ALPHA ANALYTICAL

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Alpha Analytical

Laboratory Code: 11148

SDG Number: L2047588

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Project Name: BEACH CHANNEL
Project Number: 15209

Lab Number: L2047588
Report Date: 11/05/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2047588-01	SV-1	SOIL_VAPOR	BEACH CHANNEL DRIVE	10/27/20 10:56	10/30/20
L2047588-02	SV-2	SOIL_VAPOR	BEACH CHANNEL DRIVE	10/27/20 10:57	10/30/20
L2047588-03	SV-3	SOIL_VAPOR	BEACH CHANNEL DRIVE	10/27/20 10:54	10/30/20
L2047588-04	SV-4	SOIL_VAPOR	BEACH CHANNEL DRIVE	10/27/20 10:35	10/30/20
L2047588-05	SV-5	SOIL_VAPOR	BEACH CHANNEL DRIVE	10/27/20 10:33	10/30/20
L2047588-06	SV-6	SOIL_VAPOR	BEACH CHANNEL DRIVE	10/27/20 10:32	10/30/20

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.

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on October 19, 2020. The canister certification results are provided as an addendum.

L2047588-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2047588-02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2047588-06: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG1430466-3 LCS recovery for chloroethane (172%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

Sample Receipt

The canister ID number for the sample designated SV-1 (L2047588-01) is listed on the CoC as 3981 but should be 3481.

The flow controller ID number for the sample designated SV-5 (L2047588-05) is listed on the CoC as 0782 but should be 0732.

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: Christopher J Anderson Report Date: 11/05/20

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.
LCSD	- 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.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
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.

Report Format: Data Usability Report

Footnotes

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. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Report Format: Data Usability Report

Data Qualifiers

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

ND - Not detected at the reporting limit (RL) for the sample.

Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)	Column Type: Restek RTX 502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 105 Meters
Concentrator: EST Encon (or equivalent)	df: 3.00 um
Autosampler: EST Centurion (or equivalent)	ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD	Column Type: DB-VRX
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 60 Meters
Concentrator: Tekmar Velocity / EST Encon	df: 1.40 um
Autosampler: Varian Archon / EST Centurion	ID: 0.25 mm
Purge time: 11 min	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	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	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 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.32 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

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

Pesticides/PCB/Herbicides:

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

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1uL
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 : L2047588

Received : 30-OCT-2020
Reviewer : Dylan Snook

Account Name : Impact Environmental
Project Number : 15209
Project Name : BEACH CHANNEL

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? **YES**
L2047588-01: Can ID #3981 vs. Can ID #3481
L2047588-05: FC ID #0782 vs. FC ID #0732

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
Jan 05 2021, 05:19 pm

Login Number: L2047588
Account: IMPENV Impact EnvironmentalProject: 15209
Received: 30OCT20 Due Date: 06NOV20

Sample #	Client ID	Mat	PR	Collected
L2047588-01	SV-1	11	S0	27OCT20 10:56
| ASP-B Package Due Date: 01/08/21				
ASP-B,CAN-RENT,FLOW-RENT,TO15-LL				
L2047588-02	SV-2	11	S0	27OCT20 10:57
| Package Due Date: 01/08/21				
CAN-RENT,FLOW-RENT,TO15-LL				
L2047588-03	SV-3	11	S0	27OCT20 10:54
| Package Due Date: 01/08/21				
CAN-RENT,FLOW-RENT,TO15-LL				
L2047588-04	SV-4	11	S0	27OCT20 10:35
| Package Due Date: 01/08/21				
CAN-RENT,FLOW-RENT,TO15-LL				
L2047588-05	SV-5	11	S0	27OCT20 10:33
| Package Due Date: 01/08/21				
CAN-RENT,FLOW-RENT,TO15-LL				
L2047588-06	SV-6	11	S0	27OCT20 10:32
| Package Due Date: 01/08/21				
CAN-RENT,FLOW-RENT,TO15-LL				

Logged By: Heather Hayden

AIR ANALYSIS

ALPHA ANALYTICAL

CHAIN OF CUSTODY

PAGE 1 OF 1

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

Date Rec'd in Lab: 10/31/20

ALPHA Job #: L2047588

Client Information

Client: Impact Environmental
Address: 170 Heyland Court
Bohemia NY 11716
Phone: 631-269-8800
Fax:
Email: lewbertson@impactenvironmental.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Beach Channel
Project Location: Beach Channel Drive
Project #: 15209
Project Manager: Chris Connolly
ALPHA Quote #:

Turn-Around Time

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

Date Due: Time:

Report Information - Data Deliverables

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

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ANALYSIS: TO-15 | TO-15 SIM | APH (Sustract Non-petroleum HCs) | Fixed Gases | Sulfides & Mercaptans by TO-15 | ☐

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION 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)
47588-01	SV-1	10/27	850	1056	-30.29	-2.99	SV	LR	6.4	3581 ~~0746~~	0746	X						
02	SV-2	10/27	849	1057	-30.03	-4.05	SV	LR	6.4	1941	0647	X						
03	SV-3	10/27	856	1054	-30.44	-4.83	SV	LR	6.4	2770	01821	X						
04	SV-4	10/27	840	1035	-30.01	-6.02	SV	LR	6.4	3237	01590	X						
05	SV-5	10/27	842	1033	-30.40	-8.83	SV	LR	6.4	900	0782	X						
06	SV-6	10/27	844	1032	-30.33	-7.66	SV	LR	6.4	1848	01509	X						

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

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	10/30 1400	[signature]	10/30/20 1400
[signature]	10/30/20 1652	[signature]	10/30/20 2205
[signature]	10/31/20 1345	[signature]	10/31/20 0345

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.

Form No: 101-02 Rev: (25-Sep-15)

Supporting Documentation

Project Name: BEACH CHANNEL

Lab Number: L2047588

Project Number: 15209

Report Date: 11/05/20

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 Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2047588-01	SV-1	01746	Flow 2	10/19/20	333341		-	-	-	Pass	40.0	41.2	3
L2047588-01	SV-1	3481	6.0L Can	10/19/20	333341	L2044220-04	Pass	-29.4	0.0	-	-	-	-
L2047588-02	SV-2	0647	Flow 2	10/19/20	333341		-	-	-	Pass	40.0	39.1	2
L2047588-02	SV-2	1991	6.0L Can	10/19/20	333341	L2044220-04	Pass	-29.2	-2.5	-	-	-	-
L2047588-03	SV-3	01821	Flow 2	10/19/20	333341		-	-	-	Pass	40.0	40.4	1
L2047588-03	SV-3	2770	6.0L Can	10/19/20	333341	L2044220-04	Pass	-29.3	-2.9	-	-	-	-
L2047588-04	SV-4	01550	Flow 2	10/19/20	333341		-	-	-	Pass	40.0	40.1	0
L2047588-04	SV-4	3237	6.0L Can	10/19/20	333341	L2044220-04	Pass	-29.5	-3.9	-	-	-	-
L2047588-05	SV-5	0732	Flow 2	10/19/20	333341		-	-	-	Pass	40.0	40.9	2
L2047588-05	SV-5	900	6.0L Can	10/19/20	333341	L2044220-04	Pass	-29.5	-6.2	-	-	-	-
L2047588-06	SV-6	01509	Flow 2	10/19/20	333341		-	-	-	Pass	40.0	42.3	6
L2047588-06	SV-6	1848	6.0L Can	10/19/20	333341	L2044220-04	Pass	-29.3	-5.7	-	-	-	-

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	10/16/20 02:14		
Analyst:	TS		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified

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

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	114		60-140
Bromochloromethane	119		60-140
chlorobenzene-d5	111		60-140

Project Name:	BATCH CANISTER CERTIFICATION	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	10/16/20 02:14		
Analyst:	TS		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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
1,1,2,2-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	***Lab Number:***	L2044220
Project Number:	CANISTER QC BAT	***Report Date:***	11/05/20

Air Canister Certification Results

Lab ID:	L2044220-04	Date Collected:	10/14/20 16:00
Client ID:	CAN 1965 SHELF 36	Date Received:	10/15/20
Sample Location:		Field Prep:	Not Specified

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

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	109		60-140
bromochloromethane	110		60-140
chlorobenzene-d5	100		60-140

Organics

Volatile Organics in Air
TO-15 Low Level

Volatiles QC Summary

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Client Sample ID	: SV-4	Matrix	: SOIL_VAPOR
Lab Sample ID	: L2047588-04	Analysis Date	: 11/04/20 19:16
Lab File ID	: R195372	DUP File ID	: r195373
Dup Sample ID	: WG1430466-5	DUP Analysis Date	: 11/04/20 19:59

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Dichlorodifluoromethane	0.356	0.361	1	25
Chloromethane	ND	ND	NC	25
Freon-114	ND	ND	NC	25
Vinyl chloride	ND	ND	NC	25
1,3-Butadiene	ND	ND	NC	25
Bromomethane	ND	ND	NC	25
Chloroethane	ND	ND	NC	25
Ethanol	ND	ND	NC	25
Vinyl bromide	ND	ND	NC	25
Acetone	21.9	22.3	2	25
Trichlorofluoromethane	0.490	0.543	10	25
Isopropanol	ND	ND	NC	25
1,1-Dichloroethene	ND	ND	NC	25
Tertiary butyl Alcohol	ND	ND	NC	25
Methylene chloride	ND	ND	NC	25
3-Chloropropene	ND	ND	NC	25
Carbon disulfide	0.518	0.515	1	25
Freon-113	ND	ND	NC	25
trans-1,2-Dichloroethene	ND	ND	NC	25
1,1-Dichloroethane	ND	ND	NC	25
Methyl tert butyl ether	ND	ND	NC	25
2-Butanone	0.716	0.698	3	25
cis-1,2-Dichloroethene	ND	ND	NC	25
Ethyl Acetate	ND	ND	NC	25
Chloroform	ND	0.201	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Client Sample ID	: SV-4	Matrix	: SOIL_VAPOR
Lab Sample ID	: L2047588-04	Analysis Date	: 11/04/20 19:16
Lab File ID	: R195372	DUP File ID	: r195373
Dup Sample ID	: WG1430466-5	DUP Analysis Date	: 11/04/20 19:59

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Tetrahydrofuran	ND	ND	NC	25
1,2-Dichloroethane	ND	ND	NC	25
n-Hexane	ND	ND	NC	25
1,1,1-Trichloroethane	ND	ND	NC	25
Benzene	ND	ND	NC	25
Carbon tetrachloride	ND	ND	NC	25
Cyclohexane	ND	ND	NC	25
1,2-Dichloropropane	ND	ND	NC	25
Bromodichloromethane	ND	ND	NC	25
1,4-Dioxane	ND	ND	NC	25
Trichloroethene	ND	ND	NC	25
2,2,4-Trimethylpentane	ND	ND	NC	25
Heptane	ND	ND	NC	25
cis-1,3-Dichloropropene	ND	ND	NC	25
4-Methyl-2-pentanone	ND	ND	NC	25
trans-1,3-Dichloropropene	ND	ND	NC	25
1,1,2-Trichloroethane	ND	ND	NC	25
Toluene	ND	ND	NC	25
2-Hexanone	ND	ND	NC	25
Dibromochloromethane	ND	ND	NC	25
1,2-Dibromoethane	ND	ND	NC	25
Tetrachloroethene	13.0	13.0	0	25
Chlorobenzene	ND	ND	NC	25
Ethylbenzene	ND	ND	NC	25
p/m-Xylene	ND	ND	NC	25

Lab Duplicate Sample Summary
Form 3
Air Volatiles

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Client Sample ID	: SV-4	Matrix	: SOIL_VAPOR
Lab Sample ID	: L2047588-04	Analysis Date	: 11/04/20 19:16
Lab File ID	: R195372	DUP File ID	: r195373
Dup Sample ID	: WG1430466-5	DUP Analysis Date	: 11/04/20 19:59

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Bromoform	ND	ND	NC	25
Styrene	ND	ND	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	NC	25
o-Xylene	ND	ND	NC	25
4-Ethyltoluene	ND	ND	NC	25
1,3,5-Trimethylbenzene	ND	ND	NC	25
1,2,4-Trimethylbenzene	ND	ND	NC	25
Benzyl chloride	ND	ND	NC	25
1,3-Dichlorobenzene	ND	ND	NC	25
1,4-Dichlorobenzene	ND	ND	NC	25
1,2-Dichlorobenzene	ND	ND	NC	25
1,2,4-Trichlorobenzene	ND	ND	NC	25
Hexachlorobutadiene	ND	ND	NC	25

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Impact Environmental	**Lab Number**	: L2047588
Project Name	: BEACH CHANNEL	**Project Number**	: 15209
Matrix	: SOIL_VAPOR		
LCS Sample ID	: WG1430466-3	**Analysis Date** : 11/04/20 12:36	**File ID** : r195365
LCSD Sample ID	:	**Analysis Date** :	**File ID** :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
Dichlorodifluoromethane	10	9.82	98				-	70-130	-
Chloromethane	10	9.54	95				-	70-130	-
Freon-114	10	10.1	101				-	70-130	-
Vinyl chloride	10	9.84	98				-	70-130	-
1,3-Butadiene	10	10.6	106				-	70-130	-
Bromomethane	10	9.74	97				-	70-130	-
Chloroethane	10	17.2	172 Q				-	70-130	-
Ethanol	50	44.8	90				-	40-160	-
Vinyl bromide	10	9.64	96				-	70-130	-
Acetone	50	42.4	85				-	40-160	-
Trichlorofluoromethane	10	9.28	93				-	70-130	-
Isopropanol	25	21.9	88				-	40-160	-
1,1-Dichloroethene	10	9.75	98				-	70-130	-
Tertiary butyl Alcohol	10	9.26	93				-	70-130	-
Methylene chloride	10	9.78	98				-	70-130	-
3-Chloropropene	10	10.1	101				-	70-130	-
Carbon disulfide	10	9.04	90				-	70-130	-
Freon-113	10	9.61	96				-	70-130	-
trans-1,2-Dichloroethene	10	9.54	95				-	70-130	-
1,1-Dichloroethane	10	9.44	94				-	70-130	-
Methyl tert butyl ether	10	9.94	99				-	70-130	-
2-Butanone	10	9.46	95				-	70-130	-
cis-1,2-Dichloroethene	10	9.99	100				-	70-130	-
Ethyl Acetate	10	9.88	99				-	70-130	-
Chloroform	10	10.0	100				-	70-130	-
Tetrahydrofuran	10	9.21	92				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Matrix	: SOIL_VAPOR		
LCS Sample ID	: WG1430466-3	Analysis Date : 11/04/20 12:36	File ID : r195365
LCSD Sample ID	:	Analysis Date :	File ID :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
1,2-Dichloroethane	10	9.61	96				-	70-130	-
n-Hexane	10	9.87	99				-	70-130	-
1,1,1-Trichloroethane	10	9.27	93				-	70-130	-
Benzene	10	9.35	94				-	70-130	-
Carbon tetrachloride	10	10.2	102				-	70-130	-
Cyclohexane	10	9.80	98				-	70-130	-
1,2-Dichloropropane	10	9.73	97				-	70-130	-
Bromodichloromethane	10	10.2	102				-	70-130	-
1,4-Dioxane	10	9.84	98				-	70-130	-
Trichloroethene	10	9.64	96				-	70-130	-
2,2,4-Trimethylpentane	10	10.2	102				-	70-130	-
Heptane	10	9.84	98				-	70-130	-
cis-1,3-Dichloropropene	10	10.7	107				-	70-130	-
4-Methyl-2-pentanone	10	10.2	102				-	70-130	-
trans-1,3-Dichloropropene	10	9.23	92				-	70-130	-
1,1,2-Trichloroethane	10	9.91	99				-	70-130	-
Toluene	10	9.13	91				-	70-130	-
2-Hexanone	10	10.1	101				-	70-130	-
Dibromochloromethane	10	10.1	101				-	70-130	-
1,2-Dibromoethane	10	10.0	100				-	70-130	-
Tetrachloroethene	10	9.87	99				-	70-130	-
Chlorobenzene	10	10.3	103				-	70-130	-
Ethylbenzene	10	9.88	99				-	70-130	-
p/m-Xylene	20	20.2	101				-	70-130	-
Bromoform	10	10.5	105				-	70-130	-
Styrene	10	10.5	105				-	70-130	-

Laboratory Control Sample Summary
Form 3
Air Volatiles

Client	: Impact Environmental	**Lab Number**	: L2047588
Project Name	: BEACH CHANNEL	**Project Number**	: 15209
Matrix	: SOIL_VAPOR		
LCS Sample ID	: WG1430466-3	**Analysis Date** : 11/04/20 12:36	**File ID** : r195365
LCSD Sample ID	:	**Analysis Date** :	**File ID** :

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R	RPD	Recovery Limits	RPD Limit
1,1,2,2-Tetrachloroethane	10	11.0	110				-	70-130	-
o-Xylene	10	10.4	104				-	70-130	-
4-Ethyltoluene	10	10.5	105				-	70-130	-
1,3,5-Trimethylbenzene	10	10.6	106				-	70-130	-
1,2,4-Trimethylbenzene	10	11.6	116				-	70-130	-
Benzyl chloride	10	12.0	120				-	70-130	-
1,3-Dichlorobenzene	10	11.0	110				-	70-130	-
1,4-Dichlorobenzene	10	11.5	115				-	70-130	-
1,2-Dichlorobenzene	10	12.1	121				-	70-130	-
1,2,4-Trichlorobenzene	10	12.8	128				-	70-130	-
Hexachlorobutadiene	10	10.6	106				-	70-130	-

Method Blank Summary
Form 4
Air Volatiles

Client	: Impact Environmental	**Lab Number**	: L2047588
Project Name	: BEACH CHANNEL	**Project Number**	: 15209
Lab Sample ID	: WG1430466-4	**Lab File ID**	: r195367
Instrument ID	: AIRLAB19		
Matrix	: SOIL_VAPOR	**Analysis Date**	: 11/04/20 14:43

Client Sample No.	Lab Sample ID	Analysis Date
WG1430466-3LCS	WG1430466-3	11/04/20 12:36
SV-1	L2047588-01D	11/04/20 17:09
SV-2	L2047588-02D	11/04/20 17:50
SV-3	L2047588-03	11/04/20 18:33
SV-4	L2047588-04	11/04/20 19:16
SV-4DUP	WG1430466-5	11/04/20 19:59
SV-5	L2047588-05	11/04/20 20:42
SV-6	L2047588-06D	11/04/20 21:23

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Impact Environmental	**Lab Number**	: L2047588
Project Name	: BEACH CHANNEL	**Project Number**	: 15209
Instrument ID	: AIRLAB19	**Analysis Date**	: 11/02/20 14:39
Tune Standard	: WG1429789-1	**Tune File ID**	: r195327_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	16
75	30.0 - 66.0% of mass 95	41.8
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	0.3 (.5)1
174	50.0 - 120.0% of mass 95	67
175	4.0 - 9.0% of mass 174	4.7 (7)1
176	93.0 - 101% of mass 174	64.9 (96.8)1
177	5.0 - 9.0% of mass 176	4.3 (6.6)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1368311-1	R195331	11/02/20 17:31
STD0.5	R1368311-2	R195332	11/02/20 18:15
STD1.0	R1368311-3	R195333	11/02/20 19:00
STD5.0	R1368311-5	R195334	11/02/20 19:43
STD10.0	R1368311-4	R195335	11/02/20 20:29
STD20.0	R1368311-6	R195336	11/02/20 21:11
STD50.0	R1368311-7	R195337	11/02/20 21:54
STD100	R1368311-8	R195338	11/02/20 22:39
ICV Quant	R1368311-9	R195341	11/03/20 07:39

Instrument Performance Check (Tune) Summary
Form 5
Air Volatiles
Bromofluorobenzene (BFB)

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Instrument ID	: AIRLAB19	Analysis Date	: 11/04/20 11:05
Tune Standard	: WG1430466-1	Tune File ID	: r195363_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	16.6
75	30.0 - 66.0% of mass 95	43
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.3 (.5)1
174	50.0 - 120.0% of mass 95	66.1
175	4.0 - 9.0% of mass 174	4.6 (6.9)1
176	93.0 - 101% of mass 174	64.2 (97.1)1
177	5.0 - 9.0% of mass 176	4.3 (6.7)2

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

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

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1430466-2CCAL	WG1430466-2	R195365	11/04/20 12:36
WG1430466-3LCS	WG1430466-3	R195365	11/04/20 12:36
WG1430466-4BLANK	WG1430466-4	R195367	11/04/20 14:43
SV-1	L2047588-01D	R195369	11/04/20 17:09
SV-2	L2047588-02D	R195370	11/04/20 17:50
SV-3	L2047588-03	R195371	11/04/20 18:33
SV-4	L2047588-04	R195372	11/04/20 19:16
WG1430466-5DUP	WG1430466-5	R195373	11/04/20 19:59
SV-5	L2047588-05	R195374	11/04/20 20:42
SV-6	L2047588-06D	R195375	11/04/20 21:23

Internal Standard Area and RT Summary
Form 8a
Air Volatiles

Client	: Impact Environmental	**Lab Number**	: L2047588
Project Name	: BEACH CHANNEL	**Project Number**	: 15209
Instrument ID	: AIRLAB19	**Analysis Date**	: 11/04/20 12:36:00
Sample No	: WG1430466-2	**Lab File ID**	: R195365

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1430466-2	384278	8.59	866249	10.43	149824	14.58
Upper Limit	537989	8.92	1212749	10.76	209754	14.91
Lower Limit	230567	8.26	519749	10.10	89894	14.25
Sample ID						
WG1430466-3 LCS	384278	8.59	866249	10.43	149824	14.58
WG1430466-4 BLANK	353587	8.60	823440	10.44	137289	14.58
SV-1	346109	8.60	759408	10.44	136535	14.58
SV-2	346597	8.60	767816	10.44	135308	14.58
SV-3	365179	8.60	789307	10.44	140985	14.58
SV-4	378866	8.60	862274	10.44	142664	14.58
SV-4 DUP	341121	8.59	793560	10.43	131674	14.58
SV-5	364955	8.59	829284	10.43	139982	14.58
SV-6	365443	8.59	835740	10.43	142121	14.58

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

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Volatile Organics in Air: TO-15 (AIR)

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

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

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

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Volatile Organics in Air: TO-15 (AIR)

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

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

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

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Created By: Jason Hebert
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Volatile Organics in Air: TO-15 (AIR)

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

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

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

Volatiles Sample Data

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-01D	Date Collected	: 10/27/20 10:56
Client ID	: SV-1	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 17:09
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 26.74
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195369	Instrument ID	: AIRLAB19
Sample Amount	: 9.35 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	5.35	--	ND	26.5	--	U
74-87-3	Chloromethane	ND	5.35	--	ND	11.0	--	U
76-14-2	Freon-114	ND	5.35	--	ND	37.4	--	U
75-01-4	Vinyl chloride	ND	5.35	--	ND	13.7	--	U
106-99-0	1,3-Butadiene	ND	5.35	--	ND	11.8	--	U
74-83-9	Bromomethane	ND	5.35	--	ND	20.8	--	U
75-00-3	Chloroethane	ND	5.35	--	ND	14.1	--	U
64-17-5	Ethanol	ND	134	--	ND	252	--	U
593-60-2	Vinyl bromide	ND	5.35	--	ND	23.4	--	U
67-64-1	Acetone	ND	26.7	--	ND	63.4	--	U
75-69-4	Trichlorofluoromethane	ND	5.35	--	ND	30.1	--	U
67-63-0	Isopropanol	ND	13.4	--	ND	32.9	--	U
75-35-4	1,1-Dichloroethene	ND	5.35	--	ND	21.2	--	U
75-65-0	Tertiary butyl Alcohol	ND	13.4	--	ND	40.6	--	U
75-09-2	Methylene chloride	ND	13.4	--	ND	46.6	--	U
107-05-1	3-Chloropropene	ND	5.35	--	ND	16.7	--	U
75-15-0	Carbon disulfide	ND	5.35	--	ND	16.7	--	U
76-13-1	Freon-113	ND	5.35	--	ND	41.0	--	U
156-60-5	trans-1,2-Dichloroethene	ND	5.35	--	ND	21.2	--	U
75-34-3	1,1-Dichloroethane	ND	5.35	--	ND	21.7	--	U
1634-04-4	Methyl tert butyl ether	ND	5.35	--	ND	19.3	--	U
78-93-3	2-Butanone	ND	13.4	--	ND	39.5	--	U
156-59-2	cis-1,2-Dichloroethene	ND	5.35	--	ND	21.2	--	U
141-78-6	Ethyl Acetate	ND	13.4	--	ND	48.3	--	U
67-66-3	Chloroform	ND	5.35	--	ND	26.1	--	U
109-99-9	Tetrahydrofuran	ND	13.4	--	ND	39.5	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-01D	Date Collected	: 10/27/20 10:56
Client ID	: SV-1	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 17:09
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 26.74
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195369	Instrument ID	: AIRLAB19
Sample Amount	: 9.35 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	5.35	--	ND	21.7	--	U
110-54-3	n-Hexane	ND	5.35	--	ND	18.9	--	U
71-55-6	1,1,1-Trichloroethane	ND	5.35	--	ND	29.2	--	U
71-43-2	Benzene	ND	5.35	--	ND	17.1	--	U
56-23-5	Carbon tetrachloride	ND	5.35	--	ND	33.7	--	U
110-82-7	Cyclohexane	ND	5.35	--	ND	18.4	--	U
78-87-5	1,2-Dichloropropane	ND	5.35	--	ND	24.7	--	U
75-27-4	Bromodichloromethane	ND	5.35	--	ND	35.8	--	U
123-91-1	1,4-Dioxane	ND	5.35	--	ND	19.3	--	U
79-01-6	Trichloroethene	ND	5.35	--	ND	28.8	--	U
540-84-1	2,2,4-Trimethylpentane	ND	5.35	--	ND	25.0	--	U
142-82-5	Heptane	ND	5.35	--	ND	21.9	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	5.35	--	ND	24.3	--	U
108-10-1	4-Methyl-2-pentanone	ND	13.4	--	ND	54.9	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	5.35	--	ND	24.3	--	U
79-00-5	1,1,2-Trichloroethane	ND	5.35	--	ND	29.2	--	U
108-88-3	Toluene	ND	5.35	--	ND	20.2	--	U
591-78-6	2-Hexanone	ND	5.35	--	ND	21.9	--	U
124-48-1	Dibromochloromethane	ND	5.35	--	ND	45.6	--	U
106-93-4	1,2-Dibromoethane	ND	5.35	--	ND	41.1	--	U
127-18-4	Tetrachloroethene	2330	5.35	--	15800	36.3	--	
108-90-7	Chlorobenzene	ND	5.35	--	ND	24.6	--	U
100-41-4	Ethylbenzene	ND	5.35	--	ND	23.2	--	U
179601-23-1	p/m-Xylene	ND	10.7	--	ND	46.5	--	U
75-25-2	Bromoform	ND	5.35	--	ND	55.3	--	U
100-42-5	Styrene	ND	5.35	--	ND	22.8	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-01D	Date Collected	: 10/27/20 10:56
Client ID	: SV-1	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 17:09
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 26.74
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195369	Instrument ID	: AIRLAB19
Sample Amount	: 9.35 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.35	--	ND	36.7	--	U
95-47-6	o-Xylene	ND	5.35	--	ND	23.2	--	U
622-96-8	4-Ethyltoluene	ND	5.35	--	ND	26.3	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	5.35	--	ND	26.3	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	5.35	--	ND	26.3	--	U
100-44-7	Benzyl chloride	ND	5.35	--	ND	27.7	--	U
541-73-1	1,3-Dichlorobenzene	ND	5.35	--	ND	32.2	--	U
106-46-7	1,4-Dichlorobenzene	ND	5.35	--	ND	32.2	--	U
95-50-1	1,2-Dichlorobenzene	ND	5.35	--	ND	32.2	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	5.35	--	ND	39.7	--	U
87-68-3	Hexachlorobutadiene	ND	5.35	--	ND	57.1	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-02D	Date Collected	: 10/27/20 10:57
Client ID	: SV-2	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 17:50
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.174
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195370	Instrument ID	: AIRLAB19
Sample Amount	: 115 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.454	0.435	--	2.24	2.15	--	
74-87-3	Chloromethane	ND	0.435	--	ND	0.898	--	U
76-14-2	Freon-114	ND	0.435	--	ND	3.04	--	U
75-01-4	Vinyl chloride	ND	0.435	--	ND	1.11	--	U
106-99-0	1,3-Butadiene	ND	0.435	--	ND	0.962	--	U
74-83-9	Bromomethane	ND	0.435	--	ND	1.69	--	U
75-00-3	Chloroethane	ND	0.435	--	ND	1.15	--	U
64-17-5	Ethanol	ND	10.9	--	ND	20.5	--	U
593-60-2	Vinyl bromide	ND	0.435	--	ND	1.90	--	U
67-64-1	Acetone	57.4	2.17	--	136	5.15	--	
75-69-4	Trichlorofluoromethane	ND	0.435	--	ND	2.44	--	U
67-63-0	Isopropanol	ND	1.09	--	ND	2.68	--	U
75-35-4	1,1-Dichloroethene	ND	0.435	--	ND	1.72	--	U
75-65-0	Tertiary butyl Alcohol	ND	1.09	--	ND	3.30	--	U
75-09-2	Methylene chloride	ND	1.09	--	ND	3.79	--	U
107-05-1	3-Chloropropene	ND	0.435	--	ND	1.36	--	U
75-15-0	Carbon disulfide	3.81	0.435	--	11.9	1.35	--	
76-13-1	Freon-113	ND	0.435	--	ND	3.33	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.435	--	ND	1.72	--	U
75-34-3	1,1-Dichloroethane	ND	0.435	--	ND	1.76	--	U
1634-04-4	Methyl tert butyl ether	ND	0.435	--	ND	1.57	--	U
78-93-3	2-Butanone	1.60	1.09	--	4.72	3.21	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.435	--	ND	1.72	--	U
141-78-6	Ethyl Acetate	ND	1.09	--	ND	3.93	--	U
67-66-3	Chloroform	ND	0.435	--	ND	2.12	--	U
109-99-9	Tetrahydrofuran	ND	1.09	--	ND	3.21	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-02D	Date Collected	: 10/27/20 10:57
Client ID	: SV-2	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 17:50
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.174
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195370	Instrument ID	: AIRLAB19
Sample Amount	: 115 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	0.435	--	ND	1.76	--	U
110-54-3	n-Hexane	ND	0.435	--	ND	1.53	--	U
71-55-6	1,1,1-Trichloroethane	1.43	0.435	--	7.80	2.37	--	
71-43-2	Benzene	ND	0.435	--	ND	1.39	--	U
56-23-5	Carbon tetrachloride	ND	0.435	--	ND	2.74	--	U
110-82-7	Cyclohexane	ND	0.435	--	ND	1.50	--	U
78-87-5	1,2-Dichloropropane	ND	0.435	--	ND	2.01	--	U
75-27-4	Bromodichloromethane	ND	0.435	--	ND	2.91	--	U
123-91-1	1,4-Dioxane	ND	0.435	--	ND	1.57	--	U
79-01-6	Trichloroethene	0.450	0.435	--	2.42	2.34	--	
540-84-1	2,2,4-Trimethylpentane	ND	0.435	--	ND	2.03	--	U
142-82-5	Heptane	ND	0.435	--	ND	1.78	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.435	--	ND	1.97	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.09	--	ND	4.47	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.435	--	ND	1.97	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.435	--	ND	2.37	--	U
108-88-3	Toluene	ND	0.435	--	ND	1.64	--	U
591-78-6	2-Hexanone	ND	0.435	--	ND	1.78	--	U
124-48-1	Dibromochloromethane	ND	0.435	--	ND	3.71	--	U
106-93-4	1,2-Dibromoethane	ND	0.435	--	ND	3.34	--	U
127-18-4	Tetrachloroethene	154	0.435	--	1040	2.95	--	
108-90-7	Chlorobenzene	ND	0.435	--	ND	2.00	--	U
100-41-4	Ethylbenzene	ND	0.435	--	ND	1.89	--	U
179601-23-1	p/m-Xylene	ND	0.870	--	ND	3.78	--	U
75-25-2	Bromoform	ND	0.435	--	ND	4.50	--	U
100-42-5	Styrene	ND	0.435	--	ND	1.85	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-02D	Date Collected	: 10/27/20 10:57
Client ID	: SV-2	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 17:50
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.174
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195370	Instrument ID	: AIRLAB19
Sample Amount	: 115 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.435	--	ND	2.99	--	U
95-47-6	o-Xylene	ND	0.435	--	ND	1.89	--	U
622-96-8	4-Ethyltoluene	ND	0.435	--	ND	2.14	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.435	--	ND	2.14	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.435	--	ND	2.14	--	U
100-44-7	Benzyl chloride	ND	0.435	--	ND	2.25	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.435	--	ND	2.62	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.435	--	ND	2.62	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.435	--	ND	2.62	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.435	--	ND	3.23	--	U
87-68-3	Hexachlorobutadiene	ND	0.435	--	ND	4.64	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-03	Date Collected	: 10/27/20 10:54
Client ID	: SV-3	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 18:33
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195371	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.386	0.200	--	1.91	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	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	6.03	5.00	--	11.4	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	74.4	1.00	--	177	2.38	--	
75-69-4	Trichlorofluoromethane	0.275	0.200	--	1.55	1.12	--	
67-63-0	Isopropanol	1.00	0.500	--	2.46	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	0.510	0.500	--	1.55	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	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	3.07	0.500	--	9.05	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	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	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-03	Date Collected	: 10/27/20 10:54
Client ID	: SV-3	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 18:33
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195371	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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	0.302	0.200	--	1.14	0.754	--	
591-78-6	2-Hexanone	0.666	0.200	--	2.73	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	19.0	0.200	--	129	1.36	--	
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	0.568	0.400	--	2.47	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-03	Date Collected	: 10/27/20 10:54
Client ID	: SV-3	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 18:33
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195371	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.247	0.200	--	1.07	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.553	0.200	--	2.72	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	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-04	Date Collected	: 10/27/20 10:35
Client ID	: SV-4	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 19:16
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195372	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.356	0.200	--	1.76	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	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	21.9	1.00	--	52.0	2.38	--	
75-69-4	Trichlorofluoromethane	0.490	0.200	--	2.75	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	0.518	0.200	--	1.61	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	0.716	0.500	--	2.11	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	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	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-04	Date Collected	: 10/27/20 10:35
Client ID	: SV-4	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 19:16
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195372	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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	13.0	0.200	--	88.2	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-04	Date Collected	: 10/27/20 10:35
Client ID	: SV-4	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 19:16
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195372	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-05	Date Collected	: 10/27/20 10:33
Client ID	: SV-5	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 20:42
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195374	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.503	0.200	--	2.49	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	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	25.8	1.00	--	61.3	2.38	--	
75-69-4	Trichlorofluoromethane	0.540	0.200	--	3.03	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	0.203	0.200	--	0.632	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	1.16	0.500	--	3.42	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	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	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-05	Date Collected	: 10/27/20 10:33
Client ID	: SV-5	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 20:42
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195374	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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	16.6	0.200	--	113	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-05	Date Collected	: 10/27/20 10:33
Client ID	: SV-5	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 20:42
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195374	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.302	0.200	--	1.48	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	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-06D	Date Collected	: 10/27/20 10:32
Client ID	: SV-6	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 21:23
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.778
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195375	Instrument ID	: AIRLAB19
Sample Amount	: 90.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	0.556	--	ND	2.75	--	U
74-87-3	Chloromethane	ND	0.556	--	ND	1.15	--	U
76-14-2	Freon-114	ND	0.556	--	ND	3.89	--	U
75-01-4	Vinyl chloride	ND	0.556	--	ND	1.42	--	U
106-99-0	1,3-Butadiene	ND	0.556	--	ND	1.23	--	U
74-83-9	Bromomethane	ND	0.556	--	ND	2.16	--	U
75-00-3	Chloroethane	ND	0.556	--	ND	1.47	--	U
64-17-5	Ethanol	ND	13.9	--	ND	26.2	--	U
593-60-2	Vinyl bromide	ND	0.556	--	ND	2.43	--	U
67-64-1	Acetone	15.8	2.78	--	37.5	6.60	--	
75-69-4	Trichlorofluoromethane	ND	0.556	--	ND	3.12	--	U
67-63-0	Isopropanol	ND	1.39	--	ND	3.42	--	U
75-35-4	1,1-Dichloroethene	ND	0.556	--	ND	2.20	--	U
75-65-0	Tertiary butyl Alcohol	ND	1.39	--	ND	4.21	--	U
75-09-2	Methylene chloride	ND	1.39	--	ND	4.83	--	U
107-05-1	3-Chloropropene	ND	0.556	--	ND	1.74	--	U
75-15-0	Carbon disulfide	ND	0.556	--	ND	1.73	--	U
76-13-1	Freon-113	ND	0.556	--	ND	4.26	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--	U
75-34-3	1,1-Dichloroethane	ND	0.556	--	ND	2.25	--	U
1634-04-4	Methyl tert butyl ether	ND	0.556	--	ND	2.00	--	U
78-93-3	2-Butanone	ND	1.39	--	ND	4.10	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--	U
141-78-6	Ethyl Acetate	ND	1.39	--	ND	5.01	--	U
67-66-3	Chloroform	ND	0.556	--	ND	2.72	--	U
109-99-9	Tetrahydrofuran	ND	1.39	--	ND	4.10	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-06D	Date Collected	: 10/27/20 10:32
Client ID	: SV-6	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 21:23
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.778
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195375	Instrument ID	: AIRLAB19
Sample Amount	: 90.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
107-06-2	1,2-Dichloroethane	ND	0.556	--	ND	2.25	--	U
110-54-3	n-Hexane	ND	0.556	--	ND	1.96	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.556	--	ND	3.03	--	U
71-43-2	Benzene	ND	0.556	--	ND	1.78	--	U
56-23-5	Carbon tetrachloride	ND	0.556	--	ND	3.50	--	U
110-82-7	Cyclohexane	ND	0.556	--	ND	1.91	--	U
78-87-5	1,2-Dichloropropane	ND	0.556	--	ND	2.57	--	U
75-27-4	Bromodichloromethane	ND	0.556	--	ND	3.72	--	U
123-91-1	1,4-Dioxane	ND	0.556	--	ND	2.00	--	U
79-01-6	Trichloroethene	ND	0.556	--	ND	2.99	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.556	--	ND	2.60	--	U
142-82-5	Heptane	ND	0.556	--	ND	2.28	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.39	--	ND	5.70	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.556	--	ND	3.03	--	U
108-88-3	Toluene	ND	0.556	--	ND	2.10	--	U
591-78-6	2-Hexanone	ND	0.556	--	ND	2.28	--	U
124-48-1	Dibromochloromethane	ND	0.556	--	ND	4.74	--	U
106-93-4	1,2-Dibromoethane	ND	0.556	--	ND	4.27	--	U
127-18-4	Tetrachloroethene	155	0.556	--	1050	3.77	--	
108-90-7	Chlorobenzene	ND	0.556	--	ND	2.56	--	U
100-41-4	Ethylbenzene	ND	0.556	--	ND	2.42	--	U
179601-23-1	p/m-Xylene	ND	1.11	--	ND	4.82	--	U
75-25-2	Bromoform	ND	0.556	--	ND	5.75	--	U
100-42-5	Styrene	ND	0.556	--	ND	2.37	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: L2047588-06D	Date Collected	: 10/27/20 10:32
Client ID	: SV-6	Date Received	: 10/30/20
Sample Location	: BEACH CHANNEL DRIVE	Date Analyzed	: 11/04/20 21:23
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 2.778
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195375	Instrument ID	: AIRLAB19
Sample Amount	: 90.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.556	--	ND	3.82	--	U
95-47-6	o-Xylene	ND	0.556	--	ND	2.42	--	U
622-96-8	4-Ethyltoluene	ND	0.556	--	ND	2.73	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.556	--	ND	2.73	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.556	--	ND	2.73	--	U
100-44-7	Benzyl chloride	ND	0.556	--	ND	2.88	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.556	--	ND	4.13	--	U
87-68-3	Hexachlorobutadiene	ND	0.556	--	ND	5.93	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: WG1430466-4	Date Collected	: NA
Client ID	: WG1430466-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 11/04/20 14:43
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195367	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

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

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: WG1430466-4	Date Collected	: NA
Client ID	: WG1430466-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 11/04/20 14:43
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195367	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

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

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: WG1430466-4	Date Collected	: NA
Client ID	: WG1430466-4BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 11/04/20 14:43
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195367	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: WG1430466-5	Date Collected	: 10/27/20 10:35
Client ID	: SV-4DUP	Date Received	: 10/30/20
Sample Location	:	Date Analyzed	: 11/04/20 19:59
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195373	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.361	0.200	--	1.79	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	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	22.3	1.00	--	53.0	2.38	--	
75-69-4	Trichlorofluoromethane	0.543	0.200	--	3.05	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	0.515	0.200	--	1.60	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	0.698	0.500	--	2.06	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	0.201	0.200	--	0.982	0.977	--	
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: WG1430466-5	Date Collected	: 10/27/20 10:35
Client ID	: SV-4DUP	Date Received	: 10/30/20
Sample Location	:	Date Analyzed	: 11/04/20 19:59
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195373	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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	13.0	0.200	--	88.2	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U

Results Summary
Form 1
Volatile Organics in Air

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Lab ID	: WG1430466-5	Date Collected	: 10/27/20 10:35
Client ID	: SV-4DUP	Date Received	: 10/30/20
Sample Location	:	Date Analyzed	: 11/04/20 19:59
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R195373	Instrument ID	: AIRLAB19
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195369.D
Acq On : 4 Nov 2020 5:09 PM
Operator : AIRLAB19:RY
Sample : L2047588-01D,3,9.35,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:16:57 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.60	49	346109	10.000	ppbV	0.00
Standard Area = 384278			Recovery =		90.07%	
43) 1,4-difluorobenzene	10.44	114	759408	10.000	ppbV	0.00
Standard Area = 866249			Recovery =		87.67%	
67) chlorobenzene-D5	14.58	54	136535	10.000	ppbV	0.00
Standard Area = 149824			Recovery =		91.13%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.12		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	5.26	31	7341	0.506	ppbV	100
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.73	43	21288	0.863	ppbV #	99
21) trichlorofluoromethane	5.89	101	2137	0.105	ppbV	99
22) isopropyl alcohol	5.97		0	N.D.		
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.54		0	N.D.		
28) methylene chloride	6.60		0	N.D.		
29) 3-chloropropene	0.00		0	N.D.		
30) carbon disulfide	6.88		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	8.04	43	2572	0.056	ppbV #	92
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	8.72		0	N.D.		
40) Tetrahydrofuran	9.13		0	N.D.		
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195369.D
Acq On : 4 Nov 2020 5:09 PM
Operator : AIRLAB19:RY
Sample : L2047588-01D,3,9.35,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:16:57 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	hexane	8.64		0	N.D.		
48)	1,1,1-trichloroethane	0.00		0	N.D.		
50)	benzene	10.10		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	11.15	130	3290	0.173	ppbV	99
60)	2,2,4-trimethylpentane	0.00		0	N.D.		
62)	heptane	11.43		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	13.02		0	N.D.		
72)	2-hexanone	13.27		0	N.D.		
74)	dibromochloromethane	0.00		0	N.D.		
75)	1,2-dibromoethane	0.00		0	N.D.		
78)	tetrachloroethene	14.05	166	2176969	87.004	ppbV	98
80)	chlorobenzene	0.00		0	N.D.		
81)	ethylbenzene	14.93		0	N.D.		
83)	m+p-xylene	15.07	91	3651	0.059	ppbV	99
84)	bromoform	0.00		0	N.D.		
85)	styrene	0.00		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.		
87)	o-xylene	15.44		0	N.D.		
96)	4-ethyl toluene	16.37		0	N.D.		
97)	1,3,5-trimethylbenzene	16.46		0	N.D.		
99)	1,2,4-trimethylbenzene	16.77		0	N.D.		
101)	Benzyl Chloride	0.00		0	N.D.		
102)	1,3-dichlorobenzene	0.00		0	N.D.		
103)	1,4-dichlorobenzene	0.00		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195369.D
Acq On : 4 Nov 2020 5:09 PM
Operator : AIRLAB19:RY
Sample : L2047588-01D,3,9.35,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:16:57 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

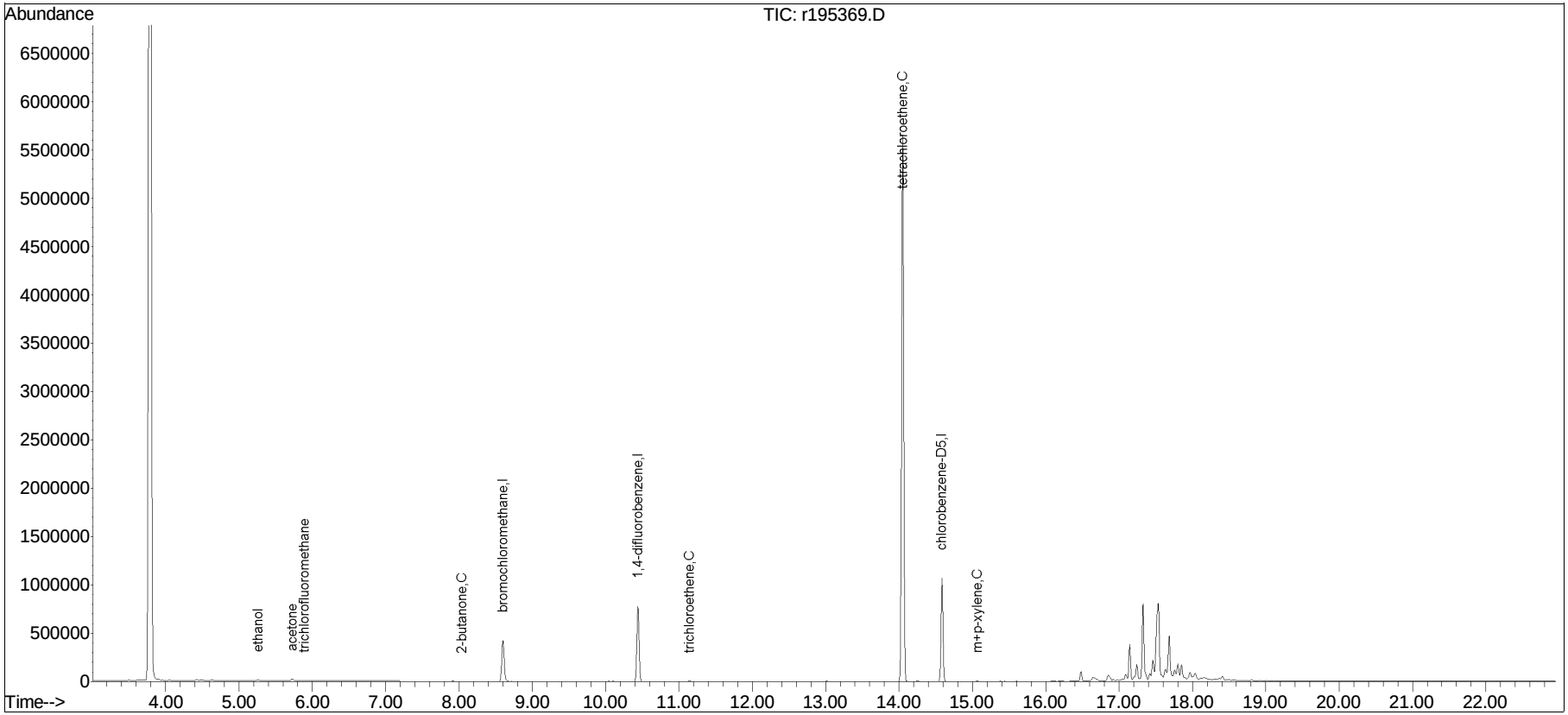
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

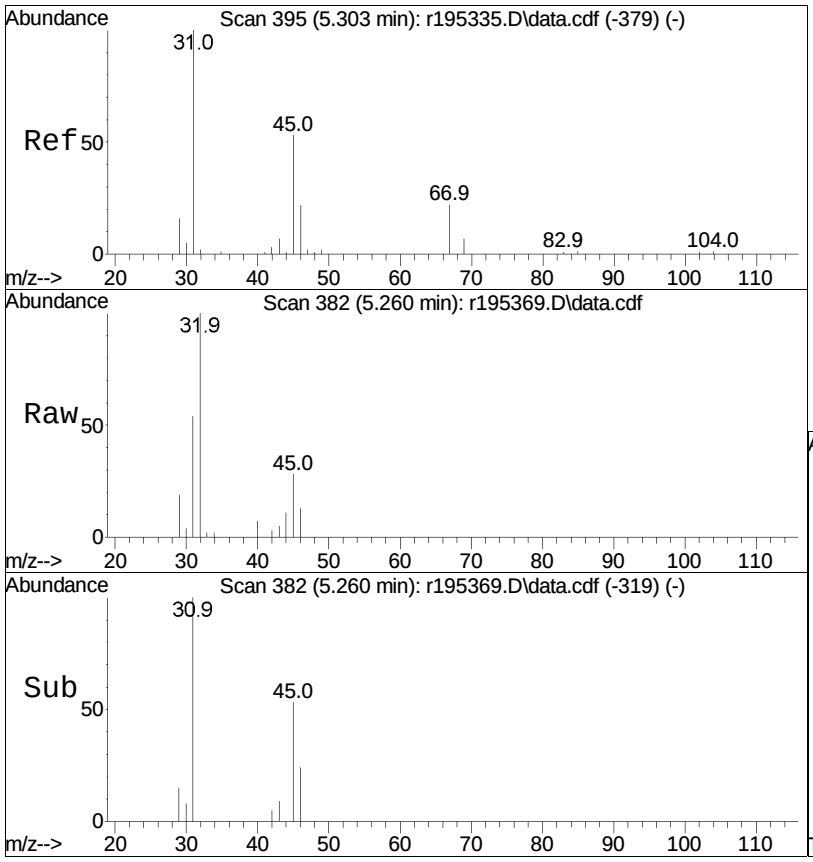
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195369.D
Acq On : 4 Nov 2020 5:09 PM
Operator : AIRLAB19:RY
Sample : L2047588-01D,3,9.35,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:16:57 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab19\2020\11\201104T\r195365.D

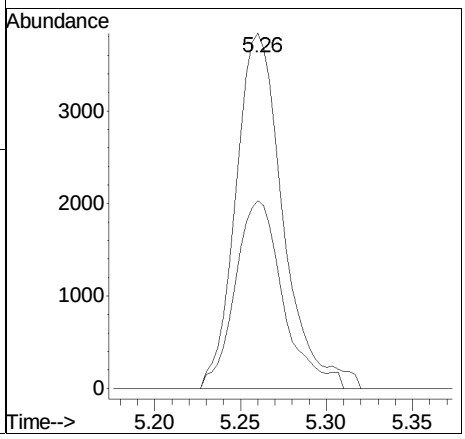


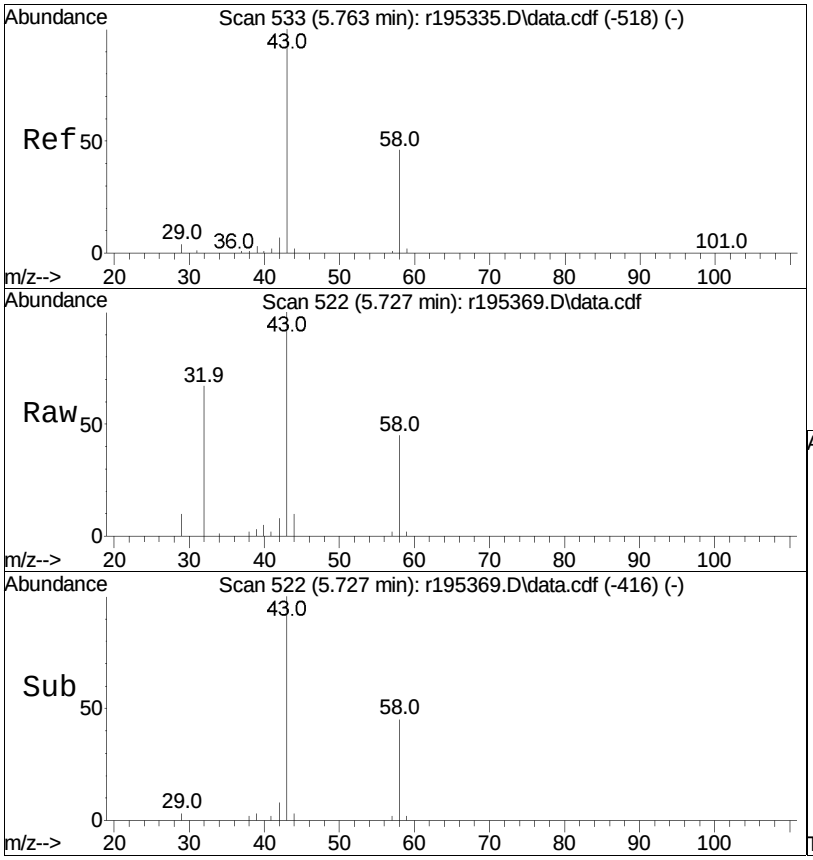


#15
ethanol
Concen: 0.51 ppbV
RT: 5.26 min Scan# 382
Delta R.T. 0.013 min
Lab File: r195369.D
Acq: 4 Nov 2020 5:09 PM

Tgt Ion: 31 Resp: 7341

Ion	Ratio	Lower	Upper
31	100		
45	52.9	42.5	63.7

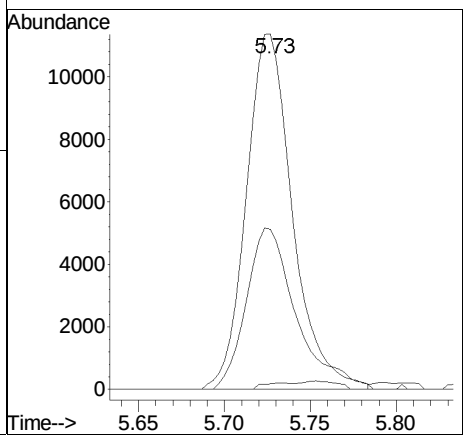


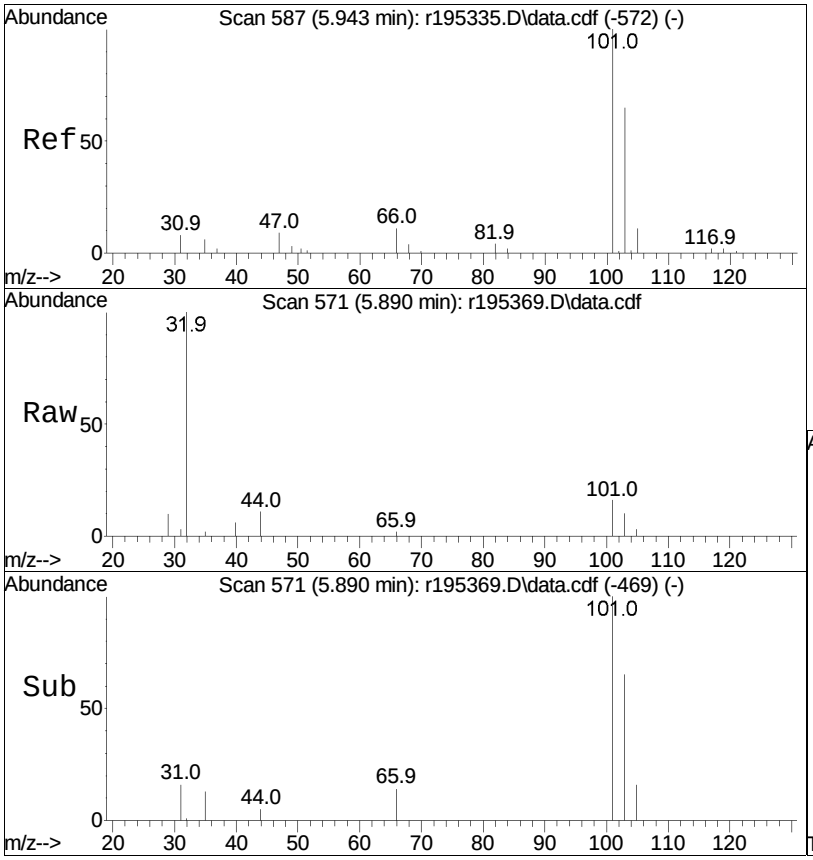


#19
acetone
Concen: 0.86 ppbV
RT: 5.73 min Scan# 522
Delta R.T. 0.023 min
Lab File: r195369.D
Acq: 4 Nov 2020 5:09 PM

Tgt Ion: 43 Resp: 21288

Ion	Ratio	Lower	Upper
43	100		
58	45.1	36.6	54.8
57	1.6	0.9	1.3#

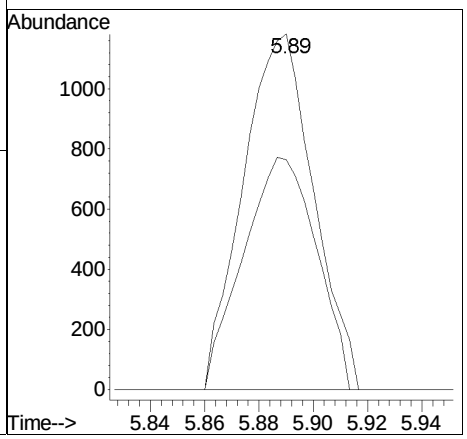


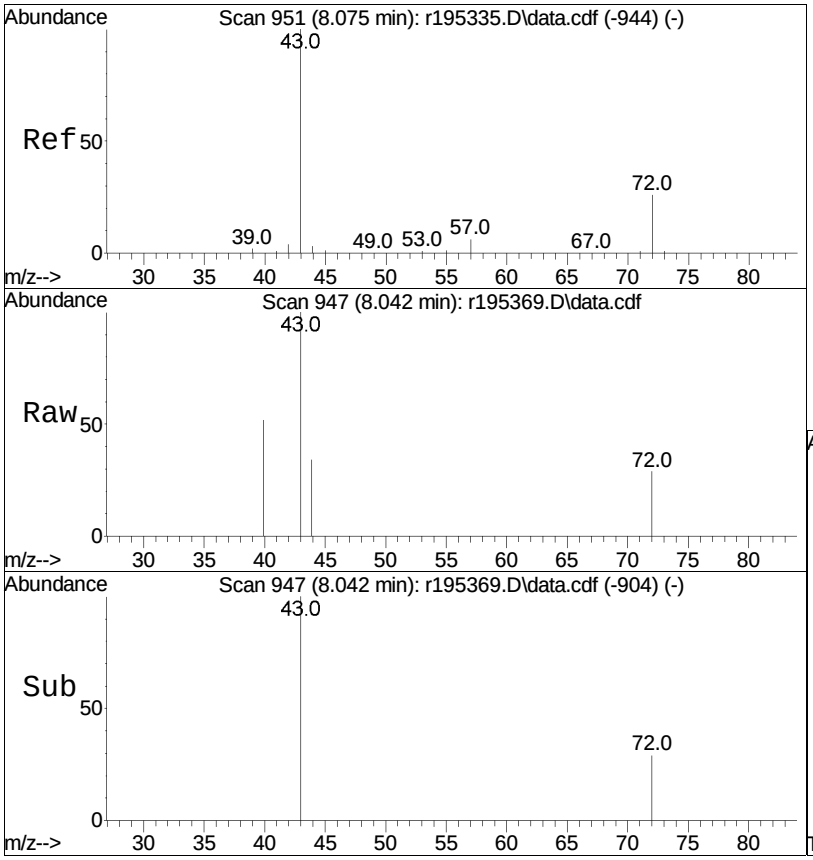


#21
trichlorofluoromethane
Concen: 0.11 ppbV
RT: 5.89 min Scan# 571
Delta R.T. 0.010 min
Lab File: r195369.D
Acq: 4 Nov 2020 5:09 PM

Tgt Ion:101 Resp: 2137

Ion	Ratio	Lower	Upper
101	100		
103	64.6	52.3	78.5

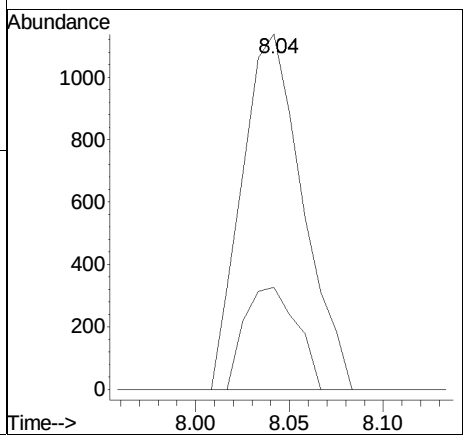


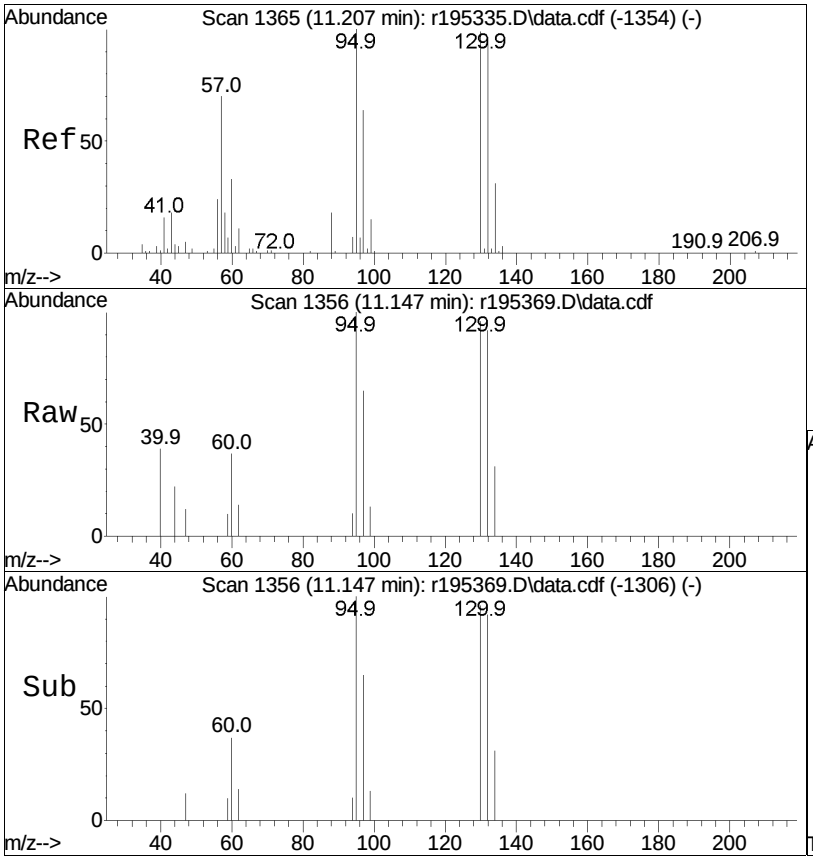


#36
2-butanone
Concen: 0.06 ppbV
RT: 8.04 min Scan# 947
Delta R.T. 0.025 min
Lab File: r195369.D
Acq: 4 Nov 2020 5:09 PM

Tgt Ion: 43 Resp: 2572

Ion	Ratio	Lower	Upper
43	100		
72	28.7	21.0	31.6
57	0.0	5.1	7.7#

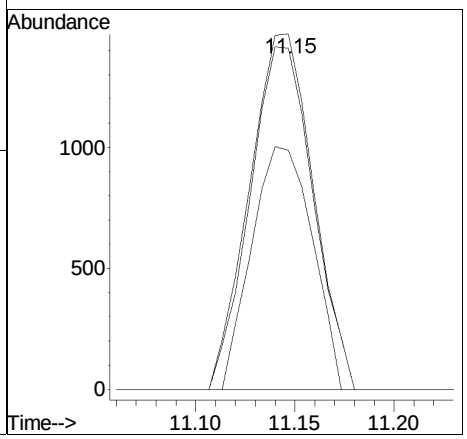


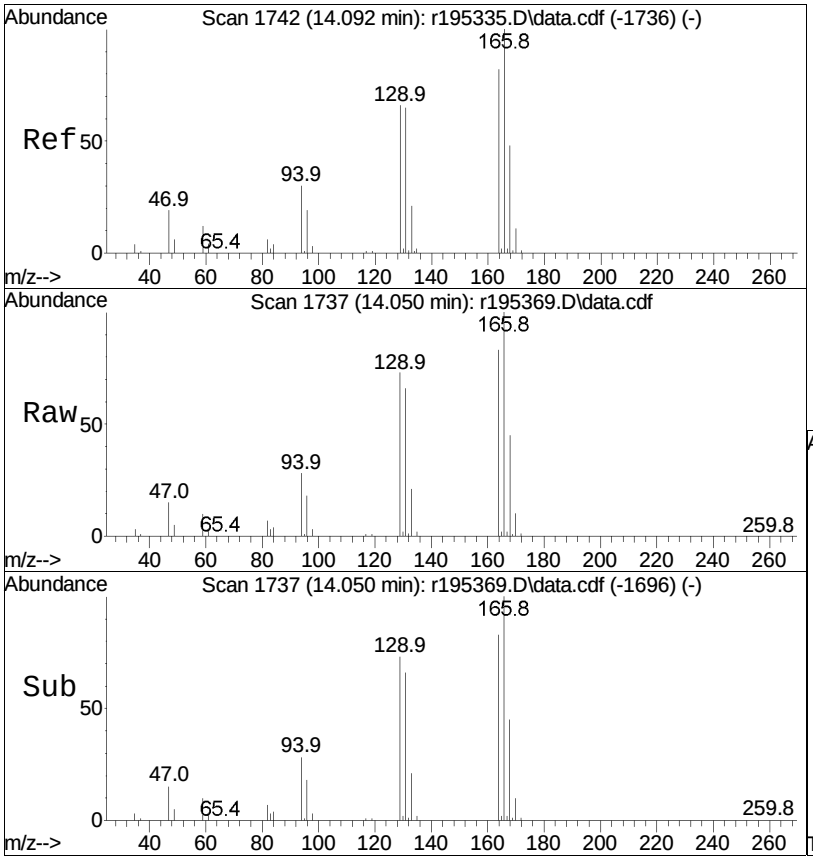


#59
trichloroethene
Concen: 0.17 ppbV
RT: 11.15 min Scan# 1356
Delta R.T. 0.007 min
Lab File: r195369.D
Acq: 4 Nov 2020 5:09 PM

Tgt Ion:130 Resp: 3290

Ion	Ratio	Lower	Upper
130	100		
132	96.0	77.2	115.8
97	67.3	52.3	78.5

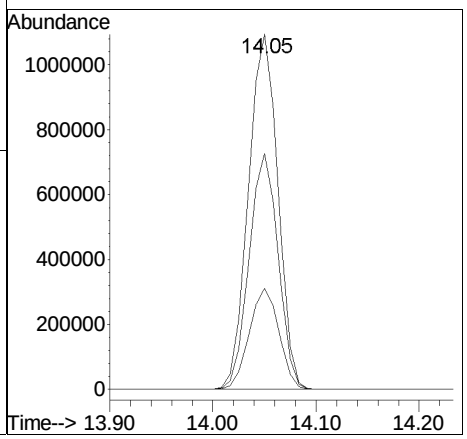


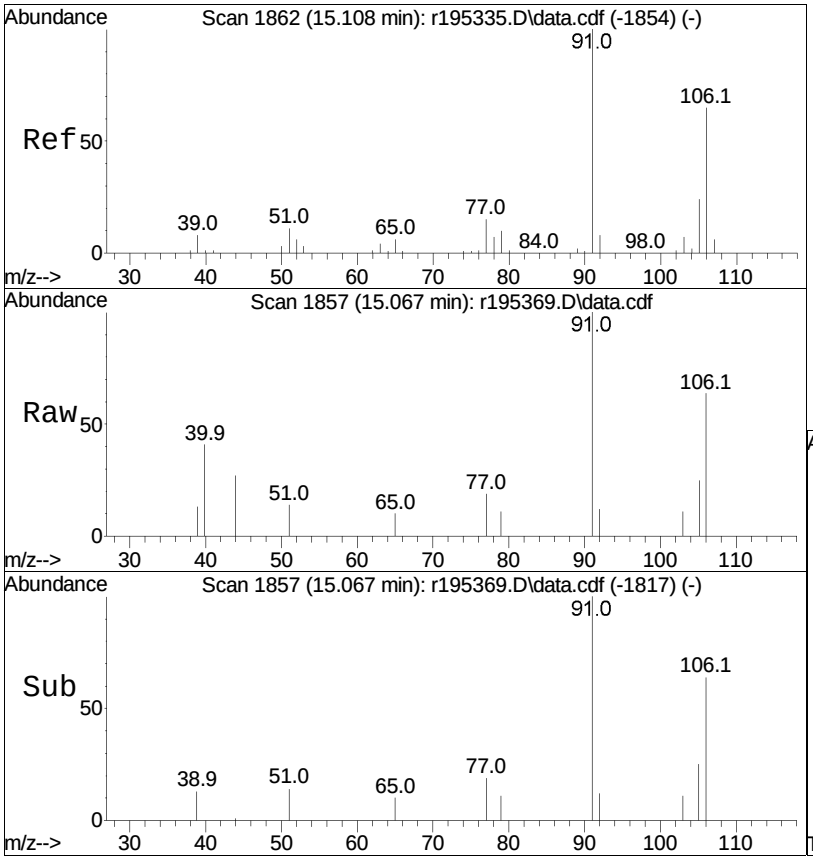


#78
tetrachloroethene
Concen: 87.00 ppbV
RT: 14.05 min Scan# 1737
Delta R.T. 0.008 min
Lab File: r195369.D
Acq: 4 Nov 2020 5:09 PM

Tgt Ion:166 Resp: 2176969

Ion	Ratio	Lower	Upper
166	100		
131	66.4	51.7	77.5
94	28.5	24.0	36.0

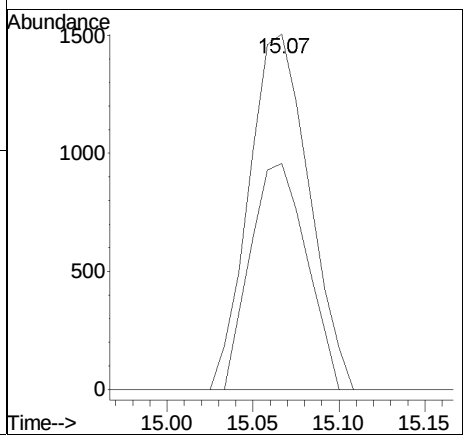




#83
m+p-xylene
Concen: 0.06 ppbV
RT: 15.07 min Scan# 1857
Delta R.T. 0.000 min
Lab File: r195369.D
Acq: 4 Nov 2020 5:09 PM

Tgt Ion: 91 Resp: 3651

Ion	Ratio	Lower	Upper
91	100		
106	63.6	51.8	77.6



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab19\	QMethod	: TFS19_201103.M
Data File	: r195369.D	Operator	: AIRLAB19:RY
Date Inj'd	: 11/4/2020 0:5: 9	Instrument	:
Sample	: L2047588-01D,3,9.35,250	Quant Date	: 11/5/2020 7:38 am

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195370.D
Acq On : 4 Nov 2020 5:50 PM
Operator : AIRLAB19:RY
Sample : L2047588-02D,3,115,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:18:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.60	49	346597	10.000	ppbV	0.00
Standard Area = 384278			Recovery =		90.19%	
43) 1,4-difluorobenzene	10.44	114	767816	10.000	ppbV	0.00
Standard Area = 866249			Recovery =		88.64%	
67) chlorobenzene-D5	14.58	54	135308	10.000	ppbV	0.00
Standard Area = 149824			Recovery =		90.31%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.11	85	5487	0.209	ppbV	98
6) chloromethane	4.29		0	N.D.		
7) Freon-114	4.27		0	N.D.		
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.	d	
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.25	31	14209	0.979	ppbV	99
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	651740	26.391	ppbV	98
21) trichlorofluoromethane	5.88	101	3188	0.157	ppbV	94
22) isopropyl alcohol	5.96	45	8140	0.220	ppbV #	96
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.52	59	3917	0.127	ppbV #	92
28) methylene chloride	6.61	49	1160	0.050	ppbV	92
29) 3-chloropropene	0.00		0	N.D.		
30) carbon disulfide	6.88	76	102671	1.751	ppbV	96
31) Freon 113	6.86		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.	d	
36) 2-butanone	8.03	43	33586	0.736	ppbV	98
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	8.72		0	N.D.		
40) Tetrahydrofuran	9.11	42	1776	0.059	ppbV	97
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195370.D
Acq On : 4 Nov 2020 5:50 PM
Operator : AIRLAB19:RY
Sample : L2047588-02D,3,115,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:18:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	hexane	8.64		0	N.D.		
48)	1,1,1-trichloroethane	9.66	97	14586	0.657	ppbV	99
50)	benzene	10.11	78	4580	0.071	ppbV	99
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	11.14	130	3986	0.207	ppbV	99
60)	2,2,4-trimethylpentane	11.17		0	N.D.		
62)	heptane	11.43		0	N.D.		
63)	cis-1,3-dichloropropene	0.00		0	N.D.		
64)	4-methyl-2-pentanone	12.06		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	13.02	91	7878	0.122	ppbV	100
72)	2-hexanone	13.26	43	6828	0.135	ppbV	94
74)	dibromochloromethane	0.00		0	N.D.		
75)	1,2-dibromoethane	0.00		0	N.D.		
78)	tetrachloroethene	14.05	166	1751131	70.620	ppbV	98
80)	chlorobenzene	0.00		0	N.D.		
81)	ethylbenzene	14.93		0	N.D.		
83)	m+p-xylene	15.06	91	7540	0.123	ppbV	100
84)	bromoform	0.00		0	N.D.		
85)	styrene	15.36		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.	d	
87)	o-xylene	15.44		0	N.D.		
96)	4-ethyl toluene	16.40		0	N.D.		
97)	1,3,5-trimethylbenzene	16.46		0	N.D.		
99)	1,2,4-trimethylbenzene	16.77	105	7447	0.105	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	16.95		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195370.D
Acq On : 4 Nov 2020 5:50 PM
Operator : AIRLAB19:RY
Sample : L2047588-02D,3,115,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:18:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

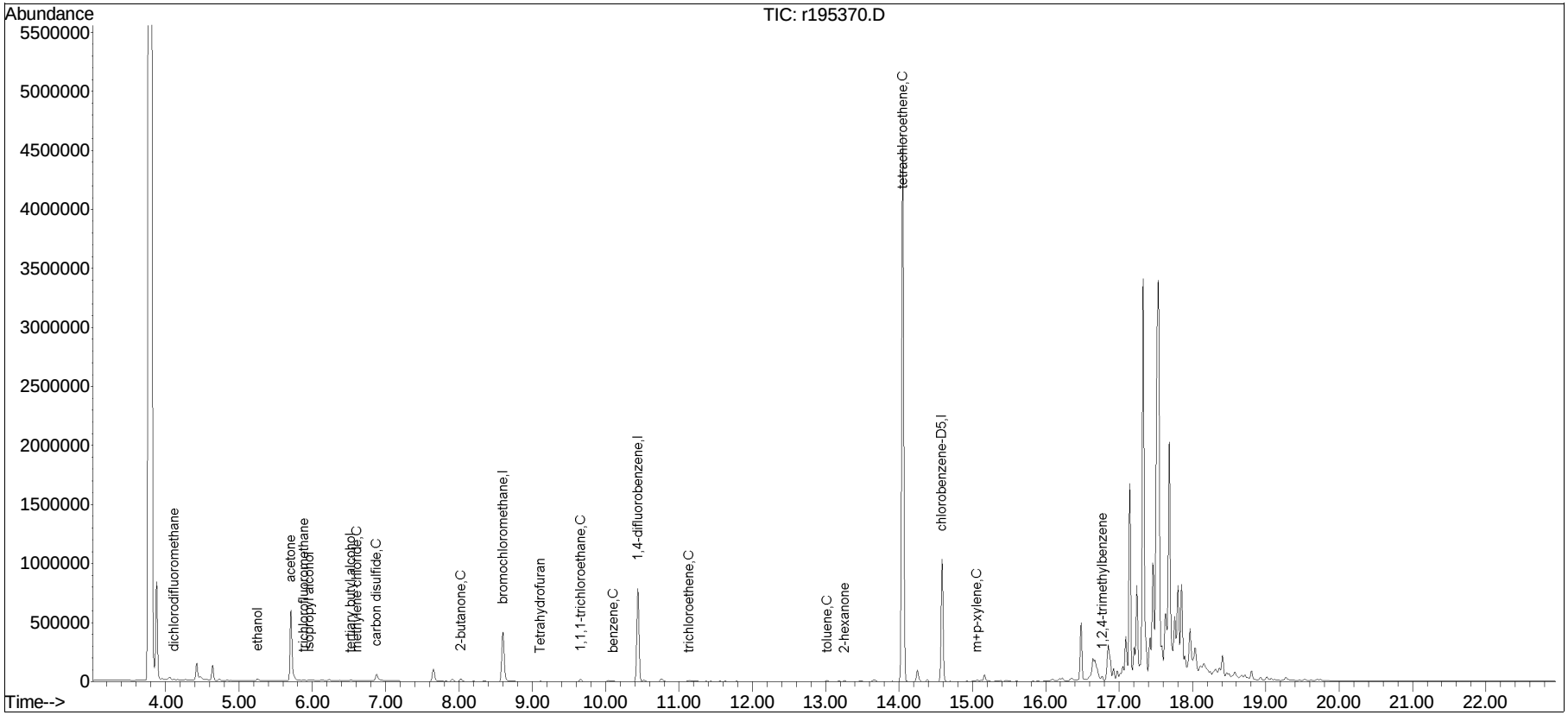
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

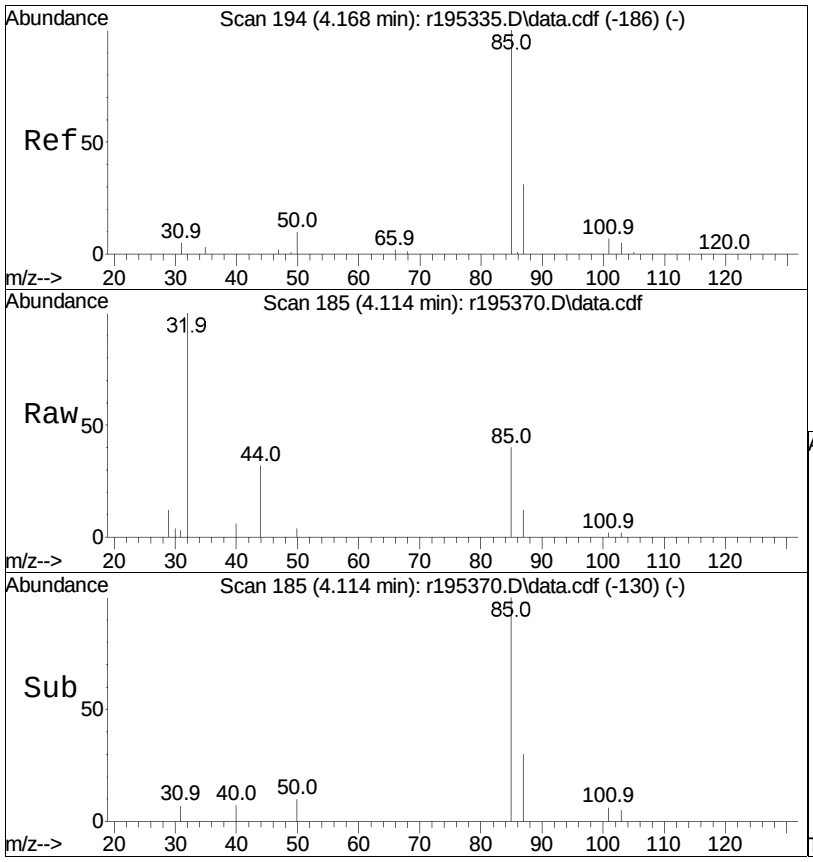
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195370.D
Acq On : 4 Nov 2020 5:50 PM
Operator : AIRLAB19:RY
Sample : L2047588-02D,3,115,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:18:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab19\2020\11\201104T\r195365.D

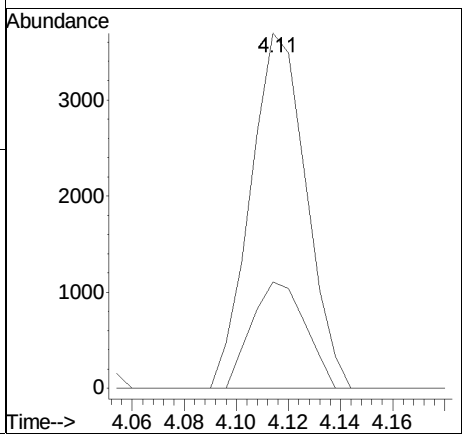


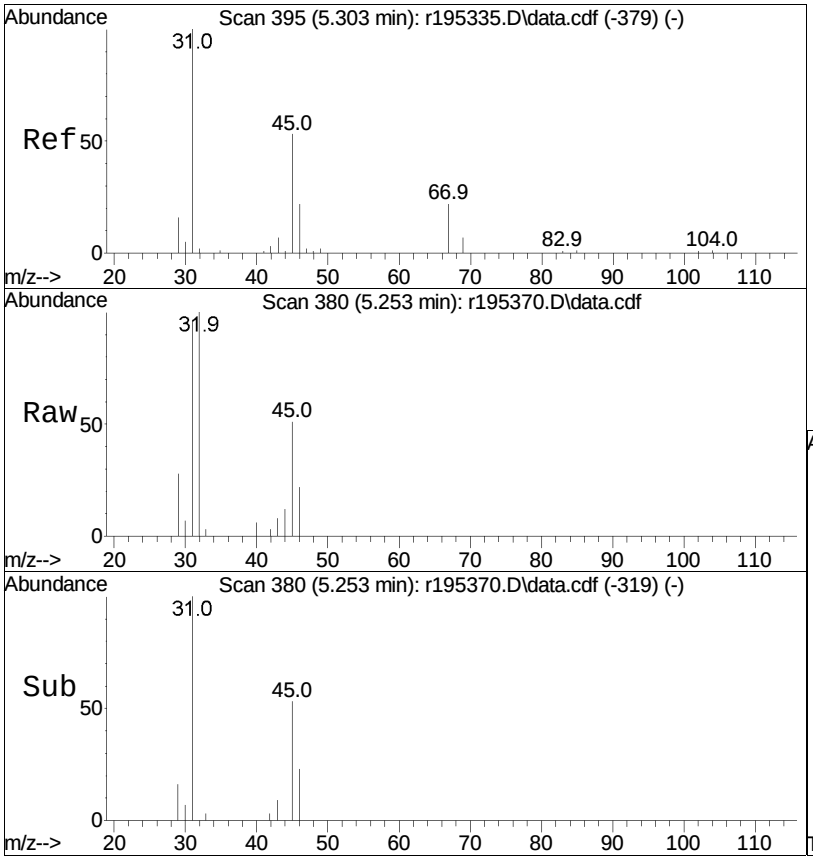


#5
dichlorodifluoromethane
Concen: 0.21 ppbV
RT: 4.11 min Scan# 185
Delta R.T. 0.000 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 85 Resp: 5487

Ion	Ratio	Lower	Upper
85	100		
87	30.0	24.6	37.0

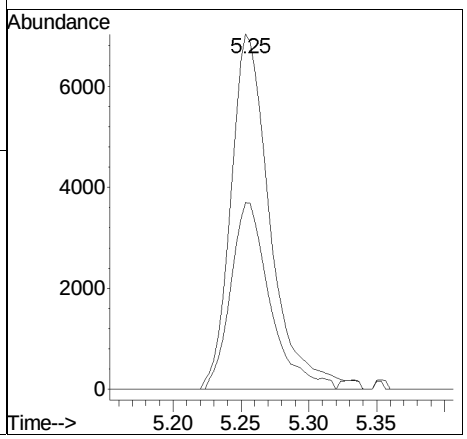


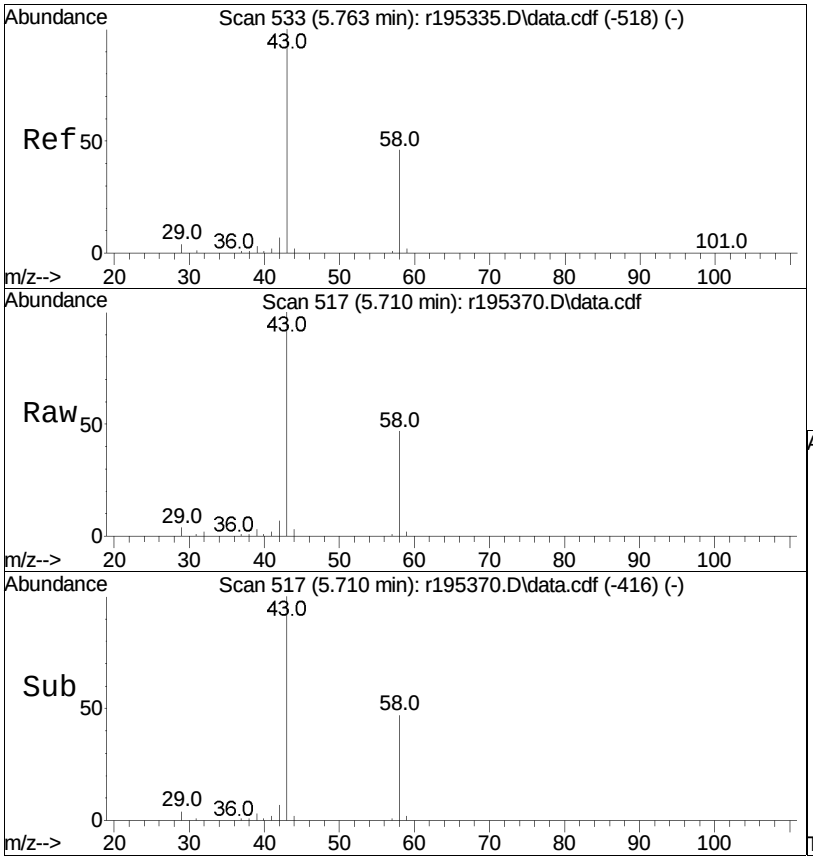


#15
ethanol
Concen: 0.98 ppbV
RT: 5.25 min Scan# 380
Delta R.T. 0.007 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 31 Resp: 14209

Ion	Ratio	Lower	Upper
31	100		
45	52.6	42.5	63.7

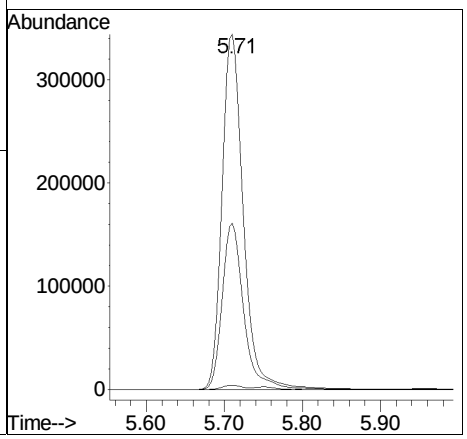


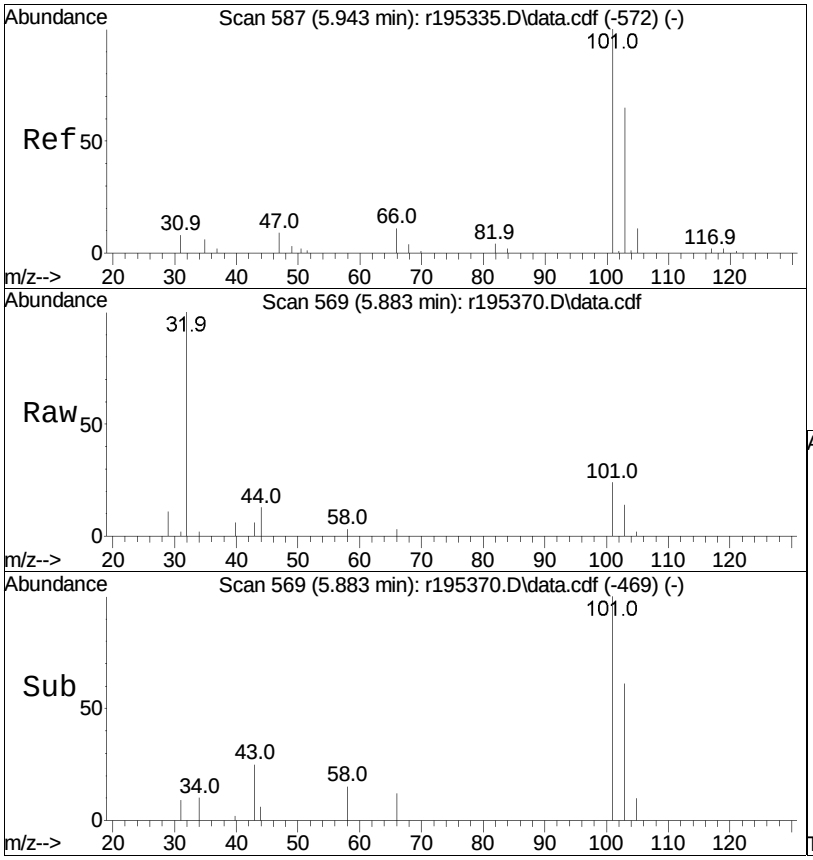


#19
acetone
Concen: 26.39 ppbV
RT: 5.71 min Scan# 517
Delta R.T. 0.007 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 43 Resp: 651740

Ion	Ratio	Lower	Upper
43	100		
58	46.8	36.6	54.8
57	1.2	0.9	1.3

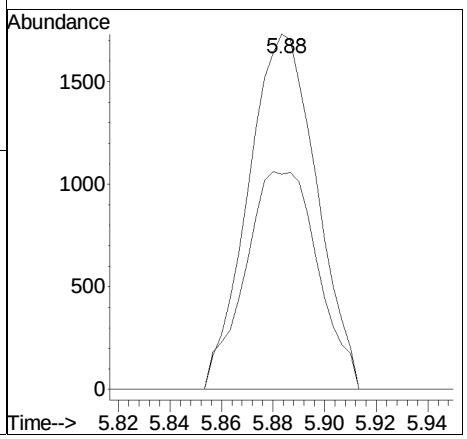


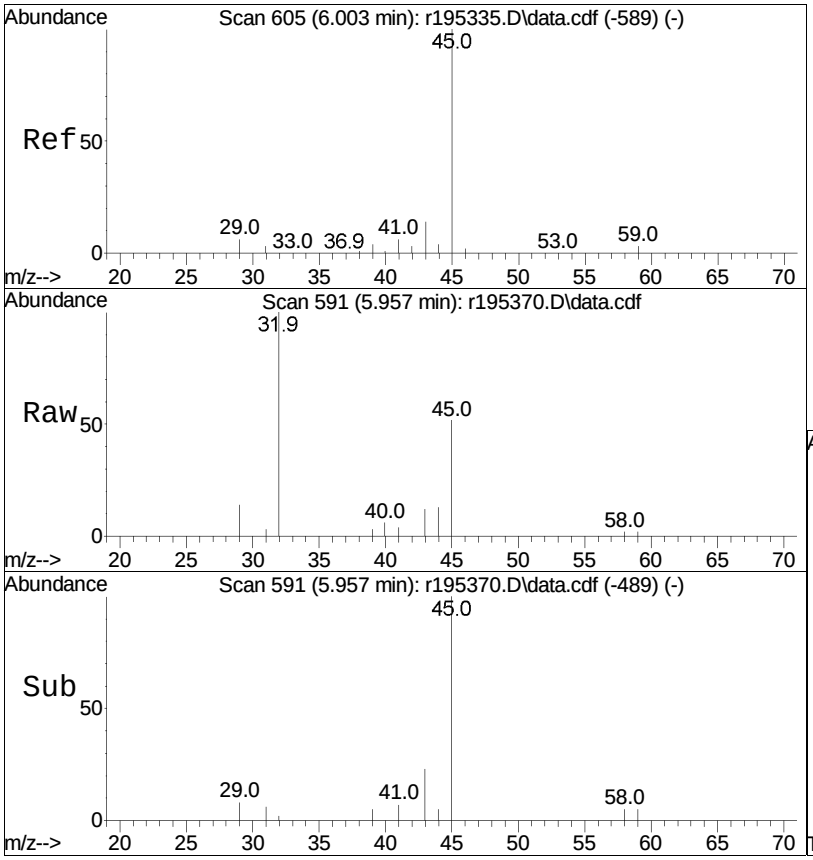


#21
trichlorofluoromethane
Concen: 0.16 ppbV
RT: 5.88 min Scan# 569
Delta R.T. 0.003 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion:101 Resp: 3188

Ion	Ratio	Lower	Upper
101	100		
103	60.6	52.3	78.5

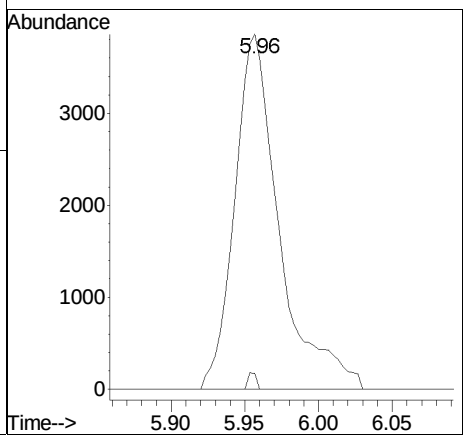


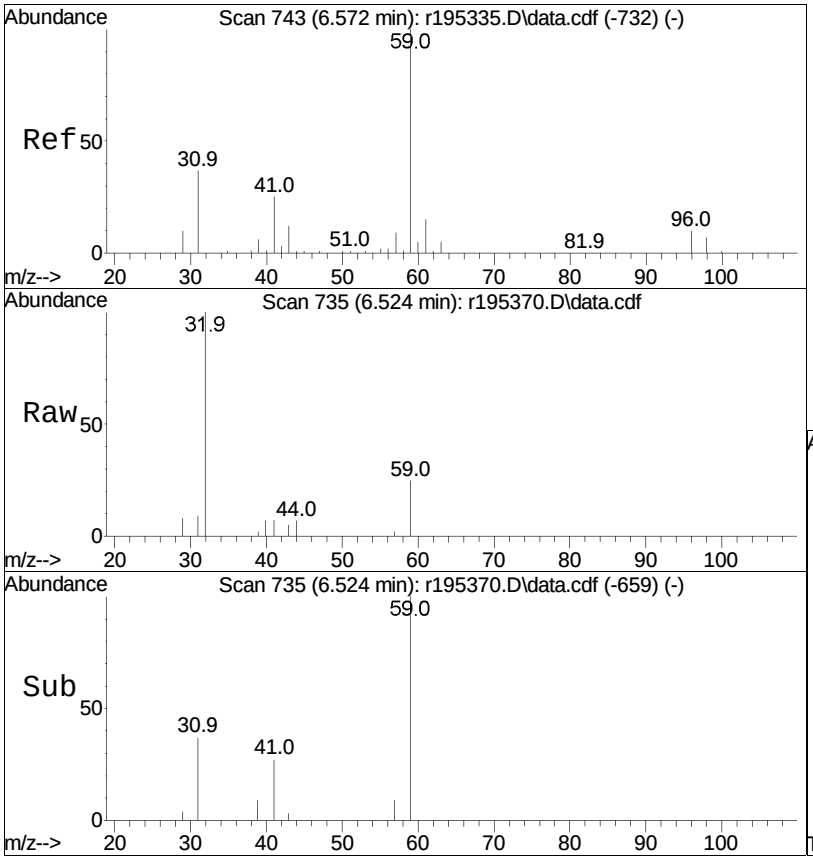


#22
isopropyl alcohol
Concen: 0.22 ppbV
RT: 5.96 min Scan# 591
Delta R.T. 0.010 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 45 Resp: 8140

Ion	Ratio	Lower	Upper
45	100		
59	4.6	2.6	4.0#

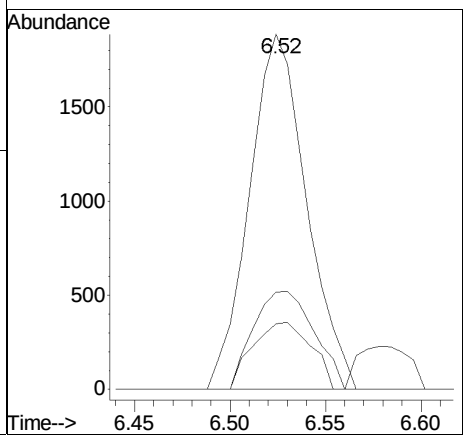


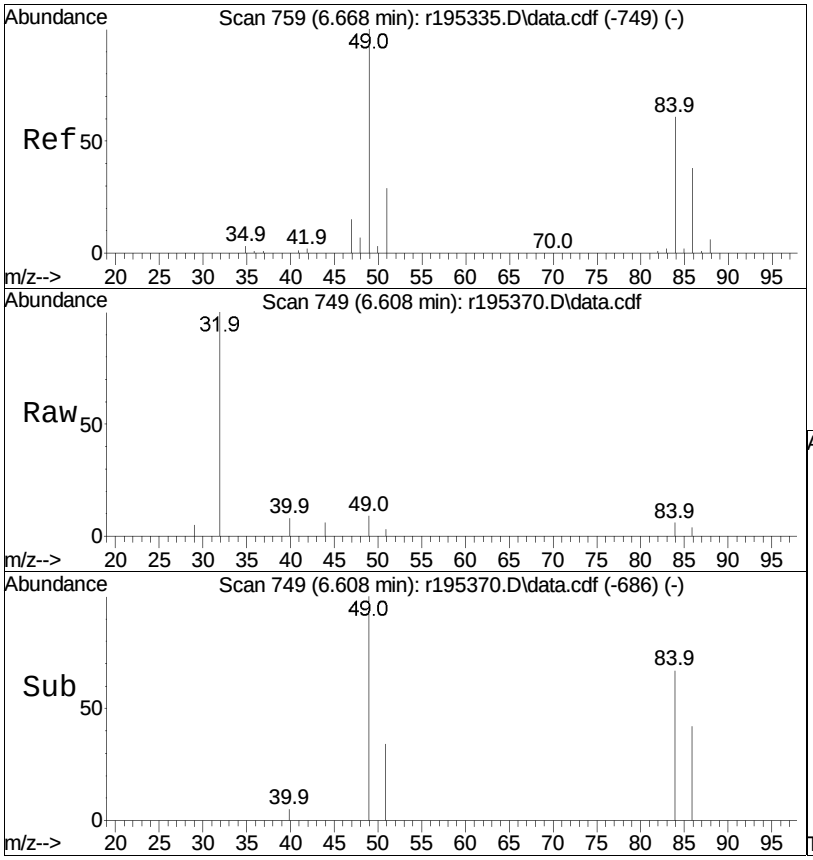


#27
tertiary butyl alcohol
Concen: 0.13 ppbV
RT: 6.52 min Scan# 735
Delta R.T. 0.012 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 59 Resp: 3917

Ion	Ratio	Lower	Upper
59	100		
41	27.3	19.8	29.8
43	18.4	10.0	15.0#

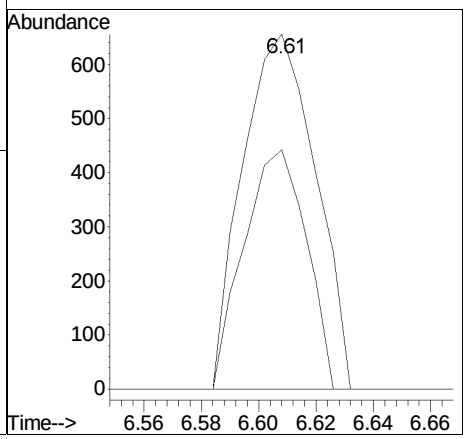


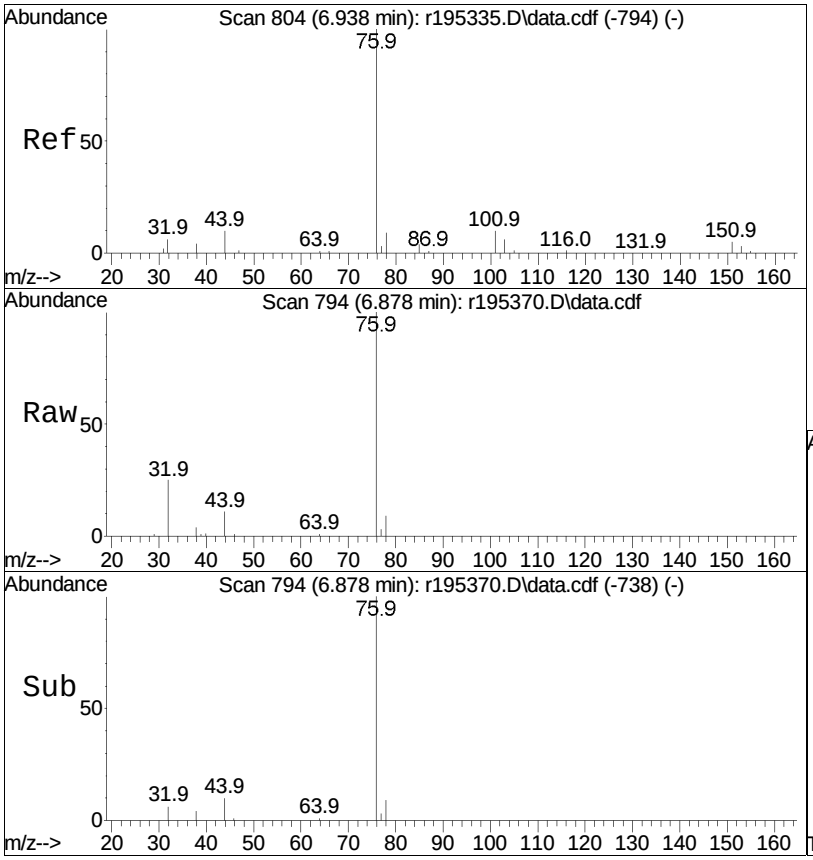


#28
methylene chloride
Concen: 0.05 ppbV
RT: 6.61 min Scan# 749
Delta R.T. 0.006 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 49 Resp: 1160

Ion	Ratio	Lower	Upper
49	100		
84	67.4	48.8	73.2

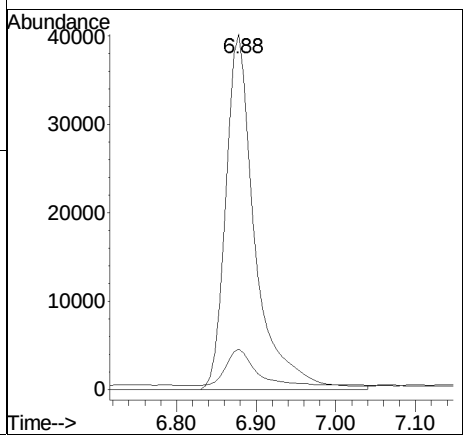


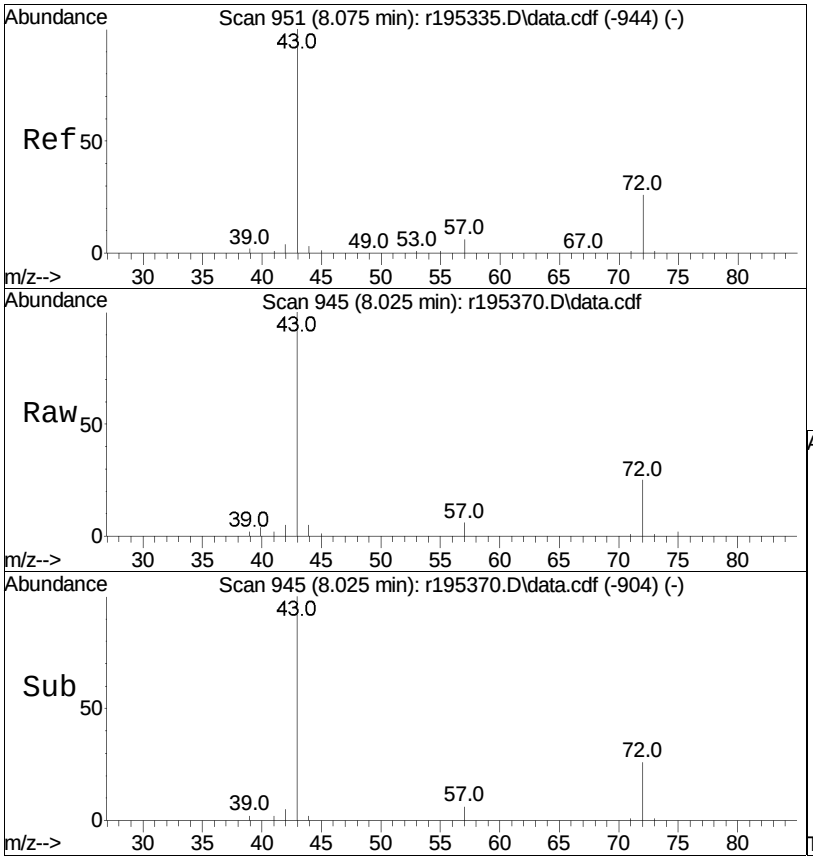


#30
carbon disulfide
Concen: 1.75 ppbV
RT: 6.88 min Scan# 794
Delta R.T. 0.006 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 76 Resp: 102671

Ion	Ratio	Lower	Upper
76	100		
44	11.4	7.9	11.9

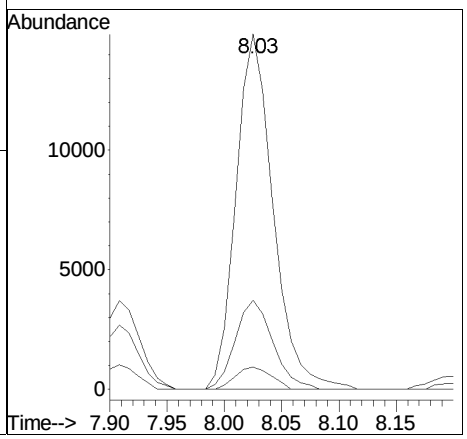


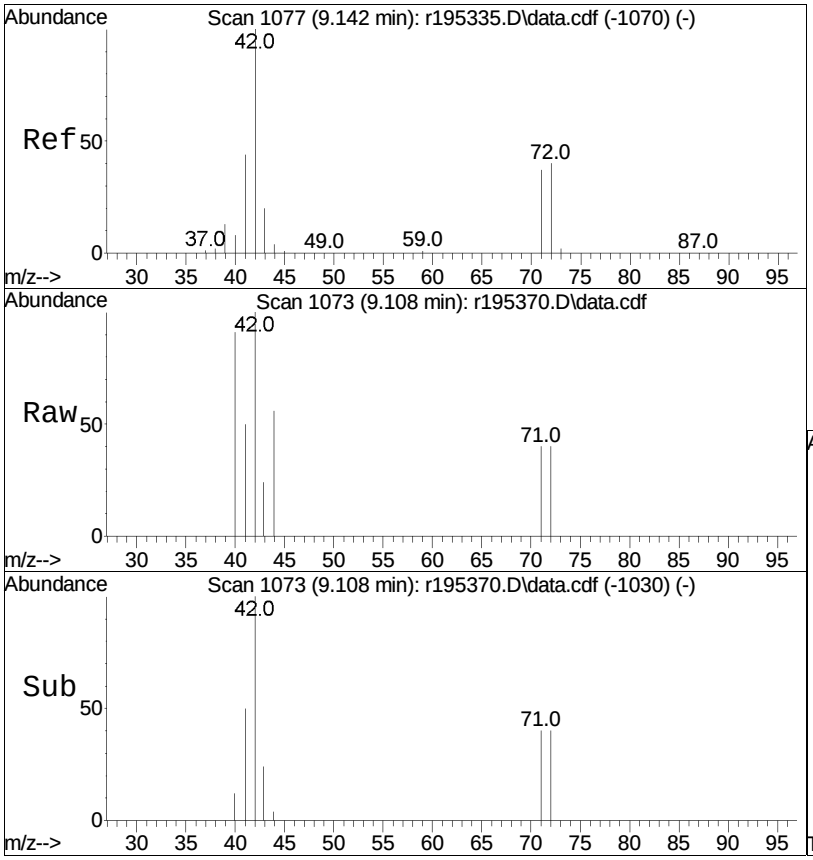


#36
2-butanone
Concen: 0.74 ppbV
RT: 8.03 min Scan# 945
Delta R.T. 0.008 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 43 Resp: 33586

Ion	Ratio	Lower	Upper
43	100		
72	25.1	21.0	31.6
57	6.3	5.1	7.7

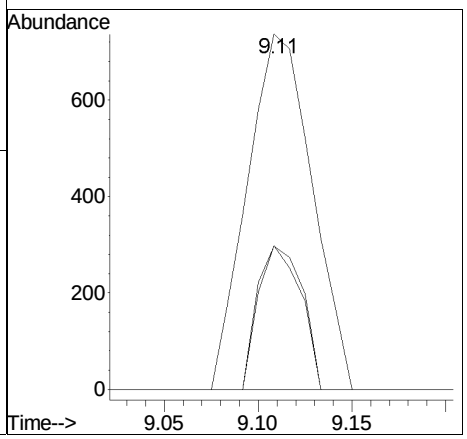


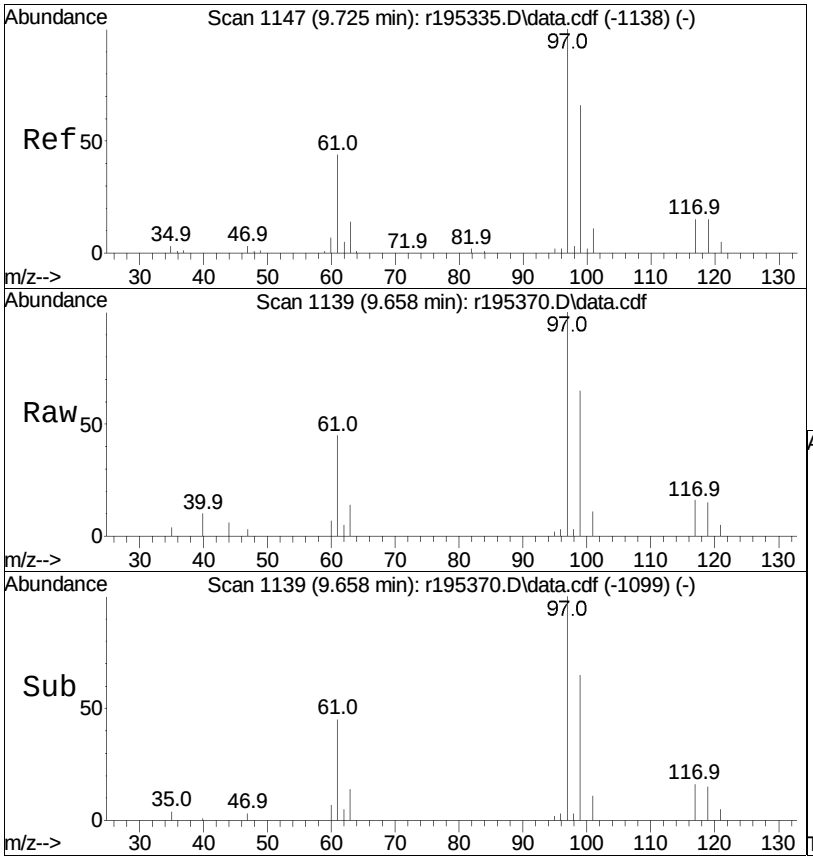


#40
Tetrahydrofuran
Concen: 0.06 ppbV
RT: 9.11 min Scan# 1073
Delta R.T. 0.025 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 42 Resp: 1776

Ion	Ratio	Lower	Upper
42	100		
71	40.4	29.7	44.5
72	40.3	32.2	48.4

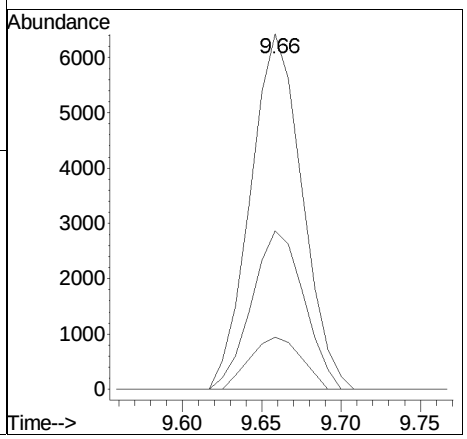


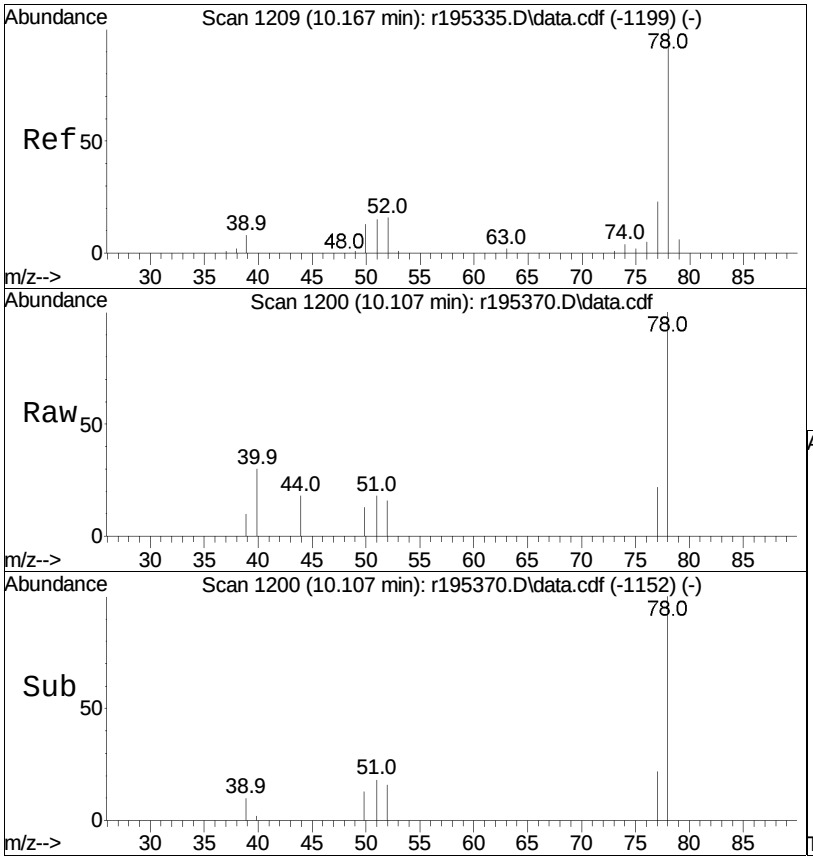


#48
1,1,1-trichloroethane
Concen: 0.66 ppbV
RT: 9.66 min Scan# 1139
Delta R.T. 0.000 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 97 Resp: 14586

Ion	Ratio	Lower	Upper
97	100		
61	44.6	35.4	53.0
119	14.7	11.7	17.5

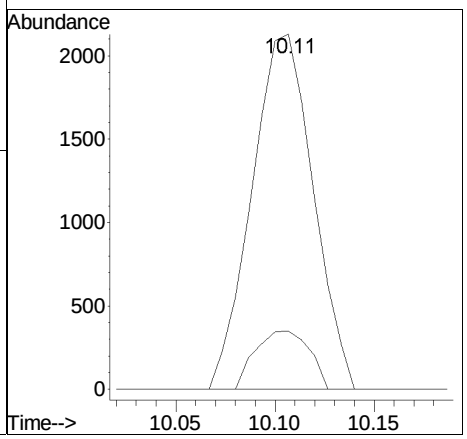


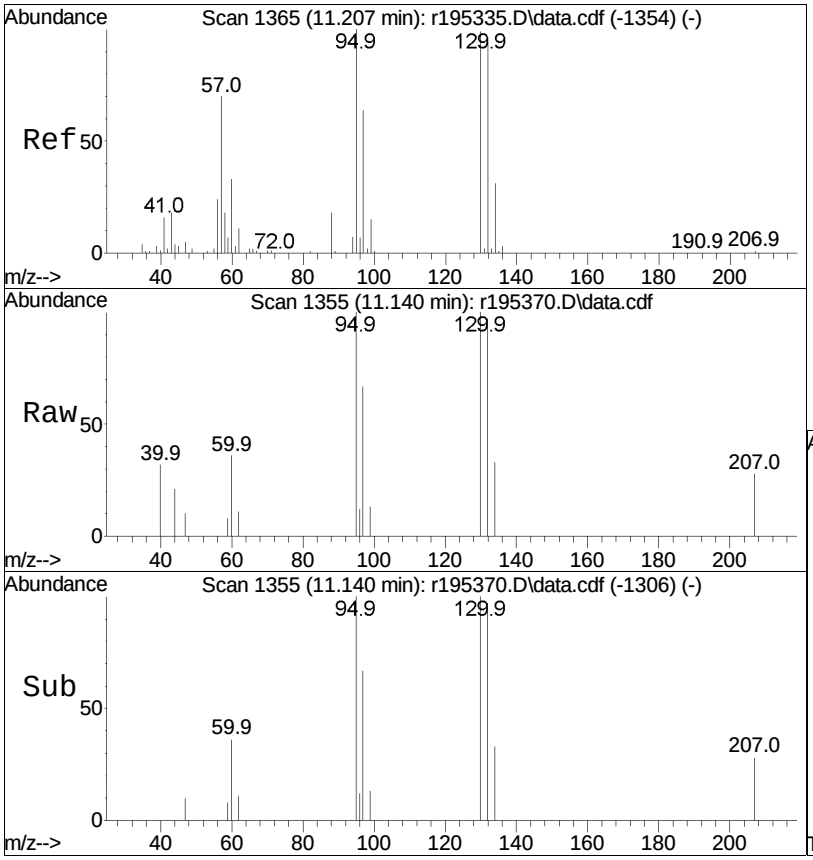


#50
benzene
Concen: 0.07 ppbV
RT: 10.11 min Scan# 1200
Delta R.T. 0.007 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 78 Resp: 4580

Ion	Ratio	Lower	Upper
78	100		
52	16.4	12.6	19.0

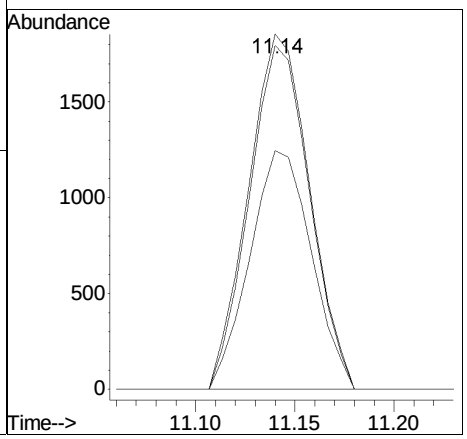


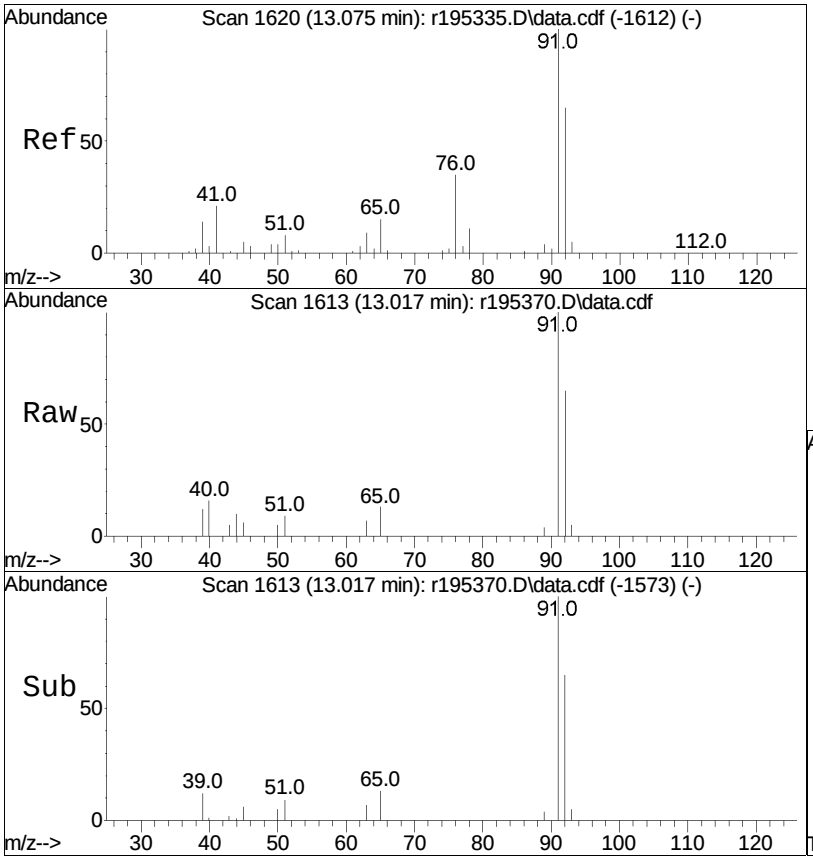


#59
trichloroethene
Concen: 0.21 ppbV
RT: 11.14 min Scan# 1355
Delta R.T. 0.000 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion:130 Resp: 3986

Ion	Ratio	Lower	Upper
130	100		
132	96.8	77.2	115.8
97	67.2	52.3	78.5

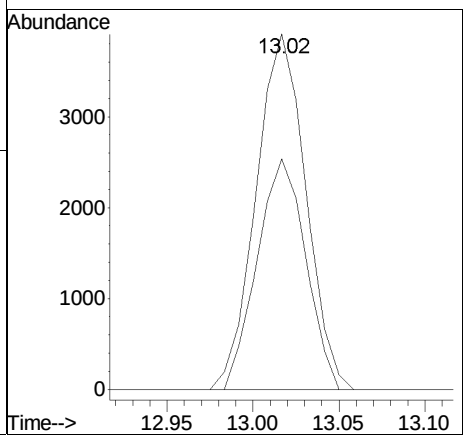


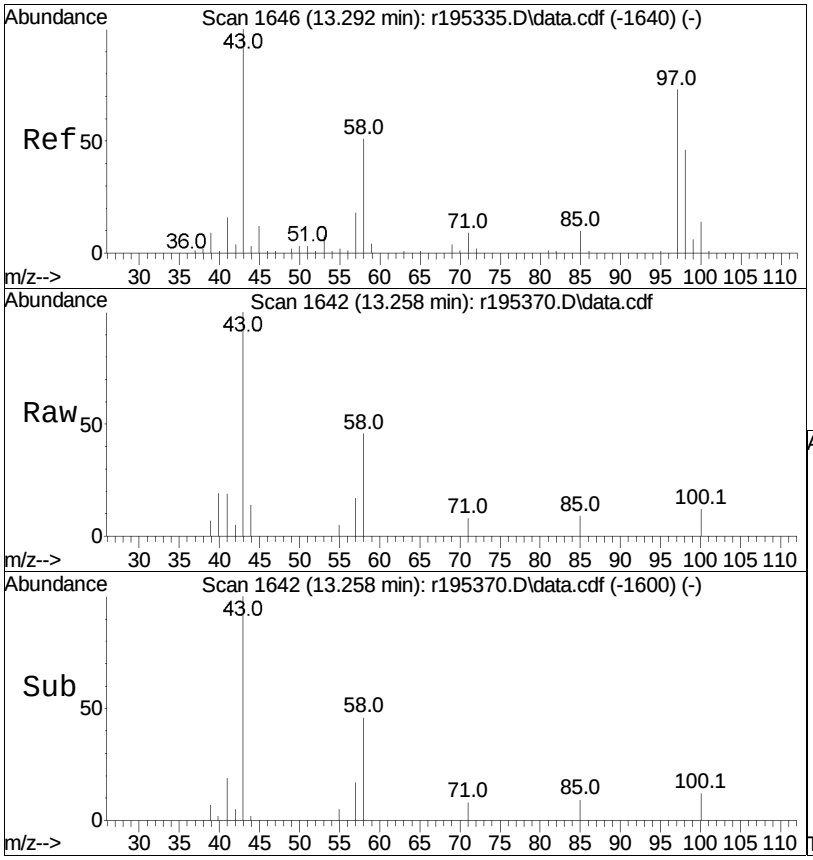


#68
toluene
Concen: 0.12 ppbV
RT: 13.02 min Scan# 1613
Delta R.T. 0.000 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 91 Resp: 7878

Ion	Ratio	Lower	Upper
91	100		
92	64.8	52.1	78.1

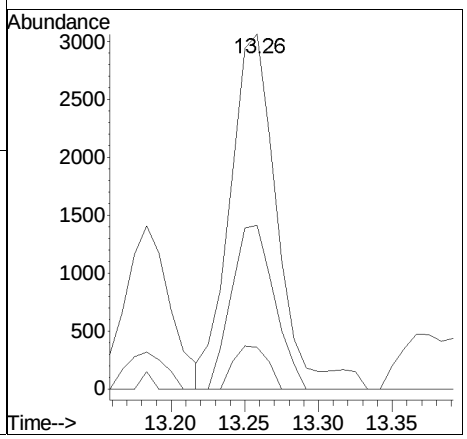


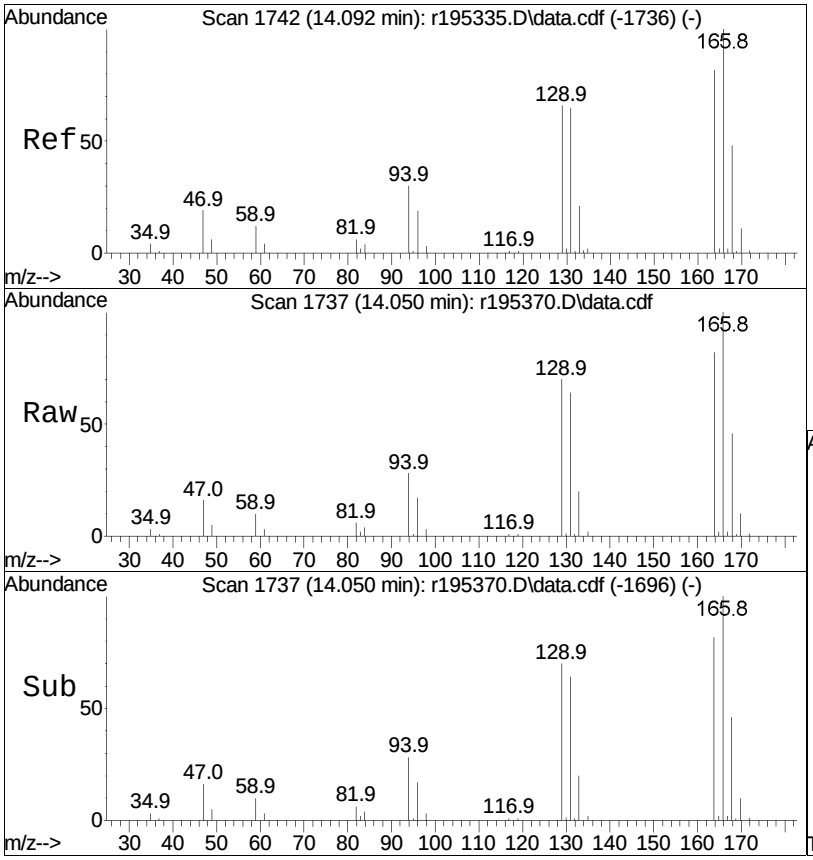


#72
2-hexanone
Concen: 0.14 ppbV
RT: 13.26 min Scan# 1642
Delta R.T. 0.017 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 43 Resp: 6828

