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Alpha Analytical

Laboratory Code: 11148

SDG Number: L2037872

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Project Name: 160 EAST 125TH STREET
Project Number: 100433203

Lab Number: L2037872
Report Date: 09/18/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2037872-01	061/LSV-7	SOIL_VAPOR	NEW YORK, NY	09/11/20 10:01	09/11/20
L2037872-02	062/LSV-1	SOIL_VAPOR	NEW YORK, NY	09/11/20 10:49	09/11/20
L2037872-03	UNUSED CAN #2573	SOIL_VAPOR	NEW YORK, NY		09/11/20

Project Name: 160 EAST 125TH STREET
Project Number: 100433203

Lab Number: L2037872
Report Date: 09/18/20

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. 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: 160 EAST 125TH STREET
Project Number: 100433203

Lab Number: L2037872
Report Date: 09/18/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on September 10, 2020. The canister certification results are provided as an addendum.

L2037872-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG1411312-3 LCS recovery for propylene (139%), 3-chloropropene (132%), 1,2-dichloroethane (134%) and benzyl chloride (137%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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: 09/18/20

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: 160 EAST 125TH STREET
Project Number: 100433203

Lab Number: L2037872
Report Date: 09/18/20

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

Terms

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

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

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

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

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

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenzo(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.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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 exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

Report Format: Data Usability Report



Project Name: 160 EAST 125TH STREET
Project Number: 100433203

Lab Number: L2037872
Report Date: 09/18/20

Data Qualifiers

- R** - Analytical results are from sample re-analysis.
- 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 : L2037872

Received : 11-SEP-2020

Reviewer : Dylan Snook

Account Name : Langan Engineering & Environmental

Project Number : 100433203

Project Name : 160 EAST 125TH STREET

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

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

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between sample labels & COC?	NO
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	YES

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NA

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 18 2020, 05:17 pm

Login Number: L2037872

Account: LANGAN-NJ Langan Engineering & Environmental Project: 100433203

Received: 11SEP20 Due Date: 18SEP20

Sample #	Client ID	Mat PR Collected
L2037872-01 061/LSV-7		11 S0 11SEP20 10:01
ASP-B Package Due Date: 09/18/20		
ASP-B, CAN-RENT, FLOW-RENT, T015-LL		
L2037872-02 062/LSV-1		11 S0 11SEP20 10:49
Package Due Date: 09/18/20		
CAN-RENT, FLOW-RENT, T015-LL		
L2037872-03 UNUSED CAN #2573		11 S0
Package Due Date: 09/18/20		
CAN-RENT, CLEAN-FEE, FLOW-RENT		



AIR ANALYSIS

PAGE 1 OF 1

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

Client Information

Client: Langan
Address: 300 Kimball Dr
Parsippany, NJ
Phone: 973-560-4900
Fax: 973-560-4901
Email: a.kritzer@langan.com

☐ These samples have been previously analyzed by Alpha.

Project Information

Project Name: 160 East 125th Street
Project Location: New York, NY
Project #: 100433203
Project Manager: Ben Rao
ALPHA Quote #:

Turn-Around Time

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

Date Due:

Time:

Date Rec'd in Lab:

9/12/20

Report Information - Data Deliverables

☐ FAX

☐ ADEx

Criteria Checker: ASPB Package

(Default based on Regulatory Criteria Indicated)

Other Formats:

☐ EMAIL (standard pdf report)

☐ Additional Deliverables:

Report to: (if different than Project Manager)

ALPHA Job #:

L2037872

Billing Information

☒ Same as Client info

PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

ANALYSIS

☐ TO-15
☐ TO-15 SIM
☐ APH Reduced Non-Halogenated HCs
☐ Fixed Gases
☐ Sulfides & Mercaptans by TO-15

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION						Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 S	APH %	Fixed C	Sulfides		Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum													
37872-01	061/LSV-27	9/11/2020	08:01	10:01	24.63	6.71	SV	an	6L	586	04126	✓							
	~~LSV-1~~	~~↓~~	~~08:49~~	~~10:49~~	~~30.14~~	~~4.62~~	~~SV~~	~~an~~	~~6L~~	~~2808~~	~~0343~~	~~✓~~							
02	062/LSV-1	9/11/2020	08:49	10:49	30.14	4.62	SV	an	6L	2808	0343	✓							
														</					

*SAMPLE MATRIX CODES

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

Container Type

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.

Relinquished By:

Date/Time

Received By:

Date/Time:

Andrew Nesci / Langan

9/11/2020 1445

MASTRO

ADL

9/11/2020 1445

MASTRO

9/11/2020 1930

9/12/2020 0445

MASTRO

ADL

9/11/2020 2300

9/12/2020 0445

Supporting Documentation

Project Name: 160 EAST 125TH STREET

Lab Number: L2037872

Project Number: 100433203

Report Date: 09/18/20

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
L2037872-01	061/LSV-7	01926	Flow 2	09/10/20	329537		-	-	-	Pass	40.0	37.6	6
L2037872-01	061/LSV-7	586	6.0L Can	09/10/20	329537	L2036663-02	Pass	-29.3	-6.2	-	-	-	-
L2037872-02	062/LSV-1	0343	Flow 2	09/10/20	329537		-	-	-	Pass	40.0	39.8	1
L2037872-02	062/LSV-1	2808	6.0L Can	09/10/20	329537	L2036387-05	Pass	-29.7	-4.3	-	-	-	-
L2037872-03	UNUSED CAN #2573	0938	Flow 2	09/10/20	329537		-	-	-	Pass	40.0	38.6	4
L2037872-03	UNUSED CAN #2573	2573	6.0L Can	09/10/20	329537	L2036663-02	Pass	-29.7	-29.9	-	-	-	-

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

Lab Number: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
Client ID: CAN 1700 SHELF 57
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 09/04/20 21:21
Analyst: TS

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
 Client ID: CAN 1700 SHELF 57
 Sample Location:

Date Collected: 09/02/20 16:00
 Date Received: 09/03/20
 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: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
 Client ID: CAN 1700 SHELF 57
 Sample Location:

Date Collected: 09/02/20 16:00
 Date Received: 09/03/20
 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: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
 Client ID: CAN 1700 SHELF 57
 Sample Location:

Date Collected: 09/02/20 16:00
 Date Received: 09/03/20
 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: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
Client ID: CAN 1700 SHELF 57
Sample Location:

Date Collected: 09/02/20 16:00
Date Received: 09/03/20
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	97		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	94		60-140



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

Lab Number: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
 Client ID: CAN 1700 SHELF 57
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 09/04/20 21:21
 Analyst: TS

Date Collected: 09/02/20 16:00
 Date Received: 09/03/20
 Field Prep: Not Specified

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



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

Lab Number: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
 Client ID: CAN 1700 SHELF 57
 Sample Location:

Date Collected: 09/02/20 16:00
 Date Received: 09/03/20
 Field Prep: Not Specified

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



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

Lab Number: L2036387
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036387-05
 Client ID: CAN 1700 SHELF 57
 Sample Location:

Date Collected: 09/02/20 16:00
 Date Received: 09/03/20
 Field Prep: Not Specified

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	104		60-140
bromochloromethane	104		60-140
chlorobenzene-d5	99		60-140



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

Lab Number: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02
Client ID: CAN 787 SHELF 31
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 09/04/20 23:19
Analyst: TS

Date Collected: 09/03/20 16:00
Date Received: 09/04/20
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: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02
 Client ID: CAN 787 SHELF 31
 Sample Location:

Date Collected: 09/03/20 16:00
 Date Received: 09/04/20
 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: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02
Client ID: CAN 787 SHELF 31
Sample Location:

Date Collected: 09/03/20 16:00
Date Received: 09/04/20
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: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02
 Client ID: CAN 787 SHELF 31
 Sample Location:

Date Collected: 09/03/20 16:00
 Date Received: 09/04/20
 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: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02 Date Collected: 09/03/20 16:00
 Client ID: CAN 787 SHELF 31 Date Received: 09/04/20
 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	99		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	96		60-140



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

Lab Number: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02
 Client ID: CAN 787 SHELF 31
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 09/04/20 23:19
 Analyst: TS

Date Collected: 09/03/20 16:00
 Date Received: 09/04/20
 Field Prep: Not Specified

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



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

Lab Number: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02
 Client ID: CAN 787 SHELF 31
 Sample Location:

Date Collected: 09/03/20 16:00
 Date Received: 09/04/20
 Field Prep: Not Specified

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



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

Lab Number: L2036663
Report Date: 09/18/20

Air Canister Certification Results

Lab ID: L2036663-02
 Client ID: CAN 787 SHELF 31
 Sample Location:

Date Collected: 09/03/20 16:00
 Date Received: 09/04/20
 Field Prep: Not Specified

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	107		60-140
bromochloromethane	104		60-140
chlorobenzene-d5	100		60-140



Organics

Volatile Organics in Air TO-15 Low Level

Volatiles QC Summary

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Langan Engineering & Environmental Lab Number : L2037872
 Project Name : 160 EAST 125TH STREET Project Number : 100433203
 Matrix : AIR
 LCS Sample ID : WG1411312-3 Analysis Date : 09/17/20 12:24 File ID : r311572
 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	9.74	97				-	70-130	-
Chloromethane	10	9.31	93				-	70-130	-
Freon-114	10	9.65	96				-	70-130	-
Vinyl chloride	10	9.38	94				-	70-130	-
1,3-Butadiene	10	9.15	92				-	70-130	-
Bromomethane	10	10.2	102				-	70-130	-
Chloroethane	10	9.89	99				-	70-130	-
Ethanol	50	37.4	75				-	40-160	-
Vinyl bromide	10	10.6	106				-	70-130	-
Acetone	50	46.2	92				-	40-160	-
Trichlorofluoromethane	10	11.9	119				-	70-130	-
Isopropanol	25	23.2	93				-	40-160	-
1,1-Dichloroethene	10	12.2	122				-	70-130	-
Tertiary butyl Alcohol	10	11.5	115				-	70-130	-
Methylene chloride	10	9.84	98				-	70-130	-
3-Chloropropene	10	13.2	132 Q				-	70-130	-
Carbon disulfide	10	10.1	101				-	70-130	-
Freon-113	10	12.3	123				-	70-130	-
trans-1,2-Dichloroethene	10	11.7	117				-	70-130	-
1,1-Dichloroethane	10	12.8	128				-	70-130	-
Methyl tert butyl ether	10	12.3	123				-	70-130	-
2-Butanone	10	12.3	123				-	70-130	-
cis-1,2-Dichloroethene	10	12.4	124				-	70-130	-
Ethyl Acetate	10	11.9	119				-	70-130	-
Chloroform	10	10.9	109				-	70-130	-
Tetrahydrofuran	10	11.9	119				-	70-130	-



Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Langan Engineering & Environmental Lab Number : L2037872
 Project Name : 160 EAST 125TH STREET Project Number : 100433203
 Matrix : AIR
 LCS Sample ID : WG1411312-3 Analysis Date : 09/17/20 12:24 File ID : r311572
 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	13.4	134 Q				-	70-130	-
n-Hexane	10	9.21	92				-	70-130	-
1,1,1-Trichloroethane	10	12.7	127				-	70-130	-
Benzene	10	9.09	91				-	70-130	-
Carbon tetrachloride	10	12.2	122				-	70-130	-
Cyclohexane	10	9.13	91				-	70-130	-
1,2-Dichloropropane	10	11.4	114				-	70-130	-
Bromodichloromethane	10	10.1	101				-	70-130	-
1,4-Dioxane	10	10.2	102				-	70-130	-
Trichloroethene	10	10.9	109				-	70-130	-
2,2,4-Trimethylpentane	10	9.46	95				-	70-130	-
Heptane	10	11.0	110				-	70-130	-
cis-1,3-Dichloropropene	10	10.7	107				-	70-130	-
4-Methyl-2-pentanone	10	11.3	113				-	70-130	-
trans-1,3-Dichloropropene	10	9.74	97				-	70-130	-
1,1,2-Trichloroethane	10	11.4	114				-	70-130	-
Toluene	10	10.6	106				-	70-130	-
2-Hexanone	10	10.8	108				-	70-130	-
Dibromochloromethane	10	11.9	119				-	70-130	-
1,2-Dibromoethane	10	9.85	98				-	70-130	-
Tetrachloroethene	10	10.2	102				-	70-130	-
Chlorobenzene	10	9.73	97				-	70-130	-
Ethylbenzene	10	11.2	112				-	70-130	-
p/m-Xylene	20	22.7	114				-	70-130	-
Bromoform	10	11.5	115				-	70-130	-
Styrene	10	9.91	99				-	70-130	-

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Langan Engineering & Environmental Lab Number : L2037872
 Project Name : 160 EAST 125TH STREET Project Number : 100433203
 Matrix : AIR
 LCS Sample ID : WG1411312-3 Analysis Date : 09/17/20 12:24 File ID : r311572
 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	10.1	101				-	70-130	-
o-Xylene	10	11.7	117				-	70-130	-
4-Ethyltoluene	10	12.8	128				-	70-130	-
1,3,5-Trimethylbenzene	10	10.5	105				-	70-130	-
1,2,4-Trimethylbenzene	10	11.0	110				-	70-130	-
Benzyl chloride	10	13.7	137 Q				-	70-130	-
1,3-Dichlorobenzene	10	11.3	113				-	70-130	-
1,4-Dichlorobenzene	10	11.0	110				-	70-130	-
1,2-Dichlorobenzene	10	11.1	111				-	70-130	-
1,2,4-Trichlorobenzene	10	10.3	103				-	70-130	-
Hexachlorobutadiene	10	11.6	116				-	70-130	-

Method Blank Summary
Form 4
Air Volatiles

Client	: Langan Engineering & Environmental	Lab Number	: L2037872
Project Name	: 160 EAST 125TH STREET	Project Number	: 100433203
Lab Sample ID	: WG1411312-4	Lab File ID	: r311574
Instrument ID	: AIRPIANO3		
Matrix	: AIR	Analysis Date	: 09/17/20 15:01

Client Sample No.	Lab Sample ID	Analysis Date
WG1411312-3LCS	WG1411312-3	09/17/20 12:24
SV-02DUP	WG1411312-5	09/17/20 22:32
061/LSV-7	L2037872-01D	09/18/20 02:23
062/LSV-1	L2037872-02	09/18/20 03:02

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L2037872
Project Name : 160 EAST 125TH STREET	Project Number : 100433203
Instrument ID : AIRPIANO3	Analysis Date : 09/11/20 20:24
Tune Standard : WG1409596-1	Tune File ID : r311446_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	16.2
75	30.0 - 66.0% of mass 95	42.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7 (1)1
174	50.0 - 120.0% of mass 95	68.2
175	4.0 - 9.0% of mass 174	5.1 (7.5)1
176	93.0 - 101% of mass 174	65 (95.3)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1349415-1	R311450	09/11/20 23:01
STD0.5	R1349415-3	R311451	09/11/20 23:41
STD1.0	R1349415-4	R311452	09/12/20 00:22
STD5.0	R1349415-2	R311453	09/12/20 01:02
STD010	R1349415-6	R311454	09/12/20 01:43
STD020	R1349415-5	R311455	09/12/20 02:21
STD050	R1349415-8	R311456	09/12/20 03:00
STD100	R1349415-7	R311457	09/12/20 03:42
STD010	R1349415-9	R311460	09/12/20 12:26

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L2037872
Project Name : 160 EAST 125TH STREET	Project Number : 100433203
Instrument ID : AIRPIANO3	Analysis Date : 09/17/20 11:02
Tune Standard : WG1411312-1	Tune File ID : r311570_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	14.2
75	30.0 - 66.0% of mass 95	40
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	1.2 (2)1
174	50.0 - 120.0% of mass 95	60.5
175	4.0 - 9.0% of mass 174	4.9 (8)1
176	93.0 - 101% of mass 174	58.2 (96.2)1
177	5.0 - 9.0% of mass 176	3.7 (6.4)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
WG1411312-2CCAL	WG1411312-2	R311572	09/17/20 12:24
WG1411312-3LCS	WG1411312-3	R311572	09/17/20 12:24
WG1411312-4BLANK	WG1411312-4	R311574	09/17/20 15:01
WG1411312-5DUP	WG1411312-5	R311583	09/17/20 22:32
061/LSV-7	L2037872-01D	R311589	09/18/20 02:23
062/LSV-1	L2037872-02	R311590	09/18/20 03:02

Internal Standard Area and RT Summary

Form 8a

Air Volatiles

Client	: Langan Engineering & Environmental	Lab Number	: L2037872
Project Name	: 160 EAST 125TH STREET	Project Number	: 100433203
Instrument ID	: AIRPIANO3	Analysis Date	: 09/17/20 12:24
Sample No	: WG1411312-2	Lab File ID	: R311572

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1411312-2	294879	9.57	816202	11.83	138022	16.57
Upper Limit	412831	9.90	1142683	12.16	193231	16.90
Lower Limit	176927	9.24	489721	11.50	82813	16.24
Sample ID						
WG1411312-3 LCS	294879	9.57	816202	11.83	138022	16.57
WG1411312-4 BLANK	282810	9.57	785132	11.84	130391	16.57
SV-02 DUP	282427	9.57	822816	11.83	127775	16.57
061/LSV-7	287267	9.57	825090	11.84	132605	16.57
062/LSV-1	300030	9.58	855324	11.84	141730	16.57

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

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

* Values outside of QC limits





Date Created: 11/22/19
Created By: Jason Hebert
File: PM7756-1
Page: 1

Volatile Organics in Air: 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			

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Volatile Organics in Air: TO-15 (AIR)

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

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

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Volatile Organics in Air: TO-15 (AIR)

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

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

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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : L2037872-01D
 Client ID : 061/LSV-7
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R311589
 Sample Amount : 150 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : 09/11/20 10:01
 Date Received : 09/11/20
 Date Analyzed : 09/18/20 02:23
 Dilution Factor : 1.667
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.457	0.333	--	2.26	1.65	--	
74-87-3	Chloromethane	ND	0.333	--	ND	0.688	--	U
76-14-2	Freon-114	ND	0.333	--	ND	2.33	--	U
75-01-4	Vinyl chloride	ND	0.333	--	ND	0.851	--	U
106-99-0	1,3-Butadiene	ND	0.333	--	ND	0.737	--	U
74-83-9	Bromomethane	ND	0.333	--	ND	1.29	--	U
75-00-3	Chloroethane	ND	0.333	--	ND	0.879	--	U
64-17-5	Ethanol	84.0	8.34	--	158	15.7	--	
593-60-2	Vinyl bromide	ND	0.333	--	ND	1.46	--	U
67-64-1	Acetone	ND	1.67	--	ND	3.97	--	U
75-69-4	Trichlorofluoromethane	ND	0.333	--	ND	1.87	--	U
67-63-0	Isopropanol	ND	0.834	--	ND	2.05	--	U
75-35-4	1,1-Dichloroethene	ND	0.333	--	ND	1.32	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.834	--	ND	2.53	--	U
75-09-2	Methylene chloride	ND	0.834	--	ND	2.90	--	U
107-05-1	3-Chloropropene	ND	0.333	--	ND	1.04	--	U
75-15-0	Carbon disulfide	1.11	0.333	--	3.46	1.04	--	
76-13-1	Freon-113	ND	0.333	--	ND	2.55	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.333	--	ND	1.32	--	U
75-34-3	1,1-Dichloroethane	ND	0.333	--	ND	1.35	--	U
1634-04-4	Methyl tert butyl ether	ND	0.333	--	ND	1.20	--	U
78-93-3	2-Butanone	2.60	0.834	--	7.67	2.46	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.333	--	ND	1.32	--	U
141-78-6	Ethyl Acetate	ND	0.834	--	ND	3.01	--	U
67-66-3	Chloroform	ND	0.333	--	ND	1.63	--	U
109-99-9	Tetrahydrofuran	ND	0.834	--	ND	2.46	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : L2037872-01D
 Client ID : 061/LSV-7
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R311589
 Sample Amount : 150 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : 09/11/20 10:01
 Date Received : 09/11/20
 Date Analyzed : 09/18/20 02:23
 Dilution Factor : 1.667
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.333	--	ND	1.35	--	U
110-54-3	n-Hexane	17.3	0.333	--	61.0	1.17	--	
71-55-6	1,1,1-Trichloroethane	ND	0.333	--	ND	1.82	--	U
71-43-2	Benzene	9.80	0.333	--	31.3	1.06	--	
56-23-5	Carbon tetrachloride	ND	0.333	--	ND	2.09	--	U
110-82-7	Cyclohexane	1.30	0.333	--	4.47	1.15	--	
78-87-5	1,2-Dichloropropane	ND	0.333	--	ND	1.54	--	U
1330-20-7	Xylenes, Total	107	0.333	--	465	1.45	--	
75-27-4	Bromodichloromethane	ND	0.333	--	ND	2.23	--	U
123-91-1	1,4-Dioxane	ND	0.333	--	ND	1.20	--	U
79-01-6	Trichloroethene	ND	0.333	--	ND	1.79	--	U
540-84-1	2,2,4-Trimethylpentane	14.7	0.333	--	68.7	1.56	--	
142-82-5	Heptane	14.3	0.333	--	58.6	1.36	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.333	--	ND	1.51	--	U
108-10-1	4-Methyl-2-pentanone	1.10	0.834	--	4.51	3.42	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.333	--	ND	1.51	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.333	--	ND	1.82	--	U
108-88-3	Toluene	99.7	0.333	--	376	1.25	--	
591-78-6	2-Hexanone	ND	0.333	--	ND	1.36	--	U
124-48-1	Dibromochloromethane	ND	0.333	--	ND	2.84	--	U
106-93-4	1,2-Dibromoethane	ND	0.333	--	ND	2.56	--	U
127-18-4	Tetrachloroethene	0.498	0.333	--	3.38	2.26	--	
108-90-7	Chlorobenzene	ND	0.333	--	ND	1.53	--	U
100-41-4	Ethylbenzene	22.3	0.333	--	96.9	1.45	--	
179601-23-1	p/m-Xylene	87.0	0.667	--	378	2.90	--	
75-25-2	Bromoform	ND	0.333	--	ND	3.44	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : L2037872-01D
 Client ID : 061/LSV-7
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R311589
 Sample Amount : 150 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : 09/11/20 10:01
 Date Received : 09/11/20
 Date Analyzed : 09/18/20 02:23
 Dilution Factor : 1.667
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
100-42-5	Styrene	ND	0.333	--	ND	1.42	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.333	--	ND	2.29	--	U
95-47-6	o-Xylene	20.5	0.333	--	89.0	1.45	--	
622-96-8	4-Ethyltoluene	5.70	0.333	--	28.0	1.64	--	
108-67-8	1,3,5-Trimethylbenzene	2.10	0.333	--	10.3	1.64	--	
95-63-6	1,2,4-Trimethylbenzene	10.5	0.333	--	51.6	1.64	--	
100-44-7	Benzyl chloride	ND	0.333	--	ND	1.72	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.333	--	ND	2.00	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.333	--	ND	2.00	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.333	--	ND	2.00	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.333	--	ND	2.47	--	U
87-68-3	Hexachlorobutadiene	ND	0.333	--	ND	3.55	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : L2037872-02
 Client ID : 062/LSV-1
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R311590
 Sample Amount : 250 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : 09/11/20 10:49
 Date Received : 09/11/20
 Date Analyzed : 09/18/20 03:02
 Dilution Factor : 1
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.466	0.200	--	2.30	0.989	--	
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	0.274	0.200	--	0.606	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	20.4	5.00	--	38.4	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	19.6	1.00	--	46.6	2.38	--	
75-69-4	Trichlorofluoromethane	0.321	0.200	--	1.80	1.12	--	
67-63-0	Isopropanol	0.872	0.500	--	2.14	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	0.599	0.500	--	1.82	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	2.08	0.200	--	6.48	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	4.27	0.500	--	12.6	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	0.744	0.200	--	3.63	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : L2037872-02
 Client ID : 062/LSV-1
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R311590
 Sample Amount : 250 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : 09/11/20 10:49
 Date Received : 09/11/20
 Date Analyzed : 09/18/20 03:02
 Dilution Factor : 1
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	17.0	0.200	--	59.9	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	4.27	0.200	--	13.6	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	1.15	0.200	--	3.96	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
1330-20-7	Xylenes, Total	51.2	0.200	--	222	0.869	--	
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	16.5	0.200	--	77.1	0.934	--	
142-82-5	Heptane	13.8	0.200	--	56.6	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	0.634	0.500	--	2.60	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	39.1	0.200	--	147	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	7.51	0.200	--	50.9	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	10.1	0.200	--	43.9	0.869	--	
179601-23-1	p/m-Xylene	40.9	0.400	--	178	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : L2037872-02
 Client ID : 062/LSV-1
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R311590
 Sample Amount : 250 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : 09/11/20 10:49
 Date Received : 09/11/20
 Date Analyzed : 09/18/20 03:02
 Dilution Factor : 1
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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	10.2	0.200	--	44.3	0.869	--	
622-96-8	4-Ethyltoluene	4.05	0.200	--	19.9	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	1.58	0.200	--	7.77	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	8.13	0.200	--	40.0	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : WG1411312-4
 Client ID : WG1411312-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R311574
 Sample Amount : 250 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 09/17/20 15:01
 Dilution Factor : 1
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
1330-20-7	Xylenes, Total	ND	0.200	--	ND	0.869	--	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



Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : WG1411312-4
 Client ID : WG1411312-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R311574
 Sample Amount : 250 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 09/17/20 15:01
 Dilution Factor : 1
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
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
71-55-6	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



Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Lab ID : WG1411312-4
 Client ID : WG1411312-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R311574
 Sample Amount : 250 ml

Lab Number : L2037872
 Project Number : 100433203
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 09/17/20 15:01
 Dilution Factor : 1
 Analyst : TS
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311589.D
 Acq On : 18 Sep 2020 2:23 AM
 Operator : AIRPIAN03:TS
 Sample : L2037872-01D, 3, 150, 250
 Misc : WG1411312, ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 07:59:32 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.567	49	287267	10.000	ppbV	# 0.03
Standard Area = 294879			Recovery =		97.42%	
43) 1,4-difluorobenzene	11.840	114	825090	10.000	ppbV	# 0.03
Standard Area = 816202			Recovery =		101.09%	
67) chlorobenzene-D5	16.567	54	132605	10.000	ppbV	0.02
Standard Area = 138022			Recovery =		96.08%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.000	85	7398	0.274	ppbV	98
6) chloromethane	0.000		0	N.D.	d	
7) Freon-114	0.000		0	N.D.	d	
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	4.558		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.327	31	668300	50.383	ppbV #	77
17) vinyl bromide	0.000		0	N.D.		
19) acetone	0.000		0	N.D.	d	
21) trichlorofluoromethane	6.087	101	2708	0.136	ppbV	96
22) isopropyl alcohol	6.263	45	10886	0.394	ppbV	98
26) 1,1-dichloroethene	6.726		0	N.D.		
27) tertiary butyl alcohol	7.008	59	13064M6	0.457	ppbV	
28) methylene chloride	7.020	49	2700	0.134	ppbV	93
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.314	76	36426	0.667	ppbV #	69
31) Freon 113	7.356		0	N.D.		
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	8.517		0	N.D.		
36) 2-butanone	8.883	43	54644	1.559	ppbV	97
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.		
39) chloroform	9.733		0	N.D.		
40) Tetrahydrofuran	10.225	42	3849M6	0.173	ppbV	
42) 1,2-dichloroethane	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311589.D
 Acq On : 18 Sep 2020 2:23 AM
 Operator : AIRPIAN03:TS
 Sample : L2037872-01D, 3, 150, 250
 Misc : WG1411312, ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 07:59:32 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.642	57	358760	10.387	ppbV	#	72
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	11.400	78	407100	5.877	ppbV		97
52) carbon tetrachloride	11.573		0	N.D.			
53) cyclohexane	11.720	56	28534	0.781	ppbV	#	93
56) 1,2-dichloropropane	0.000		0	N.D.			
57) bromodichloromethane	0.000		0	N.D.	d		
58) 1,4-dioxane	12.680		0	N.D.			
59) trichloroethene	0.000		0	N.D.			
60) 2,2,4-trimethylpentane	12.687	57	971551	8.841	ppbV	#	90
62) heptane	13.007	43	364126	8.555	ppbV		93
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	13.717	43	32114	0.660	ppbV		96
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	14.342		0	N.D.			
68) toluene	14.792	91	4051189	59.824	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	15.950	166	8159	0.299	ppbV	#	90
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	16.958	91	1041895	13.387	ppbV		92
83) m+p-xylene	17.117	91	3324212	52.180	ppbV		94
84) bromoform	0.000		0	N.D.			
85) styrene	17.442	104	9802	0.176	ppbV		99
86) 1,1,2,2-tetrachloroethane	17.517		0	N.D.			
87) o-xylene	17.542	91	774838	12.297	ppbV		90
96) 4-ethyl toluene	18.592	105	261024M6	3.422	ppbV		
97) 1,3,5-trimethylbenzene	18.658	105	100528	1.257	ppbV		98
99) 1,2,4-trimethylbenzene	18.992	105	483382	6.328	ppbV	#	57
101) Benzyl Chloride	0.000		0	N.D.	d		
102) 1,3-dichlorobenzene	19.167		0	N.D.			
103) 1,4-dichlorobenzene	19.167		0	N.D.			
107) 1,2-dichlorobenzene	19.442		0	N.D.			
115) 1,2,4-trichlorobenzene	0.000		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311589.D
 Acq On : 18 Sep 2020 2:23 AM
 Operator : AIRPIAN03:TS
 Sample : L2037872-01D,3,150,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 07:59:32 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

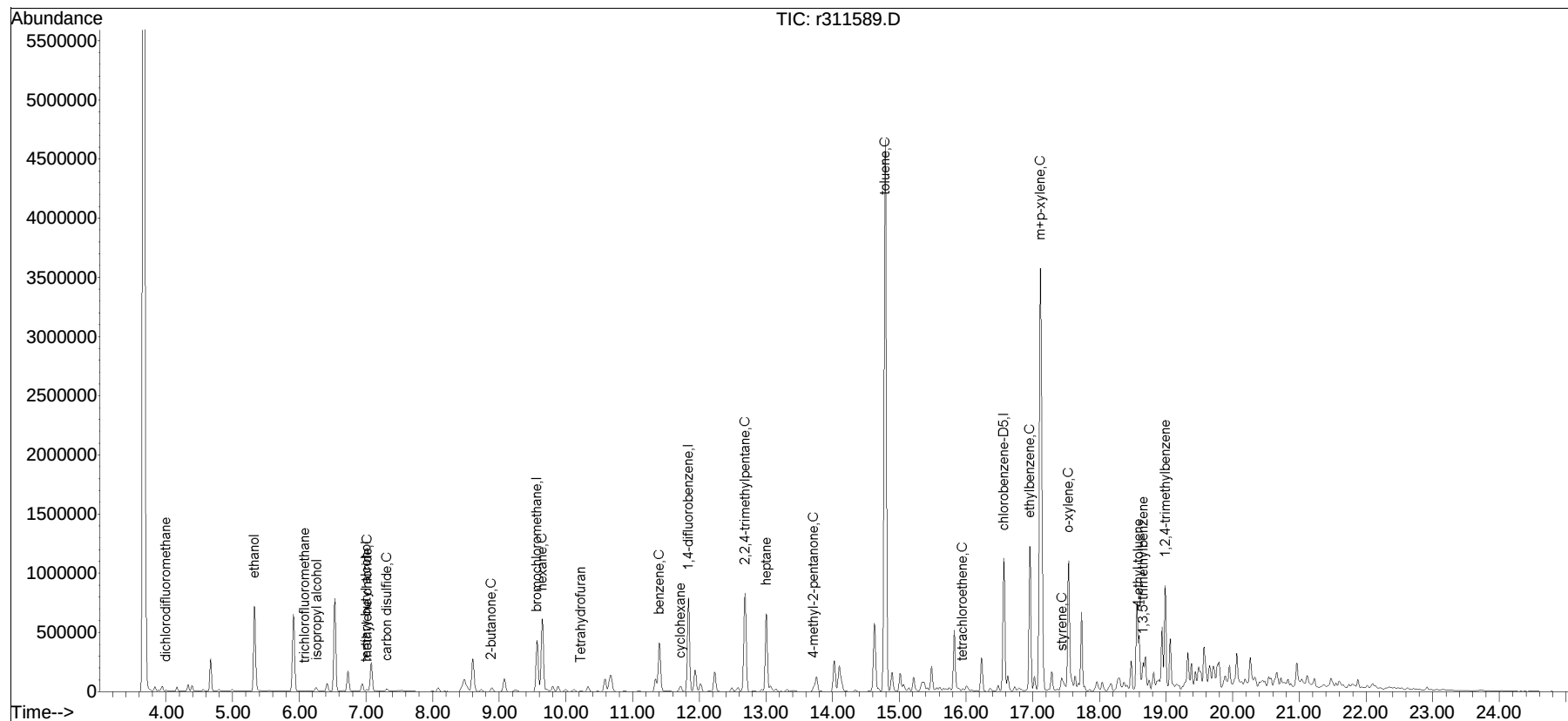
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

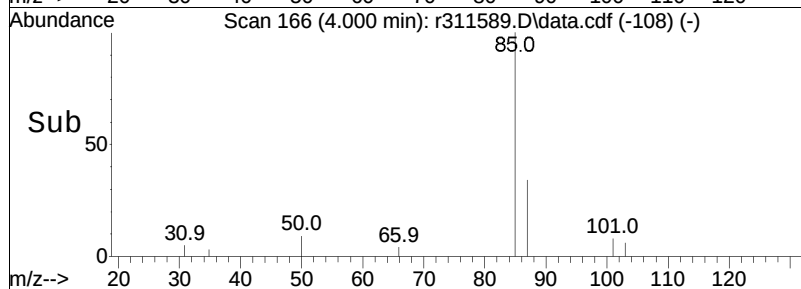
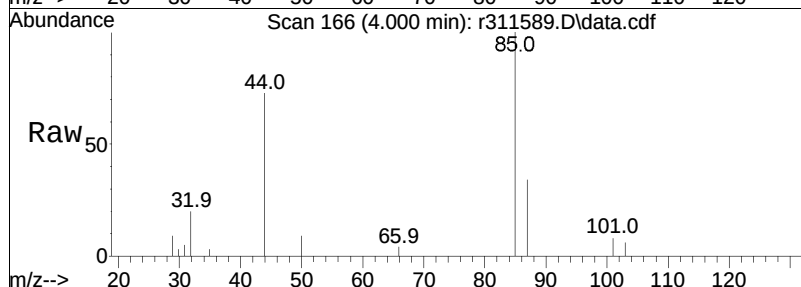
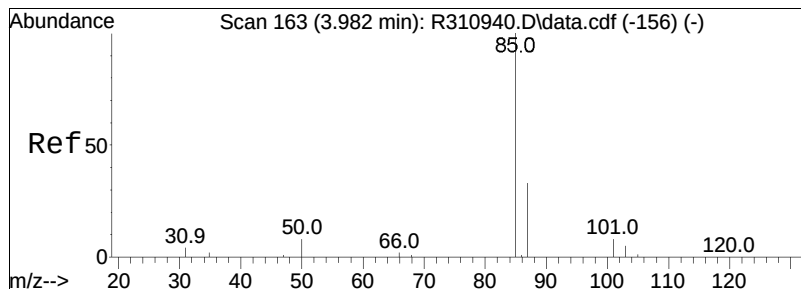
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airpiano3\2020\09\200917T\r311572.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
Data File : r311589.D
Acq On : 18 Sep 2020 2:23 AM
Operator : AIRPIANO3:TS
Sample : L2037872-01D,3,150,250
Misc : WG1411312,ICAL17116
ALS Vial : 0 Sample Multiplier: 1

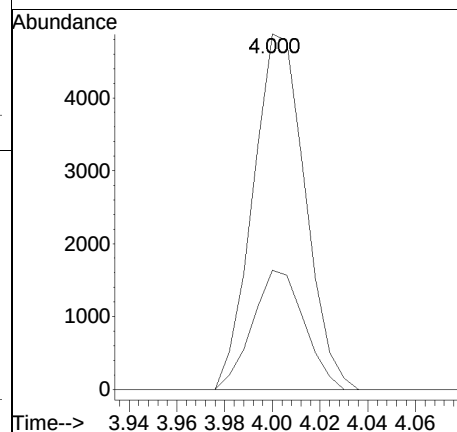
Quant Time: Sep 18 07:59:32 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Sep 15 10:50:28 2020
Response via : Initial Calibration

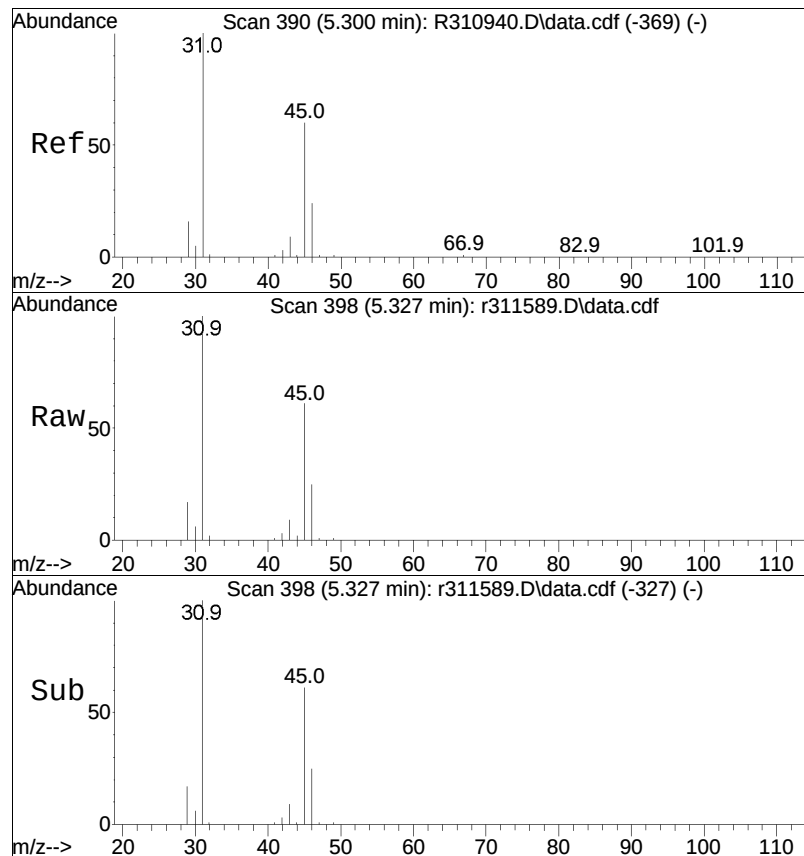




#5
dichlorodifluoromethane
Concen: 0.27 ppbV
RT: 4.000 min Scan# 166
Delta R.T. 0.018 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

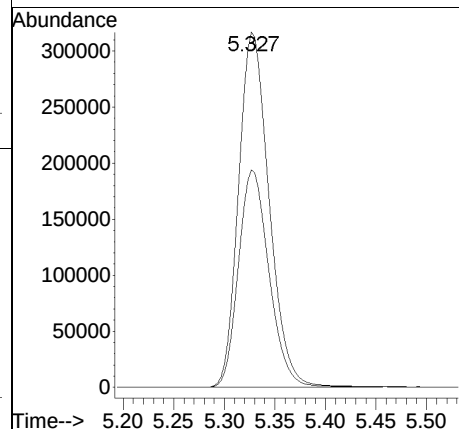
Tgt Ion: 85 Resp: 7398
Ion Ratio Lower Upper
85 100
87 33.5 25.8 38.6

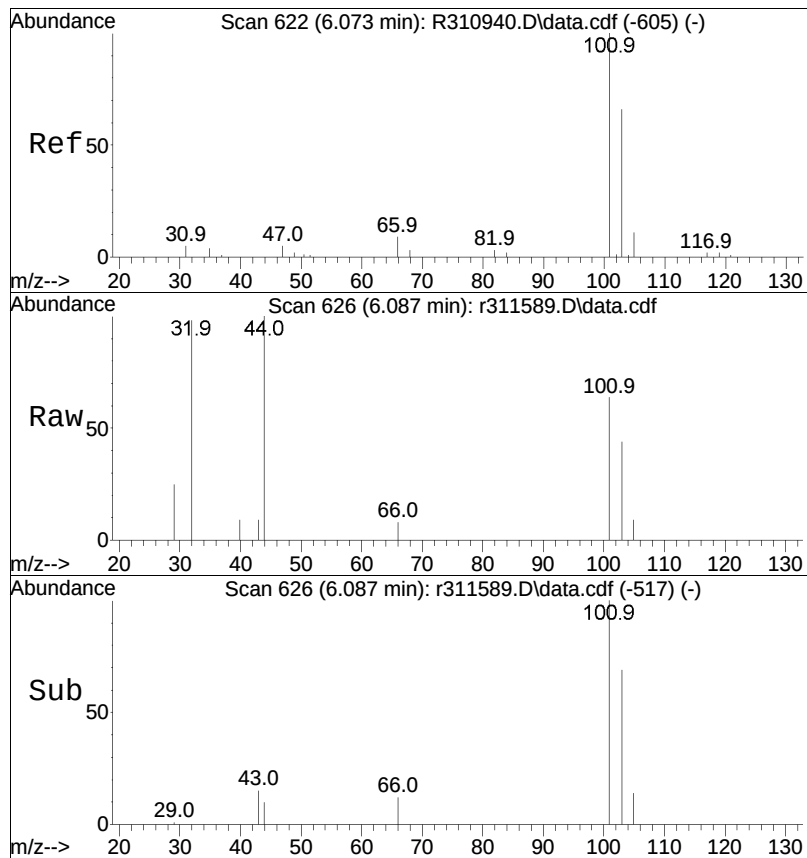




#15
 ethanol
 Concen: 50.38 ppbV
 RT: 5.327 min Scan# 398
 Delta R.T. 0.030 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

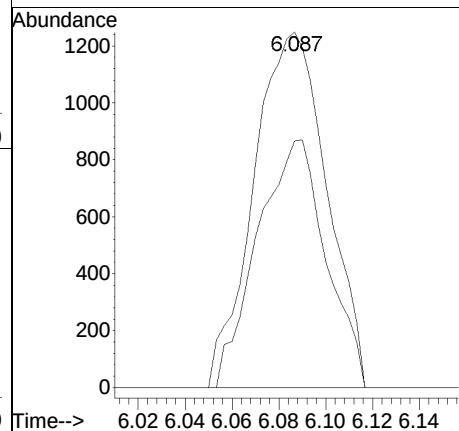
Tgt Ion	Ratio	Lower	Upper
31	100		
45	61.2	37.0	55.4#

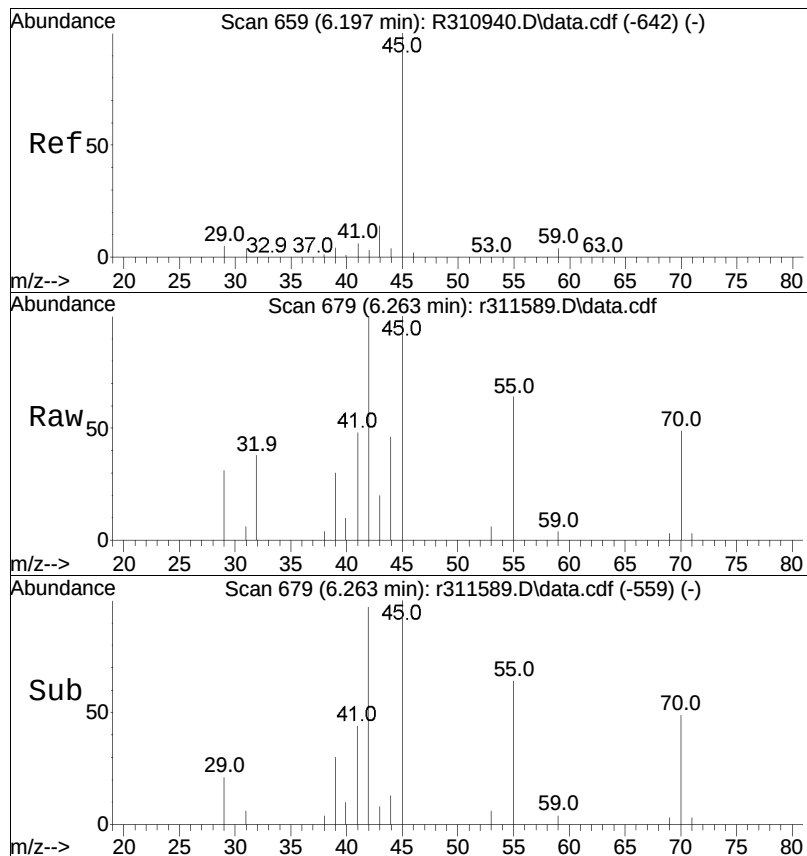




#21
 trichlorofluoromethane
 Concen: 0.14 ppbV
 RT: 6.087 min Scan# 626
 Delta R.T. 0.033 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

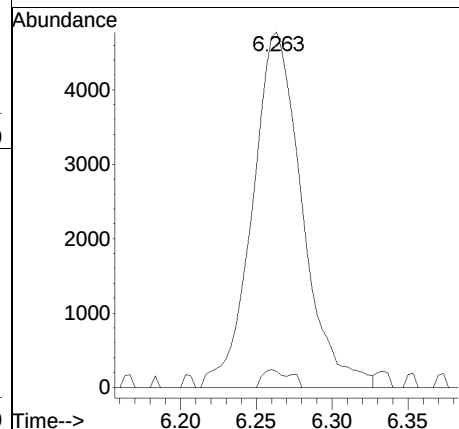
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	69.3	52.7	79.1	

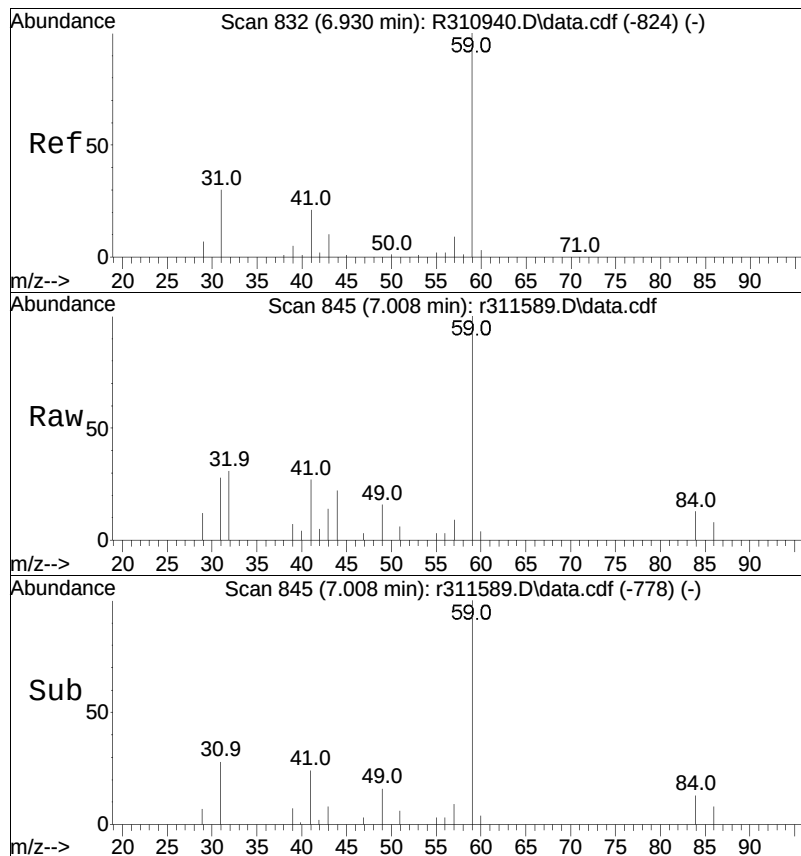




#22
isopropyl alcohol
Concen: 0.39 ppbV
RT: 6.263 min Scan# 679
Delta R.T. 0.070 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

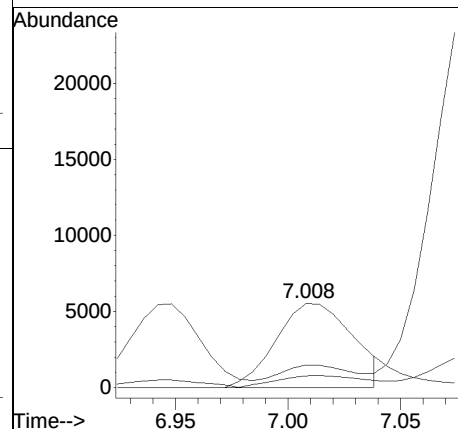
Tgt	Ion	Ratio	Lower	Upper
45	100			
59	4.5		4.0	6.0

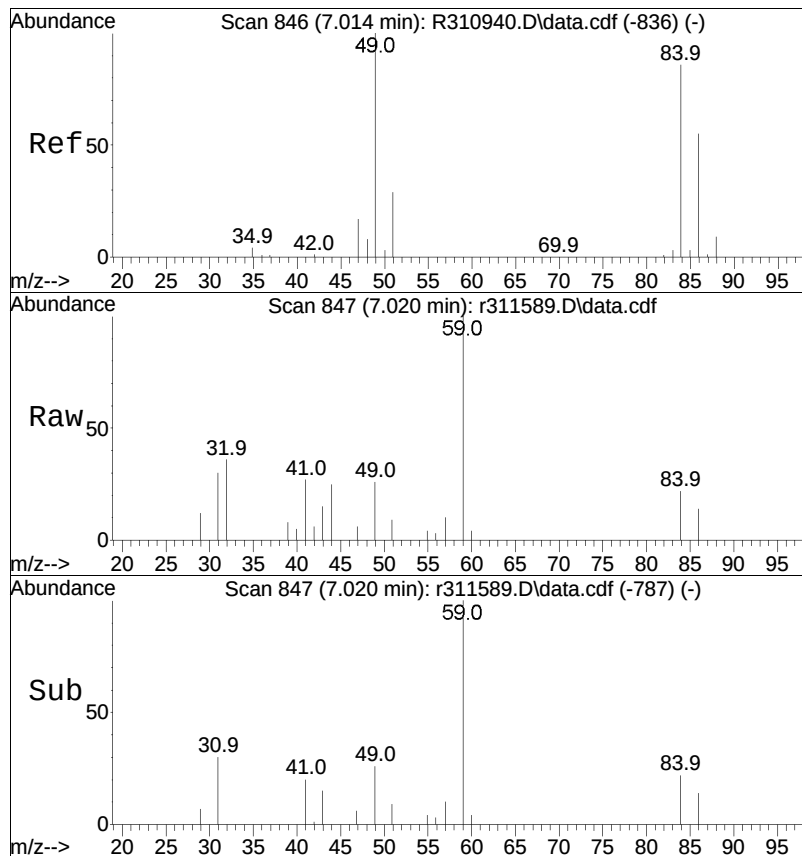




#27
 tertiary butyl alcohol
 Concen: 0.46 ppbV m
 RT: 7.008 min Scan# 845
 Delta R.T. 0.072 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

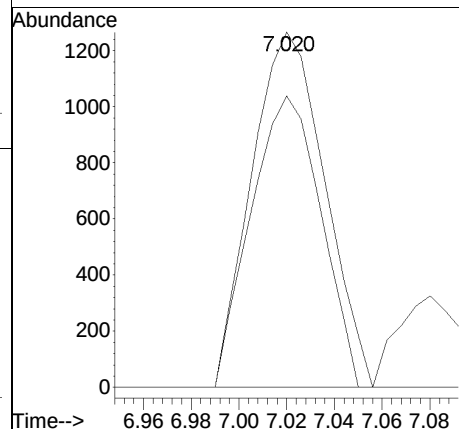
Tgt Ion:	59	Resp:	13064
Ion Ratio	Lower	Upper	
59	100		
41	26.8	16.0	24.0#
43	13.8	8.2	12.4#

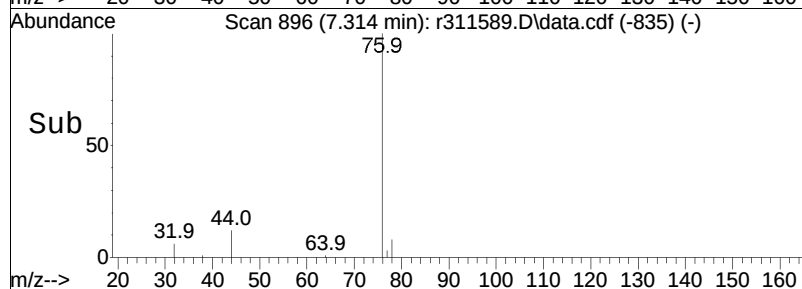
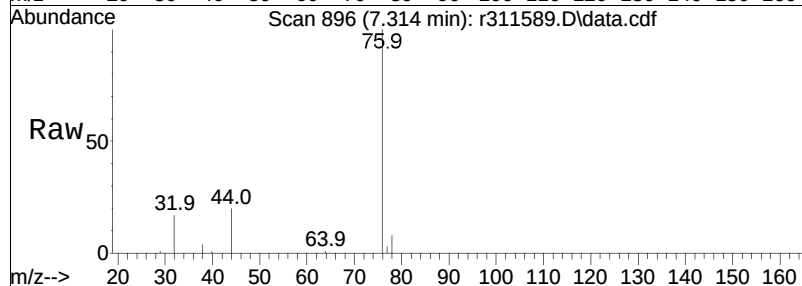
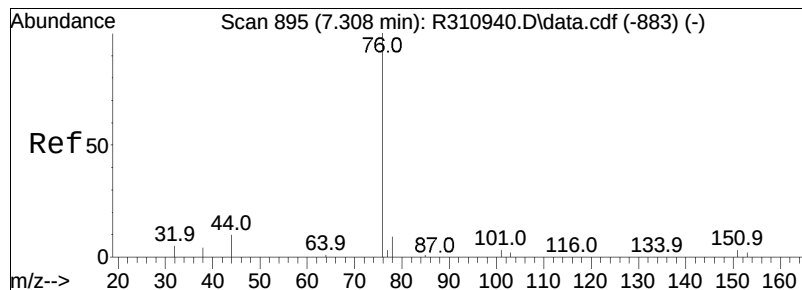




#28
 methylene chloride
 Concen: 0.13 ppbV
 RT: 7.020 min Scan# 847
 Delta R.T. 0.030 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

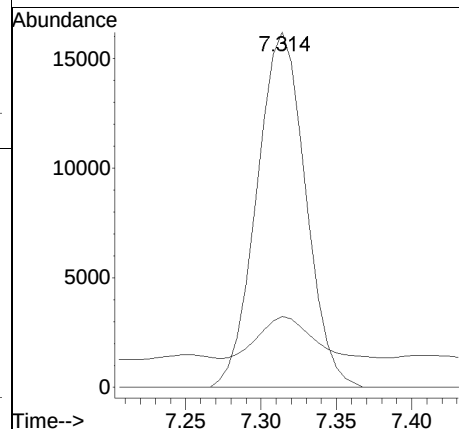
Tgt Ion:	49	84	Ratio	100	82.0	Resp:	2700	Lower	60.6	Upper	90.8
Ion	49	84	Ratio	100	82.0	Resp:	2700	Lower	60.6	Upper	90.8

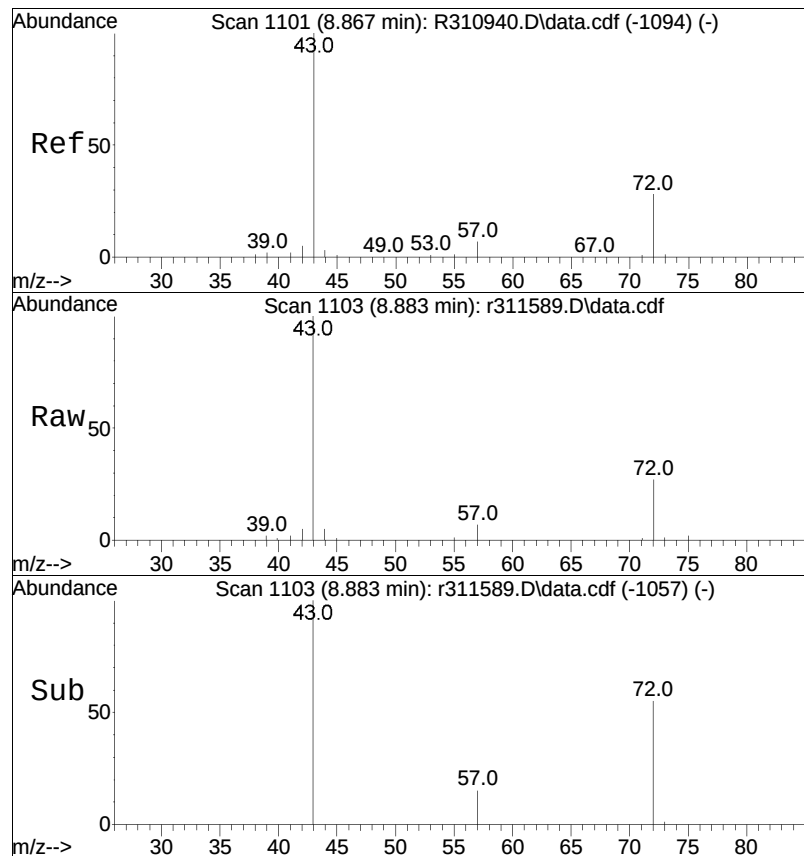




#30
carbon disulfide
Concen: 0.67 ppbV
RT: 7.314 min Scan# 896
Delta R.T. 0.036 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

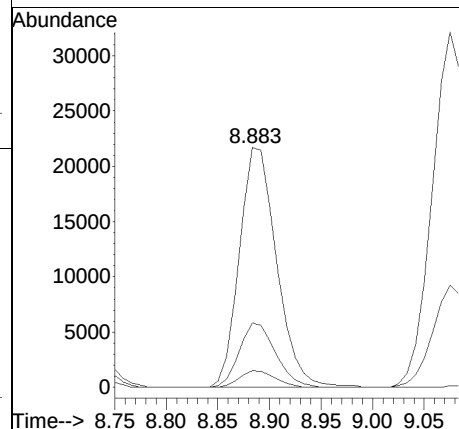
Tgt Ion	Ratio	Lower	Upper
76	100		
44	20.0	7.0	10.4#

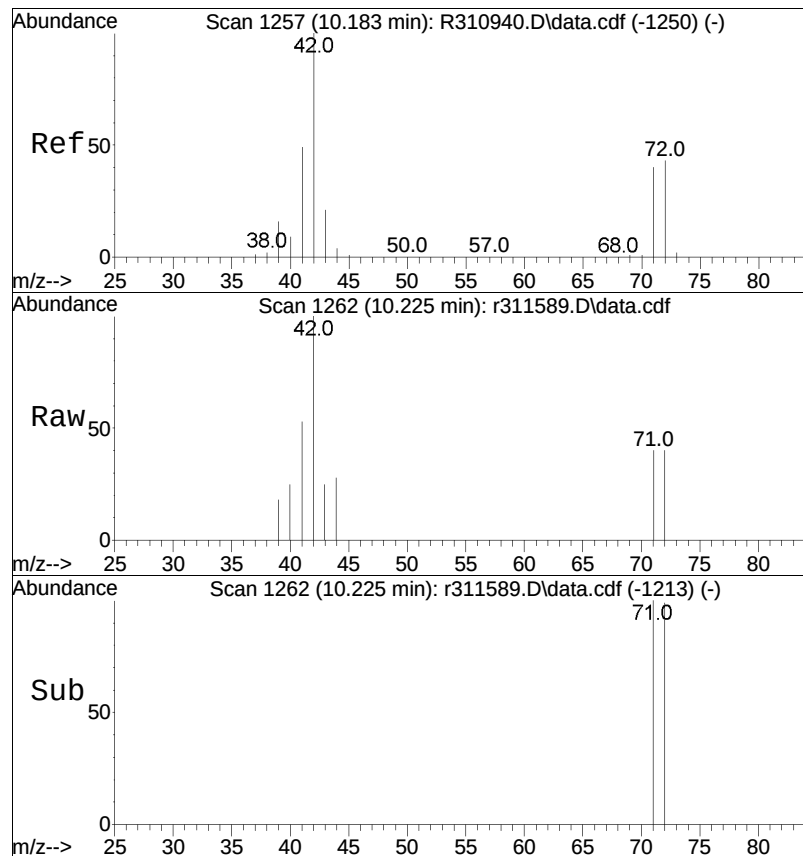




#36
 2-butanone
 Concen: 1.56 ppbV
 RT: 8.883 min Scan# 1103
 Delta R.T. 0.050 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

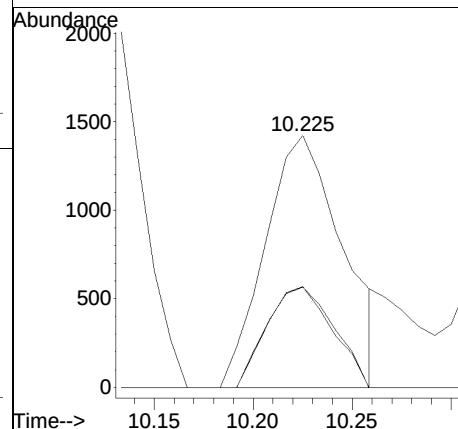
Tgt Ion:	43	Resp:	54644
Ion Ratio	Lower	Upper	
43	100		
72	26.9	22.8	34.2
57	7.0	6.6	9.8

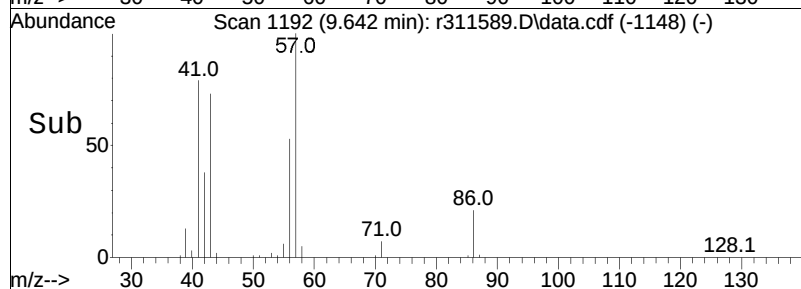
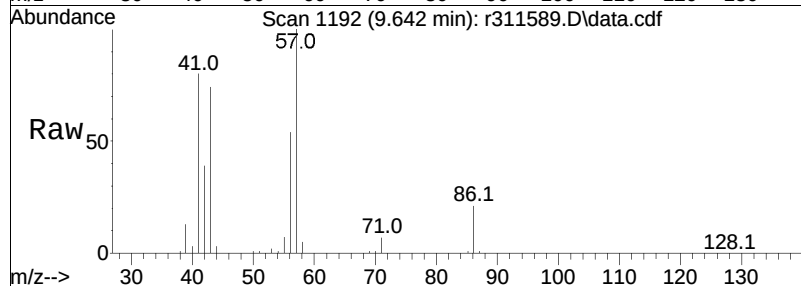
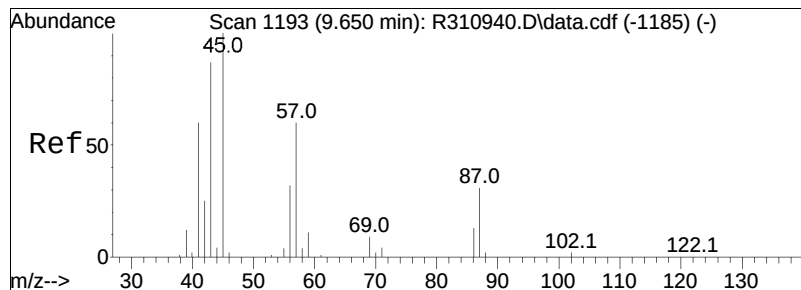




#40
 Tetrahydrofuran
 Concen: 0.17 ppbV m
 RT: 10.225 min Scan# 1262
 Delta R.T. 0.075 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

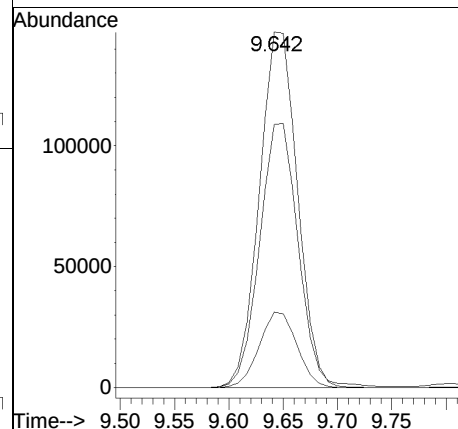
Tgt Ion:	42	Resp:	3849
Ion Ratio	Lower	Upper	
42	100		
71	40.0	31.3	46.9
72	39.8	34.9	52.3

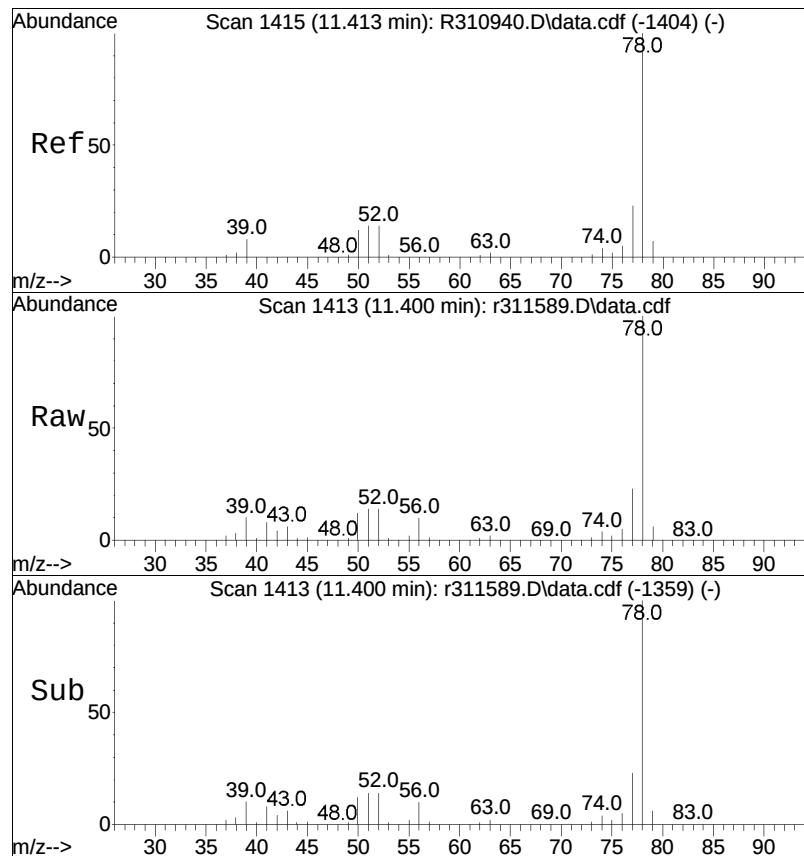




#44
hexane
Concen: 10.39 ppbV
RT: 9.642 min Scan# 1192
Delta R.T. 0.033 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

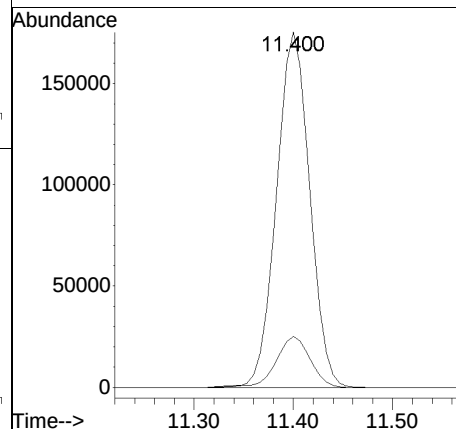
Tgt	Ion	Resp	Lower	Upper
57	100	358760		
43	74.0	87.0	130.6#	
86	21.2	16.7	25.1	

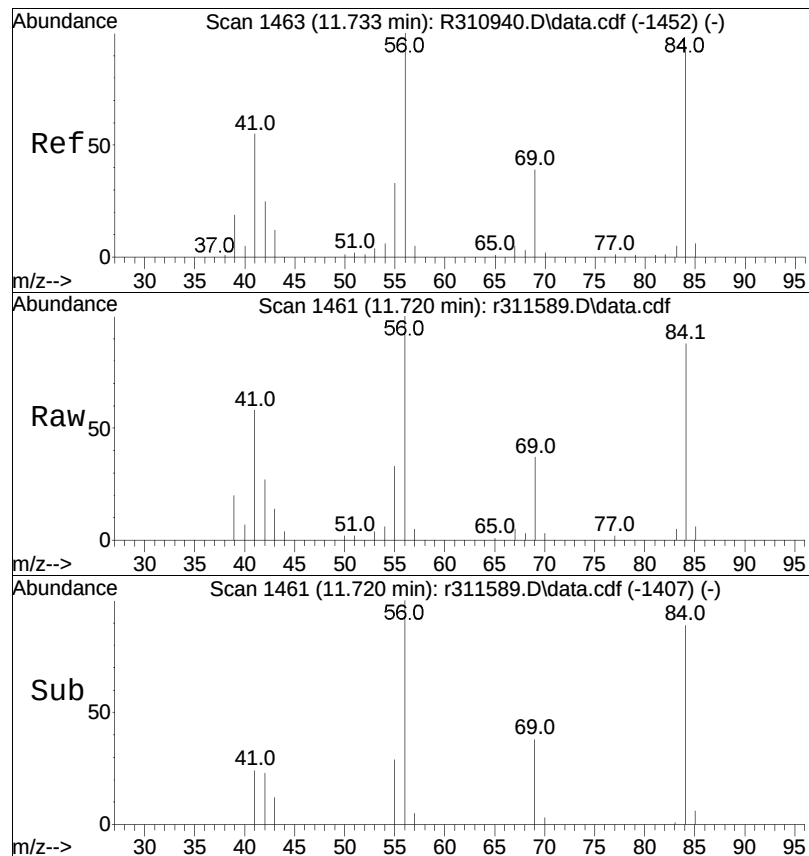




#50
benzene
Concen: 5.88 ppbV
RT: 11.400 min Scan# 1413
Delta R.T. 0.033 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

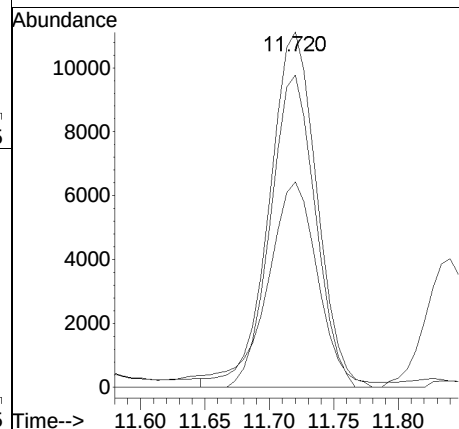
Tgt Ion	Ratio	Lower	Upper
78	100		
52	14.3	12.4	18.6

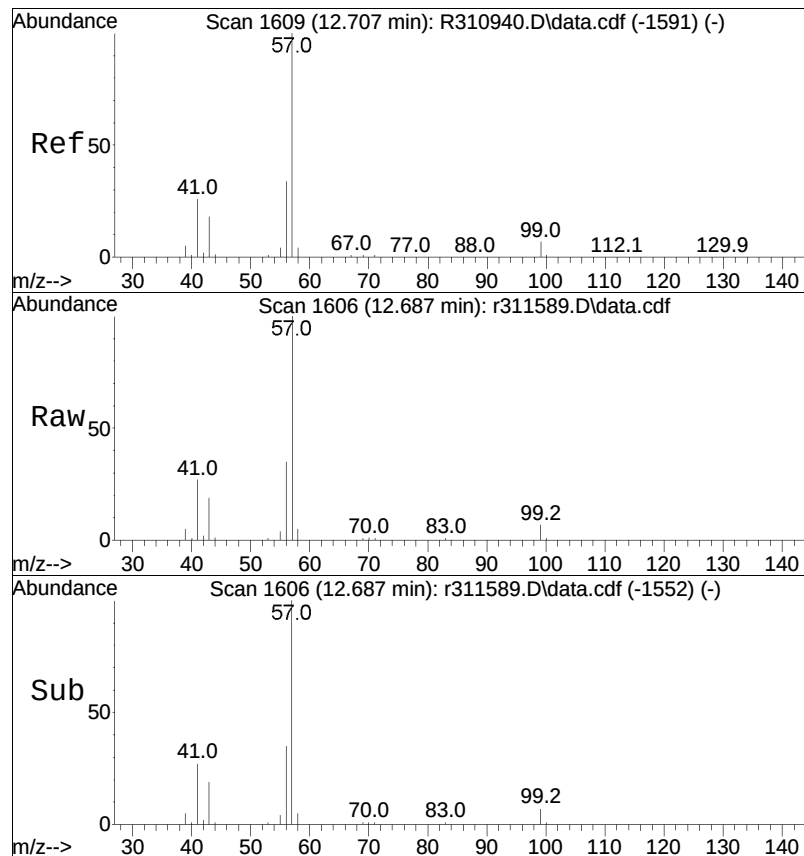




#53
cyclohexane
Concen: 0.78 ppbV
RT: 11.720 min Scan# 1461
Delta R.T. 0.033 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

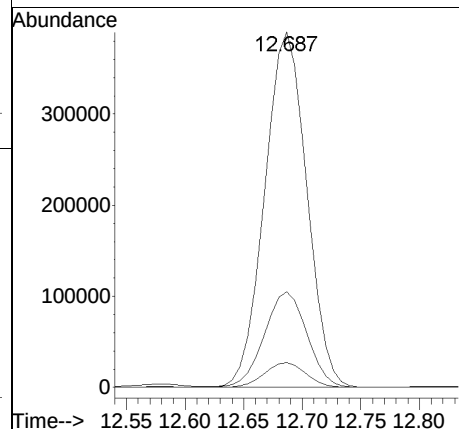
Tgt	Ion	Resp	Lower	Upper
56	100	28534		
84	87.9	71.0	106.6	
41	57.8	35.8	53.6	

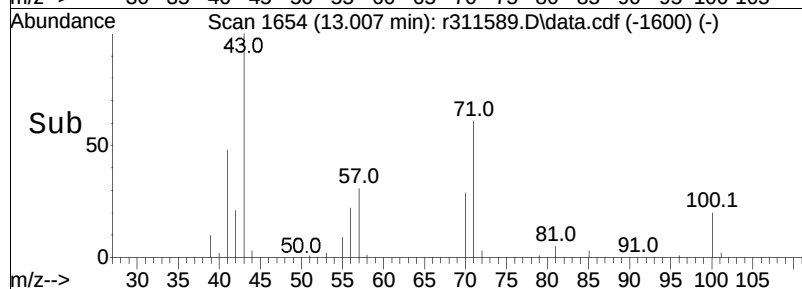
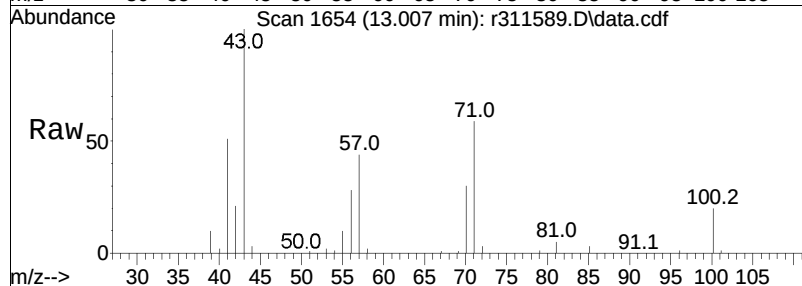
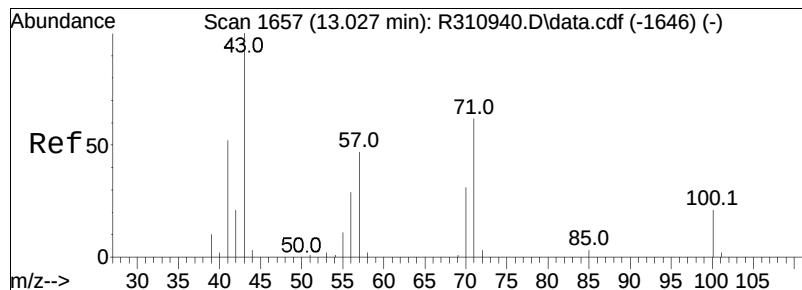




#60
 2,2,4-trimethylpentane
 Concen: 8.84 ppbV
 RT: 12.687 min Scan# 1606
 Delta R.T. 0.033 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

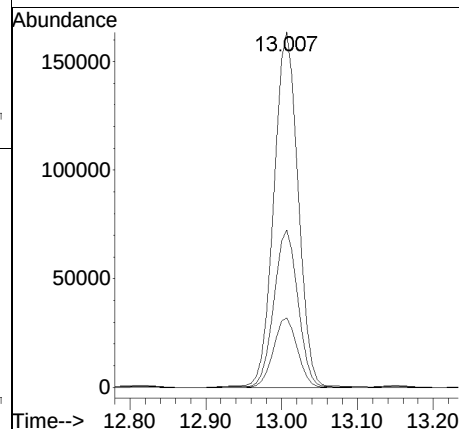
Tgt	Ion: 57	Resp:	971551
Ion	Ratio	Lower	Upper
57	100		
99	7.0	4.8	7.2
41	26.9	16.9	25.3#

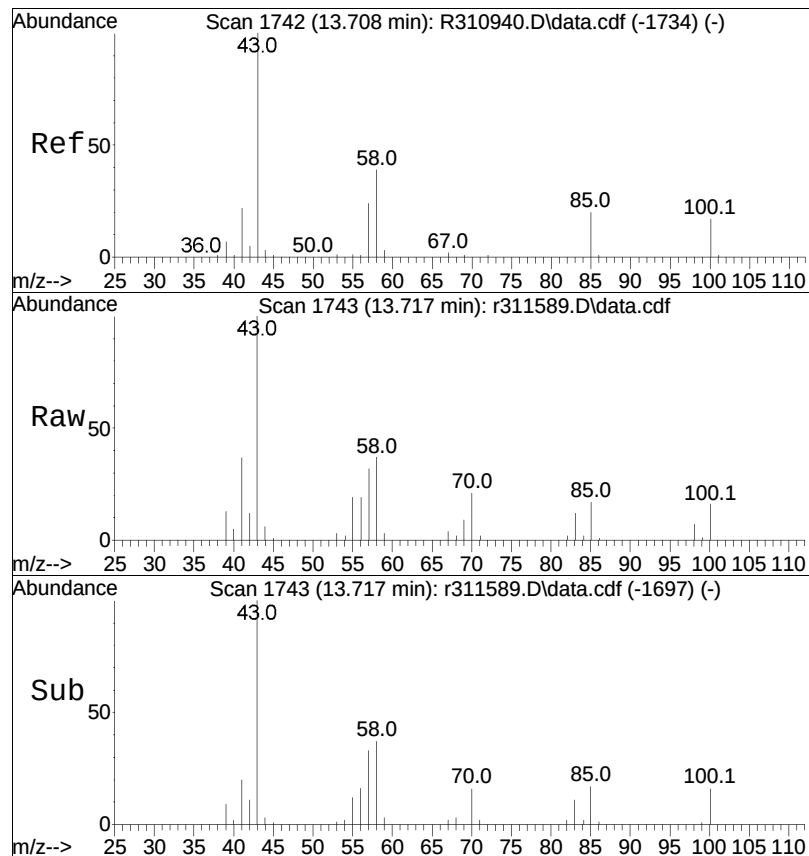




#62
 heptane
 Concen: 8.56 ppbV
 RT: 13.007 min Scan# 1654
 Delta R.T. 0.033 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

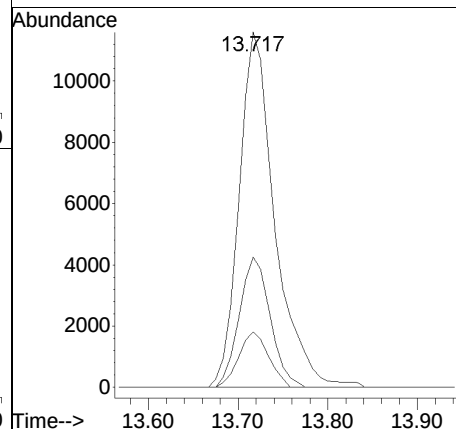
Tgt	Ion: 43	Resp: 364126
Ion	Ratio	Lower Upper
43	100	
57	44.3	40.9 61.3
100	19.6	15.8 23.8

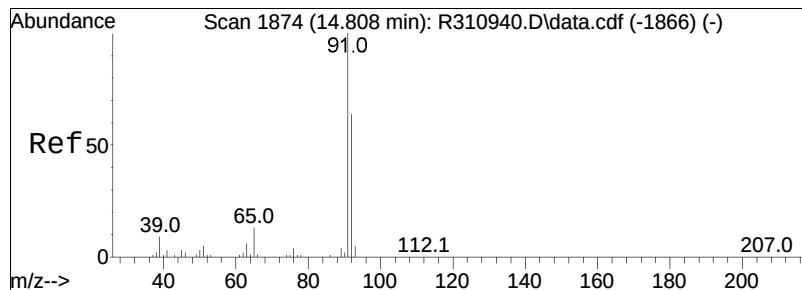




#64
 4-methyl-2-pentanone
 Concen: 0.66 ppbV
 RT: 13.717 min Scan# 1743
 Delta R.T. 0.050 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

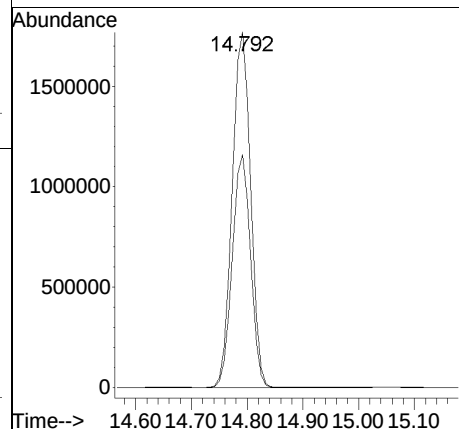
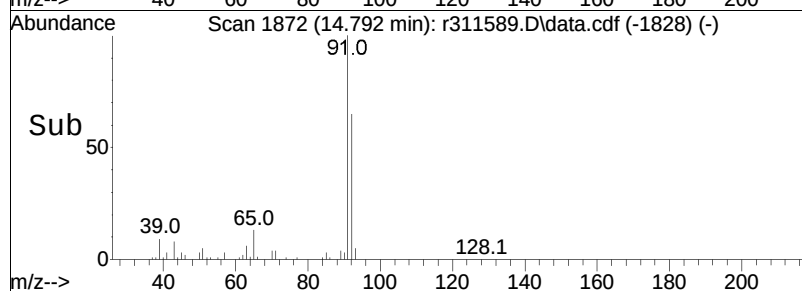
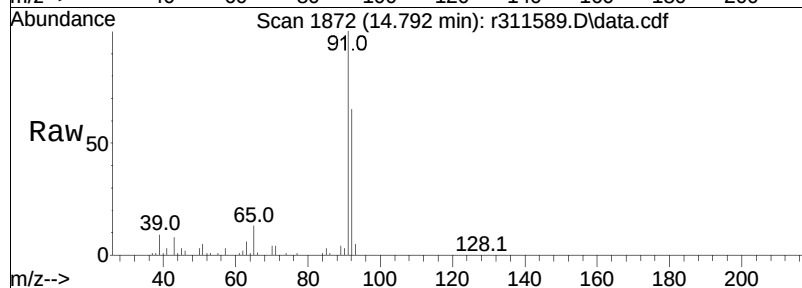
Tgt Ion:	43	58	100	Resp:	32114	Lower	Upper
Ratio	100	36.7	15.7				
		31.8	12.8				
		47.6	19.2				

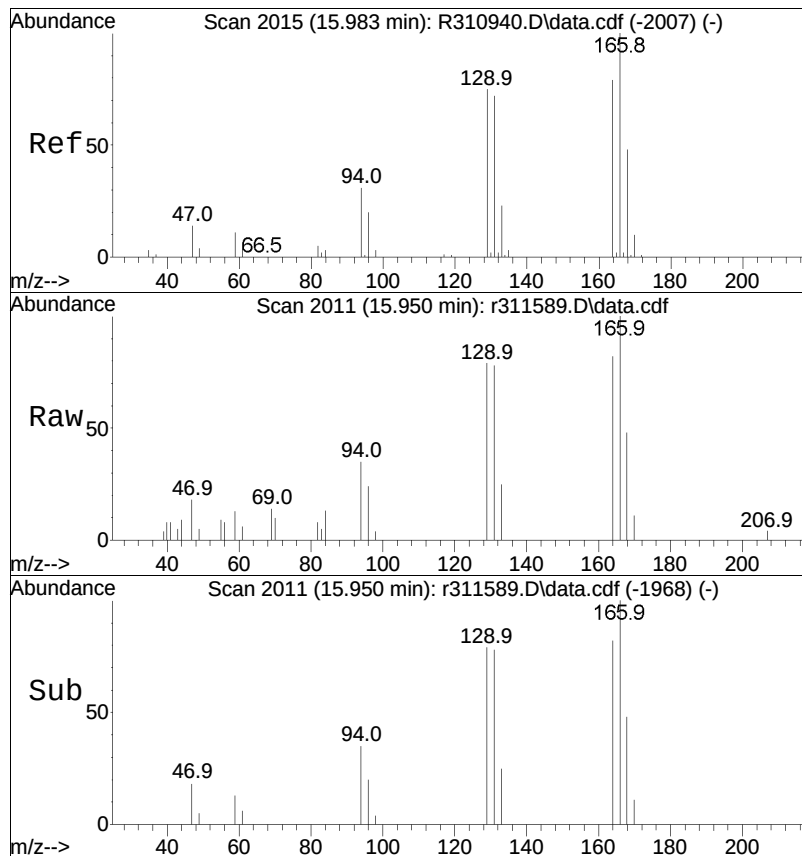




#68
toluene
Concen: 59.82 ppbV
RT: 14.792 min Scan# 1872
Delta R.T. 0.033 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

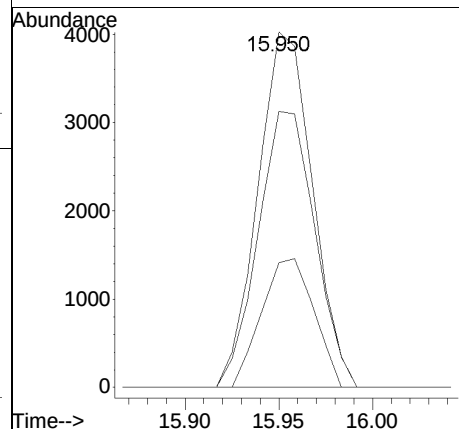
Tgt Ion	Ratio	Lower	Upper
91	100		
92	65.5	51.8	77.8

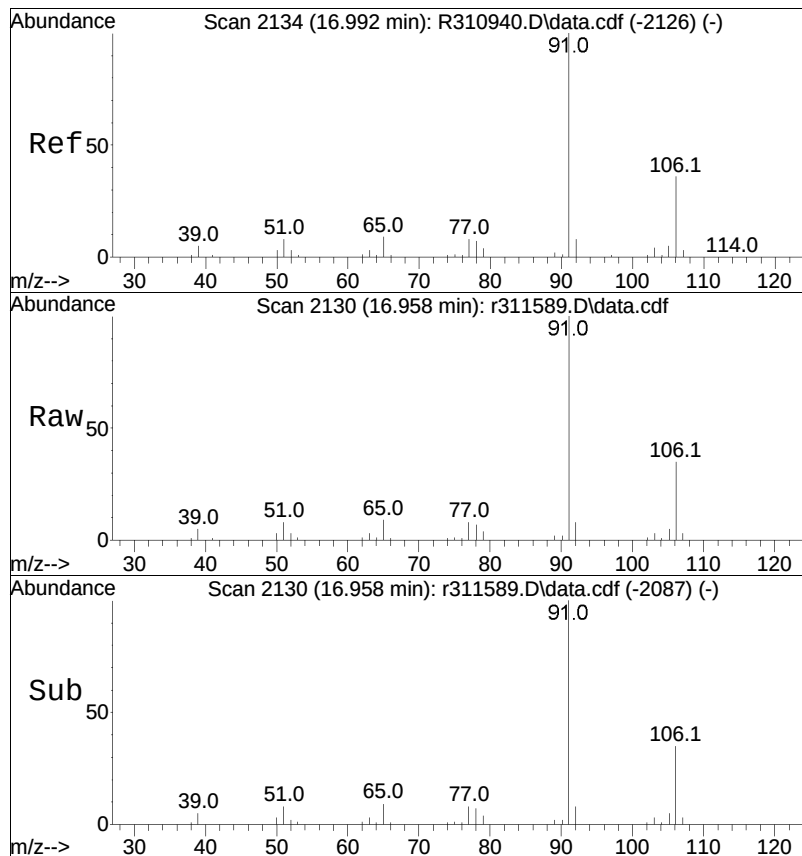




#78
 tetrachloroethene
 Concen: 0.30 ppbV
 RT: 15.950 min Scan# 2011
 Delta R.T. 0.025 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

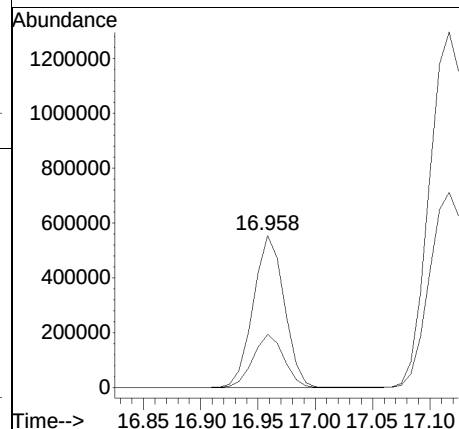
Tgt Ion	Ratio	Lower	Upper
166	100		
131	77.7	55.7	83.5
94	35.1	23.4	35.0#

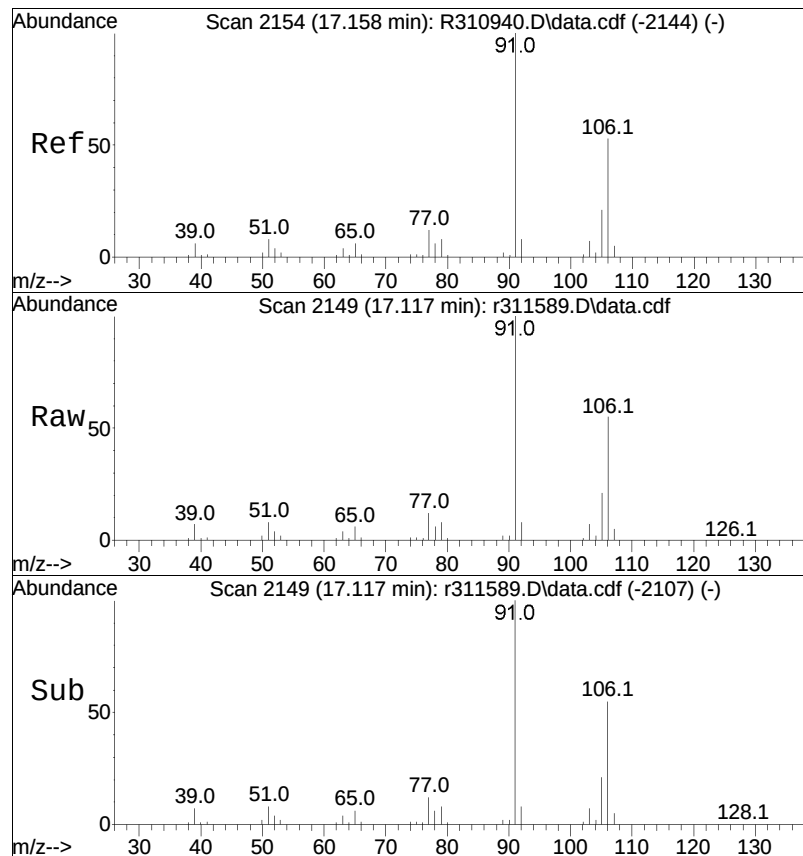




#81
ethylbenzene
Concen: 13.39 ppbV
RT: 16.958 min Scan# 2130
Delta R.T. 0.025 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

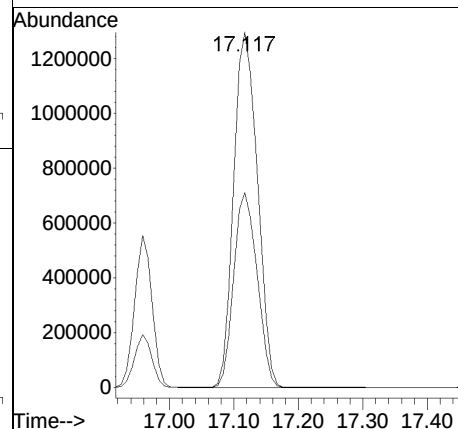
Tgt Ion	Ratio	Lower	Upper
91	100		
106	34.9	31.8	47.8

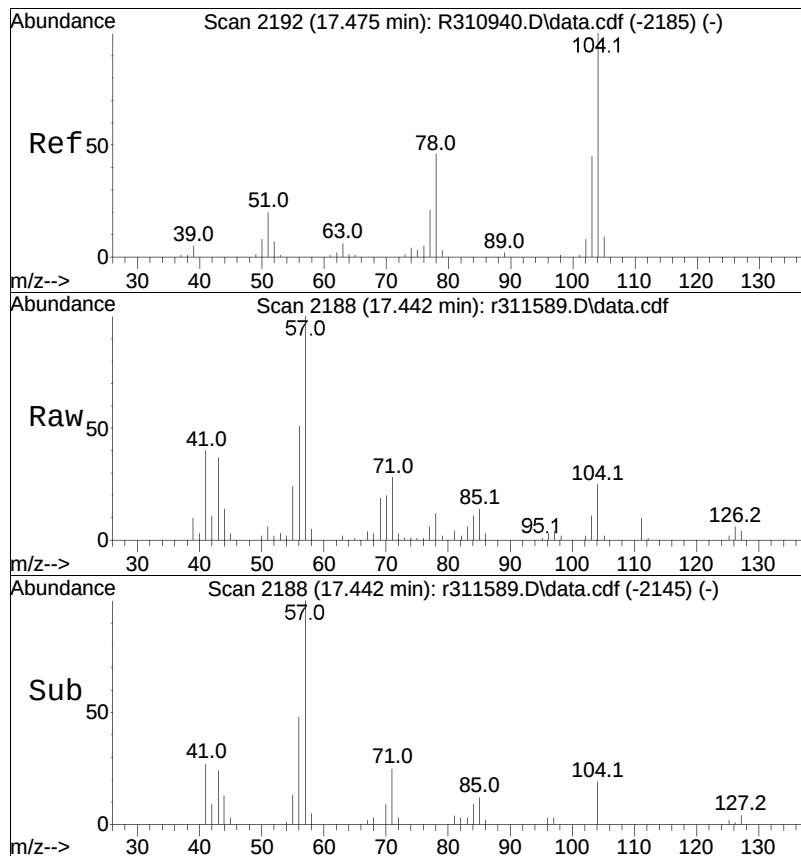




#83
 m+p-xylene
 Concen: 52.18 ppbV
 RT: 17.117 min Scan# 2149
 Delta R.T. 0.017 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

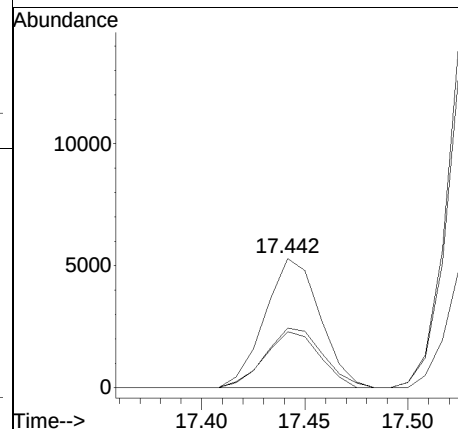
Tgt Ion:	91	106	Ratio	Lower	Upper
91	100				
106	54.9		47.6	71.4	

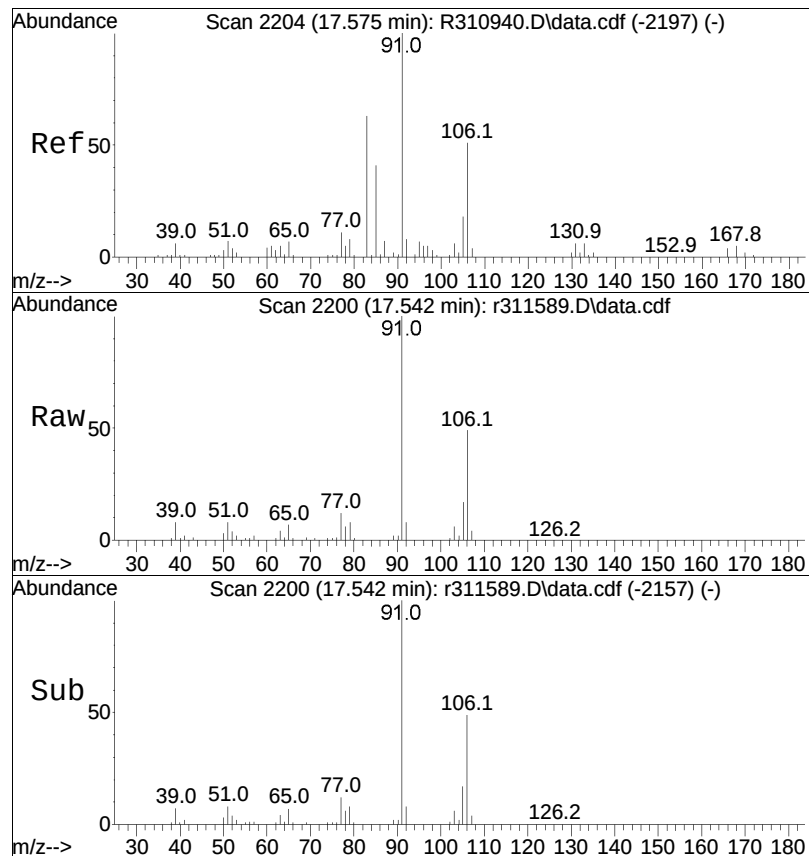




#85
styrene
Concen: 0.18 ppbV
RT: 17.442 min Scan# 2188
Delta R.T. 0.025 min
Lab File: r311589.D
Acq: 18 Sep 2020 2:23 AM

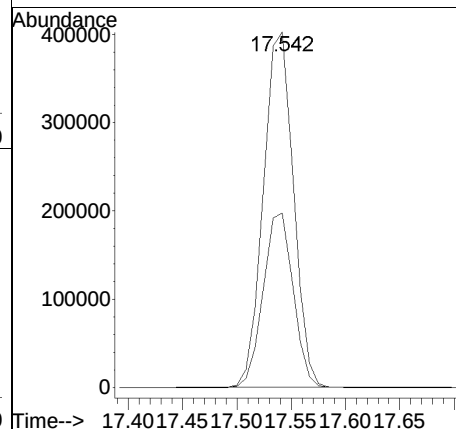
Tgt	Ion:104	Resp:	9802
Ion	Ratio	Lower	Upper
104	100		
103	43.3	34.2	51.4
78	46.1	37.5	56.3

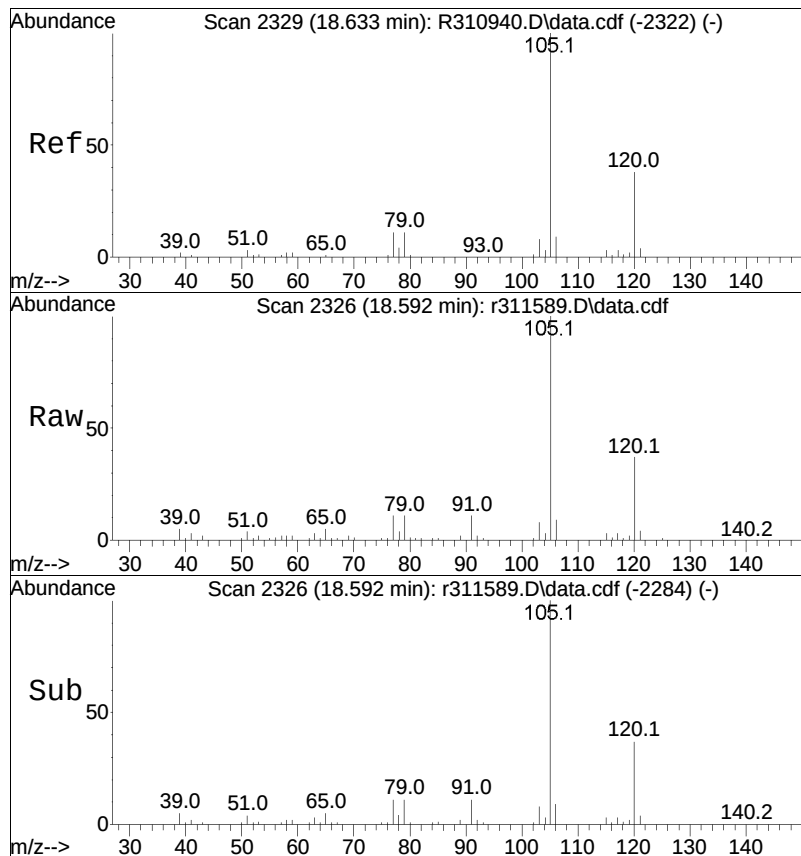




#87
 o-xylene
 Concen: 12.30 ppbV
 RT: 17.542 min Scan# 2200
 Delta R.T. 0.025 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

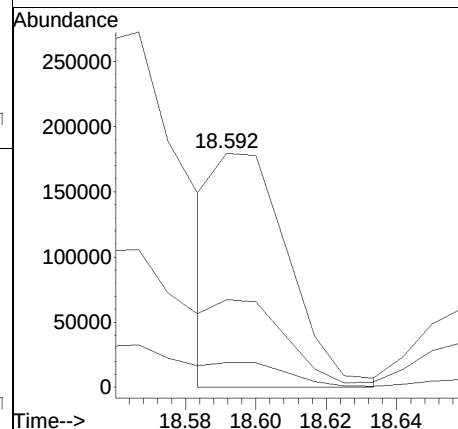
Tgt Ion	Ratio	Lower	Upper
91	100		
106	49.1	45.4	68.0

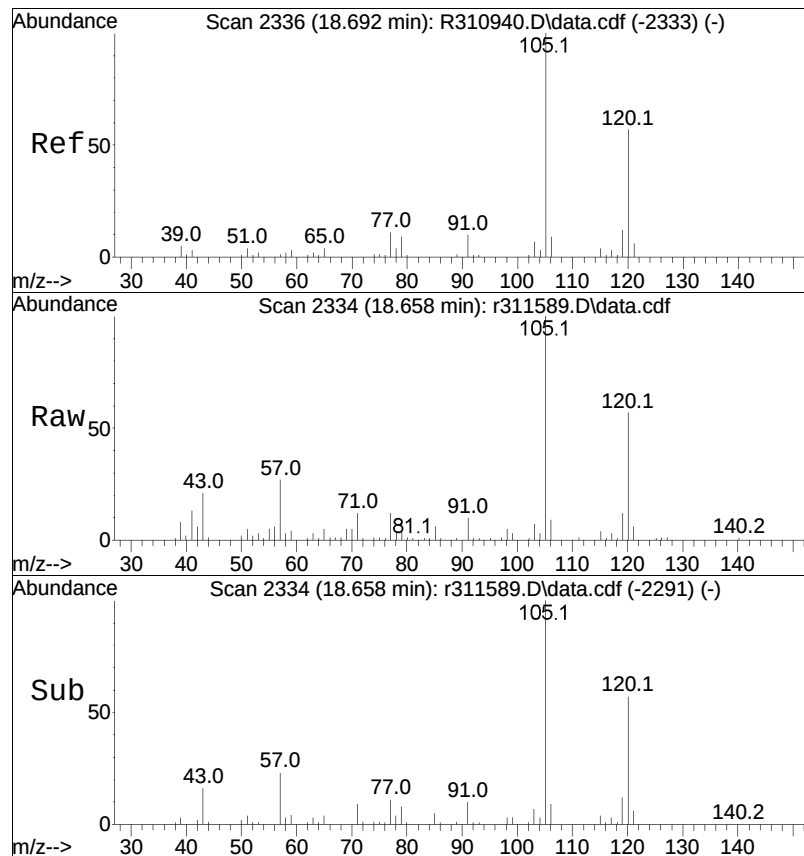




#96
 4-ethyl toluene
 Concen: 3.42 ppbV m
 RT: 18.592 min Scan# 2326
 Delta R.T. 0.017 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

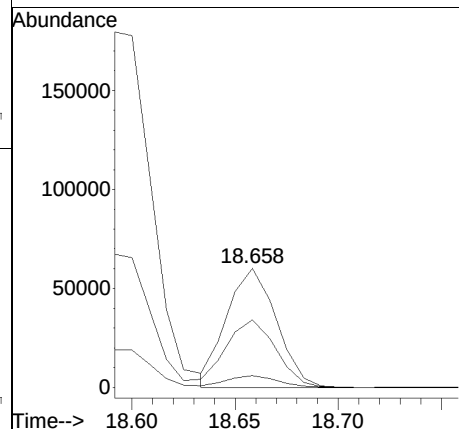
Tgt Ion	Ratio	Lower	Upper
105	100		
120	37.5	28.2	42.2
91	10.6	7.4	11.2

