



www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2024597

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

Table of Contents

New York ASP Category B Data Deliverable Package.....	1
Table of Contents	2
Sample ID Cross Reference	4
SDG Narrative	5
Data Qualifier Definitions	7
Instrument Information	10
Sample Log-in Sheet	13
Lims COC (LN01)	14
External Chain of Custody	15
Supporting Documentation	16
Air Canister Report	17
Air Canister Certification Results	18
Organics Analysis	26
Volatile Organics in Air TO-15 Low Level	27
Volatiles QC Summary	28
Form 3 - Organics	29
Form 4 - Organics	32
Form 5 - Organics	33
Form 8 - Organics	35
MDL Study - Volatile Organics in Air: TO-15	36
TO15-LL	36
TO15-SIM	0
Volatiles Sample Data	39
Form 1 - Organics	40
071/AMBIENT-2 (L2024597-01) Analyzed: 06/16/20 16:48	52
073/LSV-13 (L2024597-02) Analyzed: 06/16/20 20:46	78
076/LSV-11 (L2024597-03) Analyzed: 06/16/20 21:26	114
Volatile Standards Data	153
Initial Calibration	154
Form 6 - Organics	155
ICAL for AIRLAB16 on 06/10/20 ICAL16872	159
Initial Calibration Summary - Cal Date: 06/10/20 00:00	159
BFB Tune Injected on: 06/09/20 16:46	163
STD0.2 Injected on: 06/09/20 19:26	164
STD0.5 Injected on: 06/09/20 20:06	175
STD1.0 Injected on: 06/09/20 20:47	183
STD5.0 Injected on: 06/09/20 21:27	196
STD010 Injected on: 06/09/20 22:09	203
STD020 Injected on: 06/09/20 22:48	209
STD050 Injected on: 06/09/20 23:27	216
STD100 Injected on: 06/10/20 00:09	223
ICV Summary Injected on: 06/10/20 08:33	229
ICV Quant Injected on: 06/10/20 08:33	232
Continuing Calibration	239
Form 7 - Organics	240
CC Summary - AIRLAB16 Run: 06/16/20 11:48	243
CC Quant - AIRLAB16 Run: 06/16/20 11:48	246
bfb tune - Inst. AIRLAB16 06/16/20 11:06	252
Volatiles Raw QC Data	253
Laboratory Method BI (WG1382260-4) Analyzed: 06/16/20 14:42	254

Table of Contents

LCS Summary for WG1382260-3	262
Laboratory Control S (WG1382260-3) Analyzed: 06/16/20 12:31	265
Duplicate Sample (WG1382260-5) Analyzed: 06/16/20 19:27	332
Air Calculations	364
QC Batch WG1382260	366
ICAL Sequence for AIRLAB16 on 10-JUN-2020 00:00 ICAL16872	367
Sequence Log	369

Project Name: BROOME ST.
Project Number: 100646801

Lab Number: L2024597
Report Date: 06/17/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2024597-01	071/AMBIENT-2	AIR	NEW YORK, NY	06/11/20 16:40	06/11/20
L2024597-02	073/LSV-13	SOIL_VAPOR	NEW YORK, NY	06/11/20 13:12	06/11/20
L2024597-03	076/LSV-11	SOIL_VAPOR	NEW YORK, NY	06/11/20 14:27	06/11/20
L2024597-04	UNUSED CAN #3281	SOIL_VAPOR	NEW YORK, NY		06/11/20

Project Name: BROOME ST.
Project Number: 100646801

Lab Number: L2024597
Report Date: 06/17/20

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: BROOME ST.
Project Number: 100646801

Lab Number: L2024597
Report Date: 06/17/20

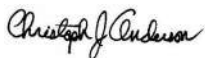
Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on June 11, 2020. The canister certification results are provided as an addendum.

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: 06/17/20

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: BROOME ST.
Project Number: 100646801

Lab Number: L2024597
Report Date: 06/17/20

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

Terms

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

Report Format: Data Usability Report



Project Name: BROOME ST.
Project Number: 100646801

Lab Number: L2024597
Report Date: 06/17/20

Data Qualifiers

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



Volatile Organics Instruments

Volatile Organics:

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

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

Volatile Organics: VPH

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

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

Volatile Organics: PIANO

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

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

Volatile Organics: Dissolved Gas

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

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

Autosampler: LEAP Headspace

Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

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

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

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

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

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



Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

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

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

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

Pesticides/PCB/Herbicides:

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

Petroleum/EPH:

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



Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

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

Semivolatile Organics (8270):

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

Semivolatile Organics (8270 SIM):

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

Semivolatile Organics (1,4-Dioxane):

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

Semivolatile Organics (209 Congener):

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

Semivolatile Organics (8081):

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

Semivolatile Organics (8082):

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

Semivolatile Organics (SHC Extractables):

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



Sample Delivery Group Summary

Alpha Job Number : L2024597

Received : 11-JUN-2020
Reviewer : Chris Anderson

Account Name : Langan Engineering & Environmental
Project Number : 100646801
Project Name : BROOME ST.

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

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

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between sample labels & COC?	NO
5) Are samples in appropriate containers for requested analysis?	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
Jun 17 2020, 05:06 pm

Login Number: L2024597

Account: LANGAN-NJ Langan Engineering & Environmental Project: 100646801

Received: 11JUN20 Due Date: 18JUN20

Sample #	Client ID	Mat PR Collected
L2024597-01 071/AMBIENT-2		10 S0 11JUN20 16:40
ASP-B Package Due Date: 06/18/20		
ASP-B, CAN-RENT, FLOW-RENT, T015-LL		
L2024597-02 073/LSV-13		11 S0 11JUN20 13:12
Package Due Date: 06/18/20		
CAN-RENT, FLOW-RENT, T015-LL		
L2024597-03 076/LSV-11		11 S0 11JUN20 14:27
Package Due Date: 06/18/20		
CAN-RENT, FLOW-RENT, T015-LL		
L2024597-04 UNUSED CAN #3281		11 S0
Package Due Date: 06/18/20		
CAN-RENT, CLEAN-FEE, FLOW-RENT		

Page 1

Logged By: Dylan Snook



AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

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: 973-4860-4900
Fax:
Email: asandvo@langan.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

Project Information

Project Name: Broome Street
Project Location: New York, NY
Project #: 100646801
Project Manager: Ben Rao
ALPHA Quote #:

Turn-Around Time

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

Date Due:

Time:

Date Rec'd in Lab:

6/12/20

Report Information - Data Deliverables

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

ALPHA Job #: L2024597

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

ANALYSIS

TO-15
TO-15 SIM
APH
Fixed Gases
Sulfides & Mercaptans by TO-15

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
24597-01	071 / Ambient-2	6/11/2020	0910	1640	-29.47	-4.73	AA	EA	6L	3352	01653	✓					CAT B
02	073 / LSV-13		1102	1312	-29.78	-4.41	SV				615	01742	✓				
03	076 / LSV-11		1217	1427	-30.25	-4.94	✓				760	0798	✓				
	EA																
	EA																
	EA																
	EA																
	EA																
	EA																
	EA																
	EA																

*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:

Esther [Signature] Langan
MSH MSHP

6/11/2020 1830
6-11-20 1955
0300

MA MGAR
D [Signature]

6-11-20 1835
6/12/20 0300

Supporting Documentation

Project Name: BROOME ST.

Lab Number: L2024597

Project Number: 100646801

Report Date: 06/17/20

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
L2024597-01	071/AMBIENT-2	01653	Flow 4	06/11/20	323610		-	-	-	Pass	13.3	12.7	5
L2024597-01	071/AMBIENT-2	3382	6.0L Can	06/11/20	323610	L2022514-03	Pass	-29.5	-4.0	-	-	-	-
L2024597-02	073/LSV-13	01742	Flow 2	06/11/20	323610		-	-	-	Pass	40.0	43.2	8
L2024597-02	073/LSV-13	615	6.0L Can	06/11/20	323610	L2022514-03	Pass	-29.3	-5.4	-	-	-	-
L2024597-03	076/LSV-11	0798	Flow 2	06/11/20	323610		-	-	-	Pass	40.0	39.3	2
L2024597-03	076/LSV-11	760	6.0L Can	06/11/20	323610	L2022514-03	Pass	-29.3	-5.5	-	-	-	-
L2024597-04	UNUSED CAN #3281	01556	Flow 2	06/11/20	323610		-	-	-	Pass	40.0	36.0	11
L2024597-04	UNUSED CAN #3281	3281	6.0L Can	06/11/20	323610	L2022514-03	Pass	-29.3	-30.8	-	-	-	-

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

Lab Number: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03
 Client ID: CAN 2776 SHELF 36
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 06/02/20 19:55
 Analyst: RY

Date Collected: 06/01/20 16:00
 Date Received: 06/02/20
 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: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03
 Client ID: CAN 2776 SHELF 36
 Sample Location:

Date Collected: 06/01/20 16:00
 Date Received: 06/02/20
 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: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03
 Client ID: CAN 2776 SHELF 36
 Sample Location:

Date Collected: 06/01/20 16:00
 Date Received: 06/02/20
 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: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03
 Client ID: CAN 2776 SHELF 36
 Sample Location:

Date Collected: 06/01/20 16:00
 Date Received: 06/02/20
 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: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03 Date Collected: 06/01/20 16:00
Client ID: CAN 2776 SHELF 36 Date Received: 06/02/20
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	90		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	89		60-140



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

Lab Number: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03
 Client ID: CAN 2776 SHELF 36
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 06/02/20 19:55
 Analyst: RY

Date Collected: 06/01/20 16:00
 Date Received: 06/02/20
 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: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03
 Client ID: CAN 2776 SHELF 36
 Sample Location:

Date Collected: 06/01/20 16:00
 Date Received: 06/02/20
 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: L2022514
Report Date: 06/17/20

Air Canister Certification Results

Lab ID: L2022514-03
 Client ID: CAN 2776 SHELF 36
 Sample Location:

Date Collected: 06/01/20 16:00
 Date Received: 06/02/20
 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	91		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	91		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 : L2024597
 Project Name : BROOME ST. Project Number : 100646801
 Matrix : AIR
 LCS Sample ID : WG1382260-3 Analysis Date : 06/16/20 12:31 File ID : r1617678
 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	9.67	97				-	70-130	-
Chloromethane	10	9.77	98				-	70-130	-
Freon-114	10	10.0	100				-	70-130	-
Vinyl chloride	10	9.75	98				-	70-130	-
1,3-Butadiene	10	10.2	102				-	70-130	-
Bromomethane	10	9.98	100				-	70-130	-
Chloroethane	10	9.95	100				-	70-130	-
Ethanol	50	46.1	92				-	40-160	-
Vinyl bromide	10	9.96	100				-	70-130	-
Acetone	50	40.8	82				-	40-160	-
Trichlorofluoromethane	10	9.96	100				-	70-130	-
Isopropanol	25	21.6	86				-	40-160	-
1,1-Dichloroethene	10	10.0	100				-	70-130	-
Tertiary butyl Alcohol	10	10.5	105				-	70-130	-
Methylene chloride	10	9.57	96				-	70-130	-
3-Chloropropene	10	11.0	110				-	70-130	-
Carbon disulfide	10	9.46	95				-	70-130	-
Freon-113	10	10.2	102				-	70-130	-
trans-1,2-Dichloroethene	10	9.89	99				-	70-130	-
1,1-Dichloroethane	10	10.1	101				-	70-130	-
Methyl tert butyl ether	10	9.88	99				-	70-130	-
2-Butanone	10	10.6	106				-	70-130	-
cis-1,2-Dichloroethene	10	10.3	103				-	70-130	-
Ethyl Acetate	10	11.2	112				-	70-130	-
Chloroform	10	9.77	98				-	70-130	-
Tetrahydrofuran	10	10.7	107				-	70-130	-



Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Langan Engineering & Environmental Lab Number : L2024597
 Project Name : BROOME ST. Project Number : 100646801
 Matrix : AIR
 LCS Sample ID : WG1382260-3 Analysis Date : 06/16/20 12:31 File ID : r1617678
 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	9.15	92				-	70-130	-
n-Hexane	10	9.97	100				-	70-130	-
1,1,1-Trichloroethane	10	9.29	93				-	70-130	-
Benzene	10	9.52	95				-	70-130	-
Carbon tetrachloride	10	9.44	94				-	70-130	-
Cyclohexane	10	10.1	101				-	70-130	-
1,2-Dichloropropane	10	10.2	102				-	70-130	-
Bromodichloromethane	10	9.76	98				-	70-130	-
1,4-Dioxane	10	10.0	100				-	70-130	-
Trichloroethene	10	10.0	100				-	70-130	-
2,2,4-Trimethylpentane	10	10.2	102				-	70-130	-
Heptane	10	10.4	104				-	70-130	-
cis-1,3-Dichloropropene	10	10.3	103				-	70-130	-
4-Methyl-2-pentanone	10	10.3	103				-	70-130	-
trans-1,3-Dichloropropene	10	8.63	86				-	70-130	-
1,1,2-Trichloroethane	10	10.4	104				-	70-130	-
Toluene	10	10.4	104				-	70-130	-
2-Hexanone	10	11.0	110				-	70-130	-
Dibromochloromethane	10	11.3	113				-	70-130	-
1,2-Dibromoethane	10	10.8	108				-	70-130	-
Tetrachloroethene	10	10.7	107				-	70-130	-
Chlorobenzene	10	10.6	106				-	70-130	-
Ethylbenzene	10	10.8	108				-	70-130	-
p/m-Xylene	20	21.5	108				-	70-130	-
Bromoform	10	11.6	116				-	70-130	-
Styrene	10	11.0	110				-	70-130	-



Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : Langan Engineering & Environmental Lab Number : L2024597
 Project Name : BROOME ST. Project Number : 100646801
 Matrix : AIR
 LCS Sample ID : WG1382260-3 Analysis Date : 06/16/20 12:31 File ID : r1617678
 LCSD Sample ID : Analysis Date : File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,1,2,2-Tetrachloroethane	10	11.3	113				-	70-130	-
o-Xylene	10	10.8	108				-	70-130	-
4-Ethyltoluene	10	11.2	112				-	70-130	-
1,3,5-Trimethylbenzene	10	11.0	110				-	70-130	-
1,2,4-Trimethylbenzene	10	11.5	115				-	70-130	-
Benzyl chloride	10	11.5	115				-	70-130	-
1,3-Dichlorobenzene	10	11.1	111				-	70-130	-
1,4-Dichlorobenzene	10	11.0	110				-	70-130	-
1,2-Dichlorobenzene	10	11.4	114				-	70-130	-
1,2,4-Trichlorobenzene	10	12.6	126				-	70-130	-
Hexachlorobutadiene	10	12.3	123				-	70-130	-



Method Blank Summary
Form 4
Air Volatiles

Client	: Langan Engineering & Environmental	Lab Number	: L2024597
Project Name	: BROOME ST.	Project Number	: 100646801
Lab Sample ID	: WG1382260-4	Lab File ID	: r1617680
Instrument ID	: AIRLAB16		
Matrix	: AIR	Analysis Date	: 06/16/20 14:42

Client Sample No.	Lab Sample ID	Analysis Date
WG1382260-3LCS	WG1382260-3	06/16/20 12:31
071/AMBIENT-2	L2024597-01	06/16/20 16:48
IA-2DUP	WG1382260-5	06/16/20 19:27
073/LSV-13	L2024597-02	06/16/20 20:46
076/LSV-11	L2024597-03	06/16/20 21:26

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L2024597
Project Name : BROOME ST.	Project Number : 100646801
Instrument ID : AIRLAB16	Analysis Date : 06/09/20 16:46
Tune Standard : WG1379955-1	Tune File ID : r1617536_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	14.1
75	30.0 - 66.0% of mass 95	35.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.4 (.6)1
174	50.0 - 120.0% of mass 95	64.2
175	4.0 - 9.0% of mass 174	4.4 (6.9)1
176	93.0 - 101% of mass 174	61.5 (95.8)1
177	5.0 - 9.0% of mass 176	3.8 (6.1)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	R1321630-1	R1617540	06/09/20 19:26
STD0.5	R1321630-2	R1617541	06/09/20 20:06
STD1.0	R1321630-3	R1617542	06/09/20 20:47
STD5.0	R1321630-4	R1617543	06/09/20 21:27
STD010	R1321630-5	R1617544	06/09/20 22:09
STD020	R1321630-6	R1617545	06/09/20 22:48
STD050	R1321630-7	R1617546	06/09/20 23:27
STD100	R1321630-8	R1617547	06/10/20 00:09
ICV Quant	R1321630-9	R1617550	06/10/20 08:33

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : Langan Engineering & Environmental	Lab Number : L2024597
Project Name : BROOME ST.	Project Number : 100646801
Instrument ID : AIRLAB16	Analysis Date : 06/16/20 11:06
Tune Standard : WG1382260-1	Tune File ID : r1617676_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	12.5
75	30.0 - 66.0% of mass 95	32.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.4 (.6)1
174	50.0 - 120.0% of mass 95	68.2
175	4.0 - 9.0% of mass 174	4.7 (6.9)1
176	93.0 - 101% of mass 174	64.3 (94.3)1
177	5.0 - 9.0% of mass 176	4.2 (6.6)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1382260-2CCAL	WG1382260-2	R1617677	06/16/20 11:48
WG1382260-3LCS	WG1382260-3	R1617678	06/16/20 12:31
WG1382260-4BLANK	WG1382260-4	R1617680	06/16/20 14:42
071/AMBIENT-2	L2024597-01	R1617682	06/16/20 16:48
WG1382260-5DUP	WG1382260-5	R1617686	06/16/20 19:27
073/LSV-13	L2024597-02	R1617688	06/16/20 20:46
076/LSV-11	L2024597-03	R1617689	06/16/20 21:26

Internal Standard Area and RT Summary

Form 8a

Air Volatiles

Client	: Langan Engineering & Environmental	Lab Number	: L2024597
Project Name	: BROOME ST.	Project Number	: 100646801
Instrument ID	: AIRLAB16	Analysis Date	: 06/16/20 11:48
Sample No	: WG1382260-2	Lab File ID	: R1617677

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1382260-2	312675	9.43	882052	11.73	116247	16.47
Upper Limit	437745	9.76	1234873	12.06	162746	16.80
Lower Limit	187605	9.10	529231	11.40	69748	16.14
Sample ID						
WG1382260-3 LCS	312116	9.43	885034	11.73	116487	16.46
WG1382260-4 BLANK	313561	9.43	887354	11.72	115388	16.47
071/AMBIENT-2	300790	9.43	859413	11.73	111618	16.47
IA-2 DUP	290184	9.44	840836	11.73	109865	16.47
073/LSV-13	295170	9.44	852322	11.73	110370	16.47
076/LSV-11	285550	9.44	825093	11.73	107979	16.47

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

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

* Values outside of QC limits





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

Volatile Organics in Air: TO-15 (AIR)

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

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

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



8 Walkup Drive, Westborough, Massachusetts 01581 • 508-898-9220 • www.alphalab.com

Westborough, MA • Mansfield, MA • Bangor, ME • Portsmouth, NH • Mahwah, NJ • Albany, NY • Buffalo, NY • Holmes, PA





Date Created: 11/22/19
Created By: Jason Hebert
File: PM7756-1
Page: 2

Volatile Organics in Air: TO-15 (AIR)

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

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

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



8 Walkup Drive, Westborough, Massachusetts 01581 • 508-898-9220 • www.alphalab.com

Westborough, MA • Mansfield, MA • Bangor, ME • Portsmouth, NH • Mahwah, NJ • Albany, NY • Buffalo, NY • Holmes, PA





Date Created: 11/22/19
Created By: Jason Hebert
File: PM7756-1
Page: 3

Volatile Organics in Air: TO-15 (AIR)

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

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

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



8 Walkup Drive, Westborough, Massachusetts 01581 • 508-898-9220 • www.alphalab.com

Westborough, MA • Mansfield, MA • Bangor, ME • Portsmouth, NH • Mahwah, NJ • Albany, NY • Buffalo, NY • Holmes, PA



Volatiles Sample Data

Results Summary Form 1 Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : BROOME ST.
 Lab ID : L2024597-01
 Client ID : 071/AMBIENT-2
 Sample Location : NEW YORK, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1617682
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 16:40
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 16:48
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.435	0.200	--	2.15	0.989	--	
74-87-3	Chloromethane	0.583	0.200	--	1.20	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	8.87	5.00	--	16.7	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	3.06	1.00	--	7.27	2.38	--	
75-69-4	Trichlorofluoromethane	0.206	0.200	--	1.16	1.12	--	
67-63-0	Isopropanol	1.68	0.500	--	4.13	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : BROOME ST.
 Lab ID : L2024597-01
 Client ID : 071/AMBIENT-2
 Sample Location : NEW YORK, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1617682
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 16:40
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 16:48
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
1330-20-7	Xylenes, Total	0.559	0.200	--	2.43	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	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.498	0.200	--	1.88	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.559	0.400	--	2.43	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 : BROOME ST.
 Lab ID : L2024597-01
 Client ID : 071/AMBIENT-2
 Sample Location : NEW YORK, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1617682
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 16:40
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 16:48
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 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

Results Summary

Form 1

Volatile Organics in Air

Client : Langan Engineering & Environmental
 Project Name : BROOME ST.
 Lab ID : L2024597-02
 Client ID : 073/LSV-13
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1617688
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 13:12
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 20:46
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.815	0.200	--	4.03	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	0.922	0.200	--	2.04	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	7.42	5.00	--	14.0	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	62.0	1.00	--	147	2.38	--	
75-69-4	Trichlorofluoromethane	0.300	0.200	--	1.69	1.12	--	
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	1.47	0.200	--	4.58	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	3.57	0.500	--	10.5	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	0.380	0.200	--	1.86	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 : BROOME ST.
 Lab ID : L2024597-02
 Client ID : 073/LSV-13
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1617688
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 13:12
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 20:46
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 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	1.21	0.200	--	4.26	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	0.845	0.200	--	2.70	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.318	0.200	--	1.09	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
1330-20-7	Xylenes, Total	3.56	0.200	--	15.5	0.869	--	
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	3.28	0.200	--	17.6	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.523	0.200	--	2.44	0.934	--	
142-82-5	Heptane	1.20	0.200	--	4.92	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	3.77	0.200	--	14.2	0.754	--	
591-78-6	2-Hexanone	0.470	0.200	--	1.93	0.820	--	
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	24.2	0.200	--	164	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.782	0.200	--	3.40	0.869	--	
179601-23-1	p/m-Xylene	2.56	0.400	--	11.1	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 : BROOME ST.
 Lab ID : L2024597-02
 Client ID : 073/LSV-13
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1617688
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 13:12
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 20:46
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 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	0.998	0.200	--	4.33	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	0.328	0.200	--	1.61	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	1.11	0.200	--	5.46	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 : BROOME ST.
 Lab ID : L2024597-03
 Client ID : 076/LSV-11
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1617689
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 14:27
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 21:26
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	57.2	0.200	--	283	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	1.08	0.200	--	2.39	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	9.41	5.00	--	17.7	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	172	1.00	--	409	2.38	--	
75-69-4	Trichlorofluoromethane	0.333	0.200	--	1.87	1.12	--	
67-63-0	Isopropanol	0.587	0.500	--	1.44	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	1.11	0.500	--	3.36	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	1.38	0.200	--	4.30	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	9.91	0.500	--	29.2	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	8.14	0.200	--	39.8	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 : BROOME ST.
 Lab ID : L2024597-03
 Client ID : 076/LSV-11
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1617689
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 14:27
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 21:26
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 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	1.57	0.200	--	5.53	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	0.970	0.200	--	3.10	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.284	0.200	--	0.978	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	2.88	0.200	--	12.5	0.869	--	
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	2.20	0.200	--	11.8	1.07	--	
540-84-1	2,2,4-Trimethylpentane	0.520	0.200	--	2.43	0.934	--	
142-82-5	Heptane	1.36	0.200	--	5.57	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	3.16	0.200	--	11.9	0.754	--	
591-78-6	2-Hexanone	1.87	0.200	--	7.66	0.820	--	
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	9.27	0.200	--	62.9	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.587	0.200	--	2.55	0.869	--	
179601-23-1	p/m-Xylene	2.10	0.400	--	9.12	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 : BROOME ST.
 Lab ID : L2024597-03
 Client ID : 076/LSV-11
 Sample Location : NEW YORK, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1617689
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : 06/11/20 14:27
 Date Received : 06/11/20
 Date Analyzed : 06/16/20 21:26
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 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	0.779	0.200	--	3.38	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	0.274	0.200	--	1.35	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	0.906	0.200	--	4.45	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 : BROOME ST.
 Lab ID : WG1382260-4
 Client ID : WG1382260-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1617680
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 06/16/20 14:42
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
1330-20-7	Xylenes, Total	ND	0.200	--	ND	0.869	--	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 : BROOME ST.
 Lab ID : WG1382260-4
 Client ID : WG1382260-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1617680
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 06/16/20 14:42
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 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 : BROOME ST.
 Lab ID : WG1382260-4
 Client ID : WG1382260-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1617680
 Sample Amount : 250 ml

Lab Number : L2024597
 Project Number : 100646801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 06/16/20 14:42
 Dilution Factor : 1
 Analyst : RY
 Instrument ID : AIRLAB16
 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\Airlab16\2020\06\200616T\
 Data File : r1617682.D
 Acq On : 16 Jun 2020 4:48 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-01,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 08:52:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.43	49	300790	10.000	ppbV	-0.05
Standard Area = 312675			Recovery =		96.20%	
43) 1,4-difluorobenzene	11.73	114	859413	10.000	ppbV	-0.05
Standard Area = 882052			Recovery =		97.43%	
67) chlorobenzene-D5	16.47	54	111618	10.000	ppbV	-0.03
Standard Area = 116247			Recovery =		96.02%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.84	85	9645	0.435	ppbV	97
6) chloromethane	4.02	50	7206	0.583	ppbV	97
7) Freon-114	4.14		0	N.D.		
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	4.43		0	N.D.		
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.13	31	78804	8.872	ppbV	93
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	56217M4	3.065	ppbV	
21) trichlorofluoromethane	5.91	101	3374	0.206	ppbV	85
22) isopropyl alcohol	6.05	45	34935	1.676	ppbV	99
26) 1,1-dichloroethene	0.00		0	N.D.	d	
27) tertiary butyl alcohol	6.81		0	N.D.		
28) methylene chloride	6.85	49	4776	0.239	ppbV	99
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	7.15		0	N.D.		
31) Freon 113	7.19	101	1836	0.061	ppbV	94
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	0.00		0	N.D.		
34) MTBE	0.00		0	N.D.		
36) 2-butanone	8.75	43	12622	0.339	ppbV	96
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	9.58		0	N.D.		
39) chloroform	9.59		0	N.D.		
40) Tetrahydrofuran	10.09		0	N.D.		
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617682.D
 Acq On : 16 Jun 2020 4:48 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-01,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 08:52:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.51	57	3343	0.122	ppbV	#	52
48) 1,1,1-trichloroethane	0.00		0	N.D.			
50) benzene	11.28	78	7839	0.131	ppbV		99
52) carbon tetrachloride	11.46	117	1194	0.061	ppbV	#	85
53) cyclohexane	11.60		0	N.D.			
56) 1,2-dichloropropane	0.00		0	N.D.			
57) bromodichloromethane	0.00		0	N.D.			
58) 1,4-dioxane	12.56		0	N.D.			
59) trichloroethene	0.00		0	N.D.			
60) 2,2,4-trimethylpentane	12.57	57	9355	0.103	ppbV		96
62) heptane	12.90	43	2681	0.064	ppbV		90
63) cis-1,3-dichloropropene	0.00		0	N.D.			
64) 4-methyl-2-pentanone	13.63		0	N.D.			
65) trans-1,3-dichloropropene	0.00		0	N.D.			
66) 1,1,2-trichloroethane	0.00		0	N.D.			
68) toluene	14.69	91	31065	0.498	ppbV		98
72) 2-hexanone	15.05		0	N.D.			
74) dibromochloromethane	0.00		0	N.D.			
75) 1,2-dibromoethane	0.00		0	N.D.			
78) tetrachloroethene	15.87	166	2476	0.089	ppbV		99
80) chlorobenzene	0.00		0	N.D.			
81) ethylbenzene	16.86	91	12277	0.151	ppbV		98
83) m+p-xylene	17.01	91	36491	0.559	ppbV		98
84) bromoform	0.00		0	N.D.			
85) styrene	17.35	104	5408	0.094	ppbV		95
86) 1,1,2,2-tetrachloroethane	0.00		0	N.D.			
87) o-xylene	17.44	91	13089	0.198	ppbV		100
96) 4-ethyl toluene	18.49		0	N.D.			
97) 1,3,5-trimethylbenzene	18.59		0	N.D.			
99) 1,2,4-trimethylbenzene	18.93	105	4422	0.057	ppbV	#	59
101) Benzyl Chloride	19.06		0	N.D.			
102) 1,3-dichlorobenzene	0.00		0	N.D.	d		
103) 1,4-dichlorobenzene	19.13		0	N.D.			
107) 1,2-dichlorobenzene	0.00		0	N.D.			
115) 1,2,4-trichlorobenzene	20.95		0	N.D.			
119) hexachlorobutadiene	0.00		0	N.D.			

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617682.D
 Acq On : 16 Jun 2020 4:48 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-01,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 08:52:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

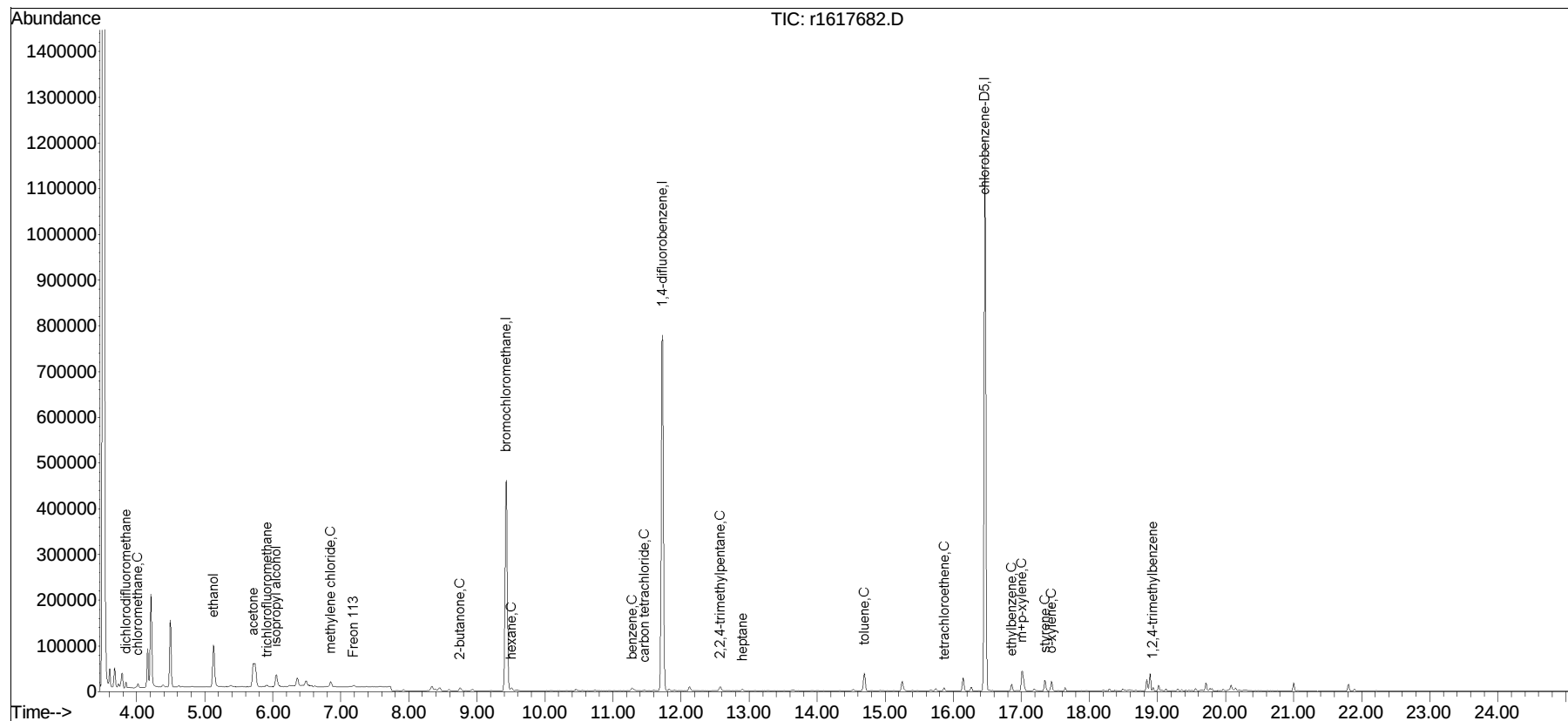
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

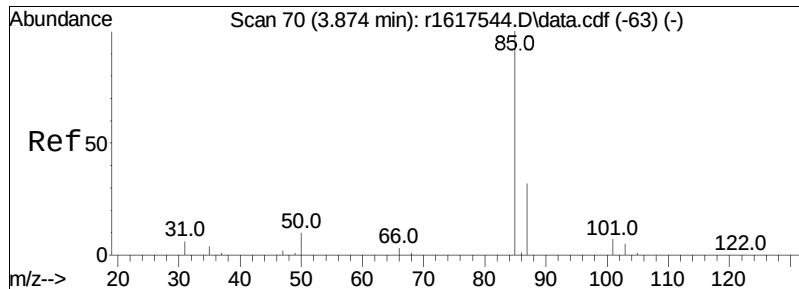
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617682.D
 Acq On : 16 Jun 2020 4:48 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-01,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 08:52:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

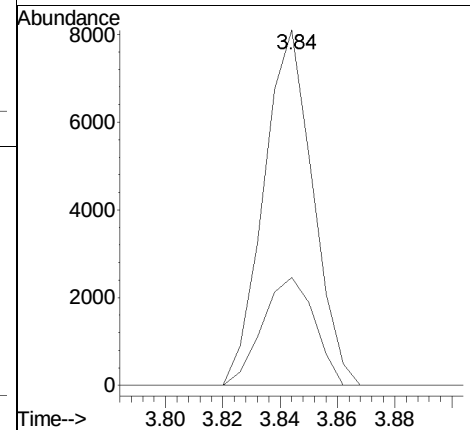
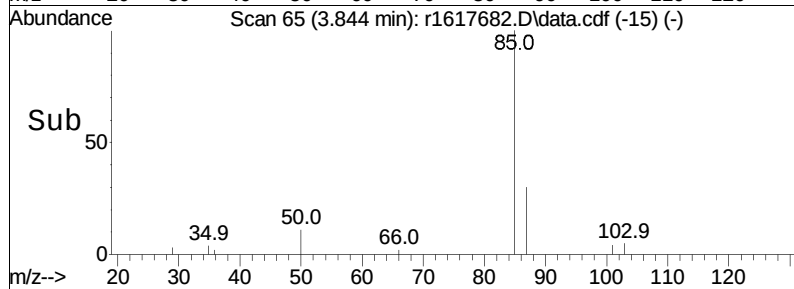
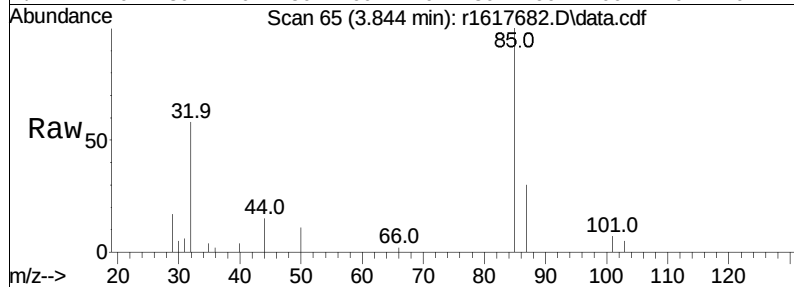
Sub List : T015-NY - .s\Data\Airlab16\2020\06\200616T\r1617677.D

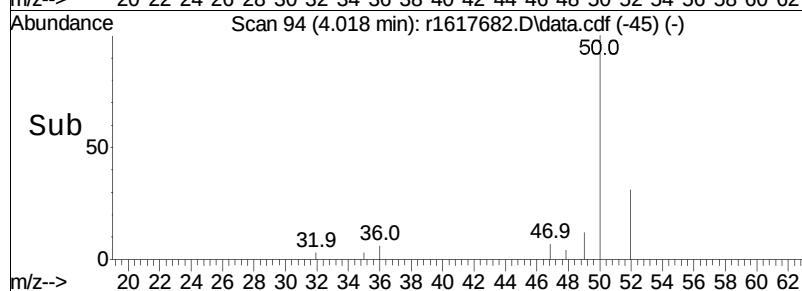
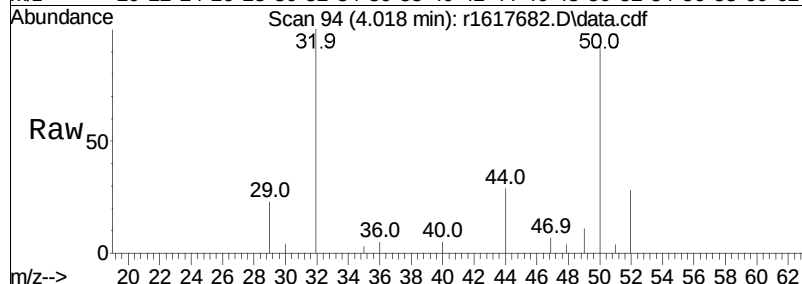
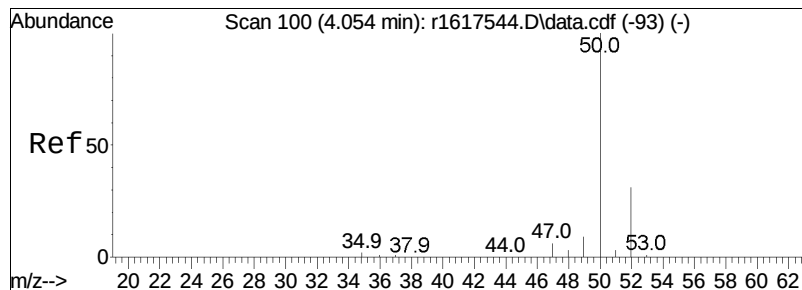




#5
dichlorodifluoromethane
Concen: 0.44 ppbV
RT: 3.84 min Scan# 65
Delta R.T. -0.030 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

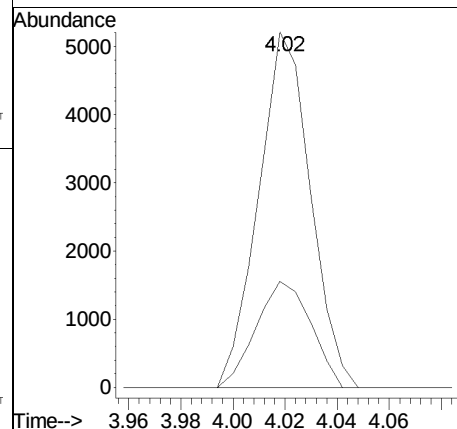
Tgt Ion: 85 Resp: 9645
Ion Ratio Lower Upper
85 100
87 30.4 25.7 38.5

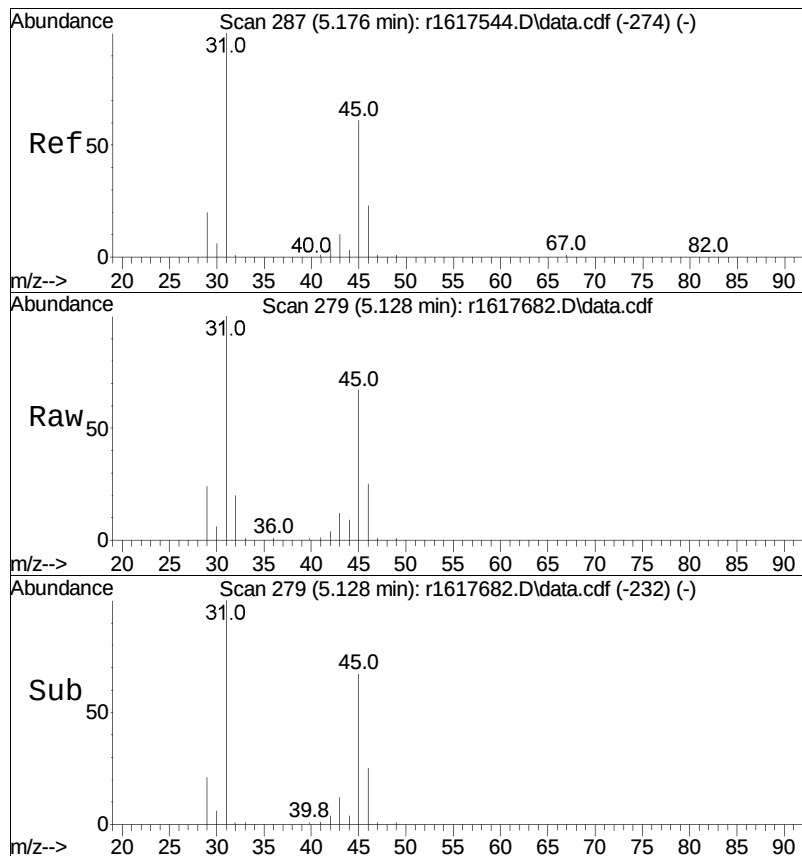




#6
 chloromethane
 Concen: 0.58 ppbV
 RT: 4.02 min Scan# 94
 Delta R.T. -0.036 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

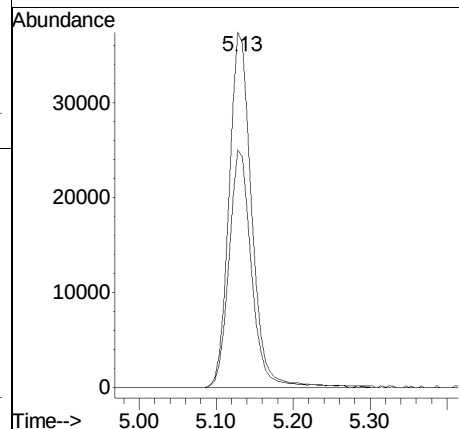
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	29.9	25.0	37.6	

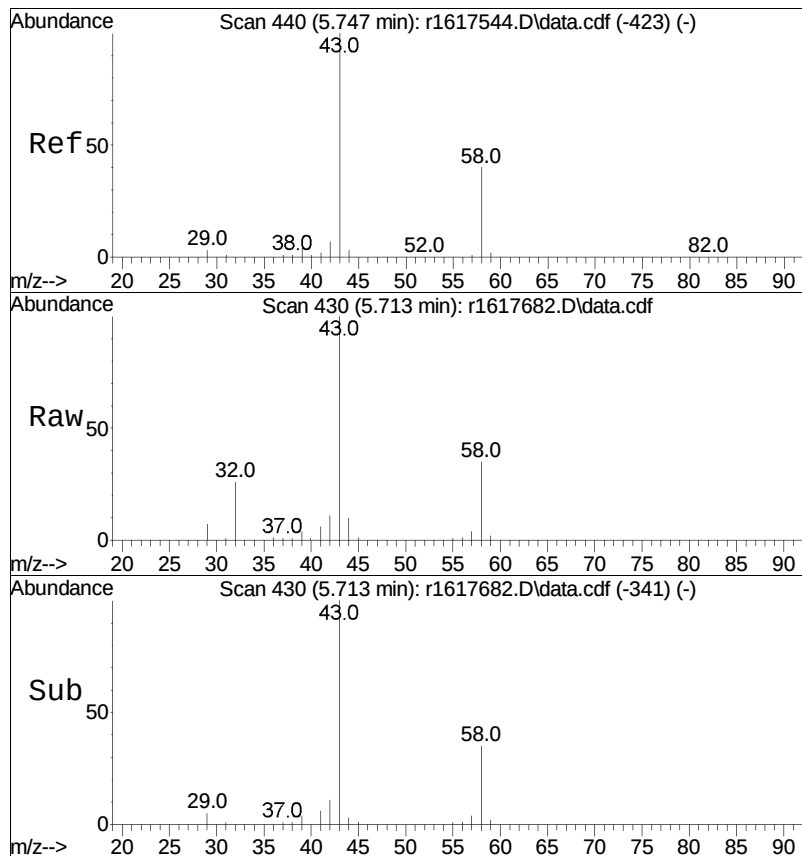




#15
 ethanol
 Concen: 8.87 ppbV
 RT: 5.13 min Scan# 279
 Delta R.T. -0.048 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

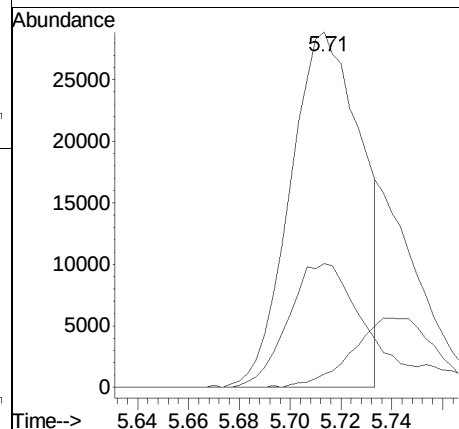
Tgt Ion:	31	45	Ratio	100	66.8	Resp:	78804	Lower	Upper

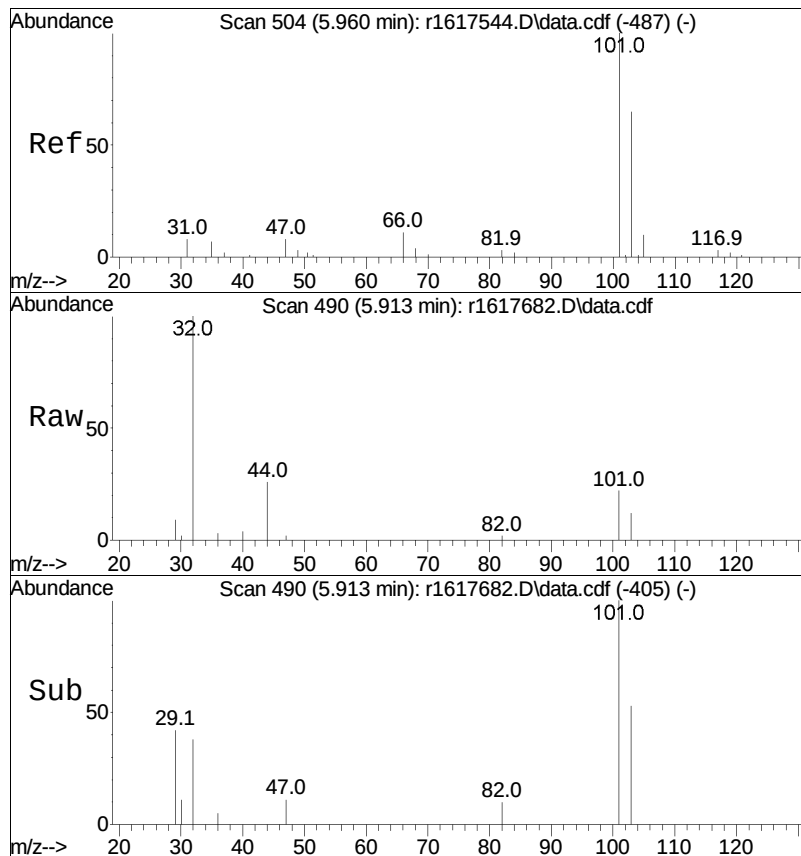




#19
 acetone
 Concen: 3.06 ppbV m
 RT: 5.71 min Scan# 430
 Delta R.T. -0.033 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

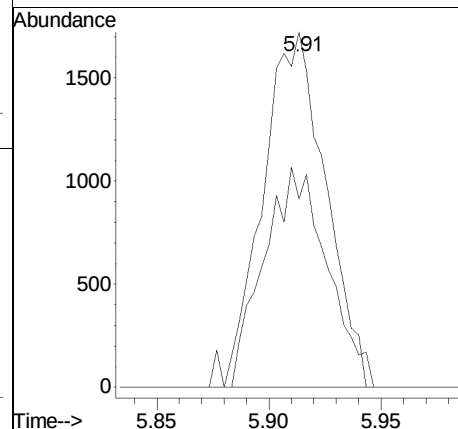
Tgt Ion:	43	Resp:	56217
Ion Ratio	Lower	Upper	
43	100		
58	34.9	31.8	47.8
57	3.8	0.8	1.2#

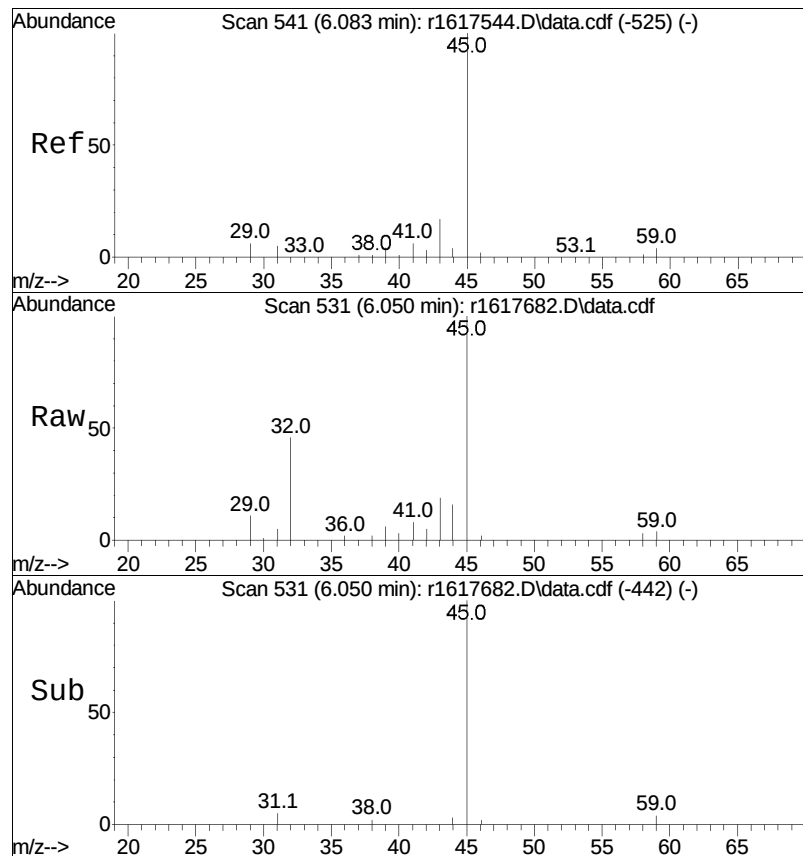




#21
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 5.91 min Scan# 490
Delta R.T. -0.047 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

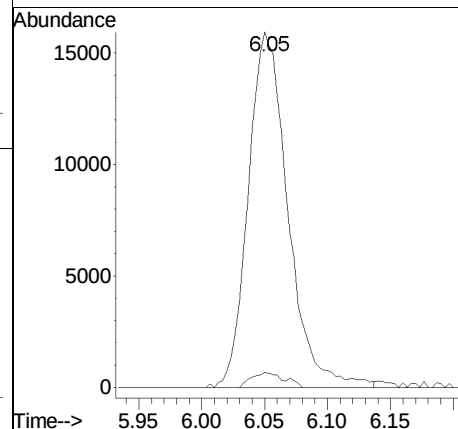
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	53.0	52.1	78.1	

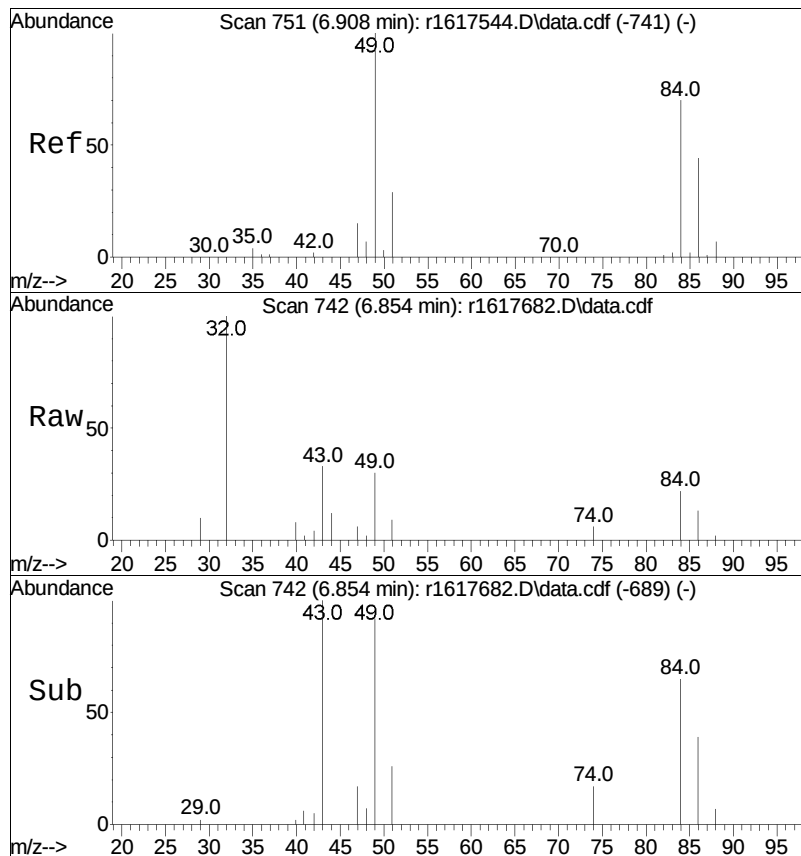




#22
isopropyl alcohol
Concen: 1.68 ppbV
RT: 6.05 min Scan# 531
Delta R.T. -0.033 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

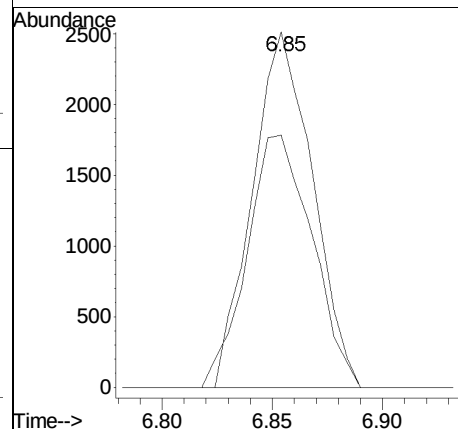
Tgt	Ion	Ratio	Lower	Upper
45	100			
59	4.2	3.1	4.7	

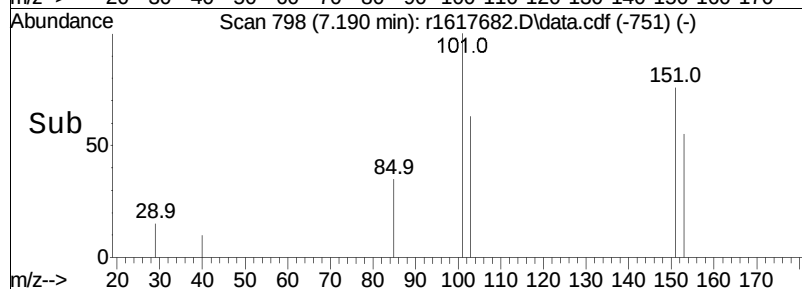
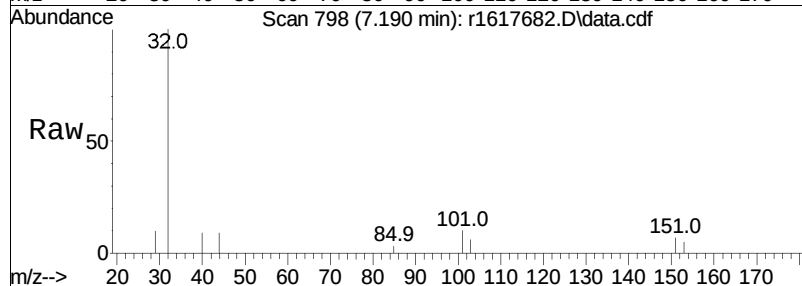
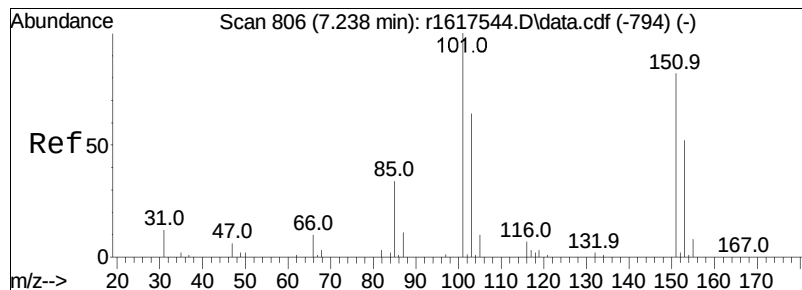




#28
 methylene chloride
 Concen: 0.24 ppbV
 RT: 6.85 min Scan# 742
 Delta R.T. -0.054 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	4776				
Ion Ratio	100	71.0			
			56.1	84.1	





#31

Freon 113

Concen: 0.06 ppbV

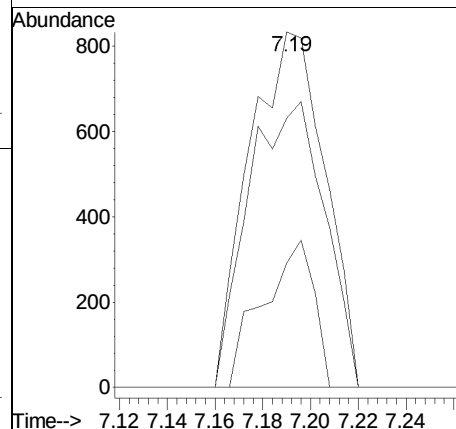
RT: 7.19 min Scan# 798

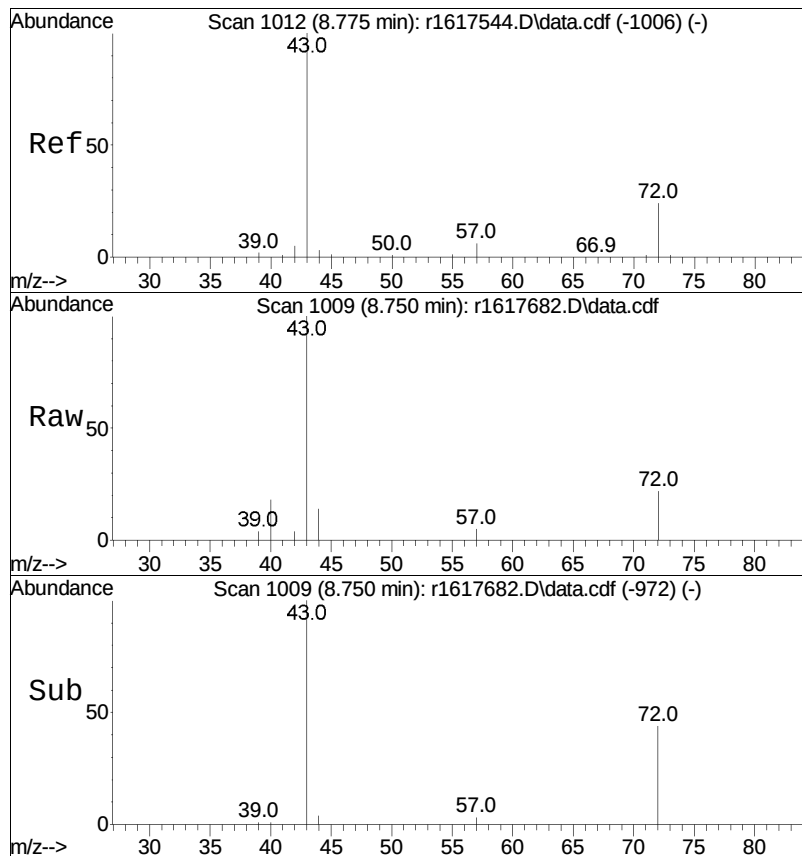
Delta R.T. -0.048 min

Lab File: r1617682.D

Acq: 16 Jun 2020 4:48 PM

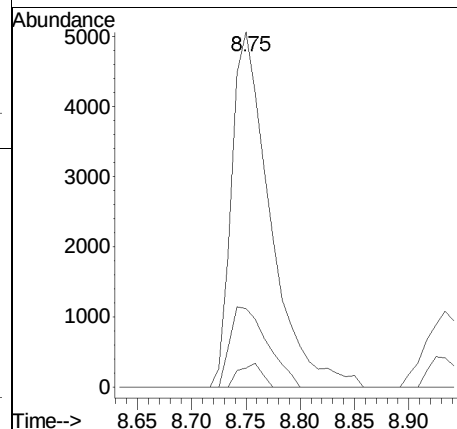
Tgt Ion:	101	Resp:	1836
Ion Ratio	Lower	Upper	
101	100		
85	35.1	27.4	41.0
151	75.8	65.8	98.6

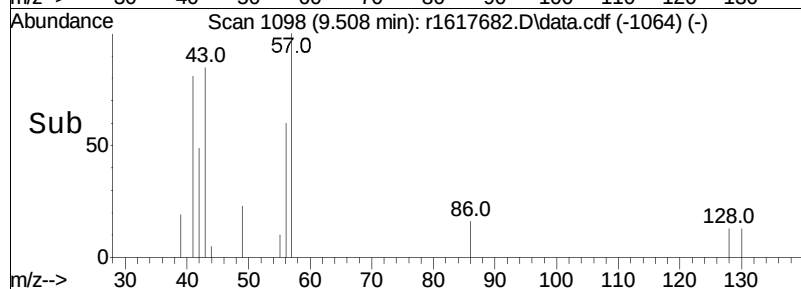
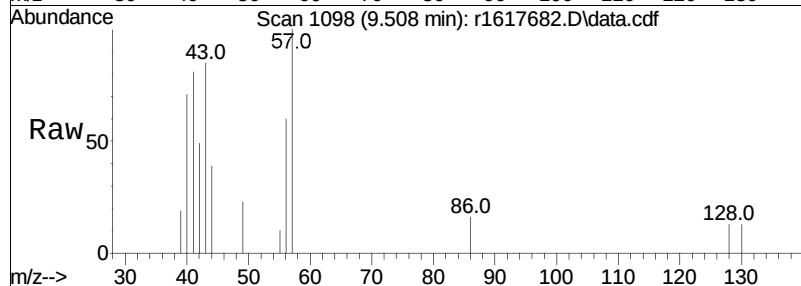
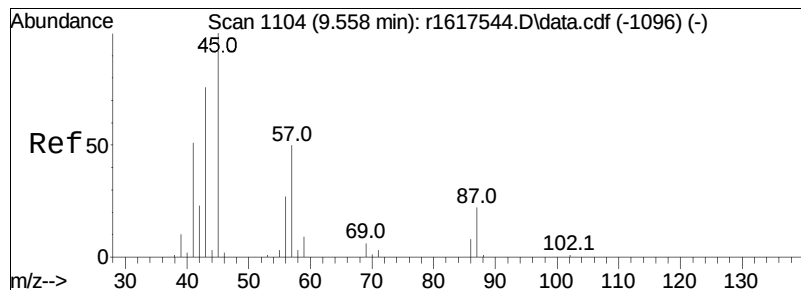




#36
 2-butanone
 Concen: 0.34 ppbV
 RT: 8.75 min Scan# 1009
 Delta R.T. -0.025 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

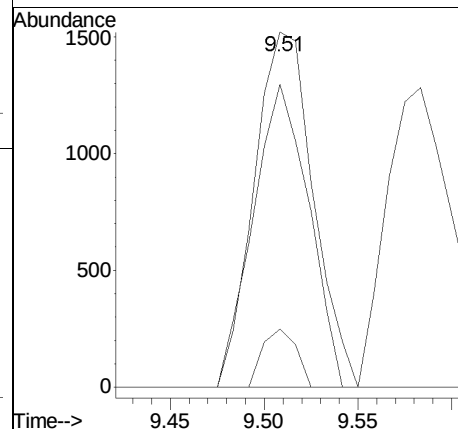
Tgt Ion:	43	Resp:	12622
Ion Ratio	Lower	Upper	
43	100		
72	22.2	19.5	29.3
57	5.5	4.6	6.8

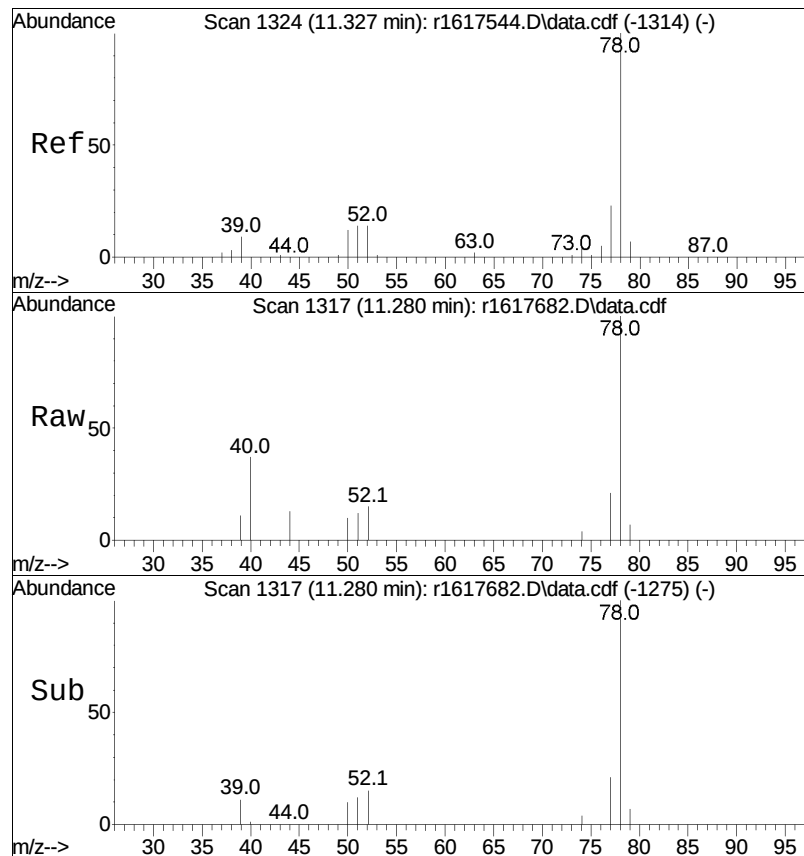




#44
hexane
Concen: 0.12 ppbV
RT: 9.51 min Scan# 1098
Delta R.T. -0.050 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

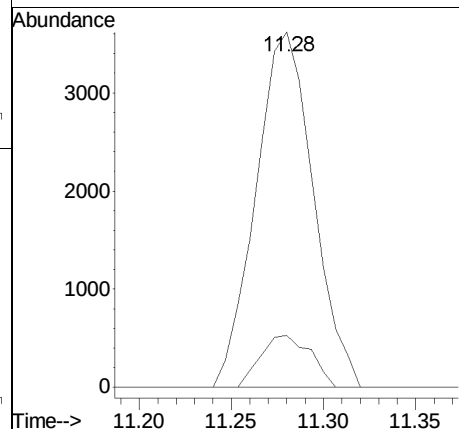
Tgt	Ion	Ratio	Lower	Upper
57	100			
43	85.3	122.6	184.0#	
86	16.4	13.1	19.7	

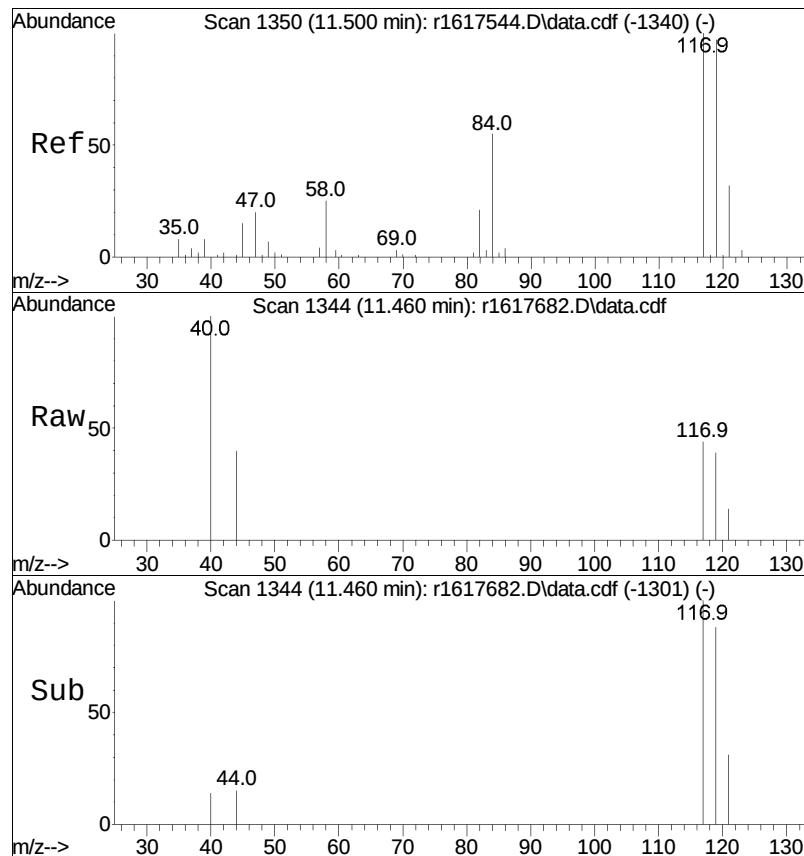




#50
benzene
Concen: 0.13 ppbV
RT: 11.28 min Scan# 1317
Delta R.T. -0.047 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

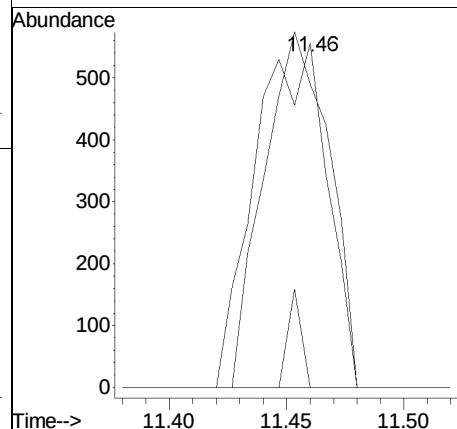
Tgt Ion	Ratio	Lower	Upper
78	100		
52	14.6	11.4	17.0

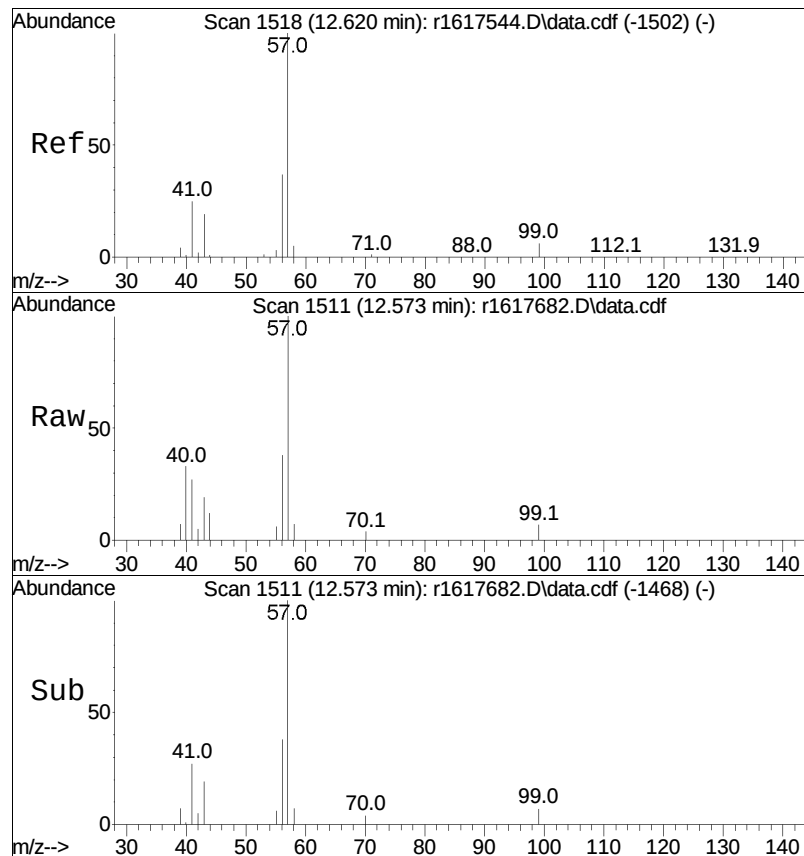




#52
 carbon tetrachloride
 Concen: 0.06 ppbV
 RT: 11.46 min Scan# 1344
 Delta R.T. -0.040 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

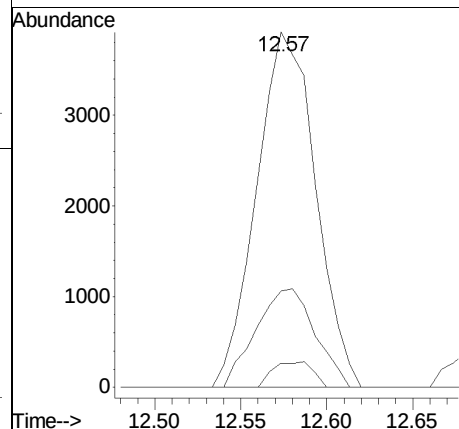
Tgt Ion	Ratio	Lower	Upper
117	100		
119	88.1	77.5	116.3
82	0.0	17.0	25.6#

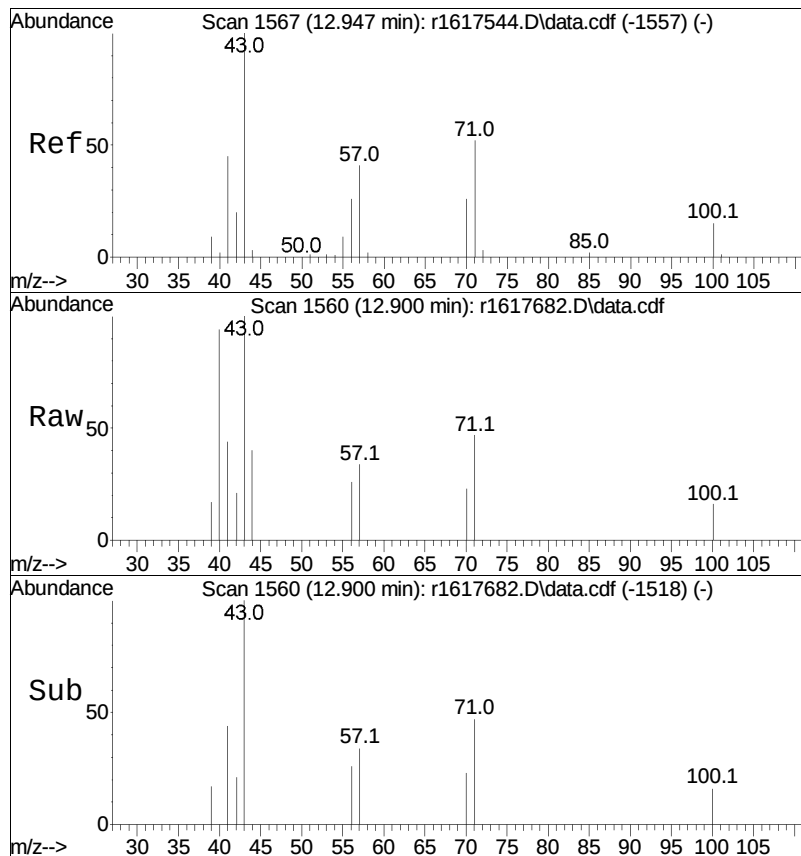




#60
 2,2,4-trimethylpentane
 Concen: 0.10 ppbV
 RT: 12.57 min Scan# 1511
 Delta R.T. -0.047 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

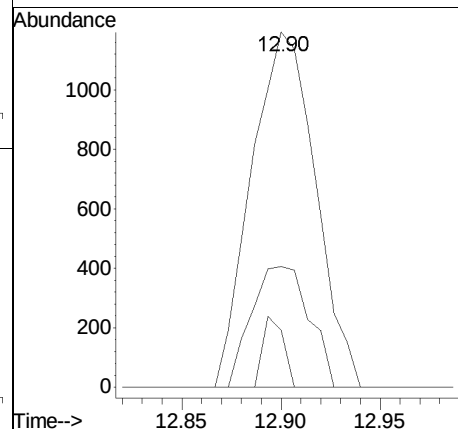
Tgt	Ion: 57	Resp:	9355
Ion	Ratio	Lower	Upper
57	100		
99	6.8	4.7	7.1
41	27.1	19.9	29.9

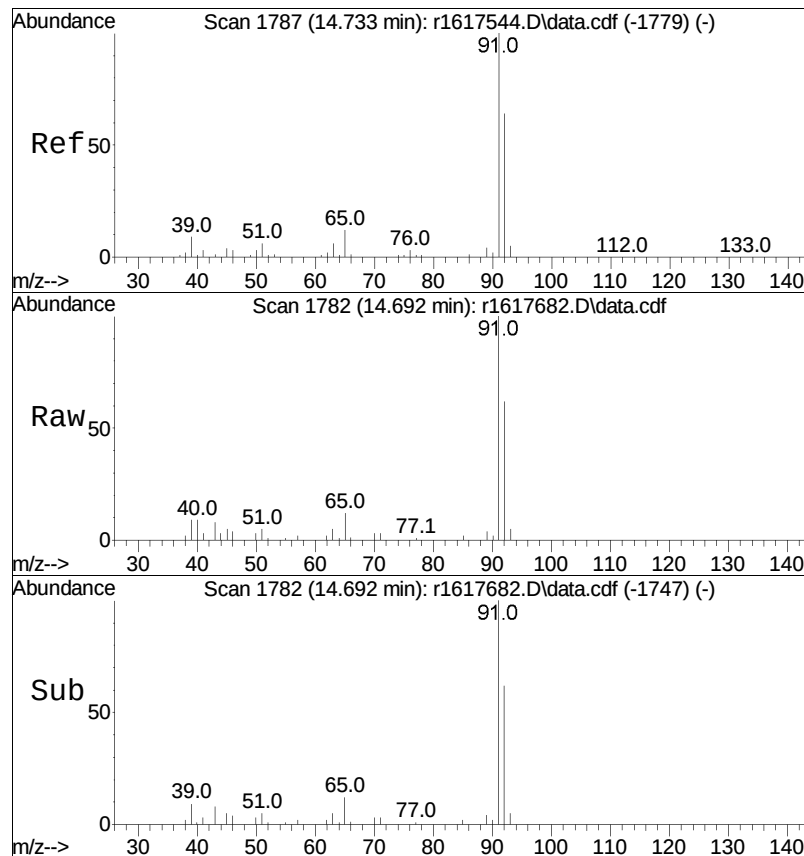




#62
 heptane
 Concen: 0.06 ppbV
 RT: 12.90 min Scan# 1560
 Delta R.T. -0.047 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

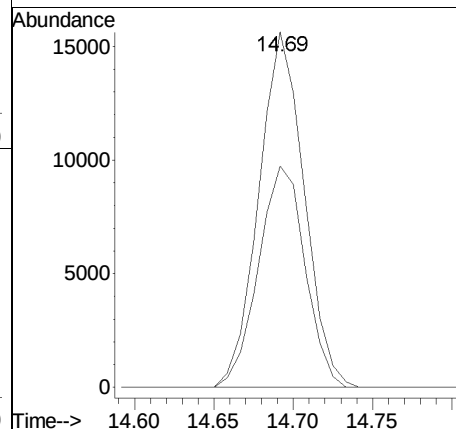
Tgt Ion:	43	Resp:	2681
Ion Ratio	Lower	Upper	
43	100		
57	34.0	33.1	49.7
100	16.2	11.8	17.8

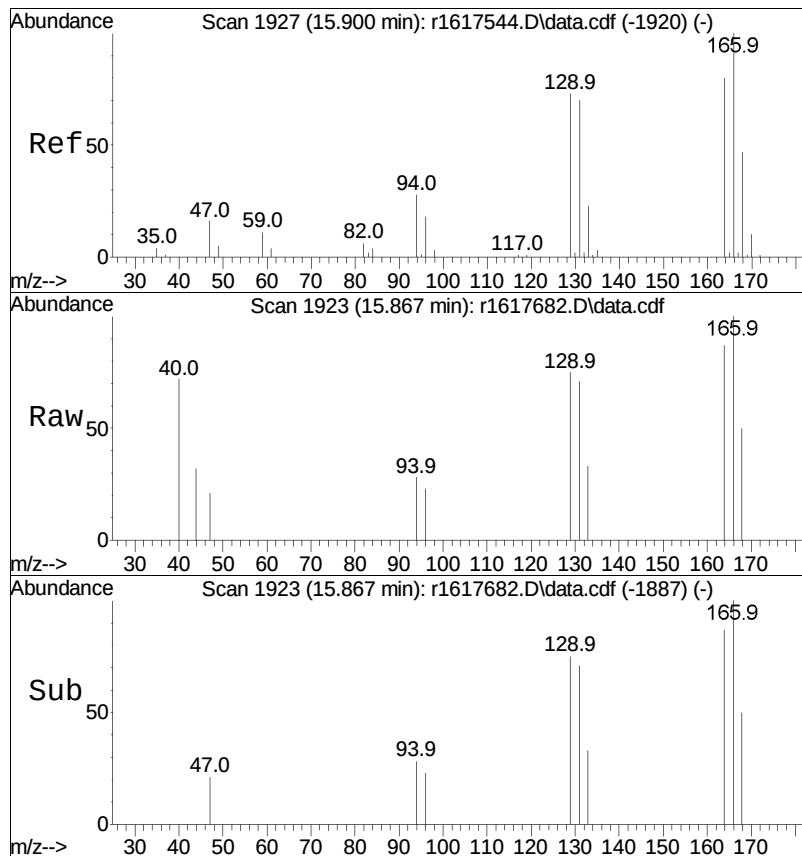




#68
toluene
Concen: 0.50 ppbV
RT: 14.69 min Scan# 1782
Delta R.T. -0.042 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

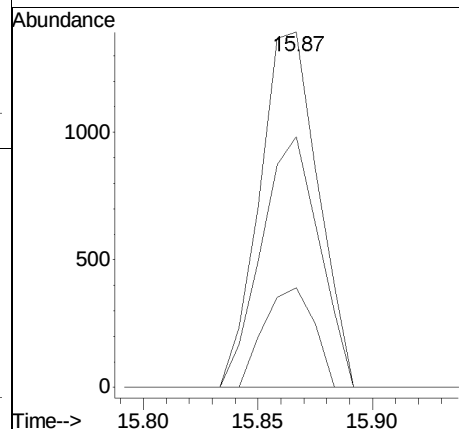
Tgt	Ion	Ratio	Lower	Upper
91	100			
92	62.3	50.9	76.3	

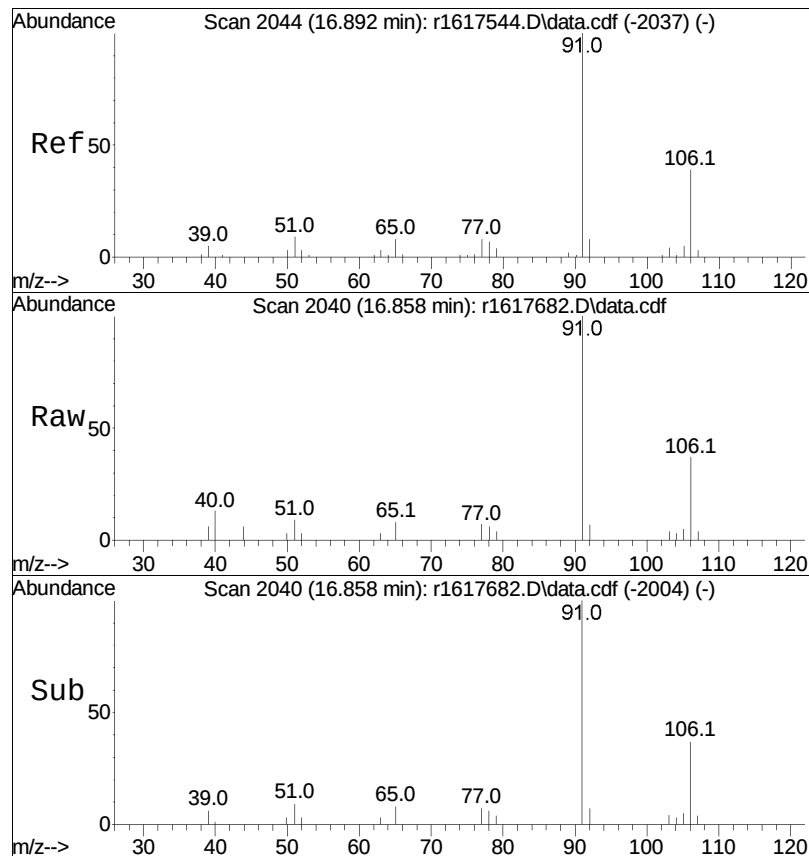




#78
 tetrachloroethene
 Concen: 0.09 ppbV
 RT: 15.87 min Scan# 1923
 Delta R.T. -0.033 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

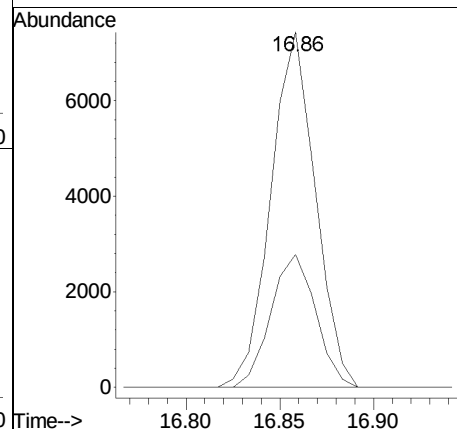
Tgt	Ion	Ratio	Lower	Upper
166	100			
131	70.6	56.1	84.1	
94	28.0	22.2	33.4	

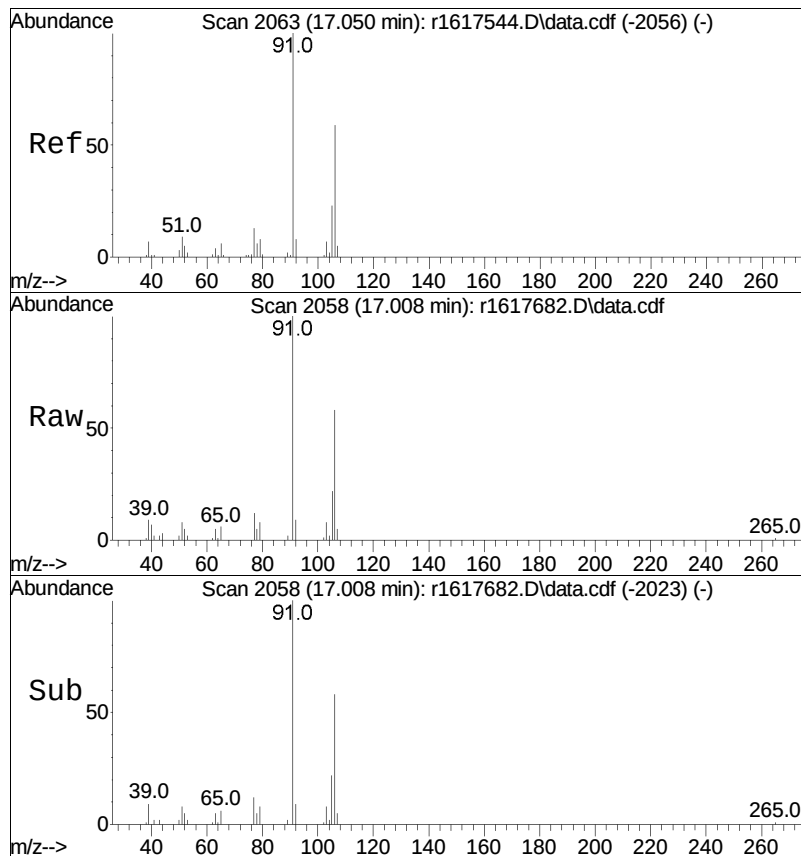




#81
ethylbenzene
Concen: 0.15 ppbV
RT: 16.86 min Scan# 2040
Delta R.T. -0.033 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

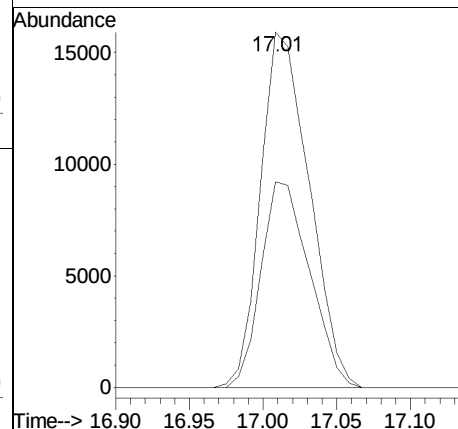
Tgt	Ion	Resp	Lower	Upper
91	100	12277		
106	37.4	31.1	46.7	

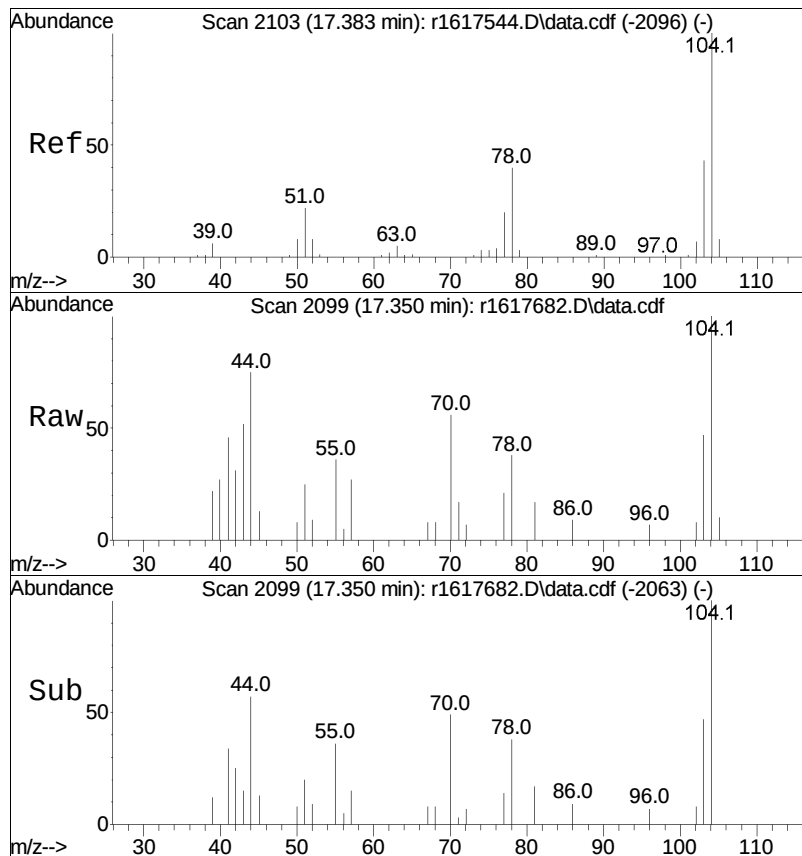




#83
 m+p-xylene
 Concen: 0.56 ppbV
 RT: 17.01 min Scan# 2058
 Delta R.T. -0.042 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

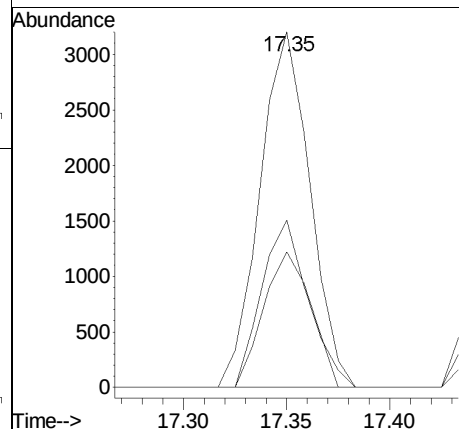
Tgt	Ion	Resp	Lower	Upper
91	100	36491		
106	57.9	47.5	71.3	

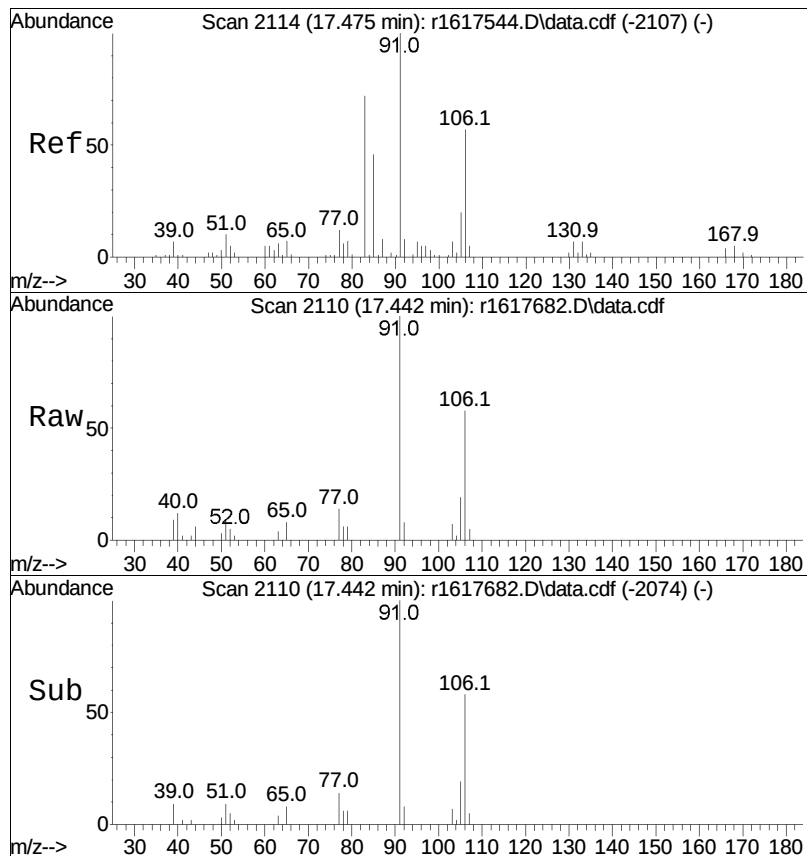




#85
styrene
Concen: 0.09 ppbV
RT: 17.35 min Scan# 2099
Delta R.T. -0.033 min
Lab File: r1617682.D
Acq: 16 Jun 2020 4:48 PM

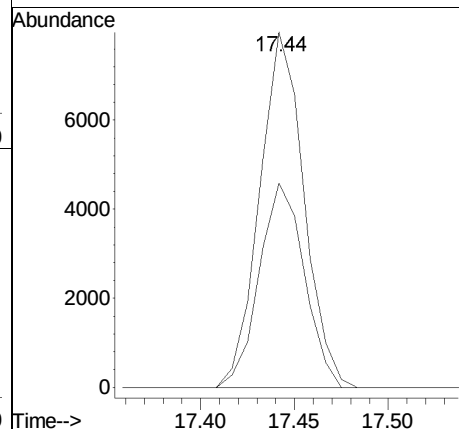
Tgt Ion:	104	Resp:	5408
Ion Ratio	Lower	Upper	
104	100		
103	47.1	34.4	51.6
78	38.1	31.8	47.6

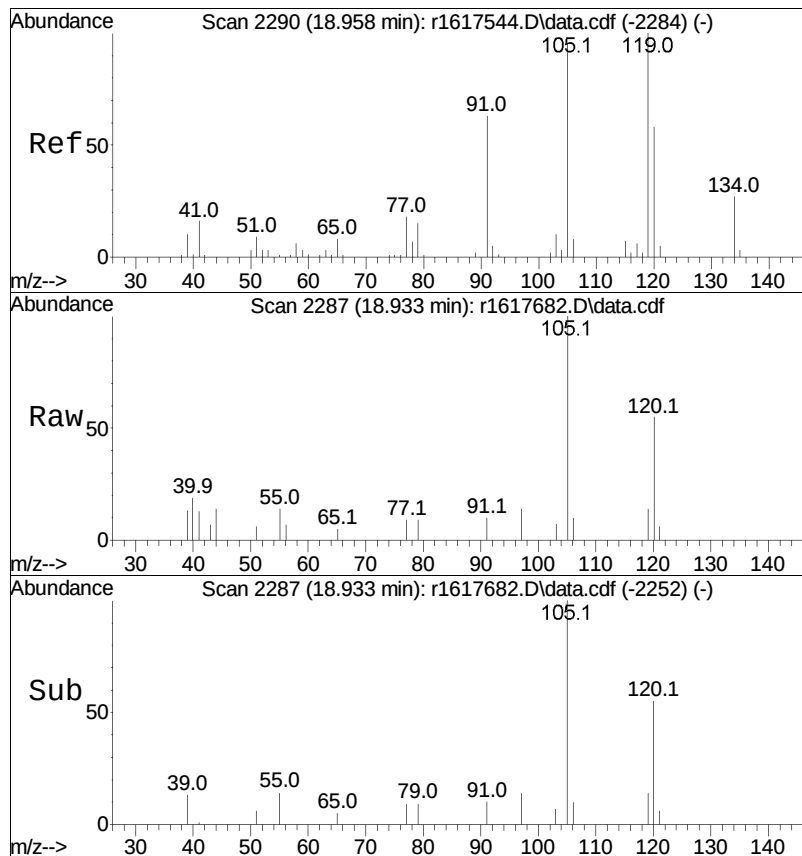




#87
 o-xylene
 Concen: 0.20 ppbV
 RT: 17.44 min Scan# 2110
 Delta R.T. -0.033 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

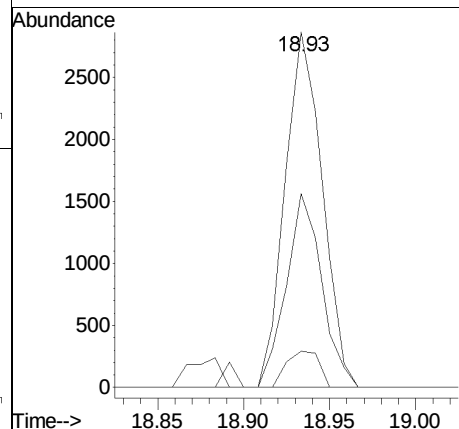
Tgt	Ion	Resp	Lower	Upper
91	100	13089		
106	57.5	45.8	68.8	





#99
 1,2,4-trimethylbenzene
 Concen: 0.06 ppbV
 RT: 18.93 min Scan# 2287
 Delta R.T. -0.025 min
 Lab File: r1617682.D
 Acq: 16 Jun 2020 4:48 PM

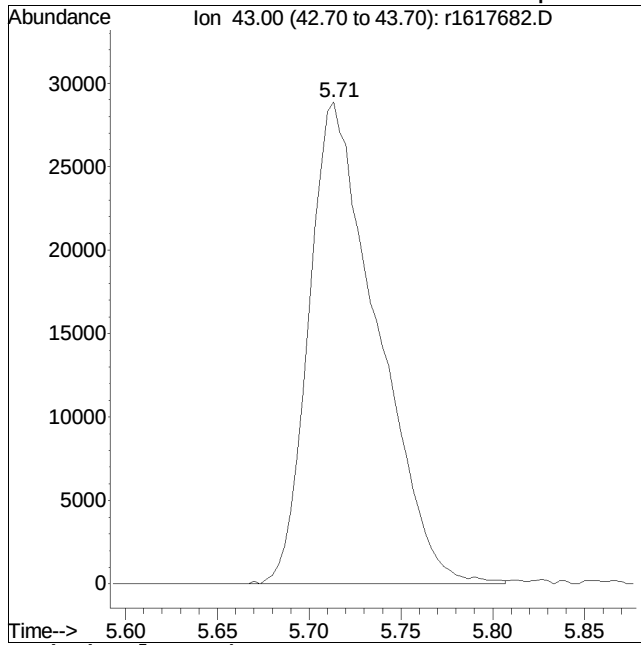
Tgt	Ion	Ratio	Resp	Lower	Upper
105	100		4422		
120	54.6	48.9	73.3		
91	10.2	53.3	79.9#		



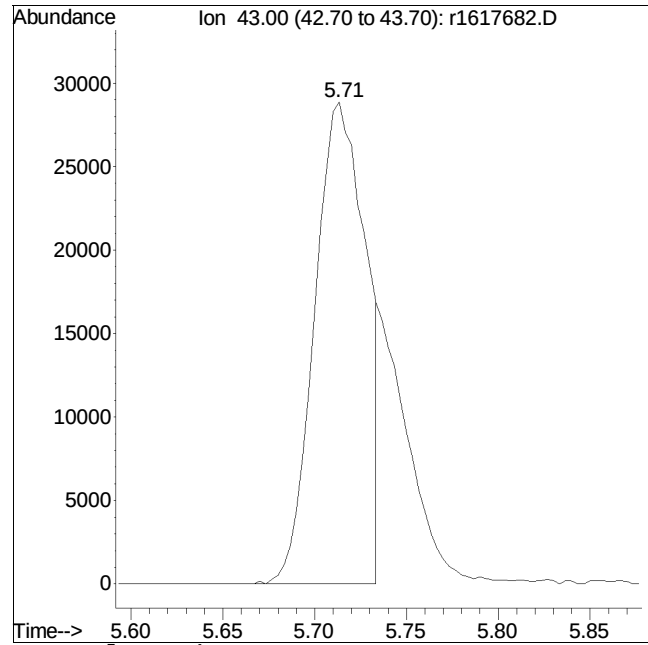
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617682.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:4: 8 Instrument :
Sample : L2024597-01,3,250,250 Quant Date : 6/17/2020 5:08 am

Compound #19: acetone



Original Peak Response = 74614



Manual Peak Response = 56217 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617688.D
 Acq On : 16 Jun 2020 8:46 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-02,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:05:00 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.44	49	295170	10.000	ppbV	-0.04
Standard Area = 312675			Recovery =		94.40%	
43) 1,4-difluorobenzene	11.73	114	852322	10.000	ppbV	-0.04
Standard Area = 882052			Recovery =		96.63%	
67) chlorobenzene-D5	16.47	54	110370	10.000	ppbV	-0.03
Standard Area = 116247			Recovery =		94.94%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.84	85	17725	0.815	ppbV	98
6) chloromethane	4.02	50	959	0.079	ppbV	97
7) Freon-114	4.14	85	1560	0.055	ppbV	92
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	4.44	54	9701	0.922	ppbV	91
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.14	31	64673	7.420	ppbV	93
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	1116865	62.048	ppbV	97
21) trichlorofluoromethane	5.93	101	4812	0.300	ppbV	86
22) isopropyl alcohol	6.06	45	7833	0.383	ppbV #	88
26) 1,1-dichloroethene	6.63		0	N.D.		
27) tertiary butyl alcohol	6.80	59	8016	0.440	ppbV #	70
28) methylene chloride	6.87		0	N.D.		
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	7.15	76	76181	1.472	ppbV #	86
31) Freon 113	7.20	101	1971	0.067	ppbV #	90
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	8.38		0	N.D.		
34) MTBE	8.36		0	N.D.		
36) 2-butanone	8.74	43	130616	3.571	ppbV	99
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	9.60		0	N.D.		
39) chloroform	9.61	83	9392	0.380	ppbV	97
40) Tetrahydrofuran	10.09		0	N.D.		
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617688.D
 Acq On : 16 Jun 2020 8:46 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-02,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:05:00 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.53	57	32843	1.207	ppbV	#	51
48) 1,1,1-trichloroethane	10.76		0	N.D.			
50) benzene	11.29	78	50145	0.845	ppbV		99
52) carbon tetrachloride	0.00		0	N.D.			
53) cyclohexane	11.61	56	9399	0.318	ppbV		94
56) 1,2-dichloropropane	0.00		0	N.D.			
57) bromodichloromethane	0.00		0	N.D.	d		
58) 1,4-dioxane	12.56		0	N.D.			
59) trichloroethene	12.53	130	82492	3.280	ppbV		97
60) 2,2,4-trimethylpentane	12.59	57	47176	0.523	ppbV		93
62) heptane	12.91	43	49926	1.199	ppbV		99
63) cis-1,3-dichloropropene	0.00		0	N.D.			
64) 4-methyl-2-pentanone	13.62	43	13726	0.304	ppbV		98
65) trans-1,3-dichloropropene	0.00		0	N.D.			
66) 1,1,2-trichloroethane	0.00		0	N.D.			
68) toluene	14.70	91	232629	3.773	ppbV		99
72) 2-hexanone	15.01	43	17006M4	0.470	ppbV		
74) dibromochloromethane	0.00		0	N.D.			
75) 1,2-dibromoethane	0.00		0	N.D.			
78) tetrachloroethene	15.87	166	668914	24.202	ppbV		98
80) chlorobenzene	0.00		0	N.D.	d		
81) ethylbenzene	16.86	91	62834	0.782	ppbV		98
83) m+p-xylene	17.02	91	165328	2.561	ppbV		99
84) bromoform	0.00		0	N.D.			
85) styrene	17.35	104	9231	0.163	ppbV		95
86) 1,1,2,2-tetrachloroethane	0.00		0	N.D.	d		
87) o-xylene	17.45	91	65216	0.998	ppbV		98
96) 4-ethyl toluene	18.52	105	17498M3	0.179	ppbV		
97) 1,3,5-trimethylbenzene	18.59	105	26760	0.328	ppbV		99
99) 1,2,4-trimethylbenzene	18.93	105	85659	1.108	ppbV	#	57
101) Benzyl Chloride	0.00		0	N.D.	d		
102) 1,3-dichlorobenzene	19.13		0	N.D.			
103) 1,4-dichlorobenzene	19.13		0	N.D.			
107) 1,2-dichlorobenzene	0.00		0	N.D.			
115) 1,2,4-trichlorobenzene	21.08		0	N.D.			
119) hexachlorobutadiene	0.00		0	N.D.			