Ion	Ratio	Lower	Upper
43	100		
58	46.2	40.7	61.1
100	11.8	10.9	16.3

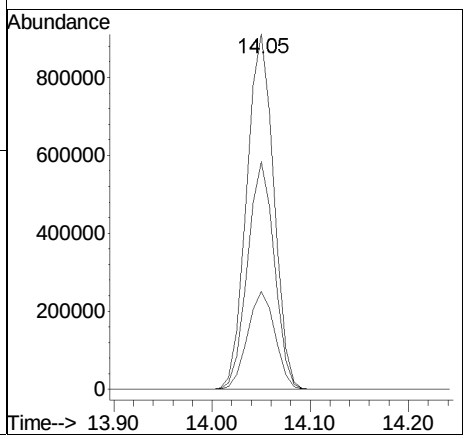


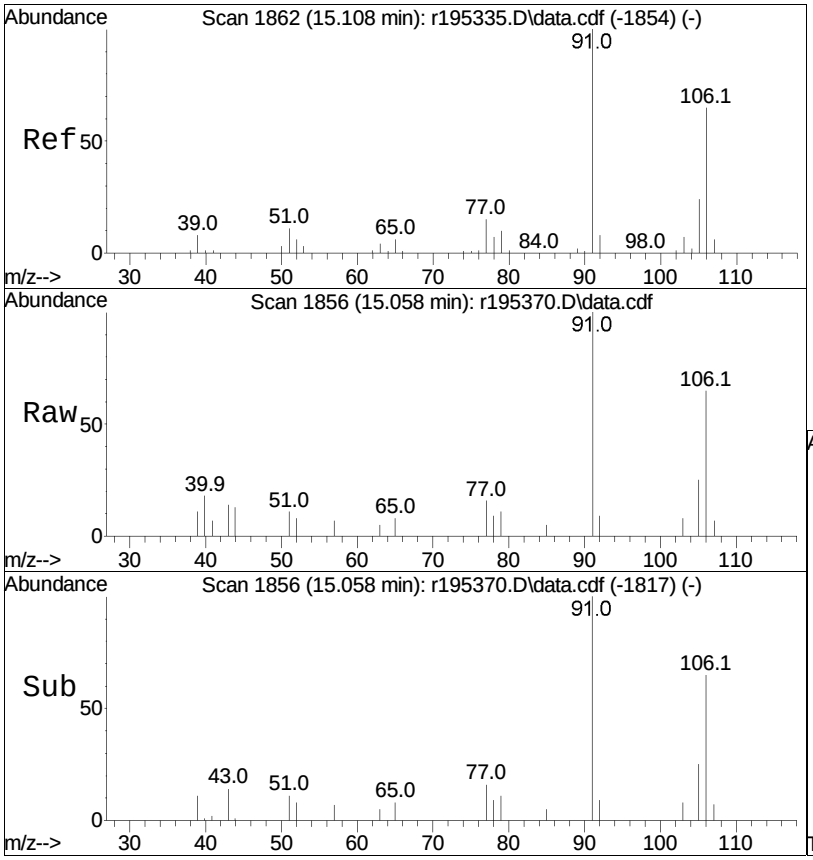


#78
tetrachloroethene
Concen: 70.62 ppbV
RT: 14.05 min Scan# 1737
Delta R.T. 0.008 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion:166 Resp: 1751131

Ion	Ratio	Lower	Upper
166	100		
131	64.1	51.7	77.5
94	27.6	24.0	36.0

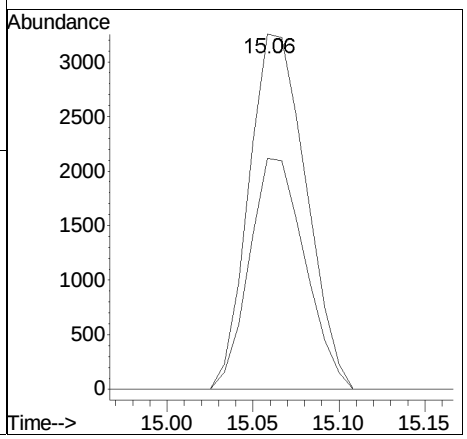


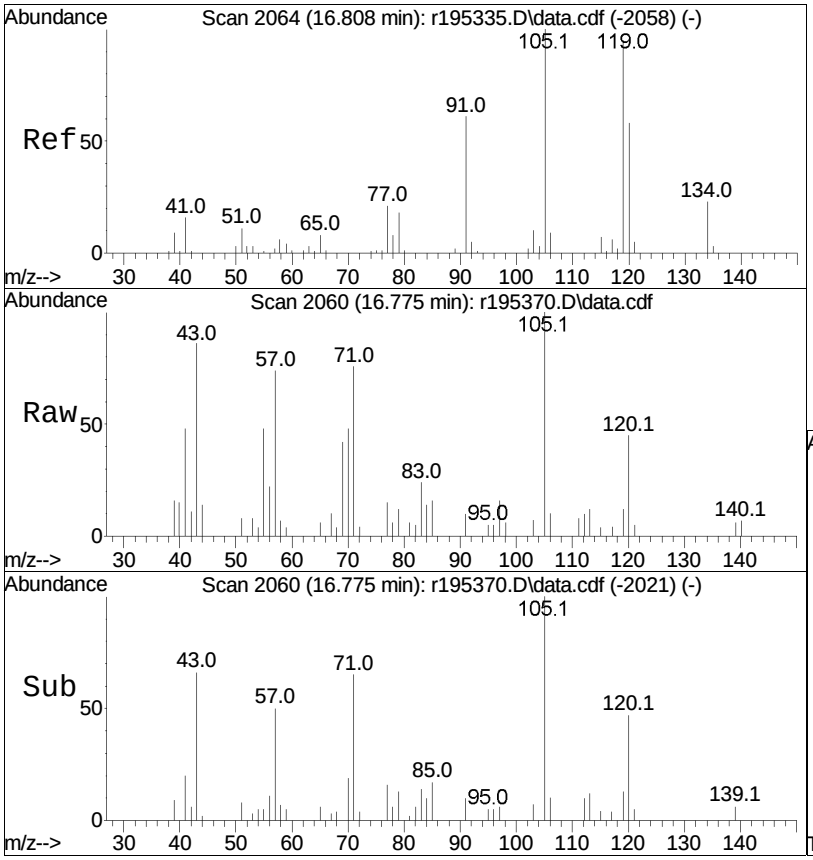


#83
m+p-xylene
Concen: 0.12 ppbV
RT: 15.06 min Scan# 1856
Delta R.T. -0.008 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion: 91 Resp: 7540

Ion	Ratio	Lower	Upper
91	100		
106	65.0	51.8	77.6

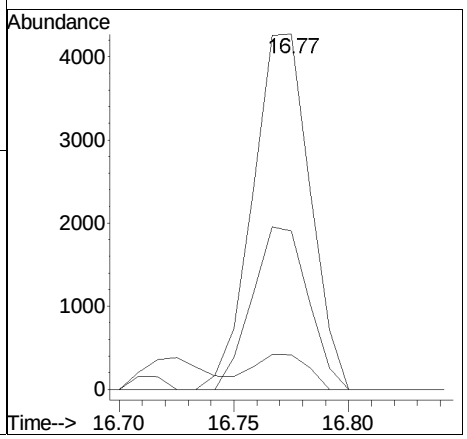




#99
1,2,4-trimethylbenzene
Concen: 0.11 ppbV
RT: 16.77 min Scan# 2060
Delta R.T. 0.008 min
Lab File: r195370.D
Acq: 4 Nov 2020 5:50 PM

Tgt Ion:105 Resp: 7447

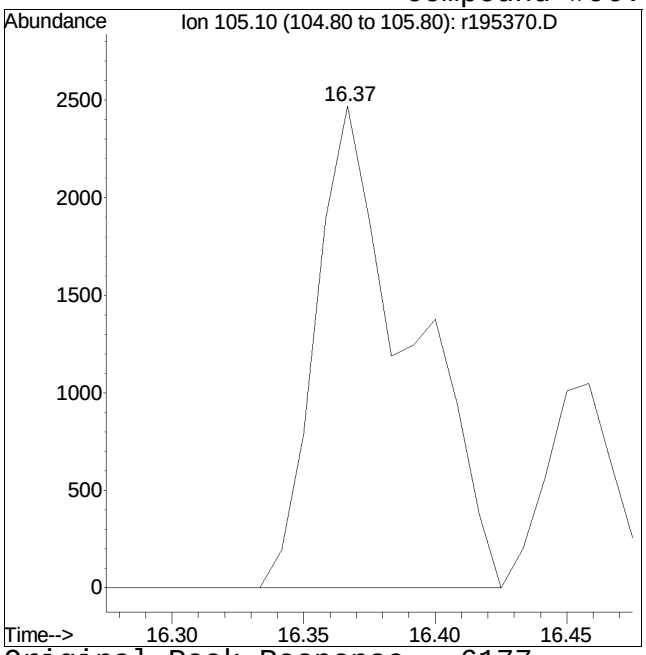
Ion	Ratio	Lower	Upper
105	100		
120	44.6	46.2	69.4#
91	9.8	48.7	73.1#



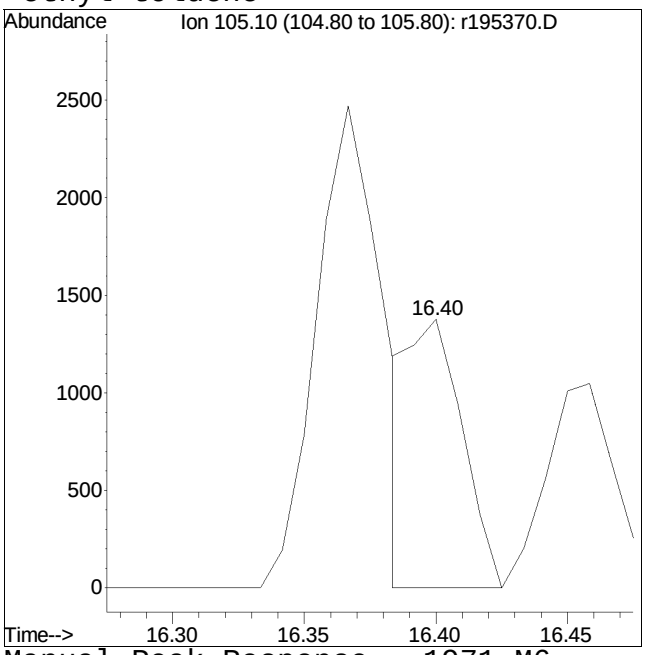
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195370.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:5: 0 Instrument :
Sample : L2047588-02D,3,115,250 Quant Date : 11/5/2020 7:39 am

Compound #96: 4-ethyl toluene



Original Peak Response = 6177



Manual Peak Response = 1971 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195371.D
Acq On : 4 Nov 2020 6:33 PM
Operator : AIRLAB19:RY
Sample : L2047588-03,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:21:15 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.60	49	365179	10.000	ppbV	0.00
Standard Area = 384278			Recovery =		95.03%	
43) 1,4-difluorobenzene	10.44	114	789307	10.000	ppbV	0.00
Standard Area = 866249			Recovery =		91.12%	
67) chlorobenzene-D5	14.58	54	140985	10.000	ppbV	0.00
Standard Area = 149824			Recovery =		94.10%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.12	85	10706	0.386	ppbV	96
6) chloromethane	4.29		0	N.D.		
7) Freon-114	4.41		0	N.D.		
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.	d	
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.25	31	92272	6.033	ppbV	98
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	1936488	74.425	ppbV	93
21) trichlorofluoromethane	5.88	101	5893	0.275	ppbV	99
22) isopropyl alcohol	5.95	45	39115	1.005	ppbV #	97
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.52	59	16602	0.510	ppbV	96
28) methylene chloride	6.60		0	N.D.		
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	6.87	76	7626	0.123	ppbV #	38
31) Freon 113	6.85	101	1794	0.059	ppbV	97
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	8.02	43	147500	3.067	ppbV	100
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	8.72	83	4282	0.147	ppbV	97
40) Tetrahydrofuran	9.10	42	3719	0.118	ppbV	99
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195371.D
Acq On : 4 Nov 2020 6:33 PM
Operator : AIRLAB19:RY
Sample : L2047588-03,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:21:15 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44)	hexane	8.64	57	2636	0.083 ppbV #	20
48)	1,1,1-trichloroethane	9.66		0	N.D.	
50)	benzene	10.11	78	4788	0.073 ppbV	93
52)	carbon tetrachloride	10.25		0	N.D.	
53)	cyclohexane	10.37		0	N.D.	
56)	1,2-dichloropropane	0.00		0	N.D.	
57)	bromodichloromethane	11.12		0	N.D.	
58)	1,4-dioxane	0.00		0	N.D.	
59)	trichloroethene	0.00		0	N.D.	
60)	2,2,4-trimethylpentane	11.18		0	N.D.	
62)	heptane	11.43	43	6130	0.128 ppbV	100
63)	cis-1,3-dichloropropene	0.00		0	N.D.	
64)	4-methyl-2-pentanone	12.05		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	13.02	91	20386	0.302 ppbV	98
72)	2-hexanone	13.25	43	35036	0.666 ppbV	93
74)	dibromochloromethane	0.00		0	N.D.	
75)	1,2-dibromoethane	0.00		0	N.D.	
78)	tetrachloroethene	14.05	166	490790	18.996 ppbV	98
80)	chlorobenzene	0.00		0	N.D. d	
81)	ethylbenzene	14.93	91	9317	0.119 ppbV	99
83)	m+p-xylene	15.06	91	36203	0.568 ppbV	99
84)	bromoform	0.00		0	N.D.	
85)	styrene	15.36		0	N.D.	
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D. d	
87)	o-xylene	15.44	91	15574	0.247 ppbV	97
96)	4-ethyl toluene	16.39	105	10569M6	0.107 ppbV	
97)	1,3,5-trimethylbenzene	16.45	105	10981	0.135 ppbV #	95
99)	1,2,4-trimethylbenzene	16.77	105	40840	0.553 ppbV #	59
101)	Benzyl Chloride	0.00		0	N.D. d	
102)	1,3-dichlorobenzene	0.00		0	N.D. d	
103)	1,4-dichlorobenzene	16.94		0	N.D.	
107)	1,2-dichlorobenzene	17.21		0	N.D.	
115)	1,2,4-trichlorobenzene	18.53		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195371.D
Acq On : 4 Nov 2020 6:33 PM
Operator : AIRLAB19:RY
Sample : L2047588-03,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:21:15 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

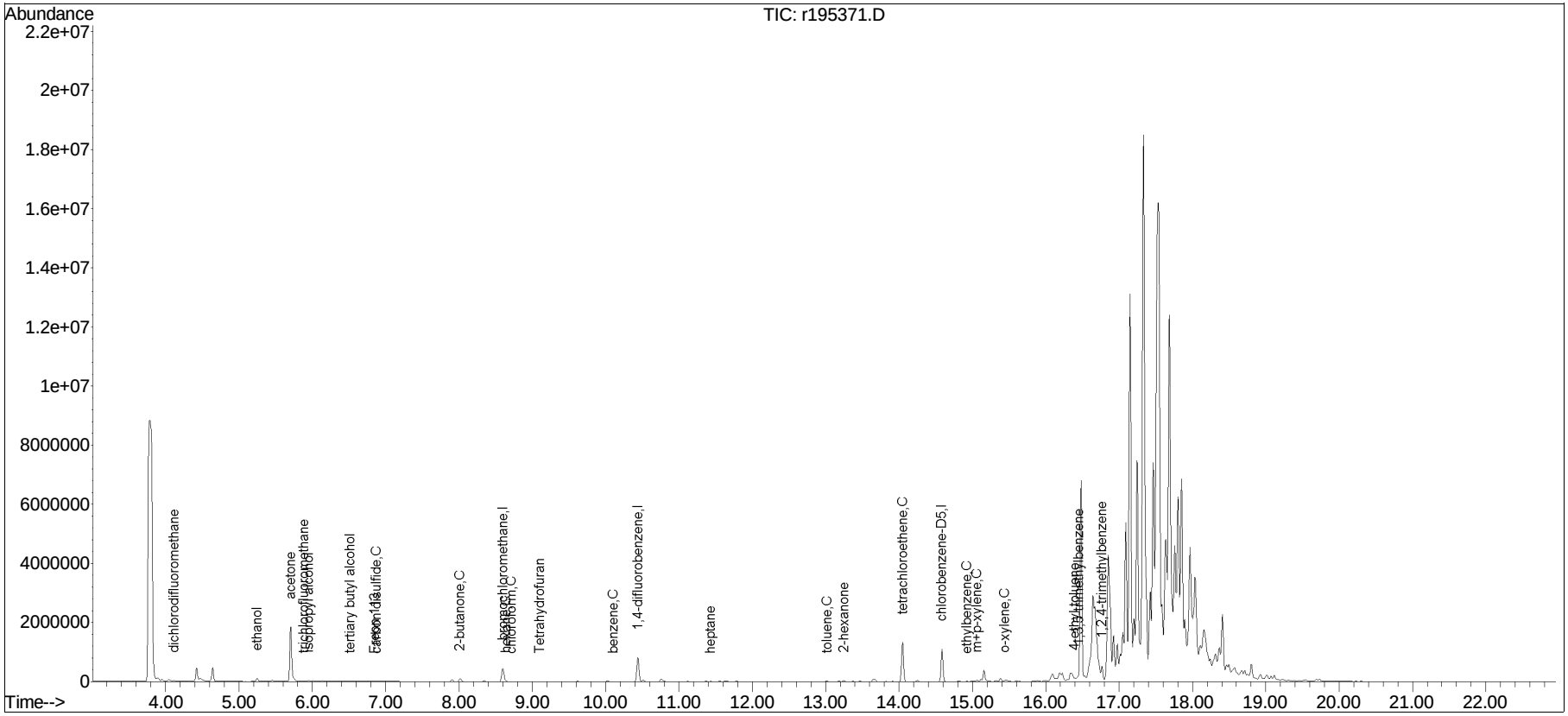
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

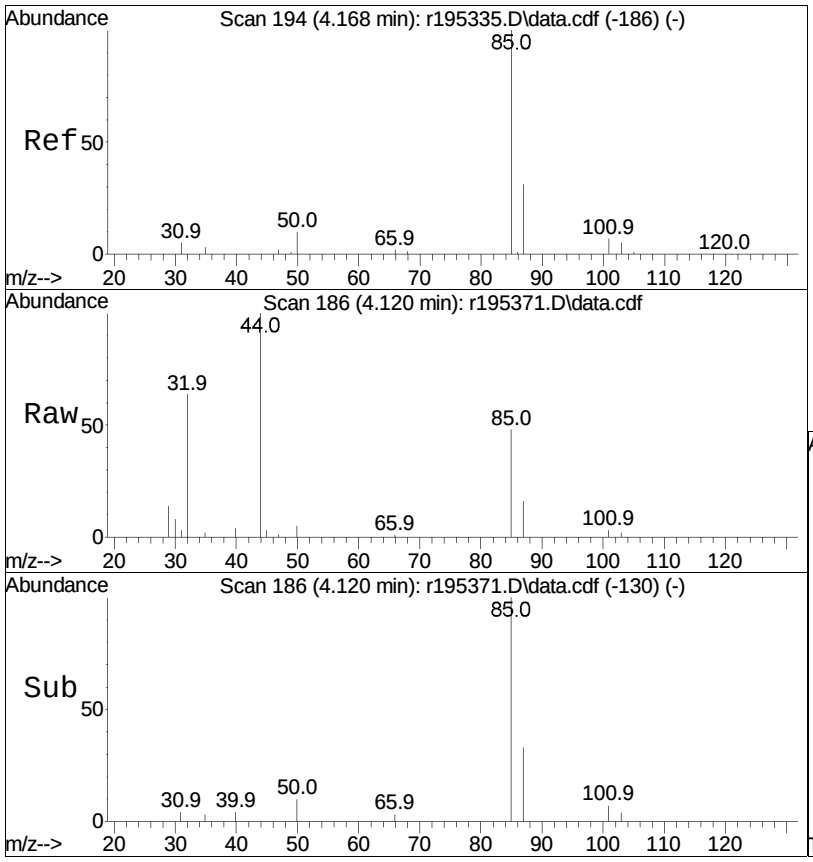
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195371.D
Acq On : 4 Nov 2020 6:33 PM
Operator : AIRLAB19:RY
Sample : L2047588-03,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:21:15 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab19\2020\11\201104T\r195365.D

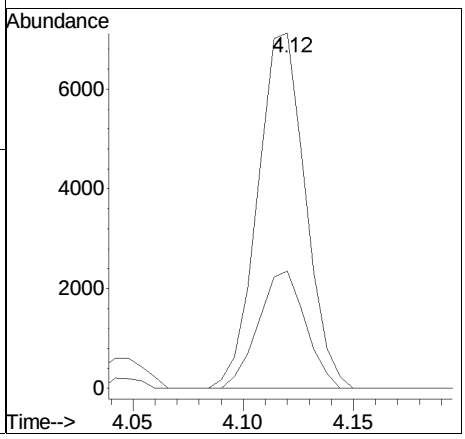


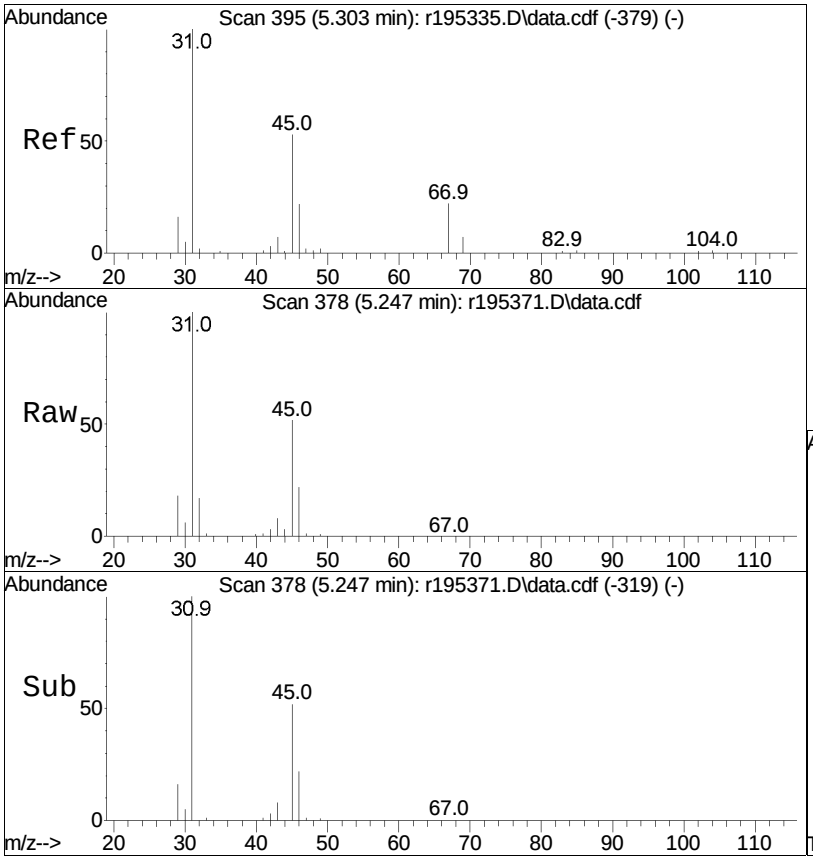


#5
dichlorodifluoromethane
Concen: 0.39 ppbV
RT: 4.12 min Scan# 186
Delta R.T. 0.006 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 85 Resp: 10706

Ion	Ratio	Lower	Upper
85	100		
87	33.0	24.6	37.0

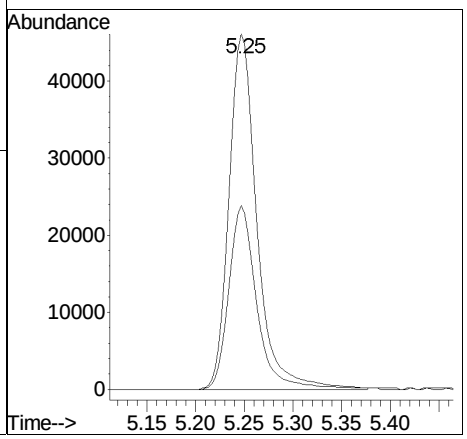


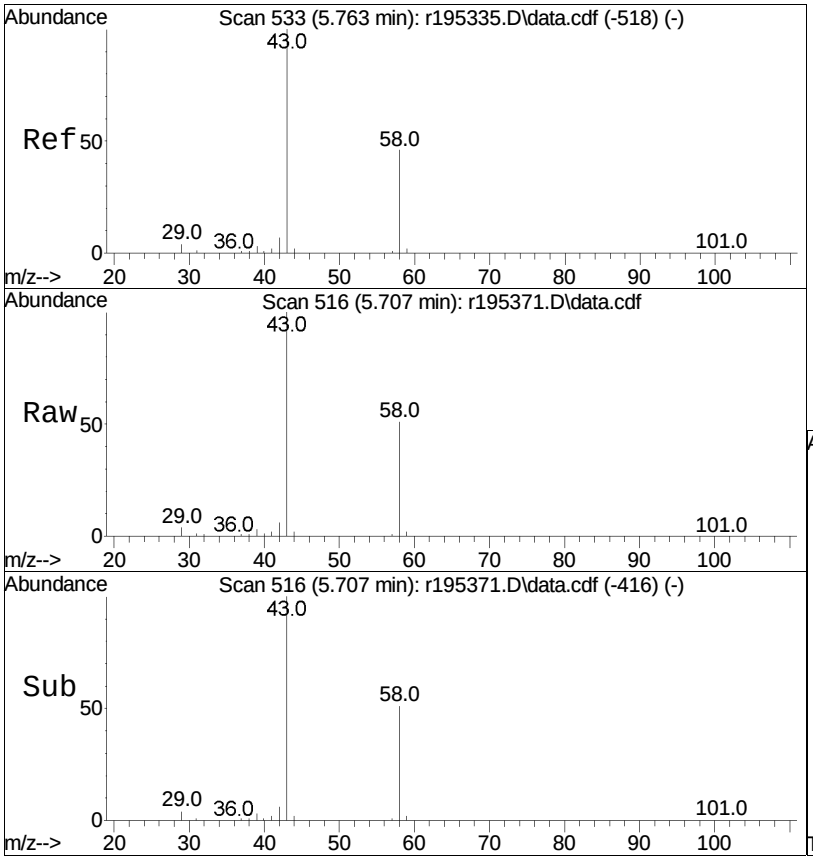


#15
ethanol
Concen: 6.03 ppbV
RT: 5.25 min Scan# 378
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 31 Resp: 92272

Ion	Ratio	Lower	Upper
31	100		
45	51.7	42.5	63.7

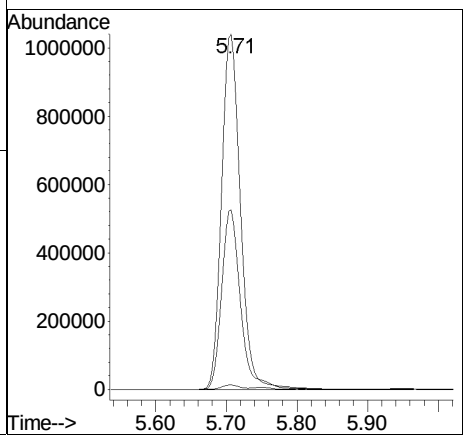


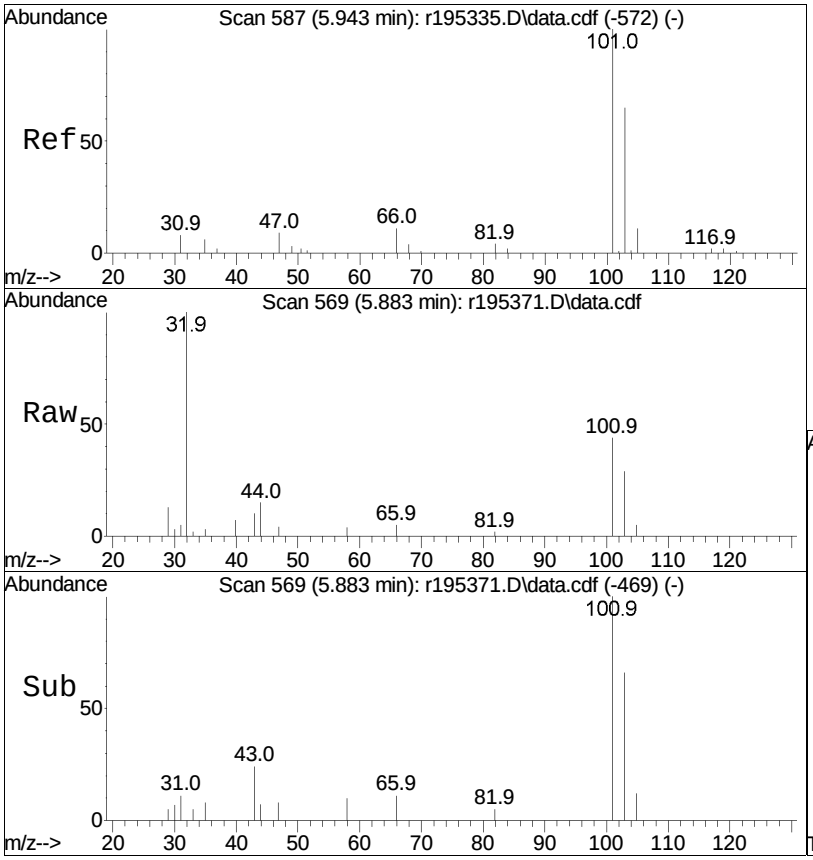


#19
acetone
Concen: 74.42 ppbV
RT: 5.71 min Scan# 516
Delta R.T. 0.003 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 43 Resp: 1936488

Ion	Ratio	Lower	Upper
43	100		
58	50.6	36.6	54.8
57	1.3	0.9	1.3

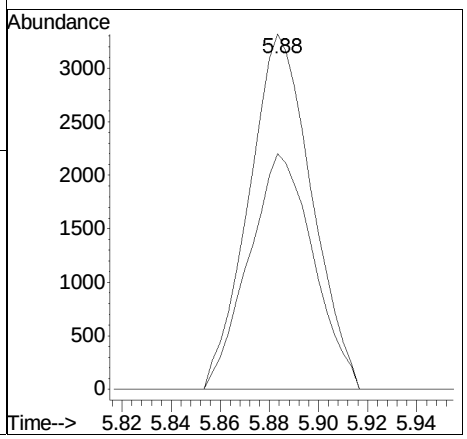


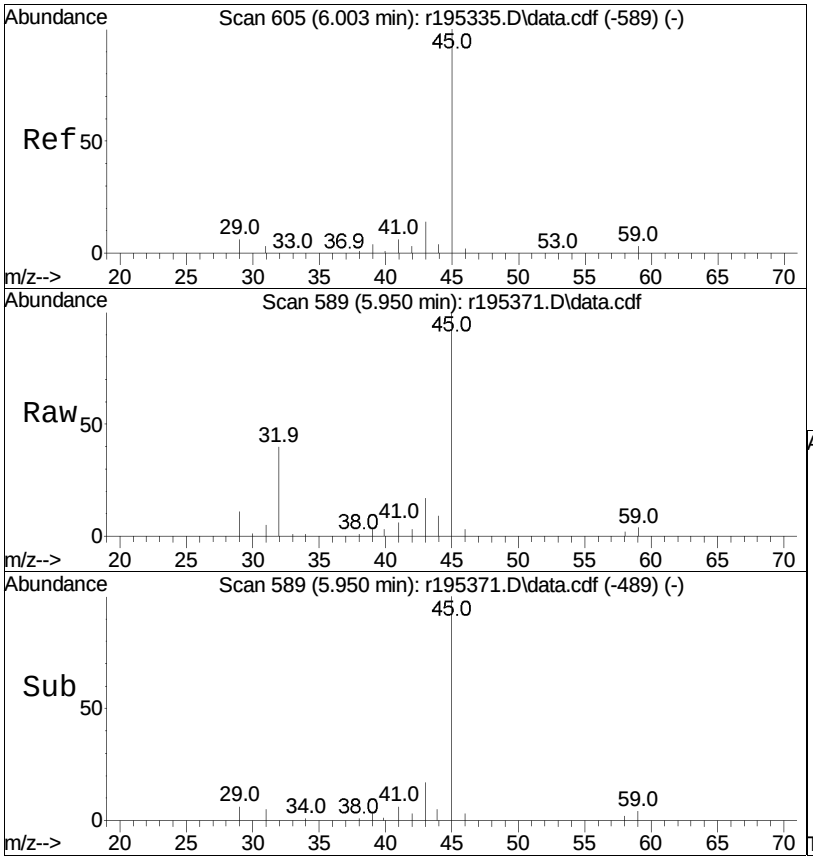


#21
trichlorofluoromethane
Concen: 0.27 ppbV
RT: 5.88 min Scan# 569
Delta R.T. 0.003 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion:101 Resp: 5893

Ion	Ratio	Lower	Upper
101	100		
103	66.3	52.3	78.5

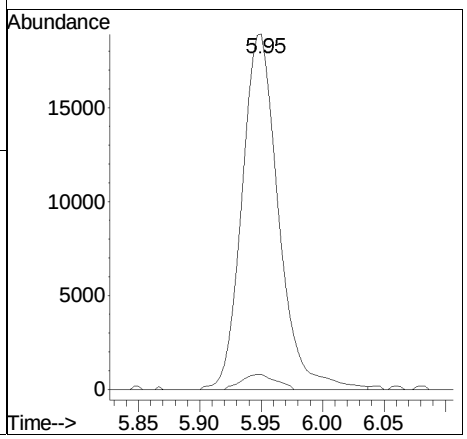


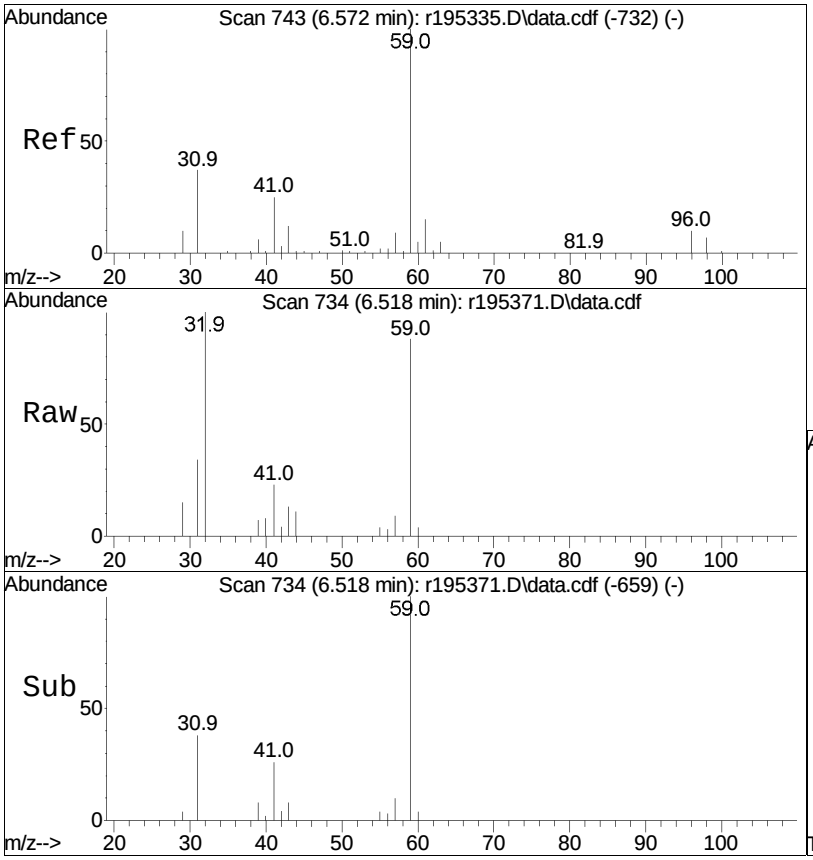


#22
isopropyl alcohol
Concen: 1.00 ppbV
RT: 5.95 min Scan# 589
Delta R.T. 0.003 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 45 Resp: 39115

Ion	Ratio	Lower	Upper
45	100		
59	4.3	2.6	4.0#

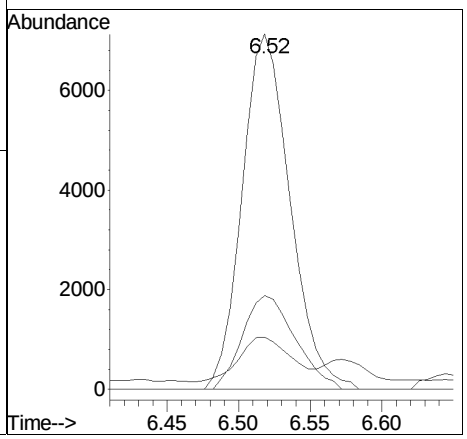


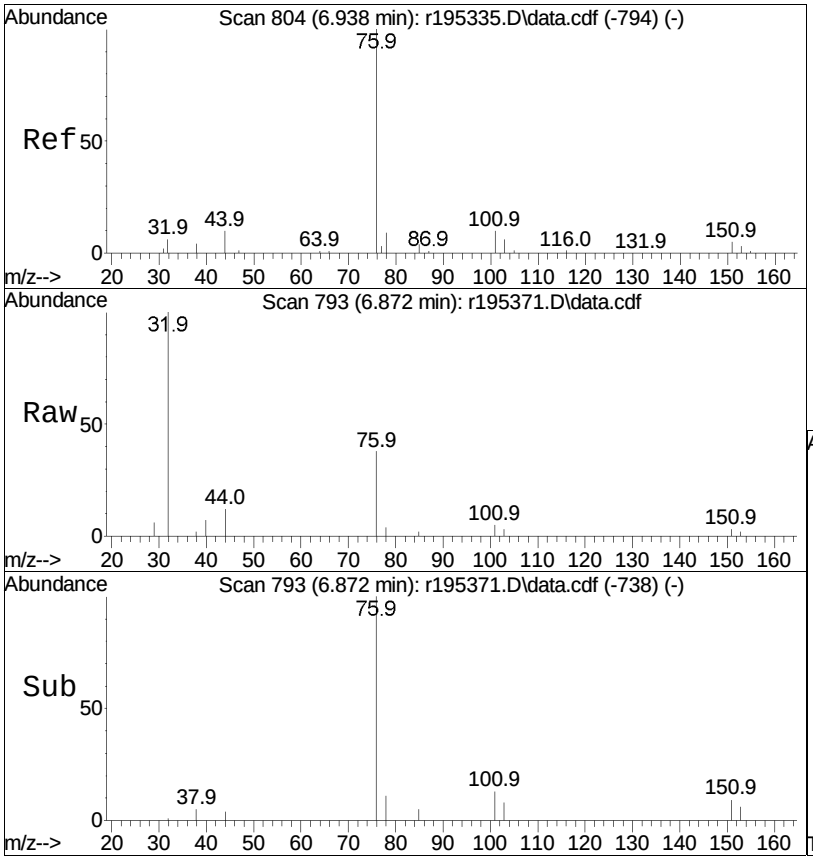


#27
tertiary butyl alcohol
Concen: 0.51 ppbV
RT: 6.52 min Scan# 734
Delta R.T. 0.006 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 59 Resp: 16602

Ion	Ratio	Lower	Upper
59	100		
41	26.4	19.8	29.8
43	14.8	10.0	15.0

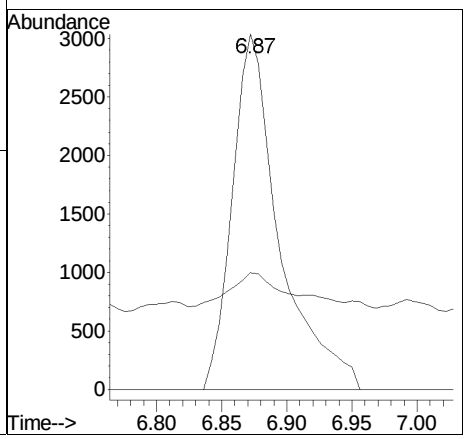


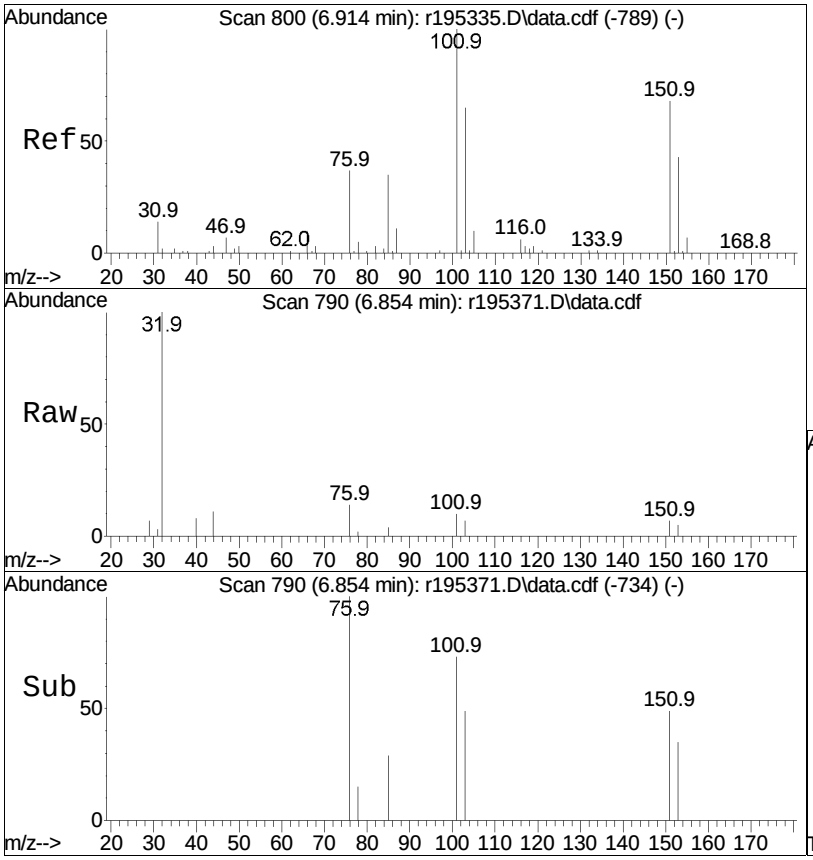


#30
carbon disulfide
Concen: 0.12 ppbV
RT: 6.87 min Scan# 793
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 76 Resp: 7626

Ion	Ratio	Lower	Upper
76	100		
44	32.8	7.9	11.9#

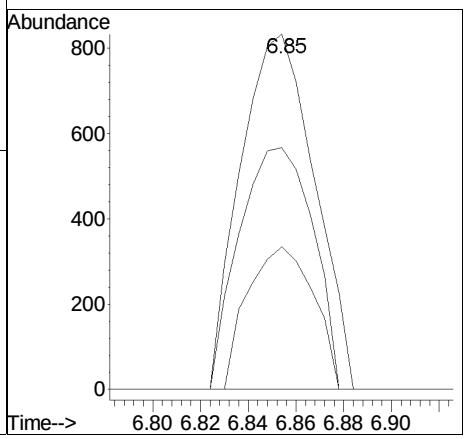


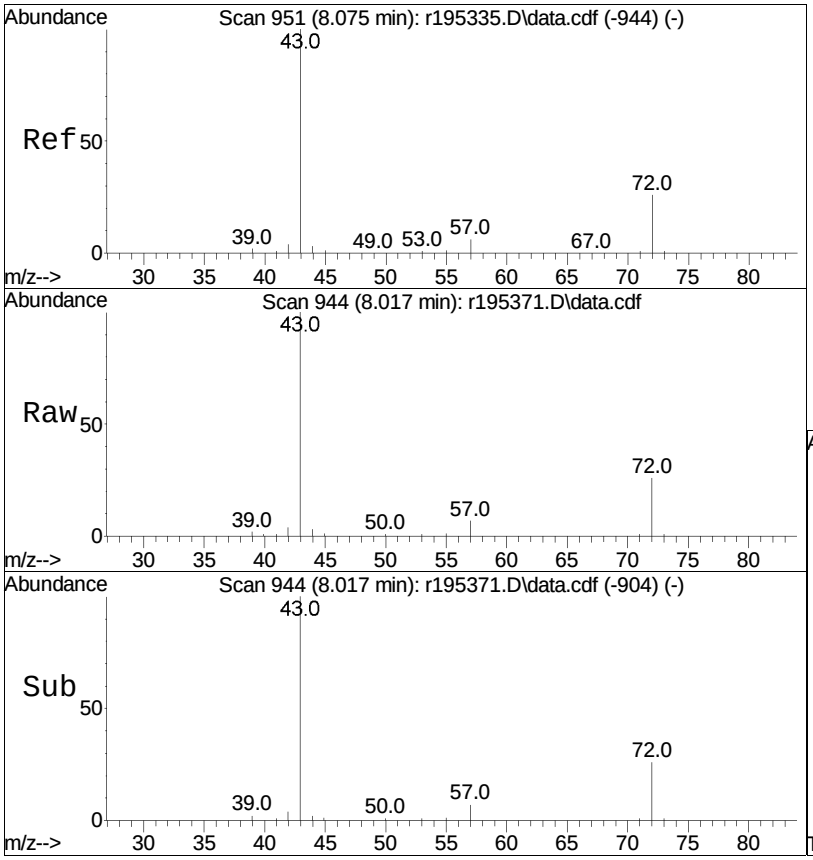


#31
Freon 113
Concen: 0.06 ppbV
RT: 6.85 min Scan# 790
Delta R.T. 0.006 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion:101 Resp: 1794

Ion	Ratio	Lower	Upper
101	100		
85	40.1	27.9	41.9
151	68.1	54.2	81.2

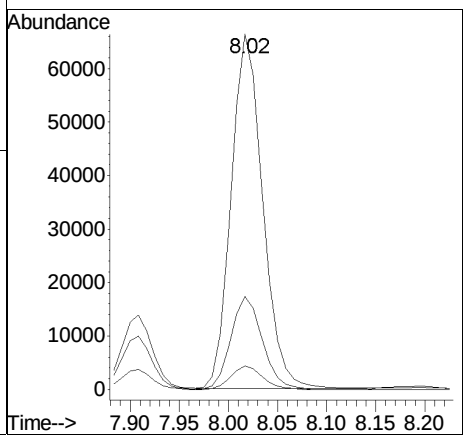


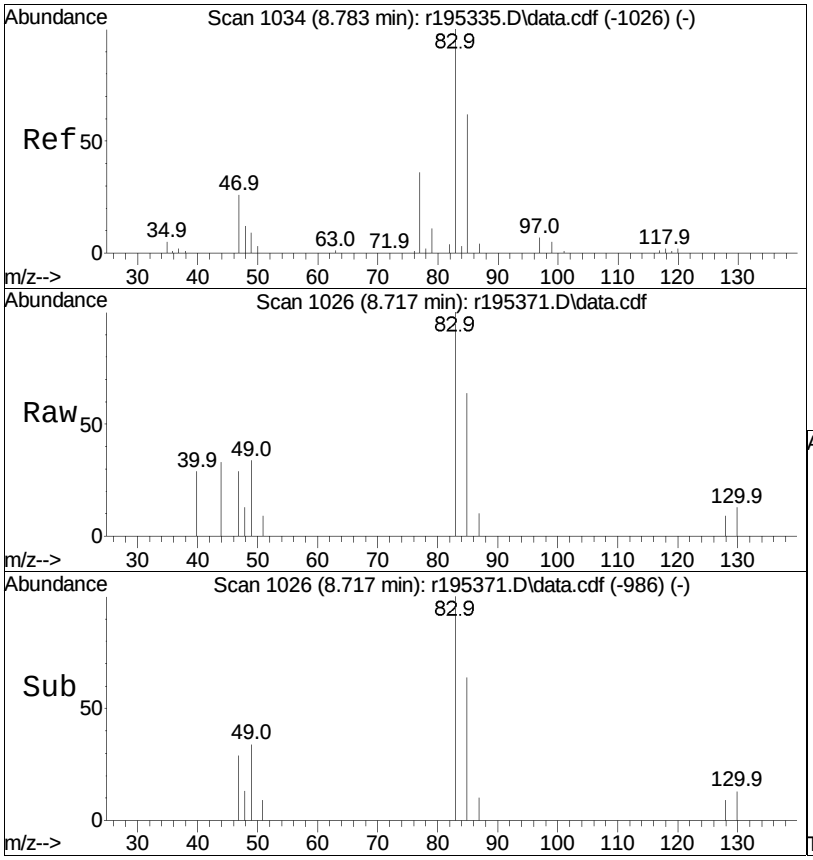


#36
2-butanone
Concen: 3.07 ppbV
RT: 8.02 min Scan# 944
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 43 Resp: 147500

Ion	Ratio	Lower	Upper
43	100		
72	26.1	21.0	31.6
57	6.6	5.1	7.7

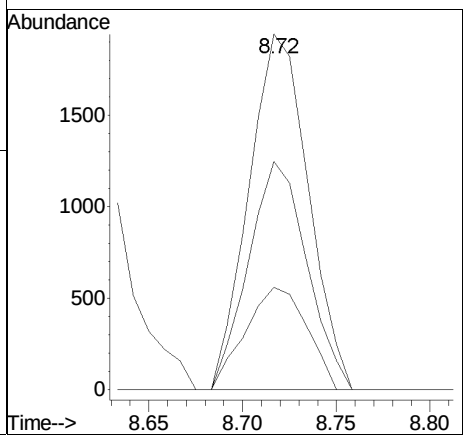


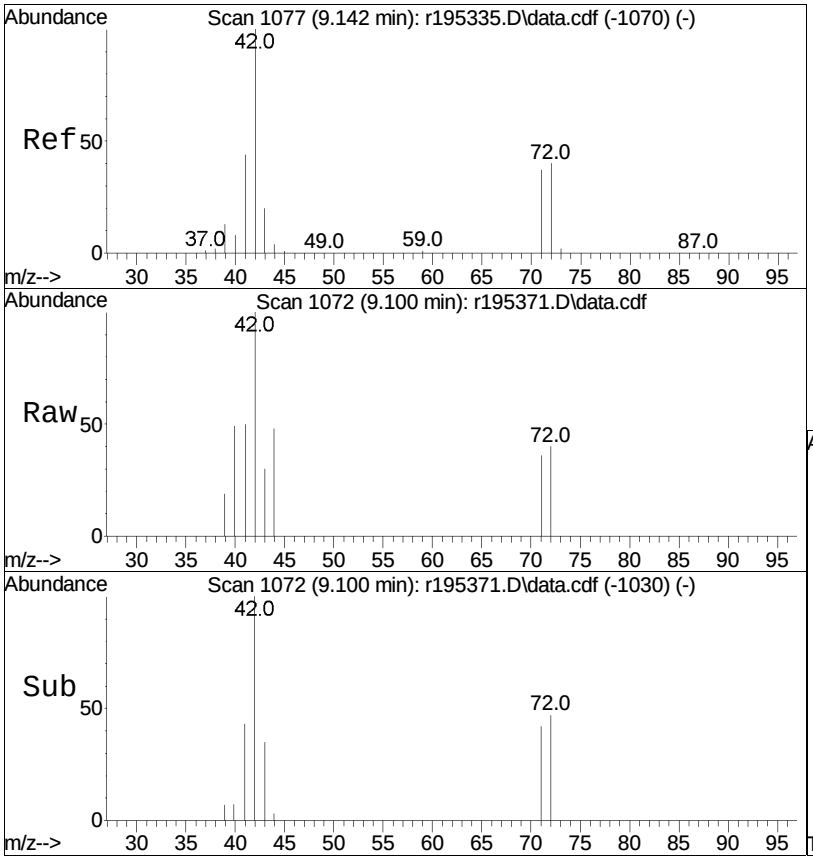


#39
chloroform
Concen: 0.15 ppbV
RT: 8.72 min Scan# 1026
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 83 Resp: 4282

Ion	Ratio	Lower	Upper
83	100		
85	64.1	49.8	74.8
47	28.7	20.8	31.2

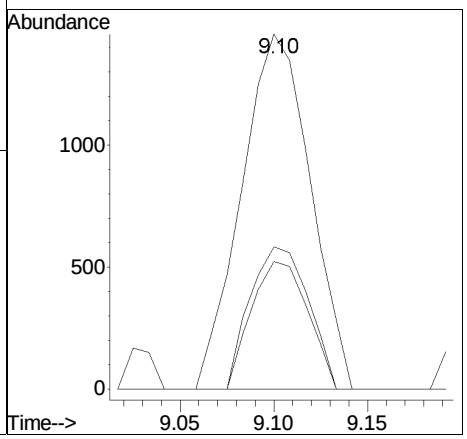


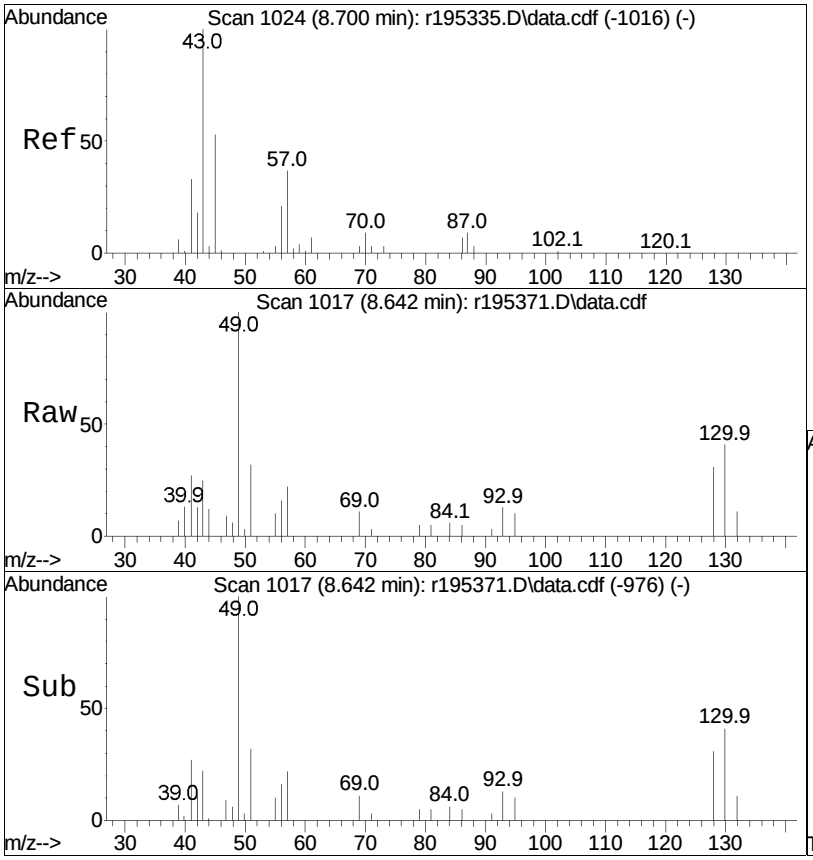


#40
Tetrahydrofuran
Concen: 0.12 ppbV
RT: 9.10 min Scan# 1072
Delta R.T. 0.017 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 42 Resp: 3719

Ion	Ratio	Lower	Upper
42	100		
71	36.0	29.7	44.5
72	40.1	32.2	48.4

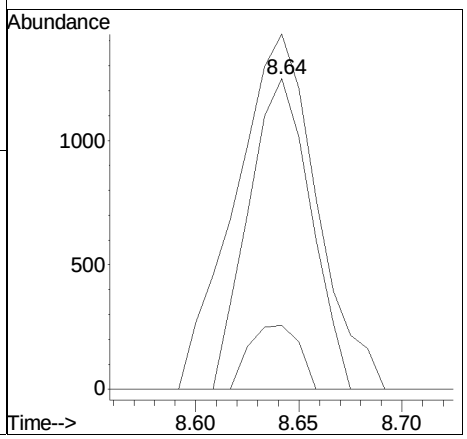


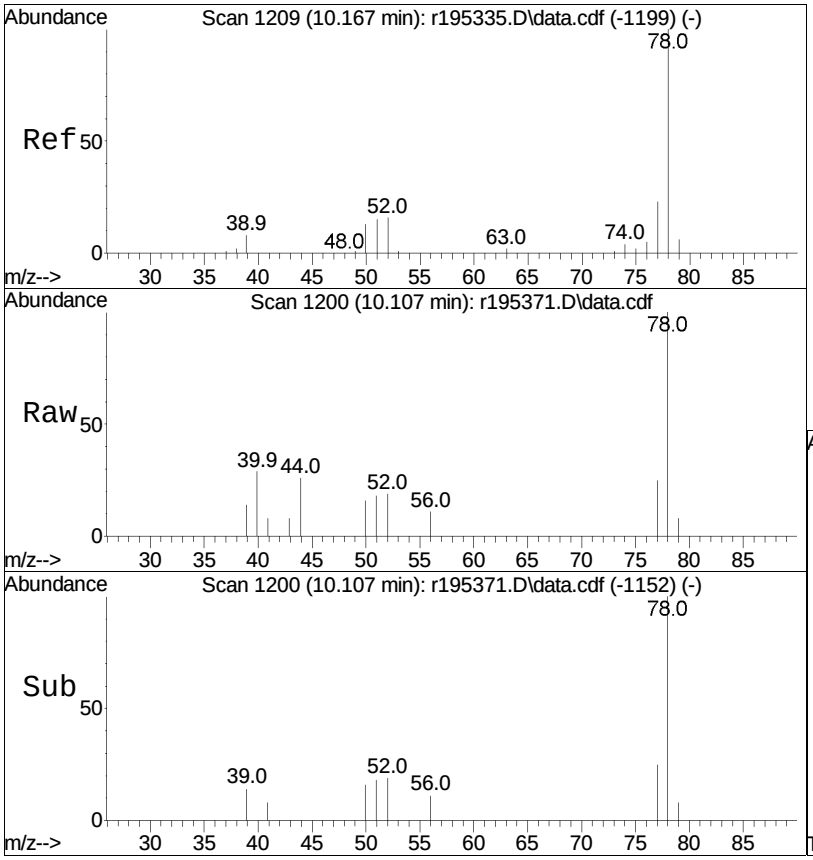


#44
hexane
Concen: 0.08 ppbV
RT: 8.64 min Scan# 1017
Delta R.T. 0.008 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 57 Resp: 2636

Ion	Ratio	Lower	Upper
57	100		
43	114.3	217.9	326.9#
86	20.6	16.2	24.2

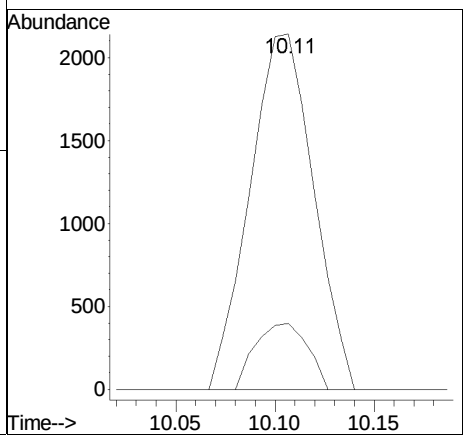


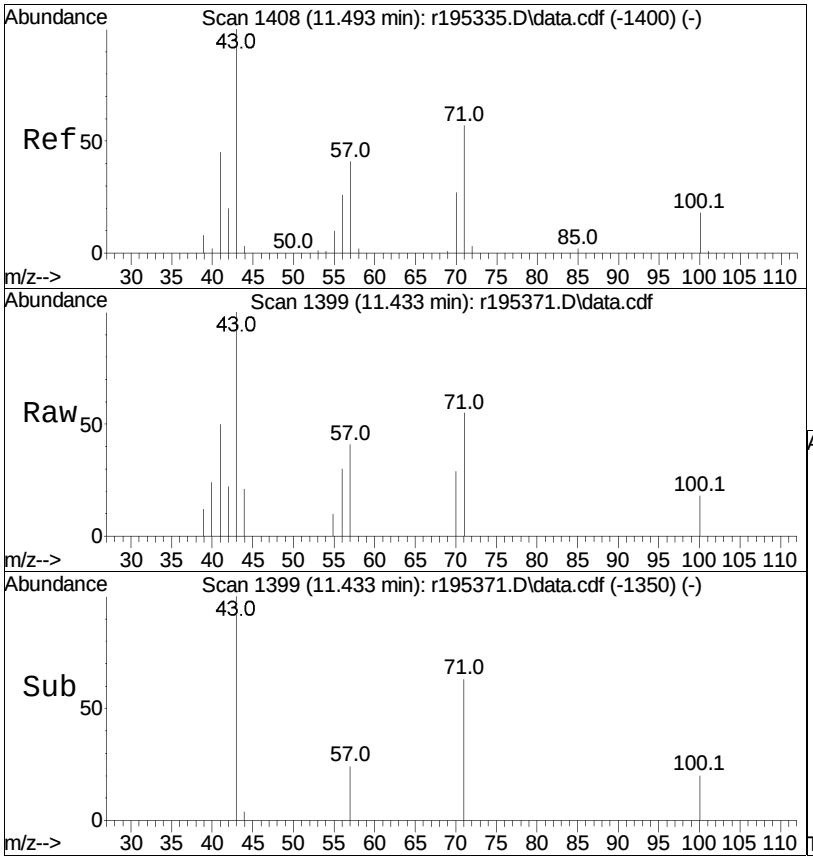


#50
benzene
Concen: 0.07 ppbV
RT: 10.11 min Scan# 1200
Delta R.T. 0.007 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 78 Resp: 4788

Ion	Ratio	Lower	Upper
78	100		
52	18.6	12.6	19.0

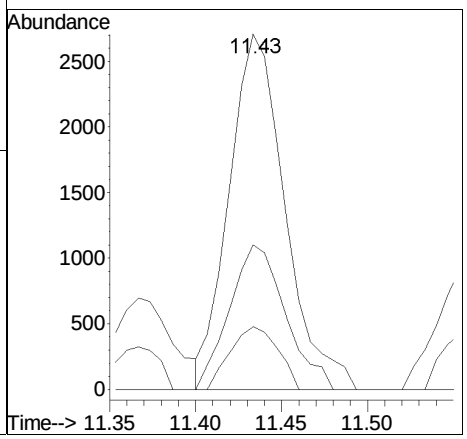


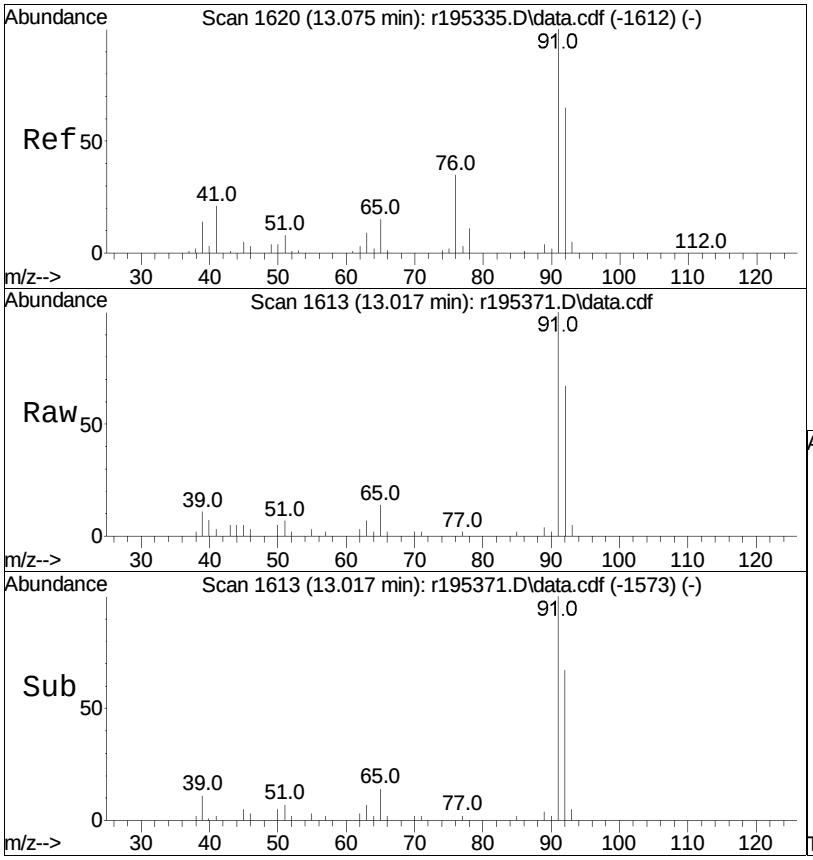


#62
heptane
Concen: 0.13 ppbV
RT: 11.43 min Scan# 1399
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 43 Resp: 6130

Ion	Ratio	Lower	Upper
43	100		
57	40.7	32.5	48.7
100	17.7	14.3	21.5

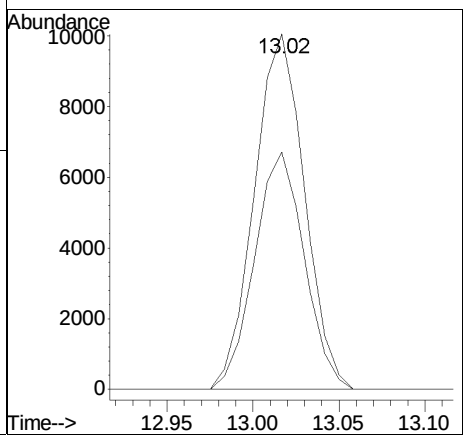


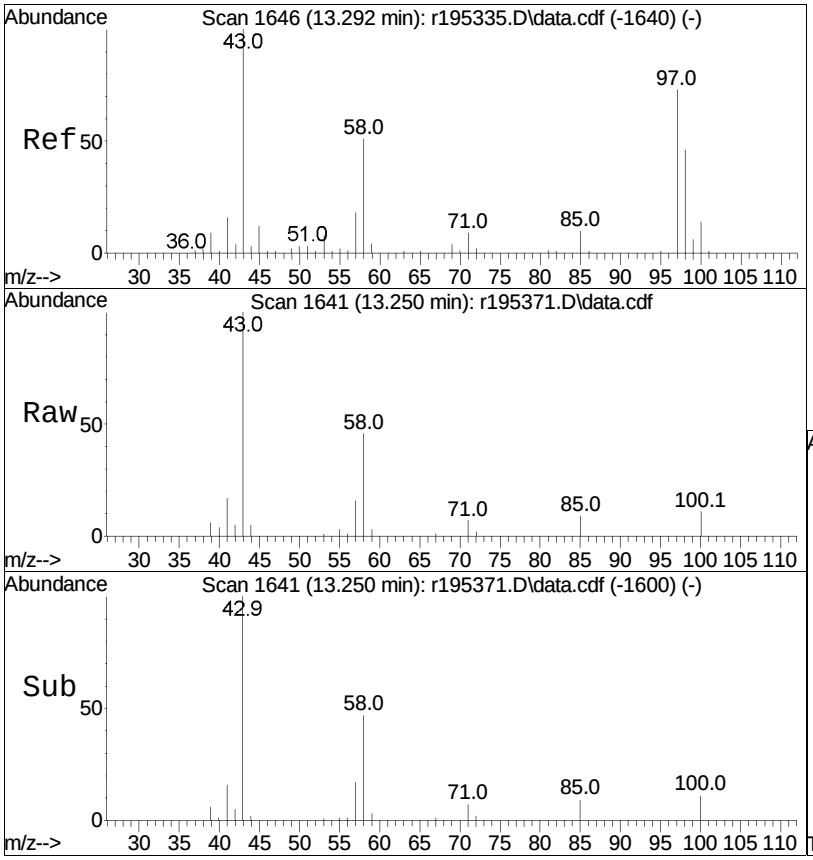


#68
toluene
Concen: 0.30 ppbV
RT: 13.02 min Scan# 1613
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 91 Resp: 20386

Ion	Ratio	Lower	Upper
91	100		
92	66.8	52.1	78.1

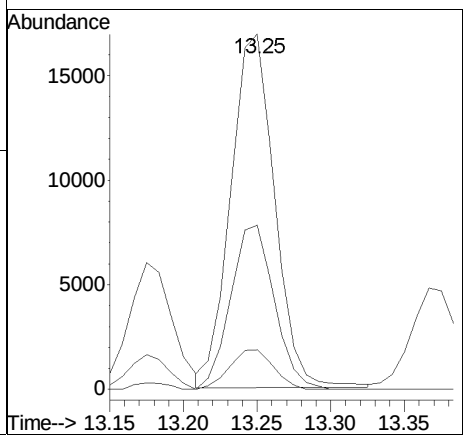


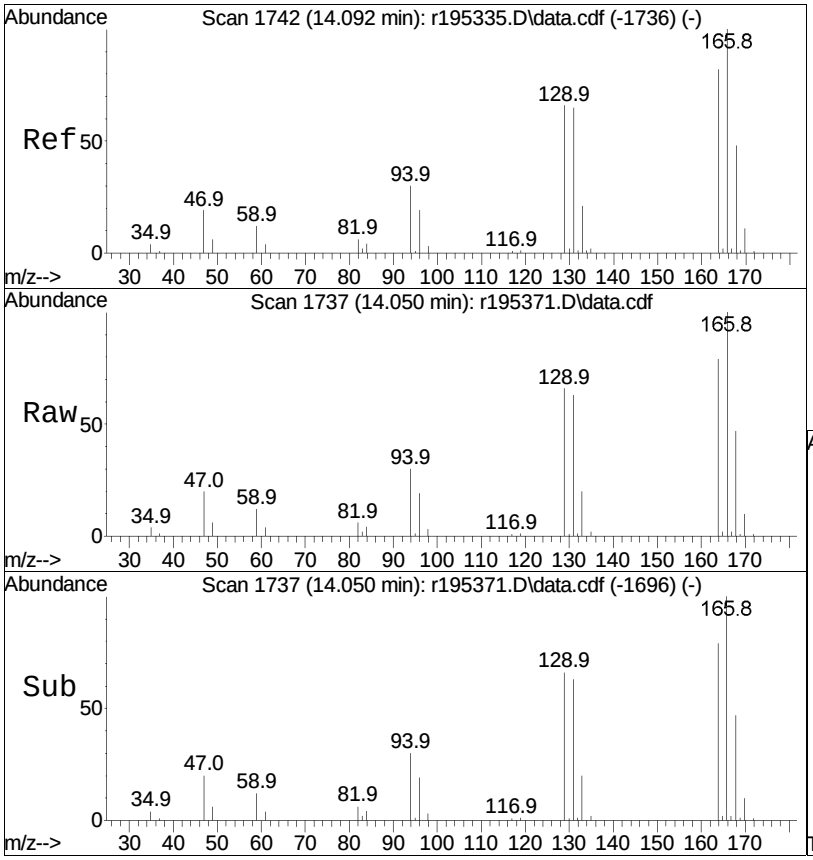


#72
2-hexanone
Concen: 0.67 ppbV
RT: 13.25 min Scan# 1641
Delta R.T. 0.008 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 43 Resp: 35036

Ion	Ratio	Lower	Upper
43	100		
58	46.2	40.7	61.1
100	11.2	10.9	16.3

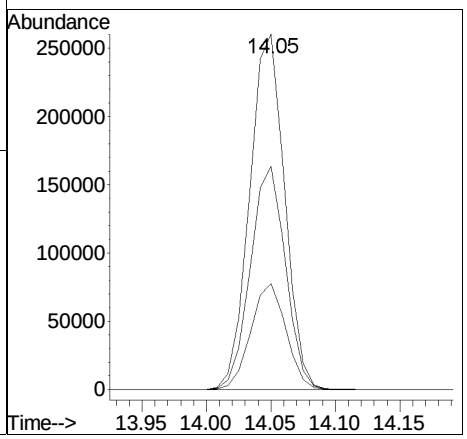


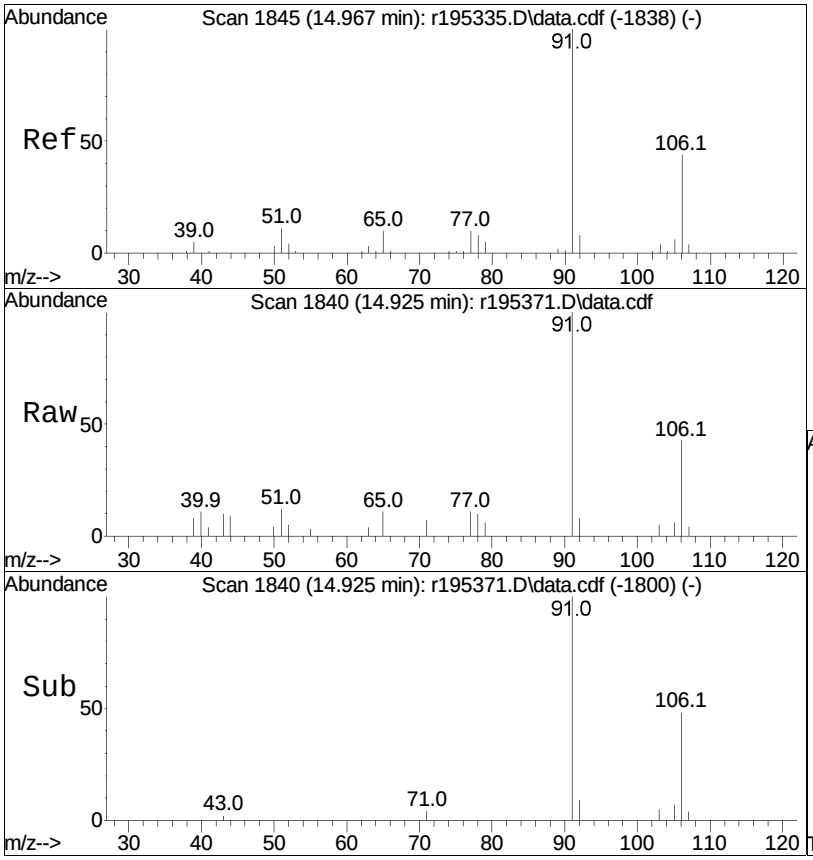


#78
tetrachloroethene
Concen: 19.00 ppbV
RT: 14.05 min Scan# 1737
Delta R.T. 0.008 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion:166 Resp: 490790

Ion	Ratio	Lower	Upper
166	100		
131	62.7	51.7	77.5
94	29.8	24.0	36.0

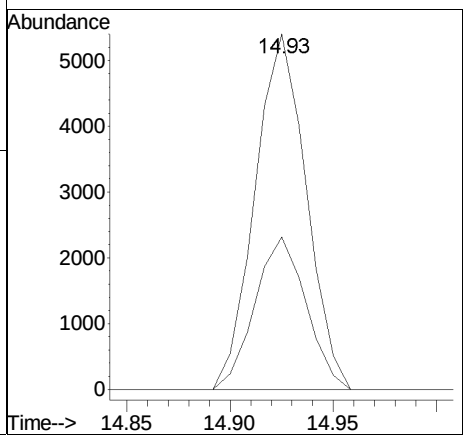


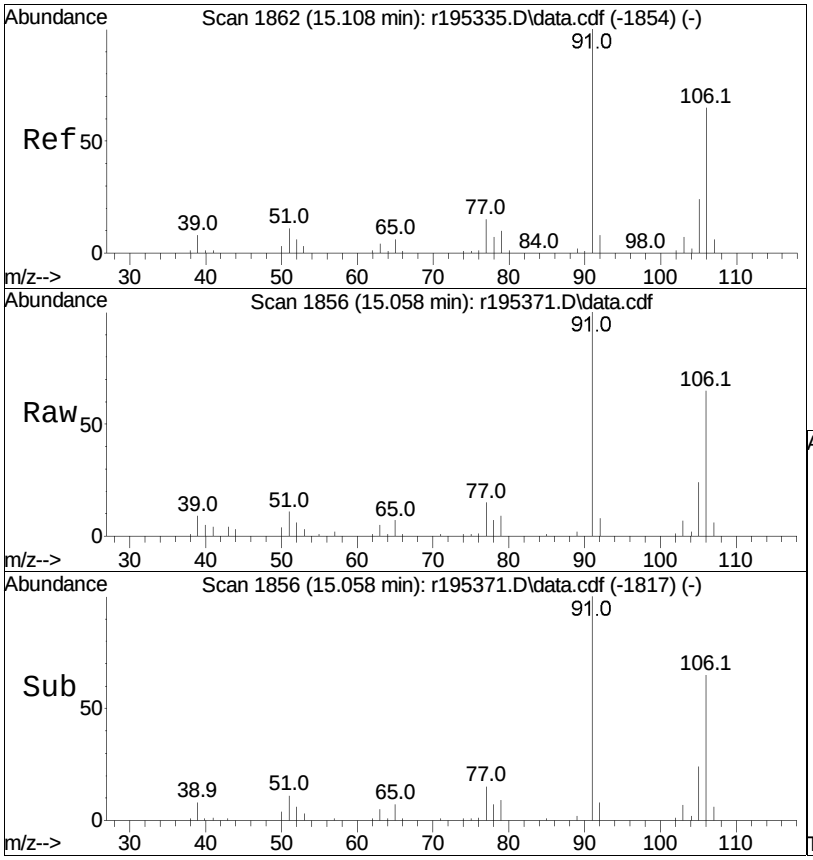


#81
ethylbenzene
Concen: 0.12 ppbV
RT: 14.93 min Scan# 1840
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 91 Resp: 9317

Ion	Ratio	Lower	Upper
91	100		
106	42.9	34.8	52.2

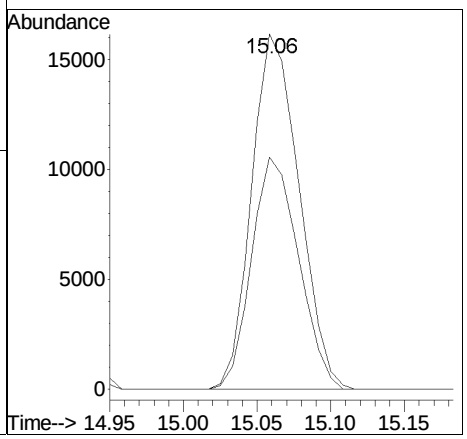


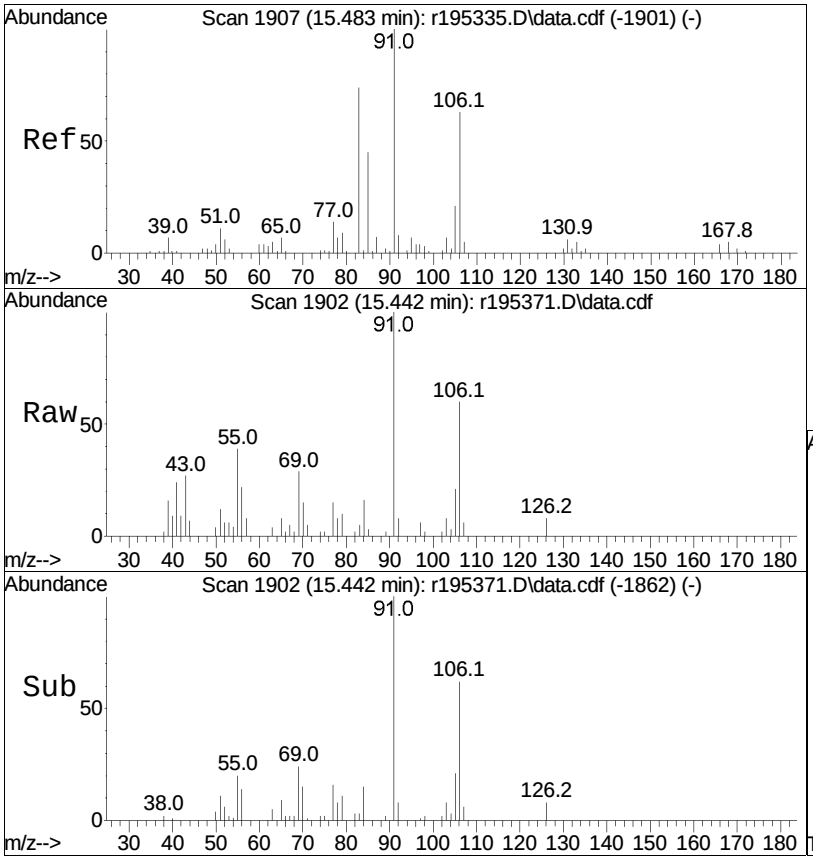


#83
m+p-xylene
Concen: 0.57 ppbV
RT: 15.06 min Scan# 1856
Delta R.T. -0.008 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 91 Resp: 36203

Ion	Ratio	Lower	Upper
91	100		
106	65.4	51.8	77.6

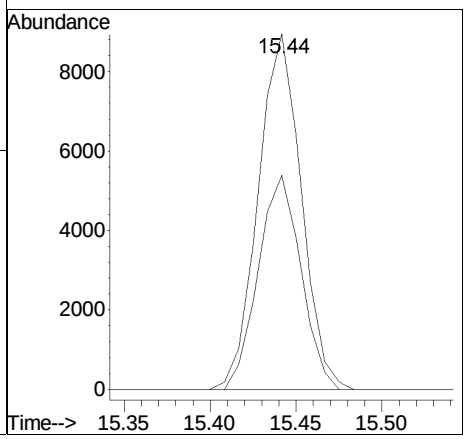


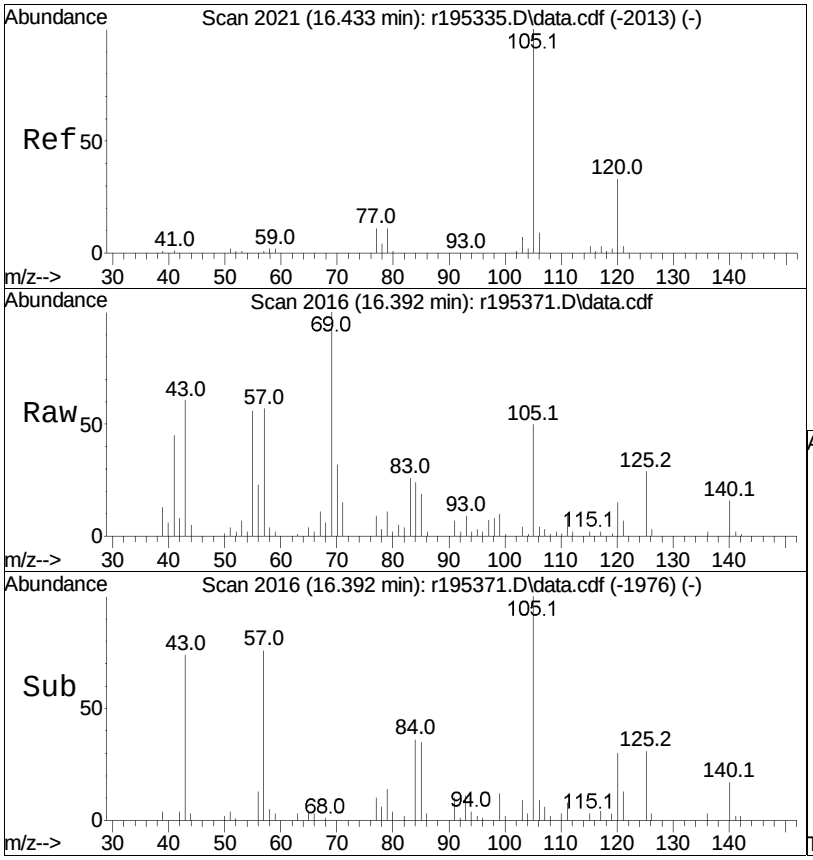


#87
o-xylene
Concen: 0.25 ppbV
RT: 15.44 min Scan# 1902
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion: 91 Resp: 15574

Ion	Ratio	Lower	Upper
91	100		
106	60.2	50.2	75.4

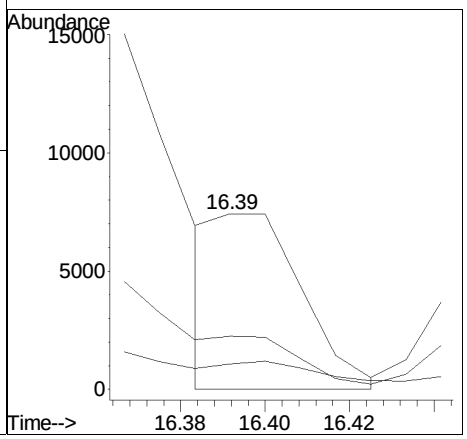


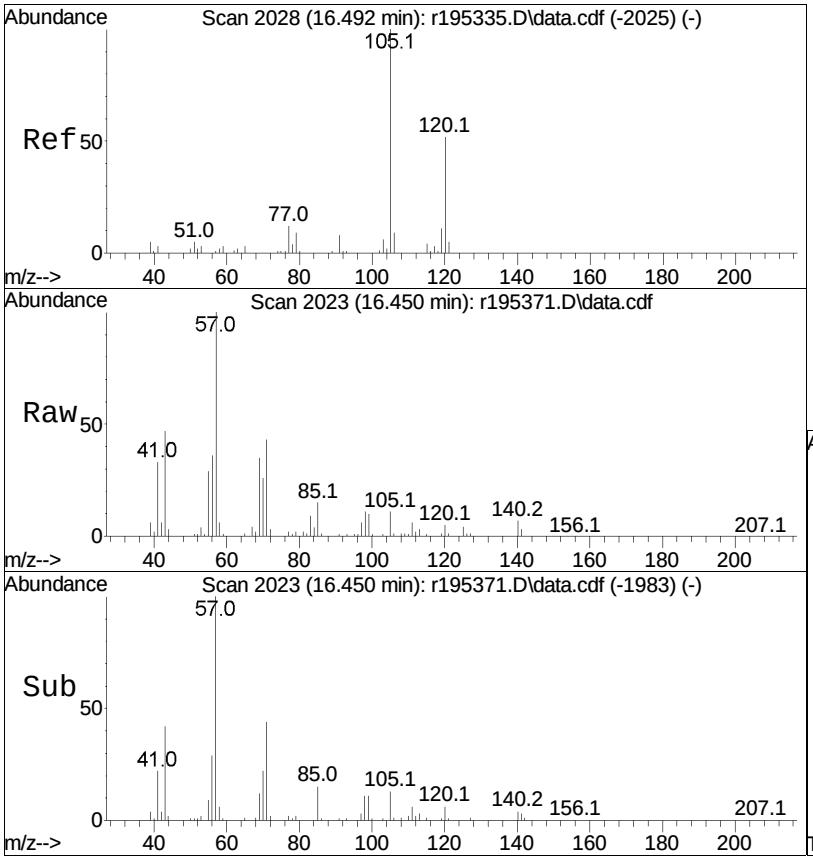


#96
4-ethyl toluene
Concen: 0.11 ppbV m
RT: 16.39 min Scan# 2016
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion:105 Resp: 10569

Ion	Ratio	Lower	Upper
105	100		
120	30.3	26.6	40.0
91	14.5	7.0	10.4#

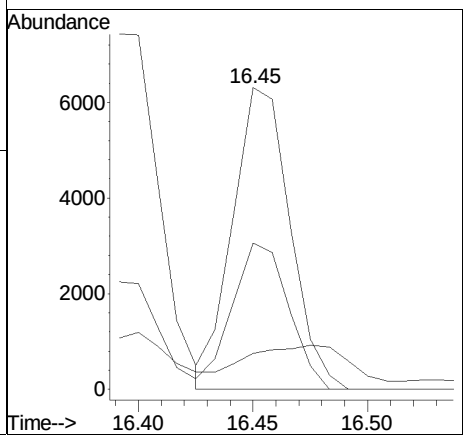


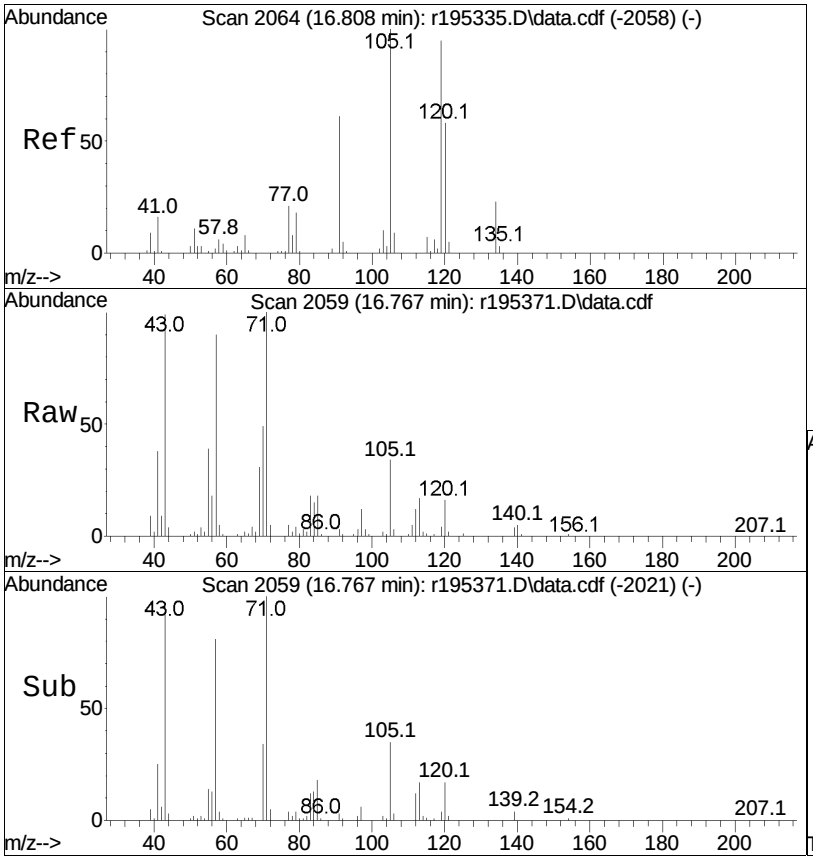


#97
1,3,5-trimethylbenzene
Concen: 0.13 ppbV
RT: 16.45 min Scan# 2023
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion:105 Resp: 10981

Ion	Ratio	Lower	Upper
105	100		
120	48.5	41.1	61.7
91	11.9	6.5	9.7#

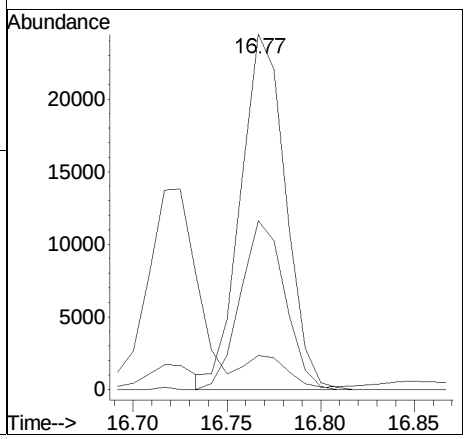




#99
1,2,4-trimethylbenzene
Concen: 0.55 ppbV
RT: 16.77 min Scan# 2059
Delta R.T. 0.000 min
Lab File: r195371.D
Acq: 4 Nov 2020 6:33 PM

Tgt Ion:105 Resp: 40840

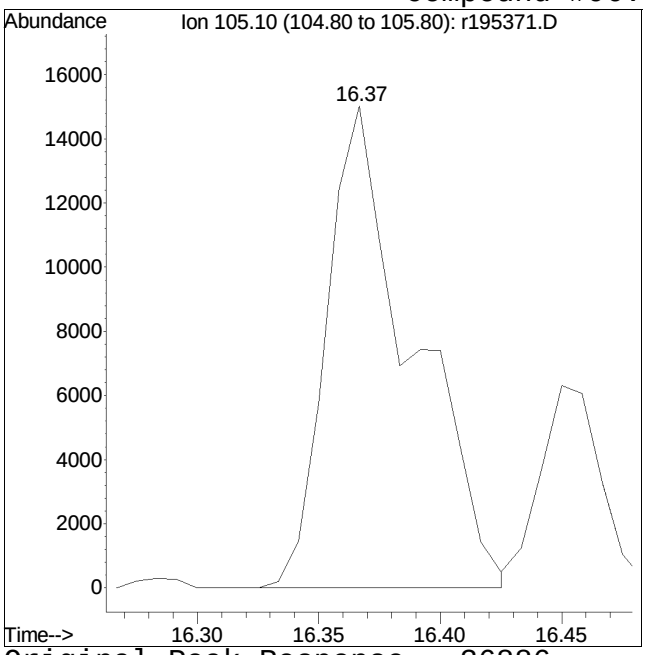
Ion	Ratio	Lower	Upper
105	100		
120	47.5	46.2	69.4
91	9.5	48.7	73.1#



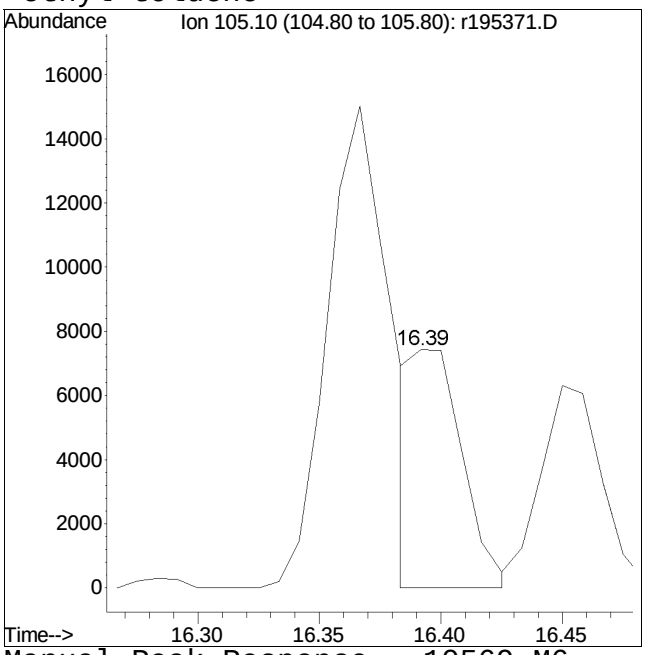
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195371.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:6: 3 Instrument :
Sample : L2047588-03,3,250,250 Quant Date : 11/5/2020 7:40 am

Compound #96: 4-ethyl toluene



Original Peak Response = 36886



Manual Peak Response = 10569 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195372.D
Acq On : 4 Nov 2020 7:16 PM
Operator : AIRLAB19:RY
Sample : L2047588-04,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:23:40 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.60	49	378866	10.000	ppbV	0.00
Standard Area = 384278			Recovery	=	98.59%	
43) 1,4-difluorobenzene	10.44	114	862274	10.000	ppbV	0.00
Standard Area = 866249			Recovery	=	99.54%	
67) chlorobenzene-D5	14.58	54	142664	10.000	ppbV	0.00
Standard Area = 149824			Recovery	=	95.22%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.11	85	10234	0.356	ppbV	99
6) chloromethane	4.28	50	1862	0.094	ppbV #	43
7) Freon-114	4.40		0	N.D.		
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.	d	
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.25	31	19248	1.213	ppbV	89
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	591310	21.905	ppbV #	80
21) trichlorofluoromethane	5.88	101	10904	0.490	ppbV	98
22) isopropyl alcohol	5.95	45	9354	0.232	ppbV #	92
26) 1,1-dichloroethene	0.00		0	N.D.	d	
27) tertiary butyl alcohol	6.52	59	6587	0.195	ppbV #	94
28) methylene chloride	6.60	49	5387	0.214	ppbV	93
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	6.87	76	33202	0.518	ppbV #	91
31) Freon 113	6.85	101	1767	0.056	ppbV	90
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	7.65		0	N.D.		
34) MTBE	0.00		0	N.D.	d	
36) 2-butanone	8.03	43	35737	0.716	ppbV	98
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	8.72	83	6014	0.198	ppbV	98
40) Tetrahydrofuran	9.11	42	2983	0.091	ppbV	98
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195372.D
Acq On : 4 Nov 2020 7:16 PM
Operator : AIRLAB19:RY
Sample : L2047588-04,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:23:40 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	hexane	8.64	57	2827	0.082	ppbV	#	7
48)	1,1,1-trichloroethane	9.66		0	N.D.			
50)	benzene	10.10	78	7857	0.109	ppbV		98
52)	carbon tetrachloride	10.25		0	N.D.			
53)	cyclohexane	10.37		0	N.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	11.13		0	N.D.			
60)	2,2,4-trimethylpentane	11.17	57	6484	0.060	ppbV	#	79
62)	heptane	11.43		0	N.D.			
63)	cis-1,3-dichloropropene	0.00		0	N.D.			
64)	4-methyl-2-pentanone	12.05		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	13.02	91	10981	0.161	ppbV		99
72)	2-hexanone	13.25	43	7239	0.136	ppbV		98
74)	dibromochloromethane	0.00		0	N.D.			
75)	1,2-dibromoethane	0.00		0	N.D.			
78)	tetrachloroethene	14.05	166	338842	12.960	ppbV		96
80)	chlorobenzene	0.00		0	N.D.			
81)	ethylbenzene	14.93		0	N.D.			
83)	m+p-xylene	15.06	91	11053	0.171	ppbV		100
84)	bromoform	0.00		0	N.D.			
85)	styrene	15.36		0	N.D.			
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.	d		
87)	o-xylene	15.44	91	4368	0.068	ppbV		97
96)	4-ethyl toluene	16.39		0	N.D.			
97)	1,3,5-trimethylbenzene	16.45		0	N.D.			
99)	1,2,4-trimethylbenzene	16.77	105	11554	0.155	ppbV	#	62
101)	Benzyl Chloride	0.00		0	N.D.	d		
102)	1,3-dichlorobenzene	16.95		0	N.D.			
103)	1,4-dichlorobenzene	16.95		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195372.D
Acq On : 4 Nov 2020 7:16 PM
Operator : AIRLAB19:RY
Sample : L2047588-04,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:23:40 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

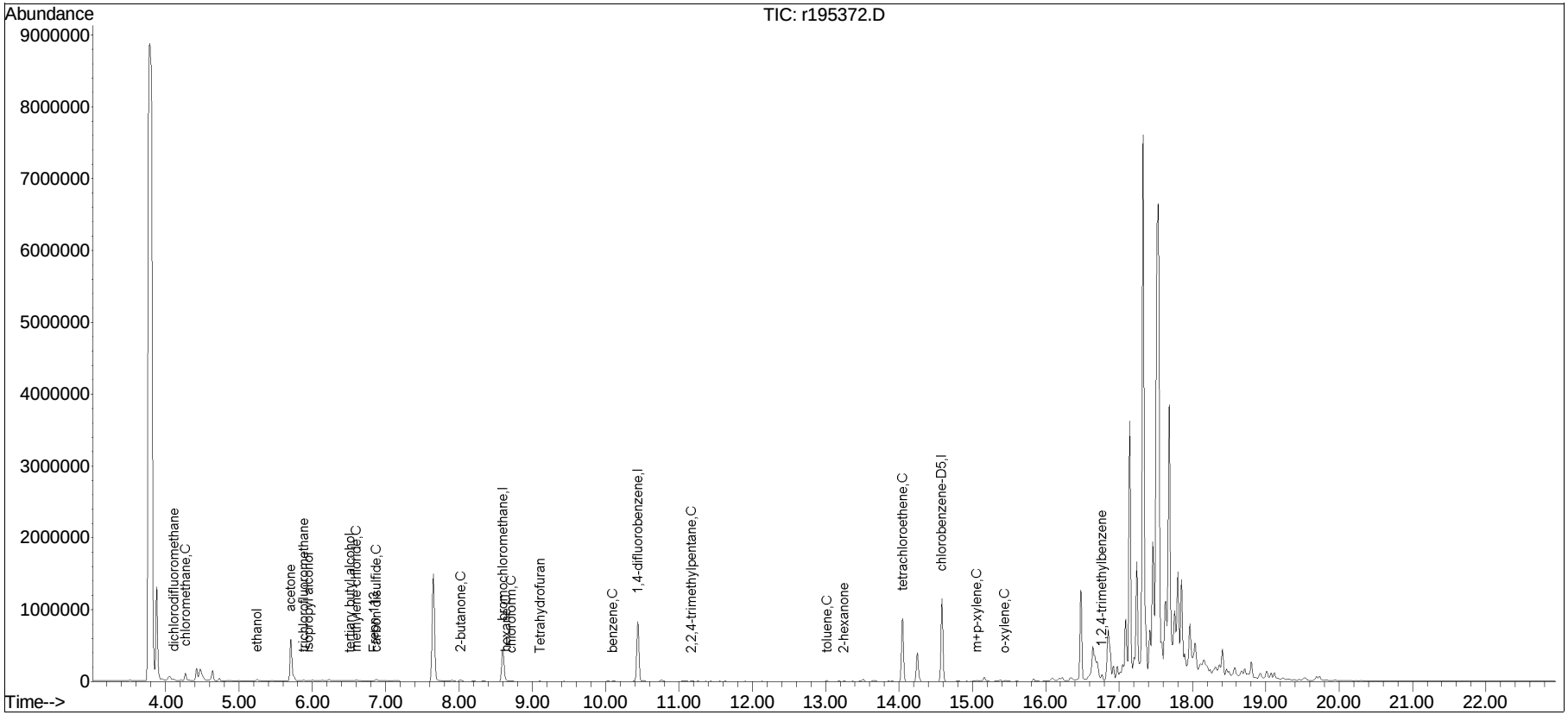
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

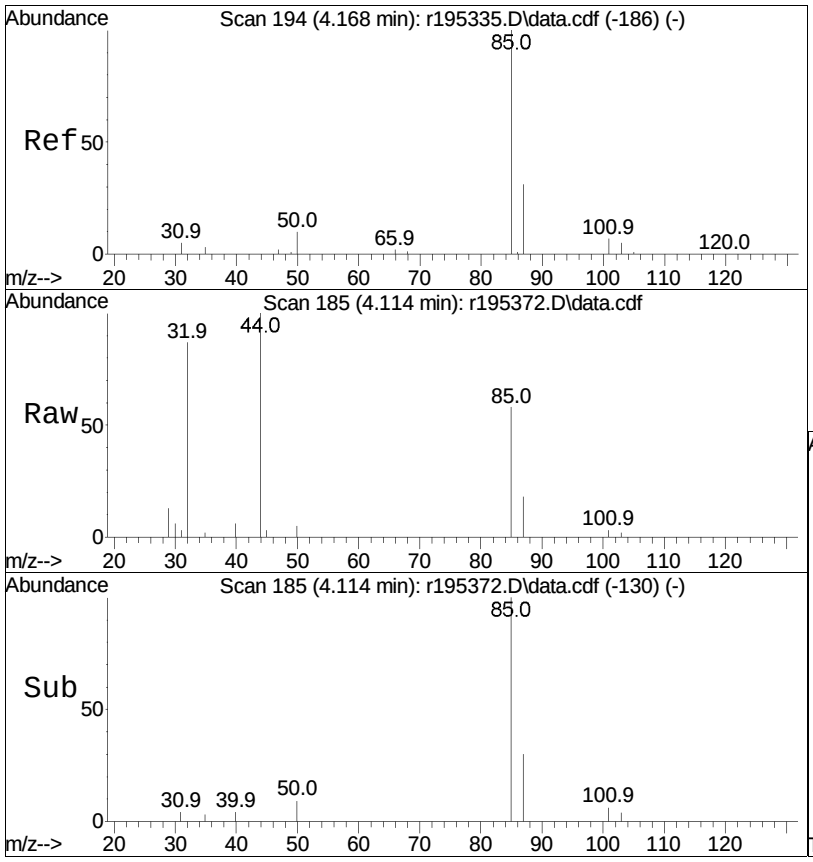
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195372.D
Acq On : 4 Nov 2020 7:16 PM
Operator : AIRLAB19:RY
Sample : L2047588-04,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:23:40 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab19\2020\11\201104T\r195365.D

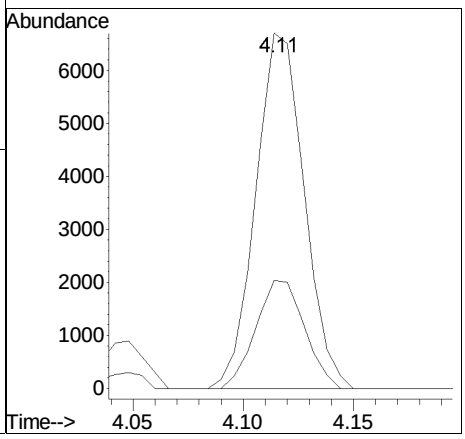


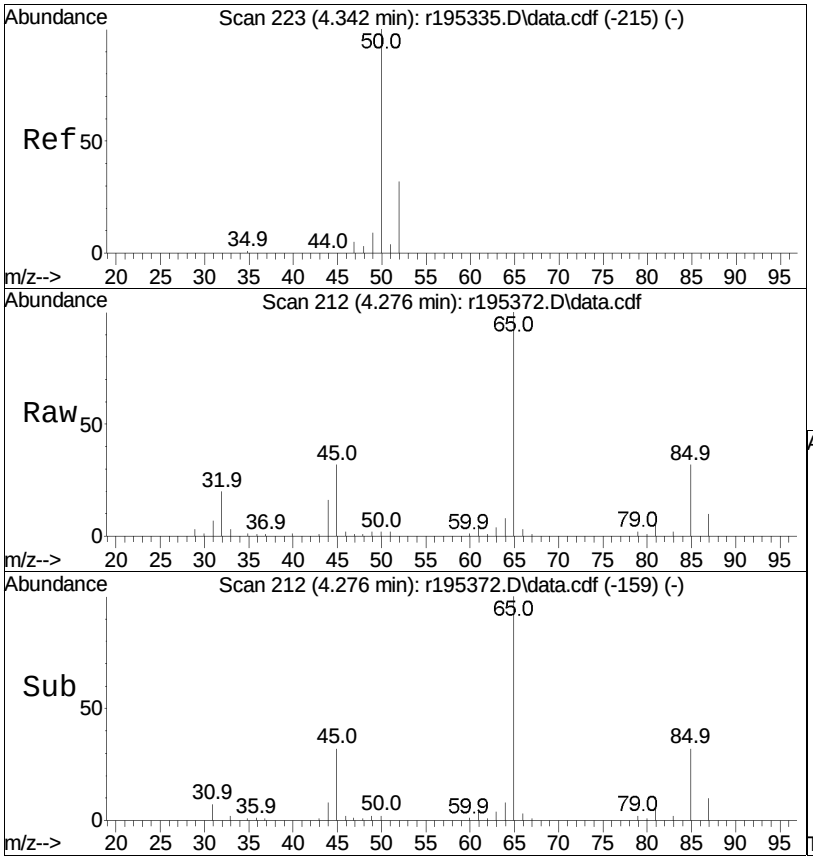


#5
dichlorodifluoromethane
Concen: 0.36 ppbV
RT: 4.11 min Scan# 185
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 85 Resp: 10234

Ion	Ratio	Lower	Upper
85	100		
87	30.4	24.6	37.0

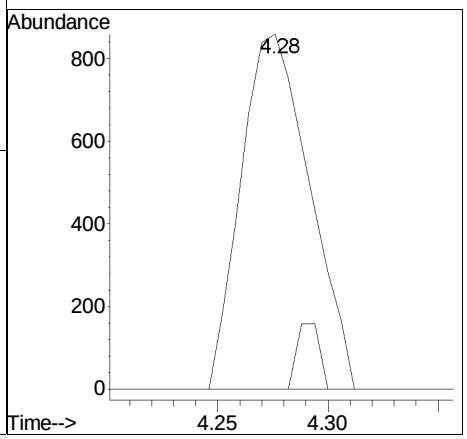


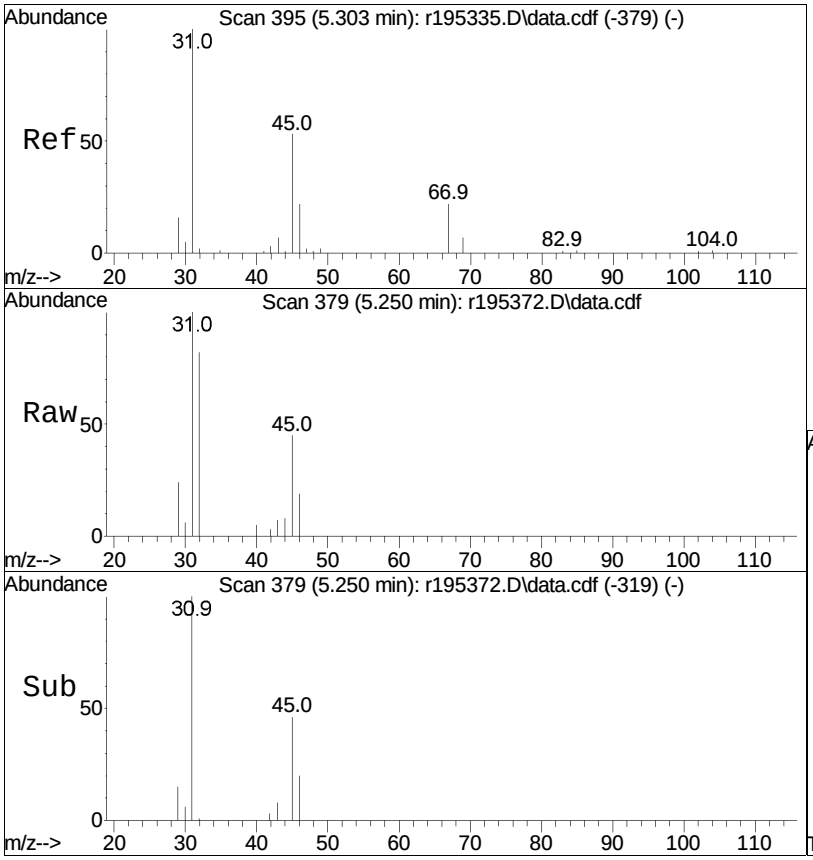


#6
chloromethane
Concen: 0.09 ppbV
RT: 4.28 min Scan# 212
Delta R.T. -0.012 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 50 Resp: 1862

Ion	Ratio	Lower	Upper
50	100		
52	0.0	25.3	37.9#

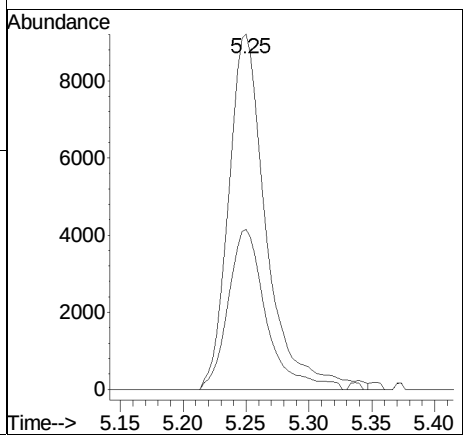


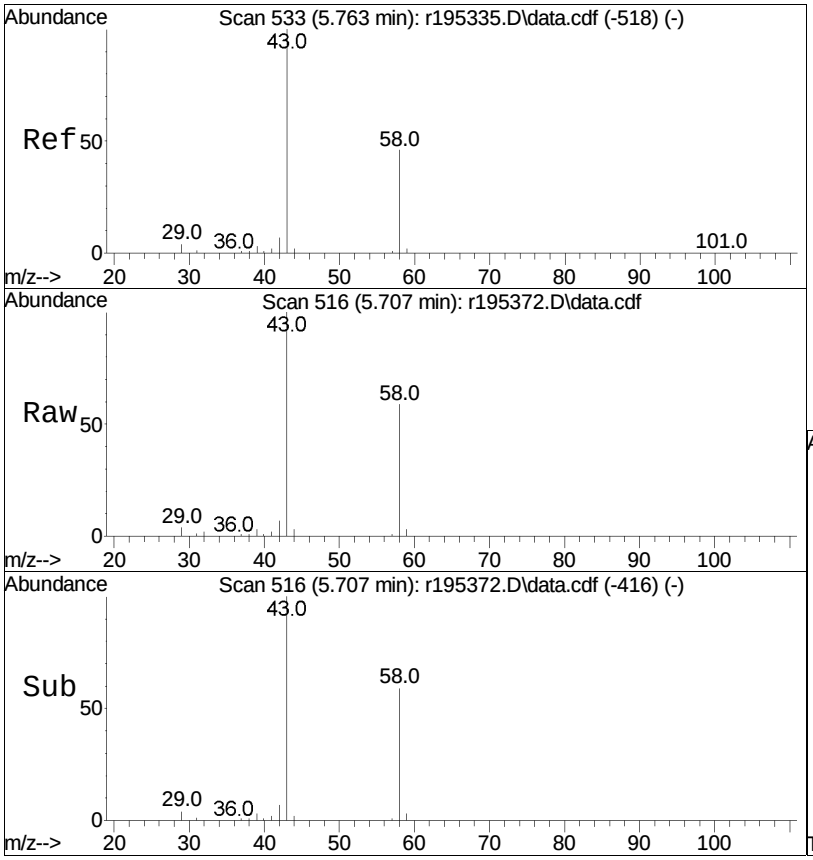


#15
ethanol
Concen: 1.21 ppbV
RT: 5.25 min Scan# 379
Delta R.T. 0.003 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 31 Resp: 19248

Ion	Ratio	Lower	Upper
31	100		
45	45.0	42.5	63.7

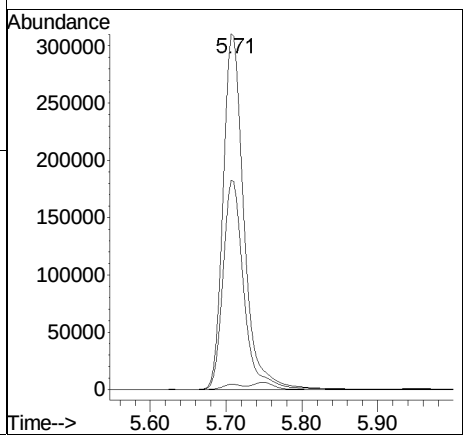


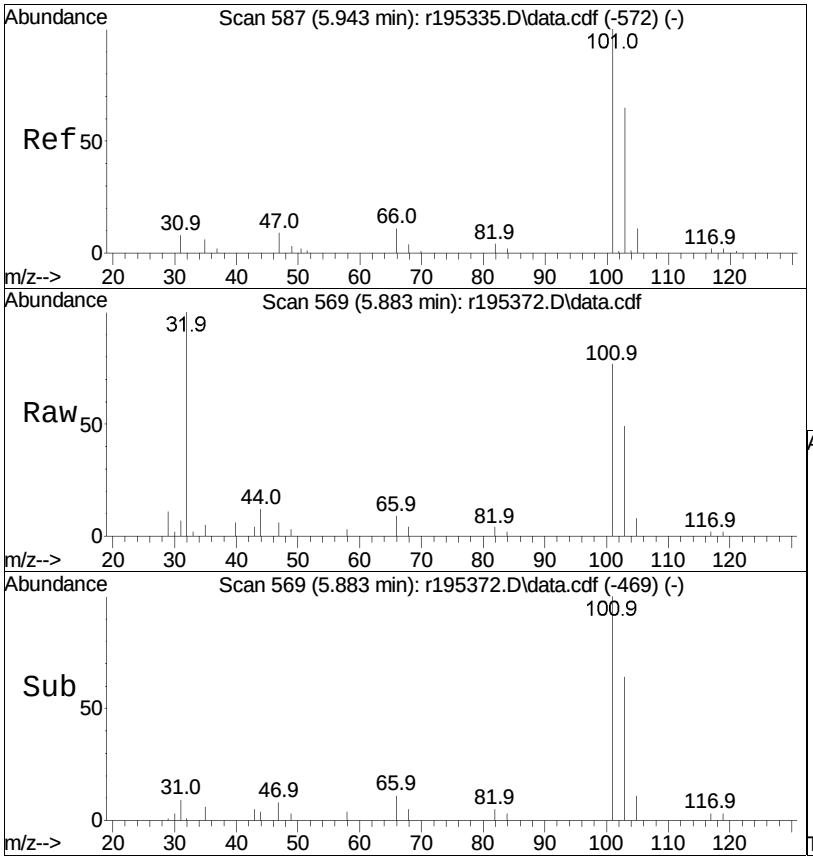


#19
acetone
Concen: 21.90 ppbV
RT: 5.71 min Scan# 516
Delta R.T. 0.003 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 43 Resp: 591310

Ion	Ratio	Lower	Upper
43	100		
58	58.9	36.6	54.8#
57	1.5	0.9	1.3#

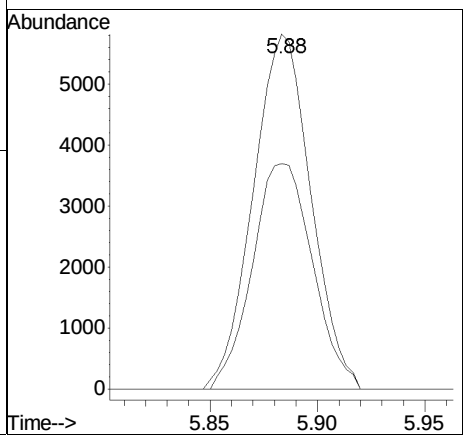


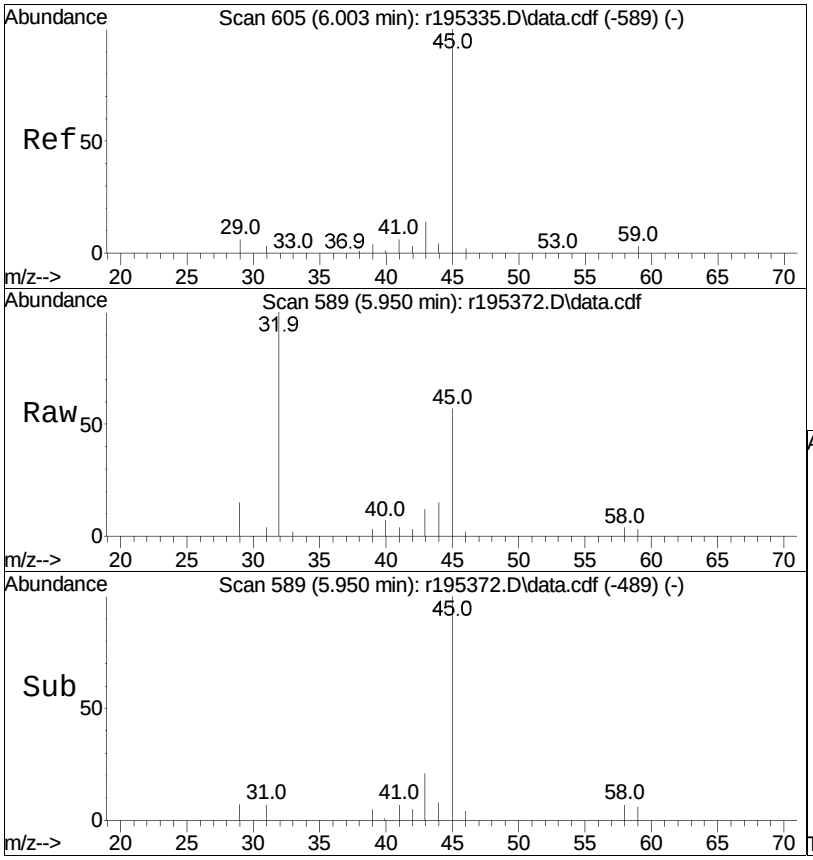


#21
trichlorofluoromethane
Concen: 0.49 ppbV
RT: 5.88 min Scan# 569
Delta R.T. 0.003 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion:101 Resp: 10904

Ion	Ratio	Lower	Upper
101	100		
103	63.5	52.3	78.5

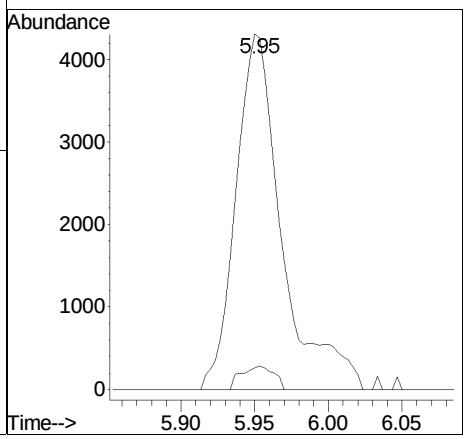


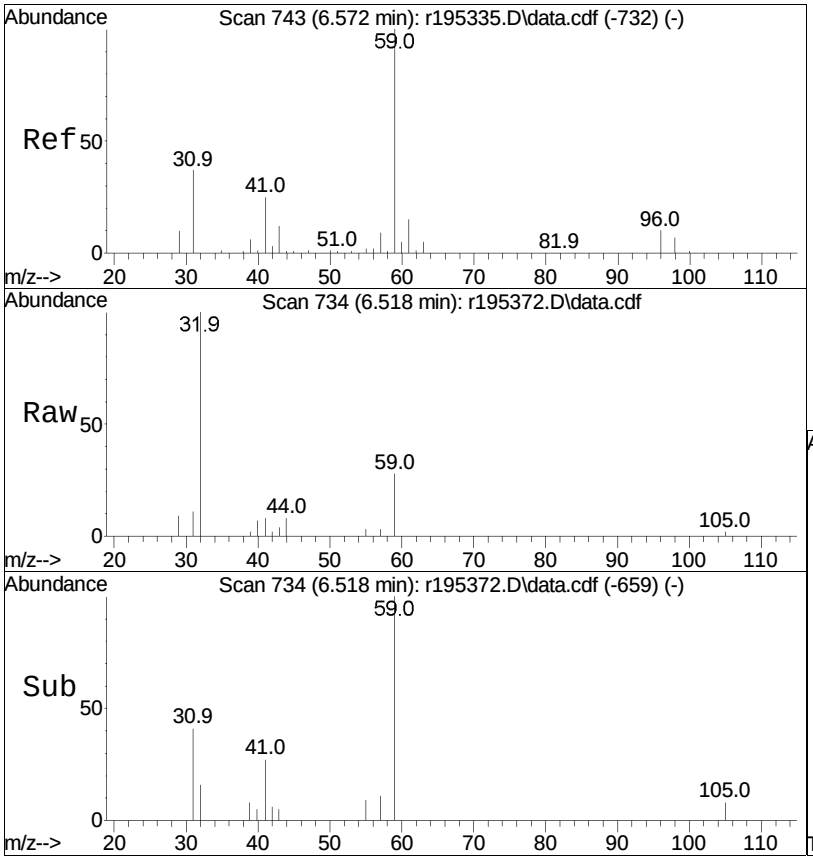


#22
isopropyl alcohol
Concen: 0.23 ppbV
RT: 5.95 min Scan# 589
Delta R.T. 0.003 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 45 Resp: 9354

Ion	Ratio	Lower	Upper
45	100		
59	6.1	2.6	4.0#

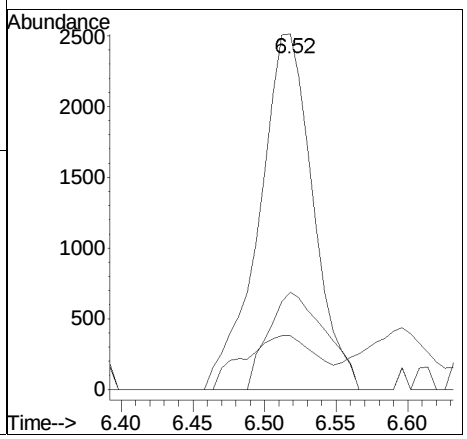


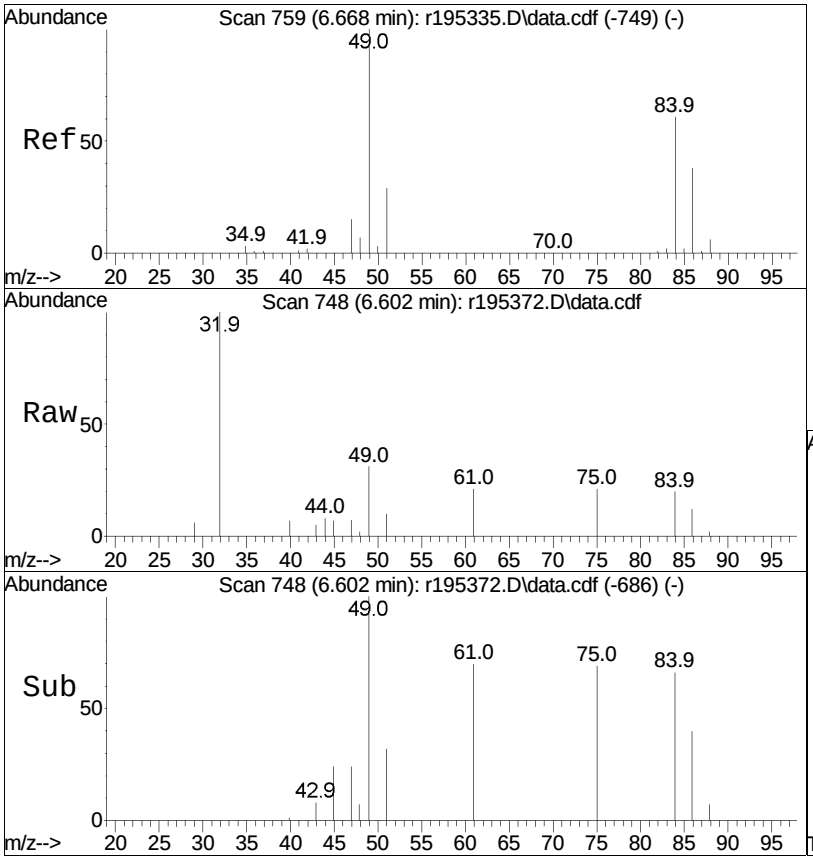


#27
tertiary butyl alcohol
Concen: 0.20 ppbV
RT: 6.52 min Scan# 734
Delta R.T. 0.006 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 59 Resp: 6587

Ion	Ratio	Lower	Upper
59	100		
41	27.4	19.8	29.8
43	15.2	10.0	15.0#

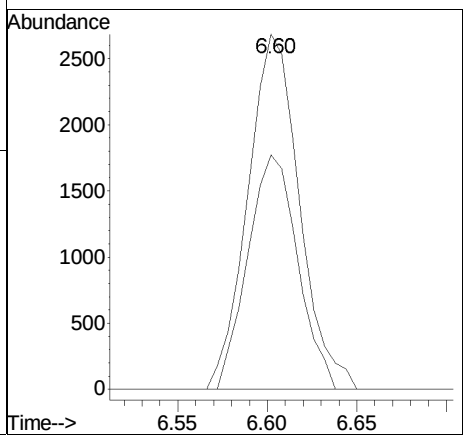


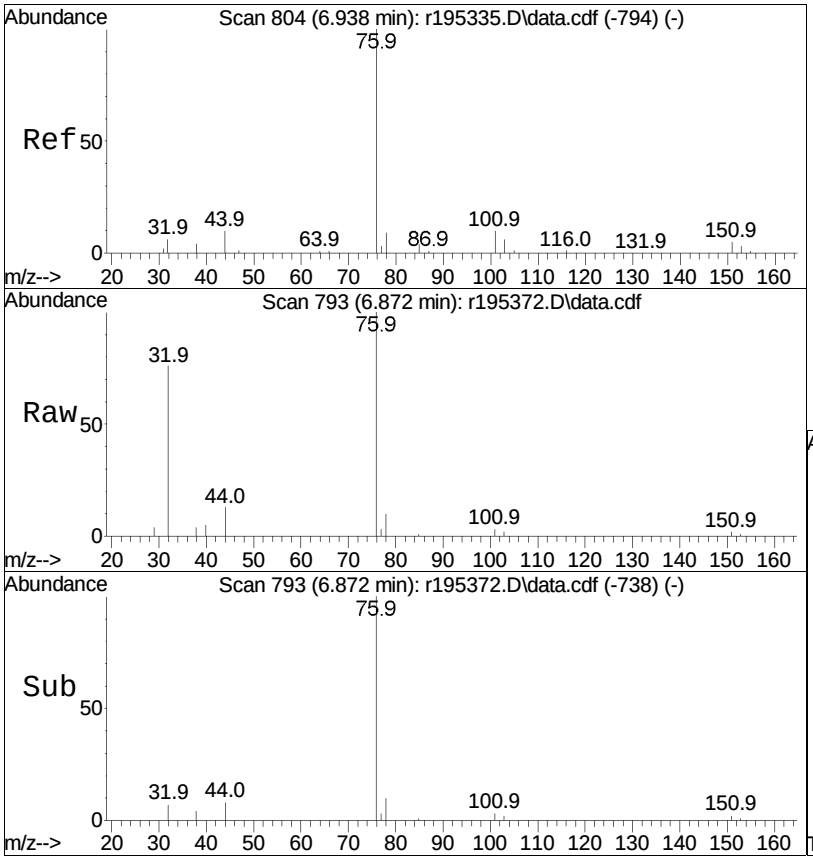


#28
methylene chloride
Concen: 0.21 ppbV
RT: 6.60 min Scan# 748
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 49 Resp: 5387