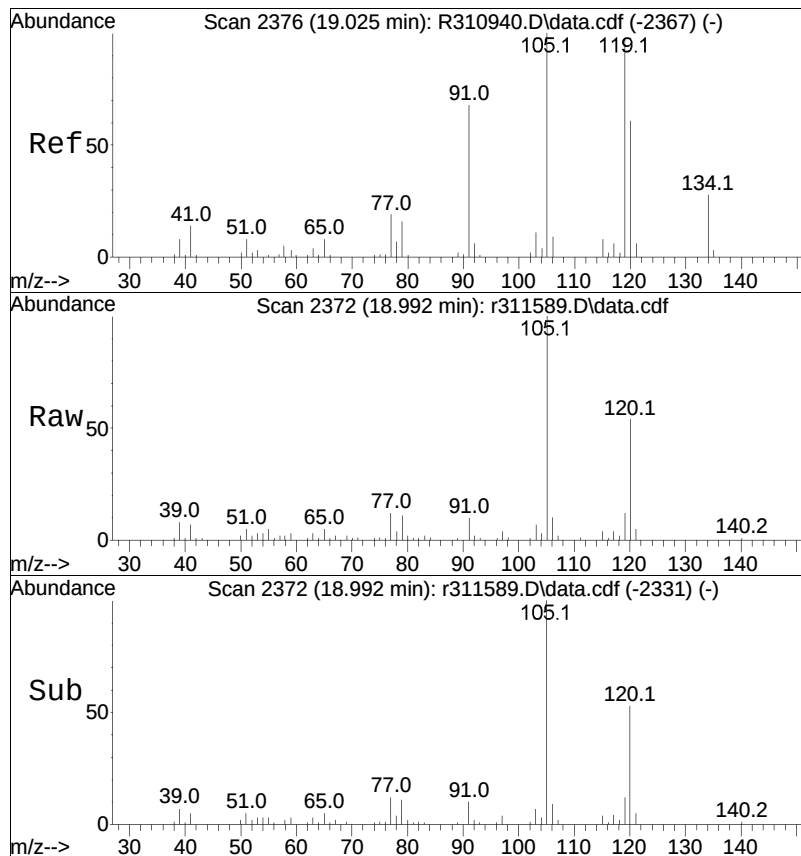




#97
 1,3,5-trimethylbenzene
 Concen: 1.26 ppbV
 RT: 18.658 min Scan# 2334
 Delta R.T. 0.025 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

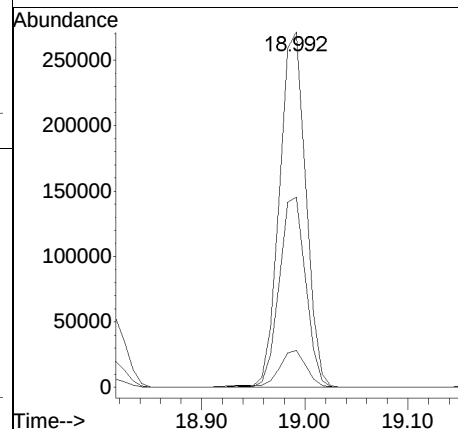
Tgt Ion:	105	Resp:	100528
Ion Ratio	Lower	Upper	
105	100		
120	56.8	44.2	66.2
91	9.9	7.0	10.6





#99
 1,2,4-trimethylbenzene
 Concen: 6.33 ppbV
 RT: 18.992 min Scan# 2372
 Delta R.T. 0.025 min
 Lab File: r311589.D
 Acq: 18 Sep 2020 2:23 AM

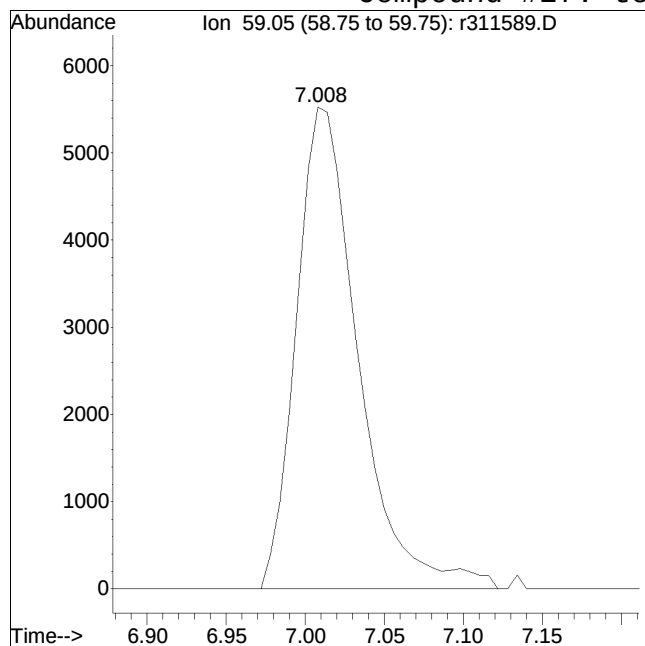
Tgt Ion	Ratio	Lower	Upper
105	100		
120	53.5	49.4	74.0
91	10.4	54.6	81.8#



Manual Integration Report

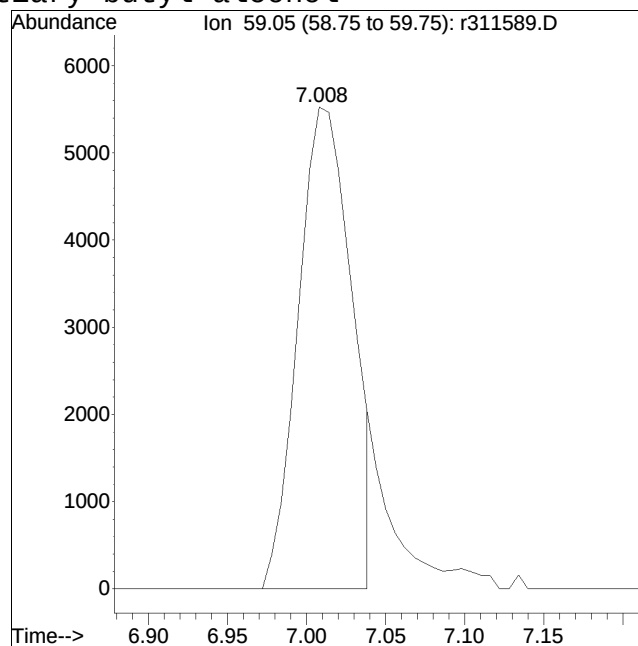
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311589.D Operator : AIRPIAN03:TS
Date Inj'd : 9/18/2020 0:2: 3 Instrument :
Sample : L2037872-01D,3,150,250 Quant Date : 9/18/2020 5:29 am

Compound #27: tertiary butyl alcohol



Original Peak Response = 15047

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

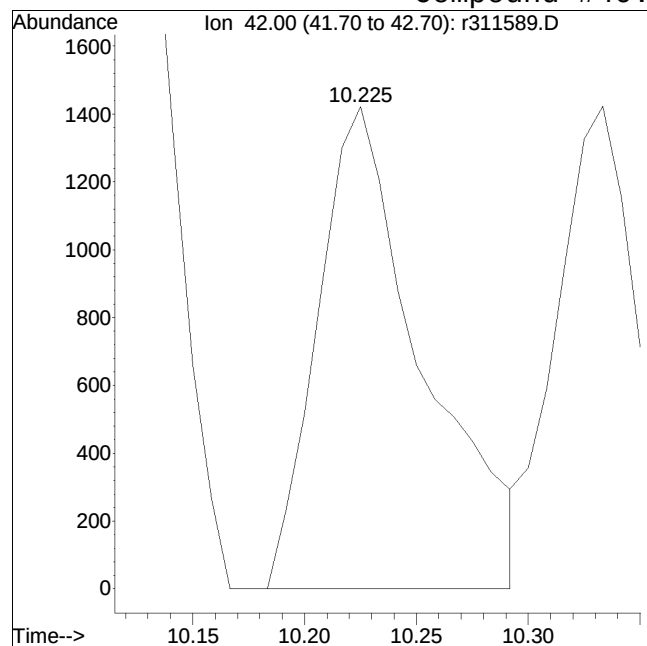


Manual Peak Response = 13064 M6

Manual Integration Report

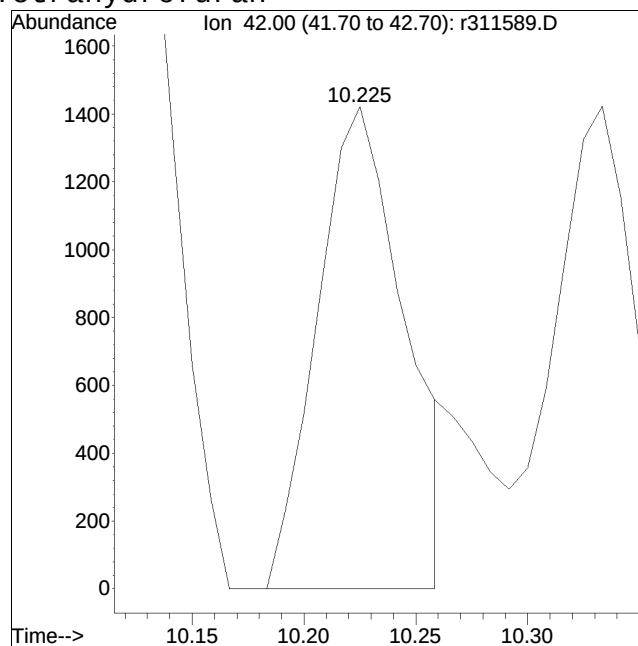
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311589.D Operator : AIRPIAN03:TS
Date Inj'd : 9/18/2020 0:2: 3 Instrument :
Sample : L2037872-01D,3,150,250 Quant Date : 9/18/2020 5:29 am

Compound #40: Tetrahydrofuran



Original Peak Response = 4640

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

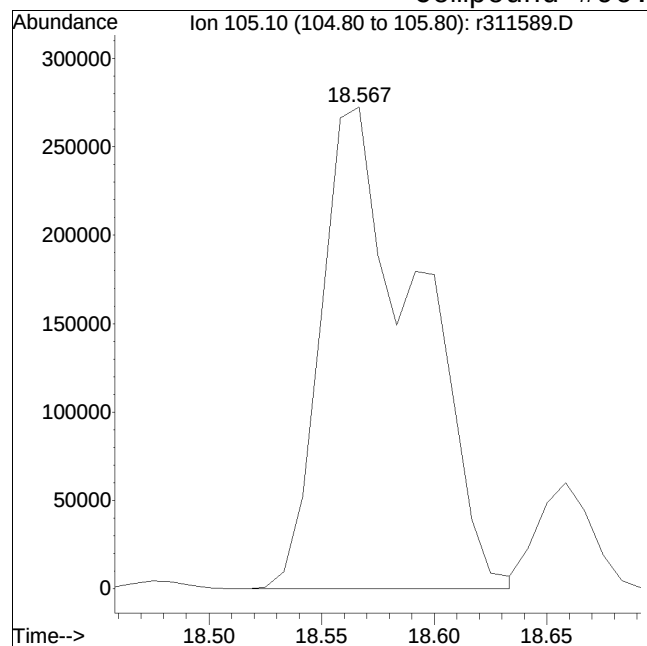


Manual Peak Response = 3849 M6

Manual Integration Report

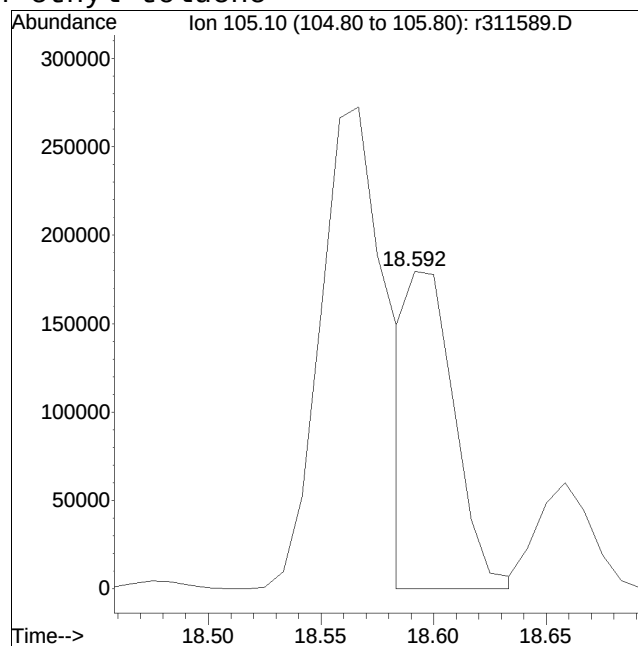
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311589.D Operator : AIRPIAN03:TS
Date Inj'd : 9/18/2020 0:2: 3 Instrument :
Sample : L2037872-01D,3,150,250 Quant Date : 9/18/2020 5:29 am

Compound #96: 4-ethyl toluene



Original Peak Response = 808874

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



Manual Peak Response = 261024 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311590.D
 Acq On : 18 Sep 2020 3:02 AM
 Operator : AIRPIAN03:TS
 Sample : L2037872-02,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 08:00:33 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.575	49	300030	10.000	ppbV	# 0.04
Standard Area = 294879			Recovery =	101.75%		
43) 1,4-difluorobenzene	11.840	114	855324	10.000	ppbV	# 0.03
Standard Area = 816202			Recovery =	104.79%		
67) chlorobenzene-D5	16.567	54	141730	10.000	ppbV	0.02
Standard Area = 138022			Recovery =	102.69%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.000	85	13166	0.466	ppbV	98
6) chloromethane	0.000		0	N.D.	d	
7) Freon-114	0.000		0	N.D.	d	
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	4.606	54	4222	0.274	ppbV #	75
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.333	31	281933	20.351	ppbV #	77
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.900	43	421749M6	19.595	ppbV	
21) trichlorofluoromethane	6.087	101	6684	0.321	ppbV	97
22) isopropyl alcohol	6.253	45	25198	0.872	ppbV #	96
26) 1,1-dichloroethene	6.798		0	N.D.		
27) tertiary butyl alcohol	6.996	59	17870M6	0.599	ppbV	
28) methylene chloride	7.026	49	1287	0.061	ppbV	95
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.314	76	118771	2.081	ppbV #	31
31) Freon 113	7.356	101	2481	0.090	ppbV	94
32) trans-1,2-dichloroethene	8.083		0	N.D.		
33) 1,1-dichloroethane	8.442		0	N.D.		
34) MTBE	8.500		0	N.D.		
36) 2-butanone	8.883	43	156347	4.272	ppbV	97
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.		
39) chloroform	9.733	83	22436	0.744	ppbV	97
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\Airpiano3\2020\09\200917T\
 Data File : r311590.D
 Acq On : 18 Sep 2020 3:02 AM
 Operator : AIRPIAN03:TS
 Sample : L2037872-02,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 08:00:33 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.650	57	610330	17.047	ppbV	#	73
48) 1,1,1-trichloroethane	10.875		0	N.D.			
50) benzene	11.400	78	306622	4.270	ppbV		97
52) carbon tetrachloride	11.573		0	N.D.			
53) cyclohexane	11.720	56	43641	1.152	ppbV	#	91
56) 1,2-dichloropropane	12.233		0	N.D.			
57) bromodichloromethane	0.000		0	N.D.	d		
58) 1,4-dioxane	12.660		0	N.D.			
59) trichloroethene	12.633		0	N.D.			
60) 2,2,4-trimethylpentane	12.687	57	1875544	16.464	ppbV	#	89
62) heptane	13.007	43	610674	13.841	ppbV		92
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	13.708	43	31961M6	0.634	ppbV		
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	14.433		0	N.D.			
68) toluene	14.792	91	2832924	39.141	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	15.950	166	218769	7.508	ppbV		95
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	16.958	91	840763	10.107	ppbV		91
83) m+p-xylene	17.117	91	2788185	40.948	ppbV		93
84) bromoform	0.000		0	N.D.			
85) styrene	17.442	104	10190	0.171	ppbV		99
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	17.542	91	687831	10.213	ppbV		90
96) 4-ethyl toluene	18.600	105	330069M6	4.049	ppbV		
97) 1,3,5-trimethylbenzene	18.658	105	135424	1.584	ppbV		99
99) 1,2,4-trimethylbenzene	18.992	105	663793	8.130	ppbV	#	57
101) Benzyl Chloride	0.000		0	N.D.	d		
102) 1,3-dichlorobenzene	19.167		0	N.D.			
103) 1,4-dichlorobenzene	19.167		0	N.D.			
107) 1,2-dichlorobenzene	19.442		0	N.D.			
115) 1,2,4-trichlorobenzene	20.925		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311590.D
 Acq On : 18 Sep 2020 3:02 AM
 Operator : AIRPIAN03:TS
 Sample : L2037872-02,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 08:00:33 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

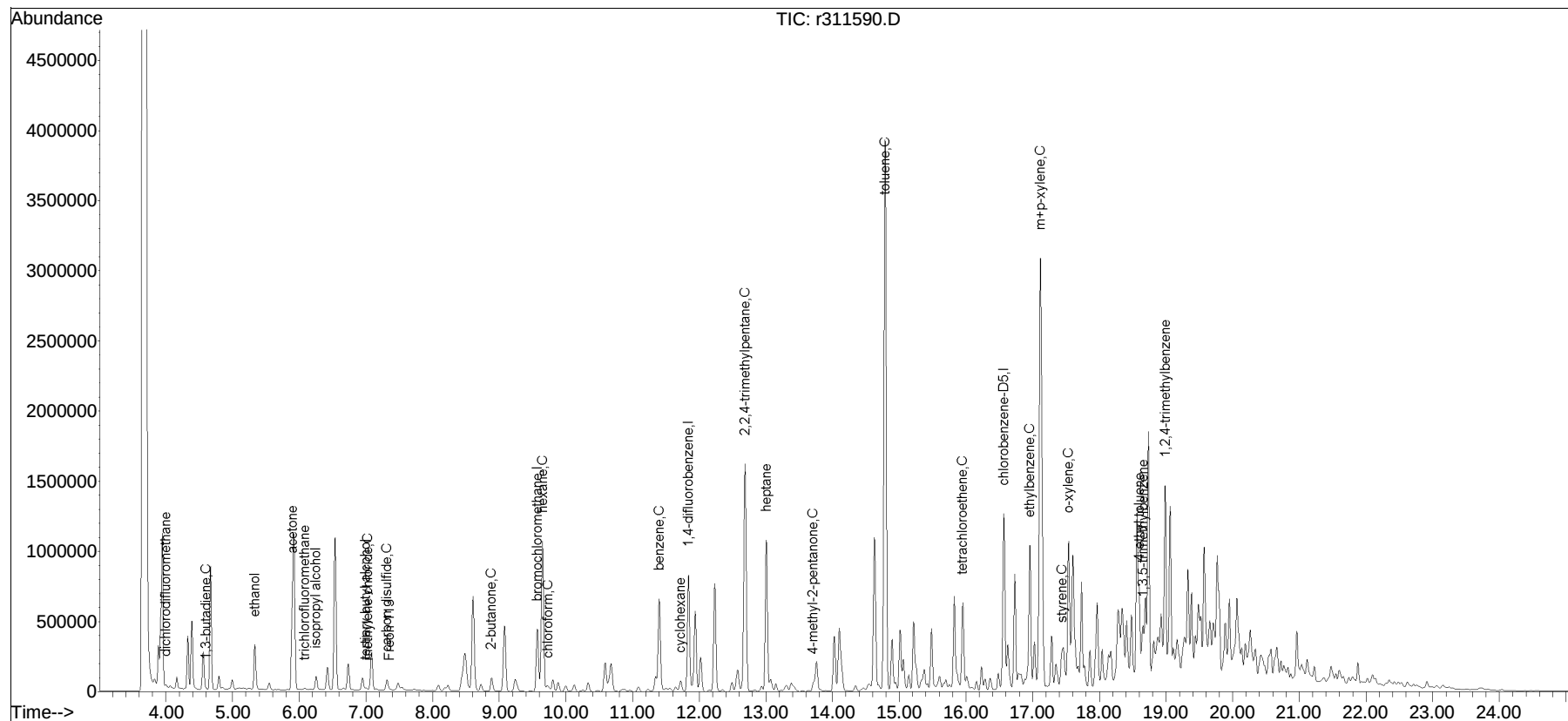
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

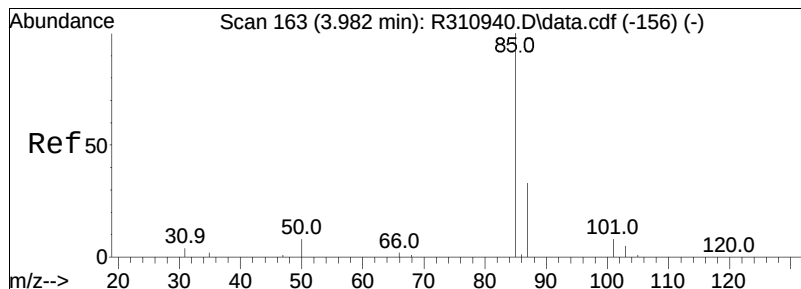
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airpiano3\2020\09\200917T\r311572.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
Data File : r311590.D
Acq On : 18 Sep 2020 3:02 AM
Operator : AIRPIANO3:TS
Sample : L2037872-02,3,250,250
Misc : WG1411312,ICAL17116
ALS Vial : 0 Sample Multiplier: 1

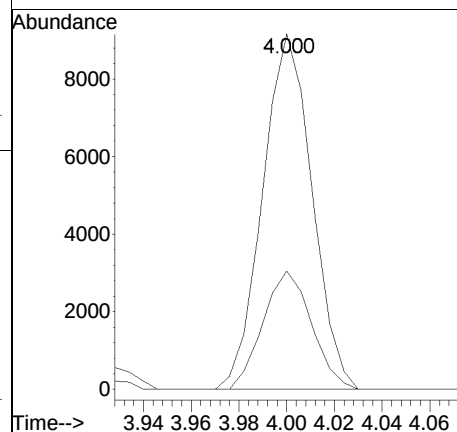
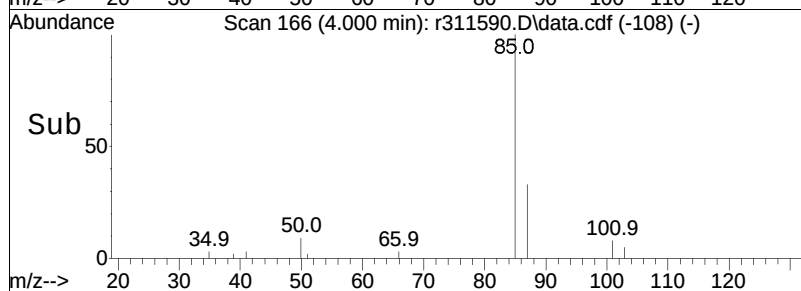
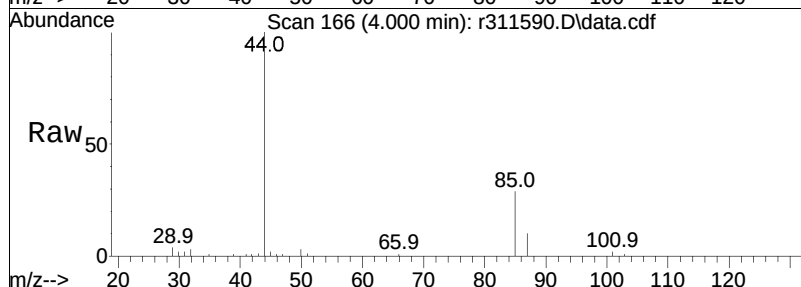
Quant Time: Sep 18 08:00:33 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Sep 15 10:50:28 2020
Response via : Initial Calibration

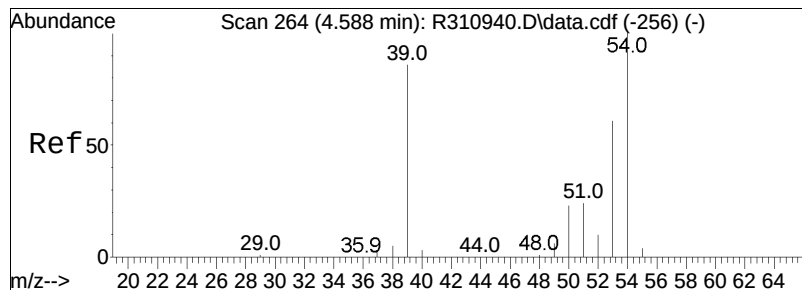




#5
 dichlorodifluoromethane
 Concen: 0.47 ppbV
 RT: 4.000 min Scan# 166
 Delta R.T. 0.018 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

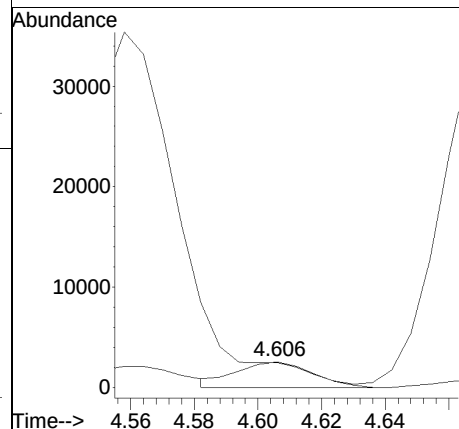
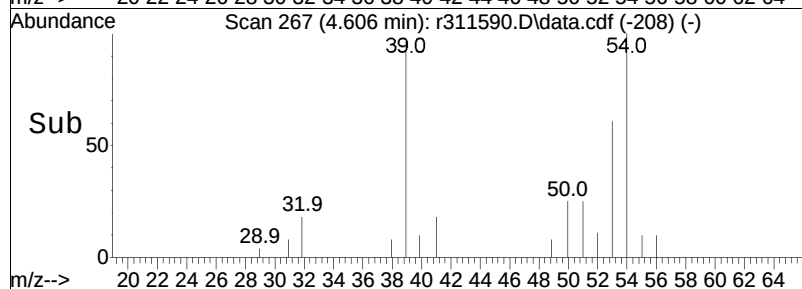
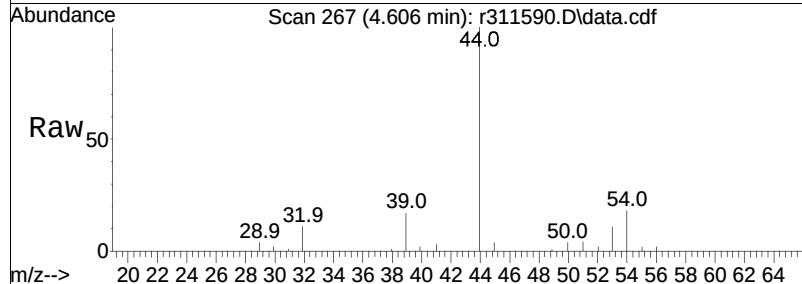
Tgt Ion: 85 Resp: 13166
 Ion Ratio Lower Upper
 85 100
 87 33.3 25.8 38.6

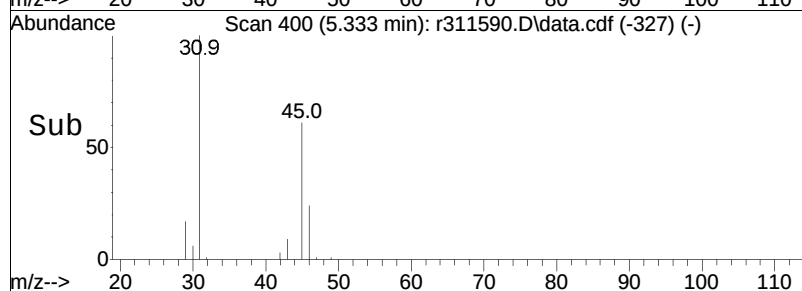
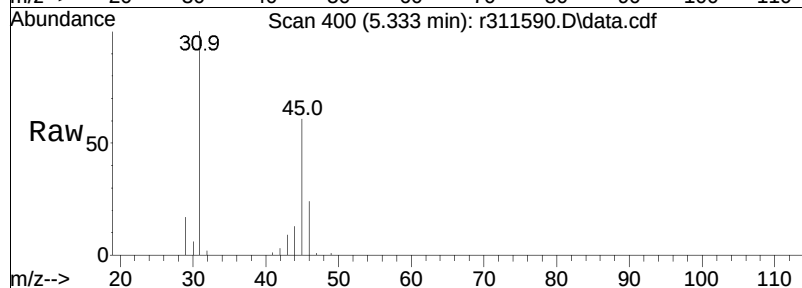
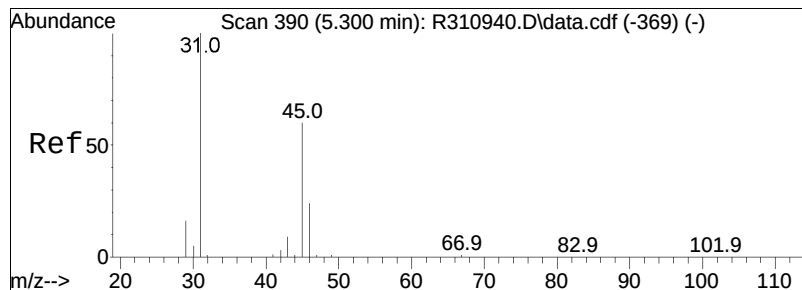




#10
 1,3-butadiene
 Concen: 0.27 ppbV
 RT: 4.606 min Scan# 267
 Delta R.T. 0.024 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

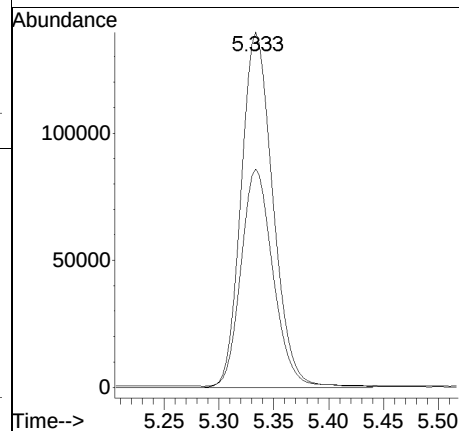
Tgt Ion	Ratio	Lower	Upper
54	100		
39	97.6	61.2	91.8#

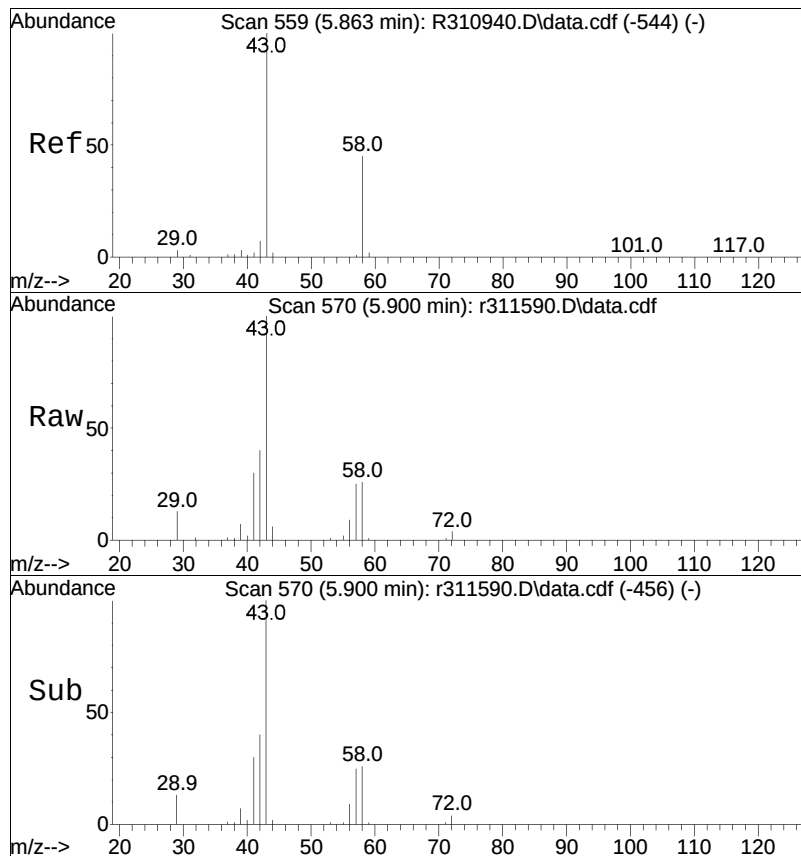




#15
ethanol
Concen: 20.35 ppbV
RT: 5.333 min Scan# 400
Delta R.T. 0.037 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

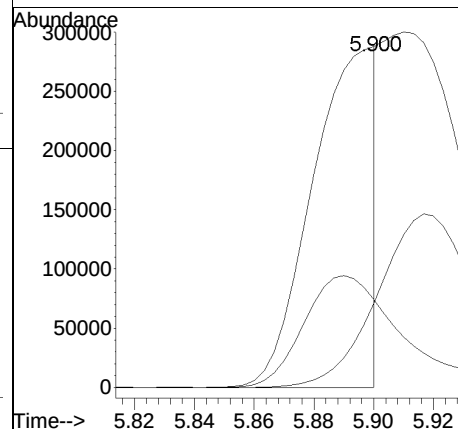
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	61.5	37.0	55.4	

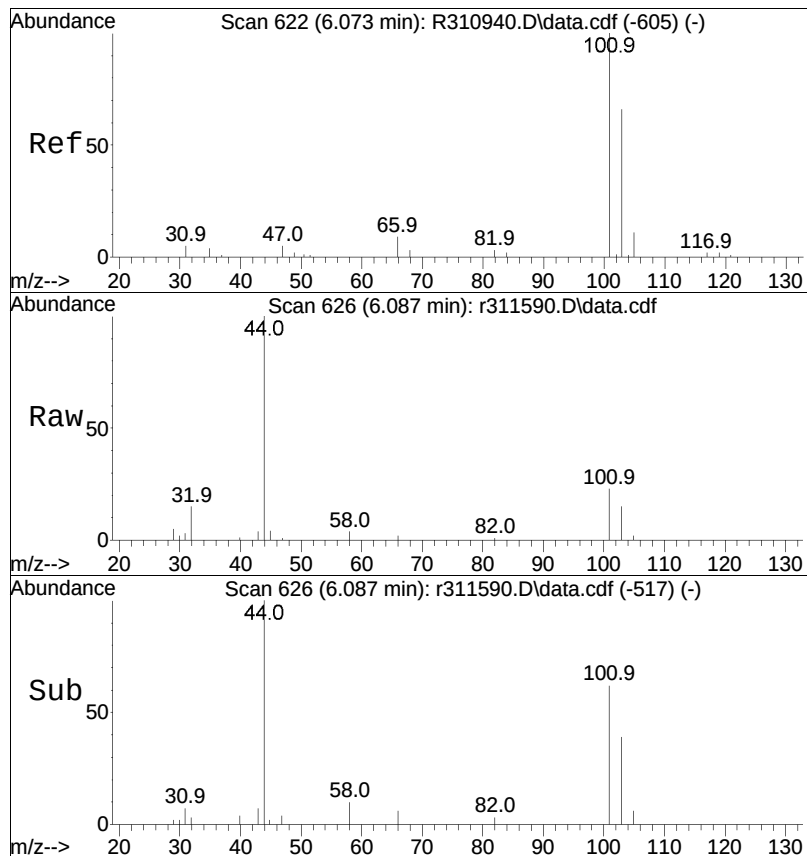




#19
acetone
Concen: 19.59 ppbV m
RT: 5.900 min Scan# 570
Delta R.T. 0.050 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

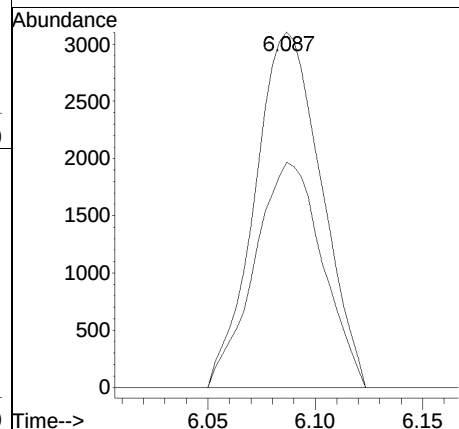
Tgt Ion	Ratio	Lower	Upper
43	100		
58	25.8	41.9	62.9#
57	24.6	1.1	1.7#

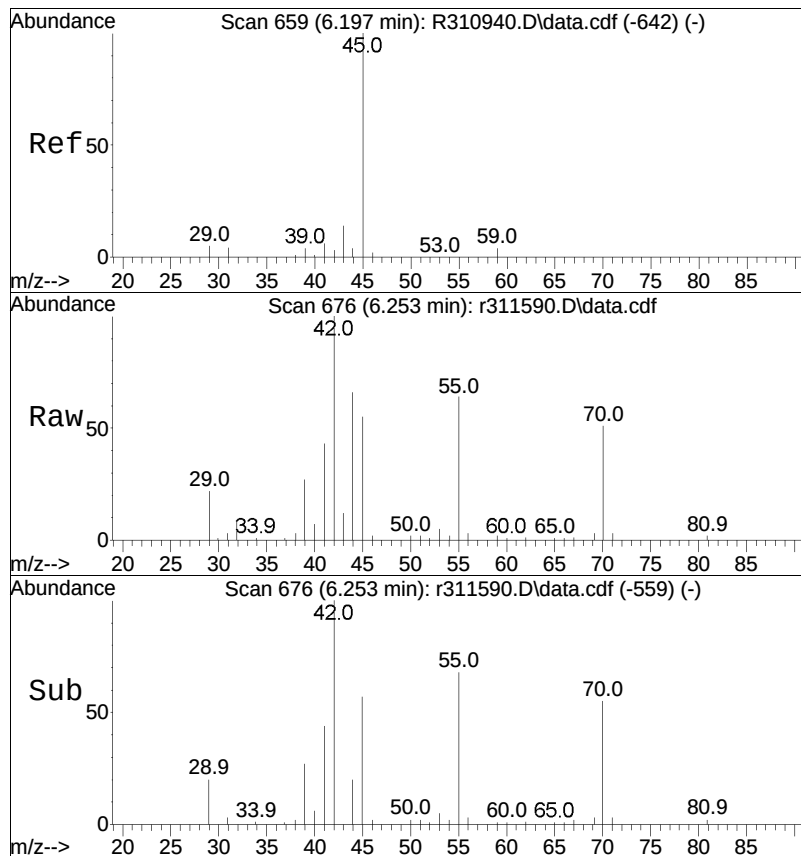




#21
trichlorofluoromethane
Concen: 0.32 ppbV
RT: 6.087 min Scan# 626
Delta R.T. 0.033 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

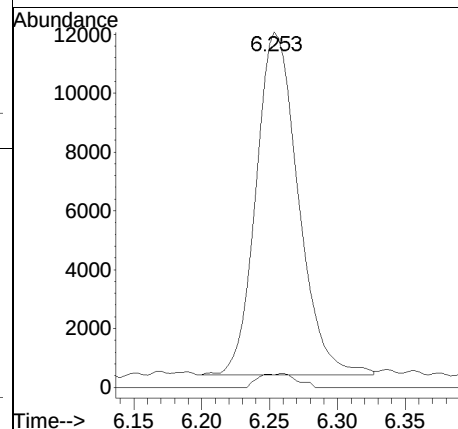
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	63.3	52.7	79.1	

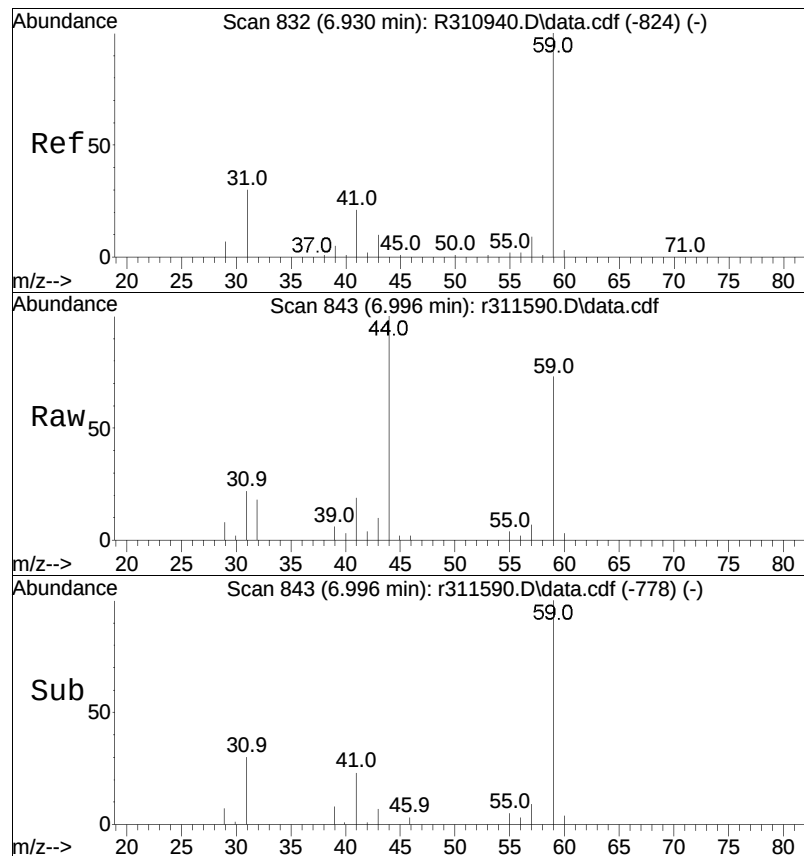




#22
 isopropyl alcohol
 Concen: 0.87 ppbV
 RT: 6.253 min Scan# 676
 Delta R.T. 0.060 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

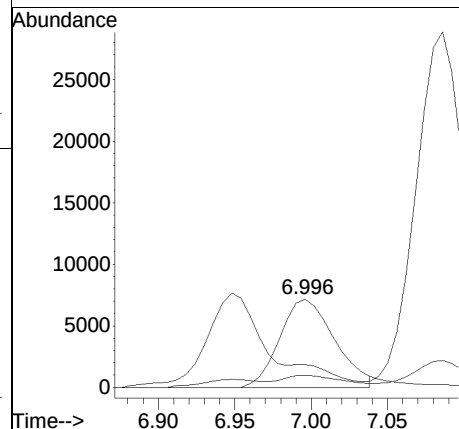
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.5	4.0	6.0#

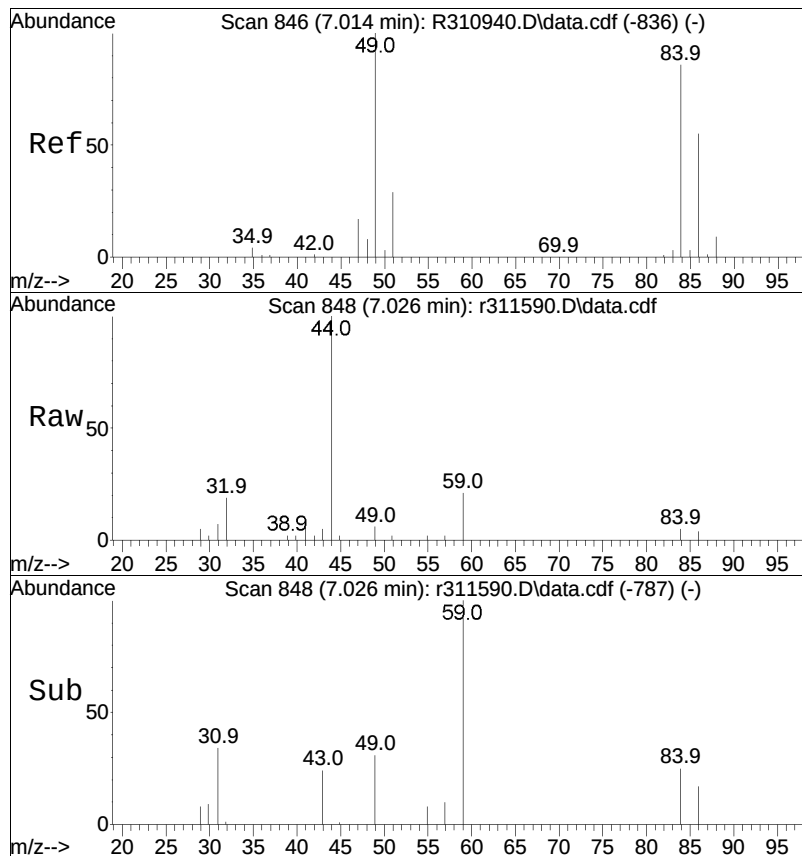




#27
 tertiary butyl alcohol
 Concen: 0.60 ppbV m
 RT: 6.996 min Scan# 843
 Delta R.T. 0.060 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

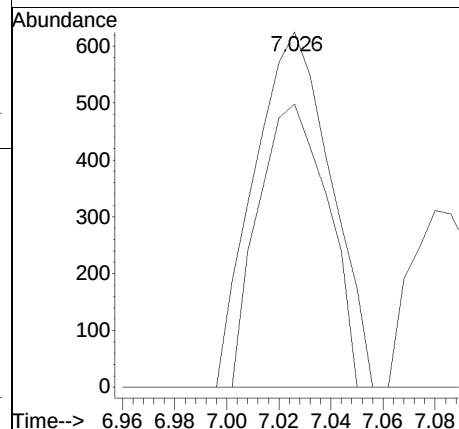
Tgt Ion	Ratio	Lower	Upper
59	100		
41	25.9	16.0	24.0#
43	13.8	8.2	12.4#

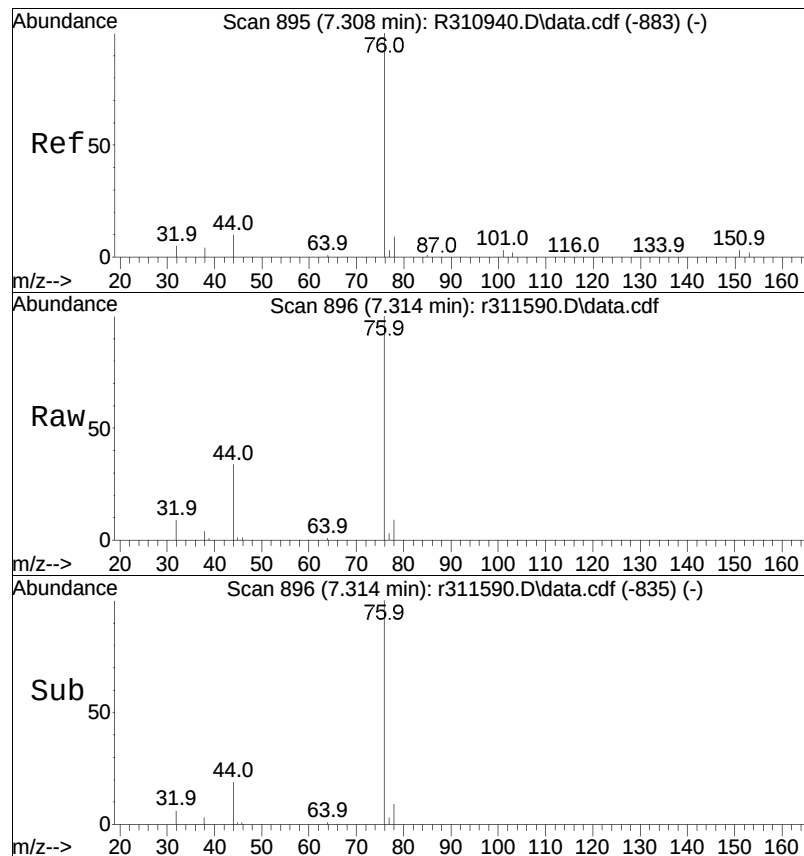




#28
 methylene chloride
 Concen: 0.06 ppbV
 RT: 7.026 min Scan# 848
 Delta R.T. 0.036 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

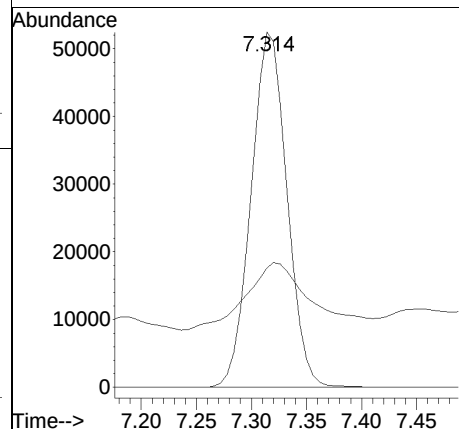
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	1287				
	100	79.7		60.6	90.8

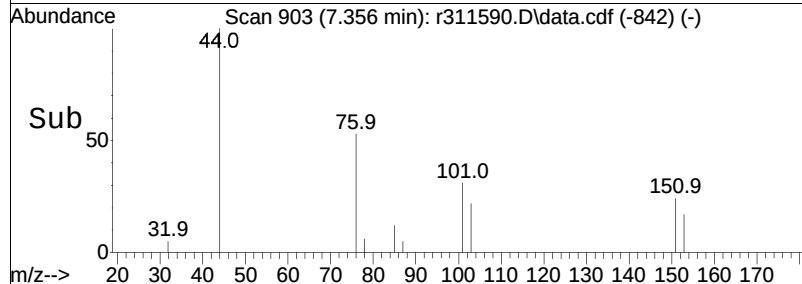
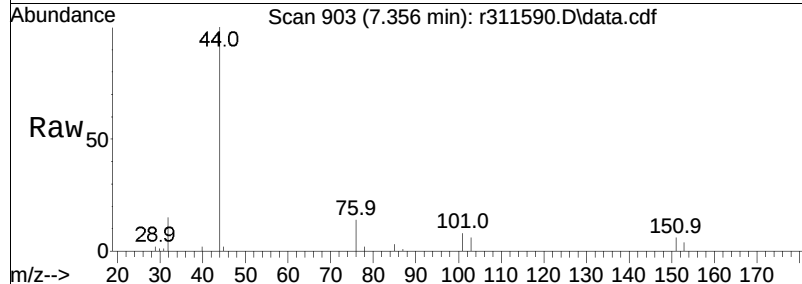
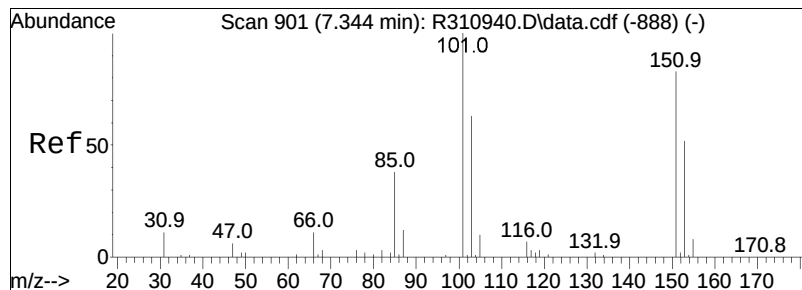




#30
 carbon disulfide
 Concen: 2.08 ppbV
 RT: 7.314 min Scan# 896
 Delta R.T. 0.036 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

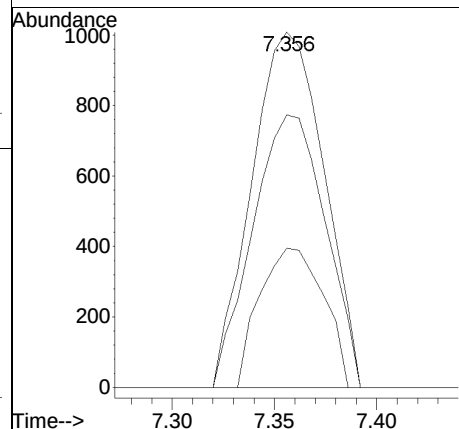
Tgt Ion	Ratio	Lower	Upper
76	100		
44	33.6	7.0	10.4#

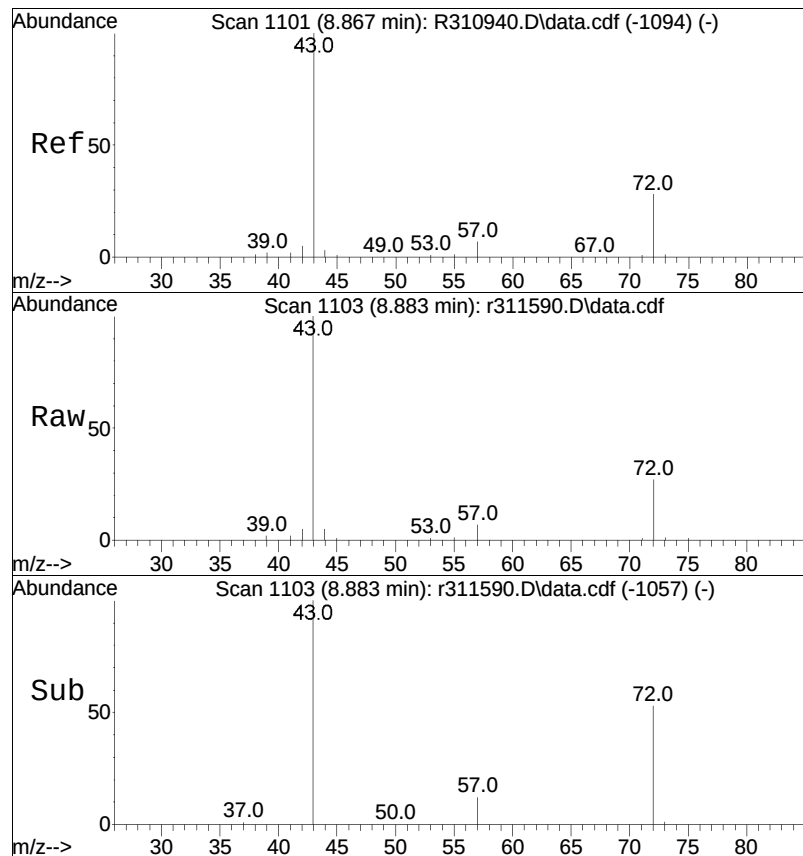




#31
 Freon 113
 Concen: 0.09 ppbV
 RT: 7.356 min Scan# 903
 Delta R.T. 0.036 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

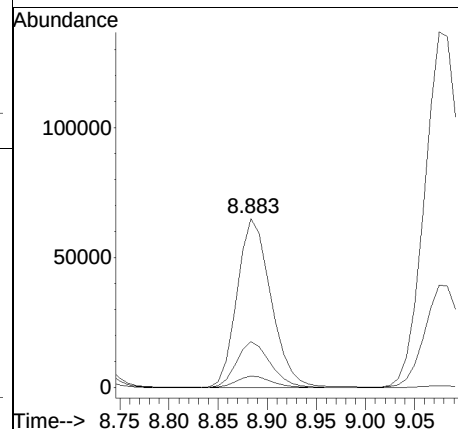
Tgt Ion:	101	Resp:	2481
Ion Ratio	Lower	Upper	
101	100		
85	39.2	34.1	51.1
151	76.7	66.4	99.6

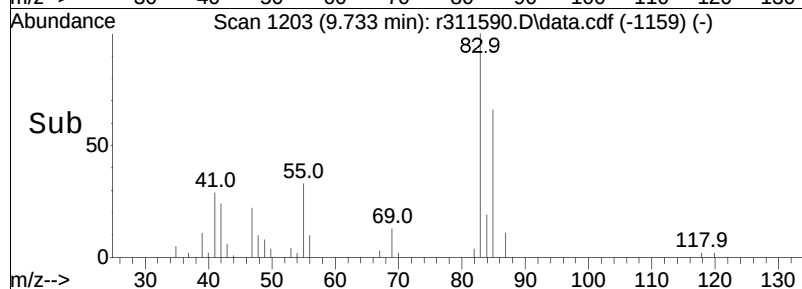
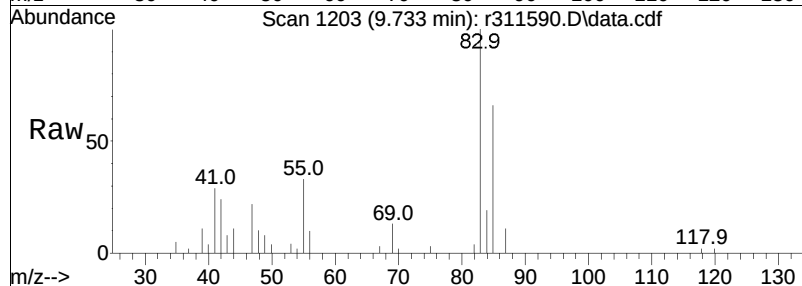
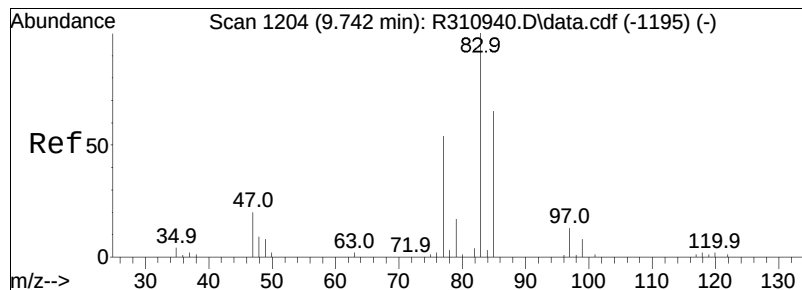




#36
 2-butanone
 Concen: 4.27 ppbV
 RT: 8.883 min Scan# 1103
 Delta R.T. 0.050 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

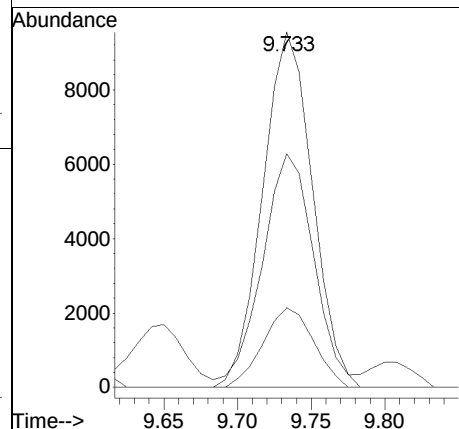
Tgt Ion:	43	Resp:	156347
Ion Ratio	Lower	Upper	
43	100		
72	27.1	22.8	34.2
57	6.7	6.6	9.8

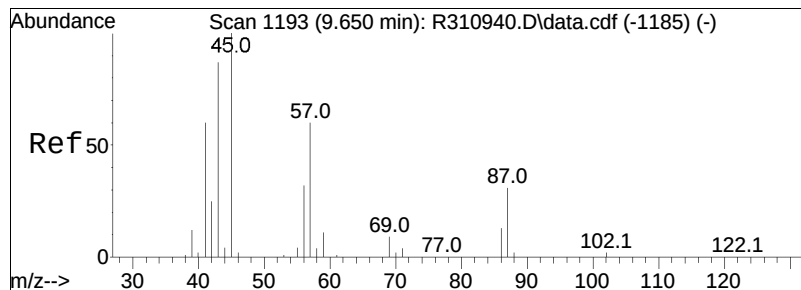




#39
chloroform
Concen: 0.74 ppbV
RT: 9.733 min Scan# 1203
Delta R.T. 0.033 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

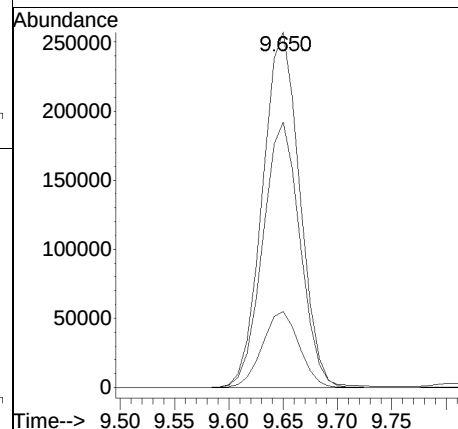
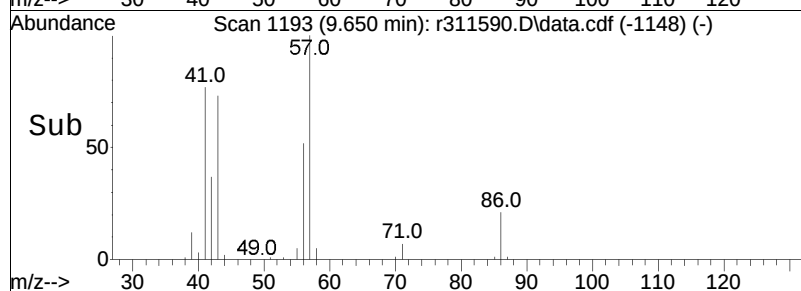
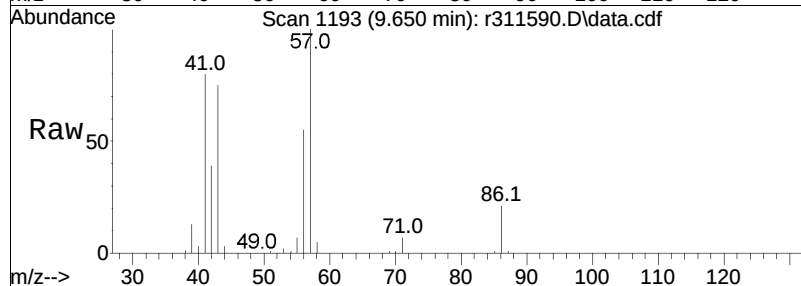
Tgt	Ion	Ratio	Lower	Upper
83	100			
85	65.8	50.5	75.7	
47	22.4	16.6	25.0	

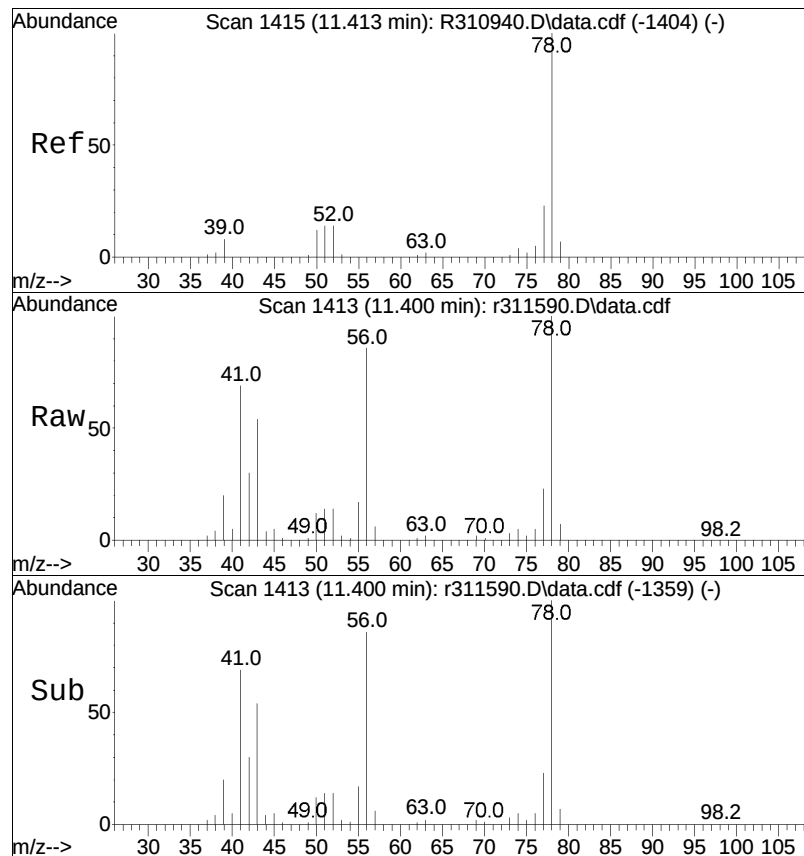




#44
hexane
Concen: 17.05 ppbV
RT: 9.650 min Scan# 1193
Delta R.T. 0.042 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

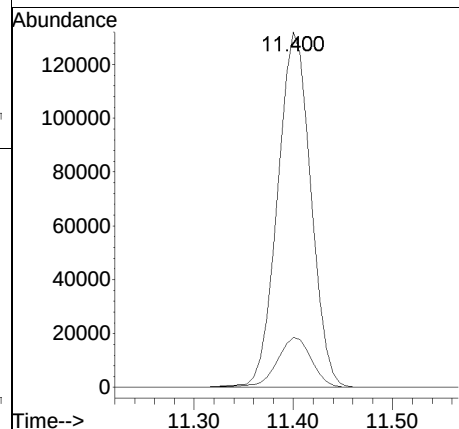
Tgt Ion	Ratio	Lower	Upper
57	100		
43	74.7	87.0	130.6#
86	21.4	16.7	25.1

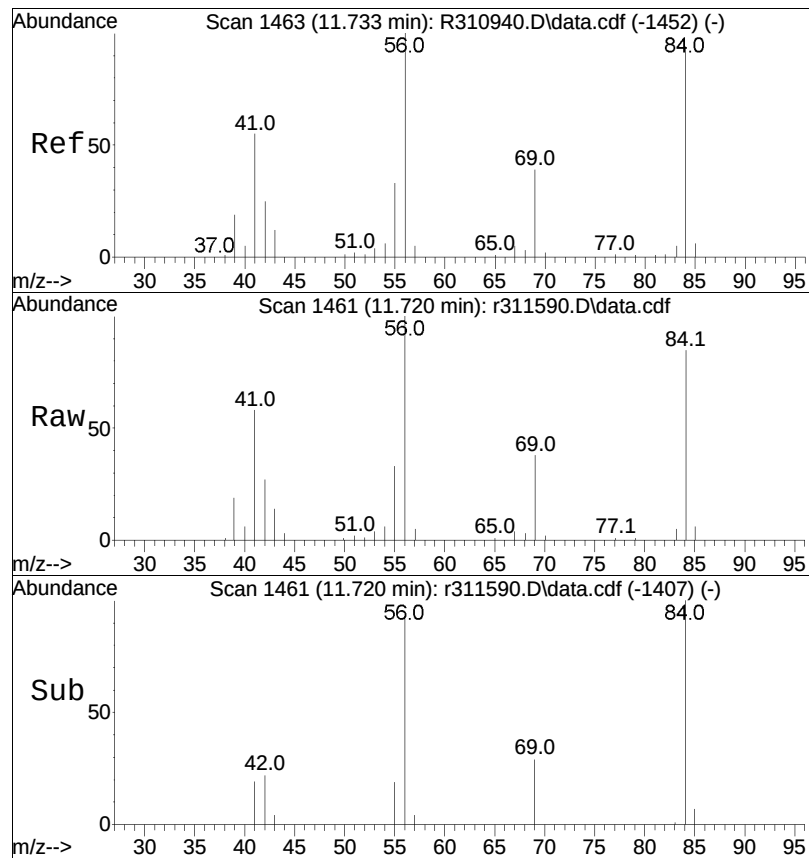




#50
benzene
Concen: 4.27 ppbV
RT: 11.400 min Scan# 1413
Delta R.T. 0.033 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

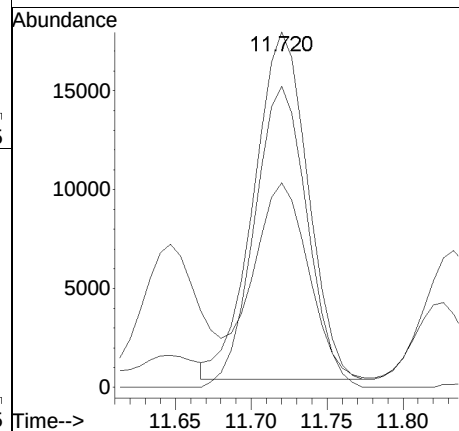
Tgt Ion	Ratio	Lower	Upper
78	100		
52	14.1	12.4	18.6

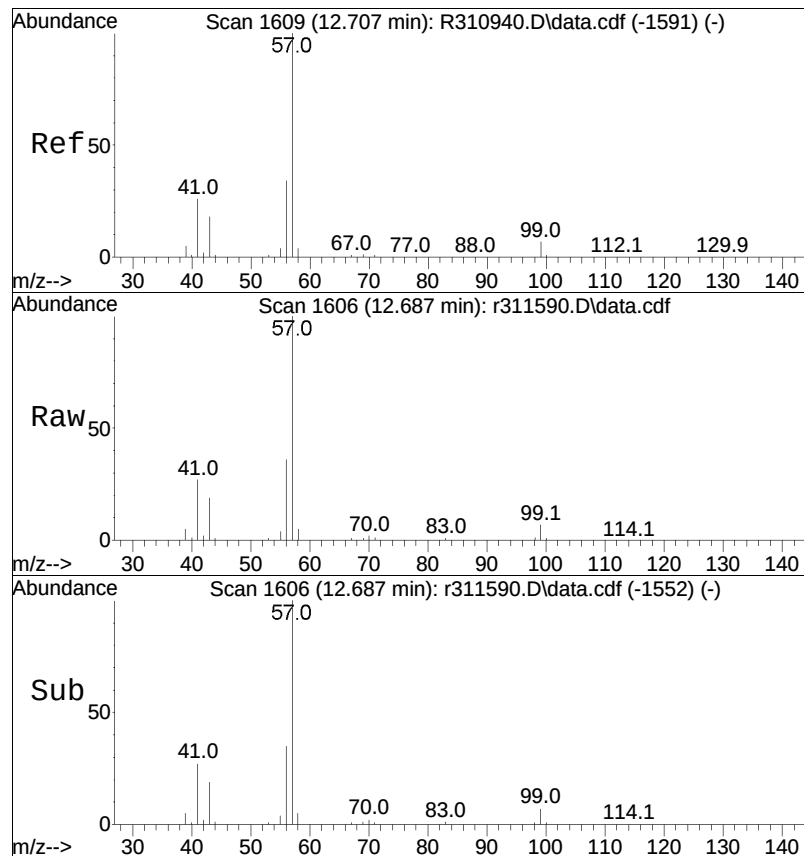




#53
cyclohexane
Concen: 1.15 ppbV
RT: 11.720 min Scan# 1461
Delta R.T. 0.033 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

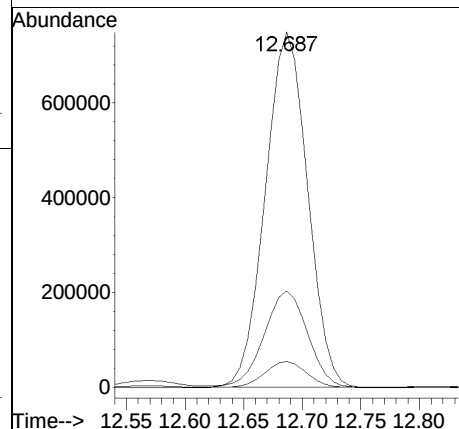
Tgt Ion:	56	Resp:	43641
Ion Ratio	Lower	Upper	
56	100		
84	84.8	71.0	106.6
41	57.6	35.8	53.6#

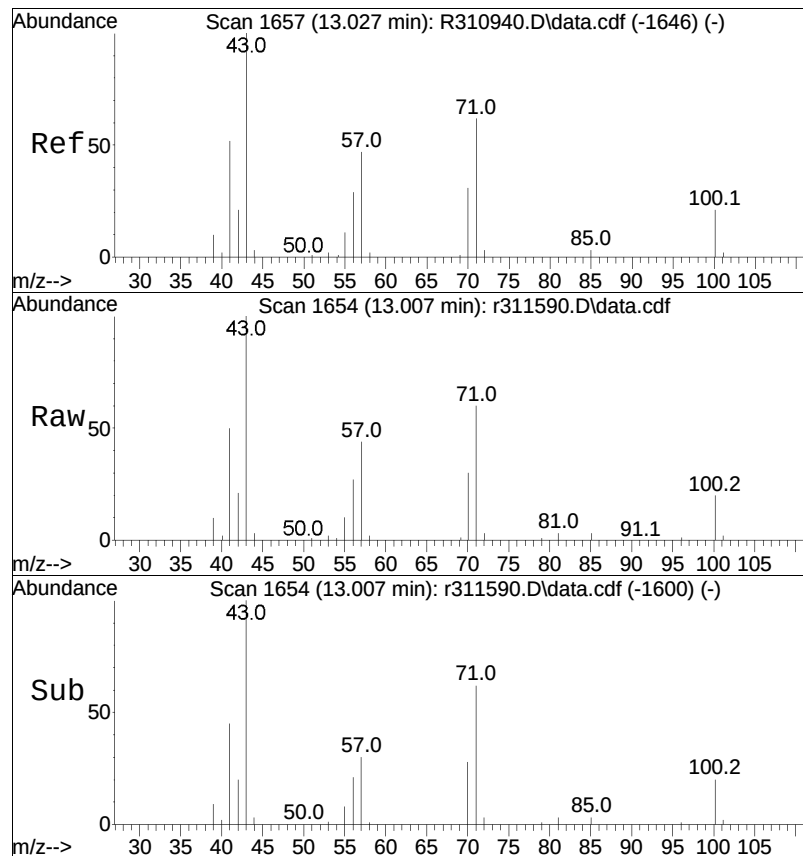




#60
 2,2,4-trimethylpentane
 Concen: 16.46 ppbV
 RT: 12.687 min Scan# 1606
 Delta R.T. 0.033 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

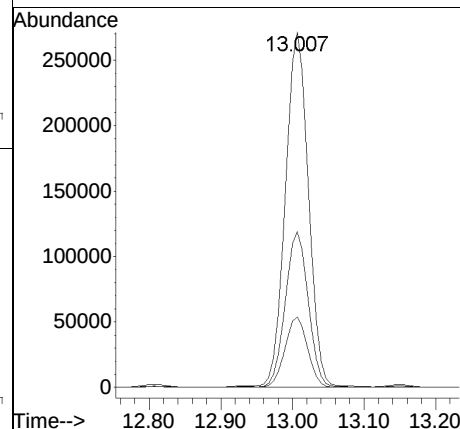
Tgt	Ion	Resp	Lower	Upper
57	100	1875544		
99	7.3		4.8	7.2#
41	27.2		16.9	25.3#

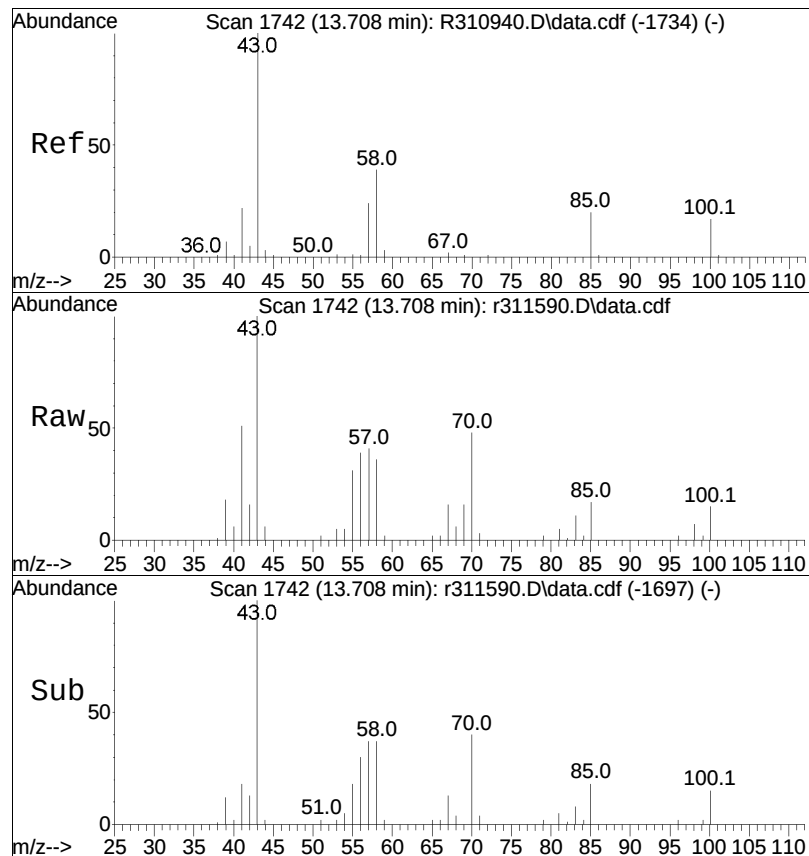




#62
 heptane
 Concen: 13.84 ppbV
 RT: 13.007 min Scan# 1654
 Delta R.T. 0.033 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

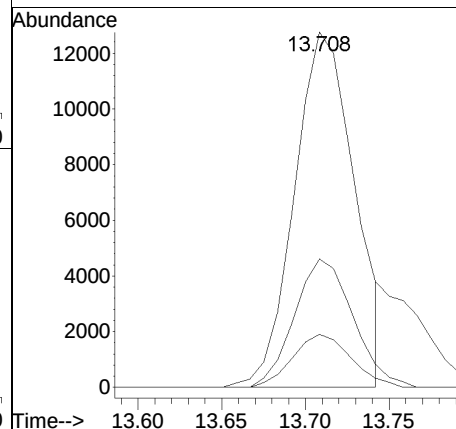
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	43.9	40.9	61.3	
100	19.9	15.8	23.8	

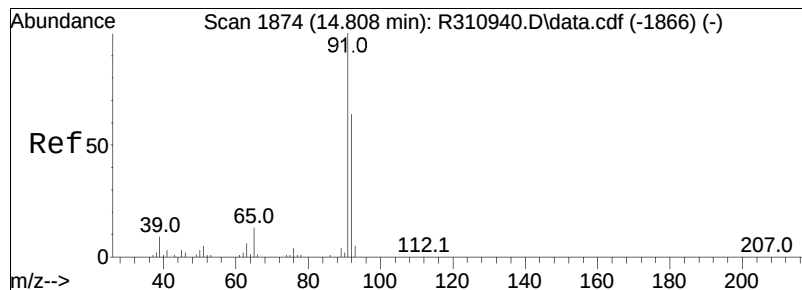




#64
 4-methyl-2-pentanone
 Concen: 0.63 ppbV m
 RT: 13.708 min Scan# 1742
 Delta R.T. 0.042 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

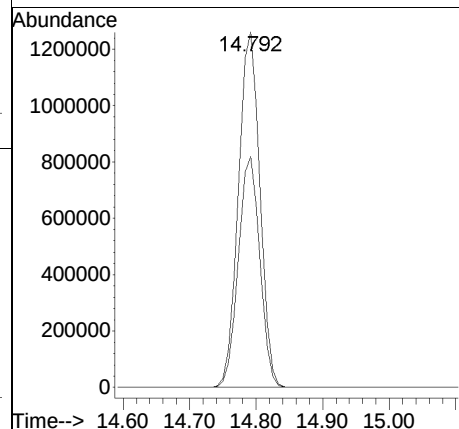
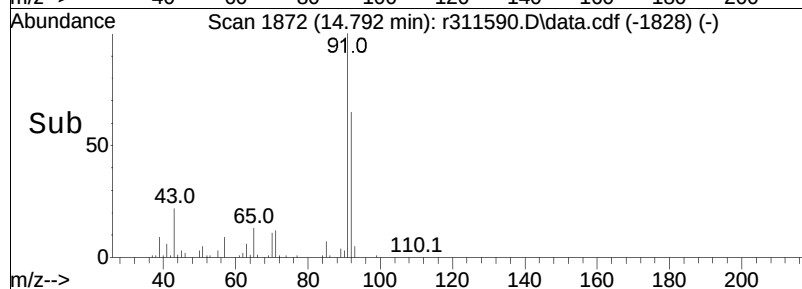
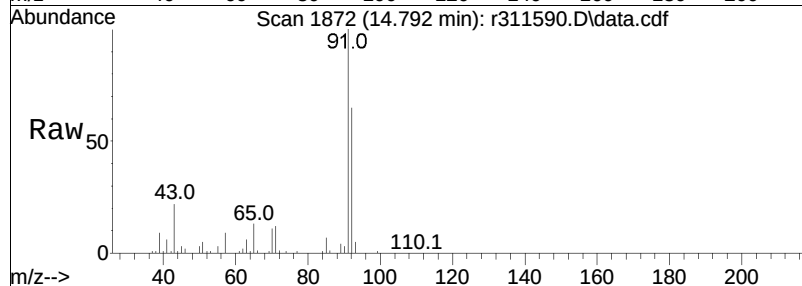
Tgt Ion:	43	58	100	Ratio	Lower	Upper
Resp:	31961					
Ion Ratio	100	36.1	14.9			
		31.8	12.8			
		47.6	19.2			

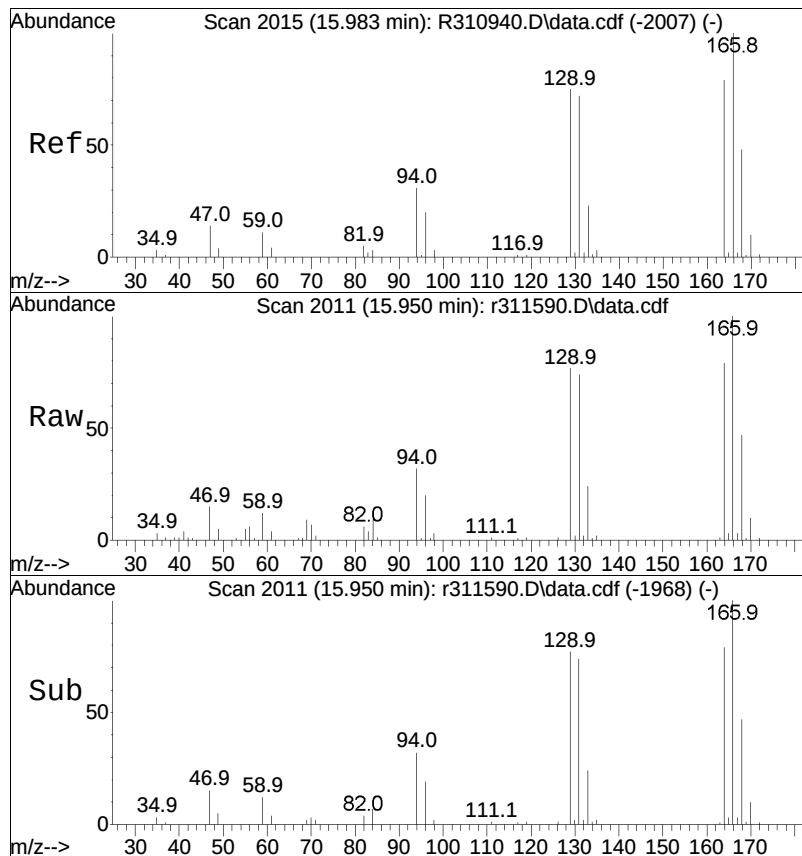




#68
toluene
Concen: 39.14 ppbV
RT: 14.792 min Scan# 1872
Delta R.T. 0.033 min
Lab File: r311590.D
Acq: 18 Sep 2020 3:02 AM

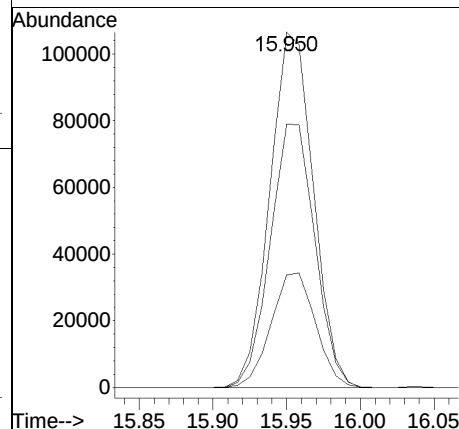
Tgt Ion	Ratio	Lower	Upper
91	100		
92	65.0	51.8	77.8

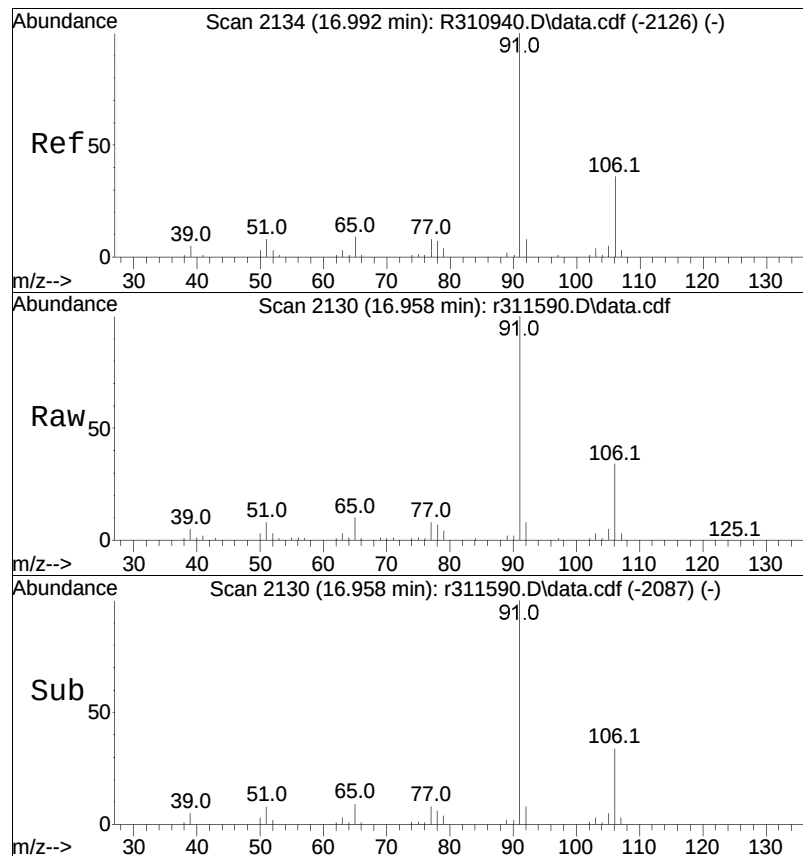




#78
 tetrachloroethene
 Concen: 7.51 ppbV
 RT: 15.950 min Scan# 2011
 Delta R.T. 0.025 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

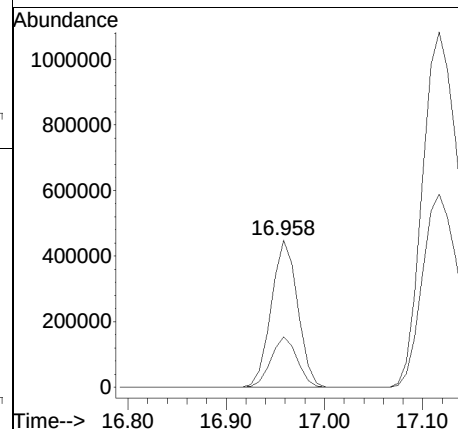
Tgt	Ion:166	Resp:	218769
Ion	Ratio	Lower	Upper
166	100		
131	74.1	55.7	83.5
94	31.7	23.4	35.0

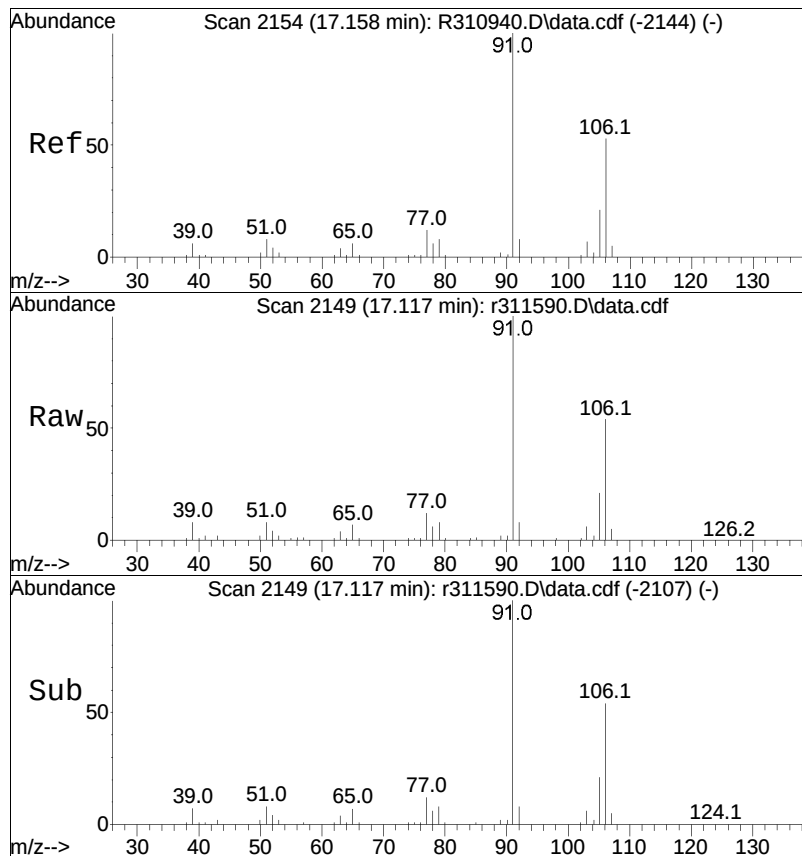




#81
 ethylbenzene
 Concen: 10.11 ppbV
 RT: 16.958 min Scan# 2130
 Delta R.T. 0.025 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

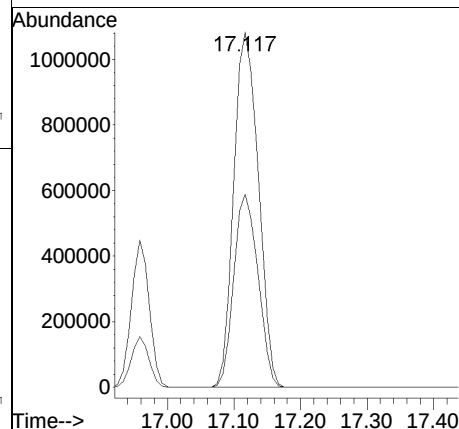
Tgt Ion	Ratio	Lower	Upper
91	100		
106	34.4	31.8	47.8

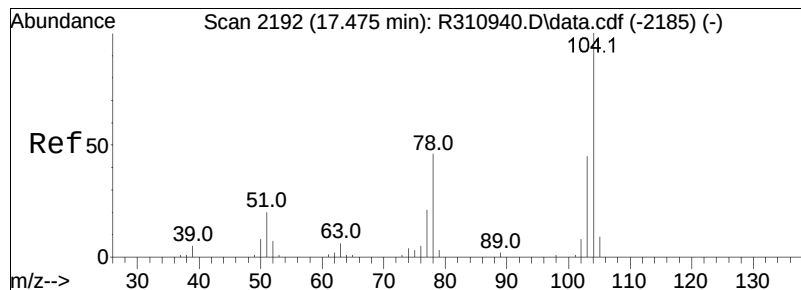




#83
 m+p-xylene
 Concen: 40.95 ppbV
 RT: 17.117 min Scan# 2149
 Delta R.T. 0.017 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

Tgt Ion: 91 Resp: 2788185
 Ion Ratio Lower Upper
 91 100
 106 54.4 47.6 71.4





#85

styrene

Concen: 0.17 ppbV

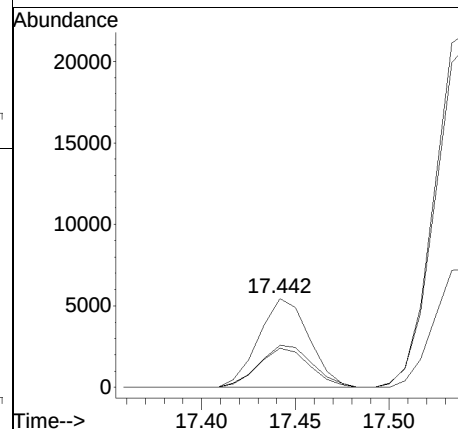
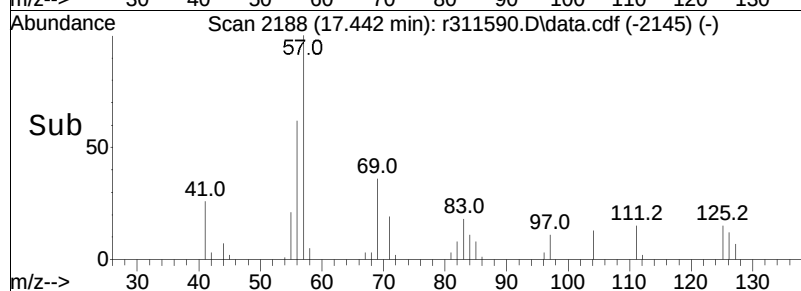
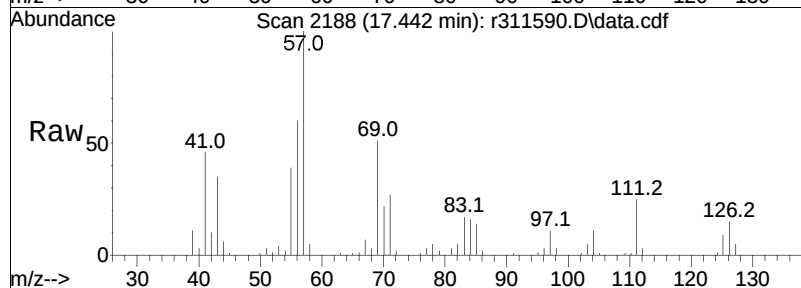
RT: 17.442 min Scan# 2188

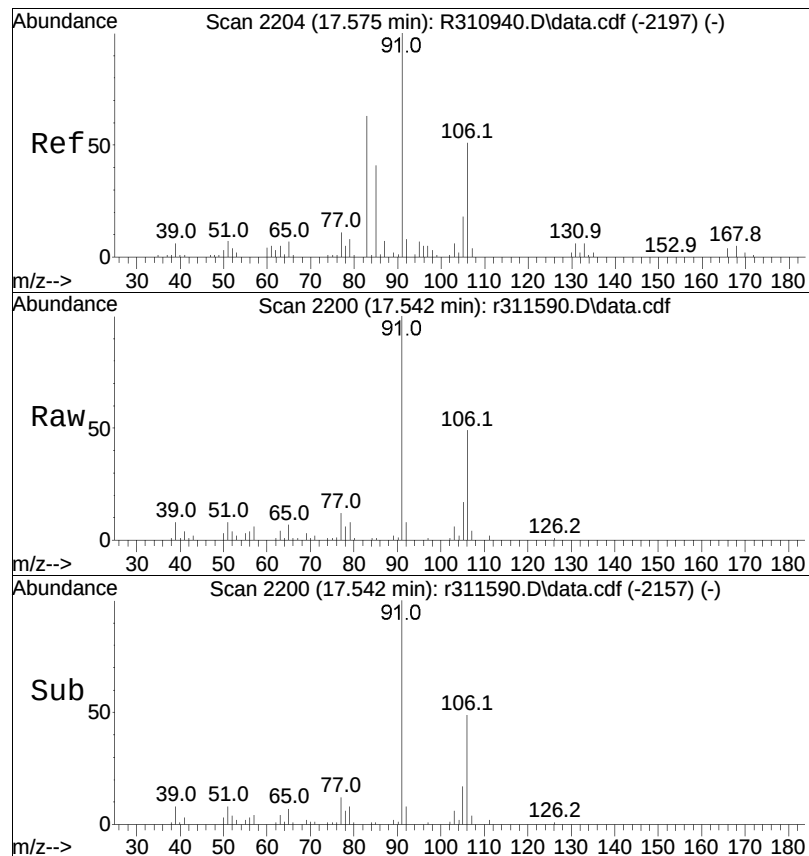
Delta R.T. 0.025 min

Lab File: r311590.D

Acq: 18 Sep 2020 3:02 AM

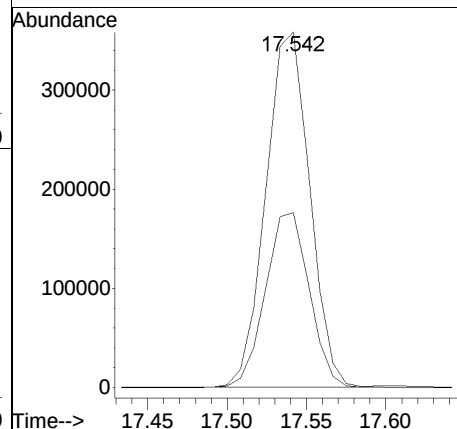
Tgt	Ion:104	Resp:	10190
Ion	Ratio	Lower	Upper
104	100		
103	44.1	34.2	51.4
78	47.4	37.5	56.3

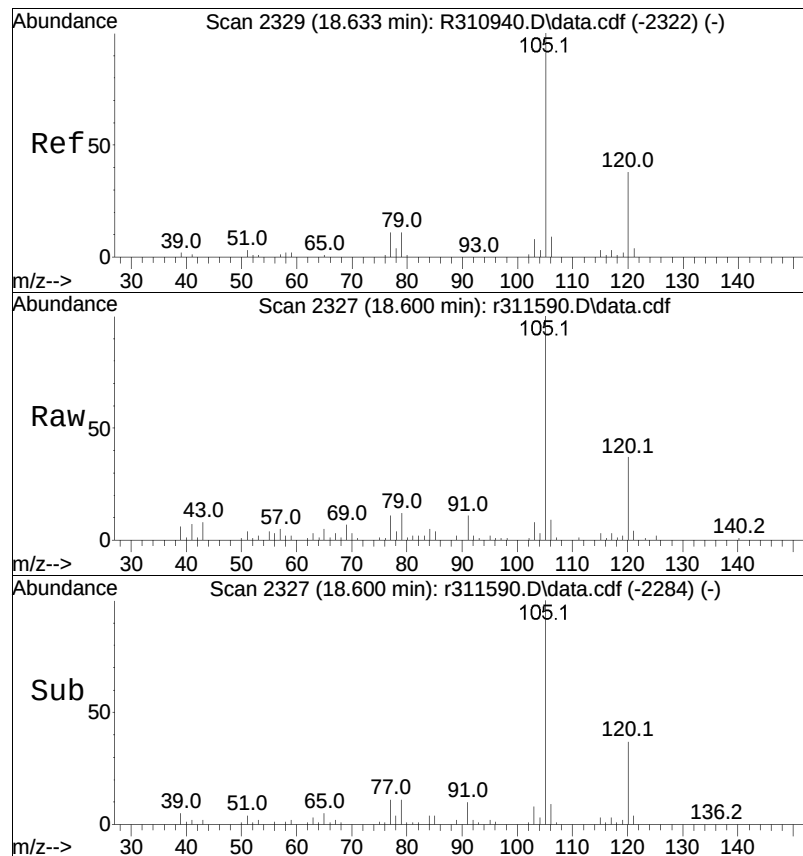




#87
 o-xylene
 Concen: 10.21 ppbV
 RT: 17.542 min Scan# 2200
 Delta R.T. 0.025 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

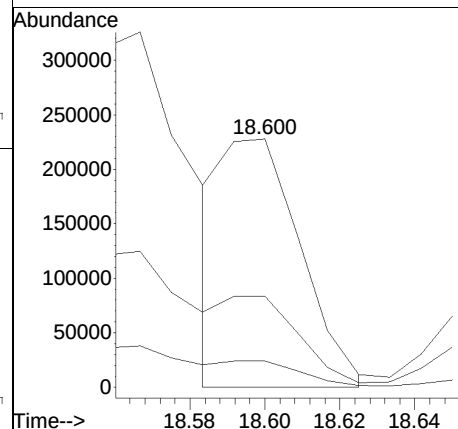
Tgt Ion	Ratio	Lower	Upper
91	100		
106	49.2	45.4	68.0

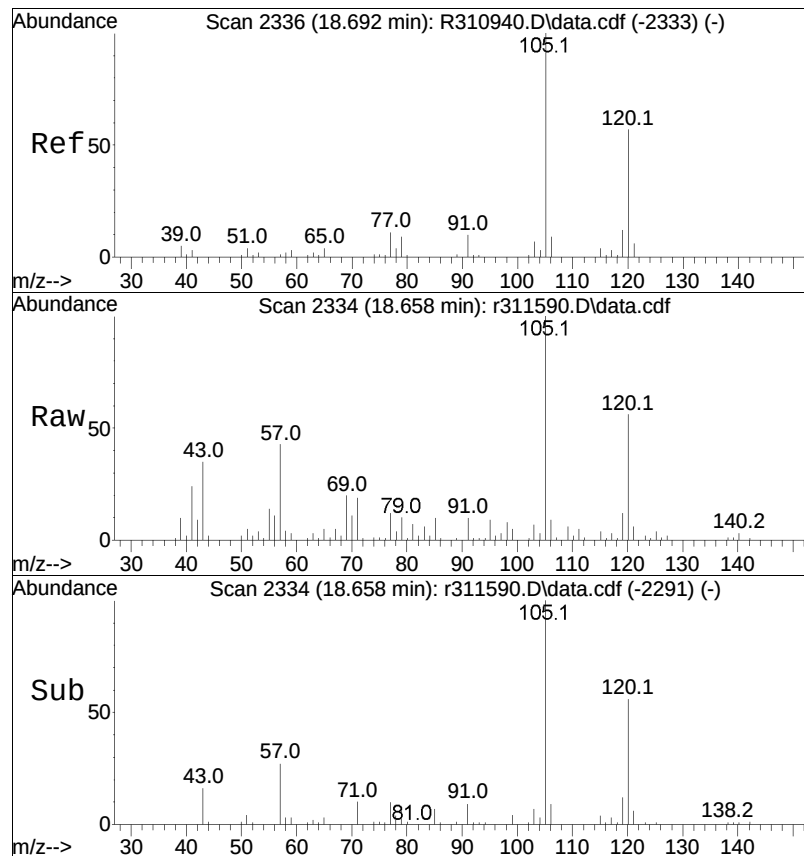




#96
 4-ethyl toluene
 Concen: 4.05 ppbV m
 RT: 18.600 min Scan# 2327
 Delta R.T. 0.025 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

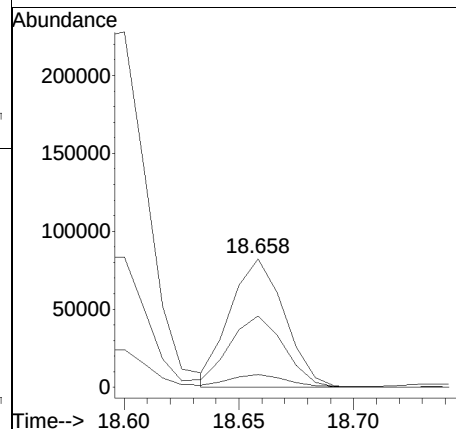
Tgt Ion:	105	Resp:	330069
Ion Ratio	Lower	Upper	
105	100		
120	36.7	28.2	42.2
91	10.6	7.4	11.2

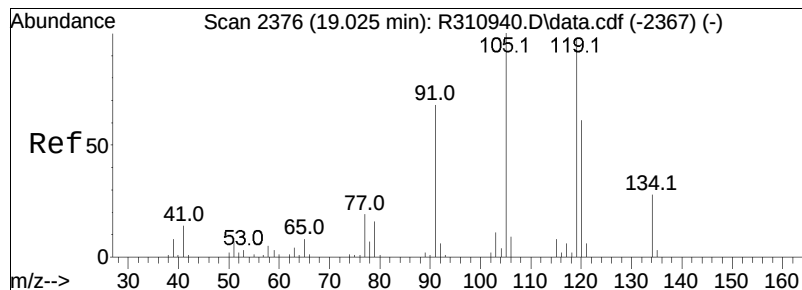




#97
 1,3,5-trimethylbenzene
 Concen: 1.58 ppbV
 RT: 18.658 min Scan# 2334
 Delta R.T. 0.025 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

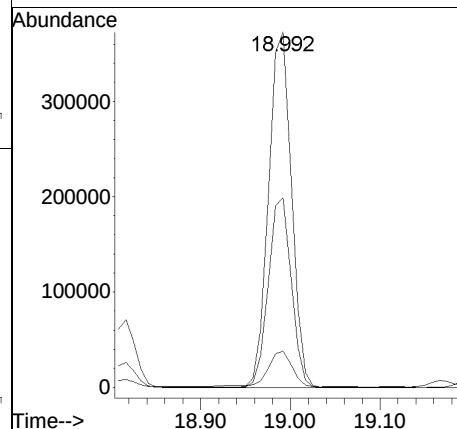
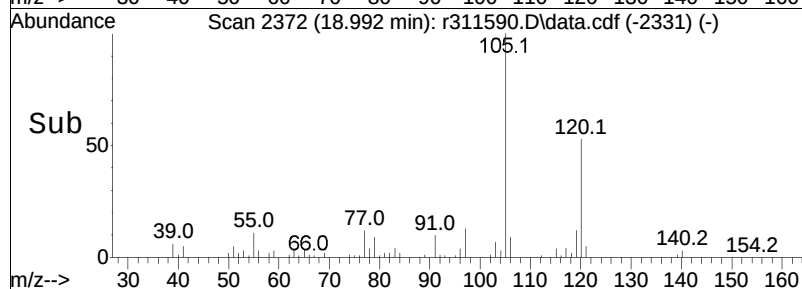
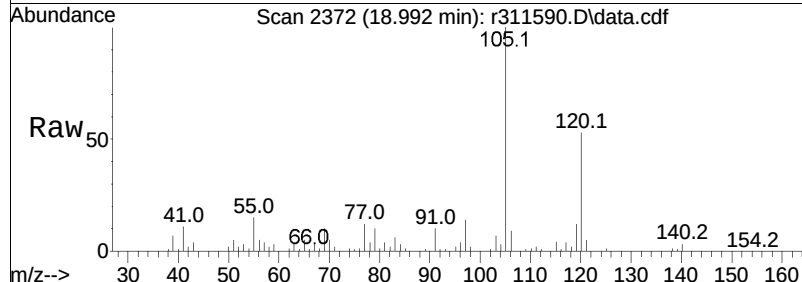
Tgt Ion:	105	Resp:	135424
Ion Ratio	Lower	Upper	
105	100		
120	55.7	44.2	66.2
91	10.0	7.0	10.6