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617688.D
 Acq On : 16 Jun 2020 8:46 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-02,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:05:00 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

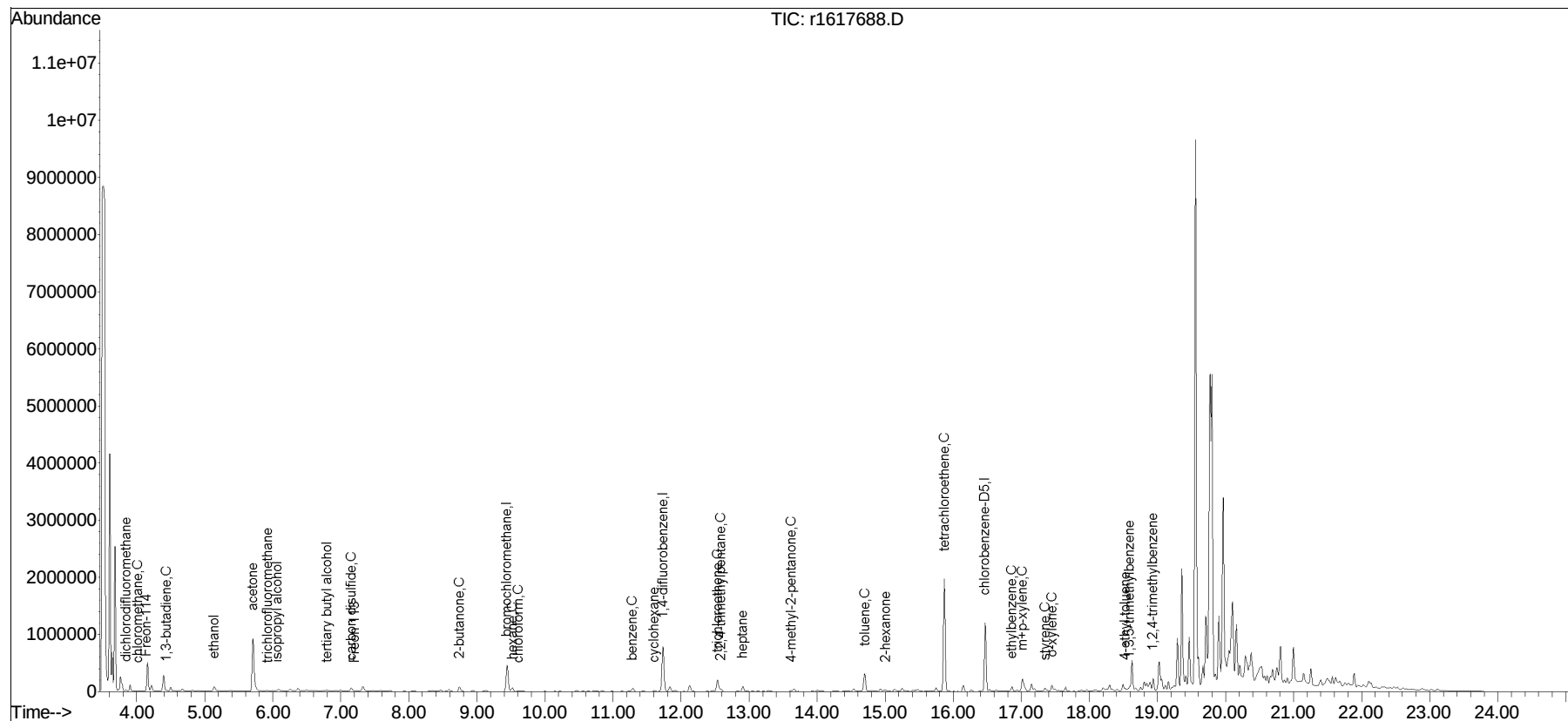
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

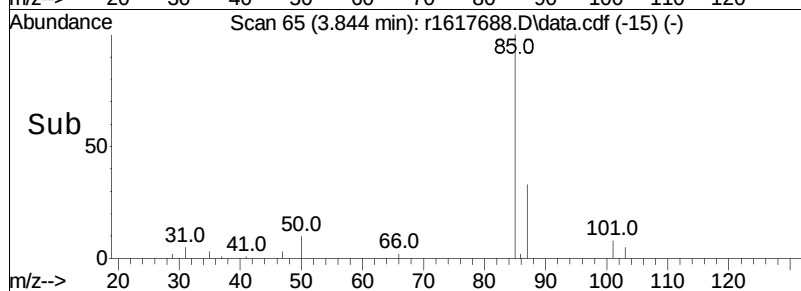
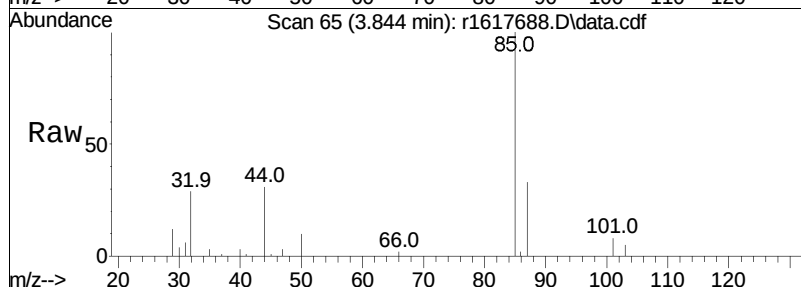
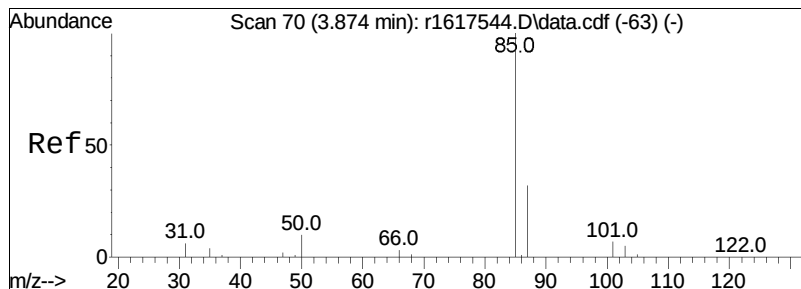
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617688.D
 Acq On : 16 Jun 2020 8:46 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-02,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:05:00 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

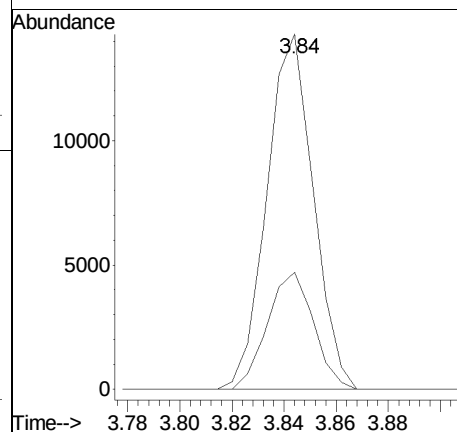
Sub List : T015-NY - .s\Data\Airlab16\2020\06\200616T\r1617677.D

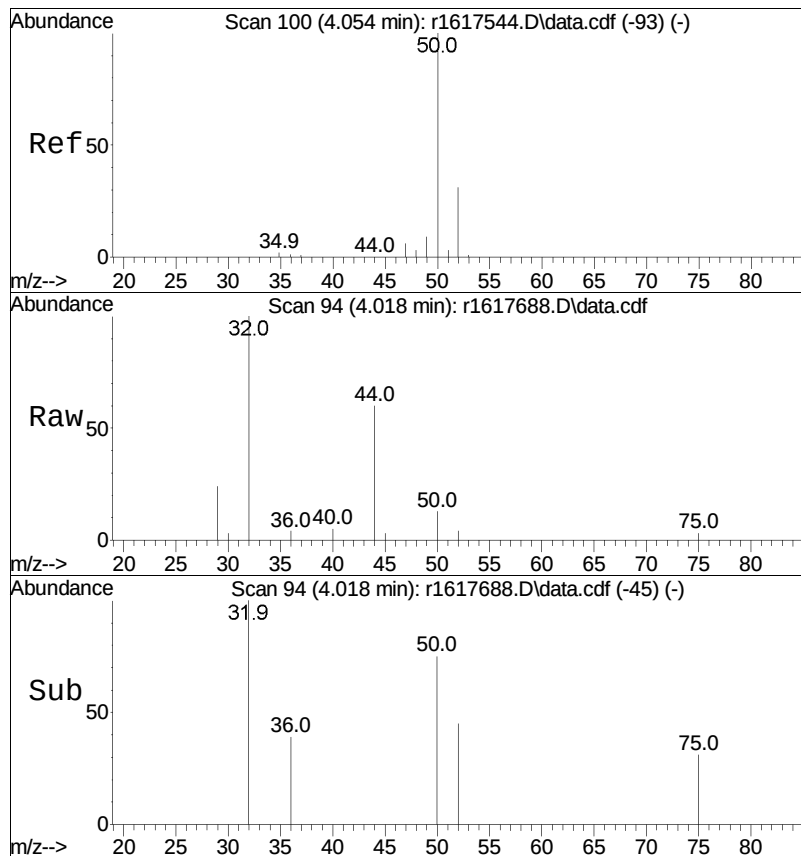




#5
 dichlorodifluoromethane
 Concen: 0.82 ppbV
 RT: 3.84 min Scan# 65
 Delta R.T. -0.030 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

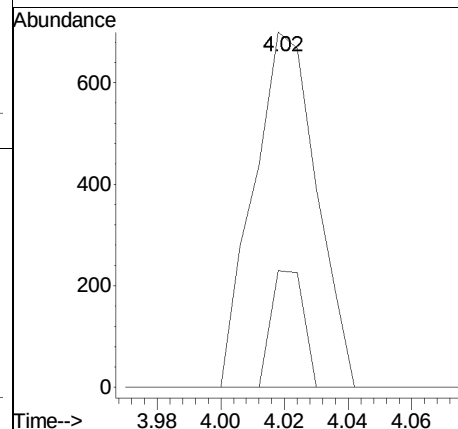
Tgt Ion: 85 Resp: 17725
 Ion Ratio Lower Upper
 85 100
 87 33.0 25.7 38.5

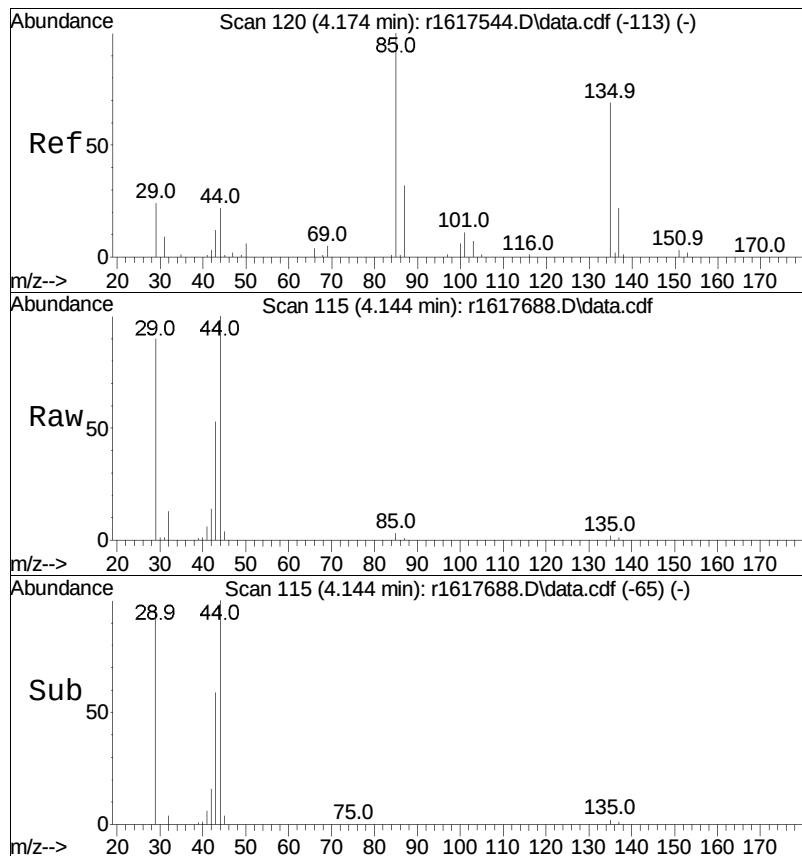




#6
 chloromethane
 Concen: 0.08 ppbV
 RT: 4.02 min Scan# 94
 Delta R.T. -0.036 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

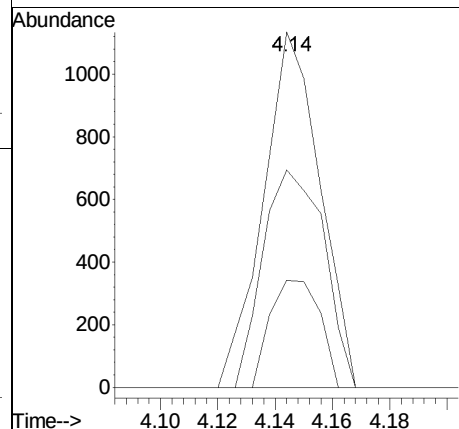
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	32.9	25.0	37.6	

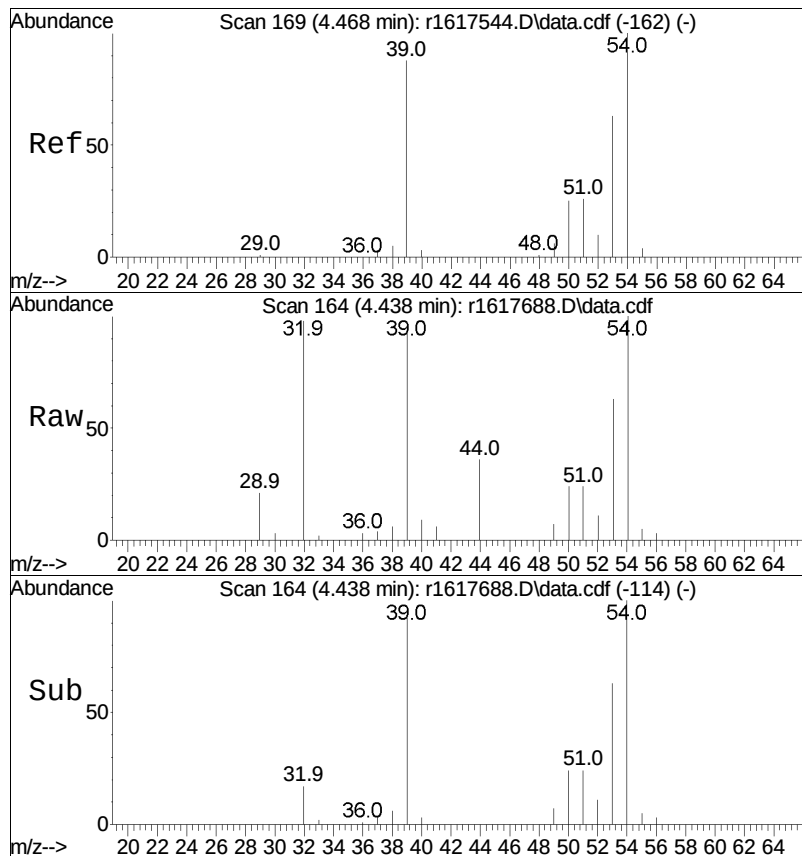




#7
 Freon-114
 Concen: 0.06 ppbV
 RT: 4.14 min Scan# 115
 Delta R.T. -0.030 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

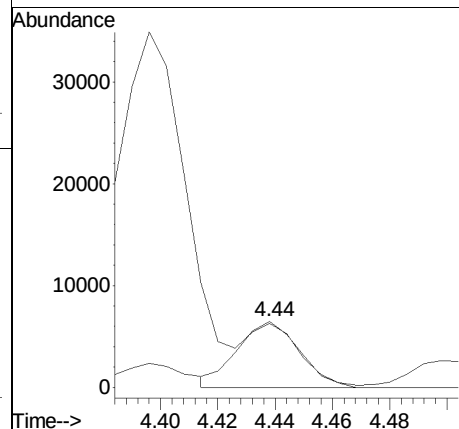
Tgt Ion:	85	Resp:	1560
Ion Ratio	Lower	Upper	
85	100		
87	30.2	25.3	37.9
135	61.2	55.4	83.0

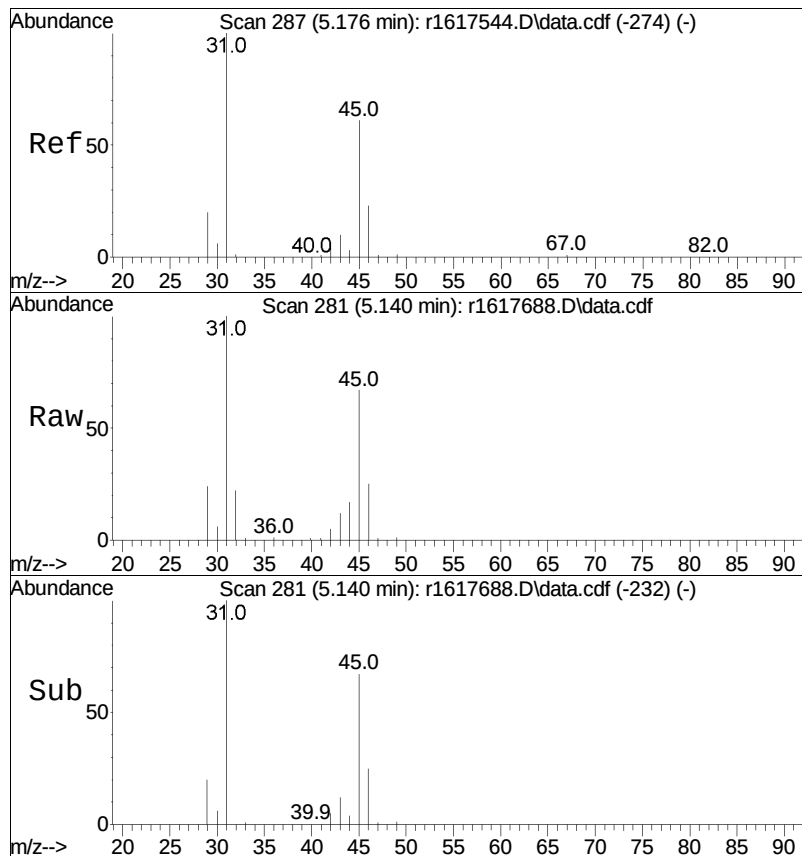




#10
 1,3-butadiene
 Concen: 0.92 ppbV
 RT: 4.44 min Scan# 164
 Delta R.T. -0.030 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

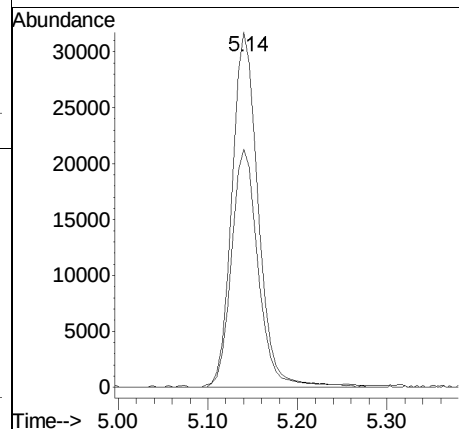
Tgt	Ion	Resp	Lower	Upper
54	100	9701		
39	96.9	71.1	106.7	

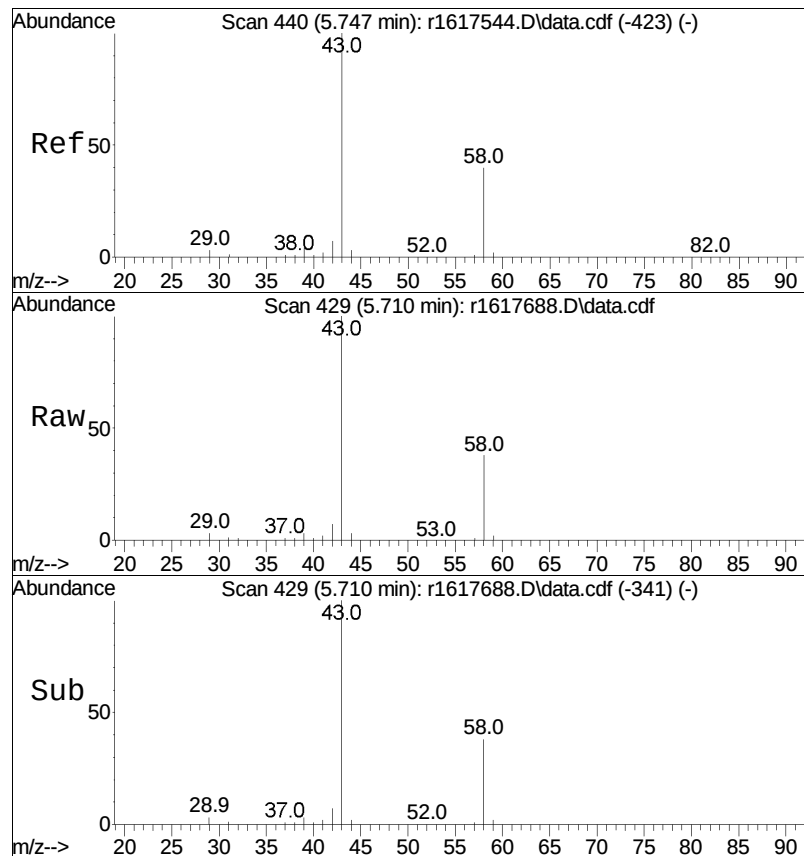




#15
 ethanol
 Concen: 7.42 ppbV
 RT: 5.14 min Scan# 281
 Delta R.T. -0.036 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

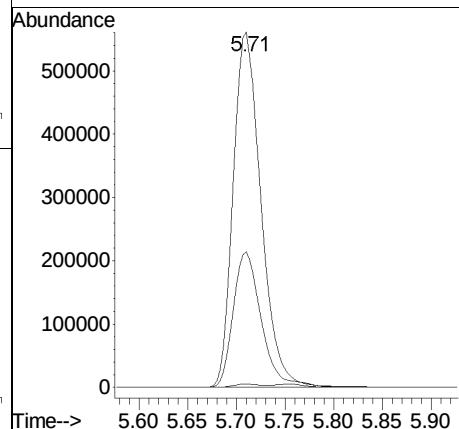
Tgt Ion:	31	Resp:	64673
Ion Ratio	Lower	Upper	
31	100		
45	67.1	49.2	73.8

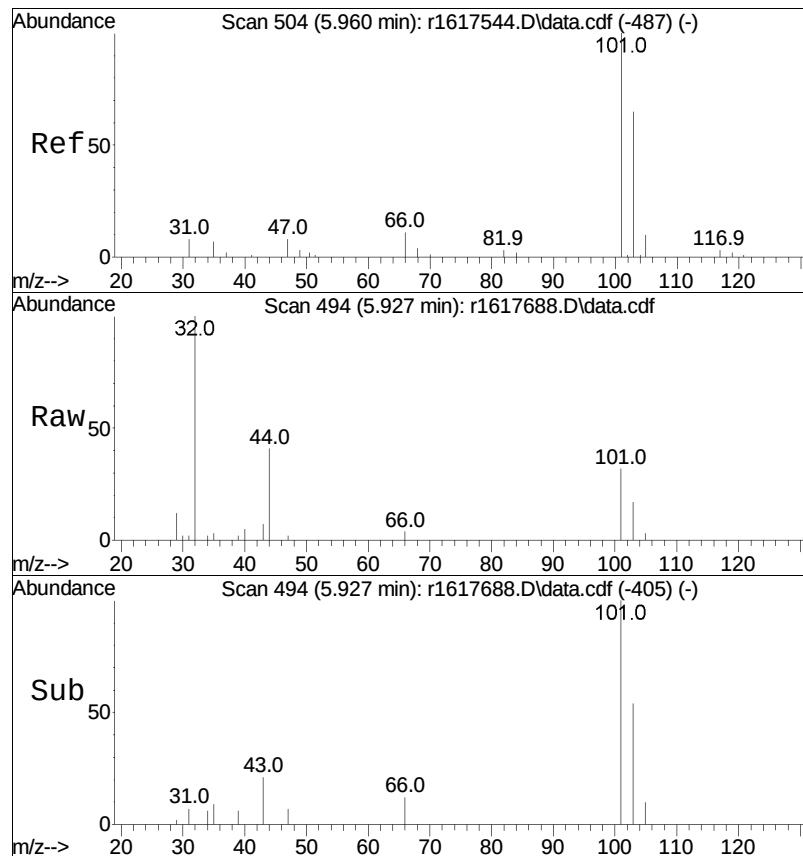




#19
 acetone
 Concen: 62.05 ppbV
 RT: 5.71 min Scan# 429
 Delta R.T. -0.037 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

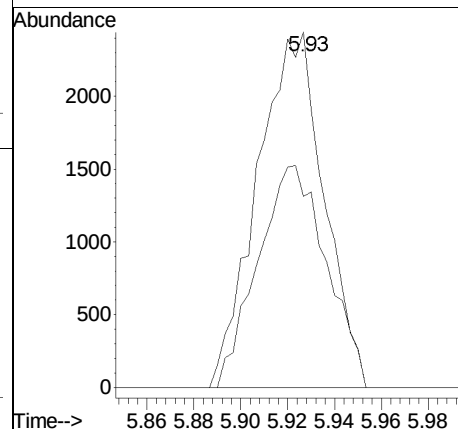
Tgt Ion:	43	Resp:	1116865
Ion Ratio	Lower	Upper	
43	100		
58	38.2	31.8	47.8
57	1.0	0.8	1.2

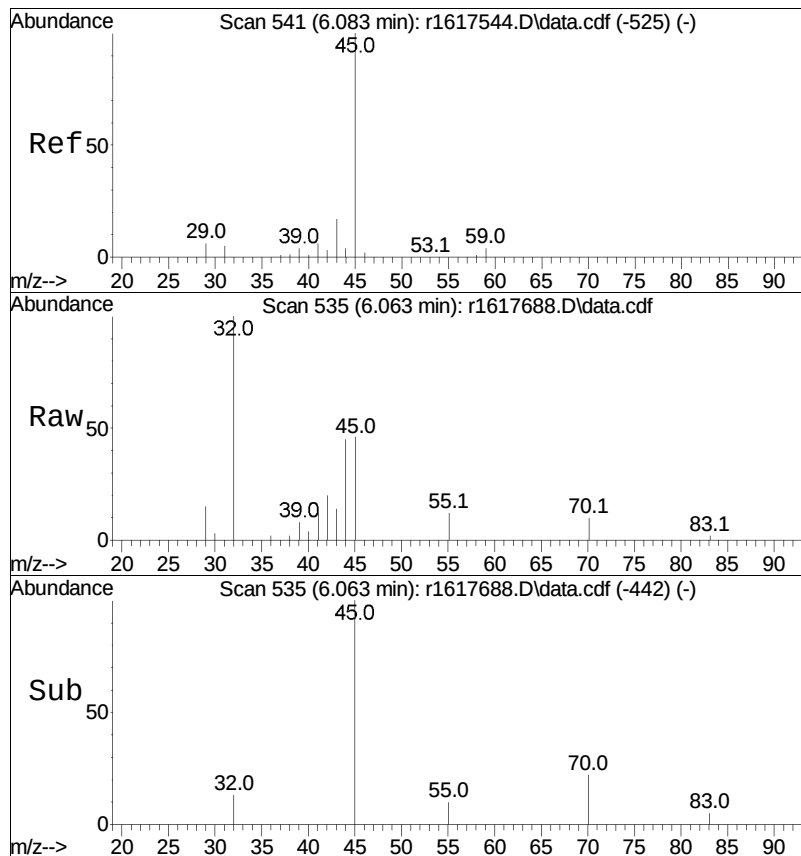




#21
 trichlorofluoromethane
 Concen: 0.30 ppbV
 RT: 5.93 min Scan# 494
 Delta R.T. -0.033 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

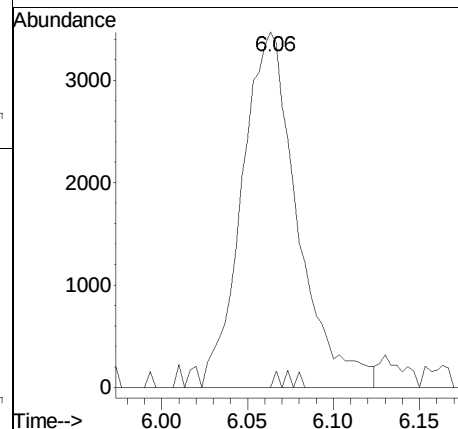
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	53.8	52.1	78.1	

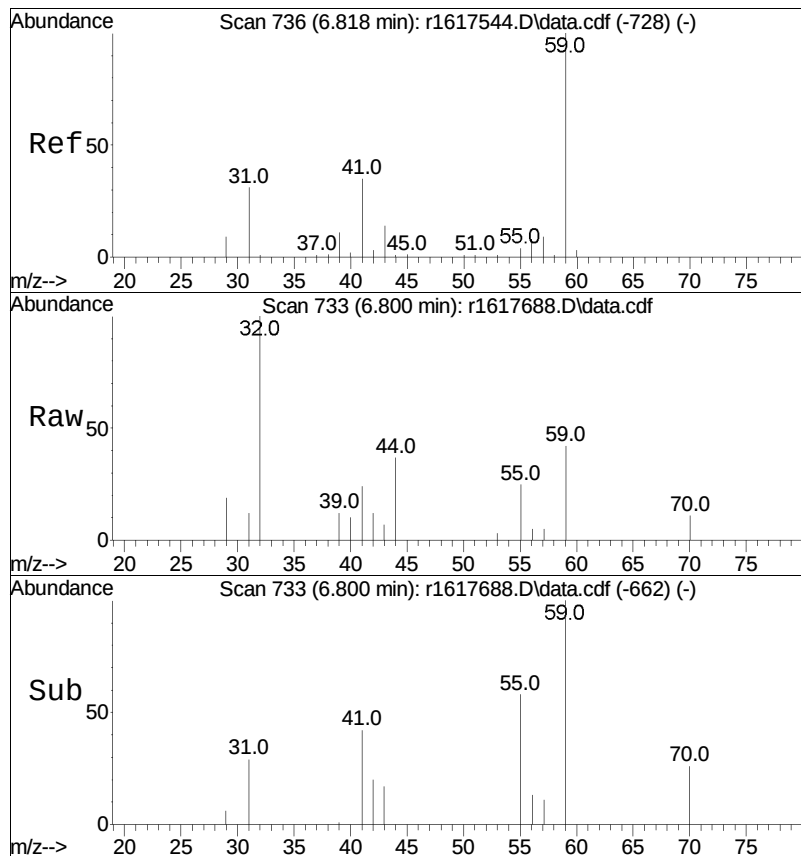




#22
isopropyl alcohol
Concen: 0.38 ppbV
RT: 6.06 min Scan# 535
Delta R.T. -0.020 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

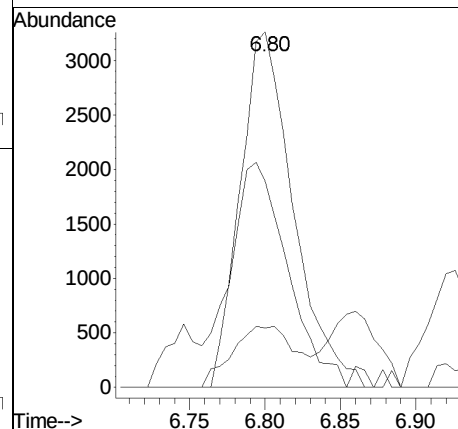
Tgt Ion:	45	Resp:	7833
Ion Ratio	100	Lower	Upper
59	0.0	3.1	4.7#

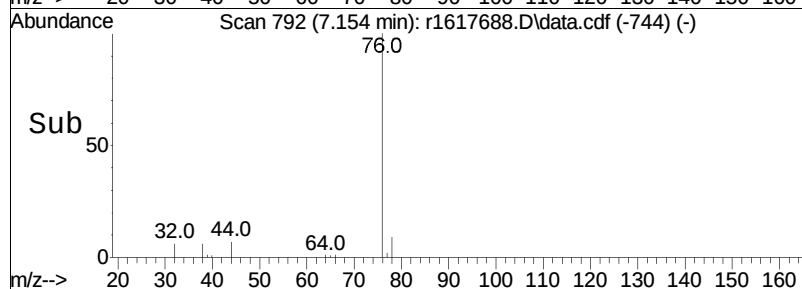
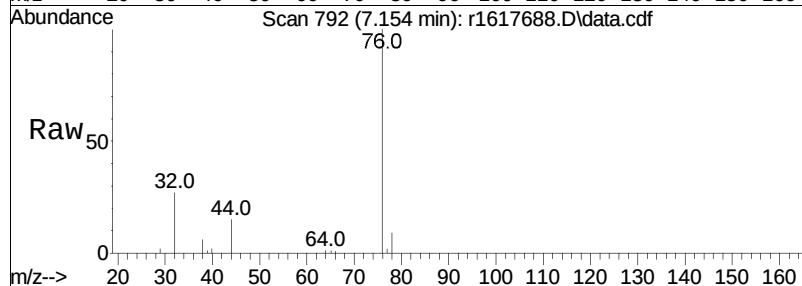
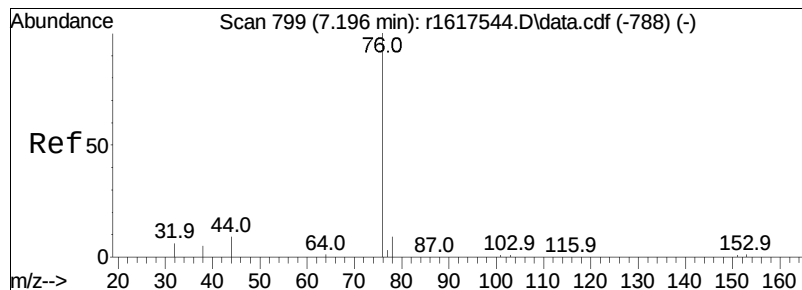




#27
 tertiary butyl alcohol
 Concen: 0.44 ppbV
 RT: 6.80 min Scan# 733
 Delta R.T. -0.018 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

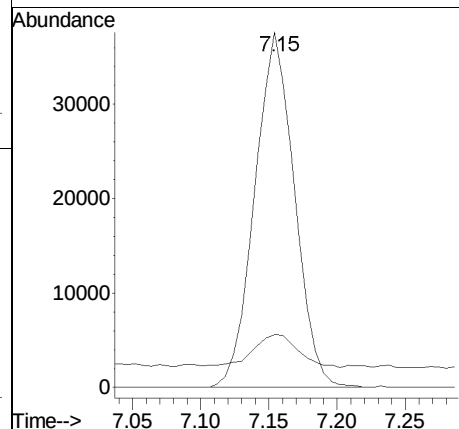
Tgt Ion:	59	Resp:	8016
Ion Ratio	Lower	Upper	
59	100		
41	58.0	28.2	42.2#
43	16.7	11.0	16.6#

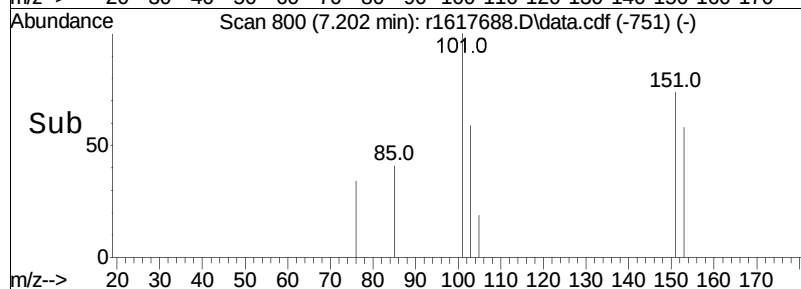
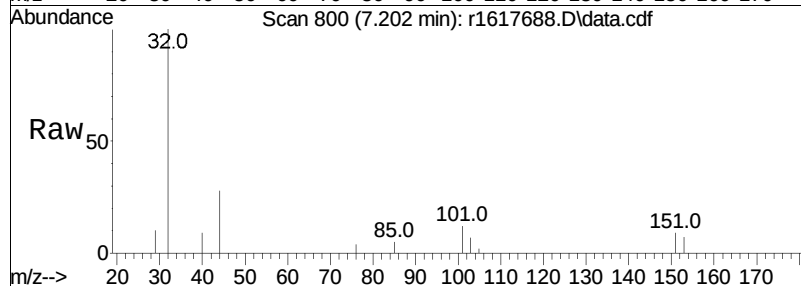
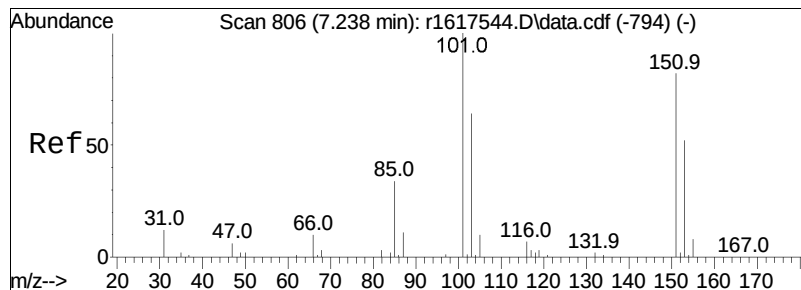




#30
carbon disulfide
Concen: 1.47 ppbV
RT: 7.15 min Scan# 792
Delta R.T. -0.042 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

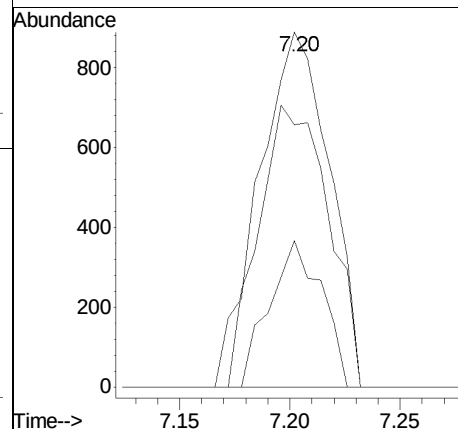
Tgt Ion	Ratio	Lower	Upper
76	100		
44	14.8	7.7	11.5#

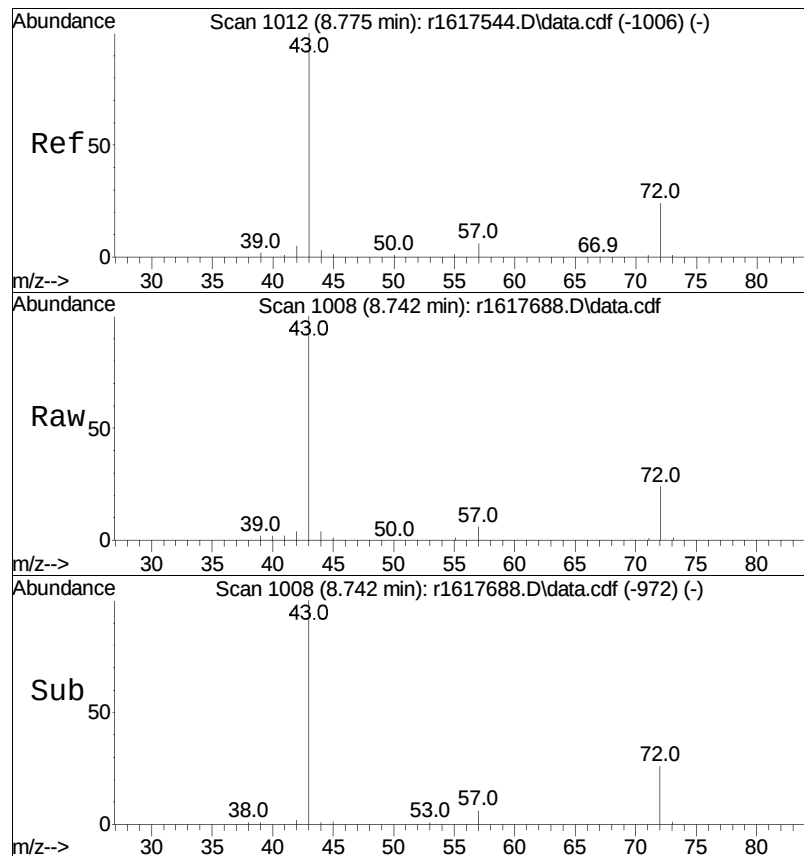




#31
 Freon 113
 Concen: 0.07 ppbV
 RT: 7.20 min Scan# 800
 Delta R.T. -0.036 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

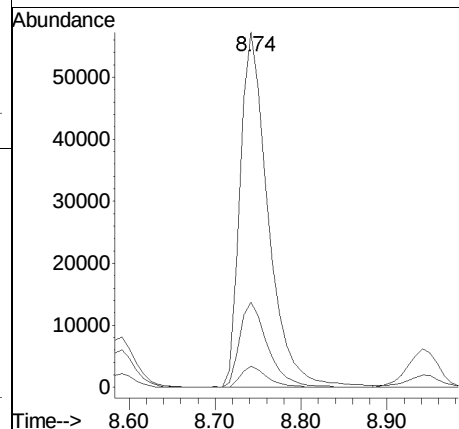
Tgt Ion	Ratio	Lower	Upper
101	100		
85	41.3	27.4	41.0#
151	73.9	65.8	98.6

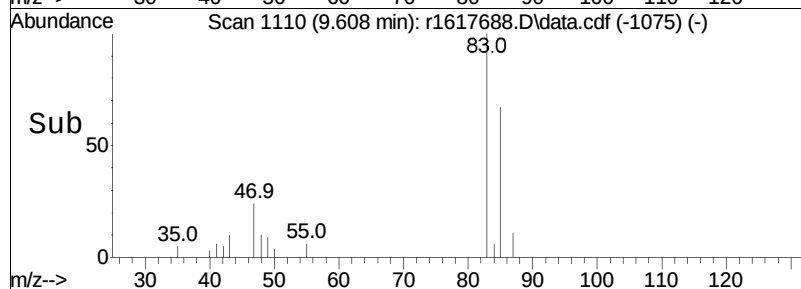
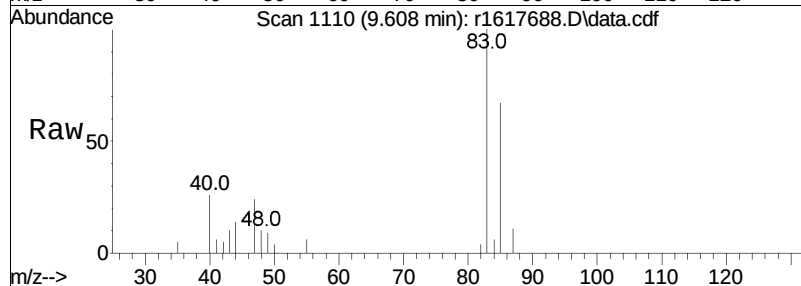
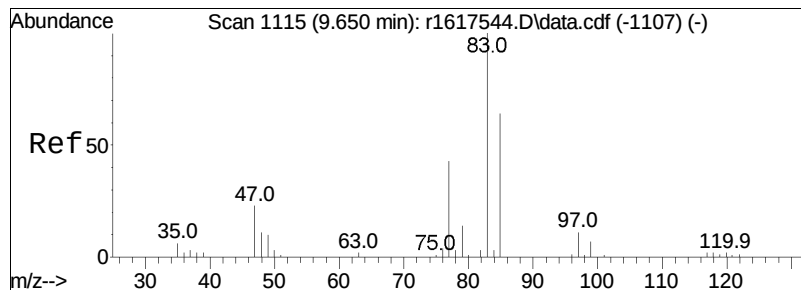




#36
 2-butanone
 Concen: 3.57 ppbV
 RT: 8.74 min Scan# 1008
 Delta R.T. -0.033 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

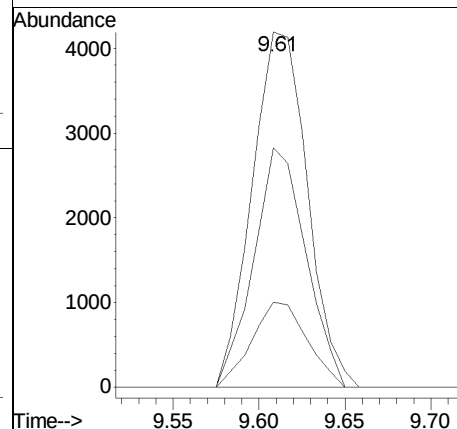
Tgt Ion:	43	Resp:	130616
Ion Ratio	Lower	Upper	
43	100		
72	24.0	19.5	29.3
57	6.0	4.6	6.8

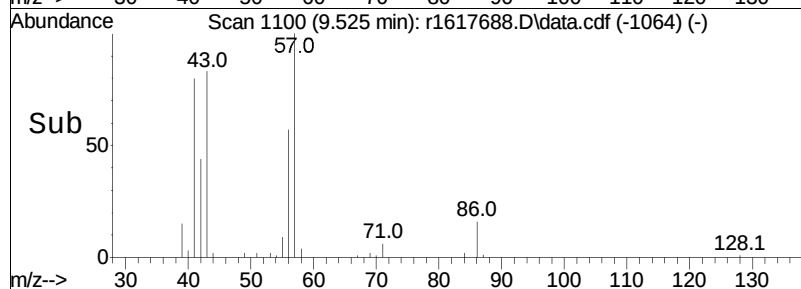
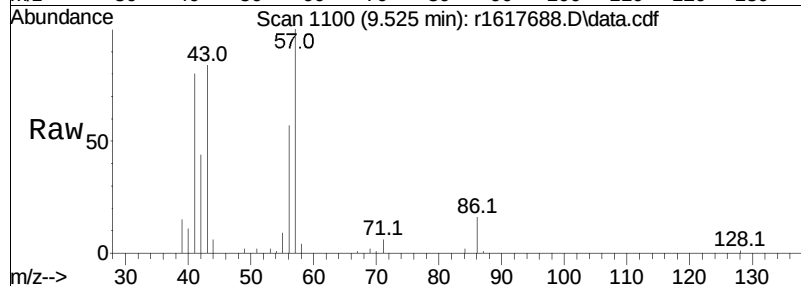
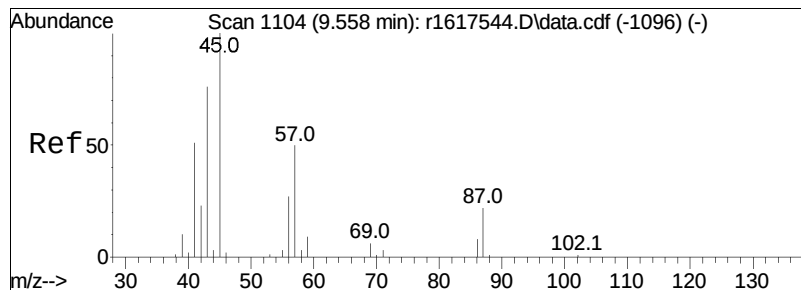




#39
chloroform
Concen: 0.38 ppbV
RT: 9.61 min Scan# 1110
Delta R.T. -0.042 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

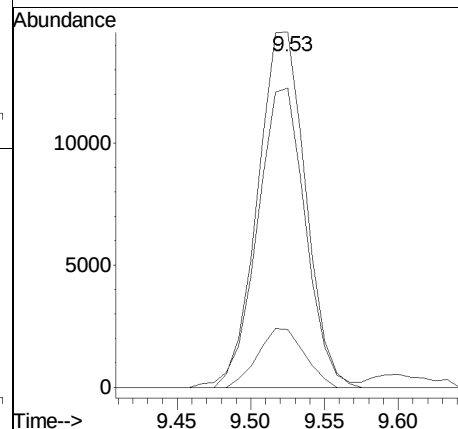
Tgt	Ion	Ratio	Resp	Lower	Upper
83	100		9392		
85	67.4	51.4		77.0	
47	24.0	19.0		28.4	

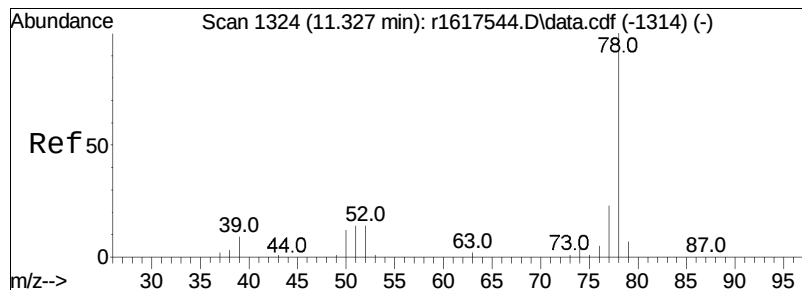




#44
hexane
Concen: 1.21 ppbV
RT: 9.53 min Scan# 1100
Delta R.T. -0.033 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

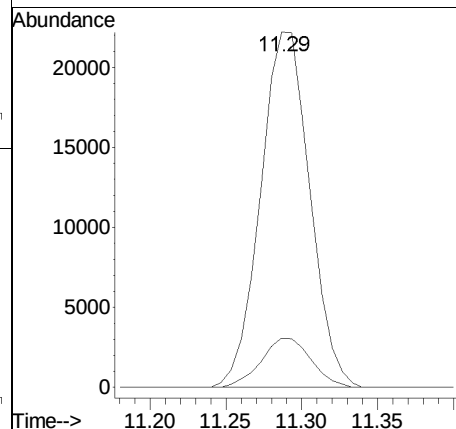
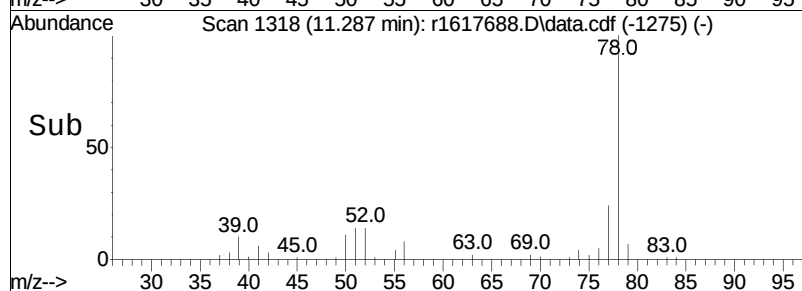
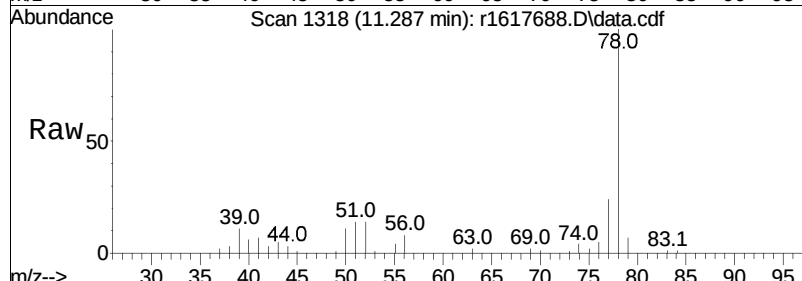
Tgt Ion	Ratio	Lower	Upper
57	100		
43	84.3	122.6	184.0#
86	16.3	13.1	19.7

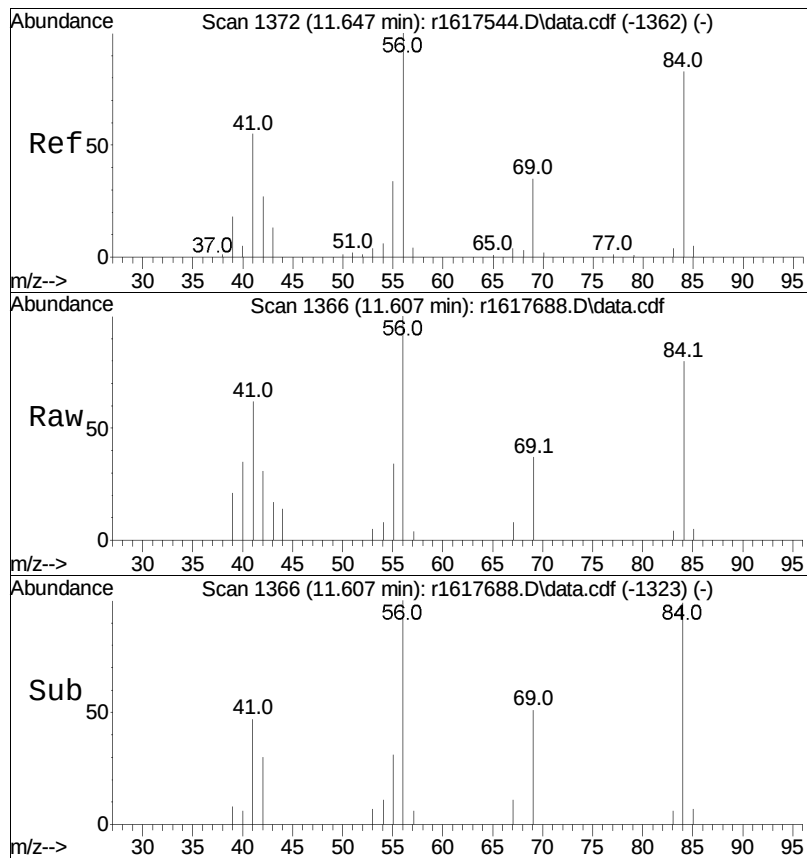




#50
benzene
Concen: 0.84 ppbV
RT: 11.29 min Scan# 1318
Delta R.T. -0.040 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

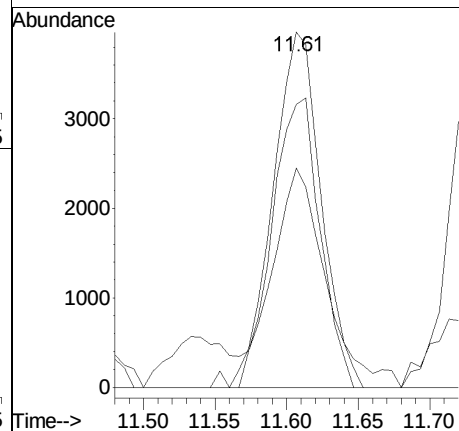
Tgt Ion	Ratio	Lower	Upper
78	100		
52	13.9	11.4	17.0

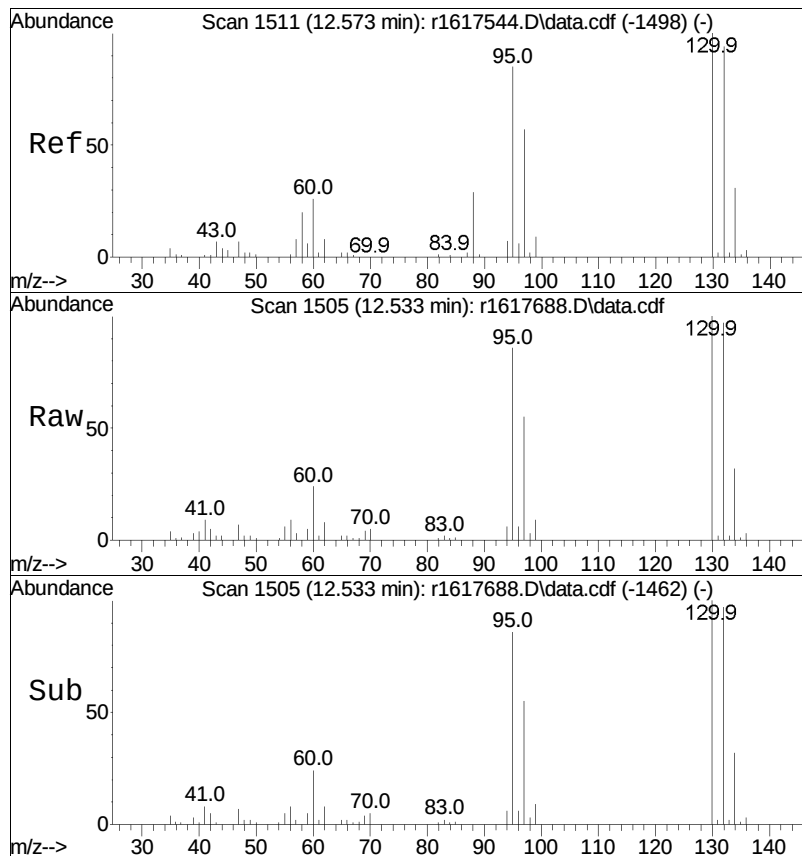




#53
cyclohexane
Concen: 0.32 ppbV
RT: 11.61 min Scan# 1366
Delta R.T. -0.040 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

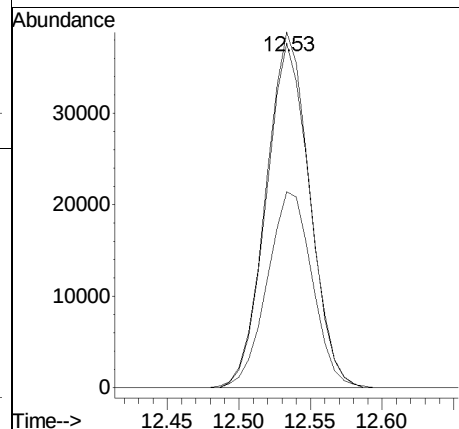
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	79.7	66.6	100.0	
41	61.7	44.2	66.4	

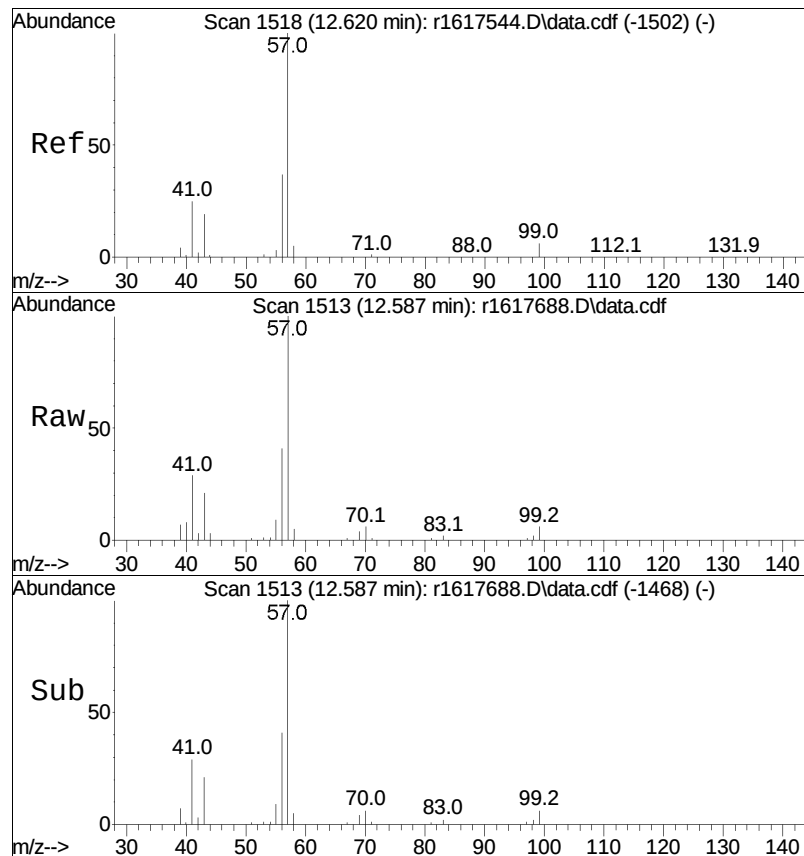




#59
 trichloroethene
 Concen: 3.28 ppbV
 RT: 12.53 min Scan# 1505
 Delta R.T. -0.040 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

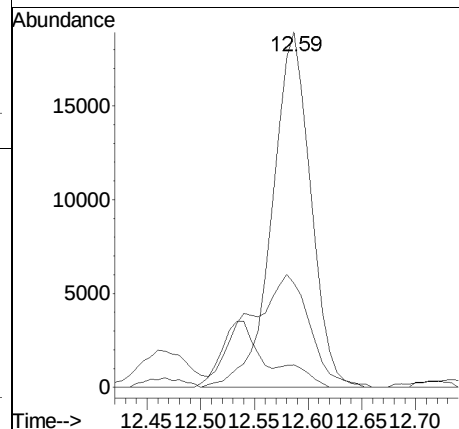
Tgt Ion	Ratio	Lower	Upper
130	100		
132	96.9	75.5	113.3
97	55.1	45.7	68.5

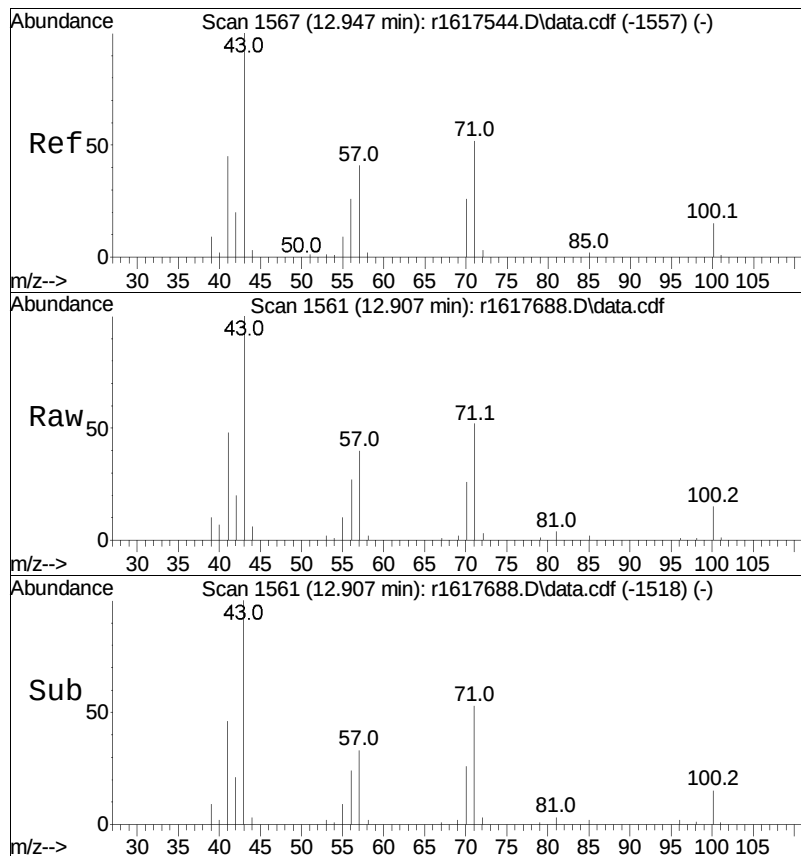




#60
 2,2,4-trimethylpentane
 Concen: 0.52 ppbV
 RT: 12.59 min Scan# 1513
 Delta R.T. -0.033 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

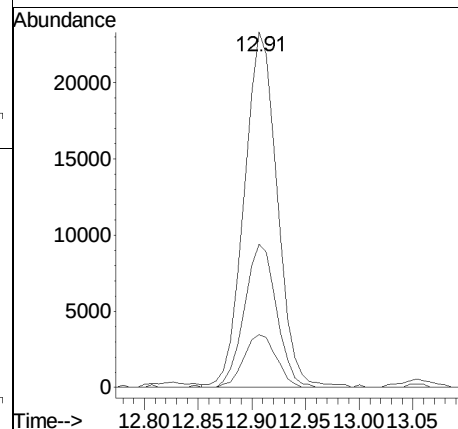
Tgt Ion	Ratio	Lower	Upper
57	100		
99	6.4	4.7	7.1
41	29.3	19.9	29.9

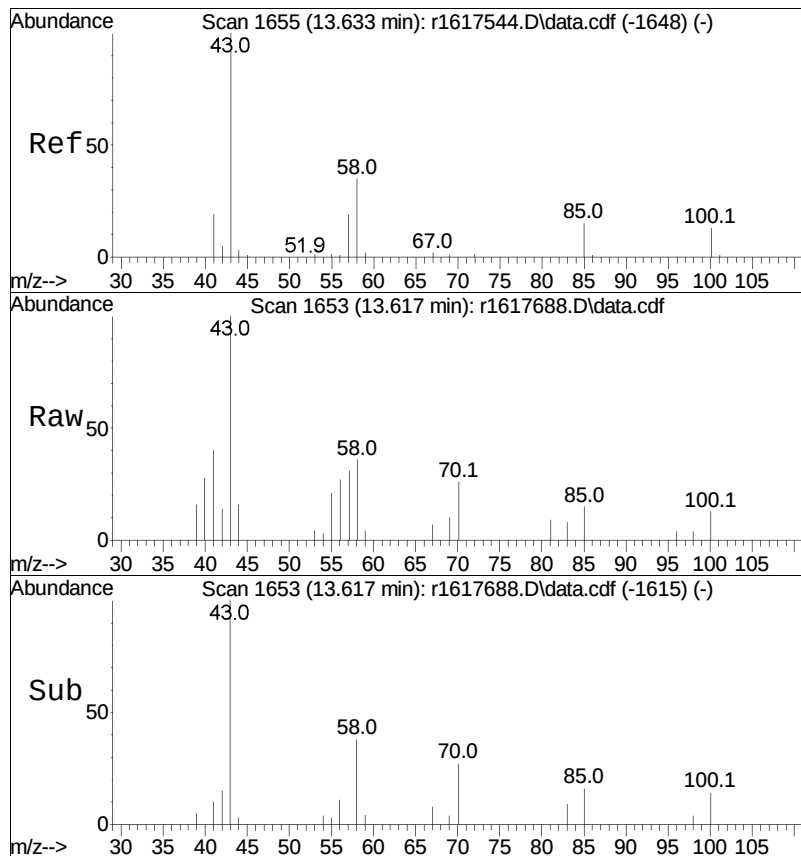




#62
heptane
Concen: 1.20 ppbV
RT: 12.91 min Scan# 1561
Delta R.T. -0.040 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

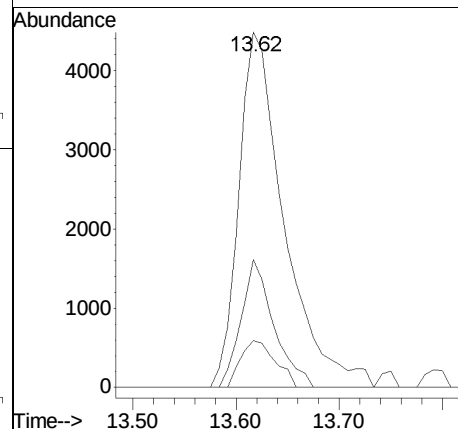
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	40.3	33.1	49.7	
100	14.8	11.8	17.8	

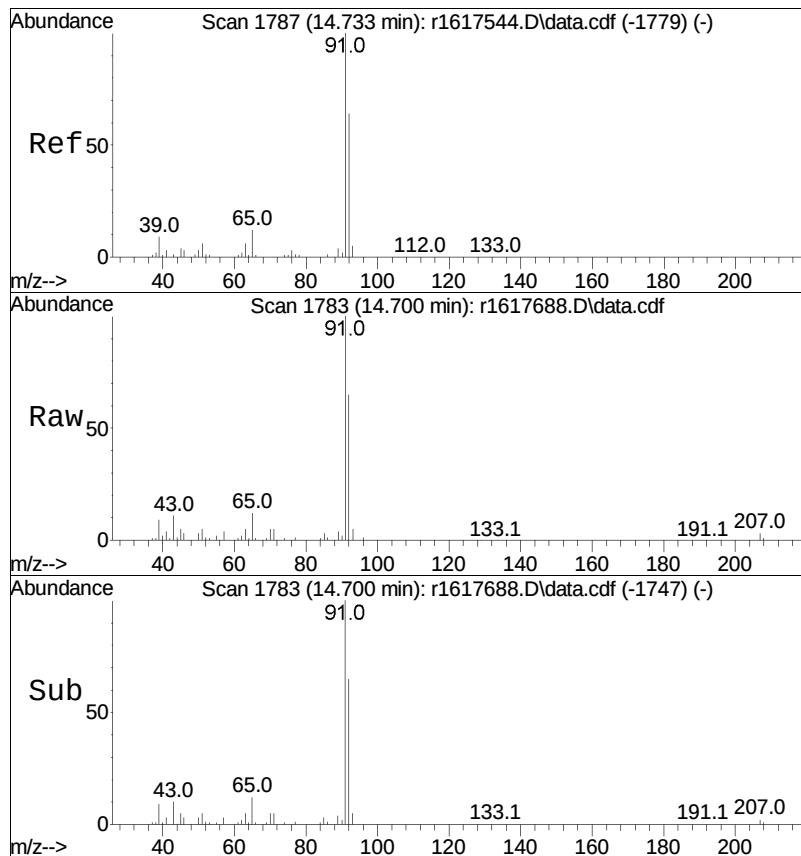




#64
 4-methyl-2-pentanone
 Concen: 0.30 ppbV
 RT: 13.62 min Scan# 1653
 Delta R.T. -0.017 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

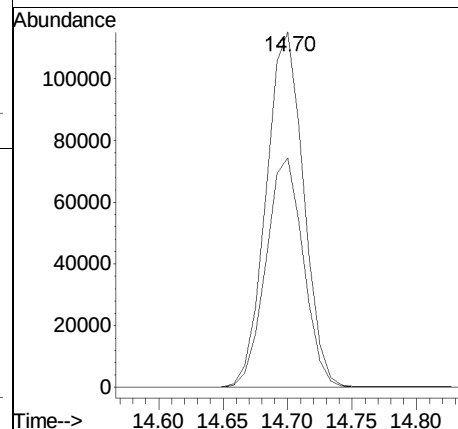
Tgt Ion:	43	58	100	Ratio	Lower	Upper
43	100					
58	35.9	27.7	41.5			
100	13.1	10.7	16.1			

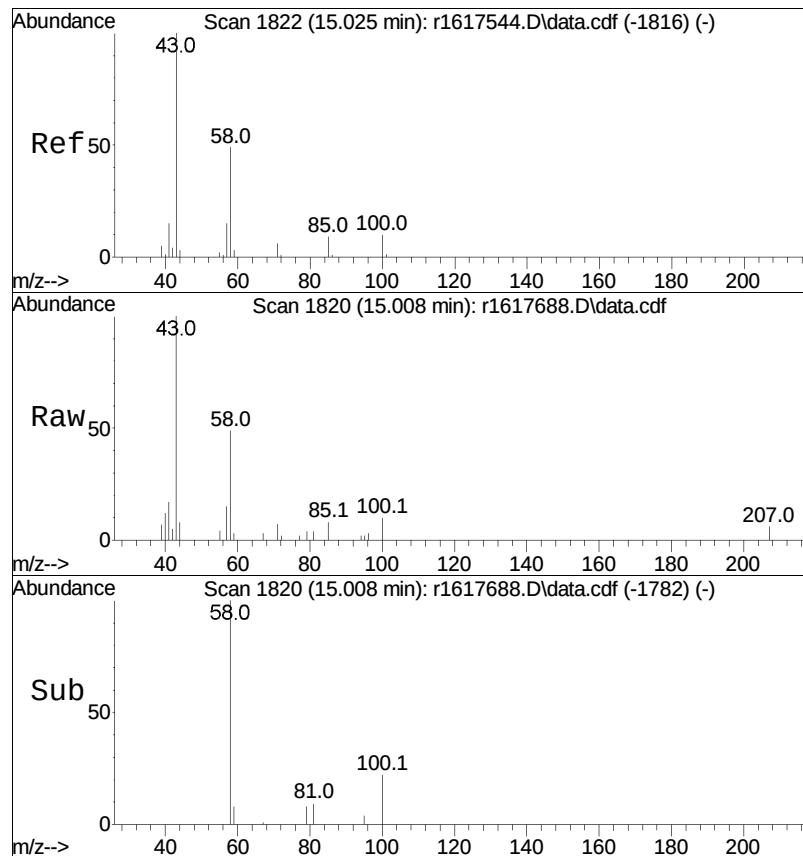




#68
toluene
Concen: 3.77 ppbV
RT: 14.70 min Scan# 1783
Delta R.T. -0.033 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

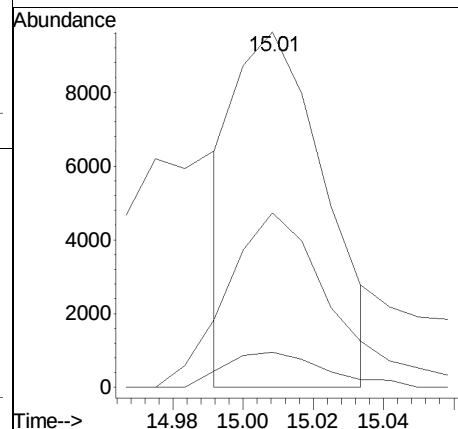
Tgt	Ion	Resp	Lower	Upper
91	100	232629		
92	64.6	50.9	76.3	

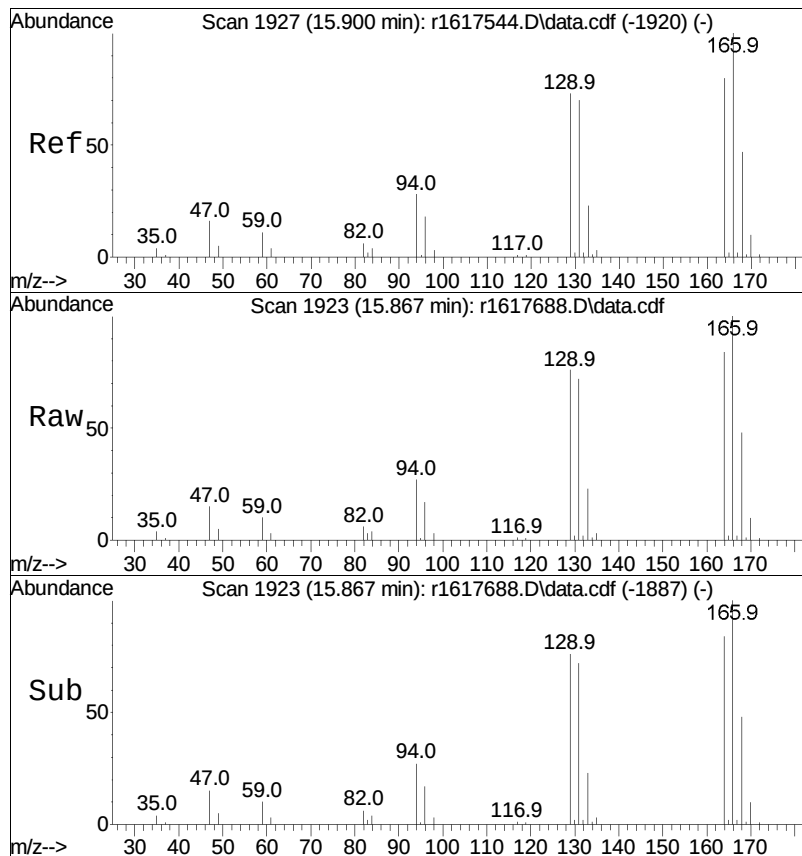




#72
 2-hexanone
 Concen: 0.47 ppbV m
 RT: 15.01 min Scan# 1820
 Delta R.T. -0.017 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

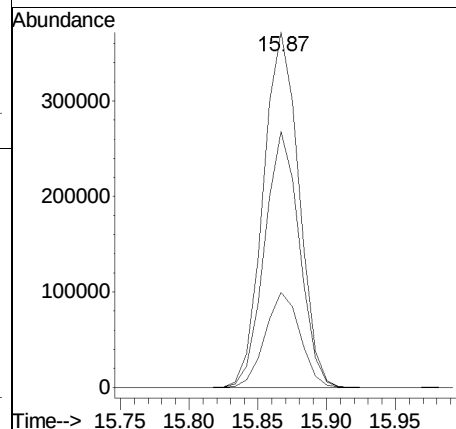
Tgt Ion	Ratio	Lower	Upper
43	100		
58	49.1	40.0	60.0
100	9.9	8.7	13.1

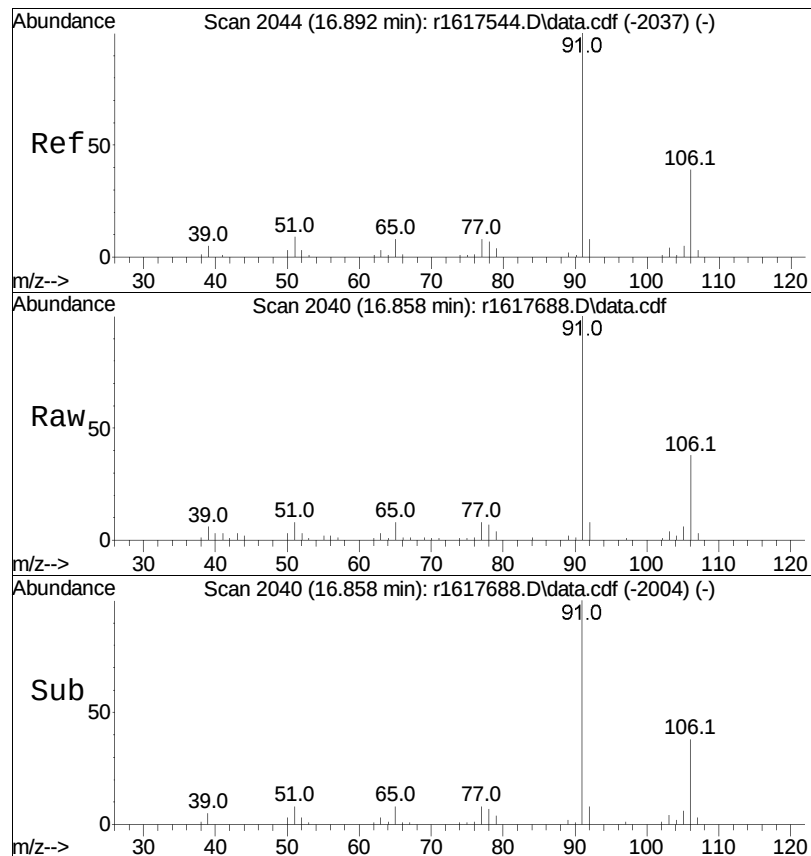




#78
 tetrachloroethene
 Concen: 24.20 ppbV
 RT: 15.87 min Scan# 1923
 Delta R.T. -0.033 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

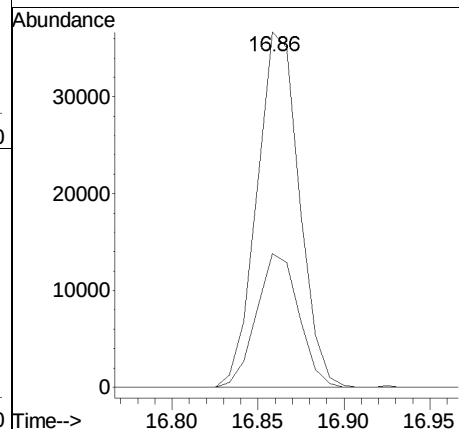
Tgt	Ion:166	Resp:	668914
Ion	Ratio	Lower	Upper
166	100		
131	72.0	56.1	84.1
94	26.8	22.2	33.4

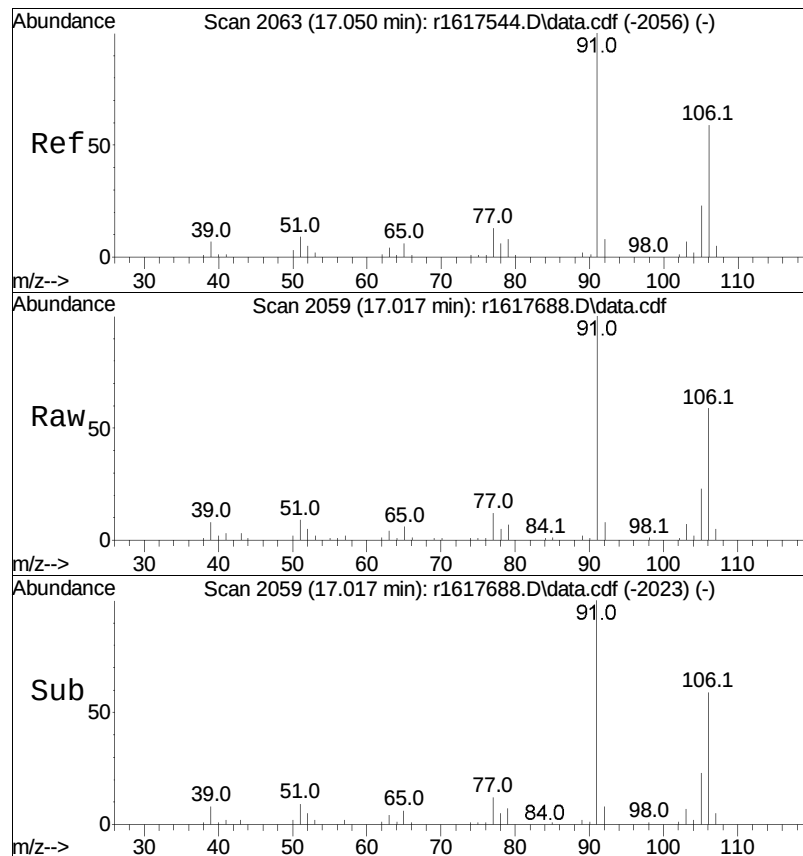




#81
 ethylbenzene
 Concen: 0.78 ppbV
 RT: 16.86 min Scan# 2040
 Delta R.T. -0.033 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

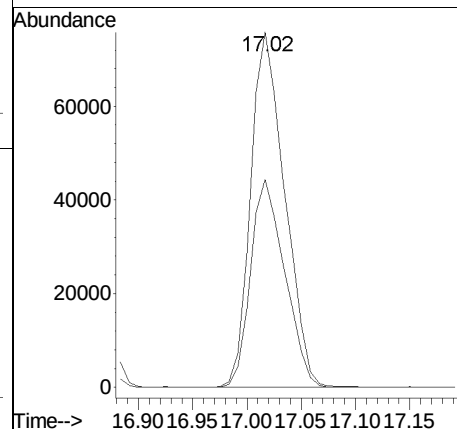
Tgt Ion	Ratio	Lower	Upper
91	100		
106	37.6	31.1	46.7

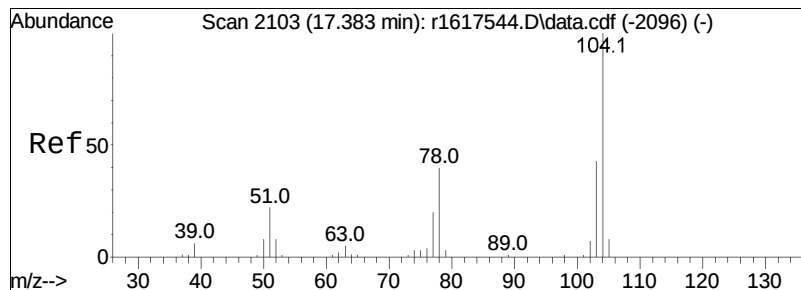




#83
 m+p-xylene
 Concen: 2.56 ppbV
 RT: 17.02 min Scan# 2059
 Delta R.T. -0.033 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

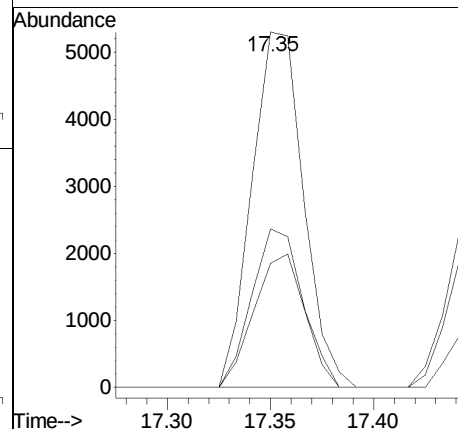
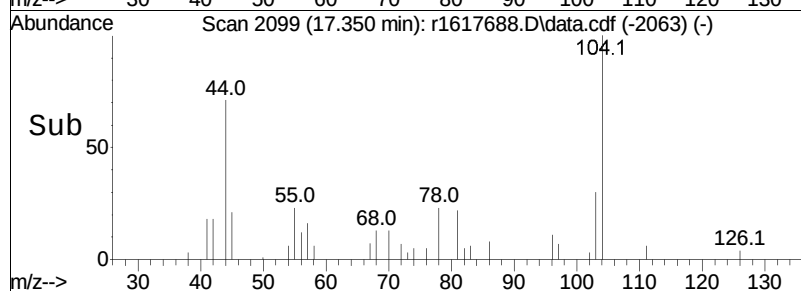
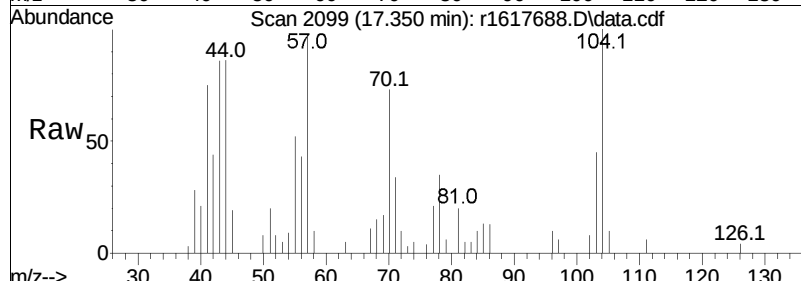
Tgt	Ion	Resp	Lower	Upper
91	100	165328		
106	58.6	47.5	71.3	

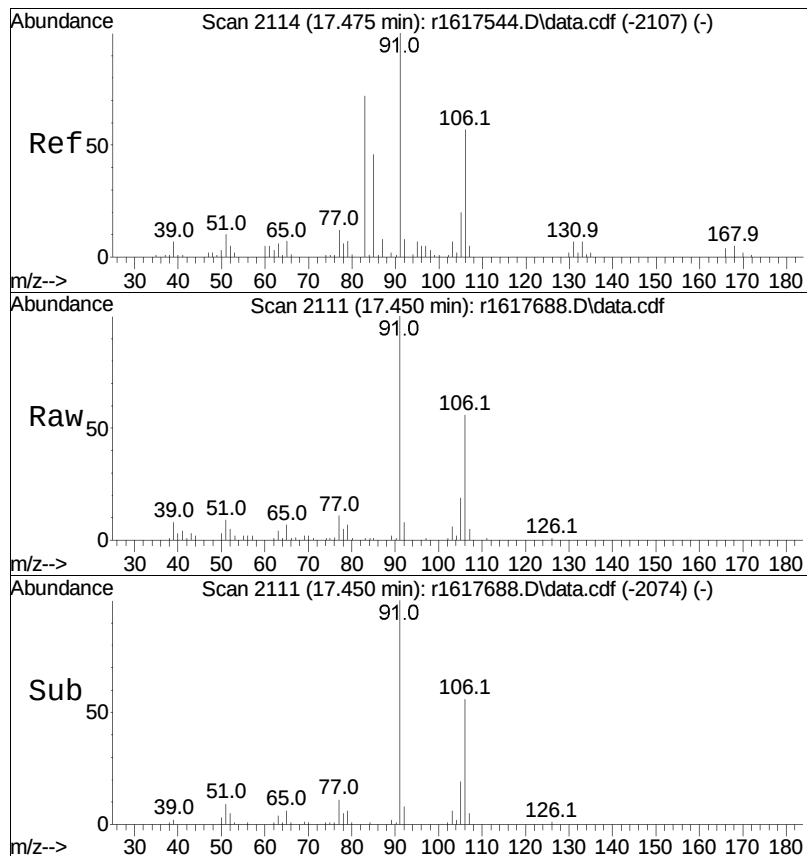




#85
styrene
Concen: 0.16 ppbV
RT: 17.35 min Scan# 2099
Delta R.T. -0.033 min
Lab File: r1617688.D
Acq: 16 Jun 2020 8:46 PM

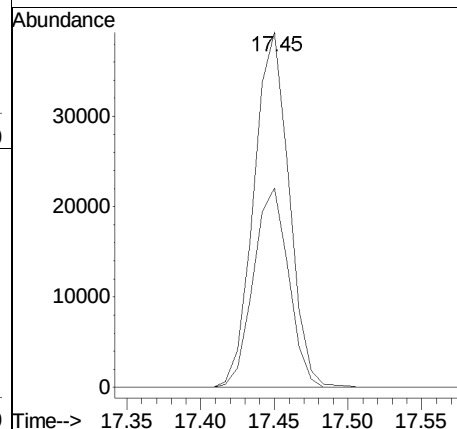
Tgt Ion	Ratio	Lower	Upper
104	100		
103	44.6	34.4	51.6
78	34.9	31.8	47.6

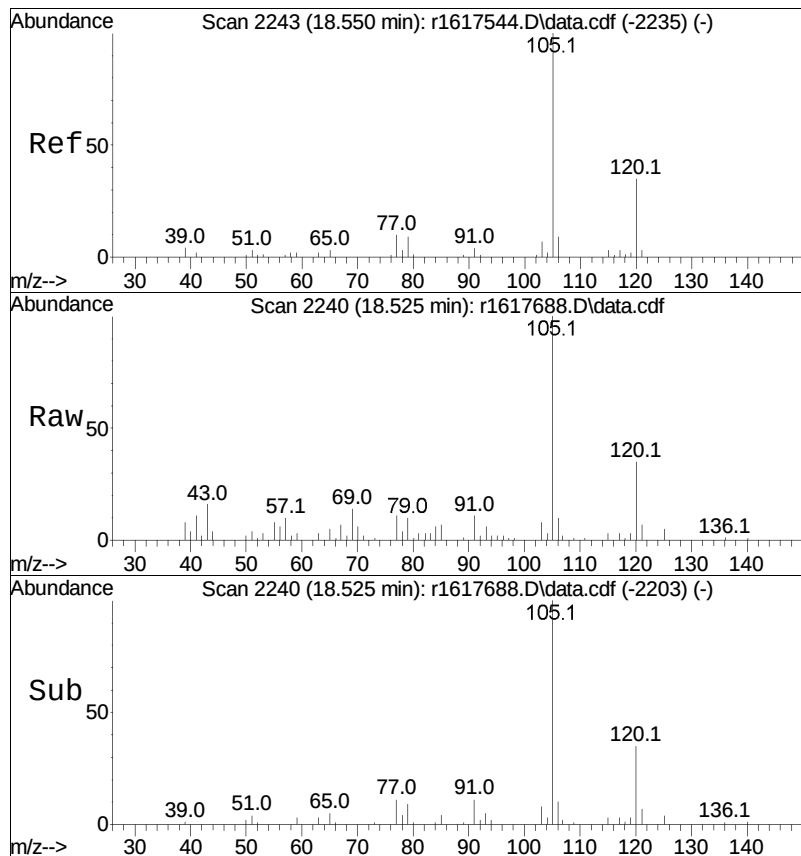




#87
 o-xylene
 Concen: 1.00 ppbV
 RT: 17.45 min Scan# 2111
 Delta R.T. -0.025 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

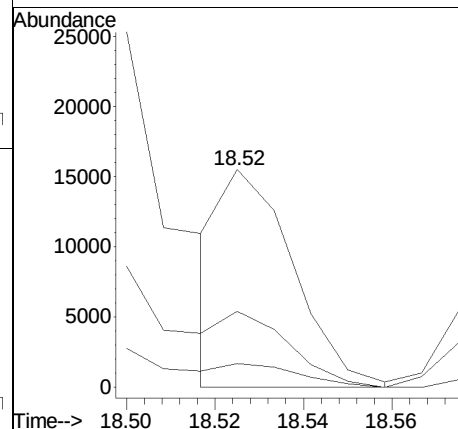
Tgt Ion	Ratio	Lower	Upper
91	100		
106	56.1	45.8	68.8

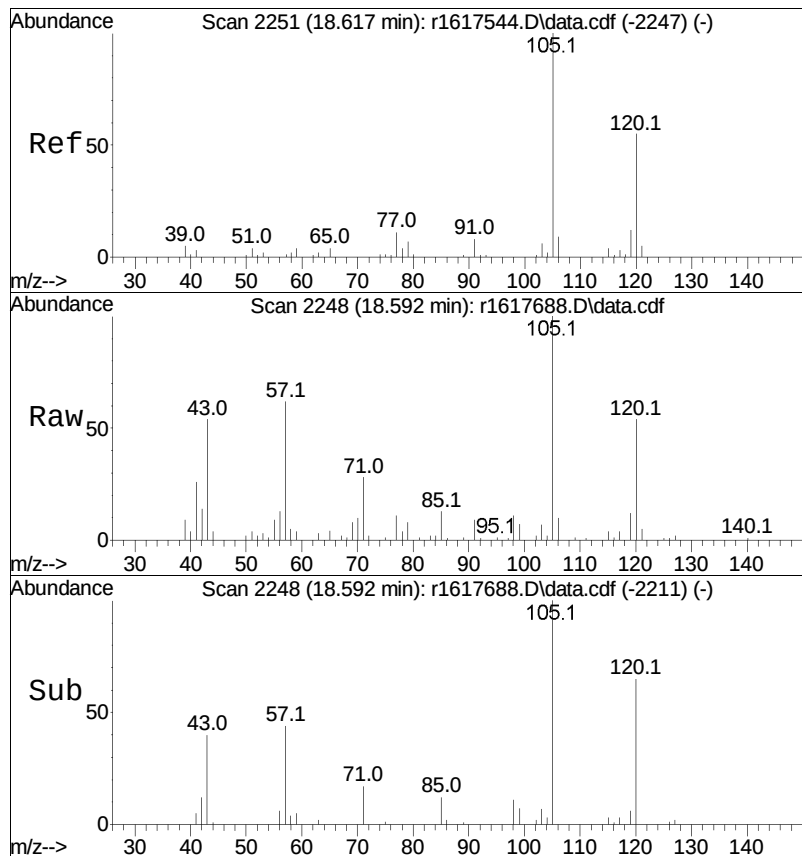




#96
 4-ethyl toluene
 Concen: 0.18 ppbV m
 RT: 18.52 min Scan# 2240
 Delta R.T. -0.025 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

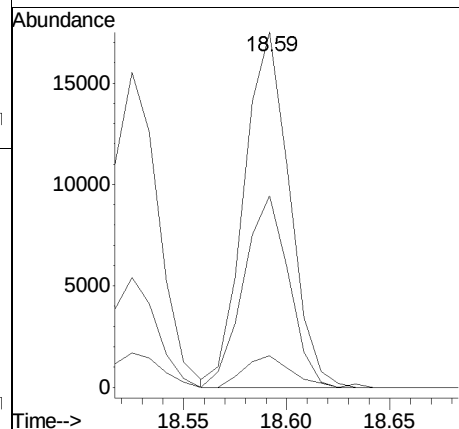
Tgt Ion:	105	Resp:	17498
Ion Ratio	Lower	Upper	
105	100		
120	34.9	27.8	41.6
91	10.9	7.1	10.7#

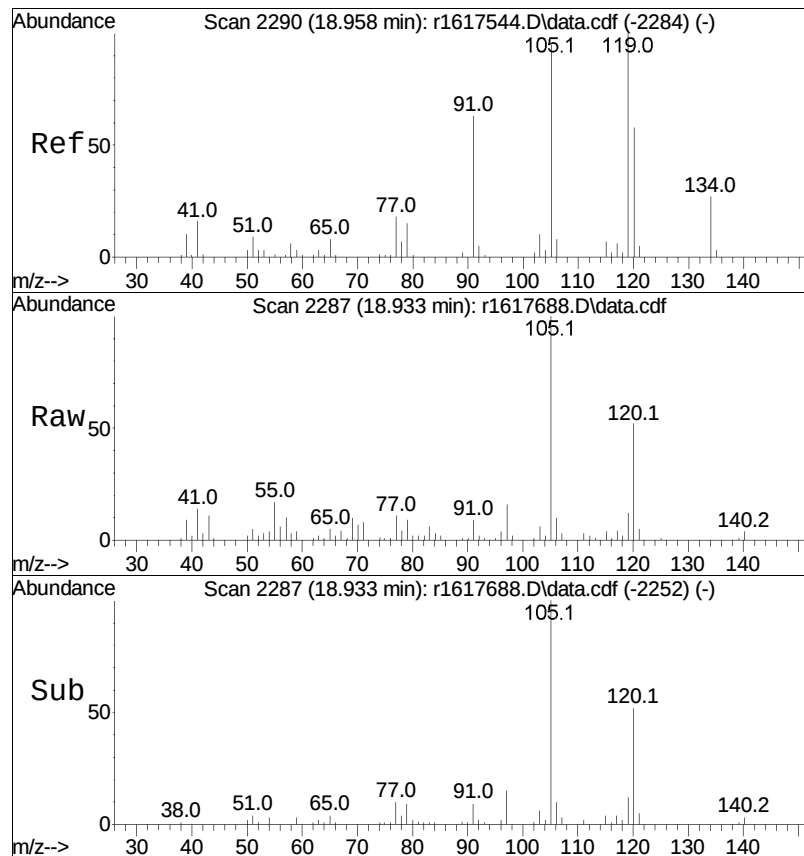




#97
 1,3,5-trimethylbenzene
 Concen: 0.33 ppbV
 RT: 18.59 min Scan# 2248
 Delta R.T. -0.025 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

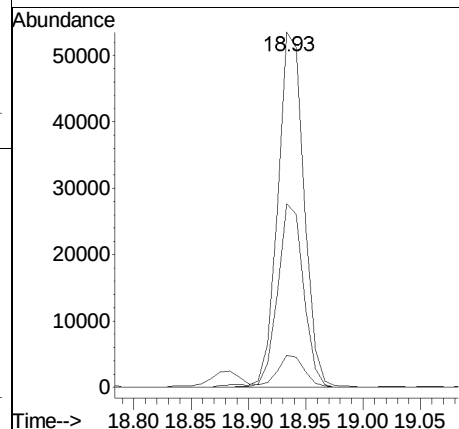
Tgt	Ion:105	Resp:	26760
Ion	Ratio	Lower	Upper
105	100		
120	54.0	43.6	65.4
91	8.9	6.8	10.2





#99
 1,2,4-trimethylbenzene
 Concen: 1.11 ppbV
 RT: 18.93 min Scan# 2287
 Delta R.T. -0.025 min
 Lab File: r1617688.D
 Acq: 16 Jun 2020 8:46 PM

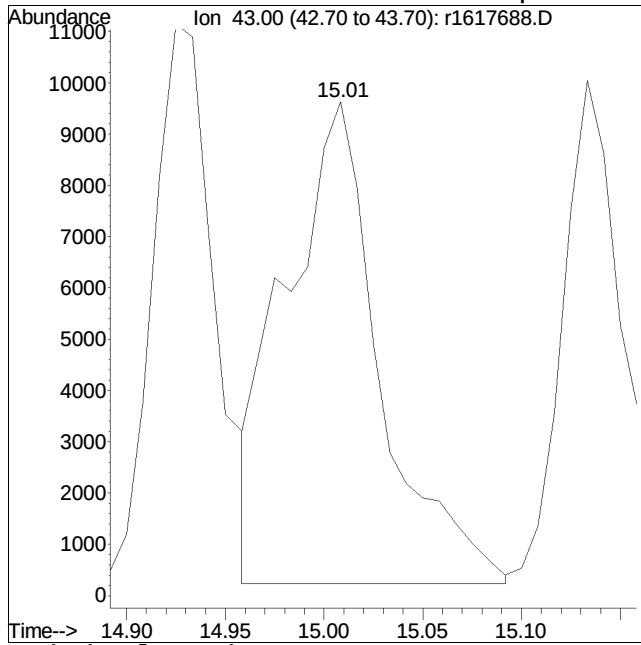
Tgt Ion	Ratio	Lower	Upper
105	100		
120	51.7	48.9	73.3
91	9.0	53.3	79.9#



Manual Integration/Negative Proof Report

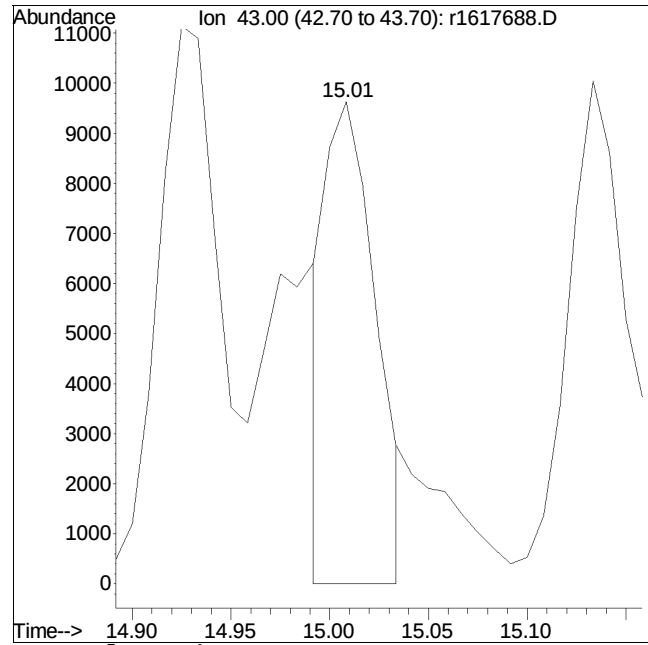
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617688.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:8: 6 Instrument :
Sample : L2024597-02,3,250,250 Quant Date : 6/17/2020 5:23 am

Compound #72: 2-hexanone



Original Peak Response = 31503

M4 = Poor automated baseline construction.

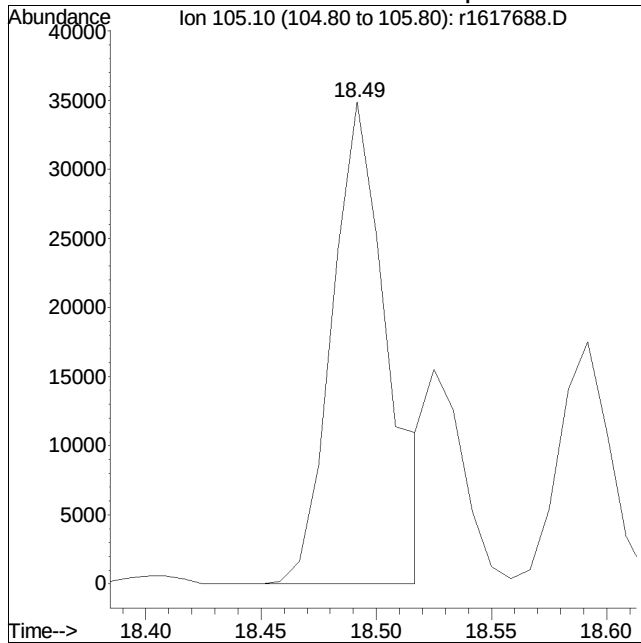


Manual Peak Response = 17006 M4

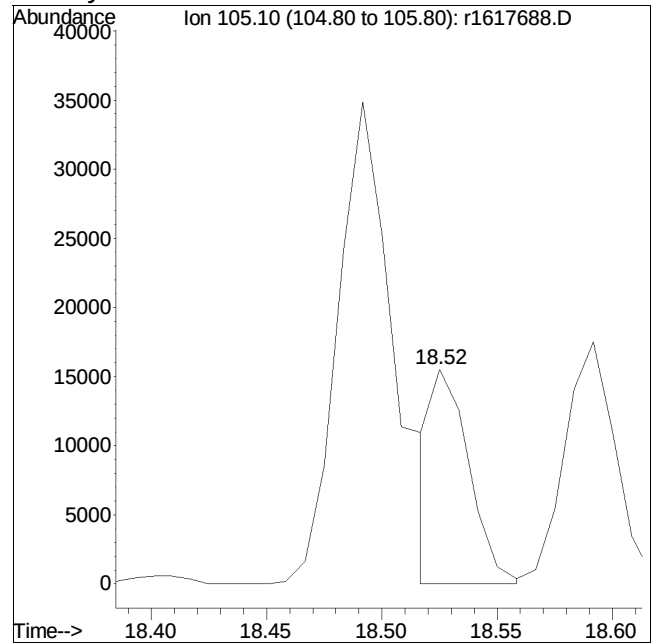
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617688.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:8: 6 Instrument :
Sample : L2024597-02,3,250,250 Quant Date : 6/17/2020 5:23 am

Compound #96: 4-ethyl toluene



Original Peak Response = 58521



Manual Peak Response = 17498 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\Airlab16\2020\06\200616T\
 Data File : r1617689.D
 Acq On : 16 Jun 2020 9:26 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-03,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:07:34 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.44	49	285550	10.000	ppbV	-0.04
Standard Area = 312675			Recovery =		91.32%	
43) 1,4-difluorobenzene	11.73	114	825093	10.000	ppbV	-0.04
Standard Area = 882052			Recovery =		93.54%	
67) chlorobenzene-D5	16.47	54	107979	10.000	ppbV	-0.03
Standard Area = 116247			Recovery =		92.89%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.84	85	1204126	57.251	ppbV	99
6) chloromethane	0.00		0	N.D.		
7) Freon-114	0.00		0	N.D.		
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	4.44	54	11033	1.084	ppbV	97
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.15	31	79352	9.411	ppbV	92
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	2993125	171.886	ppbV	99
21) trichlorofluoromethane	5.92	101	5162	0.333	ppbV #	83
22) isopropyl alcohol	6.05	45	11611M4	0.587	ppbV	
26) 1,1-dichloroethene	0.00		0	N.D.	d	
27) tertiary butyl alcohol	6.79	59	19640	1.114	ppbV #	79
28) methylene chloride	6.87	49	1768	0.093	ppbV	99
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	7.15	76	68969	1.377	ppbV #	81
31) Freon 113	7.20	101	1899	0.067	ppbV	99
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	0.00		0	N.D.		
34) MTBE	0.00		0	N.D.	d	
36) 2-butanone	8.73	43	350730	9.911	ppbV	100
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	9.60	61	294	0.058	ppbV #	1
39) chloroform	9.61	83	194736	8.145	ppbV	99
40) Tetrahydrofuran	10.07	42	3490	0.161	ppbV	96
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617689.D
 Acq On : 16 Jun 2020 9:26 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-03,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:07:34 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	9.52	57	41416	1.572	ppbV	#	49
48) 1,1,1-trichloroethane	0.00		0	N.D.	d		
50) benzene	11.29	78	55747	0.970	ppbV		98
52) carbon tetrachloride	11.46		0	N.D.			
53) cyclohexane	11.60	56	8108	0.284	ppbV		97
56) 1,2-dichloropropane	0.00		0	N.D.			
57) bromodichloromethane	12.48	83	5255M3	0.193	ppbV		
58) 1,4-dioxane	0.00		0	N.D.	d		
59) trichloroethene	12.53	130	53584	2.201	ppbV		97
60) 2,2,4-trimethylpentane	12.58	57	45415	0.520	ppbV	#	87
62) heptane	12.91	43	54831	1.361	ppbV		98
63) cis-1,3-dichloropropene	0.00		0	N.D.			
64) 4-methyl-2-pentanone	13.62	43	16883	0.386	ppbV		96
65) trans-1,3-dichloropropene	0.00		0	N.D.			
66) 1,1,2-trichloroethane	0.00		0	N.D.	d		
68) toluene	14.70	91	190918	3.165	ppbV		99
72) 2-hexanone	15.00	43	66162	1.868	ppbV		96
74) dibromochloromethane	0.00		0	N.D.			
75) 1,2-dibromoethane	0.00		0	N.D.			
78) tetrachloroethene	15.87	166	250721	9.272	ppbV		98
80) chlorobenzene	0.00		0	N.D.	d		
81) ethylbenzene	16.86	91	46186	0.587	ppbV		98
83) m+p-xylene	17.02	91	132483	2.098	ppbV		100
84) bromoform	0.00		0	N.D.			
85) styrene	17.35	104	8745	0.157	ppbV		97
86) 1,1,2,2-tetrachloroethane	0.00		0	N.D.	d		
87) o-xylene	17.45	91	49774	0.779	ppbV		100
96) 4-ethyl toluene	18.52	105	14191M3	0.148	ppbV		
97) 1,3,5-trimethylbenzene	18.59	105	21869	0.274	ppbV		98
99) 1,2,4-trimethylbenzene	18.93	105	68523	0.906	ppbV	#	56
101) Benzyl Chloride	0.00		0	N.D.	d		
102) 1,3-dichlorobenzene	0.00		0	N.D.	d		
103) 1,4-dichlorobenzene	19.13		0	N.D.			
107) 1,2-dichlorobenzene	0.00		0	N.D.			
115) 1,2,4-trichlorobenzene	0.00		0	N.D.			
119) hexachlorobutadiene	0.00		0	N.D.			

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617689.D
 Acq On : 16 Jun 2020 9:26 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-03,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:07:34 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY - .

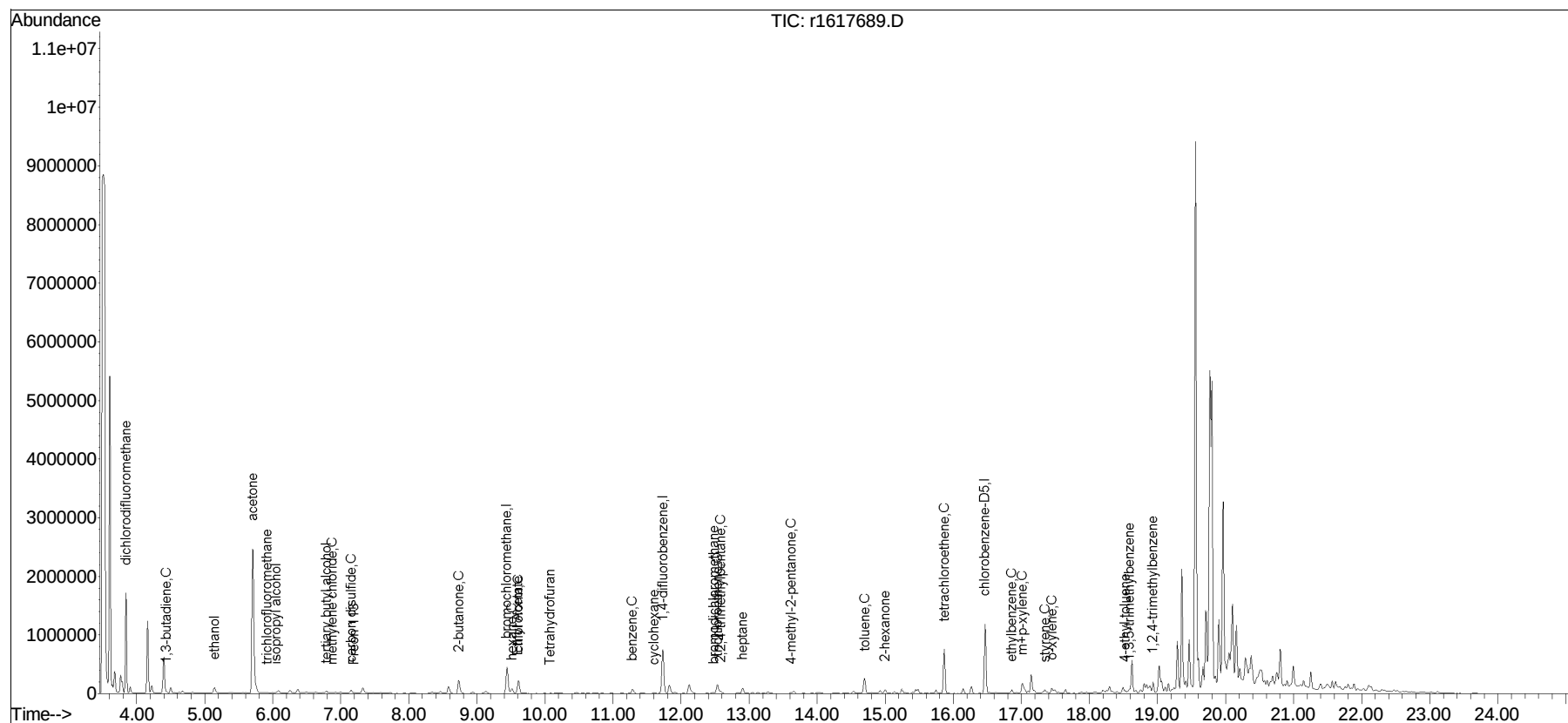
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

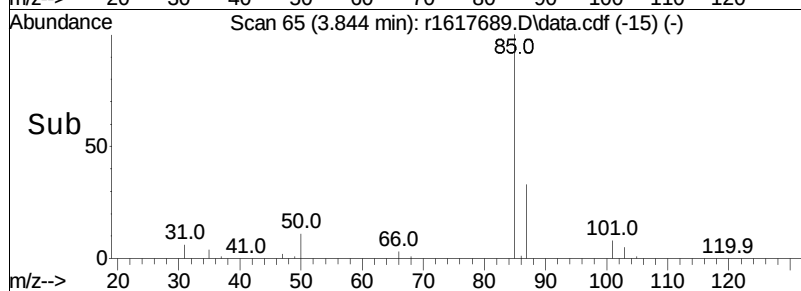
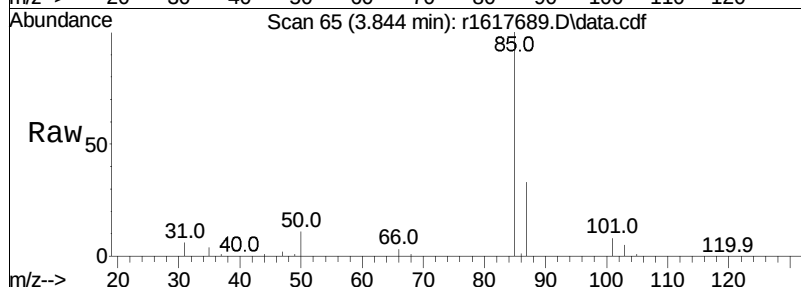
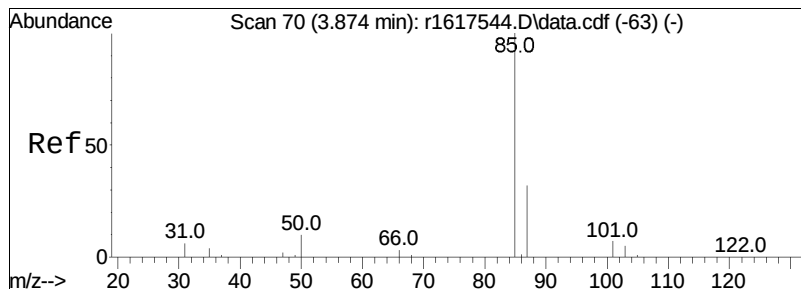
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617689.D
 Acq On : 16 Jun 2020 9:26 PM
 Operator : AIRLAB16:RY
 Sample : L2024597-03,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:07:34 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

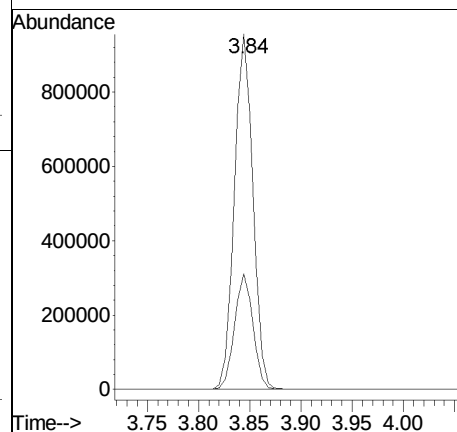
Sub List : T015-NY - .s\Data\Airlab16\2020\06\200616T\r1617677.D

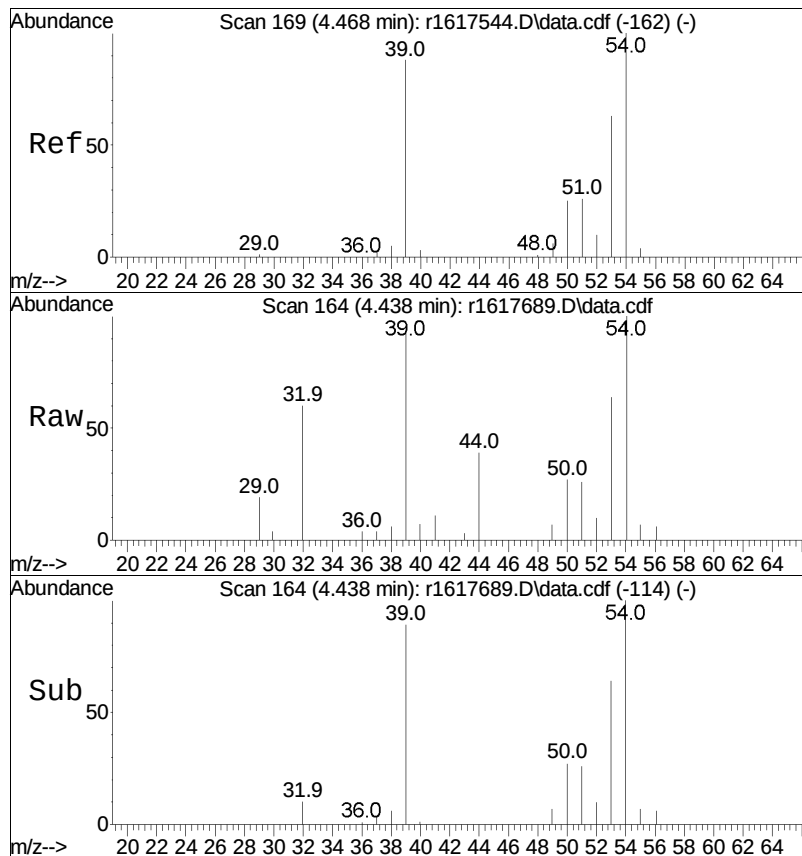




#5
dichlorodifluoromethane
Concen: 57.25 ppbV
RT: 3.84 min Scan# 65
Delta R.T. -0.030 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

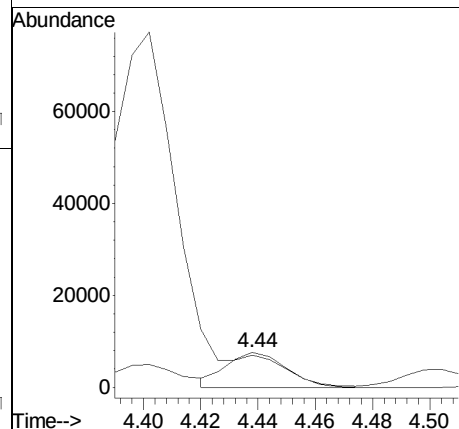
Tgt Ion: 85 Resp: 1204126
Ion Ratio Lower Upper
85 100
87 32.5 25.7 38.5

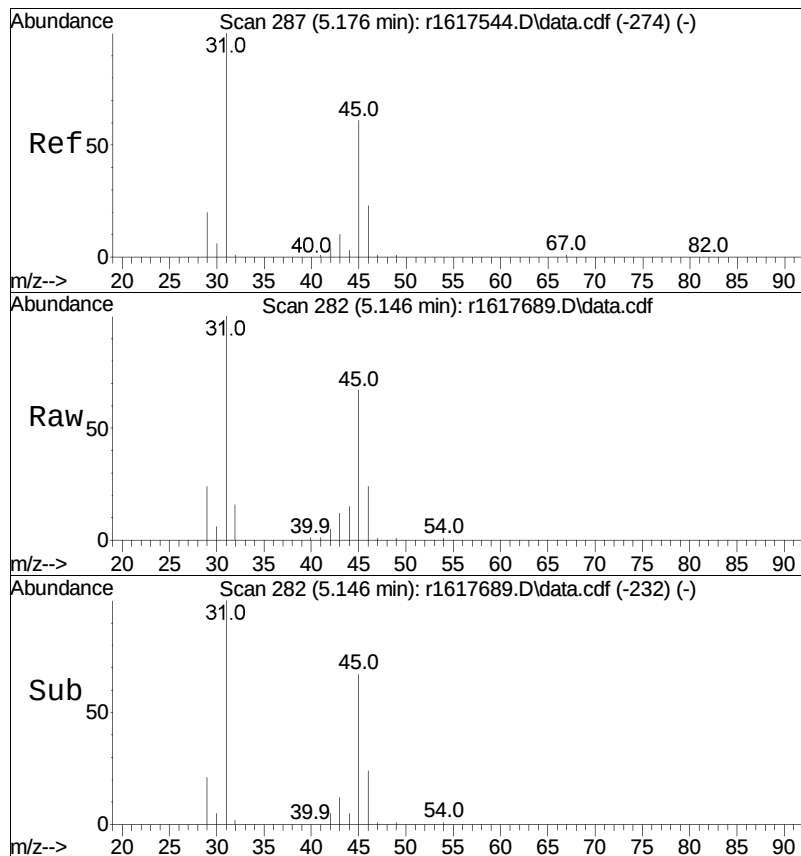




#10
 1,3-butadiene
 Concen: 1.08 ppbV
 RT: 4.44 min Scan# 164
 Delta R.T. -0.030 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

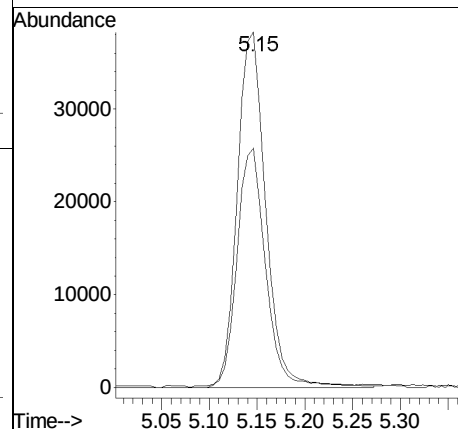
Tgt Ion	Ratio	Lower	Upper
54	100		
39	92.1	71.1	106.7

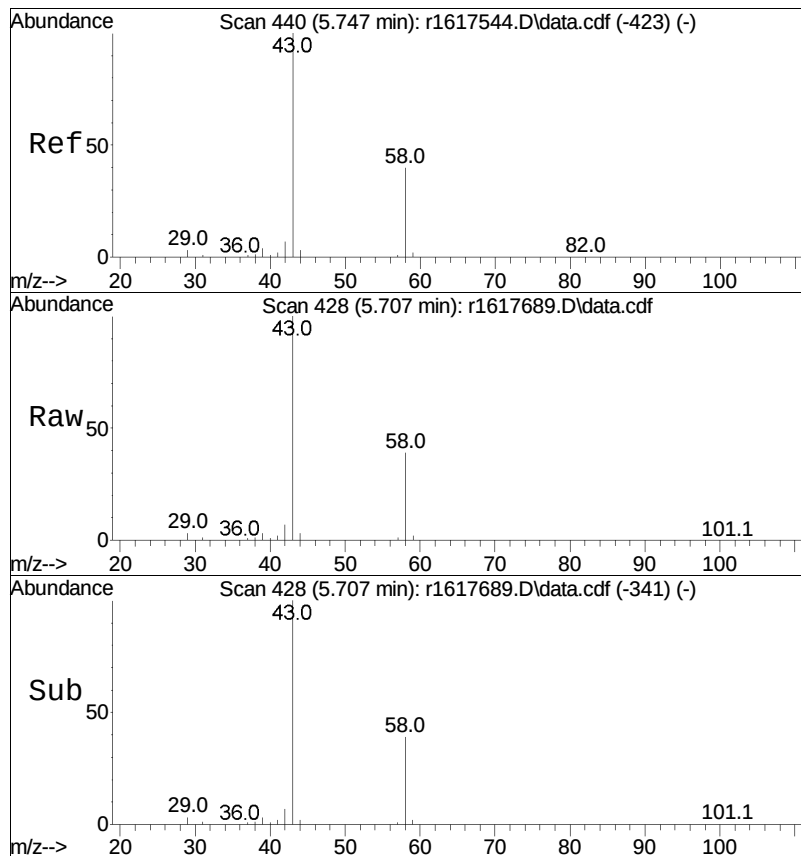




#15
 ethanol
 Concen: 9.41 ppbV
 RT: 5.15 min Scan# 282
 Delta R.T. -0.030 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

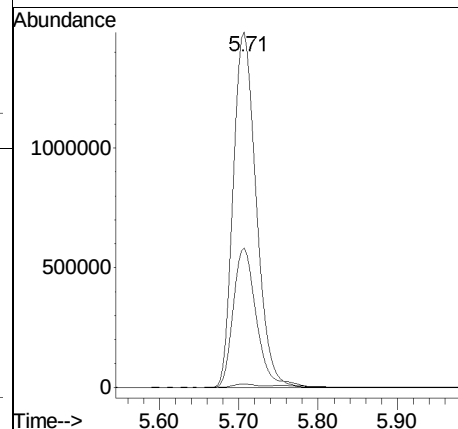
Tgt Ion:	31	Resp:	79352
Ion Ratio	Lower	Upper	
31	100		
45	67.3	49.2	73.8

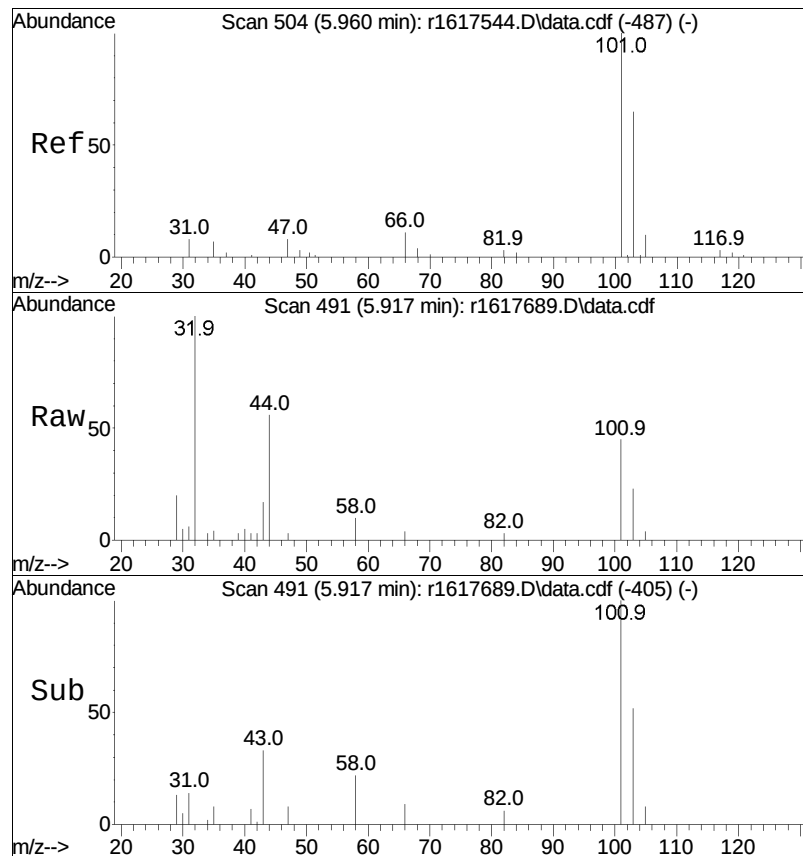




#19
 acetone
 Concen: 171.89 ppbV
 RT: 5.71 min Scan# 428
 Delta R.T. -0.040 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

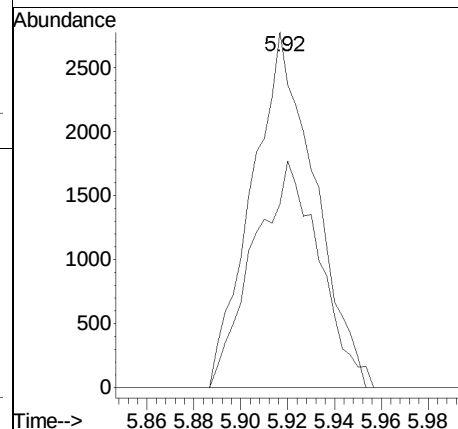
Tgt	Ion: 43	Resp: 2993125		
Ion	Ratio	Lower	Upper	
43	100			
58	39.2	31.8	47.8	
57	1.0	0.8	1.2	

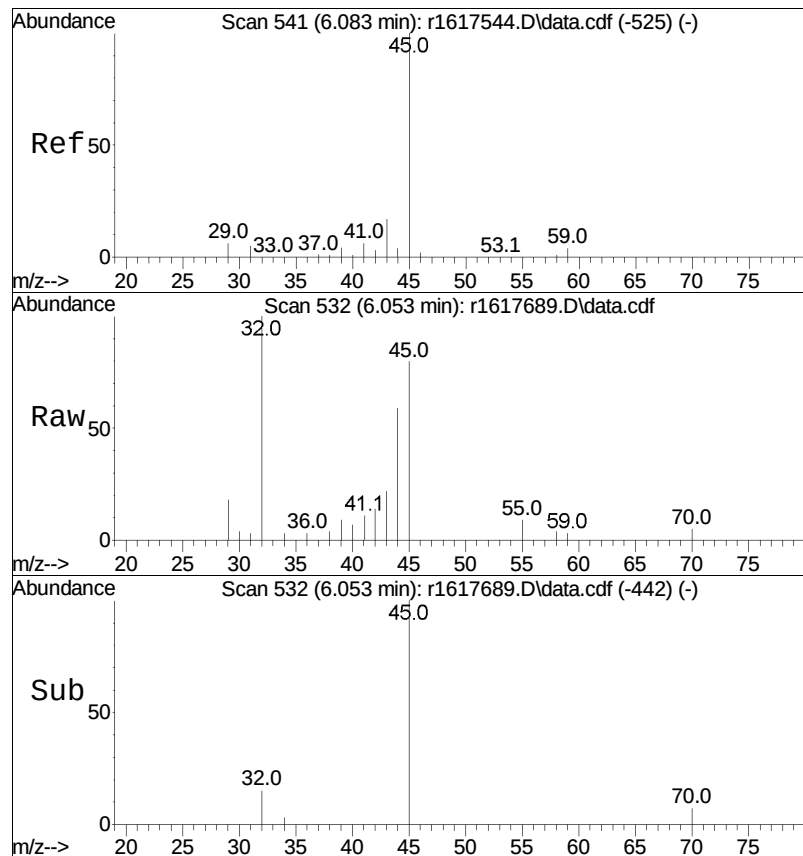




#21
 trichlorofluoromethane
 Concen: 0.33 ppbV
 RT: 5.92 min Scan# 491
 Delta R.T. -0.043 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

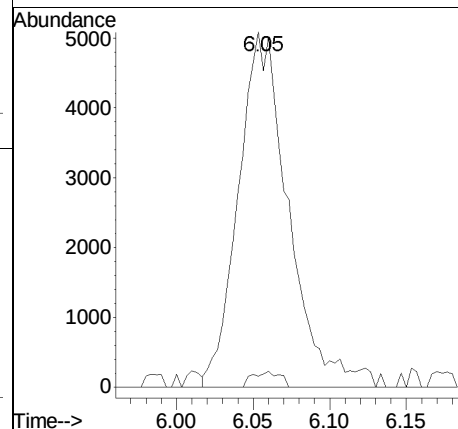
Tgt Ion	Ratio	Lower	Upper
101	100		
103	51.6	52.1	78.1#