Ion	Ratio	Lower	Upper
49	100		
84	66.0	48.8	73.2

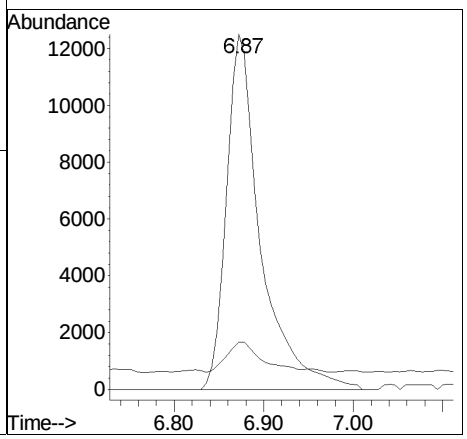


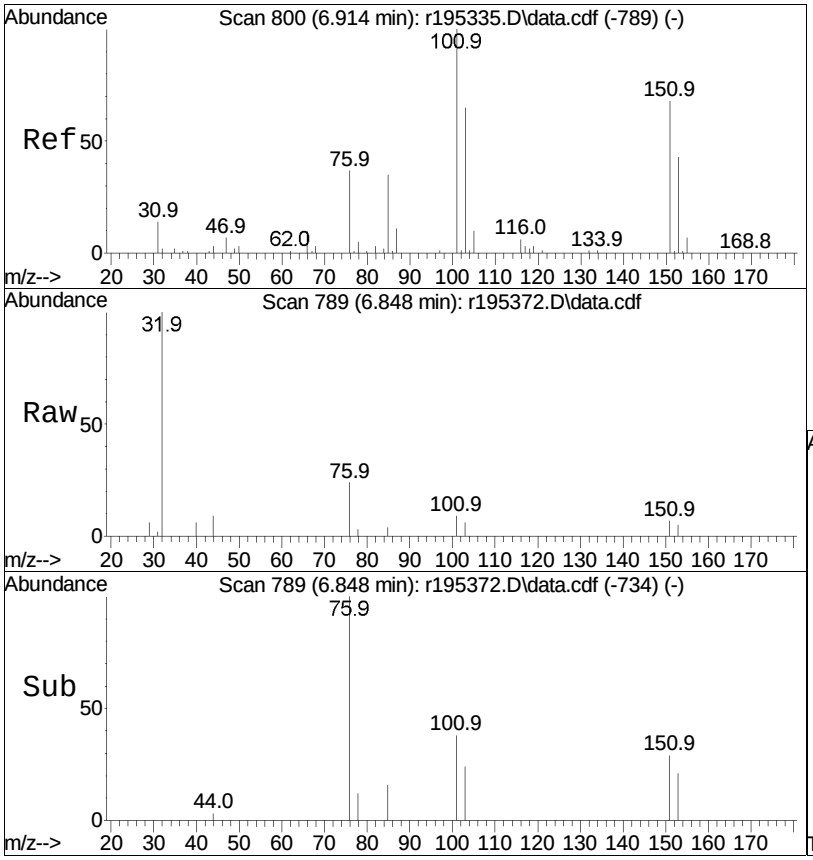


#30
carbon disulfide
Concen: 0.52 ppbV
RT: 6.87 min Scan# 793
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 76 Resp: 33202

Ion	Ratio	Lower	Upper
76	100		
44	13.3	7.9	11.9#

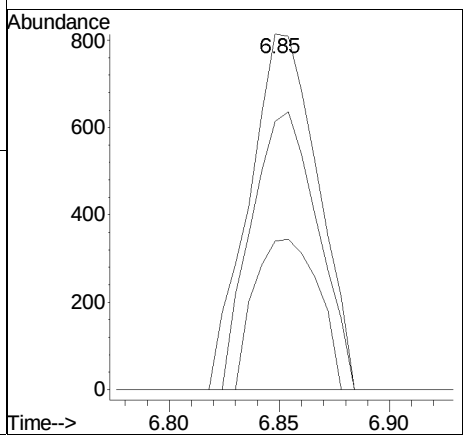


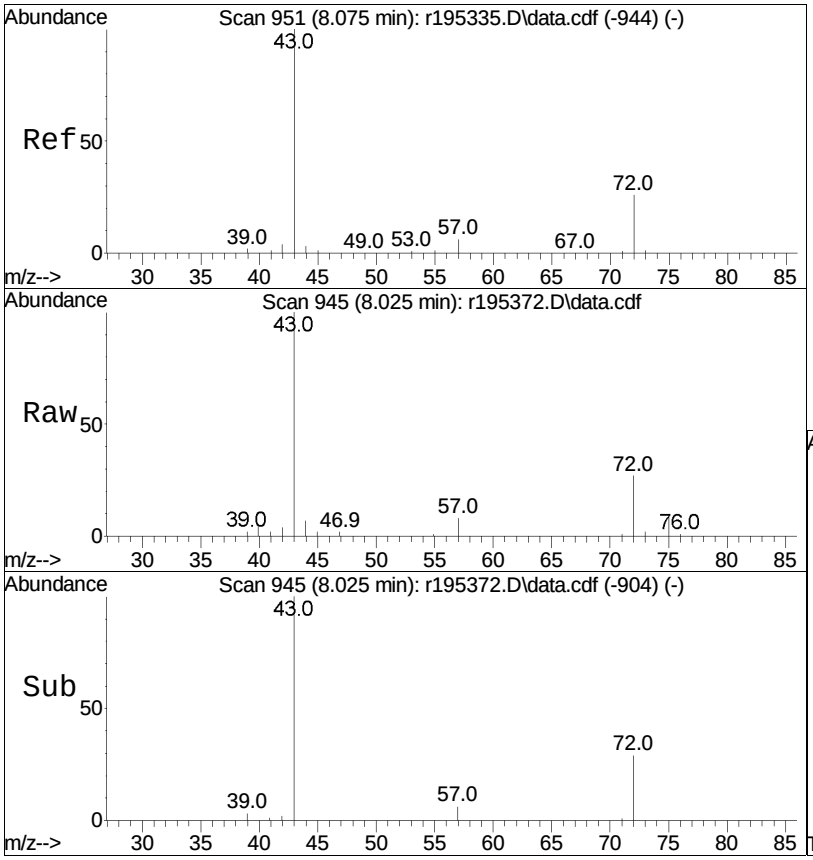


#31
Freon 113
Concen: 0.06 ppbV
RT: 6.85 min Scan# 789
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion:101 Resp: 1767

Ion	Ratio	Lower	Upper
101	100		
85	41.8	27.9	41.9
151	75.4	54.2	81.2

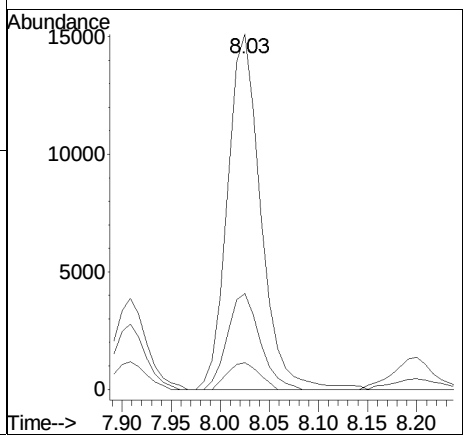


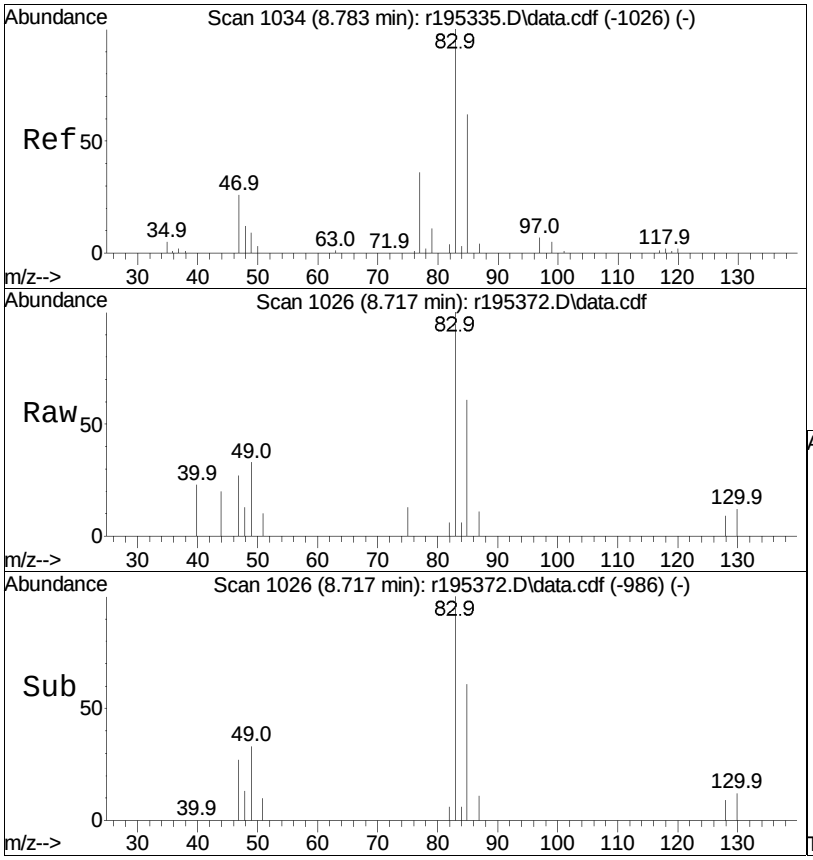


#36
2-butanone
Concen: 0.72 ppbV
RT: 8.03 min Scan# 945
Delta R.T. 0.008 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 43 Resp: 35737

Ion	Ratio	Lower	Upper
43	100		
72	27.0	21.0	31.6
57	7.5	5.1	7.7

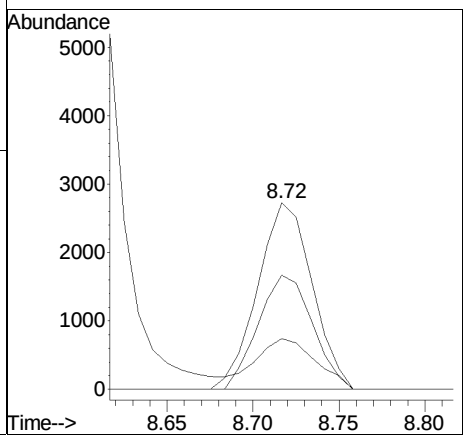


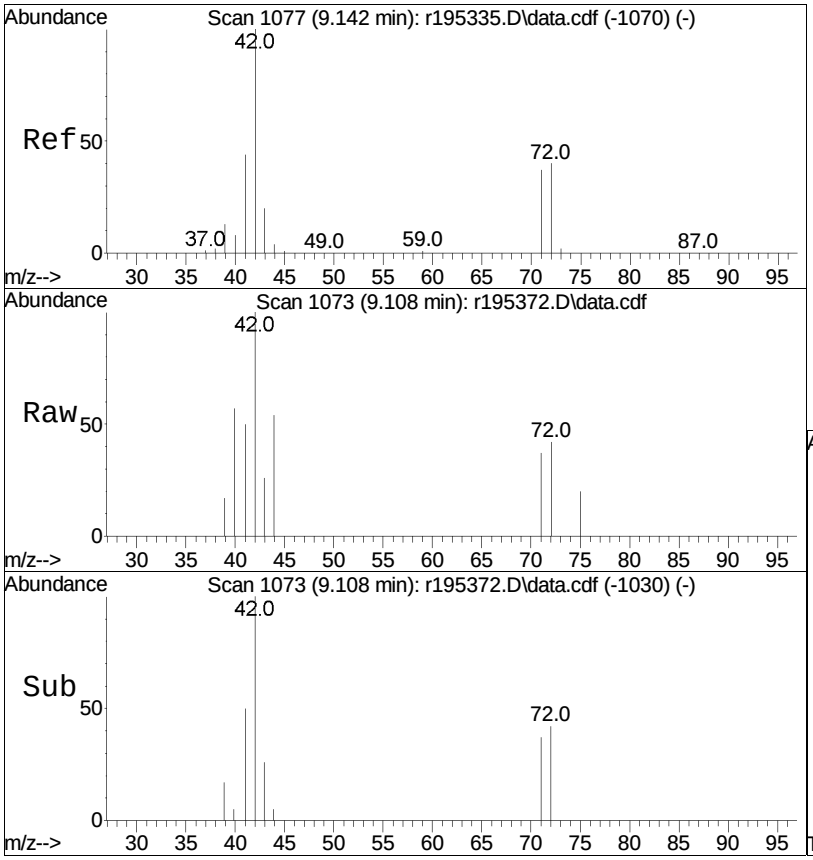


#39
chloroform
Concen: 0.20 ppbV
RT: 8.72 min Scan# 1026
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 83 Resp: 6014

Ion	Ratio	Lower	Upper
83	100		
85	61.2	49.8	74.8
47	27.2	20.8	31.2

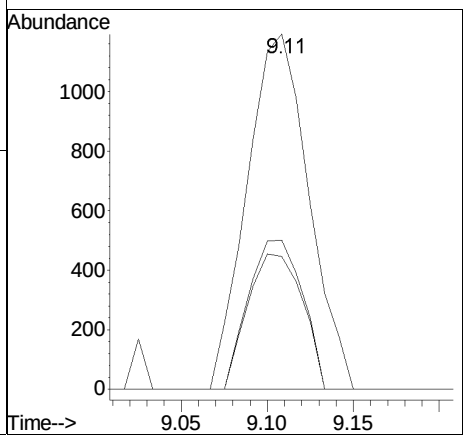


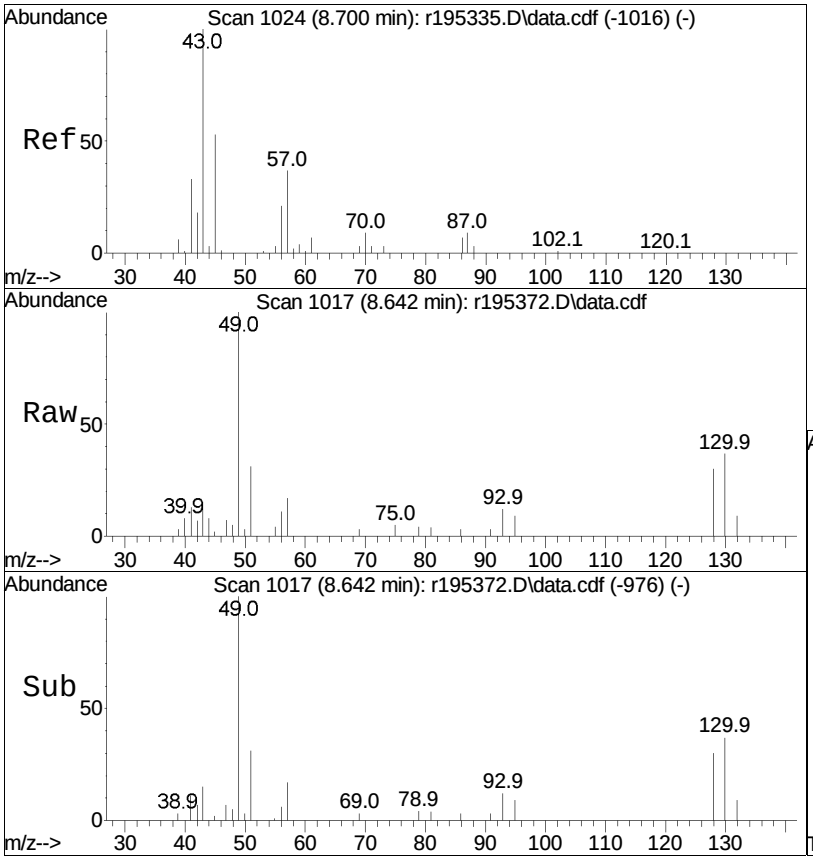


#40
Tetrahydrofuran
Concen: 0.09 ppbV
RT: 9.11 min Scan# 1073
Delta R.T. 0.025 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 42 Resp: 2983

Ion	Ratio	Lower	Upper
42	100		
71	37.4	29.7	44.5
72	42.0	32.2	48.4

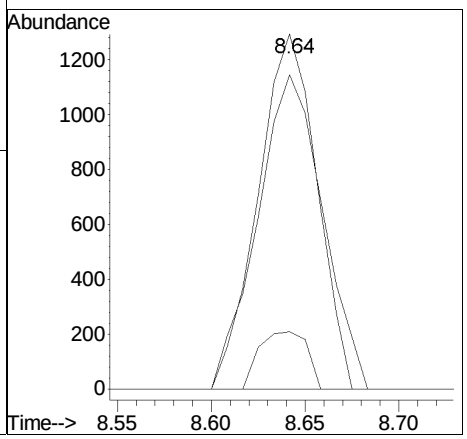


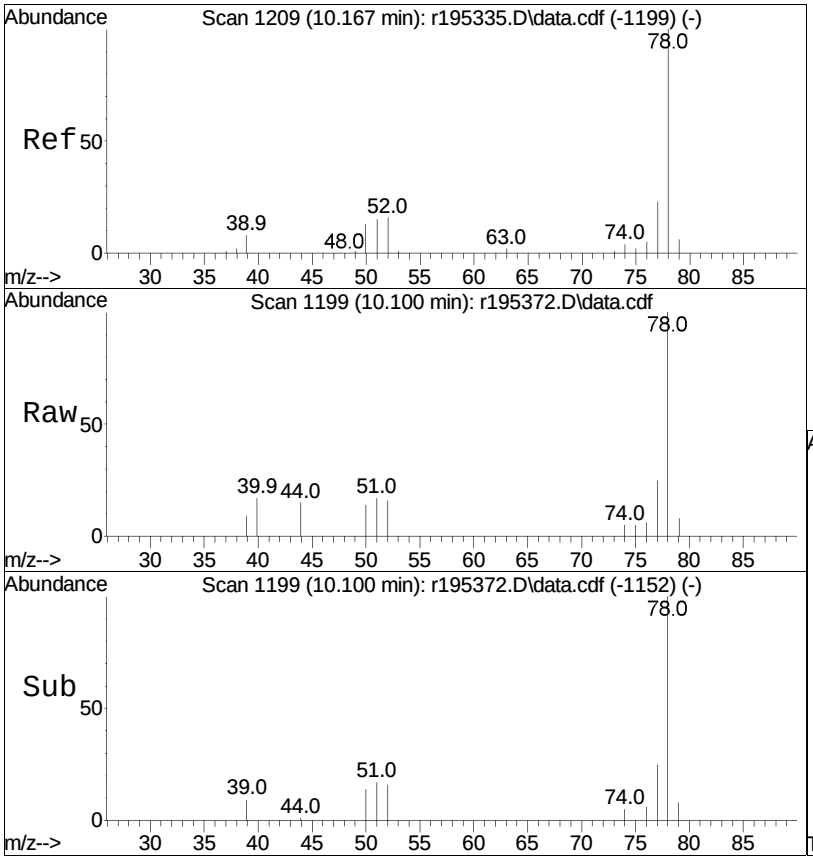


#44
hexane
Concen: 0.08 ppbV
RT: 8.64 min Scan# 1017
Delta R.T. 0.008 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 57 Resp: 2827

Ion	Ratio	Lower	Upper
57	100		
43	88.6	217.9	326.9#
86	16.2	16.2	24.2

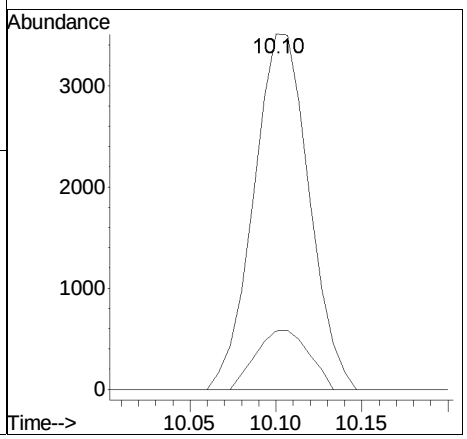


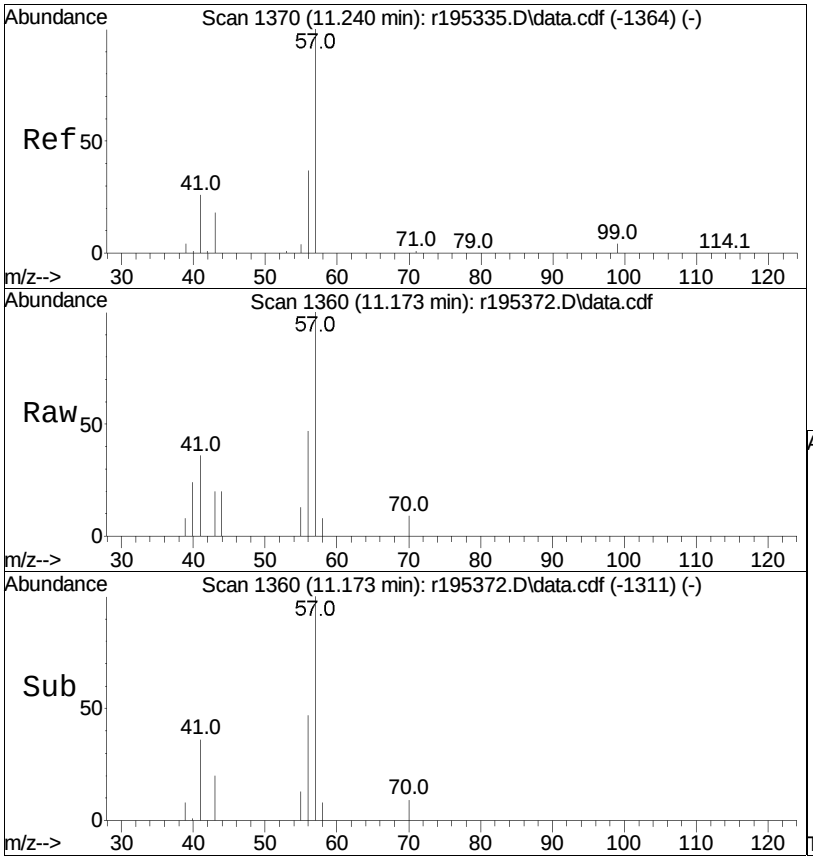


#50
benzene
Concen: 0.11 ppbV
RT: 10.10 min Scan# 1199
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 78 Resp: 7857

Ion	Ratio	Lower	Upper
78	100		
52	16.5	12.6	19.0

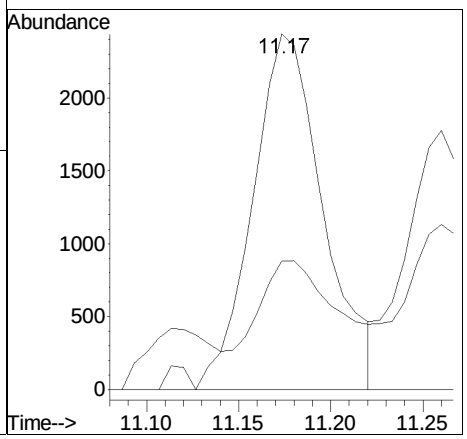


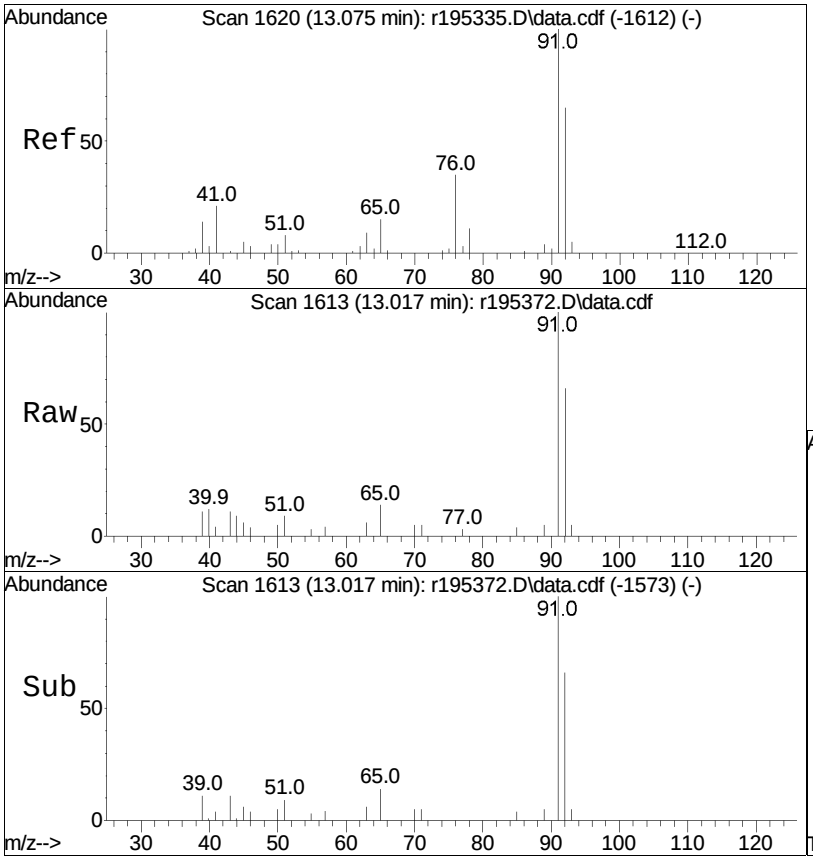


#60
2,2,4-trimethylpentane
Concen: 0.06 ppbV
RT: 11.17 min Scan# 1360
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 57 Resp: 6484

Ion	Ratio	Lower	Upper
57	100		
99	0.0	5.3	7.9#
41	36.1	20.4	30.6#

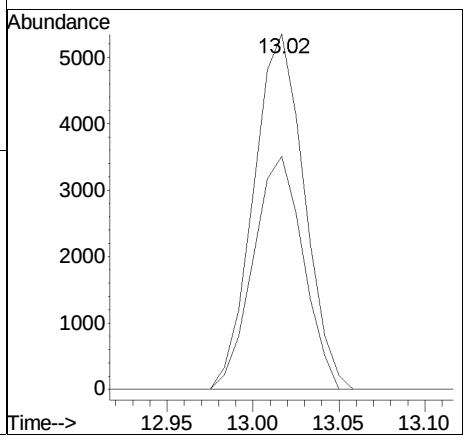


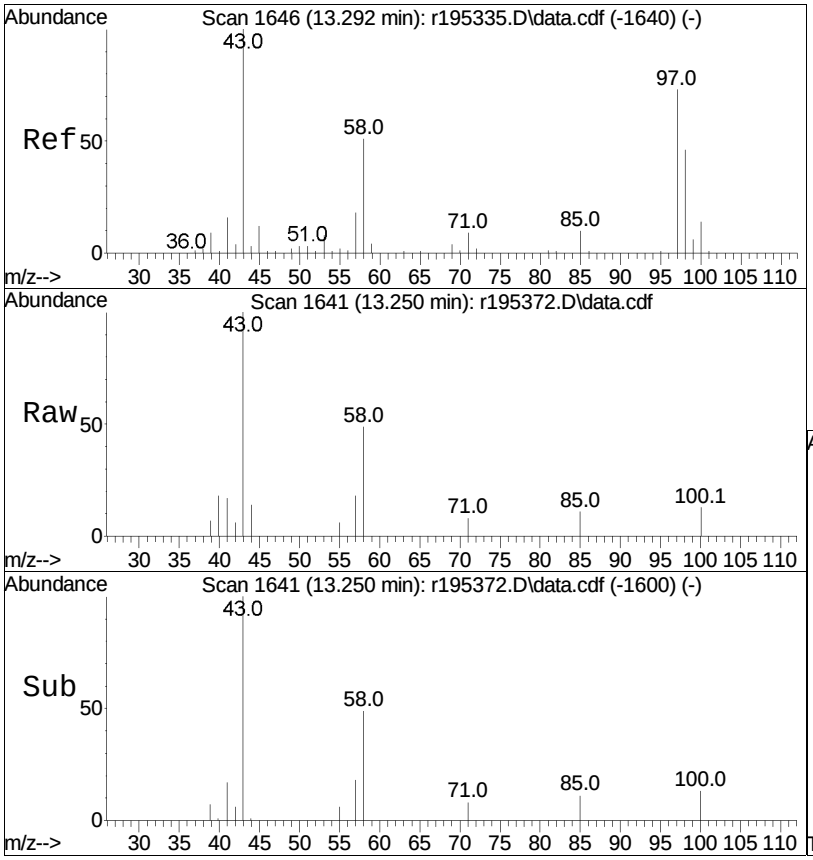


#68
toluene
Concen: 0.16 ppbV
RT: 13.02 min Scan# 1613
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 91 Resp: 10981

Ion	Ratio	Lower	Upper
91	100		
92	65.6	52.1	78.1

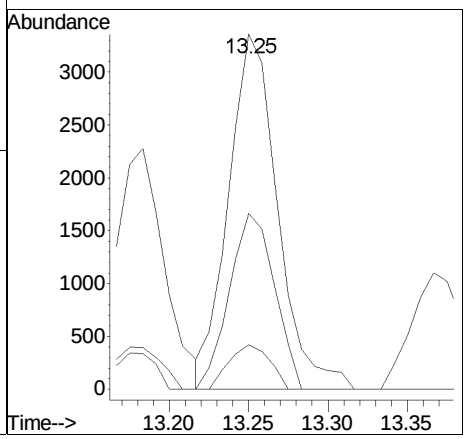


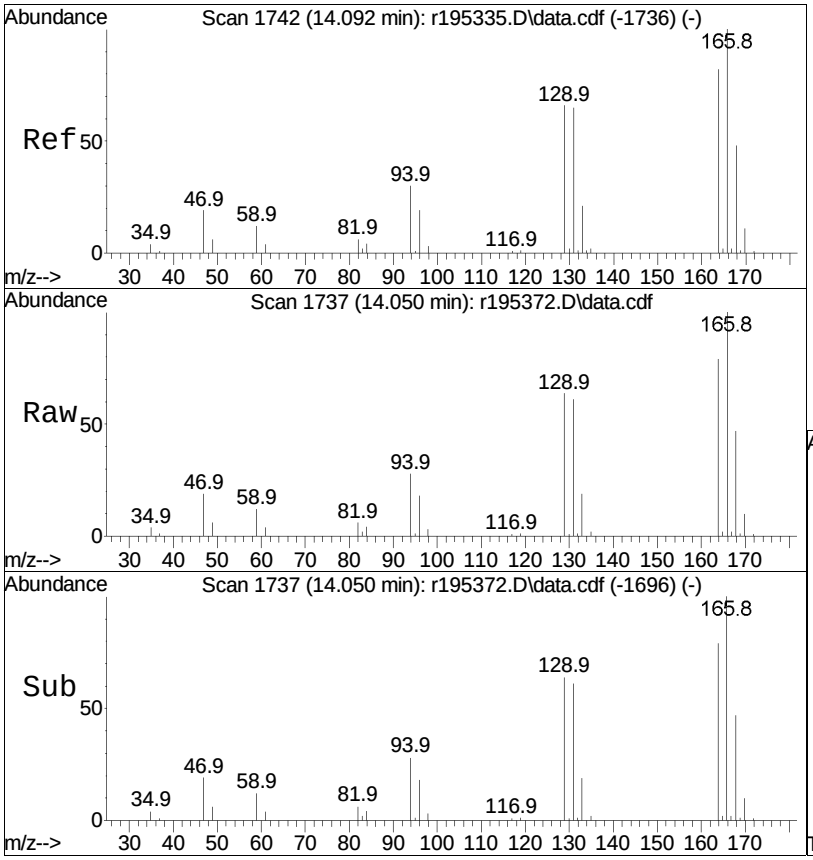


#72
2-hexanone
Concen: 0.14 ppbV
RT: 13.25 min Scan# 1641
Delta R.T. 0.008 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 43 Resp: 7239

Ion	Ratio	Lower	Upper
43	100		
58	49.5	40.7	61.1
100	12.6	10.9	16.3

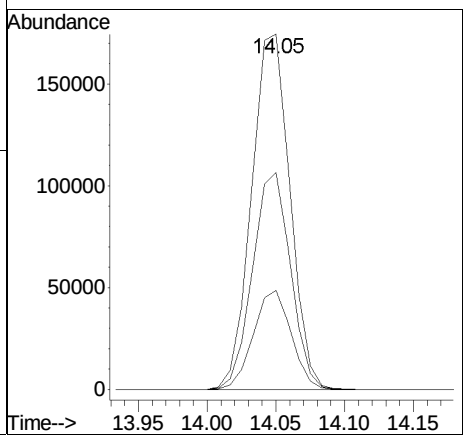


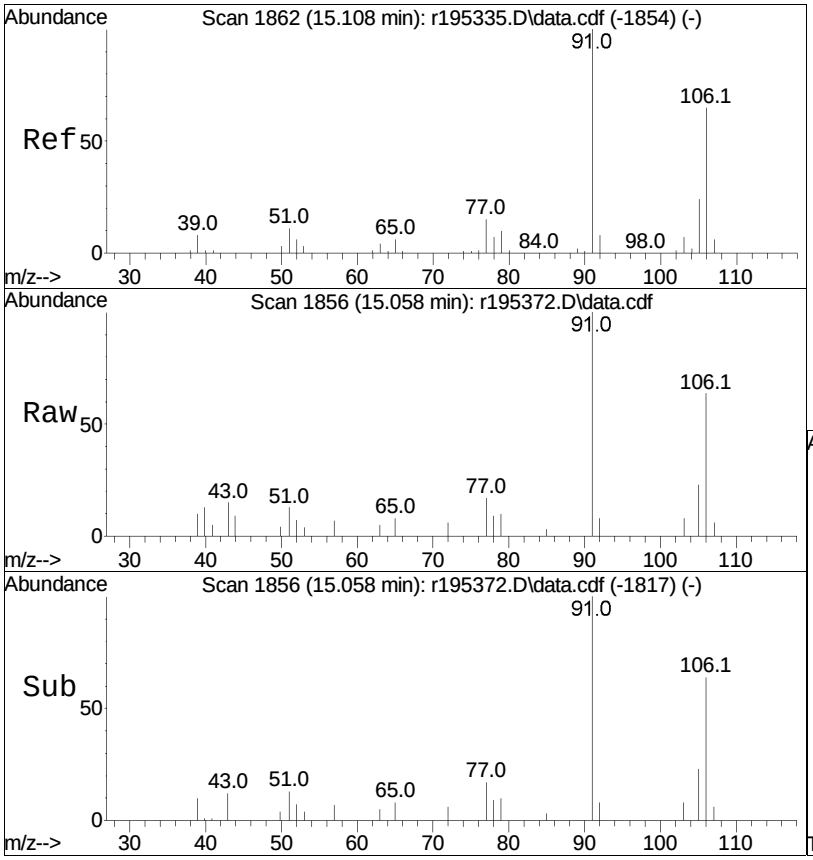


#78
tetrachloroethene
Concen: 12.96 ppbV
RT: 14.05 min Scan# 1737
Delta R.T. 0.008 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion:166 Resp: 338842

Ion	Ratio	Lower	Upper
166	100		
131	61.0	51.7	77.5
94	27.9	24.0	36.0

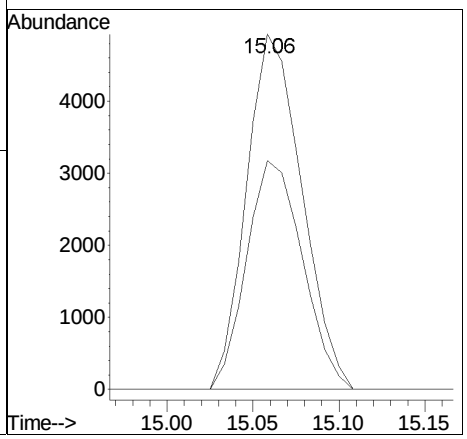


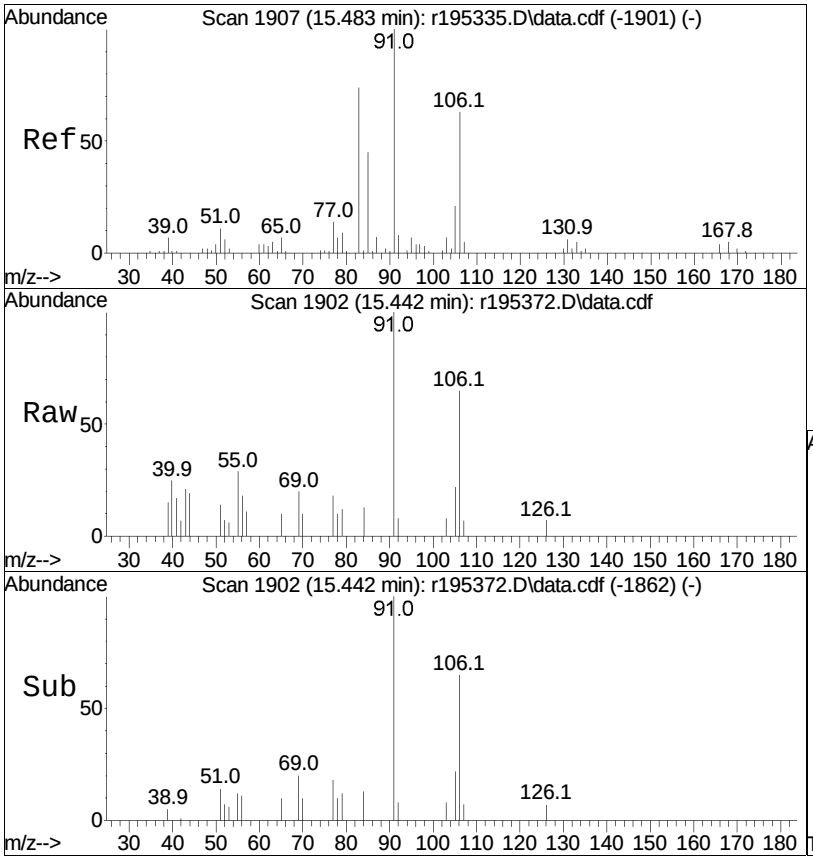


#83
m+p-xylene
Concen: 0.17 ppbV
RT: 15.06 min Scan# 1856
Delta R.T. -0.008 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 91 Resp: 11053

Ion	Ratio	Lower	Upper
91	100		
106	64.4	51.8	77.6

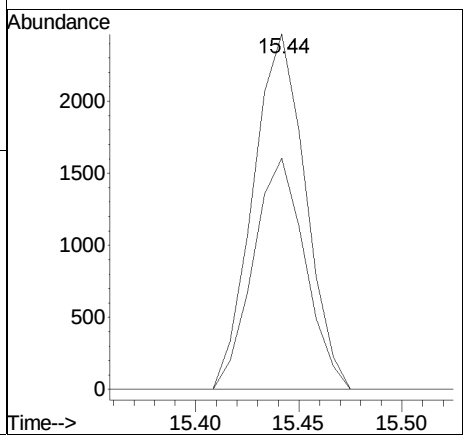


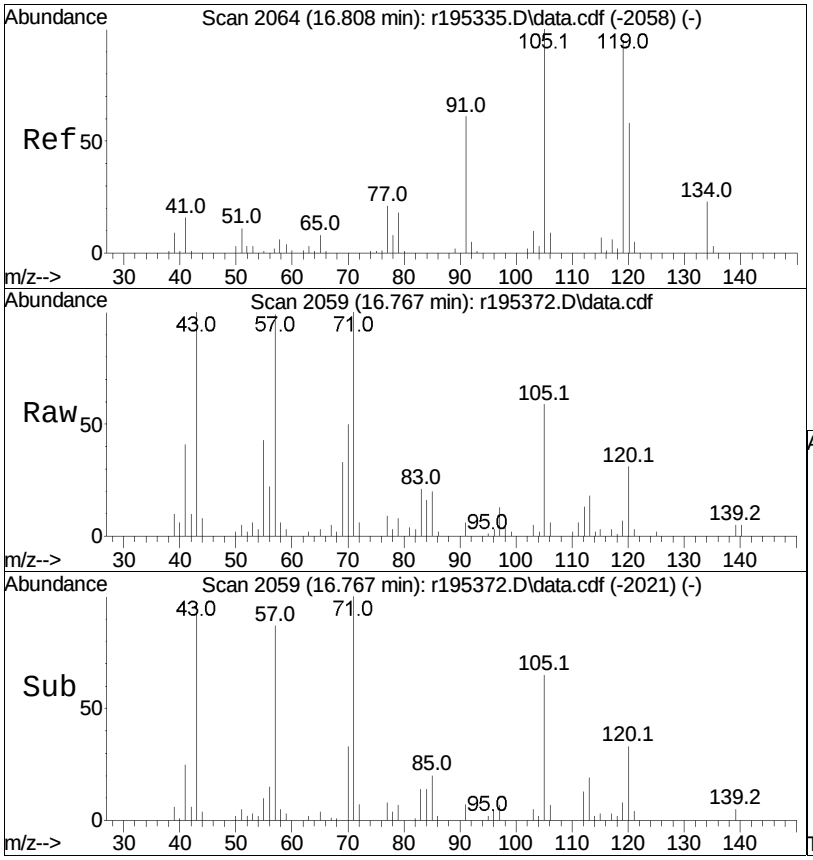


#87
o-xylene
Concen: 0.07 ppbV
RT: 15.44 min Scan# 1902
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion: 91 Resp: 4368

Ion	Ratio	Lower	Upper
91	100		
106	65.0	50.2	75.4

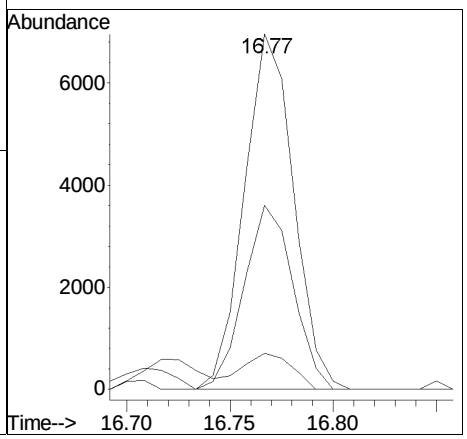




#99
1,2,4-trimethylbenzene
Concen: 0.15 ppbV
RT: 16.77 min Scan# 2059
Delta R.T. 0.000 min
Lab File: r195372.D
Acq: 4 Nov 2020 7:16 PM

Tgt Ion:105 Resp: 11554

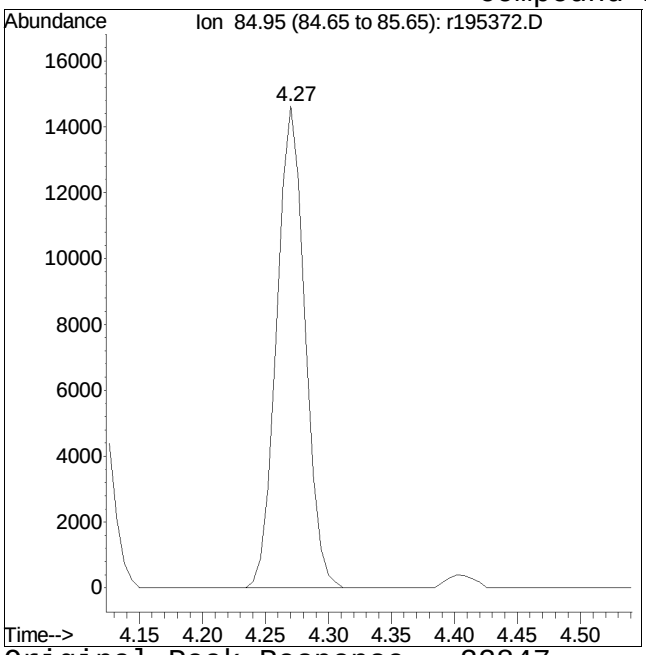
Ion	Ratio	Lower	Upper
105	100		
120	51.8	46.2	69.4
91	10.1	48.7	73.1#

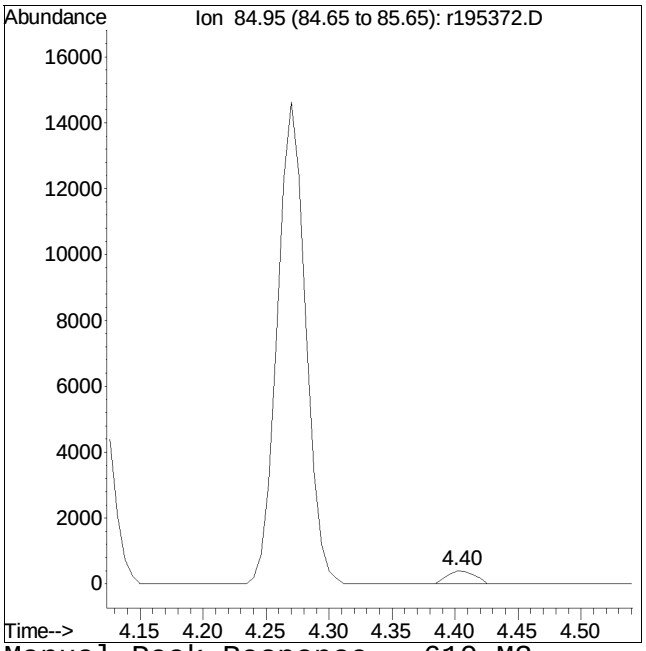


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195372.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:7: 6 Instrument :
Sample : L2047588-04,3,250,250 Quant Date : 11/5/2020 7:40 am

Compound #7: Freon-114





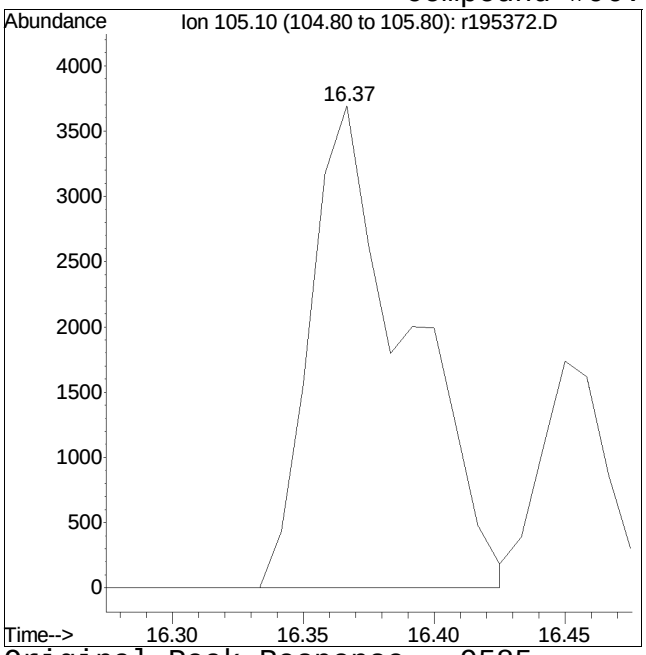
Original Peak Response = 22847 Manual Peak Response = 610 M3

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

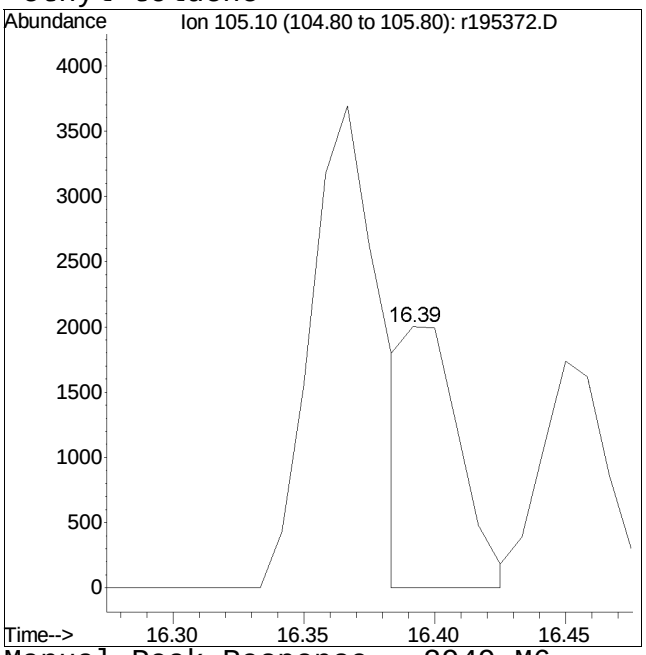
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195372.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:7: 6 Instrument :
Sample : L2047588-04,3,250,250 Quant Date : 11/5/2020 7:40 am

Compound #96: 4-ethyl toluene



Original Peak Response = 9585



Manual Peak Response = 2949 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195374.D
Acq On : 4 Nov 2020 8:42 PM
Operator : AIRLAB19:RY
Sample : L2047588-05,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:41:20 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.59	49	364955	10.000	ppbV	0.00
Standard Area = 384278			Recovery	=	94.97%	
43) 1,4-difluorobenzene	10.43	114	829284	10.000	ppbV	0.00
Standard Area = 866249			Recovery	=	95.73%	
67) chlorobenzene-D5	14.58	54	139982	10.000	ppbV	0.00
Standard Area = 149824			Recovery	=	93.43%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.11	85	13915	0.503	ppbV	98
6) chloromethane	4.29		0	N.D.		
7) Freon-114	4.40		0	N.D.		
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.	d	
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.25	31	17885	1.170	ppbV	95
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	671523	25.824	ppbV #	84
21) trichlorofluoromethane	5.88	101	11570	0.540	ppbV	100
22) isopropyl alcohol	5.95	45	9770	0.251	ppbV #	90
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.52	59	7234	0.223	ppbV	98
28) methylene chloride	6.60	49	1460	0.060	ppbV	89
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	6.87	76	12536	0.203	ppbV #	74
31) Freon 113	6.85	101	2742	0.090	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.	d	
36) 2-butanone	8.03	43	55611	1.157	ppbV	98
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	8.72	83	2705	0.093	ppbV	99
40) Tetrahydrofuran	9.11		0	N.D.		
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195374.D
Acq On : 4 Nov 2020 8:42 PM
Operator : AIRLAB19:RY
Sample : L2047588-05,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:41:20 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	hexane	8.64		0	N.D.			
48)	1,1,1-trichloroethane	9.66		0	N.D.			
50)	benzene	10.10	78	5123	0.074	ppbV		98
52)	carbon tetrachloride	10.25		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	11.15		0	N.D.			
59)	trichloroethene	11.14		0	N.D.			
60)	2,2,4-trimethylpentane	11.17		0	N.D.			
62)	heptane	11.43		0	N.D.			
63)	cis-1,3-dichloropropene	0.00		0	N.D.			
64)	4-methyl-2-pentanone	12.05		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	13.02	91	11607	0.173	ppbV		99
72)	2-hexanone	13.25	43	9389	0.180	ppbV		98
74)	dibromochloromethane	0.00		0	N.D.			
75)	1,2-dibromoethane	0.00		0	N.D.			
78)	tetrachloroethene	14.04	166	427130	16.650	ppbV		94
80)	chlorobenzene	0.00		0	N.D.		d	
81)	ethylbenzene	14.93	91	7654	0.099	ppbV		99
83)	m+p-xylene	15.06	91	24729	0.390	ppbV		99
84)	bromoform	0.00		0	N.D.			
85)	styrene	15.36		0	N.D.			
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.		d	
87)	o-xylene	15.44	91	8166	0.130	ppbV		94
96)	4-ethyl toluene	16.39		0	N.D.			
97)	1,3,5-trimethylbenzene	16.45	105	5375	0.066	ppbV	#	96
99)	1,2,4-trimethylbenzene	16.77	105	22178	0.302	ppbV	#	58
101)	Benzyl Chloride	0.00		0	N.D.		d	
102)	1,3-dichlorobenzene	0.00		0	N.D.		d	
103)	1,4-dichlorobenzene	16.94		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195374.D
Acq On : 4 Nov 2020 8:42 PM
Operator : AIRLAB19:RY
Sample : L2047588-05,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:41:20 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

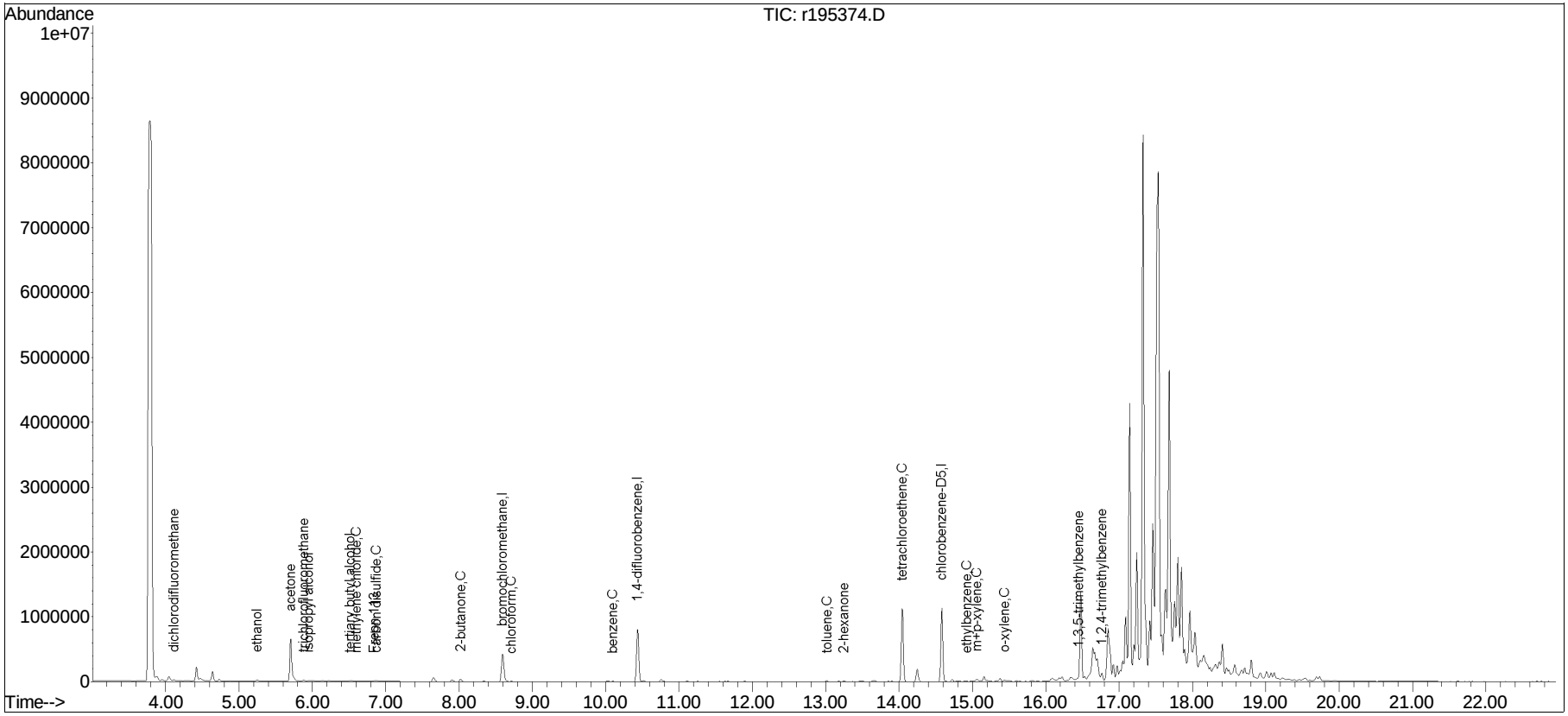
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

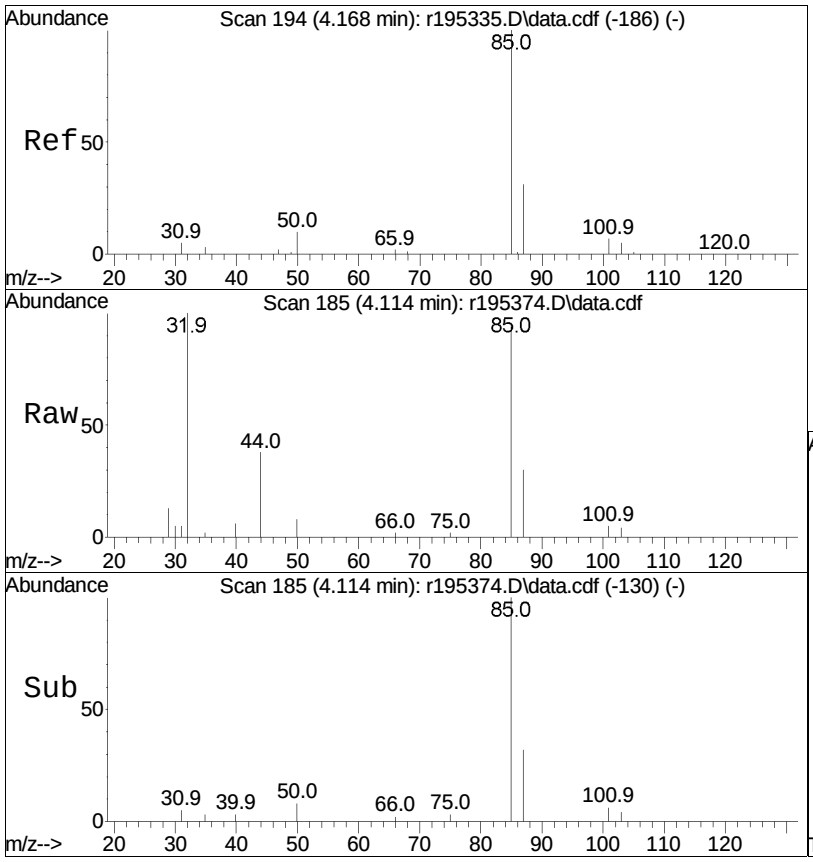
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195374.D
Acq On : 4 Nov 2020 8:42 PM
Operator : AIRLAB19:RY
Sample : L2047588-05,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:41:20 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab19\2020\11\201104T\r195365.D

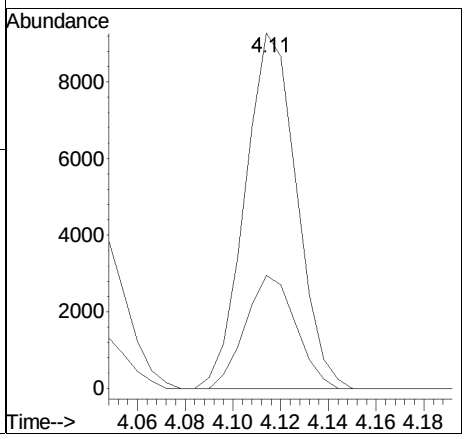


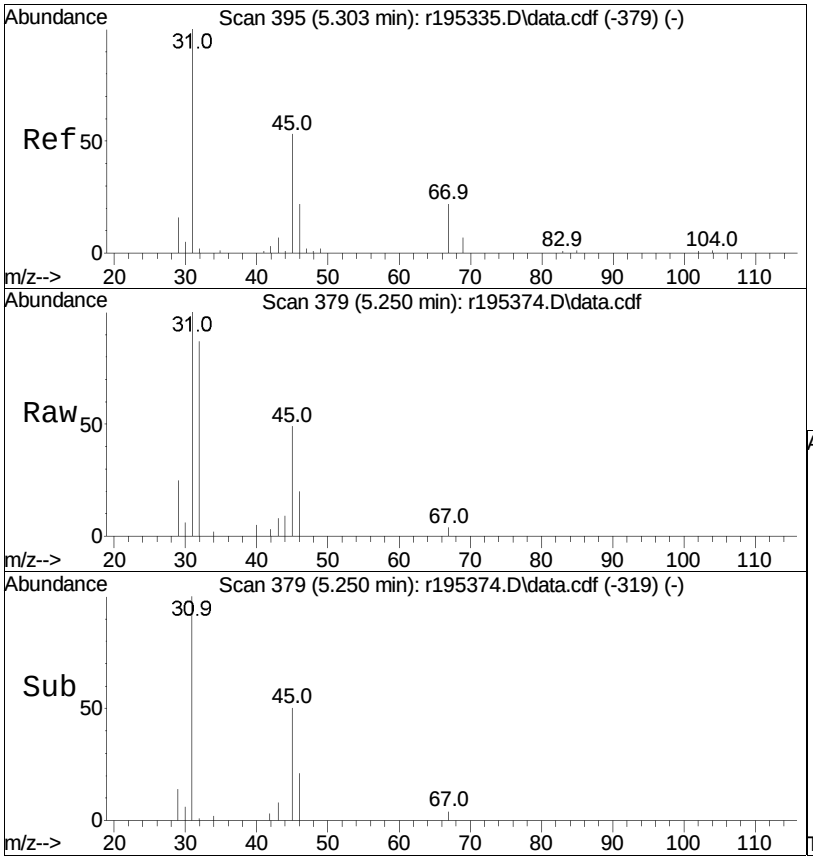


#5
dichlorodifluoromethane
Concen: 0.50 ppbV
RT: 4.11 min Scan# 185
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 85 Resp: 13915

Ion	Ratio	Lower	Upper
85	100		
87	31.8	24.6	37.0

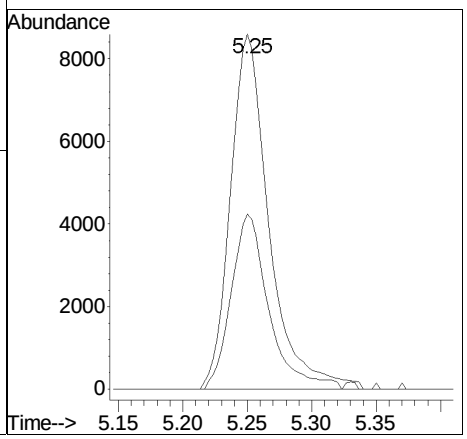


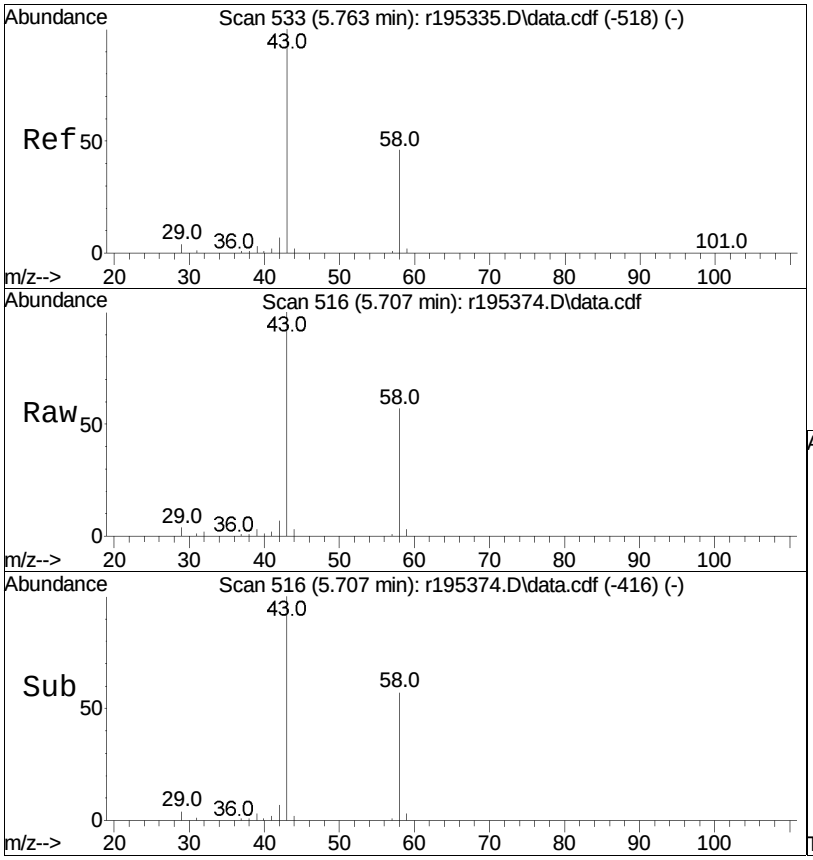


#15
ethanol
Concen: 1.17 ppbV
RT: 5.25 min Scan# 379
Delta R.T. 0.003 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 31 Resp: 17885

Ion	Ratio	Lower	Upper
31	100		
45	49.3	42.5	63.7

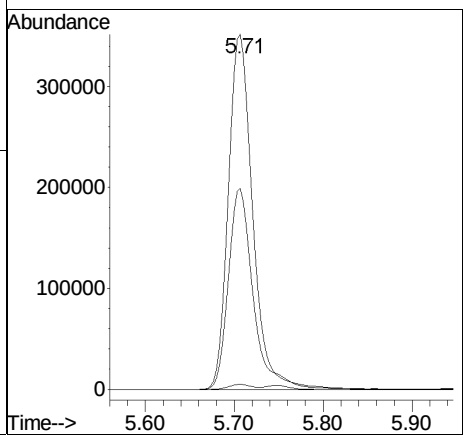


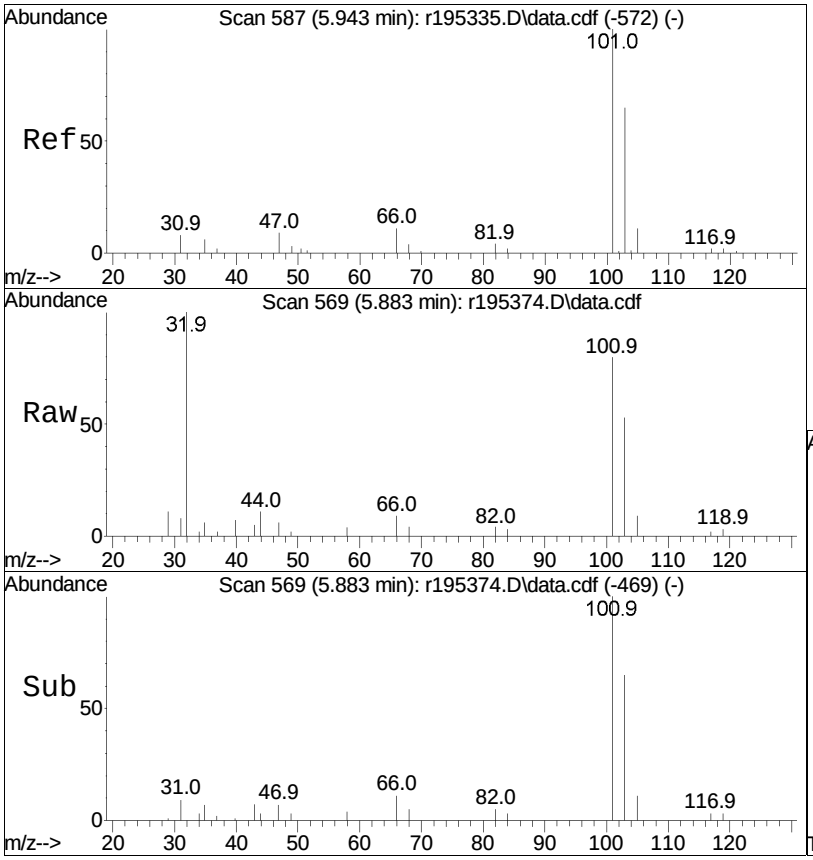


#19
acetone
Concen: 25.82 ppbV
RT: 5.71 min Scan# 516
Delta R.T. 0.003 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 43 Resp: 671523

Ion	Ratio	Lower	Upper
43	100		
58	56.6	36.6	54.8#
57	1.4	0.9	1.3#

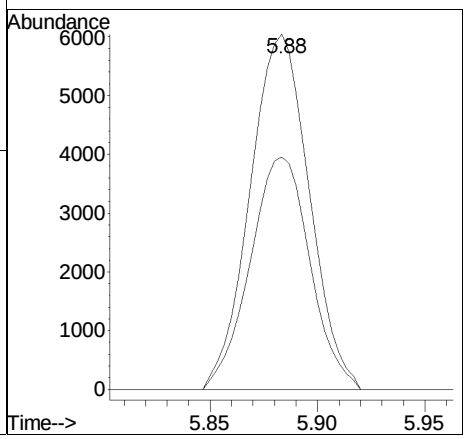


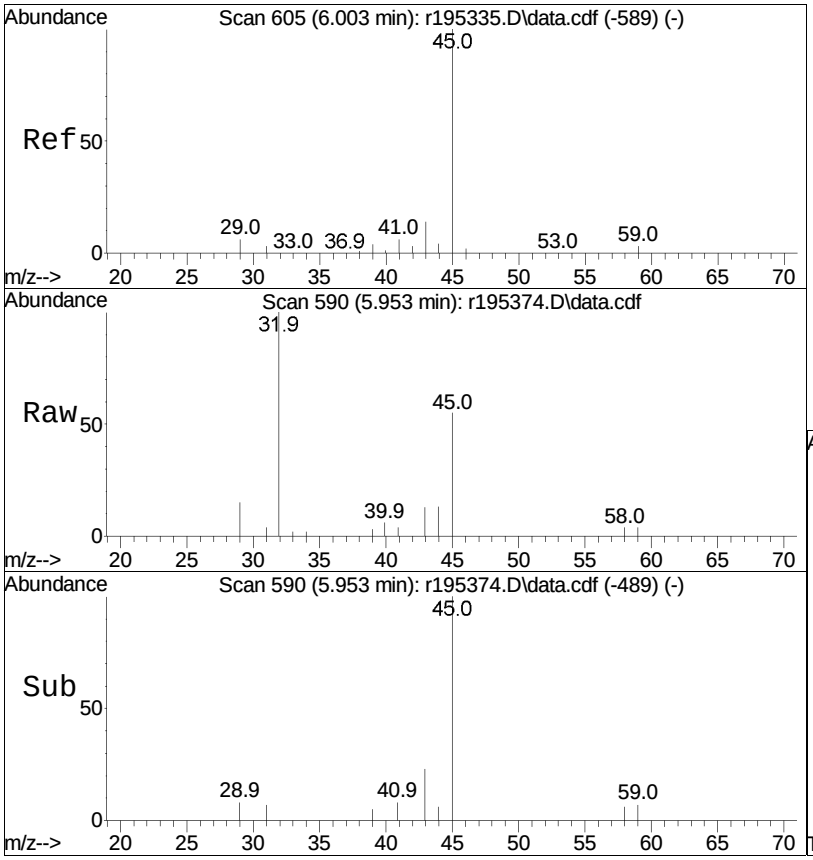


#21
trichlorofluoromethane
Concen: 0.54 ppbV
RT: 5.88 min Scan# 569
Delta R.T. 0.003 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion:101 Resp: 11570

Ion	Ratio	Lower	Upper
101	100		
103	65.4	52.3	78.5

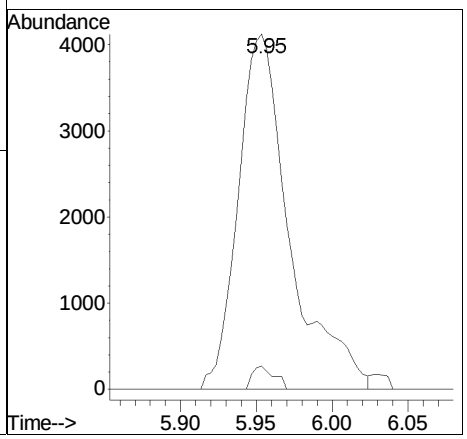


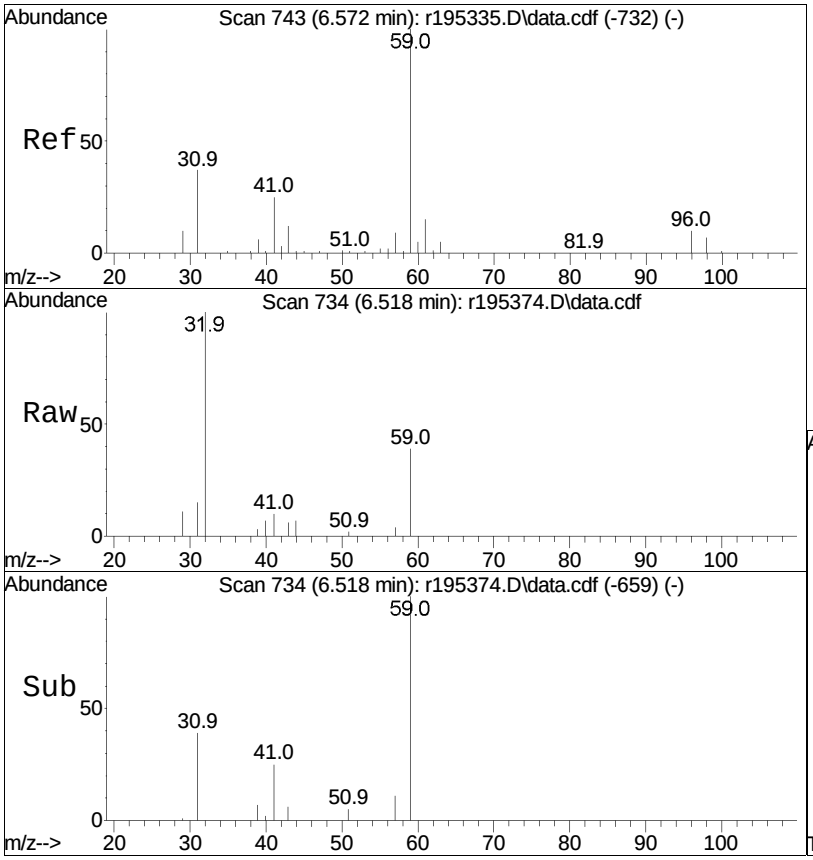


#22
isopropyl alcohol
Concen: 0.25 ppbV
RT: 5.95 min Scan# 590
Delta R.T. 0.007 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 45 Resp: 9770

Ion	Ratio	Lower	Upper
45	100		
59	6.6	2.6	4.0#

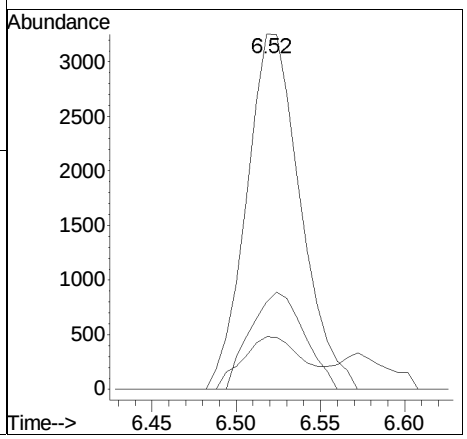


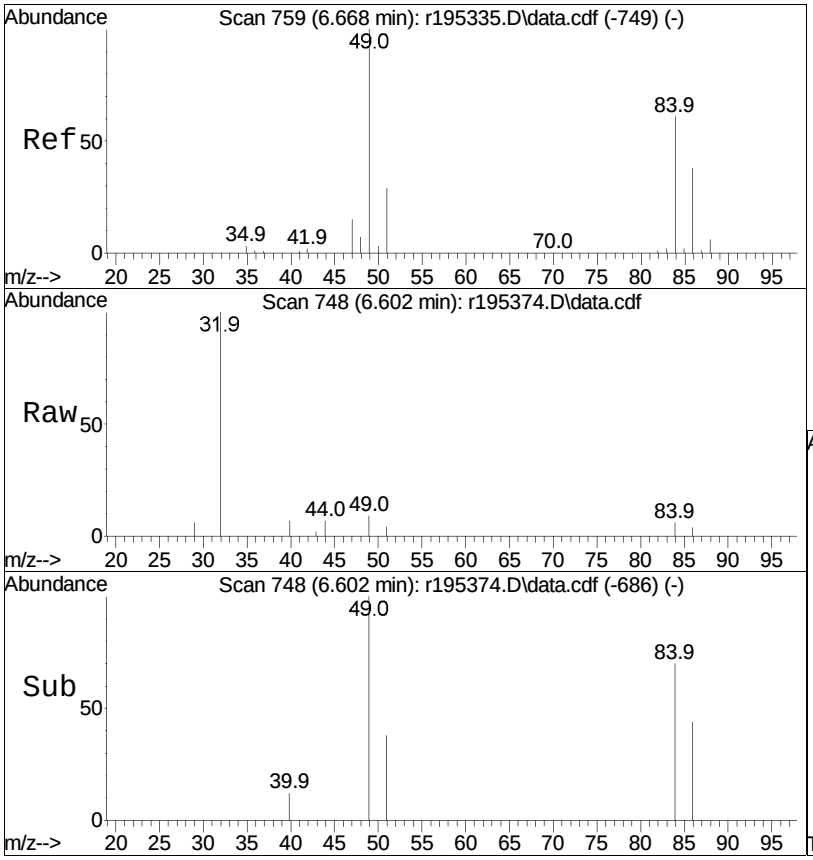


#27
tertiary butyl alcohol
Concen: 0.22 ppbV
RT: 6.52 min Scan# 734
Delta R.T. 0.006 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 59 Resp: 7234

Ion	Ratio	Lower	Upper
59	100		
41	24.6	19.8	29.8
43	14.8	10.0	15.0

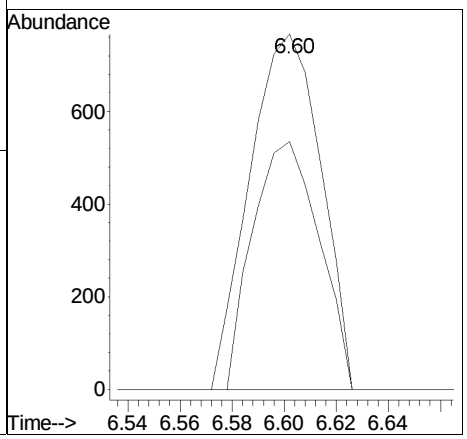


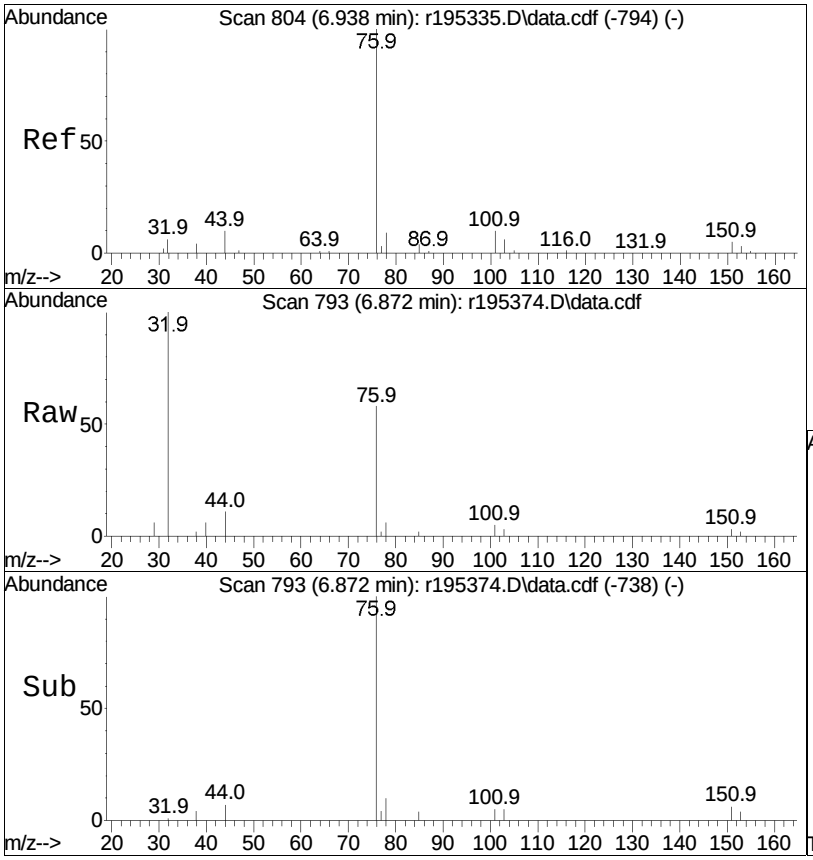


#28
methylene chloride
Concen: 0.06 ppbV
RT: 6.60 min Scan# 748
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 49 Resp: 1460

Ion	Ratio	Lower	Upper
49	100		
84	69.8	48.8	73.2

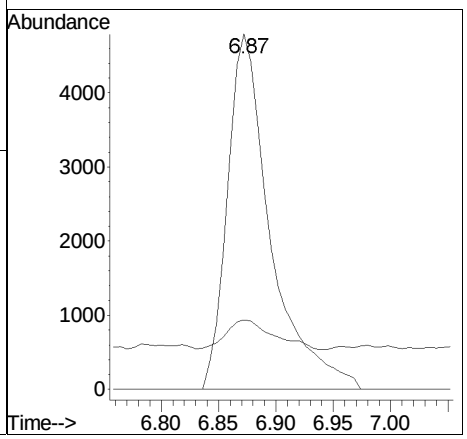


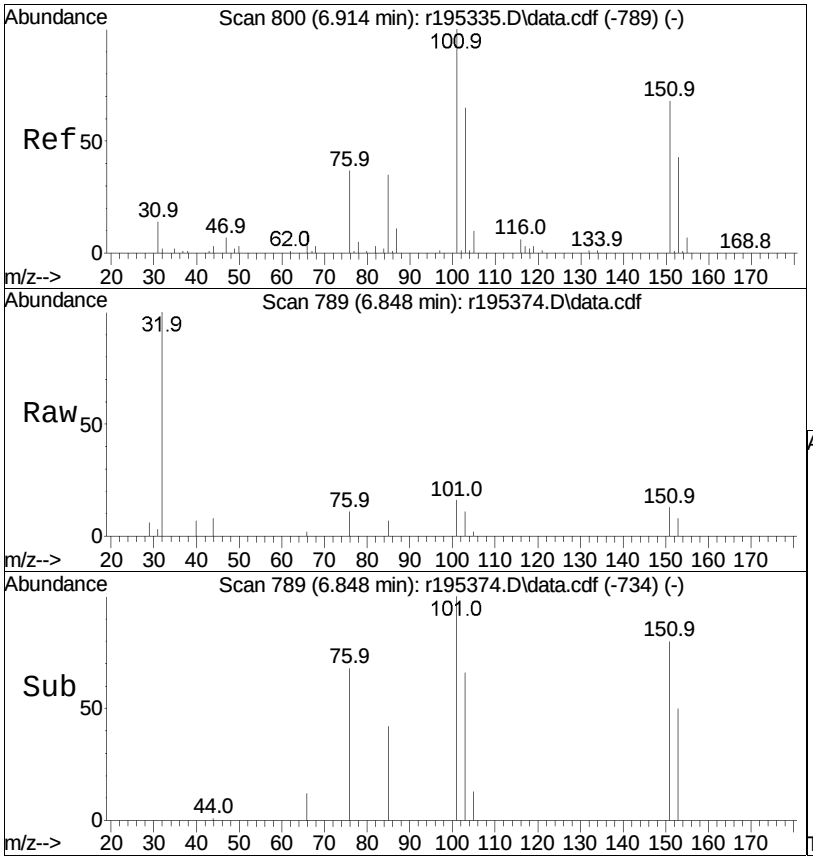


#30
carbon disulfide
Concen: 0.20 ppbV
RT: 6.87 min Scan# 793
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 76 Resp: 12536

Ion	Ratio	Lower	Upper
76	100		
44	19.6	7.9	11.9#

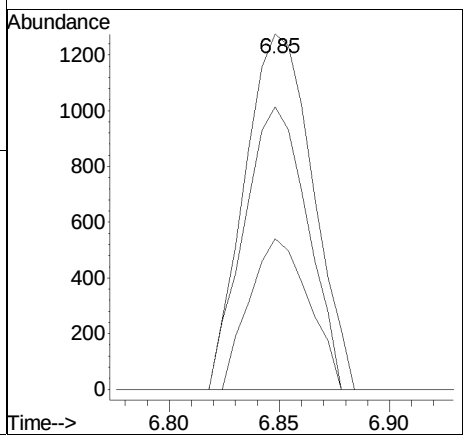


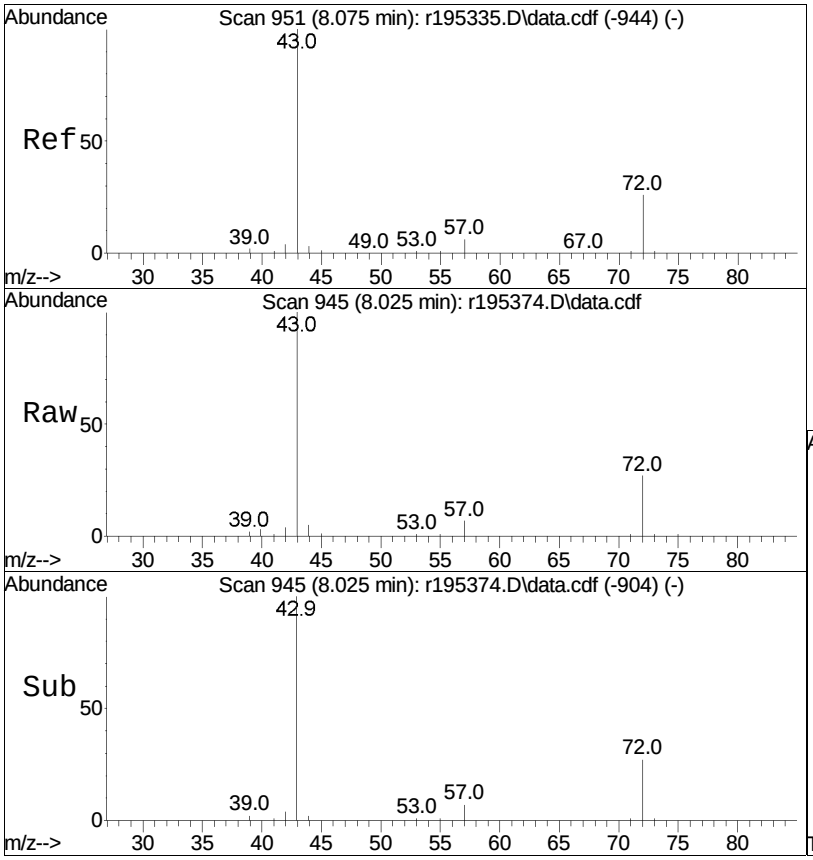


#31
Freon 113
Concen: 0.09 ppbV
RT: 6.85 min Scan# 789
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion:101 Resp: 2742

Ion	Ratio	Lower	Upper
101	100		
85	42.4	27.9	41.9#
151	79.5	54.2	81.2

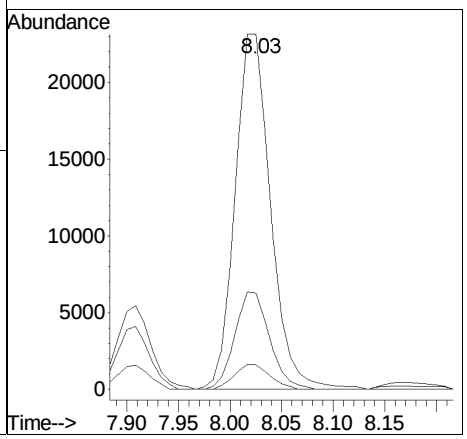


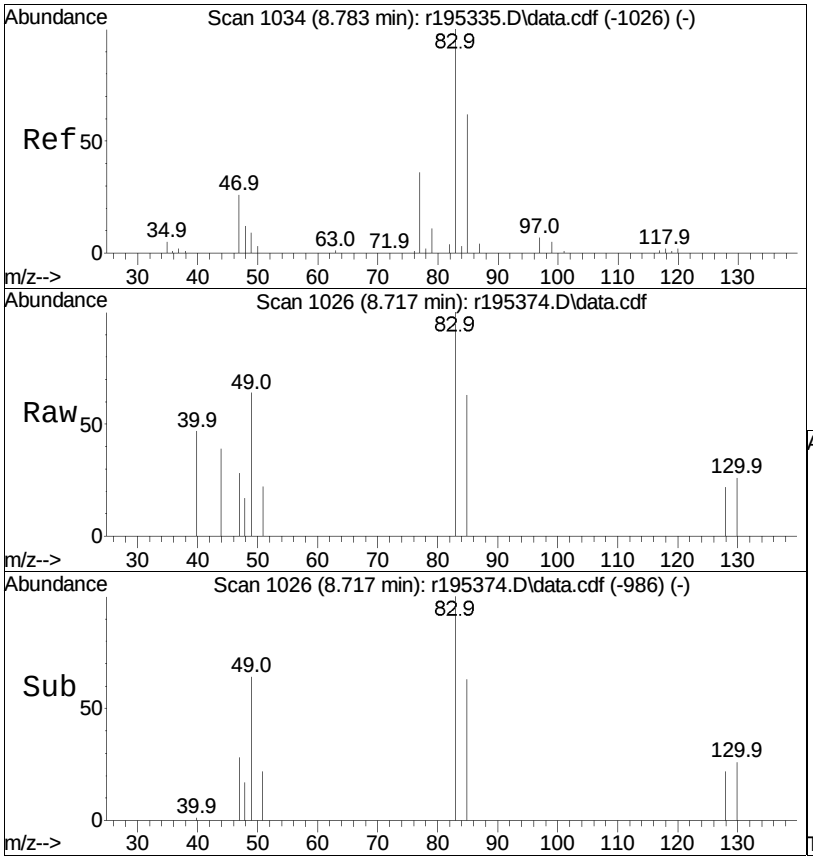


#36
2-butanone
Concen: 1.16 ppbV
RT: 8.03 min Scan# 945
Delta R.T. 0.008 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 43 Resp: 55611

Ion	Ratio	Lower	Upper
43	100		
72	27.1	21.0	31.6
57	6.9	5.1	7.7

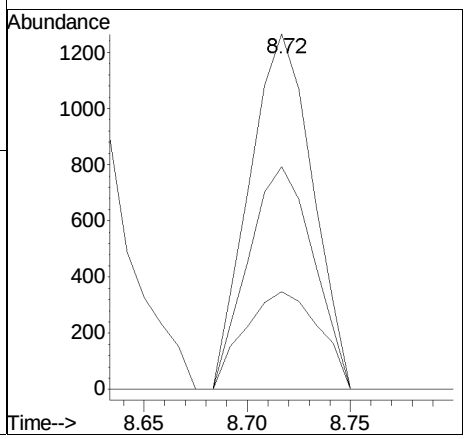


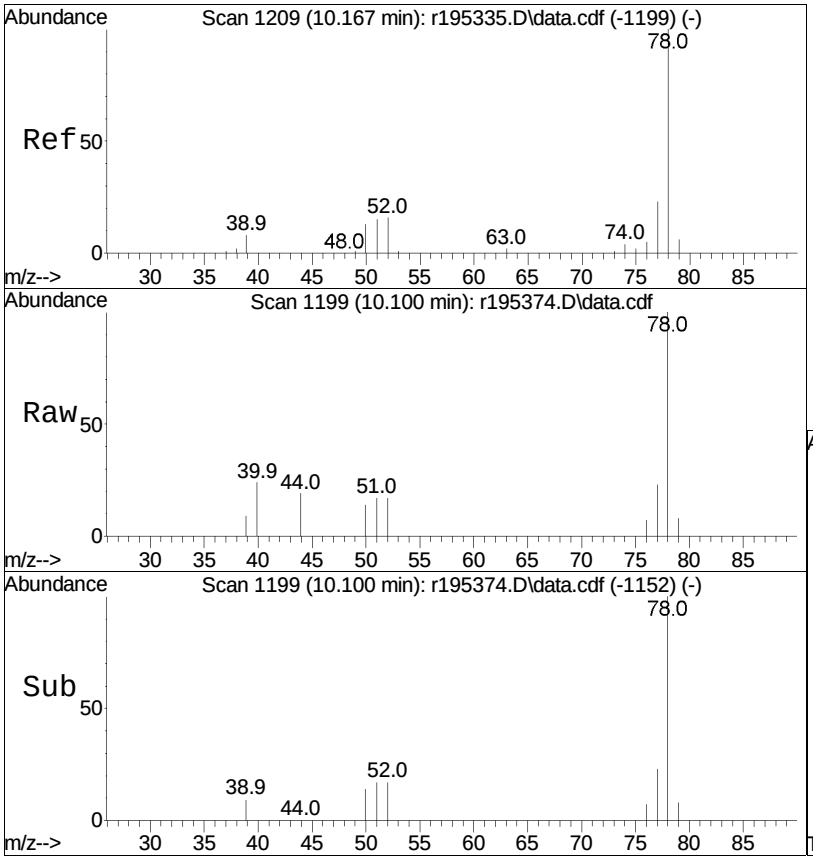


#39
chloroform
Concen: 0.09 ppbV
RT: 8.72 min Scan# 1026
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 83 Resp: 2705

Ion	Ratio	Lower	Upper
83	100		
85	62.7	49.8	74.8
47	27.5	20.8	31.2

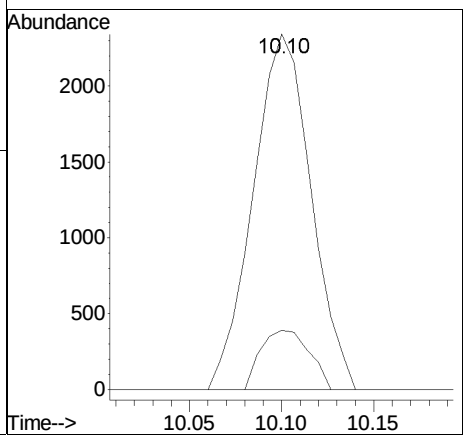


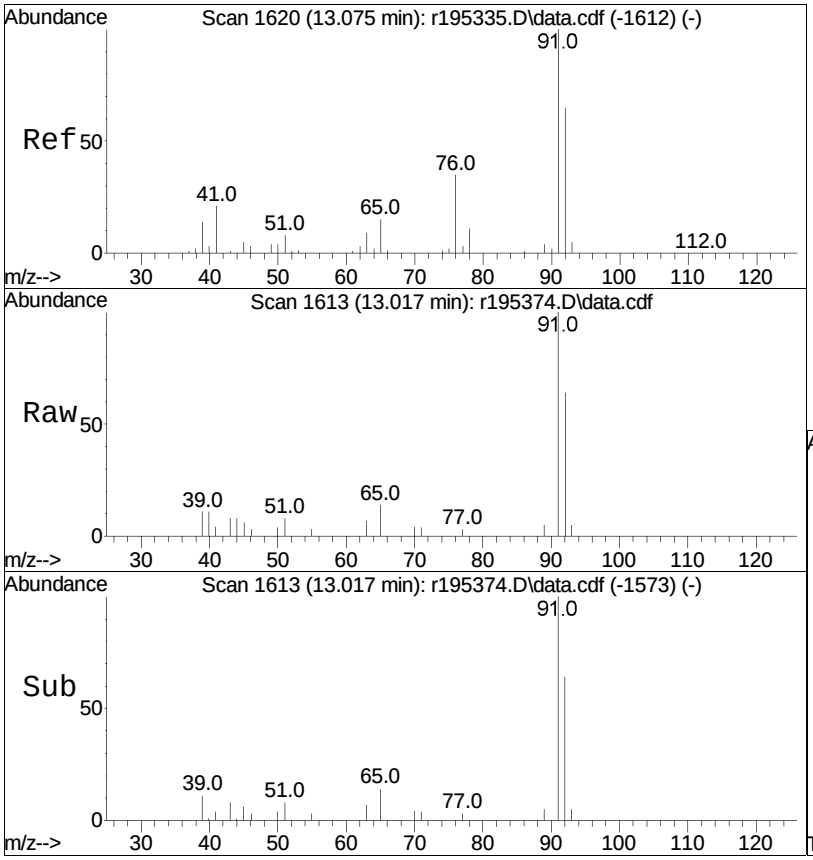


#50
benzene
Concen: 0.07 ppbV
RT: 10.10 min Scan# 1199
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 78 Resp: 5123

Ion	Ratio	Lower	Upper
78	100		
52	16.6	12.6	19.0

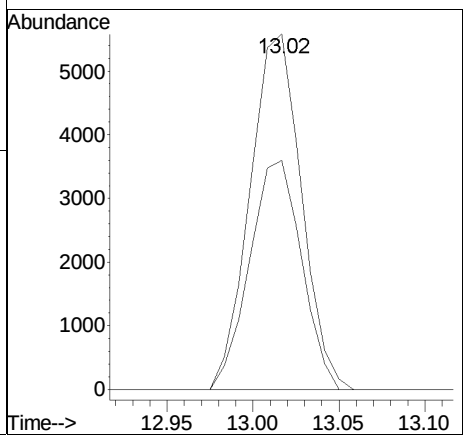


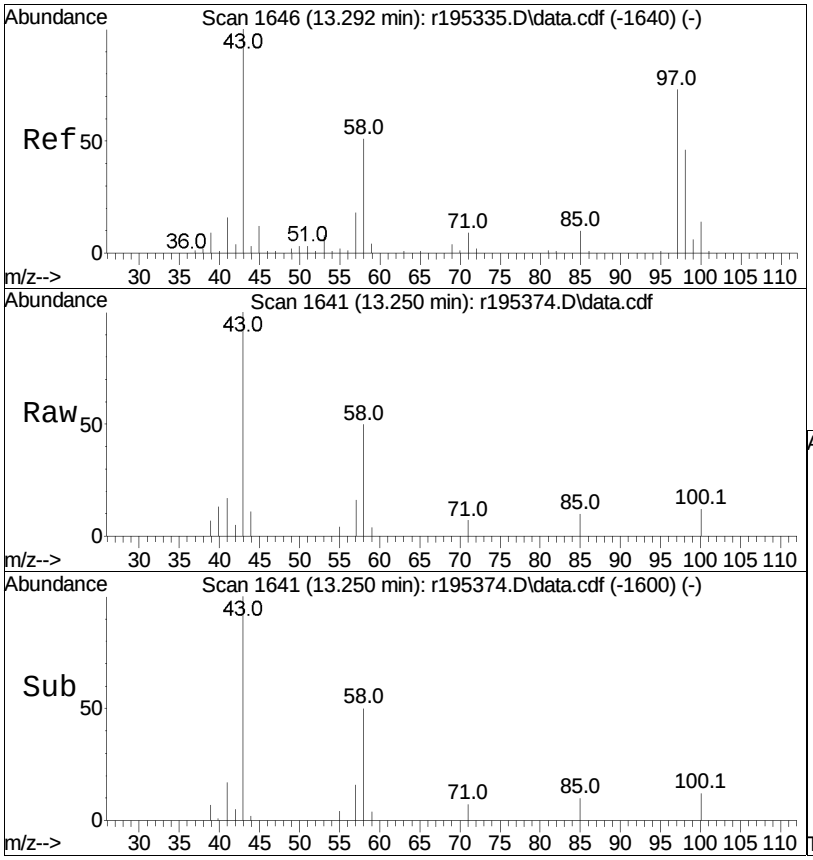


#68
toluene
Concen: 0.17 ppbV
RT: 13.02 min Scan# 1613
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 91 Resp: 11607

Ion	Ratio	Lower	Upper
91	100		
92	64.5	52.1	78.1

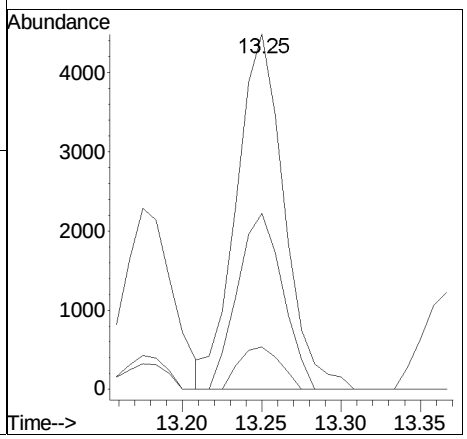


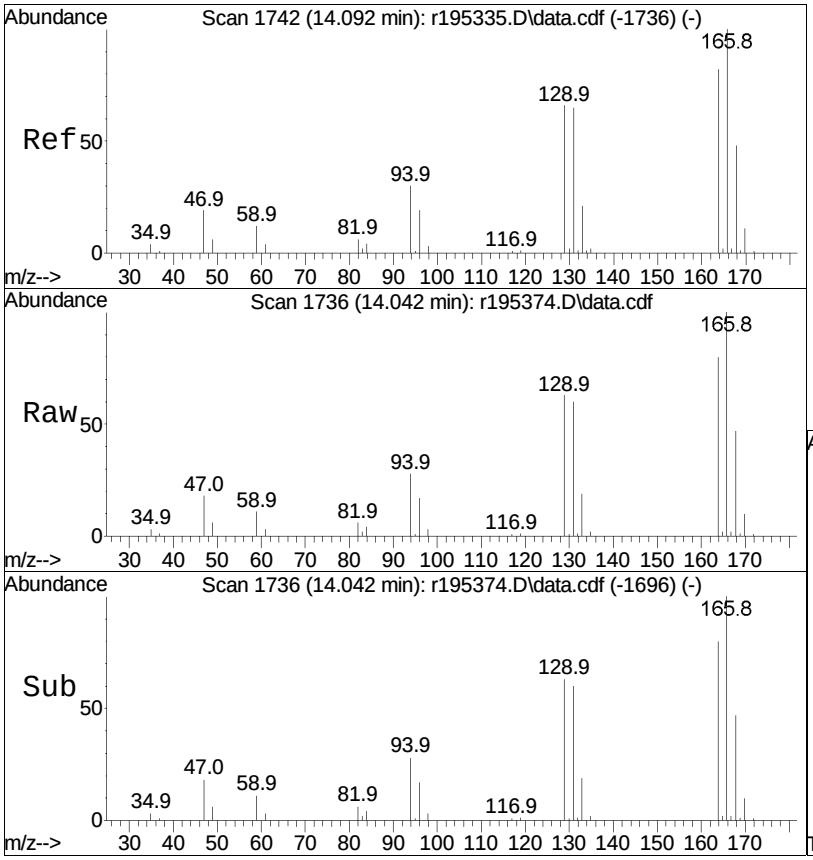


#72
2-hexanone
Concen: 0.18 ppbV
RT: 13.25 min Scan# 1641
Delta R.T. 0.008 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 43 Resp: 9389

Ion	Ratio	Lower	Upper
43	100		
58	49.5	40.7	61.1
100	11.9	10.9	16.3

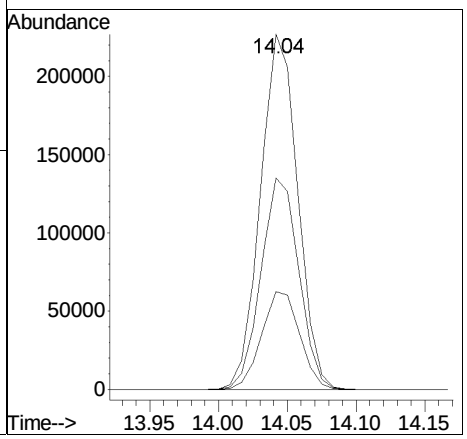


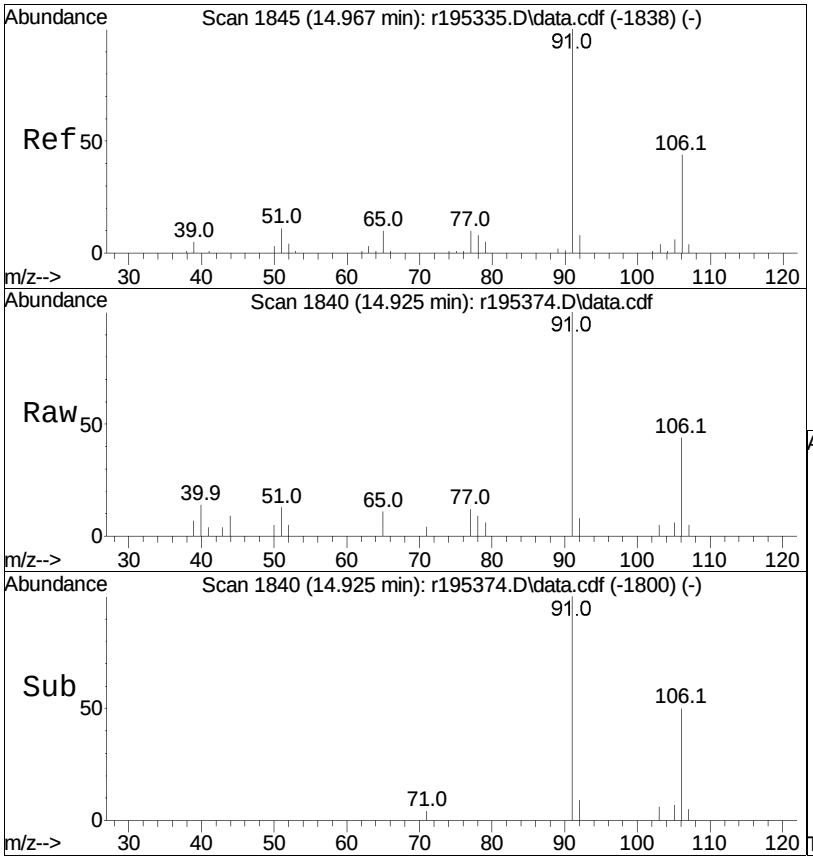


#78
tetrachloroethene
Concen: 16.65 ppbV
RT: 14.04 min Scan# 1736
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion:166 Resp: 427130

Ion	Ratio	Lower	Upper
166	100		
131	59.5	51.7	77.5
94	27.5	24.0	36.0

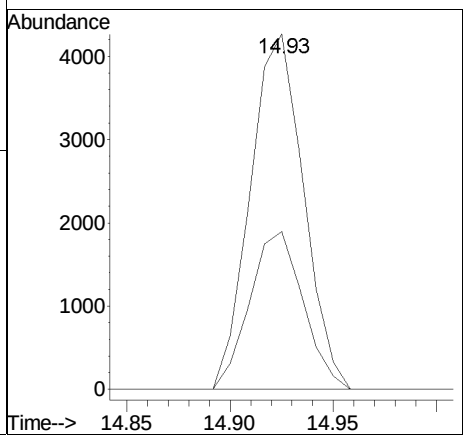


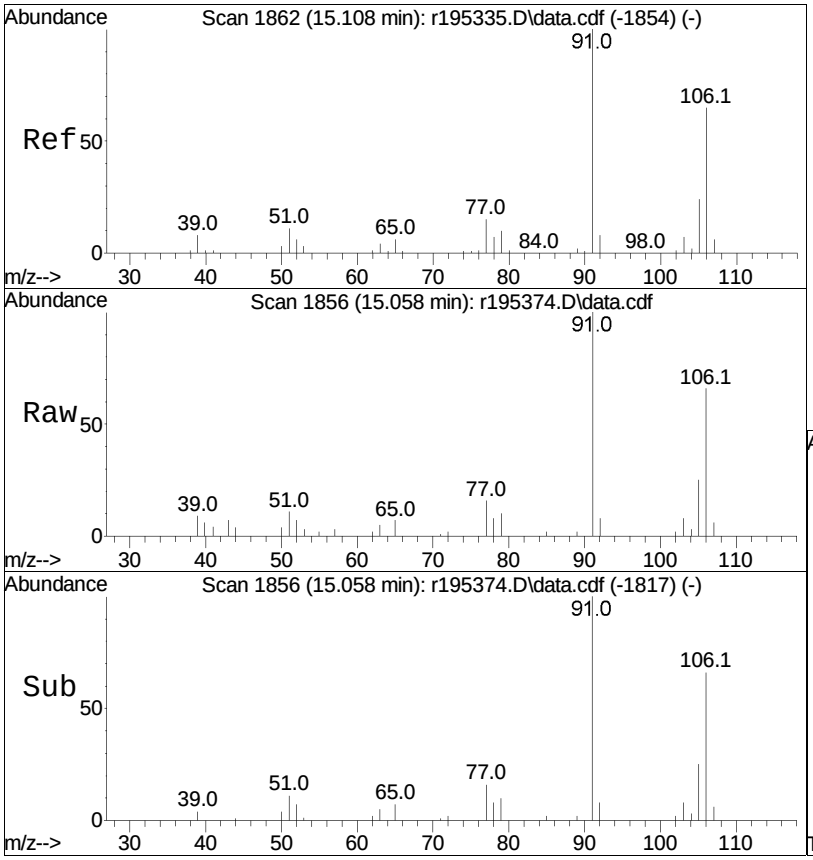


#81
ethylbenzene
Concen: 0.10 ppbV
RT: 14.93 min Scan# 1840
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 91 Resp: 7654

Ion	Ratio	Lower	Upper
91	100		
106	44.4	34.8	52.2

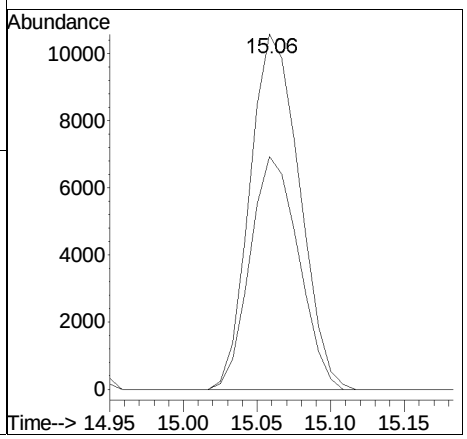


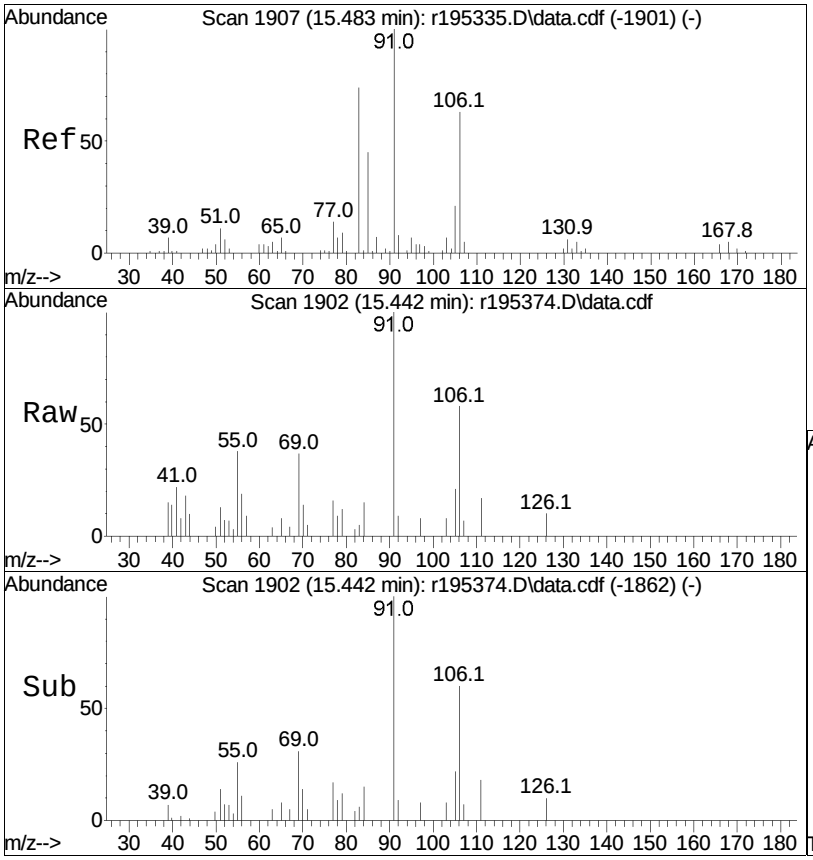


#83
m+p-xylene
Concen: 0.39 ppbV
RT: 15.06 min Scan# 1856
Delta R.T. -0.008 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 91 Resp: 24729

Ion	Ratio	Lower	Upper
91	100		
106	65.5	51.8	77.6

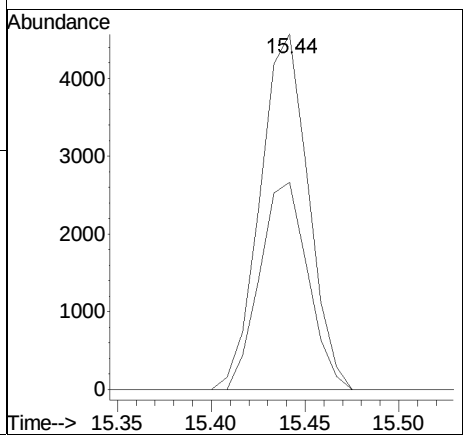


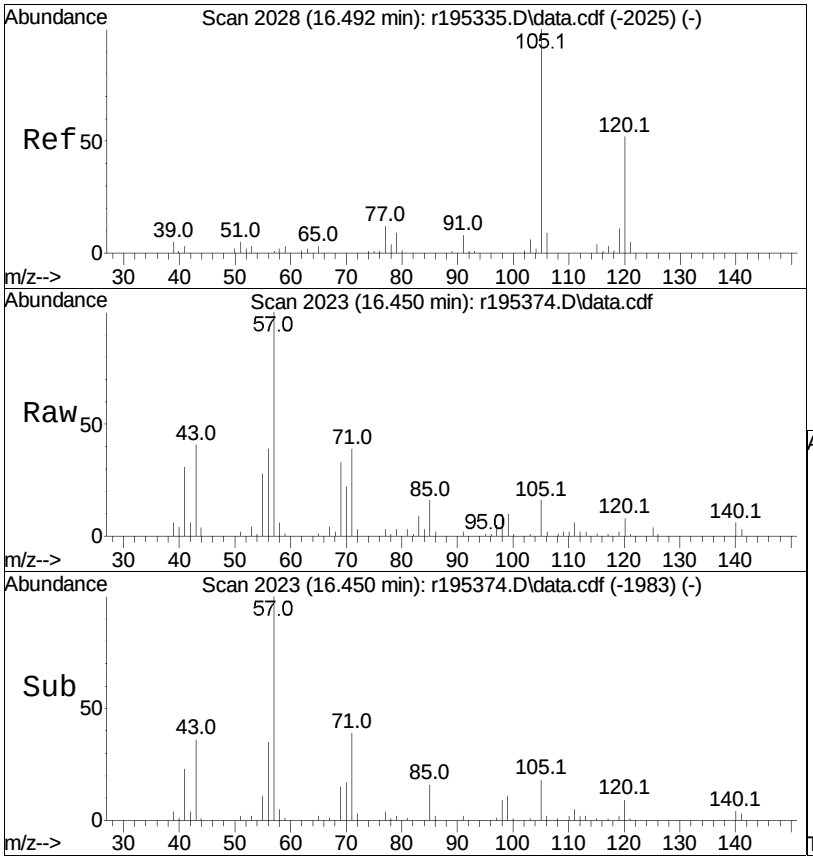


#87
o-xylene
Concen: 0.13 ppbV
RT: 15.44 min Scan# 1902
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion: 91 Resp: 8166

Ion	Ratio	Lower	Upper
91	100		
106	58.3	50.2	75.4

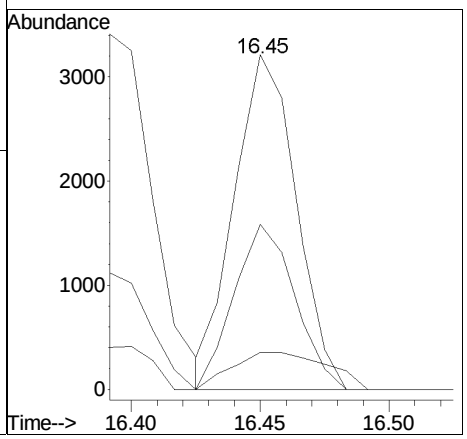


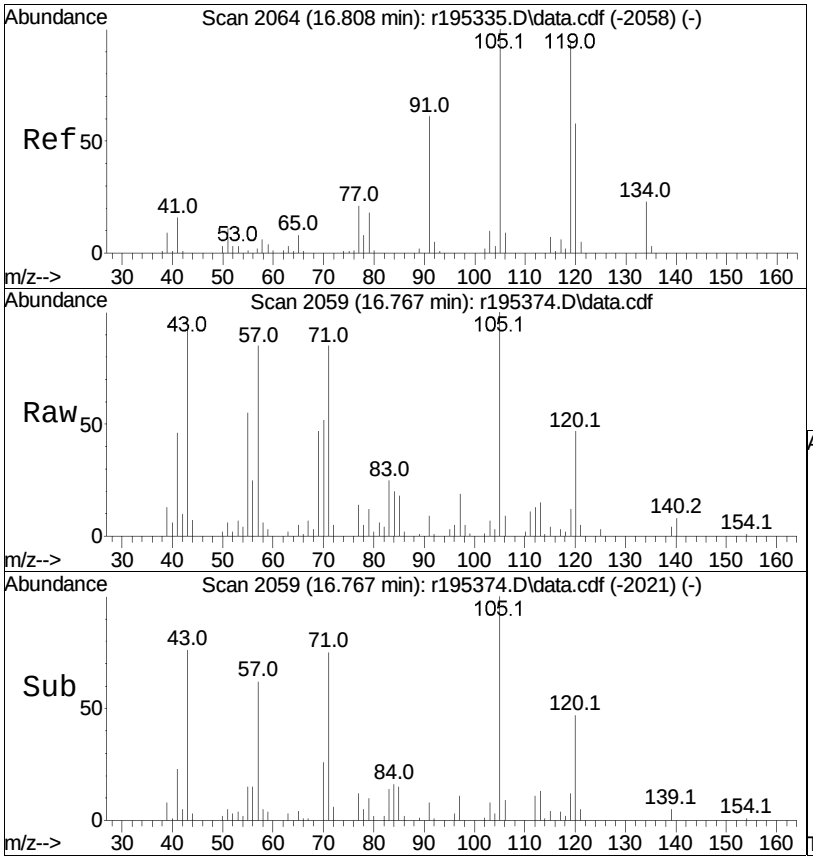


#97
1,3,5-trimethylbenzene
Concen: 0.07 ppbV
RT: 16.45 min Scan# 2023
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion:105 Resp: 5375

Ion	Ratio	Lower	Upper
105	100		
120	49.3	41.1	61.7
91	11.1	6.5	9.7#

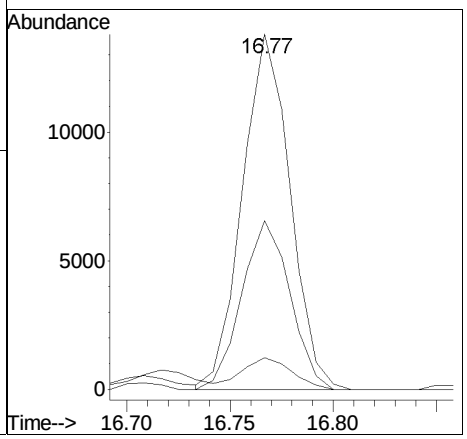




#99
1,2,4-trimethylbenzene
Concen: 0.30 ppbV
RT: 16.77 min Scan# 2059
Delta R.T. 0.000 min
Lab File: r195374.D
Acq: 4 Nov 2020 8:42 PM

Tgt Ion:105 Resp: 22178

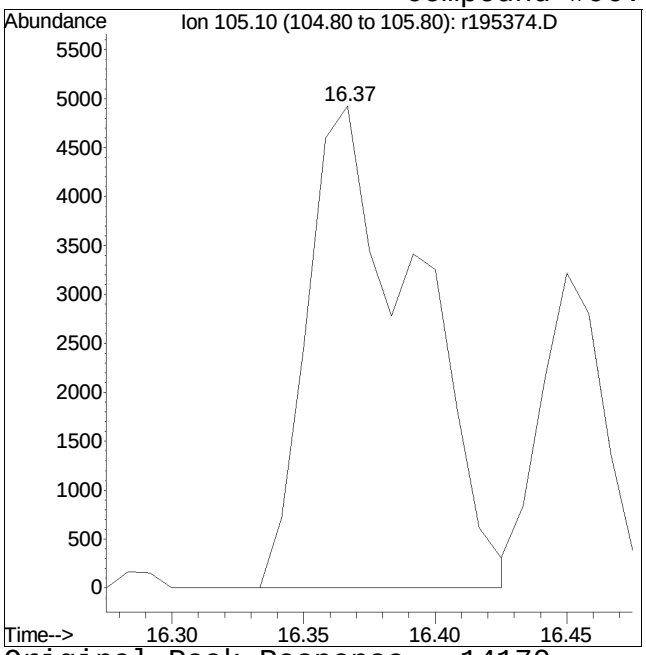
Ion	Ratio	Lower	Upper
105	100		
120	47.5	46.2	69.4
91	8.9	48.7	73.1#



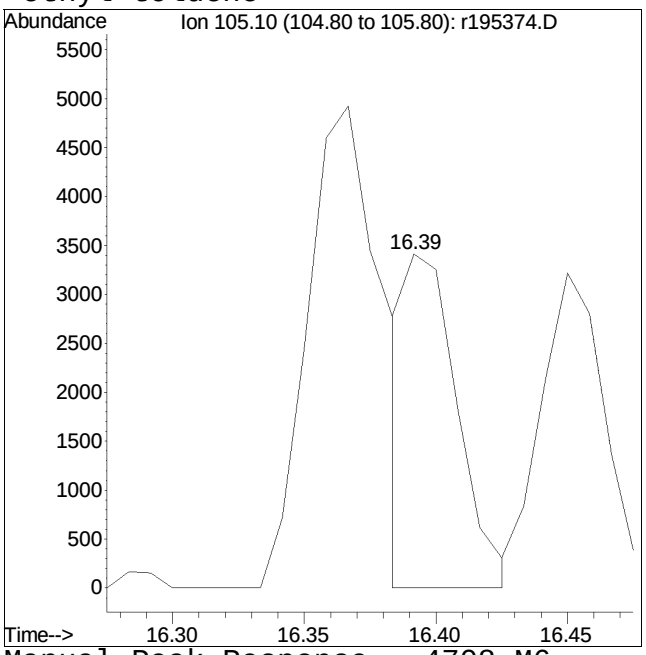
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195374.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:8: 2 Instrument :
Sample : L2047588-05,3,250,250 Quant Date : 11/5/2020 7:41 am

Compound #96: 4-ethyl toluene



Original Peak Response = 14170



Manual Peak Response = 4708 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195375.D
Acq On : 4 Nov 2020 9:23 PM
Operator : AIRLAB19:RY
Sample : L2047588-06D,3,90,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:43:08 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.59	49	365443	10.000	ppbV	0.00
Standard Area = 384278			Recovery	=	95.10%	
43) 1,4-difluorobenzene	10.43	114	835740	10.000	ppbV	0.00
Standard Area = 866249			Recovery	=	96.48%	
67) chlorobenzene-D5	14.58	54	142121	10.000	ppbV	0.00
Standard Area = 149824			Recovery	=	94.86%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.11	85	4443	0.160	ppbV	98
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.	d	
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.26	31	8915	0.583	ppbV	93
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	147978	5.683	ppbV #	86
21) trichlorofluoromethane	5.89	101	2062	0.096	ppbV	99
22) isopropyl alcohol	5.96	45	2896	0.074	ppbV #	90
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.54	59	2079	0.064	ppbV #	87
28) methylene chloride	6.60		0	N.D.		
29) 3-chloropropene	0.00		0	N.D.		
30) carbon disulfide	6.87	76	4378	0.071	ppbV #	11
31) Freon 113	6.85		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	8.03	43	12255	0.255	ppbV	98
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	8.72		0	N.D.		
40) Tetrahydrofuran	9.12		0	N.D.		
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195375.D
Acq On : 4 Nov 2020 9:23 PM
Operator : AIRLAB19:RY
Sample : L2047588-06D,3,90,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:43:08 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	hexane	8.64		0	N.D.			
48)	1,1,1-trichloroethane	9.66	97	1697	0.070	ppbV	#	88
50)	benzene	10.10	78	3519	0.050	ppbV		95
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	11.14		0	N.D.			
60)	2,2,4-trimethylpentane	11.17		0	N.D.			
62)	heptane	11.43		0	N.D.			
63)	cis-1,3-dichloropropene	0.00		0	N.D.			
64)	4-methyl-2-pentanone	11.91		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	13.02	91	4915	0.072	ppbV		96
72)	2-hexanone	13.26		0	N.D.			
74)	dibromochloromethane	0.00		0	N.D.			
75)	1,2-dibromoethane	0.00		0	N.D.			
78)	tetrachloroethene	14.04	166	1456036	55.904	ppbV		97
80)	chlorobenzene	14.73		0	N.D.			
81)	ethylbenzene	14.93		0	N.D.			
83)	m+p-xylene	15.06	91	4621	0.072	ppbV		98
84)	bromoform	0.00		0	N.D.			
85)	styrene	15.36		0	N.D.			
86)	1,1,2,2-tetrachloroethane	15.37		0	N.D.			
87)	o-xylene	15.44		0	N.D.			
96)	4-ethyl toluene	16.39		0	N.D.			
97)	1,3,5-trimethylbenzene	16.45		0	N.D.			
99)	1,2,4-trimethylbenzene	16.77	105	5098	0.068	ppbV	#	58
101)	Benzyl Chloride	0.00		0	N.D.		d	
102)	1,3-dichlorobenzene	16.95		0	N.D.			
103)	1,4-dichlorobenzene	16.95		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195375.D
Acq On : 4 Nov 2020 9:23 PM
Operator : AIRLAB19:RY
Sample : L2047588-06D,3,90,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:43:08 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

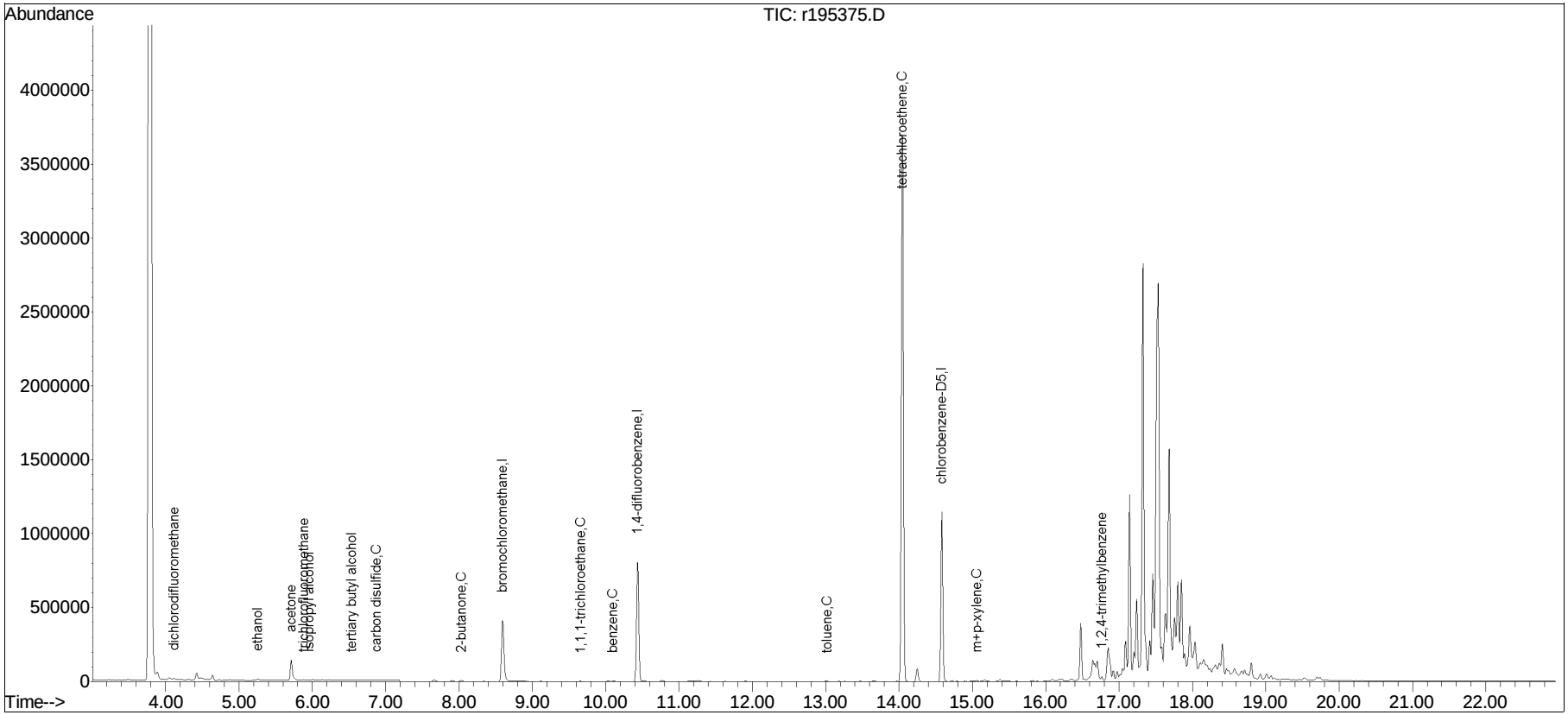
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