#99
 1,2,4-trimethylbenzene
 Concen: 8.13 ppbV
 RT: 18.992 min Scan# 2372
 Delta R.T. 0.025 min
 Lab File: r311590.D
 Acq: 18 Sep 2020 3:02 AM

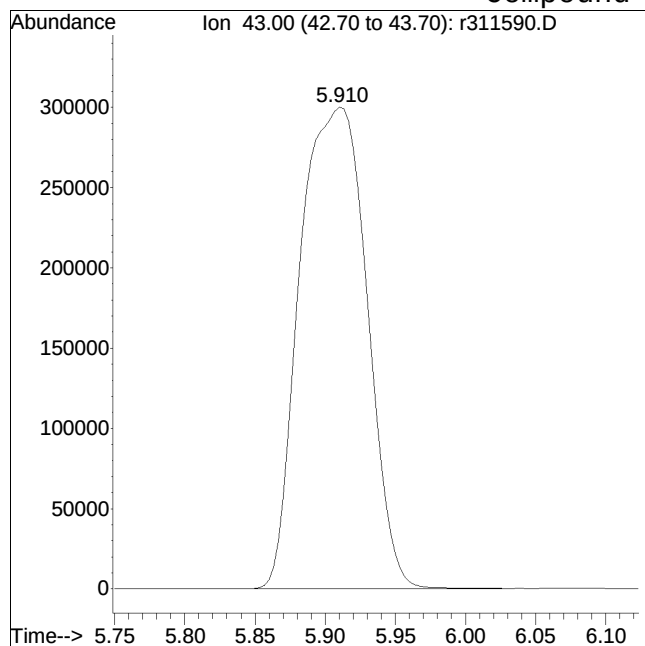
Tgt Ion	Ratio	Lower	Upper
105	100		
120	53.3	49.4	74.0
91	10.2	54.6	81.8#



Manual Integration Report

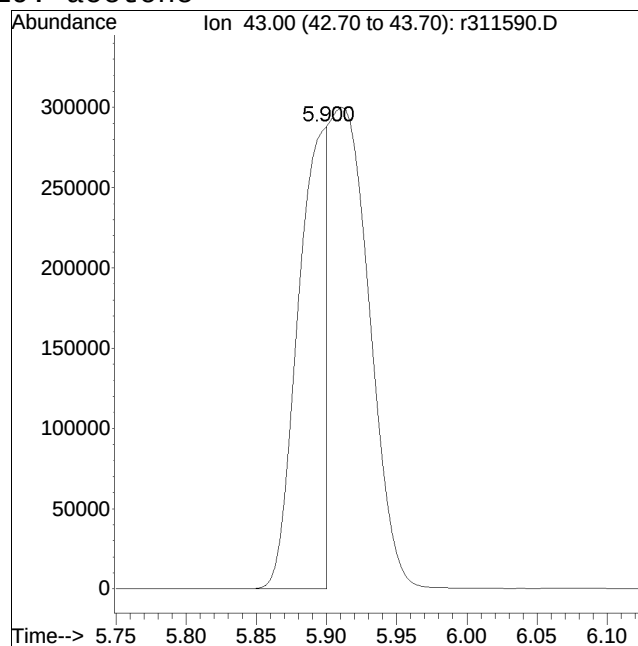
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311590.D Operator : AIRPIAN03:TS
Date Inj'd : 9/18/2020 0:3: 2 Instrument :
Sample : L2037872-02,3,250,250 Quant Date : 9/18/2020 5:29 am

Compound #19: acetone



Original Peak Response = 998619

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



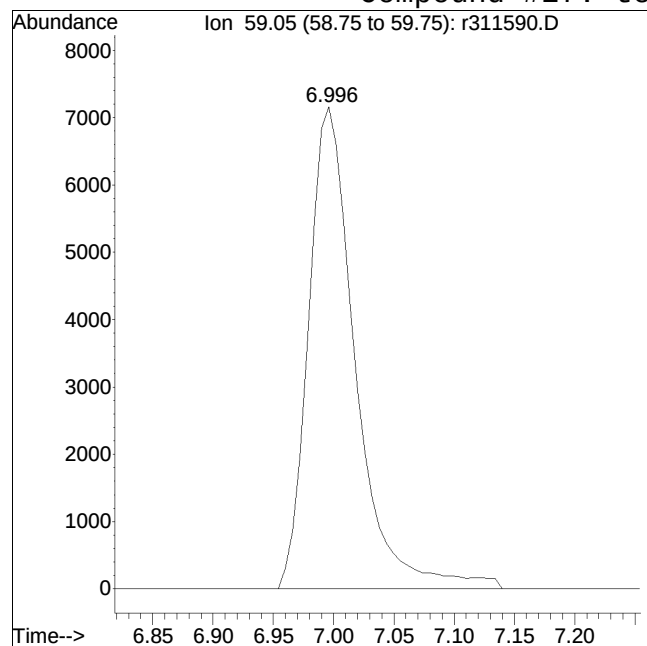
Manual Peak Response = 421749 M6

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

Manual Integration Report

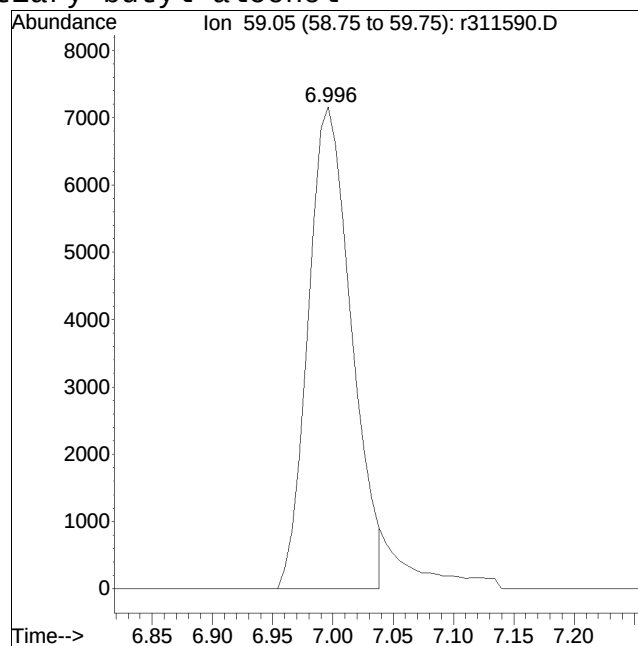
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311590.D Operator : AIRPIAN03:TS
Date Inj'd : 9/18/2020 0:3: 2 Instrument :
Sample : L2037872-02,3,250,250 Quant Date : 9/18/2020 5:29 am

Compound #27: tertiary butyl alcohol



Original Peak Response = 19419

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

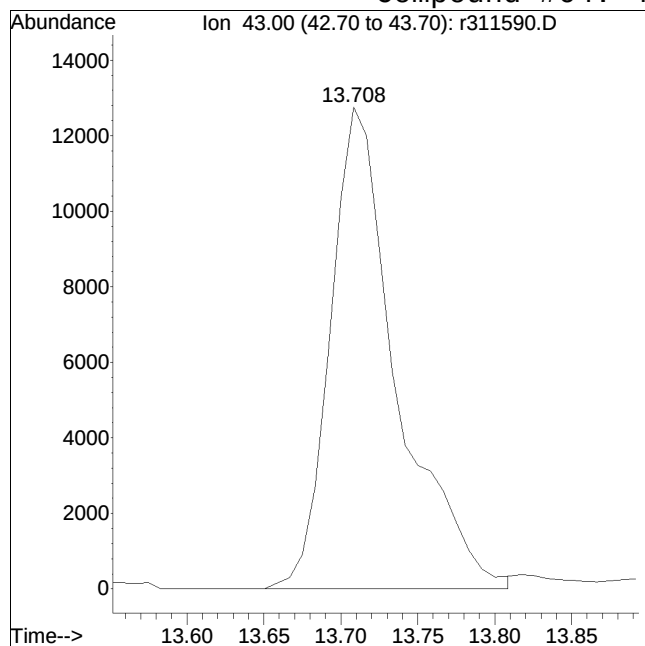


Manual Peak Response = 17870 M6

Manual Integration Report

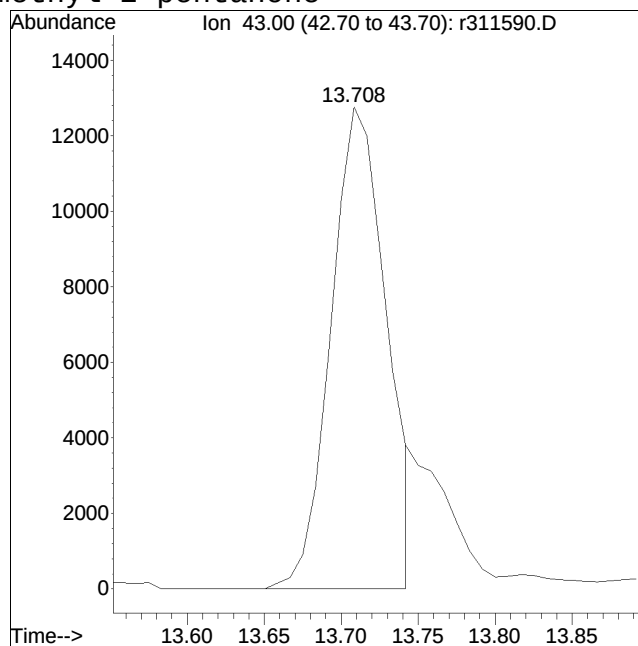
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311590.D Operator : AIRPIAN03:TS
Date Inj'd : 9/18/2020 0:3: 2 Instrument :
Sample : L2037872-02,3,250,250 Quant Date : 9/18/2020 5:29 am

Compound #64: 4-methyl-2-pentanone



Original Peak Response = 38430

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

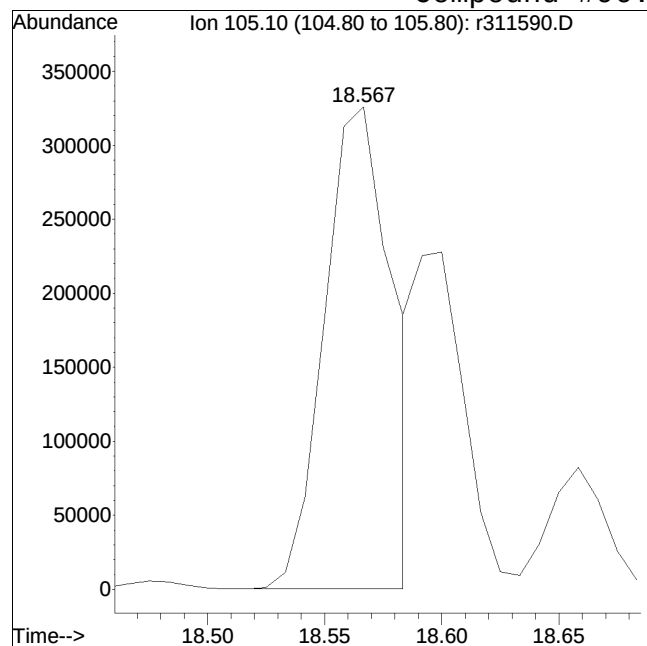


Manual Peak Response = 31961 M6

Manual Integration Report

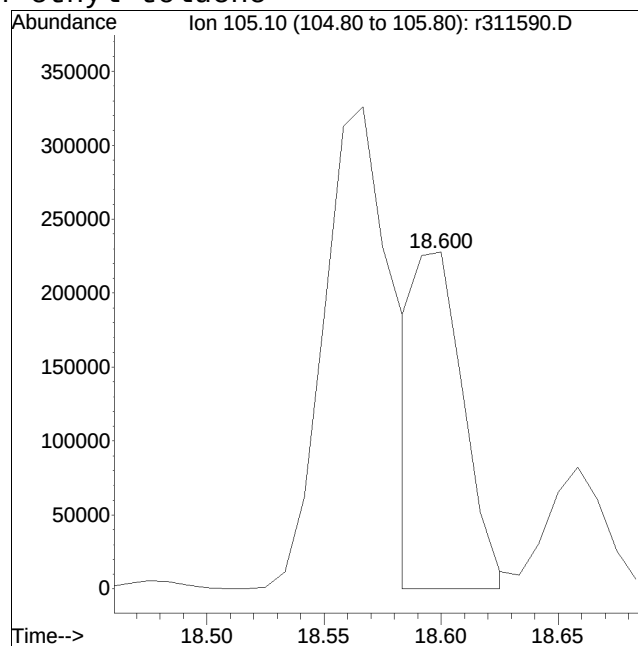
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311590.D Operator : AIRPIAN03:TS
Date Inj'd : 9/18/2020 0:3: 2 Instrument :
Sample : L2037872-02,3,250,250 Quant Date : 9/18/2020 5:29 am

Compound #96: 4-ethyl toluene



Original Peak Response = 656131

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



Manual Peak Response = 330069 M6

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : 160 EAST 125TH STREET
Instrument ID : AIRPIANO3
Calibration dates : 09/11/20 23:01 09/12/20 03:42
Lab Number : L2037872
Project Number : 100433203
Ical Ref : ICAL17116

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
 50 =r311456.D 100 =r311457.D

Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1) I bromochloromethane	-----ISTD-----									
2) chlorodifluoromethane	0.958	0.916	0.909	0.792	0.766	0.769	0.693	0.614	0.8020	14.79
3) propylene		0.532	0.517	0.441	0.423	0.425	0.382	0.352	0.4388	15.05
4) propane		0.763	0.751	0.651	0.635	0.643	0.588	0.526	0.6511	12.92
5) dichlorodifluoromethane	1.135	1.137	1.100	0.955	0.911	0.893	0.762	0.632	0.9407	19.38
6) C chloromethane	0.593	0.549	0.535	0.466	0.447	0.449	0.404	0.359	0.4754	16.54
7) Freon-114	1.512	1.500	1.481	1.255	1.187	1.160	0.940	0.715	1.2189	23.44
8) C methanol			0.287	0.250	0.239	0.229	0.205	0.180	0.2318	15.98
9) C vinyl chloride	0.640	0.628	0.619	0.543	0.521	0.527	0.481	0.432	0.5488	13.60
10) C 1,3-butadiene	0.595	0.590	0.583	0.512	0.496	0.496	0.446	0.392	0.5136	14.21
11) butane	0.982	0.918	0.895	0.778	0.750	0.746	0.680	0.610	0.7949	15.94
13) C bromomethane	0.557	0.531	0.518	0.453	0.437	0.436	0.392	0.342	0.4581	15.99
14) C chloroethane	0.316	0.319	0.315	0.274	0.268	0.269	0.249	0.235	0.2807	11.56
15) ethanol			0.536	0.525	0.491	0.476	0.403	0.339	0.4617	16.54
16) dichlorofluoromethane	1.223	1.176	1.146	0.990	0.970	0.922	0.829	0.708	0.9954	17.93
17) C vinyl bromide	0.547	0.541	0.537	0.468	0.454	0.450	0.406	0.354	0.4695	14.76
18) C acrolein		0.322	0.310	0.265	0.257	0.258	0.238	0.220	0.2671	13.82
19) acetone	0.910	0.857	0.842	0.728	0.692	0.668	0.572	0.470	0.7174	20.90
20) C acetonitrile	0.543	0.511	0.501	0.439	0.429	0.428	0.392	0.360	0.4503	13.89
21) trichlorofluoromethane	0.826	0.798	0.805	0.699	0.671	0.660	0.585	0.506	0.6937	16.31
22) isopropyl alcohol	1.305	1.129	1.088	0.931	0.896	0.884	0.785	0.685	0.9630	20.80
23) C acrylonitrile	0.565	0.545	0.539	0.472	0.460	0.460	0.422	0.388	0.4813	13.04
24) pentane	1.083	1.036	0.998	0.886	0.857	0.860	0.789	0.927	0.9294	10.89
25) ethyl ether	1.228	1.330	1.179	1.110	1.093	1.203	1.083	0.921	1.1433	10.64
26) C 1,1-dichloroethene	0.843	0.809	0.805	0.702	0.686	0.698	0.651	0.604	0.7246	11.67
27) tertiary butyl alcohol		1.010	1.048	1.008	1.000	1.015	0.970	0.915	0.9952	4.26
28) C methylene chloride		0.830	0.811	0.700	0.680	0.685	0.625	0.567	0.6999	13.47
29) C 3-chloropropene	0.942	0.889	0.896	0.780	0.758	0.763	0.713	0.668	0.8010	12.11
30) C carbon disulfide	2.273	2.183	2.175	1.888	1.830	1.816	1.627	1.425	1.9021	15.49
31) Freon 113	1.069	1.007	1.012	0.888	0.872	0.890	0.843	0.782	0.9201	10.67
32) trans-1,2-dichloroethene	0.863	0.856	0.848	0.744	0.730	0.746	0.701	0.659	0.7682	10.09
33) C 1,1-dichloroethane	1.034	1.002	1.000	0.864	0.853	0.864	0.817	0.771	0.9007	10.81
34) C MTBE	1.770	1.751	1.757	1.545	1.500	1.492	1.361	1.212	1.5485	13.09
35) C vinyl acetate			1.394	1.259	1.256	1.277	1.194	1.100	1.2467	7.80
36) C 2-butanone		1.424	1.408	1.237	1.196	1.189	1.091	0.994	1.2198	12.82
37) cis-1,2-dichloroethene	0.756	0.745	0.740	0.646	0.638	0.653	0.615	0.578	0.6712	9.94



Initial Calibration Summary

Form 6

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : 160 EAST 125TH STREET
Instrument ID : AIRPIANO3
Calibration dates : 09/11/20 23:01 09/12/20 03:42
Lab Number : L2037872
Project Number : 100433203
Ical Ref : ICAL17116

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
 50 =r311456.D 100 =r311457.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
38)	Ethyl Acetate		0.229	0.241	0.200	0.191	0.200	0.195	0.188	0.2065	9.91
39) C	chloroform	1.173	1.147	1.123	0.993	0.976	0.987	0.889	0.750	1.0049	14.20
40)	Tetrahydrofuran	0.902	0.861	0.859	0.759	0.738	0.739	0.685	0.635	0.7725	12.11
41)	2,2-dichloropropane	0.823	0.813	0.821	0.766	0.772	0.781	0.700	0.585	0.7574	10.63
42) C	1,2-dichloroethane	0.596	0.597	0.585	0.510	0.493	0.496	0.453	0.403	0.5165	13.77
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.485	0.459	0.456	0.407	0.405	0.416	0.384	0.337	0.4186	11.28
45)	diisopropyl ether	0.298	0.297	0.265	0.229	0.227	0.236	0.225	0.205	0.2478	13.98
46)	tert-butyl ethyl ether	0.729	0.706	0.717	0.648	0.639	0.656	0.618	0.586	0.6625	7.63
47) s	1,2-dichloroethane-D4	0.234	0.234	0.233	0.235	0.230	0.230	0.223	0.217	0.2296	2.70
48) C	1,1,1-trichloroethane	0.322	0.319	0.314	0.279	0.274	0.278	0.259	0.244	0.2862	10.16
49)	1,1-dichloropropene	0.396	0.382	0.380	0.334	0.327	0.326	0.298	0.275	0.3398	12.61
50) C	benzene	0.991	0.960	0.930	0.822	0.802	0.807	0.736	0.669	0.8395	13.39
52) C	carbon tetrachloride	0.297	0.294	0.292	0.263	0.263	0.267	0.245	0.218	0.2674	10.20
53)	cyclohexane	0.499	0.482	0.477	0.422	0.419	0.432	0.415	0.397	0.4428	8.50
54)	tert-amyl methyl ether	0.775	0.765	0.765	0.682	0.666	0.671	0.610	0.559	0.6867	11.41
55)	dibromomethane	0.234	0.222	0.216	0.190	0.187	0.193	0.185	0.173	0.2002	10.67
56) C	1,2-dichloropropane	0.278	0.270	0.264	0.233	0.229	0.236	0.230	0.225	0.2455	8.69
57)	bromodichloromethane	0.471	0.472	0.475	0.423	0.418	0.425	0.392	0.350	0.4282	10.29
58) C	1,4-dioxane	0.216	0.196	0.203	0.184	0.183	0.192	0.189	0.173	0.1919	6.90
59) C	trichloroethene	0.339	0.331	0.328	0.289	0.286	0.298	0.284	0.262	0.3021	9.00
60) C	2,2,4-trimethylpentane	1.540	1.485	1.461	1.301	1.285	1.283	1.213	1.088	1.3318	11.43
61)	methyl methacrylate		0.420	0.423	0.384	0.378	0.385	0.367	0.342	0.3855	7.37
62)	heptane	0.603	0.584	0.573	0.508	0.491	0.492	0.456	0.419	0.5158	12.63
63) C	cis-1,3-dichloropropene	0.453	0.442	0.440	0.391	0.388	0.395	0.367	0.334	0.4011	10.26
64) C	4-methyl-2-pentanone		0.682	0.662	0.597	0.580	0.576	0.538	0.492	0.5897	11.21
65)	trans-1,3-dichloropropene	0.392	0.369	0.392	0.356	0.358	0.370	0.342	0.309	0.3609	7.51
66) C	1,1,2-trichloroethane	0.290	0.279	0.276	0.243	0.240	0.247	0.240	0.236	0.2563	8.37
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	6.005	5.633	5.612	4.884	4.842	4.905	4.689	4.284	5.1068	11.35
69) s	toluene-D8	6.264	6.042	5.990	5.983	5.954	5.834	5.915	6.101	6.0104	2.16
71)	1,3-dichloropropane	3.175	3.066	3.021	2.684	2.621	2.602	2.366	2.087	2.7027	13.74
72)	2-hexanone	3.873	3.736	3.730	3.425	3.333	3.354	3.070	2.777	3.4124	10.79
74)	dibromochloromethane	2.377	2.290	2.372	2.125	2.151	2.191	2.071	1.821	2.1747	8.37
75) C	1,2-dibromoethane	2.619	2.555	2.620	2.294	2.265	2.255	2.112	1.974	2.3367	10.28
76)	butyl acetate		0.794	0.840	0.786	0.788	0.807	0.761	0.706	0.7831	5.32

Initial Calibration Summary

Form 6

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : 160 EAST 125TH STREET
Instrument ID : AIRPIANO3
Calibration dates : 09/11/20 23:01 09/12/20 03:42
Lab Number : L2037872
Project Number : 100433203
Ical Ref : ICAL17116

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
 50 =r311456.D 100 =r311457.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
77)	octane	2.364	2.304	2.383	2.082	2.097	2.169	2.097	1.903	2.1749	7.58
78) C	tetrachloroethene	2.308	2.242	2.300	1.974	1.980	2.045	1.938	1.661	2.0560	10.73
79)	1,1,1,2-tetrachloroethane	1.700	1.650	1.670	1.552	1.567	1.606	1.522	1.261	1.5662	8.79
80) C	chlorobenzene	4.568	4.391	4.302	3.878	3.876	3.926	3.602	3.107	3.9562	11.87
81) C	ethylbenzene	6.513	6.357	6.252	5.704	5.641	5.784	5.623	5.079	5.8691	8.07
83) C	m+p-xylene	5.317	5.301	5.174	4.715	4.703	4.835	4.600	3.790	4.8042	10.36
84) C	bromoform	1.678	1.705	1.720	1.767	1.873	1.967	1.911	1.616	1.7797	6.96
85) C	styrene	4.521	4.521	4.516	4.156	4.113	4.159	3.971	3.717	4.2092	6.97
86) C	1,1,2,2-tetrachloroethane	4.067	4.017	4.027	3.751	3.840	3.905	3.295	2.513	3.6768	14.45
87) C	o-xylene	5.315	5.295	5.184	4.775	4.770	4.919	4.398	3.357	4.7517	13.54
88)	1,2,3-trichloropropane	3.365	3.303	3.292	2.984	2.981	2.979	2.708	2.426	3.0046	10.72
89)	nonane	5.056	5.028	4.905	4.412	4.270	4.193	3.716	3.262	4.3554	14.75
90) s	bromofluorobenzene	3.803	3.763	3.702	3.799	3.668	3.737	3.874	4.095	3.8052	3.51
91) C	isopropylbenzene	7.622	7.371	7.146	6.521	6.365	6.327	5.733	5.000	6.5107	13.39
92)	bromobenzene	4.394	4.289	4.220	3.891	3.917	3.934	3.573	3.034	3.9066	11.26
93)	2-chlorotoluene	2.052	1.967	1.956	1.808	1.828	1.881	1.842	1.711	1.8806	5.70
94)	n-propylbenzene	2.287	2.309	2.256	2.120	2.133	2.215	2.140	1.915	2.1719	5.83
95)	4-chlorotoluene	1.876	1.908	1.865	1.715	1.720	1.786	1.822	1.940	1.8291	4.57
96)	4-ethyl toluene	6.782	6.306	6.427	6.082	6.155	5.980	4.673	3.613	5.7521	18.45
97)	1,3,5-trimethylbenzene	6.916	6.788	6.603	6.072	6.043	5.912	5.367	4.552	6.0315	13.04
98)	tert-butylbenzene	6.800	6.694	6.517	6.121	6.084	5.921	4.748	3.516	5.8001	19.37
99)	1,2,4-trimethylbenzene	6.777	6.654	6.578	6.089	5.947	5.855	4.736	3.452	5.7608	19.72
100)	decane	5.157	5.172	5.083	4.727	4.748	4.873	4.432	3.577	4.7211	11.15
101) C	Benzyl Chloride	1.982	2.261	2.588	3.692	4.270	4.629	4.558	3.644	3.4530	30.37#
102)	1,3-dichlorobenzene	4.125	4.114	4.168	3.882	3.774	3.971	3.546	2.674	3.7817	13.05
103) C	1,4-dichlorobenzene	3.678	3.783	3.790	3.583	3.722	3.646	3.527	2.865	3.5742	8.42
104)	sec-butylbenzene	9.686	9.540	9.350	8.579	8.383	8.293	7.399	5.935	8.3955	14.92
106)	p-isopropyltoluene	8.161	8.023	7.908	7.463	7.506	7.123	5.499	3.941	6.9530	21.26
107)	1,2-dichlorobenzene	3.679	3.748	3.884	3.557	3.570	3.570	3.375	2.899	3.5353	8.42
108)	n-butylbenzene	6.416	6.444	6.385	6.089	6.190	6.254	5.882	4.794	6.0568	8.97
111) C	1,2-dibromo-3-chloropropane	1.502	1.528	1.610	1.670	1.692	1.664	1.481	1.236	1.5481	9.68
112)	undecane	5.550	5.592	5.571	5.443	5.494	5.458	4.751	3.760	5.2022	12.37
114)	dodecane	5.365	5.655	5.715	5.877	6.039	5.520	4.810	3.828	5.3512	13.43
115) C	1,2,4-trichlorobenzene	1.926	2.091	2.235	2.424	2.607	2.641	2.741	2.313	2.3723	11.99
116)	naphthalene	6.380	6.450	6.791	7.128	7.556	7.262	7.269	6.348	6.8981	6.79
117)	1,2,3-trichlorobenzene	2.156	2.197	2.324	2.437	2.601	2.538	2.642	2.270	2.3958	7.77

Initial Calibration Summary
Form 6
Air Volatiles

Client	: Langan Engineering & Environmental	Lab Number	: L2037872
Project Name	: 160 EAST 125TH STREET	Project Number	: 100433203
Instrument ID	: AIRPIANO3	Ical Ref	: ICAL17116
Calibration dates	: 09/11/20 23:01 09/12/20 03:42		

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
50 =r311456.D 100 =r311457.D

Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
119) C hexachlorobutadiene	2.858	2.925	2.875	2.768	2.781	2.575	2.243	1.691	2.5896	16.40

Response Factor Report

Method Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Method File : TFS3_200911.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Tue Sep 15 10:50:28 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
 50 =r311456.D 100 =r311457.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
-----ISTD-----											
1) I	bromochloromethane										
2)	chlorodifluoromethane	0.958	0.916	0.909	0.792	0.766	0.769	0.693	0.614	0.8020	14.79
3)	propylene		0.532	0.517	0.441	0.423	0.425	0.382	0.352	0.4388	15.05
4)	propane		0.763	0.751	0.651	0.635	0.643	0.588	0.526	0.6511	12.92
5)	dichlorodifluoromethane	1.135	1.137	1.100	0.955	0.911	0.893	0.762	0.632	0.9407	19.38
6) C	chloromethane	0.593	0.549	0.535	0.466	0.447	0.449	0.404	0.359	0.4754	16.54
7)	Freon-114	1.512	1.500	1.481	1.255	1.187	1.160	0.940	0.715	1.2189	23.44
8) C	methanol			0.287	0.250	0.239	0.229	0.205	0.180	0.2318	15.98
9) C	vinyl chloride	0.640	0.628	0.619	0.543	0.521	0.527	0.481	0.432	0.5488	13.60
10) C	1,3-butadiene	0.595	0.590	0.583	0.512	0.496	0.496	0.446	0.392	0.5136	14.21
11)	butane	0.982	0.918	0.895	0.778	0.750	0.746	0.680	0.610	0.7949	15.94
13) C	bromomethane	0.557	0.531	0.518	0.453	0.437	0.436	0.392	0.342	0.4581	15.99
14) C	chloroethane	0.316	0.319	0.315	0.274	0.268	0.269	0.249	0.235	0.2807	11.56
15)	ethanol			0.536	0.525	0.491	0.476	0.403	0.339	0.4617	16.54
16)	dichlorofluoromethane	1.223	1.176	1.146	0.990	0.970	0.922	0.829	0.708	0.9954	17.93
17) C	vinyl bromide	0.547	0.541	0.537	0.468	0.454	0.450	0.406	0.354	0.4695	14.76
18) C	acrolein		0.322	0.310	0.265	0.257	0.258	0.238	0.220	0.2671	13.82
19)	acetone	0.910	0.857	0.842	0.728	0.692	0.668	0.572	0.470	0.7174	20.90
20) C	acetonitrile	0.543	0.511	0.501	0.439	0.429	0.428	0.392	0.360	0.4503	13.89
21)	trichlorofluoromethane	0.826	0.798	0.805	0.699	0.671	0.660	0.585	0.506	0.6937	16.31
22)	isopropyl alcohol	1.305	1.129	1.088	0.931	0.896	0.884	0.785	0.685	0.9630	20.80
23) C	acrylonitrile	0.565	0.545	0.539	0.472	0.460	0.460	0.422	0.388	0.4813	13.04
24)	pentane	1.083	1.036	0.998	0.886	0.857	0.860	0.789	0.927	0.9294	10.89
25)	ethyl ether	1.228	1.330	1.179	1.110	1.093	1.203	1.083	0.921	1.1433	10.64
26) C	1,1-dichloroethene	0.843	0.809	0.805	0.702	0.686	0.698	0.651	0.604	0.7246	11.67
27)	tertiary butyl alcohol		1.010	1.048	1.008	1.000	1.015	0.970	0.915	0.9952	4.26
28) C	methylene chloride		0.830	0.811	0.700	0.680	0.685	0.625	0.567	0.6999	13.47
29) C	3-chloropropene	0.942	0.889	0.896	0.780	0.758	0.763	0.713	0.668	0.8010	12.11
30) C	carbon disulfide	2.273	2.183	2.175	1.888	1.830	1.816	1.627	1.425	1.9021	15.49
31)	Freon 113	1.069	1.007	1.012	0.888	0.872	0.890	0.843	0.782	0.9201	10.67
32)	trans-1,2-dichloroethene	0.863	0.856	0.848	0.744	0.730	0.746	0.701	0.659	0.7682	10.09

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Method File : TFS3_200911.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Tue Sep 15 10:50:28 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
50 =r311456.D 100 =r311457.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
33) C	1,1-dichloroethane	1.034	1.002	1.000	0.864	0.853	0.864	0.817	0.771	0.9007	10.81
34) C	MTBE	1.770	1.751	1.757	1.545	1.500	1.492	1.361	1.212	1.5485	13.09
35) C	vinyl acetate			1.394	1.259	1.256	1.277	1.194	1.100	1.2467	7.80
36) C	2-butanone		1.424	1.408	1.237	1.196	1.189	1.091	0.994	1.2198	12.82
37)	cis-1,2-dichloroethene	0.756	0.745	0.740	0.646	0.638	0.653	0.615	0.578	0.6712	9.94
38)	Ethyl Acetate		0.229	0.241	0.200	0.191	0.200	0.195	0.188	0.2065	9.91
39) C	chloroform	1.173	1.147	1.123	0.993	0.976	0.987	0.889	0.750	1.0049	14.20
40)	Tetrahydrofuran	0.902	0.861	0.859	0.759	0.738	0.739	0.685	0.635	0.7725	12.11
41)	2,2-dichloropropane	0.823	0.813	0.821	0.766	0.772	0.781	0.700	0.585	0.7574	10.63
42) C	1,2-dichloroethane	0.596	0.597	0.585	0.510	0.493	0.496	0.453	0.403	0.5165	13.77
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.485	0.459	0.456	0.407	0.405	0.416	0.384	0.337	0.4186	11.28
45)	diisopropyl ether	0.298	0.297	0.265	0.229	0.227	0.236	0.225	0.205	0.2478	13.98
46)	tert-butyl ethyl ether	0.729	0.706	0.717	0.648	0.639	0.656	0.618	0.586	0.6625	7.63
47) s	1,2-dichloroethane-D4	0.234	0.234	0.233	0.235	0.230	0.230	0.223	0.217	0.2296	2.70
48) C	1,1,1-trichloroethane	0.322	0.319	0.314	0.279	0.274	0.278	0.259	0.244	0.2862	10.16
49)	1,1-dichloropropene	0.396	0.382	0.380	0.334	0.327	0.326	0.298	0.275	0.3398	12.61
50) C	benzene	0.991	0.960	0.930	0.822	0.802	0.807	0.736	0.669	0.8395	13.39
52) C	carbon tetrachloride	0.297	0.294	0.292	0.263	0.263	0.267	0.245	0.218	0.2674	10.20
53)	cyclohexane	0.499	0.482	0.477	0.422	0.419	0.432	0.415	0.397	0.4428	8.50
54)	tert-amyl methyl ether	0.775	0.765	0.765	0.682	0.666	0.671	0.610	0.559	0.6867	11.41
55)	dibromomethane	0.234	0.222	0.216	0.190	0.187	0.193	0.185	0.173	0.2002	10.67
56) C	1,2-dichloropropane	0.278	0.270	0.264	0.233	0.229	0.236	0.230	0.225	0.2455	8.69
57)	bromodichloromethane	0.471	0.472	0.475	0.423	0.418	0.425	0.392	0.350	0.4282	10.29
58) C	1,4-dioxane	0.216	0.196	0.203	0.184	0.183	0.192	0.189	0.173	0.1919	6.90
59) C	trichloroethene	0.339	0.331	0.328	0.289	0.286	0.298	0.284	0.262	0.3021	9.00
60) C	2,2,4-trimethylpentane	1.540	1.485	1.461	1.301	1.285	1.283	1.213	1.088	1.3318	11.43
61)	methyl methacrylate		0.420	0.423	0.384	0.378	0.385	0.367	0.342	0.3855	7.37
62)	heptane	0.603	0.584	0.573	0.508	0.491	0.492	0.456	0.419	0.5158	12.63
63) C	cis-1,3-dichloropropene	0.453	0.442	0.440	0.391	0.388	0.395	0.367	0.334	0.4011	10.26
64) C	4-methyl-2-pentanone		0.682	0.662	0.597	0.580	0.576	0.538	0.492	0.5897	11.21

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Method File : TFS3_200911.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Tue Sep 15 10:50:28 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
50 =r311456.D 100 =r311457.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
65)	trans-1,3-dichloropropene	0.392	0.369	0.392	0.356	0.358	0.370	0.342	0.309	0.3609	7.51
66) C	1,1,2-trichloroethane	0.290	0.279	0.276	0.243	0.240	0.247	0.240	0.236	0.2563	8.37
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	6.005	5.633	5.612	4.884	4.842	4.905	4.689	4.284	5.1068	11.35
69) s	toluene-D8	6.264	6.042	5.990	5.983	5.954	5.834	5.915	6.101	6.0104	2.16
71)	1,3-dichloropropane	3.175	3.066	3.021	2.684	2.621	2.602	2.366	2.087	2.7027	13.74
72)	2-hexanone	3.873	3.736	3.730	3.425	3.333	3.354	3.070	2.777	3.4124	10.79
74)	dibromochloromethane	2.377	2.290	2.372	2.125	2.151	2.191	2.071	1.821	2.1747	8.37
75) C	1,2-dibromoethane	2.619	2.555	2.620	2.294	2.265	2.255	2.112	1.974	2.3367	10.28
76)	butyl acetate		0.794	0.840	0.786	0.788	0.807	0.761	0.706	0.7831	5.32
77)	octane	2.364	2.304	2.383	2.082	2.097	2.169	2.097	1.903	2.1749	7.58
78) C	tetrachloroethene	2.308	2.242	2.300	1.974	1.980	2.045	1.938	1.661	2.0560	10.73
79)	1,1,1,2-tetrachloroethane	1.700	1.650	1.670	1.552	1.567	1.606	1.522	1.261	1.5662	8.79
80) C	chlorobenzene	4.568	4.391	4.302	3.878	3.876	3.926	3.602	3.107	3.9562	11.87
81) C	ethylbenzene	6.513	6.357	6.252	5.704	5.641	5.784	5.623	5.079	5.8691	8.07
83) C	m+p-xylene	5.317	5.301	5.174	4.715	4.703	4.835	4.600	3.790	4.8042	10.36
84) C	bromoform	1.678	1.705	1.720	1.767	1.873	1.967	1.911	1.616	1.7797	6.96
85) C	styrene	4.521	4.521	4.516	4.156	4.113	4.159	3.971	3.717	4.2092	6.97
86) C	1,1,2,2-tetrachloroethane	4.067	4.017	4.027	3.751	3.840	3.905	3.295	2.513	3.6768	14.45
87) C	o-xylene	5.315	5.295	5.184	4.775	4.770	4.919	4.398	3.357	4.7517	13.54
88)	1,2,3-trichloropropane	3.365	3.303	3.292	2.984	2.981	2.979	2.708	2.426	3.0046	10.72
89)	nonane	5.056	5.028	4.905	4.412	4.270	4.193	3.716	3.262	4.3554	14.75
90) s	bromofluorobenzene	3.803	3.763	3.702	3.799	3.668	3.737	3.874	4.095	3.8052	3.51
91) C	isopropylbenzene	7.622	7.371	7.146	6.521	6.365	6.327	5.733	5.000	6.5107	13.39
92)	bromobenzene	4.394	4.289	4.220	3.891	3.917	3.934	3.573	3.034	3.9066	11.26
93)	2-chlorotoluene	2.052	1.967	1.956	1.808	1.828	1.881	1.842	1.711	1.8806	5.70
94)	n-propylbenzene	2.287	2.309	2.256	2.120	2.133	2.215	2.140	1.915	2.1719	5.83
95)	4-chlorotoluene	1.876	1.908	1.865	1.715	1.720	1.786	1.822	1.940	1.8291	4.57
96)	4-ethyl toluene	6.782	6.306	6.427	6.082	6.155	5.980	4.673	3.613	5.7521	18.45
97)	1,3,5-trimethylbenzene	6.916	6.788	6.603	6.072	6.043	5.912	5.367	4.552	6.0315	13.04
98)	tert-butylbenzene	6.800	6.694	6.517	6.121	6.084	5.921	4.748	3.516	5.8001	19.37

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Method File : TFS3_200911.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Tue Sep 15 10:50:28 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r311450.D 0.5 =r311451.D 1.0 =r311452.D 5.0 =r311453.D 10 =r311454.D 20 =r311455.D
50 =r311456.D 100 =r311457.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
99)	1,2,4-trimethylbenzene	6.777	6.654	6.578	6.089	5.947	5.855	4.736	3.452	5.7608	19.72
100)	decane	5.157	5.172	5.083	4.727	4.748	4.873	4.432	3.577	4.7211	11.15
101) C	Benzyl Chloride	1.982	2.261	2.588	3.692	4.270	4.629	4.558	3.644	3.4530	30.37#
102)	1,3-dichlorobenzene	4.125	4.114	4.168	3.882	3.774	3.971	3.546	2.674	3.7817	13.05
103) C	1,4-dichlorobenzene	3.678	3.783	3.790	3.583	3.722	3.646	3.527	2.865	3.5742	8.42
104)	sec-butylbenzene	9.686	9.540	9.350	8.579	8.383	8.293	7.399	5.935	8.3955	14.92
106)	p-isopropyltoluene	8.161	8.023	7.908	7.463	7.506	7.123	5.499	3.941	6.9530	21.26
107)	1,2-dichlorobenzene	3.679	3.748	3.884	3.557	3.570	3.570	3.375	2.899	3.5353	8.42
108)	n-butylbenzene	6.416	6.444	6.385	6.089	6.190	6.254	5.882	4.794	6.0568	8.97
111) C	1,2-dibromo-3-chloropropane	1.502	1.528	1.610	1.670	1.692	1.664	1.481	1.236	1.5481	9.68
112)	undecane	5.550	5.592	5.571	5.443	5.494	5.458	4.751	3.760	5.2022	12.37
114)	dodecane	5.365	5.655	5.715	5.877	6.039	5.520	4.810	3.828	5.3512	13.43
115) C	1,2,4-trichlorobenzene	1.926	2.091	2.235	2.424	2.607	2.641	2.741	2.313	2.3723	11.99
116)	naphthalene	6.380	6.450	6.791	7.128	7.556	7.262	7.269	6.348	6.8981	6.79
117)	1,2,3-trichlorobenzene	2.156	2.197	2.324	2.437	2.601	2.538	2.642	2.270	2.3958	7.77
119) C	hexachlorobutadiene	2.858	2.925	2.875	2.768	2.781	2.575	2.243	1.691	2.5896	16.40

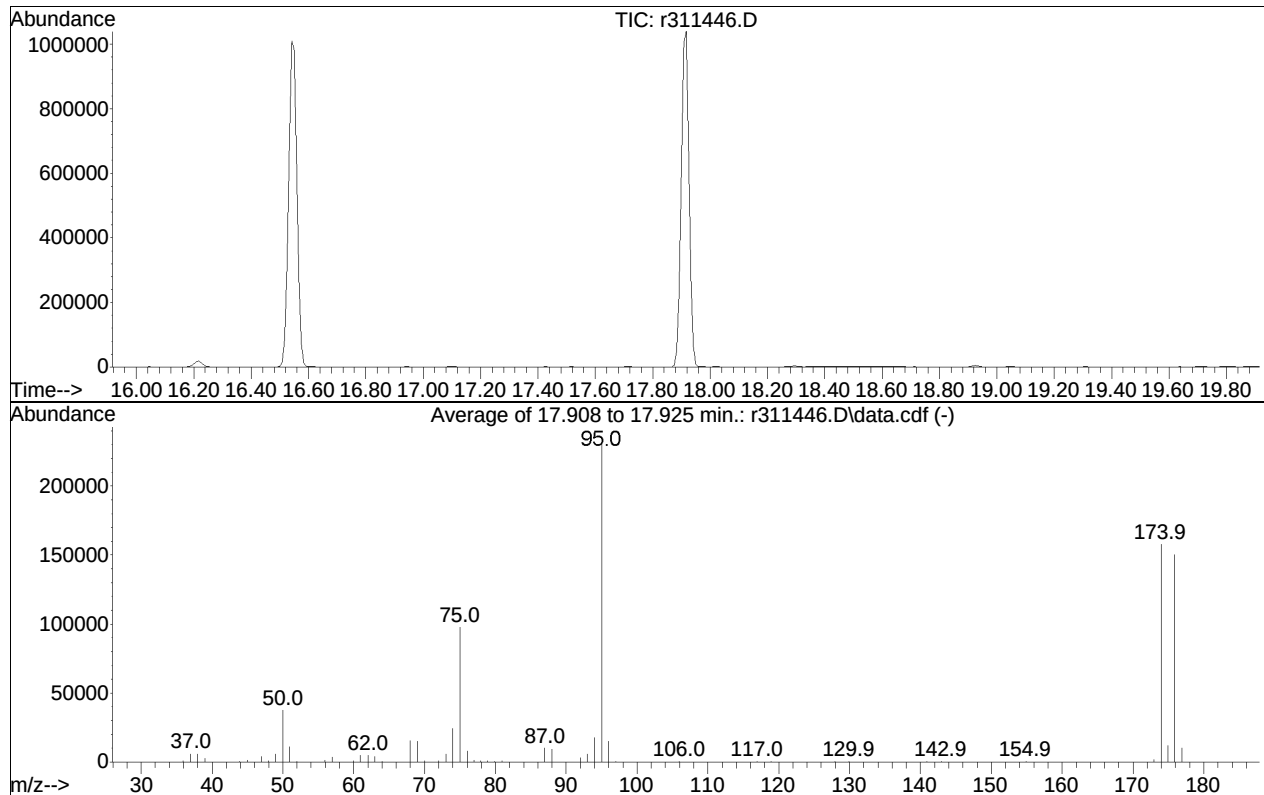
(#) = Out of Range

BFB

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311446.D
 Acq On : 11 Sep 2020 8:24 PM
 Operator : AIRPIAN03:TS
 Sample : WG1409596-1,3,250,250
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Mon Sep 14 11:26:28 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	16.2	37485	PASS
75	95	30	66	42.3	97824	PASS
95	95	100	100	100.0	231422	PASS
96	95	5	9	6.6	15212	PASS
173	174	0.00	2	1.0	1606	PASS
174	95	50	120	68.2	157815	PASS
175	174	4	9	7.5	11848	PASS
176	174	93	101	95.3	150367	PASS
177	176	5	9	6.7	10099	PASS

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311450.D
 Acq On : 11 Sep 2020 11:01 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.2
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	322887	10.000	ppbV	0.00
Standard Area = 330533			Recovery =		97.69%	
43) 1,4-difluorobenzene	11.807	114	820223	10.000	ppbV	0.00
Standard Area = 839357			Recovery =		97.72%	
67) chlorobenzene-D5	16.542	54	131146	10.000	ppbV	0.00
Standard Area = 137732			Recovery =		95.22%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.425	65	191972	10.193	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.93%	
69) toluene-D8	14.650	98	821503	10.422	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		104.22%	
90) bromofluorobenzene	17.908	95	498687	9.993	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.93%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	6185	0.239	ppbV	98
3) propylene	3.904	41	3702M6	0.261	ppbV	
4) propane	3.934	29	5246	0.250	ppbV	98
5) dichlorodifluoromethane	3.988	85	7332	0.241	ppbV	98
6) chloromethane	4.168	50	3832	0.250	ppbV	98
7) Freon-114	4.288	85	9762	0.248	ppbV	99
8) methanol	4.378	31	10315	1.378	ppbV #	80
9) vinyl chloride	4.420	62	4135	0.233	ppbV	99
10) 1,3-butadiene	4.582	54	3844	0.232	ppbV	97
11) butane	4.648	43	6341	0.247	ppbV	99
12) acetaldehyde	4.318	29	13536	1.511	ppbV	95
13) bromomethane	4.900	94	3594	0.243	ppbV	99
14) chloroethane	5.116	64	2040	0.225	ppbV	96
15) ethanol	5.327	31	19056	1.278	ppbV	99
16) dichlorofluoromethane	5.257	67	7895	0.246	ppbV #	98
17) vinyl bromide	5.540	106	3533	0.233	ppbV	100
18) acrolein	5.713	56	2284	0.265	ppbV #	83
19) acetone	5.897	43	29377	1.268	ppbV	99
20) acetonitrile	5.553	41	3505	0.241	ppbV	96
21) trichlorofluoromethane	6.057	101	5331	0.238	ppbV	99
22) isopropyl alcohol	6.243	45	21073	0.678	ppbV	98
23) acrylonitrile	6.443	53	3648	0.235	ppbV	98
24) pentane	6.503	43	6996	0.230	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311450.D
 Acq On : 11 Sep 2020 11:01 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.2
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.580	31	7930	0.215	ppbV	94
26) 1,1-dichloroethene	6.828	61	5441	0.233	ppbV	98
27) tertiary butyl alcohol	7.014	59	6504	0.202	ppbV #	94
28) methylene chloride	6.990	49	5835	0.258	ppbV	96
29) 3-chloropropene	7.134	41	6081	0.235	ppbV	100
30) carbon disulfide	7.284	76	14681	0.239	ppbV #	83
31) Freon 113	7.320	101	6903	0.232	ppbV	99
32) trans-1,2-dichloroethene	8.117	61	5574	0.225	ppbV	96
33) 1,1-dichloroethane	8.350	63	6676	0.230	ppbV	100
34) MTBE	8.483	73	11433	0.229	ppbV	98
35) vinyl acetate	8.592	43	9438	0.234	ppbV	100
36) 2-butanone	8.875	43	9744	0.247	ppbV	100
37) cis-1,2-dichloroethene	9.342	61	4880	0.225	ppbV	99
38) Ethyl Acetate	9.683	61	1525M6	0.229	ppbV	
39) chloroform	9.700	83	7576	0.234	ppbV	98
40) Tetrahydrofuran	10.200	42	5828	0.234	ppbV	100
41) 2,2-dichloropropane	9.717	77	5313	0.217	ppbV #	83
42) 1,2-dichloroethane	10.550	62	3851	0.231	ppbV	95
44) hexane	9.617	57	7955	0.232	ppbV #	69
45) diisopropyl ether	9.658	87	4884	0.240	ppbV	84
46) tert-butyl ethyl ether	10.283	59	11955	0.220	ppbV	99
48) 1,1,1-trichloroethane	10.833	97	5280	0.225	ppbV	99
49) 1,1-dichloropropene	11.207	75	6497	0.233	ppbV	99
50) benzene	11.367	78	16265	0.236	ppbV	100
51) thiophene	11.513	84	8702	0.223	ppbV	96
52) carbon tetrachloride	11.540	117	4876	0.222	ppbV	97
53) cyclohexane	11.687	56	8189	0.225	ppbV	96
54) tert-amyl methyl ether	12.113	73	12709	0.226	ppbV	98
55) dibromomethane	12.287	93	3843	0.234	ppbV	97
56) 1,2-dichloropropane	12.327	63	4564	0.227	ppbV	94
57) bromodichloromethane	12.553	83	7728	0.220	ppbV #	99
58) 1,4-dioxane	12.647	88	3542	0.225	ppbV #	70
59) trichloroethene	12.607	130	5563	0.225	ppbV	98
60) 2,2,4-trimethylpentane	12.653	57	25255	0.231	ppbV	99
61) methyl methacrylate	12.867	41	7059	0.223	ppbV	99
62) heptane	12.973	43	9897	0.234	ppbV	99
63) cis-1,3-dichloropropene	13.617	75	7431	0.226	ppbV	98
64) 4-methyl-2-pentanone	13.700	43	11292	0.233	ppbV	99
65) trans-1,3-dichloropropene	14.242	75	6437	0.217	ppbV	97
66) 1,1,2-trichloroethane	14.442	97	4750	0.226	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311450.D
 Acq On : 11 Sep 2020 11:01 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.2
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.758	91	15751	0.235	ppbV	100
70) 2-methylthiophene	14.825	97	11499	0.230	ppbV	100
71) 1,3-dichloropropane	14.792	76	8328	0.235	ppbV	98
72) 2-hexanone	15.075	43	10159	0.227	ppbV	97
73) 3-methylthiophene	15.025	97	11806	0.232	ppbV	99
74) dibromochloromethane	15.208	129	6234	0.219	ppbV	97
75) 1,2-dibromoethane	15.458	107	6870	0.224	ppbV	100
76) butyl acetate	15.725	73	2086	0.203	ppbV	96
77) octane	15.800	85	6201	0.217	ppbV	89
78) tetrachloroethene	15.925	166	6054	0.225	ppbV	96
79) 1,1,1,2-tetrachloroethane	16.567	131	4459	0.217	ppbV	98
80) chlorobenzene	16.583	112	11981	0.231	ppbV	100
81) ethylbenzene	16.933	91	17083	0.222	ppbV	99
82) 2-ethylthiophene	16.975	97	11566	0.220	ppbV	99
83) m+p-xylene	17.100	91	27893	0.443	ppbV	97
84) bromoform	17.167	173	4401	0.189	ppbV	97
85) styrene	17.417	104	11858	0.215	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.517	83	10667	0.221	ppbV	99
87) o-xylene	17.517	91	13942	0.224	ppbV	98
88) 1,2,3-trichloropropane	17.625	75	8825	0.224	ppbV	97
89) nonane	17.708	43	13262	0.232	ppbV	95
91) isopropylbenzene	18.025	105	19993	0.234	ppbV	97
92) bromobenzene	18.100	77	11525	0.225	ppbV	96
93) 2-chlorotoluene	18.425	126	5381	0.218	ppbV	99
94) n-propylbenzene	18.458	120	5998	0.211	ppbV	100
95) 4-chlorotoluene	18.483	126	4921	0.205	ppbV	98
96) 4-ethyl toluene	18.575	105	17788	0.236	ppbV	97
97) 1,3,5-trimethylbenzene	18.633	105	18140	0.229	ppbV	97
98) tert-butylbenzene	18.967	119	17835	0.234	ppbV	100
99) 1,2,4-trimethylbenzene	18.967	105	17775	0.235	ppbV	95
100) decane	19.042	57	13527	0.218	ppbV	91
101) Benzyl Chloride	19.083	91	5199	0.115	ppbV	100
102) 1,3-dichlorobenzene	19.092	146	10820	0.218	ppbV	98
103) 1,4-dichlorobenzene	19.150	146	9646	0.206	ppbV	97
104) sec-butylbenzene	19.183	105	25405	0.231	ppbV	98
105) 1,2,3-trimethylbenzene	19.308	105	18186	0.237	ppbV	96
106) p-isopropyltoluene	19.300	119	21405	0.235	ppbV	99
107) 1,2-dichlorobenzene	19.425	146	9649	0.208	ppbV	99
108) n-butylbenzene	19.642	91	16829	0.212	ppbV	98
109) indan	19.475	117	17667	0.219	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311450.D
 Acq On : 11 Sep 2020 11:01 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.2
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

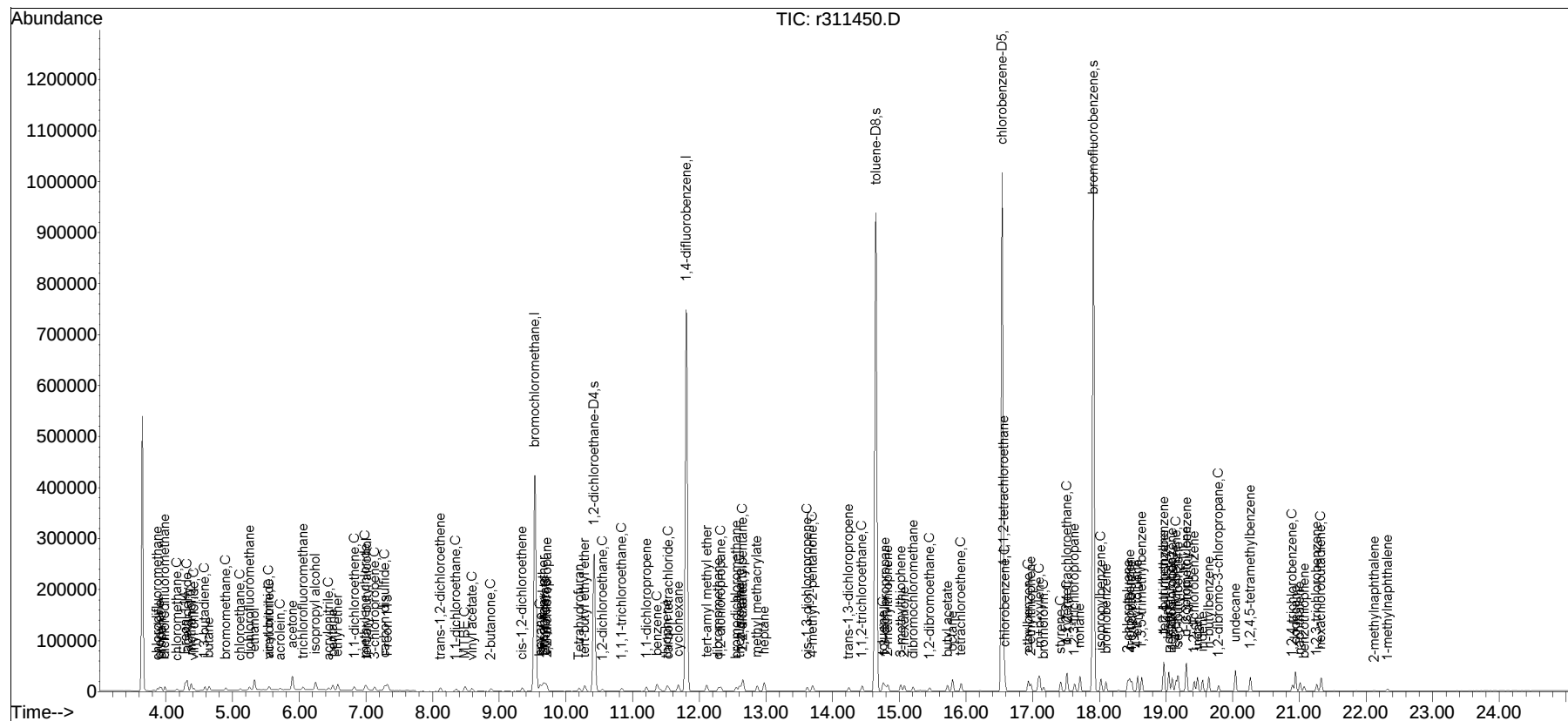
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

110)	indene	19.550	115	13218	0.205	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.792	75	3940	0.194	ppbV #	84
112)	undecane	20.042	57	14556	0.213	ppbV	90
113)	1,2,4,5-tetramethylben...	20.267	119	17610	0.214	ppbV	99
114)	dodecane	20.942	57	14071	0.201	ppbV	89
115)	1,2,4-trichlorobenzene	20.892	180	5051	0.162	ppbV	97
116)	naphthalene	21.008	128	16735	0.185	ppbV	99
117)	1,2,3-trichlorobenzene	21.258	180	5656	0.180	ppbV	98
118)	benzothiophene	21.075	134	9756	0.143	ppbV #	98
119)	hexachlorobutadiene	21.325	225	7497	0.221	ppbV	94
120)	2-methylnaphthalene	22.125	142	1366	0.102	ppbV	93
121)	1-methylnaphthalene	22.325	142	3520	0.113	ppbV	98

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

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Data Path   : O:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File  : r311450.D
Acq On     : 11 Sep 2020  11:01 PM
Operator   : AIRPIANO3:TS
Sample     : IT015-LLSTD0.2
Misc       : WG1409596
ALS Vial   : 0      Sample Multiplier: 1
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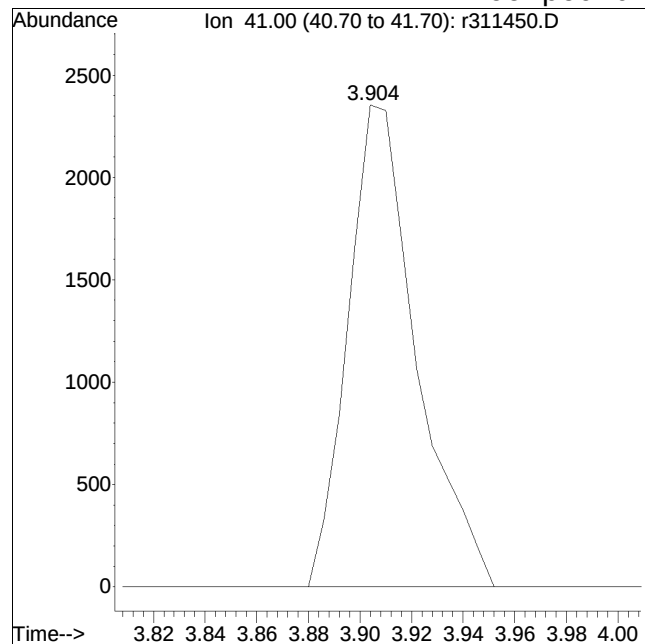
Quant Time: Sep 14 11:26:48 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Mon Sep 14 11:26:28 2020
Response via : Initial Calibration



Manual Integration Report

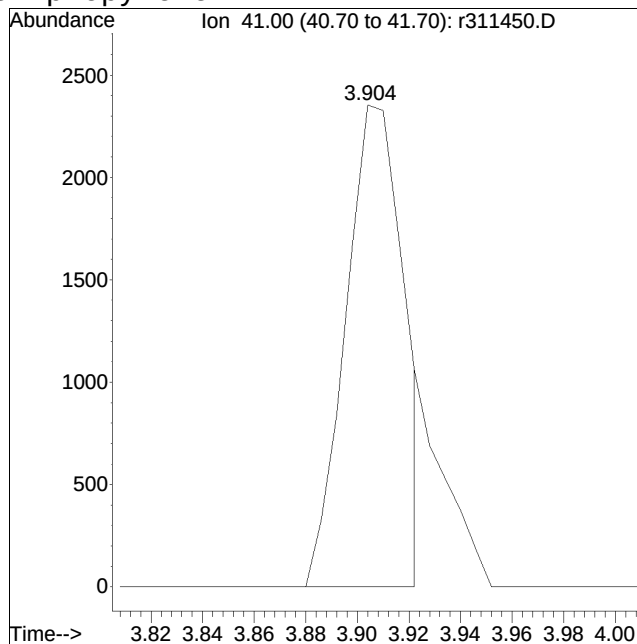
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Data File : r311450.D Operator : AIRPIAN03:TS
Date Inj'd : 9/11/2020 0:1: 1 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 9/14/2020 11:26 am

Compound #3: propylene



Original Peak Response = 4341

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

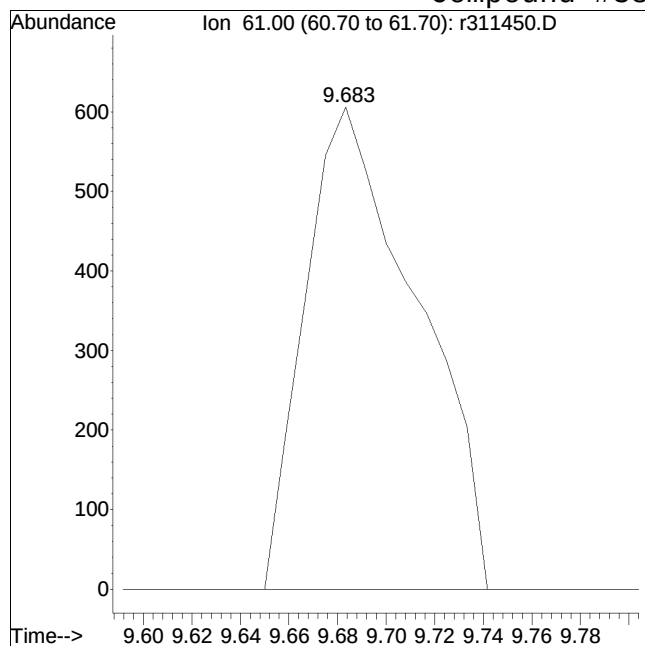


Manual Peak Response = 3702 M6

Manual Integration Report

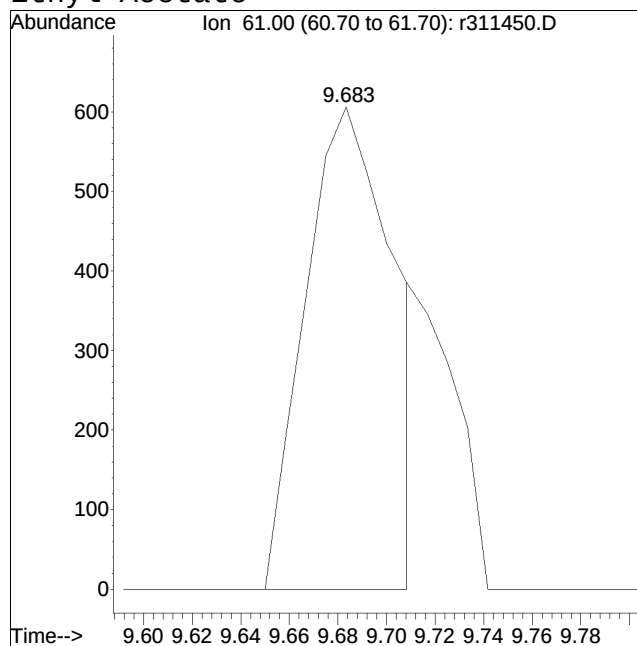
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311450.D Operator : AIRPIAN03:TS
Date Inj'd : 9/11/2020 0:1: 1 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 9/14/2020 11:26 am

Compound #38: Ethyl Acetate



Original Peak Response = 1943

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



Manual Peak Response = 1525 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311451.D
 Acq On : 11 Sep 2020 11:41 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.5
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:57 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	321675	10.000	ppbV	0.00
Standard Area = 330533			Recovery =		97.32%	
43) 1,4-difluorobenzene	11.807	114	813597	10.000	ppbV	0.00
Standard Area = 839357			Recovery =		96.93%	
67) chlorobenzene-D5	16.542	54	131241	10.000	ppbV	0.00
Standard Area = 137732			Recovery =		95.29%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.417	65	190462	10.195	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.95%	
69) toluene-D8	14.650	98	792915	10.052	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		100.52%	
90) bromofluorobenzene	17.908	95	493919	9.890	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.90%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	14734	0.571	ppbV	98
3) propylene	3.904	41	8564M6	0.607	ppbV	
4) propane	3.928	29	12271	0.586	ppbV	97
5) dichlorodifluoromethane	3.982	85	18288	0.604	ppbV	99
6) chloromethane	4.162	50	8838	0.578	ppbV	99
7) Freon-114	4.288	85	24133	0.615	ppbV	99
8) methanol	4.378	31	23726	3.182	ppbV	91
9) vinyl chloride	4.420	62	10097	0.572	ppbV	98
10) 1,3-butadiene	4.582	54	9486	0.574	ppbV	98
11) butane	4.648	43	14766	0.577	ppbV	98
12) acetaldehyde	4.312	29	29847	3.344	ppbV	98
13) bromomethane	4.894	94	8540	0.580	ppbV	100
14) chloroethane	5.116	64	5134	0.569	ppbV	97
15) ethanol	5.320	31	44087	2.968	ppbV	99
16) dichlorofluoromethane	5.253	67	18909	0.591	ppbV	96
17) vinyl bromide	5.537	106	8700	0.576	ppbV	98
18) acrolein	5.707	56	5179	0.603	ppbV #	94
19) acetone	5.887	43	68880	2.985	ppbV #	99
20) acetonitrile	5.547	41	8218	0.567	ppbV	99
21) trichlorofluoromethane	6.053	101	12836	0.575	ppbV	99
22) isopropyl alcohol	6.237	45	45402	1.466	ppbV	100
23) acrylonitrile	6.437	53	8764	0.566	ppbV	95
24) pentane	6.503	43	16663	0.550	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311451.D
 Acq On : 11 Sep 2020 11:41 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.5
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:57 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.570	31	21387	0.582	ppbV	91
26) 1,1-dichloroethene	6.822	61	13008	0.558	ppbV	99
27) tertiary butyl alcohol	6.996	59	16249	0.508	ppbV #	93
28) methylene chloride	6.990	49	13353	0.593	ppbV	97
29) 3-chloropropene	7.128	41	14295	0.555	ppbV	98
30) carbon disulfide	7.278	76	35113	0.574	ppbV #	93
31) Freon 113	7.320	101	16193	0.547	ppbV	99
32) trans-1,2-dichloroethene	8.117	61	13765	0.557	ppbV	98
33) 1,1-dichloroethane	8.350	63	16108	0.556	ppbV	100
34) MTBE	8.475	73	28169	0.565	ppbV	98
35) vinyl acetate	8.583	43	22461	0.560	ppbV	99
36) 2-butanone	8.867	43	22901	0.584	ppbV	98
37) cis-1,2-dichloroethene	9.342	61	11978	0.555	ppbV	97
38) Ethyl Acetate	9.675	61	3689M6	0.555	ppbV	
39) chloroform	9.700	83	18455	0.571	ppbV	99
40) Tetrahydrofuran	10.183	42	13847	0.557	ppbV	99
41) 2,2-dichloropropane	9.717	77	13076	0.537	ppbV #	88
42) 1,2-dichloroethane	10.550	62	9601	0.578	ppbV	99
44) hexane	9.608	57	18666	0.548	ppbV #	69
45) diisopropyl ether	9.650	87	12071	0.599	ppbV	80
46) tert-butyl ethyl ether	10.275	59	28740	0.533	ppbV	99
48) 1,1,1-trichloroethane	10.833	97	12980	0.557	ppbV	99
49) 1,1-dichloropropene	11.207	75	15549	0.562	ppbV	99
50) benzene	11.367	78	39043	0.572	ppbV	100
51) thiophene	11.513	84	21263	0.550	ppbV	98
52) carbon tetrachloride	11.540	117	11978	0.551	ppbV	99
53) cyclohexane	11.687	56	19613	0.544	ppbV	99
54) tert-amyl methyl ether	12.107	73	31136	0.557	ppbV	98
55) dibromomethane	12.287	93	9044	0.555	ppbV	99
56) 1,2-dichloropropane	12.327	63	10968	0.549	ppbV	98
57) bromodichloromethane	12.553	83	19204	0.551	ppbV	98
58) 1,4-dioxane	12.633	88	7971	0.511	ppbV #	80
59) trichloroethene	12.600	130	13445	0.547	ppbV	98
60) 2,2,4-trimethylpentane	12.653	57	60392	0.557	ppbV	99
61) methyl methacrylate	12.867	41	17076	0.544	ppbV	99
62) heptane	12.973	43	23770	0.566	ppbV	97
63) cis-1,3-dichloropropene	13.617	75	17968	0.551	ppbV	99
64) 4-methyl-2-pentanone	13.692	43	27755	0.578	ppbV	100
65) trans-1,3-dichloropropene	14.242	75	15000	0.511	ppbV	99
66) 1,1,2-trichloroethane	14.442	97	11365	0.545	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311451.D
 Acq On : 11 Sep 2020 11:41 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.5
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:57 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.758	91	36967	0.552	ppbV	99
70) 2-methylthiophene	14.825	97	27246	0.545	ppbV	99
71) 1,3-dichloropropane	14.792	76	20118	0.567	ppbV	99
72) 2-hexanone	15.075	43	24517	0.547	ppbV	95
73) 3-methylthiophene	15.025	97	27823	0.546	ppbV	99
74) dibromochloromethane	15.208	129	15027	0.527	ppbV	100
75) 1,2-dibromoethane	15.458	107	16767	0.547	ppbV	99
76) butyl acetate	15.717	73	5210	0.507	ppbV	97
77) octane	15.800	85	15119	0.530	ppbV	91
78) tetrachloroethene	15.925	166	14715	0.545	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.567	131	10829	0.527	ppbV	98
80) chlorobenzene	16.583	112	28811	0.555	ppbV	100
81) ethylbenzene	16.933	91	41713	0.542	ppbV	98
82) 2-ethylthiophene	16.975	97	28802	0.547	ppbV	99
83) m+p-xylene	17.100	91	69568	1.103	ppbV	98
84) bromoform	17.167	173	11191	0.479	ppbV	99
85) styrene	17.417	104	29665	0.537	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.517	83	26363	0.546	ppbV	99
87) o-xylene	17.517	91	34745	0.557	ppbV	98
88) 1,2,3-trichloropropane	17.625	75	21676	0.550	ppbV	99
89) nonane	17.708	43	32997	0.577	ppbV	93
91) isopropylbenzene	18.025	105	48371	0.566	ppbV	97
92) bromobenzene	18.100	77	28144	0.549	ppbV	98
93) 2-chlorotoluene	18.425	126	12907	0.523	ppbV	100
94) n-propylbenzene	18.458	120	15154	0.532	ppbV	100
95) 4-chlorotoluene	18.483	126	12520	0.522	ppbV	100
96) 4-ethyl toluene	18.575	105	41378	0.548	ppbV	97
97) 1,3,5-trimethylbenzene	18.633	105	44546	0.563	ppbV	97
98) tert-butylbenzene	18.967	119	43928	0.577	ppbV	99
99) 1,2,4-trimethylbenzene	18.967	105	43666	0.578	ppbV	96
100) decane	19.042	57	33940	0.548	ppbV	92
101) Benzyl Chloride	19.083	91	14836	0.327	ppbV	98
102) 1,3-dichlorobenzene	19.092	146	26998	0.544	ppbV	100
103) 1,4-dichlorobenzene	19.150	146	24825	0.529	ppbV	99
104) sec-butylbenzene	19.183	105	62602	0.568	ppbV	97
105) 1,2,3-trimethylbenzene	19.308	105	45114	0.587	ppbV	97
106) p-isopropyltoluene	19.308	119	52646M6	0.577	ppbV	
107) 1,2-dichlorobenzene	19.425	146	24592	0.530	ppbV	99
108) n-butylbenzene	19.642	91	42285	0.532	ppbV	99
109) indan	19.475	117	44068	0.545	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311451.D
 Acq On : 11 Sep 2020 11:41 PM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD0.5
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:26:57 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

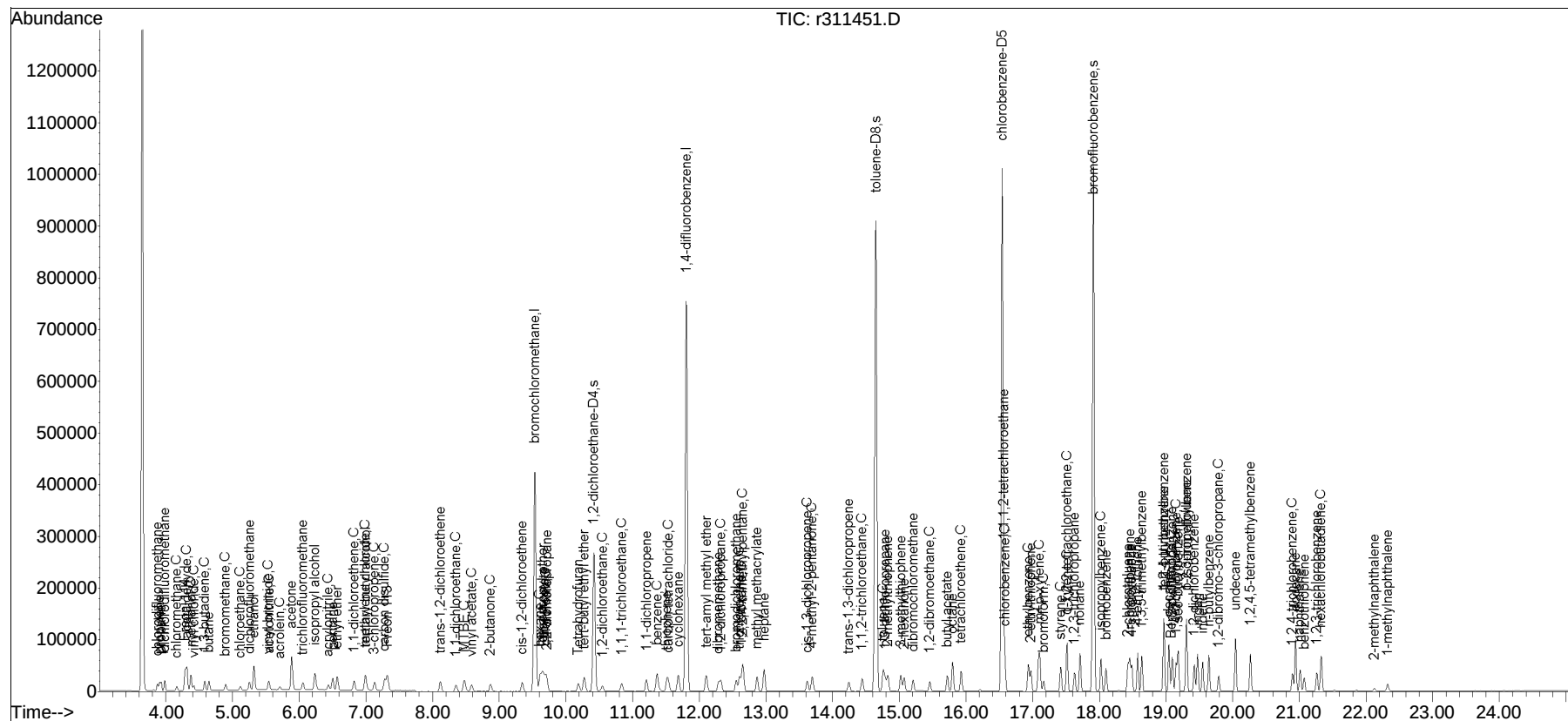
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.550	115	33170	0.515	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.792	75	10028	0.494	ppbV #	88
112) undecane	20.042	57	36693	0.537	ppbV	91
113) 1,2,4,5-tetramethylben...	20.267	119	44328	0.537	ppbV	98
114) dodecane	20.942	57	37109	0.528	ppbV	89
115) 1,2,4-trichlorobenzene	20.892	180	13724	0.441	ppbV	99
116) naphthalene	21.008	128	42328	0.468	ppbV	99
117) 1,2,3-trichlorobenzene	21.258	180	14419	0.459	ppbV	99
118) benzothiophene	21.075	134	26458	0.388	ppbV	100
119) hexachlorobutadiene	21.325	225	19197	0.565	ppbV	96
120) 2-methylnaphthalene	22.125	142	4407	0.329	ppbV	95
121) 1-methylnaphthalene	22.325	142	10963	0.352	ppbV	99

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


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Data Path   : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File  : r311451.D
Acq On     : 11 Sep 2020  11:41 PM
Operator   : AIRPIANO3:TS
Sample     : IT015-LLSTD0.5
Misc       : WG1409596
ALS Vial   : 0      Sample Multiplier: 1
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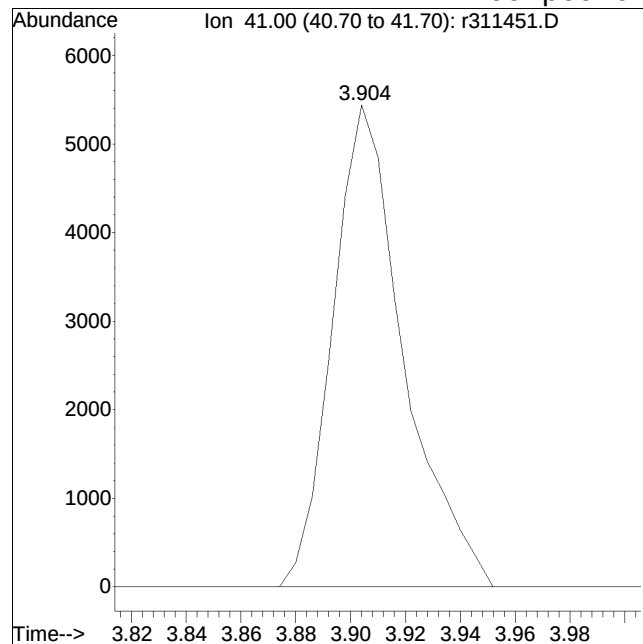
Quant Time: Sep 14 11:26:57 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Mon Sep 14 11:26:28 2020
Response via : Initial Calibration



Manual Integration Report

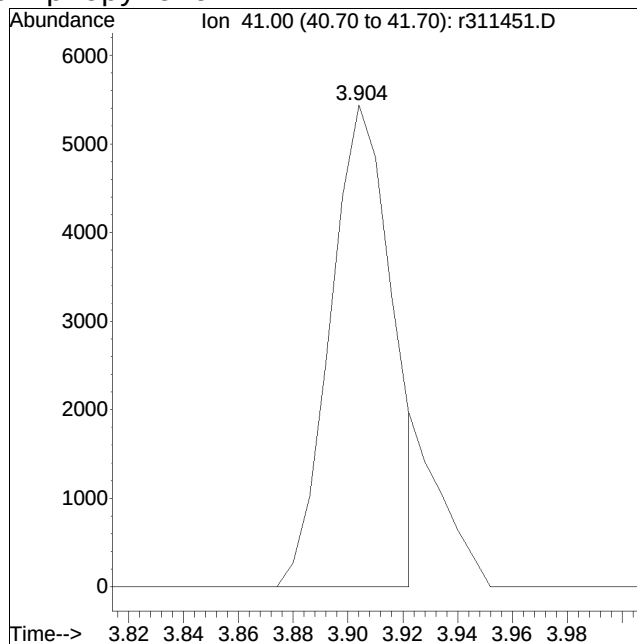
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311451.D Operator : AIRPIAN03:TS
Date Inj'd : 9/11/2020 0:1: 1 Instrument :
Sample : IT015-LLSTD0.5 Quant Date : 9/14/2020 11:26 am

Compound #3: propylene



Original Peak Response = 9802

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

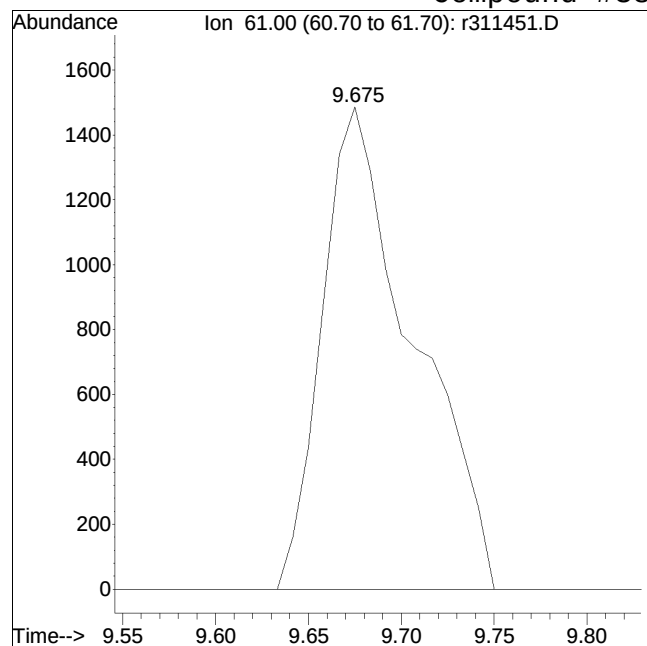


Manual Peak Response = 8564 M6

Manual Integration Report

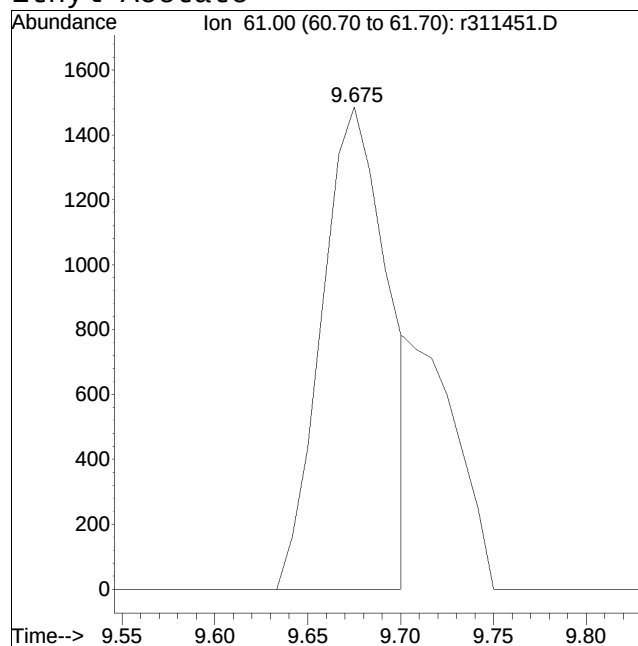
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311451.D Operator : AIRPIAN03:TS
Date Inj'd : 9/11/2020 0:1: 1 Instrument :
Sample : IT015-LLSTD0.5 Quant Date : 9/14/2020 11:26 am

Compound #38: Ethyl Acetate



Original Peak Response = 5050

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

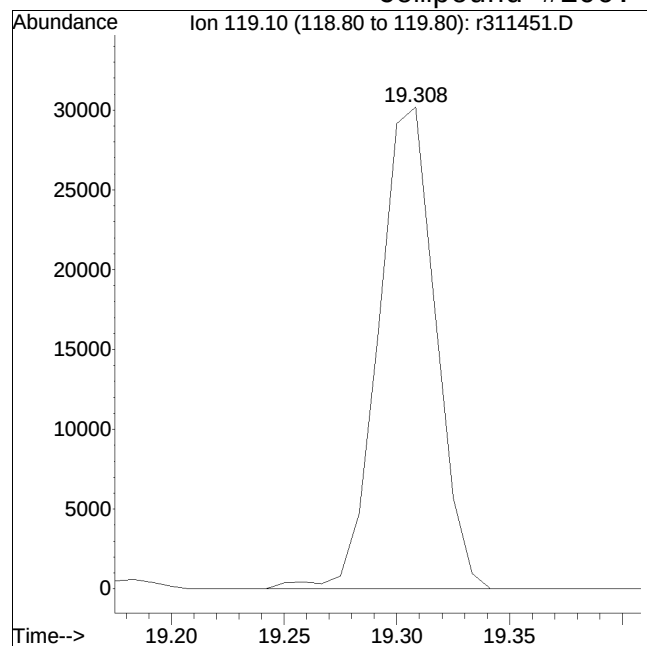


Manual Peak Response = 3689 M6

Manual Integration Report

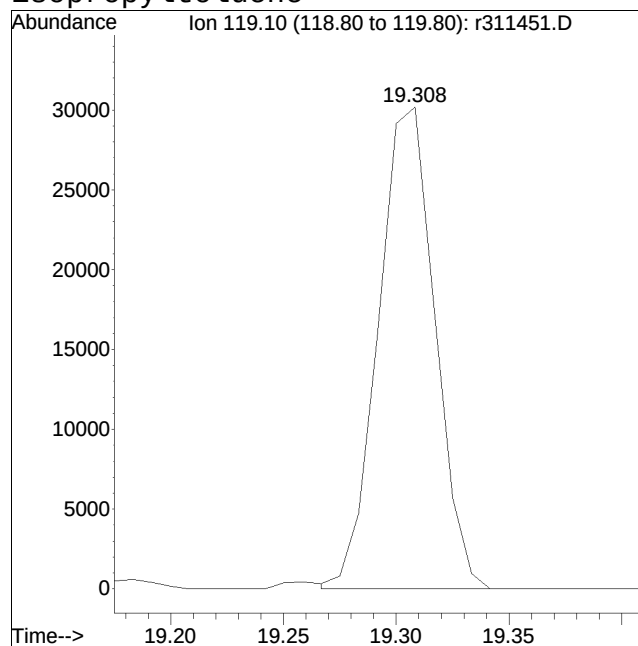
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311451.D Operator : AIRPIAN03:TS
Date Inj'd : 9/11/2020 0:1: 1 Instrument :
Sample : IT015-LLSTD0.5 Quant Date : 9/14/2020 11:26 am

Compound #106: p-isopropyltoluene



Original Peak Response = 53226

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



Manual Peak Response = 52646 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311452.D
 Acq On : 12 Sep 2020 12:22 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD1.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:05 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	321855	10.000	ppbV	0.00
Standard Area = 330533			Recovery =		97.37%	
43) 1,4-difluorobenzene	11.807	114	818613	10.000	ppbV	0.00
Standard Area = 839357			Recovery =		97.53%	
67) chlorobenzene-D5	16.542	54	133861	10.000	ppbV	0.00
Standard Area = 137732			Recovery =		97.19%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.417	65	190965	10.159	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.59%	
69) toluene-D8	14.650	98	801862	9.966	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.66%	
90) bromofluorobenzene	17.908	95	495491	9.728	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		97.28%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	29245	1.133	ppbV	98
3) propylene	3.904	41	16633M6	1.178	ppbV	
4) propane	3.928	29	24162	1.153	ppbV	99
5) dichlorodifluoromethane	3.982	85	35410	1.170	ppbV	99
6) chloromethane	4.162	50	17225	1.126	ppbV	99
7) Freon-114	4.288	85	47682	1.215	ppbV	98
8) methanol	4.366	31	46247	6.200	ppbV	96
9) vinyl chloride	4.414	62	19914	1.127	ppbV	99
10) 1,3-butadiene	4.582	54	18756	1.135	ppbV	100
11) butane	4.642	43	28819	1.126	ppbV	99
12) acetaldehyde	4.312	29	57342	6.421	ppbV	97
13) bromomethane	4.894	94	16688	1.132	ppbV	99
14) chloroethane	5.116	64	10146	1.123	ppbV	100
15) ethanol	5.313	31	86299M6	5.807	ppbV	
16) dichlorofluoromethane	5.253	67	36881	1.151	ppbV	99
17) vinyl bromide	5.537	106	17270	1.143	ppbV	97
18) acrolein	5.703	56	9983	1.161	ppbV	96
19) acetone	5.873	43	135549	5.871	ppbV	99
20) acetonitrile	5.540	41	16115	1.112	ppbV	99
21) trichlorofluoromethane	6.053	101	25924	1.161	ppbV	100
22) isopropyl alcohol	6.223	45	87510	2.824	ppbV	100
23) acrylonitrile	6.433	53	17347	1.120	ppbV	99
24) pentane	6.500	43	32131	1.059	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311452.D
 Acq On : 12 Sep 2020 12:22 AM
 Operator : AIRPIANO3:TS
 Sample : IT015-LLSTD1.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:05 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.560	31	37955	1.031	ppbV	100
26) 1,1-dichloroethene	6.822	61	25896	1.110	ppbV	99
27) tertiary butyl alcohol	6.984	59	33742	1.054	ppbV	95
28) methylene chloride	6.984	49	26116	1.159	ppbV	100
29) 3-chloropropene	7.128	41	28850	1.119	ppbV	99
30) carbon disulfide	7.278	76	70011	1.144	ppbV	97
31) Freon 113	7.320	101	32561	1.100	ppbV	99
32) trans-1,2-dichloroethene	8.117	61	27284	1.103	ppbV	99
33) 1,1-dichloroethane	8.350	63	32194	1.111	ppbV	100
34) MTBE	8.467	73	56538	1.134	ppbV	99
35) vinyl acetate	8.575	43	44882	1.119	ppbV	99
36) 2-butanone	8.858	43	45333	1.155	ppbV	99
37) cis-1,2-dichloroethene	9.342	61	23804	1.102	ppbV	100
38) Ethyl Acetate	9.667	61	7763	1.168	ppbV	94
39) chloroform	9.700	83	36148	1.118	ppbV	99
40) Tetrahydrofuran	10.175	42	27662	1.113	ppbV	99
41) 2,2-dichloropropane	9.717	77	26426	1.084	ppbV	91
42) 1,2-dichloroethane	10.542	62	18816	1.132	ppbV	99
44) hexane	9.608	57	37352	1.090	ppbV #	74
45) diisopropyl ether	9.642	87	21688	1.069	ppbV	84
46) tert-butyl ethyl ether	10.267	59	58701	1.082	ppbV	99
48) 1,1,1-trichloroethane	10.833	97	25707	1.097	ppbV	99
49) 1,1-dichloropropene	11.207	75	31084	1.117	ppbV	98
50) benzene	11.367	78	76113	1.107	ppbV	100
51) thiophene	11.513	84	42458	1.092	ppbV	98
52) carbon tetrachloride	11.540	117	23881	1.091	ppbV	99
53) cyclohexane	11.687	56	39034	1.077	ppbV	98
54) tert-amyl methyl ether	12.093	73	62658	1.115	ppbV	99
55) dibromomethane	12.287	93	17711	1.081	ppbV	98
56) 1,2-dichloropropane	12.320	63	21586	1.074	ppbV	99
57) bromodichloromethane	12.553	83	38856	1.109	ppbV	100
58) 1,4-dioxane	12.627	88	16628	1.059	ppbV	89
59) trichloroethene	12.600	130	26810	1.084	ppbV	97
60) 2,2,4-trimethylpentane	12.653	57	119598	1.097	ppbV	99
61) methyl methacrylate	12.860	41	34602	1.096	ppbV	100
62) heptane	12.973	43	46899	1.111	ppbV	97
63) cis-1,3-dichloropropene	13.617	75	35984	1.096	ppbV	99
64) 4-methyl-2-pentanone	13.683	43	54183	1.122	ppbV	100
65) trans-1,3-dichloropropene	14.242	75	32079	1.086	ppbV	100
66) 1,1,2-trichloroethane	14.442	97	22571	1.076	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311452.D
 Acq On : 12 Sep 2020 12:22 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD1.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:05 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.758	91	75129	1.099	ppbV	99
70) 2-methylthiophene	14.825	97	55749	1.093	ppbV	99
71) 1,3-dichloropropane	14.792	76	40442	1.118	ppbV	100
72) 2-hexanone	15.067	43	49934	1.093	ppbV	98
73) 3-methylthiophene	15.025	97	56785	1.093	ppbV	99
74) dibromochloromethane	15.208	129	31757	1.091	ppbV	100
75) 1,2-dibromoethane	15.458	107	35073	1.121	ppbV	99
76) butyl acetate	15.717	73	11245	1.073	ppbV	99
77) octane	15.800	85	31894	1.095	ppbV	98
78) tetrachloroethene	15.925	166	30790	1.119	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.567	131	22358	1.066	ppbV	99
80) chlorobenzene	16.583	112	57587	1.087	ppbV	99
81) ethylbenzene	16.933	91	83690	1.065	ppbV	100
82) 2-ethylthiophene	16.975	97	58131	1.083	ppbV	99
83) m+p-xylene	17.100	91	138506	2.154	ppbV	99
84) bromoform	17.167	173	23021	0.966	ppbV	99
85) styrene	17.417	104	60451	1.073	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.517	83	53902	1.095	ppbV	100
87) o-xylene	17.517	91	69397	1.091	ppbV	98
88) 1,2,3-trichloropropane	17.625	75	44063	1.096	ppbV	99
89) nonane	17.708	43	65664	1.126	ppbV	94
91) isopropylbenzene	18.025	105	95660	1.098	ppbV	97
92) bromobenzene	18.100	77	56495	1.080	ppbV	99
93) 2-chlorotoluene	18.425	126	26183	1.040	ppbV	98
94) n-propylbenzene	18.458	120	30204	1.039	ppbV	98
95) 4-chlorotoluene	18.483	126	24970	1.020	ppbV	97
96) 4-ethyl toluene	18.575	105	86027	1.117	ppbV	97
97) 1,3,5-trimethylbenzene	18.633	105	88382	1.095	ppbV	97
98) tert-butylbenzene	18.967	119	87234	1.124	ppbV	100
99) 1,2,4-trimethylbenzene	18.967	105	88051	1.142	ppbV	96
100) decane	19.042	57	68036	1.077	ppbV	94
101) Benzyl Chloride	19.083	91	34641	0.749	ppbV	99
102) 1,3-dichlorobenzene	19.092	146	55793	1.102	ppbV	99
103) 1,4-dichlorobenzene	19.150	146	50733	1.060	ppbV	99
104) sec-butylbenzene	19.183	105	125157	1.114	ppbV	97
105) 1,2,3-trimethylbenzene	19.308	105	89164	1.137	ppbV	97
106) p-isopropyltoluene	19.300	119	105860M6	1.137	ppbV	
107) 1,2-dichlorobenzene	19.425	146	51988	1.099	ppbV	99
108) n-butylbenzene	19.642	91	85474	1.054	ppbV	99
109) indan	19.475	117	89904	1.091	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311452.D
 Acq On : 12 Sep 2020 12:22 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD1.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:05 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

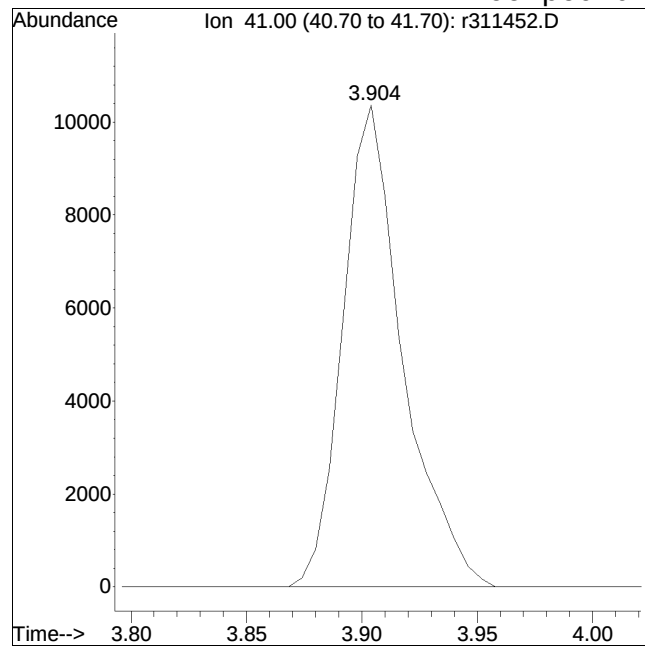
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.550	115	69136	1.053	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.792	75	21558	1.040	ppbV	90
112) undecane	20.042	57	74573	1.071	ppbV	91
113) 1,2,4,5-tetramethylben...	20.267	119	90687	1.077	ppbV	99
114) dodecane	20.942	57	76498	1.068	ppbV	91
115) 1,2,4-trichlorobenzene	20.892	180	29918	0.942	ppbV	98
116) naphthalene	21.008	128	90905	0.984	ppbV	99
117) 1,2,3-trichlorobenzene	21.258	180	31107	0.970	ppbV	98
118) benzothiophene	21.075	134	59439	0.854	ppbV	99
119) hexachlorobutadiene	21.325	225	38480	1.110	ppbV	97
120) 2-methylnaphthalene	22.125	142	10052	0.737	ppbV	100
121) 1-methylnaphthalene	22.325	142	24993	0.786	ppbV	98

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

Manual Integration Report

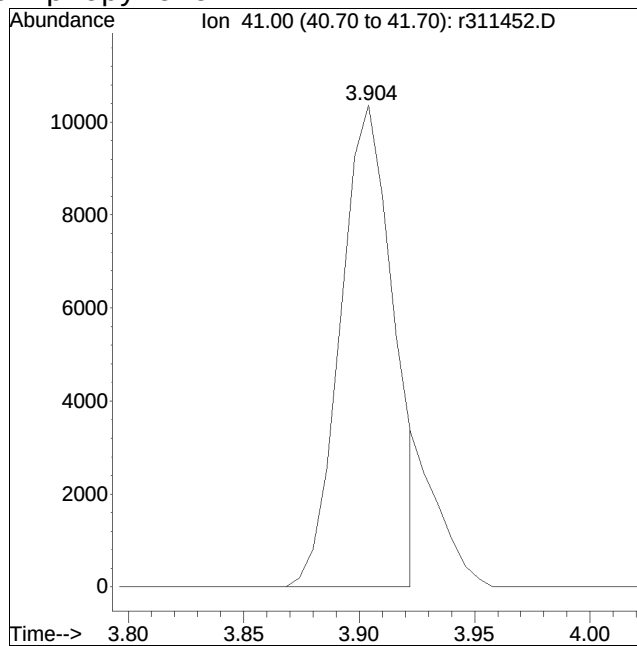
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311452.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 2 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 9/14/2020 11:27 am

Compound #3: propylene



Original Peak Response = 18757

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

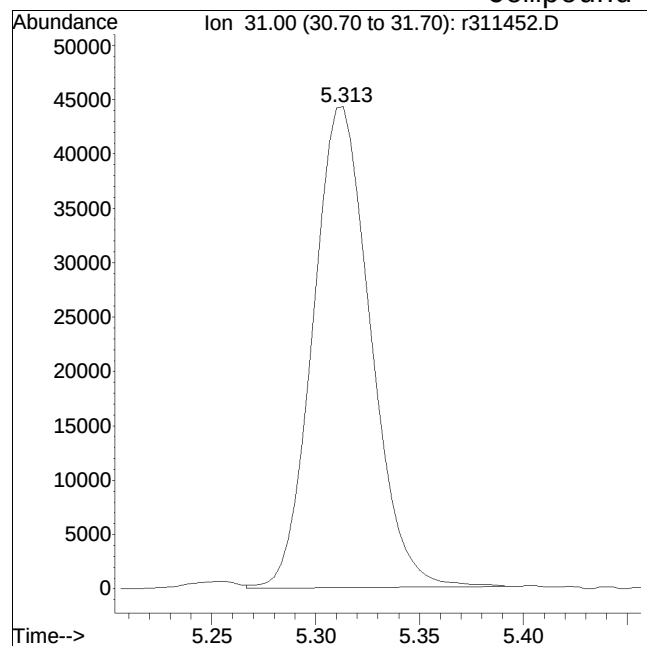


Manual Peak Response = 16633 M6

Manual Integration Report

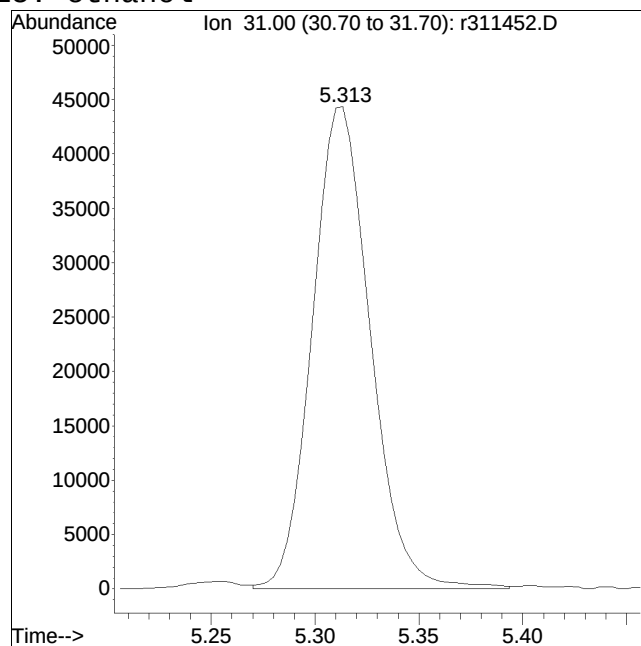
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311452.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 2 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 9/14/2020 11:27 am

Compound #15: ethanol



Original Peak Response = 85232

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

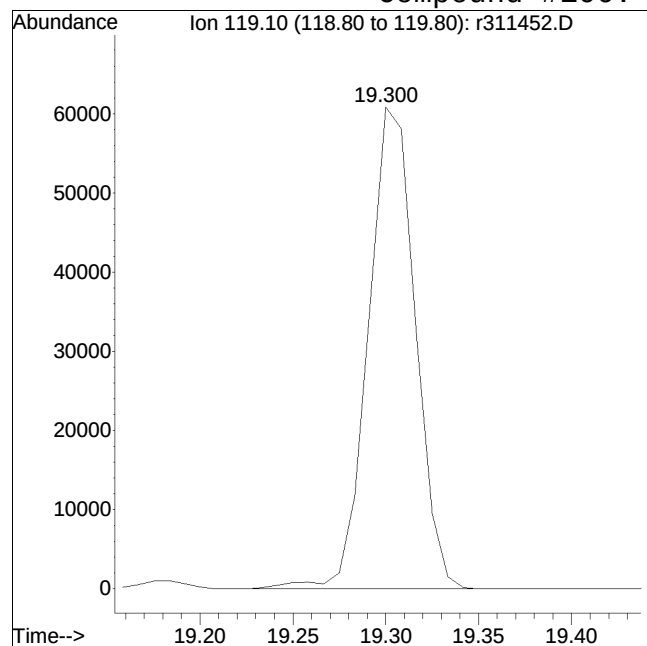


Manual Peak Response = 86299 M6

Manual Integration Report

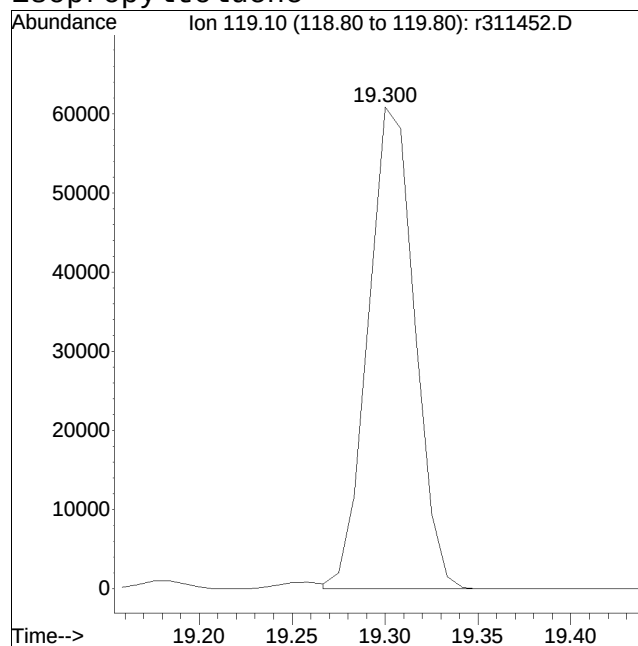
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Data File : r311452.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 2 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 9/14/2020 11:27 am