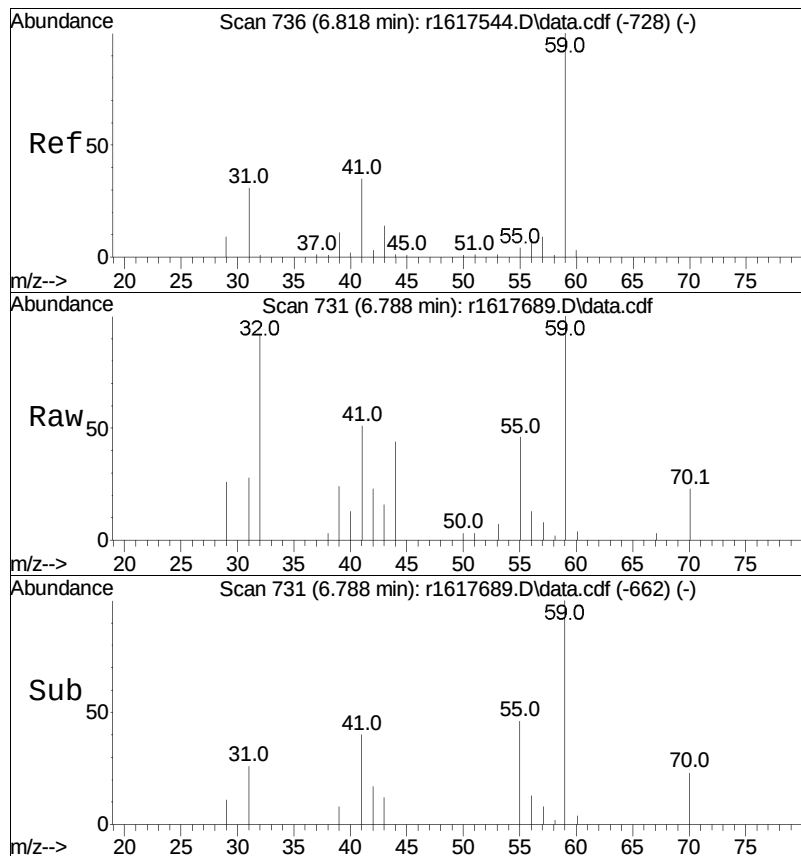




#22
isopropyl alcohol
Concen: 0.59 ppbV m
RT: 6.05 min Scan# 532
Delta R.T. -0.030 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

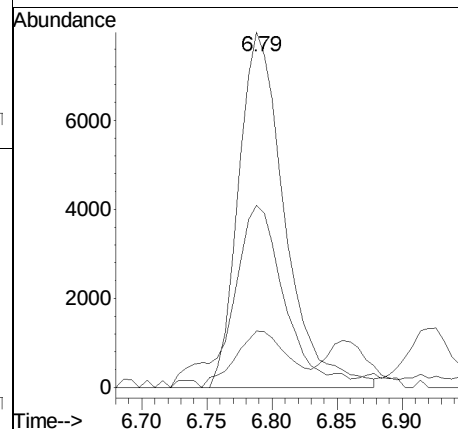
Tgt Ion	Ratio	Lower	Upper
45	100		
59	3.2	3.1	4.7

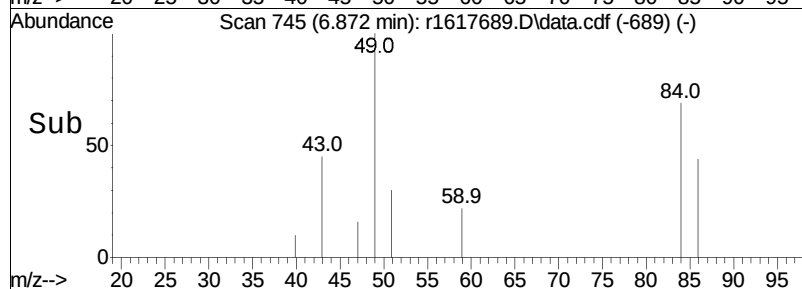
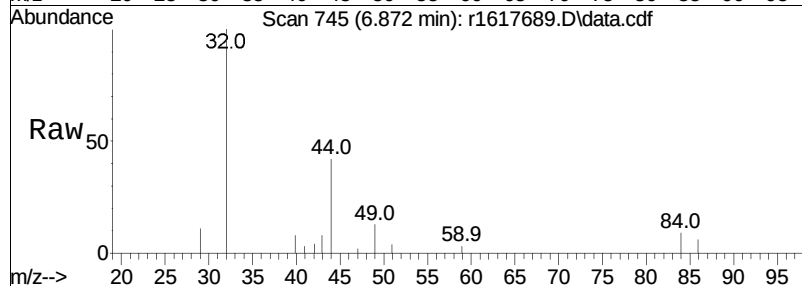
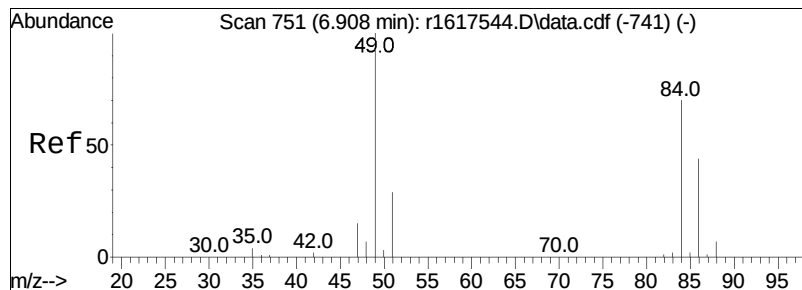




#27
 tertiary butyl alcohol
 Concen: 1.11 ppbV
 RT: 6.79 min Scan# 731
 Delta R.T. -0.030 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

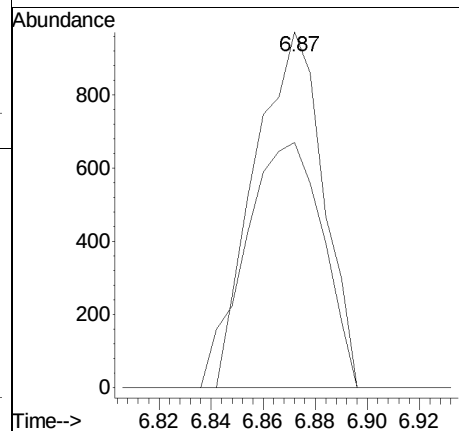
Tgt Ion	Ratio	Lower	Upper
59	100		
41	51.3	28.2	42.2#
43	15.9	11.0	16.6

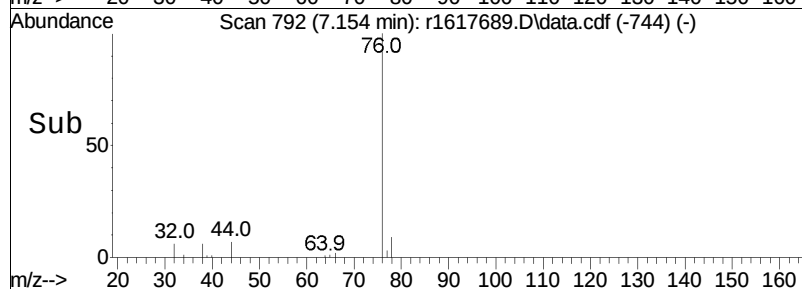
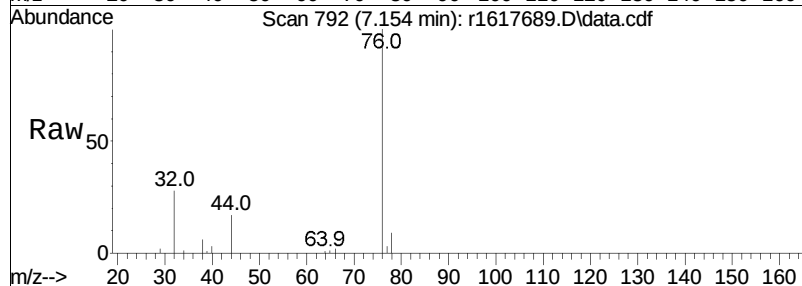
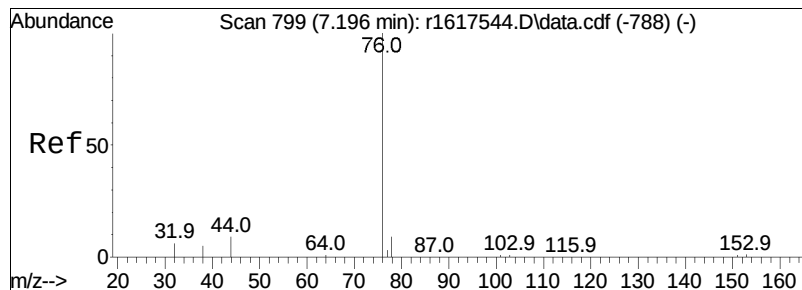




#28
 methylene chloride
 Concen: 0.09 ppbV
 RT: 6.87 min Scan# 745
 Delta R.T. -0.036 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

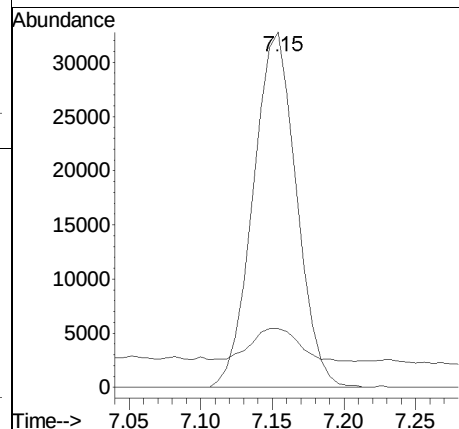
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	1768				
Ion Ratio	100	68.9			
			56.1		84.1

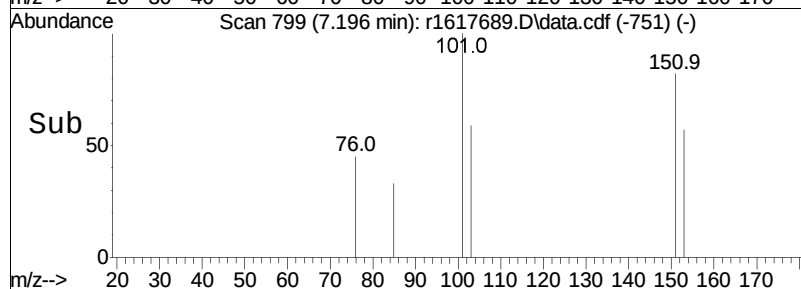
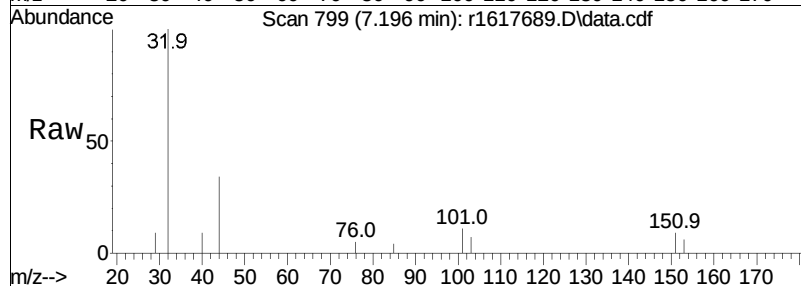
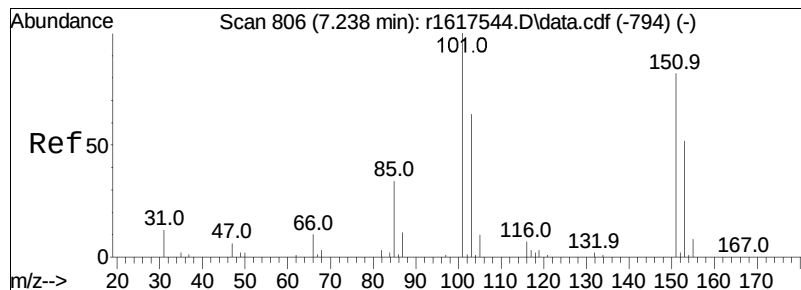




#30
carbon disulfide
Concen: 1.38 ppbV
RT: 7.15 min Scan# 792
Delta R.T. -0.042 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

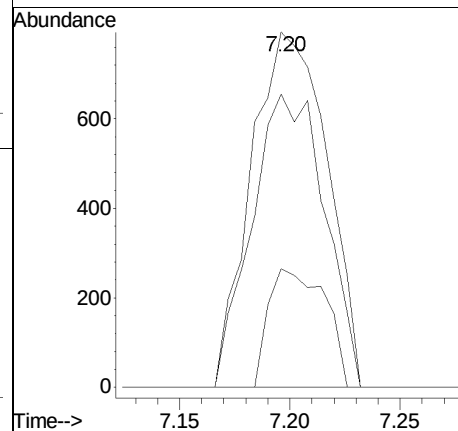
Tgt Ion	Ratio	Lower	Upper
76	100		
44	16.6	7.7	11.5#

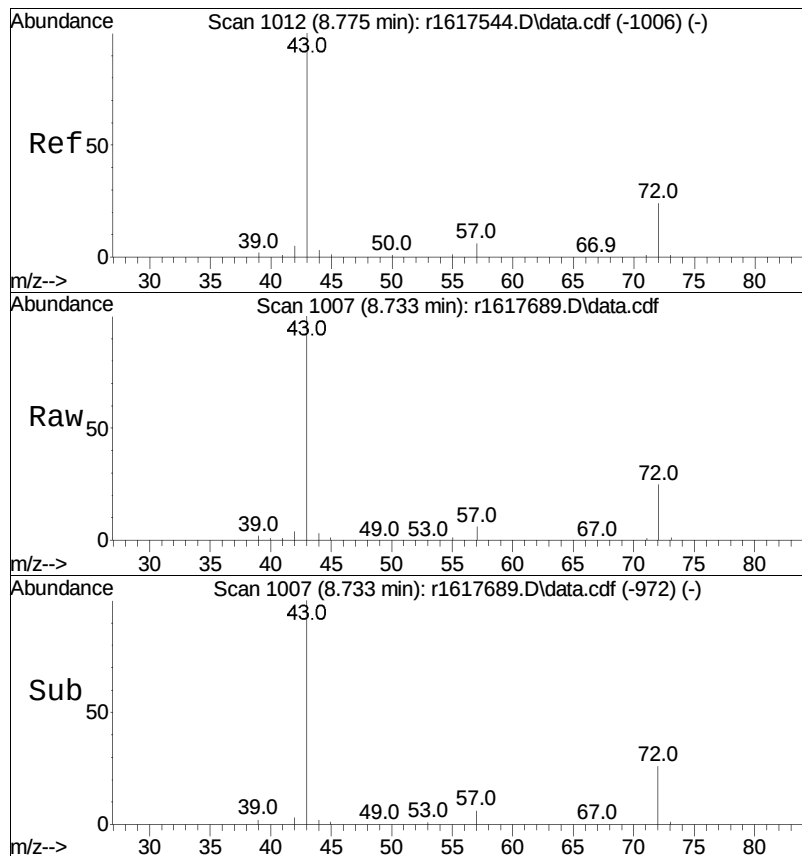




#31
 Freon 113
 Concen: 0.07 ppbV
 RT: 7.20 min Scan# 799
 Delta R.T. -0.042 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

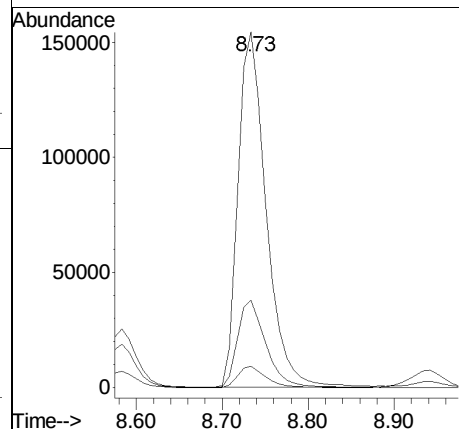
Tgt	Ion:101	Resp:	1899
Ion	Ratio	Lower	Upper
101	100		
85	33.4	27.4	41.0
151	82.5	65.8	98.6

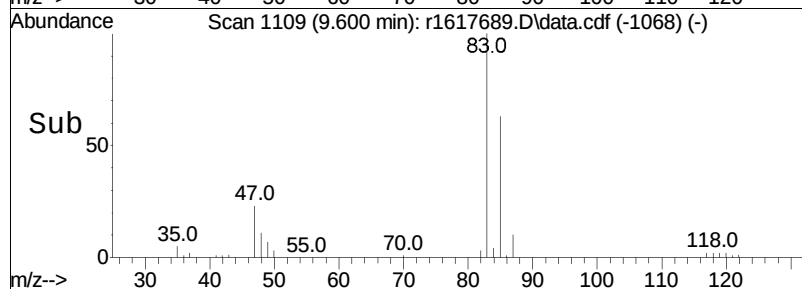
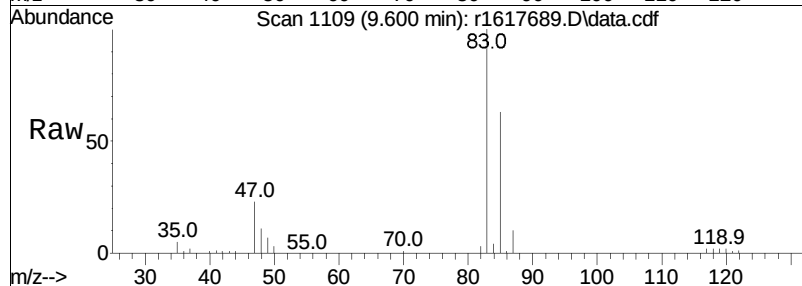
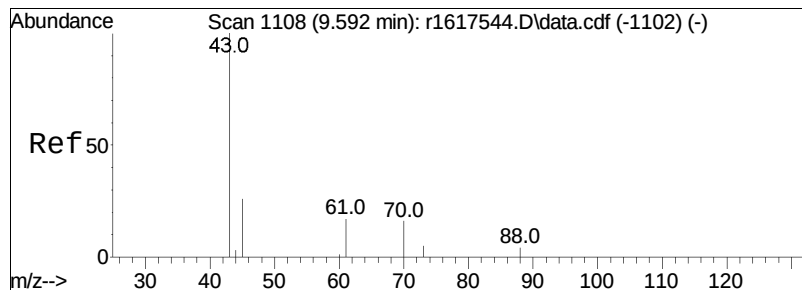




#36
 2-butanone
 Concen: 9.91 ppbV
 RT: 8.73 min Scan# 1007
 Delta R.T. -0.042 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

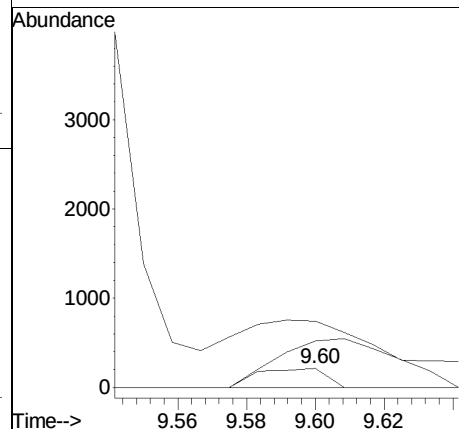
Tgt Ion:	43	Resp:	350730
Ion Ratio	Lower	Upper	
43	100		
72	24.6	19.5	29.3
57	6.0	4.6	6.8

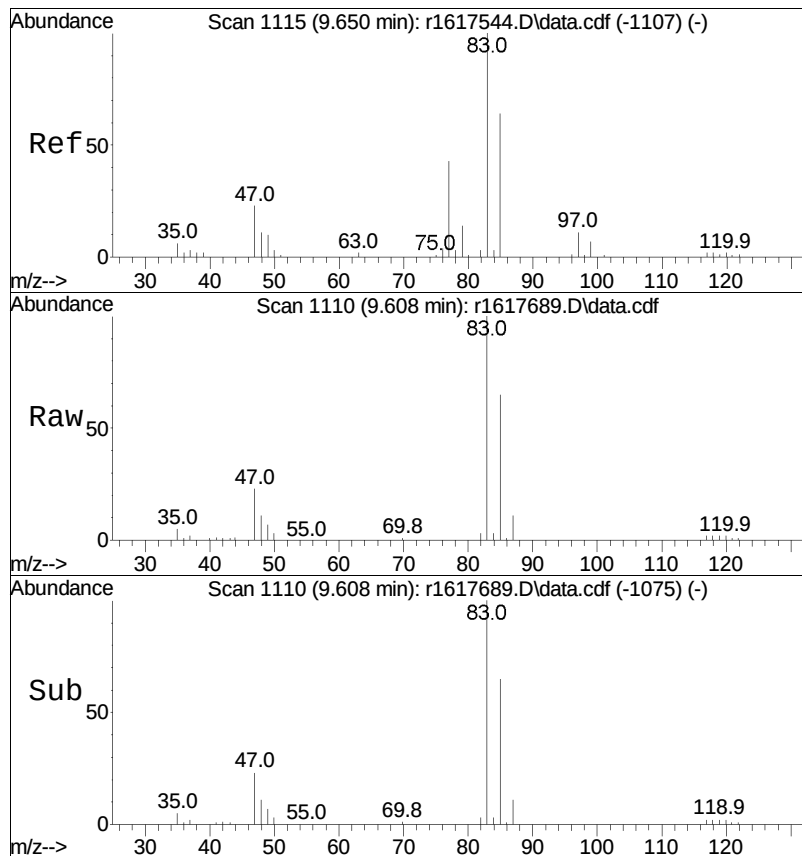




#38
Ethyl Acetate
Concen: 0.06 ppbV
RT: 9.60 min Scan# 1109
Delta R.T. 0.008 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

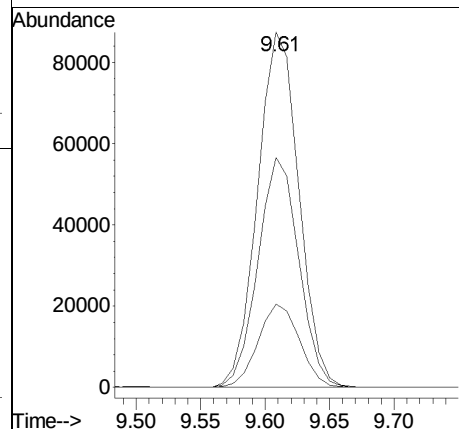
Tgt Ion	Ratio	Lower	Upper
61	100		
70	243.0	80.5	120.7#
43	347.2	701.4	1052.0#

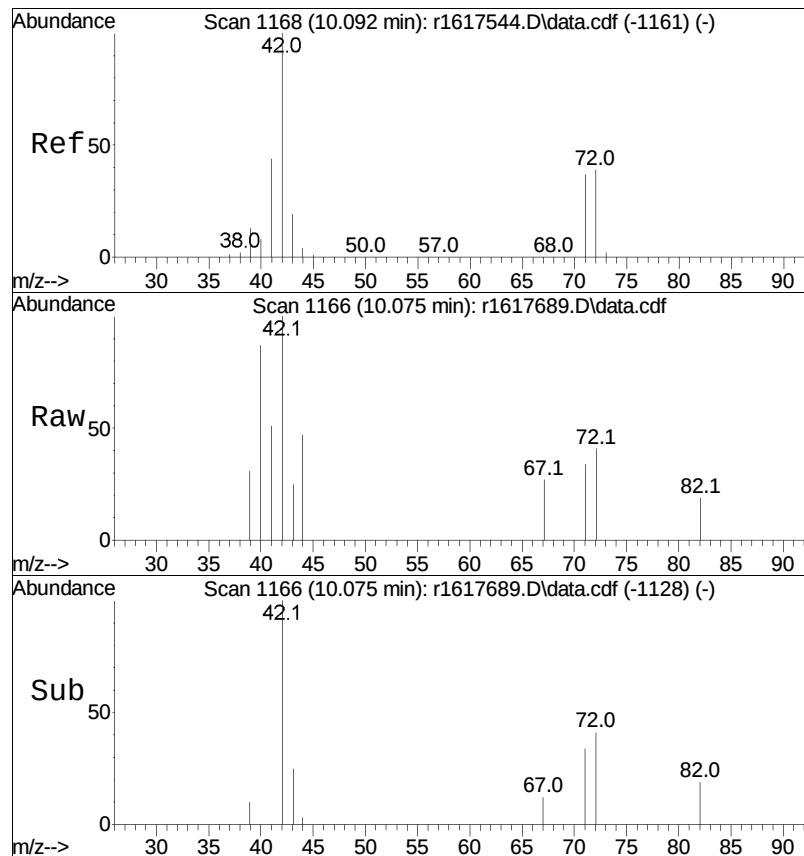




#39
 chloroform
 Concen: 8.14 ppbV
 RT: 9.61 min Scan# 1110
 Delta R.T. -0.042 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

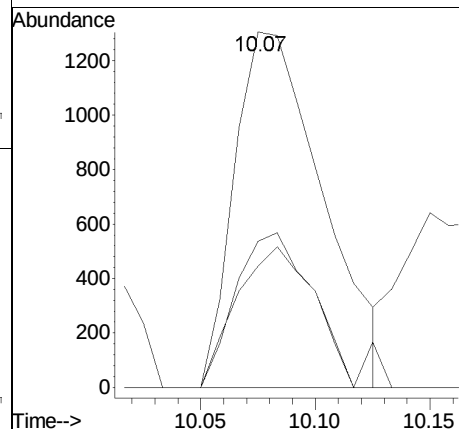
Tgt	Ion	Ratio	Resp	Lower	Upper
83	100		194736		
85	64.7	51.4		77.0	
47	23.5	19.0		28.4	

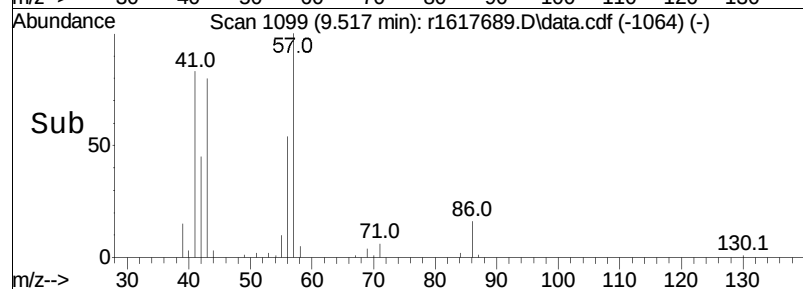
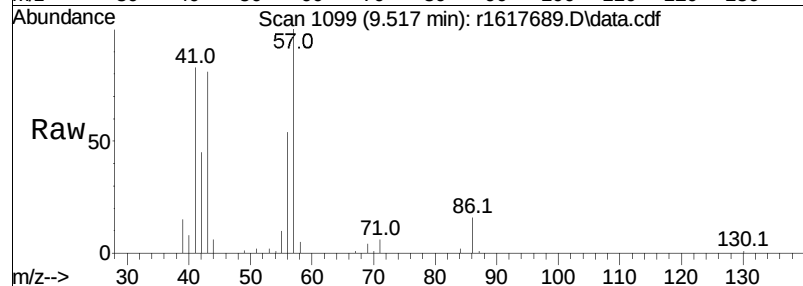
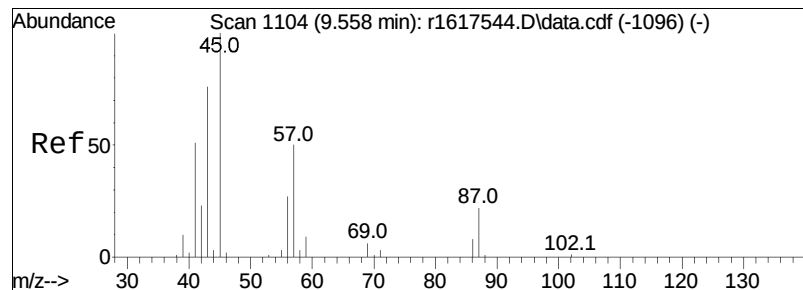




#40
Tetrahydrofuran
Concen: 0.16 ppbV
RT: 10.07 min Scan# 1166
Delta R.T. -0.017 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

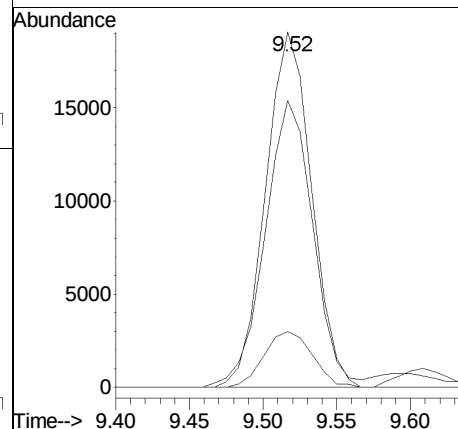
Tgt Ion	Ratio	Lower	Upper
42	100		
71	34.2	29.4	44.0
72	41.1	31.4	47.2

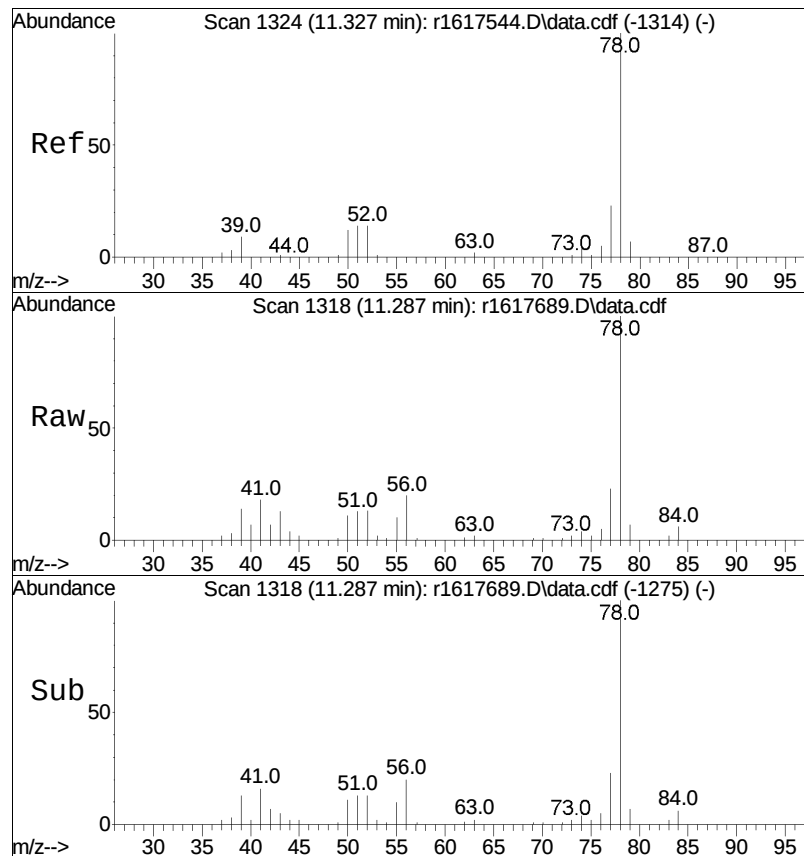




#44
hexane
Concen: 1.57 ppbV
RT: 9.52 min Scan# 1099
Delta R.T. -0.042 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

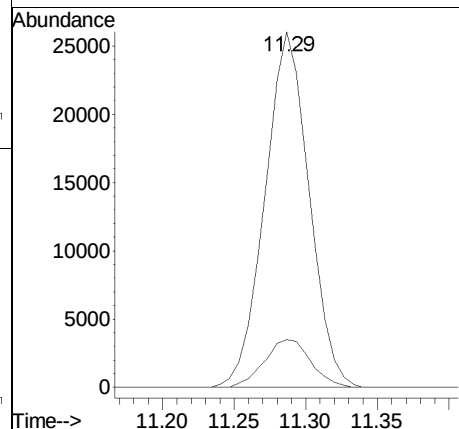
Tgt	Ion	Ratio	Lower	Upper
57	100			
43	80.7	122.6	184.0#	
86	15.7	13.1	19.7	

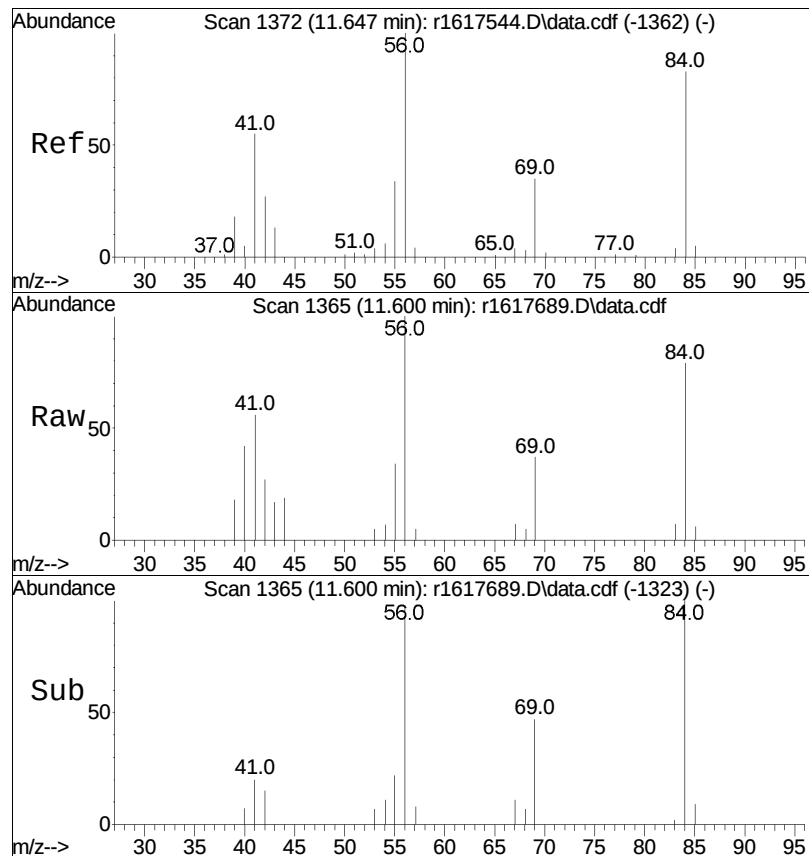




#50
benzene
Concen: 0.97 ppbV
RT: 11.29 min Scan# 1318
Delta R.T. -0.040 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

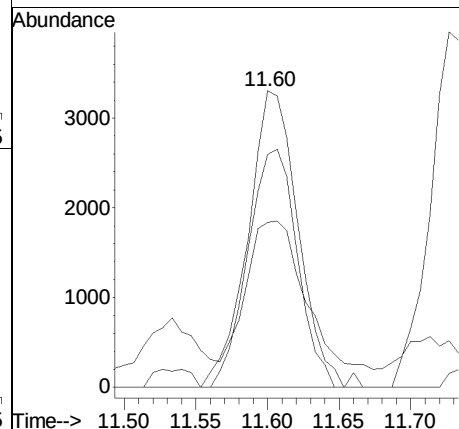
Tgt	Ion	Ratio	Lower	Upper
78	100			
52	13.5	11.4	17.0	

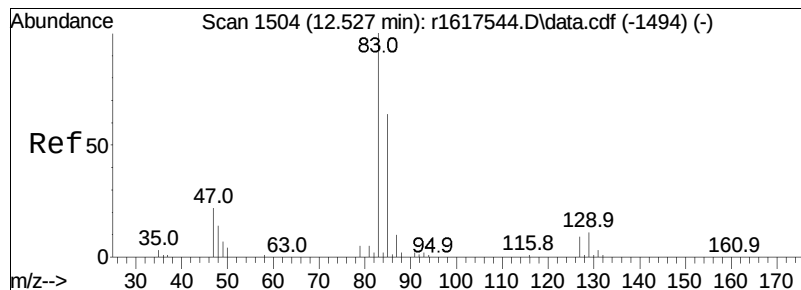




#53
cyclohexane
Concen: 0.28 ppbV
RT: 11.60 min Scan# 1365
Delta R.T. -0.047 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

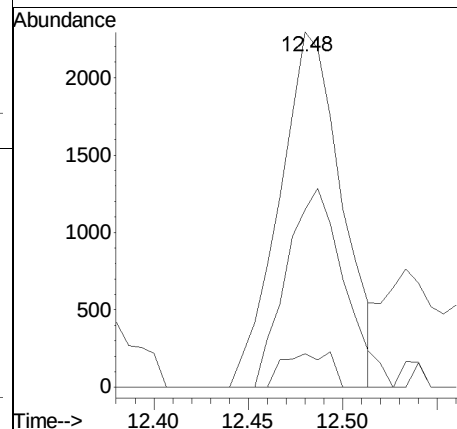
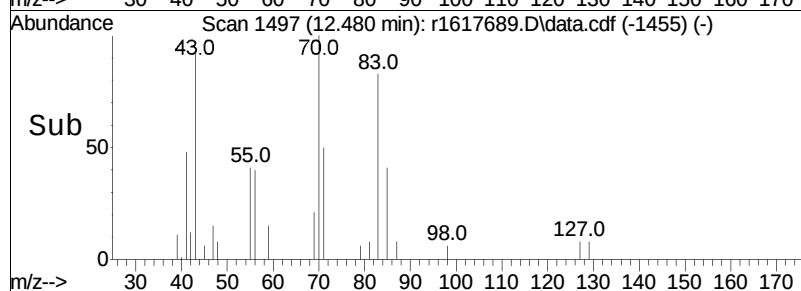
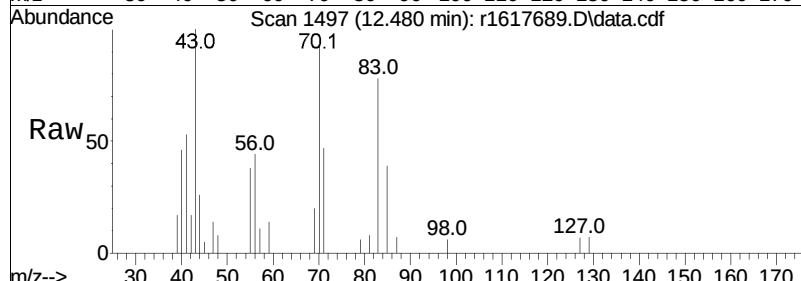
Tgt Ion	Ratio	Lower	Upper
56	100		
84	78.5	66.6	100.0
41	55.6	44.2	66.4

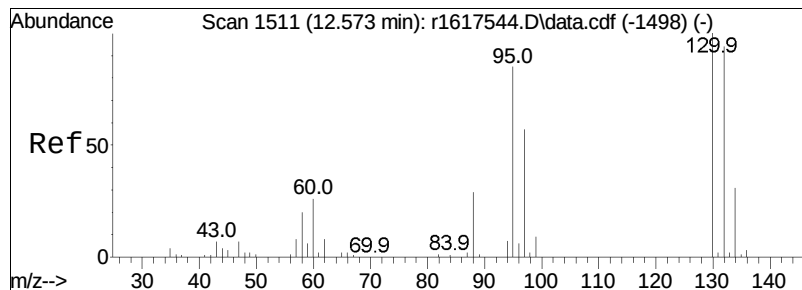




#57
bromodichloromethane
Concen: 0.19 ppbV m
RT: 12.48 min Scan# 1497
Delta R.T. -0.047 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

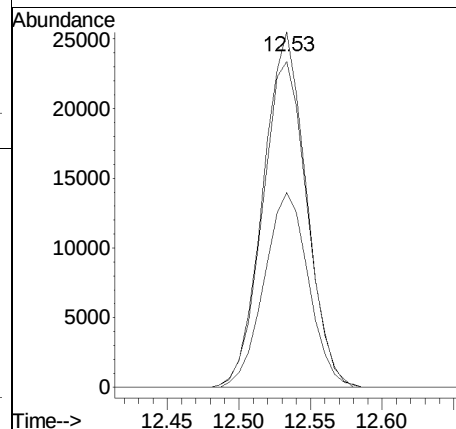
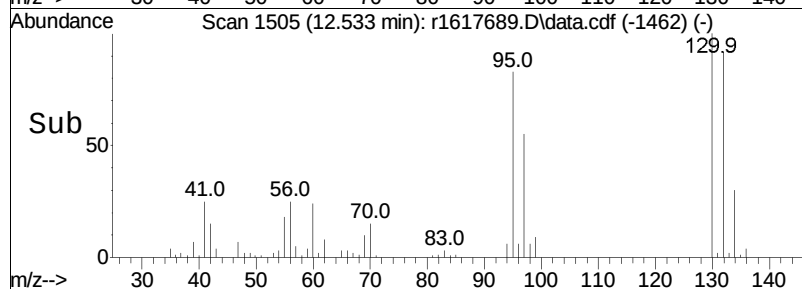
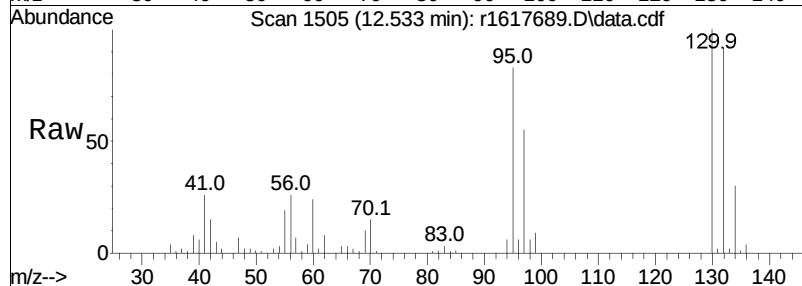
Tgt Ion	Ratio	Lower	Upper
83	100		
85	50.0	50.9	76.3#
129	9.5	8.6	13.0

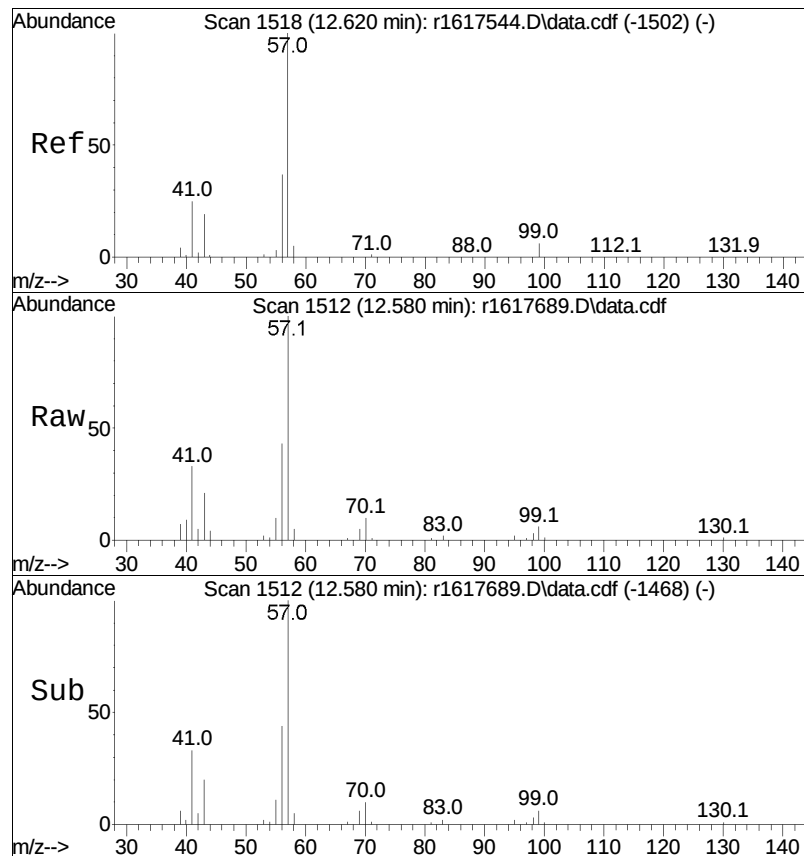




#59
 trichloroethene
 Concen: 2.20 ppbV
 RT: 12.53 min Scan# 1505
 Delta R.T. -0.040 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

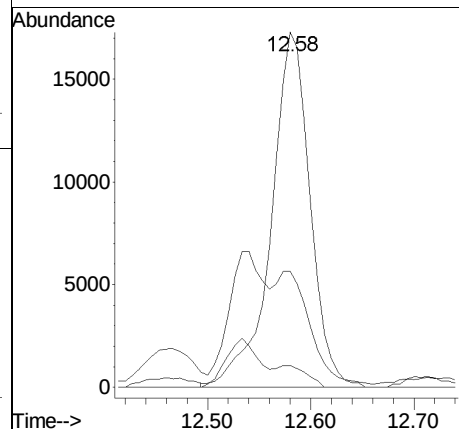
Tgt Ion	Ratio	Lower	Upper
130	100		
132	91.7	75.5	113.3
97	54.8	45.7	68.5

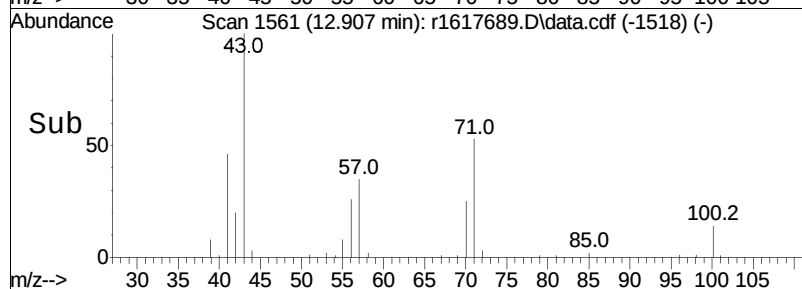
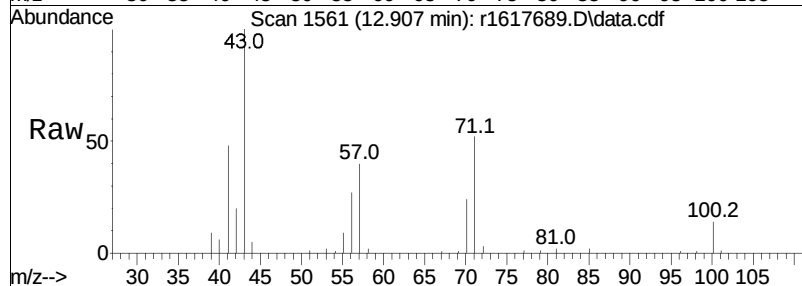
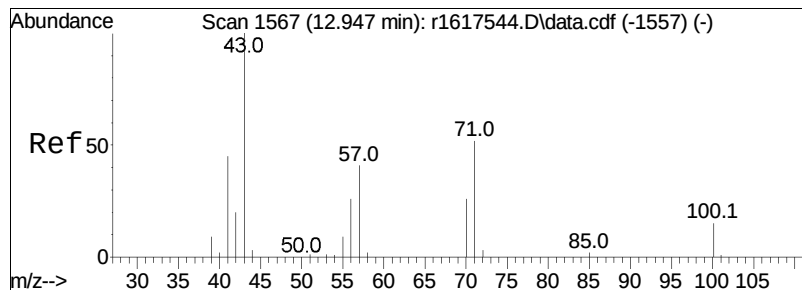




#60
 2,2,4-trimethylpentane
 Concen: 0.52 ppbV
 RT: 12.58 min Scan# 1512
 Delta R.T. -0.040 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

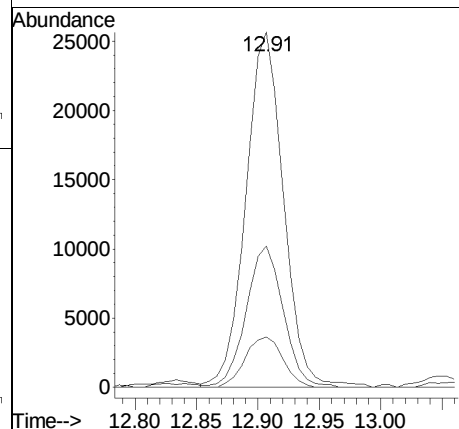
Tgt	Ion	Ratio	Lower	Upper
57	100			
99	6.2	4.7	7.1	
41	32.7	19.9	29.9	

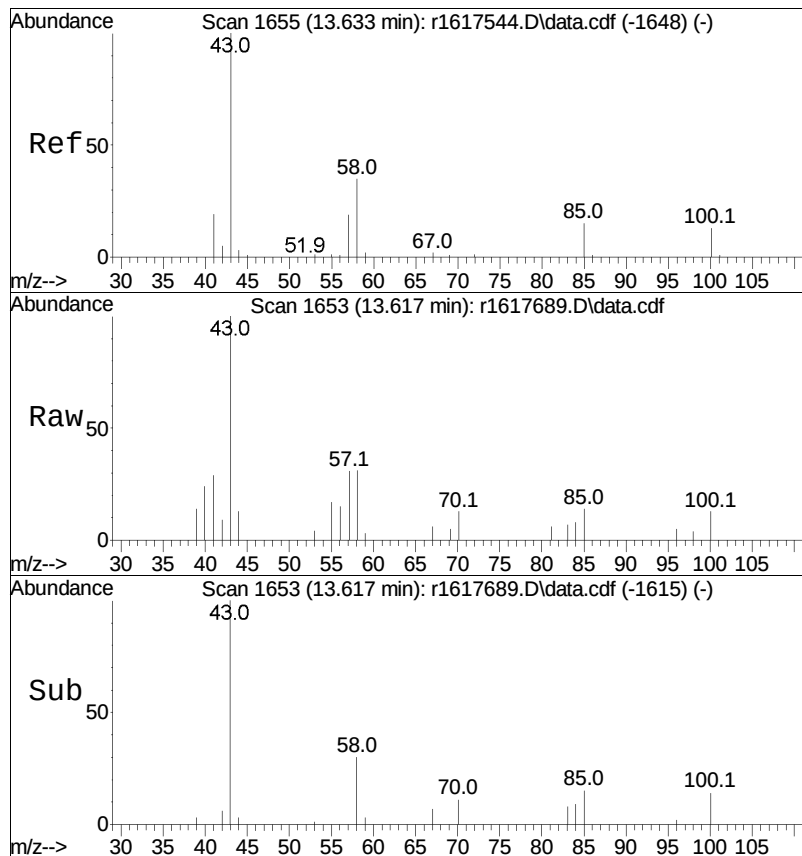




#62
 heptane
 Concen: 1.36 ppbV
 RT: 12.91 min Scan# 1561
 Delta R.T. -0.040 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

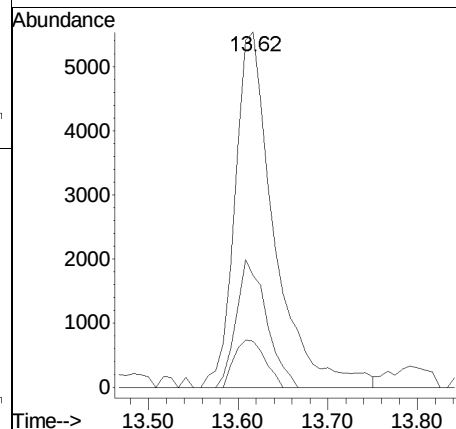
Tgt Ion:	43	57	100	Resp:	54831	Lower	Upper
Ratio	100	39.8	14.2				
		33.1	11.8				
		49.7	17.8				

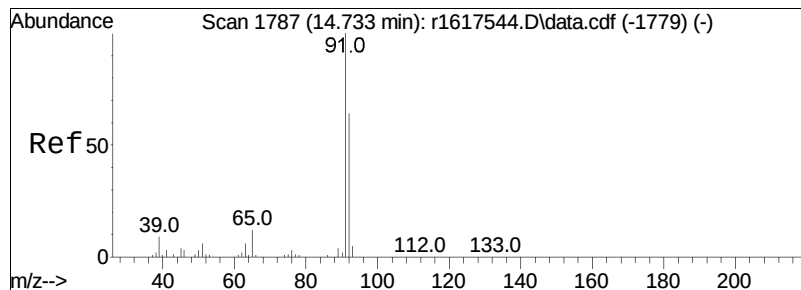




#64
 4-methyl-2-pentanone
 Concen: 0.39 ppbV
 RT: 13.62 min Scan# 1653
 Delta R.T. -0.017 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

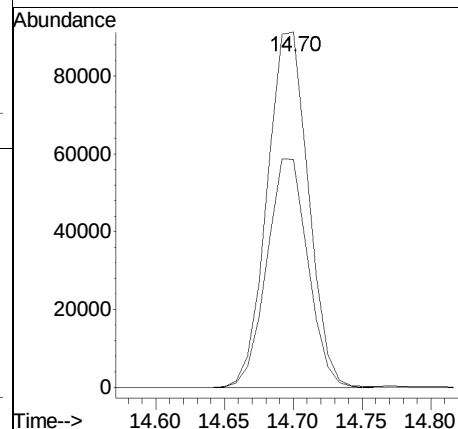
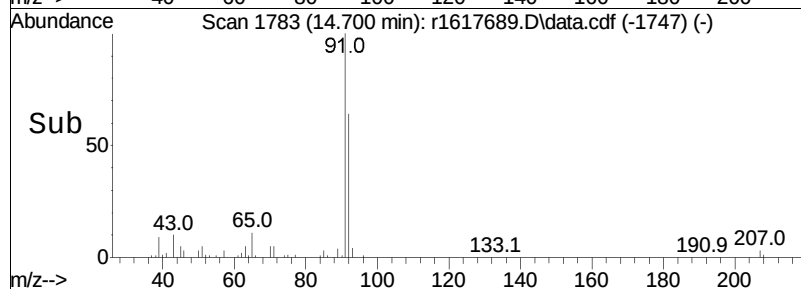
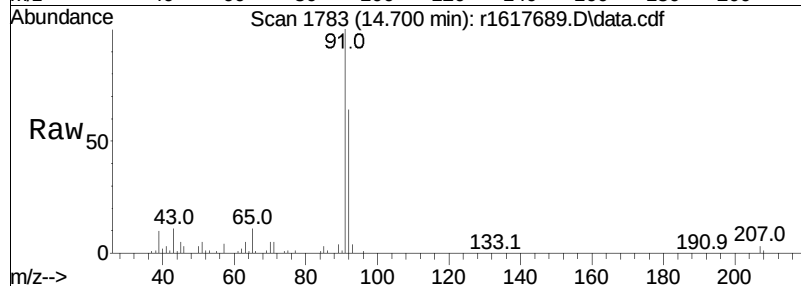
Tgt Ion:	43	Resp:	16883
Ion Ratio	Lower	Upper	
43	100		
58	31.4	27.7	41.5
100	13.0	10.7	16.1

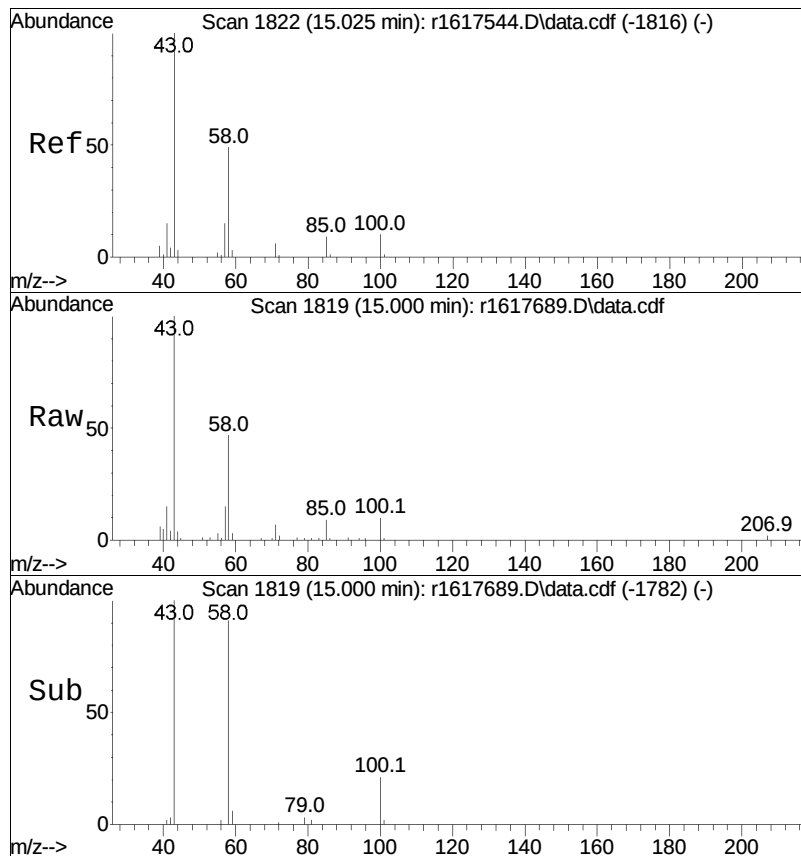




#68
toluene
Concen: 3.16 ppbV
RT: 14.70 min Scan# 1783
Delta R.T. -0.033 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

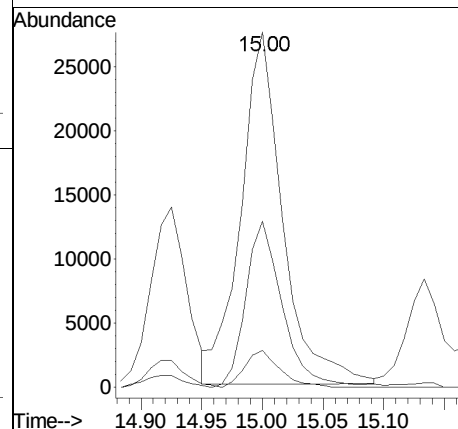
Tgt Ion	Ratio	Lower	Upper
91	100		
92	64.1	50.9	76.3

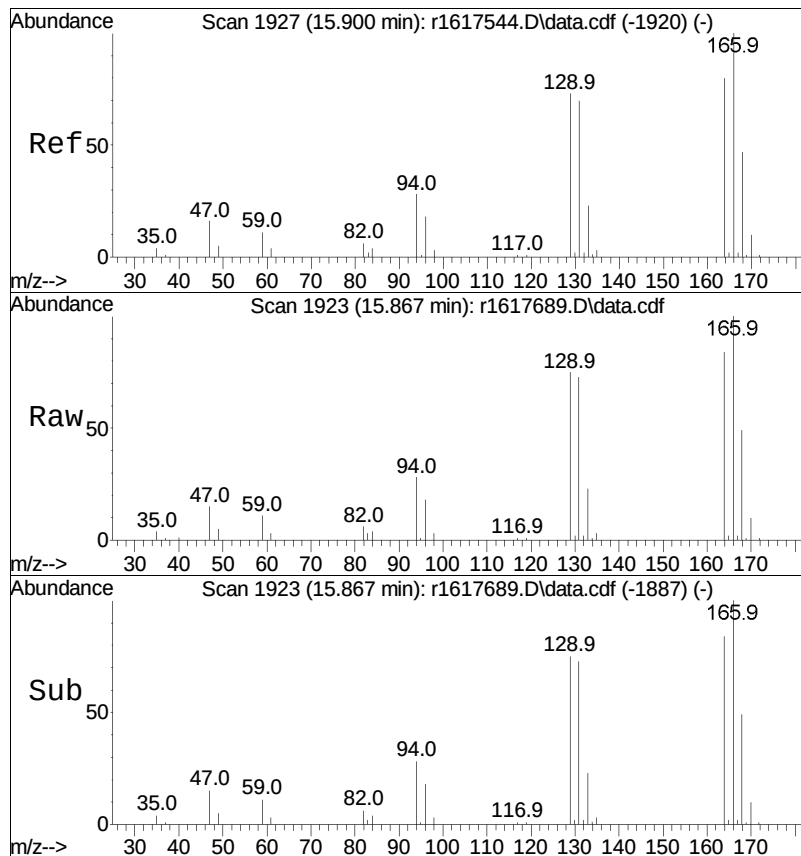




#72
 2-hexanone
 Concen: 1.87 ppbV
 RT: 15.00 min Scan# 1819
 Delta R.T. -0.025 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

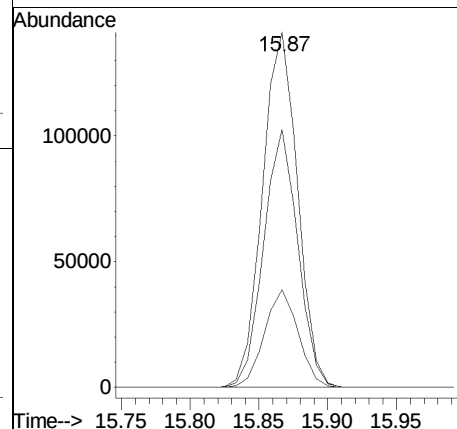
Tgt Ion	Ratio	Lower	Upper
43	100		
58	46.7	40.0	60.0
100	10.4	8.7	13.1

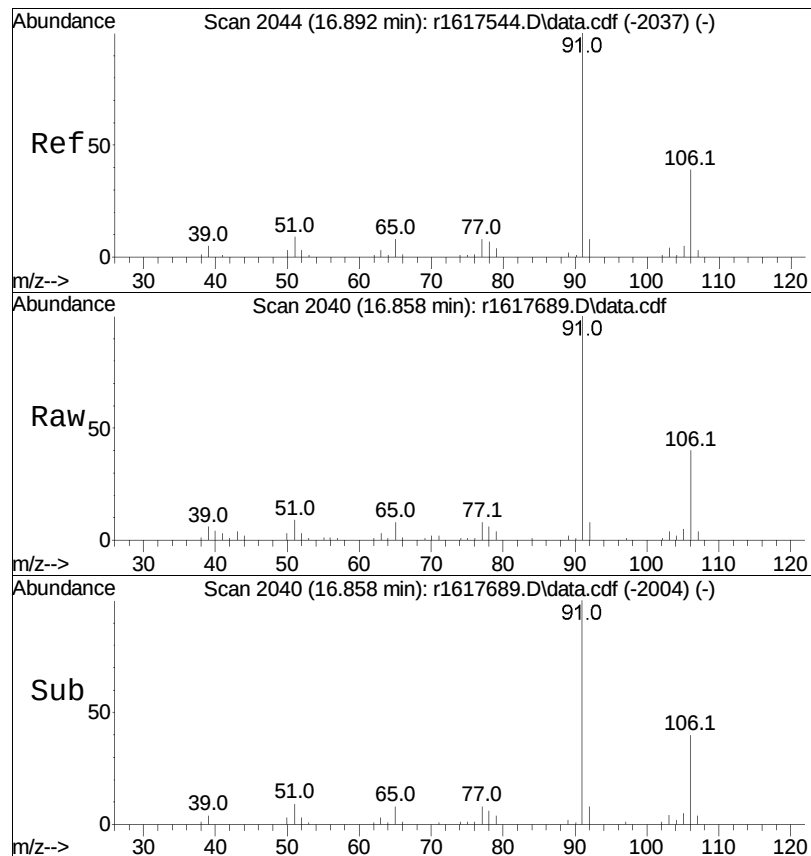




#78
 tetrachloroethene
 Concen: 9.27 ppbV
 RT: 15.87 min Scan# 1923
 Delta R.T. -0.033 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

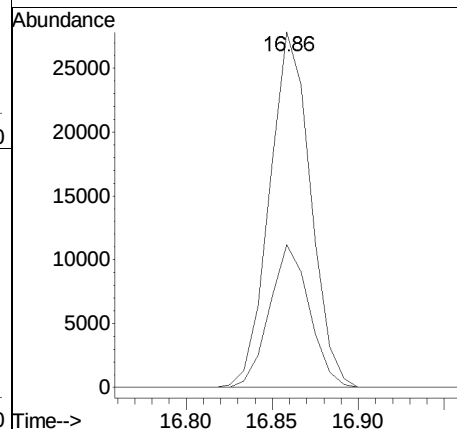
Tgt Ion:	166	Resp:	250721
Ion Ratio	Lower	Upper	
166	100		
131	72.6	56.1	84.1
94	27.5	22.2	33.4

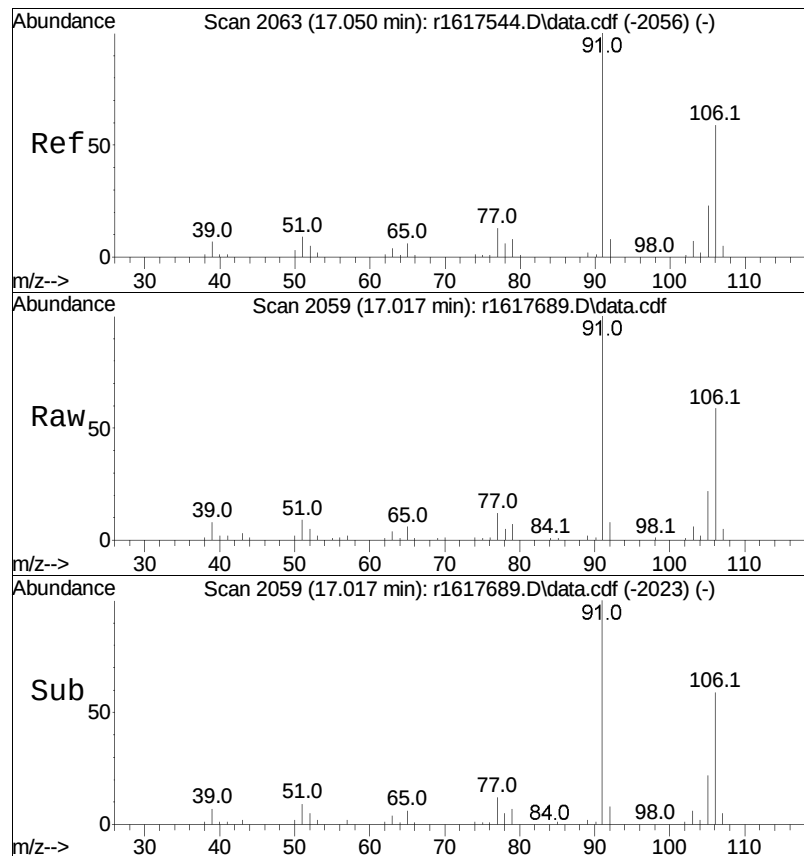




#81
ethylbenzene
Concen: 0.59 ppbV
RT: 16.86 min Scan# 2040
Delta R.T. -0.033 min
Lab File: r1617689.D
Acq: 16 Jun 2020 9:26 PM

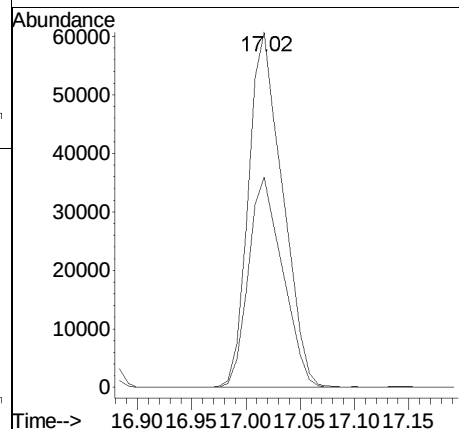
Tgt Ion	Ratio	Lower	Upper
91	100		
106	40.1	31.1	46.7

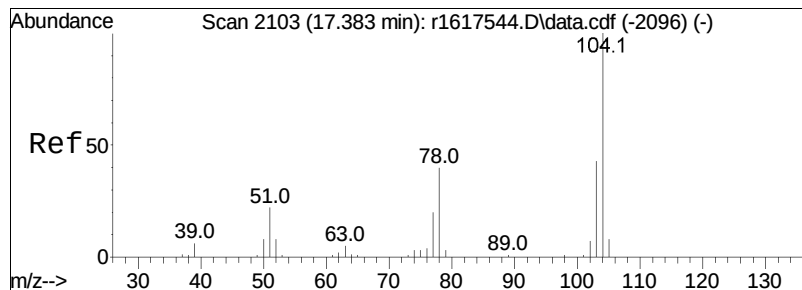




#83
 m+p-xylene
 Concen: 2.10 ppbV
 RT: 17.02 min Scan# 2059
 Delta R.T. -0.033 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

Tgt	Ion	Resp	Lower	Upper
91	100	132483		
106	59.2	47.5	71.3	





#85

styrene

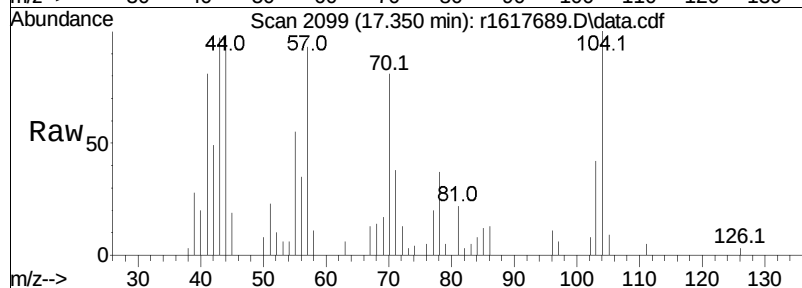
Concen: 0.16 ppbV

RT: 17.35 min Scan# 2099

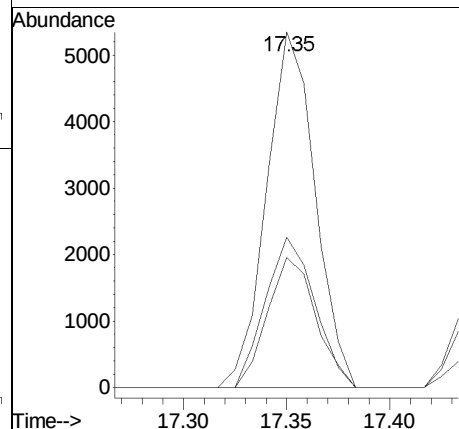
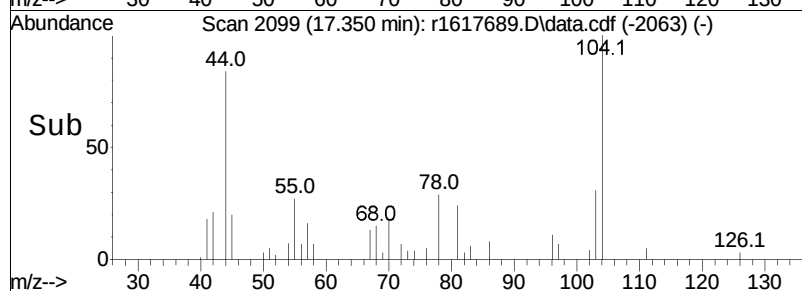
Delta R.T. -0.033 min

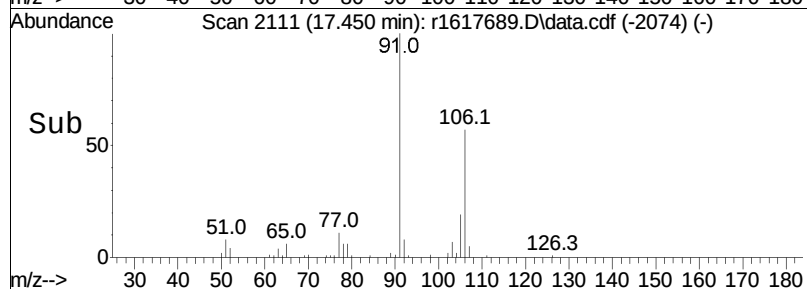
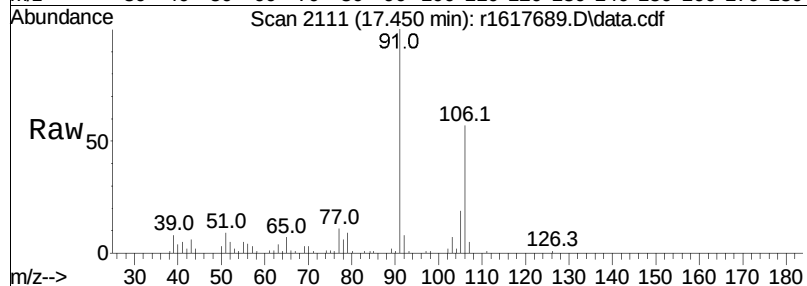
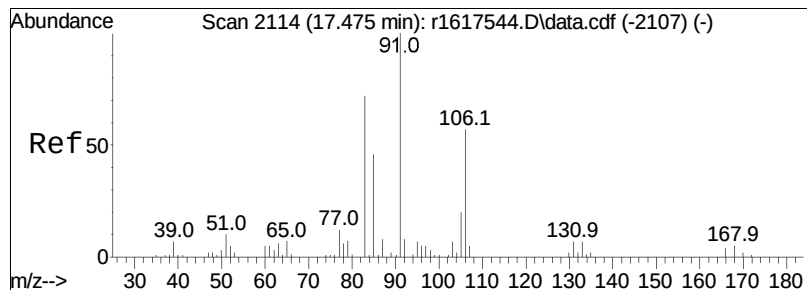
Lab File: r1617689.D

Acq: 16 Jun 2020 9:26 PM



Tgt Ion:	104	Resp:	8745
Ion Ratio	Lower	Upper	
104	100		
103	42.2	34.4	51.6
78	36.6	31.8	47.6





#87

o-xylene

Concen: 0.78 ppbV

RT: 17.45 min Scan# 2111

Delta R.T. -0.025 min

Lab File: r1617689.D

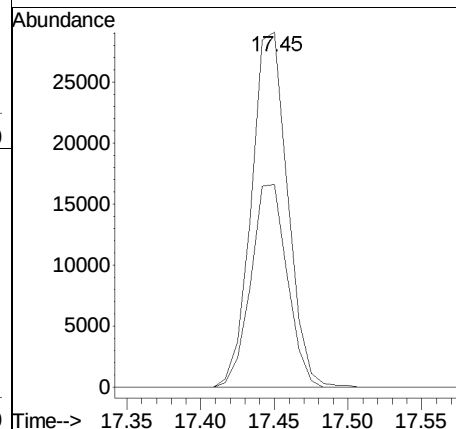
Acq: 16 Jun 2020 9:26 PM

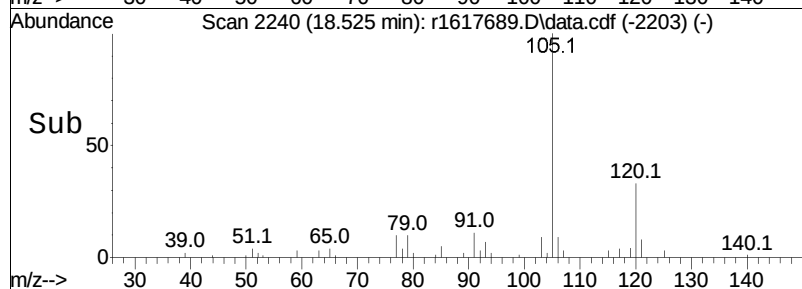
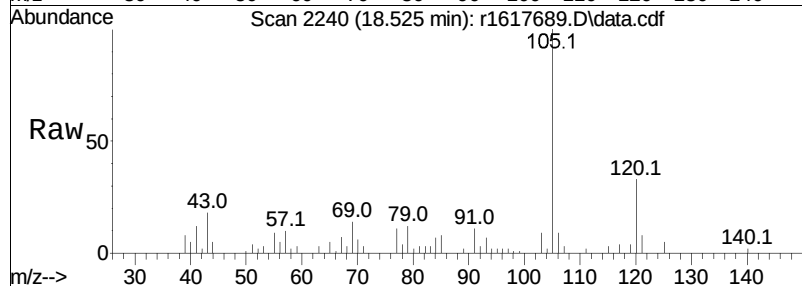
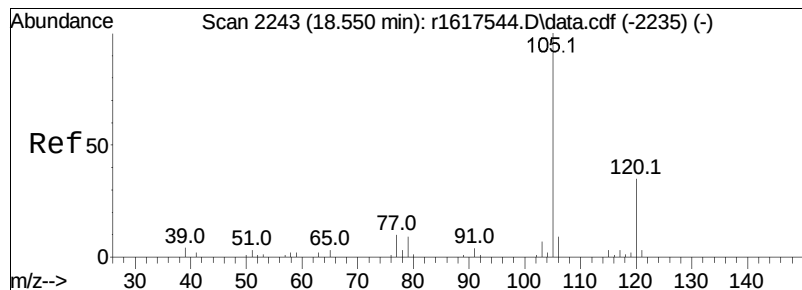
Tgt Ion: 91 Resp: 49774

Ion Ratio Lower Upper

91 100

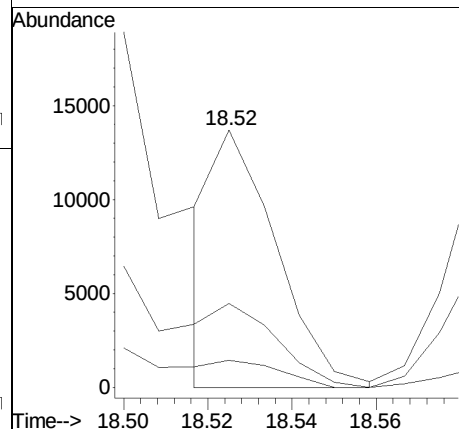
106 57.1 45.8 68.8

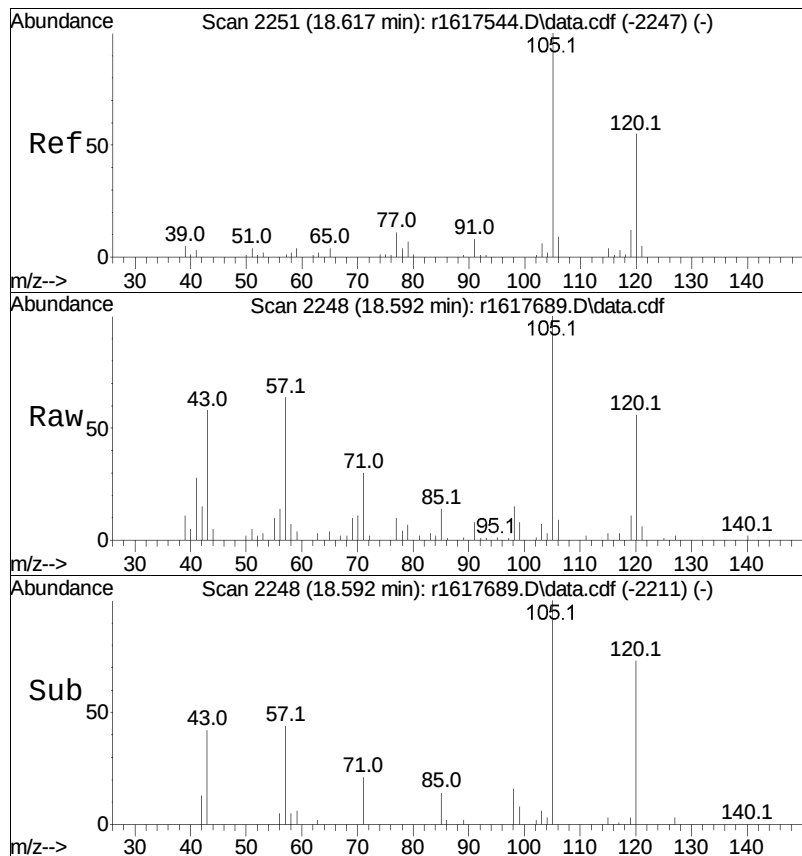




#96
 4-ethyl toluene
 Concen: 0.15 ppbV m
 RT: 18.52 min Scan# 2240
 Delta R.T. -0.025 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

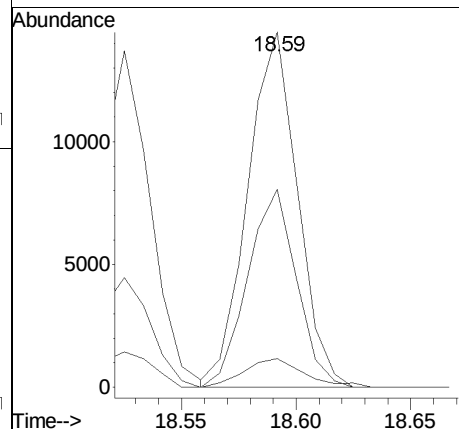
Tgt Ion	Ratio	Lower	Upper
105	100		
120	32.6	27.8	41.6
91	10.6	7.1	10.7

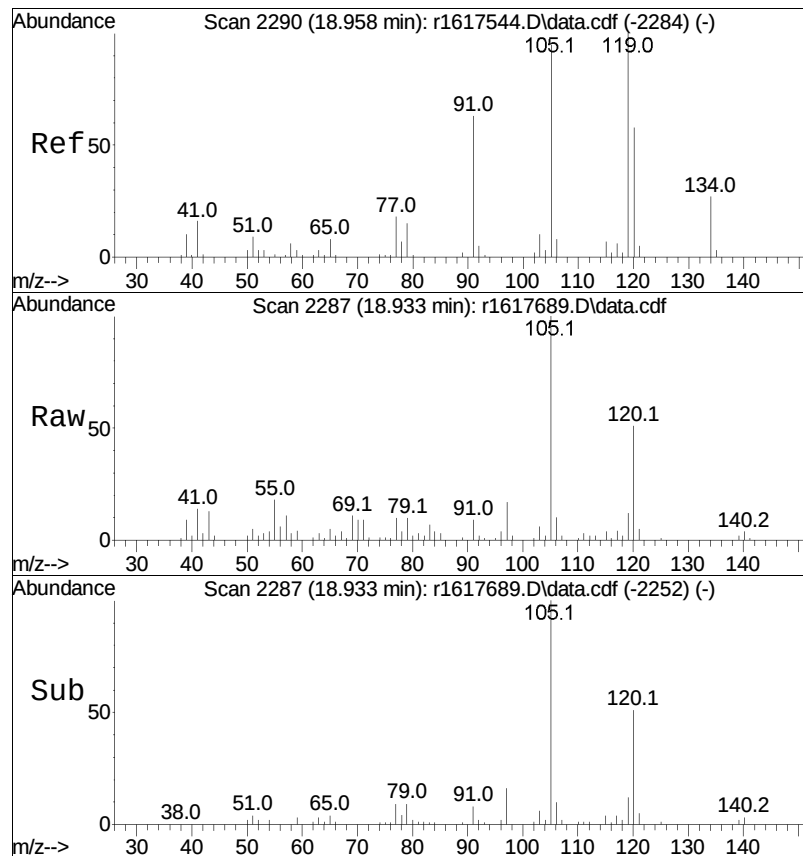




#97
 1,3,5-trimethylbenzene
 Concen: 0.27 ppbV
 RT: 18.59 min Scan# 2248
 Delta R.T. -0.025 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

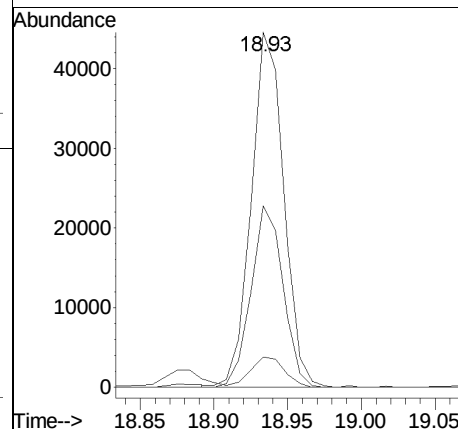
Tgt Ion:	105	Resp:	21869
Ion Ratio	Lower	Upper	
105	100		
120	55.7	43.6	65.4
91	8.1	6.8	10.2





#99
 1,2,4-trimethylbenzene
 Concen: 0.91 ppbV
 RT: 18.93 min Scan# 2287
 Delta R.T. -0.025 min
 Lab File: r1617689.D
 Acq: 16 Jun 2020 9:26 PM

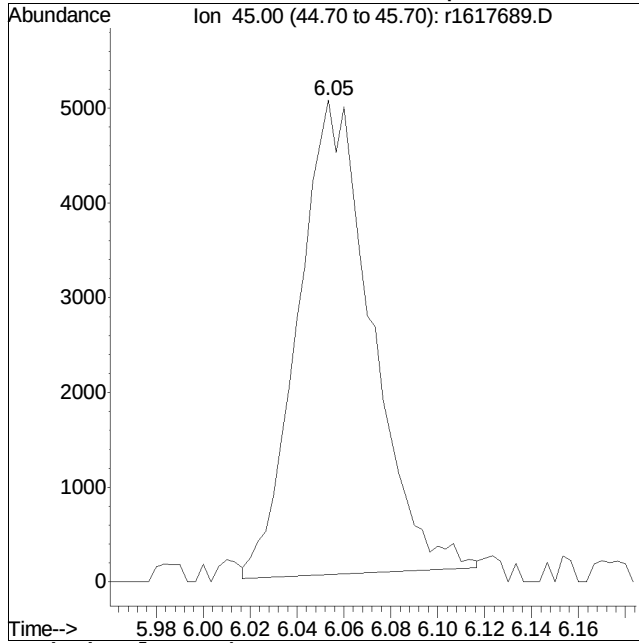
Tgt Ion	Ratio	Lower	Upper
105	100		
120	51.1	48.9	73.3
91	8.6	53.3	79.9#



Manual Integration/Negative Proof Report

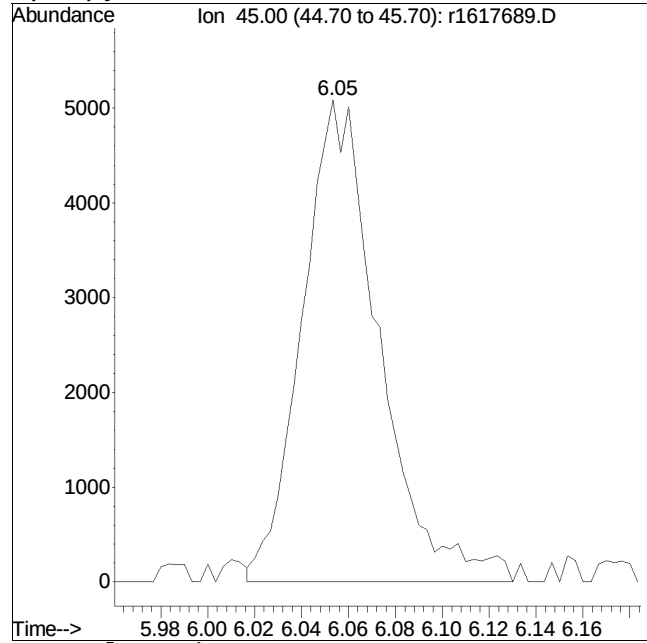
Data Path : O:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617689.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:9: 6 Instrument :
Sample : L2024597-03,3,250,250 Quant Date : 6/17/2020 5:24 am

Compound #22: isopropyl alcohol



Original Peak Response = 10897

M4 = Poor automated baseline construction.

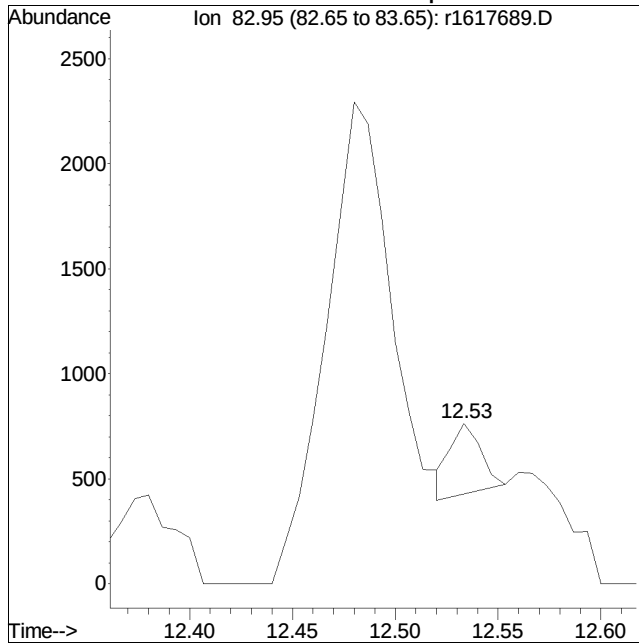


Manual Peak Response = 11611 M4

Manual Integration/Negative Proof Report

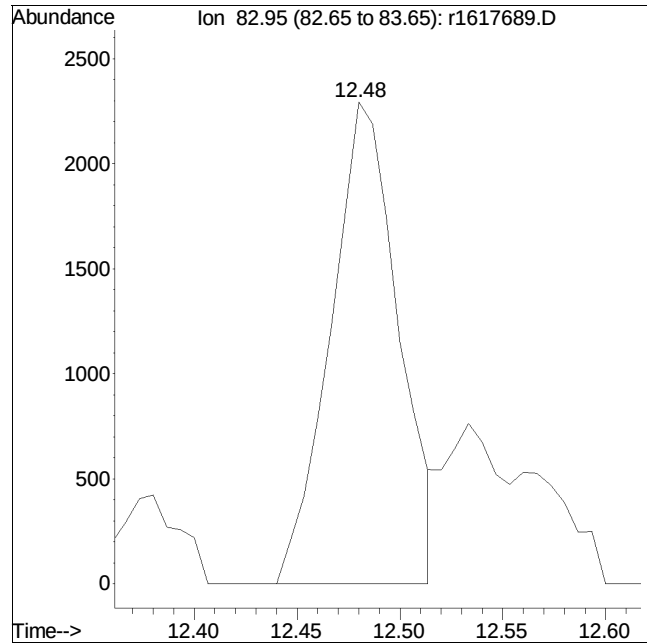
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617689.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:9: 6 Instrument :
Sample : L2024597-03,3,250,250 Quant Date : 6/17/2020 5:24 am

Compound #57: bromodichloromethane



Original Peak Response = 359

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

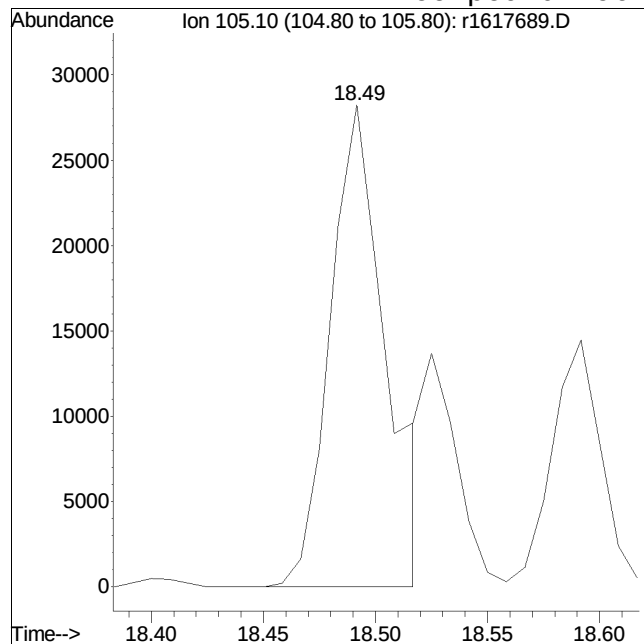


Manual Peak Response = 5255 M3

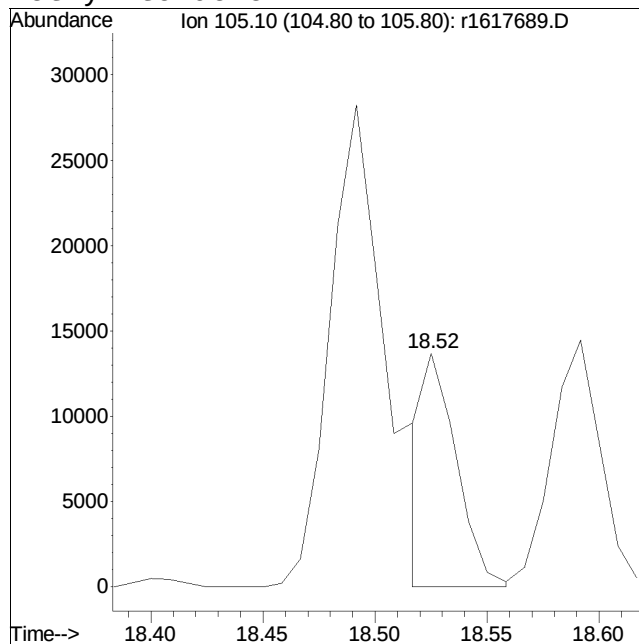
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
 Data File : r1617689.D Operator : AIRLAB16:RY
 Date Inj'd : 6/16/2020 0:9: 6 Instrument :
 Sample : L2024597-03,3,250,250 Quant Date : 6/17/2020 5:24 am

Compound #96: 4-ethyl toluene



Original Peak Response = 48470



Manual Peak Response = 14191 M3

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : BROOME ST.
Instrument ID : AIRLAB16
Calibration dates : 06/09/20 19:26 06/10/20 00:09
Lab Number : L2024597
Project Number : 100646801
Ical Ref : ICAL16872

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
 50 =r1617546.D 100 =r1617547.D

Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1) I bromochloromethane	-----ISTD-----									
2) chlorodifluoromethane	0.735	0.725	0.722	0.763	0.732	0.713	0.661	0.611	0.7076	6.83
3) propylene		0.469	0.469	0.493	0.457	0.451	0.409	0.361	0.4441	10.03
4) propane		0.500	0.491	0.510	0.496	0.483	0.452	0.423	0.4792	6.47
5) dichlorodifluoromethane	0.756	0.772	0.766	0.812	0.763	0.738	0.674	0.610	0.7366	8.70
6) C chloromethane	0.448	0.410	0.413	0.443	0.425	0.411	0.383	0.353	0.4108	7.52
7) Freon-114	0.999	1.024	0.987	1.070	1.009	0.962	0.867	0.751	0.9588	10.65
8) C methanol			0.171	0.178	0.170	0.156	0.148	0.139	0.1603	9.34
9) C vinyl chloride	0.443	0.434	0.414	0.460	0.442	0.429	0.397	0.366	0.4233	7.04
10) C 1,3-butadiene	0.379	0.363	0.354	0.373	0.359	0.369	0.341	0.312	0.3563	6.02
11) butane	0.851	0.746	0.703	0.742	0.710	0.674	0.619	0.554	0.6998	12.71
12) C acetaldehyde		0.252	0.242	0.241	0.231	0.221	0.201	0.178	0.2237	11.66
13) C bromomethane	0.379	0.395	0.383	0.412	0.397	0.382	0.351	0.318	0.3770	7.90
14) C chloroethane	0.213	0.217	0.206	0.226	0.218	0.211	0.196	0.180	0.2084	6.87
15) ethanol			0.354	0.326	0.322	0.300	0.252	0.218	0.2953	17.31
16) dichlorofluoromethane	0.730	0.715	0.705	0.756	0.736	0.706	0.661	0.610	0.7023	6.66
17) C vinyl bromide	0.384	0.381	0.386	0.388	0.384	0.392	0.352	0.320	0.3734	6.66
18) C acrolein		0.184	0.180	0.188	0.187	0.183	0.170	0.161	0.1791	5.49
19) acetone	0.691	0.624	0.632	0.664	0.647	0.614	0.539	0.467	0.6098	11.92
20) C acetonitrile	0.440	0.400	0.386	0.410	0.403	0.384	0.346	0.313	0.3855	10.23
21) trichlorofluoromethane	0.573	0.539	0.544	0.579	0.572	0.555	0.512	0.475	0.5436	6.51
22) isopropyl alcohol	0.744	0.695	0.677	0.723	0.713	0.722	0.667	0.604	0.6931	6.35
23) C acrylonitrile	0.326	0.328	0.324	0.393	0.353	0.347	0.348	0.299	0.3398	8.18
24) pentane	1.167	0.811	0.817	1.177	0.818	0.803	0.952	0.639	0.8978	21.03
25) ethyl ether	0.635	0.642	0.556	0.774	0.616	0.653	0.678	0.516	0.6338	12.26
26) C 1,1-dichloroethene	0.694	0.685	0.687	0.727	0.713	0.670	0.604	0.545	0.6656	9.14
27) tertiary butyl alcohol		0.546	0.572	0.644	0.655	0.661	0.631	0.612	0.6173	7.06
28) C methylene chloride		0.684	0.681	0.722	0.711	0.677	0.613	0.562	0.6643	8.52
29) C 3-chloropropene	0.846	0.827	0.826	0.843	0.831	0.828	0.744	0.666	0.8014	7.94
30) C carbon disulfide	1.835	1.780	1.772	1.860	1.845	1.840	1.643	1.456	1.7539	7.93
31) Freon 113	1.055	1.039	1.018	1.098	1.072	1.012	0.894	0.790	0.9974	10.38
32) trans-1,2-dichloroethene	0.737	0.759	0.759	0.768	0.761	0.756	0.680	0.615	0.7294	7.43
33) C 1,1-dichloroethane	0.943	0.921	0.918	0.992	0.966	0.913	0.824	0.743	0.9026	8.98
34) C MTBE	1.131	1.165	1.159	1.273	1.305	1.320	1.200	1.093	1.2058	6.98
35) C vinyl acetate			1.075	1.157	1.245	1.286	1.229	1.128	1.1866	6.75
36) C 2-butanone		1.194	1.211	1.322	1.336	1.325	1.206	1.081	1.2392	7.55



Initial Calibration Summary

Form 6

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : BROOME ST.
Instrument ID : AIRLAB16
Calibration dates : 06/09/20 19:26 06/10/20 00:09
Lab Number : L2024597
Project Number : 100646801
Ical Ref : ICAL16872

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
 50 =r1617546.D 100 =r1617547.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)	cis-1,2-dichloroethene	0.676	0.649	0.654	0.706	0.697	0.663	0.599	0.542	0.6481	8.32
38)	Ethyl Acetate		0.149	0.160	0.189	0.189	0.197	0.180	0.167	0.1760	10.08
39) C	chloroform	0.894	0.870	0.863	0.908	0.885	0.849	0.754	0.675	0.8373	9.64
40)	Tetrahydrofuran		0.715	0.726	0.803	0.827	0.828	0.754	0.676	0.7612	7.82
41)	2,2-dichloropropane	0.551	0.560	0.573	0.613	0.603	0.596	0.540	0.488	0.5656	7.18
42) C	1,2-dichloroethane	0.477	0.484	0.472	0.494	0.475	0.444	0.399	0.360	0.4504	10.51
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.321	0.321	0.323	0.337	0.334	0.337	0.304	0.278	0.3193	6.23
45)	diisopropyl ether	0.151	0.156	0.152	0.171	0.177	0.173	0.159	0.146	0.1605	7.17
46)	tert-butyl ethyl ether	0.432	0.439	0.444	0.503	0.523	0.510	0.472	0.446	0.4713	7.66
47) s	1,2-dichloroethane-D4	0.154	0.149	0.150	0.149	0.148	0.141	0.137	0.133	0.1450	5.10
48) C	1,1,1-trichloroethane	0.261	0.244	0.247	0.271	0.267	0.250	0.227	0.212	0.2474	8.15
49)	1,1-dichloropropene	0.273	0.281	0.280	0.307	0.308	0.293	0.268	0.248	0.2823	7.19
50) C	benzene	0.699	0.699	0.688	0.755	0.753	0.721	0.655	0.602	0.6966	7.27
51)	thiophene	0.364	0.368	0.366	0.419	0.421	0.400	0.366	0.345	0.3810	7.43
52) C	carbon tetrachloride	0.225	0.223	0.224	0.249	0.248	0.238	0.218	0.204	0.2285	6.70
53)	cyclohexane	0.335	0.339	0.344	0.365	0.363	0.366	0.338	0.321	0.3464	4.79
54)	tert-amyl methyl ether	0.467	0.463	0.474	0.525	0.537	0.530	0.505	0.474	0.4968	6.22
55)	dibromomethane	0.206	0.204	0.200	0.213	0.212	0.198	0.181	0.166	0.1975	8.24
56) C	1,2-dichloropropane	0.236	0.238	0.238	0.256	0.256	0.241	0.220	0.203	0.2362	7.48
57)	bromodichloromethane	0.325	0.328	0.325	0.348	0.350	0.347	0.320	0.297	0.3298	5.39
58) C	1,4-dioxane	0.149	0.140	0.140	0.148	0.144	0.151	0.145	0.135	0.1439	3.63
59) C	trichloroethene	0.297	0.299	0.296	0.320	0.321	0.305	0.274	0.249	0.2951	8.06
60) C	2,2,4-trimethylpentane	1.094	1.092	1.063	1.108	1.118	1.095	0.987	0.906	1.0580	6.97
61)	methyl methacrylate		0.315	0.313	0.378	0.393	0.378	0.347	0.317	0.3487	9.82
62)	heptane	0.498	0.507	0.504	0.520	0.514	0.510	0.452	0.403	0.4885	8.23
63) C	cis-1,3-dichloropropene	0.288	0.310	0.313	0.362	0.368	0.352	0.328	0.304	0.3281	8.98
64) C	4-methyl-2-pentanone		0.492	0.512	0.569	0.564	0.560	0.529	0.484	0.5302	6.66
65)	trans-1,3-dichloropropene	0.242	0.268	0.267	0.313	0.323	0.310	0.290	0.274	0.2860	9.78
66) C	1,1,2-trichloroethane	0.268	0.259	0.264	0.289	0.287	0.270	0.247	0.228	0.2641	7.54
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	5.825	5.598	5.499	6.052	6.006	5.823	5.171	4.720	5.5865	8.11
69) s	toluene-D8	5.105	5.056	5.063	5.200	5.293	5.292	5.209	5.151	5.1710	1.81
70)	2-methylthiophene	4.434	4.350	4.385	4.931	4.889	4.687	4.209	3.852	4.4672	8.07
71)	1,3-dichloropropane	2.535	2.560	2.530	2.765	2.758	2.690	2.422	2.221	2.5600	7.14
72)	2-hexanone	2.513	3.049	3.154	3.593	3.650	3.800	3.369	3.113	3.2800	12.62



Initial Calibration Summary

Form 6

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : BROOME ST.
Instrument ID : AIRLAB16
Calibration dates : 06/09/20 19:26 06/10/20 00:09
Lab Number : L2024597
Project Number : 100646801
Ical Ref : ICAL16872

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
 50 =r1617546.D 100 =r1617547.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)	3-methylthiophene	4.417	4.421	4.477	5.034	5.017	4.796	4.244	3.840	4.5309	8.93
74)	dibromochloromethane	2.437	2.437	2.487	2.704	2.706	2.801	2.506	2.312	2.5487	6.62
75) C	1,2-dibromoethane	2.688	2.718	2.769	3.114	3.071	2.947	2.640	2.379	2.7908	8.74
76)	butyl acetate		0.444	0.482	0.631	0.664	0.668	0.618	0.602	0.5870	15.13
77)	octane	1.801	1.859	1.904	2.141	2.117	2.082	1.869	1.714	1.9360	8.17
78) C	tetrachloroethene	2.591	2.476	2.549	2.738	2.696	2.620	2.307	2.057	2.5042	8.98
79)	1,1,1,2-tetrachloroethane	1.857	1.902	1.924	2.177	2.175	2.090	1.838	1.642	1.9507	9.51
80) C	chlorobenzene	4.752	4.897	4.871	5.412	5.335	5.100	4.434	3.845	4.8308	10.51
81) C	ethylbenzene	7.063	7.266	7.290	8.172	8.034	7.662	6.727	6.041	7.2819	9.57
82)	2-ethylthiophene	4.745	5.004	5.197	5.904	5.812	5.441	4.779	4.271	5.1440	10.87
83) C	m+p-xylene	5.879	5.940	6.014	6.577	6.418	6.113	5.272	4.581	5.8495	11.01
84) C	bromoform	2.124	2.109	2.133	2.467	2.492	2.619	2.400	2.147	2.3113	8.87
85) C	styrene	4.534	4.914	5.032	5.869	5.827	5.639	4.982	4.378	5.1469	11.11
86) C	1,1,2,2-tetrachloroethane	3.918	4.307	4.372	4.930	4.782	4.491	3.941	3.350	4.2615	12.02
87) C	o-xylene	6.032	6.103	6.213	6.738	6.499	6.131	5.211	4.429	5.9193	12.62
88)	1,2,3-trichloropropane	2.942	3.359	3.393	3.731	3.674	3.533	3.156	2.839	3.3283	9.81
89)	nonane	5.290	5.535	5.609	6.208	6.047	5.721	4.834	4.059	5.4130	12.81
90) s	bromofluorobenzene	3.591	3.538	3.519	3.535	3.587	3.725	3.654	3.710	3.6075	2.22
91) C	isopropylbenzene	7.687	8.229	8.379	9.415	9.040	8.559	7.287	6.259	8.1069	12.46
92)	bromobenzene	4.055	4.198	4.250	4.736	4.727	4.570	4.102	3.614	4.2816	8.94
93)	2-chlorotoluene	2.550	2.477	2.447	2.761	2.713	2.568	2.342	2.127	2.4981	8.11
94)	n-propylbenzene	2.176	2.531	2.673	3.079	3.016	2.914	2.569	2.293	2.6564	12.41
95)	4-chlorotoluene	2.034	2.295	2.313	2.599	2.588	2.528	2.254	2.060	2.3339	9.53
96)	4-ethyl toluene	0.782	0.877	0.928	1.017	0.997	0.970	0.816	0.697	0.8855	12.79
97)	1,3,5-trimethylbenzene	6.851	7.241	7.645	8.806	8.558	7.740	6.591	5.647	7.3848	14.06
98)	tert-butylbenzene	6.896	7.119	7.638	8.572	8.390	7.474	6.261	5.105	7.1820	15.73
99)	1,2,4-trimethylbenzene	6.433	7.007	7.503	8.616	8.359	7.245	6.016	4.864	7.0054	17.59
100)	decane	4.760	5.058	5.374	6.061	5.954	5.303	4.767	4.293	5.1962	11.67
101) C	Benzyl Chloride	1.956	2.382	2.959	4.256	4.845	4.772	4.686	4.324	3.7724	30.75#
102)	1,3-dichlorobenzene	4.544	5.260	5.482	6.233	6.198	5.631	4.909	4.213	5.3089	13.74
103) C	1,4-dichlorobenzene	4.483	5.062	5.139	5.993	6.135	5.491	4.906	4.291	5.1874	12.69
104)	sec-butylbenzene	0.972	1.010	1.087	1.224	1.197	1.059	0.903	0.762	1.0266	14.78
105)	1,2,3-trimethylbenzene	6.597	7.193	7.623	8.652	8.379	7.236	6.033	4.893	7.0759	17.39
106)	p-isopropyltoluene	0.808	0.868	0.890	1.028	1.016	0.886	0.749	0.598	0.8553	16.39
107)	1,2-dichlorobenzene	4.157	4.992	5.186	5.882	5.909	5.246	4.739	4.252	5.0454	13.02
108)	n-butylbenzene	6.378	6.962	7.287	8.599	8.701	7.664	6.811	6.080	7.3101	13.15



Initial Calibration Summary

Form 6

Air Volatiles

Client : Langan Engineering & Environmental
Project Name : BROOME ST.
Instrument ID : AIRLAB16
Calibration dates : 06/09/20 19:26 06/10/20 00:09
Lab Number : L2024597
Project Number : 100646801
Ical Ref : ICAL16872

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
 50 =r1617546.D 100 =r1617547.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)	indan	6.729	7.806	8.262	9.360	9.248	8.311	7.351	6.344	7.9264	13.78
110)	indene	4.545	5.580	6.045	7.345	7.422	6.589	6.126	5.406	6.1323	15.96
111) C	1,2-dibromo-3-chloropropane	1.085	1.303	1.387	1.814	1.952	1.692	1.590	1.448	1.5340	18.53
112)	undecane	4.354	5.316	5.615	6.380	6.505	5.551	5.093	4.637	5.4314	13.95
113)	1,2,4,5-tetramethylbenzene	6.672	8.147	8.585	9.415	9.845	8.420	7.483	6.610	8.1470	14.47
114)	dodecane	2.232	4.293	5.198	5.415	6.366	4.504	4.420	4.164	4.5740	26.22
115) C	1,2,4-trichlorobenzene	1.068	1.672	2.046	2.603	3.203	2.592	2.849	2.715	2.3437	29.86
116)	naphthalene	0.341	0.546	0.636	0.821	1.008	0.780	0.816	0.772	0.7148	28.44
117)	1,2,3-trichlorobenzene	1.182	1.860	2.146	2.533	3.130	2.374	2.556	2.506	2.2860	25.20
118)	benzothiophene	2.229	3.876	4.965	6.205	8.440	7.369	8.209	7.960	6.1565	36.94#
119) C	hexachlorobutadiene	1.609	2.295	2.476	2.542	2.787	2.151	2.034	1.813	2.2134	17.70
120)	2-methylnaphthalene			0.767	1.031	1.968	1.113	1.693	1.996	1.4281	36.76#
121)	1-methylnaphthalene			2.961	2.849	4.938	2.871	3.964	4.282	3.6443	24.17

Response Factor Report

Method Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Method File : TFS16_200609.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Wed Jun 10 11:25:58 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
 50 =r1617546.D 100 =r1617547.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
-----ISTD-----											
1) I	bromochloromethane										
2)	chlorodifluoromethane	0.735	0.725	0.722	0.763	0.732	0.713	0.661	0.611	0.7076	6.83
3)	propylene		0.469	0.469	0.493	0.457	0.451	0.409	0.361	0.4441	10.03
4)	propane		0.500	0.491	0.510	0.496	0.483	0.452	0.423	0.4792	6.47
5)	dichlorodifluoromethane	0.756	0.772	0.766	0.812	0.763	0.738	0.674	0.610	0.7366	8.70
6) C	chloromethane	0.448	0.410	0.413	0.443	0.425	0.411	0.383	0.353	0.4108	7.52
7)	Freon-114	0.999	1.024	0.987	1.070	1.009	0.962	0.867	0.751	0.9588	10.65
8) C	methanol			0.171	0.178	0.170	0.156	0.148	0.139	0.1603	9.34
9) C	vinyl chloride	0.443	0.434	0.414	0.460	0.442	0.429	0.397	0.366	0.4233	7.04
10) C	1,3-butadiene	0.379	0.363	0.354	0.373	0.359	0.369	0.341	0.312	0.3563	6.02
11)	butane	0.851	0.746	0.703	0.742	0.710	0.674	0.619	0.554	0.6998	12.71
12) C	acetaldehyde		0.252	0.242	0.241	0.231	0.221	0.201	0.178	0.2237	11.66
13) C	bromomethane	0.379	0.395	0.383	0.412	0.397	0.382	0.351	0.318	0.3770	7.90
14) C	chloroethane	0.213	0.217	0.206	0.226	0.218	0.211	0.196	0.180	0.2084	6.87
15)	ethanol			0.354	0.326	0.322	0.300	0.252	0.218	0.2953	17.31
16)	dichlorofluoromethane	0.730	0.715	0.705	0.756	0.736	0.706	0.661	0.610	0.7023	6.66
17) C	vinyl bromide	0.384	0.381	0.386	0.388	0.384	0.392	0.352	0.320	0.3734	6.66
18) C	acrolein		0.184	0.180	0.188	0.187	0.183	0.170	0.161	0.1791	5.49
19)	acetone	0.691	0.624	0.632	0.664	0.647	0.614	0.539	0.467	0.6098	11.92
20) C	acetonitrile	0.440	0.400	0.386	0.410	0.403	0.384	0.346	0.313	0.3855	10.23
21)	trichlorofluoromethane	0.573	0.539	0.544	0.579	0.572	0.555	0.512	0.475	0.5436	6.51
22)	isopropyl alcohol	0.744	0.695	0.677	0.723	0.713	0.722	0.667	0.604	0.6931	6.35
23) C	acrylonitrile	0.326	0.328	0.324	0.393	0.353	0.347	0.348	0.299	0.3398	8.18
24)	pentane	1.167	0.811	0.817	1.177	0.818	0.803	0.952	0.639	0.8978	21.03
25)	ethyl ether	0.635	0.642	0.556	0.774	0.616	0.653	0.678	0.516	0.6338	12.26
26) C	1,1-dichloroethene	0.694	0.685	0.687	0.727	0.713	0.670	0.604	0.545	0.6656	9.14
27)	tertiary butyl alcohol		0.546	0.572	0.644	0.655	0.661	0.631	0.612	0.6173	7.06
28) C	methylene chloride		0.684	0.681	0.722	0.711	0.677	0.613	0.562	0.6643	8.52
29) C	3-chloropropene	0.846	0.827	0.826	0.843	0.831	0.828	0.744	0.666	0.8014	7.94
30) C	carbon disulfide	1.835	1.780	1.772	1.860	1.845	1.840	1.643	1.456	1.7539	7.93
31)	Freon 113	1.055	1.039	1.018	1.098	1.072	1.012	0.894	0.790	0.9974	10.38

Response Factor Report

Method Path : O:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Method File : TFS16_200609.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Wed Jun 10 11:25:58 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
 50 =r1617546.D 100 =r1617547.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)	trans-1,2-dichloroethene	0.737	0.759	0.759	0.768	0.761	0.756	0.680	0.615	0.7294	7.43
33) C	1,1-dichloroethane	0.943	0.921	0.918	0.992	0.966	0.913	0.824	0.743	0.9026	8.98
34) C	MTBE	1.131	1.165	1.159	1.273	1.305	1.320	1.200	1.093	1.2058	6.98
35) C	vinyl acetate			1.075	1.157	1.245	1.286	1.229	1.128	1.1866	6.75
36) C	2-butanone		1.194	1.211	1.322	1.336	1.325	1.206	1.081	1.2392	7.55
37)	cis-1,2-dichloroethene	0.676	0.649	0.654	0.706	0.697	0.663	0.599	0.542	0.6481	8.32
38)	Ethyl Acetate		0.149	0.160	0.189	0.189	0.197	0.180	0.167	0.1760	10.08
39) C	chloroform	0.894	0.870	0.863	0.908	0.885	0.849	0.754	0.675	0.8373	9.64
40)	Tetrahydrofuran		0.715	0.726	0.803	0.827	0.828	0.754	0.676	0.7612	7.82
41)	2,2-dichloropropane	0.551	0.560	0.573	0.613	0.603	0.596	0.540	0.488	0.5656	7.18
42) C	1,2-dichloroethane	0.477	0.484	0.472	0.494	0.475	0.444	0.399	0.360	0.4504	10.51
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.321	0.321	0.323	0.337	0.334	0.337	0.304	0.278	0.3193	6.23
45)	diisopropyl ether	0.151	0.156	0.152	0.171	0.177	0.173	0.159	0.146	0.1605	7.17
46)	tert-butyl ethyl ether	0.432	0.439	0.444	0.503	0.523	0.510	0.472	0.446	0.4713	7.66
47) s	1,2-dichloroethane-D4	0.154	0.149	0.150	0.149	0.148	0.141	0.137	0.133	0.1450	5.10
48) C	1,1,1-trichloroethane	0.261	0.244	0.247	0.271	0.267	0.250	0.227	0.212	0.2474	8.15
49)	1,1-dichloropropene	0.273	0.281	0.280	0.307	0.308	0.293	0.268	0.248	0.2823	7.19
50) C	benzene	0.699	0.699	0.688	0.755	0.753	0.721	0.655	0.602	0.6966	7.27
51)	thiophene	0.364	0.368	0.366	0.419	0.421	0.400	0.366	0.345	0.3810	7.43
52) C	carbon tetrachloride	0.225	0.223	0.224	0.249	0.248	0.238	0.218	0.204	0.2285	6.70
53)	cyclohexane	0.335	0.339	0.344	0.365	0.363	0.366	0.338	0.321	0.3464	4.79
54)	tert-amyl methyl ether	0.467	0.463	0.474	0.525	0.537	0.530	0.505	0.474	0.4968	6.22
55)	dibromomethane	0.206	0.204	0.200	0.213	0.212	0.198	0.181	0.166	0.1975	8.24
56) C	1,2-dichloropropane	0.236	0.238	0.238	0.256	0.256	0.241	0.220	0.203	0.2362	7.48
57)	bromodichloromethane	0.325	0.328	0.325	0.348	0.350	0.347	0.320	0.297	0.3298	5.39
58) C	1,4-dioxane	0.149	0.140	0.140	0.148	0.144	0.151	0.145	0.135	0.1439	3.63
59) C	trichloroethene	0.297	0.299	0.296	0.320	0.321	0.305	0.274	0.249	0.2951	8.06
60) C	2,2,4-trimethylpentane	1.094	1.092	1.063	1.108	1.118	1.095	0.987	0.906	1.0580	6.97
61)	methyl methacrylate		0.315	0.313	0.378	0.393	0.378	0.347	0.317	0.3487	9.82
62)	heptane	0.498	0.507	0.504	0.520	0.514	0.510	0.452	0.403	0.4885	8.23

Response Factor Report

Method Path : O:\Forensics\Data\Airlab16\2020\06\200609T_I\
Method File : TFS16_200609.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Jun 10 11:25:58 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
50 =r1617546.D 100 =r1617547.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63) C	cis-1,3-dichloropropene	0.288	0.310	0.313	0.362	0.368	0.352	0.328	0.304	0.3281	8.98
64) C	4-methyl-2-pentanone		0.492	0.512	0.569	0.564	0.560	0.529	0.484	0.5302	6.66
65)	trans-1,3-dichloropropene	0.242	0.268	0.267	0.313	0.323	0.310	0.290	0.274	0.2860	9.78
66) C	1,1,2-trichloroethane	0.268	0.259	0.264	0.289	0.287	0.270	0.247	0.228	0.2641	7.54
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	5.825	5.598	5.499	6.052	6.006	5.823	5.171	4.720	5.5865	8.11
69) s	toluene-D8	5.105	5.056	5.063	5.200	5.293	5.292	5.209	5.151	5.1710	1.81
70)	2-methylthiophene	4.434	4.350	4.385	4.931	4.889	4.687	4.209	3.852	4.4672	8.07
71)	1,3-dichloropropane	2.535	2.560	2.530	2.765	2.758	2.690	2.422	2.221	2.5600	7.14
72)	2-hexanone	2.513	3.049	3.154	3.593	3.650	3.800	3.369	3.113	3.2800	12.62
73)	3-methylthiophene	4.417	4.421	4.477	5.034	5.017	4.796	4.244	3.840	4.5309	8.93
74)	dibromochloromethane	2.437	2.437	2.487	2.704	2.706	2.801	2.506	2.312	2.5487	6.62
75) C	1,2-dibromoethane	2.688	2.718	2.769	3.114	3.071	2.947	2.640	2.379	2.7908	8.74
76)	butyl acetate		0.444	0.482	0.631	0.664	0.668	0.618	0.602	0.5870	15.13
77)	octane	1.801	1.859	1.904	2.141	2.117	2.082	1.869	1.714	1.9360	8.17
78) C	tetrachloroethene	2.591	2.476	2.549	2.738	2.696	2.620	2.307	2.057	2.5042	8.98
79)	1,1,1,2-tetrachloroethane	1.857	1.902	1.924	2.177	2.175	2.090	1.838	1.642	1.9507	9.51
80) C	chlorobenzene	4.752	4.897	4.871	5.412	5.335	5.100	4.434	3.845	4.8308	10.51
81) C	ethylbenzene	7.063	7.266	7.290	8.172	8.034	7.662	6.727	6.041	7.2819	9.57
82)	2-ethylthiophene	4.745	5.004	5.197	5.904	5.812	5.441	4.779	4.271	5.1440	10.87
83) C	m+p-xylene	5.879	5.940	6.014	6.577	6.418	6.113	5.272	4.581	5.8495	11.01
84) C	bromoform	2.124	2.109	2.133	2.467	2.492	2.619	2.400	2.147	2.3113	8.87
85) C	styrene	4.534	4.914	5.032	5.869	5.827	5.639	4.982	4.378	5.1469	11.11
86) C	1,1,2,2-tetrachloroethane	3.918	4.307	4.372	4.930	4.782	4.491	3.941	3.350	4.2615	12.02
87) C	o-xylene	6.032	6.103	6.213	6.738	6.499	6.131	5.211	4.429	5.9193	12.62
88)	1,2,3-trichloropropane	2.942	3.359	3.393	3.731	3.674	3.533	3.156	2.839	3.3283	9.81
89)	nonane	5.290	5.535	5.609	6.208	6.047	5.721	4.834	4.059	5.4130	12.81
90) s	bromofluorobenzene	3.591	3.538	3.519	3.535	3.587	3.725	3.654	3.710	3.6075	2.22
91) C	isopropylbenzene	7.687	8.229	8.379	9.415	9.040	8.559	7.287	6.259	8.1069	12.46
92)	bromobenzene	4.055	4.198	4.250	4.736	4.727	4.570	4.102	3.614	4.2816	8.94
93)	2-chlorotoluene	2.550	2.477	2.447	2.761	2.713	2.568	2.342	2.127	2.4981	8.11