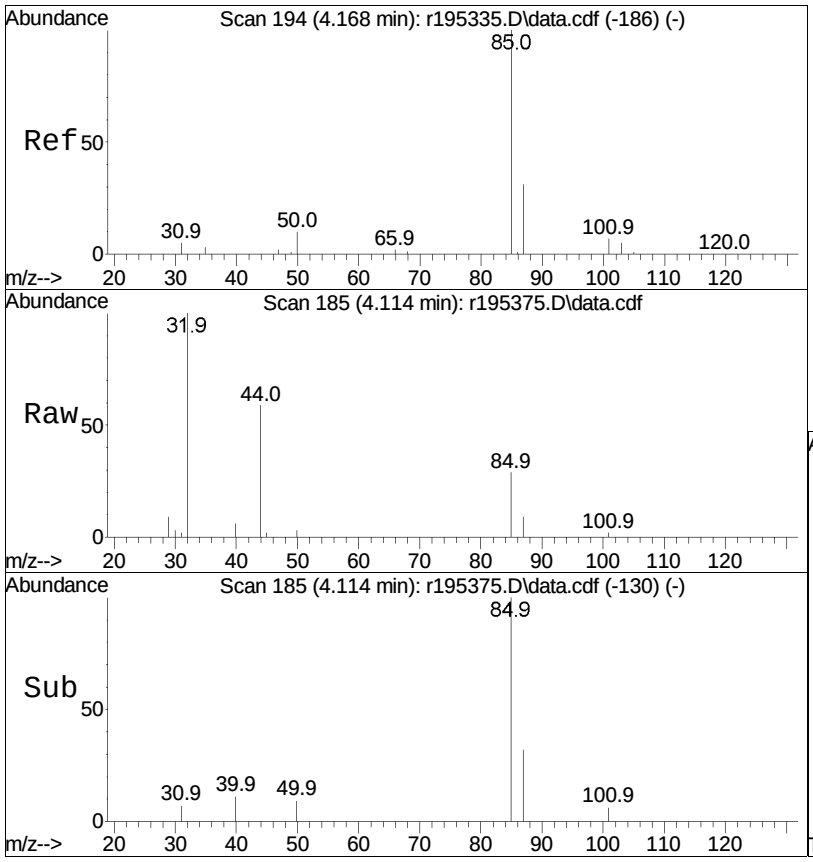
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195375.D
Acq On : 4 Nov 2020 9:23 PM
Operator : AIRLAB19:RY
Sample : L2047588-06D,3,90,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:43:08 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab19\2020\11\201104T\r195365.D

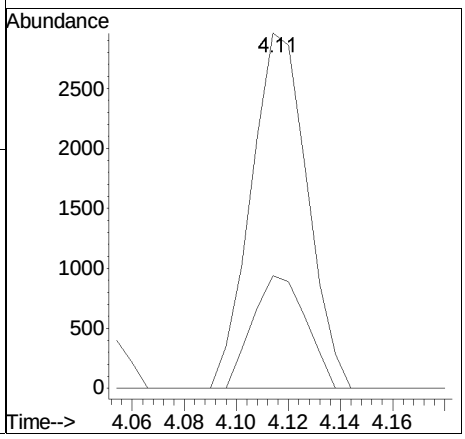


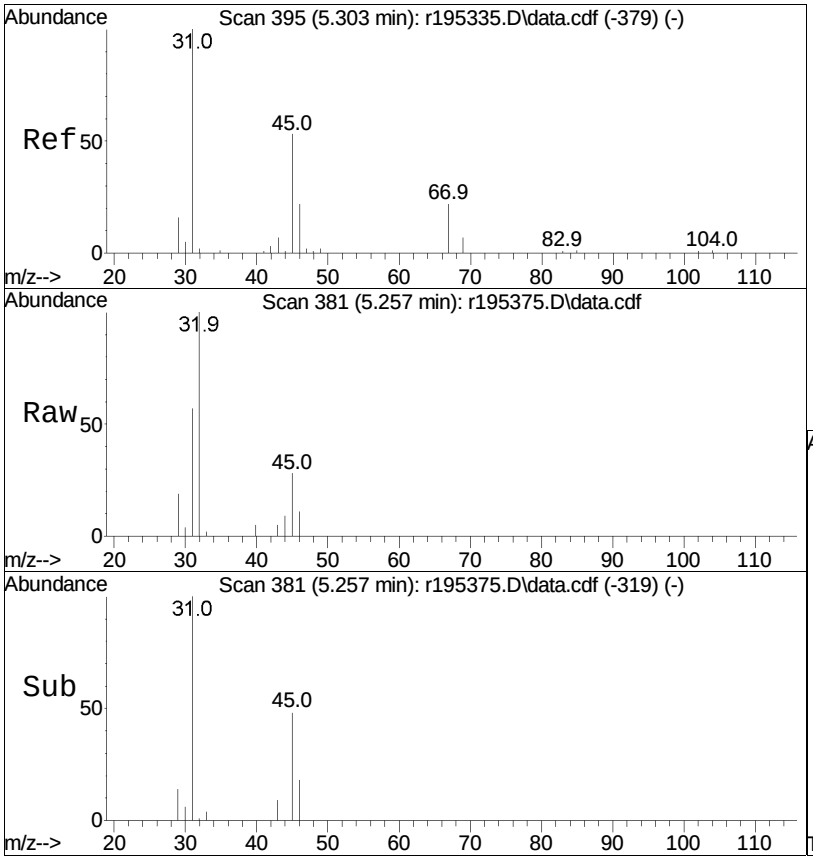


#5
dichlorodifluoromethane
Concen: 0.16 ppbV
RT: 4.11 min Scan# 185
Delta R.T. 0.000 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 85 Resp: 4443

Ion	Ratio	Lower	Upper
85	100		
87	31.7	24.6	37.0

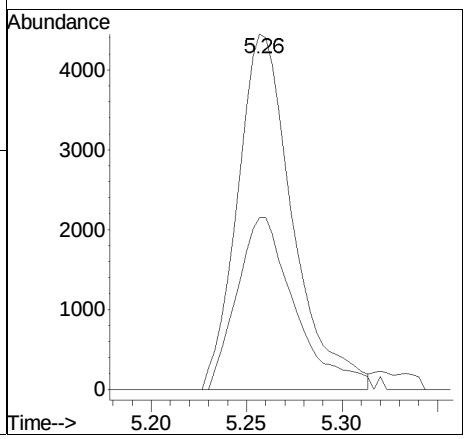


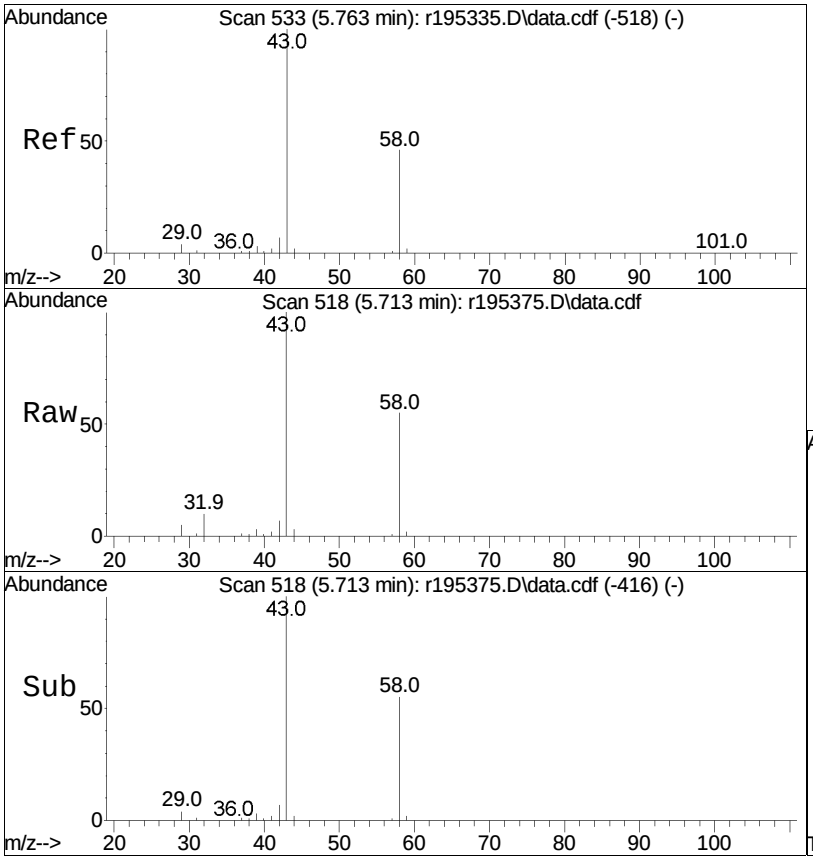


#15
ethanol
Concen: 0.58 ppbV
RT: 5.26 min Scan# 381
Delta R.T. 0.010 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 31 Resp: 8915

Ion	Ratio	Lower	Upper
31	100		
45	48.3	42.5	63.7

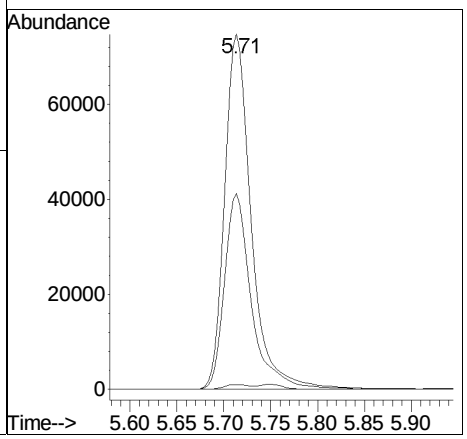


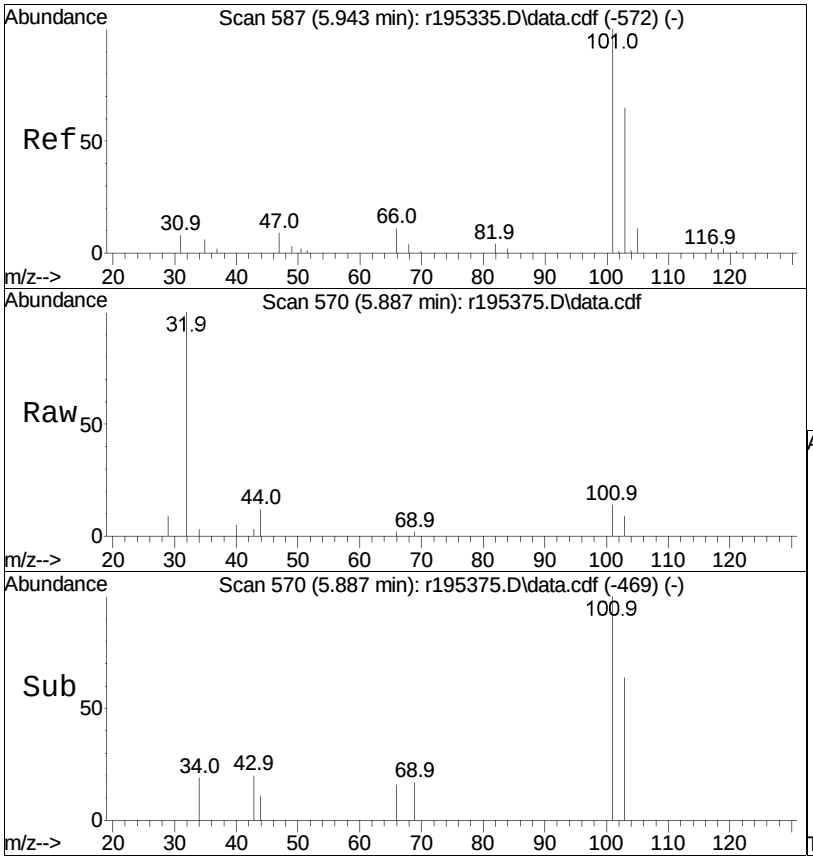


#19
acetone
Concen: 5.68 ppbV
RT: 5.71 min Scan# 518
Delta R.T. 0.010 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 43 Resp: 147978

Ion	Ratio	Lower	Upper
43	100		
58	55.1	36.6	54.8#
57	1.4	0.9	1.3#

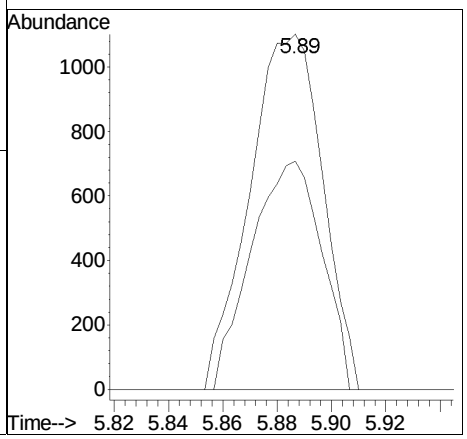


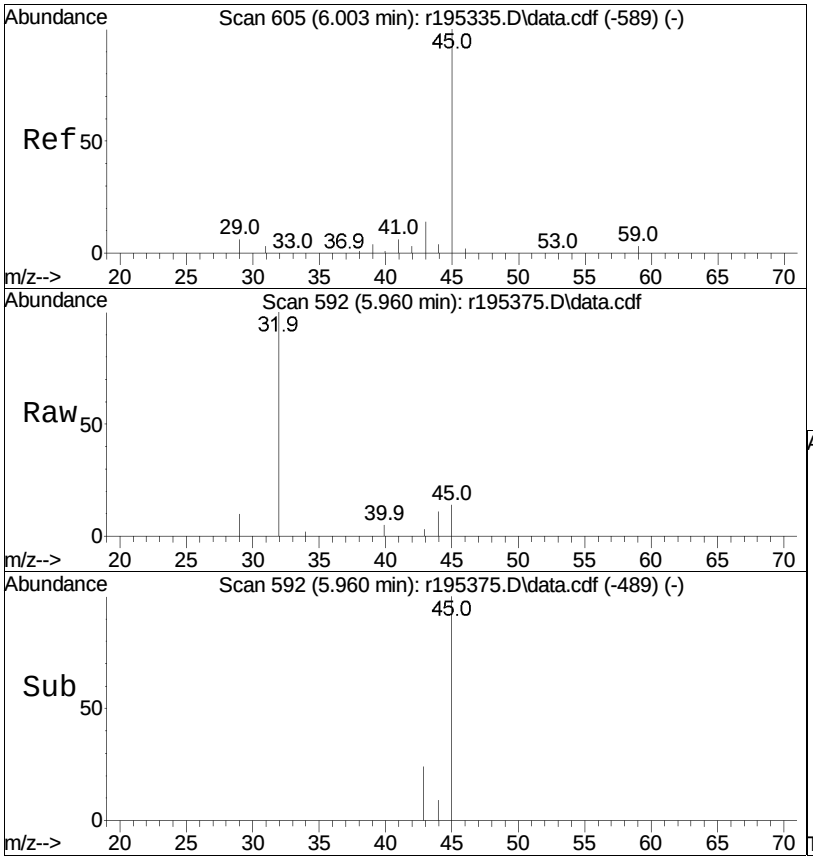


#21
trichlorofluoromethane
Concen: 0.10 ppbV
RT: 5.89 min Scan# 570
Delta R.T. 0.007 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion:101 Resp: 2062

Ion	Ratio	Lower	Upper
101	100		
103	64.2	52.3	78.5

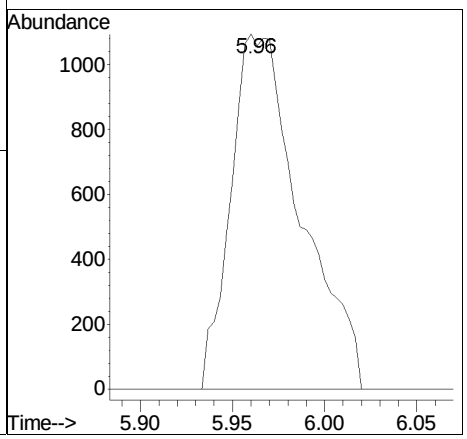


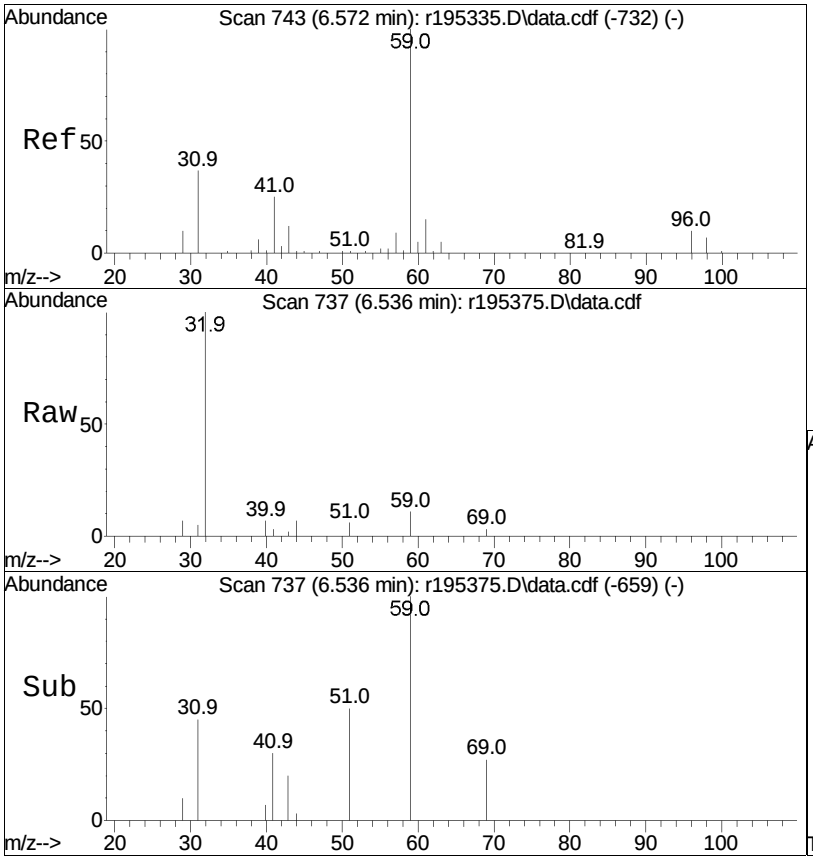


#22
isopropyl alcohol
Concen: 0.07 ppbV
RT: 5.96 min Scan# 592
Delta R.T. 0.013 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 45 Resp: 2896

Ion	Ratio	Lower	Upper
45	100		
59	0.0	2.6	4.0#

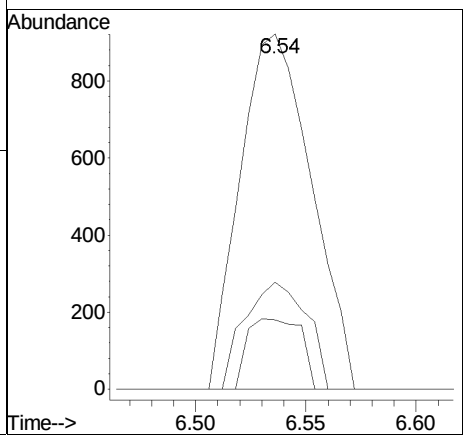


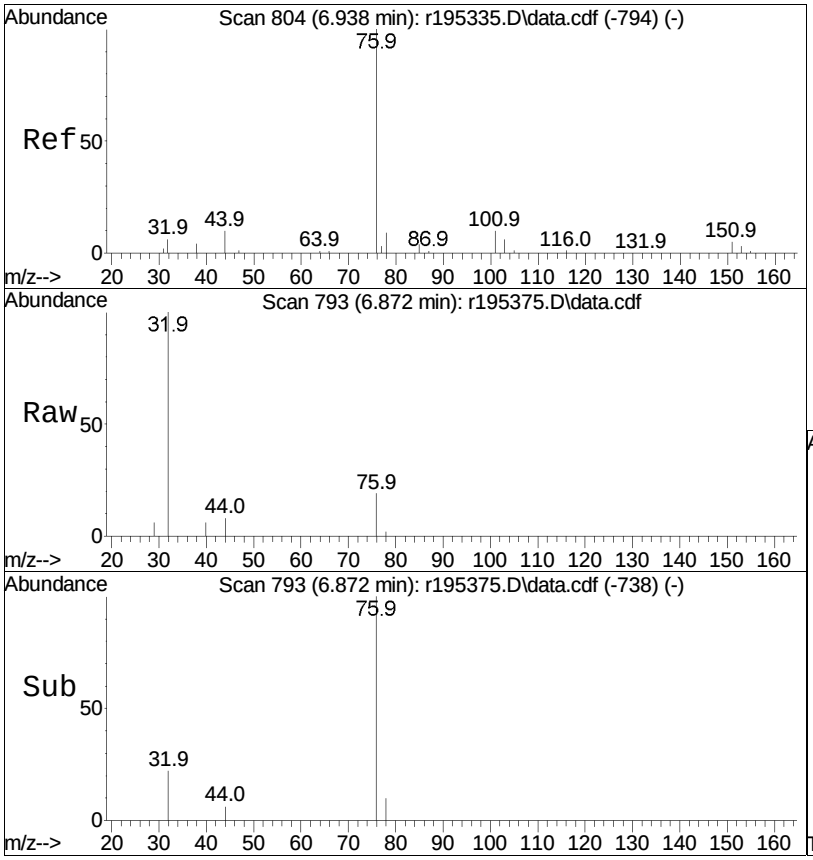


#27
tertiary butyl alcohol
Concen: 0.06 ppbV
RT: 6.54 min Scan# 737
Delta R.T. 0.024 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 59 Resp: 2079

Ion	Ratio	Lower	Upper
59	100		
41	30.2	19.8	29.8#
43	19.5	10.0	15.0#

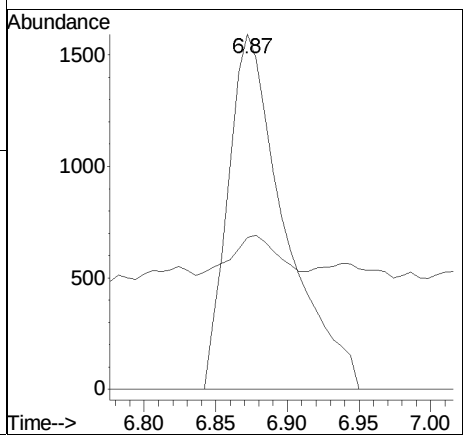


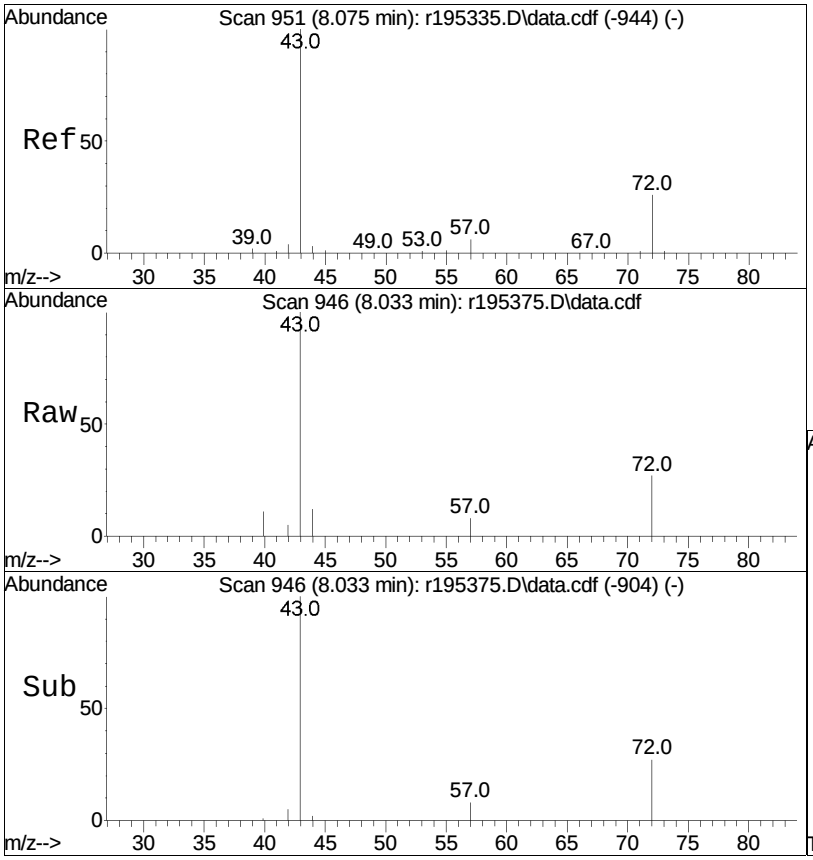


#30
carbon disulfide
Concen: 0.07 ppbV
RT: 6.87 min Scan# 793
Delta R.T. 0.000 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 76 Resp: 4378

Ion	Ratio	Lower	Upper
76	100		
44	42.7	7.9	11.9#

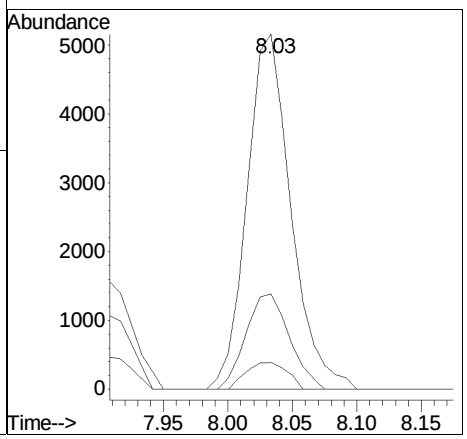


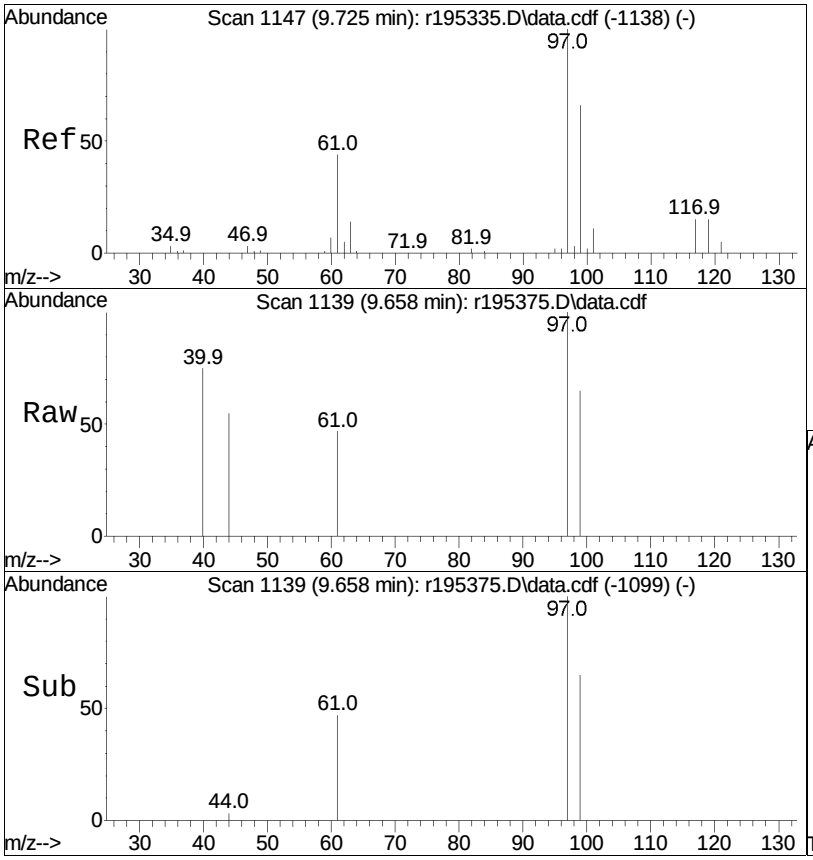


#36
2-butanone
Concen: 0.25 ppbV
RT: 8.03 min Scan# 946
Delta R.T. 0.017 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 43 Resp: 12255

Ion	Ratio	Lower	Upper
43	100		
72	26.9	21.0	31.6
57	7.6	5.1	7.7

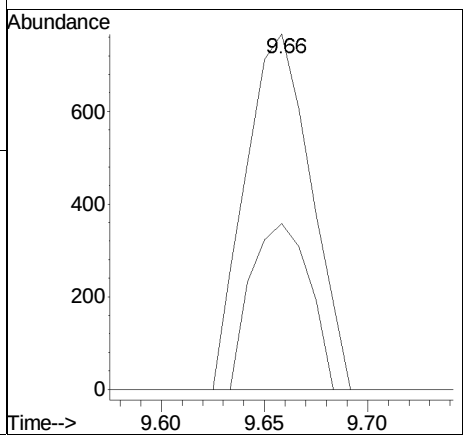


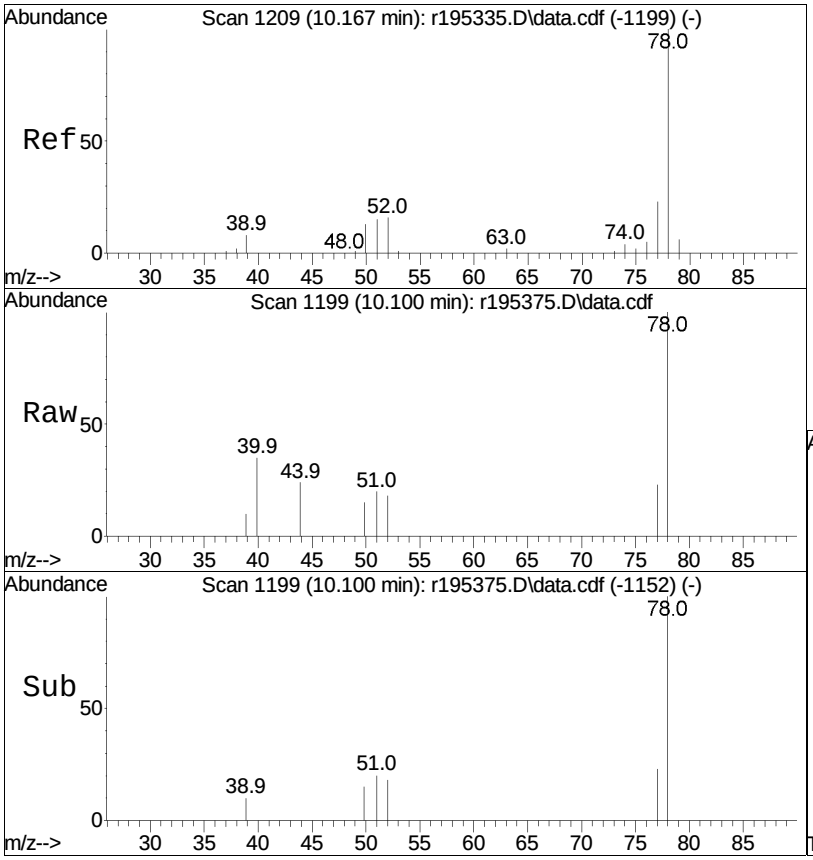


#48
1,1,1-trichloroethane
Concen: 0.07 ppbV
RT: 9.66 min Scan# 1139
Delta R.T. 0.000 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 97 Resp: 1697

Ion	Ratio	Lower	Upper
97	100		
61	46.7	35.4	53.0
119	0.0	11.7	17.5#

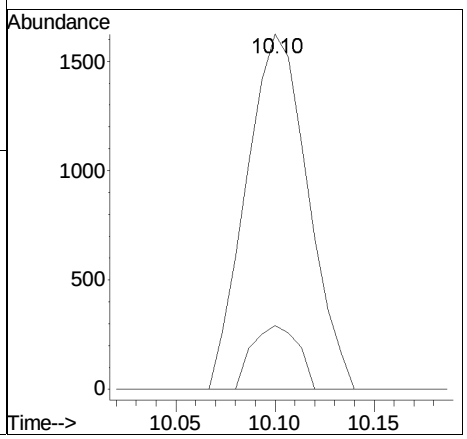


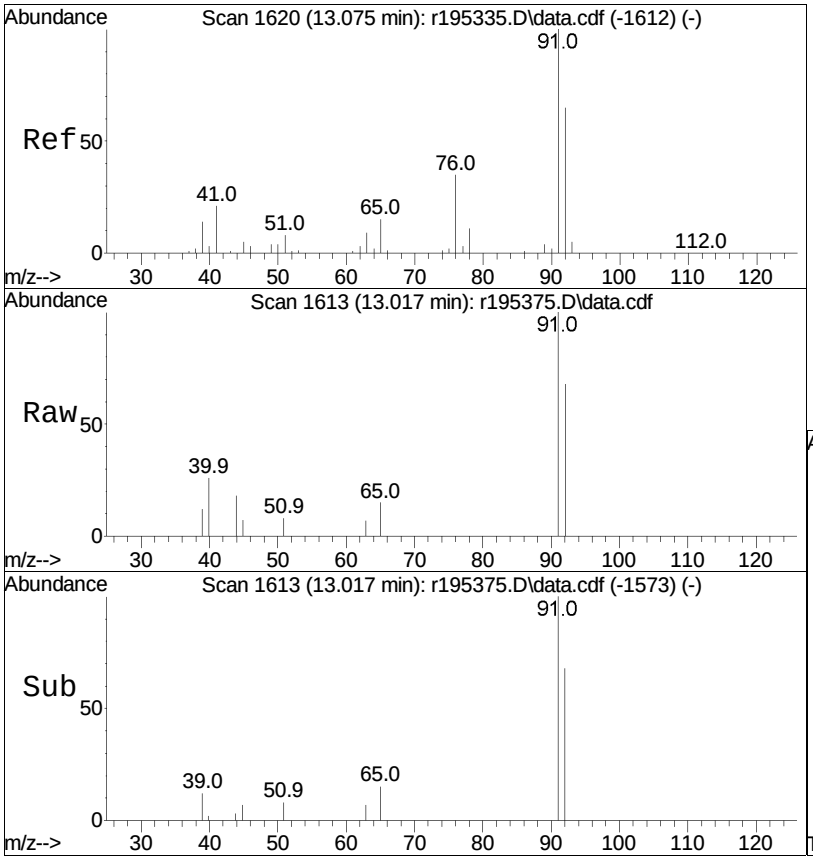


#50
benzene
Concen: 0.05 ppbV
RT: 10.10 min Scan# 1199
Delta R.T. 0.000 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 78 Resp: 3519

Ion	Ratio	Lower	Upper
78	100		
52	18.0	12.6	19.0

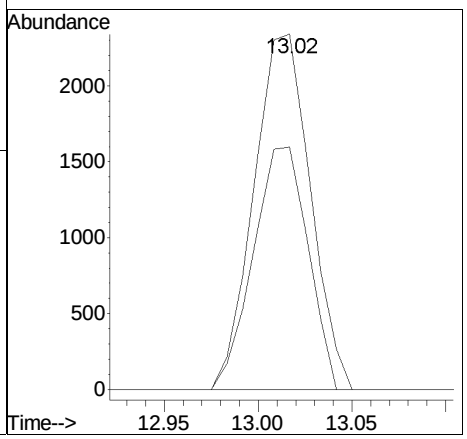


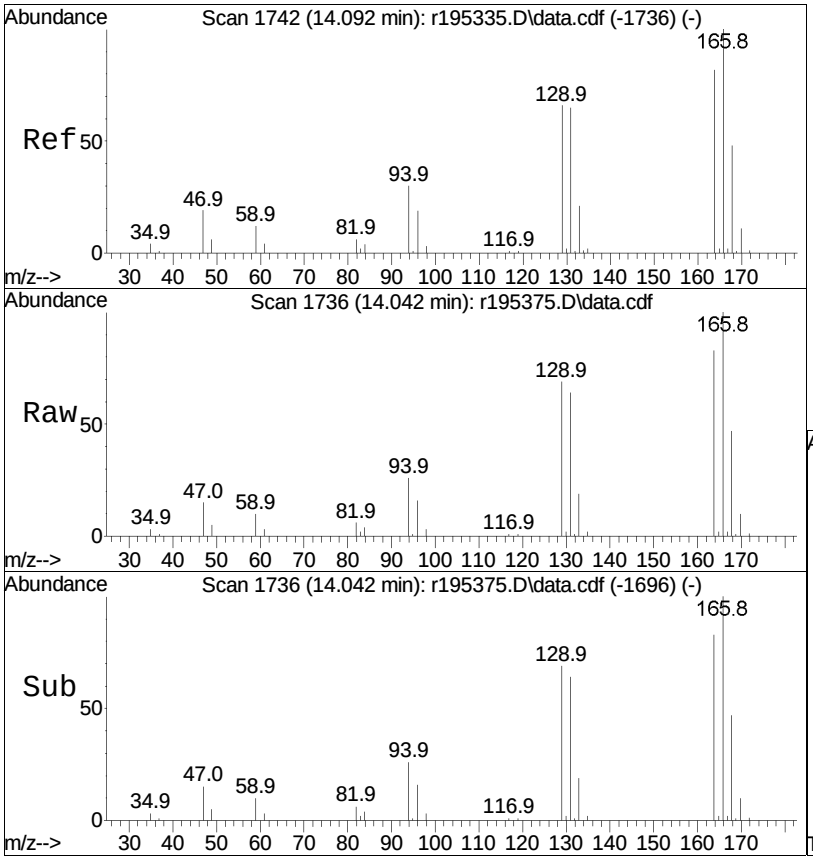


#68
toluene
Concen: 0.07 ppbV
RT: 13.02 min Scan# 1613
Delta R.T. 0.000 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 91 Resp: 4915

Ion	Ratio	Lower	Upper
91	100		
92	68.2	52.1	78.1

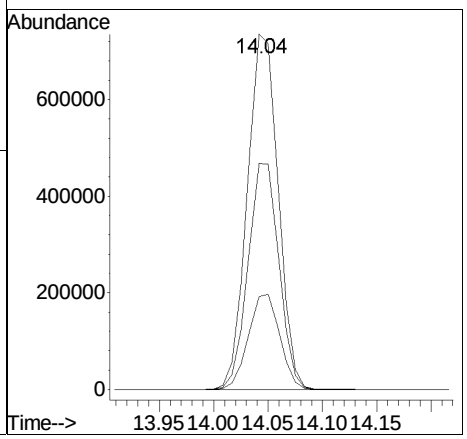


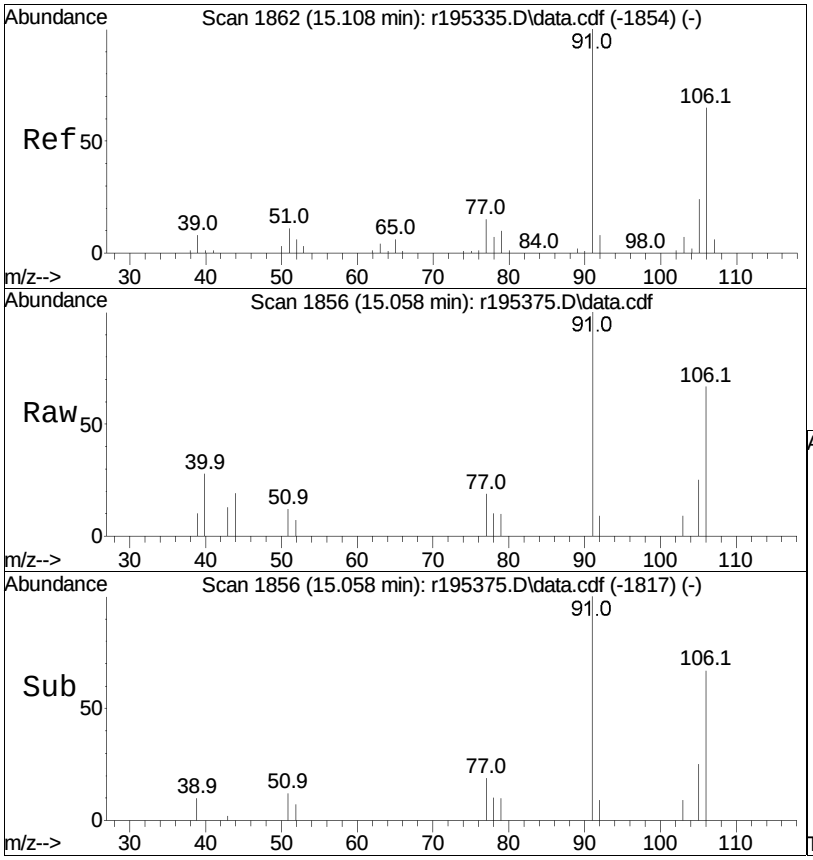


#78
tetrachloroethene
Concen: 55.90 ppbV
RT: 14.04 min Scan# 1736
Delta R.T. 0.000 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion:166 Resp: 1456036

Ion	Ratio	Lower	Upper
166	100		
131	63.6	51.7	77.5
94	26.1	24.0	36.0

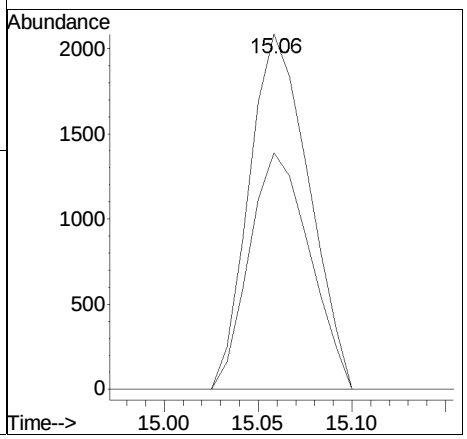


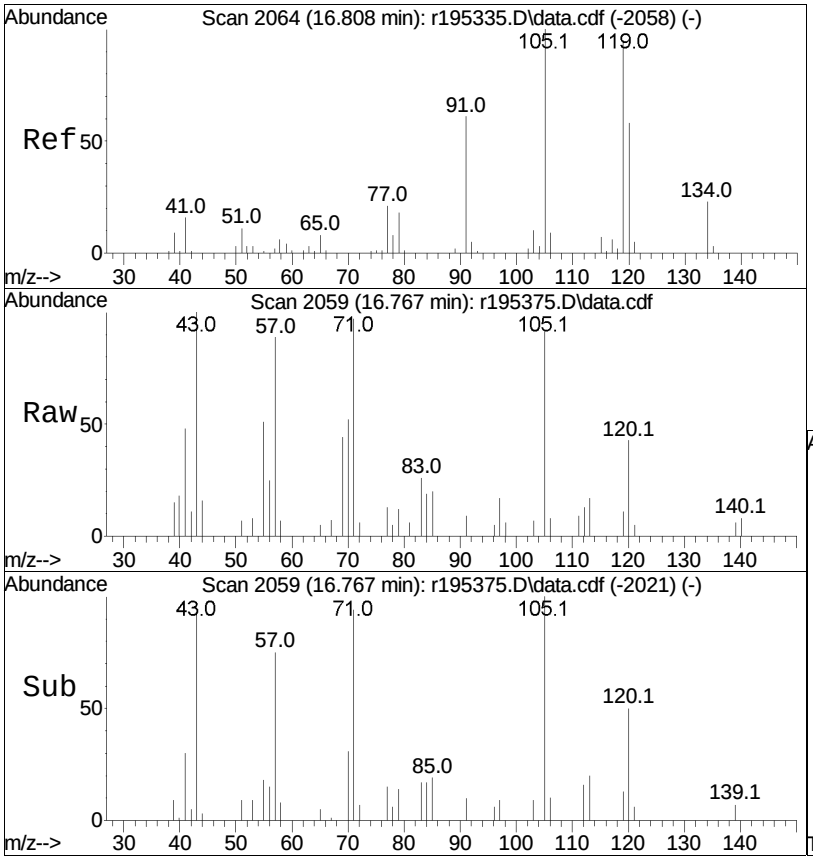


#83
m+p-xylene
Concen: 0.07 ppbV
RT: 15.06 min Scan# 1856
Delta R.T. -0.008 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion: 91 Resp: 4621

Ion	Ratio	Lower	Upper
91	100		
106	66.6	51.8	77.6

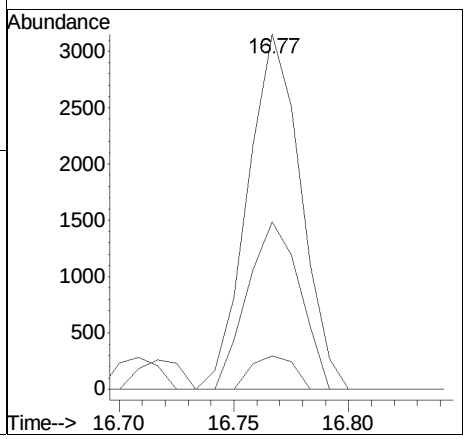




#99
1,2,4-trimethylbenzene
Concen: 0.07 ppbV
RT: 16.77 min Scan# 2059
Delta R.T. 0.000 min
Lab File: r195375.D
Acq: 4 Nov 2020 9:23 PM

Tgt Ion:105 Resp: 5098

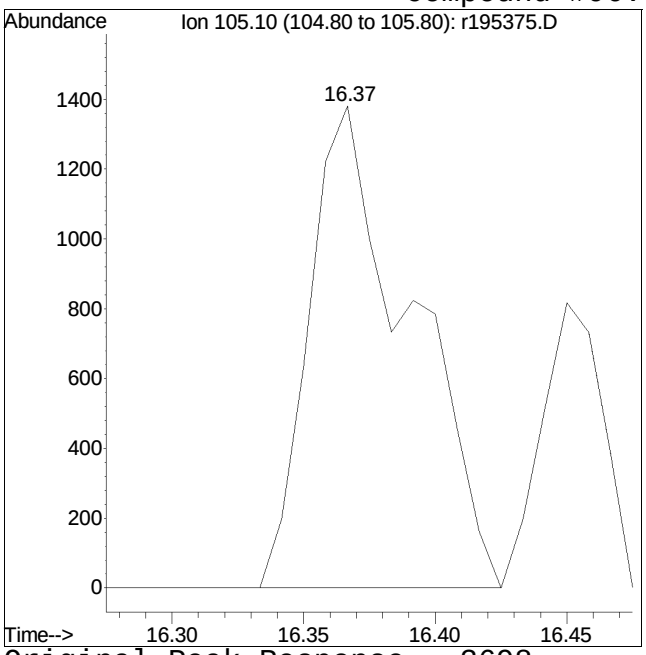
Ion	Ratio	Lower	Upper
105	100		
120	47.1	46.2	69.4
91	9.4	48.7	73.1#



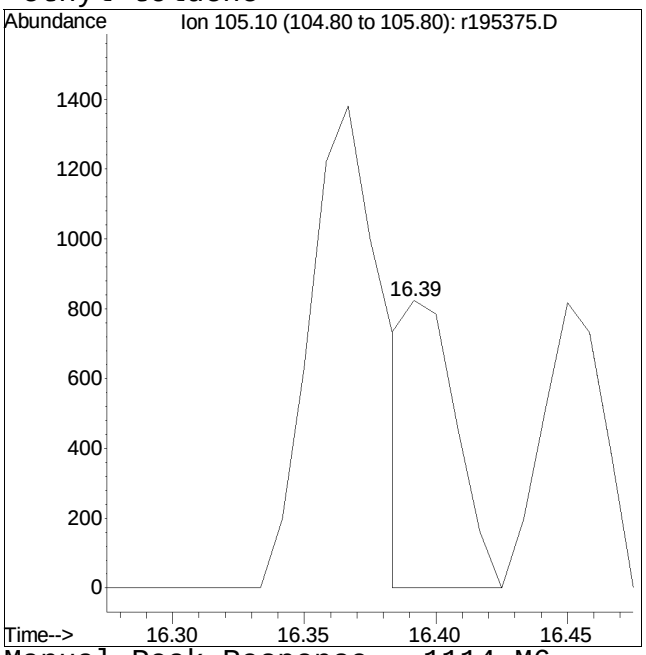
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195375.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:9: 3 Instrument :
Sample : L2047588-06D,3,90,250 Quant Date : 11/5/2020 7:42 am

Compound #96: 4-ethyl toluene



Original Peak Response = 3698



Manual Peak Response = 1114 M6

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

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Impact Environmental**	**Lab Number**	**: L2047588**
Project Name	**: BEACH CHANNEL**	**Project Number**	**: 15209**
Instrument ID	**: AIRLAB19**	**Ical Ref**	**: ICAL17306**
Calibration dates	**: 11/02/20 17:31 11/02/20 22:39**		

Calibration Files

0.2 =r195331.D 0.5 =r195332.D 1.0 =r195333.D 5.0 =r195334.D 10 =r195335.D 20 =r195336.D

50 =r195337.D 100 =r195338.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	0.823	0.718	0.710	0.713	0.709	0.707	0.645	0.633	0.7073	8.08
3)		propylene		0.485	0.467	0.471	0.470	0.463	0.399	0.371	0.4465	9.73
4)		propane		0.573	0.597	0.596	0.597	0.604	0.552	0.551	0.5815	3.87
5)		dichlorodifluoromethane	0.896	0.820	0.812	0.809	0.784	0.755	0.634	0.559	0.7586	14.47
6)	C	chloromethane	0.598	0.552	0.547	0.550	0.522	0.529	0.454	0.443	0.5245	9.92
7)		Freon-114	1.308	1.223	1.202	1.171	1.132	1.095	0.904	0.758	1.0992	16.51
8)	C	methanol			0.238	0.232	0.222	0.217	0.196	0.188	0.2152	9.21
9)	C	vinyl chloride	0.507	0.479	0.494	0.503	0.481	0.477	0.421	0.407	0.4711	7.88
10)	C	1,3-butadiene	0.510	0.482	0.493	0.511	0.496	0.504	0.461	0.446	0.4880	4.83
11)		butane	1.004	0.936	0.903	0.881	0.883	0.809	0.711	0.646	0.8466	14.01
12)	C	acetaldehyde		0.258	0.267	0.268	0.253	0.260	0.206	0.179	0.2415	14.39
13)	C	bromomethane	0.411	0.385	0.398	0.395	0.380	0.374	0.335	0.305	0.3728	9.51
14)	C	chloroethane	0.177	0.183	0.169	0.152	0.137	0.133	0.124	0.113	0.1484	17.35
15)		ethanol			0.478	0.461	0.436	0.433	0.368	0.336	0.4188	13.12
16)		dichlorofluoromethane	0.882	0.834	0.828	0.806	0.759	0.739	0.609	0.515	0.7465	16.70
17)	C	vinyl bromide	0.415	0.416	0.438	0.428	0.412	0.406	0.337	0.295	0.3934	12.70
18)	C	acrolein		0.257	0.256	0.247	0.242	0.242	0.230	0.233	0.2439	4.23
19)		acetone	0.915	0.824	0.799	0.772	0.749	0.689	0.531	0.423	0.7125	22.69
20)	C	acetonitrile	0.508	0.465	0.453	0.439	0.430	0.426	0.368	0.340	0.4286	12.41
21)		trichlorofluoromethane	0.669	0.664	0.656	0.626	0.668	0.567	0.464	0.383	0.5870	18.50
22)		isopropyl alcohol	1.330	1.117	1.075	1.060	1.170	1.126	0.951	0.702	1.0663	17.07
23)	C	acrylonitrile	0.488	0.445	0.476	0.376	0.441	0.430	0.433	0.463	0.4439	7.76
24)		pentane	1.309	1.389	1.359	1.317	1.517	1.368	1.275	1.098	1.3290	8.90
25)		ethyl ether	1.106	1.032	1.031	1.136	1.146	1.156	1.064	1.067	1.0922	4.62
26)	C	1,1-dichloroethene	0.709	0.676	0.663	0.656	0.648	0.628	0.565	0.510	0.6317	10.21
27)		tertiary butyl alcohol		0.924	0.913	0.938	0.901	0.938	0.831	0.791	0.8908	6.43
28)	C	methylene chloride		0.701	0.690	0.672	0.668	0.671	0.634	0.614	0.6643	4.55
29)	C	3-chloropropene	0.903	0.863	0.851	0.855	0.842	0.835	0.759	0.687	0.8243	8.31
30)	C	carbon disulfide	1.988	1.778	1.751	1.722	1.692	1.691	1.547	1.366	1.6922	10.64
31)		Freon 113	0.970	0.932	0.906	0.880	0.857	0.825	0.713	0.605	0.8360	14.51
32)		trans-1,2-dichloroethene	0.673	0.657	0.653	0.676	0.672	0.677	0.618	0.572	0.6497	5.71
33)	C	1,1-dichloroethane	0.988	0.928	0.899	0.886	0.862	0.847	0.758	0.687	0.8570	11.13
34)	C	MTBE	1.647	1.612	1.590	1.556	1.507	1.511	1.348	1.156	1.4909	10.93
35)	C	vinyl acetate			1.384	1.423	1.423	1.461	1.321	1.181	1.3654	7.47
36)	C	2-butanone		1.416	1.388	1.467	1.331	1.344	1.207	1.065	1.3170	10.47

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Impact Environmental**	**Lab Number**	**: L2047588**
Project Name	**: BEACH CHANNEL**	**Project Number**	**: 15209**
Instrument ID	**: AIRLAB19**	**Ical Ref**	**: ICAL17306**
Calibration dates	**: 11/02/20 17:31 11/02/20 22:39**		

Calibration Files

0.2 =r195331.D 0.5 =r195332.D 1.0 =r195333.D 5.0 =r195334.D 10 =r195335.D 20 =r195336.D

50 =r195337.D 100 =r195338.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)		cis-1,2-dichloroethene	0.606	0.601	0.594	0.603	0.597	0.598	0.546	0.503	0.5811	6.35
38)		Ethyl Acetate	0.194	0.187	0.196	0.195	0.188	0.190	0.171	0.155	0.1845	7.70
39)	C	chloroform	0.890	0.846	0.826	0.825	0.797	0.812	0.740	0.667	0.8002	8.57
40)		Tetrahydrofuran	0.983	0.903	0.898	0.900	0.867	0.875	0.792	0.702	0.8652	9.75
41)		2,2-dichloropropane	0.852	0.813	0.796	0.777	0.761	0.766	0.676	0.560	0.7501	12.24
42)	C	1,2-dichloroethane	0.508	0.487	0.473	0.475	0.459	0.456	0.405	0.329	0.4492	12.65
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.436	0.410	0.404	0.414	0.421	0.420	0.376	0.326	0.4009	8.69
45)		diisopropyl ether	0.214	0.205	0.203	0.209	0.212	0.221	0.207	0.190	0.2077	4.31
46)		tert-butyl ethyl ether	0.703	0.655	0.653	0.672	0.665	0.675	0.600	0.515	0.6423	9.19
47)	s	1,2-dichloroethane-D4	0.255	0.243	0.243	0.251	0.252	0.254	0.239	0.194	0.2414	8.36
48)	C	1,1,1-trichloroethane	0.311	0.288	0.286	0.320	0.315	0.311	0.270	0.211	0.2891	12.44
49)		1,1-dichloropropene	0.373	0.352	0.351	0.354	0.356	0.363	0.332	0.284	0.3455	7.99
50)	C	benzene	1.023	0.892	0.843	0.825	0.820	0.836	0.765	0.682	0.8357	11.72
51)		thiophene	0.437	0.411	0.413	0.422	0.424	0.436	0.415	0.384	0.4177	4.02
52)	C	carbon tetrachloride	0.268	0.262	0.258	0.262	0.261	0.259	0.225	0.174	0.2460	12.94
53)		cyclohexane	0.468	0.430	0.424	0.437	0.439	0.447	0.417	0.394	0.4320	5.04
54)		tert-amyl methyl ether	0.822	0.743	0.768	0.781	0.764	0.783	0.694	0.574	0.7411	10.37
55)		dibromomethane	0.201	0.192	0.184	0.191	0.188	0.193	0.171	0.146	0.1834	9.58
56)	C	1,2-dichloropropane	0.275	0.267	0.263	0.270	0.262	0.266	0.235	0.202	0.2549	9.54
57)		bromodichloromethane	0.412	0.396	0.390	0.404	0.396	0.409	0.365	0.309	0.3851	8.86
58)	C	1,4-dioxane	0.169	0.158	0.160	0.177	0.173	0.181	0.165	0.159	0.1679	5.15
59)	C	trichloroethene	0.266	0.257	0.256	0.261	0.255	0.261	0.239	0.212	0.2509	7.05
60)	C	2,2,4-trimethylpentane	1.373	1.306	1.295	1.330	1.262	1.302	1.176	1.019	1.2580	8.91
61)		methyl methacrylate		0.438	0.457	0.488	0.479	0.493	0.419	0.352	0.4467	11.11
62)		heptane	0.687	0.633	0.621	0.642	0.632	0.641	0.558	0.451	0.6081	11.94
63)	C	cis-1,3-dichloropropene	0.401	0.397	0.405	0.438	0.434	0.455	0.401	0.335	0.4083	8.98
64)	C	4-methyl-2-pentanone		0.699	0.716	0.761	0.740	0.745	0.643	0.500	0.6862	13.22
65)		trans-1,3-dichloropropene	0.357	0.345	0.365	0.404	0.405	0.419	0.369	0.321	0.3730	8.97
66)	C	1,1,2-trichloroethane	0.274	0.262	0.263	0.271	0.262	0.265	0.225	0.198	0.2523	10.58
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	6.038	5.315	4.866	4.776	4.549	4.654	4.218	3.884	4.7874	13.82
69)	s	toluene-D8	6.222	6.657	6.241	6.162	5.945	6.132	6.048	5.907	6.1644	3.78
70)		2-methylthiophene	3.788	3.908	3.719	3.880	3.667	3.743	3.299	3.002	3.6257	8.66
71)		1,3-dichloropropane	2.854	2.811	2.764	2.813	2.720	2.830	2.552	2.269	2.7017	7.38
72)		2-hexanone	3.736	3.851	3.863	4.134	4.039	3.975	3.439	2.822	3.7323	11.37

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Impact Environmental**	**Lab Number**	**: L2047588**
Project Name	**: BEACH CHANNEL**	**Project Number**	**: 15209**
Instrument ID	**: AIRLAB19**	**Ical Ref**	**: ICAL17306**
Calibration dates	**: 11/02/20 17:31 11/02/20 22:39**		

Calibration Files
0.2 =r195331.D 0.5 =r195332.D 1.0 =r195333.D 5.0 =r195334.D 10 =r195335.D 20 =r195336.D
50 =r195337.D 100 =r195338.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)		3-methylthiophene	3.788	3.908	3.719	3.880	3.667	3.743	3.299	3.002	3.6257	8.66
74)		dibromochloromethane	1.931	1.950	1.887	1.926	1.858	1.896	1.671	1.505	1.8278	8.60
75)	C	1,2-dibromoethane	2.300	2.342	2.349	2.440	2.366	2.398	2.122	1.834	2.2690	8.79
76)		butyl acetate		0.819	0.819	0.889	0.893	0.926	0.880	0.799	0.8607	5.58
77)		octane	1.952	1.917	1.950	2.023	1.976	2.125	2.058	1.977	1.9973	3.40
78)	C	tetrachloroethene	1.915	1.914	1.869	1.929	1.829	1.913	1.774	1.518	1.8326	7.52
79)		1,1,1,2-tetrachloroethane	1.522	1.482	1.473	1.477	1.401	1.435	1.260	1.071	1.3900	10.93
80)	C	chlorobenzene	4.012	3.979	3.986	4.118	4.066	4.149	3.566	2.949	3.8531	10.58
81)	C	ethylbenzene	5.868	5.641	5.636	5.887	5.717	5.792	5.141	4.626	5.5385	7.89
82)		2-ethylthiophene	4.140	4.073	4.102	4.262	4.119	4.093	3.521	3.022	3.9164	10.82
83)	C	m+p-xylene	4.815	4.708	4.740	4.936	4.797	4.745	4.058	3.401	4.5248	11.63
84)	C	bromoform	1.846	1.874	1.876	1.998	1.982	1.971	1.719	1.404	1.8339	10.69
85)	C	styrene	4.011	4.227	4.276	4.732	4.575	4.500	3.870	3.206	4.1747	11.63
86)	C	1,1,2,2-tetrachloroethane	3.480	3.495	3.494	3.804	3.895	3.843	3.321	2.510	3.4801	12.74
87)	C	o-xylene	4.739	4.812	4.718	4.992	4.806	4.671	3.951	3.084	4.4715	14.31
88)		1,2,3-trichloropropane	3.202	3.132	3.160	3.283	3.281	3.252	2.986	2.548	3.1055	7.91
89)		nonane	5.013	5.119	5.066	5.362	5.144	5.034	4.195	3.408	4.7926	13.68
90)	s	bromofluorobenzene	4.092	4.251	4.235	4.199	4.209	4.156	4.210	4.080	4.1789	1.52
91)	C	isopropylbenzene	6.673	7.001	6.809	7.063	6.943	6.546	5.466	4.243	6.3431	15.60
92)		bromobenzene	4.098	4.028	3.974	4.283	4.327	4.263	3.829	3.071	3.9841	10.21
93)		2-chlorotoluene	1.590	1.667	1.643	1.732	1.726	1.775	1.665	1.478	1.6594	5.63
94)		n-propylbenzene	1.691	1.894	1.930	2.127	2.135	2.259	2.088	1.765	1.9861	9.96
95)		4-chlorotoluene	1.446	1.540	1.551	1.670	1.629	1.691	1.627	1.512	1.5832	5.34
96)		4-ethyl toluene	6.792	7.461	7.751	8.280	7.825	7.573	5.909	4.577	7.0211	17.46
97)		1,3,5-trimethylbenzene	5.639	6.015	6.169	6.715	6.335	6.019	5.379	3.951	5.7778	14.58
98)		tert-butylbenzene	5.078	5.602	5.552	6.187	6.151	5.971	4.327	2.922	5.2237	21.37
99)		1,2,4-trimethylbenzene	5.207	5.809	5.986	6.613	6.290	5.616	3.892	2.519	5.2415	26.23
100)		decane	3.112	4.044	4.578	5.185	5.162	5.093	4.340	3.175	4.3361	19.43
101)	C	Benzyl Chloride	2.528	3.079	3.612	4.574	4.624	4.618	3.283	2.596	3.6143	24.66
102)		1,3-dichlorobenzene	2.845	3.179	3.357	3.831	3.785	3.425	2.698	1.911	3.1288	20.27
103)	C	1,4-dichlorobenzene	2.765	3.056	3.263	3.701	3.669	3.415	2.617	1.697	3.0229	21.94
104)		sec-butylbenzene	7.308	8.324	8.578	9.468	9.011	8.282	6.065	3.974	7.6262	23.77
105)		1,2,3-trimethylbenzene	5.046	5.894	6.195	6.685	6.242	5.630	3.518	2.450	5.2075	28.45
106)		p-isopropyltoluene	4.410	5.480	6.522	7.635	7.425	7.158	4.190	2.927	5.7184	30.43#
107)		1,2-dichlorobenzene	2.231	2.650	2.963	3.559	3.410	3.242	2.197	1.713	2.7457	23.99
108)		n-butylbenzene	4.839	3.810	4.619	6.305	6.067	5.792	3.322	3.342	4.7621	25.31

Initial Calibration Summary
Form 6
Air Volatiles

Client	**: Impact Environmental**	**Lab Number**	**: L2047588**
Project Name	**: BEACH CHANNEL**	**Project Number**	**: 15209**
Instrument ID	**: AIRLAB19**	**Ical Ref**	**: ICAL17306**
Calibration dates	**: 11/02/20 17:31 11/02/20 22:39**		

Calibration Files
0.2 =r195331.D 0.5 =r195332.D 1.0 =r195333.D 5.0 =r195334.D 10 =r195335.D 20 =r195336.D
50 =r195337.D 100 =r195338.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)		indan	5.123	5.633	5.731	6.525	6.519	6.379	4.333	2.958	5.4000	23.02
110)		indene	3.193	3.912	4.419	5.555	5.493	5.396	3.270	2.737	4.2468	26.80
111)	C	1,2-dibromo-3-chloropropane	1.415	1.220	1.241	1.869	1.715	1.487	0.982	0.985	1.3643	23.53
112)		undecane	3.402	3.973	3.326	5.295	4.227	3.666	3.629	3.968	3.9359	15.95
113)		1,2,4,5-tetramethylbenzene	4.724	4.406	3.538	6.504	5.123	4.081	3.871	3.981	4.5285	20.82
114)		dodecane	3.102	2.958	2.069	5.583	5.299	4.824	4.758	3.983	4.0721	30.82#
115)	C	1,2,4-trichlorobenzene	0.872	1.645	1.679	1.825	1.811	1.544	2.042	2.004	1.6776	21.93
116)		naphthalene	2.195	4.044	4.441	3.986	4.135	3.616	5.024	4.853	4.0366	21.73
117)		1,2,3-trichlorobenzene	1.045	1.280	1.838	2.106	2.004	1.669	2.231	2.013	1.7731	23.55
118)		benzothiophene	2.084	3.621	4.329	5.050	5.119	3.675	5.071	4.842	4.2238	25.05
119)	C	hexachlorobutadiene	1.646	1.646	1.388	1.415	1.443	1.214	1.406	1.210	1.4210	11.60
120)		2-methylnaphthalene			0.501	0.932	1.182	0.976	1.193	1.306	1.0150	28.43
121)		1-methylnaphthalene			1.451	2.131	2.399	1.544	1.710	1.696	1.8218	20.11

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Method File : TFS19_201103.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Tue Nov 03 11:21:02 2020
Response Via : Initial Calibration

Calibration Files
0.2 =r195331.D 0.5 =r195332.D 1.0 =r195333.D 5.0 =r195334.D 10 =r195335.D 20 =r195336.D
50 =r195337.D 100 =r195338.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	0.823	0.718	0.710	0.713	0.709	0.707	0.645	0.633	0.7073	8.08
3)		propylene		0.485	0.467	0.471	0.470	0.463	0.399	0.371	0.4465	9.73
4)		propane		0.573	0.597	0.596	0.597	0.604	0.552	0.551	0.5815	3.87
5)		dichlorodifluoromethane	0.896	0.820	0.812	0.809	0.784	0.755	0.634	0.559	0.7586	14.47
6)	C	chloromethane	0.598	0.552	0.547	0.550	0.522	0.529	0.454	0.443	0.5245	9.92
7)		Freon-114	1.308	1.223	1.202	1.171	1.132	1.095	0.904	0.758	1.0992	16.51
8)	C	methanol			0.238	0.232	0.222	0.217	0.196	0.188	0.2152	9.21
9)	C	vinyl chloride	0.507	0.479	0.494	0.503	0.481	0.477	0.421	0.407	0.4711	7.88
10)	C	1,3-butadiene	0.510	0.482	0.493	0.511	0.496	0.504	0.461	0.446	0.4880	4.83
11)		butane	1.004	0.936	0.903	0.881	0.883	0.809	0.711	0.646	0.8466	14.01
12)	C	acetaldehyde		0.258	0.267	0.268	0.253	0.260	0.206	0.179	0.2415	14.39
13)	C	bromomethane	0.411	0.385	0.398	0.395	0.380	0.374	0.335	0.305	0.3728	9.51
14)	C	chloroethane	0.177	0.183	0.169	0.152	0.137	0.133	0.124	0.113	0.1484	17.35
15)		ethanol			0.478	0.461	0.436	0.433	0.368	0.336	0.4188	13.12
16)		dichlorofluoromethane	0.882	0.834	0.828	0.806	0.759	0.739	0.609	0.515	0.7465	16.70
17)	C	vinyl bromide	0.415	0.416	0.438	0.428	0.412	0.406	0.337	0.295	0.3934	12.70
18)	C	acrolein		0.257	0.256	0.247	0.242	0.242	0.230	0.233	0.2439	4.23
19)		acetone	0.915	0.824	0.799	0.772	0.749	0.689	0.531	0.423	0.7125	22.69
20)	C	acetonitrile	0.508	0.465	0.453	0.439	0.430	0.426	0.368	0.340	0.4286	12.41
21)		trichlorofluoromethane	0.669	0.664	0.656	0.626	0.668	0.567	0.464	0.383	0.5870	18.50
22)		isopropyl alcohol	1.330	1.117	1.075	1.060	1.170	1.126	0.951	0.702	1.0663	17.07
23)	C	acrylonitrile	0.488	0.445	0.476	0.376	0.441	0.430	0.433	0.463	0.4439	7.76
24)		pentane	1.309	1.389	1.359	1.317	1.517	1.368	1.275	1.098	1.3290	8.90
25)		ethyl ether	1.106	1.032	1.031	1.136	1.146	1.156	1.064	1.067	1.0922	4.62
26)	C	1,1-dichloroethene	0.709	0.676	0.663	0.656	0.648	0.628	0.565	0.510	0.6317	10.21
27)		tertiary butyl alcohol		0.924	0.913	0.938	0.901	0.938	0.831	0.791	0.8908	6.43
28)	C	methylene chloride		0.701	0.690	0.672	0.668	0.671	0.634	0.614	0.6643	4.55
29)	C	3-chloropropene	0.903	0.863	0.851	0.855	0.842	0.835	0.759	0.687	0.8243	8.31
30)	C	carbon disulfide	1.988	1.778	1.751	1.722	1.692	1.691	1.547	1.366	1.6922	10.64
31)		Freon 113	0.970	0.932	0.906	0.880	0.857	0.825	0.713	0.605	0.8360	14.51

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Method File : TFS19_201103.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Tue Nov 03 11:21:02 2020
Response Via : Initial Calibration

Calibration Files
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50 =r195337.D 100 =r195338.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)		trans-1,2-dichloroethene	0.673	0.657	0.653	0.676	0.672	0.677	0.618	0.572	0.6497	5.71
33)	C	1,1-dichloroethane	0.988	0.928	0.899	0.886	0.862	0.847	0.758	0.687	0.8570	11.13
34)	C	MTBE	1.647	1.612	1.590	1.556	1.507	1.511	1.348	1.156	1.4909	10.93
35)	C	vinyl acetate			1.384	1.423	1.423	1.461	1.321	1.181	1.3654	7.47
36)	C	2-butanone		1.416	1.388	1.467	1.331	1.344	1.207	1.065	1.3170	10.47
37)		cis-1,2-dichloroethene	0.606	0.601	0.594	0.603	0.597	0.598	0.546	0.503	0.5811	6.35
38)		Ethyl Acetate	0.194	0.187	0.196	0.195	0.188	0.190	0.171	0.155	0.1845	7.70
39)	C	chloroform	0.890	0.846	0.826	0.825	0.797	0.812	0.740	0.667	0.8002	8.57
40)		Tetrahydrofuran	0.983	0.903	0.898	0.900	0.867	0.875	0.792	0.702	0.8652	9.75
41)		2,2-dichloropropane	0.852	0.813	0.796	0.777	0.761	0.766	0.676	0.560	0.7501	12.24
42)	C	1,2-dichloroethane	0.508	0.487	0.473	0.475	0.459	0.456	0.405	0.329	0.4492	12.65
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.436	0.410	0.404	0.414	0.421	0.420	0.376	0.326	0.4009	8.69
45)		diisopropyl ether	0.214	0.205	0.203	0.209	0.212	0.221	0.207	0.190	0.2077	4.31
46)		tert-butyl ethyl ether	0.703	0.655	0.653	0.672	0.665	0.675	0.600	0.515	0.6423	9.19
47)	s	1,2-dichloroethane-D4	0.255	0.243	0.243	0.251	0.252	0.254	0.239	0.194	0.2414	8.36
48)	C	1,1,1-trichloroethane	0.311	0.288	0.286	0.320	0.315	0.311	0.270	0.211	0.2891	12.44
49)		1,1-dichloropropene	0.373	0.352	0.351	0.354	0.356	0.363	0.332	0.284	0.3455	7.99
50)	C	benzene	1.023	0.892	0.843	0.825	0.820	0.836	0.765	0.682	0.8357	11.72
51)		thiophene	0.437	0.411	0.413	0.422	0.424	0.436	0.415	0.384	0.4177	4.02
52)	C	carbon tetrachloride	0.268	0.262	0.258	0.262	0.261	0.259	0.225	0.174	0.2460	12.94
53)		cyclohexane	0.468	0.430	0.424	0.437	0.439	0.447	0.417	0.394	0.4320	5.04
54)		tert-amyl methyl ether	0.822	0.743	0.768	0.781	0.764	0.783	0.694	0.574	0.7411	10.37
55)		dibromomethane	0.201	0.192	0.184	0.191	0.188	0.193	0.171	0.146	0.1834	9.58
56)	C	1,2-dichloropropane	0.275	0.267	0.263	0.270	0.262	0.266	0.235	0.202	0.2549	9.54
57)		bromodichloromethane	0.412	0.396	0.390	0.404	0.396	0.409	0.365	0.309	0.3851	8.86
58)	C	1,4-dioxane	0.169	0.158	0.160	0.177	0.173	0.181	0.165	0.159	0.1679	5.15
59)	C	trichloroethene	0.266	0.257	0.256	0.261	0.255	0.261	0.239	0.212	0.2509	7.05
60)	C	2,2,4-trimethylpentane	1.373	1.306	1.295	1.330	1.262	1.302	1.176	1.019	1.2580	8.91
61)		methyl methacrylate		0.438	0.457	0.488	0.479	0.493	0.419	0.352	0.4467	11.11
62)		heptane	0.687	0.633	0.621	0.642	0.632	0.641	0.558	0.451	0.6081	11.94

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Method File : TFS19_201103.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Tue Nov 03 11:21:02 2020
Response Via : Initial Calibration

Calibration Files
0.2 =r195331.D 0.5 =r195332.D 1.0 =r195333.D 5.0 =r195334.D 10 =r195335.D 20 =r195336.D
50 =r195337.D 100 =r195338.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63)	C	cis-1,3-dichloropropene	0.401	0.397	0.405	0.438	0.434	0.455	0.401	0.335	0.4083	8.98
64)	C	4-methyl-2-pentanone		0.699	0.716	0.761	0.740	0.745	0.643	0.500	0.6862	13.22
65)		trans-1,3-dichloropropene	0.357	0.345	0.365	0.404	0.405	0.419	0.369	0.321	0.3730	8.97
66)	C	1,1,2-trichloroethane	0.274	0.262	0.263	0.271	0.262	0.265	0.225	0.198	0.2523	10.58
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	6.038	5.315	4.866	4.776	4.549	4.654	4.218	3.884	4.7874	13.82
69)	s	toluene-D8	6.222	6.657	6.241	6.162	5.945	6.132	6.048	5.907	6.1644	3.78
70)		2-methylthiophene	3.788	3.908	3.719	3.880	3.667	3.743	3.299	3.002	3.6257	8.66
71)		1,3-dichloropropane	2.854	2.811	2.764	2.813	2.720	2.830	2.552	2.269	2.7017	7.38
72)		2-hexanone	3.736	3.851	3.863	4.134	4.039	3.975	3.439	2.822	3.7323	11.37
73)		3-methylthiophene	3.788	3.908	3.719	3.880	3.667	3.743	3.299	3.002	3.6257	8.66
74)		dibromochloromethane	1.931	1.950	1.887	1.926	1.858	1.896	1.671	1.505	1.8278	8.60
75)	C	1,2-dibromoethane	2.300	2.342	2.349	2.440	2.366	2.398	2.122	1.834	2.2690	8.79
76)		butyl acetate		0.819	0.819	0.889	0.893	0.926	0.880	0.799	0.8607	5.58
77)		octane	1.952	1.917	1.950	2.023	1.976	2.125	2.058	1.977	1.9973	3.40
78)	C	tetrachloroethene	1.915	1.914	1.869	1.929	1.829	1.913	1.774	1.518	1.8326	7.52
79)		1,1,1,2-tetrachloroethane	1.522	1.482	1.473	1.477	1.401	1.435	1.260	1.071	1.3900	10.93
80)	C	chlorobenzene	4.012	3.979	3.986	4.118	4.066	4.149	3.566	2.949	3.8531	10.58
81)	C	ethylbenzene	5.868	5.641	5.636	5.887	5.717	5.792	5.141	4.626	5.5385	7.89
82)		2-ethylthiophene	4.140	4.073	4.102	4.262	4.119	4.093	3.521	3.022	3.9164	10.82
83)	C	m+p-xylene	4.815	4.708	4.740	4.936	4.797	4.745	4.058	3.401	4.5248	11.63
84)	C	bromoform	1.846	1.874	1.876	1.998	1.982	1.971	1.719	1.404	1.8339	10.69
85)	C	styrene	4.011	4.227	4.276	4.732	4.575	4.500	3.870	3.206	4.1747	11.63
86)	C	1,1,2,2-tetrachloroethane	3.480	3.495	3.494	3.804	3.895	3.843	3.321	2.510	3.4801	12.74
87)	C	o-xylene	4.739	4.812	4.718	4.992	4.806	4.671	3.951	3.084	4.4715	14.31
88)		1,2,3-trichloropropane	3.202	3.132	3.160	3.283	3.281	3.252	2.986	2.548	3.1055	7.91
89)		nonane	5.013	5.119	5.066	5.362	5.144	5.034	4.195	3.408	4.7926	13.68
90)	s	bromofluorobenzene	4.092	4.251	4.235	4.199	4.209	4.156	4.210	4.080	4.1789	1.52
91)	C	isopropylbenzene	6.673	7.001	6.809	7.063	6.943	6.546	5.466	4.243	6.3431	15.60
92)		bromobenzene	4.098	4.028	3.974	4.283	4.327	4.263	3.829	3.071	3.9841	10.21
93)		2-chlorotoluene	1.590	1.667	1.643	1.732	1.726	1.775	1.665	1.478	1.6594	5.63

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Method File : TFS19_201103.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Tue Nov 03 11:21:02 2020
Response Via : Initial Calibration

Calibration Files
0.2 =r195331.D 0.5 =r195332.D 1.0 =r195333.D 5.0 =r195334.D 10 =r195335.D 20 =r195336.D
50 =r195337.D 100 =r195338.D

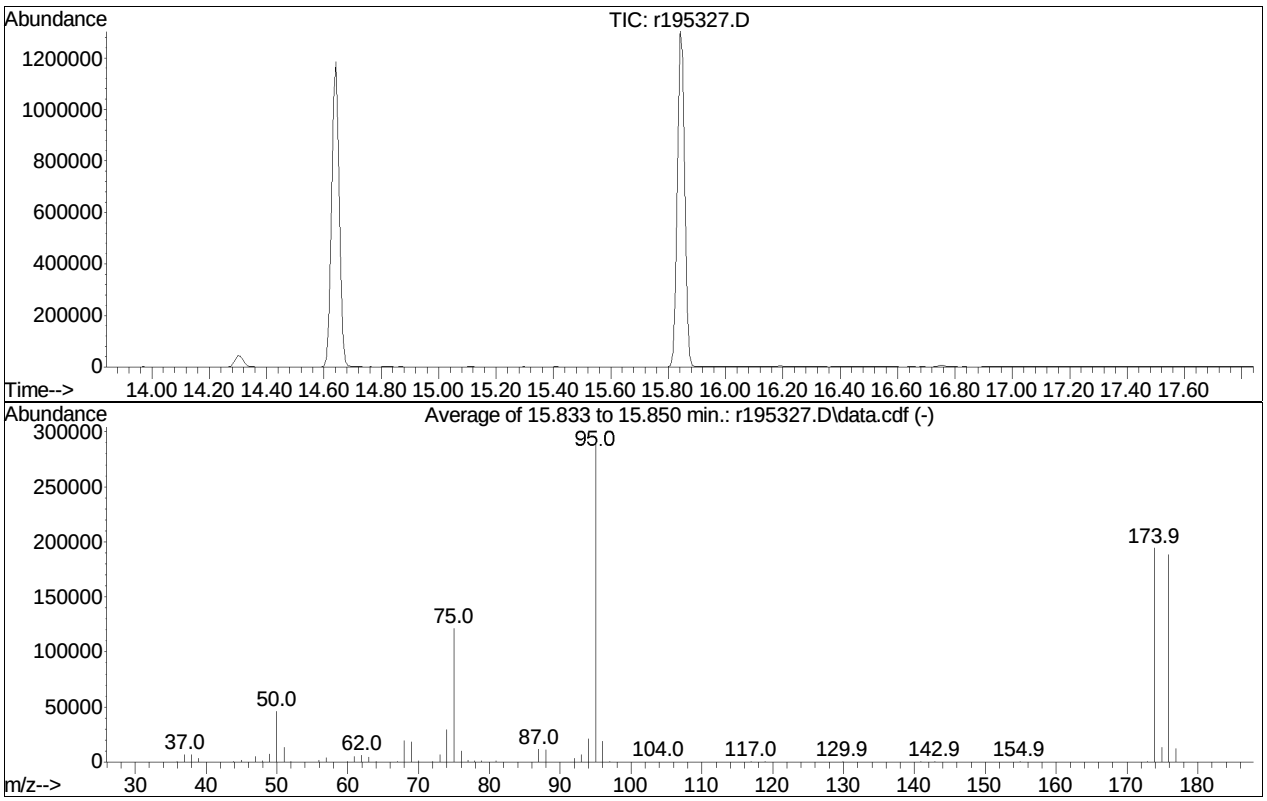
		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)		n-propylbenzene	1.691	1.894	1.930	2.127	2.135	2.259	2.088	1.765	1.9861	9.96
95)		4-chlorotoluene	1.446	1.540	1.551	1.670	1.629	1.691	1.627	1.512	1.5832	5.34
96)		4-ethyl toluene	6.792	7.461	7.751	8.280	7.825	7.573	5.909	4.577	7.0211	17.46
97)		1,3,5-trimethylbenzene	5.639	6.015	6.169	6.715	6.335	6.019	5.379	3.951	5.7778	14.58
98)		tert-butylbenzene	5.078	5.602	5.552	6.187	6.151	5.971	4.327	2.922	5.2237	21.37
99)		1,2,4-trimethylbenzene	5.207	5.809	5.986	6.613	6.290	5.616	3.892	2.519	5.2415	26.23
100)		decane	3.112	4.044	4.578	5.185	5.162	5.093	4.340	3.175	4.3361	19.43
101)	C	Benzyl Chloride	2.528	3.079	3.612	4.574	4.624	4.618	3.283	2.596	3.6143	24.66
102)		1,3-dichlorobenzene	2.845	3.179	3.357	3.831	3.785	3.425	2.698	1.911	3.1288	20.27
103)	C	1,4-dichlorobenzene	2.765	3.056	3.263	3.701	3.669	3.415	2.617	1.697	3.0229	21.94
104)		sec-butylbenzene	7.308	8.324	8.578	9.468	9.011	8.282	6.065	3.974	7.6262	23.77
105)		1,2,3-trimethylbenzene	5.046	5.894	6.195	6.685	6.242	5.630	3.518	2.450	5.2075	28.45
106)		p-isopropyltoluene	4.410	5.480	6.522	7.635	7.425	7.158	4.190	2.927	5.7184	30.43#
107)		1,2-dichlorobenzene	2.231	2.650	2.963	3.559	3.410	3.242	2.197	1.713	2.7457	23.99
108)		n-butylbenzene	4.839	3.810	4.619	6.305	6.067	5.792	3.322	3.342	4.7621	25.31
109)		indan	5.123	5.633	5.731	6.525	6.519	6.379	4.333	2.958	5.4000	23.02
110)		indene	3.193	3.912	4.419	5.555	5.493	5.396	3.270	2.737	4.2468	26.80
111)	C	1,2-dibromo-3-chloropropane	1.415	1.220	1.241	1.869	1.715	1.487	0.982	0.985	1.3643	23.53
112)		undecane	3.402	3.973	3.326	5.295	4.227	3.666	3.629	3.968	3.9359	15.95
113)		1,2,4,5-tetramethylbenzene	4.724	4.406	3.538	6.504	5.123	4.081	3.871	3.981	4.5285	20.82
114)		dodecane	3.102	2.958	2.069	5.583	5.299	4.824	4.758	3.983	4.0721	30.82#
115)	C	1,2,4-trichlorobenzene	0.872	1.645	1.679	1.825	1.811	1.544	2.042	2.004	1.6776	21.93
116)		naphthalene	2.195	4.044	4.441	3.986	4.135	3.616	5.024	4.853	4.0366	21.73
117)		1,2,3-trichlorobenzene	1.045	1.280	1.838	2.106	2.004	1.669	2.231	2.013	1.7731	23.55
118)		benzothiophene	2.084	3.621	4.329	5.050	5.119	3.675	5.071	4.842	4.2238	25.05
119)	C	hexachlorobutadiene	1.646	1.646	1.388	1.415	1.443	1.214	1.406	1.210	1.4210	11.60
120)		2-methylnaphthalene			0.501	0.932	1.182	0.976	1.193	1.306	1.0150	28.43
121)		1-methylnaphthalene			1.451	2.131	2.399	1.544	1.710	1.696	1.8218	20.11

(#) = Out of Range

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195327.D
Acq On : 2 Nov 2020 2:39 PM
Operator : AIRLAB19:TS
Sample : WG1429789-1,3,250,250
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Tue Nov 03 11:21:02 2020



Spectrum Information: Average of 15.833 to 15.850 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.0	46355	PASS
75	95	30	66	41.8	121418	PASS
95	95	100	100	100.0	290150	PASS
96	95	5	9	6.5	18785	PASS
173	174	0.00	2	0.5	894	PASS
174	95	50	120	67.0	194412	PASS
175	174	4	9	7.0	13651	PASS
176	174	93	101	96.8	188276	PASS
177	176	5	9	6.6	12436	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195331.D
Acq On : 2 Nov 2020 5:31 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.2
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:10 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.658	49	364977	10.000	ppbV	0.00
Standard Area = 386974			Recovery = 94.32%			
43) 1,4-difluorobenzene	10.500	114	840012	10.000	ppbV	0.00
Standard Area = 862720			Recovery = 97.37%			
67) chlorobenzene-D5	14.633	54	142713	10.000	ppbV	0.00
Standard Area = 151381			Recovery = 94.27%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.375	65	214538	10.581	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.81%			
69) toluene-D8	12.975	98	887949	10.093	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.93%			
90) bromofluorobenzene	15.842	95	584031	9.793	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.93%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.054	51	6008	0.233	ppbV	97
3) propylene	4.090	41	4173M6	0.256	ppbV	
4) propane	4.114	29	5274	0.248	ppbV	95
5) dichlorodifluoromethane	4.168	85	6544	0.236	ppbV	96
6) chloromethane	4.342	50	4368	0.228	ppbV	99
7) Freon-114	4.456	85	9550	0.238	ppbV	99
8) methanol	4.534	31	11970	1.524	ppbV #	1
9) vinyl chloride	4.582	62	3703	0.215	ppbV	96
10) 1,3-butadiene	4.732	54	3722	0.209	ppbV	95
11) butane	4.786	43	7328	0.237	ppbV	97
12) acetaldehyde	4.480	29	12399	1.407	ppbV	94
13) bromomethane	5.008	94	2997	0.220	ppbV	98
14) chloroethane	5.182	64	1291	0.238	ppbV	99
15) ethanol	5.313	31	24144	1.580	ppbV	98
16) dichlorofluoromethane	5.290	67	6435	0.236	ppbV	98
17) vinyl bromide	5.537	106	3026	0.211	ppbV	99
18) acrolein	5.657	56	2056	0.231	ppbV #	46
19) acetone	5.780	43	33378	1.284	ppbV #	98
20) acetonitrile	5.537	41	3706	0.237	ppbV #	55
21) trichlorofluoromethane	5.943	101	4883	0.228	ppbV	94
22) isopropyl alcohol	6.020	45	24263	0.623	ppbV	99
23) acrylonitrile	6.233	53	3563	0.220	ppbV	92
24) pentane	6.290	43	9555	0.197	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195331.D
Acq On : 2 Nov 2020 5:31 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.2
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:10 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	6.310	31	8071	0.202 ppbV	98
26) 1,1-dichloroethene	6.548	61	5174	0.224 ppbV	97
27) tertiary butyl alcohol	6.590	59	7448	0.229 ppbV	97
28) methylene chloride	6.662	49	5444M6	0.225 ppbV	
29) 3-chloropropene	6.776	41	6590	0.219 ppbV	98
30) carbon disulfide	6.944	76	14513	0.235 ppbV #	73
31) Freon 113	6.914	101	7077	0.232 ppbV	99
32) trans-1,2-dichloroethene	7.542	61	4909	0.207 ppbV	98
33) 1,1-dichloroethane	7.725	63	7211	0.231 ppbV	100
34) MTBE	7.783	73	12019	0.221 ppbV	98
35) vinyl acetate	7.867	43	10774	0.216 ppbV	98
36) 2-butanone	8.092	43	11075	0.230 ppbV	98
37) cis-1,2-dichloroethene	8.508	61	4427	0.209 ppbV	98
38) Ethyl Acetate	8.717	61	1416	0.210 ppbV	83
39) chloroform	8.783	83	6497	0.222 ppbV	96
40) Tetrahydrofuran	9.175	42	7177	0.227 ppbV	99
41) 2,2-dichloropropane	8.808	77	6221	0.227 ppbV	98
42) 1,2-dichloroethane	9.483	62	3709	0.226 ppbV	96
44) hexane	8.708	57	7324	0.217 ppbV	99
45) diisopropyl ether	8.692	87	3601	0.206 ppbV	95
46) tert-butyl ethyl ether	9.200	59	11815	0.219 ppbV	99
48) 1,1,1-trichloroethane	9.725	97	5233	0.215 ppbV	99
49) 1,1-dichloropropene	10.027	75	6266	0.216 ppbV	99
50) benzene	10.167	78	17179	0.245 ppbV	98
51) thiophene	10.300	84	7339	0.209 ppbV	99
52) carbon tetrachloride	10.313	117	4498	0.218 ppbV	95
53) cyclohexane	10.440	56	7862	0.217 ppbV	96
54) tert-amyl methyl ether	10.740	73	13811	0.222 ppbV	100
55) dibromomethane	10.947	93	3384	0.220 ppbV	99
56) 1,2-dichloropropane	10.967	63	4618	0.216 ppbV	98
57) bromodichloromethane	11.160	83	6921	0.214 ppbV	98
58) 1,4-dioxane	11.207	88	2839	0.201 ppbV	86
59) trichloroethene	11.207	130	4472	0.212 ppbV	99
60) 2,2,4-trimethylpentane	11.240	57	23071	0.218 ppbV	98
61) methyl methacrylate	11.387	41	8163	0.218 ppbV	97
62) heptane	11.500	43	11538	0.226 ppbV	98
63) cis-1,3-dichloropropene	12.080	75	6738	0.196 ppbV	97
64) 4-methyl-2-pentanone	12.113	43	12261	0.213 ppbV	98
65) trans-1,3-dichloropropene	12.625	75	5992	0.191 ppbV	95
66) 1,1,2-trichloroethane	12.800	97	4596	0.217 ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195331.D
Acq On : 2 Nov 2020 5:31 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.2
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:10 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	13.075	91	17233	0.252	ppbV		99
70)	2-methylthiophene	13.133	97	10813	0.209	ppbV		99
71)	1,3-dichloropropane	13.092	76	8147	0.211	ppbV		96
72)	2-hexanone	13.308	43	10664	0.200	ppbV		97
73)	3-methylthiophene	13.133	97	10813	0.209	ppbV		99
74)	dibromochloromethane	13.467	129	5512	0.211	ppbV		98
75)	1,2-dibromoethane	13.692	107	6566	0.203	ppbV		100
76)	butyl acetate	13.875	73	2359	0.192	ppbV		96
77)	octane	13.958	85	5572	0.195	ppbV		95
78)	tetrachloroethene	14.100	166	5465	0.209	ppbV		96
79)	1,1,1,2-tetrachloroethane	14.650	131	4345	0.219	ppbV		98
80)	chlorobenzene	14.667	112	11450	0.208	ppbV		96
81)	ethylbenzene	14.967	91	16748	0.212	ppbV		98
82)	2-ethylthiophene	15.008	97	11818	0.211	ppbV		91
83)	m+p-xylene	15.108	91	27484	0.426	ppbV		99
84)	bromoform	15.183	173	5270	0.201	ppbV		98
85)	styrene	15.400	104	11448	0.192	ppbV		98
86)	1,1,2,2-tetrachloroethane	15.483	83	9933	0.200	ppbV		98
87)	o-xylene	15.483	91	13525	0.212	ppbV		94
88)	1,2,3-trichloropropane	15.583	75	9138	0.206	ppbV		98
89)	nonane	15.642	43	14309	0.209	ppbV		96
91)	isopropylbenzene	15.942	105	19046	0.210	ppbV		96
92)	bromobenzene	16.017	77	11696	0.206	ppbV		100
93)	2-chlorotoluene	16.308	126	4539	0.192	ppbV		84
94)	n-propylbenzene	16.325	120	4827	0.170	ppbV	#	61
95)	4-chlorotoluene	16.358	126	4127	0.183	ppbV		93
96)	4-ethyl toluene	16.442	105	19387	0.193	ppbV		95
97)	1,3,5-trimethylbenzene	16.492	105	16095	0.195	ppbV		97
98)	tert-butylbenzene	16.808	119	14494	0.194	ppbV		94
99)	1,2,4-trimethylbenzene	16.808	105	14863	0.199	ppbV		92
100)	decane	16.875	57	8882	0.144	ppbV		93
101)	Benzyl Chloride	16.925	91	7216	0.140	ppbV		99
102)	1,3-dichlorobenzene	16.933	146	8120	0.182	ppbV		96
103)	1,4-dichlorobenzene	16.983	146	7892	0.183	ppbV		96
104)	sec-butylbenzene	17.017	105	20859	0.192	ppbV		100
105)	1,2,3-trimethylbenzene	17.142	105	14403	0.194	ppbV		86
106)	p-isopropyltoluene	17.133	119	12587	0.154	ppbV		95
107)	1,2-dichlorobenzene	17.250	146	6368	0.163	ppbV		97
108)	n-butylbenzene	17.450	91	13813	0.203	ppbV		97
109)	indan	17.300	117	14621	0.190	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195331.D
Acq On : 2 Nov 2020 5:31 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.2
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:10 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

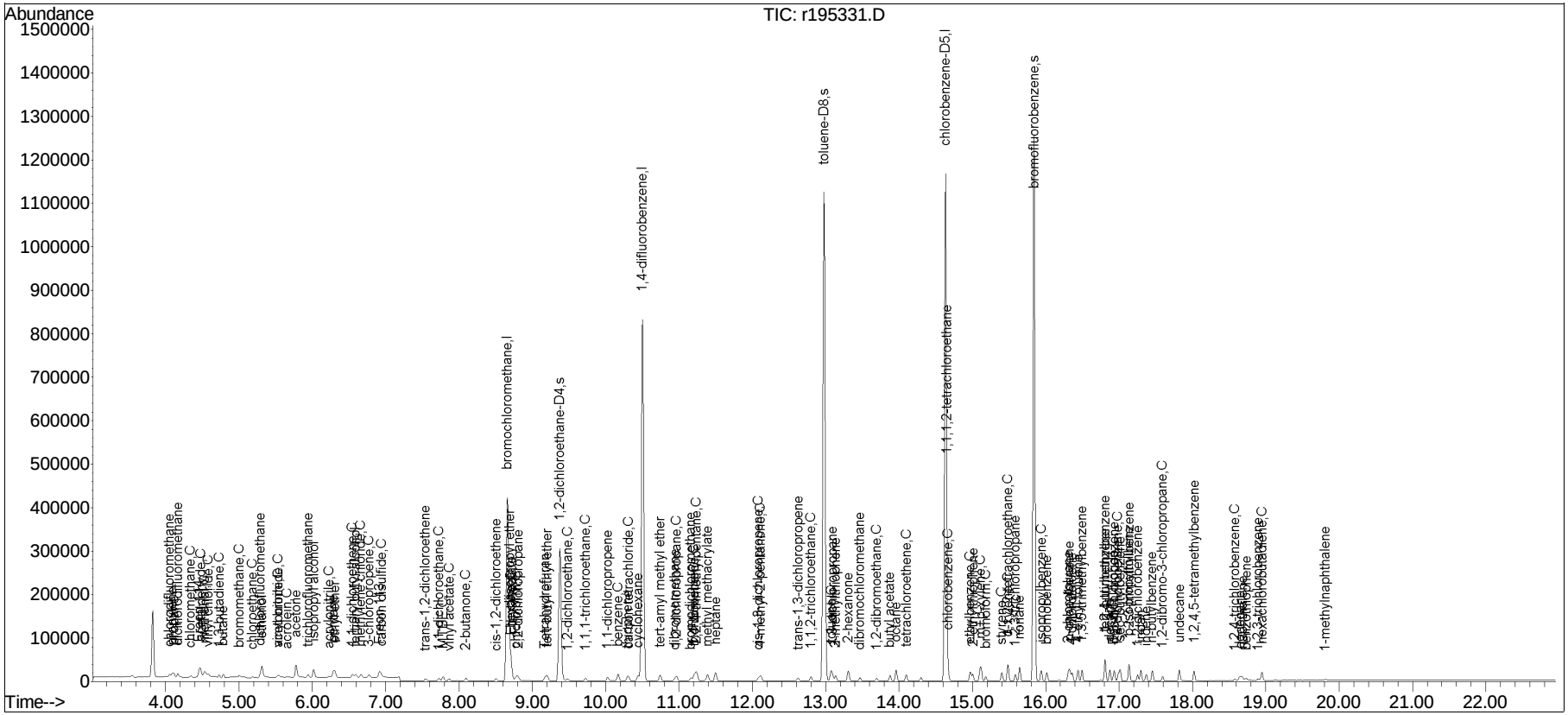
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	17.367	115	9113	0.150	ppbV	97
111) 1,2-dibromo-3-chloropr...	17.592	75	4039	0.207	ppbV	94
112) undecane	17.825	57	9709	0.173	ppbV	92
113) 1,2,4,5-tetramethylben...	18.025	119	13483	0.209	ppbV	97
114) dodecane	18.650	57	8854	0.152	ppbV	91
115) 1,2,4-trichlorobenzene	18.575	180	2488	0.104	ppbV	97
116) naphthalene	18.683	128	6264	0.109	ppbV	97
117) 1,2,3-trichlorobenzene	18.892	180	2982M6	0.118	ppbV	
118) benzothiophene	18.733	134	5948	0.099	ppbV #	91
119) hexachlorobutadiene	18.950	225	4699	0.232	ppbV	93
120) 2-methylnaphthalene	0.000		0	N.D.		
121) 1-methylnaphthalene	19.808	142	2677	0.103	ppbV	97

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195331.D
Acq On : 2 Nov 2020 5:31 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.2
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

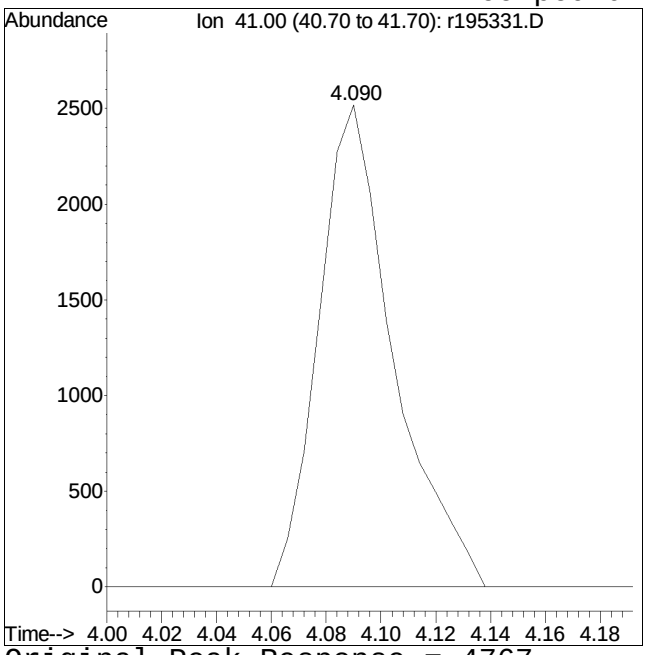
Quant Time: Nov 03 11:22:10 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

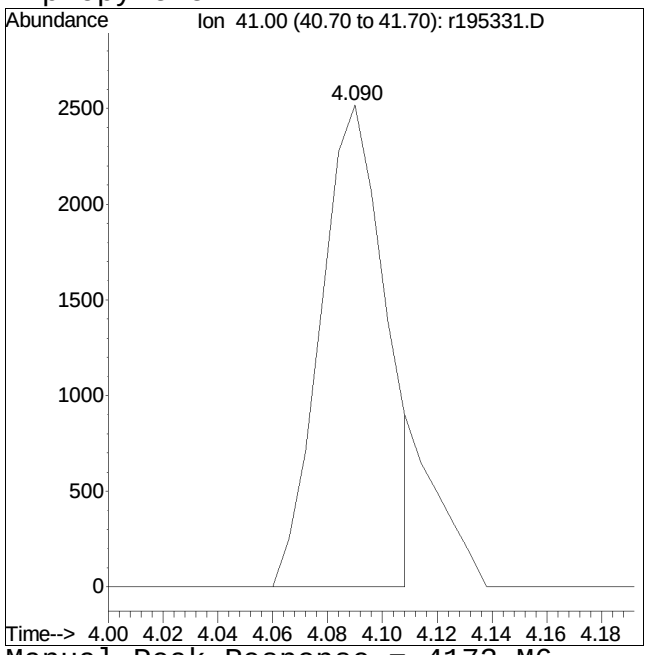


Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195331.D
Date Inj'd : 11/2/2020 0:5: 1
Sample : ITO15-LLSTD0.2
Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:22 am

Compound #3: propylene



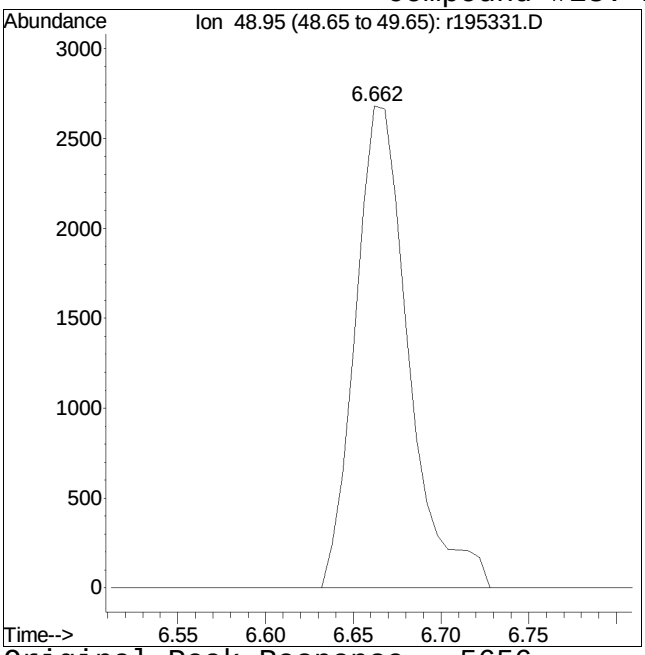


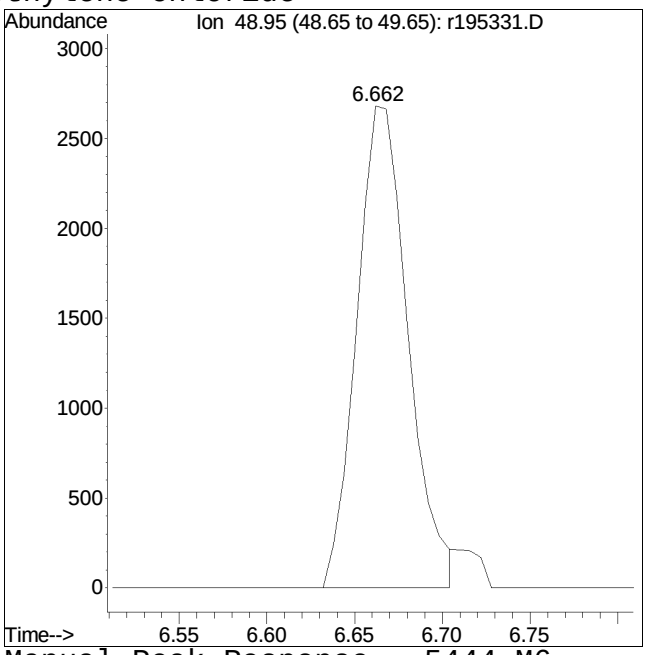
Original Peak Response = 4767 Manual Peak Response = 4173 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195331.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:5: 1 Instrument :
Sample : ITO15-LLSTD0.2 Quant Date : 11/3/2020 11:22 am

Compound #28: methylene chloride



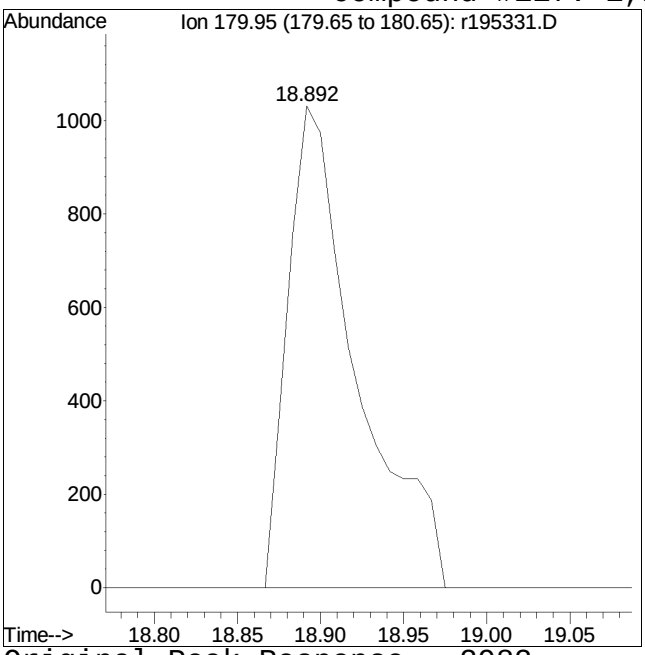


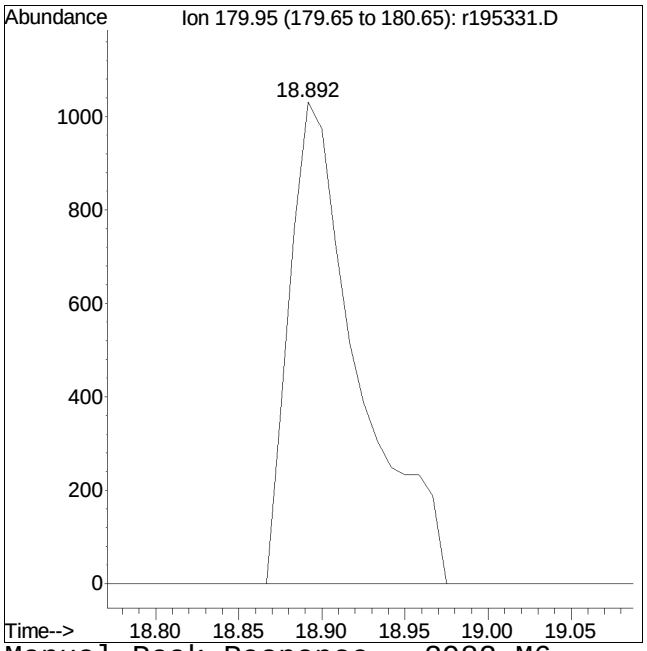
Original Peak Response = 5656 Manual Peak Response = 5444 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195331.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:5: 1 Instrument :
Sample : ITO15-LLSTD0.2 Quant Date : 11/3/2020 11:22 am

Compound #117: 1,2,3-trichlorobenzene





Original Peak Response = 2982 Manual Peak Response = 2982 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195332.D
Acq On : 2 Nov 2020 6:15 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.5
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:18 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.658	49	335495	10.000	ppbV	0.00
Standard Area = 386974			Recovery = 86.70%			
43) 1,4-difluorobenzene	10.500	114	799463	10.000	ppbV	0.00
Standard Area = 862720			Recovery = 92.67%			
67) chlorobenzene-D5	14.633	54	129627	10.000	ppbV	0.00
Standard Area = 151381			Recovery = 85.63%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.375	65	194331	10.070	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.70%			
69) toluene-D8	12.975	98	862945	10.799	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.99%			
90) bromofluorobenzene	15.842	95	551044	10.173	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.73%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.054	51	12039	0.507	ppbV	99
3) propylene	4.084	41	8136M6	0.543	ppbV	
4) propane	4.114	29	9618	0.493	ppbV	99
5) dichlorodifluoromethane	4.162	85	13761	0.541	ppbV	98
6) chloromethane	4.342	50	9253	0.526	ppbV	99
7) Freon-114	4.456	85	20521	0.556	ppbV	99
8) methanol	4.534	31	21142	2.928	ppbV #	19
9) vinyl chloride	4.582	62	8033	0.508	ppbV	98
10) 1,3-butadiene	4.726	54	8083	0.494	ppbV	99
11) butane	4.786	43	15702	0.553	ppbV	98
12) acetaldehyde	4.474	29	21626	2.669	ppbV	99
13) bromomethane	5.002	94	6463M6	0.517	ppbV	
14) chloroethane	5.182	64	3067	0.616	ppbV	100
15) ethanol	5.307	31	43454	3.093	ppbV	96
16) dichlorofluoromethane	5.287	67	13988	0.559	ppbV	100
17) vinyl bromide	5.533	106	6974	0.528	ppbV	96
18) acrolein	5.650	56	4313M6	0.527	ppbV	
19) acetone	5.773	43	69091	2.890	ppbV #	100
20) acetonitrile	5.537	41	7804	0.543	ppbV #	79
21) trichlorofluoromethane	5.943	101	11131	0.565	ppbV	97
22) isopropyl alcohol	6.010	45	46845	1.309	ppbV	99
23) acrylonitrile	6.230	53	7465	0.501	ppbV	97
24) pentane	6.287	43	23292	0.522	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195332.D
Acq On : 2 Nov 2020 6:15 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.5
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:18 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.307	31	17308	0.472	ppbV	99
26) 1,1-dichloroethene	6.548	61	11337	0.535	ppbV	97
27) tertiary butyl alcohol	6.584	59	15497	0.519	ppbV	97
28) methylene chloride	6.668	49	11754	0.527	ppbV	99
29) 3-chloropropene	6.776	41	14477	0.523	ppbV	99
30) carbon disulfide	6.938	76	29832	0.525	ppbV #	90
31) Freon 113	6.914	101	15642	0.558	ppbV	99
32) trans-1,2-dichloroethene	7.542	61	11027	0.506	ppbV	98
33) 1,1-dichloroethane	7.725	63	15563	0.541	ppbV	98
34) MTBE	7.775	73	27035	0.540	ppbV	99
35) vinyl acetate	7.858	43	23110	0.504	ppbV	98
36) 2-butanone	8.092	43	23755	0.538	ppbV	99
37) cis-1,2-dichloroethene	8.500	61	10080	0.517	ppbV	98
38) Ethyl Acetate	8.708	61	3137	0.507	ppbV	89
39) chloroform	8.783	83	14186	0.528	ppbV	96
40) Tetrahydrofuran	9.167	42	15151	0.522	ppbV	98
41) 2,2-dichloropropane	8.808	77	13633	0.542	ppbV	98
42) 1,2-dichloroethane	9.475	62	8176	0.543	ppbV	98
44) hexane	8.708	57	16398	0.512	ppbV	92
45) diisopropyl ether	8.692	87	8203	0.494	ppbV	93
46) tert-butyl ethyl ether	9.200	59	26190	0.510	ppbV	99
48) 1,1,1-trichloroethane	9.725	97	11507	0.498	ppbV	99
49) 1,1-dichloropropene	10.027	75	14084	0.510	ppbV	99
50) benzene	10.167	78	35642	0.534	ppbV	100
51) thiophene	10.293	84	16426	0.492	ppbV	99
52) carbon tetrachloride	10.313	117	10458	0.532	ppbV	100
53) cyclohexane	10.440	56	17202	0.498	ppbV	99
54) tert-amyl methyl ether	10.733	73	29696	0.501	ppbV	99
55) dibromomethane	10.947	93	7694	0.525	ppbV	97
56) 1,2-dichloropropane	10.967	63	10665	0.523	ppbV	99
57) bromodichloromethane	11.160	83	15842	0.515	ppbV	99
58) 1,4-dioxane	11.200	88	6319	0.471	ppbV	93
59) trichloroethene	11.207	130	10258	0.511	ppbV	97
60) 2,2,4-trimethylpentane	11.240	57	52224	0.519	ppbV	99
61) methyl methacrylate	11.387	41	17513	0.490	ppbV	99
62) heptane	11.500	43	25294	0.520	ppbV	98
63) cis-1,3-dichloropropene	12.080	75	15886	0.487	ppbV	98
64) 4-methyl-2-pentanone	12.107	43	27932	0.509	ppbV	98
65) trans-1,3-dichloropropene	12.625	75	13792	0.463	ppbV	98
66) 1,1,2-trichloroethane	12.800	97	10458	0.519	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195332.D
Acq On : 2 Nov 2020 6:15 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.5
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:18 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.075	91	34451	0.555	ppbV	99
70)	2-methylthiophene	13.133	97	25329	0.539	ppbV	99
71)	1,3-dichloropropane	13.092	76	18222	0.520	ppbV	98
72)	2-hexanone	13.300	43	24961	0.516	ppbV	99
73)	3-methylthiophene	13.133	97	25329	0.539	ppbV	99
74)	dibromochloromethane	13.467	129	12636	0.533	ppbV	96
75)	1,2-dibromoethane	13.692	107	15181	0.516	ppbV	99
76)	butyl acetate	13.875	73	5305	0.475	ppbV	95
77)	octane	13.958	85	12423	0.480	ppbV	94
78)	tetrachloroethene	14.092	166	12404	0.522	ppbV	99
79)	1,1,1,2-tetrachloroethane	14.650	131	9603	0.533	ppbV	99
80)	chlorobenzene	14.667	112	25789	0.516	ppbV	98
81)	ethylbenzene	14.967	91	36562	0.509	ppbV	98
82)	2-ethylthiophene	15.000	97	26401	0.520	ppbV	94
83)	m+p-xylene	15.108	91	61028	1.040	ppbV	98
84)	bromoform	15.183	173	12146	0.511	ppbV	98
85)	styrene	15.400	104	27399	0.506	ppbV	97
86)	1,1,2,2-tetrachloroethane	15.483	83	22655	0.502	ppbV	99
87)	o-xylene	15.483	91	31186	0.538	ppbV	97
88)	1,2,3-trichloropropane	15.583	75	20297	0.504	ppbV	98
89)	nonane	15.642	43	33175	0.534	ppbV	95
91)	isopropylbenzene	15.933	105	45374	0.552	ppbV	97
92)	bromobenzene	16.017	77	26105	0.505	ppbV	99
93)	2-chlorotoluene	16.308	126	10807	0.502	ppbV	96
94)	n-propylbenzene	16.325	120	12277	0.477	ppbV	76
95)	4-chlorotoluene	16.358	126	9981	0.486	ppbV	92
96)	4-ethyl toluene	16.433	105	48358	0.531	ppbV	95
97)	1,3,5-trimethylbenzene	16.492	105	38985	0.521	ppbV	97
98)	tert-butylbenzene	16.808	119	36307	0.536	ppbV	96
99)	1,2,4-trimethylbenzene	16.808	105	37652	0.554	ppbV	93
100)	decane	16.875	57	26212	0.466	ppbV	93
101)	Benzyl Chloride	16.925	91	19955	0.426	ppbV	98
102)	1,3-dichlorobenzene	16.933	146	20607	0.508	ppbV	98
103)	1,4-dichlorobenzene	16.983	146	19808	0.506	ppbV	97
104)	sec-butylbenzene	17.017	105	53949	0.546	ppbV	99
105)	1,2,3-trimethylbenzene	17.133	105	38204	0.566	ppbV	90
106)	p-isopropyltoluene	17.133	119	35515	0.479	ppbV	95
107)	1,2-dichlorobenzene	17.250	146	17175	0.483	ppbV	97
108)	n-butylbenzene	17.450	91	24693	0.400	ppbV	99
109)	indan	17.292	117	36507	0.522	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195332.D
Acq On : 2 Nov 2020 6:15 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.5
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:18 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

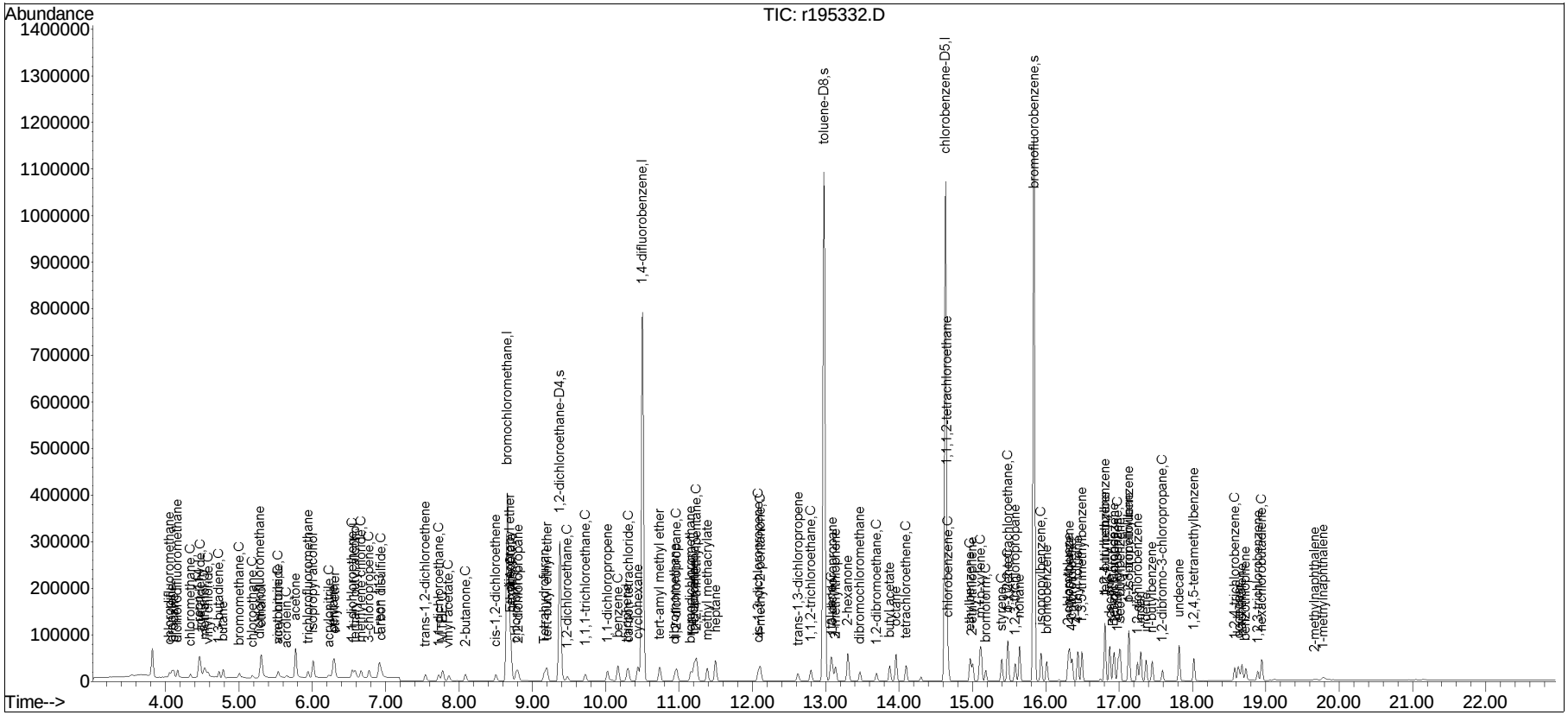
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	17.367	115	25353	0.461 ppbV	96
111) 1,2-dibromo-3-chloropr...	17.592	75	7905	0.447 ppbV	93
112) undecane	17.817	57	25753	0.505 ppbV	95
113) 1,2,4,5-tetramethylben...	18.017	119	28558	0.486 ppbV	95
114) dodecane	18.625	57	19175	0.363 ppbV	94
115) 1,2,4-trichlorobenzene	18.575	180	10661	0.490 ppbV	98
116) naphthalene	18.675	128	26210	0.501 ppbV	100
117) 1,2,3-trichlorobenzene	18.892	180	8293	0.361 ppbV	99
118) benzothiophene	18.725	134	23470	0.429 ppbV	98
119) hexachlorobutadiene	18.942	225	10666	0.579 ppbV	94
120) 2-methylnaphthalene	19.667	142	2314	0.176 ppbV	92
121) 1-methylnaphthalene	19.783	142	9470	0.401 ppbV	97

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195332.D
Acq On : 2 Nov 2020 6:15 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD0.5
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

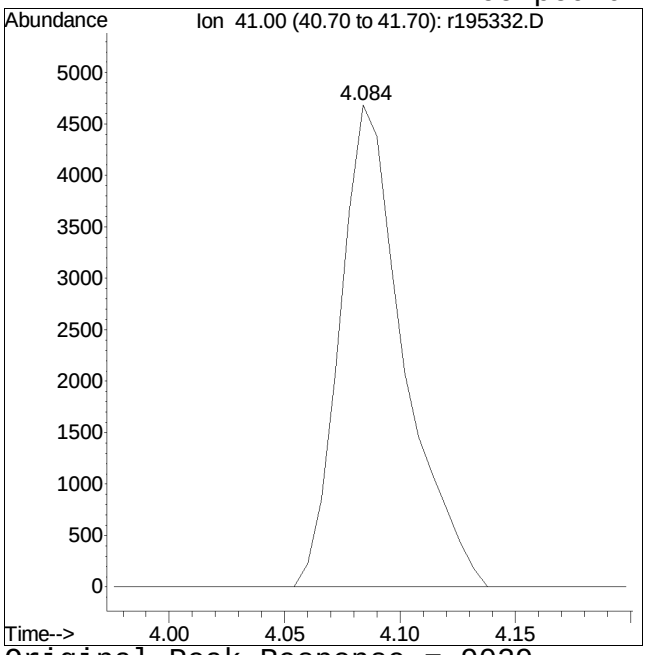
Quant Time: Nov 03 11:22:18 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

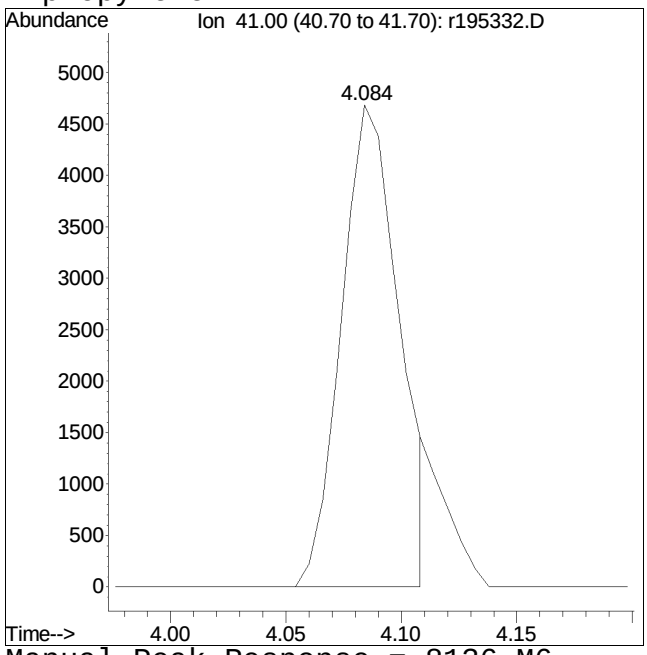


Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195332.D
Date Inj'd : 11/2/2020 0:6: 5
Sample : ITO15-LLSTD0.5
Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:22 am

Compound #3: propylene



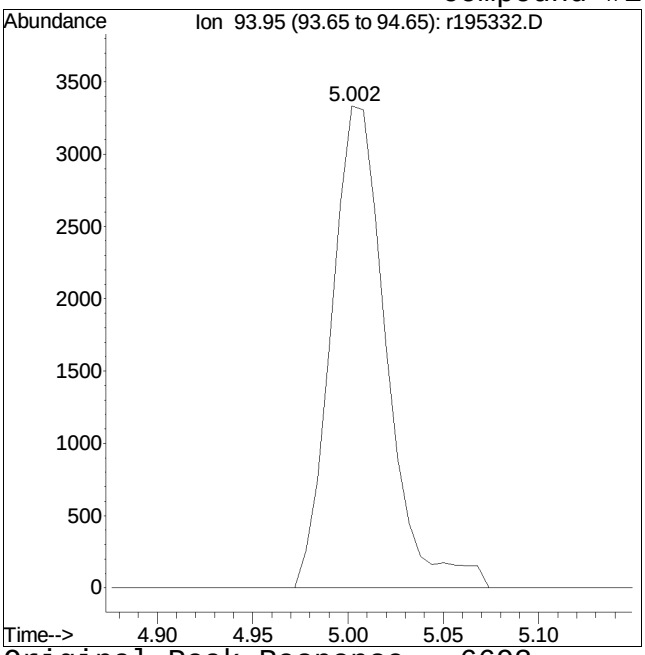


Original Peak Response = 9029 Manual Peak Response = 8136 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

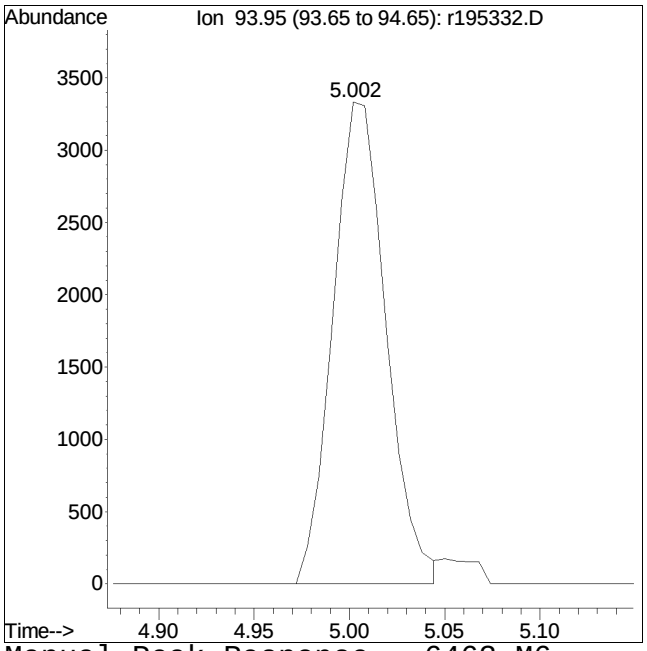
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195332.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:6: 5 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 11/3/2020 11:22 am