Compound #106: p-isopropyltoluene



Original Peak Response = 107344

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



Manual Peak Response = 105860 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311453.D
 Acq On : 12 Sep 2020 1:02 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD5.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	321976	10.000	ppbV	0.00
Standard Area = 330533			Recovery =		97.41%	
43) 1,4-difluorobenzene	11.807	114	816331	10.000	ppbV	0.00
Standard Area = 839357			Recovery =		97.26%	
67) chlorobenzene-D5	16.542	54	133652	10.000	ppbV	0.00
Standard Area = 137732			Recovery =		97.04%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.425	65	191475	10.215	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		102.15%	
69) toluene-D8	14.650	98	799700	9.955	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.55%	
90) bromofluorobenzene	17.908	95	507761	9.984	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.84%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	127469	4.936	ppbV	99
3) propylene	3.904	41	71052M6	5.029	ppbV	
4) propane	3.928	29	104861	5.002	ppbV	99
5) dichlorodifluoromethane	3.982	85	153782	5.077	ppbV	99
6) chloromethane	4.162	50	75074	4.905	ppbV	100
7) Freon-114	4.288	85	202013	5.147	ppbV	99
8) methanol	4.360	31	201241	26.968	ppbV	99
9) vinyl chloride	4.420	62	87357	4.944	ppbV	99
10) 1,3-butadiene	4.582	54	82448	4.986	ppbV	100
11) butane	4.648	43	125272	4.895	ppbV	100
12) acetaldehyde	4.306	29	235750	26.389	ppbV	99
13) bromomethane	4.894	94	72864	4.940	ppbV	100
14) chloroethane	5.116	64	44173	4.888	ppbV	100
15) ethanol	5.300	31	422341	28.408	ppbV	99
16) dichlorofluoromethane	5.253	67	159319	4.971	ppbV	100
17) vinyl bromide	5.537	106	75295	4.981	ppbV	98
18) acrolein	5.697	56	42690	4.964	ppbV	99
19) acetone	5.857	43	585862	25.364	ppbV	99
20) acetonitrile	5.533	41	70692	4.876	ppbV	99
21) trichlorofluoromethane	6.053	101	112554	5.039	ppbV	100
22) isopropyl alcohol	6.203	45	374748	12.087	ppbV	100
23) acrylonitrile	6.430	53	75996	4.904	ppbV	99
24) pentane	6.500	43	142663M6	4.702	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311453.D
 Acq On : 12 Sep 2020 1:02 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD5.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.550	31	178671	4.854	ppbV	99
26) 1,1-dichloroethene	6.822	61	113003	4.843	ppbV	99
27) tertiary butyl alcohol	6.954	59	162219	5.064	ppbV	99
28) methylene chloride	6.990	49	112728	5.002	ppbV	98
29) 3-chloropropene	7.128	41	125522	4.867	ppbV	100
30) carbon disulfide	7.278	76	303912	4.962	ppbV	99
31) Freon 113	7.320	101	142920	4.824	ppbV	99
32) trans-1,2-dichloroethene	8.117	61	119732	4.841	ppbV	99
33) 1,1-dichloroethane	8.350	63	139169	4.799	ppbV	100
34) MTBE	8.450	73	248755	4.989	ppbV	99
35) vinyl acetate	8.575	43	202610	5.047	ppbV	99
36) 2-butanone	8.842	43	199099	5.069	ppbV	99
37) cis-1,2-dichloroethene	9.350	61	104055	4.815	ppbV	100
38) Ethyl Acetate	9.658	61	32186	4.842	ppbV	94
39) chloroform	9.700	83	159934	4.943	ppbV	99
40) Tetrahydrofuran	10.158	42	122261	4.916	ppbV	99
41) 2,2-dichloropropane	9.717	77	123278	5.055	ppbV	97
42) 1,2-dichloroethane	10.550	62	82070	4.935	ppbV	100
44) hexane	9.617	57	165985	4.857	ppbV	85
45) diisopropyl ether	9.625	87	93511	4.622	ppbV	95
46) tert-butyl ethyl ether	10.258	59	264610	4.893	ppbV	99
48) 1,1,1-trichloroethane	10.833	97	113684	4.866	ppbV	99
49) 1,1-dichloropropene	11.207	75	136307	4.913	ppbV	100
50) benzene	11.367	78	335470	4.895	ppbV	100
51) thiophene	11.513	84	185636	4.788	ppbV	100
52) carbon tetrachloride	11.540	117	107182	4.910	ppbV	98
53) cyclohexane	11.687	56	172231	4.765	ppbV	99
54) tert-amyl methyl ether	12.087	73	278302	4.965	ppbV	99
55) dibromomethane	12.287	93	77520	4.744	ppbV	99
56) 1,2-dichloropropane	12.320	63	94912	4.736	ppbV	99
57) bromodichloromethane	12.553	83	172765	4.943	ppbV	99
58) 1,4-dioxane	12.607	88	74976	4.787	ppbV	99
59) trichloroethene	12.607	130	118104	4.790	ppbV	100
60) 2,2,4-trimethylpentane	12.653	57	531093	4.885	ppbV	99
61) methyl methacrylate	12.860	41	156834	4.984	ppbV	100
62) heptane	12.973	43	207239	4.921	ppbV	98
63) cis-1,3-dichloropropene	13.617	75	159678	4.877	ppbV	100
64) 4-methyl-2-pentanone	13.675	43	243478	5.058	ppbV	99
65) trans-1,3-dichloropropene	14.242	75	145253	4.930	ppbV	100
66) 1,1,2-trichloroethane	14.442	97	99143	4.738	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311453.D
 Acq On : 12 Sep 2020 1:02 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD5.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.758	91	326370	4.782	ppbV	99
70) 2-methylthiophene	14.825	97	243232	4.774	ppbV	100
71) 1,3-dichloropropane	14.792	76	179391	4.966	ppbV	99
72) 2-hexanone	15.058	43	228856	5.018	ppbV	97
73) 3-methylthiophene	15.025	97	248230	4.787	ppbV	99
74) dibromochloromethane	15.208	129	141977	4.885	ppbV	99
75) 1,2-dibromoethane	15.458	107	153297	4.909	ppbV	99
76) butyl acetate	15.708	73	52502	5.016	ppbV	98
77) octane	15.800	85	139139	4.787	ppbV	95
78) tetrachloroethene	15.925	166	131890	4.800	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.567	131	103741	4.956	ppbV	100
80) chlorobenzene	16.583	112	259142	4.901	ppbV	100
81) ethylbenzene	16.933	91	381175	4.859	ppbV	99
82) 2-ethylthiophene	16.975	97	258474	4.824	ppbV	99
83) m+p-xylene	17.100	91	630129	9.814	ppbV	99
84) bromoform	17.167	173	118114	4.966	ppbV	100
85) styrene	17.417	104	277747	4.937	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.517	83	250685	5.101	ppbV	100
87) o-xylene	17.517	91	319080	5.024	ppbV	100
88) 1,2,3-trichloropropane	17.625	75	199397	4.965	ppbV	100
89) nonane	17.708	43	294831	5.065	ppbV	97
91) isopropylbenzene	18.025	105	435802	5.008	ppbV	98
92) bromobenzene	18.100	77	260048	4.981	ppbV	100
93) 2-chlorotoluene	18.425	126	120806	4.806	ppbV	98
94) n-propylbenzene	18.458	120	141670	4.880	ppbV	99
95) 4-chlorotoluene	18.483	126	114603	4.688	ppbV	98
96) 4-ethyl toluene	18.575	105	406464	5.287	ppbV	98
97) 1,3,5-trimethylbenzene	18.633	105	405746	5.033	ppbV	98
98) tert-butylbenzene	18.967	119	409031	5.277	ppbV	99
99) 1,2,4-trimethylbenzene	18.967	105	406884	5.285	ppbV	98
100) decane	19.042	57	315867	5.006	ppbV	96
101) Benzyl Chloride	19.083	91	246741	5.346	ppbV	99
102) 1,3-dichlorobenzene	19.092	146	259408	5.132	ppbV	99
103) 1,4-dichlorobenzene	19.150	146	239405	5.012	ppbV	98
104) sec-butylbenzene	19.183	105	573312	5.109	ppbV	99
105) 1,2,3-trimethylbenzene	19.308	105	411972	5.259	ppbV	100
106) p-isopropyltoluene	19.300	119	498719M6	5.367	ppbV	
107) 1,2-dichlorobenzene	19.425	146	237707	5.031	ppbV	99
108) n-butylbenzene	19.642	91	406891	5.026	ppbV	99
109) indan	19.475	117	425581	5.173	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311453.D
 Acq On : 12 Sep 2020 1:02 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD5.0
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

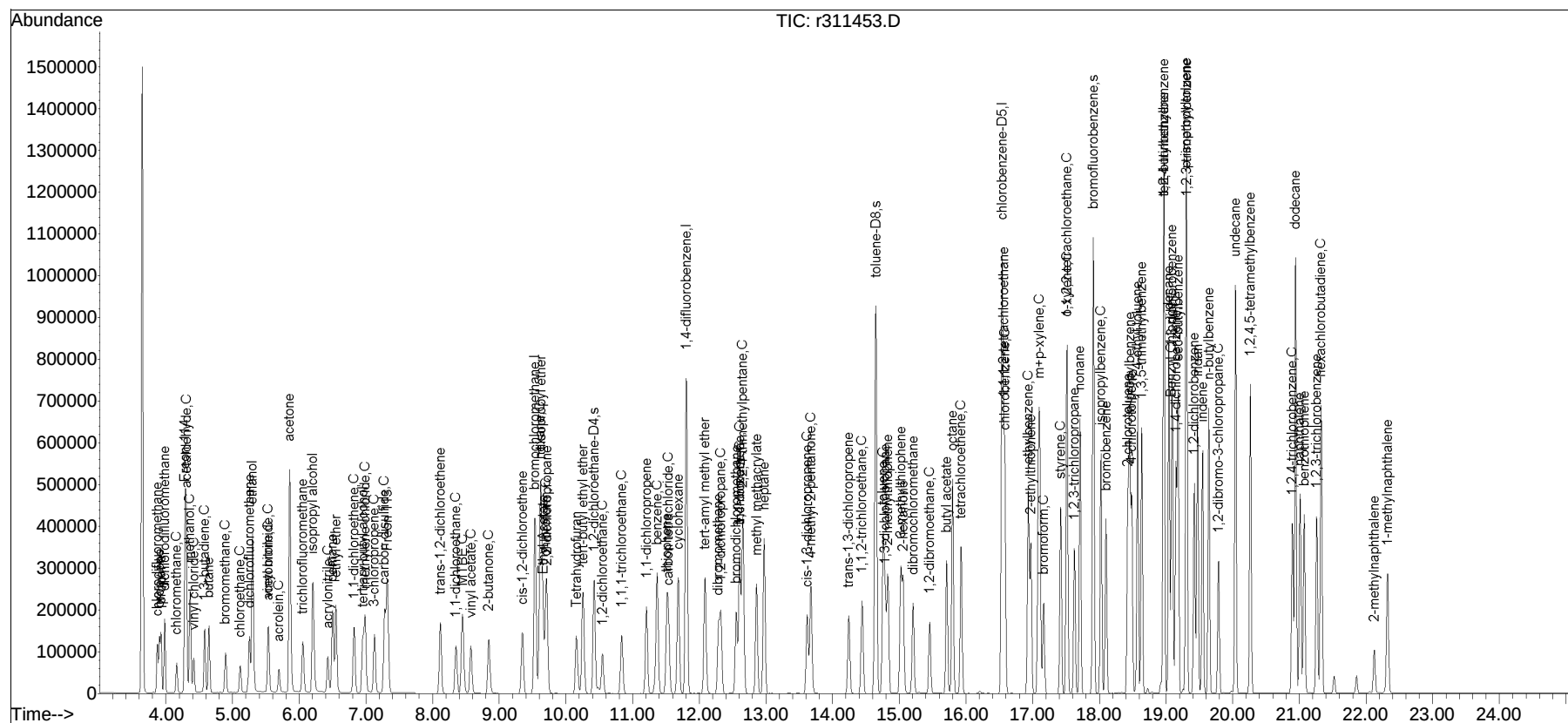
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

110)	indene	19.550	115	341927	5.215	ppbV	100
111)	1,2-dibromo-3-chloropr...	19.792	75	111588	5.393	ppbV	94
112)	undecane	20.042	57	363712	5.231	ppbV	96
113)	1,2,4,5-tetramethylben...	20.267	119	454437	5.407	ppbV	99
114)	dodecane	20.942	57	392707	5.491	ppbV	95
115)	1,2,4-trichlorobenzene	20.892	180	161959	5.108	ppbV	100
116)	naphthalene	21.008	128	476327	5.167	ppbV	100
117)	1,2,3-trichlorobenzene	21.258	180	162830	5.085	ppbV	99
118)	benzothiophene	21.075	134	403317	5.806	ppbV	100
119)	hexachlorobutadiene	21.325	225	184972	5.344	ppbV	99
120)	2-methylnaphthalene	22.125	142	71730	5.264	ppbV	99
121)	1-methylnaphthalene	22.325	142	207173	6.523	ppbV	99

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


```
Data Path   : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File  : r311453.D
Acq On     : 12 Sep 2020    1:02 AM
Operator   : AIRPIANO3:TS
Sample     : IT015-LLSTD5.0
Misc       : WG1409596
ALS Vial   : 0    Sample Multiplier: 1
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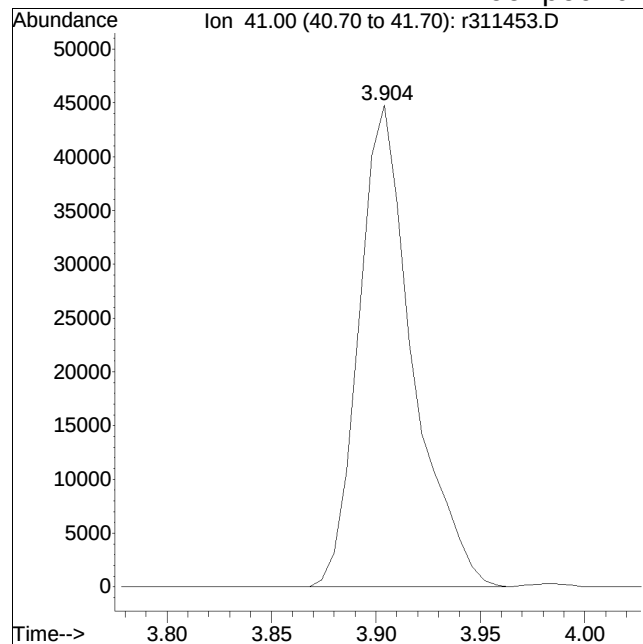
Quant Time: Sep 14 11:27:14 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Mon Sep 14 11:26:28 2020
Response via : Initial Calibration



Manual Integration Report

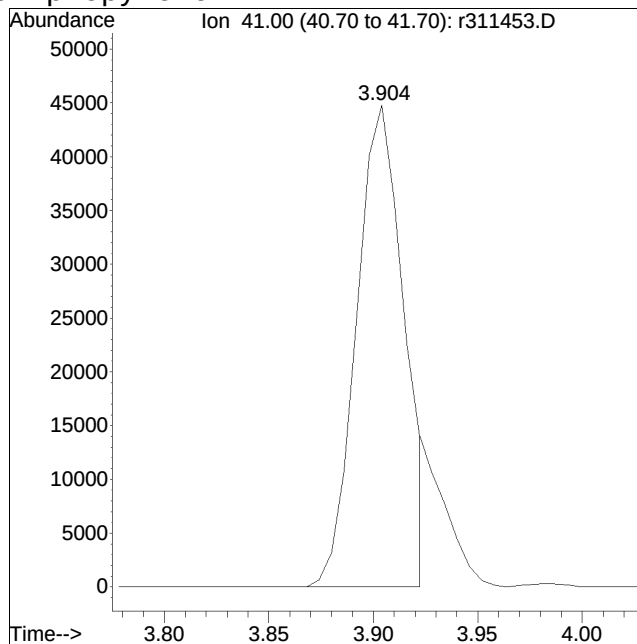
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311453.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 2 Instrument :
Sample : IT015-LLSTD5.0 Quant Date : 9/14/2020 11:27 am

Compound #3: propylene



Original Peak Response = 80275

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

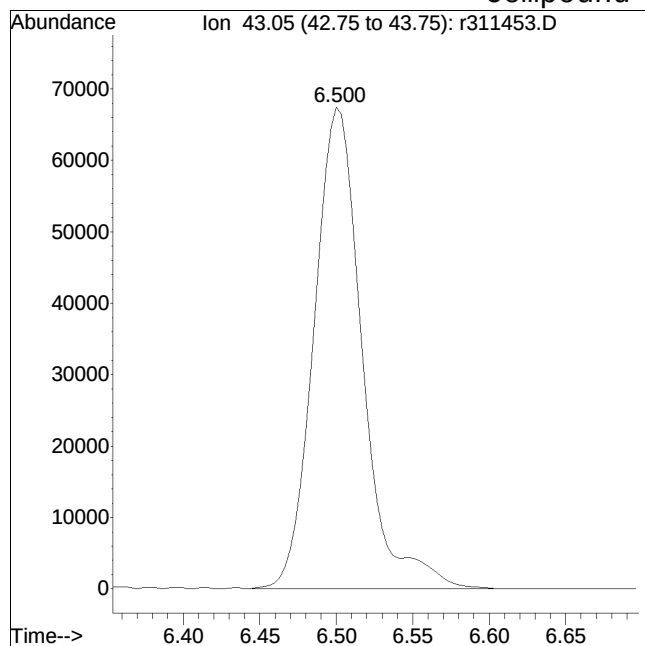


Manual Peak Response = 71052 M6

Manual Integration Report

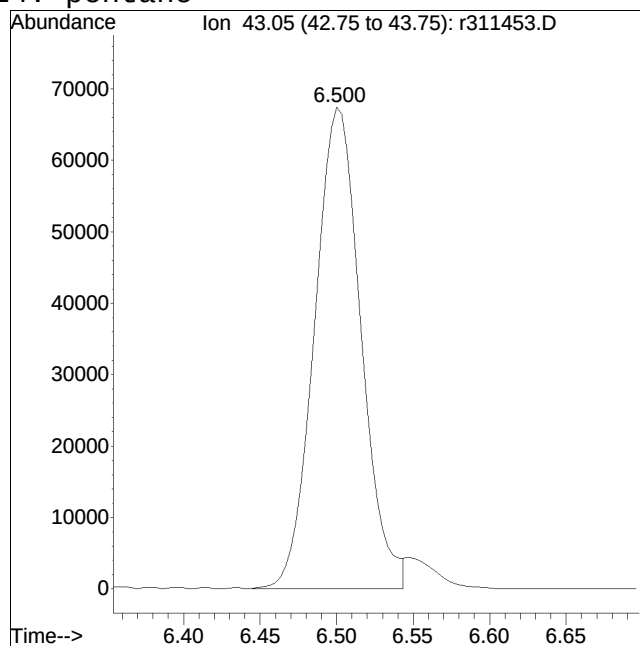
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311453.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 2 Instrument :
Sample : IT015-LLSTD5.0 Quant Date : 9/14/2020 11:27 am

Compound #24: pentane



Original Peak Response = 163414

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

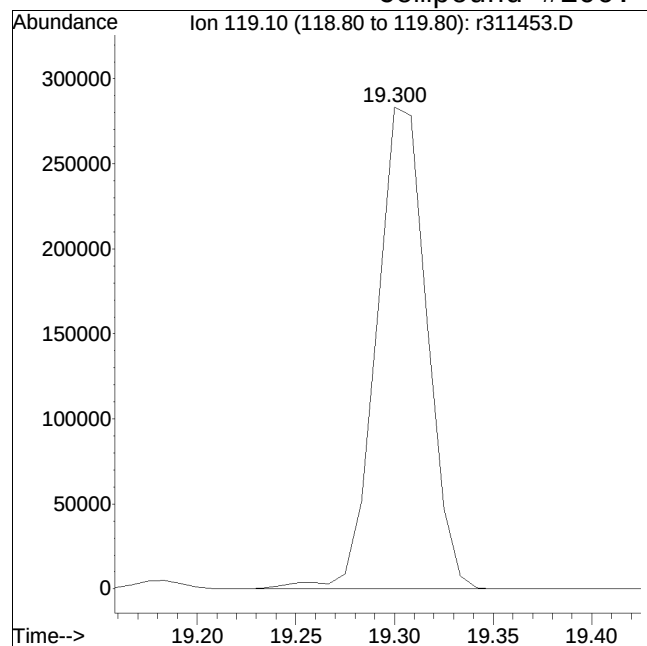


Manual Peak Response = 142663 M6

Manual Integration Report

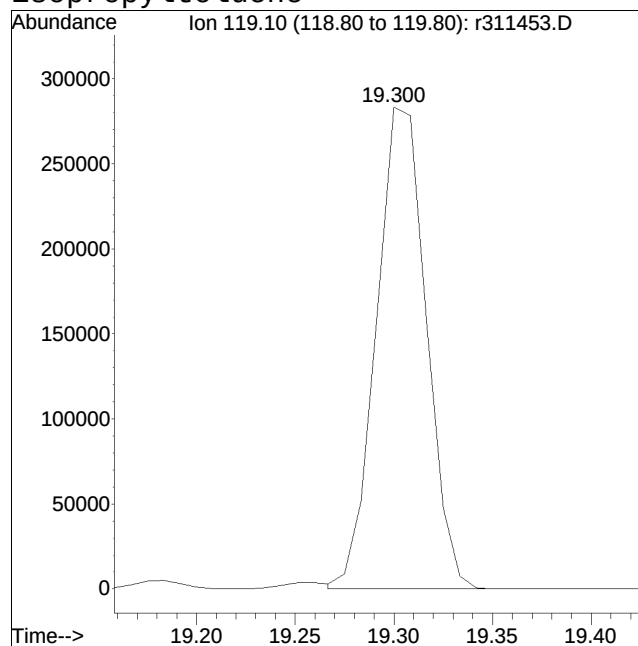
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311453.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 2 Instrument :
Sample : IT015-LLSTD5.0 Quant Date : 9/14/2020 11:27 am

Compound #106: p-isopropyltoluene



Original Peak Response = 505134

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



Manual Peak Response = 498719 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311454.D
 Acq On : 12 Sep 2020 1:43 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:50:08 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	330533	10.000	ppbV	0.00
Standard Area = 330533			Recovery =	100.00%		
43) 1,4-difluorobenzene	11.807	114	839357	10.000	ppbV	0.00
Standard Area = 839357			Recovery =	100.00%		
67) chlorobenzene-D5	16.542	54	137732	10.000	ppbV	0.00
Standard Area = 137732			Recovery =	100.00%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.425	65	193232	10.026	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.26%		
69) toluene-D8	14.650	98	819991	9.905	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.05%		
90) bromofluorobenzene	17.908	95	505197	9.639	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.39%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	253181	9.551	ppbV	100
3) propylene	3.904	41	139924M5	9.646	ppbV	
4) propane	3.928	29	210022	9.759	ppbV	100
5) dichlorodifluoromethane	3.982	85	301233	9.688	ppbV	100
6) chloromethane	4.162	50	147697	9.400	ppbV	100
7) Freon-114	4.288	85	392486	9.742	ppbV	100
8) methanol	4.360	31	395046	51.568	ppbV	100
9) vinyl chloride	4.420	62	172238	9.495	ppbV	100
10) 1,3-butadiene	4.582	54	163796	9.648	ppbV	100
11) butane	4.648	43	247818	9.432	ppbV	100
12) acetaldehyde	4.306	29	455427	49.658	ppbV	100
13) bromomethane	4.894	94	144440	9.539	ppbV	100
14) chloroethane	5.116	64	88540	9.544	ppbV	100
15) ethanol	5.297	31	812174	53.215	ppbV	100
16) dichlorofluoromethane	5.253	67	320552	9.743	ppbV	100
17) vinyl bromide	5.537	106	150131	9.674	ppbV	100
18) acrolein	5.693	56	84954	9.623	ppbV	100
19) acetone	5.850	43	1144133	48.251	ppbV	100
20) acetonitrile	5.533	41	141851	9.530	ppbV	100
21) trichlorofluoromethane	6.053	101	221650	9.667	ppbV	100
22) isopropyl alcohol	6.193	45	740118	23.253	ppbV	100
23) acrylonitrile	6.427	53	152137	9.562	ppbV	100
24) pentane	6.500	43	283152M6	9.090	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311454.D
 Acq On : 12 Sep 2020 1:43 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:50:08 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.543	31	361280	9.560	ppbV	100
26) 1,1-dichloroethene	6.822	61	226723	9.466	ppbV	100
27) tertiary butyl alcohol	6.936	59	330654	10.055	ppbV	100
28) methylene chloride	6.990	49	224901	9.721	ppbV	100
29) 3-chloropropene	7.128	41	250488	9.461	ppbV	100
30) carbon disulfide	7.278	76	604760	9.619	ppbV	100
31) Freon 113	7.320	101	288097	9.473	ppbV	100
32) trans-1,2-dichloroethene	8.117	61	241143	9.497	ppbV	100
33) 1,1-dichloroethane	8.350	63	281786	9.465	ppbV	100
34) MTBE	8.442	73	495761	9.686	ppbV	100
35) vinyl acetate	8.575	43	415124	10.074	ppbV	100
36) 2-butanone	8.833	43	395319	9.805	ppbV	100
37) cis-1,2-dichloroethene	9.350	61	210833	9.503	ppbV	100
38) Ethyl Acetate	9.650	61	63095	9.245	ppbV	100
39) chloroform	9.700	83	322438	9.708	ppbV	100
40) Tetrahydrofuran	10.150	42	243954	9.555	ppbV	100
41) 2,2-dichloropropane	9.717	77	255098	10.189	ppbV	100
42) 1,2-dichloroethane	10.550	62	162897	9.541	ppbV	100
44) hexane	9.608	57	339884	9.674	ppbV	100
45) diisopropyl ether	9.625	87	190689	9.167	ppbV	100
46) tert-butyl ethyl ether	10.250	59	536272	9.644	ppbV	100
48) 1,1,1-trichloroethane	10.833	97	230366	9.590	ppbV	100
49) 1,1-dichloropropene	11.207	75	274495	9.623	ppbV	100
50) benzene	11.367	78	672747	9.547	ppbV	100
51) thiophene	11.513	84	377588	9.472	ppbV	100
52) carbon tetrachloride	11.540	117	221012	9.847	ppbV	100
53) cyclohexane	11.687	56	351352	9.454	ppbV	100
54) tert-amyl methyl ether	12.080	73	559115	9.700	ppbV	100
55) dibromomethane	12.287	93	157229	9.357	ppbV	100
56) 1,2-dichloropropane	12.320	63	192334	9.334	ppbV	100
57) bromodichloromethane	12.553	83	350705	9.758	ppbV	100
58) 1,4-dioxane	12.600	88	153434	9.527	ppbV	100
59) trichloroethene	12.607	130	239961	9.464	ppbV	100
60) 2,2,4-trimethylpentane	12.653	57	1078284	9.646	ppbV	100
61) methyl methacrylate	12.853	41	316963	9.796	ppbV	100
62) heptane	12.973	43	412065	9.517	ppbV	100
63) cis-1,3-dichloropropene	13.617	75	325422	9.666	ppbV	100
64) 4-methyl-2-pentanone	13.667	43	487094	9.841	ppbV	100
65) trans-1,3-dichloropropene	14.242	75	300205	9.910	ppbV	100
66) 1,1,2-trichloroethane	14.442	97	201502	9.365	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311454.D
 Acq On : 12 Sep 2020 1:43 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:50:08 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.758	91	666867	9.481	ppbV	100
70) 2-methylthiophene	14.825	97	493695	9.404	ppbV	100
71) 1,3-dichloropropane	14.792	76	360934	9.696	ppbV	100
72) 2-hexanone	15.050	43	459067	9.767	ppbV	100
73) 3-methylthiophene	15.025	97	504704	9.445	ppbV	100
74) dibromochloromethane	15.208	129	296206	9.889	ppbV	100
75) 1,2-dibromoethane	15.458	107	311986	9.694	ppbV	100
76) butyl acetate	15.708	73	108541	10.064	ppbV	100
77) octane	15.800	85	288888	9.644	ppbV	100
78) tetrachloroethene	15.925	166	272641	9.628	ppbV	100
79) 1,1,1,2-tetrachloroethane	16.567	131	215806	10.004	ppbV	100
80) chlorobenzene	16.583	112	533843	9.797	ppbV	100
81) ethylbenzene	16.933	91	776937	9.611	ppbV	100
82) 2-ethylthiophene	16.975	97	531560	9.627	ppbV	100
83) m+p-xylene	17.100	91	1295409	19.577	ppbV	100
84) bromoform	17.167	173	258024	10.526	ppbV	100
85) styrene	17.417	104	566448	9.771	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.508	83	528878	10.443	ppbV	100
87) o-xylene	17.517	91	656954	10.038	ppbV	100
88) 1,2,3-trichloropropane	17.625	75	410642	9.923	ppbV	100
89) nonane	17.708	43	588161	9.805	ppbV	100
91) isopropylbenzene	18.025	105	876605	9.776	ppbV	100
92) bromobenzene	18.100	77	539440	10.026	ppbV	100
93) 2-chlorotoluene	18.425	126	251805M3	9.722	ppbV	100
94) n-propylbenzene	18.458	120	293831	9.822	ppbV	100
95) 4-chlorotoluene	18.483	126	236963	9.406	ppbV	100
96) 4-ethyl toluene	18.575	105	847764	10.701	ppbV	100
97) 1,3,5-trimethylbenzene	18.633	105	832353M6	10.019	ppbV	100
98) tert-butylbenzene	18.967	119	837920	10.489	ppbV	100
99) 1,2,4-trimethylbenzene	18.967	105	819031	10.322	ppbV	100
100) decane	19.042	57	653983	10.057	ppbV	100
101) Benzyl Chloride	19.083	91	588175	12.367	ppbV	100
102) 1,3-dichlorobenzene	19.092	146	519796	9.979	ppbV	100
103) 1,4-dichlorobenzene	19.150	146	512699M3	10.415	ppbV	100
104) sec-butylbenzene	19.183	105	1154560	9.985	ppbV	100
105) 1,2,3-trimethylbenzene	19.308	105	833837	10.330	ppbV	100
106) p-isopropyltoluene	19.300	119	1033788	10.795	ppbV	100
107) 1,2-dichlorobenzene	19.425	146	491752	10.099	ppbV	100
108) n-butylbenzene	19.642	91	852562	10.220	ppbV	100
109) indan	19.475	117	873029	10.297	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311454.D
 Acq On : 12 Sep 2020 1:43 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:50:08 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

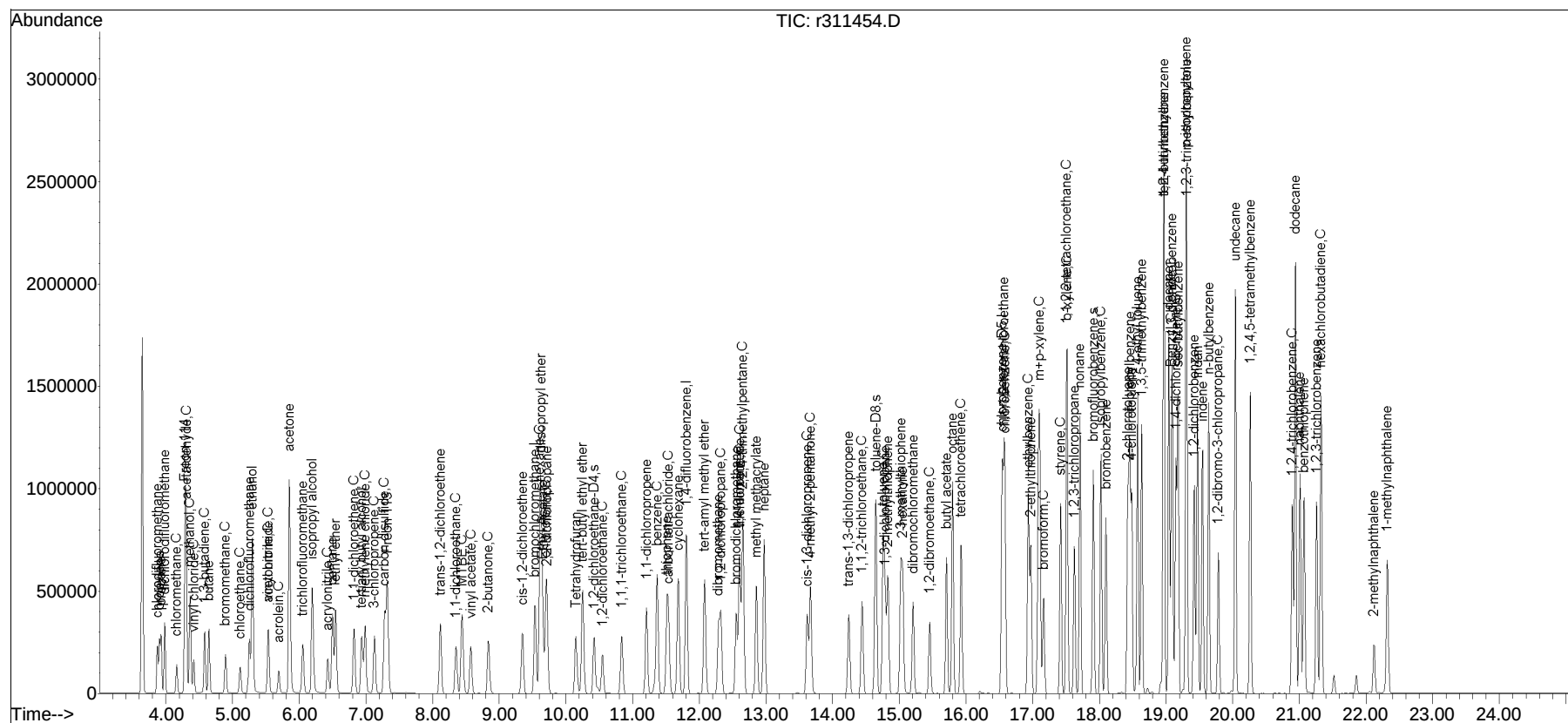
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.550	115	710652	10.518	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.783	75	233105	10.933	ppbV	100
112) undecane	20.042	57	756735	10.561	ppbV	100
113) 1,2,4,5-tetramethylben...	20.267	119	938392	10.834	ppbV	100
114) dodecane	20.942	57	831810	11.286	ppbV	100
115) 1,2,4-trichlorobenzene	20.892	180	359131	10.991	ppbV	100
116) naphthalene	21.008	128	1040724	10.954	ppbV	100
117) 1,2,3-trichlorobenzene	21.258	180	358293	10.858	ppbV	100
118) benzothiophene	21.067	134	924452	12.914	ppbV	100
119) hexachlorobutadiene	21.325	225	382980	10.738	ppbV	100
120) 2-methylnaphthalene	22.117	142	168333	11.988	ppbV	100
121) 1-methylnaphthalene	22.317	142	460540	14.071	ppbV	100

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


```
Data Path   : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File  : r311454.D
Acq On     : 12 Sep 2020    1:43 AM
Operator   : AIRPIANO3:TS
Sample     : IT015-LLSTD010
Misc       : WG1409596
ALS Vial   : 0    Sample Multiplier: 1
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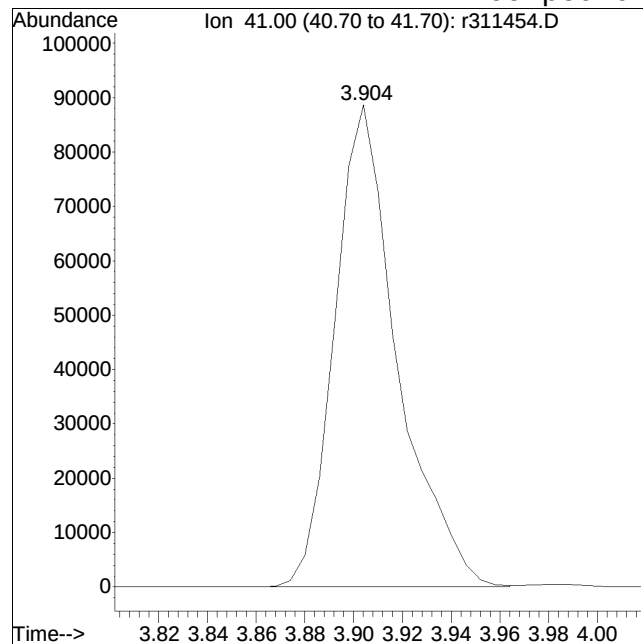
Quant Time: Sep 15 10:50:08 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Mon Sep 14 11:26:28 2020
Response via : Initial Calibration



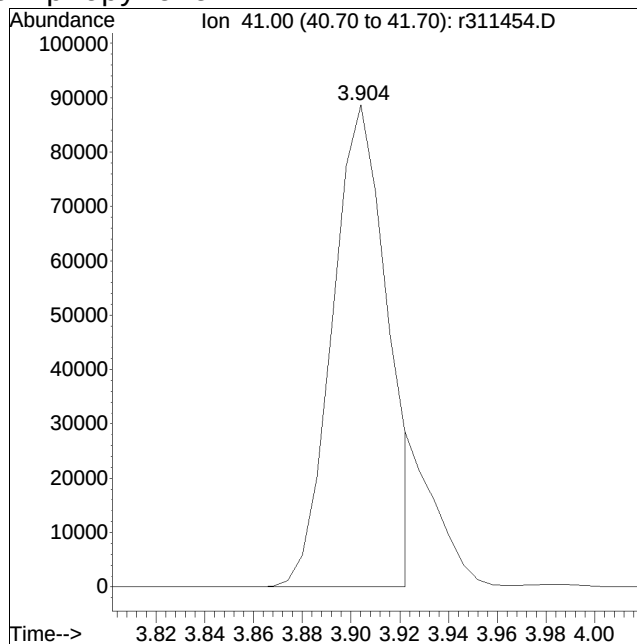
Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311454.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 3 Instrument :
Sample : IT015-LLSTD010 Quant Date : 9/14/2020 11:27 am

Compound #3: propylene



Original Peak Response = 159066



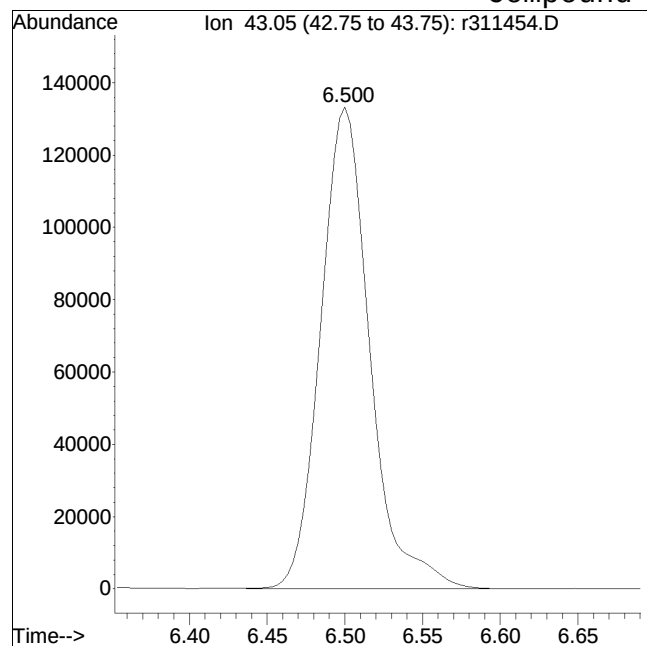
Manual Peak Response = 139924 M5

M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration Report

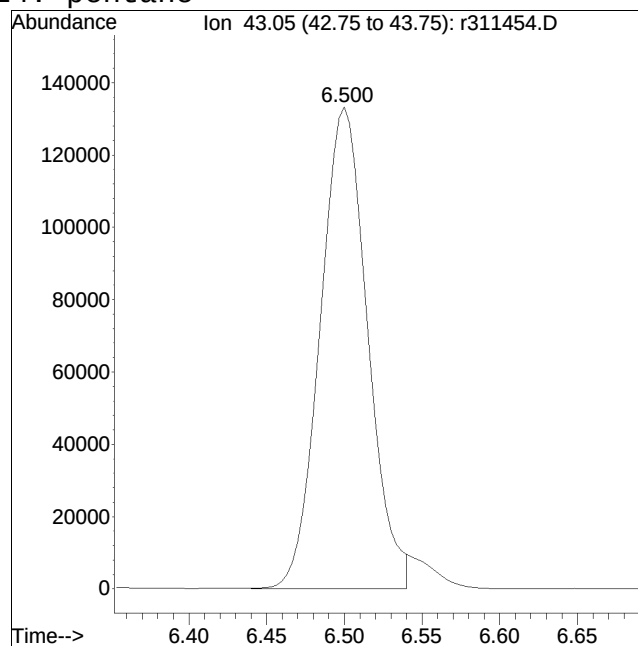
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311454.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 3 Instrument :
Sample : IT015-LLSTD010 Quant Date : 9/14/2020 11:27 am

Compound #24: pentane



Original Peak Response = 317483

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



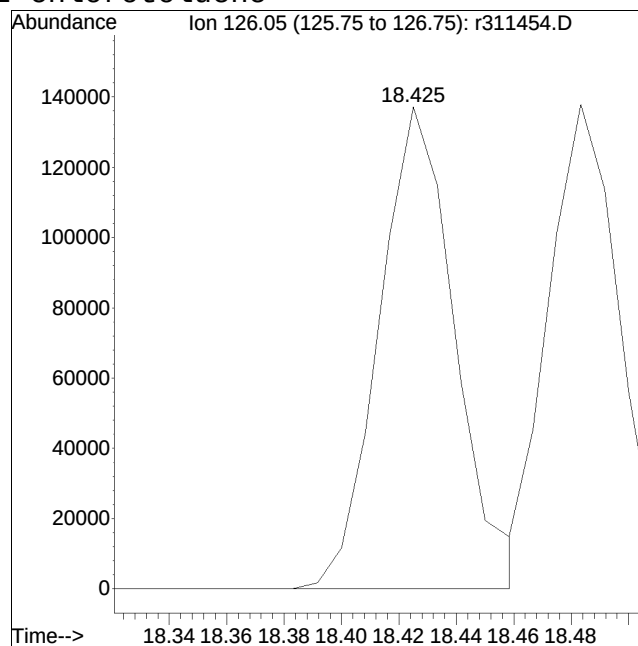
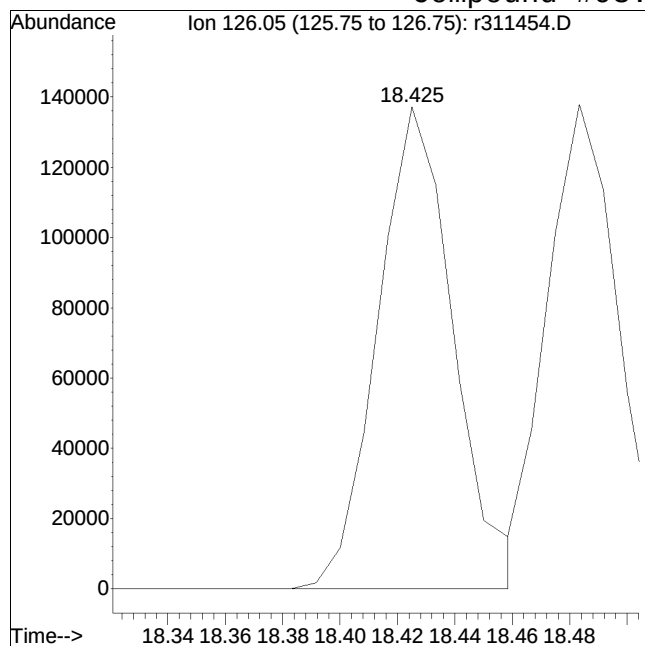
Manual Peak Response = 283152 M6

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

Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311454.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 3 Instrument :
Sample : IT015-LLSTD010 Quant Date : 9/14/2020 11:27 am

Compound #93: 2-chlorotoluene



Original Peak Response = 251805

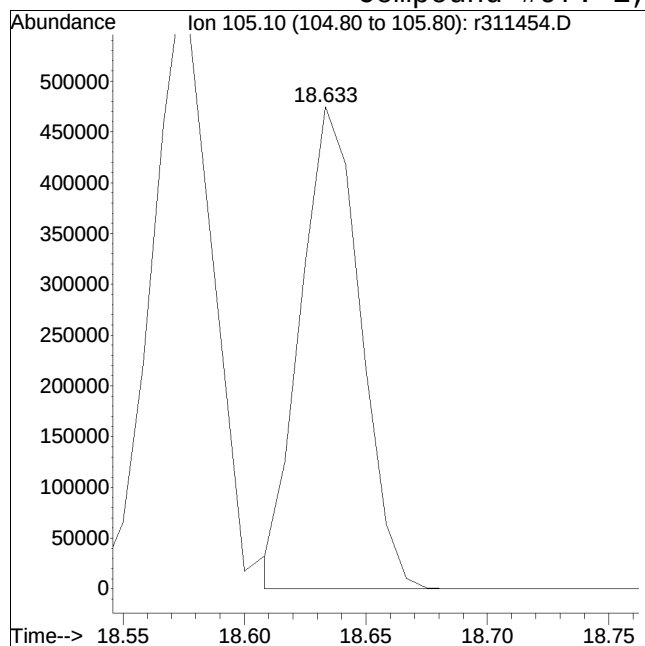
Manual Peak Response = 251805 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

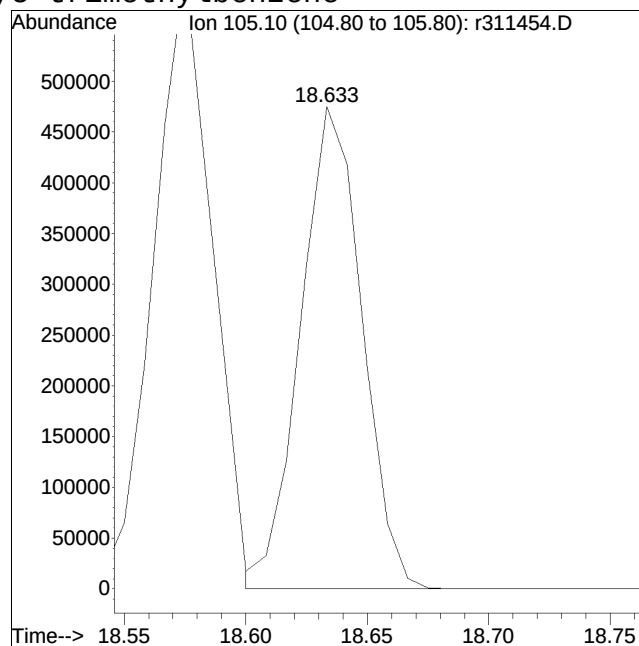
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311454.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 3 Instrument :
Sample : IT015-LLSTD010 Quant Date : 9/14/2020 11:27 am

Compound #97: 1,3,5-trimethylbenzene



Original Peak Response = 815940

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



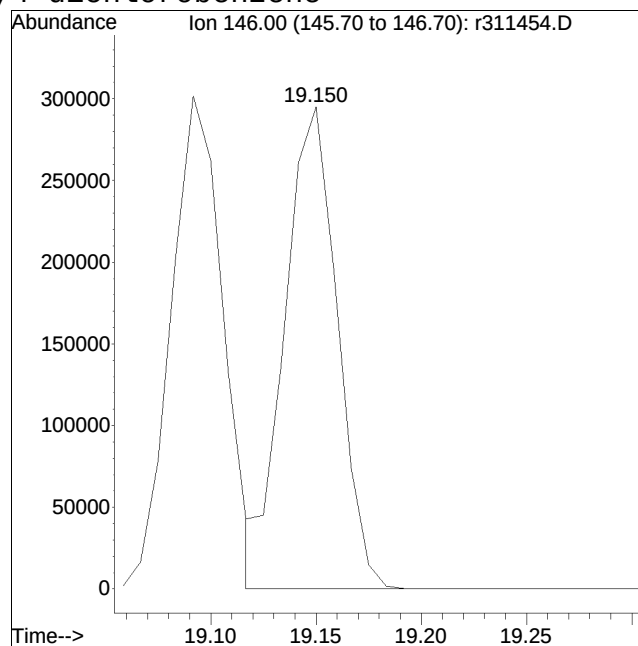
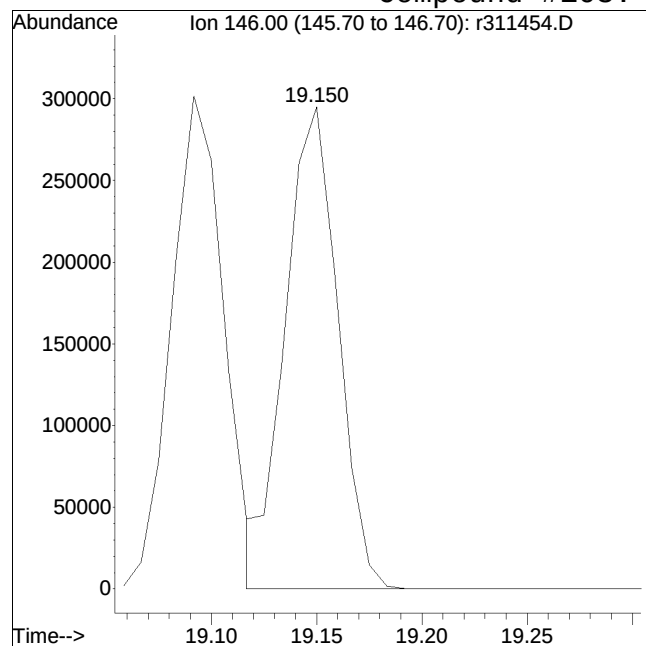
Manual Peak Response = 832353 M6

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

Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311454.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:1: 3 Instrument :
Sample : IT015-LLSTD010 Quant Date : 9/14/2020 11:27 am

Compound #103: 1,4-dichlorobenzene



Original Peak Response = 512781

Manual Peak Response = 512699 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311455.D
 Acq On : 12 Sep 2020 2:21 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD020
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:31 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.542	49	334502	10.000	ppbV	0.00
Standard Area = 330533			Recovery = 101.20%			
43) 1,4-difluorobenzene	11.807	114	848320	10.000	ppbV	0.00
Standard Area = 839357			Recovery = 101.07%			
67) chlorobenzene-D5	16.542	54	141632	10.000	ppbV	0.00
Standard Area = 137732			Recovery = 102.83%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.425	65	195186	10.020	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.20%			
69) toluene-D8	14.650	98	826335	9.707	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.07%			
90) bromofluorobenzene	17.908	95	529313	9.821	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.21%			
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	514289	19.171	ppbV	100
3) propylene	3.904	41	284117M6	19.355	ppbV	
4) propane	3.928	29	430467	19.766	ppbV	100
5) dichlorodifluoromethane	3.982	85	597383	18.984	ppbV	100
6) chloromethane	4.162	50	300054	18.870	ppbV	100
7) Freon-114	4.288	85	776262	19.039	ppbV	99
8) methanol	4.360	31	765890	98.791	ppbV	100
9) vinyl chloride	4.420	62	352369	19.194	ppbV	100
10) 1,3-butadiene	4.582	54	331506	19.296	ppbV	99
11) butane	4.648	43	498913	18.764	ppbV	99
12) acetaldehyde	4.300	29	894230	96.347	ppbV	97
13) bromomethane	4.894	94	291518	19.024	ppbV	100
14) chloroethane	5.116	64	179893	19.162	ppbV	99
15) ethanol	5.297	31	1592347	103.095	ppbV	98
16) dichlorofluoromethane	5.253	67	616521	18.517	ppbV	99
17) vinyl bromide	5.537	106	300718	19.147	ppbV	98
18) acrolein	5.690	56	172452	19.303	ppbV	99
19) acetone	5.850	43	2234070	93.099	ppbV	100
20) acetonitrile	5.533	41	286199	19.000	ppbV	99
21) trichlorofluoromethane	6.053	101	441546	19.029	ppbV	100
22) isopropyl alcohol	6.190	45	1478911	45.913	ppbV	100
23) acrylonitrile	6.427	53	307510	19.099	ppbV	99
24) pentane	6.500	43	575034M6	18.241	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311455.D
 Acq On : 12 Sep 2020 2:21 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD020
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:31 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.543	31	804557	21.038	ppbV	97
26) 1,1-dichloroethene	6.822	61	467068	19.269	ppbV	100
27) tertiary butyl alcohol	6.924	59	679083	20.406	ppbV	99
28) methylene chloride	6.990	49	458533	19.585	ppbV	98
29) 3-chloropropene	7.128	41	510331	19.046	ppbV	100
30) carbon disulfide	7.278	76	1214639	19.091	ppbV	100
31) Freon 113	7.320	101	595158	19.337	ppbV	100
32) trans-1,2-dichloroethene	8.117	61	498982	19.418	ppbV	100
33) 1,1-dichloroethane	8.350	63	578244	19.192	ppbV	100
34) MTBE	8.433	73	998139	19.269	ppbV	99
35) vinyl acetate	8.575	43	854360	20.486	ppbV	99
36) 2-butanone	8.833	43	795326	19.492	ppbV	100
37) cis-1,2-dichloroethene	9.350	61	436570	19.445	ppbV	99
38) Ethyl Acetate	9.650	61	134068	19.412	ppbV	89
39) chloroform	9.700	83	660458	19.649	ppbV	99
40) Tetrahydrofuran	10.142	42	494415	19.134	ppbV	99
41) 2,2-dichloropropane	9.717	77	522177	20.610	ppbV	98
42) 1,2-dichloroethane	10.550	62	331664	19.196	ppbV	99
44) hexane	9.608	57	706136	19.885	ppbV	98
45) diisopropyl ether	9.625	87	400598	19.056	ppbV	93
46) tert-butyl ethyl ether	10.250	59	1112992	19.803	ppbV	99
48) 1,1,1-trichloroethane	10.833	97	472335	19.456	ppbV	99
49) 1,1-dichloropropene	11.207	75	553603	19.203	ppbV	99
50) benzene	11.367	78	1369675	19.232	ppbV	99
51) thiophene	11.513	84	794358	19.716	ppbV	99
52) carbon tetrachloride	11.540	117	452966	19.968	ppbV	99
53) cyclohexane	11.687	56	732260	19.495	ppbV	99
54) tert-amyl methyl ether	12.073	73	1138750	19.548	ppbV	99
55) dibromomethane	12.293	93	327648	19.294	ppbV	99
56) 1,2-dichloropropane	12.320	63	401228	19.266	ppbV	100
57) bromodichloromethane	12.553	83	721718	19.869	ppbV	99
58) 1,4-dioxane	12.593	88	325049	19.970	ppbV	99
59) trichloroethene	12.607	130	504929	19.704	ppbV	99
60) 2,2,4-trimethylpentane	12.653	57	2176665M6	19.265	ppbV	
61) methyl methacrylate	12.853	41	653780	19.991	ppbV	99
62) heptane	12.973	43	834373	19.067	ppbV	97
63) cis-1,3-dichloropropene	13.617	75	670631	19.709	ppbV	99
64) 4-methyl-2-pentanone	13.658	43	977954	19.549	ppbV	96
65) trans-1,3-dichloropropene	14.242	75	626954	20.477	ppbV	100
66) 1,1,2-trichloroethane	14.442	97	419156	19.275	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311455.D
 Acq On : 12 Sep 2020 2:21 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD020
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:31 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.758	91	1389275	19.208	ppbV	100
70) 2-methylthiophene	14.825	97	1041649	19.295	ppbV	100
71) 1,3-dichloropropane	14.792	76	736942	19.252	ppbV	100
72) 2-hexanone	15.050	43	950191	19.660	ppbV	97
73) 3-methylthiophene	15.025	97	1064038	19.365	ppbV	100
74) dibromochloromethane	15.208	129	620611	20.149	ppbV	99
75) 1,2-dibromoethane	15.458	107	638645	19.297	ppbV	99
76) butyl acetate	15.700	73	228556	20.608	ppbV	95
77) octane	15.800	85	614509	19.949	ppbV	95
78) tetrachloroethene	15.925	166	579414	19.898	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.567	131	455000	20.512	ppbV	100
80) chlorobenzene	16.583	112	1112196	19.849	ppbV	99
81) ethylbenzene	16.933	91	1638490	19.711	ppbV	99
82) 2-ethylthiophene	16.975	97	1108295	19.518	ppbV	99
83) m+p-xylene	17.100	91	2739166	40.256	ppbV	98
84) bromoform	17.167	173	557039	22.099	ppbV	99
85) styrene	17.417	104	1178159	19.763	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.508	83	1106011	21.238	ppbV	98
87) o-xylene	17.517	91	1393419	20.705	ppbV	98
88) 1,2,3-trichloropropane	17.625	75	843849	19.830	ppbV	99
89) nonane	17.708	43	1187861	19.256	ppbV	95
91) isopropylbenzene	18.025	105	1792074	19.434	ppbV	98
92) bromobenzene	18.100	77	1114467	20.142	ppbV	98
93) 2-chlorotoluene	18.425	126	532757	20.002	ppbV	96
94) n-propylbenzene	18.458	120	627347	20.394	ppbV	97
95) 4-chlorotoluene	18.483	126	505781	19.524	ppbV	98
96) 4-ethyl toluene	18.575	105	1693804	20.791	ppbV	98
97) 1,3,5-trimethylbenzene	18.633	105	1674631	19.603	ppbV	98
98) tert-butylbenzene	18.967	119	1677261	20.418	ppbV	97
99) 1,2,4-trimethylbenzene	18.967	105	1658573	20.328	ppbV	98
100) decane	19.042	57	1380409	20.644	ppbV	93
101) Benzyl Chloride	19.083	91	1311243	26.812	ppbV	99
102) 1,3-dichlorobenzene	19.092	146	1124702	20.998	ppbV	97
103) 1,4-dichlorobenzene	19.150	146	1032765	20.401	ppbV	98
104) sec-butylbenzene	19.183	105	2349167	19.756	ppbV	97
105) 1,2,3-trimethylbenzene	19.308	105	1686974	20.323	ppbV	99
106) p-isopropyltoluene	19.308	119	2017708M6	20.489	ppbV	
107) 1,2-dichlorobenzene	19.425	146	1011342	20.198	ppbV	99
108) n-butylbenzene	19.642	91	1771454	20.650	ppbV	100
109) indan	19.475	117	1794342	20.581	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311455.D
 Acq On : 12 Sep 2020 2:21 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD020
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:31 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

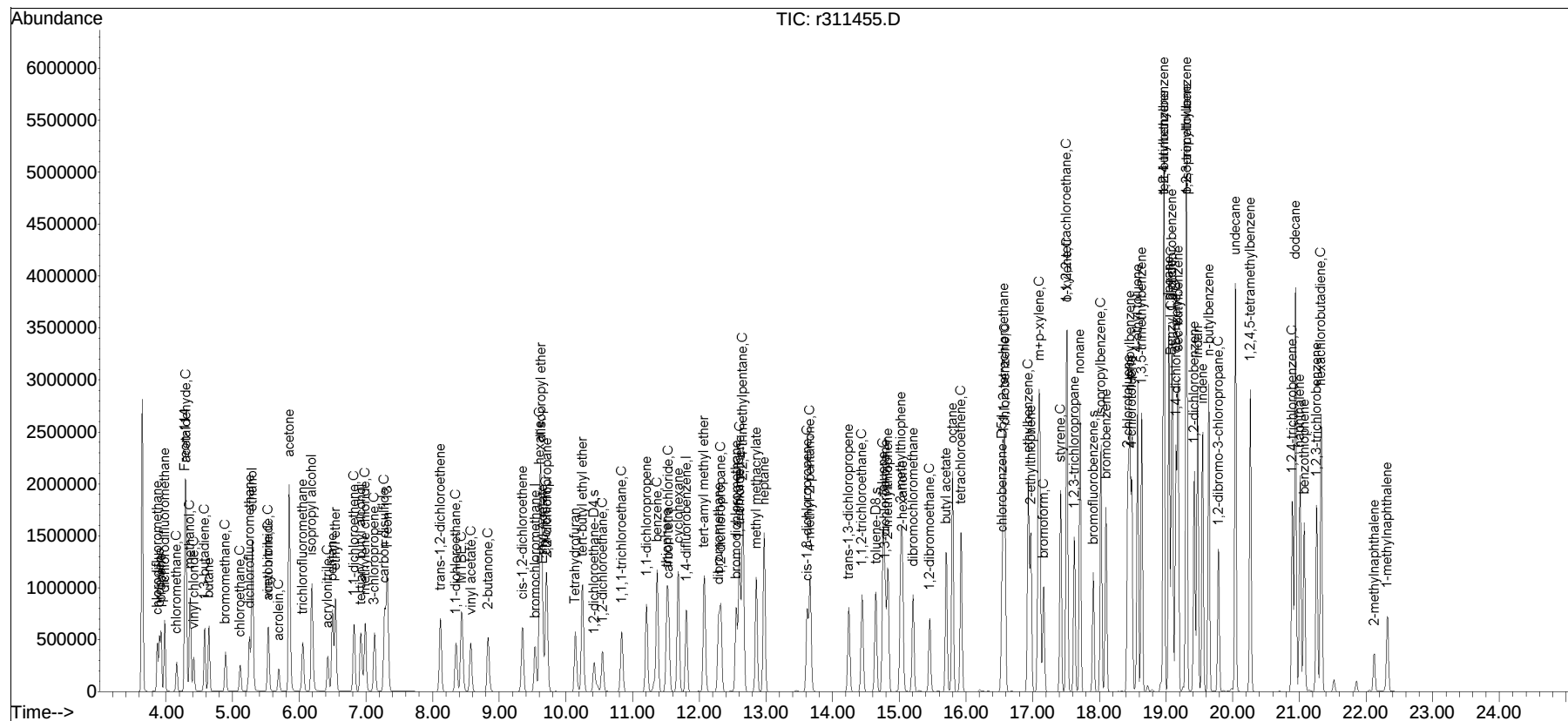
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.550	115	1454641	20.937	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.792	75	471397	21.500	ppbV	97
112) undecane	20.042	57	1545932	20.982	ppbV	95
113) 1,2,4,5-tetramethylben...	20.267	119	1801645	20.227	ppbV	97
114) dodecane	20.942	57	1563740	20.633	ppbV	94
115) 1,2,4-trichlorobenzene	20.892	180	748167	22.267	ppbV	98
116) naphthalene	21.008	128	2056995	21.054	ppbV	100
117) 1,2,3-trichlorobenzene	21.258	180	718887	21.186	ppbV	97
118) benzothiophene	21.075	134	1539339	20.911	ppbV	99
119) hexachlorobutadiene	21.325	225	729541	19.891	ppbV	97
120) 2-methylnaphthalene	22.125	142	259180	17.949	ppbV	99
121) 1-methylnaphthalene	22.317	142	528221	15.695	ppbV	99