Response Factor Report

Method Path : O:\Forensics\Data\Airlab16\2020\06\200609T_I\
Method File : TFS16_200609.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Jun 10 11:25:58 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r1617540.D 0.5 =r1617541.D 1.0 =r1617542.D 5.0 =r1617543.D 10 =r1617544.D 20 =r1617545.D
50 =r1617546.D 100 =r1617547.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)	n-propylbenzene	2.176	2.531	2.673	3.079	3.016	2.914	2.569	2.293	2.6564	12.41
95)	4-chlorotoluene	2.034	2.295	2.313	2.599	2.588	2.528	2.254	2.060	2.3339	9.53
96)	4-ethyl toluene	0.782	0.877	0.928	1.017	0.997	0.970	0.816	0.697	0.8855	12.79
97)	1,3,5-trimethylbenzene	6.851	7.241	7.645	8.806	8.558	7.740	6.591	5.647	7.3848	14.06
98)	tert-butylbenzene	6.896	7.119	7.638	8.572	8.390	7.474	6.261	5.105	7.1820	15.73
99)	1,2,4-trimethylbenzene	6.433	7.007	7.503	8.616	8.359	7.245	6.016	4.864	7.0054	17.59
100)	decane	4.760	5.058	5.374	6.061	5.954	5.303	4.767	4.293	5.1962	11.67
101) C	Benzyl Chloride	1.956	2.382	2.959	4.256	4.845	4.772	4.686	4.324	3.7724	30.75#
102)	1,3-dichlorobenzene	4.544	5.260	5.482	6.233	6.198	5.631	4.909	4.213	5.3089	13.74
103) C	1,4-dichlorobenzene	4.483	5.062	5.139	5.993	6.135	5.491	4.906	4.291	5.1874	12.69
104)	sec-butylbenzene	0.972	1.010	1.087	1.224	1.197	1.059	0.903	0.762	1.0266	14.78
105)	1,2,3-trimethylbenzene	6.597	7.193	7.623	8.652	8.379	7.236	6.033	4.893	7.0759	17.39
106)	p-isopropyltoluene	0.808	0.868	0.890	1.028	1.016	0.886	0.749	0.598	0.8553	16.39
107)	1,2-dichlorobenzene	4.157	4.992	5.186	5.882	5.909	5.246	4.739	4.252	5.0454	13.02
108)	n-butylbenzene	6.378	6.962	7.287	8.599	8.701	7.664	6.811	6.080	7.3101	13.15
109)	indan	6.729	7.806	8.262	9.360	9.248	8.311	7.351	6.344	7.9264	13.78
110)	indene	4.545	5.580	6.045	7.345	7.422	6.589	6.126	5.406	6.1323	15.96
111) C	1,2-dibromo-3-chloropropane	1.085	1.303	1.387	1.814	1.952	1.692	1.590	1.448	1.5340	18.53
112)	undecane	4.354	5.316	5.615	6.380	6.505	5.551	5.093	4.637	5.4314	13.95
113)	1,2,4,5-tetramethylbenzene	6.672	8.147	8.585	9.415	9.845	8.420	7.483	6.610	8.1470	14.47
114)	dodecane	2.232	4.293	5.198	5.415	6.366	4.504	4.420	4.164	4.5740	26.22
115) C	1,2,4-trichlorobenzene	1.068	1.672	2.046	2.603	3.203	2.592	2.849	2.715	2.3437	29.86
116)	naphthalene	0.341	0.546	0.636	0.821	1.008	0.780	0.816	0.772	0.7148	28.44
117)	1,2,3-trichlorobenzene	1.182	1.860	2.146	2.533	3.130	2.374	2.556	2.506	2.2860	25.20
118)	benzothiophene	2.229	3.876	4.965	6.205	8.440	7.369	8.209	7.960	6.1565	36.94#
119) C	hexachlorobutadiene	1.609	2.295	2.476	2.542	2.787	2.151	2.034	1.813	2.2134	17.70
120)	2-methylnaphthalene			0.767	1.031	1.968	1.113	1.693	1.996	1.4281	36.76#
121)	1-methylnaphthalene			2.961	2.849	4.938	2.871	3.964	4.282	3.6443	24.17

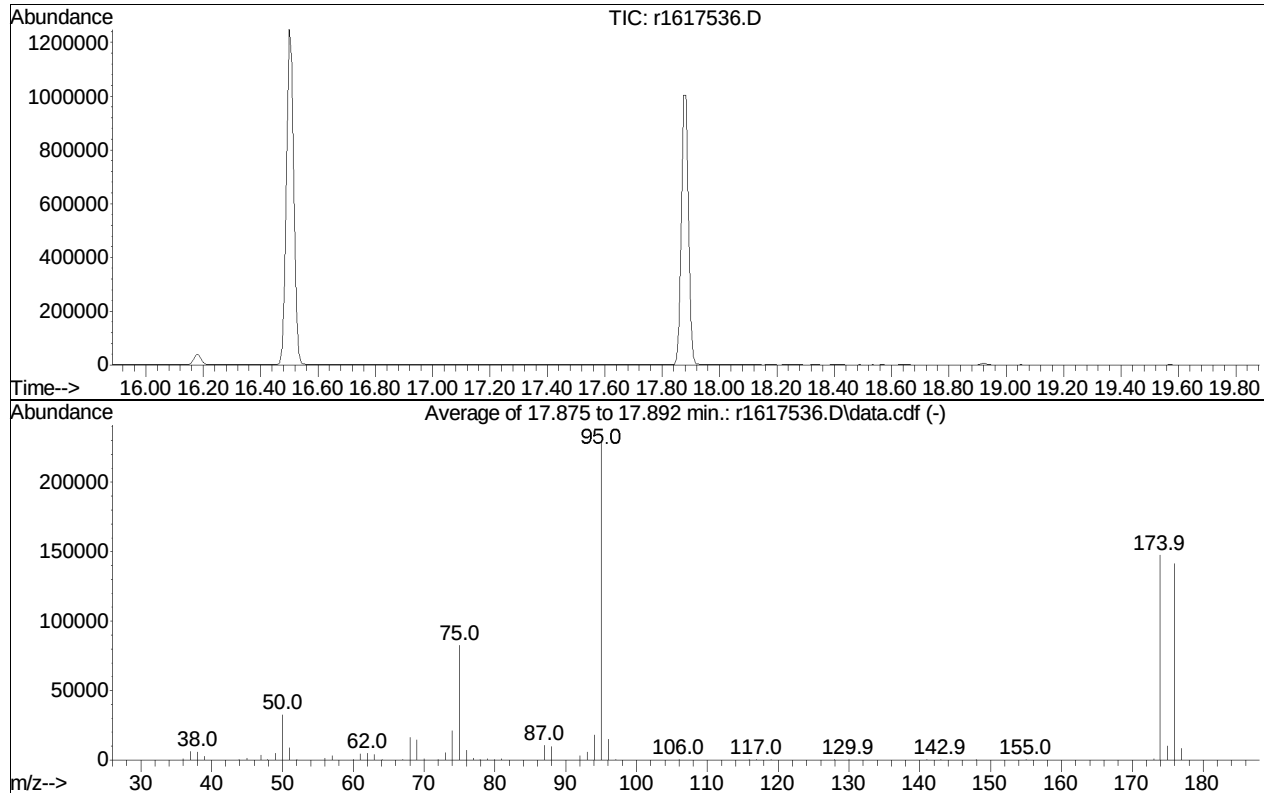
(#) = Out of Range

BFB

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617536.D
 Acq On : 9 Jun 2020 4:46 PM
 Operator : AIRLAB16:AR
 Sample : WG1379955-1
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Wed Jun 10 11:25:58 2020



AutoFind: Scans 2162, 2163, 2164; Background Corrected with Scan 2155

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.1	32518	PASS
75	95	30	66	35.9	82554	PASS
95	95	100	100	100.0	229966	PASS
96	95	5	9	6.5	15027	PASS
173	174	0.00	2	0.6	910	PASS
174	95	50	120	64.2	147605	PASS
175	174	4	9	6.9	10207	PASS
176	174	93	101	95.8	141386	PASS
177	176	5	9	6.1	8690	PASS

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617540.D
 Acq On : 9 Jun 2020 7:26 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.2
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:17 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.492	49	319217	10.000	ppbV	0.00
Standard Area = 321867			Recovery =	99.18%		
43) 1,4-difluorobenzene	11.773	114	884310	10.000	ppbV	0.00
Standard Area = 880461			Recovery =	100.44%		
67) chlorobenzene-D5	16.500	54	124437	10.000	ppbV	0.00
Standard Area = 123109			Recovery =	101.08%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.383	65	135811	10.589	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	105.89%		
69) toluene-D8	14.625	98	635259	9.872	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.72%		
90) bromofluorobenzene	17.875	95	446858	9.954	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.54%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.766	51	4690	0.208	ppbV	100
3) propylene	3.796	41	3150M6	0.222	ppbV	
4) propane	3.826	29	3279M6	0.214	ppbV	
5) dichlorodifluoromethane	3.880	85	4826	0.205	ppbV	98
6) chloromethane	4.060	50	2859	0.218	ppbV	98
7) Freon-114	4.180	85	6381	0.208	ppbV	99
8) methanol	4.258	31	6381	1.247	ppbV #	20
9) vinyl chloride	4.312	62	2830	0.209	ppbV	96
10) 1,3-butadiene	4.474	54	2419	0.213	ppbV	89
11) butane	4.540	43	5432	0.243	ppbV	98
12) acetaldehyde	4.204	29	9342M6	1.308	ppbV	
13) bromomethane	4.786	94	2422	0.201	ppbV	93
14) chloroethane	5.008	64	1360	0.204	ppbV #	88
15) ethanol	5.188	31	18638	1.977	ppbV	97
16) dichlorofluoromethane	5.146	67	4661	0.208	ppbV	95
17) vinyl bromide	5.443	106	2453	0.206	ppbV	99
18) acrolein	5.600	56	1234	0.216	ppbV #	9
19) acetone	5.777	43	22064	1.133	ppbV #	100
20) acetonitrile	5.440	41	2811	0.228	ppbV	93
21) trichlorofluoromethane	5.963	101	3656	0.211	ppbV	97
22) isopropyl alcohol	6.113	45	11873	0.537	ppbV	99
23) acrylonitrile	6.347	53	2082	0.192	ppbV	90
24) pentane	6.417	43	7449	0.260	ppbV #	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617540.D
 Acq On : 9 Jun 2020 7:26 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.2
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:17 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.470	31	4055	0.200	ppbV	93
26) 1,1-dichloroethene	6.746	61	4432	0.209	ppbV	92
27) tertiary butyl alcohol	6.854	59	3550	0.180	ppbV	93
28) methylene chloride	6.914	49	4606	0.217	ppbV	100
29) 3-chloropropene	7.052	41	5404	0.211	ppbV #	91
30) carbon disulfide	7.202	76	11714	0.209	ppbV #	62
31) Freon 113	7.244	101	6735	0.212	ppbV	94
32) trans-1,2-dichloroethene	8.058	61	4705	0.202	ppbV	95
33) 1,1-dichloroethane	8.292	63	6021	0.209	ppbV	94
34) MTBE	8.400	73	7223	0.188	ppbV	97
35) vinyl acetate	8.525	43	7140	0.189	ppbV #	95
36) 2-butanone	8.817	43	7807	0.197	ppbV #	92
37) cis-1,2-dichloroethene	9.300	61	4313	0.208	ppbV	92
38) Ethyl Acetate	9.642	61	1094M6	0.195	ppbV	
39) chloroform	9.658	83	5706	0.213	ppbV	98
40) Tetrahydrofuran	10.142	42	4342	0.179	ppbV	90
41) 2,2-dichloropropane	9.675	77	3516	0.195	ppbV	87
42) 1,2-dichloroethane	10.508	62	3046	0.212	ppbV	99
44) hexane	9.567	57	5677	0.201	ppbV #	68
45) diisopropyl ether	9.592	87	2666	0.188	ppbV	98
46) tert-butyl ethyl ether	10.217	59	7649	0.184	ppbV	96
48) 1,1,1-trichloroethane	10.800	97	4616	0.211	ppbV	97
49) 1,1-dichloropropene	11.173	75	4833	0.194	ppbV	93
50) benzene	11.333	78	12357	0.201	ppbV	97
51) thiophene	11.480	84	6443	0.191	ppbV	96
52) carbon tetrachloride	11.513	117	3973	0.197	ppbV	93
53) cyclohexane	11.653	56	5924	0.193	ppbV	94
54) tert-amyl methyl ether	12.060	73	8256	0.188	ppbV	98
55) dibromomethane	12.260	93	3648	0.209	ppbV	92
56) 1,2-dichloropropane	12.300	63	4182	0.200	ppbV #	94
57) bromodichloromethane	12.527	83	5749	0.197	ppbV	94
58) 1,4-dioxane	12.593	88	2631	0.207	ppbV	98
59) trichloroethene	12.580	130	5258	0.201	ppbV	96
60) 2,2,4-trimethylpentane	12.627	57	19355	0.207	ppbV	98
61) methyl methacrylate	12.853	41	5360	0.174	ppbV	98
62) heptane	12.953	43	8811	0.204	ppbV	96
63) cis-1,3-dichloropropene	13.600	75	5093	0.176	ppbV	94
64) 4-methyl-2-pentanone	13.667	43	8651	0.185	ppbV	97
65) trans-1,3-dichloropropene	14.225	75	4279	0.169	ppbV	92
66) 1,1,2-trichloroethane	14.425	97	4736	0.203	ppbV #	92

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617540.D
 Acq On : 9 Jun 2020 7:26 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.2
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:17 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.742	91	14496	0.209	ppbV	96
70) 2-methylthiophene	14.808	97	11035	0.199	ppbV	98
71) 1,3-dichloropropane	14.767	76	6308	0.198	ppbV	100
72) 2-hexanone	15.058	43	6254	0.153	ppbV #	98
73) 3-methylthiophene	15.000	97	10993	0.195	ppbV	99
74) dibromochloromethane	15.192	129	6064	0.191	ppbV	93
75) 1,2-dibromoethane	15.442	107	6689	0.193	ppbV	95
76) butyl acetate	15.700	73	771	0.106	ppbV	94
77) octane	15.775	85	4481	0.186	ppbV #	91
78) tetrachloroethene	15.900	166	6448	0.207	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.525	131	4622	0.190	ppbV	95
80) chlorobenzene	16.542	112	11827	0.197	ppbV	96
81) ethylbenzene	16.892	91	17578	0.194	ppbV	100
82) 2-ethylthiophene	16.933	97	11808	0.184	ppbV	97
83) m+p-xylene	17.050	91	29265	0.402	ppbV	99
84) bromoform	17.125	173	5285	0.184	ppbV	98
85) styrene	17.383	104	11283	0.176	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.475	83	9751	0.184	ppbV	98
87) o-xylene	17.475	91	15011	0.204	ppbV	95
88) 1,2,3-trichloropropane	17.592	75	7322	0.177	ppbV #	92
89) nonane	17.675	43	13165	0.195	ppbV	97
91) isopropylbenzene	17.992	105	19131	0.190	ppbV	95
92) bromobenzene	18.067	77	10092	0.189	ppbV	98
93) 2-chlorotoluene	18.400	126	6346	0.204	ppbV	93
94) n-propylbenzene	18.433	120	5415	0.164	ppbV	84
95) 4-chlorotoluene	18.458	126	5061	0.174	ppbV	87
96) 4-ethyl toluene	18.550	105	19464	0.177	ppbV	98
97) 1,3,5-trimethylbenzene	18.617	105	17051	0.186	ppbV	96
98) tert-butylbenzene	18.958	119	17163	0.192	ppbV	98
99) 1,2,4-trimethylbenzene	18.967	105	16010	0.184	ppbV	98
100) decane	19.042	57	11846	0.183	ppbV	96
101) Benzyl Chloride	19.083	91	4867	0.104	ppbV	99
102) 1,3-dichlorobenzene	19.100	146	11308M6	0.171	ppbV	
103) 1,4-dichlorobenzene	19.150	146	11156	0.173	ppbV	96
104) sec-butylbenzene	19.192	105	24190	0.189	ppbV	98
105) 1,2,3-trimethylbenzene	19.325	105	16418	0.186	ppbV	98
106) p-isopropyltoluene	19.325	119	20121M6	0.189	ppbV	
107) 1,2-dichlorobenzene	19.450	146	10346	0.165	ppbV	97
108) n-butylbenzene	19.683	91	15872	0.174	ppbV	93
109) indan	19.500	117	16746	0.170	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617540.D
 Acq On : 9 Jun 2020 7:26 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.2
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:17 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

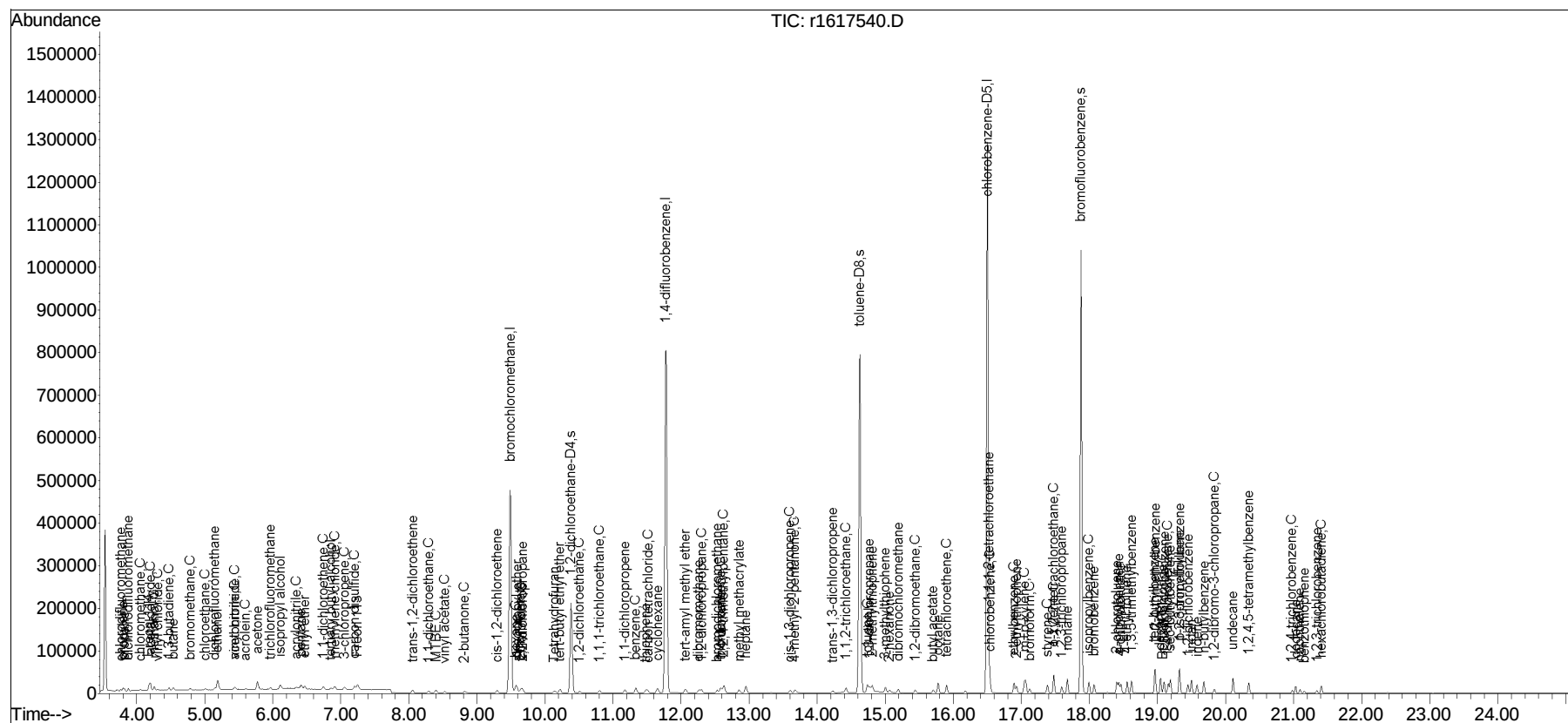
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.583	115	11311	0.148	ppbV	97
111) 1,2-dibromo-3-chloropr...	19.833	75	2700	0.141	ppbV #	88
112) undecane	20.108	57	10836	0.160	ppbV	98
113) 1,2,4,5-tetramethylben...	20.342	119	16605	0.164	ppbV #	98
114) dodecane	21.033	57	5555	0.098	ppbV	100
115) 1,2,4-trichlorobenzene	20.975	180	2659	0.091	ppbV	91
116) naphthalene	21.092	128	8490	0.095	ppbV	99
117) 1,2,3-trichlorobenzene	21.342	180	2941	0.103	ppbV	98
118) benzothiophene	21.158	134	5548	0.072	ppbV #	96
119) hexachlorobutadiene	21.408	225	4004	0.145	ppbV	93
120) 2-methylnaphthalene	22.192		0	N.D.		
121) 1-methylnaphthalene	22.375		0	N.D.		

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File  : r1617540.D
Acq On     : 9 Jun 2020    7:26 PM
Operator   : AIRLAB16:AR
Sample     : IT015-LLSTD0.2
Misc       : WG1379955
ALS Vial   : 0    Sample Multiplier: 1
```

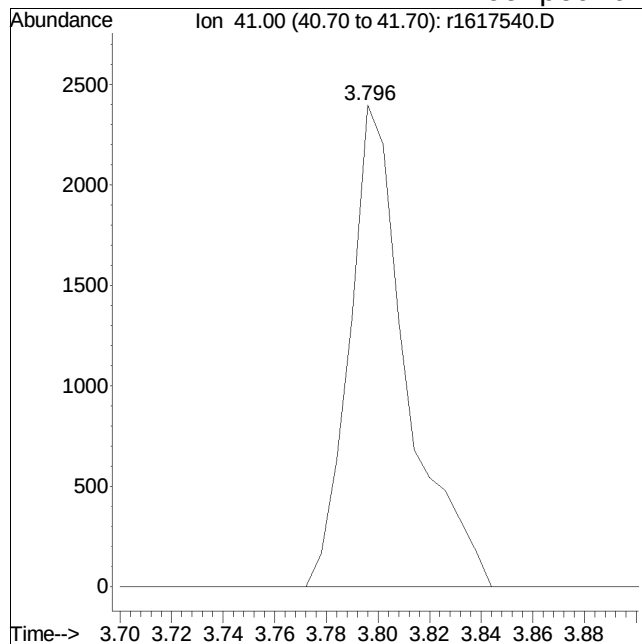
Quant Time: Jun 10 09:56:17 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

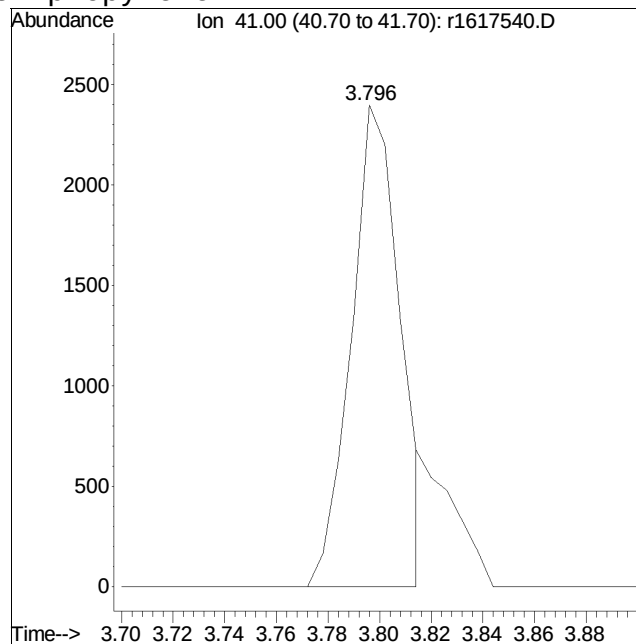
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617540.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:7: 6 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 6/10/2020 9:56 am

Compound #3: propylene



Original Peak Response = 3702

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

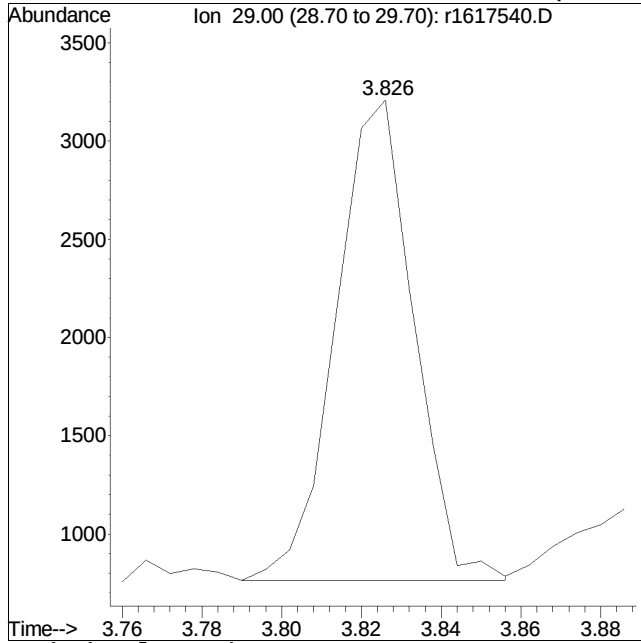


Manual Peak Response = 3150 M6

Manual Integration/Negative Proof Report

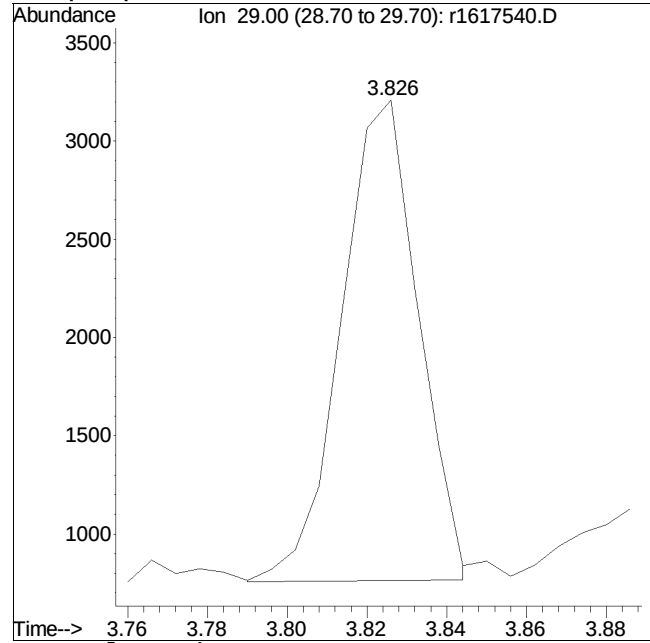
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617540.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:7: 6 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 6/10/2020 9:56 am

Compound #4: propane



Original Peak Response = 3314

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

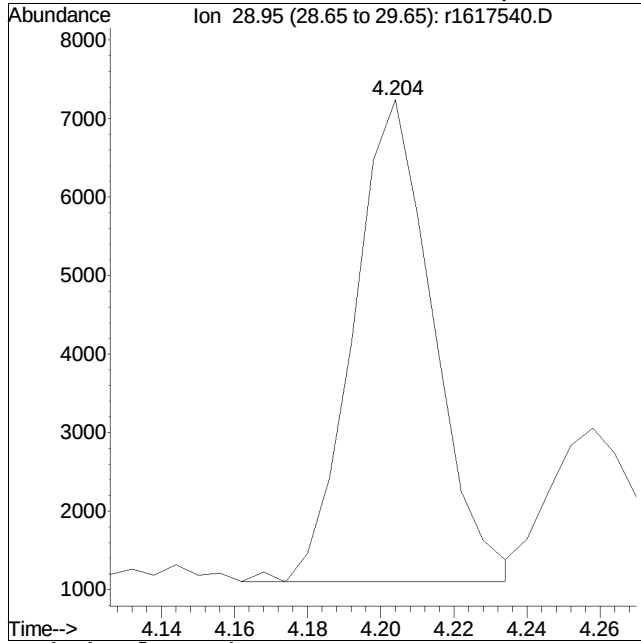


Manual Peak Response = 3279 M6

Manual Integration/Negative Proof Report

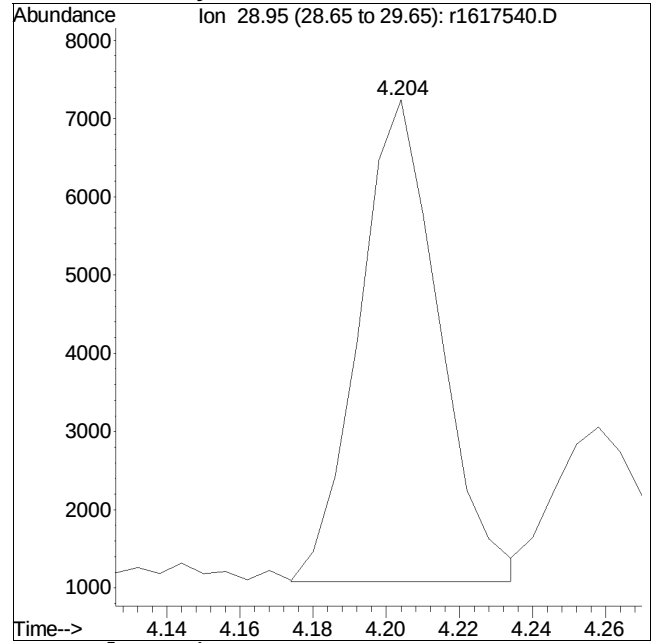
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617540.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:7: 6 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 6/10/2020 9:56 am

Compound #12: acetaldehyde



Original Peak Response = 9305

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

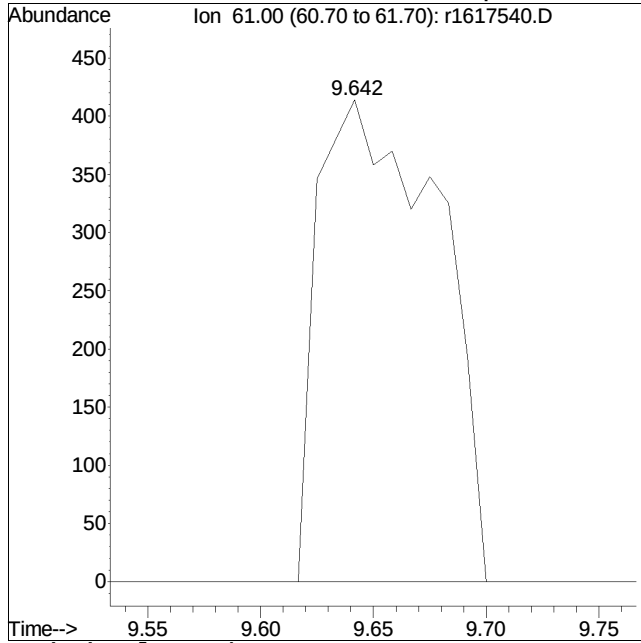


Manual Peak Response = 9342 M6

Manual Integration/Negative Proof Report

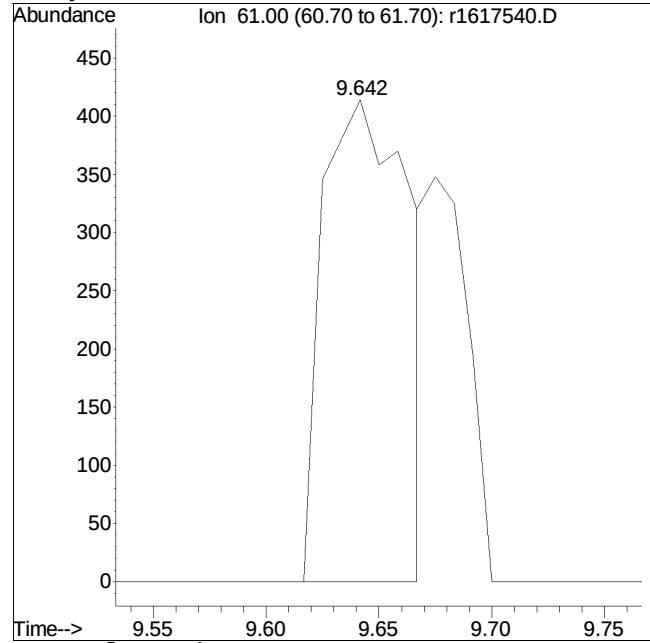
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617540.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:7: 6 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 6/10/2020 9:56 am

Compound #38: Ethyl Acetate



Original Peak Response = 1528

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

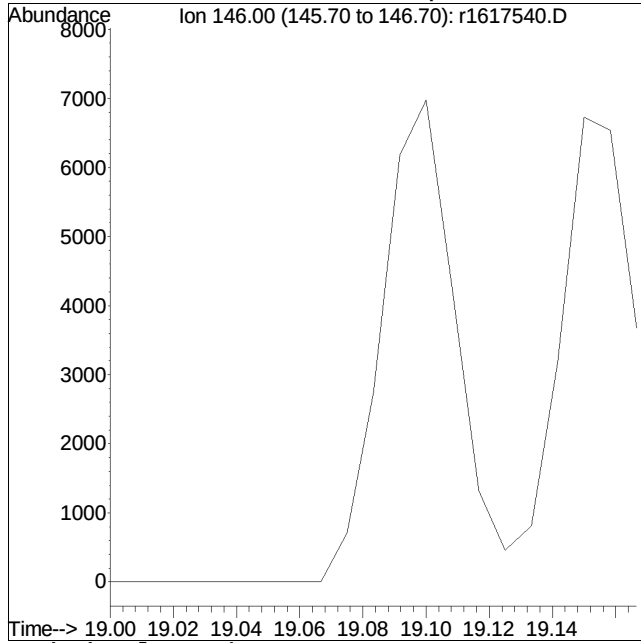


Manual Peak Response = 1094 M6

Manual Integration/Negative Proof Report

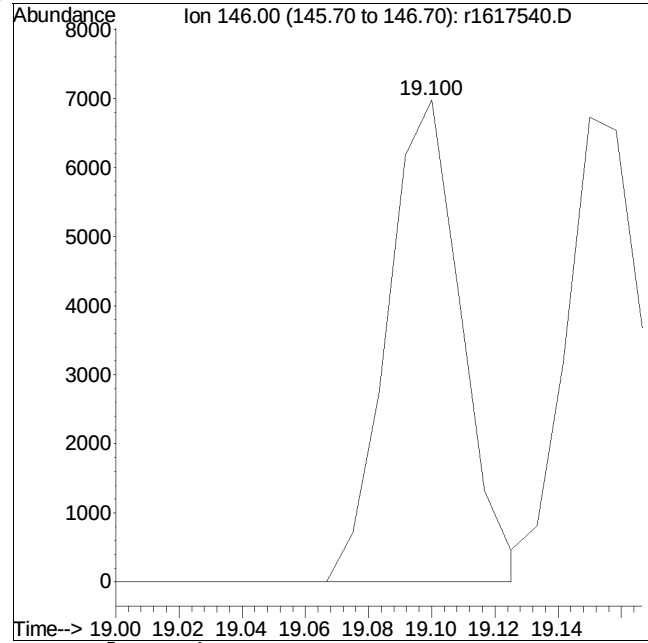
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617540.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:7: 6 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 6/10/2020 9:56 am

Compound #102: 1,3-dichlorobenzene



Original Peak Response =

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

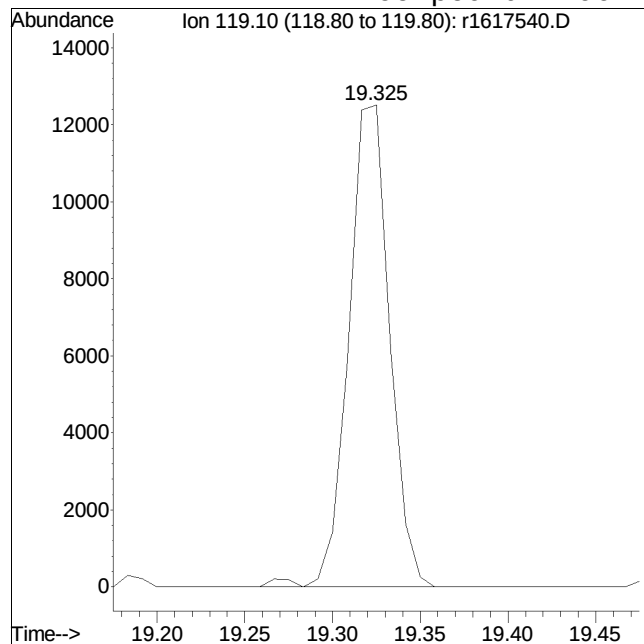


Manual Peak Response = 11308 M6

Manual Integration/Negative Proof Report

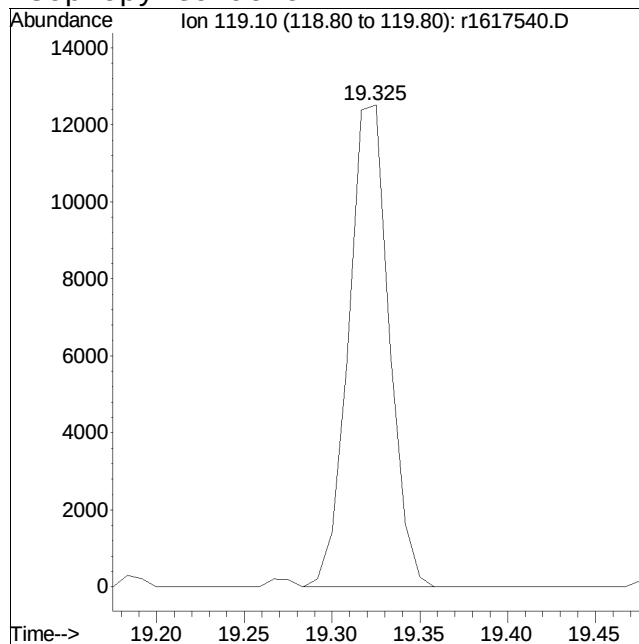
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617540.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:7: 6 Instrument :
Sample : IT015-LLSTD0.2 Quant Date : 6/10/2020 9:56 am

Compound #106: p-isopropyltoluene



Original Peak Response = 20320

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



Manual Peak Response = 20121 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617541.D
 Acq On : 9 Jun 2020 8:06 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.5
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.492	49	320586	10.000	ppbV	0.00
Standard Area = 321867			Recovery =	99.60%		
43) 1,4-difluorobenzene	11.773	114	884251	10.000	ppbV	0.00
Standard Area = 880461			Recovery =	100.43%		
67) chlorobenzene-D5	16.500	54	124970	10.000	ppbV	0.00
Standard Area = 123109			Recovery =	101.51%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.383	65	131964	10.290	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.90%		
69) toluene-D8	14.625	98	631895	9.778	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.78%		
90) bromofluorobenzene	17.875	95	442198	9.809	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.09%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.766	51	11616	0.512	ppbV	99
3) propylene	3.796	41	7519M6	0.528	ppbV	
4) propane	3.820	29	8011M6	0.521	ppbV	
5) dichlorodifluoromethane	3.874	85	12379	0.524	ppbV	99
6) chloromethane	4.054	50	6573	0.499	ppbV	97
7) Freon-114	4.180	85	16409	0.534	ppbV	96
8) methanol	4.252	31	14270	2.777	ppbV #	59
9) vinyl chloride	4.312	62	6950	0.512	ppbV	96
10) 1,3-butadiene	4.474	54	5823	0.510	ppbV	97
11) butane	4.540	43	11953	0.533	ppbV	99
12) acetaldehyde	4.198	29	20164	2.811	ppbV	92
13) bromomethane	4.786	94	6332	0.524	ppbV	99
14) chloroethane	5.008	64	3473	0.520	ppbV	98
15) ethanol	5.182	31	31489	3.326	ppbV	97
16) dichlorofluoromethane	5.146	67	11458	0.509	ppbV	100
17) vinyl bromide	5.437	106	6104	0.510	ppbV	98
18) acrolein	5.600	56	2956	0.515	ppbV #	64
19) acetone	5.767	43	50042	2.560	ppbV	99
20) acetonitrile	5.437	41	6412	0.519	ppbV	94
21) trichlorofluoromethane	5.967	101	8634	0.495	ppbV	100
22) isopropyl alcohol	6.103	45	27850	1.253	ppbV	99
23) acrylonitrile	6.343	53	5250	0.482	ppbV	95
24) pentane	6.417	43	13002	0.452	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617541.D
 Acq On : 9 Jun 2020 8:06 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.5
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.463	31	10296	0.507	ppbV	98
26) 1,1-dichloroethene	6.740	61	10984	0.515	ppbV	97
27) tertiary butyl alcohol	6.848	59	8744M6	0.442	ppbV	
28) methylene chloride	6.914	49	10961	0.515	ppbV	99
29) 3-chloropropene	7.052	41	13257	0.516	ppbV	98
30) carbon disulfide	7.202	76	28534	0.507	ppbV #	86
31) Freon 113	7.244	101	16656	0.521	ppbV	98
32) trans-1,2-dichloroethene	8.050	61	12173	0.521	ppbV	98
33) 1,1-dichloroethane	8.292	63	14767	0.510	ppbV	98
34) MTBE	8.383	73	18669	0.483	ppbV	97
35) vinyl acetate	8.525	43	17927	0.471	ppbV	99
36) 2-butanone	8.800	43	19134	0.482	ppbV	97
37) cis-1,2-dichloroethene	9.292	61	10406	0.501	ppbV	99
38) Ethyl Acetate	9.617	61	2389	0.423	ppbV	87
39) chloroform	9.658	83	13950	0.520	ppbV	100
40) Tetrahydrofuran	10.125	42	11453	0.469	ppbV	97
41) 2,2-dichloropropane	9.667	77	8979	0.495	ppbV	95
42) 1,2-dichloroethane	10.508	62	7753	0.537	ppbV	96
44) hexane	9.567	57	14185	0.502	ppbV #	76
45) diisopropyl ether	9.583	87	6906	0.487	ppbV	99
46) tert-butyl ethyl ether	10.217	59	19411	0.466	ppbV	97
48) 1,1,1-trichloroethane	10.800	97	10797	0.494	ppbV	96
49) 1,1-dichloropropene	11.173	75	12438	0.498	ppbV	97
50) benzene	11.333	78	30890	0.502	ppbV	99
51) thiophene	11.480	84	16260	0.483	ppbV	99
52) carbon tetrachloride	11.507	117	9841	0.487	ppbV	96
53) cyclohexane	11.653	56	14993	0.490	ppbV	95
54) tert-amyl methyl ether	12.053	73	20460	0.466	ppbV	99
55) dibromomethane	12.260	93	9041	0.518	ppbV	97
56) 1,2-dichloropropane	12.300	63	10524	0.504	ppbV #	94
57) bromodichloromethane	12.527	83	14490	0.497	ppbV	96
58) 1,4-dioxane	12.587	88	6201	0.487	ppbV	93
59) trichloroethene	12.580	130	13198	0.506	ppbV	99
60) 2,2,4-trimethylpentane	12.627	57	48278	0.516	ppbV	97
61) methyl methacrylate	12.847	41	13928	0.452	ppbV	97
62) heptane	12.953	43	22395	0.519	ppbV	98
63) cis-1,3-dichloropropene	13.600	75	13722	0.473	ppbV	96
64) 4-methyl-2-pentanone	13.658	43	21746	0.464	ppbV	96
65) trans-1,3-dichloropropene	14.225	75	11863	0.469	ppbV	98
66) 1,1,2-trichloroethane	14.425	97	11467	0.491	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617541.D
 Acq On : 9 Jun 2020 8:06 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.5
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.733	91	34976	0.501	ppbV	99
70) 2-methylthiophene	14.808	97	27181	0.487	ppbV	99
71) 1,3-dichloropropane	14.767	76	15994	0.500	ppbV	97
72) 2-hexanone	15.050	43	19052	0.465	ppbV	97
73) 3-methylthiophene	15.000	97	27627	0.488	ppbV	100
74) dibromochloromethane	15.192	129	15230	0.478	ppbV	98
75) 1,2-dibromoethane	15.442	107	16985	0.487	ppbV	98
76) butyl acetate	15.700	73	2772	0.378	ppbV	76
77) octane	15.775	85	11619	0.480	ppbV	93
78) tetrachloroethene	15.900	166	15473	0.494	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.525	131	11883	0.487	ppbV	99
80) chlorobenzene	16.542	112	30597	0.507	ppbV	99
81) ethylbenzene	16.892	91	45403	0.499	ppbV	98
82) 2-ethylthiophene	16.933	97	31269	0.486	ppbV	95
83) m+p-xylene	17.050	91	74236	1.016	ppbV	98
84) bromoform	17.125	173	13181	0.456	ppbV	99
85) styrene	17.383	104	30704	0.477	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.475	83	26914	0.505	ppbV	96
87) o-xylene	17.475	91	38132	0.515	ppbV	99
88) 1,2,3-trichloropropane	17.592	75	20989	0.505	ppbV	98
89) nonane	17.675	43	34584	0.511	ppbV	97
91) isopropylbenzene	17.992	105	51422	0.508	ppbV	99
92) bromobenzene	18.067	77	26233	0.490	ppbV	97
93) 2-chlorotoluene	18.400	126	15479	0.496	ppbV	97
94) n-propylbenzene	18.433	120	15816	0.476	ppbV	89
95) 4-chlorotoluene	18.458	126	14342	0.492	ppbV	87
96) 4-ethyl toluene	18.550	105	54820	0.495	ppbV	98
97) 1,3,5-trimethylbenzene	18.617	105	45243	0.490	ppbV	96
98) tert-butylbenzene	18.958	119	44481	0.496	ppbV	100
99) 1,2,4-trimethylbenzene	18.967	105	43785	0.500	ppbV	95
100) decane	19.042	57	31608	0.487	ppbV	97
101) Benzyl Chloride	19.083	91	14882	0.316	ppbV	99
102) 1,3-dichlorobenzene	19.100	146	32870	0.495	ppbV	95
103) 1,4-dichlorobenzene	19.158	146	31632	0.488	ppbV	99
104) sec-butylbenzene	19.192	105	63080	0.492	ppbV	98
105) 1,2,3-trimethylbenzene	19.325	105	44948	0.508	ppbV	99
106) p-isopropyltoluene	19.325	119	54243	0.507	ppbV	99
107) 1,2-dichlorobenzene	19.450	146	31192	0.495	ppbV	98
108) n-butylbenzene	19.683	91	43501	0.476	ppbV	93
109) indan	19.500	117	48773	0.492	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617541.D
 Acq On : 9 Jun 2020 8:06 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD0.5
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:23 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

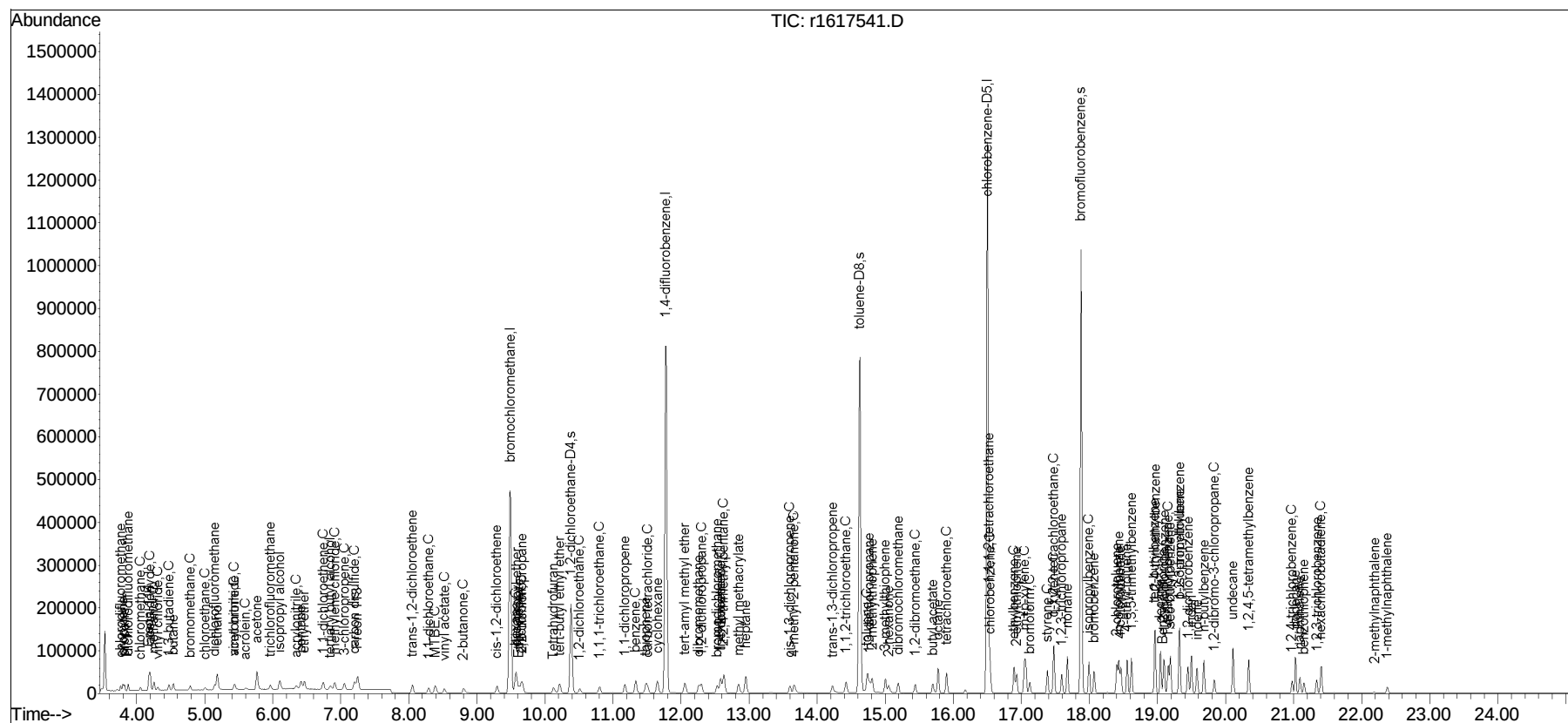
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.583	115	34868	0.455	ppbV	97
111)	1,2-dibromo-3-chloropr...	19.833	75	8143	0.425	ppbV	91
112)	undecane	20.108	57	33215	0.489	ppbV	99
113)	1,2,4,5-tetramethylben...	20.342	119	50905	0.500	ppbV	99
114)	dodecane	21.025	57	26823	0.469	ppbV	100
115)	1,2,4-trichlorobenzene	20.975	180	10447	0.357	ppbV	98
116)	naphthalene	21.092	128	34100	0.382	ppbV	100
117)	1,2,3-trichlorobenzene	21.342	180	11623	0.407	ppbV	98
118)	benzothiophene	21.150	134	24218	0.315	ppbV	100
119)	hexachlorobutadiene	21.400	225	14343	0.519	ppbV	95
120)	2-methylnaphthalene	22.192	142	2781	0.156	ppbV	89
121)	1-methylnaphthalene	22.375	142	11137	0.245	ppbV	97

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File  : r1617541.D
Acq On     : 9 Jun 2020    8:06 PM
Operator   : AIRLAB16:AR
Sample     : IT015-LLSTD0.5
Misc       : WG1379955
ALS Vial   : 0    Sample Multiplier: 1
```

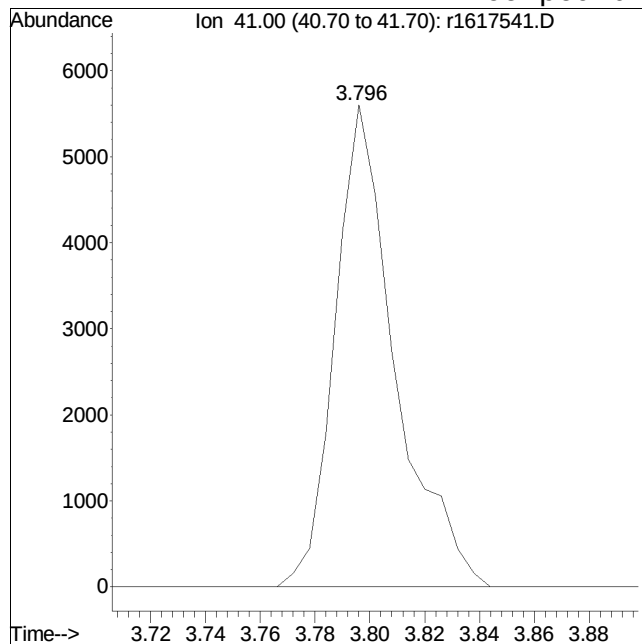
Quant Time: Jun 10 09:56:23 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

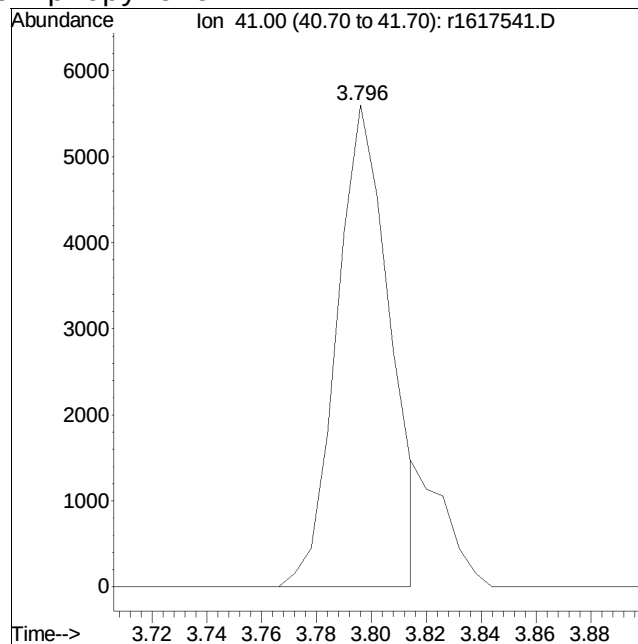
Data Path : 0:\Forensics\Data\AirLab16\QMethod : TFS16_200609.M
Data File : r1617541.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 6 Instrument :
Sample : IT015-LLSTD0.5 Quant Date : 6/10/2020 9:56 am

Compound #3: propylene



Original Peak Response = 8527

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

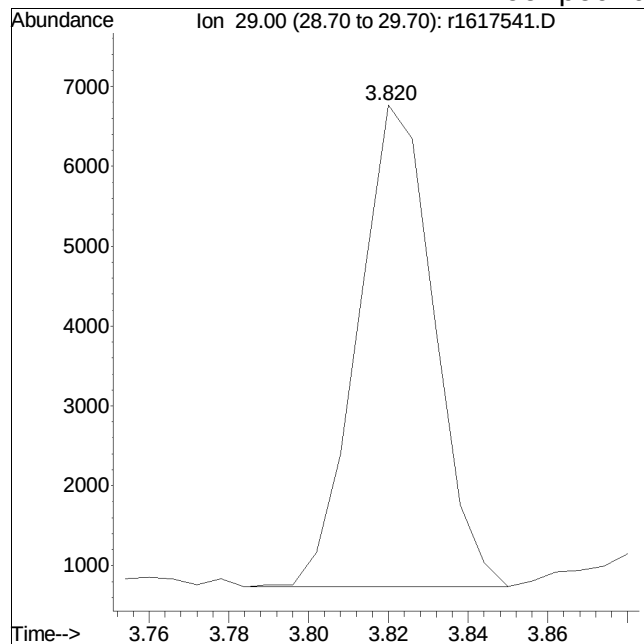


Manual Peak Response = 7519 M6

Manual Integration/Negative Proof Report

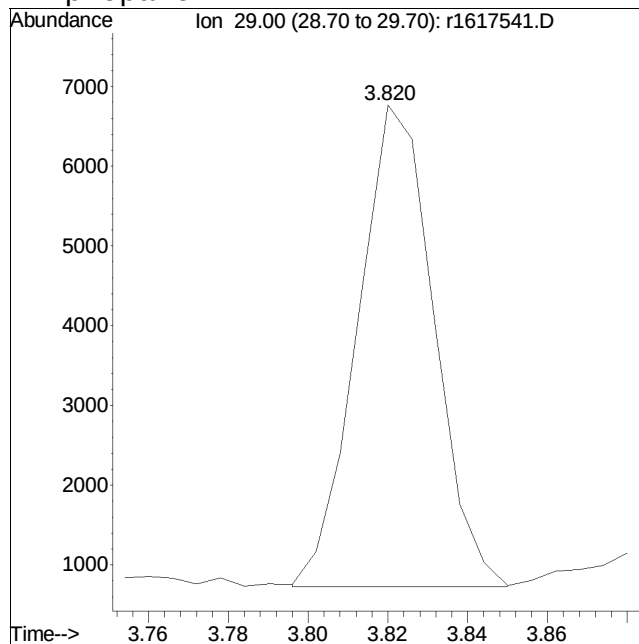
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617541.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 6 Instrument :
Sample : IT015-LLSTD0.5 Quant Date : 6/10/2020 9:56 am

Compound #4: propane



Original Peak Response = 8003

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

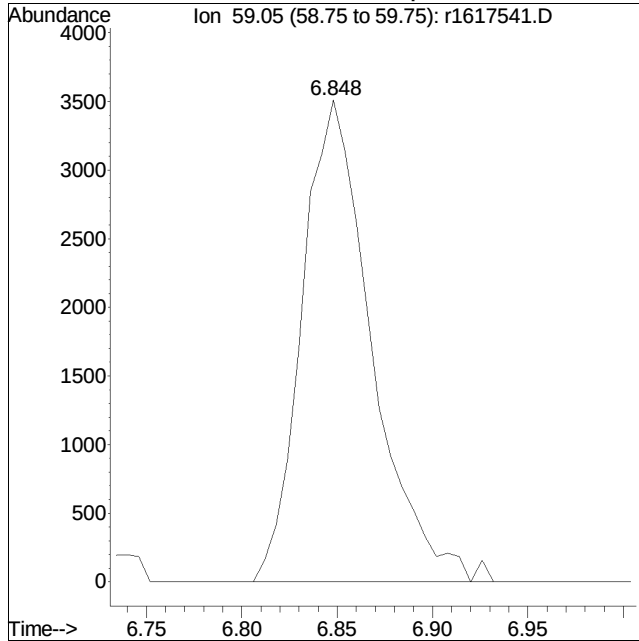


Manual Peak Response = 8011 M6

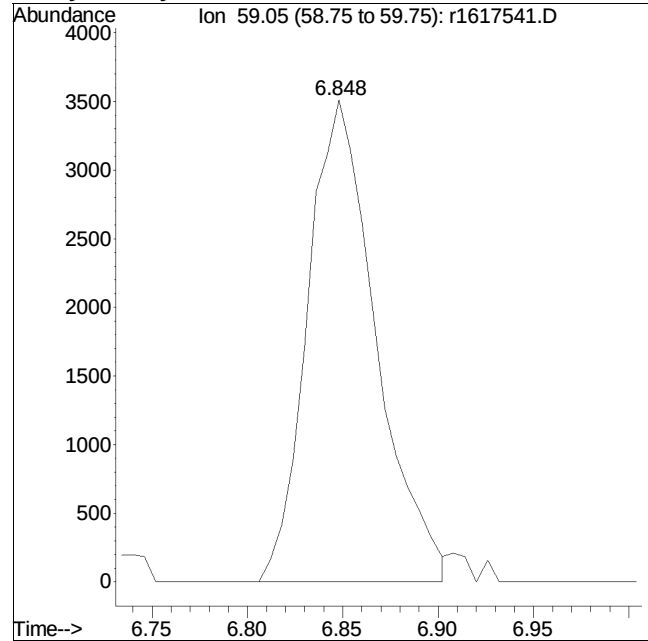
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617541.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 6 Instrument :
Sample : IT015-LLSTD0.5 Quant Date : 6/10/2020 9:56 am

Compound #27: tertiary butyl alcohol



Original Peak Response = 8943



Manual Peak Response = 8744 M6

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617542.D
 Acq On : 9 Jun 2020 8:47 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD1.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:30 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.483	49	319268	10.000	ppbV	0.00
Standard Area = 321867			Recovery = 99.19%			
43) 1,4-difluorobenzene	11.773	114	887197	10.000	ppbV	0.00
Standard Area = 880461			Recovery = 100.77%			
67) chlorobenzene-D5	16.500	54	124361	10.000	ppbV	0.00
Standard Area = 123109			Recovery = 101.02%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.375	65	133242	10.355	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.55%			
69) toluene-D8	14.625	98	629647	9.791	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.91%			
90) bromofluorobenzene	17.875	95	437666	9.756	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.56%			
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.766	51	23055	1.020	ppbV	98
3) propylene	3.796	41	14959M6	1.055	ppbV	
4) propane	3.820	29	15669	1.024	ppbV	98
5) dichlorodifluoromethane	3.874	85	24471	1.041	ppbV	98
6) chloromethane	4.054	50	13188	1.006	ppbV	98
7) Freon-114	4.180	85	31515	1.030	ppbV	97
8) methanol	4.252	31	27348	5.343	ppbV #	81
9) vinyl chloride	4.312	62	13230	0.979	ppbV	95
10) 1,3-butadiene	4.474	54	11302	0.993	ppbV	96
11) butane	4.534	43	22455M6	1.005	ppbV	
12) acetaldehyde	4.198	29	38691	5.416	ppbV	96
13) bromomethane	4.786	94	12234	1.016	ppbV	94
14) chloroethane	5.002	64	6576	0.989	ppbV	98
15) ethanol	5.176	31	56565	6.000	ppbV	98
16) dichlorofluoromethane	5.140	67	22503	1.004	ppbV	98
17) vinyl bromide	5.437	106	12312	1.033	ppbV	98
18) acrolein	5.597	56	5749	1.005	ppbV #	81
19) acetone	5.760	43	100888	5.182	ppbV	99
20) acetonitrile	5.433	41	12336M6	1.002	ppbV	
21) trichlorofluoromethane	5.960	101	17370	1.001	ppbV	99
22) isopropyl alcohol	6.097	45	54012	2.441	ppbV	99
23) acrylonitrile	6.340	53	10342	0.953	ppbV	96
24) pentane	6.410	43	26070M6	0.909	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617542.D
 Acq On : 9 Jun 2020 8:47 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD1.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:30 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.457	31	17766	0.878	ppbV	95
26) 1,1-dichloroethene	6.734	61	21919	1.031	ppbV	97
27) tertiary butyl alcohol	6.836	59	18275M6	0.927	ppbV	
28) methylene chloride	6.902	49	21742	1.025	ppbV	100
29) 3-chloropropene	7.046	41	26359	1.030	ppbV	98
30) carbon disulfide	7.196	76	56565	1.010	ppbV #	90
31) Freon 113	7.244	101	32507	1.021	ppbV	99
32) trans-1,2-dichloroethene	8.050	61	24231	1.041	ppbV	97
33) 1,1-dichloroethane	8.283	63	29295	1.017	ppbV	98
34) MTBE	8.383	73	37010	0.961	ppbV	98
35) vinyl acetate	8.517	43	34307	0.906	ppbV	99
36) 2-butanone	8.792	43	38670	0.977	ppbV	99
37) cis-1,2-dichloroethene	9.292	61	20874	1.009	ppbV	99
38) Ethyl Acetate	9.608	61	5112	0.910	ppbV	94
39) chloroform	9.650	83	27548	1.031	ppbV	97
40) Tetrahydrofuran	10.108	42	23165	0.953	ppbV	97
41) 2,2-dichloropropane	9.667	77	18305	1.014	ppbV	96
42) 1,2-dichloroethane	10.508	62	15057	1.047	ppbV	97
44) hexane	9.558	57	28646	1.011	ppbV #	78
45) diisopropyl ether	9.575	87	13492	0.948	ppbV	96
46) tert-butyl ethyl ether	10.208	59	39385	0.942	ppbV	100
48) 1,1,1-trichloroethane	10.800	97	21943	1.000	ppbV	99
49) 1,1-dichloropropene	11.167	75	24806	0.990	ppbV	97
50) benzene	11.327	78	61075	0.988	ppbV	99
51) thiophene	11.480	84	32470	0.961	ppbV	98
52) carbon tetrachloride	11.500	117	19912	0.982	ppbV	99
53) cyclohexane	11.647	56	30525	0.993	ppbV	97
54) tert-amyl methyl ether	12.047	73	42050	0.954	ppbV	99
55) dibromomethane	12.253	93	17724	1.012	ppbV	99
56) 1,2-dichloropropane	12.293	63	21088	1.006	ppbV	96
57) bromodichloromethane	12.527	83	28790M6	0.984	ppbV	
58) 1,4-dioxane	12.580	88	12379	0.970	ppbV	93
59) trichloroethene	12.573	130	26286	1.004	ppbV	97
60) 2,2,4-trimethylpentane	12.627	57	94337M6	1.005	ppbV	
61) methyl methacrylate	12.833	41	27761	0.897	ppbV	100
62) heptane	12.947	43	44696	1.031	ppbV	97
63) cis-1,3-dichloropropene	13.600	75	27759	0.954	ppbV	99
64) 4-methyl-2-pentanone	13.650	43	45425	0.966	ppbV	98
65) trans-1,3-dichloropropene	14.217	75	23656	0.932	ppbV	99
66) 1,1,2-trichloroethane	14.417	97	23381	0.998	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617542.D
 Acq On : 9 Jun 2020 8:47 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD1.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:30 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.733	91	68387	0.984	ppbV	100
70) 2-methylthiophene	14.800	97	54537	0.982	ppbV	100
71) 1,3-dichloropropane	14.767	76	31466	0.988	ppbV	98
72) 2-hexanone	15.042	43	39220M6	0.961	ppbV	
73) 3-methylthiophene	15.000	97	55681	0.988	ppbV	99
74) dibromochloromethane	15.183	129	30926	0.976	ppbV	98
75) 1,2-dibromoethane	15.433	107	34434	0.992	ppbV	98
76) butyl acetate	15.692	73	5990	0.821	ppbV	91
77) octane	15.775	85	23683	0.984	ppbV	94
78) tetrachloroethene	15.900	166	31703	1.018	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.525	131	23925	0.986	ppbV	96
80) chlorobenzene	16.542	112	60578	1.008	ppbV	99
81) ethylbenzene	16.892	91	90654	1.001	ppbV	97
82) 2-ethylthiophene	16.925	97	64626	1.010	ppbV	98
83) m+p-xylene	17.050	91	149584	2.056	ppbV	99
84) bromoform	17.117	173	26527	0.923	ppbV	98
85) styrene	17.383	104	62576	0.978	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.475	83	54372	1.026	ppbV	96
87) o-xylene	17.475	91	77267	1.050	ppbV	97
88) 1,2,3-trichloropropane	17.592	75	42194	1.019	ppbV	97
89) nonane	17.675	43	69756	1.036	ppbV	100
91) isopropylbenzene	17.992	105	104207	1.034	ppbV	100
92) bromobenzene	18.067	77	52851	0.993	ppbV	99
93) 2-chlorotoluene	18.400	126	30425	0.979	ppbV	95
94) n-propylbenzene	18.433	120	33242	1.006	ppbV	90
95) 4-chlorotoluene	18.458	126	28764	0.991	ppbV	94
96) 4-ethyl toluene	18.550	105	115406	1.048	ppbV	99
97) 1,3,5-trimethylbenzene	18.617	105	95077	1.035	ppbV	99
98) tert-butylbenzene	18.958	119	94989	1.064	ppbV	100
99) 1,2,4-trimethylbenzene	18.967	105	93307	1.071	ppbV	95
100) decane	19.042	57	66829	1.034	ppbV	100
101) Benzyl Chloride	19.083	91	36800	0.784	ppbV	97
102) 1,3-dichlorobenzene	19.092	146	68170	1.033	ppbV	99
103) 1,4-dichlorobenzene	19.150	146	63905	0.991	ppbV	100
104) sec-butylbenzene	19.192	105	135159	1.059	ppbV	97
105) 1,2,3-trimethylbenzene	19.325	105	94801	1.077	ppbV	99
106) p-isopropyltoluene	19.317	119	110644	1.040	ppbV	98
107) 1,2-dichlorobenzene	19.442	146	64498	1.028	ppbV	99
108) n-butylbenzene	19.683	91	90626	0.997	ppbV	96
109) indan	19.500	117	102753	1.042	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617542.D
 Acq On : 9 Jun 2020 8:47 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD1.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:30 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

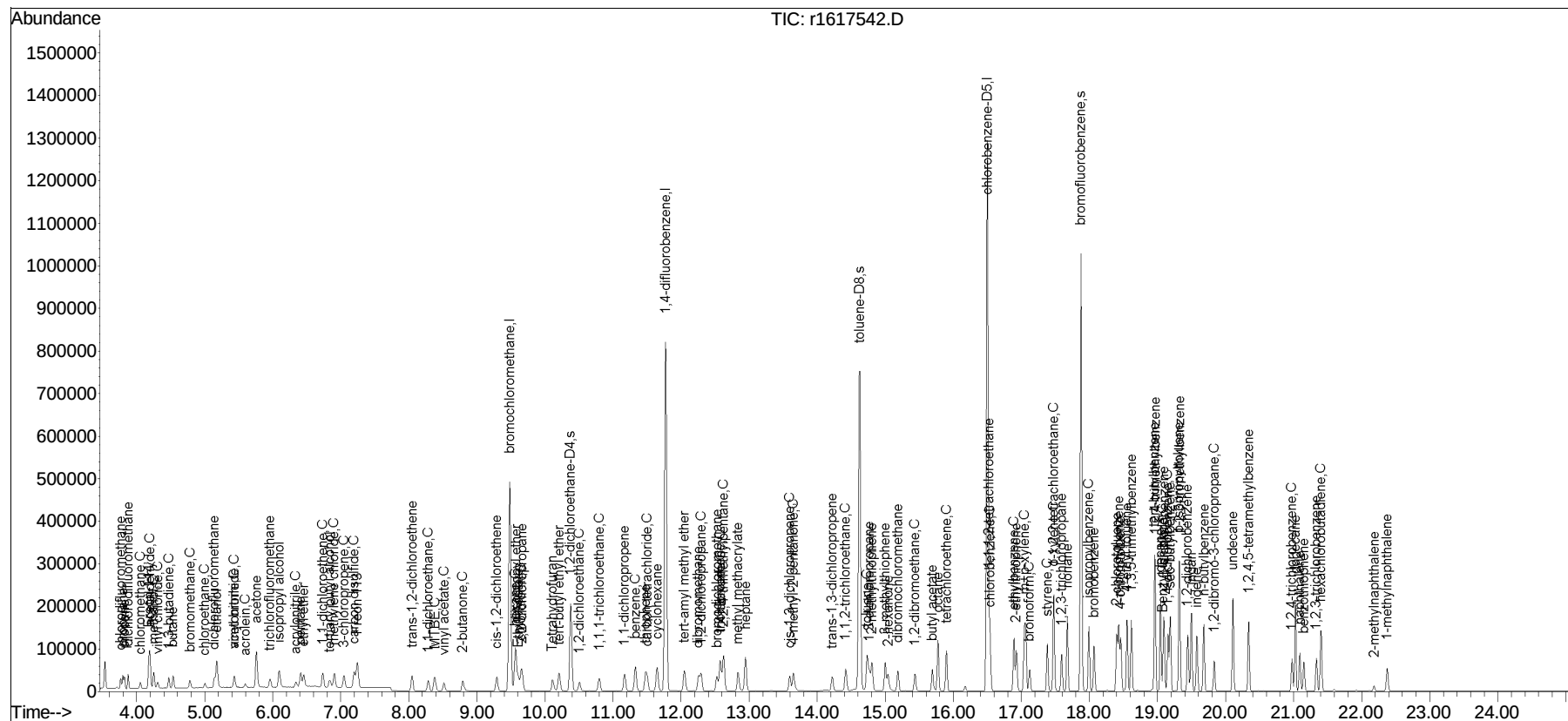
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.575	115	75180	0.986	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.833	75	17252	0.904	ppbV	90
112) undecane	20.108	57	69833	1.034	ppbV	98
113) 1,2,4,5-tetramethylben...	20.342	119	106760	1.054	ppbV	97
114) dodecane	21.025	57	64643	1.136	ppbV	97
115) 1,2,4-trichlorobenzene	20.975	180	25449	0.873	ppbV	99
116) naphthalene	21.092	128	79050	0.889	ppbV	97
117) 1,2,3-trichlorobenzene	21.333	180	26694	0.939	ppbV	98
118) benzothiophene	21.150	134	61741	0.806	ppbV	99
119) hexachlorobutadiene	21.400	225	30797	1.119	ppbV	99
120) 2-methylnaphthalene	22.183	142	9544	0.537	ppbV	94
121) 1-methylnaphthalene	22.375	142	36826	0.813	ppbV	99

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File  : r1617542.D
Acq On     : 9 Jun 2020    8:47 PM
Operator   : AIRLAB16:AR
Sample     : IT015-LLSTD1.0
Misc       : WG1379955
ALS Vial   : 0    Sample Multiplier: 1
```

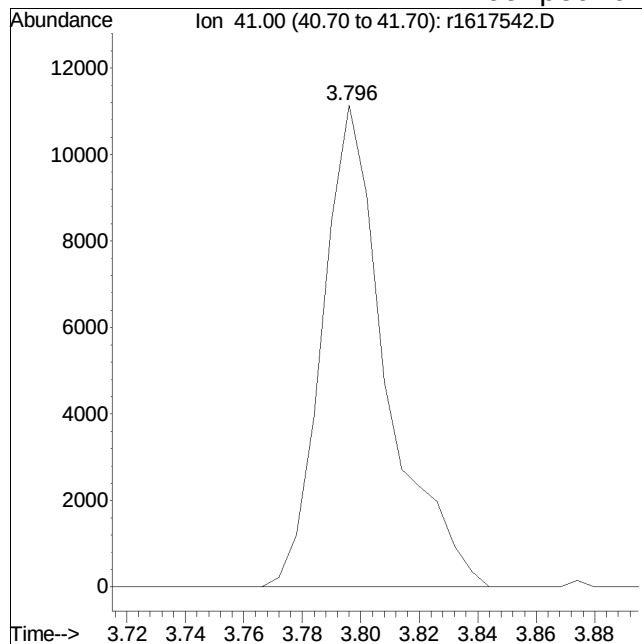
Quant Time: Jun 10 09:56:30 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

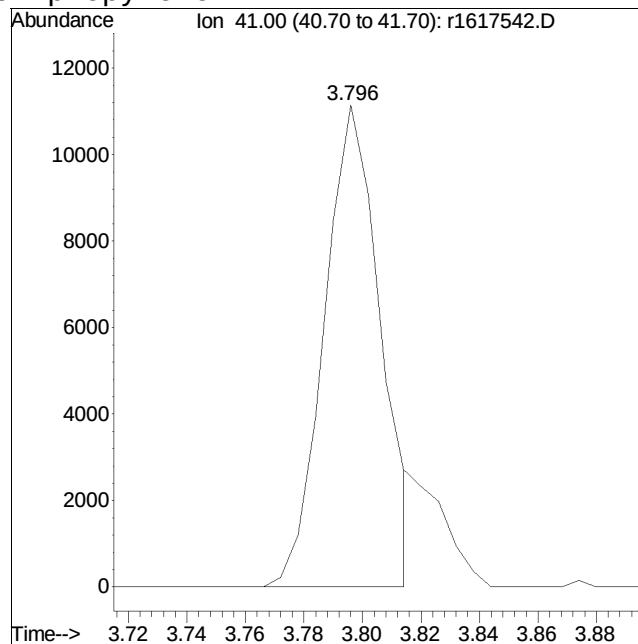
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #3: propylene



Original Peak Response = 16981

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



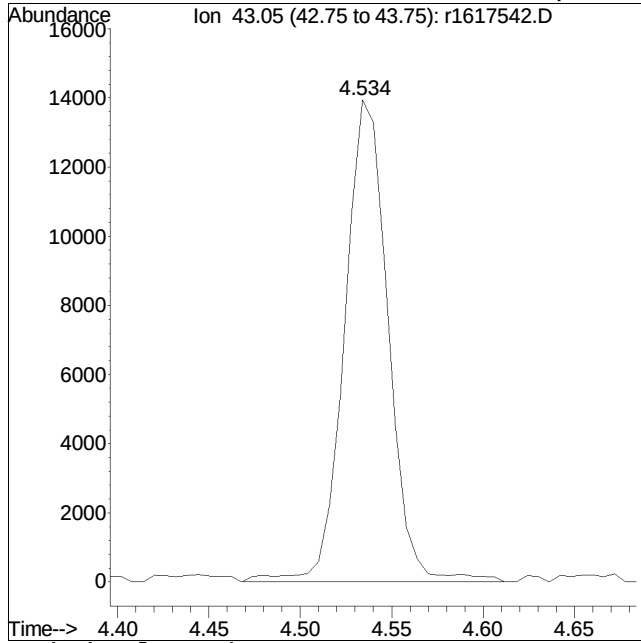
Manual Peak Response = 14959 M6

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

Manual Integration/Negative Proof Report

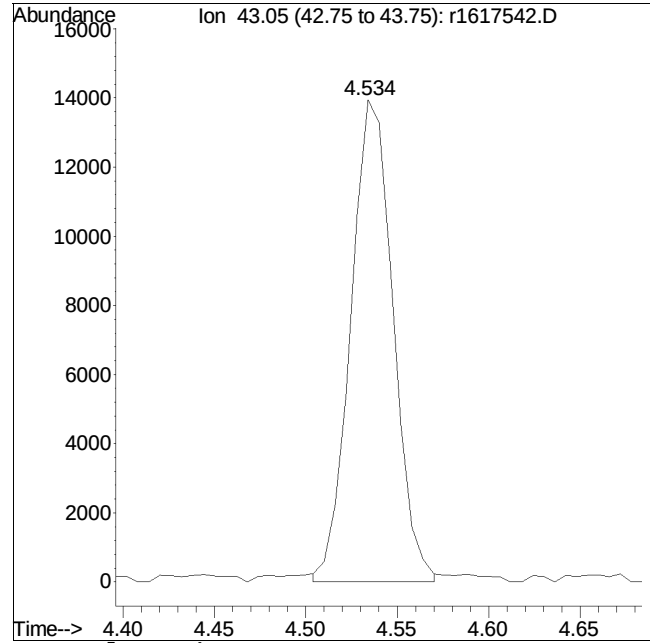
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #11: butane



Original Peak Response = 23260

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

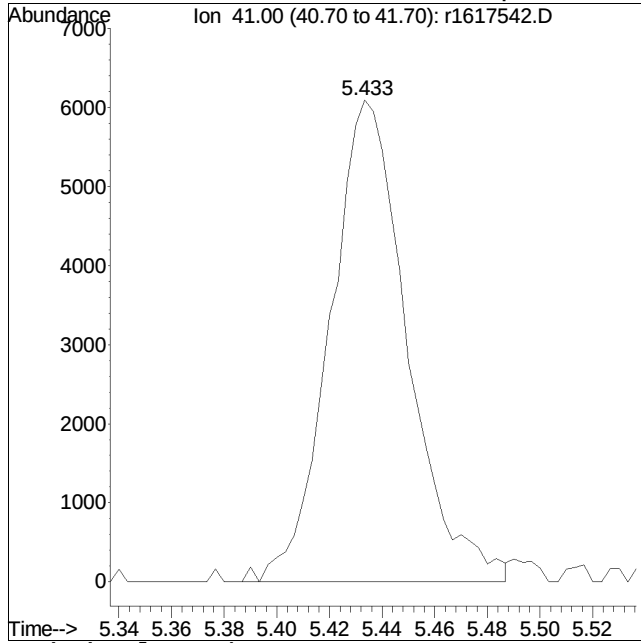


Manual Peak Response = 22455 M6

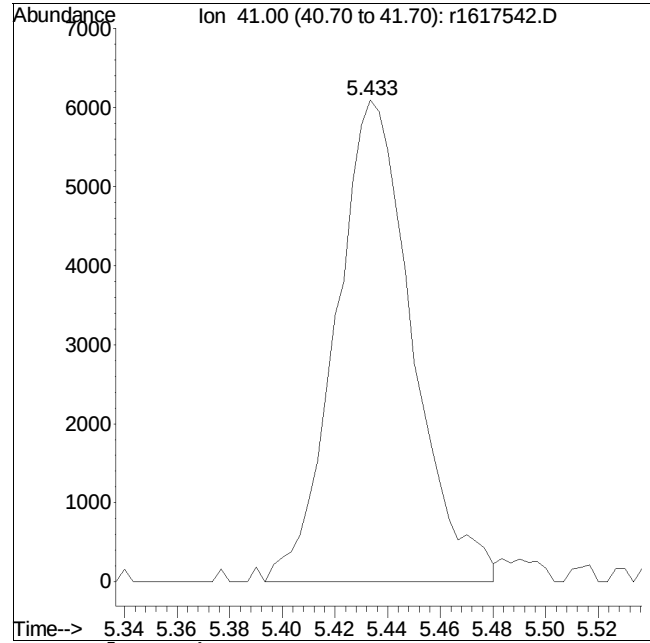
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #20: acetonitrile



Original Peak Response = 12482



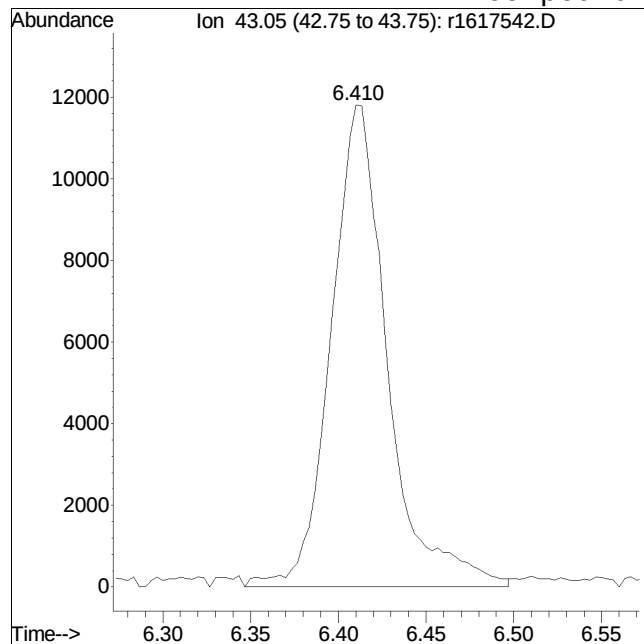
Manual Peak Response = 12336 M6

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

Manual Integration/Negative Proof Report

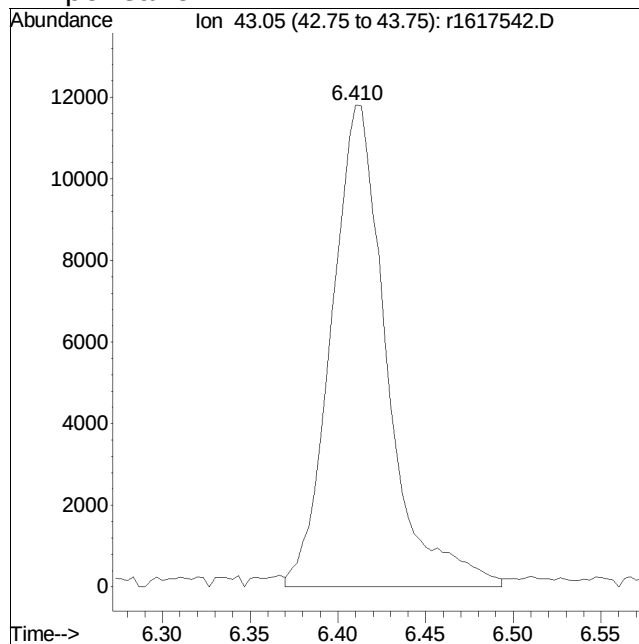
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #24: pentane



Original Peak Response = 26438

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

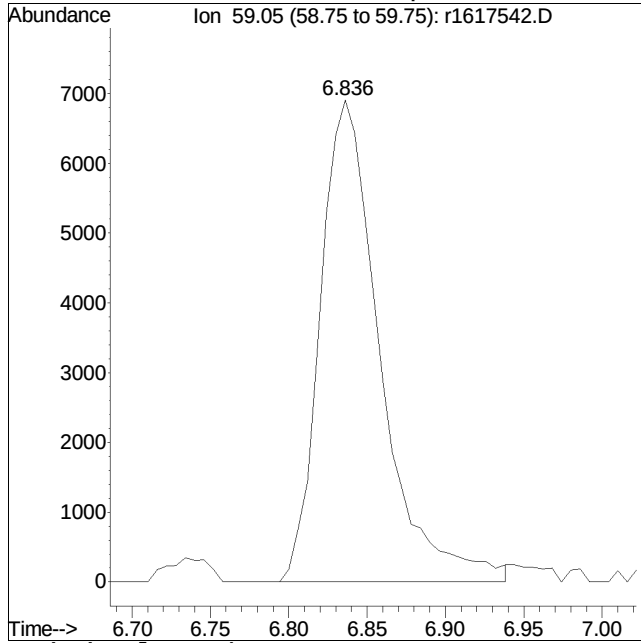


Manual Peak Response = 26070 M6

Manual Integration/Negative Proof Report

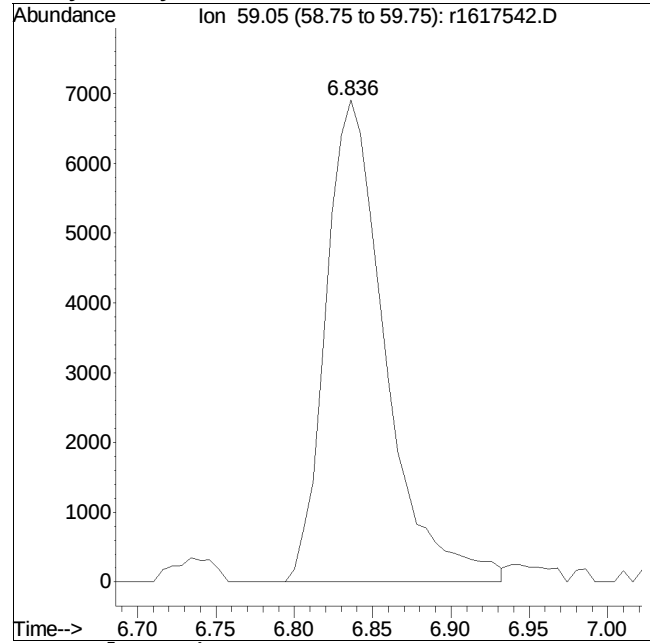
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #27: tertiary butyl alcohol



Original Peak Response = 18363

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

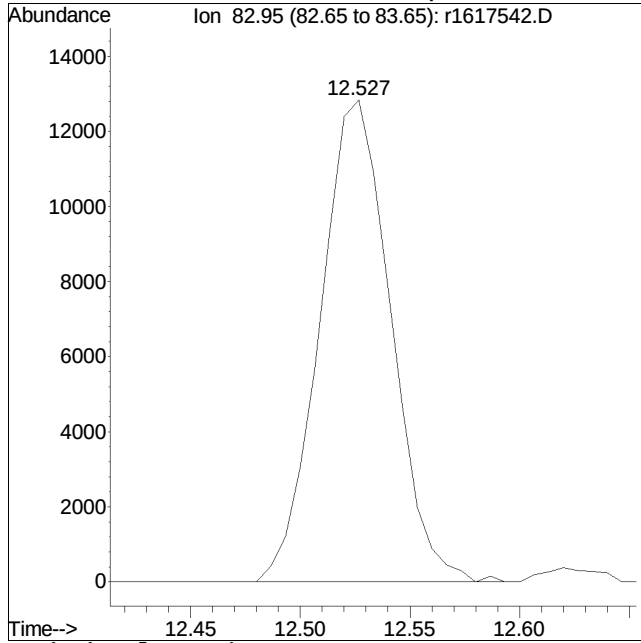


Manual Peak Response = 18275 M6

Manual Integration/Negative Proof Report

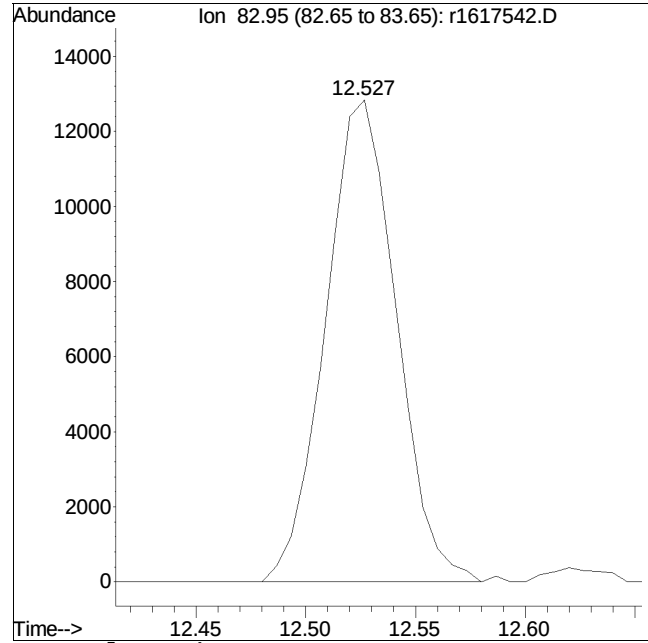
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #57: bromodichloromethane



Original Peak Response = 28853

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

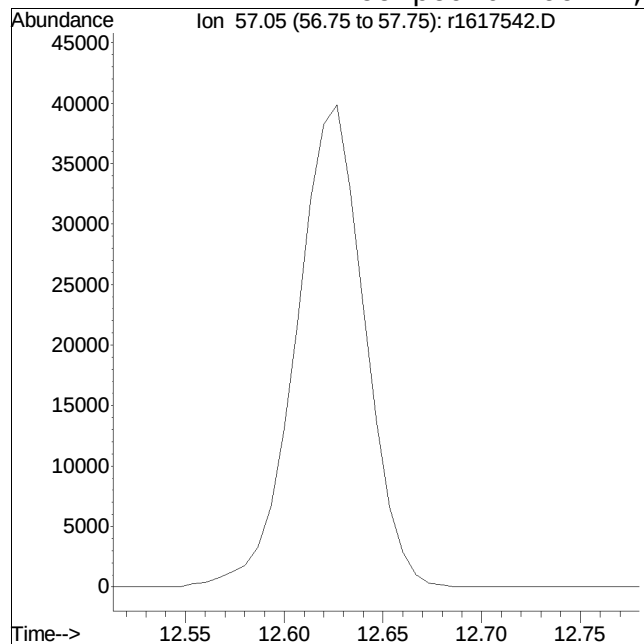


Manual Peak Response = 28790 M6

Manual Integration/Negative Proof Report

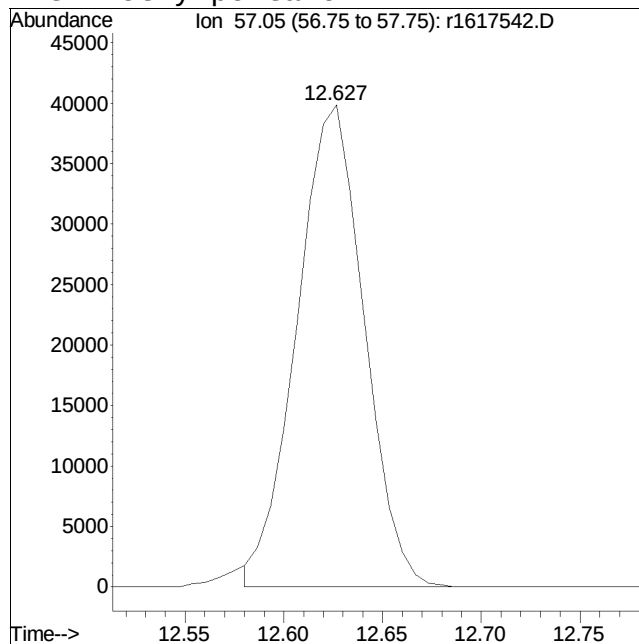
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =

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

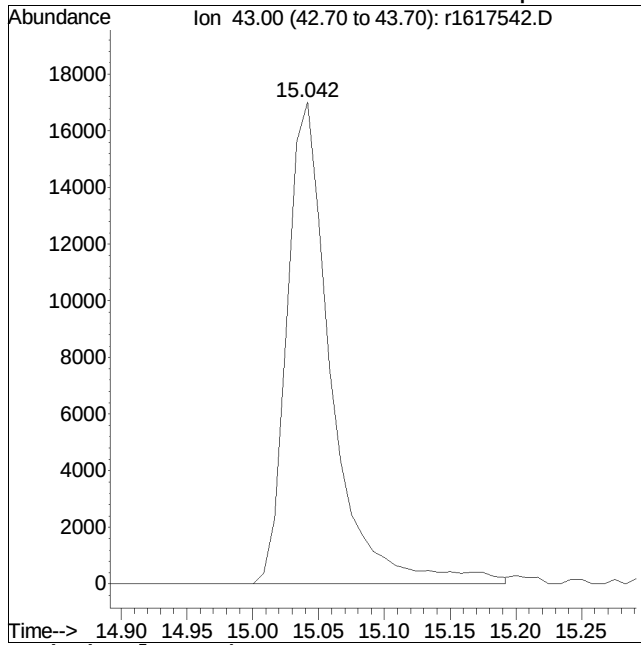


Manual Peak Response = 94337 M6

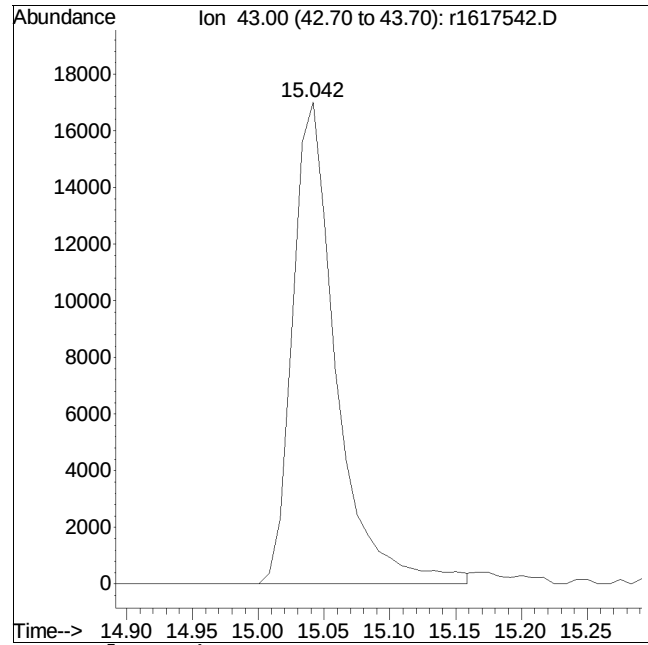
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617542.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:8: 7 Instrument :
Sample : IT015-LLSTD1.0 Quant Date : 6/10/2020 9:56 am

Compound #72: 2-hexanone



Original Peak Response = 39882



Manual Peak Response = 39220 M6

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617543.D
 Acq On : 9 Jun 2020 9:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD5.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:37 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.492	49	321798	10.000	ppbV	0.00
Standard Area = 321867			Recovery =	99.98%		
43) 1,4-difluorobenzene	11.773	114	889518	10.000	ppbV	0.00
Standard Area = 880461			Recovery =	101.03%		
67) chlorobenzene-D5	16.500	54	124286	10.000	ppbV	0.00
Standard Area = 123109			Recovery =	100.96%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.383	65	132350	10.259	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.59%		
69) toluene-D8	14.625	98	646280	10.056	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.56%		
90) bromofluorobenzene	17.875	95	439318	9.798	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.98%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.766	51	122743	5.390	ppbV	100
3) propylene	3.796	41	79301M6	5.549	ppbV	
4) propane	3.820	29	82137	5.327	ppbV	99
5) dichlorodifluoromethane	3.874	85	130609	5.510	ppbV	99
6) chloromethane	4.054	50	71288	5.393	ppbV	99
7) Freon-114	4.180	85	172198	5.581	ppbV	97
8) methanol	4.252	31	142844	27.689	ppbV	97
9) vinyl chloride	4.312	62	73956	5.429	ppbV	100
10) 1,3-butadiene	4.474	54	60049	5.237	ppbV	100
11) butane	4.534	43	119397	5.302	ppbV	100
12) acetaldehyde	4.192	29	193934	26.936	ppbV	98
13) bromomethane	4.786	94	66228	5.459	ppbV	100
14) chloroethane	5.002	64	36334	5.419	ppbV	99
15) ethanol	5.176	31	262459	27.621	ppbV	98
16) dichlorofluoromethane	5.146	67	121710	5.385	ppbV	99
17) vinyl bromide	5.440	106	62437	5.197	ppbV	98
18) acrolein	5.597	56	30244	5.247	ppbV	95
19) acetone	5.753	43	533963	27.210	ppbV	98
20) acetonitrile	5.433	41	66022	5.322	ppbV	98
21) trichlorofluoromethane	5.963	101	93150	5.325	ppbV	99
22) isopropyl alcohol	6.087	45	290702	13.034	ppbV	100
23) acrylonitrile	6.347	53	63294	5.788	ppbV	99
24) pentane	6.413	43	189317	6.553	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617543.D
 Acq On : 9 Jun 2020 9:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD5.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:37 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.453	31	124549	6.107	ppbV	95
26) 1,1-dichloroethene	6.740	61	116939	5.460	ppbV	100
27) tertiary butyl alcohol	6.824	59	103601	5.215	ppbV	98
28) methylene chloride	6.908	49	116090	5.430	ppbV	100
29) 3-chloropropene	7.052	41	135708	5.262	ppbV	99
30) carbon disulfide	7.196	76	299232	5.302	ppbV	99
31) Freon 113	7.244	101	176643	5.504	ppbV	98
32) trans-1,2-dichloroethene	8.050	61	123589	5.265	ppbV	99
33) 1,1-dichloroethane	8.292	63	159667	5.497	ppbV	99
34) MTBE	8.367	73	204878	5.280	ppbV	99
35) vinyl acetate	8.517	43	186140	4.875	ppbV	99
36) 2-butanone	8.775	43	212749	5.335	ppbV	99
37) cis-1,2-dichloroethene	9.300	61	113551	5.445	ppbV	98
38) Ethyl Acetate	9.600	61	30434	5.372	ppbV	90
39) chloroform	9.658	83	146092	5.422	ppbV	99
40) Tetrahydrofuran	10.100	42	129271	5.278	ppbV	99
41) 2,2-dichloropropane	9.667	77	98565	5.415	ppbV	99
42) 1,2-dichloroethane	10.508	62	79450	5.482	ppbV	100
44) hexane	9.567	57	149980	5.281	ppbV	92
45) diisopropyl ether	9.567	87	75976	5.323	ppbV	100
46) tert-butyl ethyl ether	10.200	59	223692	5.336	ppbV	100
48) 1,1,1-trichloroethane	10.800	97	120644	5.482	ppbV	99
49) 1,1-dichloropropene	11.173	75	136733	5.445	ppbV	97
50) benzene	11.333	78	335970	5.422	ppbV	99
51) thiophene	11.480	84	186199	5.494	ppbV	98
52) carbon tetrachloride	11.507	117	110595	5.442	ppbV	100
53) cyclohexane	11.647	56	162322	5.269	ppbV	99
54) tert-amyl methyl ether	12.040	73	233352	5.280	ppbV	100
55) dibromomethane	12.260	93	94665	5.389	ppbV	98
56) 1,2-dichloropropane	12.293	63	114026	5.427	ppbV	99
57) bromodichloromethane	12.527	83	154689	5.272	ppbV	98
58) 1,4-dioxane	12.567	88	65619	5.127	ppbV	97
59) trichloroethene	12.573	130	142410	5.425	ppbV	99
60) 2,2,4-trimethylpentane	12.627	57	492574M6	5.234	ppbV	
61) methyl methacrylate	12.833	41	168132	5.421	ppbV	99
62) heptane	12.947	43	231158	5.320	ppbV	98
63) cis-1,3-dichloropropene	13.600	75	161112	5.520	ppbV	98
64) 4-methyl-2-pentanone	13.642	43	253071	5.366	ppbV	99
65) trans-1,3-dichloropropene	14.217	75	139358	5.478	ppbV	99
66) 1,1,2-trichloroethane	14.417	97	128520	5.471	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617543.D
 Acq On : 9 Jun 2020 9:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD5.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:37 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.733	91	376067	5.416	ppbV	99
70) 2-methylthiophene	14.800	97	306443	5.519	ppbV	100
71) 1,3-dichloropropane	14.767	76	171835	5.401	ppbV	99
72) 2-hexanone	15.025	43	223289	5.477	ppbV	99
73) 3-methylthiophene	15.000	97	312846	5.555	ppbV	98
74) dibromochloromethane	15.183	129	168035	5.305	ppbV	99
75) 1,2-dibromoethane	15.433	107	193543	5.580	ppbV	99
76) butyl acetate	15.683	73	39202	5.373	ppbV	98
77) octane	15.775	85	133067	5.530	ppbV	98
78) tetrachloroethene	15.900	166	170123	5.466	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.525	131	135306	5.581	ppbV	98
80) chlorobenzene	16.542	112	336321	5.602	ppbV	99
81) ethylbenzene	16.892	91	507831	5.611	ppbV	99
82) 2-ethylthiophene	16.925	97	366888	5.739	ppbV	99
83) m+p-xylene	17.050	91	817490	11.245	ppbV	99
84) bromoform	17.117	173	153315	5.337	ppbV	97
85) styrene	17.383	104	364744	5.702	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.475	83	306369	5.784	ppbV	100
87) o-xylene	17.475	91	418692	5.691	ppbV	99
88) 1,2,3-trichloropropane	17.592	75	231829	5.604	ppbV	98
89) nonane	17.675	43	385807	5.735	ppbV	100
91) isopropylbenzene	17.992	105	585054	5.807	ppbV	98
92) bromobenzene	18.067	77	294332	5.531	ppbV	100
93) 2-chlorotoluene	18.400	126	171569	5.526	ppbV	99
94) n-propylbenzene	18.425	120	191352	5.796	ppbV	100
95) 4-chlorotoluene	18.458	126	161518	5.568	ppbV	95
96) 4-ethyl toluene	18.550	105	631979	5.742	ppbV	100
97) 1,3,5-trimethylbenzene	18.617	105	547202	5.962	ppbV	99
98) tert-butylbenzene	18.958	119	532713	5.968	ppbV	98
99) 1,2,4-trimethylbenzene	18.958	105	535410	6.149	ppbV	99
100) decane	19.042	57	376624	5.832	ppbV	99
101) Benzyl Chloride	19.083	91	264461	5.641	ppbV	100
102) 1,3-dichlorobenzene	19.092	146	387364	5.871	ppbV	100
103) 1,4-dichlorobenzene	19.150	146	372422	5.777	ppbV	99
104) sec-butylbenzene	19.183	105	760328	5.959	ppbV	99
105) 1,2,3-trimethylbenzene	19.325	105	537690	6.114	ppbV	99
106) p-isopropyltoluene	19.317	119	638599	6.007	ppbV	99
107) 1,2-dichlorobenzene	19.442	146	365523	5.829	ppbV	100
108) n-butylbenzene	19.683	91	534348	5.881	ppbV	95
109) indan	19.500	117	581672	5.904	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617543.D
 Acq On : 9 Jun 2020 9:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD5.0
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:37 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

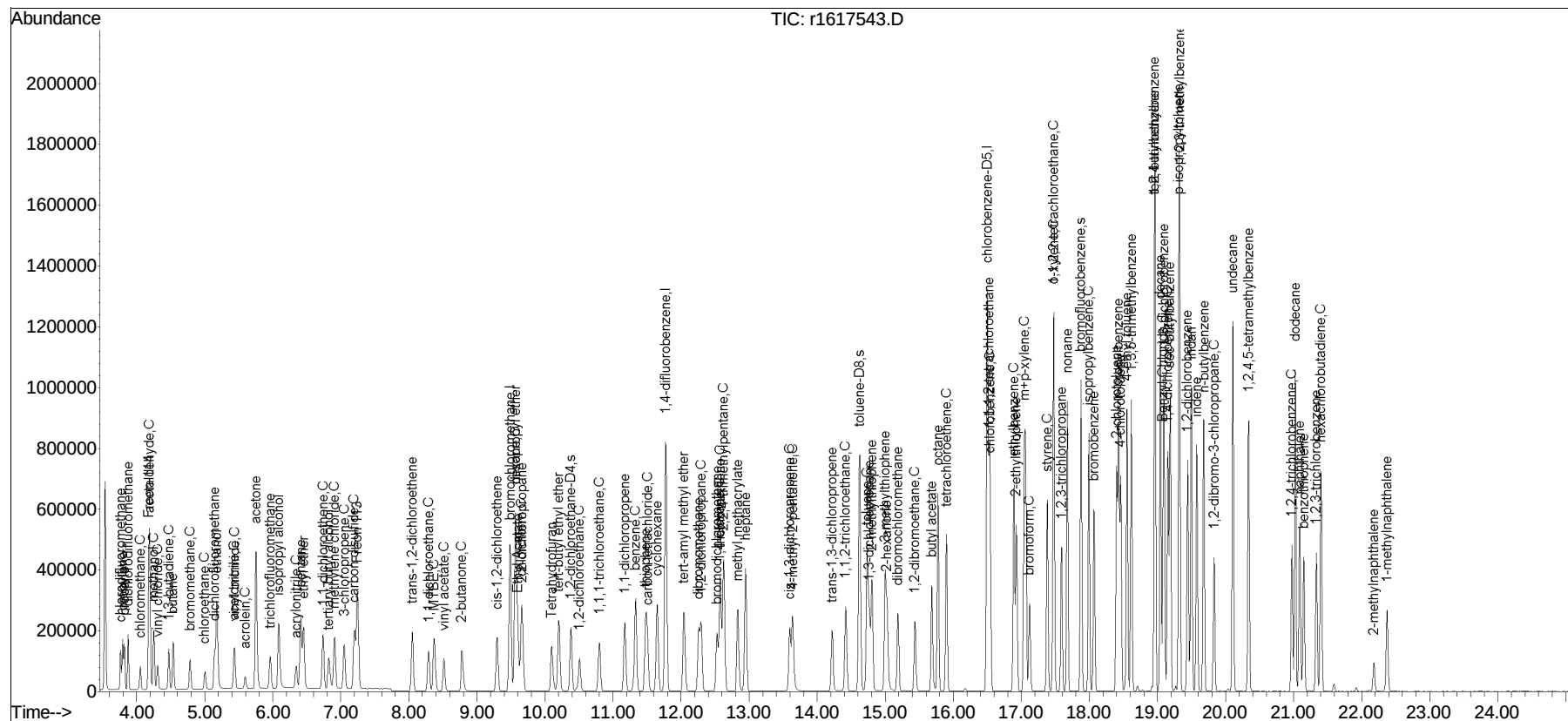
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

110) indene	19.575	115	456434	5.989	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.833	75	112754	5.914	ppbV	96
112) undecane	20.108	57	396461	5.873	ppbV	100
113) 1,2,4,5-tetramethylben...	20.342	119	585056	5.778	ppbV	98
114) dodecane	21.025	57	336507	5.919	ppbV	99
115) 1,2,4-trichlorobenzene	20.975	180	161738	5.553	ppbV	98
116) naphthalene	21.092	128	509917	5.740	ppbV	100
117) 1,2,3-trichlorobenzene	21.333	180	157404	5.540	ppbV	99
118) benzothiophene	21.150	134	385587	5.039	ppbV	99
119) hexachlorobutadiene	21.400	225	157985	5.743	ppbV	99
120) 2-methylnaphthalene	22.175	142	64057	3.609	ppbV	99
121) 1-methylnaphthalene	22.375	142	177037	3.909	ppbV	99

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File  : r1617543.D
Acq On     : 9 Jun 2020    9:27 PM
Operator   : AIRLAB16:AR
Sample     : IT015-LLSTD5.0
Misc       : WG1379955
ALS Vial   : 0    Sample Multiplier: 1
```

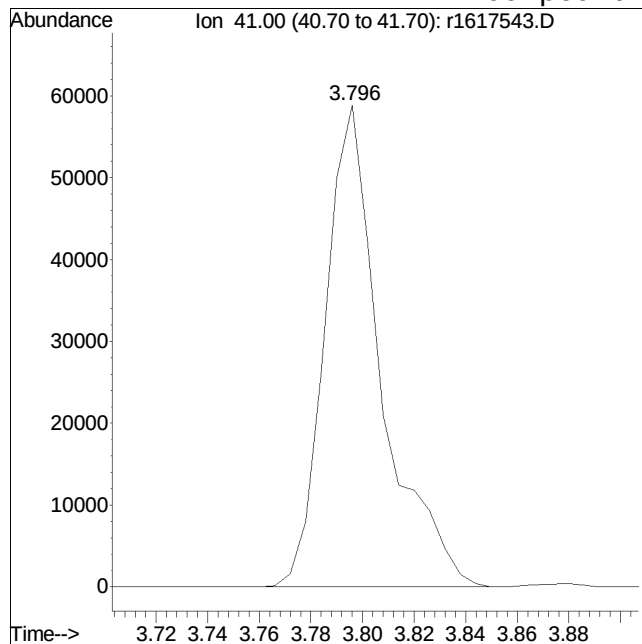
Quant Time: Jun 10 09:56:37 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

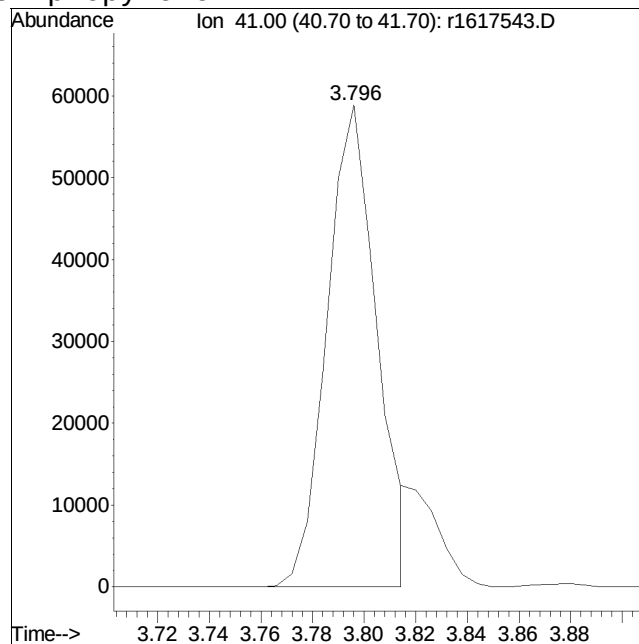
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617543.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:9: 7 Instrument :
Sample : IT015-LLSTD5.0 Quant Date : 6/10/2020 9:56 am

Compound #3: propylene



Original Peak Response = 89278

M6 = Misassignment of peak valley by



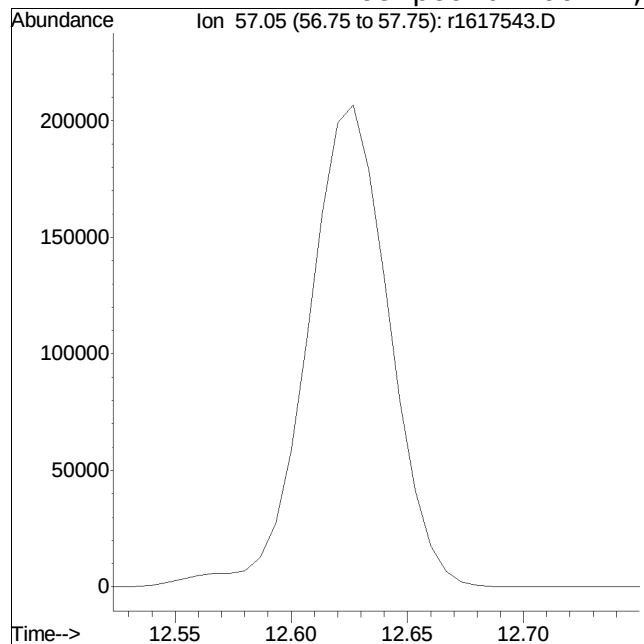
Manual Peak Response = 79301 M6

(poor split of 2 peaks).