Compound #13: bromomethane



Original Peak Response = 6693



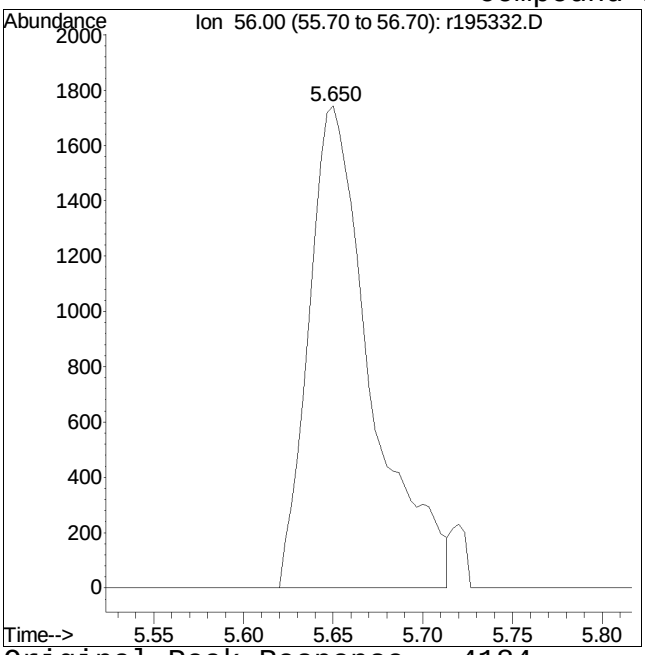
Manual Peak Response = 6463 M6

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

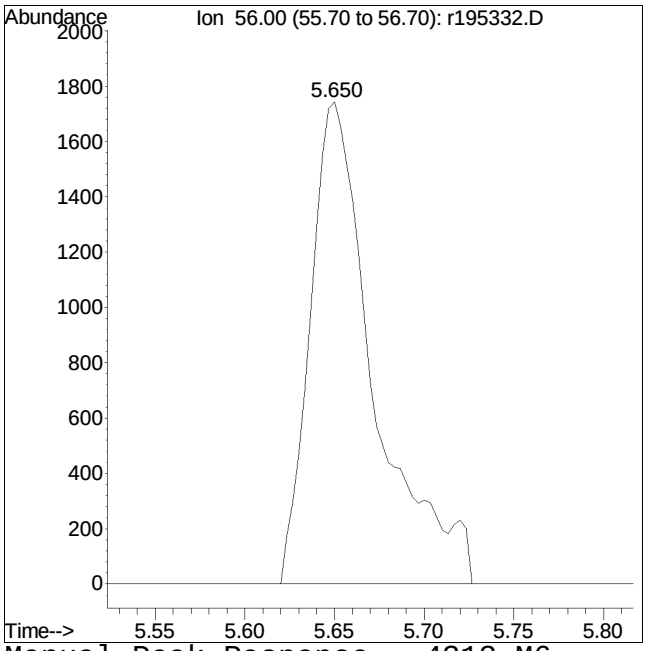
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195332.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:6: 5 Instrument :
Sample : ITO15-LLSTD0.5 Quant Date : 11/3/2020 11:22 am

Compound #18: acrolein



Original Peak Response = 4184



Manual Peak Response = 4313 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195333.D
Acq On : 2 Nov 2020 7:00 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD1.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.658	49	327240	10.000	ppbV	0.00
Standard Area = 386974			Recovery = 84.56%			
43) 1,4-difluorobenzene	10.500	114	771598	10.000	ppbV	0.00
Standard Area = 862720			Recovery = 89.44%			
67) chlorobenzene-D5	14.633	54	131620	10.000	ppbV	0.00
Standard Area = 151381			Recovery = 86.95%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.375	65	187313	10.057	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.57%			
69) toluene-D8	12.975	98	821442	10.124	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.24%			
90) bromofluorobenzene	15.833	95	557379	10.134	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.34%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.060	51	23242	1.004	ppbV	100
3) propylene	4.090	41	15277M6	1.046	ppbV	
4) propane	4.114	29	19524	1.026	ppbV	99
5) dichlorodifluoromethane	4.168	85	26557	1.070	ppbV	100
6) chloromethane	4.342	50	17898	1.043	ppbV	100
7) Freon-114	4.456	85	39327	1.093	ppbV	99
8) methanol	4.528	31	38908	5.524	ppbV #	55
9) vinyl chloride	4.582	62	16158	1.048	ppbV	99
10) 1,3-butadiene	4.732	54	16137	1.010	ppbV	98
11) butane	4.786	43	29545	1.066	ppbV	99
12) acetaldehyde	4.474	29	43740	5.534	ppbV	99
13) bromomethane	5.008	94	13010	1.066	ppbV	99
14) chloroethane	5.182	64	5520	1.136	ppbV	100
15) ethanol	5.303	31	78176	5.704	ppbV	97
16) dichlorofluoromethane	5.290	67	27086	1.109	ppbV	100
17) vinyl bromide	5.537	106	14337	1.114	ppbV	96
18) acrolein	5.647	56	8374	1.049	ppbV #	90
19) acetone	5.767	43	130717	5.606	ppbV	100
20) acetonitrile	5.523	41	14822	1.057	ppbV	89
21) trichlorofluoromethane	5.943	101	21464	1.117	ppbV	98
22) isopropyl alcohol	6.007	45	87917	2.520	ppbV	98
23) acrylonitrile	6.220	53	15565	1.071	ppbV	99
24) pentane	6.287	43	44486	1.023	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195333.D
Acq On : 2 Nov 2020 7:00 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD1.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	6.303	31	33749	0.944 ppbV	100
26) 1,1-dichloroethene	6.548	61	21688	1.049 ppbV	99
27) tertiary butyl alcohol	6.572	59	29886	1.025 ppbV	98
28) methylene chloride	6.662	49	22571	1.038 ppbV	97
29) 3-chloropropene	6.776	41	27845	1.032 ppbV	99
30) carbon disulfide	6.938	76	57316	1.035 ppbV	96
31) Freon 113	6.914	101	29641	1.084 ppbV	99
32) trans-1,2-dichloroethene	7.542	61	21359	1.005 ppbV	98
33) 1,1-dichloroethane	7.725	63	29432	1.050 ppbV	100
34) MTBE	7.775	73	52027	1.066 ppbV	99
35) vinyl acetate	7.858	43	45303	1.014 ppbV	99
36) 2-butanone	8.083	43	45417	1.054 ppbV	100
37) cis-1,2-dichloroethene	8.500	61	19440	1.022 ppbV	99
38) Ethyl Acetate	8.700	61	6421	1.063 ppbV	92
39) chloroform	8.775	83	27042	1.033 ppbV	99
40) Tetrahydrofuran	9.158	42	29388	1.038 ppbV	99
41) 2,2-dichloropropane	8.800	77	26049	1.061 ppbV	100
42) 1,2-dichloroethane	9.475	62	15466	1.052 ppbV	99
44) hexane	8.700	57	31201	1.009 ppbV	96
45) diisopropyl ether	8.683	87	15670	0.978 ppbV	98
46) tert-butyl ethyl ether	9.192	59	50393	1.017 ppbV	99
48) 1,1,1-trichloroethane	9.717	97	22079	0.990 ppbV	97
49) 1,1-dichloropropene	10.020	75	27085	1.016 ppbV	98
50) benzene	10.167	78	65044	1.009 ppbV	99
51) thiophene	10.293	84	31876	0.989 ppbV	99
52) carbon tetrachloride	10.313	117	19896	1.048 ppbV	99
53) cyclohexane	10.440	56	32746	0.982 ppbV	99
54) tert-amyl methyl ether	10.733	73	59277	1.037 ppbV	100
55) dibromomethane	10.940	93	14198	1.003 ppbV	98
56) 1,2-dichloropropane	10.967	63	20257	1.030 ppbV	99
57) bromodichloromethane	11.160	83	30130	1.014 ppbV	99
58) 1,4-dioxane	11.193	88	12380	0.955 ppbV	95
59) trichloroethene	11.200	130	19728	1.019 ppbV	99
60) 2,2,4-trimethylpentane	11.233	57	99932	1.029 ppbV	100
61) methyl methacrylate	11.380	41	35224	1.022 ppbV	99
62) heptane	11.493	43	47924	1.021 ppbV	99
63) cis-1,3-dichloropropene	12.080	75	31227	0.991 ppbV	99
64) 4-methyl-2-pentanone	12.100	43	55268	1.044 ppbV	98
65) trans-1,3-dichloropropene	12.617	75	28134	0.978 ppbV	99
66) 1,1,2-trichloroethane	12.792	97	20291	1.042 ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195333.D
Acq On : 2 Nov 2020 7:00 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD1.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.067	91	64041	1.016	ppbV	99
70)	2-methylthiophene	13.133	97	48944	1.026	ppbV	99
71)	1,3-dichloropropane	13.092	76	36379	1.023	ppbV	98
72)	2-hexanone	13.300	43	50839	1.035	ppbV	98
73)	3-methylthiophene	13.133	97	48944	1.026	ppbV	99
74)	dibromochloromethane	13.467	129	24840	1.032	ppbV	98
75)	1,2-dibromoethane	13.692	107	30924	1.035	ppbV	98
76)	butyl acetate	13.867	73	10776	0.951	ppbV	97
77)	octane	13.958	85	25668	0.976	ppbV	96
78)	tetrachloroethene	14.092	166	24598	1.020	ppbV	99
79)	1,1,1,2-tetrachloroethane	14.650	131	19387	1.060	ppbV	99
80)	chlorobenzene	14.667	112	52469	1.035	ppbV	99
81)	ethylbenzene	14.967	91	74186	1.018	ppbV	97
82)	2-ethylthiophene	15.000	97	53985	1.047	ppbV	93
83)	m+p-xylene	15.108	91	124775	2.095	ppbV	98
84)	bromoform	15.175	173	24695	1.023	ppbV	99
85)	styrene	15.400	104	56285	1.024	ppbV	98
86)	1,1,2,2-tetrachloroethane	15.475	83	45982	1.004	ppbV	100
87)	o-xylene	15.483	91	62096	1.055	ppbV	98
88)	1,2,3-trichloropropane	15.583	75	41594	1.018	ppbV	98
89)	nonane	15.642	43	66684	1.057	ppbV	98
91)	isopropylbenzene	15.933	105	89618	1.073	ppbV	97
92)	bromobenzene	16.008	77	52312	0.998	ppbV	93
93)	2-chlorotoluene	16.308	126	21619	0.990	ppbV	88
94)	n-propylbenzene	16.325	120	25408	0.972	ppbV	84
95)	4-chlorotoluene	16.358	126	20416	0.980	ppbV	95
96)	4-ethyl toluene	16.433	105	102022	1.104	ppbV	96
97)	1,3,5-trimethylbenzene	16.492	105	81199	1.068	ppbV	96
98)	tert-butylbenzene	16.808	119	73072	1.063	ppbV	96
99)	1,2,4-trimethylbenzene	16.808	105	78786	1.142	ppbV	95
100)	decane	16.867	57	60252	1.056	ppbV	96
101)	Benzyl Chloride	16.917	91	47542	0.999	ppbV	97
102)	1,3-dichlorobenzene	16.933	146	44180	1.073	ppbV	98
103)	1,4-dichlorobenzene	16.983	146	42944	1.079	ppbV	98
104)	sec-butylbenzene	17.008	105	112905	1.125	ppbV	99
105)	1,2,3-trimethylbenzene	17.133	105	81536	1.190	ppbV	91
106)	p-isopropyltoluene	17.133	119	85840	1.141	ppbV	97
107)	1,2-dichlorobenzene	17.250	146	38997	1.079	ppbV	97
108)	n-butylbenzene	17.450	91	60798	0.970	ppbV	99
109)	indan	17.292	117	75431	1.061	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195333.D
Acq On : 2 Nov 2020 7:00 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD1.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

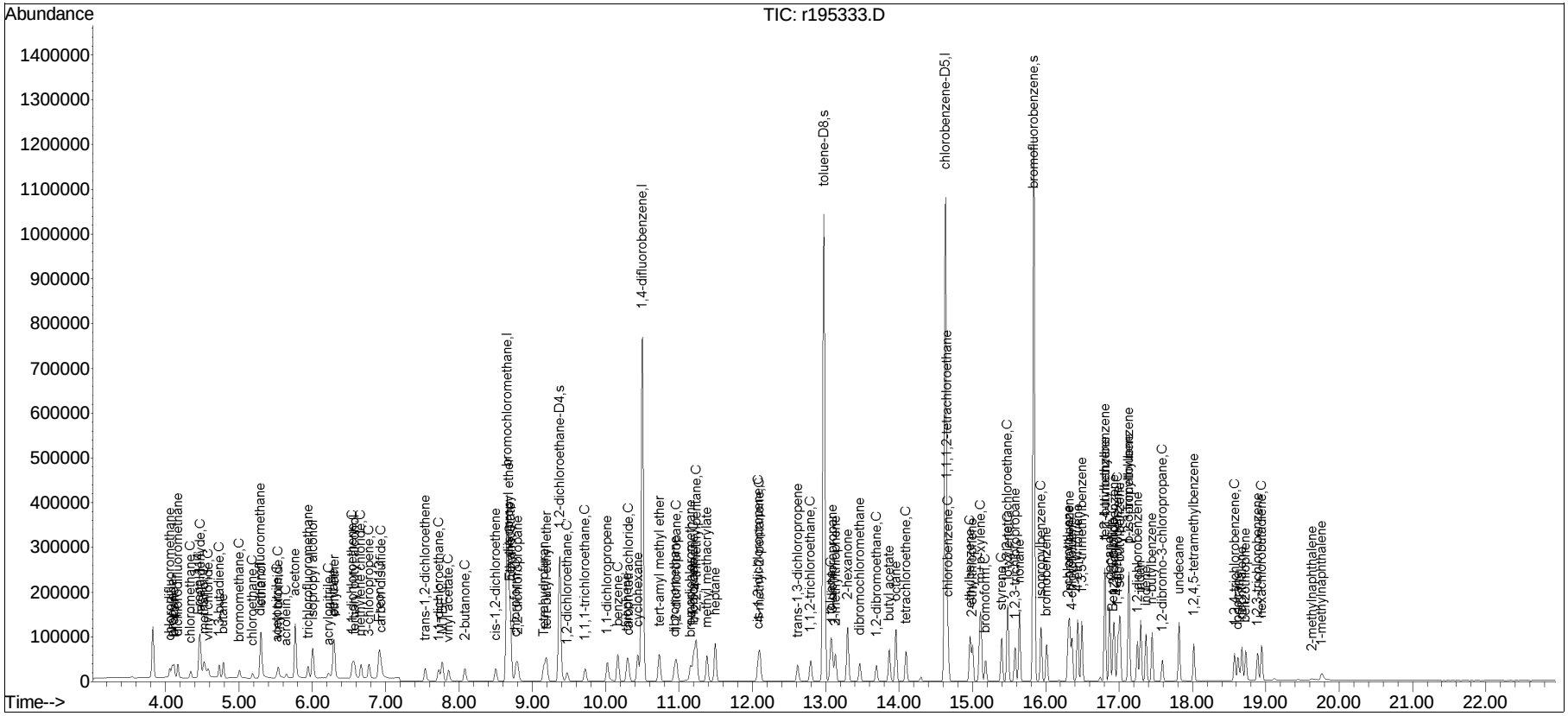
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	17.367	115	58163	1.041 ppbV	99
111) 1,2-dibromo-3-chloropr...	17.592	75	16337	0.910 ppbV	93
112) undecane	17.817	57	43776	0.845 ppbV	96
113) 1,2,4,5-tetramethylben...	18.017	119	46562	0.781 ppbV	94
114) dodecane	18.617	57	27235	0.508 ppbV	96
115) 1,2,4-trichlorobenzene	18.575	180	22096	1.001 ppbV	97
116) naphthalene	18.675	128	58454	1.100 ppbV	100
117) 1,2,3-trichlorobenzene	18.883	180	24191	1.037 ppbV	98
118) benzothiophene	18.725	134	56979	1.025 ppbV	98
119) hexachlorobutadiene	18.942	225	18267	0.977 ppbV	96
120) 2-methylnaphthalene	19.633	142	6598	0.494 ppbV	94
121) 1-methylnaphthalene	19.758	142	19095M6	0.796 ppbV	

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195333.D
Acq On : 2 Nov 2020 7:00 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD1.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

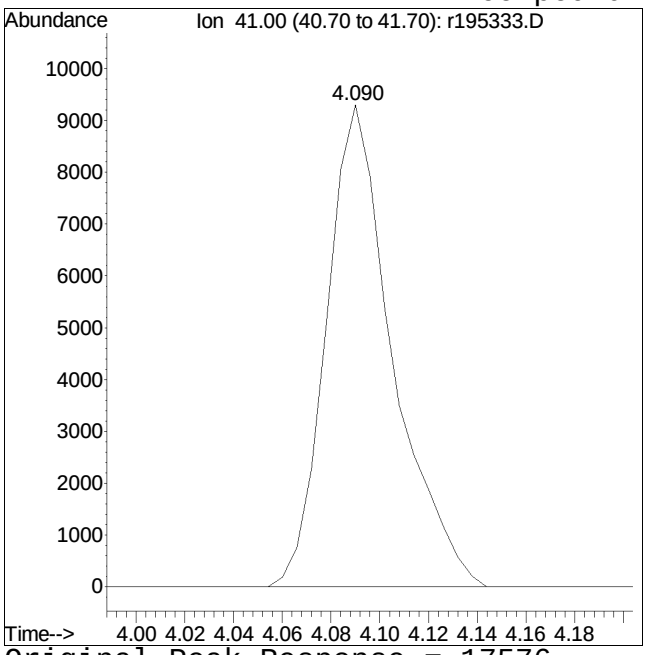


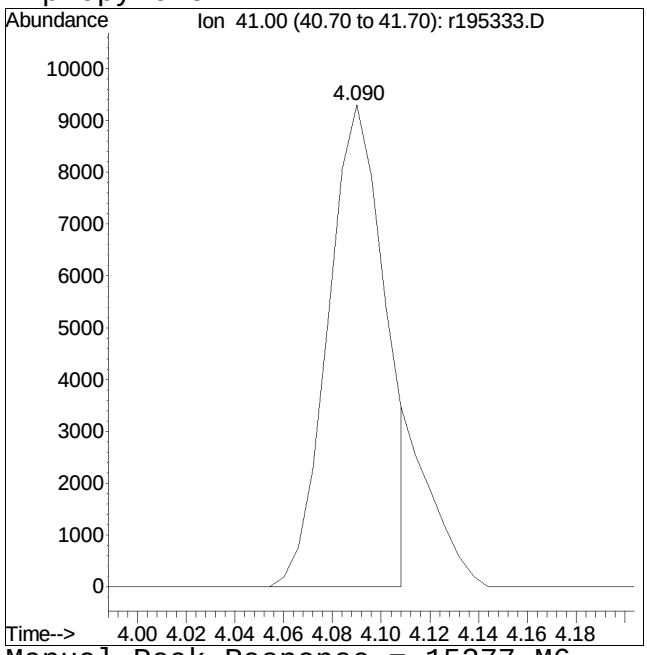
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195333.D
Date Inj'd : 11/2/2020 0:7: 0
Sample : ITO15-LLSTD1.0

Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:22 am

Compound #3: propylene



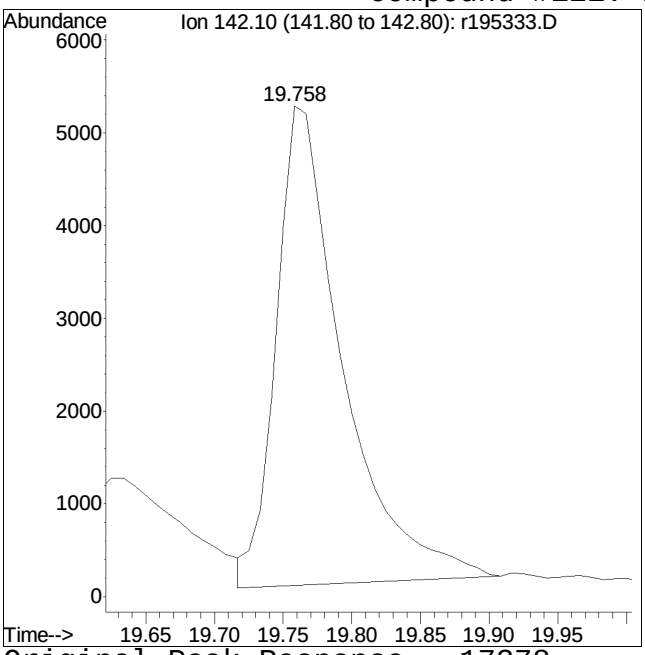


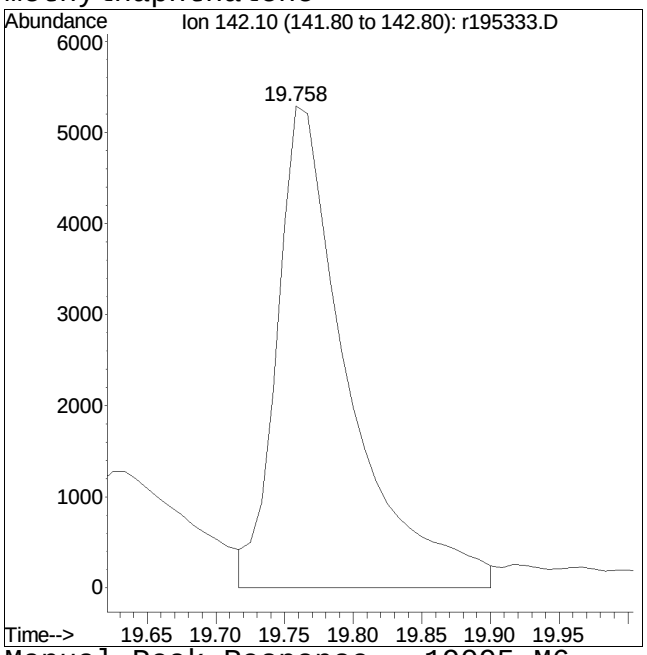
Original Peak Response = 17576 Manual Peak Response = 15277 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195333.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:7: 0 Instrument :
Sample : ITO15-LLSTD1.0 Quant Date : 11/3/2020 11:22 am

Compound #121: 1-methylnaphthalene





Original Peak Response = 17378 Manual Peak Response = 19095 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195334.D
Acq On : 2 Nov 2020 7:43 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD5.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:34 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.658	49	358223	10.000	ppbV	0.00
Standard Area = 386974			Recovery = 92.57%			
43) 1,4-difluorobenzene	10.500	114	817368	10.000	ppbV	0.00
Standard Area = 862720			Recovery = 94.74%			
67) chlorobenzene-D5	14.633	54	141952	10.000	ppbV	0.00
Standard Area = 151381			Recovery = 93.77%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.375	65	205032	10.392	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.92%			
69) toluene-D8	12.975	98	874728	9.996	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.96%			
90) bromofluorobenzene	15.833	95	596009	10.047	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.47%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.054	51	127677	5.039	ppbV	99
3) propylene	4.090	41	84430M6	5.279	ppbV	
4) propane	4.114	29	106790	5.126	ppbV	98
5) dichlorodifluoromethane	4.168	85	144936	5.333	ppbV	99
6) chloromethane	4.342	50	98461	5.241	ppbV	98
7) Freon-114	4.456	85	209784	5.328	ppbV	98
8) methanol	4.516	31	207504	26.912	ppbV	94
9) vinyl chloride	4.582	62	90129	5.341	ppbV	100
10) 1,3-butadiene	4.732	54	91550	5.237	ppbV	99
11) butane	4.786	43	157801	5.203	ppbV	100
12) acetaldehyde	4.474	29	239639	27.698	ppbV	100
13) bromomethane	5.008	94	70827	5.303	ppbV	99
14) chloroethane	5.182	64	27251	5.125	ppbV	99
15) ethanol	5.300	31	412881	27.521	ppbV	98
16) dichlorofluoromethane	5.290	67	144428	5.401	ppbV	100
17) vinyl bromide	5.537	106	76732	5.446	ppbV	99
18) acrolein	5.643	56	44206	5.060	ppbV	96
19) acetone	5.763	43	691136	27.078	ppbV	99
20) acetonitrile	5.517	41	78687M6	5.125	ppbV	
21) trichlorofluoromethane	5.943	101	112202	5.336	ppbV	99
22) isopropyl alcohol	6.003	45	474867	12.432	ppbV #	98
23) acrylonitrile	6.217	53	67259	4.230	ppbV	99
24) pentane	6.290	43	235802	4.953	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195334.D
Acq On : 2 Nov 2020 7:43 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD5.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:34 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	6.300	31	203480	5.201 ppbV	99
26) 1,1-dichloroethene	6.548	61	117485	5.192 ppbV	98
27) tertiary butyl alcohol	6.566	59	167919	5.262 ppbV	99
28) methylene chloride	6.662	49	120419	5.061 ppbV	99
29) 3-chloropropene	6.776	41	153151	5.187 ppbV	100
30) carbon disulfide	6.938	76	308490	5.089 ppbV	99
31) Freon 113	6.914	101	157598	5.263 ppbV	100
32) trans-1,2-dichloroethene	7.542	61	121086	5.203 ppbV	99
33) 1,1-dichloroethane	7.725	63	158729	5.171 ppbV	100
34) MTBE	7.767	73	278760	5.220 ppbV	99
35) vinyl acetate	7.858	43	254814	5.210 ppbV	100
36) 2-butanone	8.075	43	262785	5.570 ppbV	100
37) cis-1,2-dichloroethene	8.500	61	108060	5.191 ppbV	99
38) Ethyl Acetate	8.700	61	34859	5.273 ppbV	96
39) chloroform	8.783	83	147681	5.152 ppbV	100
40) Tetrahydrofuran	9.150	42	161288	5.204 ppbV	99
41) 2,2-dichloropropane	8.800	77	139218	5.181 ppbV	100
42) 1,2-dichloroethane	9.475	62	85105	5.289 ppbV	100
44) hexane	8.700	57	169208	5.163 ppbV	93
45) diisopropyl ether	8.683	87	85438	5.033 ppbV	96
46) tert-butyl ethyl ether	9.192	59	274498	5.228 ppbV	99
48) 1,1,1-trichloroethane	9.725	97	130881	5.538 ppbV	100
49) 1,1-dichloropropene	10.027	75	144735	5.124 ppbV	100
50) benzene	10.167	78	337186	4.937 ppbV	100
51) thiophene	10.293	84	172488	5.052 ppbV	99
52) carbon tetrachloride	10.313	117	107153	5.329 ppbV	100
53) cyclohexane	10.440	56	178496	5.055 ppbV	99
54) tert-amyl methyl ether	10.727	73	319026	5.267 ppbV	100
55) dibromomethane	10.940	93	78208	5.217 ppbV	99
56) 1,2-dichloropropane	10.967	63	110256	5.291 ppbV	99
57) bromodichloromethane	11.160	83	164994	5.242 ppbV	100
58) 1,4-dioxane	11.187	88	72216	5.262 ppbV	99
59) trichloroethene	11.200	130	106769	5.207 ppbV	99
60) 2,2,4-trimethylpentane	11.233	57	543578	5.286 ppbV	99
61) methyl methacrylate	11.380	41	199430	5.462 ppbV	99
62) heptane	11.493	43	262376	5.279 ppbV	100
63) cis-1,3-dichloropropene	12.080	75	179198	5.370 ppbV	99
64) 4-methyl-2-pentanone	12.100	43	310869	5.542 ppbV	99
65) trans-1,3-dichloropropene	12.617	75	165006	5.413 ppbV	99
66) 1,1,2-trichloroethane	12.792	97	110894	5.378 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195334.D
Acq On : 2 Nov 2020 7:43 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD5.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:34 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.067	91	338953	4.988	ppbV	100
70)	2-methylthiophene	13.133	97	275381	5.351	ppbV	100
71)	1,3-dichloropropane	13.092	76	199669	5.206	ppbV	98
72)	2-hexanone	13.292	43	293390	5.538	ppbV	99
73)	3-methylthiophene	13.133	97	275381	5.351	ppbV	100
74)	dibromochloromethane	13.467	129	136698	5.268	ppbV	98
75)	1,2-dibromoethane	13.692	107	173164	5.376	ppbV	100
76)	butyl acetate	13.867	73	63090	5.164	ppbV	96
77)	octane	13.958	85	143617	5.065	ppbV	97
78)	tetrachloroethene	14.092	166	136935	5.264	ppbV	100
79)	1,1,1,2-tetrachloroethane	14.650	131	104832	5.313	ppbV	99
80)	chlorobenzene	14.667	112	292265	5.344	ppbV	99
81)	ethylbenzene	14.967	91	417815	5.314	ppbV	99
82)	2-ethylthiophene	15.000	97	302495	5.441	ppbV	98
83)	m+p-xylene	15.108	91	700665	10.909	ppbV	99
84)	bromoform	15.183	173	141784	5.447	ppbV	98
85)	styrene	15.400	104	335880	5.668	ppbV	98
86)	1,1,2,2-tetrachloroethane	15.475	83	269979	5.465	ppbV	100
87)	o-xylene	15.483	91	354291	5.582	ppbV	100
88)	1,2,3-trichloropropane	15.583	75	233014	5.286	ppbV	99
89)	nonane	15.642	43	380582	5.594	ppbV	98
91)	isopropylbenzene	15.933	105	501338	5.568	ppbV	98
92)	bromobenzene	16.017	77	303970	5.375	ppbV	100
93)	2-chlorotoluene	16.308	126	122923	5.218	ppbV	95
94)	n-propylbenzene	16.325	120	150939	5.354	ppbV	92
95)	4-chlorotoluene	16.358	126	118534	5.274	ppbV	98
96)	4-ethyl toluene	16.433	105	587652	5.896	ppbV	97
97)	1,3,5-trimethylbenzene	16.492	105	476628	5.811	ppbV	97
98)	tert-butylbenzene	16.808	119	439142	5.922	ppbV	99
99)	1,2,4-trimethylbenzene	16.808	105	469331	6.308	ppbV	97
100)	decane	16.867	57	368035	5.979	ppbV	98
101)	Benzyl Chloride	16.917	91	324665	6.328	ppbV	98
102)	1,3-dichlorobenzene	16.933	146	271913	6.122	ppbV	99
103)	1,4-dichlorobenzene	16.983	146	262662	6.121	ppbV	98
104)	sec-butylbenzene	17.008	105	671992	6.207	ppbV	99
105)	1,2,3-trimethylbenzene	17.133	105	474471	6.419	ppbV	95
106)	p-isopropyltoluene	17.125	119	541909	6.676	ppbV	96
107)	1,2-dichlorobenzene	17.250	146	252635	6.482	ppbV	98
108)	n-butylbenzene	17.450	91	447534	6.620	ppbV	100
109)	indan	17.292	117	463090	6.041	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195334.D
Acq On : 2 Nov 2020 7:43 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD5.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:34 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

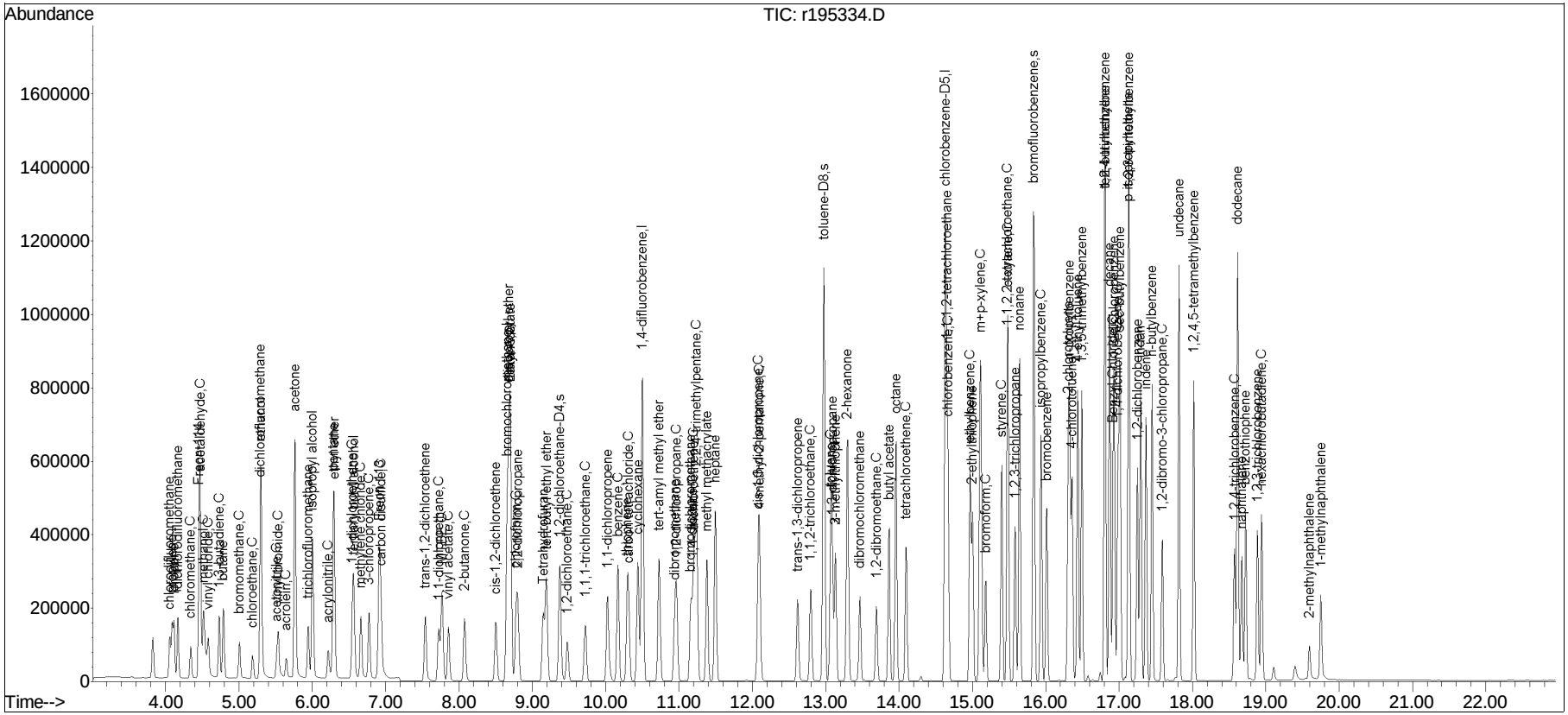
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	17.367	115	394267	6.540 ppbV	99
111) 1,2-dibromo-3-chloropr...	17.592	75	132637	6.849 ppbV	96
112) undecane	17.817	57	375812	6.726 ppbV	97
113) 1,2,4,5-tetramethylben...	18.017	119	461619	7.181 ppbV	99
114) dodecane	18.617	57	396234	6.855 ppbV	96
115) 1,2,4-trichlorobenzene	18.575	180	129518	5.439 ppbV	99
116) naphthalene	18.675	128	282912	4.937 ppbV	99
117) 1,2,3-trichlorobenzene	18.883	180	149471	5.939 ppbV	99
118) benzothiophene	18.725	134	358424	5.978 ppbV	99
119) hexachlorobutadiene	18.942	225	100422	4.978 ppbV	99
120) 2-methylnaphthalene	19.592	142	66153	4.591 ppbV	99
121) 1-methylnaphthalene	19.750	142	151220	5.848 ppbV	99

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195334.D
Acq On : 2 Nov 2020 7:43 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD5.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:34 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

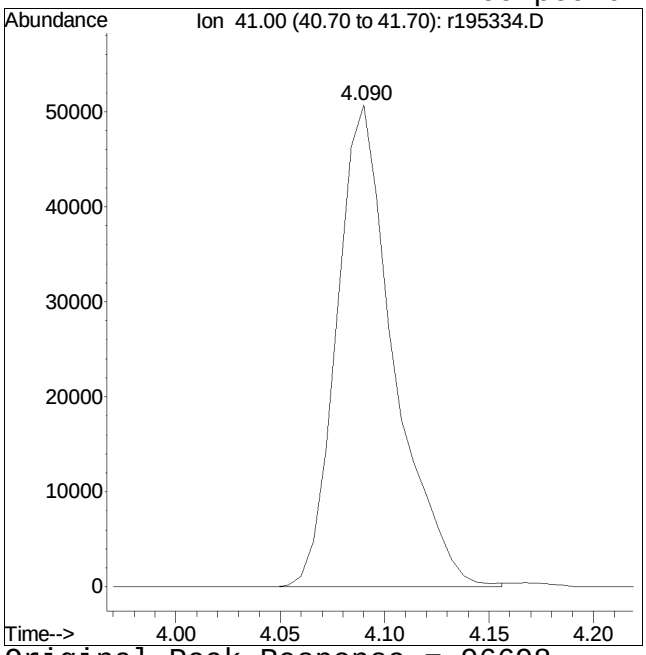


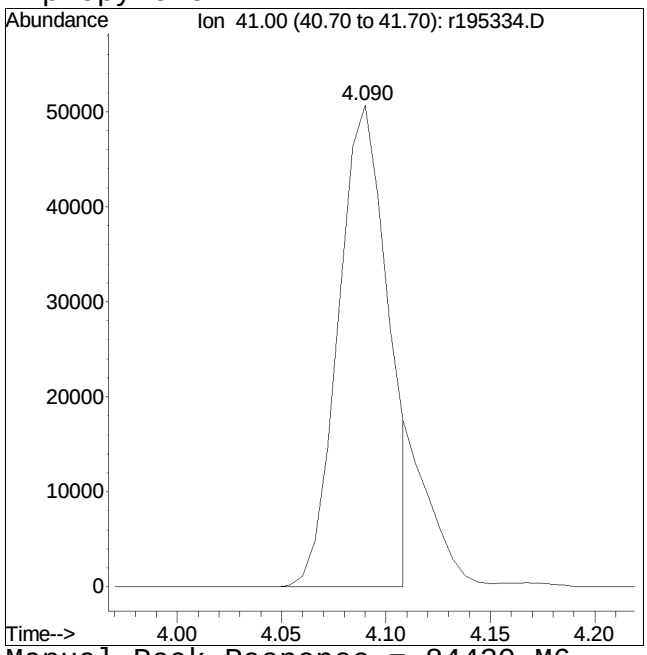
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195334.D
Date Inj'd : 11/2/2020 0:7: 3
Sample : ITO15-LLSTD5.0

Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:22 am

Compound #3: propylene



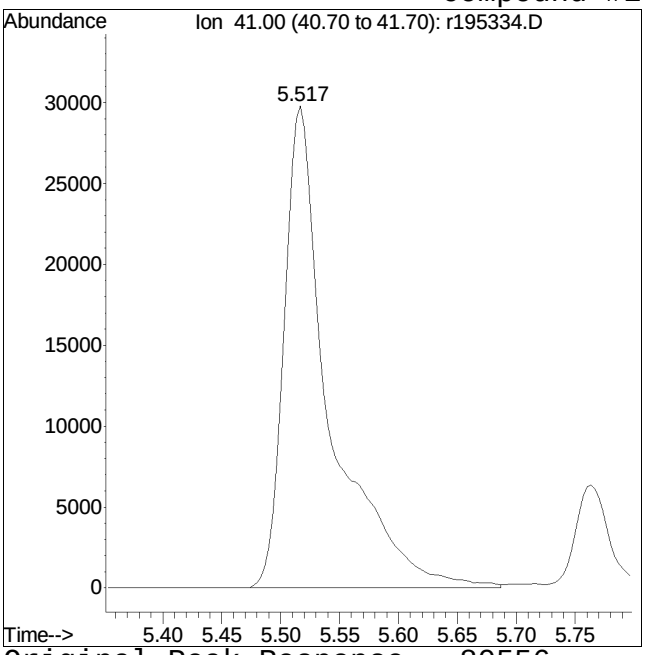


Original Peak Response = 96698 Manual Peak Response = 84430 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

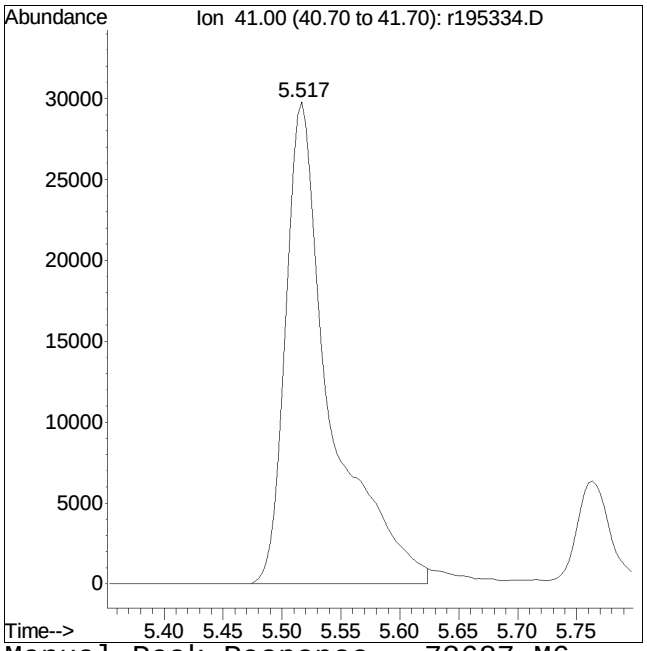
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195334.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:7: 3 Instrument :
Sample : ITO15-LLSTD5.0 Quant Date : 11/3/2020 11:22 am

Compound #20: acetonitrile



Original Peak Response = 80556



Manual Peak Response = 78687 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195335.D
Acq On : 2 Nov 2020 8:29 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	8.658	49	386974	10.000 ppbV	0.00
Standard Area = 386974			Recovery = 100.00%		
43) 1,4-difluorobenzene	10.500	114	862720	10.000 ppbV	0.00
Standard Area = 862720			Recovery = 100.00%		
67) chlorobenzene-D5	14.633	54	151381	10.000 ppbV	0.00
Standard Area = 151381			Recovery = 100.00%		
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	9.375	65	217632	10.451 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.51%		
69) toluene-D8	12.975	98	899990	9.644 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.44%		
90) bromofluorobenzene	15.833	95	637159	10.072 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.72%		
Target Compounds					Qvalue
2) chlorodifluoromethane	4.054	51	274204	10.018 ppbV	100
3) propylene	4.090	41	181771M6	10.520 ppbV	
4) propane	4.114	29	230877	10.260 ppbV	100
5) dichlorodifluoromethane	4.168	85	303294	10.332 ppbV	100
6) chloromethane	4.342	50	202180	9.962 ppbV	100
7) Freon-114	4.456	85	438195	10.302 ppbV	100
8) methanol	4.516	31	428995	51.504 ppbV	100
9) vinyl chloride	4.582	62	186089	10.208 ppbV	100
10) 1,3-butadiene	4.732	54	192036	10.169 ppbV	100
11) butane	4.786	43	341574	10.427 ppbV	100
12) acetaldehyde	4.474	29	490251	52.454 ppbV	100
13) bromomethane	5.008	94	147075	10.195 ppbV	100
14) chloroethane	5.182	64	52882	9.206 ppbV	100
15) ethanol	5.303	31	843386	52.041 ppbV	100
16) dichlorofluoromethane	5.290	67	293876	10.173 ppbV	100
17) vinyl bromide	5.537	106	159379	10.470 ppbV	100
18) acrolein	5.643	56	93803M1	9.939 ppbV	
19) acetone	5.763	43	1448514	52.535 ppbV	100
20) acetonitrile	5.517	41	166233	10.023 ppbV	100
21) trichlorofluoromethane	5.943	101	258427	11.376 ppbV	100
22) isopropyl alcohol	6.003	45	1131465	27.421 ppbV	100
23) acrylonitrile	6.217	53	170648M1	9.934 ppbV	
24) pentane	6.290	43	586907	11.412 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195335.D
Acq On : 2 Nov 2020 8:29 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.300	31	443365	10.491	ppbV	100
26) 1,1-dichloroethene	6.548	61	250764	10.258	ppbV	100
27) tertiary butyl alcohol	6.572	59	348835	10.120	ppbV	100
28) methylene chloride	6.668	49	258308	10.049	ppbV	100
29) 3-chloropropene	6.776	41	325821	10.214	ppbV	100
30) carbon disulfide	6.938	76	654937	10.002	ppbV	100
31) Freon 113	6.914	101	331483	10.247	ppbV	100
32) trans-1,2-dichloroethene	7.542	61	260223	10.350	ppbV	100
33) 1,1-dichloroethane	7.725	63	333732	10.063	ppbV	100
34) MTBE	7.767	73	583300	10.110	ppbV	100
35) vinyl acetate	7.858	43	550746	10.423	ppbV	100
36) 2-butanone	8.075	43	515146	10.108	ppbV	100
37) cis-1,2-dichloroethene	8.500	61	230997	10.272	ppbV	100
38) Ethyl Acetate	8.700	61	72703	10.181	ppbV	100
39) chloroform	8.783	83	308413	9.959	ppbV	100
40) Tetrahydrofuran	9.142	42	335652	10.026	ppbV	100
41) 2,2-dichloropropane	8.808	77	294375	10.141	ppbV	100
42) 1,2-dichloroethane	9.475	62	177631	10.219	ppbV	100
44) hexane	8.700	57	362837	10.489	ppbV	100
45) diisopropyl ether	8.683	87	182508	10.186	ppbV	100
46) tert-butyl ethyl ether	9.192	59	573896	10.356	ppbV	100
48) 1,1,1-trichloroethane	9.725	97	271807	10.897	ppbV	100
49) 1,1-dichloropropene	10.027	75	307086	10.301	ppbV	100
50) benzene	10.167	78	707341	9.811	ppbV	100
51) thiophene	10.293	84	365764	10.150	ppbV	100
52) carbon tetrachloride	10.313	117	224909	10.596	ppbV	100
53) cyclohexane	10.440	56	378483	10.155	ppbV	100
54) tert-amyl methyl ether	10.727	73	659216	10.311	ppbV	100
55) dibromomethane	10.940	93	162174	10.250	ppbV	100
56) 1,2-dichloropropane	10.967	63	225960	10.274	ppbV	100
57) bromodichloromethane	11.160	83	341206	10.270	ppbV	100
58) 1,4-dioxane	11.180	88	149665	10.331	ppbV	100
59) trichloroethene	11.207	130	220200	10.174	ppbV	100
60) 2,2,4-trimethylpentane	11.240	57	1088781M6	10.032	ppbV	
61) methyl methacrylate	11.380	41	413426	10.728	ppbV	100
62) heptane	11.493	43	545516	10.398	ppbV	100
63) cis-1,3-dichloropropene	12.080	75	374758	10.640	ppbV	100
64) 4-methyl-2-pentanone	12.093	43	638022	10.777	ppbV	100
65) trans-1,3-dichloropropene	12.617	75	349199	10.853	ppbV	100
66) 1,1,2-trichloroethane	12.792	97	225659	10.368	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195335.D
Acq On : 2 Nov 2020 8:29 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.075	91	688568	9.501	ppbV	100
70)	2-methylthiophene	13.133	97	555083	10.113	ppbV	100
71)	1,3-dichloropropane	13.092	76	411802	10.069	ppbV	100
72)	2-hexanone	13.292	43	611417	10.822	ppbV	100
73)	3-methylthiophene	13.133	97	555083	10.113	ppbV	100
74)	dibromochloromethane	13.467	129	281216	10.163	ppbV	100
75)	1,2-dibromoethane	13.692	107	358152	10.427	ppbV	100
76)	butyl acetate	13.858	73	135235	10.380	ppbV	100
77)	octane	13.958	85	299126	9.893	ppbV	100
78)	tetrachloroethene	14.092	166	276824	9.978	ppbV	100
79)	1,1,1,2-tetrachloroethane	14.650	131	212063	10.078	ppbV	100
80)	chlorobenzene	14.667	112	615554	10.553	ppbV	100
81)	ethylbenzene	14.967	91	865487	10.323	ppbV	100
82)	2-ethylthiophene	15.000	97	623515	10.517	ppbV	100
83)	m+p-xylene	15.108	91	1452330	21.203	ppbV	100
84)	bromoform	15.183	173	300047	10.808	ppbV	100
85)	styrene	15.400	104	692515	10.958	ppbV	100
86)	1,1,2,2-tetrachloroethane	15.475	83	589611	11.192	ppbV	100
87)	o-xylene	15.483	91	727554	10.748	ppbV	100
88)	1,2,3-trichloropropane	15.583	75	496716	10.566	ppbV	100
89)	nonane	15.642	43	778657	10.733	ppbV	100
91)	isopropylbenzene	15.933	105	1051104	10.947	ppbV	100
92)	bromobenzene	16.017	77	654995	10.860	ppbV	100
93)	2-chlorotoluene	16.308	126	261225M3	10.399	ppbV	
94)	n-propylbenzene	16.325	120	323137	10.747	ppbV	100
95)	4-chlorotoluene	16.358	126	246659	10.292	ppbV	100
96)	4-ethyl toluene	16.433	105	1184536	11.145	ppbV	100
97)	1,3,5-trimethylbenzene	16.492	105	958954	10.964	ppbV	100
98)	tert-butylbenzene	16.808	119	931111	11.775	ppbV	100
99)	1,2,4-trimethylbenzene	16.808	105	952228	12.001	ppbV	100
100)	decane	16.875	57	781354	11.904	ppbV	100
101)	Benzyl Chloride	16.917	91	700012	12.794	ppbV	100
102)	1,3-dichlorobenzene	16.933	146	572976	12.097	ppbV	100
103)	1,4-dichlorobenzene	16.983	146	555417	12.137	ppbV	100
104)	sec-butylbenzene	17.008	105	1364139	11.816	ppbV	100
105)	1,2,3-trimethylbenzene	17.133	105	944918	11.987	ppbV	100
106)	p-isopropyltoluene	17.133	119	1123992	12.984	ppbV	100
107)	1,2-dichlorobenzene	17.250	146	516139	12.418	ppbV	100
108)	n-butylbenzene	17.450	91	918431	12.740	ppbV	100
109)	indan	17.292	117	986887	12.073	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195335.D
Acq On : 2 Nov 2020 8:29 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

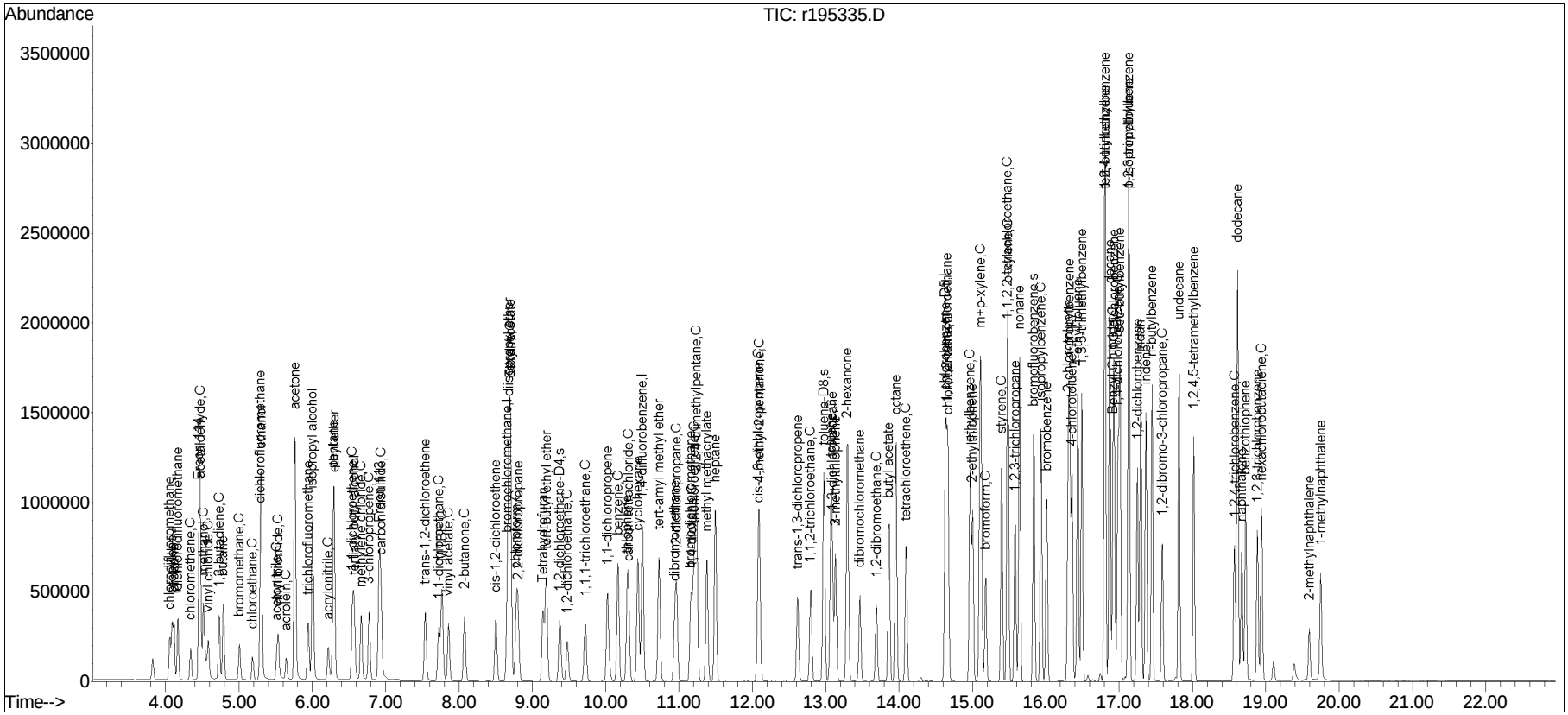
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	17.367	115	831544	12.935	ppbV	100
111) 1,2-dibromo-3-chloropr...	17.592	75	259612	12.571	ppbV	100
112) undecane	17.817	57	639880	10.740	ppbV	100
113) 1,2,4,5-tetramethylben...	18.017	119	775565	11.313	ppbV	100
114) dodecane	18.617	57	802242	13.014	ppbV	100
115) 1,2,4-trichlorobenzene	18.575	180	274153	10.796	ppbV	100
116) naphthalene	18.675	128	625909	10.243	ppbV	100
117) 1,2,3-trichlorobenzene	18.883	180	303331	11.301	ppbV	100
118) benzothiophene	18.725	134	774893	12.119	ppbV	100
119) hexachlorobutadiene	18.942	225	218385	10.152	ppbV	100
120) 2-methylnaphthalene	19.592	142	178915	11.645	ppbV	100
121) 1-methylnaphthalene	19.750	142	363144	13.168	ppbV	100

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195335.D
Acq On : 2 Nov 2020 8:29 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

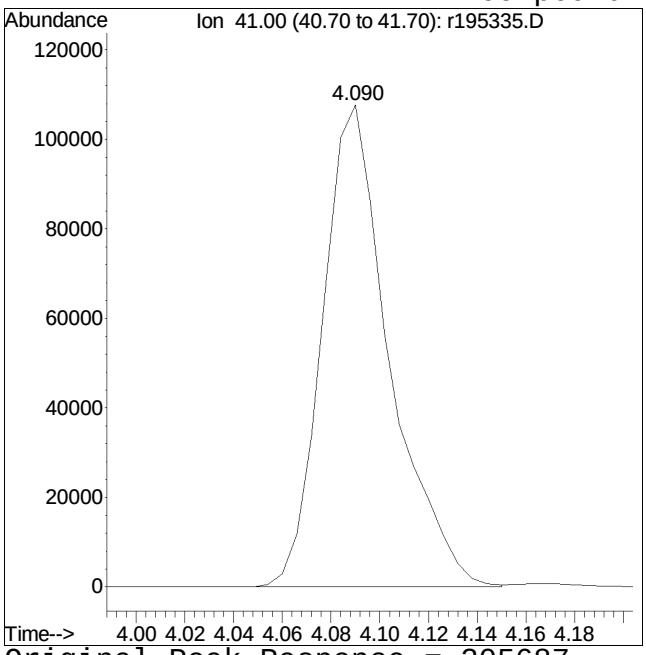
Quant Time: Nov 03 11:22:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

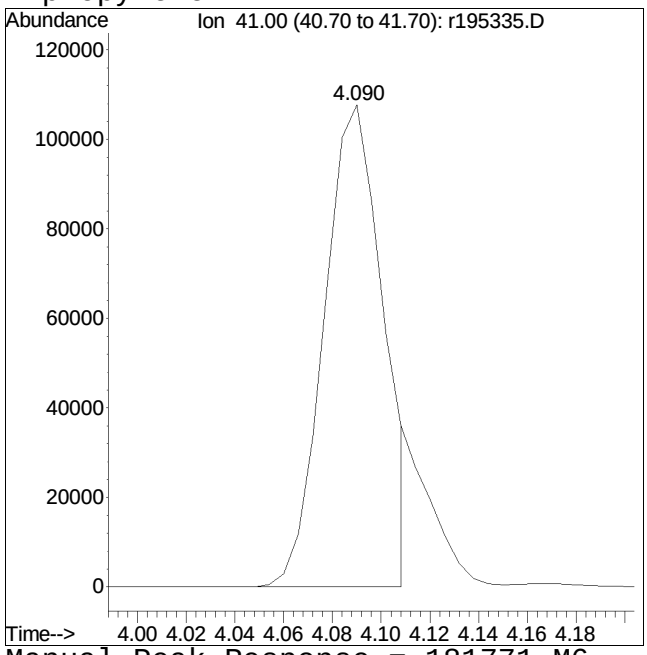


Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195335.D
Date Inj'd : 11/2/2020 0:8: 9
Sample : ITO15-LLSTD10.0
Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:22 am

Compound #3: propylene



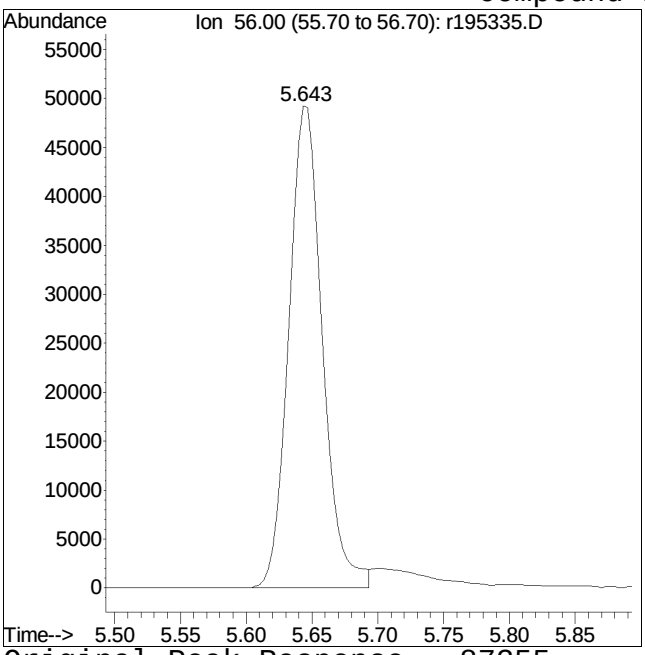


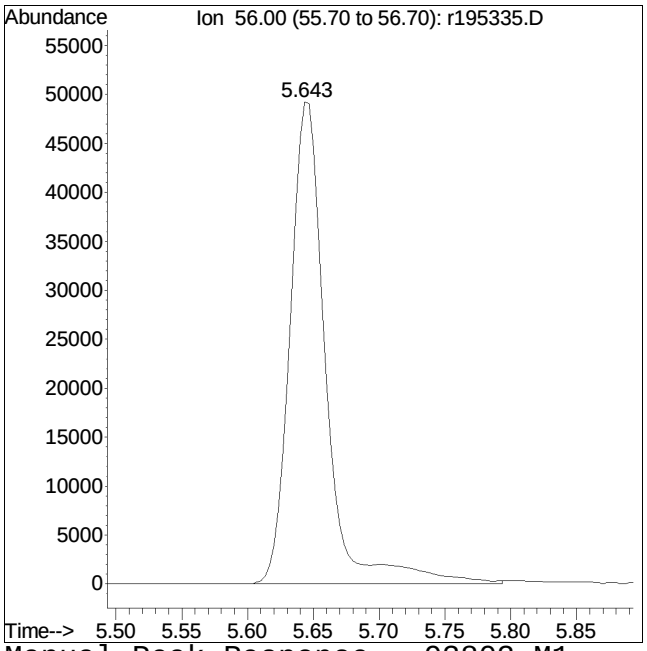
Original Peak Response = 205687 Manual Peak Response = 181771 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195335.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:8: 9 Instrument :
Sample : ITO15-LLSTD10.0 Quant Date : 11/3/2020 11:22 am

Compound #18: acrolein



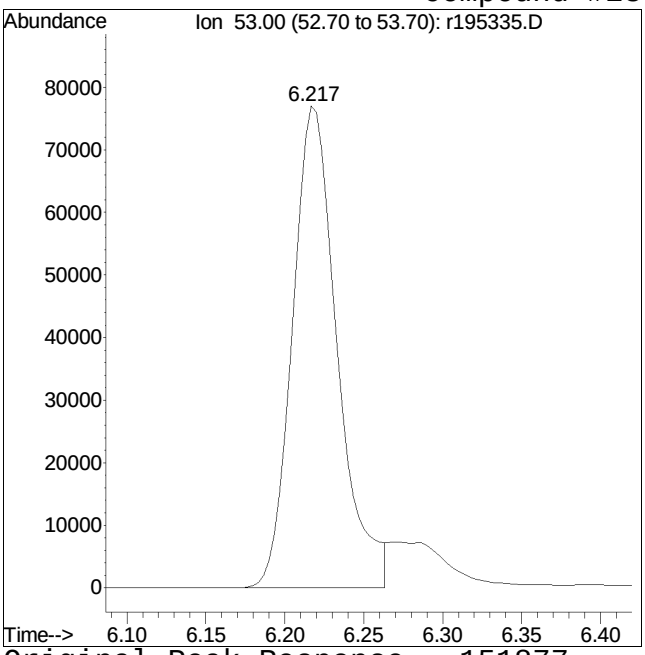


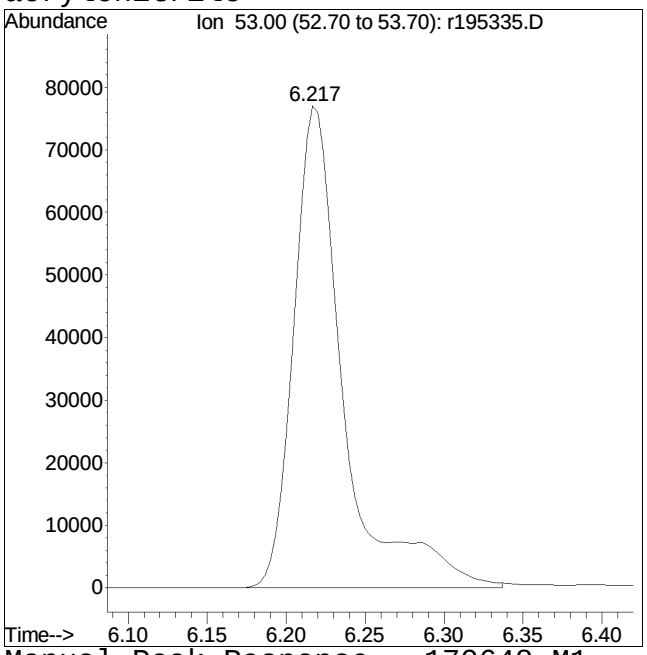
Original Peak Response = 87355 Manual Peak Response = 93803 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195335.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:8: 9 Instrument :
Sample : ITO15-LLSTD10.0 Quant Date : 11/3/2020 11:22 am

Compound #23: acrylonitrile



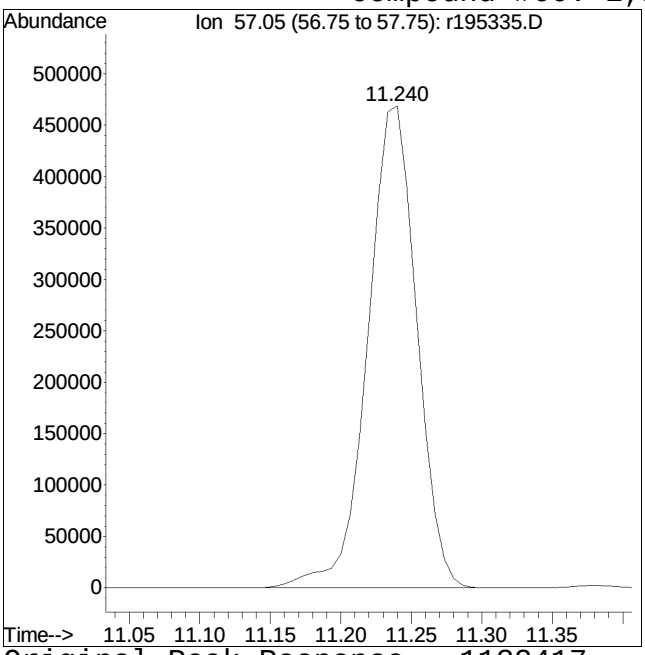


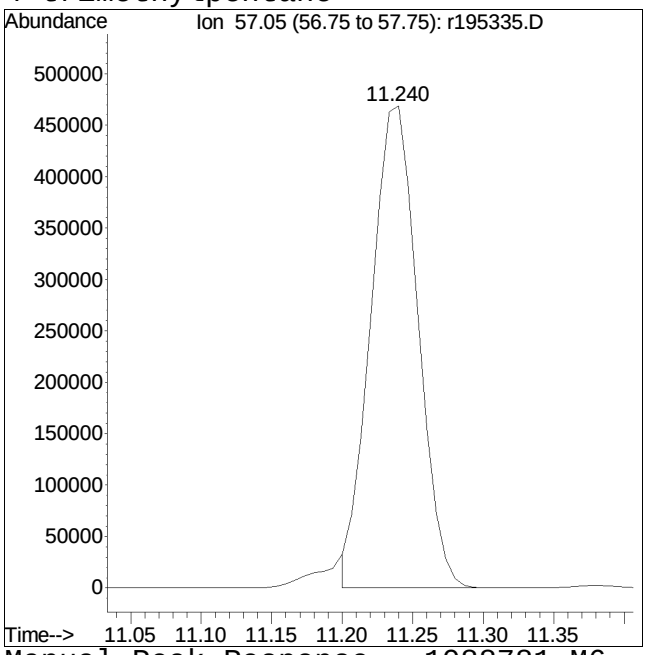
Original Peak Response = 151877 Manual Peak Response = 170648 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195335.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:8: 9 Instrument :
Sample : ITO15-LLSTD10.0 Quant Date : 11/3/2020 11:22 am

Compound #60: 2,2,4-trimethylpentane



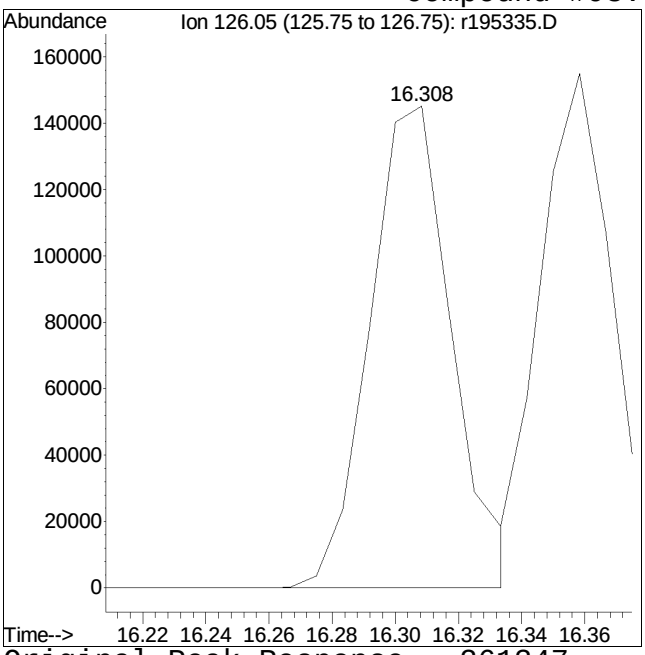


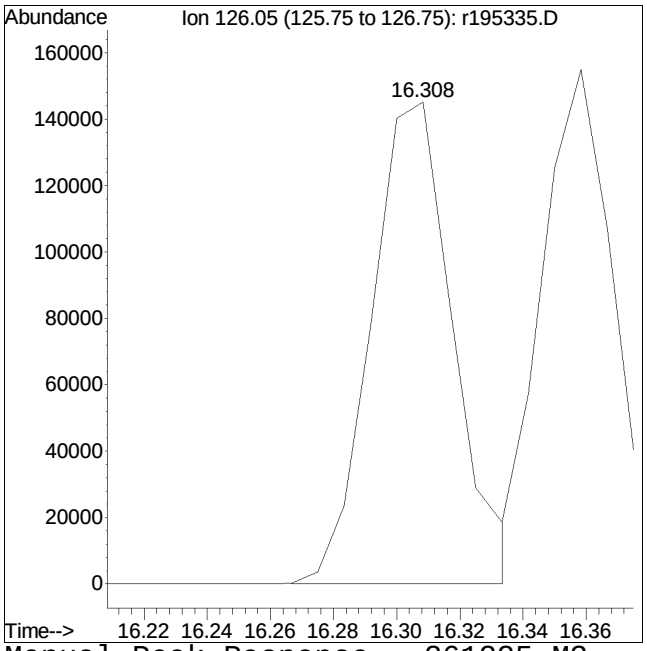
Original Peak Response = 1132417 Manual Peak Response = 1088781 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195335.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:8: 9 Instrument :
Sample : ITO15-LLSTD10.0 Quant Date : 11/3/2020 11:22 am

Compound #93: 2-chlorotoluene





Original Peak Response = 261347 Manual Peak Response = 261225 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 : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195336.D
Acq On : 2 Nov 2020 9:11 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD20.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:51 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	8.658	49	400253	10.000 ppbV	0.00
Standard Area = 386974			Recovery = 103.43%		
43) 1,4-difluorobenzene	10.500	114	889790	10.000 ppbV	0.00
Standard Area = 862720			Recovery = 103.14%		
67) chlorobenzene-D5	14.633	54	155318	10.000 ppbV	0.00
Standard Area = 151381			Recovery = 102.60%		
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	9.375	65	225828	10.514 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 105.14%		
69) toluene-D8	12.975	98	952435	9.948 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.48%		
90) bromofluorobenzene	15.833	95	645491	9.945 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.45%		
Target Compounds					Qvalue
2) chlorodifluoromethane	4.054	51	566072	19.996 ppbV	99
3) propylene	4.090	41	370485M6	20.731 ppbV	
4) propane	4.114	29	483814	20.787 ppbV	98
5) dichlorodifluoromethane	4.168	85	604311	19.903 ppbV	99
6) chloromethane	4.342	50	423722	20.185 ppbV	99
7) Freon-114	4.456	85	876394	19.920 ppbV	100
8) methanol	4.516	31	867876	100.738 ppbV	96
9) vinyl chloride	4.582	62	381577	20.237 ppbV	100
10) 1,3-butadiene	4.726	54	403768	20.672 ppbV	98
11) butane	4.786	43	647938	19.122 ppbV	98
12) acetaldehyde	4.468	29	1039219	107.501 ppbV	99
13) bromomethane	5.008	94	299032	20.040 ppbV	99
14) chloroethane	5.182	64	106700	17.959 ppbV	100
15) ethanol	5.303	31	1734226	103.460 ppbV	100
16) dichlorofluoromethane	5.290	67	591836	19.807 ppbV	99
17) vinyl bromide	5.533	106	324848	20.633 ppbV	99
18) acrolein	5.643	56	193446	19.817 ppbV	99
19) acetone	5.760	43	2758186	96.716 ppbV	95
20) acetonitrile	5.513	41	340768	19.865 ppbV	100
21) trichlorofluoromethane	5.943	101	453528	19.303 ppbV	99
22) isopropyl alcohol	6.007	45	2252545	52.778 ppbV	99
23) acrylonitrile	6.217	53	344297	19.378 ppbV	99
24) pentane	6.287	43	1095442	20.593 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195336.D
Acq On : 2 Nov 2020 9:11 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD20.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:51 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.297	31	925252	21.166	ppbV	99
26) 1,1-dichloroethene	6.548	61	502739	19.884	ppbV	99
27) tertiary butyl alcohol	6.566	59	750730	21.056	ppbV	99
28) methylene chloride	6.662	49	537160	20.203	ppbV	100
29) 3-chloropropene	6.770	41	668278	20.255	ppbV	99
30) carbon disulfide	6.932	76	1353734	19.988	ppbV	99
31) Freon 113	6.914	101	660811	19.750	ppbV	97
32) trans-1,2-dichloroethene	7.542	61	541818	20.836	ppbV	99
33) 1,1-dichloroethane	7.725	63	678257	19.774	ppbV	99
34) MTBE	7.767	73	1209395	20.267	ppbV	100
35) vinyl acetate	7.858	43	1169211	21.394	ppbV	99
36) 2-butanone	8.075	43	1076175	20.416	ppbV	99
37) cis-1,2-dichloroethene	8.508	61	478973	20.592	ppbV	98
38) Ethyl Acetate	8.700	61	152396	20.633	ppbV	87
39) chloroform	8.783	83	649689	20.284	ppbV	99
40) Tetrahydrofuran	9.142	42	700189	20.220	ppbV	100
41) 2,2-dichloropropane	8.808	77	613093	20.420	ppbV	98
42) 1,2-dichloroethane	9.475	62	365425	20.325	ppbV	98
44) hexane	8.700	57	747865	20.963	ppbV	99
45) diisopropyl ether	8.683	87	392928	21.262	ppbV	88
46) tert-butyl ethyl ether	9.192	59	1200929	21.012	ppbV	99
48) 1,1,1-trichloroethane	9.725	97	553432	21.513	ppbV	100
49) 1,1-dichloropropene	10.027	75	645428	20.992	ppbV	99
50) benzene	10.167	78	1487860	20.010	ppbV	100
51) thiophene	10.300	84	776109	20.881	ppbV	98
52) carbon tetrachloride	10.313	117	460857	21.052	ppbV	100
53) cyclohexane	10.440	56	795777	20.701	ppbV	99
54) tert-amyl methyl ether	10.727	73	1393440	21.132	ppbV	100
55) dibromomethane	10.947	93	343822	21.069	ppbV	99
56) 1,2-dichloropropane	10.967	63	473579	20.878	ppbV	99
57) bromodichloromethane	11.160	83	728258	21.253	ppbV	99
58) 1,4-dioxane	11.180	88	322554	21.588	ppbV	99
59) trichloroethene	11.207	130	464359	20.802	ppbV	100
60) 2,2,4-trimethylpentane	11.240	57	2317258M6	20.701	ppbV	
61) methyl methacrylate	11.380	41	878145	22.093	ppbV	100
62) heptane	11.500	43	1140762	21.082	ppbV	99
63) cis-1,3-dichloropropene	12.080	75	809212	22.275	ppbV	98
64) 4-methyl-2-pentanone	12.093	43	1325780	21.713	ppbV	99
65) trans-1,3-dichloropropene	12.617	75	744989	22.449	ppbV	100
66) 1,1,2-trichloroethane	12.800	97	470982	20.981	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195336.D
Acq On : 2 Nov 2020 9:11 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD20.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:51 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.075	91	1445704	19.443	ppbV	99
70)	2-methylthiophene	13.133	97	1162596	20.645	ppbV	99
71)	1,3-dichloropropane	13.092	76	879192	20.952	ppbV	98
72)	2-hexanone	13.292	43	1234639	21.298	ppbV	97
73)	3-methylthiophene	13.133	97	1162596	20.645	ppbV	99
74)	dibromochloromethane	13.467	129	588834	20.741	ppbV	100
75)	1,2-dibromoethane	13.692	107	745018	21.140	ppbV	99
76)	butyl acetate	13.858	73	287592	21.514	ppbV	96
77)	octane	13.958	85	660172	21.281	ppbV	94
78)	tetrachloroethene	14.100	166	594390	20.882	ppbV	99
79)	1,1,1,2-tetrachloroethane	14.650	131	445792	20.648	ppbV	99
80)	chlorobenzene	14.667	112	1288982	21.539	ppbV	99
81)	ethylbenzene	14.967	91	1799140	20.915	ppbV	99
82)	2-ethylthiophene	15.000	97	1271317	20.900	ppbV	98
83)	m+p-xylene	15.108	91	2947817	41.945	ppbV	98
84)	bromoform	15.183	173	612327	21.498	ppbV	99
85)	styrene	15.400	104	1397998	21.561	ppbV	100
86)	1,1,2,2-tetrachloroethane	15.475	83	1193665	22.084	ppbV	100
87)	o-xylene	15.483	91	1451086	20.894	ppbV	99
88)	1,2,3-trichloropropane	15.583	75	1010338	20.947	ppbV	99
89)	nonane	15.642	43	1563809	21.008	ppbV	95
91)	isopropylbenzene	15.933	105	2033449	20.640	ppbV	95
92)	bromobenzene	16.017	77	1324251	21.400	ppbV	98
93)	2-chlorotoluene	16.308	126	551368	21.393	ppbV	90
94)	n-propylbenzene	16.325	120	701609	22.744	ppbV	90
95)	4-chlorotoluene	16.358	126	525211	21.359	ppbV	95
96)	4-ethyl toluene	16.433	105	2352427	21.572	ppbV	96
97)	1,3,5-trimethylbenzene	16.492	105	1869689	20.834	ppbV	94
98)	tert-butylbenzene	16.808	119	1854819	22.861	ppbV	99
99)	1,2,4-trimethylbenzene	16.808	105	1744499	21.429	ppbV	93
100)	decane	16.875	57	1582200	23.493	ppbV	95
101)	Benzyl Chloride	16.917	91	1434484	25.554	ppbV	98
102)	1,3-dichlorobenzene	16.933	146	1063793	21.891	ppbV	97
103)	1,4-dichlorobenzene	16.983	146	1060816	22.594	ppbV	99
104)	sec-butylbenzene	17.008	105	2572582	21.719	ppbV	96
105)	1,2,3-trimethylbenzene	17.133	105	1748883	21.623	ppbV	93
106)	p-isopropyltoluene	17.133	119	2223626	25.036	ppbV	97
107)	1,2-dichlorobenzene	17.250	146	1007170	23.617	ppbV	99
108)	n-butylbenzene	17.450	91	1799321	24.327	ppbV	100
109)	indan	17.292	117	1981486	23.625	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195336.D
Acq On : 2 Nov 2020 9:11 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD20.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:51 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

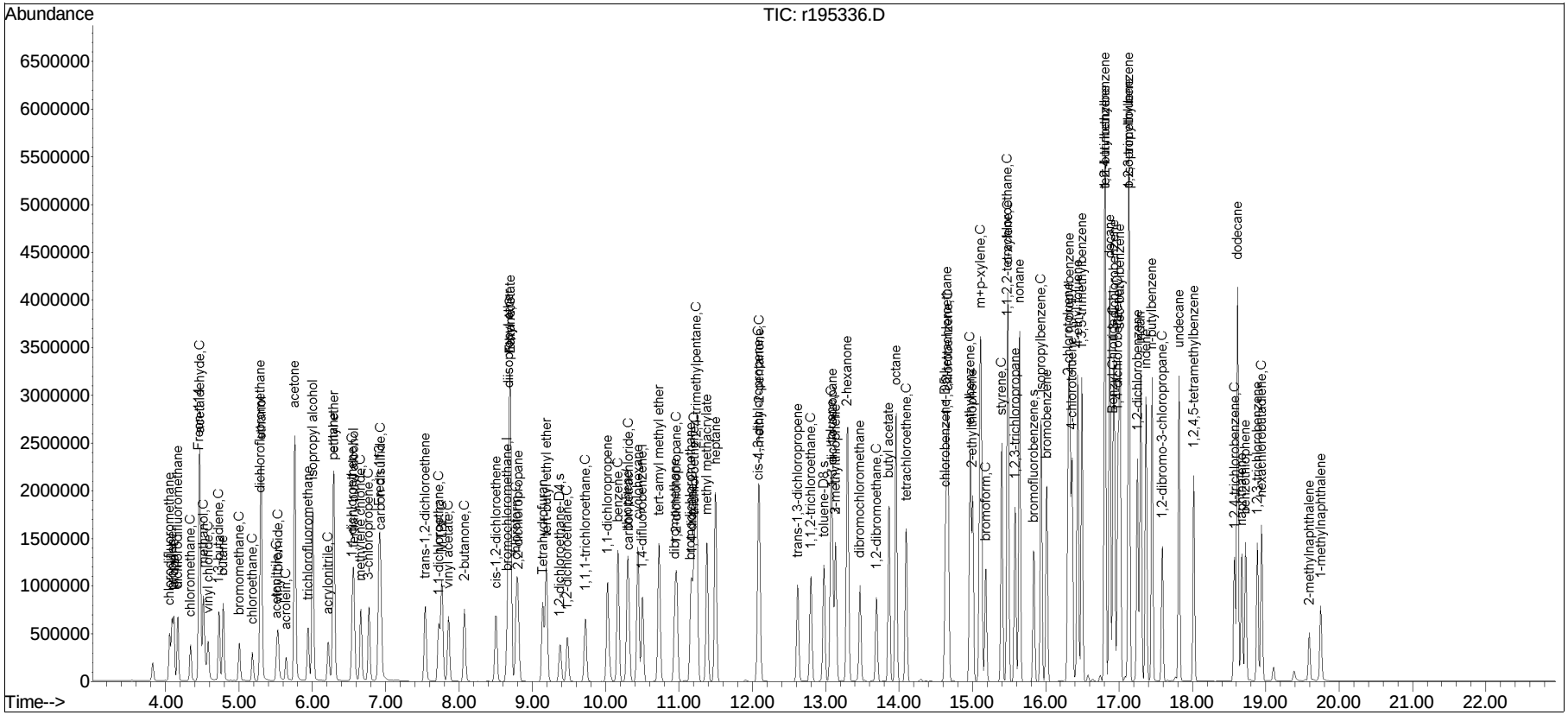
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	17.367	115	1676156	25.411 ppbV	97
111) 1,2-dibromo-3-chloropr...	17.592	75	462052	21.806 ppbV	94
112) undecane	17.817	57	1138889	18.630 ppbV	95
113) 1,2,4,5-tetramethylben...	18.017	119	1267823	18.025 ppbV	98
114) dodecane	18.617	57	1498488	23.693 ppbV	94
115) 1,2,4-trichlorobenzene	18.575	180	479521	18.404 ppbV	99
116) naphthalene	18.675	128	1123262	17.916 ppbV	99
117) 1,2,3-trichlorobenzene	18.883	180	518450	18.826 ppbV	98
118) benzothiophene	18.725	134	1141601	17.401 ppbV	99
119) hexachlorobutadiene	18.942	225	377079	17.085 ppbV	98
120) 2-methylnaphthalene	19.592	142	303153	19.230 ppbV	98
121) 1-methylnaphthalene	19.750	142	479633	16.951 ppbV	99

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195336.D
Acq On : 2 Nov 2020 9:11 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD20.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:51 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

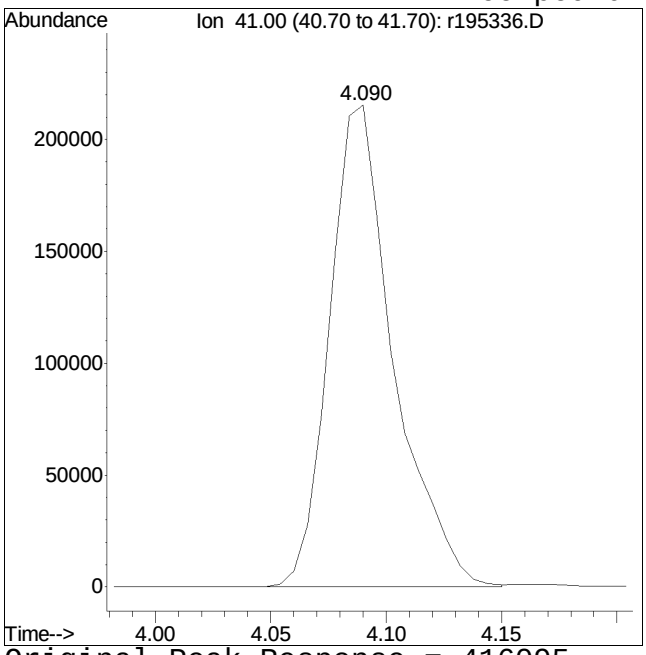


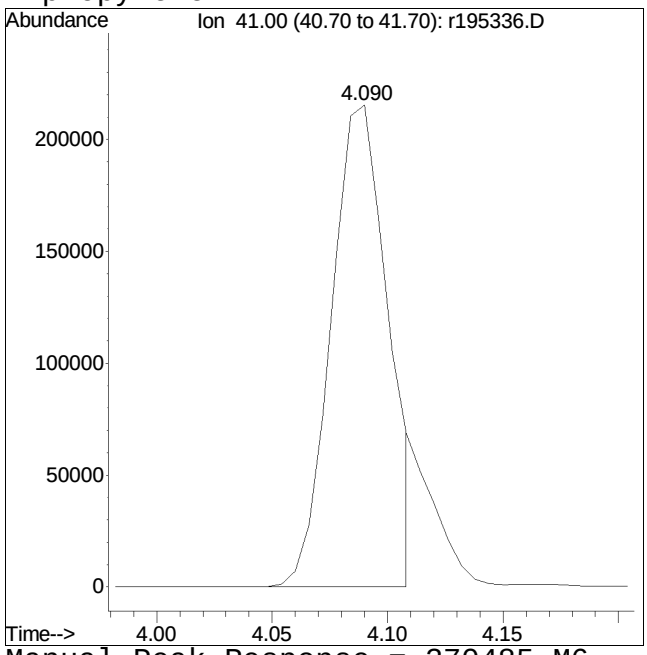
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195336.D
Date Inj'd : 11/2/2020 0:9: 1
Sample : ITO15-LLSTD20.0

Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:22 am

Compound #3: propylene



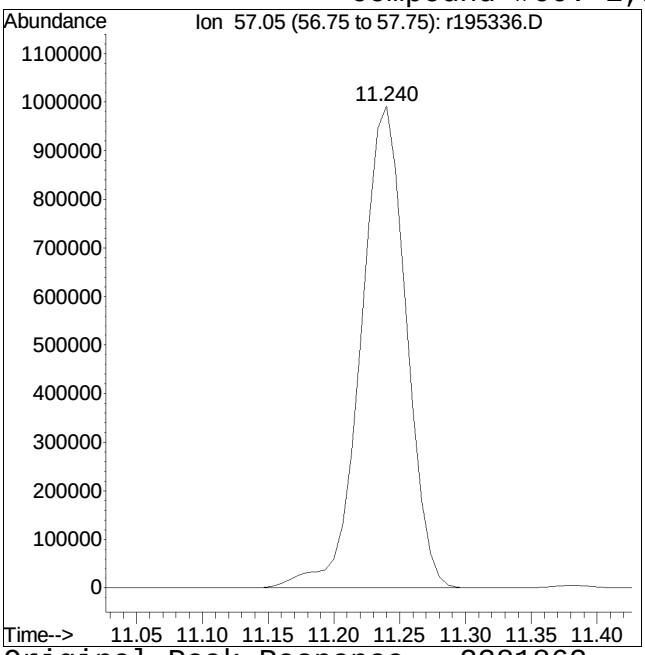


Original Peak Response = 416095 Manual Peak Response = 370485 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

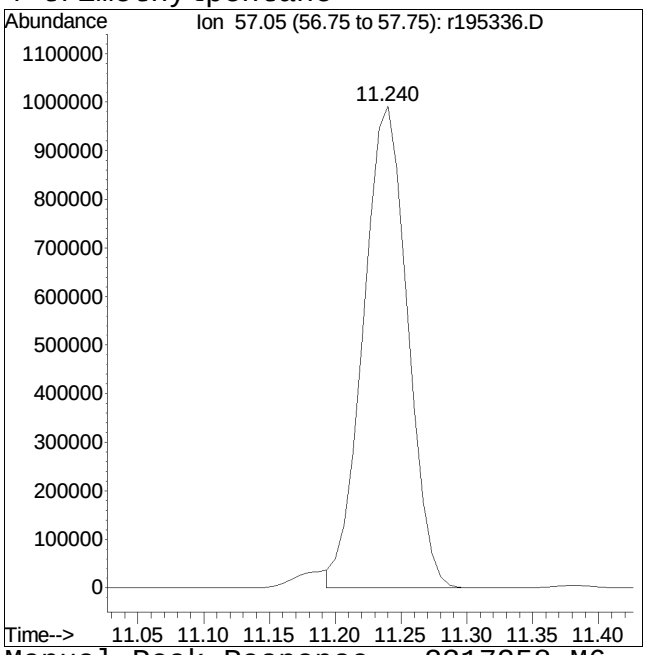
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195336.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:9: 1 Instrument :
Sample : ITO15-LLSTD20.0 Quant Date : 11/3/2020 11:22 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 2381862



Manual Peak Response = 2317258 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195337.D
Acq On : 2 Nov 2020 9:54 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD50.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	8.667	49	439377	10.000 ppbV	0.00
Standard Area = 386974			Recovery	= 113.54%	
43) 1,4-difluorobenzene	10.507	114	985671	10.000 ppbV	0.00
Standard Area = 862720			Recovery	= 114.25%	
67) chlorobenzene-D5	14.633	54	161557	10.000 ppbV	0.00
Standard Area = 151381			Recovery	= 106.72%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	9.383	65	235898	9.915 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.15%	
69) toluene-D8	12.975	98	977173	9.812 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.12%	
90) bromofluorobenzene	15.842	95	680101	10.074 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.74%	
Target Compounds					Qvalue
2) chlorodifluoromethane	4.054	51	1417725	45.620 ppbV	97
3) propylene	4.090	41	876561M6	44.681 ppbV	
4) propane	4.114	29	1212948	47.473 ppbV	95
5) dichlorodifluoromethane	4.168	85	1392419	41.775 ppbV	99
6) chloromethane	4.342	50	998463	43.329 ppbV	99
7) Freon-114	4.456	85	1986695	41.135 ppbV	99
8) methanol	4.522	31	2150695	227.411 ppbV	94
9) vinyl chloride	4.582	62	924060	44.645 ppbV	99
10) 1,3-butadiene	4.732	54	1013470	47.266 ppbV	92
11) butane	4.786	43	1561426	41.978 ppbV	98
12) acetaldehyde	4.468	29	2259318	212.903 ppbV	97
13) bromomethane	5.008	94	736248	44.947 ppbV	98
14) chloroethane	5.182	64	272964	41.853 ppbV	99
15) ethanol	5.313	31	4047310	219.953 ppbV	97
16) dichlorofluoromethane	5.290	67	1337051	40.763 ppbV	100
17) vinyl bromide	5.537	106	740449	42.842 ppbV	99
18) acrolein	5.647	56	506174	47.237 ppbV	99
19) acetone	5.767	43	5827833	186.157 ppbV #	81
20) acetonitrile	5.520	41	808616	42.942 ppbV	100
21) trichlorofluoromethane	5.947	101	1018300	39.481 ppbV	100
22) isopropyl alcohol	6.017	45	5224081	111.504 ppbV #	98
23) acrylonitrile	6.223	53	951391	48.778 ppbV	98
24) pentane	6.290	43	2801500	47.975 ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195337.D
Acq On : 2 Nov 2020 9:54 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD50.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.300	31	2336527	48.691	ppbV	96
26) 1,1-dichloroethene	6.554	61	1240268	44.685	ppbV	99
27) tertiary butyl alcohol	6.578	59	1824642	46.619	ppbV	97
28) methylene chloride	6.668	49	1393657	47.750	ppbV	96
29) 3-chloropropene	6.776	41	1667461	46.039	ppbV	96
30) carbon disulfide	6.938	76	3398553	45.711	ppbV	98
31) Freon 113	6.914	101	1566593	42.652	ppbV	90
32) trans-1,2-dichloroethene	7.542	61	1357468	47.554	ppbV	99
33) 1,1-dichloroethane	7.733	63	1665260	44.226	ppbV	99
34) MTBE	7.767	73	2961831	45.214	ppbV	97
35) vinyl acetate	7.867	43	2901508	48.364	ppbV	97
36) 2-butanone	8.083	43	2652243	45.836	ppbV	98
37) cis-1,2-dichloroethene	8.508	61	1199368	46.971	ppbV	99
38) Ethyl Acetate	8.700	61	375001	46.251	ppbV	64
39) chloroform	8.792	83	1624773	46.210	ppbV	98
40) Tetrahydrofuran	9.142	42	1740540	45.788	ppbV	98
41) 2,2-dichloropropane	8.817	77	1484679	45.046	ppbV	96
42) 1,2-dichloroethane	9.483	62	890443	45.117	ppbV	95
44) hexane	8.708	57	1854608	46.928	ppbV	81
45) diisopropyl ether	8.692	87	1020796	49.865	ppbV #	61
46) tert-butyl ethyl ether	9.192	59	2958341	46.726	ppbV	94
48) 1,1,1-trichloroethane	9.725	97	1330033	46.671	ppbV	99
49) 1,1-dichloropropene	10.027	75	1634966	48.003	ppbV	94
50) benzene	10.173	78	3772220	45.797	ppbV	98
51) thiophene	10.300	84	2043545	49.633	ppbV	94
52) carbon tetrachloride	10.320	117	1108236	45.701	ppbV	99
53) cyclohexane	10.440	56	2053151	48.215	ppbV	95
54) tert-amyl methyl ether	10.733	73	3419312	46.811	ppbV	98
55) dibromomethane	10.947	93	842723	46.617	ppbV	97
56) 1,2-dichloropropane	10.973	63	1157688	46.072	ppbV	98
57) bromodichloromethane	11.167	83	1797856	47.364	ppbV	100
58) 1,4-dioxane	11.187	88	814160	49.190	ppbV	99
59) trichloroethene	11.213	130	1180026	47.720	ppbV	96
60) 2,2,4-trimethylpentane	11.240	57	5796416M6	46.745	ppbV	
61) methyl methacrylate	11.387	41	2067002	46.946	ppbV	97
62) heptane	11.500	43	2748108	45.847	ppbV	94
63) cis-1,3-dichloropropene	12.080	75	1975036	49.079	ppbV	94
64) 4-methyl-2-pentanone	12.100	43	3170382	46.872	ppbV	95
65) trans-1,3-dichloropropene	12.625	75	1817395	49.438	ppbV	98
66) 1,1,2-trichloroethane	12.800	97	1108074	44.560	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195337.D
Acq On : 2 Nov 2020 9:54 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD50.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	13.075	91	3407358	44.055	ppbV		100
70)	2-methylthiophene	13.142	97	2664971	45.496	ppbV		98
71)	1,3-dichloropropane	13.092	76	2061095	47.221	ppbV		95
72)	2-hexanone	13.292	43	2778080	46.073	ppbV		92
73)	3-methylthiophene	13.142	97	2664971	45.496	ppbV		98
74)	dibromochloromethane	13.467	129	1349469	45.698	ppbV		98
75)	1,2-dibromoethane	13.692	107	1713960	46.755	ppbV		100
76)	butyl acetate	13.867	73	711240	51.151	ppbV		88
77)	octane	13.958	85	1662242	51.513	ppbV		80
78)	tetrachloroethene	14.100	166	1433066	48.403	ppbV		97
79)	1,1,1,2-tetrachloroethane	14.650	131	1017725	45.319	ppbV		96
80)	chlorobenzene	14.675	112	2880186	46.269	ppbV		98
81)	ethylbenzene	14.975	91	4152960	46.413	ppbV		98
82)	2-ethylthiophene	15.008	97	2843881	44.946	ppbV		96
83)	m+p-xylene	15.117	91	6555297	89.674	ppbV		92
84)	bromoform	15.183	173	1388479	46.865	ppbV		97
85)	styrene	15.400	104	3126310	46.353	ppbV		98
86)	1,1,2,2-tetrachloroethane	15.483	83	2682433	47.710	ppbV		100
87)	o-xylene	15.483	91	3191349	44.177	ppbV		94
88)	1,2,3-trichloropropane	15.583	75	2411982	48.075	ppbV		97
89)	nonane	15.642	43	3388278	43.761	ppbV	#	84
91)	isopropylbenzene	15.942	105	4415504	43.088	ppbV	#	85
92)	bromobenzene	16.017	77	3093237	48.058	ppbV		94
93)	2-chlorotoluene	16.308	126	1344714	50.159	ppbV	#	62
94)	n-propylbenzene	16.325	120	1686700	52.566	ppbV		80
95)	4-chlorotoluene	16.358	126	1314094	51.376	ppbV		82
96)	4-ethyl toluene	16.442	105	4773364	42.082	ppbV	#	88
97)	1,3,5-trimethylbenzene	16.492	105	4345287	46.551	ppbV	#	84
98)	tert-butylbenzene	16.808	119	3495155	41.415	ppbV	#	89
99)	1,2,4-trimethylbenzene	16.808	105	3143591	37.123	ppbV	#	85
100)	decane	16.875	57	3505695	50.044	ppbV		85
101)	Benzyl Chloride	16.925	91	2651801	45.414	ppbV		95
102)	1,3-dichlorobenzene	16.933	146	2179075	43.109	ppbV		97
103)	1,4-dichlorobenzene	16.983	146	2114224	43.292	ppbV		97
104)	sec-butylbenzene	17.017	105	4899174	39.764	ppbV	#	90
105)	1,2,3-trimethylbenzene	17.142	105	2841419	33.774	ppbV		97
106)	p-isopropyltoluene	17.133	119	3384700M6	36.637	ppbV		
107)	1,2-dichlorobenzene	17.250	146	1775087	40.016	ppbV		98
108)	n-butylbenzene	17.450	91	2683480	34.880	ppbV		97
109)	indan	17.300	117	3500144	40.121	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195337.D
Acq On : 2 Nov 2020 9:54 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD50.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:22:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

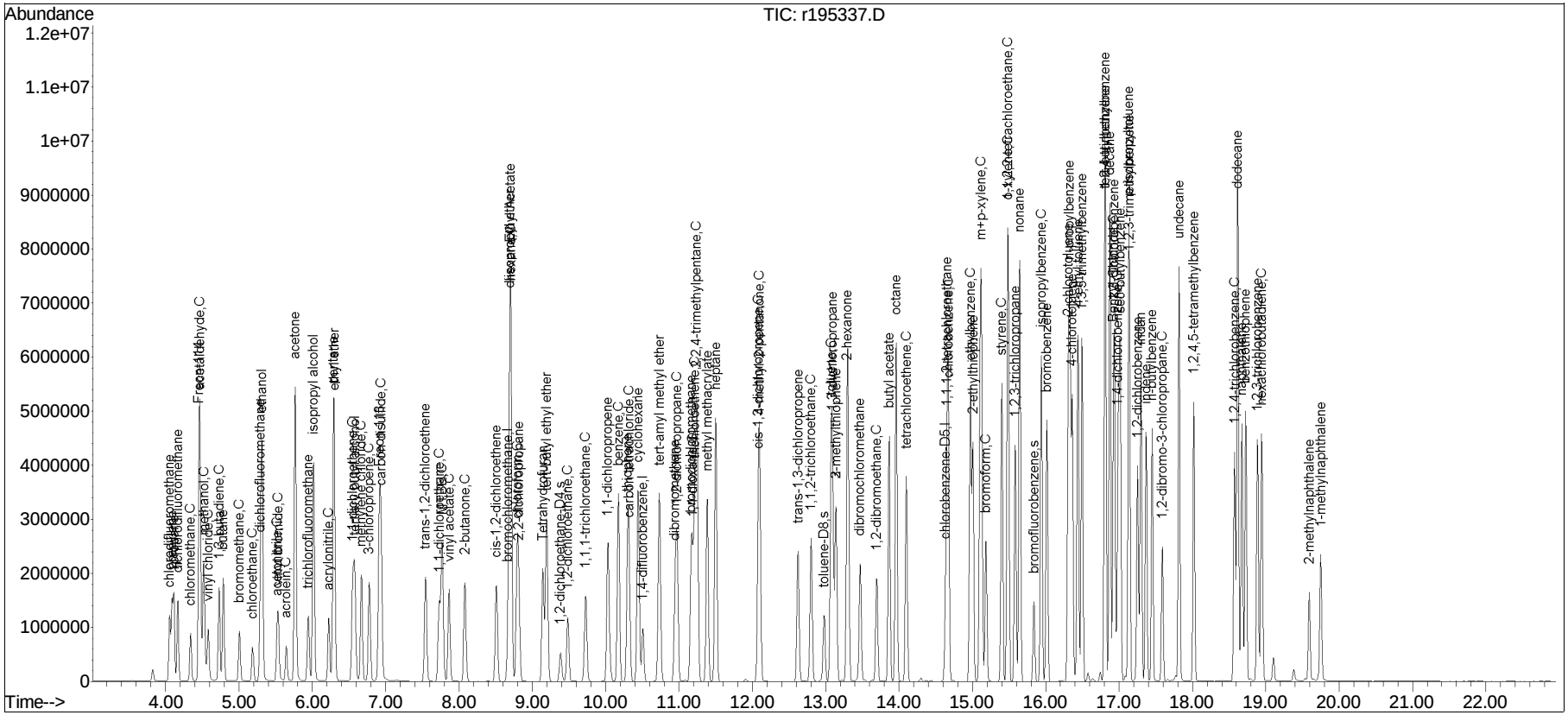
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	17.367	115	2641611	38.502 ppbV	98
111) 1,2-dibromo-3-chloropr...	17.592	75	793095	35.983 ppbV	91
112) undecane	17.817	57	2931851	46.108 ppbV	87
113) 1,2,4,5-tetramethylben...	18.017	119	3126766	42.738 ppbV	97
114) dodecane	18.617	57	3843200	58.419 ppbV	82
115) 1,2,4-trichlorobenzene	18.575	180	1649290	60.855 ppbV	94
116) naphthalene	18.675	128	4058329	62.231 ppbV	96
117) 1,2,3-trichlorobenzene	18.883	180	1801780	62.898 ppbV	96
118) benzothiophene	18.725	134	4096512	60.032 ppbV	98
119) hexachlorobutadiene	18.942	225	1136034	49.485 ppbV	91
120) 2-methylnaphthalene	19.592	142	963608	58.765 ppbV	98
121) 1-methylnaphthalene	19.750	142	1381284	46.931 ppbV	98

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195337.D
Acq On : 2 Nov 2020 9:54 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD50.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

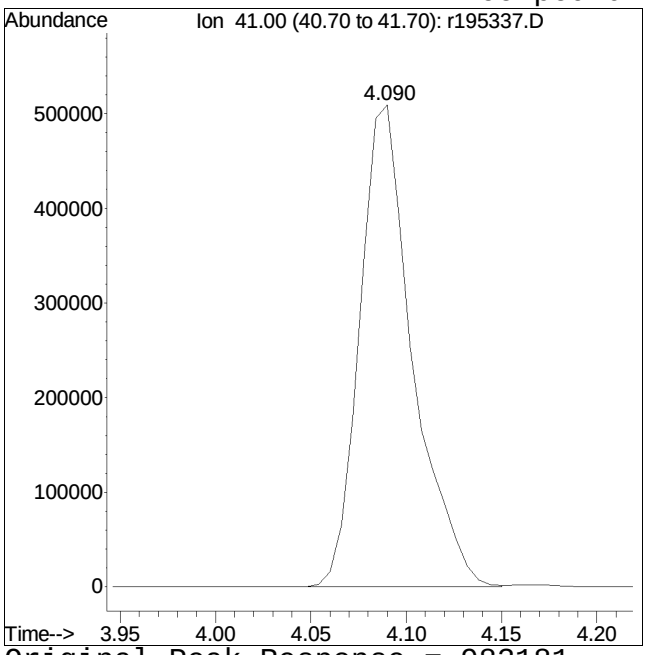
Quant Time: Nov 03 11:22:59 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

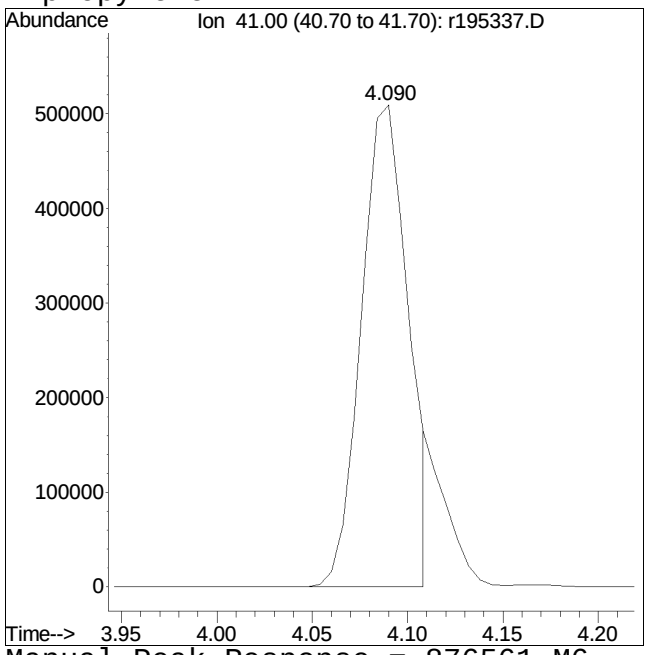


Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195337.D
Date Inj'd : 11/2/2020 0:9: 4
Sample : ITO15-LLSTD50.0
Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:22 am

Compound #3: propylene



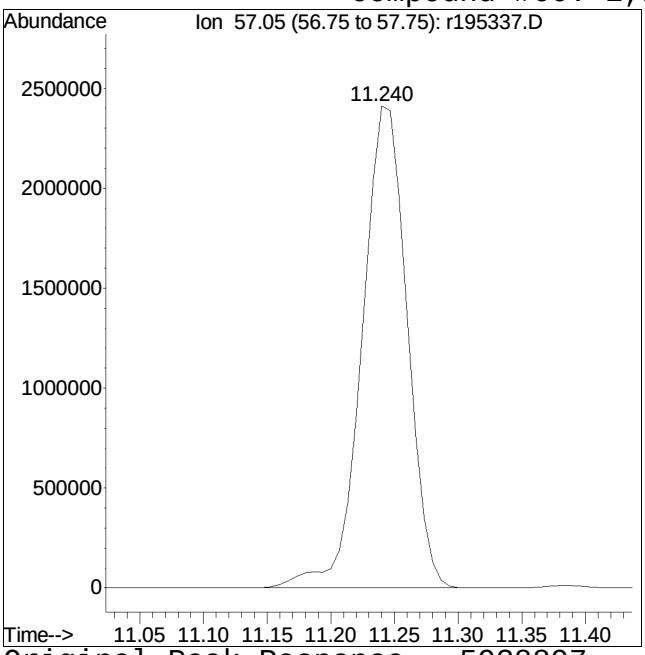


Original Peak Response = 983181 Manual Peak Response = 876561 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

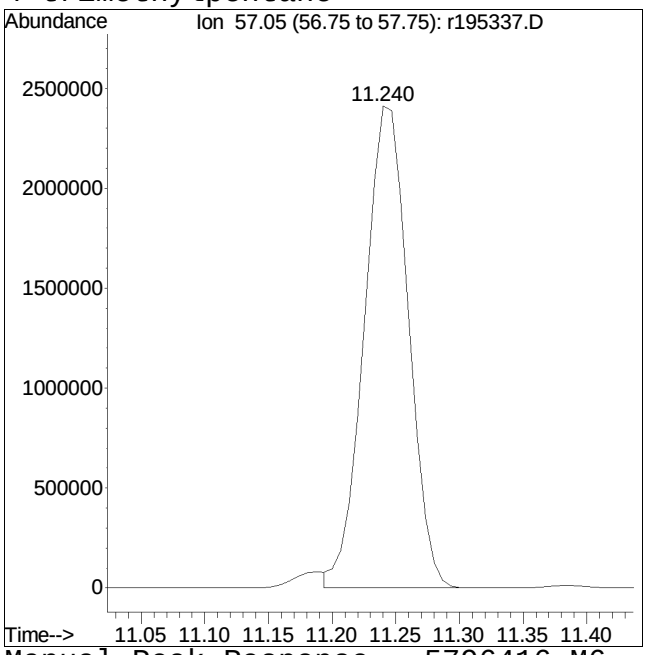
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195337.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:9: 4 Instrument :
Sample : ITO15-LLSTD50.0 Quant Date : 11/3/2020 11:22 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 5938897



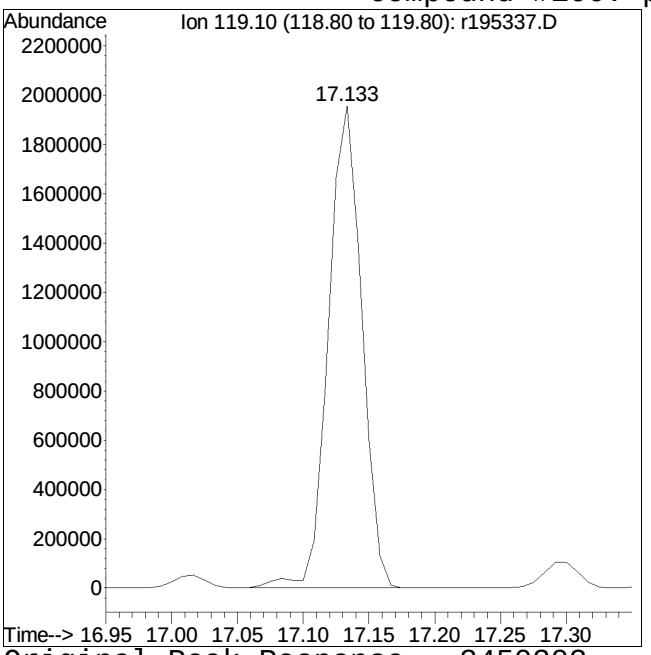
Manual Peak Response = 5796416 M6

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

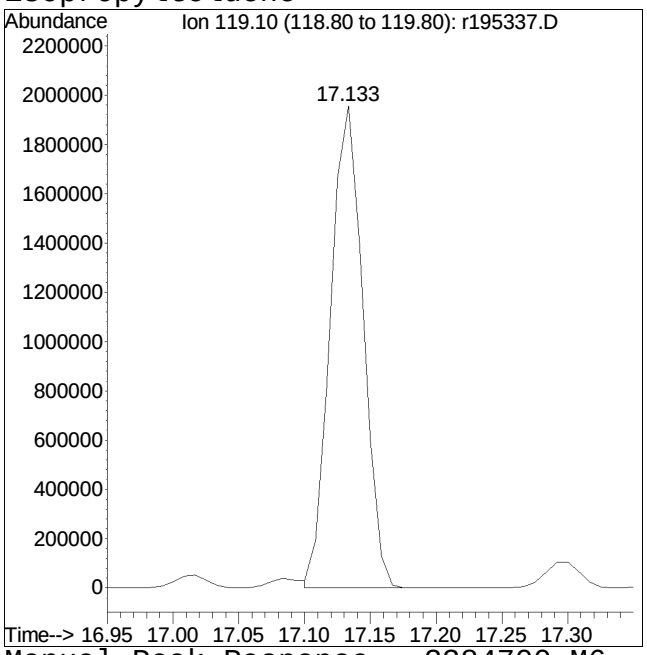
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195337.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:9: 4 Instrument :
Sample : ITO15-LLSTD50.0 Quant Date : 11/3/2020 11:22 am

Compound #106: p-isopropyltoluene



Original Peak Response = 3450303



Manual Peak Response = 3384700 M6

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195338.D
Acq On : 2 Nov 2020 10:39 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD100
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:23:07 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.667	49	429577	10.000	ppbV	0.00
Standard Area = 386974			Recovery	=	111.01%	
43) 1,4-difluorobenzene	10.507	114	1013193	10.000	ppbV	0.00
Standard Area = 862720			Recovery	=	117.44%	
67) chlorobenzene-D5	14.633	54	157453	10.000	ppbV	# 0.00
Standard Area = 151381			Recovery	=	104.01%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.383	65	196148	8.020	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	80.20%	
69) toluene-D8	12.983	98	930138	9.583	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	95.83%	
90) bromofluorobenzene	15.842	95	642381	9.763	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	=	97.63%	
Target Compounds						Qvalue
2) chlorodifluoromethane	4.054	51	2721056	89.557	ppbV #	94
3) propylene	4.090	41	1592447M6	83.024	ppbV	
4) propane	4.114	29	2368007	94.795	ppbV	92
5) dichlorodifluoromethane	4.168	85	2400508	73.662	ppbV	99
6) chloromethane	4.342	50	1901938	84.420	ppbV	97
7) Freon-114	4.456	85	3254317	68.919	ppbV	95
8) methanol	4.522	31	4029799	435.825	ppbV	92
9) vinyl chloride	4.582	62	1749759	86.466	ppbV	98
10) 1,3-butadiene	4.732	54	1916154	91.404	ppbV	89
11) butane	4.786	43	2774745	76.299	ppbV #	96
12) acetaldehyde	4.474	29	3849213	370.998	ppbV	94
13) bromomethane	5.008	94	1309527	81.769	ppbV	95
14) chloroethane	5.182	64	484430	75.971	ppbV	97
15) ethanol	5.320	31	7223543	401.522	ppbV	95
16) dichlorofluoromethane	5.293	67	2213469	69.023	ppbV	99
17) vinyl bromide	5.537	106	1268636	75.078	ppbV	95
18) acrolein	5.647	56	1000418	95.491	ppbV	97
19) acetone	5.770	43	9082566	296.740	ppbV #	70
20) acetonitrile	5.523	41	1460875	79.350	ppbV	98
21) trichlorofluoromethane	5.943	101	1646988	65.313	ppbV	98
22) isopropyl alcohol	6.020	45	7543841	164.690	ppbV #	94
23) acrylonitrile	6.223	53	1988277	104.266	ppbV	96
24) pentane	6.287	43	4718785	82.652	ppbV #	92

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195338.D
Acq On : 2 Nov 2020 10:39 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD100
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:23:07 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.300	31	4584646	97.720	ppbV	91
26) 1,1-dichloroethene	6.548	61	2189465	80.684	ppbV	95
27) tertiary butyl alcohol	6.584	59	3398227	88.805	ppbV	94
28) methylene chloride	6.674	49	2638704	92.470	ppbV	91
29) 3-chloropropene	6.776	41	2950686	83.328	ppbV	91
30) carbon disulfide	6.938	76	5869073	80.740	ppbV	96
31) Freon 113	6.914	101	2598055	72.348	ppbV	90
32) trans-1,2-dichloroethene	7.542	61	2455897	87.996	ppbV	98
33) 1,1-dichloroethane	7.733	63	2950571	80.149	ppbV	98
34) MTBE	7.767	73	4967832	77.567	ppbV #	91
35) vinyl acetate	7.867	43	5072802	86.485	ppbV #	91
36) 2-butanone	8.083	43	4573537	80.843	ppbV #	95
37) cis-1,2-dichloroethene	8.508	61	2161739	86.592	ppbV	99
38) Ethyl Acetate	8.708	61	667966	84.263	ppbV #	24
39) chloroform	8.792	83	2865632	83.361	ppbV	97
40) Tetrahydrofuran	9.142	42	3015241	81.131	ppbV	97
41) 2,2-dichloropropane	8.817	77	2407603	74.714	ppbV	92
42) 1,2-dichloroethane	9.483	62	1414827	73.323	ppbV #	86
44) hexane	8.708	57	3301787	81.277	ppbV #	60
45) diisopropyl ether	8.692	87	1928536	91.648	ppbV #	36
46) tert-butyl ethyl ether	9.192	59	5218559	80.187	ppbV #	89
48) 1,1,1-trichloroethane	9.725	97	2140973	73.087	ppbV #	94
49) 1,1-dichloropropene	10.033	75	2872683	82.051	ppbV	91
50) benzene	10.173	78	6906551	81.572	ppbV	96
51) thiophene	10.300	84	3891348	91.944	ppbV #	90
52) carbon tetrachloride	10.320	117	1765435	70.824	ppbV	99
53) cyclohexane	10.447	56	3994593	91.258	ppbV #	90
54) tert-amyl methyl ether	10.733	73	5814179	77.434	ppbV #	96
55) dibromomethane	10.953	93	1476831	79.476	ppbV	96
56) 1,2-dichloropropane	10.973	63	2051690	79.433	ppbV #	94
57) bromodichloromethane	11.167	83	3128448	80.180	ppbV	99
58) 1,4-dioxane	11.187	88	1613046	94.810	ppbV	97
59) trichloroethene	11.213	130	2144552	84.369	ppbV	93
60) 2,2,4-trimethylpentane	11.247	57	10325619M6	81.008	ppbV	
61) methyl methacrylate	11.387	41	3568524	78.846	ppbV	95
62) heptane	11.500	43	4573216	74.223	ppbV #	86
63) cis-1,3-dichloropropene	12.080	75	3390572	81.966	ppbV #	91
64) 4-methyl-2-pentanone	12.107	43	5066641	72.872	ppbV #	87
65) trans-1,3-dichloropropene	12.625	75	3256683	86.184	ppbV	95
66) 1,1,2-trichloroethane	12.800	97	2003011	78.361	ppbV #	85

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195338.D
Acq On : 2 Nov 2020 10:39 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD100
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:23:07 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	13.075	91	6115884	81.135	ppbV		99
70)	2-methylthiophene	13.142	97	4726756	82.799	ppbV		97
71)	1,3-dichloropropane	13.100	76	3572221	83.974	ppbV		93
72)	2-hexanone	13.300	43	4443037	75.606	ppbV	#	80
73)	3-methylthiophene	13.142	97	4726756	82.799	ppbV		97
74)	dibromochloromethane	13.475	129	2369647	82.337	ppbV		96
75)	1,2-dibromoethane	13.700	107	2888332	80.845	ppbV		96
76)	butyl acetate	13.867	73	1258017	92.832	ppbV		76
77)	octane	13.967	85	3112986	98.987	ppbV	#	72
78)	tetrachloroethene	14.100	166	2390048	82.830	ppbV		96
79)	1,1,1,2-tetrachloroethane	14.658	131	1685599	77.015	ppbV		96
80)	chlorobenzene	14.675	112	4642532	76.524	ppbV		98
81)	ethylbenzene	14.975	91	7283629	83.523	ppbV		94
82)	2-ethylthiophene	15.008	97	4758325	77.164	ppbV		95
83)	m+p-xylene	15.117	91	10708453	150.307	ppbV		88
84)	bromoform	15.192	173	2211343	76.585	ppbV		95
85)	styrene	15.400	104	5047156	76.784	ppbV		98
86)	1,1,2,2-tetrachloroethane	15.483	83	3951590	72.116	ppbV		99
87)	o-xylene	15.492	91	4856424	68.978	ppbV		96
88)	1,2,3-trichloropropane	15.583	75	4011430	82.040	ppbV		96
89)	nonane	15.650	43	5365862	71.108	ppbV	#	75
91)	isopropylbenzene	15.942	105	6680619	66.891	ppbV	#	79
92)	bromobenzene	16.017	77	4834931	77.075	ppbV		89
93)	2-chlorotoluene	16.308	126	2327155	89.067	ppbV	#	42
94)	n-propylbenzene	16.333	120	2779695	88.887	ppbV		67
95)	4-chlorotoluene	16.367	126	2380209	95.483	ppbV		75
96)	4-ethyl toluene	16.442	105	7207070	65.194	ppbV	#	83
97)	1,3,5-trimethylbenzene	16.500	105	6221539	68.388	ppbV	#	83
98)	tert-butylbenzene	16.808	119	4601177	55.942	ppbV	#	85
99)	1,2,4-trimethylbenzene	16.817	105	3966753	48.065	ppbV		92
100)	decane	16.875	57	4998405	73.212	ppbV	#	80
101)	Benzyl Chloride	16.925	91	4087627	71.829	ppbV		91
102)	1,3-dichlorobenzene	16.942	146	3009426	61.088	ppbV		97
103)	1,4-dichlorobenzene	16.992	146	2672057	56.140	ppbV		98
104)	sec-butylbenzene	17.017	105	6257469	52.112	ppbV	#	84
105)	1,2,3-trimethylbenzene	17.142	105	3857257	47.044	ppbV		99
106)	p-isopropyltoluene	17.133	119	4608875M6	51.189	ppbV		
107)	1,2-dichlorobenzene	17.250	146	2697787	62.402	ppbV		95
108)	n-butylbenzene	17.450	91	5261589	70.172	ppbV		92
109)	indan	17.300	117	4657743	54.781	ppbV	#	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195338.D
Acq On : 2 Nov 2020 10:39 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD100
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:23:07 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default - All compounds listed

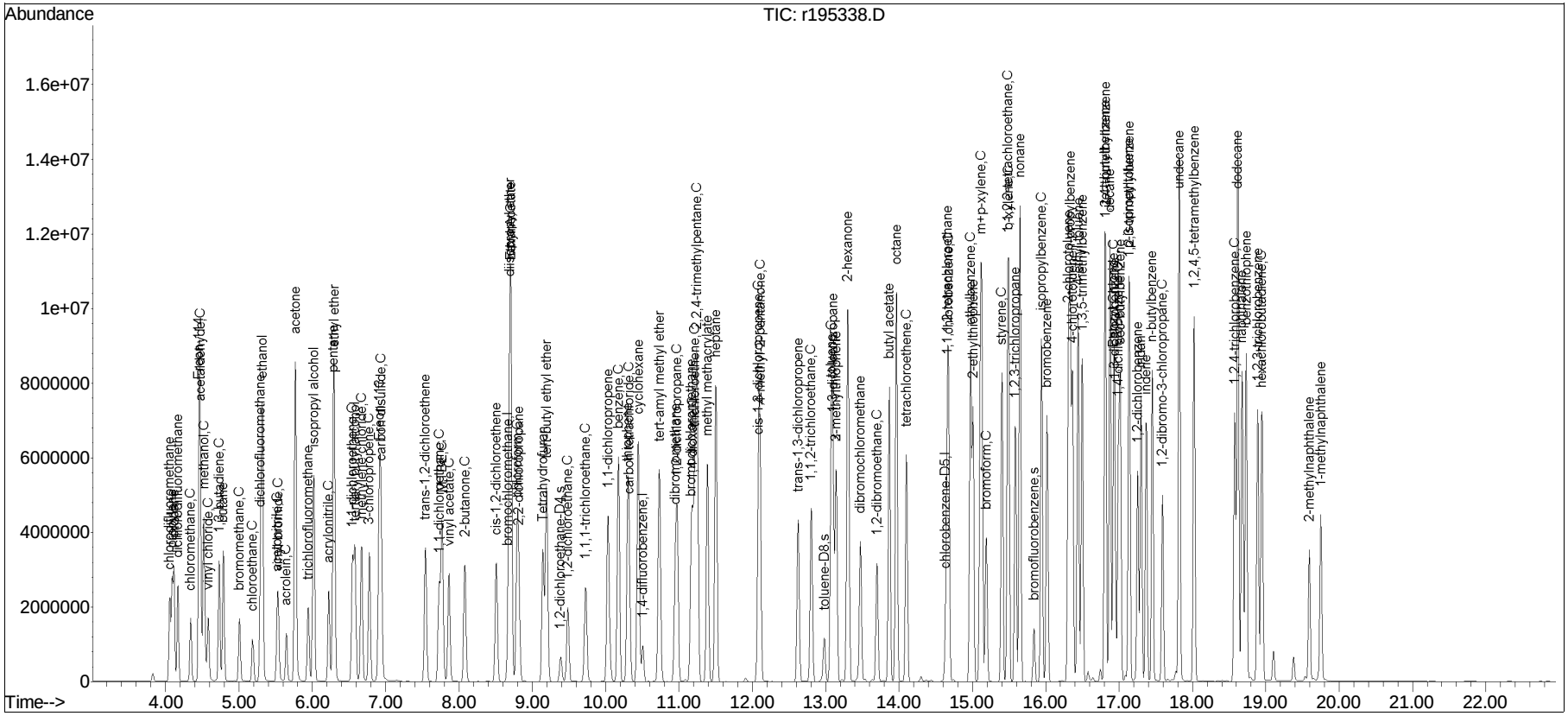
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	17.367	115	4309477	64.448	ppbV	95
111) 1,2-dibromo-3-chloropr...	17.592	75	1551125	72.210	ppbV #	86
112) undecane	17.817	57	6248267	100.825	ppbV #	82
113) 1,2,4,5-tetramethylben...	18.025	119	6267900	87.906	ppbV #	88
114) dodecane	18.617	57	6271611	97.816	ppbV #	79
115) 1,2,4-trichlorobenzene	18.575	180	3155194	119.453	ppbV #	91
116) naphthalene	18.675	128	7640430	120.213	ppbV	96
117) 1,2,3-trichlorobenzene	18.892	180	3170264	113.556	ppbV	95
118) benzothiophene	18.733	134	7623099	114.623	ppbV	97
119) hexachlorobutadiene	18.942	225	1905757	85.178	ppbV #	89
120) 2-methylnaphthalene	19.592	142	2056003	128.653	ppbV	98
121) 1-methylnaphthalene	19.750	142	2671159	93.122	ppbV	99

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

Sub List : Default - All compounds listed0\11\201102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195338.D
Acq On : 2 Nov 2020 10:39 PM
Operator : AIRLAB19:TS
Sample : ITO15-LLSTD100
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

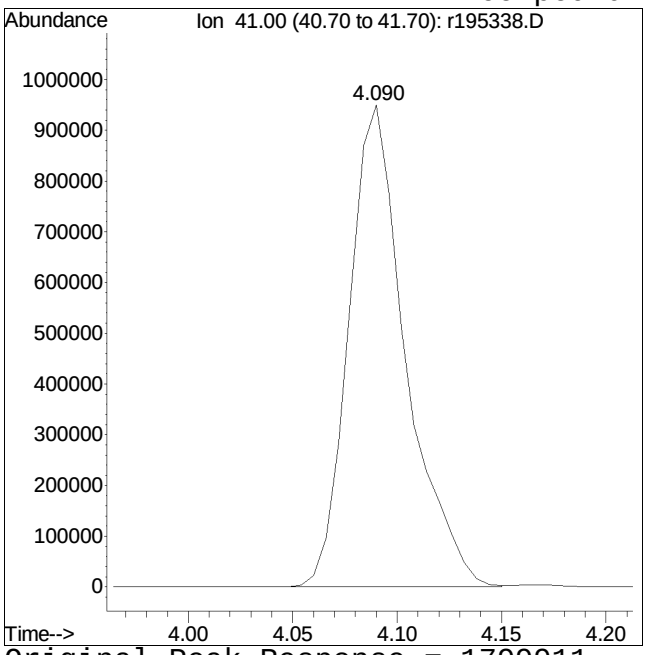
Quant Time: Nov 03 11:23:07 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