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

```
Data Path   : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File  : r311455.D
Acq On     : 12 Sep 2020    2:21 AM
Operator   : AIRPIANO3:TS
Sample     : IT015-LLSTD020
Misc       : WG1409596
ALS Vial   : 0    Sample Multiplier: 1
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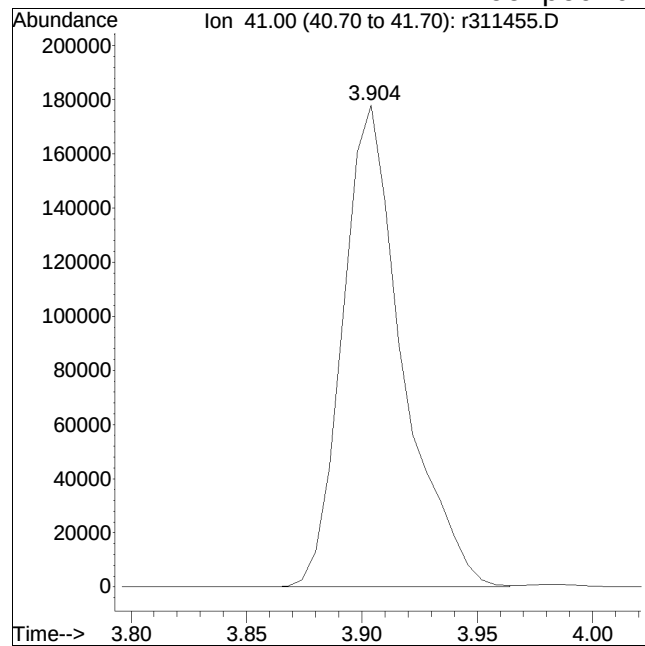
Quant Time: Sep 14 11:27:31 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Mon Sep 14 11:26:28 2020
Response via : Initial Calibration



Manual Integration Report

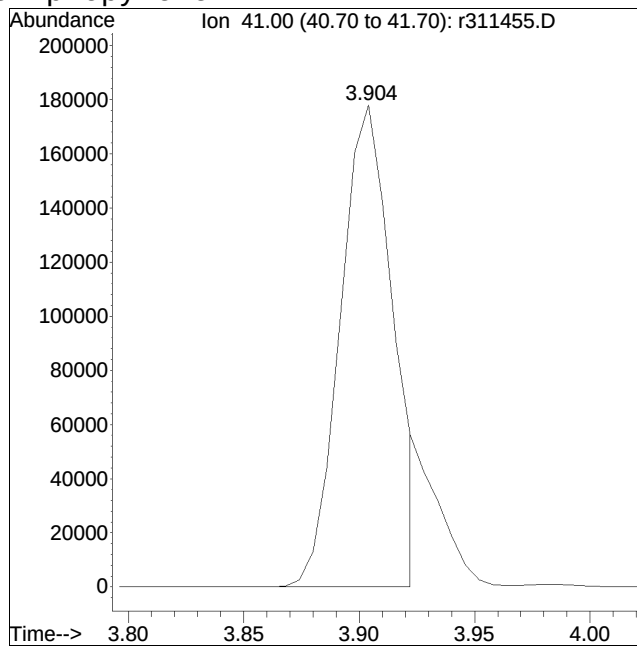
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311455.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 1 Instrument :
Sample : IT015-LLSTD020 Quant Date : 9/14/2020 11:27 am

Compound #3: propylene



Original Peak Response = 321979

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

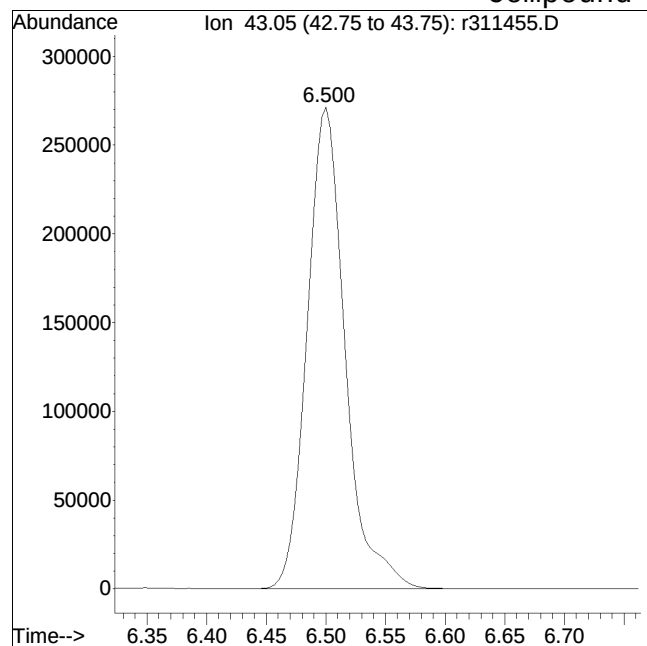


Manual Peak Response = 284117 M6

Manual Integration Report

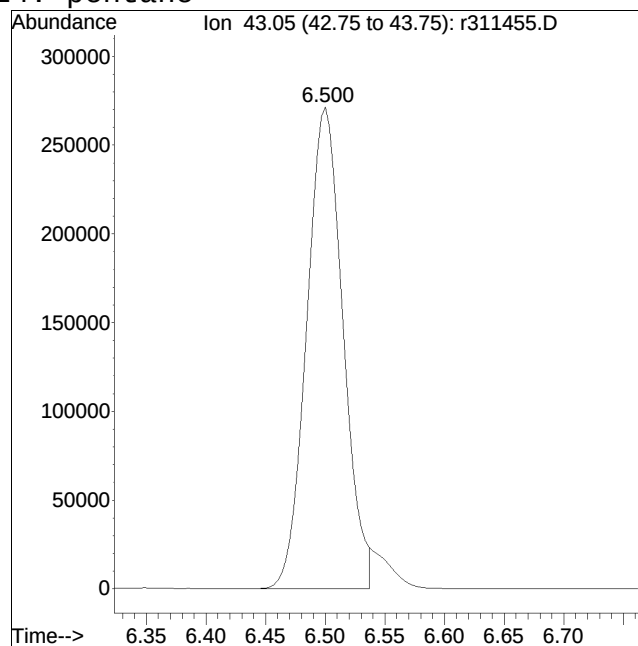
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311455.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 1 Instrument :
Sample : IT015-LLSTD020 Quant Date : 9/14/2020 11:27 am

Compound #24: pentane



Original Peak Response = 710635

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

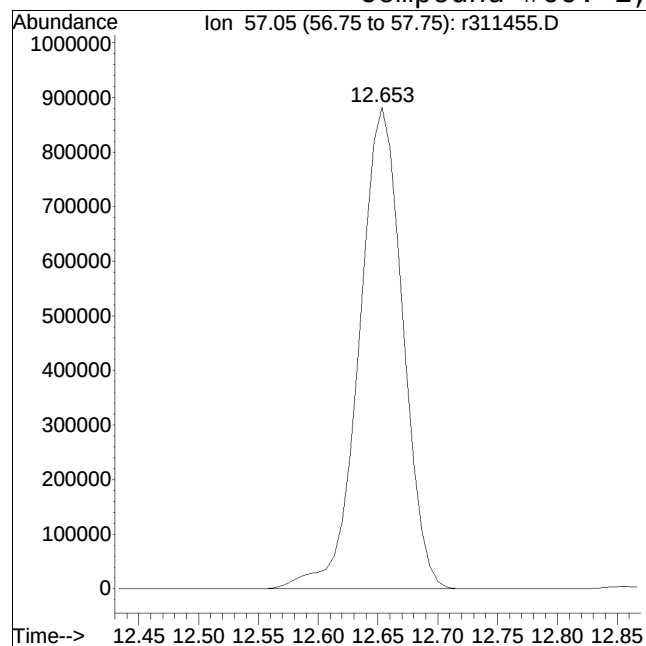


Manual Peak Response = 575034 M6

Manual Integration Report

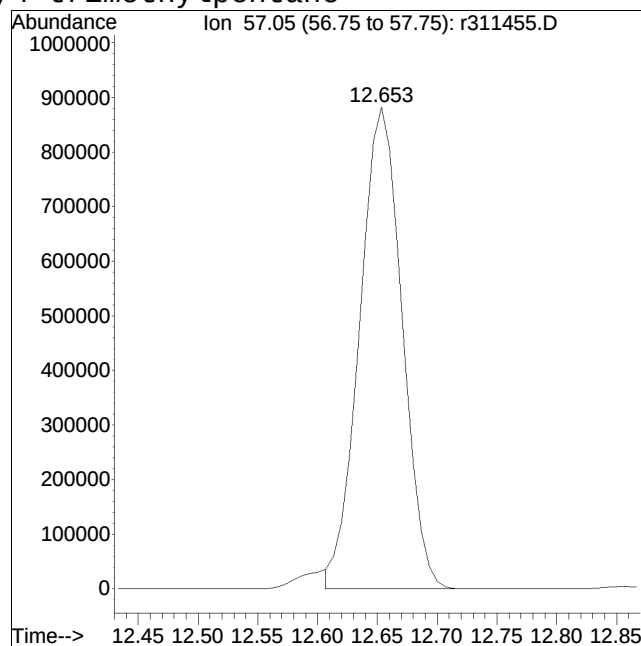
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Data File : r311455.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 1 Instrument :
Sample : IT015-LLSTD020 Quant Date : 9/14/2020 11:27 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 2236976

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

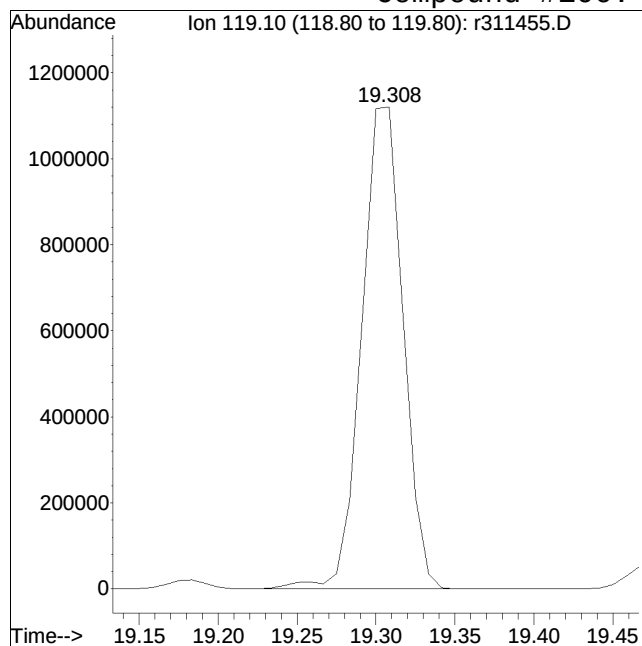


Manual Peak Response = 2176665 M6

Manual Integration Report

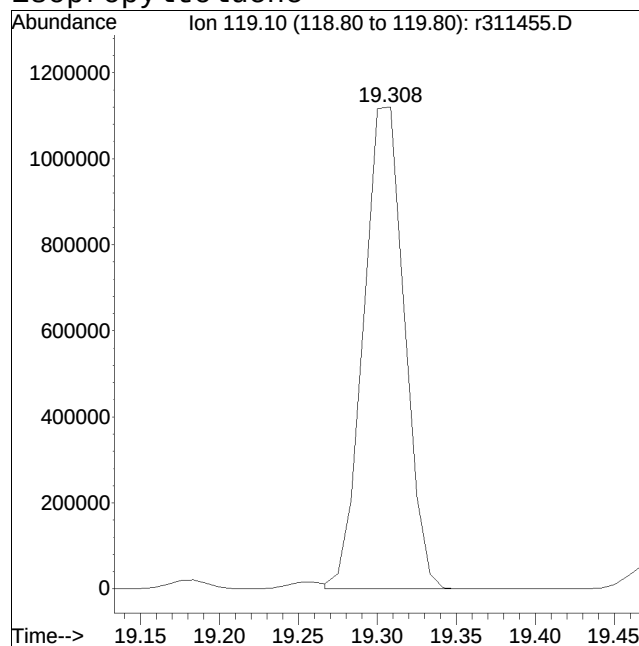
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Data File : r311455.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 1 Instrument :
Sample : IT015-LLSTD020 Quant Date : 9/14/2020 11:27 am

Compound #106: p-isopropyltoluene



Original Peak Response = 2044942

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



Manual Peak Response = 2017708 M6

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311456.D
 Acq On : 12 Sep 2020 3:00 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD050
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.542	49	351449	10.000	ppbV	0.00
Standard Area = 330533			Recovery = 106.33%			
43) 1,4-difluorobenzene	11.807	114	887511	10.000	ppbV	0.00
Standard Area = 839357			Recovery = 105.74%			
67) chlorobenzene-D5	16.542	54	148090	10.000	ppbV	0.00
Standard Area = 137732			Recovery = 107.52%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.425	65	198233	9.727	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.27%			
69) toluene-D8	14.650	98	875890	9.841	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.41%			
90) bromofluorobenzene	17.908	95	573755	10.182	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.82%			
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	1218252	43.222	ppbV	100
3) propylene	3.904	41	670682M6	43.486	ppbV	
4) propane	3.928	29	1033028	45.146	ppbV	99
5) dichlorodifluoromethane	3.982	85	1339180	40.506	ppbV	99
6) chloromethane	4.162	50	710343	42.519	ppbV	100
7) Freon-114	4.288	85	1652063	38.565	ppbV	97
8) methanol	4.366	31	1801233	221.135	ppbV	99
9) vinyl chloride	4.420	62	845883	43.854	ppbV	100
10) 1,3-butadiene	4.582	54	784095	43.438	ppbV	97
11) butane	4.648	43	1194372	42.754	ppbV	99
12) acetaldehyde	4.306	29	1880614	192.852	ppbV	91
13) bromomethane	4.900	94	688563	42.768	ppbV	100
14) chloroethane	5.116	64	437608	44.366	ppbV	100
15) ethanol	5.303	31	3544006	218.388	ppbV	94
16) dichlorofluoromethane	5.257	67	1457504	41.665	ppbV	100
17) vinyl bromide	5.540	106	714141	43.277	ppbV	100
18) acrolein	5.693	56	417960	44.527	ppbV	99
19) acetone	5.853	43	5025291	199.318	ppbV	98
20) acetonitrile	5.540	41	689017	43.536	ppbV	99
21) trichlorofluoromethane	6.057	101	1027933	42.163	ppbV	100
22) isopropyl alcohol	6.193	45	3449203	101.918	ppbV	100
23) acrylonitrile	6.433	53	741258	43.818	ppbV	100
24) pentane	6.503	43	1385783M6	41.840	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311456.D
 Acq On : 12 Sep 2020 3:00 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD050
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.543	31	1903033	47.362	ppbV	99
26) 1,1-dichloroethene	6.828	61	1144545	44.942	ppbV	98
27) tertiary butyl alcohol	6.918	59	1704069	48.738	ppbV	98
28) methylene chloride	6.996	49	1098203	44.644	ppbV	94
29) 3-chloropropene	7.134	41	1253550	44.528	ppbV	99
30) carbon disulfide	7.284	76	2859283	42.773	ppbV	99
31) Freon 113	7.326	101	1480622	45.787	ppbV	98
32) trans-1,2-dichloroethene	8.125	61	1231818	45.624	ppbV	99
33) 1,1-dichloroethane	8.358	63	1436496	45.378	ppbV	99
34) MTBE	8.433	73	2390806	43.930	ppbV	97
35) vinyl acetate	8.575	43	2098771	47.899	ppbV	96
36) 2-butanone	8.833	43	1917125	44.719	ppbV	99
37) cis-1,2-dichloroethene	9.350	61	1080454	45.803	ppbV	97
38) Ethyl Acetate	9.650	61	343044	47.275	ppbV	78
39) chloroform	9.708	83	1562737	44.251	ppbV	99
40) Tetrahydrofuran	10.142	42	1204194	44.356	ppbV	100
41) 2,2-dichloropropane	9.717	77	1230059	46.208	ppbV	96
42) 1,2-dichloroethane	10.550	62	795472	43.820	ppbV	99
44) hexane	9.617	57	1702608	45.829	ppbV	89
45) diisopropyl ether	9.625	87	1000261	45.479	ppbV	75
46) tert-butyl ethyl ether	10.250	59	2744605	46.678	ppbV	98
48) 1,1,1-trichloroethane	10.842	97	1151419	45.334	ppbV	99
49) 1,1-dichloropropene	11.213	75	1323974	43.898	ppbV	97
50) benzene	11.373	78	3265600	43.828	ppbV	98
51) thiophene	11.520	84	1966454	46.651	ppbV	98
52) carbon tetrachloride	11.547	117	1087176	45.810	ppbV	99
53) cyclohexane	11.687	56	1841330	46.858	ppbV	98
54) tert-amyl methyl ether	12.073	73	2705352	44.390	ppbV	98
55) dibromomethane	12.293	93	820778	46.198	ppbV	99
56) 1,2-dichloropropane	12.327	63	1019229	46.780	ppbV	98
57) bromodichloromethane	12.560	83	1737800	45.730	ppbV	98
58) 1,4-dioxane	12.593	88	837069	49.156	ppbV	97
59) trichloroethene	12.607	130	1261905	47.070	ppbV	98
60) 2,2,4-trimethylpentane	12.660	57	5382029M6	45.532	ppbV	
61) methyl methacrylate	12.860	41	1626998	47.553	ppbV	99
62) heptane	12.980	43	2025602	44.245	ppbV	95
63) cis-1,3-dichloropropene	13.625	75	1627936	45.730	ppbV	98
64) 4-methyl-2-pentanone	13.658	43	2387504	45.618	ppbV	93
65) trans-1,3-dichloropropene	14.242	75	1518442	47.403	ppbV	100
66) 1,1,2-trichloroethane	14.442	97	1064825	46.805	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311456.D
 Acq On : 12 Sep 2020 3:00 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD050
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.758	91	3471870	45.908	ppbV	100
70) 2-methylthiophene	14.833	97	2606559	46.176	ppbV	100
71) 1,3-dichloropropane	14.792	76	1751565	43.762	ppbV	99
72) 2-hexanone	15.050	43	2273531	44.989	ppbV	92
73) 3-methylthiophene	15.025	97	2664023	46.370	ppbV	99
74) dibromochloromethane	15.208	129	1533644	47.621	ppbV	99
75) 1,2-dibromoethane	15.458	107	1563538	45.184	ppbV	98
76) butyl acetate	15.708	73	563440	48.587	ppbV	92
77) octane	15.800	85	1552775	48.210	ppbV	87
78) tetrachloroethene	15.925	166	1434933	47.128	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.567	131	1127275	48.602	ppbV	98
80) chlorobenzene	16.583	112	2666935	45.521	ppbV	94
81) ethylbenzene	16.942	91	4163407	47.902	ppbV	97
82) 2-ethylthiophene	16.975	97	2786935	46.941	ppbV	98
83) m+p-xylene	17.100	91	6811898	95.745	ppbV	97
84) bromoform	17.167	173	1415236	53.698	ppbV	98
85) styrene	17.425	104	2940399	47.172	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.517	83	2439663	44.805	ppbV	97
87) o-xylene	17.517	91	3256769	46.282	ppbV	98
88) 1,2,3-trichloropropane	17.625	75	2004781	45.056	ppbV	97
89) nonane	17.717	43	2751211	42.655	ppbV	87
91) isopropylbenzene	18.025	105	4245043	44.028	ppbV	95
92) bromobenzene	18.100	77	2645496	45.728	ppbV	90
93) 2-chlorotoluene	18.425	126	1363873	48.973	ppbV	89
94) n-propylbenzene	18.458	120	1584704	49.269	ppbV	90
95) 4-chlorotoluene	18.492	126	1349071	49.805	ppbV	89
96) 4-ethyl toluene	18.575	105	3460036	40.619	ppbV	95
97) 1,3,5-trimethylbenzene	18.642	105	3973911	44.490	ppbV	96
98) tert-butylbenzene	18.967	119	3515617	40.930	ppbV	94
99) 1,2,4-trimethylbenzene	18.975	105	3506452	41.102	ppbV	96
100) decane	19.050	57	3281454	46.935	ppbV	91
101) Benzyl Chloride	19.083	91	3374630	65.994	ppbV	95
102) 1,3-dichlorobenzene	19.100	146	2625489	46.881	ppbV	96
103) 1,4-dichlorobenzene	19.150	146	2611675	49.342	ppbV	94
104) sec-butylbenzene	19.183	105	5478515	44.064	ppbV	92
105) 1,2,3-trimethylbenzene	19.308	105	3535751	40.738	ppbV	97
106) p-isopropyltoluene	19.308	119	4072032M6	39.547	ppbV	
107) 1,2-dichlorobenzene	19.425	146	2499171	47.736	ppbV	96
108) n-butylbenzene	19.642	91	4355685	48.561	ppbV	95
109) indan	19.475	117	4124557	45.244	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311456.D
 Acq On : 12 Sep 2020 3:00 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD050
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:41 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

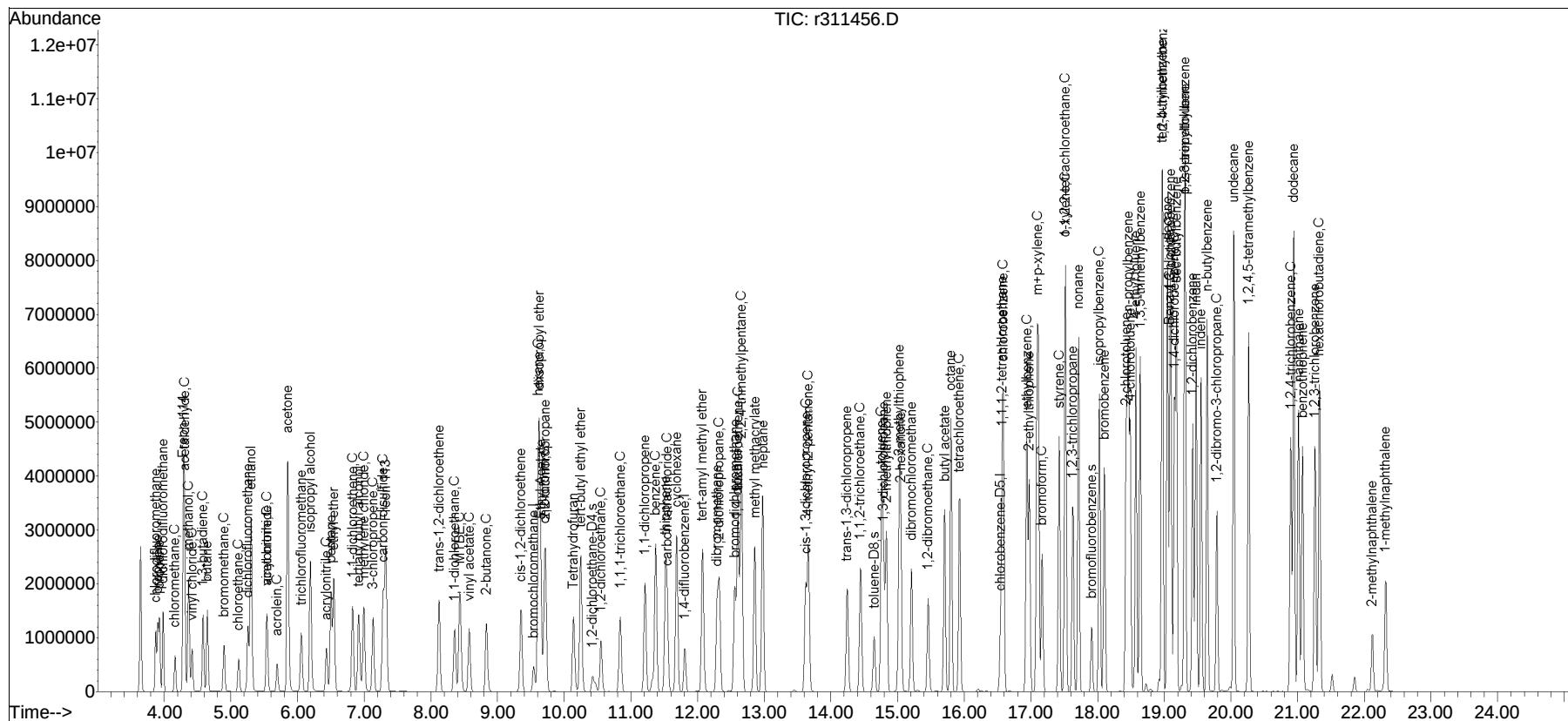
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.550	115	3448432	47.470	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.792	75	1096795	47.842	ppbV	93
112)	undecane	20.042	57	3517630	45.660	ppbV	94
113)	1,2,4,5-tetramethylben...	20.267	119	4131660	44.363	ppbV	91
114)	dodecane	20.942	57	3561739	44.946	ppbV	93
115)	1,2,4-trichlorobenzene	20.900	180	2029336	57.764	ppbV	97
116)	naphthalene	21.017	128	5382126	52.687	ppbV	100
117)	1,2,3-trichlorobenzene	21.258	180	1956509	55.145	ppbV	94
118)	benzothiophene	21.075	134	4294291	55.793	ppbV	98
119)	hexachlorobutadiene	21.325	225	1660991	43.313	ppbV	94
120)	2-methylnaphthalene	22.117	142	766839	50.791	ppbV	98
121)	1-methylnaphthalene	22.317	142	1478478	42.013	ppbV	99

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

Sub List : Default - All compounds listed20\09\200911T_I\r311454.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File : r311456.D
Acq On : 12 Sep 2020 3:00 AM
Operator : AIRPIANO3:TS
Sample : IT015-LLSTD050
Misc : WG1409596
ALS Vial : 0 Sample Multiplier: 1

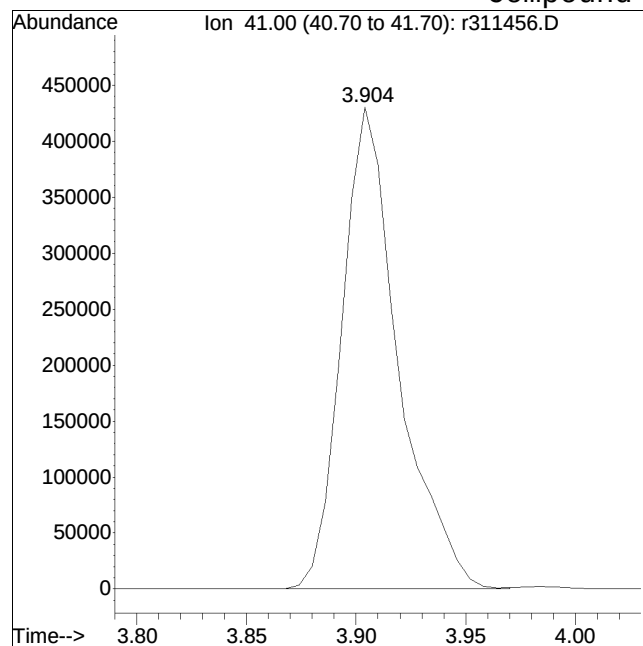
Quant Time: Sep 14 11:27:41 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Mon Sep 14 11:26:28 2020
Response via : Initial Calibration



Manual Integration Report

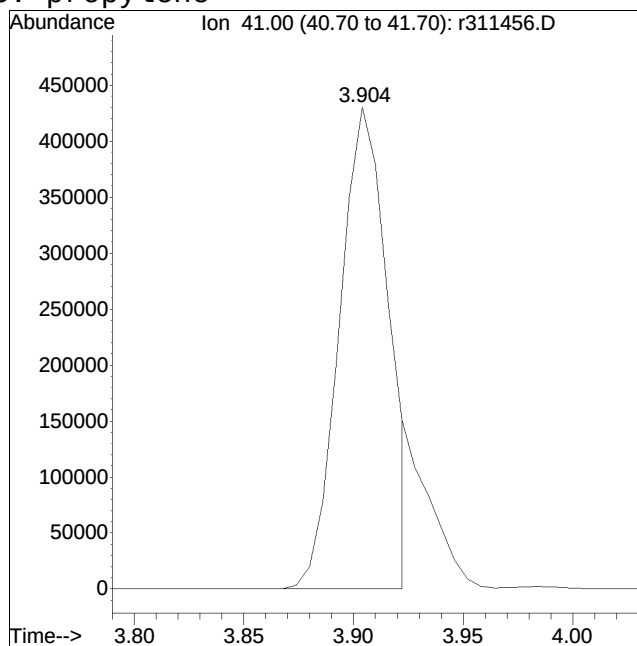
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311456.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:3: 0 Instrument :
Sample : IT015-LLSTD050 Quant Date : 9/14/2020 11:27 am

Compound #3: propylene



Original Peak Response = 773977

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

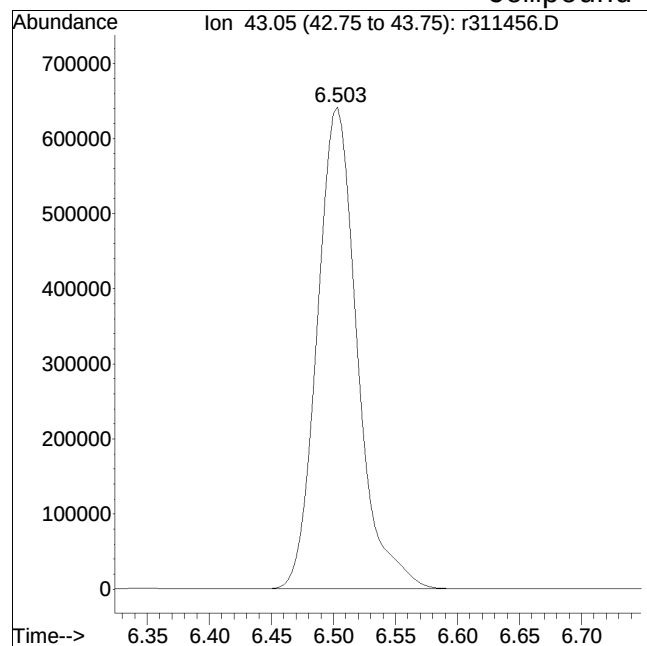


Manual Peak Response = 670682 M6

Manual Integration Report

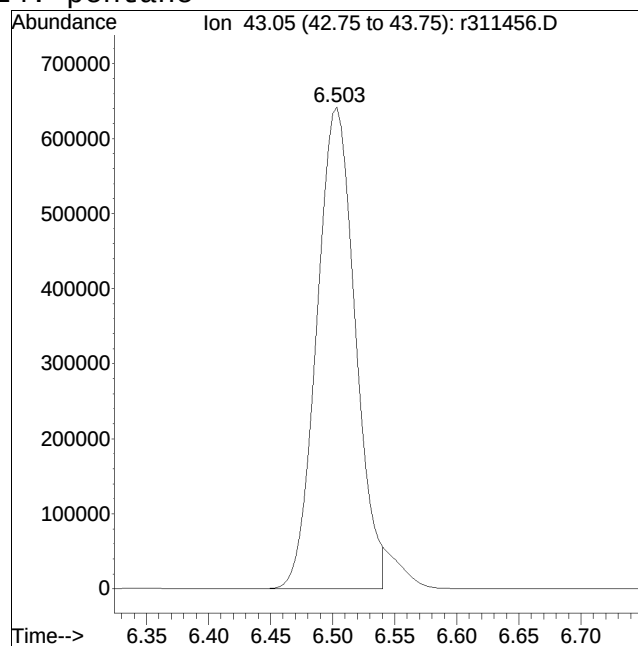
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311456.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:3: 0 Instrument :
Sample : IT015-LLSTD050 Quant Date : 9/14/2020 11:27 am

Compound #24: pentane



Original Peak Response = 1674804

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

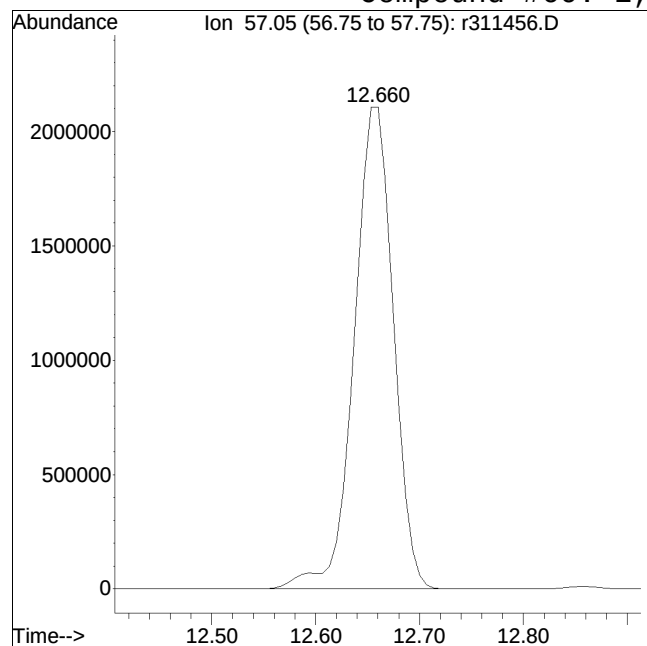


Manual Peak Response = 1385783 M6

Manual Integration Report

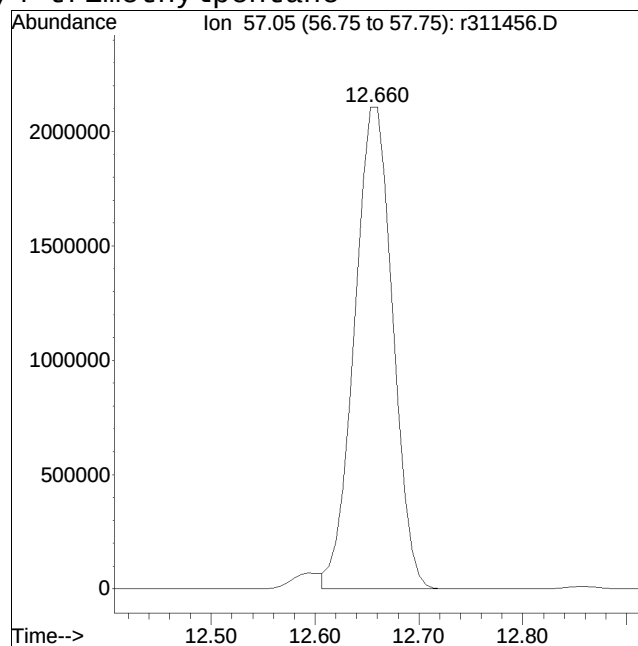
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311456.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:3: 0 Instrument :
Sample : IT015-LLSTD050 Quant Date : 9/14/2020 11:27 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 5528263

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



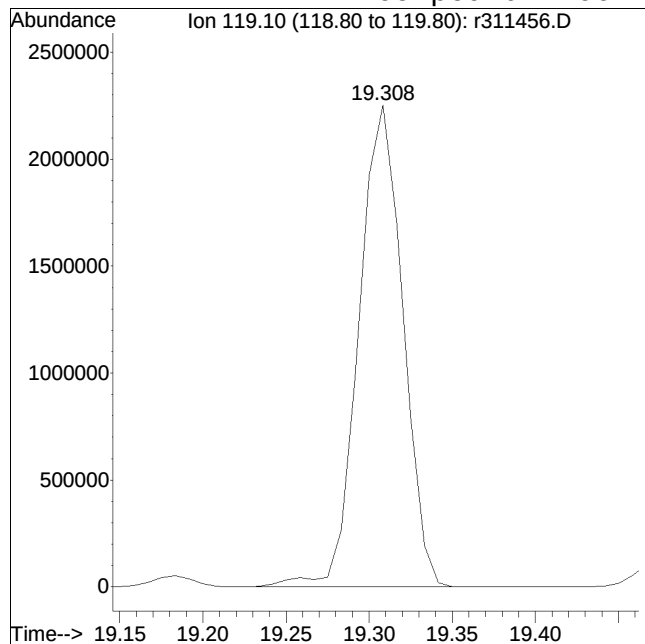
Manual Peak Response = 5382029 M6

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

Manual Integration Report

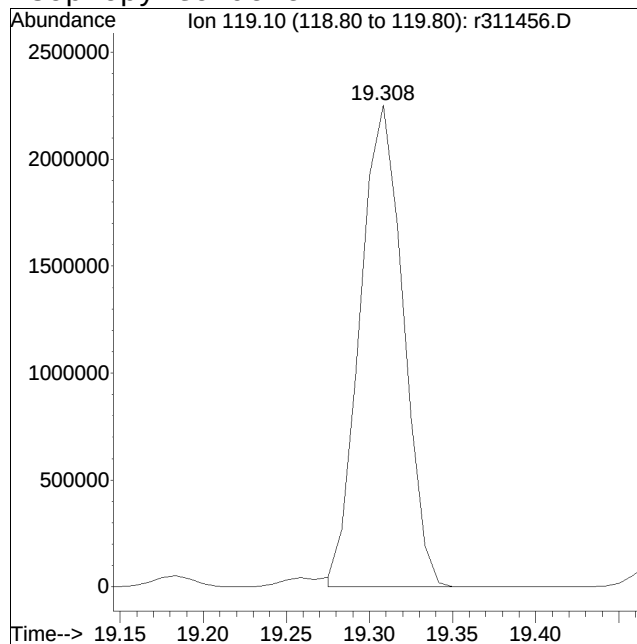
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311456.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:3: 0 Instrument :
Sample : IT015-LLSTD050 Quant Date : 9/14/2020 11:27 am

Compound #106: p-isopropyltoluene



Original Peak Response = 4158868

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



Manual Peak Response = 4072032 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311457.D
 Acq On : 12 Sep 2020 3:42 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD100
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:51 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.550	49	373000	10.000	ppbV	0.02
Standard Area = 330533			Recovery = 112.85%			
43) 1,4-difluorobenzene	11.813	114	906769	10.000	ppbV	0.00
Standard Area = 839357			Recovery = 108.03%			
67) chlorobenzene-D5	16.542	54	150022	10.000	ppbV	0.00
Standard Area = 137732			Recovery = 108.92%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.433	65	197044	9.464	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.64%			
69) toluene-D8	14.650	98	915347	10.151	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.51%			
90) bromofluorobenzene	17.917	95	614398	10.763	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.63%			
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.874	51	2289073	76.521	ppbV	99
3) propylene	3.904	41	1311510M6	80.123	ppbV	
4) propane	3.928	29	1961051	80.752	ppbV	99
5) dichlorodifluoromethane	3.982	85	2355497	67.130	ppbV	99
6) chloromethane	4.162	50	1338565	75.494	ppbV	99
7) Freon-114	4.288	85	2666381	58.647	ppbV	94
8) methanol	4.372	31	3360822	388.765	ppbV	98
9) vinyl chloride	4.420	62	1611364	78.713	ppbV	99
10) 1,3-butadiene	4.582	54	1461034	76.263	ppbV	95
11) butane	4.648	43	2276403	76.778	ppbV	100
12) acetaldehyde	4.306	29	3076953	297.303	ppbV #	83
13) bromomethane	4.894	94	1274334	74.578	ppbV	100
14) chloroethane	5.116	64	875539	83.636	ppbV	100
15) ethanol	5.313	31	6316775	366.761	ppbV	87
16) dichlorofluoromethane	5.260	67	2641904	71.159	ppbV	99
17) vinyl bromide	5.540	106	1319922	75.365	ppbV	99
18) acrolein	5.697	56	819044	82.215	ppbV	98
19) acetone	5.857	43	8774257	327.907	ppbV	98
20) acetonitrile	5.547	41	1342593	79.932	ppbV	98
21) trichlorofluoromethane	6.057	101	1886645	72.914	ppbV	99
22) isopropyl alcohol	6.203	45	6391993	177.960	ppbV	100
23) acrylonitrile	6.440	53	1447761	80.637	ppbV	99
24) pentane	6.503	43	3456770	98.338	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311457.D
 Acq On : 12 Sep 2020 3:42 AM
 Operator : AIRPIANO3:TS
 Sample : IT015-LLSTD100
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:51 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.543	31	3434551	80.540	ppbV	96
26) 1,1-dichloroethene	6.828	61	2252096	83.322	ppbV	94
27) tertiary butyl alcohol	6.918	59	3411667	91.939	ppbV	97
28) methylene chloride	6.996	49	2114434	80.990	ppbV	90
29) 3-chloropropene	7.134	41	2490183	83.345	ppbV	98
30) carbon disulfide	7.284	76	5313693	74.897	ppbV	99
31) Freon 113	7.326	101	2916179	84.971	ppbV	95
32) trans-1,2-dichloroethene	8.125	61	2458140	85.784	ppbV	96
33) 1,1-dichloroethane	8.358	63	2877489	85.647	ppbV	100
34) MTBE	8.433	73	4521990	78.288	ppbV	95
35) vinyl acetate	8.575	43	4103232	88.235	ppbV #	93
36) 2-butanone	8.833	43	3707298	81.480	ppbV	98
37) cis-1,2-dichloroethene	9.358	61	2155758	86.107	ppbV	96
38) Ethyl Acetate	9.658	61	702313	91.194	ppbV #	56
39) chloroform	9.717	83	2796009	74.598	ppbV	99
40) Tetrahydrofuran	10.142	42	2368837	82.214	ppbV	99
41) 2,2-dichloropropane	9.725	77	2180757	77.188	ppbV #	94
42) 1,2-dichloroethane	10.558	62	1504138	78.071	ppbV	97
44) hexane	9.617	57	3057989	80.564	ppbV	97
45) diisopropyl ether	9.625	87	1861833	82.854	ppbV #	68
46) tert-butyl ethyl ether	10.250	59	5313974	88.457	ppbV	96
48) 1,1,1-trichloroethane	10.842	97	2209021	85.127	ppbV	98
49) 1,1-dichloropropene	11.213	75	2493814	80.929	ppbV	94
50) benzene	11.373	78	6063410	79.649	ppbV	98
51) thiophene	11.527	84	3733840	86.699	ppbV	98
52) carbon tetrachloride	11.547	117	1976124	81.499	ppbV	99
53) cyclohexane	11.693	56	3598936	89.640	ppbV	98
54) tert-amyl methyl ether	12.080	73	5071259	81.443	ppbV	96
55) dibromomethane	12.300	93	1570538	86.522	ppbV	97
56) 1,2-dichloropropane	12.333	63	2036275	91.475	ppbV	97
57) bromodichloromethane	12.560	83	3169396	81.631	ppbV	98
58) 1,4-dioxane	12.593	88	1571159	90.306	ppbV	97
59) trichloroethene	12.613	130	2377680	86.806	ppbV	98
60) 2,2,4-trimethylpentane	12.660	57	9866161M6	81.696	ppbV	
61) methyl methacrylate	12.860	41	3103452	88.780	ppbV	96
62) heptane	12.980	43	3802245	81.287	ppbV	94
63) cis-1,3-dichloropropene	13.625	75	3024988	83.169	ppbV	99
64) 4-methyl-2-pentanone	13.667	43	4465601	83.513	ppbV #	89
65) trans-1,3-dichloropropene	14.250	75	2803550	85.663	ppbV	98
66) 1,1,2-trichloroethane	14.450	97	2140615	92.094	ppbV	92

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311457.D
 Acq On : 12 Sep 2020 3:42 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD100
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:51 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.767	91	6427064	83.890	ppbV	99
70) 2-methylthiophene	14.833	97	5057782	88.447	ppbV	99
71) 1,3-dichloropropane	14.800	76	3131639	77.236	ppbV	96
72) 2-hexanone	15.050	43	4166632	81.389	ppbV #	89
73) 3-methylthiophene	15.025	97	4980650	85.576	ppbV	98
74) dibromochloromethane	15.217	129	2732330	83.748	ppbV	97
75) 1,2-dibromoethane	15.467	107	2960917	84.464	ppbV	95
76) butyl acetate	15.708	73	1059130	90.155	ppbV	89
77) octane	15.800	85	2854484	87.483	ppbV	86
78) tetrachloroethene	15.933	166	2491669	80.781	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.575	131	1891979	80.522	ppbV	98
80) chlorobenzene	16.592	112	4661273	78.537	ppbV	92
81) ethylbenzene	16.942	91	7619438	86.536	ppbV	98
82) 2-ethylthiophene	16.975	97	5292461	87.994	ppbV	97
83) m+p-xylene	17.108	91	11372652	157.791	ppbV	97
84) bromoform	17.175	173	2423952	90.787	ppbV	96
85) styrene	17.425	104	5575715	88.297	ppbV	94
86) 1,1,2,2-tetrachloroethane	17.517	83	3770218	68.350	ppbV	98
87) o-xylene	17.525	91	5036698	70.654	ppbV	92
88) 1,2,3-trichloropropane	17.633	75	3639024	80.731	ppbV	94
89) nonane	17.717	43	4893671	74.895	ppbV #	90
91) isopropylbenzene	18.033	105	7501489	76.800	ppbV	92
92) bromobenzene	18.108	77	4552324	77.674	ppbV	86
93) 2-chlorotoluene	18.433	126	2567566	91.007	ppbV	92
94) n-propylbenzene	18.458	120	2872482	88.157	ppbV	73
95) 4-chlorotoluene	18.492	126	2910936	106.082	ppbV	83
96) 4-ethyl toluene	18.575	105	5419959	62.808	ppbV	92
97) 1,3,5-trimethylbenzene	18.642	105	6828312	75.463	ppbV	94
98) tert-butylbenzene	18.967	119	5275114	60.624	ppbV	91
99) 1,2,4-trimethylbenzene	18.975	105	5178073	59.914	ppbV	94
100) decane	19.050	57	5366314	75.767	ppbV	95
101) Benzyl Chloride	19.083	91	5466606	105.528	ppbV	91
102) 1,3-dichlorobenzene	19.100	146	4012193	70.719	ppbV	93
103) 1,4-dichlorobenzene	19.150	146	4298113	80.157	ppbV #	94
104) sec-butylbenzene	19.183	105	8903537	70.690	ppbV #	89
105) 1,2,3-trimethylbenzene	19.317	105	5201598	59.160	ppbV	98
106) p-isopropyltoluene	19.308	119	5912684M6	56.683	ppbV	
107) 1,2-dichlorobenzene	19.425	146	4349805	82.014	ppbV #	94
108) n-butylbenzene	19.650	91	7192687	79.157	ppbV	93
109) indan	19.475	117	6702025	72.571	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311457.D
 Acq On : 12 Sep 2020 3:42 AM
 Operator : AIRPIAN03:TS
 Sample : IT015-LLSTD100
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 14 11:27:51 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Mon Sep 14 11:26:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default - All compounds listed

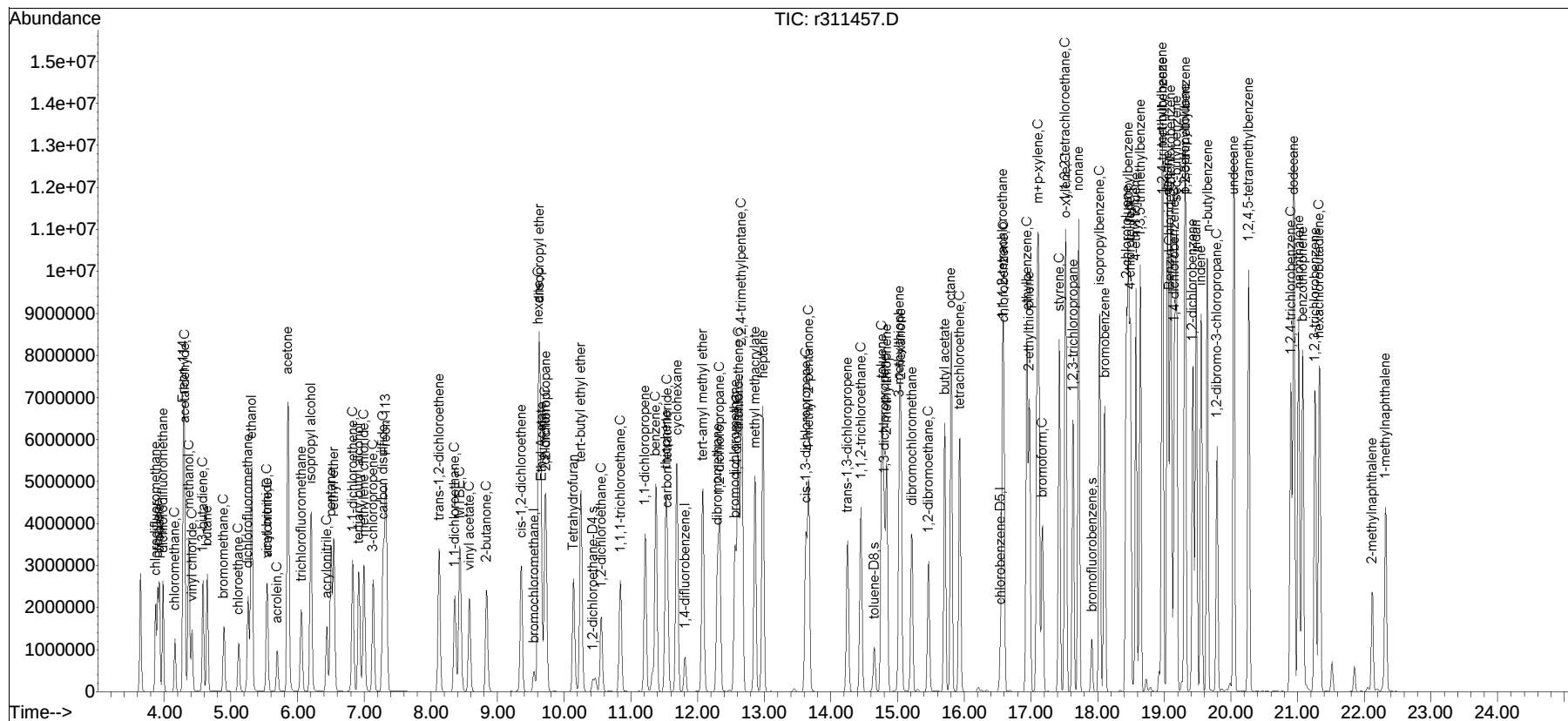
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.550	115	5874139	79.820	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.792	75	1854460	79.849	ppbV #	81
112) undecane	20.042	57	5641430	72.285	ppbV #	98
113) 1,2,4,5-tetramethylben...	20.267	119	6771852	71.775	ppbV	92
114) dodecane	20.942	57	5743212	71.541	ppbV	97
115) 1,2,4-trichlorobenzene	20.900	180	3470418	97.512	ppbV	98
116) naphthalene	21.017	128	9523928	92.031	ppbV	99
117) 1,2,3-trichlorobenzene	21.258	180	3406214	94.770	ppbV	96
118) benzothiophene	21.075	134	8110864	104.022	ppbV	98
119) hexachlorobutadiene	21.325	225	2536713	65.296	ppbV	98
120) 2-methylnaphthalene	22.117	142	1680133	109.850	ppbV	99
121) 1-methylnaphthalene	22.317	142	3128484	87.756	ppbV	98

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

Sub List : Default - All compounds listed 20\09\200911T_I\r311454.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File : r311457.D
Acq On : 12 Sep 2020 3:42 AM
Operator : AIRPIANO3:TS
Sample : IT015-LLSTD100
Misc : WG1409596
ALS Vial : 0 Sample Multiplier: 1

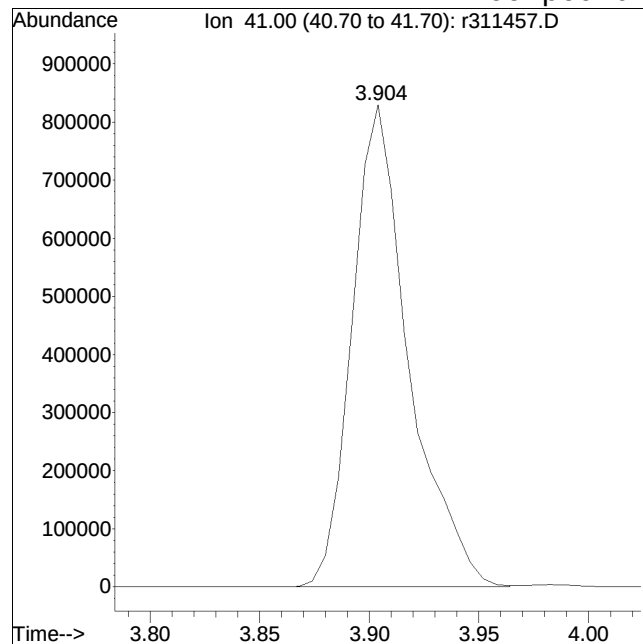
Quant Time: Sep 14 11:27:51 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Mon Sep 14 11:26:28 2020
Response via : Initial Calibration



Manual Integration Report

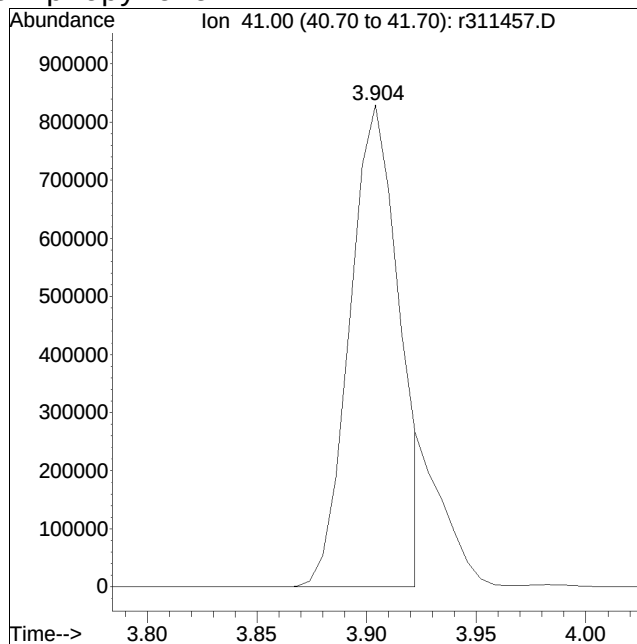
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311457.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:3: 2 Instrument :
Sample : IT015-LLSTD100 Quant Date : 9/14/2020 11:27 am

Compound #3: propylene



Original Peak Response = 1494786

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

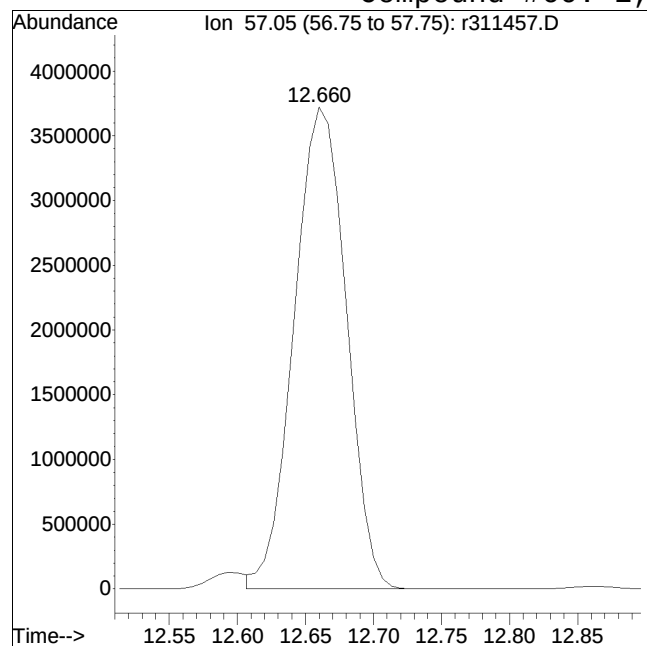


Manual Peak Response = 1311510 M6

Manual Integration Report

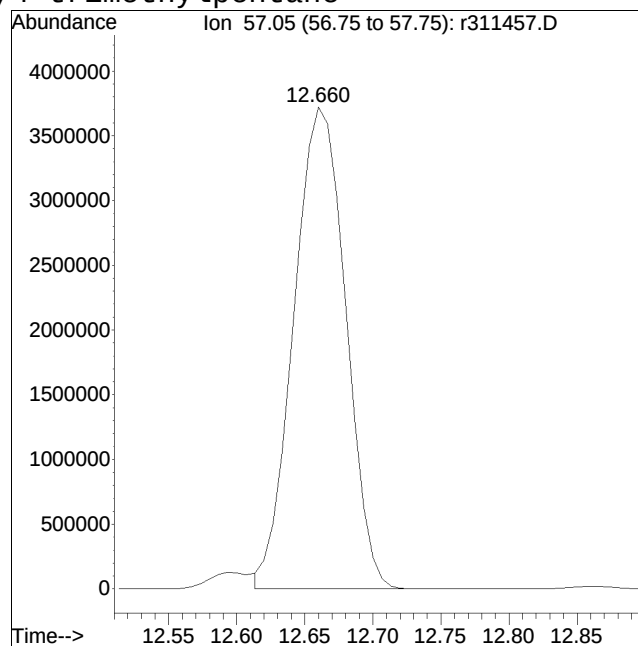
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311457.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:3: 2 Instrument :
Sample : IT015-LLSTD100 Quant Date : 9/14/2020 11:27 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 9914344

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

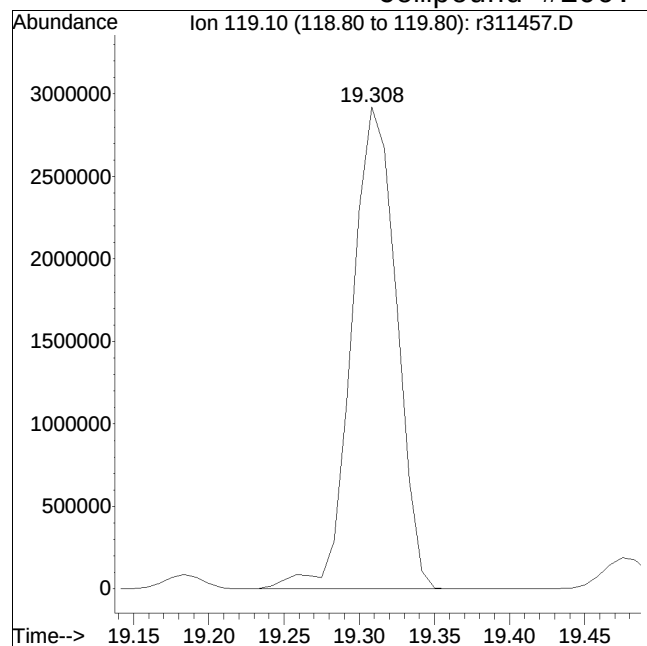


Manual Peak Response = 9866161 M6

Manual Integration Report

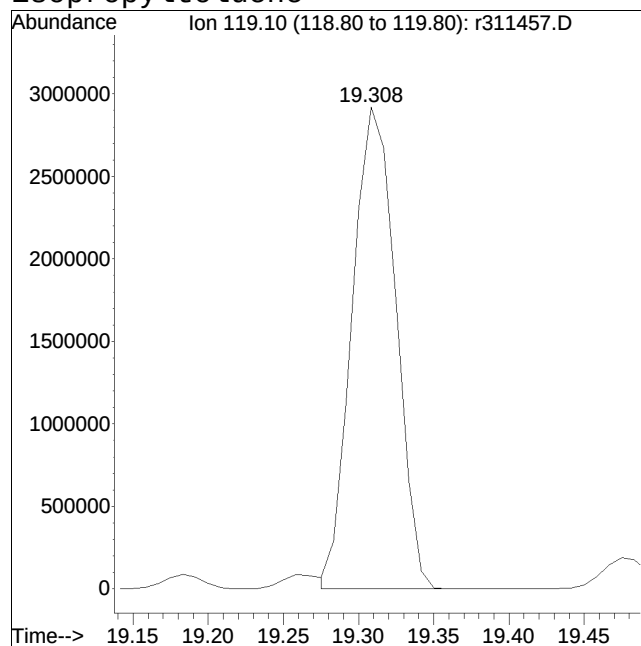
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311457.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:3: 2 Instrument :
Sample : IT015-LLSTD100 Quant Date : 9/14/2020 11:27 am

Compound #106: p-isopropyltoluene



Original Peak Response = 6068389

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



Manual Peak Response = 5912684 M6

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311460.D
 Acq On : 12 Sep 2020 12:26 PM
 Operator : AIRPIAN03:TS
 Sample : CT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:51:34 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	0.00
2	chlorodifluoromethane	0.802	0.665	17.1	87	0.00
3	propylene	0.439	0.454	-3.4	107	0.00
4	propane	0.651	0.562	13.7	88	0.00
5	dichlorodifluoromethane	0.941	0.827	12.1	91	0.00
6 C	chloromethane	0.475	0.438	7.8	98	0.00
7	Freon-114	1.219	1.147	5.9	96	0.00
8 C	methanol	0.232	0.176	24.1	74	0.00
9 C	vinyl chloride	0.549	0.499	9.1	96	0.00
10 C	1,3-butadiene	0.514	0.498	3.1	100	0.00
11	butane	0.795	0.665	16.4	89	0.00
13 C	bromomethane	0.458	0.415	9.4	95	0.00
14 C	chloroethane	0.281	0.257	8.5	96	0.00
15	ethanol	0.462	0.401	13.2	82	0.00
16	dichlorofluoromethane	0.995	0.793	20.3	82	0.00
17 C	vinyl bromide	0.470	0.416	11.5	92	0.00
18 C	acrolein	0.267	0.225	15.7	87	0.00
19	acetone	0.717	0.513	28.5	74	0.00
20 C	acetonitrile	0.450	0.367	18.4	85	0.00
21	trichlorofluoromethane	0.694	0.579	16.6	86	0.00
22	isopropyl alcohol	0.963	0.714	25.9	80	0.00
23 C	acrylonitrile	0.481	0.418	13.1	91	0.00
24	pentane	0.929	0.763	17.9	89	0.00
25	ethyl ether	1.143	0.912	20.2	83	0.00
26 C	1,1-dichloroethene	0.725	0.666	8.1	97	0.00
27	tertiary butyl alcohol	0.995	0.879	11.7	88	0.00
28 C	methylene chloride	0.700	0.680	2.9	100	0.00
29 C	3-chloropropene	0.801	0.790	1.4	104	0.00
30 C	carbon disulfide	1.902	1.701	10.6	93	0.00
31	Freon 113	0.920	0.852	7.4	98	0.00
32	trans-1,2-dichloroethene	0.768	0.687	10.5	94	0.00
33 C	1,1-dichloroethane	0.901	0.829	8.0	97	0.00
34 C	MTBE	1.549	1.446	6.6	96	0.00
35 C	vinyl acetate	1.247	1.184	5.1	94	0.00
36 C	2-butanone	1.220	1.158	5.1	97	0.00
37	cis-1,2-dichloroethene	0.671	0.635	5.4	99	0.00
38	Ethyl Acetate	0.206	0.198	3.9	104	0.00
39 C	chloroform	1.005	0.954	5.1	98	0.00
40	Tetrahydrofuran	0.772	0.711	7.9	96	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311460.D
 Acq On : 12 Sep 2020 12:26 PM
 Operator : AIRPIANO3:TS
 Sample : CT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:51:34 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	0.757	0.665	12.2	86	0.00
42 C	1,2-dichloroethane	0.517	0.441	14.7	89	0.00
43 I	1,4-difluorobenzene	1.000	1.000	0.0	99	0.00
44 C	hexane	0.419	0.410	2.1	100	0.00
45	diisopropyl ether	0.248	0.212	14.5	92	0.00
46	tert-butyl ethyl ether	0.663	0.576	13.1	89	0.00
47 s	1,2-dichloroethane-D4	0.230	0.212	7.8	91	0.00
48 C	1,1,1-trichloroethane	0.286	0.260	9.1	94	0.00
49	1,1-dichloropropene	0.340	0.306	10.0	93	0.00
50 C	benzene	0.840	0.793	5.6	98	0.00
52 C	carbon tetrachloride	0.267	0.253	5.2	95	0.00
53	cyclohexane	0.443	0.432	2.5	102	0.00
54	tert-amyl methyl ether	0.687	0.612	10.9	91	0.00
55	dibromomethane	0.200	0.171	14.5	90	0.00
56 C	1,2-dichloropropane	0.245	0.234	4.5	101	0.00
57	bromodichloromethane	0.428	0.414	3.3	98	0.00
58 C	1,4-dioxane	0.192	0.185	3.6	100	0.00
59 C	trichloroethene	0.302	0.287	5.0	99	0.00
60 C	2,2,4-trimethylpentane	1.332	1.324	0.6	102	0.00
61	methyl methacrylate	0.386	0.253	34.5#	66	0.00
62	heptane	0.516	0.496	3.9	100	0.00
63 C	cis-1,3-dichloropropene	0.401	0.410	-2.2	105	0.00
64 C	4-methyl-2-pentanone	0.590	0.578	2.0	98	0.00
65	trans-1,3-dichloropropene	0.361	0.321	11.1	89	0.00
66 C	1,1,2-trichloroethane	0.256	0.248	3.1	102	0.00
67 I	chlorobenzene-D5	1.000	1.000	0.0	98	0.00
68 C	toluene	5.107	5.004	2.0	102	0.00
69 s	toluene-D8	6.010	6.102	-1.5	101	0.00
71	1,3-dichloropropane	2.703	2.395	11.4	90	0.00
72	2-hexanone	3.412	3.230	5.3	95	0.00
74	dibromochloromethane	2.175	2.224	-2.3	102	0.00
75 C	1,2-dibromoethane	2.337	2.266	3.0	98	0.00
76	butyl acetate	0.783	0.710	9.3	89	0.00
77	octane	2.175	2.025	6.9	95	0.00
78 C	tetrachloroethene	2.056	2.035	1.0	101	0.00
79	1,1,1,2-tetrachloroethane	1.566	1.487	5.0	93	0.00
80 C	chlorobenzene	3.956	4.012	-1.4	102	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311460.D
 Acq On : 12 Sep 2020 12:26 PM
 Operator : AIRPIANO3:TS
 Sample : CT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:51:34 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	5.869	5.853	0.3	102	0.00
83 C	m+p-xylene	4.804	4.807	-0.1	101	0.00
84 C	bromoform	1.780	1.943	-9.2	102	0.00
85 C	styrene	4.209	4.134	1.8	99	0.00
86 C	1,1,2,2-tetrachloroethane	3.677	3.887	-5.7	100	0.00
87 C	o-xylene	4.752	4.777	-0.5	99	0.00
88	1,2,3-trichloropropane	3.005	2.711	9.8	90	0.00
89	nonane	4.355	3.938	9.6	91	0.00
90 s	bromofluorobenzene	3.805	3.828	-0.6	103	0.00
91 C	isopropylbenzene	6.511	6.031	7.4	93	0.00
92	bromobenzene	3.907	3.560	8.9	89	0.00
93	2-chlorotoluene	1.881	1.609	14.5	87	0.00
94	n-propylbenzene	2.172	1.928	11.2	89	0.00
95	4-chlorotoluene	1.829	1.567	14.3	90	0.00
96	4-ethyl toluene	5.752	6.973	-21.2	112	0.00
97	1,3,5-trimethylbenzene	6.032	5.697	5.6	93	0.00
98	tert-butylbenzene	5.800	5.468	5.7	88	0.00
99	1,2,4-trimethylbenzene	5.761	5.865	-1.8	97	0.00
100	decane	4.721	4.370	7.4	91	0.00
101 C	Benzyl Chloride	3.453	3.883	-12.5	90	0.00
102	1,3-dichlorobenzene	3.782	3.673	2.9	96	0.00
103 C	1,4-dichlorobenzene	3.574	3.542	0.9	94	0.00
104	sec-butylbenzene	8.396	7.678	8.6	90	0.00
106	p-isopropyltoluene	6.953	6.040	13.1	79	0.00
107	1,2-dichlorobenzene	3.535	3.429	3.0	95	0.00
108	n-butylbenzene	6.057	5.559	8.2	88	0.00
111 C	1,2-dibromo-3-chloropropane	1.548	1.399	9.6	81	0.00