Manual Integration/Negative Proof Report

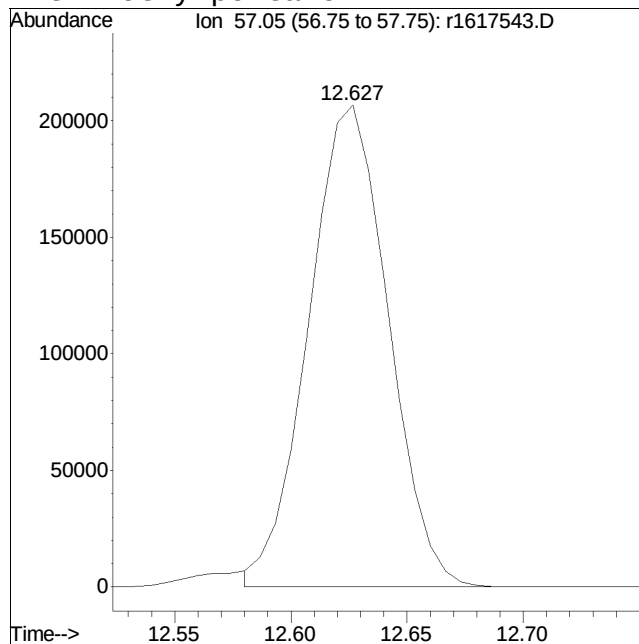
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617543.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:9: 7 Instrument :
Sample : IT015-LLSTD5.0 Quant Date : 6/10/2020 9:56 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =

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



Manual Peak Response = 492574 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617544.D
 Acq On : 9 Jun 2020 10:09 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:44 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.483	49	321867	10.000	ppbV	0.00
Standard Area = 321867			Recovery =	100.00%		
43) 1,4-difluorobenzene	11.773	114	880461	10.000	ppbV	0.00
Standard Area = 880461			Recovery =	100.00%		
67) chlorobenzene-D5	16.500	54	123109	10.000	ppbV	0.00
Standard Area = 123109			Recovery =	100.00%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.375	65	130610	10.228	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.28%		
69) toluene-D8	14.617	98	651570	10.235	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.35%		
90) bromofluorobenzene	17.875	95	441562	9.943	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.43%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.760	51	235455	10.338	ppbV	100
3) propylene	3.790	41	147170M6	10.295	ppbV	
4) propane	3.820	29	159547	10.345	ppbV	100
5) dichlorodifluoromethane	3.874	85	245589	10.359	ppbV	100
6) chloromethane	4.054	50	136668	10.337	ppbV	100
7) Freon-114	4.174	85	324823	10.526	ppbV	100
8) methanol	4.252	31	273165	52.939	ppbV	100
9) vinyl chloride	4.306	62	142366	10.450	ppbV	100
10) 1,3-butadiene	4.468	54	115500	10.070	ppbV	100
11) butane	4.534	43	228566	10.147	ppbV	100
12) acetaldehyde	4.192	29	371476	51.583	ppbV	100
13) bromomethane	4.780	94	127819	10.533	ppbV	100
14) chloroethane	5.002	64	70207	10.469	ppbV	100
15) ethanol	5.176	31	517900	54.492	ppbV	100
16) dichlorofluoromethane	5.140	67	236970	10.483	ppbV	100
17) vinyl bromide	5.437	106	123652	10.290	ppbV	100
18) acrolein	5.590	56	60220	10.446	ppbV	100
19) acetone	5.747	43	1041826	53.078	ppbV	100
20) acetonitrile	5.433	41	129823	10.464	ppbV	100
21) trichlorofluoromethane	5.960	101	184225	10.529	ppbV	100
22) isopropyl alcohol	6.083	45	573609	25.714	ppbV	100
23) acrylonitrile	6.340	53	113697	10.394	ppbV	100
24) pentane	6.410	43	263302	9.111	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617544.D
 Acq On : 9 Jun 2020 10:09 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:44 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.447	31	198165	9.714	ppbV	100
26) 1,1-dichloroethene	6.734	61	229420	10.709	ppbV	100
27) tertiary butyl alcohol	6.818	59	210839	10.611	ppbV	100
28) methylene chloride	6.908	49	228768	10.699	ppbV	100
29) 3-chloropropene	7.046	41	267392	10.367	ppbV	100
30) carbon disulfide	7.196	76	593919	10.521	ppbV	100
31) Freon 113	7.238	101	345185	10.753	ppbV	100
32) trans-1,2-dichloroethene	8.050	61	244791	10.427	ppbV	100
33) 1,1-dichloroethane	8.283	63	310980	10.705	ppbV	100
34) MTBE	8.367	73	419998	10.822	ppbV	100
35) vinyl acetate	8.508	43	400747	10.493	ppbV	100
36) 2-butanone	8.775	43	429925	10.779	ppbV	100
37) cis-1,2-dichloroethene	9.292	61	224226	10.749	ppbV	100
38) Ethyl Acetate	9.592	61	60982	10.762	ppbV	100
39) chloroform	9.650	83	284868	10.570	ppbV	100
40) Tetrahydrofuran	10.092	42	266133	10.863	ppbV	100
41) 2,2-dichloropropane	9.667	77	194140	10.664	ppbV	100
42) 1,2-dichloroethane	10.500	62	152729	10.535	ppbV	100
44) hexane	9.558	57	293731	10.448	ppbV	100
45) diisopropyl ether	9.567	87	155652	11.017	ppbV	100
46) tert-butyl ethyl ether	10.200	59	460550	11.099	ppbV	100
48) 1,1,1-trichloroethane	10.792	97	234653	10.773	ppbV	100
49) 1,1-dichloropropene	11.167	75	271130	10.908	ppbV	100
50) benzene	11.327	78	662716	10.806	ppbV	100
51) thiophene	11.480	84	370972	11.058	ppbV	100
52) carbon tetrachloride	11.500	117	217922	10.834	ppbV	100
53) cyclohexane	11.647	56	319530	10.478	ppbV	100
54) tert-amyl methyl ether	12.040	73	473231	10.818	ppbV	100
55) dibromomethane	12.253	93	186401	10.720	ppbV	100
56) 1,2-dichloropropane	12.293	63	225745	10.855	ppbV	100
57) bromodichloromethane	12.527	83	307828	10.600	ppbV	100
58) 1,4-dioxane	12.560	88	126819	10.010	ppbV	100
59) trichloroethene	12.573	130	282570	10.875	ppbV	100
60) 2,2,4-trimethylpentane	12.620	57	984614	10.570	ppbV	100
61) methyl methacrylate	12.827	41	345809	11.265	ppbV	100
62) heptane	12.947	43	452583	10.524	ppbV	100
63) cis-1,3-dichloropropene	13.592	75	324319	11.225	ppbV	100
64) 4-methyl-2-pentanone	13.633	43	496897	10.645	ppbV	100
65) trans-1,3-dichloropropene	14.217	75	284235	11.289	ppbV	100
66) 1,1,2-trichloroethane	14.417	97	253120	10.887	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617544.D
 Acq On : 9 Jun 2020 10:09 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:44 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.733	91	739381	10.751	ppbV	100
70) 2-methylthiophene	14.800	97	601911	10.945	ppbV	100
71) 1,3-dichloropropane	14.767	76	339495	10.772	ppbV	100
72) 2-hexanone	15.025	43	449307	11.127	ppbV	100
73) 3-methylthiophene	15.000	97	617646	11.073	ppbV	100
74) dibromochloromethane	15.183	129	333097	10.616	ppbV	100
75) 1,2-dibromoethane	15.433	107	378082	11.004	ppbV	100
76) butyl acetate	15.683	73	81790	11.318	ppbV	100
77) octane	15.775	85	260646	10.936	ppbV	100
78) tetrachloroethene	15.900	166	331953	10.767	ppbV	100
79) 1,1,1,2-tetrachloroethane	16.525	131	267764	11.150	ppbV	100
80) chlorobenzene	16.542	112	656813	11.044	ppbV	100
81) ethylbenzene	16.892	91	989095	11.033	ppbV	100
82) 2-ethylthiophene	16.925	97	715486	11.298	ppbV	100
83) m+p-xylene	17.050	91	1580287	21.945	ppbV	100
84) bromoform	17.117	173	306770	10.781	ppbV	100
85) styrene	17.383	104	717317	11.321	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.475	83	588714	11.222	ppbV	100
87) o-xylene	17.475	91	800071	10.979	ppbV	100
88) 1,2,3-trichloropropane	17.592	75	452283	11.038	ppbV	100
89) nonane	17.675	43	744459	11.172	ppbV	100
91) isopropylbenzene	17.992	105	1112882	11.151	ppbV	100
92) bromobenzene	18.067	77	581973	11.041	ppbV	100
93) 2-chlorotoluene	18.400	126	333992	10.860	ppbV	100
94) n-propylbenzene	18.425	120	371309	11.354	ppbV	100
95) 4-chlorotoluene	18.458	126	318603	11.089	ppbV	100
96) 4-ethyl toluene	18.550	105	1227391	11.259	ppbV	100
97) 1,3,5-trimethylbenzene	18.617	105	1053606	11.589	ppbV	100
98) tert-butylbenzene	18.958	119	1032920	11.682	ppbV	100
99) 1,2,4-trimethylbenzene	18.958	105	1029089	11.933	ppbV	100
100) decane	19.042	57	732981	11.458	ppbV	100
101) Benzyl Chloride	19.083	91	596508	12.844	ppbV	100
102) 1,3-dichlorobenzene	19.092	146	763055	11.675	ppbV	100
103) 1,4-dichlorobenzene	19.150	146	755217	11.826	ppbV	100
104) sec-butylbenzene	19.183	105	1473456	11.659	ppbV	100
105) 1,2,3-trimethylbenzene	19.325	105	1031557	11.842	ppbV	100
106) p-isopropyltoluene	19.317	119	1250616	11.877	ppbV	100
107) 1,2-dichlorobenzene	19.442	146	727444	11.711	ppbV	100
108) n-butylbenzene	19.675	91	1071117	11.902	ppbV	100
109) indan	19.500	117	1138553	11.668	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617544.D
 Acq On : 9 Jun 2020 10:09 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:44 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

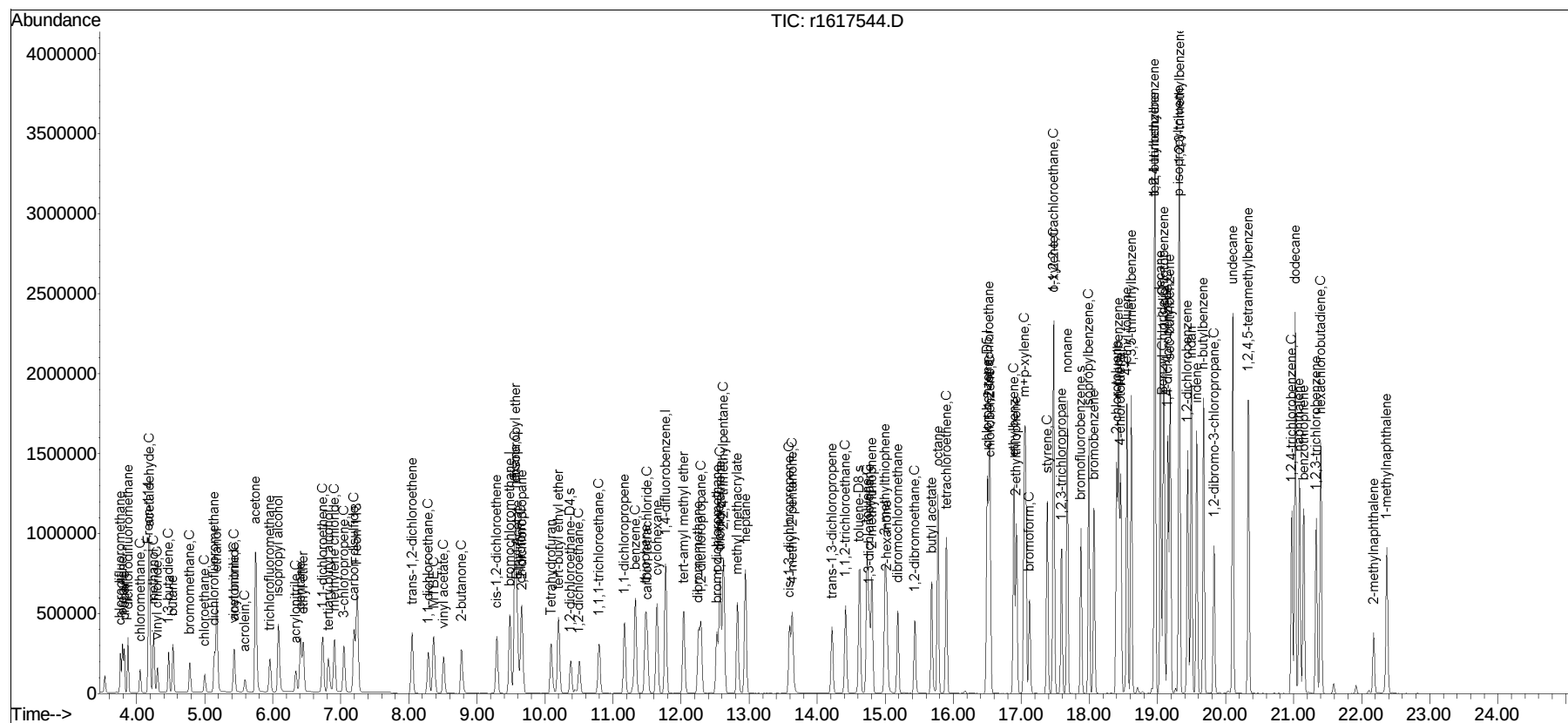
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.575	115	913754	12.104	ppbV	100
111)	1,2-dibromo-3-chloropr...	19.833	75	240318	12.726	ppbV	100
112)	undecane	20.108	57	800830	11.977	ppbV	100
113)	1,2,4,5-tetramethylben...	20.333	119	1211950	12.084	ppbV	100
114)	dodecane	21.025	57	783735	13.918	ppbV	100
115)	1,2,4-trichlorobenzene	20.975	180	394359	13.668	ppbV	100
116)	naphthalene	21.083	128	1241118	14.104	ppbV	100
117)	1,2,3-trichlorobenzene	21.333	180	385333	13.692	ppbV	100
118)	benzothiophene	21.150	134	1039031	13.709	ppbV	100
119)	hexachlorobutadiene	21.400	225	343067	12.590	ppbV	100
120)	2-methylnaphthalene	22.175	142	242282	13.781	ppbV	100
121)	1-methylnaphthalene	22.367	142	607903	13.550	ppbV	100

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File  : r1617544.D
Acq On     : 9 Jun 2020 10:09 PM
Operator   : AIRLAB16:AR
Sample     : IT015-LLSTD010
Misc       : WG1379955
ALS Vial   : 0    Sample Multiplier: 1
```

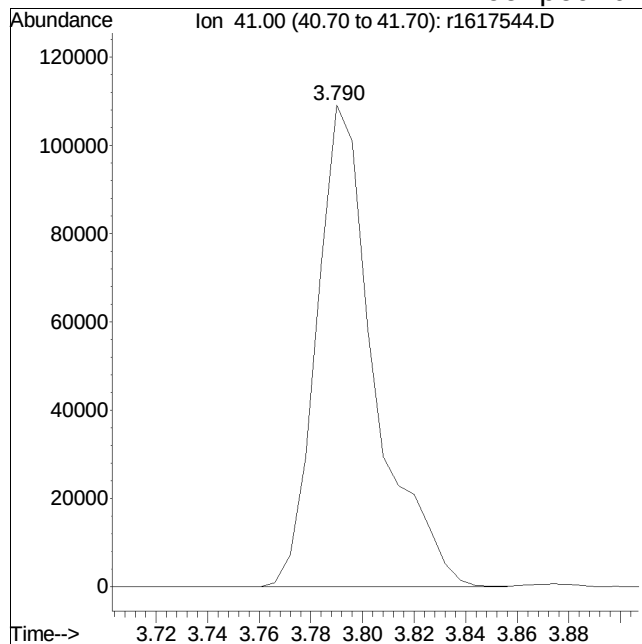
Quant Time: Jun 10 09:56:44 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

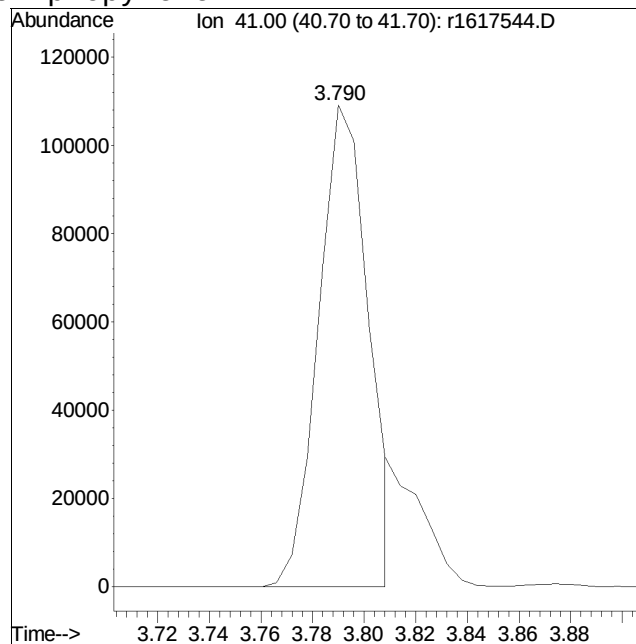
Data Path : 0:\Forensics\Data\AirLab16\QMethod : TFS16_200609.M
Data File : r1617544.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:0: 9 Instrument :
Sample : IT015-LLSTD010 Quant Date : 6/10/2020 9:56 am

Compound #3: propylene



Original Peak Response = 170457

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



Manual Peak Response = 147170 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617545.D
 Acq On : 9 Jun 2020 10:48 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD020
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:51 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.483	49	313598	10.000	ppbV	0.00
Standard Area = 321867			Recovery =		97.43%	
43) 1,4-difluorobenzene	11.773	114	859946	10.000	ppbV	0.00
Standard Area = 880461			Recovery =		97.67%	
67) chlorobenzene-D5	16.500	54	117851	10.000	ppbV	0.00
Standard Area = 123109			Recovery =		95.73%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.375	65	121144	9.713	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		97.13%	
69) toluene-D8	14.617	98	623683	10.234	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		102.34%	
90) bromofluorobenzene	17.875	95	438967	10.325	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		103.25%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.766	51	447201	20.152	ppbV	99
3) propylene	3.796	41	282795M6	20.305	ppbV	
4) propane	3.820	29	302803	20.151	ppbV	99
5) dichlorodifluoromethane	3.874	85	463085	20.048	ppbV	100
6) chloromethane	4.054	50	257829	20.015	ppbV	99
7) Freon-114	4.180	85	603124	20.060	ppbV	98
8) methanol	4.252	31	489798	97.425	ppbV	99
9) vinyl chloride	4.306	62	269279	20.286	ppbV	99
10) 1,3-butadiene	4.468	54	231638	20.729	ppbV	98
11) butane	4.534	43	422743	19.262	ppbV	100
12) acetaldehyde	4.192	29	694075	98.921	ppbV	97
13) bromomethane	4.780	94	239384	20.247	ppbV	99
14) chloroethane	5.002	64	132158	20.227	ppbV	99
15) ethanol	5.176	31	939917	101.502	ppbV	100
16) dichlorofluoromethane	5.146	67	442551	20.094	ppbV	100
17) vinyl bromide	5.433	106	245830	20.996	ppbV	98
18) acrolein	5.590	56	114541	20.392	ppbV	98
19) acetone	5.747	43	1925155	100.668	ppbV	98
20) acetonitrile	5.433	41	240714	19.913	ppbV	97
21) trichlorofluoromethane	5.960	101	348256	20.429	ppbV	98
22) isopropyl alcohol	6.083	45	1132719	52.116	ppbV	100
23) acrylonitrile	6.340	53	217607	20.418	ppbV	98
24) pentane	6.407	43	503780	17.892	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617545.D
 Acq On : 9 Jun 2020 10:48 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD020
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:51 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.447	31	409608	20.608	ppbV	98
26) 1,1-dichloroethene	6.734	61	420161	20.129	ppbV	100
27) tertiary butyl alcohol	6.812	59	414358	21.404	ppbV	98
28) methylene chloride	6.908	49	424909	20.395	ppbV	100
29) 3-chloropropene	7.046	41	519333	20.665	ppbV	99
30) carbon disulfide	7.196	76	1154071	20.983	ppbV	100
31) Freon 113	7.238	101	634770	20.295	ppbV	100
32) trans-1,2-dichloroethene	8.050	61	474397	20.740	ppbV	99
33) 1,1-dichloroethane	8.283	63	572426	20.224	ppbV	100
34) MTBE	8.358	73	828039	21.898	ppbV	99
35) vinyl acetate	8.508	43	806650	21.678	ppbV	99
36) 2-butanone	8.767	43	830911	21.381	ppbV	99
37) cis-1,2-dichloroethene	9.292	61	415788	20.458	ppbV	99
38) Ethyl Acetate	9.592	61	123736	22.413	ppbV	92
39) chloroform	9.650	83	532660	20.286	ppbV	99
40) Tetrahydrofuran	10.083	42	519225	21.752	ppbV	99
41) 2,2-dichloropropane	9.667	77	374118	21.092	ppbV	95
42) 1,2-dichloroethane	10.500	62	278528	19.720	ppbV	98
44) hexane	9.558	57	578794	21.079	ppbV	99
45) diisopropyl ether	9.567	87	297060	21.528	ppbV	98
46) tert-butyl ethyl ether	10.192	59	877352	21.649	ppbV	99
48) 1,1,1-trichloroethane	10.792	97	430765	20.249	ppbV	99
49) 1,1-dichloropropene	11.167	75	504402	20.776	ppbV	99
50) benzene	11.327	78	1240577	20.711	ppbV	100
51) thiophene	11.473	84	687163	20.972	ppbV	99
52) carbon tetrachloride	11.500	117	409440	20.841	ppbV	98
53) cyclohexane	11.647	56	629800	21.145	ppbV	99
54) tert-amyl methyl ether	12.033	73	911192	21.328	ppbV	99
55) dibromomethane	12.253	93	341037	20.081	ppbV	99
56) 1,2-dichloropropane	12.287	63	414821	20.423	ppbV	97
57) bromodichloromethane	12.520	83	596421	21.028	ppbV	99
58) 1,4-dioxane	12.553	88	259245	20.952	ppbV	100
59) trichloroethene	12.573	130	524016	20.648	ppbV	99
60) 2,2,4-trimethylpentane	12.620	57	1883670M6	20.704	ppbV	
61) methyl methacrylate	12.827	41	649495	21.662	ppbV	99
62) heptane	12.947	43	877184	20.883	ppbV	99
63) cis-1,3-dichloropropene	13.592	75	604827	21.434	ppbV	99
64) 4-methyl-2-pentanone	13.625	43	963952	21.142	ppbV	99
65) trans-1,3-dichloropropene	14.217	75	533829	21.708	ppbV	99
66) 1,1,2-trichloroethane	14.417	97	463528	20.412	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617545.D
 Acq On : 9 Jun 2020 10:48 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD020
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:51 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.733	91	1372437	20.846	ppbV	99
70) 2-methylthiophene	14.800	97	1104748	20.985	ppbV	99
71) 1,3-dichloropropane	14.758	76	634087	21.017	ppbV	99
72) 2-hexanone	15.017	43	895703	23.171	ppbV	97
73) 3-methylthiophene	15.000	97	1130328	21.168	ppbV	99
74) dibromochloromethane	15.183	129	660214	21.980	ppbV	98
75) 1,2-dibromoethane	15.433	107	694696	21.122	ppbV	99
76) butyl acetate	15.675	73	157478	22.763	ppbV	95
77) octane	15.775	85	490771	21.510	ppbV	98
78) tetrachloroethene	15.892	166	617531	20.924	ppbV	98
79) 1,1,1,2-tetrachloroethane	16.525	131	492673	21.430	ppbV	99
80) chlorobenzene	16.542	112	1202048	21.114	ppbV	99
81) ethylbenzene	16.892	91	1805872	21.043	ppbV	100
82) 2-ethylthiophene	16.925	97	1282493	21.155	ppbV	99
83) m+p-xylene	17.058	91	2881825	41.804	ppbV	100
84) bromoform	17.117	173	617226	22.660	ppbV	99
85) styrene	17.375	104	1329212	21.914	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.475	83	1058495	21.076	ppbV	99
87) o-xylene	17.475	91	1445002	20.714	ppbV	100
88) 1,2,3-trichloropropane	17.592	75	832711	21.230	ppbV	100
89) nonane	17.675	43	1348541	21.140	ppbV	97
91) isopropylbenzene	17.992	105	2017314	21.115	ppbV	98
92) bromobenzene	18.067	77	1077169	21.348	ppbV	99
93) 2-chlorotoluene	18.400	126	605224	20.558	ppbV	99
94) n-propylbenzene	18.425	120	686868	21.940	ppbV	89
95) 4-chlorotoluene	18.458	126	595844	21.663	ppbV	99
96) 4-ethyl toluene	18.550	105	2285665	21.902	ppbV	98
97) 1,3,5-trimethylbenzene	18.617	105	1824255	20.961	ppbV	99
98) tert-butylbenzene	18.958	119	1761752	20.815	ppbV	99
99) 1,2,4-trimethylbenzene	18.958	105	1707642	20.684	ppbV	99
100) decane	19.042	57	1250015	20.412	ppbV	97
101) Benzyl Chloride	19.083	91	1124777	25.300	ppbV	98
102) 1,3-dichlorobenzene	19.092	146	1327316	21.215	ppbV	99
103) 1,4-dichlorobenzene	19.150	146	1294135	21.169	ppbV	99
104) sec-butylbenzene	19.183	105	2496796	20.638	ppbV	97
105) 1,2,3-trimethylbenzene	19.325	105	1705599	20.453	ppbV	98
106) p-isopropyltoluene	19.317	119	2088965	20.723	ppbV	99
107) 1,2-dichlorobenzene	19.442	146	1236465	20.795	ppbV	100
108) n-butylbenzene	19.675	91	1806338	20.967	ppbV	99
109) indan	19.500	117	1958855	20.970	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617545.D
 Acq On : 9 Jun 2020 10:48 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD020
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:51 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

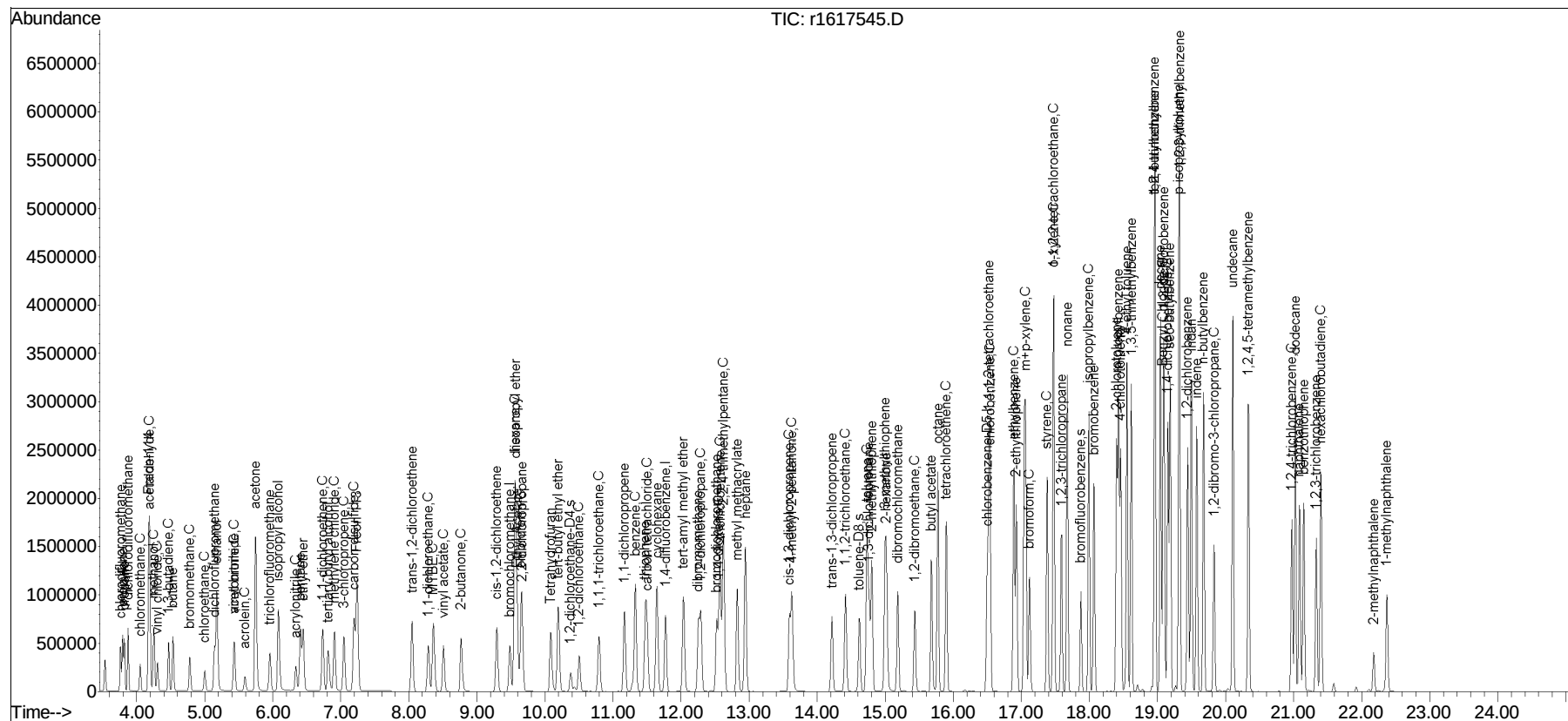
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.575	115	1553079	21.490	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.833	75	398904	22.066	ppbV	98
112)	undecane	20.108	57	1308481	20.442	ppbV	98
113)	1,2,4,5-tetramethylben...	20.333	119	1984498	20.669	ppbV	100
114)	dodecane	21.025	57	1061642	19.695	ppbV	99
115)	1,2,4-trichlorobenzene	20.975	180	610848	22.116	ppbV	99
116)	naphthalene	21.083	128	1837406	21.811	ppbV	100
117)	1,2,3-trichlorobenzene	21.333	180	559577	20.771	ppbV	99
118)	benzothiophene	21.150	134	1736967	23.940	ppbV	100
119)	hexachlorobutadiene	21.400	225	506919	19.433	ppbV	97
120)	2-methylnaphthalene	22.175	142	262402	15.591	ppbV	98
121)	1-methylnaphthalene	22.367	142	676805	15.758	ppbV	99

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File  : r1617545.D
Acq On     : 9 Jun 2020 10:48 PM
Operator   : AIRLAB16:AR
Sample     : IT015-LLSTD020
Misc       : WG1379955
ALS Vial   : 0 Sample Multiplier: 1
```

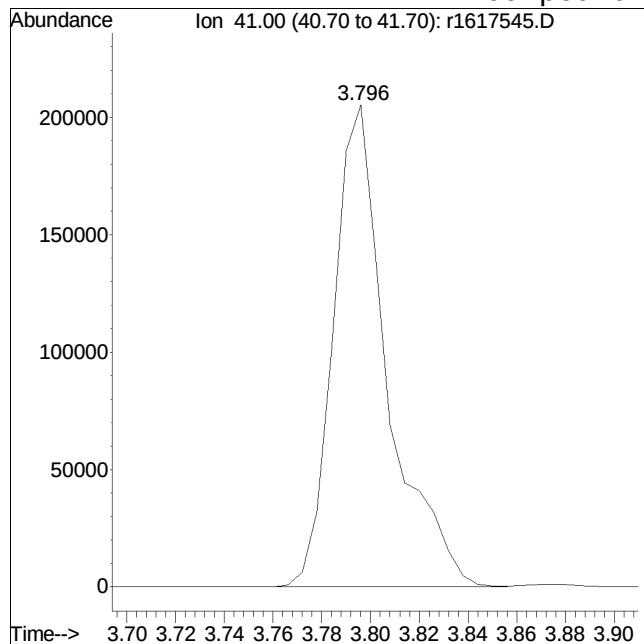
Quant Time: Jun 10 09:56:51 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

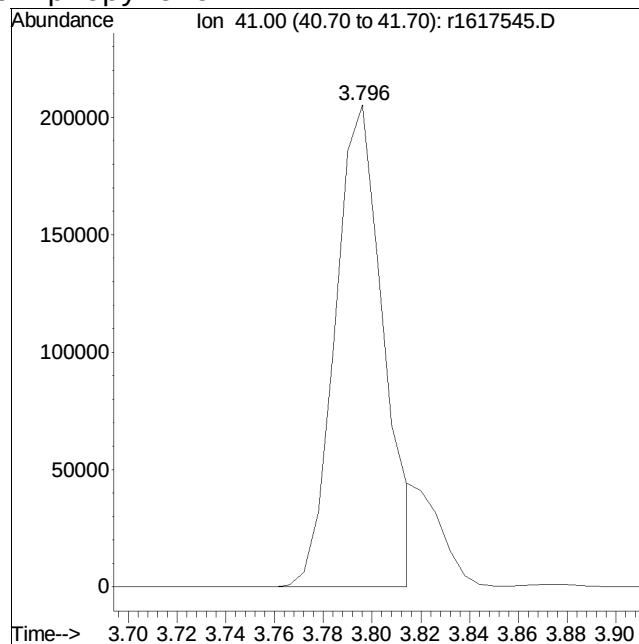
Data Path : 0:\Forensics\Data\AirLab16\QMethod : TFS16_200609.M
 Data File : r1617545.D Operator : AIRLAB16:AR
 Date Inj'd : 6/9/2020 0:0: 8 Instrument :
 Sample : IT015-LLSTD020 Quant Date : 6/10/2020 9:56 am

Compound #3: propylene



Original Peak Response = 316937

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



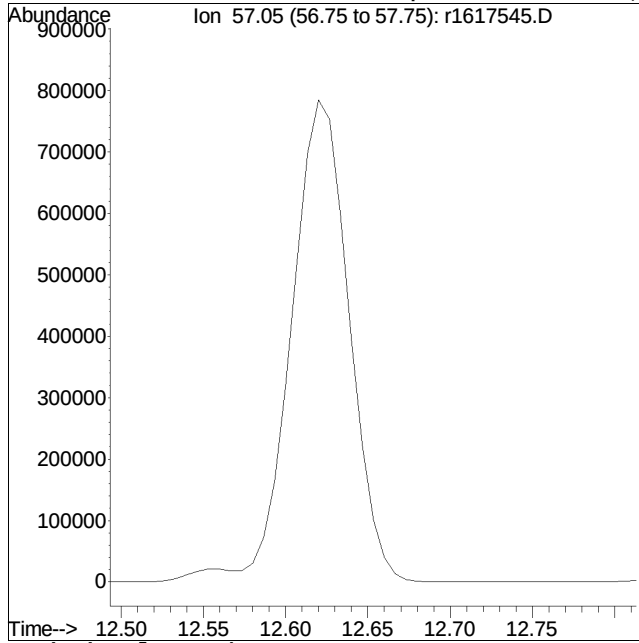
Manual Peak Response = 282795 M6

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

Manual Integration/Negative Proof Report

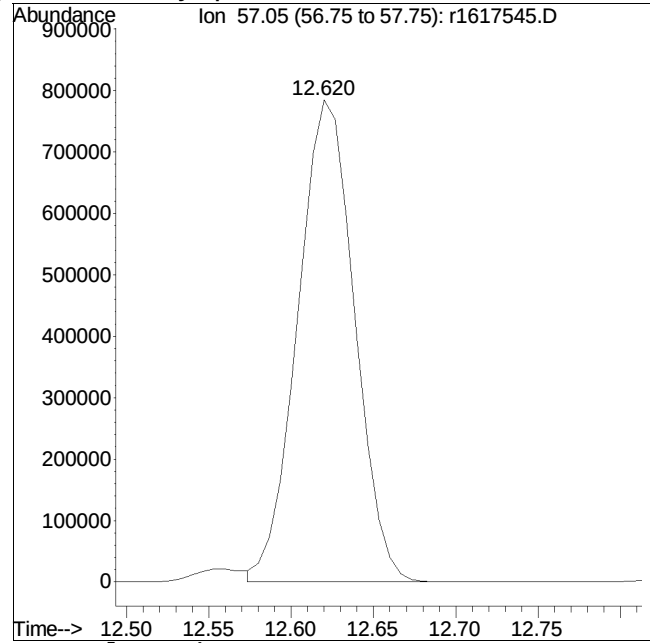
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617545.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:0: 8 Instrument :
Sample : IT015-LLSTD020 Quant Date : 6/10/2020 9:56 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =

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



Manual Peak Response = 1883670 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617546.D
 Acq On : 9 Jun 2020 11:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD050
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:58 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.492	49	311983	10.000	ppbV	0.00
Standard Area = 321867			Recovery =		96.93%	
43) 1,4-difluorobenzene	11.773	114	844910	10.000	ppbV	0.00
Standard Area = 880461			Recovery =		95.96%	
67) chlorobenzene-D5	16.500	54	116866	10.000	ppbV	0.00
Standard Area = 123109			Recovery =		94.93%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.383	65	115414	9.418	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		94.18%	
69) toluene-D8	14.625	98	608701	10.073	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		100.73%	
90) bromofluorobenzene	17.875	95	427085	10.130	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.30%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.760	51	1031289	46.714	ppbV	100
3) propylene	3.790	41	637852M6	46.035	ppbV	
4) propane	3.814	29	705234	47.175	ppbV	99
5) dichlorodifluoromethane	3.868	85	1052102	45.785	ppbV	100
6) chloromethane	4.048	50	597668	46.637	ppbV	99
7) Freon-114	4.174	85	1352984	45.232	ppbV	99
8) methanol	4.252	31	1151454	230.220	ppbV	98
9) vinyl chloride	4.306	62	619911	46.943	ppbV	99
10) 1,3-butadiene	4.468	54	532208	47.874	ppbV	99
11) butane	4.534	43	965570	44.224	ppbV	99
12) acetaldehyde	4.192	29	1567299	224.531	ppbV	95
13) bromomethane	4.780	94	546881	46.494	ppbV	99
14) chloroethane	5.002	64	305921	47.063	ppbV	98
15) ethanol	5.188	31	1963169	213.102	ppbV	97
16) dichlorofluoromethane	5.152	67	1030478	47.031	ppbV	100
17) vinyl bromide	5.440	106	549659	47.189	ppbV	94
18) acrolein	5.593	56	265901	47.583	ppbV	96
19) acetone	5.750	43	4201557	220.839	ppbV	98
20) acetonitrile	5.440	41	540122	44.912	ppbV	98
21) trichlorofluoromethane	5.963	101	798401	47.076	ppbV	100
22) isopropyl alcohol	6.090	45	2600891	120.286	ppbV	99
23) acrylonitrile	6.347	53	543486	51.260	ppbV	99
24) pentane	6.413	43	1484481	52.996	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617546.D
 Acq On : 9 Jun 2020 11:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD050
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:58 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.450	31	1057332	53.471	ppbV	96
26) 1,1-dichloroethene	6.740	61	942382	45.382	ppbV	100
27) tertiary butyl alcohol	6.818	59	984806	51.134	ppbV	96
28) methylene chloride	6.914	49	956852	46.166	ppbV	100
29) 3-chloropropene	7.052	41	1160609	46.422	ppbV	98
30) carbon disulfide	7.202	76	2562837	46.838	ppbV	100
31) Freon 113	7.244	101	1394928	44.830	ppbV	98
32) trans-1,2-dichloroethene	8.050	61	1060474	46.602	ppbV	99
33) 1,1-dichloroethane	8.292	63	1285635	45.657	ppbV	100
34) MTBE	8.367	73	1871708	49.754	ppbV	99
35) vinyl acetate	8.517	43	1917375	51.795	ppbV	98
36) 2-butanone	8.767	43	1880864	48.649	ppbV	98
37) cis-1,2-dichloroethene	9.300	61	933701	46.180	ppbV	99
38) Ethyl Acetate	9.600	61	281489	51.251	ppbV	79
39) chloroform	9.658	83	1176587	45.042	ppbV	100
40) Tetrahydrofuran	10.083	42	1175765	49.512	ppbV	98
41) 2,2-dichloropropane	9.667	77	842655	47.754	ppbV	94
42) 1,2-dichloroethane	10.508	62	622124	44.274	ppbV	98
44) hexane	9.567	57	1285833	47.662	ppbV	100
45) diisopropyl ether	9.567	87	670036	49.422	ppbV	85
46) tert-butyl ethyl ether	10.200	59	1995611	50.119	ppbV	98
48) 1,1,1-trichloroethane	10.800	97	957614	45.815	ppbV	98
49) 1,1-dichloropropene	11.173	75	1130540	47.396	ppbV	100
50) benzene	11.333	78	2769184	47.052	ppbV	99
51) thiophene	11.480	84	1545720	48.014	ppbV	99
52) carbon tetrachloride	11.507	117	919740	47.649	ppbV	98
53) cyclohexane	11.647	56	1426988	48.763	ppbV	98
54) tert-amyl methyl ether	12.040	73	2133661	50.830	ppbV	100
55) dibromomethane	12.260	93	763424	45.752	ppbV	98
56) 1,2-dichloropropane	12.293	63	929688	46.586	ppbV	98
57) bromodichloromethane	12.527	83	1350752	48.470	ppbV	98
58) 1,4-dioxane	12.560	88	612391	50.373	ppbV	100
59) trichloroethene	12.573	130	1156109	46.366	ppbV	99
60) 2,2,4-trimethylpentane	12.627	57	4168736M6	46.635	ppbV	
61) methyl methacrylate	12.827	41	1465062	49.734	ppbV	98
62) heptane	12.947	43	1908950	46.255	ppbV	96
63) cis-1,3-dichloropropene	13.592	75	1383753	49.910	ppbV	99
64) 4-methyl-2-pentanone	13.633	43	2235459	49.903	ppbV	98
65) trans-1,3-dichloropropene	14.217	75	1225125	50.705	ppbV	99
66) 1,1,2-trichloroethane	14.417	97	1045222	46.847	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617546.D
 Acq On : 9 Jun 2020 11:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD050
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:58 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.733	91	3021381	46.278	ppbV	100
70) 2-methylthiophene	14.808	97	2459255	47.107	ppbV	99
71) 1,3-dichloropropane	14.767	76	1415170	47.302	ppbV	98
72) 2-hexanone	15.017	43	1968514	51.353	ppbV	93
73) 3-methylthiophene	15.000	97	2480106	46.838	ppbV	99
74) dibromochloromethane	15.183	129	1464474	49.166	ppbV	99
75) 1,2-dibromoethane	15.433	107	1542525	47.295	ppbV	99
76) butyl acetate	15.675	73	361276	52.662	ppbV	90
77) octane	15.775	85	1091873	48.259	ppbV	90
78) tetrachloroethene	15.900	166	1347773	46.053	ppbV	98
79) 1,1,1,2-tetrachloroethane	16.525	131	1074089	47.114	ppbV	99
80) chlorobenzene	16.542	112	2591171	45.897	ppbV	98
81) ethylbenzene	16.892	91	3931061	46.193	ppbV	100
82) 2-ethylthiophene	16.925	97	2792376	46.450	ppbV	97
83) m+p-xylene	17.058	91	6161016	90.126	ppbV	99
84) bromoform	17.125	173	1402320	51.916	ppbV	97
85) styrene	17.383	104	2911012	48.396	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.475	83	2303052	46.244	ppbV	100
87) o-xylene	17.475	91	3044684	44.014	ppbV	100
88) 1,2,3-trichloropropane	17.592	75	1843871	47.405	ppbV	98
89) nonane	17.675	43	2824907	44.656	ppbV	91
91) isopropylbenzene	17.992	105	4258031	44.944	ppbV	94
92) bromobenzene	18.067	77	2396741	47.899	ppbV	99
93) 2-chlorotoluene	18.400	126	1368599	46.879	ppbV	91
94) n-propylbenzene	18.425	120	1501081	48.353	ppbV	84
95) 4-chlorotoluene	18.458	126	1317329	48.297	ppbV	93
96) 4-ethyl toluene	18.550	105	4770316	46.096	ppbV	94
97) 1,3,5-trimethylbenzene	18.617	105	3851387	44.626	ppbV	94
98) tert-butylbenzene	18.958	119	3658366	43.587	ppbV	99
99) 1,2,4-trimethylbenzene	18.967	105	3515285	42.938	ppbV	95
100) decane	19.042	57	2785405	45.868	ppbV	90
101) Benzyl Chloride	19.083	91	2738035	62.106	ppbV	95
102) 1,3-dichlorobenzene	19.100	146	2868627	46.236	ppbV	97
103) 1,4-dichlorobenzene	19.150	146	2866752	47.288	ppbV	99
104) sec-butylbenzene	19.192	105	5275134	43.970	ppbV	96
105) 1,2,3-trimethylbenzene	19.325	105	3525155	42.629	ppbV	96
106) p-isopropyltoluene	19.317	119	4375091	43.768	ppbV	96
107) 1,2-dichlorobenzene	19.442	146	2769178	46.964	ppbV	99
108) n-butylbenzene	19.683	91	3979754	46.585	ppbV	100
109) indan	19.500	117	4295406	46.371	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617546.D
 Acq On : 9 Jun 2020 11:27 PM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD050
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:56:58 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

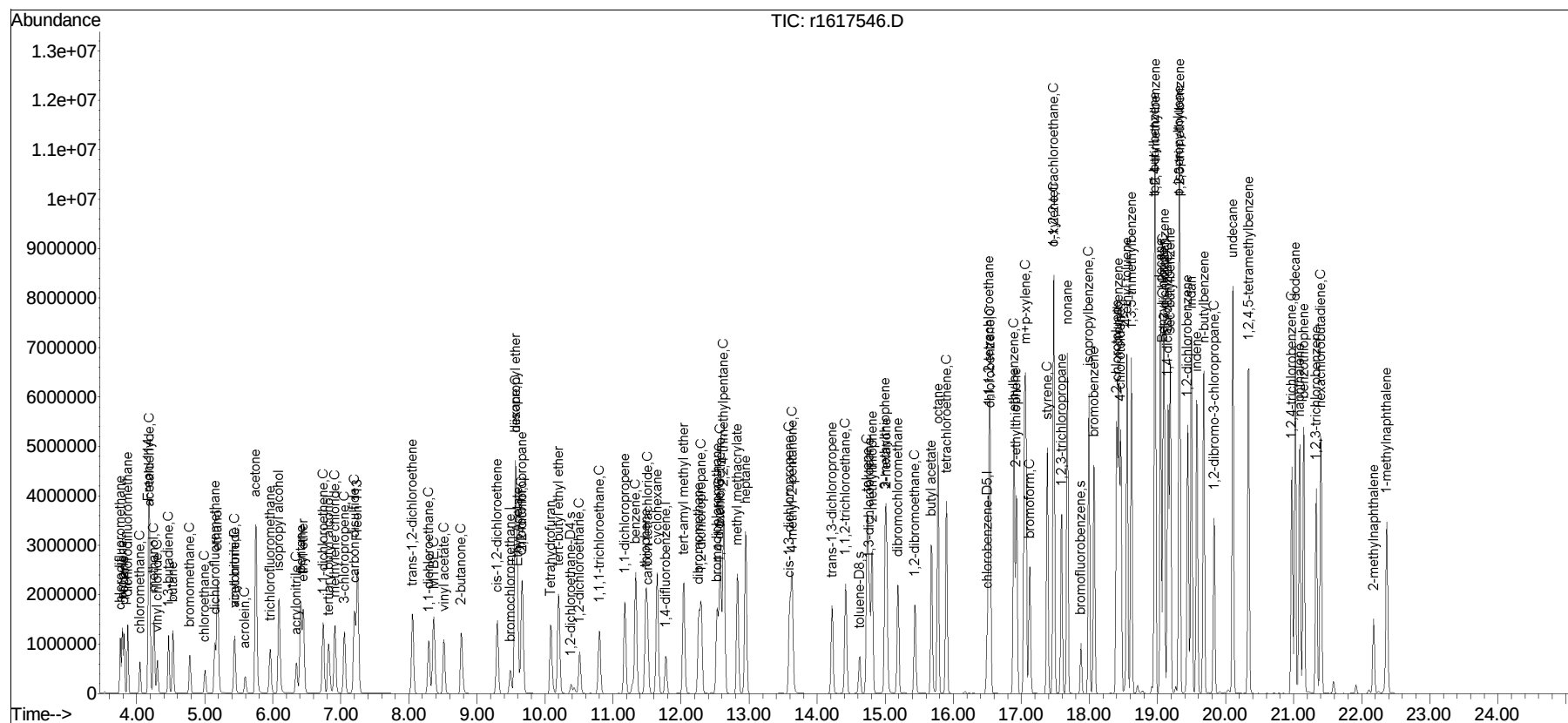
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.575	115	3579633	49.949	ppbV	98
111)	1,2-dibromo-3-chloropr...	19.833	75	929018	51.822	ppbV	94
112)	undecane	20.108	57	2976284	46.889	ppbV	92
113)	1,2,4,5-tetramethylben...	20.342	119	4372709	45.927	ppbV	99
114)	dodecane	21.025	57	2582549	48.314	ppbV	91
115)	1,2,4-trichlorobenzene	20.975	180	1665034	60.791	ppbV	97
116)	naphthalene	21.092	128	4768480	57.082	ppbV	99
117)	1,2,3-trichlorobenzene	21.333	180	1493744	55.914	ppbV	99
118)	benzothiophene	21.150	134	4796490	66.665	ppbV	99
119)	hexachlorobutadiene	21.400	225	1188550	45.948	ppbV	98
120)	2-methylnaphthalene	22.175	142	989157	59.269	ppbV	100
121)	1-methylnaphthalene	22.367	142	2316569	54.392	ppbV	97

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File   : r1617546.D
Acq On      : 9 Jun 2020 11:27 PM
Operator    : AIRLAB16:AR
Sample      : IT015-LLSTD050
Misc        : WG1379955
ALS Vial    : 0    Sample Multiplier: 1
```

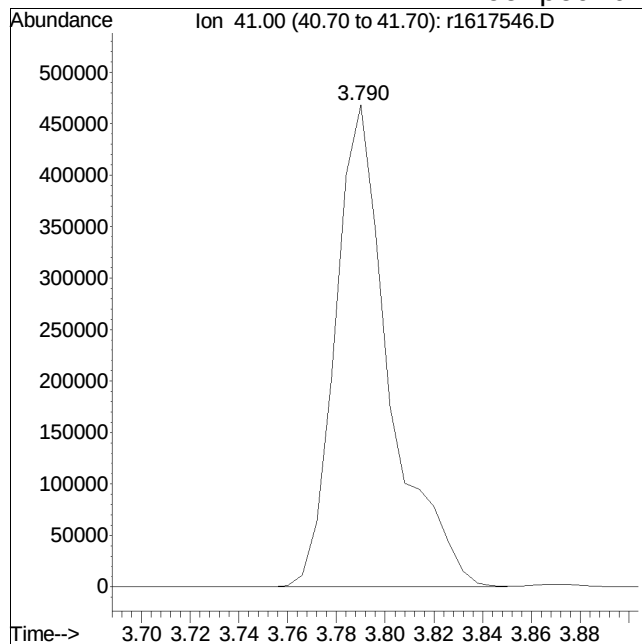
Quant Time: Jun 10 09:56:58 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

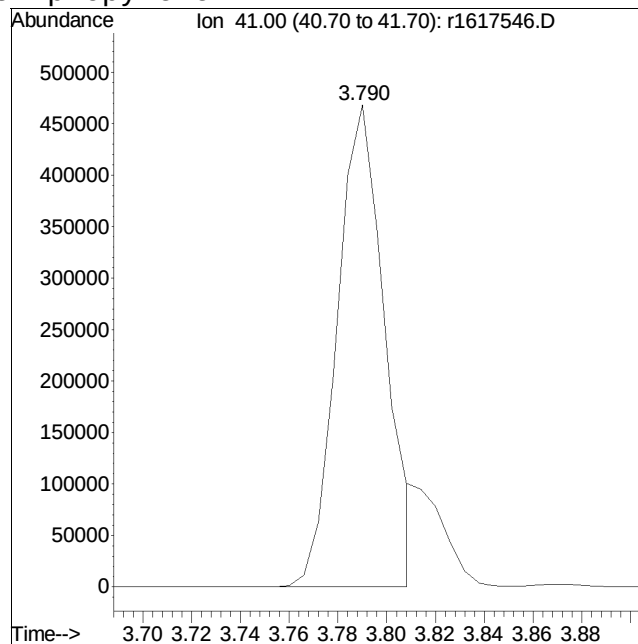
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617546.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:1: 7 Instrument :
Sample : IT015-LLSTD050 Quant Date : 6/10/2020 9:56 am

Compound #3: propylene



Original Peak Response = 723492

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

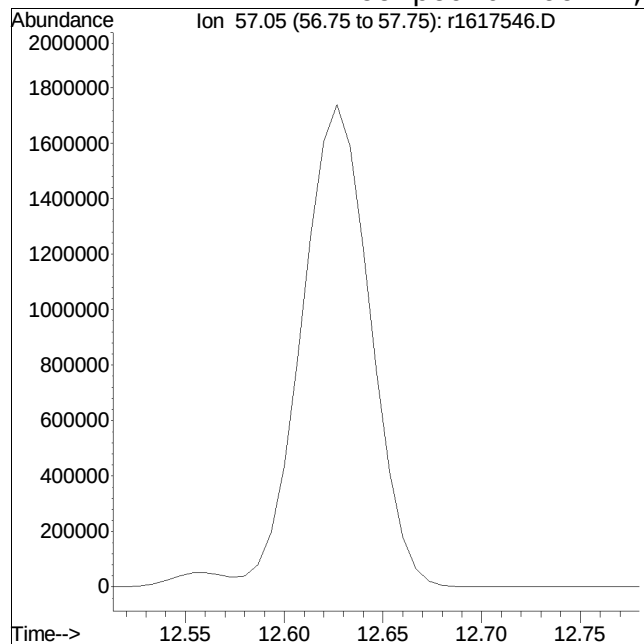


Manual Peak Response = 637852 M6

Manual Integration/Negative Proof Report

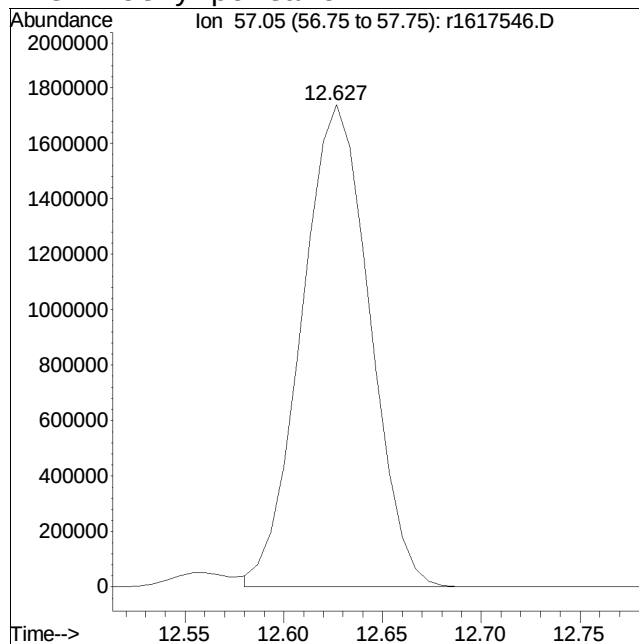
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617546.D Operator : AIRLAB16:AR
Date Inj'd : 6/9/2020 0:1: 7 Instrument :
Sample : IT015-LLSTD050 Quant Date : 6/10/2020 9:56 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =

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



Manual Peak Response = 4168736 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617547.D
 Acq On : 10 Jun 2020 12:09 AM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD100
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:57:05 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.492	49	312925	10.000	ppbV	0.00
Standard Area = 321867			Recovery =		97.22%	
43) 1,4-difluorobenzene	11.773	114	818331	10.000	ppbV	0.00
Standard Area = 880461			Recovery =		92.94%	
67) chlorobenzene-D5	16.500	54	113151	10.000	ppbV	0.00
Standard Area = 123109			Recovery =		91.91%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.383	65	108587	9.149	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		91.49%	
69) toluene-D8	14.625	98	582798	9.961	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.61%	
90) bromofluorobenzene	17.875	95	419824	10.285	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		102.85%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.760	51	1912129	86.353	ppbV	100
3) propylene	3.790	41	1130802M6	81.366	ppbV	
4) propane	3.820	29	1322425	88.194	ppbV	97
5) dichlorodifluoromethane	3.874	85	1909585	82.850	ppbV	99
6) chloromethane	4.048	50	1105607	86.013	ppbV	100
7) Freon-114	4.174	85	2351555	78.380	ppbV	99
8) methanol	4.258	31	2181986	434.950	ppbV	99
9) vinyl chloride	4.306	62	1146332	86.545	ppbV	99
10) 1,3-butadiene	4.468	54	976137	87.542	ppbV	98
11) butane	4.534	43	1732586	79.114	ppbV	98
12) acetaldehyde	4.192	29	2785963	397.915	ppbV	94
13) bromomethane	4.780	94	993902	84.243	ppbV	99
14) chloroethane	5.002	64	564479	86.578	ppbV	98
15) ethanol	5.194	31	3409142	368.948	ppbV	95
16) dichlorofluoromethane	5.146	67	1908211	86.829	ppbV	100
17) vinyl bromide	5.437	106	1000280	85.617	ppbV	97
18) acrolein	5.593	56	504373	89.987	ppbV	96
19) acetone	5.753	43	7312043	383.173	ppbV	97
20) acetonitrile	5.440	41	980628	81.296	ppbV	97
21) trichlorofluoromethane	5.963	101	1486900	87.408	ppbV	98
22) isopropyl alcohol	6.100	45	4726114	217.915	ppbV	99
23) acrylonitrile	6.347	53	936310	88.044	ppbV	100
24) pentane	6.410	43	1998744	71.141	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617547.D
 Acq On : 10 Jun 2020 12:09 AM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD100
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:57:05 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.450	31	1614538	81.404	ppbV	98
26) 1,1-dichloroethene	6.740	61	1706143	81.915	ppbV	99
27) tertiary butyl alcohol	6.824	59	1916313	99.202	ppbV	93
28) methylene chloride	6.914	49	1760005	84.661	ppbV	99
29) 3-chloropropene	7.052	41	2083021	83.065	ppbV	98
30) carbon disulfide	7.196	76	4556850	83.029	ppbV	100
31) Freon 113	7.244	101	2472499	79.221	ppbV	97
32) trans-1,2-dichloroethene	8.050	61	1924595	84.320	ppbV	99
33) 1,1-dichloroethane	8.292	63	2325962	82.353	ppbV	100
34) MTBE	8.358	73	3420004	90.637	ppbV	98
35) vinyl acetate	8.517	43	3528407	95.028	ppbV	97
36) 2-butanone	8.767	43	3383358	87.248	ppbV	96
37) cis-1,2-dichloroethene	9.300	61	1696710	83.664	ppbV	99
38) Ethyl Acetate	9.600	61	522026	94.760	ppbV	68
39) chloroform	9.658	83	2111977	80.607	ppbV	100
40) Tetrahydrofuran	10.083	42	2116200	88.845	ppbV	96
41) 2,2-dichloropropane	9.667	77	1527525	86.305	ppbV	92
42) 1,2-dichloroethane	10.508	62	1125243	79.838	ppbV	97
44) hexane	9.558	57	2274689	87.055	ppbV	80
45) diisopropyl ether	9.567	87	1192683	90.829	ppbV	75
46) tert-butyl ethyl ether	10.200	59	3650744	94.665	ppbV	98
48) 1,1,1-trichloroethane	10.800	97	1732007	85.555	ppbV	98
49) 1,1-dichloropropene	11.173	75	2030234	87.878	ppbV	99
50) benzene	11.333	78	4925218	86.404	ppbV	97
51) thiophene	11.480	84	2821248	90.481	ppbV	98
52) carbon tetrachloride	11.507	117	1669607	89.307	ppbV	98
53) cyclohexane	11.647	56	2625436	92.631	ppbV	97
54) tert-amyl methyl ether	12.033	73	3878804	95.405	ppbV	99
55) dibromomethane	12.260	93	1357104	83.973	ppbV	99
56) 1,2-dichloropropane	12.293	63	1664223	86.101	ppbV	97
57) bromodichloromethane	12.527	83	2433669	90.166	ppbV	99
58) 1,4-dioxane	12.553	88	1107023	94.017	ppbV	99
59) trichloroethene	12.573	130	2040622	84.497	ppbV	99
60) 2,2,4-trimethylpentane	12.627	57	7417777	85.677	ppbV	98
61) methyl methacrylate	12.827	41	2597670	91.045	ppbV	96
62) heptane	12.947	43	3301698	82.601	ppbV	92
63) cis-1,3-dichloropropene	13.592	75	2488488	92.672	ppbV	99
64) 4-methyl-2-pentanone	13.625	43	3964407	91.374	ppbV	93
65) trans-1,3-dichloropropene	14.217	75	2244700	95.921	ppbV	99
66) 1,1,2-trichloroethane	14.417	97	1869697	86.522	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617547.D
 Acq On : 10 Jun 2020 12:09 AM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD100
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:57:05 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.733	91	5340399	84.484	ppbV	100
70) 2-methylthiophene	14.808	97	4358147	86.221	ppbV	100
71) 1,3-dichloropropane	14.767	76	2512591	86.741	ppbV	97
72) 2-hexanone	15.025	43	3522274	94.904	ppbV	92
73) 3-methylthiophene	15.000	97	4345282	84.756	ppbV	100
74) dibromochloromethane	15.192	129	2616215	90.717	ppbV	99
75) 1,2-dibromoethane	15.442	107	2691721	85.240	ppbV	99
76) butyl acetate	15.675	73	681446	102.594	ppbV	83
77) octane	15.775	85	1939681	88.546	ppbV	85
78) tetrachloroethene	15.900	166	2327353	82.135	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.525	131	1858498	84.198	ppbV	99
80) chlorobenzene	16.542	112	4350728	79.594	ppbV	99
81) ethylbenzene	16.892	91	6835121	82.955	ppbV	99
82) 2-ethylthiophene	16.925	97	4832310	83.023	ppbV	97
83) m+p-xylene	17.058	91	10366862	156.629	ppbV	97
84) bromoform	17.125	173	2429139	92.883	ppbV	98
85) styrene	17.383	104	4954104	85.068	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.475	83	3790638	78.613	ppbV	100
87) o-xylene	17.475	91	5011631	74.826	ppbV	100
88) 1,2,3-trichloropropane	17.592	75	3212687	85.309	ppbV	98
89) nonane	17.675	43	4592434	74.981	ppbV #	82
91) isopropylbenzene	17.992	105	7081887	77.204	ppbV	91
92) bromobenzene	18.067	77	4089280	84.408	ppbV	95
93) 2-chlorotoluene	18.400	126	2407232	85.163	ppbV	85
94) n-propylbenzene	18.433	120	2594545	86.319	ppbV	82
95) 4-chlorotoluene	18.458	126	2330820	88.261	ppbV	88
96) 4-ethyl toluene	18.550	105	7882941	78.674	ppbV	91
97) 1,3,5-trimethylbenzene	18.617	105	6389378	76.465	ppbV	91
98) tert-butylbenzene	18.958	119	5775994	71.076	ppbV	96
99) 1,2,4-trimethylbenzene	18.967	105	5503639	69.432	ppbV	97
100) decane	19.050	57	4857432	82.615	ppbV	83
101) Benzyl Chloride	19.083	91	4892267	114.614	ppbV	93
102) 1,3-dichlorobenzene	19.100	146	4767480	79.364	ppbV	96
103) 1,4-dichlorobenzene	19.150	146	4855676	82.726	ppbV	97
104) sec-butylbenzene	19.192	105	8619770	74.208	ppbV	92
105) 1,2,3-trimethylbenzene	19.325	105	5536796	69.154	ppbV	98
106) p-isopropyltoluene	19.325	119	6765833	69.908	ppbV	96
107) 1,2-dichlorobenzene	19.450	146	4811349	84.277	ppbV	97
108) n-butylbenzene	19.683	91	6879681	83.174	ppbV	98
109) indan	19.500	117	7178223	80.036	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617547.D
 Acq On : 10 Jun 2020 12:09 AM
 Operator : AIRLAB16:AR
 Sample : IT015-LLSTD100
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 09:57:05 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 09:55:48 2020
 Response via : Initial Calibration

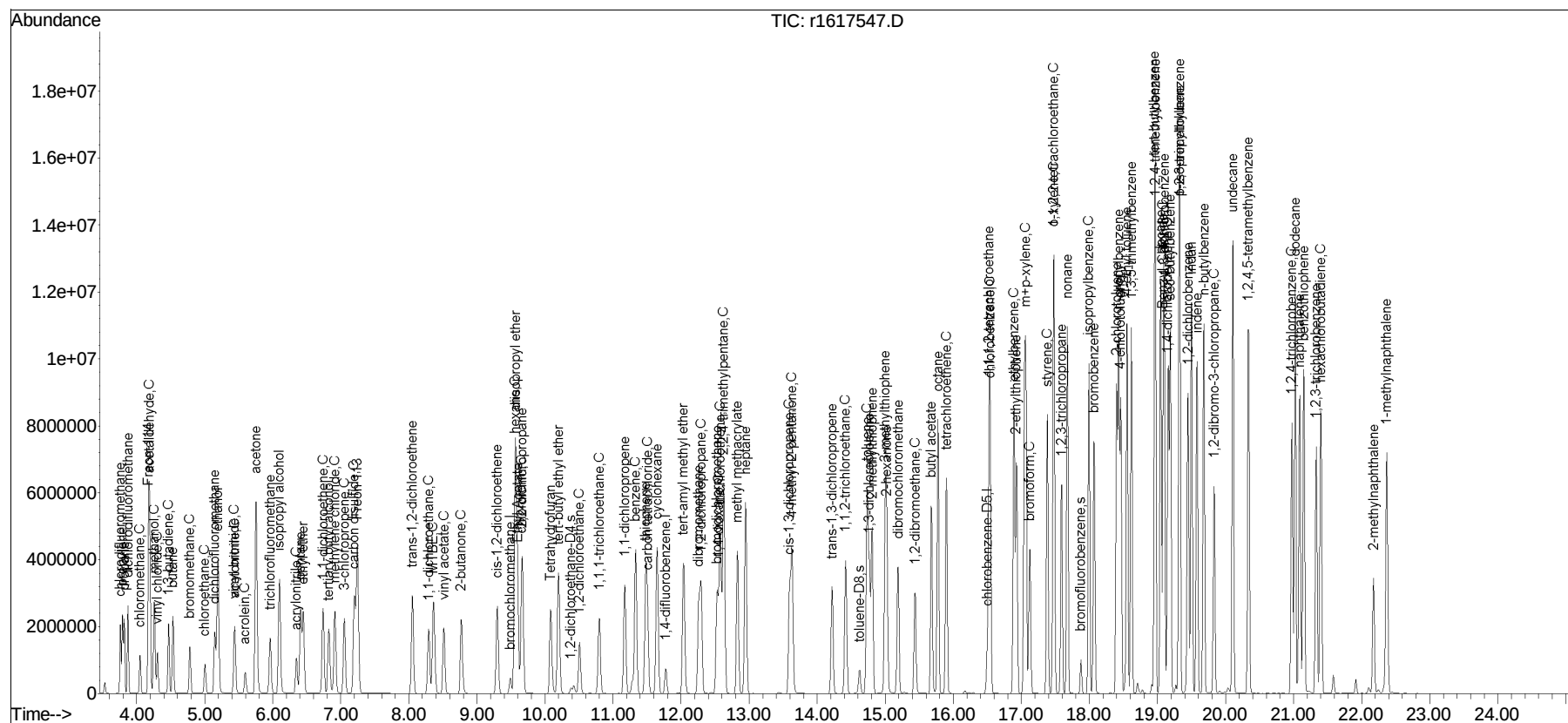
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.583	115	6116415	88.149	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.833	75	1638152	94.379	ppbV	91
112) undecane	20.108	57	5246297	85.365	ppbV #	85
113) 1,2,4,5-tetramethylben...	20.333	119	7479628	81.138	ppbV	98
114) dodecane	21.025	57	4711362	91.032	ppbV	84
115) 1,2,4-trichlorobenzene	20.975	180	3072506	115.862	ppbV	98
116) naphthalene	21.092	128	8732083	107.960	ppbV	98
117) 1,2,3-trichlorobenzene	21.333	180	2835602	109.627	ppbV	99
118) benzothiophene	21.150	134	9006854	129.294	ppbV	98
119) hexachlorobutadiene	21.400	225	2051233	81.902	ppbV	99
120) 2-methylnaphthalene	22.175	142	2258629	139.777	ppbV	99
121) 1-methylnaphthalene	22.367	142	4845282	117.501	ppbV	96

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

```
Data Path   : O:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File   : r1617547.D
Acq On      : 10 Jun 2020   12:09 AM
Operator    : AIRLAB16:AR
Sample      : IT015-LLSTD100
Misc        : WG1379955
ALS Vial    : 0      Sample Multiplier: 1
```

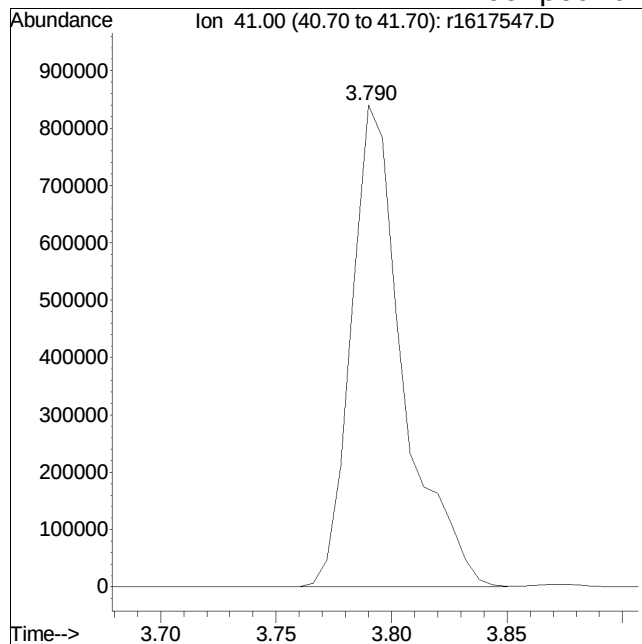
Quant Time: Jun 10 09:57:05 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 09:55:48 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

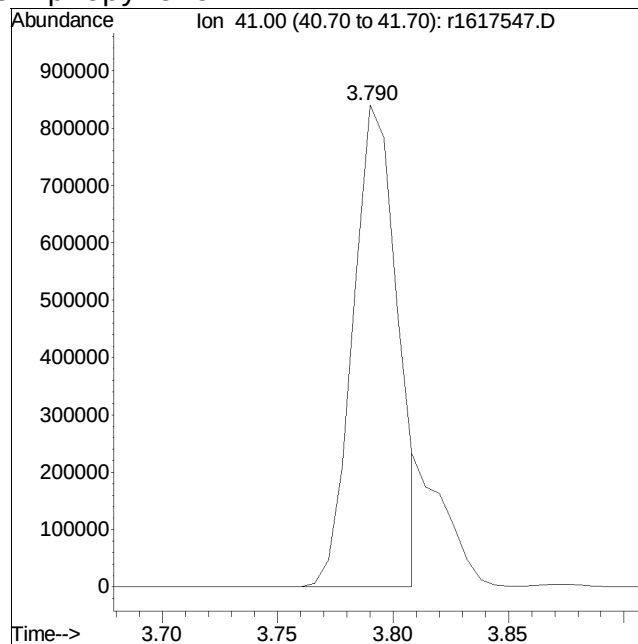
Data Path : 0:\Forensics\Data\AirLab16\QMethod : TFS16_200609.M
Data File : r1617547.D Operator : AIRLAB16:AR
Date Inj'd : 6/10/2020 0:2: 9 Instrument :
Sample : IT015-LLSTD100 Quant Date : 6/10/2020 9:57 am

Compound #3: propylene



Original Peak Response = 1315178

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



Manual Peak Response = 1130802 M6

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617550.D
 Acq On : 10 Jun 2020 8:33 AM
 Operator : AIRLAB16:AR
 Sample : CT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 11:28:09 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	92	0.00
2	chlorodifluoromethane	0.708	0.626	11.6	79	0.00
3	propylene	0.444	0.453	-2.0	91	0.00
4	propane	0.479	0.431	10.0	80	0.00
5	dichlorodifluoromethane	0.737	0.723	1.9	87	0.00
6 C	chloromethane	0.411	0.394	4.1	85	-0.01
7	Freon-114	0.959	0.949	1.0	87	0.00
8 C	methanol	0.160	0.162	-1.3	88	-0.01
9 C	vinyl chloride	0.423	0.401	5.2	83	0.00
10 C	1,3-butadiene	0.356	0.362	-1.7	93	0.00
11	butane	0.700	0.595	15.0	77	0.00
13 C	bromomethane	0.377	0.357	5.3	83	0.00
14 C	chloroethane	0.208	0.198	4.8	84	-0.01
15	ethanol	0.295	0.288	2.4	82	-0.01
16	dichlorofluoromethane	0.702	0.611	13.0	76	-0.01
17 C	vinyl bromide	0.373	0.356	4.6	85	-0.01
18 C	acrolein	0.179	0.152	15.1	75	0.00
19	acetone	0.610	0.456	25.2	65	-0.01
20 C	acetonitrile	0.385	0.338	12.2	77	-0.01
21	trichlorofluoromethane	0.544	0.521	4.2	84	-0.01
22	isopropyl alcohol	0.693	0.558	19.5	72	0.00
23 C	acrylonitrile	0.340	0.313	7.9	82	-0.01
24	pentane	0.898	0.678	24.5	76	-0.01
25	ethyl ether	0.634	0.531	16.2	79	0.00
26 C	1,1-dichloroethene	0.666	0.616	7.5	80	-0.01
27	tertiary butyl alcohol	0.617	0.655	-6.2	92	-0.01
28 C	methylene chloride	0.664	0.645	2.9	84	-0.01
29 C	3-chloropropene	0.801	0.781	2.5	87	-0.01
30 C	carbon disulfide	1.754	1.622	7.5	81	-0.01
31	Freon 113	0.997	0.949	4.8	81	-0.01
32	trans-1,2-dichloroethene	0.729	0.665	8.8	81	-0.02
33 C	1,1-dichloroethane	0.903	0.826	8.5	79	0.00
34 C	MTBE	1.206	1.231	-2.1	87	-0.02
35 C	vinyl acetate	1.187	1.046	11.9	77	0.00
36 C	2-butanone	1.239	1.198	3.3	83	-0.02
37	cis-1,2-dichloroethene	0.648	0.611	5.7	81	0.00
38	Ethyl Acetate	0.176	0.181	-2.8	88	0.00
39 C	chloroform	0.837	0.816	2.5	85	0.00
40	Tetrahydrofuran	0.761	0.727	4.5	81	-0.02

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617550.D
 Acq On : 10 Jun 2020 8:33 AM
 Operator : AIRLAB16:AR
 Sample : CT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 11:28:09 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.566	0.510	9.9	78	-0.02
42 C	1,2-dichloroethane	0.450	0.402	10.7	78	0.00
43 I	1,4-difluorobenzene	1.000	1.000	0.0	92	-0.01
44 C	hexane	0.319	0.314	1.6	87	0.00
45	diisopropyl ether	0.160	0.151	5.6	79	-0.02
46	tert-butyl ethyl ether	0.471	0.434	7.9	77	-0.02
47 s	1,2-dichloroethane-D4	0.145	0.134	7.6	83	0.00
48 C	1,1,1-trichloroethane	0.247	0.233	5.7	81	0.00
49	1,1-dichloropropene	0.282	0.268	5.0	80	0.00
50 C	benzene	0.697	0.670	3.9	82	-0.01
52 C	carbon tetrachloride	0.228	0.225	1.3	84	0.00
53	cyclohexane	0.346	0.349	-0.9	89	-0.01
54	tert-amyl methyl ether	0.497	0.456	8.2	78	-0.01
55	dibromomethane	0.197	0.176	10.7	77	0.00
56 C	1,2-dichloropropane	0.236	0.222	5.9	80	-0.01
57	bromodichloromethane	0.330	0.333	-0.9	88	-0.01
58 C	1,4-dioxane	0.144	0.141	2.1	90	-0.01
59 C	trichloroethene	0.295	0.285	3.4	82	-0.01
60 C	2,2,4-trimethylpentane	1.058	1.051	0.7	87	0.00
61	methyl methacrylate	0.349	0.232	33.5#	54#	0.00
62	heptane	0.488	0.478	2.0	86	-0.01
63 C	cis-1,3-dichloropropene	0.328	0.349	-6.4	87	0.00
64 C	4-methyl-2-pentanone	0.530	0.524	1.1	86	0.00
65	trans-1,3-dichloropropene	0.286	0.260	9.1	74	0.00
66 C	1,1,2-trichloroethane	0.264	0.257	2.7	82	0.00
67 I	chlorobenzene-D5	1.000	1.000	0.0	92	0.00
68 C	toluene	5.586	5.389	3.5	82	0.00
69 s	toluene-D8	5.171	5.031	2.7	87	0.00
71	1,3-dichloropropane	2.560	2.339	8.6	78	-0.02
72	2-hexanone	3.280	3.384	-3.2	85	0.00
74	dibromochloromethane	2.549	2.681	-5.2	91	0.00
75 C	1,2-dibromoethane	2.791	2.796	-0.2	84	0.00
76	butyl acetate	0.587	0.537	8.5	74	0.00
77	octane	1.936	1.799	7.1	78	0.00
78 C	tetrachloroethene	2.504	2.467	1.5	84	0.00
79	1,1,1,2-tetrachloroethane	1.951	1.837	5.8	78	0.00
80 C	chlorobenzene	4.831	4.869	-0.8	84	-0.02

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617550.D
 Acq On : 10 Jun 2020 8:33 AM
 Operator : AIRLAB16:AR
 Sample : CT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 11:28:09 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81 C	ethylbenzene	7.282	7.222	0.8	83	0.00
83 C	m+p-xylene	5.849	5.771	1.3	83	0.00
84 C	bromoform	2.311	2.513	-8.7	93	0.00
85 C	styrene	5.147	5.321	-3.4	84	-0.02
86 C	1,1,2,2-tetrachloroethane	4.261	4.511	-5.9	87	0.00
87 C	o-xylene	5.919	5.915	0.1	84	0.00
88	1,2,3-trichloropropane	3.328	3.173	4.7	79	0.00
89	nonane	5.413	5.021	7.2	76	0.00
90 s	bromofluorobenzene	3.607	3.499	3.0	90	0.00
91 C	isopropylbenzene	8.107	8.016	1.1	81	0.00
92	bromobenzene	4.282	4.160	2.8	81	0.00
93	2-chlorotoluene	2.498	2.262	9.4	77	0.00
94	n-propylbenzene	2.656	2.552	3.9	78	0.00
95	4-chlorotoluene	2.334	2.221	4.8	79	0.00
96	4-ethyl toluene	8.855	9.402	-6.2	87	0.00
97	1,3,5-trimethylbenzene	7.385	7.722	-4.6	83	0.00
98	tert-butylbenzene	7.182	7.179	0.0	79	0.00
99	1,2,4-trimethylbenzene	7.005	7.622	-8.8	84	0.00
100	decane	5.196	5.020	3.4	77	0.00
101 C	Benzyl Chloride	3.772	4.415	-17.0	84	0.00
102	1,3-dichlorobenzene	5.309	5.608	-5.6	83	0.00
103 C	1,4-dichlorobenzene	5.187	5.383	-3.8	81	0.00
104	sec-butylbenzene	10.266	10.261	0.0	79	0.00
106	p-isopropyltoluene	8.553	8.202	4.1	74	0.00
107	1,2-dichlorobenzene	5.045	5.408	-7.2	84	0.00
108	n-butylbenzene	7.310	7.674	-5.0	81	0.00
111 C	1,2-dibromo-3-chloropropane	1.534	1.698	-10.7	80	0.00
112	undecane	5.431	5.514	-1.5	78	0.00
114	dodecane	4.574	5.222	-14.2	75	0.00
115 C	1,2,4-trichlorobenzene	2.344	2.961	-26.3	85	0.00
116	naphthalene	7.148	8.340	-16.7	76	0.00
117	1,2,3-trichlorobenzene	2.286	2.658	-16.3	78	0.00
119 C	hexachlorobutadiene	2.213	2.552	-15.3	84	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\Airlab16\2020\06\200609T_I\
 Data File : r1617550.D
 Acq On : 10 Jun 2020 8:33 AM
 Operator : AIRLAB16:AR
 Sample : CT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 11:28:09 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default-ICV-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.475	49	296271	10.000	ppbV	0.00
Standard Area = 321867			Recovery =		92.05%	
43) 1,4-difluorobenzene	11.760	114	811105	10.000	ppbV	-0.01
Standard Area = 880461			Recovery =		92.12%	
67) chlorobenzene-D5	16.492	54	113015	10.000	ppbV	0.00
Standard Area = 123109			Recovery =		91.80%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.367	65	109012	9.267	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		92.67%	
69) toluene-D8	14.608	98	568615	9.730	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		97.30%	
90) bromofluorobenzene	17.867	95	395447	9.699	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		96.99%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.754	51	185337	8.840	ppbV	100
3) propylene	3.784	41	134163M6	10.196	ppbV	
4) propane	3.814	29	127685	8.994	ppbV	96
5) dichlorodifluoromethane	3.868	85	214081	9.810	ppbV	99
6) chloromethane	4.042	50	116605	9.581	ppbV	98
7) Freon-114	4.168	85	281096	9.896	ppbV	97
8) methanol	4.240	31	240315	50.596	ppbV	99
9) vinyl chloride	4.300	62	118796	9.473	ppbV	100
10) 1,3-butadiene	4.462	54	107174	10.152	ppbV	99
11) butane	4.528	43	176331	8.504	ppbV	100
13) bromomethane	4.774	94	105790	9.471	ppbV	98
14) chloroethane	4.990	64	58725	9.513	ppbV	97
15) ethanol	5.164	31	427079	48.818	ppbV	97
16) dichlorofluoromethane	5.128	67	181001	8.699	ppbV	99
17) vinyl bromide	5.423	106	105512	9.539	ppbV	99
18) acrolein	5.580	56	45154	8.509	ppbV	96
19) acetone	5.737	43	674986	37.360	ppbV	98
20) acetonitrile	5.420	41	100117	8.766	ppbV	97
21) trichlorofluoromethane	5.947	101	154421	9.588	ppbV	98
22) isopropyl alcohol	6.073	45	413014	20.114	ppbV	100
23) acrylonitrile	6.327	53	92743	9.211	ppbV	99
24) pentane	6.397	43	200839	7.550	ppbV	99
25) ethyl ether	6.437	31	157369	8.380	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617550.D
 Acq On : 10 Jun 2020 8:33 AM
 Operator : AIRLAB16:AR
 Sample : CT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 11:28:09 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	6.722	61	182509	9.255	ppbV	99
27) tertiary butyl alcohol	6.806	59	194054	10.610	ppbV	96
28) methylene chloride	6.896	49	191230	9.716	ppbV	98
29) 3-chloropropene	7.034	41	231440	9.748	ppbV	98
30) carbon disulfide	7.184	76	480693	9.251	ppbV	99
31) Freon 113	7.226	101	281246	9.518	ppbV	99
32) trans-1,2-dichloroethene	8.033	61	197146	9.123	ppbV	99
33) 1,1-dichloroethane	8.275	63	244790	9.154	ppbV	99
34) MTBE	8.350	73	364658	10.207	ppbV	99
35) vinyl acetate	8.500	43	309979	8.818	ppbV	99
36) 2-butanone	8.758	43	354802	9.664	ppbV	99
37) cis-1,2-dichloroethene	9.283	61	181115	9.433	ppbV	100
38) Ethyl Acetate	9.583	61	53497	10.257	ppbV	84
39) chloroform	9.642	83	241671	9.742	ppbV	100
40) Tetrahydrofuran	10.075	42	215416	9.552	ppbV	98
41) 2,2-dichloropropane	9.650	77	151129	9.019	ppbV	96
42) 1,2-dichloroethane	10.492	62	119055	8.922	ppbV	98
44) hexane	9.550	57	254319	9.820	ppbV	98
45) diisopropyl ether	9.550	87	122404	9.405	ppbV	92
46) tert-butyl ethyl ether	10.183	59	352356	9.218	ppbV	99
48) 1,1,1-trichloroethane	10.783	97	189257	9.432	ppbV	98
49) 1,1-dichloropropene	11.160	75	217775	9.510	ppbV	98
50) benzene	11.313	78	543607	9.622	ppbV	99
52) carbon tetrachloride	11.493	117	182434	9.845	ppbV	99
53) cyclohexane	11.633	56	283093	10.077	ppbV	98
54) tert-amyl methyl ether	12.027	73	370269	9.188	ppbV	99
55) dibromomethane	12.247	93	142880	8.920	ppbV	97
56) 1,2-dichloropropane	12.280	63	180185	9.405	ppbV	99
57) bromodichloromethane	12.513	83	269990	10.092	ppbV	100
58) 1,4-dioxane	12.547	88	114159	9.782	ppbV	99
59) trichloroethene	12.560	130	231005	9.651	ppbV	98
60) 2,2,4-trimethylpentane	12.613	57	852124M6	9.930	ppbV	
61) methyl methacrylate	12.820	41	188335	6.660	ppbV	98
62) heptane	12.933	43	387397	9.778	ppbV	98
63) cis-1,3-dichloropropene	13.583	75	283223	10.641	ppbV	99
64) 4-methyl-2-pentanone	13.625	43	425216	9.888	ppbV	99
65) trans-1,3-dichloropropene	14.208	75	211000	9.097	ppbV	98
66) 1,1,2-trichloroethane	14.408	97	208512	9.735	ppbV	96
68) toluene	14.725	91	609052	9.647	ppbV	99
71) 1,3-dichloropropane	14.750	76	264366	9.138	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617550.D
 Acq On : 10 Jun 2020 8:33 AM
 Operator : AIRLAB16:AR
 Sample : CT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 11:28:09 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) 2-hexanone	15.017	43	382432	10.317	ppbV	98
74) dibromochloromethane	15.175	129	302959	10.518	ppbV	99
75) 1,2-dibromoethane	15.425	107	315959	10.018	ppbV	98
76) butyl acetate	15.675	73	60708	9.151	ppbV	96
77) octane	15.767	85	203291	9.291	ppbV	98
78) tetrachloroethene	15.892	166	278796	9.851	ppbV	98
79) 1,1,1,2-tetrachloroethane	16.517	131	207627	9.418	ppbV	99
80) chlorobenzene	16.525	112	550242	10.078	ppbV	99
81) ethylbenzene	16.883	91	816161	9.917	ppbV	100
83) m+p-xylene	17.042	91	1304401	19.731	ppbV	100
84) bromoform	17.108	173	284036	10.874	ppbV	97
85) styrene	17.367	104	601353	10.338	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.467	83	509866	10.587	ppbV	100
87) o-xylene	17.467	91	668527	9.993	ppbV	100
88) 1,2,3-trichloropropane	17.583	75	358568	9.533	ppbV	99
89) nonane	17.667	43	567488	9.277	ppbV	99
91) isopropylbenzene	17.983	105	905901	9.888	ppbV	100
92) bromobenzene	18.058	77	470114	9.715	ppbV	98
93) 2-chlorotoluene	18.392	126	255666	9.056	ppbV	100
94) n-propylbenzene	18.417	120	288448	9.608	ppbV	97
95) 4-chlorotoluene	18.450	126	251024	9.517	ppbV	98
96) 4-ethyl toluene	18.542	105	1062575	10.618	ppbV	99
97) 1,3,5-trimethylbenzene	18.608	105	872698	10.457	ppbV	99
98) tert-butylbenzene	18.950	119	811391	9.997	ppbV	99
99) 1,2,4-trimethylbenzene	18.950	105	861366	10.880	ppbV	96
100) decane	19.033	57	567329	9.661	ppbV	100
101) Benzyl Chloride	19.075	91	498976	11.704	ppbV	99
102) 1,3-dichlorobenzene	19.083	146	633744	10.563	ppbV	99
103) 1,4-dichlorobenzene	19.142	146	608321	10.376	ppbV	98
104) sec-butylbenzene	19.175	105	1159698	9.996	ppbV	99
106) p-isopropyltoluene	19.308	119	926938	9.589	ppbV	96
107) 1,2-dichlorobenzene	19.433	146	611129	10.718	ppbV	100
108) n-butylbenzene	19.667	91	867268	10.498	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.825	75	191936	11.071	ppbV	98
112) undecane	20.100	57	623199	10.153	ppbV	99
114) dodecane	21.017	57	590163	11.417	ppbV	99
115) 1,2,4-trichlorobenzene	20.967	180	334597	12.633	ppbV	98
116) naphthalene	21.083	128	942555	11.667	ppbV	99
117) 1,2,3-trichlorobenzene	21.325	180	300341	11.625	ppbV	98
119) hexachlorobutadiene	21.392	225	288454	11.531	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\
 Data File : r1617550.D
 Acq On : 10 Jun 2020 8:33 AM
 Operator : AIRLAB16:AR
 Sample : CT015-LLSTD010
 Misc : WG1379955
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 10 11:28:09 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

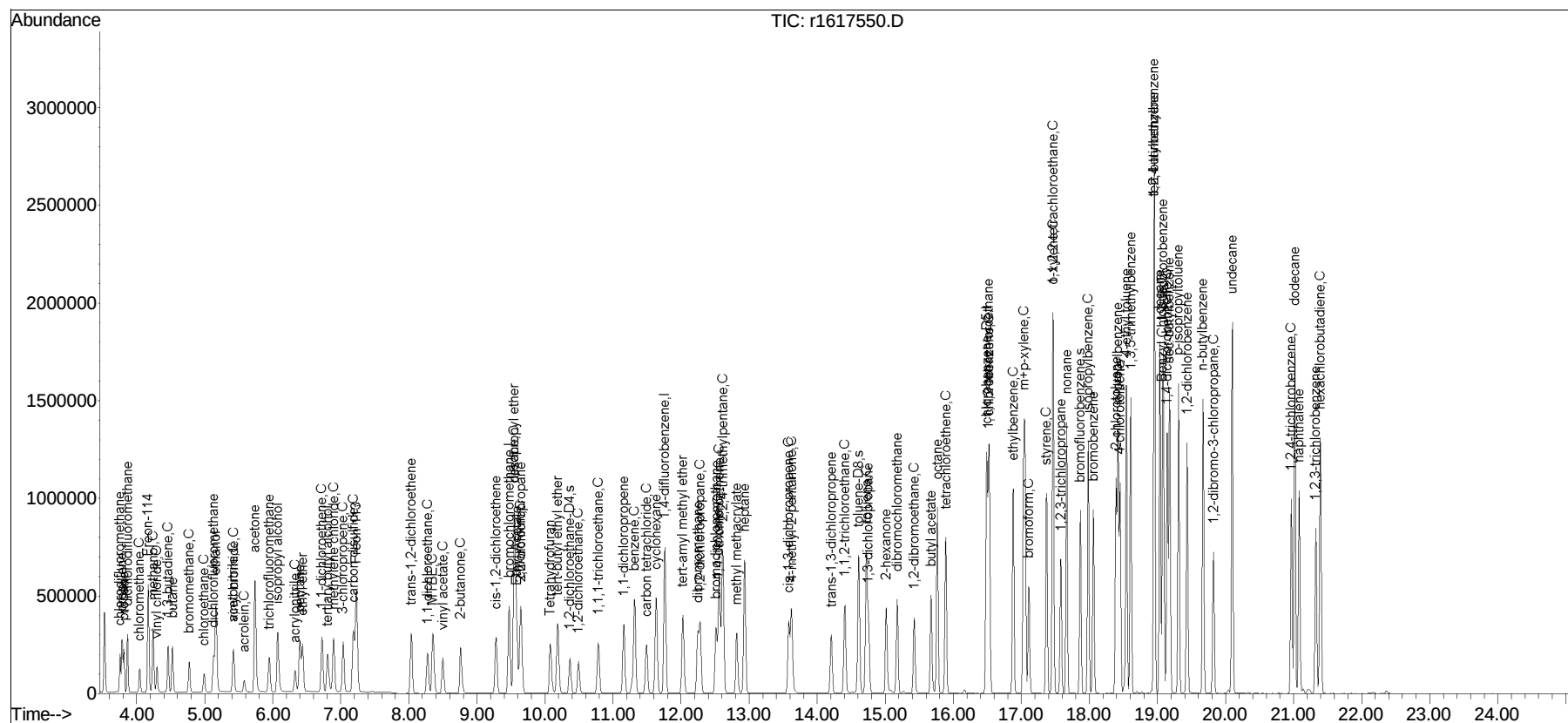
CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\r1617544.D
 Sub List : Default-ICV-AP2 - All compounds listed

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

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

```
Data Path   : 0:\Forensics\Data\AirLab16\2020\06\200609T_I\
Data File  : r1617550.D
Acq On     : 10 Jun 2020    8:33 AM
Operator   : AIRLAB16:AR
Sample     : CT015-LLSTD010
Misc       : WG1379955
ALS Vial   : 0    Sample Multiplier: 1
```

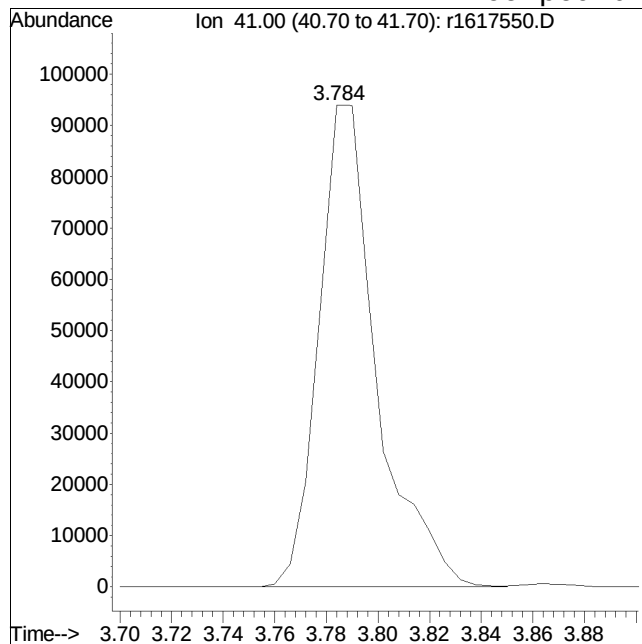
Quant Time: Jun 10 11:28:09 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200609T_I\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 11:25:58 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

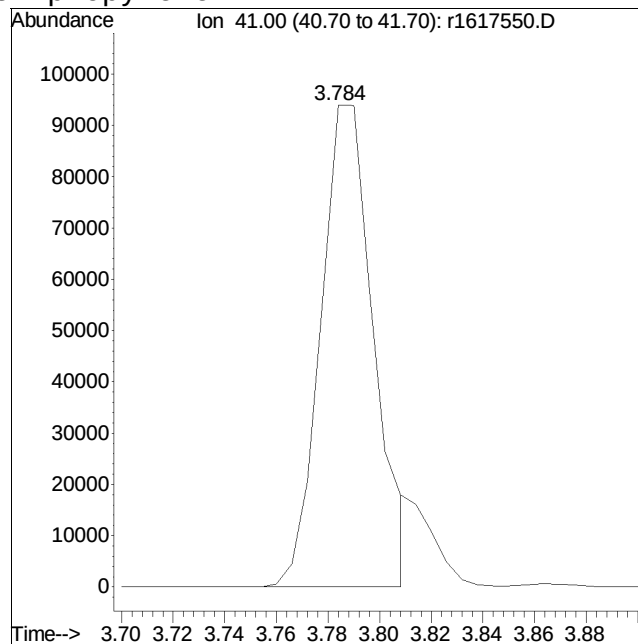
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617550.D Operator : AIRLAB16:AR
Date Inj'd : 6/10/2020 0:8: 3 Instrument :
Sample : CT015-LLSTD010 Quant Date : 6/10/2020 11:27 am

Compound #3: propylene



Original Peak Response = 146403

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

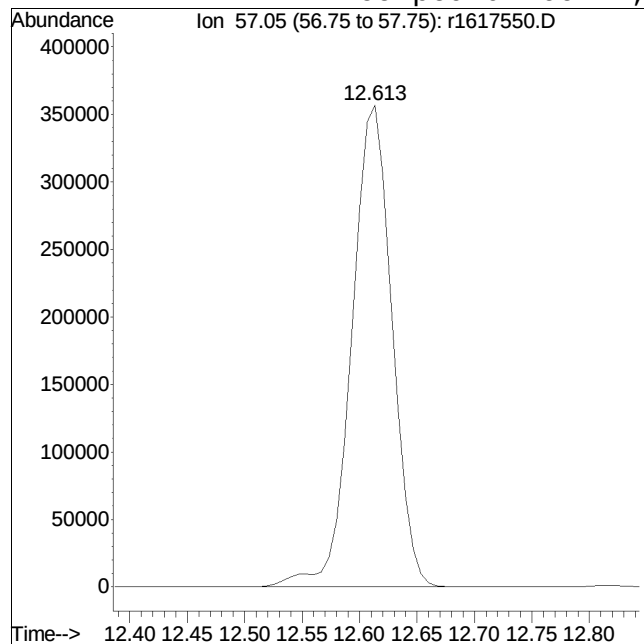


Manual Peak Response = 134163 M6

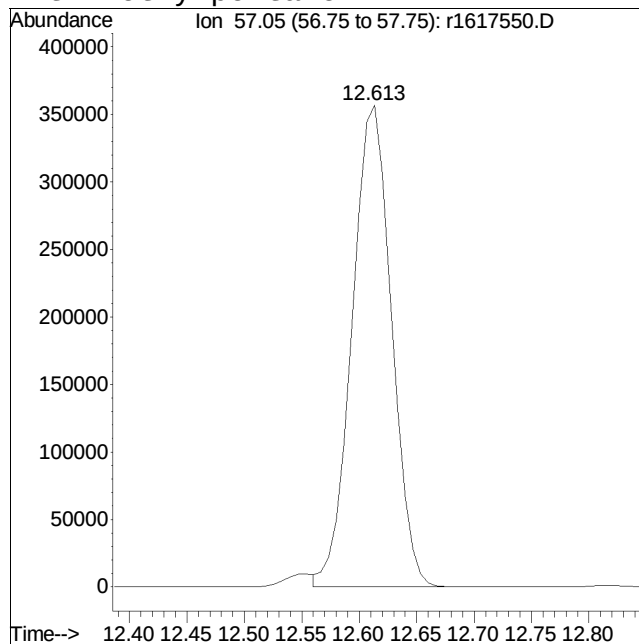
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617550.D Operator : AIRLAB16:AR
Date Inj'd : 6/10/2020 0:8: 3 Instrument :
Sample : CT015-LLSTD010 Quant Date : 6/10/2020 11:27 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 869336



Manual Peak Response = 852124 M6

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

Continuing Calibration

Calibration Verification Summary

Form 7

Air Volatiles

Client : Langan Engineering & Environmental
 Project Name : BROOME ST.
 Instrument ID : AIRLAB16
 Lab File ID : R1617677
 Sample No : WG1382260-2
 Channel :

Lab Number : L2024597
 Project Number : 100646801
 Calibration Date : 06/16/20 11:48
 Init. Calib. Date(s) : 06/09/20 06/10/20
 Init. Calib. Times : 19:26 00:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	97	-.05
chlorodifluoromethane	0.708	0.731	-	-3.2	30	97	-.03
propylene	0.444	0.511	-	-15.1	30	109	-.03
propane	0.479	0.493	-	-2.9	30	97	-.04
dichlorodifluoromethane	0.737	0.788	-	-6.9	30	100	-.04
chloromethane	0.411	0.447	-	-8.8	30	102	-.04
Freon-114	0.959	1.064	-	-10.9	30	102	-.04
methanol	0.16	0.193	-	-20.6	30	110	-.04
vinyl chloride	0.423	0.461	-	-9	30	101	-.04
1,3-butadiene	0.356	0.378	-	-6.2	30	102	-.04
butane	0.7	0.751	-	-7.3	30	103	-.04
bromomethane	0.377	0.416	-	-10.3	30	102	-.04
chloroethane	0.208	0.227	-	-9.1	30	101	-.05
ethanol	0.295	0.306	-	-3.7	30	92	-.04
dichlorofluoromethane	0.702	0.772	-	-10	30	102	-.04
vinyl bromide	0.373	0.415	-	-11.3	30	105	-.05
acrolein	0.179	0.176	-	1.7	30	91	-.04
acetone	0.61	0.68	-	-11.5	30	102	-.04
acetonitrile	0.385	0.421	-	-9.4	30	101	-.05
trichlorofluoromethane	0.544	0.575	-	-5.7	30	98	-.05
isopropyl alcohol	0.693	0.721	-	-4	30	98	-.05
acrylonitrile	0.34	0.342	-	-0.6	30	94	-.05
pentane	0.898	0.84	-	6.5	30	100	-.05
ethyl ether	0.634	0.585	-	7.7	30	92	-.05
1,1-dichloroethene	0.666	0.725	-	-8.9	30	99	-.05
tertiary butyl alcohol	0.617	0.662	-	-7.3	30	98	-.05
methylene chloride	0.664	0.671	-	-1.1	30	92	-.05
3-chloropropene	0.801	0.873	-	-9	30	102	-.05
carbon disulfide	1.754	1.856	-	-5.8	30	98	-.05
Freon 113	0.997	1.066	-	-6.9	30	97	-.05
trans-1,2-dichloroethene	0.729	0.78	-	-7	30	100	-.05
1,1-dichloroethane	0.903	0.958	-	-6.1	30	96	-.05
MTBE	1.206	1.226	-	-1.7	30	91	-.05
vinyl acetate	1.187	1.131	-	4.7	30	88	-.05
2-butanone	1.239	1.375	-	-11	30	100	-.05
cis-1,2-dichloroethene	0.648	0.694	-	-7.1	30	97	-.05
Ethyl Acetate	0.176	0.2	-	-13.6	30	102	-.04
chloroform	0.837	0.843	-	-0.7	30	93	-.05
Tetrahydrofuran	0.761	0.861	-	-13.1	30	101	-.05
2,2-dichloropropane	0.566	0.546	-	3.5	30	88	-.05
1,2-dichloroethane	0.45	0.441	-	2	30	90	-.04
1,4-difluorobenzene	1	1	-	0	30	100	-.05
hexane	0.319	0.335	-	-5	30	101	-.05

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : Langan Engineering & Environmental
 Project Name : BROOME ST.
 Instrument ID : AIRLAB16
 Lab File ID : R1617677
 Sample No : WG1382260-2
 Channel :

Lab Number : L2024597
 Project Number : 100646801
 Calibration Date : 06/16/20 11:48
 Init. Calib. Date(s) : 06/09/20 06/10/20
 Init. Calib. Times : 19:26 00:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.16	0.166	-	-3.8	30	94	-.05
tert-butyl ethyl ether	0.471	0.473	-	-0.4	30	91	-.05
1,1,1-trichloroethane	0.247	0.24	-	2.8	30	90	-.05
1,1-dichloropropene	0.282	0.283	-	-0.4	30	92	-.05
benzene	0.697	0.71	-	-1.9	30	95	-.05
carbon tetrachloride	0.228	0.221	-	3.1	30	90	-.05
cyclohexane	0.346	0.36	-	-4	30	99	-.05
tert-amyl methyl ether	0.497	0.479	-	3.6	30	89	-.05
dibromomethane	0.197	0.211	-	-7.1	30	100	-.05
1,2-dichloropropane	0.236	0.254	-	-7.6	30	99	-.05
bromodichloromethane	0.33	0.332	-	-0.6	30	95	-.05
1,4-dioxane	0.144	0.149	-	-3.5	30	103	-.05
trichloroethene	0.295	0.312	-	-5.8	30	98	-.05
2,2,4-trimethylpentane	1.058	1.126	-	-6.4	30	101	-.05
methyl methacrylate	0.349	0.375	-	-7.4	30	96	-.05
heptane	0.488	0.521	-	-6.8	30	102	-.05
cis-1,3-dichloropropene	0.328	0.338	-	-3	30	92	-.04
4-methyl-2-pentanone	0.53	0.573	-	-8.1	30	102	-.05
trans-1,3-dichloropropene	0.286	0.288	-	-0.7	30	89	-.04
1,1,2-trichloroethane	0.264	0.284	-	-7.6	30	99	-.04
chlorobenzene-D5	1	1	-	0	30	94	-.03
toluene	5.586	6.201	-	-11	30	97	-.04
1,3-dichloropropane	2.56	2.764	-	-8	30	95	-.04
2-hexanone	3.28	3.789	-	-15.5	30	98	-.04
dibromochloromethane	2.549	2.885	-	-13.2	30	101	-.04
1,2-dibromoethane	2.791	3.162	-	-13.3	30	97	-.04
butyl acetate	0.587	0.626	-	-6.6	30	89	-.04
octane	1.936	2.144	-	-10.7	30	96	-.03
tetrachloroethene	2.504	2.814	-	-12.4	30	99	-.04
1,1,1,2-tetrachloroethane	1.951	2.231	-	-14.4	30	97	-.03
chlorobenzene	4.831	5.399	-	-11.8	30	96	-.04
ethylbenzene	7.282	8.227	-	-13	30	97	-.03
m+p-xylene	5.849	6.581	-	-12.5	30	97	-.03
bromoform	2.311	2.683	-	-16.1	30	102	-.03
styrene	5.147	5.92	-	-15	30	96	-.04
1,1,2,2-tetrachloroethane	4.261	4.998	-	-17.3	30	99	-.03
o-xylene	5.919	6.655	-	-12.4	30	97	-.03
1,2,3-trichloropropane	3.328	3.696	-	-11.1	30	95	-.03
nonane	5.413	6.228	-	-15.1	30	97	-.03
isopropylbenzene	8.107	9.181	-	-13.2	30	96	-.03
bromobenzene	4.282	4.662	-	-8.9	30	93	-.03
2-chlorotoluene	2.498	2.781	-	-11.3	30	97	-.03
n-propylbenzene	2.656	3.093	-	-16.5	30	97	-.03

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : Langan Engineering & Environmental
 Project Name : BROOME ST.
 Instrument ID : AIRLAB16
 Lab File ID : R1617677
 Sample No : WG1382260-2
 Channel :

Lab Number : L2024597
 Project Number : 100646801
 Calibration Date : 06/16/20 11:48
 Init. Calib. Date(s) : 06/09/20 06/10/20
 Init. Calib. Times : 19:26 00:09

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	2.334	2.691	-	-15.3	30	98	-.03
4-ethyl toluene	8.855	10.488	-	-18.4	30	99	-.03
1,3,5-trimethylbenzene	7.385	8.7	-	-17.8	30	96	-.03
tert-butylbenzene	7.182	8.459	-	-17.8	30	95	-.02
1,2,4-trimethylbenzene	7.005	8.434	-	-20.4	30	95	-.02
decane	5.196	6.199	-	-19.3	30	98	-.03
Benzyl Chloride	3.772	4.594	-	-21.8	30	90	-.03
1,3-dichlorobenzene	5.309	6.237	-	-17.5	30	95	-.02
1,4-dichlorobenzene	5.187	6.139	-	-18.4	30	94	-.03
sec-butylbenzene	10.266	12.326	-	-20.1	30	97	-.02
p-isopropyltoluene	8.553	10.236	-	-19.7	30	95	-.02
1,2-dichlorobenzene	5.045	6.026	-	-19.4	30	96	-.03
n-butylbenzene	7.31	8.997	-	-23.1	30	98	-.03
1,2-dibromo-3-chloropropan	1.534	1.785	-	-16.4	30	86	-.03
undecane	5.431	6.746	-	-24.2	30	98	-.03
dodecane	4.574	6.394	-	-39.8*	30	95	-.03
1,2,4-trichlorobenzene	2.344	2.985	-	-27.3	30	88	-.03
naphthalene	7.148	9.153	-	-28	30	86	-.02
1,2,3-trichlorobenzene	2.286	2.946	-	-28.9	30	89	-.03
hexachlorobutadiene	2.213	2.848	-	-28.7	30	96	-.03

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617677.D
 Acq On : 16 Jun 2020 11:48 AM
 Operator : AIRLAB16:RY
 Sample : WG1382260-2,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:53:27 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	97	-0.05
2	chlorodifluoromethane	0.708	0.731	-3.2	97	-0.03
3	propylene	0.444	0.511	-15.1	109	-0.03
4	propane	0.479	0.493	-2.9	97	-0.04
5	dichlorodifluoromethane	0.737	0.788	-6.9	100	-0.04
6 C	chloromethane	0.411	0.447	-8.8	102	-0.04
7	Freon-114	0.959	1.064	-10.9	102	-0.04
8 C	methanol	0.160	0.193	-20.6	110	-0.04
9 C	vinyl chloride	0.423	0.461	-9.0	101	-0.04
10 C	1,3-butadiene	0.356	0.378	-6.2	102	-0.04
11	butane	0.700	0.751	-7.3	103	-0.04
13 C	bromomethane	0.377	0.416	-10.3	102	-0.04
14 C	chloroethane	0.208	0.227	-9.1	101	-0.05
15	ethanol	0.295	0.306	-3.7	92	-0.04
16	dichlorofluoromethane	0.702	0.772	-10.0	102	-0.04
17 C	vinyl bromide	0.373	0.415	-11.3	105	-0.05
18 C	acrolein	0.179	0.176	1.7	91	-0.04
19	acetone	0.610	0.680	-11.5	102	-0.04
20 C	acetonitrile	0.385	0.421	-9.4	101	-0.05
21	trichlorofluoromethane	0.544	0.575	-5.7	98	-0.05
22	isopropyl alcohol	0.693	0.721	-4.0	98	-0.05
23 C	acrylonitrile	0.340	0.342	-0.6	94	-0.05
24	pentane	0.898	0.840	6.5	100	-0.05
25	ethyl ether	0.634	0.585	7.7	92	-0.05
26 C	1,1-dichloroethene	0.666	0.725	-8.9	99	-0.05
27	tertiary butyl alcohol	0.617	0.662	-7.3	98	-0.05
28 C	methylene chloride	0.664	0.671	-1.1	92	-0.05
29 C	3-chloropropene	0.801	0.873	-9.0	102	-0.05
30 C	carbon disulfide	1.754	1.856	-5.8	98	-0.05
31	Freon 113	0.997	1.066	-6.9	97	-0.05
32	trans-1,2-dichloroethene	0.729	0.780	-7.0	100	-0.05
33 C	1,1-dichloroethane	0.903	0.958	-6.1	96	-0.05
34 C	MTBE	1.206	1.226	-1.7	91	-0.05
35 C	vinyl acetate	1.187	1.131	4.7	88	-0.05
36 C	2-butanone	1.239	1.375	-11.0	100	-0.05
37	cis-1,2-dichloroethene	0.648	0.694	-7.1	97	-0.05
38	Ethyl Acetate	0.176	0.200	-13.6	102	-0.04
39 C	chloroform	0.837	0.843	-0.7	93	-0.05
40	Tetrahydrofuran	0.761	0.861	-13.1	101	-0.05

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617677.D
 Acq On : 16 Jun 2020 11:48 AM
 Operator : AIRLAB16:RY
 Sample : WG1382260-2,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:53:27 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.566	0.546	3.5	88	-0.05
42 C	1,2-dichloroethane	0.450	0.441	2.0	90	-0.04
43 I	1,4-difluorobenzene	1.000	1.000	0.0	100	-0.05
44 C	hexane	0.319	0.335	-5.0	101	-0.05
45	diisopropyl ether	0.160	0.166	-3.8	94	-0.05
46	tert-butyl ethyl ether	0.471	0.473	-0.4	91	-0.05
48 C	1,1,1-trichloroethane	0.247	0.240	2.8	90	-0.05
49	1,1-dichloropropene	0.282	0.283	-0.4	92	-0.05
50 C	benzene	0.697	0.710	-1.9	95	-0.05
52 C	carbon tetrachloride	0.228	0.221	3.1	90	-0.05
53	cyclohexane	0.346	0.360	-4.0	99	-0.05
54	tert-amyl methyl ether	0.497	0.479	3.6	89	-0.05
55	dibromomethane	0.197	0.211	-7.1	100	-0.05
56 C	1,2-dichloropropane	0.236	0.254	-7.6	99	-0.05
57	bromodichloromethane	0.330	0.332	-0.6	95	-0.05
58 C	1,4-dioxane	0.144	0.149	-3.5	103	-0.05
59 C	trichloroethene	0.295	0.312	-5.8	98	-0.05
60 C	2,2,4-trimethylpentane	1.058	1.126	-6.4	101	-0.05
61	methyl methacrylate	0.349	0.375	-7.4	96	-0.05
62	heptane	0.488	0.521	-6.8	102	-0.05
63 C	cis-1,3-dichloropropene	0.328	0.338	-3.0	92	-0.04
64 C	4-methyl-2-pentanone	0.530	0.573	-8.1	102	-0.05
65	trans-1,3-dichloropropene	0.286	0.288	-0.7	89	-0.04
66 C	1,1,2-trichloroethane	0.264	0.284	-7.6	99	-0.04
67 I	chlorobenzene-D5	1.000	1.000	0.0	94	-0.03
68 C	toluene	5.586	6.201	-11.0	97	-0.04
71	1,3-dichloropropane	2.560	2.764	-8.0	95	-0.04
72	2-hexanone	3.280	3.789	-15.5	98	-0.04
74	dibromochloromethane	2.549	2.885	-13.2	101	-0.04
75 C	1,2-dibromoethane	2.791	3.162	-13.3	97	-0.04
76	butyl acetate	0.587	0.626	-6.6	89	-0.04
77	octane	1.936	2.144	-10.7	96	-0.03
78 C	tetrachloroethene	2.504	2.814	-12.4	99	-0.04
79	1,1,1,2-tetrachloroethane	1.951	2.231	-14.4	97	-0.03
80 C	chlorobenzene	4.831	5.399	-11.8	96	-0.04
81 C	ethylbenzene	7.282	8.227	-13.0	97	-0.03
83 C	m+p-xylene	5.849	6.581	-12.5	97	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617677.D
 Acq On : 16 Jun 2020 11:48 AM
 Operator : AIRLAB16:RY
 Sample : WG1382260-2,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:53:27 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84 C	bromoform	2.311	2.683	-16.1	102	-0.03
85 C	styrene	5.147	5.920	-15.0	96	-0.04
86 C	1,1,2,2-tetrachloroethane	4.261	4.998	-17.3	99	-0.03
87 C	o-xylene	5.919	6.655	-12.4	97	-0.03
88	1,2,3-trichloropropane	3.328	3.696	-11.1	95	-0.03
89	nonane	5.413	6.228	-15.1	97	-0.03
91 C	isopropylbenzene	8.107	9.181	-13.2	96	-0.03
92	bromobenzene	4.282	4.662	-8.9	93	-0.03
93	2-chlorotoluene	2.498	2.781	-11.3	97	-0.03
94	n-propylbenzene	2.656	3.093	-16.5	97	-0.03
95	4-chlorotoluene	2.334	2.691	-15.3	98	-0.03
96	4-ethyl toluene	8.855	10.488	-18.4	99	-0.03
97	1,3,5-trimethylbenzene	7.385	8.700	-17.8	96	-0.03
98	tert-butylbenzene	7.182	8.459	-17.8	95	-0.02
99	1,2,4-trimethylbenzene	7.005	8.434	-20.4	95	-0.02
100	decane	5.196	6.199	-19.3	98	-0.03
101 C	Benzyl Chloride	3.772	4.594	-21.8	90	-0.03
102	1,3-dichlorobenzene	5.309	6.237	-17.5	95	-0.02
103 C	1,4-dichlorobenzene	5.187	6.139	-18.4	94	-0.03
104	sec-butylbenzene	10.266	12.326	-20.1	97	-0.02
106	p-isopropyltoluene	8.553	10.236	-19.7	95	-0.02
107	1,2-dichlorobenzene	5.045	6.026	-19.4	96	-0.03
108	n-butylbenzene	7.310	8.997	-23.1	98	-0.03
111 C	1,2-dibromo-3-chloropropane	1.534	1.785	-16.4	86	-0.03
112	undecane	5.431	6.746	-24.2	98	-0.03
114	dodecane	4.574	6.394	-39.8#	95	-0.03
115 C	1,2,4-trichlorobenzene	2.344	2.985	-27.3	88	-0.03
116	naphthalene	7.148	9.153	-28.0	86	-0.02
117	1,2,3-trichlorobenzene	2.286	2.946	-28.9	89	-0.03
119 C	hexachlorobutadiene	2.213	2.848	-28.7	96	-0.03

* 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\Airlab16\2020\06\200616T\
 Data File : r1617677.D
 Acq On : 16 Jun 2020 11:48 AM
 Operator : AIRLAB16:RY
 Sample : WG1382260-2,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:53:27 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.43	49	312675	10.000	ppbV	-0.05
Standard Area = 312675			Recovery	=	100.00%	
43) 1,4-difluorobenzene	11.73	114	882052	10.000	ppbV	-0.05
Standard Area = 882052			Recovery	=	100.00%	
67) chlorobenzene-D5	16.47	54	116247	10.000	ppbV	-0.03
Standard Area = 116247			Recovery	=	100.00%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) chlorodifluoromethane	3.73	51	228709	10.337	ppbV	100
3) propylene	3.76	41	159902M6	11.515	ppbV	
4) propane	3.78	29	154186	10.291	ppbV	95
5) dichlorodifluoromethane	3.84	85	246382	10.698	ppbV	99
6) chloromethane	4.02	50	139806	10.885	ppbV	100
7) Freon-114	4.14	85	332782	11.101	ppbV	99
8) methanol	4.22	31	301444	60.137	ppbV	99
9) vinyl chloride	4.27	62	144062	10.885	ppbV	99
10) 1,3-butadiene	4.43	54	118036	10.594	ppbV	96
11) butane	4.49	43	234858	10.733	ppbV	99
13) bromomethane	4.74	94	130162	11.041	ppbV	100
14) chloroethane	4.95	64	70946	10.890	ppbV	99
15) ethanol	5.13	31	478876	51.867	ppbV	95
16) dichlorofluoromethane	5.10	67	241458	10.996	ppbV	100
17) vinyl bromide	5.39	106	129614	11.103	ppbV	97
18) acrolein	5.55	56	55042	9.828	ppbV	98
19) acetone	5.70	43	1062841	55.741	ppbV	97
20) acetonitrile	5.38	41	131534	10.913	ppbV	98
21) trichlorofluoromethane	5.91	101	179740	10.575	ppbV	99
22) isopropyl alcohol	6.04	45	563718	26.013	ppbV	100
23) acrylonitrile	6.29	53	106931	10.063	ppbV	99
24) pentane	6.36	43	262793	9.361	ppbV	99
25) ethyl ether	6.40	31	182817	9.225	ppbV	95
26) 1,1-dichloroethene	6.69	61	226676	10.892	ppbV	99
27) tertiary butyl alcohol	6.77	59	207140	10.732	ppbV	93
28) methylene chloride	6.86	49	209920	10.106	ppbV	98
29) 3-chloropropene	7.00	41	272998	10.895	ppbV	96
30) carbon disulfide	7.14	76	580179	10.580	ppbV	99
31) Freon 113	7.19	101	333397	10.691	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617677.D
 Acq On : 16 Jun 2020 11:48 AM
 Operator : AIRLAB16:RY
 Sample : WG1382260-2,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:53:27 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.00	61	243875	10.693	ppbV	99
33) 1,1-dichloroethane	8.23	63	299693	10.619	ppbV	100
34) MTBE	8.32	73	383287	10.166	ppbV	100
35) vinyl acetate	8.46	43	353673	9.533	ppbV	100
36) 2-butanone	8.72	43	430065	11.099	ppbV	100
37) cis-1,2-dichloroethene	9.24	61	217052	10.711	ppbV	100
38) Ethyl Acetate	9.55	61	62435	11.342	ppbV	77
39) chloroform	9.60	83	263520	10.066	ppbV	100
40) Tetrahydrofuran	10.04	42	269098	11.307	ppbV	99
41) 2,2-dichloropropane	9.62	77	170601	9.647	ppbV	95
42) 1,2-dichloroethane	10.46	62	137804	9.785	ppbV	98
44) hexane	9.51	57	295767	10.502	ppbV	95
45) diisopropyl ether	9.52	87	146171	10.328	ppbV	98
46) tert-butyl ethyl ether	10.15	59	417277	10.038	ppbV	99
48) 1,1,1-trichloroethane	10.74	97	211624	9.698	ppbV	96
49) 1,1-dichloropropene	11.12	75	249400	10.015	ppbV	98
50) benzene	11.28	78	626524	10.197	ppbV	99
52) carbon tetrachloride	11.45	117	195293	9.692	ppbV	98
53) cyclohexane	11.59	56	317641	10.397	ppbV	100
54) tert-amyl methyl ether	11.99	73	422489	9.641	ppbV	99
55) dibromomethane	12.21	93	185703	10.661	ppbV	97
56) 1,2-dichloropropane	12.24	63	224056	10.754	ppbV	99
57) bromodichloromethane	12.47	83	293114	10.075	ppbV	100
58) 1,4-dioxane	12.51	88	131218	10.339	ppbV	99
59) trichloroethene	12.53	130	275563	10.586	ppbV	98
60) 2,2,4-trimethylpentane	12.57	57	993166	10.643	ppbV	100
61) methyl methacrylate	12.78	41	331029	10.764	ppbV	99
62) heptane	12.90	43	459389	10.663	ppbV	98
63) cis-1,3-dichloropropene	13.55	75	297696	10.285	ppbV	99
64) 4-methyl-2-pentanone	13.58	43	505129	10.801	ppbV	100
65) trans-1,3-dichloropropene	14.18	75	254359	10.084	ppbV	98
66) 1,1,2-trichloroethane	14.38	97	250373	10.749	ppbV	98
68) toluene	14.69	91	720803	11.099	ppbV	100
71) 1,3-dichloropropane	14.73	76	321272	10.796	ppbV	98
72) 2-hexanone	14.98	43	440445	11.551	ppbV	99
74) dibromochloromethane	15.14	129	335344	11.318	ppbV	100
75) 1,2-dibromoethane	15.39	107	367516	11.328	ppbV	100
76) butyl acetate	15.64	73	72820	10.671	ppbV	96
77) octane	15.74	85	249201	11.073	ppbV	94
78) tetrachloroethene	15.86	166	327138	11.238	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617677.D
 Acq On : 16 Jun 2020 11:48 AM
 Operator : AIRLAB16:RY
 Sample : WG1382260-2,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:53:27 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.49	131	259304	11.435	ppbV	100
80)	chlorobenzene	16.50	112	627567	11.175	ppbV	97
81)	ethylbenzene	16.86	91	956323	11.297	ppbV	99
83)	m+p-xylene	17.02	91	1530150	22.503	ppbV	100
84)	bromoform	17.08	173	311918	11.609	ppbV	97
85)	styrene	17.34	104	688202	11.503	ppbV	97
86)	1,1,2,2-tetrachloroethane	17.44	83	580981	11.728	ppbV	99
87)	o-xylene	17.44	91	773653	11.243	ppbV	100
88)	1,2,3-trichloropropane	17.56	75	429596	11.104	ppbV	99
89)	nonane	17.64	43	723965	11.505	ppbV	99
91)	isopropylbenzene	17.96	105	1067313	11.325	ppbV	99
92)	bromobenzene	18.03	77	541905	10.888	ppbV	98
93)	2-chlorotoluene	18.37	126	323275M6	11.132	ppbV	
94)	n-propylbenzene	18.40	120	359605	11.645	ppbV	95
95)	4-chlorotoluene	18.43	126	312805	11.529	ppbV	100
96)	4-ethyl toluene	18.52	105	1219209	11.844	ppbV	99
97)	1,3,5-trimethylbenzene	18.58	105	1011348	11.781	ppbV	100
98)	tert-butylbenzene	18.93	119	983345	11.778	ppbV	99
99)	1,2,4-trimethylbenzene	18.93	105	980392	12.039	ppbV	96
100)	decane	19.02	57	720626	11.930	ppbV	100
101)	Benzyl Chloride	19.05	91	534066	12.179	ppbV	98
102)	1,3-dichlorobenzene	19.07	146	725014	11.748	ppbV	99
103)	1,4-dichlorobenzene	19.12	146	713635	11.834	ppbV	97
104)	sec-butylbenzene	19.16	105	1432850	12.007	ppbV	99
106)	p-isopropyltoluene	19.29	119	1189881	11.967	ppbV	100
107)	1,2-dichlorobenzene	19.41	146	700520	11.944	ppbV	99
108)	n-butylbenzene	19.65	91	1045920	12.308	ppbV	97
111)	1,2-dibromo-3-chloropr...	19.80	75	207453	11.634	ppbV	93
112)	undecane	20.07	57	784197	12.420	ppbV	99
114)	dodecane	20.99	57	743250	13.979	ppbV	99
115)	1,2,4-trichlorobenzene	20.94	180	346965	12.735	ppbV	97
116)	naphthalene	21.06	128	1063982	12.804	ppbV	100
117)	1,2,3-trichlorobenzene	21.30	180	342455	12.887	ppbV	98
119)	hexachlorobutadiene	21.37	225	331028	12.865	ppbV	97

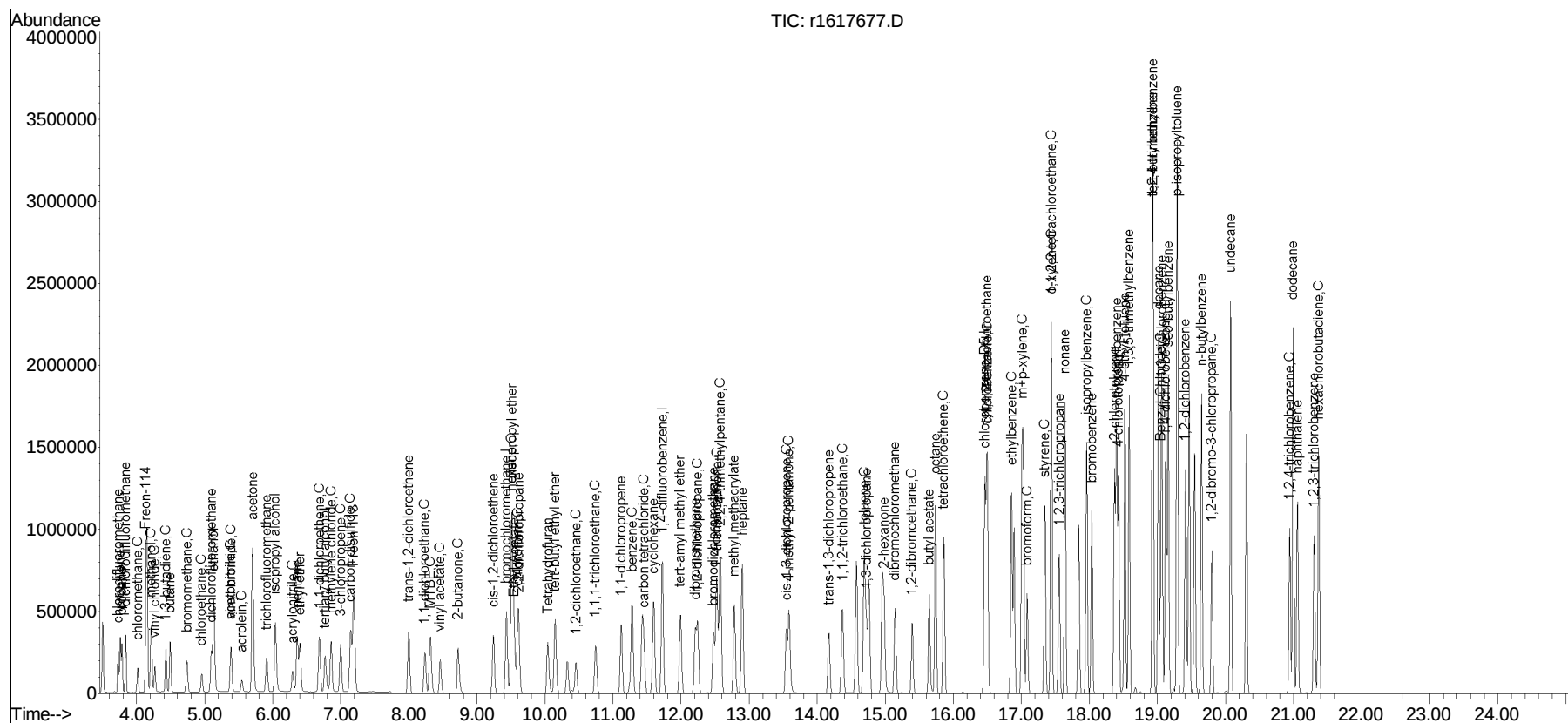
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

