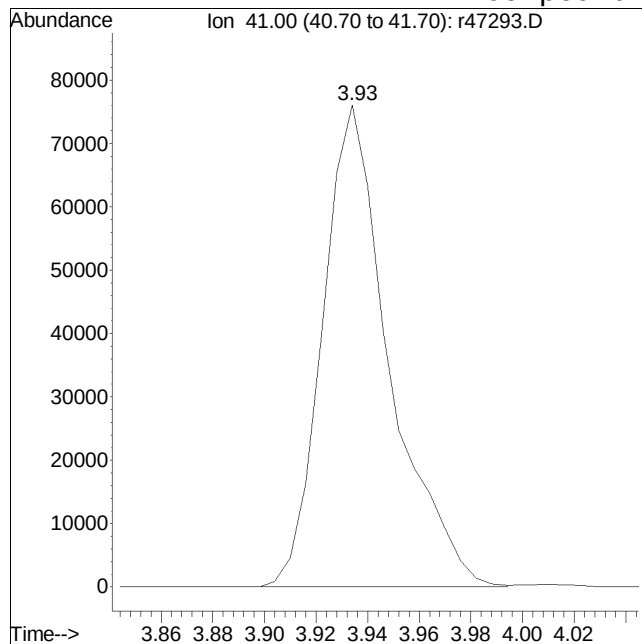
Sub List : Default - All compounds listed20\01\200115T_I\r47293.D



Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47293.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:6: 8 Instrument :
Sample : IT015-SIMSTD010 Quant Date : 1/16/2020 10:36 am

Compound #3: propylene



Original Peak Response = 136826

Manual Peak Response = 125923 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47294.D
 Acq On : 15 Jan 2020 7:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD020
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:46:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.57	49	231509	10.000	ppbV	0.00
Standard Area = 207093			Recovery =	111.79%		
43) 1,4-difluorobenzene	11.83	114	621151	10.000	ppbV	0.00
Standard Area = 612436			Recovery =	101.42%		
67) chlorobenzene-D5	16.54	54	109274	10.000	ppbV	0.00
Standard Area = 109807			Recovery =	99.51%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.45	65	125887	9.585	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.85%		
69) toluene-D8	14.66	98	468772	10.274	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.74%		
90) bromofluorobenzene	17.92	95	335966	10.375	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	103.75%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.90	51	324815	19.969	ppbV	99
3) propylene	3.93	41	275751M4	19.589	ppbV	
4) propane	3.96	29	263165	19.805	ppbV	98
5) dichlorodifluoromethane	4.01	85	343576	19.174	ppbV	100
6) chloromethane	4.20	50	203722	19.973	ppbV	100
7) Freon-114	4.32	85	462379	19.071	ppbV	100
8) methanol	4.38	31	440555	96.421	ppbV	99
9) vinyl chloride	4.45	62	240220	19.711	ppbV	100
10) 1,3-butadiene	4.62	54	207506	19.496	ppbV	98
11) butane	4.68	43	420350	19.179	ppbV	99
12) acetaldehyde	4.33	29	519685	82.831	ppbV	100
13) bromomethane	4.93	94	180440	19.566	ppbV	98
14) chloroethane	5.15	64	133077	19.819	ppbV	99
15) ethanol	5.31	31	846221	91.341	ppbV	100
16) dichlorofluoromethane	5.29	67	400976	19.129	ppbV	99
17) vinyl bromide	5.57	106	218469	21.505	ppbV	98
18) acrolein	5.72	56	124423	22.292	ppbV	97
19) acetone	5.87	43	2347678	110.426	ppbV	96
20) acetonitrile	5.56	41	299507	24.897	ppbV	99
21) trichlorofluoromethane	6.09	101	407195	23.850	ppbV	99
22) isopropyl alcohol	6.20	45	1396171	52.990	ppbV	100
23) acrylonitrile	6.46	53	225705	21.837	ppbV	97
24) pentane	6.54	43	647818	23.910	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47294.D
 Acq On : 15 Jan 2020 7:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD020
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:46:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.57	31	449006	24.831	ppbV	99
26) 1,1-dichloroethene	6.86	61	393994	24.461	ppbV	95
27) tertiary butyl alcohol	6.91	59	529892	23.094	ppbV	96
28) methylene chloride	7.02	49	312680	21.990	ppbV	94
29) 3-chloropropene	7.16	41	500035	24.099	ppbV	95
30) carbon disulfide	7.32	76	800704	21.422	ppbV	97
31) Freon 113	7.35	101	442851	21.787	ppbV	97
32) trans-1,2-dichloroethene	8.15	61	428037	23.553	ppbV	93
33) 1,1-dichloroethane	8.38	63	514693	23.081	ppbV	100
34) MTBE	8.45	73	767148	21.694	ppbV	96
35) vinyl acetate	8.59	43	816425	23.438	ppbV	99
36) 2-butanone	8.85	43	750969	23.435	ppbV	96
37) cis-1,2-dichloroethene	9.38	61	374936	24.275	ppbV	92
38) Ethyl Acetate	9.66	61	110809	22.388	ppbV #	37
39) chloroform	9.72	83	448248	23.063	ppbV	98
40) Tetrahydrofuran	10.16	42	485715	19.601	ppbV	98
41) 2,2-dichloropropane	9.74	77	378962	22.719	ppbV	91
42) 1,2-dichloroethane	10.57	62	297549	18.729	ppbV	97
44) hexane	9.64	57	537497	25.039	ppbV #	45
45) diisopropyl ether	9.63	87	273585	24.394	ppbV	95
46) tert-butyl ethyl ether	10.26	59	934432	21.089	ppbV	100
48) 1,1,1-trichloroethane	10.86	97	405029	21.300	ppbV	98
49) 1,1-dichloropropene	11.23	75	386481	21.550	ppbV	97
50) benzene	11.39	78	887224	21.610	ppbV	99
51) thiophene	11.54	84	1940272	20.817	ppbV	99
52) carbon tetrachloride	11.57	117	353979	20.744	ppbV	98
53) cyclohexane	11.71	56	569173	21.302	ppbV	98
54) tert-amyl methyl ether	12.09	73	855475	21.664	ppbV	99
55) dibromomethane	12.31	93	251513	21.006	ppbV	95
56) 1,2-dichloropropane	12.34	63	355035	22.316	ppbV	97
57) bromodichloromethane	12.57	83	510772	21.013	ppbV	99
58) 1,4-dioxane	12.60	88	229858	21.241	ppbV	100
59) trichloroethene	12.62	130	359348	22.424	ppbV	97
60) 2,2,4-trimethylpentane	12.67	57	1780169	21.192	ppbV	98
61) methyl methacrylate	12.87	41	592526	18.672	ppbV	97
62) heptane	12.99	43	801914	21.439	ppbV	100
63) cis-1,3-dichloropropene	13.63	75	464624	22.349	ppbV	98
64) 4-methyl-2-pentanone	13.67	43	926358	21.352	ppbV	99
65) trans-1,3-dichloropropene	14.25	75	450100	22.451	ppbV	96
66) 1,1,2-trichloroethane	14.45	97	337549	22.281	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47294.D
 Acq On : 15 Jan 2020 7:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD020
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:46:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.77	91	1108096	21.874	ppbV	100
70) 2-methylthiophene	14.84	97	3097424	20.428	ppbV	99
71) 1,3-dichloropropane	14.80	76	505835	21.588	ppbV	96
72) 2-hexanone	15.05	43	768363	19.258	ppbV	95
73) 3-methylthiophene	15.03	97	3161953	20.068	ppbV	99
74) dibromochloromethane	15.22	129	490879	22.056	ppbV	99
75) 1,2-dibromoethane	15.47	107	493629	22.608	ppbV	99
76) butyl acetate	15.70	73	164989	22.513	ppbV	98
77) octane	15.80	85	462423	21.458	ppbV	99
78) tetrachloroethene	15.93	166	455058	22.608	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.57	131	357705	21.812	ppbV	98
80) chlorobenzene	16.58	112	846339	22.511	ppbV	99
81) ethylbenzene	16.93	91	1420665	22.090	ppbV	98
82) 2-ethylthiophene	16.98	97	3416866	19.714	ppbV	97
83) m+p-xylene	17.10	91	2346875	43.241	ppbV	97
84) bromoform	17.17	173	489936	22.073	ppbV	99
85) styrene	17.43	104	951434	22.835	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.52	83	796938	21.944	ppbV	99
87) o-xylene	17.52	91	1167703	21.429	ppbV	97
88) 1,2,3-trichloropropane	17.63	75	610658	21.628	ppbV	97
89) nonane	17.71	43	1130180	21.474	ppbV	100
91) isopropylbenzene	18.02	105	1493513	21.721	ppbV	99
92) bromobenzene	18.11	77	817070	21.597	ppbV	98
93) 2-chlorotoluene	18.43	126	443815	22.027	ppbV	93
94) n-propylbenzene	18.46	120	531236	21.813	ppbV	93
95) 4-chlorotoluene	18.49	126	424935	22.265	ppbV	92
96) 4-ethyl toluene	18.58	105	1709602	21.704	ppbV	99
97) 1,3,5-trimethylbenzene	18.65	105	1382038	22.347	ppbV	99
98) tert-butylbenzene	18.99	119	1432972	20.689	ppbV	99
99) 1,2,4-trimethylbenzene	18.99	105	1342832	21.859	ppbV	94
100) decane	19.07	57	1209064	22.101	ppbV	99
101) Benzyl Chloride	19.12	91	1164596	27.554	ppbV	100
102) 1,3-dichlorobenzene	19.13	146	845356	25.604	ppbV	99
103) 1,4-dichlorobenzene	19.18	146	819811	23.252	ppbV	98
104) sec-butylbenzene	19.22	105	1958101	21.267	ppbV	99
105) 1,2,3-trimethylbenzene	19.35	105	1213760	18.618	ppbV	99
106) p-isopropyltoluene	19.35	119	1742216	20.049	ppbV	99
107) 1,2-dichlorobenzene	19.48	146	784391	22.805	ppbV	99
108) n-butylbenzene	19.71	91	1567035	20.647	ppbV	97
109) indan	19.52	117	1374103	19.232	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47294.D
 Acq On : 15 Jan 2020 7:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD020
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:46:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.61	115	1100138	19.536	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.86	75	356197	20.457	ppbV	95
112) undecane	20.13	57	1321116	19.946	ppbV	99
113) 1,2,4,5-tetramethylben...	20.35	119	1311575	18.555	ppbV	98
114) dodecane	21.03	57	1285363	17.525	ppbV	99
115) 1,2,4-trichlorobenzene	20.98	180	581387	21.601	ppbV	99
116) naphthalene	21.10	128	1616802	19.251	ppbV	100
117) 1,2,3-trichlorobenzene	21.35	180	610171	18.472	ppbV	99
118) benzothiophene	21.16	134	1183421	27.305	ppbV	99
119) hexachlorobutadiene	21.42	225	610375	20.192	ppbV	98
120) 2-methylnaphthalene	22.20	142	325434	27.039	ppbV	98
121) 1-methylnaphthalene	22.40	142	745863	25.119	ppbV	99

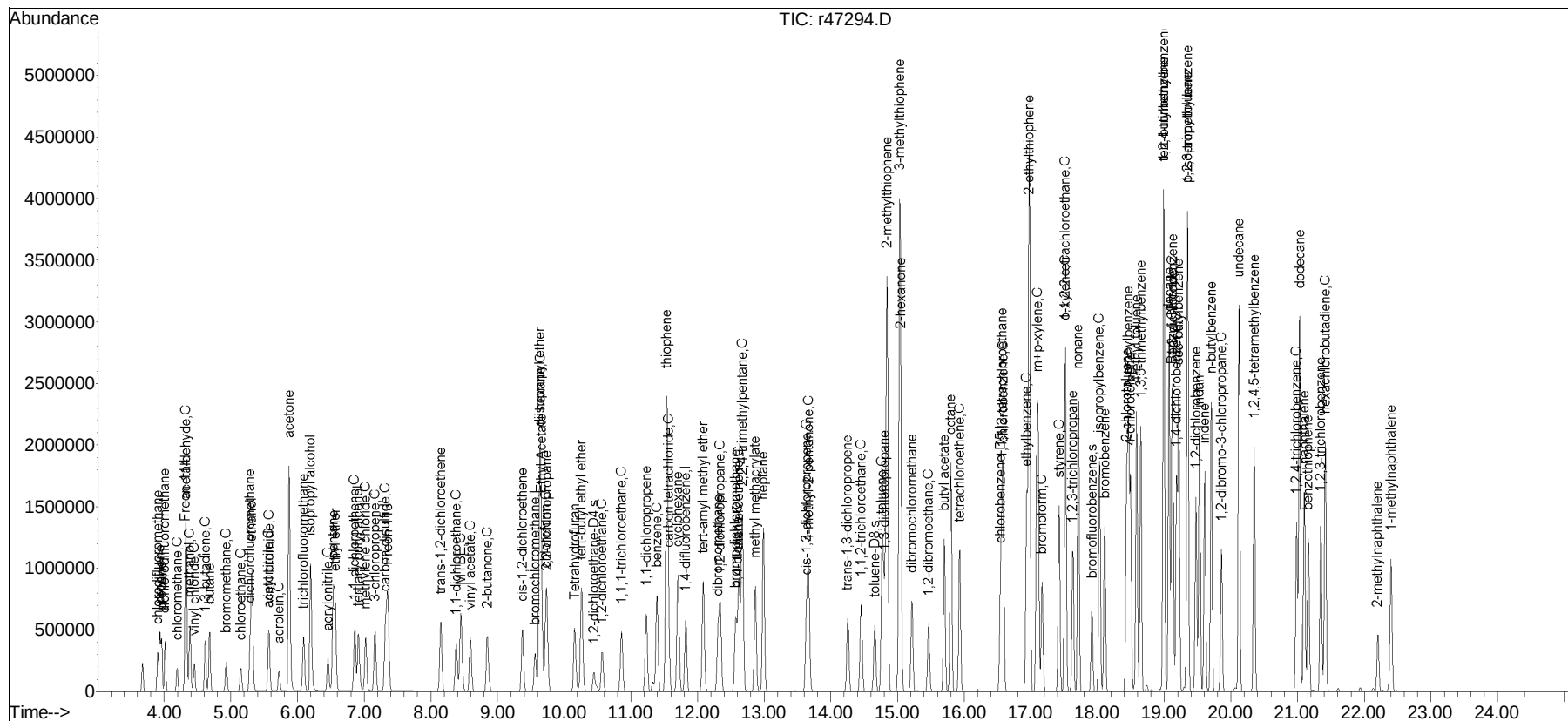
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Data File   : r47294.D
Acq On      : 15 Jan 2020    7:37 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD020
Misc        : WG1330812
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Jan 16 10:46:14 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:36:24 2020
Response via : Initial Calibration

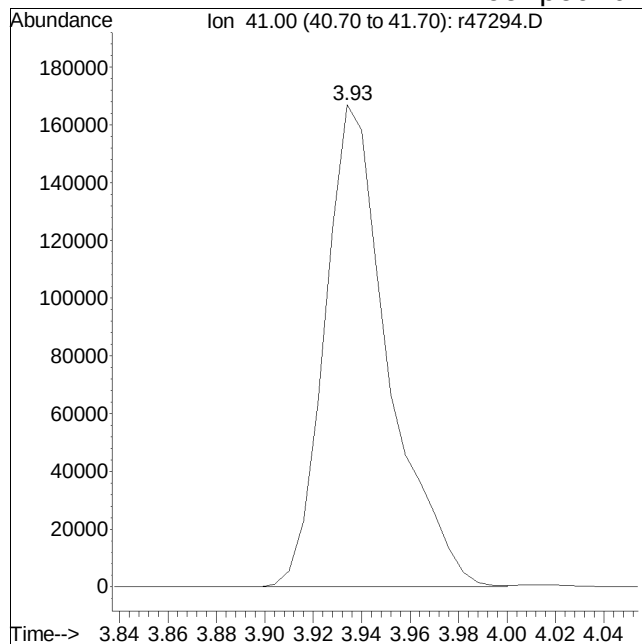
Sub List : Default - All compounds listed20\01\200115T_I\r47293.D



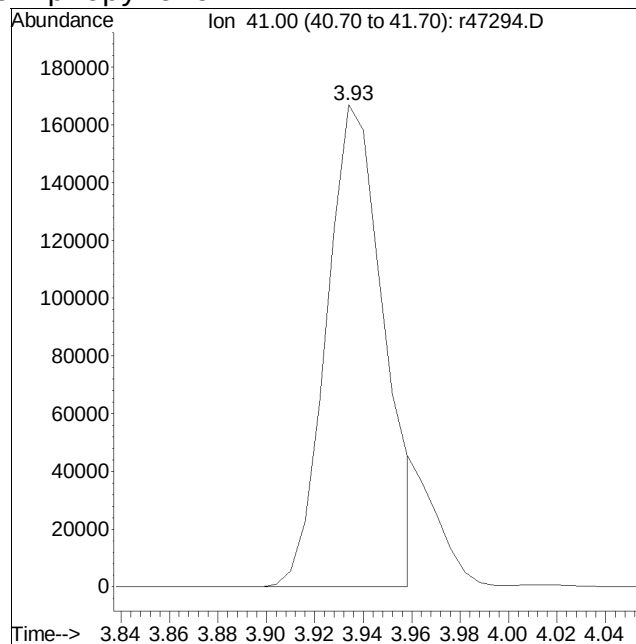
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47294.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:7: 7 Instrument :
Sample : IT015-SIMSTD020 Quant Date : 1/16/2020 10:37 am

Compound #3: propylene



Original Peak Response = 305698



Manual Peak Response = 275751 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47295.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:47:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.57	49	253359	10.000	ppbV	0.00
Standard Area = 207093			Recovery =	122.34%		
43) 1,4-difluorobenzene	11.83	114	663130	10.000	ppbV	0.00
Standard Area = 612436			Recovery =	108.28%		
67) chlorobenzene-D5	16.54	54	113326	10.000	ppbV	0.00
Standard Area = 109807			Recovery =	103.20%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.45	65	125621	8.959	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	89.59%		
69) toluene-D8	14.66	98	510779	10.794	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.94%		
90) bromofluorobenzene	17.92	95	378066	11.258	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	112.58%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.90	51	768739	43.185	ppbV	97
3) propylene	3.93	41	637217M4	41.363	ppbV	
4) propane	3.96	29	626766	43.101	ppbV	96
5) dichlorodifluoromethane	4.01	85	743980	37.938	ppbV	100
6) chloromethane	4.20	50	481877	43.168	ppbV	100
7) Freon-114	4.32	85	1011498	38.121	ppbV	98
8) methanol	4.39	31	1025904	205.168	ppbV	98
9) vinyl chloride	4.46	62	544146	40.799	ppbV	99
10) 1,3-butadiene	4.62	54	482023	41.383	ppbV	94
11) butane	4.68	43	946140	39.447	ppbV	98
12) acetaldehyde	4.34	29	1171199	170.575	ppbV	97
13) bromomethane	4.94	94	415027	41.122	ppbV	99
14) chloroethane	5.15	64	307363	41.827	ppbV	99
15) ethanol	5.33	31	1639471	161.702	ppbV	99
16) dichlorofluoromethane	5.29	67	934261	40.727	ppbV	100
17) vinyl bromide	5.58	106	454729	40.902	ppbV	100
18) acrolein	5.73	56	260527	42.652	ppbV	98
19) acetone	5.88	43	3693234	158.735	ppbV	92
20) acetonitrile	5.57	41	519947	39.493	ppbV	99
21) trichlorofluoromethane	6.09	101	699334	37.428	ppbV	99
22) isopropyl alcohol	6.21	45	2590792	89.849	ppbV	99
23) acrylonitrile	6.46	53	483390	42.734	ppbV	99
24) pentane	6.54	43	1163880	39.253	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47295.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:47:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.57	31	825286	41.704	ppbV	97
26) 1,1-dichloroethene	6.86	61	904244	51.297	ppbV	97
27) tertiary butyl alcohol	6.93	59	1250097	49.784	ppbV	97
28) methylene chloride	7.03	49	756096	48.588	ppbV	95
29) 3-chloropropene	7.17	41	1186734	52.261	ppbV	98
30) carbon disulfide	7.32	76	1913756	46.784	ppbV	99
31) Freon 113	7.35	101	1049444	47.176	ppbV	97
32) trans-1,2-dichloroethene	8.15	61	1005931	50.579	ppbV	96
33) 1,1-dichloroethane	8.38	63	1218739	49.941	ppbV	100
34) MTBE	8.46	73	1843320	47.632	ppbV	98
35) vinyl acetate	8.60	43	2003218	52.548	ppbV	100
36) 2-butanone	8.86	43	1804995	51.470	ppbV	98
37) cis-1,2-dichloroethene	9.38	61	876955	51.881	ppbV	96
38) Ethyl Acetate	9.67	61	265833	49.077	ppbV	67
39) chloroform	9.73	83	1033264	48.578	ppbV	99
40) Tetrahydrofuran	10.16	42	1181073	43.551	ppbV	95
41) 2,2-dichloropropane	9.74	77	871210	47.726	ppbV	96
42) 1,2-dichloroethane	10.57	62	665878	38.299	ppbV #	93
44) hexane	9.64	57	1237791	54.012	ppbV	80
45) diisopropyl ether	9.64	87	627989	52.450	ppbV	98
46) tert-butyl ethyl ether	10.27	59	2157809	45.617	ppbV	97
48) 1,1,1-trichloroethane	10.87	97	931817	45.902	ppbV	97
49) 1,1-dichloropropene	11.23	75	937333	48.956	ppbV	91
50) benzene	11.39	78	2146774	48.978	ppbV	100
51) thiophene	11.55	84	4313686	43.351	ppbV	96
52) carbon tetrachloride	11.57	117	757327	41.571	ppbV	100
53) cyclohexane	11.71	56	1353226	47.439	ppbV	97
54) tert-amyl methyl ether	12.09	73	2091490	49.611	ppbV	97
55) dibromomethane	12.31	93	581810	45.515	ppbV	93
56) 1,2-dichloropropane	12.35	63	849308	50.004	ppbV #	95
57) bromodichloromethane	12.57	83	1186444	45.719	ppbV	100
58) 1,4-dioxane	12.61	88	558801	48.369	ppbV	99
59) trichloroethene	12.63	130	846135	49.457	ppbV	98
60) 2,2,4-trimethylpentane	12.67	57	4037615	45.023	ppbV	96
61) methyl methacrylate	12.87	41	1387816	40.966	ppbV	92
62) heptane	12.99	43	1881447	47.116	ppbV	98
63) cis-1,3-dichloropropene	13.63	75	1141979	51.453	ppbV	92
64) 4-methyl-2-pentanone	13.67	43	2200460	47.509	ppbV	97
65) trans-1,3-dichloropropene	14.26	75	1100120	51.400	ppbV	93
66) 1,1,2-trichloroethane	14.46	97	826653	51.111	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47295.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:47:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.78	91	2591203	49.322	ppbV	99
70) 2-methylthiophene	14.85	97	6146469	39.087	ppbV	99
71) 1,3-dichloropropane	14.81	76	1213220	49.926	ppbV	91
72) 2-hexanone	15.05	43	1541201	37.247	ppbV #	82
73) 3-methylthiophene	15.04	97	6053311	37.046	ppbV	99
74) dibromochloromethane	15.22	129	1118228	48.448	ppbV	98
75) 1,2-dibromoethane	15.47	107	1183817	52.279	ppbV	100
76) butyl acetate	15.70	73	432728	56.936	ppbV	84
77) octane	15.80	85	1088920	48.724	ppbV	95
78) tetrachloroethene	15.93	166	1058214	50.693	ppbV	94
79) 1,1,1,2-tetrachloroethane	16.57	131	805456	47.360	ppbV	97
80) chlorobenzene	16.59	112	1986613	50.952	ppbV	99
81) ethylbenzene	16.94	91	3286337	49.272	ppbV	94
82) 2-ethylthiophene	16.98	97	6291269	35.000	ppbV	91
83) m+p-xylene	17.10	91	5063947	89.967	ppbV	90
84) bromoform	17.18	173	1088522	47.288	ppbV	97
85) styrene	17.43	104	2303477	53.309	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.52	83	1778881	47.230	ppbV	97
87) o-xylene	17.52	91	2418785	42.800	ppbV	87
88) 1,2,3-trichloropropane	17.63	75	1495330	51.067	ppbV #	96
89) nonane	17.72	43	2521993	46.206	ppbV	97
91) isopropylbenzene	18.03	105	3416910	47.916	ppbV	98
92) bromobenzene	18.11	77	1941511	49.484	ppbV	95
93) 2-chlorotoluene	18.43	126	1061023	50.778	ppbV	78
94) n-propylbenzene	18.47	120	1261848	49.959	ppbV	72
95) 4-chlorotoluene	18.50	126	1049048	53.001	ppbV	77
96) 4-ethyl toluene	18.58	105	3872830	47.408	ppbV	98
97) 1,3,5-trimethylbenzene	18.65	105	3165413	49.353	ppbV	97
98) tert-butylbenzene	18.99	119	2892847	40.273	ppbV	95
99) 1,2,4-trimethylbenzene	19.00	105	2692007	42.254	ppbV #	89
100) decane	19.07	57	2702646	47.636	ppbV	94
101) Benzyl Chloride	19.12	91	2621638	59.810	ppbV	95
102) 1,3-dichlorobenzene	19.13	146	1876418	54.800	ppbV	98
103) 1,4-dichlorobenzene	19.18	146	1914876	52.369	ppbV	97
104) sec-butylbenzene	19.22	105	4302458	45.058	ppbV	95
105) 1,2,3-trimethylbenzene	19.36	105	2481807	36.708	ppbV	100
106) p-isopropyltoluene	19.35	119	3534732	39.222	ppbV	94
107) 1,2-dichlorobenzene	19.48	146	1886229	52.879	ppbV	97
108) n-butylbenzene	19.71	91	3434716	43.637	ppbV	90
109) indan	19.53	117	3106171	41.919	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47295.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:47:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

110)	indene	19.61	115	2603350	44.576	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.86	75	842261	46.644	ppbV	88
112)	undecane	20.13	57	2944550	42.867	ppbV	95
113)	1,2,4,5-tetramethylben...	20.35	119	2963648	40.427	ppbV	95
114)	dodecane	21.03	57	2924438	38.447	ppbV	94
115)	1,2,4-trichlorobenzene	20.98	180	1513757	54.232	ppbV	97
116)	naphthalene	21.10	128	3931130	45.134	ppbV	99
117)	1,2,3-trichlorobenzene	21.35	180	1545472	45.114	ppbV	98
118)	benzothiophene	21.17	134	3181896	70.791	ppbV	99
119)	hexachlorobutadiene	21.42	225	1319426	42.089	ppbV	95
120)	2-methylnaphthalene	22.21	142	1010250	80.937	ppbV	98
121)	1-methylnaphthalene	22.40	142	2033682	66.040	ppbV	97

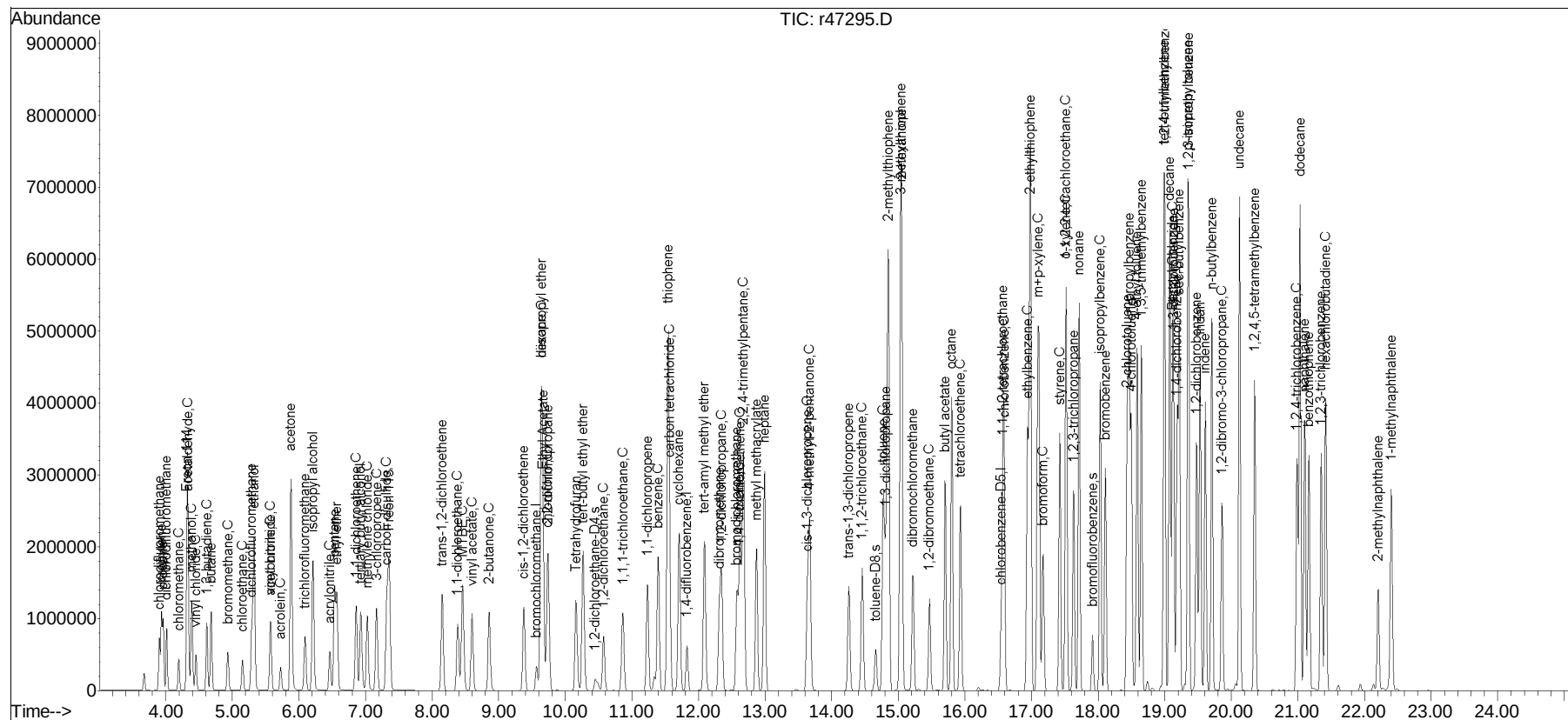
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47295.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIANO4:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:47:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

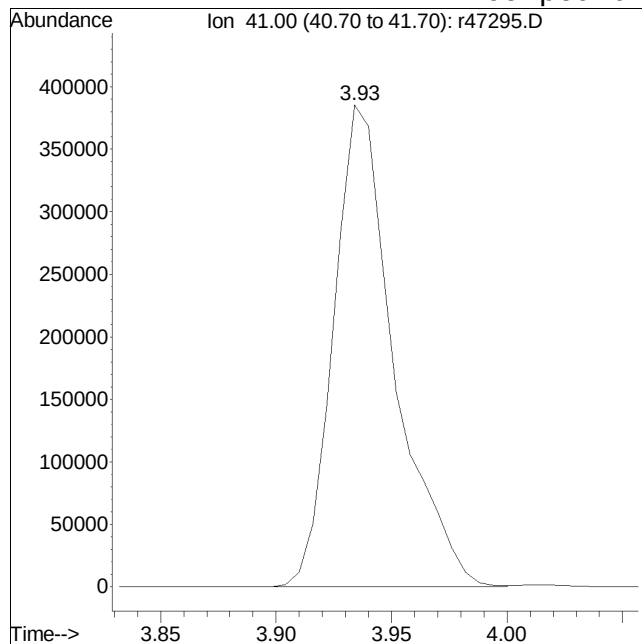
Sub List : Default - All compounds listed 20\01\200115T_I\r47293.D



Manual Integration/Negative Proof Report

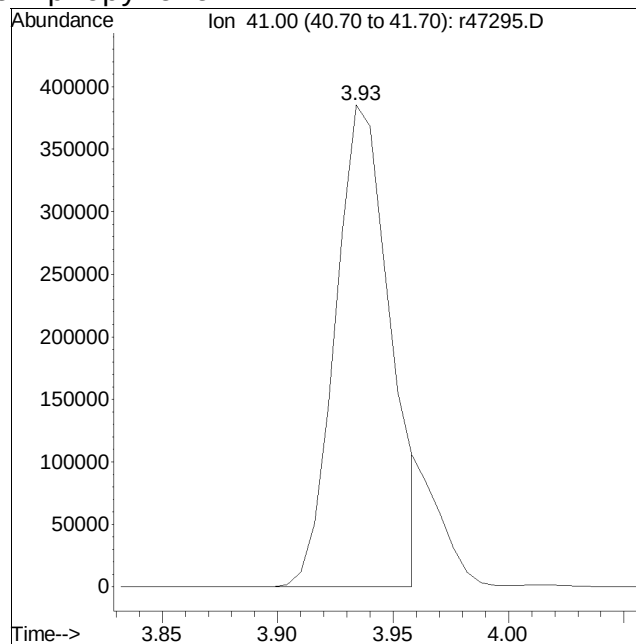
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47295.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:8: 6 Instrument :
Sample : IT015-SIMSTD050 Quant Date : 1/16/2020 10:37 am

Compound #3: propylene



Original Peak Response = 706959

M4 = Poor automated baseline construction.



Manual Peak Response = 637217 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47299.D
 Acq On : 16 Jan 2020 9:41 AM
 Operator : AIRPIAN04:RY
 Sample : IT015-LLSTD100
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:51:42 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.62	49	290159	10.000	ppbV	0.05
Standard Area = 207093			Recovery =	140.11%		
43) 1,4-difluorobenzene	11.87	114	742193	10.000	ppbV	0.05
Standard Area = 612436			Recovery =	121.19%		
67) chlorobenzene-D5	16.58	54	115445	10.000	ppbV	# 0.04
Standard Area = 109807			Recovery =	105.13%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.50	65	121518	7.743	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery =	77.43%		
69) toluene-D8	14.70	98	579609	12.024	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery =	120.24%		
90) bromofluorobenzene	17.95	95	431069	12.600	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	126.00%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.93	51	1506518	73.898	ppbV #	93
3) propylene	3.96	41	1225541M4	69.463	ppbV	
4) propane	3.99	29	1221304	73.334	ppbV	96
5) dichlorodifluoromethane	4.04	85	1345972	59.931	ppbV	99
6) chloromethane	4.23	50	934317	73.084	ppbV	100
7) Freon-114	4.35	85	1763387	58.029	ppbV	97
8) methanol	4.43	31	1930976	337.194	ppbV	97
9) vinyl chloride	4.49	62	1013034	66.322	ppbV	100
10) 1,3-butadiene	4.65	54	915850	68.656	ppbV	89
11) butane	4.71	43	1715425	62.449	ppbV	97
12) acetaldehyde	4.37	29	2062765	262.321	ppbV	94
13) bromomethane	4.97	94	764850	66.173	ppbV	100
14) chloroethane	5.19	64	576090	68.454	ppbV	100
15) ethanol	5.37	31	2812884	242.251	ppbV	97
16) dichlorofluoromethane	5.33	67	1463323	55.700	ppbV	99
17) vinyl bromide	5.62	106	826346	64.901	ppbV	100
18) acrolein	5.77	56	512818	73.308	ppbV	96
19) acetone	5.93	43	6187165	232.197	ppbV #	86
20) acetonitrile	5.61	41	949411	62.968	ppbV	98
21) trichlorofluoromethane	6.13	101	1193231	55.762	ppbV	99
22) isopropyl alcohol	6.26	45	4611223	139.637	ppbV	99
23) acrylonitrile	6.51	53	954151	73.653	ppbV	99
24) pentane	6.58	43	2607474	76.786	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47299.D
 Acq On : 16 Jan 2020 9:41 AM
 Operator : AIRPIAN04:RY
 Sample : IT015-LLSTD100
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:51:42 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.61	31	2113375	93.250	ppbV	95
26) 1,1-dichloroethene	6.90	61	1256932	62.261	ppbV	96
27) tertiary butyl alcohol	6.98	59	1830386	63.649	ppbV	97
28) methylene chloride	7.07	49	1241178	69.644	ppbV	98
29) 3-chloropropene	7.21	41	1658281	63.765	ppbV	94
30) carbon disulfide	7.36	76	3060639	65.332	ppbV	96
31) Freon 113	7.40	101	1537715	60.359	ppbV	96
32) trans-1,2-dichloroethene	8.20	61	1442193	63.318	ppbV	98
33) 1,1-dichloroethane	8.43	63	1786023	63.905	ppbV	99
34) MTBE	8.51	73	2787397	62.893	ppbV	97
35) vinyl acetate	8.65	43	2875015	65.852	ppbV	97
36) 2-butanone	8.91	43	3581104	89.165	ppbV	98
37) cis-1,2-dichloroethene	9.43	61	1658230	85.659	ppbV	99
38) Ethyl Acetate	9.72	61	526850	84.929	ppbV	95
39) chloroform	9.78	83	1898808	77.949	ppbV	99
40) Tetrahydrofuran	10.22	42	2386582	76.842	ppbV	91
41) 2,2-dichloropropane	9.79	77	1582387	75.690	ppbV	97
42) 1,2-dichloroethane	10.63	62	1151887	57.850	ppbV #	87
44) hexane	9.68	57	2306777	89.936	ppbV	84
45) diisopropyl ether	9.70	87	1196207	89.265	ppbV	90
46) tert-butyl ethyl ether	10.32	59	3992400	75.410	ppbV	95
48) 1,1,1-trichloroethane	10.91	97	1818045	80.018	ppbV #	96
49) 1,1-dichloropropene	11.28	75	1866249	87.090	ppbV #	84
50) benzene	11.44	78	4382175	89.328	ppbV	100
51) thiophene	11.59	84	7493719	67.286	ppbV	93
52) carbon tetrachloride	11.62	117	1217426	59.707	ppbV	99
53) cyclohexane	11.75	56	2687494	84.178	ppbV	94
54) tert-amyl methyl ether	12.14	73	4125418	87.433	ppbV	95
55) dibromomethane	12.36	93	1065317	74.462	ppbV	90
56) 1,2-dichloropropane	12.39	63	1607358	84.553	ppbV #	94
57) bromodichloromethane	12.63	83	2197706	75.666	ppbV	99
58) 1,4-dioxane	12.66	88	1055193	81.607	ppbV	96
59) trichloroethene	12.67	130	1552812	81.094	ppbV	98
60) 2,2,4-trimethylpentane	12.72	57	7629612	76.014	ppbV	93
61) methyl methacrylate	12.92	41	2616277	69.001	ppbV #	85
62) heptane	13.04	43	3512462	78.591	ppbV	94
63) cis-1,3-dichloropropene	13.68	75	2315822	93.227	ppbV #	86
64) 4-methyl-2-pentanone	13.72	43	4142725	79.915	ppbV #	94
65) trans-1,3-dichloropropene	14.31	75	2163955	90.334	ppbV #	89
66) 1,1,2-trichloroethane	14.51	97	1618489	89.410	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47299.D
 Acq On : 16 Jan 2020 9:41 AM
 Operator : AIRPIAN04:RY
 Sample : IT015-LLSTD100
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:51:42 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.82	91	4820247	90.067	ppbV	98
70) 2-methylthiophene	14.89	97	9620061	60.053	ppbV	99
71) 1,3-dichloropropane	14.86	76	2304387	93.089	ppbV #	83
72) 2-hexanone	15.10	43	2407479	57.115	ppbV #	82
73) 3-methylthiophene	15.08	97	9456058	56.808	ppbV	99
74) dibromochloromethane	15.26	129	1942359	82.609	ppbV	96
75) 1,2-dibromoethane	15.51	107	2215876	96.060	ppbV	99
76) butyl acetate	15.74	73	875669	113.100	ppbV	71
77) octane	15.84	85	2045938	89.865	ppbV	89
78) tetrachloroethene	15.97	166	1875282	88.185	ppbV #	91
79) 1,1,1,2-tetrachloroethane	16.61	131	1316618	75.994	ppbV	97
80) chlorobenzene	16.63	112	3455485	86.998	ppbV	99
81) ethylbenzene	16.98	91	5678901	83.582	ppbV	89
82) 2-ethylthiophene	17.02	97	9466908	51.700	ppbV	91
83) m+p-xylene	17.14	91	8115363	141.532	ppbV	85
84) bromoform	17.21	173	1857212	79.201	ppbV	99
85) styrene	17.46	104	4189184	95.170	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.55	83	2967934	77.354	ppbV	97
87) o-xylene	17.56	91	3801654	66.036	ppbV #	85
88) 1,2,3-trichloropropane	17.67	75	2834428	95.022	ppbV #	93
89) nonane	17.75	43	4214333	75.794	ppbV	91
91) isopropylbenzene	18.07	105	5771604	79.451	ppbV	94
92) bromobenzene	18.14	77	3484946	87.192	ppbV	95
93) 2-chlorotoluene	18.47	126	1860907	87.423	ppbV	73
94) n-propylbenzene	18.50	120	2075518	80.665	ppbV #	65
95) 4-chlorotoluene	18.52	126	1828688M3	90.695	ppbV	
96) 4-ethyl toluene	18.62	105	6459955	77.627	ppbV	95
97) 1,3,5-trimethylbenzene	18.68	105	5088026	77.873	ppbV	94
98) tert-butylbenzene	19.02	119	4456424	60.901	ppbV	94
99) 1,2,4-trimethylbenzene	19.03	105	4035168	62.174	ppbV #	88
100) decane	19.10	57	4492632	77.733	ppbV	88
101) Benzyl Chloride	19.15	91	4159167	93.146	ppbV	92
102) 1,3-dichlorobenzene	19.17	146	3085649	88.461	ppbV	97
103) 1,4-dichlorobenzene	19.22	146	3061345M3	82.186	ppbV	
104) sec-butylbenzene	19.25	105	6779564	69.697	ppbV	93
105) 1,2,3-trimethylbenzene	19.38	105	3744483	54.368	ppbV	96
106) p-isopropyltoluene	19.38	119	5296729	57.694	ppbV	93
107) 1,2-dichlorobenzene	19.51	146	3212425	88.404	ppbV	97
108) n-butylbenzene	19.74	91	5519335	68.835	ppbV #	86
109) indan	19.56	117	5081292	67.315	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47299.D
 Acq On : 16 Jan 2020 9:41 AM
 Operator : AIRPIAN04:RY
 Sample : IT015-LLSTD100
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:51:42 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.64	115	4509193	75.792	ppbV	97
111) 1,2-dibromo-3-chloropr...	19.89	75	1405522	76.408	ppbV	85
112) undecane	20.15	57	4746822	67.836	ppbV	92
113) 1,2,4,5-tetramethylben...	20.38	119	4733474	63.384	ppbV	93
114) dodecane	21.06	57	4679732	60.395	ppbV	88
115) 1,2,4-trichlorobenzene	21.02	180	2489128	87.538	ppbV	98
116) naphthalene	21.13	128	6322245	71.254	ppbV	99
117) 1,2,3-trichlorobenzene	21.38	180	2505212	71.787	ppbV	98
118) benzothiophene	21.19	134	5439931	118.806	ppbV	98
119) hexachlorobutadiene	21.45	225	1950792	61.087	ppbV	93
120) 2-methylnaphthalene	22.23	142	1951491	153.475	ppbV	97
121) 1-methylnaphthalene	22.43	142	3555093	113.326	ppbV	98

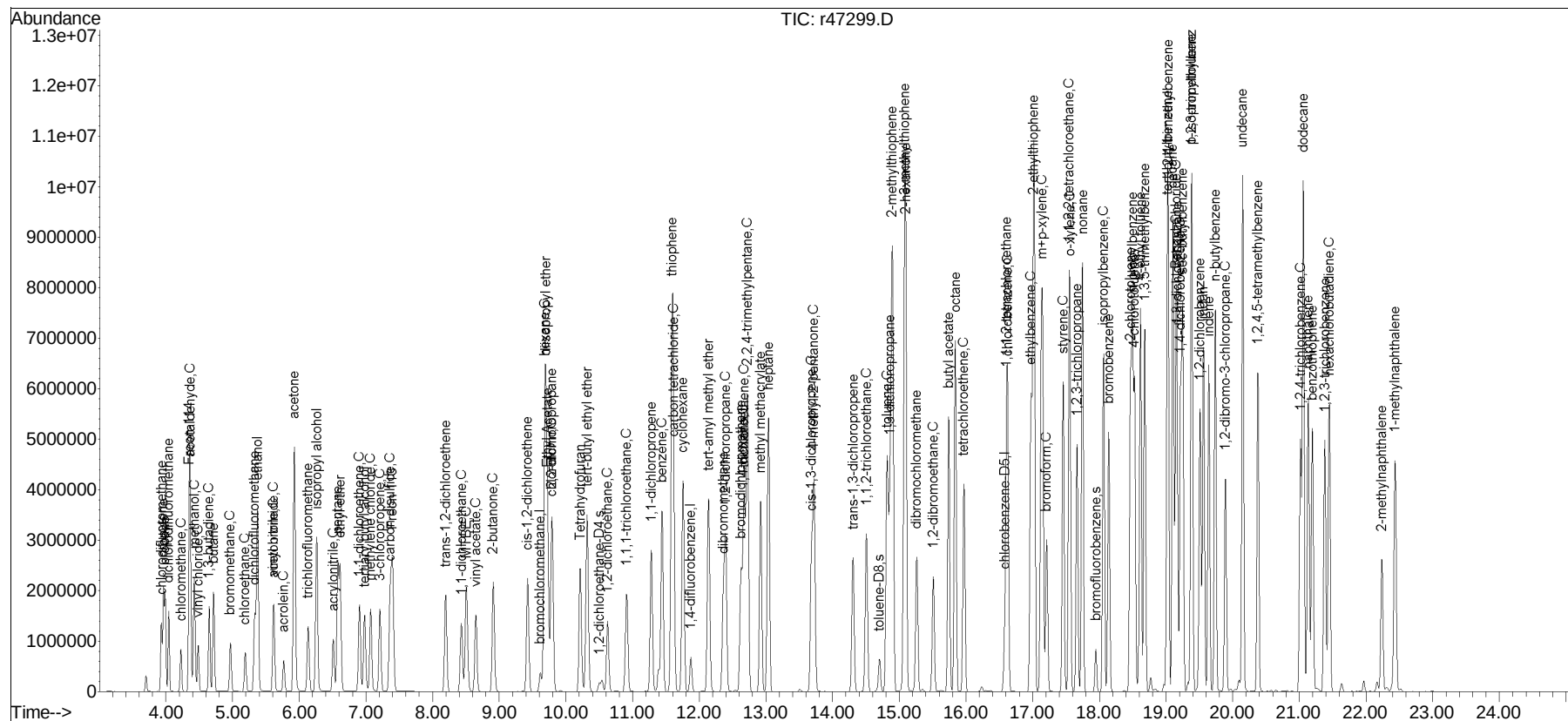
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47299.D
 Acq On : 16 Jan 2020 9:41 AM
 Operator : AIRPIANO4:RY
 Sample : IT015-LLSTD100
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:51:42 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:36:24 2020
 Response via : Initial Calibration

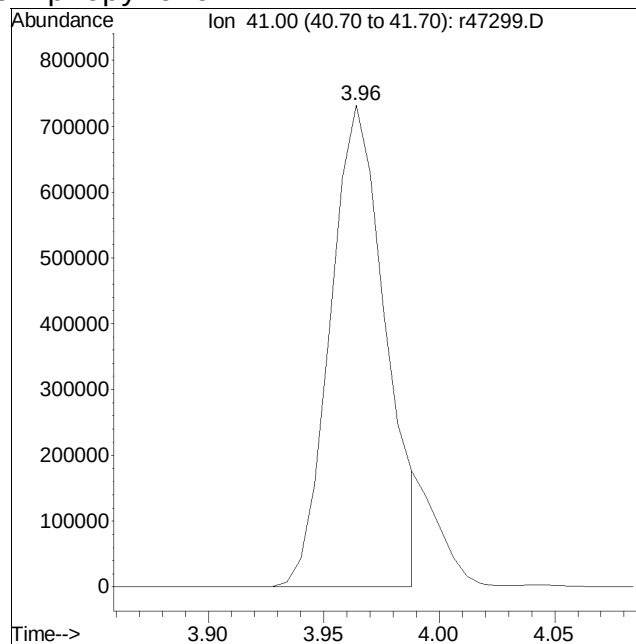
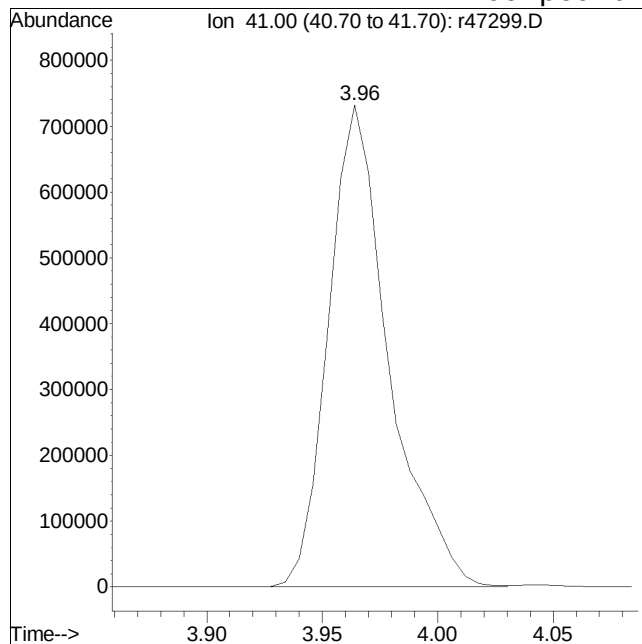
Sub List : Default - All compounds listed 20\01\200115T_I\r47293.D



Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47299.D Operator : AIRPIAN04:RY
Date Inj'd : 1/16/2020 0:9: 1 Instrument :
Sample : IT015-LLSTD100 Quant Date : 1/16/2020 10:38 am

Compound #3: propylene



Original Peak Response = 1334633

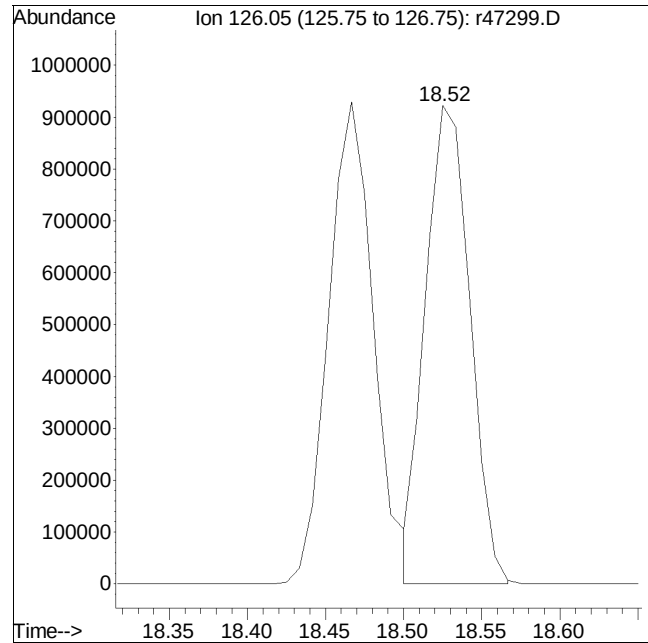
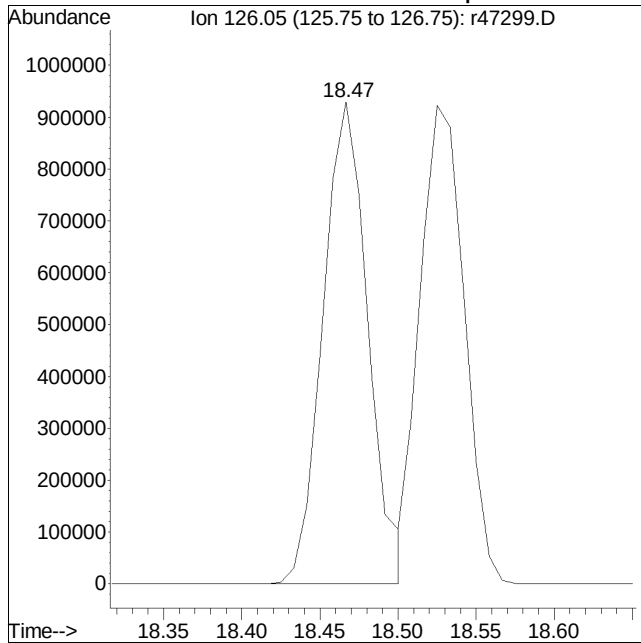
Manual Peak Response = 1225541 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47299.D Operator : AIRPIANO4:RY
Date Inj'd : 1/16/2020 0:9: 1 Instrument :
Sample : IT015-LLSTD100 Quant Date : 1/16/2020 10:38 am

Compound #95: 4-chlorotoluene



Original Peak Response = 1860907

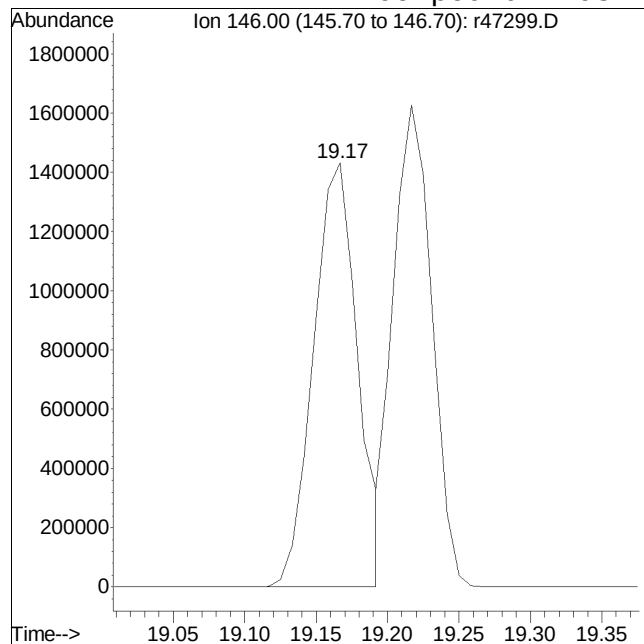
Manual Peak Response = 1828688 M3

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.

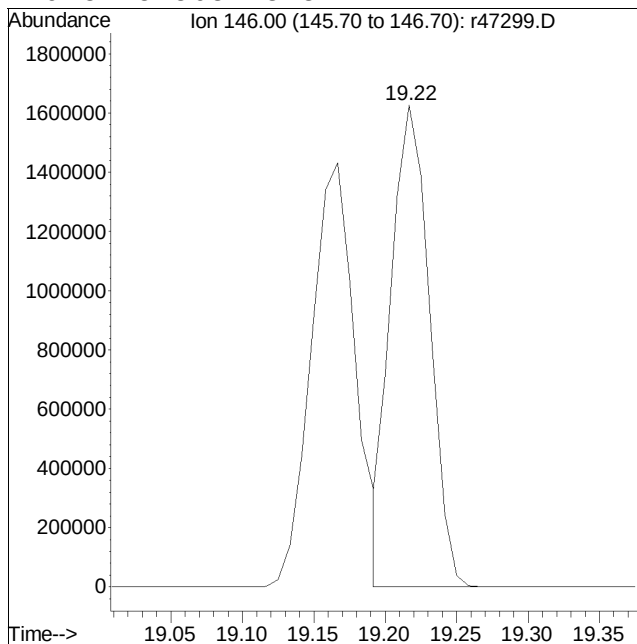
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
 Data File : r47299.D Operator : AIRPIAN04:RY
 Date Inj'd : 1/16/2020 0:9: 1 Instrument :
 Sample : IT015-LLSTD100 Quant Date : 1/16/2020 10:38 am

Compound #103: 1,4-dichlorobenzene



Original Peak Response = 3085649



Manual Peak Response = 3061345 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\Airpiano4\2020\01\200115T_I\
 Data File : r47302.D
 Acq On : 16 Jan 2020 11:46 AM
 Operator : AIRPIAN04:RY
 Sample : CT015-LLSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 12:31:24 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	101	0.05
2	chlorodifluoromethane	0.707	0.707	0.0	102	0.03
3	propylene	0.581	0.671	-15.5	112	0.04
4	propane	0.556	0.586	-5.4	103	0.04
5	dichlorodifluoromethane	0.782	0.717	8.3	94	0.04
6 C	chloromethane	0.445	0.479	-7.6	110	0.04
7	Freon-114	1.047	1.059	-1.1	102	0.04
8 C	methanol	0.184	0.176	4.3	90	0.04
9 C	vinyl chloride	0.526	0.510	3.0	98	0.04
10 C	1,3-butadiene	0.453	0.489	-7.9	108	0.04
11	butane	0.942	0.829	12.0	89	0.04
13 C	bromomethane	0.404	0.391	3.2	99	0.04
14 C	chloroethane	0.296	0.283	4.4	99	0.05
15	ethanol	0.339	0.339	0.0	86	0.04
16	dichlorofluoromethane	0.909	0.735	19.1	82	0.04
17 C	vinyl bromide	0.439	0.422	3.9	97	0.05
18 C	acrolein	0.239	0.224	6.3	94	0.05
19	acetone	0.885	0.674	23.8	74	0.05
20 C	acetonitrile	0.538	0.440	18.2	86	0.05
21	trichlorofluoromethane	0.764	0.608	20.4	84	0.05
22	isopropyl alcohol	1.112	0.963	13.4	86	0.05
23 C	acrylonitrile	0.453	0.437	3.5	99	0.05
24	pentane	1.213	0.998	17.7	86	0.05
25	ethyl ether	0.817	0.809	1.0	105	0.05
26 C	1,1-dichloroethene	0.737	0.634	14.0	92	0.05
27	tertiary butyl alcohol	1.001	0.859	14.2	88	0.05
28 C	methylene chloride	0.625	0.639	-2.2	106	0.05
29 C	3-chloropropene	0.942	0.855	9.2	97	0.05
30 C	carbon disulfide	1.635	1.550	5.2	97	0.05
31	Freon 113	0.903	0.855	5.3	99	0.05
32	trans-1,2-dichloroethene	0.826	0.689	16.6	89	0.05
33 C	1,1-dichloroethane	1.003	0.877	12.6	92	0.05
34 C	MTBE	1.528	1.440	5.8	96	0.05
35 C	vinyl acetate	1.492	1.388	7.0	93	0.05
36 C	2-butanone	1.454	1.260	13.3	92	0.05
37	cis-1,2-dichloroethene	0.724	0.618	14.6	94	0.05
38	Ethyl Acetate	0.223	0.203	9.0	96	0.05
39 C	chloroform	0.890	0.901	-1.2	109	0.06
40	Tetrahydrofuran	1.027	1.155	-12.5	109	0.05

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47302.D
 Acq On : 16 Jan 2020 11:46 AM
 Operator : AIRPIAN04:RY
 Sample : CT015-LLSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 12:31:24 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	0.754	0.727	3.6	102	0.05
42 C	1,2-dichloroethane	0.668	0.584	12.6	86	0.05
43 I	1,4-difluorobenzene	1.000	1.000	0.0	112	0.05
44 C	hexane	0.376	0.297	21.0	96	0.05
45	diisopropyl ether	0.194	0.142	26.8	88	0.05
46	tert-butyl ethyl ether	0.709	0.577	18.6	91	0.05
47 s	1,2-dichloroethane-D4	0.204	0.170	16.7	90	0.05
48 C	1,1,1-trichloroethane	0.314	0.312	0.6	114	0.05
49	1,1-dichloropropene	0.294	0.283	3.7	110	0.05
50 C	benzene	0.687	0.675	1.7	115	0.05
52 C	carbon tetrachloride	0.269	0.243	9.7	99	0.05
53	cyclohexane	0.436	0.403	7.6	105	0.05
54	tert-amyl methyl ether	0.638	0.618	3.1	109	0.05
55	dibromomethane	0.196	0.170	13.3	99	0.05
56 C	1,2-dichloropropane	0.269	0.257	4.5	113	0.05
57	bromodichloromethane	0.395	0.358	9.4	103	0.05
58 C	1,4-dioxane	0.173	0.172	0.6	111	0.05
59 C	trichloroethene	0.262	0.269	-2.7	117	0.05
60 C	2,2,4-trimethylpentane	1.352	1.292	4.4	107	0.05
61	methyl methacrylate	0.445	0.319	28.3	70	0.05
62	heptane	0.591	0.619	-4.7	115	0.05
63 C	cis-1,3-dichloropropene	0.342	0.378	-10.5	127	0.05
64 C	4-methyl-2-pentanone	0.676	0.706	-4.4	113	0.04
65	trans-1,3-dichloropropene	0.324	0.301	7.1	105	0.04
66 C	1,1,2-trichloroethane	0.253	0.265	-4.7	122	0.04
67 I	chlorobenzene-D5	1.000	1.000	0.0	100	0.04
68 C	toluene	4.866	5.145	-5.7	111	0.04
69 s	toluene-D8	4.292	4.902	-14.2	118	0.04
71	1,3-dichloropropane	2.220	2.221	-0.0	104	0.04
72	2-hexanone	3.298	4.052	-22.9	111	0.04
74	dibromochloromethane	2.003	2.237	-11.7	110	0.04
75 C	1,2-dibromoethane	2.094	2.340	-11.7	117	0.04
76	butyl acetate	0.666	0.729	-9.5	109	0.04
77	octane	1.959	1.933	1.3	98	0.03
78 C	tetrachloroethene	1.909	2.165	-13.4	118	0.03
79	1,1,1,2-tetrachloroethane	1.465	1.536	-4.8	103	0.04
80 C	chlorobenzene	3.599	4.049	-12.5	118	0.04

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47302.D
 Acq On : 16 Jan 2020 11:46 AM
 Operator : AIRPIAN04:RY
 Sample : CT015-LLSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 12:31:24 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	5.935	6.742	-13.6	115	0.03
83 C	m+p-xylene	4.950	5.480	-10.7	111	0.03
84 C	bromoform	1.906	2.362	-23.9	116	0.03
85 C	styrene	3.829	4.614	-20.5	121	0.03
86 C	1,1,2,2-tetrachloroethane	3.386	3.739	-10.4	113	0.03
87 C	o-xylene	4.857	5.582	-14.9	112	0.03
88	1,2,3-trichloropropane	2.645	2.709	-2.4	105	0.03
89	nonane	4.624	5.109	-10.5	106	0.03
90 s	bromofluorobenzene	3.058	3.299	-7.9	112	0.03
91 C	isopropylbenzene	6.228	6.877	-10.4	109	0.03
92	bromobenzene	3.485	3.552	-1.9	103	0.03
93	2-chlorotoluene	1.808	1.908	-5.5	104	0.03
94	n-propylbenzene	2.169	2.278	-5.0	102	0.03
95	4-chlorotoluene	1.734	1.782	-2.8	102	0.03
96	4-ethyl toluene	6.976	8.125	-16.5	113	0.03
97	1,3,5-trimethylbenzene	5.685	6.642	-16.8	118	0.03
98	tert-butylbenzene	5.949	6.410	-7.7	101	0.03
99	1,2,4-trimethylbenzene	5.340	6.593	-23.5	117	0.03
100	decane	5.091	4.862	4.5	97	0.03
101 C	Benzyl Chloride	3.894	3.455	11.3	89	0.02
102	1,3-dichlorobenzene	3.119	2.638	15.4	87	0.03
103 C	1,4-dichlorobenzene	3.225	3.796	-17.7	118	0.03
104	sec-butylbenzene	8.106	8.741	-7.8	104	0.03
106	p-isopropyltoluene	7.246	7.375	-1.8	93	0.02
107	1,2-dichlorobenzene	3.186	3.795	-19.1	121	0.03
108	n-butylbenzene	6.302	7.032	-11.6	101	0.03
111 C	1,2-dibromo-3-chloropropane	1.441	1.559	-8.2	98	0.03
112	undecane	5.571	5.770	-3.6	95	0.03
114	dodecane	5.518	5.985	-8.5	89	0.03
115 C	1,2,4-trichlorobenzene	2.185	3.345	-53.1#	136	0.03
116	naphthalene	6.204	7.600	-22.5	99	0.03
117	1,2,3-trichlorobenzene	2.494	3.019	-21.1	100	0.03
119 C	hexachlorobutadiene	2.574	3.461	-34.5#	125	0.03

* 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\Airpiano4\2020\01\200115T_I\
 Data File : r47302.D
 Acq On : 16 Jan 2020 11:46 AM
 Operator : AIRPIAN04:RY
 Sample : CT015-LLSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 12:31:24 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default-ICV-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.62	49	209879	10.000	ppbV	0.05
Standard Area = 207093			Recovery =	101.35%		
43) 1,4-difluorobenzene	11.87	114	687402	10.000	ppbV	0.05
Standard Area = 612436			Recovery =	112.24%		
67) chlorobenzene-D5	16.58	54	109999	10.000	ppbV	0.04
Standard Area = 109807			Recovery =	100.17%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.50	65	116960	8.323	ppbV	0.05
Spiked Amount 10.000	Range 70 - 130		Recovery =	83.23%		
69) toluene-D8	14.70	98	539239	11.421	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery =	114.21%		
90) bromofluorobenzene	17.95	95	362898	10.788	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.88%		
Target Compounds						Qvalue
2) chlorodifluoromethane	3.93	51	148346	9.996	ppbV	# 93
3) propylene	3.97	41	140850M4	11.554	ppbV	
4) propane	3.99	29	122899	10.541	ppbV	# 95
5) dichlorodifluoromethane	4.05	85	150520	9.172	ppbV	100
6) chloromethane	4.23	50	100521	10.753	ppbV	99
7) Freon-114	4.35	85	222284	10.117	ppbV	98
8) methanol	4.42	31	184244	47.752	ppbV	97
9) vinyl chloride	4.49	62	107060	9.704	ppbV	100
10) 1,3-butadiene	4.65	54	102623	10.796	ppbV	87
11) butane	4.72	43	173912	8.796	ppbV	97
13) bromomethane	4.97	94	82016	9.670	ppbV	98
14) chloroethane	5.19	64	59300	9.559	ppbV	99
15) ethanol	5.36	31	355602	50.003	ppbV	97
16) dichlorofluoromethane	5.33	67	154305	8.090	ppbV	99
17) vinyl bromide	5.62	106	88494	9.599	ppbV	99
18) acrolein	5.77	56	46975	9.359	ppbV	98
19) acetone	5.92	43	707749	38.096	ppbV	90
20) acetonitrile	5.61	41	92397	8.190	ppbV	100
21) trichlorofluoromethane	6.14	101	127701	7.969	ppbV	98
22) isopropyl alcohol	6.25	45	505499	21.655	ppbV	100
23) acrylonitrile	6.50	53	91614	9.628	ppbV	99
24) pentane	6.58	43	209408	8.224	ppbV	97
25) ethyl ether	6.62	31	169800	9.902	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47302.D
 Acq On : 16 Jan 2020 11:46 AM
 Operator : AIRPIAN04:RY
 Sample : CT015-LLSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 12:31:24 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	6.90	61	132990	8.598	ppbV	94
27) tertiary butyl alcohol	6.98	59	180289	8.580	ppbV	96
28) methylene chloride	7.07	49	134203	10.233	ppbV	99
29) 3-chloropropene	7.21	41	179506	9.084	ppbV	93
30) carbon disulfide	7.37	76	325316	9.480	ppbV	96
31) Freon 113	7.40	101	179519	9.473	ppbV	98
32) trans-1,2-dichloroethene	8.20	61	144575	8.343	ppbV	95
33) 1,1-dichloroethane	8.43	63	184101	8.746	ppbV	100
34) MTBE	8.51	73	302122	9.421	ppbV	98
35) vinyl acetate	8.65	43	291255	9.304	ppbV	97
36) 2-butanone	8.91	43	264446	8.664	ppbV	96
37) cis-1,2-dichloroethene	9.43	61	129669	8.535	ppbV	94
38) Ethyl Acetate	9.72	61	42645	9.128	ppbV	90
39) chloroform	9.78	83	189126	10.122	ppbV	99
40) Tetrahydrofuran	10.23	42	242428	11.249	ppbV	94
41) 2,2-dichloropropane	9.79	77	152648	9.651	ppbV	99
42) 1,2-dichloroethane	10.63	62	122613	8.746	ppbV #	89
44) hexane	9.68	57	203904	7.880	ppbV	89
45) diisopropyl ether	9.69	87	97845	7.354	ppbV	99
46) tert-butyl ethyl ether	10.32	59	396659	8.143	ppbV	97
48) 1,1,1-trichloroethane	10.91	97	214206	9.925	ppbV	93
49) 1,1-dichloropropene	11.28	75	194467	9.630	ppbV #	87
50) benzene	11.44	78	464062	9.831	ppbV	99
52) carbon tetrachloride	11.61	117	167098	9.036	ppbV #	98
53) cyclohexane	11.75	56	277128	9.257	ppbV	96
54) tert-amyl methyl ether	12.14	73	424882	9.683	ppbV	96
55) dibromomethane	12.36	93	116978	8.670	ppbV	92
56) 1,2-dichloropropane	12.39	63	176998	9.588	ppbV #	94
57) bromodichloromethane	12.62	83	246132	9.063	ppbV	100
58) 1,4-dioxane	12.66	88	118288	9.956	ppbV	95
59) trichloroethene	12.67	130	184906	10.264	ppbV	99
60) 2,2,4-trimethylpentane	12.72	57	888018	9.557	ppbV	98
61) methyl methacrylate	12.92	41	219560	7.176	ppbV	88
62) heptane	13.03	43	425584	10.473	ppbV	95
63) cis-1,3-dichloropropene	13.68	75	259691	11.034	ppbV #	88
64) 4-methyl-2-pentanone	13.72	43	485156	10.443	ppbV	96
65) trans-1,3-dichloropropene	14.30	75	206949	9.286	ppbV #	89
66) 1,1,2-trichloroethane	14.50	97	182159	10.467	ppbV	91
68) toluene	14.81	91	565982	10.575	ppbV	99
71) 1,3-dichloropropane	14.84	76	244341	10.007	ppbV	90

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47302.D
 Acq On : 16 Jan 2020 11:46 AM
 Operator : AIRPIAN04:RY
 Sample : CT015-LLSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 12:31:24 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) 2-hexanone	15.09	43	445719	12.288	ppbV	# 88
74) dibromochloromethane	15.26	129	246019	11.164	ppbV	99
75) 1,2-dibromoethane	15.51	107	257361	11.171	ppbV	100
76) butyl acetate	15.74	73	80172	10.944	ppbV	90
77) octane	15.83	85	212648	9.866	ppbV	94
78) tetrachloroethene	15.97	166	238152	11.341	ppbV	94
79) 1,1,1,2-tetrachloroethane	16.61	131	169012	10.490	ppbV	97
80) chlorobenzene	16.63	112	445365	11.250	ppbV	99
81) ethylbenzene	16.97	91	741654	11.360	ppbV	98
83) m+p-xylene	17.13	91	1205642	22.143	ppbV	96
84) bromoform	17.20	173	259820	12.393	ppbV	99
85) styrene	17.46	104	507560	12.052	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.55	83	411327	11.045	ppbV	99
87) o-xylene	17.55	91	613976	11.493	ppbV	96
88) 1,2,3-trichloropropane	17.67	75	298021	10.244	ppbV	# 94
89) nonane	17.74	43	562036	11.051	ppbV	91
91) isopropylbenzene	18.06	105	756492	11.043	ppbV	98
92) bromobenzene	18.14	77	390764	10.193	ppbV	100
93) 2-chlorotoluene	18.47	126	209894	10.553	ppbV	100
94) n-propylbenzene	18.49	120	250631	10.504	ppbV	97
95) 4-chlorotoluene	18.52	126	195980M3	10.274	ppbV	
96) 4-ethyl toluene	18.62	105	893692	11.646	ppbV	98
97) 1,3,5-trimethylbenzene	18.68	105	730562	11.683	ppbV	99
98) tert-butylbenzene	19.02	119	705095	10.774	ppbV	99
99) 1,2,4-trimethylbenzene	19.02	105	725260	12.347	ppbV	90
100) decane	19.10	57	534811	9.551	ppbV	91
101) Benzyl Chloride	19.14	91	380011	8.873	ppbV	97
102) 1,3-dichlorobenzene	19.16	146	290163	8.457	ppbV	97
103) 1,4-dichlorobenzene	19.22	146	417535M3	11.772	ppbV	
104) sec-butylbenzene	19.25	105	961471	10.783	ppbV	100
106) p-isopropyltoluene	19.38	119	811190	10.177	ppbV	95
107) 1,2-dichlorobenzene	19.51	146	417470	11.912	ppbV	99
108) n-butylbenzene	19.73	91	773507	11.158	ppbV	95
111) 1,2-dibromo-3-chloropr...	19.89	75	171469	10.820	ppbV	94
112) undecane	20.15	57	634701	10.357	ppbV	92
114) dodecane	21.06	57	658390	10.847	ppbV	92
115) 1,2,4-trichlorobenzene	21.02	180	367993	15.309	ppbV	96
116) naphthalene	21.13	128	836019	12.251	ppbV	99
117) 1,2,3-trichlorobenzene	21.38	180	332076	12.103	ppbV	97
119) hexachlorobutadiene	21.45	225	380723	13.448	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\
 Data File : r47302.D
 Acq On : 16 Jan 2020 11:46 AM
 Operator : AIRPIAN04:RY
 Sample : CT015-LLSTD010
 Misc : WG1330812
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 12:31:24 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\r47293.D
 Sub List : Default-ICV-AP2 - All compounds listed

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

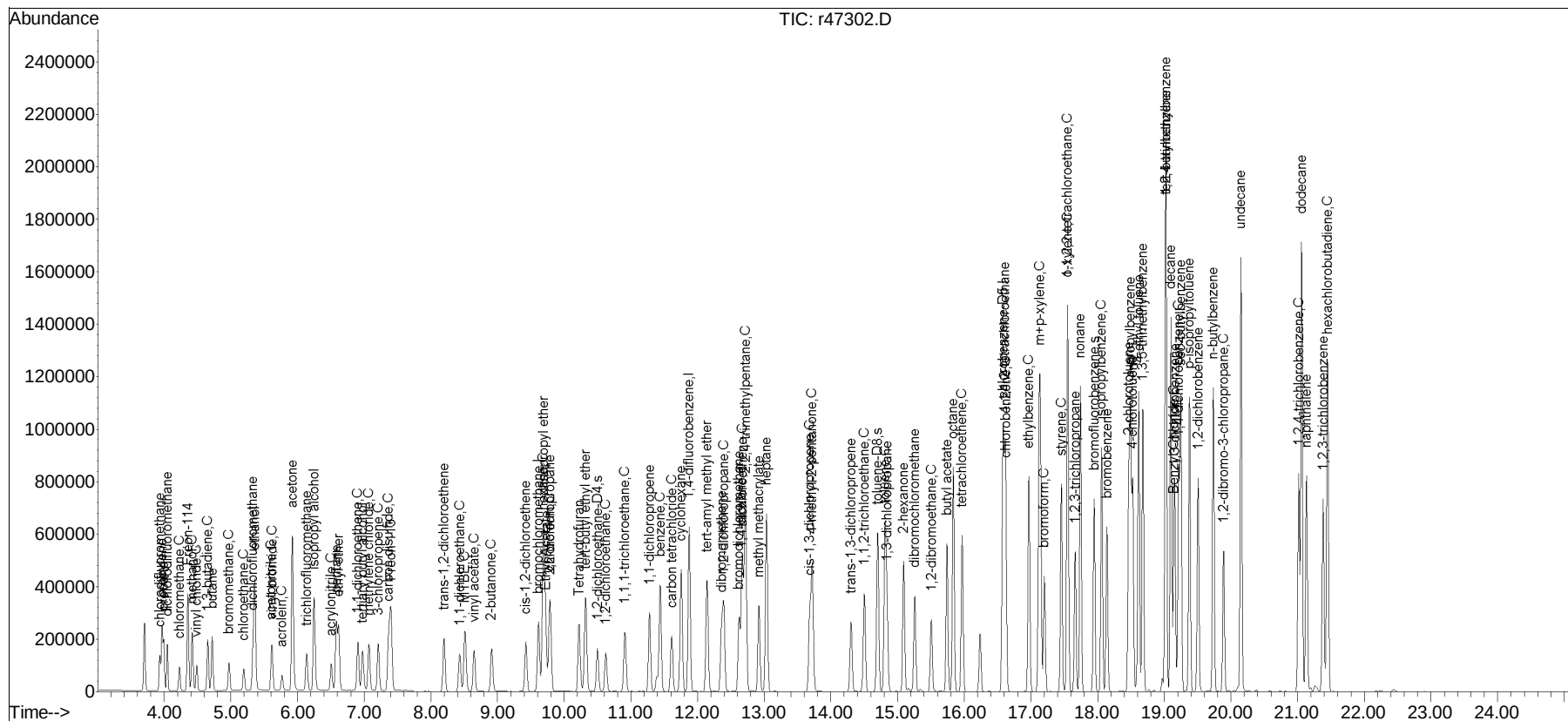
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200115T_I\
Data File   : r47302.D
Acq On      : 16 Jan 2020  11:46 AM
Operator    : AIRPIANO4:RY
Sample      : CT015-LLSTD010
Misc        : WG1330812
ALS Vial    : 0      Sample Multiplier: 1
```

Quant Time: Jan 16 12:31:24 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115T_I\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

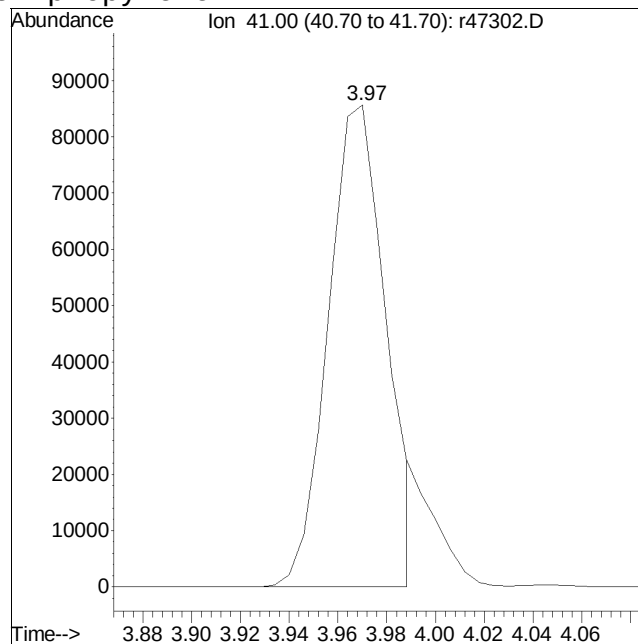
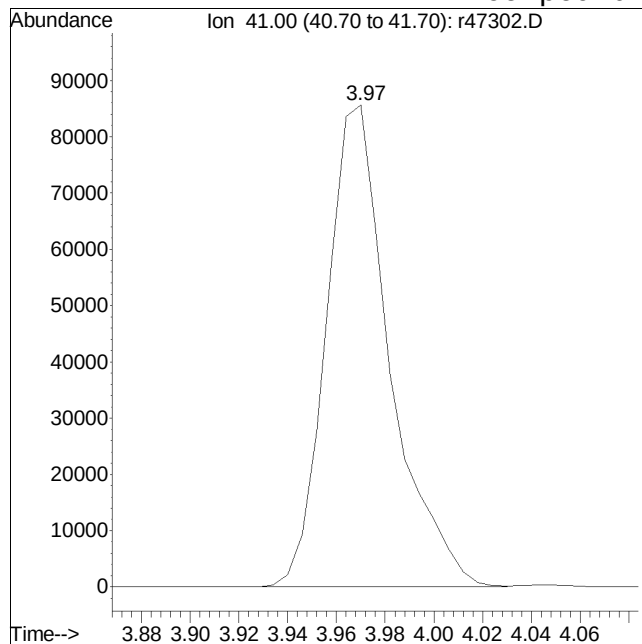
Sub List : Default-ICV-AP2 - All compounds listed0115T_I\r47293.D



Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47302.D Operator : AIRPIAN04:RY
Date Inj'd : 1/16/2020 0:1: 6 Instrument :
Sample : CT015-LLSTD010 Quant Date : 1/16/2020 12:29 pm

Compound #3: propylene



Original Peak Response = 155014

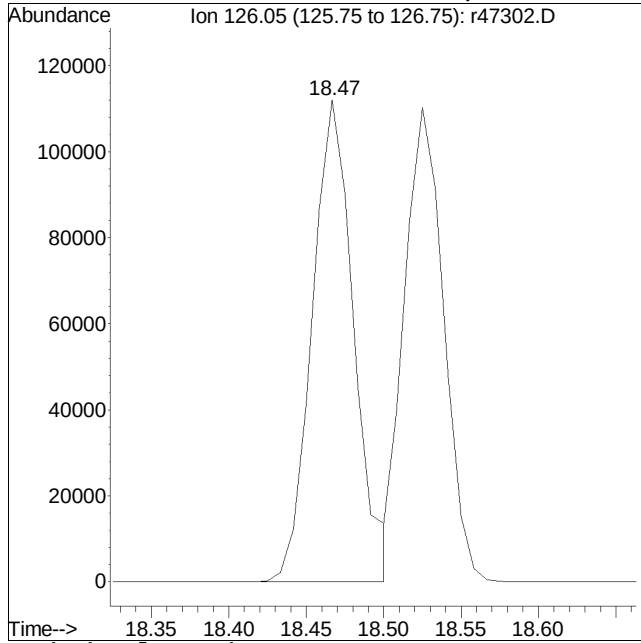
Manual Peak Response = 140850 M4

M4 = Poor automated baseline construction.

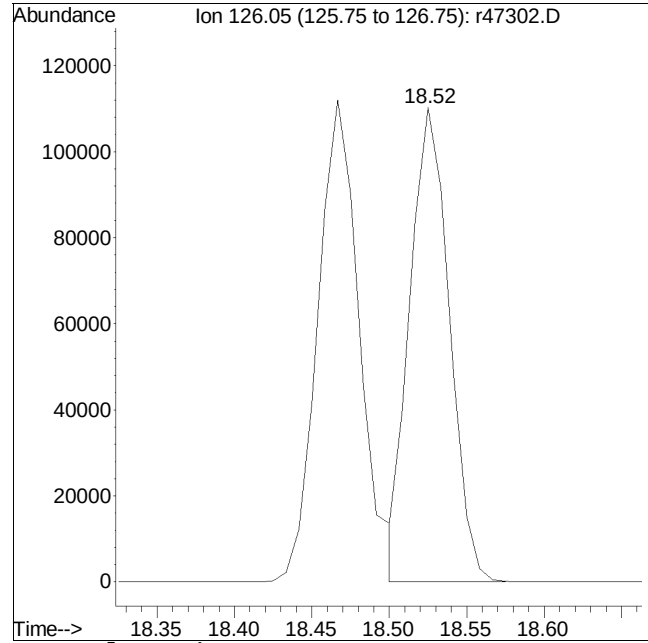
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47302.D Operator : AIRPIAN04:RY
Date Inj'd : 1/16/2020 0:1: 6 Instrument :
Sample : CT015-LLSTD010 Quant Date : 1/16/2020 12:29 pm

Compound #95: 4-chlorotoluene



Original Peak Response = 209894



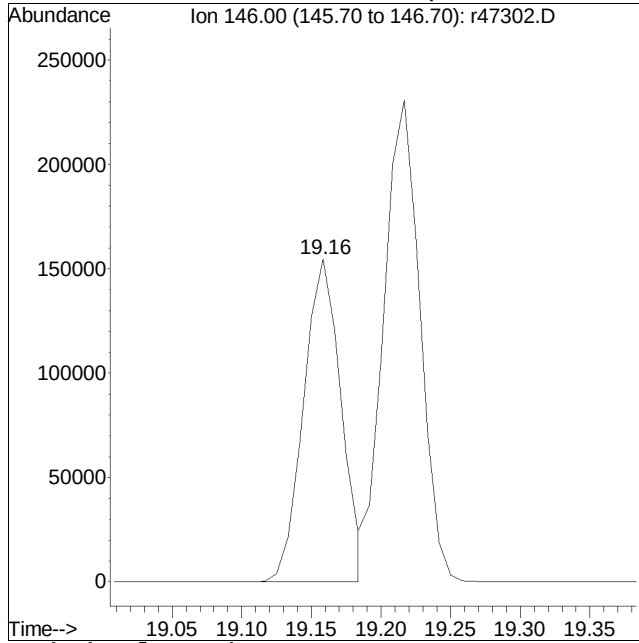
Manual Peak Response = 195980 M3

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.

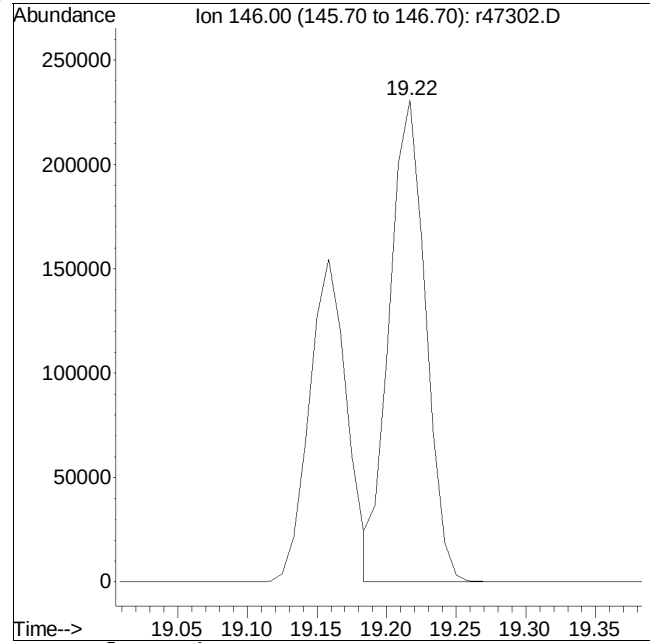
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TFS4_200115.M
Data File : r47302.D Operator : AIRPIANO4:RY
Date Inj'd : 1/16/2020 0:1: 6 Instrument :
Sample : CT015-LLSTD010 Quant Date : 1/16/2020 12:29 pm

Compound #103: 1,4-dichlorobenzene



Original Peak Response = 290163



Manual Peak Response = 417535 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.

Continuing Calibration

Calibration Verification Summary

Form 7

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Lab File ID : R47409
 Sample No : WG1332350-2
 Channel :

Lab Number : L2002033
 Project Number :
 Calibration Date : 01/21/20 12:33
 Init. Calib. Date(s) : 01/15/20 01/16/20
 Init. Calib. Times : 16:16 09:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	100	-.03
chlorodifluoromethane	0.707	0.696	-	1.6	30	99	-.02
propylene	0.581	0.673	-	-15.8	30	110	-.02
propane	0.556	0.578	-	-4	30	101	-.01
dichlorodifluoromethane	0.782	0.729	-	6.8	30	94	-.02
chloromethane	0.445	0.476	-	-7	30	108	-.02
Freon-114	1.047	1.079	-	-3.1	30	103	-.02
methanol	0.184	0.175	-	4.9	30	89	-.02
vinyl chloride	0.526	0.527	-	-0.2	30	100	-.02
1,3-butadiene	0.453	0.496	-	-9.5	30	108	-.02
butane	0.942	0.865	-	8.2	30	91	-.02
bromomethane	0.404	0.411	-	-1.7	30	103	-.02
chloroethane	0.296	0.294	-	0.7	30	101	-.02
ethanol	0.339	0.324	-	4.4	30	81	-.02
dichlorofluoromethane	0.909	0.778	-	14.4	30	86	-.02
vinyl bromide	0.439	0.438	-	0.2	30	100	-.02
acrolein	0.239	0.227	-	5	30	94	-.02
acetone	0.885	0.714	-	19.3	30	78	-.02
acetonitrile	0.538	0.472	-	12.3	30	91	-.02
trichlorofluoromethane	0.764	0.619	-	19	30	84	-.02
isopropyl alcohol	1.112	1.001	-	10	30	88	-.02
acrylonitrile	0.453	0.441	-	2.6	30	99	-.02
pentane	1.213	1.048	-	13.6	30	89	-.02
ethyl ether	0.817	0.726	-	11.1	30	93	-.02
1,1-dichloroethene	0.737	0.649	-	11.9	30	93	-.02
tertiary butyl alcohol	1.001	0.866	-	13.5	30	87	-.02
methylene chloride	0.625	0.636	-	-1.8	30	103	-.02
3-chloropropene	0.942	0.902	-	4.2	30	101	-.02
carbon disulfide	1.635	1.559	-	4.6	30	96	-.02
Freon 113	0.903	0.878	-	2.8	30	100	-.02
trans-1,2-dichloroethene	0.826	0.708	-	14.3	30	90	-.03
1,1-dichloroethane	1.003	0.896	-	10.7	30	93	-.03
MTBE	1.528	1.431	-	6.3	30	94	-.02
vinyl acetate	1.492	1.438	-	3.6	30	95	-.03
2-butanone	1.454	1.317	-	9.4	30	95	-.02
cis-1,2-dichloroethene	0.724	0.635	-	12.3	30	95	-.03
Ethyl Acetate	0.223	0.213	-	4.5	30	100	-.03
chloroform	0.89	0.778	-	12.6	30	93	-.02
Tetrahydrofuran	1.027	1.149	-	-11.9	30	107	-.03
2,2-dichloropropane	0.754	0.56	-	25.7	30	78	-.03
1,2-dichloroethane	0.668	0.601	-	10	30	87	-.02
1,4-difluorobenzene	1	1	-	0	30	108	-.02
hexane	0.376	0.307	-	18.4	30	97	-.03

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Lab File ID : R47409
 Sample No : WG1332350-2
 Channel :

Lab Number : L2002033
 Project Number :
 Calibration Date : 01/21/20 12:33
 Init. Calib. Date(s) : 01/15/20 01/16/20
 Init. Calib. Times : 16:16 09:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.194	0.149	-	23.2	30	89	-.02
tert-butyl ethyl ether	0.709	0.591	-	16.6	30	90	-.02
1,1,1-trichloroethane	0.314	0.278	-	11.5	30	99	-.02
1,1-dichloropropene	0.294	0.274	-	6.8	30	103	-.02
benzene	0.687	0.662	-	3.6	30	109	-.02
carbon tetrachloride	0.269	0.243	-	9.7	30	96	-.02
cyclohexane	0.436	0.41	-	6	30	103	-.03
tert-amyl methyl ether	0.638	0.59	-	7.5	30	101	-.02
dibromomethane	0.196	0.174	-	11.2	30	98	-.03
1,2-dichloropropane	0.269	0.262	-	2.6	30	111	-.02
bromodichloromethane	0.395	0.358	-	9.4	30	99	-.02
1,4-dioxane	0.173	0.175	-	-1.2	30	109	-.02
trichloroethene	0.262	0.269	-	-2.7	30	113	-.02
2,2,4-trimethylpentane	1.352	1.322	-	2.2	30	106	-.02
methyl methacrylate	0.445	0.334	-	24.9	30	71	-.02
heptane	0.591	0.614	-	-3.9	30	111	-.02
cis-1,3-dichloropropene	0.342	0.362	-	-5.8	30	117	-.02
4-methyl-2-pentanone	0.676	0.704	-	-4.1	30	109	-.03
trans-1,3-dichloropropene	0.324	0.288	-	11.1	30	97	-.03
1,1,2-trichloroethane	0.253	0.264	-	-4.3	30	117	-.03
chlorobenzene-D5	1	1	-	0	30	97	-.02
toluene	4.866	5.202	-	-6.9	30	109	-.02
1,3-dichloropropane	2.22	2.169	-	2.3	30	98	-.03
2-hexanone	3.298	4.042	-	-22.6	30	107	-.02
dibromochloromethane	2.003	2.267	-	-13.2	30	108	-.02
1,2-dibromoethane	2.094	2.302	-	-9.9	30	112	-.02
butyl acetate	0.666	0.698	-	-4.8	30	101	-.02
octane	1.959	1.945	-	0.7	30	96	-.02
tetrachloroethene	1.909	2.235	-	-17.1	30	118	-.03
1,1,1,2-tetrachloroethane	1.465	1.544	-	-5.4	30	100	-.02
chlorobenzene	3.599	4.002	-	-11.2	30	113	-.02
ethylbenzene	5.935	6.825	-	-15	30	112	-.02
m+p-xylene	4.95	5.612	-	-13.4	30	109	-.02
bromoform	1.906	2.385	-	-25.1	30	114	-.02
styrene	3.829	4.459	-	-16.5	30	113	-.02
1,1,2,2-tetrachloroethane	3.386	3.868	-	-14.2	30	113	-.02
o-xylene	4.857	5.641	-	-16.1	30	110	-.02
1,2,3-trichloropropane	2.645	2.623	-	0.8	30	98	-.02
nonane	4.624	5.043	-	-9.1	30	101	-.02
isopropylbenzene	6.228	6.694	-	-7.5	30	103	-.02
bromobenzene	3.485	3.521	-	-1	30	99	-.02
2-chlorotoluene	1.808	1.912	-	-5.8	30	100	-.02
n-propylbenzene	2.169	2.29	-	-5.6	30	100	-.02

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Lab File ID : R47409
 Sample No : WG1332350-2
 Channel :

Lab Number : L2002033
 Project Number :
 Calibration Date : 01/21/20 12:33
 Init. Calib. Date(s) : 01/15/20 01/16/20
 Init. Calib. Times : 16:16 09:41

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	1.734	1.794	-	-3.5	30	100	-.02
4-ethyl toluene	6.976	7.97	-	-14.2	30	107	-.02
1,3,5-trimethylbenzene	5.685	6.579	-	-15.7	30	113	-.02
tert-butylbenzene	5.949	6.419	-	-7.9	30	98	-.02
1,2,4-trimethylbenzene	5.34	6.529	-	-22.3	30	113	-.02
decane	5.091	5.076	-	0.3	30	98	0
Benzyl Chloride	3.894	3.911	-	-0.4	30	98	-.02
1,3-dichlorobenzene	3.119	3.282	-	-5.2	30	105	-.02
1,4-dichlorobenzene	3.225	3.927	-	-21.8	30	118	-.02
sec-butylbenzene	8.106	8.631	-	-6.5	30	99	-.02
p-isopropyltoluene	7.246	7.417	-	-2.4	30	90	-.02
1,2-dichlorobenzene	3.186	3.927	-	-23.3	30	121	-.02
n-butylbenzene	6.302	7.085	-	-12.4	30	99	-.02
1,2-dibromo-3-chloropropan	1.441	1.522	-	-5.6	30	93	-.02
undecane	5.571	5.954	-	-6.9	30	95	0
dodecane	5.518	6.135	-	-11.2	30	89	0
1,2,4-trichlorobenzene	2.185	3.358	-	-53.7*	30	132	-.02
naphthalene	6.204	7.611	-	-22.7	30	96	-.02
1,2,3-trichlorobenzene	2.494	3.07	-	-23.1	30	98	-.02
hexachlorobutadiene	2.574	3.452	-	-34.1*	30	121	-.02

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-2,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	100	-0.03
2	chlorodifluoromethane	0.707	0.696	1.6	99	-0.02
3	propylene	0.581	0.673	-15.8	110	-0.02
4	propane	0.556	0.578	-4.0	101	-0.01
5	dichlorodifluoromethane	0.782	0.729	6.8	94	-0.02
6 C	chloromethane	0.445	0.476	-7.0	108	-0.02
7	Freon-114	1.047	1.079	-3.1	103	-0.02
8 C	methanol	0.184	0.175	4.9	89	-0.02
9 C	vinyl chloride	0.526	0.527	-0.2	100	-0.02
10 C	1,3-butadiene	0.453	0.496	-9.5	108	-0.02
11	butane	0.942	0.865	8.2	91	-0.02
13 C	bromomethane	0.404	0.411	-1.7	103	-0.02
14 C	chloroethane	0.296	0.294	0.7	101	-0.02
15	ethanol	0.339	0.324	4.4	81	-0.02
16	dichlorofluoromethane	0.909	0.778	14.4	86	-0.02
17 C	vinyl bromide	0.439	0.438	0.2	100	-0.02
18 C	acrolein	0.239	0.227	5.0	94	-0.02
19	acetone	0.885	0.714	19.3	78	-0.02
20 C	acetonitrile	0.538	0.472	12.3	91	-0.02
21	trichlorofluoromethane	0.764	0.619	19.0	84	-0.02
22	isopropyl alcohol	1.112	1.001	10.0	88	-0.02
23 C	acrylonitrile	0.453	0.441	2.6	99	-0.02
24	pentane	1.213	1.048	13.6	89	-0.02
25	ethyl ether	0.817	0.726	11.1	93	-0.02
26 C	1,1-dichloroethene	0.737	0.649	11.9	93	-0.02
27	tertiary butyl alcohol	1.001	0.866	13.5	87	-0.02
28 C	methylene chloride	0.625	0.636	-1.8	103	-0.02
29 C	3-chloropropene	0.942	0.902	4.2	101	-0.02
30 C	carbon disulfide	1.635	1.559	4.6	96	-0.02
31	Freon 113	0.903	0.878	2.8	100	-0.02
32	trans-1,2-dichloroethene	0.826	0.708	14.3	90	-0.03
33 C	1,1-dichloroethane	1.003	0.896	10.7	93	-0.03
34 C	MTBE	1.528	1.431	6.3	94	-0.02
35 C	vinyl acetate	1.492	1.438	3.6	95	-0.03
36 C	2-butanone	1.454	1.317	9.4	95	-0.02
37	cis-1,2-dichloroethene	0.724	0.635	12.3	95	-0.03
38	Ethyl Acetate	0.223	0.213	4.5	100	-0.03
39 C	chloroform	0.890	0.778	12.6	93	-0.02
40	Tetrahydrofuran	1.027	1.149	-11.9	107	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-2,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	0.754	0.560	25.7	78	-0.03
42 C	1,2-dichloroethane	0.668	0.601	10.0	87	-0.02
43 I	1,4-difluorobenzene	1.000	1.000	0.0	108	-0.02
44 C	hexane	0.376	0.307	18.4	97	-0.03
45	diisopropyl ether	0.194	0.149	23.2	89	-0.02
46	tert-butyl ethyl ether	0.709	0.591	16.6	90	-0.02
48 C	1,1,1-trichloroethane	0.314	0.278	11.5	99	-0.02
49	1,1-dichloropropene	0.294	0.274	6.8	103	-0.02
50 C	benzene	0.687	0.662	3.6	109	-0.02
52 C	carbon tetrachloride	0.269	0.243	9.7	96	-0.02
53	cyclohexane	0.436	0.410	6.0	103	-0.03
54	tert-amyl methyl ether	0.638	0.590	7.5	101	-0.02
55	dibromomethane	0.196	0.174	11.2	98	-0.03
56 C	1,2-dichloropropane	0.269	0.262	2.6	111	-0.02
57	bromodichloromethane	0.395	0.358	9.4	99	-0.02
58 C	1,4-dioxane	0.173	0.175	-1.2	109	-0.02
59 C	trichloroethene	0.262	0.269	-2.7	113	-0.02
60 C	2,2,4-trimethylpentane	1.352	1.322	2.2	106	-0.02
61	methyl methacrylate	0.445	0.334	24.9	71	-0.02
62	heptane	0.591	0.614	-3.9	111	-0.02
63 C	cis-1,3-dichloropropene	0.342	0.362	-5.8	117	-0.02
64 C	4-methyl-2-pentanone	0.676	0.704	-4.1	109	-0.03
65	trans-1,3-dichloropropene	0.324	0.288	11.1	97	-0.03
66 C	1,1,2-trichloroethane	0.253	0.264	-4.3	117	-0.03
67 I	chlorobenzene-D5	1.000	1.000	0.0	97	-0.02
68 C	toluene	4.866	5.202	-6.9	109	-0.02
71	1,3-dichloropropane	2.220	2.169	2.3	98	-0.03
72	2-hexanone	3.298	4.042	-22.6	107	-0.02
74	dibromochloromethane	2.003	2.267	-13.2	108	-0.02
75 C	1,2-dibromoethane	2.094	2.302	-9.9	112	-0.02
76	butyl acetate	0.666	0.698	-4.8	101	-0.02
77	octane	1.959	1.945	0.7	96	-0.02
78 C	tetrachloroethene	1.909	2.235	-17.1	118	-0.03
79	1,1,1,2-tetrachloroethane	1.465	1.544	-5.4	100	-0.02
80 C	chlorobenzene	3.599	4.002	-11.2	113	-0.02
81 C	ethylbenzene	5.935	6.825	-15.0	112	-0.02
83 C	m+p-xylene	4.950	5.612	-13.4	109	-0.02

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-2,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	1.906	2.385	-25.1	114	-0.02
85 C	styrene	3.829	4.459	-16.5	113	-0.02
86 C	1,1,2,2-tetrachloroethane	3.386	3.868	-14.2	113	-0.02
87 C	o-xylene	4.857	5.641	-16.1	110	-0.02
88	1,2,3-trichloropropane	2.645	2.623	0.8	98	-0.02
89	nonane	4.624	5.043	-9.1	101	-0.02
91 C	isopropylbenzene	6.228	6.694	-7.5	103	-0.02
92	bromobenzene	3.485	3.521	-1.0	99	-0.02
93	2-chlorotoluene	1.808	1.912	-5.8	100	-0.02
94	n-propylbenzene	2.169	2.290	-5.6	100	-0.02
95	4-chlorotoluene	1.734	1.794	-3.5	100	-0.02
96	4-ethyl toluene	6.976	7.970	-14.2	107	-0.02
97	1,3,5-trimethylbenzene	5.685	6.579	-15.7	113	-0.02
98	tert-butylbenzene	5.949	6.419	-7.9	98	-0.02
99	1,2,4-trimethylbenzene	5.340	6.529	-22.3	113	-0.02
100	decane	5.091	5.076	0.3	98	0.00
101 C	Benzyl Chloride	3.894	3.911	-0.4	98	-0.02
102	1,3-dichlorobenzene	3.119	3.282	-5.2	105	-0.02
103 C	1,4-dichlorobenzene	3.225	3.927	-21.8	118	-0.02
104	sec-butylbenzene	8.106	8.631	-6.5	99	-0.02
106	p-isopropyltoluene	7.246	7.417	-2.4	90	-0.02
107	1,2-dichlorobenzene	3.186	3.927	-23.3	121	-0.02
108	n-butylbenzene	6.302	7.085	-12.4	99	-0.02
111 C	1,2-dibromo-3-chloropropane	1.441	1.522	-5.6	93	-0.02
112	undecane	5.571	5.954	-6.9	95	0.00
114	dodecane	5.518	6.135	-11.2	89	0.00
115 C	1,2,4-trichlorobenzene	2.185	3.358	-53.7#	132	-0.02
116	naphthalene	6.204	7.611	-22.7	96	-0.02
117	1,2,3-trichlorobenzene	2.494	3.070	-23.1	98	-0.02
119 C	hexachlorobutadiene	2.574	3.452	-34.1#	121	-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\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-2,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.542	49	206855	10.000	ppbV	-0.03
Standard Area = 206855			Recovery	=	100.00%	
43) 1,4-difluorobenzene	11.807	114	664478	10.000	ppbV	-0.02
Standard Area = 664478			Recovery	=	100.00%	
67) chlorobenzene-D5	16.525	54	106395	10.000	ppbV	-0.02
Standard Area = 106395			Recovery	=	100.00%	

System Monitoring Compounds

Target Compounds					Qvalue	
2) chlorodifluoromethane	3.886	51	144037	9.848	ppbV #	94
3) propylene	3.916	41	139117M6	11.578	ppbV	
4) propane	3.946	29	119598	10.408	ppbV #	95
5) dichlorodifluoromethane	3.994	85	150841	9.326	ppbV	100
6) chloromethane	4.174	50	98469	10.688	ppbV	100
7) Freon-114	4.300	85	223230	10.308	ppbV	99
8) methanol	4.366	31	181335	47.685	ppbV	97
9) vinyl chloride	4.432	62	109073	10.031	ppbV	100
10) 1,3-butadiene	4.594	54	102599	10.951	ppbV	91
11) butane	4.660	43	178915	9.182	ppbV	97
13) bromomethane	4.912	94	85044	10.174	ppbV	99
14) chloroethane	5.128	64	60752	9.936	ppbV	99
15) ethanol	5.290	31	335314	47.840	ppbV	99
16) dichlorofluoromethane	5.266	67	161019	8.565	ppbV	99
17) vinyl bromide	5.553	106	90614	9.973	ppbV	96
18) acrolein	5.703	56	46983	9.497	ppbV	97
19) acetone	5.857	43	738458	40.330	ppbV	93
20) acetonitrile	5.543	41	97538	8.772	ppbV	99
21) trichlorofluoromethane	6.070	101	127998	8.104	ppbV	98
22) isopropyl alcohol	6.180	45	517559	22.496	ppbV	100
23) acrylonitrile	6.437	53	91181	9.723	ppbV	98
24) pentane	6.513	43	216733	8.636	ppbV	99
25) ethyl ether	6.547	31	150198	8.887	ppbV	97
26) 1,1-dichloroethene	6.832	61	134318	8.810	ppbV	94
27) tertiary butyl alcohol	6.904	59	179164	8.651	ppbV	98
28) methylene chloride	7.000	49	131643	10.185	ppbV	99
29) 3-chloropropene	7.138	41	186596	9.580	ppbV	94
30) carbon disulfide	7.294	76	322479	9.534	ppbV	96
31) Freon 113	7.330	101	181576	9.721	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-2,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.125	61	146509	8.579	ppbV	94
33) 1,1-dichloroethane	8.358	63	185363	8.935	ppbV	100
34) MTBE	8.442	73	295979	9.365	ppbV	98
35) vinyl acetate	8.575	43	297374	9.638	ppbV	98
36) 2-butanone	8.842	43	272340	9.053	ppbV	98
37) cis-1,2-dichloroethene	9.350	61	131297	8.769	ppbV	94
38) Ethyl Acetate	9.650	61	44127	9.583	ppbV	100
39) chloroform	9.708	83	160836	8.734	ppbV	99
40) Tetrahydrofuran	10.150	42	237645	11.188	ppbV	97
41) 2,2-dichloropropane	9.717	77	115898	7.434	ppbV	98
42) 1,2-dichloroethane	10.550	62	124273	8.994	ppbV #	92
44) hexane	9.608	57	204300	8.168	ppbV	83
45) diisopropyl ether	9.625	87	98799	7.682	ppbV	96
46) tert-butyl ethyl ether	10.250	59	392893	8.344	ppbV	98
48) 1,1,1-trichloroethane	10.842	97	184801	8.858	ppbV	96
49) 1,1-dichloropropene	11.207	75	182216	9.335	ppbV	91
50) benzene	11.367	78	439586	9.633	ppbV	99
52) carbon tetrachloride	11.540	117	161670	9.044	ppbV #	96
53) cyclohexane	11.680	56	272481	9.416	ppbV	97
54) tert-amyl methyl ether	12.073	73	392312	9.249	ppbV	98
55) dibromomethane	12.287	93	115556	8.860	ppbV	93
56) 1,2-dichloropropane	12.320	63	174424	9.774	ppbV #	94
57) bromodichloromethane	12.553	83	238127	9.071	ppbV	99
58) 1,4-dioxane	12.593	88	116501	10.144	ppbV	96
59) trichloroethene	12.600	130	179003	10.279	ppbV	98
60) 2,2,4-trimethylpentane	12.647	57	878184	9.777	ppbV	98
61) methyl methacrylate	12.853	41	222236	7.515	ppbV	94
62) heptane	12.967	43	407905	10.384	ppbV	96
63) cis-1,3-dichloropropene	13.617	75	240740	10.582	ppbV	93
64) 4-methyl-2-pentanone	13.650	43	468026	10.422	ppbV	97
65) trans-1,3-dichloropropene	14.233	75	191326	8.881	ppbV	93
66) 1,1,2-trichloroethane	14.433	97	175128	10.410	ppbV	93
68) toluene	14.750	91	553445	10.691	ppbV	100
71) 1,3-dichloropropane	14.775	76	230718	9.769	ppbV	93
72) 2-hexanone	15.033	43	430045	12.258	ppbV #	89
74) dibromochloromethane	15.200	129	241243	11.318	ppbV	100
75) 1,2-dibromoethane	15.450	107	244967	10.993	ppbV	100
76) butyl acetate	15.683	73	74264	10.481	ppbV	97
77) octane	15.783	85	206939	9.926	ppbV	95
78) tetrachloroethene	15.908	166	237816	11.708	ppbV #	92

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-2,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

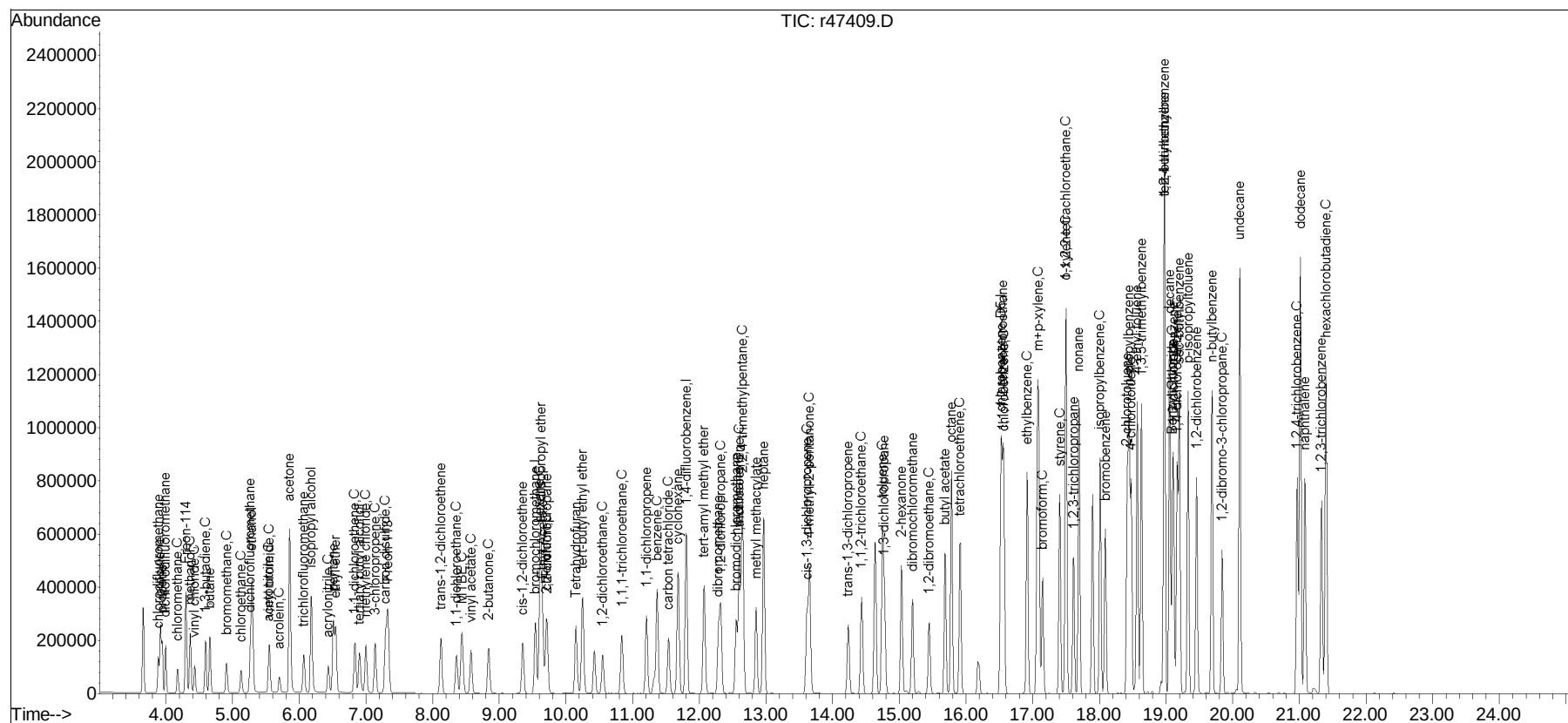
CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.550	131	164274	10.542	ppbV	98
80)	chlorobenzene	16.567	112	425817	11.121	ppbV	98
81)	ethylbenzene	16.917	91	726097	11.498	ppbV	99
83)	m+p-xylene	17.083	91	1194271	22.677	ppbV	99
84)	bromoform	17.150	173	253720	12.512	ppbV	99
85)	styrene	17.408	104	474379	11.646	ppbV	98
86)	1,1,2,2-tetrachloroethane	17.500	83	411506	11.424	ppbV	99
87)	o-xylene	17.500	91	600218	11.616	ppbV	98
88)	1,2,3-trichloropropane	17.617	75	279071	9.917	ppbV	97
89)	nonane	17.692	43	536508	10.906	ppbV	94
91)	isopropylbenzene	18.008	105	712165	10.748	ppbV	100
92)	bromobenzene	18.092	77	374564	10.102	ppbV	96
93)	2-chlorotoluene	18.417	126	203451	10.576	ppbV	95
94)	n-propylbenzene	18.442	120	243608	10.556	ppbV	100
95)	4-chlorotoluene	18.475	126	190832	10.343	ppbV	96
96)	4-ethyl toluene	18.567	105	848015	11.425	ppbV	99
97)	1,3,5-trimethylbenzene	18.633	105	699937	11.572	ppbV	100
98)	tert-butylbenzene	18.975	119	682976	10.790	ppbV	98
99)	1,2,4-trimethylbenzene	18.975	105	694618	12.226	ppbV	93
100)	decane	19.058	57	540082	9.972	ppbV	94
101)	Benzyl Chloride	19.100	91	416103	10.044	ppbV	98
102)	1,3-dichlorobenzene	19.108	146	349229	10.524	ppbV	95
103)	1,4-dichlorobenzene	19.167	146	417837	12.179	ppbV	96
104)	sec-butylbenzene	19.200	105	918264	10.647	ppbV	99
106)	p-isopropyltoluene	19.333	119	789167	10.236	ppbV	96
107)	1,2-dichlorobenzene	19.458	146	417799	12.325	ppbV	95
108)	n-butylbenzene	19.692	91	753768	11.242	ppbV	97
111)	1,2-dibromo-3-chloropr...	19.842	75	161914	10.563	ppbV	92
112)	undecane	20.108	57	633463	10.687	ppbV	95
114)	dodecane	21.017	57	652767	11.118	ppbV	94
115)	1,2,4-trichlorobenzene	20.967	180	357296	15.368	ppbV	96
116)	naphthalene	21.083	128	809787	12.268	ppbV	99
117)	1,2,3-trichlorobenzene	21.333	180	326651	12.309	ppbV	97
119)	hexachlorobutadiene	21.400	225	367242	13.412	ppbV	97

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