112	undecane	5.202	5.004	3.8	90	0.00
114	dodecane	5.351	5.252	1.9	86	0.00
115 C	1,2,4-trichlorobenzene	2.372	2.193	7.5	83	0.00
116	naphthalene	6.898	5.382	22.0	70	0.00
117	1,2,3-trichlorobenzene	2.396	1.943	18.9	74	0.00
119 C	hexachlorobutadiene	2.590	2.583	0.3	91	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311460.D
 Acq On : 12 Sep 2020 12:26 PM
 Operator : AIRPIAN03:TS
 Sample : CT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:51:34 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default-ICV-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.533	49	329923	10.000	ppbV	0.00
Standard Area = 330533			Recovery =		99.82%	
43) 1,4-difluorobenzene	11.800	114	829895	10.000	ppbV	0.00
Standard Area = 839357			Recovery =		98.87%	
67) chlorobenzene-D5	16.542	54	135590	10.000	ppbV	0.00
Standard Area = 137732			Recovery =		98.44%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.417	65	176198	9.246	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		92.46%	
69) toluene-D8	14.642	98	827379	10.152	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.52%	
90) bromofluorobenzene	17.908	95	519084	10.061	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		100.61%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.868	51	219298	8.288	ppbV	98
3) propylene	3.904	41	149815M6	10.347	ppbV	
4) propane	3.928	29	185580	8.640	ppbV	99
5) dichlorodifluoromethane	3.982	85	272719	8.787	ppbV	99
6) chloromethane	4.162	50	144620	9.221	ppbV	100
7) Freon-114	4.288	85	378363	9.409	ppbV	98
8) methanol	4.360	31	290974	38.053	ppbV	99
9) vinyl chloride	4.414	62	164714	9.097	ppbV	100
10) 1,3-butadiene	4.582	54	164217	9.691	ppbV	98
11) butane	4.642	43	219546	8.372	ppbV	99
13) bromomethane	4.894	94	136900	9.058	ppbV	99
14) chloroethane	5.110	64	84629	9.140	ppbV	100
15) ethanol	5.297	31	662204	43.469	ppbV	100
16) dichlorofluoromethane	5.250	67	261678	7.969	ppbV	99
17) vinyl bromide	5.537	106	137376	8.868	ppbV	98
18) acrolein	5.693	56	74134	8.413	ppbV	98
19) acetone	5.850	43	846303	35.757	ppbV	97
20) acetonitrile	5.533	41	121149	8.154	ppbV	99
21) trichlorofluoromethane	6.053	101	191141	8.352	ppbV	100
22) isopropyl alcohol	6.193	45	588788	18.533	ppbV	100
23) acrylonitrile	6.427	53	138029	8.692	ppbV	99
24) pentane	6.497	43	251569M6	8.204	ppbV	
25) ethyl ether	6.543	31	300936	7.978	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311460.D
 Acq On : 12 Sep 2020 12:26 PM
 Operator : AIRPIAN03:TS
 Sample : CT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:51:34 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	6.822	61	219776	9.193	ppbV	99
27) tertiary butyl alcohol	6.936	59	290030	8.834	ppbV	99
28) methylene chloride	6.984	49	224245	9.711	ppbV	98
29) 3-chloropropene	7.128	41	260523	9.858	ppbV	98
30) carbon disulfide	7.278	76	561057	8.941	ppbV	99
31) Freon 113	7.314	101	280982	9.256	ppbV	99
32) trans-1,2-dichloroethene	8.117	61	226702	8.944	ppbV	99
33) 1,1-dichloroethane	8.350	63	273395	9.200	ppbV	99
34) MTBE	8.442	73	477045	9.337	ppbV	98
35) vinyl acetate	8.567	43	390694	9.498	ppbV	99
36) 2-butanone	8.833	43	382159	9.496	ppbV	100
37) cis-1,2-dichloroethene	9.342	61	209435	9.458	ppbV	99
38) Ethyl Acetate	9.650	61	65459	9.610	ppbV	85
39) chloroform	9.700	83	314643	9.491	ppbV	100
40) Tetrahydrofuran	10.142	42	234590	9.205	ppbV	100
41) 2,2-dichloropropane	9.708	77	219415	8.780	ppbV	97
42) 1,2-dichloroethane	10.542	62	145596	8.544	ppbV	96
44) hexane	9.608	57	340006	9.787	ppbV	99
45) diisopropyl ether	9.617	87	175525	8.535	ppbV	94
46) tert-butyl ethyl ether	10.250	59	477920	8.692	ppbV	99
48) 1,1,1-trichloroethane	10.833	97	215928	9.092	ppbV	99
49) 1,1-dichloropropene	11.200	75	254294	9.017	ppbV	97
50) benzene	11.360	78	658074	9.445	ppbV	100
52) carbon tetrachloride	11.533	117	210054	9.465	ppbV	99
53) cyclohexane	11.680	56	358406	9.754	ppbV	99
54) tert-amyl methyl ether	12.073	73	507747	8.910	ppbV	99
55) dibromomethane	12.287	93	141947	8.544	ppbV	100
56) 1,2-dichloropropane	12.320	63	193839	9.514	ppbV	99
57) bromodichloromethane	12.547	83	343674	9.672	ppbV	100
58) 1,4-dioxane	12.593	88	153875	9.664	ppbV	99
59) trichloroethene	12.600	130	237854	9.488	ppbV	98
60) 2,2,4-trimethylpentane	12.647	57	1099169	9.945	ppbV	98
61) methyl methacrylate	12.853	41	209892	6.561	ppbV	99
62) heptane	12.967	43	411396	9.610	ppbV	98
63) cis-1,3-dichloropropene	13.617	75	340590	10.232	ppbV	98
64) 4-methyl-2-pentanone	13.667	43	479279	9.793	ppbV	97
65) trans-1,3-dichloropropene	14.242	75	266638	8.902	ppbV	98
66) 1,1,2-trichloroethane	14.442	97	205979	9.683	ppbV	96
68) toluene	14.750	91	678434	9.798	ppbV	100
71) 1,3-dichloropropane	14.783	76	324678	8.860	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311460.D
 Acq On : 12 Sep 2020 12:26 PM
 Operator : AIRPIAN03:TS
 Sample : CT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:51:34 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) 2-hexanone	15.050	43	437925	9.465	ppbV	96
74) dibromochloromethane	15.200	129	301515	10.225	ppbV	99
75) 1,2-dibromoethane	15.450	107	307183	9.695	ppbV	100
76) butyl acetate	15.708	73	96321	9.072	ppbV	97
77) octane	15.792	85	274508	9.309	ppbV	93
78) tetrachloroethene	15.925	166	275919	9.898	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.567	131	201664	9.496	ppbV	99
80) chlorobenzene	16.575	112	543974	10.141	ppbV	97
81) ethylbenzene	16.933	91	793550	9.972	ppbV	99
83) m+p-xylene	17.092	91	1303441	20.010	ppbV	99
84) bromoform	17.158	173	263462	10.918	ppbV	99
85) styrene	17.417	104	560548	9.822	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.508	83	527040	10.572	ppbV	100
87) o-xylene	17.508	91	647731	10.053	ppbV	99
88) 1,2,3-trichloropropane	17.625	75	367564	9.022	ppbV	98
89) nonane	17.708	43	534008	9.043	ppbV	99
91) isopropylbenzene	18.017	105	817703	9.263	ppbV	99
92) bromobenzene	18.100	77	482767	9.114	ppbV	97
93) 2-chlorotoluene	18.425	126	218220	8.558	ppbV	89
94) n-propylbenzene	18.450	120	261404	8.876	ppbV	98
95) 4-chlorotoluene	18.483	126	212471	8.567	ppbV	97
96) 4-ethyl toluene	18.575	105	945404	12.122	ppbV	99
97) 1,3,5-trimethylbenzene	18.633	105	772445	9.445	ppbV	100
98) tert-butylbenzene	18.958	119	741453	9.428	ppbV	99
99) 1,2,4-trimethylbenzene	18.967	105	795232	10.181	ppbV	93
100) decane	19.042	57	592580	9.257	ppbV	100
101) Benzyl Chloride	19.083	91	526501	11.245	ppbV	100
102) 1,3-dichlorobenzene	19.092	146	498063	9.713	ppbV	99
103) 1,4-dichlorobenzene	19.142	146	480281	9.910	ppbV	96
104) sec-butylbenzene	19.175	105	1041096	9.146	ppbV	100
106) p-isopropyltoluene	19.300	119	818961	8.687	ppbV	98
107) 1,2-dichlorobenzene	19.417	146	464947	9.699	ppbV	98
108) n-butylbenzene	19.642	91	753803	9.179	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.783	75	189727	9.039	ppbV	100
112) undecane	20.042	57	678461	9.619	ppbV	99
114) dodecane	20.942	57	712051	9.814	ppbV	98
115) 1,2,4-trichlorobenzene	20.892	180	297412	9.246	ppbV	100
116) naphthalene	21.008	128	729687	7.802	ppbV	100
117) 1,2,3-trichlorobenzene	21.258	180	263488	8.111	ppbV	100
119) hexachlorobutadiene	21.325	225	350167	9.973	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
 Data File : r311460.D
 Acq On : 12 Sep 2020 12:26 PM
 Operator : AIRPIAN03:TS
 Sample : CT015-LLSTD010
 Misc : WG1409596
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 15 10:51:34 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\r311454.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

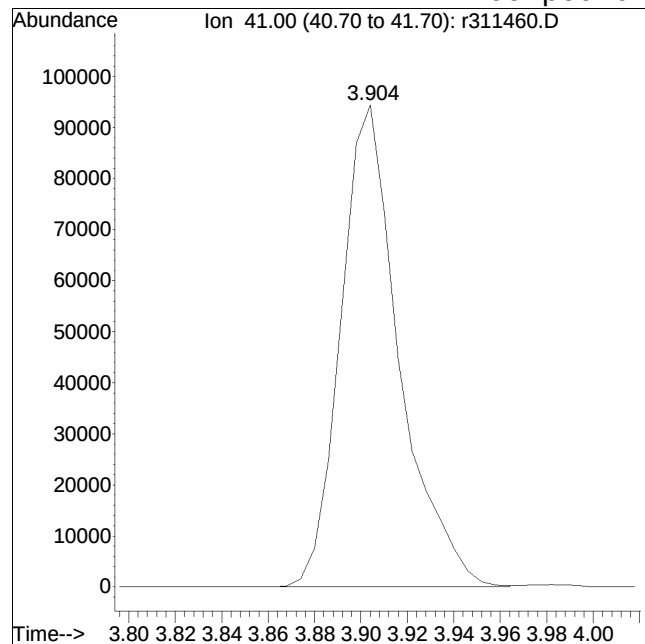
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Data Path   : 0:\Forensics\Data\Airpiano3\2020\09\200911T_I\
Data File  : r311460.D
Acq On     : 12 Sep 2020  12:26 PM
Operator   : AIRPIANO3:TS
Sample     : CT015-LLSTD010
Misc       : WG1409596
ALS Vial   : 0      Sample Multiplier: 1
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[illegible]

Manual Integration Report

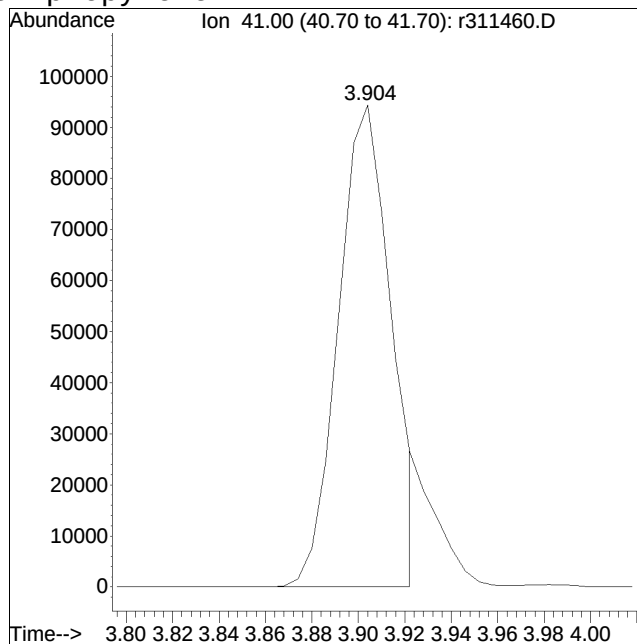
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311460.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 6 Instrument :
Sample : CT015-LLSTD010 Quant Date : 9/15/2020 10:50 am

Compound #3: propylene



Original Peak Response = 165922

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

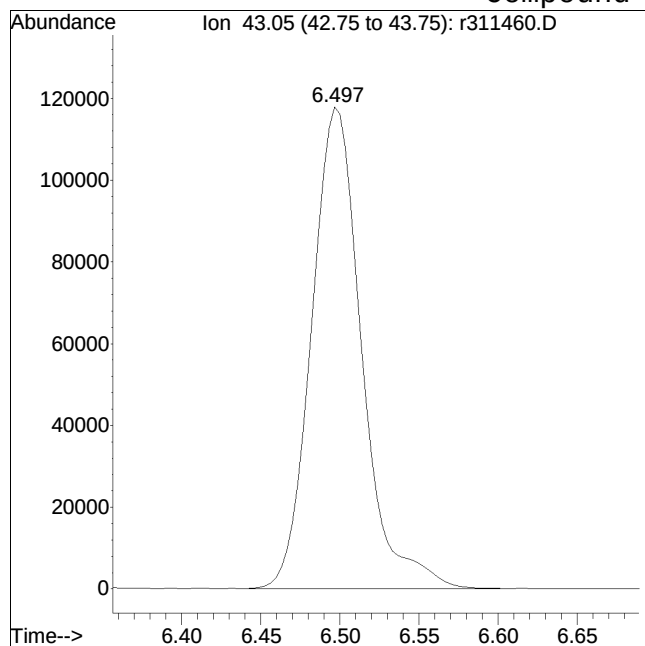


Manual Peak Response = 149815 M6

Manual Integration Report

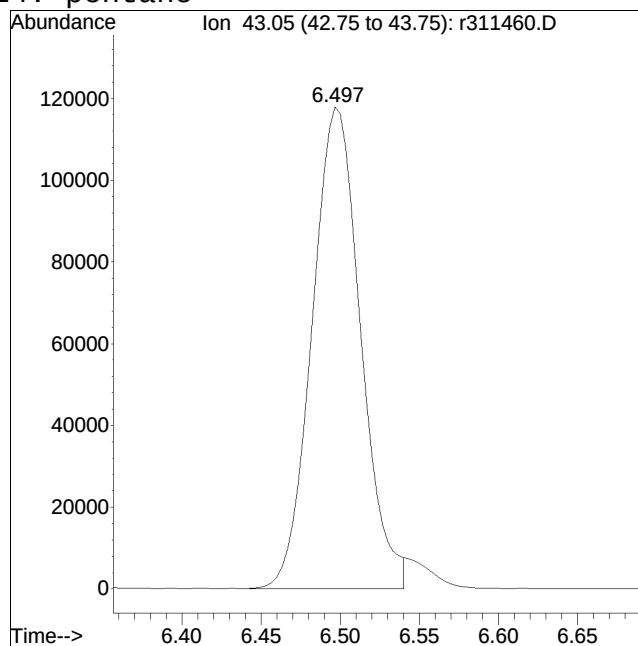
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311460.D Operator : AIRPIAN03:TS
Date Inj'd : 9/12/2020 0:2: 6 Instrument :
Sample : CT015-LLSTD010 Quant Date : 9/15/2020 10:50 am

Compound #24: pentane



Original Peak Response = 281499

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



Manual Peak Response = 251569 M6

Continuing Calibration

Calibration Verification Summary

Form 7

Air Volatiles

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Instrument ID : AIRPIANO3
 Lab File ID : R311572
 Sample No : WG1411312-2
 Channel :

Lab Number : L2037872
 Project Number : 100433203
 Calibration Date : 09/17/20 12:24
 Init. Calib. Date(s) : 09/11/20 09/12/20
 Init. Calib. Times : 23:01 03:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	89	.03
chlorodifluoromethane	0.802	0.677	-	15.6	30	79	.02
propylene	0.439	0.611	-	-39.2*	30	129	.02
propane	0.651	0.542	-	16.7	30	76	.02
dichlorodifluoromethane	0.941	0.916	-	2.7	30	90	.02
chloromethane	0.475	0.443	-	6.7	30	88	.02
Freon-114	1.219	1.176	-	3.5	30	88	.02
methanol	0.232	0.162	-	30.2*	30	60	.02
vinyl chloride	0.549	0.515	-	6.2	30	88	.02
1,3-butadiene	0.514	0.47	-	8.6	30	85	.02
butane	0.795	0.815	-	-2.5	30	97	.02
bromomethane	0.458	0.469	-	-2.4	30	96	.02
chloroethane	0.281	0.278	-	1.1	30	92	.02
ethanol	0.462	0.345	-	25.3	30	63	.02
dichlorofluoromethane	0.995	0.922	-	7.3	30	85	.02
vinyl bromide	0.47	0.499	-	-6.2	30	98	.03
acrolein	0.267	0.208	-	22.1	30	72	.03
acetone	0.717	0.664	-	7.4	30	86	.03
acetonitrile	0.45	0.418	-	7.1	30	87	.03
trichlorofluoromethane	0.694	0.824	-	-18.7	30	110	.03
isopropyl alcohol	0.963	0.892	-	7.4	30	89	.03
acrylonitrile	0.481	0.403	-	16.2	30	78	.03
pentane	0.929	1.186	-	-27.7	30	124	.03
ethyl ether	1.143	0.851	-	25.5	30	69	.03
1,1-dichloroethene	0.725	0.883	-	-21.8	30	115	.03
tertiary butyl alcohol	0.995	1.143	-	-14.9	30	102	.02
methylene chloride	0.7	0.689	-	1.6	30	90	.02
3-chloropropene	0.801	1.06	-	-32.3*	30	125	.03
carbon disulfide	1.902	1.918	-	-0.8	30	94	.03
Freon 113	0.92	1.132	-	-23	30	116	.03
trans-1,2-dichloroethene	0.768	0.897	-	-16.8	30	110	.03
1,1-dichloroethane	0.901	1.151	-	-27.7	30	120	.03
MTBE	1.549	1.901	-	-22.7	30	113	.03
vinyl acetate	1.247	1.552	-	-24.5	30	110	.03
2-butanone	1.22	1.496	-	-22.6	30	112	.03
cis-1,2-dichloroethene	0.671	0.831	-	-23.8	30	116	.03
Ethyl Acetate	0.206	0.246	-	-19.4	30	115	.03
chloroform	1.005	1.094	-	-8.9	30	100	.03
Tetrahydrofuran	0.772	0.919	-	-19	30	111	.03
2,2-dichloropropane	0.757	0.876	-	-15.7	30	101	.03
1,2-dichloroethane	0.517	0.693	-	-34*	30	125	.02
1,4-difluorobenzene	1	1	-	0	30	97	.03
hexane	0.419	0.385	-	8.1	30	93	.03

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : Langan Engineering & Environmental
 Project Name : 160 EAST 125TH STREET
 Instrument ID : AIRPIANO3
 Lab File ID : R311572
 Sample No : WG1411312-2
 Channel :

Lab Number : L2037872
 Project Number : 100433203
 Calibration Date : 09/17/20 12:24
 Init. Calib. Date(s) : 09/11/20 09/12/20
 Init. Calib. Times : 23:01 03:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.248	0.218	-	12.1	30	93	.03
tert-butyl ethyl ether	0.663	0.651	-	1.8	30	99	.03
1,1,1-trichloroethane	0.286	0.363	-	-26.9	30	129	.03
1,1-dichloropropene	0.34	0.334	-	1.8	30	99	.03
benzene	0.84	0.763	-	9.2	30	93	.03
carbon tetrachloride	0.267	0.328	-	-22.8	30	121	.03
cyclohexane	0.443	0.404	-	8.8	30	94	.03
tert-amyl methyl ether	0.687	0.696	-	-1.3	30	102	.03
dibromomethane	0.2	0.204	-	-2	30	106	.03
1,2-dichloropropane	0.245	0.279	-	-13.9	30	118	.03
bromodichloromethane	0.428	0.431	-	-0.7	30	100	.03
1,4-dioxane	0.192	0.195	-	-1.6	30	104	.03
trichloroethene	0.302	0.329	-	-8.9	30	112	.03
2,2,4-trimethylpentane	1.332	1.26	-	5.4	30	95	.03
methyl methacrylate	0.386	0.324	-	16.1	30	83	.03
heptane	0.516	0.565	-	-9.5	30	112	.03
cis-1,3-dichloropropene	0.401	0.43	-	-7.2	30	108	.03
4-methyl-2-pentanone	0.59	0.669	-	-13.4	30	112	.03
trans-1,3-dichloropropene	0.361	0.352	-	2.5	30	96	.03
1,1,2-trichloroethane	0.256	0.292	-	-14.1	30	118	.03
chlorobenzene-D5	1	1	-	0	30	100	.02
toluene	5.107	5.406	-	-5.9	30	112	.03
1,3-dichloropropane	2.703	2.347	-	13.2	30	90	.03
2-hexanone	3.412	3.676	-	-7.7	30	111	.02
dibromochloromethane	2.175	2.593	-	-19.2	30	121	.02
1,2-dibromoethane	2.337	2.301	-	1.5	30	102	.02
butyl acetate	0.783	0.743	-	5.1	30	94	.02
octane	2.175	1.92	-	11.7	30	92	.02
tetrachloroethene	2.056	2.106	-	-2.4	30	107	.02
1,1,1,2-tetrachloroethane	1.566	1.738	-	-11	30	111	.02
chlorobenzene	3.956	3.849	-	2.7	30	100	.03
ethylbenzene	5.869	6.593	-	-12.3	30	117	.02
m+p-xylene	4.804	5.449	-	-13.4	30	116	.02
bromoform	1.78	2.048	-	-15.1	30	110	.02
styrene	4.209	4.171	-	0.9	30	102	.02
1,1,2,2-tetrachloroethane	3.677	3.721	-	-1.2	30	97	.03
o-xylene	4.752	5.571	-	-17.2	30	117	.02
1,2,3-trichloropropane	3.005	2.713	-	9.7	30	91	.02
nonane	4.355	4.204	-	3.5	30	99	.03
isopropylbenzene	6.511	6.343	-	2.6	30	100	.02
bromobenzene	3.907	3.478	-	11	30	89	.02
2-chlorotoluene	1.881	1.869	-	0.6	30	102	.02
n-propylbenzene	2.172	2.164	-	0.4	30	102	.02

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : 160 EAST 125TH STREET
Instrument ID : AIRPIANO3
Lab File ID : R311572
Sample No : WG1411312-2
Channel :

Lab Number : L2037872
Project Number : 100433203
Calibration Date : 09/17/20 12:24
Init. Calib. Date(s) : 09/11/20 09/12/20
Init. Calib. Times : 23:01 03:42

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	1.829	1.798	-	1.7	30	105	.02
4-ethyl toluene	5.752	7.354	-	-27.9	30	120	.02
1,3,5-trimethylbenzene	6.032	6.348	-	-5.2	30	105	.03
tert-butylbenzene	5.8	6.012	-	-3.7	30	99	.02
1,2,4-trimethylbenzene	5.761	6.311	-	-9.5	30	106	.02
decane	4.721	4.412	-	6.5	30	93	.02
Benzyl Chloride	3.453	4.727	-	-36.9*	30	111	.02
1,3-dichlorobenzene	3.782	4.284	-	-13.3	30	114	.02
1,4-dichlorobenzene	3.574	3.93	-	-10	30	106	.02
sec-butylbenzene	8.396	8.013	-	4.6	30	96	.02
p-isopropyltoluene	6.953	6.694	-	3.7	30	89	.02
1,2-dichlorobenzene	3.535	3.91	-	-10.6	30	110	.02
n-butylbenzene	6.057	6.534	-	-7.9	30	106	.02
1,2-dibromo-3-chloropropan	1.548	1.573	-	-1.6	30	93	.02
undecane	5.202	5.004	-	3.8	30	91	.02
dodecane	5.351	5.223	-	2.4	30	87	.02
1,2,4-trichlorobenzene	2.372	2.441	-	-2.9	30	94	.03
naphthalene	6.898	6.44	-	6.6	30	85	.03
1,2,3-trichlorobenzene	2.396	2.185	-	8.8	30	84	.02
hexachlorobutadiene	2.59	3.013	-	-16.3	30	109	.03

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-2,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	89	0.03
2	chlorodifluoromethane	0.802	0.677	15.6	79	0.02
3	propylene	0.439	0.611	-39.2#	129	0.02
4	propane	0.651	0.542	16.7	76	0.02
5	dichlorodifluoromethane	0.941	0.916	2.7	90	0.02
6 C	chloromethane	0.475	0.443	6.7	88	0.02
7	Freon-114	1.219	1.176	3.5	88	0.02
8 C	methanol	0.232	0.162	30.2#	60	0.02
9 C	vinyl chloride	0.549	0.515	6.2	88	0.02
10 C	1,3-butadiene	0.514	0.470	8.6	85	0.02
11	butane	0.795	0.815	-2.5	97	0.02
13 C	bromomethane	0.458	0.469	-2.4	96	0.02
14 C	chloroethane	0.281	0.278	1.1	92	0.02
15	ethanol	0.462	0.345	25.3	63	0.02
16	dichlorofluoromethane	0.995	0.922	7.3	85	0.02
17 C	vinyl bromide	0.470	0.499	-6.2	98	0.03
18 C	acrolein	0.267	0.208	22.1	72	0.03
19	acetone	0.717	0.664	7.4	86	0.03
20 C	acetonitrile	0.450	0.418	7.1	87	0.03
21	trichlorofluoromethane	0.694	0.824	-18.7	110	0.03
22	isopropyl alcohol	0.963	0.892	7.4	89	0.03
23 C	acrylonitrile	0.481	0.403	16.2	78	0.03
24	pentane	0.929	1.186	-27.7	124	0.03
25	ethyl ether	1.143	0.851	25.5	69	0.03
26 C	1,1-dichloroethene	0.725	0.883	-21.8	115	0.03
27	tertiary butyl alcohol	0.995	1.143	-14.9	102	0.02
28 C	methylene chloride	0.700	0.689	1.6	90	0.02
29 C	3-chloropropene	0.801	1.060	-32.3#	125	0.03
30 C	carbon disulfide	1.902	1.918	-0.8	94	0.03
31	Freon 113	0.920	1.132	-23.0	116	0.03
32	trans-1,2-dichloroethene	0.768	0.897	-16.8	110	0.03
33 C	1,1-dichloroethane	0.901	1.151	-27.7	120	0.03
34 C	MTBE	1.549	1.901	-22.7	113	0.03
35 C	vinyl acetate	1.247	1.552	-24.5	110	0.03
36 C	2-butanone	1.220	1.496	-22.6	112	0.03
37	cis-1,2-dichloroethene	0.671	0.831	-23.8	116	0.03
38	Ethyl Acetate	0.206	0.246	-19.4	115	0.03
39 C	chloroform	1.005	1.094	-8.9	100	0.03
40	Tetrahydrofuran	0.772	0.919	-19.0	111	0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-2,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	0.757	0.876	-15.7	101	0.03
42 C	1,2-dichloroethane	0.517	0.693	-34.0#	125	0.02
43 I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.03
44 C	hexane	0.419	0.385	8.1	93	0.03
45	diisopropyl ether	0.248	0.218	12.1	93	0.03
46	tert-butyl ethyl ether	0.663	0.651	1.8	99	0.03
48 C	1,1,1-trichloroethane	0.286	0.363	-26.9	129	0.03
49	1,1-dichloropropene	0.340	0.334	1.8	99	0.03
50 C	benzene	0.840	0.763	9.2	93	0.03
52 C	carbon tetrachloride	0.267	0.328	-22.8	121	0.03
53	cyclohexane	0.443	0.404	8.8	94	0.03
54	tert-amyl methyl ether	0.687	0.696	-1.3	102	0.03
55	dibromomethane	0.200	0.204	-2.0	106	0.03
56 C	1,2-dichloropropane	0.245	0.279	-13.9	118	0.03
57	bromodichloromethane	0.428	0.431	-0.7	100	0.03
58 C	1,4-dioxane	0.192	0.195	-1.6	104	0.03
59 C	trichloroethene	0.302	0.329	-8.9	112	0.03
60 C	2,2,4-trimethylpentane	1.332	1.260	5.4	95	0.03
61	methyl methacrylate	0.386	0.324	16.1	83	0.03
62	heptane	0.516	0.565	-9.5	112	0.03
63 C	cis-1,3-dichloropropene	0.401	0.430	-7.2	108	0.03
64 C	4-methyl-2-pentanone	0.590	0.669	-13.4	112	0.03
65	trans-1,3-dichloropropene	0.361	0.352	2.5	96	0.03
66 C	1,1,2-trichloroethane	0.256	0.292	-14.1	118	0.03
67 I	chlorobenzene-D5	1.000	1.000	0.0	100	0.02
68 C	toluene	5.107	5.406	-5.9	112	0.03
71	1,3-dichloropropane	2.703	2.347	13.2	90	0.03
72	2-hexanone	3.412	3.676	-7.7	111	0.02
74	dibromochloromethane	2.175	2.593	-19.2	121	0.02
75 C	1,2-dibromoethane	2.337	2.301	1.5	102	0.02
76	butyl acetate	0.783	0.743	5.1	94	0.02
77	octane	2.175	1.920	11.7	92	0.02
78 C	tetrachloroethene	2.056	2.106	-2.4	107	0.02
79	1,1,1,2-tetrachloroethane	1.566	1.738	-11.0	111	0.02
80 C	chlorobenzene	3.956	3.849	2.7	100	0.03
81 C	ethylbenzene	5.869	6.593	-12.3	117	0.02
83 C	m+p-xylene	4.804	5.449	-13.4	116	0.02

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-2,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	1.780	2.048	-15.1	110	0.02
85 C	styrene	4.209	4.171	0.9	102	0.02
86 C	1,1,2,2-tetrachloroethane	3.677	3.721	-1.2	97	0.03
87 C	o-xylene	4.752	5.571	-17.2	117	0.02
88	1,2,3-trichloropropane	3.005	2.713	9.7	91	0.02
89	nonane	4.355	4.204	3.5	99	0.03
91 C	isopropylbenzene	6.511	6.343	2.6	100	0.02
92	bromobenzene	3.907	3.478	11.0	89	0.02
93	2-chlorotoluene	1.881	1.869	0.6	102	0.02
94	n-propylbenzene	2.172	2.164	0.4	102	0.02
95	4-chlorotoluene	1.829	1.798	1.7	105	0.02
96	4-ethyl toluene	5.752	7.354	-27.9	120	0.02
97	1,3,5-trimethylbenzene	6.032	6.348	-5.2	105	0.03
98	tert-butylbenzene	5.800	6.012	-3.7	99	0.02
99	1,2,4-trimethylbenzene	5.761	6.311	-9.5	106	0.02
100	decane	4.721	4.412	6.5	93	0.02
101 C	Benzyl Chloride	3.453	4.727	-36.9#	111	0.02
102	1,3-dichlorobenzene	3.782	4.284	-13.3	114	0.02
103 C	1,4-dichlorobenzene	3.574	3.930	-10.0	106	0.02
104	sec-butylbenzene	8.396	8.013	4.6	96	0.02
106	p-isopropyltoluene	6.953	6.694	3.7	89	0.02
107	1,2-dichlorobenzene	3.535	3.910	-10.6	110	0.02
108	n-butylbenzene	6.057	6.534	-7.9	106	0.02
111 C	1,2-dibromo-3-chloropropane	1.548	1.573	-1.6	93	0.02
112	undecane	5.202	5.004	3.8	91	0.02
114	dodecane	5.351	5.223	2.4	87	0.02
115 C	1,2,4-trichlorobenzene	2.372	2.441	-2.9	94	0.03
116	naphthalene	6.898	6.440	6.6	85	0.03
117	1,2,3-trichlorobenzene	2.396	2.185	8.8	84	0.02
119 C	hexachlorobutadiene	2.590	3.013	-16.3	109	0.03

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-2,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.567	49	294879	10.000	ppbV	# 0.03
Standard Area = 294879			Recovery	=	100.00%	
43) 1,4-difluorobenzene	11.833	114	816202	10.000	ppbV	# 0.03
Standard Area = 816202			Recovery	=	100.00%	
67) chlorobenzene-D5	16.567	54	138022	10.000	ppbV	0.02
Standard Area = 138022			Recovery	=	100.00%	

System Monitoring Compounds

Target Compounds					Qvalue	
2) chlorodifluoromethane	3.892	51	199625	8.441	ppbV	# 90
3) propylene	3.922	41	180287M6	13.932	ppbV	
4) propane	3.946	29	159937	8.331	ppbV	# 85
5) dichlorodifluoromethane	4.000	85	270056	9.735	ppbV	99
6) chloromethane	4.180	50	130501	9.310	ppbV	96
7) Freon-114	4.306	85	346779	9.648	ppbV	96
8) methanol	4.384	31	238699	34.927	ppbV	99
9) vinyl chloride	4.438	62	151885	9.385	ppbV	97
10) 1,3-butadiene	4.606	54	138526	9.146	ppbV	83
11) butane	4.666	43	240254	10.250	ppbV	97
13) bromomethane	4.918	94	138169	10.228	ppbV	97
14) chloroethane	5.140	64	81841	9.889	ppbV	97
15) ethanol	5.320	31	509049	37.386	ppbV	# 82
16) dichlorofluoromethane	5.277	67	271903	9.264	ppbV	98
17) vinyl bromide	5.563	106	147158	10.629	ppbV	98
18) acrolein	5.720	56	61279	7.781	ppbV	98
19) acetone	5.877	43	978437	46.253	ppbV	# 83
20) acetonitrile	5.560	41	123396	9.293	ppbV	98
21) trichlorofluoromethane	6.080	101	242914	11.875	ppbV	99
22) isopropyl alcohol	6.220	45	657917	23.170	ppbV	# 97
23) acrylonitrile	6.453	53	118769	8.368	ppbV	97
24) pentane	6.527	43	349778	12.762	ppbV	# 95
25) ethyl ether	6.573	31	250931	7.443	ppbV	# 92
26) 1,1-dichloroethene	6.852	61	260339	12.184	ppbV	98
27) tertiary butyl alcohol	6.960	59	337098	11.487	ppbV	# 93
28) methylene chloride	7.014	49	203149	9.843	ppbV	95
29) 3-chloropropene	7.158	41	312551	13.232	ppbV	94
30) carbon disulfide	7.308	76	565478	10.082	ppbV	# 95
31) Freon 113	7.350	101	333824	12.304	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-2,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.150	61	264574	11.679	ppbV	100
33) 1,1-dichloroethane	8.383	63	339499	12.782	ppbV	99
34) MTBE	8.467	73	560681	12.279	ppbV	94
35) vinyl acetate	8.600	43	457789	12.452	ppbV	96
36) 2-butanone	8.867	43	441053	12.262	ppbV	97
37) cis-1,2-dichloroethene	9.375	61	245122	12.385	ppbV	99
38) Ethyl Acetate	9.675	61	72478	11.904	ppbV	80
39) chloroform	9.733	83	322477	10.883	ppbV	97
40) Tetrahydrofuran	10.175	42	271075	11.900	ppbV	98
41) 2,2-dichloropropane	9.742	77	258196	11.560	ppbV	92
42) 1,2-dichloroethane	10.575	62	204431	13.422	ppbV #	89
44) hexane	9.642	57	314534	9.206	ppbV #	72
45) diisopropyl ether	9.650	87	177540	8.777	ppbV	99
46) tert-butyl ethyl ether	10.283	59	531353	9.826	ppbV	96
48) 1,1,1-trichloroethane	10.867	97	296520	12.695	ppbV	97
49) 1,1-dichloropropene	11.240	75	272432	9.822	ppbV	91
50) benzene	11.400	78	622699	9.087	ppbV	97
52) carbon tetrachloride	11.567	117	267429	12.253	ppbV	98
53) cyclohexane	11.713	56	329976	9.131	ppbV #	94
54) tert-amyl methyl ether	12.107	73	568014	10.134	ppbV	97
55) dibromomethane	12.320	93	166872	10.213	ppbV	94
56) 1,2-dichloropropane	12.353	63	227858	11.372	ppbV	98
57) bromodichloromethane	12.580	83	351977	10.071	ppbV #	97
58) 1,4-dioxane	12.627	88	159225	10.167	ppbV	97
59) trichloroethene	12.633	130	268278	10.881	ppbV	98
60) 2,2,4-trimethylpentane	12.680	57	1028343	9.460	ppbV #	90
61) methyl methacrylate	12.887	41	264192	8.396	ppbV	97
62) heptane	13.000	43	461431	10.959	ppbV	92
63) cis-1,3-dichloropropene	13.650	75	350765	10.714	ppbV	93
64) 4-methyl-2-pentanone	13.700	43	546010	11.344	ppbV	97
65) trans-1,3-dichloropropene	14.267	75	287057	9.744	ppbV	94
66) 1,1,2-trichloroethane	14.467	97	238634	11.406	ppbV	87
68) toluene	14.783	91	746205	10.587	ppbV	100
71) 1,3-dichloropropane	14.817	76	323890	8.683	ppbV #	86
72) 2-hexanone	15.075	43	507338	10.772	ppbV	95
74) dibromochloromethane	15.233	129	357916	11.924	ppbV	99
75) 1,2-dibromoethane	15.483	107	317619	9.848	ppbV	98
76) butyl acetate	15.733	73	102524	9.486	ppbV	89
77) octane	15.825	85	264937	8.826	ppbV	90
78) tetrachloroethene	15.950	166	290742	10.246	ppbV	91

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-2,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

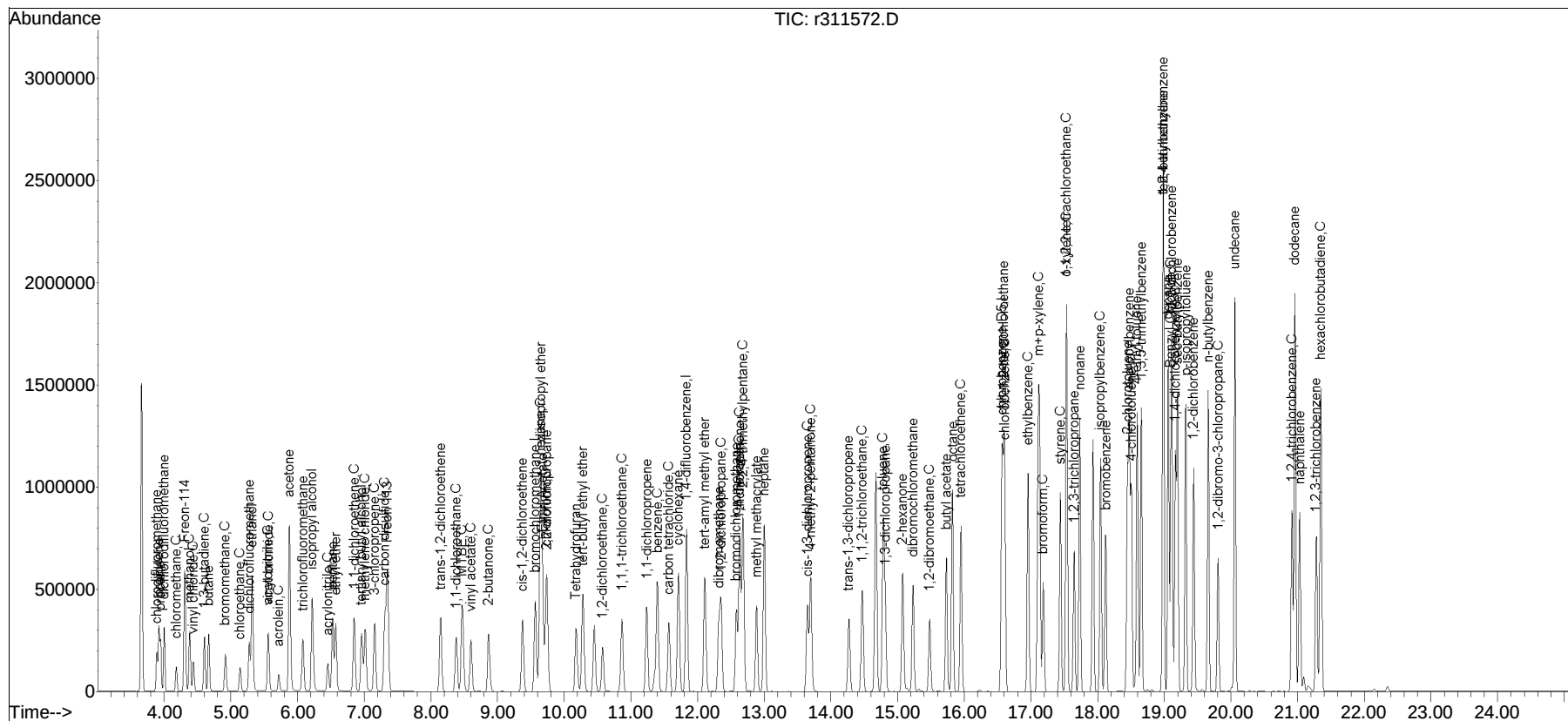
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.592	131	239837	11.095	ppbV	99
80)	chlorobenzene	16.608	112	531227	9.729	ppbV	99
81)	ethylbenzene	16.958	91	910016	11.234	ppbV	91
83)	m+p-xylene	17.117	91	1504212	22.685	ppbV	90
84)	bromoform	17.183	173	282638	11.506	ppbV	99
85)	styrene	17.442	104	575725	9.910	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.533	83	513589	10.120	ppbV	97
87)	o-xylene	17.533	91	768888	11.724	ppbV	91
88)	1,2,3-trichloropropane	17.650	75	374511	9.031	ppbV #	96
89)	nonane	17.733	43	580209	9.652	ppbV	96
91)	isopropylbenzene	18.042	105	875530	9.743	ppbV	97
92)	bromobenzene	18.125	77	480094	8.904	ppbV	96
93)	2-chlorotoluene	18.450	126	257992	9.940	ppbV	79
94)	n-propylbenzene	18.475	120	298641	9.962	ppbV	96
95)	4-chlorotoluene	18.508	126	248172	9.830	ppbV	99
96)	4-ethyl toluene	18.592	105	1015047	12.785	ppbV	97
97)	1,3,5-trimethylbenzene	18.658	105	876150	10.525	ppbV	99
98)	tert-butylbenzene	18.983	119	829744	10.365	ppbV	99
99)	1,2,4-trimethylbenzene	18.983	105	871066	10.955	ppbV	99
100)	decane	19.058	57	608991	9.346	ppbV	94
101)	Benzyl Chloride	19.100	91	652366	13.688	ppbV	99
102)	1,3-dichlorobenzene	19.108	146	591257	11.328	ppbV	94
103)	1,4-dichlorobenzene	19.167	146	542477	10.996	ppbV	94
104)	sec-butylbenzene	19.200	105	1106005	9.545	ppbV	95
106)	p-isopropyltoluene	19.325	119	923971	9.628	ppbV	95
107)	1,2-dichlorobenzene	19.442	146	539711	11.061	ppbV	95
108)	n-butylbenzene	19.658	91	901808	10.787	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.808	75	217061	10.159	ppbV	94
112)	undecane	20.058	57	690642	9.619	ppbV	92
114)	dodecane	20.958	57	720854	9.760	ppbV	90
115)	1,2,4-trichlorobenzene	20.917	180	336957	10.291	ppbV	94
116)	naphthalene	21.033	128	888825	9.336	ppbV	99
117)	1,2,3-trichlorobenzene	21.275	180	301557	9.120	ppbV	97
119)	hexachlorobutadiene	21.350	225	415895	11.636	ppbV	95

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

Sub List : Default-LCS-AP2 - All compounds listed0917T\r311572.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
Data File : r311572.D
Acq On : 17 Sep 2020 12:24 PM
Operator : AIRPIANO3:TS
Sample : WG1411312-2,3,250,250
Misc : WG1411312,ICAL17116
ALS Vial : 0 Sample Multiplier: 1

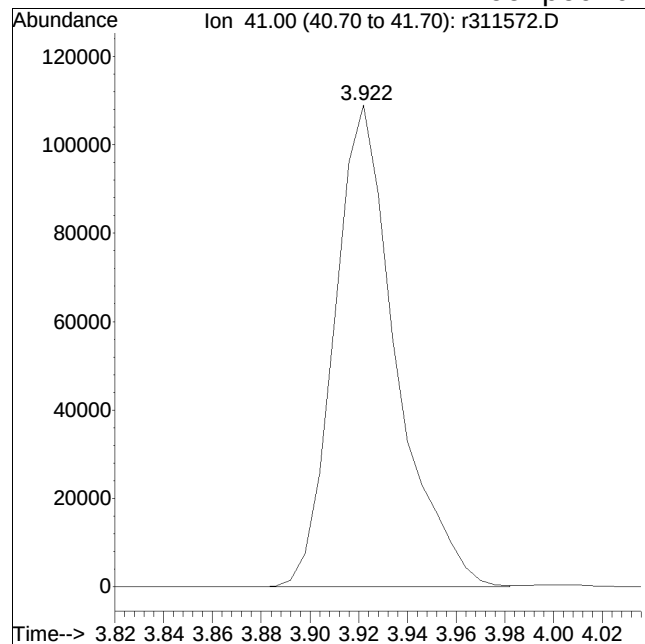
Quant Time: Sep 17 13:29:39 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Sep 15 10:50:28 2020
Response via : Initial Calibration



Manual Integration Report

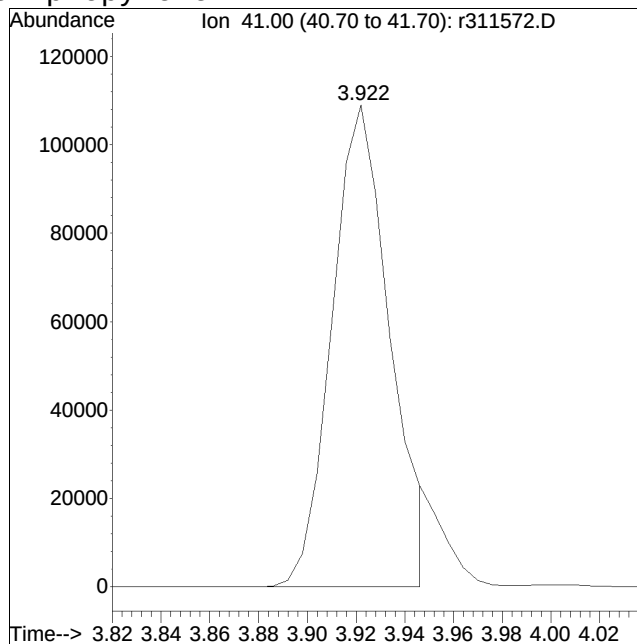
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311572.D Operator : AIRPIAN03:TS
Date Inj'd : 9/17/2020 0:2: 4 Instrument :
Sample : WG1411312-2, 3, 250, 250 Quant Date : 9/17/2020 1:29 pm

Compound #3: propylene



Original Peak Response = 192351

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



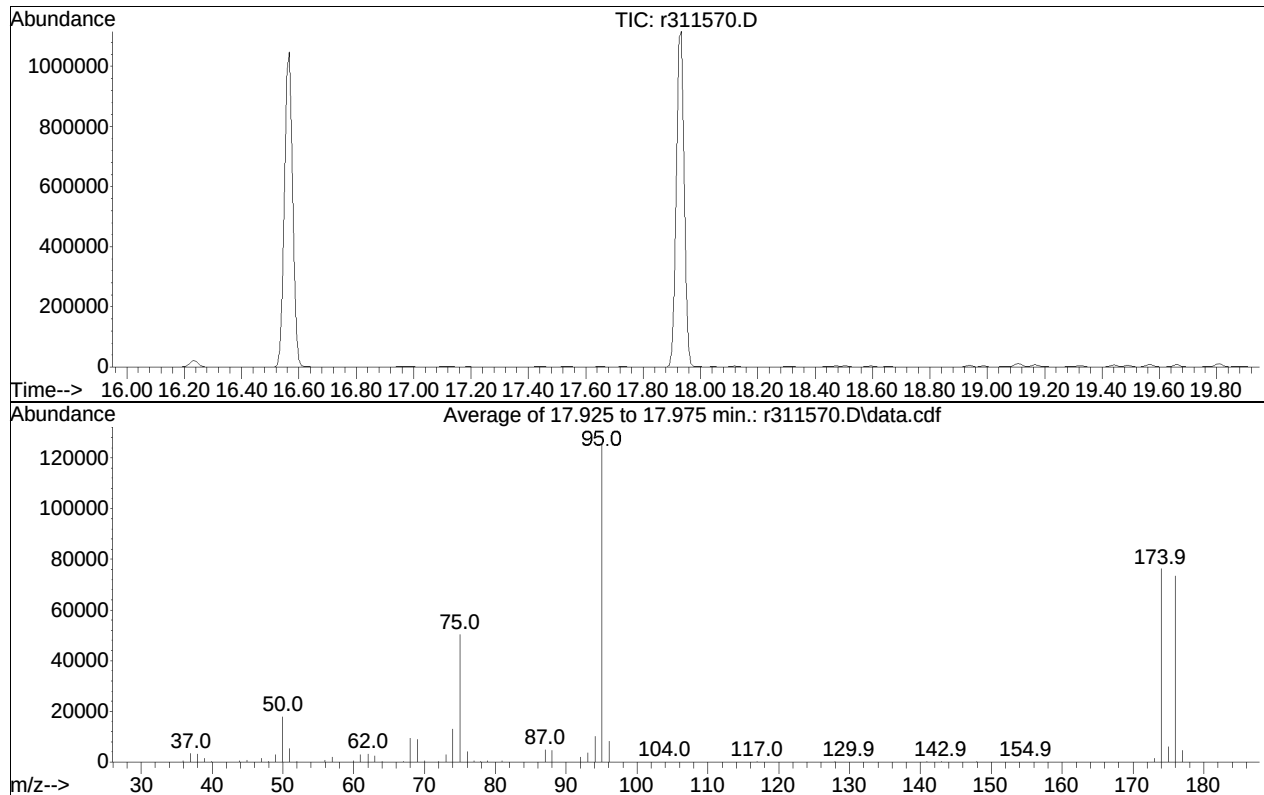
Manual Peak Response = 180287 M6

BFB

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311570.D
 Acq On : 17 Sep 2020 11:02 AM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-1,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Tue Sep 15 10:50:28 2020



Spectrum Information: Average of 17.925 to 17.975 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.2	17919	PASS
75	95	30	66	40.0	50349	PASS
95	95	100	100	100.0	126011	PASS
96	95	5	9	6.4	8110	PASS
173	174	0.00	2	2.0	1525	PASS
174	95	50	120	60.5	76289	PASS
175	174	4	9	8.0	6122	PASS
176	174	93	101	96.2	73382	PASS
177	176	5	9	6.4	4712	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311574.D