```
Data Path : 0:\Forensics\Data\AirLab16\2020\06\200616T\
Data File : r1617677.D
Acq On    : 16 Jun 2020  11:48 AM
Operator  : AIRLAB16:RY
Sample    : WG1382260-2,3,250,250
Misc      : WG1382260,ICAL16872
ALS Vial  : 0      Sample Multiplier: 1
```

Quant Time: Jun 16 13:53:27 2020
Quant Method : 0:\Forensics\Data\AirLab16\2020\06\200616T\TFS16_200609.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 11:25:58 2020
Response via : Initial Calibration

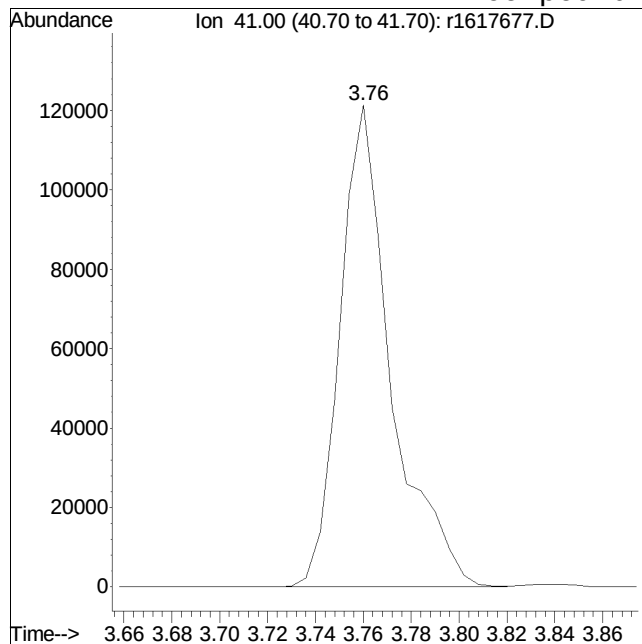
Sub List : Default-LCS-AP2 - All compounds listed616T\r1617677.D



Manual Integration/Negative Proof Report

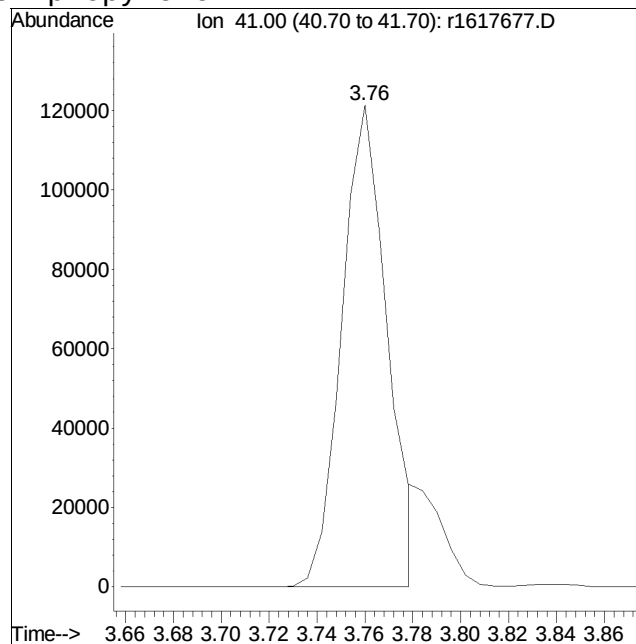
Data Path : 0:\Forensics\Data\AirLab16\QMethod : TFS16_200609.M
Data File : r1617677.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:1: 8 Instrument :
Sample : WG1382260-2,3,250,250 Quant Date : 6/16/2020 1:53 pm

Compound #3: propylene



Original Peak Response = 180355

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

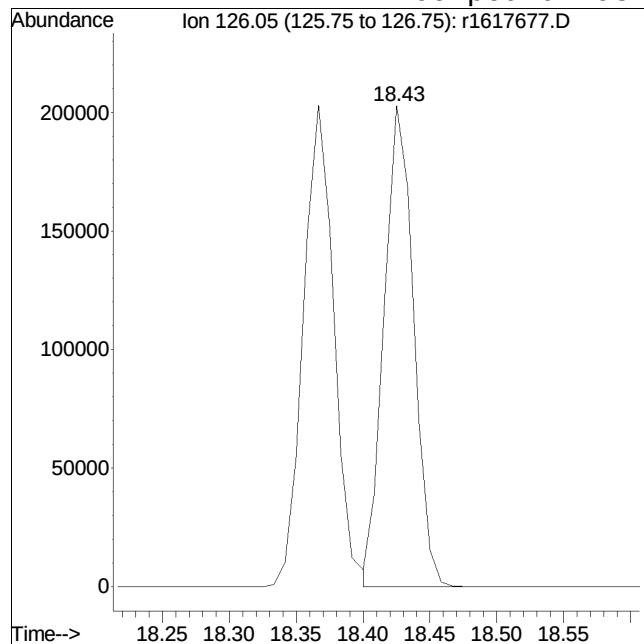


Manual Peak Response = 159902 M6

Manual Integration/Negative Proof Report

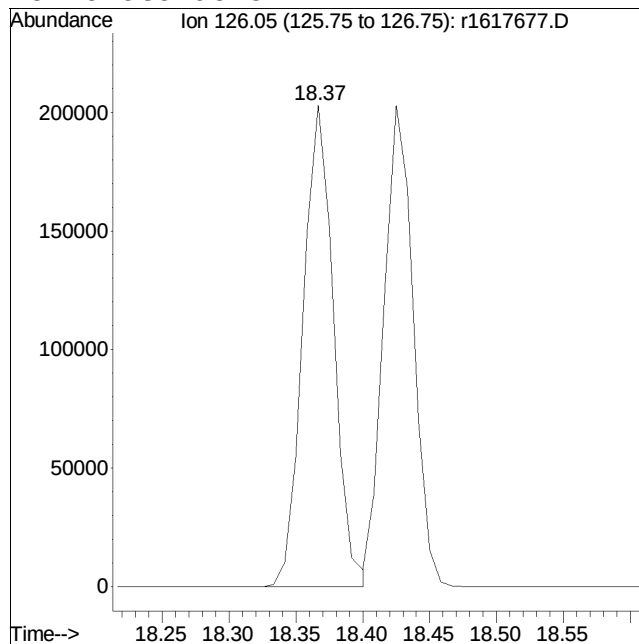
Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617677.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:1: 8 Instrument :
Sample : WG1382260-2,3,250,250 Quant Date : 6/16/2020 1:53 pm

Compound #93: 2-chlorotoluene



Original Peak Response = 312805

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



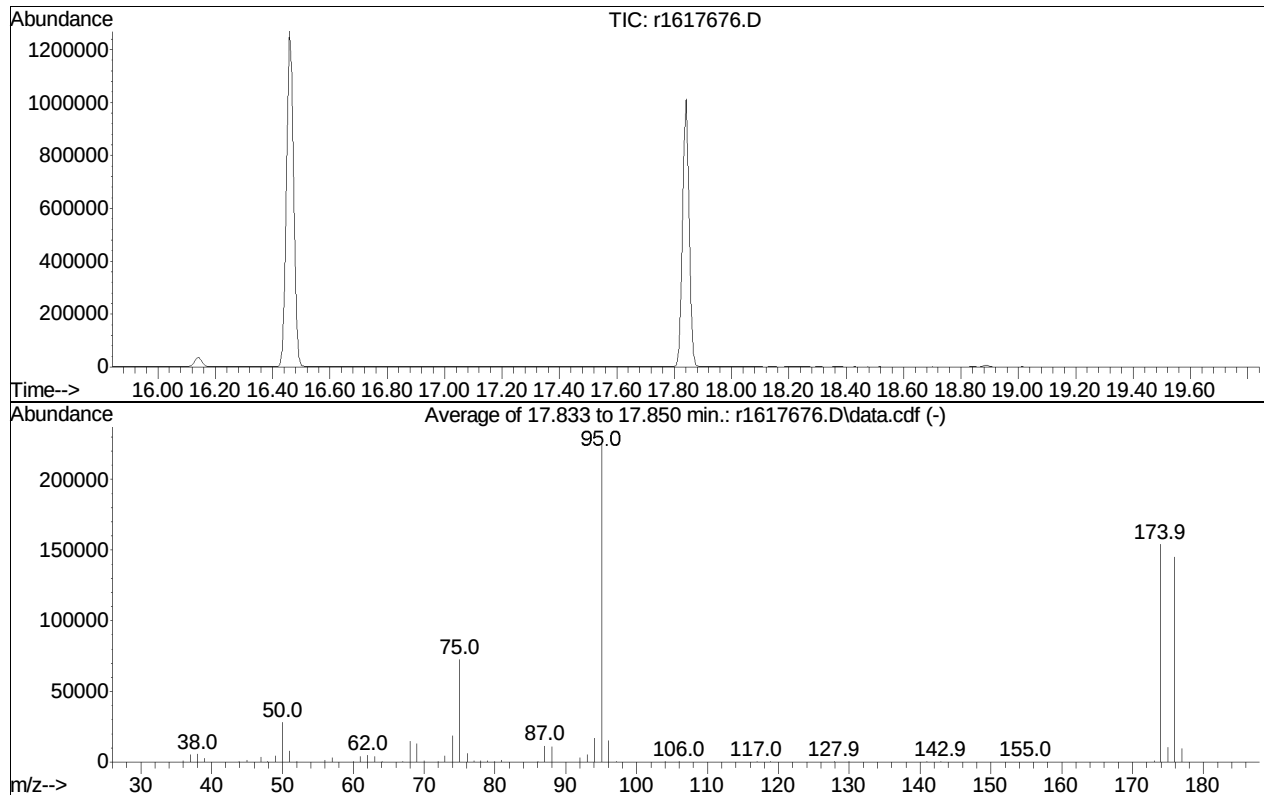
Manual Peak Response = 323275 M6

BFB

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617676.D
 Acq On : 16 Jun 2020 11:06 AM
 Operator : AIRLAB16:RY
 Sample : WG1382260-1,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Wed Jun 10 11:25:58 2020



Spectrum Information: Average of 17.833 to 17.850 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	12.5	28149	PASS
75	95	30	66	32.2	72686	PASS
95	95	100	100	100.0	226029	PASS
96	95	5	9	6.7	15091	PASS
173	174	0.00	2	0.6	871	PASS
174	95	50	120	68.2	154154	PASS
175	174	4	9	6.9	10665	PASS
176	174	93	101	94.3	145305	PASS
177	176	5	9	6.6	9561	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617680.D
 Acq On : 16 Jun 2020 2:42 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-4,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 05:08:05 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.43	49	313561	10.000	ppbV	-0.06
Standard Area = 312675			Recovery = 100.28%			
43) 1,4-difluorobenzene	11.72	114	887354	10.000	ppbV	-0.05
Standard Area = 882052			Recovery = 100.60%			
67) chlorobenzene-D5	16.47	54	115388	10.000	ppbV	-0.03
Standard Area = 116247			Recovery = 99.26%			

System Monitoring Compounds

Target Compounds						Qvalue
5) dichlorodifluoromethane	0.00		0		N.D.	
6) chloromethane	0.00		0		N.D.	
7) Freon-114	0.00		0		N.D.	
9) vinyl chloride	0.00		0		N.D.	
10) 1,3-butadiene	0.00		0		N.D.	
13) bromomethane	0.00		0		N.D.	
14) chloroethane	0.00		0		N.D.	
15) ethanol	5.14	31	10214	1.103	ppbV	97
17) vinyl bromide	0.00		0		N.D.	
19) acetone	5.73	43	2300	0.120	ppbV #	93
21) trichlorofluoromethane	0.00		0		N.D.	
22) isopropyl alcohol	6.05		0		N.D.	
26) 1,1-dichloroethene	0.00		0		N.D.	
27) tertiary butyl alcohol	0.00		0		N.D.	
28) methylene chloride	6.85		0		N.D.	
29) 3-chloropropene	0.00		0		N.D.	
30) carbon disulfide	7.15		0		N.D.	
31) Freon 113	0.00		0		N.D.	
32) trans-1,2-dichloroethene	0.00		0		N.D.	
33) 1,1-dichloroethane	0.00		0		N.D.	
34) MTBE	0.00		0		N.D.	
36) 2-butanone	8.81		0		N.D.	
37) cis-1,2-dichloroethene	0.00		0		N.D.	
38) Ethyl Acetate	0.00		0		N.D.	
39) chloroform	0.00		0		N.D.	
40) Tetrahydrofuran	0.00		0		N.D.	
42) 1,2-dichloroethane	0.00		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617680.D
 Acq On : 16 Jun 2020 2:42 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-4,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 05:08:05 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	0.00		0		N.D.	
48) 1,1,1-trichloroethane	0.00		0		N.D.	
50) benzene	11.28		0		N.D.	
52) carbon tetrachloride	0.00		0		N.D.	
53) cyclohexane	0.00		0		N.D.	d
56) 1,2-dichloropropane	0.00		0		N.D.	
57) bromodichloromethane	0.00		0		N.D.	
58) 1,4-dioxane	0.00		0		N.D.	
59) trichloroethene	0.00		0		N.D.	
60) 2,2,4-trimethylpentane	0.00		0		N.D.	
62) heptane	0.00		0		N.D.	
63) cis-1,3-dichloropropene	0.00		0		N.D.	
64) 4-methyl-2-pentanone	0.00		0		N.D.	
65) trans-1,3-dichloropropene	0.00		0		N.D.	
66) 1,1,2-trichloroethane	0.00		0		N.D.	
68) toluene	14.69		0		N.D.	
72) 2-hexanone	0.00		0		N.D.	
74) dibromochloromethane	0.00		0		N.D.	
75) 1,2-dibromoethane	0.00		0		N.D.	
78) tetrachloroethene	0.00		0		N.D.	
80) chlorobenzene	0.00		0		N.D.	
81) ethylbenzene	17.02		0		N.D.	
83) m+p-xylene	17.02		0		N.D.	
84) bromoform	0.00		0		N.D.	
85) styrene	17.36		0		N.D.	
86) 1,1,2,2-tetrachloroethane	0.00		0		N.D.	
87) o-xylene	0.00		0		N.D.	
96) 4-ethyl toluene	18.52		0		N.D.	
97) 1,3,5-trimethylbenzene	18.59		0		N.D.	
99) 1,2,4-trimethylbenzene	18.93		0		N.D.	
101) Benzyl Chloride	19.06		0		N.D.	
102) 1,3-dichlorobenzene	19.07		0		N.D.	
103) 1,4-dichlorobenzene	19.13		0		N.D.	
107) 1,2-dichlorobenzene	19.42		0		N.D.	
115) 1,2,4-trichlorobenzene	20.95	180	1823	0.067	ppbV	93
119) hexachlorobutadiene	0.00		0		N.D.	

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617680.D
 Acq On : 16 Jun 2020 2:42 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-4,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 05:08:05 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

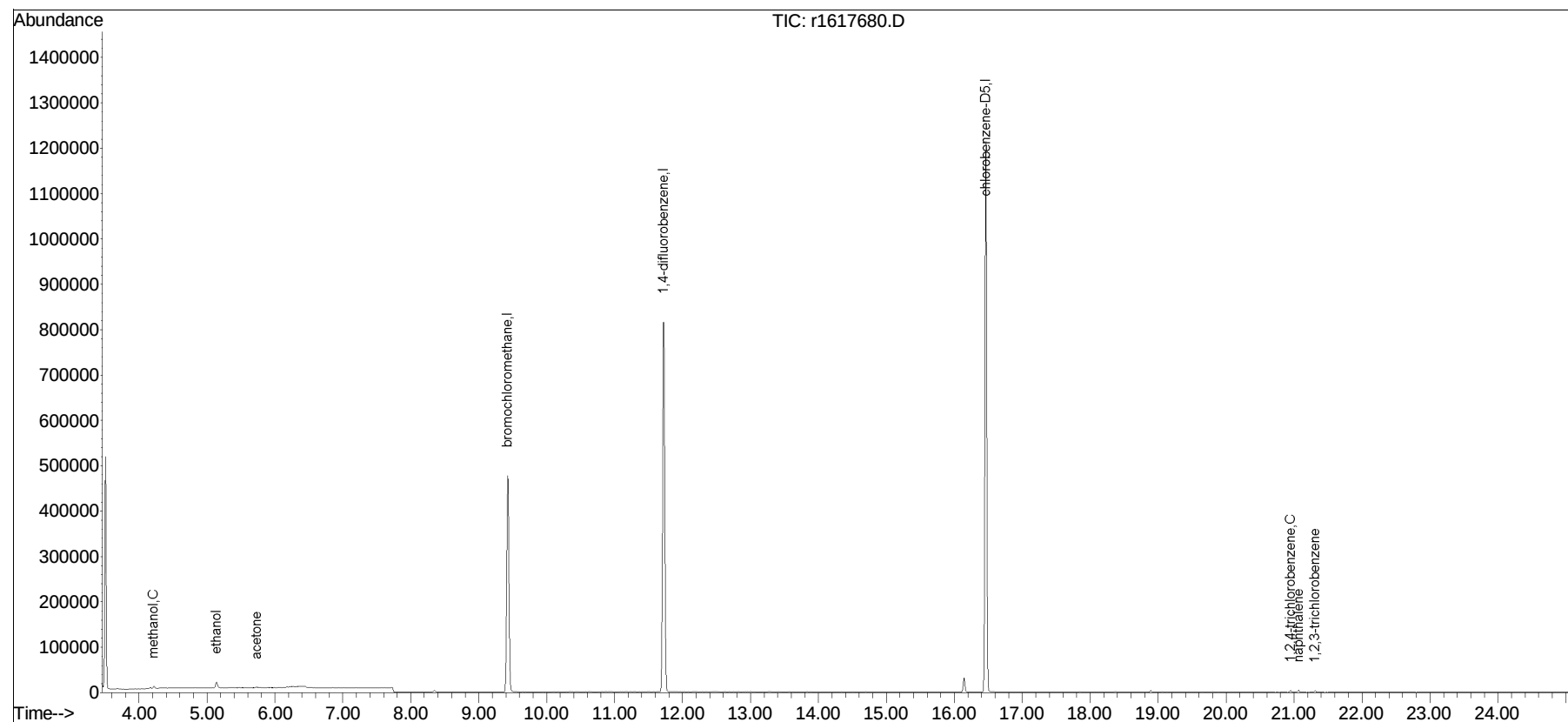
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

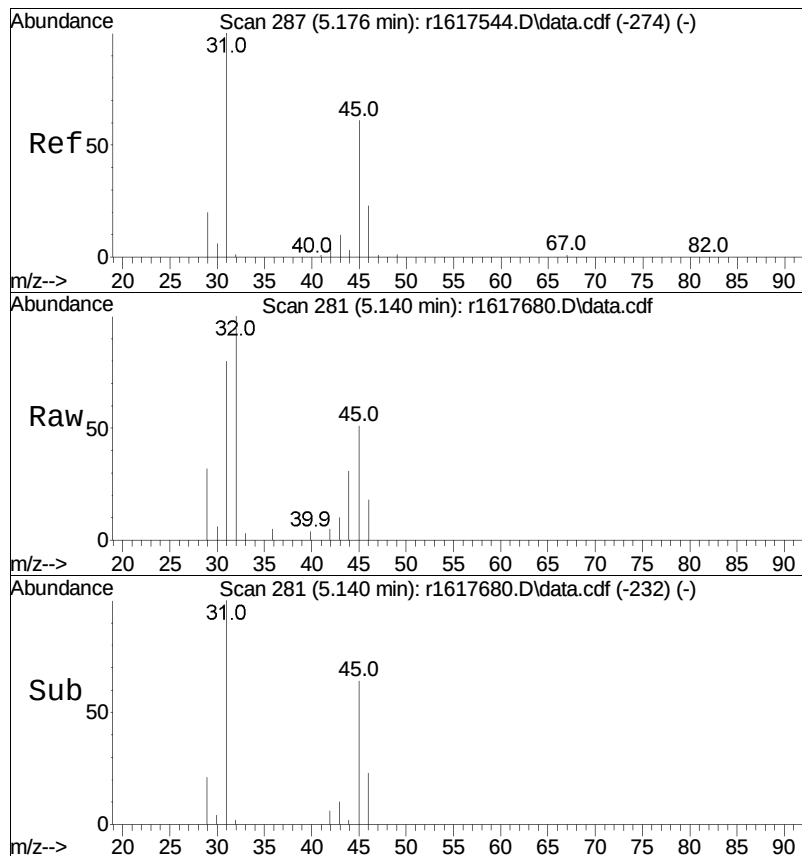
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
Data File : r1617680.D
Acq On : 16 Jun 2020 2:42 PM
Operator : AIRLAB16:RY
Sample : WG1382260-4,3,250,250
Misc : WG1382260,ICAL16872
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 05:08:05 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 11:25:58 2020
Response via : Initial Calibration

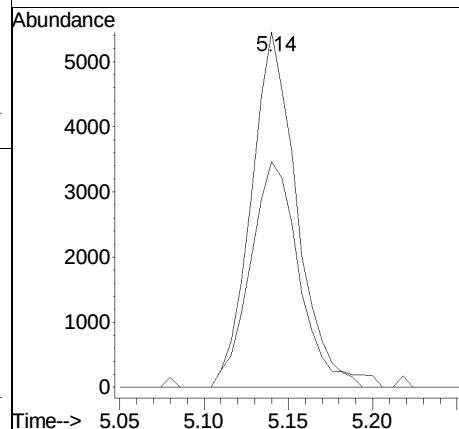
Sub List : Default-LCS-AP2 - All compounds listed616T\r1617677.D

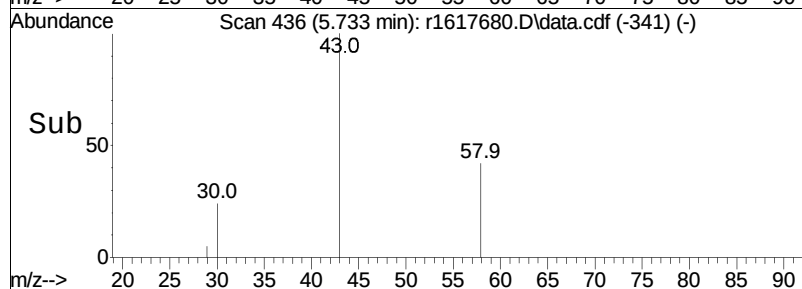
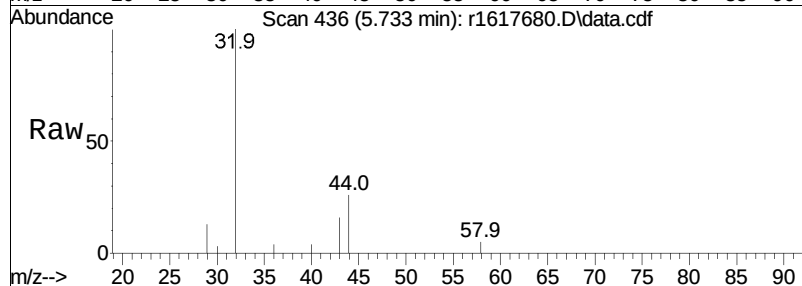
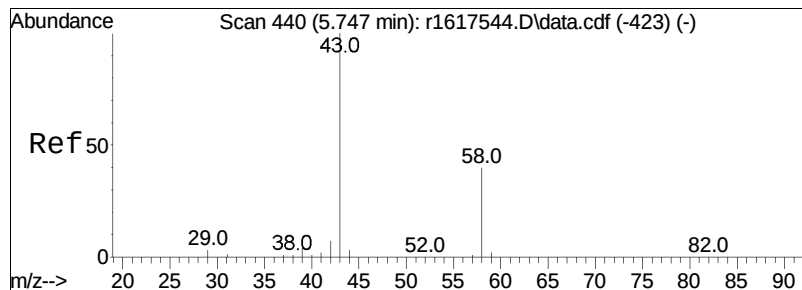




#15
ethanol
Concen: 1.10 ppbV
RT: 5.14 min Scan# 281
Delta R.T. -0.036 min
Lab File: r1617680.D
Acq: 16 Jun 2020 2:42 PM

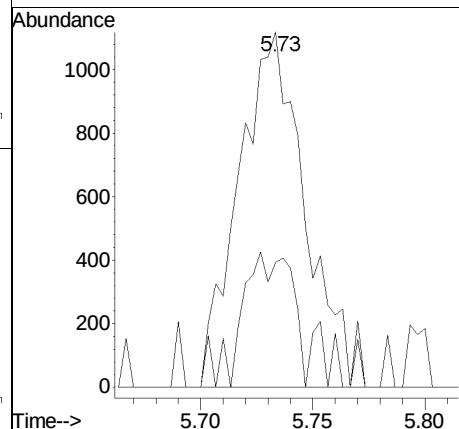
Tgt Ion:	31	45	Ratio	100	63.5	Resp:	10214	Lower	Upper
31	100								
45		63.5						49.2	73.8

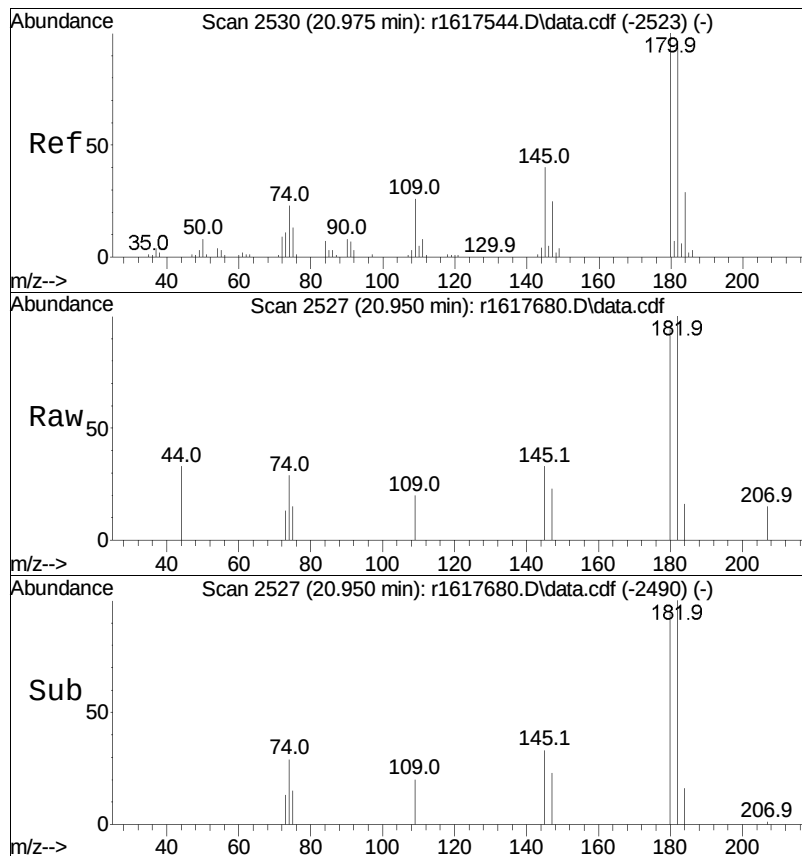




#19
acetone
Concen: 0.12 ppbV
RT: 5.73 min Scan# 436
Delta R.T. -0.013 min
Lab File: r1617680.D
Acq: 16 Jun 2020 2:42 PM

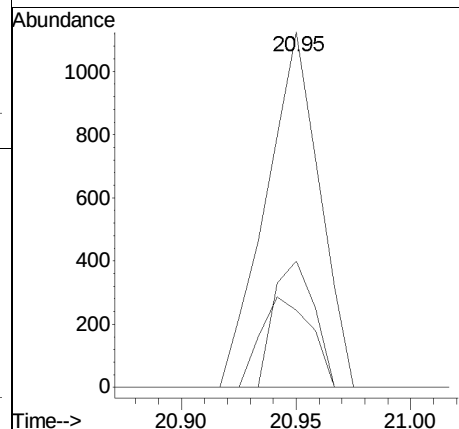
Tgt Ion	Ratio	Lower	Upper
43	100		
58	35.2	31.8	47.8
57	0.0	0.8	1.2





#115
 1,2,4-trichlorobenzene
 Concen: 0.07 ppbV
 RT: 20.95 min Scan# 2527
 Delta R.T. -0.025 min
 Lab File: r1617680.D
 Acq: 16 Jun 2020 2:42 PM

Tgt Ion:180	Resp:	1823
Ion Ratio	Lower	Upper
180 100		
145 35.6	31.7	47.5
109 21.7	20.6	31.0



Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617680.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:2: 2 Instrument :
Sample : WG1382260-4,3,250,250 Quant Date : 6/17/2020 5:07 am

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

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617678.D
 Acq On : 16 Jun 2020 12:31 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-3,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:54:31 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	bromochloromethane	10.000	10.000	0.0	97	-0.05
2	chlorodifluoromethane	10.000	8.650	13.5	81	-0.03
3	propylene	10.000	10.961	-9.6	103	-0.03
4	propane	10.000	8.592	14.1	81	-0.04
5	dichlorodifluoromethane	10.000	9.671	3.3	91	-0.04
6 C	chloromethane	10.000	9.774	2.3	92	-0.04
7	Freon-114	10.000	10.038	-0.4	92	-0.03
8 C	methanol	50.000	50.057	-0.1	92	-0.04
9 C	vinyl chloride	10.000	9.753	2.5	91	-0.04
10 C	1,3-butadiene	10.000	10.216	-2.2	98	-0.04
11	butane	10.000	9.134	8.7	87	-0.04
13 C	bromomethane	10.000	9.977	0.2	92	-0.04
14 C	chloroethane	10.000	9.949	0.5	92	-0.04
15	ethanol	50.000	46.098	7.8	82	-0.04
16	dichlorofluoromethane	10.000	9.326	6.7	86	-0.04
17 C	vinyl bromide	10.000	9.961	0.4	94	-0.05
18 C	acrolein	10.000	8.414	15.9	78	-0.04
19	acetone	50.000	40.813	18.4	75	-0.04
20 C	acetonitrile	10.000	9.534	4.7	88	-0.05
21	trichlorofluoromethane	10.000	9.963	0.4	92	-0.05
22	isopropyl alcohol	25.000	21.643	13.4	82	-0.04
23 C	acrylonitrile	10.000	9.285	7.1	87	-0.05
24	pentane	10.000	8.416	15.8	90	-0.05
25	ethyl ether	10.000	8.046	19.5	80	-0.05
26 C	1,1-dichloroethene	10.000	10.022	-0.2	91	-0.05
27	tertiary butyl alcohol	10.000	10.527	-5.3	96	-0.05
28 C	methylene chloride	10.000	9.570	4.3	87	-0.05
29 C	3-chloropropene	10.000	10.972	-9.7	103	-0.05
30 C	carbon disulfide	10.000	9.465	5.4	87	-0.05
31	Freon 113	10.000	10.254	-2.5	92	-0.05
32	trans-1,2-dichloroethene	10.000	9.886	1.1	92	-0.05
33 C	1,1-dichloroethane	10.000	10.092	-0.9	91	-0.05
34 C	MTBE	10.000	9.881	1.2	89	-0.05
35 C	vinyl acetate	10.000	9.248	7.5	85	-0.05
36 C	2-butanone	10.000	10.616	-6.2	96	-0.05
37	cis-1,2-dichloroethene	10.000	10.295	-2.9	93	-0.05
38	Ethyl Acetate	10.000	11.248	-12.5	101	-0.04
39 C	chloroform	10.000	9.767	2.3	90	-0.05
40	Tetrahydrofuran	10.000	10.730	-7.3	96	-0.05

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617678.D
 Acq On : 16 Jun 2020 12:31 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-3,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:54:31 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	10.000	8.706	12.9	79	-0.05
42 C	1,2-dichloroethane	10.000	9.154	8.5	84	-0.04
43 I	1,4-difluorobenzene	10.000	10.000	0.0	101	-0.05
44 C	hexane	10.000	9.968	0.3	96	-0.05
45	diisopropyl ether	10.000	9.195	8.0	84	-0.05
46	tert-butyl ethyl ether	10.000	8.817	11.8	80	-0.05
48 C	1,1,1-trichloroethane	10.000	9.288	7.1	87	-0.05
49	1,1-dichloropropene	10.000	9.292	7.1	86	-0.05
50 C	benzene	10.000	9.515	4.8	89	-0.05
52 C	carbon tetrachloride	10.000	9.437	5.6	88	-0.05
53	cyclohexane	10.000	10.060	-0.6	97	-0.05
54	tert-amyl methyl ether	10.000	8.757	12.4	81	-0.05
55	dibromomethane	10.000	9.335	6.6	88	-0.05
56 C	1,2-dichloropropane	10.000	10.207	-2.1	95	-0.05
57	bromodichloromethane	10.000	9.755	2.4	93	-0.05
58 C	1,4-dioxane	10.000	10.051	-0.5	101	-0.05
59 C	trichloroethene	10.000	10.008	-0.1	93	-0.05
60 C	2,2,4-trimethylpentane	10.000	10.187	-1.9	97	-0.05
61	methyl methacrylate	10.000	7.116	28.8	64	-0.04
62	heptane	10.000	10.385	-3.8	99	-0.05
63 C	cis-1,3-dichloropropene	10.000	10.339	-3.4	93	-0.04
64 C	4-methyl-2-pentanone	10.000	10.335	-3.4	98	-0.05
65	trans-1,3-dichloropropene	10.000	8.631	13.7	77	-0.04
66 C	1,1,2-trichloroethane	10.000	10.378	-3.8	96	-0.04
67 I	chlorobenzene-D5	10.000	10.000	0.0	95	-0.04
68 C	toluene	10.000	10.457	-4.6	92	-0.04
71	1,3-dichloropropane	10.000	9.591	4.1	84	-0.04
72	2-hexanone	10.000	11.044	-10.4	94	-0.04
74	dibromochloromethane	10.000	11.279	-12.8	101	-0.04
75 C	1,2-dibromoethane	10.000	10.795	-7.9	93	-0.04
76	butyl acetate	10.000	9.480	5.2	79	-0.04
77	octane	10.000	9.876	1.2	85	-0.03
78 C	tetrachloroethene	10.000	10.688	-6.9	94	-0.04
79	1,1,1,2-tetrachloroethane	10.000	10.211	-2.1	87	-0.03
80 C	chlorobenzene	10.000	10.646	-6.5	91	-0.04
81 C	ethylbenzene	10.000	10.768	-7.7	92	-0.04
83 C	m+p-xylene	20.000	21.472	-7.4	93	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617678.D
 Acq On : 16 Jun 2020 12:31 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-3,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:54:31 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84 C	bromoform	10.000	11.554	-15.5	101	-0.03
85 C	styrene	10.000	10.960	-9.6	92	-0.04
86 C	1,1,2,2-tetrachloroethane	10.000	11.311	-13.1	95	-0.03
87 C	o-xylene	10.000	10.823	-8.2	93	-0.03
88	1,2,3-trichloropropane	10.000	9.869	1.3	85	-0.04
89	nonane	10.000	10.216	-2.2	87	-0.03
91 C	isopropylbenzene	10.000	10.399	-4.0	88	-0.03
92	bromobenzene	10.000	9.878	1.2	85	-0.03
93	2-chlorotoluene	10.000	9.982	0.2	87	-0.03
94	n-propylbenzene	10.000	10.321	-3.2	86	-0.03
95	4-chlorotoluene	10.000	10.193	-1.9	87	-0.03
96	4-ethyl toluene	10.000	11.150	-11.5	94	-0.03
97	1,3,5-trimethylbenzene	10.000	11.002	-10.0	90	-0.03
98	tert-butylbenzene	10.000	10.528	-5.3	85	-0.03
99	1,2,4-trimethylbenzene	10.000	11.473	-14.7	91	-0.02
100	decane	10.000	10.605	-6.1	88	-0.03
101 C	Benzyl Chloride	10.000	11.541	-15.4	85	-0.03
102	1,3-dichlorobenzene	10.000	11.119	-11.2	90	-0.02
103 C	1,4-dichlorobenzene	10.000	11.008	-10.1	88	-0.03
104	sec-butylbenzene	10.000	10.661	-6.6	87	-0.02
106	p-isopropyltoluene	10.000	9.925	0.7	79	-0.03
107	1,2-dichlorobenzene	10.000	11.377	-13.8	92	-0.03
108	n-butylbenzene	10.000	11.274	-12.7	90	-0.03
111 C	1,2-dibromo-3-chloropropane	10.000	10.637	-6.4	79	-0.03
112	undecane	10.000	11.040	-10.4	87	-0.03
114	dodecane	10.000	11.608	-16.1	79	-0.03
115 C	1,2,4-trichlorobenzene	10.000	12.567	-25.7	87	-0.03
116	naphthalene	10.000	11.782	-17.8	79	-0.02
117	1,2,3-trichlorobenzene	10.000	12.007	-20.1	83	-0.03
119 C	hexachlorobutadiene	10.000	12.348	-23.5	93	-0.02

* 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\Airlab16\2020\06\200616T\
 Data File : r1617678.D
 Acq On : 16 Jun 2020 12:31 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-3,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:54:31 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

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

Internal Standards						
1) bromochloromethane	9.43	49	312116	10.000	ppbV	-0.05
Standard Area = 312675			Recovery =	99.82%		
43) 1,4-difluorobenzene	11.73	114	885034	10.000	ppbV	-0.05
Standard Area = 882052			Recovery =	100.34%		
67) chlorobenzene-D5	16.46	54	116487	10.000	ppbV	-0.04
Standard Area = 116247			Recovery =	100.21%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.84	85	222332	9.671	ppbV	100
6) chloromethane	4.02	50	125315	9.774	ppbV	99
7) Freon-114	4.14	85	300372	10.038	ppbV	97
9) vinyl chloride	4.27	62	128845	9.753	ppbV	100
10) 1,3-butadiene	4.43	54	113622	10.216	ppbV	98
13) bromomethane	4.74	94	117410	9.977	ppbV	99
14) chloroethane	4.96	64	64696	9.949	ppbV	100
15) ethanol	5.13	31	424854	46.098	ppbV	95
17) vinyl bromide	5.39	106	116073	9.961	ppbV	94
19) acetone	5.70	43	776820	40.813	ppbV	98
21) trichlorofluoromethane	5.91	101	169046	9.963	ppbV	98
22) isopropyl alcohol	6.04	45	468174	21.643	ppbV	99
26) 1,1-dichloroethene	6.69	61	208192	10.022	ppbV	99
27) tertiary butyl alcohol	6.77	59	202836	10.527	ppbV	93
28) methylene chloride	6.85	49	198441	9.570	ppbV	94
29) 3-chloropropene	7.00	41	274425	10.972	ppbV	97
30) carbon disulfide	7.14	76	518131	9.465	ppbV	99
31) Freon 113	7.19	101	319207	10.254	ppbV	99
32) trans-1,2-dichloroethene	8.00	61	225074	9.886	ppbV	100
33) 1,1-dichloroethane	8.23	63	284288	10.092	ppbV	99
34) MTBE	8.32	73	371881	9.881	ppbV	99
36) 2-butanone	8.72	43	410600	10.616	ppbV	100
37) cis-1,2-dichloroethene	9.24	61	208234	10.295	ppbV	97
38) Ethyl Acetate	9.55	61	61805	11.248	ppbV	77
39) chloroform	9.60	83	255241	9.767	ppbV	99
40) Tetrahydrofuran	10.04	42	254909	10.730	ppbV	98
42) 1,2-dichloroethane	10.46	62	128683	9.154	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617678.D
 Acq On : 16 Jun 2020 12:31 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-3,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:54:31 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	9.51	57	281678	9.968	ppbV	88
48) 1,1,1-trichloroethane	10.74	97	203359	9.288	ppbV	97
50) benzene	11.28	78	586554	9.515	ppbV	99
52) carbon tetrachloride	11.45	117	190797	9.437	ppbV	97
53) cyclohexane	11.60	56	308356	10.060	ppbV	97
56) 1,2-dichloropropane	12.24	63	213367	10.207	ppbV	99
57) bromodichloromethane	12.48	83	284766	9.755	ppbV	100
58) 1,4-dioxane	12.51	88	127992	10.051	ppbV	98
59) trichloroethene	12.53	130	261391	10.008	ppbV	99
60) 2,2,4-trimethylpentane	12.57	57	953888	10.187	ppbV	100
62) heptane	12.90	43	448957	10.385	ppbV	99
63) cis-1,3-dichloropropene	13.55	75	300271	10.339	ppbV	100
64) 4-methyl-2-pentanone	13.58	43	484971	10.335	ppbV	99
65) trans-1,3-dichloropropene	14.18	75	218443	8.631	ppbV	99
66) 1,1,2-trichloroethane	14.38	97	242541	10.378	ppbV	98
68) toluene	14.69	91	680487	10.457	ppbV	99
72) 2-hexanone	14.98	43	421969	11.044	ppbV	99
74) dibromochloromethane	15.14	129	334854	11.279	ppbV	99
75) 1,2-dibromoethane	15.39	107	350951	10.795	ppbV	98
78) tetrachloroethene	15.86	166	311782	10.688	ppbV	98
80) chlorobenzene	16.50	112	599075	10.646	ppbV	98
81) ethylbenzene	16.85	91	913360	10.768	ppbV	99
83) m+p-xylene	17.02	91	1463054	21.472	ppbV	100
84) bromoform	17.08	173	311071	11.554	ppbV	97
85) styrene	17.34	104	657072	10.960	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.44	83	561500	11.311	ppbV	99
87) o-xylene	17.44	91	746275	10.823	ppbV	100
96) 4-ethyl toluene	18.52	105	1150145	11.150	ppbV	100
97) 1,3,5-trimethylbenzene	18.58	105	946459	11.002	ppbV	99
99) 1,2,4-trimethylbenzene	18.93	105	936198	11.473	ppbV	92
101) Benzyl Chloride	19.05	91	507150	11.541	ppbV	99
102) 1,3-dichlorobenzene	19.07	146	687613	11.119	ppbV	99
103) 1,4-dichlorobenzene	19.12	146	665146	11.008	ppbV	97
107) 1,2-dichlorobenzene	19.41	146	668675	11.377	ppbV	96
115) 1,2,4-trichlorobenzene	20.94	180	343082	12.567	ppbV	97
119) hexachlorobutadiene	21.38	225	318370	12.348	ppbV	97

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

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617678.D
 Acq On : 16 Jun 2020 12:31 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-3,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 16 13:54:31 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : Default-LCS-AP2 - All compounds listed

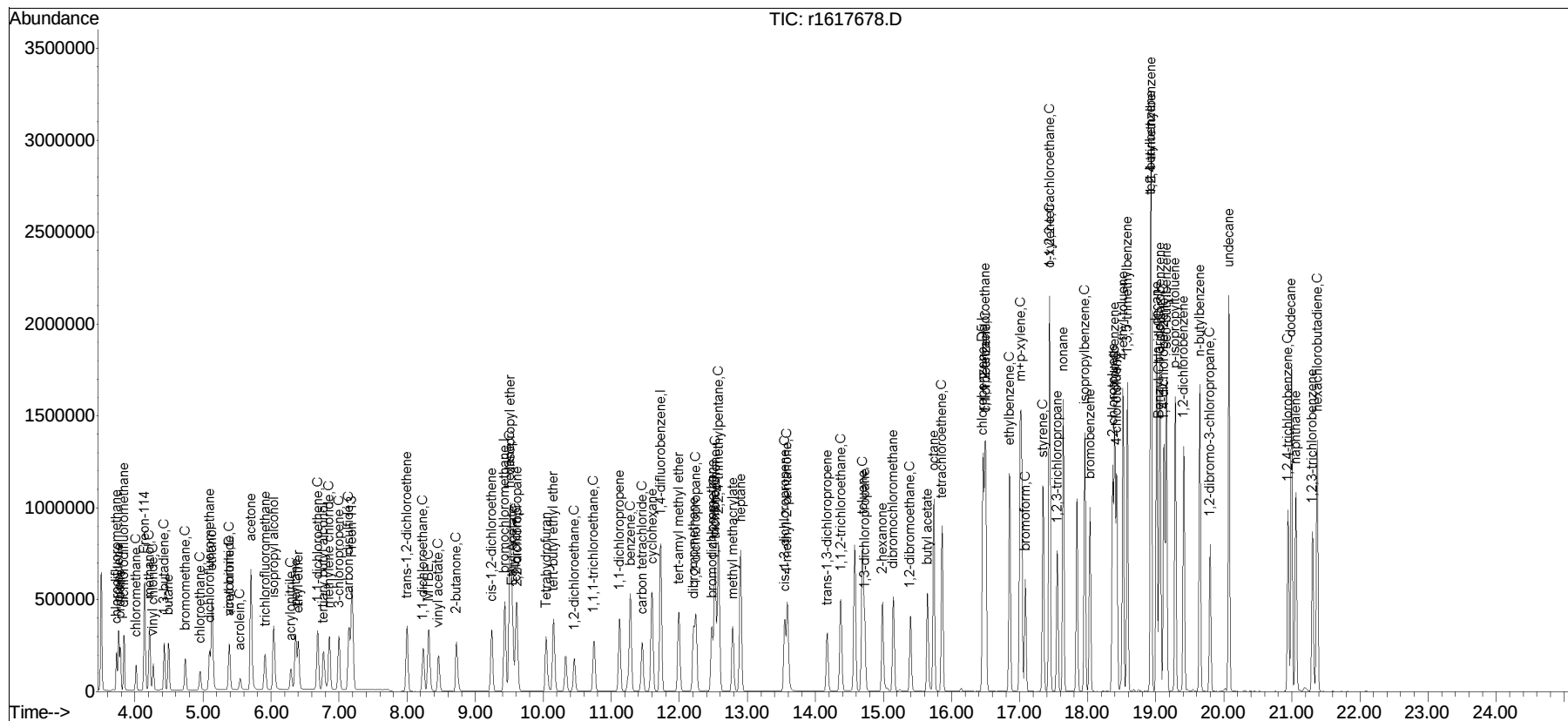
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

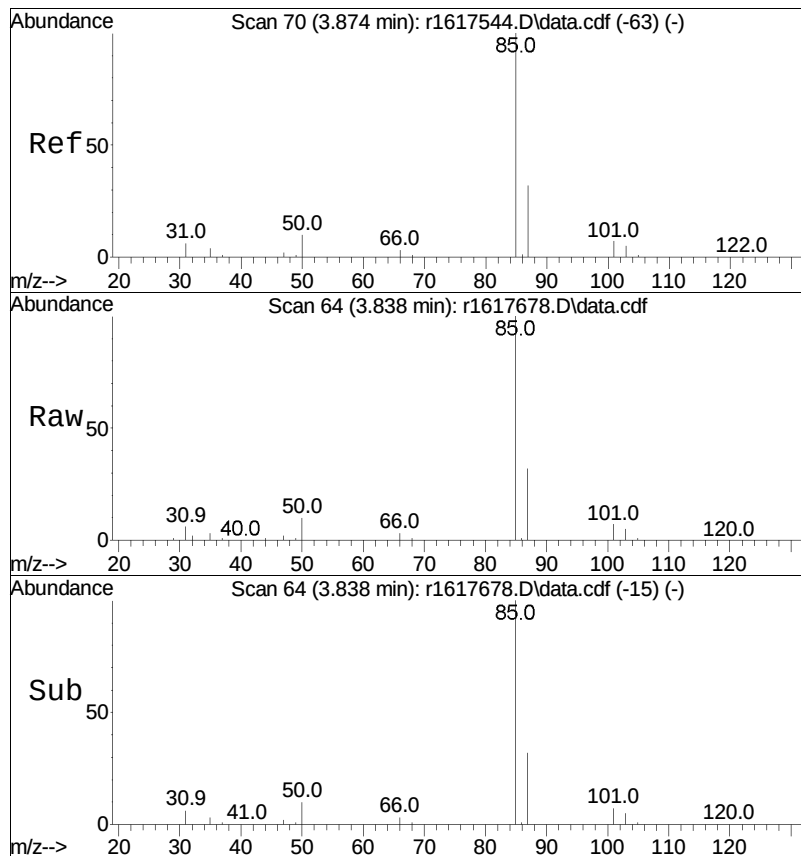
(QT Reviewed)