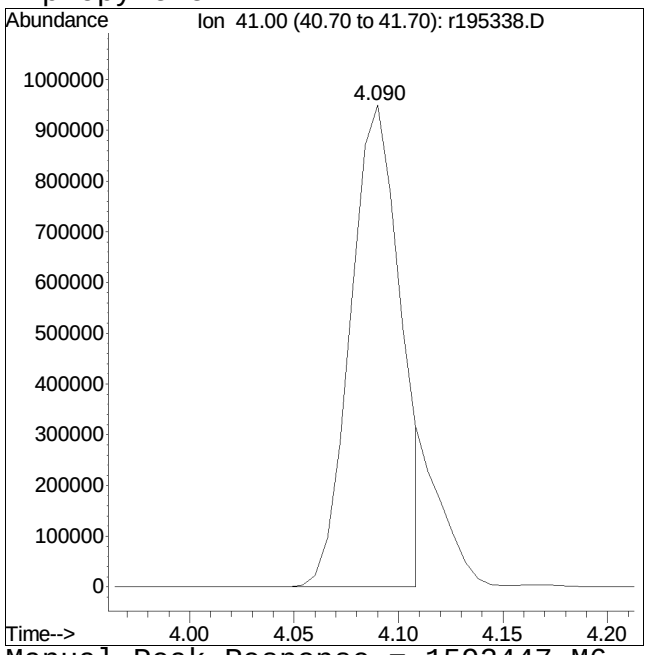


Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195338.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:0: 9 Instrument :
Sample : ITO15-LLSTD100 Quant Date : 11/3/2020 11:23 am

Compound #3: propylene



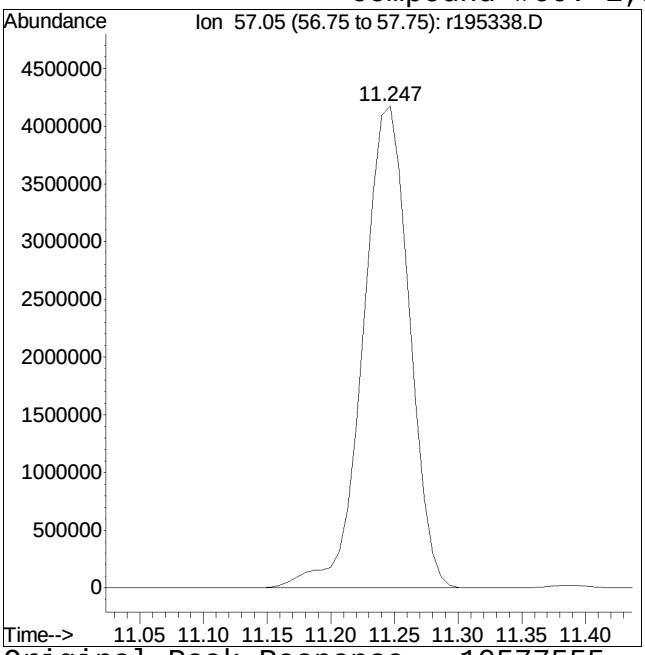


Original Peak Response = 1799911 Manual Peak Response = 1592447 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

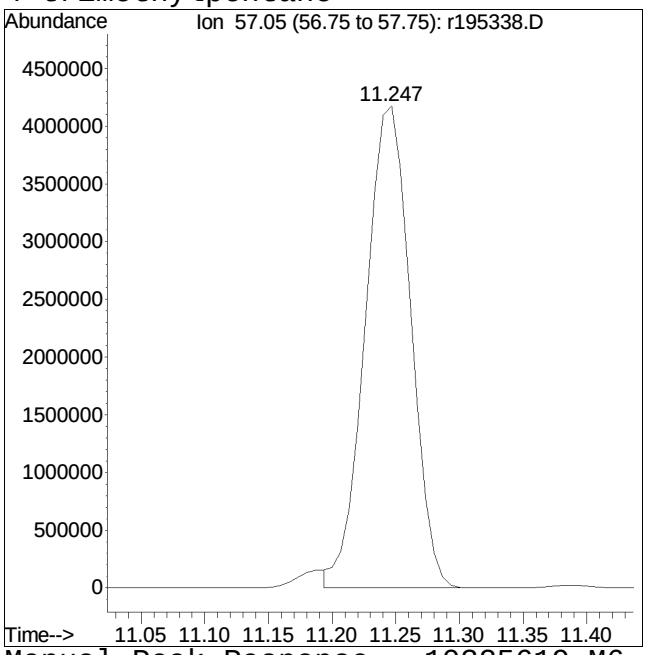
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195338.D Operator : AIRLAB19:TS
Date Inj'd : 11/2/2020 0:0: 9 Instrument :
Sample : ITO15-LLSTD100 Quant Date : 11/3/2020 11:23 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response = 10577555



Manual Peak Response = 10325619 M6

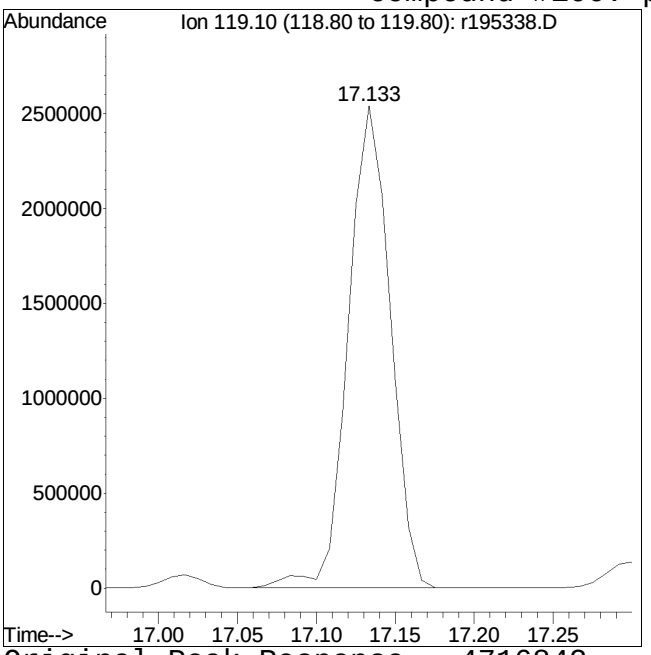
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

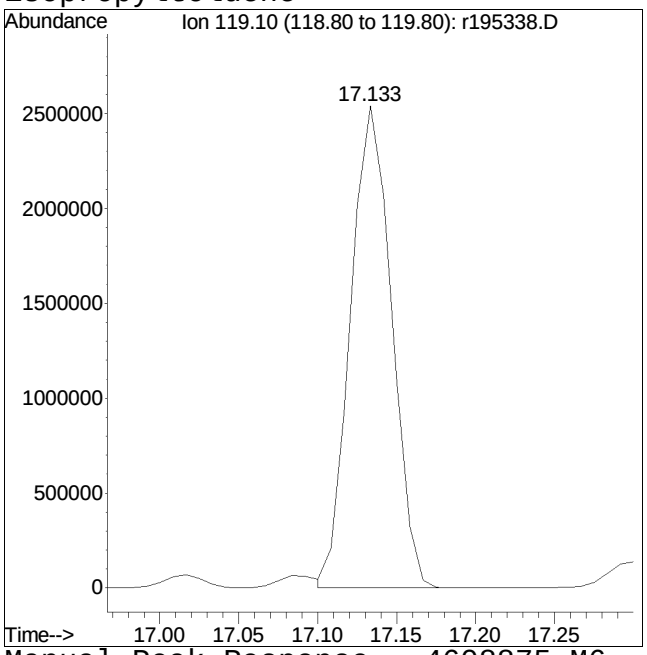
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195338.D
Date Inj'd : 11/2/2020 0:0: 9
Sample : ITO15-LLSTD100

Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:23 am

Compound #106: p-isopropyltoluene





Original Peak Response = 4716842 Manual Peak Response = 4608875 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	104	0.00
2		chlorodifluoromethane	0.707	0.614	13.2	90	0.00
3		propylene	0.446	0.458	-2.7	102	0.00
4		propane	0.582	0.537	7.7	94	0.00
5		dichlorodifluoromethane	0.759	0.691	9.0	92	0.00
6	C	chloromethane	0.524	0.493	5.9	98	0.00
7		Freon-114	1.099	1.056	3.9	97	0.00
8	C	methanol	0.215	0.164	23.7	77	0.00
9	C	vinyl chloride	0.471	0.442	6.2	96	0.00
10	C	1,3-butadiene	0.488	0.517	-5.9	109	0.00
11		butane	0.847	0.666	21.4	79	0.00
13	C	bromomethane	0.373	0.342	8.3	94	0.00
14	C	chloroethane	0.148	0.124	16.2	95	0.00
15		ethanol	0.419	0.343	18.1	82	0.00
16		dichlorofluoromethane	0.747	0.577	22.8	79	0.00
17	C	vinyl bromide	0.393	0.345	12.2	87	0.00
18	C	acrolein	0.244	0.205	16.0	88	0.00
19		acetone	0.713	0.555	22.2	77	0.00
20	C	acetonitrile	0.429	0.340	20.7	83	0.00
21		trichlorofluoromethane	0.587	0.466	20.6	73	0.00
22		isopropyl alcohol	1.066	0.773	27.5	69	0.00
23	C	acrylonitrile	0.444	0.371	16.4	88	0.00
24		pentane	1.329	1.254	5.6	86	0.00
25		ethyl ether	1.092	1.035	5.2	94	0.00
26	C	1,1-dichloroethene	0.632	0.595	5.9	96	0.00
27		tertiary butyl alcohol	0.891	0.787	11.7	91	0.00
28	C	methylene chloride	0.664	0.659	0.8	103	0.00
29	C	3-chloropropene	0.824	0.811	1.6	100	0.00
30	C	carbon disulfide	1.692	1.538	9.1	95	0.00
31		Freon 113	0.836	0.751	10.2	91	0.00
32		trans-1,2-dichloroethene	0.650	0.604	7.1	94	0.00
33	C	1,1-dichloroethane	0.857	0.775	9.6	94	0.00
34	C	MTBE	1.491	1.424	4.5	99	0.00
35	C	vinyl acetate	1.365	1.213	11.1	89	0.00
36	C	2-butanone	1.317	1.215	7.7	95	0.00
37		cis-1,2-dichloroethene	0.581	0.564	2.9	99	0.00
38		Ethyl Acetate	0.185	0.179	3.2	99	0.00
39	C	chloroform	0.800	0.796	0.5	104	0.00
40		Tetrahydrofuran	0.865	0.784	9.4	94	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	0.750	0.645	14.0	88	0.00
42	C	1,2-dichloroethane	0.449	0.404	10.0	92	0.00
43	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00
44	C	hexane	0.401	0.399	0.5	100	0.00
45		diisopropyl ether	0.208	0.188	9.6	94	0.00
46		tert-butyl ethyl ether	0.642	0.568	11.5	90	0.00
47	s	1,2-dichloroethane-D4	0.241	0.224	7.1	94	0.00
48	C	1,1,1-trichloroethane	0.289	0.276	4.5	93	0.00
49		1,1-dichloropropene	0.346	0.321	7.2	96	0.00
50	C	benzene	0.836	0.797	4.7	103	0.00
52	C	carbon tetrachloride	0.246	0.241	2.0	98	0.00
53		cyclohexane	0.432	0.430	0.5	104	0.00
54		tert-amyl methyl ether	0.741	0.666	10.1	92	0.00
55		dibromomethane	0.183	0.157	14.2	89	0.00
56	C	1,2-dichloropropane	0.255	0.243	4.7	98	0.00
57		bromodichloromethane	0.385	0.386	-0.3	103	0.00
58	C	1,4-dioxane	0.168	0.167	0.6	102	0.00
59	C	trichloroethene	0.251	0.234	6.8	97	0.00
60	C	2,2,4-trimethylpentane	1.258	1.286	-2.2	108	0.00
61		methyl methacrylate	0.447	0.296	33.8#	65	0.00
62		heptane	0.608	0.593	2.5	99	0.00
63	C	cis-1,3-dichloropropene	0.408	0.433	-6.1	105	0.00
64	C	4-methyl-2-pentanone	0.686	0.685	0.1	98	0.00
65		trans-1,3-dichloropropene	0.373	0.341	8.6	89	0.00
66	C	1,1,2-trichloroethane	0.252	0.237	6.0	96	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	101	0.00
68	C	toluene	4.787	4.394	8.2	98	0.00
69	s	toluene-D8	6.164	5.756	6.6	98	0.00
71		1,3-dichloropropane	2.702	2.452	9.3	91	0.00
72		2-hexanone	3.732	3.824	-2.5	96	0.00
74		dibromochloromethane	1.828	1.820	0.4	99	0.00
75	C	1,2-dibromoethane	2.269	2.267	0.1	97	0.00
76		butyl acetate	0.861	0.752	12.7	85	0.00
77		octane	1.997	1.821	8.8	93	0.00
78	C	tetrachloroethene	1.833	1.829	0.2	101	0.00
79		1,1,1,2-tetrachloroethane	1.390	1.208	13.1	87	0.00
80	C	chlorobenzene	3.853	4.055	-5.2	101	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	C	ethylbenzene	5.539	5.501	0.7	97	0.00
83	C	m+p-xylene	4.525	4.500	0.6	95	0.00
84	C	bromoform	1.834	1.886	-2.8	96	0.00
85	C	styrene	4.175	4.333	-3.8	96	0.00
86	C	1,1,2,2-tetrachloroethane	3.480	3.871	-11.2	100	0.00
87	C	o-xylene	4.472	4.616	-3.2	97	0.00
88		1,2,3-trichloropropane	3.105	2.873	7.5	89	0.00
89		nonane	4.793	4.426	7.7	87	0.00
90	s	bromofluorobenzene	4.179	3.959	5.3	95	0.00
91	C	isopropylbenzene	6.343	6.183	2.5	90	0.00
92		bromobenzene	3.984	3.863	3.0	90	0.00
93		2-chlorotoluene	1.659	1.495	9.9	88	0.00
94		n-propylbenzene	1.986	1.903	4.2	90	0.00
95		4-chlorotoluene	1.583	1.376	13.1	85	0.00
96		4-ethyl toluene	7.021	7.365	-4.9	95	0.00
97		1,3,5-trimethylbenzene	5.778	6.669	-15.4	106	0.00
98		tert-butylbenzene	5.224	5.458	-4.5	90	0.00
99		1,2,4-trimethylbenzene	5.242	5.929	-13.1	95	0.00
100		decane	4.336	4.559	-5.1	89	0.00
101	C	Benzyl Chloride	3.614	4.192	-16.0	92	0.00
102		1,3-dichlorobenzene	3.129	3.527	-12.7	94	0.00
103	C	1,4-dichlorobenzene	3.023	3.375	-11.6	93	0.00
104		sec-butylbenzene	7.626	7.577	0.6	85	0.00
106		p-isopropyltoluene	5.718	6.036	-5.6	82	0.00
107		1,2-dichlorobenzene	2.746	3.234	-17.8	96	0.00
108		n-butylbenzene	4.762	5.332	-12.0	89	0.00
111	C	1,2-dibromo-3-chloropropane	1.364	1.503	-10.2	89	0.00
112		undecane	3.936	4.536	-15.2	109	0.00
114		dodecane	4.072	4.012	1.5	77	0.00
115	C	1,2,4-trichlorobenzene	1.678	1.751	-4.4	98	0.00
116		naphthalene	4.037	3.128	22.5	77	0.00
117		1,2,3-trichlorobenzene	1.773	1.531	13.6	77	0.00
119	C	hexachlorobutadiene	1.421	1.333	6.2	93	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 : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	8.658	49	403403	10.000 ppbV	0.00
Standard Area = 386974			Recovery	= 104.25%	
43) 1,4-difluorobenzene	10.500	114	913413	10.000 ppbV	0.00
Standard Area = 862720			Recovery	= 105.88%	
67) chlorobenzene-D5	14.633	54	153086	10.000 ppbV	0.00
Standard Area = 151381			Recovery	= 101.13%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	9.375	65	204504	9.275 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 92.75%	
69) toluene-D8	12.975	98	881184	9.338 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 93.38%	
90) bromofluorobenzene	15.833	95	606128	9.475 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 94.75%	
Target Compounds					Qvalue
2) chlorodifluoromethane	4.054	51	247757	8.683 ppbV	96
3) propylene	4.090	41	184755M6	10.257 ppbV	
4) propane	4.114	29	216623	9.234 ppbV	94
5) dichlorodifluoromethane	4.168	85	278717	9.108 ppbV	99
6) chloromethane	4.342	50	198693	9.391 ppbV	99
7) Freon-114	4.456	85	425996	9.607 ppbV	97
8) methanol	4.516	31	329814	37.984 ppbV	94
9) vinyl chloride	4.582	62	178329	9.384 ppbV	99
10) 1,3-butadiene	4.732	54	208480	10.590 ppbV	91
11) butane	4.786	43	268556	7.864 ppbV	98
13) bromomethane	5.008	94	138109	9.183 ppbV	97
14) chloroethane	5.182	64	50198	8.383 ppbV	99
15) ethanol	5.300	31	691111	40.908 ppbV	93
16) dichlorofluoromethane	5.290	67	232705	7.727 ppbV	99
17) vinyl bromide	5.533	106	139360	8.782 ppbV	100
18) acrolein	5.643	56	82670	8.403 ppbV	99
19) acetone	5.760	43	1119006	38.932 ppbV #	86
20) acetonitrile	5.513	41	137273	7.940 ppbV	98
21) trichlorofluoromethane	5.943	101	187970	7.938 ppbV	98
22) isopropyl alcohol	6.000	45	779778	18.128 ppbV #	97
23) acrylonitrile	6.217	53	149562M6	8.352 ppbV	
24) pentane	6.287	43	505935	9.437 ppbV	99
25) ethyl ether	6.300	31	417499	9.476 ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	6.548	61	240124	9.423	ppbV	99
27) tertiary butyl alcohol	6.566	59	317641	8.839	ppbV	97
28) methylene chloride	6.662	49	265670	9.914	ppbV	98
29) 3-chloropropene	6.776	41	327145	9.838	ppbV	97
30) carbon disulfide	6.938	76	620529	9.090	ppbV	98
31) Freon 113	6.914	101	303084	8.988	ppbV	92
32) trans-1,2-dichloroethene	7.542	61	243673	9.297	ppbV	97
33) 1,1-dichloroethane	7.725	63	312588	9.042	ppbV	99
34) MTBE	7.767	73	574569	9.553	ppbV	98
35) vinyl acetate	7.858	43	489405	8.885	ppbV	97
36) 2-butanone	8.075	43	490103	9.225	ppbV	98
37) cis-1,2-dichloroethene	8.500	61	227596	9.708	ppbV	97
38) Ethyl Acetate	8.700	61	72247	9.705	ppbV	90
39) chloroform	8.783	83	321045	9.945	ppbV	99
40) Tetrahydrofuran	9.142	42	316330	9.064	ppbV	99
41) 2,2-dichloropropane	8.808	77	260161	8.597	ppbV	96
42) 1,2-dichloroethane	9.475	62	163009	8.996	ppbV	96
44) hexane	8.700	57	364650	9.957	ppbV	97
45) diisopropyl ether	8.683	87	171665	9.049	ppbV	91
46) tert-butyl ethyl ether	9.192	59	518515	8.838	ppbV	98
48) 1,1,1-trichloroethane	9.725	97	251735	9.532	ppbV	98
49) 1,1-dichloropropene	10.027	75	293570	9.301	ppbV	97
50) benzene	10.167	78	728029	9.538	ppbV	100
52) carbon tetrachloride	10.313	117	220066	9.793	ppbV	98
53) cyclohexane	10.440	56	392684	9.951	ppbV	97
54) tert-amyl methyl ether	10.727	73	607880	8.980	ppbV	98
55) dibromomethane	10.940	93	143802	8.584	ppbV	97
56) 1,2-dichloropropane	10.967	63	222368	9.550	ppbV	99
57) bromodichloromethane	11.160	83	352714	10.027	ppbV	100
58) 1,4-dioxane	11.180	88	152154	9.920	ppbV	100
59) trichloroethene	11.207	130	213420	9.313	ppbV	99
60) 2,2,4-trimethylpentane	11.240	57	1174315	10.219	ppbV	97
61) methyl methacrylate	11.380	41	270606	6.632	ppbV	100
62) heptane	11.493	43	541338	9.746	ppbV	98
63) cis-1,3-dichloropropene	12.080	75	395191	10.597	ppbV	97
64) 4-methyl-2-pentanone	12.093	43	626004	9.987	ppbV	98
65) trans-1,3-dichloropropene	12.617	75	311709	9.150	ppbV	99
66) 1,1,2-trichloroethane	12.792	97	216615	9.400	ppbV	93
68) toluene	13.067	91	672712	9.179	ppbV	100
71) 1,3-dichloropropane	13.092	76	375294	9.074	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default-ICV-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
72)	2-hexanone	13.292	43	585420	10.246	ppbV		98
74)	dibromochloromethane	13.467	129	278610	9.957	ppbV		99
75)	1,2-dibromoethane	13.692	107	347091	9.992	ppbV		97
76)	butyl acetate	13.858	73	115130	8.738	ppbV		98
77)	octane	13.958	85	278759	9.117	ppbV		95
78)	tetrachloroethene	14.092	166	280043	9.982	ppbV		95
79)	1,1,1,2-tetrachloroethane	14.650	131	184918	8.690	ppbV		98
80)	chlorobenzene	14.667	112	620748	10.524	ppbV		100
81)	ethylbenzene	14.967	91	842093	9.932	ppbV		99
83)	m+p-xylene	15.108	91	1377769	19.890	ppbV		99
84)	bromoform	15.183	173	288733	10.285	ppbV		99
85)	styrene	15.400	104	663262	10.378	ppbV		99
86)	1,1,2,2-tetrachloroethane	15.475	83	592524	11.122	ppbV		100
87)	o-xylene	15.483	91	706616	10.323	ppbV		99
88)	1,2,3-trichloropropane	15.583	75	439756	9.250	ppbV		99
89)	nonane	15.642	43	677616	9.236	ppbV		95
91)	isopropylbenzene	15.933	105	946593	9.748	ppbV		97
92)	bromobenzene	16.008	77	591349	9.696	ppbV		94
93)	2-chlorotoluene	16.300	126	228903	9.011	ppbV	#	60
94)	n-propylbenzene	16.325	120	291332	9.582	ppbV		95
95)	4-chlorotoluene	16.358	126	210689	8.693	ppbV		100
96)	4-ethyl toluene	16.433	105	1127426	10.489	ppbV		99
97)	1,3,5-trimethylbenzene	16.492	105	1020916	11.542	ppbV		95
98)	tert-butylbenzene	16.808	119	835579	10.449	ppbV		97
99)	1,2,4-trimethylbenzene	16.808	105	907651	11.312	ppbV		96
100)	decane	16.867	57	697982	10.515	ppbV		95
101)	Benzyl Chloride	16.917	91	641771	11.599	ppbV		100
102)	1,3-dichlorobenzene	16.933	146	539902	11.272	ppbV		99
103)	1,4-dichlorobenzene	16.983	146	516656	11.165	ppbV		99
104)	sec-butylbenzene	17.008	105	1159870	9.935	ppbV		100
106)	p-isopropyltoluene	17.125	119	924099	10.556	ppbV		97
107)	1,2-dichlorobenzene	17.250	146	495106	11.779	ppbV		99
108)	n-butylbenzene	17.450	91	816299	11.197	ppbV		98
111)	1,2-dibromo-3-chloropr...	17.592	75	230118	11.018	ppbV		100
112)	undecane	17.817	57	694458	11.526	ppbV		98
114)	dodecane	18.617	57	614225	9.853	ppbV		99
115)	1,2,4-trichlorobenzene	18.567	180	268129	10.441	ppbV		96
116)	naphthalene	18.675	128	478902	7.750	ppbV		100
117)	1,2,3-trichlorobenzene	18.883	180	234305	8.632	ppbV		99
119)	hexachlorobutadiene	18.942	225	204042	9.380	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201102T_I\r195335.D
Sub List : Default-ICV-AP2 - All compounds listed

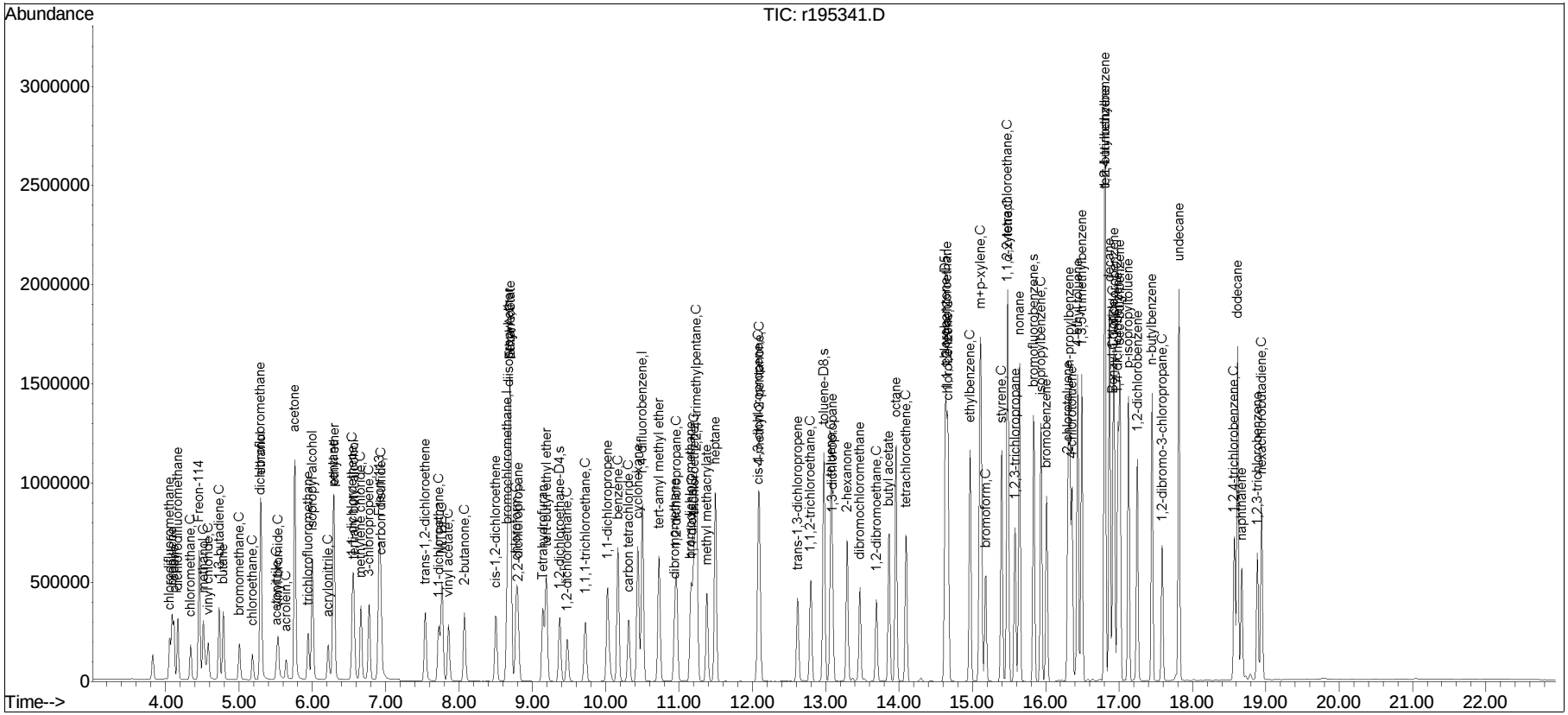
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Sub List : Default-ICV-AP2 - All compounds listed102T_I\r195335.D

Data Path : O:\Forensics\Data\Airlab19\2020\11\201102T_I\
Data File : r195341.D
Acq On : 3 Nov 2020 7:39 AM
Operator : AIRLAB19:TS
Sample : CTO15-LLSTD10.0
Misc : WG1429789
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 03 11:26:26 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201102T_I\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Nov 03 11:21:02 2020
Response via : Initial Calibration

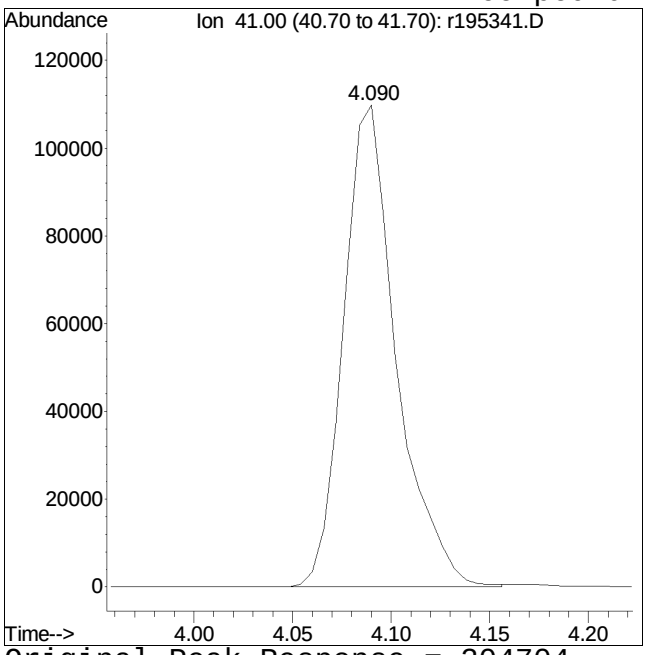


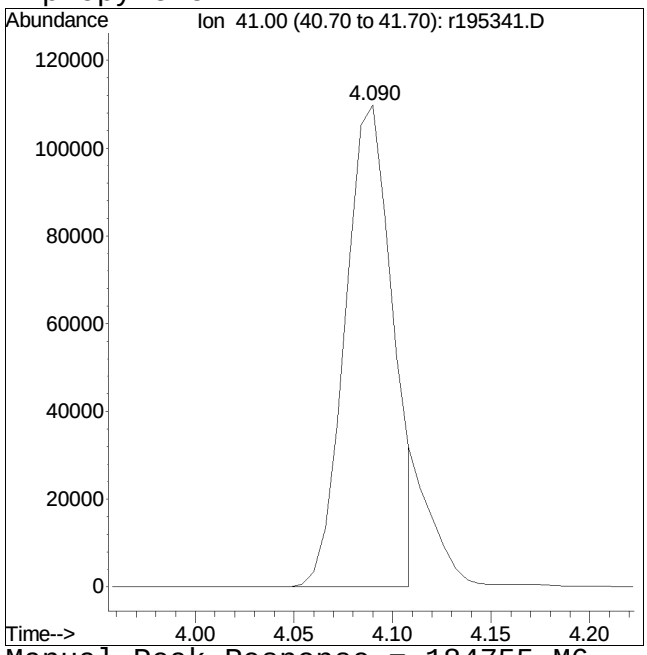
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19Q
Data File : r195341.D
Date Inj'd : 11/3/2020 0:7: 9
Sample : CTO15-LLSTD10.0

Method : TFS19_201103.M
Operator : AIRLAB19:TS
Instrument :
Quant Date : 11/3/2020 11:25 am

Compound #3: propylene



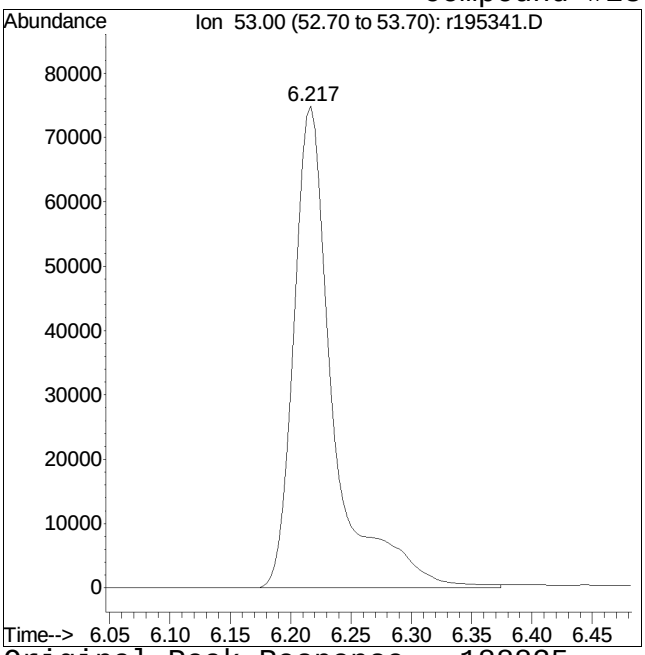


Original Peak Response = 204704 Manual Peak Response = 184755 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

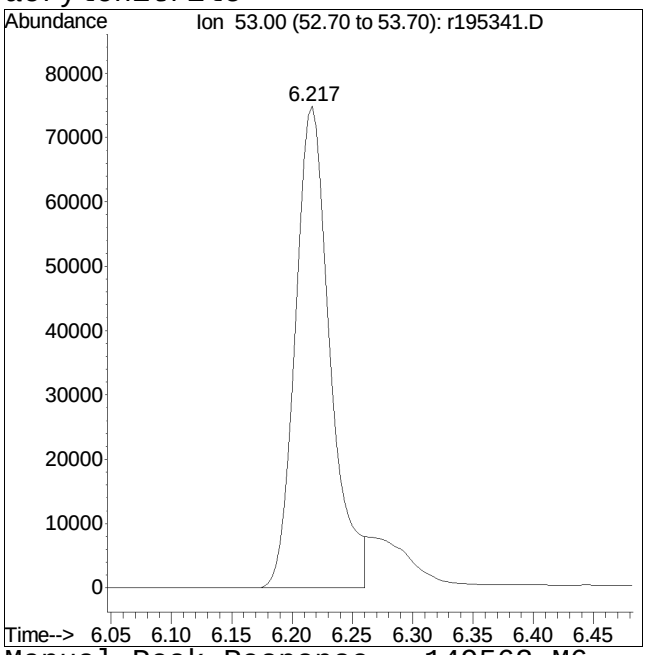
Manual Integration Report

Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_201103.M
Data File : r195341.D Operator : AIRLAB19:TS
Date Inj'd : 11/3/2020 0:7: 9 Instrument :
Sample : CTO15-LLSTD10.0 Quant Date : 11/3/2020 11:25 am

Compound #23: acrylonitrile



Original Peak Response = 188835



Manual Peak Response = 149562 M6

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

Continuing Calibration

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Instrument ID	: AIRLAB19	Calibration Date	: 11/04/20 12:36
Lab File ID	: R195365	Init. Calib. Date(s)	: 11/02/20 11/02/20
Sample No	: WG1430466-2	Init. Calib. Times	: 17:31 22:39
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	99	0
chlorodifluoromethane	0.707	0.622	-	12	30	87	0
propylene	0.446	0.475	-	-6.5	30	100	0
propane	0.582	0.533	-	8.4	30	89	0
dichlorodifluoromethane	0.759	0.745	-	1.8	30	94	0
chloromethane	0.524	0.5	-	4.6	30	95	0
Freon-114	1.099	1.11	-	-1	30	97	0
methanol	0.215	0.166	-	22.8	30	75	0
vinyl chloride	0.471	0.463	-	1.7	30	96	0
1,3-butadiene	0.488	0.516	-	-5.7	30	103	0
butane	0.847	0.724	-	14.5	30	81	0
bromomethane	0.373	0.363	-	2.7	30	95	0
chloroethane	0.148	0.255	-	-72.3*	30	185	0
ethanol	0.419	0.375	-	10.5	30	86	0
dichlorofluoromethane	0.747	0.732	-	2	30	96	0
vinyl bromide	0.393	0.379	-	3.6	30	91	0
acrolein	0.244	0.205	-	16	30	84	0
acetone	0.713	0.605	-	15.1	30	80	0
acetonitrile	0.429	0.354	-	17.5	30	82	0
trichlorofluoromethane	0.587	0.545	-	7.2	30	81	0
isopropyl alcohol	1.066	0.934	-	12.4	30	79	0
acrylonitrile	0.444	0.406	-	8.6	30	91	0
pentane	1.329	0.962	-	27.6	30	63	0
ethyl ether	1.092	0.832	-	23.8	30	72	0
1,1-dichloroethene	0.632	0.616	-	2.5	30	94	0
tertiary butyl alcohol	0.891	0.825	-	7.4	30	91	0
methylene chloride	0.664	0.65	-	2.1	30	97	0
3-chloropropene	0.824	0.835	-	-1.3	30	98	0
carbon disulfide	1.692	1.529	-	9.6	30	90	0
Freon 113	0.836	0.803	-	3.9	30	93	0
trans-1,2-dichloroethene	0.65	0.62	-	4.6	30	92	0
1,1-dichloroethane	0.857	0.809	-	5.6	30	93	0
MTBE	1.491	1.483	-	0.5	30	98	0
vinyl acetate	1.365	1.25	-	8.4	30	87	0
2-butanone	1.317	1.246	-	5.4	30	93	0
cis-1,2-dichloroethene	0.581	0.581	-	0	30	97	0
Ethyl Acetate	0.185	0.182	-	1.6	30	96	0
chloroform	0.8	0.804	-	-0.5	30	100	0
Tetrahydrofuran	0.865	0.797	-	7.9	30	91	0
2,2-dichloropropane	0.75	0.673	-	10.3	30	88	0
1,2-dichloroethane	0.449	0.431	-	4	30	93	0
1,4-difluorobenzene	1	1	-	0	30	100	0
hexane	0.401	0.396	-	1.2	30	94	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Instrument ID	: AIRLAB19	Calibration Date	: 11/04/20 12:36
Lab File ID	: R195365	Init. Calib. Date(s)	: 11/02/20 11/02/20
Sample No	: WG1430466-2	Init. Calib. Times	: 17:31 22:39
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.208	0.187	-	10.1	30	89	0
tert-butyl ethyl ether	0.642	0.577	-	10.1	30	87	0
1,1,1-trichloroethane	0.289	0.268	-	7.3	30	85	0
1,1-dichloropropene	0.346	0.325	-	6.1	30	92	0
benzene	0.836	0.781	-	6.6	30	96	0
carbon tetrachloride	0.246	0.252	-	-2.4	30	97	0
cyclohexane	0.432	0.423	-	2.1	30	97	0
tert-amyl methyl ether	0.741	0.675	-	8.9	30	89	0
dibromomethane	0.183	0.161	-	12	30	86	0
1,2-dichloropropane	0.255	0.248	-	2.7	30	95	0
bromodichloromethane	0.385	0.391	-	-1.6	30	99	0
1,4-dioxane	0.168	0.165	-	1.8	30	96	0
trichloroethene	0.251	0.242	-	3.6	30	95	0
2,2,4-trimethylpentane	1.258	1.282	-	-1.9	30	102	0
methyl methacrylate	0.447	0.306	-	31.5*	30	64	0
heptane	0.608	0.598	-	1.6	30	95	0
cis-1,3-dichloropropene	0.408	0.438	-	-7.4	30	101	0
4-methyl-2-pentanone	0.686	0.701	-	-2.2	30	95	0
trans-1,3-dichloropropene	0.373	0.344	-	7.8	30	85	0
1,1,2-trichloroethane	0.252	0.25	-	0.8	30	96	0
chlorobenzene-D5	1	1	-	0	30	99	0
toluene	4.787	4.37	-	8.7	30	95	0
1,3-dichloropropane	2.702	2.407	-	10.9	30	88	0
2-hexanone	3.732	3.788	-	-1.5	30	93	0
dibromochloromethane	1.828	1.845	-	-0.9	30	98	0
1,2-dibromoethane	2.269	2.275	-	-0.3	30	95	0
butyl acetate	0.861	0.732	-	15	30	81	0
octane	1.997	1.757	-	12	30	88	0
tetrachloroethene	1.833	1.809	-	1.3	30	98	0
1,1,1,2-tetrachloroethane	1.39	1.228	-	11.7	30	87	0
chlorobenzene	3.853	3.966	-	-2.9	30	97	0
ethylbenzene	5.539	5.474	-	1.2	30	95	0
m+p-xylene	4.525	4.561	-	-0.8	30	94	0
bromoform	1.834	1.921	-	-4.7	30	96	0
styrene	4.175	4.377	-	-4.8	30	95	0
1,1,2,2-tetrachloroethane	3.48	3.821	-	-9.8	30	97	0
o-xylene	4.472	4.649	-	-4	30	96	0
1,2,3-trichloropropane	3.105	2.842	-	8.5	30	86	0
nonane	4.793	4.405	-	8.1	30	85	0
isopropylbenzene	6.343	6.201	-	2.2	30	88	0
bromobenzene	3.984	3.793	-	4.8	30	87	0
2-chlorotoluene	1.659	1.478	-	10.9	30	85	0
n-propylbenzene	1.986	1.876	-	5.5	30	87	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Air Volatiles

Client	: Impact Environmental	Lab Number	: L2047588
Project Name	: BEACH CHANNEL	Project Number	: 15209
Instrument ID	: AIRLAB19	Calibration Date	: 11/04/20 12:36
Lab File ID	: R195365	Init. Calib. Date(s)	: 11/02/20 11/02/20
Sample No	: WG1430466-2	Init. Calib. Times	: 17:31 22:39
Channel	:		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	1.583	1.418	-	10.4	30	86	0
4-ethyl toluene	7.021	7.39	-	-5.3	30	93	0
1,3,5-trimethylbenzene	5.778	6.132	-	-6.1	30	96	0
tert-butylbenzene	5.224	5.487	-	-5	30	88	0
1,2,4-trimethylbenzene	5.242	6.103	-	-16.4	30	96	0
decane	4.336	4.587	-	-5.8	30	88	0
Benzyl Chloride	3.614	4.325	-	-19.7	30	93	0
1,3-dichlorobenzene	3.129	3.452	-	-10.3	30	90	0
1,4-dichlorobenzene	3.023	3.491	-	-15.5	30	94	0
sec-butylbenzene	7.626	7.811	-	-2.4	30	86	0
p-isopropyltoluene	5.718	6.073	-	-6.2	30	81	0
1,2-dichlorobenzene	2.746	3.328	-	-21.2	30	97	0
n-butylbenzene	4.762	5.492	-	-15.3	30	90	0
1,2-dibromo-3-chloropropan	1.364	1.547	-	-13.4	30	89	0
undecane	3.936	4.969	-	-26.2	30	116	0
dodecane	4.072	4.146	-	-1.8	30	77	0
1,2,4-trichlorobenzene	1.678	2.143	-	-27.7	30	117	0
naphthalene	4.037	3.528	-	12.6	30	84	0
1,2,3-trichlorobenzene	1.773	1.569	-	11.5	30	77	0
hexachlorobutadiene	1.421	1.513	-	-6.5	30	104	0

* Value outside of QC limits.

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-2,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 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	99	0.00
2		chlorodifluoromethane	0.707	0.622	12.0	87	0.00
3		propylene	0.446	0.475	-6.5	100	0.00
4		propane	0.582	0.533	8.4	89	0.00
5		dichlorodifluoromethane	0.759	0.745	1.8	94	0.00
6	C	chloromethane	0.524	0.500	4.6	95	0.00
7		Freon-114	1.099	1.110	-1.0	97	0.00
8	C	methanol	0.215	0.166	22.8	75	0.00
9	C	vinyl chloride	0.471	0.463	1.7	96	0.00
10	C	1,3-butadiene	0.488	0.516	-5.7	103	0.00
11		butane	0.847	0.724	14.5	81	0.00
13	C	bromomethane	0.373	0.363	2.7	95	0.00
14	C	chloroethane	0.148	0.255	-72.3#	185#	0.00
15		ethanol	0.419	0.375	10.5	86	0.00
16		dichlorofluoromethane	0.747	0.732	2.0	96	0.00
17	C	vinyl bromide	0.393	0.379	3.6	91	0.00
18	C	acrolein	0.244	0.205	16.0	84	0.00
19		acetone	0.713	0.605	15.1	80	0.00
20	C	acetonitrile	0.429	0.354	17.5	82	0.00
21		trichlorofluoromethane	0.587	0.545	7.2	81	0.00
22		isopropyl alcohol	1.066	0.934	12.4	79	0.00
23	C	acrylonitrile	0.444	0.406	8.6	91	0.00
24		pentane	1.329	0.962	27.6	63	0.00
25		ethyl ether	1.092	0.832	23.8	72	0.00
26	C	1,1-dichloroethene	0.632	0.616	2.5	94	0.00
27		tertiary butyl alcohol	0.891	0.825	7.4	91	0.00
28	C	methylene chloride	0.664	0.650	2.1	97	0.00
29	C	3-chloropropene	0.824	0.835	-1.3	98	0.00
30	C	carbon disulfide	1.692	1.529	9.6	90	0.00
31		Freon 113	0.836	0.803	3.9	93	0.00
32		trans-1,2-dichloroethene	0.650	0.620	4.6	92	0.00
33	C	1,1-dichloroethane	0.857	0.809	5.6	93	0.00
34	C	MTBE	1.491	1.483	0.5	98	0.00
35	C	vinyl acetate	1.365	1.250	8.4	87	0.00
36	C	2-butanone	1.317	1.246	5.4	93	0.00
37		cis-1,2-dichloroethene	0.581	0.581	0.0	97	0.00
38		Ethyl Acetate	0.185	0.182	1.6	96	0.00
39	C	chloroform	0.800	0.804	-0.5	100	0.00
40		Tetrahydrofuran	0.865	0.797	7.9	91	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-2,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 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	0.750	0.673	10.3	88	0.00
42	C	1,2-dichloroethane	0.449	0.431	4.0	93	0.00
43	I	1,4-difluorobenzene	1.000	1.000	0.0	100	0.00
44	C	hexane	0.401	0.396	1.2	94	0.00
45		diisopropyl ether	0.208	0.187	10.1	89	0.00
46		tert-butyl ethyl ether	0.642	0.577	10.1	87	0.00
48	C	1,1,1-trichloroethane	0.289	0.268	7.3	85	0.00
49		1,1-dichloropropene	0.346	0.325	6.1	92	0.00
50	C	benzene	0.836	0.781	6.6	96	0.00
52	C	carbon tetrachloride	0.246	0.252	-2.4	97	0.00
53		cyclohexane	0.432	0.423	2.1	97	0.00
54		tert-amyl methyl ether	0.741	0.675	8.9	89	0.00
55		dibromomethane	0.183	0.161	12.0	86	0.00
56	C	1,2-dichloropropane	0.255	0.248	2.7	95	0.00
57		bromodichloromethane	0.385	0.391	-1.6	99	0.00
58	C	1,4-dioxane	0.168	0.165	1.8	96	0.00
59	C	trichloroethene	0.251	0.242	3.6	95	0.00
60	C	2,2,4-trimethylpentane	1.258	1.282	-1.9	102	0.00
61		methyl methacrylate	0.447	0.306	31.5#	64	0.00
62		heptane	0.608	0.598	1.6	95	0.00
63	C	cis-1,3-dichloropropene	0.408	0.438	-7.4	101	0.00
64	C	4-methyl-2-pentanone	0.686	0.701	-2.2	95	0.00
65		trans-1,3-dichloropropene	0.373	0.344	7.8	85	0.00
66	C	1,1,2-trichloroethane	0.252	0.250	0.8	96	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	99	0.00
68	C	toluene	4.787	4.370	8.7	95	0.00
71		1,3-dichloropropane	2.702	2.407	10.9	88	0.00
72		2-hexanone	3.732	3.788	-1.5	93	0.00
74		dibromochloromethane	1.828	1.845	-0.9	98	0.00
75	C	1,2-dibromoethane	2.269	2.275	-0.3	95	0.00
76		butyl acetate	0.861	0.732	15.0	81	0.00
77		octane	1.997	1.757	12.0	88	0.00
78	C	tetrachloroethene	1.833	1.809	1.3	98	0.00
79		1,1,1,2-tetrachloroethane	1.390	1.228	11.7	87	0.00
80	C	chlorobenzene	3.853	3.966	-2.9	97	0.00
81	C	ethylbenzene	5.539	5.474	1.2	95	0.00
83	C	m+p-xylene	4.525	4.561	-0.8	94	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-2,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 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	1.834	1.921	-4.7	96	0.00
85	C	styrene	4.175	4.377	-4.8	95	0.00
86	C	1,1,2,2-tetrachloroethane	3.480	3.821	-9.8	97	0.00
87	C	o-xylene	4.472	4.649	-4.0	96	0.00
88		1,2,3-trichloropropane	3.105	2.842	8.5	86	0.00
89		nonane	4.793	4.405	8.1	85	0.00
91	C	isopropylbenzene	6.343	6.201	2.2	88	0.00
92		bromobenzene	3.984	3.793	4.8	87	0.00
93		2-chlorotoluene	1.659	1.478	10.9	85	0.00
94		n-propylbenzene	1.986	1.876	5.5	87	0.00
95		4-chlorotoluene	1.583	1.418	10.4	86	0.00
96		4-ethyl toluene	7.021	7.390	-5.3	93	0.00
97		1,3,5-trimethylbenzene	5.778	6.132	-6.1	96	0.00
98		tert-butylbenzene	5.224	5.487	-5.0	88	0.00
99		1,2,4-trimethylbenzene	5.242	6.103	-16.4	96	0.00
100		decane	4.336	4.587	-5.8	88	0.00
101	C	Benzyl Chloride	3.614	4.325	-19.7	93	0.00
102		1,3-dichlorobenzene	3.129	3.452	-10.3	90	0.00
103	C	1,4-dichlorobenzene	3.023	3.491	-15.5	94	0.00
104		sec-butylbenzene	7.626	7.811	-2.4	86	0.00
106		p-isopropyltoluene	5.718	6.073	-6.2	81	0.00
107		1,2-dichlorobenzene	2.746	3.328	-21.2	97	0.00
108		n-butylbenzene	4.762	5.492	-15.3	90	0.00
111	C	1,2-dibromo-3-chloropropane	1.364	1.547	-13.4	89	0.00
112		undecane	3.936	4.969	-26.2	116	0.00
114		dodecane	4.072	4.146	-1.8	77	0.00
115	C	1,2,4-trichlorobenzene	1.678	2.143	-27.7	117	0.00
116		naphthalene	4.037	3.528	12.6	84	0.00
117		1,2,3-trichlorobenzene	1.773	1.569	11.5	77	0.00
119	C	hexachlorobutadiene	1.421	1.513	-6.5	104	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-2,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.59	49	384278	10.000	ppbV	0.00
Standard Area = 384278			Recovery = 100.00%			
43) 1,4-difluorobenzene	10.43	114	866249	10.000	ppbV	0.00
Standard Area = 866249			Recovery = 100.00%			
67) chlorobenzene-D5	14.58	54	149824	10.000	ppbV	0.00
Standard Area = 149824			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) chlorodifluoromethane	4.01	51	239050	8.795	ppbV	98
3) propylene	4.04	41	182507M6	10.637	ppbV	
4) propane	4.07	29	204674	9.159	ppbV	96
5) dichlorodifluoromethane	4.12	85	286219	9.818	ppbV	99
6) chloromethane	4.29	50	192190	9.536	ppbV	100
7) Freon-114	4.41	85	426596	10.099	ppbV	98
8) methanol	4.47	31	319769	38.660	ppbV	94
9) vinyl chloride	4.53	62	178070	9.837	ppbV	99
10) 1,3-butadiene	4.68	54	198224	10.570	ppbV	93
11) butane	4.73	43	278238	8.553	ppbV	98
13) bromomethane	4.95	94	139601	9.745	ppbV	98
14) chloroethane	5.13	64	97886	17.161	ppbV	98
15) ethanol	5.25	31	721233	44.816	ppbV	96
16) dichlorofluoromethane	5.23	67	281259	9.804	ppbV	99
17) vinyl bromide	5.48	106	145708	9.639	ppbV	99
18) acrolein	5.59	56	78708	8.398	ppbV	99
19) acetone	5.70	43	1162146	42.445	ppbV	93
20) acetonitrile	5.46	41	135850	8.249	ppbV	99
21) trichlorofluoromethane	5.88	101	209412	9.283	ppbV	99
22) isopropyl alcohol	5.94	45	897656	21.907	ppbV	99
23) acrylonitrile	6.16	53	156122	9.152	ppbV	100
24) pentane	6.23	43	369527	7.235	ppbV	99
25) ethyl ether	6.24	31	319608	7.615	ppbV	98
26) 1,1-dichloroethene	6.48	61	236584	9.746	ppbV	100
27) tertiary butyl alcohol	6.51	59	317000	9.261	ppbV	99
28) methylene chloride	6.60	49	249759	9.784	ppbV	100
29) 3-chloropropene	6.71	41	320694	10.124	ppbV	98
30) carbon disulfide	6.87	76	587751	9.039	ppbV	99
31) Freon 113	6.85	101	308639	9.608	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-2,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	7.47	61	238267	9.544	ppbV	99
33) 1,1-dichloroethane	7.66	63	310876	9.440	ppbV	99
34) MTBE	7.70	73	569786	9.945	ppbV	99
35) vinyl acetate	7.79	43	480414	9.156	ppbV	99
36) 2-butanone	8.01	43	478690	9.459	ppbV	99
37) cis-1,2-dichloroethene	8.43	61	223120	9.991	ppbV	99
38) Ethyl Acetate	8.63	61	70029	9.875	ppbV	93
39) chloroform	8.72	83	308790	10.042	ppbV	99
40) Tetrahydrofuran	9.08	42	306338	9.214	ppbV	99
41) 2,2-dichloropropane	8.74	77	258770	8.977	ppbV	97
42) 1,2-dichloroethane	9.41	62	165806	9.606	ppbV	99
44) hexane	8.63	57	342878	9.872	ppbV	90
45) diisopropyl ether	8.62	87	162052	9.007	ppbV	92
46) tert-butyl ethyl ether	9.13	59	499924	8.985	ppbV	99
48) 1,1,1-trichloroethane	9.66	97	232083	9.267	ppbV	99
49) 1,1-dichloropropene	9.96	75	281790	9.414	ppbV	99
50) benzene	10.10	78	676845	9.350	ppbV	100
52) carbon tetrachloride	10.25	117	217960	10.227	ppbV	99
53) cyclohexane	10.37	56	366558	9.795	ppbV	99
54) tert-amyl methyl ether	10.66	73	584633	9.107	ppbV	99
55) dibromomethane	10.87	93	139894	8.805	ppbV	98
56) 1,2-dichloropropane	10.90	63	214817	9.728	ppbV	100
57) bromodichloromethane	11.09	83	338783	10.156	ppbV	100
58) 1,4-dioxane	11.12	88	143085	9.837	ppbV	98
59) trichloroethene	11.14	130	209578	9.644	ppbV	98
60) 2,2,4-trimethylpentane	11.17	57	1110281	10.188	ppbV	99
61) methyl methacrylate	11.32	41	264806	6.843	ppbV	99
62) heptane	11.43	43	518130	9.836	ppbV	99
63) cis-1,3-dichloropropene	12.01	75	379603	10.733	ppbV	98
64) 4-methyl-2-pentanone	12.03	43	607546	10.220	ppbV	99
65) trans-1,3-dichloropropene	12.56	75	298094	9.227	ppbV	99
66) 1,1,2-trichloroethane	12.73	97	216547	9.909	ppbV	99
68) toluene	13.02	91	654658	9.127	ppbV	99
71) 1,3-dichloropropane	13.03	76	360640	8.909	ppbV	99
72) 2-hexanone	13.24	43	567482	10.148	ppbV	97
74) dibromochloromethane	13.41	129	276497	10.096	ppbV	98
75) 1,2-dibromoethane	13.63	107	340827	10.026	ppbV	99
76) butyl acetate	13.82	73	109681	8.506	ppbV	96
77) octane	13.91	85	263212	8.796	ppbV	98
78) tetrachloroethene	14.04	166	270987	9.870	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-2,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	14.60	131	183969	8.834	ppbV	100
80)	chlorobenzene	14.62	112	594216	10.293	ppbV	99
81)	ethylbenzene	14.93	91	820154	9.884	ppbV	100
83)	m+p-xylene	15.07	91	1366702	20.160	ppbV	100
84)	bromoform	15.13	173	287873	10.477	ppbV	98
85)	styrene	15.35	104	655771	10.484	ppbV	98
86)	1,1,2,2-tetrachloroethane	15.43	83	572546	10.981	ppbV	99
87)	o-xylene	15.44	91	696525	10.397	ppbV	100
88)	1,2,3-trichloropropane	15.53	75	425831	9.152	ppbV	98
89)	nonane	15.60	43	659941	9.191	ppbV	97
91)	isopropylbenzene	15.89	105	929086	9.776	ppbV	98
92)	bromobenzene	15.97	77	568235	9.520	ppbV	94
93)	2-chlorotoluene	16.27	126	221387	8.905	ppbV	93
94)	n-propylbenzene	16.28	120	281039	9.444	ppbV	97
95)	4-chlorotoluene	16.32	126	212382	8.954	ppbV	99
96)	4-ethyl toluene	16.39	105	1107232	10.526	ppbV	99
97)	1,3,5-trimethylbenzene	16.45	105	918723	10.613	ppbV	97
98)	tert-butylbenzene	16.77	119	822014	10.503	ppbV	99
99)	1,2,4-trimethylbenzene	16.77	105	914429	11.644	ppbV	97
100)	decane	16.83	57	687201	10.578	ppbV	96
101)	Benzyl Chloride	16.88	91	648036	11.967	ppbV	99
102)	1,3-dichlorobenzene	16.89	146	517198	11.033	ppbV	97
103)	1,4-dichlorobenzene	16.94	146	522990	11.548	ppbV	100
104)	sec-butylbenzene	16.98	105	1170330	10.243	ppbV	99
106)	p-isopropyltoluene	17.09	119	909907	10.620	ppbV	95
107)	1,2-dichlorobenzene	17.21	146	498568	12.119	ppbV	98
108)	n-butylbenzene	17.42	91	822855	11.533	ppbV	98
111)	1,2-dibromo-3-chloropr...	17.55	75	231718	11.337	ppbV	94
112)	undecane	17.78	57	744404	12.624	ppbV	97
114)	dodecane	18.58	57	621188	10.182	ppbV	98
115)	1,2,4-trichlorobenzene	18.53	180	321084	12.775	ppbV	97
116)	naphthalene	18.63	128	528506	8.739	ppbV	99
117)	1,2,3-trichlorobenzene	18.85	180	235061	8.848	ppbV	97
119)	hexachlorobutadiene	18.91	225	226631	10.645	ppbV	98

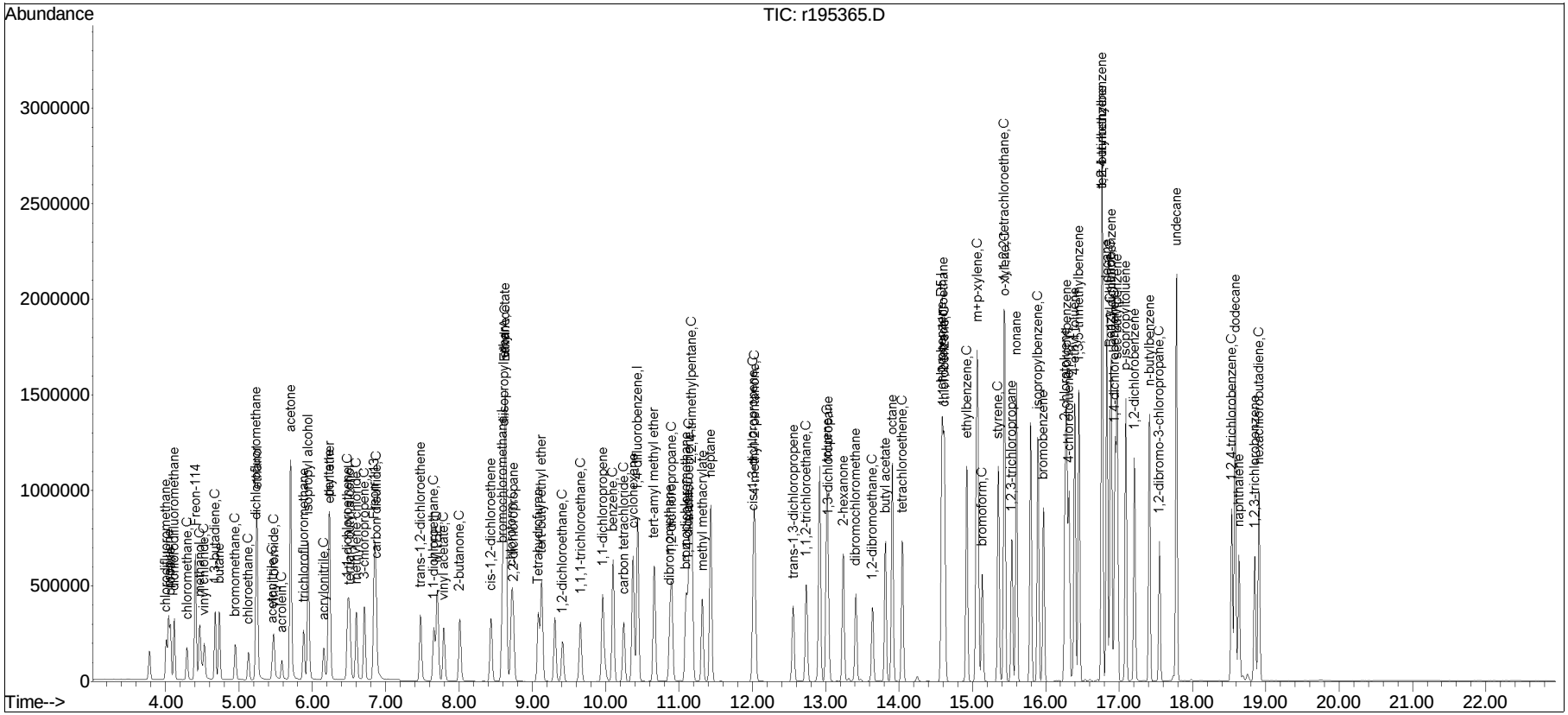
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-2,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

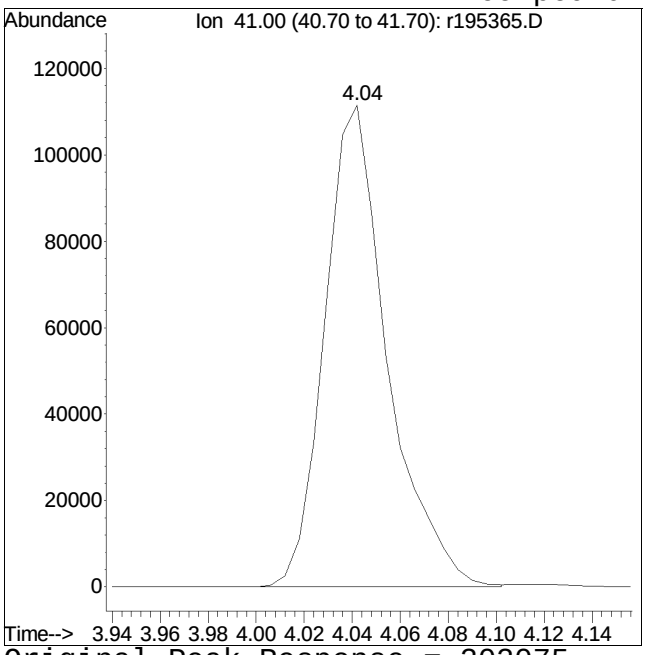
Sub List : Default-LCS-AP2 - All compounds listed104T\r195365.D



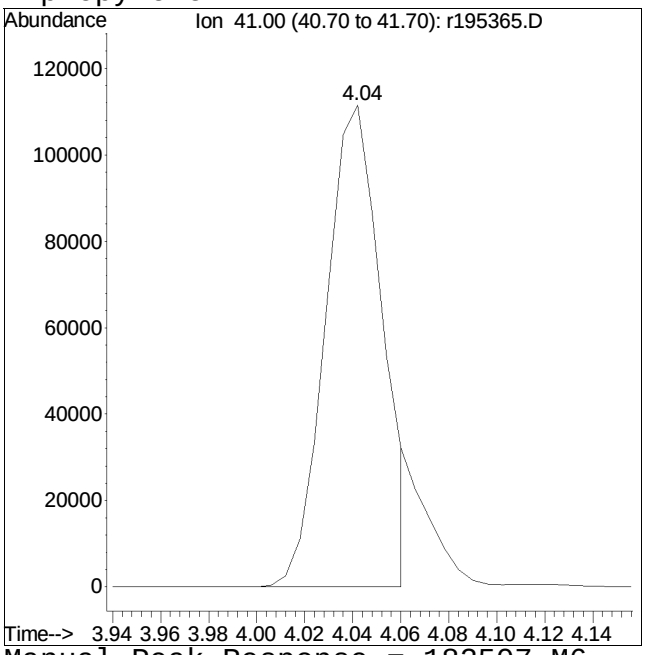
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195365.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:2: 6 Instrument :
Sample : WG1430466-2,3,250,250 Quant Date : 11/4/2020 1:42 pm

Compound #3: propylene



Original Peak Response = 202075



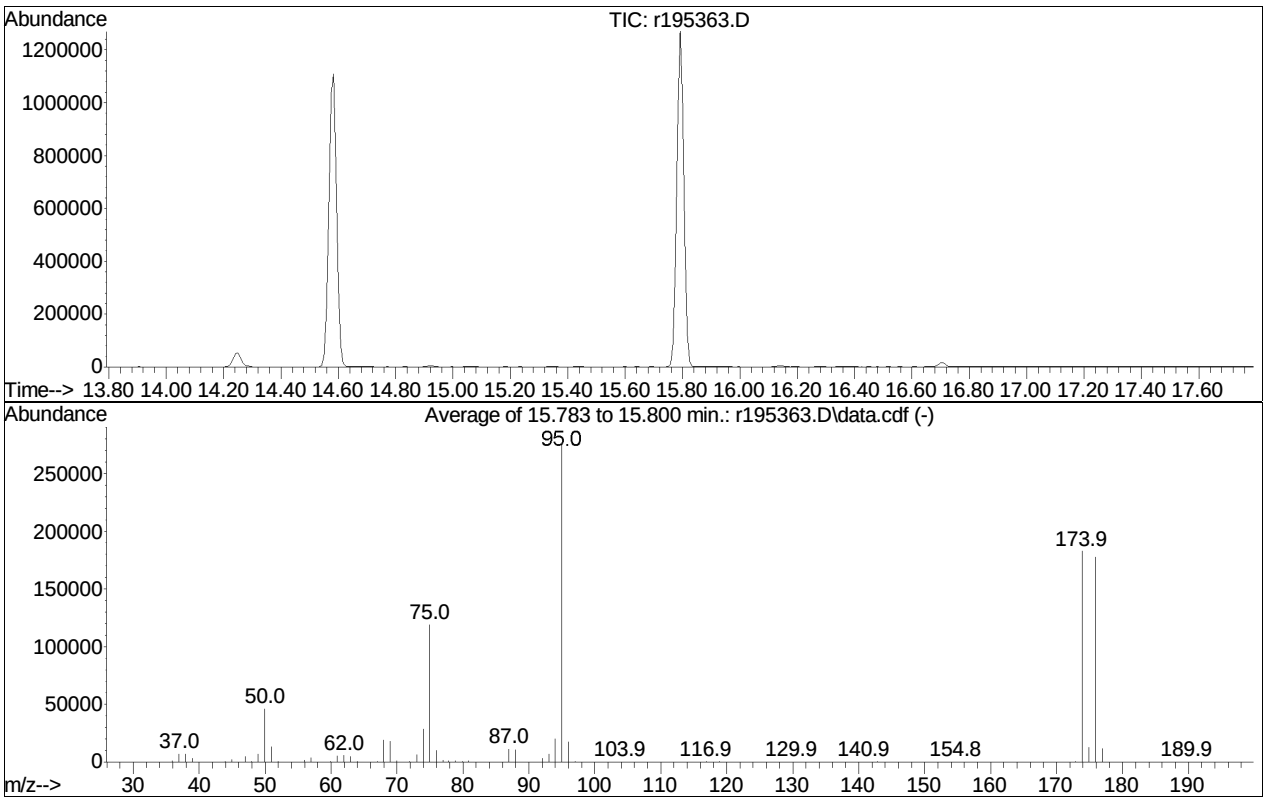
Manual Peak Response = 182507 M6

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

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195363.D
Acq On : 4 Nov 2020 11:05 AM
Operator : AIRLAB19:RY
Sample : WG1430466-1,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Wed Nov 04 13:41:58 2020



Spectrum Information: Average of 15.783 to 15.800 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.6	46003	PASS
75	95	30	66	43.0	119004	PASS
95	95	100	100	100.0	276857	PASS
96	95	5	9	6.3	17580	PASS
173	174	0.00	2	0.5	871	PASS
174	95	50	120	66.1	183047	PASS
175	174	4	9	6.9	12639	PASS
176	174	93	101	97.1	177721	PASS
177	176	5	9	6.7	11850	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195367.D
Acq On : 4 Nov 2020 2:43 PM
Operator : AIRLAB19:RY
Sample : WG1430466-4,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 07:40:02 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.60	49	353587	10.000	ppbV	0.00
Standard Area = 384278			Recovery =		92.01%	
43) 1,4-difluorobenzene	10.44	114	823440	10.000	ppbV	0.00
Standard Area = 866249			Recovery =		95.06%	
67) chlorobenzene-D5	14.58	54	137289	10.000	ppbV	0.00
Standard Area = 149824			Recovery =		91.63%	
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	5.27	31	7925	0.535	ppbV	96
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.74	43	2355	0.093	ppbV #	96
21) trichlorofluoromethane	0.00		0	N.D.		
22) isopropyl alcohol	5.98		0	N.D.		
26) 1,1-dichloroethene	0.00		0	N.D.		
27) tertiary butyl alcohol	6.54		0	N.D.		
28) methylene chloride	6.60		0	N.D.		
29) 3-chloropropene	0.00		0	N.D.		
30) carbon disulfide	6.88		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	8.05		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195367.D
Acq On : 4 Nov 2020 2:43 PM
Operator : AIRLAB19:RY
Sample : WG1430466-4,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 07:40:02 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.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	10.11		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	11.17		0	N.D.		
59)	trichloroethene	0.00		0	N.D.		
60)	2,2,4-trimethylpentane	0.00		0	N.D.		
62)	heptane	11.44		0	N.D.		
63)	cis-1,3-dichloropropene	0.00		0	N.D.		
64)	4-methyl-2-pentanone	12.08		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	13.02		0	N.D.		
72)	2-hexanone	13.28		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	15.07		0	N.D.		
83)	m+p-xylene	15.07		0	N.D.		
84)	bromoform	0.00		0	N.D.		
85)	styrene	0.00		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	0.00		0	N.D.		
97)	1,3,5-trimethylbenzene	0.00		0	N.D.		
99)	1,2,4-trimethylbenzene	16.77		0	N.D.		
101)	Benzyl Chloride	16.89		0	N.D.		
102)	1,3-dichlorobenzene	16.90		0	N.D.		
103)	1,4-dichlorobenzene	16.95		0	N.D.		
107)	1,2-dichlorobenzene	17.22		0	N.D.		
115)	1,2,4-trichlorobenzene	18.54		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195367.D
Acq On : 4 Nov 2020 2:43 PM
Operator : AIRLAB19:RY
Sample : WG1430466-4,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 07:40:02 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

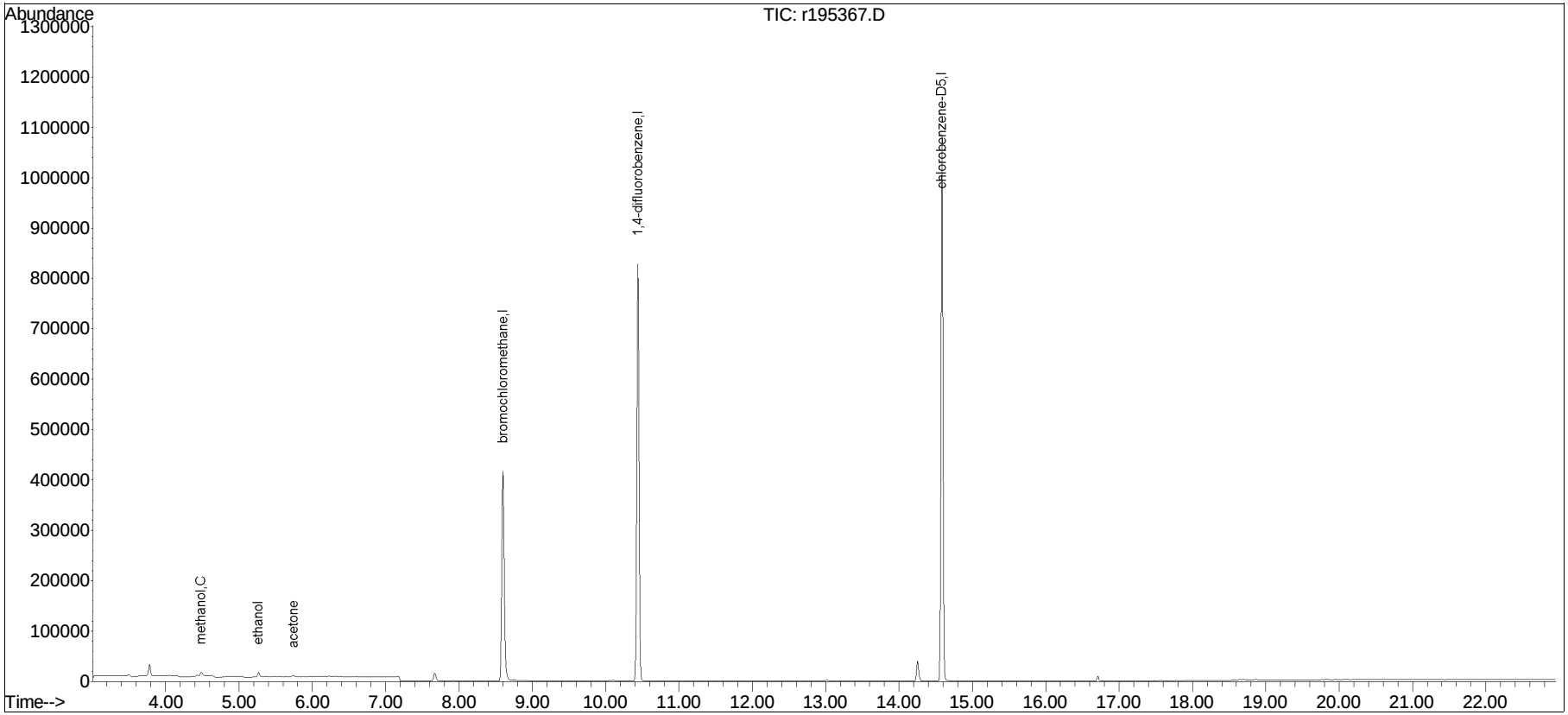
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

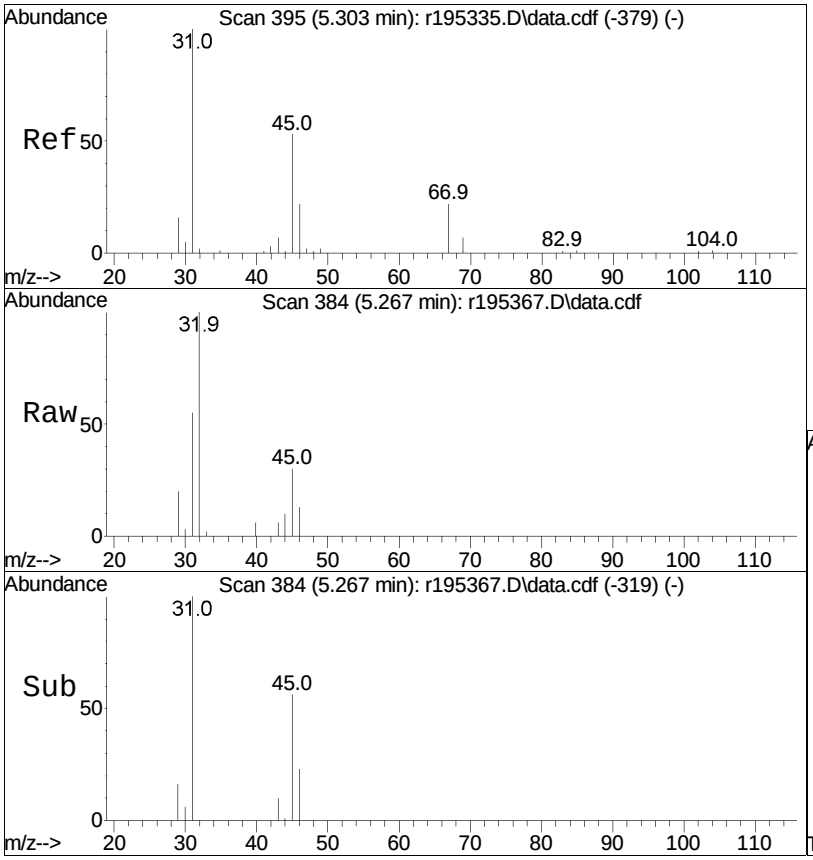
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195367.D
Acq On : 4 Nov 2020 2:43 PM
Operator : AIRLAB19:RY
Sample : WG1430466-4,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 07:40:02 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed104T\r195365.D

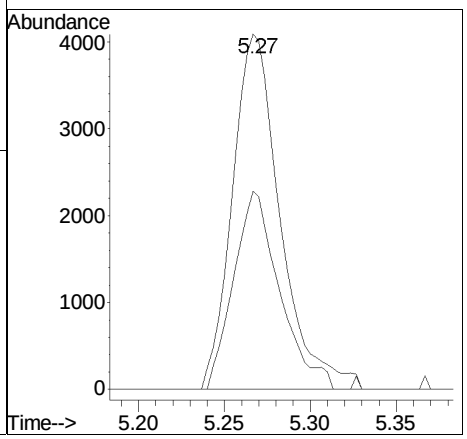


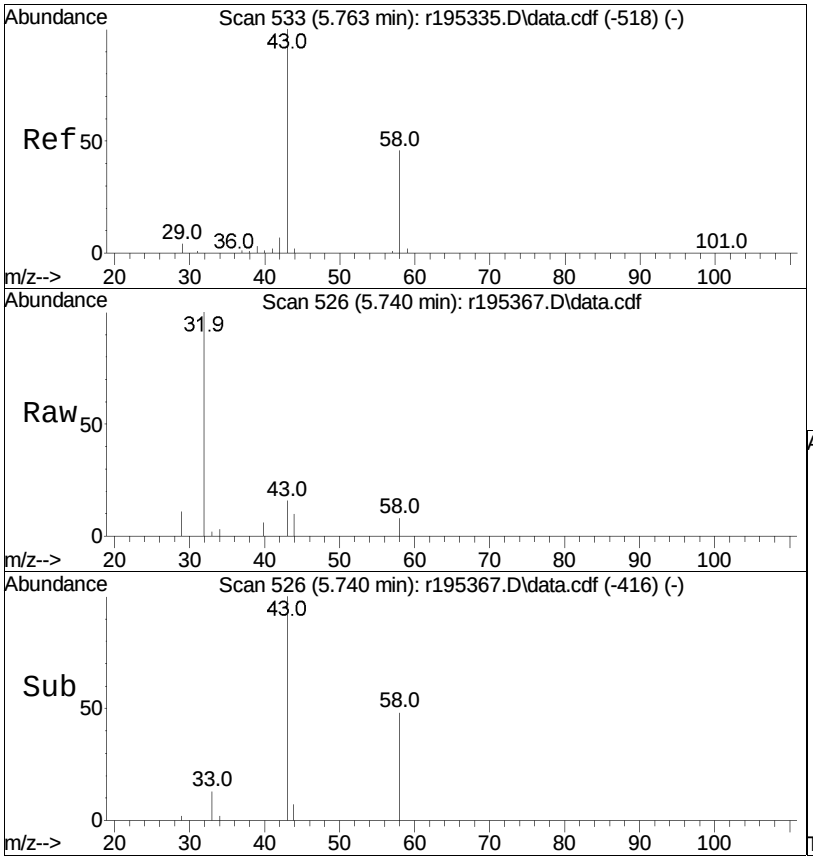


#15
ethanol
Concen: 0.54 ppbV
RT: 5.27 min Scan# 384
Delta R.T. 0.020 min
Lab File: r195367.D
Acq: 4 Nov 2020 2:43 PM

Tgt Ion: 31 Resp: 7925

Ion	Ratio	Lower	Upper
31	100		
45	55.8	42.5	63.7

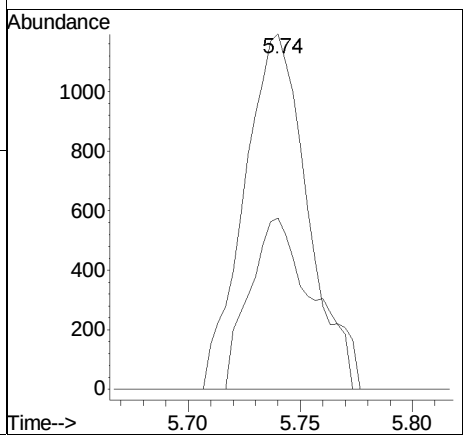




#19
acetone
Concen: 0.09 ppbV
RT: 5.74 min Scan# 526
Delta R.T. 0.037 min
Lab File: r195367.D
Acq: 4 Nov 2020 2:43 PM

Tgt Ion: 43 Resp: 2355

Ion	Ratio	Lower	Upper
43	100		
58	48.2	36.6	54.8
57	0.0	0.9	1.3#



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\Airlab19\	QMethod	: TFS19_201103.M
Data File	: r195367.D	Operator	: AIRLAB19:RY
Date Inj'd	: 11/4/2020 0:2: 3	Instrument	:
Sample	: WG1430466-4,3,250,250	Quant Date	: 11/5/2020 7:36 am

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

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-3,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 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	99	0.00
2		chlorodifluoromethane	10.000	8.795	12.1	87	0.00
3		propylene	10.000	10.637	-6.4	100	0.00
4		propane	10.000	9.159	8.4	89	0.00
5		dichlorodifluoromethane	10.000	9.818	1.8	94	0.00
6	C	chloromethane	10.000	9.536	4.6	95	0.00
7		Freon-114	10.000	10.099	-1.0	97	0.00
8	C	methanol	50.000	38.660	22.7	75	0.00
9	C	vinyl chloride	10.000	9.837	1.6	96	0.00
10	C	1,3-butadiene	10.000	10.570	-5.7	103	0.00
11		butane	10.000	8.553	14.5	81	0.00
13	C	bromomethane	10.000	9.745	2.6	95	0.00
14	C	chloroethane	10.000	17.161	-71.6#	185	0.00
15		ethanol	50.000	44.816	10.4	86	0.00
16		dichlorofluoromethane	10.000	9.804	2.0	96	0.00
17	C	vinyl bromide	10.000	9.639	3.6	91	0.00
18	C	acrolein	10.000	8.398	16.0	84	0.00
19		acetone	50.000	42.445	15.1	80	0.00
20	C	acetonitrile	10.000	8.249	17.5	82	0.00
21		trichlorofluoromethane	10.000	9.283	7.2	81	0.00
22		isopropyl alcohol	25.000	21.907	12.4	79	0.00
23	C	acrylonitrile	10.000	9.152	8.5	91	0.00
24		pentane	10.000	7.235	27.6	63	0.00
25		ethyl ether	10.000	7.615	23.8	72	0.00
26	C	1,1-dichloroethene	10.000	9.746	2.5	94	0.00
27		tertiary butyl alcohol	10.000	9.261	7.4	91	0.00
28	C	methylene chloride	10.000	9.784	2.2	97	0.00
29	C	3-chloropropene	10.000	10.124	-1.2	98	0.00
30	C	carbon disulfide	10.000	9.039	9.6	90	0.00
31		Freon 113	10.000	9.608	3.9	93	0.00
32		trans-1,2-dichloroethene	10.000	9.544	4.6	92	0.00
33	C	1,1-dichloroethane	10.000	9.440	5.6	93	0.00
34	C	MTBE	10.000	9.945	0.5	98	0.00
35	C	vinyl acetate	10.000	9.156	8.4	87	0.00
36	C	2-butanone	10.000	9.459	5.4	93	0.00
37		cis-1,2-dichloroethene	10.000	9.991	0.1	97	0.00
38		Ethyl Acetate	10.000	9.875	1.3	96	0.00
39	C	chloroform	10.000	10.042	-0.4	100	0.00
40		Tetrahydrofuran	10.000	9.214	7.9	91	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-3,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 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	8.977	10.2	88	0.00
42	C	1,2-dichloroethane	10.000	9.606	3.9	93	0.00
43	I	1,4-difluorobenzene	10.000	10.000	0.0	100	0.00
44	C	hexane	10.000	9.872	1.3	94	0.00
45		diisopropyl ether	10.000	9.007	9.9	89	0.00
46		tert-butyl ethyl ether	10.000	8.985	10.2	87	0.00
48	C	1,1,1-trichloroethane	10.000	9.267	7.3	85	0.00
49		1,1-dichloropropene	10.000	9.414	5.9	92	0.00
50	C	benzene	10.000	9.350	6.5	96	0.00
52	C	carbon tetrachloride	10.000	10.227	-2.3	97	0.00
53		cyclohexane	10.000	9.795	2.1	97	0.00
54		tert-amyl methyl ether	10.000	9.107	8.9	89	0.00
55		dibromomethane	10.000	8.805	12.0	86	0.00
56	C	1,2-dichloropropane	10.000	9.728	2.7	95	0.00
57		bromodichloromethane	10.000	10.156	-1.6	99	0.00
58	C	1,4-dioxane	10.000	9.837	1.6	96	0.00
59	C	trichloroethene	10.000	9.644	3.6	95	0.00
60	C	2,2,4-trimethylpentane	10.000	10.188	-1.9	102	0.00
61		methyl methacrylate	10.000	6.843	31.6#	64	0.00
62		heptane	10.000	9.836	1.6	95	0.00
63	C	cis-1,3-dichloropropene	10.000	10.733	-7.3	101	0.00
64	C	4-methyl-2-pentanone	10.000	10.220	-2.2	95	0.00
65		trans-1,3-dichloropropene	10.000	9.227	7.7	85	0.00
66	C	1,1,2-trichloroethane	10.000	9.909	0.9	96	0.00
67	I	chlorobenzene-D5	10.000	10.000	0.0	99	0.00
68	C	toluene	10.000	9.127	8.7	95	0.00
71		1,3-dichloropropane	10.000	8.909	10.9	88	0.00
72		2-hexanone	10.000	10.148	-1.5	93	0.00
74		dibromochloromethane	10.000	10.096	-1.0	98	0.00
75	C	1,2-dibromoethane	10.000	10.026	-0.3	95	0.00
76		butyl acetate	10.000	8.506	14.9	81	0.00
77		octane	10.000	8.796	12.0	88	0.00
78	C	tetrachloroethene	10.000	9.870	1.3	98	0.00
79		1,1,1,2-tetrachloroethane	10.000	8.834	11.7	87	0.00
80	C	chlorobenzene	10.000	10.293	-2.9	97	0.00
81	C	ethylbenzene	10.000	9.884	1.2	95	0.00
83	C	m+p-xylene	20.000	20.160	-0.8	94	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-3,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 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	10.477	-4.8	96	0.00
85	C	styrene	10.000	10.484	-4.8	95	0.00
86	C	1,1,2,2-tetrachloroethane	10.000	10.981	-9.8	97	0.00
87	C	o-xylene	10.000	10.397	-4.0	96	0.00
88		1,2,3-trichloropropane	10.000	9.152	8.5	86	0.00
89		nonane	10.000	9.191	8.1	85	0.00
91	C	isopropylbenzene	10.000	9.776	2.2	88	0.00
92		bromobenzene	10.000	9.520	4.8	87	0.00
93		2-chlorotoluene	10.000	8.905	11.0	85	0.00
94		n-propylbenzene	10.000	9.444	5.6	87	0.00
95		4-chlorotoluene	10.000	8.954	10.5	86	0.00
96		4-ethyl toluene	10.000	10.526	-5.3	93	0.00
97		1,3,5-trimethylbenzene	10.000	10.613	-6.1	96	0.00
98		tert-butylbenzene	10.000	10.503	-5.0	88	0.00
99		1,2,4-trimethylbenzene	10.000	11.644	-16.4	96	0.00
100		decane	10.000	10.578	-5.8	88	0.00
101	C	Benzyl Chloride	10.000	11.967	-19.7	93	0.00
102		1,3-dichlorobenzene	10.000	11.033	-10.3	90	0.00
103	C	1,4-dichlorobenzene	10.000	11.548	-15.5	94	0.00
104		sec-butylbenzene	10.000	10.243	-2.4	86	0.00
106		p-isopropyltoluene	10.000	10.620	-6.2	81	0.00
107		1,2-dichlorobenzene	10.000	12.119	-21.2	97	0.00
108		n-butylbenzene	10.000	11.533	-15.3	90	0.00
111	C	1,2-dibromo-3-chloropropane	10.000	11.337	-13.4	89	0.00
112		undecane	10.000	12.624	-26.2	116	0.00
114		dodecane	10.000	10.182	-1.8	77	0.00
115	C	1,2,4-trichlorobenzene	10.000	12.775	-27.8	117	0.00
116		naphthalene	10.000	8.739	12.6	84	0.00
117		1,2,3-trichlorobenzene	10.000	8.848	11.5	77	0.00
119	C	hexachlorobutadiene	10.000	10.645	-6.4	104	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-3,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.59	49	384278	10.000	ppbV	0.00
Standard Area = 384278			Recovery = 100.00%			
43) 1,4-difluorobenzene	10.43	114	866249	10.000	ppbV	0.00
Standard Area = 866249			Recovery = 100.00%			
67) chlorobenzene-D5	14.58	54	149824	10.000	ppbV	0.00
Standard Area = 149824			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.12	85	286219	9.818	ppbV	99
6) chloromethane	4.29	50	192190	9.536	ppbV	100
7) Freon-114	4.41	85	426596	10.099	ppbV	98
9) vinyl chloride	4.53	62	178070	9.837	ppbV	99
10) 1,3-butadiene	4.68	54	198224	10.570	ppbV	93
13) bromomethane	4.95	94	139601	9.745	ppbV	98
14) chloroethane	5.13	64	97886	17.161	ppbV	98
15) ethanol	5.25	31	721233	44.816	ppbV	96
17) vinyl bromide	5.48	106	145708	9.639	ppbV	99
19) acetone	5.70	43	1162146	42.445	ppbV	93
21) trichlorofluoromethane	5.88	101	209412	9.283	ppbV	99
22) isopropyl alcohol	5.94	45	897656	21.907	ppbV	99
26) 1,1-dichloroethene	6.48	61	236584	9.746	ppbV	100
27) tertiary butyl alcohol	6.51	59	317000	9.261	ppbV	99
28) methylene chloride	6.60	49	249759	9.784	ppbV	100
29) 3-chloropropene	6.71	41	320694	10.124	ppbV	98
30) carbon disulfide	6.87	76	587751	9.039	ppbV	99
31) Freon 113	6.85	101	308639	9.608	ppbV	96
32) trans-1,2-dichloroethene	7.47	61	238267	9.544	ppbV	99
33) 1,1-dichloroethane	7.66	63	310876	9.440	ppbV	99
34) MTBE	7.70	73	569786	9.945	ppbV	99
36) 2-butanone	8.01	43	478690	9.459	ppbV	99
37) cis-1,2-dichloroethene	8.43	61	223120	9.991	ppbV	99
38) Ethyl Acetate	8.63	61	70029	9.875	ppbV	93
39) chloroform	8.72	83	308790	10.042	ppbV	99
40) Tetrahydrofuran	9.08	42	306338	9.214	ppbV	99
42) 1,2-dichloroethane	9.41	62	165806	9.606	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-3,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	8.63	57	342878	9.872	ppbV	90
48) 1,1,1-trichloroethane	9.66	97	232083	9.267	ppbV	99
50) benzene	10.10	78	676845	9.350	ppbV	100
52) carbon tetrachloride	10.25	117	217960	10.227	ppbV	99
53) cyclohexane	10.37	56	366558	9.795	ppbV	99
56) 1,2-dichloropropane	10.90	63	214817	9.728	ppbV	100
57) bromodichloromethane	11.09	83	338783	10.156	ppbV	100
58) 1,4-dioxane	11.12	88	143085	9.837	ppbV	98
59) trichloroethene	11.14	130	209578	9.644	ppbV	98
60) 2,2,4-trimethylpentane	11.17	57	1110281	10.188	ppbV	99
62) heptane	11.43	43	518130	9.836	ppbV	99
63) cis-1,3-dichloropropene	12.01	75	379603	10.733	ppbV	98
64) 4-methyl-2-pentanone	12.03	43	607546	10.220	ppbV	99
65) trans-1,3-dichloropropene	12.56	75	298094	9.227	ppbV	99
66) 1,1,2-trichloroethane	12.73	97	216547	9.909	ppbV	99
68) toluene	13.02	91	654658	9.127	ppbV	99
72) 2-hexanone	13.24	43	567482	10.148	ppbV	97
74) dibromochloromethane	13.41	129	276497	10.096	ppbV	98
75) 1,2-dibromoethane	13.63	107	340827	10.026	ppbV	99
78) tetrachloroethene	14.04	166	270987	9.870	ppbV	98
80) chlorobenzene	14.62	112	594216	10.293	ppbV	99
81) ethylbenzene	14.93	91	820154	9.884	ppbV	100
83) m+p-xylene	15.07	91	1366702	20.160	ppbV	100
84) bromoform	15.13	173	287873	10.477	ppbV	98
85) styrene	15.35	104	655771	10.484	ppbV	98
86) 1,1,2,2-tetrachloroethane	15.43	83	572546	10.981	ppbV	99
87) o-xylene	15.44	91	696525	10.397	ppbV	100
96) 4-ethyl toluene	16.39	105	1107232	10.526	ppbV	99
97) 1,3,5-trimethylbenzene	16.45	105	918723	10.613	ppbV	97
99) 1,2,4-trimethylbenzene	16.77	105	914429	11.644	ppbV	97
101) Benzyl Chloride	16.88	91	648036	11.967	ppbV	99
102) 1,3-dichlorobenzene	16.89	146	517198	11.033	ppbV	97
103) 1,4-dichlorobenzene	16.94	146	522990	11.548	ppbV	100
107) 1,2-dichlorobenzene	17.21	146	498568	12.119	ppbV	98
115) 1,2,4-trichlorobenzene	18.53	180	321084	12.775	ppbV	97
119) hexachlorobutadiene	18.91	225	226631	10.645	ppbV	98

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

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-3,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : Default-LCS-AP2 - All compounds listed

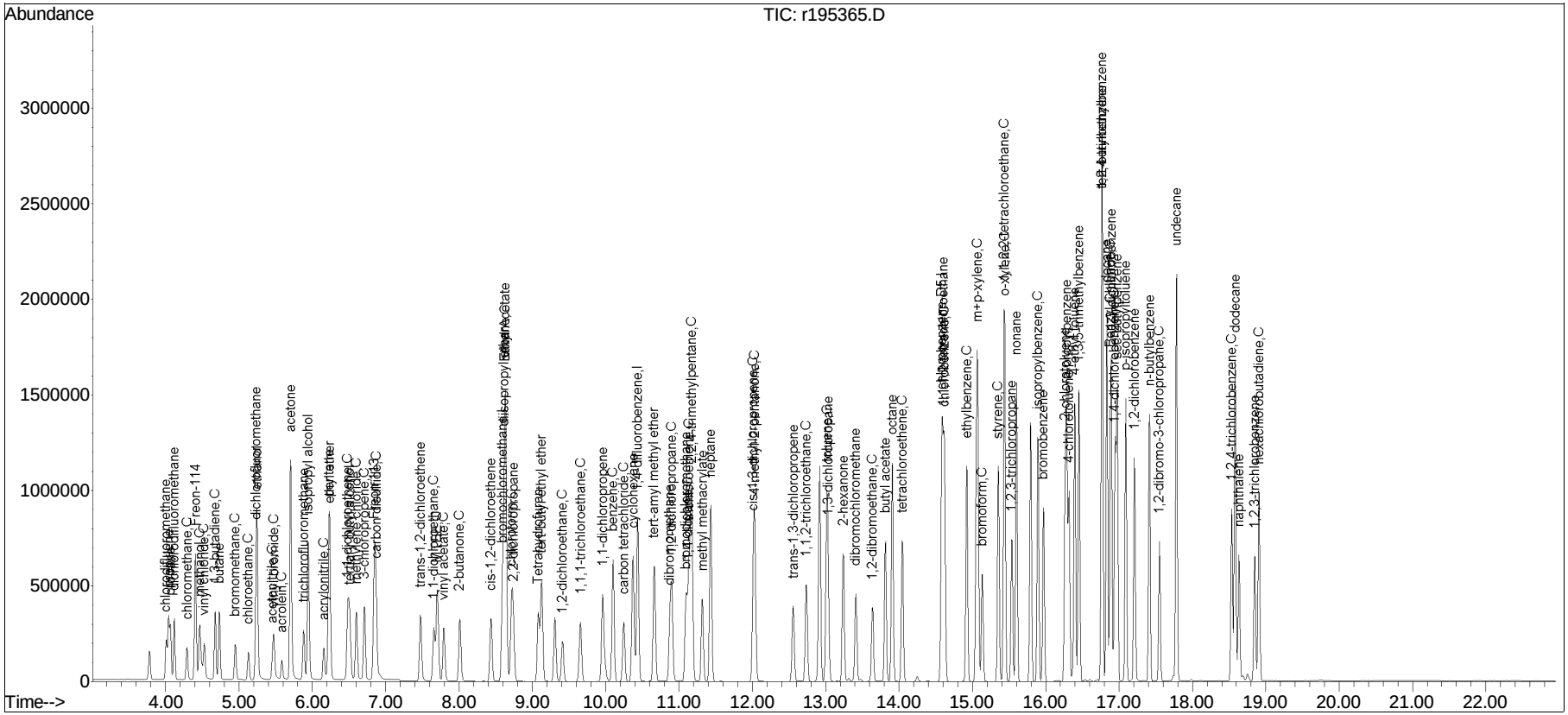
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

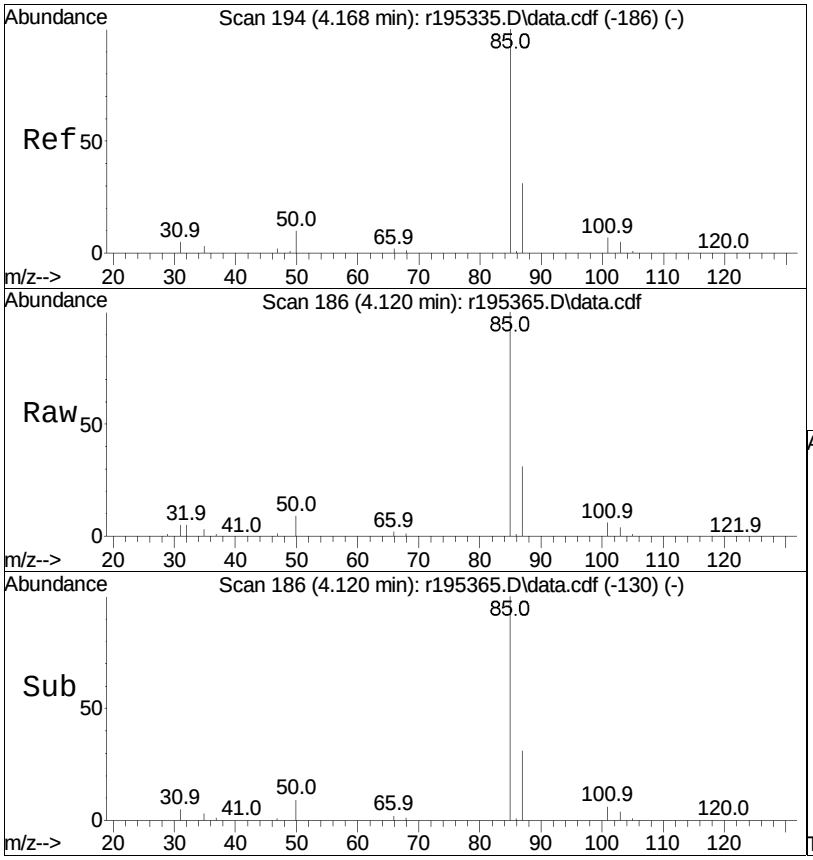
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195365.D
Acq On : 4 Nov 2020 12:36 PM
Operator : AIRLAB19:RY
Sample : WG1430466-3,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 04 13:42:29 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed104T\r195365.D

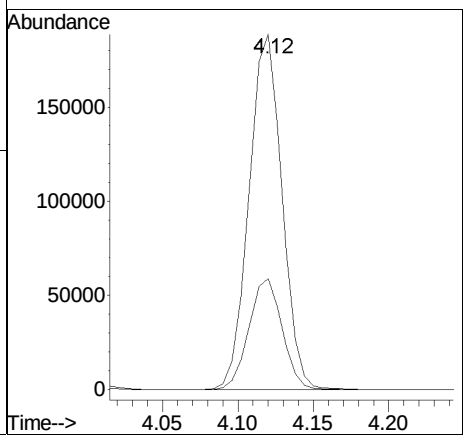


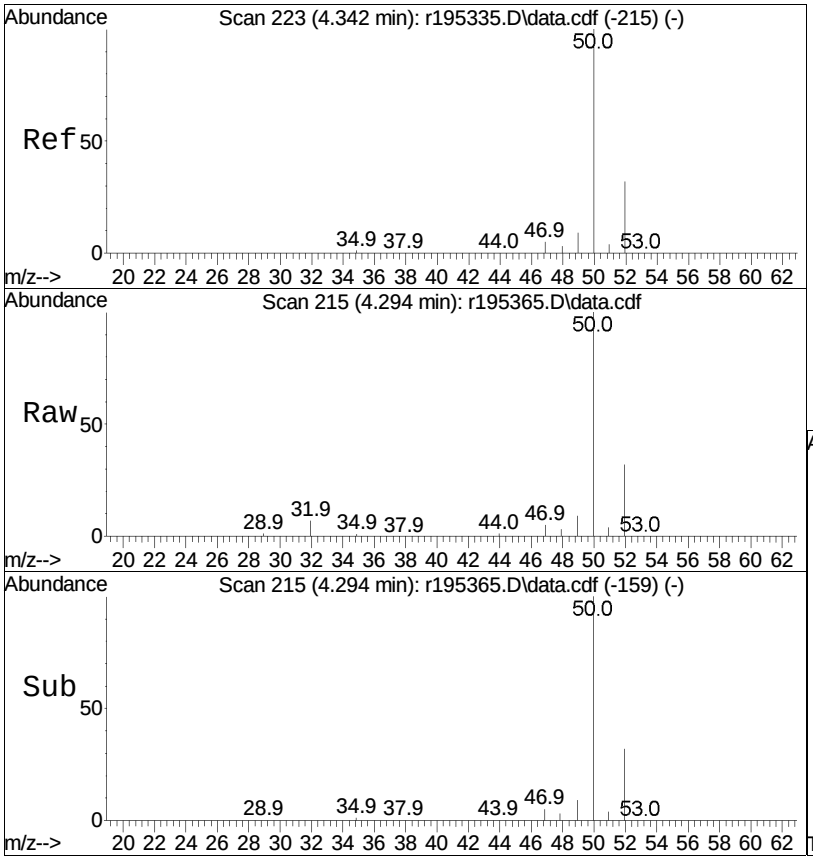


#5
dichlorodifluoromethane
Concen: 9.82 ppbV
RT: 4.12 min Scan# 186
Delta R.T. 0.006 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 85 Resp: 286219

Ion	Ratio	Lower	Upper
85	100		
87	31.2	24.6	37.0

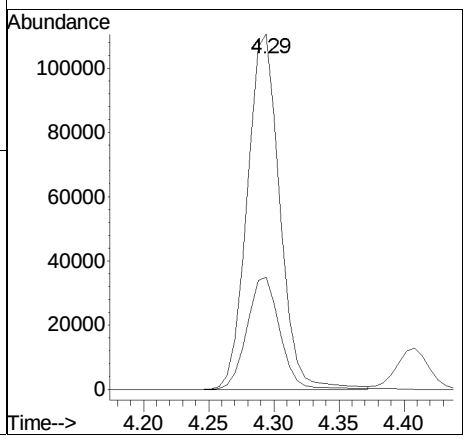


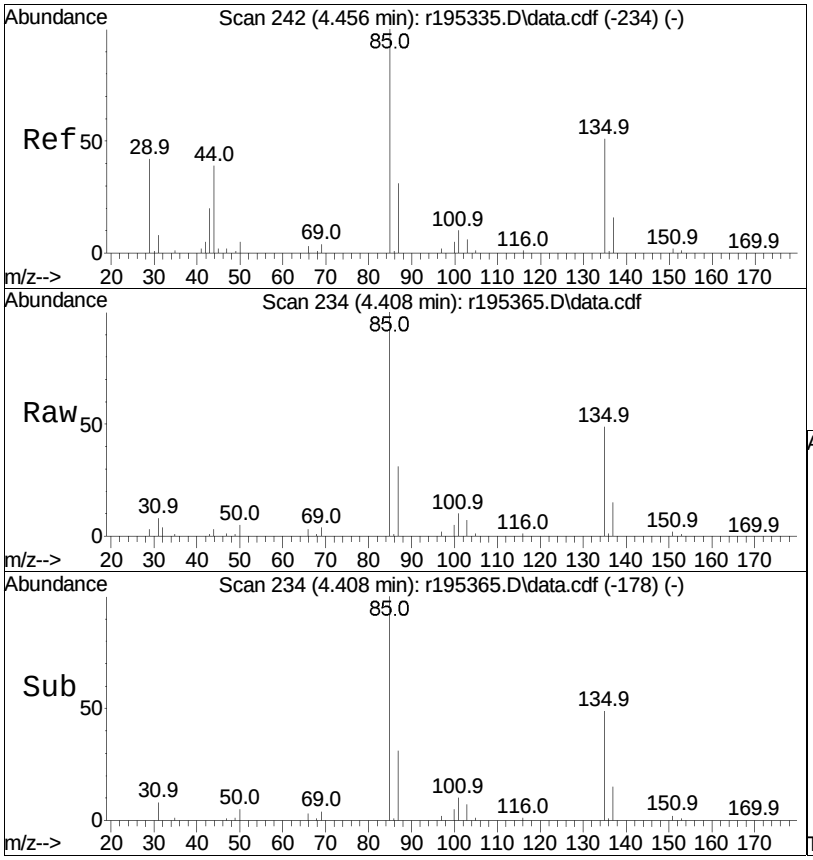


#6
chloromethane
Concen: 9.54 ppbV
RT: 4.29 min Scan# 215
Delta R.T. 0.006 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 50 Resp: 192190

Ion	Ratio	Lower	Upper
50	100		
52	31.6	25.3	37.9

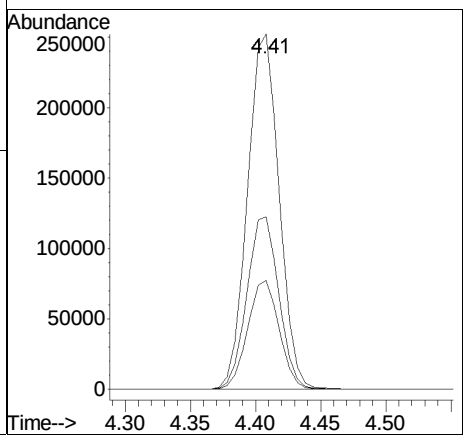


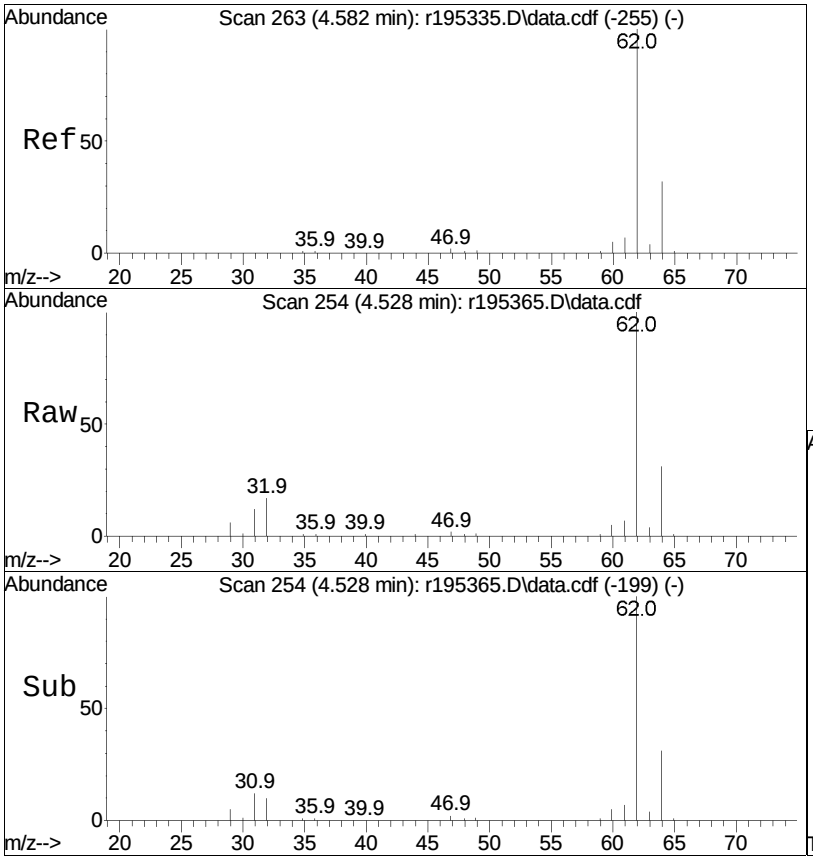


#7
Freon-114
Concen: 10.10 ppbV
RT: 4.41 min Scan# 234
Delta R.T. 0.006 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 85 Resp: 426596

Ion	Ratio	Lower	Upper
85	100		
87	30.7	24.5	36.7
135	48.6	40.6	60.8

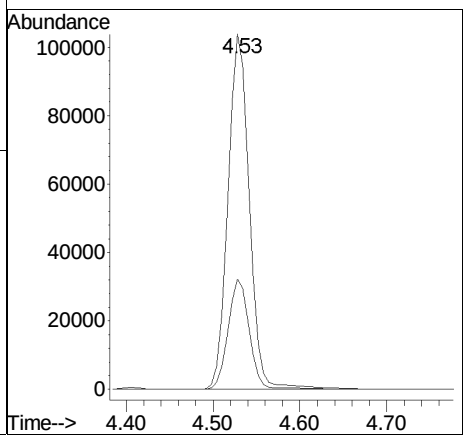


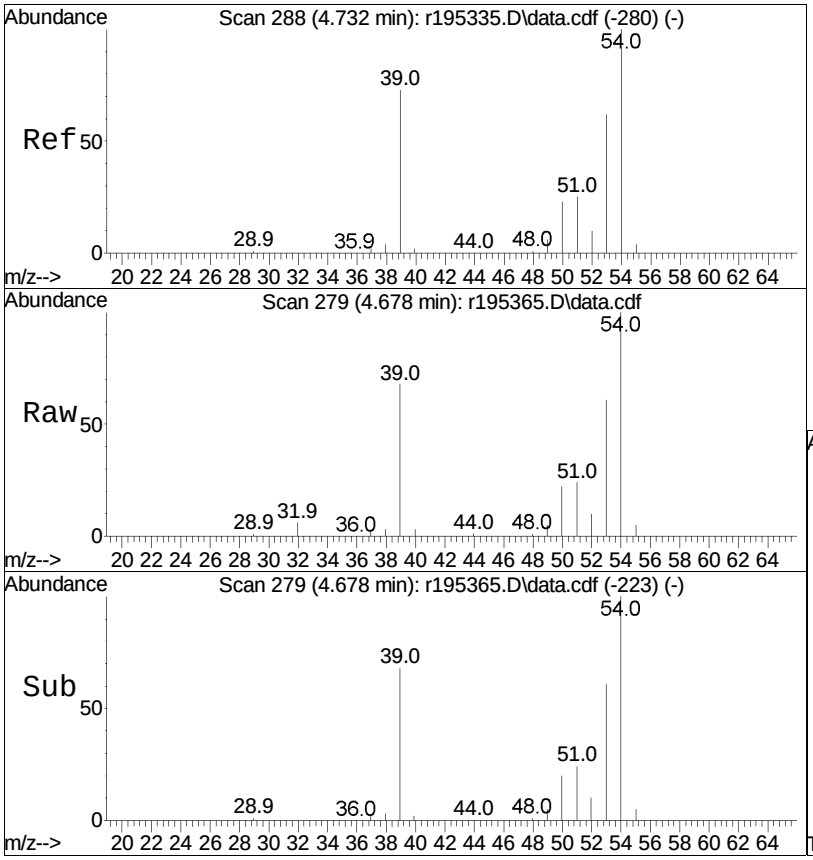


#9
vinyl chloride
Concen: 9.84 ppbV
RT: 4.53 min Scan# 254
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 62 Resp: 178070

Ion	Ratio	Lower	Upper
62	100		
64	31.1	25.2	37.8

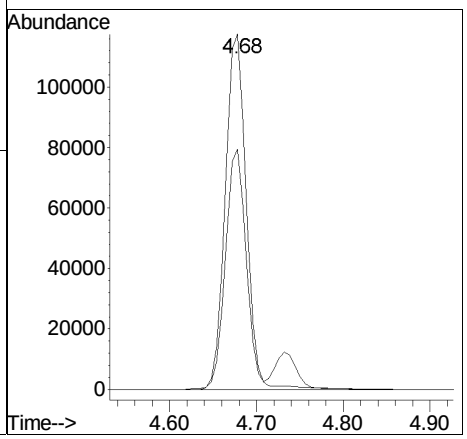


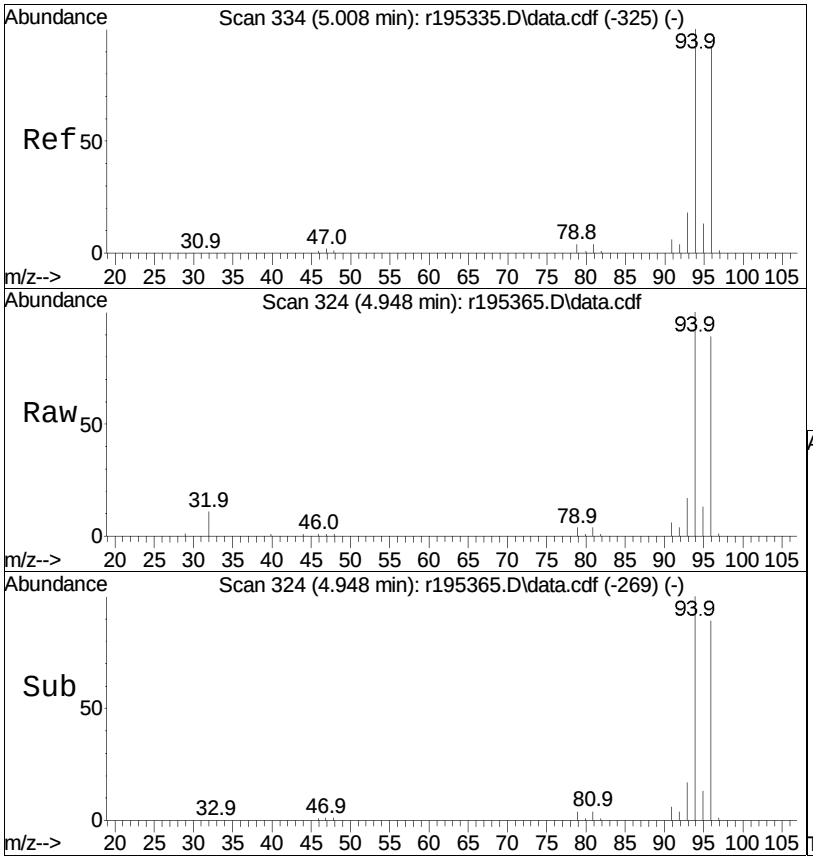


#10
1,3-butadiene
Concen: 10.57 ppbV
RT: 4.68 min Scan# 279
Delta R.T. 0.006 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 54 Resp: 198224

Ion	Ratio	Lower	Upper
54	100		
39	67.6	58.5	87.7

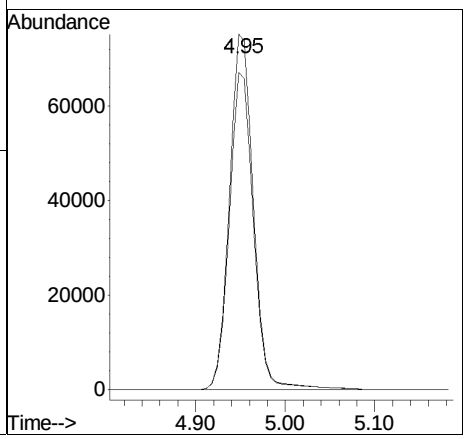


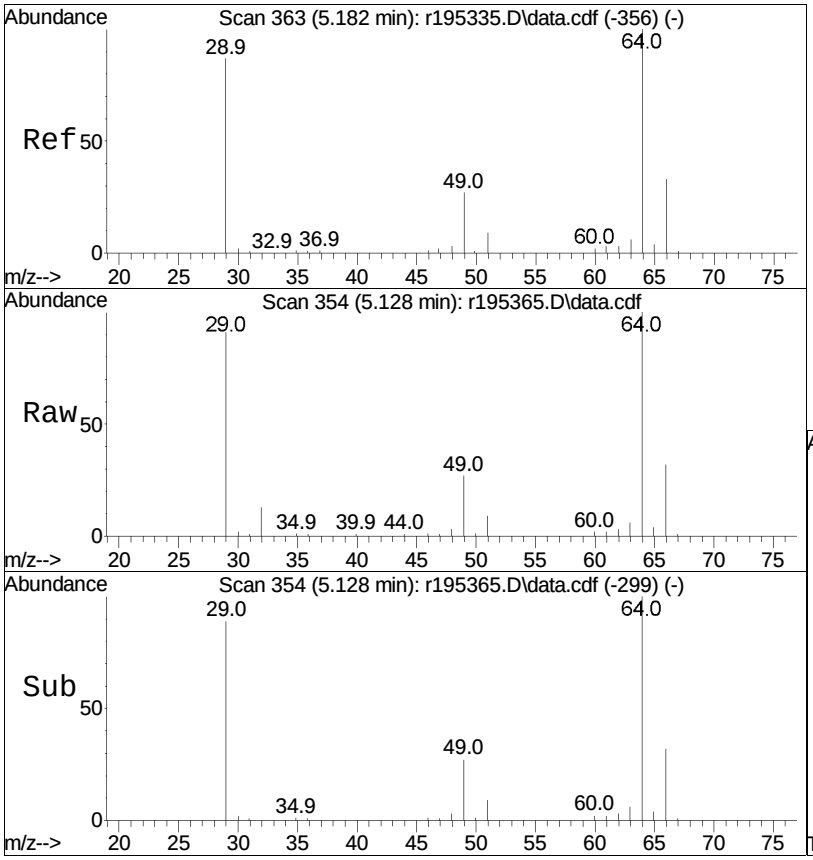


#13
bromomethane
Concen: 9.74 ppbV
RT: 4.95 min Scan# 324
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 94 Resp: 139601

Ion	Ratio	Lower	Upper
94	100		
96	89.2	73.3	109.9

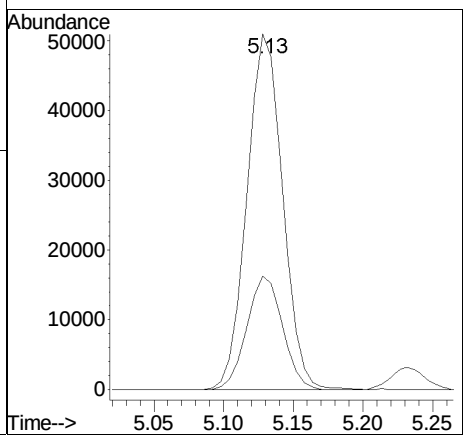


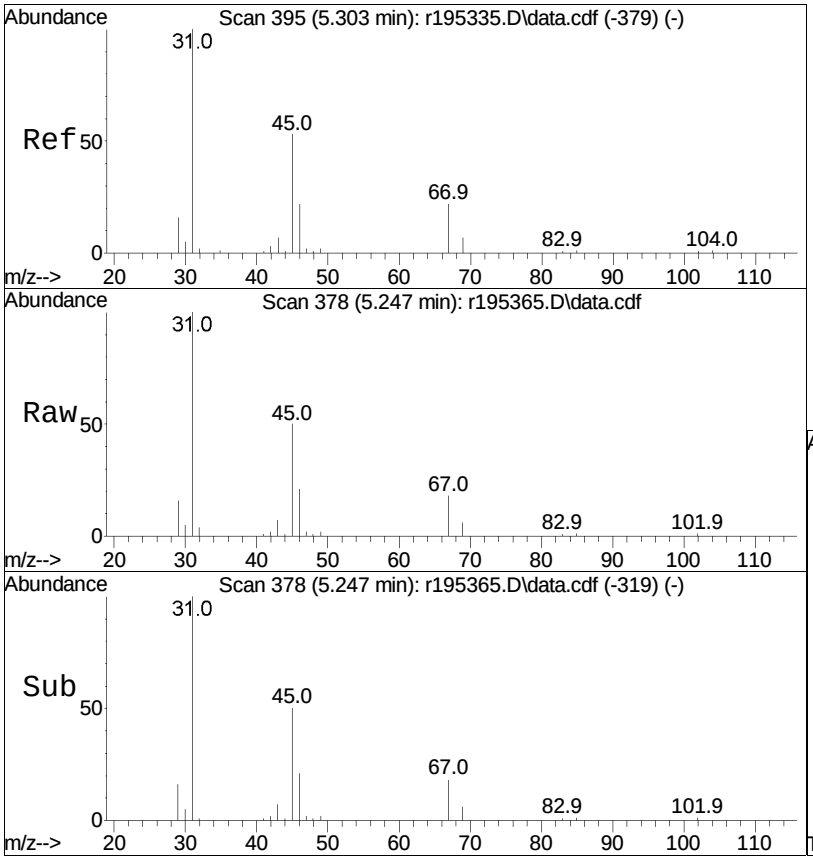


#14
chloroethane
Concen: 17.16 ppbV
RT: 5.13 min Scan# 354
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 64 Resp: 97886

Ion	Ratio	Lower	Upper
64	100		
66	31.9	26.2	39.4

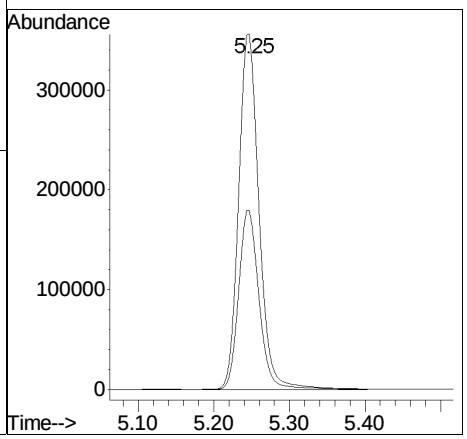


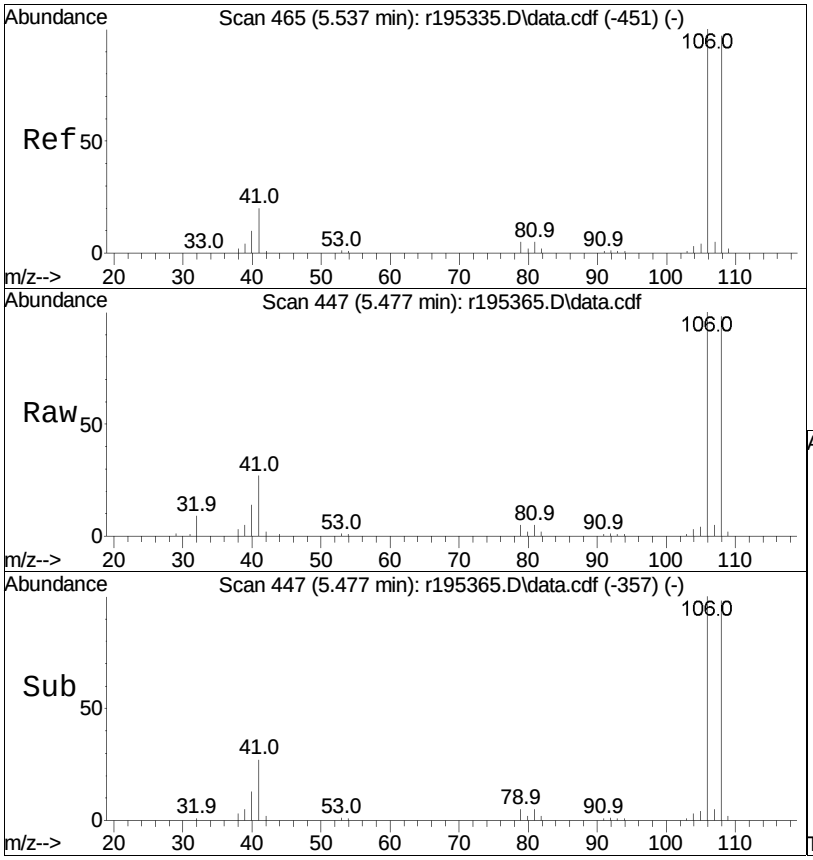


#15
ethanol
Concen: 44.82 ppbV
RT: 5.25 min Scan# 378
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 31 Resp: 721233

Ion	Ratio	Lower	Upper
31	100		
45	50.4	42.5	63.7

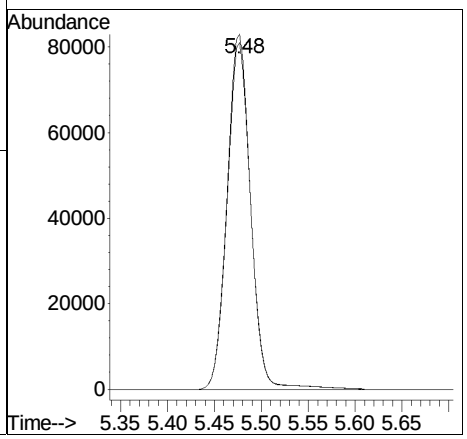


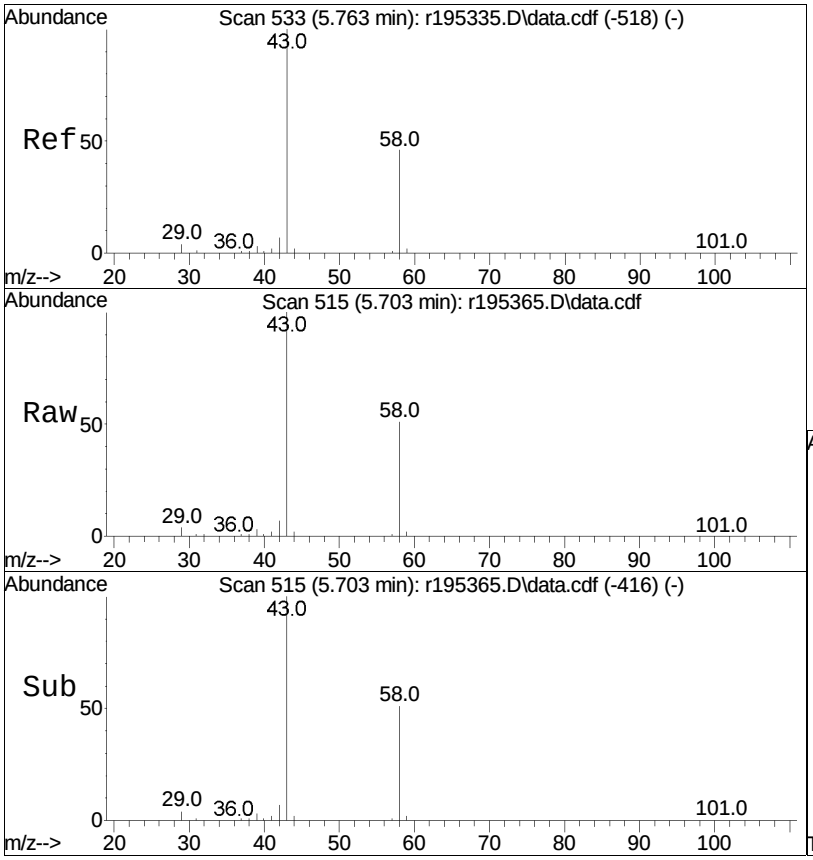


#17
vinyl bromide
Concen: 9.64 ppbV
RT: 5.48 min Scan# 447
Delta R.T. 0.003 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:106 Resp: 145708