 Acq On : 17 Sep 2020 3:01 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-4,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 05:16:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.567	49	282810	10.000	ppbV	# 0.03
Standard Area = 294879			Recovery =		95.91%	
43) 1,4-difluorobenzene	11.840	114	785132	10.000	ppbV	# 0.03
Standard Area = 816202			Recovery =		96.19%	
67) chlorobenzene-D5	16.567	54	130391	10.000	ppbV	0.02
Standard Area = 138022			Recovery =		94.47%	

System Monitoring Compounds

Target Compounds						Qvalue
5) dichlorodifluoromethane	0.000		0		N.D.	
6) chloromethane	0.000		0		N.D.	
7) Freon-114	0.000		0		N.D.	
9) vinyl chloride	0.000		0		N.D.	
10) 1,3-butadiene	0.000		0		N.D.	
13) bromomethane	0.000		0		N.D.	
14) chloroethane	0.000		0		N.D.	
15) ethanol	5.357	31	1554	0.119	ppbV #	73
17) vinyl bromide	0.000		0		N.D.	
19) acetone	5.937	43	4288	0.211	ppbV #	90
21) trichlorofluoromethane	0.000		0		N.D.	
22) isopropyl alcohol	6.277	45	4668	0.171	ppbV #	85
26) 1,1-dichloroethene	0.000		0		N.D.	
27) tertiary butyl alcohol	0.000		0		N.D.	
28) methylene chloride	7.020	49	1435	0.072	ppbV	88
29) 3-chloropropene	0.000		0		N.D.	
30) carbon disulfide	7.308		0		N.D.	
31) Freon 113	0.000		0		N.D.	
32) trans-1,2-dichloroethene	0.000		0		N.D.	
33) 1,1-dichloroethane	0.000		0		N.D.	
34) MTBE	0.000		0		N.D.	
36) 2-butanone	8.925		0		N.D.	
37) cis-1,2-dichloroethene	0.000		0		N.D.	
38) Ethyl Acetate	0.000		0		N.D.	
39) chloroform	0.000		0		N.D.	
40) Tetrahydrofuran	0.000		0		N.D.	
42) 1,2-dichloroethane	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311574.D
 Acq On : 17 Sep 2020 3:01 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-4,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 05:16:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	9.642		0		N.D.	
48) 1,1,1-trichloroethane	0.000		0		N.D.	
50) benzene	11.400		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	12.687		0		N.D.	
62) heptane	13.000		0		N.D.	
63) cis-1,3-dichloropropene	0.000		0		N.D.	
64) 4-methyl-2-pentanone	13.750		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	14.792		0		N.D.	
72) 2-hexanone	15.117		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	16.958		0		N.D.	
83) m+p-xylene	17.117		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	17.542		0		N.D.	
96) 4-ethyl toluene	18.600		0		N.D.	
97) 1,3,5-trimethylbenzene	18.658		0		N.D.	
99) 1,2,4-trimethylbenzene	18.992		0		N.D.	
101) Benzyl Chloride	19.108		0		N.D.	
102) 1,3-dichlorobenzene	19.117		0		N.D.	
103) 1,4-dichlorobenzene	19.167		0		N.D.	
107) 1,2-dichlorobenzene	19.450		0		N.D.	
115) 1,2,4-trichlorobenzene	20.925		0		N.D.	
119) hexachlorobutadiene	0.000		0		N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311574.D
 Acq On : 17 Sep 2020 3:01 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-4,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 05:16:14 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

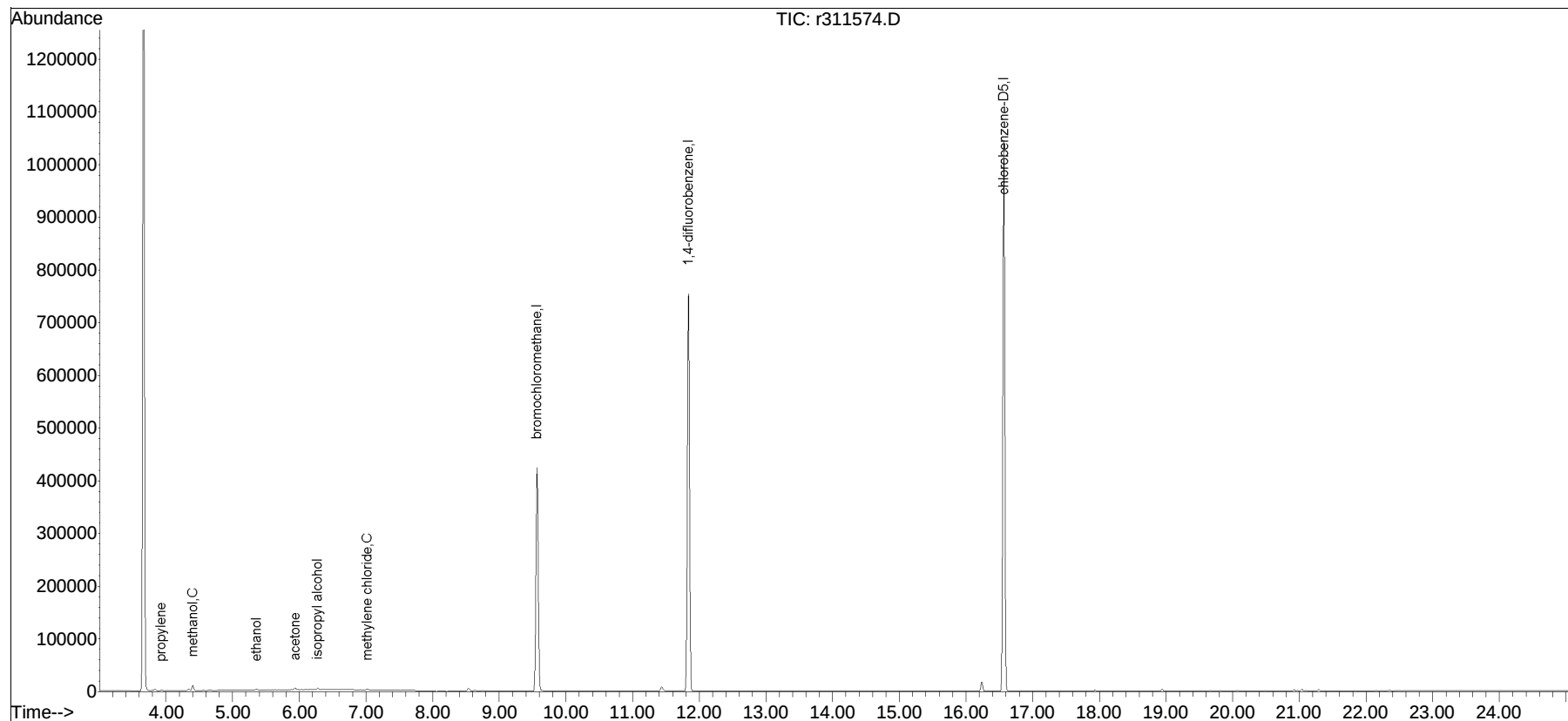
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

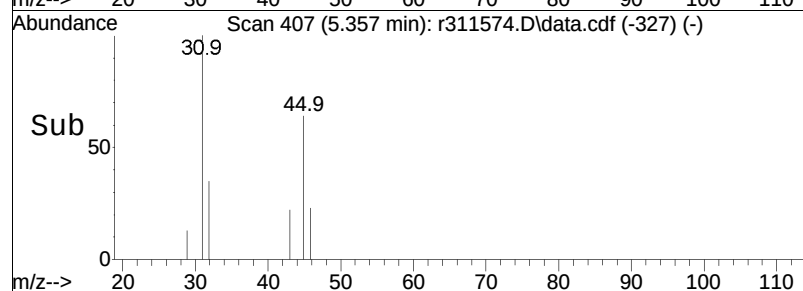
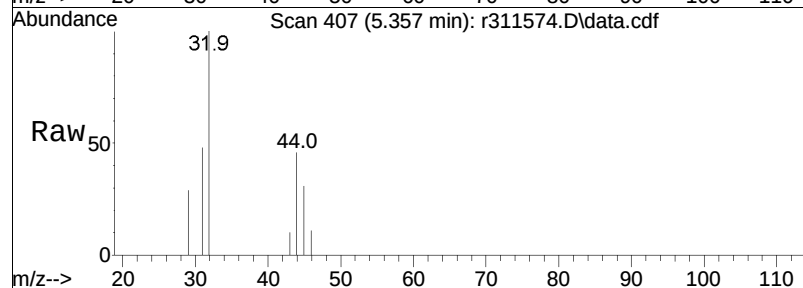
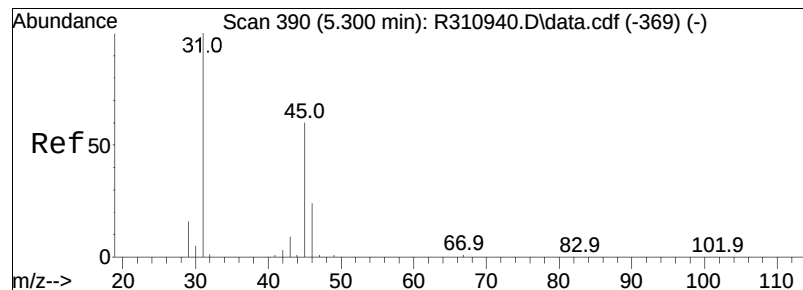
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : Default-LCS-AP2 - All compounds listed0917T\r311572.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
Data File : r311574.D
Acq On : 17 Sep 2020 3:01 PM
Operator : AIRPIANO3:TS
Sample : WG1411312-4,3,250,250
Misc : WG1411312,ICAL17116
ALS Vial : 0 Sample Multiplier: 1

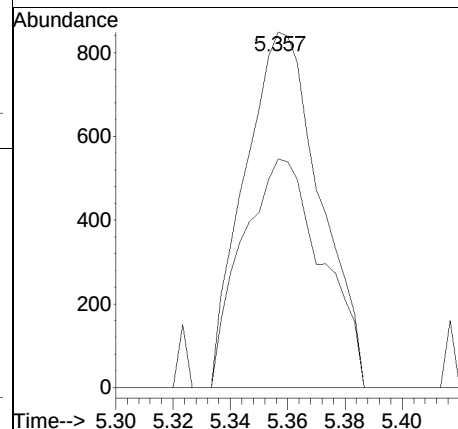
Quant Time: Sep 18 05:16:14 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Sep 15 10:50:28 2020
Response via : Initial Calibration

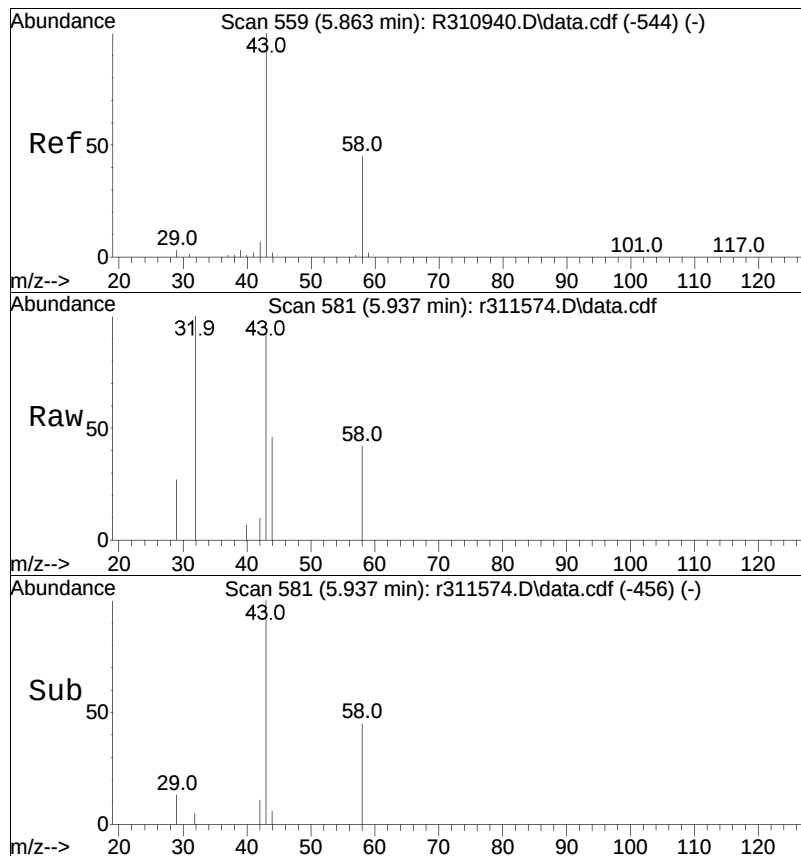




#15
ethanol
Concen: 0.12 ppbV
RT: 5.357 min Scan# 407
Delta R.T. 0.060 min
Lab File: r311574.D
Acq: 17 Sep 2020 3:01 PM

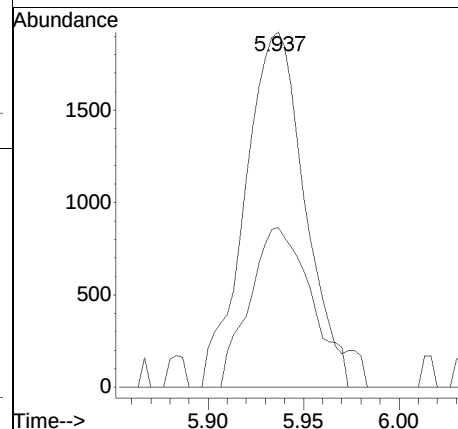
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	64.3	37.0	55.4	

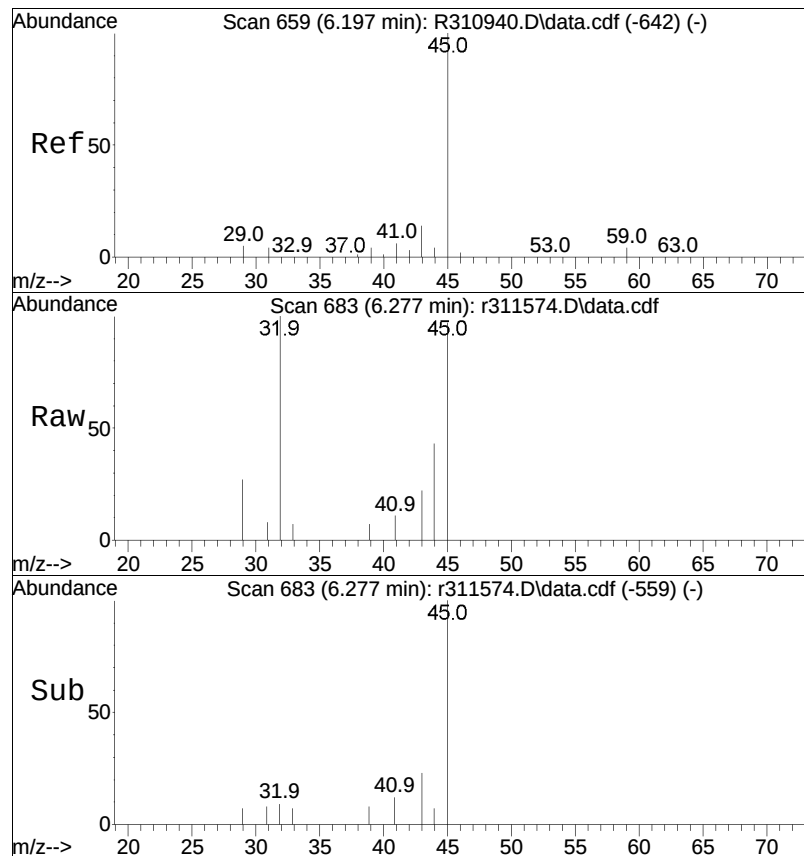




#19
acetone
Concen: 0.21 ppbV
RT: 5.937 min Scan# 581
Delta R.T. 0.087 min
Lab File: r311574.D
Acq: 17 Sep 2020 3:01 PM

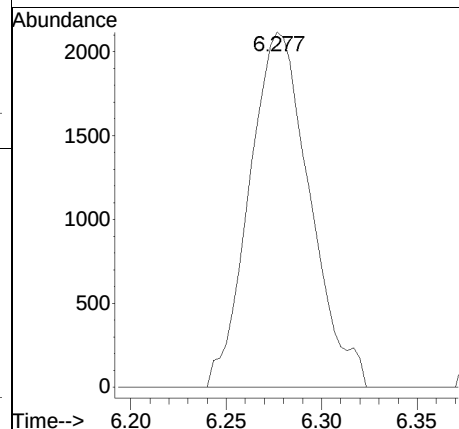
Tgt	Ion	Ratio	Resp	Lower	Upper
43	100		4288		
58	45.0			41.9	62.9
57	0.0			1.1	1.7#

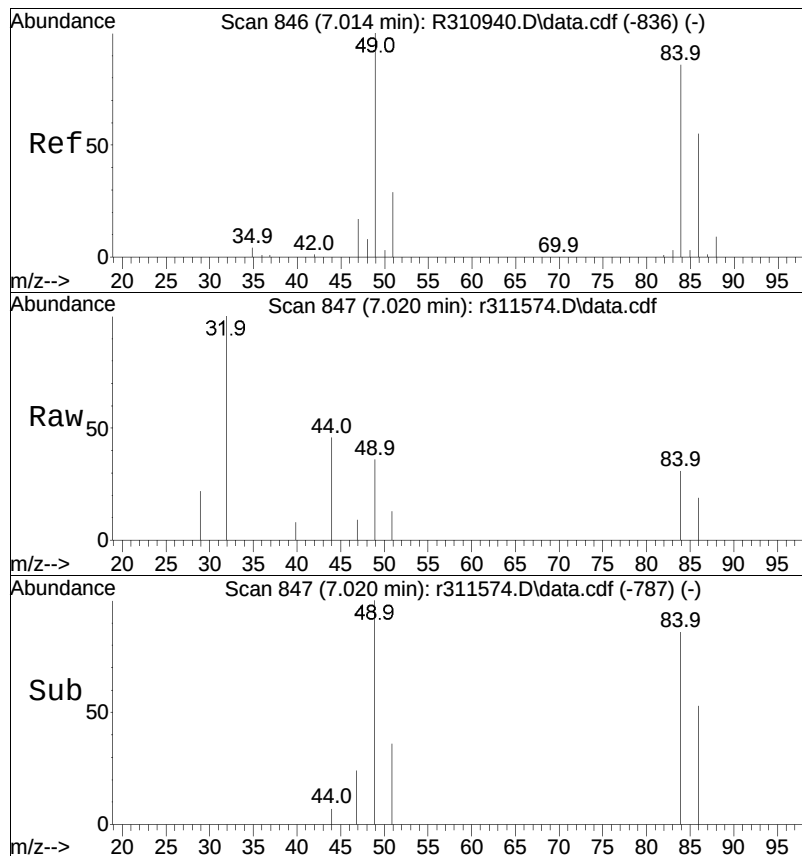




#22
 isopropyl alcohol
 Concen: 0.17 ppbV
 RT: 6.277 min Scan# 683
 Delta R.T. 0.083 min
 Lab File: r311574.D
 Acq: 17 Sep 2020 3:01 PM

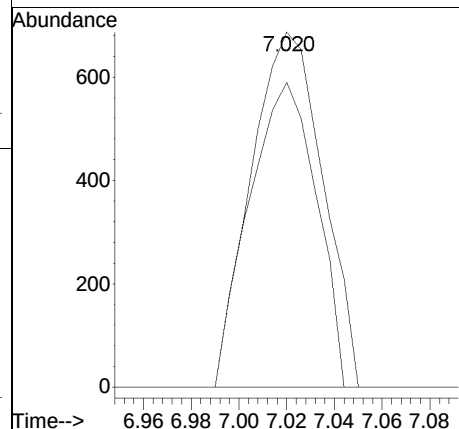
Tgt Ion	Ratio	Lower	Upper
45	100		
59	0.0	4.0	6.0#





#28
 methylene chloride
 Concen: 0.07 ppbV
 RT: 7.020 min Scan# 847
 Delta R.T. 0.030 min
 Lab File: r311574.D
 Acq: 17 Sep 2020 3:01 PM

Tgt Ion:	49	Resp:	1435
Ion Ratio	Lower	Upper	
49	100		
84	85.9	60.6	90.8



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311574.D Operator : AIRPIAN03:TS
Date Inj'd : 9/17/2020 0:3: 1 Instrument :
Sample : WG1411312-4,3,250,250 Quant Date : 9/18/2020 5:15 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-3,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	89	0.03
2	chlorodifluoromethane	10.000	8.441	15.6	79	0.02
3	propylene	10.000	13.932	-39.3#	129	0.02
4	propane	10.000	8.331	16.7	76	0.02
5	dichlorodifluoromethane	10.000	9.735	2.7	90	0.02
6 C	chloromethane	10.000	9.310	6.9	88	0.02
7	Freon-114	10.000	9.648	3.5	88	0.02
8 C	methanol	50.000	34.927	30.1#	60	0.02
9 C	vinyl chloride	10.000	9.385	6.2	88	0.02
10 C	1,3-butadiene	10.000	9.146	8.5	85	0.02
11	butane	10.000	10.250	-2.5	97	0.02
13 C	bromomethane	10.000	10.228	-2.3	96	0.02
14 C	chloroethane	10.000	9.889	1.1	92	0.02
15	ethanol	50.000	37.386	25.2	63	0.02
16	dichlorofluoromethane	10.000	9.264	7.4	85	0.02
17 C	vinyl bromide	10.000	10.629	-6.3	98	0.03
18 C	acrolein	10.000	7.781	22.2	72	0.03
19	acetone	50.000	46.253	7.5	86	0.03
20 C	acetonitrile	10.000	9.293	7.1	87	0.03
21	trichlorofluoromethane	10.000	11.875	-18.8	110	0.03
22	isopropyl alcohol	25.000	23.170	7.3	89	0.03
23 C	acrylonitrile	10.000	8.368	16.3	78	0.03
24	pentane	10.000	12.762	-27.6	124	0.03
25	ethyl ether	10.000	7.443	25.6	69	0.03
26 C	1,1-dichloroethene	10.000	12.184	-21.8	115	0.03
27	tertiary butyl alcohol	10.000	11.487	-14.9	102	0.02
28 C	methylene chloride	10.000	9.843	1.6	90	0.02
29 C	3-chloropropene	10.000	13.232	-32.3#	125	0.03
30 C	carbon disulfide	10.000	10.082	-0.8	94	0.03
31	Freon 113	10.000	12.304	-23.0	116	0.03
32	trans-1,2-dichloroethene	10.000	11.679	-16.8	110	0.03
33 C	1,1-dichloroethane	10.000	12.782	-27.8	120	0.03
34 C	MTBE	10.000	12.279	-22.8	113	0.03
35 C	vinyl acetate	10.000	12.452	-24.5	110	0.03
36 C	2-butanone	10.000	12.262	-22.6	112	0.03
37	cis-1,2-dichloroethene	10.000	12.385	-23.8	116	0.03
38	Ethyl Acetate	10.000	11.904	-19.0	115	0.03
39 C	chloroform	10.000	10.883	-8.8	100	0.03
40	Tetrahydrofuran	10.000	11.900	-19.0	111	0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-3,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 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	11.560	-15.6	101	0.03
42 C	1,2-dichloroethane	10.000	13.422	-34.2#	125	0.02
43 I	1,4-difluorobenzene	10.000	10.000	0.0	97	0.03
44 C	hexane	10.000	9.206	7.9	93	0.03
45	diisopropyl ether	10.000	8.777	12.2	93	0.03
46	tert-butyl ethyl ether	10.000	9.826	1.7	99	0.03
48 C	1,1,1-trichloroethane	10.000	12.695	-27.0	129	0.03
49	1,1-dichloropropene	10.000	9.822	1.8	99	0.03
50 C	benzene	10.000	9.087	9.1	93	0.03
52 C	carbon tetrachloride	10.000	12.253	-22.5	121	0.03
53	cyclohexane	10.000	9.131	8.7	94	0.03
54	tert-amyl methyl ether	10.000	10.134	-1.3	102	0.03
55	dibromomethane	10.000	10.213	-2.1	106	0.03
56 C	1,2-dichloropropane	10.000	11.372	-13.7	118	0.03
57	bromodichloromethane	10.000	10.071	-0.7	100	0.03
58 C	1,4-dioxane	10.000	10.167	-1.7	104	0.03
59 C	trichloroethene	10.000	10.881	-8.8	112	0.03
60 C	2,2,4-trimethylpentane	10.000	9.460	5.4	95	0.03
61	methyl methacrylate	10.000	8.396	16.0	83	0.03
62	heptane	10.000	10.959	-9.6	112	0.03
63 C	cis-1,3-dichloropropene	10.000	10.714	-7.1	108	0.03
64 C	4-methyl-2-pentanone	10.000	11.344	-13.4	112	0.03
65	trans-1,3-dichloropropene	10.000	9.744	2.6	96	0.03
66 C	1,1,2-trichloroethane	10.000	11.406	-14.1	118	0.03
67 I	chlorobenzene-D5	10.000	10.000	0.0	100	0.02
68 C	toluene	10.000	10.587	-5.9	112	0.03
71	1,3-dichloropropane	10.000	8.683	13.2	90	0.03
72	2-hexanone	10.000	10.772	-7.7	111	0.02
74	dibromochloromethane	10.000	11.924	-19.2	121	0.02
75 C	1,2-dibromoethane	10.000	9.848	1.5	102	0.02
76	butyl acetate	10.000	9.486	5.1	94	0.02
77	octane	10.000	8.826	11.7	92	0.02
78 C	tetrachloroethene	10.000	10.246	-2.5	107	0.02
79	1,1,1,2-tetrachloroethane	10.000	11.095	-11.0	111	0.02
80 C	chlorobenzene	10.000	9.729	2.7	100	0.03
81 C	ethylbenzene	10.000	11.234	-12.3	117	0.02
83 C	m+p-xylene	20.000	22.685	-13.4	116	0.02

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-3,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84 C	bromoform	10.000	11.506	-15.1	110	0.02
85 C	styrene	10.000	9.910	0.9	102	0.02
86 C	1,1,2,2-tetrachloroethane	10.000	10.120	-1.2	97	0.03
87 C	o-xylene	10.000	11.724	-17.2	117	0.02
88	1,2,3-trichloropropane	10.000	9.031	9.7	91	0.02
89	nonane	10.000	9.652	3.5	99	0.03
91 C	isopropylbenzene	10.000	9.743	2.6	100	0.02
92	bromobenzene	10.000	8.904	11.0	89	0.02
93	2-chlorotoluene	10.000	9.940	0.6	102	0.02
94	n-propylbenzene	10.000	9.962	0.4	102	0.02
95	4-chlorotoluene	10.000	9.830	1.7	105	0.02
96	4-ethyl toluene	10.000	12.785	-27.9	120	0.02
97	1,3,5-trimethylbenzene	10.000	10.525	-5.3	105	0.03
98	tert-butylbenzene	10.000	10.365	-3.7	99	0.02
99	1,2,4-trimethylbenzene	10.000	10.955	-9.6	106	0.02
100	decane	10.000	9.346	6.5	93	0.02
101 C	Benzyl Chloride	10.000	13.688	-36.9#	111	0.02
102	1,3-dichlorobenzene	10.000	11.328	-13.3	114	0.02
103 C	1,4-dichlorobenzene	10.000	10.996	-10.0	106	0.02
104	sec-butylbenzene	10.000	9.545	4.6	96	0.02
106	p-isopropyltoluene	10.000	9.628	3.7	89	0.02
107	1,2-dichlorobenzene	10.000	11.061	-10.6	110	0.02
108	n-butylbenzene	10.000	10.787	-7.9	106	0.02
111 C	1,2-dibromo-3-chloropropane	10.000	10.159	-1.6	93	0.02
112	undecane	10.000	9.619	3.8	91	0.02
114	dodecane	10.000	9.760	2.4	87	0.02
115 C	1,2,4-trichlorobenzene	10.000	10.291	-2.9	94	0.03
116	naphthalene	10.000	9.336	6.6	85	0.03
117	1,2,3-trichlorobenzene	10.000	9.120	8.8	84	0.02
119 C	hexachlorobutadiene	10.000	11.636	-16.4	109	0.03

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-3,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.567	49	294879	10.000	ppbV	# 0.03
Standard Area = 294879			Recovery =	100.00%		
43) 1,4-difluorobenzene	11.833	114	816202	10.000	ppbV	# 0.03
Standard Area = 816202			Recovery =	100.00%		
67) chlorobenzene-D5	16.567	54	138022	10.000	ppbV	0.02
Standard Area = 138022			Recovery =	100.00%		

System Monitoring Compounds

Target Compounds					Qvalue	
5) dichlorodifluoromethane	4.000	85	270056	9.735	ppbV	99
6) chloromethane	4.180	50	130501	9.310	ppbV	96
7) Freon-114	4.306	85	346779	9.648	ppbV	96
9) vinyl chloride	4.438	62	151885	9.385	ppbV	97
10) 1,3-butadiene	4.606	54	138526	9.146	ppbV	83
13) bromomethane	4.918	94	138169	10.228	ppbV	97
14) chloroethane	5.140	64	81841	9.889	ppbV	97
15) ethanol	5.320	31	509049	37.386	ppbV #	82
17) vinyl bromide	5.563	106	147158	10.629	ppbV	98
19) acetone	5.877	43	978437	46.253	ppbV #	83
21) trichlorofluoromethane	6.080	101	242914	11.875	ppbV	99
22) isopropyl alcohol	6.220	45	657917	23.170	ppbV #	97
26) 1,1-dichloroethene	6.852	61	260339	12.184	ppbV	98
27) tertiary butyl alcohol	6.960	59	337098	11.487	ppbV #	93
28) methylene chloride	7.014	49	203149	9.843	ppbV	95
29) 3-chloropropene	7.158	41	312551	13.232	ppbV	94
30) carbon disulfide	7.308	76	565478	10.082	ppbV #	95
31) Freon 113	7.350	101	333824	12.304	ppbV	94
32) trans-1,2-dichloroethene	8.150	61	264574	11.679	ppbV	100
33) 1,1-dichloroethane	8.383	63	339499	12.782	ppbV	99
34) MTBE	8.467	73	560681	12.279	ppbV	94
36) 2-butanone	8.867	43	441053	12.262	ppbV	97
37) cis-1,2-dichloroethene	9.375	61	245122	12.385	ppbV	99
38) Ethyl Acetate	9.675	61	72478	11.904	ppbV	80
39) chloroform	9.733	83	322477	10.883	ppbV	97
40) Tetrahydrofuran	10.175	42	271075	11.900	ppbV	98
42) 1,2-dichloroethane	10.575	62	204431	13.422	ppbV #	89

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-3,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.642	57	314534	9.206	ppbV	#	72
48) 1,1,1-trichloroethane	10.867	97	296520	12.695	ppbV		97
50) benzene	11.400	78	622699	9.087	ppbV		97
52) carbon tetrachloride	11.567	117	267429	12.253	ppbV		98
53) cyclohexane	11.713	56	329976	9.131	ppbV	#	94
56) 1,2-dichloropropane	12.353	63	227858	11.372	ppbV		98
57) bromodichloromethane	12.580	83	351977	10.071	ppbV	#	97
58) 1,4-dioxane	12.627	88	159225	10.167	ppbV		97
59) trichloroethene	12.633	130	268278	10.881	ppbV		98
60) 2,2,4-trimethylpentane	12.680	57	1028343	9.460	ppbV	#	90
62) heptane	13.000	43	461431	10.959	ppbV		92
63) cis-1,3-dichloropropene	13.650	75	350765	10.714	ppbV		93
64) 4-methyl-2-pentanone	13.700	43	546010	11.344	ppbV		97
65) trans-1,3-dichloropropene	14.267	75	287057	9.744	ppbV		94
66) 1,1,2-trichloroethane	14.467	97	238634	11.406	ppbV		87
68) toluene	14.783	91	746205	10.587	ppbV		100
72) 2-hexanone	15.075	43	507338	10.772	ppbV		95
74) dibromochloromethane	15.233	129	357916	11.924	ppbV		99
75) 1,2-dibromoethane	15.483	107	317619	9.848	ppbV		98
78) tetrachloroethene	15.950	166	290742	10.246	ppbV		91
80) chlorobenzene	16.608	112	531227	9.729	ppbV		99
81) ethylbenzene	16.958	91	910016	11.234	ppbV		91
83) m+p-xylene	17.117	91	1504212	22.685	ppbV		90
84) bromoform	17.183	173	282638	11.506	ppbV		99
85) styrene	17.442	104	575725	9.910	ppbV		99
86) 1,1,2,2-tetrachloroethane	17.533	83	513589	10.120	ppbV		97
87) o-xylene	17.533	91	768888	11.724	ppbV		91
96) 4-ethyl toluene	18.592	105	1015047	12.785	ppbV		97
97) 1,3,5-trimethylbenzene	18.658	105	876150	10.525	ppbV		99
99) 1,2,4-trimethylbenzene	18.983	105	871066	10.955	ppbV		99
101) Benzyl Chloride	19.100	91	652366	13.688	ppbV		99
102) 1,3-dichlorobenzene	19.108	146	591257	11.328	ppbV		94
103) 1,4-dichlorobenzene	19.167	146	542477	10.996	ppbV		94
107) 1,2-dichlorobenzene	19.442	146	539711	11.061	ppbV		95
115) 1,2,4-trichlorobenzene	20.917	180	336957	10.291	ppbV		94
119) hexachlorobutadiene	21.350	225	415895	11.636	ppbV		95

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311572.D
 Acq On : 17 Sep 2020 12:24 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-3,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 17 13:29:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

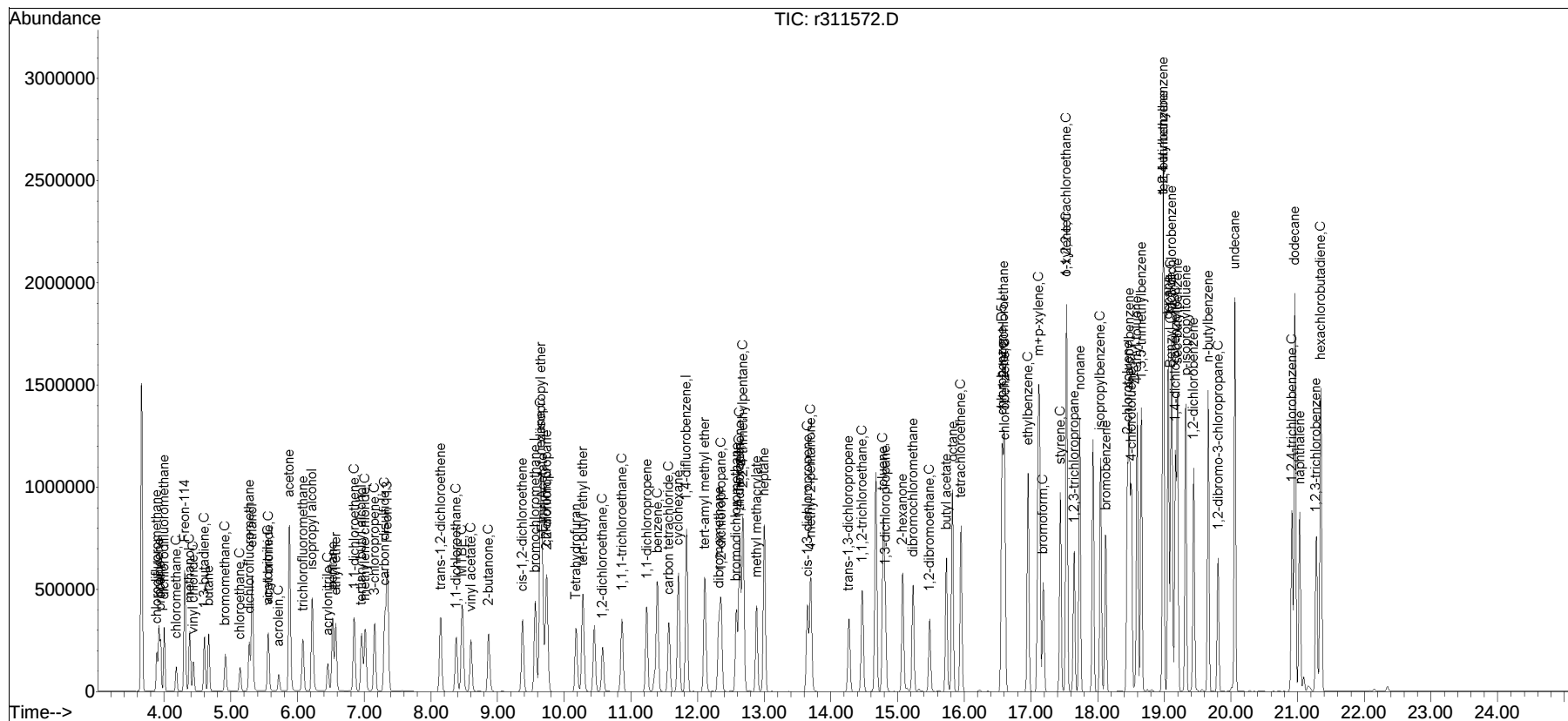
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : Default-LCS-AP2 - All compounds listed

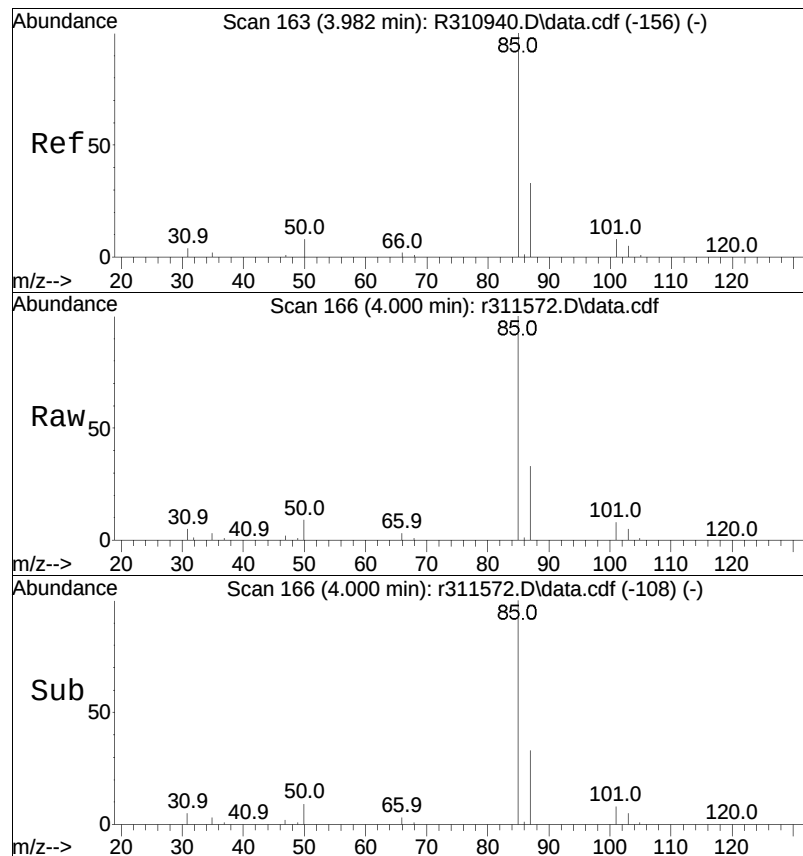
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : Default-LCS-AP2 - All compounds listed0917T\r311572.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
Data File : r311572.D
Acq On : 17 Sep 2020 12:24 PM
Operator : AIRPIANO3:TS
Sample : WG1411312-3,3,250,250
Misc : WG1411312,ICAL17116
ALS Vial : 0 Sample Multiplier: 1

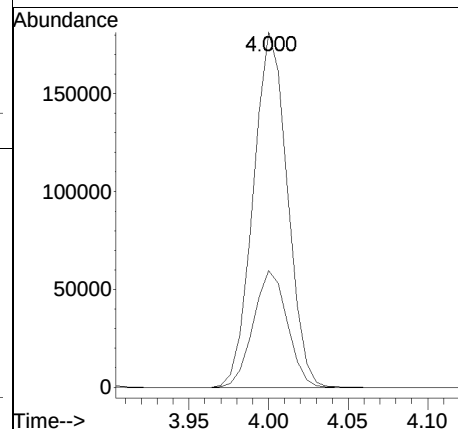
Quant Time: Sep 17 13:29:39 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Sep 15 10:50:28 2020
Response via : Initial Calibration

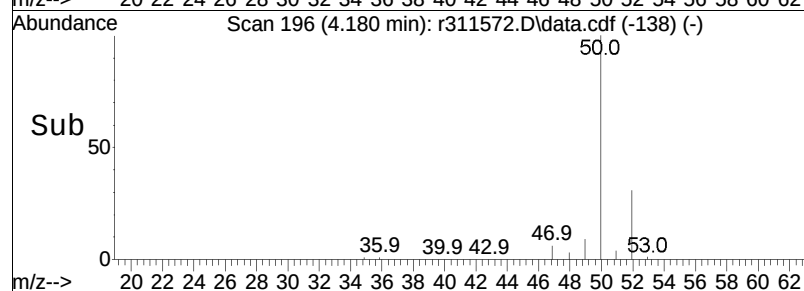
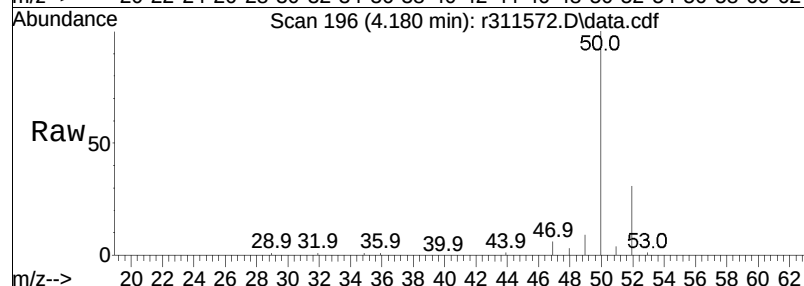
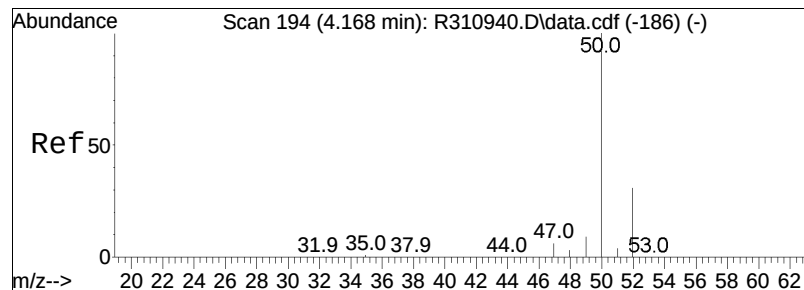




#5
 dichlorodifluoromethane
 Concen: 9.74 ppbV
 RT: 4.000 min Scan# 166
 Delta R.T. 0.018 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

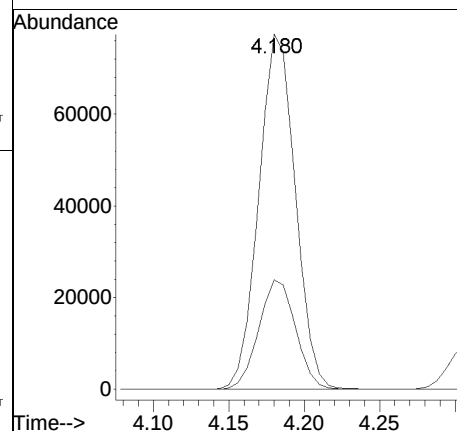
Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.9	25.8	38.6

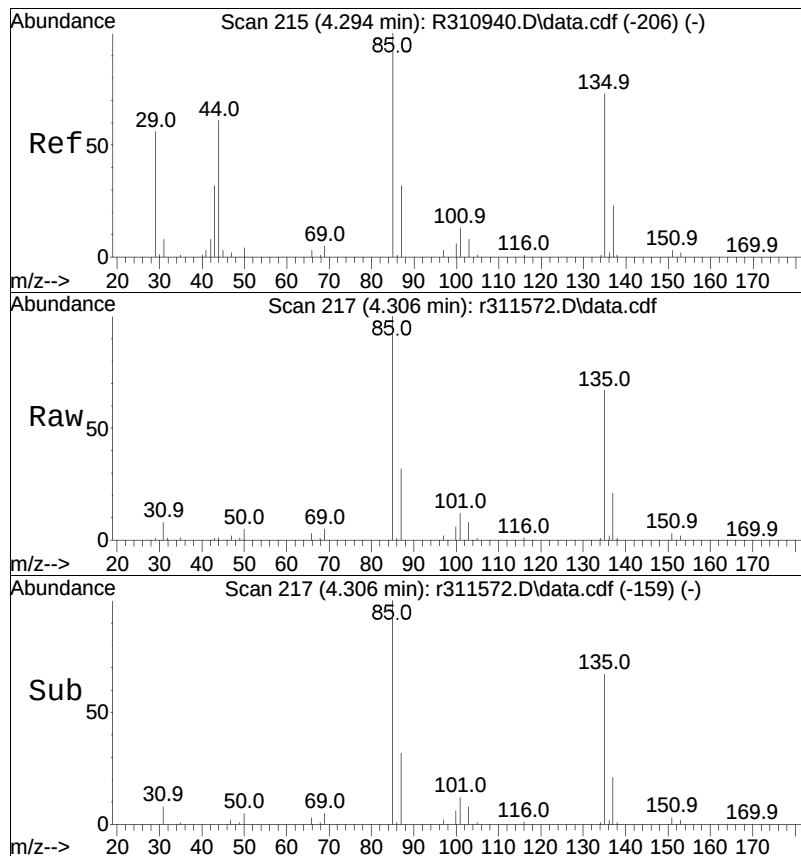




#6
chloromethane
Concen: 9.31 ppbV
RT: 4.180 min Scan# 196
Delta R.T. 0.018 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

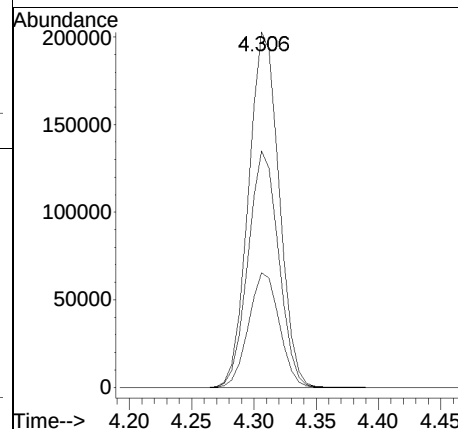
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	30.8	26.5	39.7	

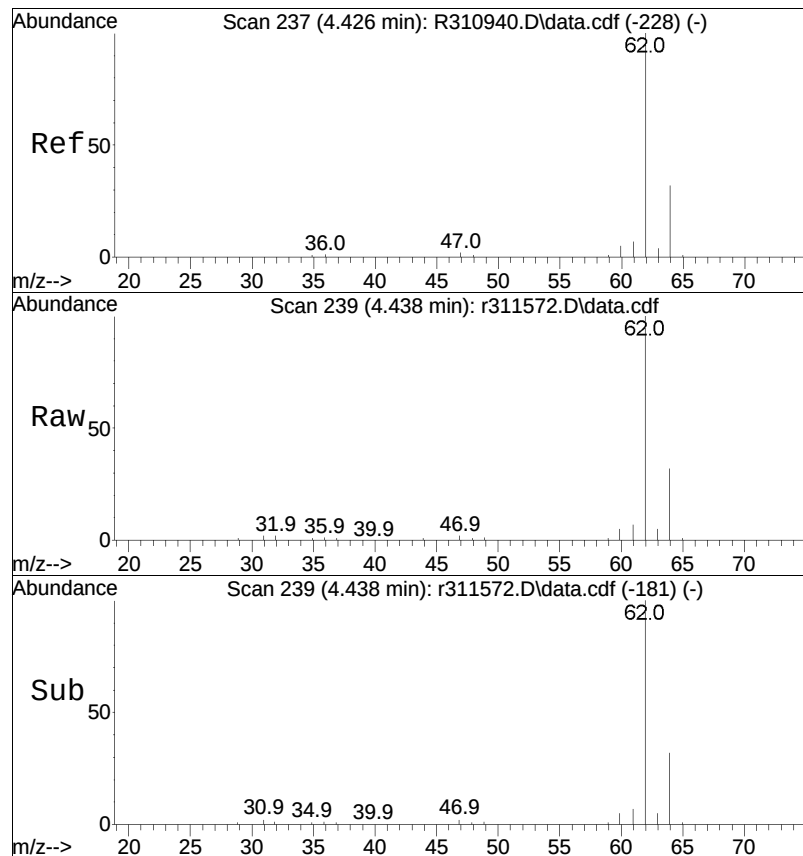




#7
 Freon-114
 Concen: 9.65 ppbV
 RT: 4.306 min Scan# 217
 Delta R.T. 0.018 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

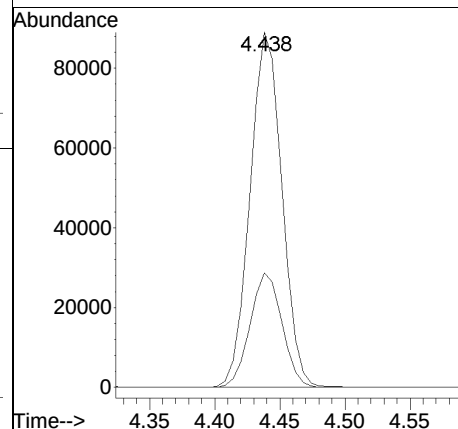
Tgt Ion:	85	Resp:	346779
Ion Ratio	Lower	Upper	
85	100		
87	32.3	25.9	38.9
135	66.5	49.1	73.7

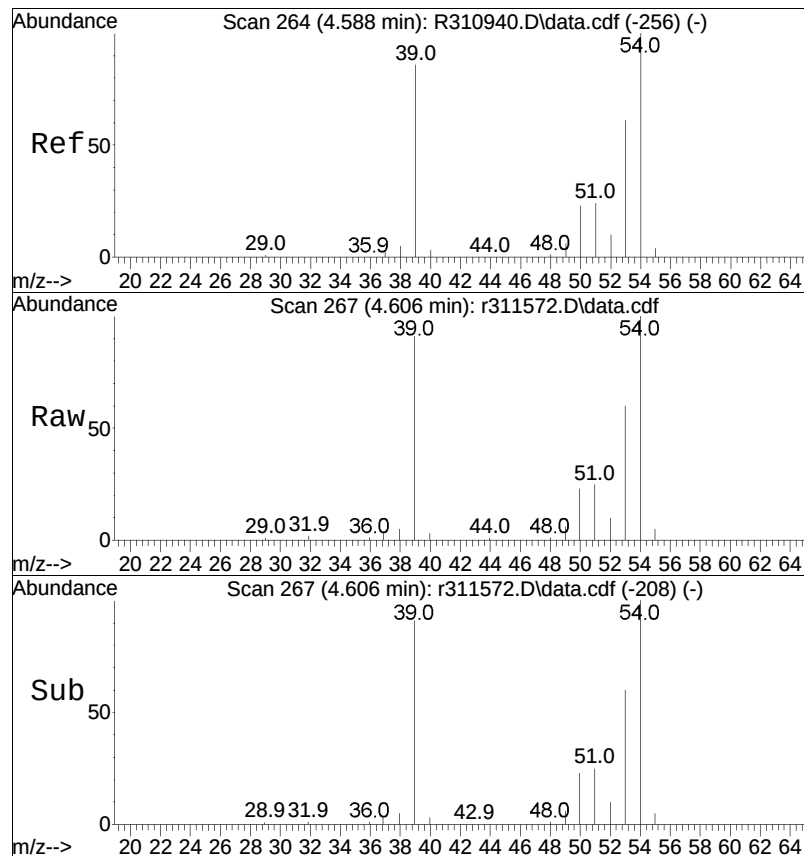




#9
 vinyl chloride
 Concen: 9.39 ppbV
 RT: 4.438 min Scan# 239
 Delta R.T. 0.018 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

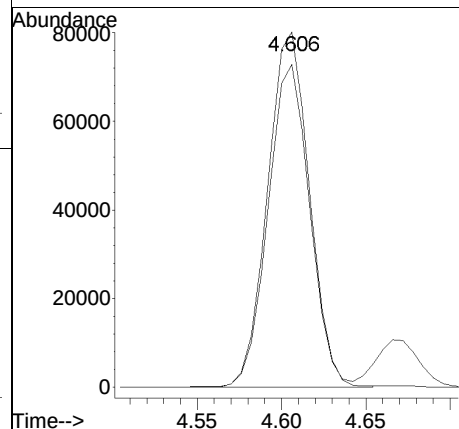
Tgt	Ion	Resp	Lower	Upper
62	100	151885		
64	32.2	24.6	36.8	

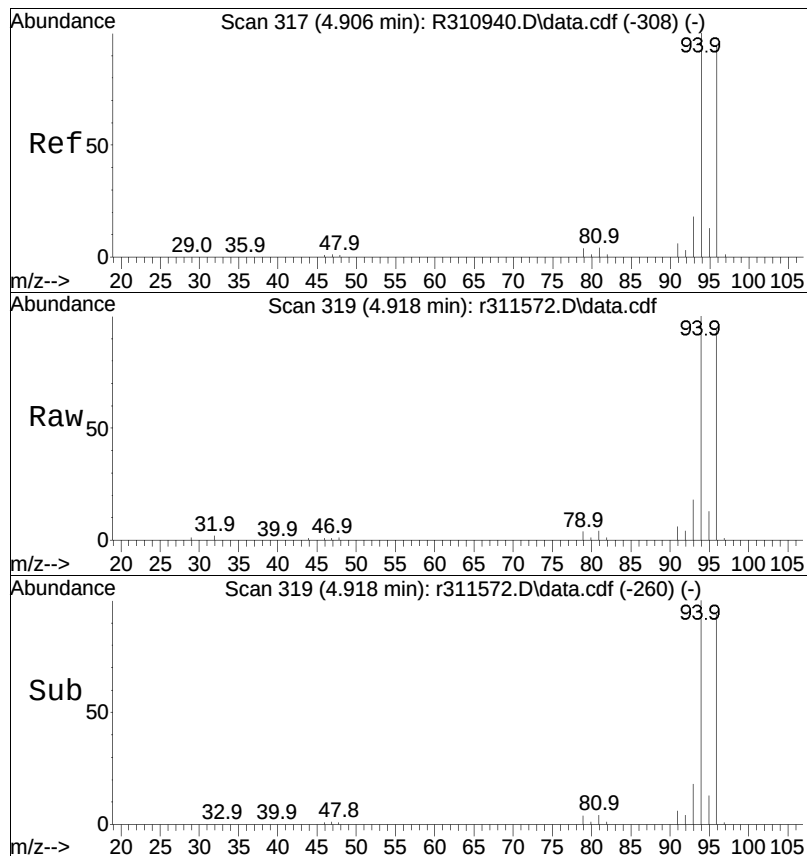




#10
 1,3-butadiene
 Concen: 9.15 ppbV
 RT: 4.606 min Scan# 267
 Delta R.T. 0.024 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

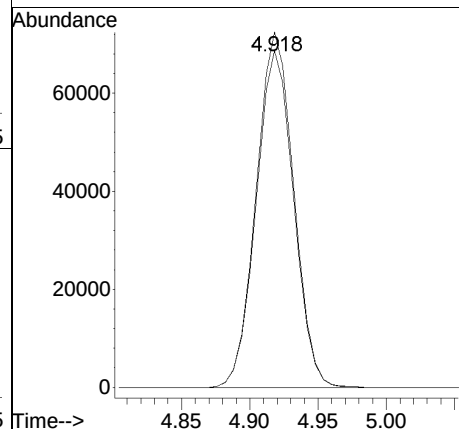
Tgt Ion	Ratio	Lower	Upper
54	100		
39	90.9	61.2	91.8

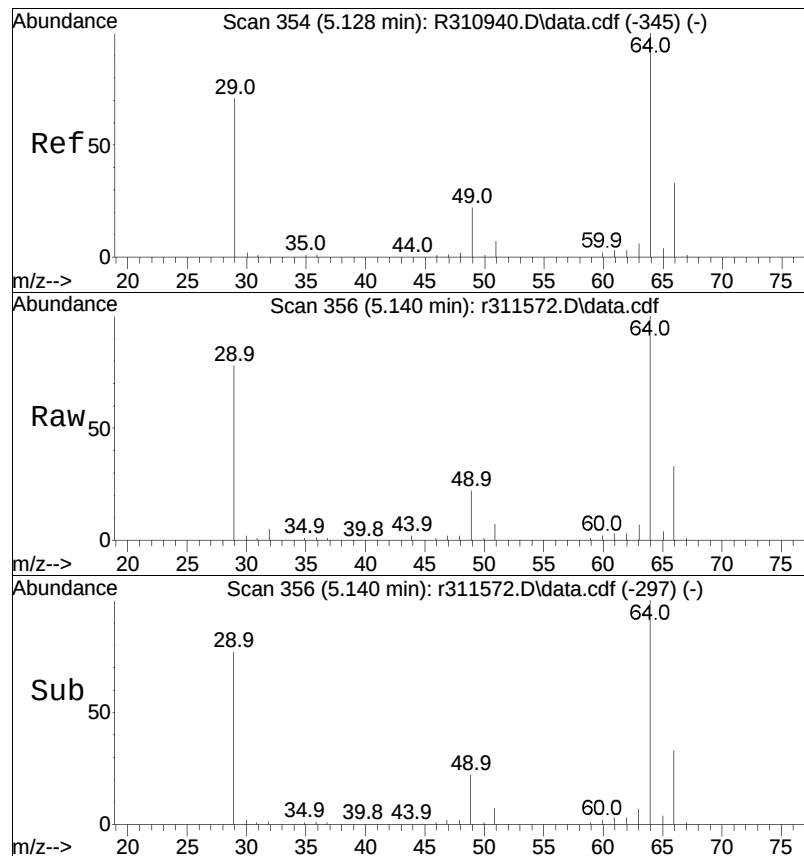




#13
bromomethane
Concen: 10.23 ppbV
RT: 4.918 min Scan# 319
Delta R.T. 0.024 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

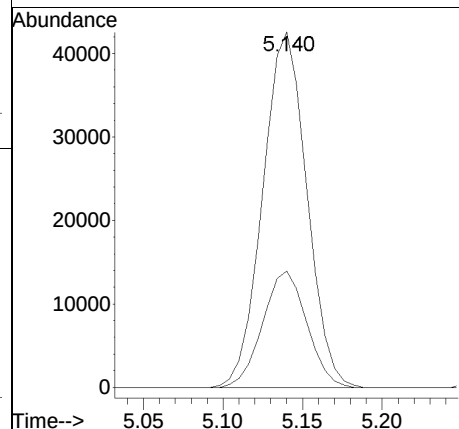
Tgt Ion	Ratio	Lower	Upper
94	100		
96	94.8	73.2	109.8

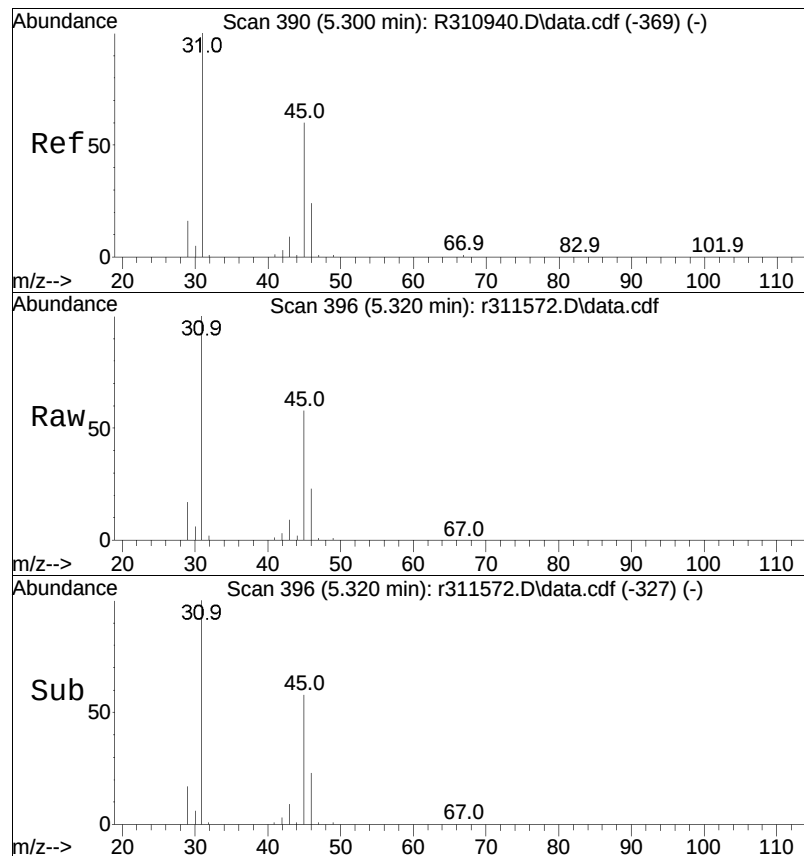




#14
 chloroethane
 Concen: 9.89 ppbV
 RT: 5.140 min Scan# 356
 Delta R.T. 0.024 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

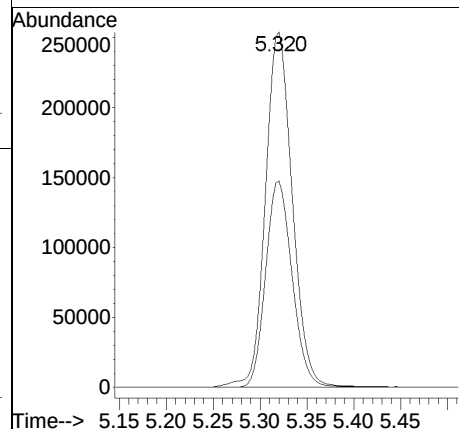
Tgt Ion	Ratio	Lower	Upper
64	100		
66	32.8	25.0	37.6

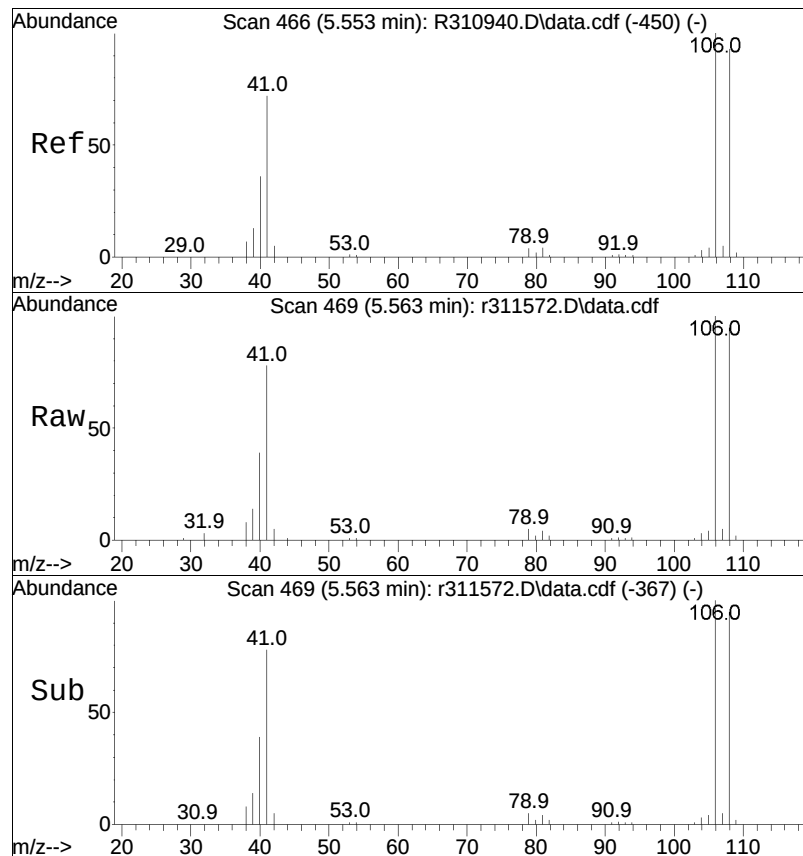




#15
ethanol
Concen: 37.39 ppbV
RT: 5.320 min Scan# 396
Delta R.T. 0.023 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

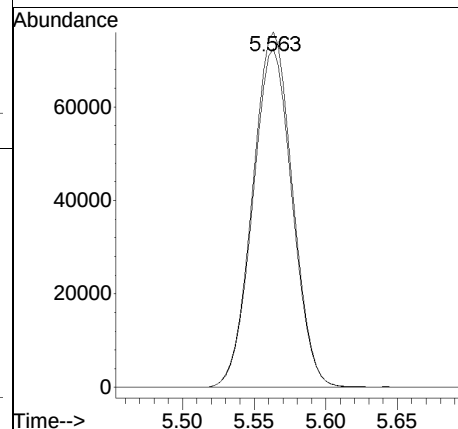
Tgt	Ion: 31	Resp: 509049
Ion	Ratio	Lower Upper
31	100	
45	58.1	37.0 55.4#

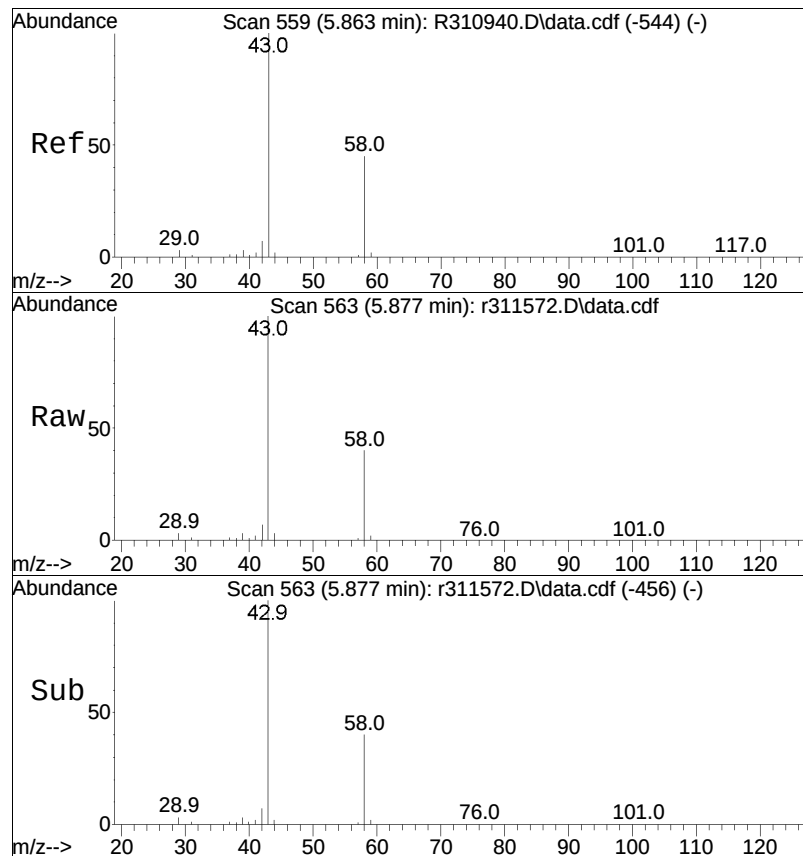




#17
 vinyl bromide
 Concen: 10.63 ppbV
 RT: 5.563 min Scan# 469
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

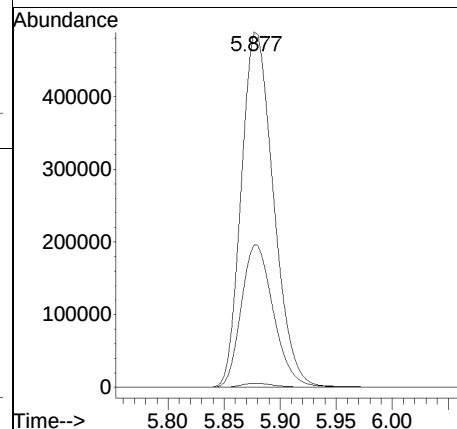
Tgt Ion	Ratio	Lower	Upper
106	100		
108	95.3	74.6	111.8

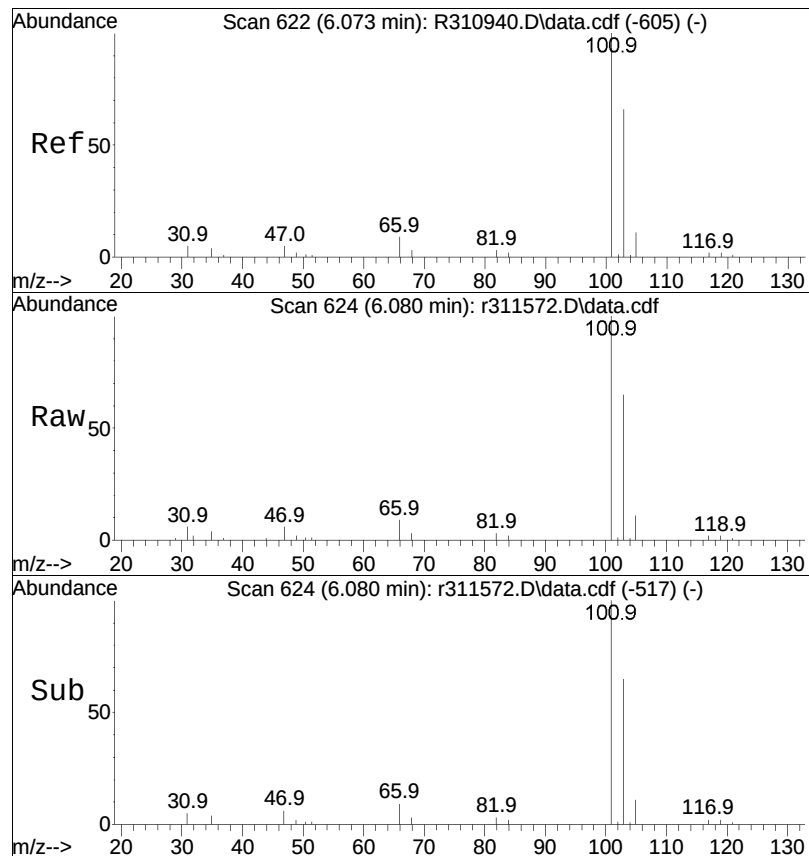




#19
acetone
Concen: 46.25 ppbV
RT: 5.877 min Scan# 563
Delta R.T. 0.027 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

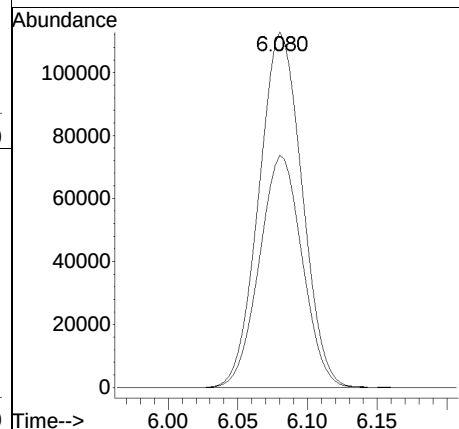
Tgt	Ion	Ratio	Resp	Lower	Upper
43	100		978437		
58	40.2			41.9	62.9#
57	1.2			1.1	1.7

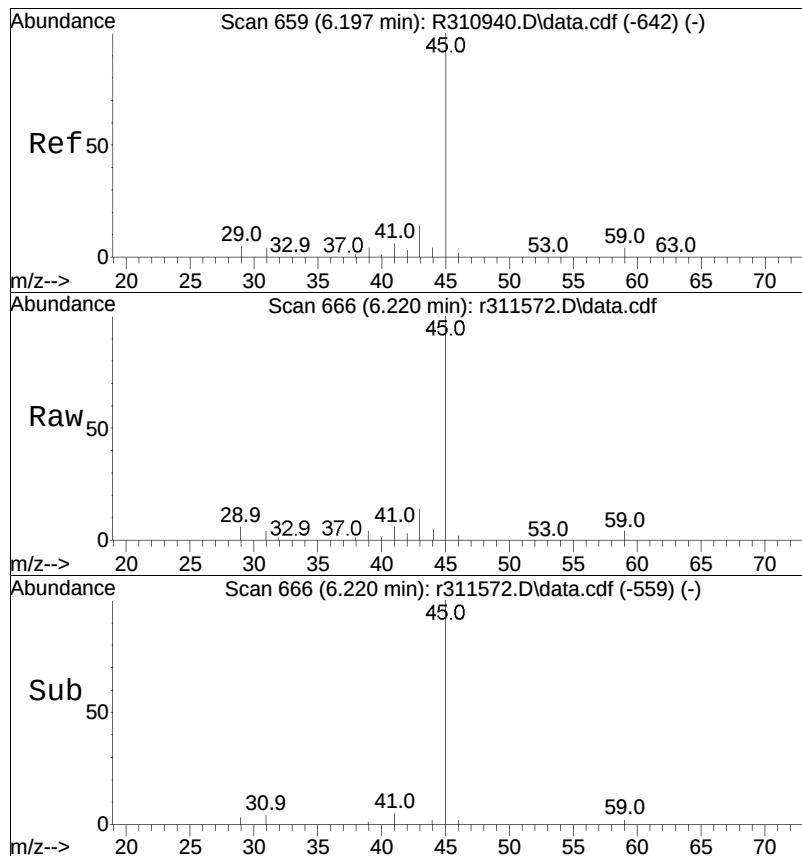




#21
 trichlorofluoromethane
 Concen: 11.88 ppbV
 RT: 6.080 min Scan# 624
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

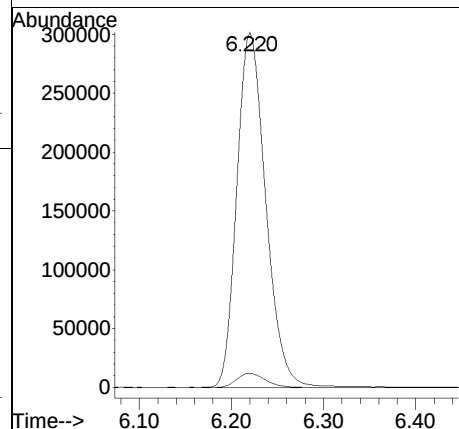
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	65.3	52.7	79.1	

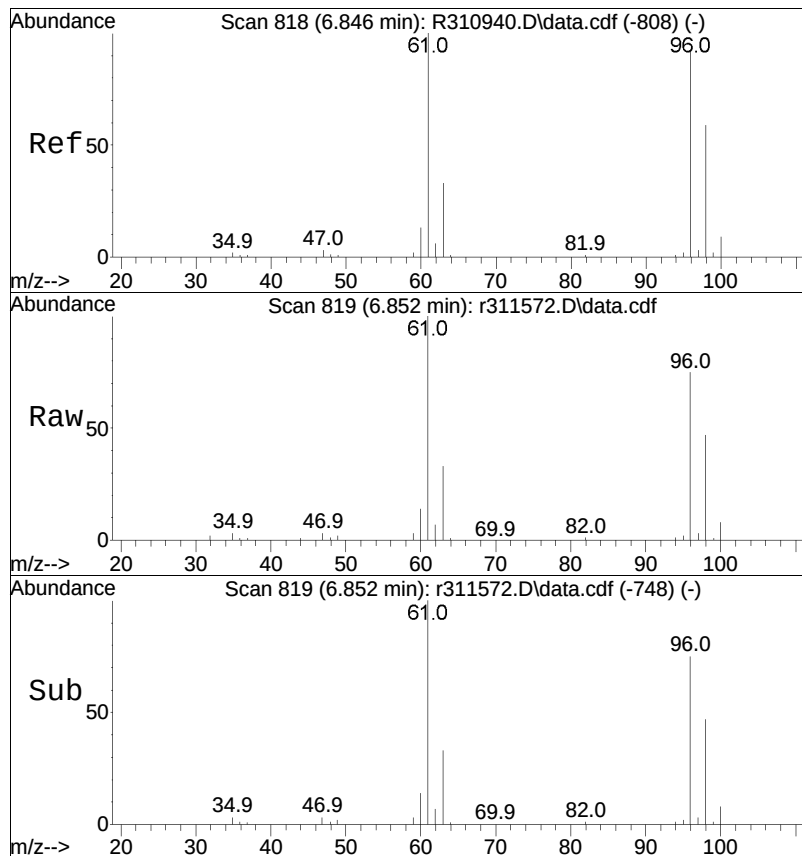




#22
 isopropyl alcohol
 Concen: 23.17 ppbV
 RT: 6.220 min Scan# 666
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

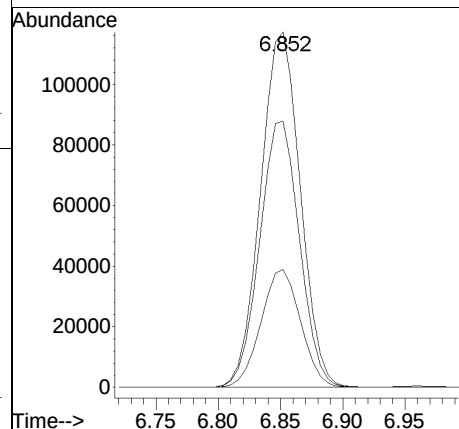
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.9	4.0	6.0#

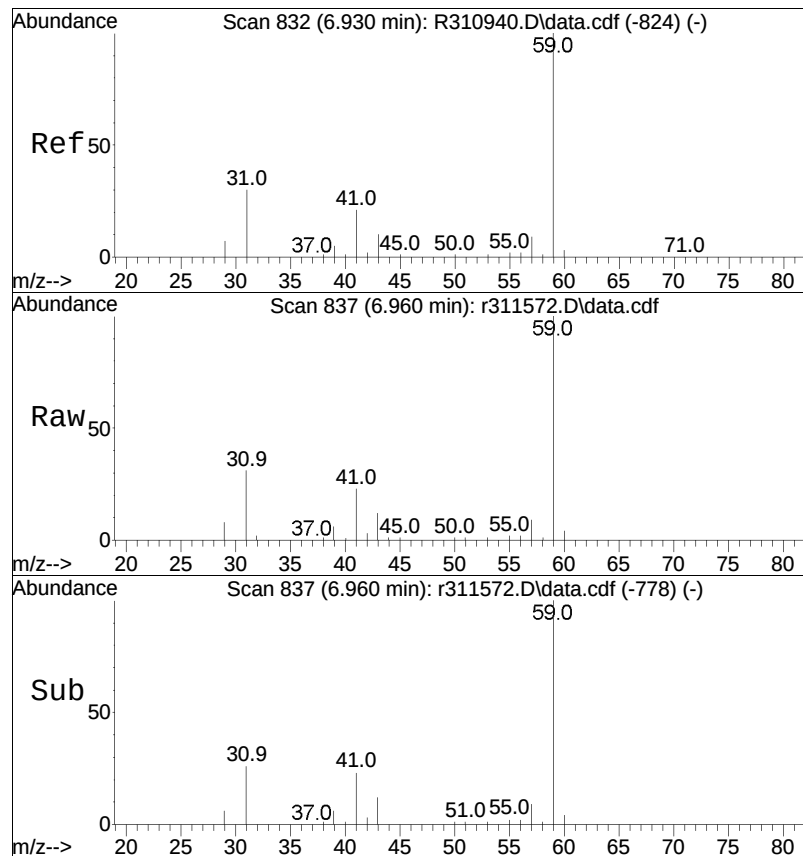




#26
 1,1-dichloroethene
 Concen: 12.18 ppbV
 RT: 6.852 min Scan# 819
 Delta R.T. 0.030 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

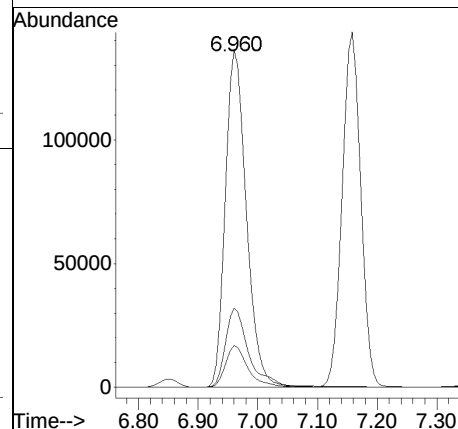
Tgt Ion:	61	Resp:	260339
Ion Ratio	Lower	Upper	
61	100		
96	74.9	59.5	89.3
63	33.2	24.6	37.0

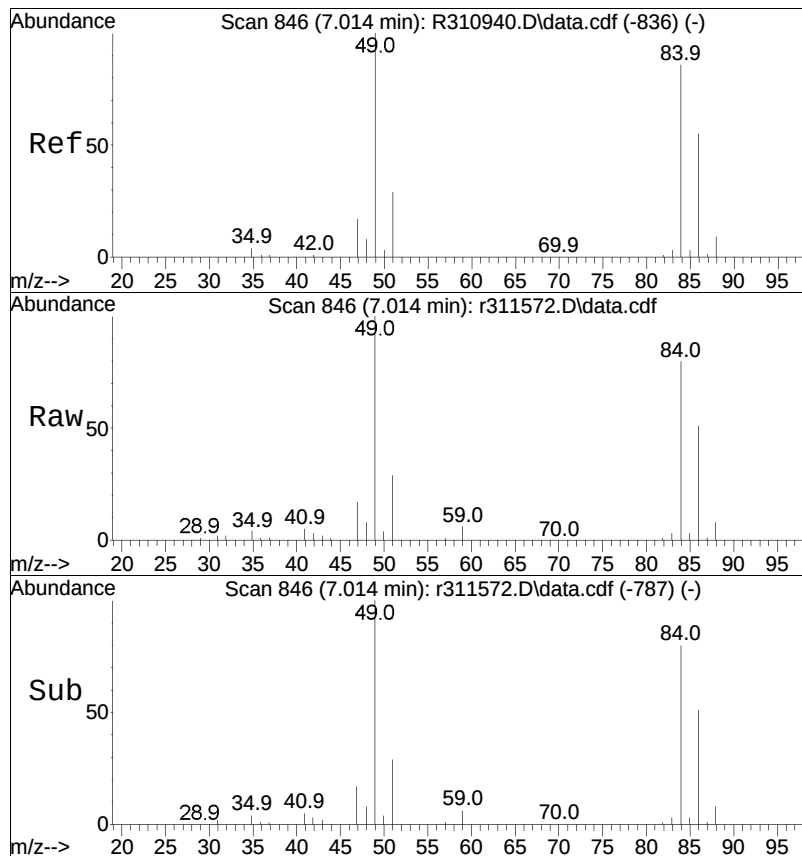




#27
 tertiary butyl alcohol
 Concen: 11.49 ppbV
 RT: 6.960 min Scan# 837
 Delta R.T. 0.024 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

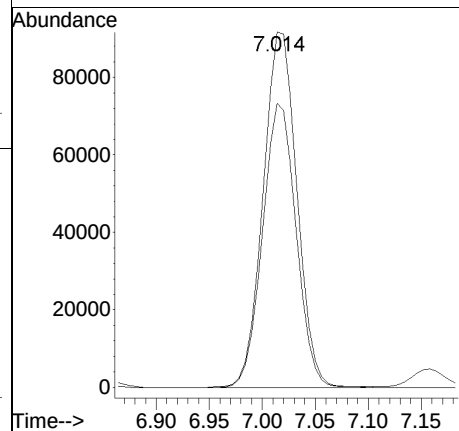
Tgt	Ion: 59	Resp:	337098
Ion	Ratio	Lower	Upper
59	100		
41	23.5	16.0	24.0
43	12.4	8.2	12.4#

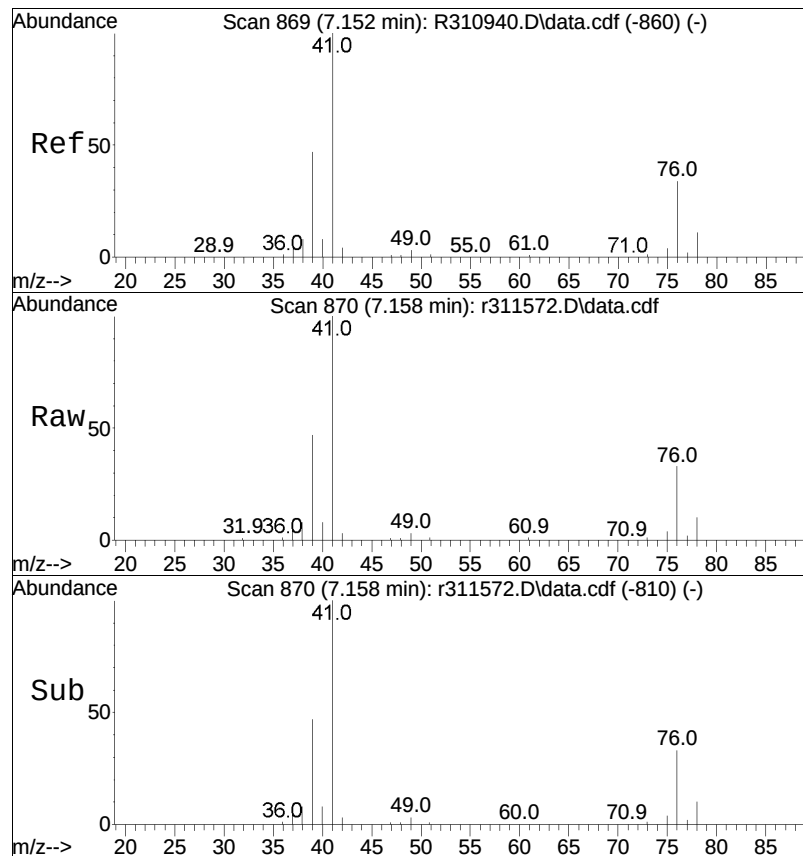




#28
 methylene chloride
 Concen: 9.84 ppbV
 RT: 7.014 min Scan# 846
 Delta R.T. 0.024 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

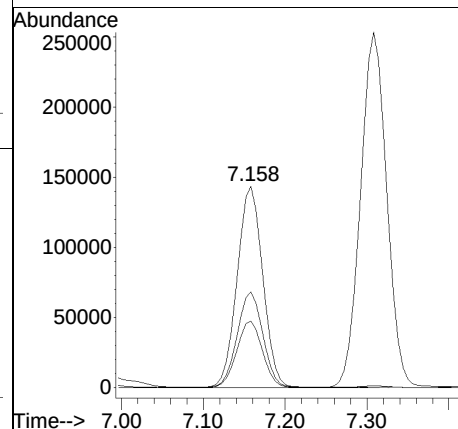
Tgt Ion:	49	Resp:	203149
Ion Ratio	Lower	Upper	
49	100		
84	80.0	60.6	90.8

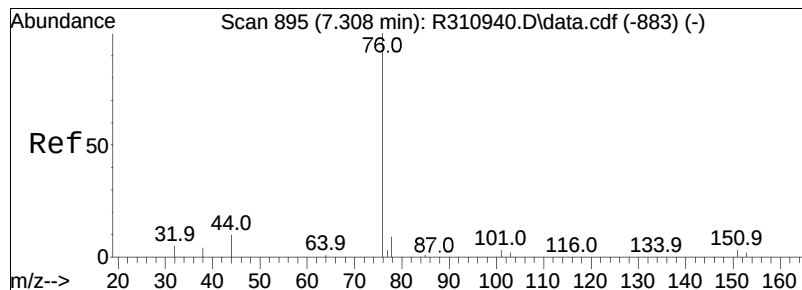




#29
 3-chloropropene
 Concen: 13.23 ppbV
 RT: 7.158 min Scan# 870
 Delta R.T. 0.030 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

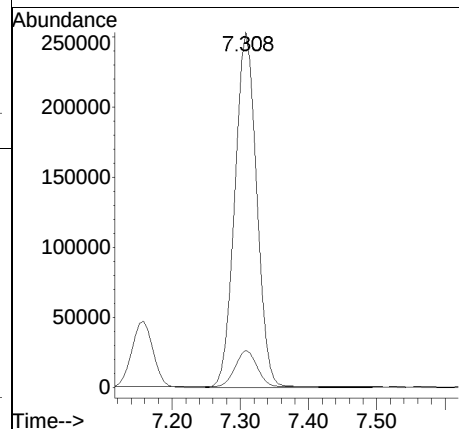
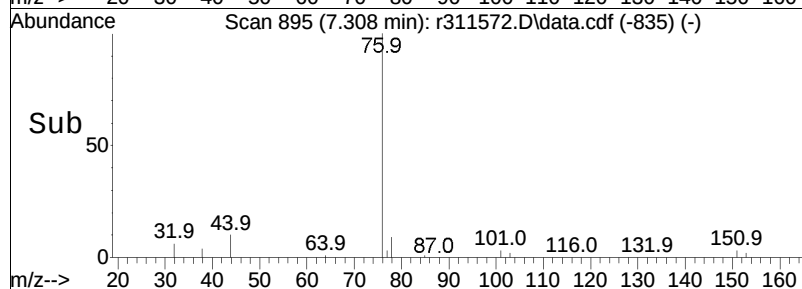
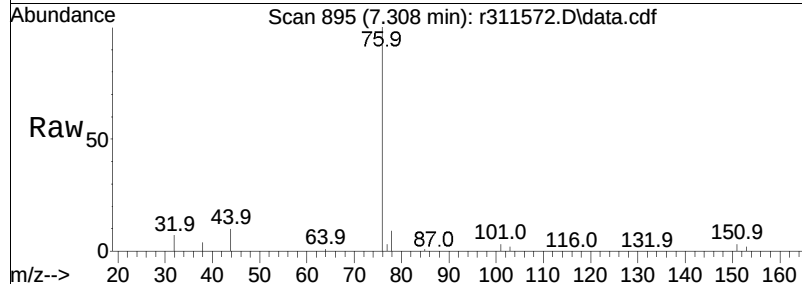
Tgt Ion:	41	Resp:	312551
Ion Ratio	Lower	Upper	
41	100		
39	47.4	36.6	55.0
76	33.0	30.9	46.3

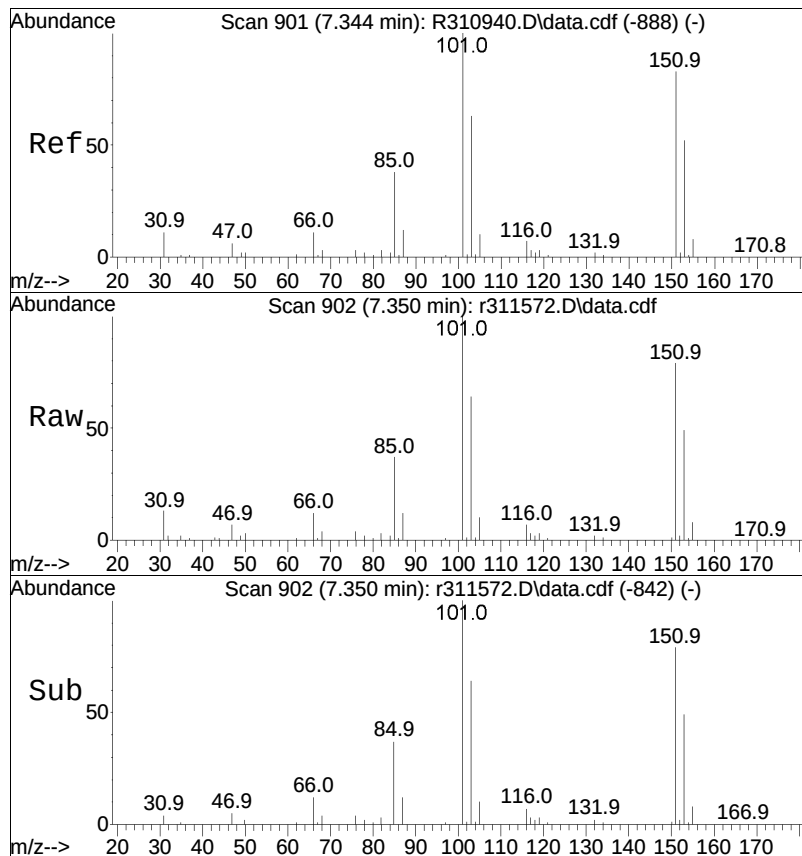




#30
 carbon disulfide
 Concen: 10.08 ppbV
 RT: 7.308 min Scan# 895
 Delta R.T. 0.030 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

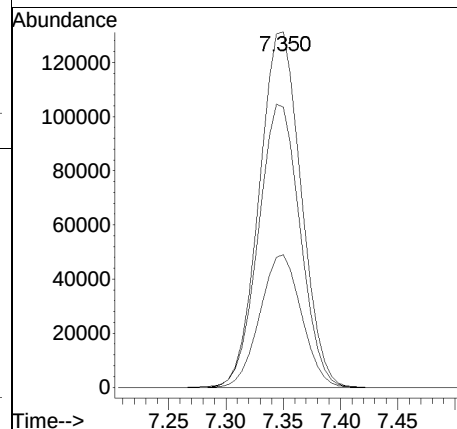
Tgt Ion	Ratio	Lower	Upper
76	100		
44	10.5	7.0	10.4#

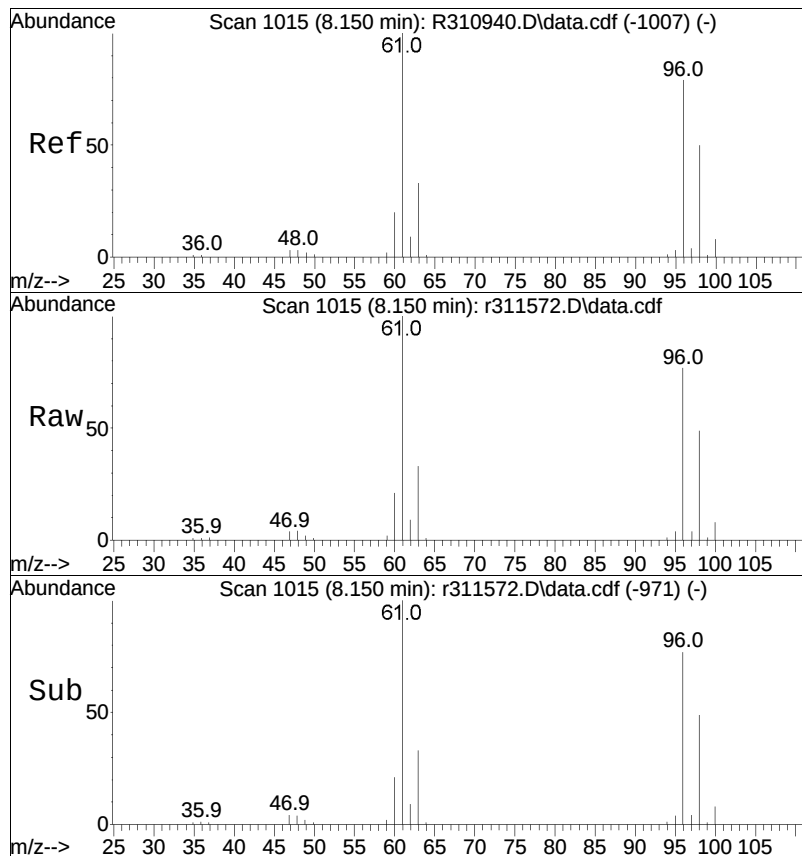




#31
 Freon 113
 Concen: 12.30 ppbV
 RT: 7.350 min Scan# 902
 Delta R.T. 0.030 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

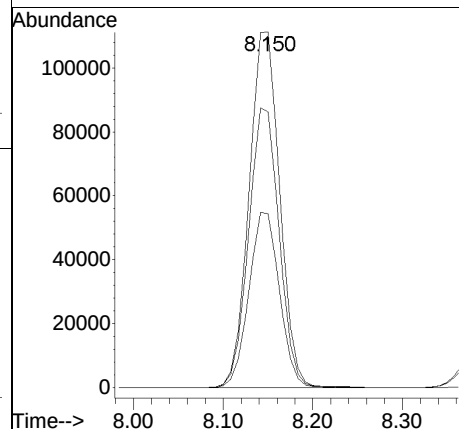
Tgt Ion:	101	Resp:	333824
Ion Ratio	Lower	Upper	
101	100		
85	37.4	34.1	51.1
151	78.9	66.4	99.6

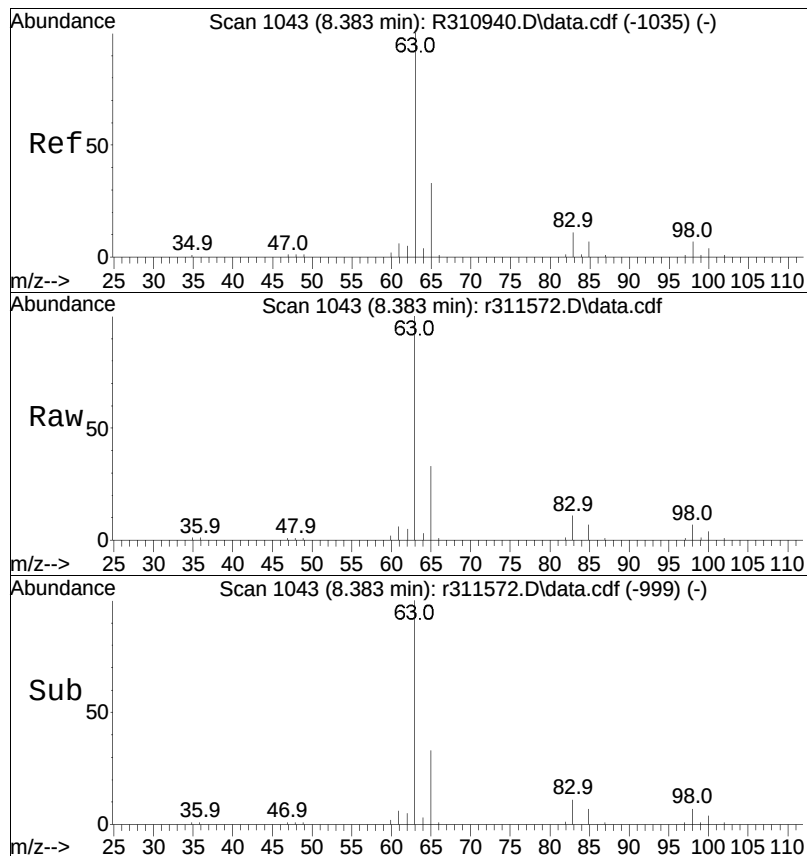




#32
 trans-1,2-dichloroethene
 Concen: 11.68 ppbV
 RT: 8.150 min Scan# 1015
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

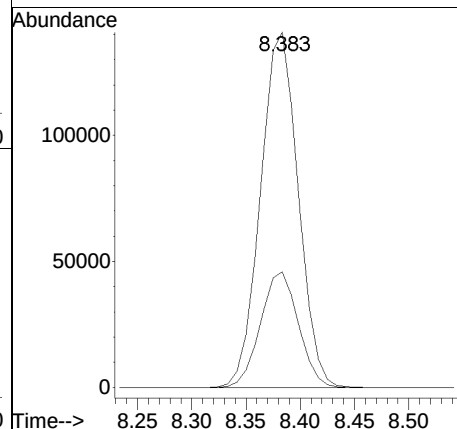
Tgt Ion:	61	Resp:	264574
Ion Ratio	Lower	Upper	
61	100		
96	77.5	62.1	93.1
98	48.9	39.3	58.9

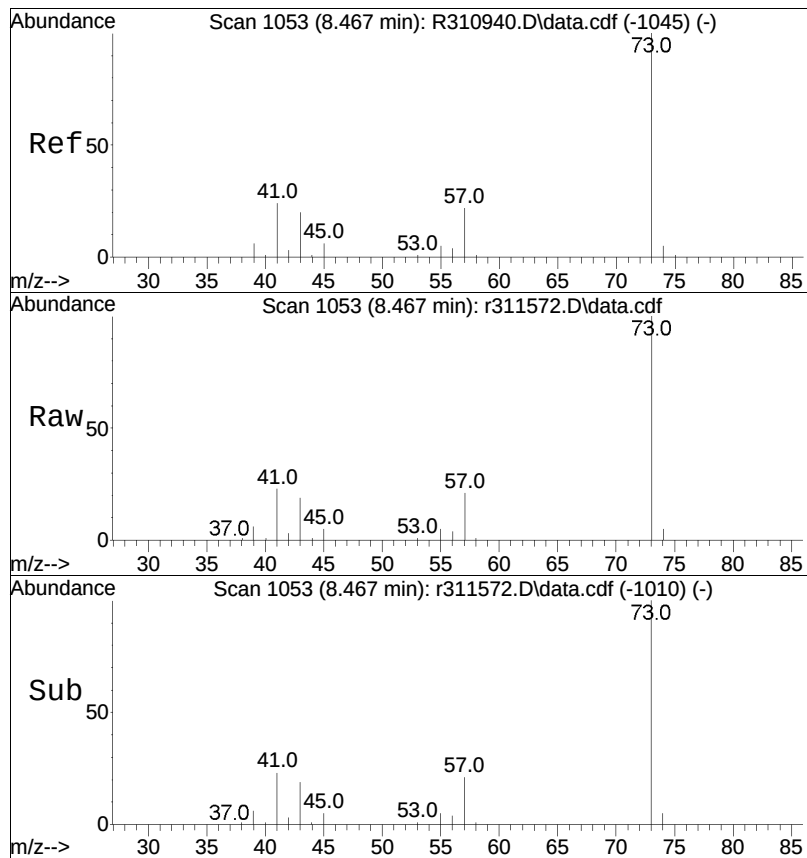




#33
 1,1-dichloroethane
 Concen: 12.78 ppbV
 RT: 8.383 min Scan# 1043
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

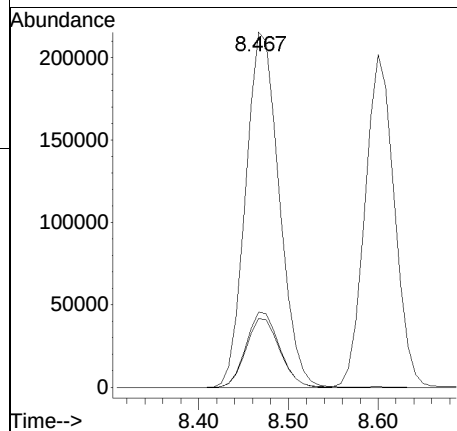
Tgt Ion	Ratio	Lower	Upper
63	100		
65	32.5	25.5	38.3

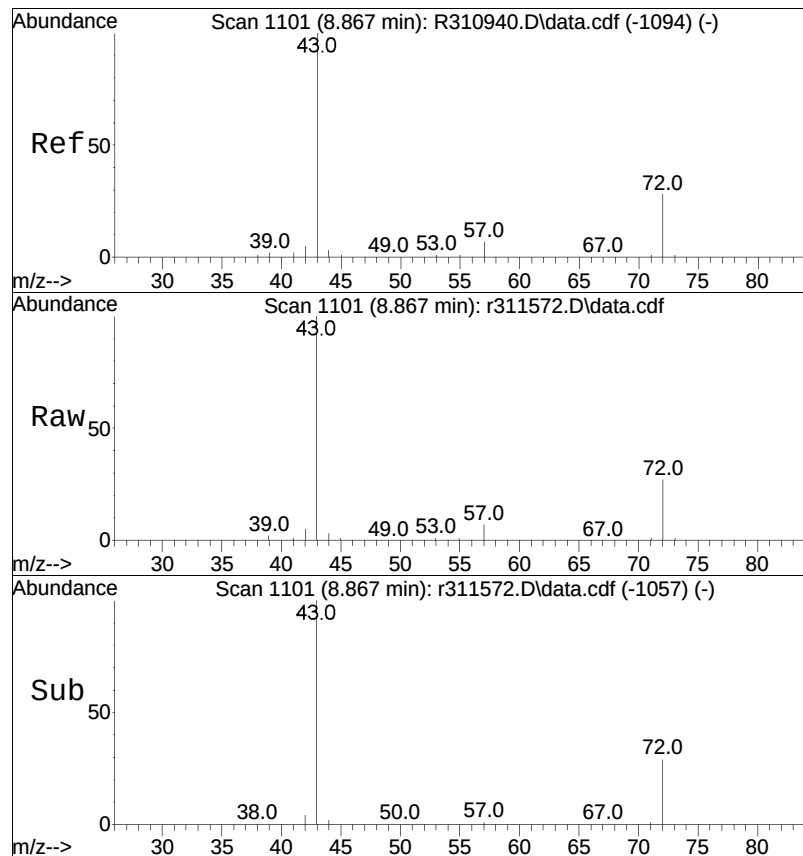




#34
 MTBE
 Concen: 12.28 ppbV
 RT: 8.467 min Scan# 1053
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

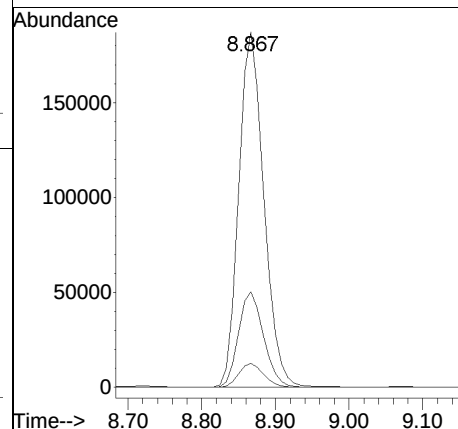
Tgt Ion	Ratio	Lower	Upper
73	100		
57	21.2	19.8	29.6
43	19.3	13.8	20.8

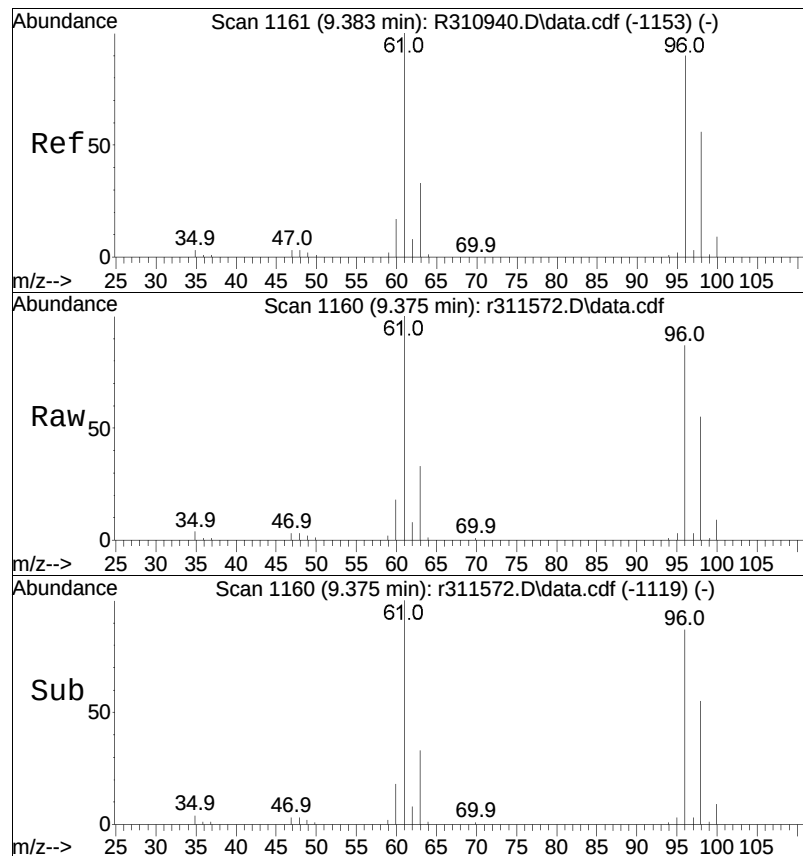




#36
 2-butanone
 Concen: 12.26 ppbV
 RT: 8.867 min Scan# 1101
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

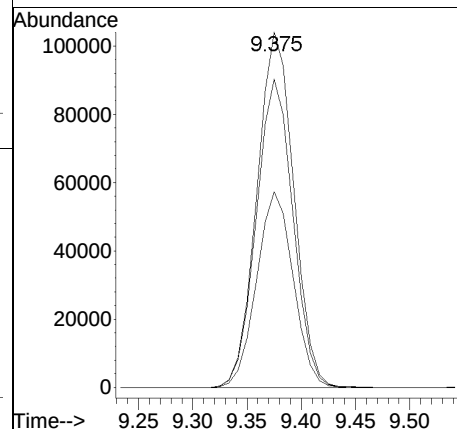
Tgt	Ion	Ratio	Lower	Upper
43	100			
72	26.9	22.8	34.2	
57	6.8	6.6	9.8	

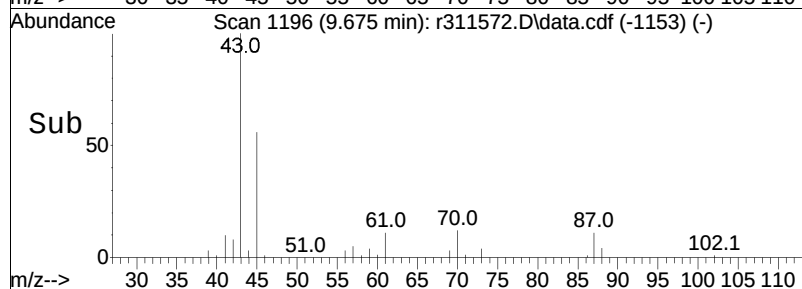
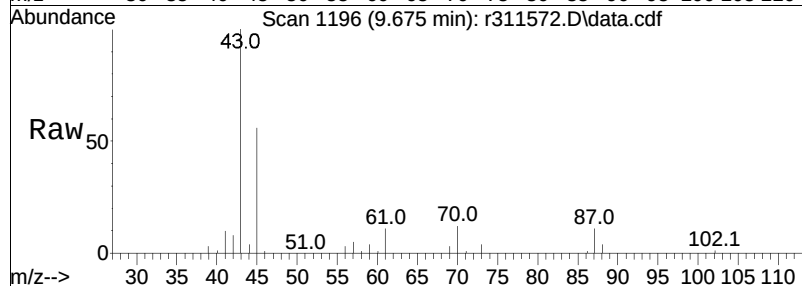
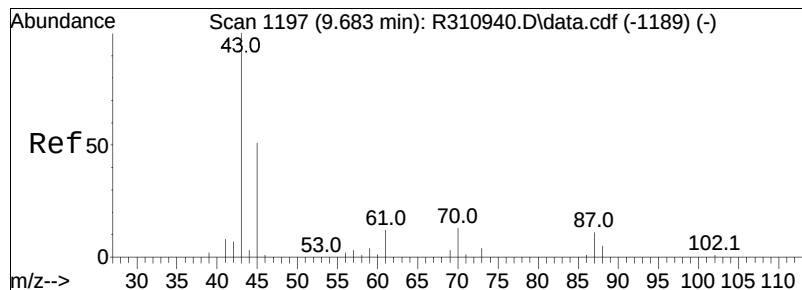




#37
 cis-1,2-dichloroethene
 Concen: 12.38 ppbV
 RT: 9.375 min Scan# 1160
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

Tgt Ion:	61	Resp:	245122
Ion Ratio	Lower	Upper	
61	100		
96	86.8	68.5	102.7
98	55.1	43.8	65.6





#38

Ethyl Acetate

Concen: 11.90 ppbV

RT: 9.675 min Scan# 1196

Delta R.T. 0.025 min

Lab File: r311572.D

Acq: 17 Sep 2020 12:24 PM

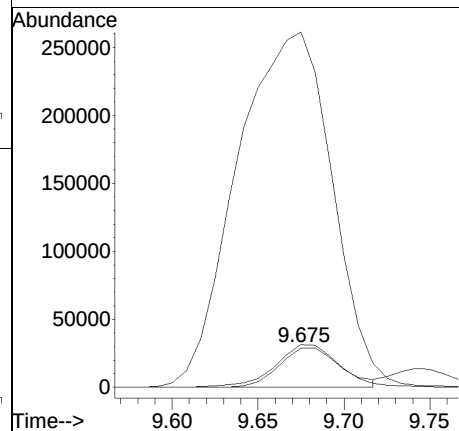
Tgt Ion: 61 Resp: 72478

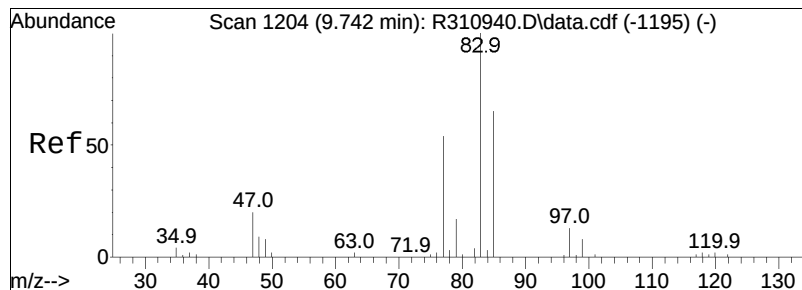
Ion Ratio Lower Upper

61 100

70 108.9 82.6 123.8

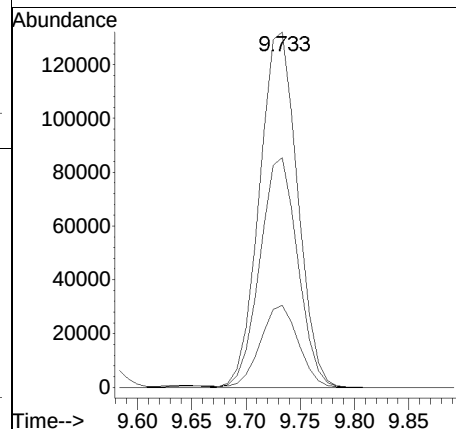
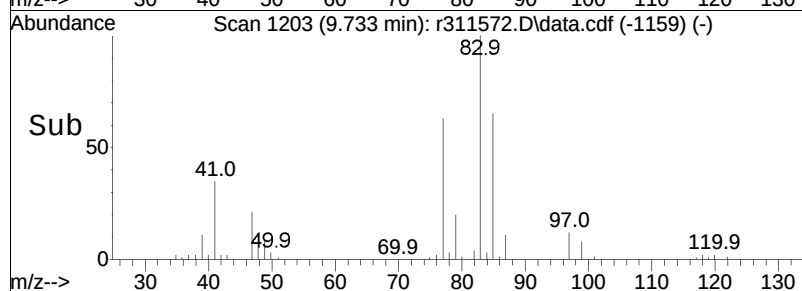
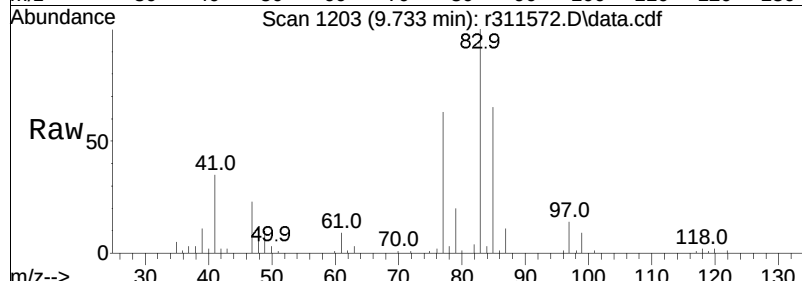
43 902.3 655.1 982.7

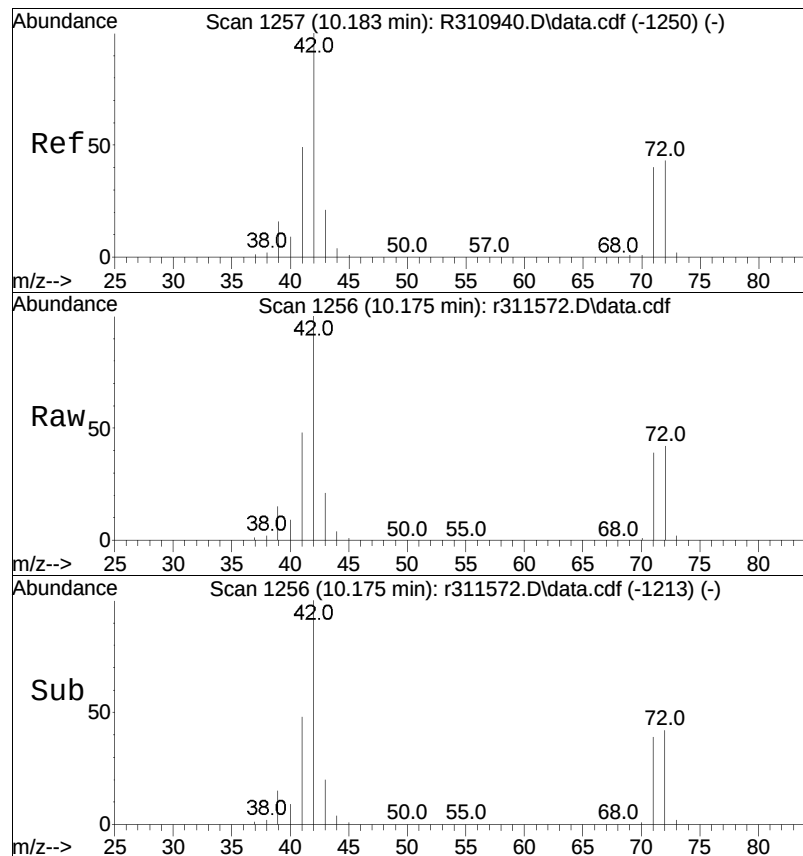




#39
chloroform
Concen: 10.88 ppbV
RT: 9.733 min Scan# 1203
Delta R.T. 0.033 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

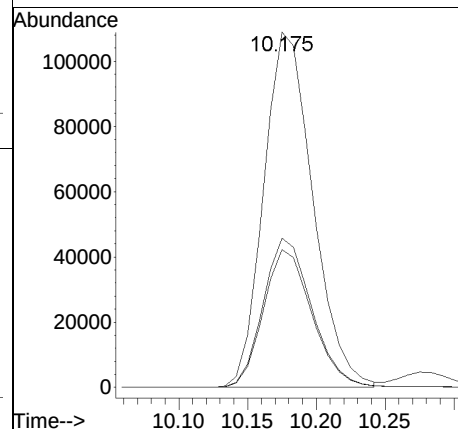
Tgt	Ion	Ratio	Lower	Upper
83	100			
85	64.7	50.5	75.7	
47	23.1	16.6	25.0	

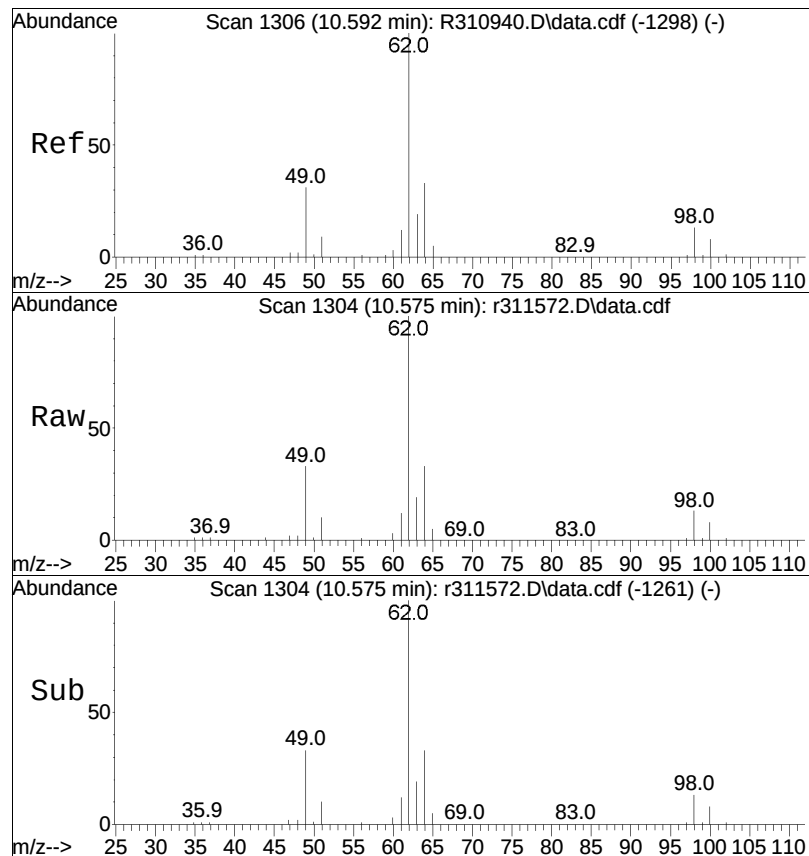




#40
 Tetrahydrofuran
 Concen: 11.90 ppbV
 RT: 10.175 min Scan# 1256
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

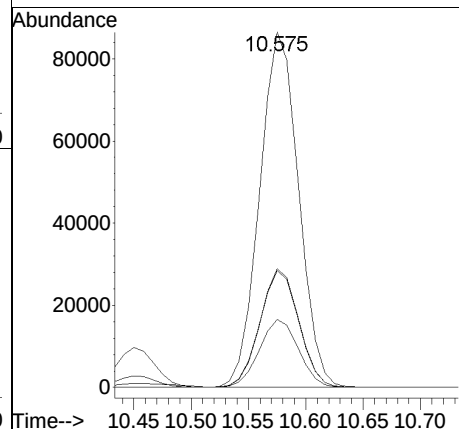
Tgt Ion:	42	Resp:	271075
Ion Ratio	Lower	Upper	
42	100		
71	38.8	31.3	46.9
72	42.0	34.9	52.3

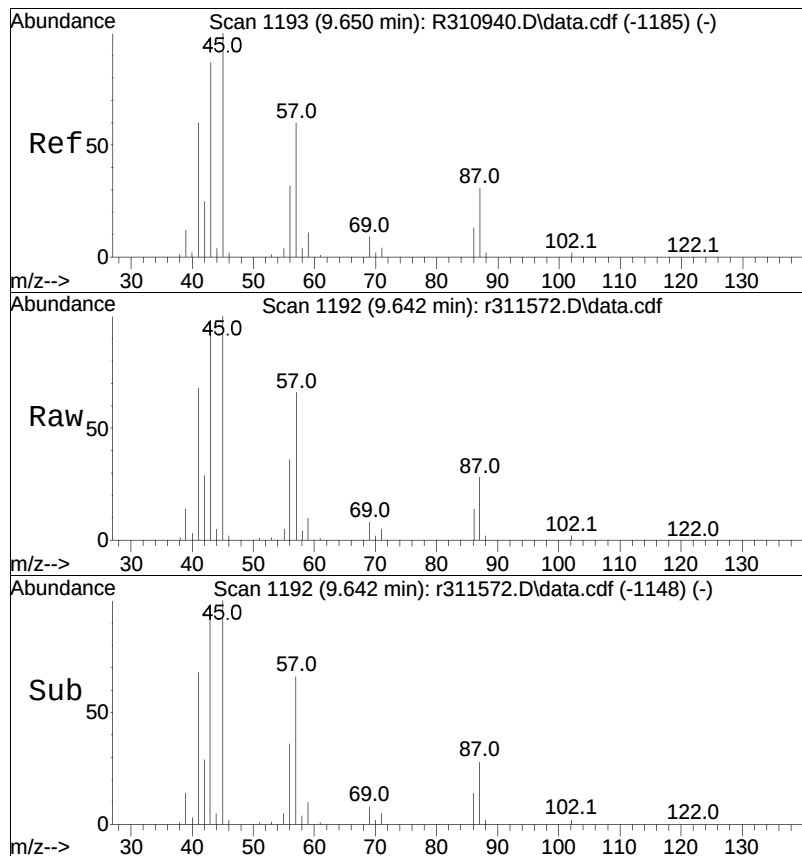




#42
 1,2-dichloroethane
 Concen: 13.42 ppbV
 RT: 10.575 min Scan# 1304
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

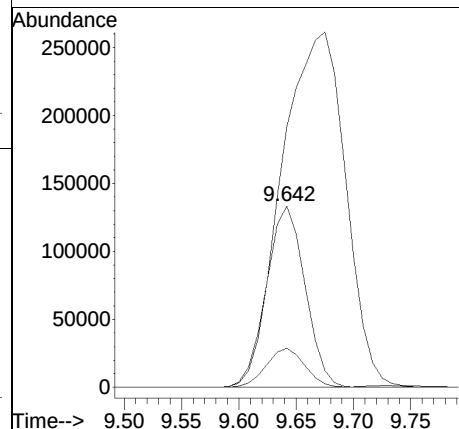
Tgt Ion:	62	Resp:	204431
Ion Ratio	Lower	Upper	
62	100		
64	33.4	25.4	38.2
49	32.9	36.6	55.0#
63	19.1	16.0	24.0

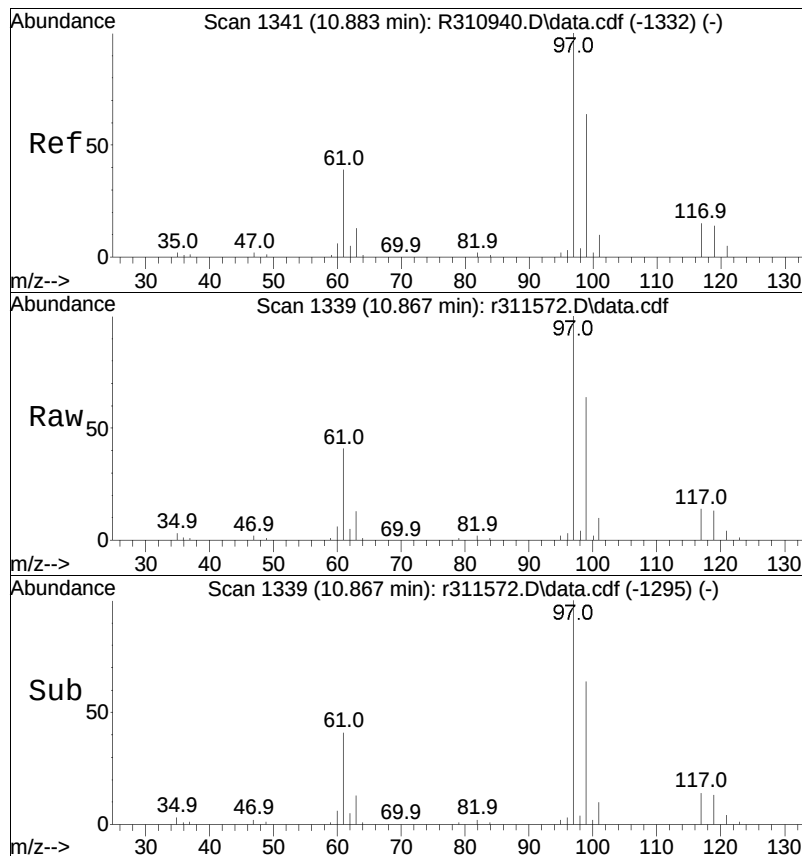




#44
 hexane
 Concen: 9.21 ppbV
 RT: 9.642 min Scan# 1192
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

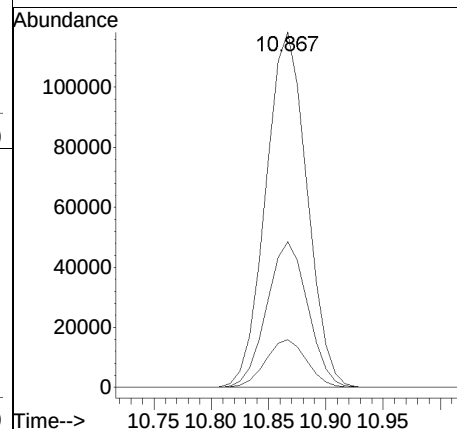
Tgt	Ion: 57	Resp: 314534
Ion	Ratio	Lower Upper
57	100	
43	143.5	87.0 130.6#
86	21.6	16.7 25.1

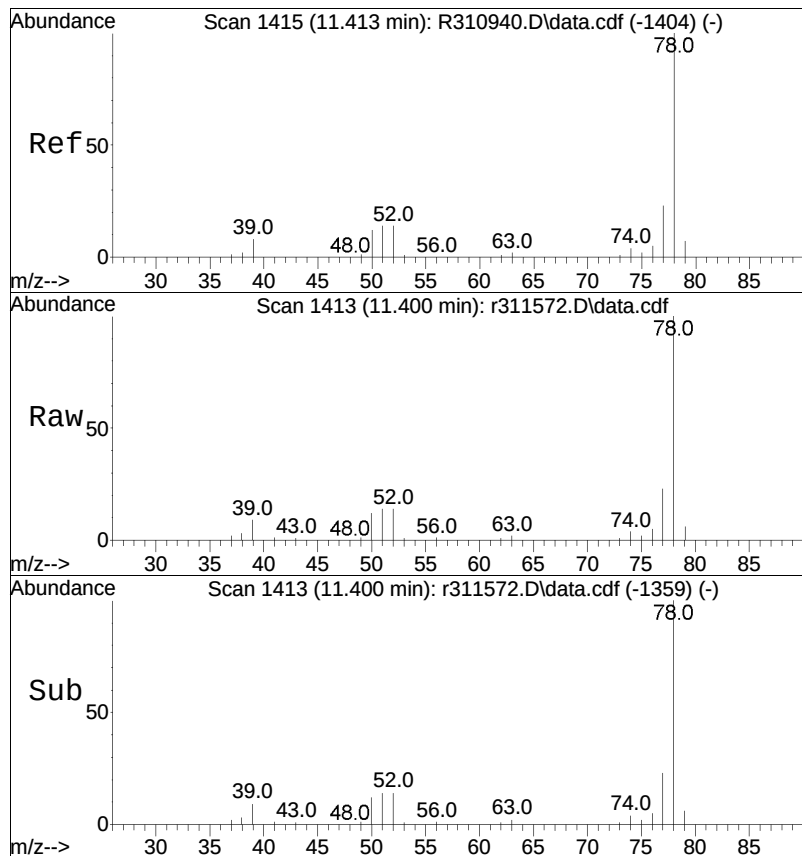




#48
 1,1,1-trichloroethane
 Concen: 12.69 ppbV
 RT: 10.867 min Scan# 1339
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

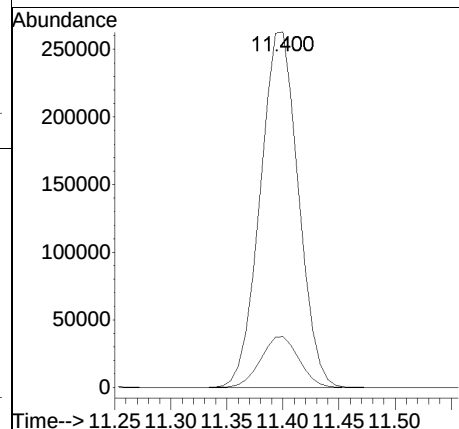
Tgt Ion	Ratio	Resp	Lower	Upper
97	100	296520		
61	41.0		33.9	50.9
119	13.5		12.6	19.0

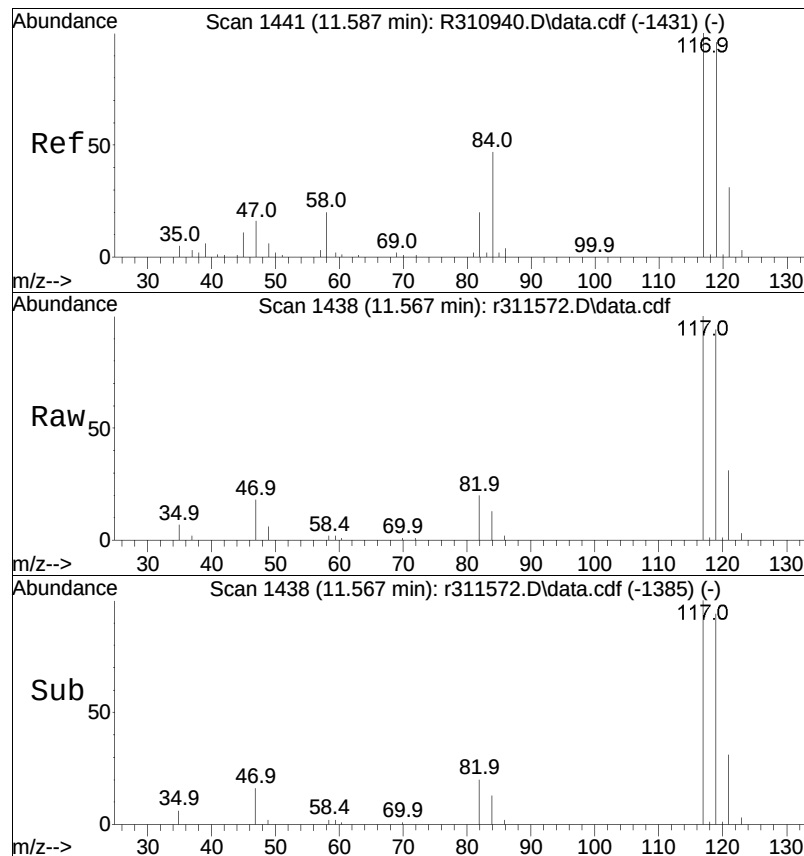




#50
benzene
Concen: 9.09 ppbV
RT: 11.400 min Scan# 1413
Delta R.T. 0.033 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

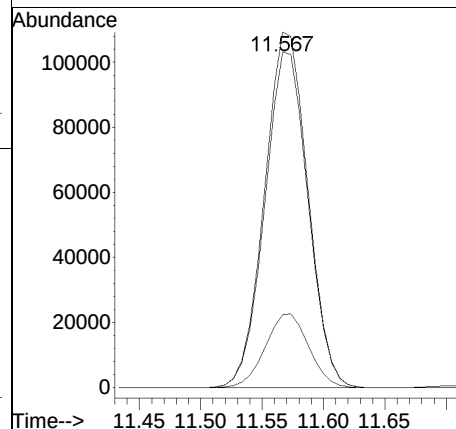
Tgt Ion	Ratio	Lower	Upper
78	100		
52	14.3	12.4	18.6

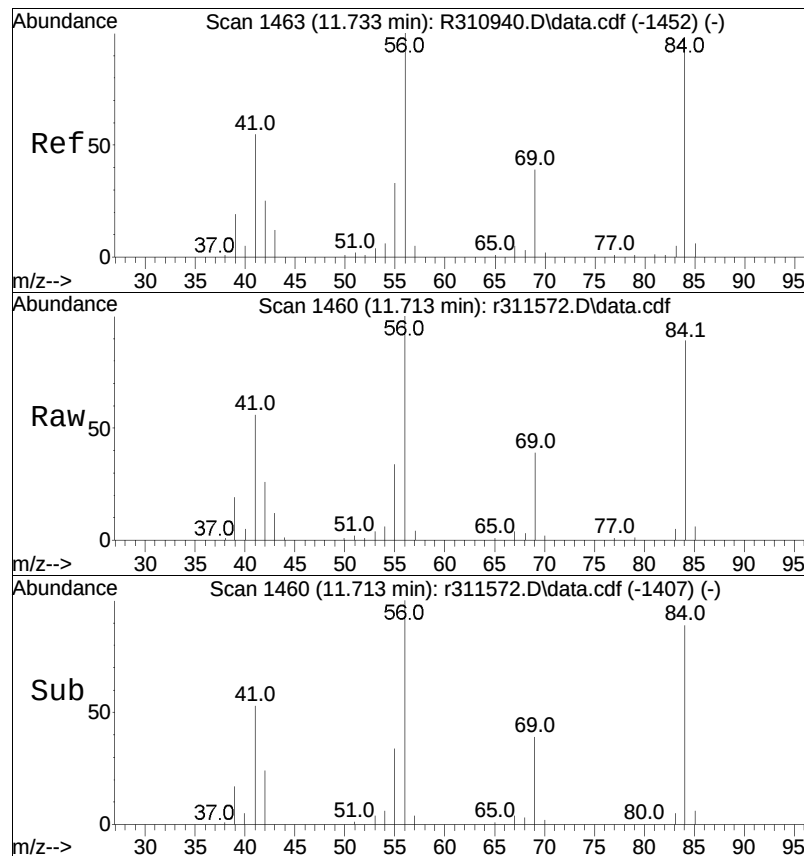




#52
 carbon tetrachloride
 Concen: 12.25 ppbV
 RT: 11.567 min Scan# 1438
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

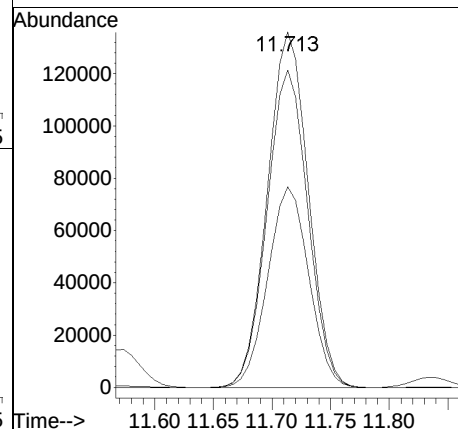
Tgt Ion	Ratio	Resp	Lower	Upper
117	100	267429		
119	94.4		75.0	112.4
82	20.4		18.8	28.2

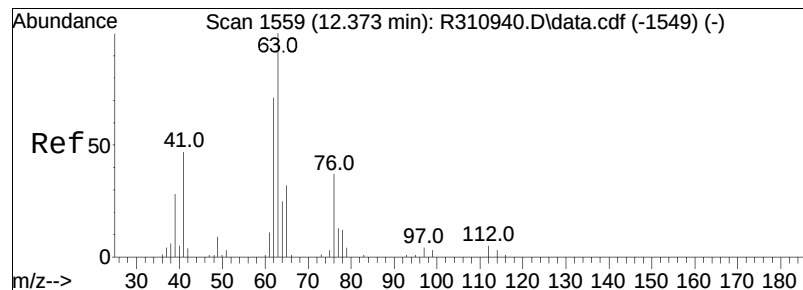




#53
cyclohexane
Concen: 9.13 ppbV
RT: 11.713 min Scan# 1460
Delta R.T. 0.027 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

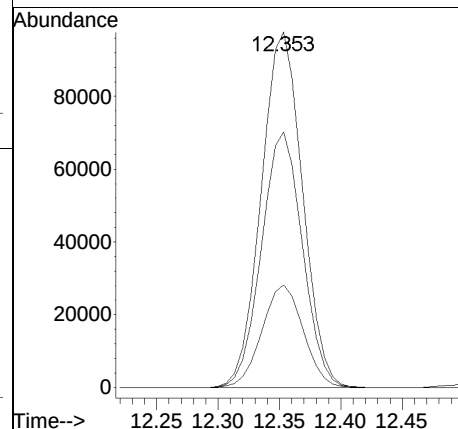
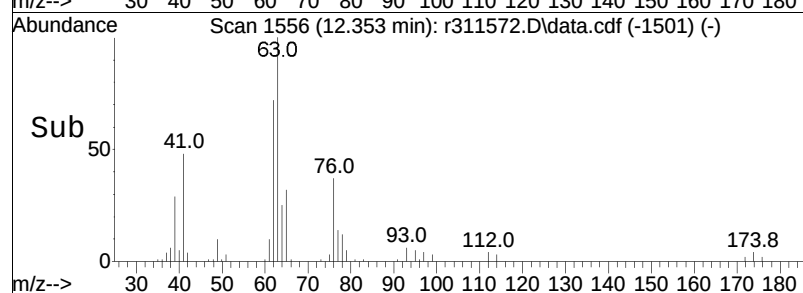
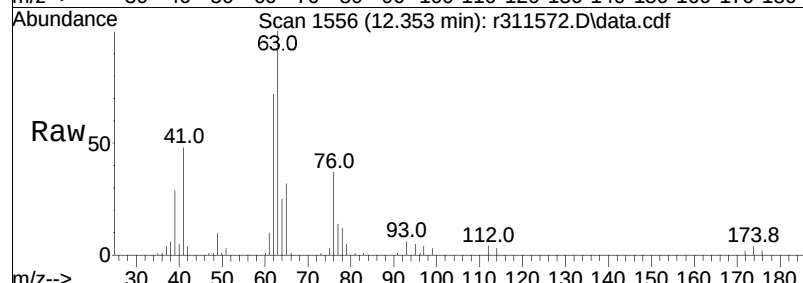
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	89.3	71.0	106.6	
41	56.5	35.8	53.6	

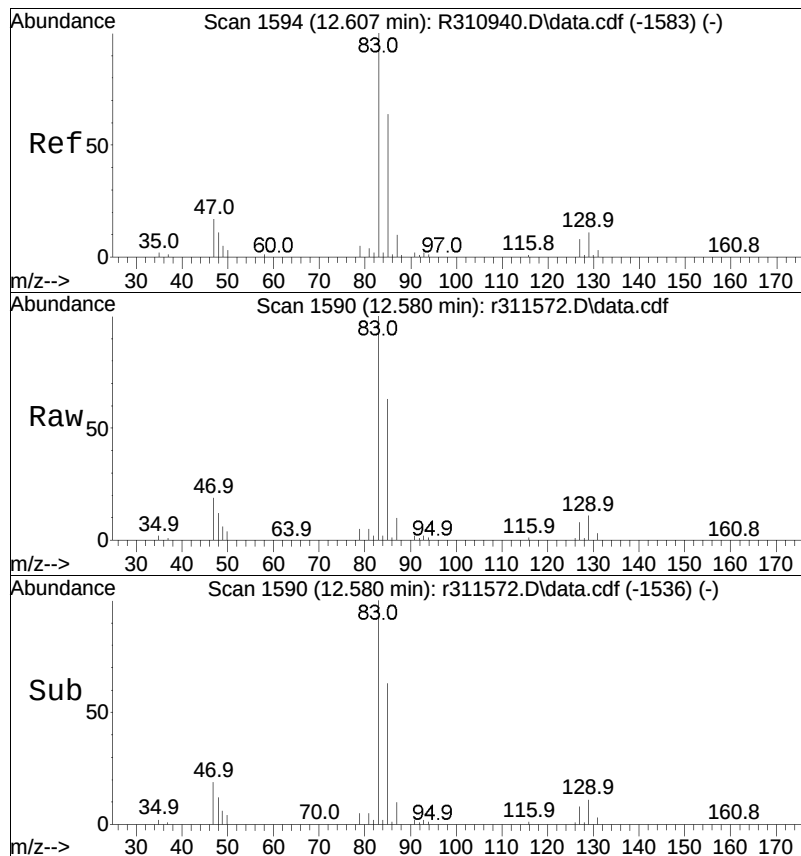




#56
 1,2-dichloropropane
 Concen: 11.37 ppbV
 RT: 12.353 min Scan# 1556
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

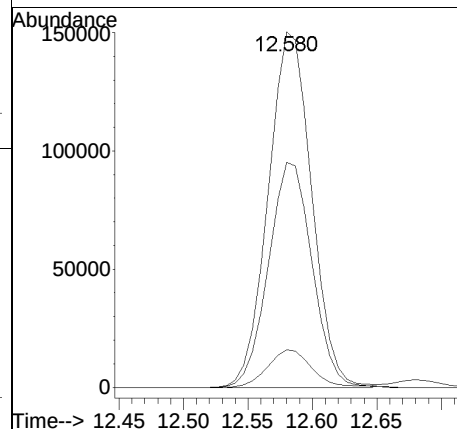
Tgt Ion:	63	Resp:	227858
Ion Ratio	Lower	Upper	
63	100		
62	71.9	58.4	87.6
39	28.9	22.2	33.4

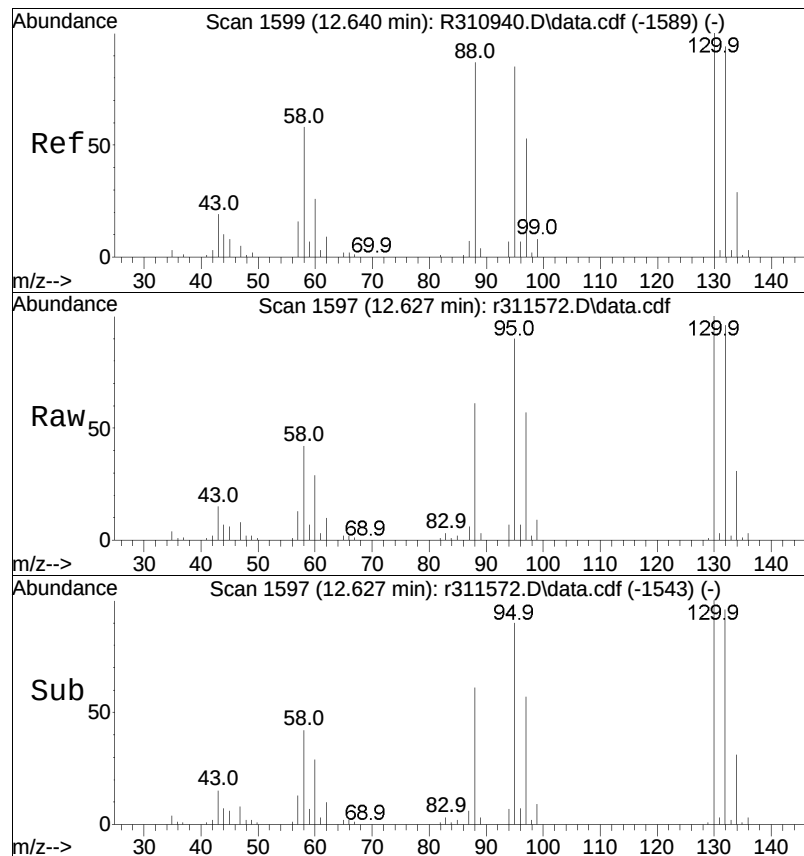




#57
 bromodichloromethane
 Concen: 10.07 ppbV
 RT: 12.580 min Scan# 1590
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

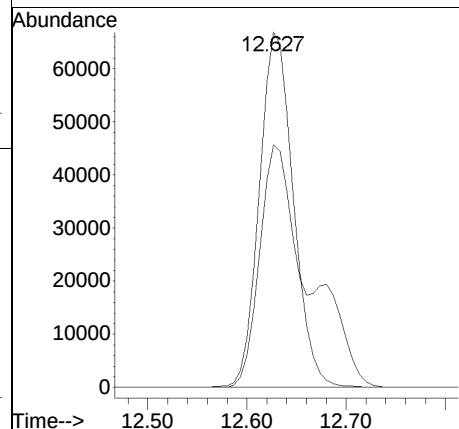
Tgt Ion:	83	Resp:	351977
Ion Ratio	Lower	Upper	
83	100		
85	63.4	49.1	73.7
129	10.6	7.0	10.4#

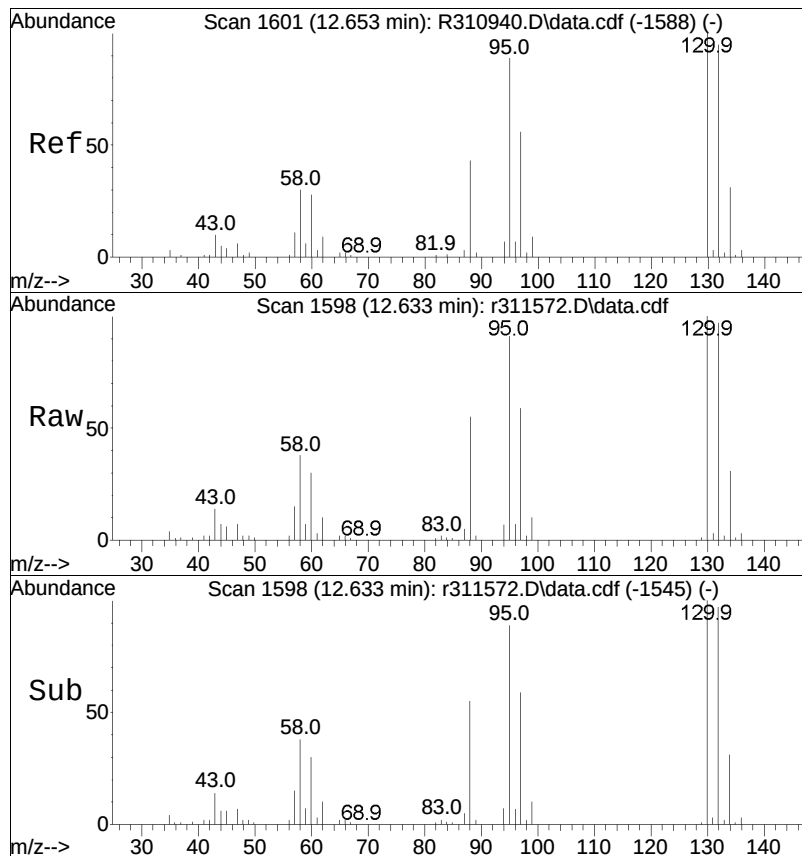




#58
 1,4-dioxane
 Concen: 10.17 ppbV
 RT: 12.627 min Scan# 1597
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

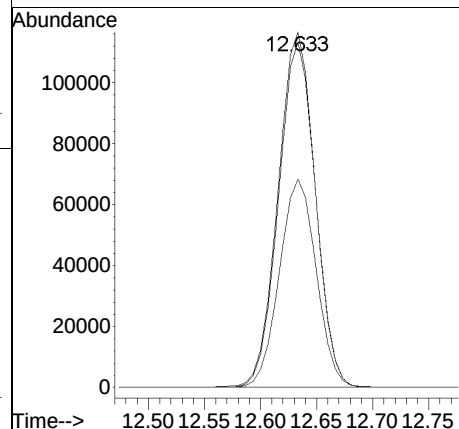
Tgt Ion:	88	Resp:	159225
Ion Ratio	100	Lower	Upper
58	68.2	56.8	85.2

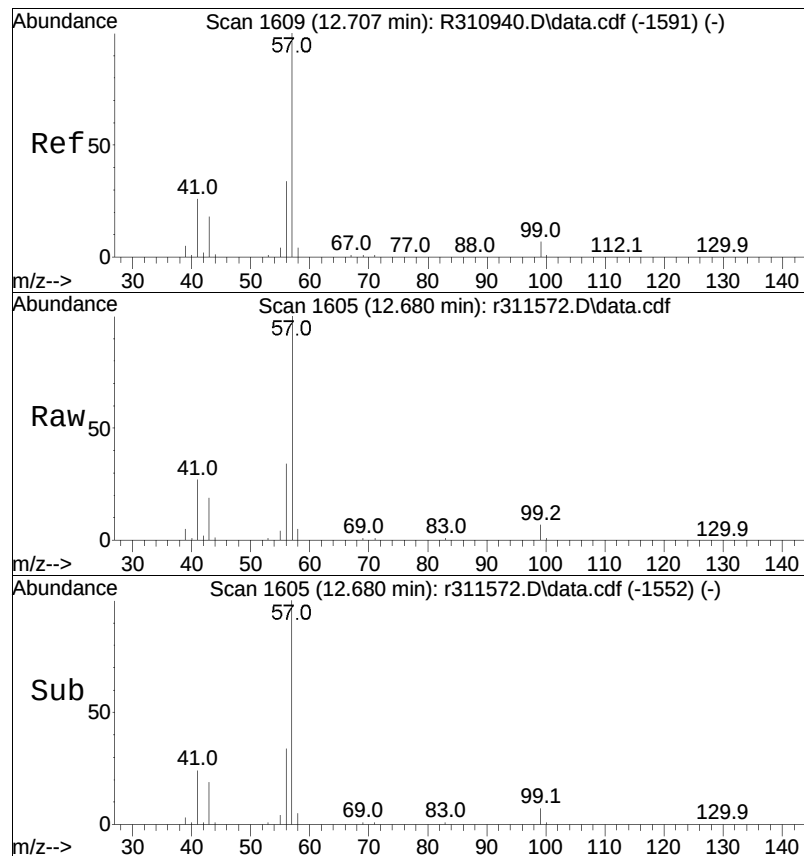




#59
trichloroethene
Concen: 10.88 ppbV
RT: 12.633 min Scan# 1598
Delta R.T. 0.027 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

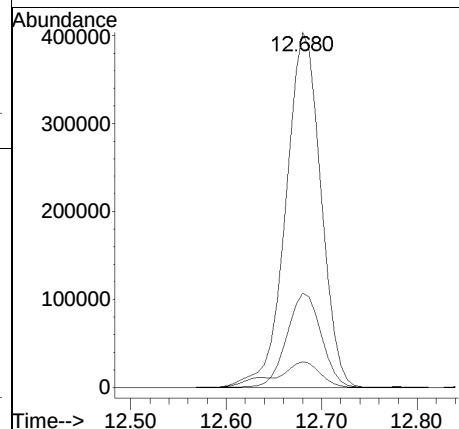
Tgt	Ion:130	Resp:	268278
Ion	Ratio	Lower	Upper
130	100		
132	97.2	77.0	115.4
97	58.6	45.3	67.9

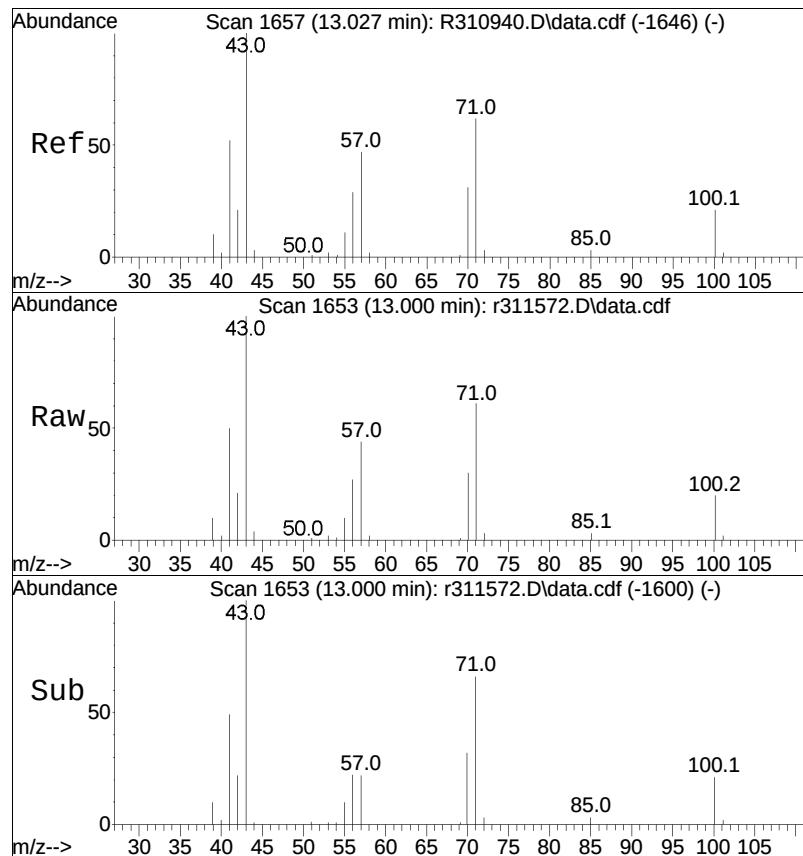




#60
 2,2,4-trimethylpentane
 Concen: 9.46 ppbV
 RT: 12.680 min Scan# 1605
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

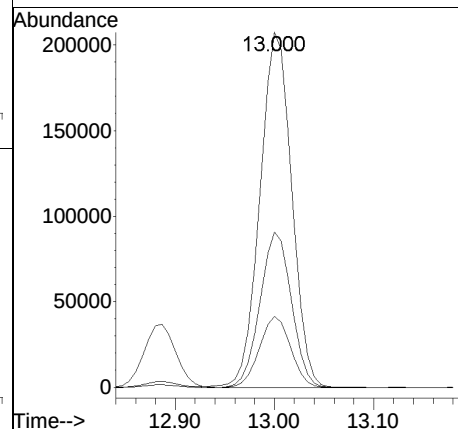
Tgt Ion:	57	Resp:	1028343
Ion Ratio	Lower	Upper	
57	100		
99	7.2	4.8	7.2#
41	26.6	16.9	25.3#

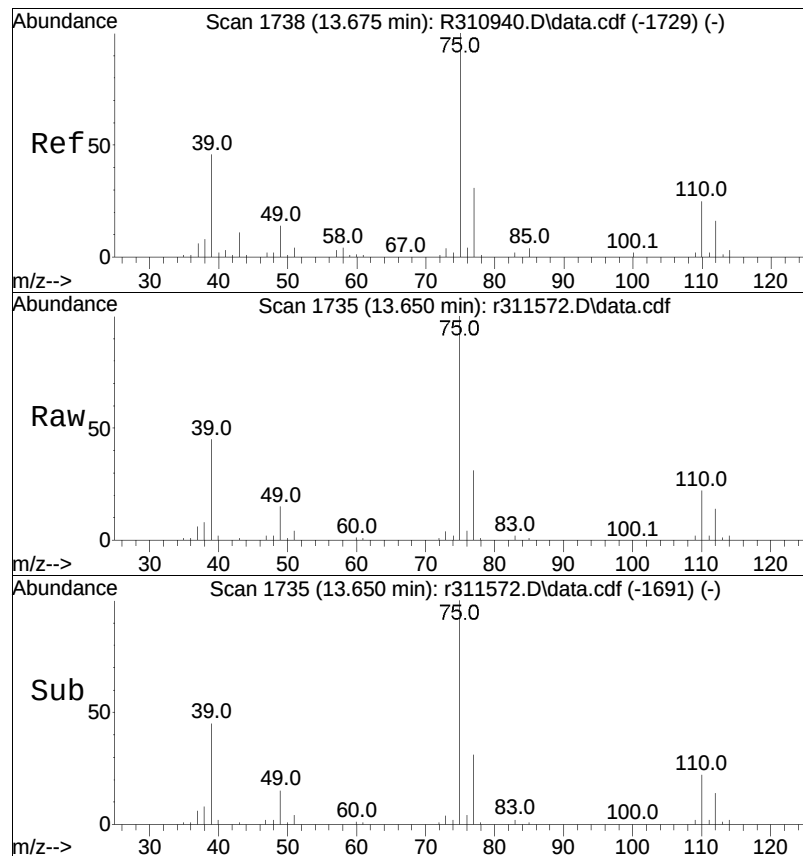




#62
 heptane
 Concen: 10.96 ppbV
 RT: 13.000 min Scan# 1653
 Delta R.T. 0.027 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

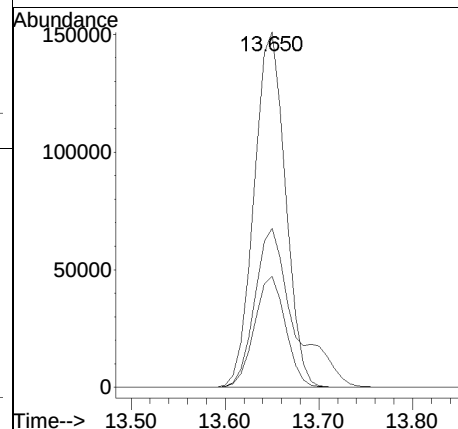
Tgt	Ion: 43	Resp:	461431
Ion	Ratio	Lower	Upper
43	100		
57	43.8	40.9	61.3
100	20.0	15.8	23.8

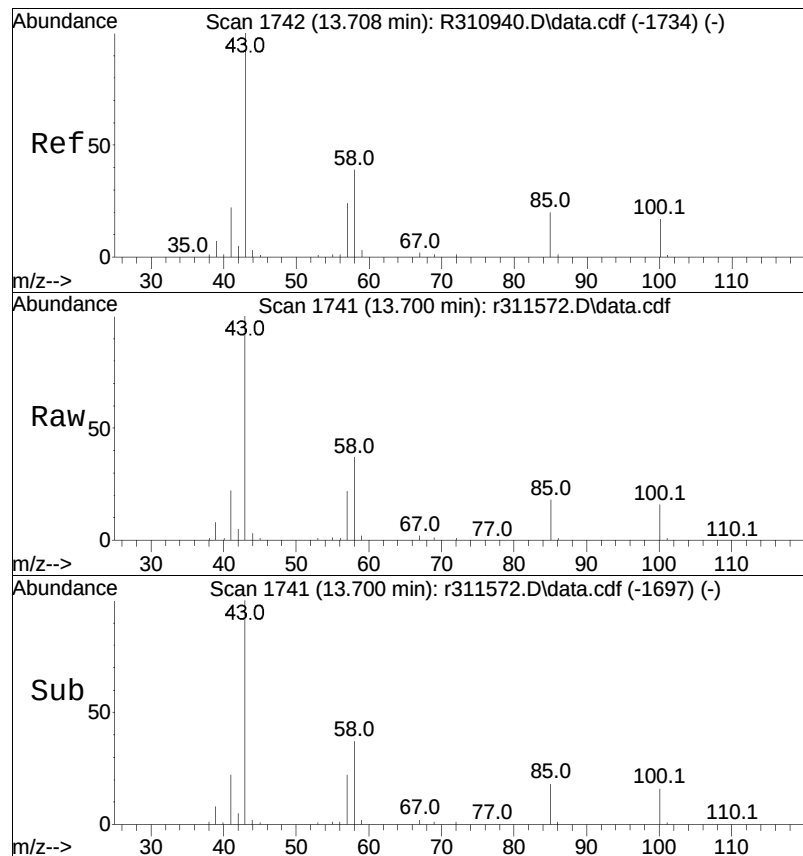




#63
 cis-1,3-dichloropropene
 Concen: 10.71 ppbV
 RT: 13.650 min Scan# 1735
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

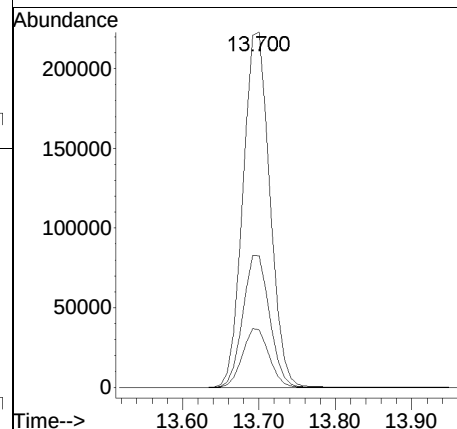
Tgt Ion	Ratio	Lower	Upper
75	100		
39	44.8	30.0	45.0
77	31.2	25.7	38.5

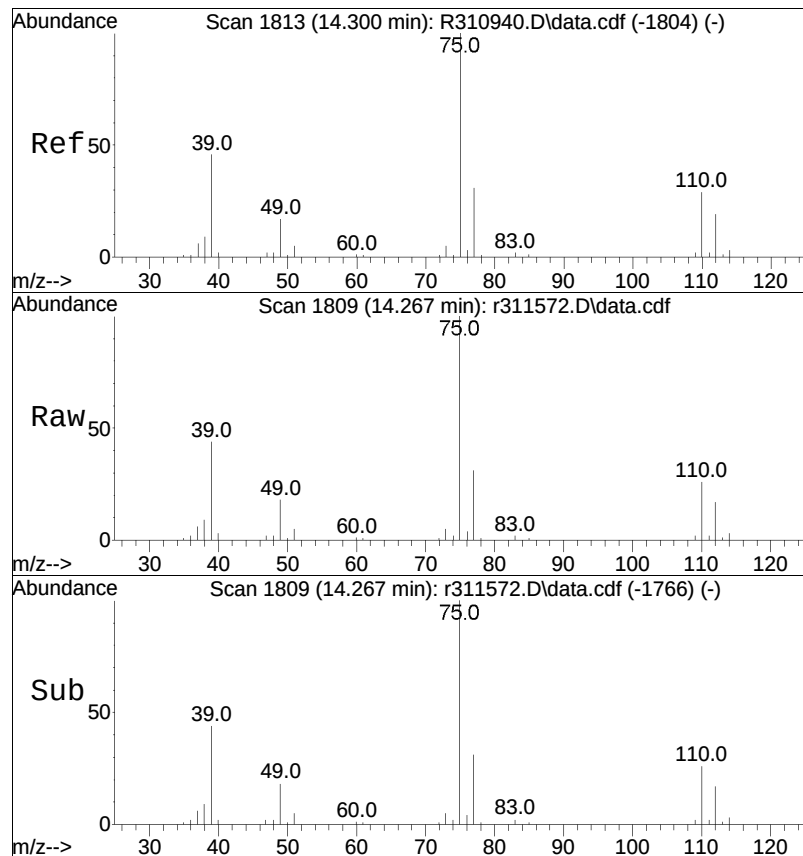




#64
 4-methyl-2-pentanone
 Concen: 11.34 ppbV
 RT: 13.700 min Scan# 1741
 Delta R.T. 0.033 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

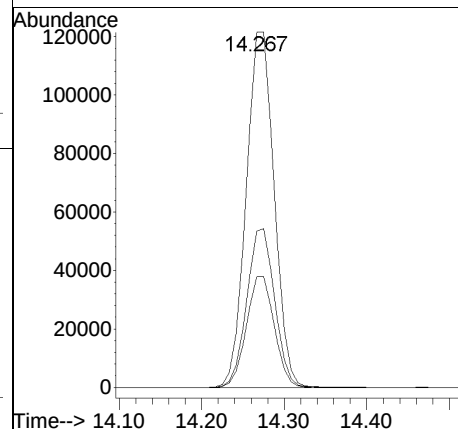
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	37.1	31.8	47.6	
100	16.2	12.8	19.2	

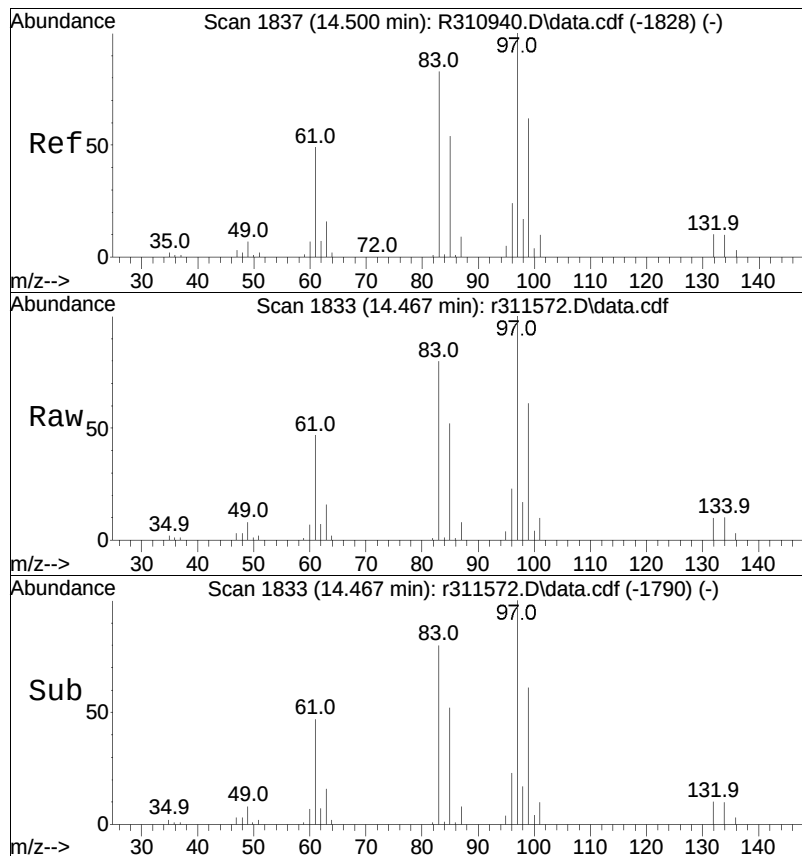




#65
 trans-1,3-dichloropropene
 Concen: 9.74 ppbV
 RT: 14.267 min Scan# 1809
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