```
Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File   : r47409.D
Acq On      : 21 Jan 2020  12:33 PM
Operator    : AIRPIANO4:EW
Sample      : WG1332350-2,3,250,250
Misc        : WG1332350,ICAL16438
ALS Vial    : 0      Sample Multiplier: 1
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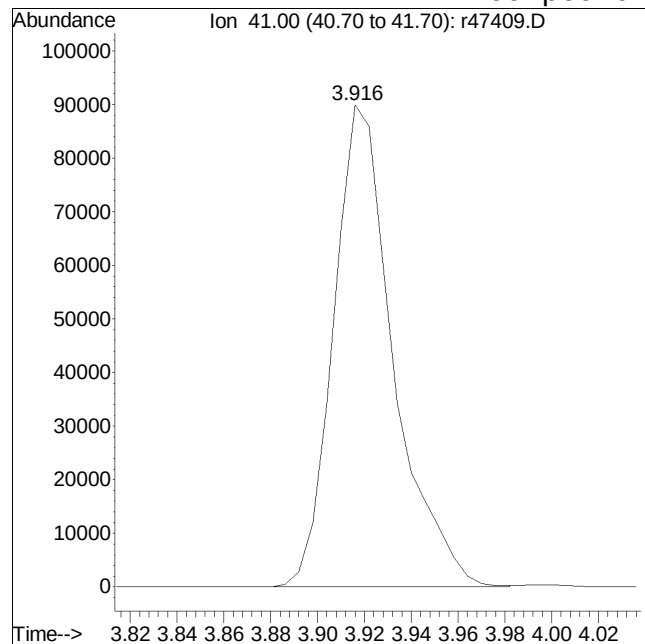
Quant Time: Jan 21 13:33:25 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration



Manual Integration Report

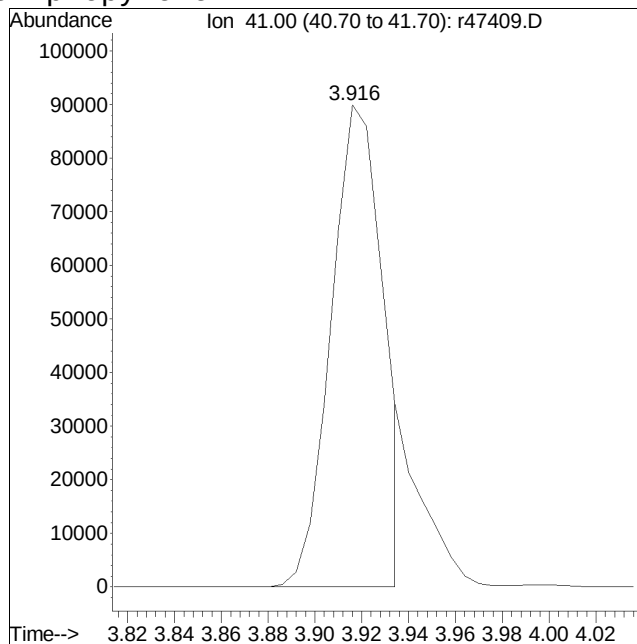
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47409.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:2: 3 Instrument :
Sample : WG1332350-2, 3, 250, 250 Quant Date : 1/21/2020 1:33 pm

Compound #3: propylene



Original Peak Response = 159704

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



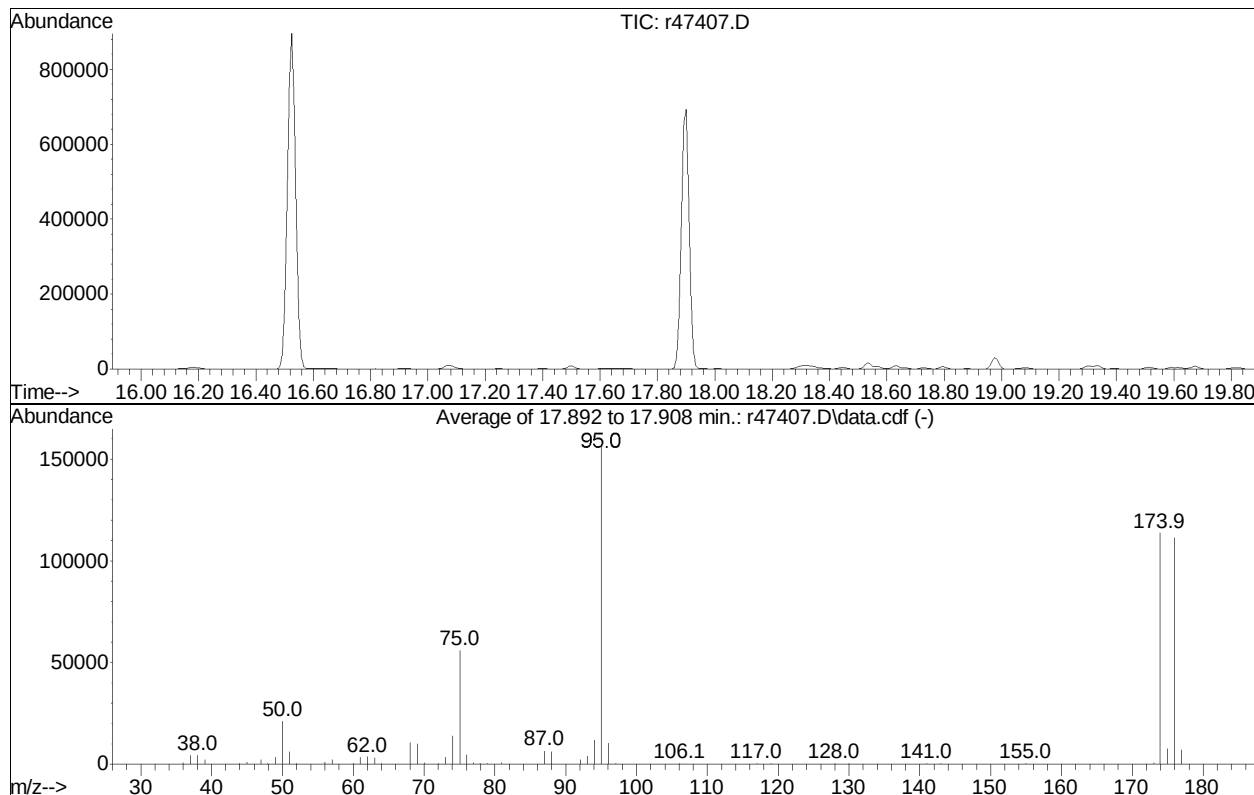
Manual Peak Response = 139117 M6

BFB

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47407.D
 Acq On : 21 Jan 2020 11:09 AM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-1,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Jan 16 10:52:02 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	13.5	21224	PASS
75	95	30	66	35.6	55889	PASS
95	95	100	100	100.0	157084	PASS
96	95	5	9	6.5	10258	PASS
173	174	0.00	2	0.5	610	PASS
174	95	50	120	72.5	113903	PASS
175	174	4	9	6.7	7671	PASS
176	174	93	101	97.7	111275	PASS
177	176	5	9	6.3	7064	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47411.D
 Acq On : 21 Jan 2020 2:34 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-4,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 16:13:44 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.542	49	240385	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =	116.21%		
43) 1,4-difluorobenzene	11.800	114	641505	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =	96.54%		
67) chlorobenzene-D5	16.525	54	100696	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =	94.64%		

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	0.000		0	N.D.	
17) vinyl bromide	0.000		0	N.D.	
19) acetone	5.883	43	1162	0.055 ppbV #	97
21) trichlorofluoromethane	0.000		0	N.D.	
22) isopropyl alcohol	6.203		0	N.D.	
26) 1,1-dichloroethene	0.000		0	N.D.	
27) tertiary butyl alcohol	0.000		0	N.D.	
28) methylene chloride	0.000		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	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\Airpiano4\2020\01\200121T\
 Data File : r47411.D
 Acq On : 21 Jan 2020 2:34 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-4,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 16:13:44 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.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	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	14.750		0		N.D.	
72) 2-hexanone	15.058		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	16.917		0		N.D.	
83) m+p-xylene	17.075		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	17.500		0		N.D.	
96) 4-ethyl toluene	18.567		0		N.D.	
97) 1,3,5-trimethylbenzene	18.567		0		N.D.	
99) 1,2,4-trimethylbenzene	18.975		0		N.D.	
101) Benzyl Chloride	19.100		0		N.D.	
102) 1,3-dichlorobenzene	19.167		0		N.D.	
103) 1,4-dichlorobenzene	19.167		0		N.D.	
107) 1,2-dichlorobenzene	19.458		0		N.D.	
115) 1,2,4-trichlorobenzene	20.967		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\Airpiano4\2020\01\200121T\
 Data File : r47411.D
 Acq On : 21 Jan 2020 2:34 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-4,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 16:13:44 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.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 listed0121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\

Data File : r47411.D

Acq On : 21 Jan 2020 2:34 PM

Operator : AIRPIANO4:EW

Sample : WG1332350-4,3,250,250

Misc : WG1332350,ICAL16438

ALS Vial : 0 Sample Multiplier: 1

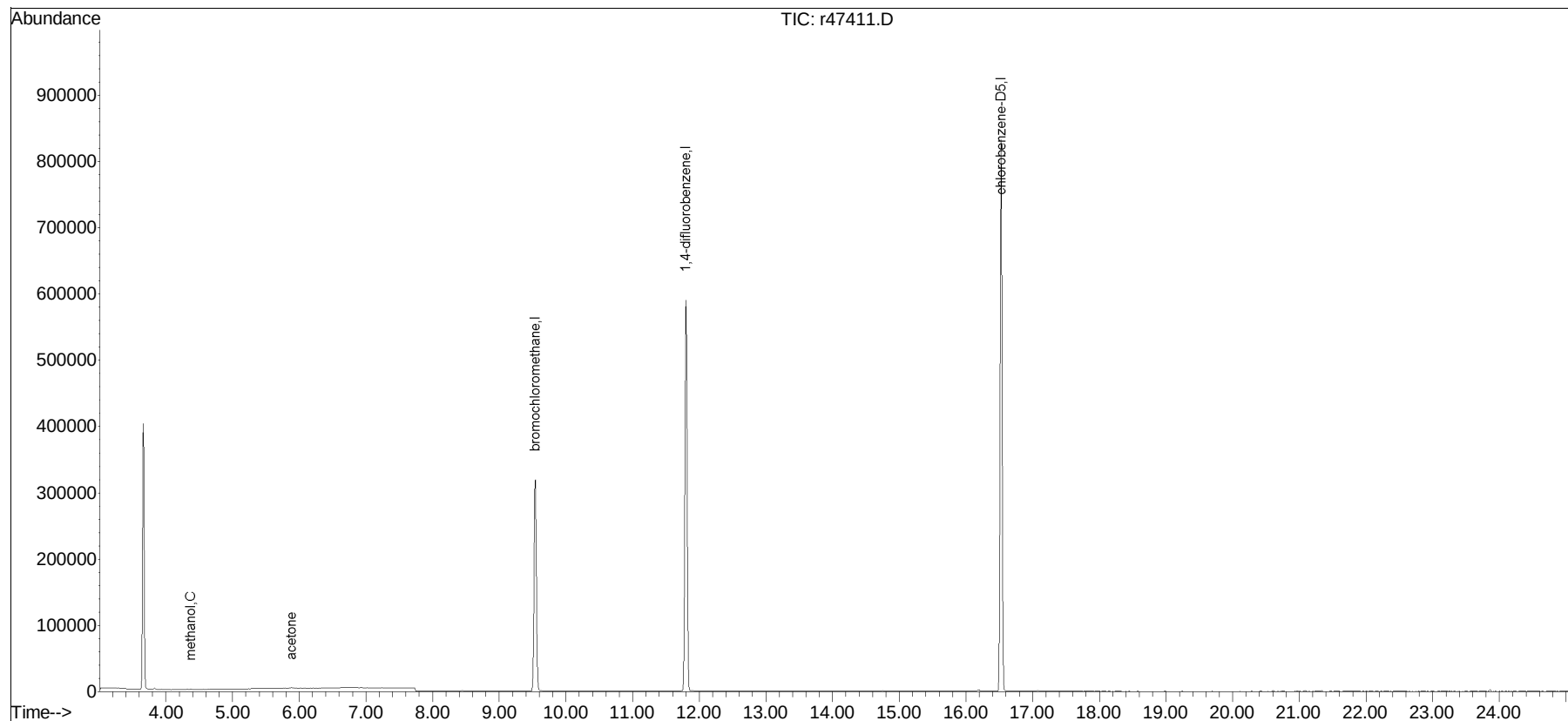
Quant Time: Jan 21 16:13:44 2020

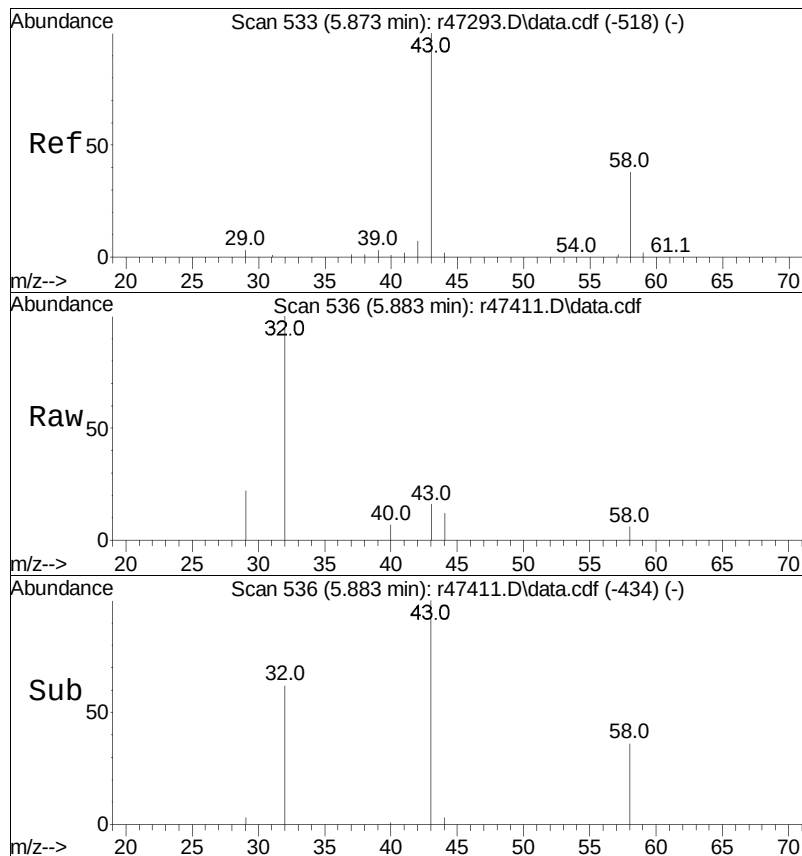
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M

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

QLast Update : Thu Jan 16 10:52:02 2020

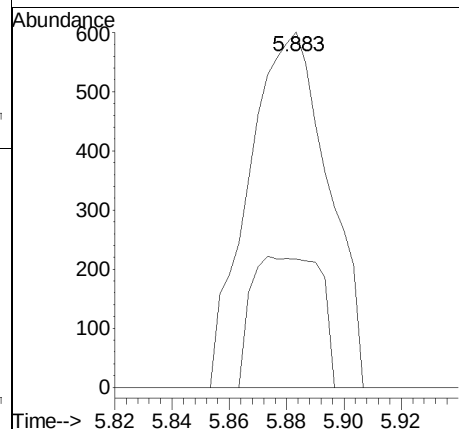
Response via : Initial Calibration





#19
 acetone
 Concen: 0.05 ppbV
 RT: 5.883 min Scan# 536
 Delta R.T. 0.010 min
 Lab File: r47411.D
 Acq: 21 Jan 2020 2:34 PM

Tgt Ion:	43	Resp:	1162
Ion Ratio	Lower	Upper	
43	100		
58	36.1	30.2	45.2
57	0.0	0.7	1.1#



Manual Integration Report

Data Path	: O:\Forensics\Data\AirpianoQ	Method	: TFS4_200115.M
Data File	: r47411.D	Operator	: AIRPIAN04:EW
Date Inj'd	: 1/21/2020 0:2: 4	Instrument	:
Sample	: WG1332350-4,3,250,250	Quant Date	: 1/21/2020 4:12 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-3,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	100	-0.03
2	chlorodifluoromethane	10.000	9.848	1.5	99	-0.02
3	propylene	10.000	11.578	-15.8	110	-0.02
4	propane	10.000	10.408	-4.1	101	-0.01
5	dichlorodifluoromethane	10.000	9.326	6.7	94	-0.02
6 C	chloromethane	10.000	10.688	-6.9	108	-0.02
7	Freon-114	10.000	10.308	-3.1	103	-0.02
8 C	methanol	50.000	47.685	4.6	89	-0.02
9 C	vinyl chloride	10.000	10.031	-0.3	100	-0.02
10 C	1,3-butadiene	10.000	10.951	-9.5	108	-0.02
11	butane	10.000	9.182	8.2	91	-0.02
13 C	bromomethane	10.000	10.174	-1.7	103	-0.02
14 C	chloroethane	10.000	9.936	0.6	101	-0.02
15	ethanol	50.000	47.840	4.3	81	-0.02
16	dichlorofluoromethane	10.000	8.565	14.4	86	-0.02
17 C	vinyl bromide	10.000	9.973	0.3	100	-0.02
18 C	acrolein	10.000	9.497	5.0	94	-0.02
19	acetone	50.000	40.330	19.3	78	-0.02
20 C	acetonitrile	10.000	8.772	12.3	91	-0.02
21	trichlorofluoromethane	10.000	8.104	19.0	84	-0.02
22	isopropyl alcohol	25.000	22.496	10.0	88	-0.02
23 C	acrylonitrile	10.000	9.723	2.8	99	-0.02
24	pentane	10.000	8.636	13.6	89	-0.02
25	ethyl ether	10.000	8.887	11.1	93	-0.02
26 C	1,1-dichloroethene	10.000	8.810	11.9	93	-0.02
27	tertiary butyl alcohol	10.000	8.651	13.5	87	-0.02
28 C	methylene chloride	10.000	10.185	-1.9	103	-0.02
29 C	3-chloropropene	10.000	9.580	4.2	101	-0.02
30 C	carbon disulfide	10.000	9.534	4.7	96	-0.02
31	Freon 113	10.000	9.721	2.8	100	-0.02
32	trans-1,2-dichloroethene	10.000	8.579	14.2	90	-0.03
33 C	1,1-dichloroethane	10.000	8.935	10.6	93	-0.03
34 C	MTBE	10.000	9.365	6.3	94	-0.02
35 C	vinyl acetate	10.000	9.638	3.6	95	-0.03
36 C	2-butanone	10.000	9.053	9.5	95	-0.02
37	cis-1,2-dichloroethene	10.000	8.769	12.3	95	-0.03
38	Ethyl Acetate	10.000	9.583	4.2	100	-0.03
39 C	chloroform	10.000	8.734	12.7	93	-0.02
40	Tetrahydrofuran	10.000	11.188	-11.9	107	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-3,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	7.434	25.7	78	-0.03
42 C	1,2-dichloroethane	10.000	8.994	10.1	87	-0.02
43 I	1,4-difluorobenzene	10.000	10.000	0.0	108	-0.02
44 C	hexane	10.000	8.168	18.3	97	-0.03
45	diisopropyl ether	10.000	7.682	23.2	89	-0.02
46	tert-butyl ethyl ether	10.000	8.344	16.6	90	-0.02
48 C	1,1,1-trichloroethane	10.000	8.858	11.4	99	-0.02
49	1,1-dichloropropene	10.000	9.335	6.6	103	-0.02
50 C	benzene	10.000	9.633	3.7	109	-0.02
52 C	carbon tetrachloride	10.000	9.044	9.6	96	-0.02
53	cyclohexane	10.000	9.416	5.8	103	-0.03
54	tert-amyl methyl ether	10.000	9.249	7.5	101	-0.02
55	dibromomethane	10.000	8.860	11.4	98	-0.03
56 C	1,2-dichloropropane	10.000	9.774	2.3	111	-0.02
57	bromodichloromethane	10.000	9.071	9.3	99	-0.02
58 C	1,4-dioxane	10.000	10.144	-1.4	109	-0.02
59 C	trichloroethene	10.000	10.279	-2.8	113	-0.02
60 C	2,2,4-trimethylpentane	10.000	9.777	2.2	106	-0.02
61	methyl methacrylate	10.000	7.515	24.9	71	-0.02
62	heptane	10.000	10.384	-3.8	111	-0.02
63 C	cis-1,3-dichloropropene	10.000	10.582	-5.8	117	-0.02
64 C	4-methyl-2-pentanone	10.000	10.422	-4.2	109	-0.03
65	trans-1,3-dichloropropene	10.000	8.881	11.2	97	-0.03
66 C	1,1,2-trichloroethane	10.000	10.410	-4.1	117	-0.03
67 I	chlorobenzene-D5	10.000	10.000	0.0	97	-0.02
68 C	toluene	10.000	10.691	-6.9	109	-0.02
71	1,3-dichloropropane	10.000	9.769	2.3	98	-0.03
72	2-hexanone	10.000	12.258	-22.6	107	-0.02
74	dibromochloromethane	10.000	11.318	-13.2	108	-0.02
75 C	1,2-dibromoethane	10.000	10.993	-9.9	112	-0.02
76	butyl acetate	10.000	10.481	-4.8	101	-0.02
77	octane	10.000	9.926	0.7	96	-0.02
78 C	tetrachloroethene	10.000	11.708	-17.1	118	-0.03
79	1,1,1,2-tetrachloroethane	10.000	10.542	-5.4	100	-0.02
80 C	chlorobenzene	10.000	11.121	-11.2	113	-0.02
81 C	ethylbenzene	10.000	11.498	-15.0	112	-0.02
83 C	m+p-xylene	20.000	22.677	-13.4	109	-0.02

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-3,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 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	12.512	-25.1	114	-0.02
85 C	styrene	10.000	11.646	-16.5	113	-0.02
86 C	1,1,2,2-tetrachloroethane	10.000	11.424	-14.2	113	-0.02
87 C	o-xylene	10.000	11.616	-16.2	110	-0.02
88	1,2,3-trichloropropane	10.000	9.917	0.8	98	-0.02
89	nonane	10.000	10.906	-9.1	101	-0.02
91 C	isopropylbenzene	10.000	10.748	-7.5	103	-0.02
92	bromobenzene	10.000	10.102	-1.0	99	-0.02
93	2-chlorotoluene	10.000	10.576	-5.8	100	-0.02
94	n-propylbenzene	10.000	10.556	-5.6	100	-0.02
95	4-chlorotoluene	10.000	10.343	-3.4	100	-0.02
96	4-ethyl toluene	10.000	11.425	-14.3	107	-0.02
97	1,3,5-trimethylbenzene	10.000	11.572	-15.7	113	-0.02
98	tert-butylbenzene	10.000	10.790	-7.9	98	-0.02
99	1,2,4-trimethylbenzene	10.000	12.226	-22.3	113	-0.02
100	decane	10.000	9.972	0.3	98	0.00
101 C	Benzyl Chloride	10.000	10.044	-0.4	98	-0.02
102	1,3-dichlorobenzene	10.000	10.524	-5.2	105	-0.02
103 C	1,4-dichlorobenzene	10.000	12.179	-21.8	118	-0.02
104	sec-butylbenzene	10.000	10.647	-6.5	99	-0.02
106	p-isopropyltoluene	10.000	10.236	-2.4	90	-0.02
107	1,2-dichlorobenzene	10.000	12.325	-23.2	121	-0.02
108	n-butylbenzene	10.000	11.242	-12.4	99	-0.02
111 C	1,2-dibromo-3-chloropropane	10.000	10.563	-5.6	93	-0.02
112	undecane	10.000	10.687	-6.9	95	0.00
114	dodecane	10.000	11.118	-11.2	89	0.00
115 C	1,2,4-trichlorobenzene	10.000	15.368	-53.7#	132	-0.02
116	naphthalene	10.000	12.268	-22.7	96	-0.02
117	1,2,3-trichlorobenzene	10.000	12.309	-23.1	98	-0.02
119 C	hexachlorobutadiene	10.000	13.412	-34.1#	121	-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\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-3,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.542	49	206855	10.000	ppbV	-0.03
Standard Area = 206855			Recovery	=	100.00%	
43) 1,4-difluorobenzene	11.807	114	664478	10.000	ppbV	-0.02
Standard Area = 664478			Recovery	=	100.00%	
67) chlorobenzene-D5	16.525	54	106395	10.000	ppbV	-0.02
Standard Area = 106395			Recovery	=	100.00%	

System Monitoring Compounds

Target Compounds					Qvalue	
5) dichlorodifluoromethane	3.994	85	150841	9.326	ppbV	100
6) chloromethane	4.174	50	98469	10.688	ppbV	100
7) Freon-114	4.300	85	223230	10.308	ppbV	99
9) vinyl chloride	4.432	62	109073	10.031	ppbV	100
10) 1,3-butadiene	4.594	54	102599	10.951	ppbV	91
13) bromomethane	4.912	94	85044	10.174	ppbV	99
14) chloroethane	5.128	64	60752	9.936	ppbV	99
15) ethanol	5.290	31	335314	47.840	ppbV	99
17) vinyl bromide	5.553	106	90614	9.973	ppbV	96
19) acetone	5.857	43	738458	40.330	ppbV	93
21) trichlorofluoromethane	6.070	101	127998	8.104	ppbV	98
22) isopropyl alcohol	6.180	45	517559	22.496	ppbV	100
26) 1,1-dichloroethene	6.832	61	134318	8.810	ppbV	94
27) tertiary butyl alcohol	6.904	59	179164	8.651	ppbV	98
28) methylene chloride	7.000	49	131643	10.185	ppbV	99
29) 3-chloropropene	7.138	41	186596	9.580	ppbV	94
30) carbon disulfide	7.294	76	322479	9.534	ppbV	96
31) Freon 113	7.330	101	181576	9.721	ppbV	98
32) trans-1,2-dichloroethene	8.125	61	146509	8.579	ppbV	94
33) 1,1-dichloroethane	8.358	63	185363	8.935	ppbV	100
34) MTBE	8.442	73	295979	9.365	ppbV	98
36) 2-butanone	8.842	43	272340	9.053	ppbV	98
37) cis-1,2-dichloroethene	9.350	61	131297	8.769	ppbV	94
38) Ethyl Acetate	9.650	61	44127	9.583	ppbV	100
39) chloroform	9.708	83	160836	8.734	ppbV	99
40) Tetrahydrofuran	10.150	42	237645	11.188	ppbV	97
42) 1,2-dichloroethane	10.550	62	124273	8.994	ppbV #	92

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-3,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	9.608	57	204300	8.168	ppbV	83
48) 1,1,1-trichloroethane	10.842	97	184801	8.858	ppbV	96
50) benzene	11.367	78	439586	9.633	ppbV	99
52) carbon tetrachloride	11.540	117	161670	9.044	ppbV #	96
53) cyclohexane	11.680	56	272481	9.416	ppbV	97
56) 1,2-dichloropropane	12.320	63	174424	9.774	ppbV #	94
57) bromodichloromethane	12.553	83	238127	9.071	ppbV	99
58) 1,4-dioxane	12.593	88	116501	10.144	ppbV	96
59) trichloroethene	12.600	130	179003	10.279	ppbV	98
60) 2,2,4-trimethylpentane	12.647	57	878184	9.777	ppbV	98
62) heptane	12.967	43	407905	10.384	ppbV	96
63) cis-1,3-dichloropropene	13.617	75	240740	10.582	ppbV	93
64) 4-methyl-2-pentanone	13.650	43	468026	10.422	ppbV	97
65) trans-1,3-dichloropropene	14.233	75	191326	8.881	ppbV	93
66) 1,1,2-trichloroethane	14.433	97	175128	10.410	ppbV	93
68) toluene	14.750	91	553445	10.691	ppbV	100
72) 2-hexanone	15.033	43	430045	12.258	ppbV #	89
74) dibromochloromethane	15.200	129	241243	11.318	ppbV	100
75) 1,2-dibromoethane	15.450	107	244967	10.993	ppbV	100
78) tetrachloroethene	15.908	166	237816	11.708	ppbV #	92
80) chlorobenzene	16.567	112	425817	11.121	ppbV	98
81) ethylbenzene	16.917	91	726097	11.498	ppbV	99
83) m+p-xylene	17.083	91	1194271	22.677	ppbV	99
84) bromoform	17.150	173	253720	12.512	ppbV	99
85) styrene	17.408	104	474379	11.646	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.500	83	411506	11.424	ppbV	99
87) o-xylene	17.500	91	600218	11.616	ppbV	98
96) 4-ethyl toluene	18.567	105	848015	11.425	ppbV	99
97) 1,3,5-trimethylbenzene	18.633	105	699937	11.572	ppbV	100
99) 1,2,4-trimethylbenzene	18.975	105	694618	12.226	ppbV	93
101) Benzyl Chloride	19.100	91	416103	10.044	ppbV	98
102) 1,3-dichlorobenzene	19.108	146	349229	10.524	ppbV	95
103) 1,4-dichlorobenzene	19.167	146	417837	12.179	ppbV	96
107) 1,2-dichlorobenzene	19.458	146	417799	12.325	ppbV	95
115) 1,2,4-trichlorobenzene	20.967	180	357296	15.368	ppbV	96
119) hexachlorobutadiene	21.400	225	367242	13.412	ppbV	97

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47409.D
 Acq On : 21 Jan 2020 12:33 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-3,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

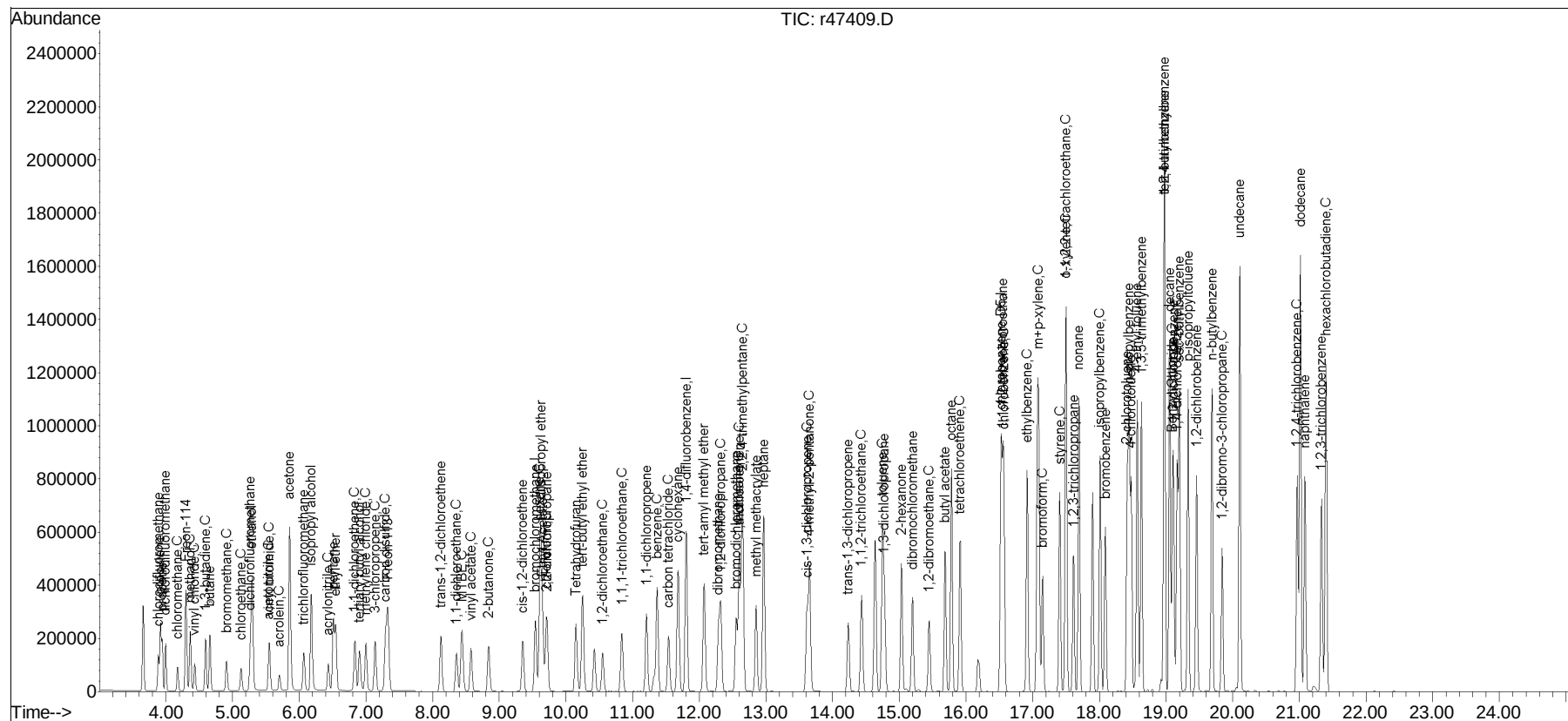
Quant Time: Jan 21 13:33:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

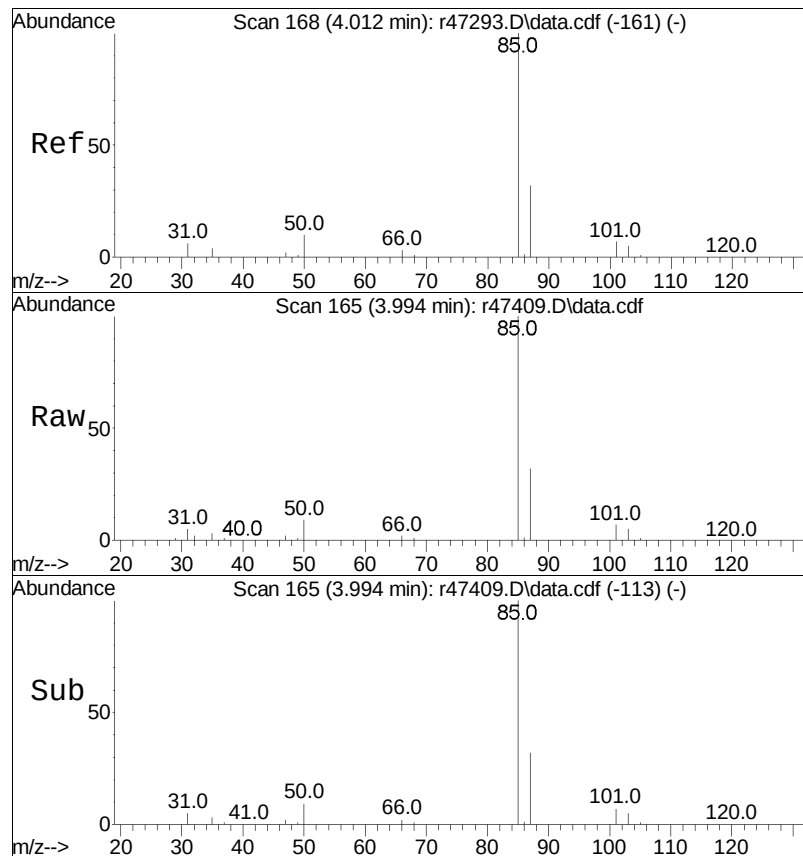
CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

```
Data Path   : O:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File   : r47409.D
Acq On      : 21 Jan 2020  12:33 PM
Operator    : AIRPIANO4:EW
Sample      : WG1332350-3,3,250,250
Misc        : WG1332350,ICAL16438
ALS Vial    : 0      Sample Multiplier: 1
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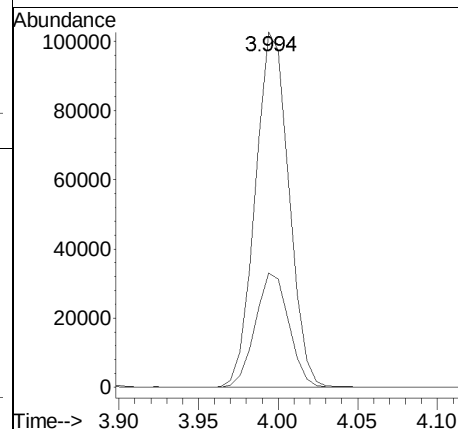
Quant Time: Jan 21 13:33:25 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

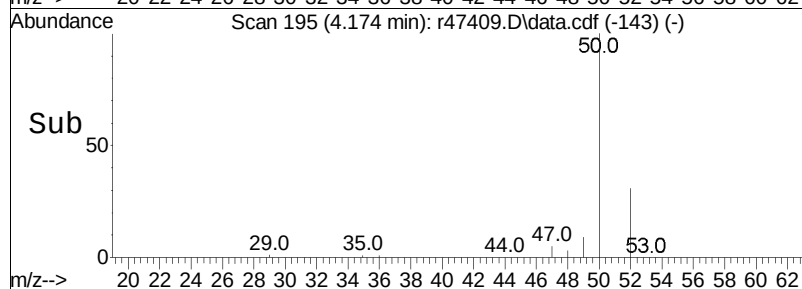
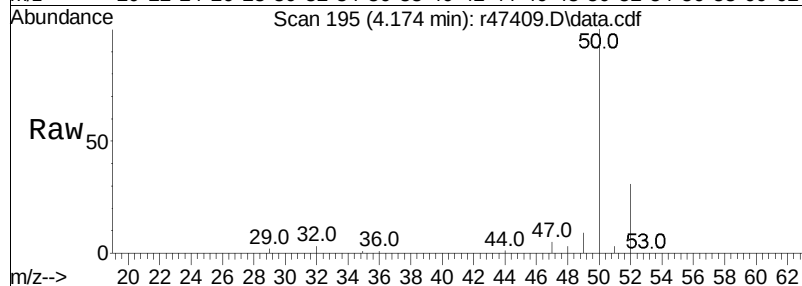
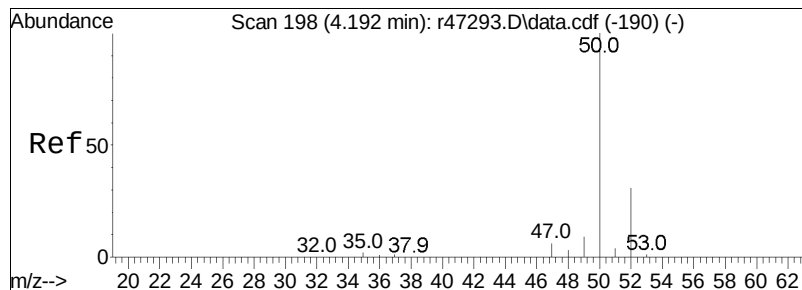




#5
dichlorodifluoromethane
Concen: 9.33 ppbV
RT: 3.994 min Scan# 165
Delta R.T. -0.018 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

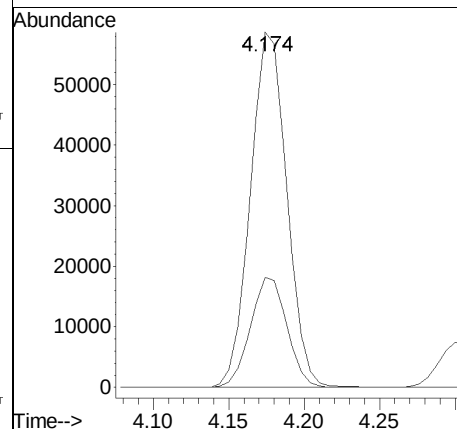
Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.2	25.8	38.6

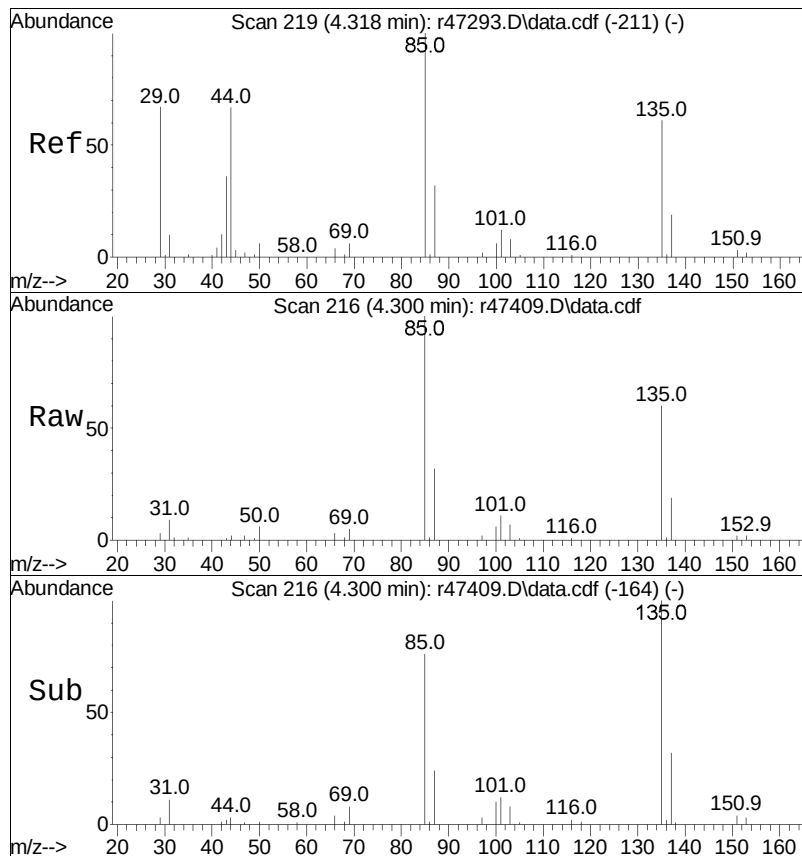




#6
chloromethane
Concen: 10.69 ppbV
RT: 4.174 min Scan# 195
Delta R.T. -0.018 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

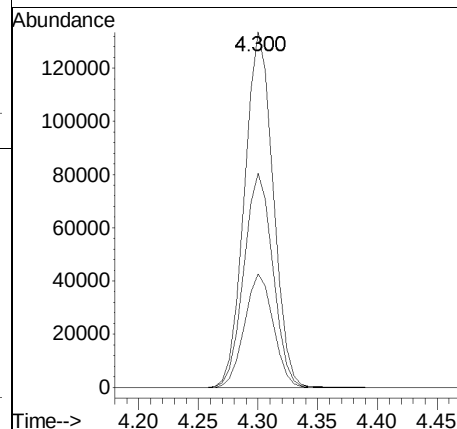
Tgt	Ion	Resp	Lower	Upper
50	100	98469		
52	31.0	24.9	37.3	

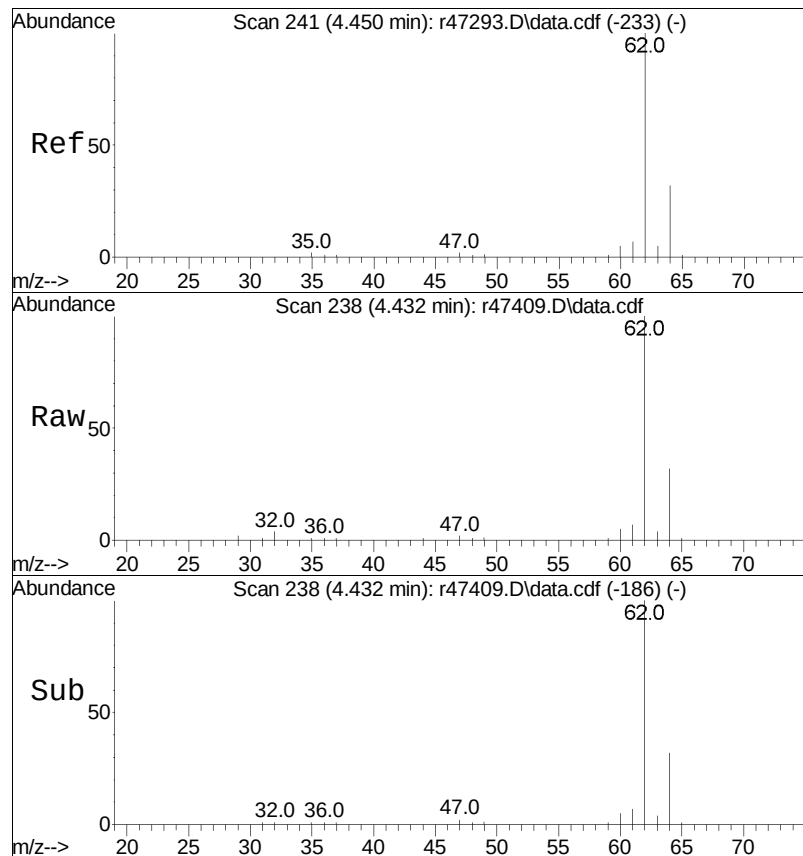




#7
Freon-114
Concen: 10.31 ppbV
RT: 4.300 min Scan# 216
Delta R.T. -0.018 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

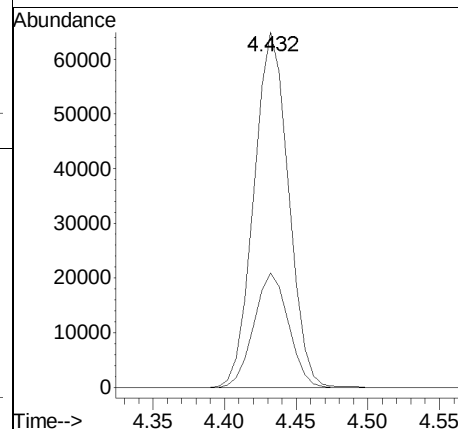
Tgt Ion:	85	Resp:	223230
Ion Ratio	Lower	Upper	
85	100		
87	32.0	25.8	38.6
135	60.3	49.1	73.7

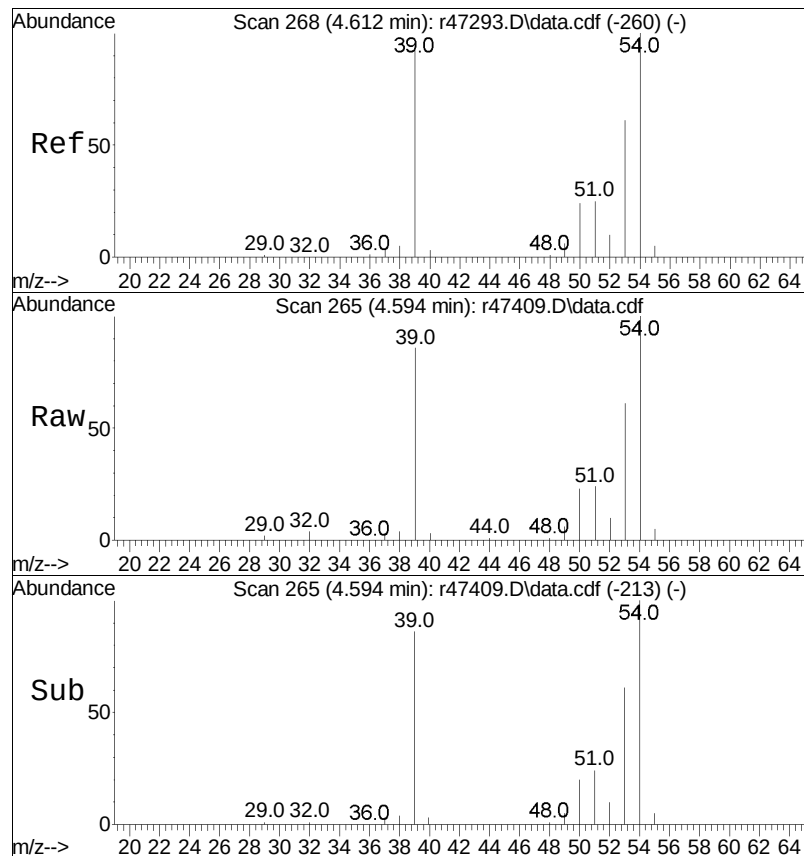




#9
 vinyl chloride
 Concen: 10.03 ppbV
 RT: 4.432 min Scan# 238
 Delta R.T. -0.018 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

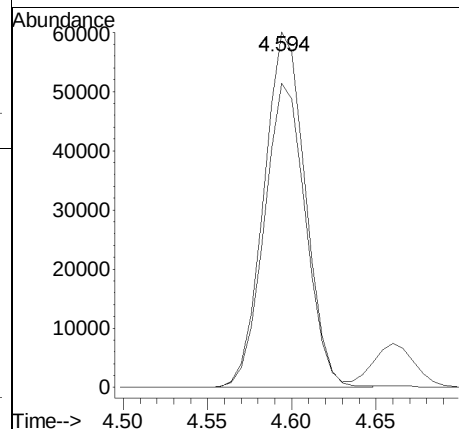
Tgt Ion	Ratio	Lower	Upper
62	100		
64	32.2	25.6	38.4

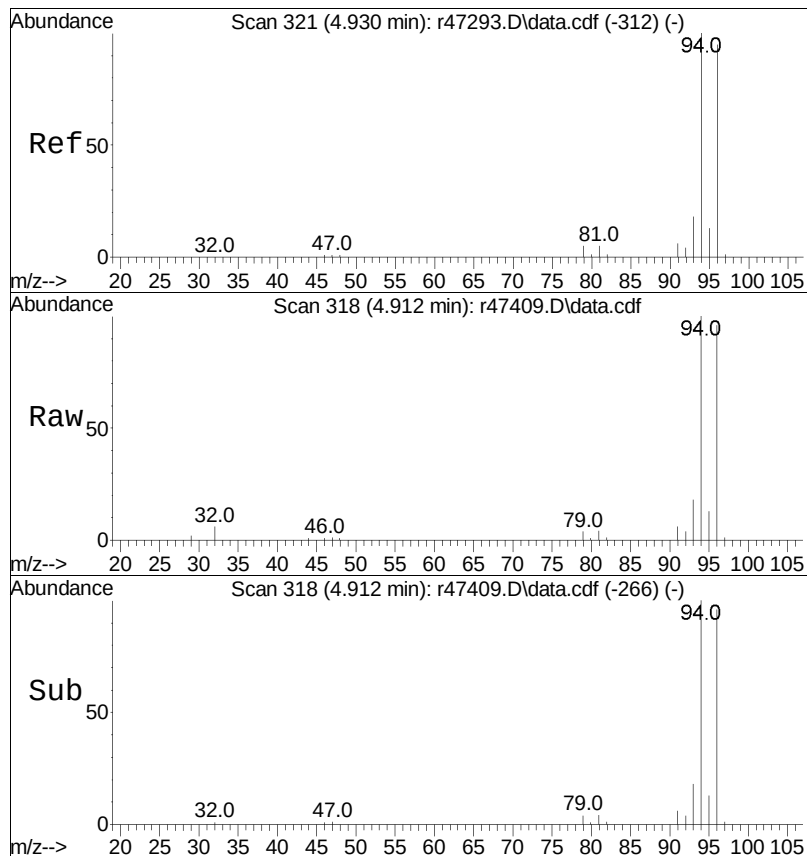




#10
 1,3-butadiene
 Concen: 10.95 ppbV
 RT: 4.594 min Scan# 265
 Delta R.T. -0.018 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

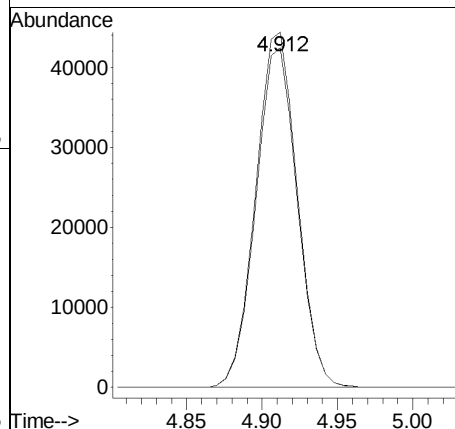
Tgt	Ion	Resp	Lower	Upper
54	100	102599		
39	85.5	75.5	113.3	

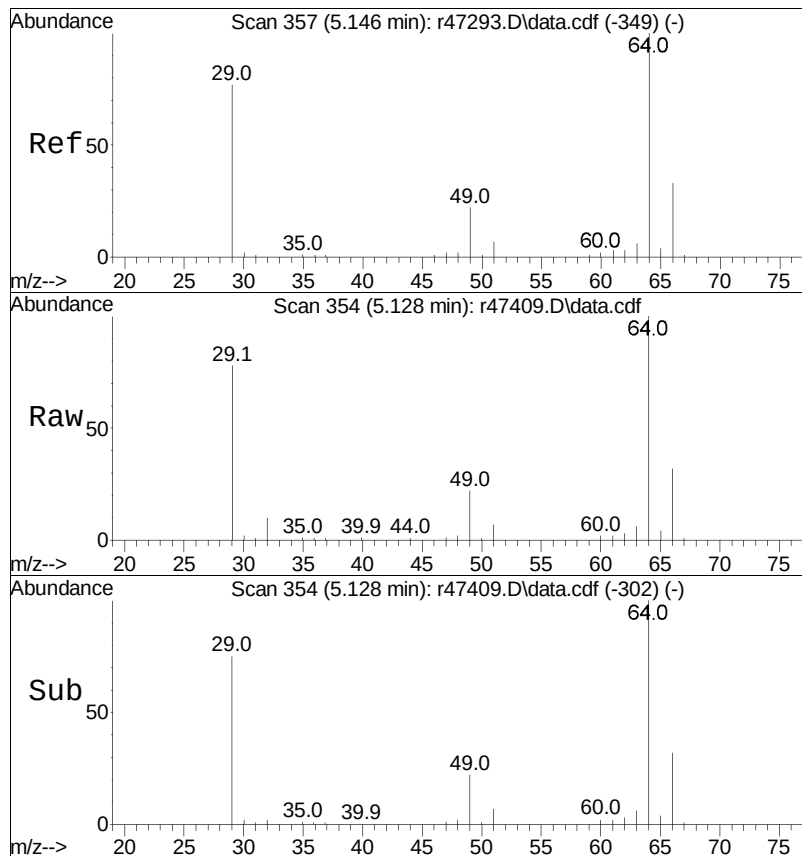




#13
 bromomethane
 Concen: 10.17 ppbV
 RT: 4.912 min Scan# 318
 Delta R.T. -0.018 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

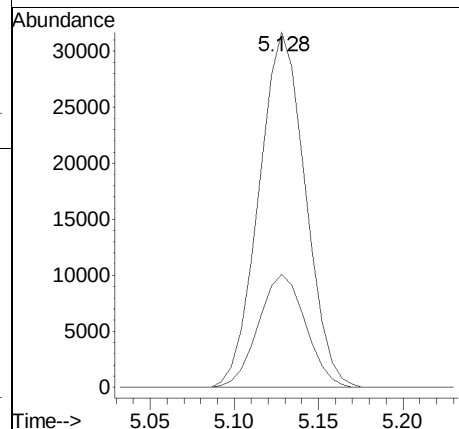
Tgt Ion	Ratio	Lower	Upper
94	100		
96	95.6	75.8	113.8

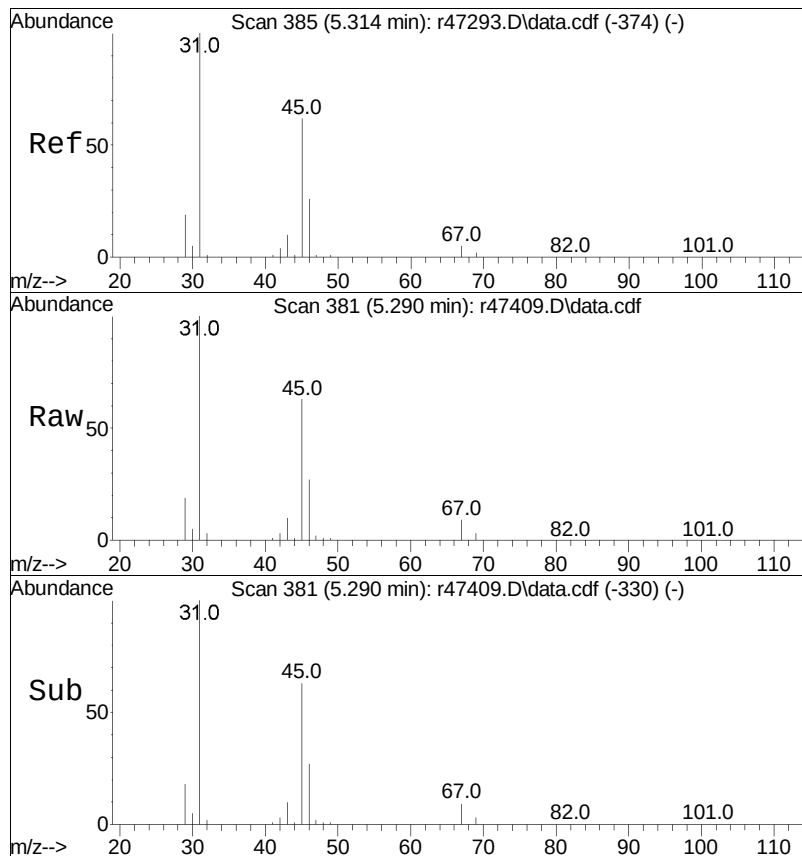




#14
 chloroethane
 Concen: 9.94 ppbV
 RT: 5.128 min Scan# 354
 Delta R.T. -0.018 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

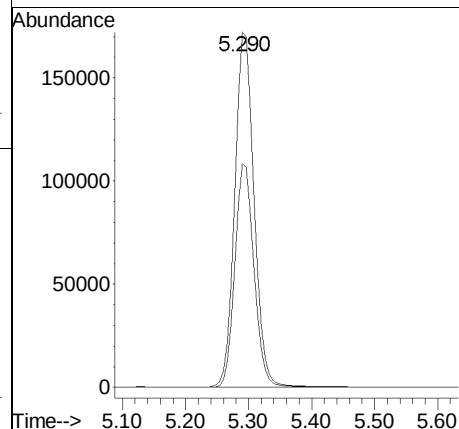
Tgt	Ion	Ratio	Lower	Upper
64	100			
66	31.8	26.1	39.1	

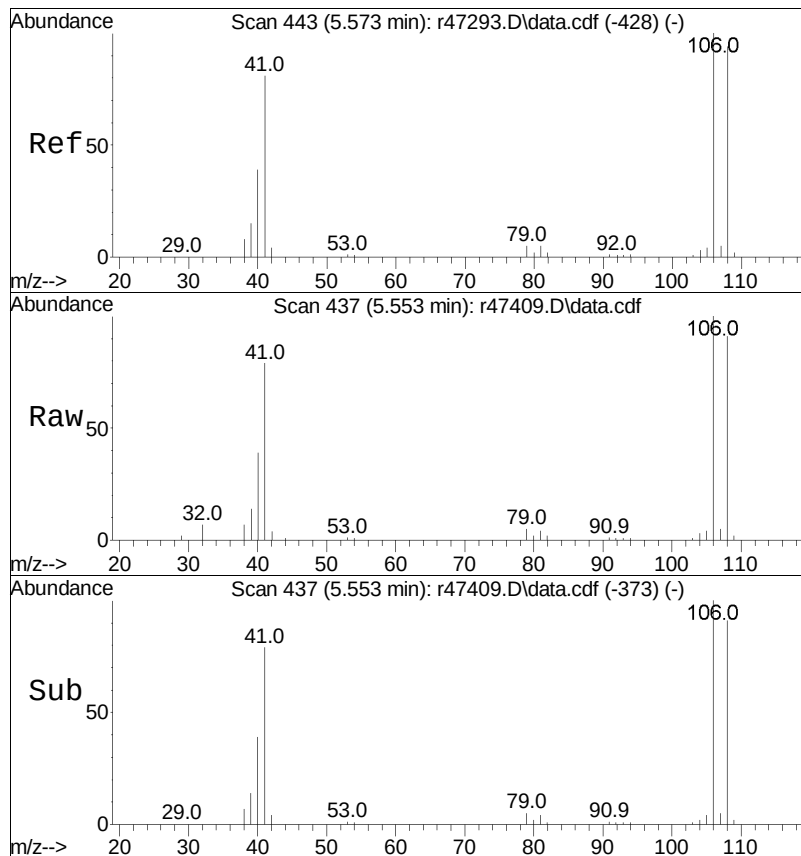




#15
ethanol
Concen: 47.84 ppbV
RT: 5.290 min Scan# 381
Delta R.T. -0.024 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

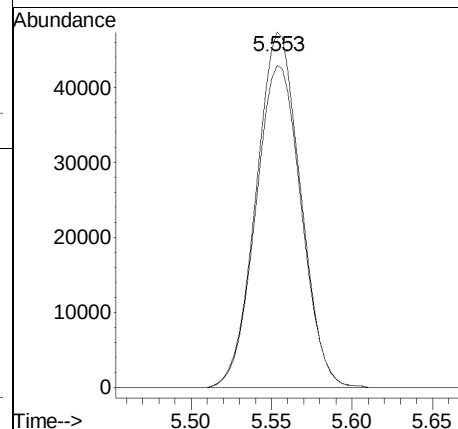
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	63.0	49.7	74.5	

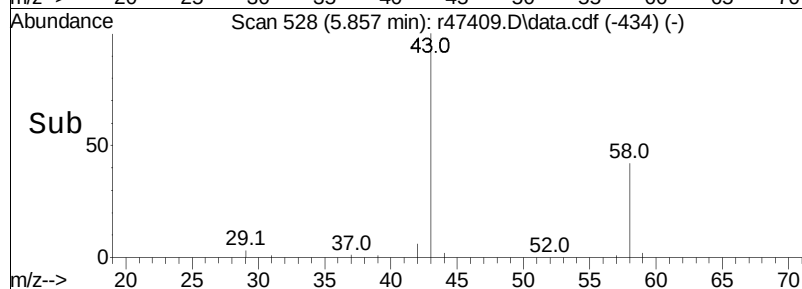
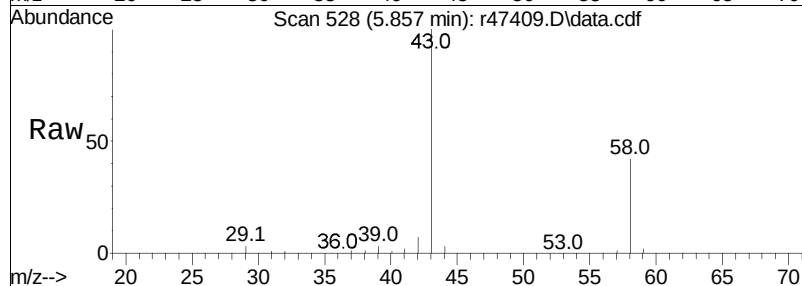
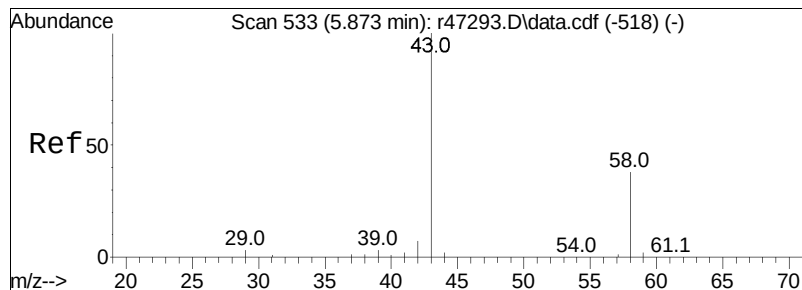




#17
 vinyl bromide
 Concen: 9.97 ppbV
 RT: 5.553 min Scan# 437
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

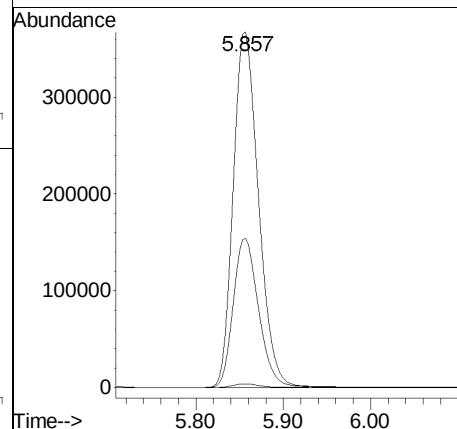
Tgt Ion	Ratio	Lower	Upper
106	100		
108	90.6	75.5	113.3

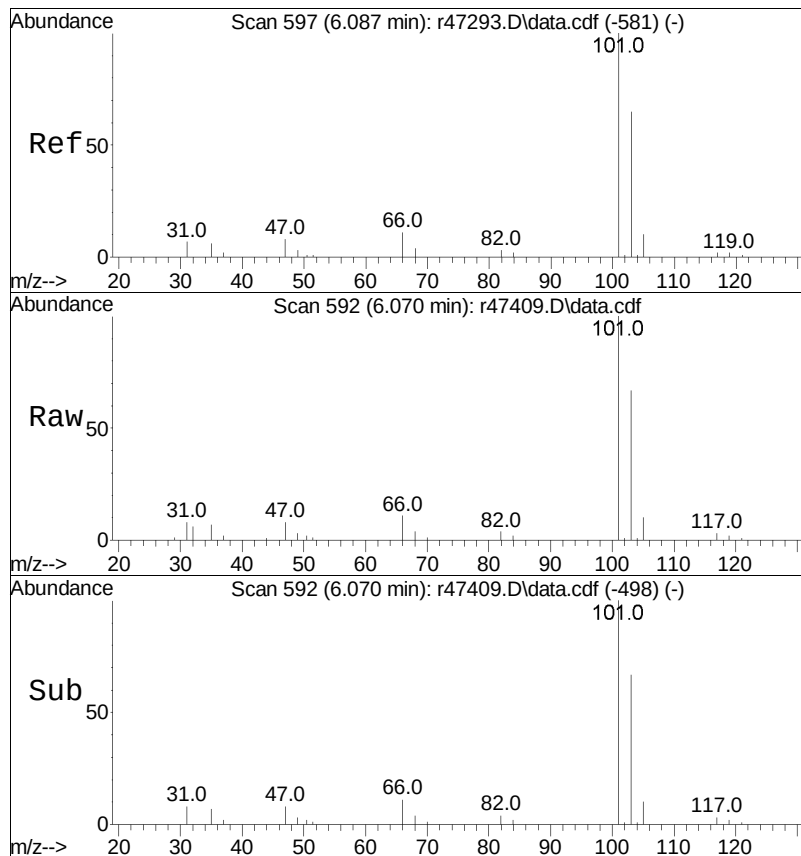




#19
acetone
Concen: 40.33 ppbV
RT: 5.857 min Scan# 528
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

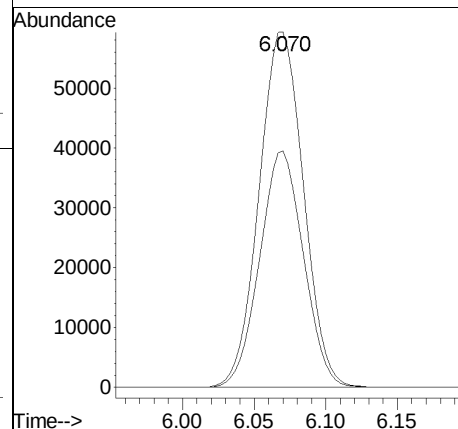
Tgt Ion:	43	58	57	Ratio	Lower	Upper
Resp:	738458					
Ion	100	42.0	1.0			
Ratio						
Lower		30.2	0.7			
Upper		45.2	1.1			

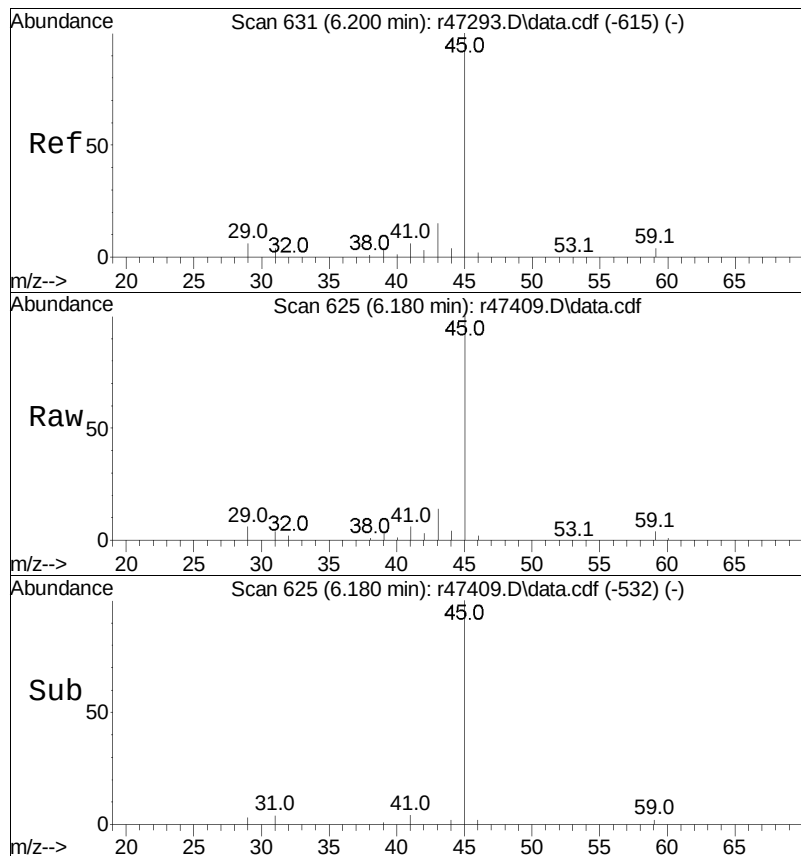




#21
 trichlorofluoromethane
 Concen: 8.10 ppbV
 RT: 6.070 min Scan# 592
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

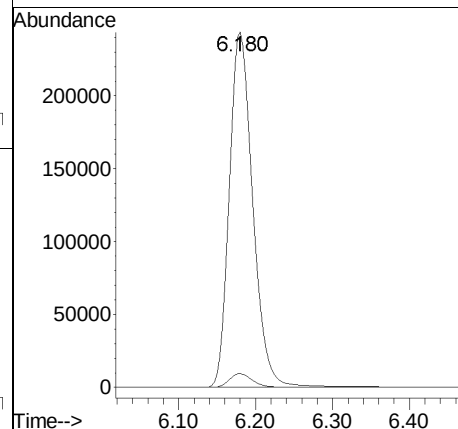
Tgt	Ion	Ratio	Resp	Lower	Upper
101	101	100	127998		
103	103	66.5		52.2	78.4

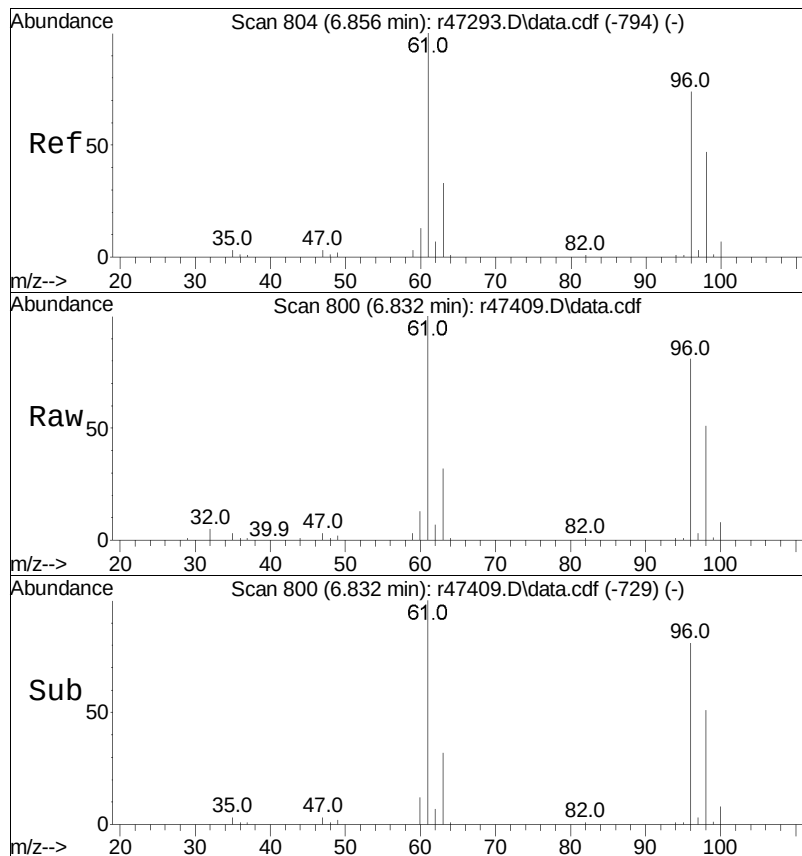




#22
 isopropyl alcohol
 Concen: 22.50 ppbV
 RT: 6.180 min Scan# 625
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

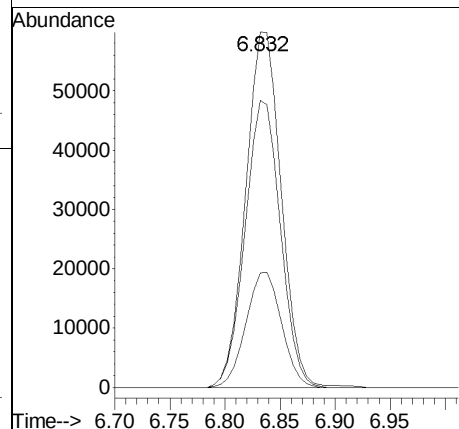
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.9	3.0	4.6

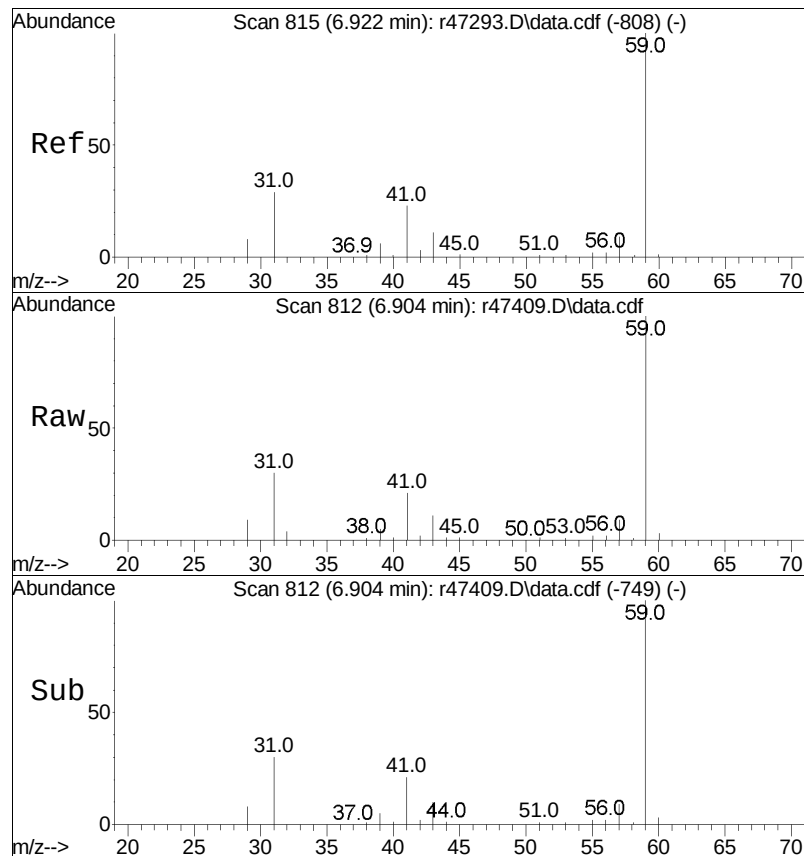




#26
 1,1-dichloroethene
 Concen: 8.81 ppbV
 RT: 6.832 min Scan# 800
 Delta R.T. -0.024 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

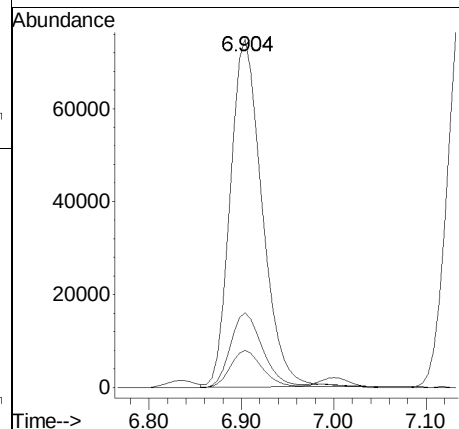
Tgt Ion:	61	Resp:	134318
Ion Ratio	Lower	Upper	
61	100		
96	80.8	58.8	88.2
63	32.2	26.1	39.1

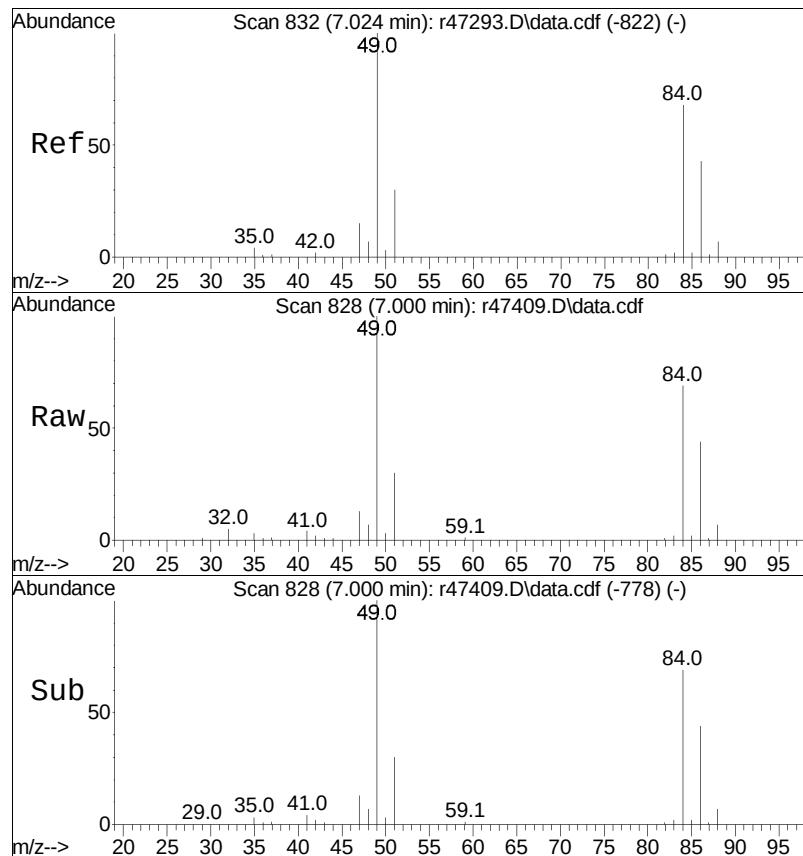




#27
 tertiary butyl alcohol
 Concen: 8.65 ppbV
 RT: 6.904 min Scan# 812
 Delta R.T. -0.018 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

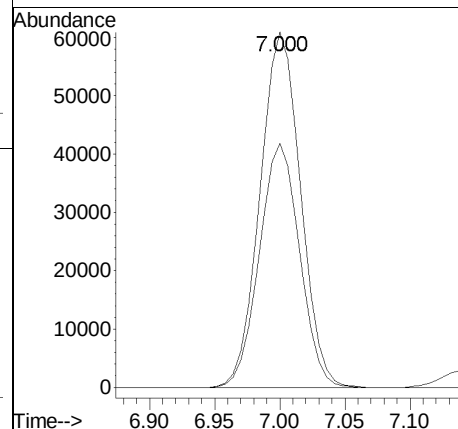
Tgt Ion:	59	Resp:	179164
Ion Ratio	Lower	Upper	
59	100		
41	21.4	18.1	27.1
43	10.6	9.0	13.4

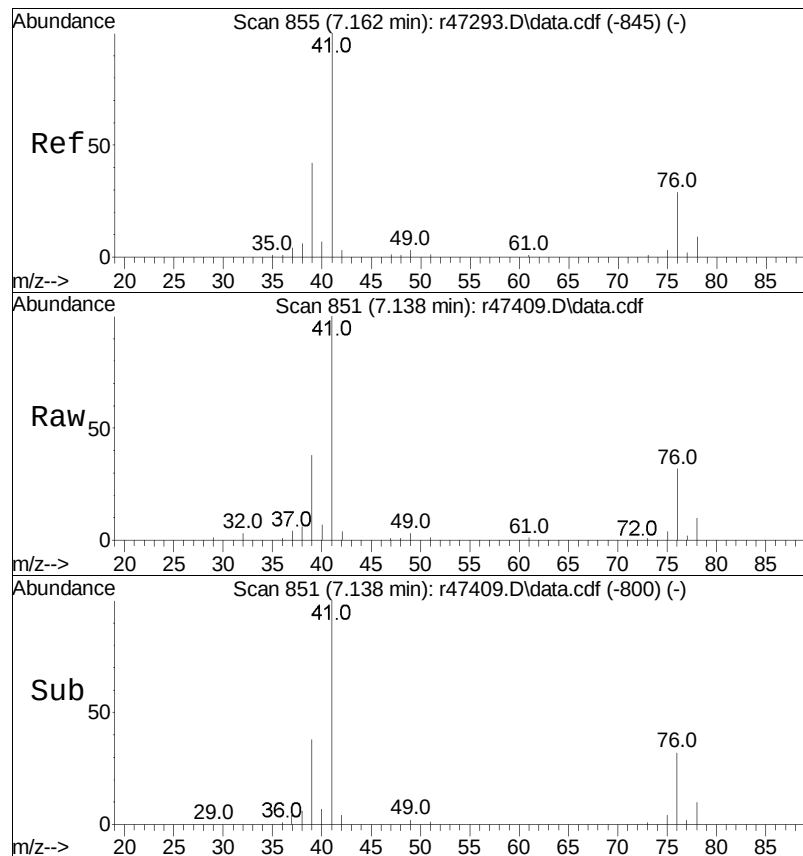




#28
 methylene chloride
 Concen: 10.18 ppbV
 RT: 7.000 min Scan# 828
 Delta R.T. -0.024 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

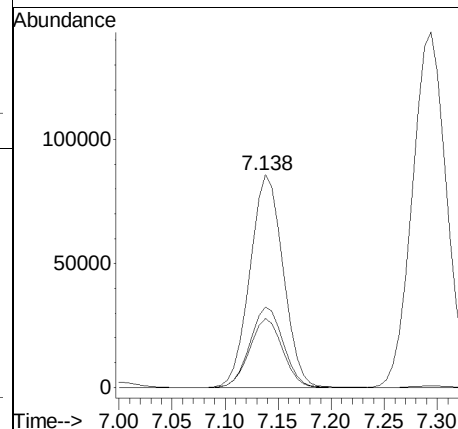
Tgt Ion:	49	84	Ratio	100	68.7	Resp:	131643	Lower	Upper
Ion	49	84	Ratio	100	68.7	Resp:	131643	Lower	Upper
								54.1	81.1

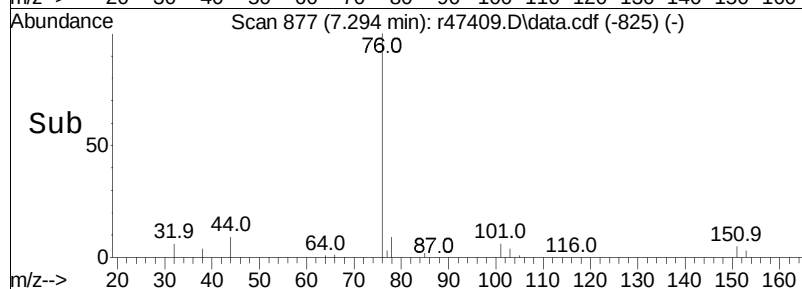
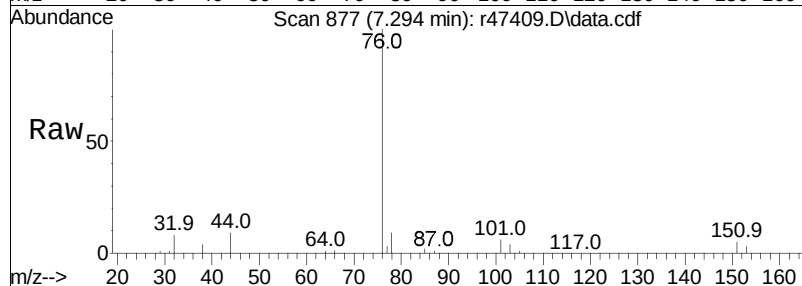
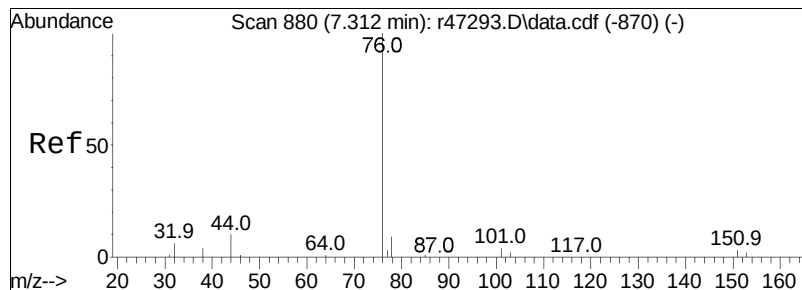




#29
 3-chloropropene
 Concen: 9.58 ppbV
 RT: 7.138 min Scan# 851
 Delta R.T. -0.024 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

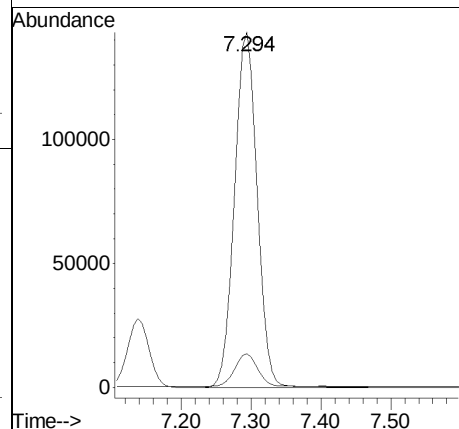
Tgt Ion:	41	Resp:	186596
Ion Ratio	Lower	Upper	
41	100		
39	37.8	33.4	50.0
76	32.4	23.4	35.2

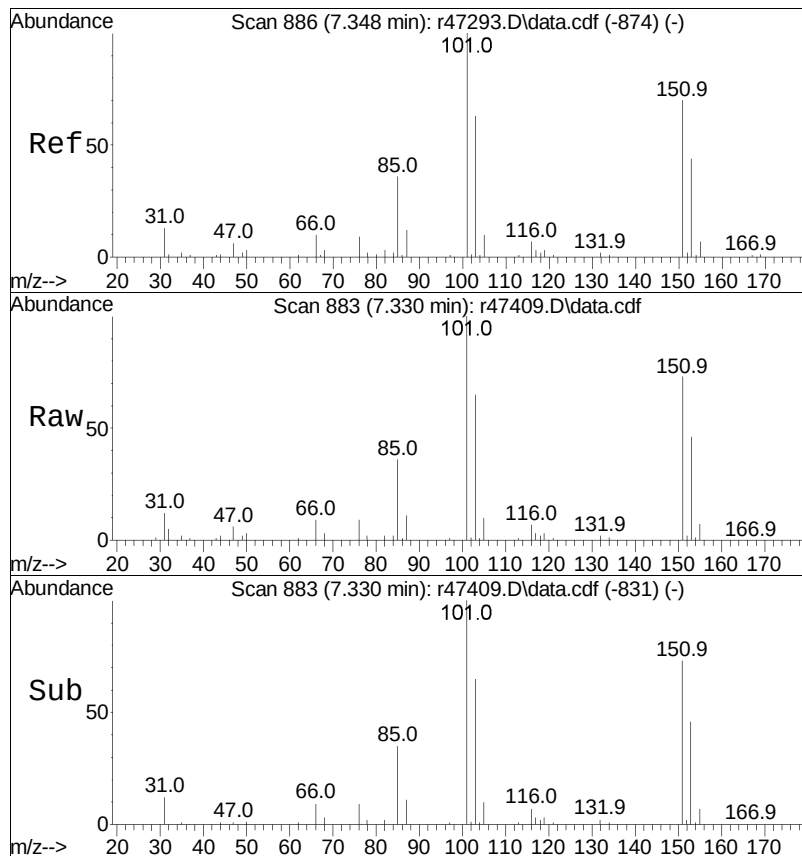




#30
carbon disulfide
Concen: 9.53 ppbV
RT: 7.294 min Scan# 877
Delta R.T. -0.018 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

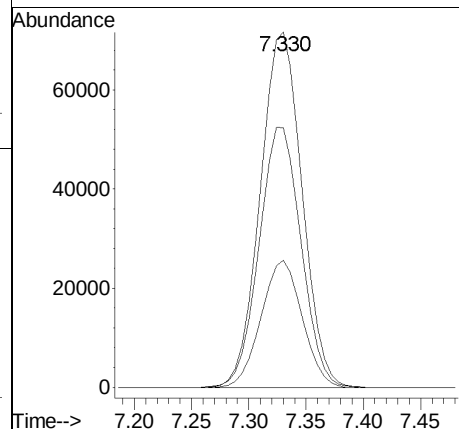
Tgt Ion	Ratio	Lower	Upper
76	100		
44	9.5	8.7	13.1

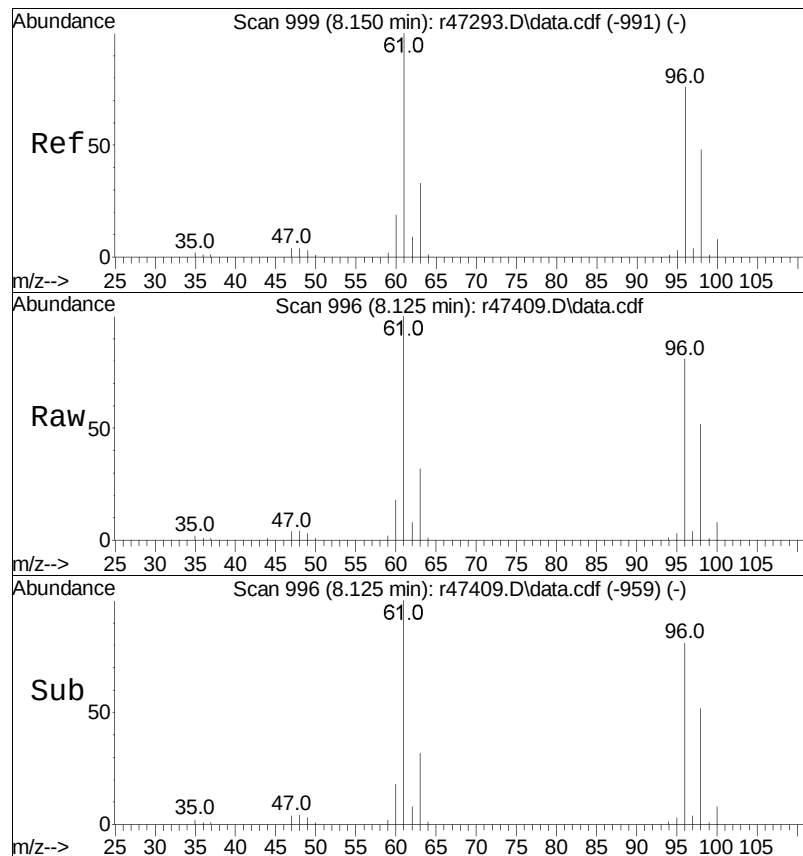




#31
 Freon 113
 Concen: 9.72 ppbV
 RT: 7.330 min Scan# 883
 Delta R.T. -0.018 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

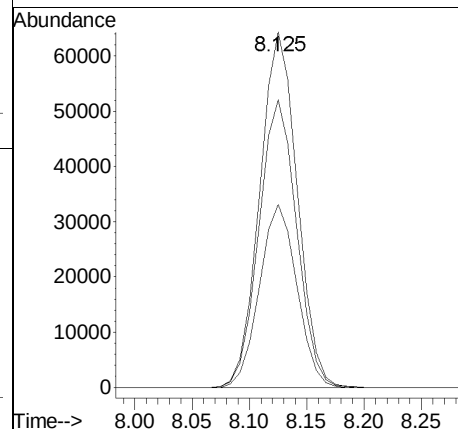
Tgt	Ion:101	Resp:	181576
Ion	Ratio	Lower	Upper
101	100		
85	35.8	28.8	43.2
151	73.1	56.3	84.5

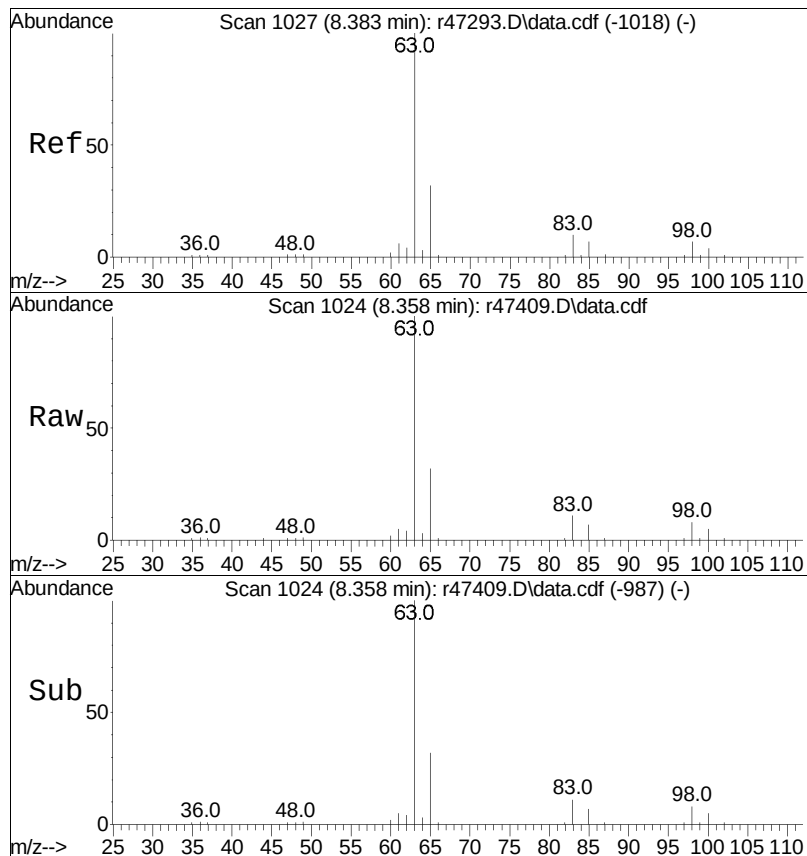




#32
 trans-1,2-dichloroethene
 Concen: 8.58 ppbV
 RT: 8.125 min Scan# 996
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

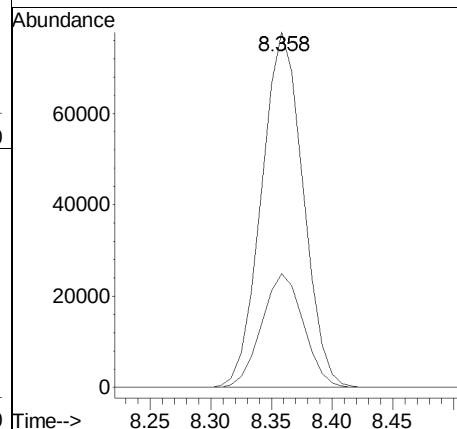
Tgt Ion:	61	Resp:	146509
Ion Ratio	Lower	Upper	
61	100		
96	80.9	60.5	90.7
98	51.5	38.7	58.1

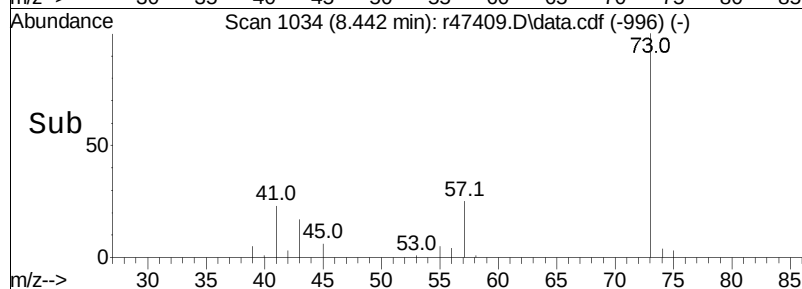
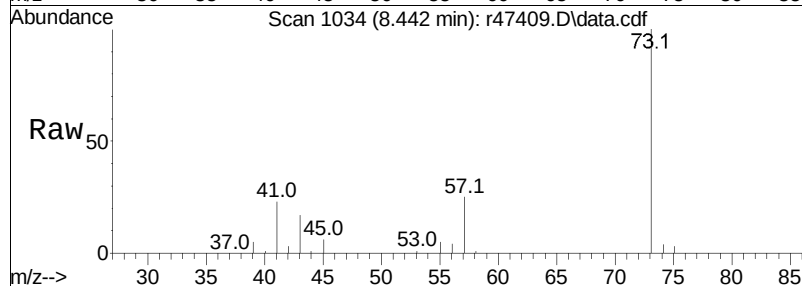
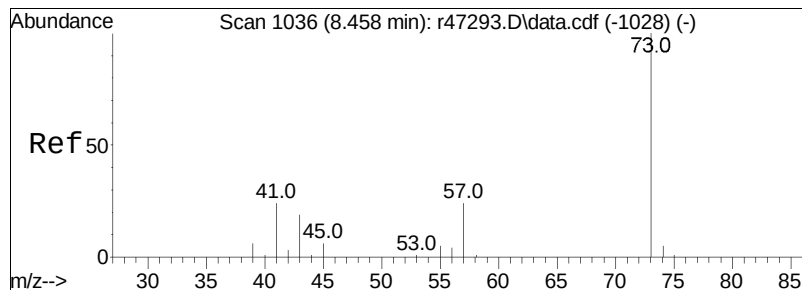




#33
 1,1-dichloroethane
 Concen: 8.93 ppbV
 RT: 8.358 min Scan# 1024
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

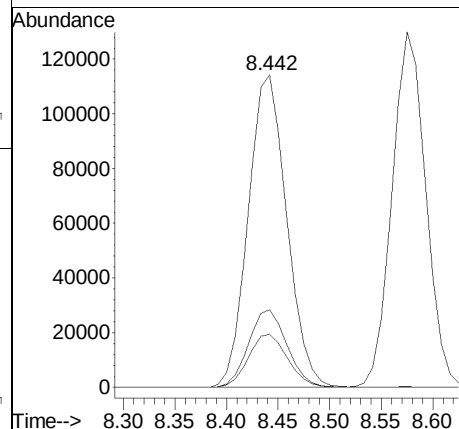
Tgt	Ion	Ratio	Lower	Upper
63	100			
65	32.0	25.8	38.6	

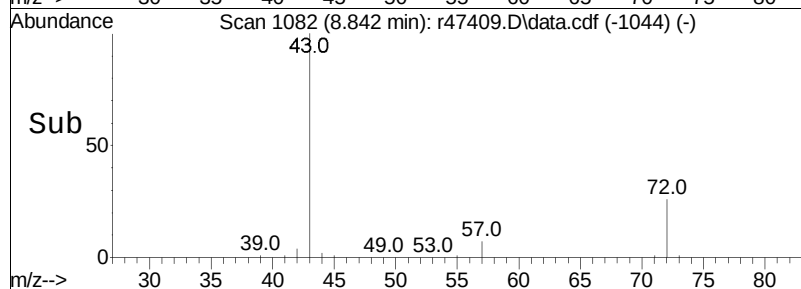
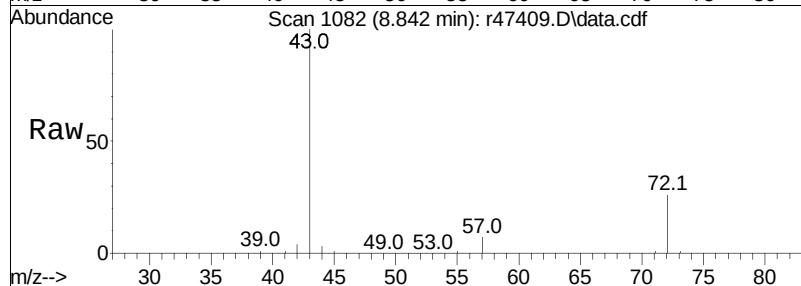
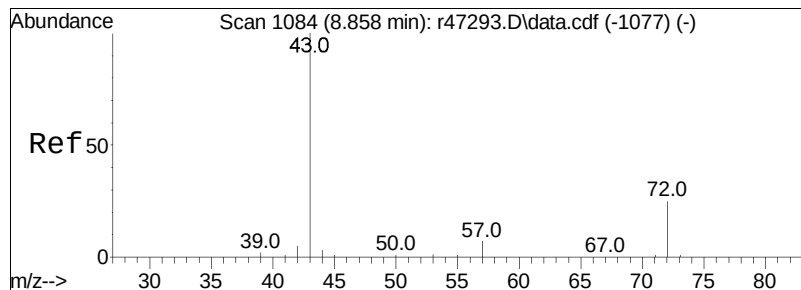




#34
MTBE
Concen: 9.36 ppbV
RT: 8.442 min Scan# 1034
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

Tgt Ion	Ratio	Lower	Upper
73	100		
57	24.8	19.4	29.2
43	17.0	15.0	22.4





#36

2-butanone

Concen: 9.05 ppbV

RT: 8.842 min Scan# 1082

Delta R.T. -0.017 min

Lab File: r47409.D

Acq: 21 Jan 2020 12:33 PM

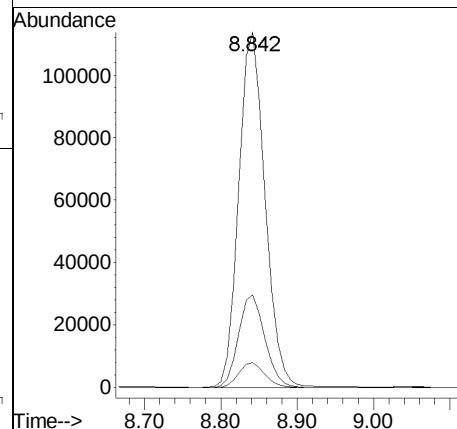
Tgt Ion: 43 Resp: 272340

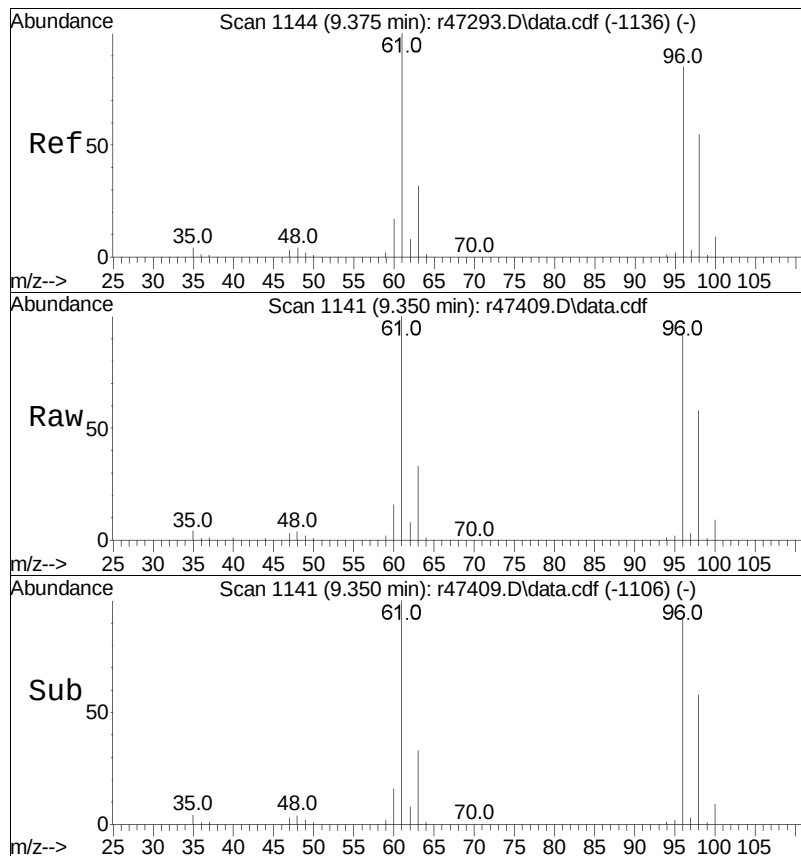
Ion Ratio Lower Upper

43 100

72 26.0 19.8 29.6

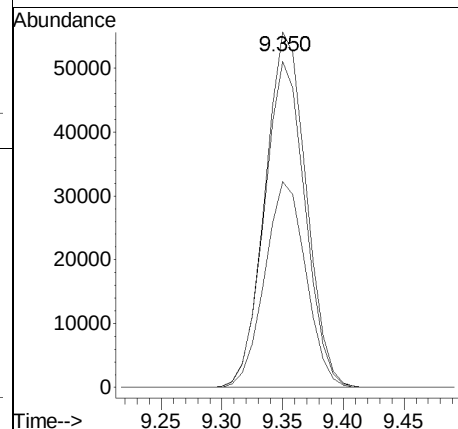
57 7.0 5.5 8.3

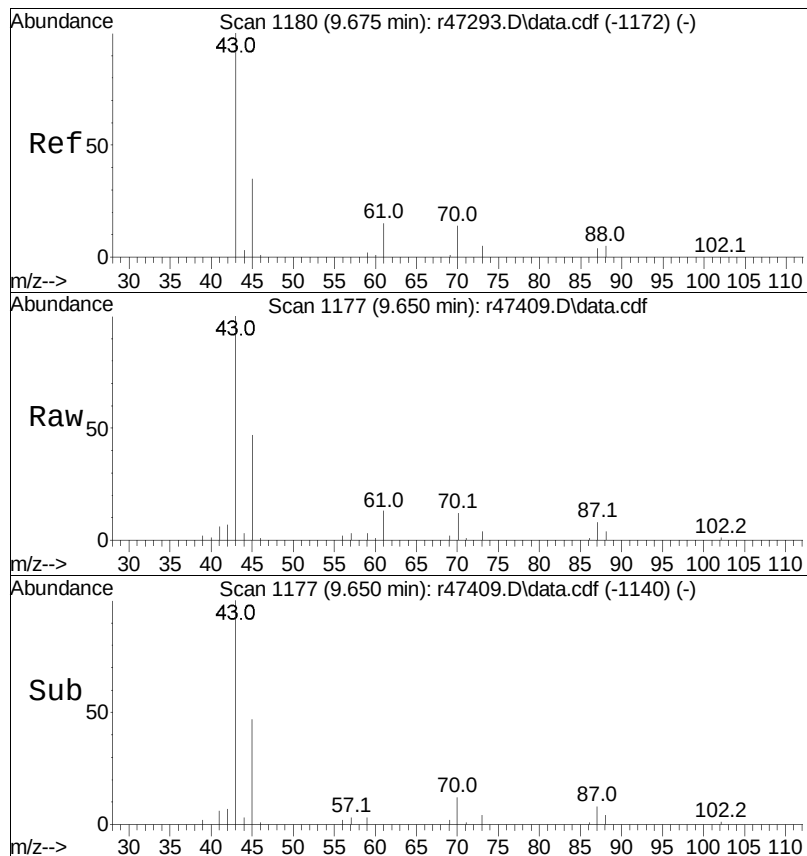




#37
 cis-1,2-dichloroethene
 Concen: 8.77 ppbV
 RT: 9.350 min Scan# 1141
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

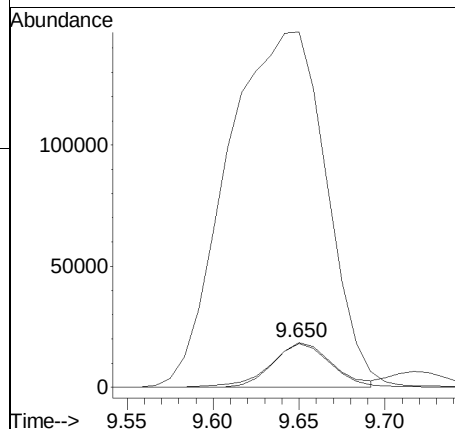
Tgt Ion:	61	Resp:	131297
Ion Ratio	Lower	Upper	
61	100		
96	91.7	67.9	101.9
98	57.9	44.0	66.0

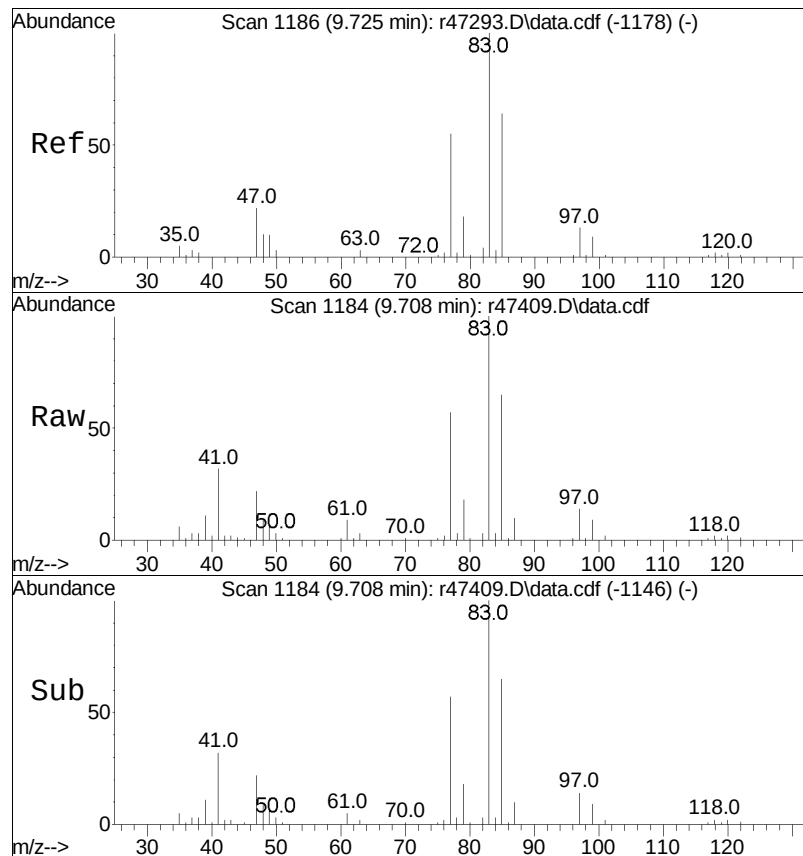




#38
 Ethyl Acetate
 Concen: 9.58 ppbV
 RT: 9.650 min Scan# 1177
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

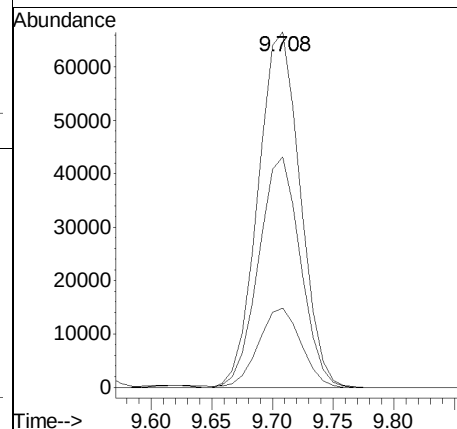
Tgt	Ion: 61	Resp:	44127
Ion	Ratio	Lower	Upper
61	100		
70	97.7	77.3	115.9
43	792.6	633.3	949.9

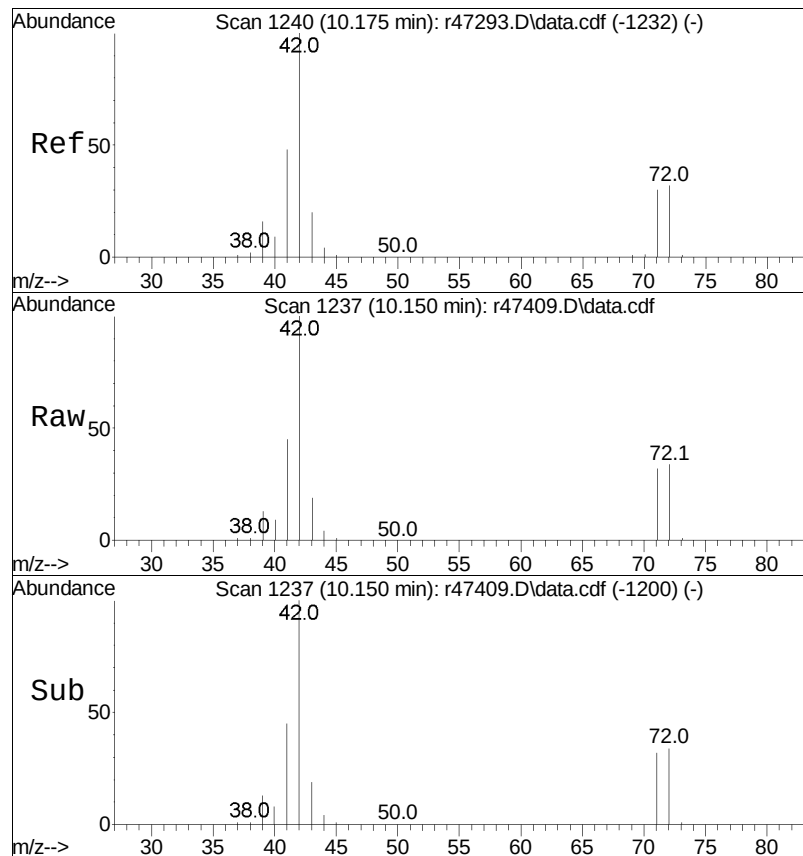




#39
chloroform
Concen: 8.73 ppbV
RT: 9.708 min Scan# 1184
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

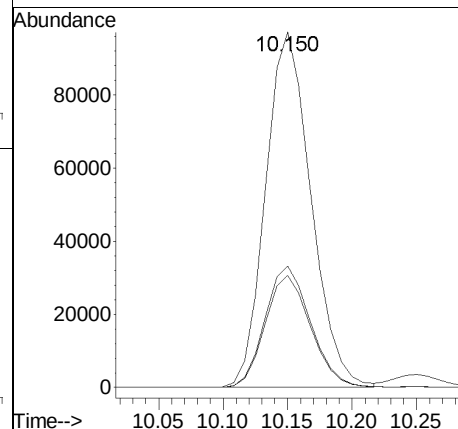
Tgt	Ion: 83	Resp: 160836
Ion	Ratio	Lower Upper
83	100	
85	64.9	51.3 76.9
47	22.3	17.8 26.8

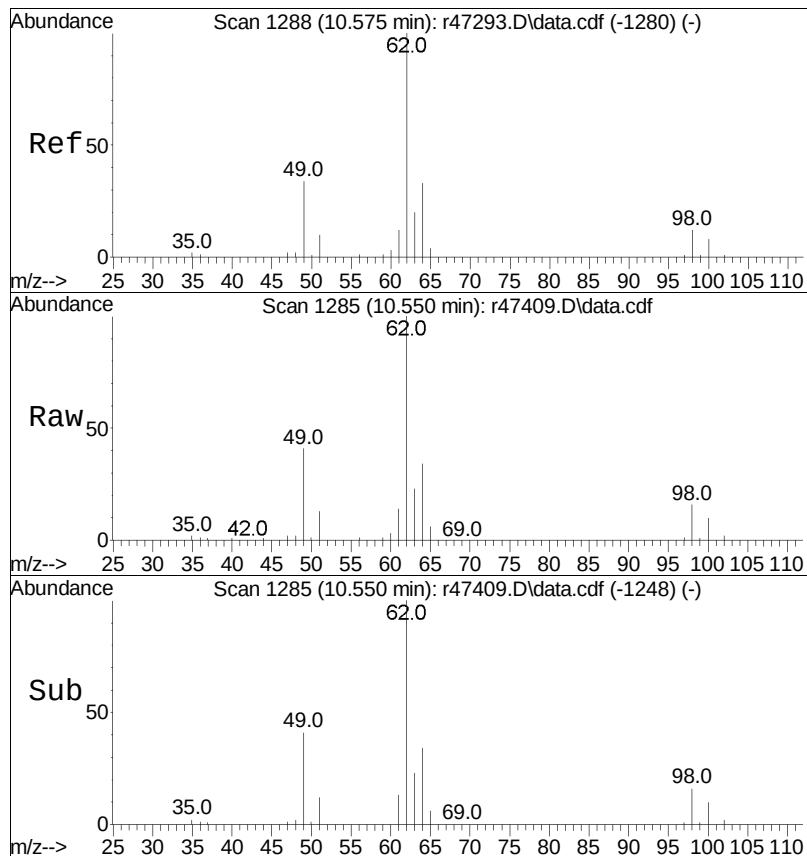




#40
 Tetrahydrofuran
 Concen: 11.19 ppbV
 RT: 10.150 min Scan# 1237
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

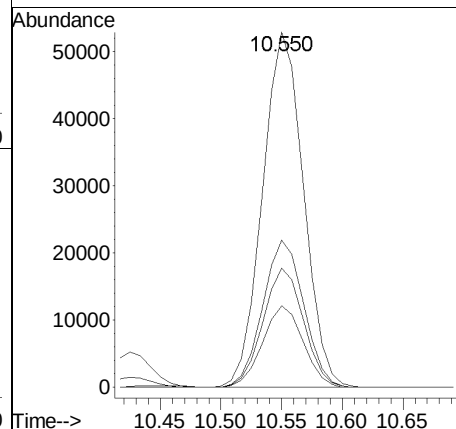
Tgt Ion	Ratio	Lower	Upper
42	100		
71	31.5	24.2	36.2
72	34.2	25.6	38.4

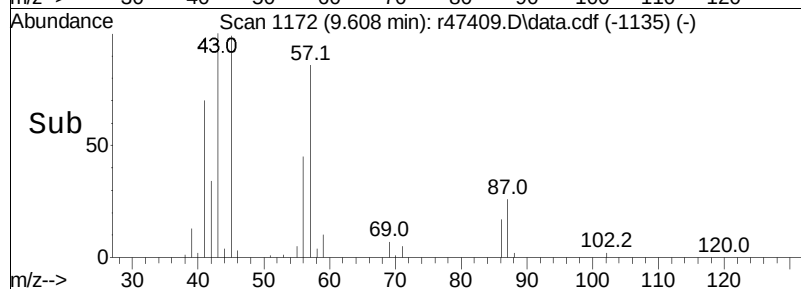
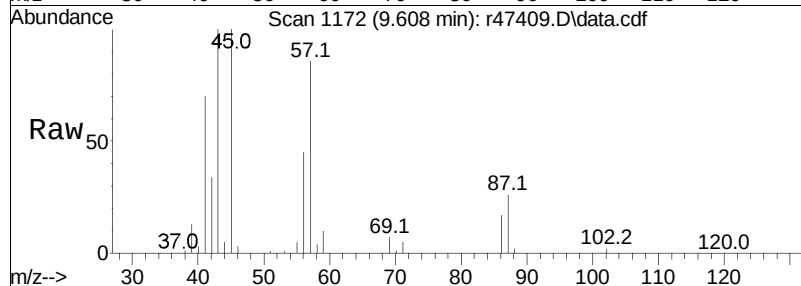
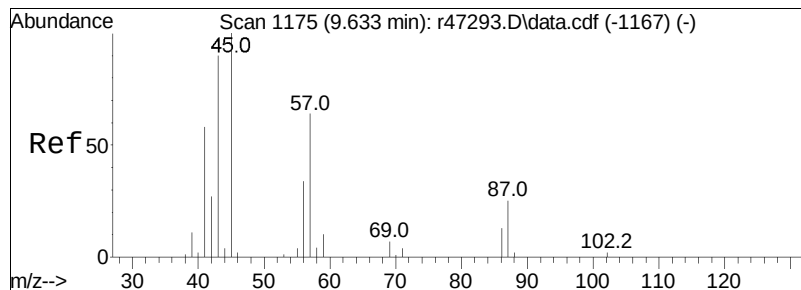




#42
 1,2-dichloroethane
 Concen: 8.99 ppbV
 RT: 10.550 min Scan# 1285
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

Tgt Ion:	62	Resp:	124273
Ion Ratio	Lower	Upper	
62	100		
64	33.5	26.2	39.4
49	41.4	26.9	40.3#
63	23.0	15.6	23.4





#44

hexane

Concen: 8.17 ppbV

RT: 9.608 min Scan# 1172

Delta R.T. -0.025 min

Lab File: r47409.D

Acq: 21 Jan 2020 12:33 PM

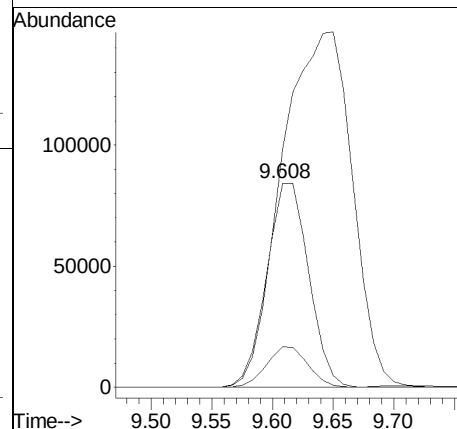
Tgt Ion: 57 Resp: 204300

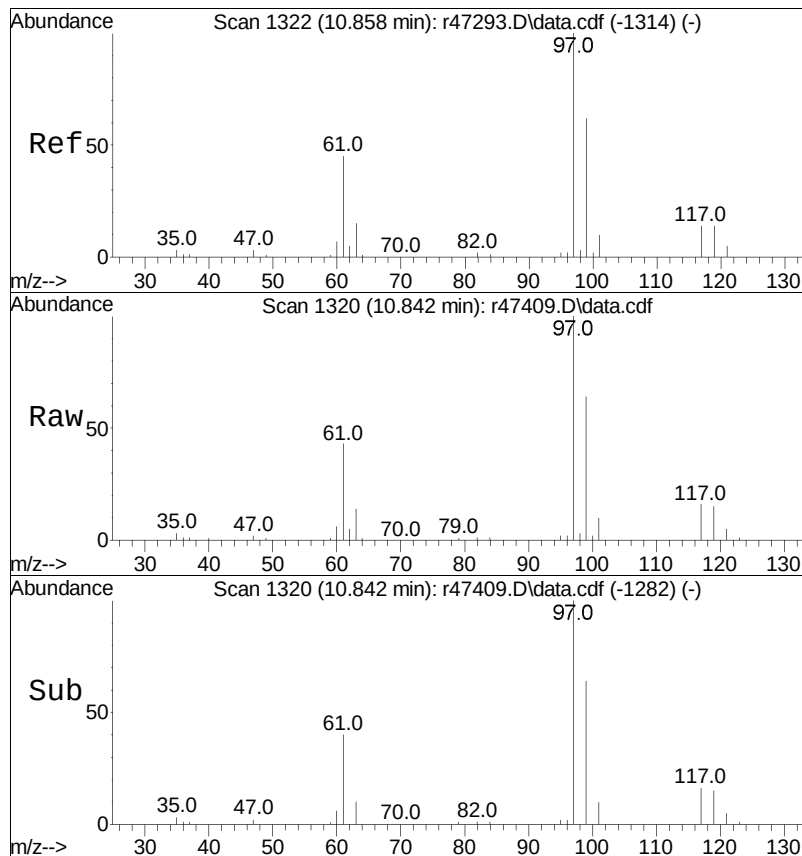
Ion Ratio Lower Upper

57 100

43 116.9 111.8 167.8

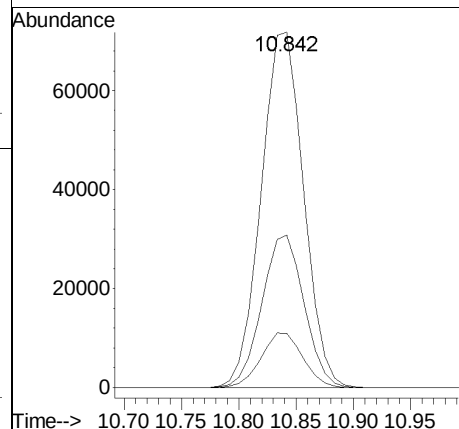
86 19.8 15.8 23.6

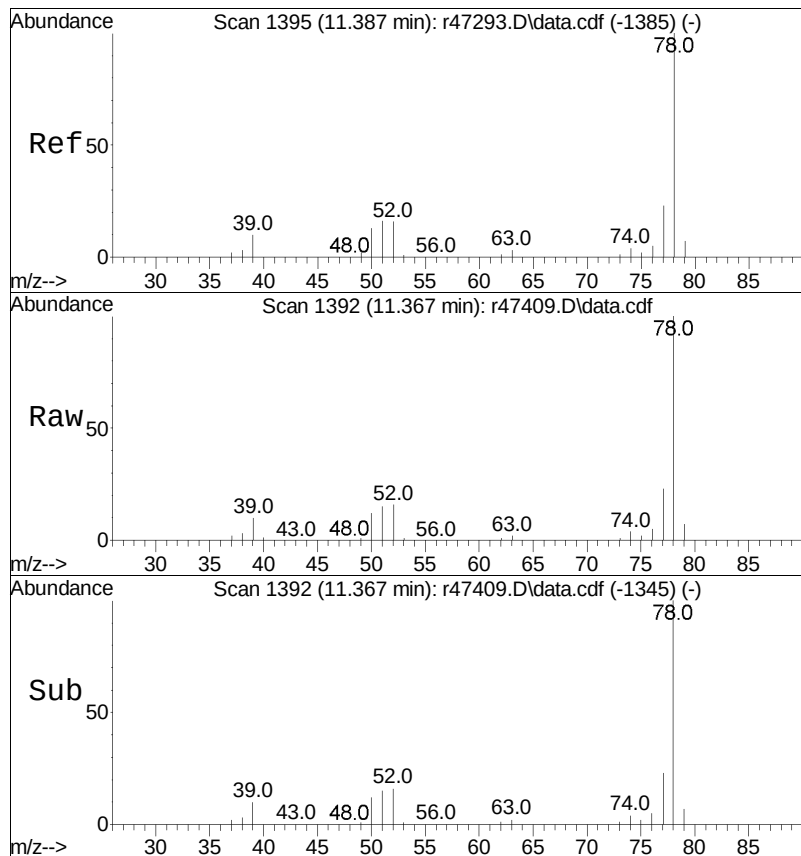




#48
 1,1,1-trichloroethane
 Concen: 8.86 ppbV
 RT: 10.842 min Scan# 1320
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

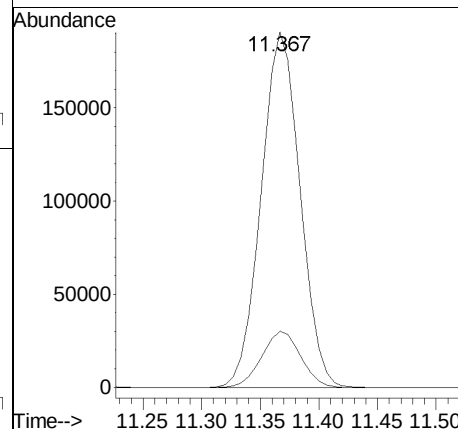
Tgt Ion	Ratio	Resp	Lower	Upper
97	100	184801		
61	42.9		36.2	54.4
119	15.3		11.0	16.6

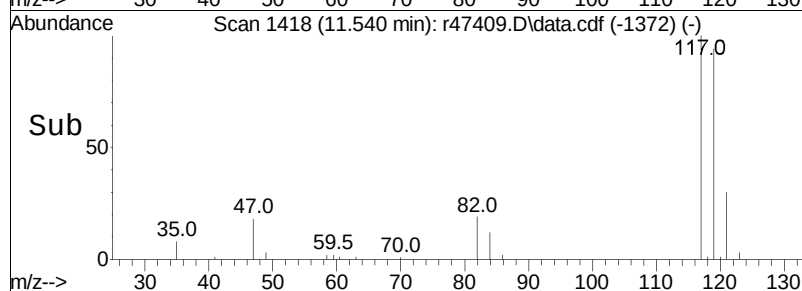
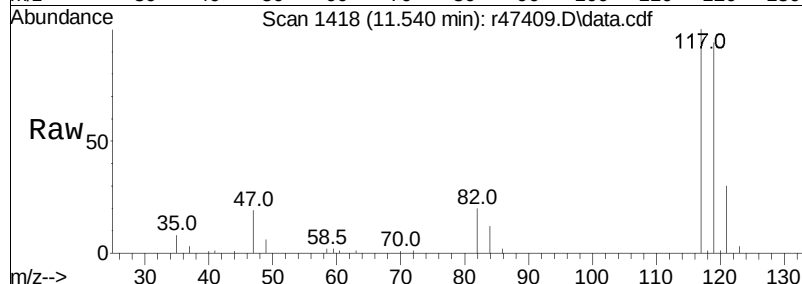
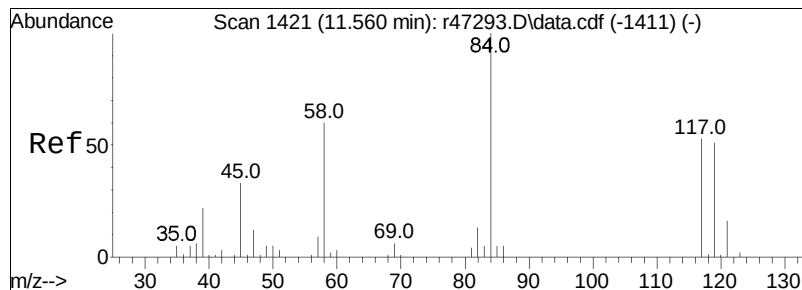




#50
benzene
Concen: 9.63 ppbV
RT: 11.367 min Scan# 1392
Delta R.T. -0.020 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

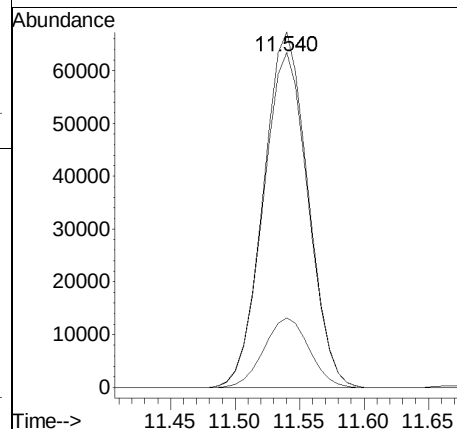
Tgt Ion	Ratio	Lower	Upper
78	100		
52	15.8	13.0	19.4

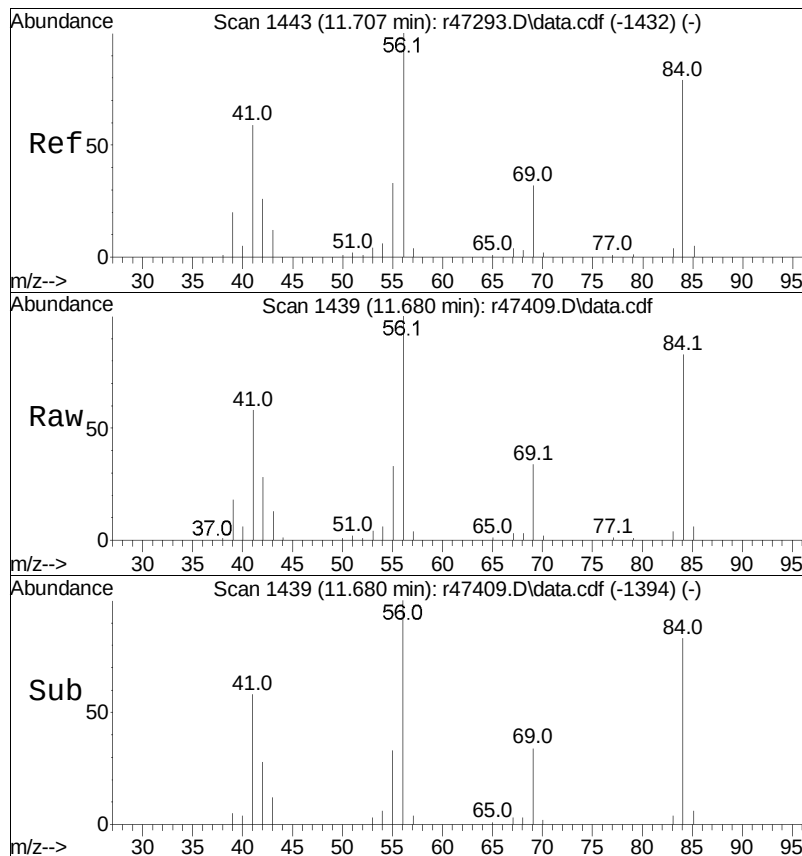




#52
 carbon tetrachloride
 Concen: 9.04 ppbV
 RT: 11.540 min Scan# 1418
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

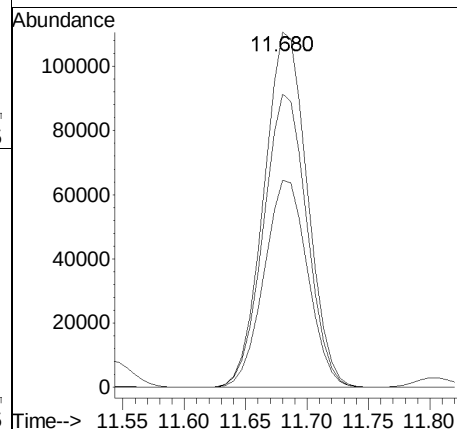
Tgt Ion	Ratio	Resp	Lower	Upper
117	100	161670		
119	94.3		77.3	115.9
82	19.6		20.2	30.2#

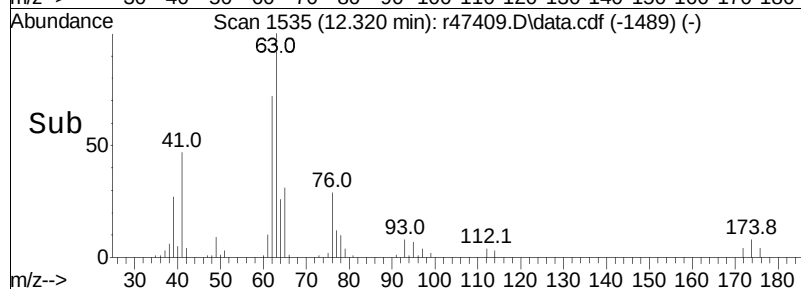
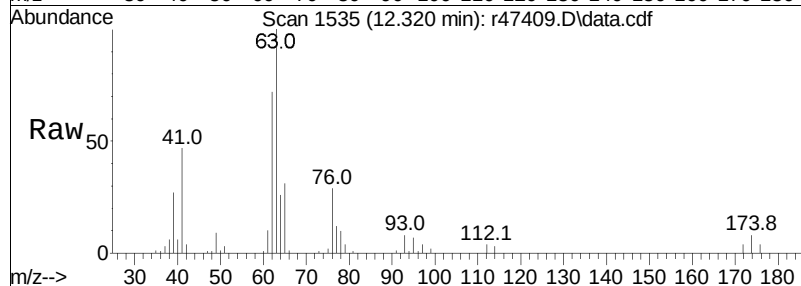
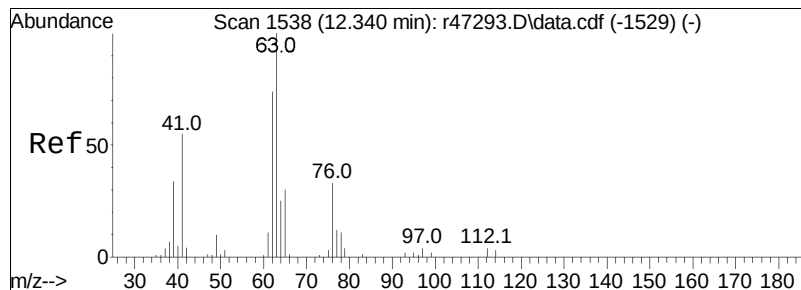




#53
cyclohexane
Concen: 9.42 ppbV
RT: 11.680 min Scan# 1439
Delta R.T. -0.027 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

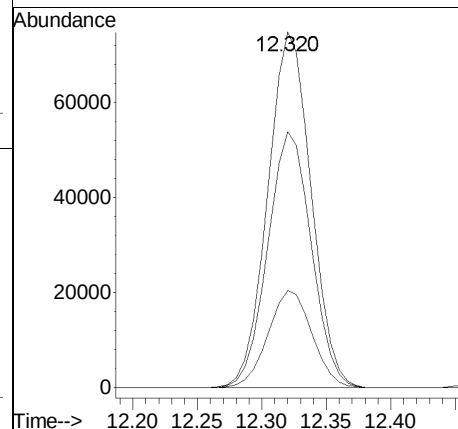
Tgt Ion:	56	Resp:	272481
Ion Ratio	Lower	Upper	
56	100		
84	82.6	63.0	94.6
41	58.3	46.8	70.2

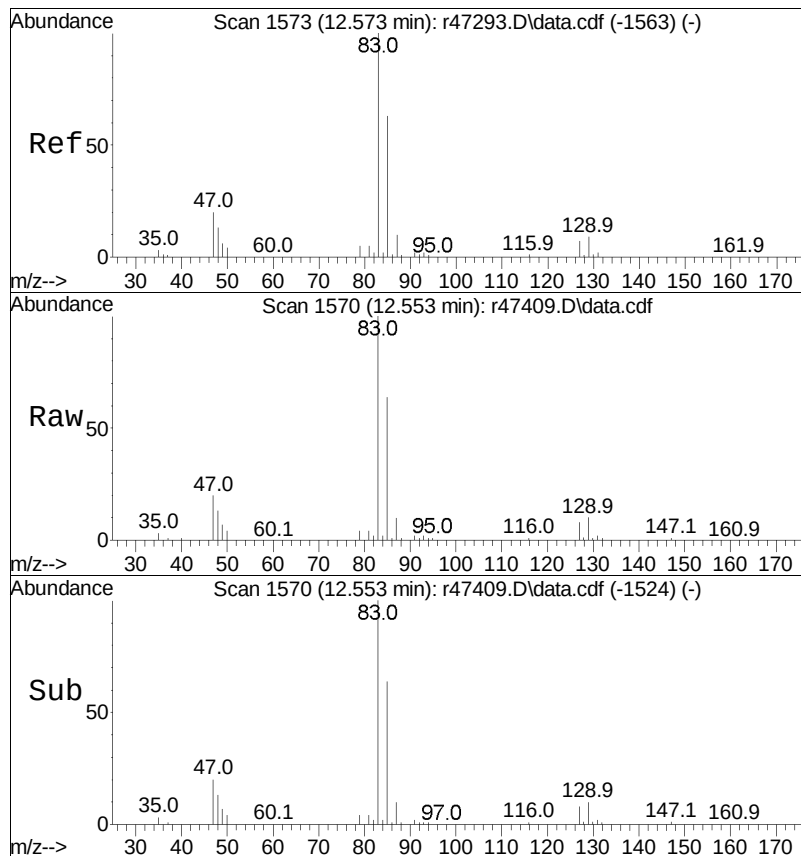




#56
 1,2-dichloropropane
 Concen: 9.77 ppbV
 RT: 12.320 min Scan# 1535
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

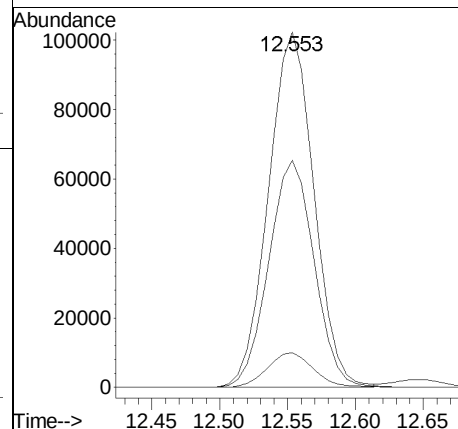
Tgt Ion	Ratio	Lower	Upper
63	100		
62	71.9	59.4	89.2
39	27.3	27.4	41.0#

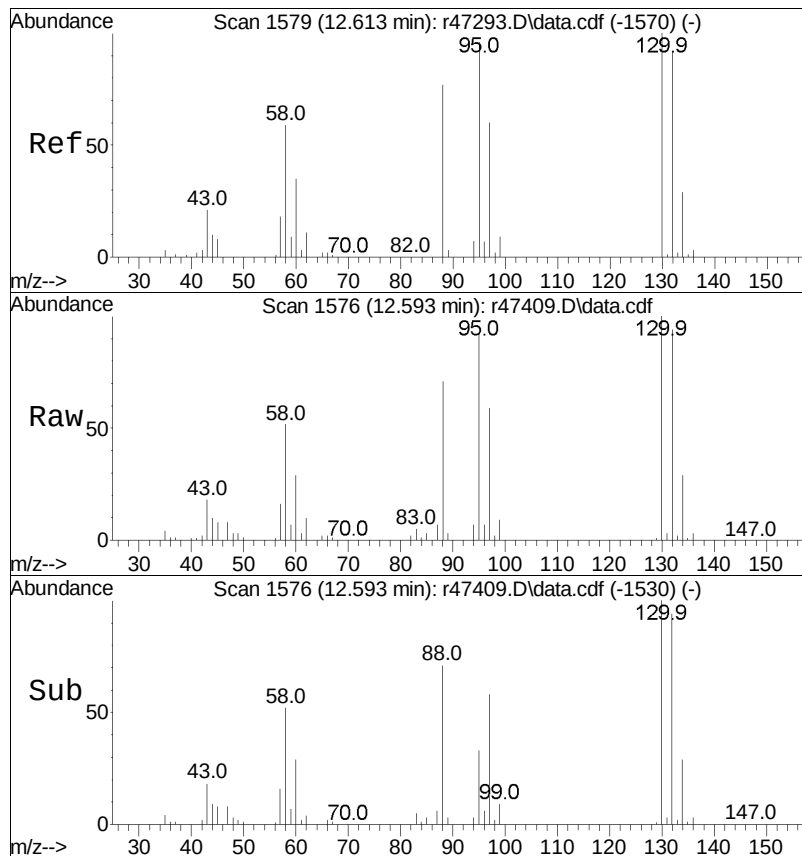




#57
 bromodichloromethane
 Concen: 9.07 ppbV
 RT: 12.553 min Scan# 1570
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

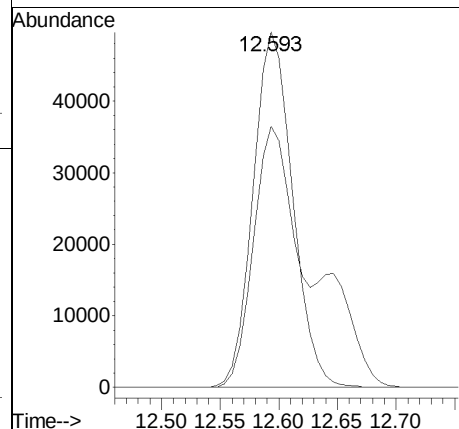
Tgt Ion:	83	Resp:	238127
Ion Ratio	Lower	Upper	
83	100		
85	63.9	50.7	76.1
129	9.8	7.4	11.0

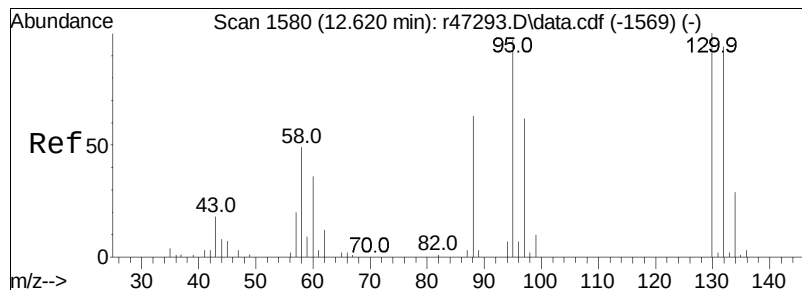




#58
 1,4-dioxane
 Concen: 10.14 ppbV
 RT: 12.593 min Scan# 1576
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

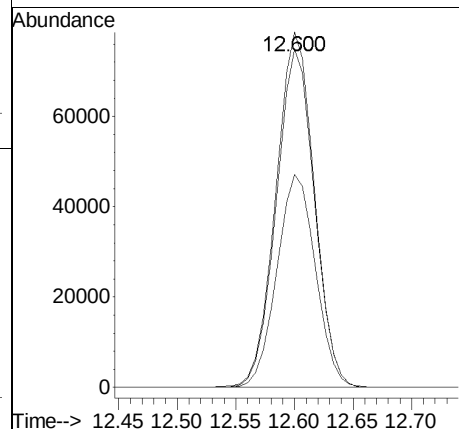
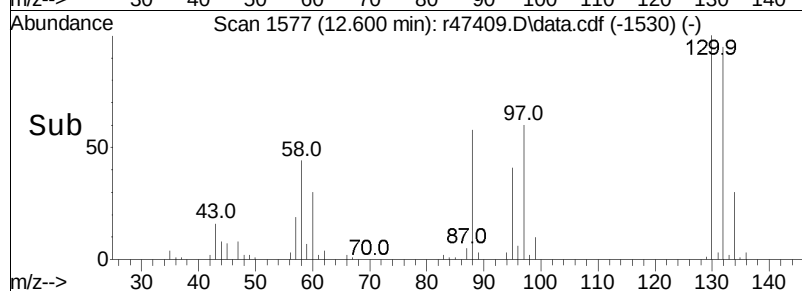
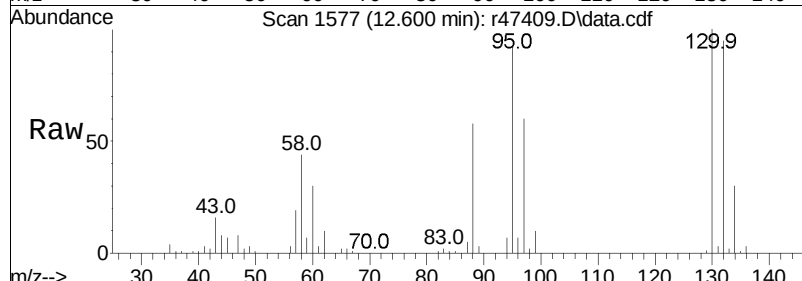
Tgt	Ion	Ratio	Lower	Upper
88	100			
58	73.5	61.5	92.3	

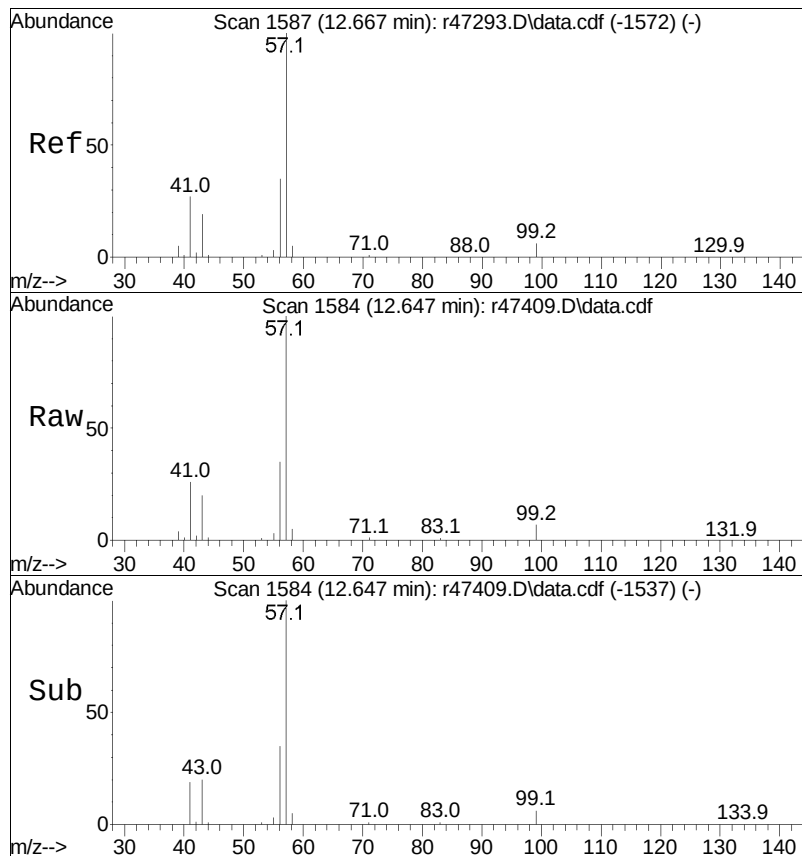




#59
trichloroethene
Concen: 10.28 ppbV
RT: 12.600 min Scan# 1577
Delta R.T. -0.020 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

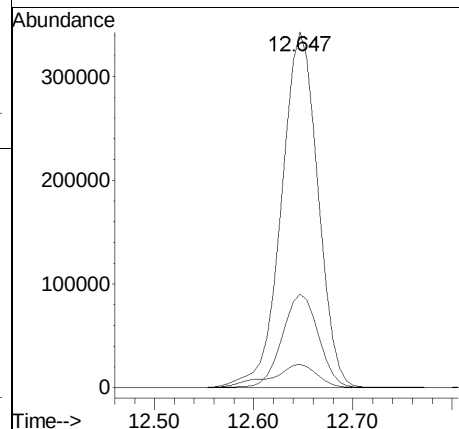
Tgt Ion	Ratio	Lower	Upper
130	100		
132	95.2	75.0	112.4
97	59.9	49.4	74.0

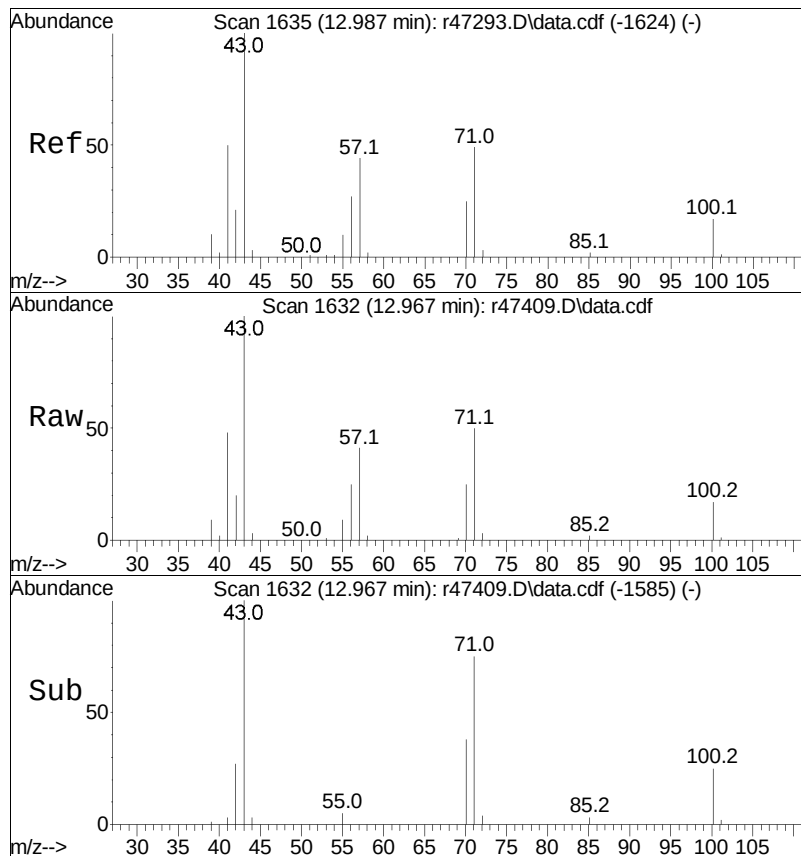




#60
 2,2,4-trimethylpentane
 Concen: 9.78 ppbV
 RT: 12.647 min Scan# 1584
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

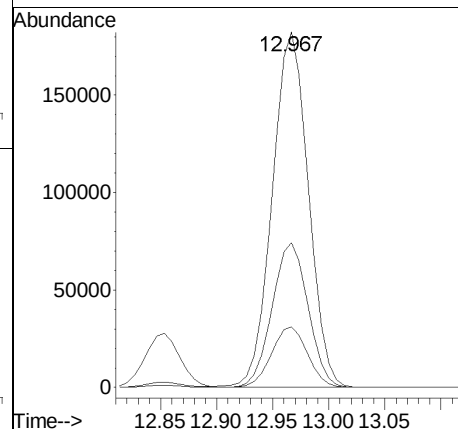
Tgt	Ion: 57	Resp: 878184
Ion	Ratio	Lower Upper
57	100	
99	6.5	4.8 7.2
41	26.3	21.8 32.8

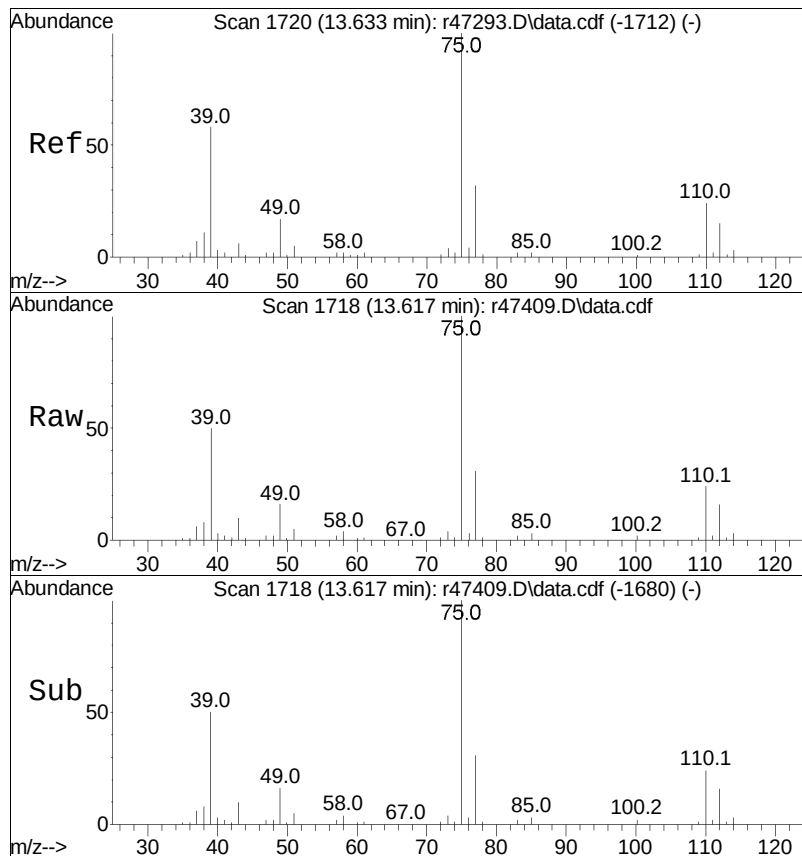




#62
 heptane
 Concen: 10.38 ppbV
 RT: 12.967 min Scan# 1632
 Delta R.T. -0.020 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

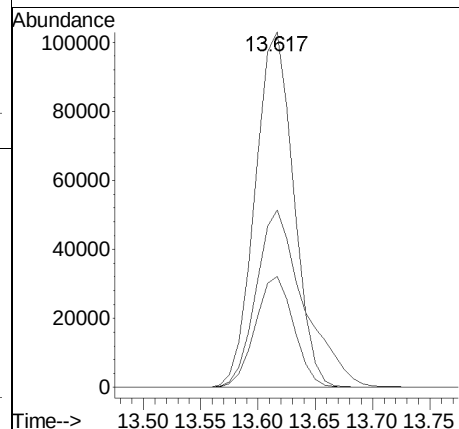
Tgt	Ion: 43	Resp:	407905
Ion	Ratio	Lower	Upper
43	100		
57	40.7	35.2	52.8
100	17.1	13.7	20.5

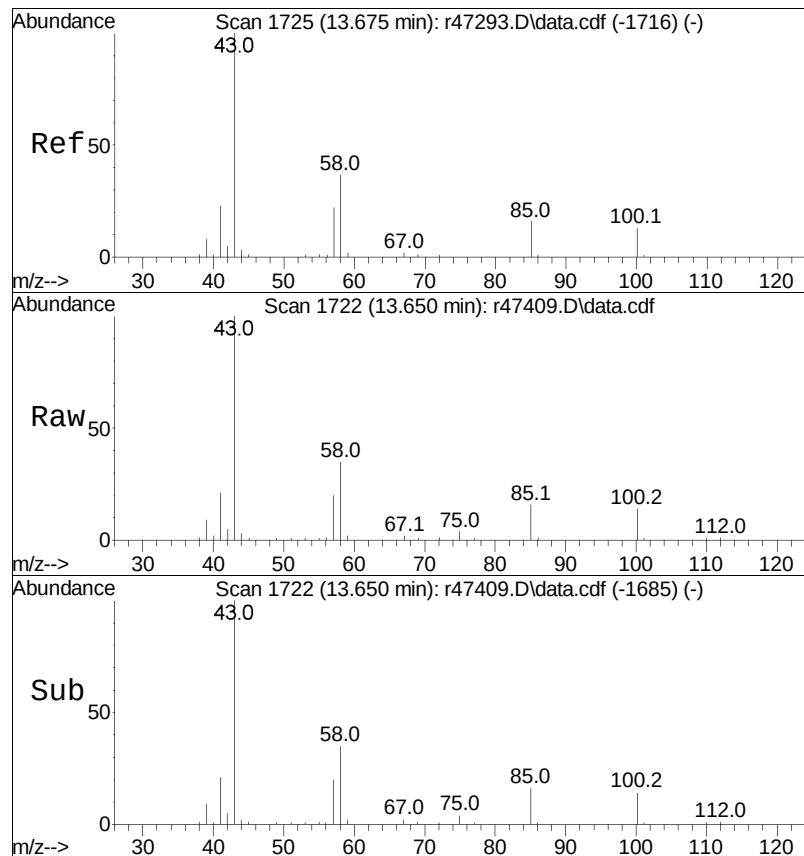




#63
 cis-1,3-dichloropropene
 Concen: 10.58 ppbV
 RT: 13.617 min Scan# 1718
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

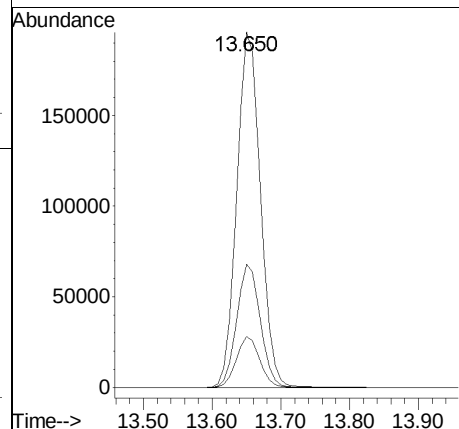
Tgt Ion	Ratio	Resp	Lower	Upper
75	100	240740		
39	49.9		46.3	69.5
77	31.2		25.4	38.2

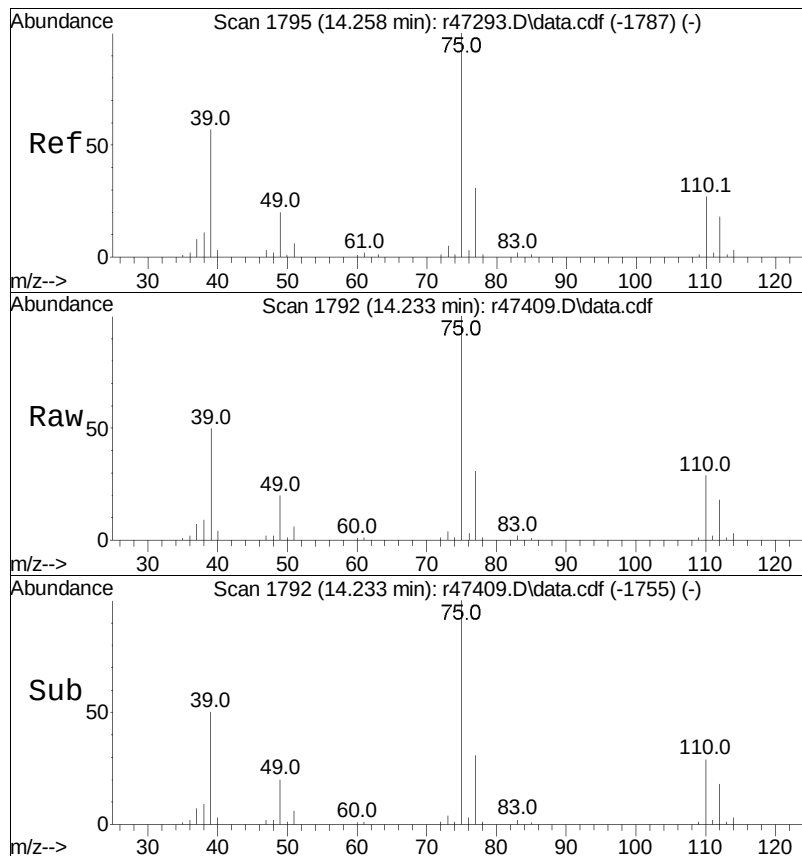




#64
 4-methyl-2-pentanone
 Concen: 10.42 ppbV
 RT: 13.650 min Scan# 1722
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

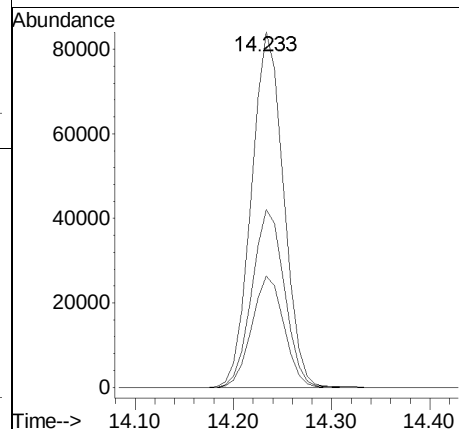
Tgt	Ion: 43	Resp: 468026
Ion	Ratio	Lower Upper
43	100	
58	34.7	29.3 43.9
100	14.3	10.7 16.1

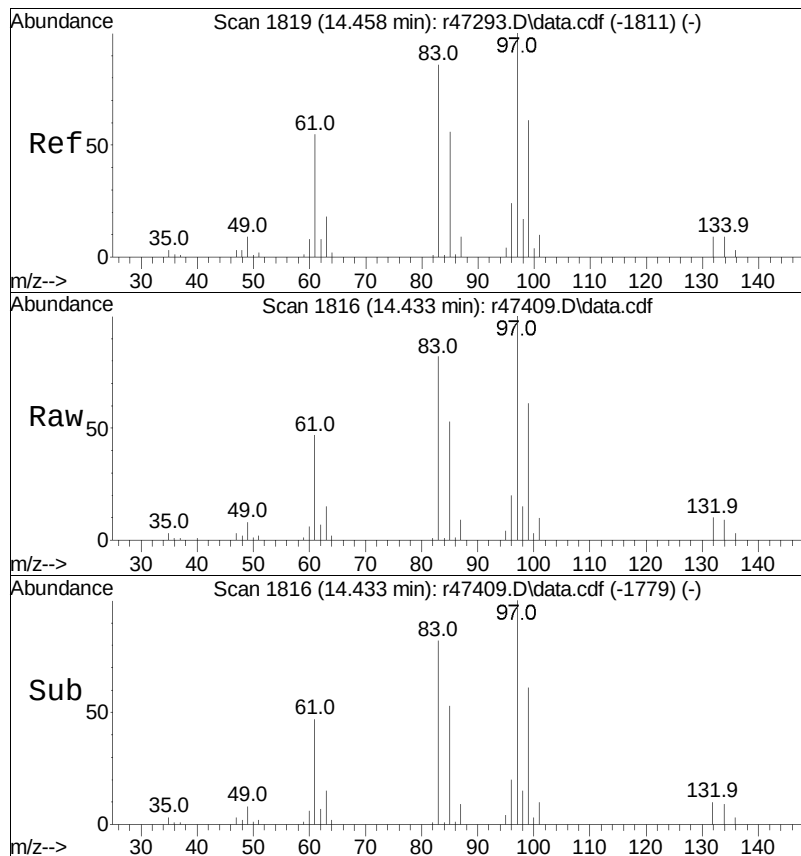




#65
 trans-1,3-dichloropropene
 Concen: 8.88 ppbV
 RT: 14.233 min Scan# 1792
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

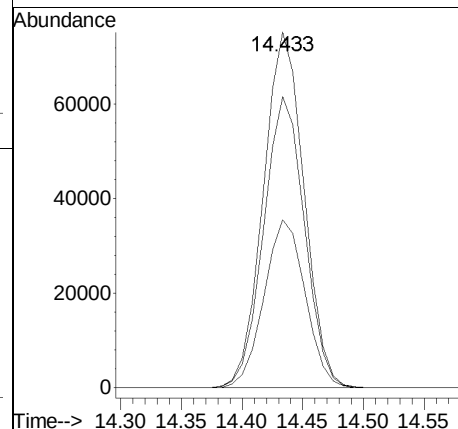
Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.3	25.0	37.4
39	50.0	46.0	69.0

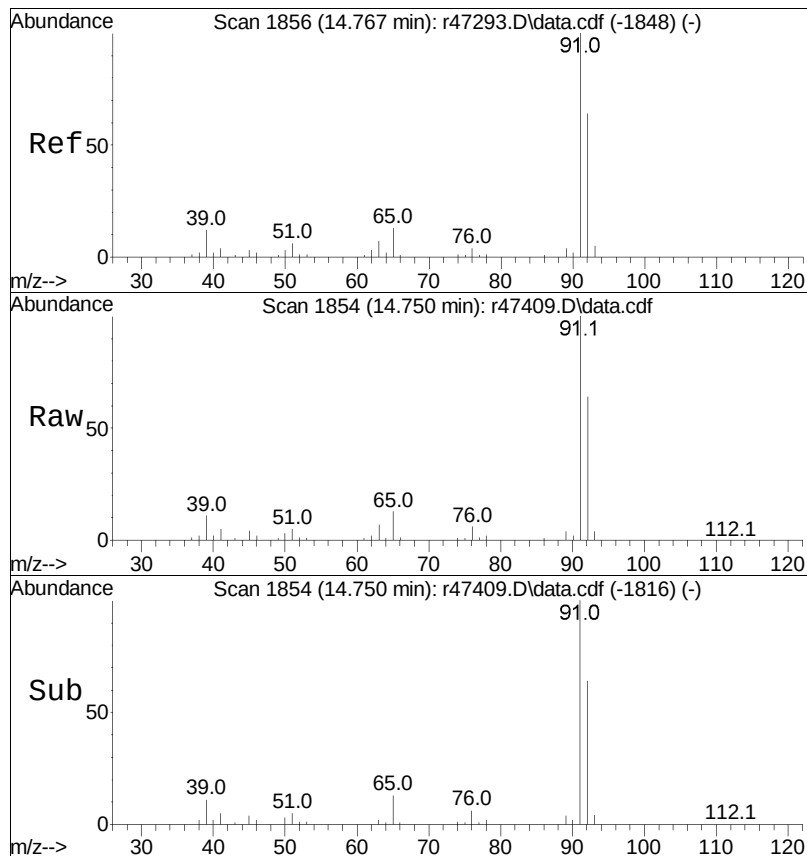




#66
 1,1,2-trichloroethane
 Concen: 10.41 ppbV
 RT: 14.433 min Scan# 1816
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

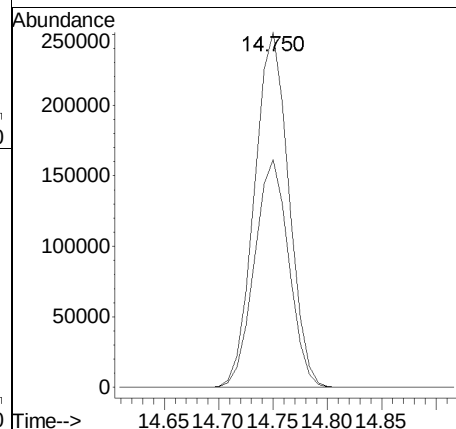
Tgt Ion	Ratio	Lower	Upper
97	100		
83	81.8	69.0	103.6
61	47.2	44.1	66.1

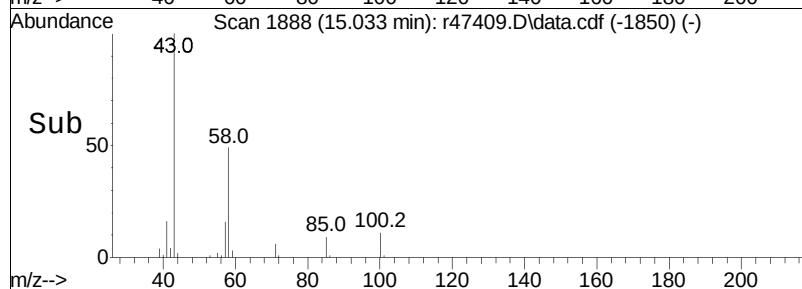
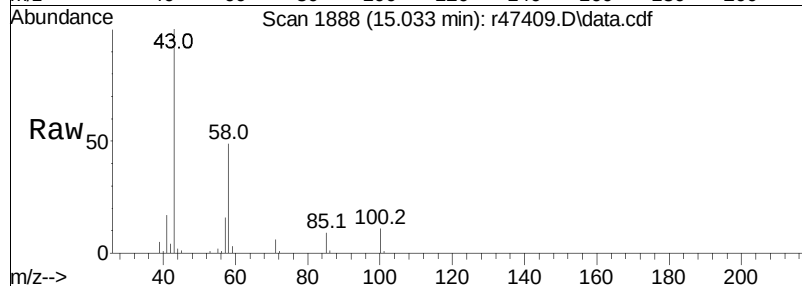
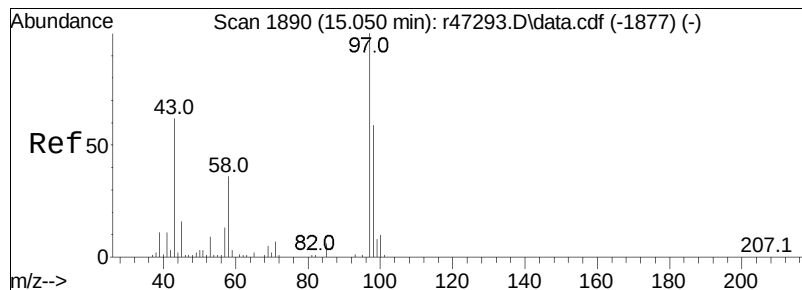




#68
toluene
Concen: 10.69 ppbV
RT: 14.750 min Scan# 1854
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

Tgt Ion	Ratio	Lower	Upper
91	100		
92	64.1	51.1	76.7





#72

2-hexanone

Concen: 12.26 ppbV

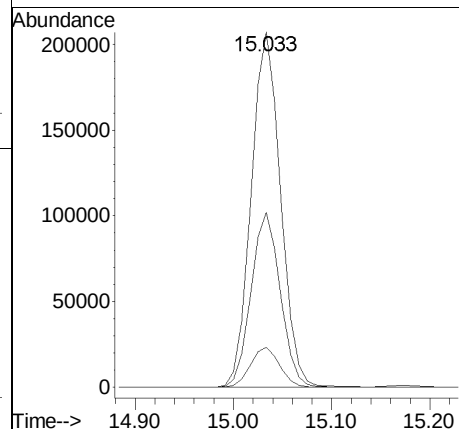
RT: 15.033 min Scan# 1888

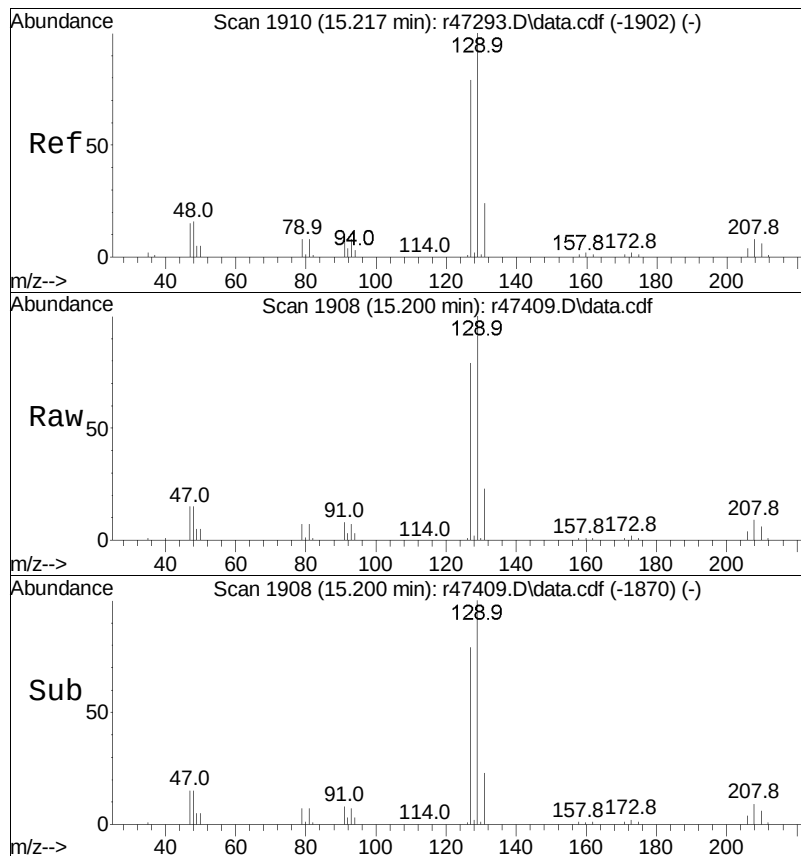
Delta R.T. -0.017 min

Lab File: r47409.D

Acq: 21 Jan 2020 12:33 PM

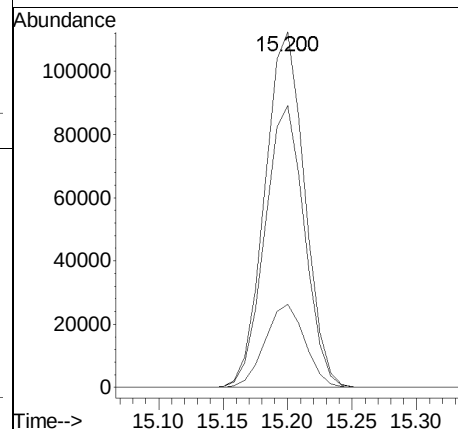
Tgt	Ion: 43	Resp:	430045
Ion	Ratio	Lower	Upper
43	100		
58	49.2	46.2	69.4
100	11.3	12.4	18.6#

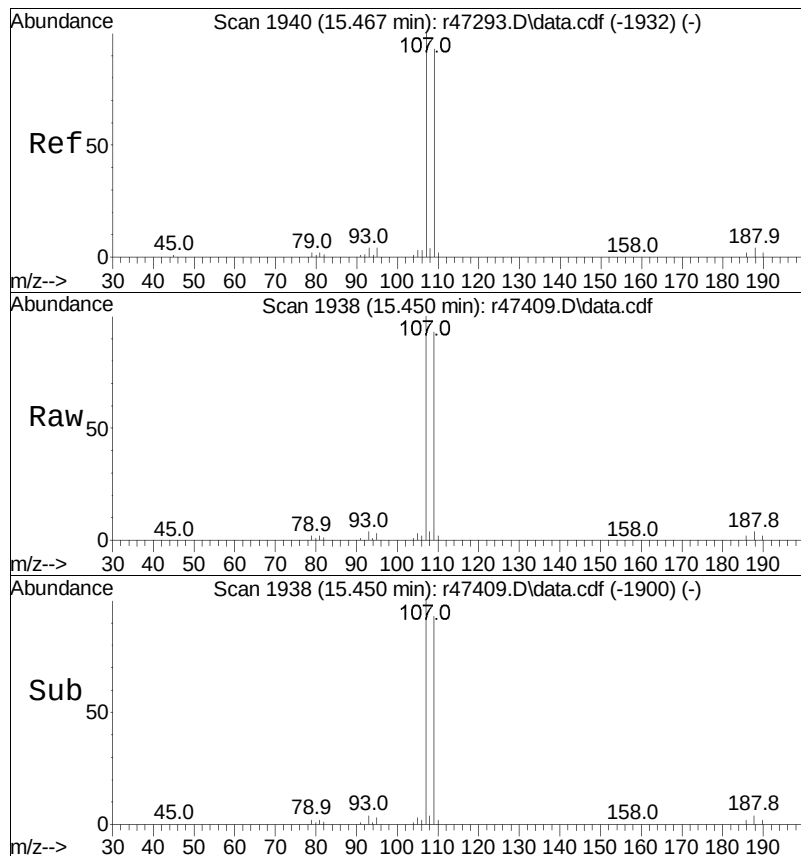




#74
 dibromochloromethane
 Concen: 11.32 ppbV
 RT: 15.200 min Scan# 1908
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

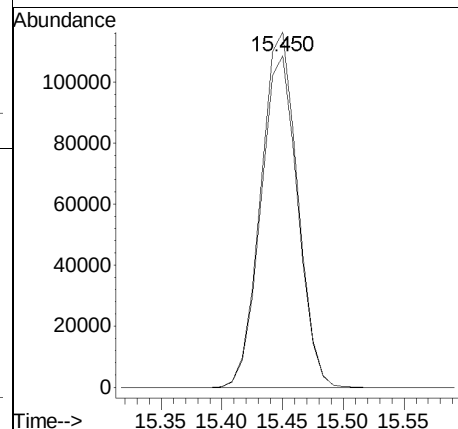
Tgt Ion	Ratio	Resp	Lower	Upper
129	100	241243		
127	79.3		63.0	94.6
131	23.4		18.8	28.2

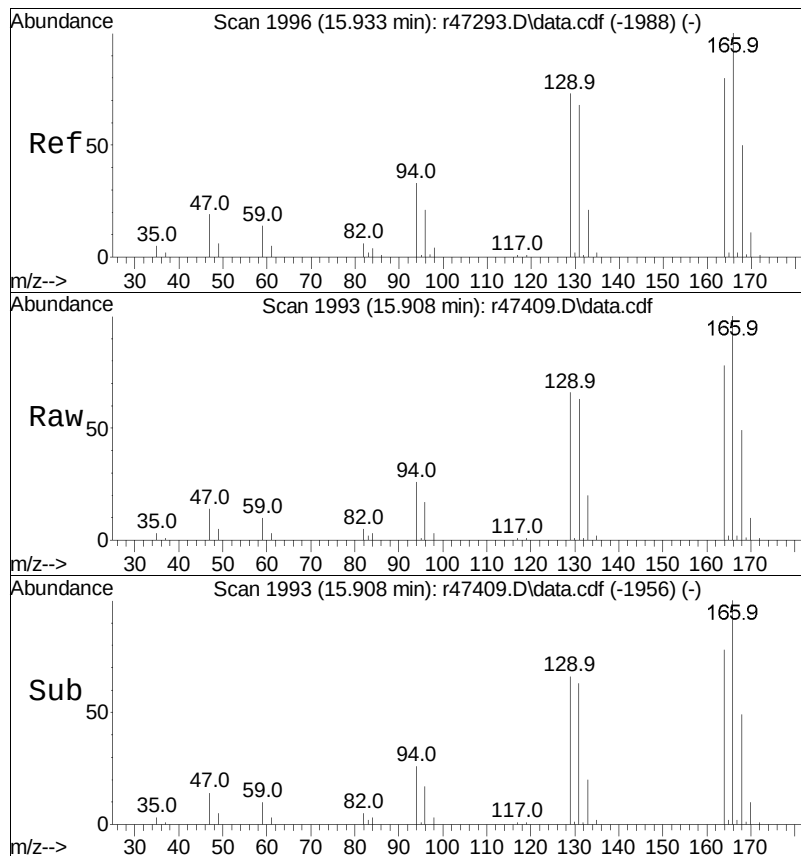




#75
 1,2-dibromoethane
 Concen: 10.99 ppbV
 RT: 15.450 min Scan# 1938
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

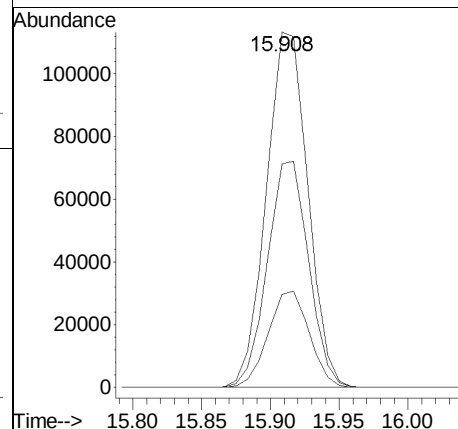
Tgt Ion	Ratio	Lower	Upper
107	100		
109	93.3	74.3	111.5

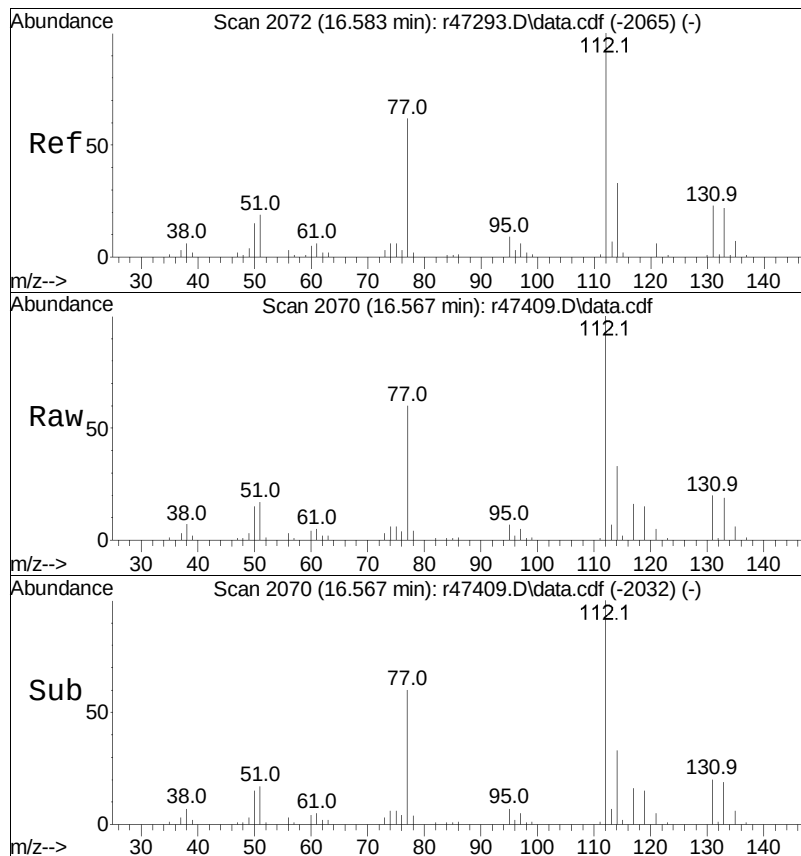




#78
 tetrachloroethene
 Concen: 11.71 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

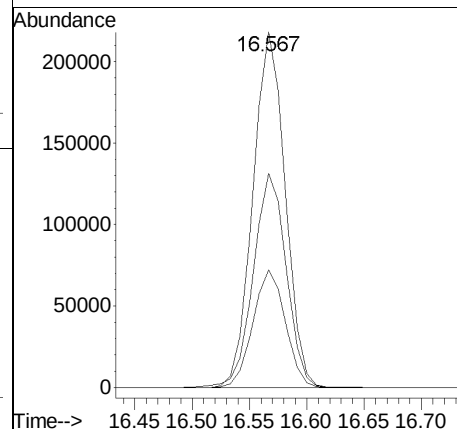
Tgt Ion	Ratio	Resp	Lower	Upper
166	100	237816		
131	62.9		54.5	81.7
94	26.2		26.3	39.5#

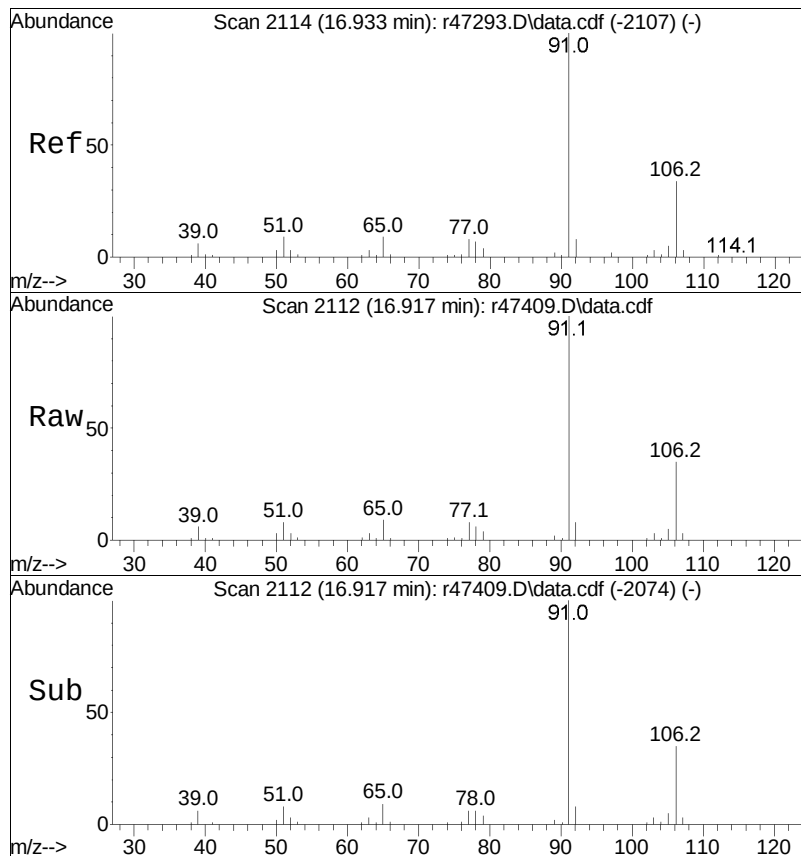




#80
chlorobenzene
Concen: 11.12 ppbV
RT: 16.567 min Scan# 2070
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

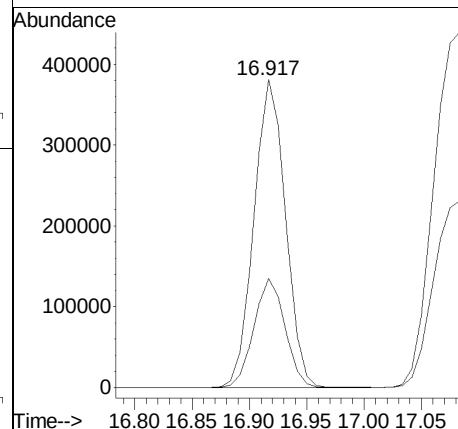
Tgt Ion	Ratio	Lower	Upper
112	100		
114	33.1	26.5	39.7
77	60.2	49.6	74.4

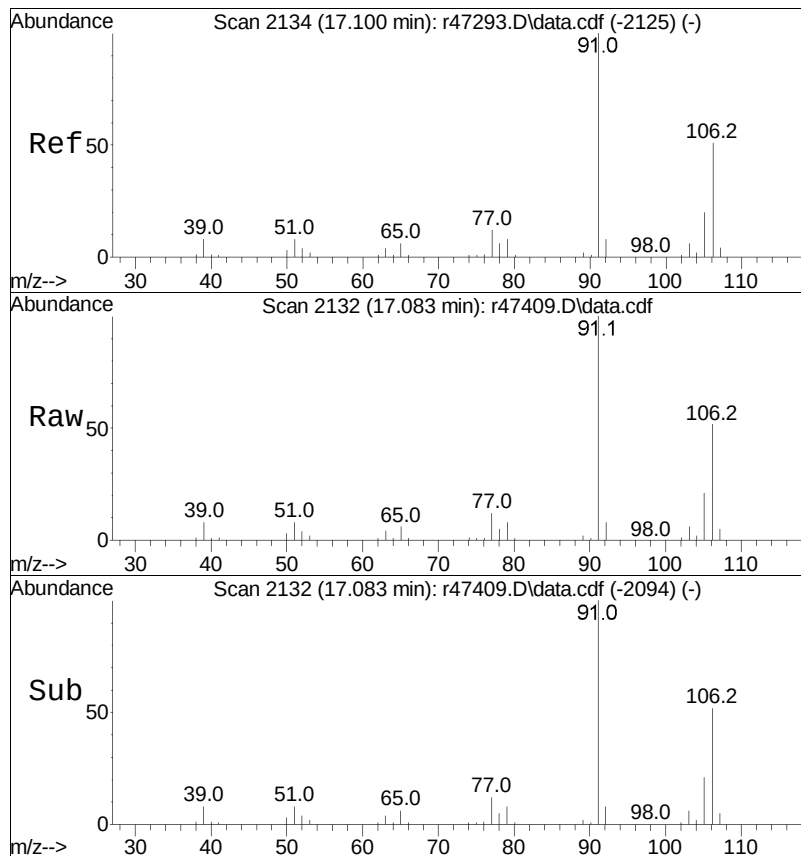




#81
ethylbenzene
Concen: 11.50 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

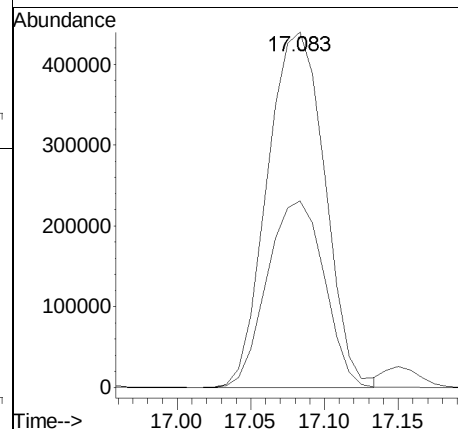
Tgt	Ion	Resp	Lower	Upper
91	100	726097		
106	35.3	27.6	41.4	

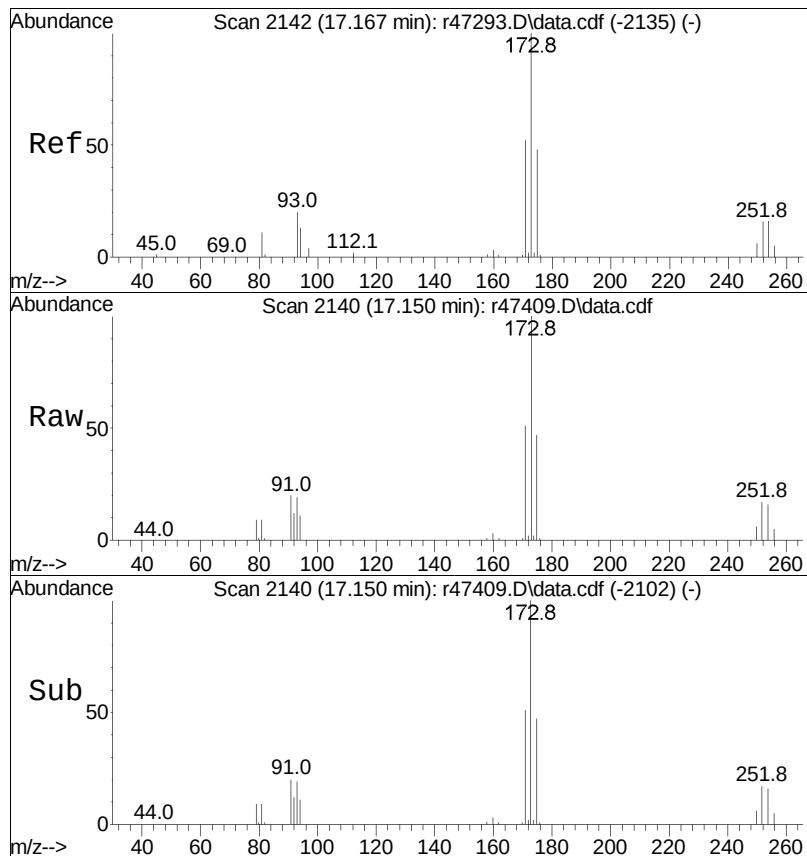




#83
 m+p-xylene
 Concen: 22.68 ppbV
 RT: 17.083 min Scan# 2132
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

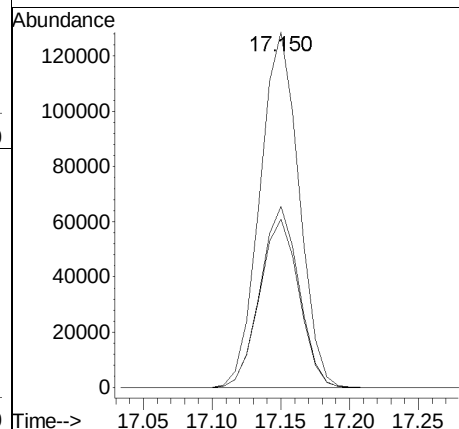
Tgt	Ion	Resp	Lower	Upper
91	100	1194271		
106	52.5	41.2	61.8	

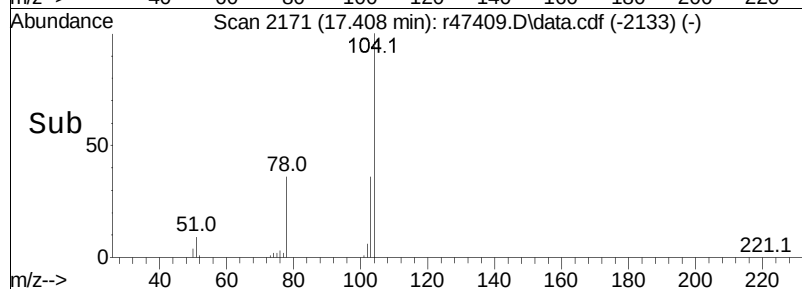
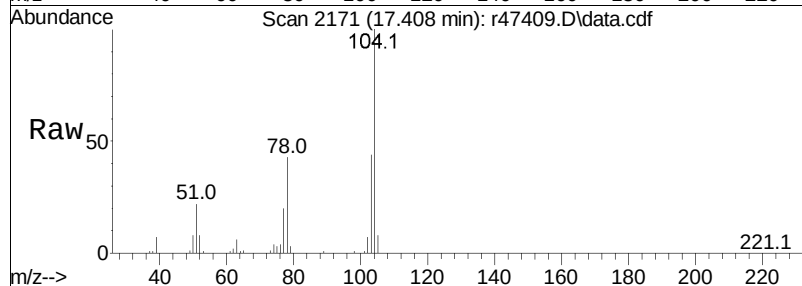
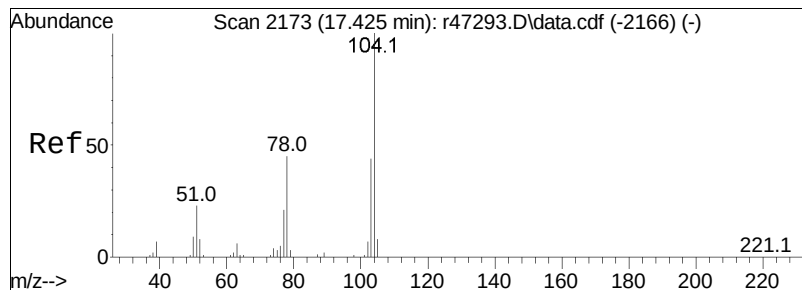




#84
bromoform
Concen: 12.51 ppbV
RT: 17.150 min Scan# 2140
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

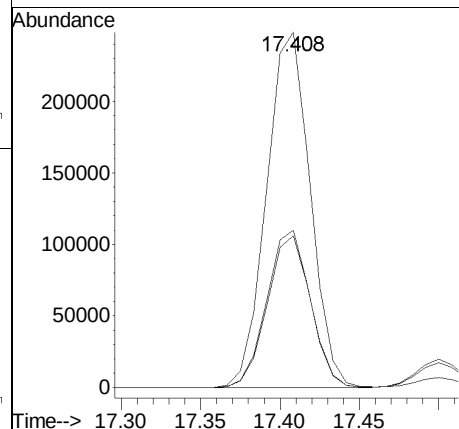
Tgt Ion	Ratio	Resp	Lower	Upper
173	100	253720		
175	47.4		38.7	58.1
171	51.0		41.5	62.3

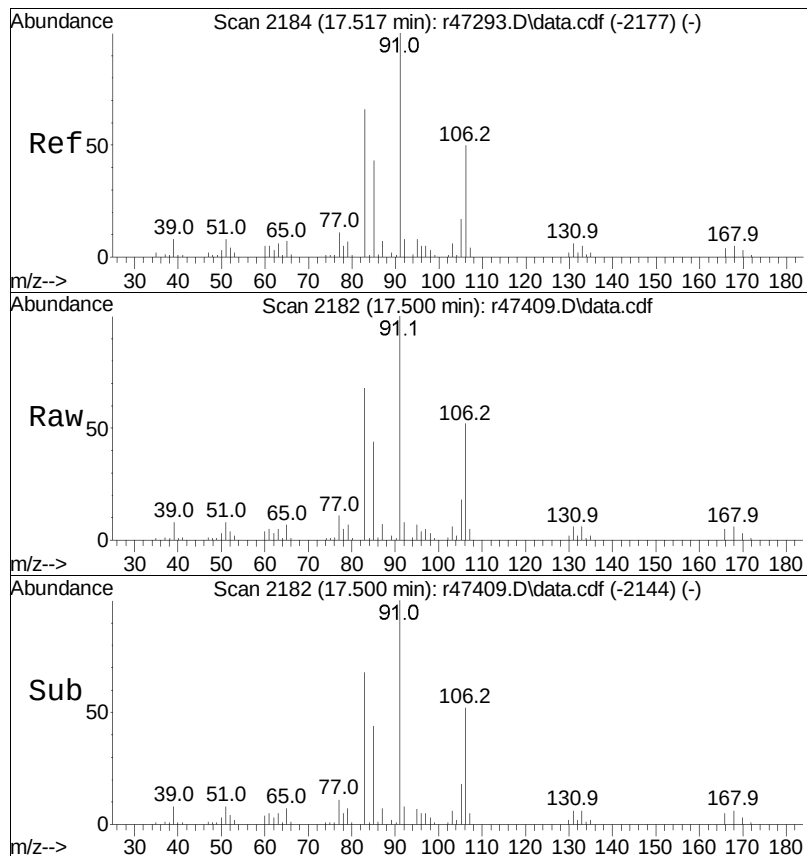




#85
styrene
Concen: 11.65 ppbV
RT: 17.408 min Scan# 2171
Delta R.T. -0.017 min
Lab File: r47409.D
Acq: 21 Jan 2020 12:33 PM

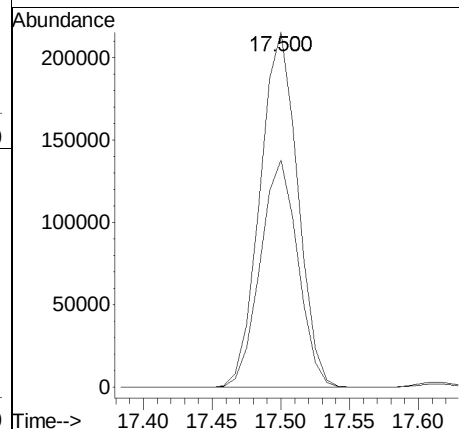
Tgt Ion	Ratio	Lower	Upper
104	100		
103	44.2	35.0	52.4
78	42.7	36.2	54.4

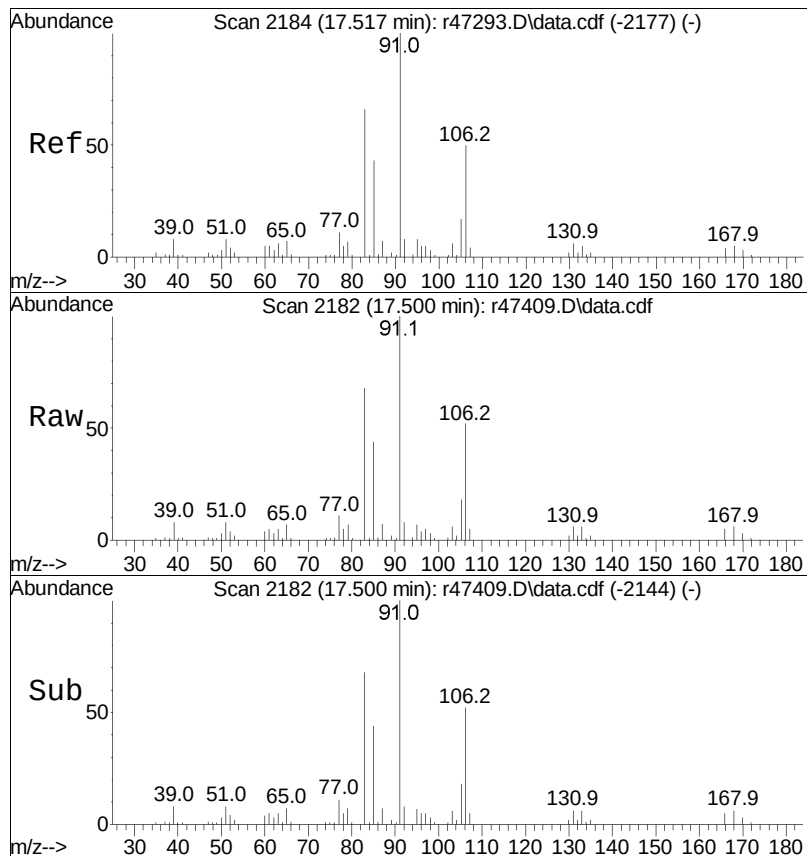




#86
 1,1,2,2-tetrachloroethane
 Concen: 11.42 ppbV
 RT: 17.500 min Scan# 2182
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

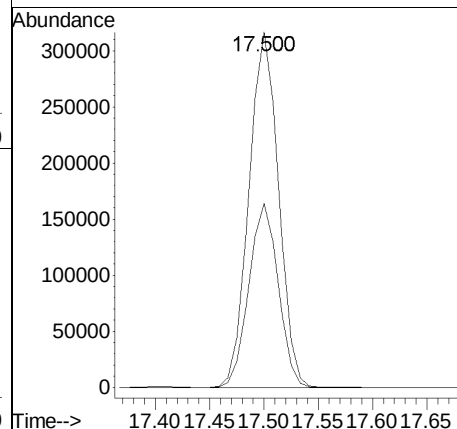
Tgt Ion:	83	Resp:	411506
Ion Ratio	Lower	Upper	
83	100		
85	64.0	51.7	77.5

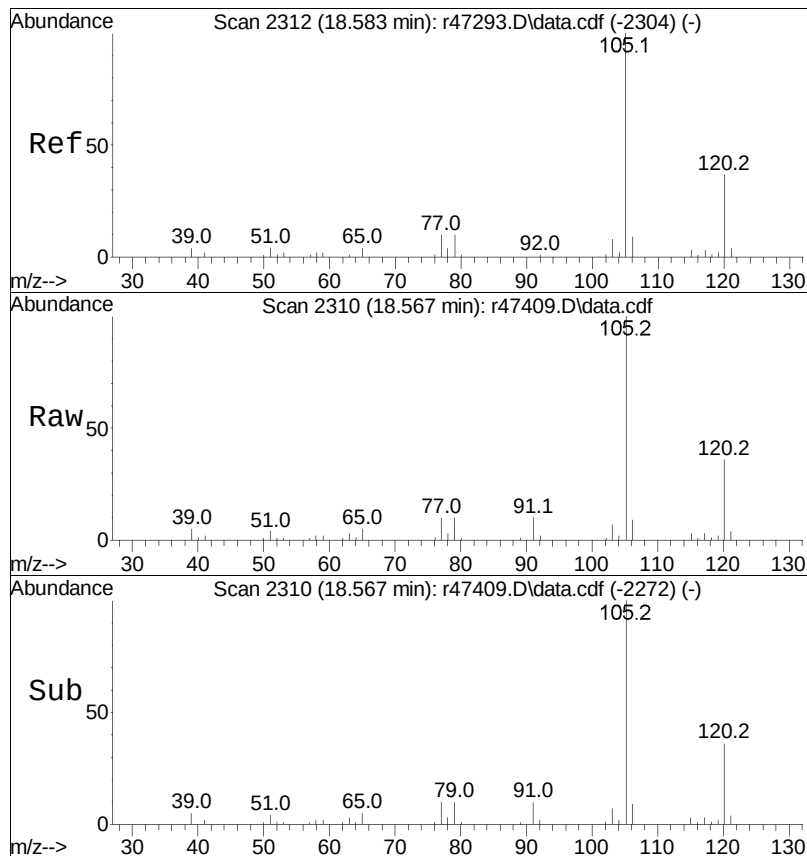




#87
 o-xylene
 Concen: 11.62 ppbV
 RT: 17.500 min Scan# 2182
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

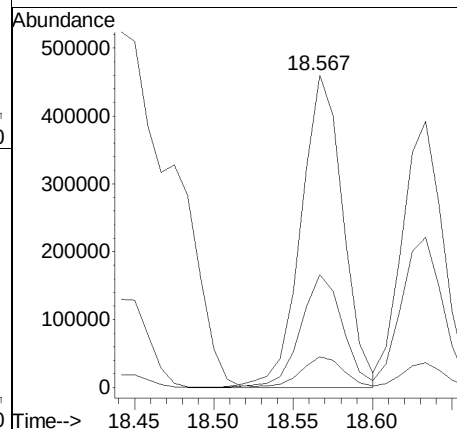
Tgt Ion	Ratio	Lower	Upper
91	100		
106	51.8	40.1	60.1

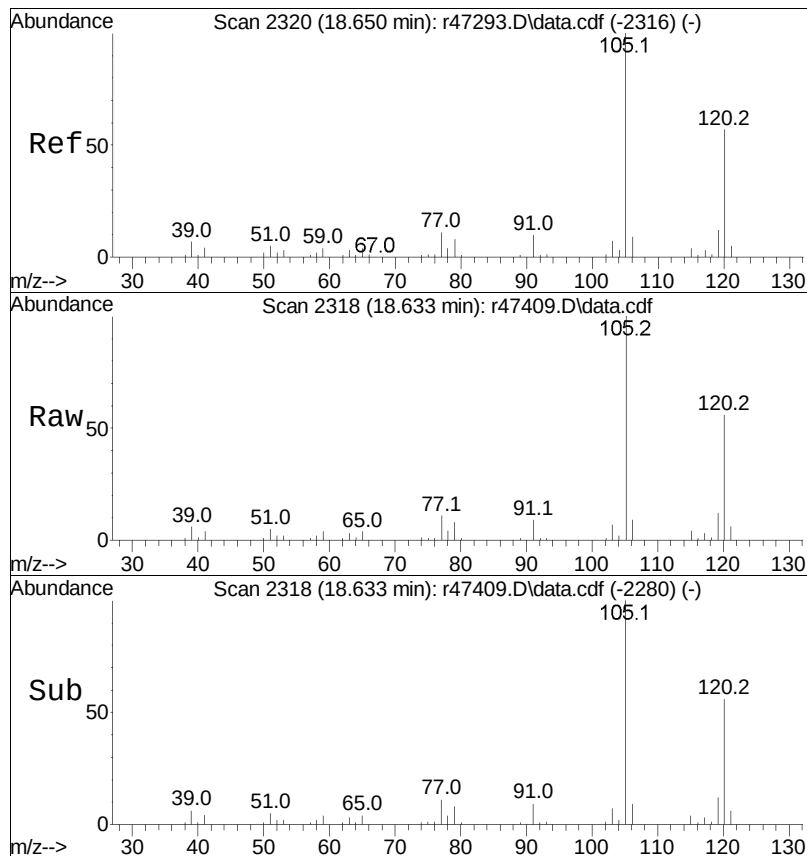




#96
 4-ethyl toluene
 Concen: 11.43 ppbV
 RT: 18.567 min Scan# 2310
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

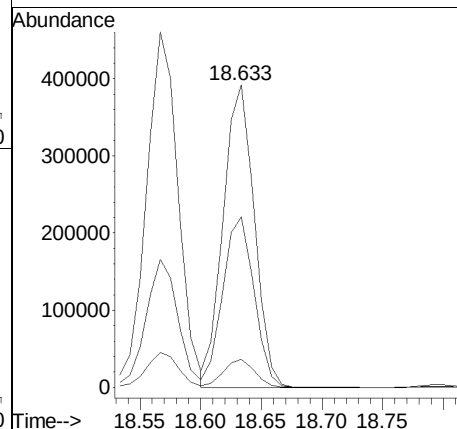
Tgt Ion:	105	Resp:	848015
Ion Ratio	Lower	Upper	
105	100		
120	36.1	29.4	44.2
91	9.8	8.2	12.4

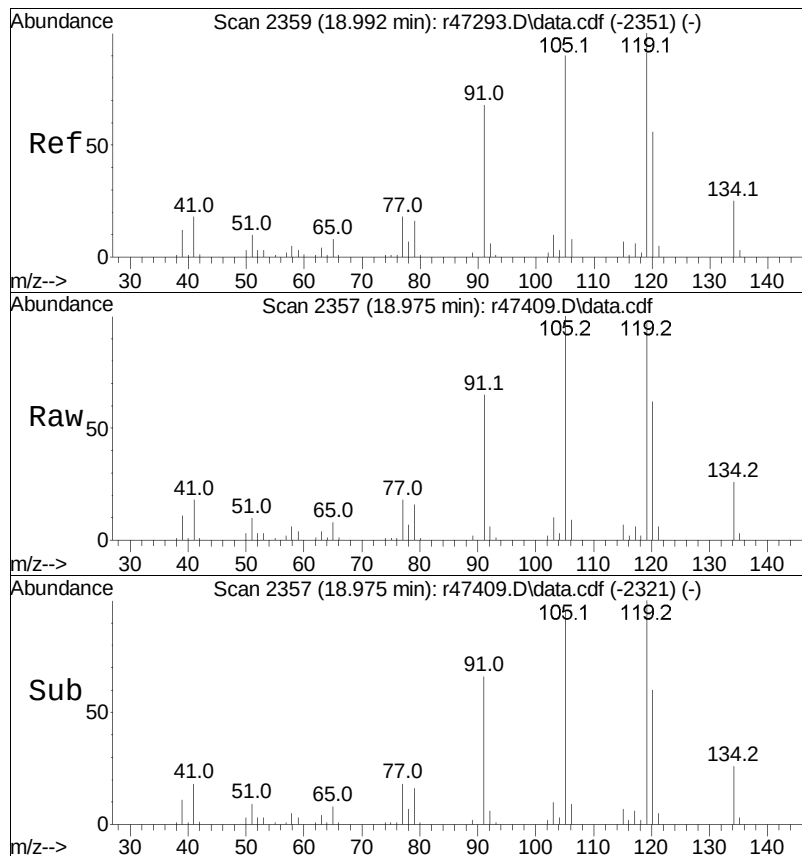




#97
 1,3,5-trimethylbenzene
 Concen: 11.57 ppbV
 RT: 18.633 min Scan# 2318
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

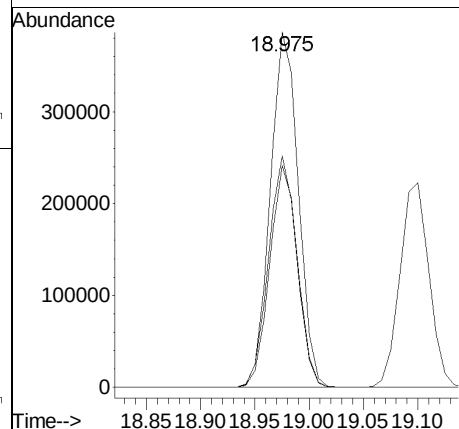
Tgt Ion:	105	Resp:	699937
Ion Ratio	Lower	Upper	
105	100		
120	56.4	45.2	67.8
91	9.3	7.8	11.6

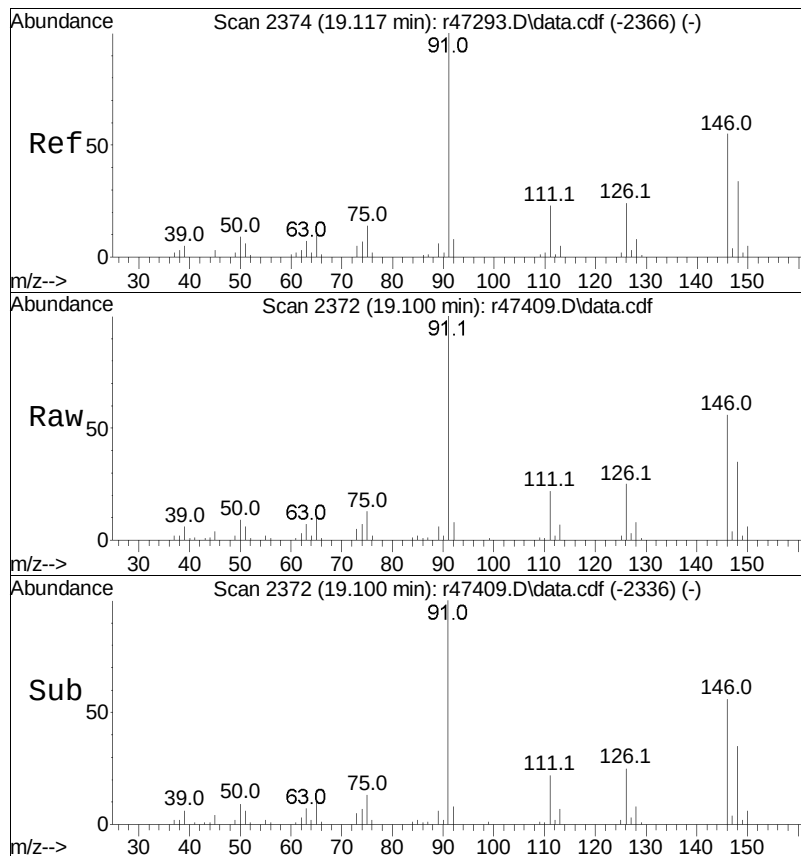




#99
 1,2,4-trimethylbenzene
 Concen: 12.23 ppbV
 RT: 18.975 min Scan# 2357
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

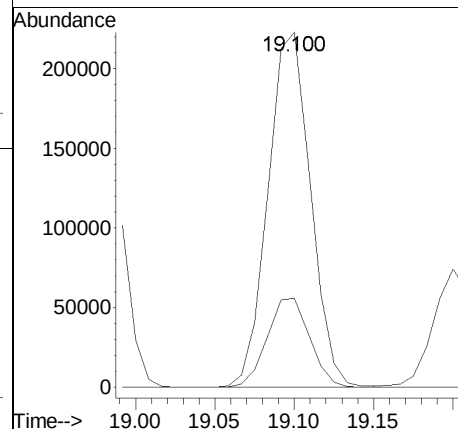
Tgt	Ion:105	Resp:	694618
Ion	Ratio	Lower	Upper
105	100		
120	62.4	50.2	75.4
91	65.2	61.0	91.6

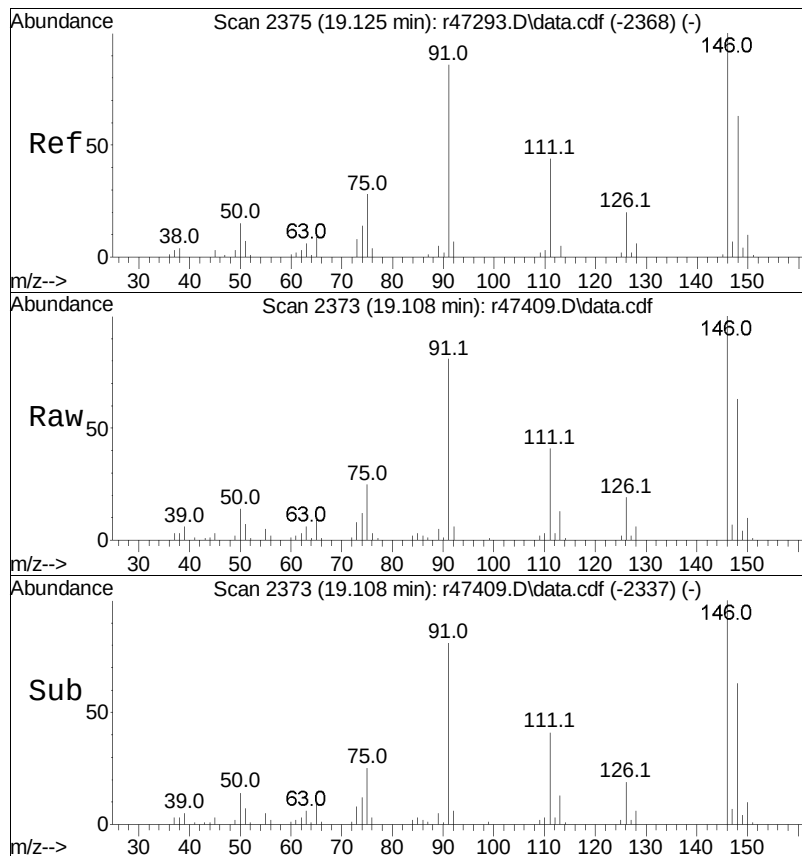




#101
 Benzyl Chloride
 Concen: 10.04 ppbV
 RT: 19.100 min Scan# 2372
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

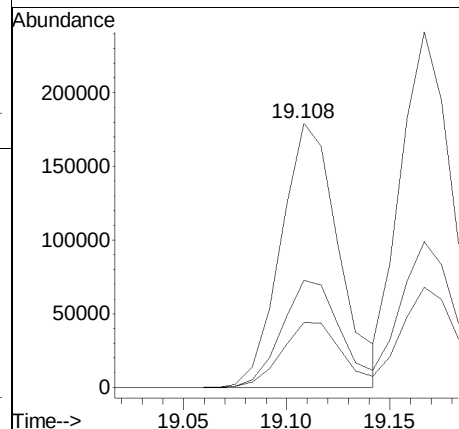
Tgt Ion	91	Resp	416103
Ion Ratio	Lower	Upper	
91	100		
126	25.1	19.4	29.0

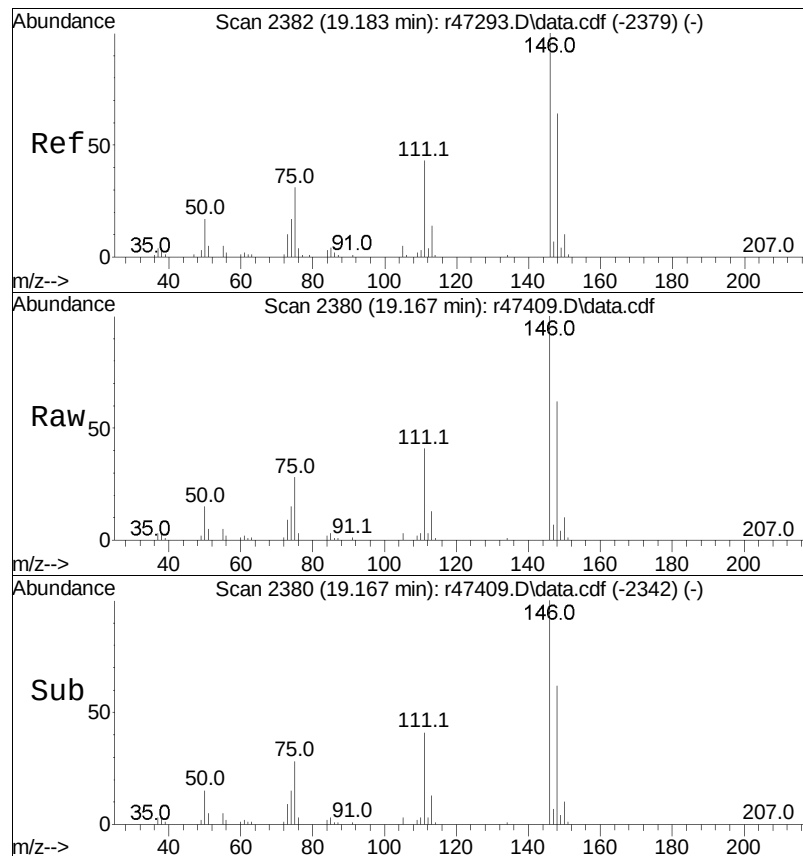




#102
 1,3-dichlorobenzene
 Concen: 10.52 ppbV
 RT: 19.108 min Scan# 2373
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

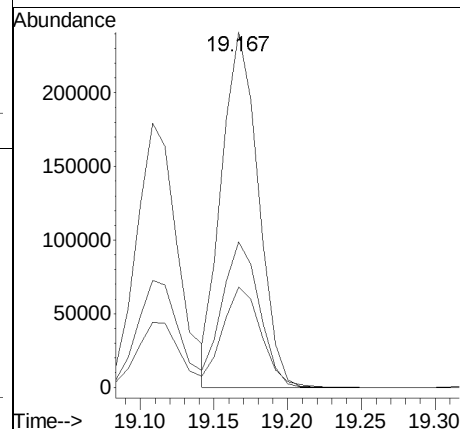
Tgt Ion	Ratio	Lower	Upper
146	100		
111	40.5	35.1	52.7
75	24.6	22.1	33.1

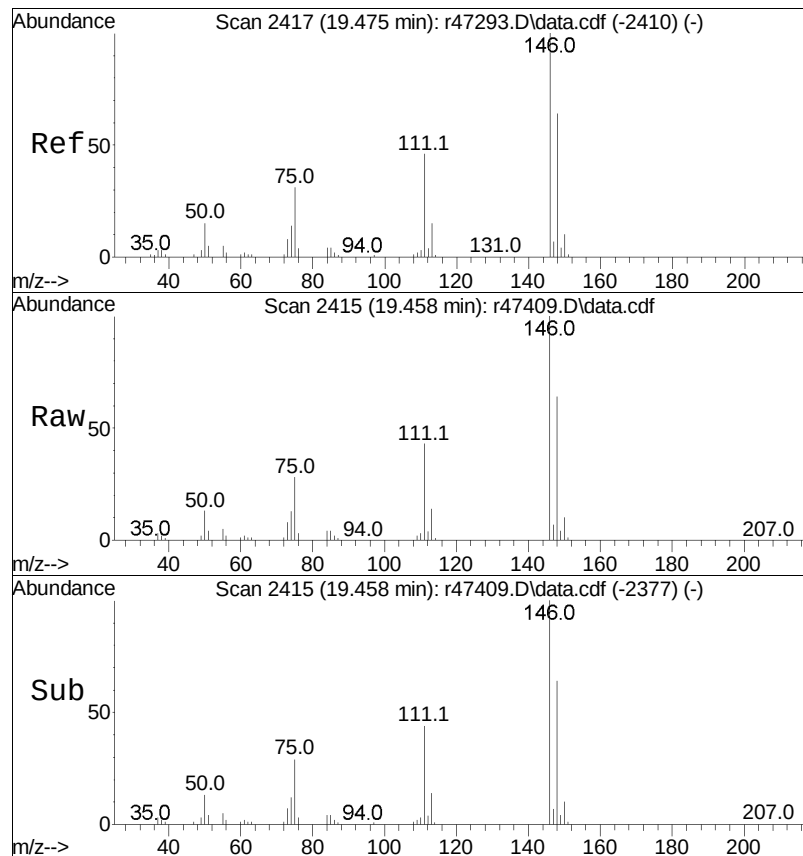




#103
 1,4-dichlorobenzene
 Concen: 12.18 ppbV
 RT: 19.167 min Scan# 2380
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

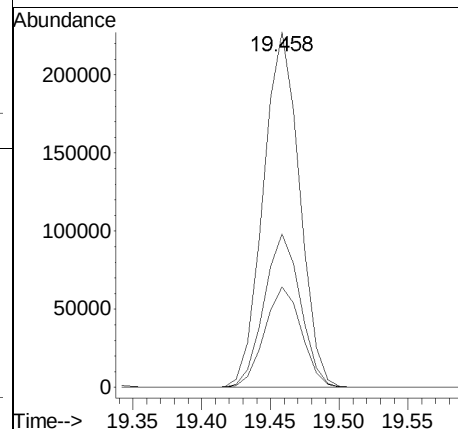
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	417837		
111	41.0		34.4	51.6
75	28.2		24.6	36.8

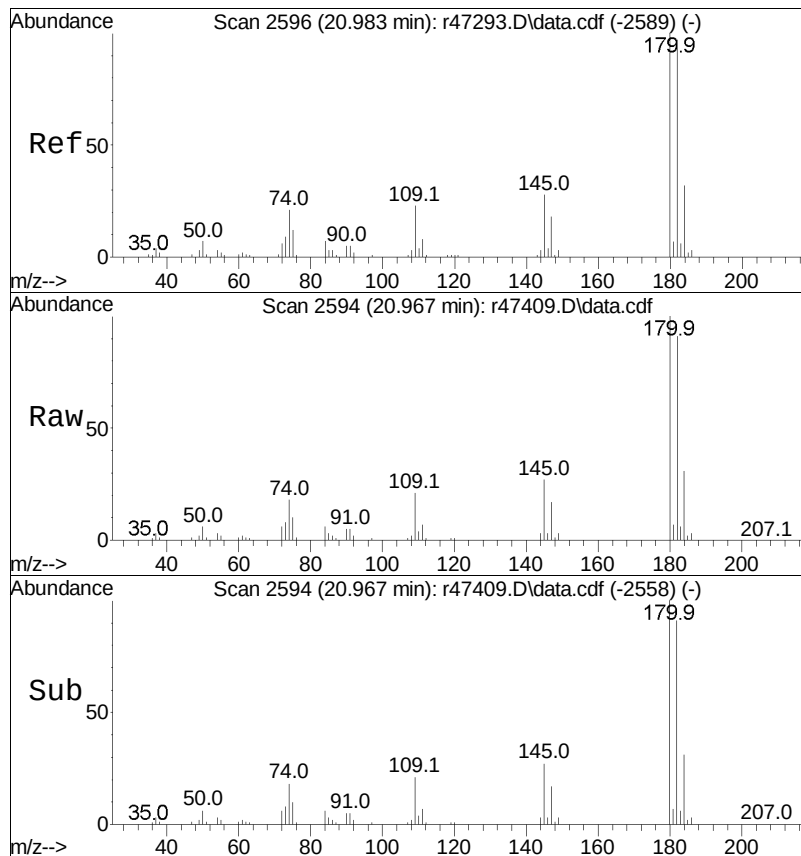




#107
 1,2-dichlorobenzene
 Concen: 12.32 ppbV
 RT: 19.458 min Scan# 2415
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

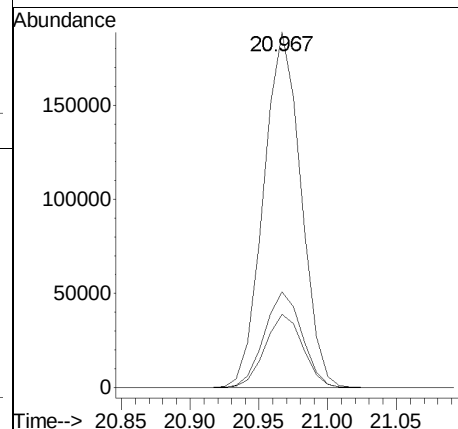
Tgt Ion	Ratio	Resp	Lower	Upper
146	100	417799		
111	43.2		36.6	54.8
75	28.3		25.0	37.6

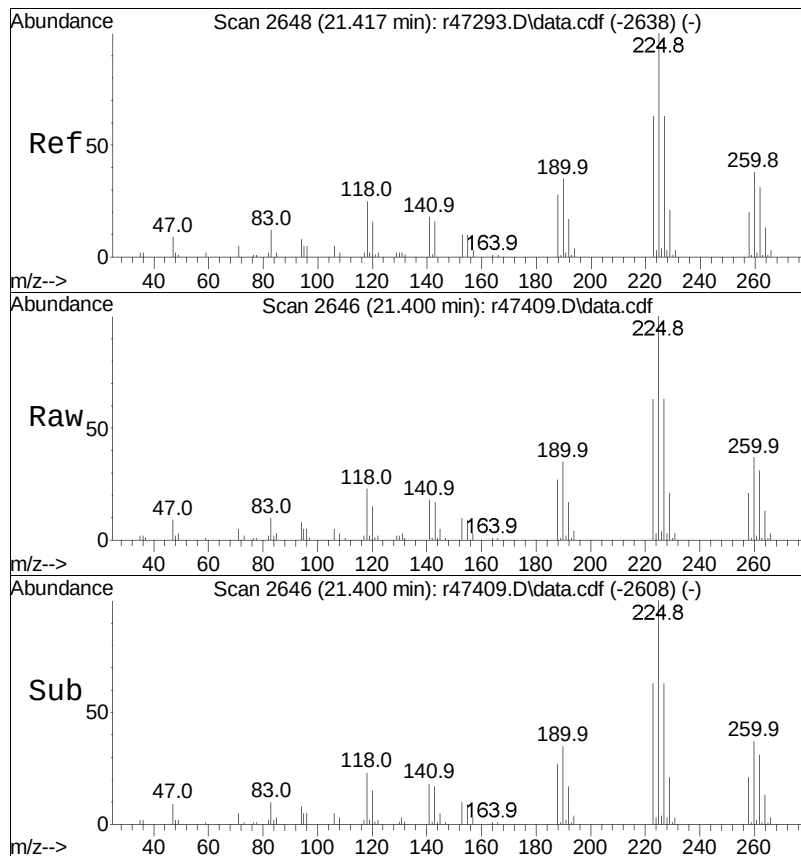




#115
 1,2,4-trichlorobenzene
 Concen: 15.37 ppbV
 RT: 20.967 min Scan# 2594
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

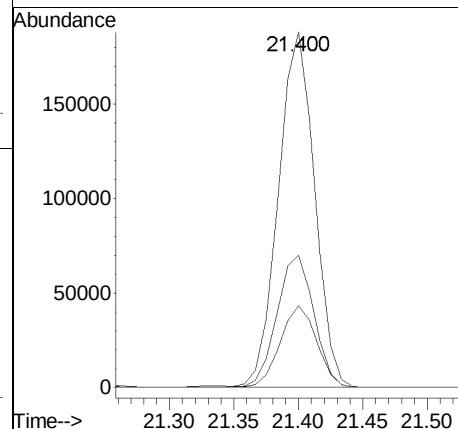
Tgt Ion	Ratio	Lower	Upper
180	100		
145	26.9	22.7	34.1
109	20.6	18.6	27.8





#119
 hexachlorobutadiene
 Concen: 13.41 ppbV
 RT: 21.400 min Scan# 2646
 Delta R.T. -0.017 min
 Lab File: r47409.D
 Acq: 21 Jan 2020 12:33 PM

Tgt	Ion:225	Resp:	367242
Ion	Ratio	Lower	Upper
225	100		
260	37.2	30.7	46.1
118	23.0	20.6	30.8



Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47420.D
 Acq On : 21 Jan 2020 10:09 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-5,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:47:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.533	49	206469	10.000	ppbV	-0.03
Standard Area = 206855			Recovery =		99.81%	
43) 1,4-difluorobenzene	11.800	114	550760	10.000	ppbV	-0.03
Standard Area = 664478			Recovery =		82.89%	
67) chlorobenzene-D5	16.525	54	105540	10.000	ppbV	-0.02
Standard Area = 106395			Recovery =		99.20%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.000	85	7267	0.450	ppbV	98
6) chloromethane	4.174	50	4516	0.491	ppbV	100
7) Freon-114	0.000		0	N.D.	d	
10) 1,3-butadiene	4.594	54	495	0.053	ppbV #	80
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.296	31	1944846	277.994	ppbV	95
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.853	43	363693M6	19.900	ppbV	
21) trichlorofluoromethane	6.063	101	6374	0.404	ppbV	95
22) isopropyl alcohol	6.180	45	578214	25.180	ppbV	100
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	6.994	49	3954	0.306	ppbV	97
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	0.000		0	N.D.	d	
31) Freon 113	7.324	101	1126	0.060	ppbV	94
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	8.842	43	13272	0.442	ppbV	99
38) Ethyl Acetate	9.650	61	8187	1.781	ppbV	87
39) chloroform	9.700	83	1378	0.075	ppbV #	96
40) Tetrahydrofuran	10.167	42	1943	0.092	ppbV	99
42) 1,2-dichloroethane	10.550	62	1302	0.094	ppbV #	87
44) hexane	9.608	57	6696	0.323	ppbV #	60
50) benzene	11.360	78	17947	0.475	ppbV	99
53) cyclohexane	11.680	56	2172	0.091	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
 Data File : r47420.D
 Acq On : 21 Jan 2020 10:09 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332350-5,3,250,250
 Misc : WG1332350,ICAL16438
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 08:47:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:52:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121T\r47409.D
 Sub List : T015-NY-7-SIM - .

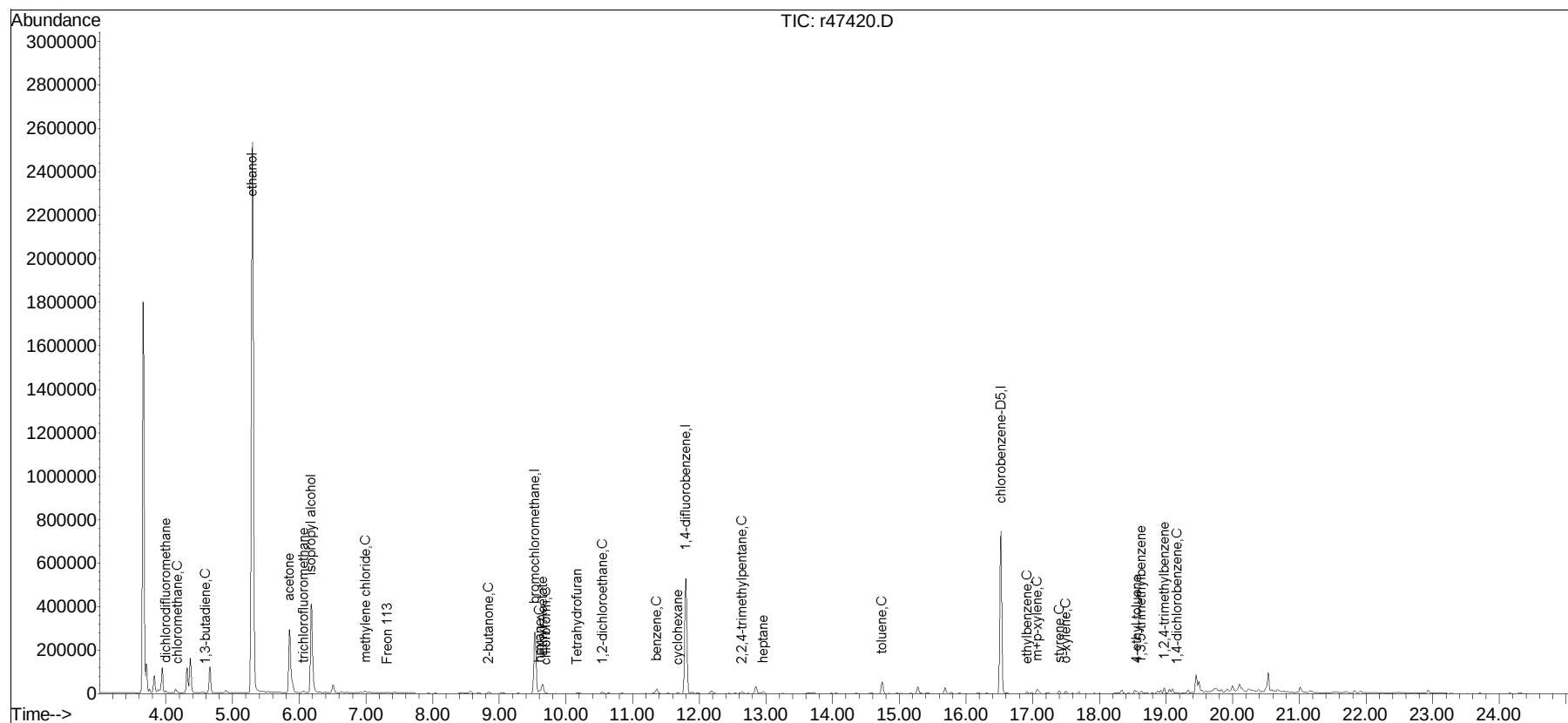
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	12.640	57	8867	0.119	ppbV	92
62) heptane	12.960	43	5731	0.176	ppbV	95
63) cis-1,3-dichloropropene	0.000		0	N.D.		
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	14.742	91	43683	0.851	ppbV	97
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	16.575		0	N.D.		
81) ethylbenzene	16.917	91	6912	0.110	ppbV	98
83) m+p-xylene	17.067	91	17663	0.338	ppbV	97
84) bromoform	0.000		0	N.D.		
85) styrene	17.400	104	5087	0.126	ppbV	97
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87) o-xylene	17.500	91	7508	0.146	ppbV	100
96) 4-ethyl toluene	18.567	105	5140M3	0.070	ppbV	
97) 1,3,5-trimethylbenzene	18.625	105	3858	0.064	ppbV #	94
99) 1,2,4-trimethylbenzene	18.975	105	13404	0.238	ppbV #	50
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	146	1819	0.053	ppbV	95
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	0.000		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

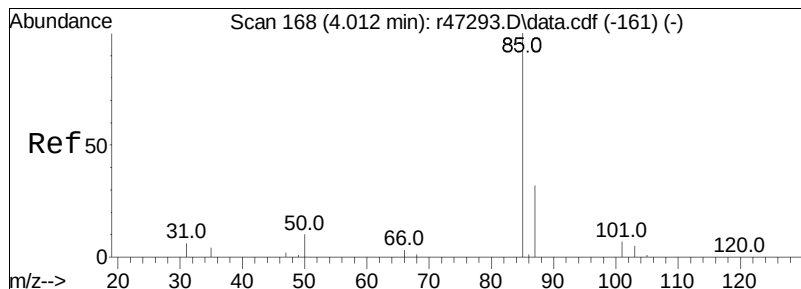
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airpiano4\2020\01\200121T\r47409.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121T\
Data File : r47420.D
Acq On : 21 Jan 2020 10:09 PM
Operator : AIRPIANO4:EW
Sample : WG1332350-5, 3, 250, 250
Misc : WG1332350, ICAL16438
ALS Vial : 0 Sample Multiplier: 1

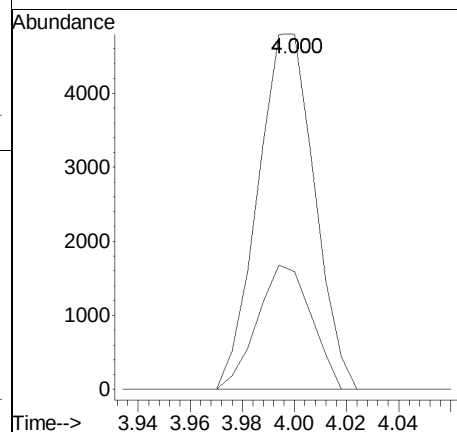
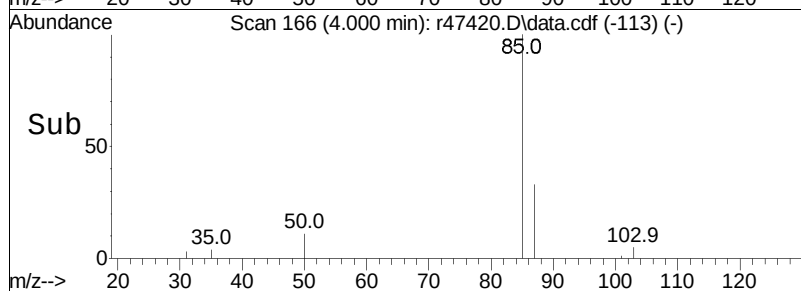
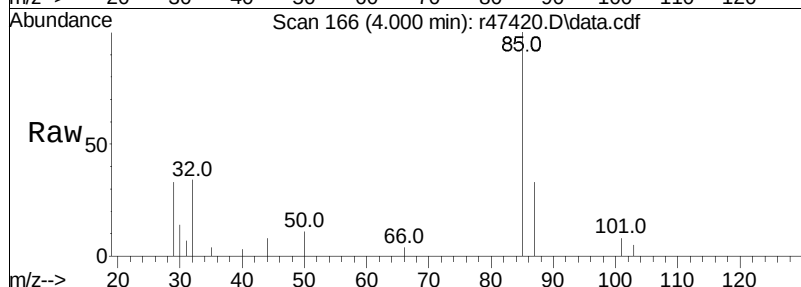
Quant Time: Jan 22 08:47:48 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121T\TFS4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:52:02 2020
Response via : Initial Calibration

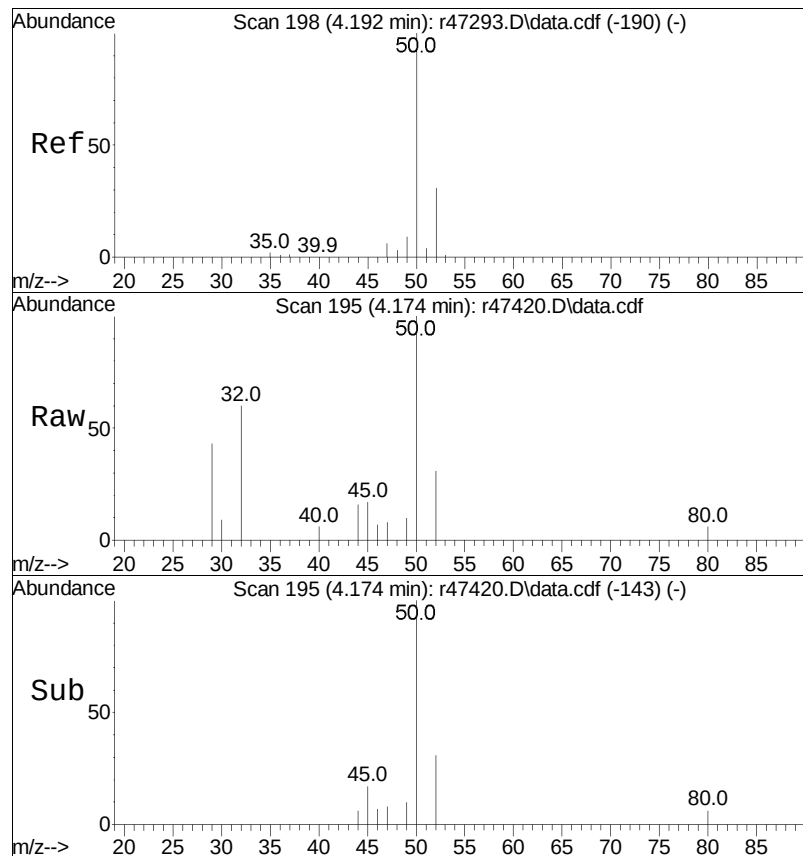




#5
dichlorodifluoromethane
Concen: 0.45 ppbV
RT: 4.000 min Scan# 166
Delta R.T. -0.012 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

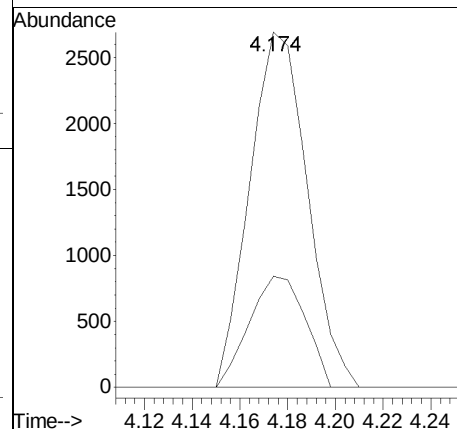
Tgt Ion: 85 Resp: 7267
Ion Ratio Lower Upper
85 100
87 33.1 25.8 38.6

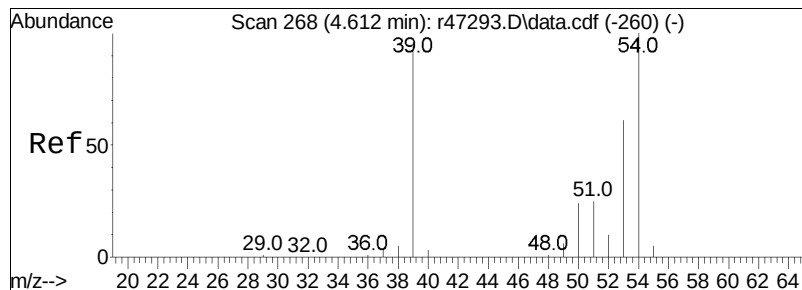




#6
 chloromethane
 Concen: 0.49 ppbV
 RT: 4.174 min Scan# 195
 Delta R.T. -0.018 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

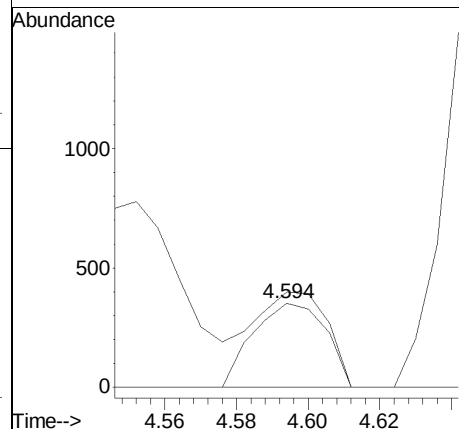
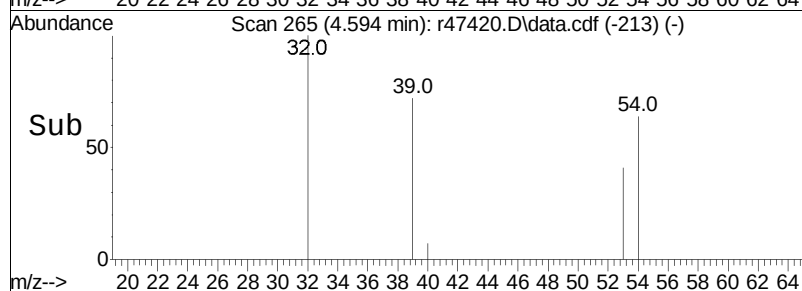
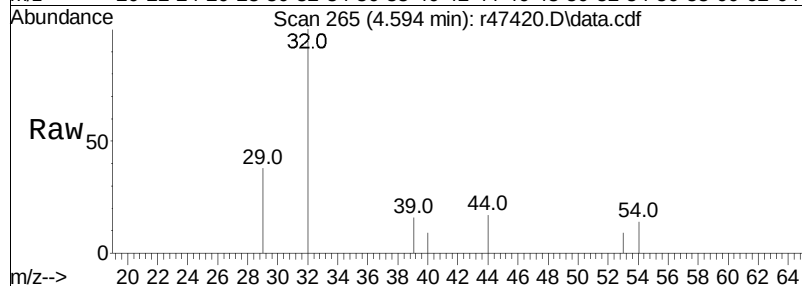
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	31.3	24.9	37.3	

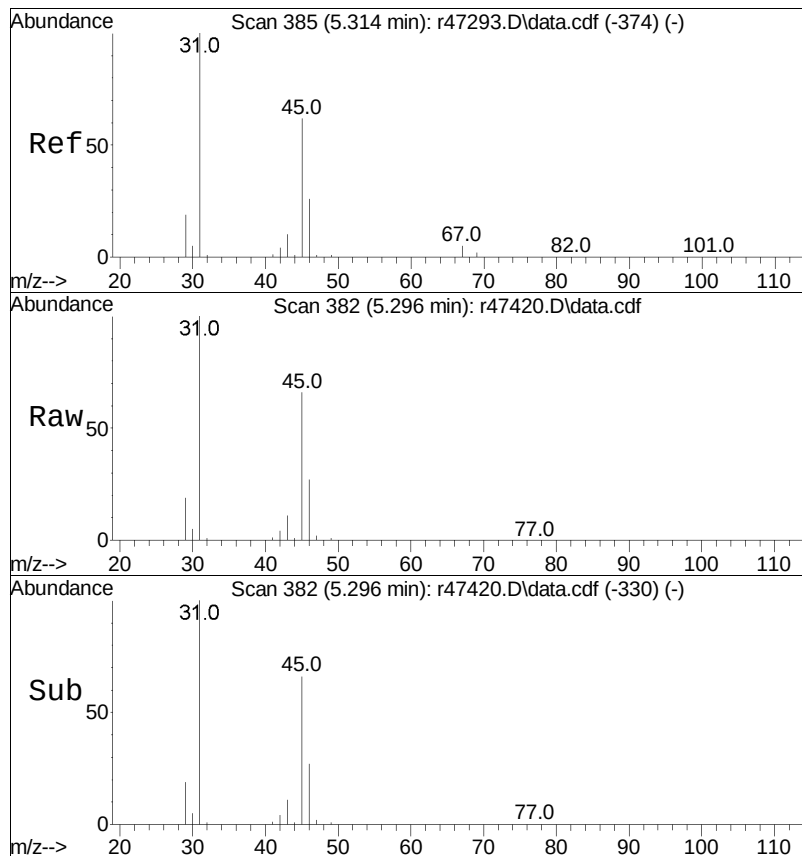




#10
 1,3-butadiene
 Concen: 0.05 ppbV
 RT: 4.594 min Scan# 265
 Delta R.T. -0.018 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

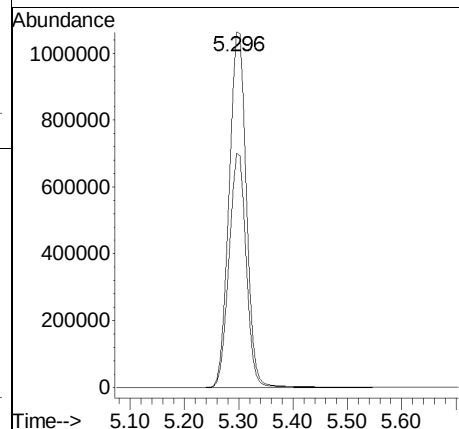
Tgt	Ion	Ratio	Lower	Upper
54	100			
39	113.4	75.5	113.3#	

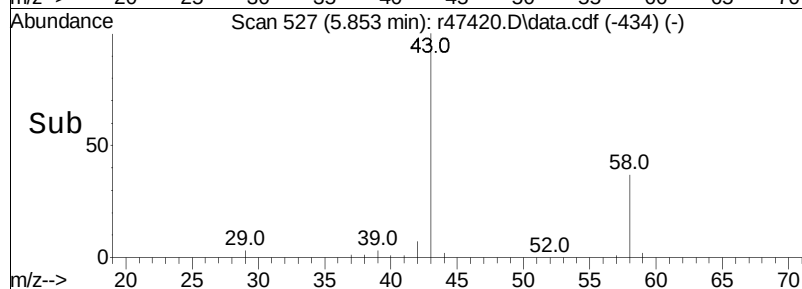
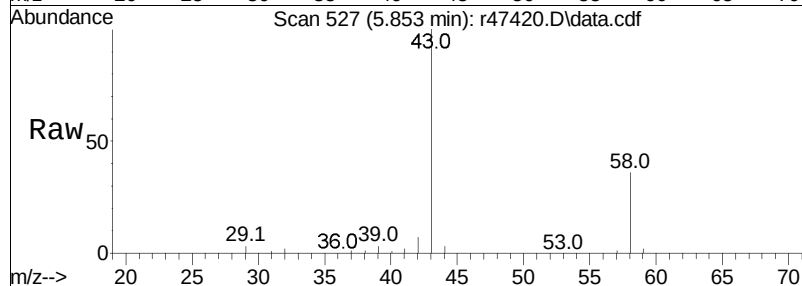
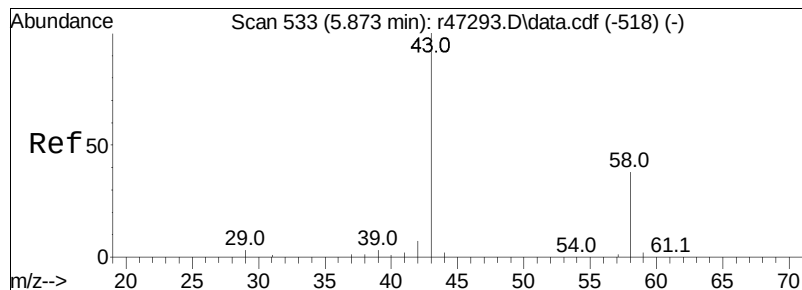




#15
 ethanol
 Concen: 277.99 ppbV
 RT: 5.296 min Scan# 382
 Delta R.T. -0.018 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

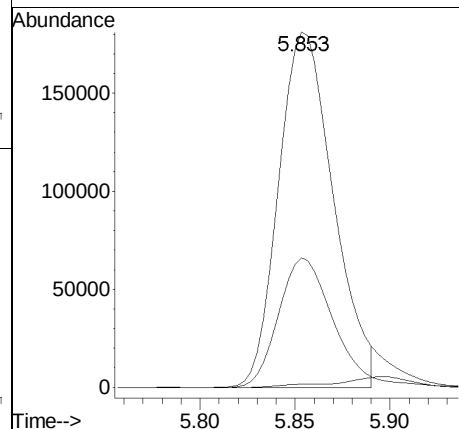
Tgt Ion:	31	Resp:	1944846
Ion Ratio	Lower	Upper	
31	100		
45	65.9	49.7	74.5

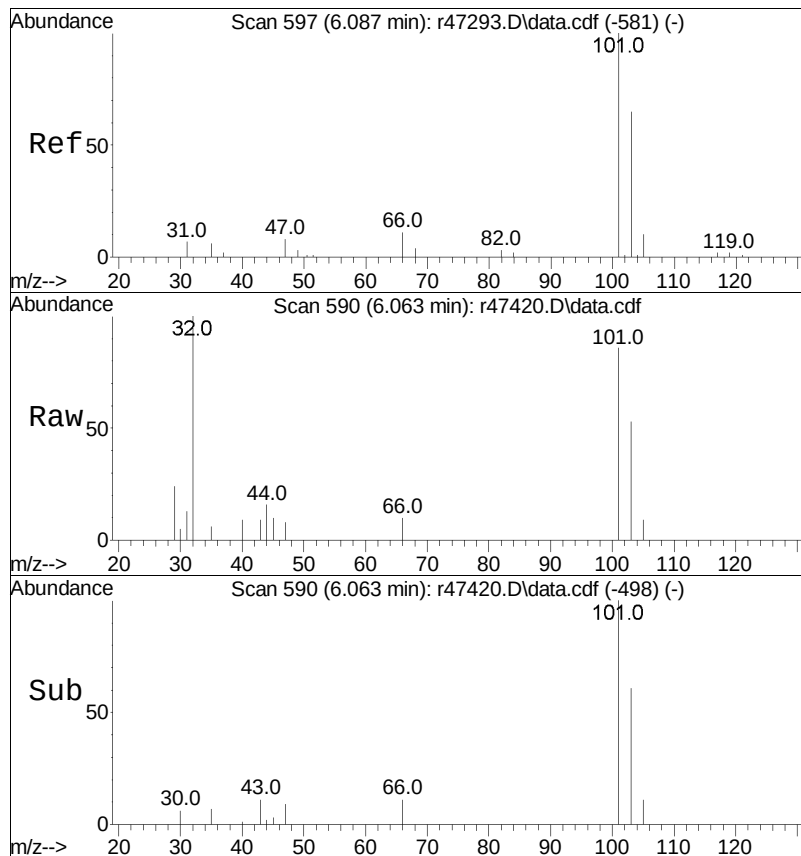




#19
acetone
Concen: 19.90 ppbV m
RT: 5.853 min Scan# 527
Delta R.T. -0.020 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

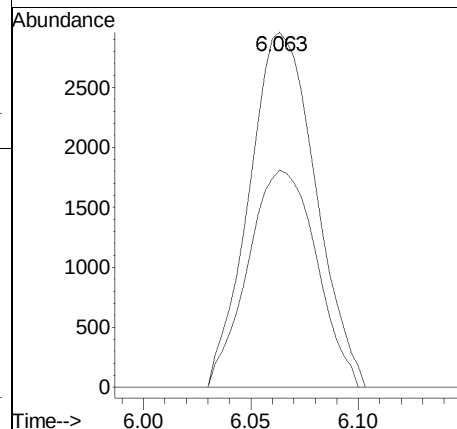
Tgt Ion:	43	Resp:	363693
Ion Ratio	100	Lower	Upper
43	100		
58	36.5	30.2	45.2
57	0.9	0.7	1.1

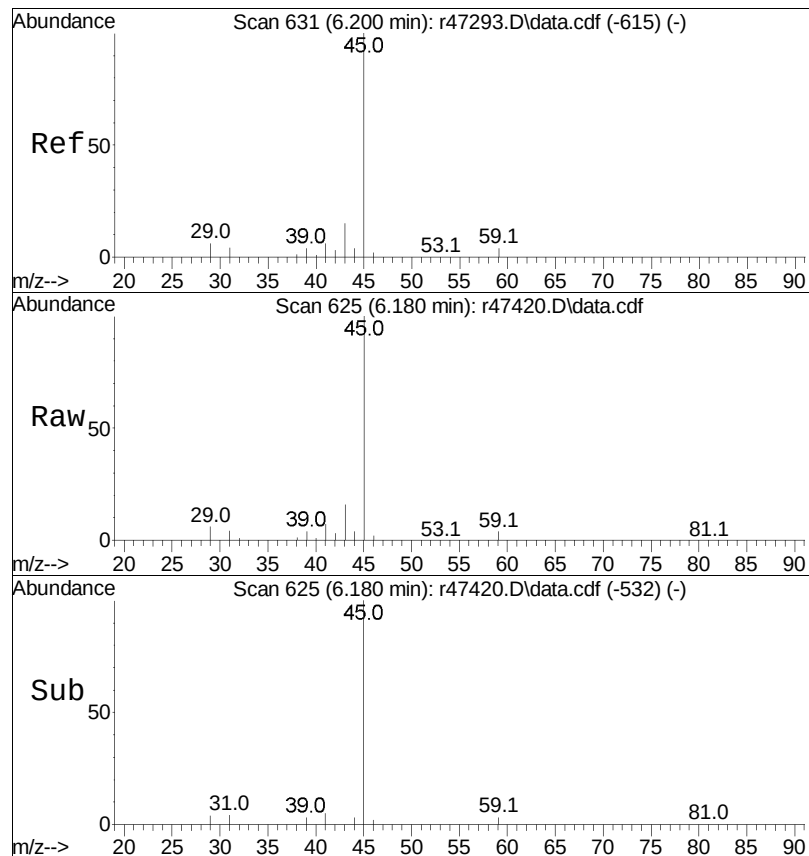




#21
trichlorofluoromethane
Concen: 0.40 ppbV
RT: 6.063 min Scan# 590
Delta R.T. -0.023 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

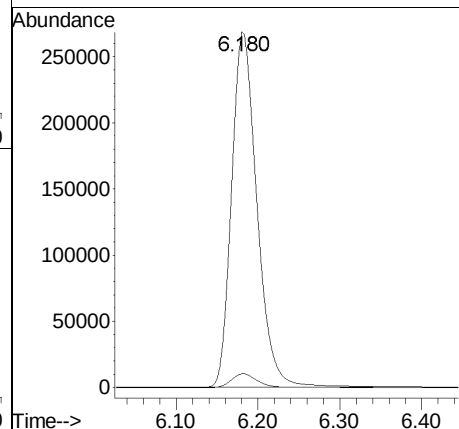
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	61.1	52.2	78.4	

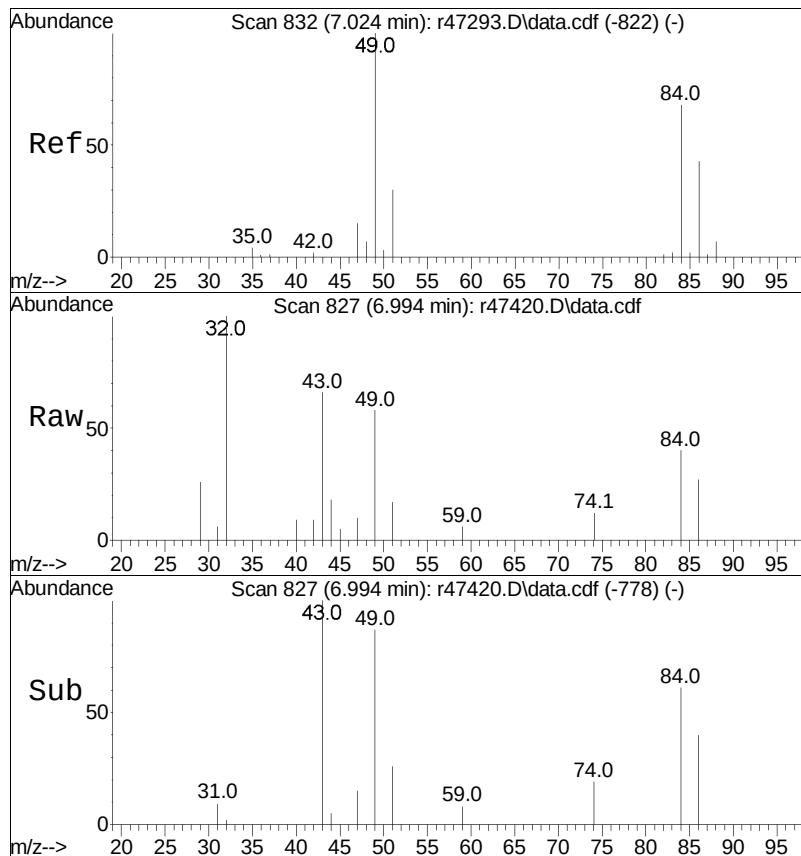




#22
 isopropyl alcohol
 Concen: 25.18 ppbV
 RT: 6.180 min Scan# 625
 Delta R.T. -0.020 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

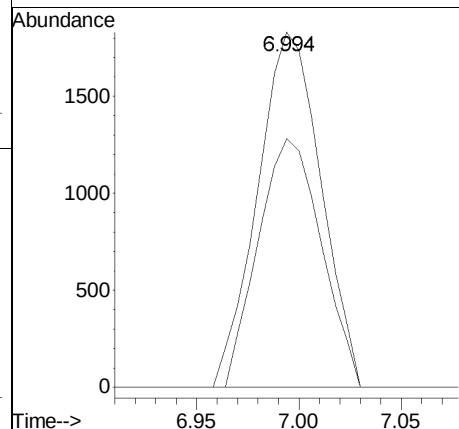
Tgt	Ion	Ratio	Lower	Upper
45	100			
59	3.8	3.0	4.6	

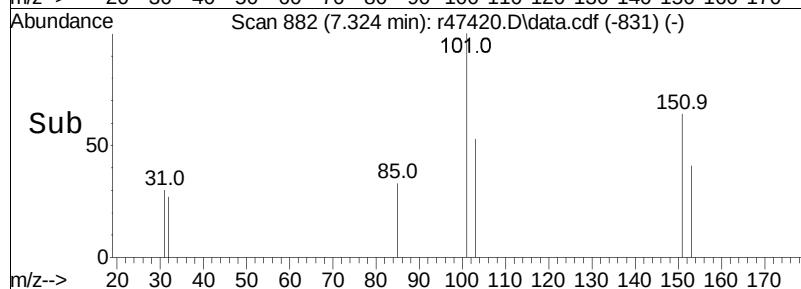
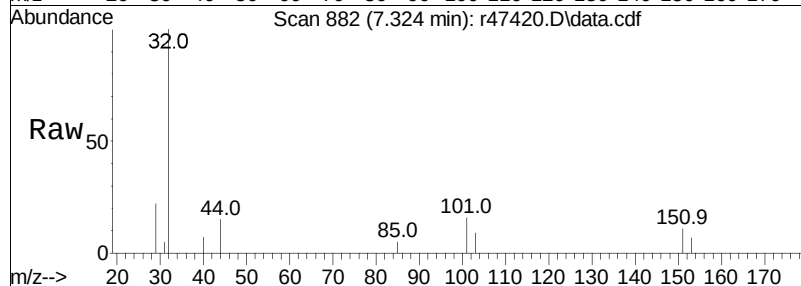
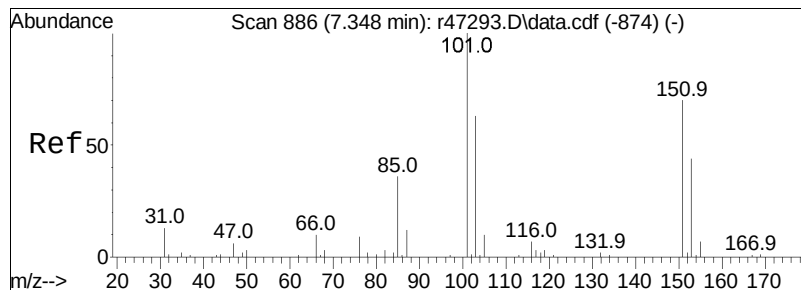




#28
 methylene chloride
 Concen: 0.31 ppbV
 RT: 6.994 min Scan# 827
 Delta R.T. -0.030 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

Tgt Ion:	49	84	Ratio	100	70.0	Resp:	3954	Lower	Upper
								54.1	81.1





#31

Freon 113

Concen: 0.06 ppbV

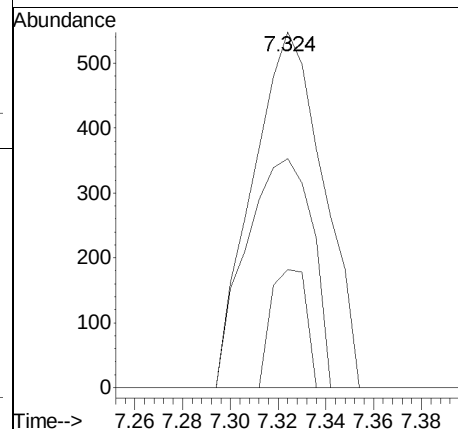
RT: 7.324 min Scan# 882

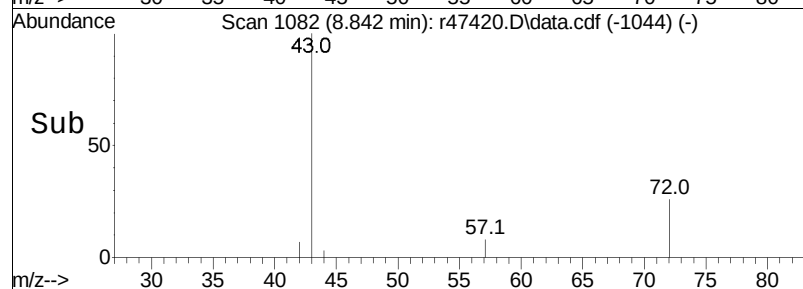
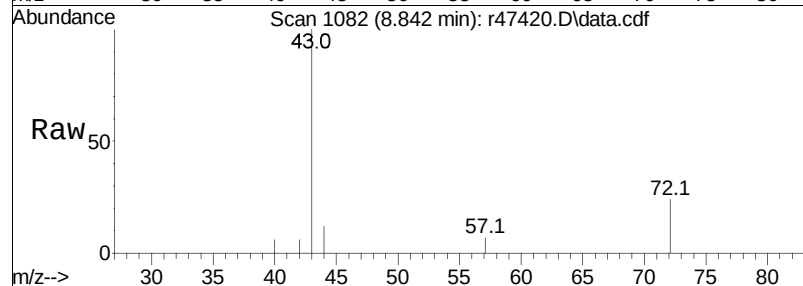
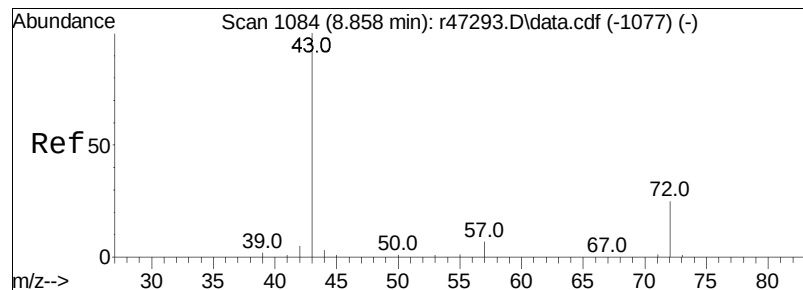
Delta R.T. -0.024 min

Lab File: r47420.D

Acq: 21 Jan 2020 10:09 PM

Tgt Ion:	101	Resp:	1126
Ion Ratio	Lower	Upper	
101	100		
85	33.2	28.8	43.2
151	64.4	56.3	84.5





#36

2-butanone

Concen: 0.44 ppbV

RT: 8.842 min Scan# 1082

Delta R.T. -0.017 min

Lab File: r47420.D

Acq: 21 Jan 2020 10:09 PM

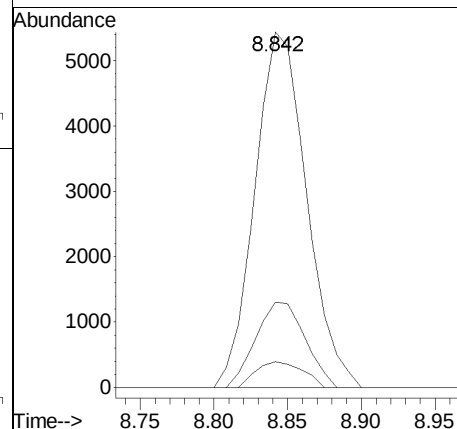
Tgt Ion: 43 Resp: 13272

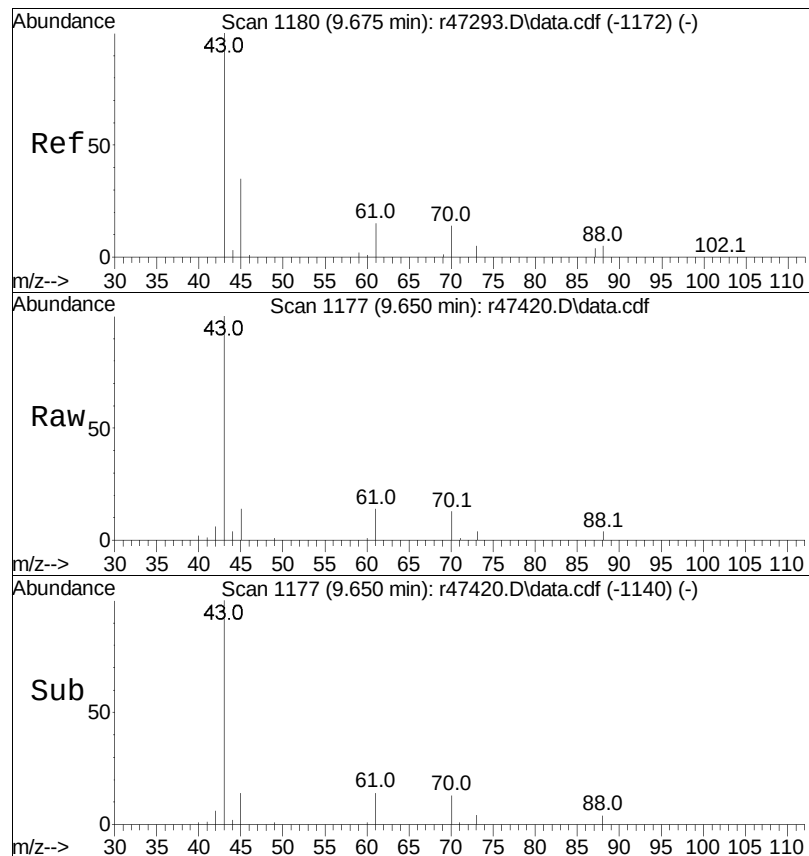
Ion Ratio Lower Upper

43 100

72 24.1 19.8 29.6

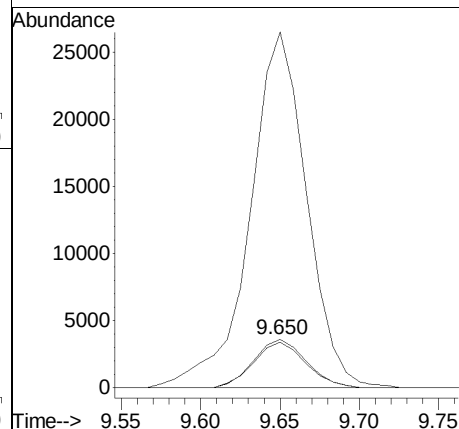
57 7.2 5.5 8.3

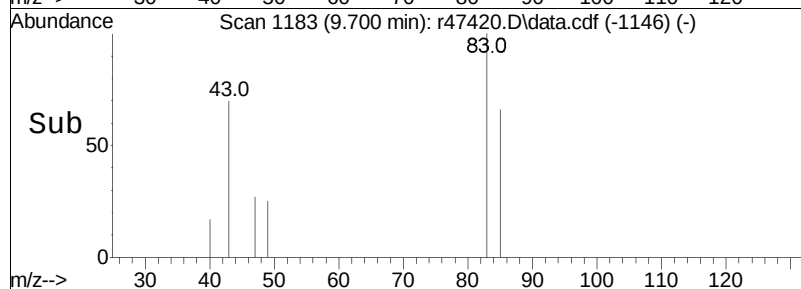
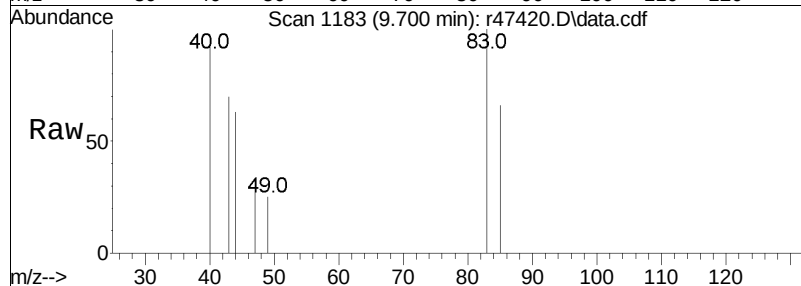
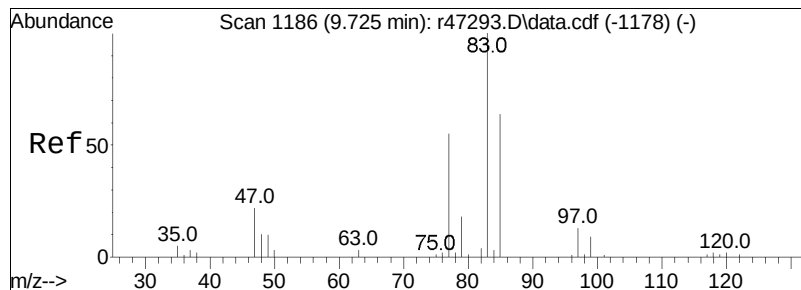




#38
 Ethyl Acetate
 Concen: 1.78 ppbV
 RT: 9.650 min Scan# 1177
 Delta R.T. -0.025 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

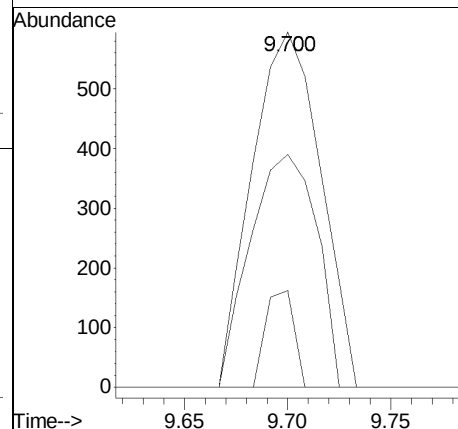
Tgt Ion:	61	Resp:	8187
Ion Ratio	Lower	Upper	
61	100		
70	94.1	77.3	115.9
43	739.3	633.3	949.9

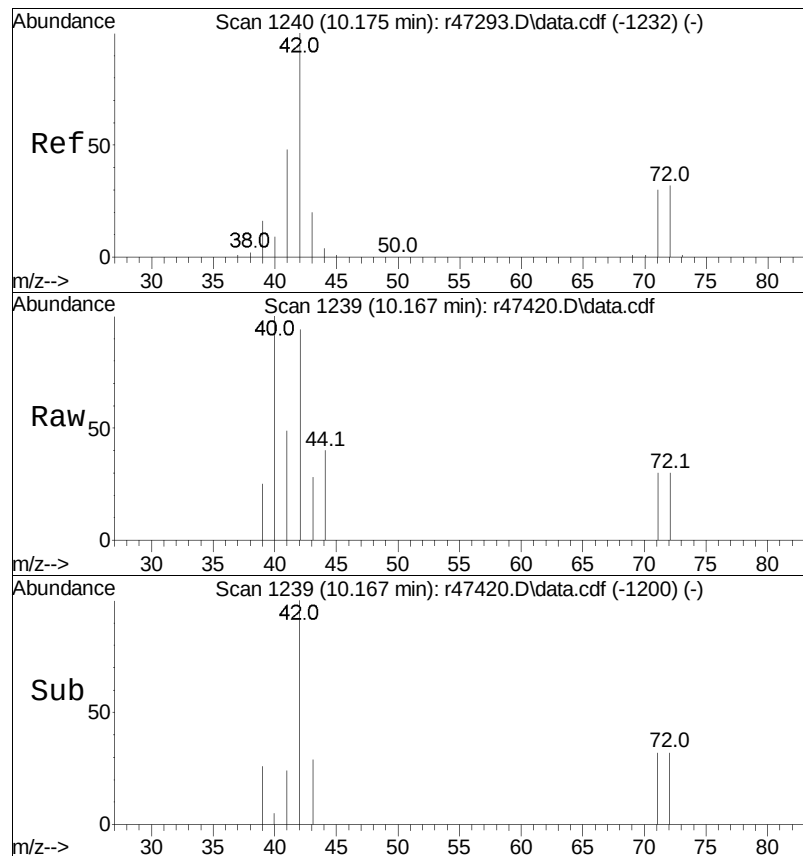




#39
chloroform
Concen: 0.07 ppbV
RT: 9.700 min Scan# 1183
Delta R.T. -0.025 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

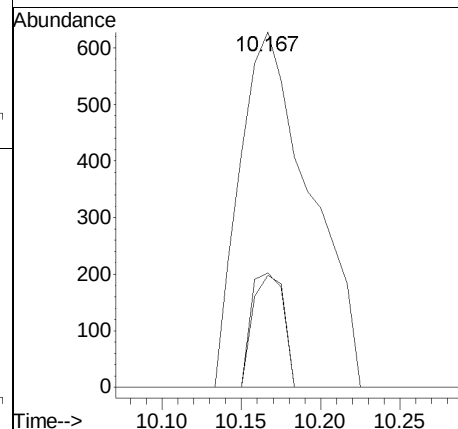
Tgt Ion	Ratio	Resp	Lower	Upper
83	100	1378		
85	65.5		51.3	76.9
47	27.2		17.8	26.8

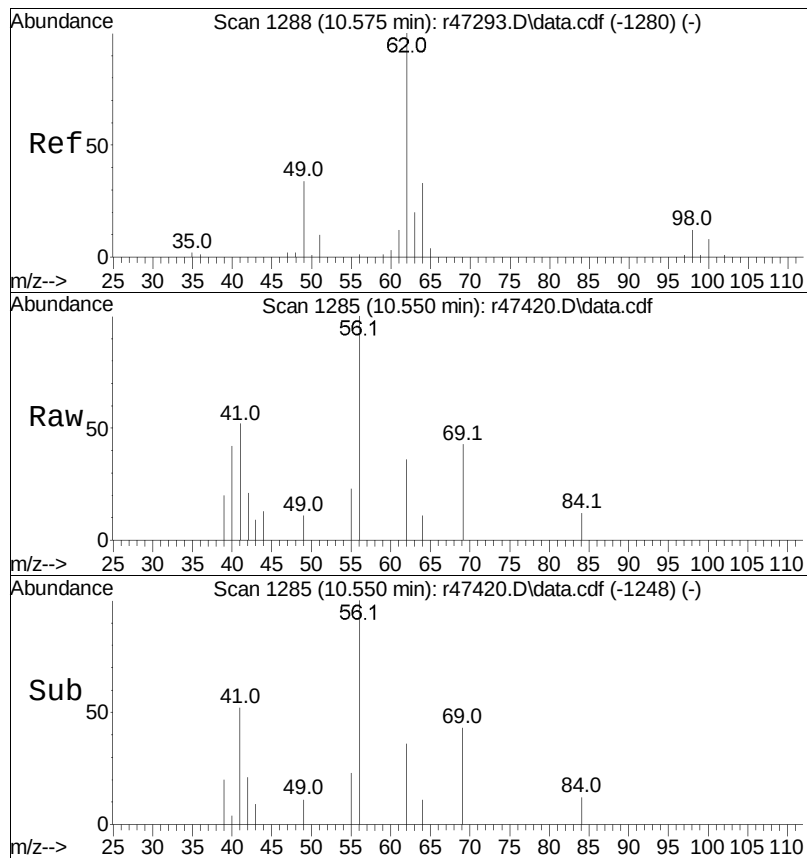




#40
Tetrahydrofuran
Concen: 0.09 ppbV
RT: 10.167 min Scan# 1239
Delta R.T. -0.008 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

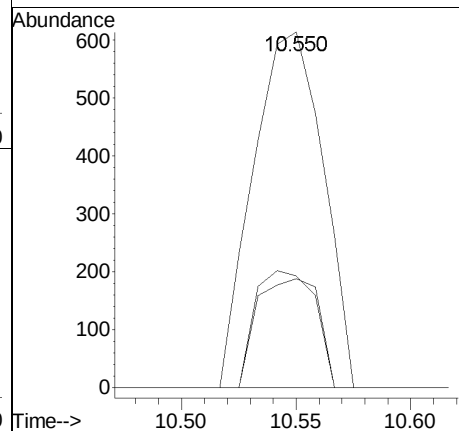
Tgt Ion	Ratio	Lower	Upper
42	100		
71	31.5	24.2	36.2
72	32.2	25.6	38.4

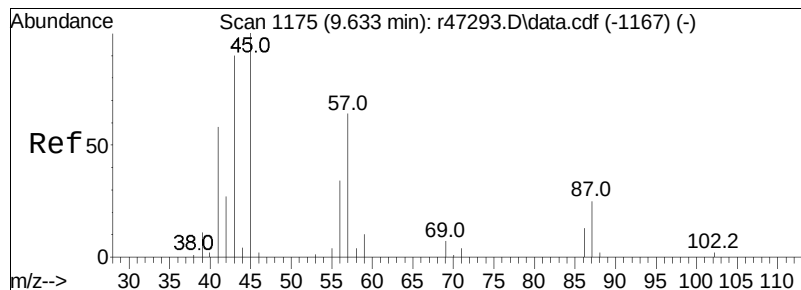




#42
 1,2-dichloroethane
 Concen: 0.09 ppbV
 RT: 10.550 min Scan# 1285
 Delta R.T. -0.025 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

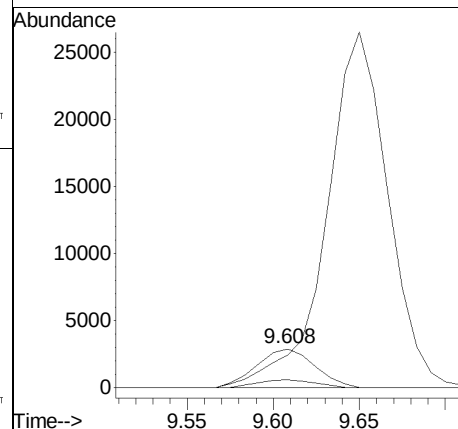
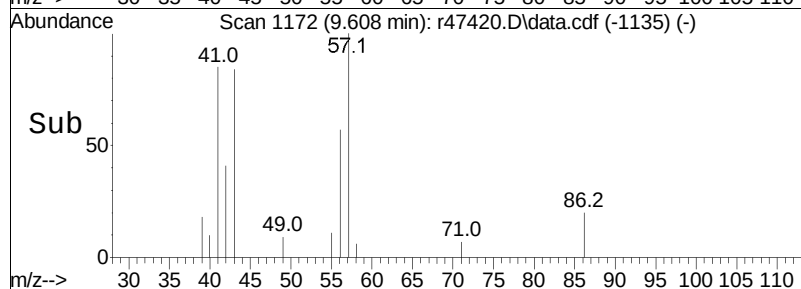
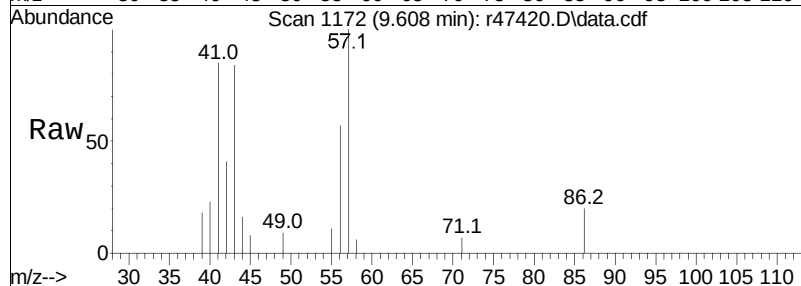
Tgt Ion:	62	Resp:	1302
Ion Ratio	Lower	Upper	
62	100		
64	31.4	26.2	39.4
49	30.6	26.9	40.3
63	0.0	15.6	23.4#

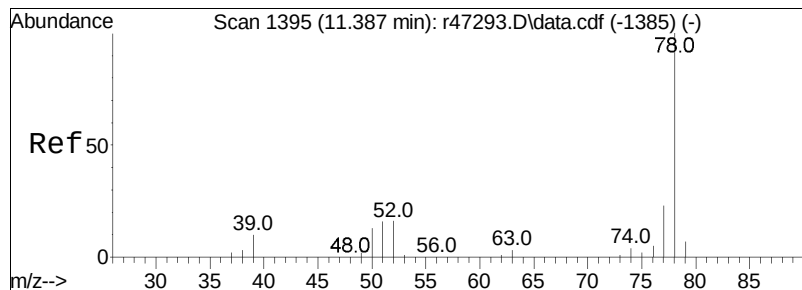




#44
 hexane
 Concen: 0.32 ppbV
 RT: 9.608 min Scan# 1172
 Delta R.T. -0.025 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

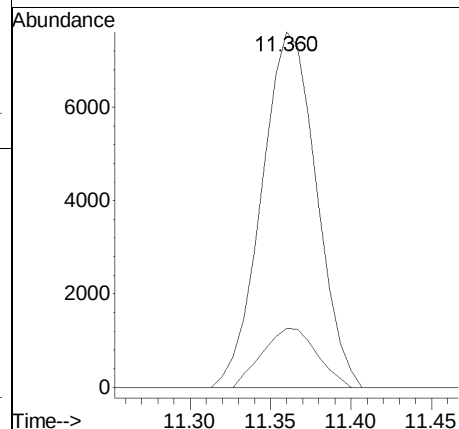
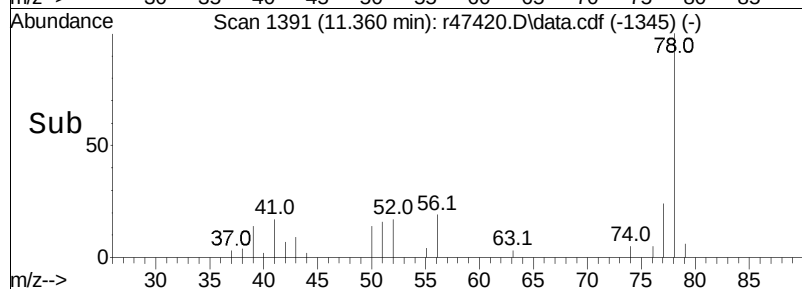
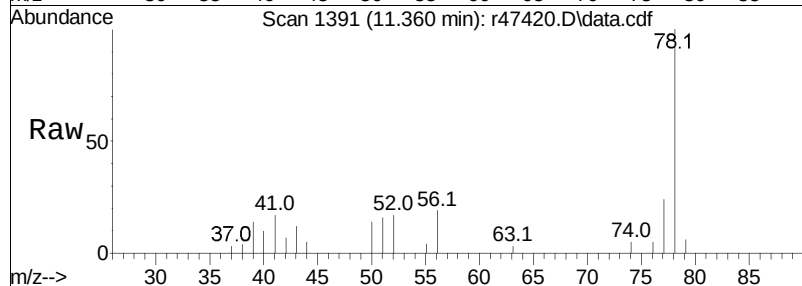
Tgt Ion	Ratio	Lower	Upper
57	100		
43	83.8	111.8	167.8#
86	19.6	15.8	23.6

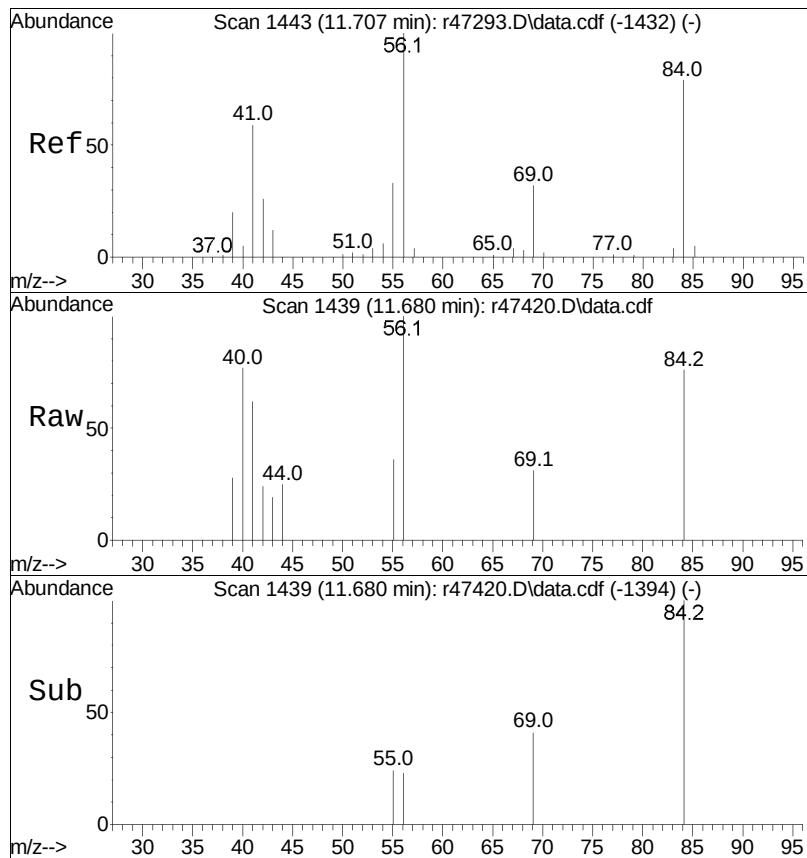




#50
benzene
Concen: 0.47 ppbV
RT: 11.360 min Scan# 1391
Delta R.T. -0.027 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

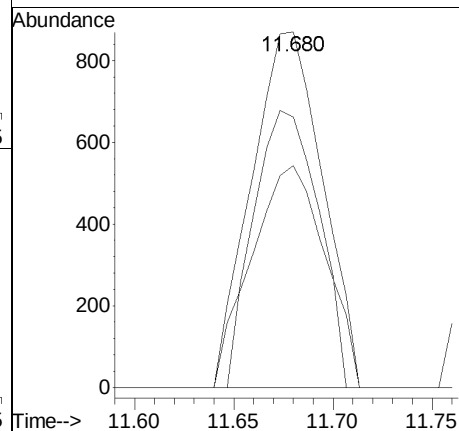
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.6	13.0	19.4

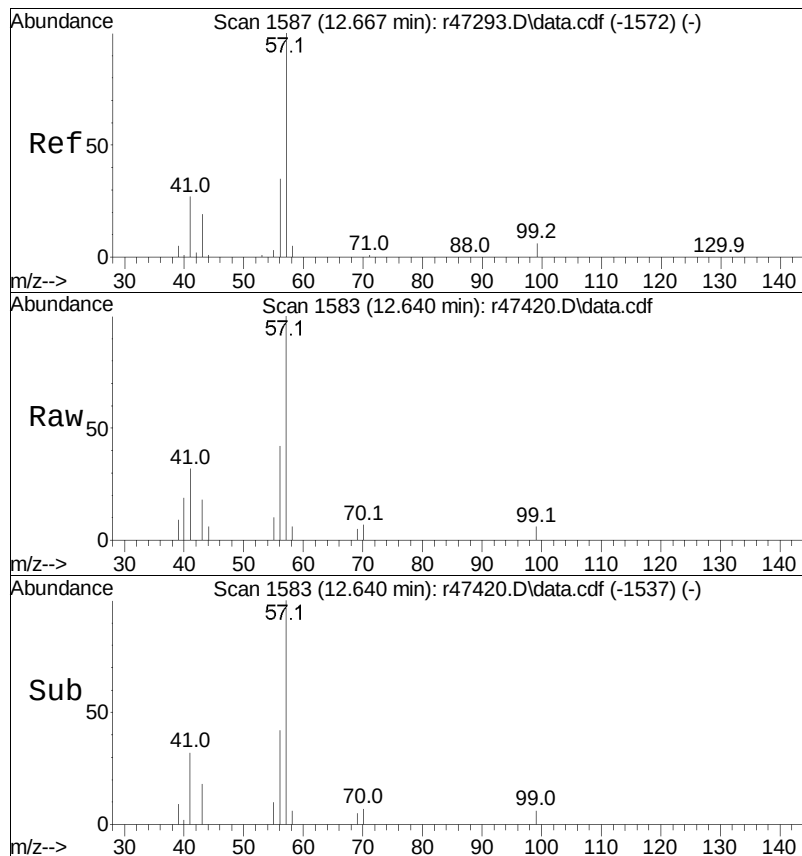




#53
cyclohexane
Concen: 0.09 ppbV
RT: 11.680 min Scan# 1439
Delta R.T. -0.027 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

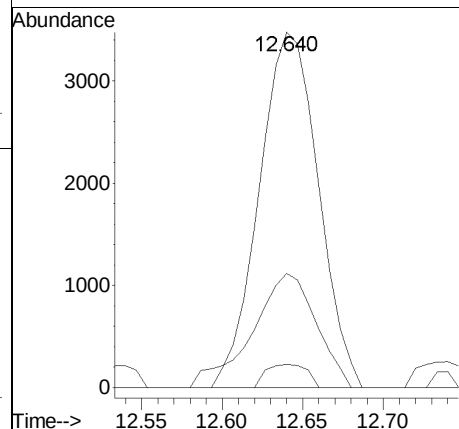
Tgt	Ion	Resp	Lower	Upper
56	100	2172		
84	76.1	63.0	94.6	
41	62.4	46.8	70.2	

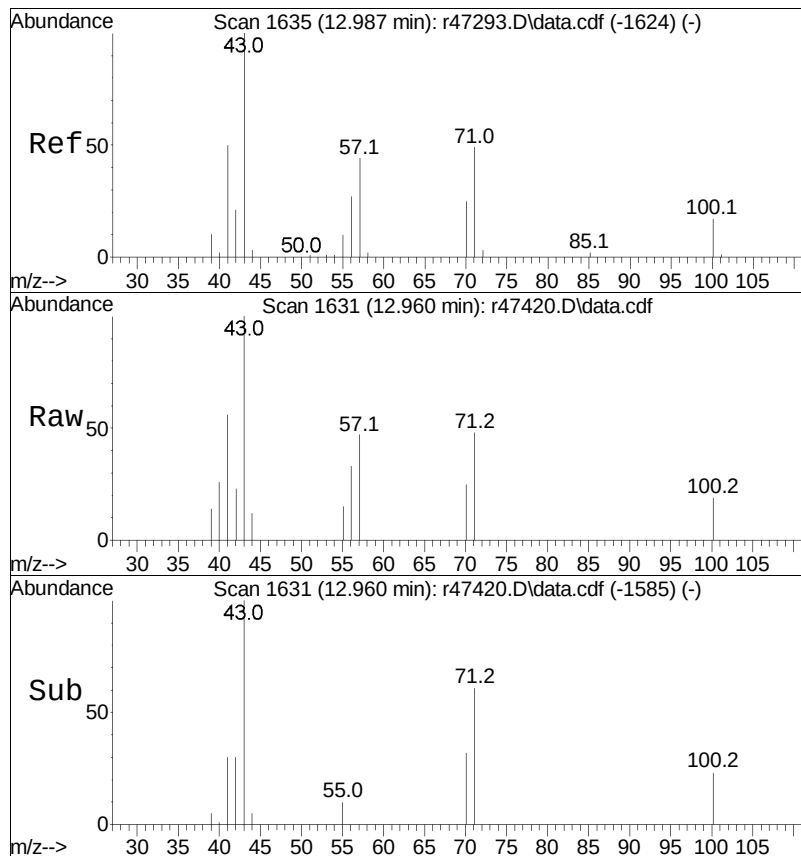




#60
 2,2,4-trimethylpentane
 Concen: 0.12 ppbV
 RT: 12.640 min Scan# 1583
 Delta R.T. -0.027 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

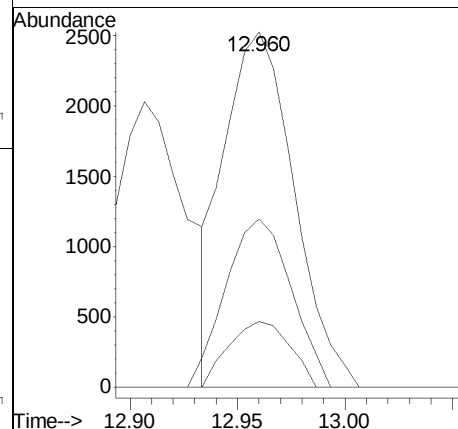
Tgt Ion	Ratio	Lower	Upper
57	100		
99	6.5	4.8	7.2
41	32.1	21.8	32.8

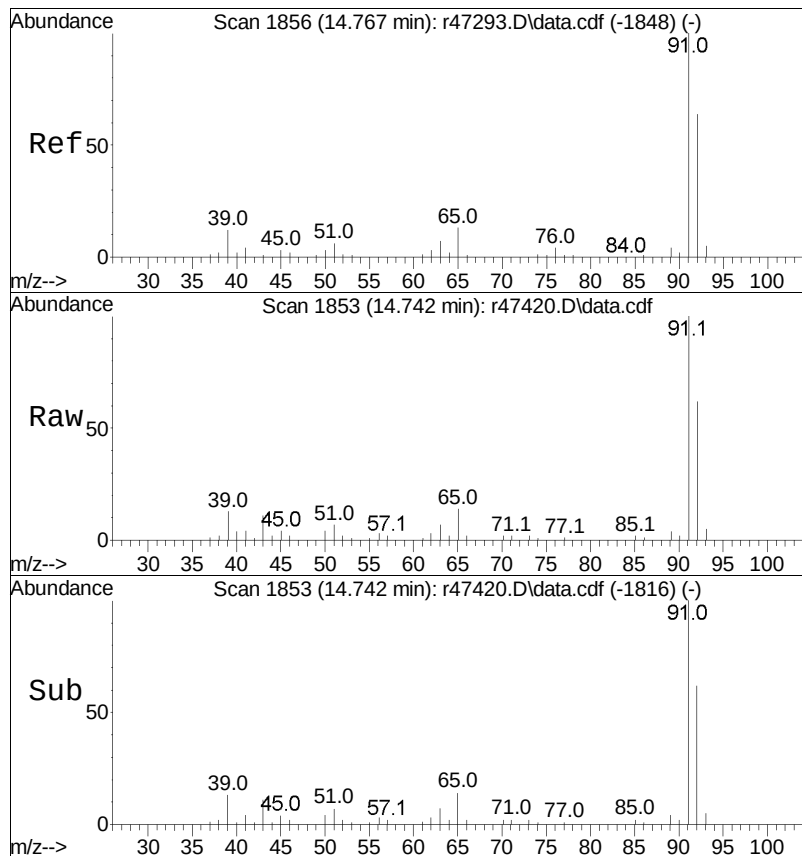




#62
 heptane
 Concen: 0.18 ppbV
 RT: 12.960 min Scan# 1631
 Delta R.T. -0.027 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

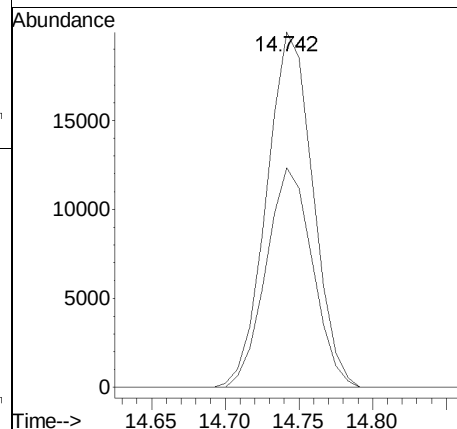
Tgt Ion:	43	Resp:	5731
Ion Ratio	Lower	Upper	
43	100		
57	47.4	35.2	52.8
100	18.5	13.7	20.5

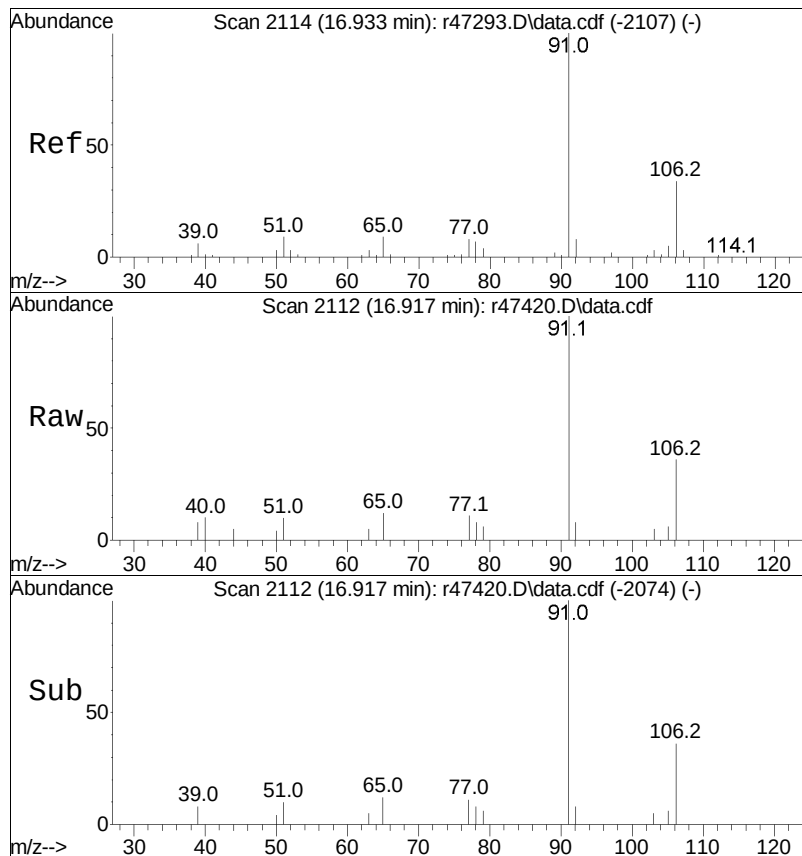




#68
 toluene
 Concen: 0.85 ppbV
 RT: 14.742 min Scan# 1853
 Delta R.T. -0.025 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

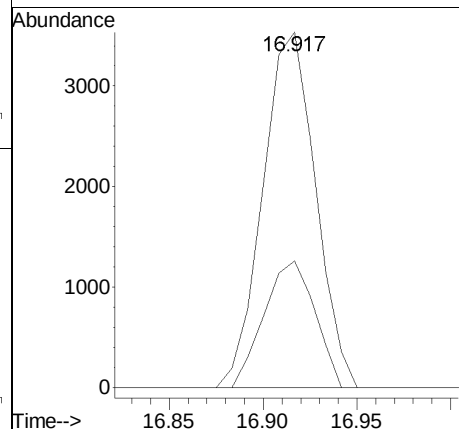
Tgt Ion:	91	Resp:	43683
Ion Ratio	Lower	Upper	
91	100		
92	61.8	51.1	76.7

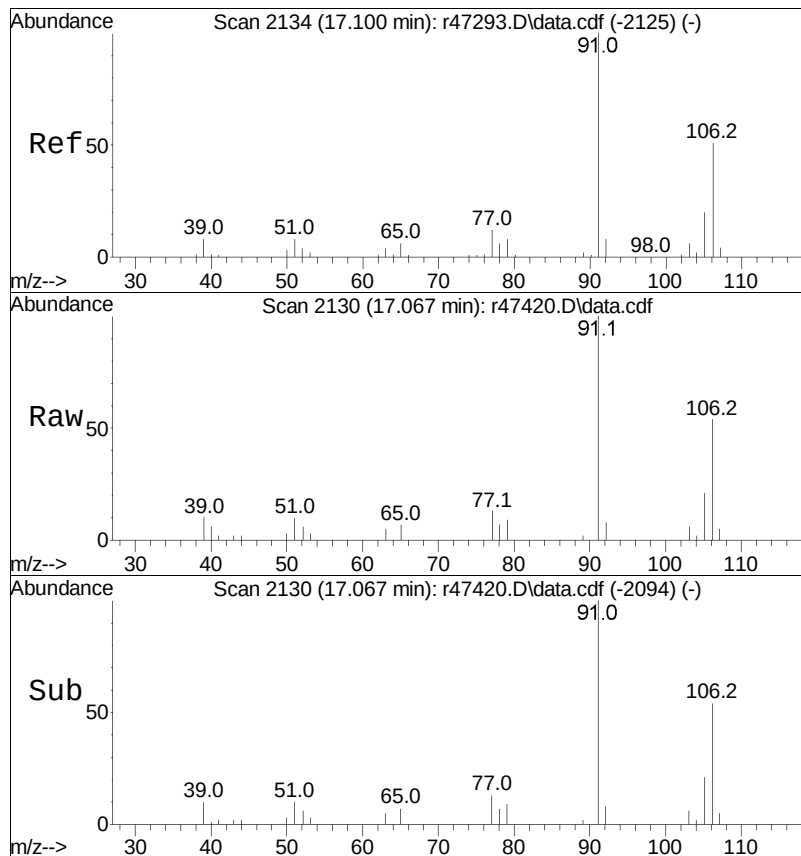




#81
ethylbenzene
Concen: 0.11 ppbV
RT: 16.917 min Scan# 2112
Delta R.T. -0.017 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

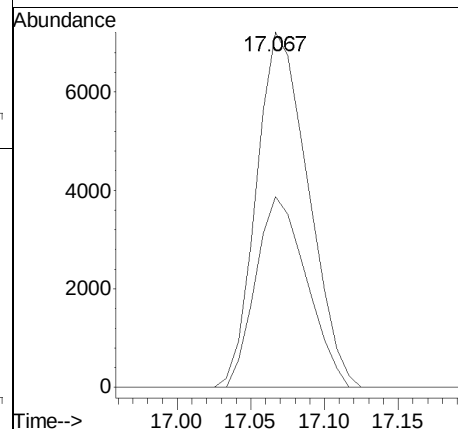
Tgt	Ion	Resp	Lower	Upper
91	100	6912		
106	35.6	27.6	41.4	

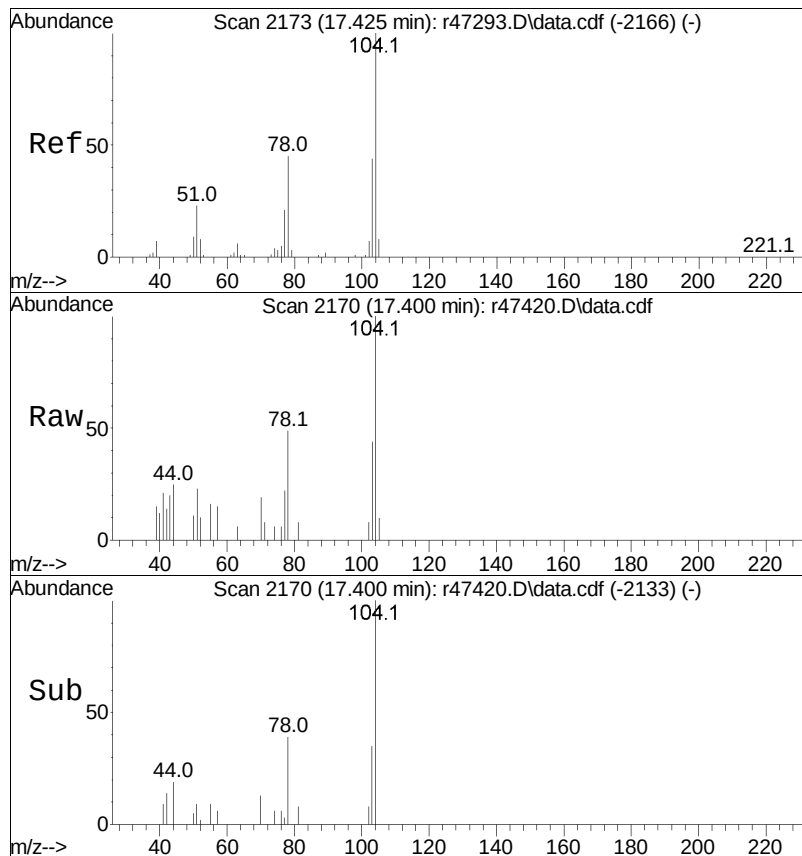




#83
 m+p-xylene
 Concen: 0.34 ppbV
 RT: 17.067 min Scan# 2130
 Delta R.T. -0.033 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

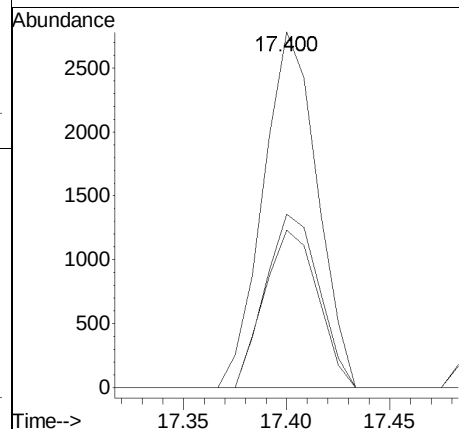
Tgt Ion:	91	Resp:	17663
Ion Ratio	Lower	Upper	
91	100		
106	53.7	41.2	61.8

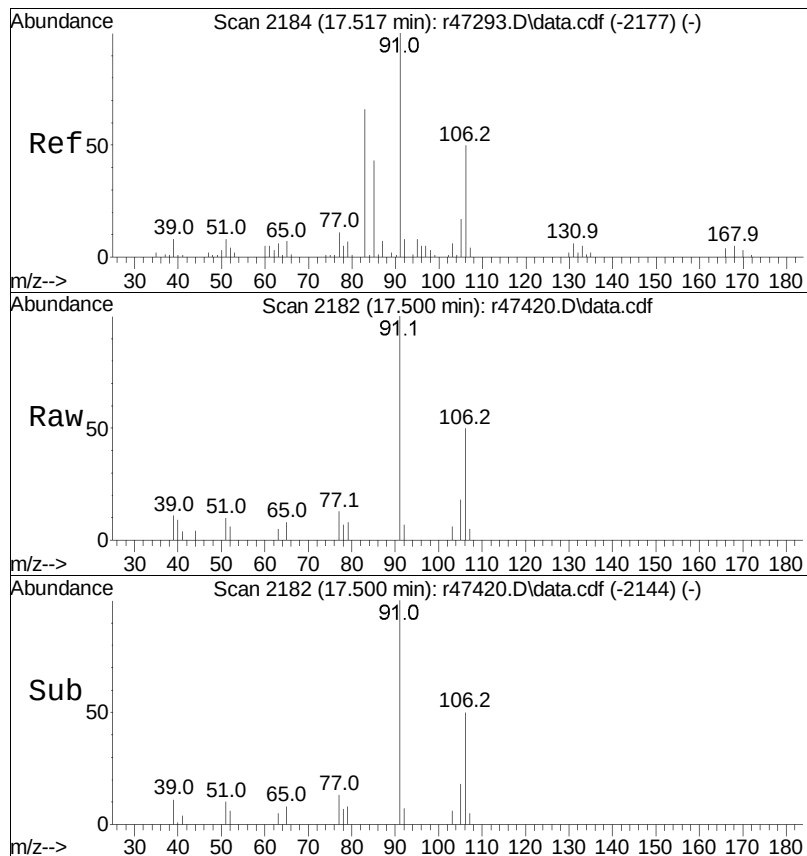




#85
styrene
Concen: 0.13 ppbV
RT: 17.400 min Scan# 2170
Delta R.T. -0.025 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

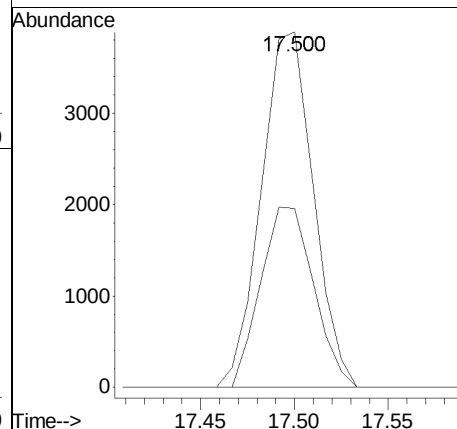
Tgt Ion:	104	Resp:	5087
Ion Ratio	Lower	Upper	
104	100		
103	44.2	35.0	52.4
78	48.7	36.2	54.4

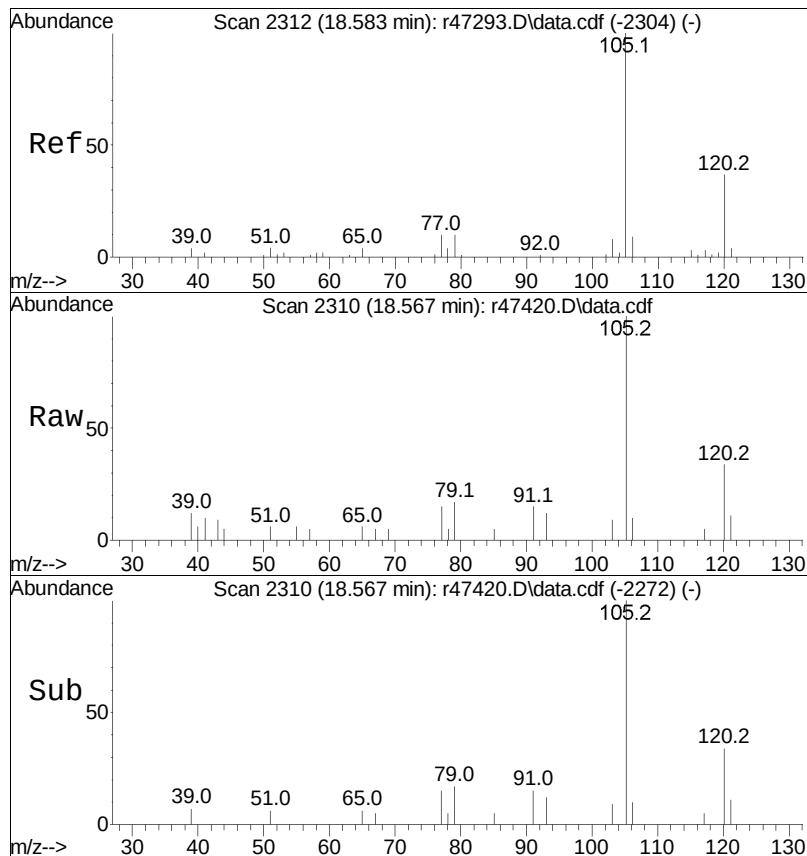




#87
o-xylene
Concen: 0.15 ppbV
RT: 17.500 min Scan# 2182
Delta R.T. -0.017 min
Lab File: r47420.D
Acq: 21 Jan 2020 10:09 PM

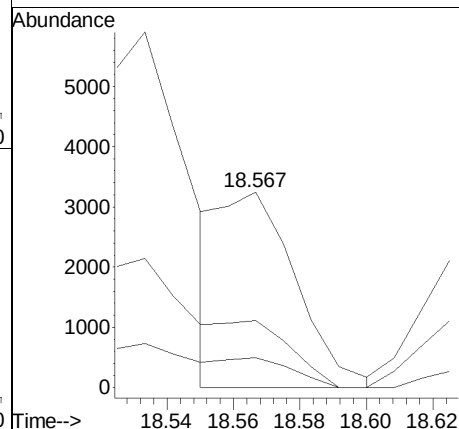
Tgt Ion	Ratio	Lower	Upper
91	100		
106	50.4	40.1	60.1

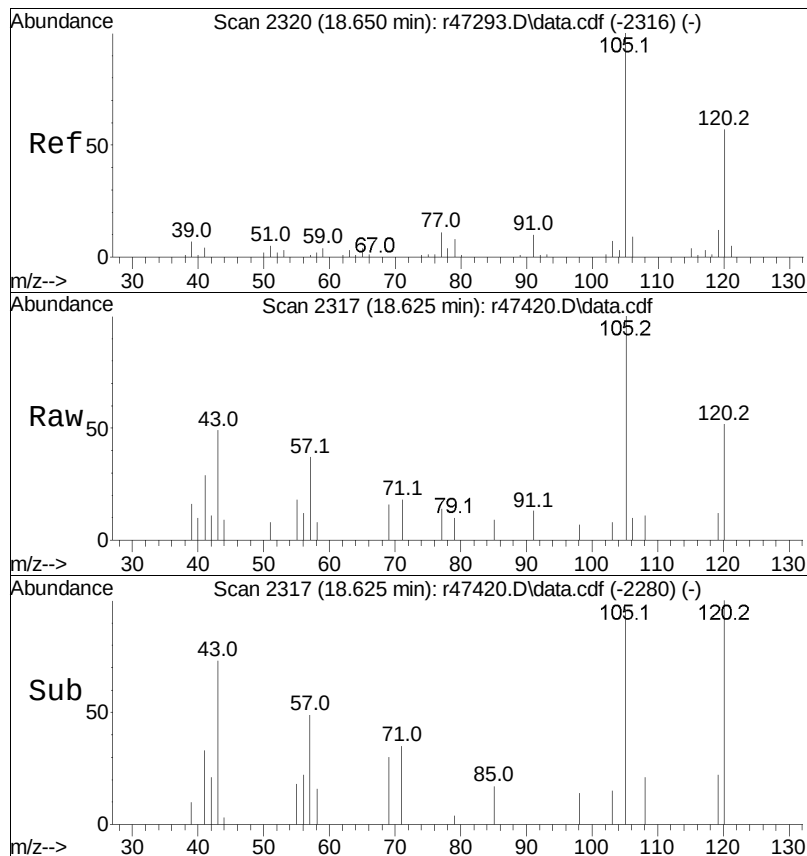




#96
 4-ethyl toluene
 Concen: 0.07 ppbV m
 RT: 18.567 min Scan# 2310
 Delta R.T. -0.017 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

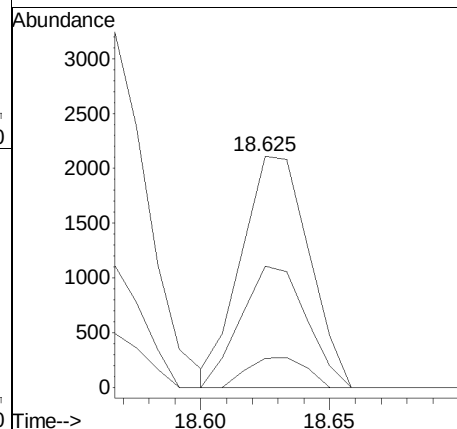
Tgt Ion	Ratio	Lower	Upper
105	100		
120	34.3	29.4	44.2
91	15.2	8.2	12.4

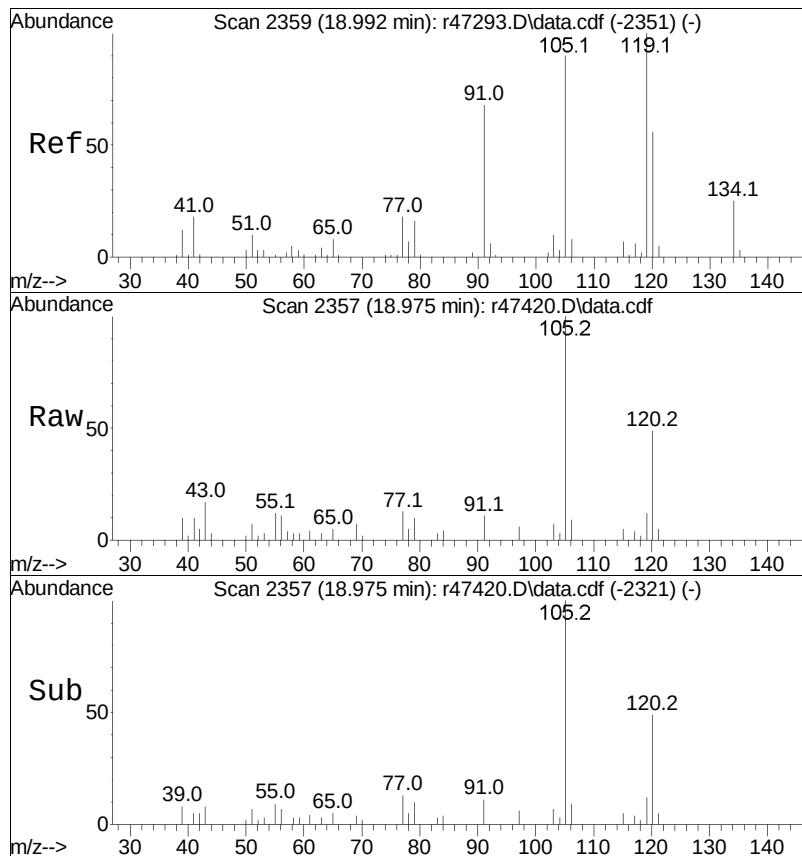




#97
 1,3,5-trimethylbenzene
 Concen: 0.06 ppbV
 RT: 18.625 min Scan# 2317
 Delta R.T. -0.025 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

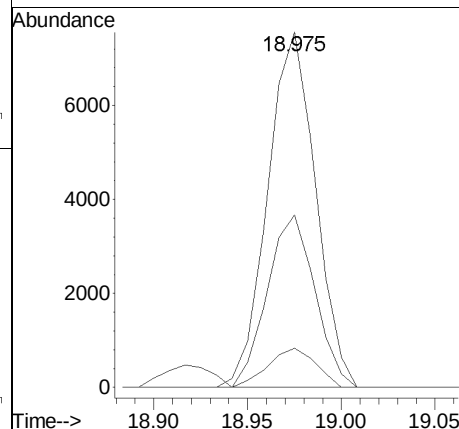
Tgt Ion	Ratio	Lower	Upper
105	100		
120	52.5	45.2	67.8
91	12.6	7.8	11.6

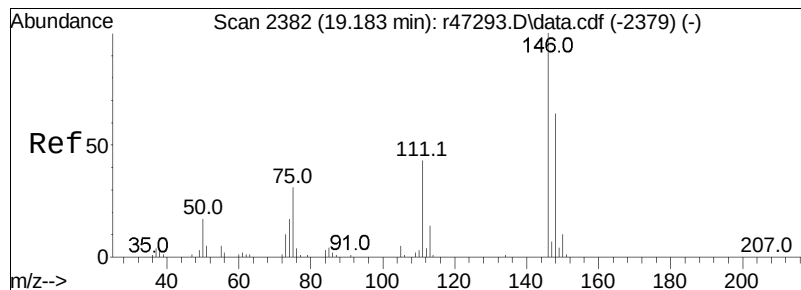




#99
 1,2,4-trimethylbenzene
 Concen: 0.24 ppbV
 RT: 18.975 min Scan# 2357
 Delta R.T. -0.017 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

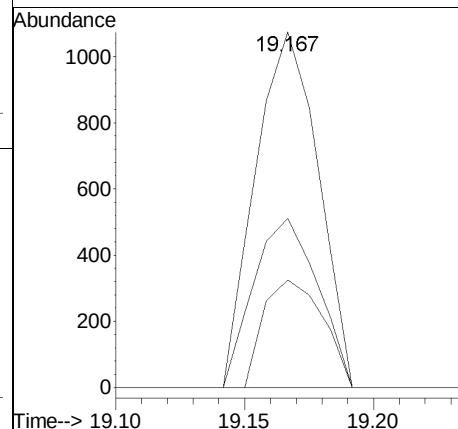
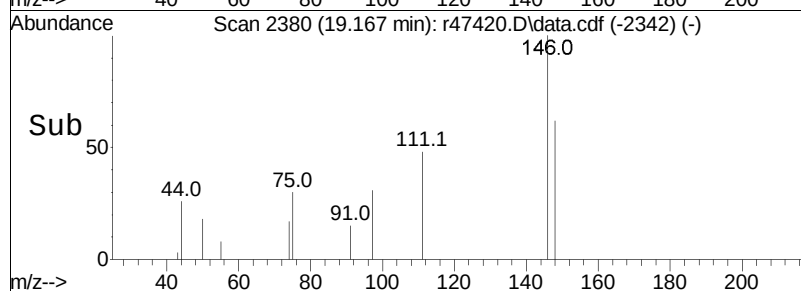
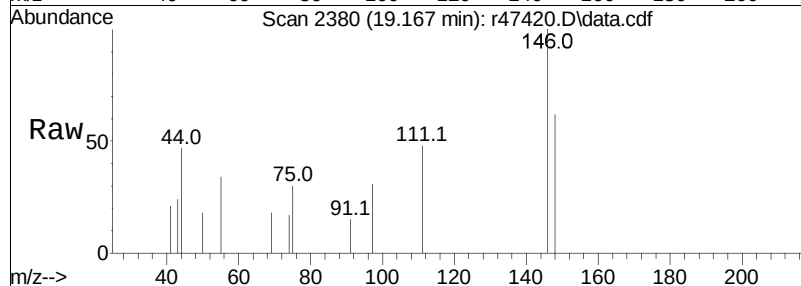
Tgt	Ion:105	Resp:	13404
Ion	Ratio	Lower	Upper
105	100		
120	48.5	50.2	75.4#
91	11.0	61.0	91.6#





#103
 1,4-dichlorobenzene
 Concen: 0.05 ppbV
 RT: 19.167 min Scan# 2380
 Delta R.T. -0.017 min
 Lab File: r47420.D
 Acq: 21 Jan 2020 10:09 PM

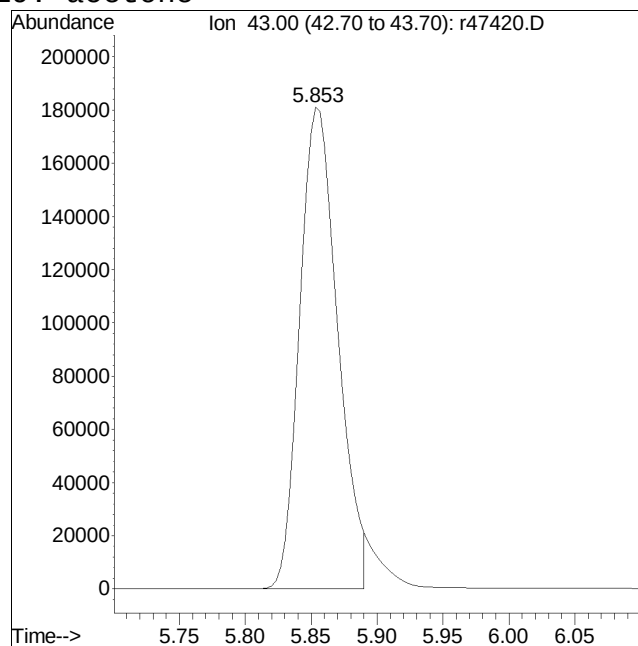
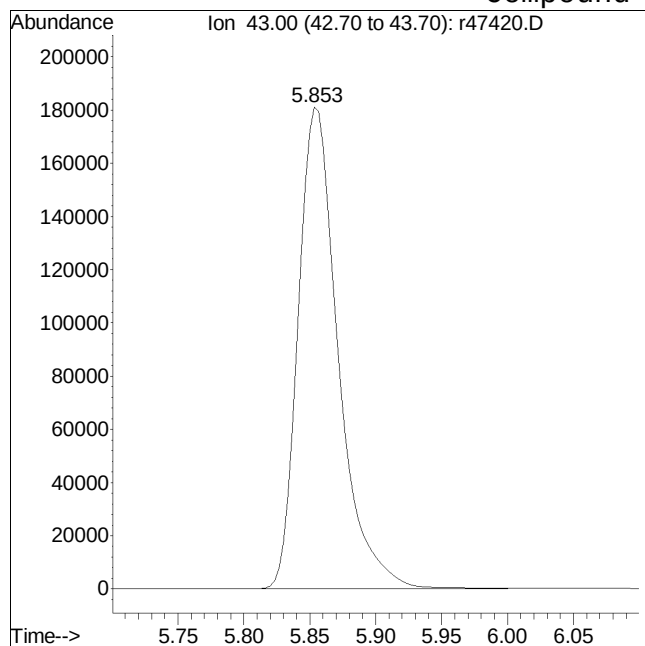
Tgt Ion	Ratio	Lower	Upper
146	100		
111	47.6	34.4	51.6
75	30.3	24.6	36.8



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47420.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:0: 9 Instrument :
Sample : WG1332350-5,3,250,250 Quant Date : 1/22/2020 5:37 am

Compound #19: acetone



Original Peak Response = 382923

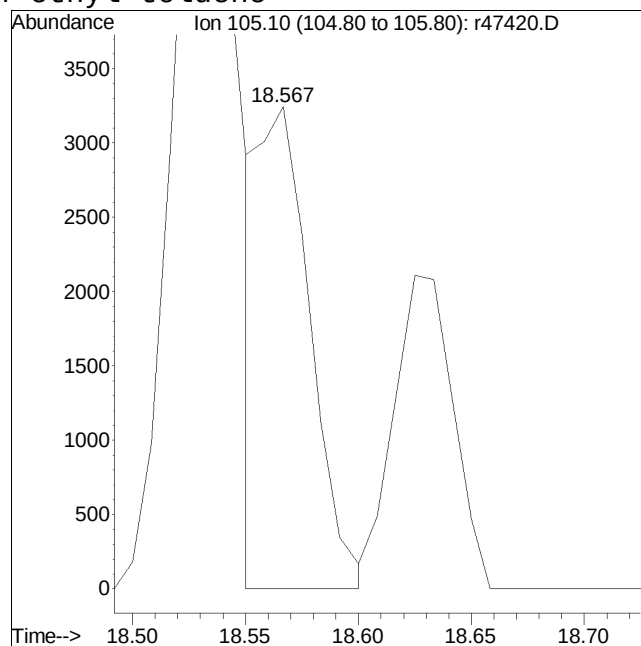
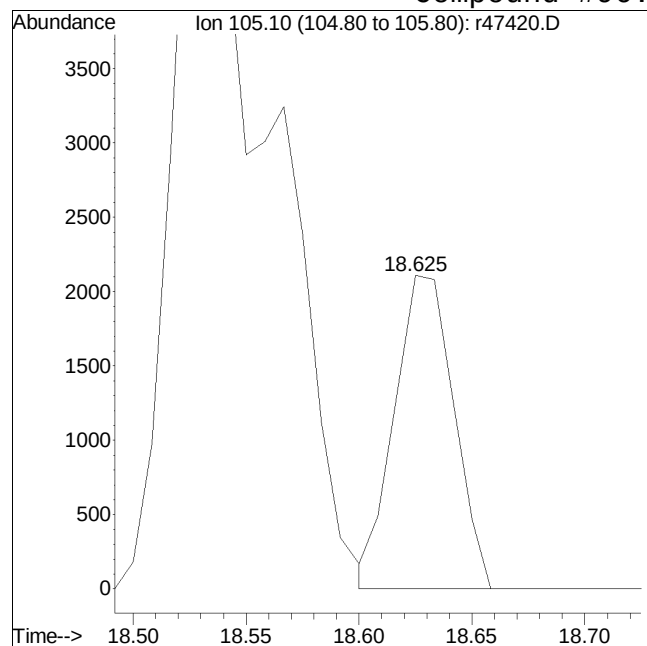
Manual Peak Response = 363693 M6

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

Manual Integration Report

Data Path : O:\Forensics\Data\AirpianoQMethod : TFS4_200115.M
Data File : r47420.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:0: 9 Instrument :
Sample : WG1332350-5,3,250,250 Quant Date : 1/22/2020 5:37 am

Compound #96: 4-ethyl toluene



Original Peak Response = 3858

Manual Peak Response = 5140 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)

Jan 22 2020, 01:48 pm

Work Group: WG1332350 for Department: 3 GC/MS

Created: 21-JAN-20 Due: Operator: ry

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2001881-01	AAMP_SITE_1E-0104209R-001	S T015-LL	AIR	DONE	U	0203	0122	S0	Can-6
L2001881-02	AAMP_SITE_1W-010420R-002	S T015-LL	AIR	DONE	U	0203	0122	S0	Can-6
L2001881-03	AAMP_SITE_3-010420R-003	S T015-LL	AIR	DONE	U	0203	0122	S0	Can-6
L2001881-04	AAMP_SITE_4A-010420R-004	S T015-LL	AIR	DONE	U	0203	0122	S0	Can-6
L2001881-05	AAMP_SITE_5A-010420R-005	S T015-LL	AIR	DONE	U	0203	0122	S0	Can-6
L2001881-06	QUARTERLY SPIKE 5 PPBV	S T015-LL	AIR	DONE	U	0203	0122	S0	Can-6
L2001881-07	QUARTERLY SPIKE 10 PPBV	S T015-LL	AIR	DONE	U	0203	0122	S0	Can-6
L2002033-01	0A	S T015-LL	AIR	DONE	U	0214	0122	S0	Can-6
L2002033-02	171 IA	S T015-LL	AIR	DONE	U	0214	0122	S0	Can-6
L2002033-03	179A IA	S T015-LL	AIR	DONE	U	0214	0122	S0	Can-6
L2002033-04	179A SSV	S T015-LL	SOIL_VAPOR	DONE	U	0214	0122	S0	Can-6
L2002033-05	181A IA	S T015-LL	AIR	DONE	U	0214	0122	S0	Can-6
L2002033-06	181A SSV	S T015-LL	SOIL_VAPOR	DONE	U	0214	0122	S0	Can-6
L2002349-01	SV-13	S T015-LL	SOIL_VAPOR	DONE	U	0215	0122	S0	Can-2.7
L2002349-02	SV-14	S T015-LL	SOIL_VAPOR	DONE	U	0215	0122	S0	Can-2.7
L2002349-03	SV-15	S T015-LL	SOIL_VAPOR	DONE	U	0215	0122	S0	Can-2.7
L2002648-01	SG1	S T015-LL	SOIL_VAPOR	DONE	U	0217	0122	1B	Can-6
WG1332350-1	MS BFB Tune Standard	S T015-LL	SOIL_VAPOR	DONE	U				
WG1332350-1	MS BFB Tune Standard	S T015-LL	AIR	DONE	U				
WG1332350-2	Continuing Calibrati	S T015-LL	SOIL_VAPOR	DONE	U				
WG1332350-2	Continuing Calibrati	S T015-LL	AIR	DONE	U				
WG1332350-3	Laboratory Control S	S T015-LL	SOIL_VAPOR	DONE	U				
WG1332350-3	Laboratory Control S	S T015-LL	AIR	DONE	U				
WG1332350-4	Laboratory Method Bl	S T015-LL	AIR	DONE	U				
WG1332350-4	Laboratory Method Bl	S T015-LL	SOIL_VAPOR	DONE	U				
WG1332350-5	Duplicate Sample	S T015-LL	AIR	DONE	U				
WG1332350-5	Duplicate Sample	S T015-LL	SOIL_VAPOR	DONE	U				
Comments:									
WG1332350-5	L2002033-02								

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano4

Internal Standard/Surrogate IDs: SS19-023 / SS19-022

Date: 01/15/2020

Internal Standard/Surrogate Volume: 100 ml

Initials: RY

Sequence File Name: 200115.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	BA4011501	TO15_SFS.qgm	R47282.qgd	250ml			NA
1	BA4011502	TO15_SFS.qgm	R47283.qgd	250ml			NA
1	BA4011503	TO15_SFS.qgm	R47284.qgd	250ml			NA
1	TA4011501	TO15_SFS.qgm	R47285.qgd	250ml	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R47286.qgd	50 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R47287.qgd	125 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R47288.qgd	250 mL SS20-003D	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R47289.qgd	50 mL SS20-003C			NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R47290.qgd	125 mL SS20-003C			NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R47291.qgd	250 mL SS20-003C			NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R47292.qgd	125 mL SS20-003B1			NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R47293.qgd	250 mL SS20-003B1			NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R47294.qgd	50 mL SS20-003A			NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R47295.qgd	125 mL SS20-003A			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R47296.qgd	250 mL SS20-003A	NOT USED FOR SIM	IS FAILED	NA
1	BA4011501	TO15_SFS.qgm	R47297.qgd	250 mL			NA
1	BA4011502	TO15_SFS.qgm	R47298.qgd	250 mL			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R47299.qgd	250 mL SS20-003A	NOT USED FOR SIM		NA
1	BA4011502	TO15_SFS.qgm	R47300.qgd	250 mL			NA
1	BA4011502	TO15_SFS.qgm	R47301.qgd	250 mL			NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R47302.qgd	250 mL SS20-002E	FULL SCAN ICV		NA

[illegible]

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

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Alpha Analytical Air Lab Instrument Run Log

Instrument ID: <u>Airpiano4</u>	Internal Standard/Surrogate IDs: <u>SS19-023 / SS19-022</u>	
Date: <u>01/21/2020</u>	Internal Standard/Surrogate Volume: <u>100 ml</u>	
Initials: <u>RY</u>	Sequence File Name: <u>200121.S</u>	

SIM ICAL# 16437

Full Scan ICAL# 16438

APH ICAL# 16439

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	TA4012101	TO15_SFS.qgm	R47407.qgd	250ml	TUNE		NA
2	CA4012101	TO15_SFS.qgm	R47408.qgd	250 mL SS20-003F	NJ CC FAILED		NA
3	CTO15-LLSTD10	TO15_SFS.qgm	R47409.qgd	250 mL SS20-002E	LL LCS		NA
3	CTO15-SIMSTD5	TO15_SFS.qgm	R47410.qgd	125 mL SS20-002E	SIM LCS		NA
1	BA4012101	TO15_SFS.qgm	R47411.qgd	250ml	LL BLANK		NA
1	BA4012102	TO15_SFS.qgm	R47412.qgd	250ml	SIM BLANK		NA
1	L2002033-01,3,250,250	TO15_SFS.qgm	R47413.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
2	L2001881-01,3,250,250	TO15_SFS.qgm	R47414.qgd	WG1332350,ICAL16438		DOW 2019	Y
3	L2001881-02,3,250,250	TO15_SFS.qgm	R47415.qgd	WG1332350,ICAL16438		DOW 2019	Y
4	L2001881-03,3,250,250	TO15_SFS.qgm	R47416.qgd	WG1332350,ICAL16438		DOW 2019	Y
5	L2001881-04,3,250,250	TO15_SFS.qgm	R47417.qgd	WG1332350,ICAL16438		DOW 2019	Y
6	L2001881-05,3,250,250	TO15_SFS.qgm	R47418.qgd	WG1332350,ICAL16438		DOW 2019	Y
7	L2002033-02,3,250,250	TO15_SFS.qgm	R47419.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
7	L2002033-02DUP,3,250,250	TO15_SFS.qgm	R47420.qgd	WG1332350,ICAL16438	LL/ SIM DUP	NY/ 7 SIM	Y
8	L2002033-03,3,250,250	TO15_SFS.qgm	R47421.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
9	L2002033-05,3,250,250	TO15_SFS.qgm	R47422.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
10	L2002349-01D,3,200,250	TO15_SFS.qgm	R47423.qgd	WG1332350,ICAL16438		NY	Y
11	L2002349-02,3,250,250	TO15_SFS.qgm	R47424.qgd	WG1332350,ICAL16438		NY	Y
12	L2002349-03,3,250,250	TO15_SFS.qgm	R47425.qgd	WG1332350,ICAL16438		NY	Y
13	L2002033-04,3,250,250	TO15_SFS.qgm	R47426.qgd	WG1332350,ICAL16438		NY	Y
14	L2002033-06D,3,125,250	TO15_SFS.qgm	R47427.qgd	WG1332350,ICAL16438		NY	Y

Alpha Analytical Air Lab Instrument Run Log

15	L2002648-01,3,250,250	TO15_SFS.qgm	R47428.qgd	WG1332350,ICAL16438		NY	Y
16	L2001881-06,3,250,250	TO15_SFS.qgm	R47429.qgd	WG1332350,ICAL16438		DOW 2019	Y
16	L2001881-07,3,250,250	TO15_SFS.qgm	R47430.qgd	WG1332350,ICAL16438		DOW 2019	Y

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 See sample ID, report, or see Form 1 report, or divide nominal volume by actual volume analyzed
Dilution Factor: See sample ID, report, or 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	: Tyll Engineering and Consulting PC	Lab Number	: L2002033
Project Name	: ELKS PLAZA	Project Number	:
Client Sample ID	: 171 IA	Matrix	: AIR
Lab Sample ID	: L2002033-02	Analysis Date	: 01/21/20 21:30
Lab File ID	: R47419_EV2	DUP File ID	: r47420_Ev2
Dup Sample ID	: WG1332352-5	DUP Analysis Date	: 01/21/20 22:09

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	0.067	0.065	3	25
Trichloroethene	ND	ND	NC	25
Tetrachloroethene	0.047	0.044	7	25

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Tyll Engineering and Consulting PC Lab Number : L2002033
 Project Name : ELKS PLAZA Project Number :
 Matrix : AIR
 LCS Sample ID : WG1332352-3 Analysis Date : 01/21/20 13:12 File ID : r47410_Ev2
 LCSD Sample ID : 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			
Vinyl chloride	5	4.40	88				-	70-130	25
1,1-Dichloroethene	5	4.10	82				-	70-130	25
cis-1,2-Dichloroethene	5	4.34	87				-	70-130	25
1,1,1-Trichloroethane	5	4.09	82				-	70-130	25
Carbon tetrachloride	5	4.04	81				-	70-130	25
Trichloroethene	5	4.96	99				-	70-130	25
Tetrachloroethene	5	5.87	117				-	70-130	25

Method Blank Summary
Form 4
Air Volatiles

Client	: Tyll Engineering and Consulting PC	Lab Number	: L2002033
Project Name	: ELKS PLAZA	Project Number	:
Lab Sample ID	: WG1332352-4	Lab File ID	: r47412_Ev2
Instrument ID	: AIRPIANO4		
Matrix	: AIR	Analysis Date	: 01/21/20 15:13

Client Sample No.	Lab Sample ID	Analysis Date
WG1332352-3LCS	WG1332352-3	01/21/20 13:12
OA	L2002033-01	01/21/20 17:33
171 IA	L2002033-02	01/21/20 21:30
171 IADUP	WG1332352-5	01/21/20 22:09
179A IA	L2002033-03	01/21/20 22:48
181A IA	L2002033-05	01/21/20 23:28

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Tyll Engineering and Consulting PC	Lab Number : L2002033
Project Name : ELKS PLAZA	Project Number :
Instrument ID : AIRPIANO4	Analysis Date : 01/15/20 13:38
Tune Standard : WG1330814-1	Tune File ID : r47285_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	15
75	30.0 - 66.0% of mass 95	39
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4 (.6)1
174	50.0 - 120.0% of mass 95	70.4
175	4.0 - 9.0% of mass 174	4.9 (7)1
176	93.0 - 101% of mass 174	68.7 (97.7)1
177	5.0 - 9.0% of mass 176	4.5 (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
STD0.02	R1275220-1	R47286_EV2	01/15/20 14:16
STD0.05	R1275220-2	R47287_EV2	01/15/20 14:56
STD0.1	R1275220-4	R47288_EV2	01/15/20 15:37
STD0.2	R1275220-3	R47289_EV2	01/15/20 16:16
STD0.5	R1275220-5	R47290_EV2	01/15/20 16:55
STD1.0	R1275220-6	R47291_EV2	01/15/20 17:37
STD5.0	R1275220-7	R47292_EV2	01/15/20 18:17
STD010	R1275220-8	R47293_EV2	01/15/20 18:58
STD020	R1275220-9	R47294_EV2	01/15/20 19:37
STD050	R1275220-10	R47295_EV2	01/15/20 20:16
ICV QUANT	R1275220-11	R47304_EV2	01/16/20 13:31

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Tyll Engineering and Consulting PC	Lab Number : L2002033
Project Name : ELKS PLAZA	Project Number :
Instrument ID : AIRPIANO4	Analysis Date : 01/21/20 11:09
Tune Standard : WG1332352-1	Tune File ID : r47407_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	13.5
75	30.0 - 66.0% of mass 95	35.6
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	72.5
175	4.0 - 9.0% of mass 174	4.9 (6.7)1
176	93.0 - 101% of mass 174	70.8 (97.7)1
177	5.0 - 9.0% of mass 176	4.5 (6.3)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
WG1332352-2CCAL	WG1332352-2	R47410_EV2	01/21/20 13:12
WG1332352-3LCS	WG1332352-3	R47410_EV2	01/21/20 13:12
WG1332352-4BLANK	WG1332352-4	R47412_EV2	01/21/20 15:13
OA	L2002033-01	R47413_EV2	01/21/20 17:33
171 IA	L2002033-02	R47419_EV2	01/21/20 21:30
WG1332352-5DUP	WG1332352-5	R47420_EV2	01/21/20 22:09
179A IA	L2002033-03	R47421_EV2	01/21/20 22:48
181A IA	L2002033-05	R47422_EV2	01/21/20 23:28

Internal Standard Area and RT Summary

Form 8a

Air Volatiles

Client	: Tyll Engineering and Consulting PC	Lab Number	: L2002033
Project Name	: ELKS PLAZA	Project Number	:
Instrument ID	: AIRPIANO4	Analysis Date	: 01/21/20 13:12
Sample No	: WG1332352-2	Lab File ID	: R47410_EV2

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1332352-2	122510	9.53	417004	11.80	63917	16.53
Upper Limit	171514	9.86	583806	12.13	89484	16.86
Lower Limit	73506	9.20	250202	11.47	38350	16.20
Sample ID						
WG1332352-3 LCS	122510	9.53	417004	11.80	63917	16.53
WG1332352-4 BLANK	132899	9.53	377368	11.80	56198	16.49
OA	105598	9.53	357544	11.79	55955	16.52
171 IA	114617	9.53	338030	11.79	62629	16.52
171 IA DUP	123857	9.53	342843	11.79	63578	16.52
179A IA	124330	9.53	342838	11.79	64549	16.52
181A IA	129531	9.53	344771	11.79	64737	16.52

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			

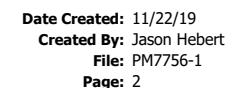
Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



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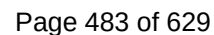
Westborough, MA • Mansfield, MA • Bangor, ME • Portsmouth, NH • Mahwah, NJ • Albany, NY • Buffalo, NY • Holmes, PA





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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-01
 Client ID : OA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R47413_EV2
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:35
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 17:33
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.065	0.020	--	0.441	0.136	--	

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-02
 Client ID : 171 IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R47419_EV2
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 21:30
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.067	0.020	--	0.421	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.047	0.020	--	0.319	0.136	--	

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-03
 Client ID : 179A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R47421_EV2
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:45
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:48
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.077	0.020	--	0.484	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.055	0.020	--	0.373	0.136	--	

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-05
 Client ID : 181A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R47422_EV2
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:59
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 23:28
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.069	0.020	--	0.434	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.063	0.020	--	0.427	0.136	--	

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332352-4
 Client ID : WG1332352-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R47412_EV2
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 01/21/20 15:13
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : WG1332352-5
 Client ID : 171 IADUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R47420_EV2
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:30
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:09
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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	0.065	0.020	--	0.409	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.044	0.020	--	0.298	0.136	--	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47413_Ev2.D
 Acq On : 21 Jan 2020 5:33 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-01,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:28:08 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.533	49	105598	10.000	ppbV	-0.03
Standard Area = 122510			Recovery =		86.20%	
33) 1,4-difluorobenzene	11.793	114	357544	10.000	ppbV	-0.03
Standard Area = 417004			Recovery =		85.74%	
51) chlorobenzene-D5	16.517	54	55955	10.000	ppbV	-0.03
Standard Area = 63917			Recovery =		87.54%	

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	11.527	117	674	0.061 ppbV	96
44) trichloroethene	0.000		0	N.D. d	
57) tetrachloroethene	15.908	166	711	0.065 ppbV	96

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

Sub List : 7-NY-SIM - .\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\

Data File : r47413_Ev2.D

Acq On : 21 Jan 2020 5:33 PM

Operator : AIRPIANO4:EW

Sample : L2002033-01,3,250,250

Misc : WG1332352,ICAL16437

ALS Vial : 0 Sample Multiplier: 1

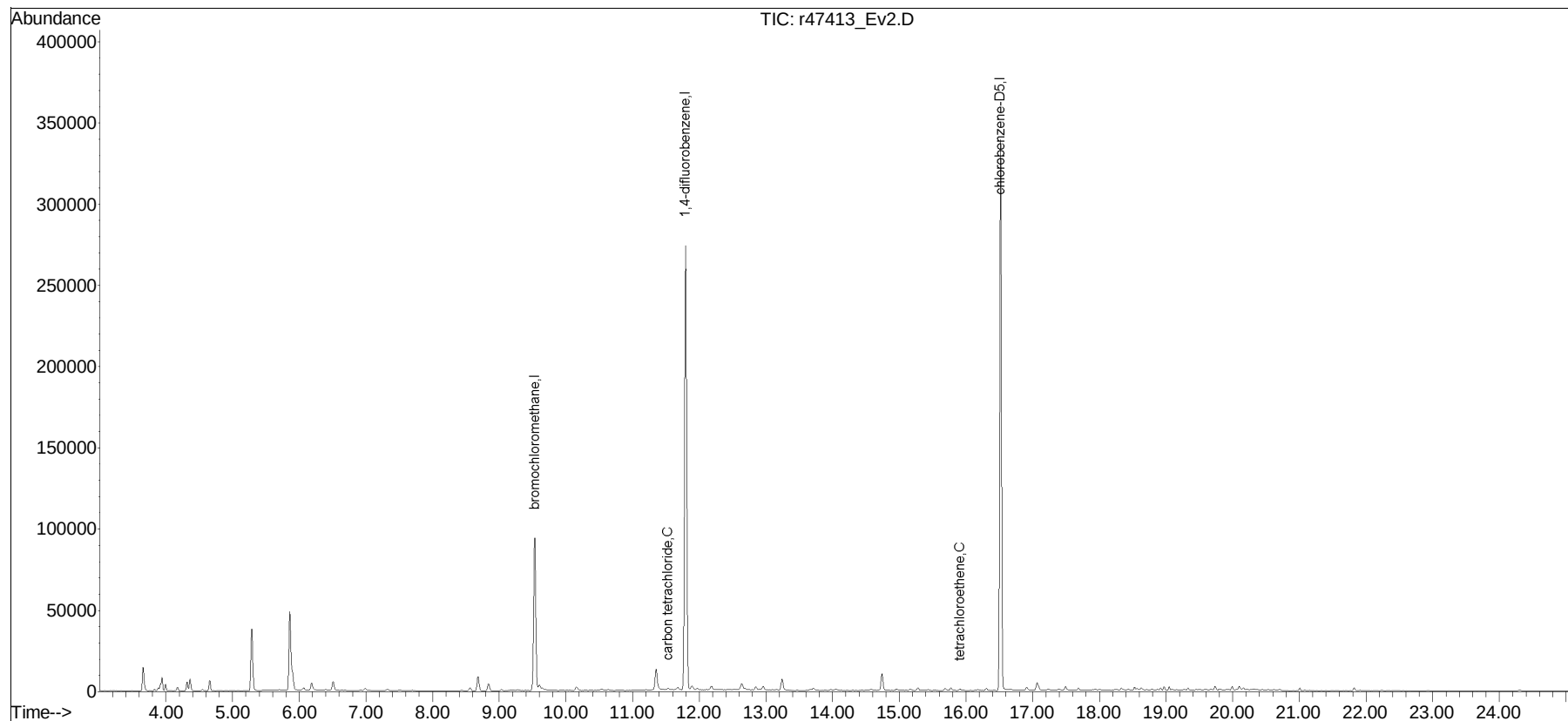
Quant Time: Jan 22 09:28:08 2020

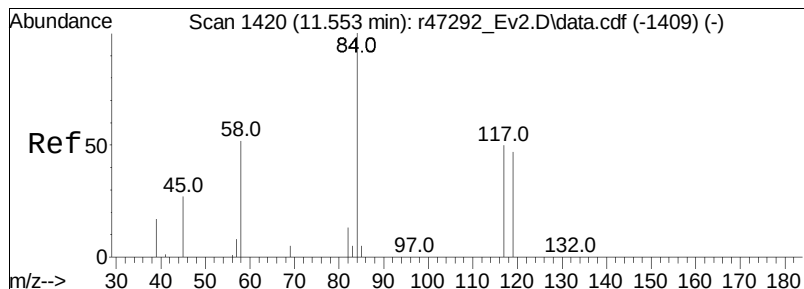
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M

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

QLast Update : Thu Jan 16 10:30:41 2020

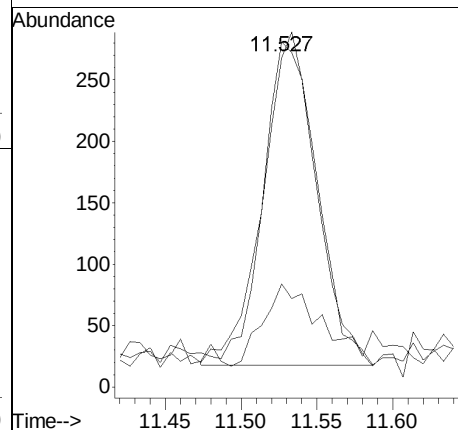
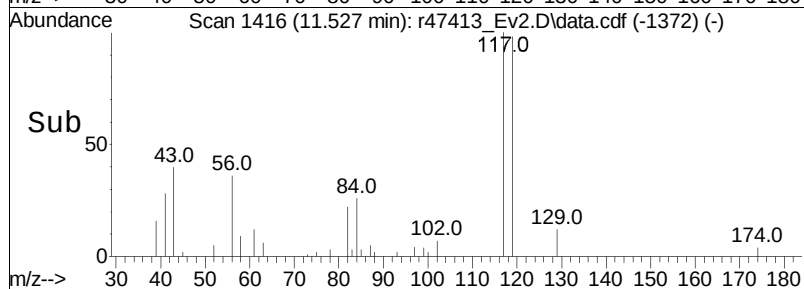
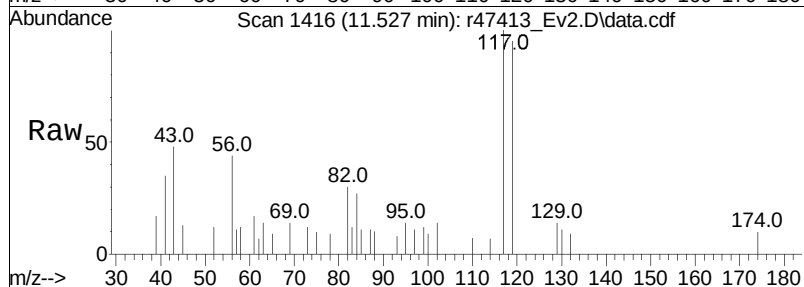
Response via : Initial Calibration

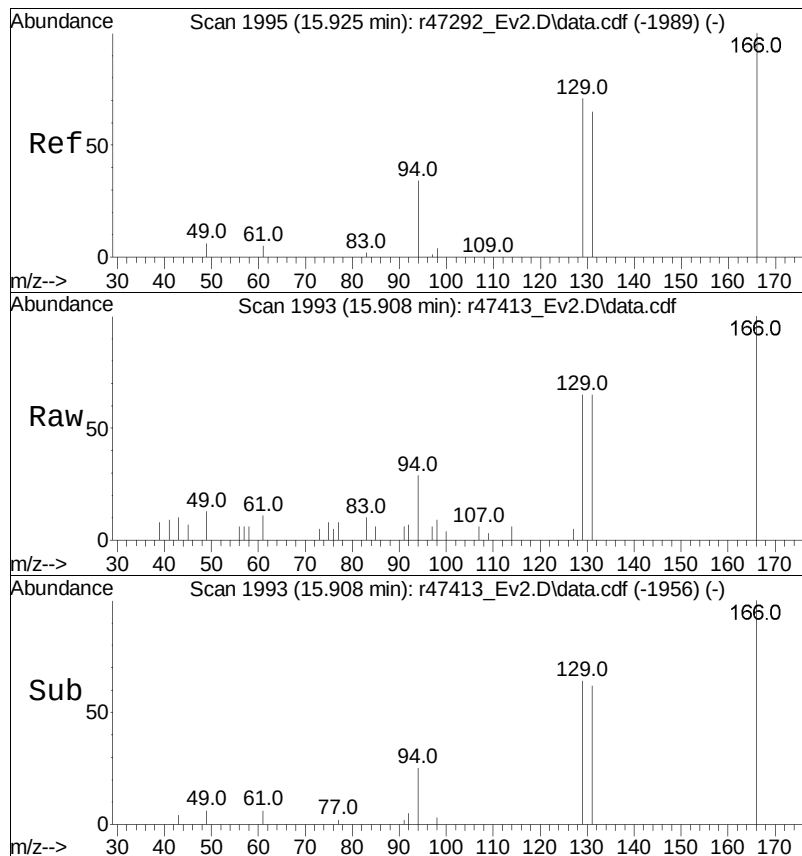




#38
 carbon tetrachloride
 Concen: 0.06 ppbV
 RT: 11.527 min Scan# 1416
 Delta R.T. -0.033 min
 Lab File: r47413_Ev2.D
 Acq: 21 Jan 2020 5:33 PM

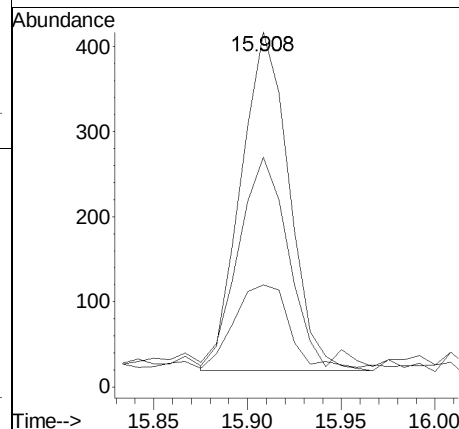
Tgt Ion	Ratio	Resp	Lower	Upper
117	100	674		
119	95.4	74.6	112.0	
82	29.9	20.5	30.7	





#57
 tetrachloroethene
 Concen: 0.06 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47413_Ev2.D
 Acq: 21 Jan 2020 5:33 PM

Tgt Ion:	166	Resp:	711
Ion Ratio	Lower	Upper	
166	100		
131	64.7	52.3	78.5
94	28.8	27.2	40.8



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47413_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:5: 3 Instrument :
Sample : L2002033-01,3,250,250 Quant Date : 1/22/2020 5:46 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47419_Ev2.D
 Acq On : 21 Jan 2020 9:30 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-02,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:28:45 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.533	49	114617	10.000	ppbV	-0.03
Standard Area = 122510			Recovery =		93.56%	
33) 1,4-difluorobenzene	11.793	114	338030	10.000	ppbV	-0.03
Standard Area = 417004			Recovery =		81.06%	
51) chlorobenzene-D5	16.517	54	62629	10.000	ppbV	-0.03
Standard Area = 63917			Recovery =		97.98%	

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	11.527	117	701M4	0.067	ppbV
44) trichloroethene	12.580	130	152M4	0.017	ppbV
57) tetrachloroethene	15.908	166	574	0.047	ppbV

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

Sub List : 7-NY-SIM - .\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\

Data File : r47419_Ev2.D

Acq On : 21 Jan 2020 9:30 PM

Operator : AIRPIANO4:EW

Sample : L2002033-02,3,250,250

Misc : WG1332352,ICAL16437

ALS Vial : 0 Sample Multiplier: 1

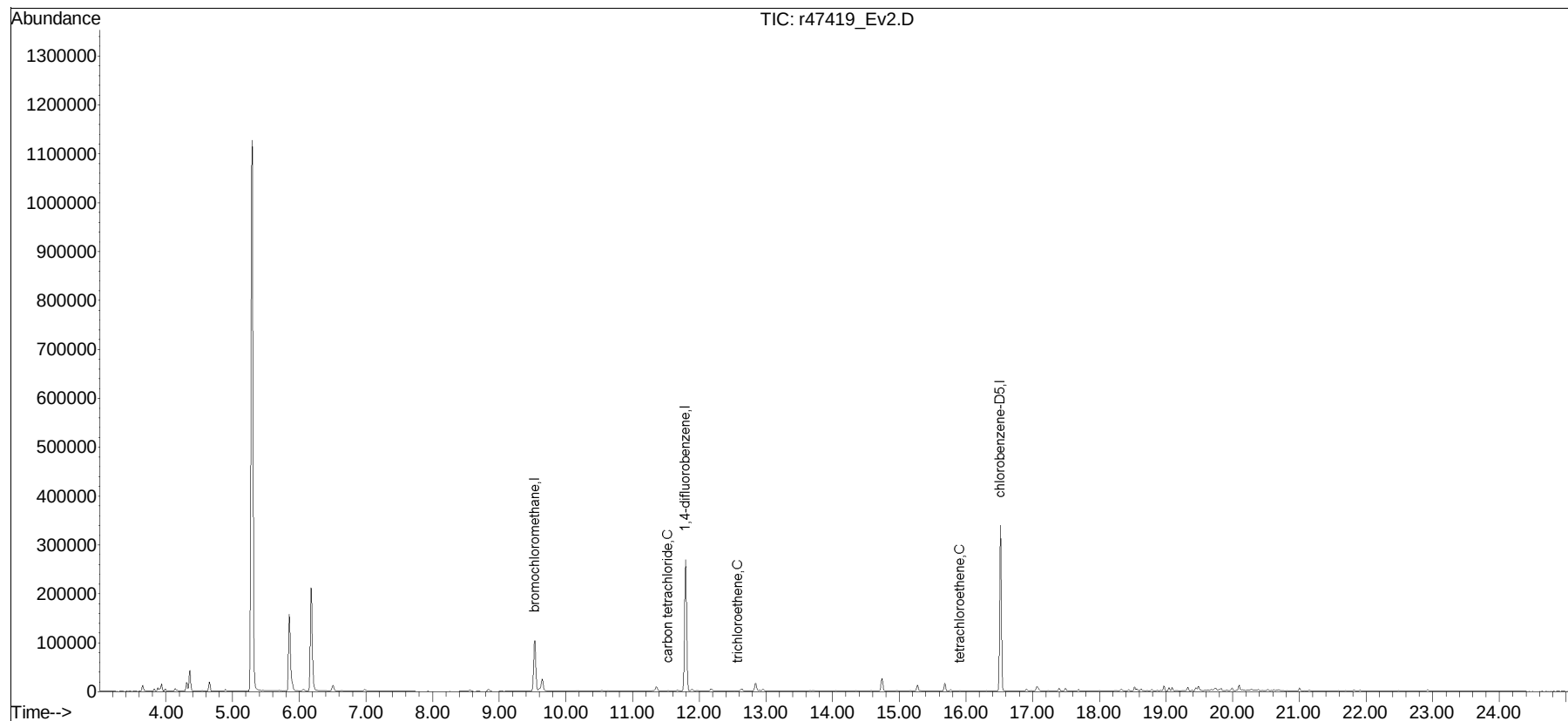
Quant Time: Jan 22 09:28:45 2020

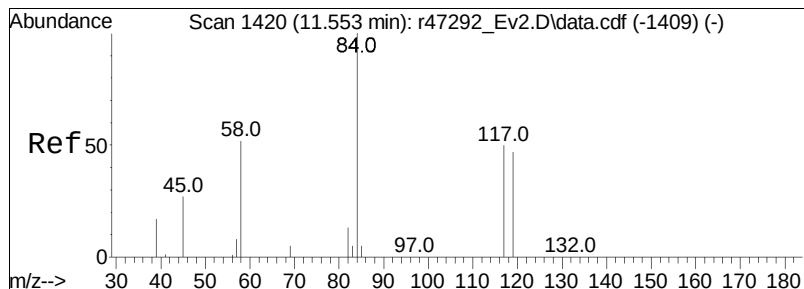
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M

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

QLast Update : Thu Jan 16 10:30:42 2020

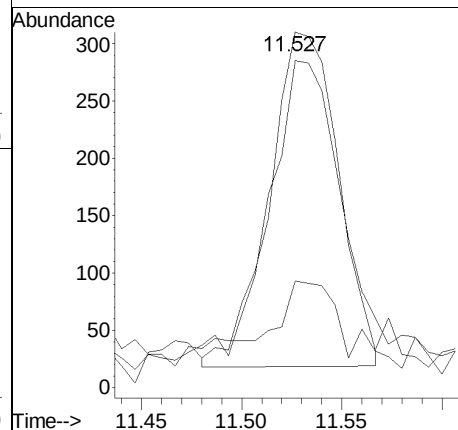
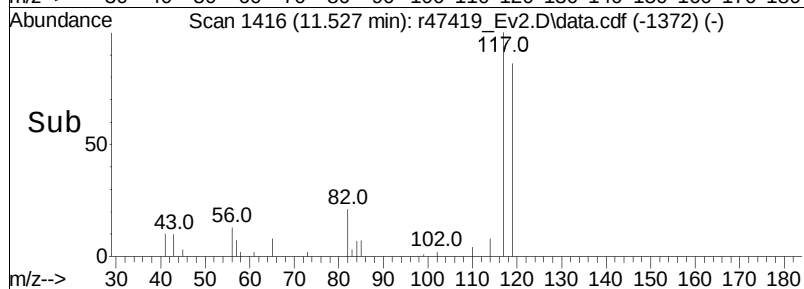
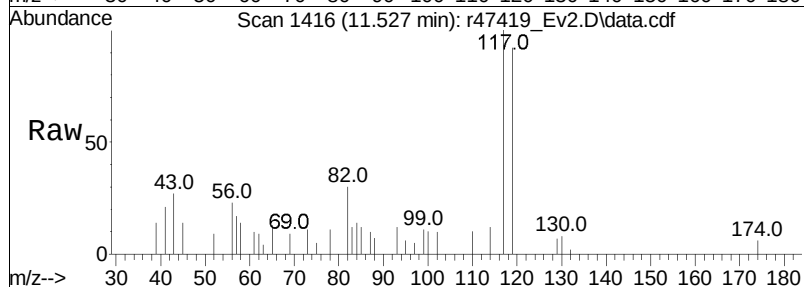
Response via : Initial Calibration

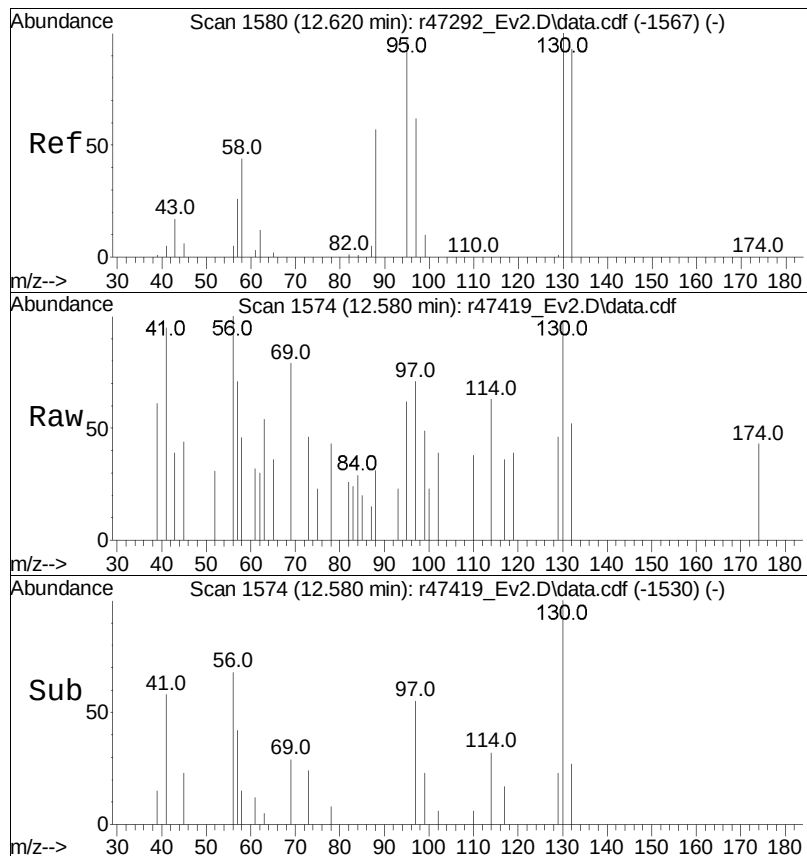




#38
 carbon tetrachloride
 Concen: 0.07 ppbV m
 RT: 11.527 min Scan# 1416
 Delta R.T. -0.033 min
 Lab File: r47419_Ev2.D
 Acq: 21 Jan 2020 9:30 PM

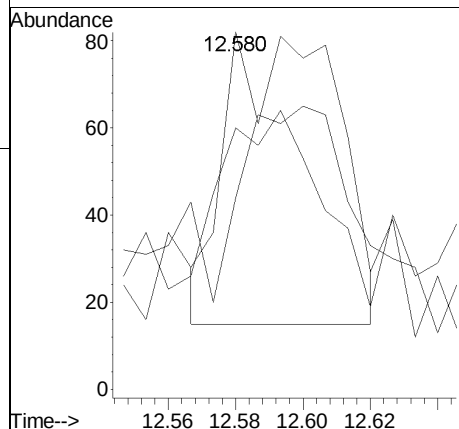
Tgt Ion:	117	Resp:	701
Ion Ratio	Lower	Upper	
117	100		
119	91.9	74.6	112.0
82	30.0	20.5	30.7

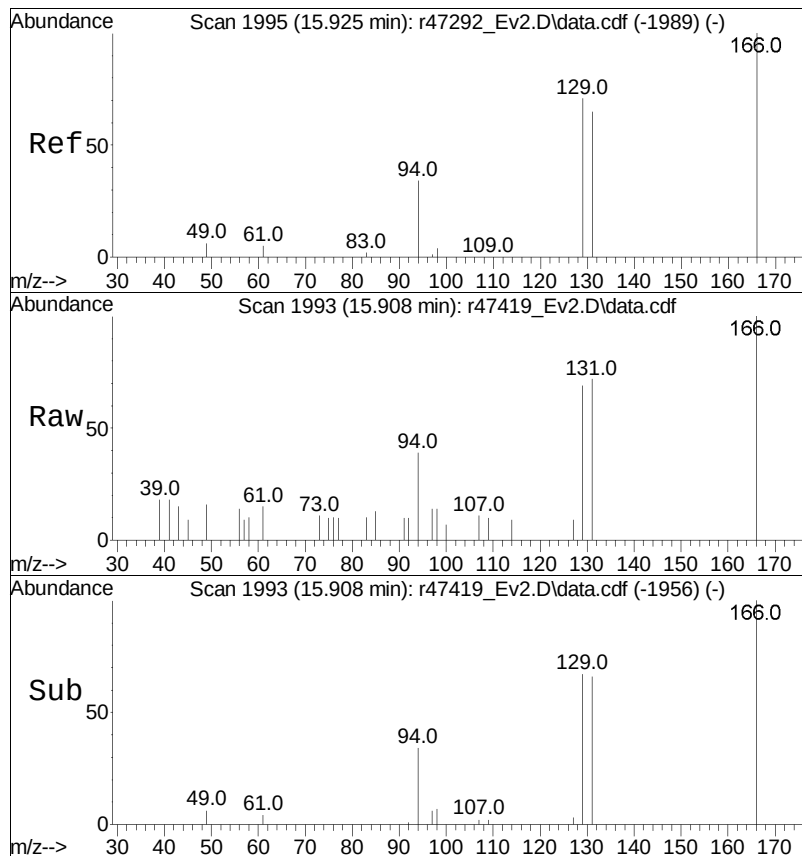




#44
 trichloroethene
 Concen: 0.02 ppbV m
 RT: 12.580 min Scan# 1574
 Delta R.T. -0.040 min
 Lab File: r47419_Ev2.D
 Acq: 21 Jan 2020 9:30 PM

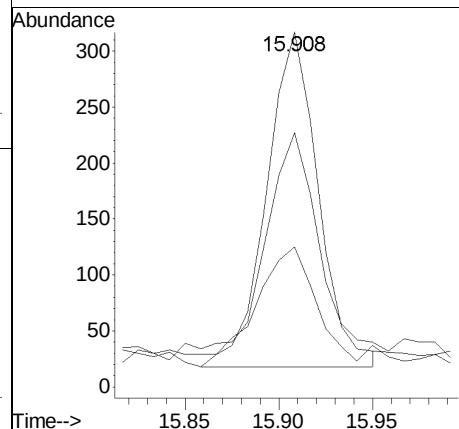
Tgt Ion	Ratio	Lower	Upper
130	100		
132	53.7	74.3	111.5#
97	73.2	49.7	74.5





#57
 tetrachloroethene
 Concen: 0.05 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47419_Ev2.D
 Acq: 21 Jan 2020 9:30 PM

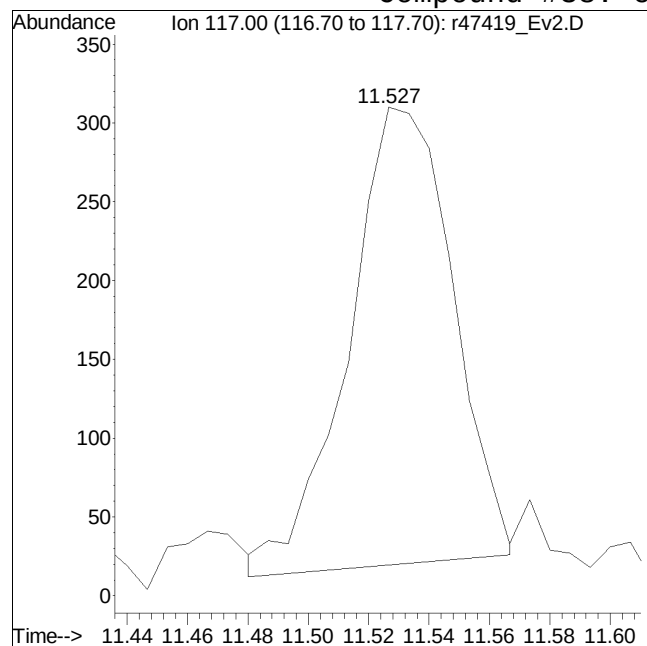
Tgt Ion:	166	Resp:	574
Ion Ratio	Lower	Upper	
166	100		
131	71.6	52.3	78.5
94	39.4	27.2	40.8



Manual Integration Report

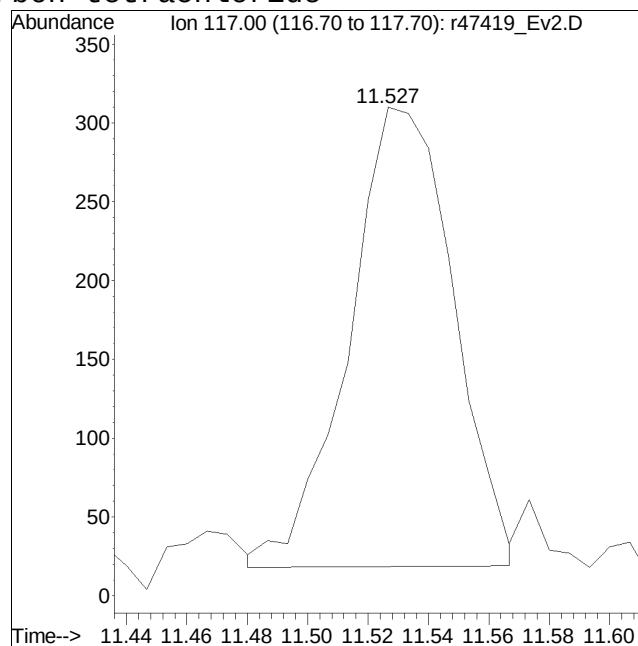
Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47419_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:9: 0 Instrument :
Sample : L2002033-02,3,250,250 Quant Date : 1/22/2020 5:46 am

Compound #38: carbon tetrachloride



Original Peak Response = 698

M4 = Poor automated baseline construction.

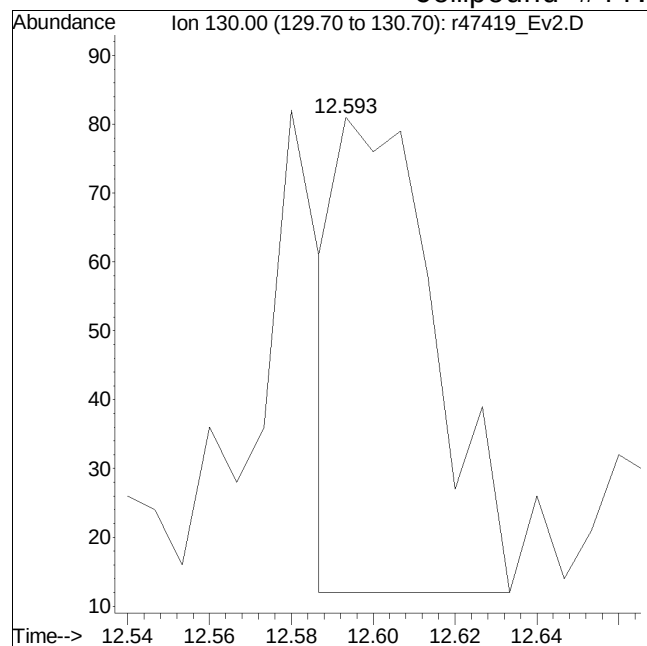


Manual Peak Response = 701 M4

Manual Integration Report

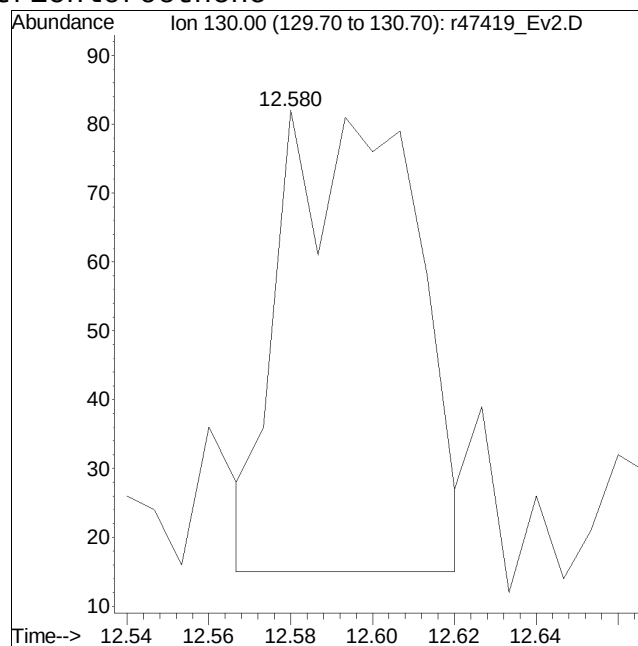
Data Path : O:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47419_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:9: 0 Instrument :
Sample : L2002033-02,3,250,250 Quant Date : 1/22/2020 5:46 am

Compound #44: trichloroethene



Original Peak Response = 115

M4 = Poor automated baseline construction.



Manual Peak Response = 152 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47421_Ev2.D
 Acq On : 21 Jan 2020 10:48 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-03,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 05:46:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : 7-NY-SIM - .

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

Internal Standards						
1) bromochloromethane	9.533	49	124330	10.000	ppbV	-0.03
Standard Area = 122510			Recovery = 101.49%			
33) 1,4-difluorobenzene	11.793	114	342838	10.000	ppbV	-0.03
Standard Area = 417004			Recovery = 82.21%			
51) chlorobenzene-D5	16.517	54	64549	10.000	ppbV	-0.03
Standard Area = 63917			Recovery = 100.99%			

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	11.533	117	810	0.077	ppbV #	94
44) trichloroethene	12.593	130	133	0.014	ppbV #	82
57) tetrachloroethene	15.908	166	701	0.055	ppbV	96

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

Sub List : 7-NY-SIM - .\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\

Data File : r47421_Ev2.D

Acq On : 21 Jan 2020 10:48 PM

Operator : AIRPIANO4:EW

Sample : L2002033-03,3,250,250

Misc : WG1332352,ICAL16437

ALS Vial : 0 Sample Multiplier: 1

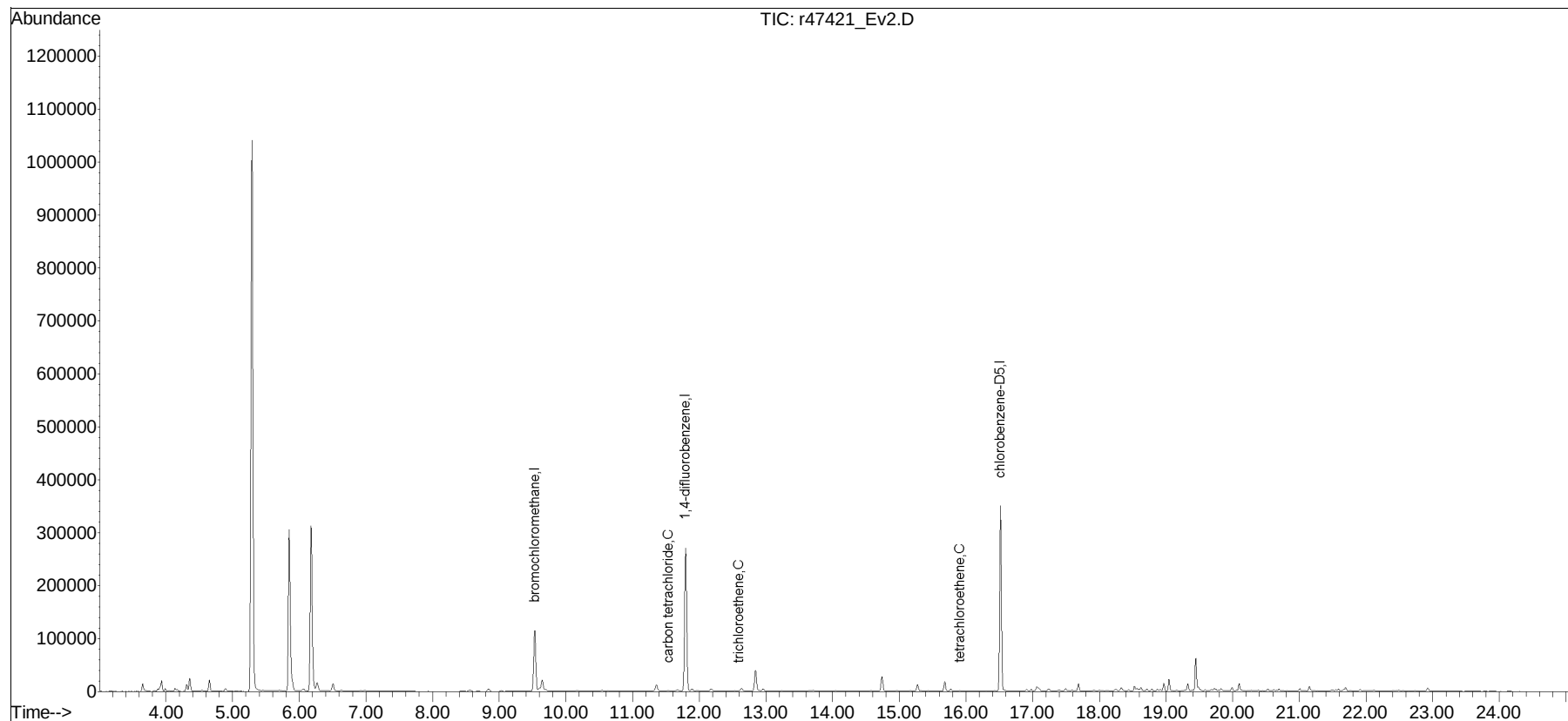
Quant Time: Jan 22 05:46:39 2020

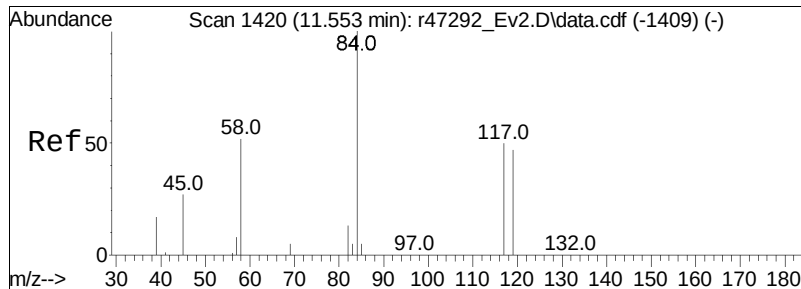
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M

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

QLast Update : Thu Jan 16 10:30:42 2020

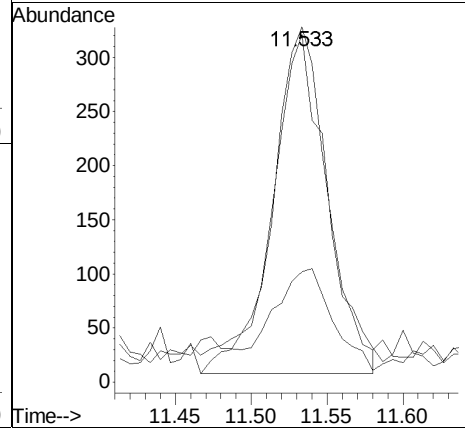
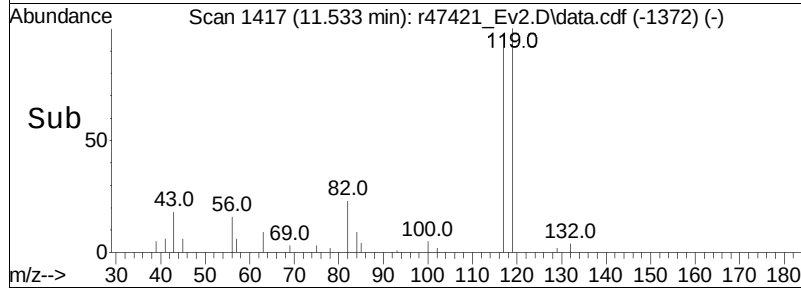
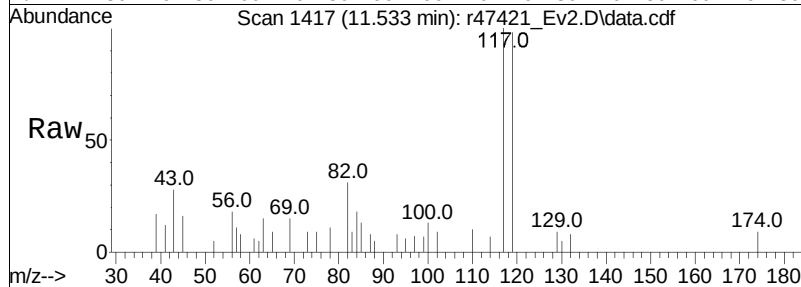
Response via : Initial Calibration

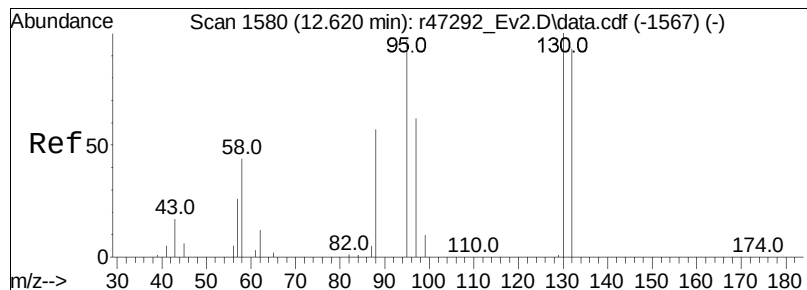




#38
 carbon tetrachloride
 Concen: 0.08 ppbV
 RT: 11.533 min Scan# 1417
 Delta R.T. -0.027 min
 Lab File: r47421_Ev2.D
 Acq: 21 Jan 2020 10:48 PM

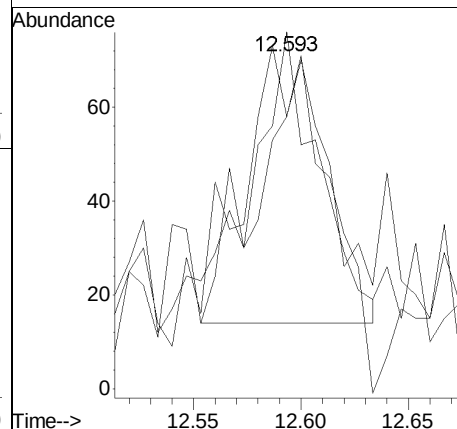
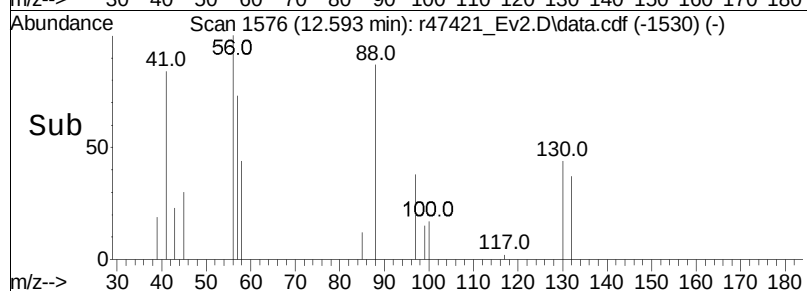
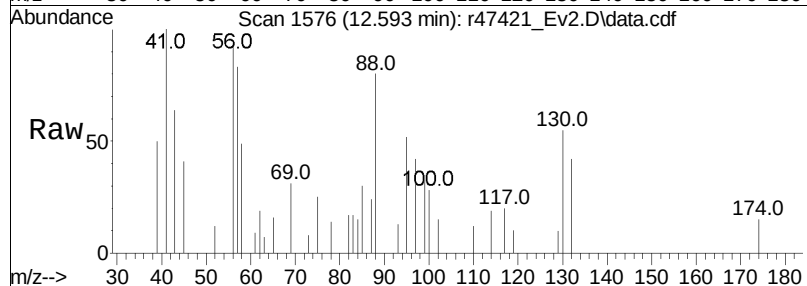
Tgt Ion:117 Resp: 810
 Ion Ratio Lower Upper
 117 100
 119 97.9 74.6 112.0
 82 31.1 20.5 30.7#

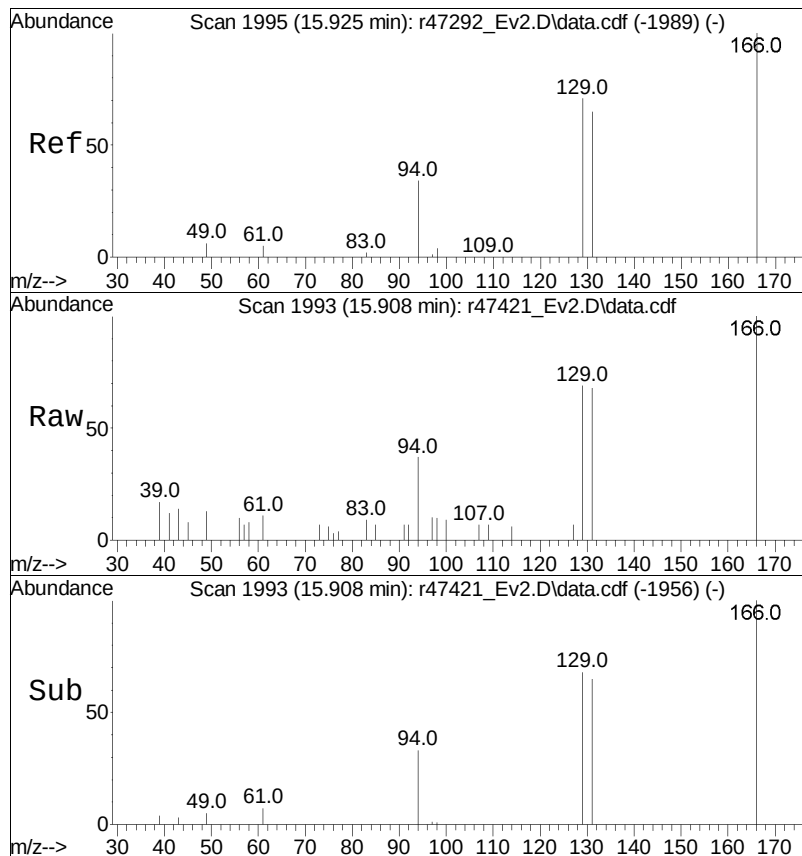




#44
trichloroethene
Concen: 0.01 ppbV
RT: 12.593 min Scan# 1576
Delta R.T. -0.027 min
Lab File: r47421_Ev2.D
Acq: 21 Jan 2020 10:48 PM

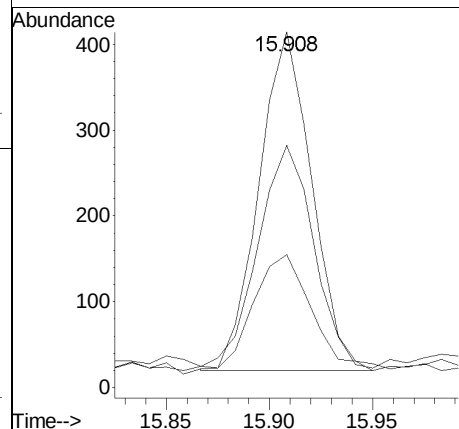
Tgt Ion	Ratio	Lower	Upper
130	100		
132	76.3	74.3	111.5
97	76.3	49.7	74.5





#57
 tetrachloroethene
 Concen: 0.06 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47421_Ev2.D
 Acq: 21 Jan 2020 10:48 PM

Tgt Ion:	166	Resp:	701
Ion Ratio	Lower	Upper	
166	100		
131	68.1	52.3	78.5
94	37.4	27.2	40.8



Manual Integration Report

Data Path	: 0:\Forensics\Data\AirpianoQ	Method	: TSIM4_200115.M
Data File	: r47421_Ev2.D	Operator	: AIRPIAN04:EW
Date Inj'd	: 1/21/2020 0:0: 8	Instrument	:
Sample	: L2002033-03,3,250,250	Quant Date	: 1/22/2020 5:46 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47422_Ev2.D
 Acq On : 21 Jan 2020 11:28 PM
 Operator : AIRPIAN04:EW
 Sample : L2002033-05,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:29:56 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : 7-NY-SIM - .

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

Internal Standards						
1) bromochloromethane	9.533	49	129531	10.000	ppbV	-0.03
Standard Area = 122510			Recovery = 105.73%			
33) 1,4-difluorobenzene	11.793	114	344771	10.000	ppbV	-0.03
Standard Area = 417004			Recovery = 82.68%			
51) chlorobenzene-D5	16.517	54	64737	10.000	ppbV	-0.03
Standard Area = 63917			Recovery = 101.28%			

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	11.533	117	738	0.069	ppbV 97
44) trichloroethene	12.587		0	N.D.	
57) tetrachloroethene	15.908	166	801	0.063	ppbV 98

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

Sub List : 7-NY-SIM - .\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\

Data File : r47422_Ev2.D

Acq On : 21 Jan 2020 11:28 PM

Operator : AIRPIANO4:EW

Sample : L2002033-05,3,250,250

Misc : WG1332352,ICAL16437

ALS Vial : 0 Sample Multiplier: 1

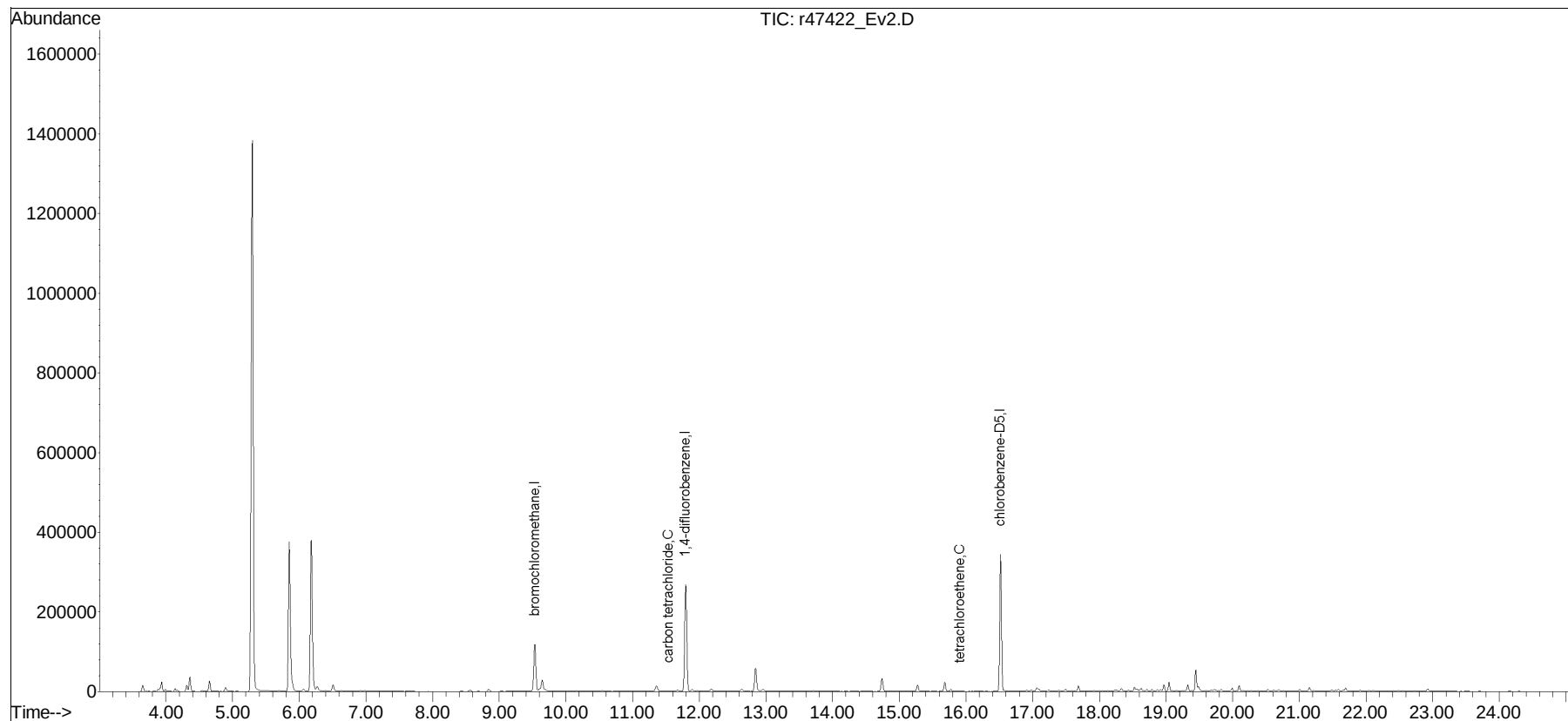
Quant Time: Jan 22 09:29:56 2020

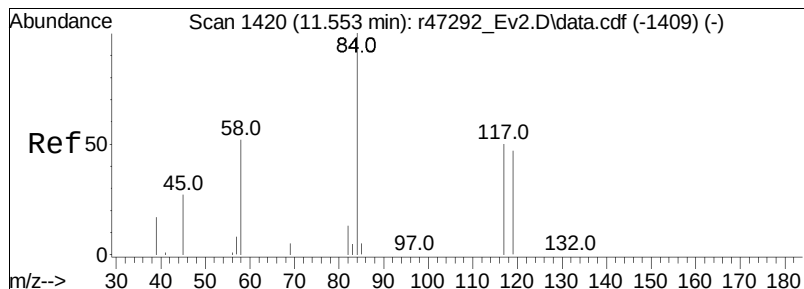
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M

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

QLast Update : Thu Jan 16 10:30:42 2020

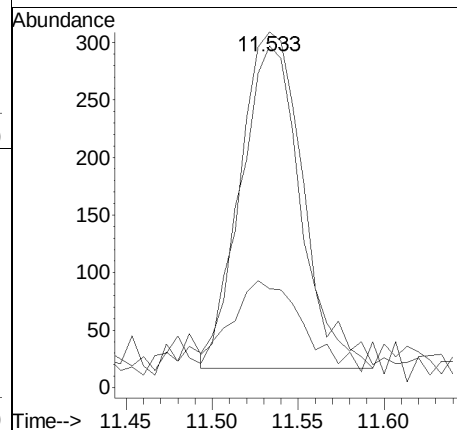
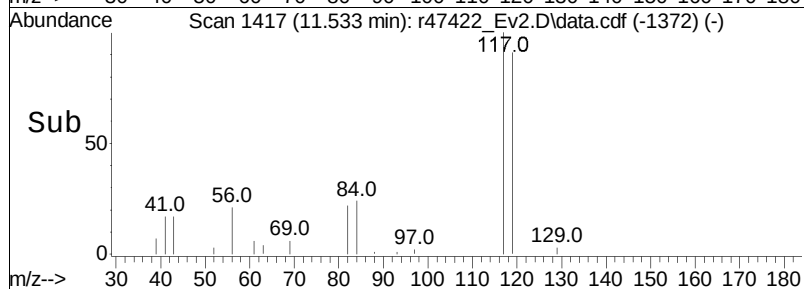
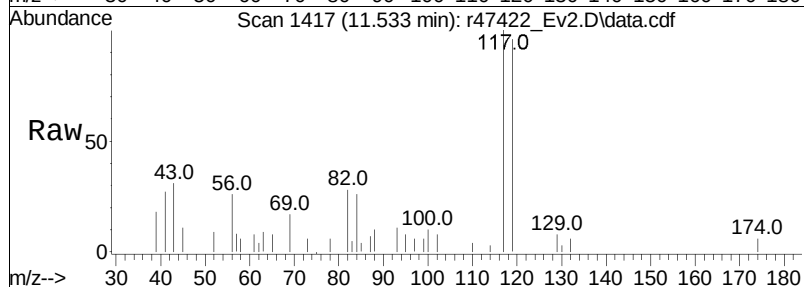
Response via : Initial Calibration

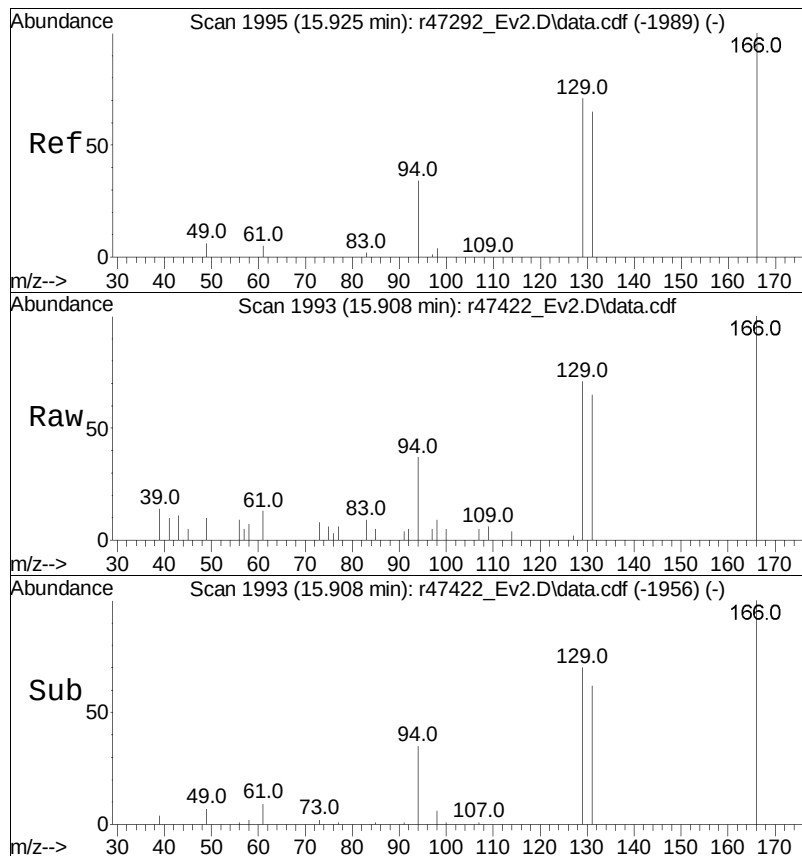




#38
 carbon tetrachloride
 Concen: 0.07 ppbV
 RT: 11.533 min Scan# 1417
 Delta R.T. -0.027 min
 Lab File: r47422_Ev2.D
 Acq: 21 Jan 2020 11:28 PM

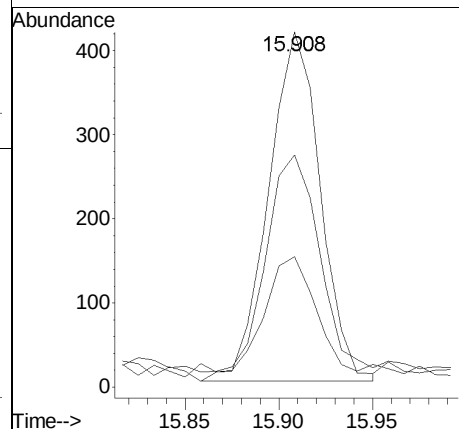
Tgt Ion:	117	Resp:	738
Ion Ratio	Lower	Upper	
117	100		
119	96.1	74.6	112.0
82	27.8	20.5	30.7





#57
 tetrachloroethene
 Concen: 0.06 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47422_Ev2.D
 Acq: 21 Jan 2020 11:28 PM

Tgt Ion:	166	Resp:	801
Ion Ratio	Lower	Upper	
166	100		
131	65.4	52.3	78.5
94	36.7	27.2	40.8



Manual Integration Report

Data Path	: 0:\Forensics\Data\AirpianoQ	Method	: TSIM4_200115.M
Data File	: r47422_Ev2.D	Operator	: AIRPIAN04:EW
Date Inj'd	: 1/21/2020 0:1: 8	Instrument	:
Sample	: L2002033-05,3,250,250	Quant Date	: 1/22/2020 5:46 am

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Calibration dates : 01/15/20 14:16 01/15/20 20:16

Lab Number : L2002033
 Project Number :
 Ical Ref : ICAL16437

Calibration Files

0.02=r47286_Ev2.D 0.05=r47287_Ev2.D 0.1 =r47288_Ev2.D 0.2 =r47289_Ev2.D 0.5 =r47290_Ev2.D
 1.0 =r47291_Ev2.D 5.0 =r47292_Ev2.D 10.0=r47293_Ev2.D 20.0=r47294_Ev2.D 50.0=r47295_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				0.702	0.645	0.651	0.589	0.610	0.593	0.508	0.6141	9.97
3) dichlorodifluoromethane				1.045	0.963	0.946	0.860	0.797	0.767	0.605	0.8547	17.20
4) C chloromethane				0.542	0.509	0.494	0.461	0.441	0.441	0.379	0.4665	11.46
5) Freon-114		1.357	1.300	1.391	1.282	1.266	1.154	1.084	1.033	0.821	1.1878	15.40
6) C vinyl chloride	0.937	0.690	0.665	0.674	0.625	0.607	0.558	0.536	0.524	0.434	0.6250	21.67
7) C 1,3-butadiene	0.571	0.573	0.516	0.538	0.515	0.510	0.481	0.463	0.453	0.384	0.5004	11.49
8) C bromomethane	0.635	0.520	0.483	0.525	0.498	0.492	0.446	0.424	0.417	0.347	0.4787	16.20
9) C chloroethane			0.388	0.380	0.348	0.342	0.309	0.297	0.294	0.248	0.3258	14.57
10) ethanol					0.443	0.434	0.418	0.402	0.374	0.303	0.3955	13.00
11) C vinyl bromide				0.565	0.508	0.517	0.482	0.462	0.494	0.377	0.4864	11.93
12) C acrolein		0.224	0.293	0.306	0.251	0.267	0.250	0.242	0.274	0.206	0.2571	12.42
13) acetone				1.141	1.025	1.002	1.015	0.936	1.016	0.593	0.9611	18.01
14) trichlorofluoromethane		0.931	0.915	1.006	0.932	0.928	0.842	0.774	0.922	0.581	0.8702	14.52
15) isopropyl alcohol				1.399	1.215	1.181	1.183	1.128	1.165	0.814	1.1548	15.05
16) C acrylonitrile				0.507	0.495	0.492	0.462	0.444	0.487	0.377	0.4663	9.59
17) C 1,1-dichloroethene	0.950	0.827	0.849	0.891	0.817	0.809	0.743	0.703	0.856	0.718	0.8161	9.52
18) tertiary butyl alcohol					1.111	1.101	1.050	1.004	1.162	0.997	1.0707	6.07
19) C methylene chloride					0.727	0.705	0.637	0.611	0.668	0.590	0.6565	8.13
20) C 3-chloropropene					1.022	0.997	0.943	0.899	1.080	0.939	0.9799	6.72
21) C carbon disulfide				1.962	1.811	1.794	1.683	1.611	1.720	1.512	1.7274	8.48
22) Freon 113	1.248	1.182	1.046	1.125	1.035	1.019	0.946	0.896	0.968	0.837	1.0302	12.39
23) trans-1,2-dichloroethene	1.104	0.931	0.886	0.967	0.895	0.886	0.835	0.796	0.928	0.793	0.9020	10.10
24) C 1,1-dichloroethane	1.393	1.112	1.110	1.219	1.117	1.102	1.014	0.968	1.121	0.972	1.1128	11.24
25) C MTBE	2.041	1.691	1.619	1.785	1.654	1.669	1.576	1.521	1.638	1.440	1.6634	9.80
26) C vinyl acetate					1.557	1.567	1.516	1.491	1.749	1.564	1.5737	5.78
27) C 2-butanone				1.675	1.534	1.526	1.423	1.376	1.605	1.422	1.5088	7.17
28) cis-1,2-dichloroethene	0.724	0.837	0.766	0.825	0.775	0.768	0.707	0.679	0.819	0.701	0.7602	7.33
29) Ethyl Acetate				0.258	0.231	0.239	0.220	0.215	0.244	0.213	0.2315	7.11
30) C chloroform	1.491	1.124	1.061	1.114	1.007	0.992	0.915	0.871	0.995	0.837	1.0408	17.76
31) Tetrahydrofuran				1.119	1.039	1.058	1.052	1.058	1.041	0.925	1.0416	5.57
32) C 1,2-dichloroethane	0.942	0.842	0.785	0.859	0.784	0.780	0.725	0.698	0.651	0.532	0.7598	15.20
33) I 1,4-difluorobenzene	-----ISTD-----											
34) C hexane				0.407	0.380	0.369	0.347	0.334	0.417	0.357	0.3731	8.22
35) s 1,2-dichloroethane-D4	0.211	0.216	0.213	0.212	0.211	0.212	0.208	0.206	0.197	0.184	0.2069	4.68
36) C 1,1,1-trichloroethane	0.464	0.334	0.342	0.353	0.327	0.320	0.301	0.296	0.318	0.289	0.3343	14.95



Initial Calibration Summary

Form 6

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Calibration dates : 01/15/20 14:16 01/15/20 20:16

Lab Number : L2002033
 Project Number :
 Ical Ref : ICAL16437

Calibration Files

0.02=r47286_Ev2.D 0.05=r47287_Ev2.D 0.1 =r47288_Ev2.D 0.2 =r47289_Ev2.D 0.5 =r47290_Ev2.D
 1.0 =r47291_Ev2.D 5.0 =r47292_Ev2.D 10.0=r47293_Ev2.D 20.0=r47294_Ev2.D 50.0=r47295_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	0.762	0.687	0.757	0.704	0.697	0.666	0.651	0.703	0.630	0.6952	6.32	
38)	C carbon tetrachloride	0.376	0.368	0.297	0.325	0.311	0.308	0.290	0.282	0.292	0.233	0.3082	13.42
39)	cyclohexane	0.474	0.446	0.440	0.432	0.421	0.448	0.396	0.4368	5.54			
40)	Dibromomethane	0.357	0.246	0.235	0.217	0.209	0.196	0.193	0.203	0.174	0.2256	23.88	
41)	C 1,2-dichloropropane	0.381	0.281	0.279	0.293	0.273	0.270	0.257	0.253	0.280	0.249	0.2817	13.40
42)	bromodichloromethane	0.487	0.514	0.414	0.458	0.428	0.420	0.403	0.391	0.412	0.354	0.4280	10.96
43)	C 1,4-dioxane	0.169	0.182	0.173	0.171	0.171	0.172	0.183	0.167	0.1736	3.37		
44)	C trichloroethene	0.324	0.274	0.250	0.285	0.263	0.267	0.258	0.254	0.284	0.255	0.2715	8.16
45)	C 2,2,4-trimethylpentane	1.349	1.321	1.479	1.394	1.402	1.363	1.324	1.359	1.170	1.3513	6.16	
46)	heptane	0.595	0.567	0.578	0.582	0.577	0.620	0.541	0.5800	4.18			
47)	C cis-1,3-dichloropropene	0.418	0.297	0.291	0.326	0.313	0.318	0.312	0.313	0.350	0.320	0.3259	11.05
48)	C 4-methyl-2-pentanone	0.635	0.648	0.664	0.662	0.709	0.626	0.6576	4.46				
49)	trans-1,3-dichloropropene	0.453	0.313	0.315	0.360	0.336	0.336	0.327	0.328	0.365	0.333	0.3466	11.84
50)	C 1,1,2-trichloroethane	0.268	0.255	0.246	0.271	0.251	0.249	0.237	0.235	0.264	0.240	0.2517	5.04
51)	I chlorobenzene-D5	-----ISTD-----											
52)	C toluene	6.268	5.260	5.559	5.022	4.967	4.704	4.656	5.134	4.644	5.1350	10.16	
53)	s toluene-D8	4.075	4.051	4.046	4.043	4.064	4.124	4.112	4.179	4.334	4.551	4.1580	3.95
54)	2-hexanone	3.387	3.372	3.524	3.656	3.586	3.465	2.688	3.3827	9.54			
55)	dibromochloromethane	2.430	2.084	1.843	2.098	1.988	2.007	2.033	2.038	2.279	2.021	2.0821	7.84
56)	C 1,2-dibromoethane	2.335	2.071	2.042	2.295	2.124	2.124	2.040	2.006	2.285	2.129	2.1452	5.50
57)	C tetrachloroethene	2.121	2.094	1.776	2.061	1.942	1.966	1.866	1.878	2.098	1.879	1.9682	6.07
58)	1,1,1,2-tetrachloroethane	2.058	1.561	1.420	1.593	1.480	1.476	1.492	1.502	1.671	1.453	1.5705	11.86
59)	C chlorobenzene	4.353	3.779	3.657	4.075	3.792	3.766	3.592	3.554	3.974	3.584	3.8126	6.67
60)	C ethylbenzene	7.020	5.825	5.596	6.174	5.920	5.969	5.938	5.905	6.596	5.816	6.0760	6.97
61)	C m+p-xylene	7.610	5.492	4.932	5.519	5.203	5.242	5.054	4.959	5.370	4.486	5.3866	15.58
62)	C bromoform	1.733	1.829	1.594	1.880	1.800	1.839	1.984	2.046	2.305	1.988	1.8997	10.24
63)	C styrene	3.554	3.059	3.137	3.650	3.609	3.698	3.794	3.823	4.405	4.132	3.6860	10.94
64)	C 1,1,2,2-tetrachloroethane	3.443	3.222	3.223	3.814	3.595	3.626	3.434	3.368	3.718	3.189	3.4631	6.33
65)	C o-xylene	6.767	5.306	4.690	5.335	5.112	5.204	5.097	4.993	5.362	4.329	5.2193	12.09
66)	1,2,3-Trichloropropane	2.952	2.259	2.294	2.821	2.668	2.674	2.637	2.614	2.836	2.655	2.6412	8.34
67)	s bromofluorobenzene	2.737	2.800	2.685	2.710	2.840	2.928	2.871	2.991	3.107	3.349	2.9018	7.05
68)	C isopropylbenzene	6.638	6.353	6.435	6.414	6.356	6.951	6.182	6.4755	3.85			
69)	Bromobenzene	3.997	3.164	3.065	3.551	3.485	3.499	3.486	3.447	3.736	3.421	3.4850	7.50
70)	4-ethyl toluene	5.208	5.067	5.629	6.958	6.939	7.188	7.311	7.293	7.898	7.005	6.6496	14.73
71)	1,3,5-trimethylbenzene	5.160	4.754	4.760	5.886	5.897	6.030	5.868	5.793	6.487	5.639	5.6275	10.02
72)	tert-butylbenzene	6.181	6.137	6.442	6.497	6.431	6.653	5.165	6.2152	7.99			

Initial Calibration Summary

Form 6

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Calibration dates : 01/15/20 14:16 01/15/20 20:16

Lab Number : L2002033
 Project Number :
 Ical Ref : ICAL16437

Calibration Files

0.02=r47286_Ev2.D 0.05=r47287_Ev2.D 0.1 =r47288_Ev2.D 0.2 =r47289_Ev2.D 0.5 =r47290_Ev2.D
 1.0 =r47291_Ev2.D 5.0 =r47292_Ev2.D 10.0=r47293_Ev2.D 20.0=r47294_Ev2.D 50.0=r47295_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	5.049	4.595	4.564	5.599	5.640	5.893	5.752	5.699	6.214	4.834	5.3839	10.73
74) C	Benzyl Chloride				3.045	3.205	3.468	4.089	3.950	5.414	4.646	3.9737	21.18
75)	1,3-dichlorobenzene	2.723	2.916	2.523	3.083	2.912	2.911	2.890	2.960	3.844	3.393	3.0155	12.17
76) C	1,4-dichlorobenzene	3.142	2.728	2.670	3.267	3.233	3.287	3.281	3.345	3.851	3.428	3.2232	10.44
77)	sec-butylbenzene				8.674	8.332	8.554	8.677	8.577	9.112	7.839	8.5377	4.54
78)	p-isopropyltoluene				7.385	7.311	7.669	8.032	7.903	8.003	6.176	7.4970	8.66
79)	1,2-dichlorobenzene	2.382	2.447	2.556	3.155	3.036	3.148	3.145	3.168	3.661	3.362	3.0060	13.79
80)	n-butylbenzene				5.886	5.971	6.399	7.009	6.967	7.260	6.160	6.5216	8.48
81) C	1,2,4-trichlorobenzene		1.297	1.197	1.552	1.747	2.026	2.382	2.565	2.785	2.749	2.0334	30.31#
82)	naphthalene		4.356	3.812	4.557	4.826	5.367	7.118	7.635	7.417	7.050	5.7932	25.90
83)	1,2,3-trichlorobenzene		1.625	1.564	2.004	2.105	2.281	2.935	3.111	2.916	2.808	2.3721	24.83
84) C	hexachlorobutadiene		2.263	2.240	2.779	2.762	2.805	2.812	2.787	2.820	2.333	2.6222	9.90

Response Factor Report

Method Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Method File : TSIM4_200115.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Jan 16 10:30:41 2020
 Response Via : Initial Calibration

Calibration Files

0.02=r47286_Ev2.D 0.05=r47287_Ev2.D 0.1 =r47288_Ev2.D 0.2 =r47289_Ev2.D 0.5 =r47290_Ev2.D
 1.0 =r47291_Ev2.D 5.0 =r47292_Ev2.D 10.0=r47293_Ev2.D 20.0=r47294_Ev2.D 50.0=r47295_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				0.702	0.645	0.651	0.589	0.610	0.593	0.508	0.6141	9.97
3)	dichlorodifluorome...				1.045	0.963	0.946	0.860	0.797	0.767	0.605	0.8547	17.20
4) C	chloromethane				0.542	0.509	0.494	0.461	0.441	0.441	0.379	0.4665	11.46
5)	Freon-114		1.357	1.300	1.391	1.282	1.266	1.154	1.084	1.033	0.821	1.1878	15.40
6) C	vinyl chloride	0.937	0.690	0.665	0.674	0.625	0.607	0.558	0.536	0.524	0.434	0.6250	21.67
7) C	1,3-butadiene	0.571	0.573	0.516	0.538	0.515	0.510	0.481	0.463	0.453	0.384	0.5004	11.49
8) C	bromomethane	0.635	0.520	0.483	0.525	0.498	0.492	0.446	0.424	0.417	0.347	0.4787	16.20
9) C	chloroethane			0.388	0.380	0.348	0.342	0.309	0.297	0.294	0.248	0.3258	14.57
10)	ethanol					0.443	0.434	0.418	0.402	0.374	0.303	0.3955	13.00
11) C	vinyl bromide				0.565	0.508	0.517	0.482	0.462	0.494	0.377	0.4864	11.93
12) C	acrolein		0.224	0.293	0.306	0.251	0.267	0.250	0.242	0.274	0.206	0.2571	12.42
13)	acetone				1.141	1.025	1.002	1.015	0.936	1.016	0.593	0.9611	18.01
14)	trichlorofluoromet...		0.931	0.915	1.006	0.932	0.928	0.842	0.774	0.922	0.581	0.8702	14.52
15)	isopropyl alcohol				1.399	1.215	1.181	1.183	1.128	1.165	0.814	1.1548	15.05
16) C	acrylonitrile				0.507	0.495	0.492	0.462	0.444	0.487	0.377	0.4663	9.59
17) C	1,1-dichloroethene	0.950	0.827	0.849	0.891	0.817	0.809	0.743	0.703	0.856	0.718	0.8161	9.52
18)	tertiary butyl alc...					1.111	1.101	1.050	1.004	1.162	0.997	1.0707	6.07
19) C	methylene chloride					0.727	0.705	0.637	0.611	0.668	0.590	0.6565	8.13
20) C	3-chloropropene					1.022	0.997	0.943	0.899	1.080	0.939	0.9799	6.72
21) C	carbon disulfide				1.962	1.811	1.794	1.683	1.611	1.720	1.512	1.7274	8.48
22)	Freon 113	1.248	1.182	1.046	1.125	1.035	1.019	0.946	0.896	0.968	0.837	1.0302	12.39
23)	trans-1,2-dichloro...	1.104	0.931	0.886	0.967	0.895	0.886	0.835	0.796	0.928	0.793	0.9020	10.10
24) C	1,1-dichloroethane	1.393	1.112	1.110	1.219	1.117	1.102	1.014	0.968	1.121	0.972	1.1128	11.24
25) C	MTBE	2.041	1.691	1.619	1.785	1.654	1.669	1.576	1.521	1.638	1.440	1.6634	9.80
26) C	vinyl acetate					1.557	1.567	1.516	1.491	1.749	1.564	1.5737	5.78
27) C	2-butanone				1.675	1.534	1.526	1.423	1.376	1.605	1.422	1.5088	7.17
28)	cis-1,2-dichloroet...	0.724	0.837	0.766	0.825	0.775	0.768	0.707	0.679	0.819	0.701	0.7602	7.33
29)	Ethyl Acetate				0.258	0.231	0.239	0.220	0.215	0.244	0.213	0.2315	7.11
30) C	chloroform	1.491	1.124	1.061	1.114	1.007	0.992	0.915	0.871	0.995	0.837	1.0408	17.76
31)	Tetrahydrofuran				1.119	1.039	1.058	1.052	1.058	1.041	0.925	1.0416	5.57

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Method File : TSIM4_200115.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Thu Jan 16 10:30:41 2020
Response Via : Initial Calibration

Calibration Files

0.02=r47286_Ev2.D 0.05=r47287_Ev2.D 0.1 =r47288_Ev2.D 0.2 =r47289_Ev2.D 0.5 =r47290_Ev2.D
1.0 =r47291_Ev2.D 5.0 =r47292_Ev2.D 10.0=r47293_Ev2.D 20.0=r47294_Ev2.D 50.0=r47295_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	0.942	0.842	0.785	0.859	0.784	0.780	0.725	0.698	0.651	0.532	0.7598	15.20
33) I	1,4-difluorobenzene	-----ISTD-----											
34) C	hexane				0.407	0.380	0.369	0.347	0.334	0.417	0.357	0.3731	8.22
35) s	1,2-dichloroethane-D4	0.211	0.216	0.213	0.212	0.211	0.212	0.208	0.206	0.197	0.184	0.2069	4.68
36) C	1,1,1-trichloroethane	0.464	0.334	0.342	0.353	0.327	0.320	0.301	0.296	0.318	0.289	0.3343	14.95
37) C	benzene		0.762	0.687	0.757	0.704	0.697	0.666	0.651	0.703	0.630	0.6952	6.32
38) C	carbon tetrachloride	0.376	0.368	0.297	0.325	0.311	0.308	0.290	0.282	0.292	0.233	0.3082	13.42
39)	cyclohexane				0.474	0.446	0.440	0.432	0.421	0.448	0.396	0.4368	5.54
40)	Dibromomethane		0.357	0.246	0.235	0.217	0.209	0.196	0.193	0.203	0.174	0.2256	23.88
41) C	1,2-dichloropropane	0.381	0.281	0.279	0.293	0.273	0.270	0.257	0.253	0.280	0.249	0.2817	13.40
42)	bromodichloromethane	0.487	0.514	0.414	0.458	0.428	0.420	0.403	0.391	0.412	0.354	0.4280	10.96
43) C	1,4-dioxane			0.169	0.182	0.173	0.171	0.171	0.172	0.183	0.167	0.1736	3.37
44) C	trichloroethene	0.324	0.274	0.250	0.285	0.263	0.267	0.258	0.254	0.284	0.255	0.2715	8.16
45) C	2,2,4-trimethylpen...		1.349	1.321	1.479	1.394	1.402	1.363	1.324	1.359	1.170	1.3513	6.16
46)	heptane				0.595	0.567	0.578	0.582	0.577	0.620	0.541	0.5800	4.18
47) C	cis-1,3-dichloropr...	0.418	0.297	0.291	0.326	0.313	0.318	0.312	0.313	0.350	0.320	0.3259	11.05
48) C	4-methyl-2-pentanone					0.635	0.648	0.664	0.662	0.709	0.626	0.6576	4.46
49)	trans-1,3-dichloro...	0.453	0.313	0.315	0.360	0.336	0.336	0.327	0.328	0.365	0.333	0.3466	11.84
50) C	1,1,2-trichloroethane	0.268	0.255	0.246	0.271	0.251	0.249	0.237	0.235	0.264	0.240	0.2517	5.04
51) I	chlorobenzene-D5	-----ISTD-----											
52) C	toluene		6.268	5.260	5.559	5.022	4.967	4.704	4.656	5.134	4.644	5.1350	10.16
53) s	toluene-D8	4.075	4.051	4.046	4.043	4.064	4.124	4.112	4.179	4.334	4.551	4.1580	3.95
54)	2-hexanone				3.387	3.372	3.524	3.656	3.586	3.465	2.688	3.3827	9.54
55)	dibromochloromethane	2.430	2.084	1.843	2.098	1.988	2.007	2.033	2.038	2.279	2.021	2.0821	7.84
56) C	1,2-dibromoethane	2.335	2.071	2.042	2.295	2.124	2.124	2.040	2.006	2.285	2.129	2.1452	5.50
57) C	tetrachloroethene	2.121	2.094	1.776	2.061	1.942	1.966	1.866	1.878	2.098	1.879	1.9682	6.07
58)	1,1,1,2-tetrachlor...	2.058	1.561	1.420	1.593	1.480	1.476	1.492	1.502	1.671	1.453	1.5705	11.86
59) C	chlorobenzene	4.353	3.779	3.657	4.075	3.792	3.766	3.592	3.554	3.974	3.584	3.8126	6.67
60) C	ethylbenzene	7.020	5.825	5.596	6.174	5.920	5.969	5.938	5.905	6.596	5.816	6.0760	6.97
61) C	m+p-xylene	7.610	5.492	4.932	5.519	5.203	5.242	5.054	4.959	5.370	4.486	5.3866	15.58

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Method File : TSIM4_200115.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Thu Jan 16 10:30:41 2020
Response Via : Initial Calibration

Calibration Files

0.02=r47286_Ev2.D 0.05=r47287_Ev2.D 0.1 =r47288_Ev2.D 0.2 =r47289_Ev2.D 0.5 =r47290_Ev2.D
1.0 =r47291_Ev2.D 5.0 =r47292_Ev2.D 10.0=r47293_Ev2.D 20.0=r47294_Ev2.D 50.0=r47295_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	1.733	1.829	1.594	1.880	1.800	1.839	1.984	2.046	2.305	1.988	1.8997	10.24
63) C	styrene	3.554	3.059	3.137	3.650	3.609	3.698	3.794	3.823	4.405	4.132	3.6860	10.94
64) C	1,1,2,2-tetrachlor...	3.443	3.222	3.223	3.814	3.595	3.626	3.434	3.368	3.718	3.189	3.4631	6.33
65) C	o-xylene	6.767	5.306	4.690	5.335	5.112	5.204	5.097	4.993	5.362	4.329	5.2193	12.09
66)	1,2,3-Trichloropro...	2.952	2.259	2.294	2.821	2.668	2.674	2.637	2.614	2.836	2.655	2.6412	8.34
67) s	bromofluorobenzene	2.737	2.800	2.685	2.710	2.840	2.928	2.871	2.991	3.107	3.349	2.9018	7.05
68) C	isopropylbenzene				6.638	6.353	6.435	6.414	6.356	6.951	6.182	6.4755	3.85
69)	Bromobenzene	3.997	3.164	3.065	3.551	3.485	3.499	3.486	3.447	3.736	3.421	3.4850	7.50
70)	4-ethyl toluene	5.208	5.067	5.629	6.958	6.939	7.188	7.311	7.293	7.898	7.005	6.6496	14.73
71)	1,3,5-trimethylben...	5.160	4.754	4.760	5.886	5.897	6.030	5.868	5.793	6.487	5.639	5.6275	10.02
72)	tert-butylbenzene				6.181	6.137	6.442	6.497	6.431	6.653	5.165	6.2152	7.99
73)	1,2,4-trimethylben...	5.049	4.595	4.564	5.599	5.640	5.893	5.752	5.699	6.214	4.834	5.3839	10.73
74) C	Benzyl Chloride				3.045	3.205	3.468	4.089	3.950	5.414	4.646	3.9737	21.18
75)	1,3-dichlorobenzene	2.723	2.916	2.523	3.083	2.912	2.911	2.890	2.960	3.844	3.393	3.0155	12.17
76) C	1,4-dichlorobenzene	3.142	2.728	2.670	3.267	3.233	3.287	3.281	3.345	3.851	3.428	3.2232	10.44
77)	sec-butylbenzene				8.674	8.332	8.554	8.677	8.577	9.112	7.839	8.5377	4.54
78)	p-isopropyltoluene				7.385	7.311	7.669	8.032	7.903	8.003	6.176	7.4970	8.66
79)	1,2-dichlorobenzene	2.382	2.447	2.556	3.155	3.036	3.148	3.145	3.168	3.661	3.362	3.0060	13.79
80)	n-butylbenzene				5.886	5.971	6.399	7.009	6.967	7.260	6.160	6.5216	8.48
81) C	1,2,4-trichloroben...		1.297	1.197	1.552	1.747	2.026	2.382	2.565	2.785	2.749	2.0334	30.31#
82)	naphthalene		4.356	3.812	4.557	4.826	5.367	7.118	7.635	7.417	7.050	5.7932	25.90
83)	1,2,3-trichloroben...		1.625	1.564	2.004	2.105	2.281	2.935	3.111	2.916	2.808	2.3721	24.83
84) C	hexachlorobutadiene		2.263	2.240	2.779	2.762	2.805	2.812	2.787	2.820	2.333	2.6222	9.90

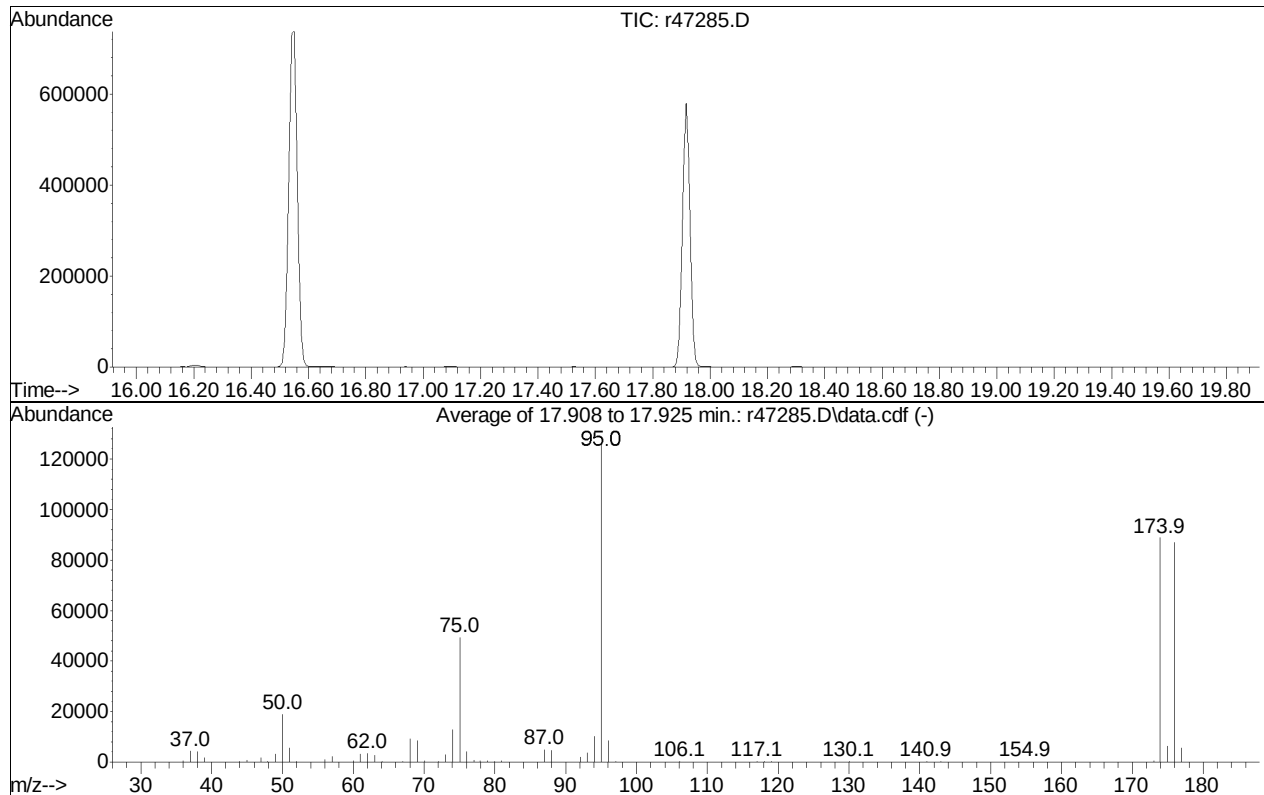
(#) = Out of Range

BFB

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47285.D
 Acq On : 15 Jan 2020 1:38 PM
 Operator : AIRPIANO4:RY
 Sample : WG1330814-1,3,250,250
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Jan 16 10:30:41 2020



Spectrum Information: Average of 17.908 to 17.925 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.0	18979	PASS
75	95	30	66	39.0	49271	PASS
95	95	100	100	100.0	126497	PASS
96	95	5	9	6.7	8413	PASS
173	174	0.00	2	0.6	550	PASS
174	95	50	120	70.4	88994	PASS
175	174	4	9	7.0	6231	PASS
176	174	93	101	97.7	86917	PASS
177	176	5	9	6.6	5708	PASS

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47286_Ev2.D
 Acq On : 15 Jan 2020 2:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.02
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:27:43 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.567	49	117341	10.000	ppbV	0.00
Standard Area = 123037			Recovery =	95.37%		
33) 1,4-difluorobenzene	11.827	114	356566	10.000	ppbV	0.00
Standard Area = 379639			Recovery =	93.92%		
51) chlorobenzene-D5	16.542	54	63177	10.000	ppbV	0.00
Standard Area = 66307			Recovery =	95.28%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.450	65	75273	10.203	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.03%		
53) toluene-D8	14.658	98	257423	9.800	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.00%		
67) bromofluorobenzene	17.908	95	172918	9.432	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.32%		
Target Compounds						
					Qvalue	
2) propylene	3.934	41	218	0.030	ppbV #	83
3) dichlorodifluoromethane	4.012	85	268	0.027	ppbV #	81
4) chloromethane	4.192	50	150	0.027	ppbV #	70
5) Freon-114	4.318	85	363	0.026	ppbV	92
6) vinyl chloride	4.456	62	220	0.030	ppbV #	76
7) 1,3-butadiene	4.618	54	134	0.023	ppbV	93
8) bromomethane	4.936	94	149	0.027	ppbV	94
9) chloroethane	5.152	64	116	0.030	ppbV #	53
10) ethanol	5.320	31	1021	0.220	ppbV	94
11) vinyl bromide	5.580	106	159M4	0.028	ppbV	
12) acrolein	5.740	56	123M2	0.041	ppbV	
13) acetone	5.900	43	2155	0.191	ppbV #	98
14) trichlorofluoromethane	6.097	101	284M4	0.028	ppbV	
15) isopropyl alcohol	6.223	45	1715	0.127	ppbV #	94
16) acrylonitrile	6.467	53	131M2	0.024	ppbV	
17) 1,1-dichloroethene	6.862	61	223	0.023	ppbV #	90
18) tertiary butyl alcohol	6.958	59	395	0.031	ppbV #	58
19) methylene chloride	7.024	49	295	0.038	ppbV	98
20) 3-chloropropene	7.168	41	274	0.024	ppbV #	71
21) carbon disulfide	7.324	76	553	0.027	ppbV #	1
22) Freon 113	7.360	101	293	0.024	ppbV #	89
23) trans-1,2-dichloroethene	8.150	61	259	0.024	ppbV #	92

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47286_Ev2.D
 Acq On : 15 Jan 2020 2:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.02
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:27:43 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.383	63	327	0.025	ppbV #	69
25) MTBE	8.483	73	479	0.025	ppbV #	53
26) vinyl acetate	8.600	43	458	0.025	ppbV #	85
27) 2-butanone	8.883	43	561	0.032	ppbV #	83
28) cis-1,2-dichloroethene	9.375	61	170	0.019	ppbV #	66
29) Ethyl Acetate	0.000		0	N.D.		
30) chloroform	9.725	83	350	0.029	ppbV #	78
31) Tetrahydrofuran	10.200	42	270	0.022	ppbV #	84
32) 1,2-dichloroethane	10.575	62	221	0.025	ppbV #	65
34) hexane	9.642	57	339	0.025	ppbV #	93
36) 1,1,1-trichloroethane	10.858	97	331	0.028	ppbV #	75
37) benzene	11.387	78	638	0.026	ppbV #	84
38) carbon tetrachloride	11.560	117	268	0.024	ppbV #	87
39) cyclohexane	11.713	56	347	0.022	ppbV	90
40) Dibromomethane	12.313	93	350	0.044	ppbV #	79
41) 1,2-dichloropropane	12.347	63	272	0.027	ppbV #	69
42) bromodichloromethane	12.573	83	347	0.023	ppbV #	74
43) 1,4-dioxane	12.653	88	180M3	0.029	ppbV	
44) trichloroethene	12.620	130	231	0.024	ppbV	96
45) 2,2,4-trimethylpentane	12.667	57	1144	0.024	ppbV #	94
46) heptane	12.980	43	484	0.023	ppbV #	86
47) cis-1,3-dichloropropene	14.258	75	298	0.026	ppbV #	70
48) 4-methyl-2-pentanone	13.692	43	513	0.022	ppbV #	82
49) trans-1,3-dichloropropene	13.633	75	323	0.026	ppbV #	85
50) 1,1,2-trichloroethane	14.458	97	191	0.021	ppbV #	87
52) toluene	14.767	91	1159	0.036	ppbV	100
54) 2-hexanone	15.067	43	384	0.018	ppbV #	90
55) dibromochloromethane	15.217	129	307	0.023	ppbV #	86
56) 1,2-dibromoethane	15.467	107	295	0.022	ppbV	99
57) tetrachloroethene	15.933	166	268	0.022	ppbV #	82
58) 1,1,1,2-tetrachloroethane	16.567	131	260	0.026	ppbV #	93
59) chlorobenzene	16.583	112	550	0.023	ppbV	92
60) ethylbenzene	16.933	91	887	0.023	ppbV #	87
61) m+p-xylene	17.083	91	1923	0.057	ppbV	97
62) bromoform	17.167	173	219	0.018	ppbV	89
63) styrene	17.417	104	449	0.019	ppbV #	86
64) 1,1,2,2-tetrachloroethane	17.517	83	435	0.020	ppbV	96
65) o-xylene	17.517	91	855	0.026	ppbV	95
66) 1,2,3-Trichloropropane	17.633	75	373	0.022	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47286_Ev2.D
 Acq On : 15 Jan 2020 2:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.02
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:27:43 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	737	0.018	ppbV	95
69) Bromobenzene	18.100	77	505	0.023	ppbV #	78
70) 4-ethyl toluene	18.583	105	658	0.016	ppbV #	94
71) 1,3,5-trimethylbenzene	18.642	105	652	0.018	ppbV #	95
72) tert-butylbenzene	18.992	119	691	0.018	ppbV #	84
73) 1,2,4-trimethylbenzene	18.992	105	638	0.019	ppbV	93
74) Benzyl Chloride	19.108	91	381	0.015	ppbV #	89
75) 1,3-dichlorobenzene	19.125	146	344	0.018	ppbV #	76
76) 1,4-dichlorobenzene	19.183	146	397	0.019	ppbV #	85
77) sec-butylbenzene	19.208	105	1032	0.019	ppbV	98
78) p-isopropyltoluene	19.342	119	836	0.018	ppbV	95
79) 1,2-dichlorobenzene	19.475	146	301	0.016	ppbV #	88
80) n-butylbenzene	19.700	91	639	0.016	ppbV	89
81) 1,2,4-trichlorobenzene	20.983	180	238	0.019	ppbV #	63
82) naphthalene	21.100	128	781	0.021	ppbV #	83
83) 1,2,3-trichlorobenzene	21.350	180	245	0.016	ppbV #	67
84) hexachlorobutadiene	21.417	225	333	0.020	ppbV #	85

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

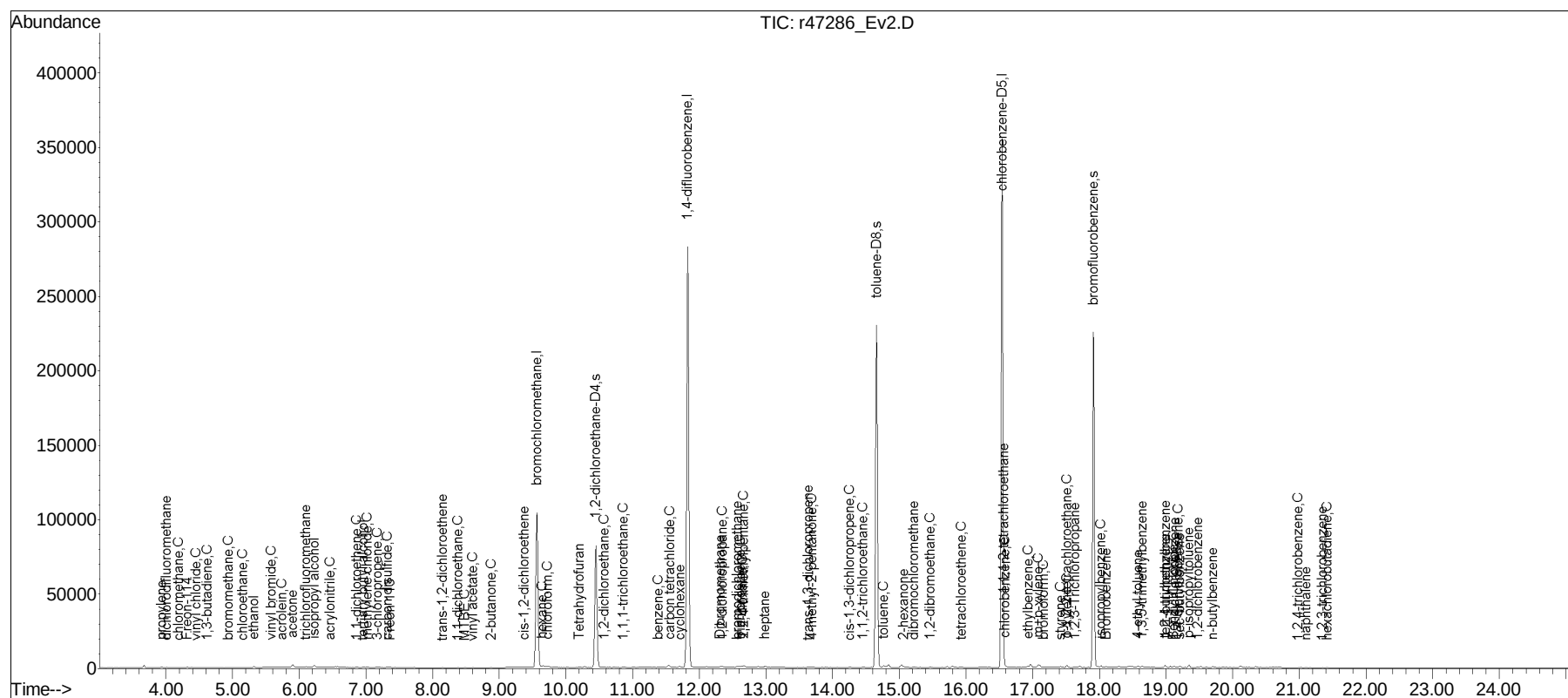
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Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Data File   : r47286_Ev2.D
Acq On      : 15 Jan 2020    2:16 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD0.02
Misc        : WG1330814
ALS Vial    : 0    Sample Multiplier: 1
```

Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

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

QLast Update : Thu Jan 16 09:51:52 2020

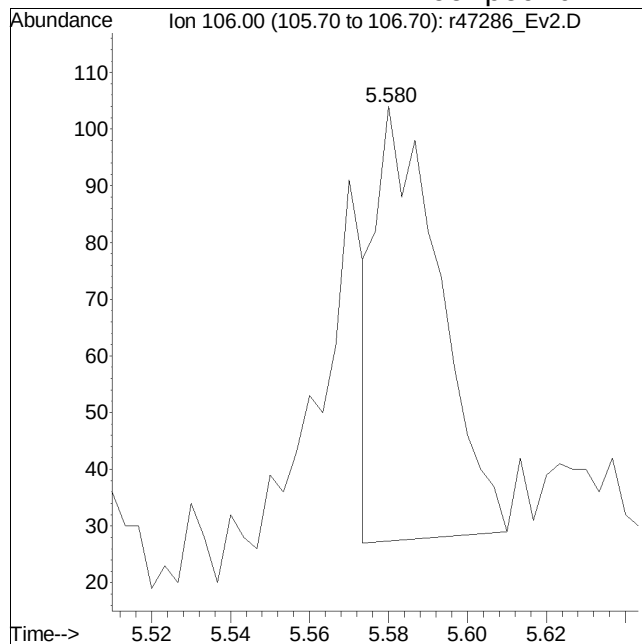
Response via : Initial Calibration



Manual Integration/Negative Proof Report

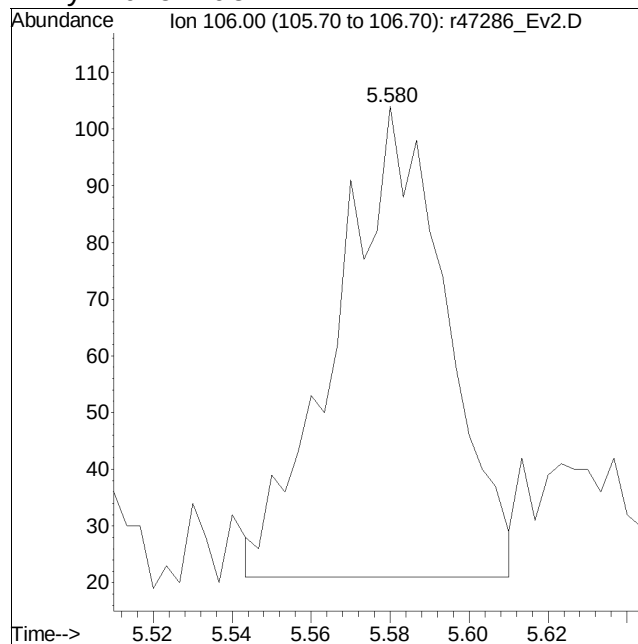
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47286_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:2: 6 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 1/16/2020 10:27 am

Compound #11: vinyl bromide



Original Peak Response = 86

M4 = Poor automated baseline construction.

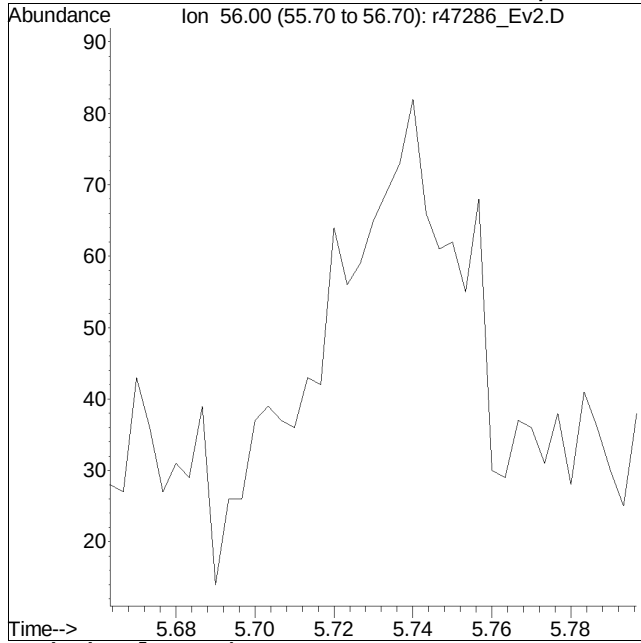


Manual Peak Response = 159 M4

Manual Integration/Negative Proof Report

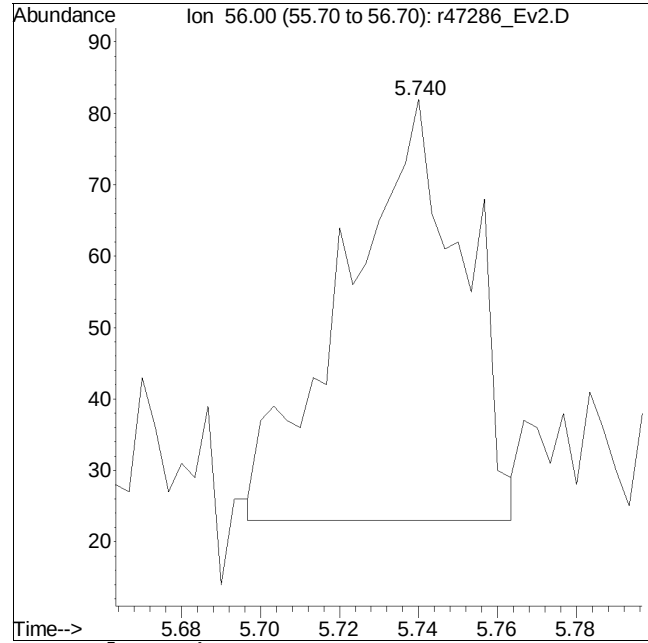
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47286_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 1/15/2020 0:2: 6 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 1/16/2020 10:27 am

Compound #12: acrolein



Original Peak Response = 0

M2 = Peak not found by automatic integration algorithm.

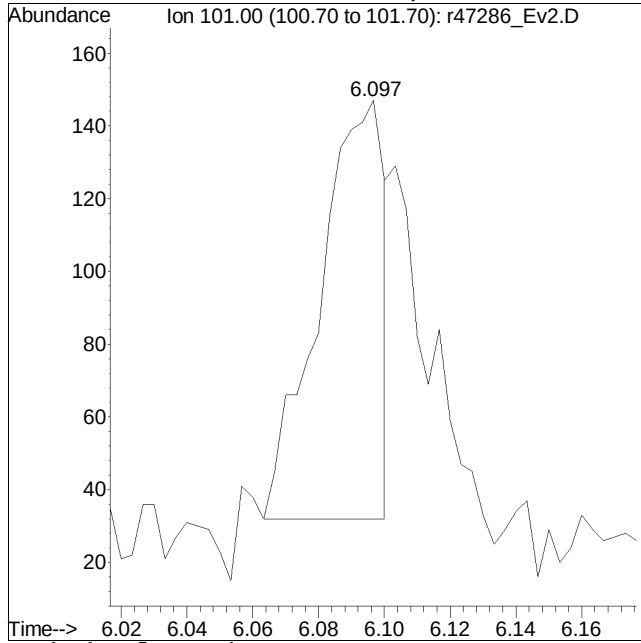


Manual Peak Response = 123 M2

Manual Integration/Negative Proof Report

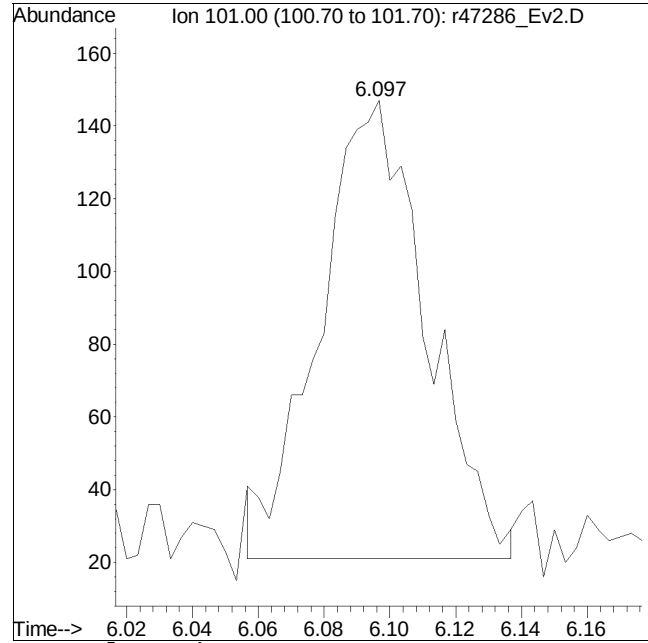
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47286_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 1/15/2020 0:2: 6 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 1/16/2020 10:27 am

Compound #14: trichlorofluoromethane



Original Peak Response = 157

M4 = Poor automated baseline construction.

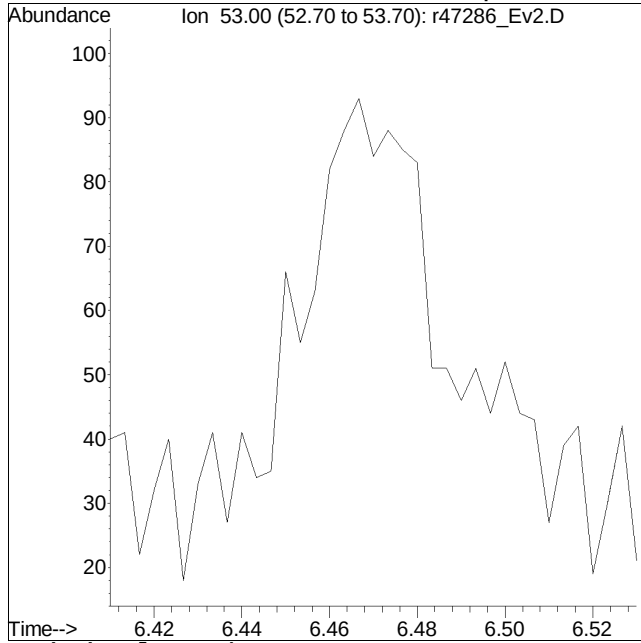


Manual Peak Response = 284 M4

Manual Integration/Negative Proof Report

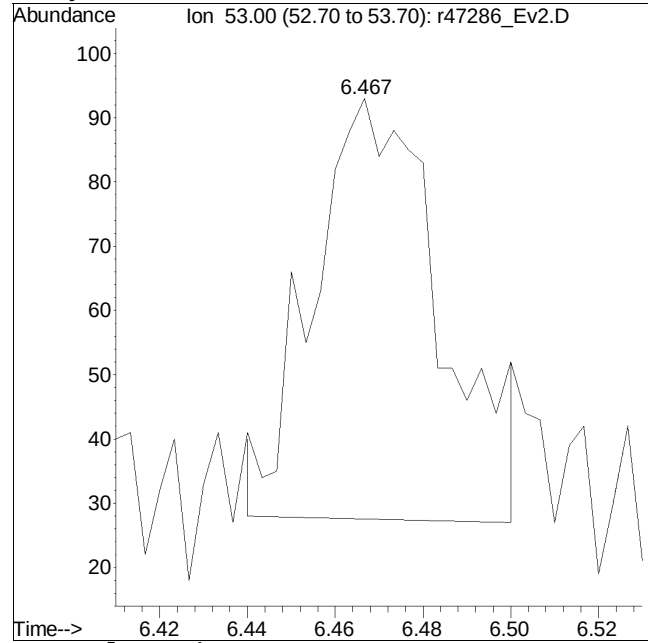
Data Path : O:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47286_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 1/15/2020 0:2: 6 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 1/16/2020 10:27 am

Compound #16: acrylonitrile



Original Peak Response = 0

M2 = Peak not found by automatic integration algorithm.

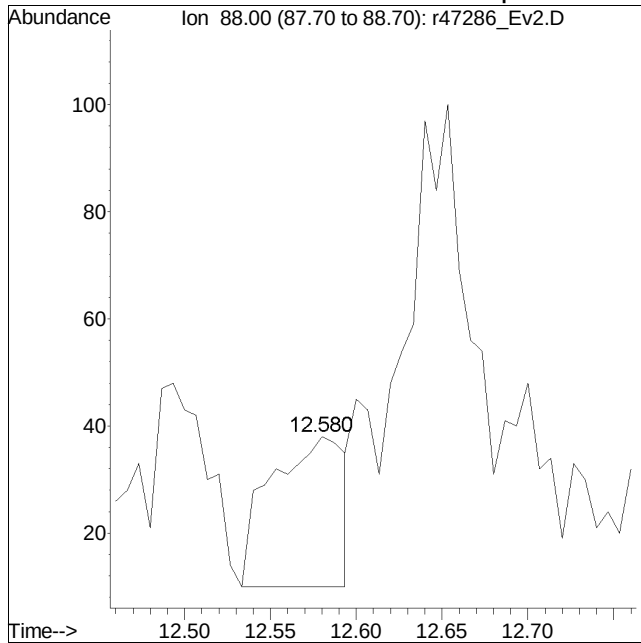


Manual Peak Response = 131 M2

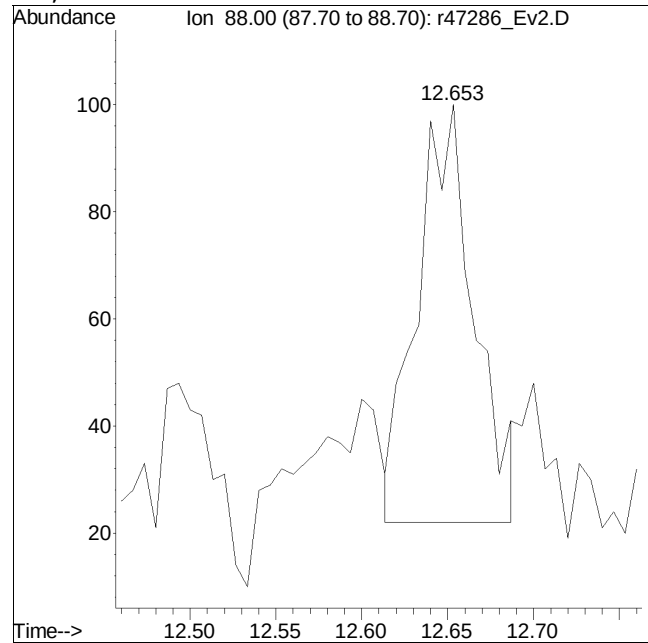
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47286_Ev2.D Operator : AIRPIANO4:RY
Date Inj'd : 1/15/2020 0:2: 6 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 1/16/2020 10:27 am

Compound #43: 1,4-dioxane



Original Peak Response = 83



Manual Peak Response = 180 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\Airpiano4\2020\01\200115SIM_I\
 Data File : r47287_Ev2.D
 Acq On : 15 Jan 2020 2:56 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.05
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:27:52 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	116874	10.000	ppbV	0.00
Standard Area = 123037			Recovery =	94.99%		
33) 1,4-difluorobenzene	11.827	114	350299	10.000	ppbV	0.00
Standard Area = 379639			Recovery =	92.27%		
51) chlorobenzene-D5	16.542	54	62762	10.000	ppbV	0.00
Standard Area = 66307			Recovery =	94.65%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	75605	10.431	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	104.31%		
53) toluene-D8	14.658	98	254233	9.742	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.42%		
67) bromofluorobenzene	17.917	95	175710	9.648	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.48%		
Target Compounds						
					Qvalue	
2) propylene	3.928	41	408M4	0.057	ppbV	
3) dichlorodifluoromethane	4.012	85	595	0.060	ppbV	91
4) chloromethane	4.192	50	331	0.061	ppbV #	83
5) Freon-114	4.318	85	793	0.057	ppbV	91
6) vinyl chloride	4.450	62	403	0.055	ppbV #	81
7) 1,3-butadiene	4.612	54	335	0.057	ppbV	99
8) bromomethane	4.930	94	304	0.054	ppbV	99
9) chloroethane	5.146	64	212	0.056	ppbV #	82
10) ethanol	5.320	31	1758	0.380	ppbV	96
11) vinyl bromide	5.573	106	287	0.050	ppbV	89
12) acrolein	5.730	56	131	0.044	ppbV #	61
13) acetone	5.893	43	3780	0.337	ppbV #	99
14) trichlorofluoromethane	6.090	101	544	0.053	ppbV	99
15) isopropyl alcohol	6.217	45	2758	0.204	ppbV #	97
16) acrylonitrile	6.457	53	276	0.051	ppbV	96
17) 1,1-dichloroethene	6.856	61	483	0.051	ppbV #	94
18) tertiary butyl alcohol	6.952	59	798	0.064	ppbV #	96
19) methylene chloride	7.018	49	507	0.066	ppbV	93
20) 3-chloropropene	7.156	41	590	0.052	ppbV #	87
21) carbon disulfide	7.318	76	1079	0.053	ppbV #	1
22) Freon 113	7.354	101	691	0.057	ppbV #	90
23) trans-1,2-dichloroethene	8.142	61	544	0.052	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47287_Ev2.D
 Acq On : 15 Jan 2020 2:56 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.05
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:27:52 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	650	0.050	ppbV	88
25) MTBE	8.475	73	988	0.051	ppbV #	79
26) vinyl acetate	8.600	43	926	0.050	ppbV #	92
27) 2-butanone	8.875	43	1044	0.059	ppbV #	92
28) cis-1,2-dichloroethene	9.367	61	489	0.055	ppbV	99
29) Ethyl Acetate	9.675	61	199	0.074	ppbV	65
30) chloroform	9.725	83	657	0.054	ppbV #	94
31) Tetrahydrofuran	10.192	42	601	0.049	ppbV	94
32) 1,2-dichloroethane	10.567	62	492	0.055	ppbV #	77
34) hexane	9.633	57	703	0.054	ppbV #	90
36) 1,1,1-trichloroethane	10.858	97	585	0.050	ppbV #	94
37) benzene	11.387	78	1334	0.055	ppbV	93
38) carbon tetrachloride	11.560	117	644	0.060	ppbV #	94
39) cyclohexane	11.700	56	774	0.051	ppbV #	88
40) Dibromomethane	12.313	93	625	0.079	ppbV #	92
41) 1,2-dichloropropane	12.340	63	492	0.050	ppbV #	86
42) bromodichloromethane	12.567	83	901	0.060	ppbV #	97
43) 1,4-dioxane	12.633	88	279	0.046	ppbV	93
44) trichloroethene	12.620	130	480	0.050	ppbV	89
45) 2,2,4-trimethylpentane	12.667	57	2363	0.050	ppbV #	92
46) heptane	12.987	43	1020	0.050	ppbV #	93
47) cis-1,3-dichloropropene	14.250	75	521	0.046	ppbV #	83
48) 4-methyl-2-pentanone	13.683	43	992	0.043	ppbV #	97
49) trans-1,3-dichloropropene	13.633	75	548	0.045	ppbV #	85
50) 1,1,2-trichloroethane	14.450	97	447	0.051	ppbV	93
52) toluene	14.767	91	1967	0.061	ppbV	100
54) 2-hexanone	15.067	43	877	0.041	ppbV	99
55) dibromochloromethane	15.217	129	654	0.050	ppbV #	96
56) 1,2-dibromoethane	15.467	107	650	0.048	ppbV	98
57) tetrachloroethene	15.933	166	657	0.053	ppbV	98
58) 1,1,1,2-tetrachloroethane	16.567	131	490	0.050	ppbV #	94
59) chlorobenzene	16.583	112	1186	0.050	ppbV	96
60) ethylbenzene	16.933	91	1828	0.048	ppbV	96
61) m+p-xylene	17.092	91	3447	0.102	ppbV	98
62) bromoform	17.167	173	574	0.048	ppbV	90
63) styrene	17.425	104	960	0.041	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.517	83	1011	0.047	ppbV	94
65) o-xylene	17.517	91	1665	0.051	ppbV	97
66) 1,2,3-Trichloropropane	17.625	75	709	0.043	ppbV #	83

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47287_Ev2.D
 Acq On : 15 Jan 2020 2:56 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.05
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:27:52 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	1832	0.045	ppbV	97
69) Bromobenzene	18.100	77	993	0.045	ppbV	100
70) 4-ethyl toluene	18.583	105	1590	0.038	ppbV #	96
71) 1,3,5-trimethylbenzene	18.642	105	1492	0.042	ppbV #	94
72) tert-butylbenzene	18.992	119	1595	0.041	ppbV	94
73) 1,2,4-trimethylbenzene	18.992	105	1442	0.043	ppbV	98
74) Benzyl Chloride	19.117	91	818	0.033	ppbV #	88
75) 1,3-dichlorobenzene	19.125	146	915	0.048	ppbV #	80
76) 1,4-dichlorobenzene	19.183	146	856	0.042	ppbV #	88
77) sec-butylbenzene	19.217	105	2213	0.041	ppbV	93
78) p-isopropyltoluene	19.350	119	1888	0.040	ppbV	92
79) 1,2-dichlorobenzene	19.475	146	768	0.041	ppbV	95
80) n-butylbenzene	19.700	91	1364	0.033	ppbV	99
81) 1,2,4-trichlorobenzene	20.983	180	407	0.032	ppbV #	81
82) naphthalene	21.100	128	1367	0.038	ppbV #	88
83) 1,2,3-trichlorobenzene	21.350	180	510	0.034	ppbV #	84
84) hexachlorobutadiene	21.417	225	710	0.043	ppbV #	92

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

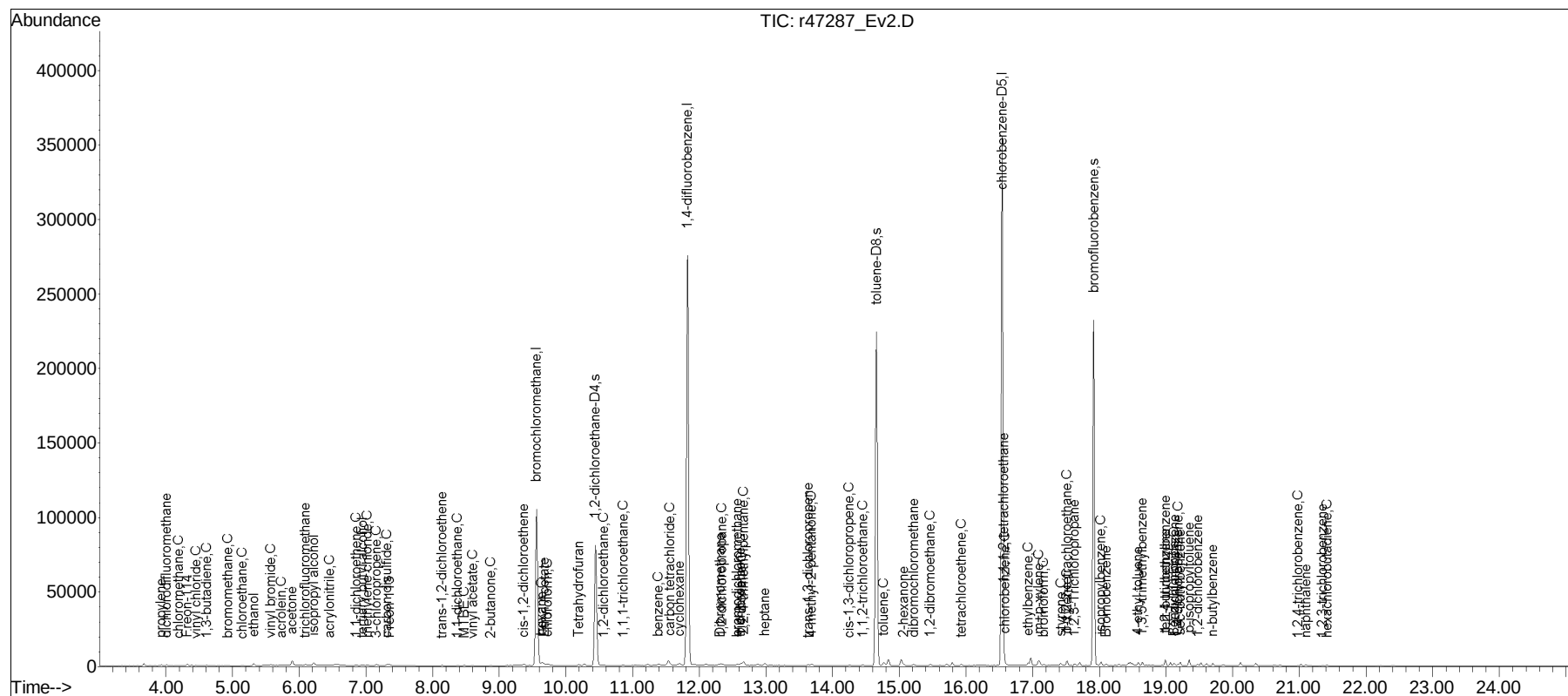
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Data File   : r47287_Ev2.D
Acq On      : 15 Jan 2020    2:56 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD0.05
Misc        : WG1330814
ALS Vial    : 0    Sample Multiplier: 1
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Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

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

QLast Update : Thu Jan 16 09:51:52 2020

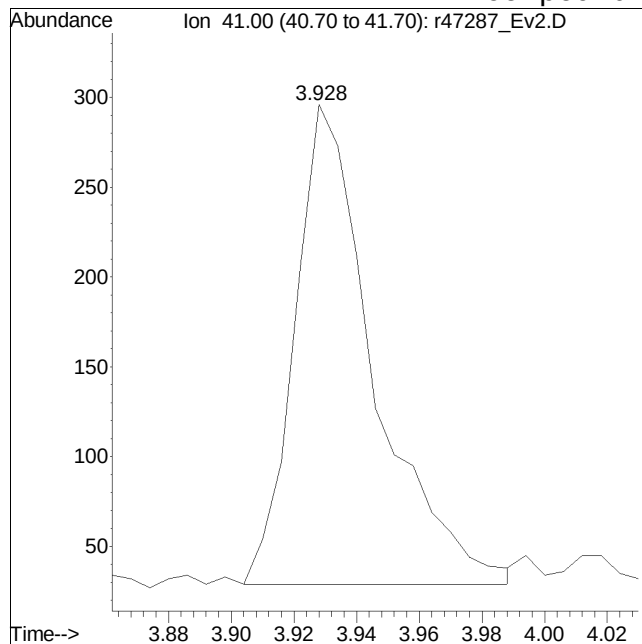
Response via : Initial Calibration



Manual Integration/Negative Proof Report

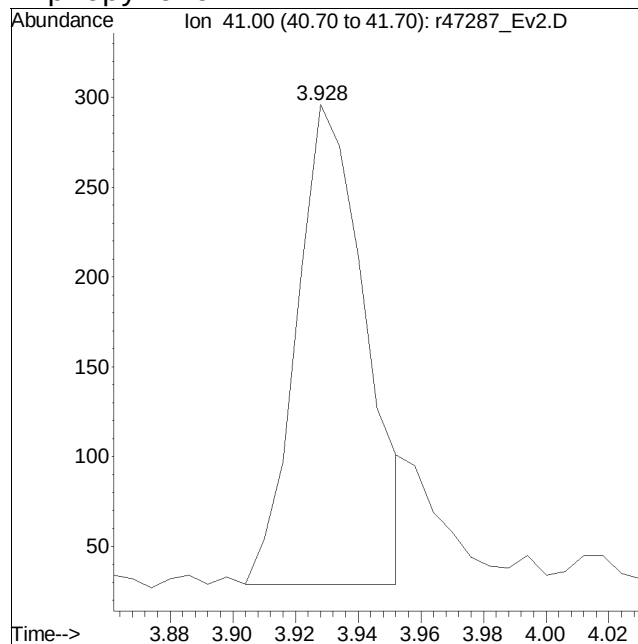
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47287_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:2: 6 Instrument :
Sample : IT015-SIMSTD0.05 Quant Date : 1/16/2020 10:27 am

Compound #2: propylene



Original Peak Response = 469

M4 = Poor automated baseline construction.



Manual Peak Response = 408 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47288_Ev2.D
 Acq On : 15 Jan 2020 3:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.1
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:01 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	118574	10.000	ppbV	0.00
Standard Area = 123037			Recovery =	96.37%		
33) 1,4-difluorobenzene	11.827	114	359853	10.000	ppbV	0.00
Standard Area = 379639			Recovery =	94.79%		
51) chlorobenzene-D5	16.542	54	63174	10.000	ppbV	0.00
Standard Area = 66307			Recovery =	95.28%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	76818	10.317	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	103.17%		
53) toluene-D8	14.658	98	255604	9.731	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.31%		
67) bromofluorobenzene	17.908	95	169605	9.252	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.52%		
Target Compounds						
					Qvalue	
2) propylene	3.928	41	800M4	0.110	ppbV	
3) dichlorodifluoromethane	4.012	85	1185	0.117	ppbV	93
4) chloromethane	4.192	50	702	0.127	ppbV	90
5) Freon-114	4.318	85	1542	0.109	ppbV	96
6) vinyl chloride	4.450	62	789	0.106	ppbV	94
7) 1,3-butadiene	4.612	54	612	0.103	ppbV	99
8) bromomethane	4.930	94	573	0.101	ppbV	95
9) chloroethane	5.146	64	460	0.119	ppbV #	78
10) ethanol	5.314	31	2827	0.603	ppbV	99
11) vinyl bromide	5.573	106	603	0.105	ppbV	97
12) acrolein	5.730	56	348	0.114	ppbV #	32
13) acetone	5.890	43	6625	0.581	ppbV #	97
14) trichlorofluoromethane	6.090	101	1085	0.105	ppbV	97
15) isopropyl alcohol	6.213	45	4329	0.316	ppbV #	97
16) acrylonitrile	6.463	53	539	0.097	ppbV	94
17) 1,1-dichloroethene	6.856	61	1007	0.104	ppbV	97
18) tertiary butyl alcohol	6.946	59	1414	0.111	ppbV	97
19) methylene chloride	7.018	49	959	0.123	ppbV	98
20) 3-chloropropene	7.156	41	1156	0.099	ppbV	92
21) carbon disulfide	7.312	76	2048	0.100	ppbV #	1
22) Freon 113	7.348	101	1240	0.102	ppbV	97
23) trans-1,2-dichloroethene	8.142	61	1050	0.098	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47288_Ev2.D
 Acq On : 15 Jan 2020 3:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.1
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:01 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	1316	0.100	ppbV	95
25) MTBE	8.475	73	1920	0.097	ppbV #	90
26) vinyl acetate	8.592	43	1790	0.096	ppbV	96
27) 2-butanone	8.875	43	1779	0.099	ppbV #	94
28) cis-1,2-dichloroethene	9.367	61	908	0.101	ppbV	97
29) Ethyl Acetate	9.675	61	277	0.101	ppbV	89
30) chloroform	9.725	83	1258	0.102	ppbV	97
31) Tetrahydrofuran	10.192	42	1244	0.101	ppbV	94
32) 1,2-dichloroethane	10.567	62	931	0.103	ppbV #	89
34) hexane	9.633	57	1334	0.099	ppbV #	93
36) 1,1,1-trichloroethane	10.858	97	1229	0.102	ppbV #	89
37) benzene	11.387	78	2471	0.099	ppbV	99
38) carbon tetrachloride	11.567	117	1070	0.096	ppbV	98
39) cyclohexane	11.700	56	1555	0.099	ppbV	96
40) Dibromomethane	12.313	93	887	0.109	ppbV #	95
41) 1,2-dichloropropane	12.340	63	1004	0.099	ppbV #	88
42) bromodichloromethane	12.567	83	1489	0.097	ppbV #	98
43) 1,4-dioxane	12.633	88	607	0.097	ppbV	87
44) trichloroethene	12.620	130	900	0.092	ppbV	98
45) 2,2,4-trimethylpentane	12.667	57	4753	0.098	ppbV	97
46) heptane	12.987	43	1867	0.089	ppbV	93
47) cis-1,3-dichloropropene	14.258	75	1048	0.089	ppbV	95
48) 4-methyl-2-pentanone	13.683	43	2028	0.086	ppbV	94
49) trans-1,3-dichloropropene	13.633	75	1132	0.091	ppbV	92
50) 1,1,2-trichloroethane	14.450	97	886	0.098	ppbV	97
52) toluene	14.767	91	3323	0.102	ppbV	98
54) 2-hexanone	15.058	43	1811	0.085	ppbV	97
55) dibromochloromethane	15.217	129	1164	0.088	ppbV #	96
56) 1,2-dibromoethane	15.467	107	1290	0.095	ppbV	98
57) tetrachloroethene	15.933	166	1122	0.090	ppbV	94
58) 1,1,1,2-tetrachloroethane	16.567	131	897	0.090	ppbV #	96
59) chlorobenzene	16.583	112	2310	0.096	ppbV	97
60) ethylbenzene	16.933	91	3535	0.092	ppbV	99
61) m+p-xylene	17.092	91	6231	0.183	ppbV	97
62) bromoform	17.167	173	1007	0.084	ppbV	96
63) styrene	17.417	104	1982	0.085	ppbV	95
64) 1,1,2,2-tetrachloroethane	17.517	83	2036	0.093	ppbV	99
65) o-xylene	17.517	91	2963	0.090	ppbV	95
66) 1,2,3-Trichloropropane	17.625	75	1449	0.087	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47288_Ev2.D
 Acq On : 15 Jan 2020 3:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.1
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:01 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	3638	0.089	ppbV	98
69) Bromobenzene	18.100	77	1936	0.088	ppbV	99
70) 4-ethyl toluene	18.583	105	3556	0.085	ppbV	96
71) 1,3,5-trimethylbenzene	18.642	105	3007	0.085	ppbV	95
72) tert-butylbenzene	18.992	119	3179	0.081	ppbV	97
73) 1,2,4-trimethylbenzene	18.992	105	2883	0.085	ppbV	96
74) Benzyl Chloride	19.108	91	1526	0.061	ppbV	98
75) 1,3-dichlorobenzene	19.125	146	1594	0.084	ppbV	93
76) 1,4-dichlorobenzene	19.183	146	1687	0.083	ppbV	92
77) sec-butylbenzene	19.217	105	4468	0.083	ppbV	95
78) p-isopropyltoluene	19.342	119	3719	0.079	ppbV	100
79) 1,2-dichlorobenzene	19.475	146	1615	0.085	ppbV	98
80) n-butylbenzene	19.700	91	2835	0.069	ppbV	98
81) 1,2,4-trichlorobenzene	20.983	180	756	0.059	ppbV #	83
82) naphthalene	21.100	128	2408	0.066	ppbV #	95
83) 1,2,3-trichlorobenzene	21.350	180	988	0.066	ppbV	94
84) hexachlorobutadiene	21.417	225	1415	0.085	ppbV	96

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

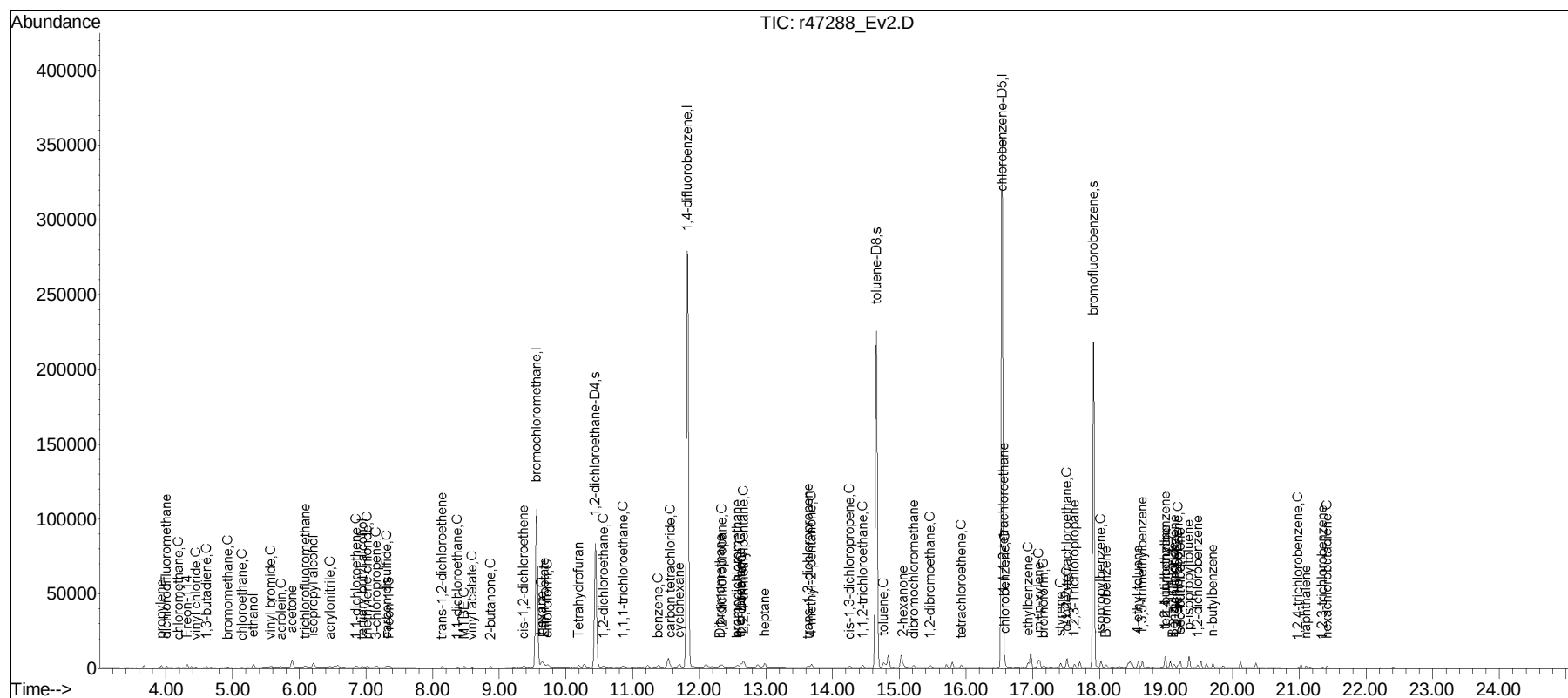
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Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Data File  : r47288_Ev2.D
Acq On     : 15 Jan 2020   3:37 PM
Operator   : AIRPIANO4:RY
Sample     : IT015-SIMSTD0.1
Misc       : WG1330814
ALS Vial   : 0    Sample Multiplier: 1
```

Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

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

QLast Update : Thu Jan 16 09:51:52 2020

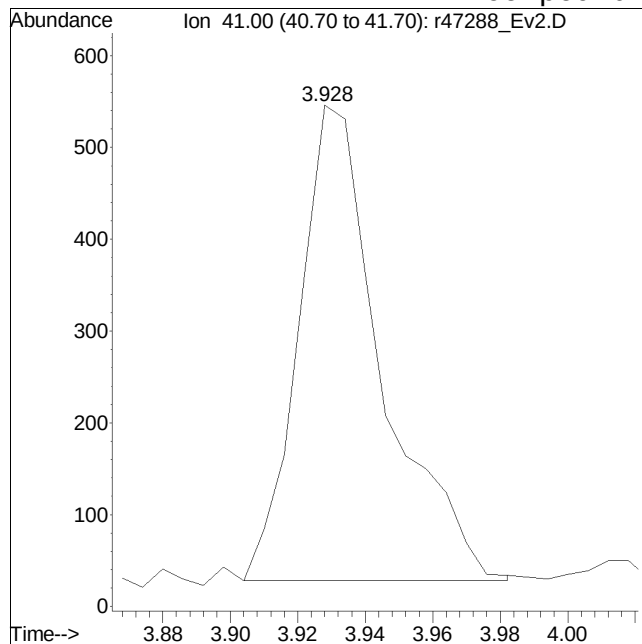
Response via : Initial Calibration



Manual Integration/Negative Proof Report

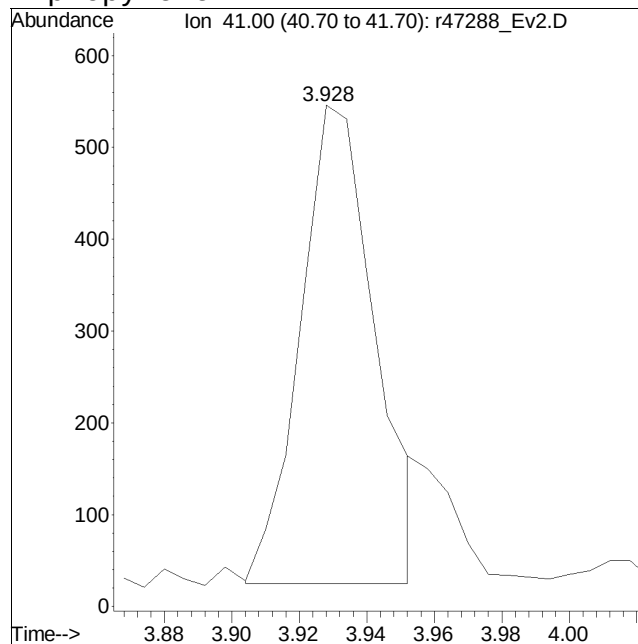
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47288_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:3: 7 Instrument :
Sample : IT015-SIMSTD0.1 Quant Date : 1/16/2020 10:27 am

Compound #2: propylene



Original Peak Response = 889

M4 = Poor automated baseline construction.



Manual Peak Response = 800 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47289_Ev2.D
 Acq On : 15 Jan 2020 4:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:10 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	119074	10.000	ppbV	0.00
Standard Area = 123037			Recovery =	96.78%		
33) 1,4-difluorobenzene	11.827	114	360372	10.000	ppbV	0.00
Standard Area = 379639			Recovery =	94.92%		
51) chlorobenzene-D5	16.542	54	63731	10.000	ppbV	0.00
Standard Area = 66307			Recovery =	96.12%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	76454	10.253	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.53%		
53) toluene-D8	14.658	98	257677	9.724	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.24%		
67) bromofluorobenzene	17.908	95	172734	9.340	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	93.40%		
Target Compounds						
					Qvalue	
2) propylene	3.928	41	1672M4	0.229	ppbV	
3) dichlorodifluoromethane	4.012	85	2488	0.244	ppbV	97
4) chloromethane	4.192	50	1290	0.232	ppbV	94
5) Freon-114	4.318	85	3313	0.234	ppbV	96
6) vinyl chloride	4.450	62	1605	0.216	ppbV	95
7) 1,3-butadiene	4.612	54	1281	0.215	ppbV	98
8) bromomethane	4.930	94	1251	0.219	ppbV	99
9) chloroethane	5.146	64	905	0.233	ppbV #	85
10) ethanol	5.314	31	5904	1.254	ppbV	98
11) vinyl bromide	5.577	106	1345	0.232	ppbV	98
12) acrolein	5.727	56	729	0.238	ppbV #	90
13) acetone	5.890	43	13583	1.187	ppbV #	100
14) trichlorofluoromethane	6.090	101	2396	0.231	ppbV	100
15) isopropyl alcohol	6.213	45	8327	0.606	ppbV	98
16) acrylonitrile	6.463	53	1207	0.217	ppbV	97
17) 1,1-dichloroethene	6.856	61	2121	0.218	ppbV	99
18) tertiary butyl alcohol	6.946	59	2843	0.223	ppbV	97
19) methylene chloride	7.024	49	1970	0.252	ppbV	97
20) 3-chloropropene	7.162	41	2593	0.222	ppbV	96
21) carbon disulfide	7.318	76	4672	0.227	ppbV #	55
22) Freon 113	7.354	101	2680	0.218	ppbV	96
23) trans-1,2-dichloroethene	8.142	61	2304	0.215	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47289_Ev2.D
 Acq On : 15 Jan 2020 4:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:10 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	2903	0.219	ppbV	99
25) MTBE	8.475	73	4252	0.215	ppbV	96
26) vinyl acetate	8.600	43	3975	0.212	ppbV	96
27) 2-butanone	8.867	43	3989	0.222	ppbV #	99
28) cis-1,2-dichloroethene	9.375	61	1964	0.217	ppbV	94
29) Ethyl Acetate	9.675	61	614	0.223	ppbV	92
30) chloroform	9.725	83	2653	0.214	ppbV	97
31) Tetrahydrofuran	10.183	42	2664	0.215	ppbV	99
32) 1,2-dichloroethane	10.567	62	2046	0.226	ppbV	92
34) hexane	9.633	57	2935	0.218	ppbV	93
36) 1,1,1-trichloroethane	10.858	97	2544	0.211	ppbV	92
37) benzene	11.387	78	5458	0.218	ppbV	96
38) carbon tetrachloride	11.560	117	2341	0.211	ppbV	99
39) cyclohexane	11.700	56	3419	0.217	ppbV	99
40) Dibromomethane	12.307	93	1693	0.208	ppbV #	96
41) 1,2-dichloropropane	12.340	63	2114	0.208	ppbV #	95
42) bromodichloromethane	12.573	83	3298	0.214	ppbV #	99
43) 1,4-dioxane	12.633	88	1313	0.210	ppbV	98
44) trichloroethene	12.620	130	2056	0.210	ppbV	95
45) 2,2,4-trimethylpentane	12.667	57	10662	0.219	ppbV	99
46) heptane	12.987	43	4286	0.205	ppbV	97
47) cis-1,3-dichloropropene	14.258	75	2353	0.200	ppbV	95
48) 4-methyl-2-pentanone	13.683	43	4827	0.204	ppbV	97
49) trans-1,3-dichloropropene	13.633	75	2598	0.208	ppbV	95
50) 1,1,2-trichloroethane	14.458	97	1953	0.215	ppbV	97
52) toluene	14.767	91	7086	0.217	ppbV	99
54) 2-hexanone	15.058	43	4317	0.200	ppbV	98
55) dibromochloromethane	15.217	129	2674	0.202	ppbV	99
56) 1,2-dibromoethane	15.467	107	2925	0.214	ppbV	100
57) tetrachloroethene	15.933	166	2627	0.209	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.567	131	2030	0.203	ppbV	96
59) chlorobenzene	16.583	112	5194	0.214	ppbV	97
60) ethylbenzene	16.933	91	7870	0.203	ppbV	96
61) m+p-xylene	17.092	91	14070	0.410	ppbV	99
62) bromoform	17.167	173	2396	0.198	ppbV	99
63) styrene	17.417	104	4652	0.198	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.508	83	4861	0.220	ppbV	99
65) o-xylene	17.508	91	6800	0.204	ppbV	99
66) 1,2,3-Trichloropropane	17.625	75	3596	0.214	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47289_Ev2.D
 Acq On : 15 Jan 2020 4:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:10 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	isopropylbenzene	18.025	105	8461	0.205	ppbV	98
69)	Bromobenzene	18.100	77	4526	0.204	ppbV	99
70)	4-ethyl toluene	18.583	105	8869	0.209	ppbV	97
71)	1,3,5-trimethylbenzene	18.642	105	7503	0.209	ppbV	95
72)	tert-butylbenzene	18.983	119	7878	0.199	ppbV	99
73)	1,2,4-trimethylbenzene	18.992	105	7136	0.208	ppbV	95
74)	Benzyl Chloride	19.108	91	3881	0.153	ppbV	98
75)	1,3-dichlorobenzene	19.125	146	3930	0.204	ppbV	92
76)	1,4-dichlorobenzene	19.183	146	4164	0.203	ppbV	94
77)	sec-butylbenzene	19.208	105	11056	0.203	ppbV	98
78)	p-isopropyltoluene	19.342	119	9413	0.197	ppbV	100
79)	1,2-dichlorobenzene	19.475	146	4021	0.210	ppbV	98
80)	n-butylbenzene	19.700	91	7502	0.180	ppbV	98
81)	1,2,4-trichlorobenzene	20.983	180	1978	0.153	ppbV	94
82)	naphthalene	21.100	128	5809	0.157	ppbV	97
83)	1,2,3-trichlorobenzene	21.350	180	2554	0.169	ppbV	97
84)	hexachlorobutadiene	21.417	225	3542	0.212	ppbV	97

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

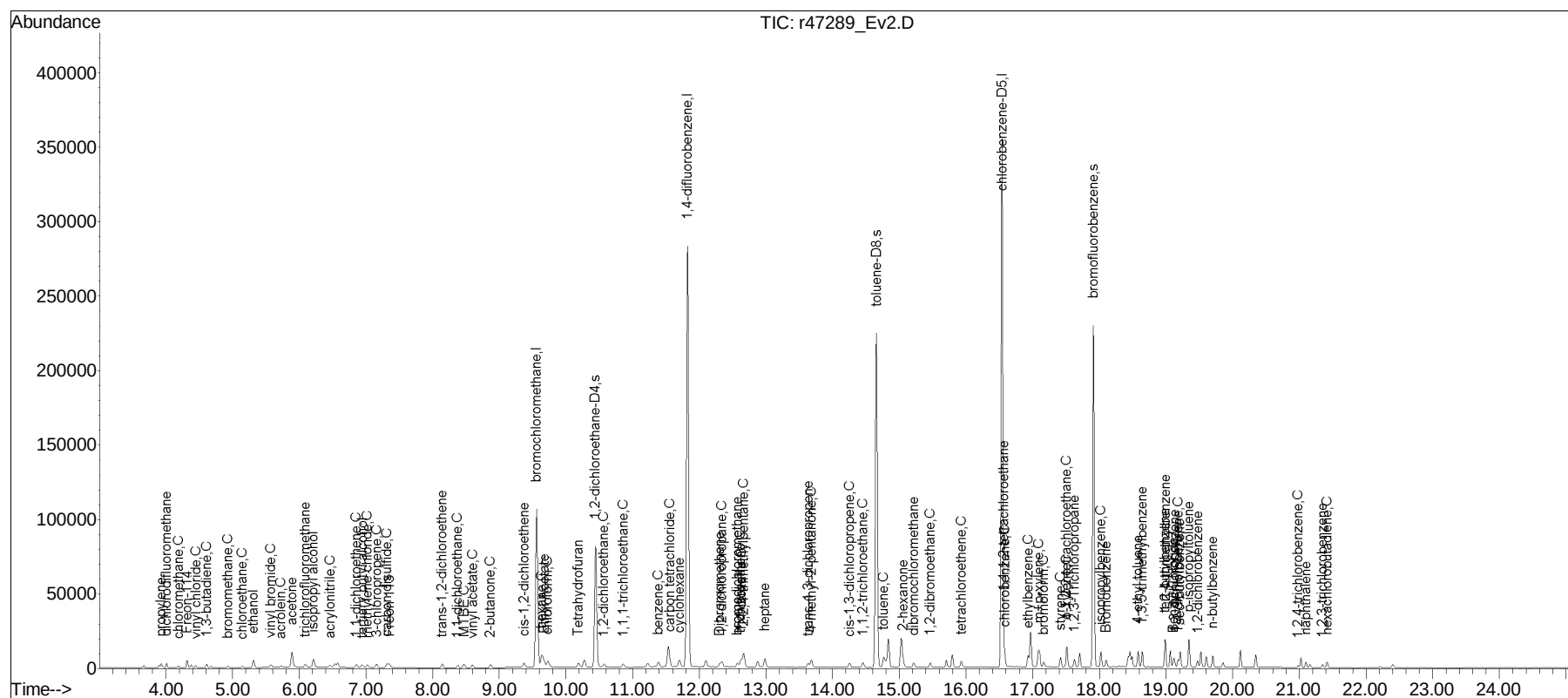
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Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Data File   : r47289_Ev2.D
Acq On      : 15 Jan 2020    4:16 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD0.2
Misc        : WG1330814
ALS Vial    : 0    Sample Multiplier: 1
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Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

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

QLast Update : Thu Jan 16 09:51:52 2020

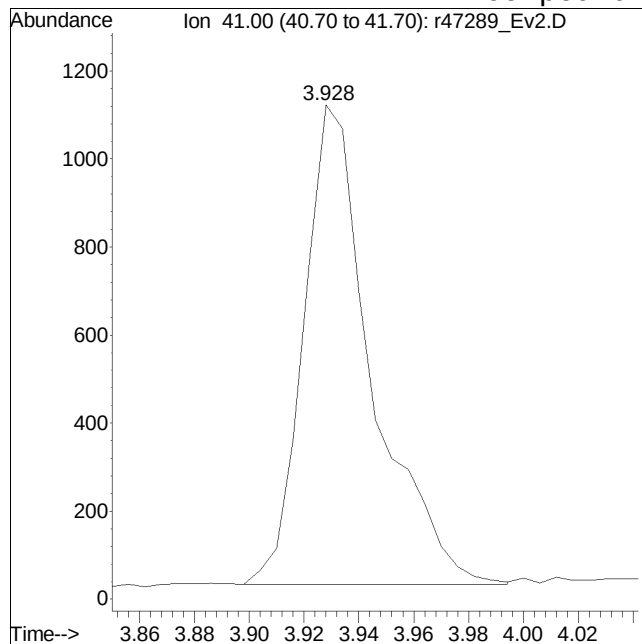
Response via : Initial Calibration



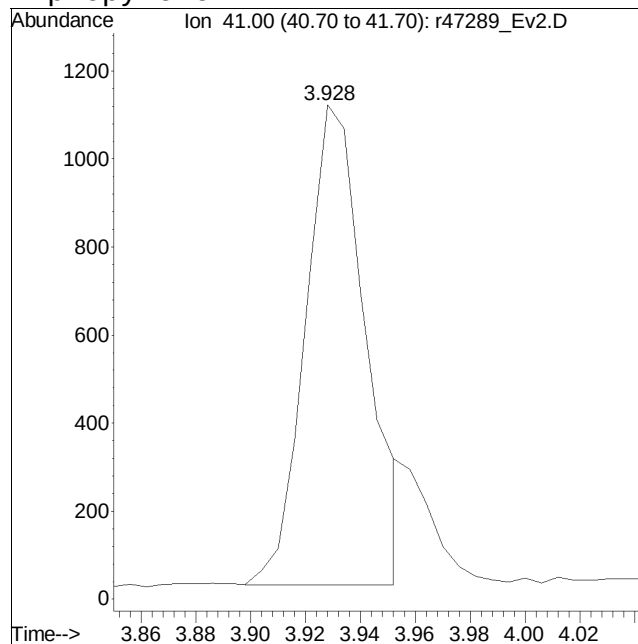
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47289_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:4: 6 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 1/16/2020 10:28 am

Compound #2: propylene



Original Peak Response = 1882



Manual Peak Response = 1672 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47290_Ev2.D
 Acq On : 15 Jan 2020 4:55 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:19 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	119680	10.000	ppbV	0.00
Standard Area = 123037			Recovery =	97.27%		
33) 1,4-difluorobenzene	11.827	114	362533	10.000	ppbV	0.00
Standard Area = 379639			Recovery =	95.49%		
51) chlorobenzene-D5	16.533	54	63959	10.000	ppbV	0.00
Standard Area = 66307			Recovery =	96.46%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	76502	10.199	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.99%		
53) toluene-D8	14.658	98	259959	9.775	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.75%		
67) bromofluorobenzene	17.908	95	181636	9.787	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.87%		
Target Compounds						
					Qvalue	
2) propylene	3.934	41	3862M4	0.525	ppbV	
3) dichlorodifluoromethane	4.012	85	5764	0.563	ppbV	99
4) chloromethane	4.192	50	3043	0.545	ppbV	100
5) Freon-114	4.318	85	7669	0.539	ppbV	99
6) vinyl chloride	4.450	62	3739	0.500	ppbV	99
7) 1,3-butadiene	4.612	54	3080	0.514	ppbV	100
8) bromomethane	4.930	94	2980	0.520	ppbV	100
9) chloroethane	5.152	64	2085	0.535	ppbV	98
10) ethanol	5.314	31	13245	2.798	ppbV	98
11) vinyl bromide	5.580	106	3041	0.522	ppbV	96
12) acrolein	5.733	56	1504	0.489	ppbV	97
13) acetone	5.887	43	30658	2.665	ppbV	99
14) trichlorofluoromethane	6.093	101	5579	0.536	ppbV	96
15) isopropyl alcohol	6.210	45	18169	1.315	ppbV	100
16) acrylonitrile	6.460	53	2960	0.530	ppbV	100
17) 1,1-dichloroethene	6.856	61	4887	0.500	ppbV	99
18) tertiary butyl alcohol	6.940	59	6648	0.519	ppbV	98
19) methylene chloride	7.024	49	4348	0.553	ppbV	97
20) 3-chloropropene	7.162	41	6113	0.521	ppbV	98
21) carbon disulfide	7.318	76	10838	0.524	ppbV #	82
22) Freon 113	7.354	101	6191	0.502	ppbV	99
23) trans-1,2-dichloroethene	8.142	61	5356	0.496	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47290_Ev2.D
 Acq On : 15 Jan 2020 4:55 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:19 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	6684	0.502	ppbV	100
25) MTBE	8.467	73	9898	0.497	ppbV	98
26) vinyl acetate	8.600	43	9315	0.495	ppbV	99
27) 2-butanone	8.867	43	9180	0.508	ppbV	99
28) cis-1,2-dichloroethene	9.367	61	4640	0.510	ppbV	95
29) Ethyl Acetate	9.675	61	1383	0.499	ppbV	94
30) chloroform	9.725	83	6028	0.484	ppbV	99
31) Tetrahydrofuran	10.183	42	6215	0.499	ppbV	100
32) 1,2-dichloroethane	10.567	62	4690	0.516	ppbV	97
34) hexane	9.633	57	6883	0.509	ppbV	97
36) 1,1,1-trichloroethane	10.858	97	5925	0.489	ppbV	96
37) benzene	11.387	78	12757	0.506	ppbV	98
38) carbon tetrachloride	11.560	117	5632	0.504	ppbV	99
39) cyclohexane	11.700	56	8088	0.511	ppbV	99
40) Dibromomethane	12.307	93	3940	0.482	ppbV #	99
41) 1,2-dichloropropane	12.340	63	4946	0.484	ppbV	96
42) bromodichloromethane	12.573	83	7761	0.500	ppbV	100
43) 1,4-dioxane	12.627	88	3144	0.500	ppbV	96
44) trichloroethene	12.620	130	4775	0.485	ppbV	97
45) 2,2,4-trimethylpentane	12.667	57	25267	0.516	ppbV	97
46) heptane	12.980	43	10274	0.489	ppbV	98
47) cis-1,3-dichloropropene	14.250	75	5665	0.480	ppbV	96
48) 4-methyl-2-pentanone	13.675	43	11516	0.483	ppbV	99
49) trans-1,3-dichloropropene	13.633	75	6089	0.485	ppbV	96
50) 1,1,2-trichloroethane	14.450	97	4554	0.499	ppbV	96
52) toluene	14.767	91	16060	0.489	ppbV	99
54) 2-hexanone	15.050	43	10784	0.498	ppbV	97
55) dibromochloromethane	15.217	129	6357	0.477	ppbV	98
56) 1,2-dibromoethane	15.467	107	6794	0.495	ppbV	100
57) tetrachloroethene	15.925	166	6212	0.493	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.567	131	4734	0.471	ppbV	98
59) chlorobenzene	16.583	112	12127	0.497	ppbV	95
60) ethylbenzene	16.933	91	18933	0.487	ppbV	97
61) m+p-xylene	17.092	91	33280	0.966	ppbV	100
62) bromoform	17.167	173	5756	0.474	ppbV	99
63) styrene	17.417	104	11543	0.490	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.508	83	11498	0.519	ppbV	100
65) o-xylene	17.508	91	16347	0.490	ppbV	98
66) 1,2,3-Trichloropropane	17.625	75	8533	0.505	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47290_Ev2.D
 Acq On : 15 Jan 2020 4:55 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:19 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	20316	0.491	ppbV	98
69) Bromobenzene	18.100	77	11144	0.500	ppbV	98
70) 4-ethyl toluene	18.583	105	22191	0.522	ppbV	97
71) 1,3,5-trimethylbenzene	18.642	105	18857	0.524	ppbV	98
72) tert-butylbenzene	18.983	119	19626	0.494	ppbV	99
73) 1,2,4-trimethylbenzene	18.983	105	18035	0.524	ppbV	98
74) Benzyl Chloride	19.108	91	10249	0.403	ppbV	98
75) 1,3-dichlorobenzene	19.125	146	9313	0.483	ppbV	98
76) 1,4-dichlorobenzene	19.183	146	10338	0.501	ppbV	98
77) sec-butylbenzene	19.208	105	26644	0.488	ppbV	100
78) p-isopropyltoluene	19.342	119	23380	0.488	ppbV	98
79) 1,2-dichlorobenzene	19.475	146	9708	0.505	ppbV	95
80) n-butylbenzene	19.700	91	19094	0.458	ppbV	99
81) 1,2,4-trichlorobenzene	20.983	180	5587	0.430	ppbV	96
82) naphthalene	21.100	128	15432	0.416	ppbV	100
83) 1,2,3-trichlorobenzene	21.350	180	6732	0.444	ppbV	99
84) hexachlorobutadiene	21.417	225	8834	0.527	ppbV	97

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

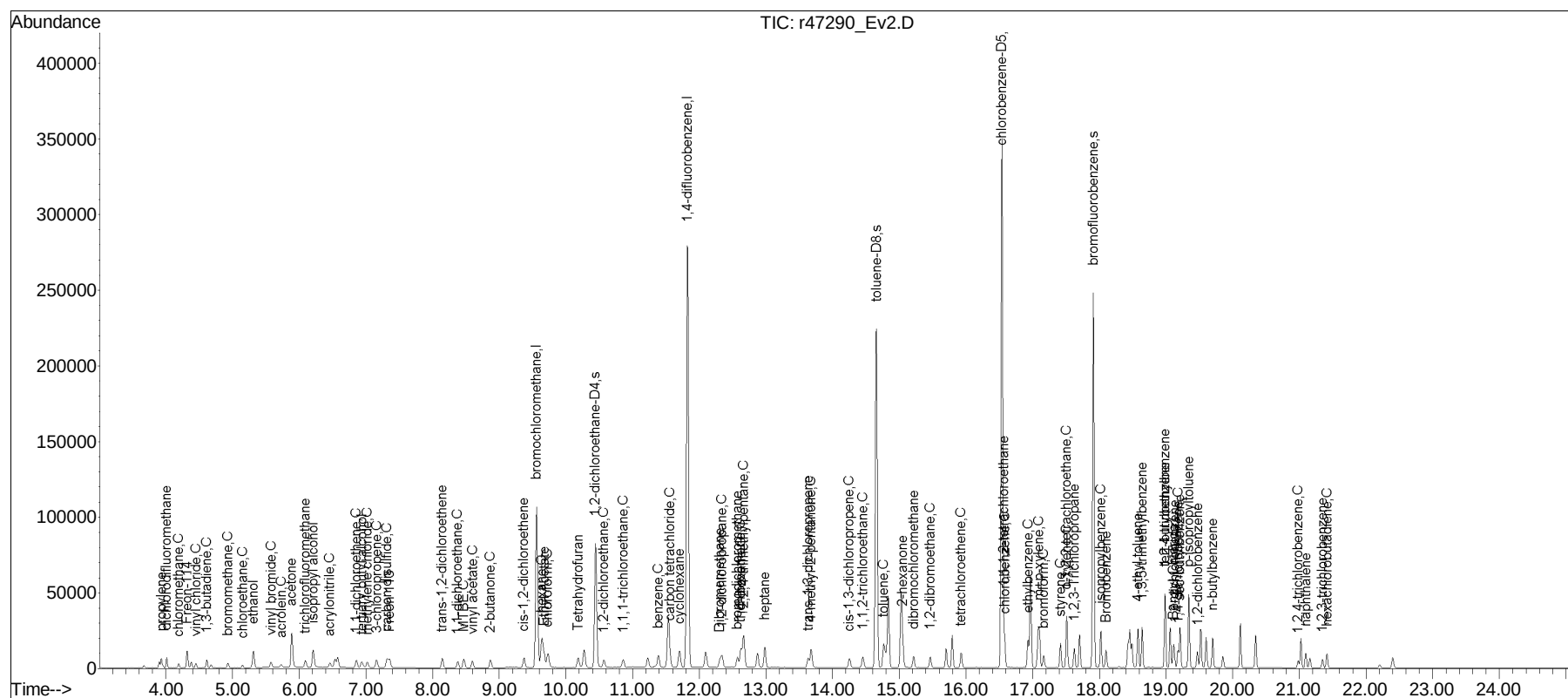
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Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Data File  : r47290_Ev2.D
Acq On     : 15 Jan 2020    4:55 PM
Operator   : AIRPIANO4:RY
Sample     : IT015-SIMSTD0.5
Misc       : WG1330814
ALS Vial   : 0    Sample Multiplier: 1
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Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

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

QLast Update : Thu Jan 16 09:51:52 2020

Response via : Initial Calibration

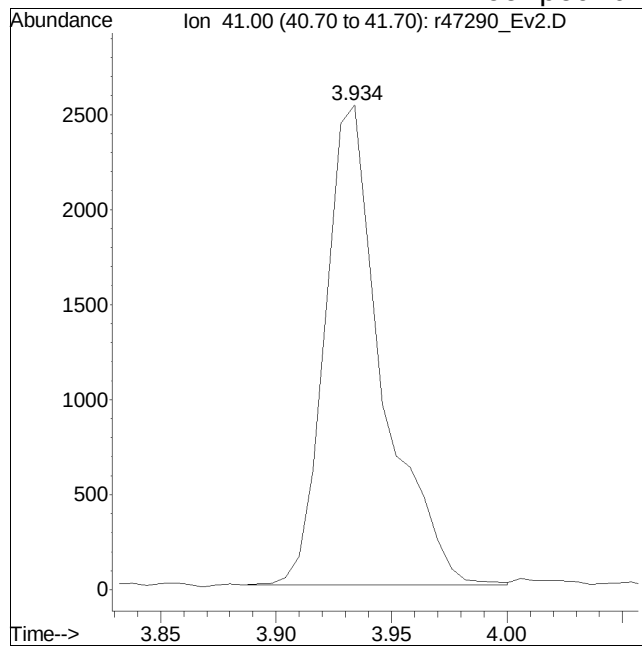


Page: 4

Manual Integration/Negative Proof Report

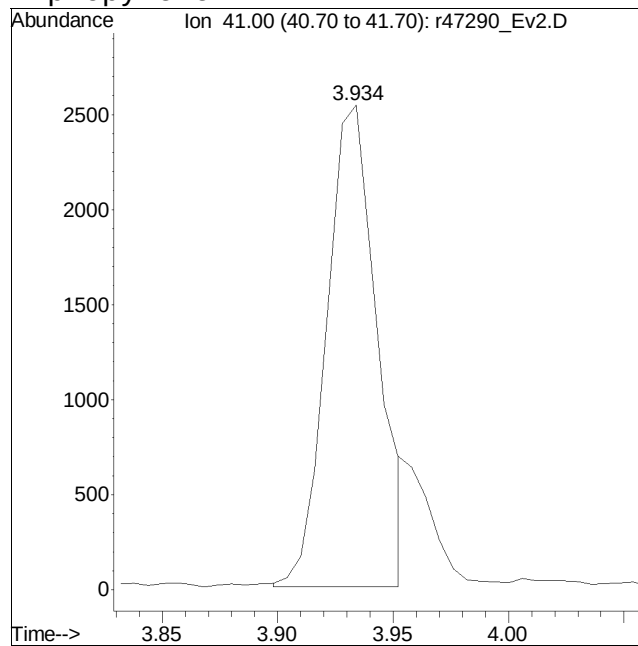
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47290_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:4: 5 Instrument :
Sample : IT015-SIMSTD0.5 Quant Date : 1/16/2020 10:28 am

Compound #2: propylene



Original Peak Response = 4362

M4 = Poor automated baseline construction.



Manual Peak Response = 3862 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47291_Ev2.D
 Acq On : 15 Jan 2020 5:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	120256	10.000	ppbV	0.00
Standard Area = 123037			Recovery =	97.74%		
33) 1,4-difluorobenzene	11.820	114	369002	10.000	ppbV	0.00
Standard Area = 379639			Recovery =	97.20%		
51) chlorobenzene-D5	16.533	54	64638	10.000	ppbV	0.00
Standard Area = 66307			Recovery =	97.48%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	78095	10.228	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.28%		
53) toluene-D8	14.650	98	266597	9.919	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.19%		
67) bromofluorobenzene	17.908	95	189253	10.090	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.90%		
Target Compounds						
					Qvalue	
2) propylene	3.928	41	7831M4	1.060	ppbV	
3) dichlorodifluoromethane	4.012	85	11376	1.107	ppbV	98
4) chloromethane	4.192	50	5935	1.058	ppbV	98
5) Freon-114	4.318	85	15228	1.066	ppbV	98
6) vinyl chloride	4.450	62	7304	0.972	ppbV	100
7) 1,3-butadiene	4.612	54	6128	1.018	ppbV	95
8) bromomethane	4.930	94	5918	1.028	ppbV	100
9) chloroethane	5.146	64	4112	1.050	ppbV	97
10) ethanol	5.308	31	26076	5.483	ppbV	100
11) vinyl bromide	5.573	106	6212	1.062	ppbV	96
12) acrolein	5.723	56	3205	1.037	ppbV	98
13) acetone	5.880	43	60273	5.215	ppbV	99
14) trichlorofluoromethane	6.090	101	11161	1.067	ppbV	100
15) isopropyl alcohol	6.200	45	35508	2.557	ppbV	100
16) acrylonitrile	6.457	53	5915	1.055	ppbV	100
17) 1,1-dichloroethene	6.850	61	9729	0.991	ppbV	98
18) tertiary butyl alcohol	6.928	59	13238	1.028	ppbV	99
19) methylene chloride	7.018	49	8480	1.074	ppbV	99
20) 3-chloropropene	7.156	41	11989	1.017	ppbV	98
21) carbon disulfide	7.312	76	21577	1.039	ppbV #	92
22) Freon 113	7.348	101	12251	0.989	ppbV	99
23) trans-1,2-dichloroethene	8.142	61	10649	0.982	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47291_Ev2.D
 Acq On : 15 Jan 2020 5:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	13248	0.990	ppbV	100
25) MTBE	8.458	73	20068	1.003	ppbV	99
26) vinyl acetate	8.592	43	18847	0.996	ppbV	99
27) 2-butanone	8.858	43	18357	1.012	ppbV	100
28) cis-1,2-dichloroethene	9.367	61	9234	1.010	ppbV	99
29) Ethyl Acetate	9.667	61	2874	1.033	ppbV	88
30) chloroform	9.717	83	11924	0.953	ppbV	99
31) Tetrahydrofuran	10.175	42	12721	1.016	ppbV	99
32) 1,2-dichloroethane	10.567	62	9385	1.027	ppbV	99
34) hexane	9.625	57	13624	0.990	ppbV	90
36) 1,1,1-trichloroethane	10.858	97	11807	0.957	ppbV	98
37) benzene	11.387	78	25702	1.002	ppbV	99
38) carbon tetrachloride	11.560	117	11365	0.999	ppbV	98
39) cyclohexane	11.700	56	16219	1.006	ppbV	99
40) Dibromomethane	12.307	93	7700	0.925	ppbV #	99
41) 1,2-dichloropropane	12.340	63	9972	0.959	ppbV	96
42) bromodichloromethane	12.567	83	15500	0.981	ppbV	99
43) 1,4-dioxane	12.620	88	6309	0.985	ppbV	95
44) trichloroethene	12.620	130	9848	0.983	ppbV	100
45) 2,2,4-trimethylpentane	12.660	57	51736	1.038	ppbV	98
46) heptane	12.980	43	21326	0.996	ppbV	97
47) cis-1,3-dichloropropene	14.250	75	11733	0.976	ppbV	97
48) 4-methyl-2-pentanone	13.675	43	23924	0.986	ppbV	99
49) trans-1,3-dichloropropene	13.633	75	12409	0.970	ppbV	99
50) 1,1,2-trichloroethane	14.450	97	9186	0.989	ppbV	97
52) toluene	14.767	91	32105	0.967	ppbV	98
54) 2-hexanone	15.050	43	22781	1.042	ppbV	96
55) dibromochloromethane	15.217	129	12974	0.964	ppbV	100
56) 1,2-dibromoethane	15.458	107	13728	0.990	ppbV	100
57) tetrachloroethene	15.925	166	12710	0.999	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.567	131	9541	0.940	ppbV	98
59) chlorobenzene	16.583	112	24343	0.988	ppbV	96
60) ethylbenzene	16.925	91	38584	0.982	ppbV	99
61) m+p-xylene	17.092	91	67767	1.946	ppbV	100
62) bromoform	17.167	173	11888	0.968	ppbV	99
63) styrene	17.417	104	23903	1.003	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.508	83	23436	1.047	ppbV	99
65) o-xylene	17.508	91	33635	0.997	ppbV	98
66) 1,2,3-Trichloropropane	17.625	75	17287	1.013	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47291_Ev2.D
 Acq On : 15 Jan 2020 5:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	41593	0.994	ppbV	98
69) Bromobenzene	18.100	77	22617	1.004	ppbV	98
70) 4-ethyl toluene	18.583	105	46463	1.081	ppbV	99
71) 1,3,5-trimethylbenzene	18.642	105	38978	1.072	ppbV	99
72) tert-butylbenzene	18.983	119	41639	1.036	ppbV	99
73) 1,2,4-trimethylbenzene	18.983	105	38092	1.095	ppbV	98
74) Benzyl Chloride	19.108	91	22414	0.873	ppbV	99
75) 1,3-dichlorobenzene	19.125	146	18814	0.965	ppbV	100
76) 1,4-dichlorobenzene	19.183	146	21247	1.020	ppbV	100
77) sec-butylbenzene	19.208	105	55290	1.002	ppbV	99
78) p-isopropyltoluene	19.342	119	49571	1.023	ppbV	99
79) 1,2-dichlorobenzene	19.475	146	20345	1.047	ppbV	93
80) n-butylbenzene	19.700	91	41362	0.981	ppbV	99
81) 1,2,4-trichlorobenzene	20.983	180	13097	0.996	ppbV	98
82) naphthalene	21.100	128	34689	0.926	ppbV	100
83) 1,2,3-trichlorobenzene	21.350	180	14745	0.962	ppbV	98
84) hexachlorobutadiene	21.417	225	18128	1.070	ppbV	98

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


```
Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Data File  : r47291_Ev2.D
Acq On     : 15 Jan 2020    5:37 PM
Operator   : AIRPIANO4:RY
Sample     : IT015-SIMSTD1.0
Misc       : WG1330814
ALS Vial   : 0    Sample Multiplier: 1
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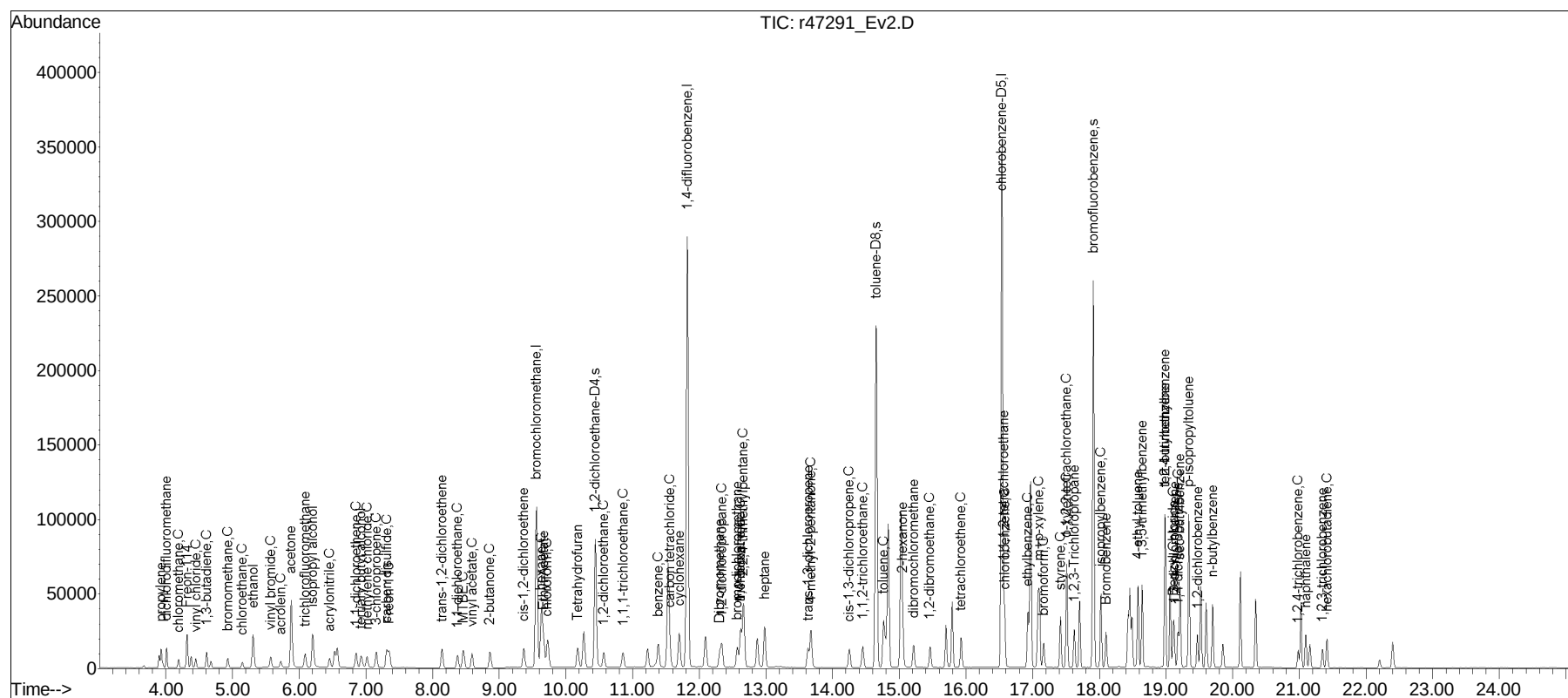
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

11. M

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

QLast Update : Thu Jan 16 09:51:52 2020

Response via : Initial Calibration

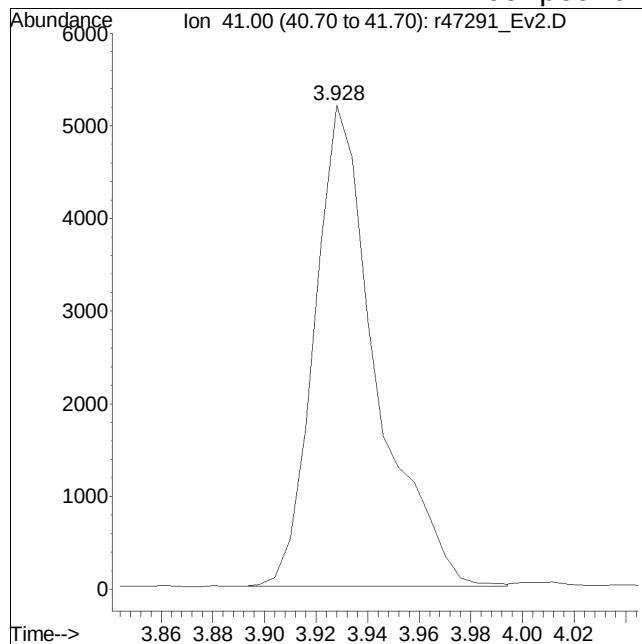


Page: 4

Manual Integration/Negative Proof Report

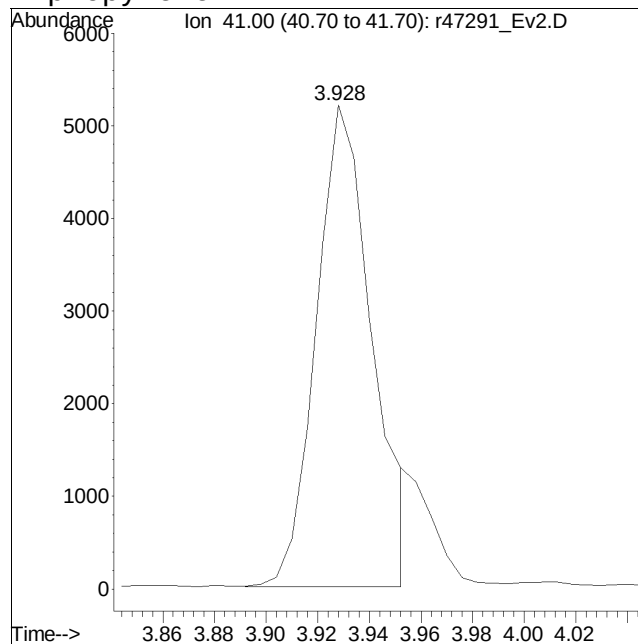
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Data File : r47291_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:5: 7 Instrument :
Sample : IT015-SIMSTD1.0 Quant Date : 1/16/2020 10:28 am

Compound #2: propylene



Original Peak Response = 8662

M4 = Poor automated baseline construction.



Manual Peak Response = 7831 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47292_Ev2.D
 Acq On : 15 Jan 2020 6:17 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	123037	10.000	ppbV	0.00
Standard Area = 123037			Recovery =	100.00%		
33) 1,4-difluorobenzene	11.820	114	379639	10.000	ppbV	0.00
Standard Area = 379639			Recovery =	100.00%		
51) chlorobenzene-D5	16.533	54	66307	10.000	ppbV	0.00
Standard Area = 66307			Recovery =	100.00%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	78922	10.047	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.47%		
53) toluene-D8	14.650	98	272640	9.889	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.89%		
67) bromofluorobenzene	17.908	95	190342	9.893	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.93%		
Target Compounds						
					Qvalue	
2) propylene	3.928	41	36253M6	4.798	ppbV	
3) dichlorodifluoromethane	4.006	85	52898	5.030	ppbV	100
4) chloromethane	4.186	50	28365	4.942	ppbV	100
5) Freon-114	4.312	85	71016	4.859	ppbV	100
6) vinyl chloride	4.444	62	34313	4.462	ppbV	100
7) 1,3-butadiene	4.606	54	29589	4.806	ppbV	100
8) bromomethane	4.924	94	27432	4.657	ppbV	100
9) chloroethane	5.146	64	19021	4.746	ppbV	100
10) ethanol	5.302	31	128515	26.410	ppbV	100
11) vinyl bromide	5.570	106	29622	4.950	ppbV	100
12) acrolein	5.717	56	15355	4.855	ppbV	100
13) acetone	5.870	43	312357	26.414	ppbV	100
14) trichlorofluoromethane	6.087	101	51777	4.836	ppbV	100
15) isopropyl alcohol	6.193	45	181892	12.802	ppbV	100
16) acrylonitrile	6.453	53	28432	4.955	ppbV	100
17) 1,1-dichloroethene	6.850	61	45701	4.551	ppbV	100
18) tertiary butyl alcohol	6.922	59	64588	4.903	ppbV	100
19) methylene chloride	7.012	49	39199	4.853	ppbV	100
20) 3-chloropropene	7.150	41	58006	4.811	ppbV	100
21) carbon disulfide	7.312	76	103507	4.870	ppbV	100
22) Freon 113	7.348	101	58168	4.589	ppbV	100
23) trans-1,2-dichloroethene	8.142	61	51391	4.631	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47292_Ev2.D
 Acq On : 15 Jan 2020 6:17 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	62376	4.556	ppbV	100
25) MTBE	8.450	73	96929	4.736	ppbV	100
26) vinyl acetate	8.592	43	93237	4.815	ppbV	100
27) 2-butanone	8.850	43	87560	4.717	ppbV	100
28) cis-1,2-dichloroethene	9.367	61	43522	4.653	ppbV	100
29) Ethyl Acetate	9.667	61	13564	4.763	ppbV	100
30) chloroform	9.717	83	56310	4.397	ppbV	100
31) Tetrahydrofuran	10.167	42	64716	5.050	ppbV	100
32) 1,2-dichloroethane	10.567	62	44593	4.770	ppbV	100
34) hexane	9.625	57	65922	4.654	ppbV	100
36) 1,1,1-trichloroethane	10.858	97	57106	4.500	ppbV	100
37) benzene	11.380	78	126511	4.793	ppbV	100
38) carbon tetrachloride	11.553	117	55129	4.712	ppbV	100
39) cyclohexane	11.700	56	82072	4.949	ppbV	100
40) Dibromomethane	12.307	93	37182	4.342	ppbV #	100
41) 1,2-dichloropropane	12.340	63	48722	4.557	ppbV	100
42) bromodichloromethane	12.567	83	76488	4.707	ppbV	100
43) 1,4-dioxane	12.613	88	32553	4.939	ppbV	100
44) trichloroethene	12.620	130	48956	4.750	ppbV	100
45) 2,2,4-trimethylpentane	12.660	57	258817	5.045	ppbV	100
46) heptane	12.980	43	110544	5.020	ppbV	100
47) cis-1,3-dichloropropene	14.250	75	59271	4.791	ppbV	100
48) 4-methyl-2-pentanone	13.667	43	125970	5.046	ppbV	100
49) trans-1,3-dichloropropene	13.633	75	62043	4.715	ppbV	100
50) 1,1,2-trichloroethane	14.450	97	45047	4.714	ppbV	100
52) toluene	14.767	91	155941	4.580	ppbV	100
54) 2-hexanone	15.042	43	121215	5.404	ppbV	100
55) dibromochloromethane	15.217	129	67416	4.883	ppbV	100
56) 1,2-dibromoethane	15.458	107	67645	4.756	ppbV	100
57) tetrachloroethene	15.925	166	61879	4.741	ppbV	100
58) 1,1,1,2-tetrachloroethane	16.567	131	49468	4.750	ppbV	100
59) chlorobenzene	16.575	112	119073	4.710	ppbV	100
60) ethylbenzene	16.925	91	196851	4.886	ppbV	100
61) m+p-xylene	17.092	91	335105	9.382	ppbV	100
62) bromoform	17.167	173	65764	5.221	ppbV	100
63) styrene	17.417	104	125770	5.146	ppbV	100
64) 1,1,2,2-tetrachloroethane	17.508	83	113838	4.958	ppbV	100
65) o-xylene	17.508	91	168983	4.883	ppbV	100
66) 1,2,3-Trichloropropane	17.625	75	87428	4.992	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47292_Ev2.D
 Acq On : 15 Jan 2020 6:17 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	212640	4.952	ppbV	100
69) Bromobenzene	18.100	77	115569	5.001	ppbV	100
70) 4-ethyl toluene	18.583	105	242392	5.497	ppbV	100
71) 1,3,5-trimethylbenzene	18.642	105	194530	5.213	ppbV	100
72) tert-butylbenzene	18.983	119	215407	5.227	ppbV	100
73) 1,2,4-trimethylbenzene	18.983	105	190703	5.342	ppbV	100
74) Benzyl Chloride	19.108	91	135560	5.145	ppbV	100
75) 1,3-dichlorobenzene	19.125	146	95826	4.792	ppbV	100
76) 1,4-dichlorobenzene	19.183	146	108778	5.090	ppbV	100
77) sec-butylbenzene	19.208	105	287663	5.081	ppbV	100
78) p-isopropyltoluene	19.342	119	266305	5.357	ppbV	100
79) 1,2-dichlorobenzene	19.467	146	104284	5.232	ppbV	100
80) n-butylbenzene	19.700	91	232382	5.374	ppbV	100
81) 1,2,4-trichlorobenzene	20.983	180	78988	5.859	ppbV	100
82) naphthalene	21.092	128	235996	6.144	ppbV	100
83) 1,2,3-trichlorobenzene	21.342	180	97319	6.187	ppbV	100
84) hexachlorobutadiene	21.417	225	93217	5.361	ppbV	100

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

Sub List : Default - All compounds listed20\01\200115SIM_I\r47292_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\

Data File : r47292_Ev2.D

Acq On : 15 Jan 2020 6:17 PM

Operator : AIRPIANO4:RY

Sample : IT015-SIMSTD5.0

Misc : WG1330814

ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:38 2020

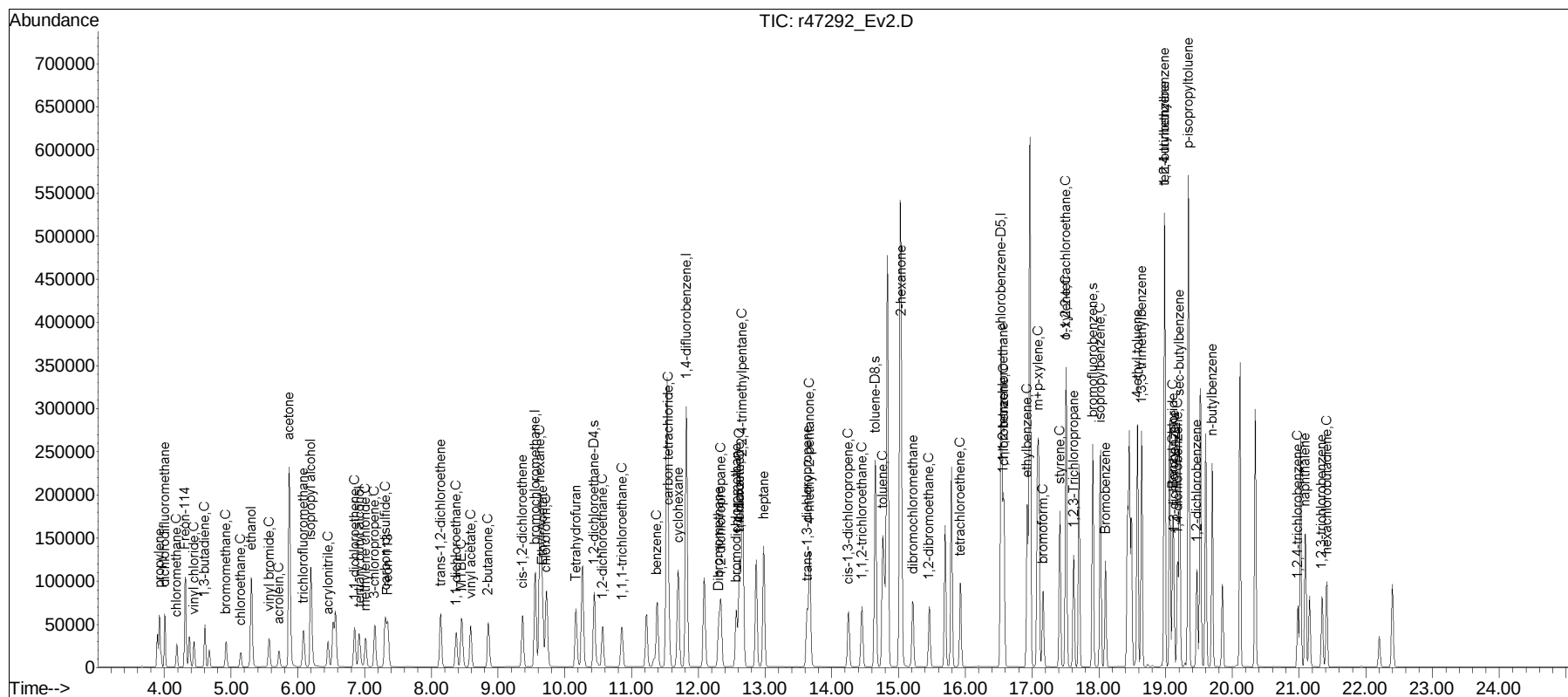
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

..M

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

QLast Update : Thu Jan 16 09:51:52 2020

Response via : Initial Calibration



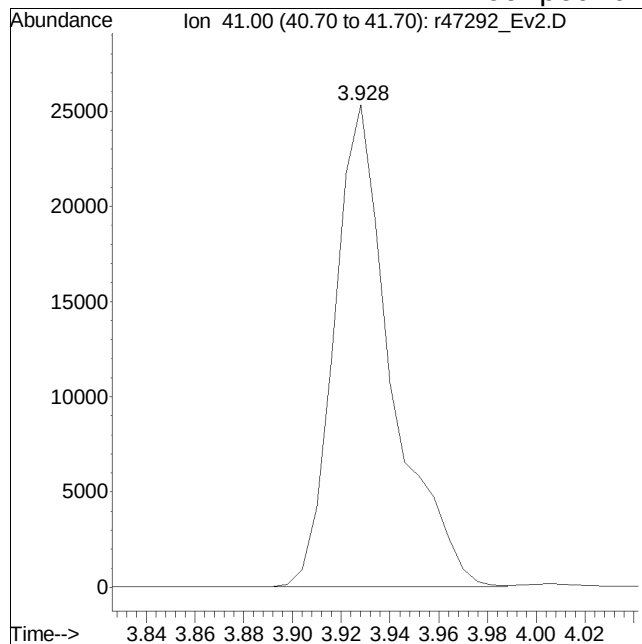
TSIM4_200115.M Fri Jan 17 06:23:06 2020

Page: 4

Manual Integration/Negative Proof Report

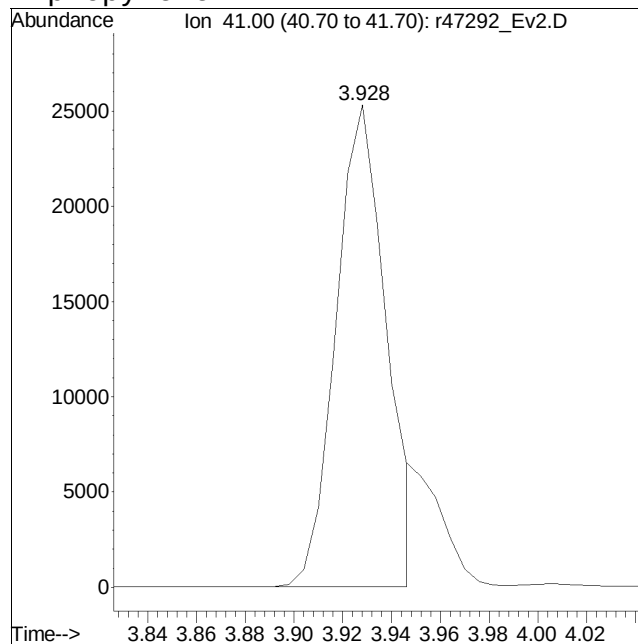
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
 Data File : r47292_Ev2.D Operator : AIRPIAN04:RY
 Date Inj'd : 1/15/2020 0:6: 7 Instrument :
 Sample : IT015-SIMSTD5.0 Quant Date : 1/16/2020 10:28 am

Compound #2: propylene



Original Peak Response = 41485

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



Manual Peak Response = 36253 M6

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47293_Ev2.D
 Acq On : 15 Jan 2020 6:58 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD010
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:47 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	126526	10.000	ppbV	0.00
Standard Area = 123037			Recovery = 102.84%			
33) 1,4-difluorobenzene	11.820	114	391420	10.000	ppbV	0.00
Standard Area = 379639			Recovery = 103.10%			
51) chlorobenzene-D5	16.533	54	68009	10.000	ppbV	0.00
Standard Area = 66307			Recovery = 102.57%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	80437	9.932	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.32%			
53) toluene-D8	14.650	98	284234	10.051	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.51%			
67) bromofluorobenzene	17.908	95	203444	10.309	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.09%			
Target Compounds						
					Qvalue	
2) propylene	3.928	41	77242M4	9.941	ppbV	
3) dichlorodifluoromethane	4.012	85	100885	9.328	ppbV	99
4) chloromethane	4.186	50	55791	9.452	ppbV	100
5) Freon-114	4.312	85	137170	9.127	ppbV	100
6) vinyl chloride	4.444	62	67762	8.568	ppbV	100
7) 1,3-butadiene	4.612	54	58621	9.259	ppbV	93
8) bromomethane	4.924	94	53612	8.851	ppbV	99
9) chloroethane	5.146	64	37526	9.104	ppbV	99
10) ethanol	5.308	31	254190	50.796	ppbV	99
11) vinyl bromide	5.573	106	58516	9.509	ppbV	99
12) acrolein	5.720	56	30679	9.432	ppbV	99
13) acetone	5.873	43	591844	48.669	ppbV	97
14) trichlorofluoromethane	6.087	101	97948	8.896	ppbV	99
15) isopropyl alcohol	6.197	45	356738	24.415	ppbV	100
16) acrylonitrile	6.453	53	56238	9.531	ppbV	100
17) 1,1-dichloroethene	6.850	61	88897	8.609	ppbV	100
18) tertiary butyl alcohol	6.922	59	127011	9.375	ppbV	99
19) methylene chloride	7.018	49	77289	9.305	ppbV	100
20) 3-chloropropene	7.156	41	113750	9.175	ppbV	99
21) carbon disulfide	7.312	76	203793	9.324	ppbV	99
22) Freon 113	7.348	101	113385	8.699	ppbV	100
23) trans-1,2-dichloroethene	8.142	61	100679	8.821	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47293_Ev2.D
 Acq On : 15 Jan 2020 6:58 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD010
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:47 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	122485	8.700	ppbV	100
25) MTBE	8.458	73	192445	9.144	ppbV	97
26) vinyl acetate	8.592	43	188591	9.471	ppbV	100
27) 2-butanone	8.850	43	174097	9.120	ppbV	99
28) cis-1,2-dichloroethene	9.367	61	85898	8.931	ppbV	98
29) Ethyl Acetate	9.667	61	27214	9.293	ppbV	100
30) chloroform	9.725	83	110206	8.369	ppbV	98
31) Tetrahydrofuran	10.167	42	133866	10.158	ppbV	99
32) 1,2-dichloroethane	10.567	62	88282	9.183	ppbV	99
34) hexane	9.625	57	130549	8.939	ppbV	96
36) 1,1,1-trichloroethane	10.858	97	115870	8.856	ppbV	100
37) benzene	11.387	78	254825	9.365	ppbV	100
38) carbon tetrachloride	11.560	117	110214	9.136	ppbV	99
39) cyclohexane	11.700	56	164854	9.642	ppbV	99
40) Dibromomethane	12.307	93	75504	8.552	ppbV #	100
41) 1,2-dichloropropane	12.340	63	98855	8.967	ppbV	99
42) bromodichloromethane	12.567	83	153014	9.133	ppbV	100
43) 1,4-dioxane	12.613	88	67516	9.935	ppbV	95
44) trichloroethene	12.620	130	99494	9.362	ppbV	99
45) 2,2,4-trimethylpentane	12.660	57	518113	9.796	ppbV	100
46) heptane	12.980	43	225909	9.950	ppbV	100
47) cis-1,3-dichloropropene	14.250	75	122480	9.602	ppbV	99
48) 4-methyl-2-pentanone	13.667	43	259306	10.074	ppbV	100
49) trans-1,3-dichloropropene	13.633	75	128381	9.462	ppbV	99
50) 1,1,2-trichloroethane	14.450	97	92104	9.347	ppbV	99
52) toluene	14.767	91	316661	9.068	ppbV	100
54) 2-hexanone	15.042	43	243850	10.599	ppbV	99
55) dibromochloromethane	15.217	129	138593	9.787	ppbV	99
56) 1,2-dibromoethane	15.458	107	136453	9.353	ppbV	99
57) tetrachloroethene	15.925	166	127720	9.542	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.567	131	102136	9.562	ppbV	99
59) chlorobenzene	16.583	112	241708	9.322	ppbV	95
60) ethylbenzene	16.933	91	401617	9.719	ppbV	97
61) m+p-xylene	17.092	91	674480	18.411	ppbV	98
62) bromoform	17.167	173	139114	10.767	ppbV	99
63) styrene	17.417	104	259966	10.370	ppbV	100
64) 1,1,2,2-tetrachloroethane	17.508	83	229081	9.727	ppbV	100
65) o-xylene	17.508	91	339550	9.566	ppbV	100
66) 1,2,3-Trichloropropane	17.625	75	177803	9.899	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47293_Ev2.D
 Acq On : 15 Jan 2020 6:58 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD010
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:47 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	isopropylbenzene	18.025	105	432279	9.816	ppbV	100
69)	Bromobenzene	18.100	77	234416	9.891	ppbV	99
70)	4-ethyl toluene	18.583	105	496009	10.968	ppbV	100
71)	1,3,5-trimethylbenzene	18.642	105	393985	10.294	ppbV	99
72)	tert-butylbenzene	18.983	119	437382	10.348	ppbV	100
73)	1,2,4-trimethylbenzene	18.983	105	387613	10.586	ppbV	99
74)	Benzyl Chloride	19.108	91	268634	9.940	ppbV	99
75)	1,3-dichlorobenzene	19.125	146	201298	9.815	ppbV	96
76)	1,4-dichlorobenzene	19.183	146	227524	10.379	ppbV	99
77)	sec-butylbenzene	19.208	105	583328	10.046	ppbV	100
78)	p-isopropyltoluene	19.342	119	537491	10.542	ppbV	99
79)	1,2-dichlorobenzene	19.475	146	215463	10.539	ppbV	91
80)	n-butylbenzene	19.700	91	473804	10.683	ppbV	99
81)	1,2,4-trichlorobenzene	20.983	180	174442	12.614	ppbV	99
82)	naphthalene	21.092	128	519274	13.180	ppbV	100
83)	1,2,3-trichlorobenzene	21.342	180	211546	13.113	ppbV	99
84)	hexachlorobutadiene	21.417	225	189516	10.627	ppbV	98

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

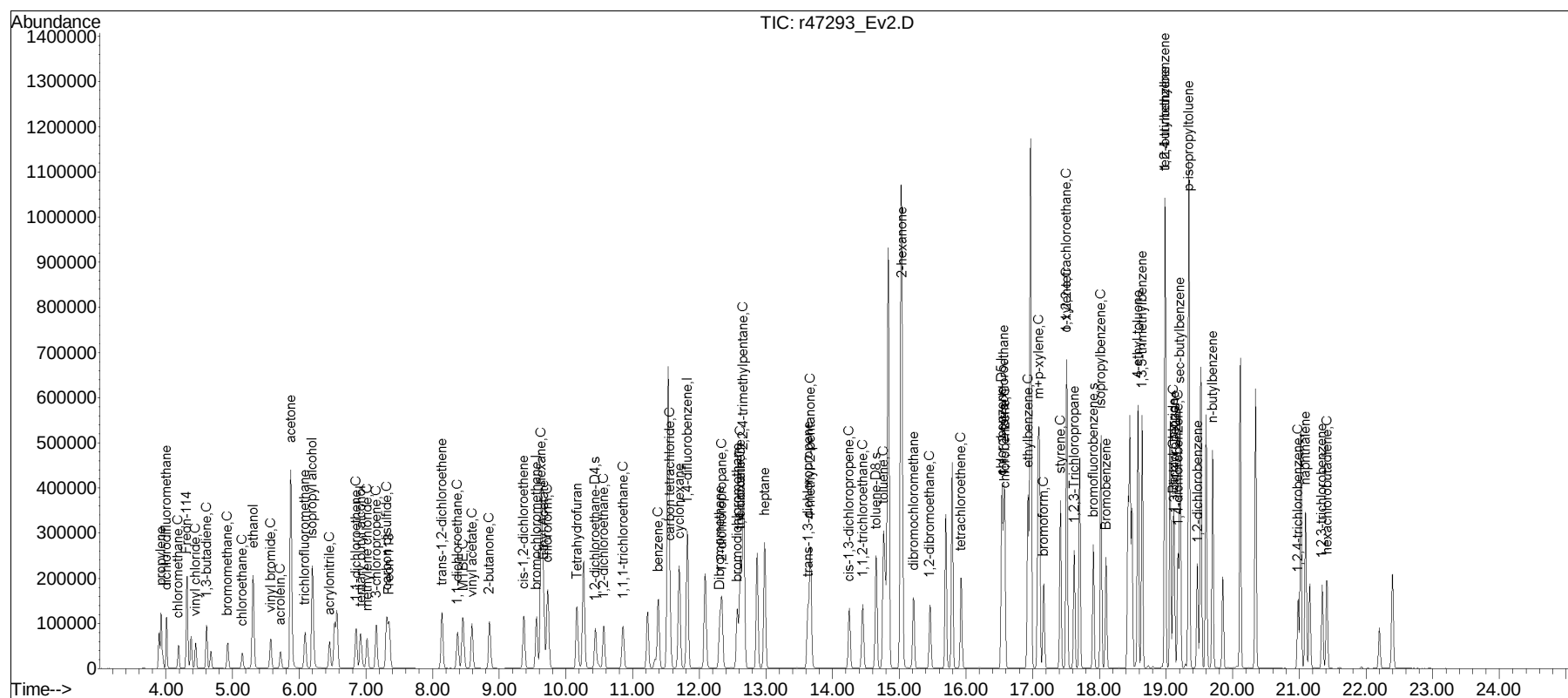
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Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Data File   : r47293_Ev2.D
Acq On      : 15 Jan 2020    6:58 PM
Operator    : AIRPIANO4:RY
Sample      : IT015-SIMSTD010
Misc        : WG1330814
ALS Vial    : 0    Sample Multiplier: 1
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Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

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

QLast Update : Thu Jan 16 09:51:52 2020

Response via : Initial Calibration

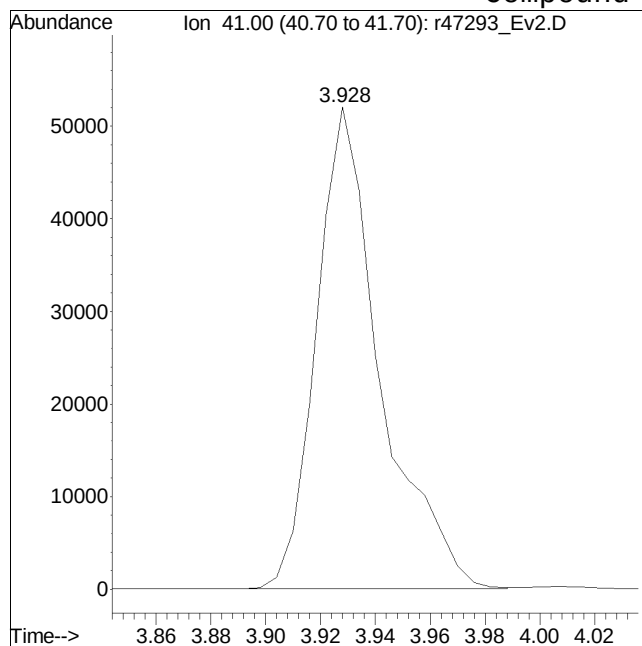


Page: 4

Manual Integration/Negative Proof Report

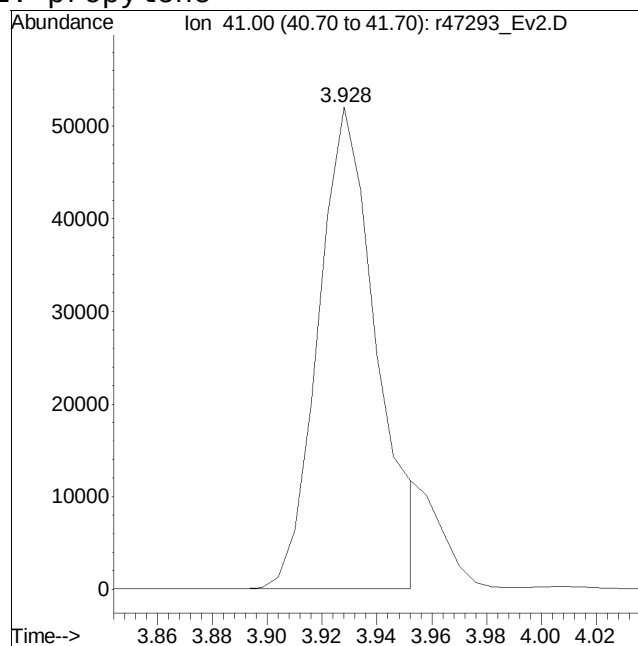
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47293_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:6: 8 Instrument :
Sample : IT015-SIMSTD010 Quant Date : 1/16/2020 10:28 am

Compound #2: propylene



Original Peak Response = 84279

M4 = Poor automated baseline construction.



Manual Peak Response = 77242 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47294_Ev2.D
 Acq On : 15 Jan 2020 7:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD020
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:54 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	141715	10.000	ppbV	0.00
Standard Area = 123037			Recovery = 115.18%			
33) 1,4-difluorobenzene	11.820	114	398912	10.000	ppbV	0.00
Standard Area = 379639			Recovery = 105.08%			
51) chlorobenzene-D5	16.533	54	67575	10.000	ppbV	0.00
Standard Area = 66307			Recovery = 101.91%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	78420	9.501	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.01%			
53) toluene-D8	14.650	98	292849	10.423	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.23%			
67) bromofluorobenzene	17.908	95	209954	10.707	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.07%			
Target Compounds						
					Qvalue	
2) propylene	3.928	41	168002M6	19.304	ppbV	
3) dichlorodifluoromethane	4.012	85	217520	17.958	ppbV	100
4) chloromethane	4.192	50	124979	18.903	ppbV	99
5) Freon-114	4.318	85	292902	17.401	ppbV	99
6) vinyl chloride	4.450	62	148574	16.773	ppbV	100
7) 1,3-butadiene	4.612	54	128479	18.117	ppbV	92
8) bromomethane	4.930	94	118106	17.409	ppbV	99
9) chloroethane	5.146	64	83314	18.047	ppbV	100
10) ethanol	5.308	31	529921	94.547	ppbV	100
11) vinyl bromide	5.573	106	140063	20.321	ppbV	99
12) acrolein	5.720	56	77756	21.344	ppbV	97
13) acetone	5.870	43	1439298	105.672	ppbV	99
14) trichlorofluoromethane	6.090	101	261417	21.198	ppbV	100
15) isopropyl alcohol	6.193	45	825165	50.422	ppbV	100
16) acrylonitrile	6.453	53	138124	20.900	ppbV	97
17) 1,1-dichloroethene	6.856	61	242640	20.979	ppbV	95
18) tertiary butyl alcohol	6.910	59	329275	21.700	ppbV	97
19) methylene chloride	7.018	49	189458	20.365	ppbV	94
20) 3-chloropropene	7.156	41	306143	22.046	ppbV	95
21) carbon disulfide	7.312	76	487481	19.913	ppbV	98
22) Freon 113	7.348	101	274290	18.788	ppbV	96
23) trans-1,2-dichloroethene	8.142	61	263136	20.585	ppbV	89

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47294_Ev2.D
 Acq On : 15 Jan 2020 7:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD020
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:54 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	317680	20.145	ppbV	99
25) MTBE	8.442	73	464310	19.697	ppbV	97
26) vinyl acetate	8.583	43	495634	22.223	ppbV	97
27) 2-butanone	8.842	43	454813	21.271	ppbV	100
28) cis-1,2-dichloroethene	9.367	61	232183	21.553	ppbV	89
29) Ethyl Acetate	9.658	61	69053	21.052	ppbV	77
30) chloroform	9.725	83	282125	19.128	ppbV	99
31) Tetrahydrofuran	10.150	42	295036	19.988	ppbV	99
32) 1,2-dichloroethane	10.567	62	184595	17.143	ppbV	96
34) hexane	9.633	57	332876	22.366	ppbV #	57
36) 1,1,1-trichloroethane	10.858	97	253335	18.999	ppbV	98
37) benzene	11.387	78	560908	20.226	ppbV	100
38) carbon tetrachloride	11.560	117	233283	18.975	ppbV	99
39) cyclohexane	11.700	56	357047	20.491	ppbV	99
40) Dibromomethane	12.307	93	161867	17.989	ppbV #	97
41) 1,2-dichloropropane	12.333	63	223677	19.908	ppbV	97
42) bromodichloromethane	12.567	83	328970	19.266	ppbV	99
43) 1,4-dioxane	12.600	88	145828	21.056	ppbV	97
44) trichloroethene	12.620	130	226904	20.951	ppbV	99
45) 2,2,4-trimethylpentane	12.667	57	1084326	20.116	ppbV	98
46) heptane	12.980	43	494827	21.385	ppbV	99
47) cis-1,3-dichloropropene	14.250	75	279051	21.467	ppbV	96
48) 4-methyl-2-pentanone	13.658	43	565958	21.575	ppbV	99
49) trans-1,3-dichloropropene	13.625	75	291444	21.077	ppbV	96
50) 1,1,2-trichloroethane	14.450	97	210786	20.991	ppbV	95
52) toluene	14.767	91	693864	19.996	ppbV	100
54) 2-hexanone	15.042	43	468357	20.487	ppbV #	92
55) dibromochloromethane	15.217	129	308045	21.894	ppbV	99
56) 1,2-dibromoethane	15.458	107	308841	21.304	ppbV	99
57) tetrachloroethene	15.925	166	283552	21.319	ppbV	98
58) 1,1,1,2-tetrachloroethane	16.567	131	225793	21.276	ppbV	98
59) chlorobenzene	16.583	112	537111	20.848	ppbV	95
60) ethylbenzene	16.933	91	891490	21.712	ppbV	96
61) m+p-xylene	17.100	91	1451537	39.877	ppbV	95
62) bromoform	17.167	173	311470	24.263	ppbV	99
63) styrene	17.417	104	595318	23.900	ppbV	98
64) 1,1,2,2-tetrachloroethane	17.508	83	502459	21.471	ppbV	100
65) o-xylene	17.508	91	724615	20.545	ppbV	97
66) 1,2,3-Trichloropropane	17.625	75	383322	21.477	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47294_Ev2.D
 Acq On : 15 Jan 2020 7:37 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD020
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:54 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	939412	21.468	ppbV	98
69) Bromobenzene	18.100	77	504855	21.438	ppbV	97
70) 4-ethyl toluene	18.583	105	1067378	23.754	ppbV	99
71) 1,3,5-trimethylbenzene	18.642	105	876734	23.055	ppbV	99
72) tert-butylbenzene	18.983	119	899145	21.409	ppbV	98
73) 1,2,4-trimethylbenzene	18.992	105	839833	23.084	ppbV #	88
74) Benzyl Chloride	19.108	91	731702	27.249	ppbV	100
75) 1,3-dichlorobenzene	19.125	146	519557	25.497	ppbV	94
76) 1,4-dichlorobenzene	19.183	146	520530	23.898	ppbV	99
77) sec-butylbenzene	19.208	105	1231450	21.345	ppbV	99
78) p-isopropyltoluene	19.342	119	1081577	21.349	ppbV	97
79) 1,2-dichlorobenzene	19.475	146	494745	24.356	ppbV	91
80) n-butylbenzene	19.700	91	981139	22.263	ppbV	96
81) 1,2,4-trichlorobenzene	20.983	180	376341	27.389	ppbV	99
82) naphthalene	21.092	128	1002428	25.606	ppbV	100
83) 1,2,3-trichlorobenzene	21.342	180	394134	24.588	ppbV	99
84) hexachlorobutadiene	21.417	225	381173	21.512	ppbV	96

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

Sub List : Default - All compounds listed20\01\200115SIM_I\r47292_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\

Data File : r47294_Ev2.D

Acq On : 15 Jan 2020 7:37 PM

Operator : AIRPIANO4:RY

Sample : IT015-SIMSTD020

Misc : WG1330814

ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:28:54 2020

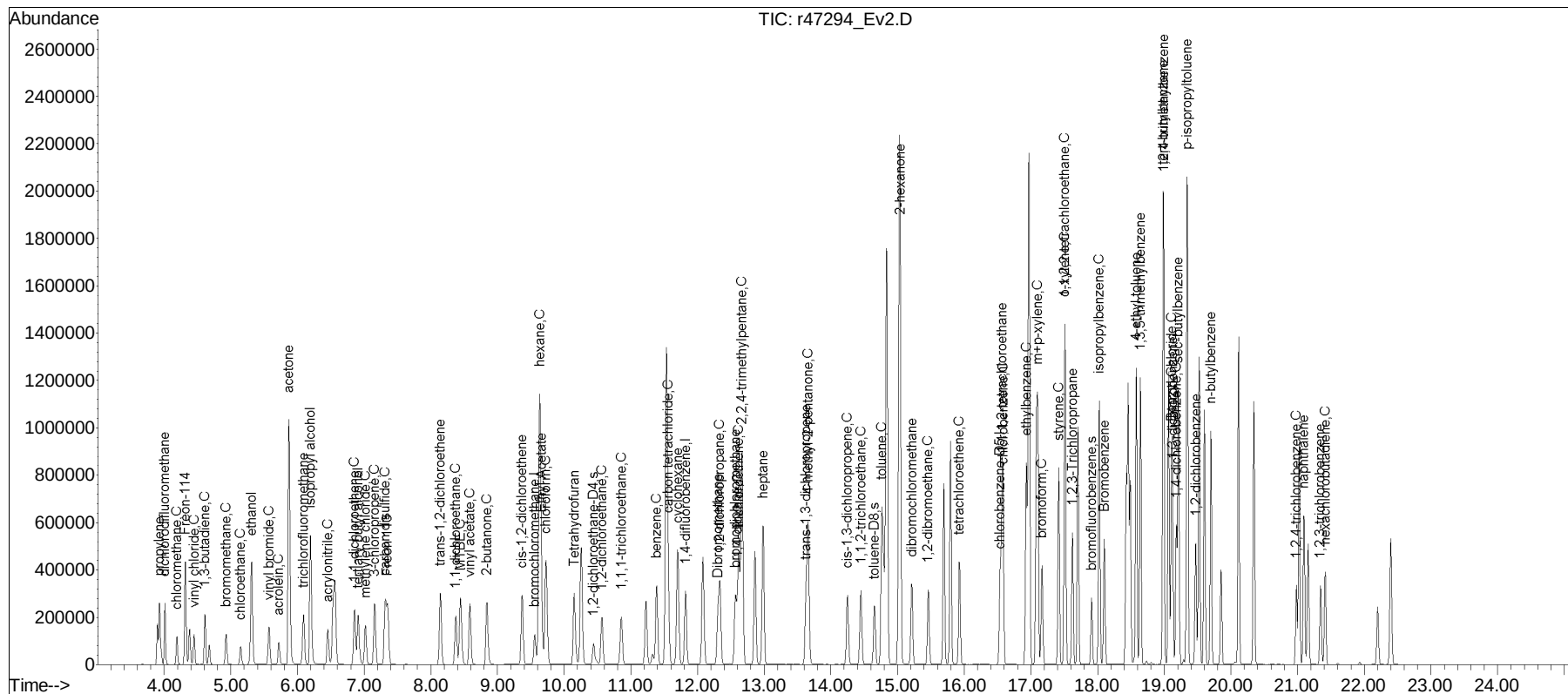
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

..M

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

QLast Update : Thu Jan 16 09:51:52 2020

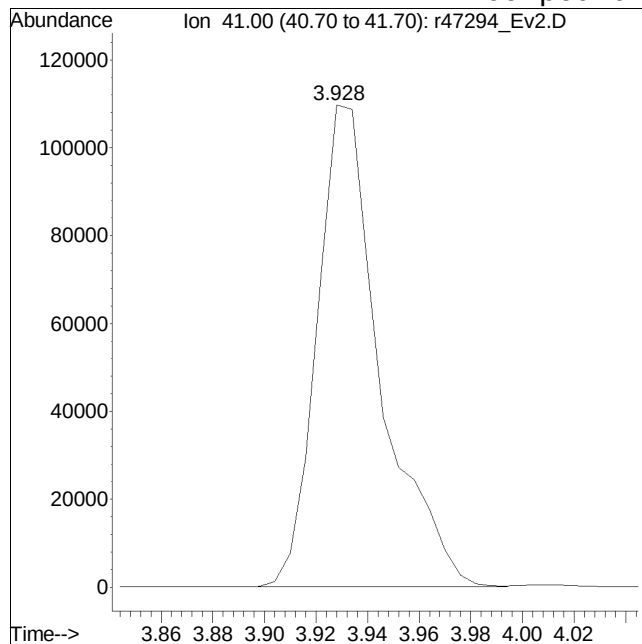
Response via : Initial Calibration



Manual Integration/Negative Proof Report

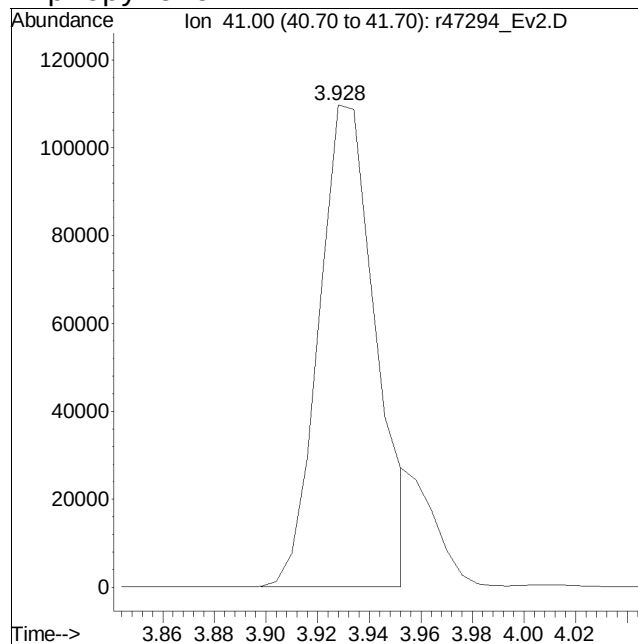
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47294_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:7: 7 Instrument :
Sample : IT015-SIMSTD020 Quant Date : 1/16/2020 10:28 am

Compound #2: propylene



Original Peak Response = 187493

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



Manual Peak Response = 168002 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47295_Ev2.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:29:04 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.558	49	155772	10.000	ppbV	0.00
Standard Area = 123037			Recovery = 126.61%			
33) 1,4-difluorobenzene	11.820	114	430327	10.000	ppbV	0.00
Standard Area = 379639			Recovery = 113.35%			
51) chlorobenzene-D5	16.542	54	70495	10.000	ppbV	# 0.00
Standard Area = 66307			Recovery = 106.32%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.442	65	79153	8.890	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 88.90%			
53) toluene-D8	14.658	98	320846	10.946	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 109.46%			
67) bromofluorobenzene	17.908	95	236088	11.541	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.41%			
Target Compounds						
					Qvalue	
2) propylene	3.934	41	395447M4	41.337	ppbV	
3) dichlorodifluoromethane	4.012	85	470895	35.367	ppbV	100
4) chloromethane	4.192	50	295198	40.620	ppbV	99
5) Freon-114	4.318	85	639829	34.581	ppbV	100
6) vinyl chloride	4.450	62	338264	34.742	ppbV	100
7) 1,3-butadiene	4.612	54	299078	38.368	ppbV	90
8) bromomethane	4.930	94	270378	36.257	ppbV	100
9) chloroethane	5.152	64	193173	38.068	ppbV	99
10) ethanol	5.320	31	1180354	191.592	ppbV	100
11) vinyl bromide	5.577	106	293470	38.736	ppbV	99
12) acrolein	5.723	56	160066	39.974	ppbV	100
13) acetone	5.877	43	2310801	154.346	ppbV	90
14) trichlorofluoromethane	6.090	101	452624	33.391	ppbV	98
15) isopropyl alcohol	6.210	45	1585724	88.152	ppbV	99
16) acrylonitrile	6.460	53	293687	40.429	ppbV	100
17) 1,1-dichloroethene	6.856	61	558905	43.962	ppbV	98
18) tertiary butyl alcohol	6.922	59	776571	46.560	ppbV	98
19) methylene chloride	7.024	49	459894	44.974	ppbV	94
20) 3-chloropropene	7.162	41	731126	47.899	ppbV	99
21) carbon disulfide	7.318	76	1177424	43.756	ppbV	99
22) Freon 113	7.354	101	651746	40.615	ppbV	96
23) trans-1,2-dichloroethene	8.142	61	617364	43.937	ppbV	90

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47295_Ev2.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:29:04 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.375	63	756828	43.662	ppbV	99
25) MTBE	8.450	73	1121231	43.273	ppbV	99
26) vinyl acetate	8.592	43	1217943	49.682	ppbV	98
27) 2-butanone	8.850	43	1107682	47.129	ppbV	99
28) cis-1,2-dichloroethene	9.375	61	546235	46.129	ppbV	96
29) Ethyl Acetate	9.667	61	165973	46.033	ppbV	94
30) chloroform	9.725	83	651589	40.190	ppbV	99
31) Tetrahydrofuran	10.150	42	720418	44.403	ppbV	99
32) 1,2-dichloroethane	10.567	62	414529	35.023	ppbV #	93
34) hexane	9.633	57	769146	47.906	ppbV	87
36) 1,1,1-trichloroethane	10.858	97	621145	43.183	ppbV	98
37) benzene	11.387	78	1356444	45.341	ppbV	99
38) carbon tetrachloride	11.567	117	501939	37.846	ppbV	98
39) cyclohexane	11.707	56	852972	45.379	ppbV	97
40) Dibromomethane	12.307	93	374863	38.618	ppbV #	93
41) 1,2-dichloropropane	12.340	63	536215	44.241	ppbV #	95
42) bromodichloromethane	12.573	83	760856	41.307	ppbV	99
43) 1,4-dioxane	12.600	88	359060	48.060	ppbV	95
44) trichloroethene	12.620	130	548346	46.934	ppbV	97
45) 2,2,4-trimethylpentane	12.667	57	2517814	43.299	ppbV	96
46) heptane	12.987	43	1164436	46.650	ppbV	98
47) cis-1,3-dichloropropene	14.250	75	688998	49.134	ppbV	92
48) 4-methyl-2-pentanone	13.658	43	1347647	47.624	ppbV	99
49) trans-1,3-dichloropropene	13.633	75	716784	48.053	ppbV	91
50) 1,1,2-trichloroethane	14.450	97	516623	47.691	ppbV	94
52) toluene	14.767	91	1637066	45.224	ppbV	99
54) 2-hexanone	15.050	43	947528	39.731	ppbV #	87
55) dibromochloromethane	15.217	129	712485	48.541	ppbV	97
56) 1,2-dibromoethane	15.467	107	750577	49.632	ppbV	98
57) tetrachloroethene	15.933	166	662308	47.734	ppbV	96
58) 1,1,1,2-tetrachloroethane	16.567	131	511993	46.245	ppbV	97
59) chlorobenzene	16.583	112	1263351	47.005	ppbV	96
60) ethylbenzene	16.933	91	2050170	47.864	ppbV	92
61) m+p-xylene	17.100	91	3162194	83.275	ppbV	88
62) bromoform	17.167	173	700847	52.333	ppbV	98
63) styrene	17.417	104	1456389	56.048	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.508	83	1124041	46.043	ppbV	97
65) o-xylene	17.517	91	1525935	41.473	ppbV	87
66) 1,2,3-Trichloropropane	17.625	75	935790	50.260	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47295_Ev2.D
 Acq On : 15 Jan 2020 8:16 PM
 Operator : AIRPIAN04:RY
 Sample : IT015-SIMSTD050
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 10:29:04 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 09:51:52 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.025	105	2178951	47.733	ppbV	97
69) Bromobenzene	18.100	77	1205885	49.085	ppbV	95
70) 4-ethyl toluene	18.583	105	2469252	52.676	ppbV	98
71) 1,3,5-trimethylbenzene	18.642	105	1987672	50.103	ppbV	98
72) tert-butylbenzene	18.992	119	1820539	41.552	ppbV	94
73) 1,2,4-trimethylbenzene	18.992	105	1703906	44.894	ppbV #	87
74) Benzyl Chloride	19.108	91	1637608	58.459	ppbV	97
75) 1,3-dichlorobenzene	19.125	146	1196043	56.263	ppbV	91
76) 1,4-dichlorobenzene	19.183	146	1208109	53.169	ppbV	97
77) sec-butylbenzene	19.217	105	2763083	45.909	ppbV	91
78) p-isopropyltoluene	19.350	119	2176741	41.187	ppbV	92
79) 1,2-dichlorobenzene	19.475	146	1184990	55.920	ppbV	93
80) n-butylbenzene	19.700	91	2171202	47.227	ppbV	91
81) 1,2,4-trichlorobenzene	20.983	180	969097	67.607	ppbV	99
82) naphthalene	21.100	128	2485116	60.851	ppbV	99
83) 1,2,3-trichlorobenzene	21.350	180	989601	59.179	ppbV	97
84) hexachlorobutadiene	21.417	225	822173	44.478	ppbV	94

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

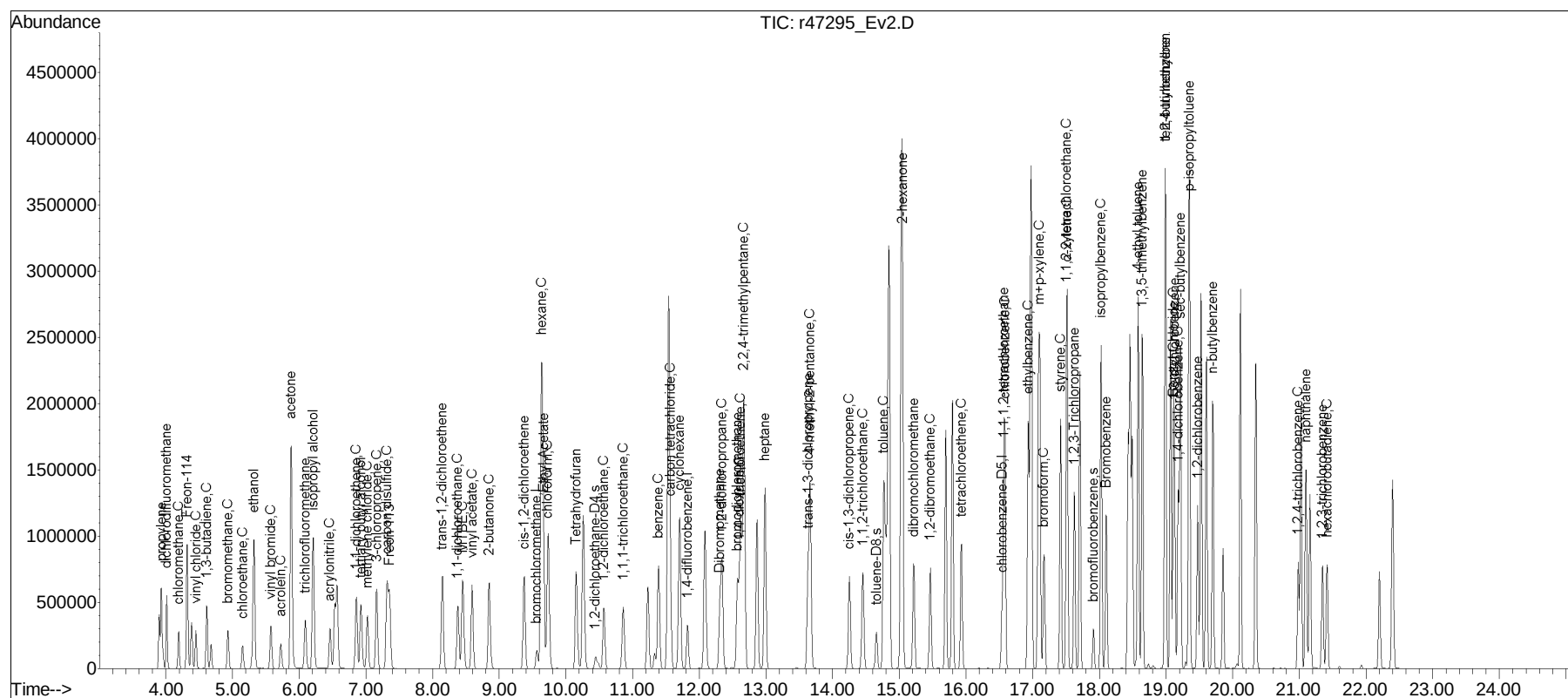
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Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
Data File  : r47295_Ev2.D
Acq On     : 15 Jan 2020    8:16 PM
Operator   : AIRPIANO4:RY
Sample     : IT015-SIMSTD050
Misc       : WG1330814
ALS Vial   : 0    Sample Multiplier: 1
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Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

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

QLast Update : Thu Jan 16 09:51:52 2020

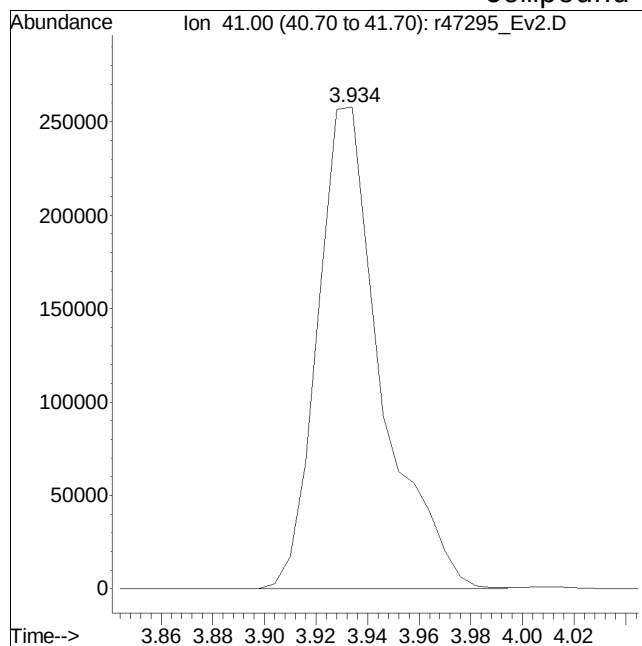
Response via : Initial Calibration



Manual Integration/Negative Proof Report

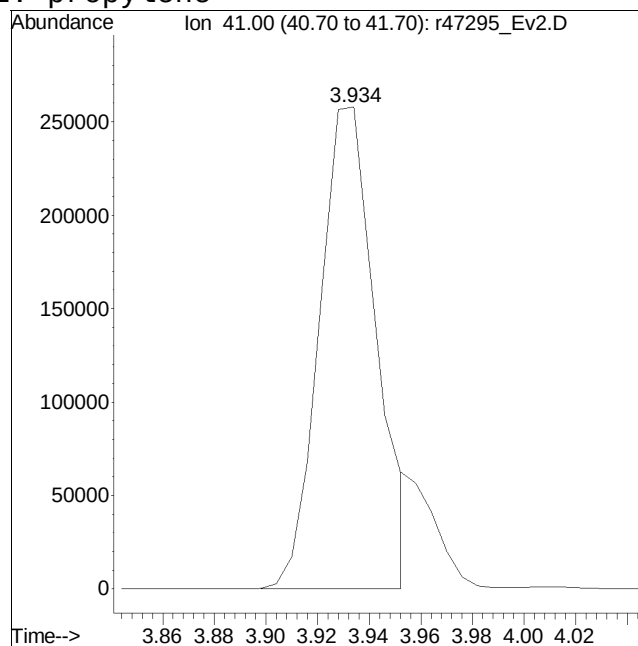
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47295_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/15/2020 0:8: 6 Instrument :
Sample : IT015-SIMSTD050 Quant Date : 1/16/2020 10:28 am

Compound #2: propylene



Original Peak Response = 441358

M4 = Poor automated baseline construction.



Manual Peak Response = 395447 M4

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47304_Ev2.D
 Acq On : 16 Jan 2020 1:31 PM
 Operator : AIRPIAN04:RY
 Sample : CT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 14:00:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	105	0.03
2	propylene	0.614	0.712	-16.0	127	0.03
3	dichlorodifluoromethane	0.855	0.766	10.4	94	0.03
4 C	chloromethane	0.467	0.488	-4.5	111	0.03
5	Freon-114	1.188	1.135	4.5	103	0.04
6 C	vinyl chloride	0.625	0.528	15.5	100	0.03
7 C	1,3-butadiene	0.500	0.505	-1.0	110	0.03
8 C	bromomethane	0.479	0.432	9.8	102	0.04
9 C	chloroethane	0.326	0.300	8.0	102	0.04
10	ethanol	0.395	0.376	4.8	94	0.03
11 C	vinyl bromide	0.486	0.467	3.9	102	0.04
12 C	acrolein	0.257	0.230	10.5	97	0.03
13	acetone	0.961	0.735	23.5	76	0.02
14	trichlorofluoromethane	0.870	0.674	22.5	84	0.04
15	isopropyl alcohol	1.155	1.014	12.2	90	0.02
16 C	acrylonitrile	0.466	0.443	4.9	101	0.03
17 C	1,1-dichloroethene	0.816	0.653	20.0	92	0.04
18	tertiary butyl alcohol	1.071	0.890	16.9	89	0.01
19 C	methylene chloride	0.656	0.648	1.2	107	0.04
20 C	3-chloropropene	0.980	0.886	9.6	99	0.04
21 C	carbon disulfide	1.727	1.592	7.8	99	0.04
22	Freon 113	1.030	0.901	12.5	100	0.04
23	trans-1,2-dichloroethene	0.902	0.710	21.3	89	0.04
24 C	1,1-dichloroethane	1.113	0.903	18.9	94	0.04
25 C	MTBE	1.663	1.481	10.9	99	0.02
26 C	vinyl acetate	1.574	1.418	9.9	98	0.03
27 C	2-butanone	1.509	1.304	13.6	96	0.02
28	cis-1,2-dichloroethene	0.760	0.643	15.4	96	0.04
29	Ethyl Acetate	0.231	0.228	1.3	109	0.05
30 C	chloroform	1.041	1.092	-4.9	125	0.04
31	Tetrahydrofuran	1.042	1.173	-12.6	117	0.02
32 C	1,2-dichloroethane	0.760	0.613	19.3	89	0.04
33 I	1,4-difluorobenzene	1.000	1.000	0.0	117	0.04
34 C	hexane	0.373	0.296	20.6	99	0.03
35 S	1,2-dichloroethane-D4	0.207	0.168	18.8	94	0.04
36 C	1,1,1-trichloroethane	0.334	0.312	6.6	121	0.04
37 C	benzene	0.695	0.670	3.6	117	0.05

TSIM4_200115.M Thu Jan 16 14:04:02 2020

1

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47304_Ev2.D
 Acq On : 16 Jan 2020 1:31 PM
 Operator : AIRPIAN04:RY
 Sample : CT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 14:00:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115
 .M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	0.308	0.254	17.5	102	0.05
39	cyclohexane	0.437	0.401	8.2	108	0.03
40	Dibromomethane	0.226	0.175	22.6	104	0.04
41 C	1,2-dichloropropane	0.282	0.258	8.5	117	0.04
42	bromodichloromethane	0.428	0.366	14.5	106	0.04
43 C	1,4-dioxane	0.174	0.173	0.6	118	0.00
44 C	trichloroethene	0.271	0.276	-1.8	125	0.05
45 C	2,2,4-trimethylpentane	1.351	1.290	4.5	110	0.04
46	heptane	0.580	0.607	-4.7	121	0.05
47 C	cis-1,3-dichloropropene	0.326	0.291	10.7	109	0.03
48 C	4-methyl-2-pentanone	0.658	0.687	-4.4	121	0.02
49	trans-1,3-dichloropropene	0.347	0.366	-5.5	130	0.04
50 C	1,1,2-trichloroethane	0.252	0.261	-3.6	128	0.03
51 I	chlorobenzene-D5	1.000	1.000	0.0	102	0.03
52 C	toluene	5.135	5.365	-4.5	116	0.04
53 s	toluene-D8	4.158	4.965	-19.4	123	0.03
54	2-hexanone	3.383	4.071	-20.3	113	0.02
55	dibromochloromethane	2.082	2.345	-12.6	117	0.03
56 C	1,2-dibromoethane	2.145	2.410	-12.4	120	0.03
57 C	tetrachloroethene	1.968	2.257	-14.7	123	0.03
58	1,1,1,2-tetrachloroethane	1.571	1.601	-1.9	109	0.03
59 C	chlorobenzene	3.813	4.189	-9.9	119	0.03
60 C	ethylbenzene	6.076	6.996	-15.1	120	0.03
61 C	m+p-xylene	5.387	5.727	-6.3	115	0.04
62 C	bromoform	1.900	2.380	-25.3	122	0.03
63 C	styrene	3.686	4.625	-25.5	124	0.03
64 C	1,1,2,2-tetrachloroethane	3.463	3.883	-12.1	115	0.03
65 C	o-xylene	5.219	5.852	-12.1	117	0.03
66	1,2,3-Trichloropropane	2.641	2.742	-3.8	106	0.03
67 s	bromofluorobenzene	2.902	3.401	-17.2	121	0.03
68 C	isopropylbenzene	6.475	7.046	-8.8	112	0.03
69	Bromobenzene	3.485	3.547	-1.8	104	0.03
70	4-ethyl toluene	6.650	8.260	-24.2	115	0.03
71	1,3,5-trimethylbenzene	5.627	6.920	-23.0	120	0.03
72	tert-butylbenzene	6.215	6.704	-7.9	105	0.02
73	1,2,4-trimethylbenzene	5.384	6.904	-28.2	122	0.02
74 C	Benzyl Chloride	3.974	3.361	15.4	84	0.02

TSIM4_200115.M Thu Jan 16 14:04:02 2020

2

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47304_Ev2.D
 Acq On : 16 Jan 2020 1:31 PM
 Operator : AIRPIAN04:RY
 Sample : CT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 14:00:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115
 .M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	3.016	2.835	6.0	100	0.02
76 C	1,4-dichlorobenzene	3.223	3.822	-18.6	119	0.02
77	sec-butylbenzene	8.538	8.995	-5.4	106	0.03
78	p-isopropyltoluene	7.497	7.535	-0.5	95	0.03
79	1,2-dichlorobenzene	3.006	3.817	-27.0	124	0.02
80	n-butylbenzene	6.522	7.191	-10.3	104	0.03
81 C	1,2,4-trichlorobenzene	2.033	3.109	-52.9#	133	0.03
82	naphthalene	5.793	7.119	-22.9	102	0.02
83	1,2,3-trichlorobenzene	2.372	2.891	-21.9	100	0.02
84 C	hexachlorobutadiene	2.622	3.569	-36.1#	129	0.03

* 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\Airpiano4\2020\01\200115SIM_I\
 Data File : r47304_Ev2.D
 Acq On : 16 Jan 2020 1:31 PM
 Operator : AIRPIAN04:RY
 Sample : CT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 14:00:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.60	49	129317	10.000	ppbV	0.03
Standard Area = 123037			Recovery =	105.10%		
33) 1,4-difluorobenzene	11.87	114	442315	10.000	ppbV	0.04
Standard Area = 379639			Recovery =	116.51%		
51) chlorobenzene-D5	16.57	54	67487	10.000	ppbV	# 0.03
Standard Area = 66307			Recovery =	101.78%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.49	65	74343	8.123	ppbV	0.04
Spiked Amount 10.000	Range 70 - 130		Recovery =	81.23%		
53) toluene-D8	14.69	98	335103	11.942	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	119.42%		
67) bromofluorobenzene	17.94	95	229525	11.721	ppbV	0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	117.21%		
Target Compounds						
					Qvalue	
2) propylene	3.96	41	46023M6	5.795	ppbV	
3) dichlorodifluoromethane	4.04	85	49511	4.479	ppbV	99
4) chloromethane	4.22	50	31536	5.227	ppbV	100
5) Freon-114	4.35	85	73417	4.780	ppbV	99
6) vinyl chloride	4.49	62	34169	4.227	ppbV	100
7) 1,3-butadiene	4.65	54	32639	5.044	ppbV	83
8) bromomethane	4.97	94	27963	4.517	ppbV	99
9) chloroethane	5.19	64	19389	4.603	ppbV	99
10) ethanol	5.35	31	121410	23.738	ppbV	99
11) vinyl bromide	5.62	106	30209	4.803	ppbV	99
12) acrolein	5.77	56	14883	4.477	ppbV	99
13) acetone	5.92	43	237512	19.110	ppbV	91
14) trichlorofluoromethane	6.13	101	43549	3.870	ppbV	100
15) isopropyl alcohol	6.24	45	163900	10.975	ppbV	100
16) acrylonitrile	6.50	53	28632	4.748	ppbV	100
17) 1,1-dichloroethene	6.90	61	42242	4.002	ppbV	94
18) tertiary butyl alcohol	6.97	59	57540	4.156	ppbV	96
19) methylene chloride	7.07	49	41910	4.937	ppbV	100
20) 3-chloropropene	7.20	41	57283	4.521	ppbV	# 92
21) carbon disulfide	7.36	76	102905	4.607	ppbV	96
22) Freon 113	7.40	101	58276	4.374	ppbV	96
23) trans-1,2-dichloroethene	8.19	61	45889	3.934	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47304_Ev2.D
 Acq On : 16 Jan 2020 1:31 PM
 Operator : AIRPIAN04:RY
 Sample : CT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 14:00:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.43	63	58382	4.057	ppbV	100
25) MTBE	8.50	73	95781	4.453	ppbV	97
26) vinyl acetate	8.63	43	91698	4.506	ppbV	100
27) 2-butanone	8.90	43	84346	4.323	ppbV	96
28) cis-1,2-dichloroethene	9.42	61	41593	4.231	ppbV	93
29) Ethyl Acetate	9.72	61	14730	4.921	ppbV	95
30) chloroform	9.77	83	70631	5.248	ppbV	99
31) Tetrahydrofuran	10.22	42	75874	5.633	ppbV	96
32) 1,2-dichloroethane	10.62	62	39646	4.035	ppbV #	89
34) hexane	9.68	57	65556	3.972	ppbV	96
36) 1,1,1-trichloroethane	10.90	97	69055	4.671	ppbV	96
37) benzene	11.43	78	148260	4.821	ppbV	99
38) carbon tetrachloride	11.61	117	56072	4.113	ppbV #	97
39) cyclohexane	11.75	56	88660	4.589	ppbV	97
40) Dibromomethane	12.35	93	38758	3.885	ppbV #	91
41) 1,2-dichloropropane	12.39	63	56957	4.572	ppbV #	95
42) bromodichloromethane	12.61	83	80873	4.272	ppbV	99
43) 1,4-dioxane	12.66	88	38259	4.982	ppbV	91
44) trichloroethene	12.67	130	61003	5.080	ppbV	99
45) 2,2,4-trimethylpentane	12.71	57	285351	4.774	ppbV	99
46) heptane	13.03	43	134269	5.233	ppbV	94
47) cis-1,3-dichloropropene	14.29	75	64439	4.471	ppbV	90
48) 4-methyl-2-pentanone	13.71	43	151841	5.220	ppbV	95
49) trans-1,3-dichloropropene	13.68	75	80900	5.277	ppbV #	88
50) 1,1,2-trichloroethane	14.49	97	57696	5.182	ppbV	91
52) toluene	14.81	91	181038	5.224	ppbV	100
54) 2-hexanone	15.08	43	137361	6.017	ppbV #	87
55) dibromochloromethane	15.25	129	79142	5.632	ppbV	100
56) 1,2-dibromoethane	15.50	107	81328	5.617	ppbV	99
57) tetrachloroethene	15.97	166	76153	5.733	ppbV	96
58) 1,1,1,2-tetrachloroethane	16.60	131	54024	5.097	ppbV	98
59) chlorobenzene	16.62	112	141366	5.494	ppbV	96
60) ethylbenzene	16.97	91	236067	5.757	ppbV	96
61) m+p-xylene	17.13	91	386526	10.633	ppbV	97
62) bromoform	17.20	173	80320	6.265	ppbV	98
63) styrene	17.45	104	156052	6.273	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.54	83	131030	5.606	ppbV	100
65) o-xylene	17.54	91	197455	5.606	ppbV	99
66) 1,2,3-Trichloropropane	17.66	75	92523	5.191	ppbV #	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47304_Ev2.D
 Acq On : 16 Jan 2020 1:31 PM
 Operator : AIRPIAN04:RY
 Sample : CT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 14:00:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\r47292_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.06	105	237766	5.441	ppbV	100
69) Bromobenzene	18.13	77	119676	5.088	ppbV	97
70) 4-ethyl toluene	18.61	105	278724	6.211	ppbV	98
71) 1,3,5-trimethylbenzene	18.68	105	233499	6.148	ppbV	98
72) tert-butylbenzene	19.02	119	226230	5.394	ppbV	99
73) 1,2,4-trimethylbenzene	19.02	105	232959	6.412	ppbV #	88
74) Benzyl Chloride	19.13	91	113416	4.229	ppbV	99
75) 1,3-dichlorobenzene	19.15	146	95658	4.700	ppbV	96
76) 1,4-dichlorobenzene	19.21	146	128958	5.928	ppbV	95
77) sec-butylbenzene	19.24	105	303535	5.268	ppbV	97
78) p-isopropyltoluene	19.38	119	254269M3	5.026	ppbV	
79) 1,2-dichlorobenzene	19.50	146	128795	6.349	ppbV	95
80) n-butylbenzene	19.73	91	242635	5.513	ppbV	95
81) 1,2,4-trichlorobenzene	21.02	180	104906	7.645	ppbV	98
82) naphthalene	21.13	128	240234	6.145	ppbV	99
83) 1,2,3-trichlorobenzene	21.38	180	97569	6.095	ppbV	98
84) hexachlorobutadiene	21.45	225	120432	6.806	ppbV	97

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\
 Data File : r47304_Ev2.D
 Acq On : 16 Jan 2020 1:31 PM
 Operator : AIRPIANO4:RY
 Sample : CT015-SIMSTD5.0
 Misc : WG1330814
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 16 14:00:28 2020

Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200115SIM_I\TSIM4_200115

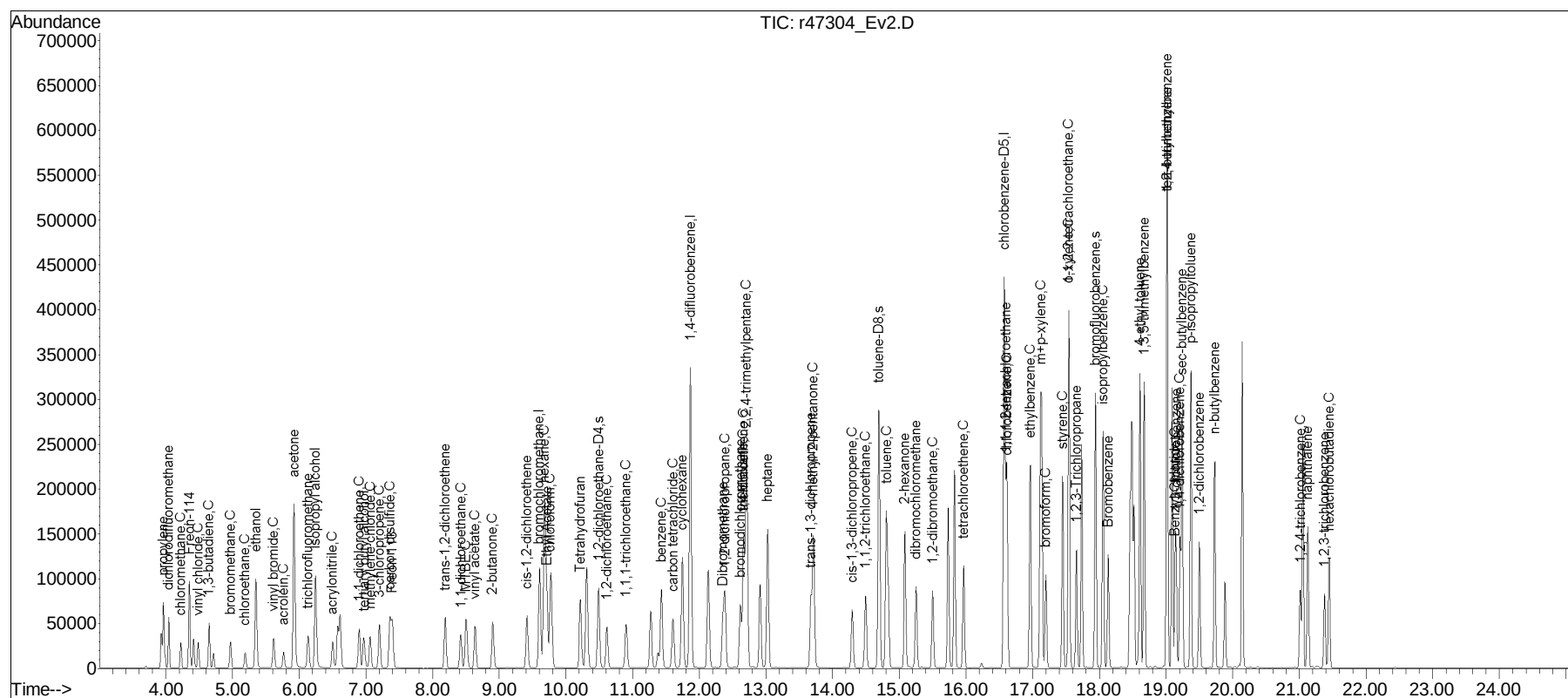
..M

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

QLast Update : Thu Jan 16 10:30:42 2020

Response via : Initial Calibration

Sub List : Default - All compounds listed 20\01\200115SIM_I\r47292_Ev2.D



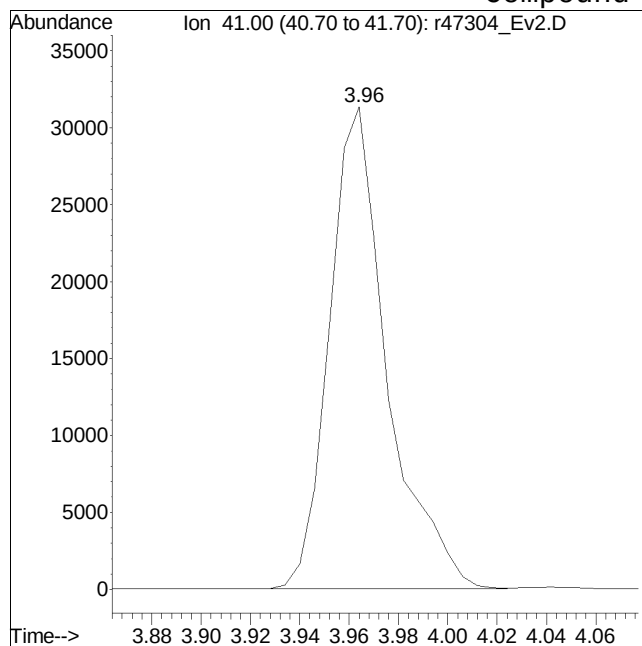
TSIM4_200115.M Thu Jan 16 14:04:02 2020

Page: 4

Manual Integration/Negative Proof Report

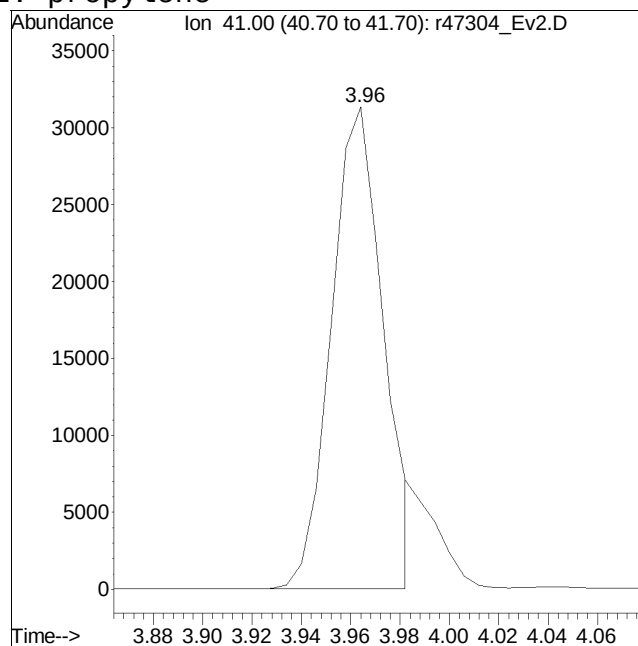
Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
Data File : r47304_Ev2.D Operator : AIRPIAN04:RY
Date Inj'd : 1/16/2020 0:1: 1 Instrument :
Sample : CT015-SIMSTD5.0 Quant Date : 1/16/2020 1:59 pm

Compound #2: propylene



Original Peak Response = 50845

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

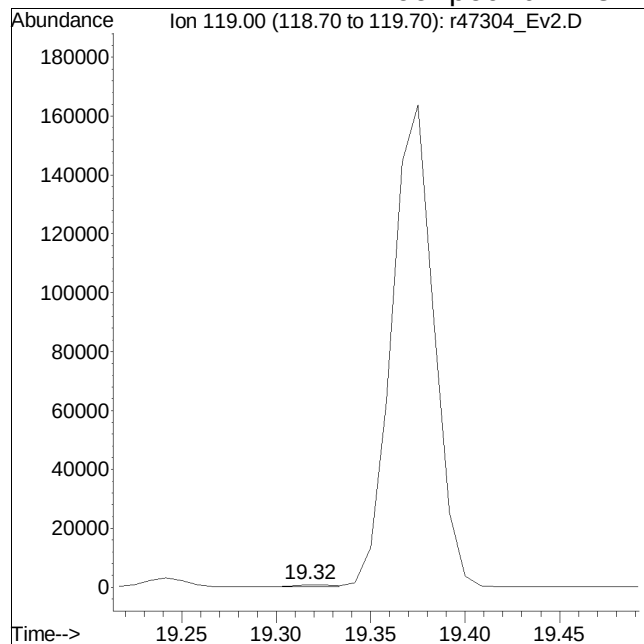


Manual Peak Response = 46023 M6

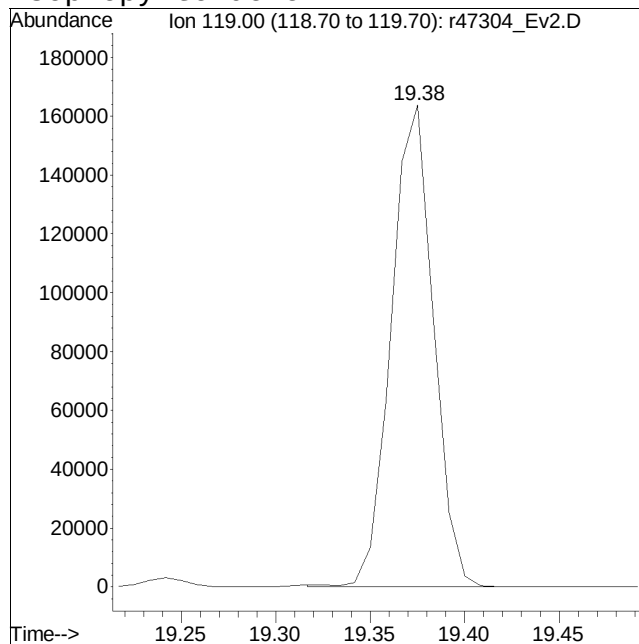
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano4QMethod : TSIM4_200115.M
 Data File : r47304_Ev2.D Operator : AIRPIANO4:RY
 Date Inj'd : 1/16/2020 0:1: 1 Instrument :
 Sample : CT015-SIMSTD5.0 Quant Date : 1/16/2020 1:59 pm

Compound #78: p-isopropyltoluene



Original Peak Response = 1151



Manual Peak Response = 254269 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.

Continuing Calibration

Calibration Verification Summary

Form 7

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Lab File ID : R47410_EV2
 Sample No : WG1332352-2
 Channel :

Lab Number : L2002033
 Project Number :
 Calibration Date : 01/21/20 13:12
 Init. Calib. Date(s) : 01/15/20 01/15/20
 Init. Calib. Times : 14:16 20:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	100	-.03
propylene	0.614	0.742	-	-20.8	30	125	-.02
dichlorodifluoromethane	0.855	0.78	-	8.8	30	90	-.02
chloromethane	0.467	0.491	-	-5.1	30	106	-.02
Freon-114	1.188	1.167	-	1.8	30	101	-.02
vinyl chloride	0.625	0.55	-	12	30	98	-.02
1,3-butadiene	0.5	0.512	-	-2.4	30	106	-.02
bromomethane	0.479	0.447	-	6.7	30	100	-.03
chloroethane	0.326	0.31	-	4.9	30	100	-.02
ethanol	0.395	0.355	-	10.1	30	85	-.04
vinyl bromide	0.486	0.478	-	1.6	30	99	-.03
acrolein	0.257	0.229	-	10.9	30	91	-.04
acetone	0.961	0.758	-	21.1	30	74	-.05
trichlorofluoromethane	0.87	0.681	-	21.7	30	81	-.03
isopropyl alcohol	1.155	1.029	-	10.9	30	87	-.05
acrylonitrile	0.466	0.442	-	5.2	30	95	-.03
1,1-dichloroethene	0.816	0.669	-	18	30	90	-.03
tertiary butyl alcohol	1.071	0.891	-	16.8	30	85	-.06
methylene chloride	0.656	0.649	-	1.1	30	101	-.03
3-chloropropene	0.98	0.933	-	4.8	30	99	-.04
carbon disulfide	1.727	1.603	-	7.2	30	95	-.04
Freon 113	1.03	0.932	-	9.5	30	98	-.04
trans-1,2-dichloroethene	0.902	0.729	-	19.2	30	87	-.03
1,1-dichloroethane	1.113	0.925	-	16.9	30	91	-.03
MTBE	1.663	1.469	-	11.7	30	93	-.05
vinyl acetate	1.574	1.462	-	7.1	30	96	-.03
2-butanone	1.509	1.341	-	11.1	30	94	-.05
cis-1,2-dichloroethene	0.76	0.659	-	13.3	30	93	-.03
Ethyl Acetate	0.231	0.219	-	5.2	30	99	-.02
chloroform	1.041	0.824	-	20.8	30	90	-.03
Tetrahydrofuran	1.042	1.16	-	-11.3	30	110	-.06
1,2-dichloroethane	0.76	0.622	-	18.2	30	85	-.03
1,4-difluorobenzene	1	1	-	0	30	110	-.03
hexane	0.373	0.298	-	20.1	30	94	-.03
1,1,1-trichloroethane	0.334	0.274	-	18	30	100	-.02
benzene	0.695	0.655	-	5.8	30	108	-.03
carbon tetrachloride	0.308	0.249	-	19.2	30	94	-.03
cyclohexane	0.437	0.401	-	8.2	30	102	-.03
Dibromomethane	0.226	0.175	-	22.6	30	98	-.03
1,2-dichloropropane	0.282	0.262	-	7.1	30	112	-.03
bromodichloromethane	0.428	0.361	-	15.7	30	98	-.03
1,4-dioxane	0.174	0.175	-	-0.6	30	112	-.06
trichloroethene	0.271	0.269	-	0.7	30	115	-.02

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Instrument ID : AIRPIANO4
 Lab File ID : R47410_EV2
 Sample No : WG1332352-2
 Channel :

Lab Number : L2002033
 Project Number :
 Calibration Date : 01/21/20 13:12
 Init. Calib. Date(s) : 01/15/20 01/15/20
 Init. Calib. Times : 14:16 20:16

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
2,2,4-trimethylpentane	1.351	1.304	-	3.5	30	105	-.03
heptane	0.58	0.589	-	-1.6	30	111	-.02
cis-1,3-dichloropropene	0.326	0.279	-	14.4	30	98	-.03
4-methyl-2-pentanone	0.658	0.67	-	-1.8	30	111	-.04
trans-1,3-dichloropropene	0.347	0.353	-	-1.7	30	118	-.03
1,1,2-trichloroethane	0.252	0.256	-	-1.6	30	119	-.03
chlorobenzene-D5	1	1	-	0	30	96	-.02
toluene	5.135	5.381	-	-4.8	30	110	-.03
2-hexanone	3.383	3.962	-	-17.1	30	104	-.04
dibromochloromethane	2.082	2.305	-	-10.7	30	109	-.03
1,2-dibromoethane	2.145	2.349	-	-9.5	30	111	-.03
tetrachloroethene	1.968	2.31	-	-17.4	30	119	-.03
1,1,1,2-tetrachloroethane	1.571	1.562	-	0.6	30	101	-.02
chlorobenzene	3.813	4.175	-	-9.5	30	112	-.02
ethylbenzene	6.076	6.947	-	-14.3	30	113	-.02
m+p-xylene	5.387	5.683	-	-5.5	30	108	-.02
bromoform	1.9	2.397	-	-26.2	30	116	-.03
styrene	3.686	4.493	-	-21.9	30	114	-.03
1,1,2,2-tetrachloroethane	3.463	3.95	-	-14.1	30	111	-.04
o-xylene	5.219	5.811	-	-11.3	30	110	-.04
1,2,3-Trichloropropane	2.641	2.667	-	-1	30	98	-.05
isopropylbenzene	6.475	6.834	-	-5.5	30	103	-.06
Bromobenzene	3.485	3.472	-	0.4	30	96	-.06
4-ethyl toluene	6.65	8.035	-	-20.8	30	106	-.08
1,3,5-trimethylbenzene	5.627	6.722	-	-19.5	30	110	-.08
tert-butylbenzene	6.215	7.594	-	-22.2	30	113	-.11
1,2,4-trimethylbenzene	5.384	6.697	-	-24.4	30	112	-.11
Benzyl Chloride	3.974	4.836	-	-21.7	30	114	-.11
1,3-dichlorobenzene	3.016	4.084	-	-35.4*	30	136	-.11
1,4-dichlorobenzene	3.223	3.988	-	-23.7	30	117	-.11
sec-butylbenzene	8.538	8.814	-	-3.2	30	98	-.11
p-isopropyltoluene	7.497	7.458	-	0.5	30	89	-.12
1,2-dichlorobenzene	3.006	3.905	-	-29.9	30	120	-.13
n-butylbenzene	6.522	7.191	-	-10.3	30	99	-.13
1,2,4-trichlorobenzene	2.033	3.306	-	-62.6*	30	134	-.14
naphthalene	5.793	7.3	-	-26	30	99	-.14
1,2,3-trichlorobenzene	2.372	3.083	-	-30	30	101	-.13
hexachlorobutadiene	2.622	3.706	-	-41.3*	30	127	-.13

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-2,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	100	-0.03
2	propylene	0.614	0.742	-20.8	125	-0.02
3	dichlorodifluoromethane	0.855	0.780	8.8	90	-0.02
4 C	chloromethane	0.467	0.491	-5.1	106	-0.02
5	Freon-114	1.188	1.167	1.8	101	-0.02
6 C	vinyl chloride	0.625	0.550	12.0	98	-0.02
7 C	1,3-butadiene	0.500	0.512	-2.4	106	-0.02
8 C	bromomethane	0.479	0.447	6.7	100	-0.03
9 C	chloroethane	0.326	0.310	4.9	100	-0.02
10	ethanol	0.395	0.355	10.1	85	-0.04
11 C	vinyl bromide	0.486	0.478	1.6	99	-0.03
12 C	acrolein	0.257	0.229	10.9	91	-0.04
13	acetone	0.961	0.758	21.1	74	-0.05
14	trichlorofluoromethane	0.870	0.681	21.7	81	-0.03
15	isopropyl alcohol	1.155	1.029	10.9	87	-0.05
16 C	acrylonitrile	0.466	0.442	5.2	95	-0.03
17 C	1,1-dichloroethene	0.816	0.669	18.0	90	-0.03
18	tertiary butyl alcohol	1.071	0.891	16.8	85	-0.06
19 C	methylene chloride	0.656	0.649	1.1	101	-0.03
20 C	3-chloropropene	0.980	0.933	4.8	99	-0.04
21 C	carbon disulfide	1.727	1.603	7.2	95	-0.04
22	Freon 113	1.030	0.932	9.5	98	-0.04
23	trans-1,2-dichloroethene	0.902	0.729	19.2	87	-0.03
24 C	1,1-dichloroethane	1.113	0.925	16.9	91	-0.03
25 C	MTBE	1.663	1.469	11.7	93	-0.05
26 C	vinyl acetate	1.574	1.462	7.1	96	-0.03
27 C	2-butanone	1.509	1.341	11.1	94	-0.05
28	cis-1,2-dichloroethene	0.760	0.659	13.3	93	-0.03
29	Ethyl Acetate	0.231	0.219	5.2	99	-0.02
30 C	chloroform	1.041	0.824	20.8	90	-0.03
31	Tetrahydrofuran	1.042	1.160	-11.3	110	-0.06
32 C	1,2-dichloroethane	0.760	0.622	18.2	85	-0.03
33 I	1,4-difluorobenzene	1.000	1.000	0.0	110	-0.03
34 C	hexane	0.373	0.298	20.1	94	-0.03
36 C	1,1,1-trichloroethane	0.334	0.274	18.0	100	-0.02
37 C	benzene	0.695	0.655	5.8	108	-0.03
38 C	carbon tetrachloride	0.308	0.249	19.2	94	-0.03
39	cyclohexane	0.437	0.401	8.2	102	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-2,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	0.226	0.175	22.6	98	-0.03
41 C	1,2-dichloropropane	0.282	0.262	7.1	112	-0.03
42	bromodichloromethane	0.428	0.361	15.7	98	-0.03
43 C	1,4-dioxane	0.174	0.175	-0.6	112	-0.06
44 C	trichloroethene	0.271	0.269	0.7	115	-0.02
45 C	2,2,4-trimethylpentane	1.351	1.304	3.5	105	-0.03
46	heptane	0.580	0.589	-1.6	111	-0.02
47 C	cis-1,3-dichloropropene	0.326	0.279	14.4	98	-0.03
48 C	4-methyl-2-pentanone	0.658	0.670	-1.8	111	-0.04
49	trans-1,3-dichloropropene	0.347	0.353	-1.7	118	-0.03
50 C	1,1,2-trichloroethane	0.252	0.256	-1.6	119	-0.03
51 I	chlorobenzene-D5	1.000	1.000	0.0	96	-0.02
52 C	toluene	5.135	5.381	-4.8	110	-0.03
54	2-hexanone	3.383	3.962	-17.1	104	-0.04
55	dibromochloromethane	2.082	2.305	-10.7	109	-0.03
56 C	1,2-dibromoethane	2.145	2.349	-9.5	111	-0.03
57 C	tetrachloroethene	1.968	2.310	-17.4	119	-0.03
58	1,1,1,2-tetrachloroethane	1.571	1.562	0.6	101	-0.02
59 C	chlorobenzene	3.813	4.175	-9.5	112	-0.02
60 C	ethylbenzene	6.076	6.947	-14.3	113	-0.02
61 C	m+p-xylene	5.387	5.683	-5.5	108	-0.02
62 C	bromofom	1.900	2.397	-26.2	116	-0.03
63 C	styrene	3.686	4.493	-21.9	114	-0.03
64 C	1,1,2,2-tetrachloroethane	3.463	3.950	-14.1	111	-0.04
65 C	o-xylene	5.219	5.811	-11.3	110	-0.04
66	1,2,3-Trichloropropane	2.641	2.667	-1.0	98	-0.05
68 C	isopropylbenzene	6.475	6.834	-5.5	103	-0.06
69	Bromobenzene	3.485	3.472	0.4	96	-0.06
70	4-ethyl toluene	6.650	8.035	-20.8	106	-0.08
71	1,3,5-trimethylbenzene	5.627	6.722	-19.5	110	-0.08
72	tert-butylbenzene	6.215	7.594	-22.2	113	-0.11
73	1,2,4-trimethylbenzene	5.384	6.697	-24.4	112	-0.11
74 C	Benzyl Chloride	3.974	4.836	-21.7	114	-0.11
75	1,3-dichlorobenzene	3.016	4.084	-35.4#	136	-0.11
76 C	1,4-dichlorobenzene	3.223	3.988	-23.7	117	-0.11
77	sec-butylbenzene	8.538	8.814	-3.2	98	-0.11
78	p-isopropyltoluene	7.497	7.458	0.5	89	-0.12
79	1,2-dichlorobenzene	3.006	3.905	-29.9	120	-0.13

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-2,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	6.522	7.191	-10.3	99	-0.13
81 C	1,2,4-trichlorobenzene	2.033	3.306	-62.6#	134	-0.14
82	naphthalene	5.793	7.300	-26.0	99	-0.14
83	1,2,3-trichlorobenzene	2.372	3.083	-30.0	101	-0.13
84 C	hexachlorobutadiene	2.622	3.706	-41.3#	127	-0.13

* 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\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-2,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	122510	10.000	ppbV	-0.03
Standard Area = 122510			Recovery	=	100.00%	
33) 1,4-difluorobenzene	11.800	114	417004	10.000	ppbV	-0.03
Standard Area = 417004			Recovery	=	100.00%	
51) chlorobenzene-D5	16.525	54	63917	10.000	ppbV	#-0.02
Standard Area = 63917			Recovery	=	100.00%	

System Monitoring Compounds

Target Compounds					Qvalue
2) propylene	3.916	41	45478M6	6.045	ppbV
3) dichlorodifluoromethane	3.994	85	47773	4.562	ppbV 99
4) chloromethane	4.174	50	30046	5.257	ppbV 99
5) Freon-114	4.300	85	71490	4.913	ppbV 99
6) vinyl chloride	4.432	62	33673	4.397	ppbV 100
7) 1,3-butadiene	4.594	54	31338	5.112	ppbV 84
8) bromomethane	4.906	94	27366	4.666	ppbV 99
9) chloroethane	5.128	64	18979	4.756	ppbV 99
10) ethanol	5.284	31	108825	22.460	ppbV 97
11) vinyl bromide	5.553	106	29263	4.911	ppbV 100
12) acrolein	5.700	56	14036	4.457	ppbV 99
13) acetone	5.853	43	232053	19.708	ppbV 92
14) trichlorofluoromethane	6.067	101	41711	3.913	ppbV 98
15) isopropyl alcohol	6.177	45	157532	11.135	ppbV 100
16) acrylonitrile	6.433	53	27052	4.735	ppbV 99
17) 1,1-dichloroethene	6.832	61	40955	4.096	ppbV 93
18) tertiary butyl alcohol	6.898	59	54603	4.163	ppbV 98
19) methylene chloride	6.994	49	39737	4.941	ppbV 100
20) 3-chloropropene	7.132	41	57166	4.762	ppbV 93
21) carbon disulfide	7.288	76	98182	4.639	ppbV 96
22) Freon 113	7.324	101	57071	4.522	ppbV 96
23) trans-1,2-dichloroethene	8.117	61	44661	4.041	ppbV 98
24) 1,1-dichloroethane	8.350	63	56673	4.157	ppbV 100
25) MTBE	8.433	73	90004	4.417	ppbV 98
26) vinyl acetate	8.567	43	89567	4.646	ppbV 99
27) 2-butanone	8.833	43	82121	4.443	ppbV 96
28) cis-1,2-dichloroethene	9.342	61	40376	4.335	ppbV 98
29) Ethyl Acetate	9.642	61	13417	4.732	ppbV 94
30) chloroform	9.700	83	50501	3.961	ppbV 99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-2,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
31) Tetrahydrofuran	10.142	42	71054	5.568	ppbV	99
32) 1,2-dichloroethane	10.542	62	38112	4.094	ppbV #	92
34) hexane	9.608	57	62122	3.993	ppbV	99
36) 1,1,1-trichloroethane	10.833	97	57029	4.091	ppbV	97
37) benzene	11.360	78	136471	4.707	ppbV	99
38) carbon tetrachloride	11.533	117	51906	4.039	ppbV #	96
39) cyclohexane	11.680	56	83637	4.592	ppbV	97
40) Dibromomethane	12.287	93	36422	3.872	ppbV #	90
41) 1,2-dichloropropane	12.320	63	54528	4.643	ppbV #	95
42) bromodichloromethane	12.547	83	75284	4.218	ppbV	100
43) 1,4-dioxane	12.593	88	36394	5.027	ppbV	92
44) trichloroethene	12.600	130	56171	4.961	ppbV	99
45) 2,2,4-trimethylpentane	12.640	57	271799	4.823	ppbV	99
46) heptane	12.960	43	122840	5.079	ppbV	96
47) cis-1,3-dichloropropene	14.233	75	58260	4.287	ppbV	92
48) 4-methyl-2-pentanone	13.650	43	139664	5.093	ppbV	97
49) trans-1,3-dichloropropene	13.608	75	73516	5.086	ppbV	91
50) 1,1,2-trichloroethane	14.433	97	53463	5.093	ppbV	91
52) toluene	14.742	91	171957	5.239	ppbV	100
54) 2-hexanone	15.025	43	126622	5.856	ppbV #	88
55) dibromochloromethane	15.192	129	73650	5.534	ppbV	100
56) 1,2-dibromoethane	15.442	107	75079	5.476	ppbV	99
57) tetrachloroethene	15.908	166	73823	5.868	ppbV	94
58) 1,1,1,2-tetrachloroethane	16.550	131	49928	4.974	ppbV	98
59) chlorobenzene	16.567	112	133425	5.475	ppbV	94
60) ethylbenzene	16.908	91	222021	5.717	ppbV	98
61) m+p-xylene	17.067	91	363262	10.551	ppbV	99
62) bromoform	17.142	173	76611	6.309	ppbV	99
63) styrene	17.383	104	143579	6.094	ppbV	98
64) 1,1,2,2-tetrachloroethane	17.475	83	126223	5.702	ppbV	100
65) o-xylene	17.475	91	185722	5.567	ppbV	98
66) 1,2,3-Trichloropropane	17.583	75	85245	5.050	ppbV	96
68) isopropylbenzene	17.967	105	218389M6	5.276	ppbV	
69) Bromobenzene	18.042	77	110966	4.982	ppbV	93
70) 4-ethyl toluene	18.500	105	256774	6.041	ppbV	99
71) 1,3,5-trimethylbenzene	18.558	105	214815	5.972	ppbV	97
72) tert-butylbenzene	18.883	119	242690M6	6.109	ppbV	
73) 1,2,4-trimethylbenzene	18.883	105	214023	6.219	ppbV	91
74) Benzyl Chloride	19.000	91	154549	6.085	ppbV	98
75) 1,3-dichlorobenzene	19.017	146	130513M6	6.771	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-2,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

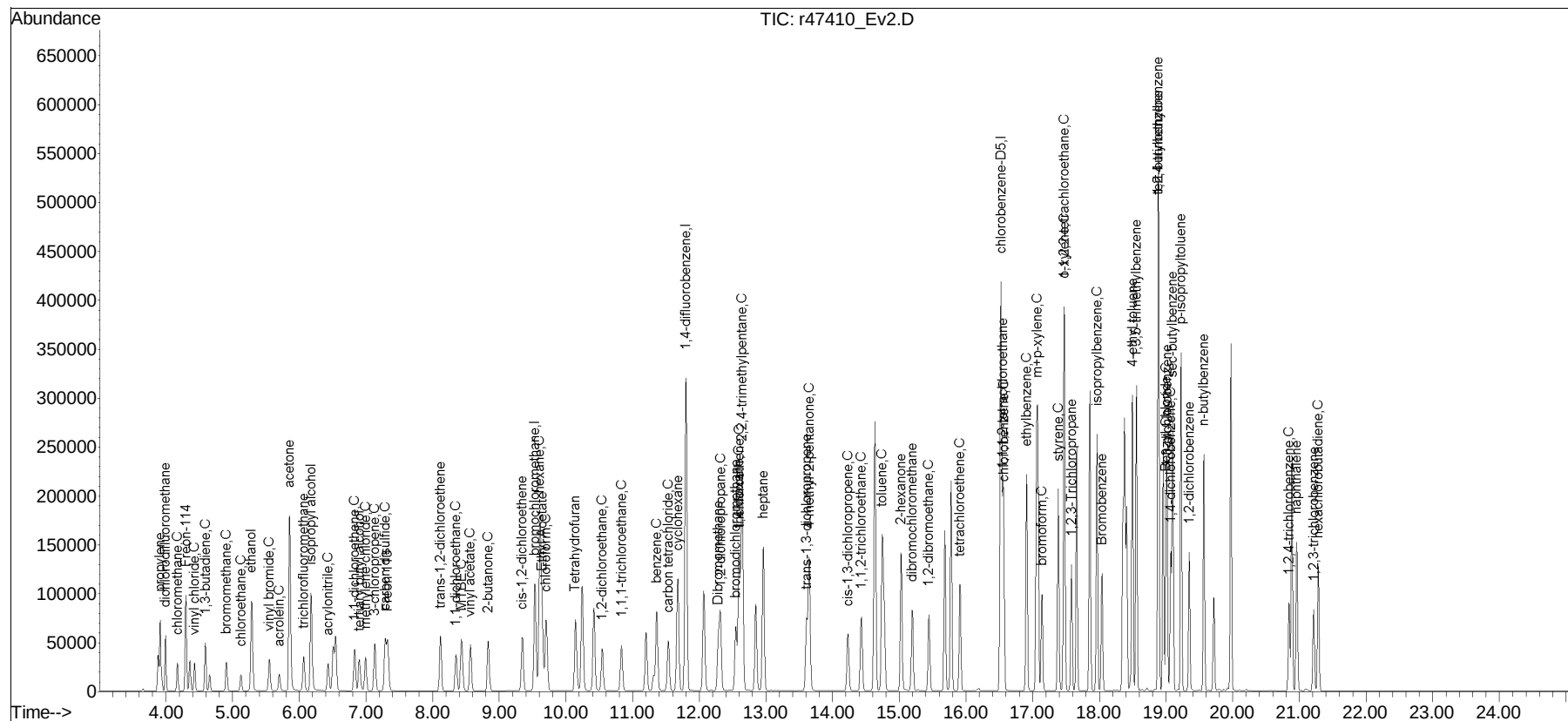
CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76)	1,4-dichlorobenzene	19.075	146	127446	6.186	ppbV	96
77)	sec-butylbenzene	19.100	105	281667	5.162	ppbV	99
78)	p-isopropyltoluene	19.225	119	238339	4.974	ppbV	96
79)	1,2-dichlorobenzene	19.350	146	124801	6.495	ppbV	90
80)	n-butylbenzene	19.567	91	229804	5.513	ppbV	99
81)	1,2,4-trichlorobenzene	20.842	180	105647	8.129	ppbV	99
82)	naphthalene	20.958	128	233307	6.301	ppbV	98
83)	1,2,3-trichlorobenzene	21.217	180	98513	6.497	ppbV	95
84)	hexachlorobutadiene	21.283	225	118444	7.067	ppbV	97

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


```
Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
Data File  : r47410_Ev2.D
Acq On     : 21 Jan 2020    1:12 PM
Operator   : AIRPIANO4:EW
Sample     : WG1332352-2,3,250,250
Misc       : WG1332352,ICAL16437
ALS Vial   : 0    Sample Multiplier: 1
```

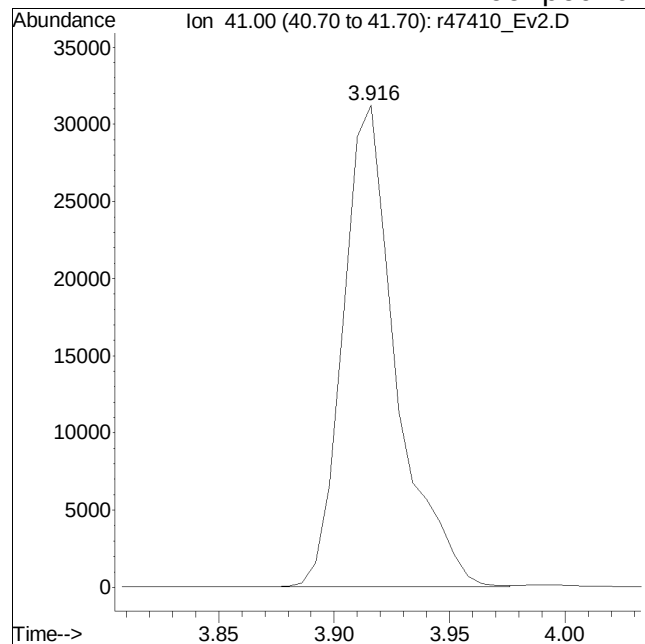
Quant Time: Jan 21 14:18:26 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:30:42 2020
Response via : Initial Calibration



Manual Integration Report

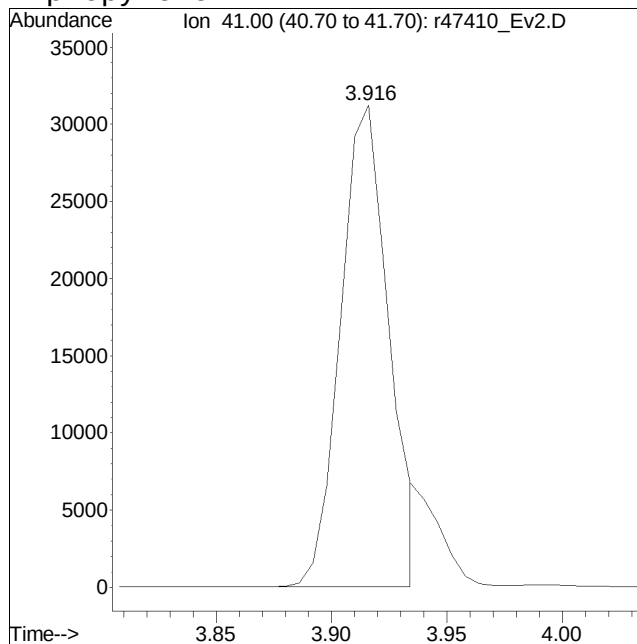
Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47410_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:1: 2 Instrument :
Sample : WG1332352-2, 3, 250, 250 Quant Date : 1/21/2020 2:17 pm

Compound #2: propylene



Original Peak Response = 50190

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

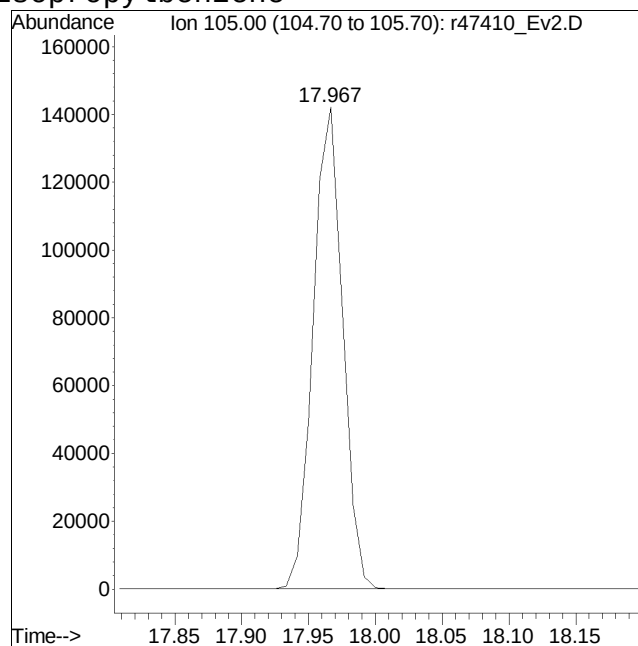
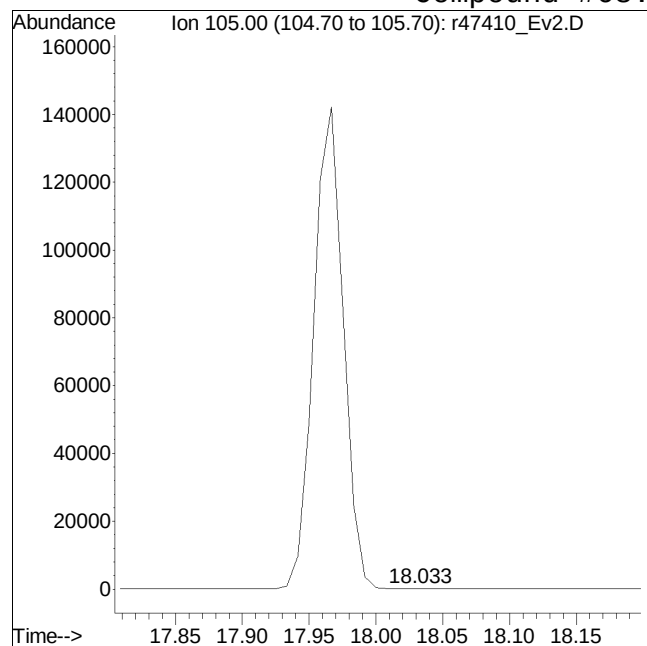


Manual Peak Response = 45478 M6

Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47410_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:1: 2 Instrument :
Sample : WG1332352-2,3,250,250 Quant Date : 1/21/2020 2:17 pm

Compound #68: isopropylbenzene



Original Peak Response = 332

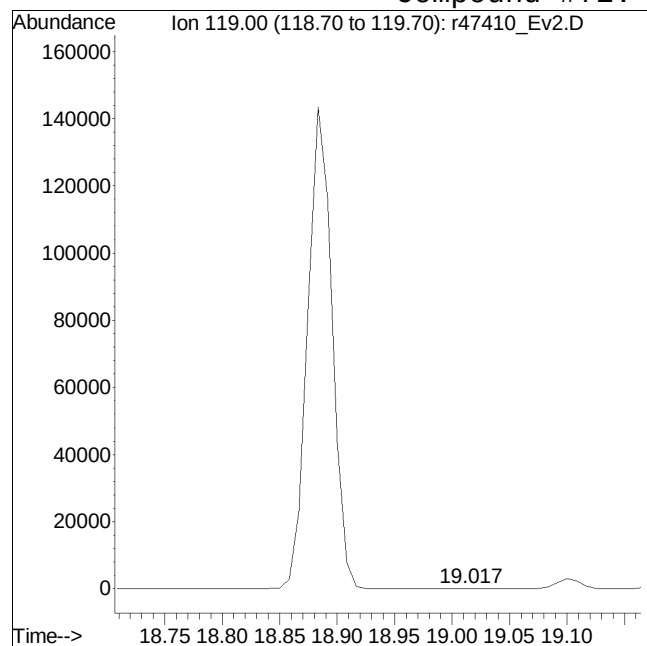
Manual Peak Response = 218389 M6

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

Manual Integration Report

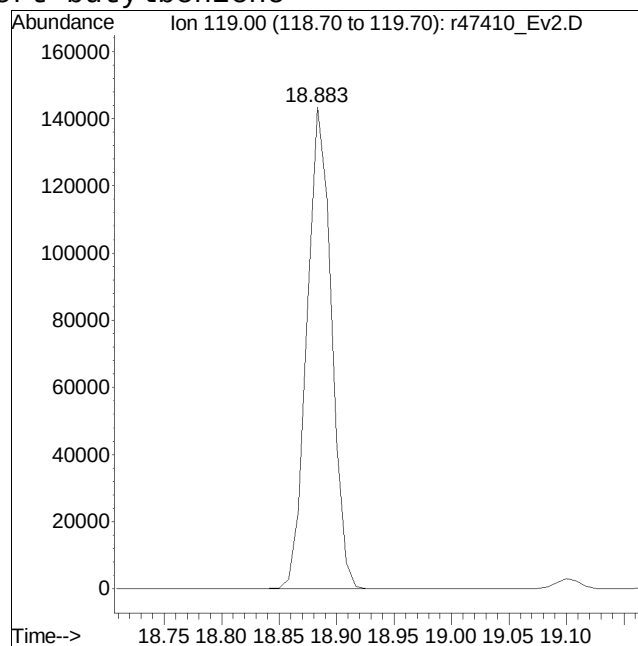
Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47410_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:1: 2 Instrument :
Sample : WG1332352-2,3,250,250 Quant Date : 1/21/2020 2:17 pm

Compound #72: tert-butylbenzene



Original Peak Response = 177

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

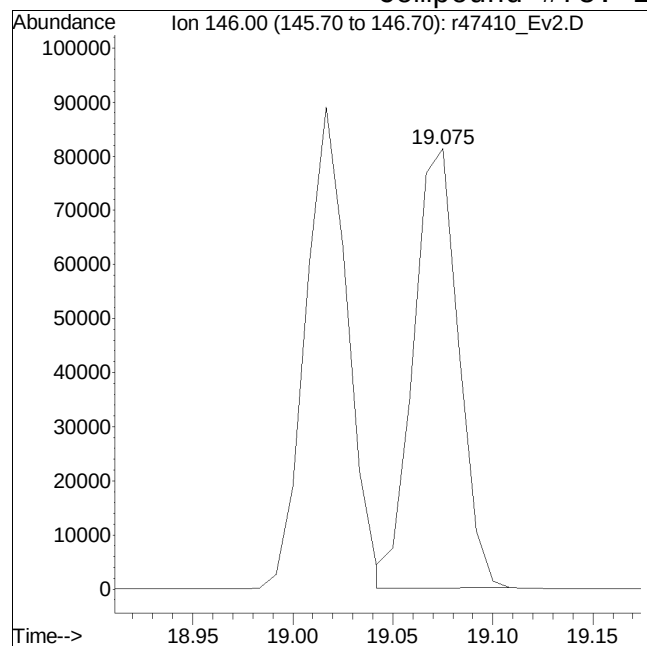


Manual Peak Response = 242690 M6

Manual Integration Report

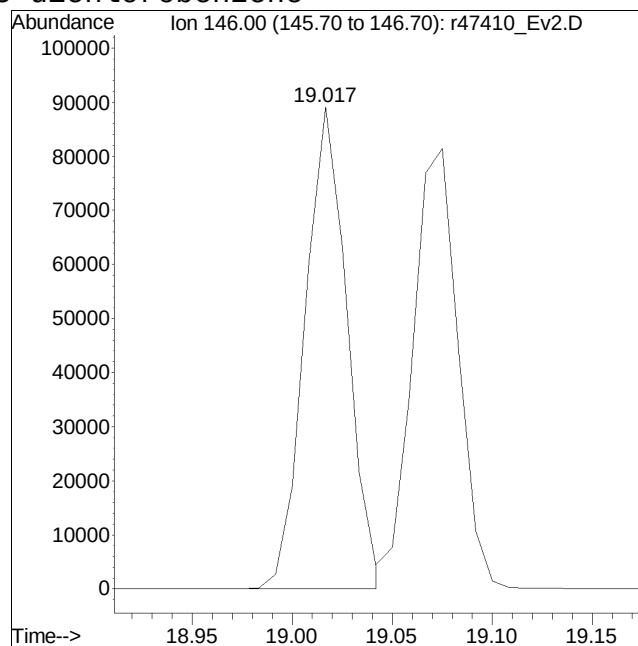
Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47410_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:1: 2 Instrument :
Sample : WG1332352-2,3,250,250 Quant Date : 1/21/2020 2:17 pm

Compound #75: 1,3-dichlorobenzene



Original Peak Response = 127446

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



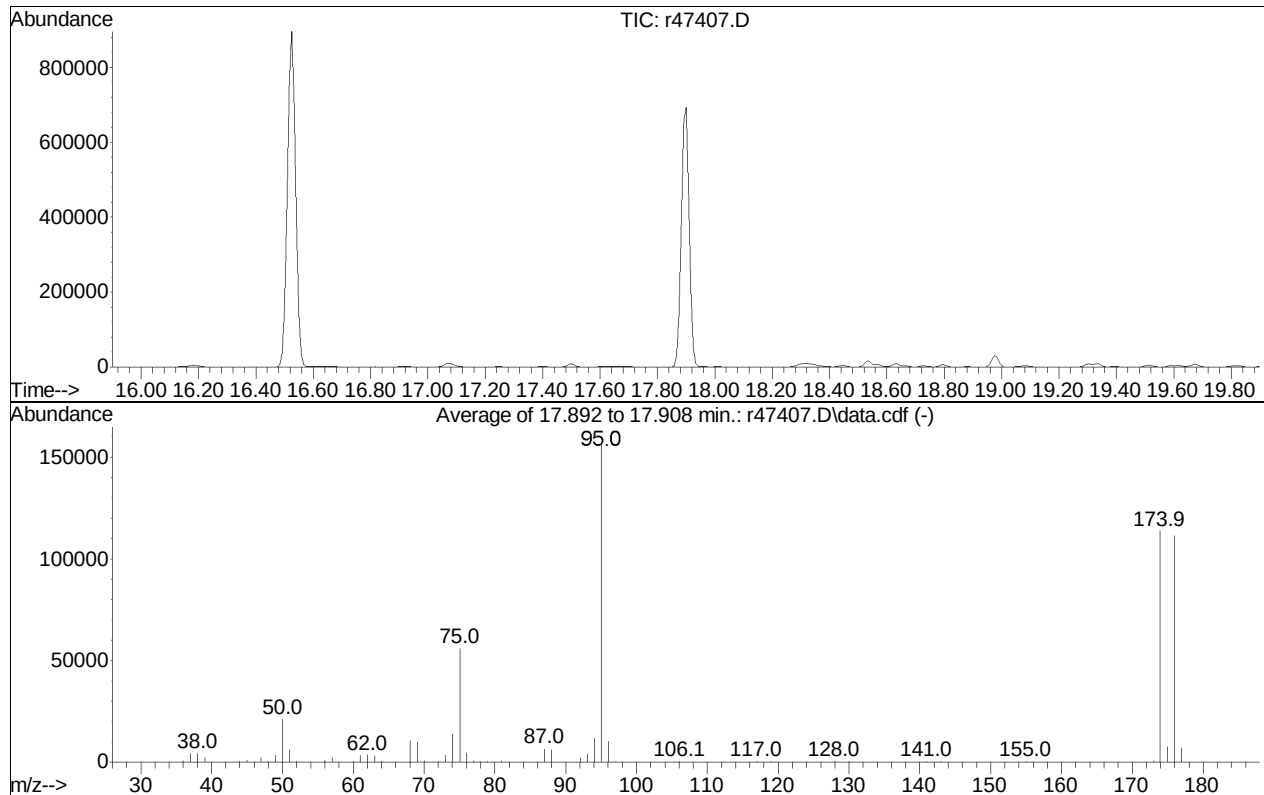
Manual Peak Response = 130513 M6

BFB

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
Data File : r47407.D
Acq On : 21 Jan 2020 11:09 AM
Operator : AIRPIAN04:EW
Sample : WG1332352-1,3,250,250
Misc : WG1332352,ICAL16437
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Thu Jan 16 10:30:41 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	13.5	21224	PASS
75	95	30	66	35.6	55889	PASS
95	95	100	100	100.0	157084	PASS
96	95	5	9	6.5	10258	PASS
173	174	0.00	2	0.5	610	PASS
174	95	50	120	72.5	113903	PASS
175	174	4	9	6.7	7671	PASS
176	174	93	101	97.7	111275	PASS
177	176	5	9	6.3	7064	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47412_Ev2.D
 Acq On : 21 Jan 2020 3:13 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-4,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 16:16:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	132899	10.000	ppbV	-0.03
Standard Area = 122510			Recovery = 108.48%			
33) 1,4-difluorobenzene	11.800	114	377368	10.000	ppbV	-0.03
Standard Area = 417004			Recovery = 90.50%			
51) chlorobenzene-D5	16.492	54	56198	10.000	ppbV	-0.05
Standard Area = 63917			Recovery = 87.92%			

System Monitoring Compounds

Target Compounds			Qvalue
6) vinyl chloride	0.000	0	N.D.
17) 1,1-dichloroethene	6.718	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	0.000	0	N.D.
44) trichloroethene	0.000	0	N.D.
57) tetrachloroethene	0.000	0	N.D.

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

Sub List : Default-LCS-AP2 - All compounds listed0121SIM\r47410_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\

Data File : r47412_Ev2.D

Acq On : 21 Jan 2020 3:13 PM

Operator : AIRPIANO4:EW

Sample : WG1332352-4,3,250,250

Misc : WG1332352,ICAL16437

ALS Vial : 0 Sample Multiplier: 1

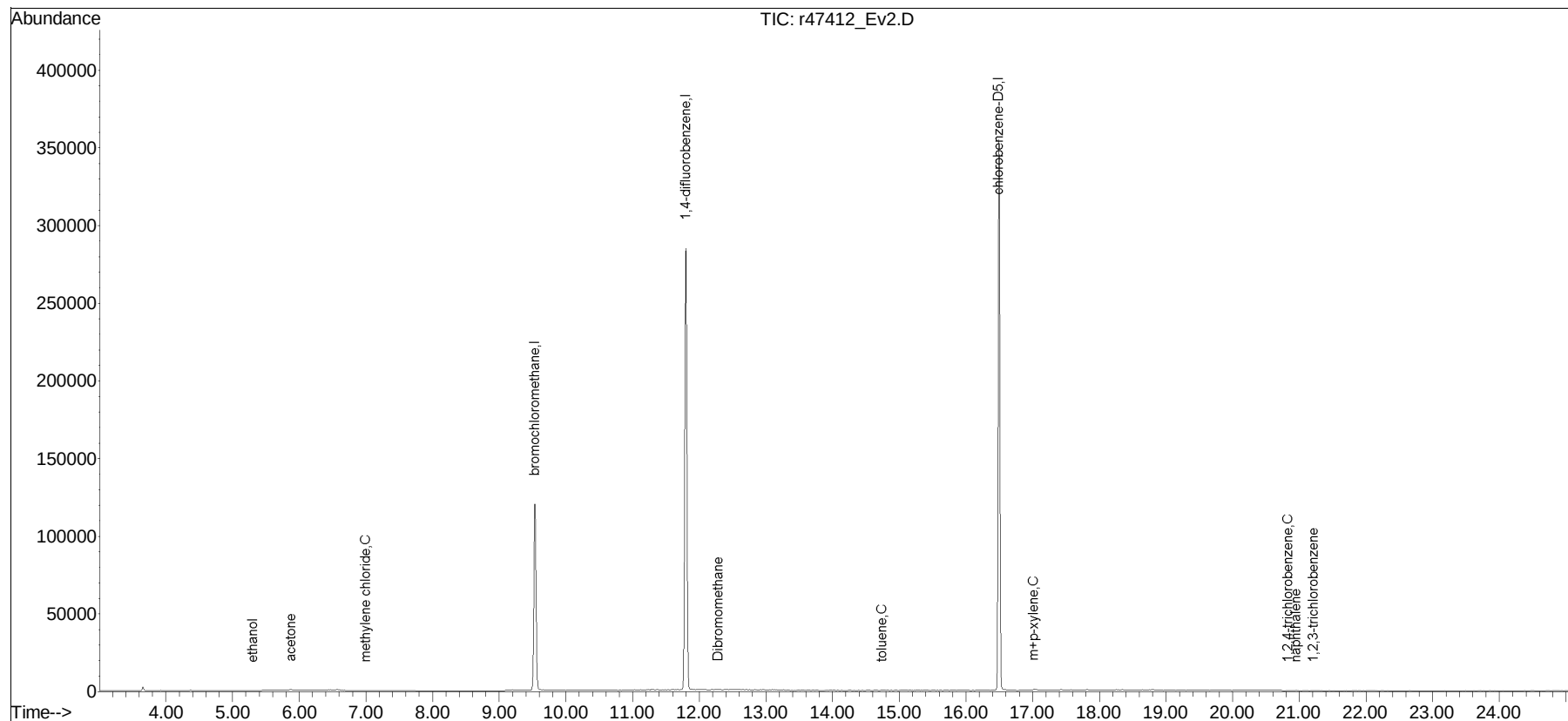
Quant Time: Jan 21 16:16:39 2020

Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M

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

QLast Update : Thu Jan 16 10:30:42 2020

Response via : Initial Calibration



Manual Integration Report

Data Path	: 0:\Forensics\Data\AirpianoQ	Method	: TSIM4_200115.M
Data File	: r47412_Ev2.D	Operator	: AIRPIAN04:EW
Date Inj'd	: 1/21/2020 0:3: 3	Instrument	:
Sample	: WG1332352-4,3,250,250	Quant Date	: 1/21/2020 4:15 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-3,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	100	-0.03
2	propylene	5.000	6.045	-20.9	125	-0.02
3	dichlorodifluoromethane	5.000	4.562	8.8	90	-0.02
4 C	chloromethane	5.000	5.257	-5.1	106	-0.02
5	Freon-114	5.000	4.913	1.7	101	-0.02
6 C	vinyl chloride	5.000	4.397	12.1	98	-0.02
7 C	1,3-butadiene	5.000	5.112	-2.2	106	-0.02
8 C	bromomethane	5.000	4.666	6.7	100	-0.03
9 C	chloroethane	5.000	4.756	4.9	100	-0.02
10	ethanol	25.000	22.460	10.2	85	-0.04
11 C	vinyl bromide	5.000	4.911	1.8	99	-0.03
12 C	acrolein	5.000	4.457	10.9	91	-0.04
13	acetone	25.000	19.708	21.2	74	-0.05
14	trichlorofluoromethane	5.000	3.913	21.7	81	-0.03
15	isopropyl alcohol	12.500	11.135	10.9	87	-0.05
16 C	acrylonitrile	5.000	4.735	5.3	95	-0.03
17 C	1,1-dichloroethene	5.000	4.096	18.1	90	-0.03
18	tertiary butyl alcohol	5.000	4.163	16.7	85	-0.06
19 C	methylene chloride	5.000	4.941	1.2	101	-0.03
20 C	3-chloropropene	5.000	4.762	4.8	99	-0.04
21 C	carbon disulfide	5.000	4.639	7.2	95	-0.04
22	Freon 113	5.000	4.522	9.6	98	-0.04
23	trans-1,2-dichloroethene	5.000	4.041	19.2	87	-0.03
24 C	1,1-dichloroethane	5.000	4.157	16.9	91	-0.03
25 C	MTBE	5.000	4.417	11.7	93	-0.05
26 C	vinyl acetate	5.000	4.646	7.1	96	-0.03
27 C	2-butanone	5.000	4.443	11.1	94	-0.05
28	cis-1,2-dichloroethene	5.000	4.335	13.3	93	-0.03
29	Ethyl Acetate	5.000	4.732	5.4	99	-0.02
30 C	chloroform	5.000	3.961	20.8	90	-0.03
31	Tetrahydrofuran	5.000	5.568	-11.4	110	-0.06
32 C	1,2-dichloroethane	5.000	4.094	18.1	85	-0.03
33 I	1,4-difluorobenzene	10.000	10.000	0.0	110	-0.03
34 C	hexane	5.000	3.993	20.1	94	-0.03
36 C	1,1,1-trichloroethane	5.000	4.091	18.2	100	-0.02
37 C	benzene	5.000	4.707	5.9	108	-0.03
38 C	carbon tetrachloride	5.000	4.039	19.2	94	-0.03
39	cyclohexane	5.000	4.592	8.2	102	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-3,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	3.872	22.6	98	-0.03
41 C	1,2-dichloropropane	5.000	4.643	7.1	112	-0.03
42	bromodichloromethane	5.000	4.218	15.6	98	-0.03
43 C	1,4-dioxane	5.000	5.027	-0.5	112	-0.06
44 C	trichloroethene	5.000	4.961	0.8	115	-0.02
45 C	2,2,4-trimethylpentane	5.000	4.823	3.5	105	-0.03
46	heptane	5.000	5.079	-1.6	111	-0.02
47 C	cis-1,3-dichloropropene	5.000	4.287	14.3	98	-0.03
48 C	4-methyl-2-pentanone	5.000	5.093	-1.9	111	-0.04
49	trans-1,3-dichloropropene	5.000	5.086	-1.7	118	-0.03
50 C	1,1,2-trichloroethane	5.000	5.093	-1.9	119	-0.03
51 I	chlorobenzene-D5	10.000	10.000	0.0	96	-0.02
52 C	toluene	5.000	5.239	-4.8	110	-0.03
54	2-hexanone	5.000	5.856	-17.1	104	-0.04
55	dibromochloromethane	5.000	5.534	-10.7	109	-0.03
56 C	1,2-dibromoethane	5.000	5.476	-9.5	111	-0.03
57 C	tetrachloroethene	5.000	5.868	-17.4	119	-0.03
58	1,1,1,2-tetrachloroethane	5.000	4.974	0.5	101	-0.02
59 C	chlorobenzene	5.000	5.475	-9.5	112	-0.02
60 C	ethylbenzene	5.000	5.717	-14.3	113	-0.02
61 C	m+p-xylene	10.000	10.551	-5.5	108	-0.02
62 C	bromoform	5.000	6.309	-26.2	116	-0.03
63 C	styrene	5.000	6.094	-21.9	114	-0.03
64 C	1,1,2,2-tetrachloroethane	5.000	5.702	-14.0	111	-0.04
65 C	o-xylene	5.000	5.567	-11.3	110	-0.04
66	1,2,3-Trichloropropane	5.000	5.050	-1.0	98	-0.05
68 C	isopropylbenzene	5.000	5.276	-5.5	103	-0.06
69	Bromobenzene	5.000	4.982	0.4	96	-0.06
70	4-ethyl toluene	5.000	6.041	-20.8	106	-0.08
71	1,3,5-trimethylbenzene	5.000	5.972	-19.4	110	-0.08
72	tert-butylbenzene	5.000	6.109	-22.2	113	-0.11
73	1,2,4-trimethylbenzene	5.000	6.219	-24.4	112	-0.11
74 C	Benzyl Chloride	5.000	6.085	-21.7	114	-0.11
75	1,3-dichlorobenzene	5.000	6.771	-35.4#	136	-0.11
76 C	1,4-dichlorobenzene	5.000	6.186	-23.7	117	-0.11
77	sec-butylbenzene	5.000	5.162	-3.2	98	-0.11
78	p-isopropyltoluene	5.000	4.974	0.5	89	-0.12
79	1,2-dichlorobenzene	5.000	6.495	-29.9	120	-0.13

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-3,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 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	5.513	-10.3	99	-0.13
81 C	1,2,4-trichlorobenzene	5.000	8.129	-62.6#	134	-0.14
82	naphthalene	5.000	6.301	-26.0	99	-0.14
83	1,2,3-trichlorobenzene	5.000	6.497	-29.9	101	-0.13
84 C	hexachlorobutadiene	5.000	7.067	-41.3#	127	-0.13

* 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\Airpiano4\2020\01\200121SIM\
 Data File : r47410_Ev2.D
 Acq On : 21 Jan 2020 1:12 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-3,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 21 14:18:26 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	122510	10.000	ppbV	-0.03
Standard Area = 122510			Recovery	=	100.00%	
33) 1,4-difluorobenzene	11.800	114	417004	10.000	ppbV	-0.03
Standard Area = 417004			Recovery	=	100.00%	
51) chlorobenzene-D5	16.525	54	63917	10.000	ppbV	#-0.02
Standard Area = 63917			Recovery	=	100.00%	

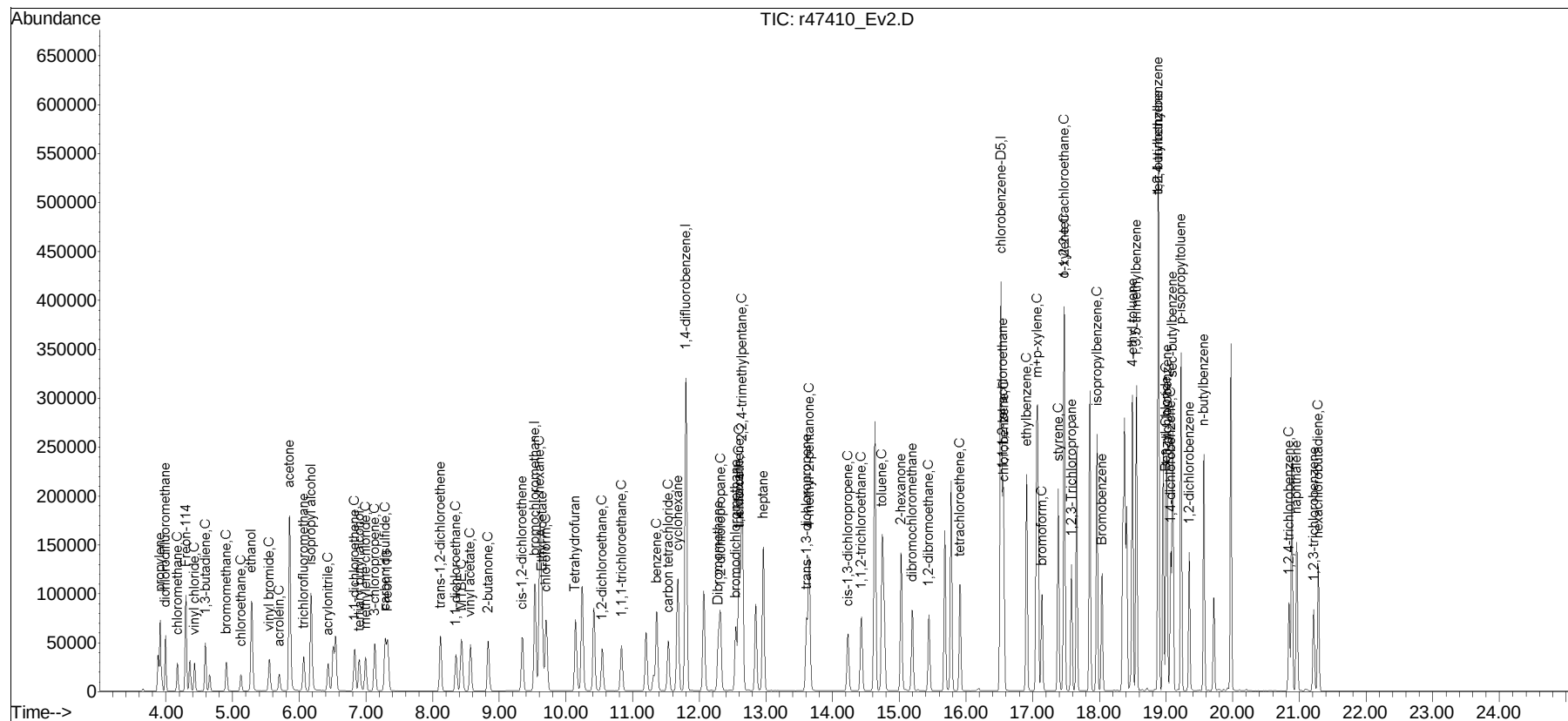
System Monitoring Compounds

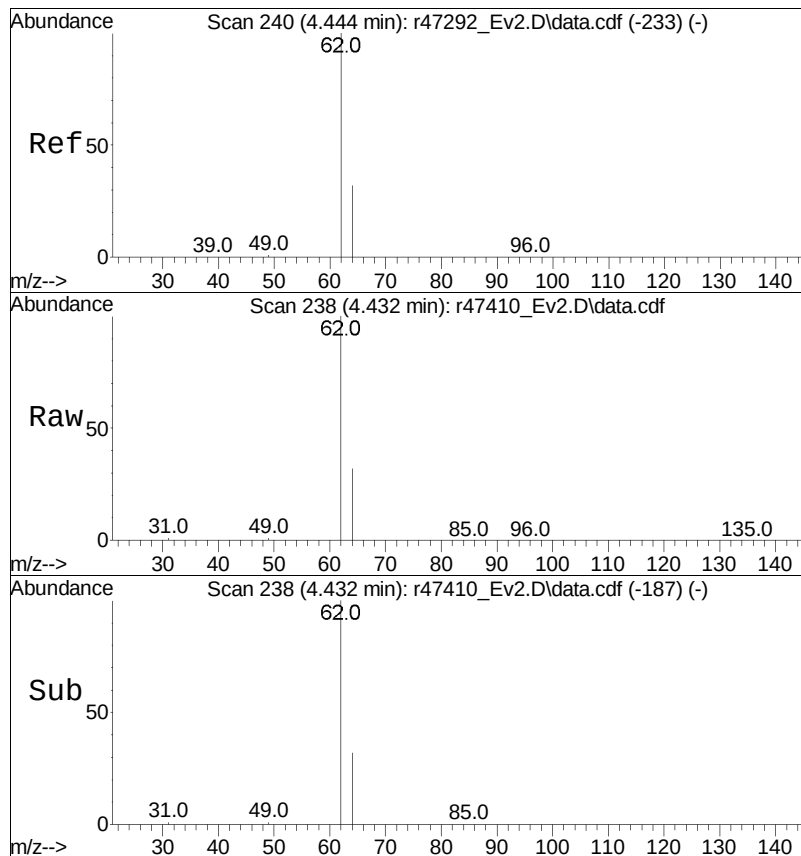
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
6) vinyl chloride	4.432	62	33673	4.397	ppbV	100
17) 1,1-dichloroethene	6.832	61	40955	4.096	ppbV	93
28) cis-1,2-dichloroethene	9.342	61	40376	4.335	ppbV	98
36) 1,1,1-trichloroethane	10.833	97	57029	4.091	ppbV	97
38) carbon tetrachloride	11.533	117	51906	4.039	ppbV	# 96
44) trichloroethene	12.600	130	56171	4.961	ppbV	99
57) tetrachloroethene	15.908	166	73823	5.868	ppbV	94

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

```
Data Path   : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
Data File  : r47410_Ev2.D
Acq On     : 21 Jan 2020    1:12 PM
Operator   : AIRPIANO4:EW
Sample     : WG1332352-3,3,250,250
Misc       : WG1332352,ICAL16437
ALS Vial   : 0    Sample Multiplier: 1
```

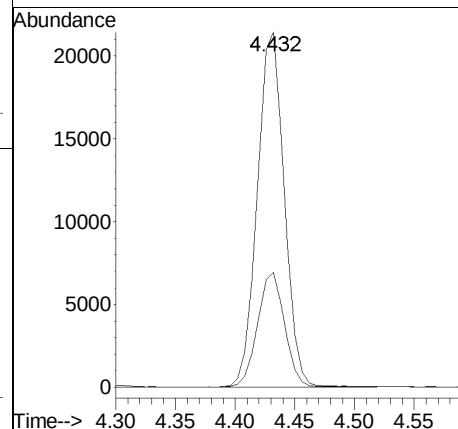
Quant Time: Jan 21 14:18:26 2020
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Jan 16 10:30:42 2020
Response via : Initial Calibration

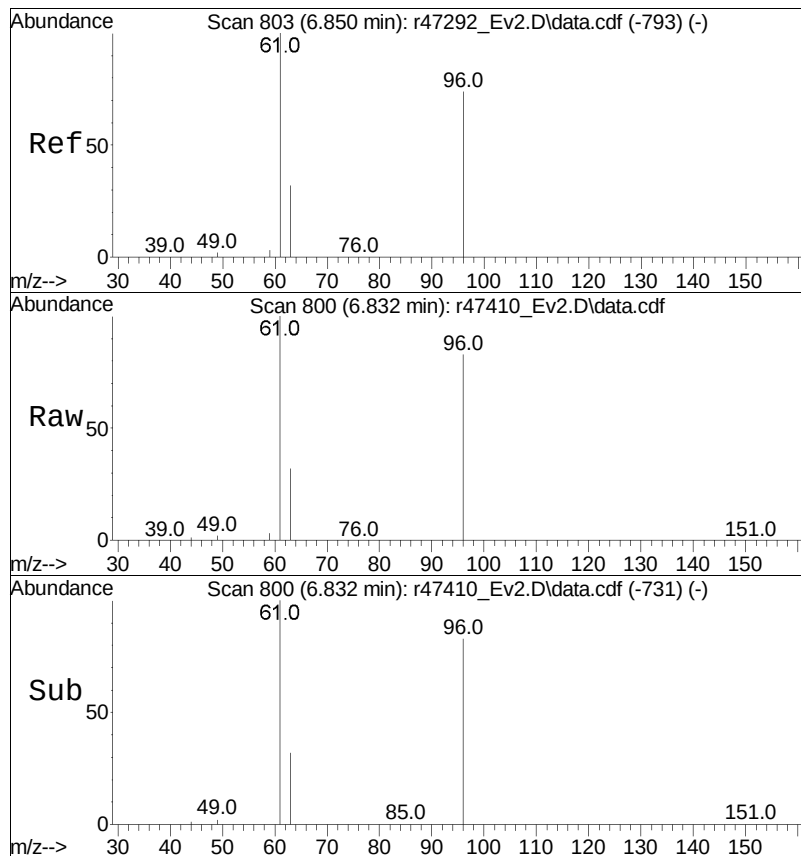




#6
 vinyl chloride
 Concen: 4.40 ppbV
 RT: 4.432 min Scan# 238
 Delta R.T. -0.024 min
 Lab File: r47410_Ev2.D
 Acq: 21 Jan 2020 1:12 PM

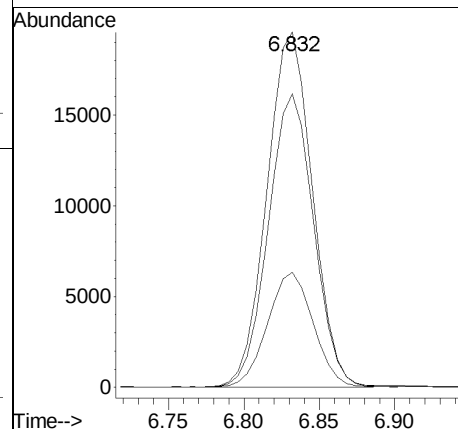
Tgt Ion	Ratio	Lower	Upper
62	100		
64	32.3	25.8	38.6

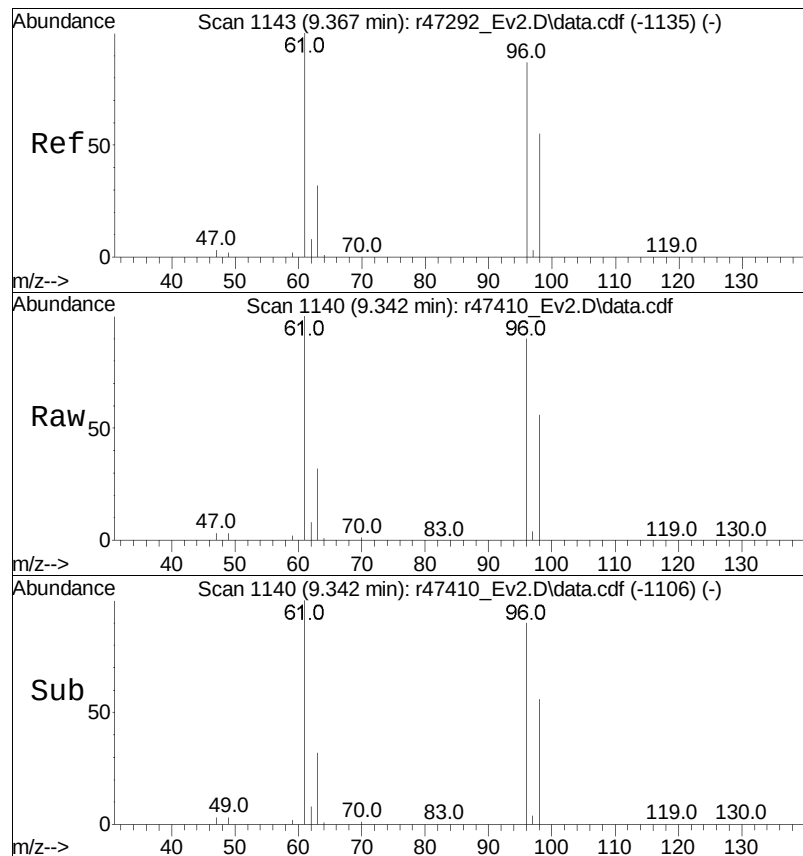




#17
 1,1-dichloroethene
 Concen: 4.10 ppbV
 RT: 6.832 min Scan# 800
 Delta R.T. -0.030 min
 Lab File: r47410_Ev2.D
 Acq: 21 Jan 2020 1:12 PM

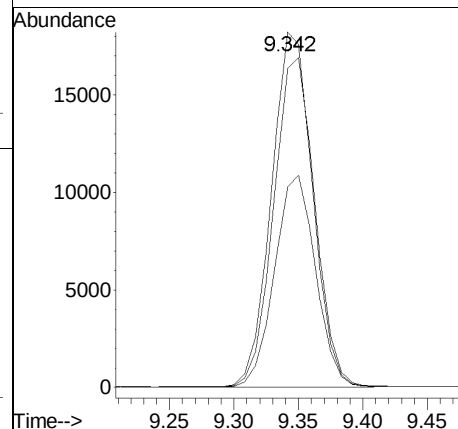
Tgt Ion:	61	Resp:	40955
Ion Ratio	Lower	Upper	
61	100		
96	82.6	59.3	88.9
63	32.4	25.8	38.8

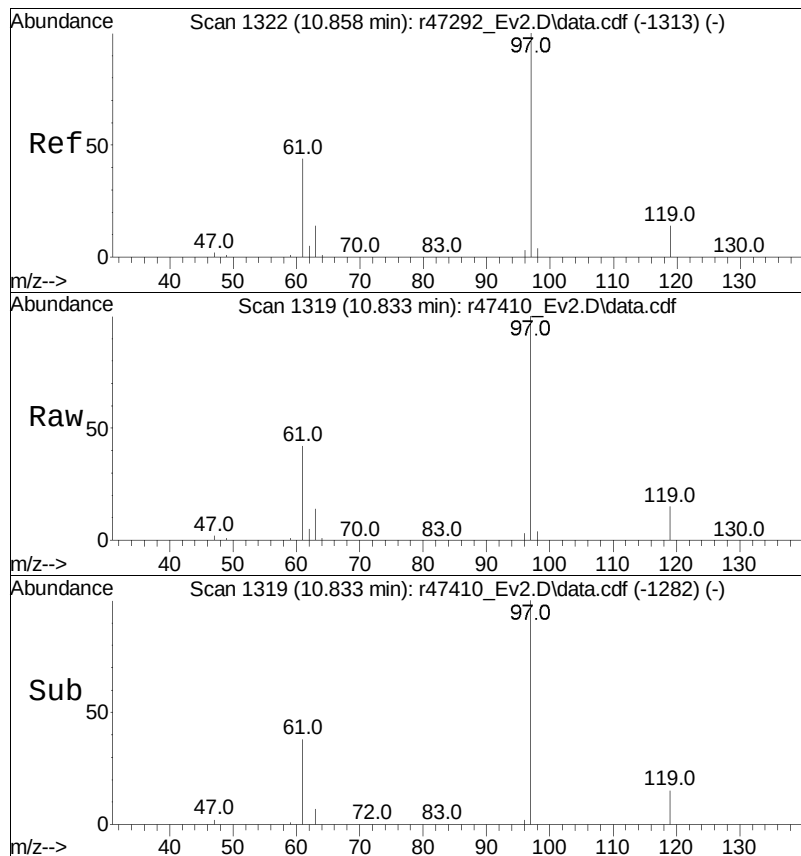




#28
 cis-1,2-dichloroethene
 Concen: 4.34 ppbV
 RT: 9.342 min Scan# 1140
 Delta R.T. -0.033 min
 Lab File: r47410_Ev2.D
 Acq: 21 Jan 2020 1:12 PM

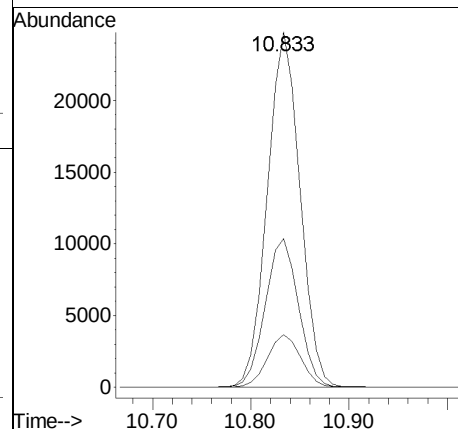
Tgt	Ion: 61	Resp:	40376
Ion	Ratio	Lower	Upper
61	100		
96	89.7	69.9	104.9
98	56.4	44.2	66.2

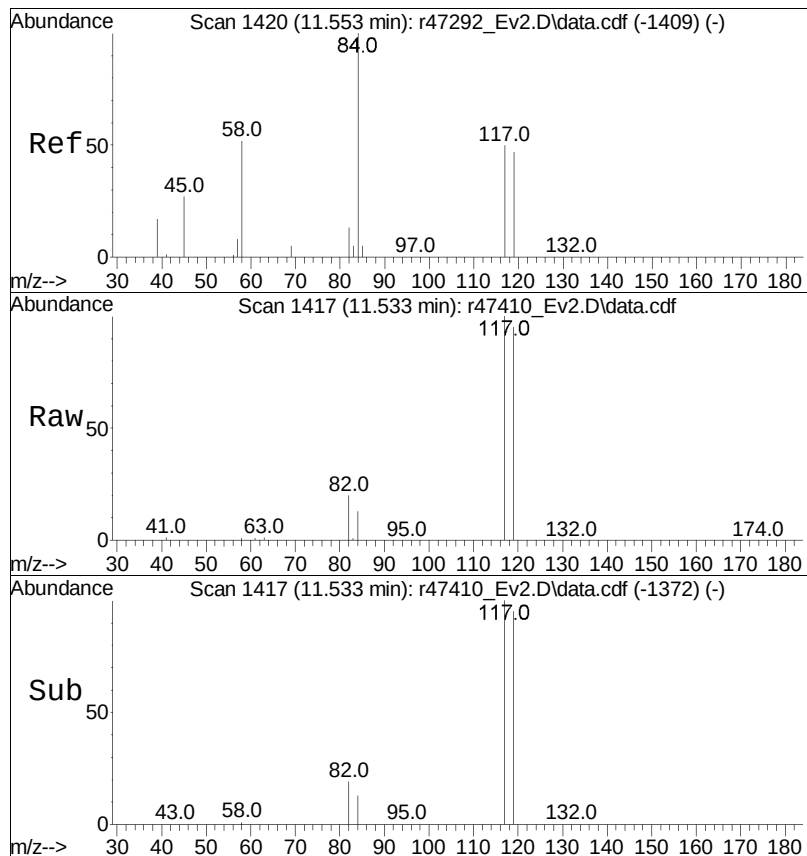




#36
 1,1,1-trichloroethane
 Concen: 4.09 ppbV
 RT: 10.833 min Scan# 1319
 Delta R.T. -0.025 min
 Lab File: r47410_Ev2.D
 Acq: 21 Jan 2020 1:12 PM

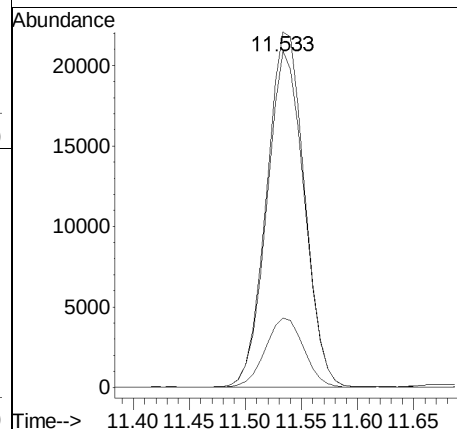
Tgt Ion:	97	Resp:	57029
Ion Ratio	Lower	Upper	
97	100		
61	41.9	35.4	53.2
119	14.9	11.1	16.7

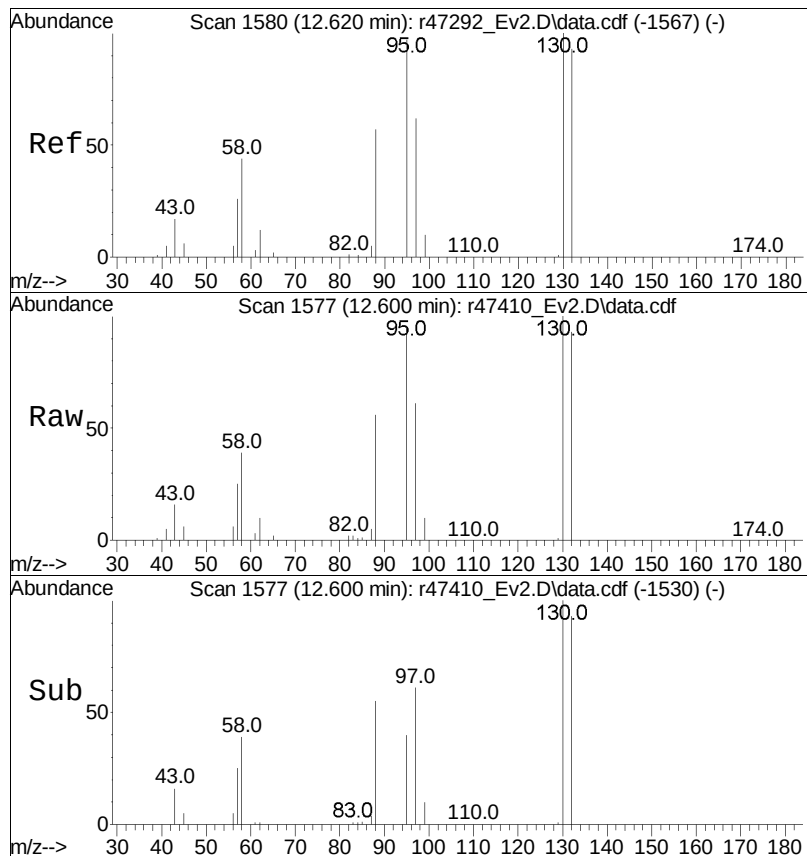




#38
 carbon tetrachloride
 Concen: 4.04 ppbV
 RT: 11.533 min Scan# 1417
 Delta R.T. -0.027 min
 Lab File: r47410_Ev2.D
 Acq: 21 Jan 2020 1:12 PM

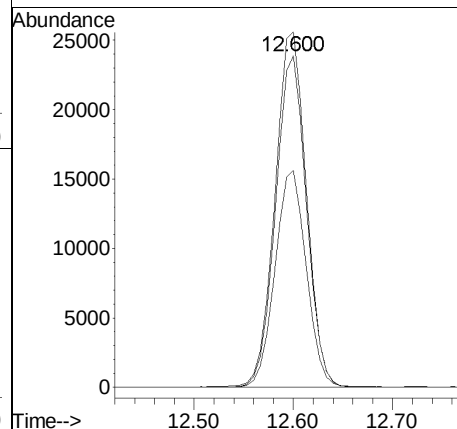
Tgt Ion	Ratio	Lower	Upper
117	100		
119	94.6	74.6	112.0
82	19.6	20.5	30.7#

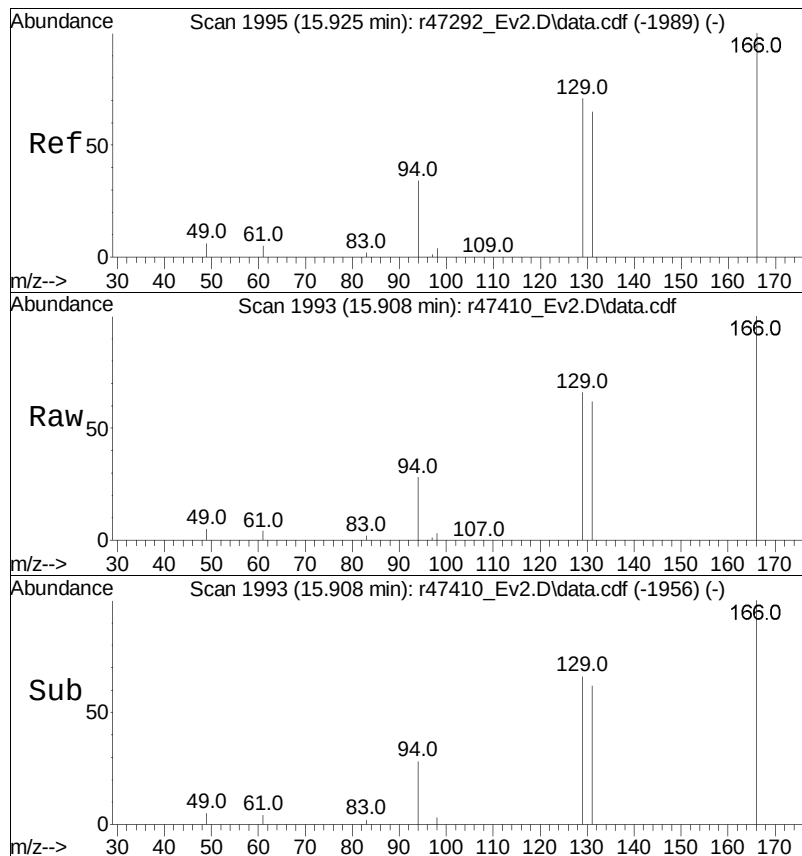




#44
trichloroethene
Concen: 4.96 ppbV
RT: 12.600 min Scan# 1577
Delta R.T. -0.020 min
Lab File: r47410_Ev2.D
Acq: 21 Jan 2020 1:12 PM

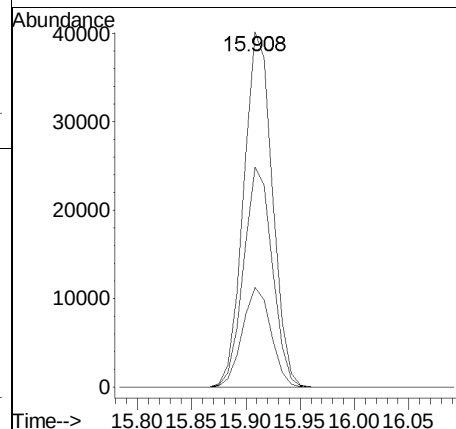
Tgt	Ion:130	Resp:	56171
Ion	Ratio	Lower	Upper
130	100		
132	93.3	74.3	111.5
97	61.0	49.7	74.5





#57
 tetrachloroethene
 Concen: 5.87 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47410_Ev2.D
 Acq: 21 Jan 2020 1:12 PM

Tgt Ion:	166	Resp:	73823
Ion Ratio	Lower	Upper	
166	100		
131	62.0	52.3	78.5
94	28.1	27.2	40.8



Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\
 Data File : r47420_Ev2.D
 Acq On : 21 Jan 2020 10:09 PM
 Operator : AIRPIAN04:EW
 Sample : WG1332352-5,3,250,250
 Misc : WG1332352,ICAL16437
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jan 22 09:29:09 2020
 Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Jan 16 10:30:42 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D
 Sub List : 7-NY-SIM - .

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

Internal Standards						
1) bromochloromethane	9.533	49	123857	10.000	ppbV	-0.03
Standard Area = 122510			Recovery = 101.10%			
33) 1,4-difluorobenzene	11.793	114	342843	10.000	ppbV	-0.03
Standard Area = 417004			Recovery = 82.22%			
51) chlorobenzene-D5	16.517	54	63578	10.000	ppbV	-0.03
Standard Area = 63917			Recovery = 99.47%			

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	11.527	117	683	0.065	ppbV	98
44) trichloroethene	12.580	130	154M4	0.017	ppbV	
57) tetrachloroethene	15.908	166	549	0.044	ppbV	95

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

Sub List : 7-NY-SIM - .\Data\Airpiano4\2020\01\200121SIM\r47410_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\

Data File : r47420_Ev2.D

Acq On : 21 Jan 2020 10:09 PM

Operator : AIRPIANO4:EW

Sample : WG1332352-5,3,250,250

Misc : WG1332352,ICAL16437

ALS Vial : 0 Sample Multiplier: 1

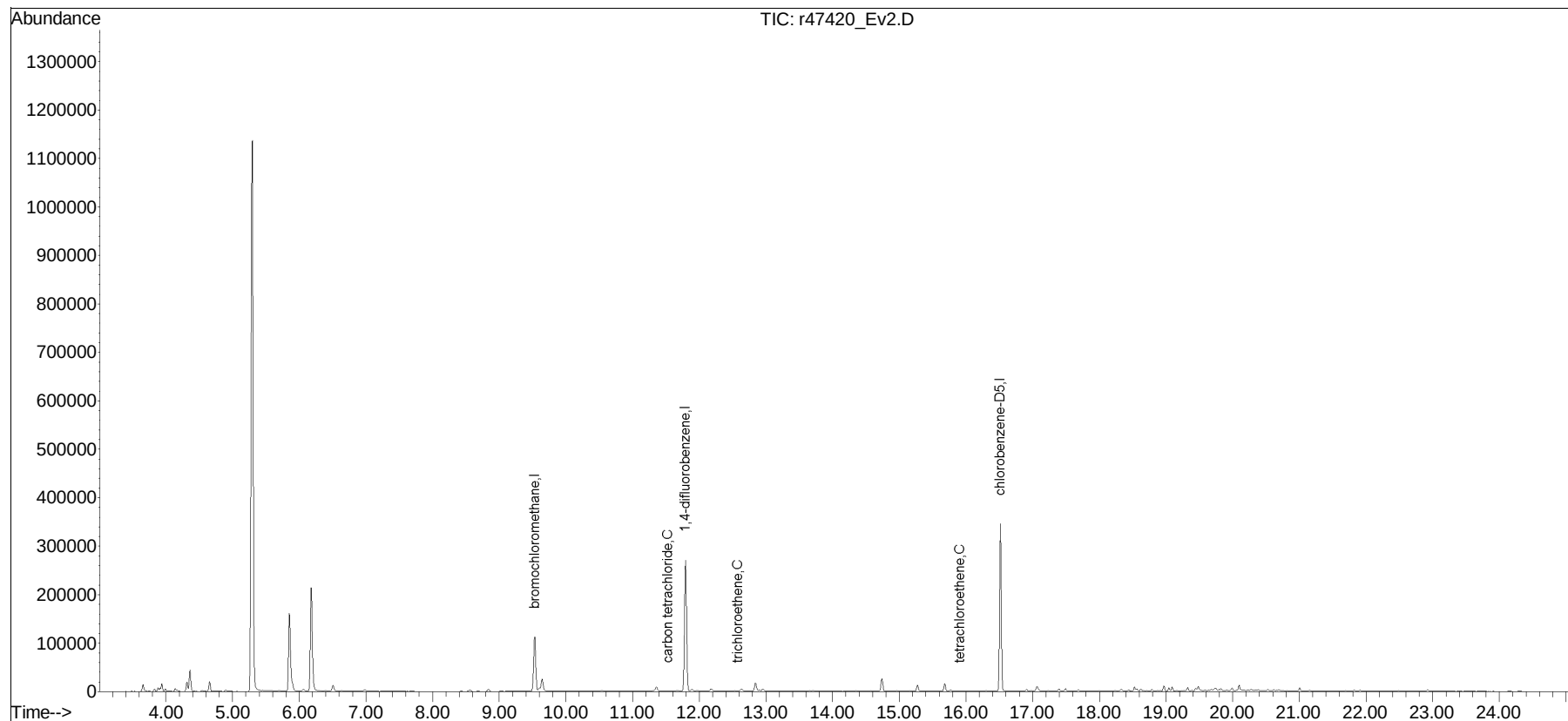
Quant Time: Jan 22 09:29:09 2020

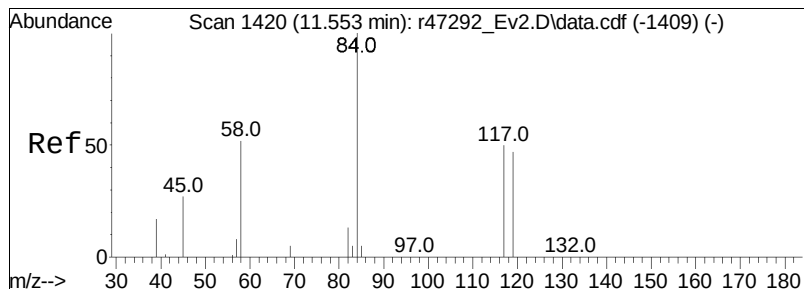
Quant Method : 0:\Forensics\Data\Airpiano4\2020\01\200121SIM\TSIM4_200115.M

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

QLast Update : Thu Jan 16 10:30:42 2020

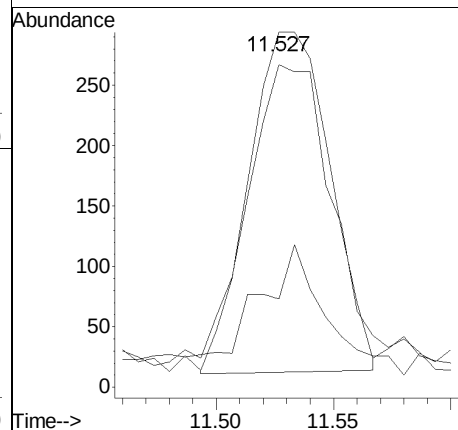
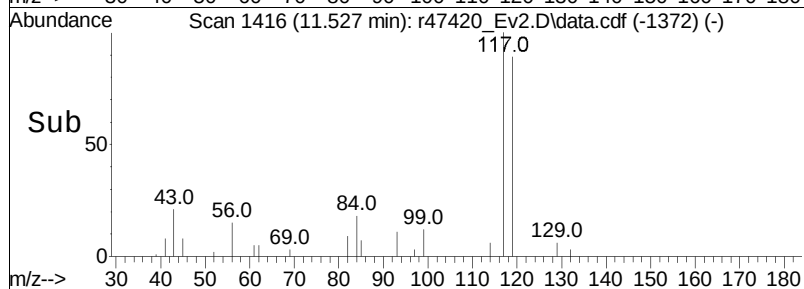
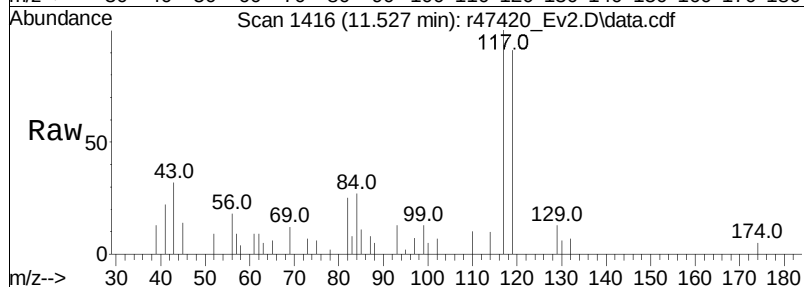
Response via : Initial Calibration

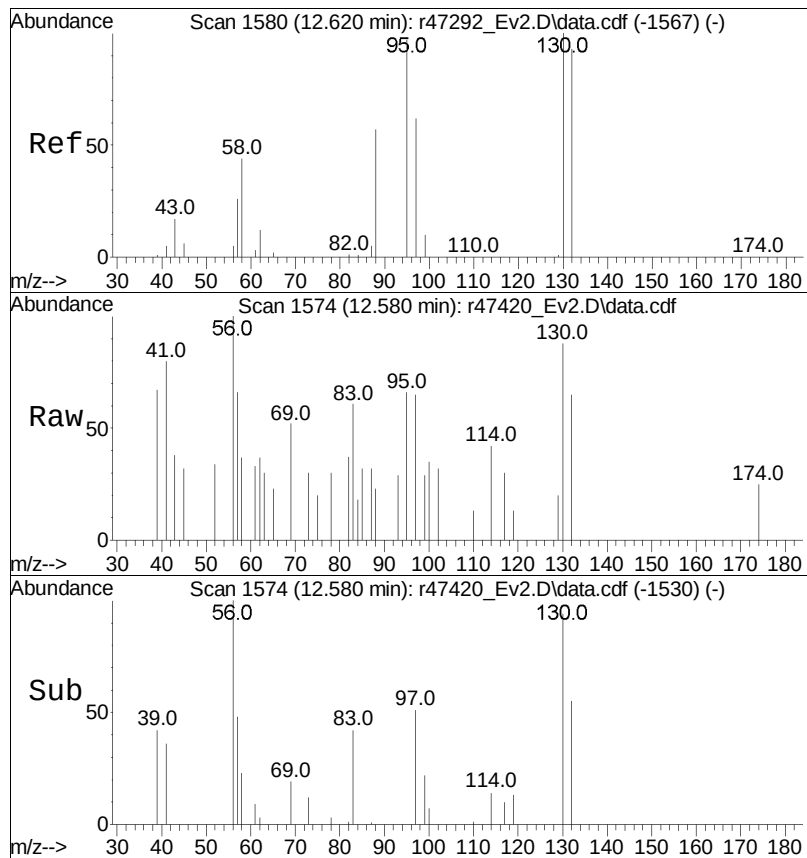




#38
 carbon tetrachloride
 Concen: 0.06 ppbV
 RT: 11.527 min Scan# 1416
 Delta R.T. -0.033 min
 Lab File: r47420_Ev2.D
 Acq: 21 Jan 2020 10:09 PM

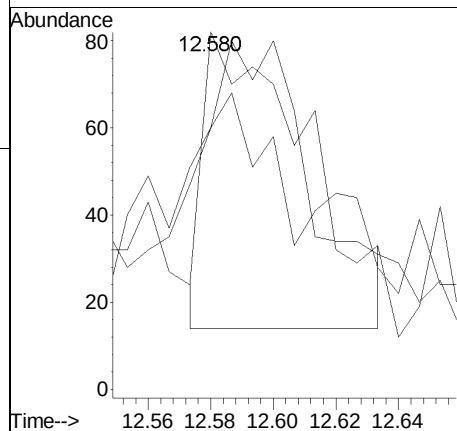
Tgt Ion:	117	Resp:	683
Ion Ratio	Lower	Upper	
117	100		
119	90.8	74.6	112.0
82	24.8	20.5	30.7

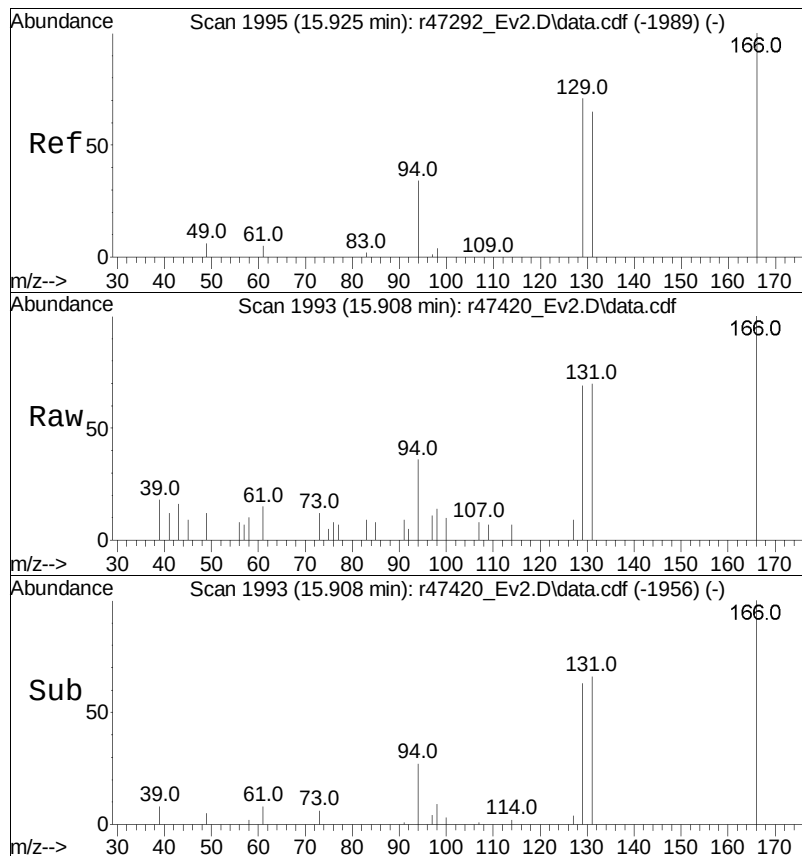




#44
trichloroethene
Concen: 0.02 ppbV m
RT: 12.580 min Scan# 1574
Delta R.T. -0.040 min
Lab File: r47420_Ev2.D
Acq: 21 Jan 2020 10:09 PM

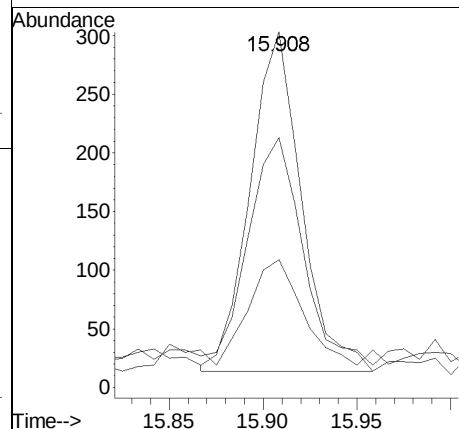
Tgt Ion	Ratio	Lower	Upper
130	100		
132	73.2	74.3	111.5#
97	73.2	49.7	74.5





#57
 tetrachloroethene
 Concen: 0.04 ppbV
 RT: 15.908 min Scan# 1993
 Delta R.T. -0.025 min
 Lab File: r47420_Ev2.D
 Acq: 21 Jan 2020 10:09 PM

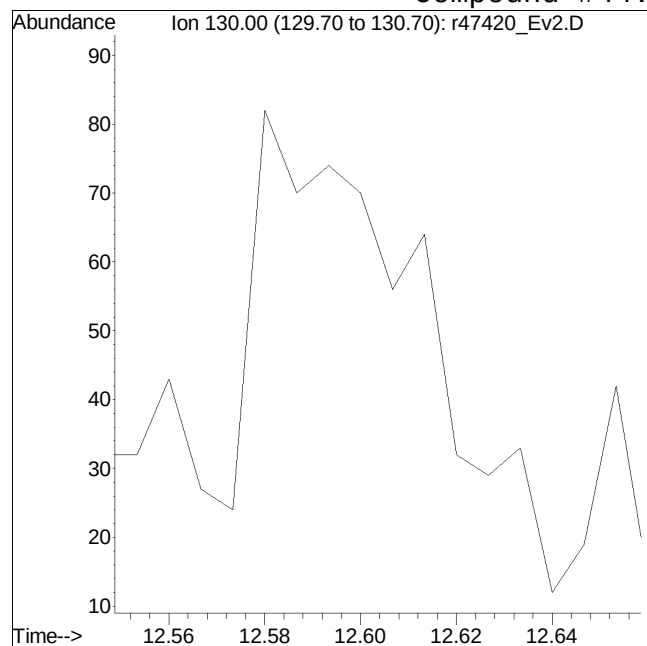
Tgt Ion:	166	Resp:	549
Ion Ratio	Lower	Upper	
166	100		
131	70.3	52.3	78.5
94	36.0	27.2	40.8



Manual Integration Report

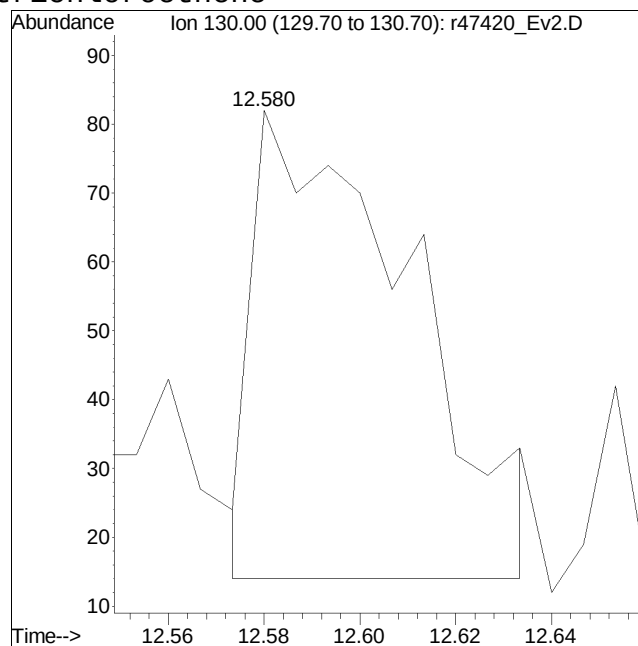
Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM4_200115.M
Data File : r47420_Ev2.D Operator : AIRPIAN04:EW
Date Inj'd : 1/21/2020 0:0: 9 Instrument :
Sample : WG1332352-5,3,250,250 Quant Date : 1/22/2020 5:46 am

Compound #44: trichloroethene



Original Peak Response = 0

M4 = Poor automated baseline construction.



Manual Peak Response = 154 M4

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)

Jan 22 2020, 02:51 pm

Work Group: WG1332352 for Department: 3 GC/MS

Created: 21-JAN-20 Due: Operator: ry

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2002033-01	0A	S T015-SIM	AIR	DONE	U	0214	0122	S0	Can-6
L2002033-02	171 IA	S T015-SIM	AIR	DONE	U	0214	0122	S0	Can-6
L2002033-03	179A IA	S T015-SIM	AIR	DONE	U	0214	0122	S0	Can-6
L2002033-05	181A IA	S T015-SIM	AIR	DONE	U	0214	0122	S0	Can-6
WG1332352-1	MS BFB Tune Standard	S T015-SIM	AIR	DONE	U				
WG1332352-2	Continuing Calibrati	S T015-SIM	AIR	DONE	U				
WG1332352-3	Laboratory Control S	S T015-SIM	AIR	DONE	U				
WG1332352-4	Laboratory Method Bl	S T015-SIM	AIR	DONE	U				
WG1332352-5	Duplicate Sample	S T015-SIM	AIR	DONE	U				
Comments:									
WG1332352-5	L2002033-02								

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano4 Internal Standard/Surrogate IDs: SS19-023 / SS19-022

Date: 01/15/2020 Internal Standard/Surrogate Volume: 100 ml

Initials: RY Sequence File Name: 200115.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	BA4011501	TO15_SFS.qgm	R47282.qgd	250ml			NA
1	BA4011502	TO15_SFS.qgm	R47283.qgd	250ml			NA
1	BA4011503	TO15_SFS.qgm	R47284.qgd	250ml			NA
1	TA4011501	TO15_SFS.qgm	R47285.qgd	250ml	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R47286.qgd	50 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R47287.qgd	125 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R47288.qgd	250 mL SS20-003D	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R47289.qgd	50 mL SS20-003C			NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R47290.qgd	125 mL SS20-003C			NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R47291.qgd	250 mL SS20-003C			NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R47292.qgd	125 mL SS20-003B1			NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R47293.qgd	250 mL SS20-003B1			NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R47294.qgd	50 mL SS20-003A			NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R47295.qgd	125 mL SS20-003A			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R47296.qgd	250 mL SS20-003A	NOT USED FOR SIM	IS FAILED	NA
1	BA4011501	TO15_SFS.qgm	R47297.qgd	250 mL			NA
1	BA4011502	TO15_SFS.qgm	R47298.qgd	250 mL			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R47299.qgd	250 mL SS20-003A	NOT USED FOR SIM		NA
1	BA4011502	TO15_SFS.qgm	R47300.qgd	250 mL			NA
1	BA4011502	TO15_SFS.qgm	R47301.qgd	250 mL			NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R47302.qgd	250 mL SS20-002E	FULL SCAN ICV		NA

Alpha Analytical Air Lab Instrument Run Log

2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R47303.qgd	125 mL SS20-002E	SIM ICV FAILED		NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R47304.qgd	125 mL SS20-002E	SIM ICV		NA

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 volume analyzed (mL), nominal
Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano4

Internal Standard/Surrogate IDs: SS19-023 / SS19-022

Date: 01/21/2020

Internal Standard/Surrogate Volume: 100 ml

Initials: RY

Sequence File Name: 200121.S

SIM ICAL# 16437

Full Scan ICAL# 16438

APH ICAL# 16439

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	TA4012101	TO15_SFS.qgm	R47407.qgd	250ml	TUNE		NA
2	CA4012101	TO15_SFS.qgm	R47408.qgd	250 mL SS20-003F	NJ CC FAILED		NA
3	CTO15-LLSTD10	TO15_SFS.qgm	R47409.qgd	250 mL SS20-002E	LL LCS		NA
3	CTO15-SIMSTD5	TO15_SFS.qgm	R47410.qgd	125 mL SS20-002E	SIM LCS		NA
1	BA4012101	TO15_SFS.qgm	R47411.qgd	250ml	LL BLANK		NA
1	BA4012102	TO15_SFS.qgm	R47412.qgd	250ml	SIM BLANK		NA
1	L2002033-01,3,250,250	TO15_SFS.qgm	R47413.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
2	L2001881-01,3,250,250	TO15_SFS.qgm	R47414.qgd	WG1332350,ICAL16438		DOW 2019	Y
3	L2001881-02,3,250,250	TO15_SFS.qgm	R47415.qgd	WG1332350,ICAL16438		DOW 2019	Y
4	L2001881-03,3,250,250	TO15_SFS.qgm	R47416.qgd	WG1332350,ICAL16438		DOW 2019	Y
5	L2001881-04,3,250,250	TO15_SFS.qgm	R47417.qgd	WG1332350,ICAL16438		DOW 2019	Y
6	L2001881-05,3,250,250	TO15_SFS.qgm	R47418.qgd	WG1332350,ICAL16438		DOW 2019	Y
7	L2002033-02,3,250,250	TO15_SFS.qgm	R47419.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
7	L2002033-02DUP,3,250,250	TO15_SFS.qgm	R47420.qgd	WG1332350,ICAL16438	LL/ SIM DUP	NY/ 7 SIM	Y
8	L2002033-03,3,250,250	TO15_SFS.qgm	R47421.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
9	L2002033-05,3,250,250	TO15_SFS.qgm	R47422.qgd	WG1332350,ICAL16438		NY/ 7 SIM	Y
10	L2002349-01D,3,200,250	TO15_SFS.qgm	R47423.qgd	WG1332350,ICAL16438		NY	Y
11	L2002349-02,3,250,250	TO15_SFS.qgm	R47424.qgd	WG1332350,ICAL16438		NY	Y
12	L2002349-03,3,250,250	TO15_SFS.qgm	R47425.qgd	WG1332350,ICAL16438		NY	Y
13	L2002033-04,3,250,250	TO15_SFS.qgm	R47426.qgd	WG1332350,ICAL16438		NY	Y
14	L2002033-06D,3,125,250	TO15_SFS.qgm	R47427.qgd	WG1332350,ICAL16438		NY	Y

Alpha Analytical Air Lab Instrument Run Log

15	L2002648-01,3,250,250	TO15_SFS.qgm	R47428.qgd	WG1332350,ICAL16438		NY	Y
16	L2001881-06,3,250,250	TO15_SFS.qgm	R47429.qgd	WG1332350,ICAL16438		DOW 2019	Y
16	L2001881-07,3,250,250	TO15_SFS.qgm	R47430.qgd	WG1332350,ICAL16438		DOW 2019	Y

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 See sample ID, report, or see Form 1 report, or divide nominal volume by actual volume analyzed
Dilution Factor: See sample ID, report, or see Form 1 report, or divide nominal volume by actual volume analyzed

Attachment D

**DATA USABILITY SUMMARY REPORT
ELKS PLAZA, FREEPORT, NEW YORK**

Client: Tyll Engineering and Consulting, Commack, New York
SDG: L2002033
Laboratory: Alpha Analytical, Mansfield, Massachusetts
Site: Elks Plaza, Freeport, New York
Date: February 16, 2020

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	OA	L2002033-01	Air
2	171 IA	L2002033-02	Air
3	179A IA	L2002033-03	Air
4*	179A SSV	L2002033-04	Air
5	181A IA	L2002033-05	Air
6*	181A SSV	L2002033-06	Air

* - VOC Only

A Data Usability Summary Review was performed on the analytical data for six air samples collected on January 15, 2020 by Tyll Engineering at the Elks Plaza Site in Freeport, New York. The samples were analyzed under "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition January 1999, EPA/625/R-96/010B", Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)".

Specific method references are as follows:

Analysis

VOC & VOC SIM

Method References

USEPA Method TO-15

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-31, Revision 6, September 2016: Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15.
- and the reviewer's professional judgment.

The following items/criteria were reviewed for this report:

Organics

- Data Completeness

- Cover letter, Narrative, and Data Reporting Forms
- Canister Certification Blanks
- Canister Certification Pressures Differences
- Chains-of-Custody and Traffic Reports
- Holding Times and sample preservation
- Laboratory Control Sample (LCS) recoveries
- GC/MS Tuning
- Method Blank Contamination
- Initial and Continuing Calibration Summaries
- Compound Quantitation
- Internal Standard (IS) Area Performance
- Field Duplicate Sample Precision

Data Usability Assessment

There were no rejections of data.

Overall the data are acceptable for the intended purposes as qualified for the deficiencies detailed in this report.

Please note that any results qualified (U) due to blank contamination may be then qualified (J) due to another action. Therefore, the results may be qualified (UJ) due to the culmination of the blank contaminations and actions from other exceedances of QC criteria.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (VOCs)& VOC-SIM

Chains-of-Custody and Traffic Reports

- All criteria were met.

Cover letter, Narrative, and Data Reporting Forms

- All criteria were met.

Canister Certification Blanks

- The batch blank checks were non-detect or < RL.

Canister Certification Pressures Differences

- All criteria were met.

Chains-of-Custody and Traffic Reports

- All criteria were met.

Holding Times

- All samples were analyzed within 30 days for air samples.

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R) except for the following.

LCS ID	Compound	%R	Qualifier	Affected Samples
WG1332350-3LCS	1,2,4-Trichlorobenzene	154%	None	All Associated Samples ND
	Hexachlorobutadiene	134%	None	

GC/MS Tuning

- All criteria were met.

Method Blank

- The method blanks were free of contamination.

Initial Calibration

- The initial calibrations exhibited acceptable %RSD and/or correlation coefficients.

Continuing Calibration

- The continuing calibrations exhibited acceptable %D values except for the following.

CCAL Date	Compound	%D/RRF	Qualifier	Affected Samples
01/21/20	1,2,4-Trichlorobenzene	53.4%	UJ	All Samples
	Hexachlorobutadiene	34.1%	UJ	

Compound Quantitation

- EDS Sample 6 was analyzed at a 2X dilution due to high concentrations of target compounds. The reporting limits were adjusted accordingly. No action was required.

Internal Standard (IS) Area Performance

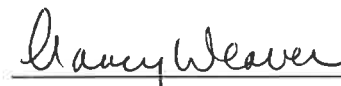
- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:


Nancy Weaver
Senior Chemist

Dated: 2/17/20

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the samples.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the samples.

Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-01
Client ID : OA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47413
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:35
Date Received : 01/15/20
Date Analyzed : 01/21/20 17:33
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.429	0.200	--	2.12	0.989	--	
74-87-3	Chloromethane	0.516	0.200	--	1.07	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	13.3	5.00	--	25.1	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	6.73	1.00	--	16.0	2.38	--	
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	0.625	0.500	--	1.54	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	0.512	0.500	--	1.51	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	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	0.237	0.200	--	0.757	0.639	--	

NW 2/14/20



Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-01
Client ID : OA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47413
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:35
Date Received : 01/15/20
Date Analyzed : 01/21/20 17:33
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
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	0.383	0.200	--	1.44	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	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
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



NW 2/16/20

Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-01
Client ID : OA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47413
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:35
Date Received : 01/15/20
Date Analyzed : 01/21/20 17:33
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
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~~ uJ	0.200	--	~~ND~~ uJ	1.48	--	~~U~~
87-68-3	Hexachlorobutadiene	~~ND~~ uJ	0.200	--	~~ND~~ uJ	2.13	--	~~U~~

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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-02
Client ID : 171 IA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47419
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:30
Date Received : 01/15/20
Date Analyzed : 01/21/20 21:30
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.474	0.200	--	2.34	0.989	--	
74-87-3	Chloromethane	0.514	0.200	--	1.06	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	332	5.00	--	626	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	20.8	1.00	--	49.4	2.38	--	
75-69-4	Trichlorofluoromethane	0.426	0.200	--	2.39	1.12	--	
67-63-0	Isopropanol	26.8	0.500	--	65.9	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	1.97	0.500	--	7.10	1.80	--	
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	0.288	0.200	--	1.02	0.705	--	
71-43-2	Benzene	0.469	0.200	--	1.50	0.639	--	



Results Summary Form 1 Volatile Organics in Air

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Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-02
Client ID : 171 IA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47419
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:30
Date Received : 01/15/20
Date Analyzed : 01/21/20 21:30
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
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	0.853	0.200	--	3.21	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	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
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	0.244	0.200	--	1.20	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



mw 2/16/20

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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-02
Client ID : 171 IA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47419
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:30
Date Received : 01/15/20
Date Analyzed : 01/21/20 21:30
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
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~~ <i>uj</i>	0.200	--	~~ND~~ <i>uj</i>	1.48	--	<i>u</i>
87-68-3	Hexachlorobutadiene	~~ND~~ <i>uj</i>	0.200	--	~~ND~~ <i>uj</i>	2.13	--	<i>u</i>

Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-03
 Client ID : 179A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47421
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:45
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:48
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.473	0.200	--	2.34	0.989	--	
74-87-3	Chloromethane	0.645	0.200	--	1.33	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	284	5.00	--	535	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	37.1	1.00	--	88.1	2.38	--	
75-69-4	Trichlorofluoromethane	0.438	0.200	--	2.46	1.12	--	
67-63-0	Isopropanol	36.0	0.500	--	88.5	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	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	1.53	0.500	--	5.51	1.80	--	
67-66-3	Chloroform	0.307	0.200	--	1.50	0.977	--	
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	0.322	0.200	--	1.13	0.705	--	
71-43-2	Benzene	0.672	0.200	--	2.15	0.639	--	

Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-03
Client ID : 179A IA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47421
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:45
Date Received : 01/15/20
Date Analyzed : 01/21/20 22:48
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
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	0.847	0.200	--	3.19	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	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
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	0.246	0.200	--	1.21	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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-03
 Client ID : 179A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47421
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:45
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 22:48
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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~~ <i>UJ</i>	0.200	--	~~ND~~ <i>UJ</i>	1.48	--	~~U~~
87-68-3	Hexachlorobutadiene	~~ND~~ <i>UJ</i>	0.200	--	~~ND~~ <i>UJ</i>	2.13	--	~~U~~

NW 2/16/20

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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-04
Client ID : 179A SSV
Sample Location : FREEPORT, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R47426
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:55
Date Received : 01/15/20
Date Analyzed : 01/22/20 02:04
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.490	0.200	--	2.42	0.989	--	
74-87-3	Chloromethane	0.653	0.200	--	1.35	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	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	240	5.00	--	452	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	48.9	1.00	--	116	2.38	--	
75-69-4	Trichlorofluoromethane	0.418	0.200	--	2.35	1.12	--	
67-63-0	Isopropanol	29.2	0.500	--	71.8	1.23	--	
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	1.23	0.500	--	3.63	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	1.19	0.500	--	4.29	1.80	--	
67-66-3	Chloroform	0.671	0.200	--	3.28	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-04
Client ID : 179A SSV
Sample Location : FREEPORT, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R47426
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:55
Date Received : 01/15/20
Date Analyzed : 01/22/20 02:04
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
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	0.895	0.200	--	3.15	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	0.834	0.200	--	2.66	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.355	0.200	--	1.22	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
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	0.309	0.200	--	1.44	0.934	--	
142-82-5	Heptane	0.466	0.200	--	1.91	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	1.61	0.200	--	6.07	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
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	0.306	0.200	--	1.33	0.869	--	
179601-23-1	p/m-Xylene	1.10	0.400	--	4.78	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-04
Client ID : 179A SSV
Sample Location : FREEPORT, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R47426
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:55
Date Received : 01/15/20
Date Analyzed : 01/22/20 02:04
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
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	0.474	0.200	--	2.06	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	0.671	0.200	--	3.30	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 uJ	0.200	--	ND uJ	1.48	--	u
87-68-3	Hexachlorobutadiene	ND uJ	0.200	--	ND uJ	2.13	--	u

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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-05
Client ID : 181A IA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R47422
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:59
Date Received : 01/15/20
Date Analyzed : 01/21/20 23:28
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.456	0.200	--	2.25	0.989	--	
74-87-3	Chloromethane	0.607	0.200	--	1.25	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	364	5.00	--	686	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	44.4	1.00	--	105	2.38	--	
75-69-4	Trichlorofluoromethane	0.485	0.200	--	2.73	1.12	--	
67-63-0	Isopropanol	42.5	0.500	--	104	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	0.517	0.500	--	1.52	1.47	--	
141-78-6	Ethyl Acetate	1.93	0.500	--	6.96	1.80	--	
67-66-3	Chloroform	0.334	0.200	--	1.63	0.977	--	
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	0.327	0.200	--	1.15	0.705	--	
71-43-2	Benzene	0.665	0.200	--	2.12	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-05
 Client ID : 181A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47422
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:59
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 23:28
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.231	0.200	--	0.947	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	0.996	0.200	--	3.75	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	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
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	0.279	0.200	--	1.37	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 : Tyll Engineering and Consulting PC
 Project Name : ELKS PLAZA
 Lab ID : L2002033-05
 Client ID : 181A IA
 Sample Location : FREEPORT, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R47422
 Sample Amount : 250 ml

Lab Number : L2002033
 Project Number :
 Date Collected : 01/15/20 03:59
 Date Received : 01/15/20
 Date Analyzed : 01/21/20 23:28
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO4
 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~~ uJ	0.200	--	~~ND~~ uJ	1.48	--	y
87-68-3	Hexachlorobutadiene	~~ND~~ uJ	0.200	--	~~ND~~ uJ	2.13	--	u

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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-06D
Client ID : 181A SSV
Sample Location : FREEPORT, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R47427
Sample Amount : 125 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 04:00
Date Received : 01/15/20
Date Analyzed : 01/22/20 02:41
Dilution Factor : 2
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.496	0.400	--	2.45	1.98	--	
74-87-3	Chloromethane	ND	0.400	--	ND	0.826	--	U
76-14-2	Freon-114	ND	0.400	--	ND	2.80	--	U
75-01-4	Vinyl chloride	ND	0.400	--	ND	1.02	--	U
106-99-0	1,3-Butadiene	0.626	0.400	--	1.38	0.885	--	
74-83-9	Bromomethane	ND	0.400	--	ND	1.55	--	U
75-00-3	Chloroethane	ND	0.400	--	ND	1.06	--	U
64-17-5	Ethanol	66.0	10.0	--	124	18.8	--	
593-60-2	Vinyl bromide	ND	0.400	--	ND	1.75	--	U
67-64-1	Acetone	57.6	2.00	--	137	4.75	--	
75-69-4	Trichlorofluoromethane	0.844	0.400	--	4.74	2.25	--	
67-63-0	Isopropanol	4.63	1.00	--	11.4	2.46	--	
75-35-4	1,1-Dichloroethene	ND	0.400	--	ND	1.59	--	U
75-65-0	Tertiary butyl Alcohol	ND	1.00	--	ND	3.03	--	U
75-09-2	Methylene chloride	ND	1.00	--	ND	3.47	--	U
107-05-1	3-Chloropropene	ND	0.400	--	ND	1.25	--	U
75-15-0	Carbon disulfide	0.588	0.400	--	1.83	1.25	--	
76-13-1	Freon-113	ND	0.400	--	ND	3.07	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--	U
75-34-3	1,1-Dichloroethane	ND	0.400	--	ND	1.62	--	U
1634-04-4	Methyl tert butyl ether	ND	0.400	--	ND	1.44	--	U
78-93-3	2-Butanone	2.31	1.00	--	6.81	2.95	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.400	--	ND	1.59	--	U
141-78-6	Ethyl Acetate	ND	1.00	--	ND	3.60	--	U
67-66-3	Chloroform	0.528	0.400	--	2.58	1.95	--	
109-99-9	Tetrahydrofuran	ND	1.00	--	ND	2.95	--	U

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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-06D
Client ID : 181A SSV
Sample Location : FREEPORT, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R47427
Sample Amount : 125 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 04:00
Date Received : 01/15/20
Date Analyzed : 01/22/20 02:41
Dilution Factor : 2
Analyst : EW
Instrument ID : AIRPIANO4
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.400	--	ND	1.62	--	U
110-54-3	n-Hexane	1.96	0.400	--	6.91	1.41	--	
71-55-6	1,1,1-Trichloroethane	ND	0.400	--	ND	2.18	--	U
71-43-2	Benzene	1.11	0.400	--	3.55	1.28	--	
56-23-5	Carbon tetrachloride	ND	0.400	--	ND	2.52	--	U
110-82-7	Cyclohexane	1.00	0.400	--	3.44	1.38	--	
78-87-5	1,2-Dichloropropane	ND	0.400	--	ND	1.85	--	U
75-27-4	Bromodichloromethane	ND	0.400	--	ND	2.68	--	U
123-91-1	1,4-Dioxane	ND	0.400	--	ND	1.44	--	U
79-01-6	Trichloroethene	0.646	0.400	--	3.47	2.15	--	
540-84-1	2,2,4-Trimethylpentane	ND	0.400	--	ND	1.87	--	U
142-82-5	Heptane	1.46	0.400	--	5.98	1.64	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.00	--	ND	4.10	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.400	--	ND	1.82	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.400	--	ND	2.18	--	U
108-88-3	Toluene	6.12	0.400	--	23.1	1.51	--	
591-78-6	2-Hexanone	ND	0.400	--	ND	1.64	--	U
124-48-1	Dibromochloromethane	ND	0.400	--	ND	3.41	--	U
106-93-4	1,2-Dibromoethane	ND	0.400	--	ND	3.07	--	U
127-18-4	Tetrachloroethene	136	0.400	--	922	2.71	--	
108-90-7	Chlorobenzene	ND	0.400	--	ND	1.84	--	U
100-41-4	Ethylbenzene	2.31	0.400	--	10.0	1.74	--	
179601-23-1	p/m-Xylene	9.57	0.800	--	41.6	3.47	--	
75-25-2	Bromoform	ND	0.400	--	ND	4.14	--	U
100-42-5	Styrene	ND	0.400	--	ND	1.70	--	U



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Results Summary Form 1 Volatile Organics in Air

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-06D
Client ID : 181A SSV
Sample Location : FREEPORT, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R47427
Sample Amount : 125 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 04:00
Date Received : 01/15/20
Date Analyzed : 01/22/20 02:41
Dilution Factor : 2
Analyst : EW
Instrument ID : AIRPIANO4
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	0.400	--	ND	2.75	--	U
95-47-6	o-Xylene	4.12	0.400	--	17.9	1.74	--	
622-96-8	4-Ethyltoluene	0.946	0.400	--	4.65	1.97	--	
108-67-8	1,3,5-Trimethylbenzene	1.33	0.400	--	6.54	1.97	--	
95-63-6	1,2,4-Trimethylbenzene	4.91	0.400	--	24.1	1.97	--	
100-44-7	Benzyl chloride	ND	0.400	--	ND	2.07	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.400	--	ND	2.40	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.400	--	ND	2.40	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.400	--	ND	2.40	--	U
120-82-1	1,2,4-Trichlorobenzene	~~ND~~ UJ	0.400	--	~~ND~~ UJ	2.97	--	~~U~~
87-68-3	Hexachlorobutadiene	~~ND~~ UJ	0.400	--	~~ND~~ UJ	4.27	--	~~U~~

Results Summary Form 1 Volatile Organics in Air by SIM

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-01
Client ID : OA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15-SIM
Lab File ID : R47413_EV2
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:35
Date Received : 01/15/20
Date Analyzed : 01/21/20 17:33
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
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	0.065	0.020	--	0.441	0.136	--	

NW 2/16/20



Results Summary Form 1 Volatile Organics in Air by SIM

2

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-02
Client ID : 171 IA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15-SIM
Lab File ID : R47419_EV2
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:30
Date Received : 01/15/20
Date Analyzed : 01/21/20 21:30
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
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	0.067	0.020	--	0.421	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.047	0.020	--	0.319	0.136	--	

MW 2/16/20



Results Summary Form 1 Volatile Organics in Air by SIM

3

Client : Tyll Engineering and Consulting PC
Project Name : ELKS PLAZA
Lab ID : L2002033-03
Client ID : 179A IA
Sample Location : FREEPORT, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15-SIM
Lab File ID : R47421_EV2
Sample Amount : 250 ml

Lab Number : L2002033
Project Number :
Date Collected : 01/15/20 03:45
Date Received : 01/15/20
Date Analyzed : 01/21/20 22:48
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO4
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	0.077	0.020	--	0.484	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.055	0.020	--	0.373	0.136	--	

NW 2/16/20



Results Summary Form 1 Volatile Organics in Air by SIM

5

Client : Tyll Engineering and Consulting PC Project Name : ELKS PLAZA Lab ID : L2002033-05 Client ID : 181A IA Sample Location : FREEPORT, NY Sample Matrix : AIR Analytical Method : 48,TO-15-SIM Lab File ID : R47422_EV2 Sample Amount : 250 ml	Lab Number : L2002033 Project Number : Date Collected : 01/15/20 03:59 Date Received : 01/15/20 Date Analyzed : 01/21/20 23:28 Dilution Factor : 1 Analyst : EW Instrument ID : AIRPIANO4 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	0.069	0.020	--	0.434	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.063	0.020	--	0.427	0.136	--	

NW 2/14/20