Ion	Ratio	Lower	Upper
106	100		
108	97.6	77.4	116.2

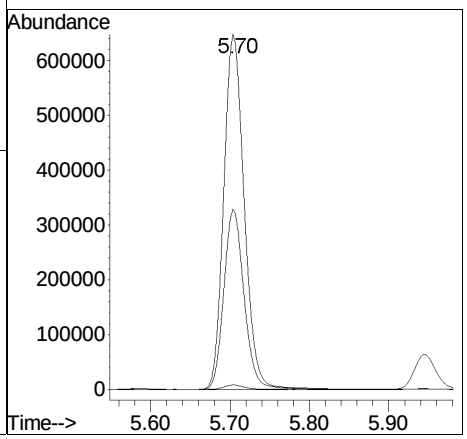


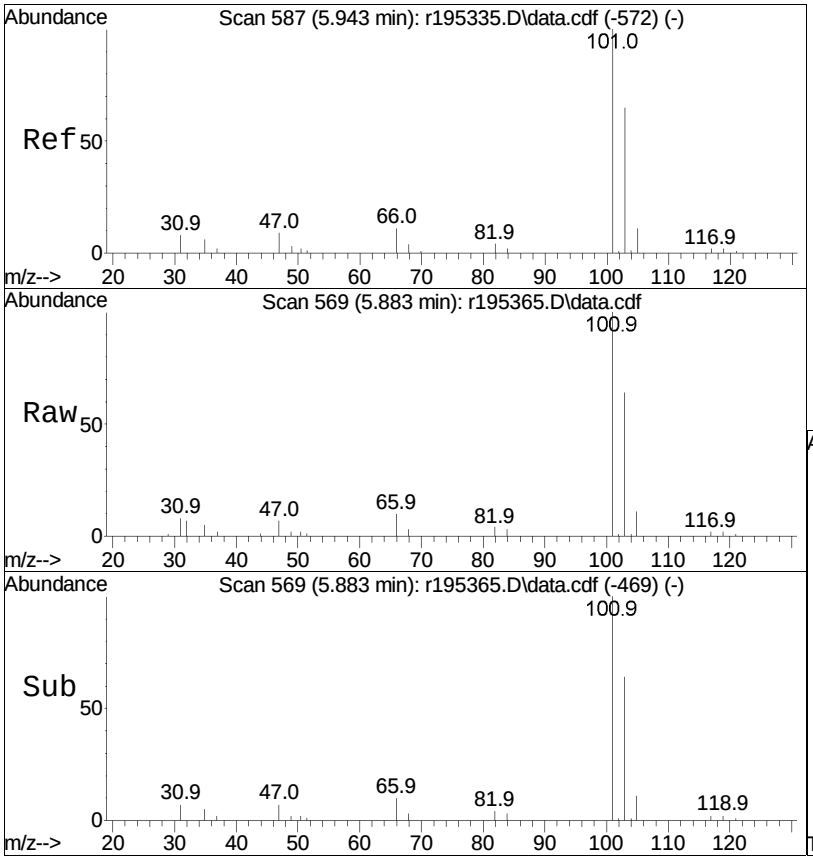


#19
acetone
Concen: 42.44 ppbV
RT: 5.70 min Scan# 515
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 43 Resp: 1162146

Ion	Ratio	Lower	Upper
43	100		
58	50.8	36.6	54.8
57	1.3	0.9	1.3

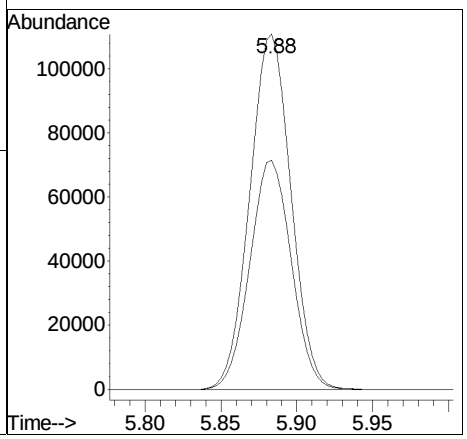


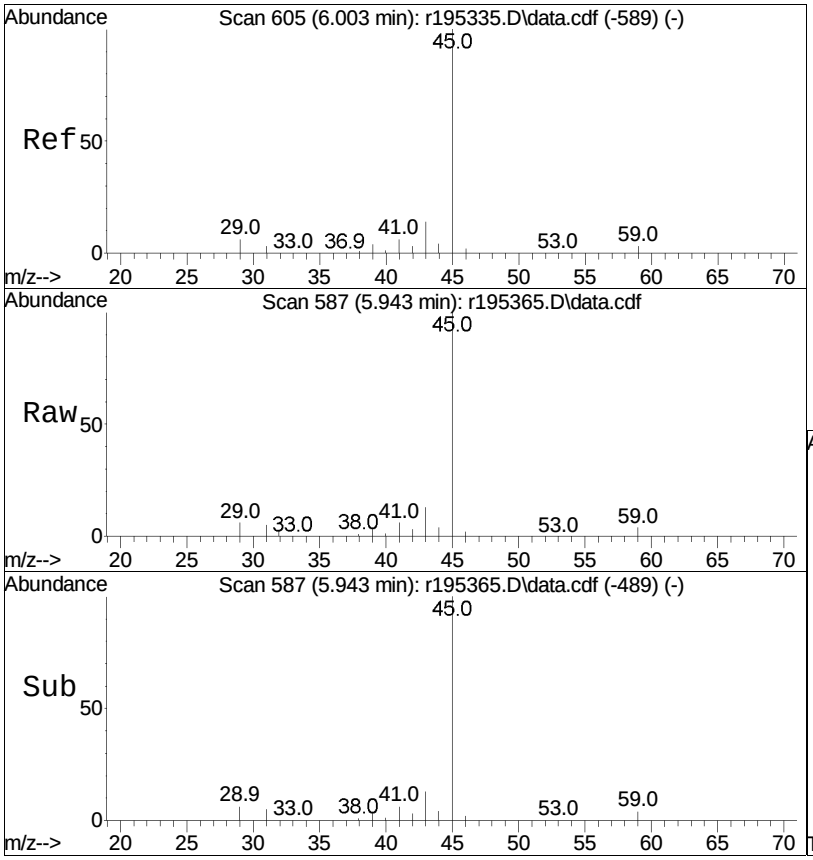


#21
trichlorofluoromethane
Concen: 9.28 ppbV
RT: 5.88 min Scan# 569
Delta R.T. 0.003 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:101 Resp: 209412

Ion	Ratio	Lower	Upper
101	100		
103	64.5	52.3	78.5

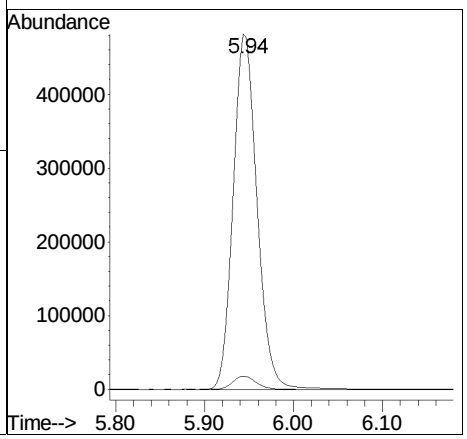


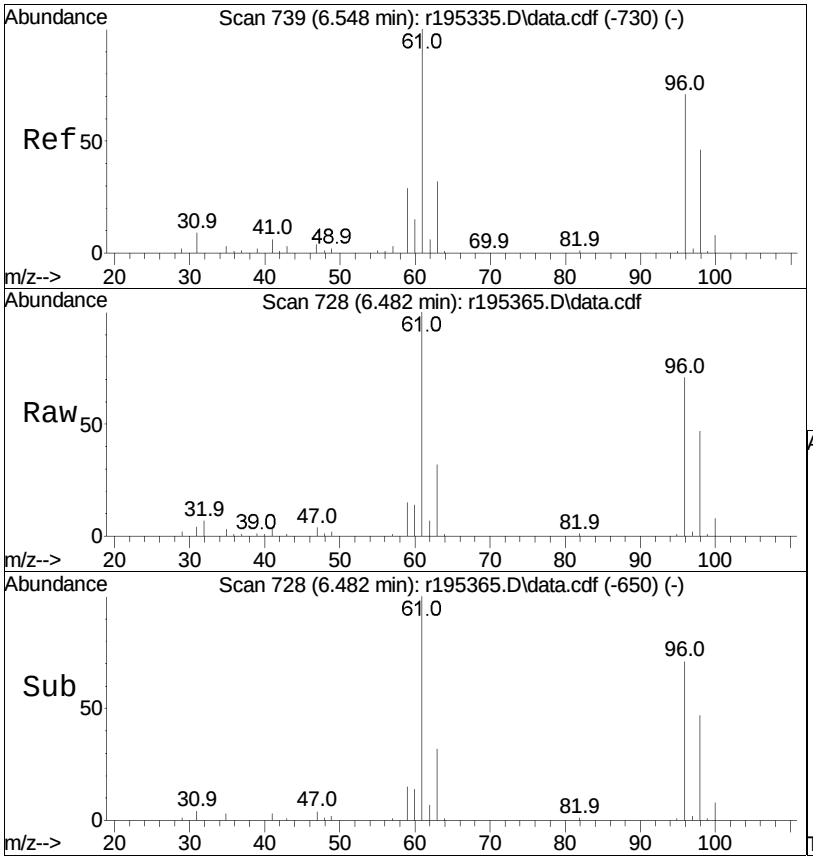


#22
isopropyl alcohol
Concen: 21.91 ppbV
RT: 5.94 min Scan# 587
Delta R.T. -0.003 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 45 Resp: 897656

Ion	Ratio	Lower	Upper
45	100		
59	3.8	2.6	4.0

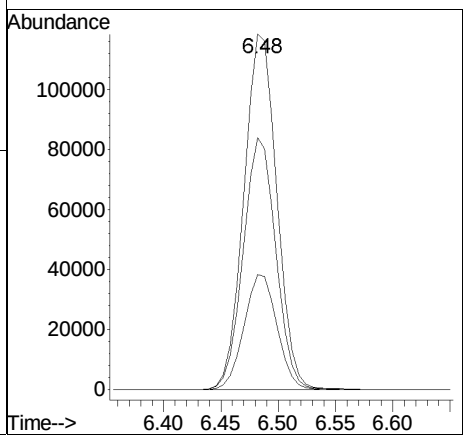


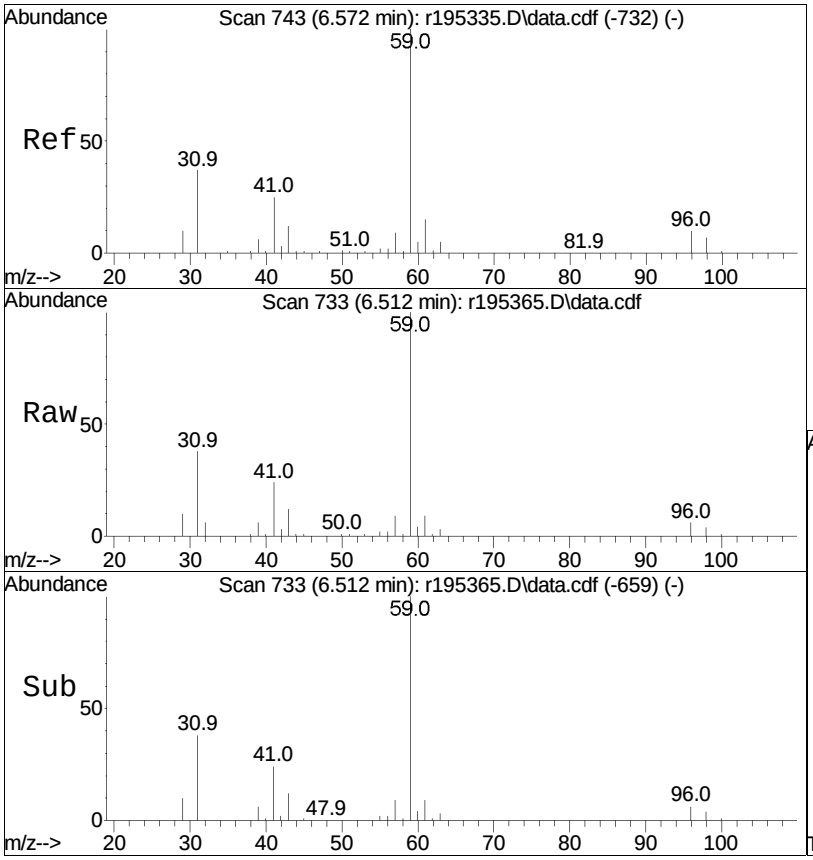


#26
1,1-dichloroethene
Concen: 9.75 ppbV
RT: 6.48 min Scan# 728
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 61 Resp: 236584

Ion	Ratio	Lower	Upper
61	100		
96	70.8	56.6	84.8
63	32.3	25.6	38.4

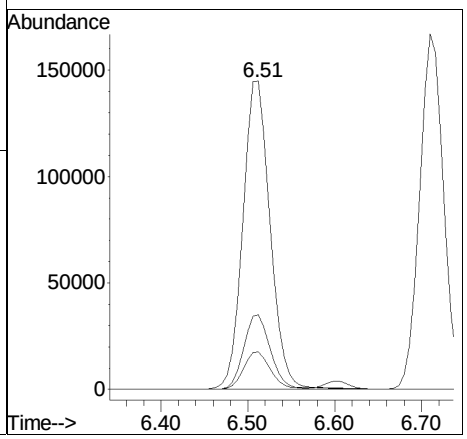


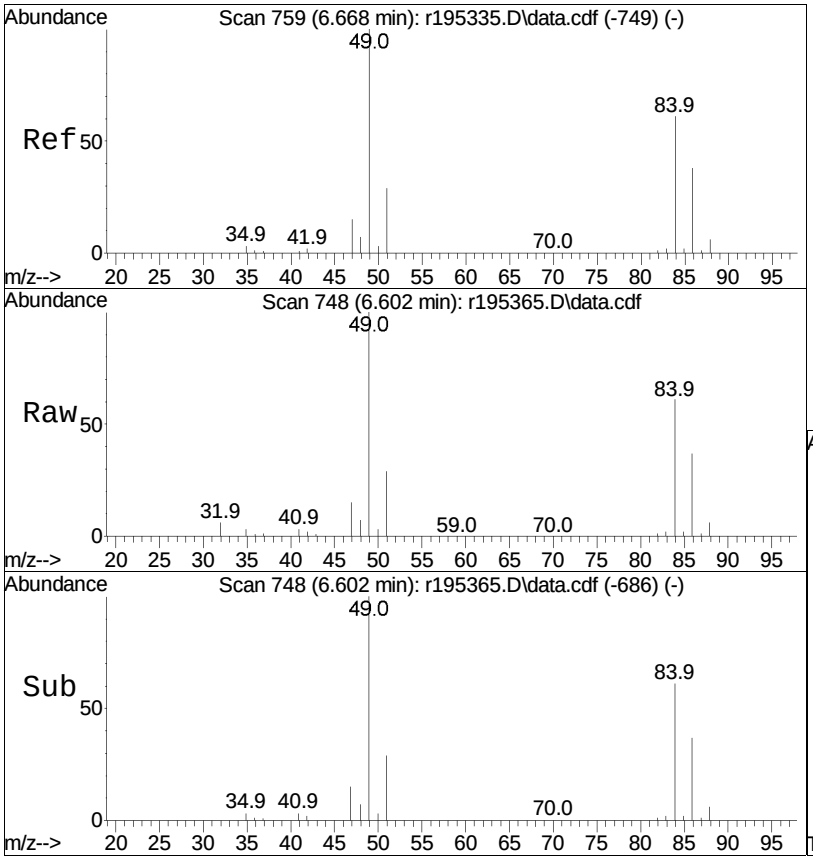


#27
tertiary butyl alcohol
Concen: 9.26 ppbV
RT: 6.51 min Scan# 733
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 59 Resp: 317000

Ion	Ratio	Lower	Upper
59	100		
41	24.3	19.8	29.8
43	12.1	10.0	15.0

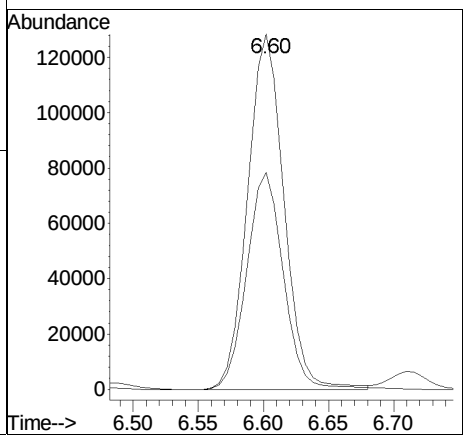


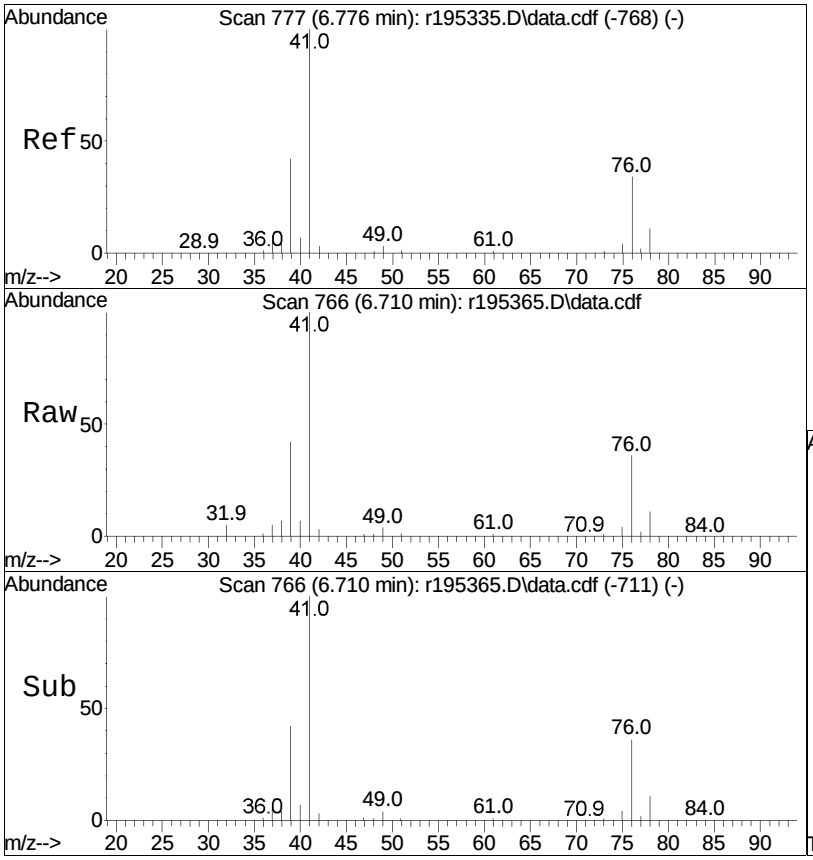


#28
methylene chloride
Concen: 9.78 ppbV
RT: 6.60 min Scan# 748
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 49 Resp: 249759

Ion	Ratio	Lower	Upper
49	100		
84	61.0	48.8	73.2

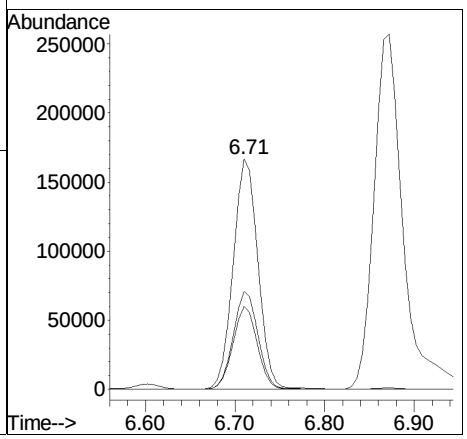


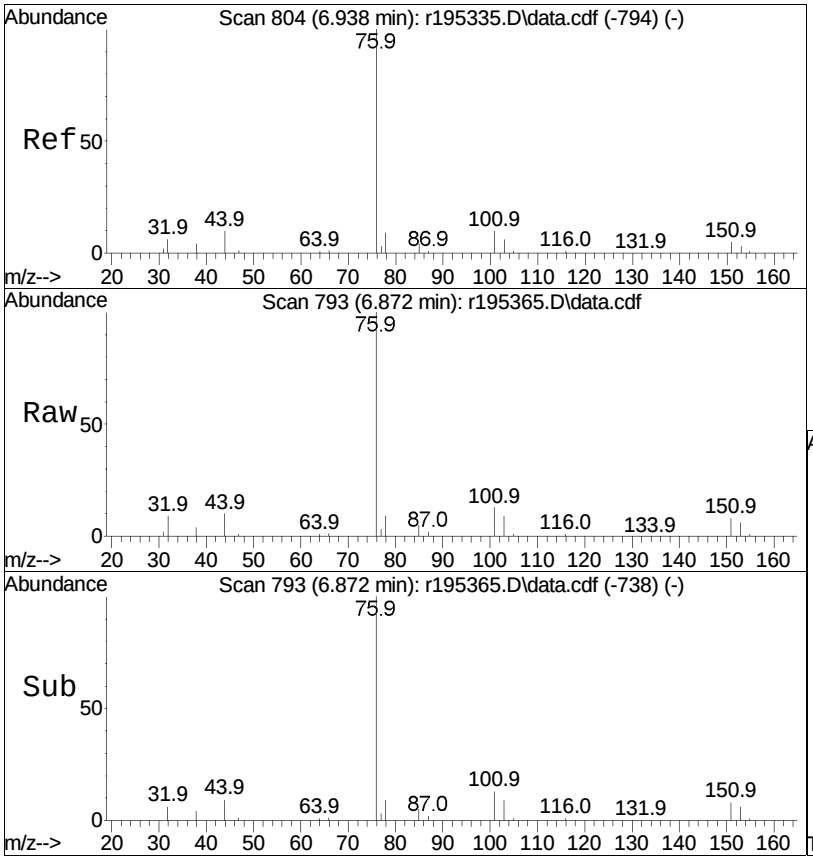


#29
3-chloropropene
Concen: 10.12 ppbV
RT: 6.71 min Scan# 766
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 41 Resp: 320694

Ion	Ratio	Lower	Upper
41	100		
39	42.4	33.6	50.4
76	36.0	26.9	40.3

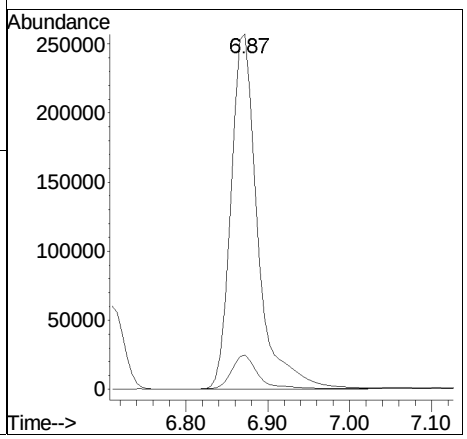


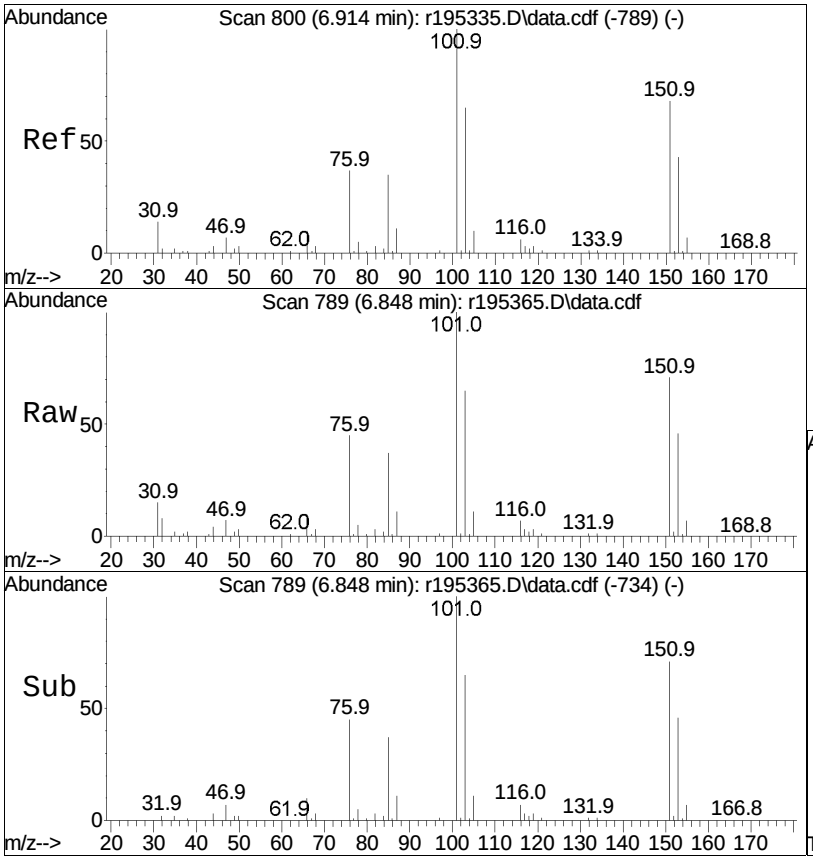


#30
carbon disulfide
Concen: 9.04 ppbV
RT: 6.87 min Scan# 793
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 76 Resp: 587751

Ion	Ratio	Lower	Upper
76	100		
44	9.7	7.9	11.9

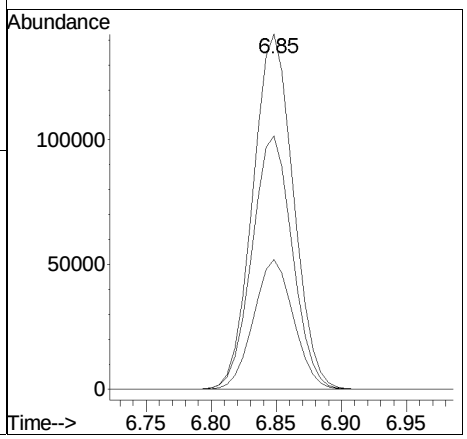


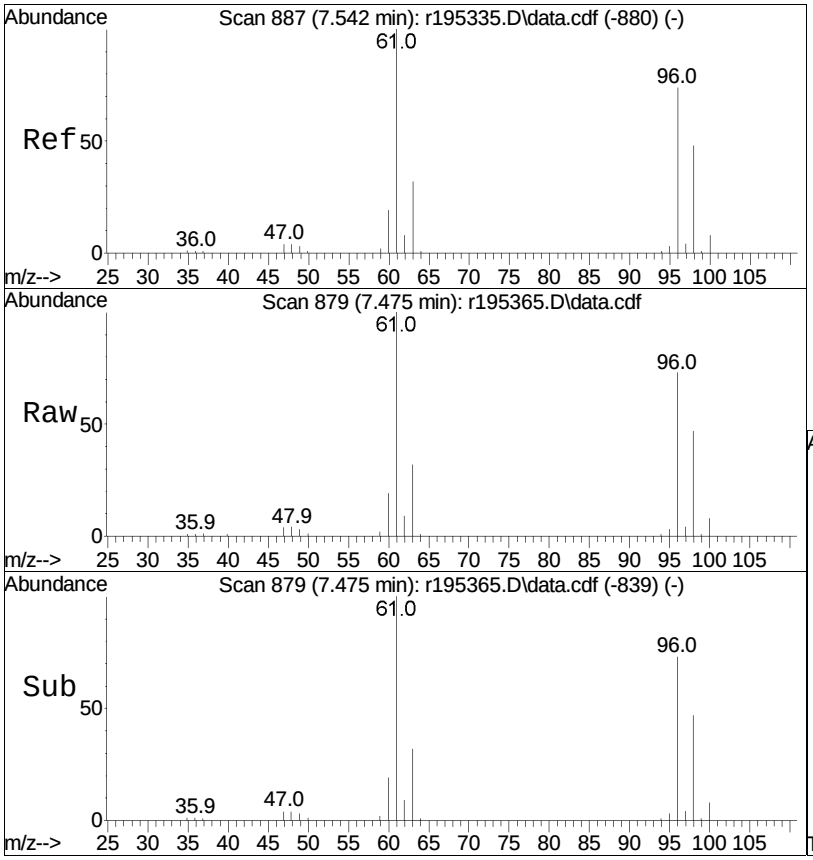


#31
Freon 113
Concen: 9.61 ppbV
RT: 6.85 min Scan# 789
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:101 Resp: 308639

Ion	Ratio	Lower	Upper
101	100		
85	36.5	27.9	41.9
151	71.3	54.2	81.2

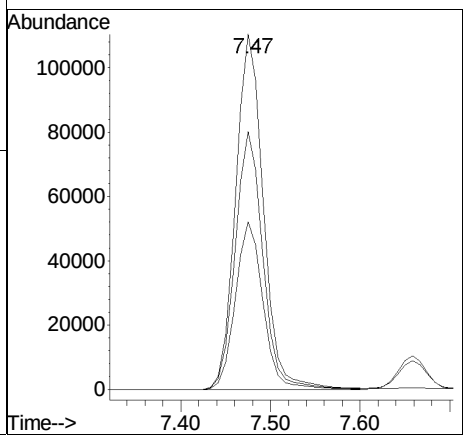


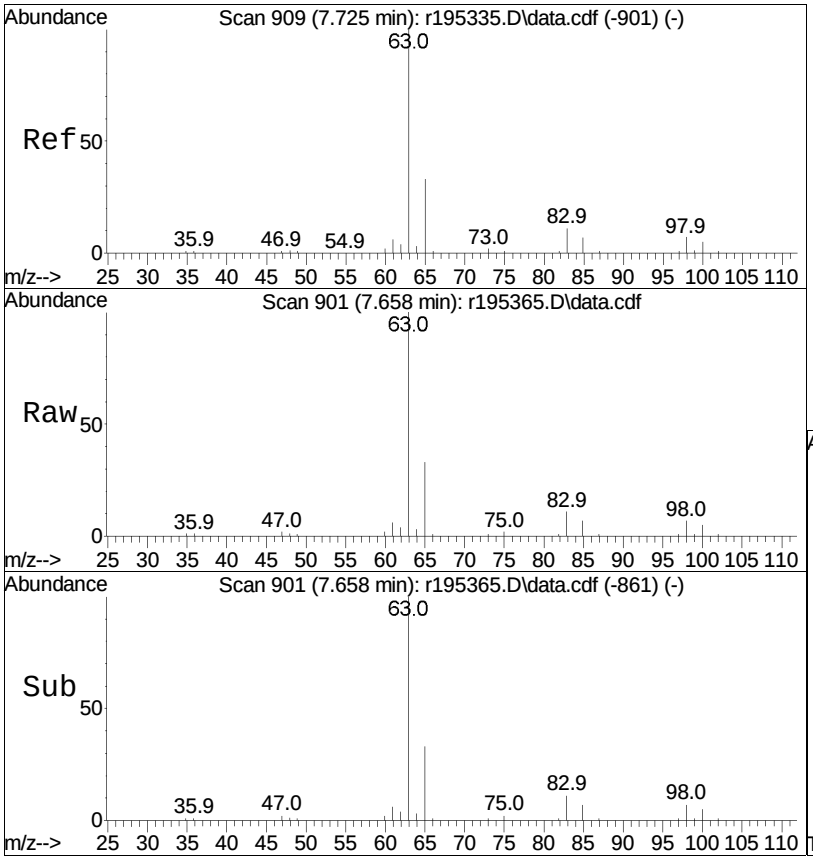


#32
trans-1,2-dichloroethene
Concen: 9.54 ppbV
RT: 7.47 min Scan# 879
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 61 Resp: 238267

Ion	Ratio	Lower	Upper
61	100		
96	72.6	58.8	88.2
98	47.2	38.6	57.8

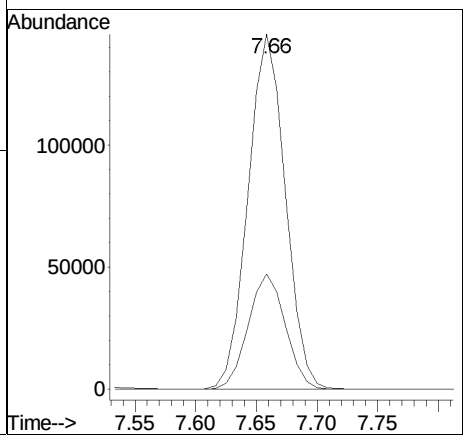


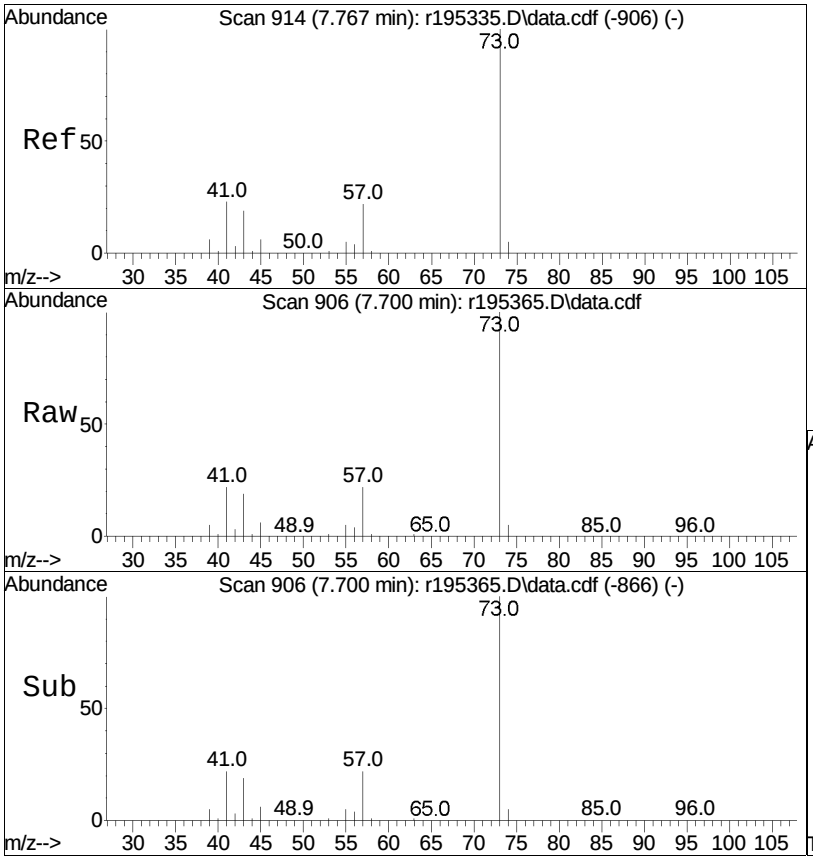


#33
1,1-dichloroethane
Concen: 9.44 ppbV
RT: 7.66 min Scan# 901
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 63 Resp: 310876

Ion	Ratio	Lower	Upper
63	100		
65	32.5	26.5	39.7

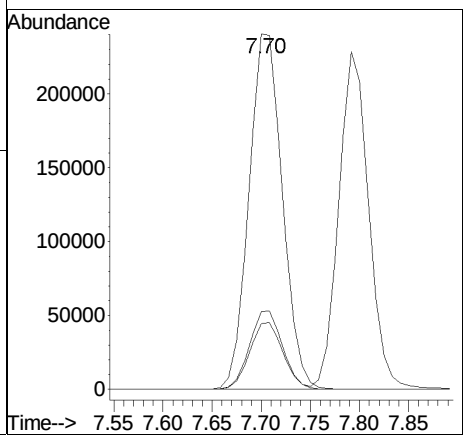


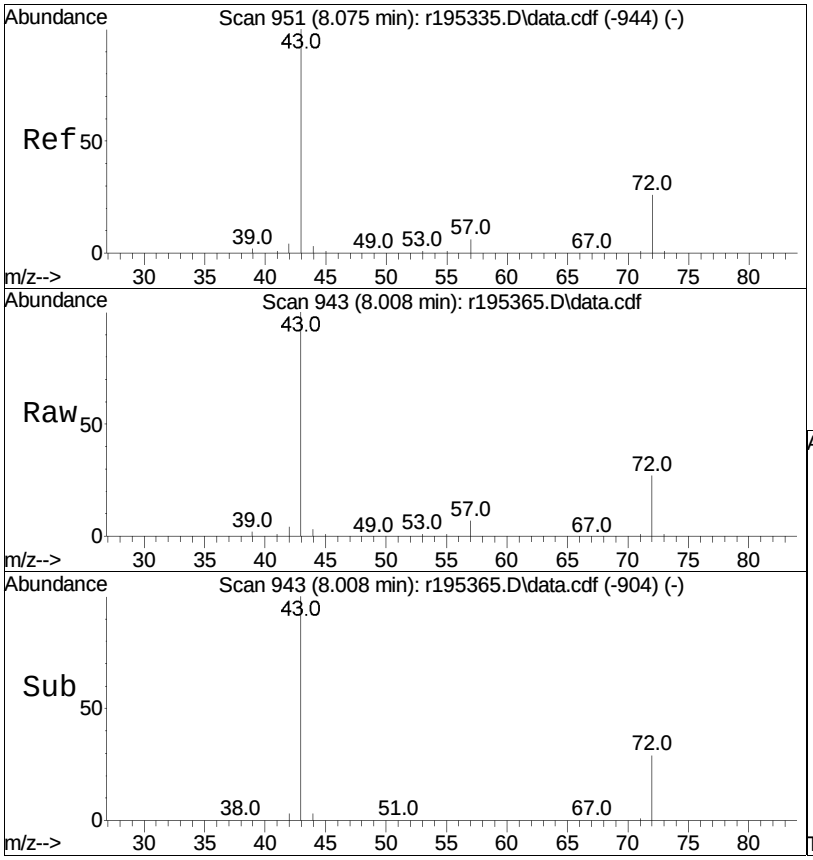


#34
MTBE
Concen: 9.95 ppbV
RT: 7.70 min Scan# 906
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 73 Resp: 569786

Ion	Ratio	Lower	Upper
73	100		
57	21.9	17.5	26.3
43	18.5	15.4	23.0

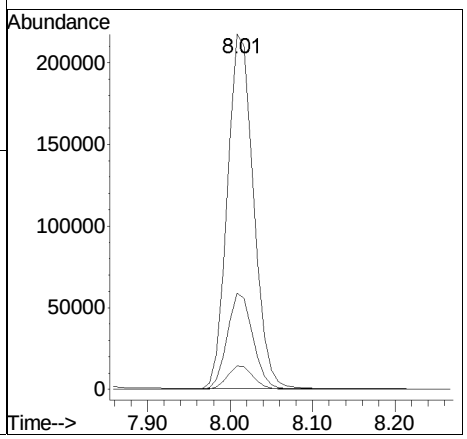


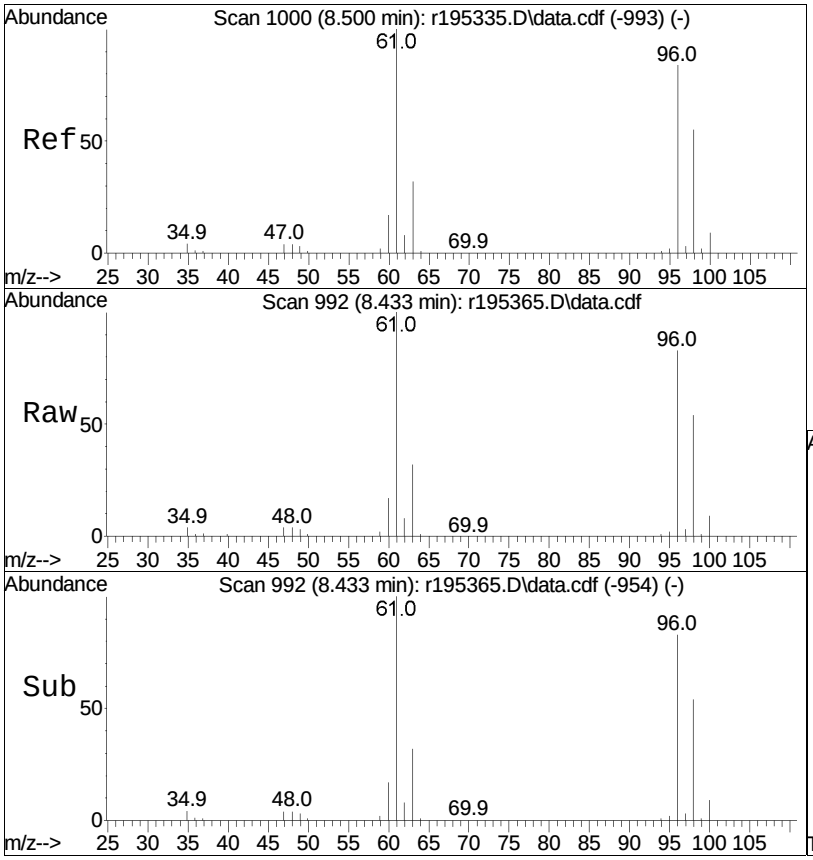


#36
2-butanone
Concen: 9.46 ppbV
RT: 8.01 min Scan# 943
Delta R.T. -0.008 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 43 Resp: 478690

Ion	Ratio	Lower	Upper
43	100		
72	27.1	21.0	31.6
57	6.6	5.1	7.7

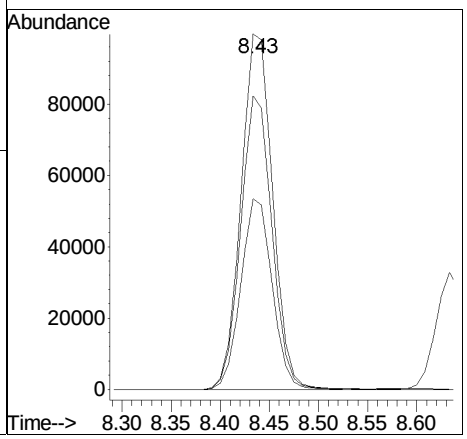


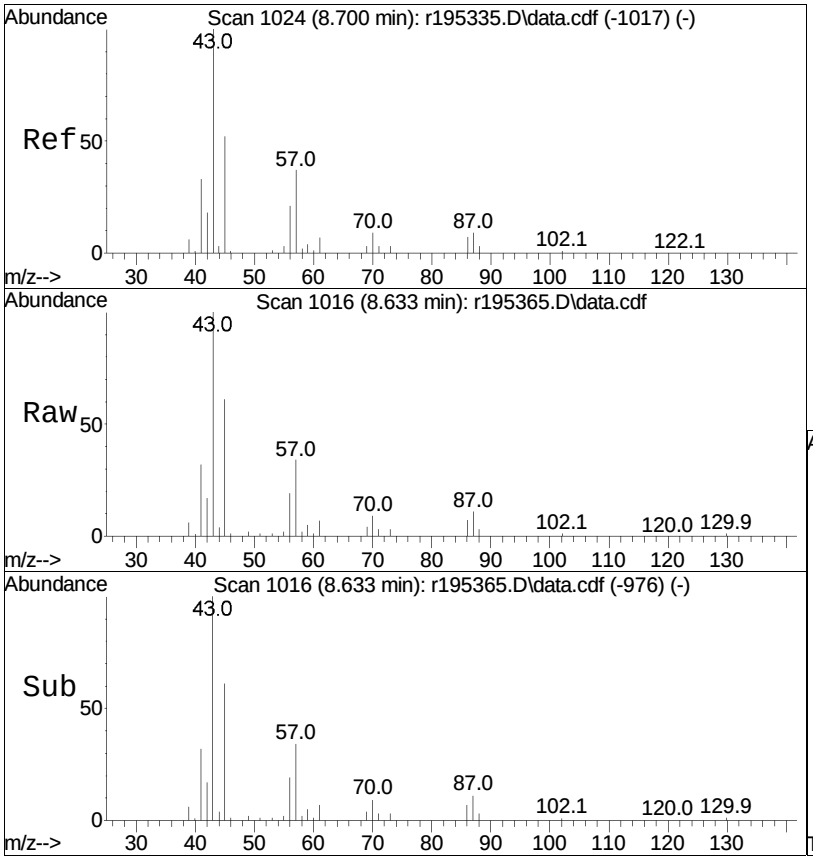


#37
cis-1,2-dichloroethene
Concen: 9.99 ppbV
RT: 8.43 min Scan# 992
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 61 Resp: 223120

Ion	Ratio	Lower	Upper
61	100		
96	82.6	67.0	100.6
98	53.6	43.8	65.8

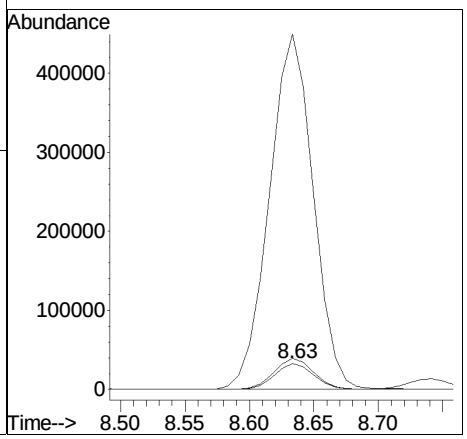


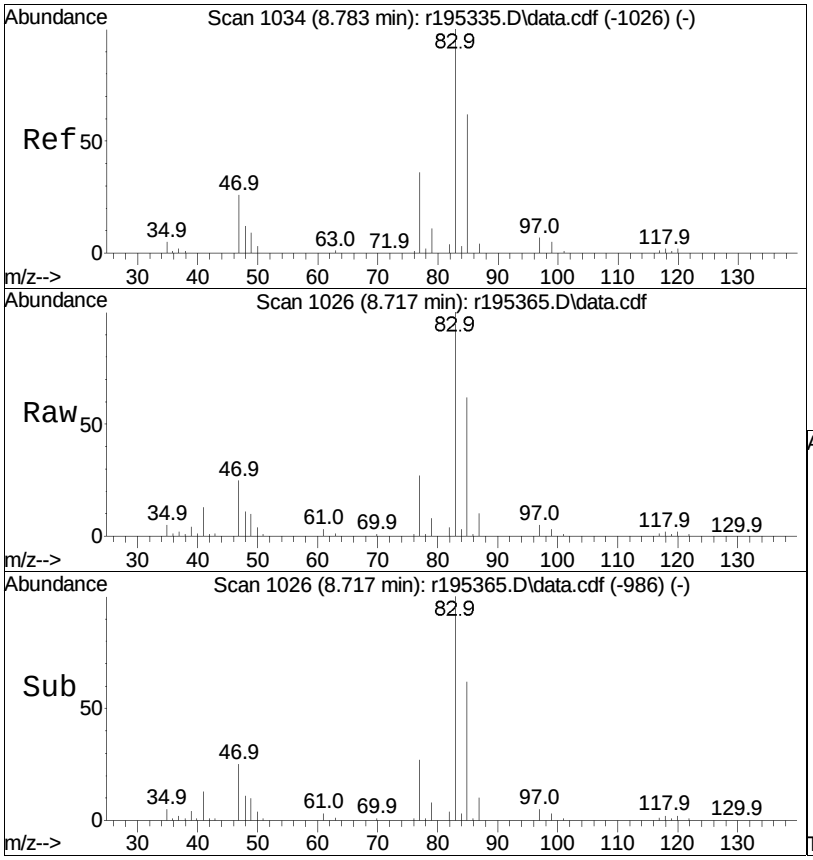


#38
Ethyl Acetate
Concen: 9.88 ppbV
RT: 8.63 min Scan# 1016
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 61 Resp: 70029

Ion	Ratio	Lower	Upper
61	100		
70	119.9	98.0	147.0
43	1370.4	1128.3	1692.5

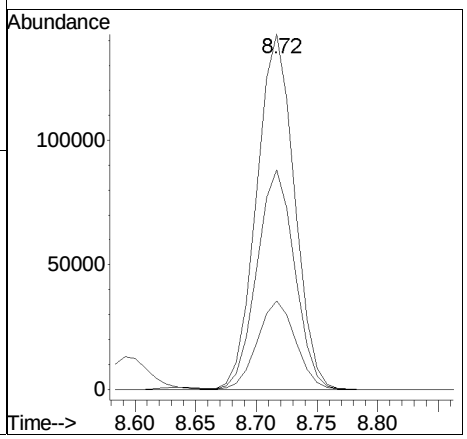


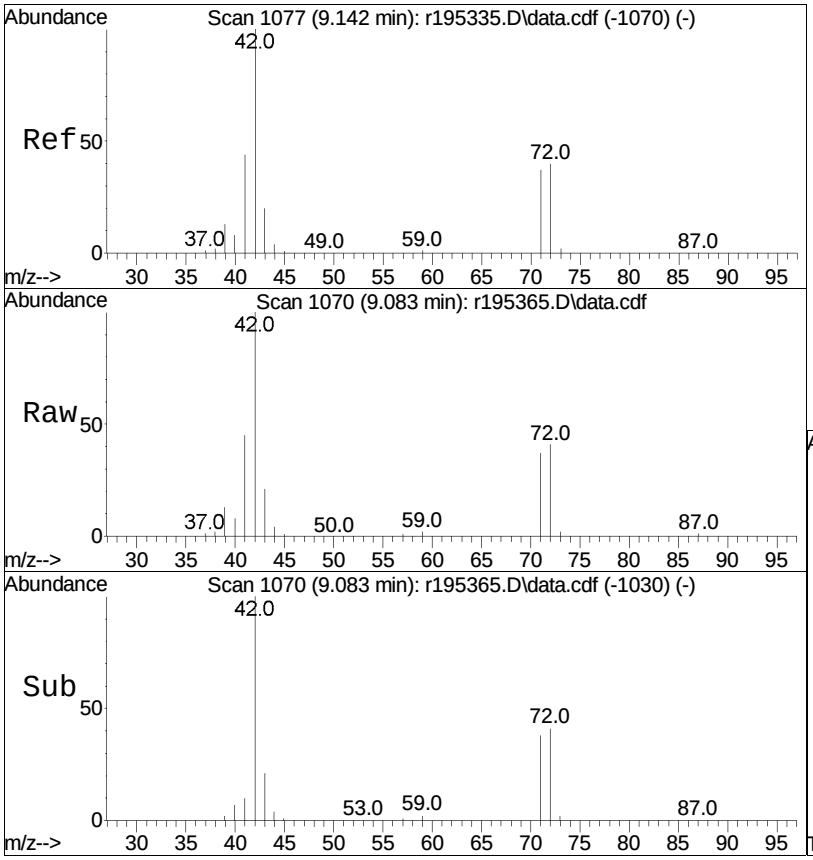


#39
chloroform
Concen: 10.04 ppbV
RT: 8.72 min Scan# 1026
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 83 Resp: 308790

Ion	Ratio	Lower	Upper
83	100		
85	61.8	49.8	74.8
47	24.9	20.8	31.2

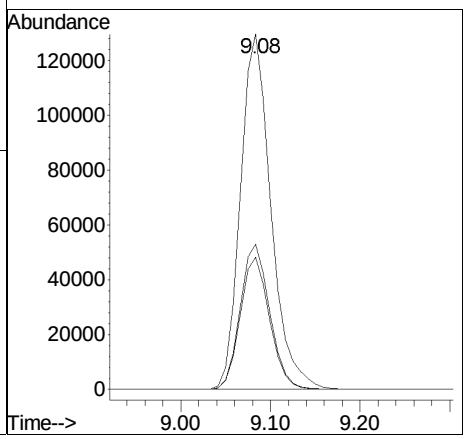


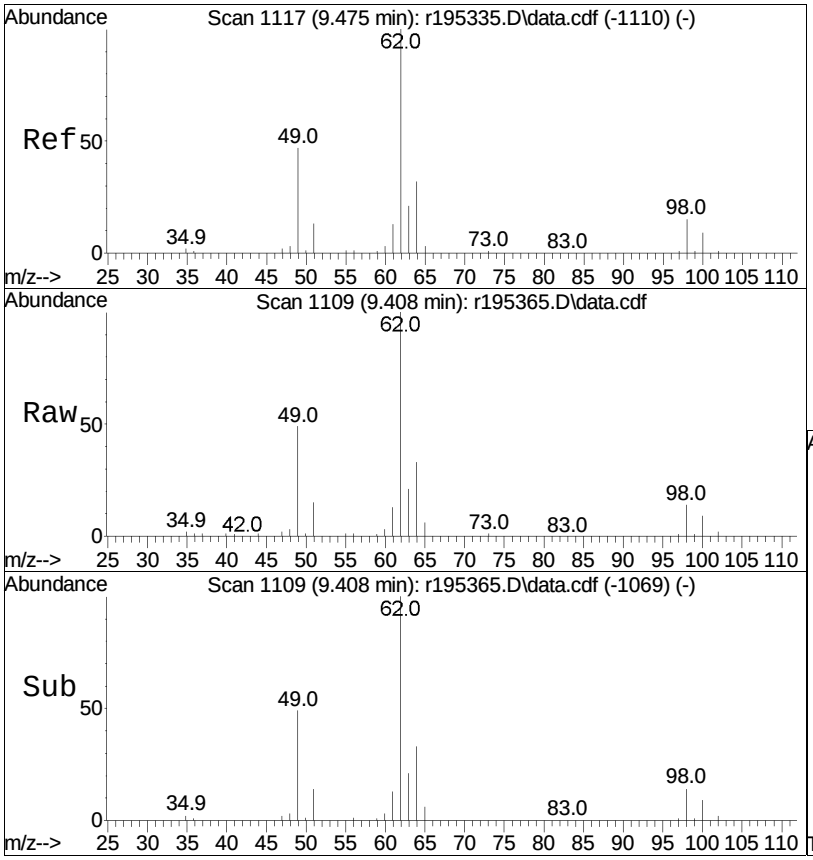


#40
Tetrahydrofuran
Concen: 9.21 ppbV
RT: 9.08 min Scan# 1070
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 42 Resp: 306338

Ion	Ratio	Lower	Upper
42	100		
71	37.2	29.7	44.5
72	40.9	32.2	48.4

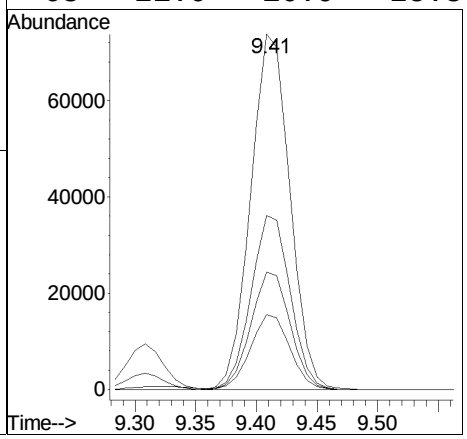


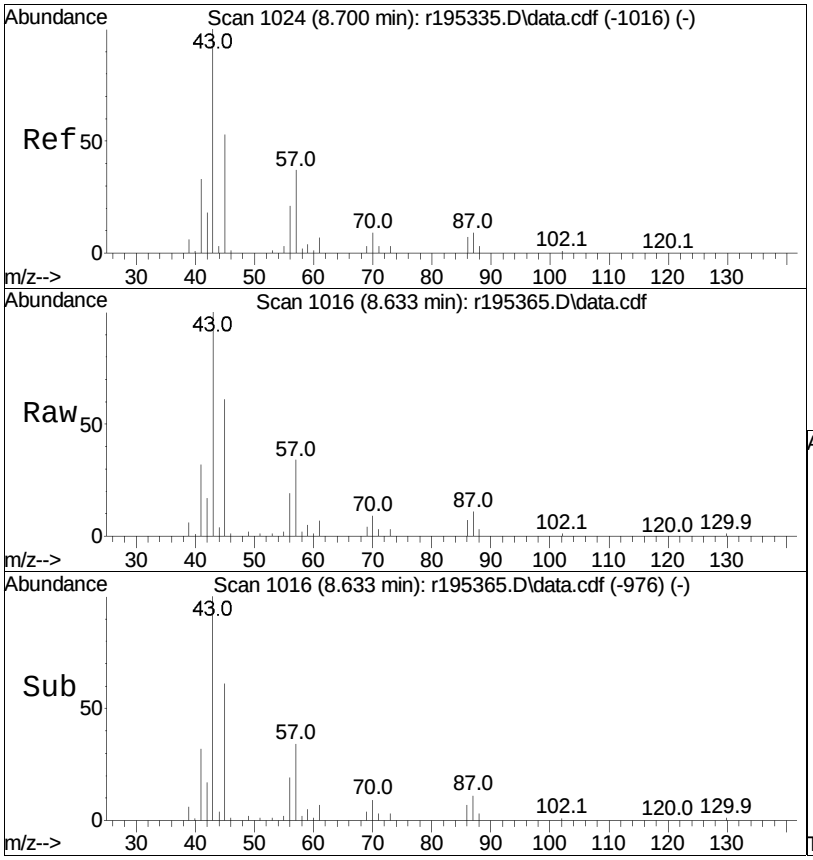


#42
1,2-dichloroethane
Concen: 9.61 ppbV
RT: 9.41 min Scan# 1109
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 62 Resp: 165806

Ion	Ratio	Lower	Upper
62	100		
64	33.0	26.2	39.2
49	49.0	37.8	56.6
63	21.0	16.9	25.3

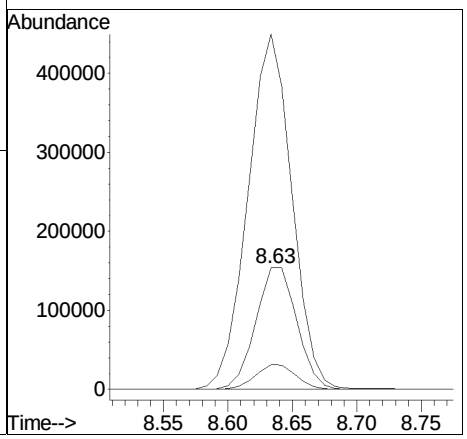


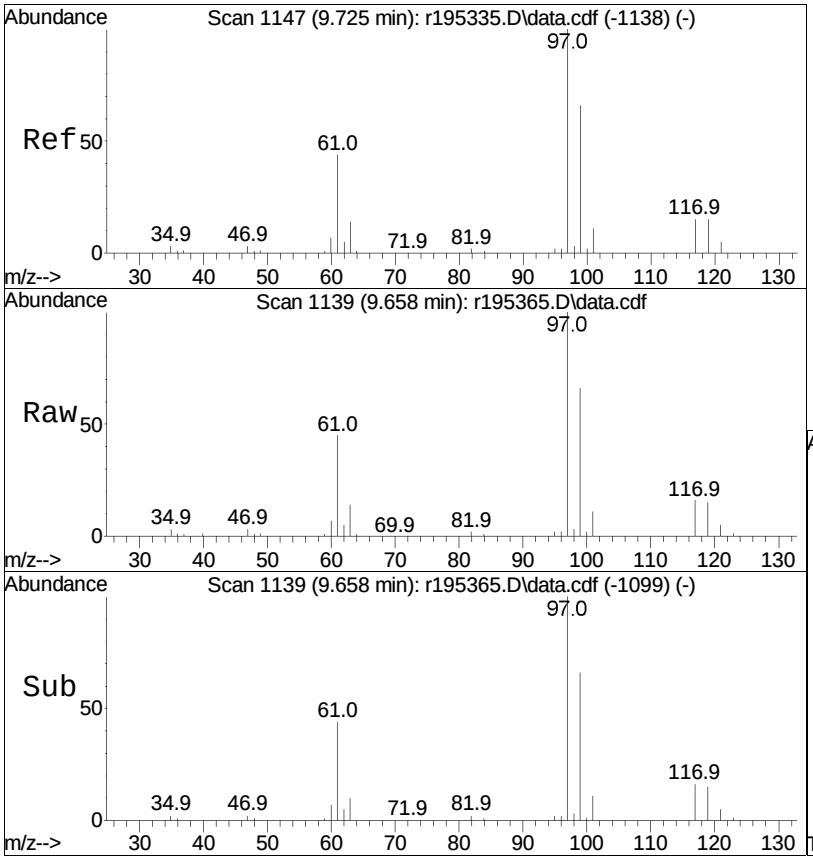


#44
hexane
Concen: 9.87 ppbV
RT: 8.63 min Scan# 1016
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 57 Resp: 342878

Ion	Ratio	Lower	Upper
57	100		
43	292.1	217.9	326.9
86	20.3	16.2	24.2

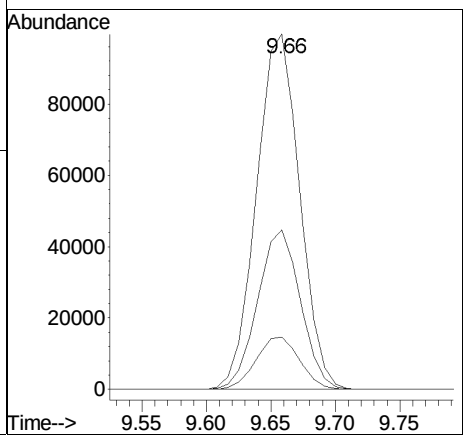


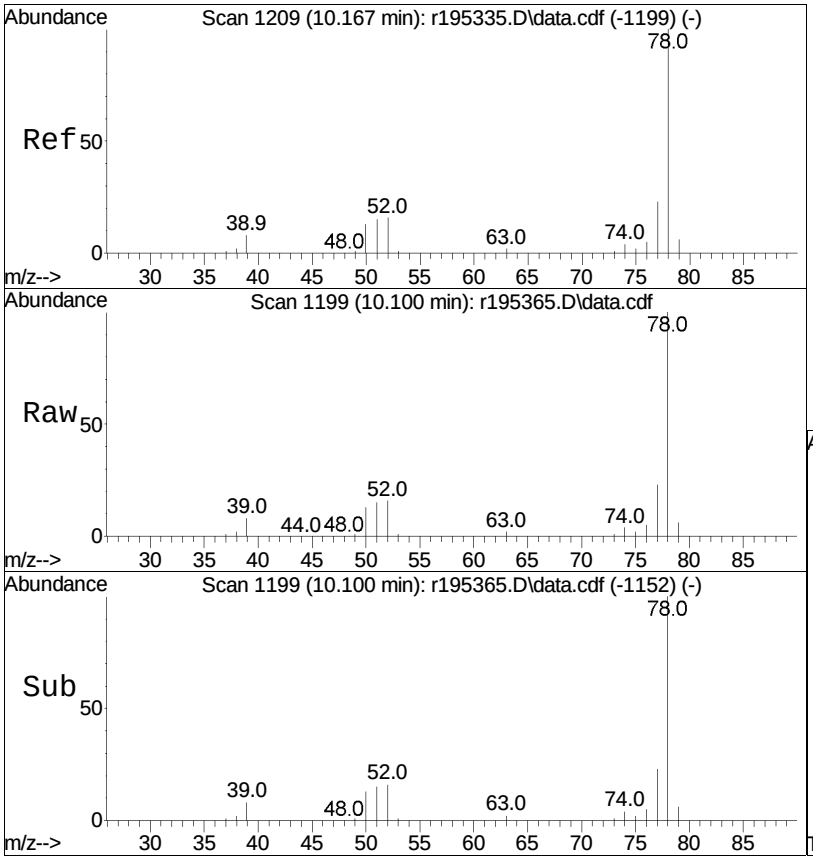


#48
1,1,1-trichloroethane
Concen: 9.27 ppbV
RT: 9.66 min Scan# 1139
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 97 Resp: 232083

Ion	Ratio	Lower	Upper
97	100		
61	44.9	35.4	53.0
119	14.8	11.7	17.5

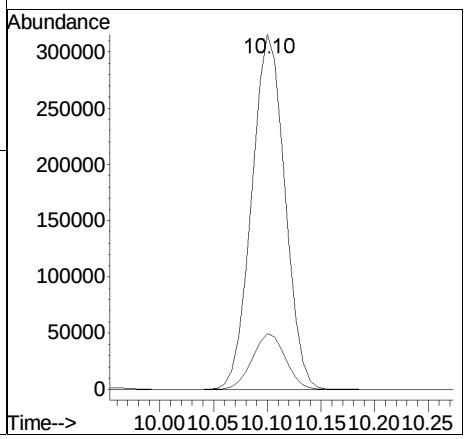


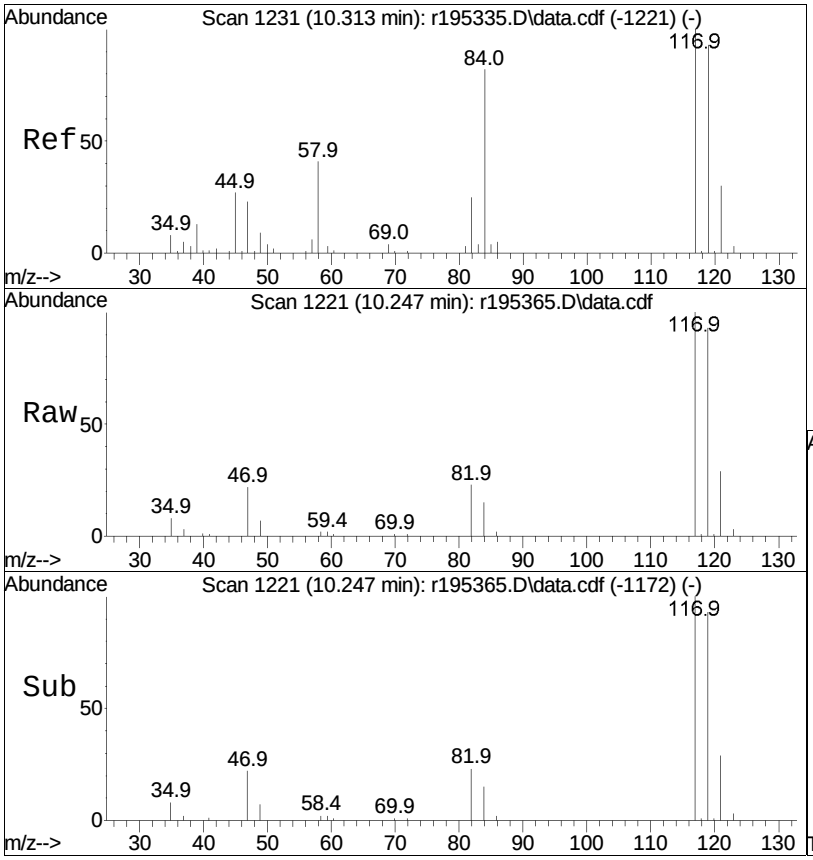


#50
benzene
Concen: 9.35 ppbV
RT: 10.10 min Scan# 1199
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 78 Resp: 676845

Ion	Ratio	Lower	Upper
78	100		
52	15.7	12.6	19.0

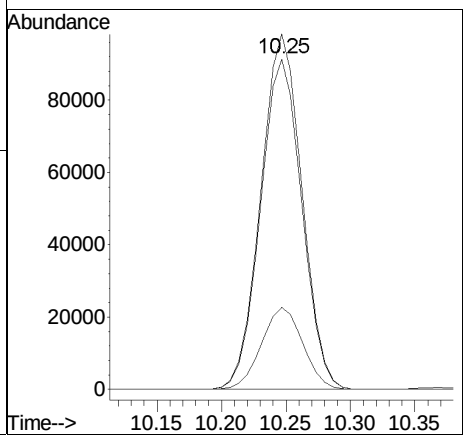


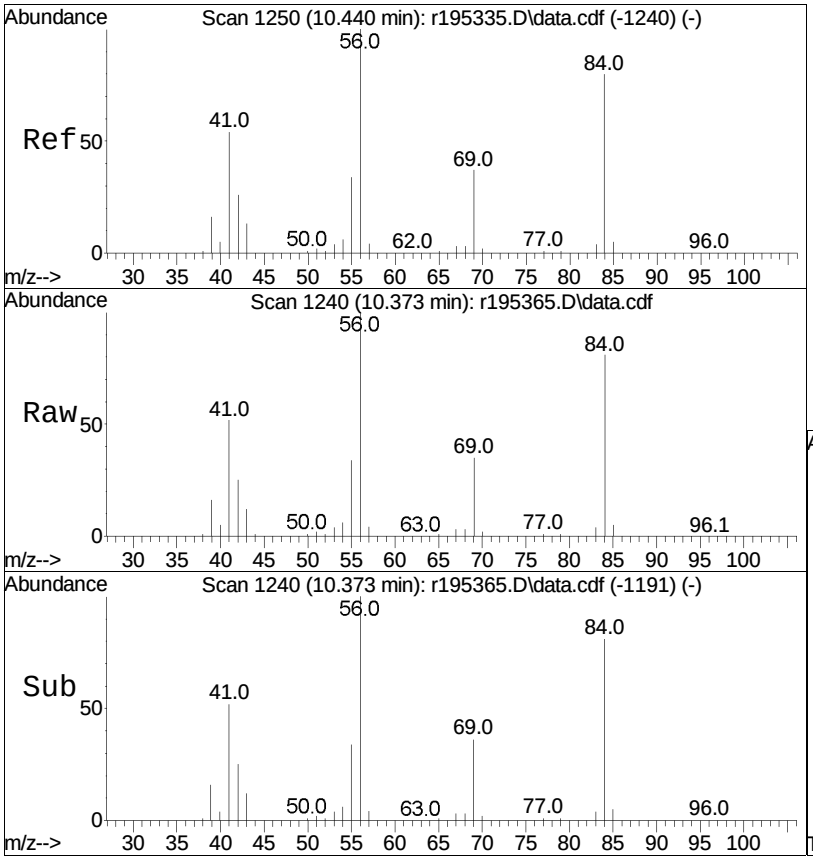


#52
carbon tetrachloride
Concen: 10.23 ppbV
RT: 10.25 min Scan# 1221
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:117 Resp: 217960

Ion	Ratio	Lower	Upper
117	100		
119	92.9	74.2	111.2
82	23.1	19.9	29.9

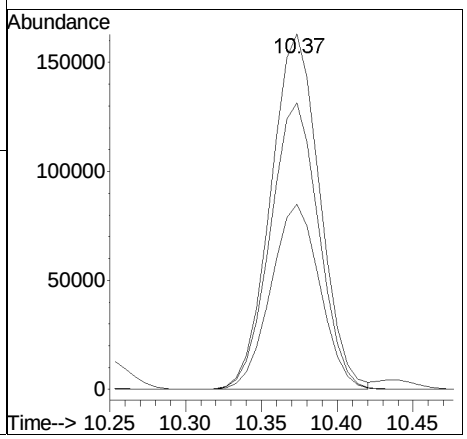


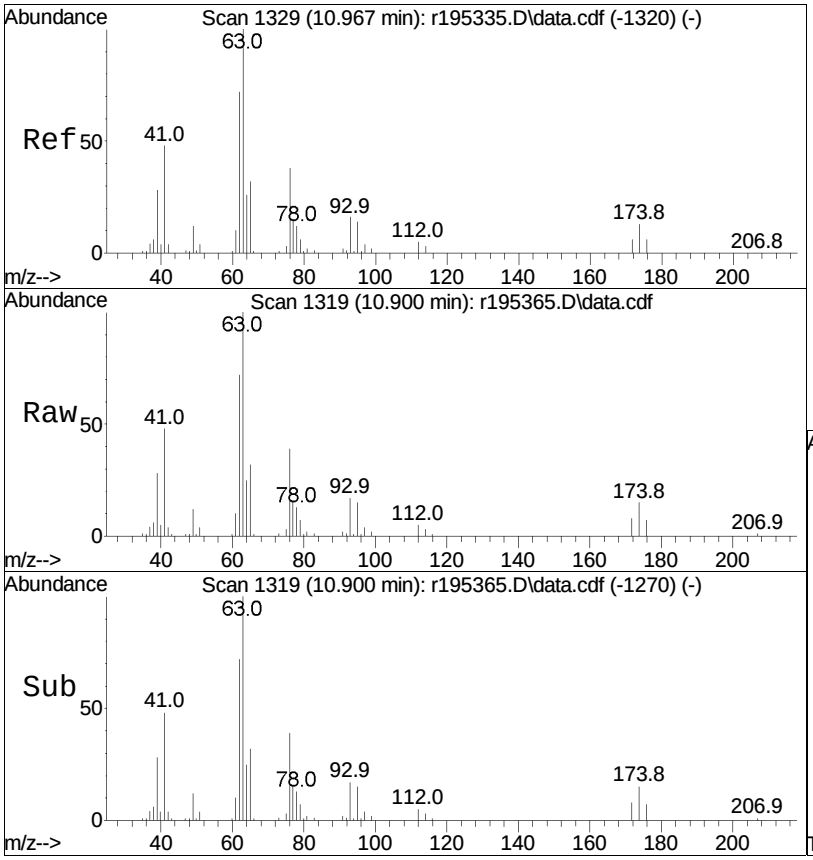


#53
cyclohexane
Concen: 9.79 ppbV
RT: 10.37 min Scan# 1240
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 56 Resp: 366558

Ion	Ratio	Lower	Upper
56	100		
84	80.6	64.2	96.4
41	52.1	42.9	64.3

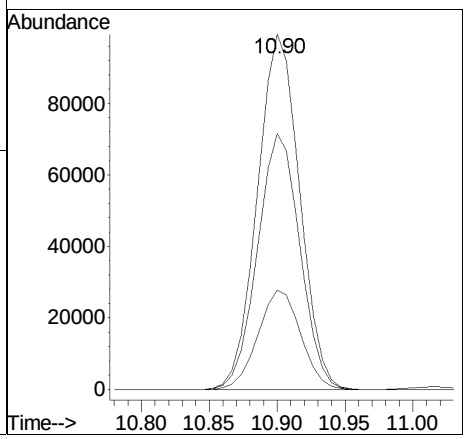


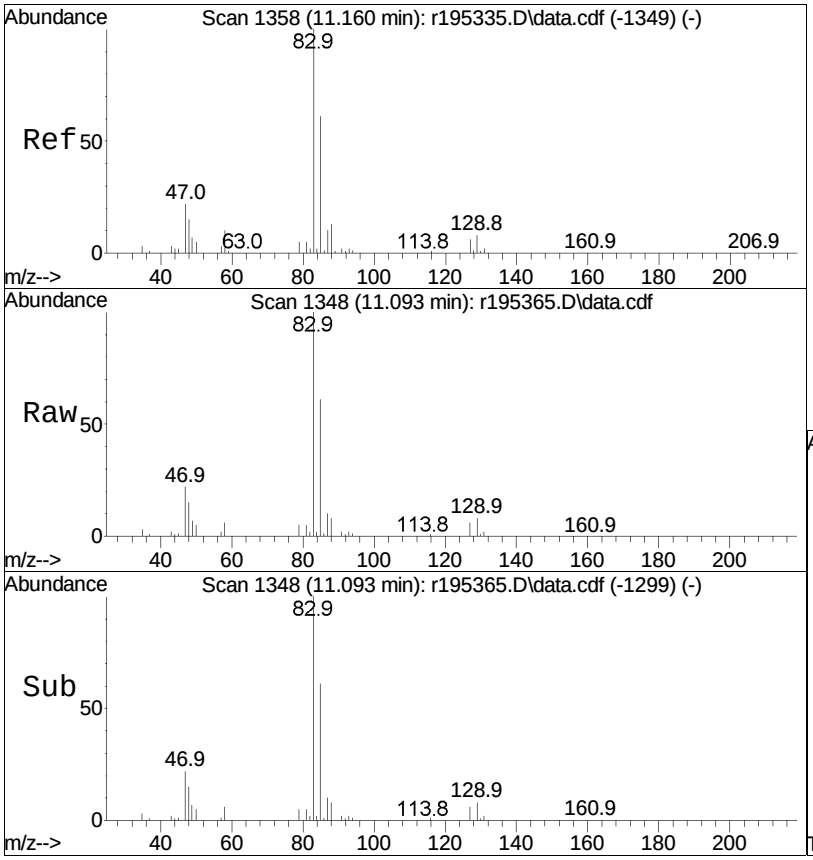


#56
1,2-dichloropropane
Concen: 9.73 ppbV
RT: 10.90 min Scan# 1319
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 63 Resp: 214817

Ion	Ratio	Lower	Upper
63	100		
62	72.0	57.8	86.6
39	28.0	22.3	33.5

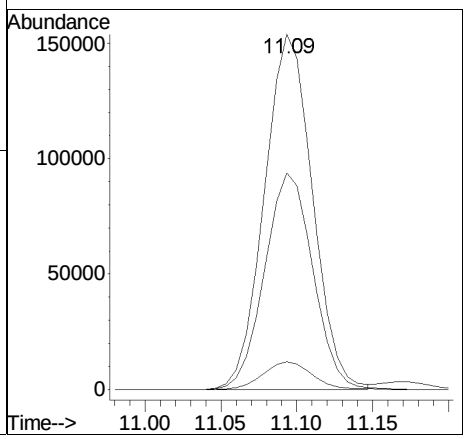


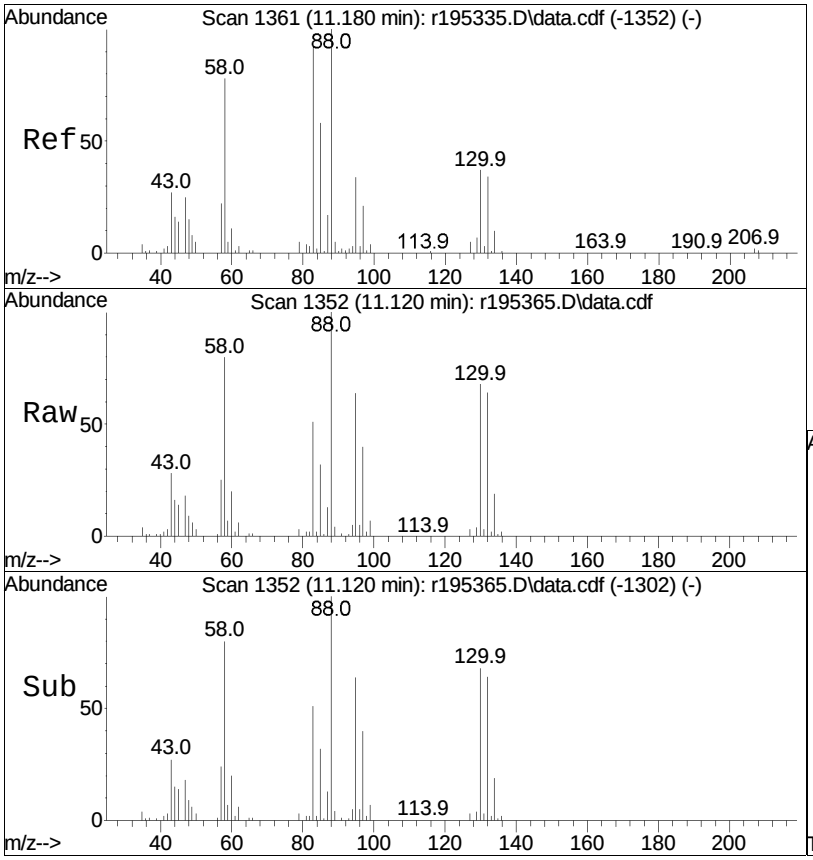


#57
bromodichloromethane
Concen: 10.16 ppbV
RT: 11.09 min Scan# 1348
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 83 Resp: 338783

Ion	Ratio	Lower	Upper
83	100		
85	61.0	49.0	73.4
129	7.8	6.3	9.5

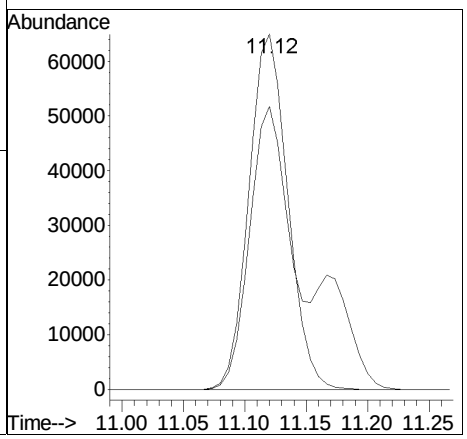


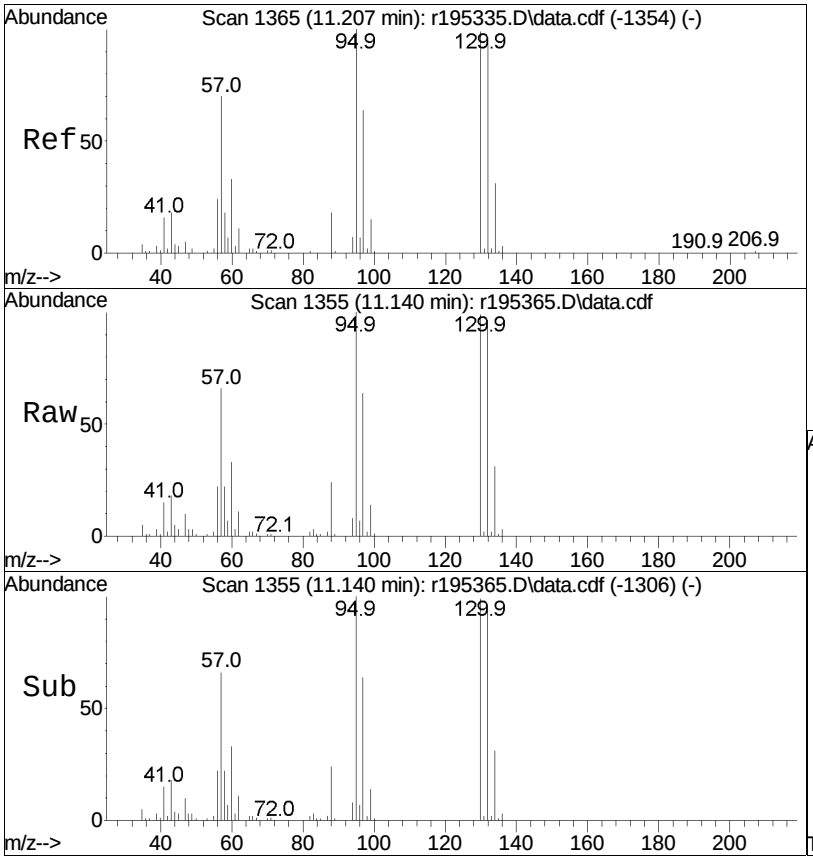


#58
1,4-dioxane
Concen: 9.84 ppbV
RT: 11.12 min Scan# 1352
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 88 Resp: 143085

Ion	Ratio	Lower	Upper
88	100		
58	79.7	62.1	93.1

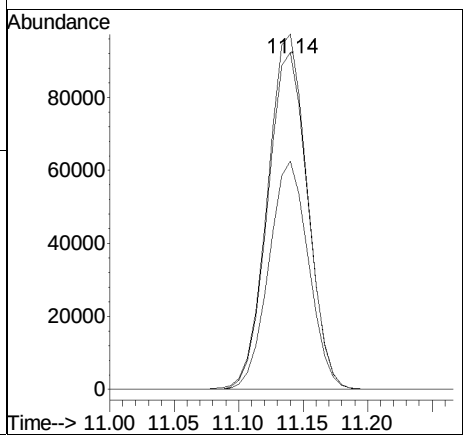


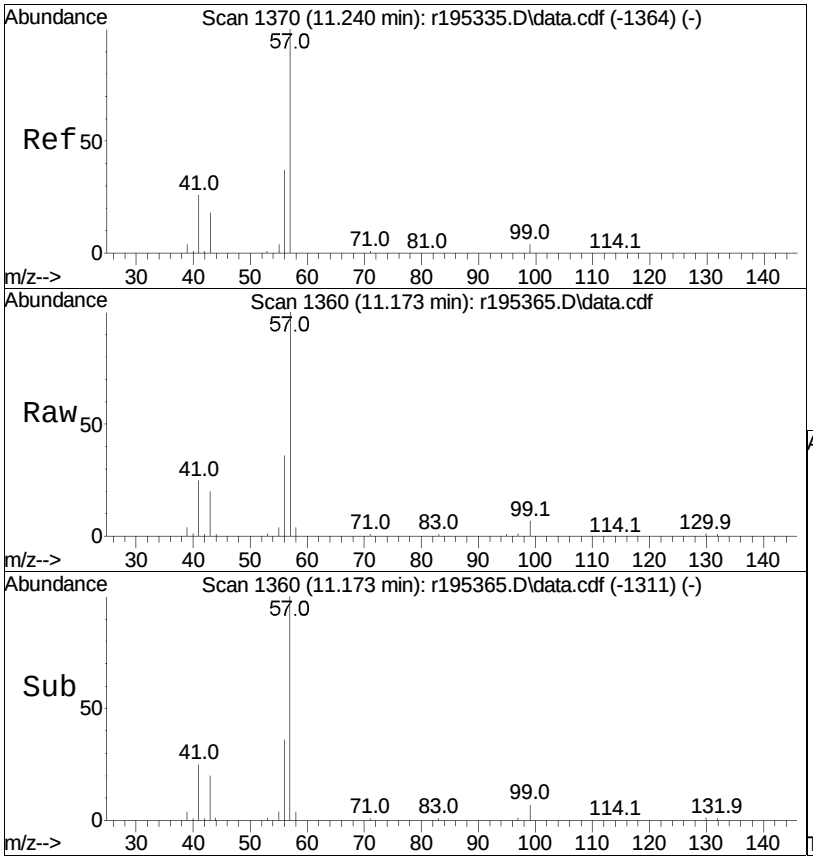


#59
trichloroethene
Concen: 9.64 ppbV
RT: 11.14 min Scan# 1355
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:130 Resp: 209578

Ion	Ratio	Lower	Upper
130	100		
132	94.8	77.2	115.8
97	64.2	52.3	78.5

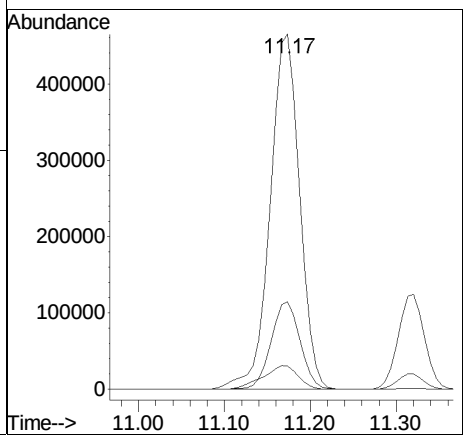


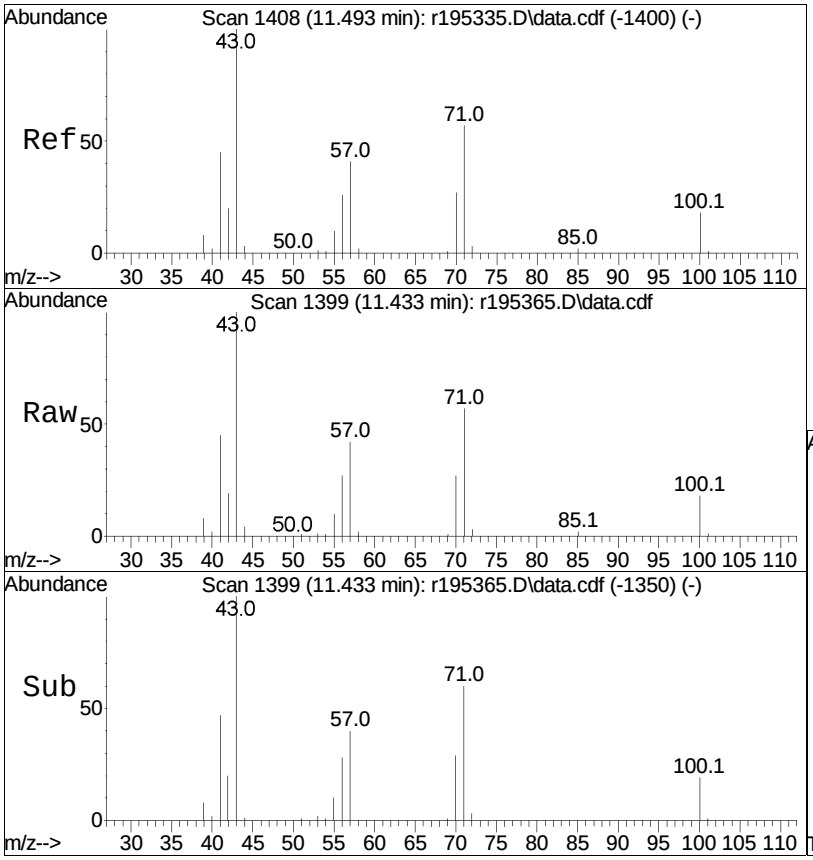


#60
2,2,4-trimethylpentane
Concen: 10.19 ppbV
RT: 11.17 min Scan# 1360
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 57 Resp: 1110281

Ion	Ratio	Lower	Upper
57	100		
99	6.6	5.3	7.9
41	24.7	20.4	30.6

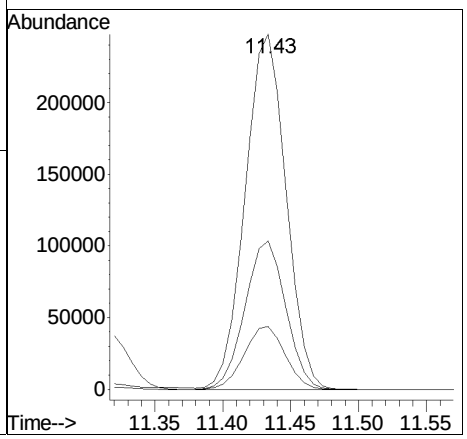


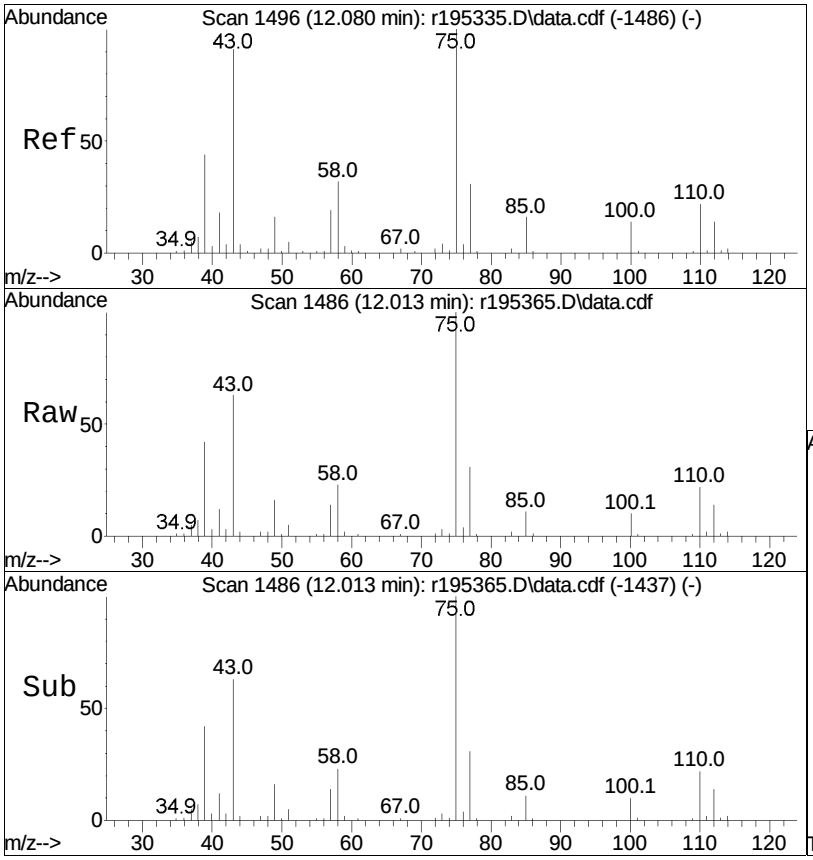


#62
heptane
Concen: 9.84 ppbV
RT: 11.43 min Scan# 1399
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 43 Resp: 518130

Ion	Ratio	Lower	Upper
43	100		
57	41.8	32.5	48.7
100	17.7	14.3	21.5

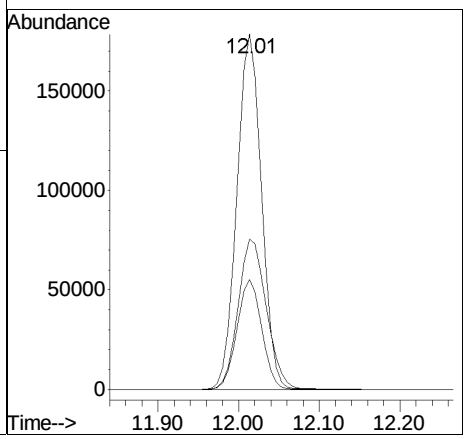


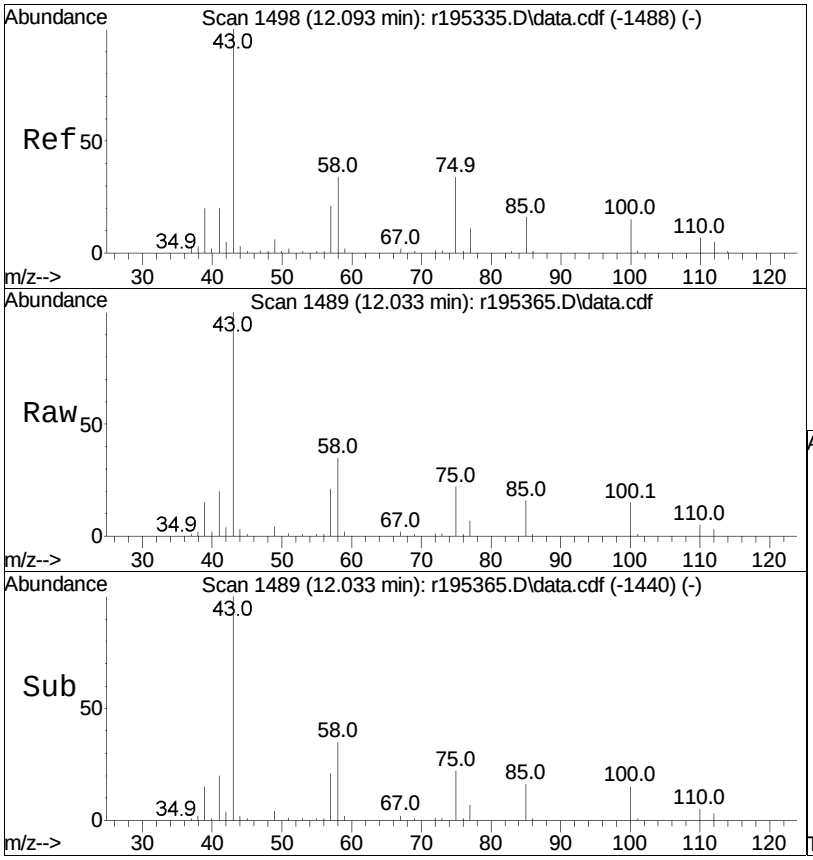


#63
cis-1,3-dichloropropene
Concen: 10.73 ppbV
RT: 12.01 min Scan# 1486
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 75 Resp: 379603

Ion	Ratio	Lower	Upper
75	100		
39	42.3	35.3	52.9
77	31.0	24.7	37.1

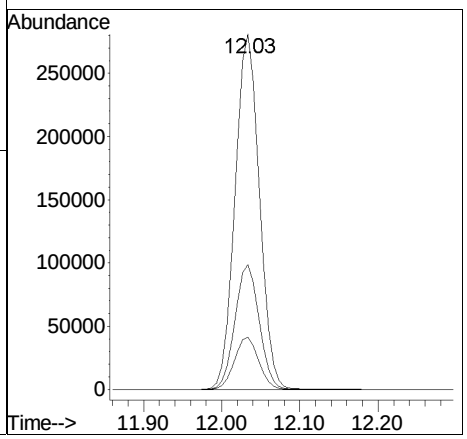


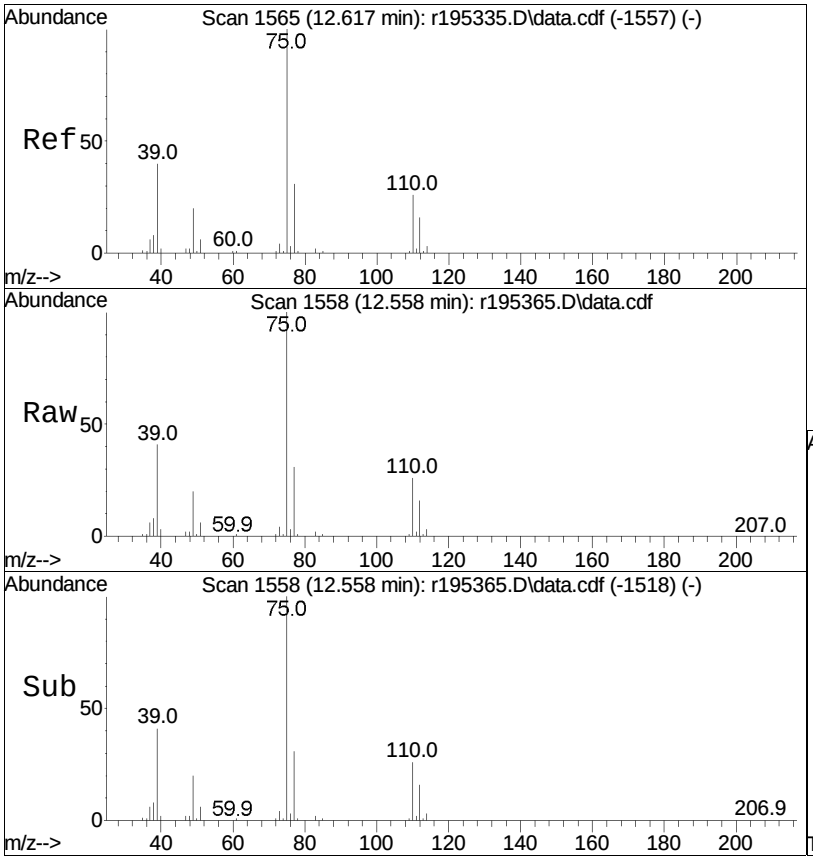


#64
4-methyl-2-pentanone
Concen: 10.22 ppbV
RT: 12.03 min Scan# 1489
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 43 Resp: 607546

Ion	Ratio	Lower	Upper
43	100		
58	35.1	27.5	41.3
100	14.7	11.9	17.9

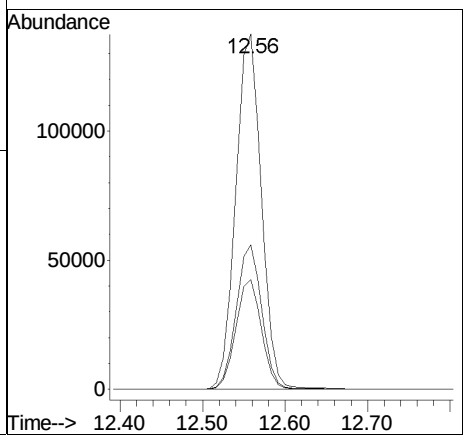


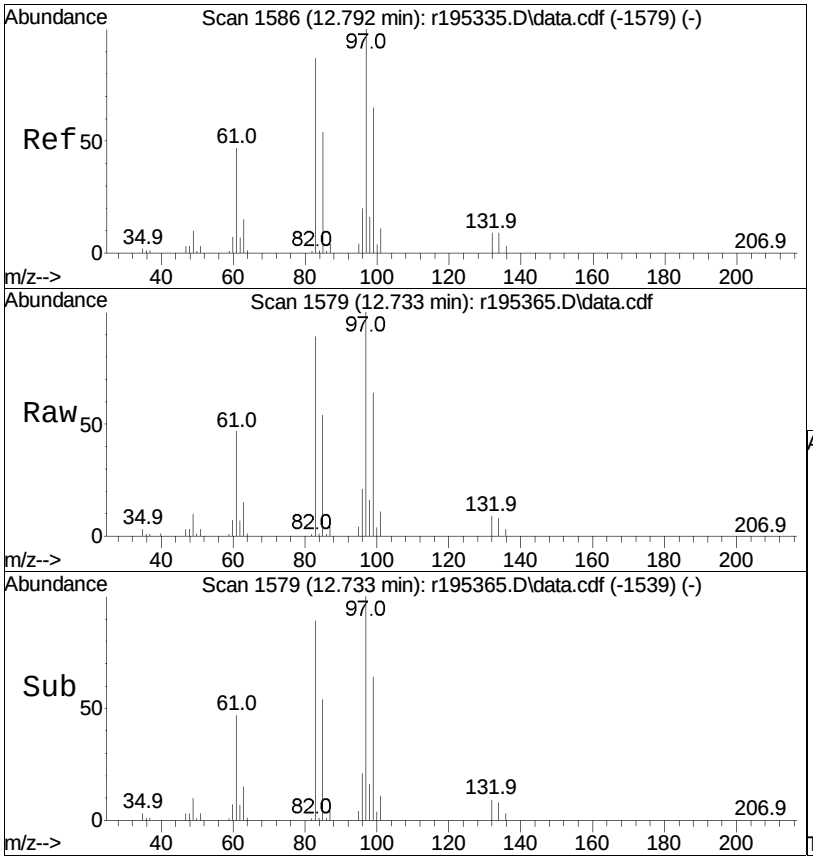


#65
trans-1,3-dichloropropene
Concen: 9.23 ppbV
RT: 12.56 min Scan# 1558
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 75 Resp: 298094

Ion	Ratio	Lower	Upper
75	100		
77	30.9	24.6	36.8
39	40.7	31.8	47.8

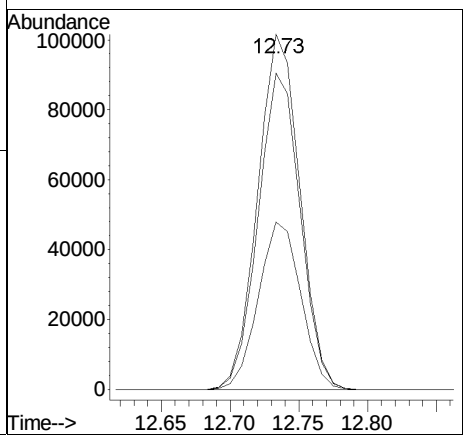


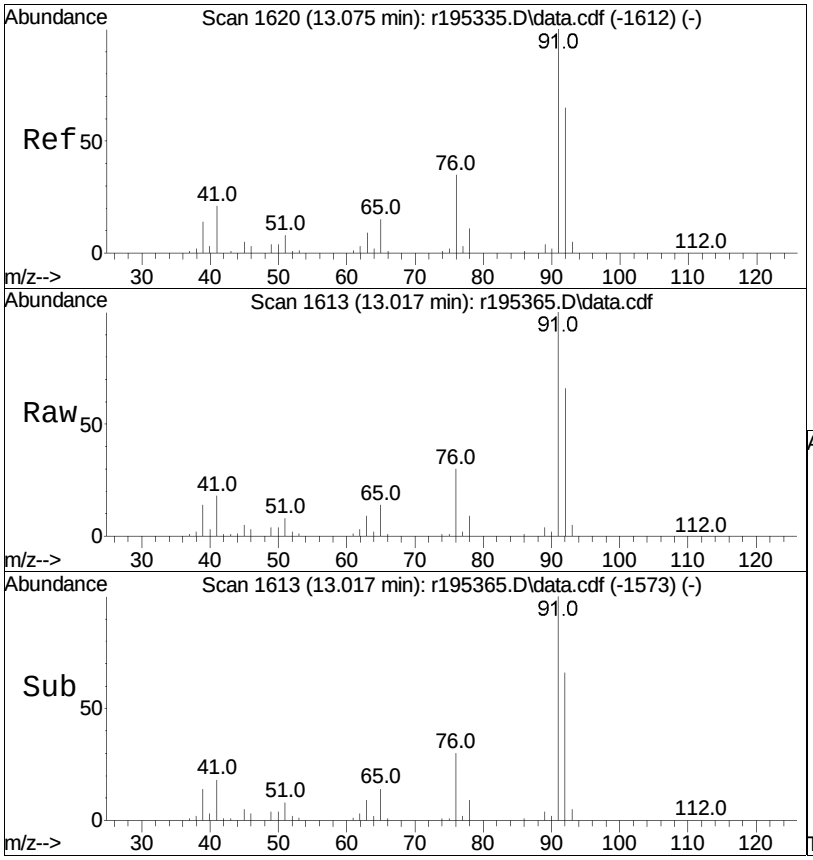


#66
1,1,2-trichloroethane
Concen: 9.91 ppbV
RT: 12.73 min Scan# 1579
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 97 Resp: 216547

Ion	Ratio	Lower	Upper
97	100		
83	89.0	69.9	104.9
61	47.1	37.4	56.0

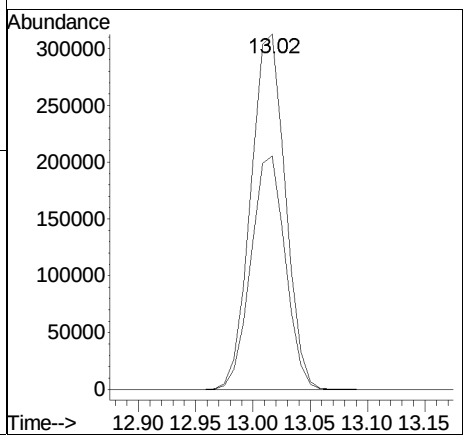


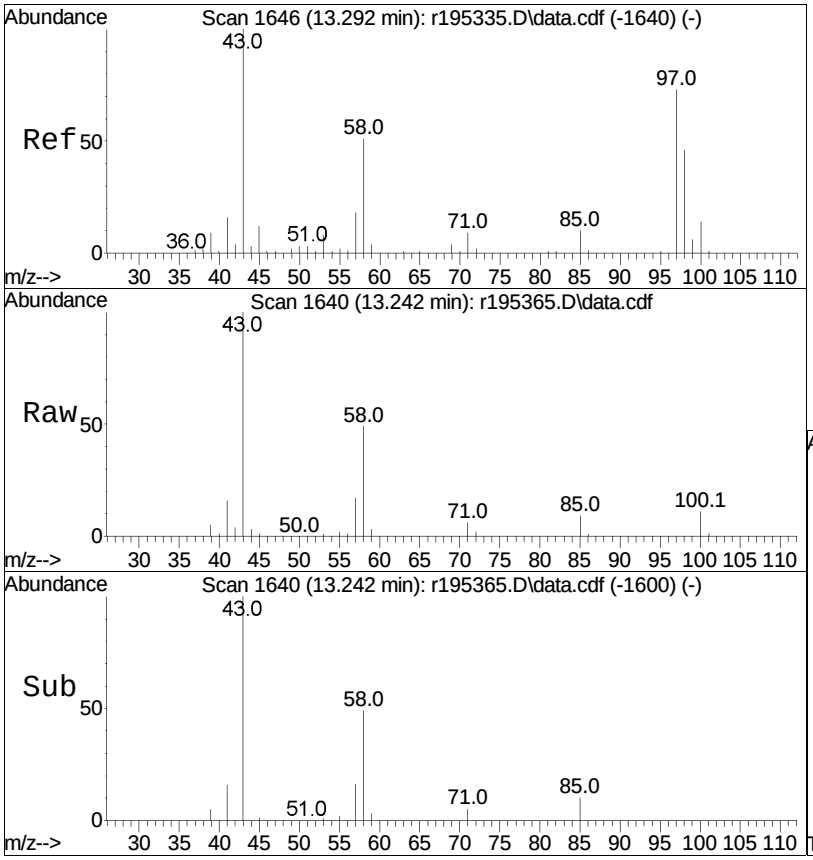


#68
toluene
Concen: 9.13 ppbV
RT: 13.02 min Scan# 1613
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 91 Resp: 654658

Ion	Ratio	Lower	Upper
91	100		
92	65.6	52.1	78.1

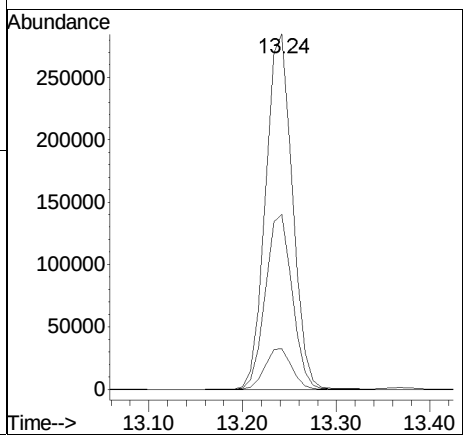


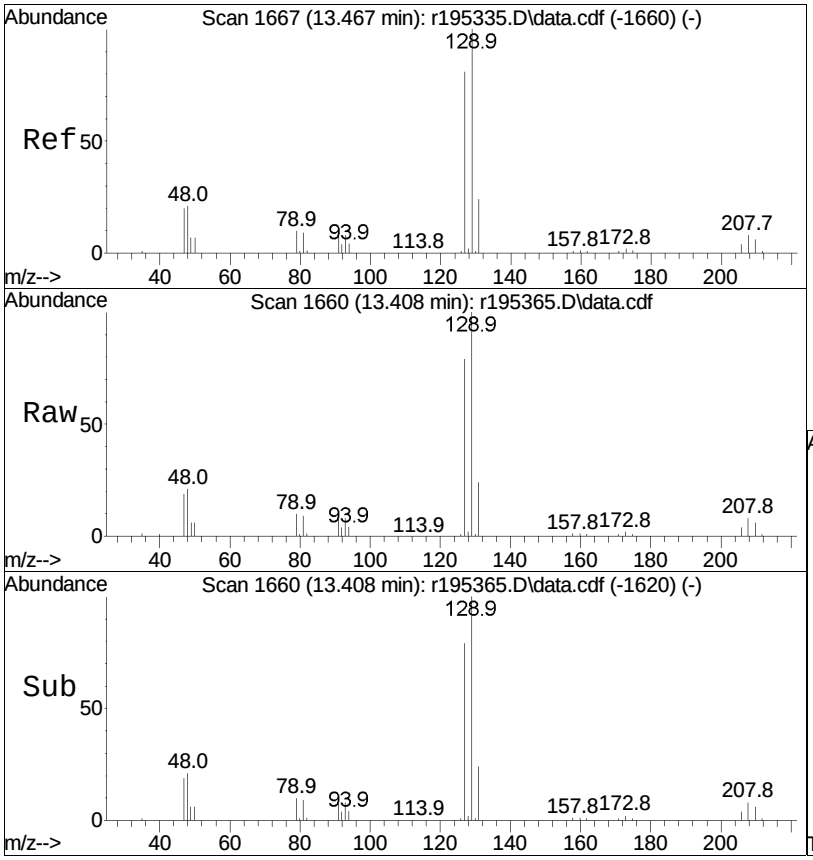


#72
2-hexanone
Concen: 10.15 ppbV
RT: 13.24 min Scan# 1640
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 43 Resp: 567482

Ion	Ratio	Lower	Upper
43	100		
58	49.2	40.7	61.1
100	11.5	10.9	16.3

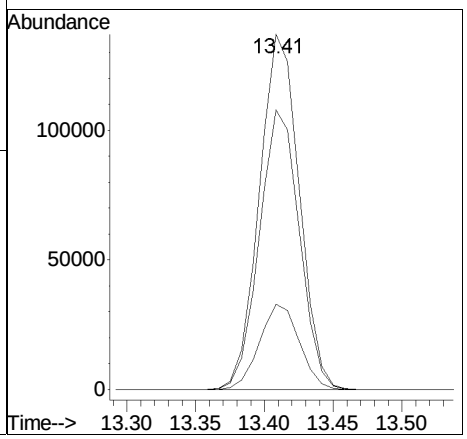


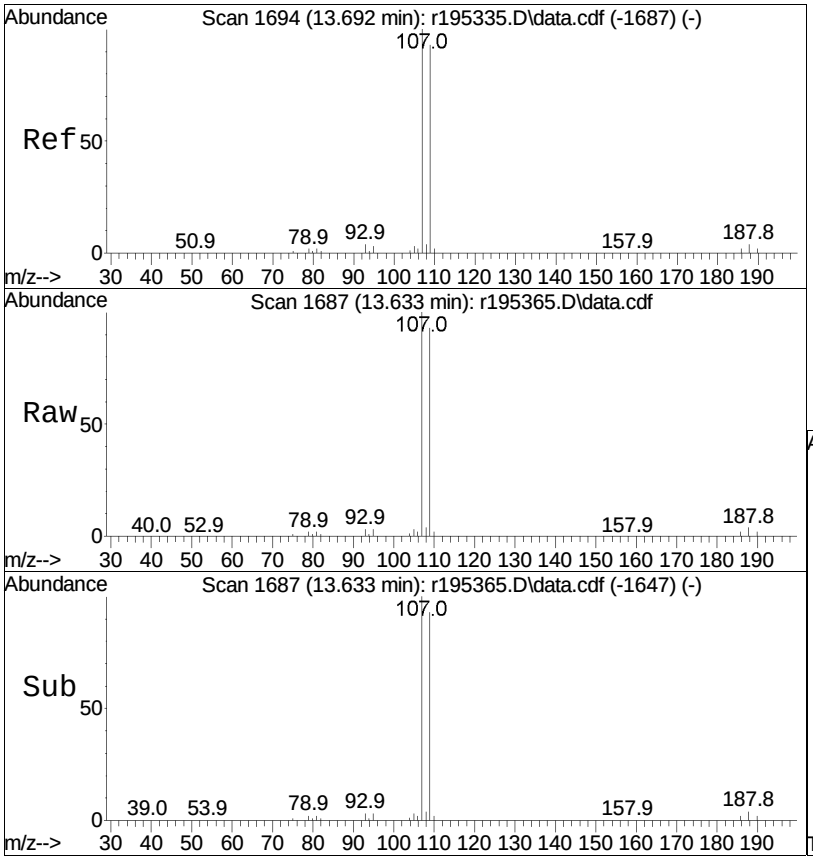


#74
dibromochloromethane
Concen: 10.10 ppbV
RT: 13.41 min Scan# 1660
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:129 Resp: 276497

Ion	Ratio	Lower	Upper
129	100		
127	78.7	64.6	96.8
131	24.0	19.3	28.9

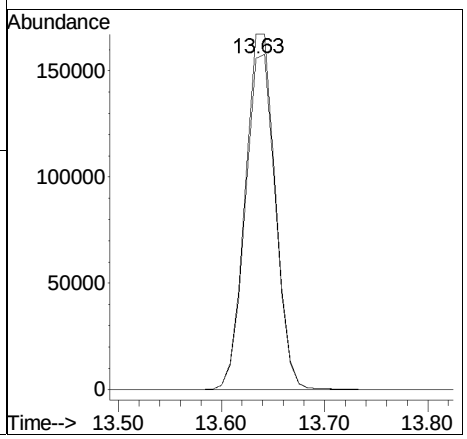


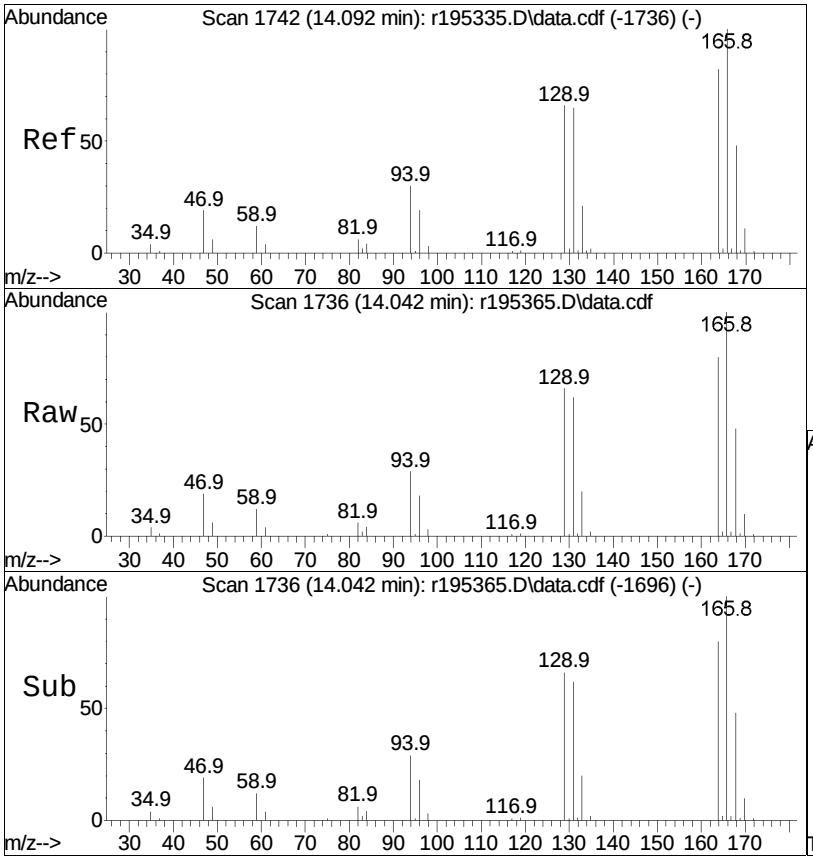


#75
1,2-dibromoethane
Concen: 10.03 ppbV
RT: 13.63 min Scan# 1687
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:107 Resp: 340827

Ion	Ratio	Lower	Upper
107	100		
109	93.2	74.0	111.0

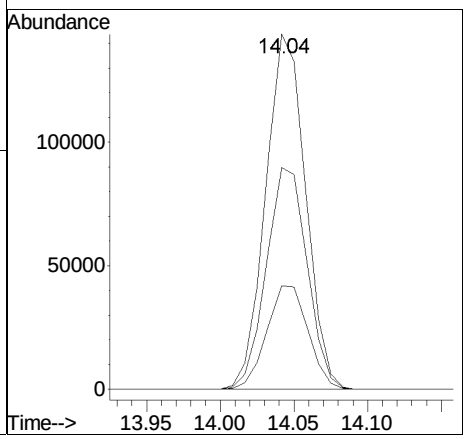


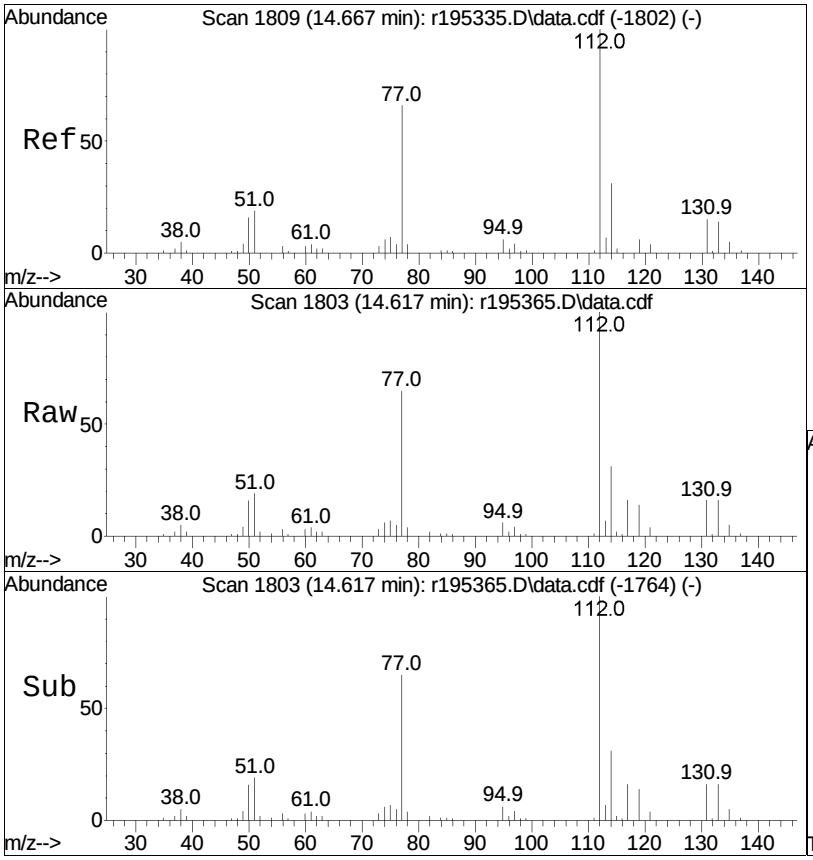


#78
tetrachloroethene
Concen: 9.87 ppbV
RT: 14.04 min Scan# 1736
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:166 Resp: 270987

Ion	Ratio	Lower	Upper
166	100		
131	62.4	51.7	77.5
94	29.2	24.0	36.0

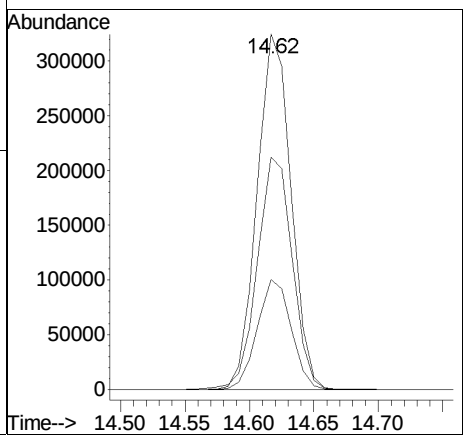


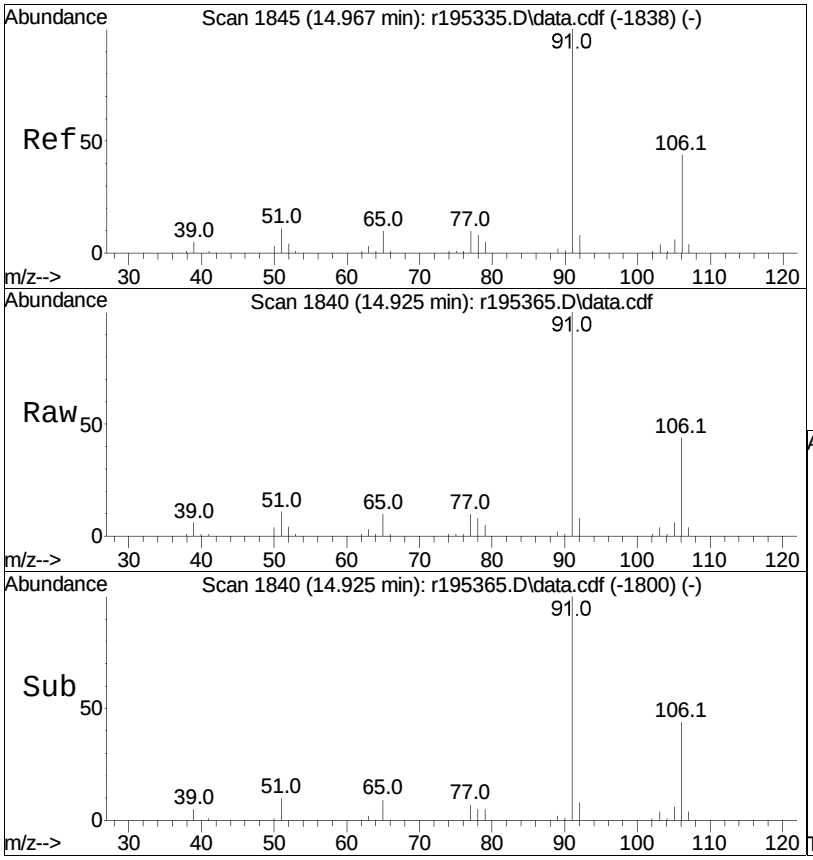


#80
chlorobenzene
Concen: 10.29 ppbV
RT: 14.62 min Scan# 1803
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:112 Resp: 594216

Ion	Ratio	Lower	Upper
112	100		
114	30.9	24.6	36.8
77	65.4	53.0	79.4

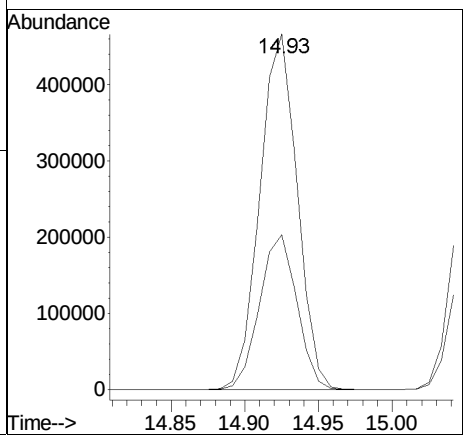


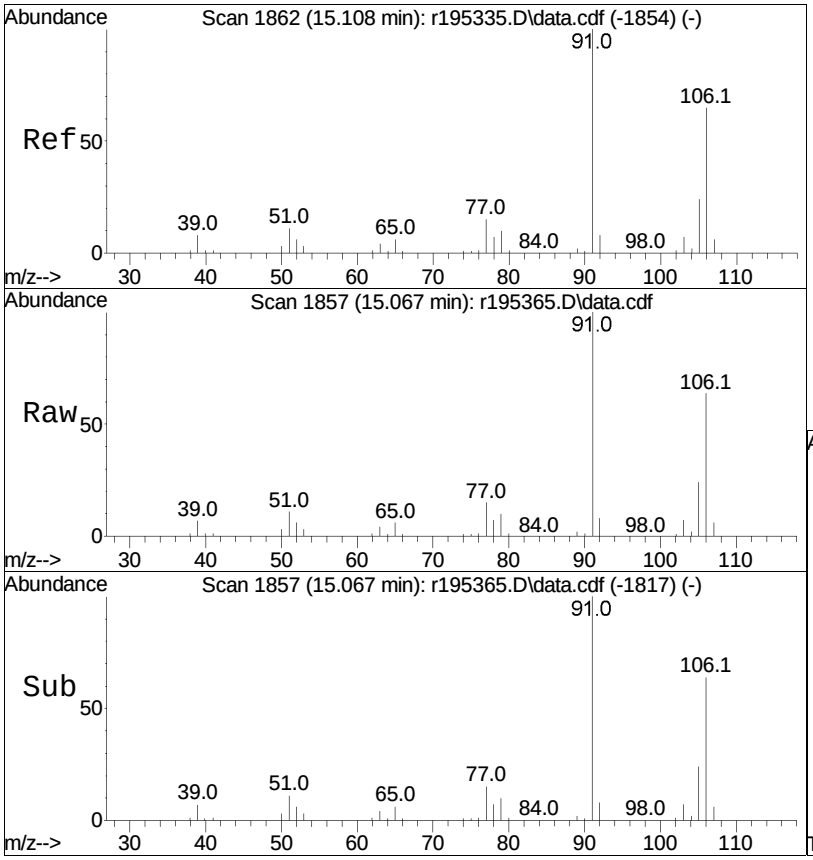


#81
ethylbenzene
Concen: 9.88 ppbV
RT: 14.93 min Scan# 1840
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 91 Resp: 820154

Ion	Ratio	Lower	Upper
91	100		
106	43.5	34.8	52.2

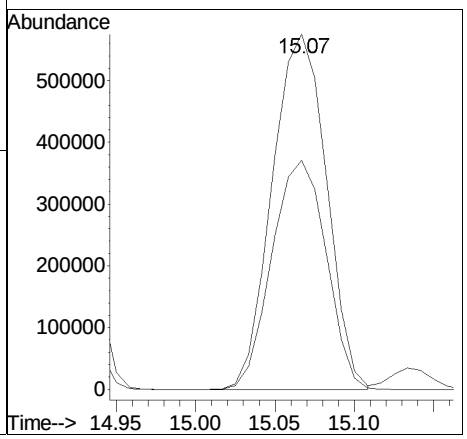


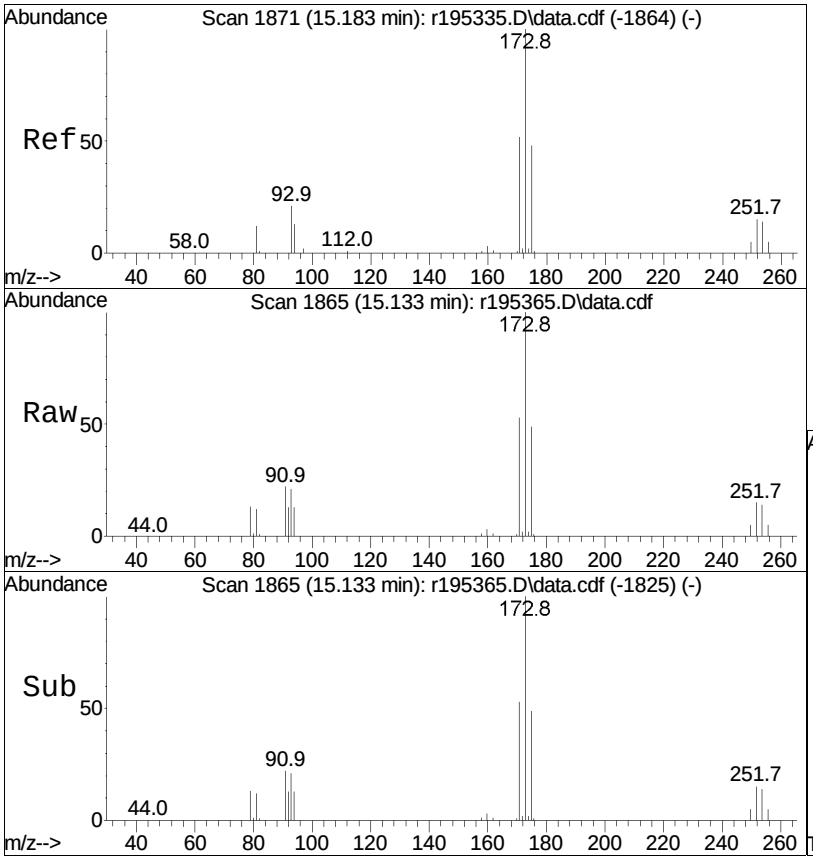


#83
m+p-xylene
Concen: 20.16 ppbV
RT: 15.07 min Scan# 1857
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 91 Resp: 1366702

Ion	Ratio	Lower	Upper
91	100		
106	64.5	51.8	77.6

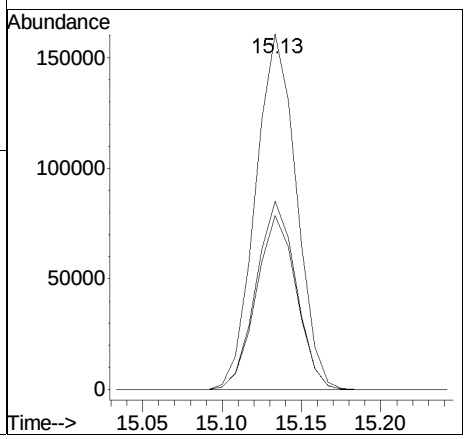


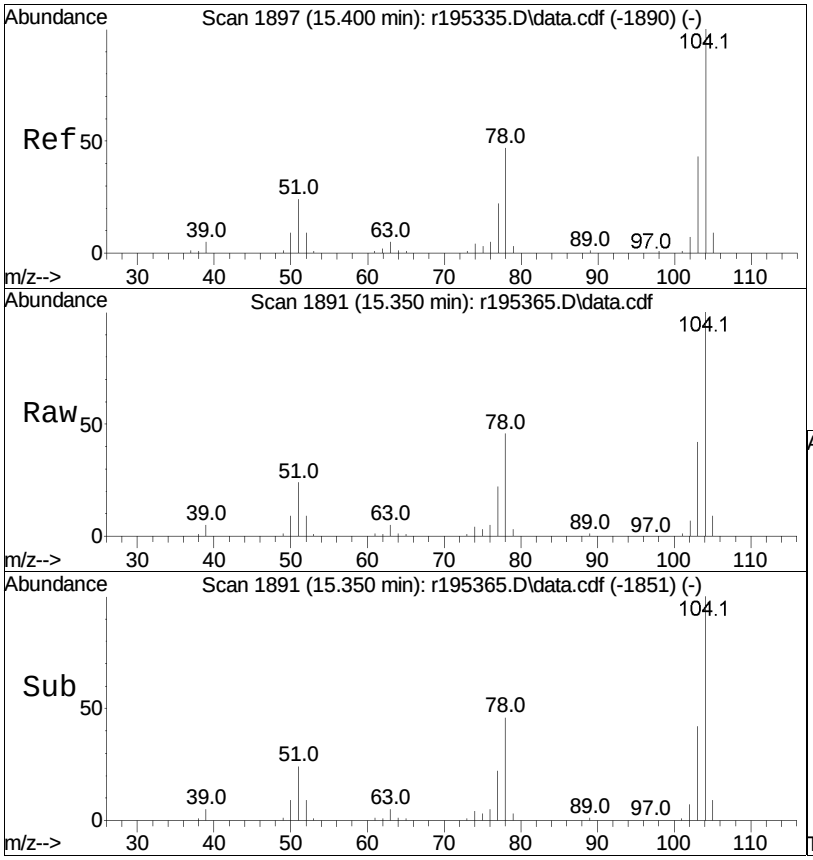


#84
bromoform
Concen: 10.48 ppbV
RT: 15.13 min Scan# 1865
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:173 Resp: 287873

Ion	Ratio	Lower	Upper
173	100		
175	48.9	38.5	57.7
171	52.9	41.4	62.0

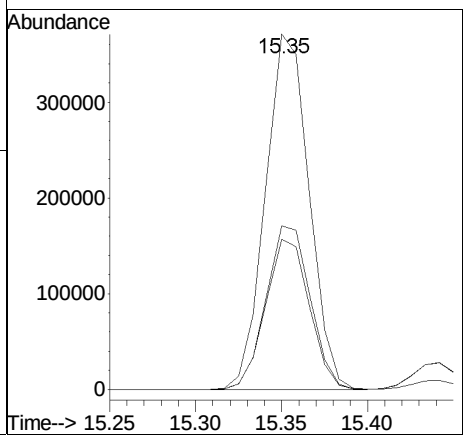


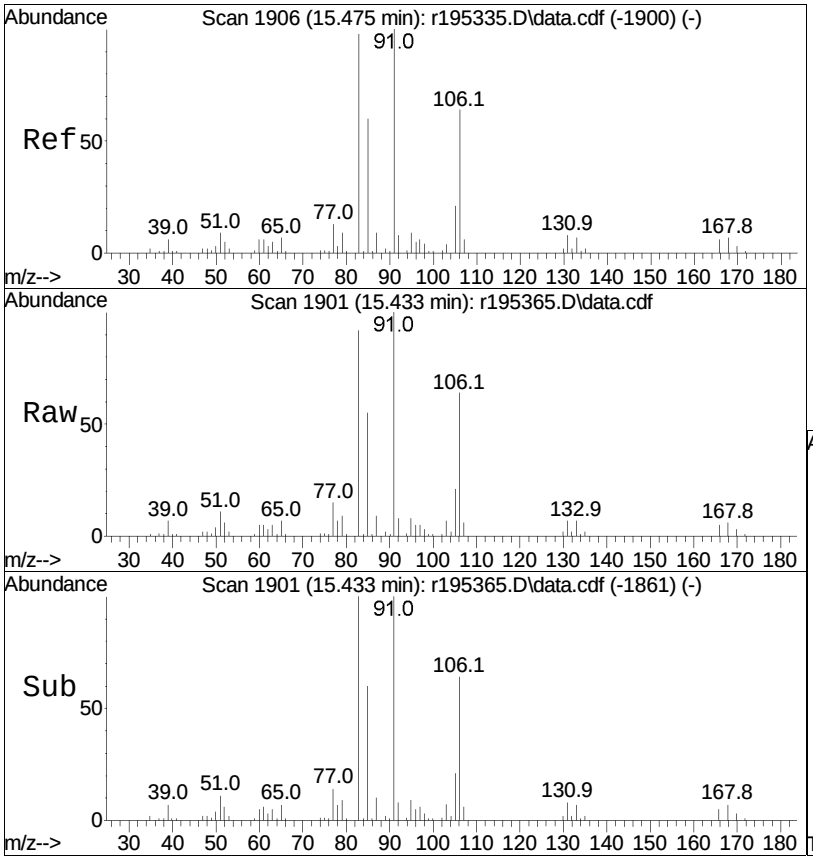


#85
styrene
Concen: 10.48 ppbV
RT: 15.35 min Scan# 1891
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:104 Resp: 655771

Ion	Ratio	Lower	Upper
104	100		
103	42.3	34.6	52.0
78	46.1	37.7	56.5

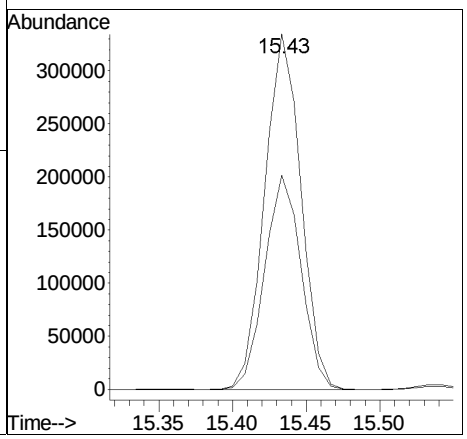


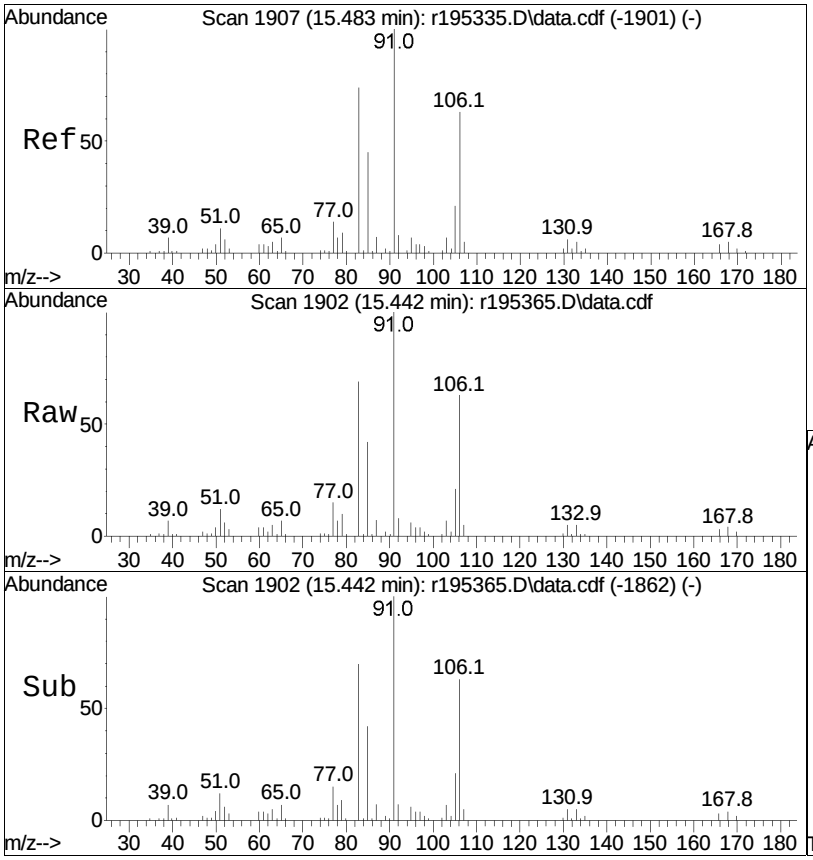


#86
1,1,2,2-tetrachloroethane
Concen: 10.98 ppbV
RT: 15.43 min Scan# 1901
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 83 Resp: 572546

Ion	Ratio	Lower	Upper
83	100		
85	60.3	48.7	73.1

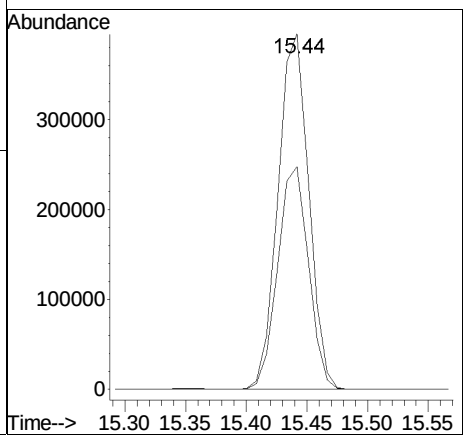


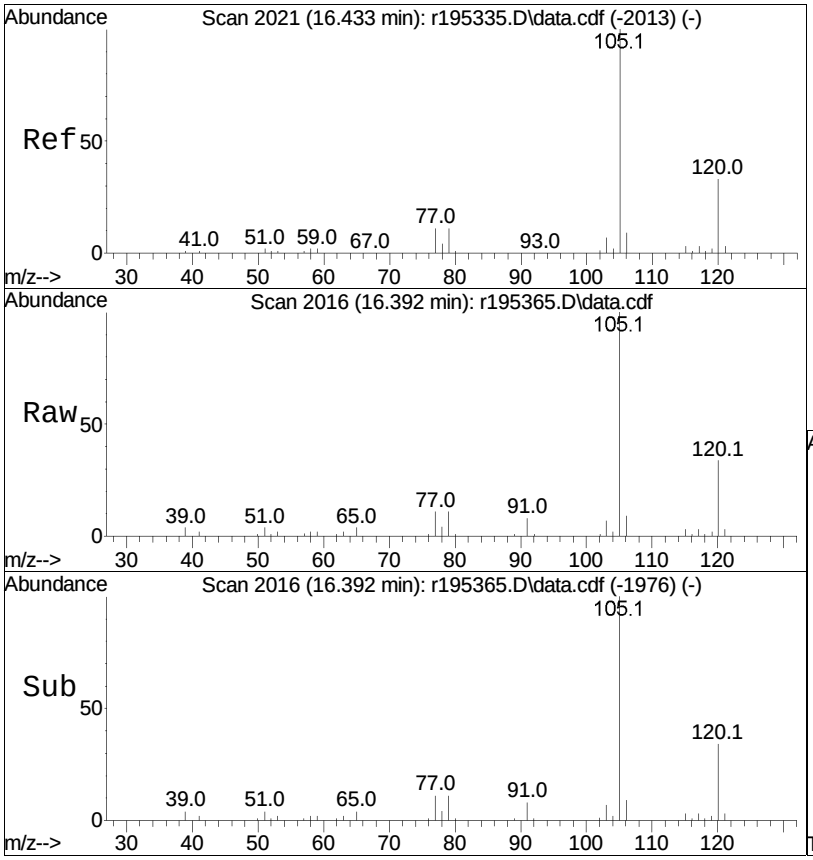


#87
o-xylene
Concen: 10.40 ppbV
RT: 15.44 min Scan# 1902
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 91 Resp: 696525

Ion	Ratio	Lower	Upper
91	100		
106	62.7	50.2	75.4

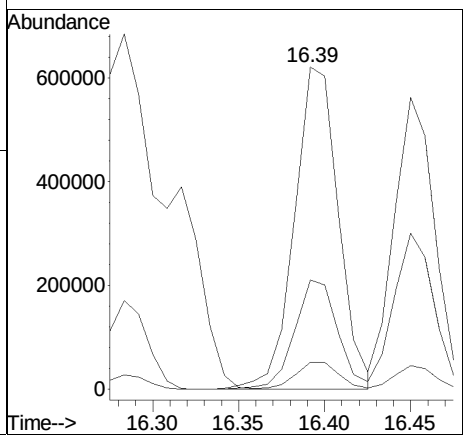


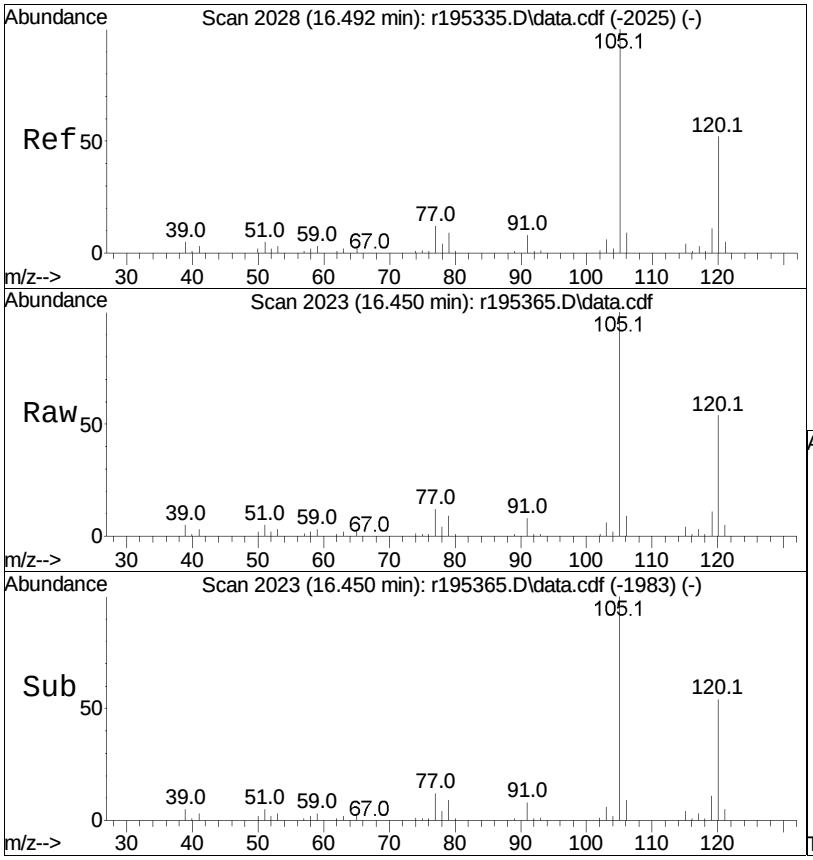


#96
4-ethyl toluene
Concen: 10.53 ppbV
RT: 16.39 min Scan# 2016
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:105 Resp: 1107232

Ion	Ratio	Lower	Upper
105	100		
120	33.9	26.6	40.0
91	8.4	7.0	10.4

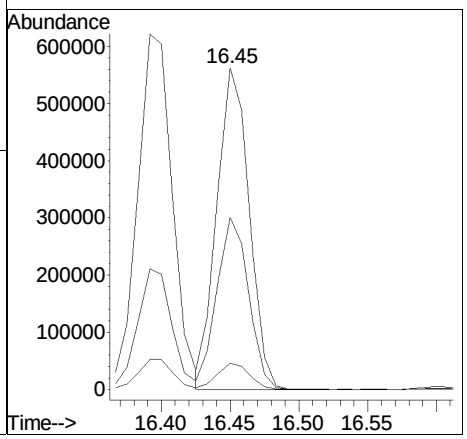


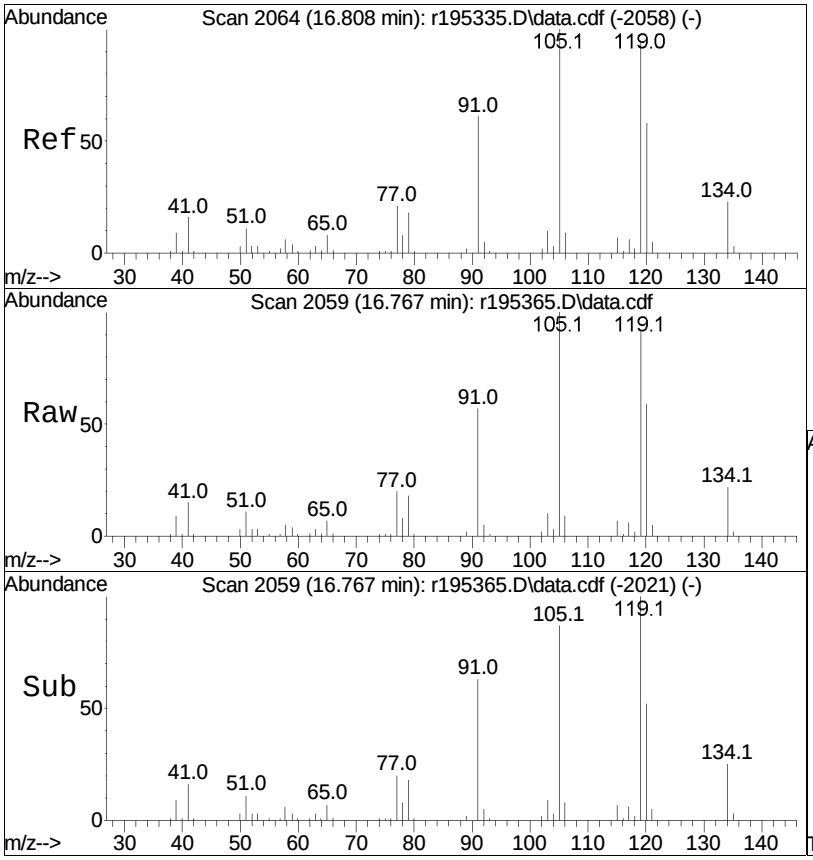


#97
1,3,5-trimethylbenzene
Concen: 10.61 ppbV
RT: 16.45 min Scan# 2023
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:105 Resp: 918723

Ion	Ratio	Lower	Upper
105	100		
120	53.5	41.1	61.7
91	8.2	6.5	9.7

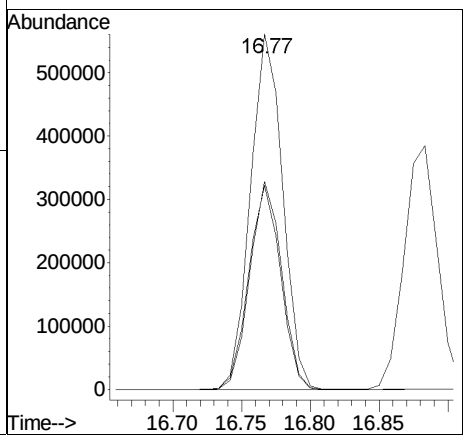


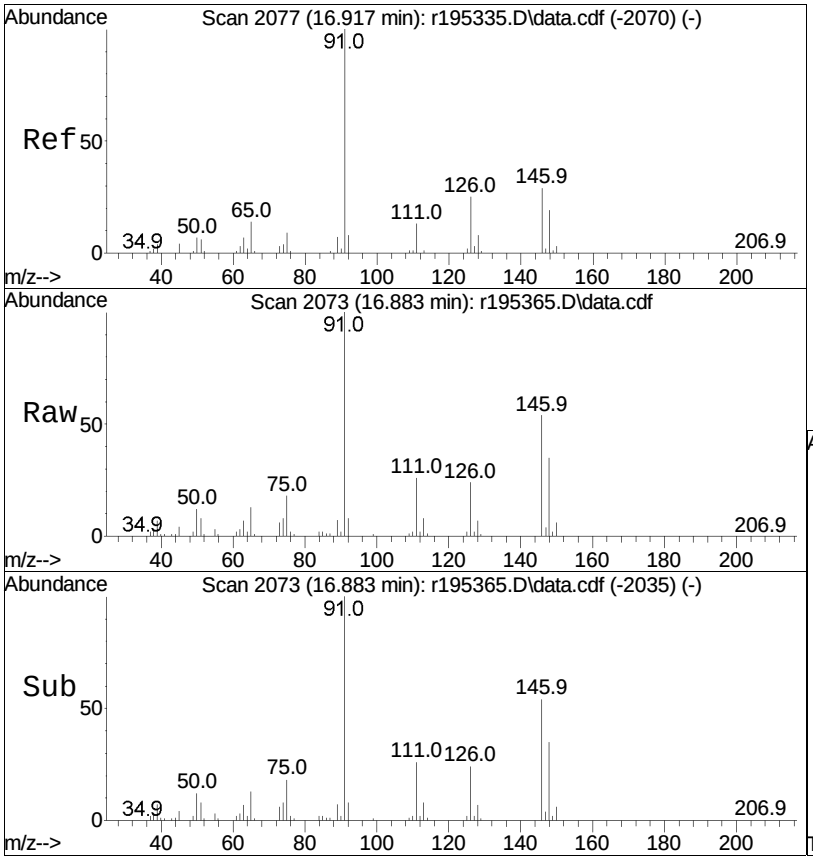


#99
1,2,4-trimethylbenzene
Concen: 11.64 ppbV
RT: 16.77 min Scan# 2059
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:105 Resp: 914429

Ion	Ratio	Lower	Upper
105	100		
120	58.5	46.2	69.4
91	57.4	48.7	73.1

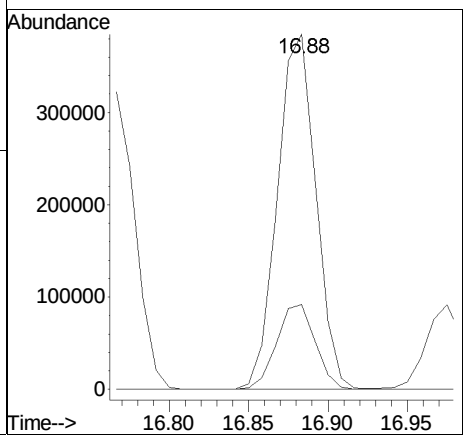


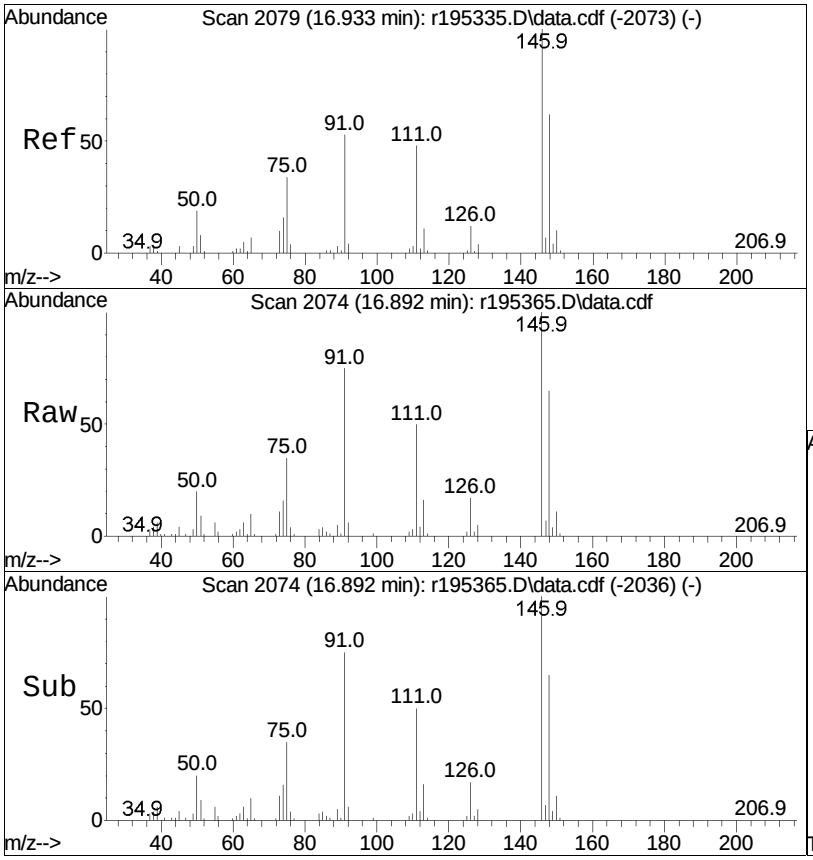


#101
Benzyl Chloride
Concen: 11.97 ppbV
RT: 16.88 min Scan# 2073
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion: 91 Resp: 648036

Ion	Ratio	Lower	Upper
91	100		
126	23.9	19.7	29.5

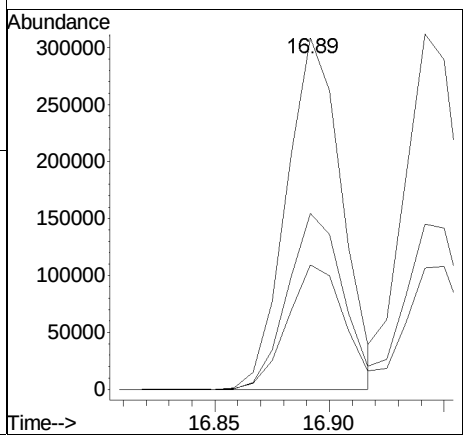


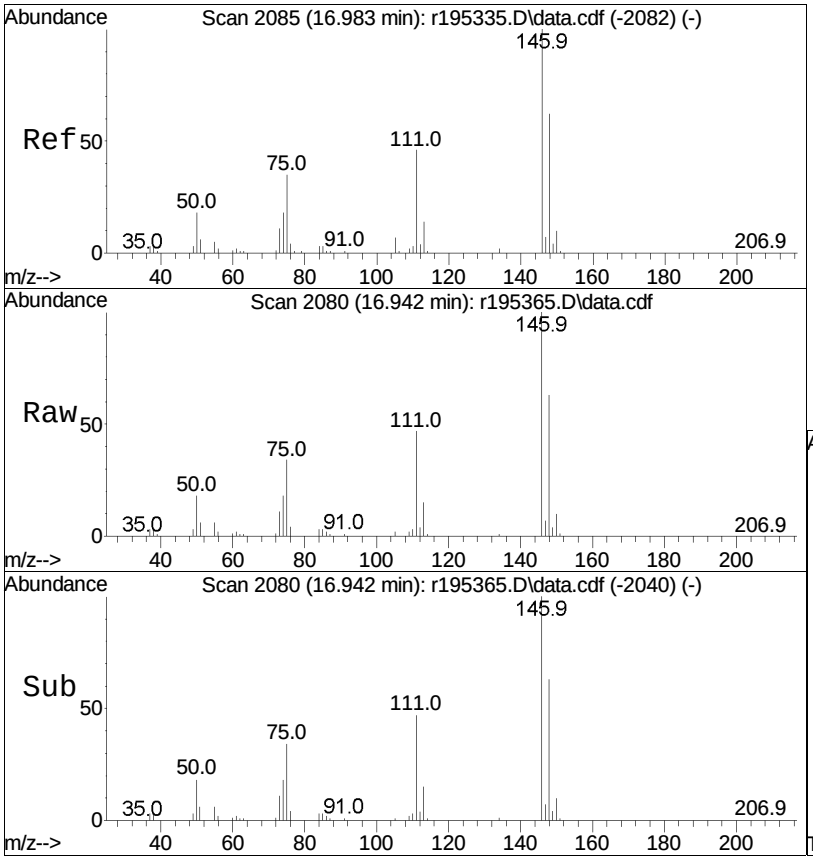


#102
1,3-dichlorobenzene
Concen: 11.03 ppbV
RT: 16.89 min Scan# 2074
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:146 Resp: 517198

Ion	Ratio	Lower	Upper
146	100		
111	50.1	38.1	57.1
75	35.4	27.4	41.2

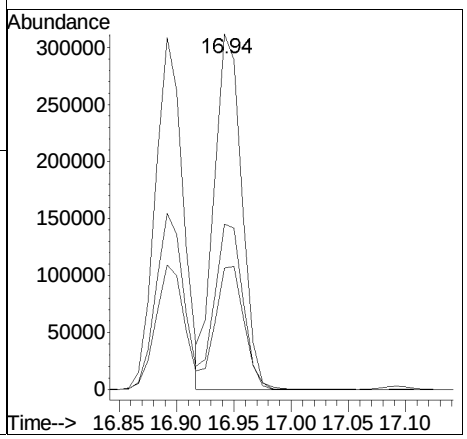


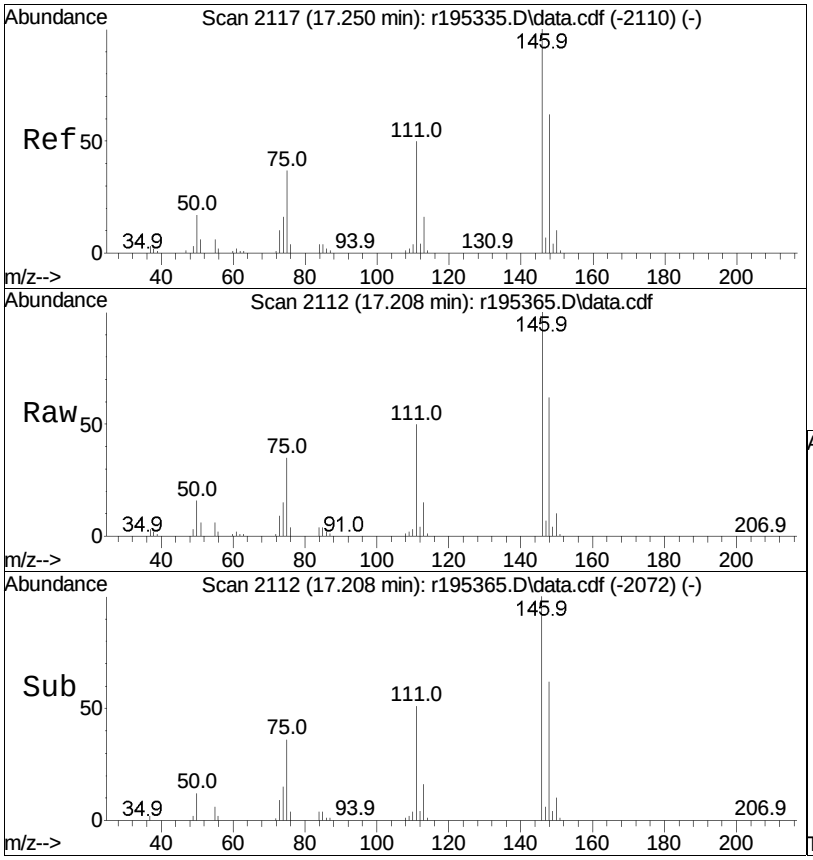


#103
1,4-dichlorobenzene
Concen: 11.55 ppbV
RT: 16.94 min Scan# 2080
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:146 Resp: 522990

Ion	Ratio	Lower	Upper
146	100		
111	46.5	37.2	55.8
75	34.1	27.8	41.6

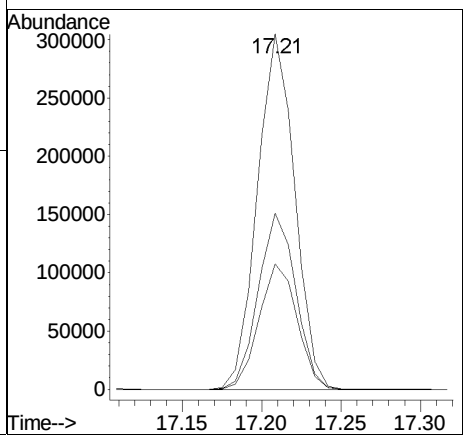


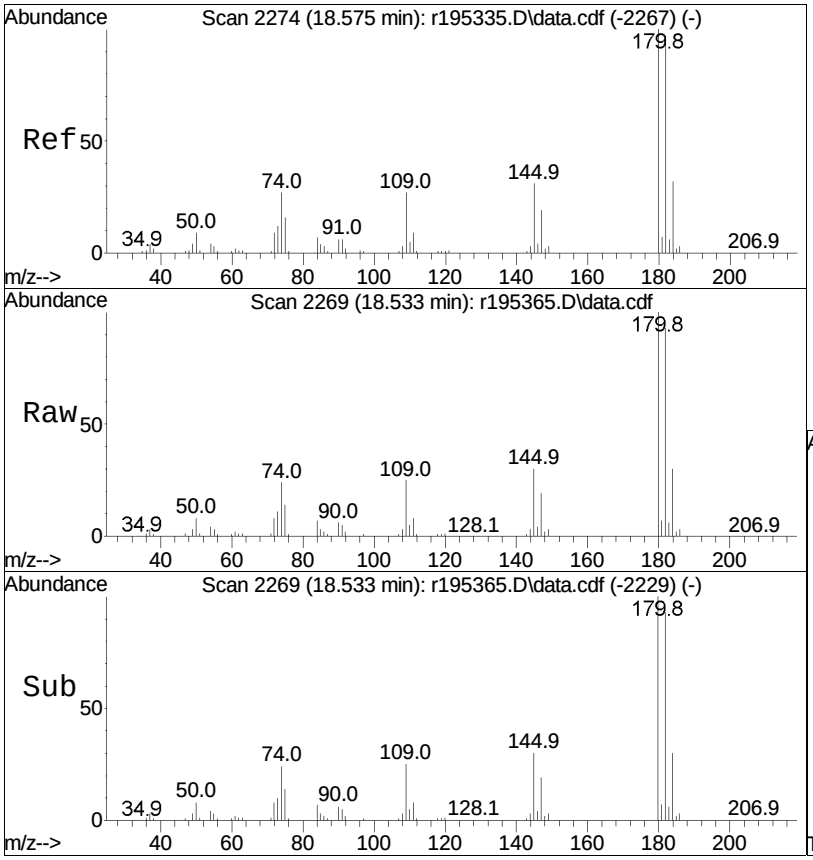


#107
1,2-dichlorobenzene
Concen: 12.12 ppbV
RT: 17.21 min Scan# 2112
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:146 Resp: 498568

Ion	Ratio	Lower	Upper
146	100		
111	49.6	40.2	60.4
75	35.3	29.4	44.0

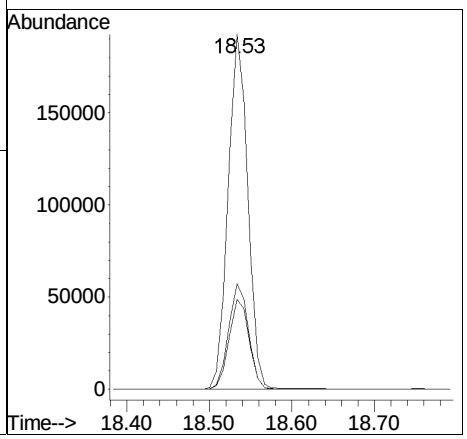


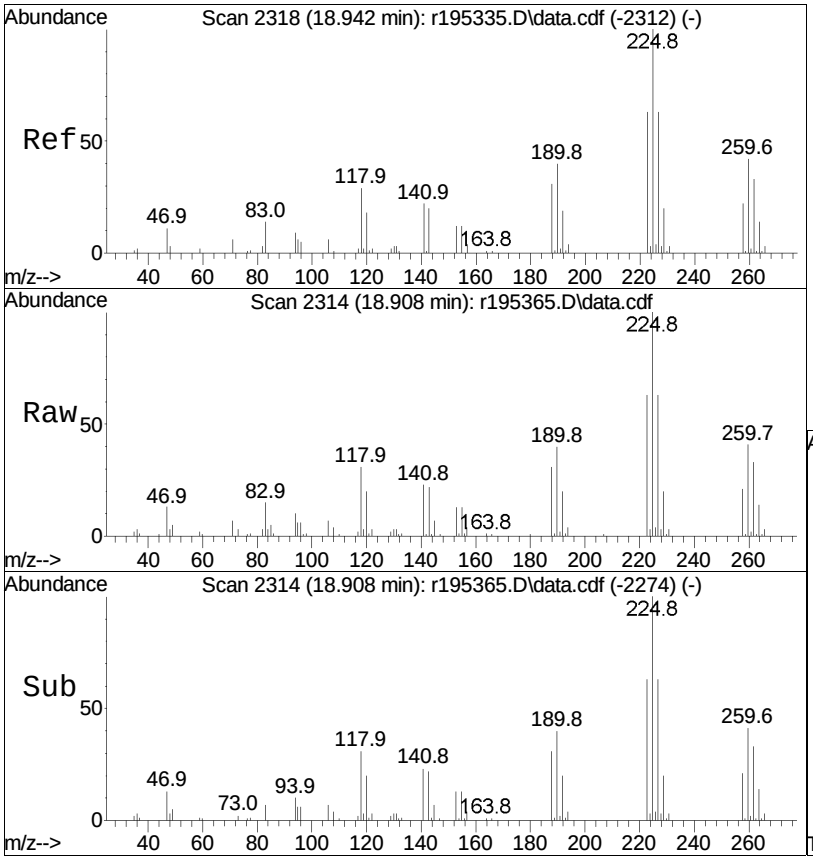


#115
1,2,4-trichlorobenzene
Concen: 12.77 ppbV
RT: 18.53 min Scan# 2269
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:180 Resp: 321084

Ion	Ratio	Lower	Upper
180	100		
145	29.8	24.8	37.2
109	25.3	21.6	32.4

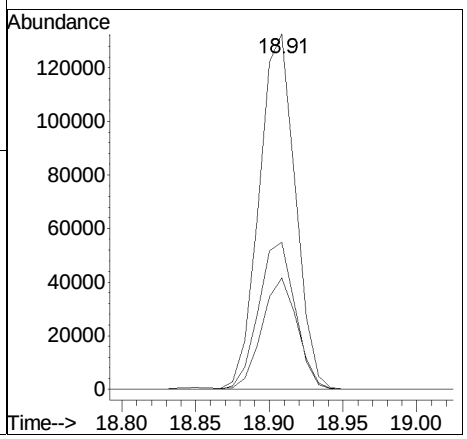




#119
hexachlorobutadiene
Concen: 10.65 ppbV
RT: 18.91 min Scan# 2314
Delta R.T. 0.000 min
Lab File: r195365.D
Acq: 4 Nov 2020 12:36 PM

Tgt Ion:225 Resp: 226631

Ion	Ratio	Lower	Upper
225	100		
260	41.4	33.7	50.5
118	31.4	23.4	35.2



Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195373.D
Acq On : 4 Nov 2020 7:59 PM
Operator : AIRLAB19:RY
Sample : WG1430466-5,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:25:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.59	49	341121	10.000	ppbV	0.00
Standard Area = 384278			Recovery =		88.77%	
43) 1,4-difluorobenzene	10.43	114	793560	10.000	ppbV	0.00
Standard Area = 866249			Recovery =		91.61%	
67) chlorobenzene-D5	14.58	54	131674	10.000	ppbV	0.00
Standard Area = 149824			Recovery =		87.89%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	4.11	85	9338	0.361	ppbV	100
6) chloromethane	0.00		0	N.D.	d	
7) Freon-114	0.00		0	N.D.	d	
9) vinyl chloride	0.00		0	N.D.		
10) 1,3-butadiene	0.00		0	N.D.	d	
13) bromomethane	0.00		0	N.D.		
14) chloroethane	0.00		0	N.D.		
15) ethanol	5.25	31	16511	1.156	ppbV	89
17) vinyl bromide	0.00		0	N.D.		
19) acetone	5.71	43	543115	22.346	ppbV #	82
21) trichlorofluoromethane	5.88	101	10875	0.543	ppbV	99
22) isopropyl alcohol	5.95	45	7827	0.215	ppbV #	93
26) 1,1-dichloroethene	0.00		0	N.D.	d	
27) tertiary butyl alcohol	6.52	59	5526	0.182	ppbV #	96
28) methylene chloride	6.60	49	5097	0.225	ppbV	90
29) 3-chloropropene	0.00		0	N.D.	d	
30) carbon disulfide	6.87	76	29712	0.515	ppbV #	93
31) Freon 113	6.85	101	1449	0.051	ppbV #	88
32) trans-1,2-dichloroethene	0.00		0	N.D.		
33) 1,1-dichloroethane	7.64		0	N.D.		
34) MTBE	0.00		0	N.D.	d	
36) 2-butanone	8.02	43	31358	0.698	ppbV	96
37) cis-1,2-dichloroethene	0.00		0	N.D.		
38) Ethyl Acetate	0.00		0	N.D.		
39) chloroform	8.72	83	5496	0.201	ppbV	99
40) Tetrahydrofuran	9.10	42	2665	0.090	ppbV	99
42) 1,2-dichloroethane	0.00		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195373.D
Acq On : 4 Nov 2020 7:59 PM
Operator : AIRLAB19:RY
Sample : WG1430466-5,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:25:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	hexane	8.64	57	2592	0.081	ppbV #	8
48)	1,1,1-trichloroethane	9.66		0	N.D.		
50)	benzene	10.10	78	7162	0.108	ppbV	100
52)	carbon tetrachloride	10.25		0	N.D.		
53)	cyclohexane	10.37		0	N.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	11.17	57	5699	0.057	ppbV #	76
62)	heptane	11.43		0	N.D.		
63)	cis-1,3-dichloropropene	0.00		0	N.D.		
64)	4-methyl-2-pentanone	12.05		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	13.02	91	9943	0.158	ppbV	99
72)	2-hexanone	13.25	43	6098	0.124	ppbV	97
74)	dibromochloromethane	0.00		0	N.D.		
75)	1,2-dibromoethane	0.00		0	N.D.		
78)	tetrachloroethene	14.04	166	313824	13.005	ppbV	94
80)	chlorobenzene	0.00		0	N.D.		
81)	ethylbenzene	14.93		0	N.D.		
83)	m+p-xylene	15.06	91	10508	0.176	ppbV	99
84)	bromoform	0.00		0	N.D.		
85)	styrene	15.36		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.00		0	N.D.	d	
87)	o-xylene	15.44	91	4070	0.069	ppbV	98
96)	4-ethyl toluene	16.39		0	N.D.		
97)	1,3,5-trimethylbenzene	16.45		0	N.D.		
99)	1,2,4-trimethylbenzene	16.77	105	11268	0.163	ppbV #	60
101)	Benzyl Chloride	0.00		0	N.D.	d	
102)	1,3-dichlorobenzene	0.00		0	N.D.	d	
103)	1,4-dichlorobenzene	16.94		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 : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195373.D
Acq On : 4 Nov 2020 7:59 PM
Operator : AIRLAB19:RY
Sample : WG1430466-5,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:25:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2020\11\201104T\r195365.D
Sub List : TO15-NY - .

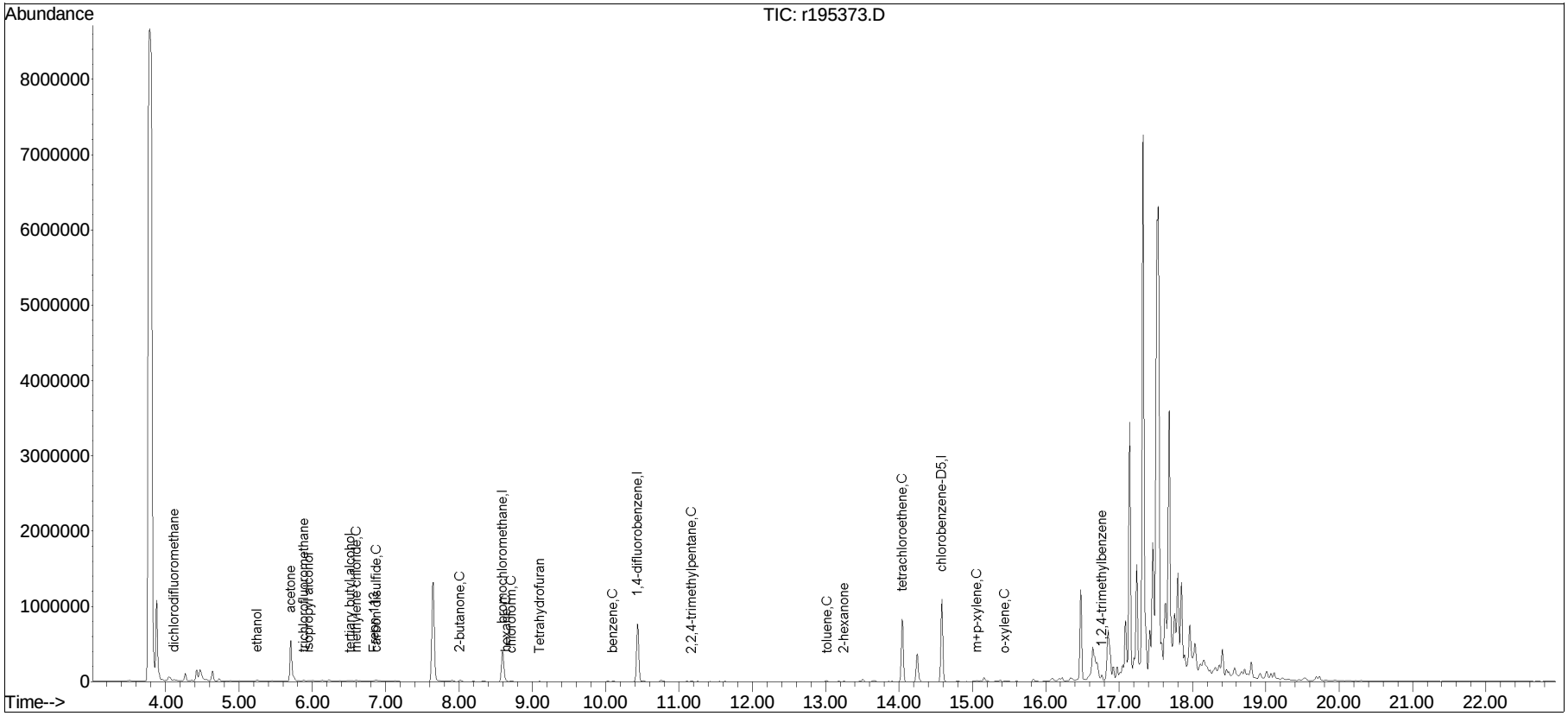
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

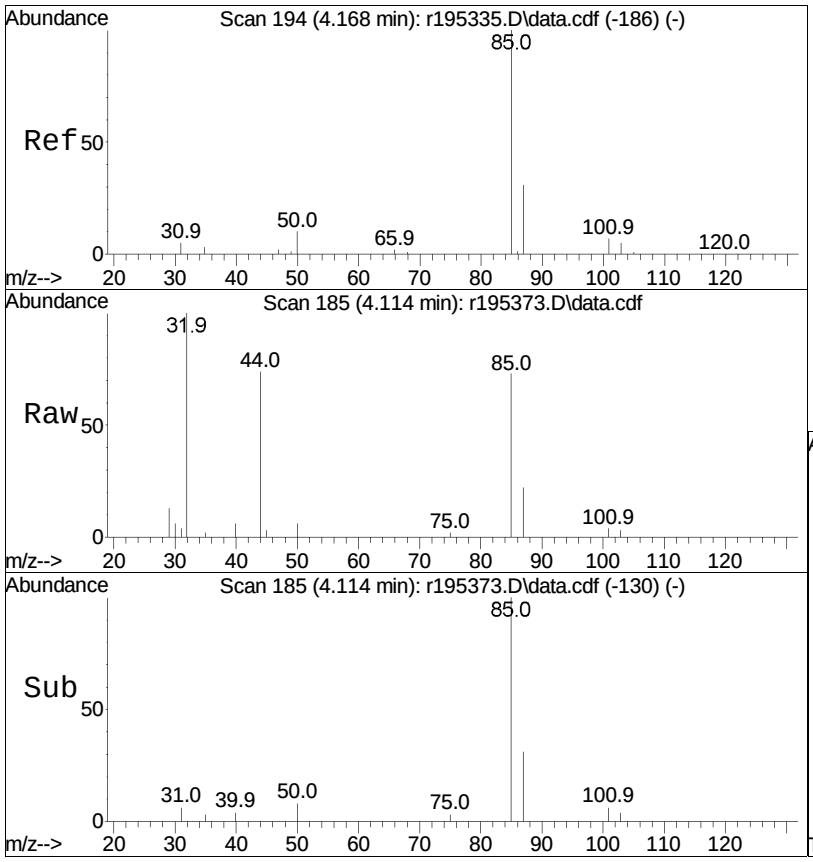
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2020\11\201104T\
Data File : r195373.D
Acq On : 4 Nov 2020 7:59 PM
Operator : AIRLAB19:RY
Sample : WG1430466-5,3,250,250
Misc : WG1430466,ICAL17306
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Nov 05 10:25:43 2020
Quant Method : O:\Forensics\Data\Airlab19\2020\11\201104T\TFS19_201103.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Nov 04 13:41:58 2020
Response via : Initial Calibration

Sub List : TO15-NY - .s\Data\Airlab19\2020\11\201104T\r195365.D

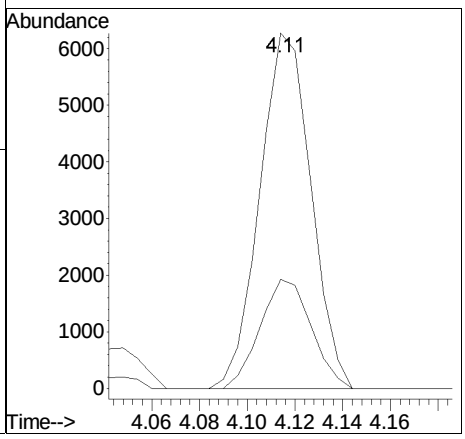


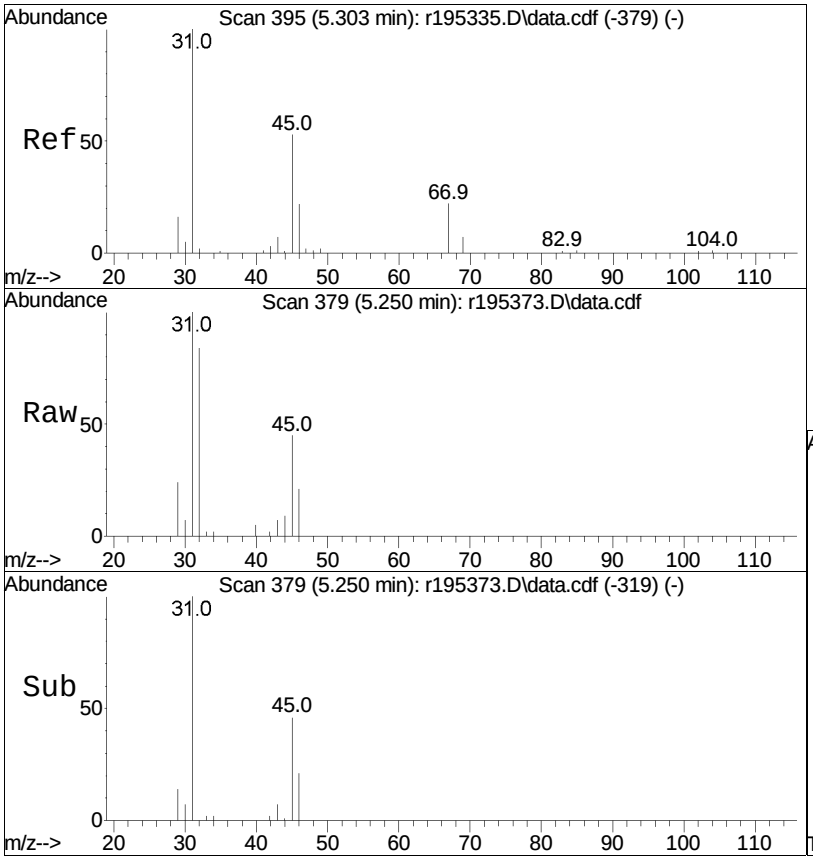


#5
dichlorodifluoromethane
Concen: 0.36 ppbV
RT: 4.11 min Scan# 185
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 85 Resp: 9338

Ion	Ratio	Lower	Upper
85	100		
87	30.7	24.6	37.0

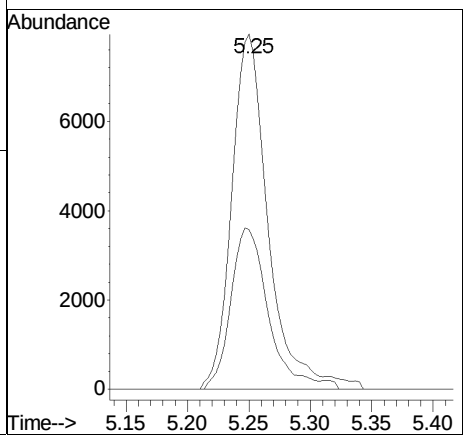


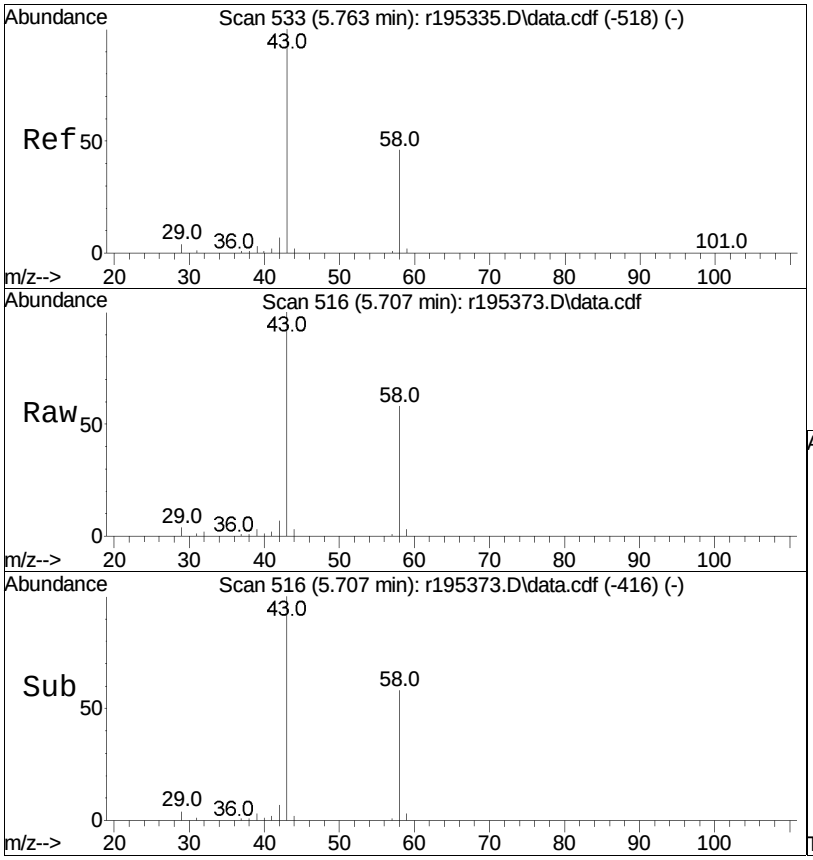


#15
ethanol
Concen: 1.16 ppbV
RT: 5.25 min Scan# 379
Delta R.T. 0.003 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 31 Resp: 16511

Ion	Ratio	Lower	Upper
31	100		
45	44.9	42.5	63.7

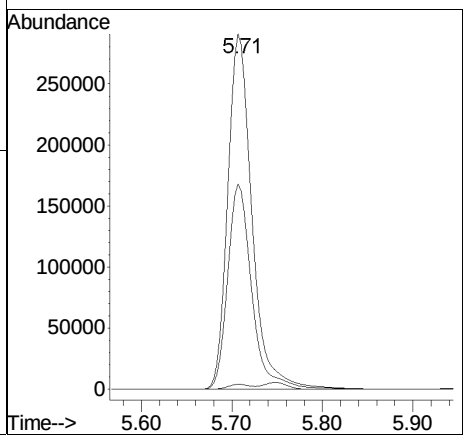


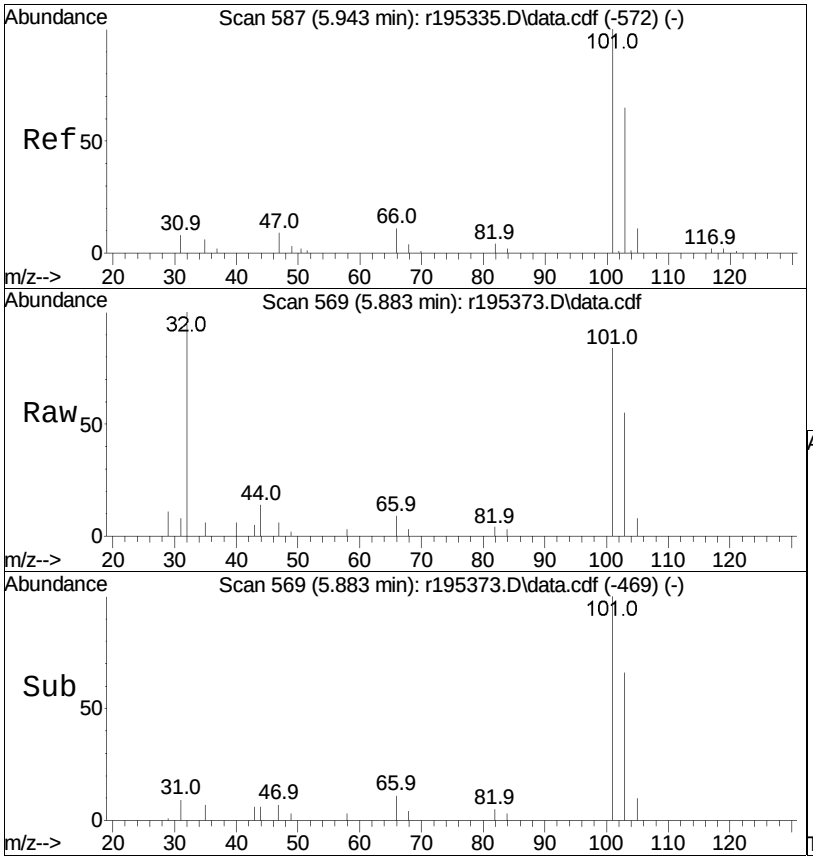


#19
acetone
Concen: 22.35 ppbV
RT: 5.71 min Scan# 516
Delta R.T. 0.003 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 43 Resp: 543115

Ion	Ratio	Lower	Upper
43	100		
58	57.8	36.6	54.8#
57	1.5	0.9	1.3#

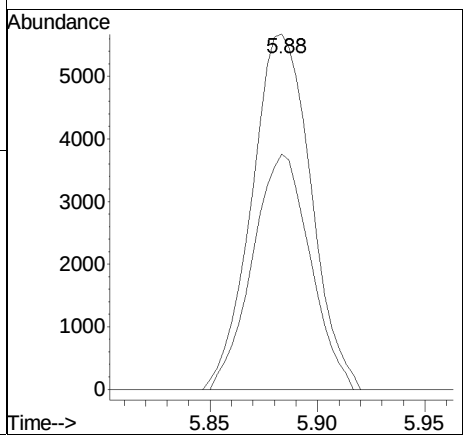


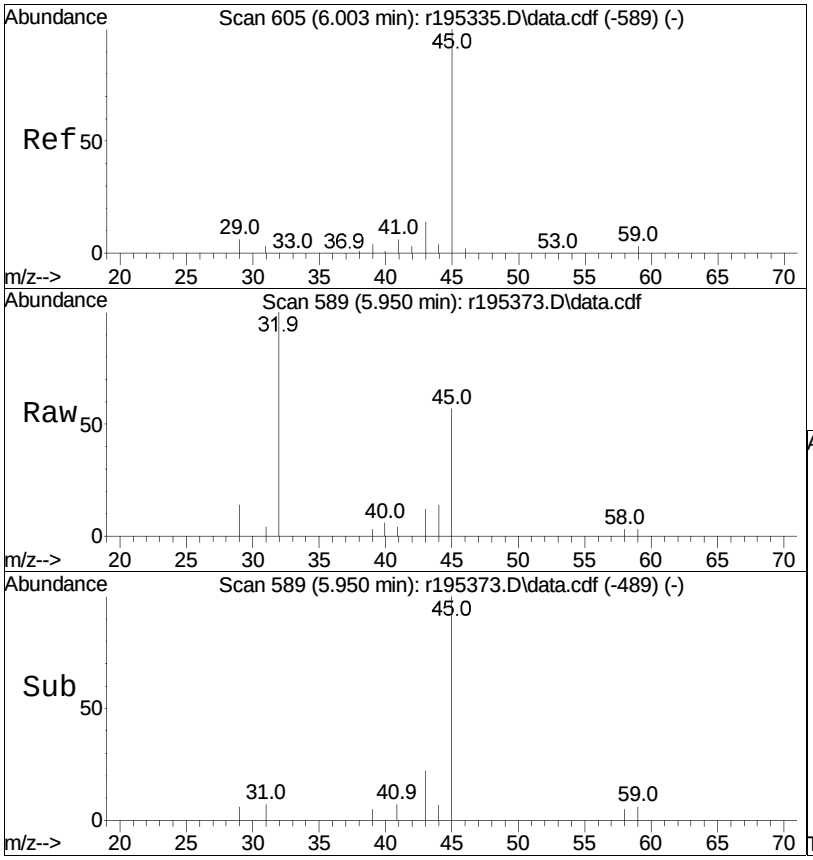


#21
trichlorofluoromethane
Concen: 0.54 ppbV
RT: 5.88 min Scan# 569
Delta R.T. 0.003 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion:101 Resp: 10875

Ion	Ratio	Lower	Upper
101	100		
103	66.2	52.3	78.5

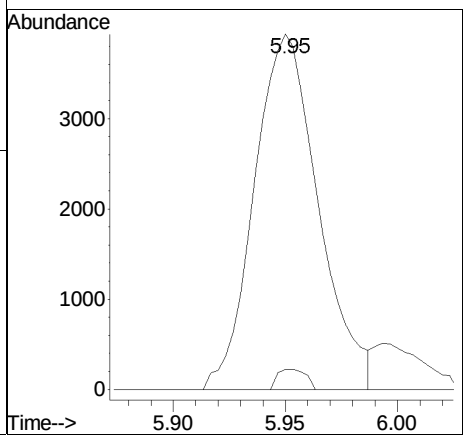


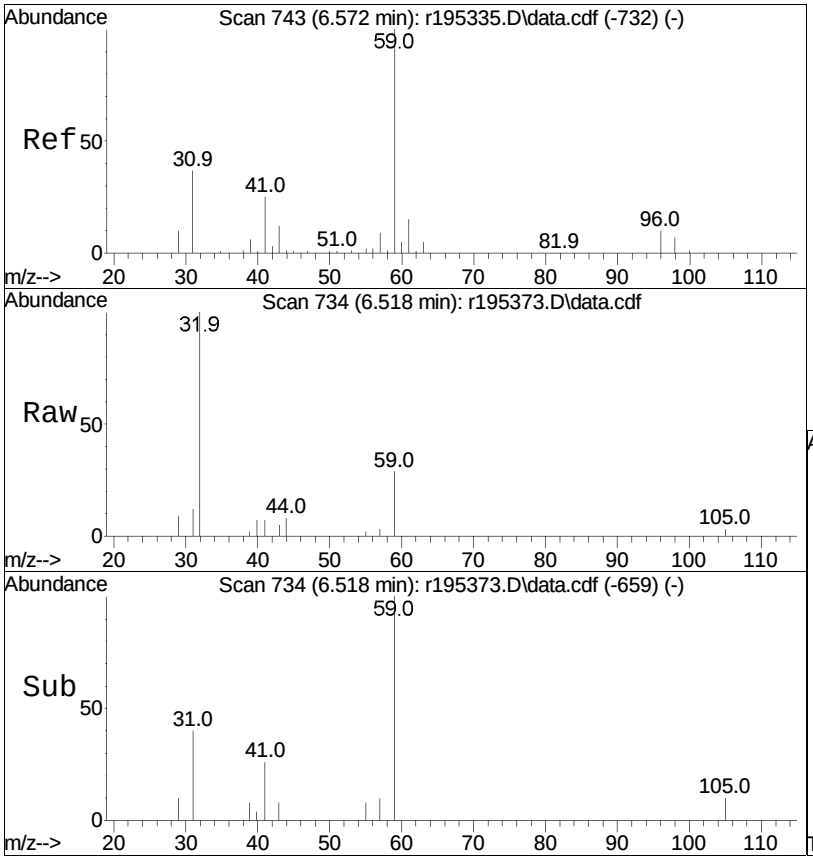


#22
isopropyl alcohol
Concen: 0.22 ppbV
RT: 5.95 min Scan# 589
Delta R.T. 0.003 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 45 Resp: 7827

Ion	Ratio	Lower	Upper
45	100		
59	5.6	2.6	4.0#

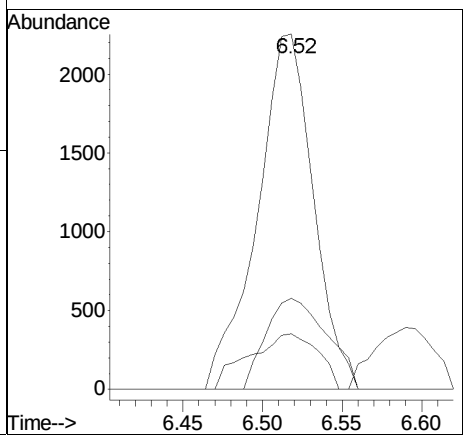


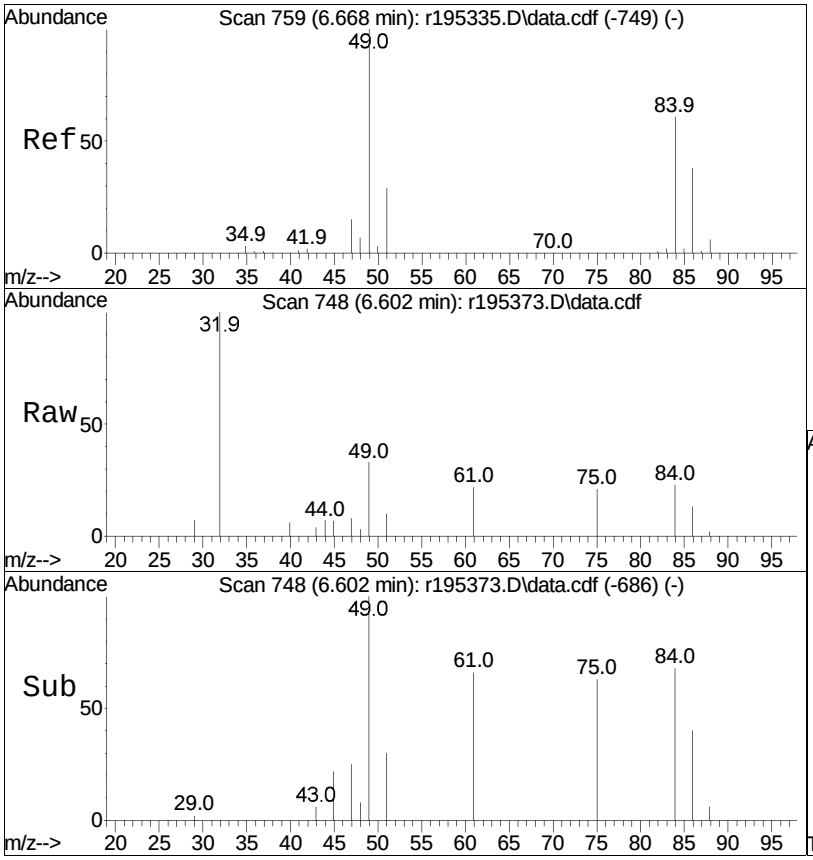


#27
tertiary butyl alcohol
Concen: 0.18 ppbV
RT: 6.52 min Scan# 734
Delta R.T. 0.006 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 59 Resp: 5526

Ion	Ratio	Lower	Upper
59	100		
41	25.6	19.8	29.8
43	15.7	10.0	15.0#

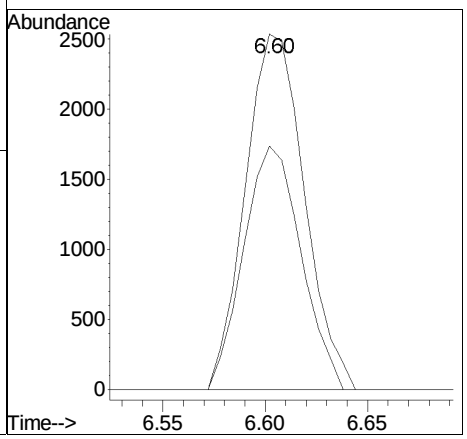


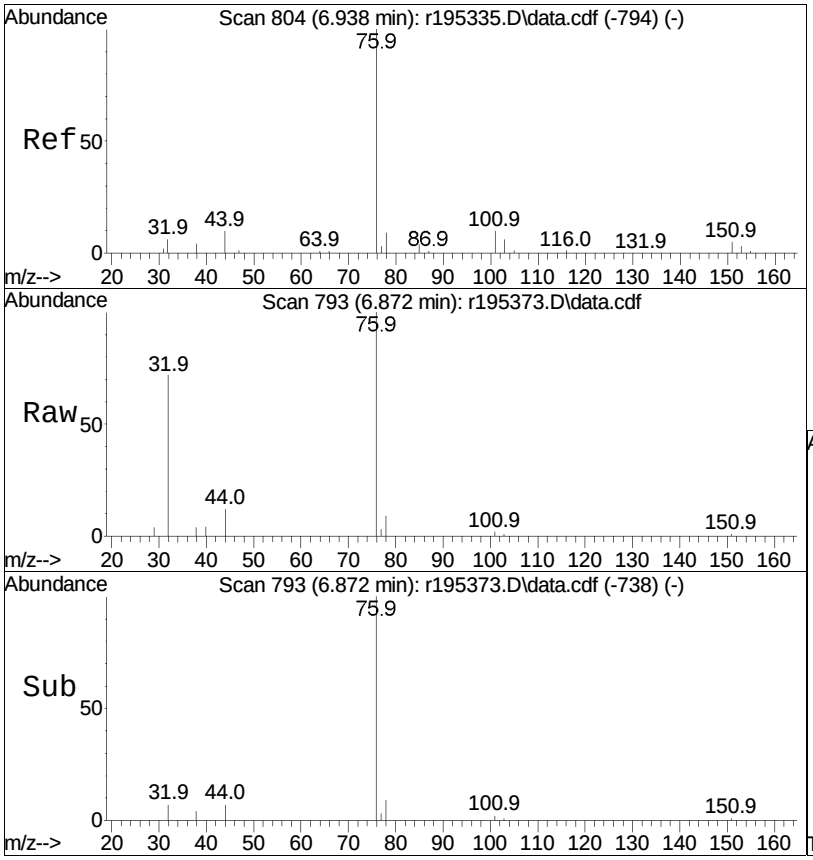


#28
methylene chloride
Concen: 0.22 ppbV
RT: 6.60 min Scan# 748
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 49 Resp: 5097

Ion	Ratio	Lower	Upper
49	100		
84	68.5	48.8	73.2

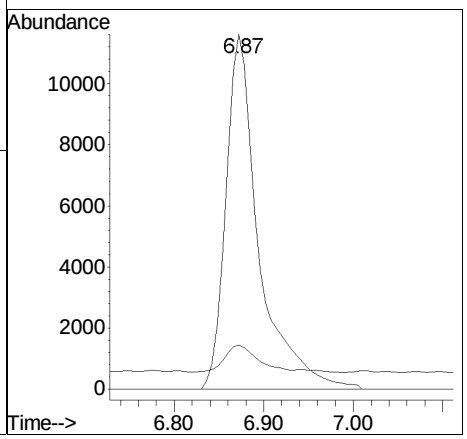


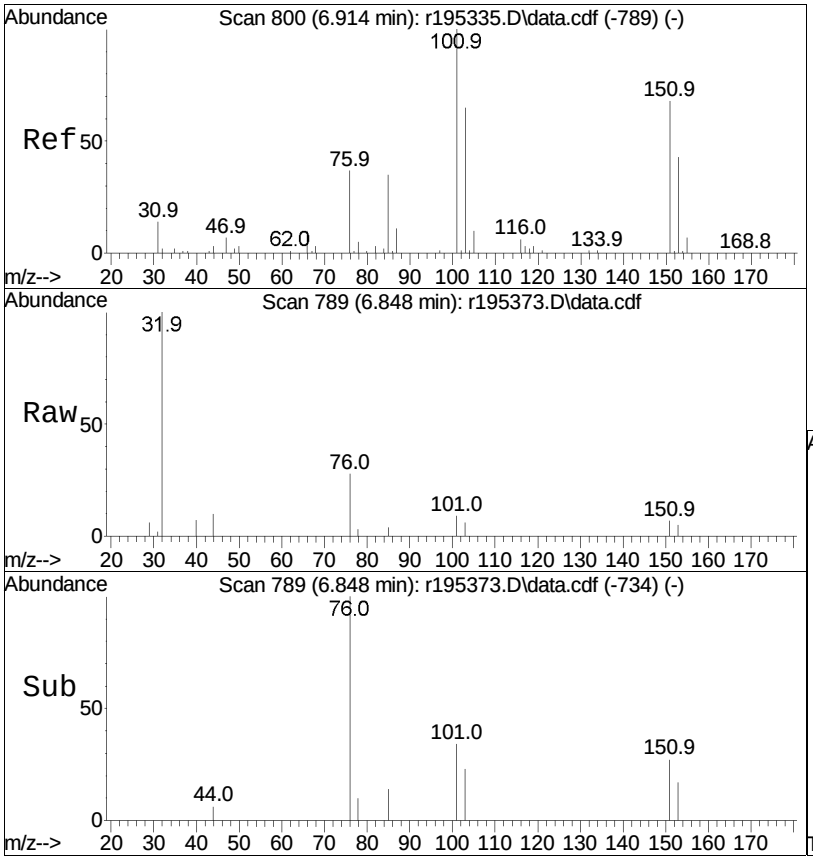


#30
carbon disulfide
Concen: 0.51 ppbV
RT: 6.87 min Scan# 793
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 76 Resp: 29712

Ion	Ratio	Lower	Upper
76	100		
44	12.5	7.9	11.9#

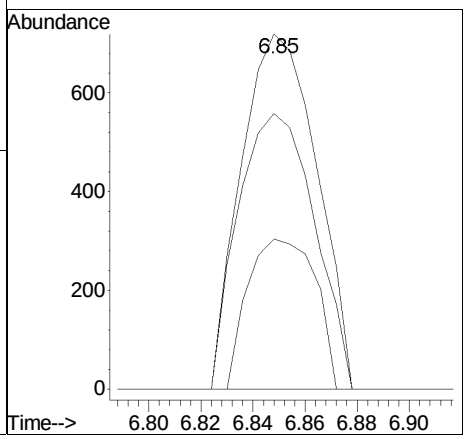


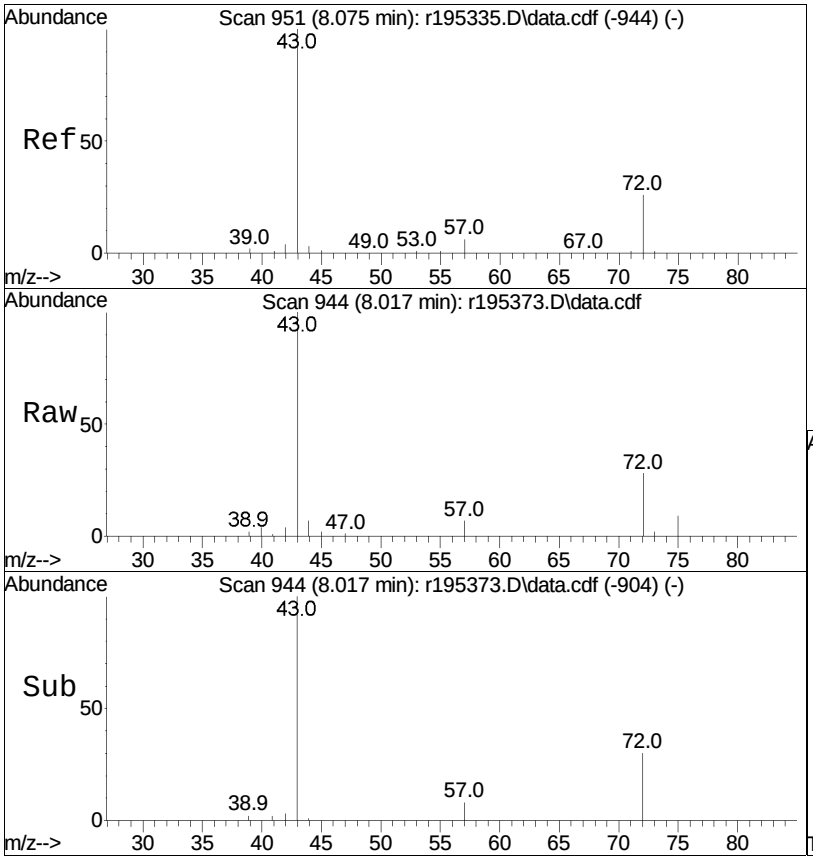


#31
Freon 113
Concen: 0.05 ppbV
RT: 6.85 min Scan# 789
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion:101 Resp: 1449

Ion	Ratio	Lower	Upper
101	100		
85	42.3	27.9	41.9#
151	77.6	54.2	81.2

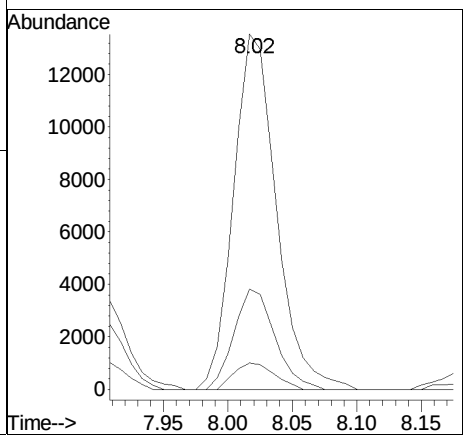


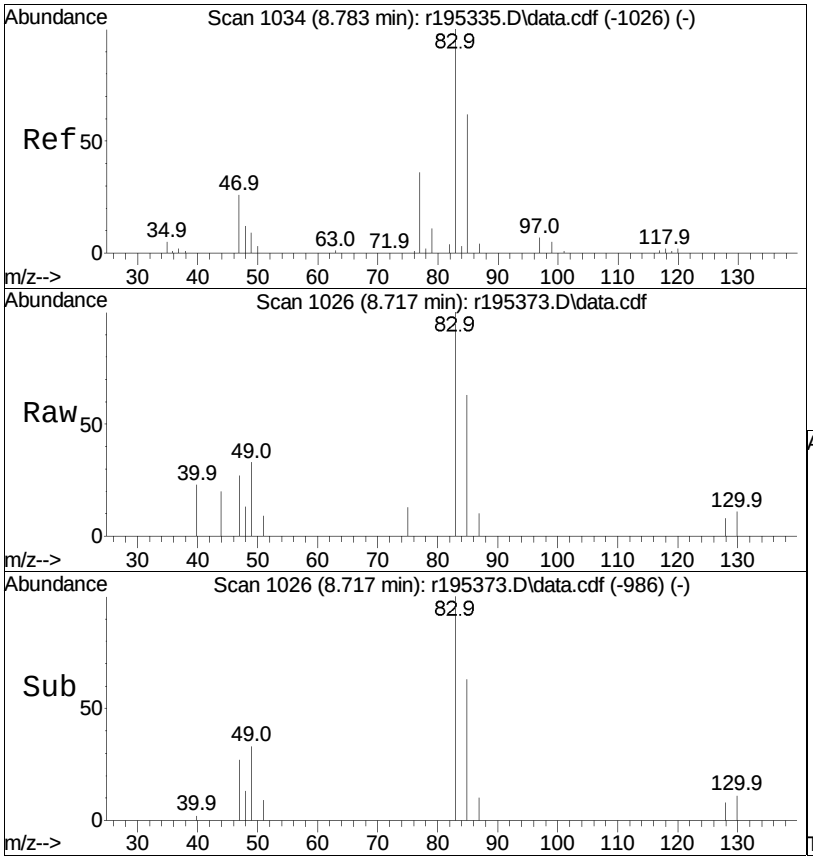


#36
2-butanone
Concen: 0.70 ppbV
RT: 8.02 min Scan# 944
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 43 Resp: 31358

Ion	Ratio	Lower	Upper
43	100		
72	28.2	21.0	31.6
57	7.4	5.1	7.7

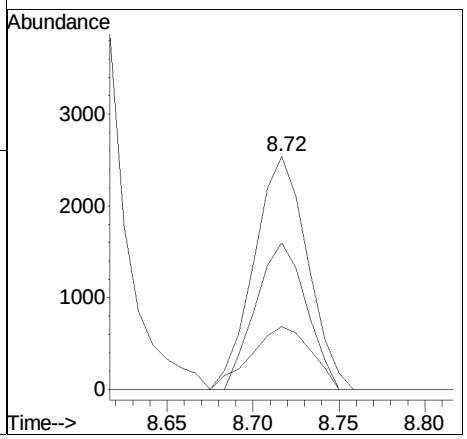


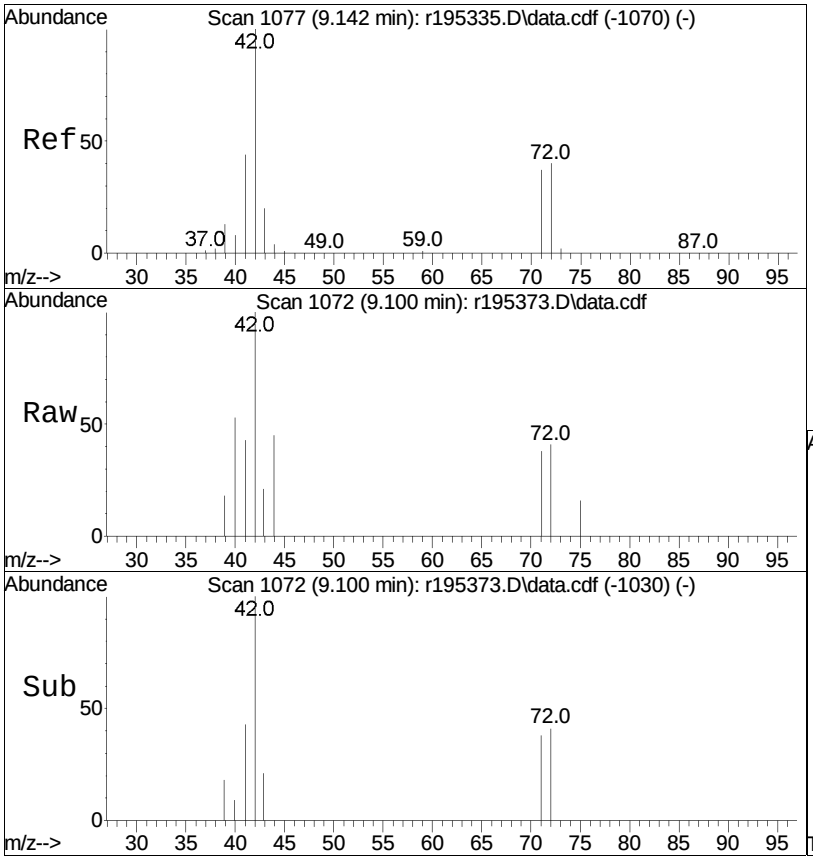


#39
chloroform
Concen: 0.20 ppbV
RT: 8.72 min Scan# 1026
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 83 Resp: 5496

Ion	Ratio	Lower	Upper
83	100		
85	63.0	49.8	74.8
47	27.0	20.8	31.2

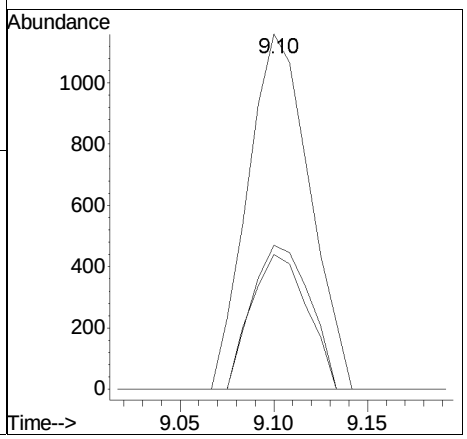


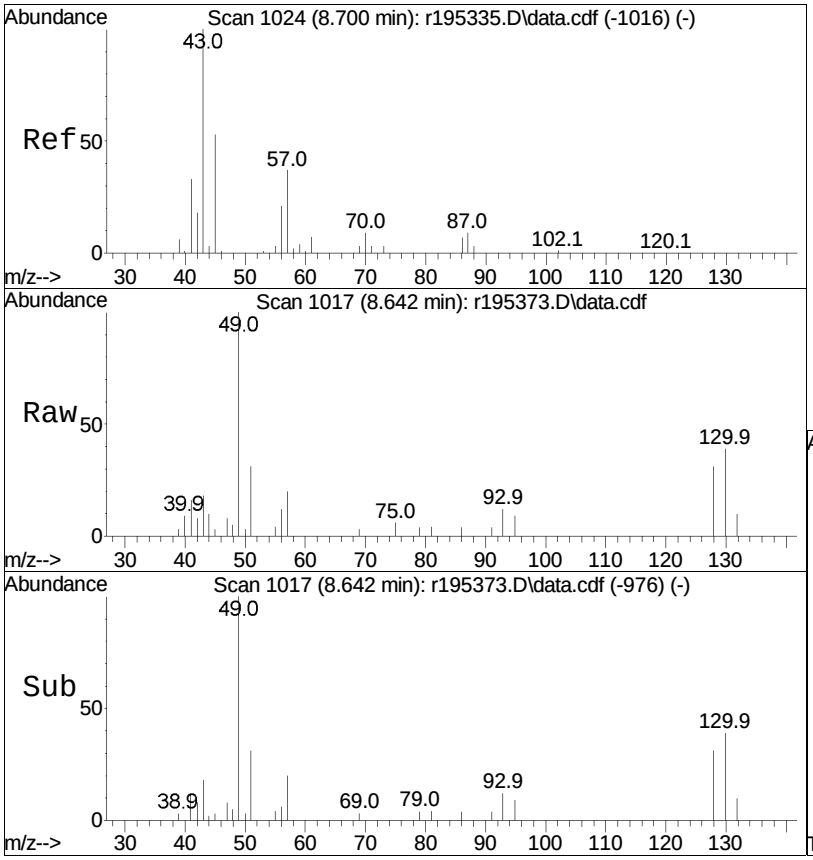


#40
Tetrahydrofuran
Concen: 0.09 ppbV
RT: 9.10 min Scan# 1072
Delta R.T. 0.017 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 42 Resp: 2665

Ion	Ratio	Lower	Upper
42	100		
71	38.0	29.7	44.5
72	40.6	32.2	48.4

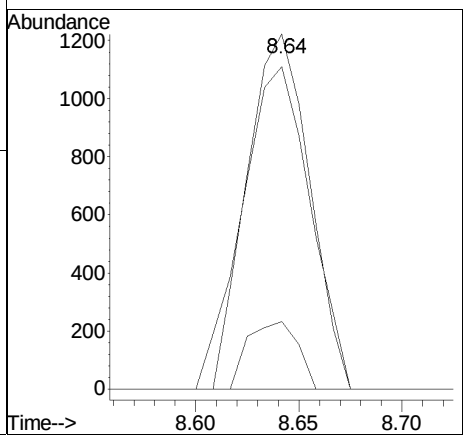


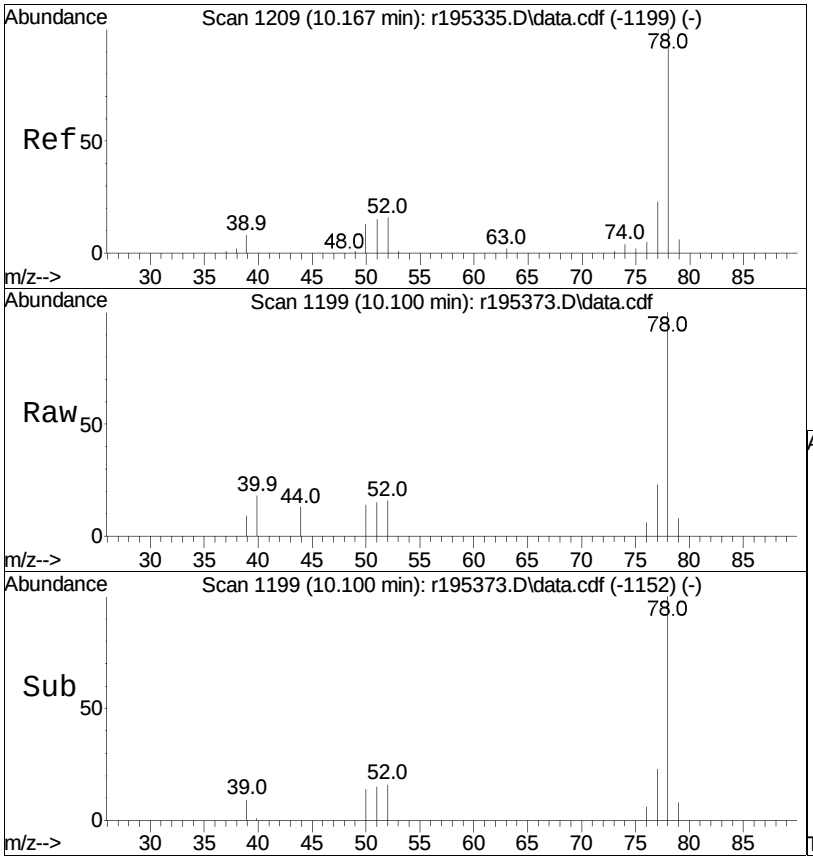


#44
hexane
Concen: 0.08 ppbV
RT: 8.64 min Scan# 1017
Delta R.T. 0.008 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 57 Resp: 2592

Ion	Ratio	Lower	Upper
57	100		
43	90.8	217.9	326.9#
86	19.1	16.2	24.2

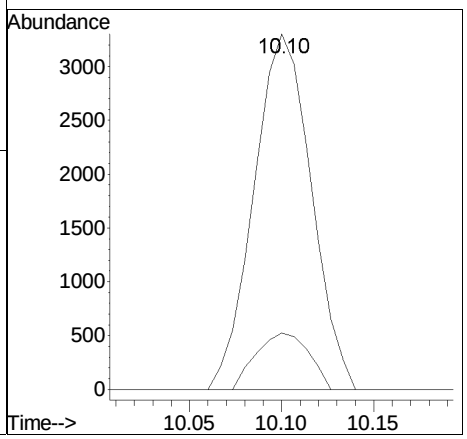


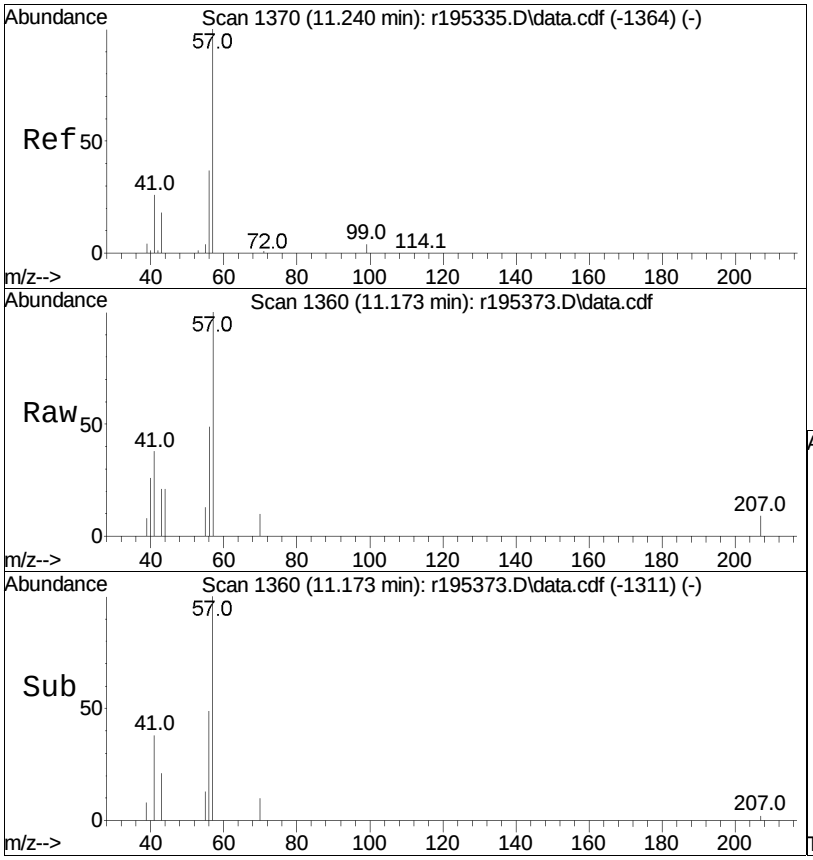


#50
benzene
Concen: 0.11 ppbV
RT: 10.10 min Scan# 1199
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 78 Resp: 7162

Ion	Ratio	Lower	Upper
78	100		
52	15.9	12.6	19.0

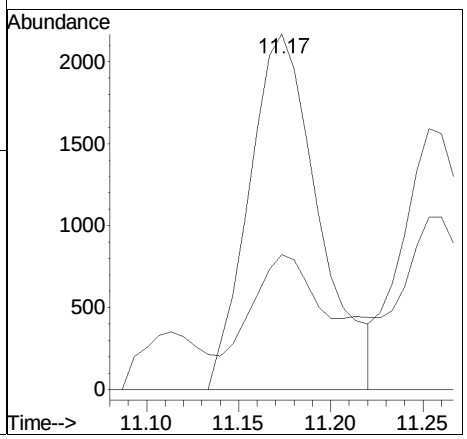


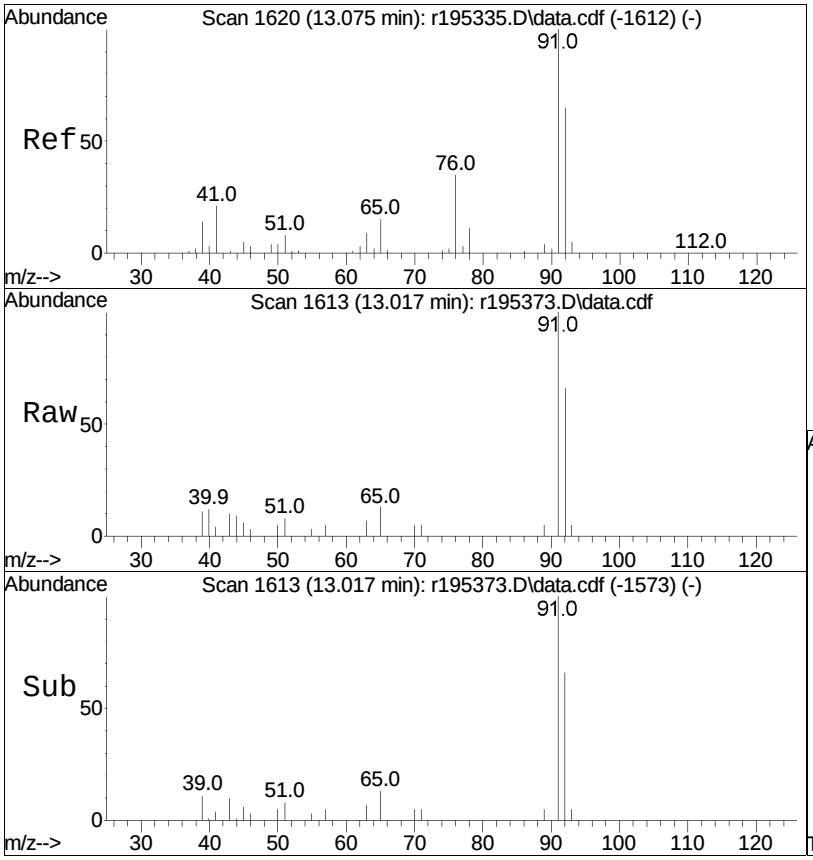


#60
2,2,4-trimethylpentane
Concen: 0.06 ppbV
RT: 11.17 min Scan# 1360
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 57 Resp: 5699

Ion	Ratio	Lower	Upper
57	100		
99	0.0	5.3	7.9#
41	37.9	20.4	30.6#

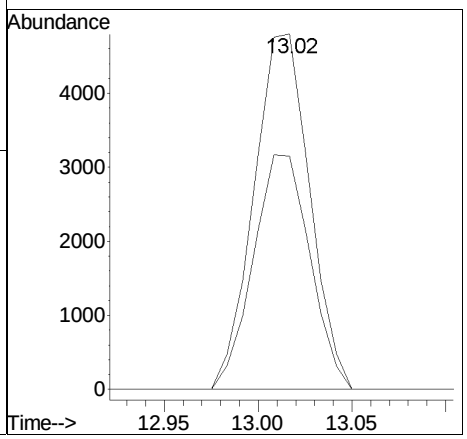


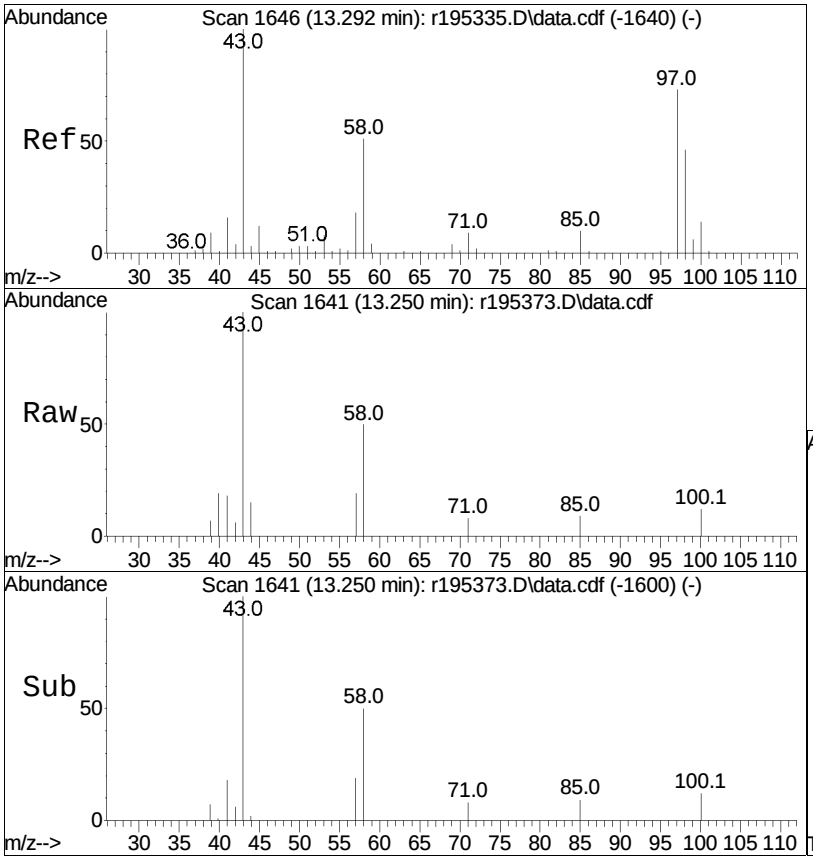


#68
toluene
Concen: 0.16 ppbV
RT: 13.02 min Scan# 1613
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 91 Resp: 9943

Ion	Ratio	Lower	Upper
91	100		
92	65.7	52.1	78.1

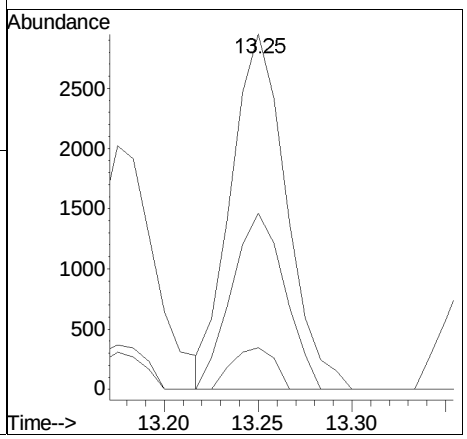


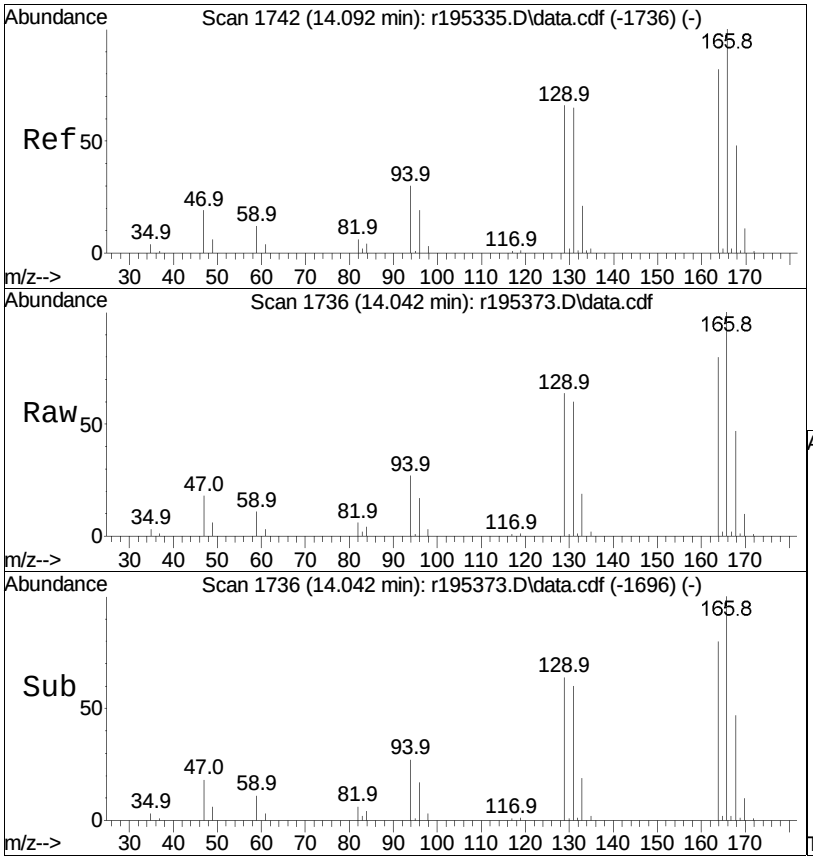


#72
2-hexanone
Concen: 0.12 ppbV
RT: 13.25 min Scan# 1641
Delta R.T. 0.008 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 43 Resp: 6098

Ion	Ratio	Lower	Upper
43	100		
58	49.6	40.7	61.1
100	11.7	10.9	16.3

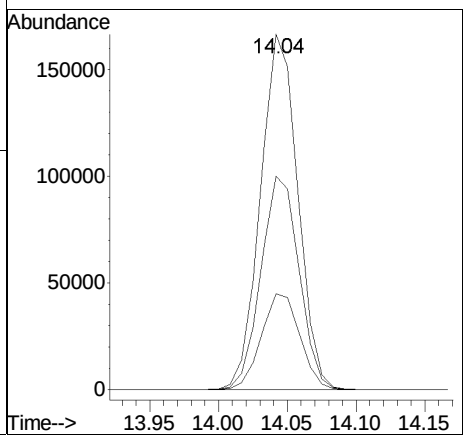


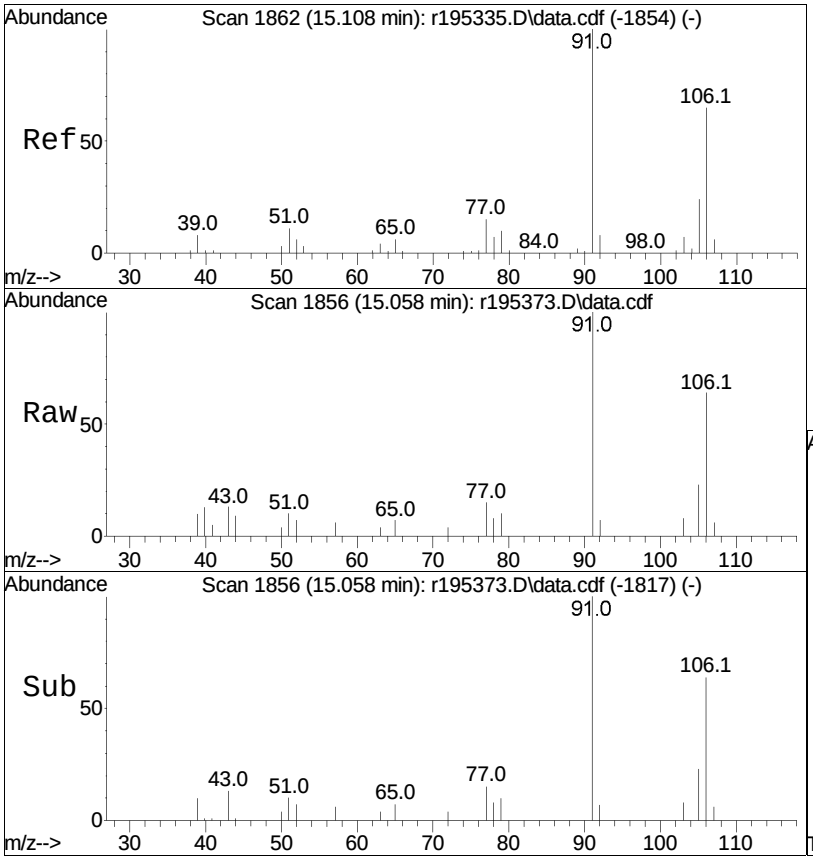


#78
tetrachloroethene
Concen: 13.01 ppbV
RT: 14.04 min Scan# 1736
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion:166 Resp: 313824

Ion	Ratio	Lower	Upper
166	100		
131	60.0	51.7	77.5
94	26.9	24.0	36.0

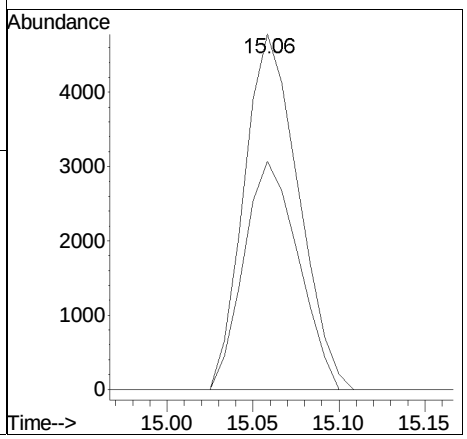


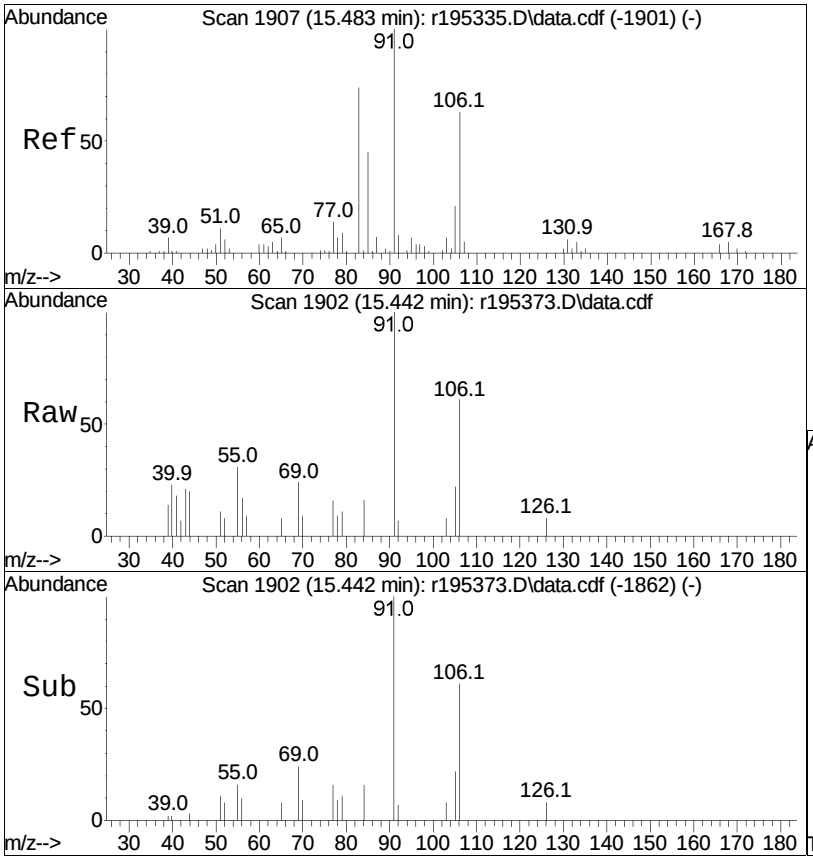


#83
m+p-xylene
Concen: 0.18 ppbV
RT: 15.06 min Scan# 1856
Delta R.T. -0.008 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 91 Resp: 10508

Ion	Ratio	Lower	Upper
91	100		
106	64.2	51.8	77.6

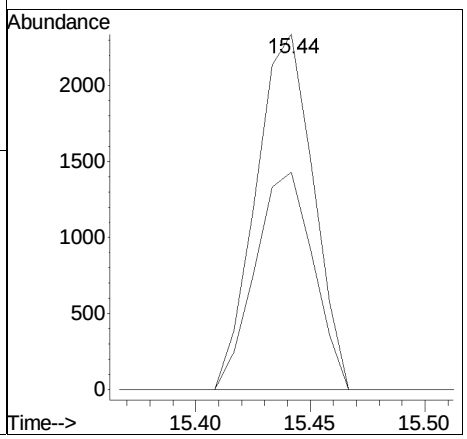


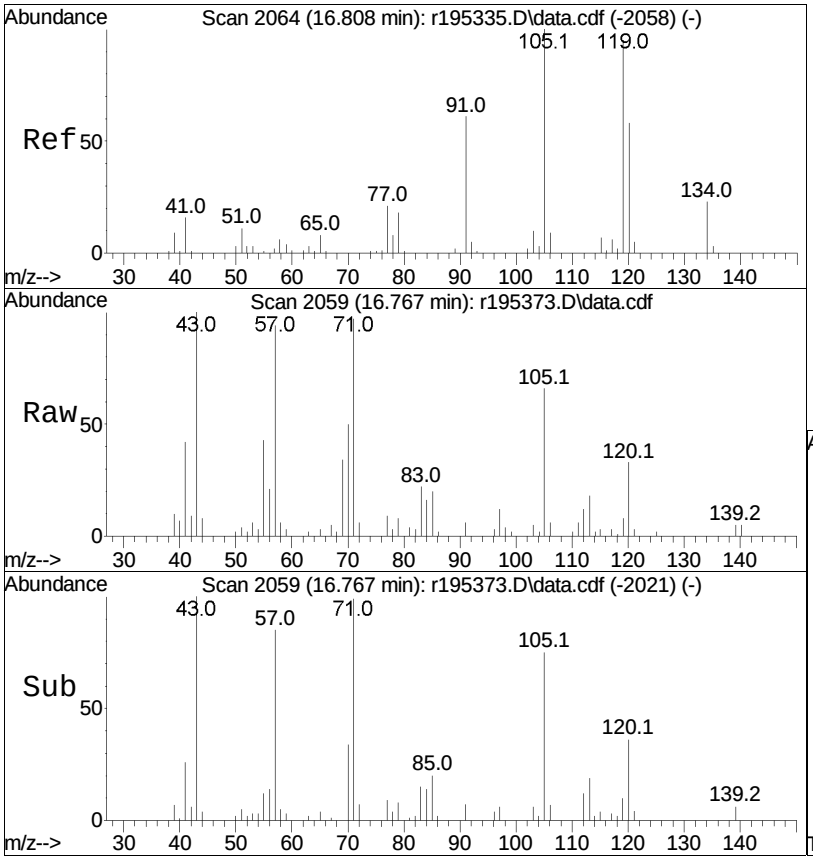


#87
o-xylene
Concen: 0.07 ppbV
RT: 15.44 min Scan# 1902
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion: 91 Resp: 4070

Ion	Ratio	Lower	Upper
91	100		
106	61.1	50.2	75.4

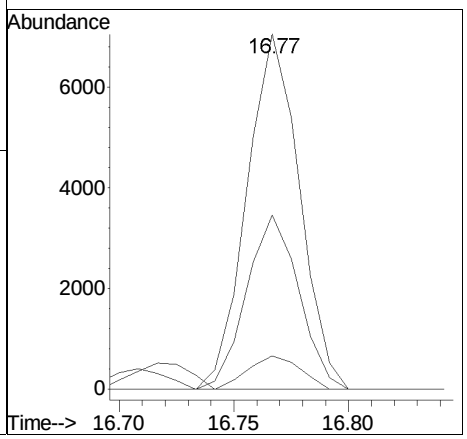




#99
1,2,4-trimethylbenzene
Concen: 0.16 ppbV
RT: 16.77 min Scan# 2059
Delta R.T. 0.000 min
Lab File: r195373.D
Acq: 4 Nov 2020 7:59 PM

Tgt Ion:105 Resp: 11268

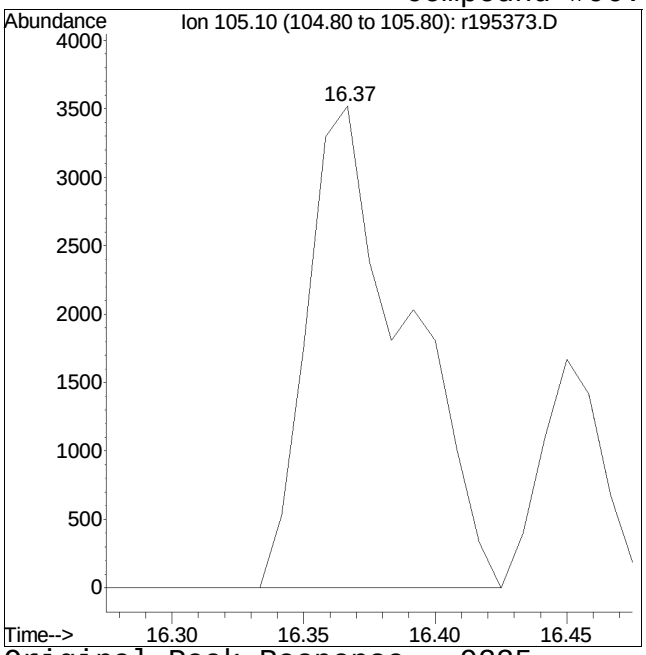
Ion	Ratio	Lower	Upper
105	100		
120	49.1	46.2	69.4
91	9.4	48.7	73.1#

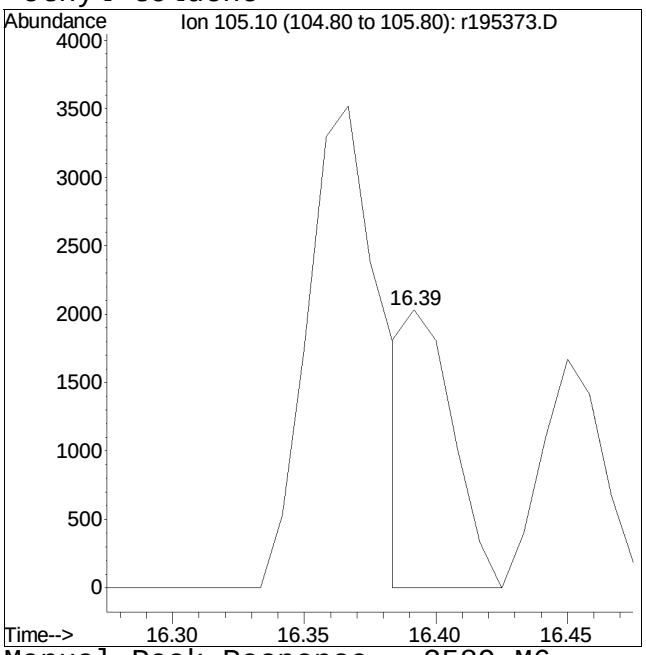


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\Airlab19\QMethod : TFS19_201103.M
Data File : r195373.D Operator : AIRLAB19:RY
Date Inj'd : 11/4/2020 0:7: 9 Instrument :
Sample : WG1430466-5,3,250,250 Quant Date : 11/5/2020 7:41 am

Compound #96: 4-ethyl toluene





Original Peak Response = 9235 Manual Peak Response = 2589 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, ppbv = C_s x 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
DF = V_{cf} / V_{ci}
Where:
V_{ci} = volume of air in canister prior to pressurization, L
P =

Conversion of ppbv to ug/m^3
ug/m^3 = (ppbv) * MW / 24.47
Where:
24.47 = molar gas constant (g/g-mole)
MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

V_{ci} = 2.7 * PI/14.696

Step 2: Calculate the volume in the canister after pressurization.

V_{cf} = 2.7 * PF/14.696

Step 3: Calculate the dilution factor.

DF = V_{cf} / V_{ci}

Where:

V_{ci} = volume of air in canister prior to pressurization, L
PI = pressure reading of canister prior to pressurization (psia)
V_{cf} = volume of air in canister after pressurization, L
PF = pressure reading of canister after pressurization (psia)
DF = dilution factor
14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Jan 05 2021, 04:15 pm

Work Group: WG1430466 for Department: 3 GC/MS

Created: 04-NOV-20 Due: Operator: EW

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2047588-01	SV-1	S	TO15-LL	SOIL_VAPOR	DONE	U	1126	1106	S0	Can-6
L2047588-02	SV-2	S	TO15-LL	SOIL_VAPOR	DONE	U	1126	1106	S0	Can-6
L2047588-03	SV-3	S	TO15-LL	SOIL_VAPOR	DONE	U	1126	1106	S0	Can-6
L2047588-04	SV-4	S	TO15-LL	SOIL_VAPOR	DONE	U	1126	1106	S0	Can-6
L2047588-05	SV-5	S	TO15-LL	SOIL_VAPOR	DONE	U	1126	1106	S0	Can-6
L2047588-06	SV-6	S	TO15-LL	SOIL_VAPOR	DONE	U	1126	1106	S0	Can-6
L2047758-01	SVI-01	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-02	SVI-02	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-03	SVI-03	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-04	SG-01	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-05	SG-02	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-06	SG-03	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-07	SG-04	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-08	SG-05	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
L2047758-09	SG-06	S	TO15-LL	SOIL_VAPOR	DONE	U	1129	1106	S0	Can-2.7
WG1430466-1	MS BFB Tune Standard	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1430466-2	Continuing Calibrati	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1430466-3	Laboratory Control S	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1430466-4	Laboratory Method Bl	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG1430466-5	Duplicate Sample	S	TO15-LL	SOIL_VAPOR	DONE	U				

Comments:

WG1430466-5 L2047588-04

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: AIRLAB19

Internal Standard/Surrogate IDs: SS19-030 / SS19-022

Date: 11/02/2020

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: TS

Sequence File Name: 201102.S

SIM ICAL# Full Scan ICAL# APH ICAL#17239

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	BA19110201	TO15_SFS.qgm	R195324.qgd	250 mL			NA
1	BA19110202	TO15_SFS.qgm	R195325.qgd	250 mL			NA
1	BA19110203	TO15_SFS.qgm	R195326.qgd	250 mL			NA
1	TA19110201	TO15_SFS.qgm	R195327.qgd	250 mL	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R195328.qgd	50 mL SS20-039D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R195329.qgd	125 mL SS20-039D	SIM ONLY	DEFAULT	NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R195330.qgd	250 mL SS20-039D	SIM ONLY	DEFAULT	NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R195331.qgd	50 mL SS20-039C		DEFAULT	NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R195332.qgd	125 mL SS20-039C		DEFAULT	NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R195333.qgd	250 mL SS20-039C		DEFAULT	NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R195334.qgd	125 mL SS20-039B		DEFAULT	NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R195335.qgd	250 mL SS20-039B		DEFAULT	NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R195336.qgd	50 mL SS20-039A		DEFAULT	NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R195337.qgd	125 mL SS20-039A		DEFAULT	NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R195338.qgd	250 mL SS20-039A	LL ONLY	DEFAULT	NA
1	BA19110201	TO15_SFS.qgm	R195339.qgd	250 mL			NA
1	BA19110202	TO15_SFS.qgm	R195340.qgd	250 mL			NA
2	CTO15-LLSTD10.0	TO15_SFS.qgm	R195341.qgd	250 mL SS20-032F	LL ICV	DEFAULT ICV AP 2	NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R195342.qgd	125 mL SS20-032F	SIM ICV	DEFAULT ICV AP 2	NA

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: AIRLAB19

Internal Standard/Surrogate IDs: SS19-030 / SS19-022

Date: 11/04/2020

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: EW

Sequence File Name: 201104.S

SIM ICAL# 17304 Full Scan ICAL# 17306 APH ICAL#17239

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	TA19110401	TO15_SFS.qgm	R195363.qgd	250 mL	TUNE		NA
2	CA19110401	TO15_SFS.qgm	R195364.qgd	250 mL SS20-039F	NJ CC FAILED		NA
3	CTO15-LLSTD10.0	TO15_SFS.qgm	R195365.qgd	250 mL SS20-032F	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R195366.qgd	125 mL SS20-032F	SIM LCS		NA
1	BA19110401	TO15_SFS.qgm	R195367.qgd	250 mL	LL BLANK		NA
1	BA19110402	TO15_SFS.qgm	R195368.qgd	250 mL	SIM BLANK		NA
1	L2047588-01D,3,9.35,250	TO15_SFS.qgm	R195369.qgd	WG1430466,ICAL17306	T	NY	Y
2	L2047588-02D,3,115,250	TO15_SFS.qgm	R195370.qgd	WG1430466,ICAL17306	T	NY	Y
3	L2047588-03,3,250,250	TO15_SFS.qgm	R195371.qgd	WG1430466,ICAL17306		NY	Y
4	L2047588-04,3,250,250	TO15_SFS.qgm	R195372.qgd	WG1430466,ICAL17306		NY	Y
4	L2047588-04DUP,3,250,250	TO15_SFS.qgm	R195373.qgd	WG1430466,ICAL17306	LL DUP	NY	Y
5	L2047588-05,3,250,250	TO15_SFS.qgm	R195374.qgd	WG1430466,ICAL17306		NY	Y
6	L2047588-06D,3,90,250	TO15_SFS.qgm	R195375.qgd	WG1430466,ICAL17306	T	NY	Y
7	L2047758-01,3,250,250	TO15_SFS.qgm	R195376.qgd	WG1430466,ICAL17306		NY	Y
8	L2047758-02,3,250,250	TO15_SFS.qgm	R195377.qgd	WG1430466,ICAL17306		NY	Y
9	L2047758-03,3,250,250	TO15_SFS.qgm	R195378.qgd	WG1430466,ICAL17306		NY	Y
10	L2047758-04,3,250,250	TO15_SFS.qgm	R195379.qgd	WG1430466,ICAL17306		NY	Y
11	L2047758-05,3,250,250	TO15_SFS.qgm	R195380.qgd	WG1430466,ICAL17306		NY	Y
12	L2047758-06,3,250,250	TO15_SFS.qgm	R195381.qgd	WG1430466,ICAL17306		NY	Y
13	L2047758-07,3,250,250	TO15_SFS.qgm	R195382.qgd	WG1430466,ICAL17306		NY	Y

Alpha Analytical Air Lab
Instrument Run Log

14	L2047758-08,3,250,250	TO15_SFS.qgm	R195383.qgd	WG1430466,ICAL17306		NY	Y
15	L2047758-09,3,250,250	TO15_SFS.qgm	R195384.qgd	WG1430466,ICAL17306		NY	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical, Inc.
Canister Dilution Worksheet

	NJDEP Required Information							Pressurization Dilution				Can Dilution				Instrument Dilution				
Sample ID	Can size, L	P_1, in Hg	P_1, atm	V_1, L	P_2, in Hg	P_2, atm	V_2, L	P_1, psia	P_2, psia	Dilution factor	Gas Used*	Volume injected, mL	Final Pressure, psia	Volume of Dilution Gas in Can, L	Can dilution factor	Volume of Bag or Can Analyzed, mL	Instrument Dilution Factor	Final Dilution Factor	Final Volume Injected, mL**	Analyst Initials
L2047588-01D	6.0	-2.18	0.93	5.56	29.45	1.98	###	13.6	29.1	2.14	N2	1000	14.7	1.00	1.00	20	12.50	26.75	9.35	AW/TS
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	
		-29.94	0.00	0.00	-29.94	0.00	0.00			#DIV/0!	N2	1000	14.7	1.00	1.00		#DIV/0!	#DIV/0!	#DIV/0!	

*N2 = Nitrogen and H2= Hydrogen

** Reported to 2 decimal places unless 0.01 or less; then 3 decimal places are reported

Analyst data input fields

Analyst Comments:

in Hg = ((psia/14.67)*29.94)-29.94 atm =psia/14.67 psig=psia - 14.67 psia = dilution instrument reading

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1/5/2021 4:15 PM