```
Data Path   : 0:\Forensics\Data\Airlab16\2020\06\200616T\
Data File  : r1617678.D
Acq On     : 16 Jun 2020   12:31 PM
Operator   : AIRLAB16:RY
Sample     : WG1382260-3,3,250,250
Misc       : WG1382260,ICAL16872
ALS Vial   : 0    Sample Multiplier: 1
```

Quant Time: Jun 16 13:54:31 2020
Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 10 11:25:58 2020
Response via : Initial Calibration

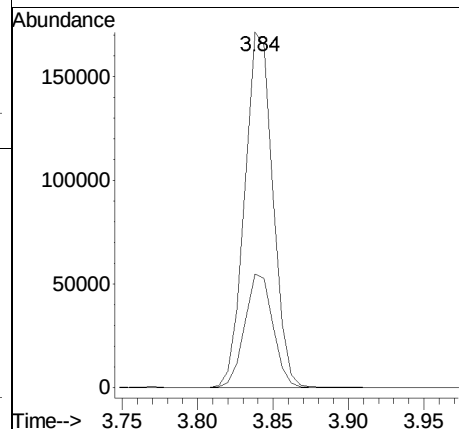
Sub List : Default-LCS-AP2 - All compounds listed616T\r1617677.D

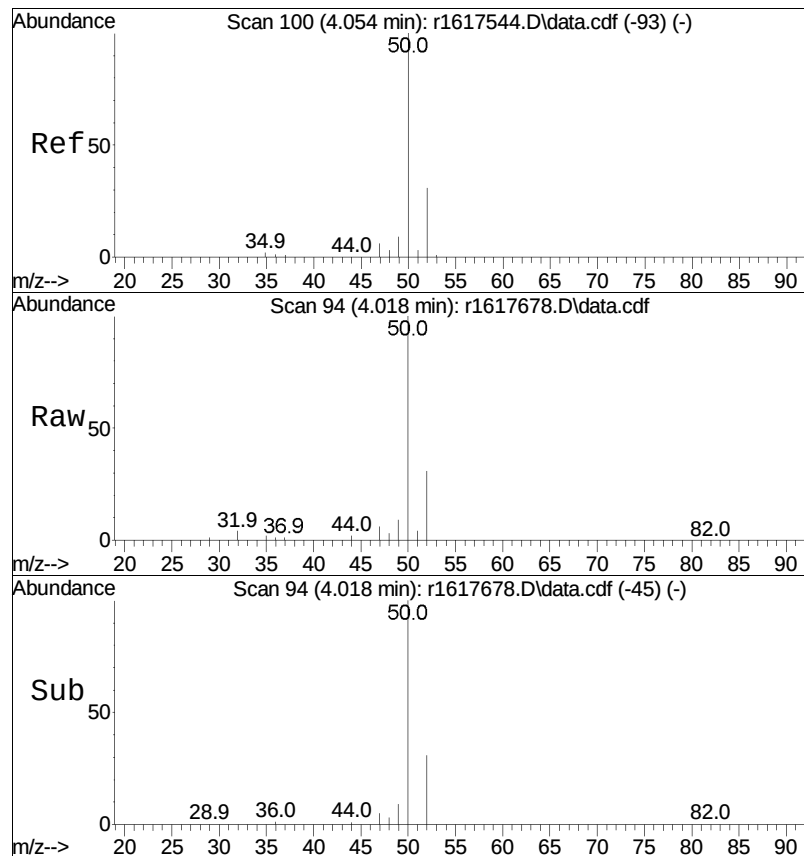




#5
dichlorodifluoromethane
Concen: 9.67 ppbV
RT: 3.84 min Scan# 64
Delta R.T. -0.036 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

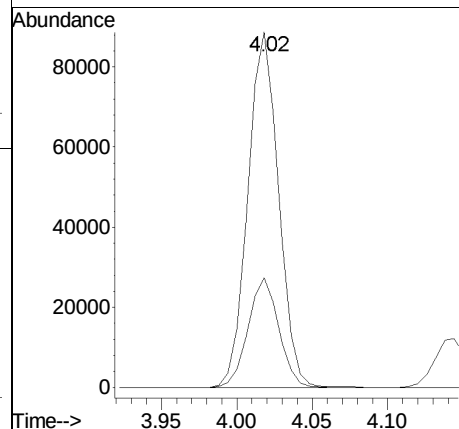
Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.0	25.7	38.5

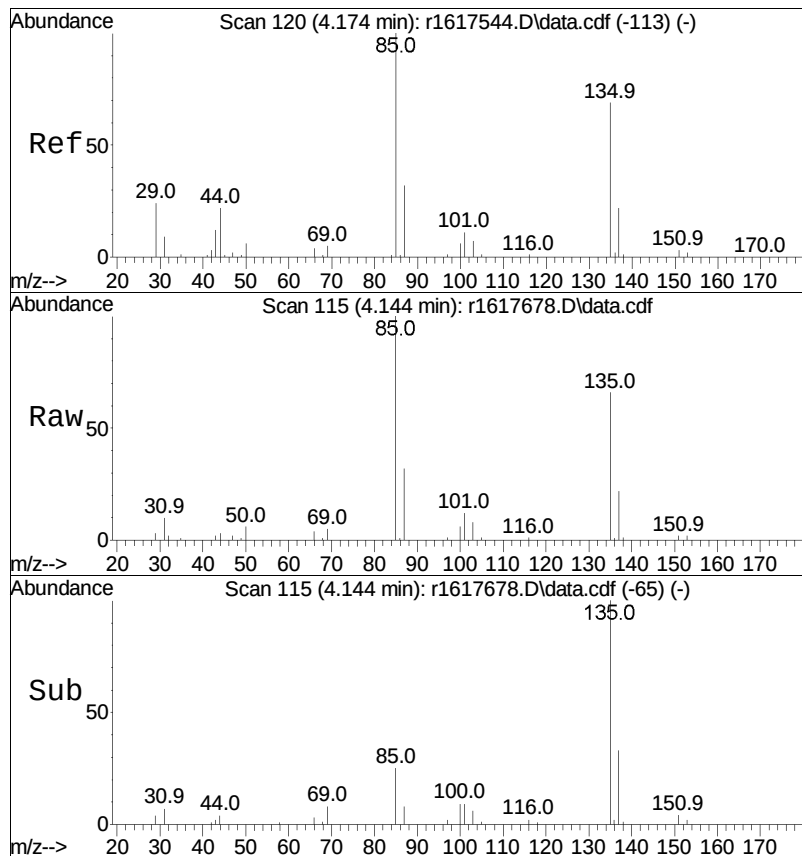




#6
 chloromethane
 Concen: 9.77 ppbV
 RT: 4.02 min Scan# 94
 Delta R.T. -0.036 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

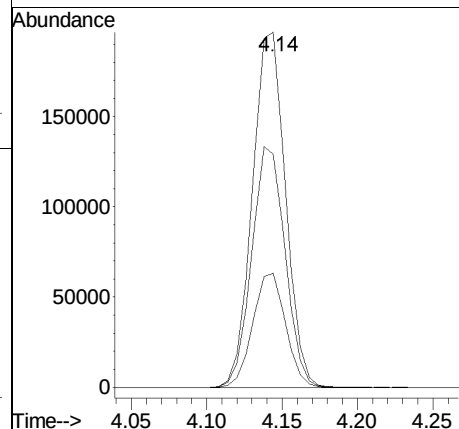
Tgt	Ion	Resp	Lower	Upper
50	100	125315		
52	30.9	25.0	37.6	

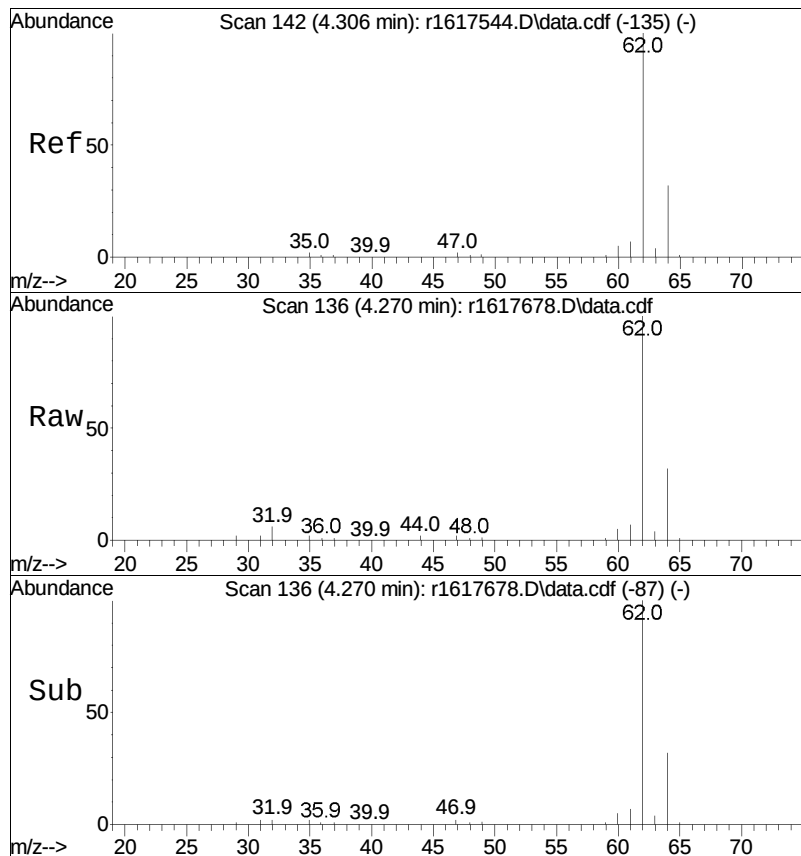




#7
 Freon-114
 Concen: 10.04 ppbV
 RT: 4.14 min Scan# 115
 Delta R.T. -0.030 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

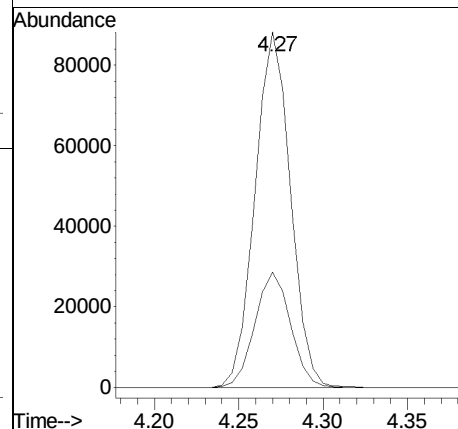
Tgt	Ion: 85	Resp:	300372
Ion	Ratio	Lower	Upper
85	100		
87	32.1	25.3	37.9
135	65.7	55.4	83.0

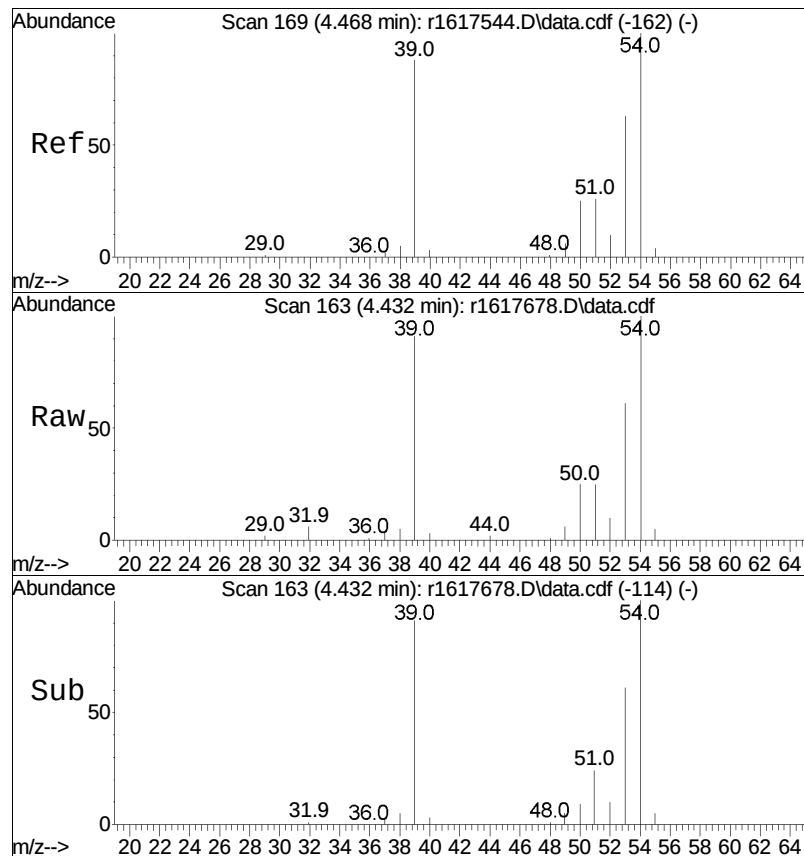




#9
 vinyl chloride
 Concen: 9.75 ppbV
 RT: 4.27 min Scan# 136
 Delta R.T. -0.036 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

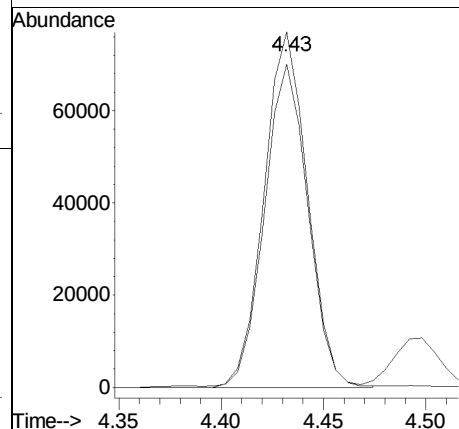
Tgt Ion	Ratio	Lower	Upper
62	100		
64	32.4	25.8	38.6

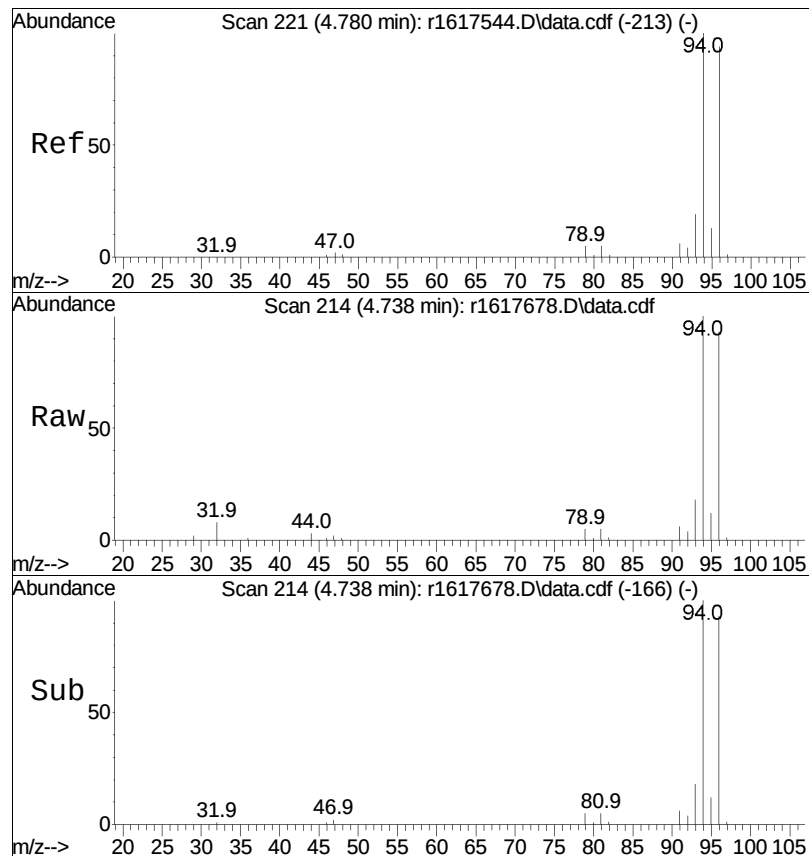




#10
 1,3-butadiene
 Concen: 10.22 ppbV
 RT: 4.43 min Scan# 163
 Delta R.T. -0.036 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

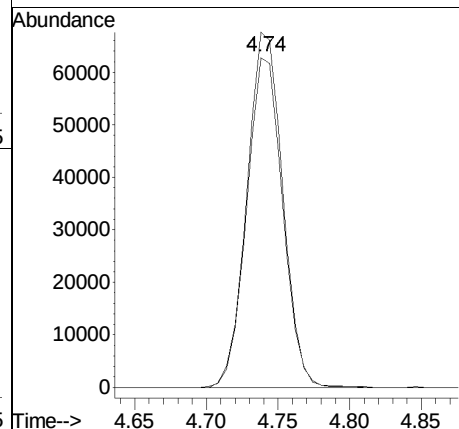
Tgt	Ion: 54	Resp: 113622
Ion	Ratio	Lower Upper
54	100	
39	90.9	71.1 106.7

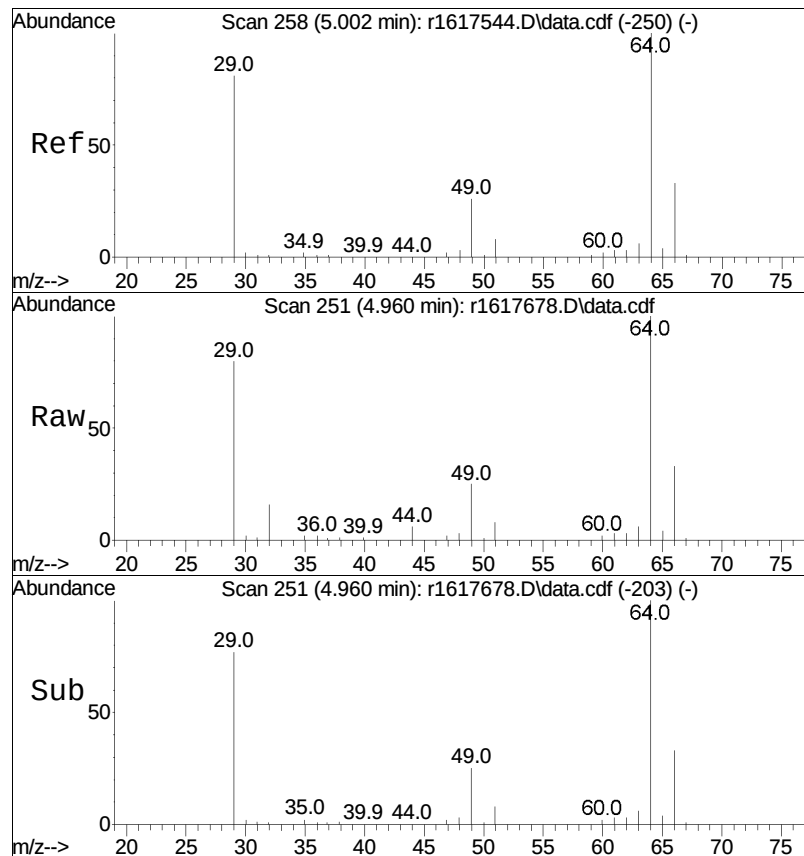




#13
bromomethane
Concen: 9.98 ppbV
RT: 4.74 min Scan# 214
Delta R.T. -0.042 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

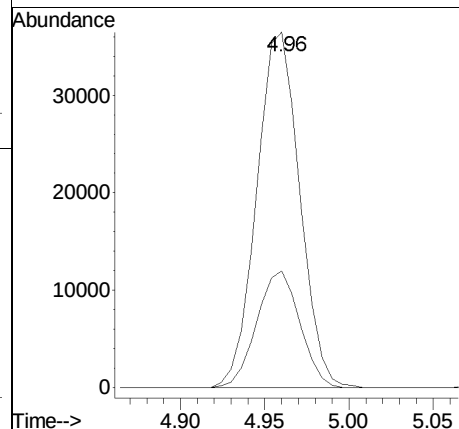
Tgt Ion	Ratio	Lower	Upper
94	100		
96	92.7	74.8	112.2

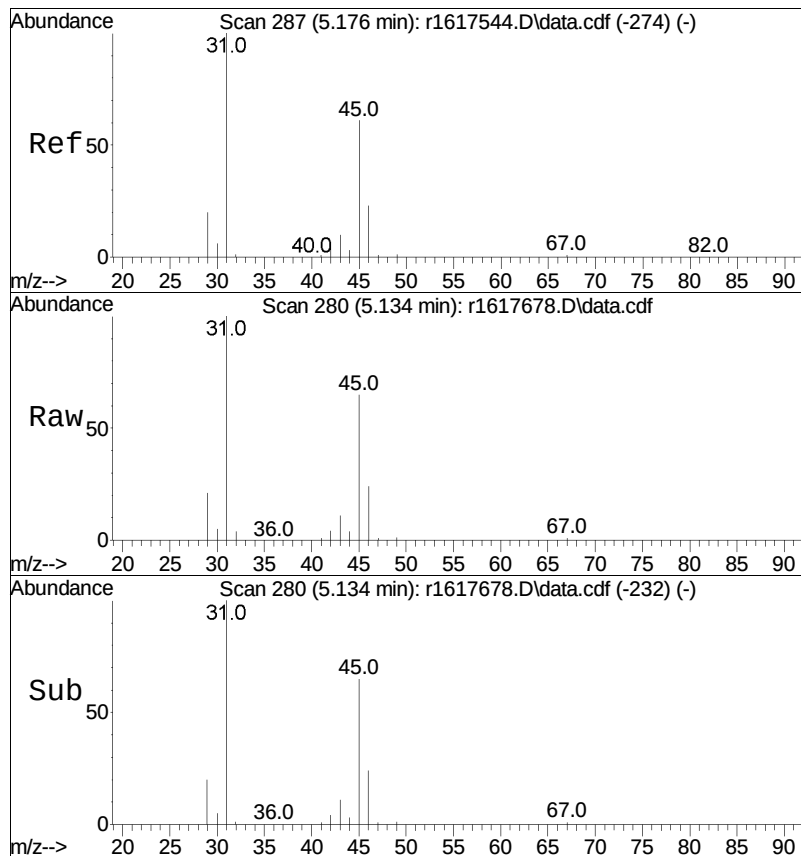




#14
 chloroethane
 Concen: 9.95 ppbV
 RT: 4.96 min Scan# 251
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

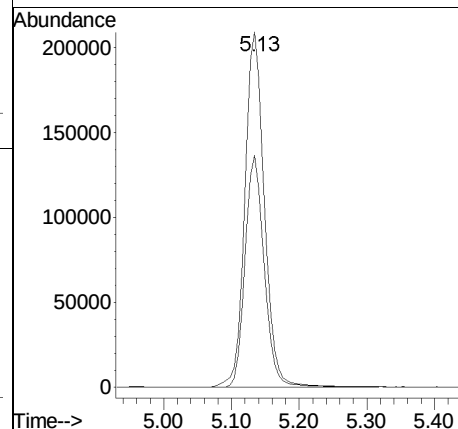
Tgt Ion:	64	Resp:	64696
Ion Ratio	Lower	Upper	
64	100		
66	32.8	26.3	39.5

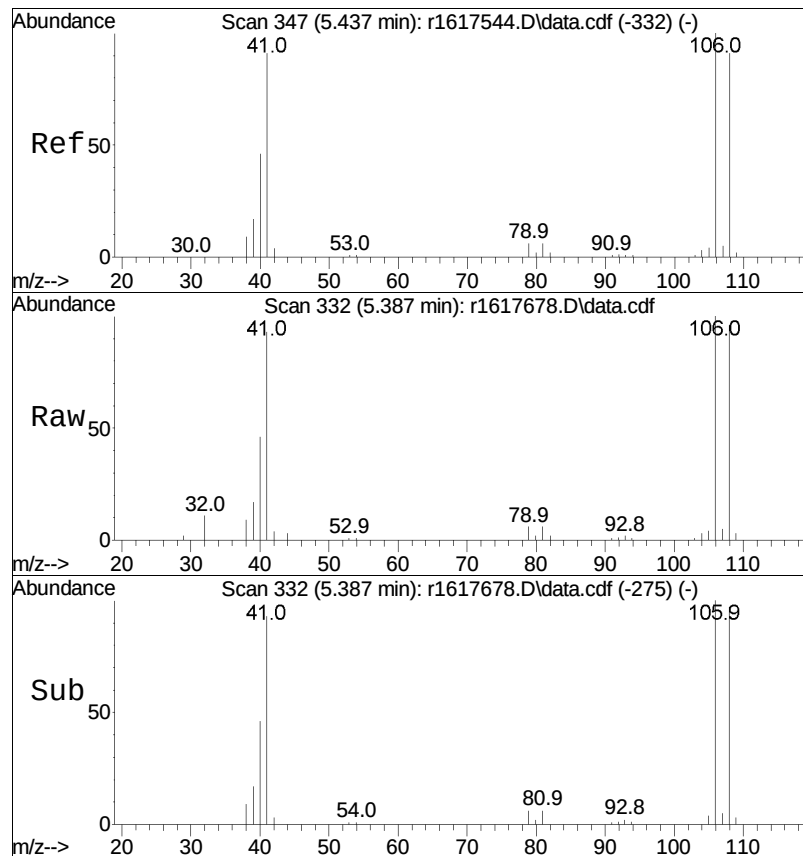




#15
 ethanol
 Concen: 46.10 ppbV
 RT: 5.13 min Scan# 280
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

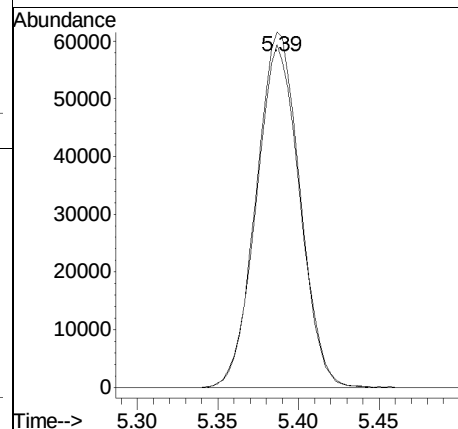
Tgt Ion:	31	45	Ratio	Lower	Upper
Resp:	424854				
Ion Ratio	100	65.3			
			49.2	73.8	

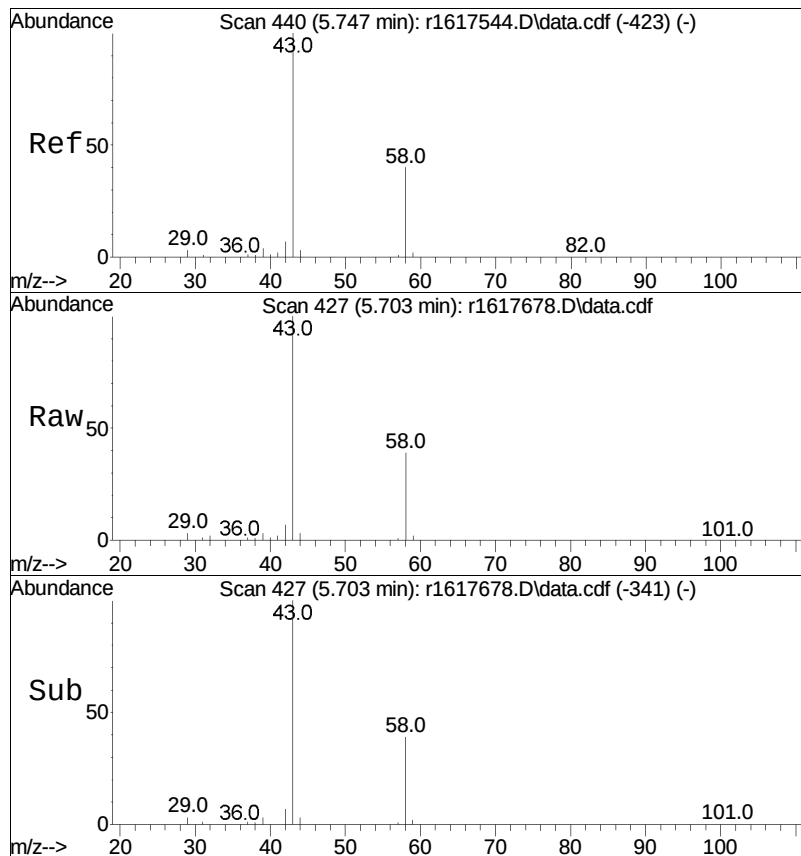




#17
 vinyl bromide
 Concen: 9.96 ppbV
 RT: 5.39 min Scan# 332
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

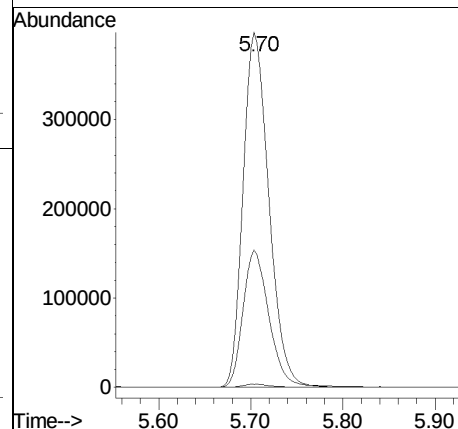
Tgt Ion	Ratio	Lower	Upper
106	100		
108	96.5	72.5	108.7

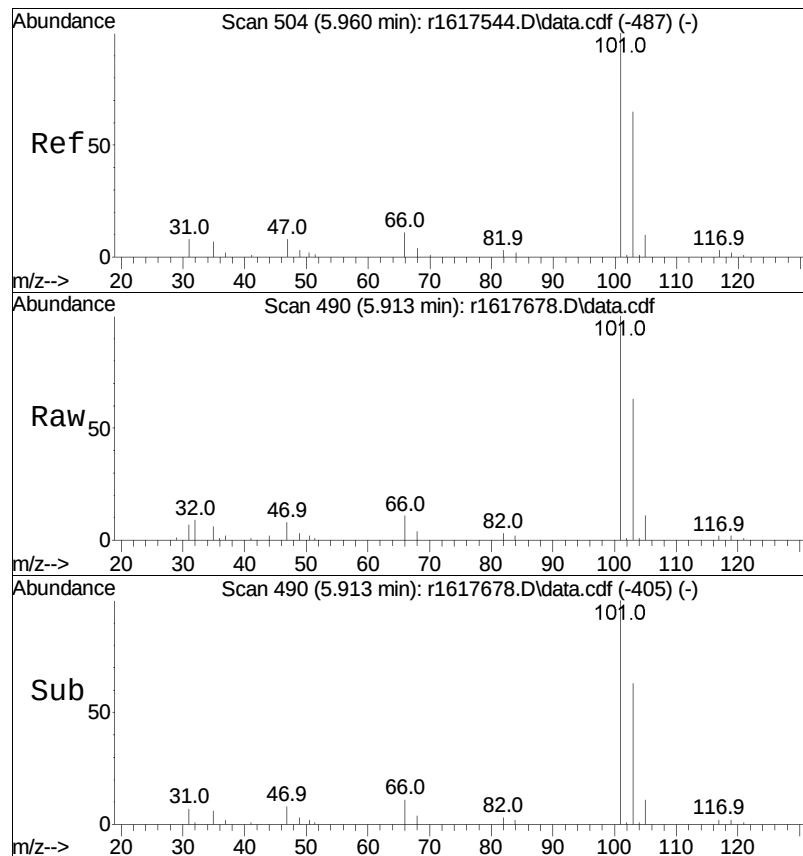




#19
acetone
Concen: 40.81 ppbV
RT: 5.70 min Scan# 427
Delta R.T. -0.043 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

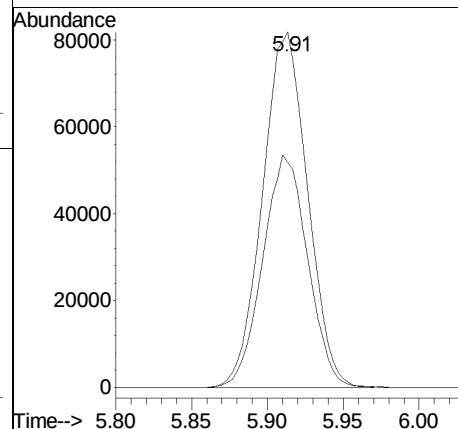
Tgt Ion	Ratio	Lower	Upper
43	100		
58	38.7	31.8	47.8
57	0.9	0.8	1.2

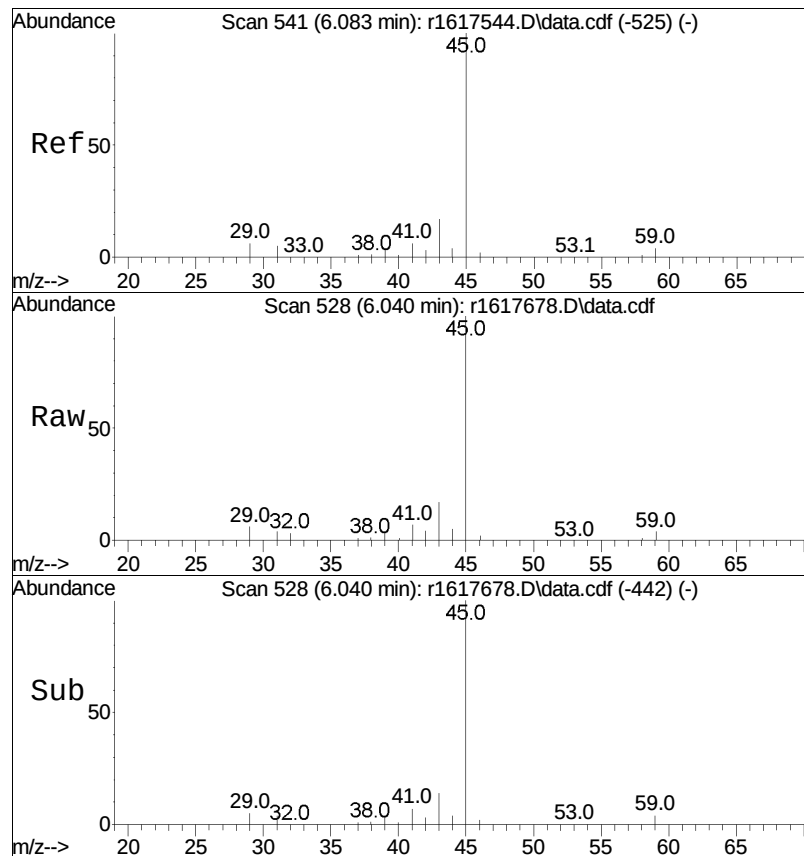




#21
 trichlorofluoromethane
 Concen: 9.96 ppbV
 RT: 5.91 min Scan# 490
 Delta R.T. -0.047 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

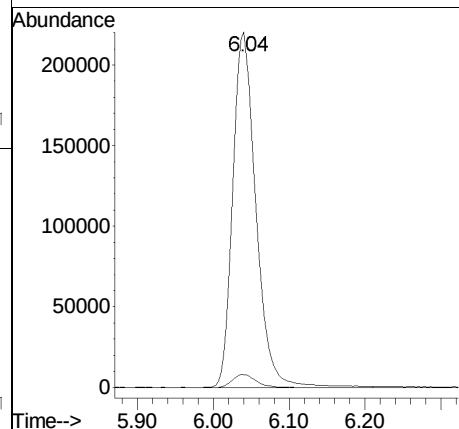
Tgt Ion	Ratio	Lower	Upper
101	100		
103	63.3	52.1	78.1

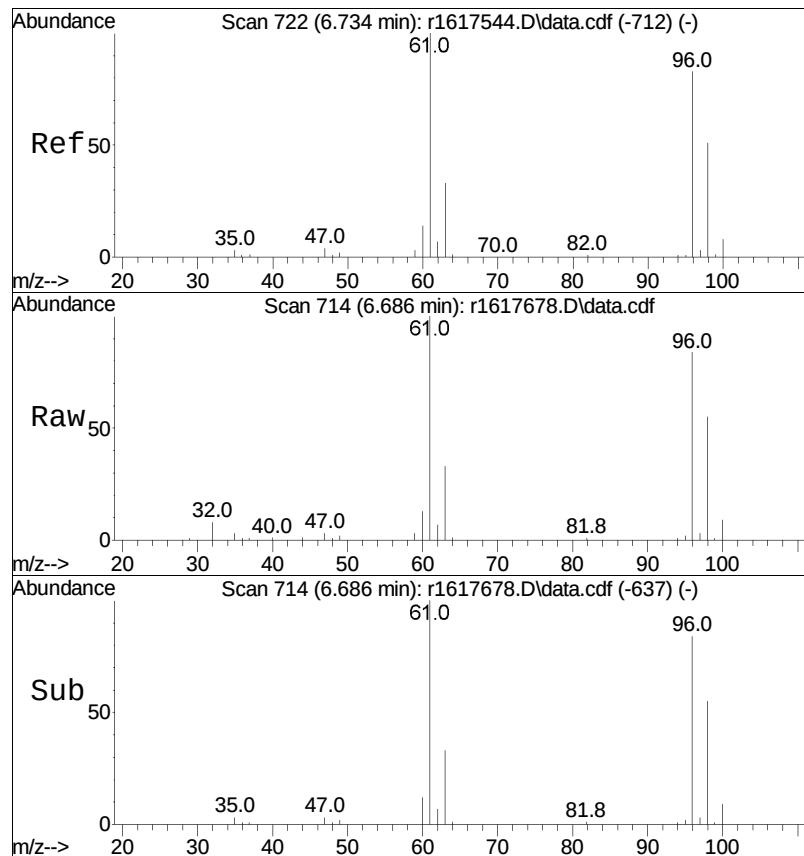




#22
 isopropyl alcohol
 Concen: 21.64 ppbV
 RT: 6.04 min Scan# 528
 Delta R.T. -0.043 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

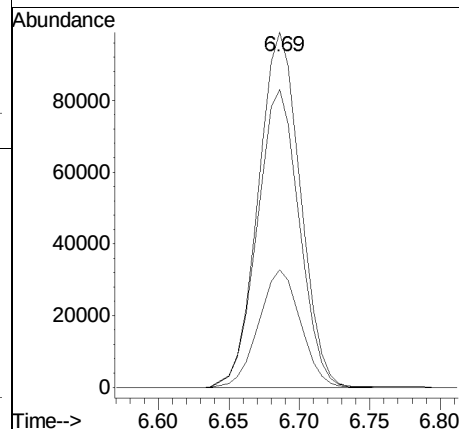
Tgt	Ion	Ratio	Lower	Upper
45	100			
59	3.6		3.1	4.7

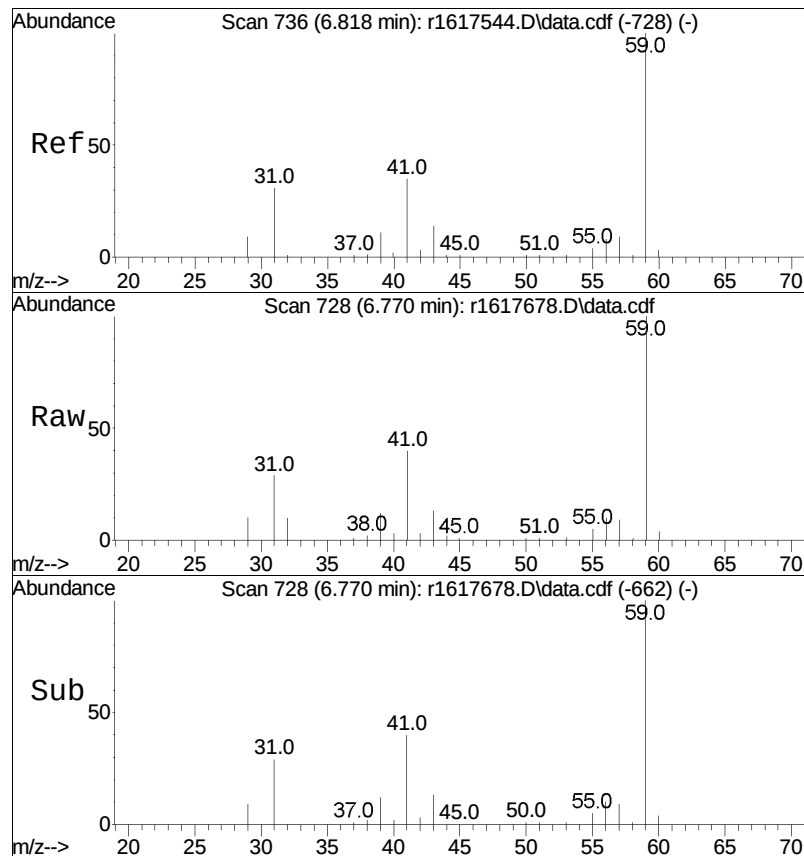




#26
 1,1-dichloroethene
 Concen: 10.02 ppbV
 RT: 6.69 min Scan# 714
 Delta R.T. -0.048 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

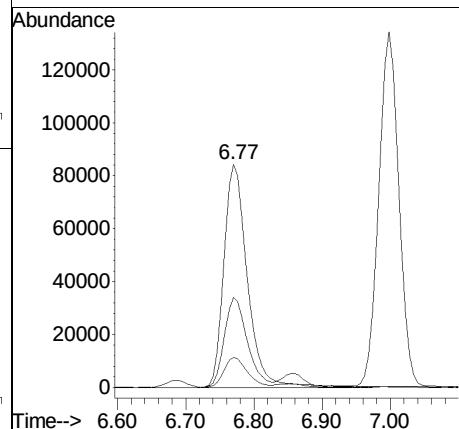
Tgt	Ion: 61	Resp: 208192
Ion	Ratio	Lower Upper
61	100	
96	83.8	66.2 99.2
63	33.1	26.2 39.2

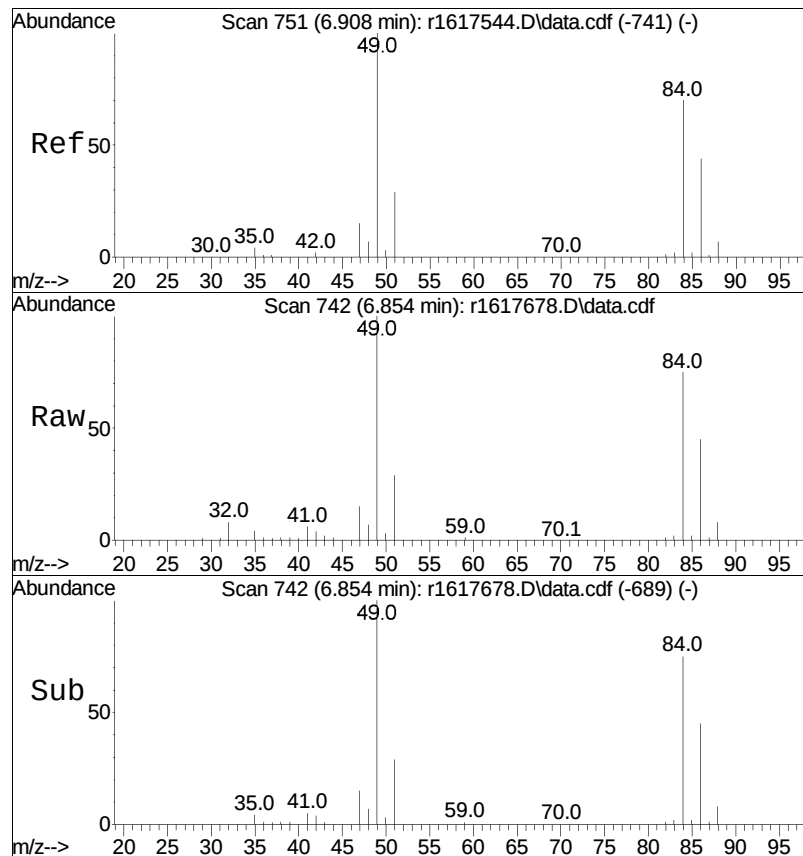




#27
 tertiary butyl alcohol
 Concen: 10.53 ppbV
 RT: 6.77 min Scan# 728
 Delta R.T. -0.048 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

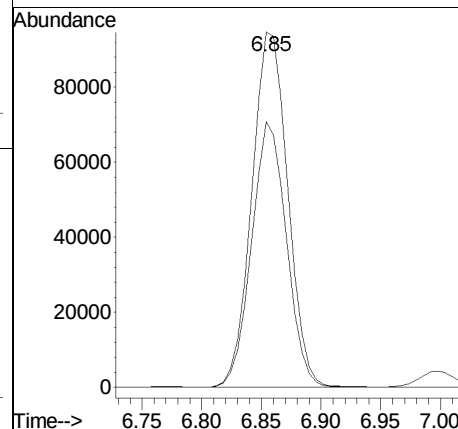
Tgt Ion:	59	Resp:	202836
Ion Ratio	Lower	Upper	
59	100		
41	40.4	28.2	42.2
43	13.5	11.0	16.6

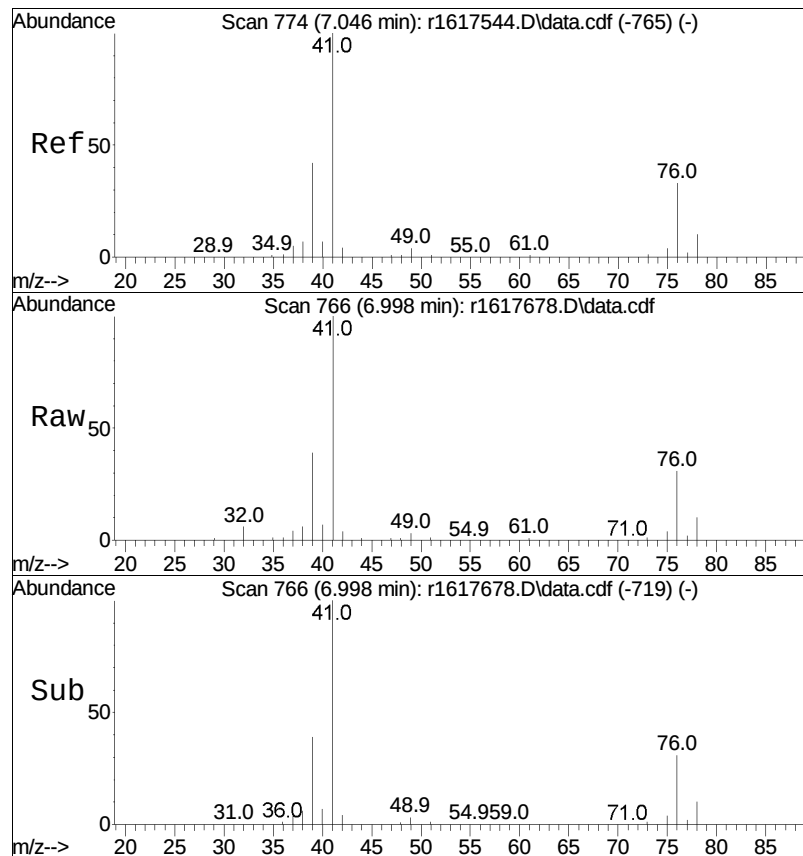




#28
 methylene chloride
 Concen: 9.57 ppbV
 RT: 6.85 min Scan# 742
 Delta R.T. -0.054 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

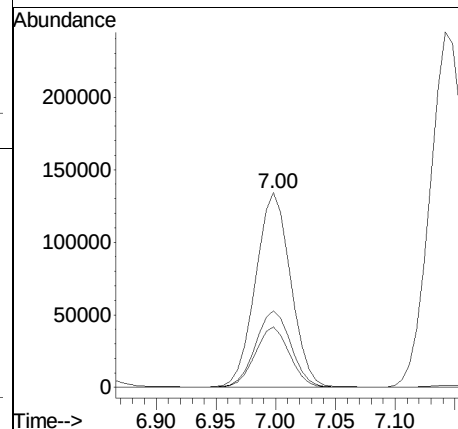
Tgt Ion:	49	Resp:	198441
Ion Ratio	Lower	Upper	
49	100		
84	74.7	56.1	84.1

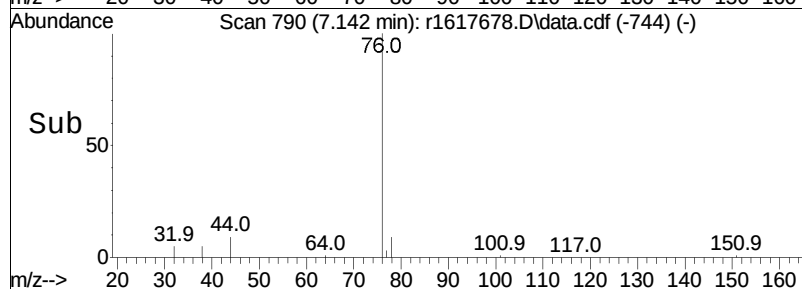
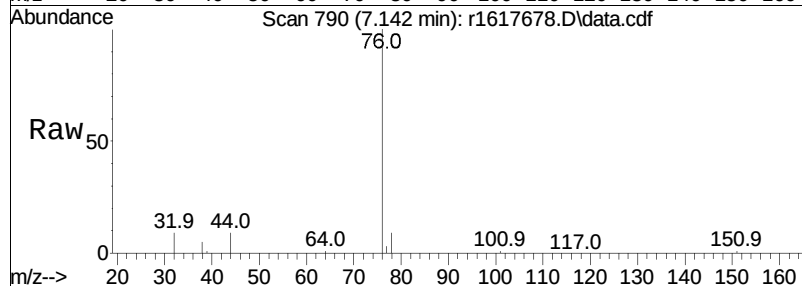
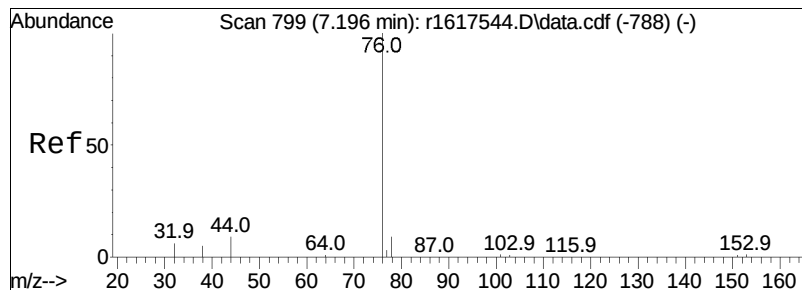




#29
 3-chloropropene
 Concen: 10.97 ppbV
 RT: 7.00 min Scan# 766
 Delta R.T. -0.048 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

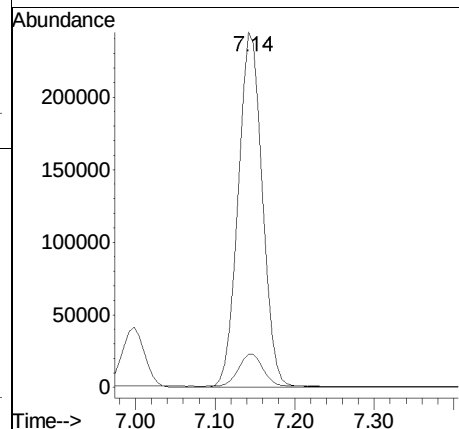
Tgt Ion:	41	Resp:	274425
Ion Ratio	Lower	Upper	
41	100		
39	39.4	33.4	50.2
76	31.0	26.0	39.0

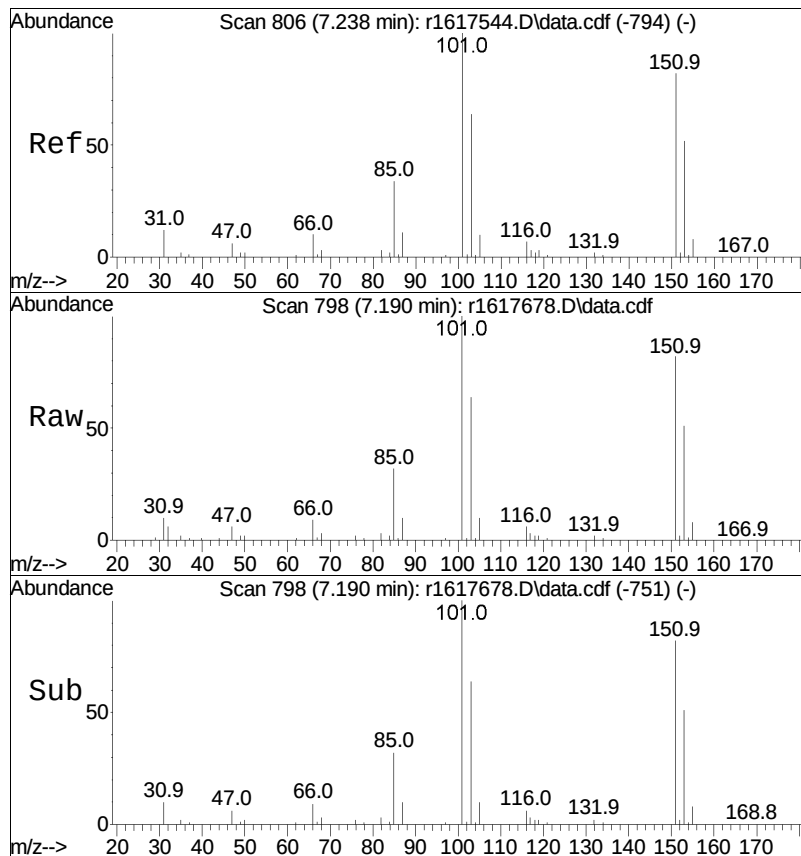




#30
carbon disulfide
Concen: 9.47 ppbV
RT: 7.14 min Scan# 790
Delta R.T. -0.054 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

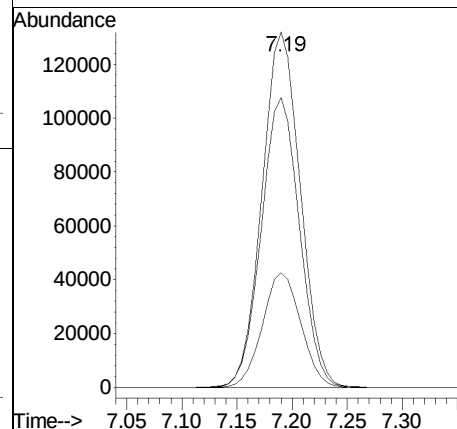
Tgt Ion	Ratio	Lower	Upper
76	100		
44	9.4	7.7	11.5

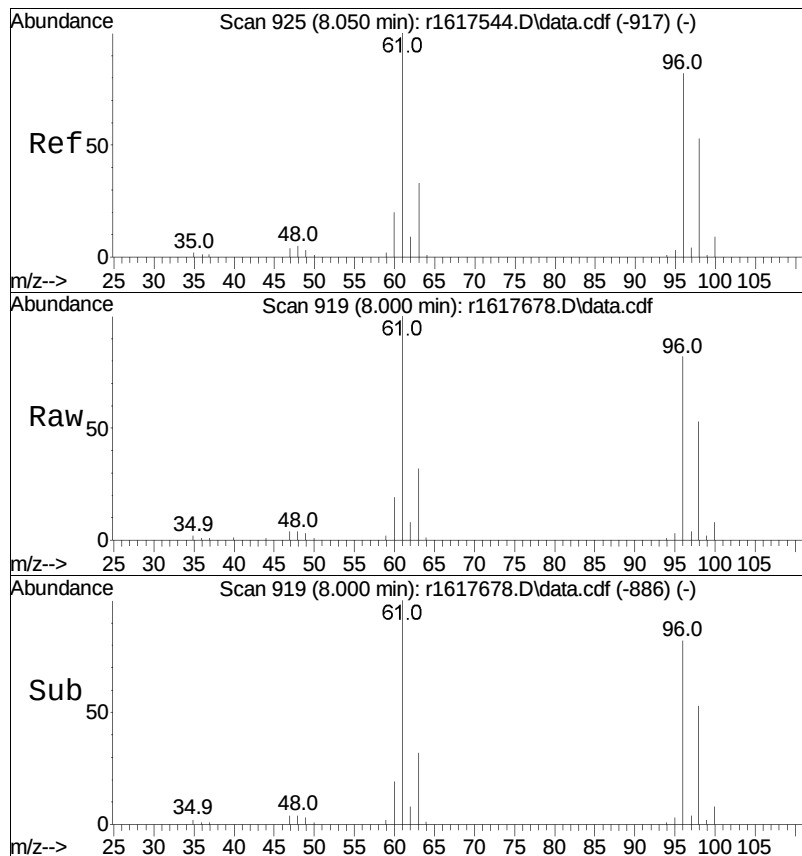




#31
 Freon 113
 Concen: 10.25 ppbV
 RT: 7.19 min Scan# 798
 Delta R.T. -0.048 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

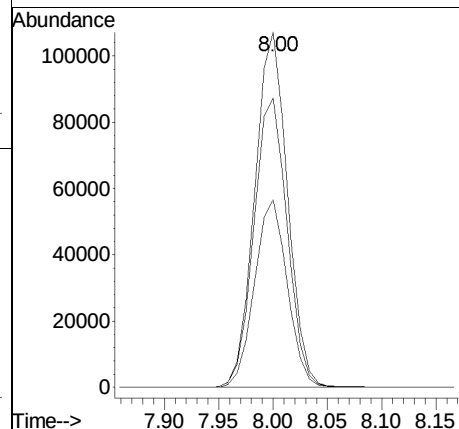
Tgt	Ion:101	Resp:	319207
Ion	Ratio	Lower	Upper
101	100		
85	32.3	27.4	41.0
151	81.6	65.8	98.6

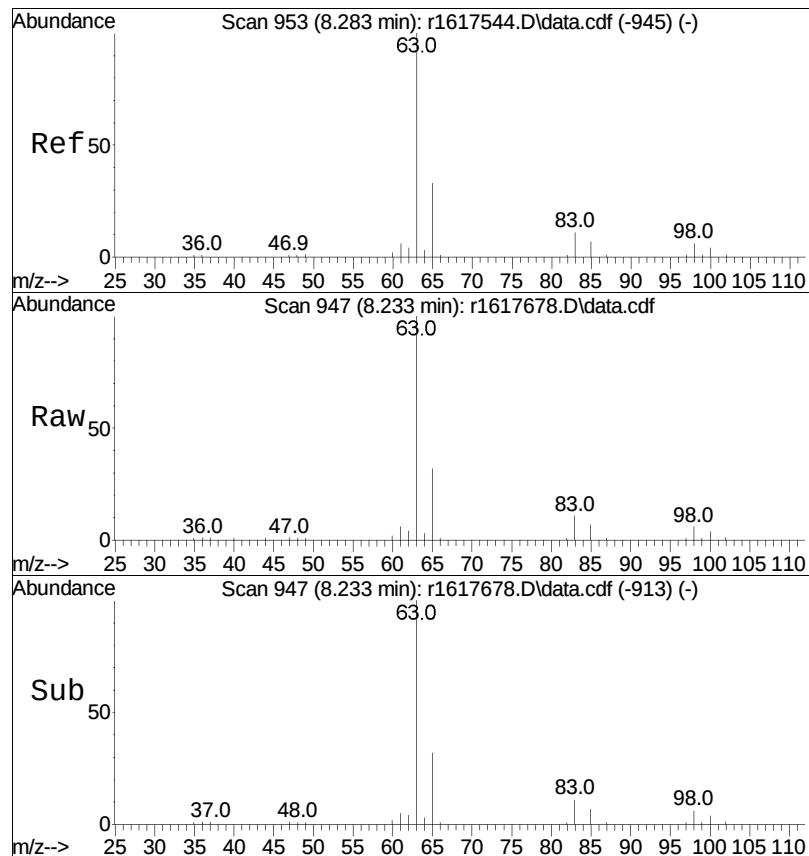




#32
 trans-1,2-dichloroethene
 Concen: 9.89 ppbV
 RT: 8.00 min Scan# 919
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

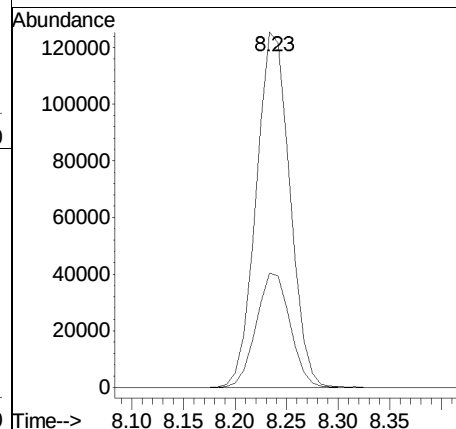
Tgt Ion:	61	Resp:	225074
Ion Ratio	Lower	Upper	
61	100		
96	81.5	65.4	98.2
98	52.8	42.4	63.6

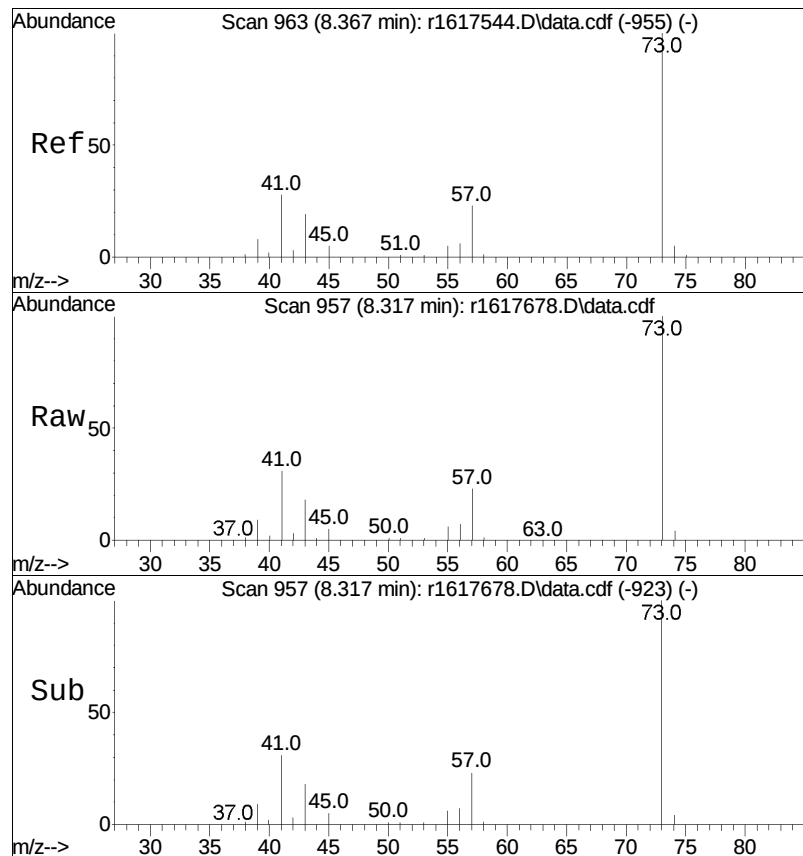




#33
 1,1-dichloroethane
 Concen: 10.09 ppbV
 RT: 8.23 min Scan# 947
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

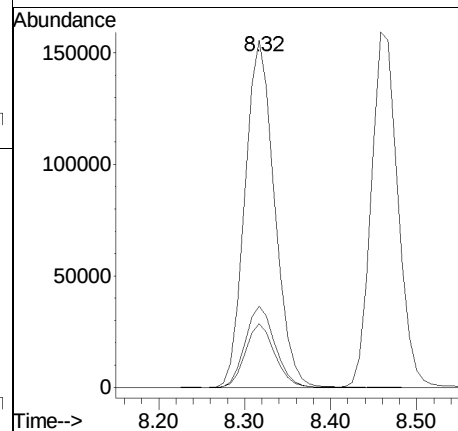
Tgt	Ion	Ratio	Lower	Upper
63	100			
65	32.2	26.2	39.2	

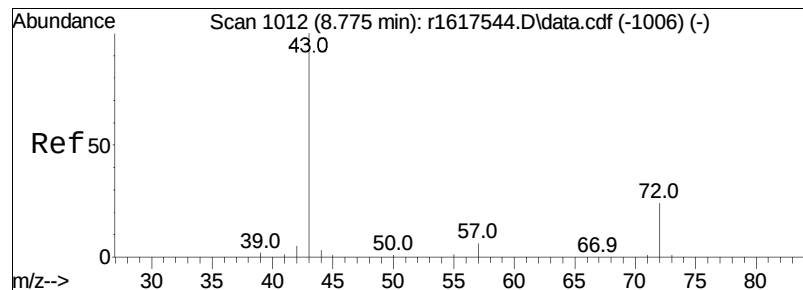




#34
 MTBE
 Concen: 9.88 ppbV
 RT: 8.32 min Scan# 957
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

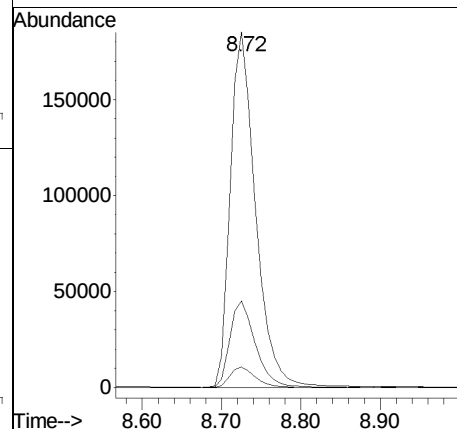
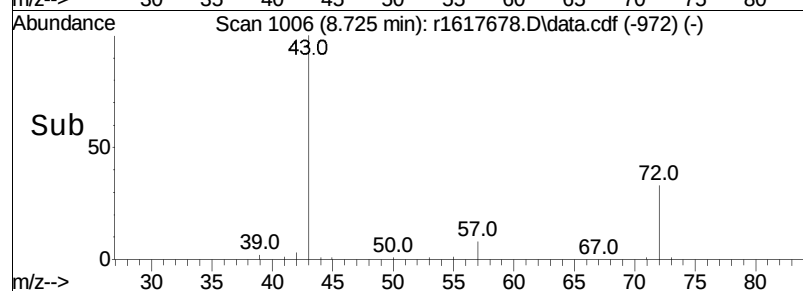
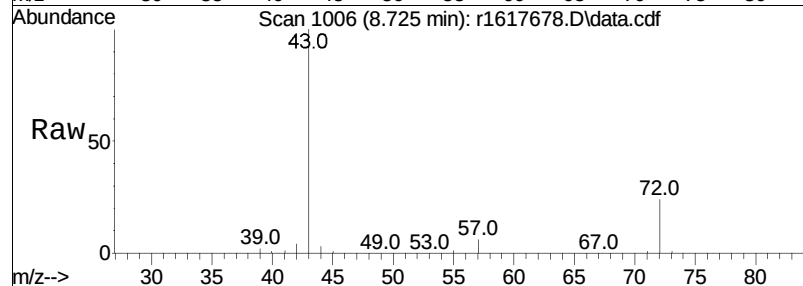
Tgt Ion:	73	Resp:	371881
Ion Ratio	Lower	Upper	
73	100		
57	23.4	18.3	27.5
43	18.4	14.8	22.2

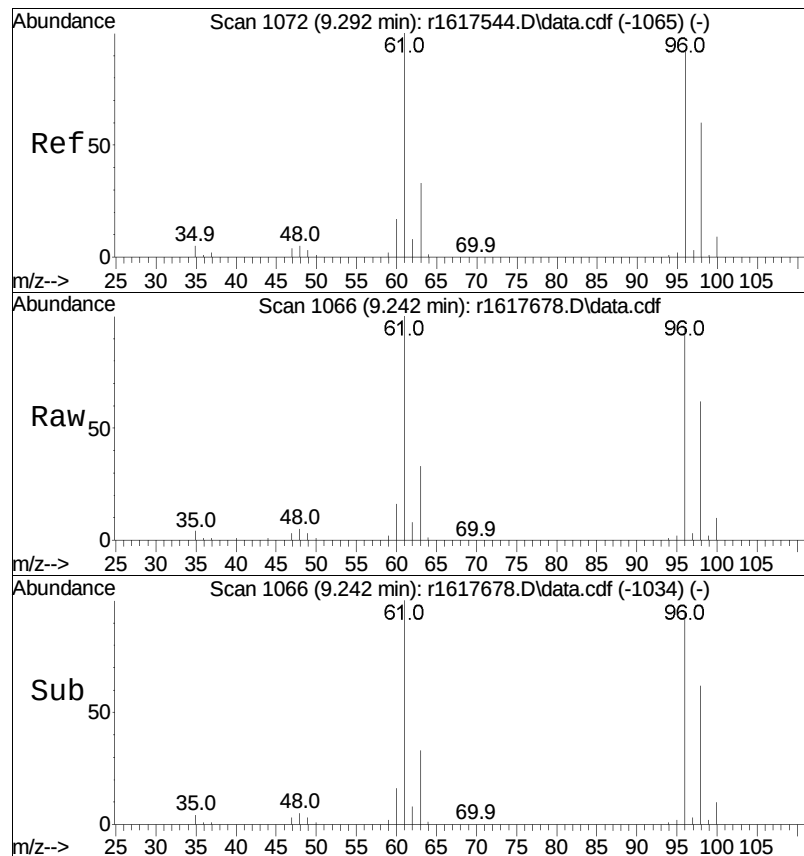




#36
 2-butanone
 Concen: 10.62 ppbV
 RT: 8.72 min Scan# 1006
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

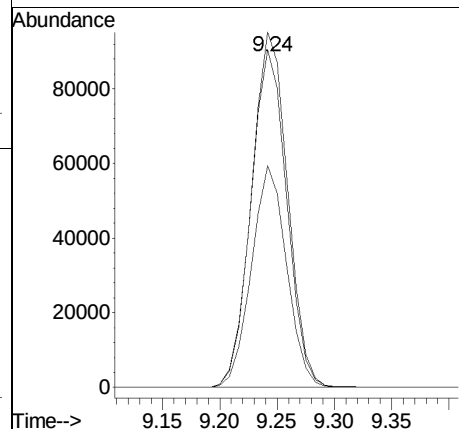
Tgt	Ion: 43	Resp:	410600
Ion	Ratio	Lower	Upper
43	100		
72	24.3	19.5	29.3
57	5.7	4.6	6.8

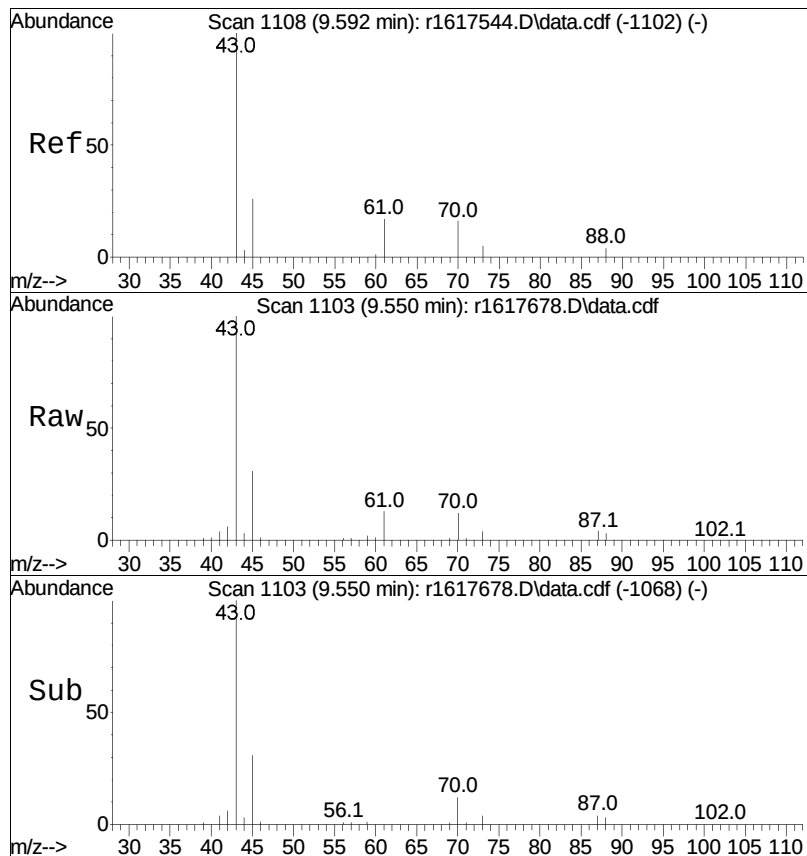




#37
 cis-1,2-dichloroethene
 Concen: 10.29 ppbV
 RT: 9.24 min Scan# 1066
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

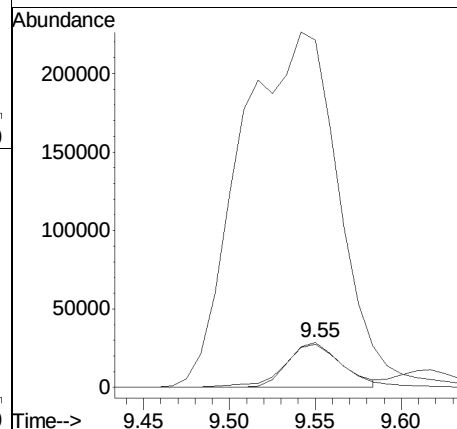
Tgt Ion:	61	Resp:	208234
Ion Ratio	Lower	Upper	
61	100		
96	95.0	74.1	111.1
98	62.4	48.0	72.0

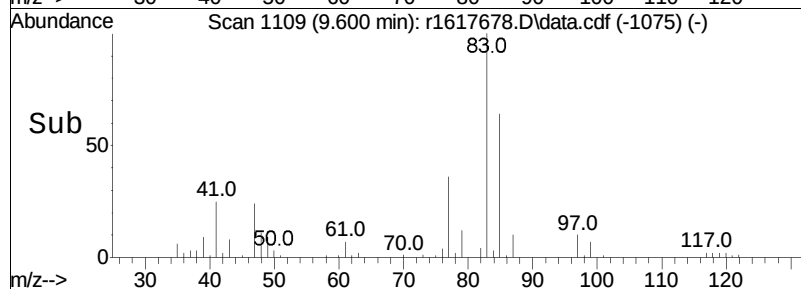
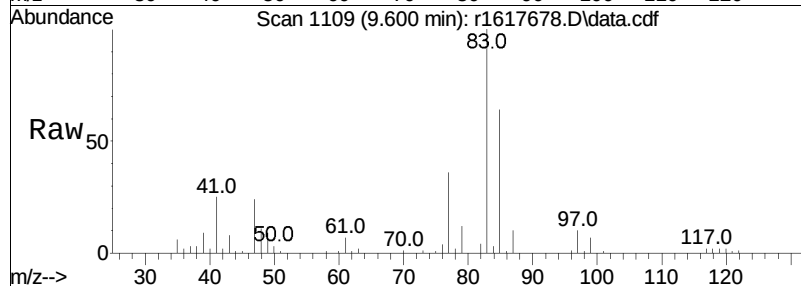
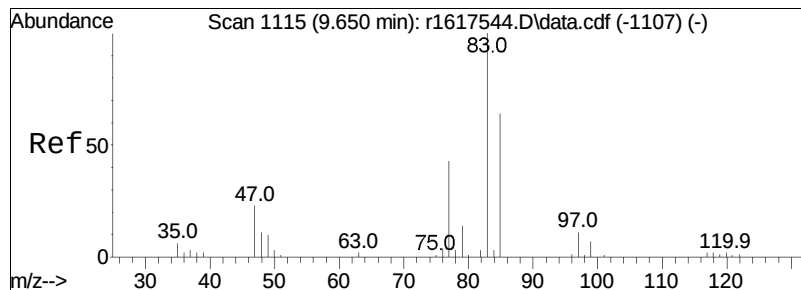




#38
 Ethyl Acetate
 Concen: 11.25 ppbV
 RT: 9.55 min Scan# 1103
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

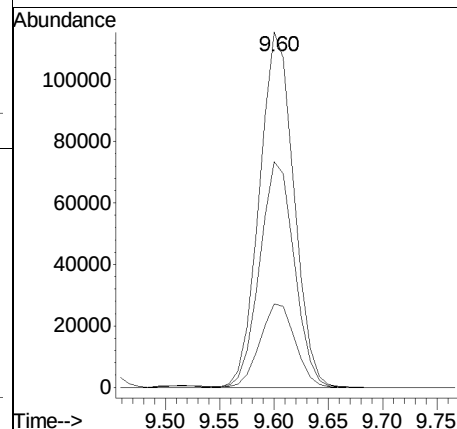
Tgt Ion:	61	Resp:	61805
Ion Ratio	Lower	Upper	
61	100		
70	96.4	80.5	120.7
43	774.3	701.4	1052.0

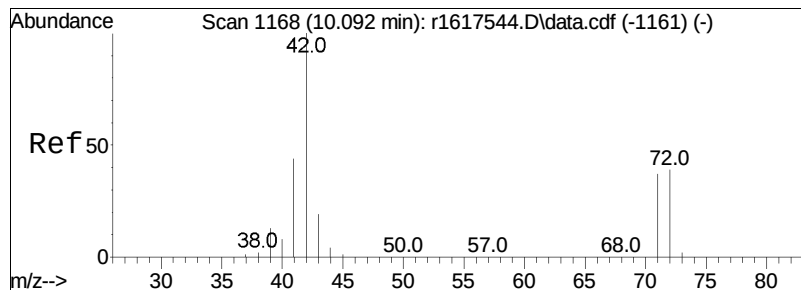




#39
chloroform
Concen: 9.77 ppbV
RT: 9.60 min Scan# 1109
Delta R.T. -0.050 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

Tgt Ion	Ratio	Resp	Lower	Upper
83	100	255241		
85	63.5		51.4	77.0
47	23.5		19.0	28.4





#40

Tetrahydrofuran

Concen: 10.73 ppbV

RT: 10.04 min Scan# 1162

Delta R.T. -0.050 min

Lab File: r1617678.D

Acq: 16 Jun 2020 12:31 PM

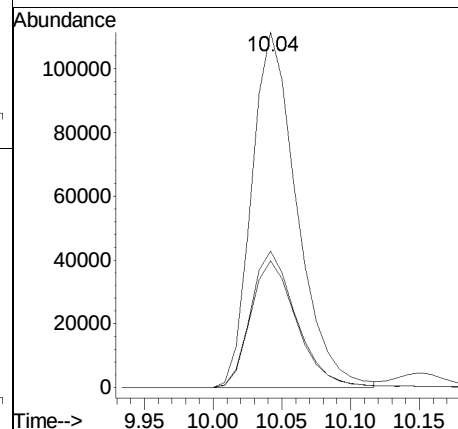
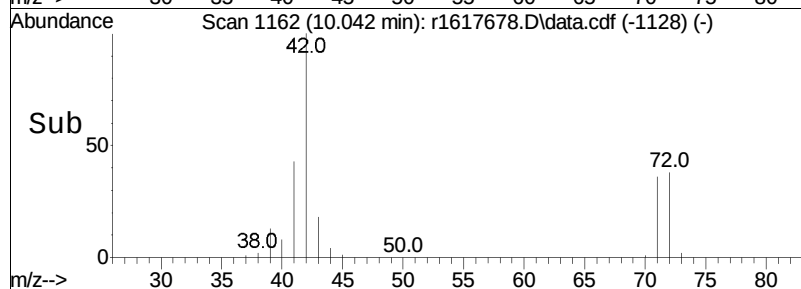
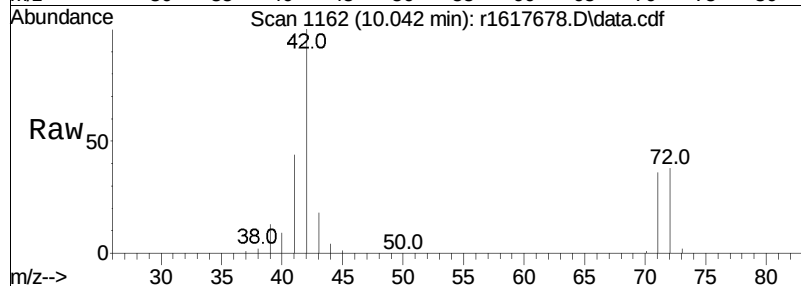
Tgt Ion: 42 Resp: 254909

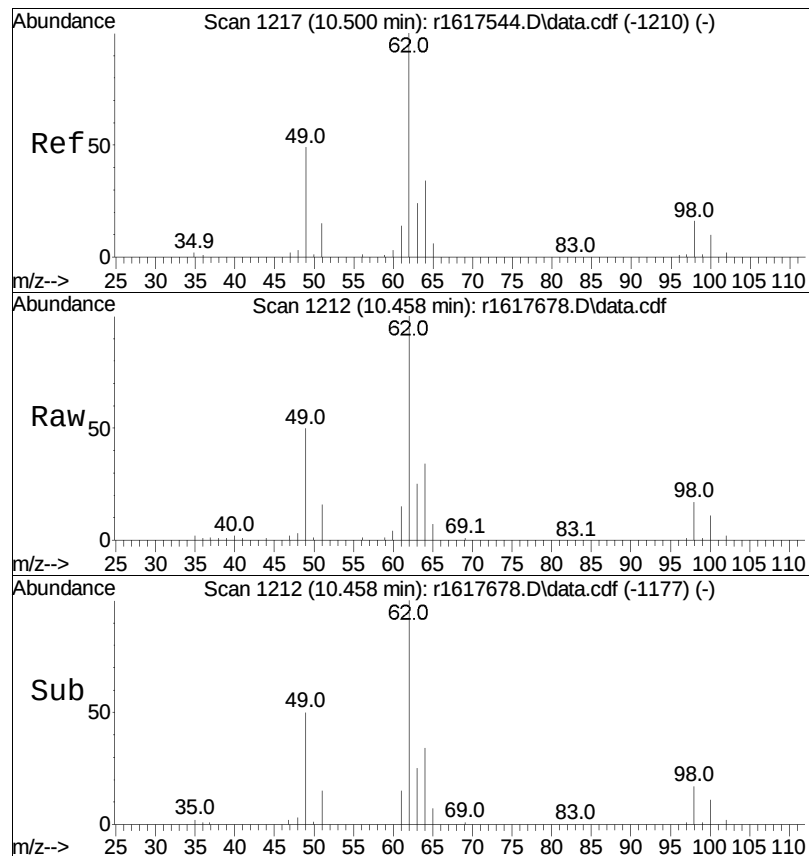
Ion Ratio Lower Upper

42 100

71 35.6 29.4 44.0

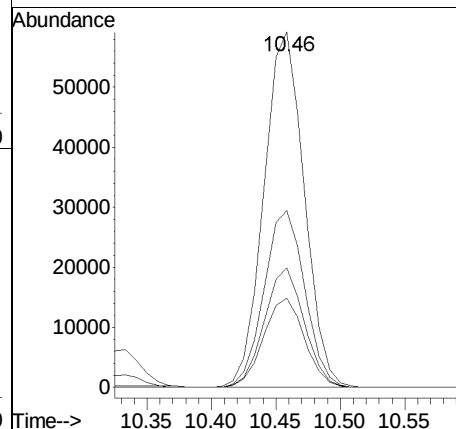
72 38.4 31.4 47.2

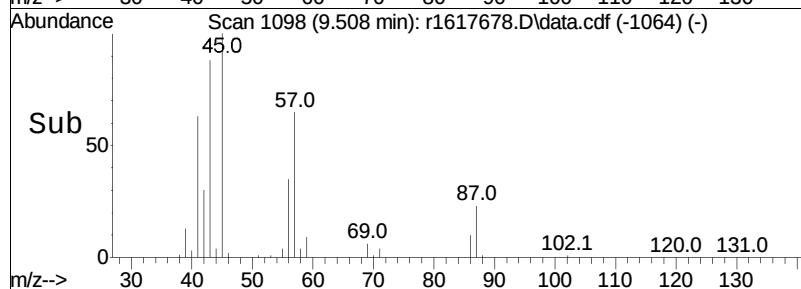
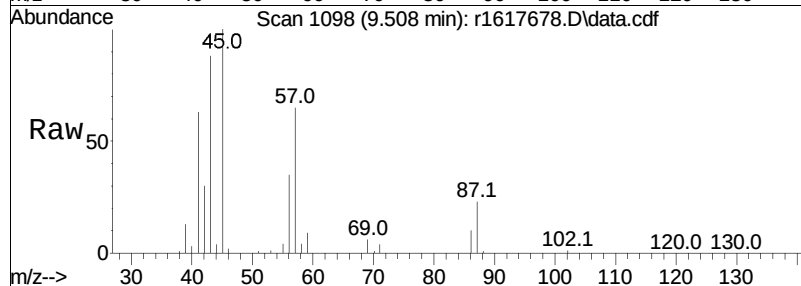
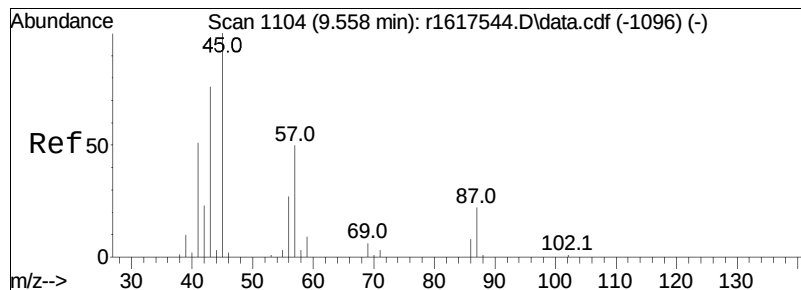




#42
 1,2-dichloroethane
 Concen: 9.15 ppbV
 RT: 10.46 min Scan# 1212
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

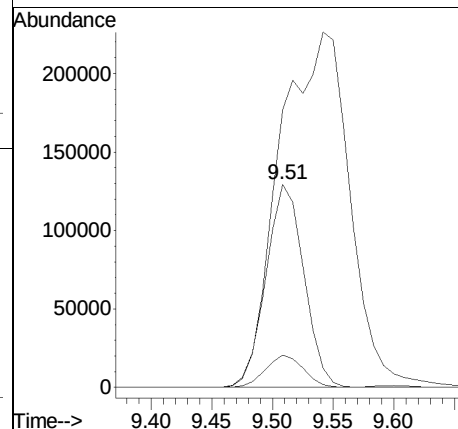
Tgt Ion:	62	Resp:	128683
Ion Ratio	Lower	Upper	
62	100		
64	33.6	27.0	40.4
49	49.8	39.4	59.2
63	25.1	19.0	28.4

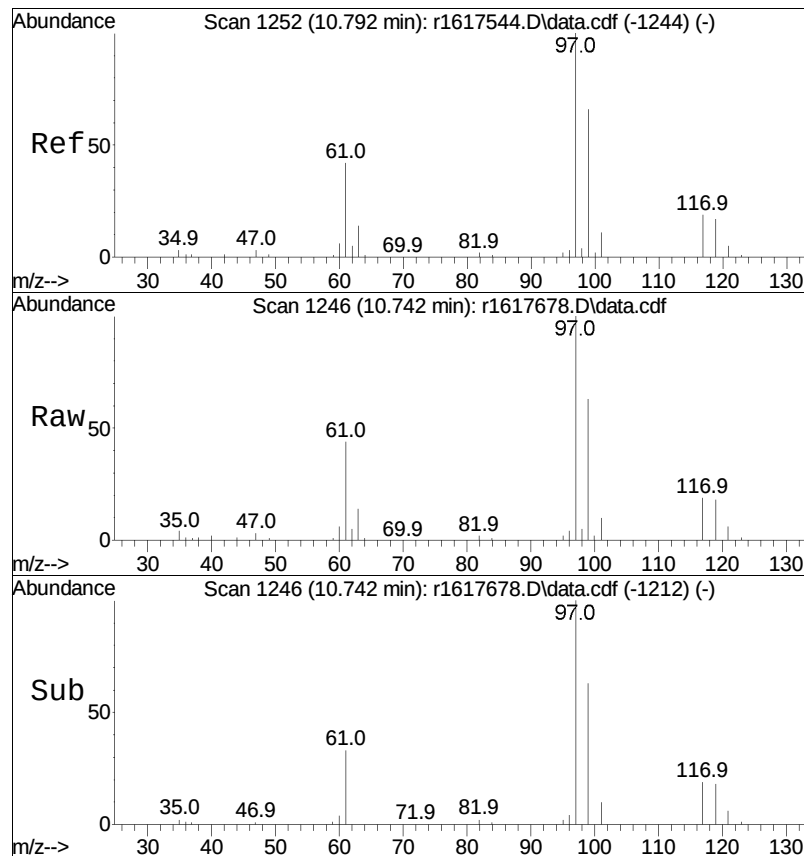




#44
hexane
Concen: 9.97 ppbV
RT: 9.51 min Scan# 1098
Delta R.T. -0.050 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

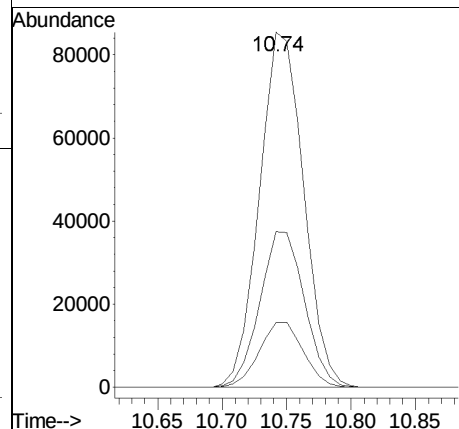
Tgt	Ion	Resp	Lower	Upper
57	100			
43	136.9	281678	122.6	184.0
86	16.0		13.1	19.7

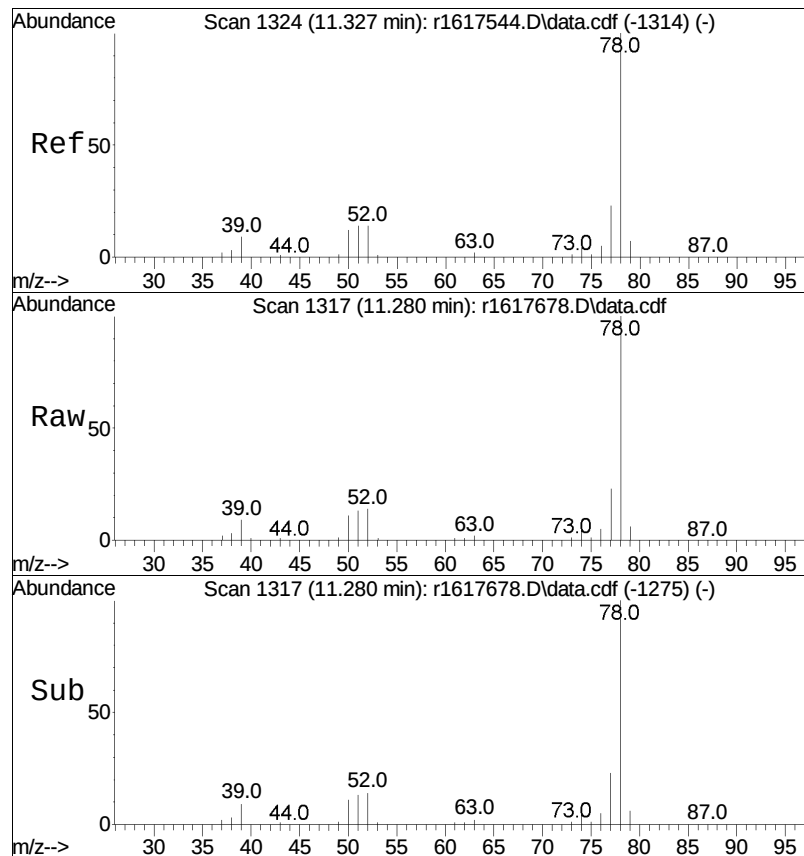




#48
 1,1,1-trichloroethane
 Concen: 9.29 ppbV
 RT: 10.74 min Scan# 1246
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

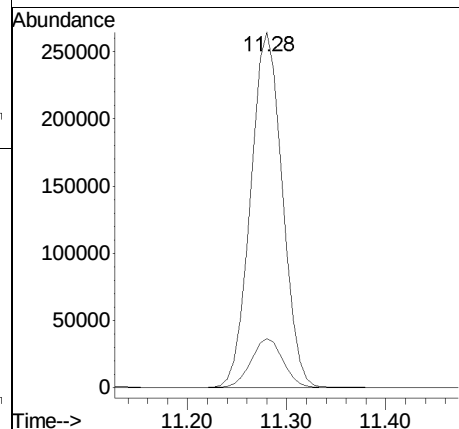
Tgt Ion:	97	Resp:	203359
Ion Ratio	Lower	Upper	
97	100		
61	43.8	33.5	50.3
119	18.2	13.8	20.6

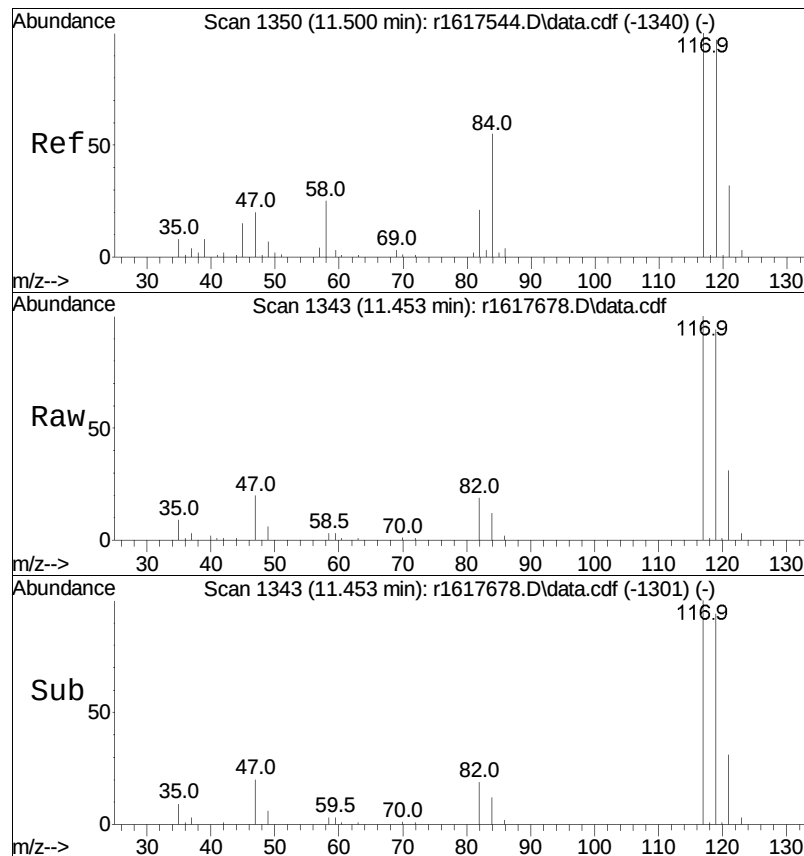




#50
benzene
Concen: 9.51 ppbV
RT: 11.28 min Scan# 1317
Delta R.T. -0.047 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

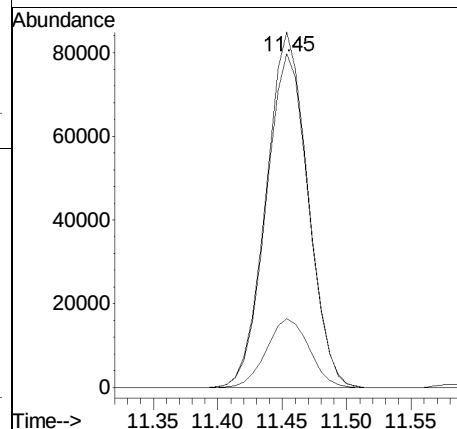
Tgt Ion	Ratio	Lower	Upper
78	100		
52	13.8	11.4	17.0

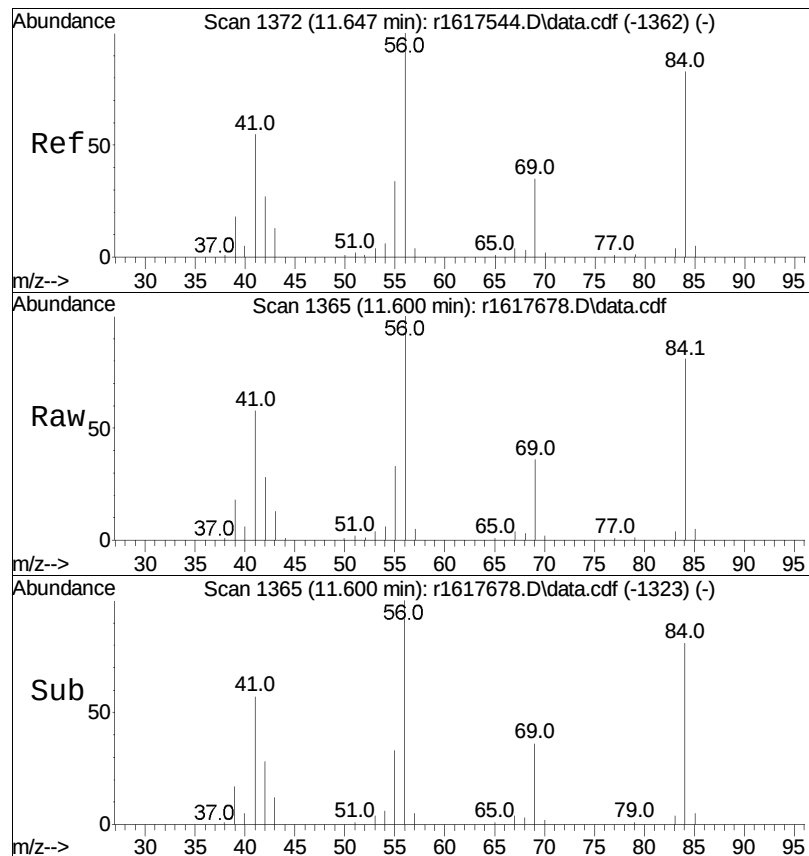




#52
 carbon tetrachloride
 Concen: 9.44 ppbV
 RT: 11.45 min Scan# 1343
 Delta R.T. -0.047 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

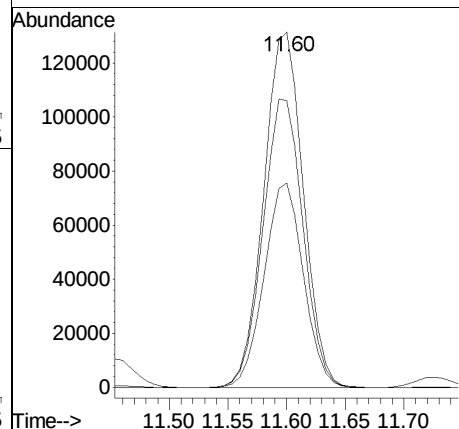
Tgt Ion:	117	Resp:	190797
Ion Ratio	Lower	Upper	
117	100		
119	93.9	77.5	116.3
82	19.3	17.0	25.6

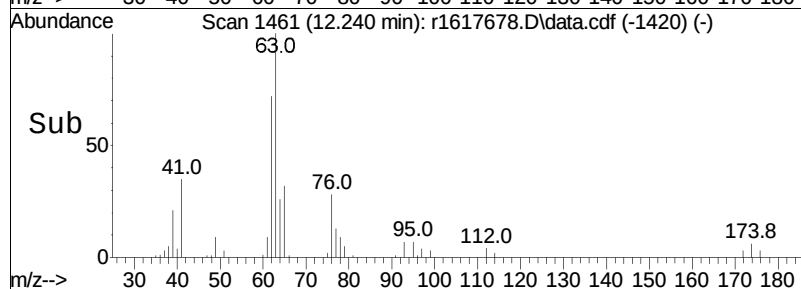
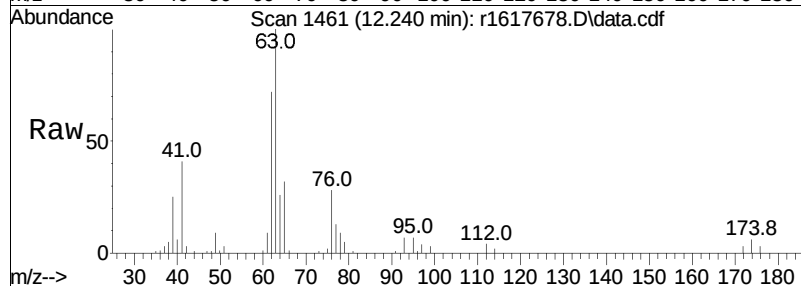
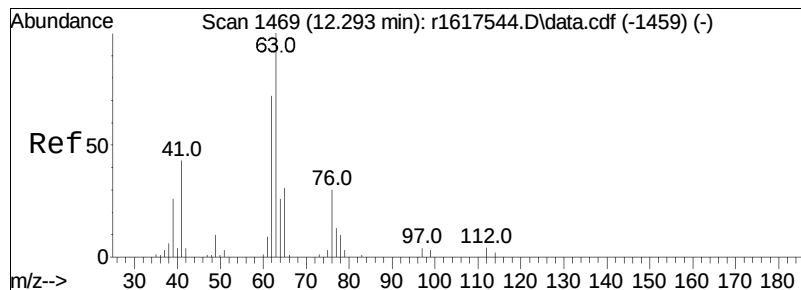




#53
cyclohexane
Concen: 10.06 ppbV
RT: 11.60 min Scan# 1365
Delta R.T. -0.047 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

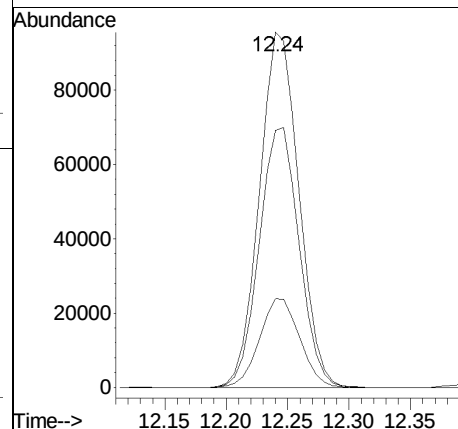
Tgt	Ion	Resp	308356
Ion	Ratio	Lower	Upper
56	100		
84	80.7	66.6	100.0
41	57.5	44.2	66.4

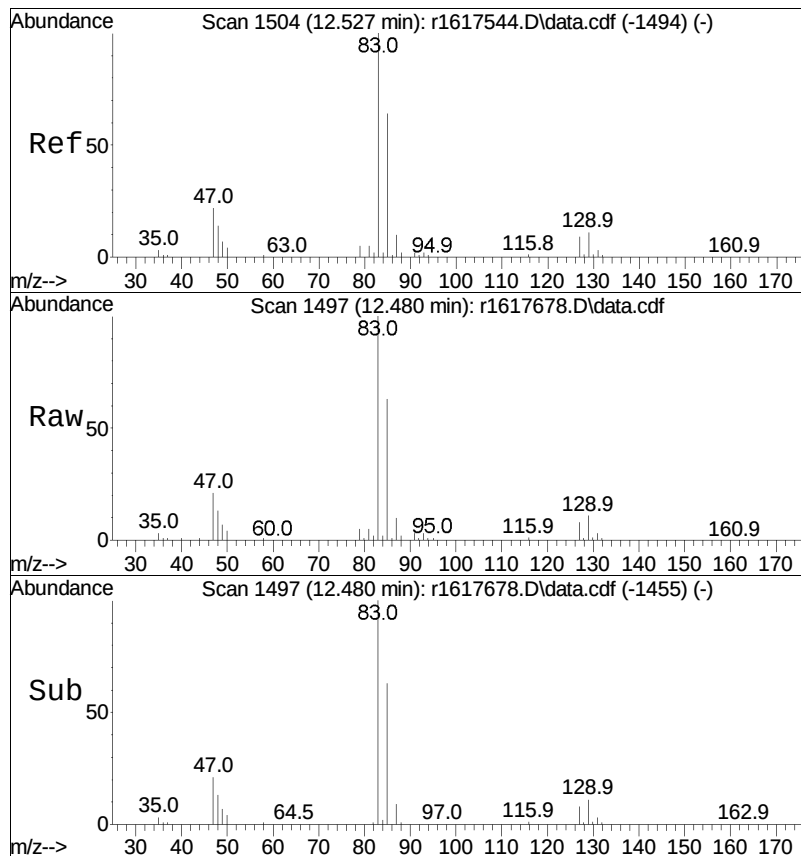




#56
 1,2-dichloropropane
 Concen: 10.21 ppbV
 RT: 12.24 min Scan# 1461
 Delta R.T. -0.053 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

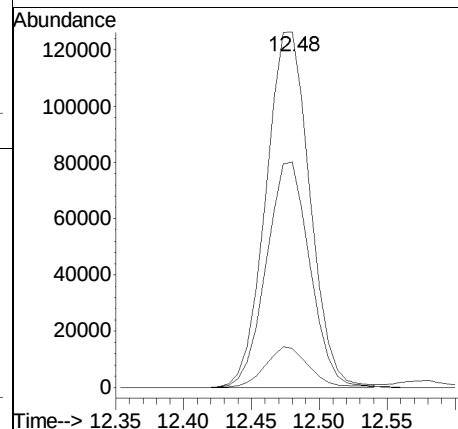
Tgt	Ion	Ratio	Lower	Upper
63	100			
62	72.3	57.6	86.4	
39	24.9	21.0	31.4	

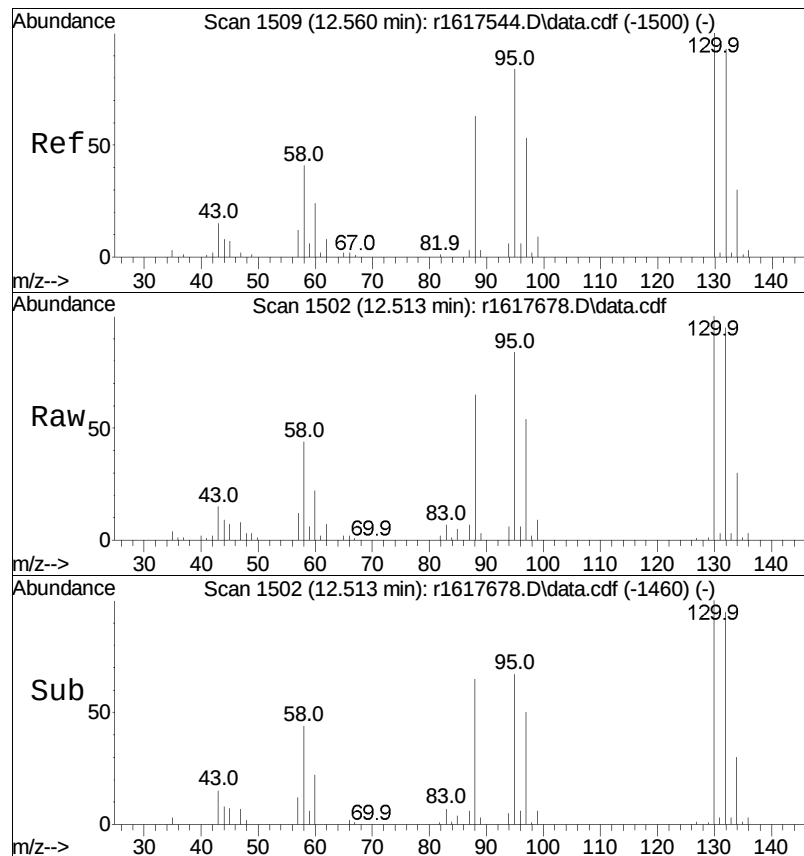




#57
 bromodichloromethane
 Concen: 9.76 ppbV
 RT: 12.48 min Scan# 1497
 Delta R.T. -0.047 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

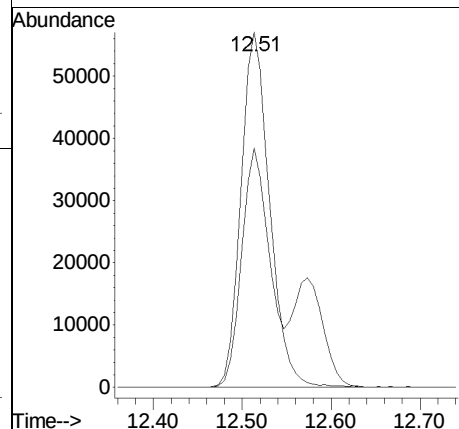
Tgt Ion:	83	Resp:	284766
Ion Ratio	Lower	Upper	
83	100		
85	63.4	50.9	76.3
129	11.0	8.6	13.0

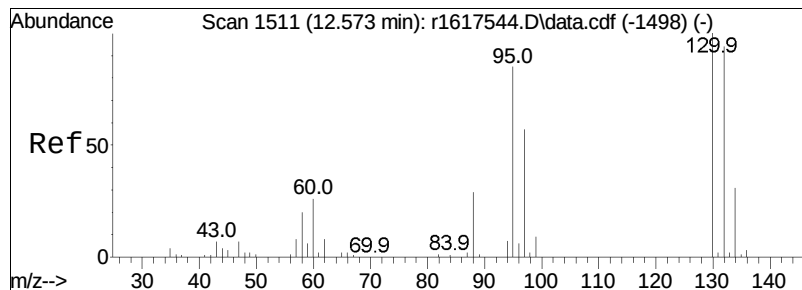




#58
 1,4-dioxane
 Concen: 10.05 ppbV
 RT: 12.51 min Scan# 1502
 Delta R.T. -0.047 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

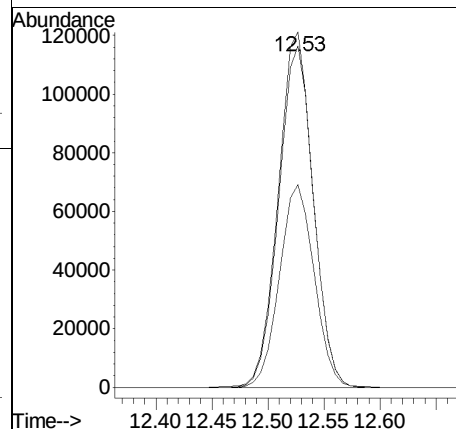
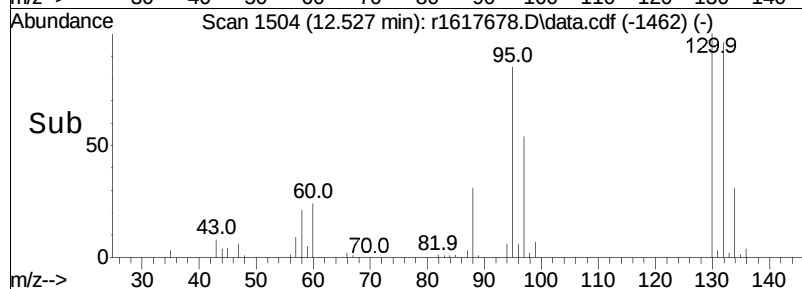
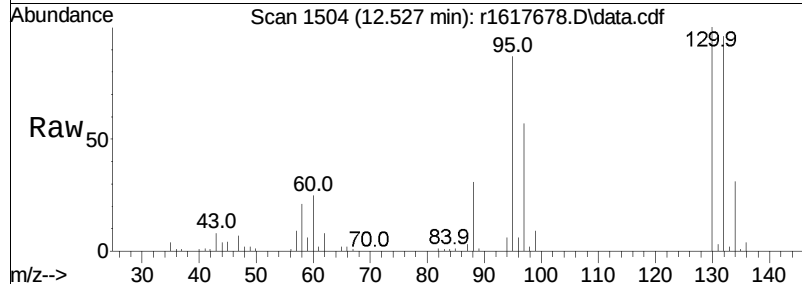
Tgt	Ion	Ratio	Lower	Upper
88	100			
58	67.4	52.6	79.0	

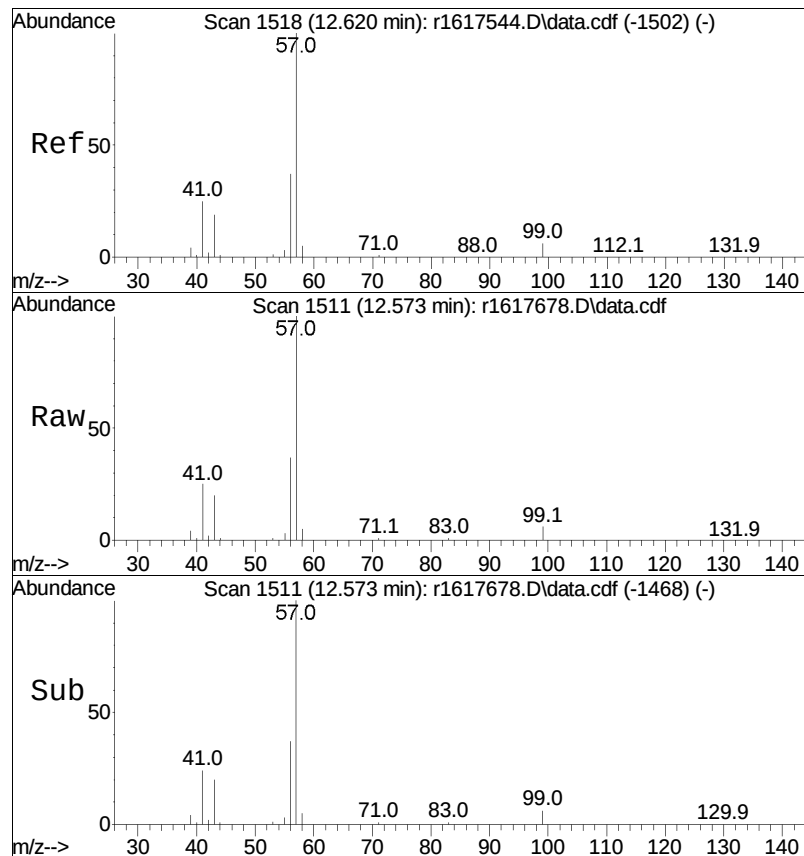




#59
trichloroethene
Concen: 10.01 ppbV
RT: 12.53 min Scan# 1504
Delta R.T. -0.047 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

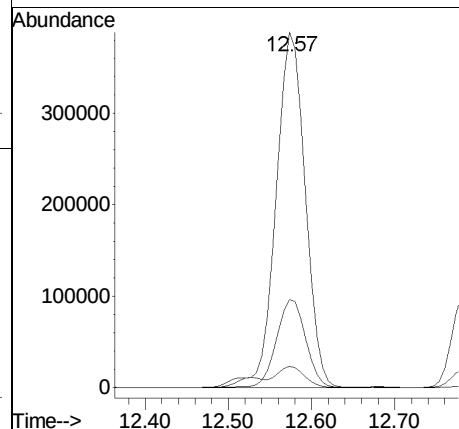
Tgt Ion	Ratio	Lower	Upper
130	100		
132	96.1	75.5	113.3
97	57.1	45.7	68.5

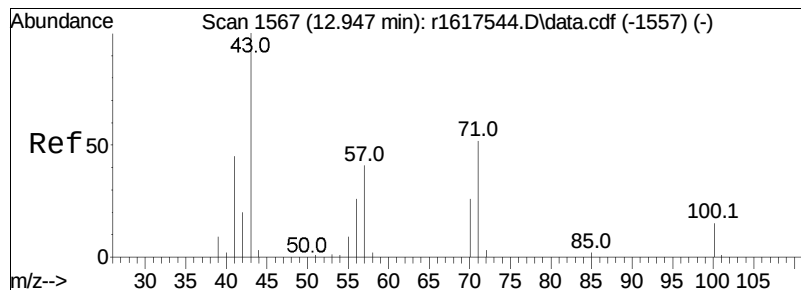




#60
 2,2,4-trimethylpentane
 Concen: 10.19 ppbV
 RT: 12.57 min Scan# 1511
 Delta R.T. -0.047 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

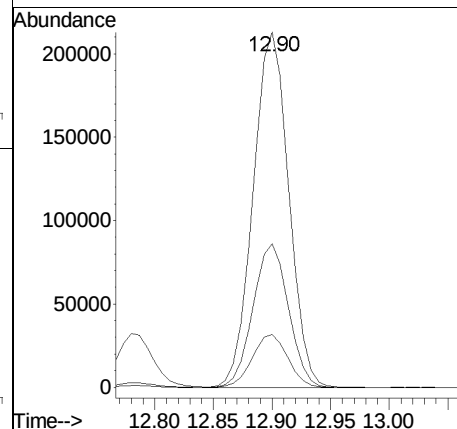
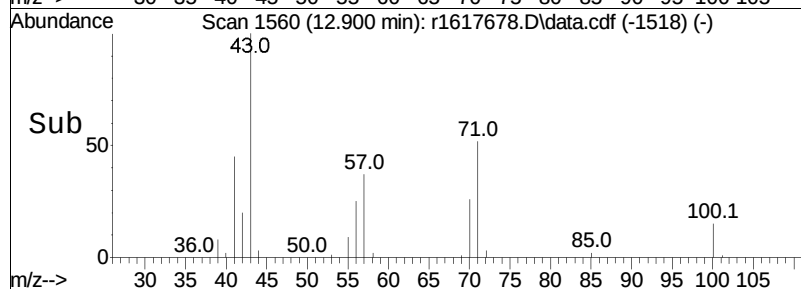
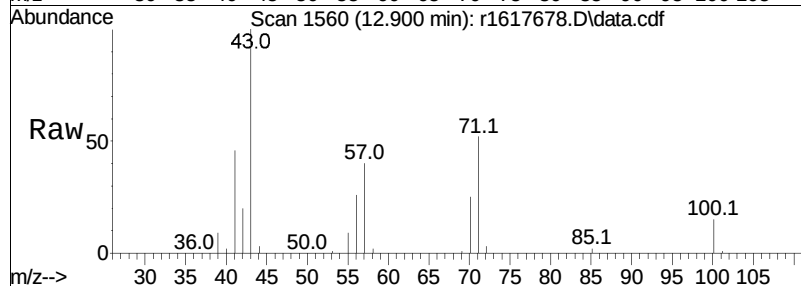
Tgt	Ion: 57	Resp: 953888
Ion	Ratio	Lower Upper
57	100	
99	6.0	4.7 7.1
41	24.7	19.9 29.9

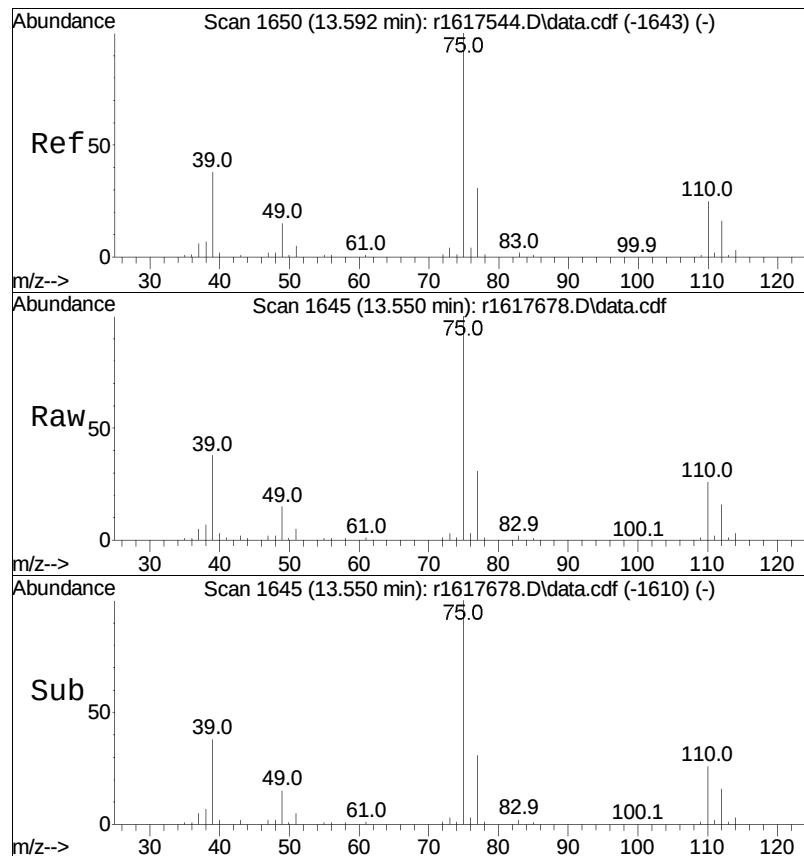




#62
 heptane
 Concen: 10.39 ppbV
 RT: 12.90 min Scan# 1560
 Delta R.T. -0.047 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

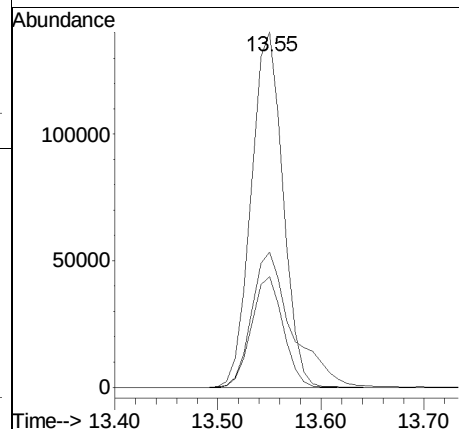
Tgt Ion	Ratio	Lower	Upper
43	100		
57	40.4	33.1	49.7
100	14.9	11.8	17.8

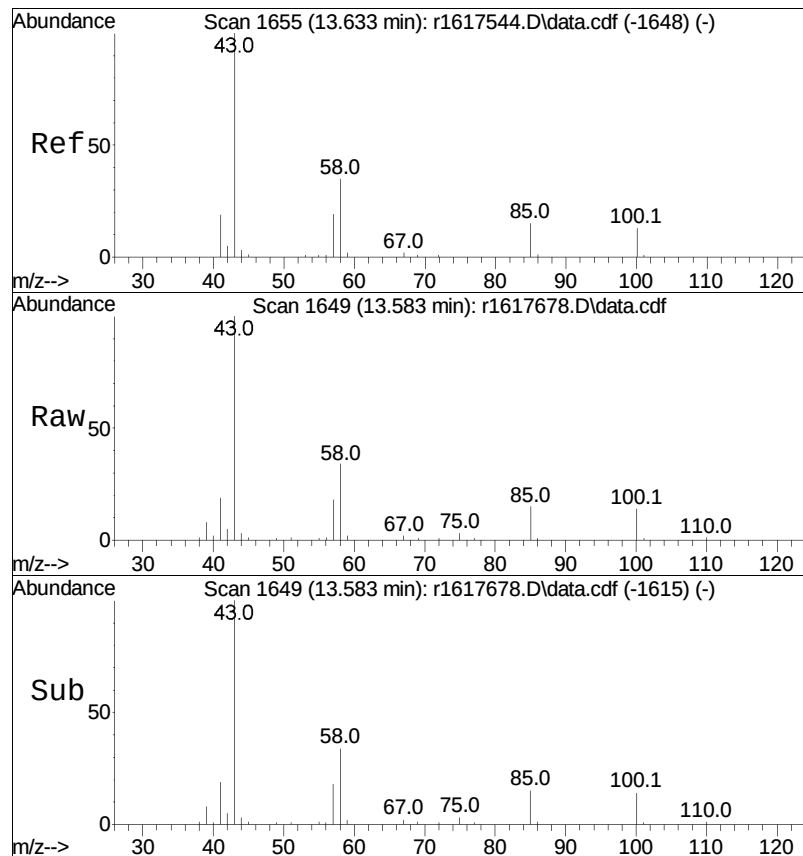




#63
 cis-1,3-dichloropropene
 Concen: 10.34 ppbV
 RT: 13.55 min Scan# 1645
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

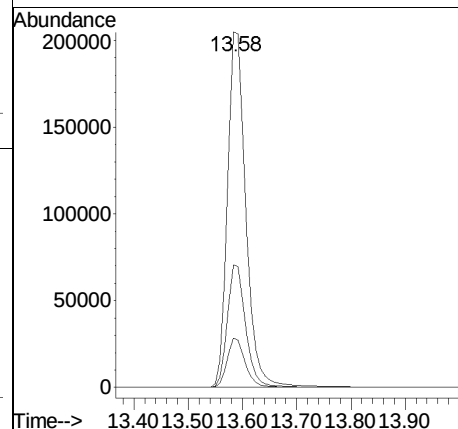
Tgt Ion:	75	Resp:	300271
Ion Ratio	Lower	Upper	
75	100		
39	38.1	30.7	46.1
77	31.2	25.0	37.6

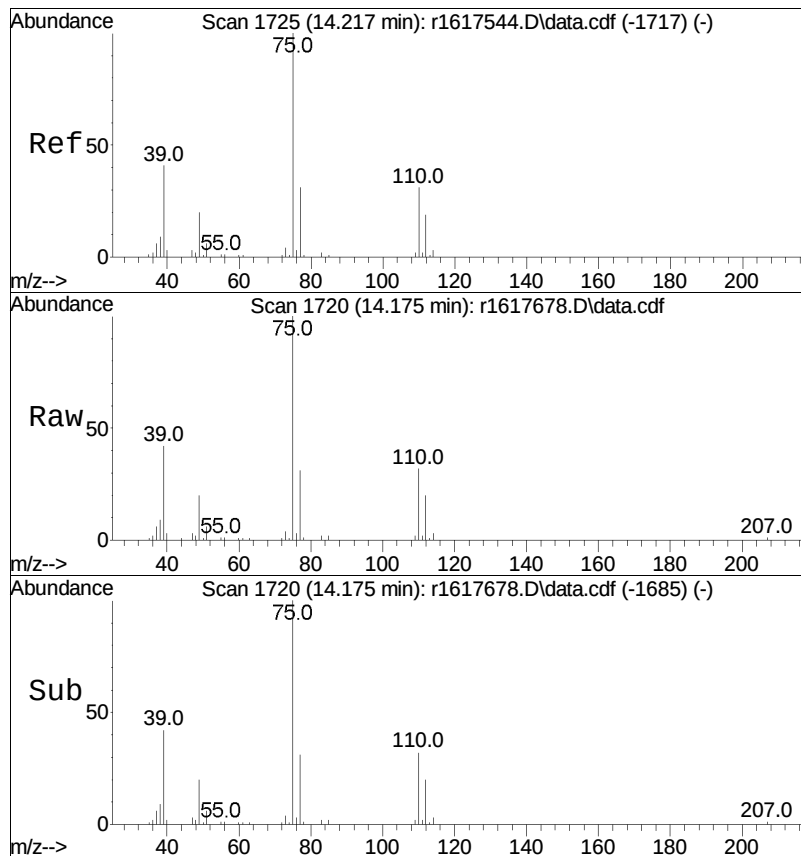




#64
 4-methyl-2-pentanone
 Concen: 10.34 ppbV
 RT: 13.58 min Scan# 1649
 Delta R.T. -0.050 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

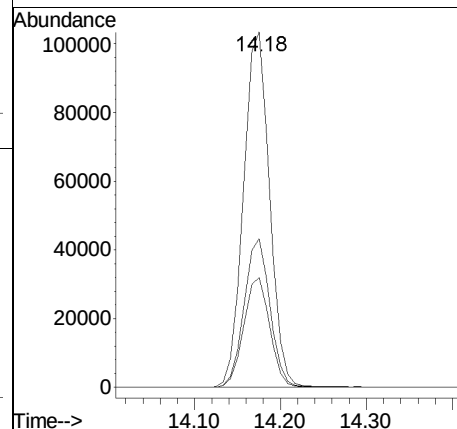
Tgt Ion:	43	Resp:	484971
Ion Ratio	Lower	Upper	
43	100		
58	34.5	27.7	41.5
100	14.0	10.7	16.1

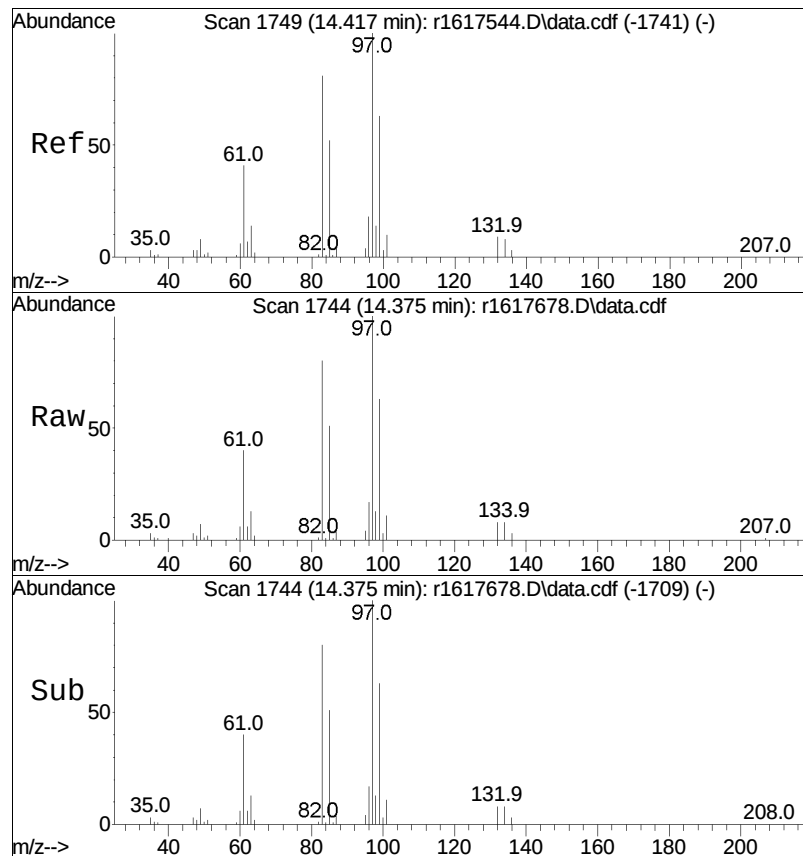




#65
 trans-1,3-dichloropropene
 Concen: 8.63 ppbV
 RT: 14.18 min Scan# 1720
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

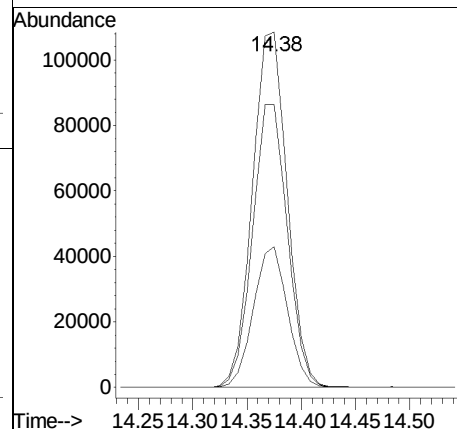
Tgt Ion	Ratio	Lower	Upper
75	100		
77	31.0	25.1	37.7
39	41.9	33.0	49.6

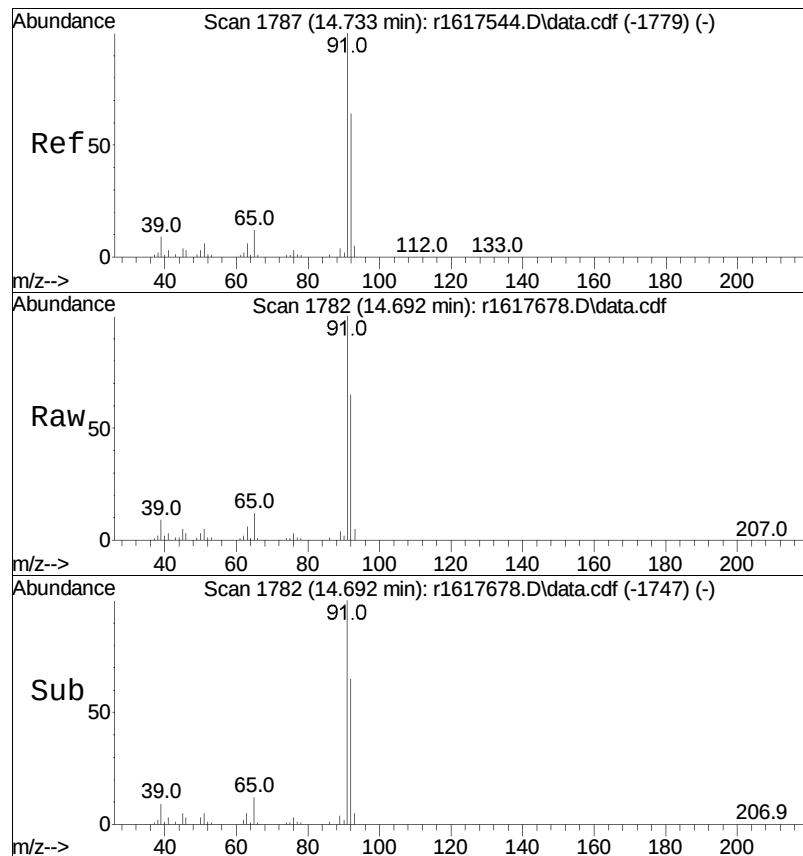




#66
 1,1,2-trichloroethane
 Concen: 10.38 ppbV
 RT: 14.38 min Scan# 1744
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

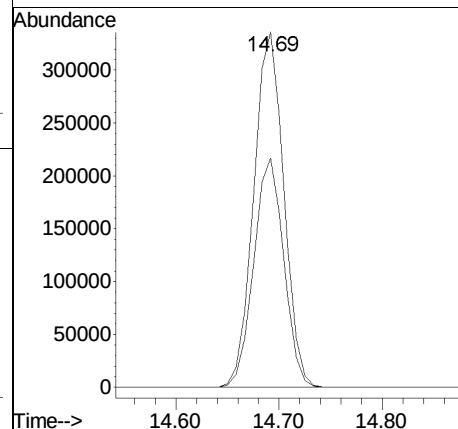
Tgt Ion:	97	Resp:	242541
Ion Ratio	Lower	Upper	
97	100		
83	79.6	65.1	97.7
61	39.6	32.9	49.3

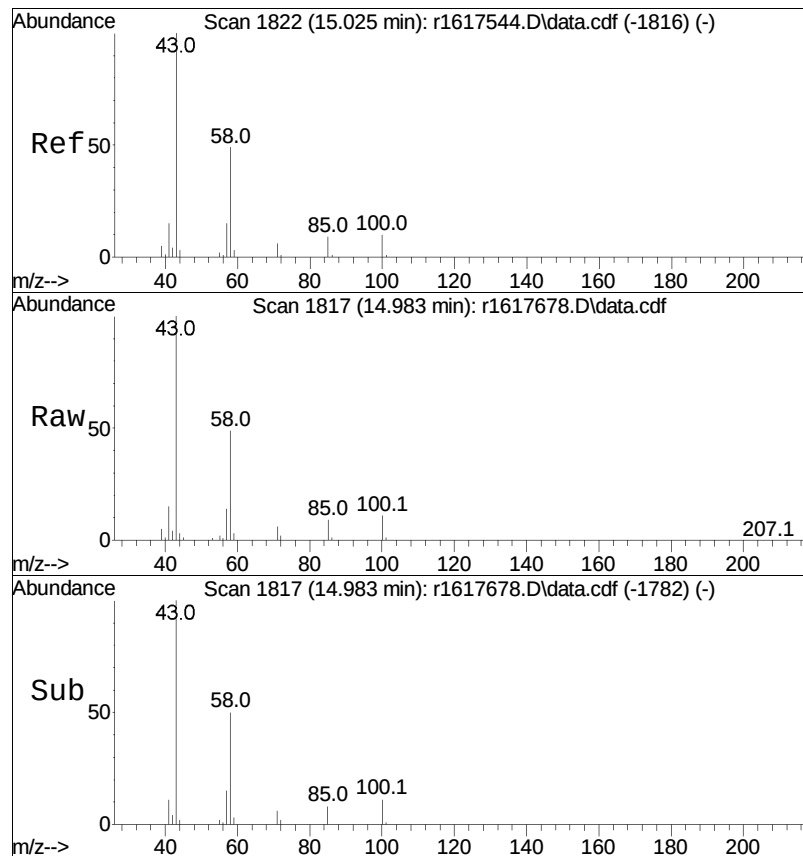




#68
toluene
Concen: 10.46 ppbV
RT: 14.69 min Scan# 1782
Delta R.T. -0.042 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

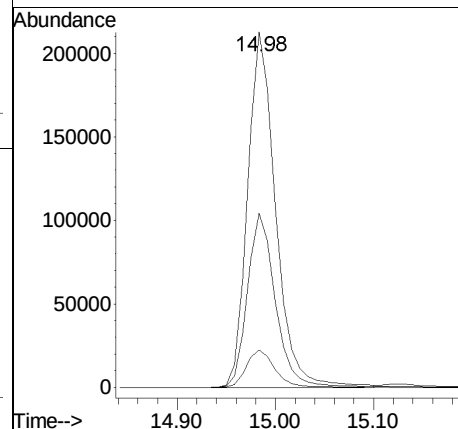
Tgt	Ion	Resp	Lower	Upper
91	100	680487		
92	64.6	50.9	76.3	

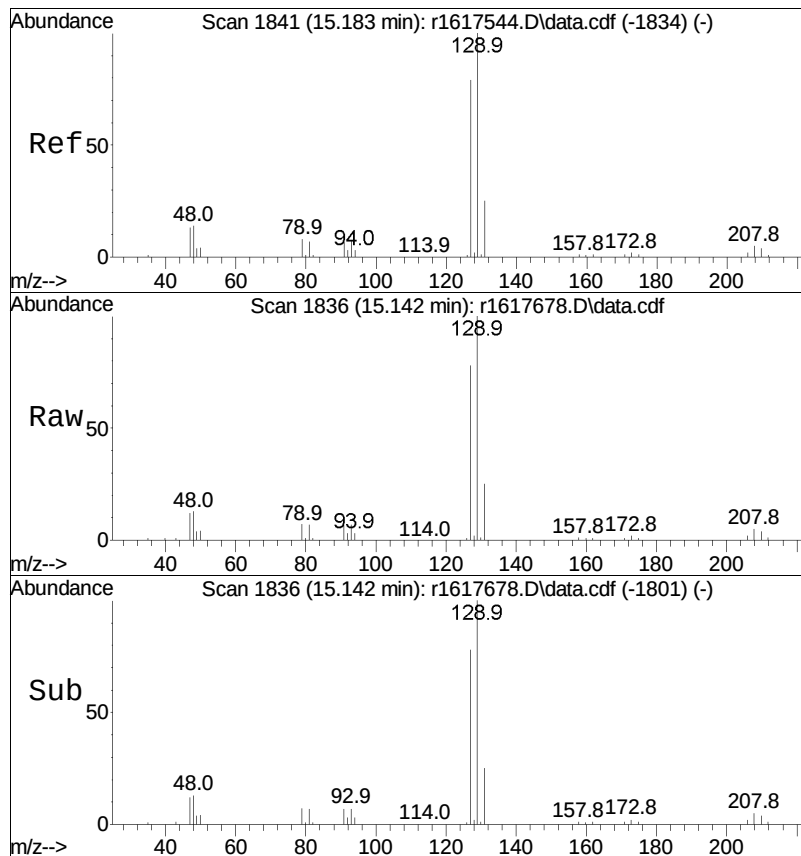




#72
 2-hexanone
 Concen: 11.04 ppbV
 RT: 14.98 min Scan# 1817
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

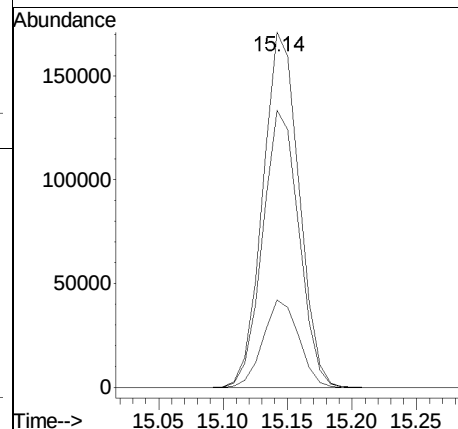
Tgt Ion:	43	Resp:	421969
Ion Ratio	Lower	Upper	
43	100		
58	49.0	40.0	60.0
100	10.5	8.7	13.1

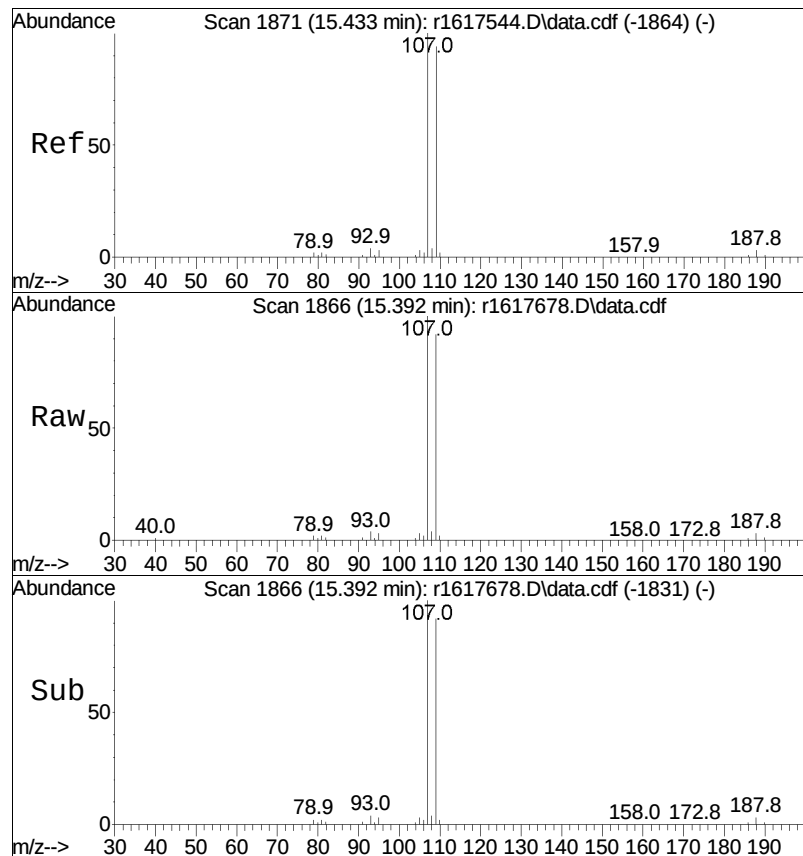




#74
 dibromochloromethane
 Concen: 11.28 ppbV
 RT: 15.14 min Scan# 1836
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

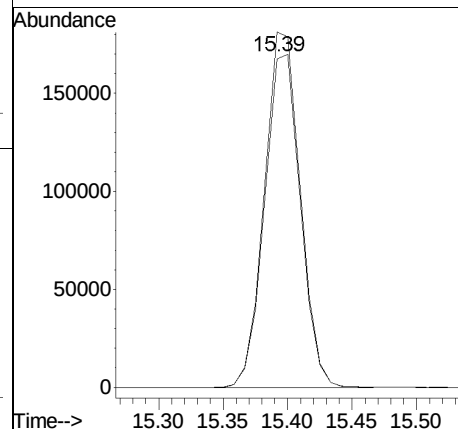
Tgt	Ion:129	Resp:	334854
Ion	Ratio	Lower	Upper
129	100		
127	78.0	62.9	94.3
131	24.6	19.6	29.4

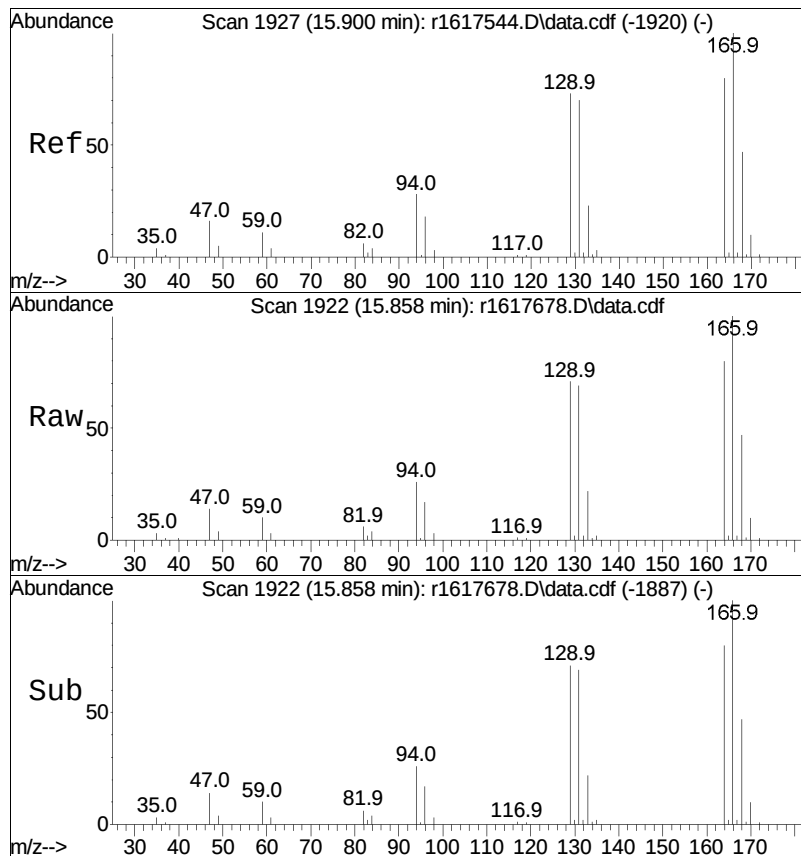




#75
 1,2-dibromoethane
 Concen: 10.80 ppbV
 RT: 15.39 min Scan# 1866
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

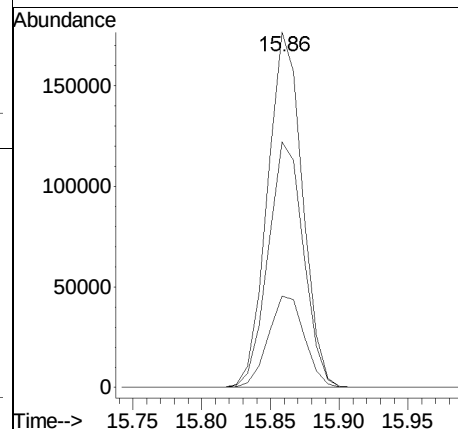
Tgt Ion	Ratio	Lower	Upper
107	100		
109	92.4	75.3	112.9

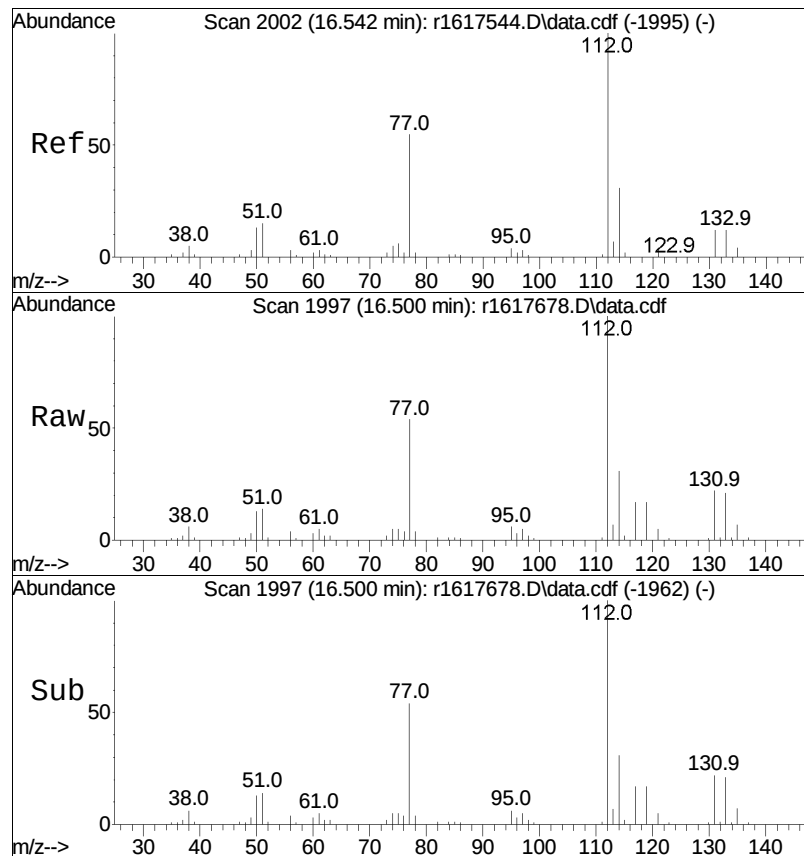




#78
 tetrachloroethene
 Concen: 10.69 ppbV
 RT: 15.86 min Scan# 1922
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

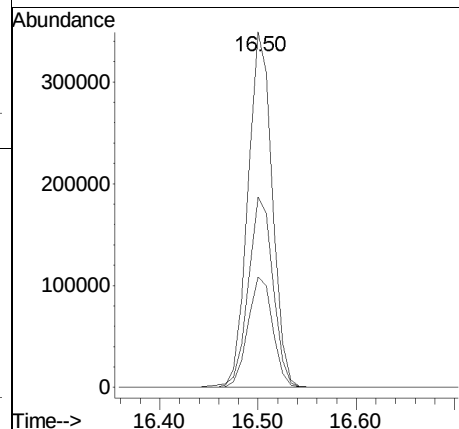
Tgt	Ion:166	Resp:	311782
Ion	Ratio	Lower	Upper
166	100		
131	69.1	56.1	84.1
94	25.7	22.2	33.4

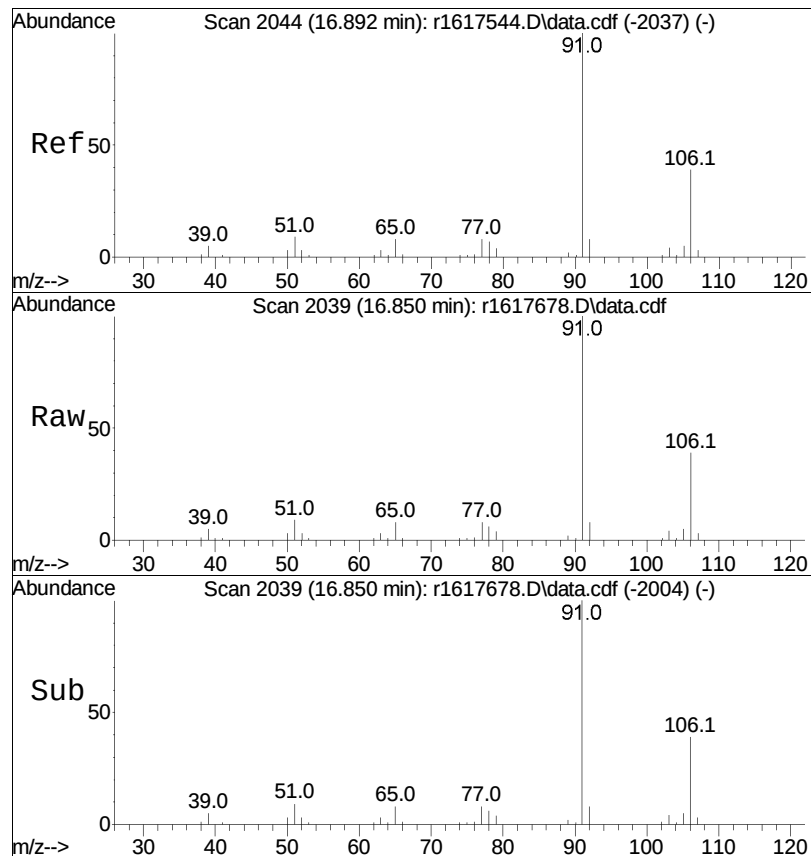




#80
 chlorobenzene
 Concen: 10.65 ppbV
 RT: 16.50 min Scan# 1997
 Delta R.T. -0.042 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

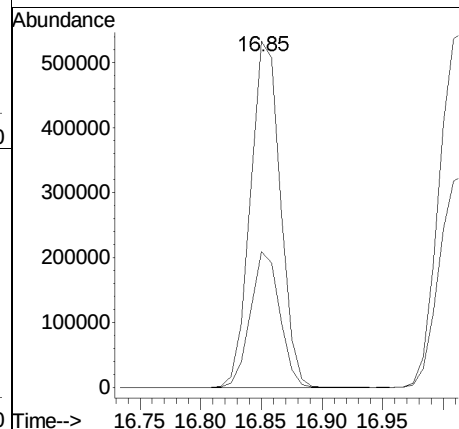
Tgt	Ion:112	Resp:	599075
Ion	Ratio	Lower	Upper
112	100		
114	31.1	25.0	37.6
77	53.6	44.5	66.7

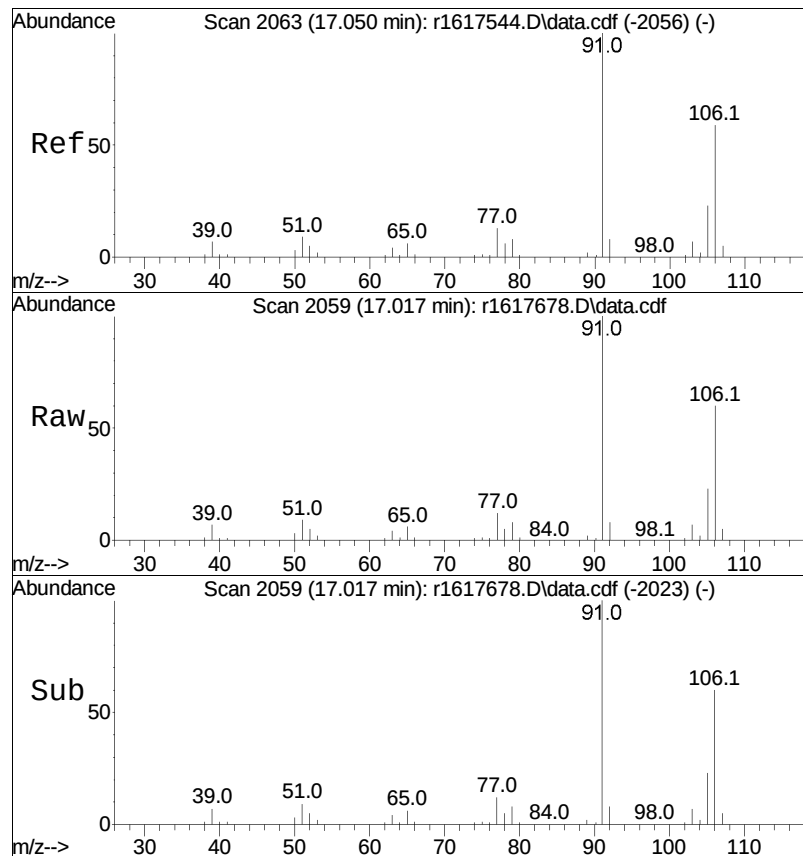




#81
ethylbenzene
Concen: 10.77 ppbV
RT: 16.85 min Scan# 2039
Delta R.T. -0.042 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

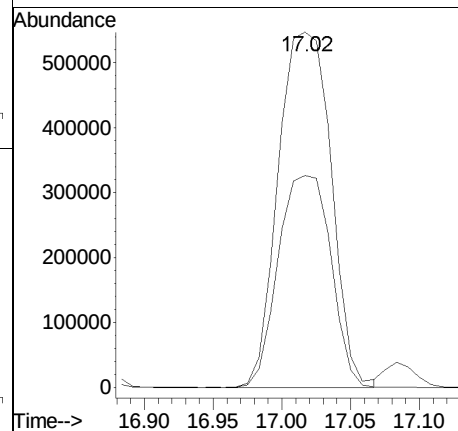
Tgt	Ion	Resp	Lower	Upper
91	100	913360		
106	39.2	31.1	46.7	

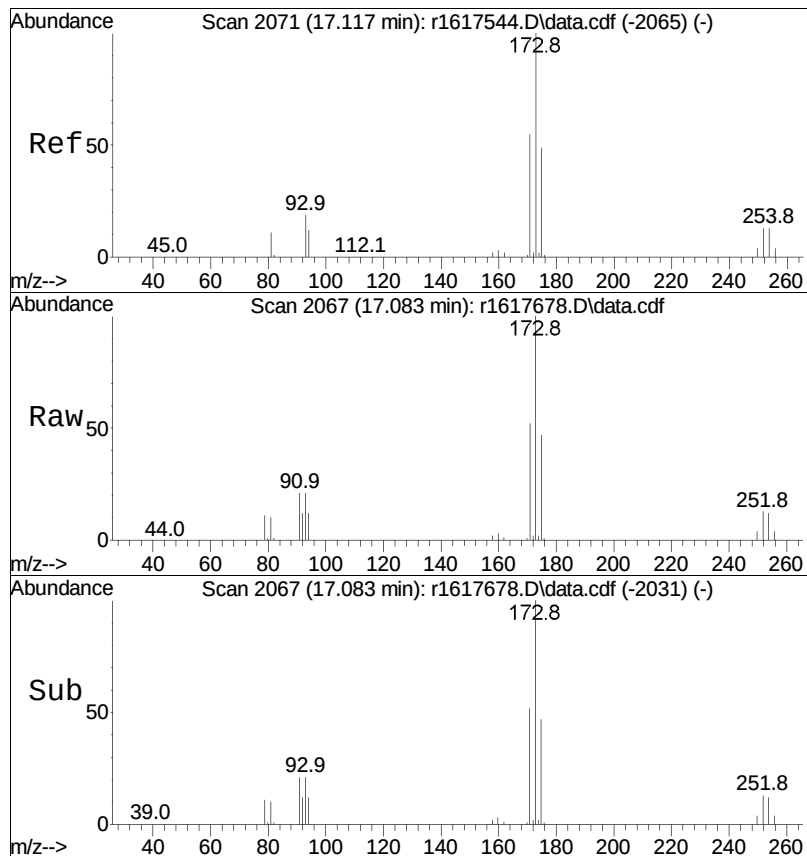




#83
 m+p-xylene
 Concen: 21.47 ppbV
 RT: 17.02 min Scan# 2059
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

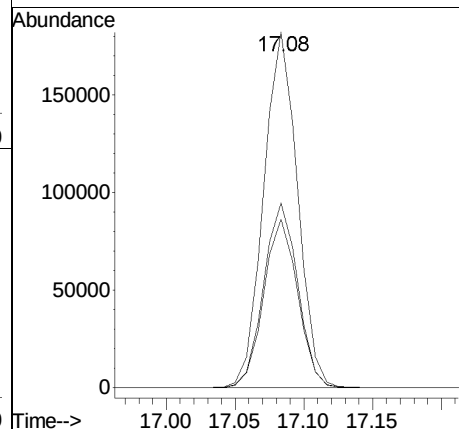
Tgt	Ion	Resp	Lower	Upper
91	100	1463054		
106	59.6	47.5	71.3	

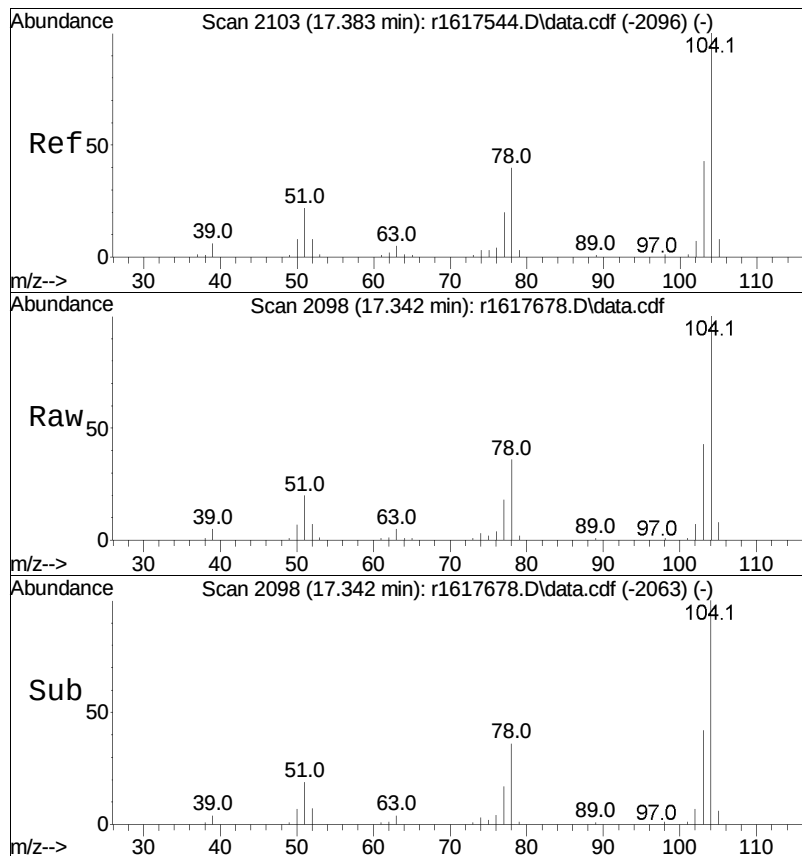




#84
bromoform
Concen: 11.55 ppbV
RT: 17.08 min Scan# 2067
Delta R.T. -0.033 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

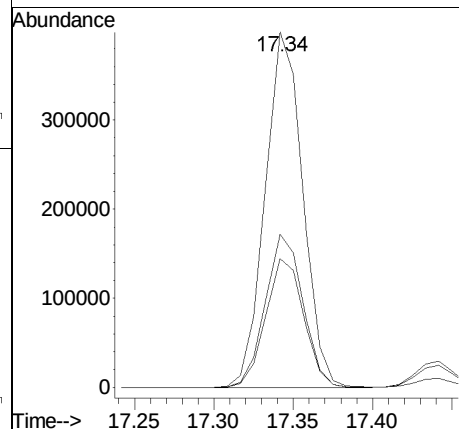
Tgt Ion	Ratio	Lower	Upper
173	100		
175	47.3	38.8	58.2
171	51.9	44.0	66.0

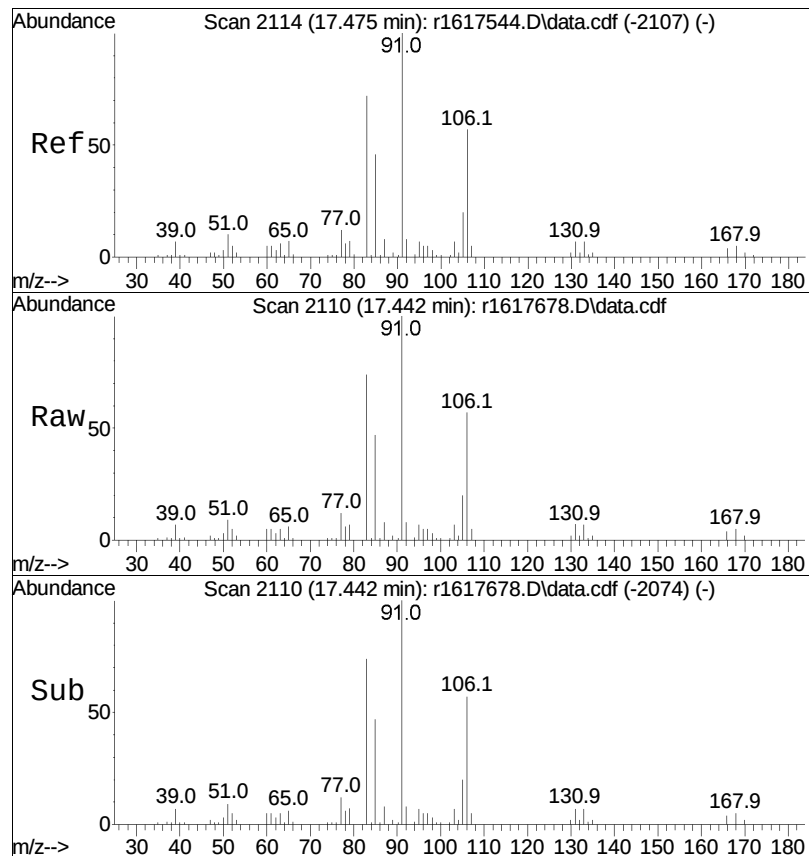




#85
styrene
Concen: 10.96 ppbV
RT: 17.34 min Scan# 2098
Delta R.T. -0.042 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

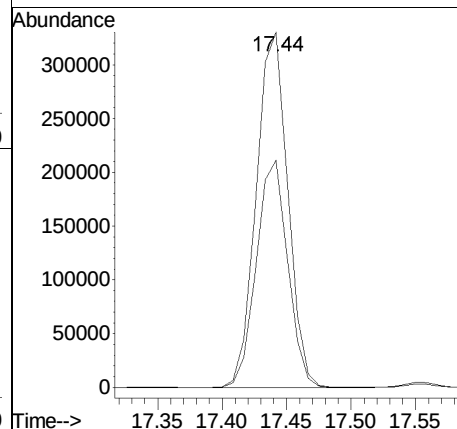
Tgt	Ion	Ratio	Lower	Upper
104	104	100		
103	43.1		34.4	51.6
78	36.2		31.8	47.6

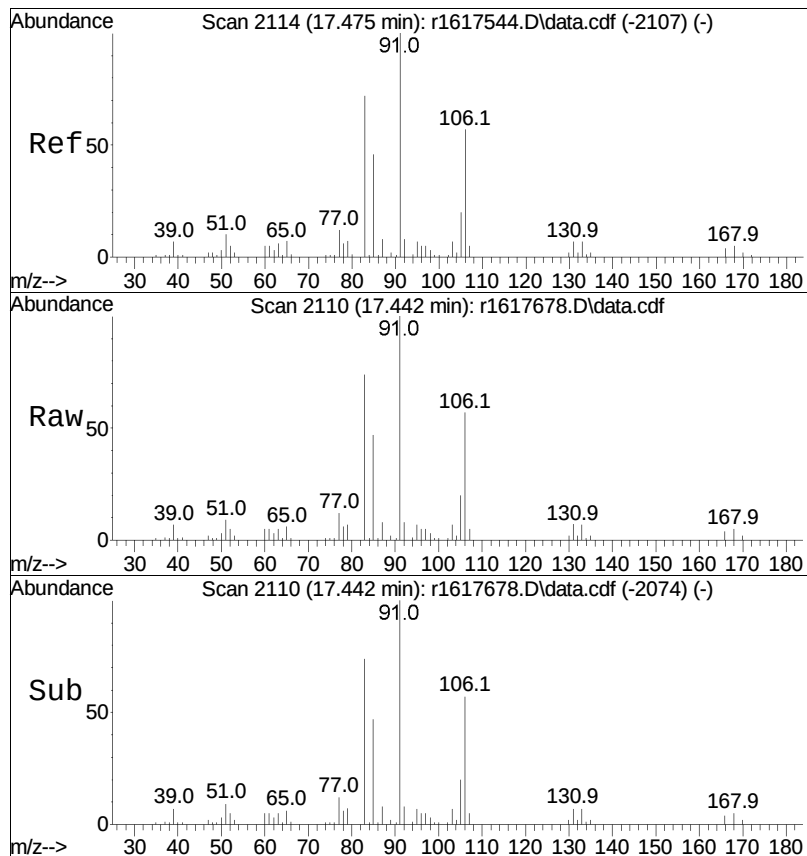




#86
 1,1,2,2-tetrachloroethane
 Concen: 11.31 ppbV
 RT: 17.44 min Scan# 2110
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

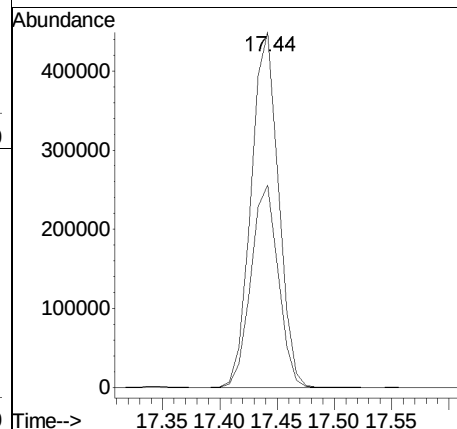
Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.9	50.8	76.2

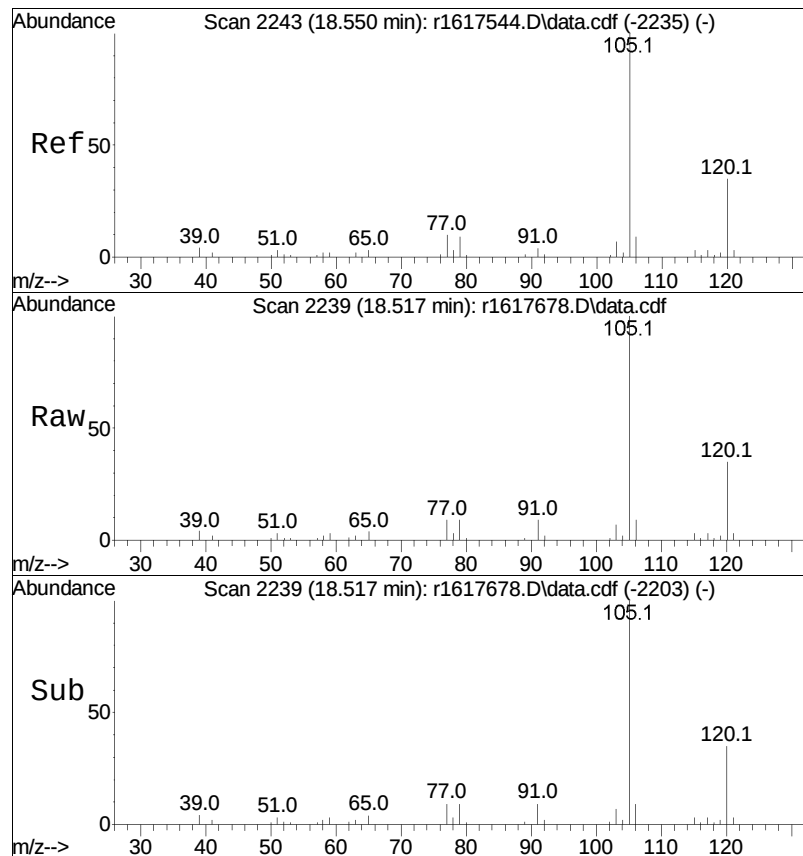




#87
 o-xylene
 Concen: 10.82 ppbV
 RT: 17.44 min Scan# 2110
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

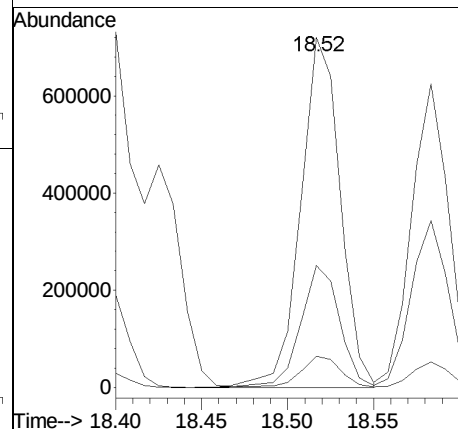
Tgt	Ion	Resp	Lower	Upper
91	100	746275		
106	57.0	45.8	68.8	

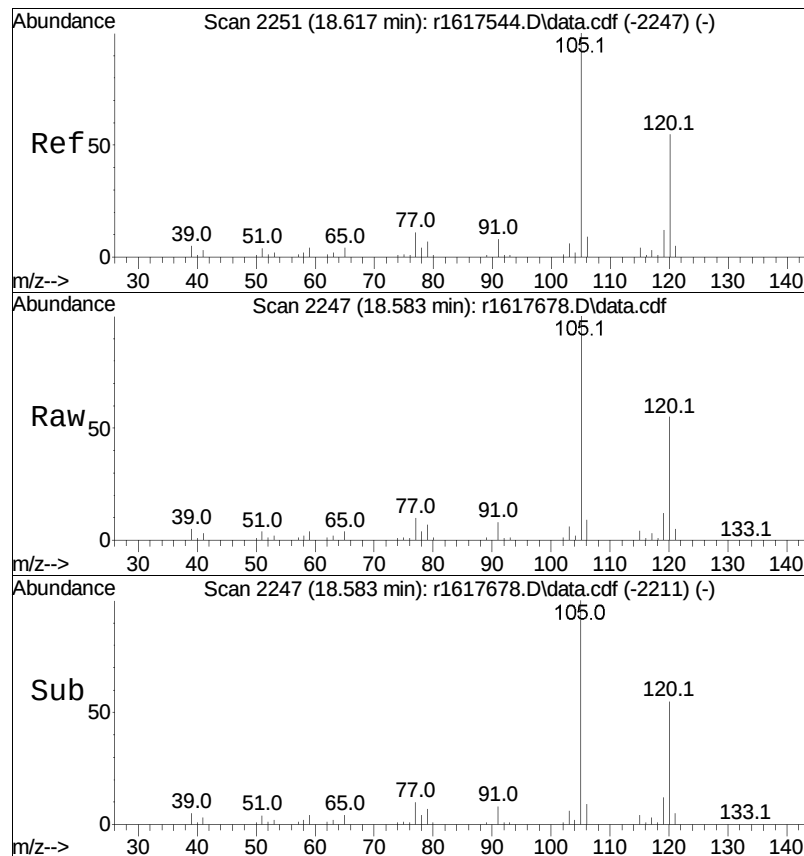




#96
 4-ethyl toluene
 Concen: 11.15 ppbV
 RT: 18.52 min Scan# 2239
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

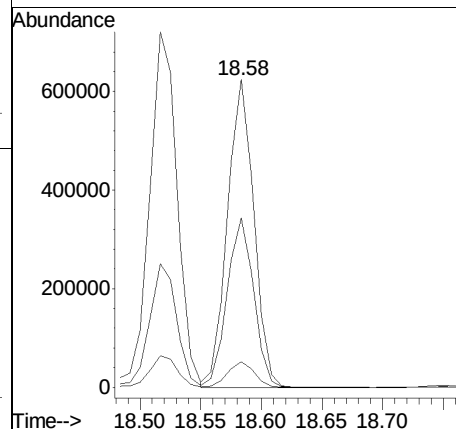
Tgt Ion	Ratio	Lower	Upper
105	100		
120	34.8	27.8	41.6
91	8.9	7.1	10.7

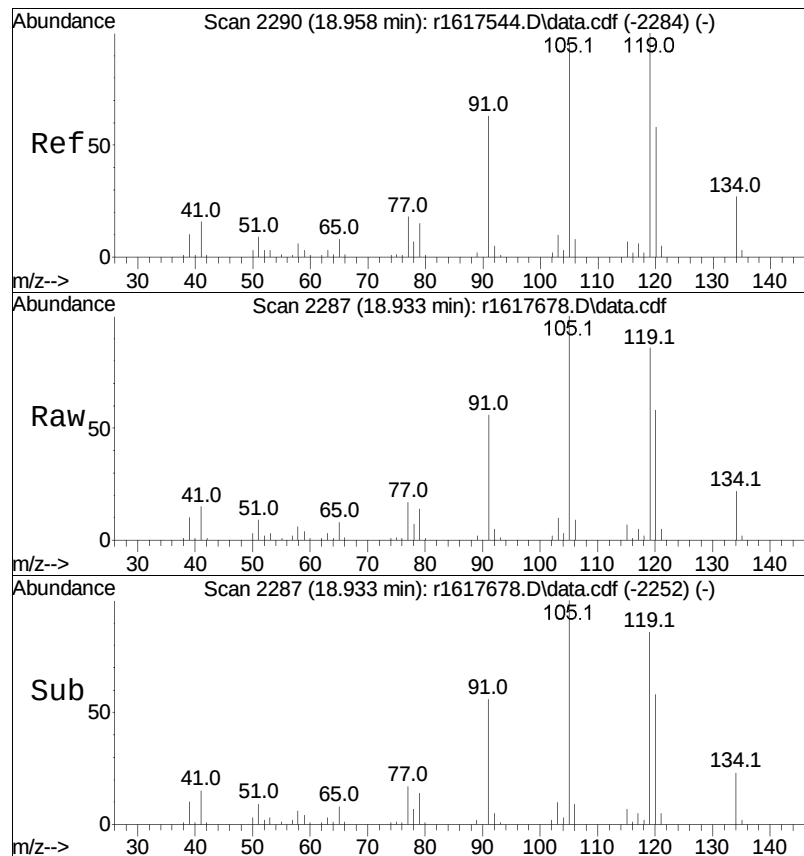




#97
 1,3,5-trimethylbenzene
 Concen: 11.00 ppbV
 RT: 18.58 min Scan# 2247
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

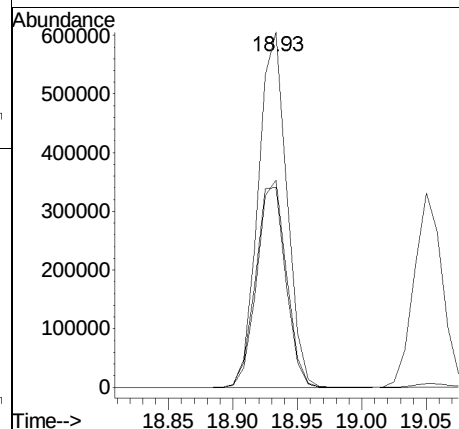
Tgt Ion	Ratio	Lower	Upper
105	100		
120	55.0	43.6	65.4
91	8.4	6.8	10.2

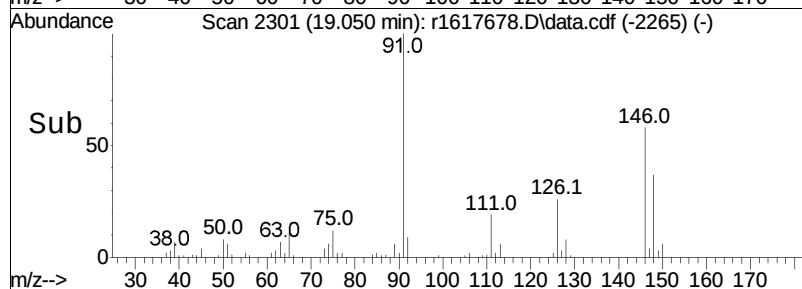
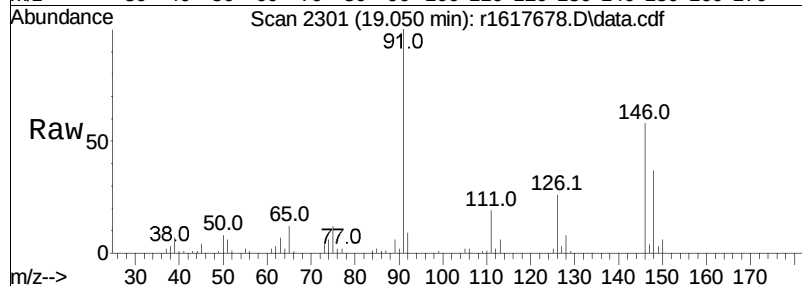
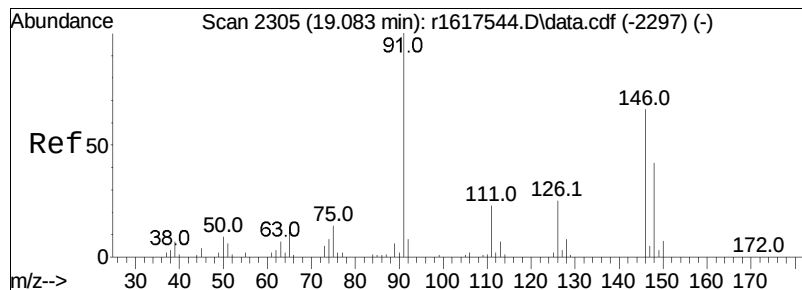




#99
 1,2,4-trimethylbenzene
 Concen: 11.47 ppbV
 RT: 18.93 min Scan# 2287
 Delta R.T. -0.025 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

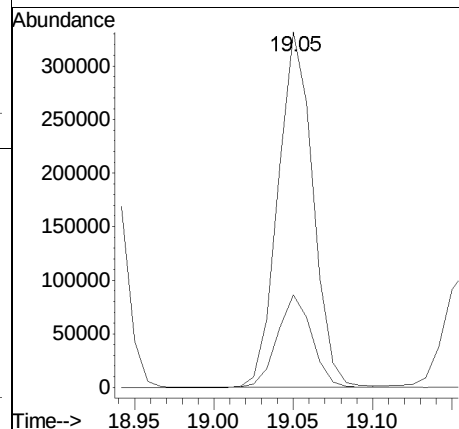
Tgt Ion:	105	Resp:	936198
Ion Ratio	Lower	Upper	
105	100		
120	58.3	48.9	73.3
91	56.3	53.3	79.9

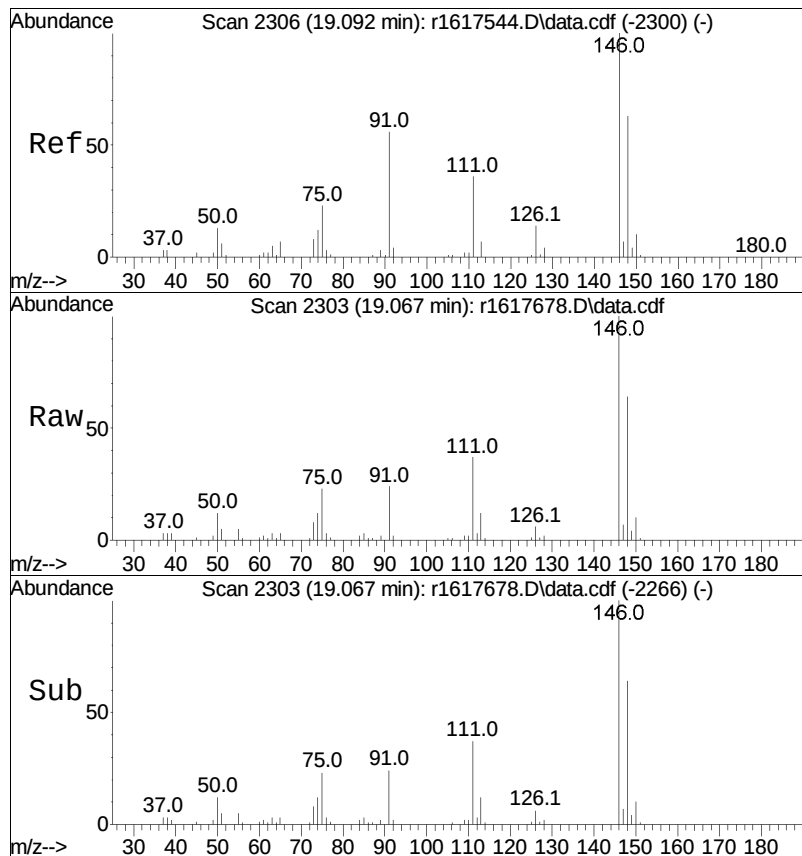




#101
Benzyl Chloride
Concen: 11.54 ppbV
RT: 19.05 min Scan# 2301
Delta R.T. -0.033 min
Lab File: r1617678.D
Acq: 16 Jun 2020 12:31 PM

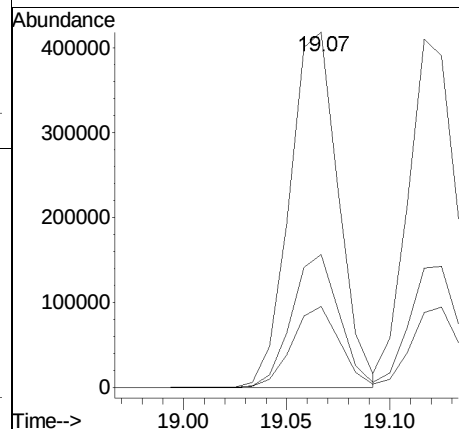
Tgt Ion:	91	Resp:	507150
Ion Ratio	Lower	Upper	
91	100		
126	26.0	20.2	30.4

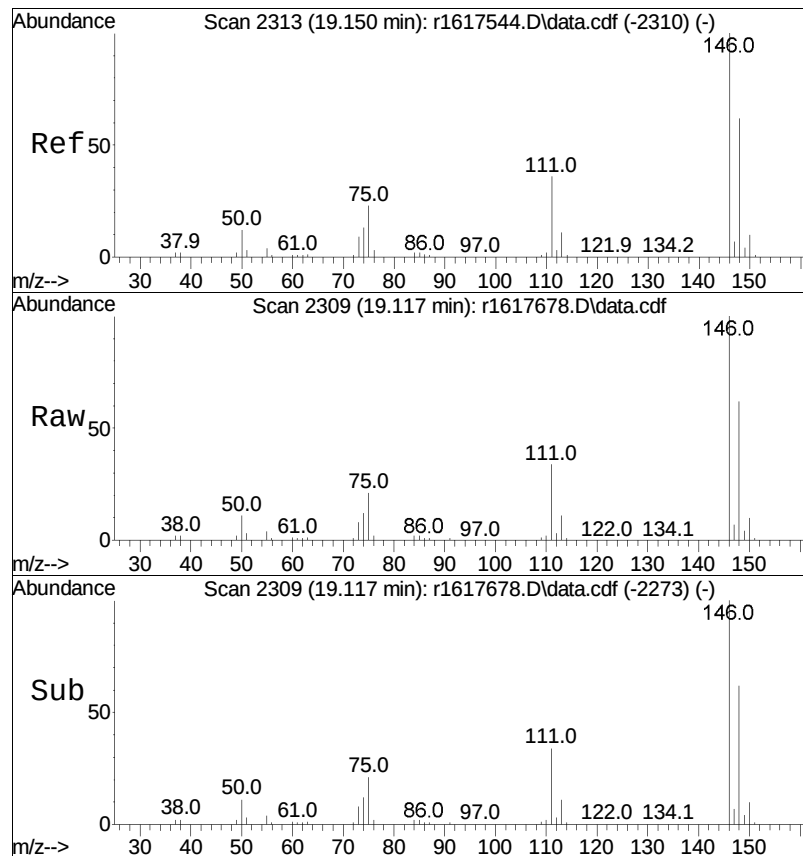




#102
 1,3-dichlorobenzene
 Concen: 11.12 ppbV
 RT: 19.07 min Scan# 2303
 Delta R.T. -0.025 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

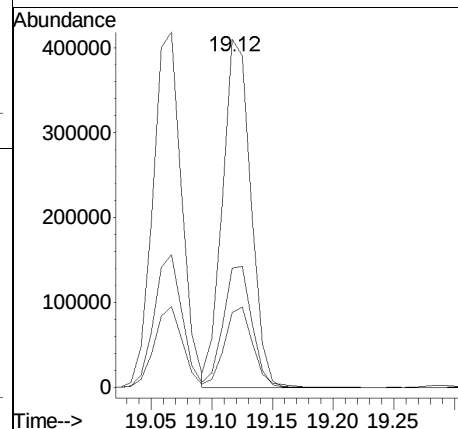
Tgt	Ion	Ratio	Lower	Upper
146	100			
111	37.4	29.0	43.6	
75	22.8	18.1	27.1	

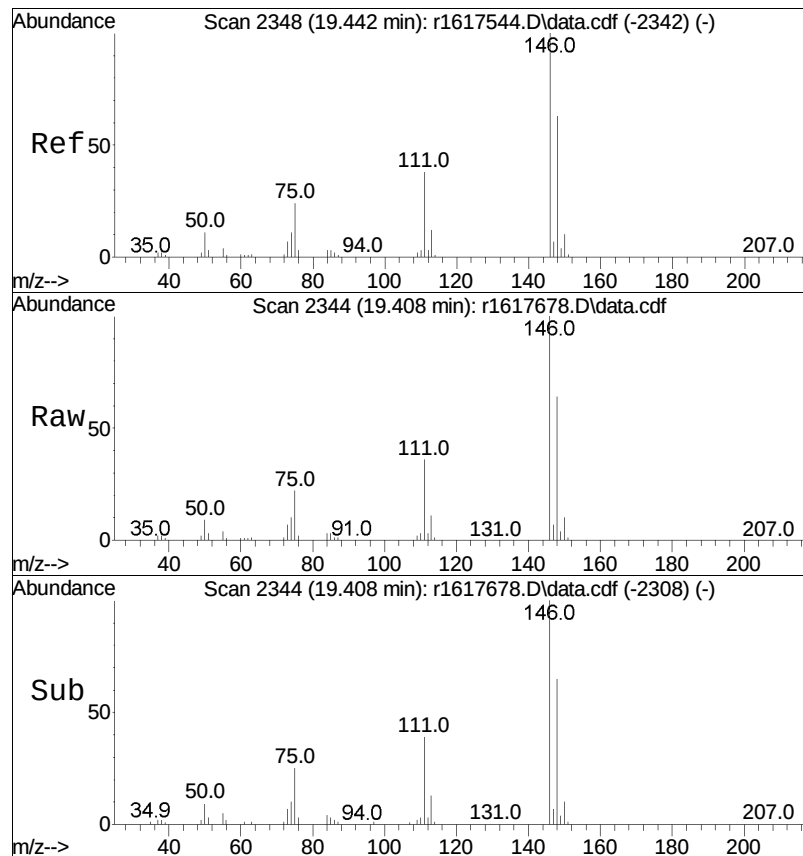




#103
 1,4-dichlorobenzene
 Concen: 11.01 ppbV
 RT: 19.12 min Scan# 2309
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

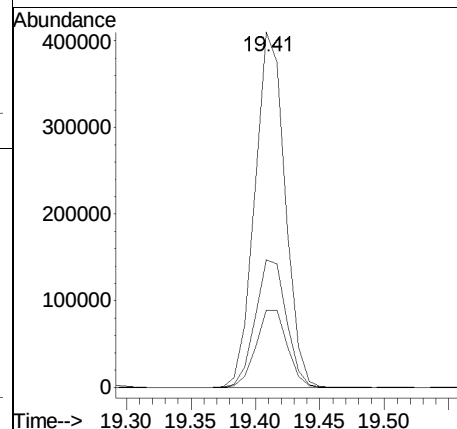
Tgt Ion	Ratio	Lower	Upper
146	100		
111	34.3	28.6	42.8
75	21.5	18.6	27.8

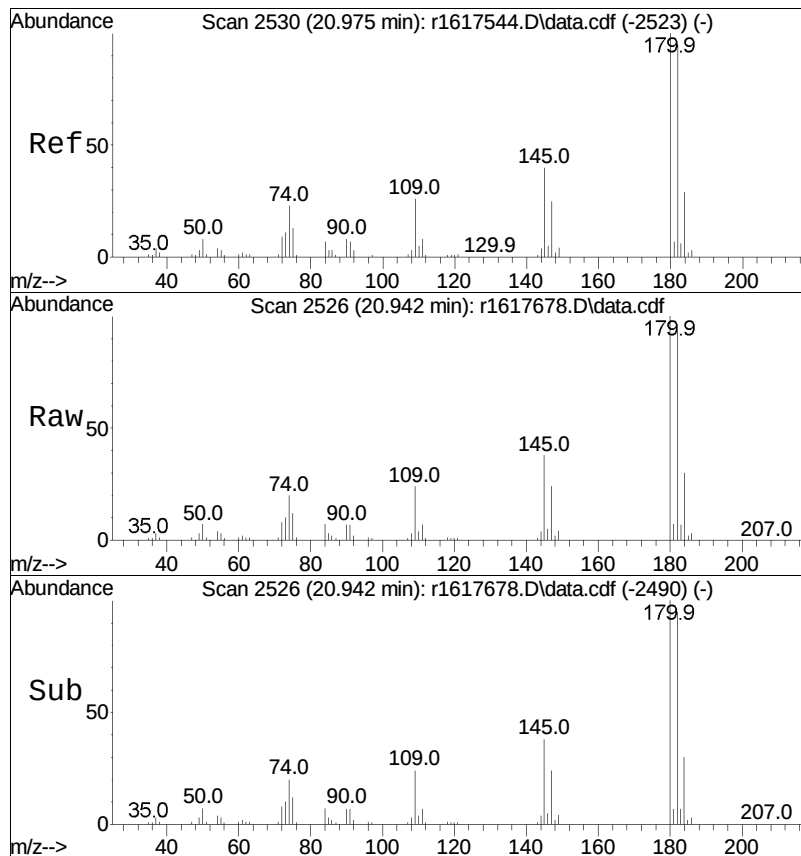




#107
 1,2-dichlorobenzene
 Concen: 11.38 ppbV
 RT: 19.41 min Scan# 2344
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

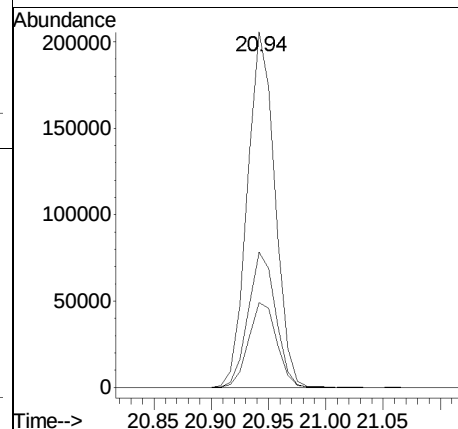
Tgt Ion:	146	Resp:	668675
Ion Ratio	Lower	Upper	
146	100		
111	35.9	30.4	45.6
75	21.8	18.9	28.3

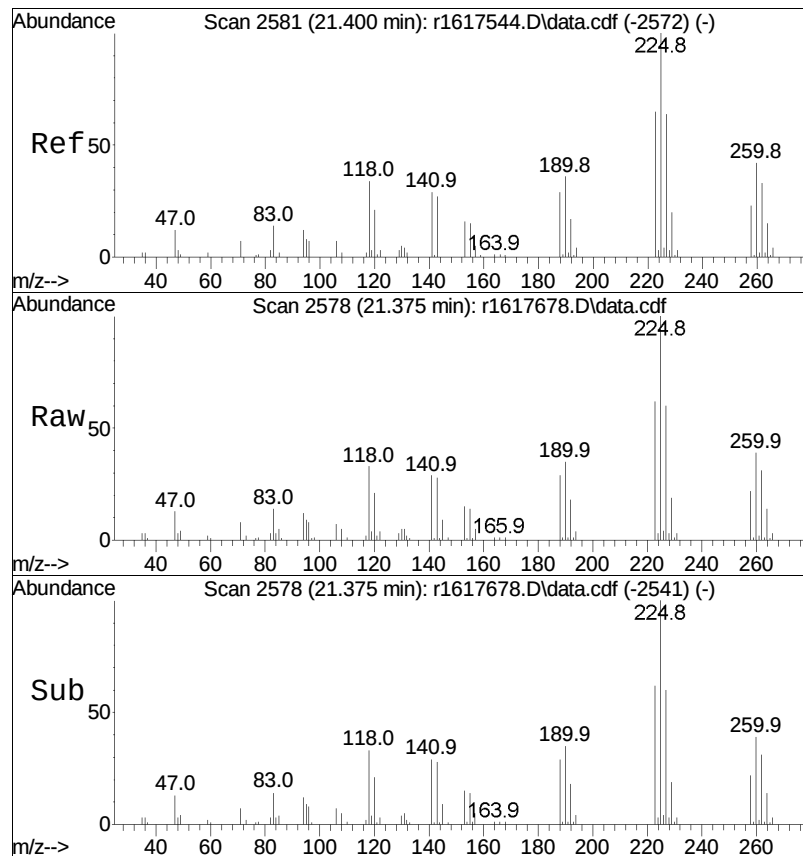




#115
 1,2,4-trichlorobenzene
 Concen: 12.57 ppbV
 RT: 20.94 min Scan# 2526
 Delta R.T. -0.033 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

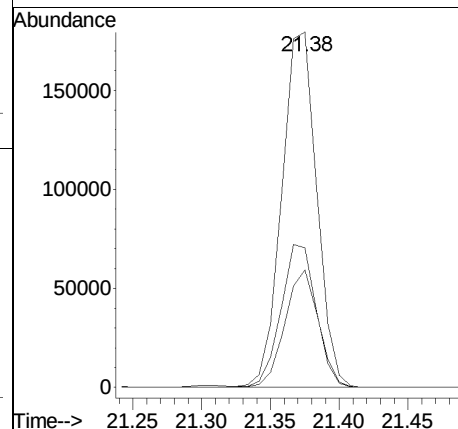
Tgt Ion:	180	Resp:	343082
Ion Ratio	Lower	Upper	
180	100		
145	38.1	31.7	47.5
109	23.9	20.6	31.0





#119
 hexachlorobutadiene
 Concen: 12.35 ppbV
 RT: 21.38 min Scan# 2578
 Delta R.T. -0.025 min
 Lab File: r1617678.D
 Acq: 16 Jun 2020 12:31 PM

Tgt	Ion:225	Resp:	318370
Ion	Ratio	Lower	Upper
225	100		
260	39.3	33.8	50.8
118	33.1	27.4	41.0



Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617686.D
 Acq On : 16 Jun 2020 7:27 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-5,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:00:32 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.44	49	290184	10.000	ppbV	-0.04
Standard Area = 312675			Recovery =		92.81%	
43) 1,4-difluorobenzene	11.73	114	840836	10.000	ppbV	-0.04
Standard Area = 882052			Recovery =		95.33%	
67) chlorobenzene-D5	16.47	54	109865	10.000	ppbV	-0.03
Standard Area = 116247			Recovery =		94.51%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.84	85	11038	0.516	ppbV	97
6) chloromethane	4.02	50	5606	0.470	ppbV	95
7) Freon-114	4.14		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.		
13) bromomethane	0.00		0	N.D.		
14) chloroethane	4.97		0	N.D.		
15) ethanol	5.15	31	14293	1.668	ppbV	92
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.73	43	49455M4	2.795	ppbV	
21) trichlorofluoromethane	5.92	101	4924	0.312	ppbV	91
22) isopropyl alcohol	6.07	45	5696	0.283	ppbV #	88
27) tertiary butyl alcohol	6.81	59	1672	0.093	ppbV #	76
28) methylene chloride	6.87	49	3900	0.202	ppbV	85
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	7.15	76	17333	0.341	ppbV #	69
31) Freon 113	7.20	101	1951	0.067	ppbV #	86
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	0.00		0	N.D.		
34) MTBE	0.00		0	N.D.		
36) 2-butanone	8.77	43	11475	0.319	ppbV #	98
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	9.61	83	314421	12.941	ppbV	99
40) Tetrahydrofuran	10.09	42	5970	0.270	ppbV	98
42) 1,2-dichloroethane	0.00		0	N.D.		
44) hexane	9.53	57	5449	0.203	ppbV #	47
50) benzene	11.29	78	7912	0.135	ppbV	95
53) cyclohexane	11.61	56	2528	0.087	ppbV #	90
56) 1,2-dichloropropane	0.00		0	N.D.		
57) bromodichloromethane	12.49	83	16529	0.596	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617686.D
 Acq On : 16 Jun 2020 7:27 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-5,3,250,250
 Misc : WG1382260,ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:00:32 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab16\2020\06\200616T\r1617677.D
 Sub List : T015-NY-7-SIM - .

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
58)	1,4-dioxane	12.57		0	N.D.			
60)	2,2,4-trimethylpentane	12.59	57	23898	0.269	ppbV		94
62)	heptane	12.91	43	3975	0.097	ppbV #		97
63)	cis-1,3-dichloropropene	0.00		0	N.D.			
64)	4-methyl-2-pentanone	13.65		0	N.D.			
65)	trans-1,3-dichloropropene	0.00		0	N.D.			
66)	1,1,2-trichloroethane	0.00		0	N.D.			
68)	toluene	14.70	91	37769	0.615	ppbV		98
72)	2-hexanone	15.03	43	3747	0.104	ppbV		94
74)	dibromochloromethane	15.16		0	N.D.			
75)	1,2-dibromoethane	0.00		0	N.D.			
80)	chlorobenzene	0.00		0	N.D.	d		
81)	ethylbenzene	16.86	91	5881	0.074	ppbV		96
83)	m+p-xylene	17.02	91	14845	0.231	ppbV		99
84)	bromoform	0.00		0	N.D.			
85)	styrene	17.35	104	4566	0.081	ppbV		96
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.	d		
87)	o-xylene	17.45	91	6509	0.100	ppbV		97
96)	4-ethyl toluene	18.52		0	N.D.			
97)	1,3,5-trimethylbenzene	18.59		0	N.D.			
99)	1,2,4-trimethylbenzene	18.94	105	7604	0.099	ppbV #		57
101)	Benzyl Chloride	0.00		0	N.D.	d		
102)	1,3-dichlorobenzene	0.00		0	N.D.	d		
103)	1,4-dichlorobenzene	19.13	146	13605	0.239	ppbV		97
107)	1,2-dichlorobenzene	0.00		0	N.D.			
115)	1,2,4-trichlorobenzene	20.95		0	N.D.			
119)	hexachlorobutadiene	0.00		0	N.D.			

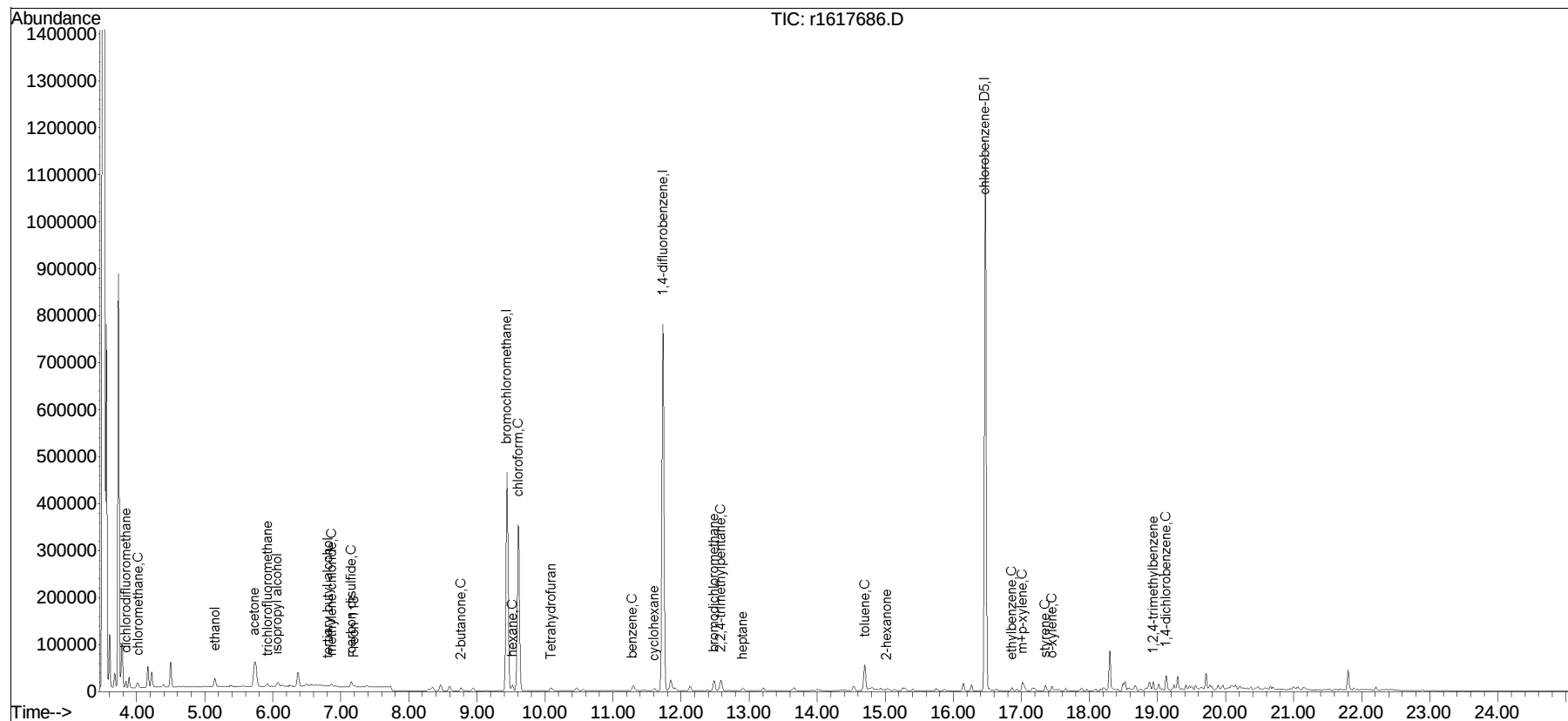
(#) = qualifier out of range (m) = manual integration (+) = signals summed

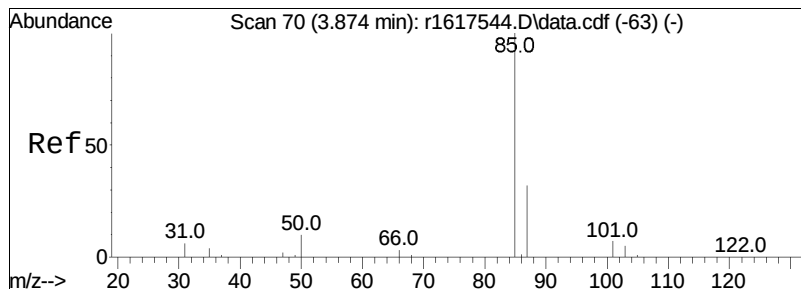
Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab16\2020\06\200616T\
 Data File : r1617686.D
 Acq On : 16 Jun 2020 7:27 PM
 Operator : AIRLAB16:RY
 Sample : WG1382260-5, 3, 250, 250
 Misc : WG1382260, ICAL16872
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Jun 17 09:00:32 2020
 Quant Method : 0:\Forensics\Data\Airlab16\2020\06\200616T\TFS16_200609.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Jun 10 11:25:58 2020
 Response via : Initial Calibration

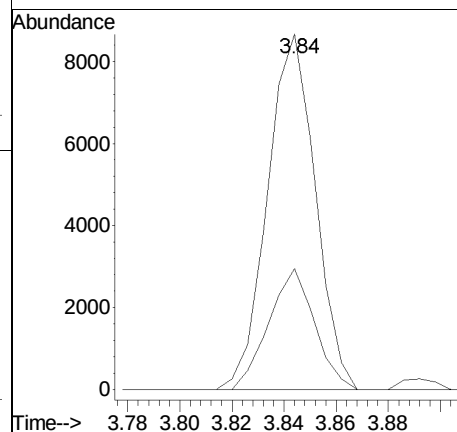
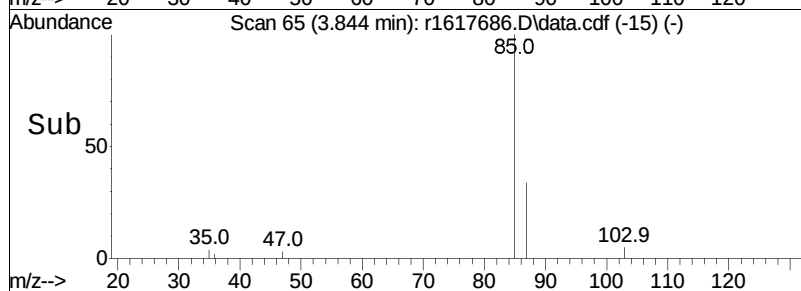
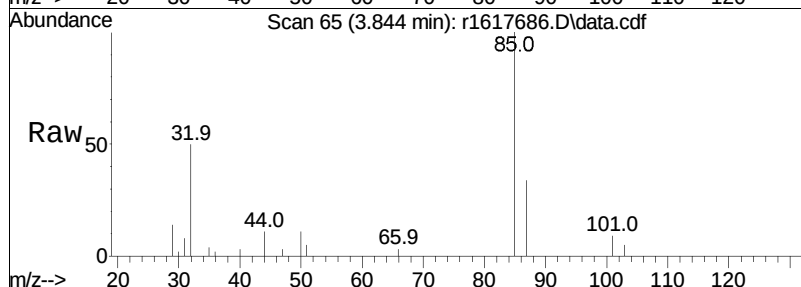
Sub List : T015-NY-7-SIM - .\Airlab16\2020\06\200616T\r1617677.D

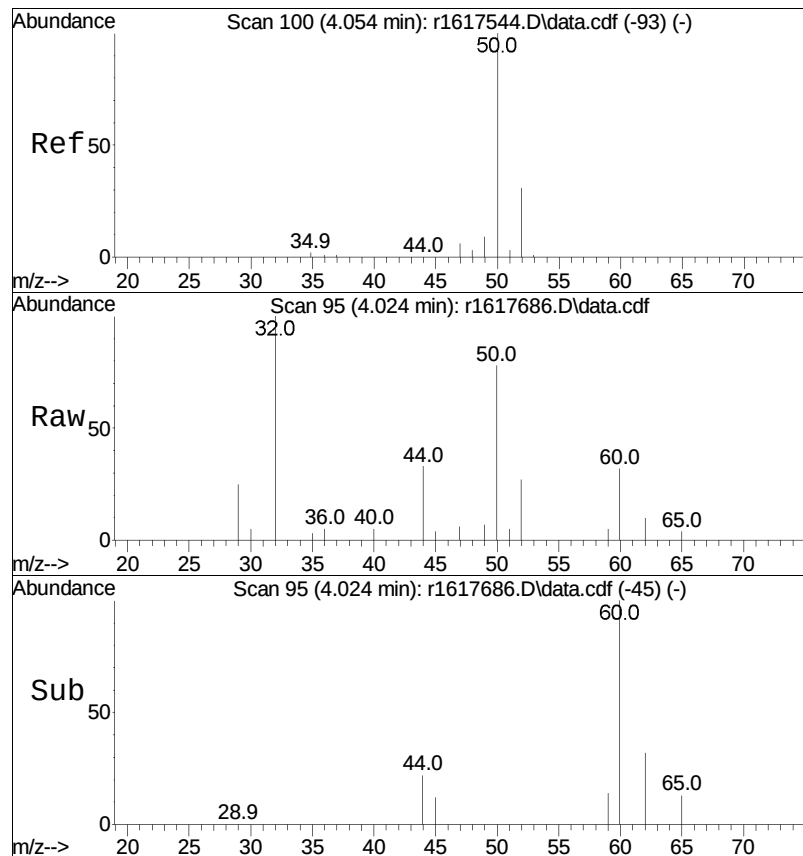




#5
dichlorodifluoromethane
Concen: 0.52 ppbV
RT: 3.84 min Scan# 65
Delta R.T. -0.030 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

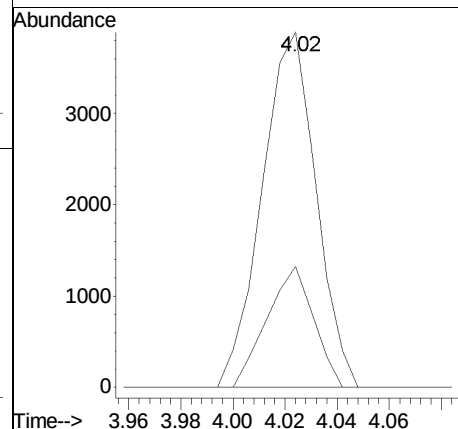
Tgt Ion: 85 Resp: 11038
Ion Ratio Lower Upper
85 100
87 34.0 25.7 38.5

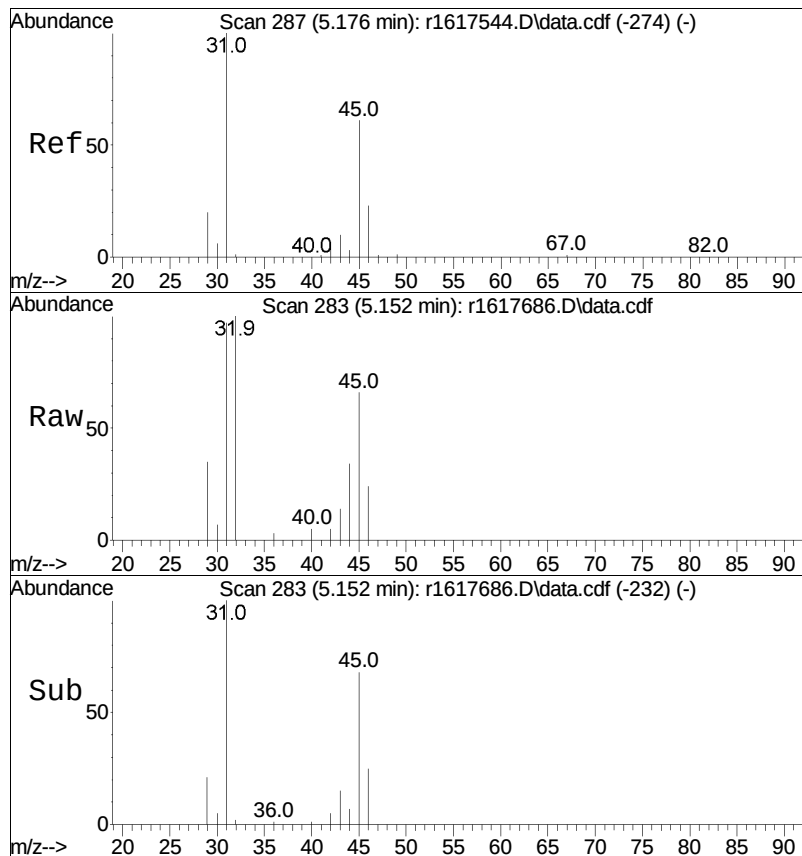




#6
 chloromethane
 Concen: 0.47 ppbV
 RT: 4.02 min Scan# 95
 Delta R.T. -0.030 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

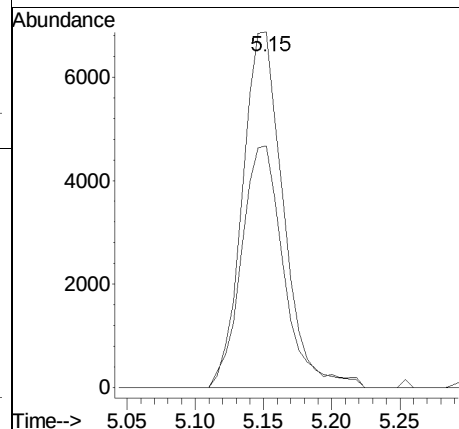
Tgt	Ion	Resp	Lower	Upper
50	100	5606		
52	34.0	25.0	37.6	

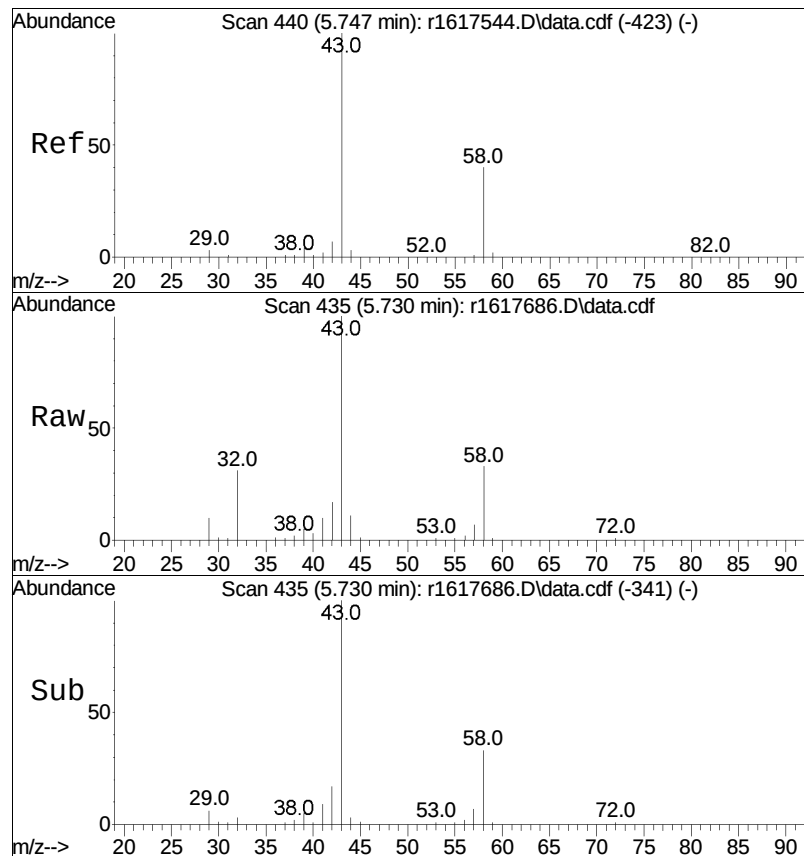




#15
 ethanol
 Concen: 1.67 ppbV
 RT: 5.15 min Scan# 283
 Delta R.T. -0.024 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

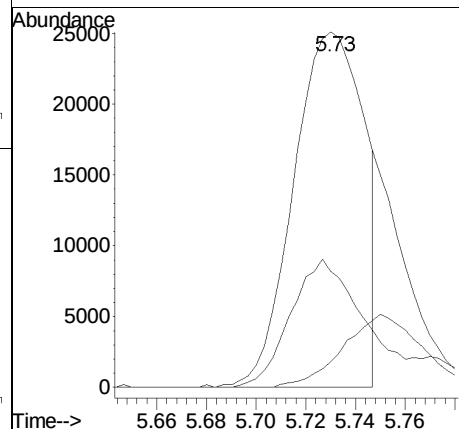
Tgt Ion:	31	Resp:	14293
Ion Ratio	Lower	Upper	
31	100		
45	68.0	49.2	73.8

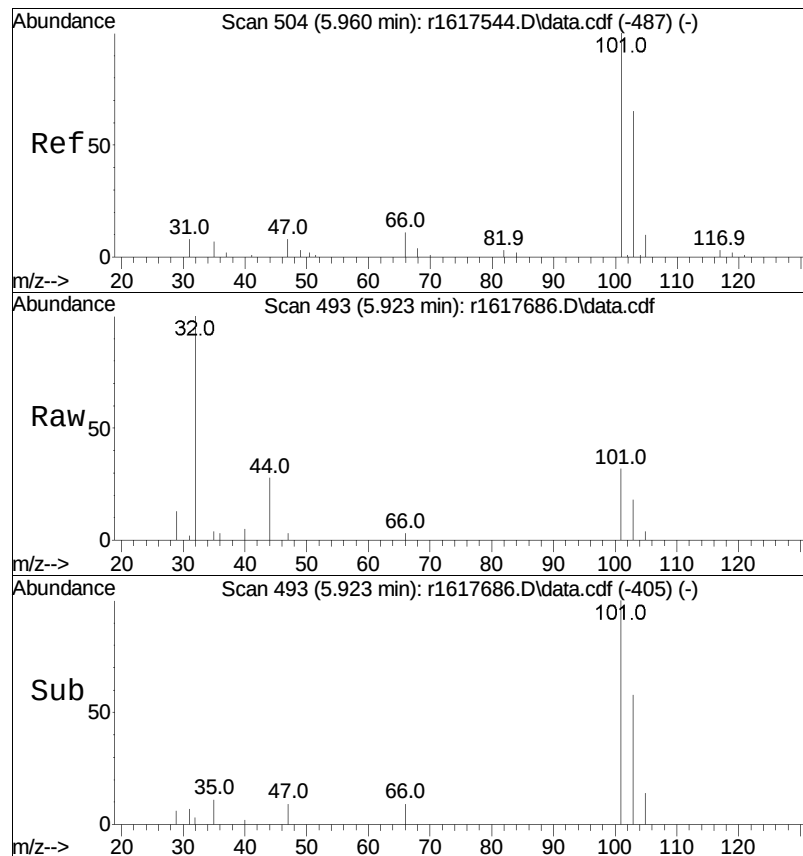




#19
 acetone
 Concen: 2.79 ppbV m
 RT: 5.73 min Scan# 435
 Delta R.T. -0.017 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

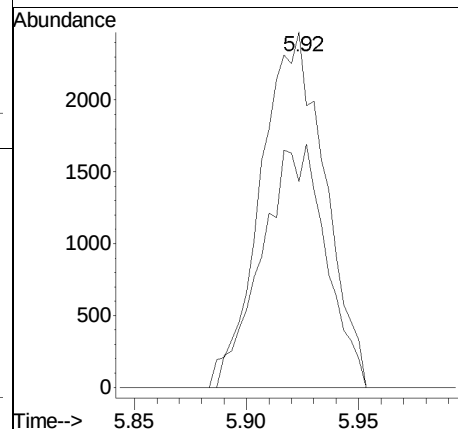
Tgt Ion:	43	Resp:	49455
Ion Ratio	Lower	Upper	
43	100		
58	32.6	31.8	47.8
57	7.2	0.8	1.2#

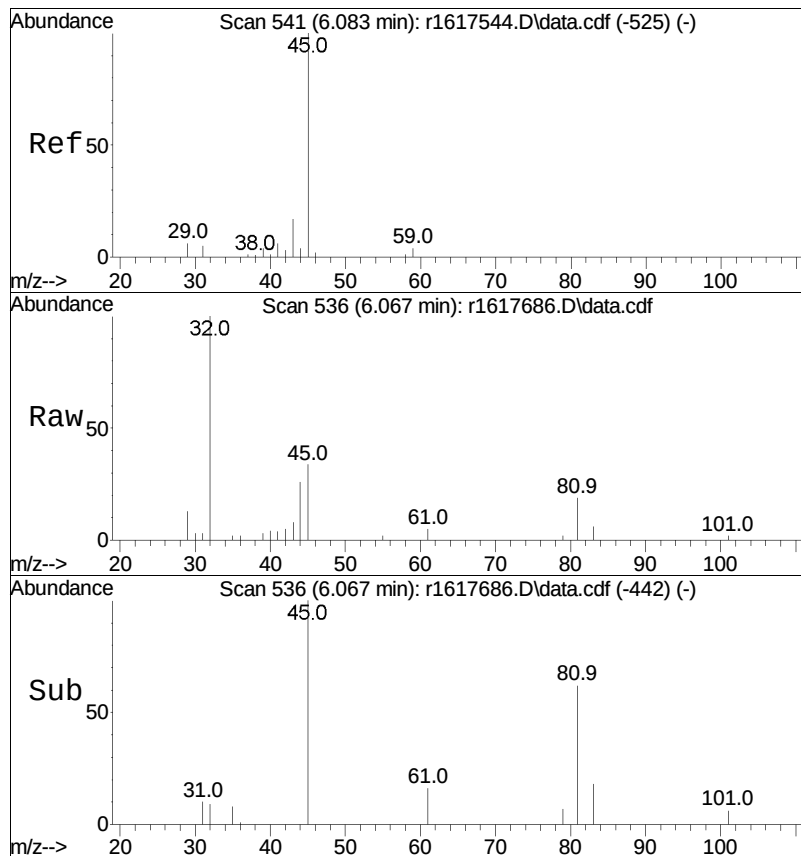




#21
trichlorofluoromethane
Concen: 0.31 ppbV
RT: 5.92 min Scan# 493
Delta R.T. -0.037 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

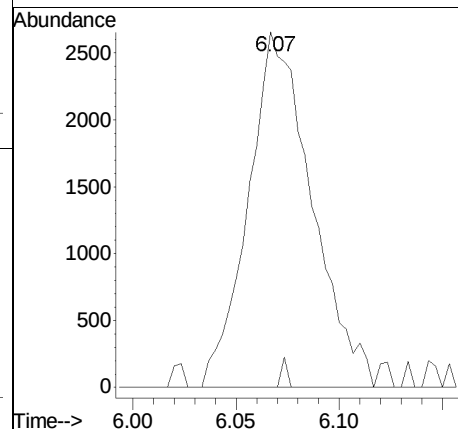
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	57.9	52.1	78.1	

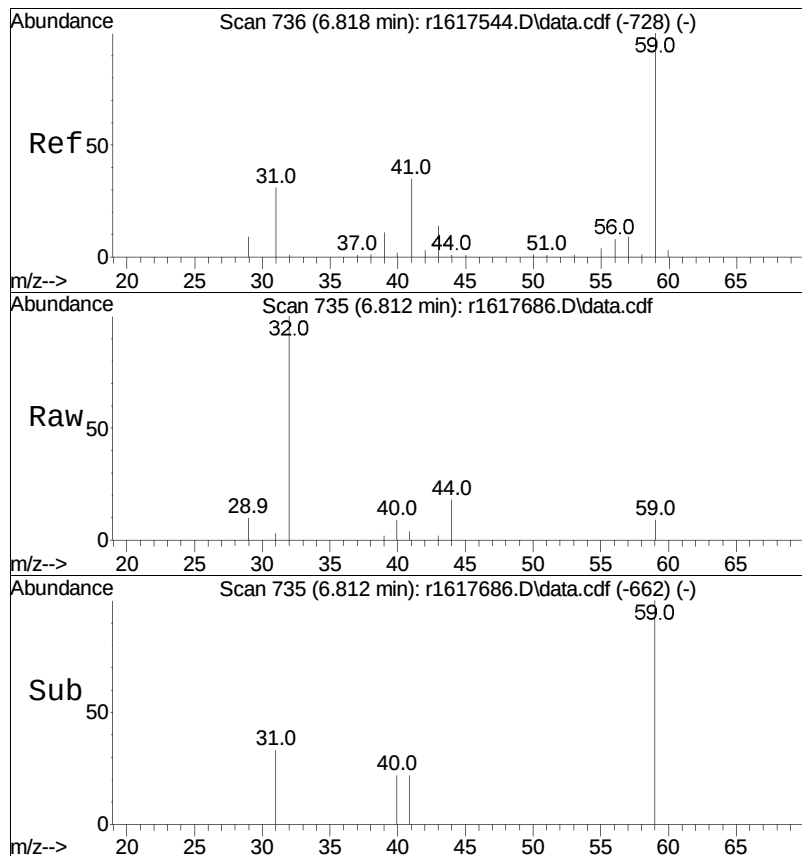




#22
isopropyl alcohol
Concen: 0.28 ppbV
RT: 6.07 min Scan# 536
Delta R.T. -0.017 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

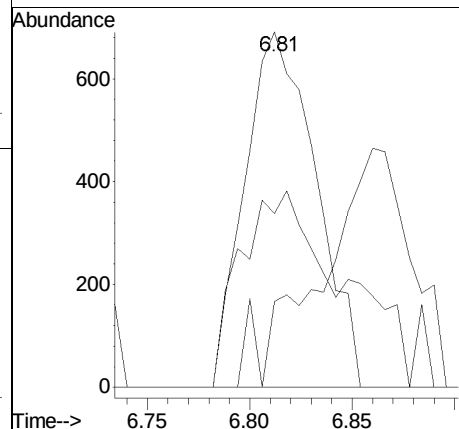
Tgt Ion	Ratio	Lower	Upper
45	100		
59	0.0	3.1	4.7#

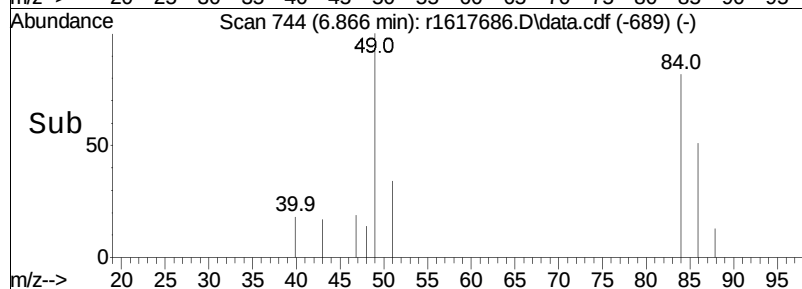
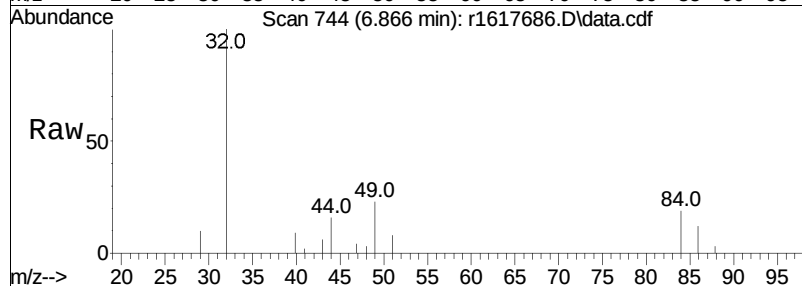
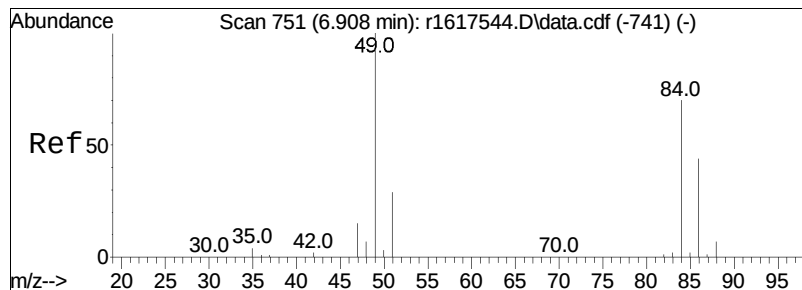




#27
 tertiary butyl alcohol
 Concen: 0.09 ppbV
 RT: 6.81 min Scan# 735
 Delta R.T. -0.006 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

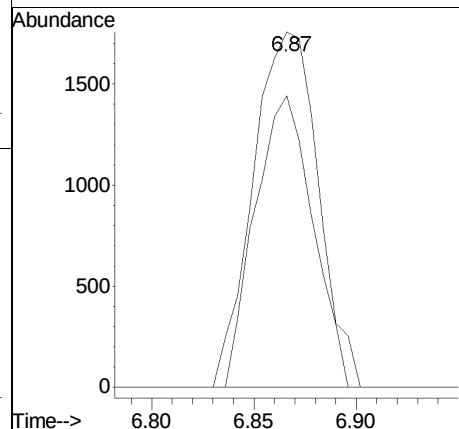
Tgt Ion:	59	Resp:	1672
Ion Ratio	Lower	Upper	
59	100		
41	48.9	28.2	42.2#
43	24.2	11.0	16.6#

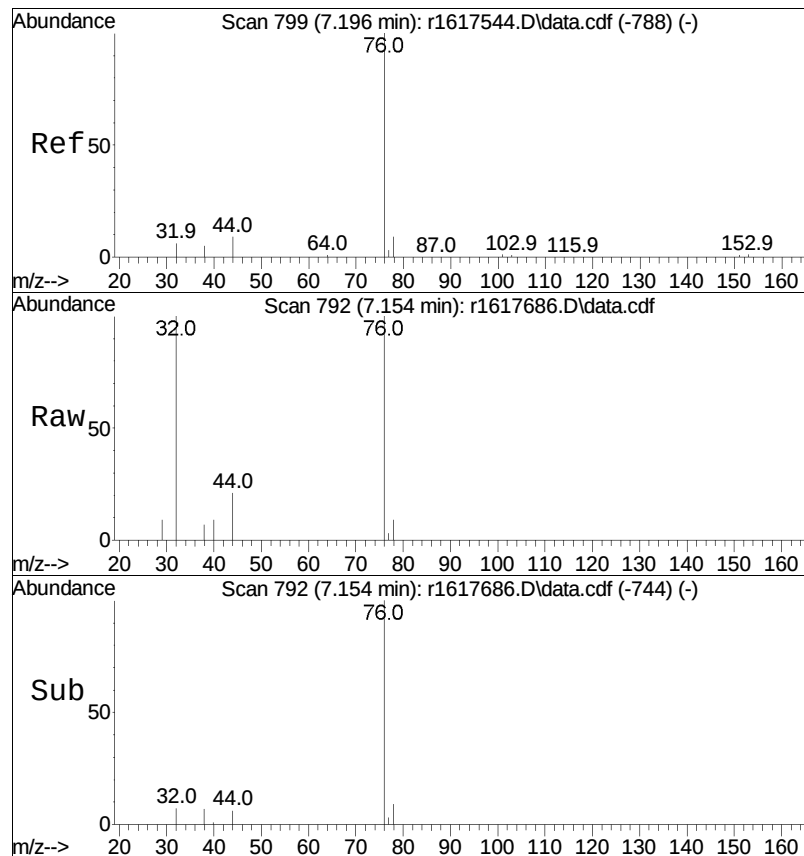




#28
 methylene chloride
 Concen: 0.20 ppbV
 RT: 6.87 min Scan# 744
 Delta R.T. -0.042 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

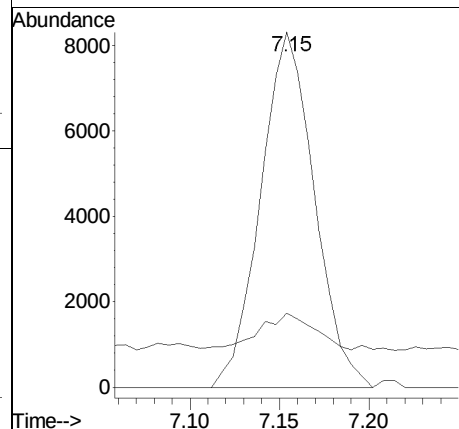
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	3900				
Ion Ratio	100	82.0			
			56.1		84.1

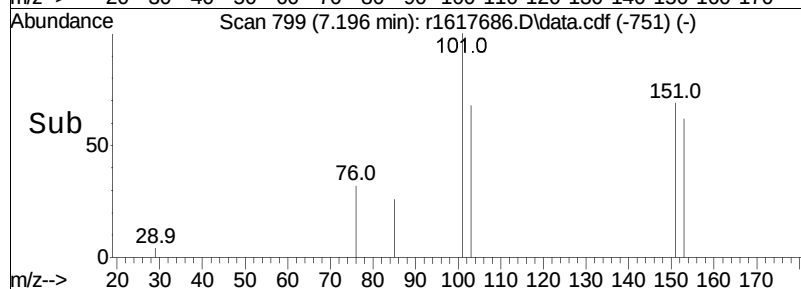
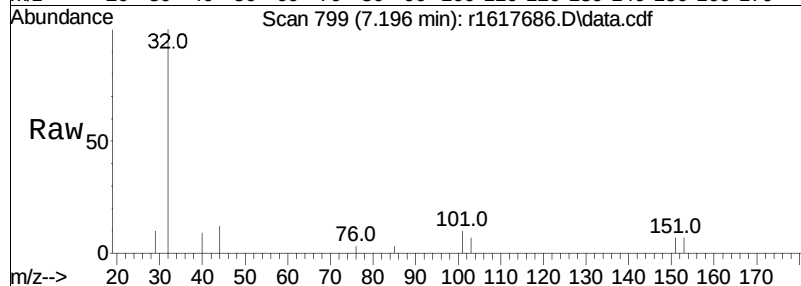
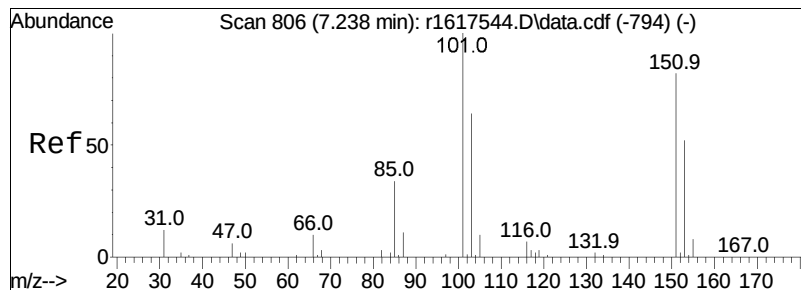




#30
 carbon disulfide
 Concen: 0.34 ppbV
 RT: 7.15 min Scan# 792
 Delta R.T. -0.042 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

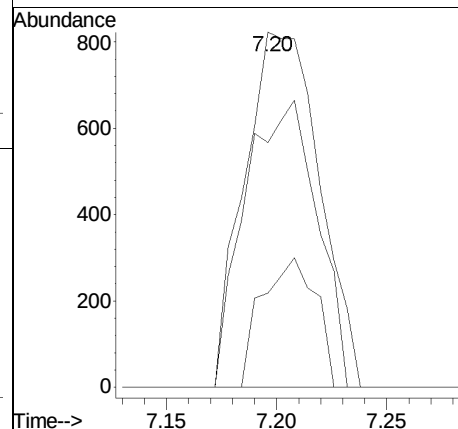
Tgt Ion	Ratio	Lower	Upper
76	100		
44	20.9	7.7	11.5#

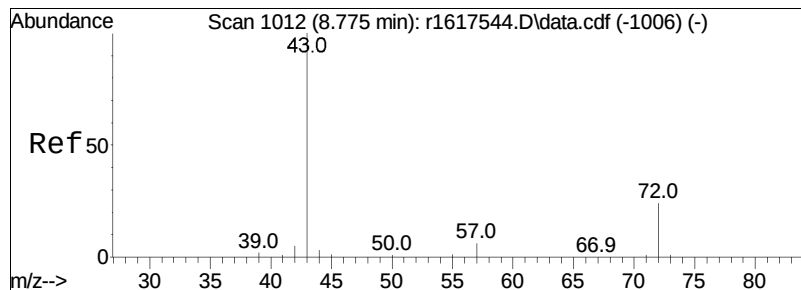




#31
 Freon 113
 Concen: 0.07 ppbV
 RT: 7.20 min Scan# 799
 Delta R.T. -0.042 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

Tgt Ion:	101	Resp:	1951
Ion Ratio	Lower	Upper	
101	100		
85	26.5	27.4	41.0#
151	68.9	65.8	98.6





#36

2-butanone

Concen: 0.32 ppbV

RT: 8.77 min Scan# 1011

Delta R.T. -0.008 min

Lab File: r1617686.D

Acq: 16 Jun 2020 7:27 PM

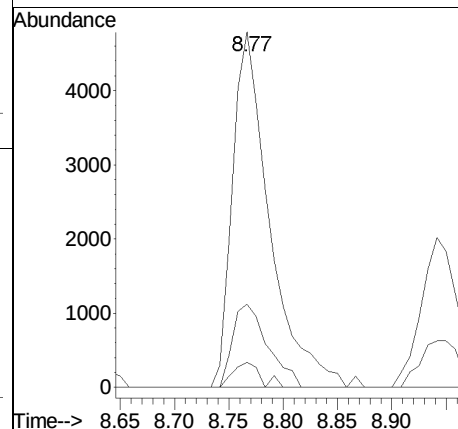
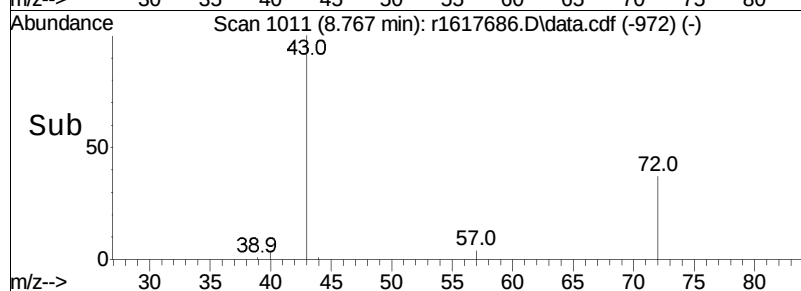
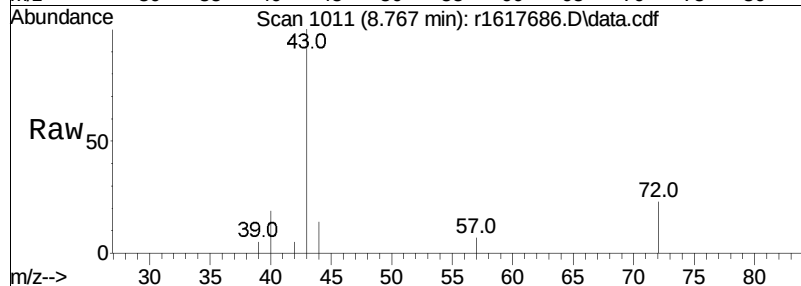
Tgt Ion: 43 Resp: 11475

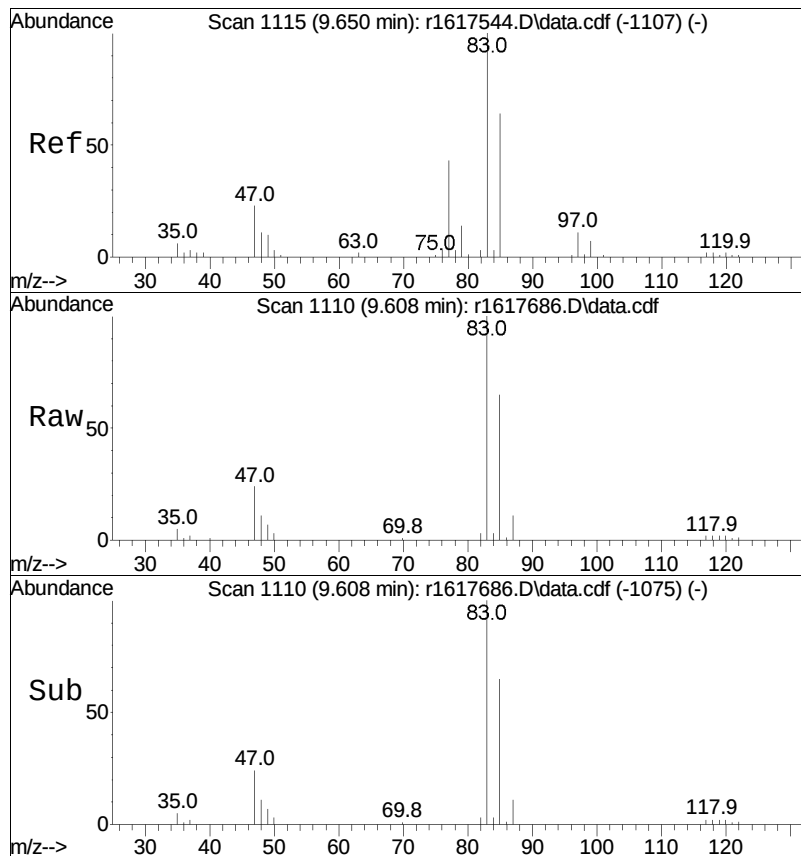
Ion Ratio Lower Upper

43 100

72 23.4 19.5 29.3

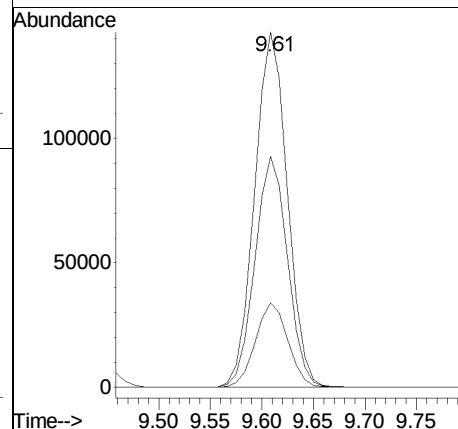
57 7.0 4.6 6.8#

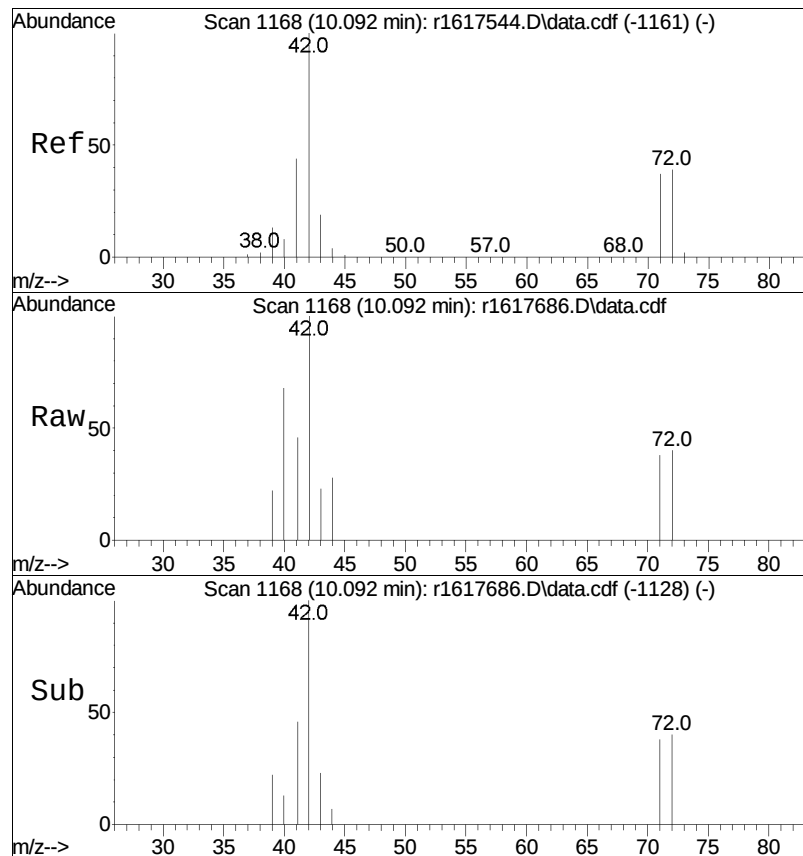




#39
 chloroform
 Concen: 12.94 ppbV
 RT: 9.61 min Scan# 1110
 Delta R.T. -0.042 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

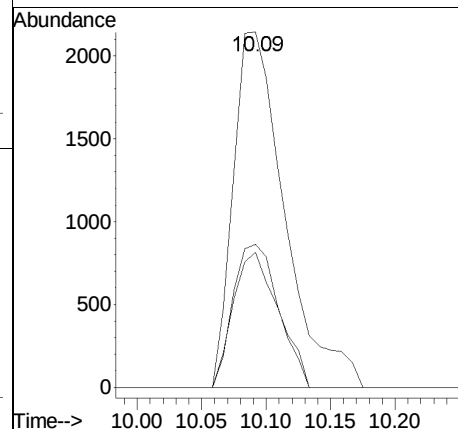
Tgt	Ion: 83	Resp:	314421
Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.4	77.0
47	23.8	19.0	28.4

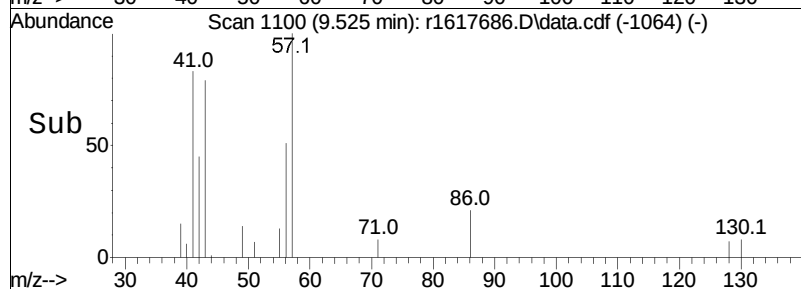
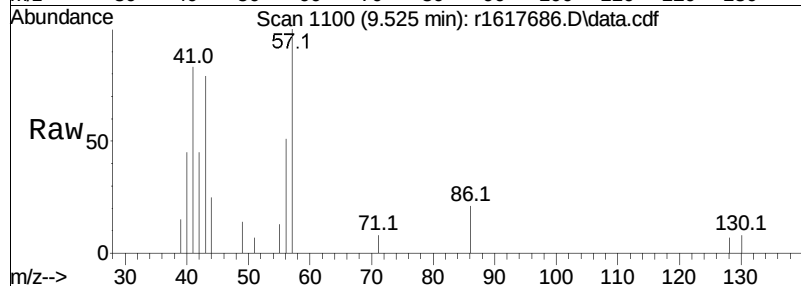
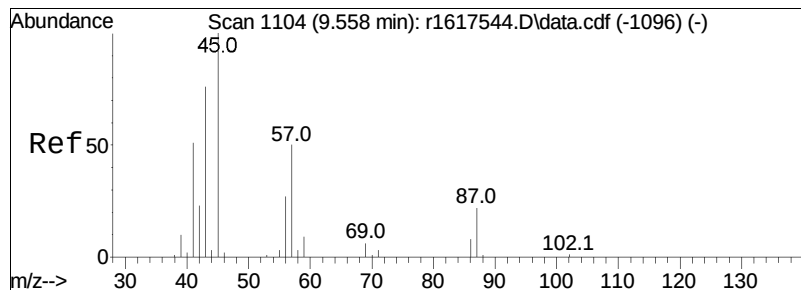




#40
Tetrahydrofuran
Concen: 0.27 ppbV
RT: 10.09 min Scan# 1168
Delta R.T. 0.000 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

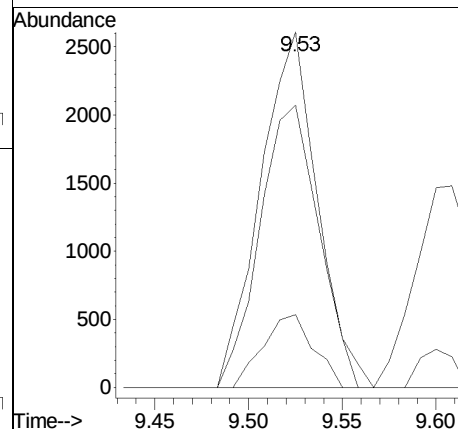
Tgt Ion	Ratio	Lower	Upper
42	100		
71	38.0	29.4	44.0
72	40.3	31.4	47.2

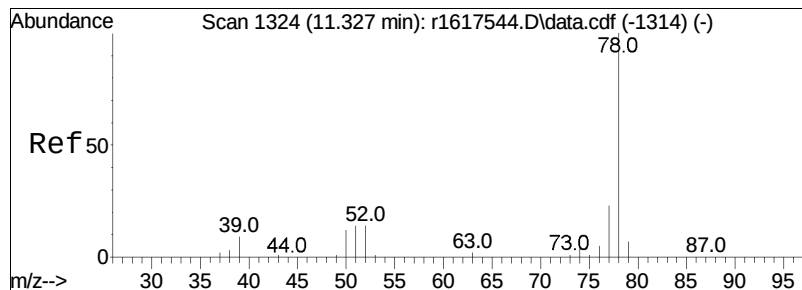




#44
hexane
Concen: 0.20 ppbV
RT: 9.53 min Scan# 1100
Delta R.T. -0.033 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

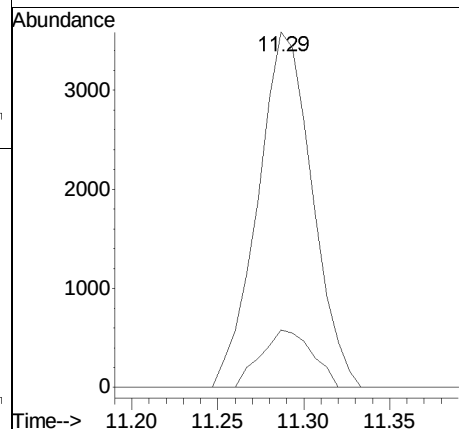
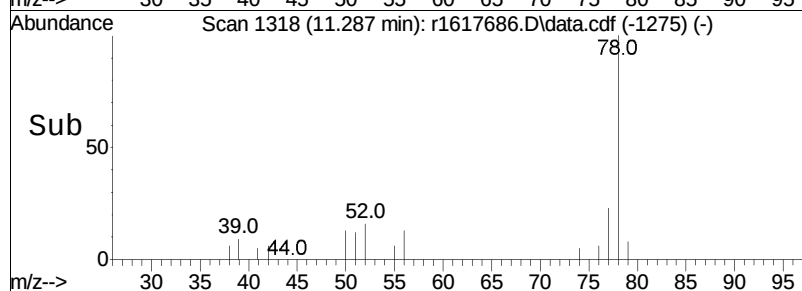
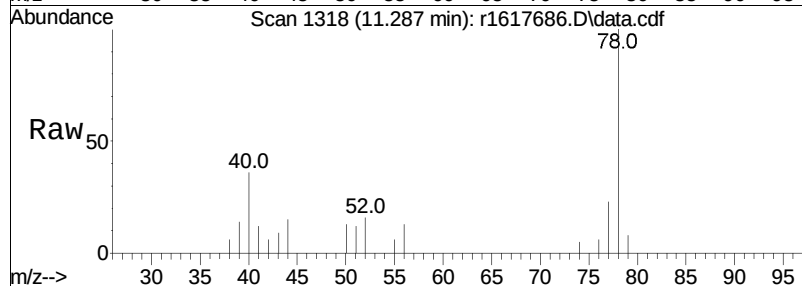
Tgt	Ion	Ratio	Lower	Upper
57	100			
43	79.4	122.6	184.0#	
86	20.5	13.1	19.7#	

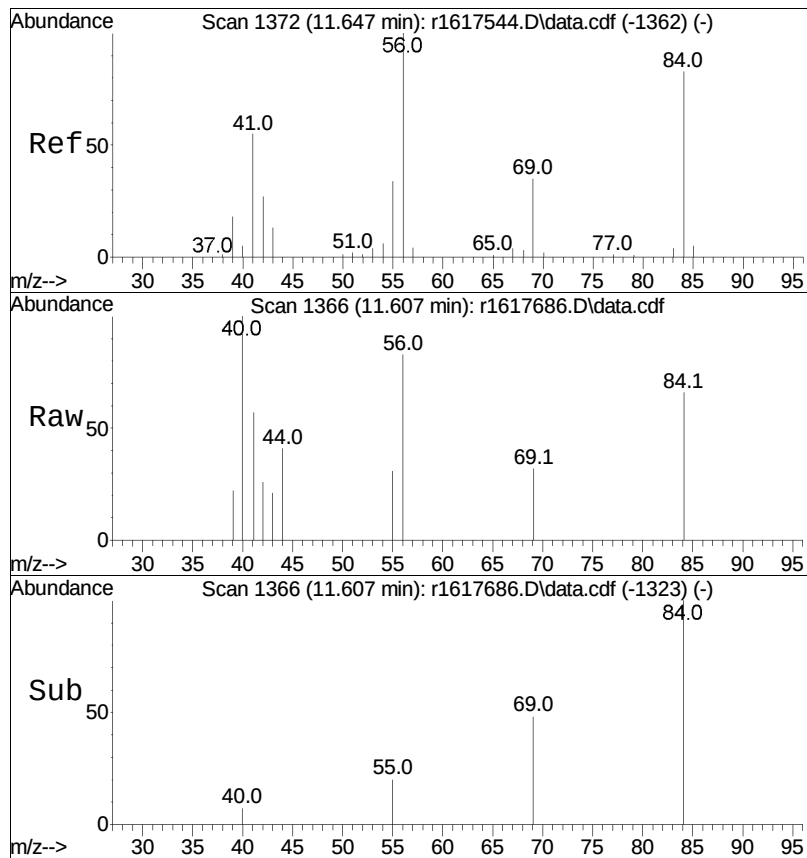




#50
benzene
Concen: 0.14 ppbV
RT: 11.29 min Scan# 1318
Delta R.T. -0.040 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

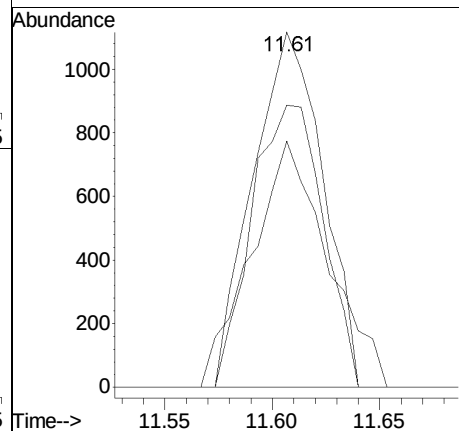
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.2	11.4	17.0

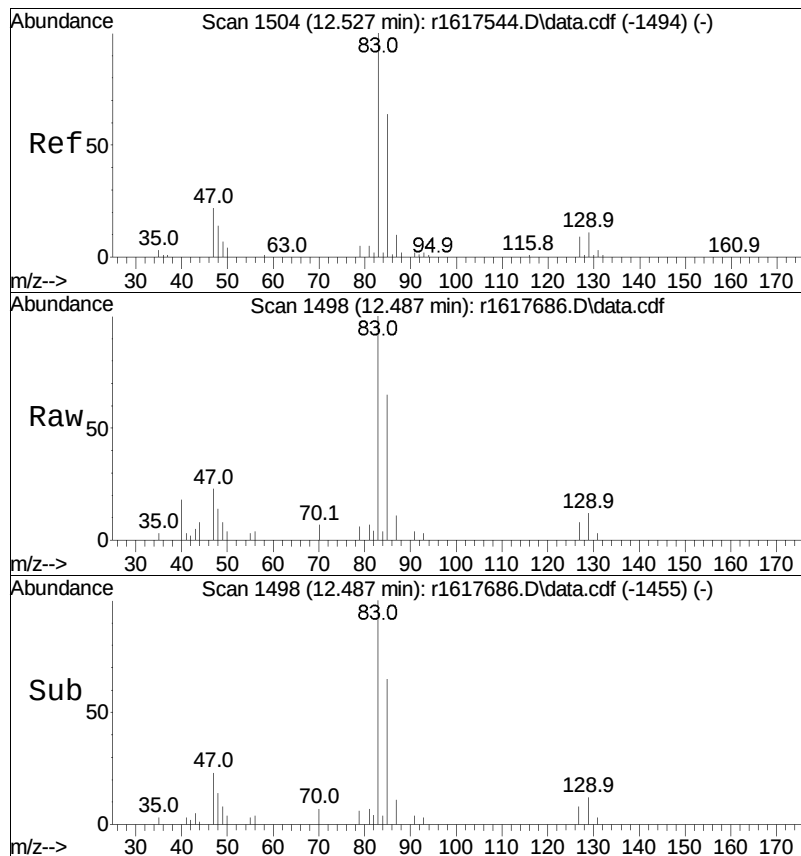




#53
cyclohexane
Concen: 0.09 ppbV
RT: 11.61 min Scan# 1366
Delta R.T. -0.040 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

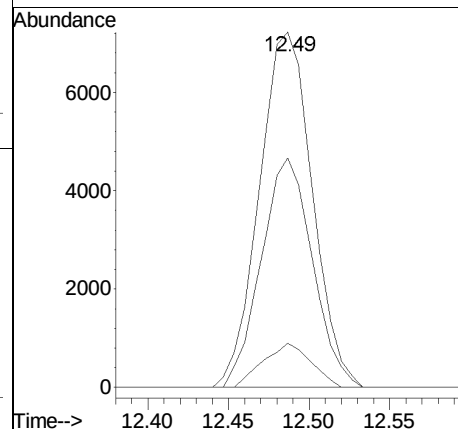
Tgt	Ion	Resp	Lower	Upper
56	100			
84	79.4	66.6	100.0	
41	69.3	44.2	66.4	

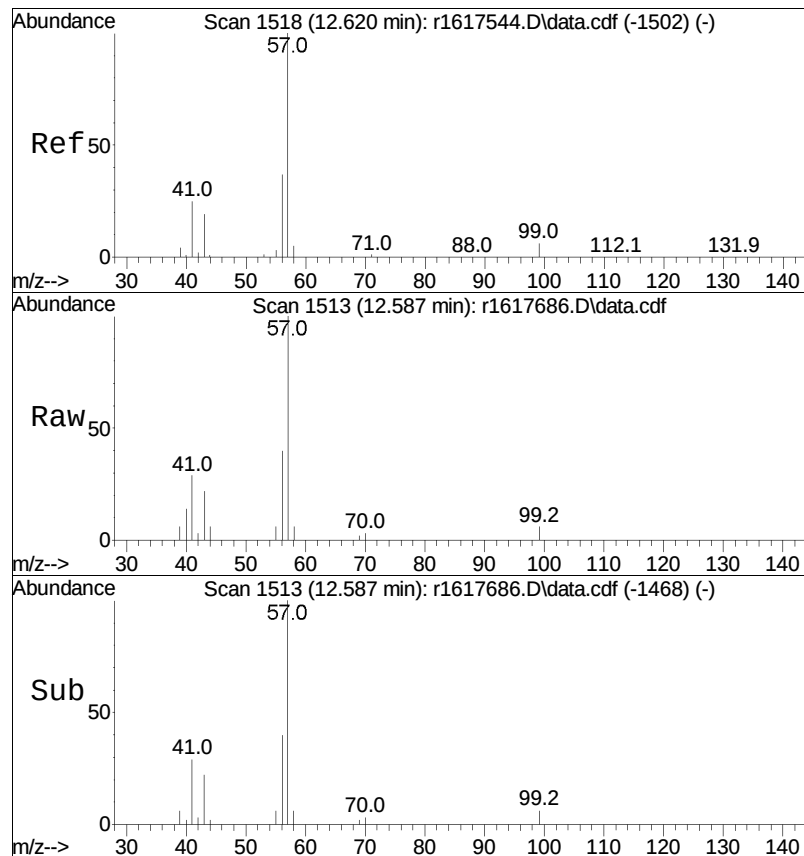




#57
bromodichloromethane
Concen: 0.60 ppbV
RT: 12.49 min Scan# 1498
Delta R.T. -0.040 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

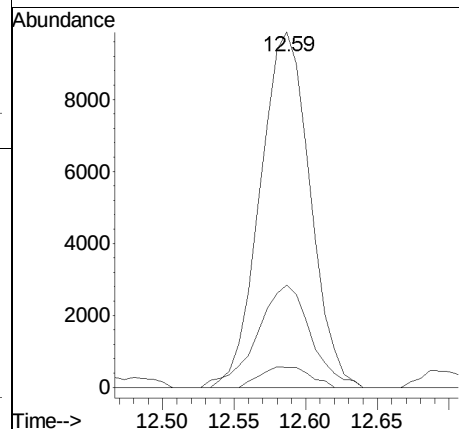
Tgt Ion:	83	Resp:	16529
Ion Ratio	Lower	Upper	
83	100		
85	64.6	50.9	76.3
129	12.4	8.6	13.0

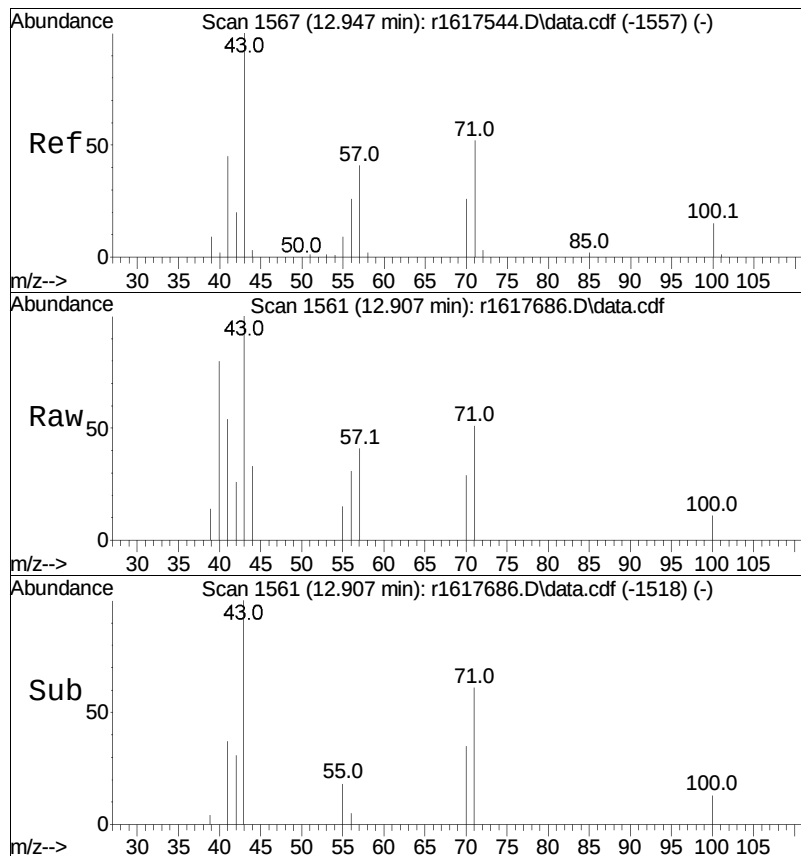




#60
 2,2,4-trimethylpentane
 Concen: 0.27 ppbV
 RT: 12.59 min Scan# 1513
 Delta R.T. -0.033 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

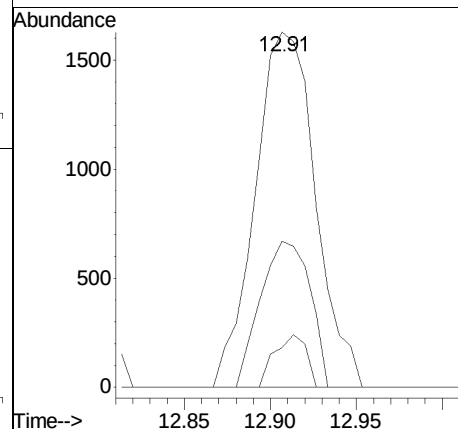
Tgt	Ion	Ratio	Lower	Upper
57	100			
99	5.6	4.7	7.1	
41	28.8	19.9	29.9	

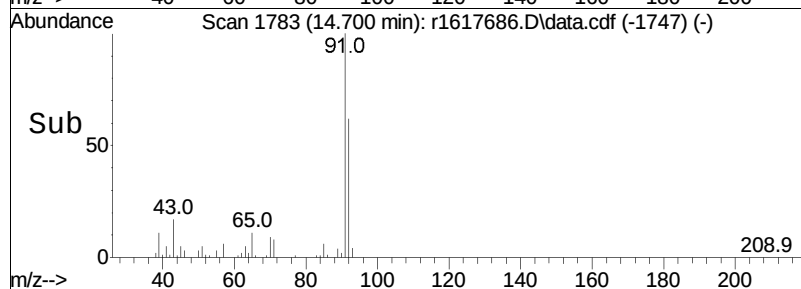
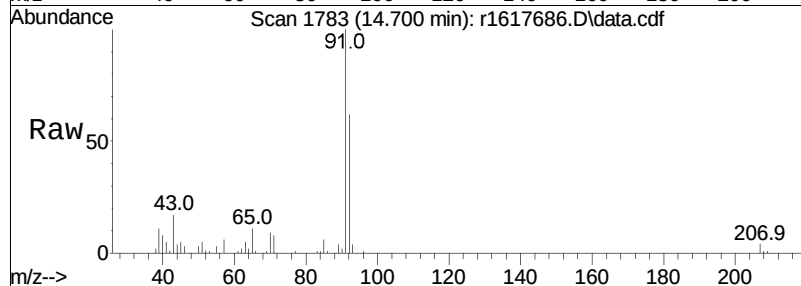
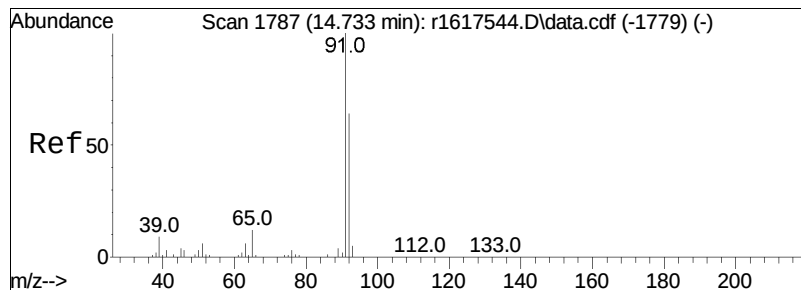




#62
 heptane
 Concen: 0.10 ppbV
 RT: 12.91 min Scan# 1561
 Delta R.T. -0.040 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

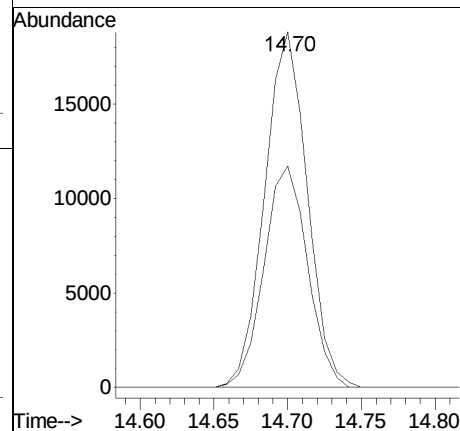
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	41.2	33.1	49.7	
100	11.2	11.8	17.8	

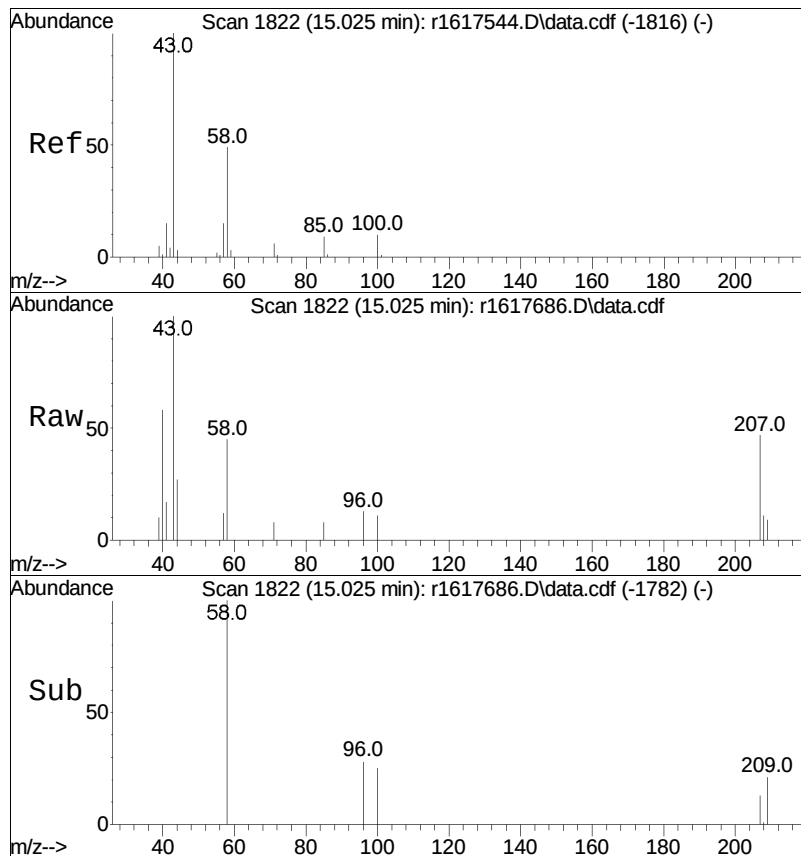




#68
toluene
Concen: 0.62 ppbV
RT: 14.70 min Scan# 1783
Delta R.T. -0.033 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

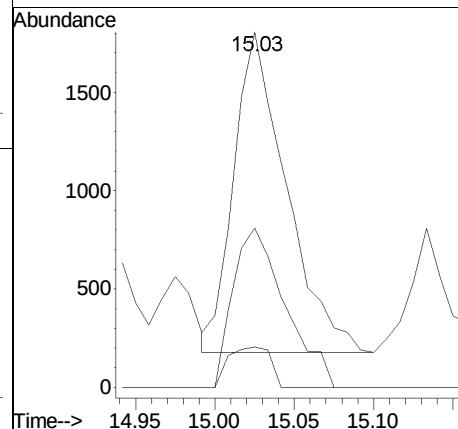
Tgt	Ion	Resp	Lower	Upper
91	100	37769		
92	62.3	50.9	76.3	

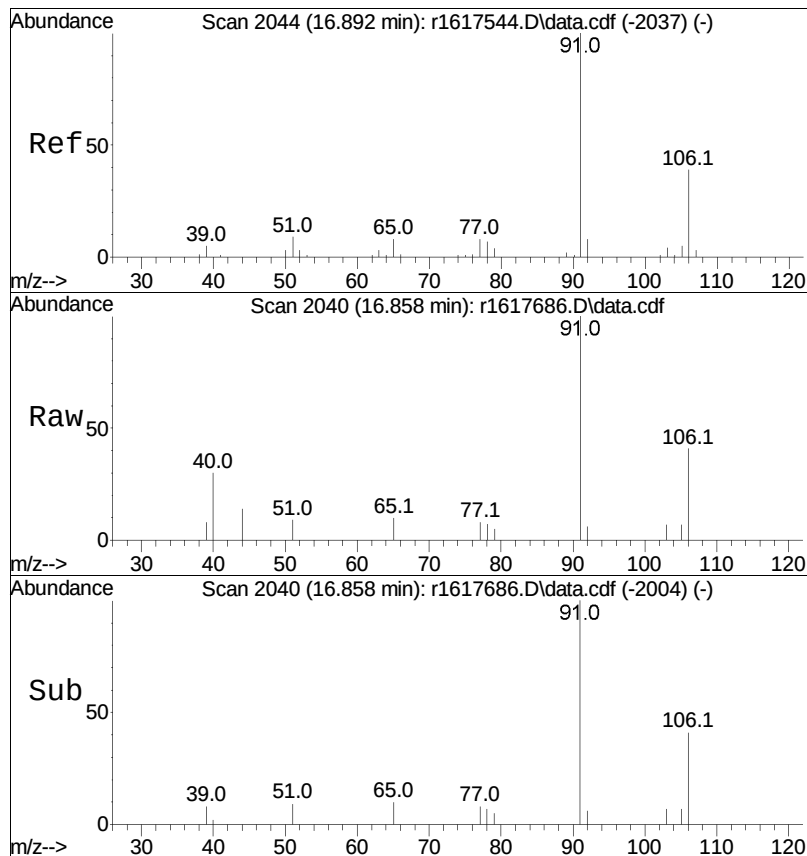




#72
 2-hexanone
 Concen: 0.10 ppbV
 RT: 15.03 min Scan# 1822
 Delta R.T. 0.000 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

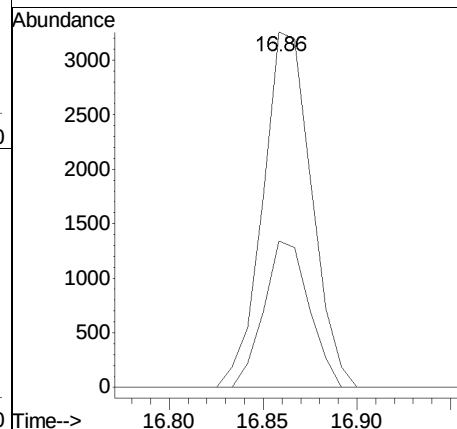
Tgt Ion	Ratio	Lower	Upper
43	100		
58	44.9	40.0	60.0
100	11.4	8.7	13.1

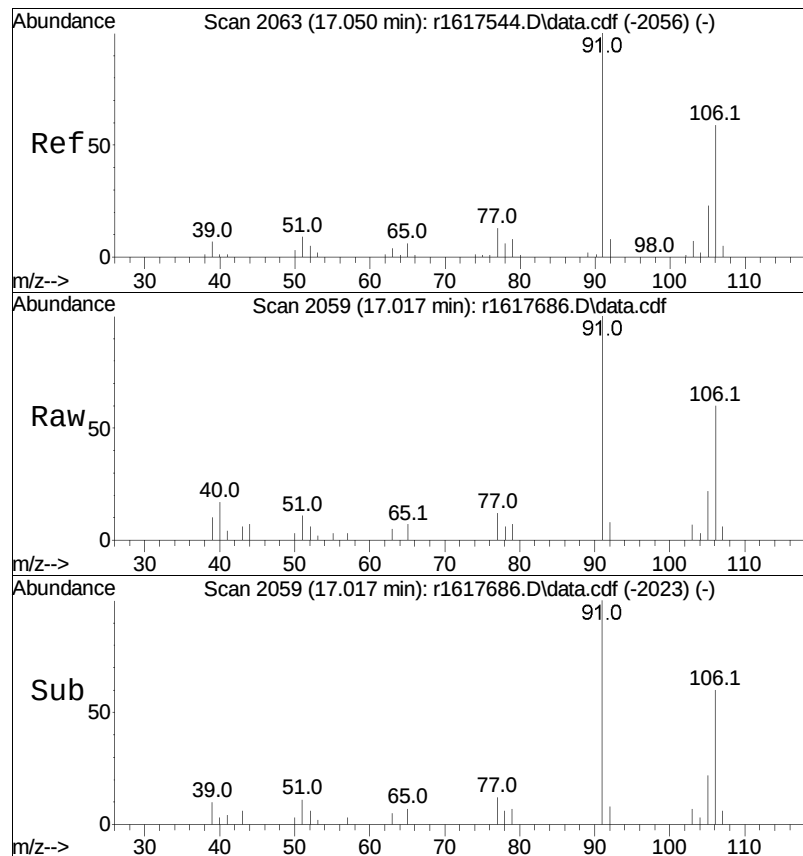




#81
 ethylbenzene
 Concen: 0.07 ppbV
 RT: 16.86 min Scan# 2040
 Delta R.T. -0.033 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

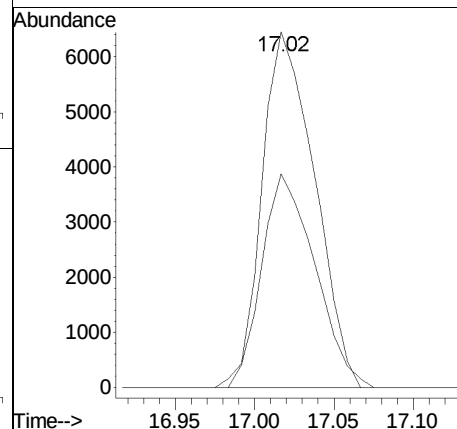
Tgt Ion	Ratio	Lower	Upper
91	100		
106	41.2	31.1	46.7

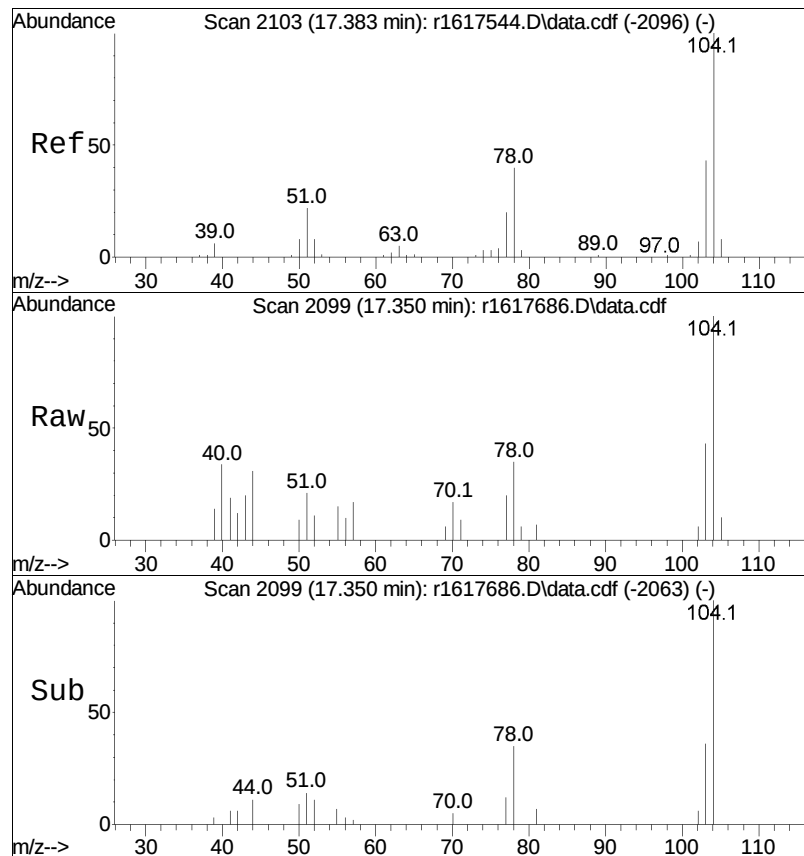




#83
 m+p-xylene
 Concen: 0.23 ppbV
 RT: 17.02 min Scan# 2059
 Delta R.T. -0.033 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

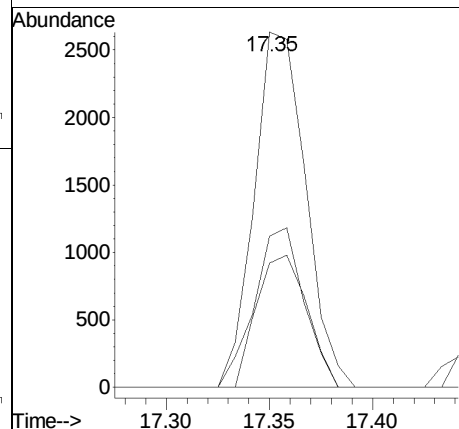
Tgt	Ion	Resp	Lower	Upper
91	100	14845		
106	60.1	47.5	71.3	

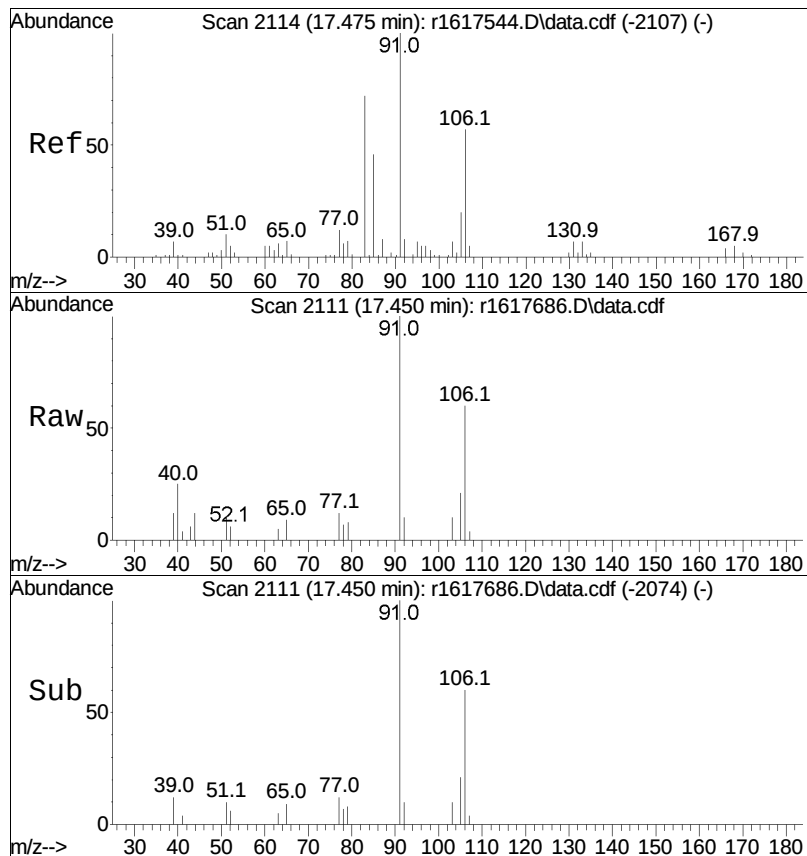




#85
styrene
Concen: 0.08 ppbV
RT: 17.35 min Scan# 2099
Delta R.T. -0.033 min
Lab File: r1617686.D
Acq: 16 Jun 2020 7:27 PM

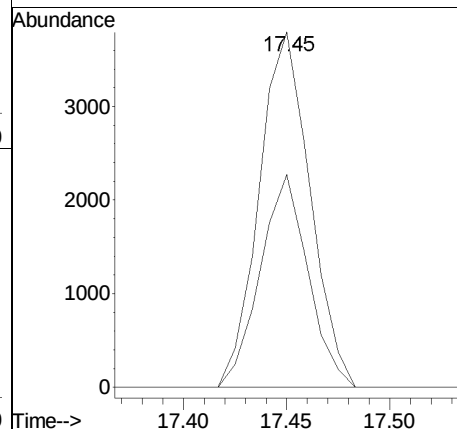
Tgt	Ion:104	Resp:	4566
Ion	Ratio	Lower	Upper
104	100		
103	42.6	34.4	51.6
78	35.0	31.8	47.6

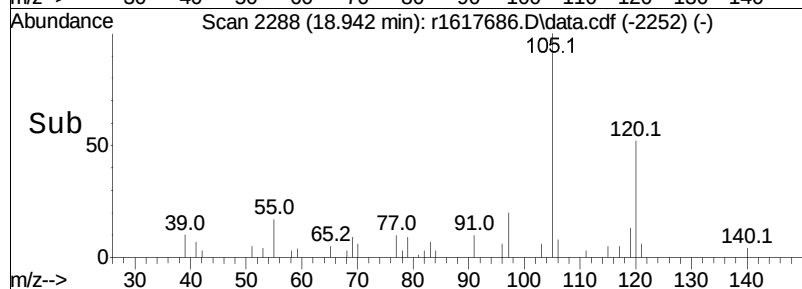
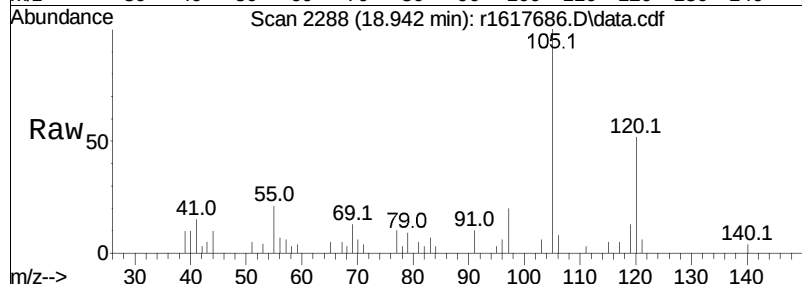
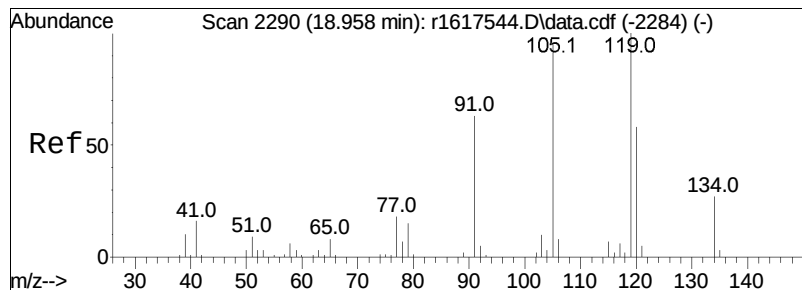




#87
 o-xylene
 Concen: 0.10 ppbV
 RT: 17.45 min Scan# 2111
 Delta R.T. -0.025 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

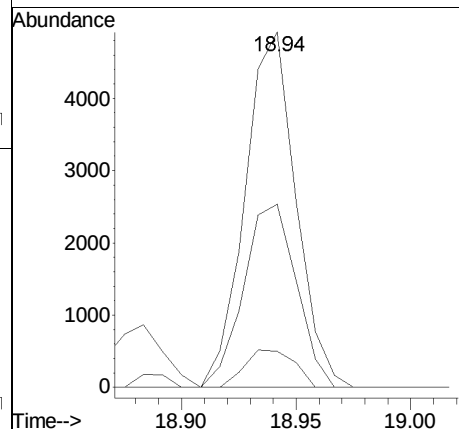
Tgt Ion	Ratio	Lower	Upper
91	100		
106	59.8	45.8	68.8

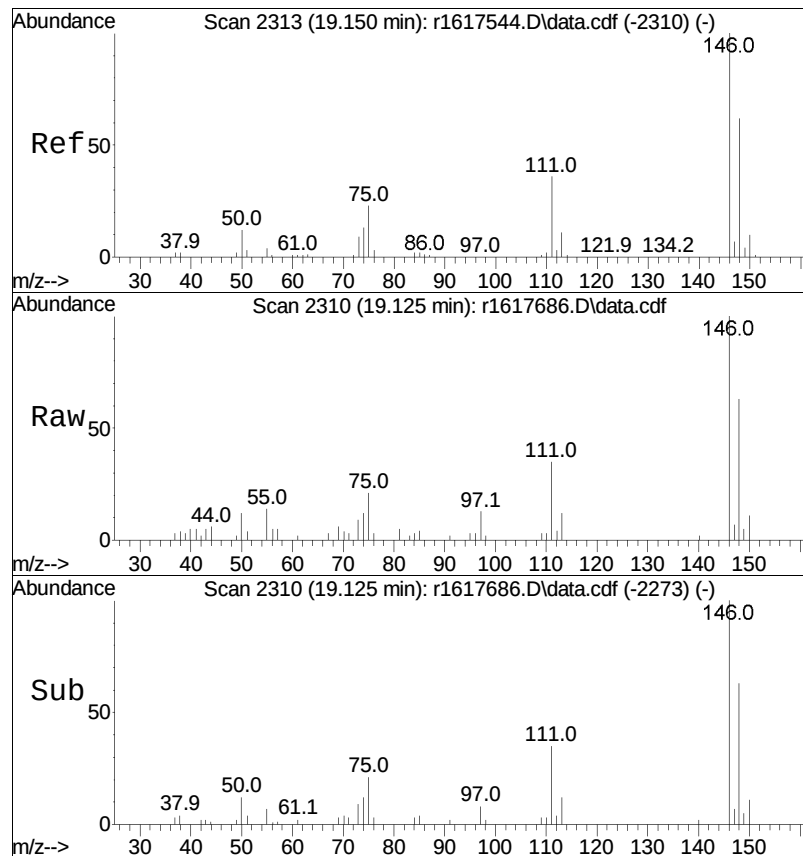




#99
 1,2,4-trimethylbenzene
 Concen: 0.10 ppbV
 RT: 18.94 min Scan# 2288
 Delta R.T. -0.017 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

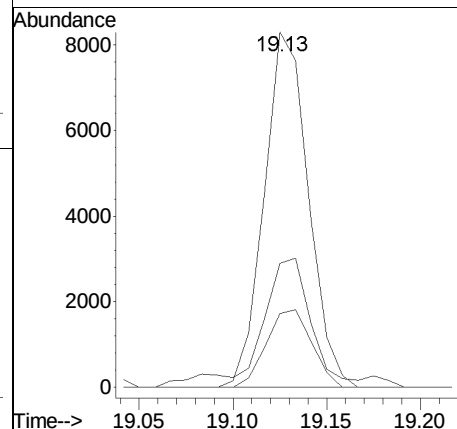
Tgt Ion	Ratio	Lower	Upper
105	100		
120	51.5	48.9	73.3
91	10.2	53.3	79.9#





#103
 1,4-dichlorobenzene
 Concen: 0.24 ppbV
 RT: 19.13 min Scan# 2310
 Delta R.T. -0.025 min
 Lab File: r1617686.D
 Acq: 16 Jun 2020 7:27 PM

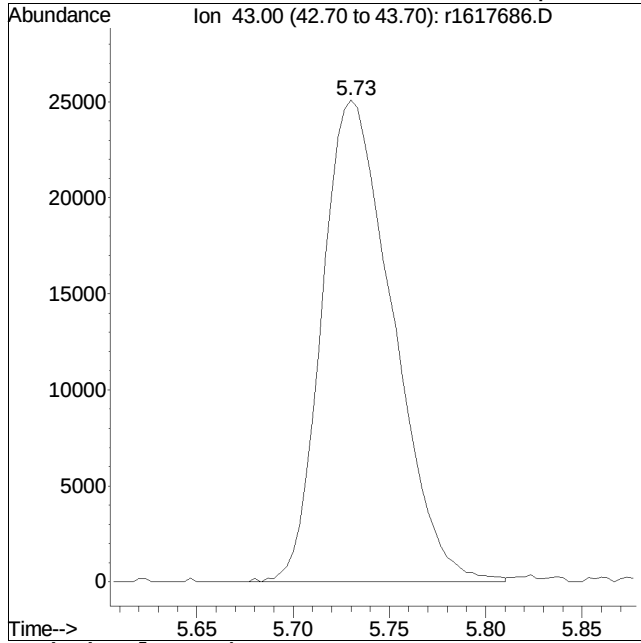
Tgt	Ion	Ratio	Lower	Upper
146	100			
111	34.9	28.6	42.8	
75	20.8	18.6	27.8	



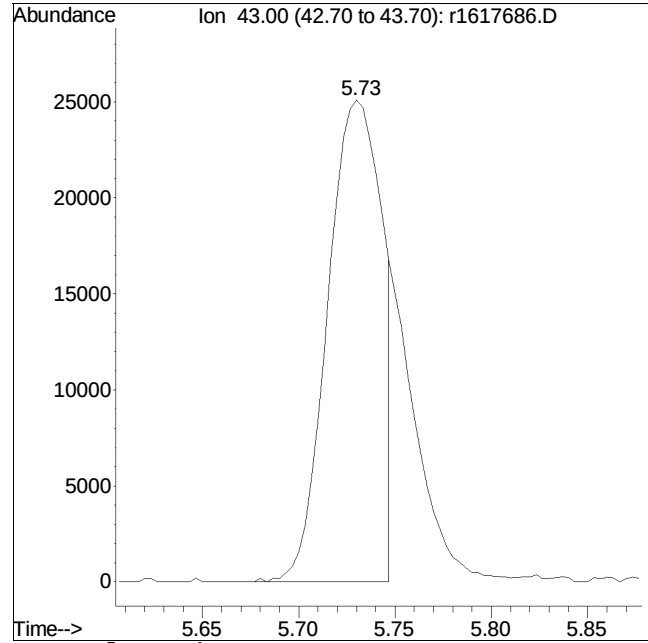
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617686.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:7: 7 Instrument :
Sample : WG1382260-5,3,250,250 Quant Date : 6/17/2020 5:09 am

Compound #19: acetone



Original Peak Response = 64038



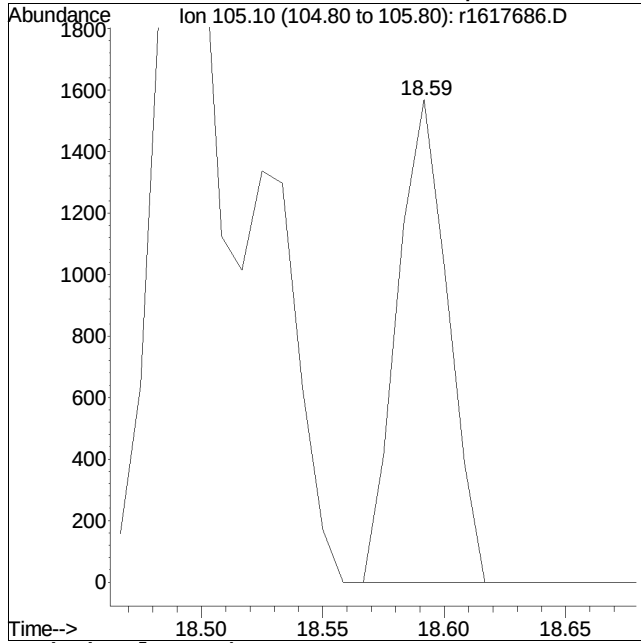
Manual Peak Response = 49455 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

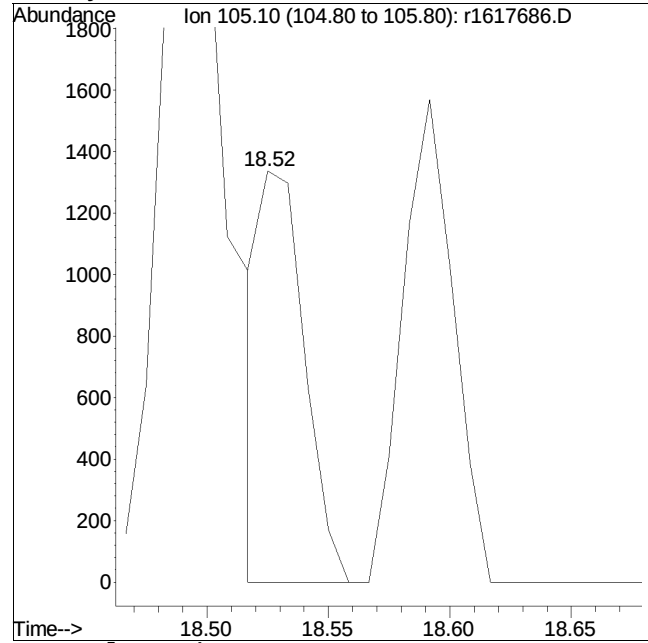
Data Path : O:\Forensics\Data\Airlab16\QMethod : TFS16_200609.M
Data File : r1617686.D Operator : AIRLAB16:RY
Date Inj'd : 6/16/2020 0:7: 7 Instrument :
Sample : WG1382260-5,3,250,250 Quant Date : 6/17/2020 5:09 am

Compound #96: 4-ethyl toluene



Original Peak Response = 2280

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



Manual Peak Response = 1716 M3

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)

Jun 17 2020, 04:28 pm

Work Group: WG1382260 for Department: 3 GC/MS

Created: 16-JUN-20 Due: Operator: TS

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2024426-01	SV-1	S T015-LL	SOIL_VAPOR	DONE	U	0711	0618	S0	Can-2.7
L2024426-02	SV-2	S T015-LL	SOIL_VAPOR	DONE	U	0711	0618	S0	Can-2.7
L2024597-01	071/AMBIENT-2	S T015-LL	AIR	DONE	U	0711	0618	S0	Can-6
L2024597-02	073/LSV-13	S T015-LL	SOIL_VAPOR	DONE	U	0711	0618	S0	Can-6
L2024597-03	076/LSV-11	S T015-LL	SOIL_VAPOR	DONE	U	0711	0618	S0	Can-6
L2024599-06	SV-1	S T015-LL	SOIL_VAPOR	DONE	U	0711	0624	S0	Can-2.7
L2024599-07	SV-2	S T015-LL	SOIL_VAPOR	DONE	U	0711	0624	S0	Can-2.7
L2024605-01	IA-1	S T015-LL	AIR	DONE	U	0711	0618	S0	Can-6
L2024605-02	IA-2	S T015-LL	AIR	DONE	U	0711	0618	S0	Can-6
L2024605-03	IA-3	S T015-LL	AIR	DONE	U	0711	0618	S0	Can-6
L2024605-04	AA-1	S T015-LL	AIR	DONE	U	0711	0618	S0	Can-6
L2024793-01	RSV-3	S T015-LL	SOIL_VAPOR	DONE	U	0712	0618	S0	Can-2.7
L2024793-02	RSV-7	S T015-LL	SOIL_VAPOR	DONE	U	0712	0618	S0	Can-2.7
L2024793-03	RSV-2	S T015-LL	SOIL_VAPOR	DONE	U	0712	0618	S0	Can-2.7
L2024793-04	RSV-1	S T015-LL	SOIL_VAPOR	DONE	U	0712	0618	S0	Can-2.7
L2024793-05	RSV-6	S T015-LL	SOIL_VAPOR	DONE	U	0712	0618	S0	Can-2.7
L2024793-06	RSV-5	S T015-LL	SOIL_VAPOR	DONE	U	0712	0618	S0	Can-2.7
L2024793-07	RSV-4	S T015-LL	SOIL_VAPOR	DONE	U	0712	0618	S0	Can-2.7
L2025194-01	IA-1	S T015-LL	AIR	DONE	U	0716	0617	1A	Can-6
WG1382260-1	MS BFB Tune Standard	S T015-LL	AIR	DONE	U				
WG1382260-2	Continuing Calibrati	S T015-LL	AIR	DONE	U				
WG1382260-3	Laboratory Control S	S T015-LL	AIR	DONE	U				
WG1382260-4	Laboratory Method Bl	S T015-LL	AIR	DONE	U				
WG1382260-5	Duplicate Sample	S T015-LL	AIR	DONE	U				
Comments:									
WG1382260-5	L2024605-02								

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: AirLab 16 Internal Standard/Surrogate IDs: SS20-009/ SS19-022

Date: 06/09/20 Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: AR/TS Sequence File Name: 200609.S

SIM ICAL# 16873

Full Scan ICAL# 16872

APH ICAL# 16856

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ Sublist	Check Pass ? Y/N
1	BA16060901	TO15_SFS.qgm	R1617533.qgd	250ML	TUNE		NA
1	BA16060902	TO15_SFS.qgm	R1617534.qgd	250ML			NA
1	BA16060903	TO15_SFS.qgm	R1617535.qgd	250ML			NA
1	TA16060401	TO15_SFS.qgm	R1617536.qgd	250ML			NA
5	ITO15-SIMTD0.02	TO15_SFS.qgm	R1617537.qgd	SS20-003D 50 mL	SIM ONLY		NA
5	ITO15-SIMTD0.05	TO15_SFS.qgm	R1617538.qgd	SS20-003D 125 mL	SIM ONLY		NA
5	ITO15-SIMTD0.1	TO15_SFS.qgm	R1617539.qgd	SS20-003D 250 mL	SIM ONLY		NA
6	ITO15-LLSTD0.2	TO15_SFS.qgm	R1617540.qgd	SS20-003C 50 mL			NA
6	ITO15-LLSTD0.5	TO15_SFS.qgm	R1617541.qgd	SS20-003C 125 mL			NA
6	ITO15-LLSTD1.0	TO15_SFS.qgm	R1617542.qgd	SS20-003C 250 mL			NA
7	ITO15-LLSTD5.0	TO15_SFS.qgm	R1617543.qgd	SS20-003B1 125 mL			NA
7	ITO15-LLSTD010	TO15_SFS.qgm	R1617544.qgd	SS20-003B1 250 mL			NA
8	ITO15-LLSTD020	TO15_SFS.qgm	R1617545.qgd	SS20-003A 50 mL			NA
8	ITO15-LLSTD050	TO15_SFS.qgm	R1617546.qgd	SS20-003A 125 mL			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R1617547.qgd	SS20-003A 250 mL	LL ONLY		NA
1	BA16060901	TO15_SFS.qgm	R1617548.qgd	250ML			NA
1	BA16060902	TO15_SFS.qgm	R1617549.qgd	250ML			NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R1617550.qgd	SS20-015G 250 mL	LL ICV		NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R1617551.qgd	SS20-015G 125 mL	SIM ICV		NA
13							
14							
15							

Alpha Analytical Air Lab Instrument Run Log

16							
1							
2							
13							
14							

Column ID: Rtx-1 0.25 mm ID

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

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume
analyzed

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: AirLab 16

Internal Standard/Surrogate IDs: SS20-009/ SS19-022

Date: 06/16/20

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: TS

Sequence File Name: 200616.S

SIM ICAL# 16873

Full Scan ICAL# 16872

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	TA16061601	TO15_SFS.qgm	R1617676.qgd	250ML	TUNE		NA
2	CA16061601	TO15_SFS.qgm	R1617677.qgd	SS20-013G 250 mL	LL CC		NA
3	CTO15-LLSTD010	TO15_SFS.qgm	R1617678.qgd	SS20-015G 250 mL	LL LCS		NA
3	CTO15-SIMSTD5	TO15_SFS.qgm	R1617679.qgd	SS20-015G 125 mL	SIM LCS		NA
1	BA16061601	TO15_SFS.qgm	R1617680.qgd	250ML	LL BLANK		Y
1	BA16061602	TO15_SFS.qgm	R1617681.qgd	250ML	SIM BLANK		Y
1	L2024597-01,3,250,250	TO15_SFS.qgm	R1617682.qgd	WG1382260,ICAL16872		NY	Y
2	L2024605-04,3,250,250	TO15_SFS.qgm	R1617683.qgd	WG1382260,ICAL16872		NY/7SIM	Y
3	L2024605-01,3,250,250	TO15_SFS.qgm	R1617684.qgd	WG1382260,ICAL16872		NY/7SIM	Y
4	L2024605-02,3,250,250	TO15_SFS.qgm	R1617685.qgd	WG1382260,ICAL16872		NY/7SIM	Y
4	L2024605-02DUP,3,250,250	TO15_SFS.qgm	R1617686.qgd	WG1382260,ICAL16872	LL/SIM DUP	NY/7SIM	Y
5	L2024605-03,3,250,250	TO15_SFS.qgm	R1617687.qgd	WG1382260,ICAL16872		NY/7SIM	Y
6	L2024597-02,3,250,250	TO15_SFS.qgm	R1617688.qgd	WG1382260,ICAL16872		NY	Y
7	L2024597-03,3,250,250	TO15_SFS.qgm	R1617689.qgd	WG1382260,ICAL16872		NY	Y
8	L2024793-01,3,250,250	TO15_SFS.qgm	R1617690.qgd	WG1382260,ICAL16872		NY	Y
9	L2024793-02,3,250,250	TO15_SFS.qgm	R1617691.qgd	WG1382260,ICAL16872		NY	Y
10	L2024793-03,3,250,250	TO15_SFS.qgm	R1617692.qgd	WG1382260,ICAL16872	DCDFM OVERCAL	NY	Y
11	L2024793-04,3,250,250	TO15_SFS.qgm	R1617693.qgd	WG1382260,ICAL16872		NY	Y
12	L2024793-05D,3,13.24,250	TO15_SFS.qgm	R1617694.qgd	WG1382260,ICAL16872	T	NY	Y
13	L2024793-06D,3,14.93,250	TO15_SFS.qgm	R1617695.qgd	WG1382260,ICAL16872	T	NY	Y
14	L2024793-07,3,250,250	TO15_SFS.qgm	R1617696.qgd	WG1382260,ICAL16872	DCDFM OVERCAL	NY	Y
15	L2024426-01,3,250,250	TO15_SFS.qgm	R1617697.qgd	WG1382260,ICAL16872		NY	Y

Alpha Analytical Air Lab Instrument Run Log

16	L2024426-02,3,250,250	TO15_SFS.qgm	R1617698.qgd	WG1382260,ICAL16872		NY	Y
1	L2025194-01,3,250,250	TO15_SFS.qgm	R1617699.qgd	WG1382260,ICAL16872	ETOH AND THF OVERCAL	NY/7SIM	Y
2	L2024599-06,3,250,250	TO15_SFS.qgm	R1617700.qgd	WG1382260,ICAL16872		NY	Y
3	L2024599-07,3,250,250	TO15_SFS.qgm	R1617701.qgd	WG1382260,ICAL16872		NY	Y
1	L2025194-01D,3,75,250	TO15_SFS.qgm	R1617702.qgd	WG1382260,ICAL16872		ETOH AND THF	Y
10	L2024793-03D,3,20,250	TO15_SFS.qgm	R1617703.qgd	WG1382260,ICAL16872		DCDFM ONLY	Y
14	L2024793-07D,3,100,250	TO15_SFS.qgm	R1617704.qgd	WG1382260,ICAL16872		DCDFM ONLY	Y

Column ID: Rtx-1 0.25 mm ID

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