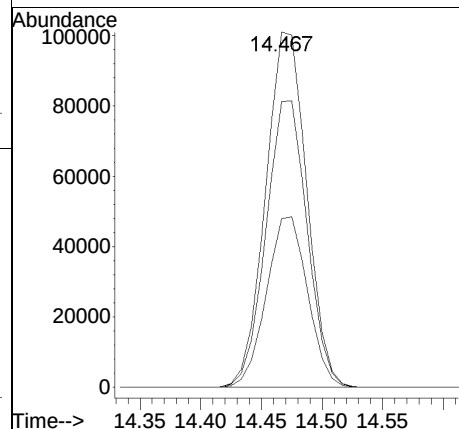
Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.2	25.9	38.9
39	44.0	31.1	46.7

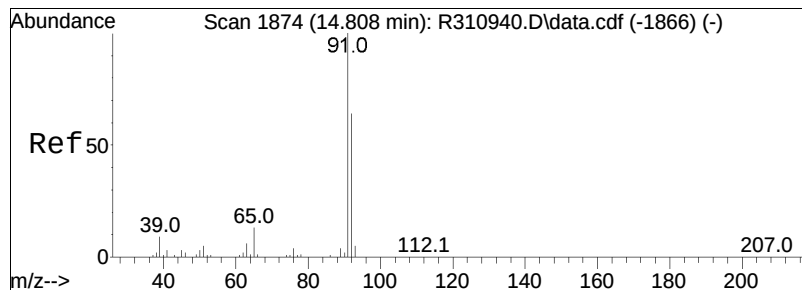




#66
 1,1,2-trichloroethane
 Concen: 11.41 ppbV
 RT: 14.467 min Scan# 1833
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

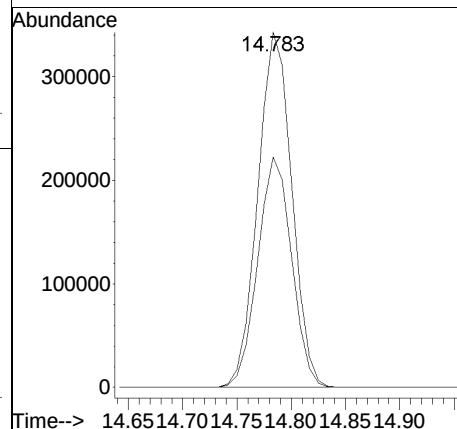
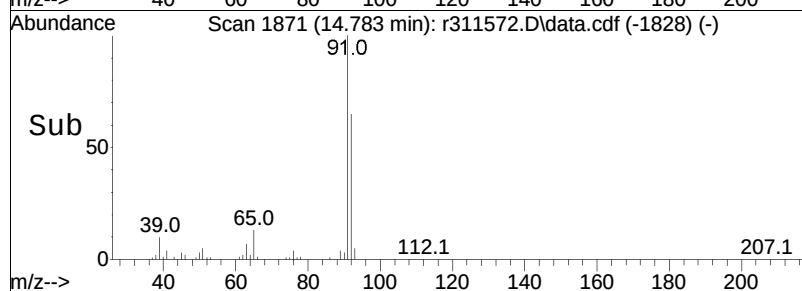
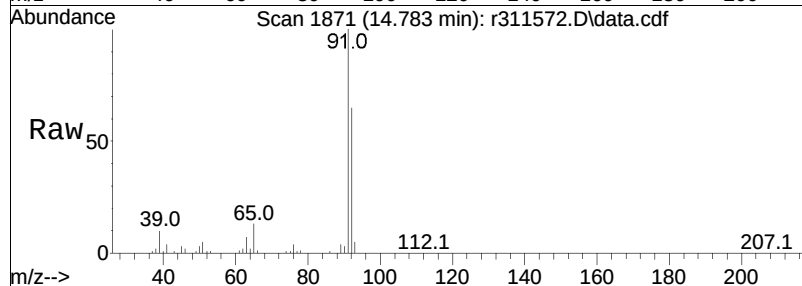
Tgt Ion:	97	Resp:	238634
Ion Ratio	100	Lower	Upper
83	80.5	78.5	117.7
61	47.5	37.1	55.7

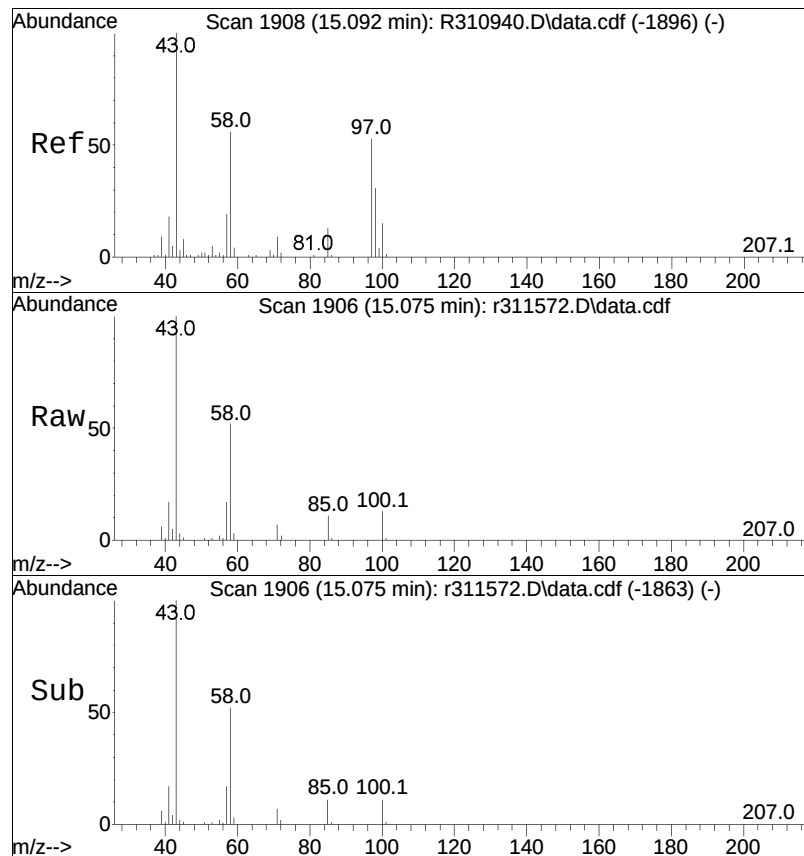




#68
toluene
Concen: 10.59 ppbV
RT: 14.783 min Scan# 1871
Delta R.T. 0.025 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

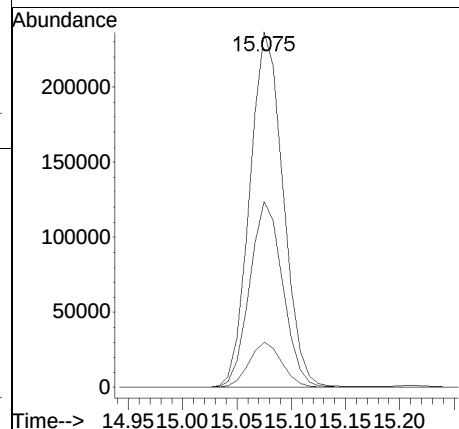
Tgt Ion	Ratio	Lower	Upper
91	100		
92	64.9	51.8	77.8

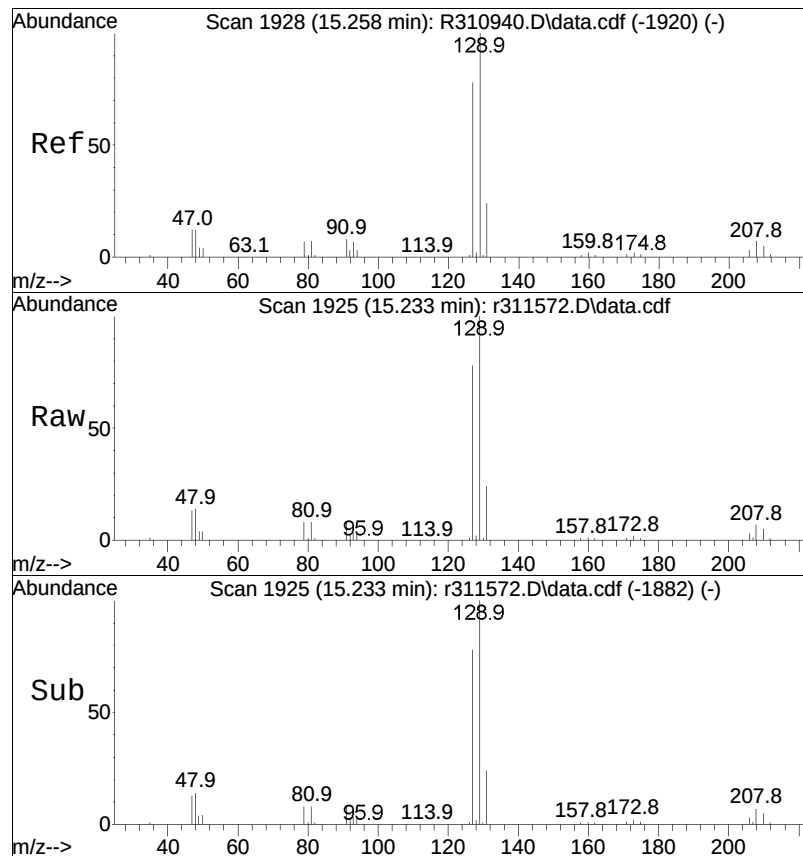




#72
 2-hexanone
 Concen: 10.77 ppbV
 RT: 15.075 min Scan# 1906
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

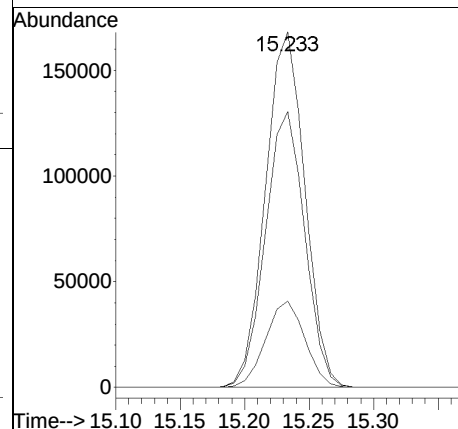
Tgt	Ion: 43	Resp:	507338
Ion	Ratio	Lower	Upper
43	100		
58	52.3	45.6	68.4
100	12.7	10.5	15.7

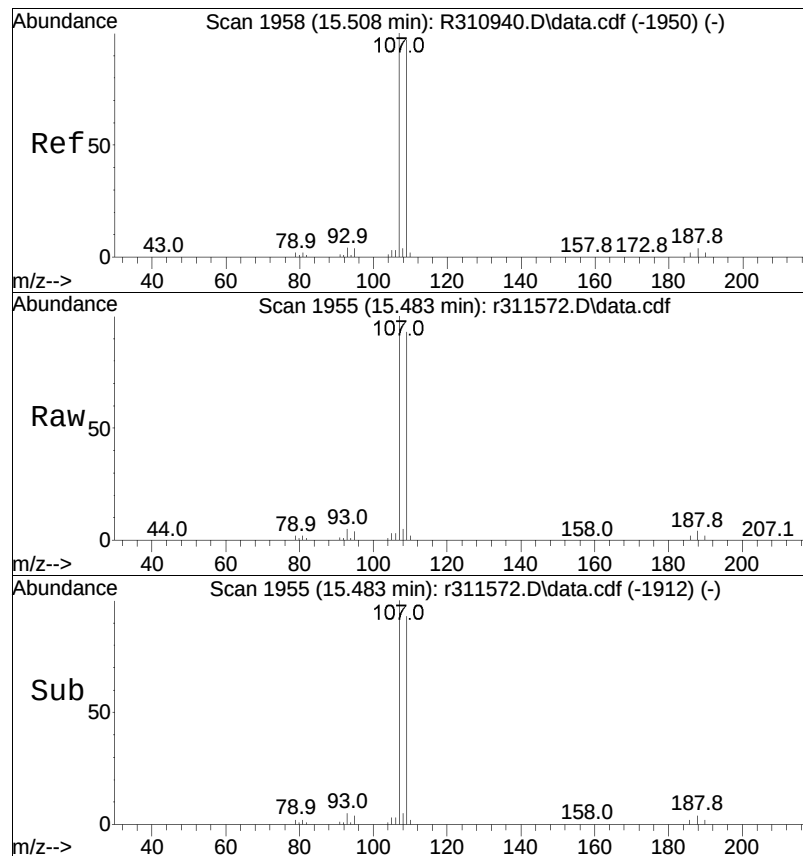




#74
 dibromochloromethane
 Concen: 11.92 ppbV
 RT: 15.233 min Scan# 1925
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

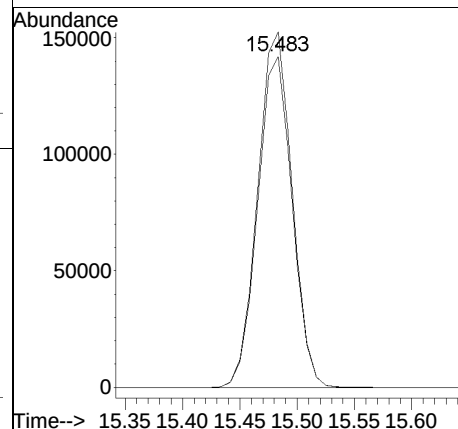
Tgt	Ion	Ratio	Resp	Lower	Upper
129	100		357916		
127	77.6	63.0		94.4	
131	24.3	19.4		29.2	

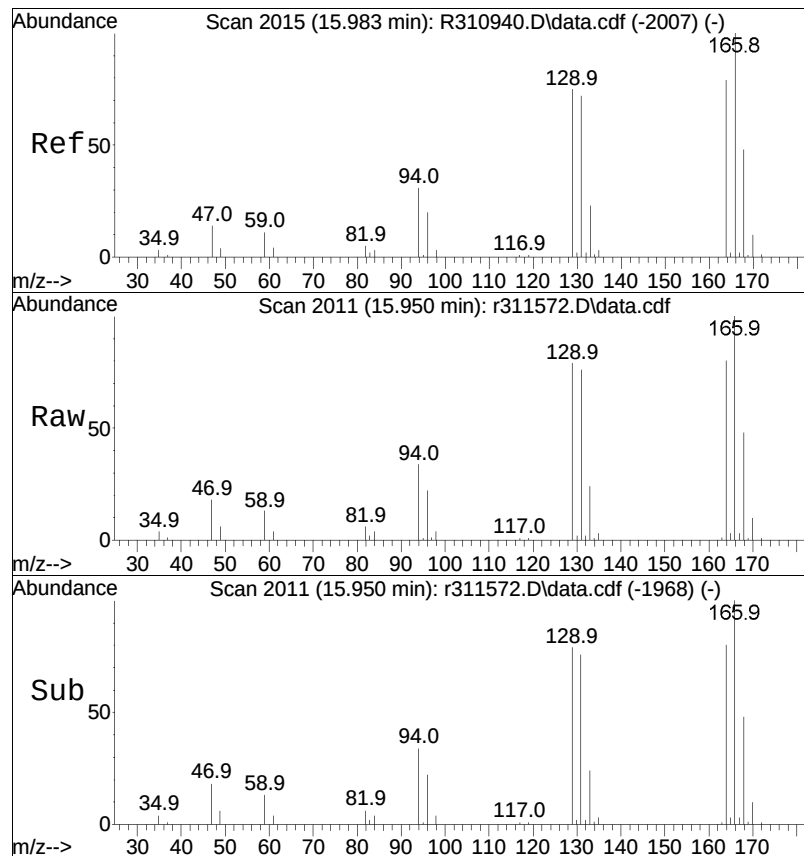




#75
 1,2-dibromoethane
 Concen: 9.85 ppbV
 RT: 15.483 min Scan# 1955
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

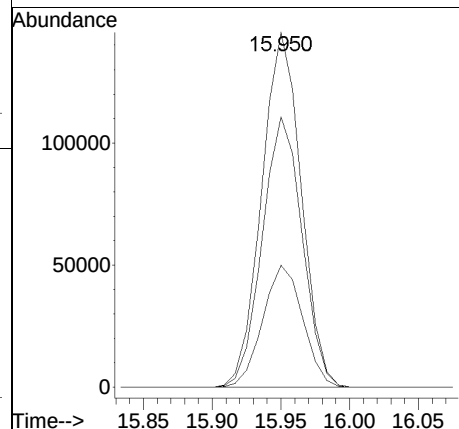
Tgt Ion	Ratio	Lower	Upper
107	100		
109	93.1	76.1	114.1

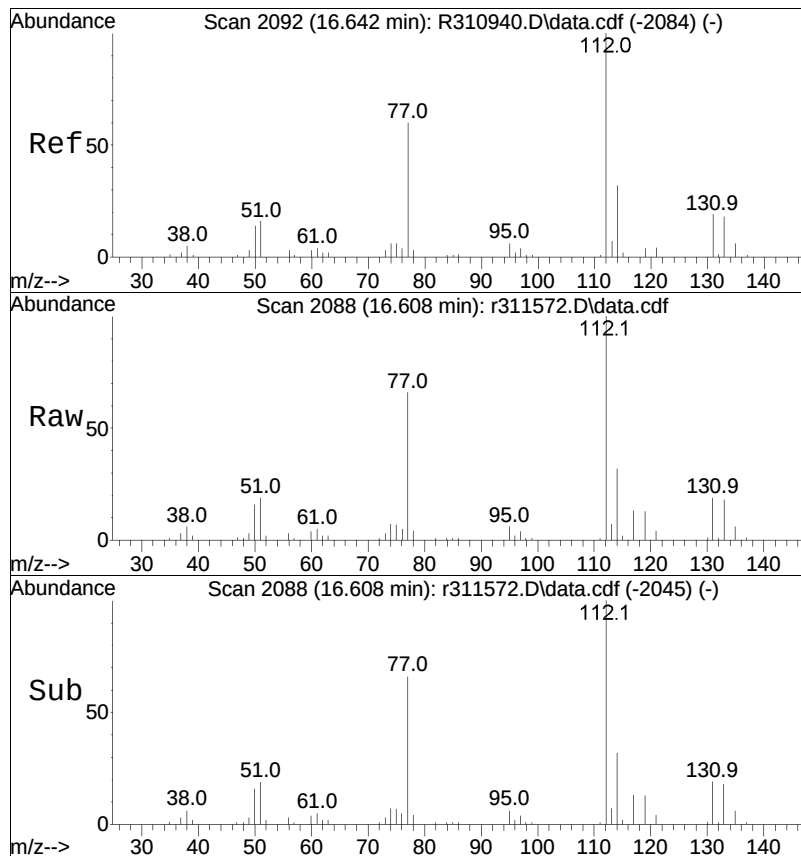




#78
 tetrachloroethene
 Concen: 10.25 ppbV
 RT: 15.950 min Scan# 2011
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

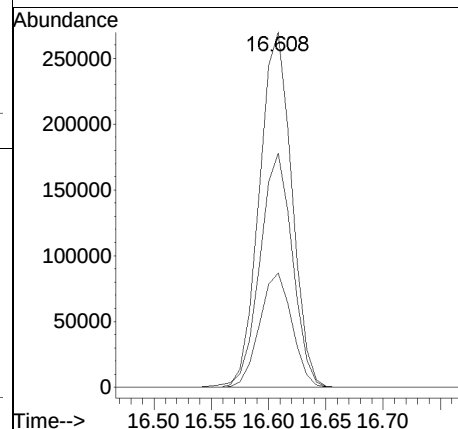
Tgt	Ion:166	Resp:	290742
Ion	Ratio	Lower	Upper
166	100		
131	76.2	55.7	83.5
94	34.4	23.4	35.0

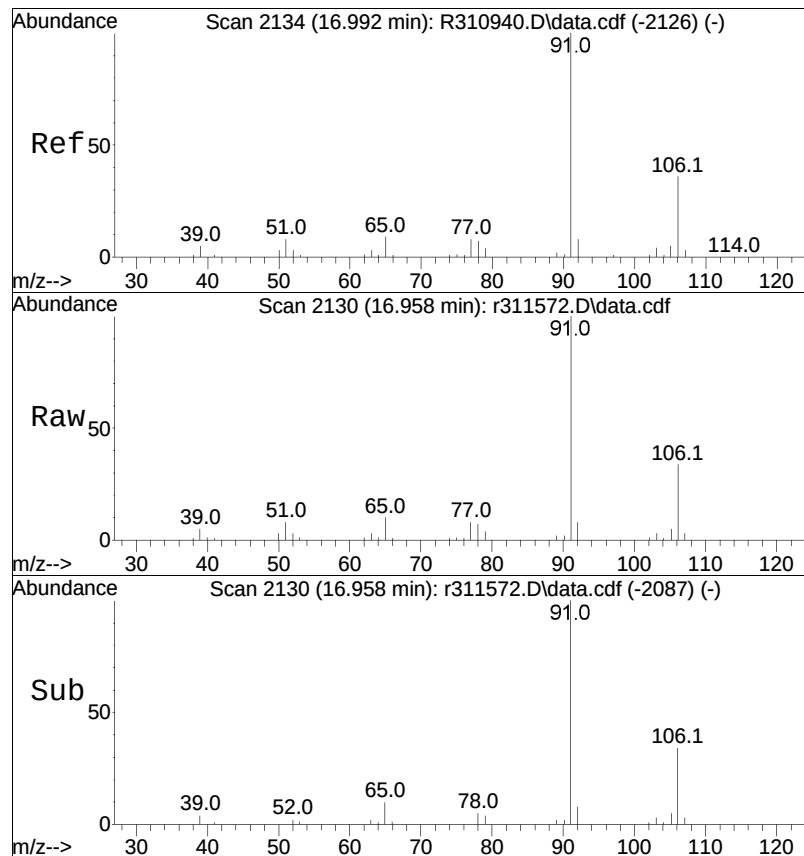




#80
chlorobenzene
Concen: 9.73 ppbV
RT: 16.608 min Scan# 2088
Delta R.T. 0.025 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

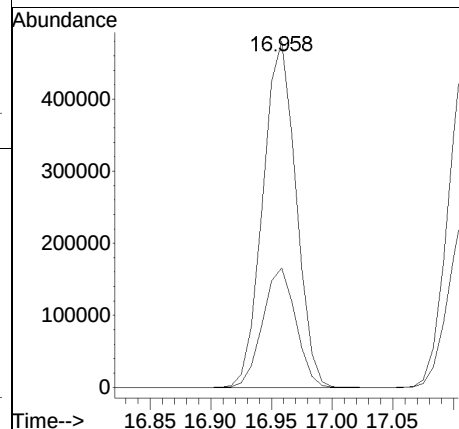
Tgt	Ion	Ratio	Resp	Lower	Upper
112	100		531227		
114	32.2	25.5		38.3	
77	65.9	53.4		80.2	

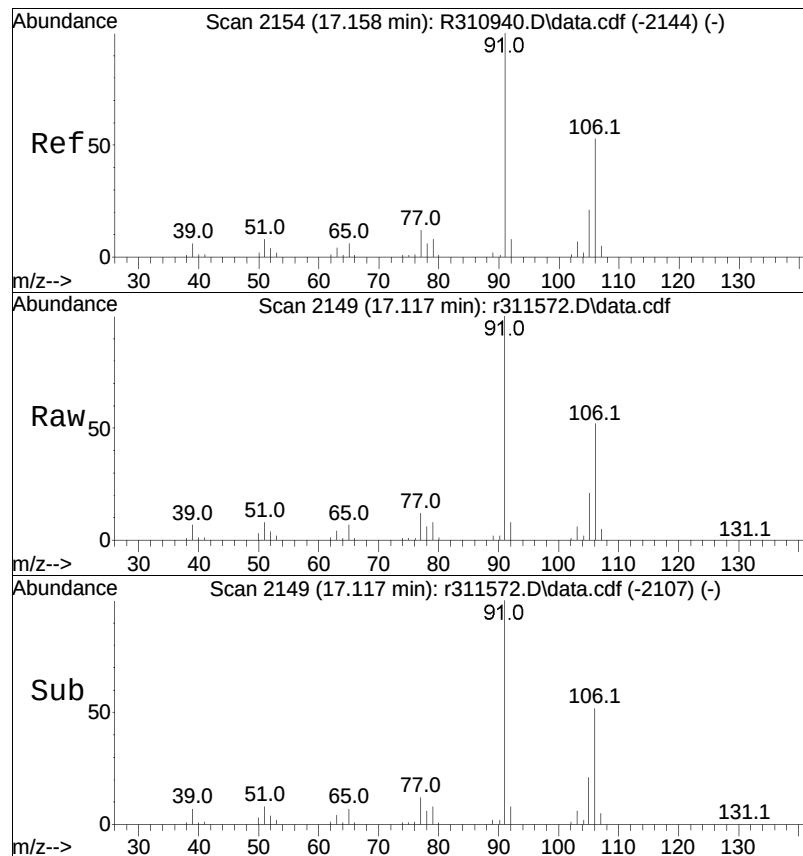




#81
 ethylbenzene
 Concen: 11.23 ppbV
 RT: 16.958 min Scan# 2130
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

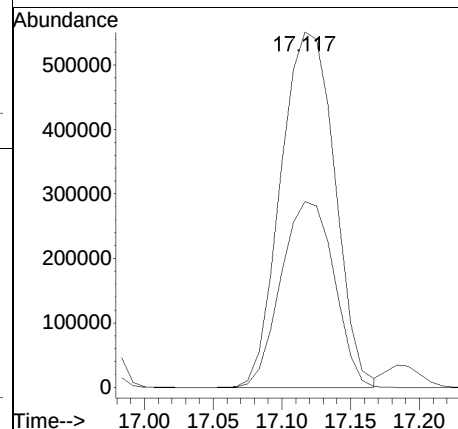
Tgt	Ion	Resp	910016
Ion	Ratio	Lower	Upper
91	100		
106	34.5	31.8	47.8

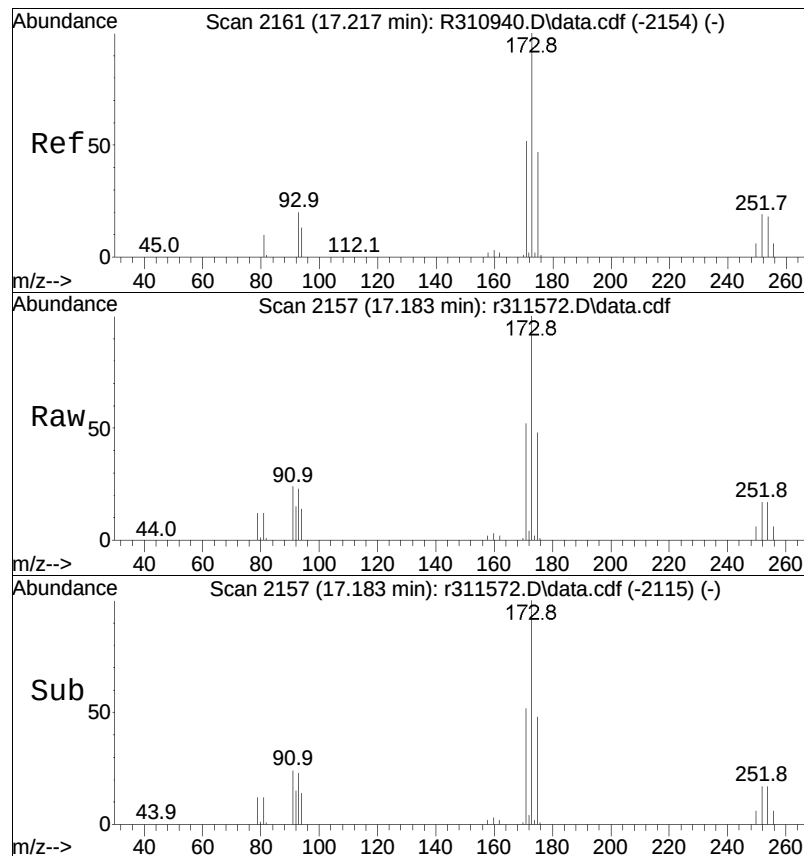




#83
 m+p-xylene
 Concen: 22.68 ppbV
 RT: 17.117 min Scan# 2149
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

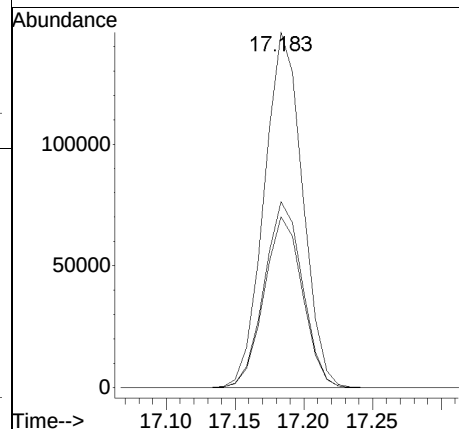
Tgt Ion	Ratio	Lower	Upper
91	100		
106	52.3	47.6	71.4

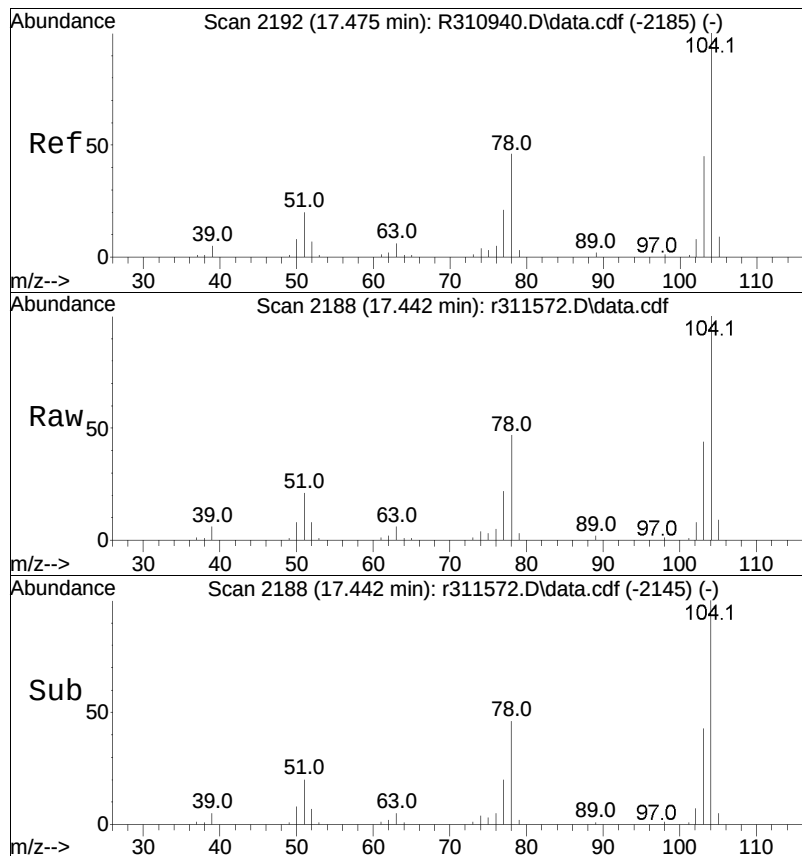




#84
bromoform
Concen: 11.51 ppbV
RT: 17.183 min Scan# 2157
Delta R.T. 0.017 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

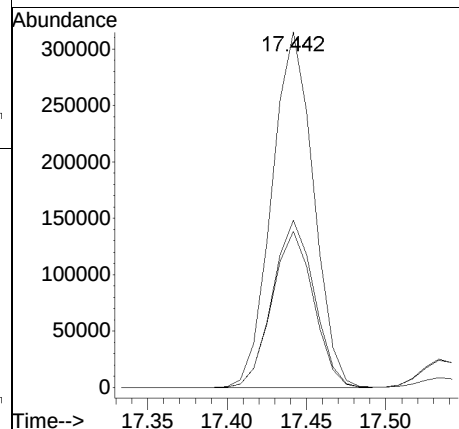
Tgt Ion:	173	Resp:	282638
Ion Ratio	Lower	Upper	
173	100		
175	48.0	38.9	58.3
171	52.3	41.2	61.8

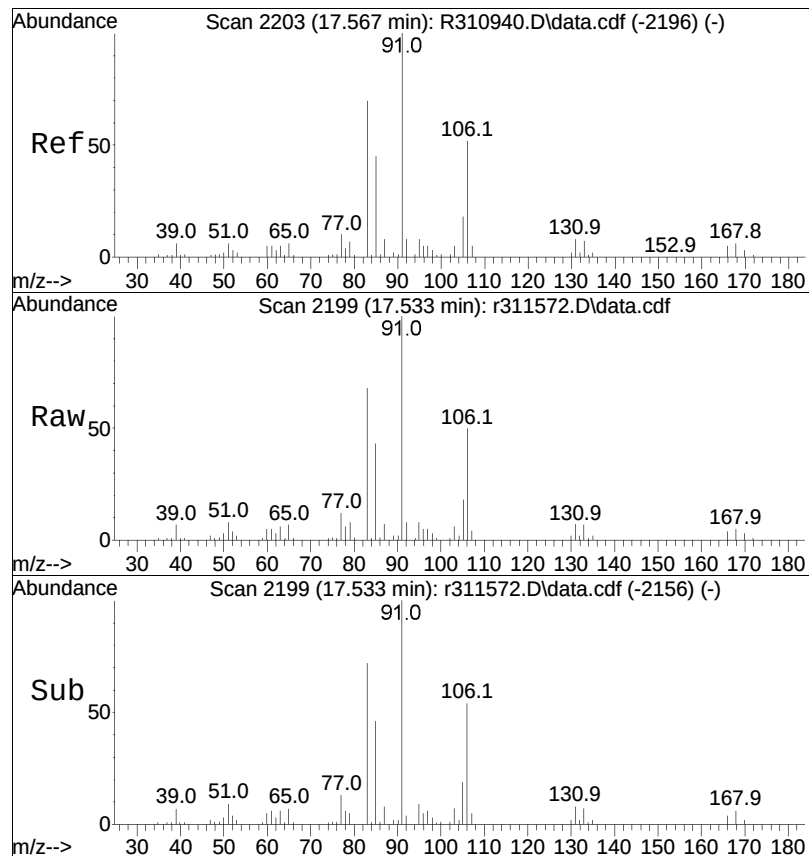




#85
styrene
Concen: 9.91 ppbV
RT: 17.442 min Scan# 2188
Delta R.T. 0.025 min
Lab File: r311572.D
Acq: 17 Sep 2020 12:24 PM

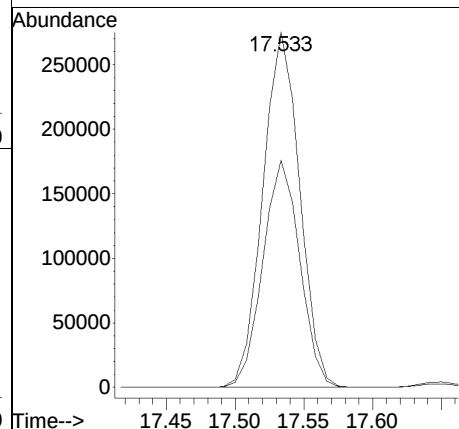
Tgt	Ion	Ratio	Lower	Upper
104	100			
103	43.9	34.2	51.4	
78	47.0	37.5	56.3	

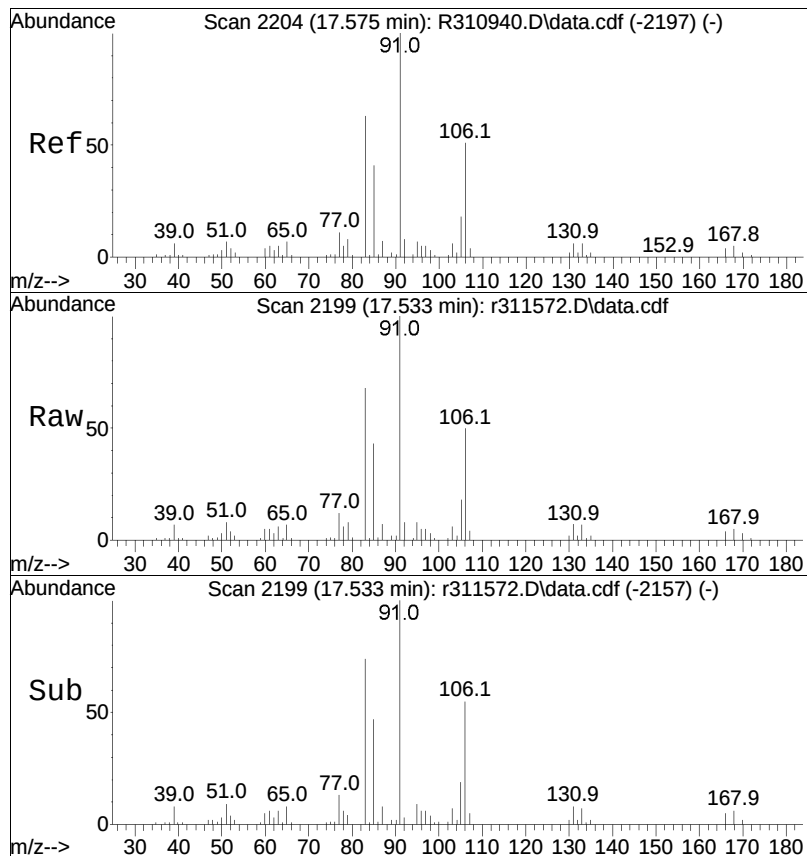




#86
 1,1,2,2-tetrachloroethane
 Concen: 10.12 ppbV
 RT: 17.533 min Scan# 2199
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

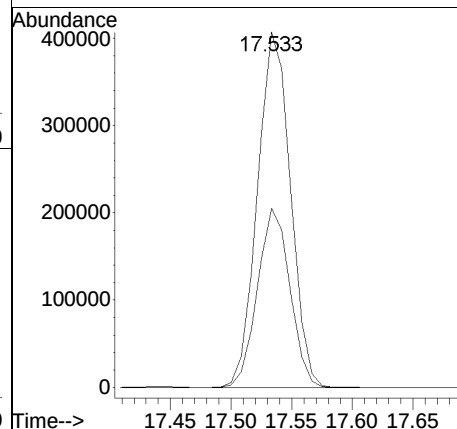
Tgt Ion:	83	Resp:	513589
Ion Ratio	Lower	Upper	
83	100		
85	63.9	49.2	73.8

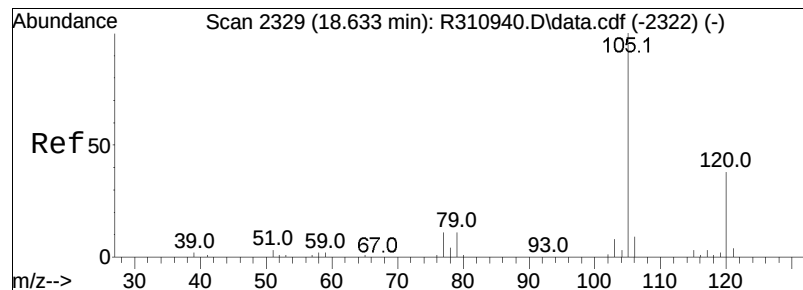




#87
 o-xylene
 Concen: 11.72 ppbV
 RT: 17.533 min Scan# 2199
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

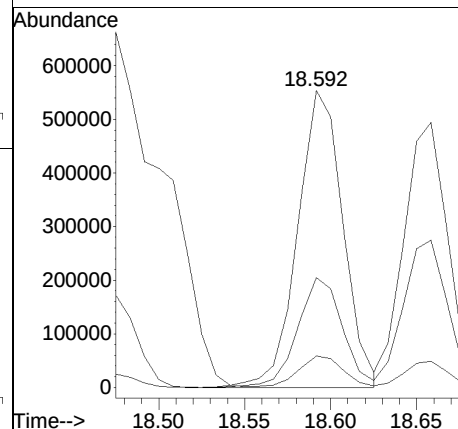
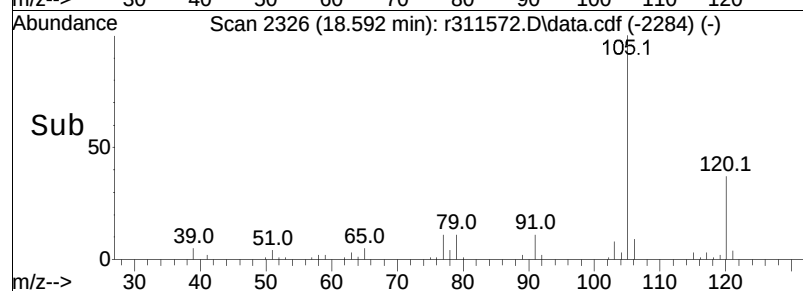
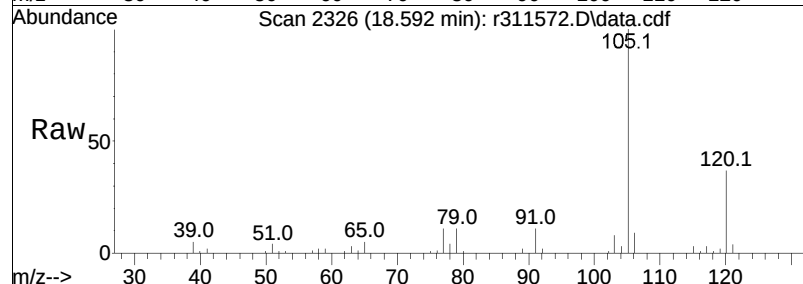
Tgt Ion:	91	Resp:	768888
Ion Ratio	Lower	Upper	
91	100		
106	50.4	45.4	68.0

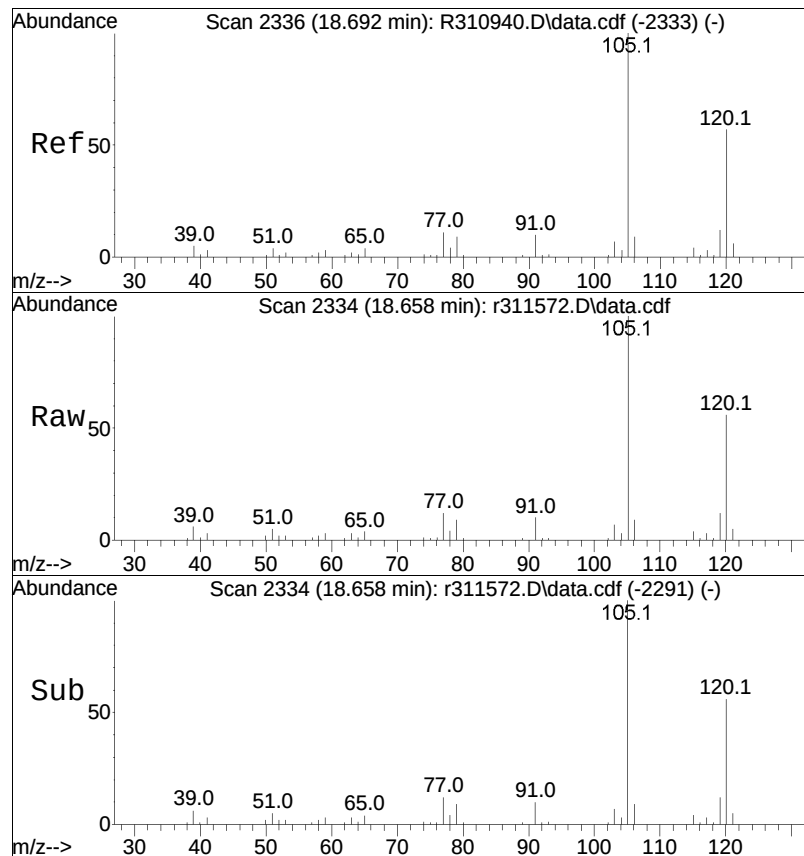




#96
 4-ethyl toluene
 Concen: 12.79 ppbV
 RT: 18.592 min Scan# 2326
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

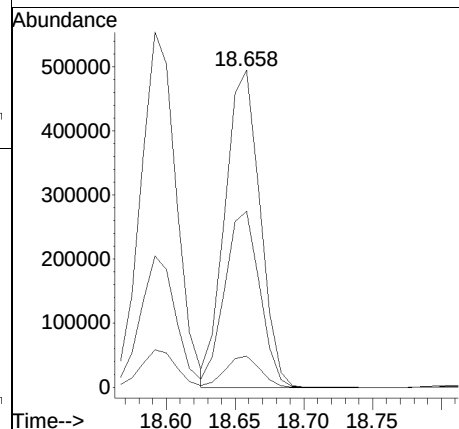
Tgt Ion	Ratio	Lower	Upper
105	100		
120	37.0	28.2	42.2
91	10.6	7.4	11.2

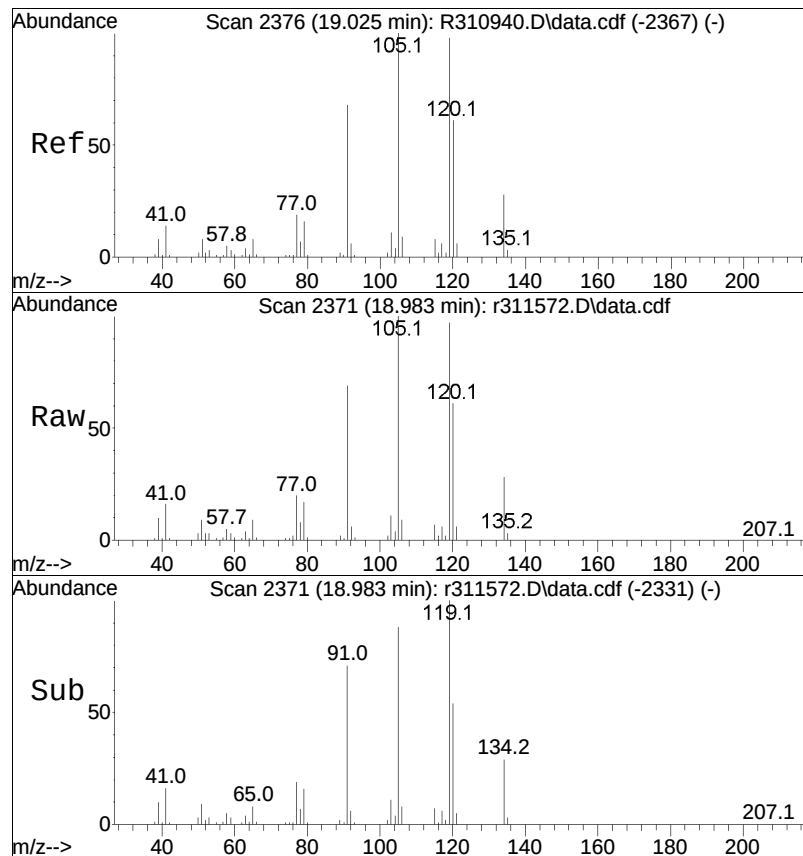




#97
 1,3,5-trimethylbenzene
 Concen: 10.52 ppbV
 RT: 18.658 min Scan# 2334
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

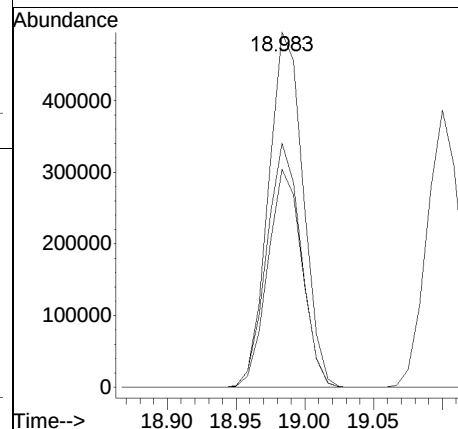
Tgt Ion	Ratio	Lower	Upper
105	100		
120	55.6	44.2	66.2
91	9.9	7.0	10.6

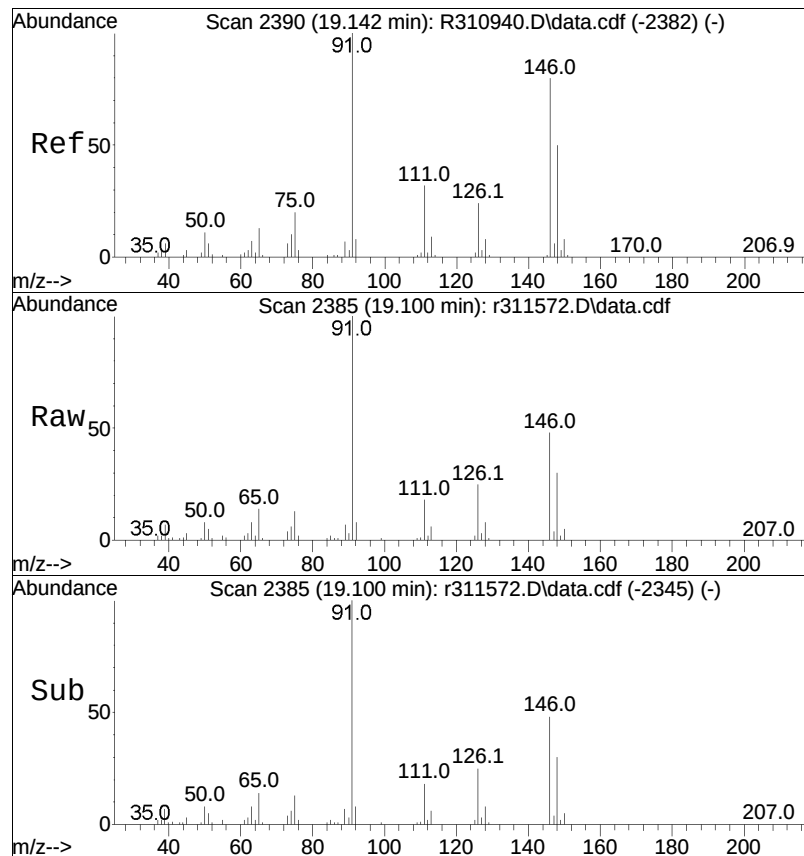




#99
 1,2,4-trimethylbenzene
 Concen: 10.96 ppbV
 RT: 18.983 min Scan# 2371
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

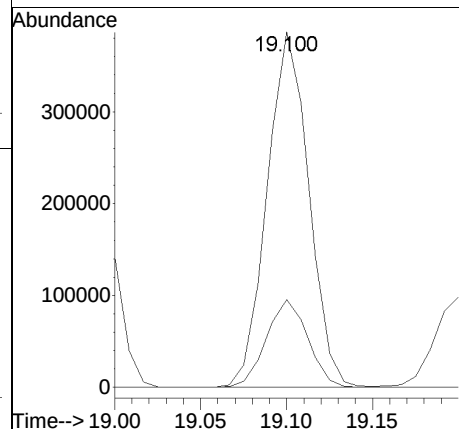
Tgt	Ion:105	Resp:	871066
Ion	Ratio	Lower	Upper
105	100		
120	61.4	49.4	74.0
91	68.7	54.6	81.8

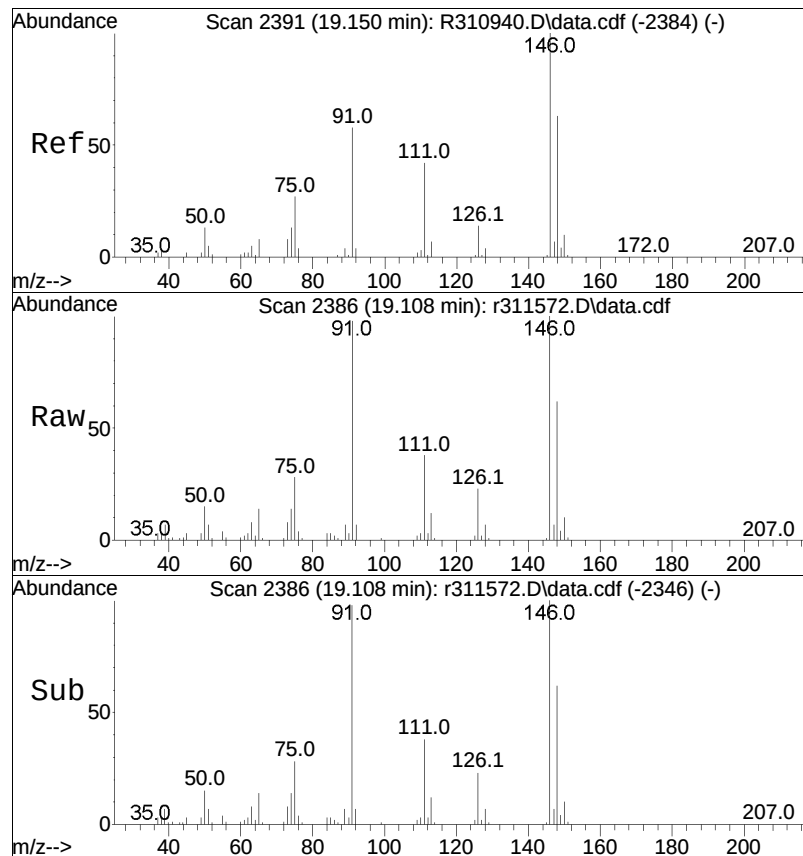




#101
 Benzyl Chloride
 Concen: 13.69 ppbV
 RT: 19.100 min Scan# 2385
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

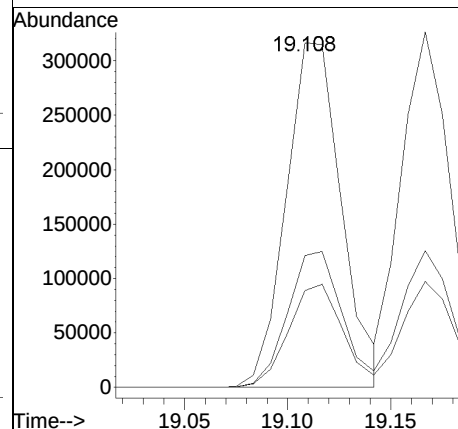
Tgt Ion	Ratio	Lower	Upper
91	100		
126	24.7	20.0	30.0

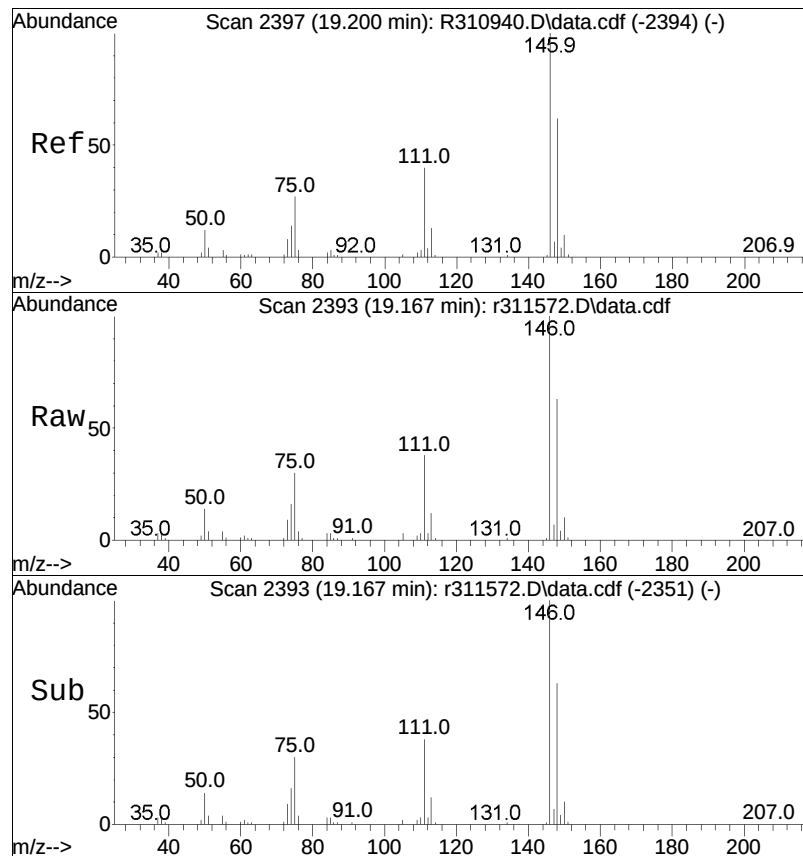




#102
 1,3-dichlorobenzene
 Concen: 11.33 ppbV
 RT: 19.108 min Scan# 2386
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

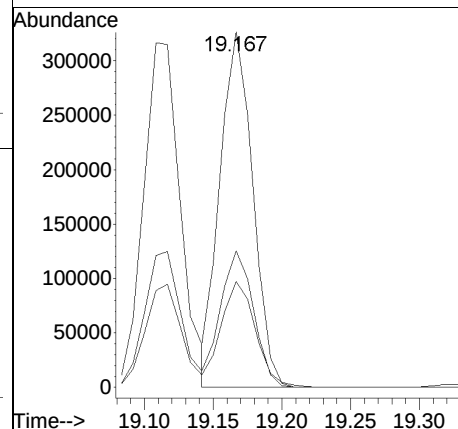
Tgt	Ion:146	Resp:	591257
Ion	Ratio	Lower	Upper
146	100		
111	38.2	33.8	50.6
75	28.1	24.5	36.7

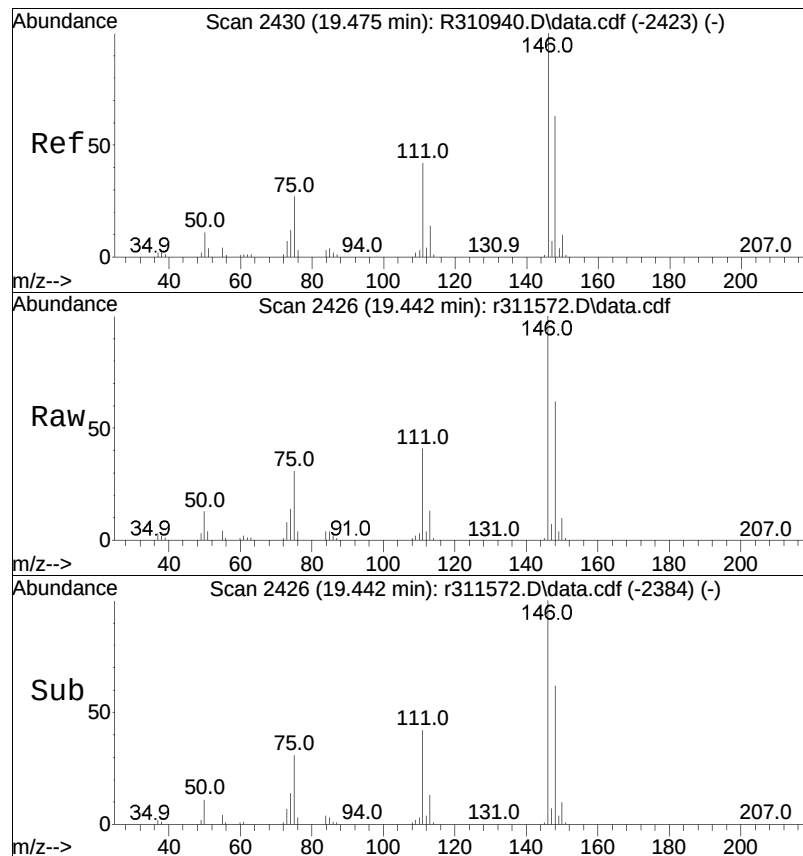




#103
 1,4-dichlorobenzene
 Concen: 11.00 ppbV
 RT: 19.167 min Scan# 2393
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

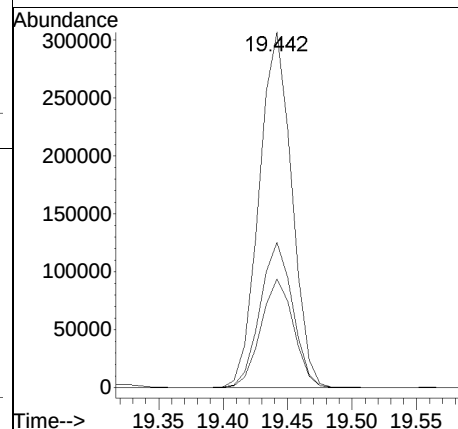
Tgt	Ion	Ratio	Lower	Upper
146	100			
111	38.5	34.3	51.5	
75	29.8	26.5	39.7	

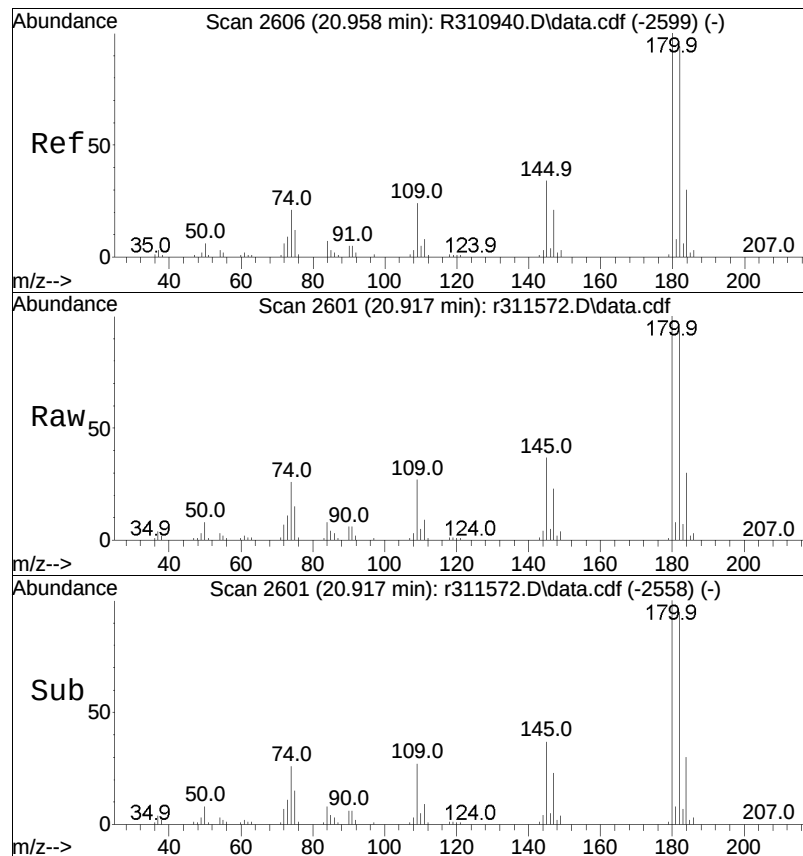




#107
 1,2-dichlorobenzene
 Concen: 11.06 ppbV
 RT: 19.442 min Scan# 2426
 Delta R.T. 0.017 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

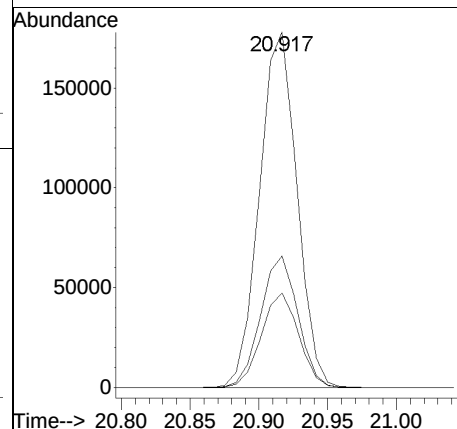
Tgt	Ion	Ratio	Resp	Lower	Upper
146	100		539711		
111	40.8			35.6	53.4
75	30.5			26.4	39.6

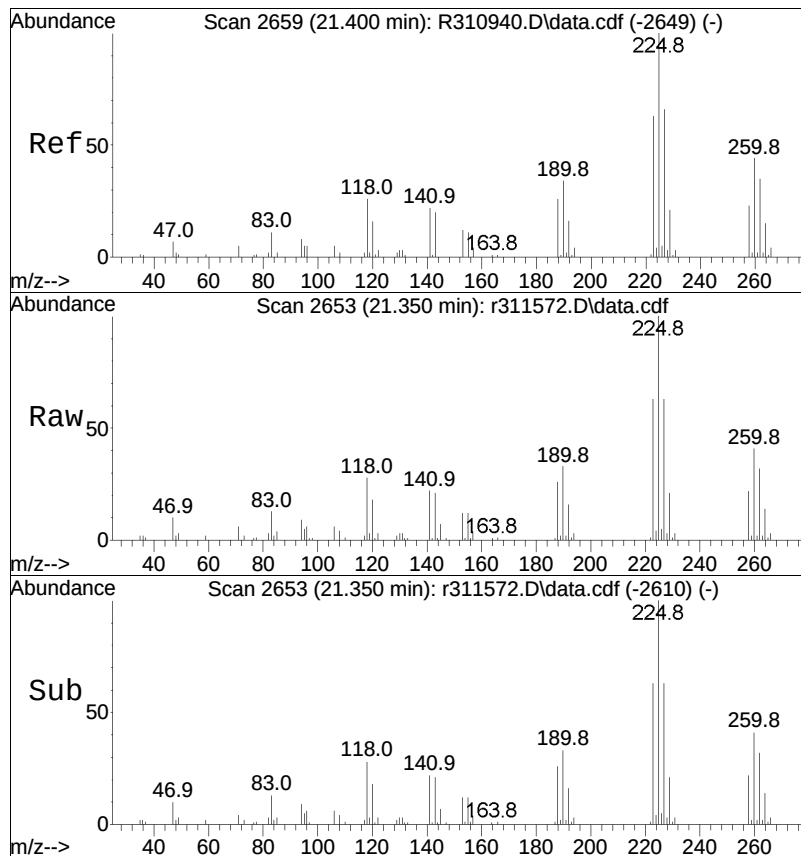




#115
 1,2,4-trichlorobenzene
 Concen: 10.29 ppbV
 RT: 20.917 min Scan# 2601
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

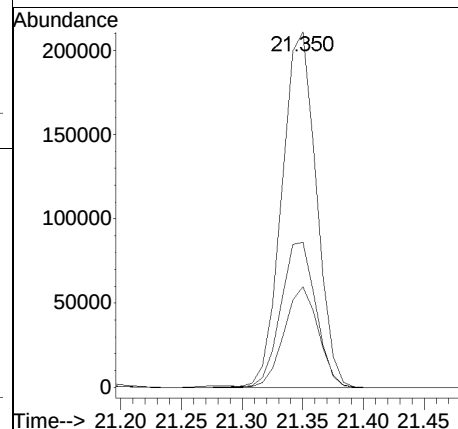
Tgt	Ion	Ratio	Resp	Lower	Upper
180	100		336957		
145	37.0	26.0		39.0	
109	26.6	19.9		29.9	





#119
 hexachlorobutadiene
 Concen: 11.64 ppbV
 RT: 21.350 min Scan# 2653
 Delta R.T. 0.025 min
 Lab File: r311572.D
 Acq: 17 Sep 2020 12:24 PM

Tgt Ion	Ratio	Resp	Lower	Upper
225	100	415895		
260	40.8		35.5	53.3
118	28.3		21.4	32.0



Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311583.D
 Acq On : 17 Sep 2020 10:32 PM
 Operator : AIRPIANO3:TS
 Sample : WG1411312-5,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 07:53:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.567	49	282427	10.000	ppbV	# 0.03
Standard Area = 294879			Recovery =		95.78%	
43) 1,4-difluorobenzene	11.833	114	822816	10.000	ppbV	# 0.03
Standard Area = 816202			Recovery =		100.81%	
67) chlorobenzene-D5	16.567	54	127775	10.000	ppbV	0.02
Standard Area = 138022			Recovery =		92.58%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.000	85	21965	0.827	ppbV	99
6) chloromethane	4.180		0	N.D.		
7) Freon-114	0.000		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	4.558		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.340	31	134107	10.284	ppbV #	77
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.890	43	542135	26.758	ppbV #	82
21) trichlorofluoromethane	6.083	101	6490	0.331	ppbV	99
22) isopropyl alcohol	6.253	45	125408	4.611	ppbV #	97
26) 1,1-dichloroethene	0.000		0	N.D.		
27) tertiary butyl alcohol	7.014	59	19583	0.697	ppbV #	86
28) methylene chloride	7.020	49	2124	0.107	ppbV	93
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.308	76	7337	0.137	ppbV #	2
31) Freon 113	7.350	101	3396	0.131	ppbV	93
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	8.383		0	N.D.		
34) MTBE	8.517		0	N.D.		
36) 2-butanone	8.892	43	84820	2.462	ppbV	97
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	9.708		0	N.D.		
39) chloroform	9.733	83	74207	2.615	ppbV	96
40) Tetrahydrofuran	10.217	42	15375M6	0.705	ppbV	
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	9.642	57	2551	0.074	ppbV #	72
48) 1,1,1-trichloroethane	10.867	97	11111	0.472	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
 Data File : r311583.D
 Acq On : 17 Sep 2020 10:32 PM
 Operator : AIRPIAN03:TS
 Sample : WG1411312-5,3,250,250
 Misc : WG1411312,ICAL17116
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Sep 18 07:53:25 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Sep 15 10:50:28 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\09\200917T\r311572.D
 Sub List : T015-NY - .

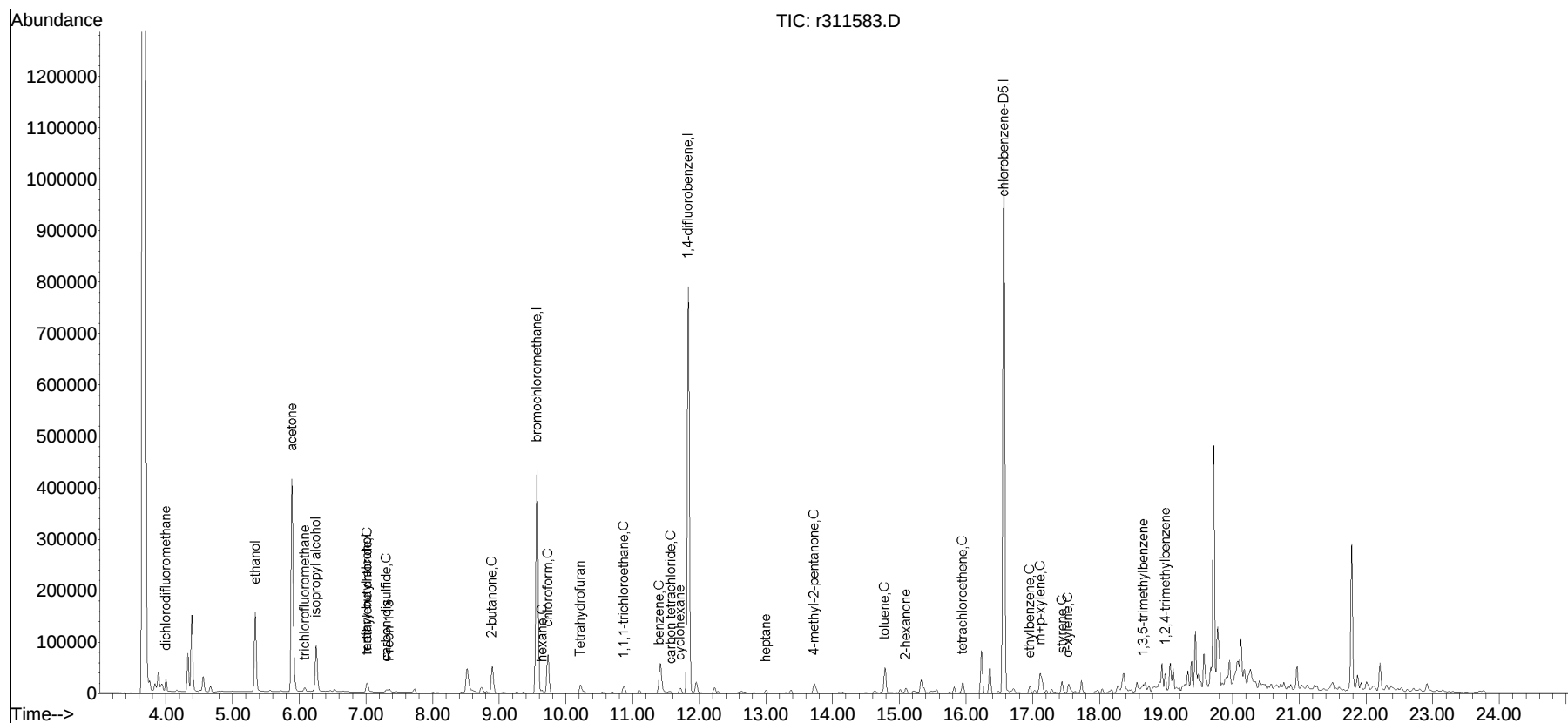
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) benzene	11.400	78	12946	0.187	ppbV	99
52) carbon tetrachloride	11.573	117	1821	0.083	ppbV	97
53) cyclohexane	11.713	56	6572	0.180	ppbV #	90
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	12.580		0	N.D.		
58) 1,4-dioxane	12.680		0	N.D.		
59) trichloroethene	12.633		0	N.D.		
60) 2,2,4-trimethylpentane	12.687		0	N.D.		
62) heptane	13.000	43	4870	0.115	ppbV #	87
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	13.725	43	17339	0.357	ppbV	98
65) trans-1,3-dichloropropene	0.000		0	N.D.		
66) 1,1,2-trichloroethane	0.000		0	N.D.		
68) toluene	14.783	91	39952	0.612	ppbV	99
72) 2-hexanone	15.100	43	8686	0.199	ppbV	95
74) dibromochloromethane	0.000		0	N.D.		
75) 1,2-dibromoethane	0.000		0	N.D.		
78) tetrachloroethene	15.950	166	7852	0.299	ppbV	91
80) chlorobenzene	16.625		0	N.D.		
81) ethylbenzene	16.958	91	12306	0.164	ppbV	90
83) m+p-xylene	17.117	91	35782	0.583	ppbV	87
84) bromoform	0.000		0	N.D.		
85) styrene	17.442	104	5964	0.111	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.583		0	N.D.		
87) o-xylene	17.533	91	10893	0.179	ppbV	89
96) 4-ethyl toluene	18.592		0	N.D.		
97) 1,3,5-trimethylbenzene	18.658	105	4764	0.062	ppbV #	98
99) 1,2,4-trimethylbenzene	18.992	105	15101M6	0.205	ppbV	
101) Benzyl Chloride	19.167		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	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	0.000		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

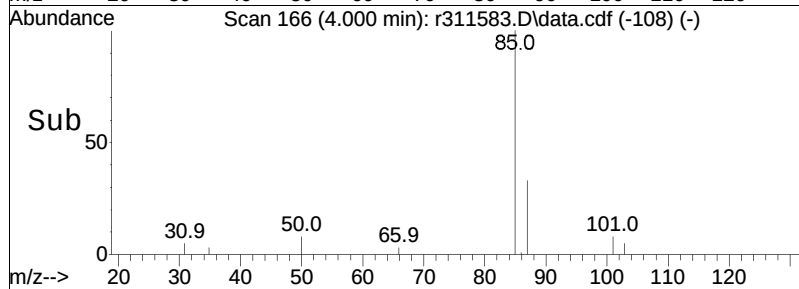
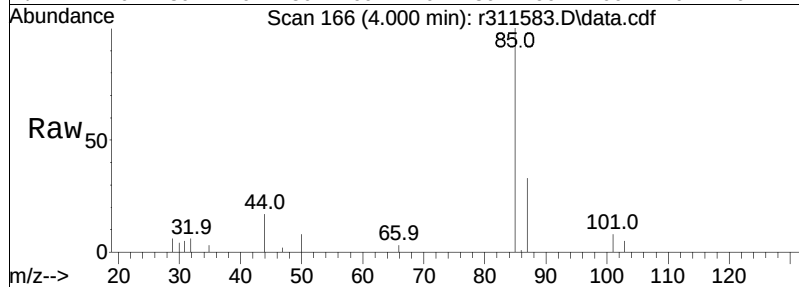
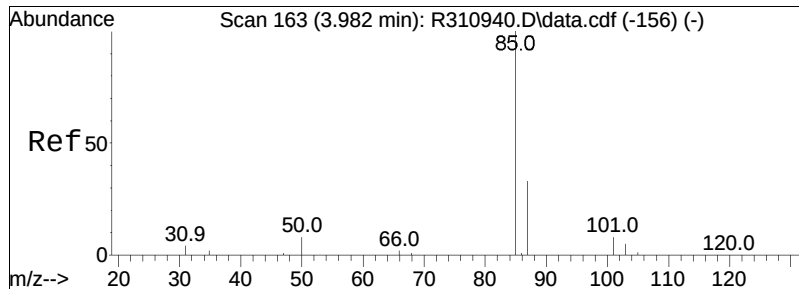
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY - .s\Data\Airpiano3\2020\09\200917T\r311572.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\09\200917T\
Data File : r311583.D
Acq On : 17 Sep 2020 10:32 PM
Operator : AIRPIANO3:TS
Sample : WG1411312-5, 3, 250, 250
Misc : WG1411312, ICAL17116
ALS Vial : 0 Sample Multiplier: 1

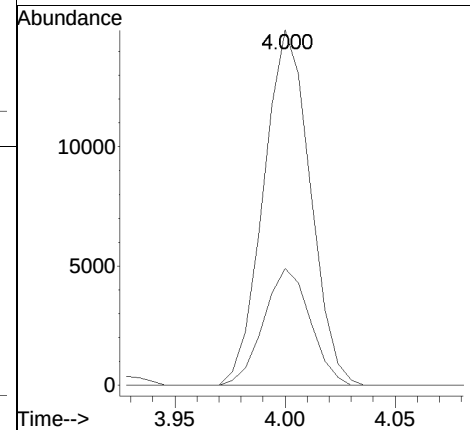
Quant Time: Sep 18 07:53:25 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\09\200917T\TFS3_200911.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Sep 15 10:50:28 2020
Response via : Initial Calibration

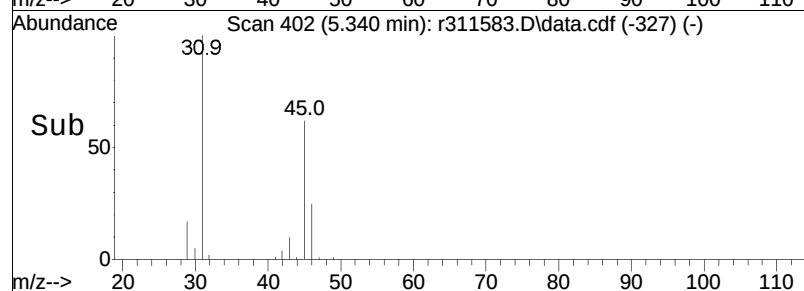
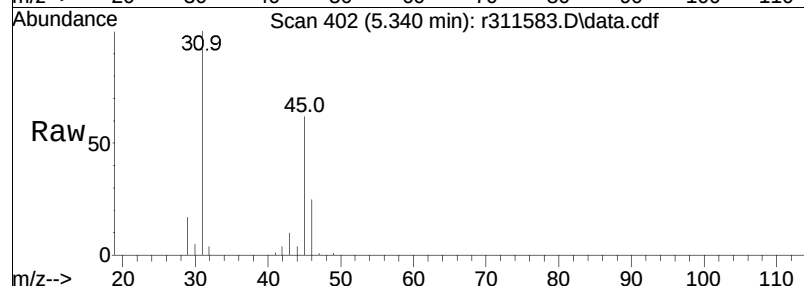
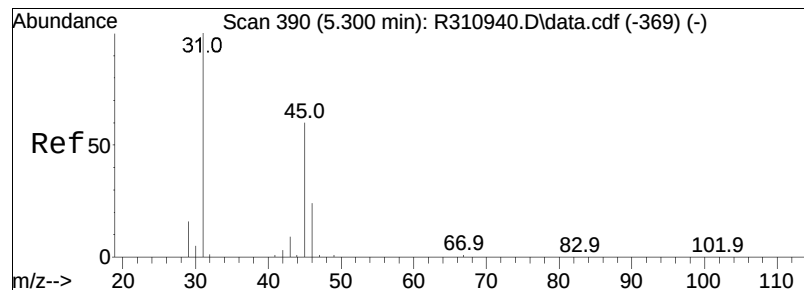




#5
dichlorodifluoromethane
Concen: 0.83 ppbV
RT: 4.000 min Scan# 166
Delta R.T. 0.018 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

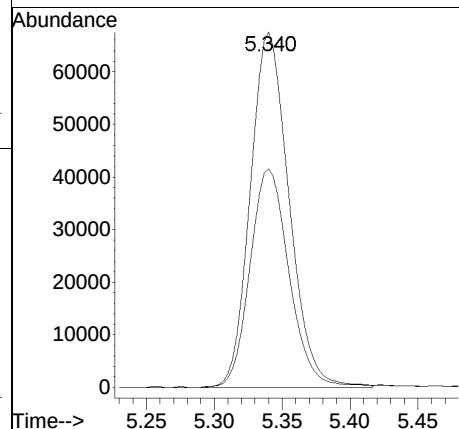
Tgt Ion: 85 Resp: 21965
Ion Ratio Lower Upper
85 100
87 32.9 25.8 38.6

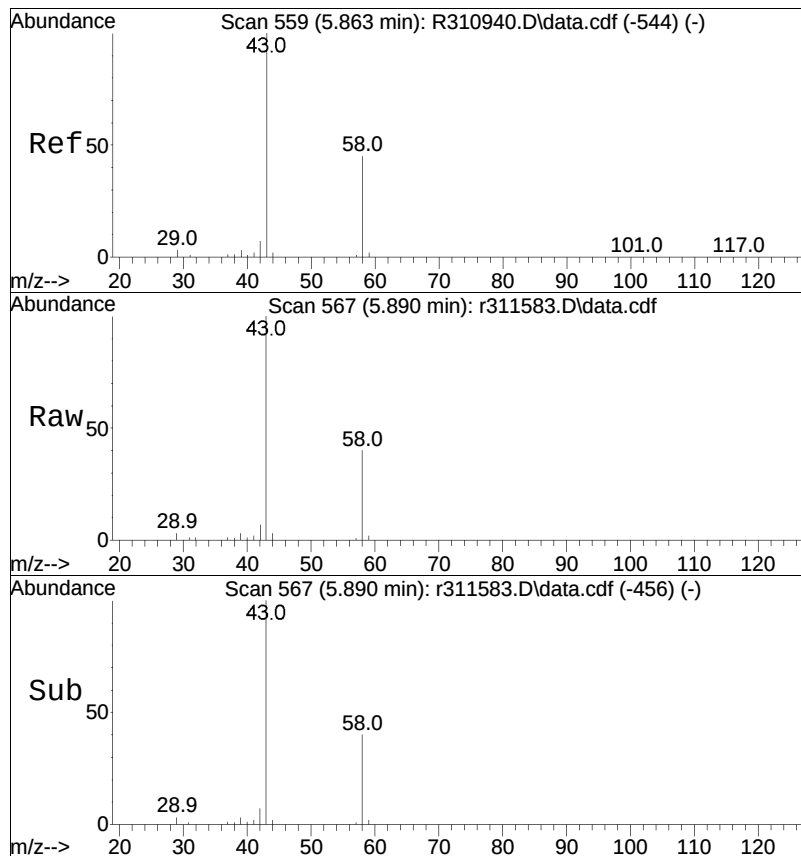




#15
ethanol
Concen: 10.28 ppbV
RT: 5.340 min Scan# 402
Delta R.T. 0.043 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

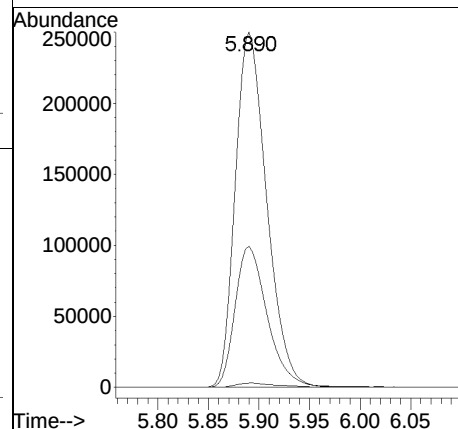
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	61.6	37.0	55.4	

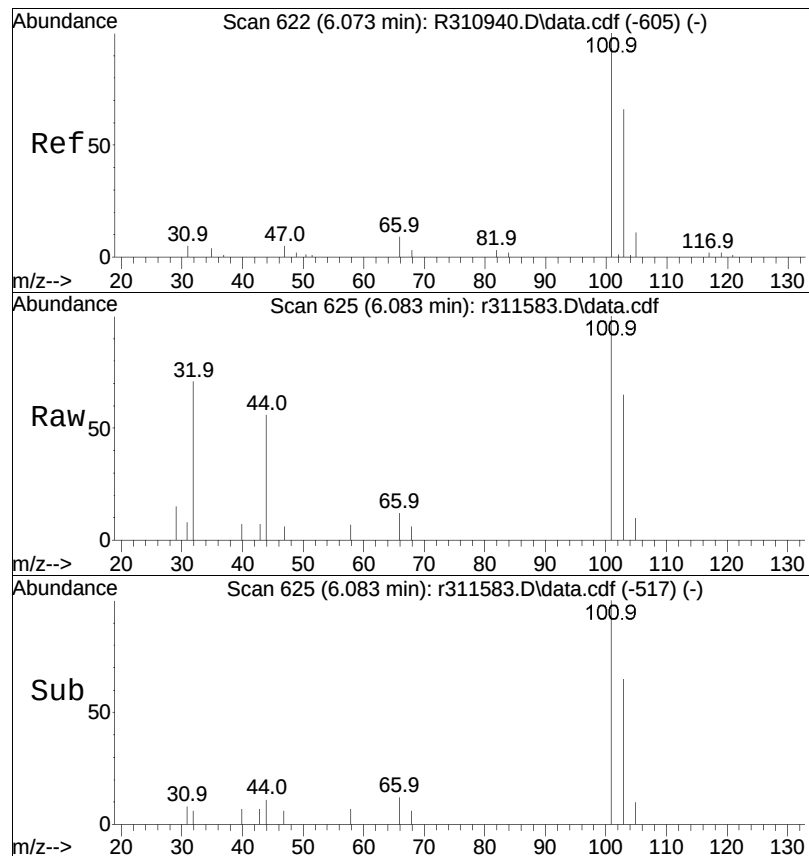




#19
acetone
Concen: 26.76 ppbV
RT: 5.890 min Scan# 567
Delta R.T. 0.040 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

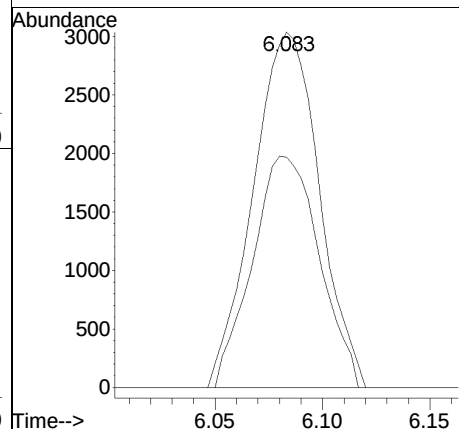
Tgt Ion	Ratio	Resp	Lower	Upper
43	100	542135		
58	39.7		41.9	62.9#
57	1.2		1.1	1.7

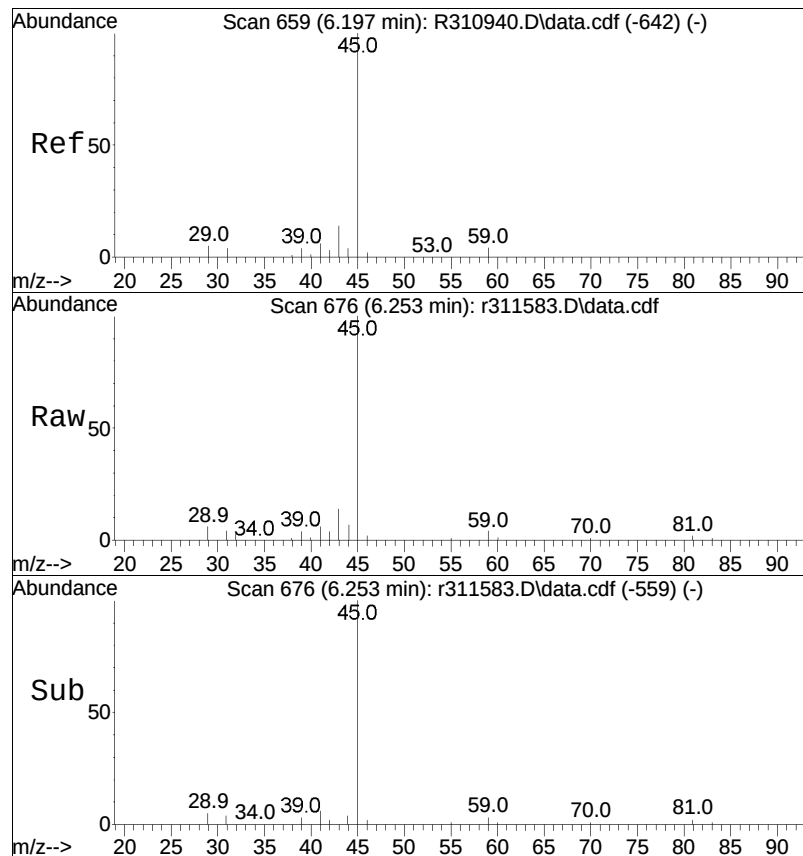




#21
trichlorofluoromethane
Concen: 0.33 ppbV
RT: 6.083 min Scan# 625
Delta R.T. 0.030 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

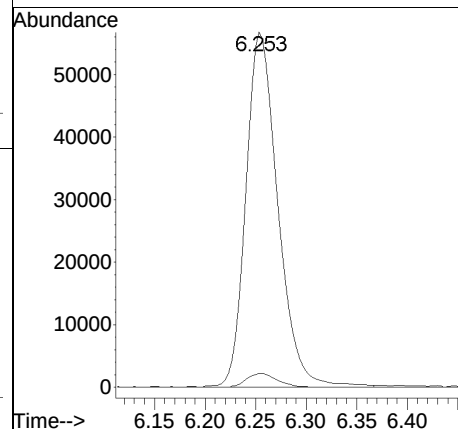
Tgt Ion	Ratio	Lower	Upper
101	100		
103	64.8	52.7	79.1

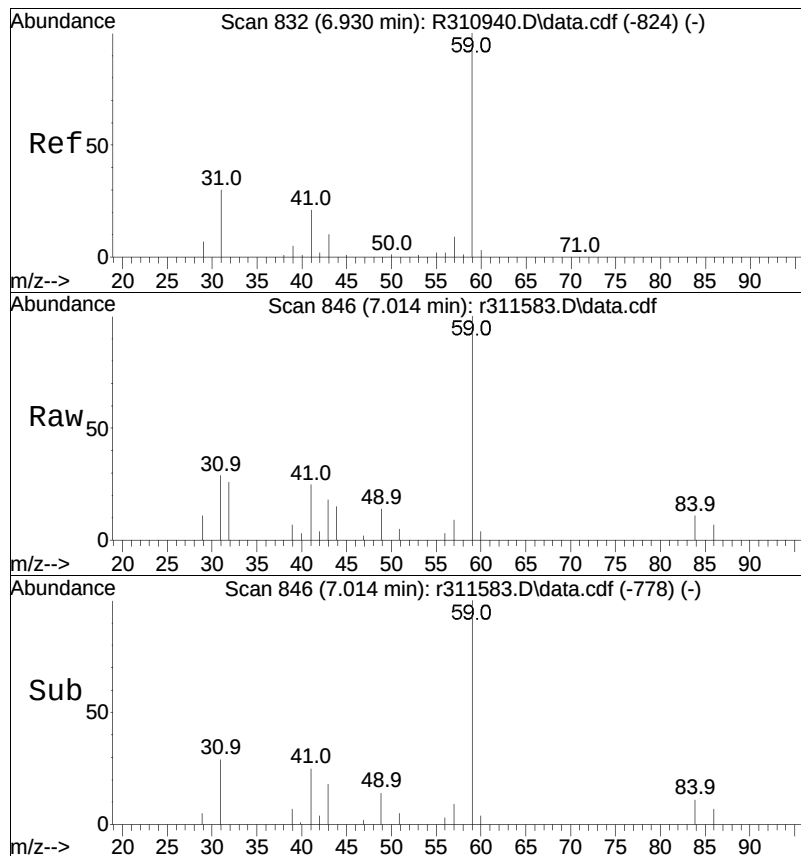




#22
 isopropyl alcohol
 Concen: 4.61 ppbV
 RT: 6.253 min Scan# 676
 Delta R.T. 0.060 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

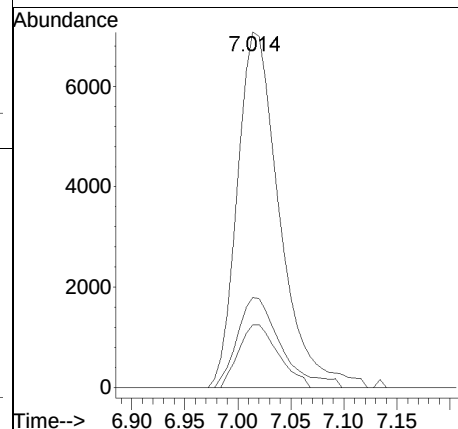
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.9	4.0	6.0#

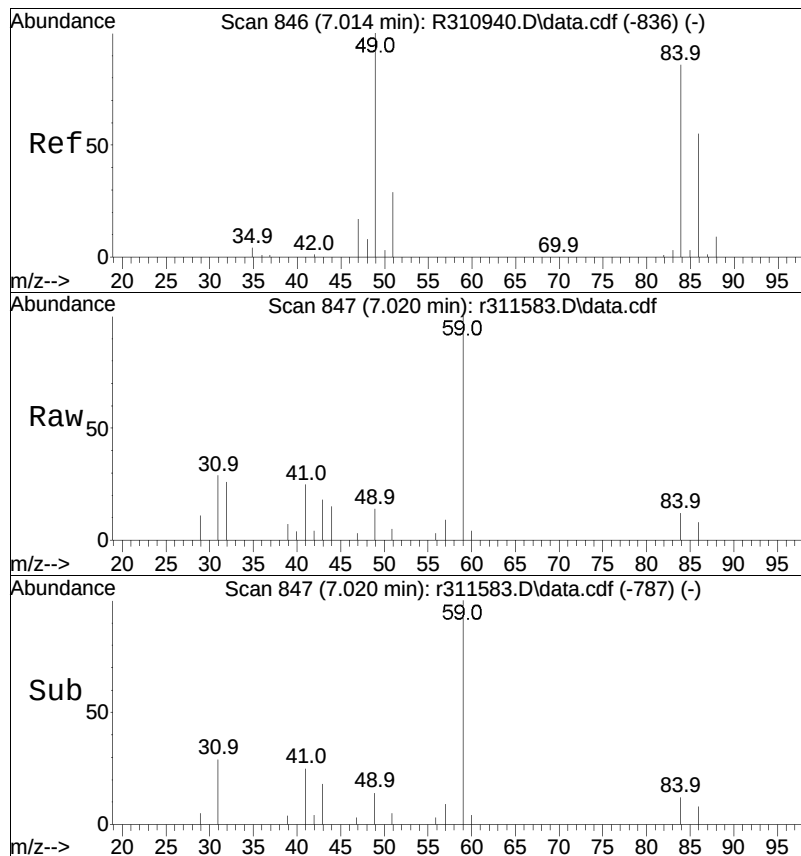




#27
 tertiary butyl alcohol
 Concen: 0.70 ppbV
 RT: 7.014 min Scan# 846
 Delta R.T. 0.078 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

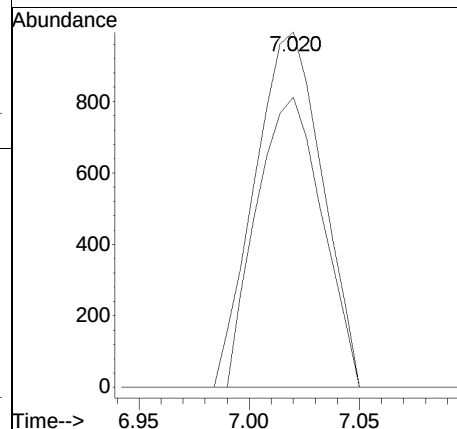
Tgt Ion:	59	Resp:	19583
Ion Ratio	Lower	Upper	
59	100		
41	25.3	16.0	24.0#
43	17.6	8.2	12.4#

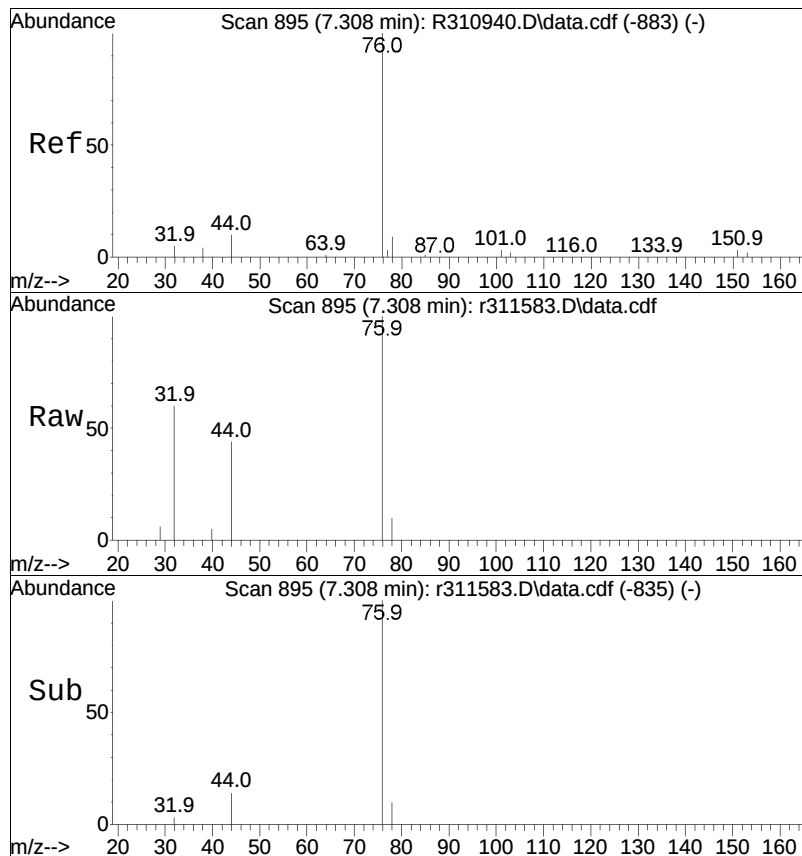




#28
 methylene chloride
 Concen: 0.11 ppbV
 RT: 7.020 min Scan# 847
 Delta R.T. 0.030 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

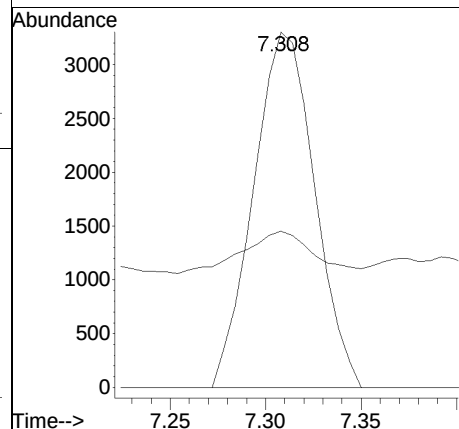
Tgt	Ion	Resp	Lower	Upper
49	100			
84	81.7	60.6	90.8	

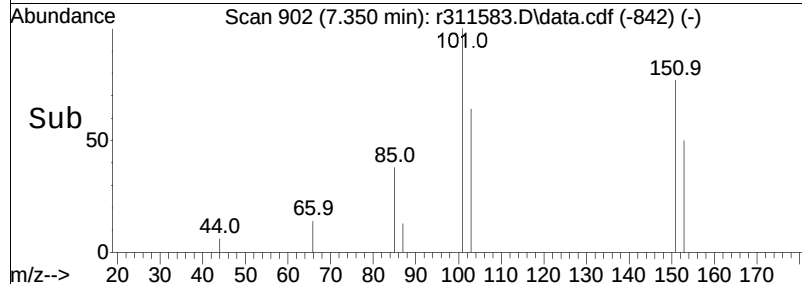
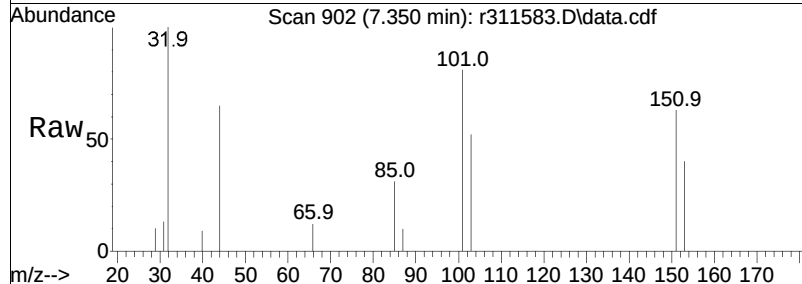
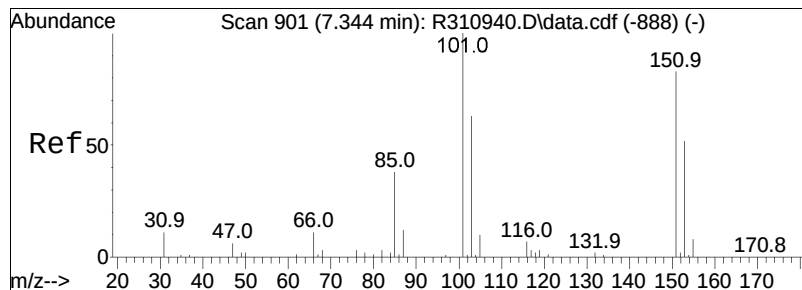




#30
 carbon disulfide
 Concen: 0.14 ppbV
 RT: 7.308 min Scan# 895
 Delta R.T. 0.030 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

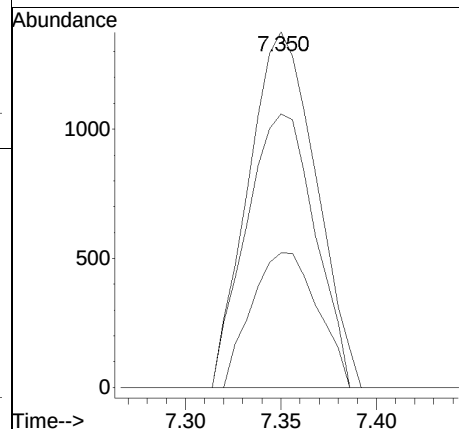
Tgt Ion	Ratio	Lower	Upper
76	100		
44	44.0	7.0	10.4#

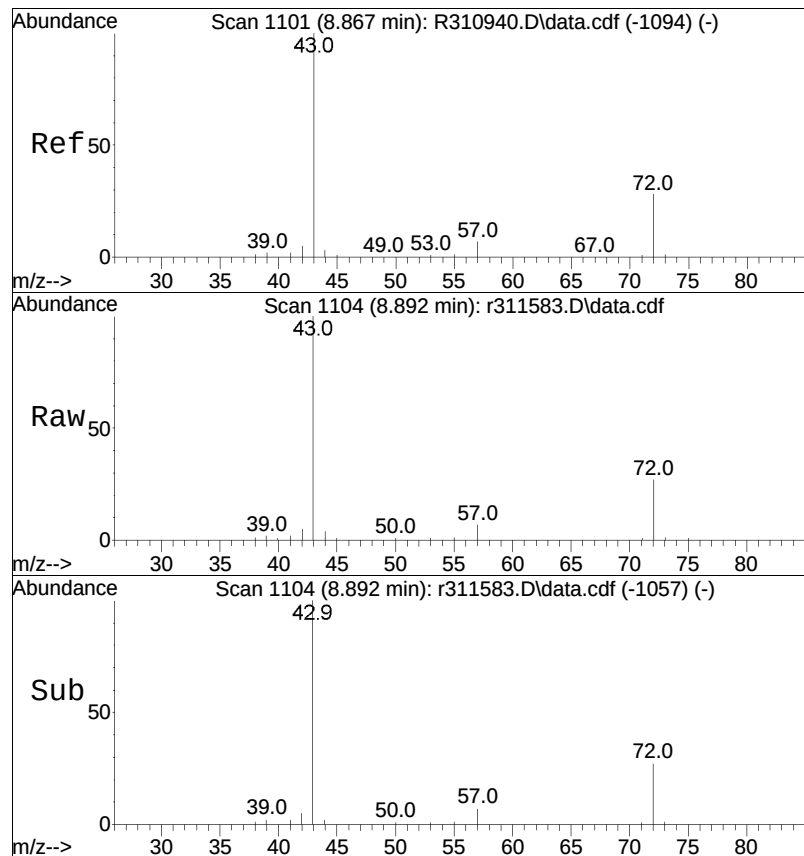




#31
 Freon 113
 Concen: 0.13 ppbV
 RT: 7.350 min Scan# 902
 Delta R.T. 0.030 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

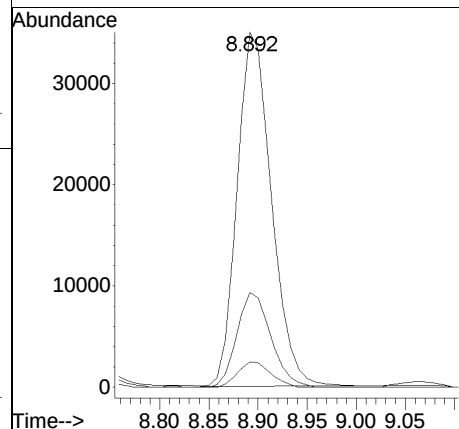
Tgt Ion:	101	Resp:	3396
Ion Ratio	Lower	Upper	
101	100		
85	37.9	34.1	51.1
151	77.0	66.4	99.6

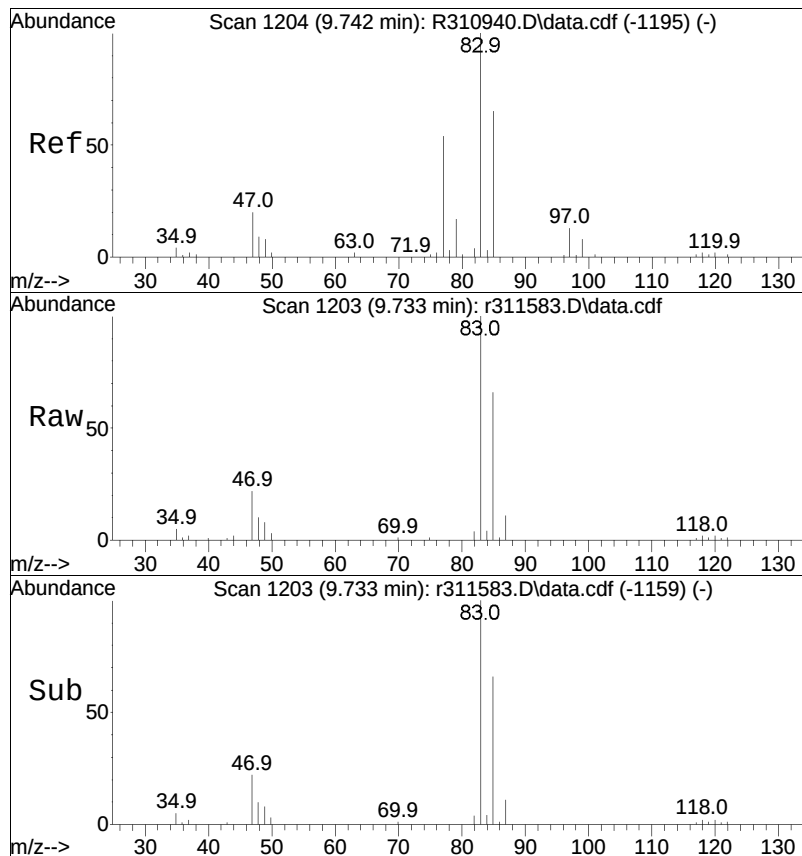




#36
 2-butanone
 Concen: 2.46 ppbV
 RT: 8.892 min Scan# 1104
 Delta R.T. 0.058 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

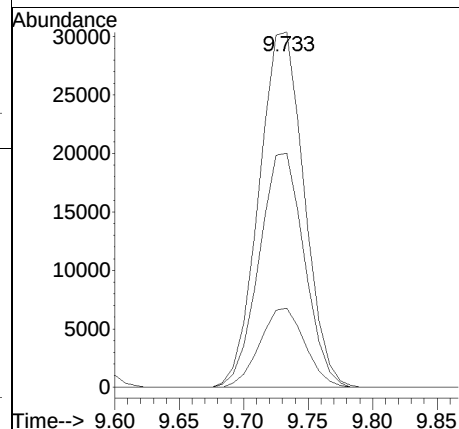
Tgt Ion:	43	Resp:	84820
Ion Ratio	Lower	Upper	
43	100		
72	26.7	22.8	34.2
57	7.2	6.6	9.8

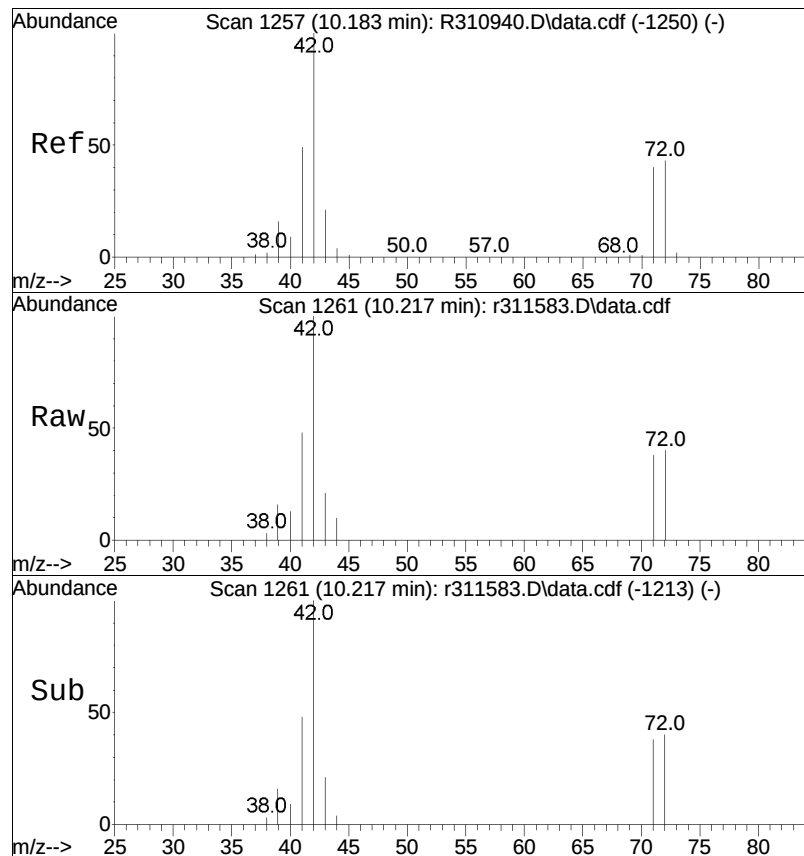




#39
 chloroform
 Concen: 2.61 ppbV
 RT: 9.733 min Scan# 1203
 Delta R.T. 0.033 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

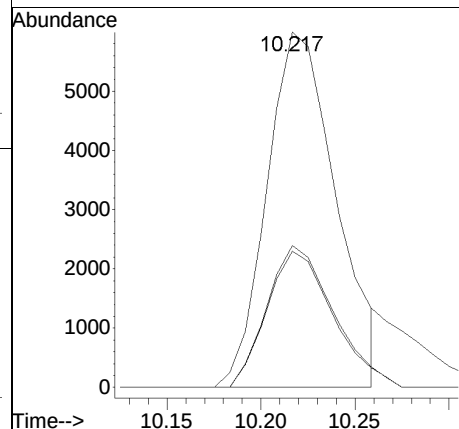
Tgt	Ion: 83	Resp:	74207
Ion	Ratio	Lower	Upper
83	100		
85	65.9	50.5	75.7
47	22.3	16.6	25.0

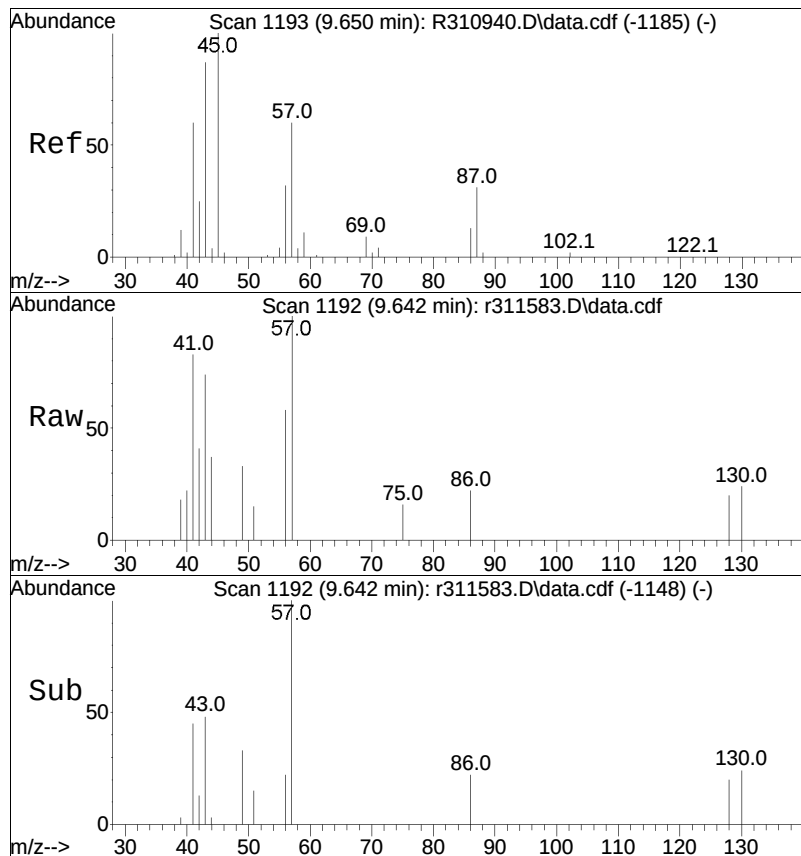




#40
Tetrahydrofuran
Concen: 0.70 ppbV m
RT: 10.217 min Scan# 1261
Delta R.T. 0.067 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

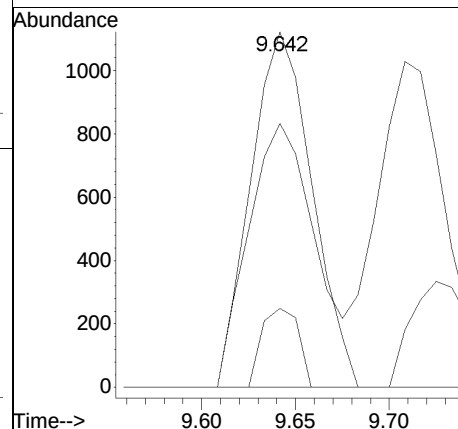
Tgt Ion	Ratio	Lower	Upper
42	100		
71	38.3	31.3	46.9
72	39.9	34.9	52.3

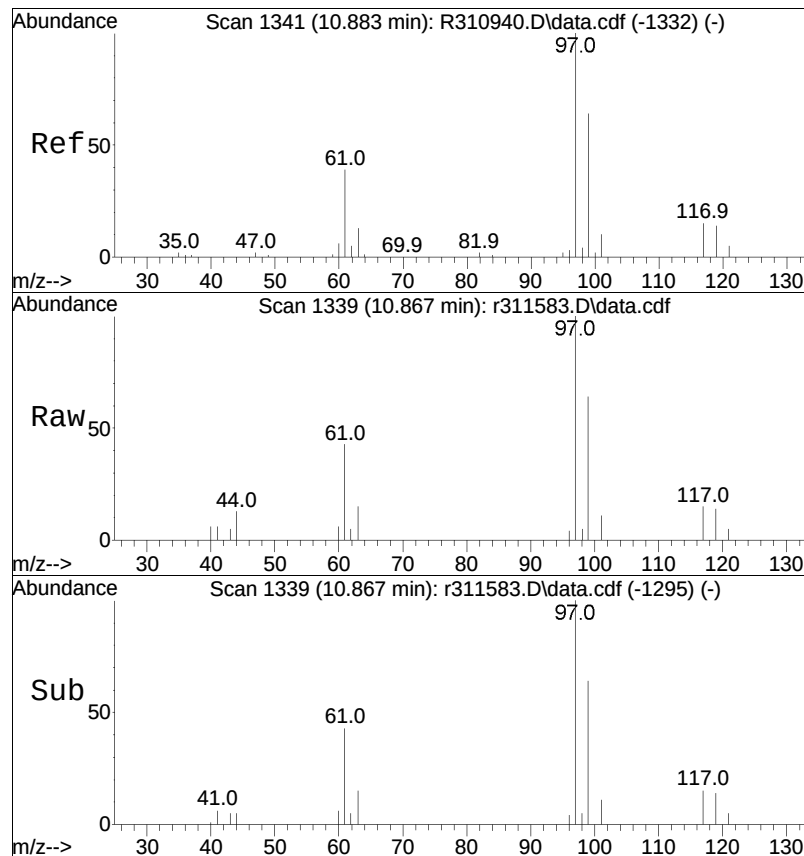




#44
hexane
Concen: 0.07 ppbV
RT: 9.642 min Scan# 1192
Delta R.T. 0.033 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

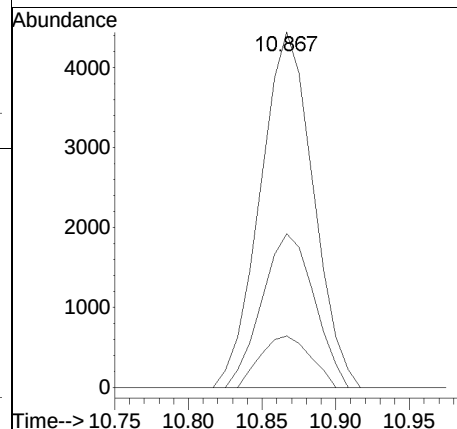
Tgt Ion	Ratio	Lower	Upper
57	100		
43	74.3	87.0	130.6#
86	22.2	16.7	25.1

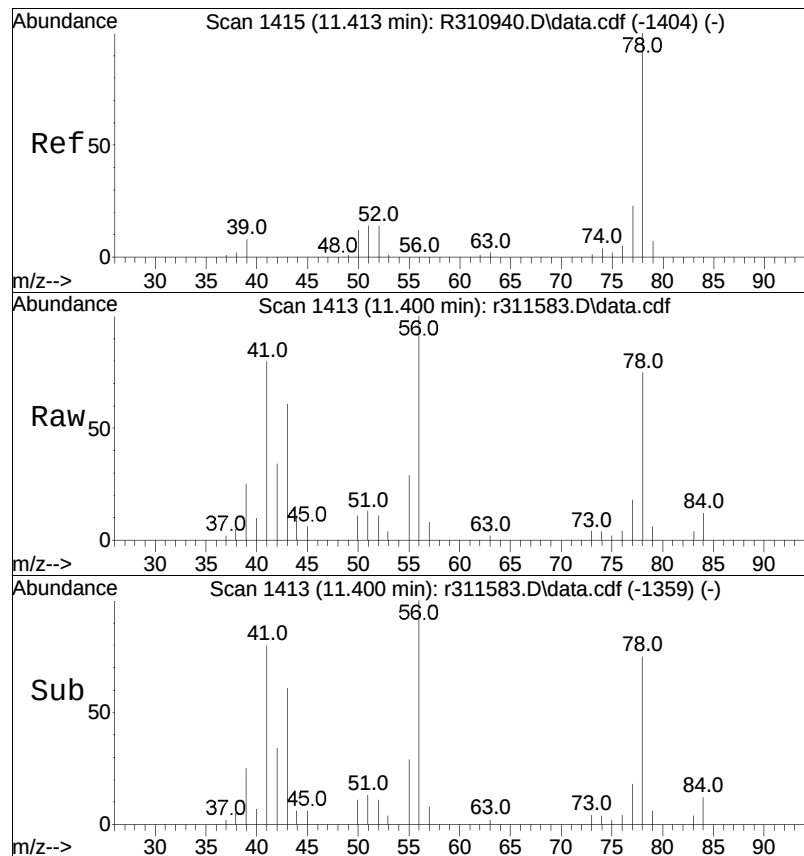




#48
 1,1,1-trichloroethane
 Concen: 0.47 ppbV
 RT: 10.867 min Scan# 1339
 Delta R.T. 0.033 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

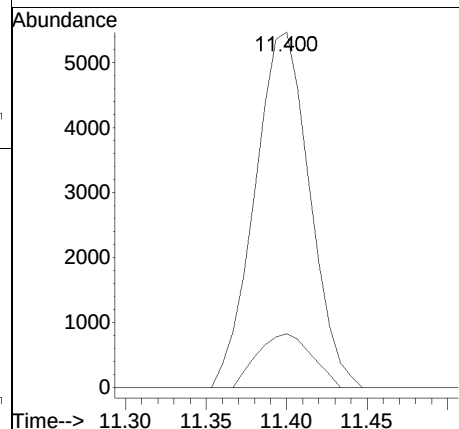
Tgt Ion:	97	Resp:	11111
Ion Ratio	Lower	Upper	
97	100		
61	43.2	33.9	50.9
119	14.5	12.6	19.0

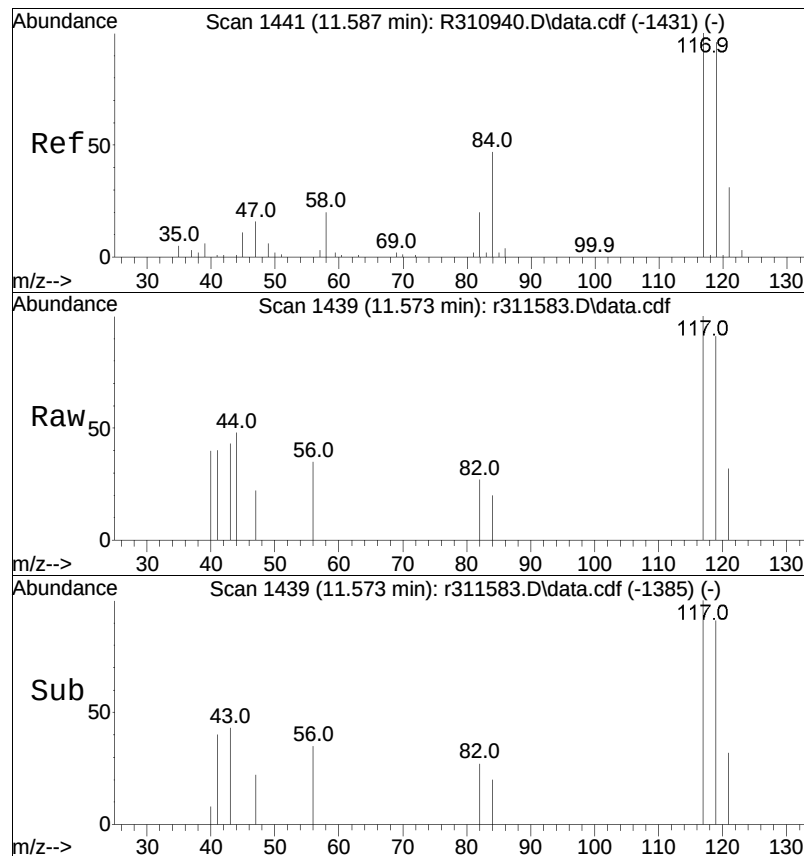




#50
benzene
Concen: 0.19 ppbV
RT: 11.400 min Scan# 1413
Delta R.T. 0.033 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

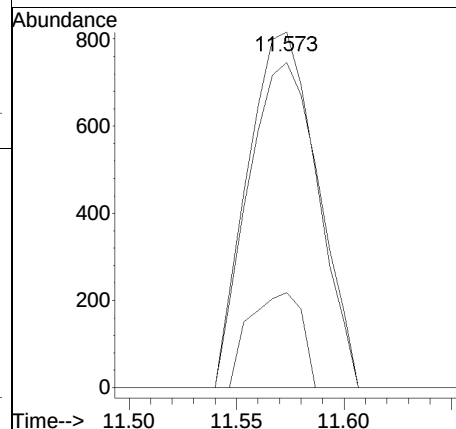
Tgt Ion	Ratio	Lower	Upper
78	100		
52	15.1	12.4	18.6

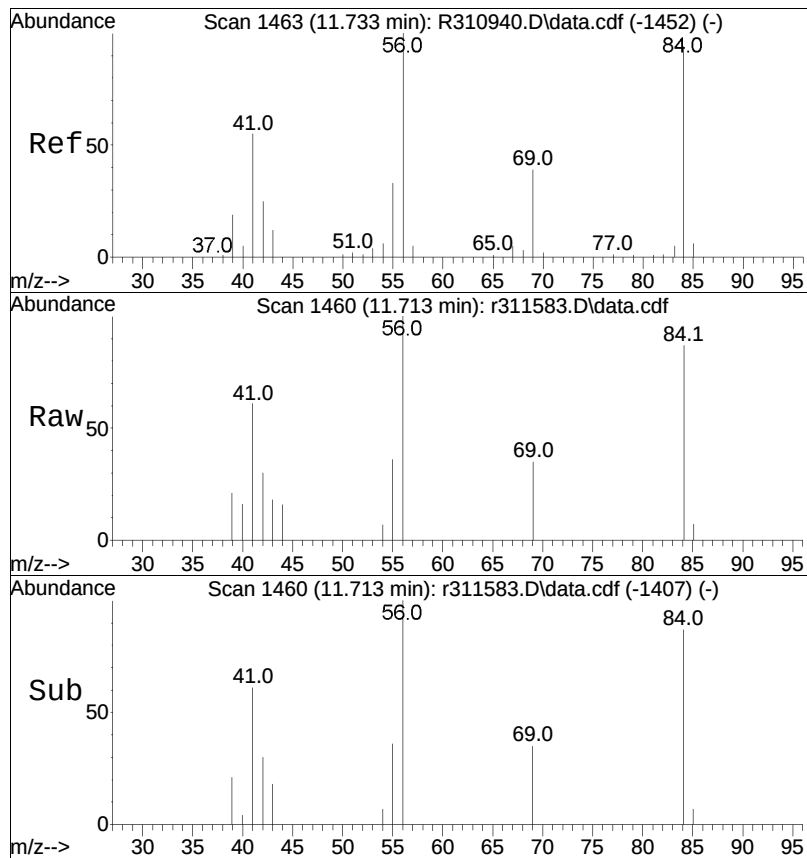




#52
 carbon tetrachloride
 Concen: 0.08 ppbV
 RT: 11.573 min Scan# 1439
 Delta R.T. 0.033 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

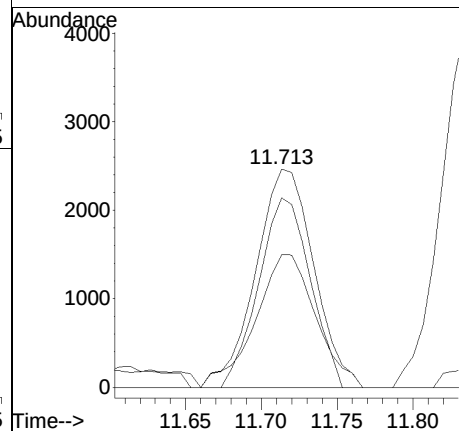
Tgt Ion	Ratio	Lower	Upper
117	100		
119	91.4	75.0	112.4
82	26.7	18.8	28.2

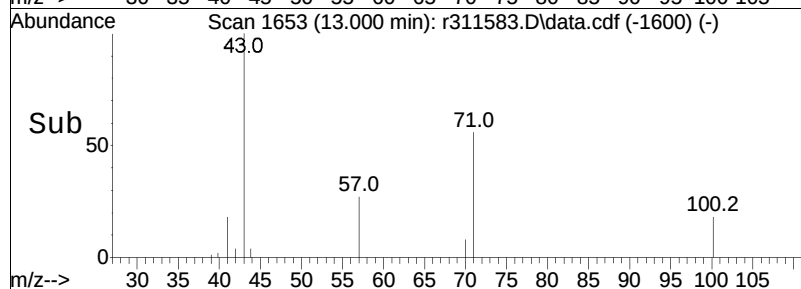
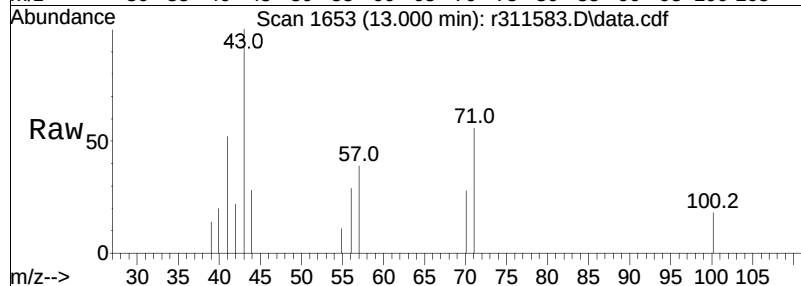
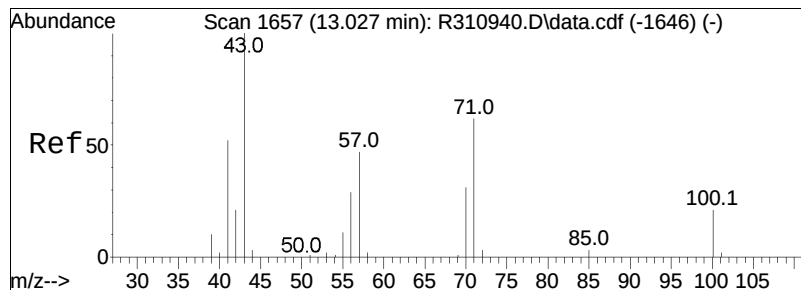




#53
cyclohexane
Concen: 0.18 ppbV
RT: 11.713 min Scan# 1460
Delta R.T. 0.027 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

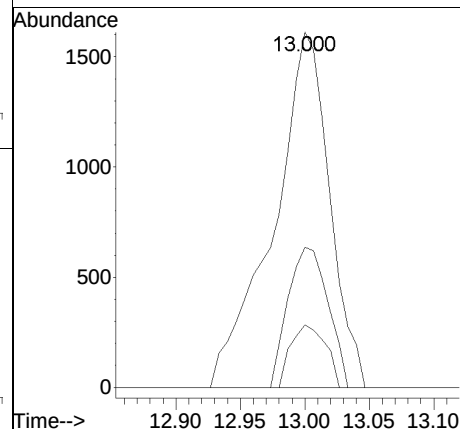
Tgt Ion	Ratio	Lower	Upper
56	100		
84	86.8	71.0	106.6
41	60.8	35.8	53.6

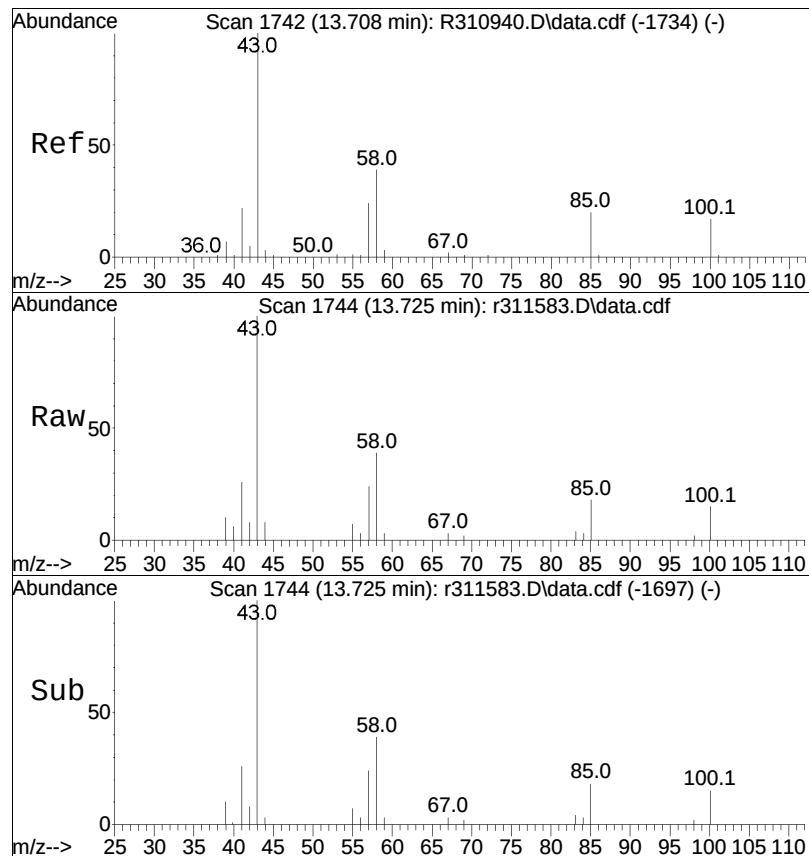




#62
 heptane
 Concen: 0.11 ppbV
 RT: 13.000 min Scan# 1653
 Delta R.T. 0.027 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

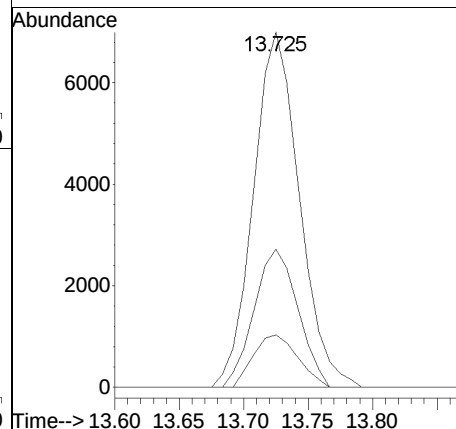
Tgt Ion	Ratio	Resp	Lower	Upper
43	100	4870		
57	39.5		40.9	61.3#
100	17.6		15.8	23.8

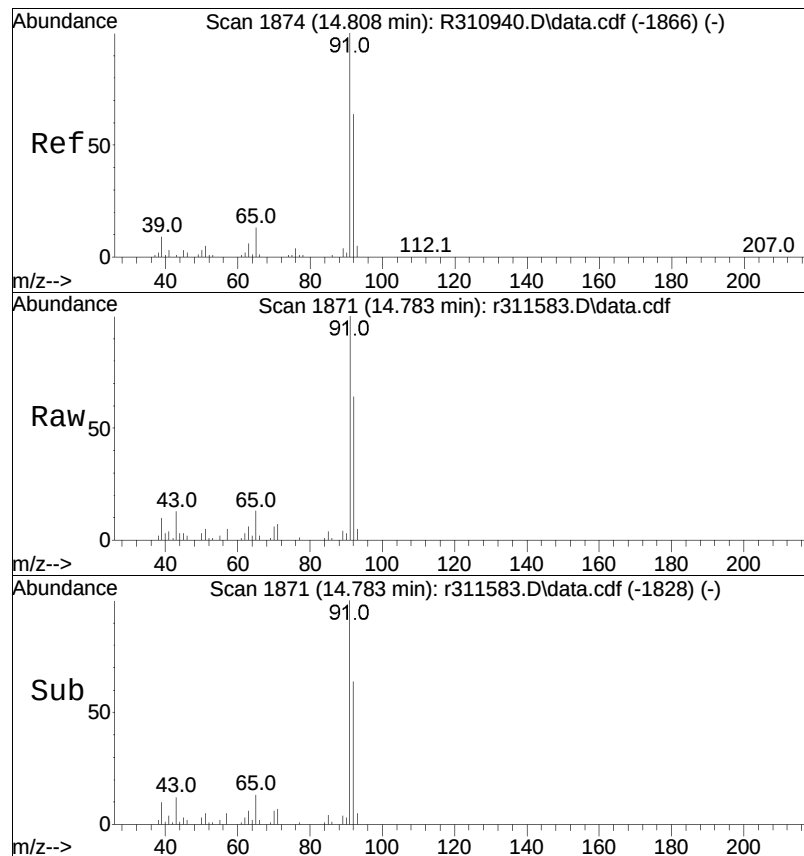




#64
 4-methyl-2-pentanone
 Concen: 0.36 ppbV
 RT: 13.725 min Scan# 1744
 Delta R.T. 0.058 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

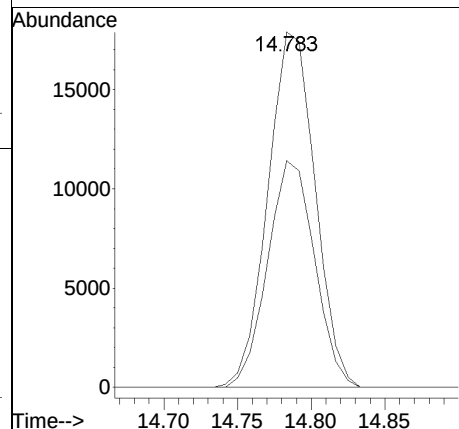
Tgt	Ion	Resp	Lower	Upper
43	100	17339		
58	38.9		31.8	47.6
100	14.8		12.8	19.2

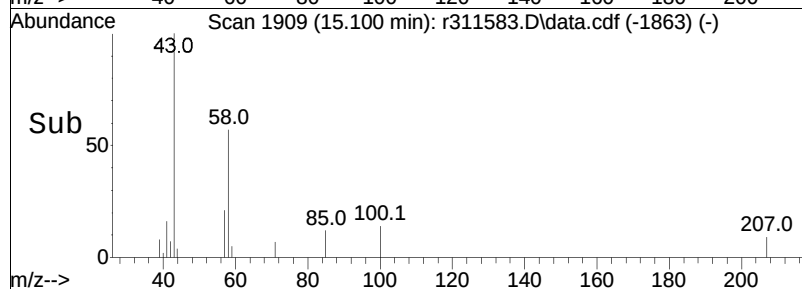
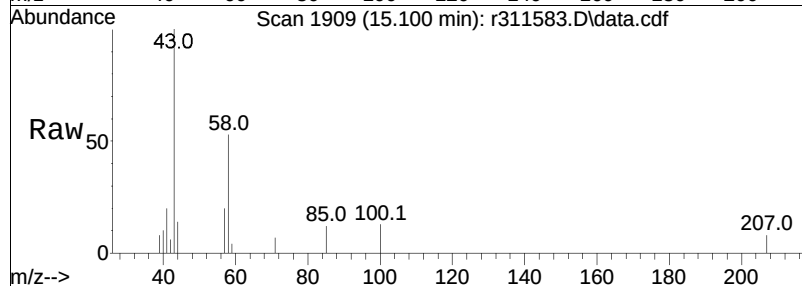
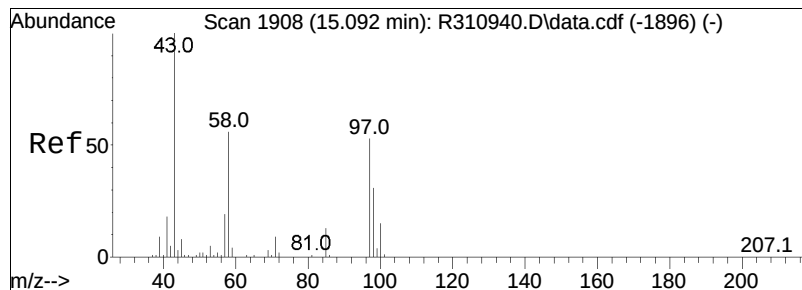




#68
 toluene
 Concen: 0.61 ppbV
 RT: 14.783 min Scan# 1871
 Delta R.T. 0.025 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

Tgt	Ion	Resp	Lower	Upper
91	100	39952		
92	63.8	51.8	77.8	





#72

2-hexanone

Concen: 0.20 ppbV

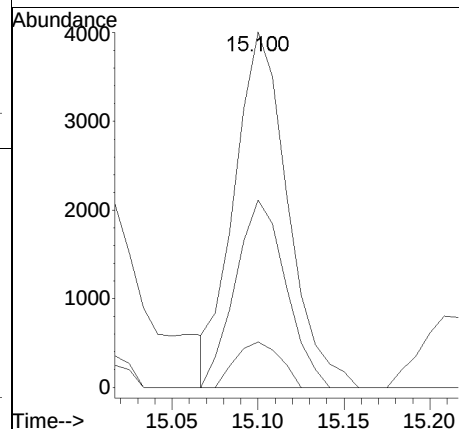
RT: 15.100 min Scan# 1909

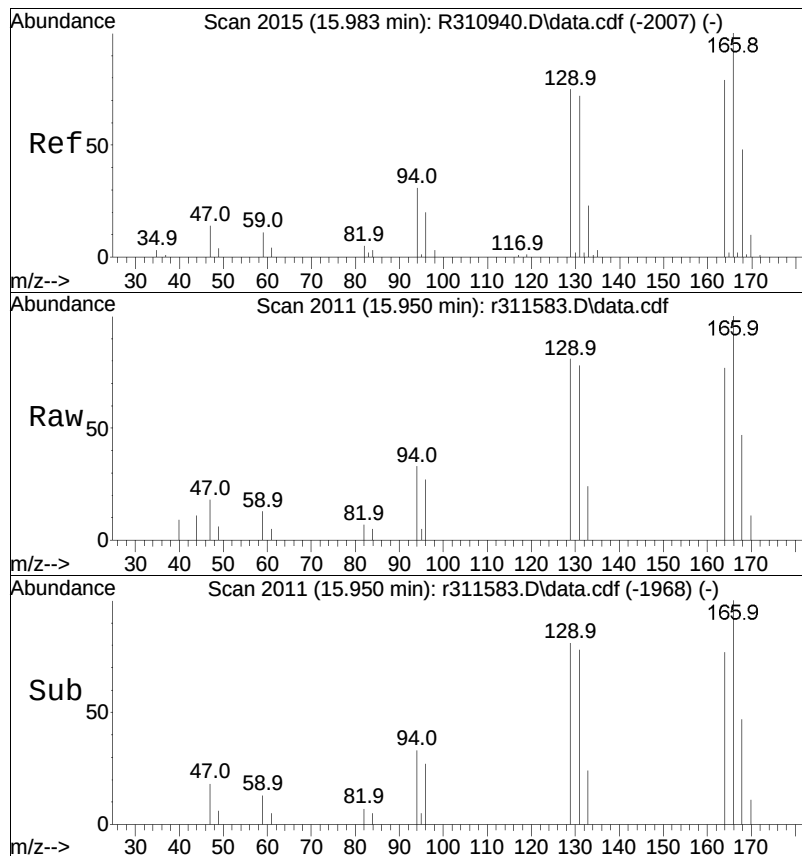
Delta R.T. 0.050 min

Lab File: r311583.D

Acq: 17 Sep 2020 10:32 PM

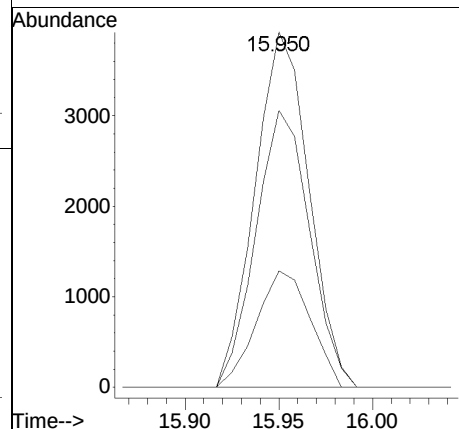
Tgt Ion:	43	Resp:	8686
Ion Ratio	Lower	Upper	
43	100		
58	52.7	45.6	68.4
100	12.8	10.5	15.7

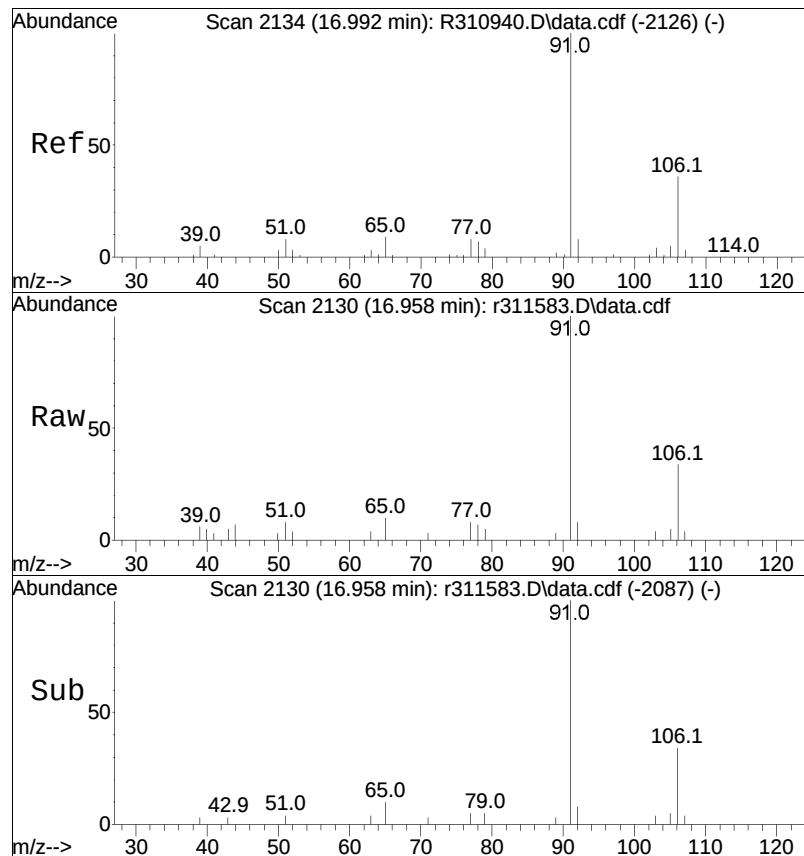




#78
 tetrachloroethene
 Concen: 0.30 ppbV
 RT: 15.950 min Scan# 2011
 Delta R.T. 0.025 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

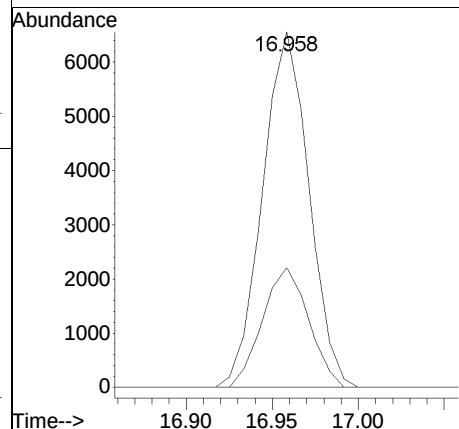
Tgt Ion:	166	Resp:	7852
Ion Ratio	Lower	Upper	
166	100		
131	78.0	55.7	83.5
94	32.8	23.4	35.0

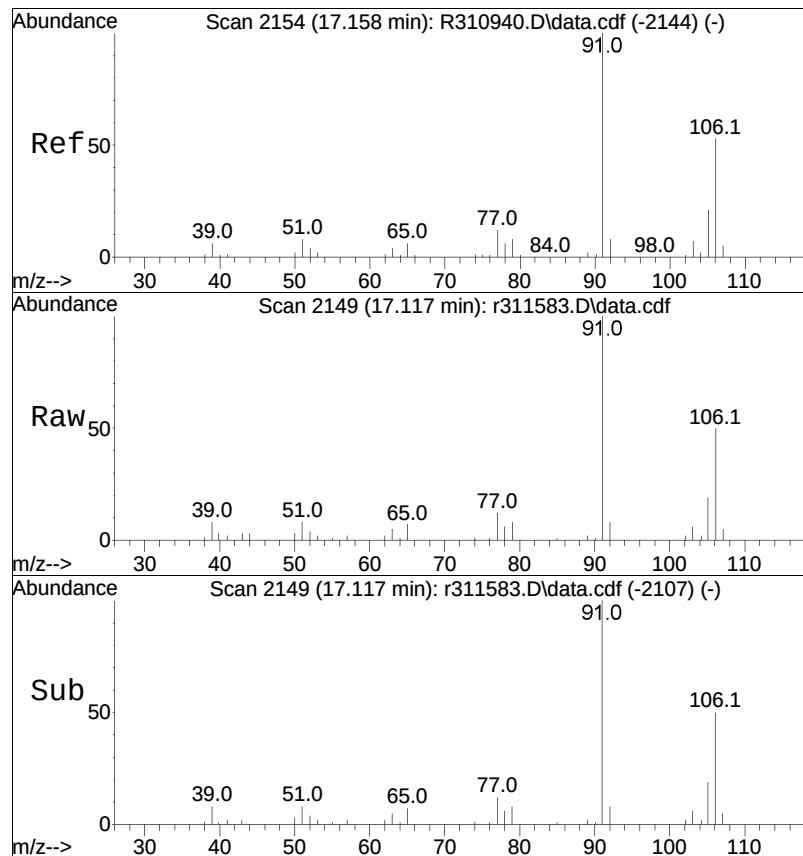




#81
ethylbenzene
Concen: 0.16 ppbV
RT: 16.958 min Scan# 2130
Delta R.T. 0.025 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

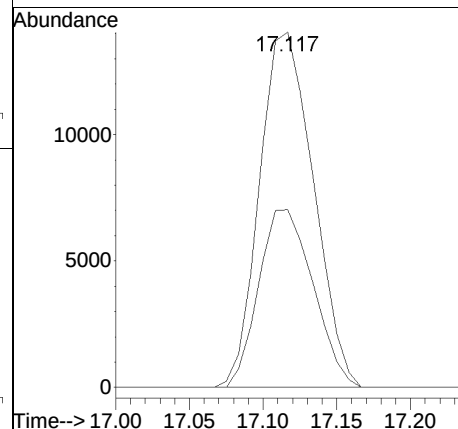
Tgt	Ion	Resp	Lower	Upper
91	100	12306		
106	33.7	31.8	47.8	

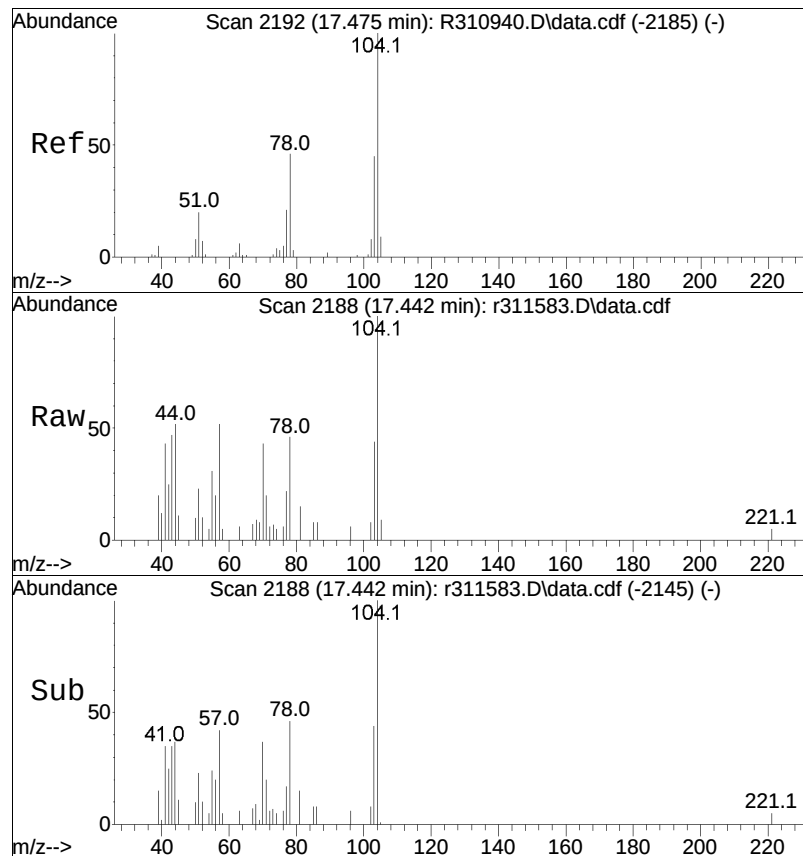




#83
 m+p-xylene
 Concen: 0.58 ppbV
 RT: 17.117 min Scan# 2149
 Delta R.T. 0.017 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

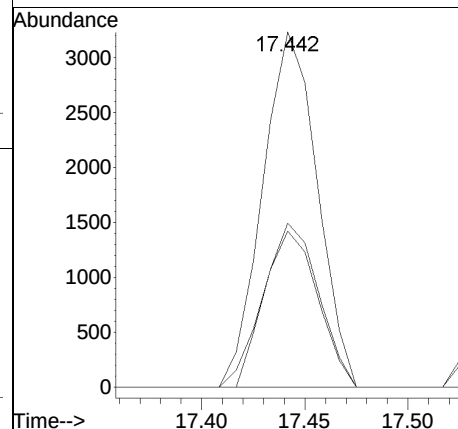
Tgt	Ion	Resp	Lower	Upper
91	100	35782		
106	50.0	47.6	71.4	

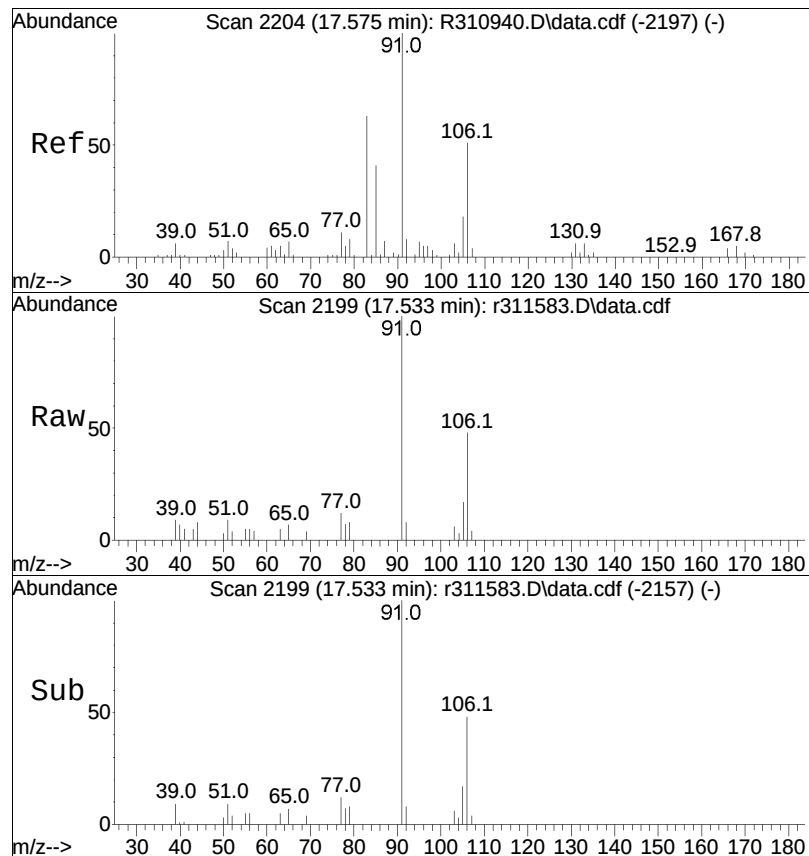




#85
styrene
Concen: 0.11 ppbV
RT: 17.442 min Scan# 2188
Delta R.T. 0.025 min
Lab File: r311583.D
Acq: 17 Sep 2020 10:32 PM

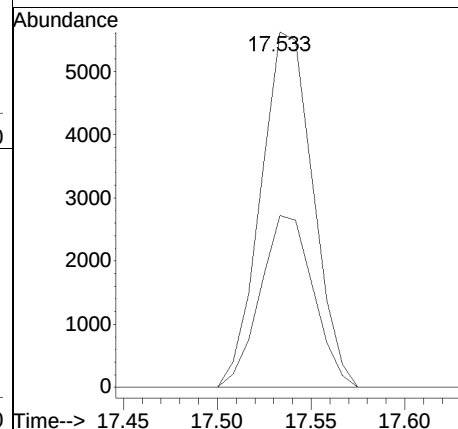
Tgt Ion	Ratio	Lower	Upper
104	100		
103	44.0	34.2	51.4
78	46.2	37.5	56.3

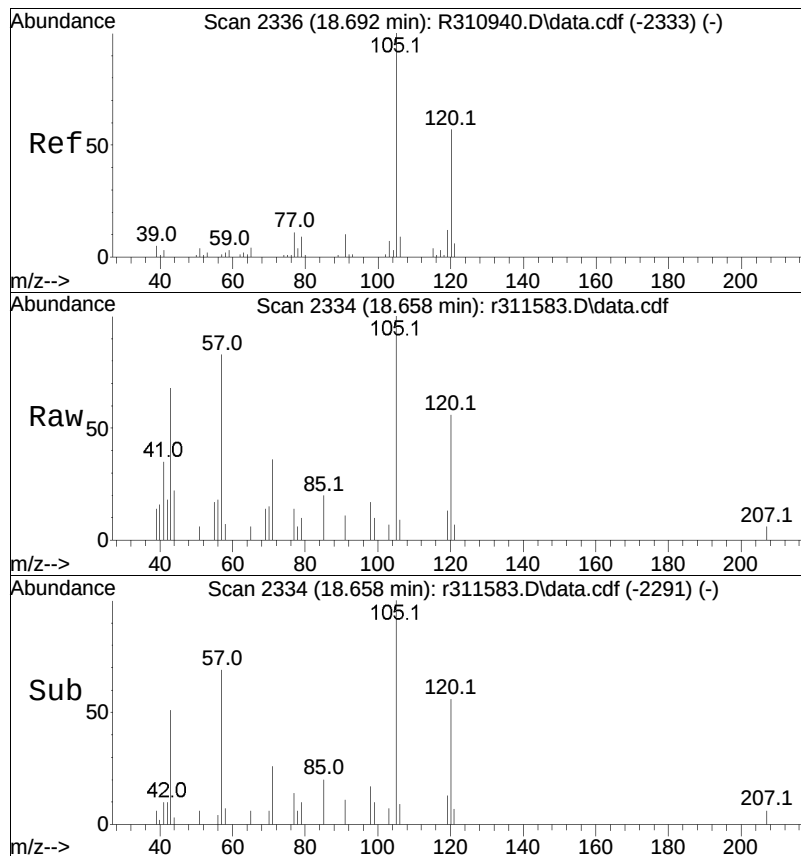




#87
 o-xylene
 Concen: 0.18 ppbV
 RT: 17.533 min Scan# 2199
 Delta R.T. 0.017 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

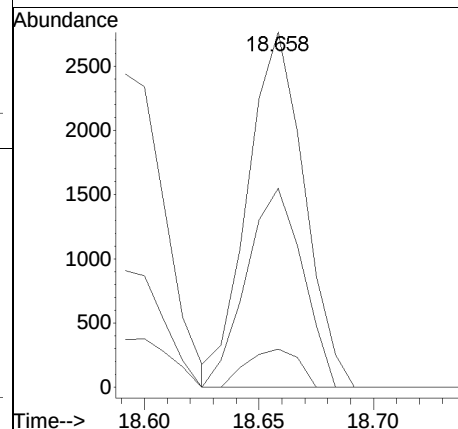
Tgt Ion:	91	Resp:	10893
Ion Ratio	Lower	Upper	
91	100		
106	48.4	45.4	68.0

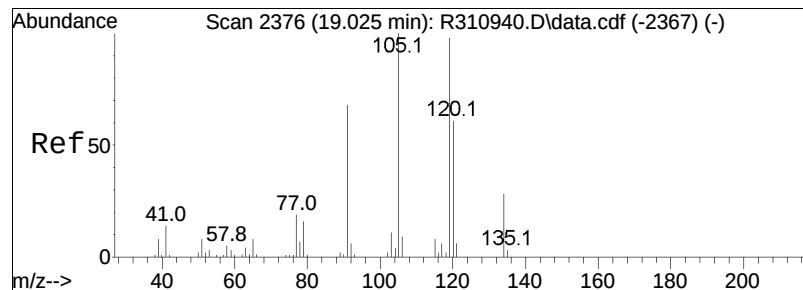




#97
 1,3,5-trimethylbenzene
 Concen: 0.06 ppbV
 RT: 18.658 min Scan# 2334
 Delta R.T. 0.025 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

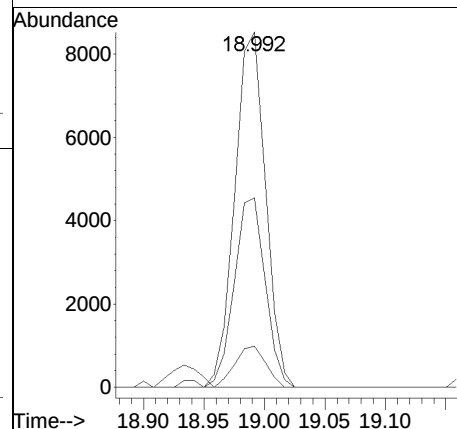
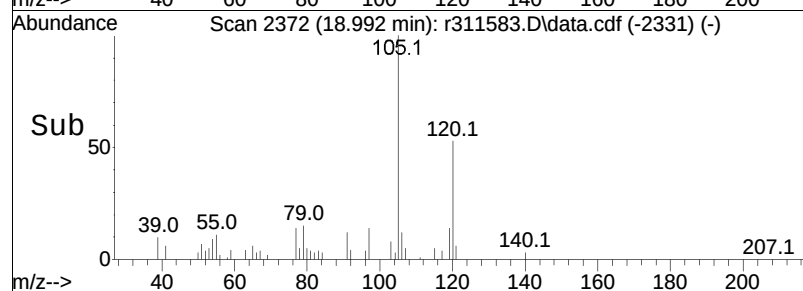
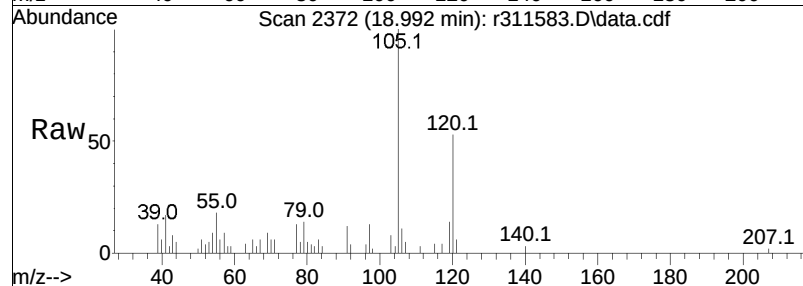
Tgt Ion	Ratio	Lower	Upper
105	100		
120	56.0	44.2	66.2
91	10.8	7.0	10.6





#99
 1,2,4-trimethylbenzene
 Concen: 0.21 ppbV m
 RT: 18.992 min Scan# 2372
 Delta R.T. 0.025 min
 Lab File: r311583.D
 Acq: 17 Sep 2020 10:32 PM

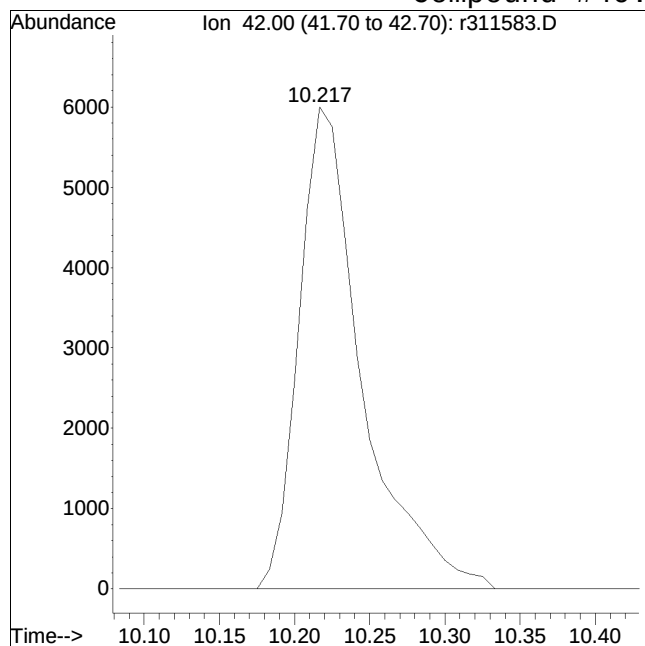
Tgt Ion	Ratio	Lower	Upper
105	100		
120	53.3	49.4	74.0
91	11.6	54.6	81.8#



Manual Integration Report

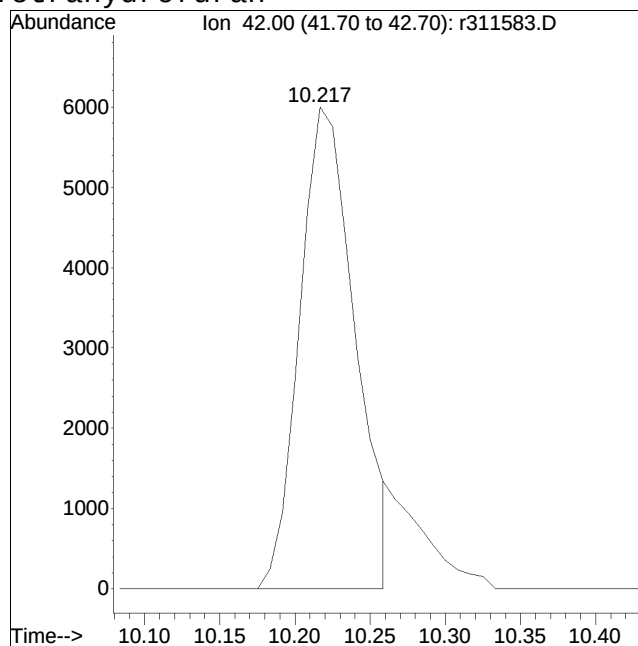
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311583.D Operator : AIRPIAN03:TS
Date Inj'd : 9/17/2020 0:0: 2 Instrument :
Sample : WG1411312-5,3,250,250 Quant Date : 9/18/2020 5:24 am

Compound #40: Tetrahydrofuran



Original Peak Response = 17532

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

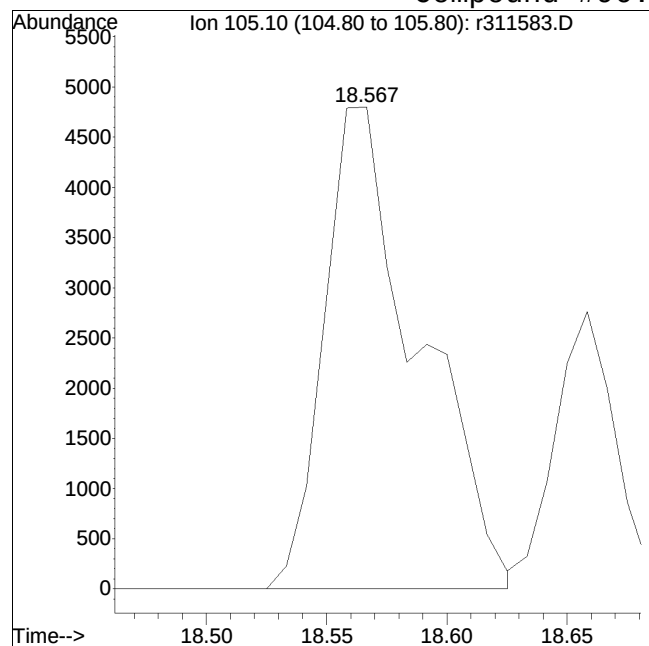


Manual Peak Response = 15375 M6

Manual Integration Report

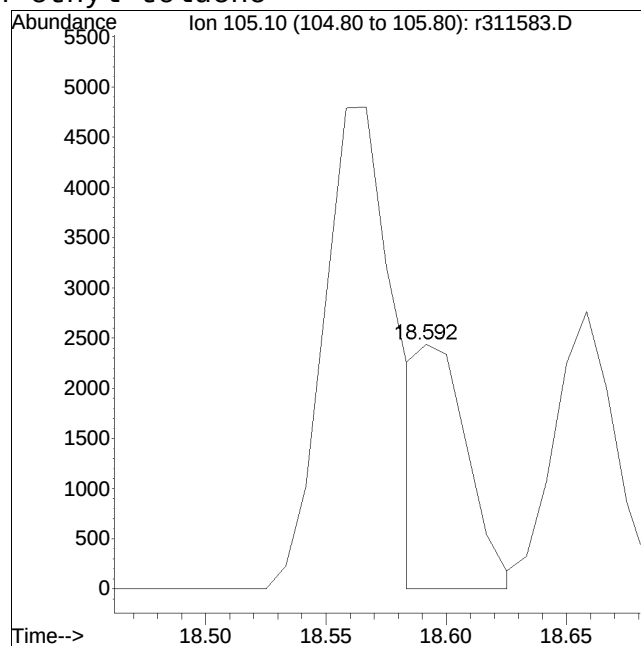
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311583.D Operator : AIRPIAN03:TS
Date Inj'd : 9/17/2020 0:0: 2 Instrument :
Sample : WG1411312-5,3,250,250 Quant Date : 9/18/2020 5:24 am

Compound #96: 4-ethyl toluene



Original Peak Response = 13082

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

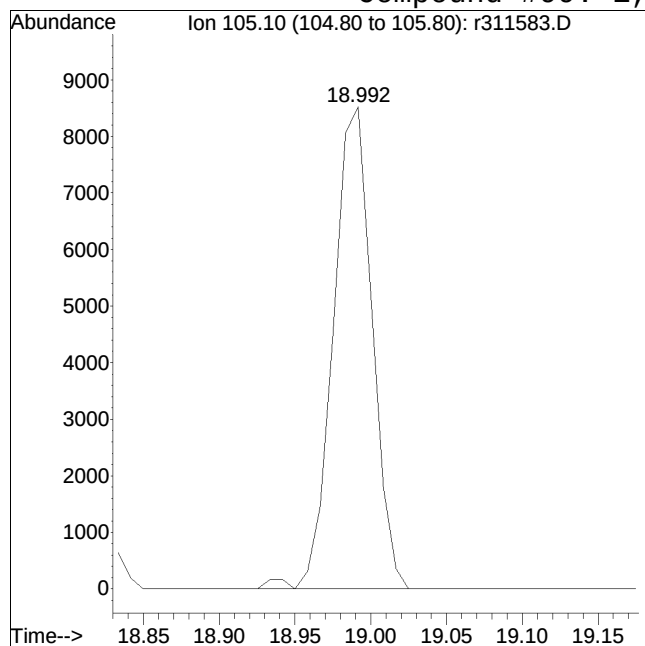


Manual Peak Response = 3471 M6

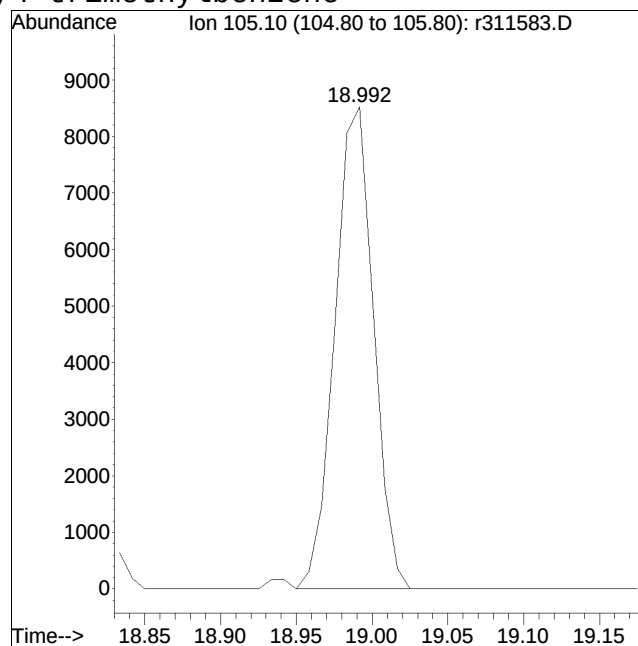
Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200911.M
Data File : r311583.D Operator : AIRPIAN03:TS
Date Inj'd : 9/17/2020 0:0: 2 Instrument :
Sample : WG1411312-5,3,250,250 Quant Date : 9/18/2020 5:24 am

Compound #99: 1,2,4-trimethylbenzene



Original Peak Response = 15268



Manual Peak Response = 15101 M6

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

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)

Sep 18 2020, 02:04 pm

Work Group: WG1411312 for Department: 3 GC/MS

Created: 17-SEP-20 Due: Operator: EW

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2037830-01	SV-1	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2037830-02	SV-2	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2037830-04	SV-4	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2037830-05	SV-5	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2037830-06	0A-1	S T015-LL	AIR	DONE	U	1011	0918	S0	Can-6
L2037872-01	061/LSV-7	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2037872-02	062/LSV-1	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2037878-01	SVE-INFLUENT_091120	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2037878-02	SVE-EFFLUENT_091120	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-6
L2038006-01	EFF-01	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-2.7
L2038039-01	SV-01	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-2.7
L2038039-02	SV-02	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-2.7
L2038039-03	SV-03	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-2.7
L2038039-04	SV-04	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-2.7
L2038039-05	SV-05	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-2.7
L2038039-06	SV-06	S T015-LL	SOIL_VAPOR	DONE	U	1011	0918	S0	Can-2.7
WG1411312-1	MS BFB Tune Standard	S T015-LL	AIR	DONE	U				
WG1411312-1	MS BFB Tune Standard	S T015-LL	SOIL_VAPOR	DONE	U				
WG1411312-2	Continuing Calibrati	S T015-LL	SOIL_VAPOR	DONE	U				
WG1411312-2	Continuing Calibrati	S T015-LL	AIR	DONE	U				
WG1411312-3	Laboratory Control S	S T015-LL	AIR	DONE	U				
WG1411312-3	Laboratory Control S	S T015-LL	SOIL_VAPOR	DONE	U				
WG1411312-4	Laboratory Method Bl	S T015-LL	SOIL_VAPOR	DONE	U				
WG1411312-4	Laboratory Method Bl	S T015-LL	AIR	DONE	U				
WG1411312-5	Duplicate Sample	S T015-LL	SOIL_VAPOR	DONE	U				
WG1411312-5	Duplicate Sample	S T015-LL	AIR	DONE	U				
Comments:									
WG1411312-5	L2038039-02								

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano3

Internal Standard/Surrogate IDs: SS20-009 / SS20-025

Date: 09/11/20

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: EW

Sequence File Name: 200911.S

SIM ICAL# 17115

Full Scan ICAL# 17116

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	BA3091101	TO15_SFS.qgm	R311444.qgd	250 mL			NA
1	BA3091101	TO15_SFS.qgm	R311445.qgd	250 mL			NA
1	TA3091101	TO15_SFS.qgm	R311446.qgd	250 mL	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R311447.qgd	50 mL SS20-029D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R311448.qgd	125 mL SS20-029D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R311449.qgd	250 mL SS20-029D	SIM ONLY	DEFAULT	NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R311450.qgd	50 mL SS20-029C		DEFAULT	NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R311451.qgd	125 mL SS20-029C		DEFAULT	NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R311452.qgd	250 mL SS20-029C		DEFAULT	NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R311453.qgd	125 mL SS20-029B1		DEFAULT	NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R311454.qgd	250 mL SS20-029B1		DEFAULT	NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R311455.qgd	50 mL SS20-029A		DEFAULT	NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R311456.qgd	125 mL SS20-029A		DEFAULT	NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R311457.qgd	250 mL SS20-029A	LL ONLY	DEFAULT	NA
1	BA3091101	TO15_SFS.qgm	R311458.qgd	250 mL		DEFAULT	NA
1	BA3091102	TO15_SFS.qgm	R311459.qgd	250 mL		DEFAULT	NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R311460.qgd	250 mL SS20-031F	LL ICV	DEF-ICV-AP2	NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R311461.qgd	125 mL SS20-031F	SIM ICV	DEF-ICV-AP2	NA

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: <u>Airpiano3</u>	Internal Standard/Surrogate IDs: <u>SS20-009 / SS20-025</u>	
Date: <u>09/17/20</u>	Internal Standard/Surrogate Volume: <u>100 ml</u>	
Analyst Initials: <u>EW</u>	Sequence File Name: <u>200917.S</u>	

SIM ICAL# 17115		Full Scan ICAL# 17116		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	TA3091701	TO15_SFS.qgm	R311569.qgd	250 mL	RE-TUNE CHECK; DO NOT USE		NA
1	TA3091702	TO15_SFS.qgm	R311570.qgd	250 mL	TUNE		NA
2	CA3091701	TO15_SFS.qgm	R311571.qgd	250mL SS20-029B3	NJ CC FAILED		NA
3	CTO15-LLSTD10	TO15_SFS.qgm	R311572.qgd	250 mL SS20-031F	LL LCS		NA
3	CTO15-SIMSTD5	TO15_SFS.qgm	R311573.qgd	125 mL SS20-031F	SIM LCS		NA
1	BA3091701	TO15_SFS.qgm	R311574.qgd	250 mL	LL BLANK		NA
1	BA3091702	TO15_SFS.qgm	R311575.qgd	250 mL	SIM BLANK		Y
1	L2037830-06,3,250,250	TO15_SFS.qgm	R311576.qgd	WG1411312,ICAL17116		NY	Y
2	L2037830-01,3,250,250	TO15_SFS.qgm	R311577.qgd	WG1411312,ICAL17116	DO NOT USE; CO2	NY	Y
3	L2037830-02,3,250,250	TO15_SFS.qgm	R311578.qgd	WG1411312,ICAL17116	TCFM OVERCAL	NY	Y
4	L2037830-04D,3,60,250	TO15_SFS.qgm	R311579.qgd	WG1411312,ICAL17116	T	NY	Y
5	L2037830-05,3,250,250	TO15_SFS.qgm	R311580.qgd	WG1411312,ICAL17116		NY	Y
6	L2038039-01,3,250,250	TO15_SFS.qgm	R311581.qgd	WG1411312,ICAL17116		NY	Y
7	L2038039-02,3,250,250	TO15_SFS.qgm	R311582.qgd	WG1411312,ICAL17116		NY	Y
7	L2038039-02DUP,3,250,250	TO15_SFS.qgm	R311583.qgd	WG1411312,ICAL17116	LL DUP	NY	Y
8	L2038039-03,3,250,250	TO15_SFS.qgm	R311584.qgd	WG1411312,ICAL17116		NY	Y
9	L2038039-04,3,250,250	TO15_SFS.qgm	R311585.qgd	WG1411312,ICAL17116		NY	Y
10	L2038039-05,3,250,250	TO15_SFS.qgm	R311586.qgd	WG1411312,ICAL17116		NY	Y
11	L2038039-06,3,250,250	TO15_SFS.qgm	R311587.qgd	WG1411312,ICAL17116		NY	Y
12	L2038006-01D,3,100,250	TO15_SFS.qgm	R311588.qgd	WG1411312,ICAL17116	T	STD + NAPH	Y

Alpha Analytical Air Lab Instrument Run Log

13	L2037872-01D,3,150,250	TO15_SFS.qgm	R311589.qgd	WG1411312,ICAL17116	T	NY	Y
14	L2037872-02,3,250,250	TO15_SFS.qgm	R311590.qgd	WG1411312,ICAL17116		NY	Y
15	L2037878-01D,3,0.19,250	TO15_SFS.qgm	R311591.qgd	WG1411312,ICAL17116	T	NY	Y
16	L2037878-02D,3,10,250	TO15_SFS.qgm	R311592.qgd	WG1411312,ICAL17116	T	NY	Y
3	L2037830-02D,3,50,250	TO15_SFS.qgm	R311593.qgd	WG1411312,ICAL17116		TCFM ONLY	Y
2	L2037830-01D,3,25,250	TO15_SFS.qgm	R311594.qgd	WG1411312,ICAL17116		NY	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 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed