284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Cover Page

Order ID : Q3131

Project ID : CHADWICK SQUARE

Client : RTP Environmental

Lab Sample Number	Client Sample Number
Q3131-01	141-1A-1
Q3131-02	141-1A-2

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 9/29/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

Alliance Project No. : Q3131

Client Contact Information	Bottle Order ID : **B2509029**	Courier :	1 of 2 COCs
Client ID : **RTPE01**	Project ID : ~~Air~~ Chadwick Square	Sampler Name(s) :	Analysis / Matrix
Customer Name : **RTP Environmental**	Project Manager : **David gabel**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **239 US Highway 22 East**	Phone Number : **732-968-9600**		
	Fax Number :	Batch Certified	
	Site Details: 141 JUNIPER DRIVE		
City : **Green Brook**			
State : **NJ**	Analysis Turnaround Time		
Zip Code : **08812**	Standard : **10 business days** **OR**	Data Package Type : Full	
Country :	Rush (Specify): _____ **Days**	EDD Type : Horizon Plus Excel or CT.	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
141-1A-1	9/16/25 -9/17/25	1030	0915	-30	-11	70	70	-30	-6.7	10478	10275	6 L	4.16	VL042854.D	X				X			

Temperature (Fahrenheit)				
	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)				
	Ambient	Maximum	Minimum	
Start				
Stop				

** Submittal of this COC indicates approval of the analysis based on existing conditions.

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings:

Sampling site (State):

Quick Connector required : NO

Canisters Shiped by: Sam	Date/Time: 09/15/25	Canisters Received by: DG	Date/Time: 9/15/25		
Samples Relinquished by: CW	Date/Time: 9/17/25	Received by:	Date/Time: 9/17/25 1530		B2509029 - 3
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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Alliance Project No. : Q3131

Client Contact Information	Bottle Order ID : **B2509029**	Courier :	2 of 2 COCs
Client ID : **RTPE01**	Project ID : ~~Air~~ Chadwick Square	Sampler Name(s) :	Analysis / Matrix
Customer Name : **RTP Environmental**	Project Manager : **David gabel**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **239 US Highway 22 East**	Phone Number : **732-968-9600**		
	Fax Number :	Individual Certified	
	Site Details: 141 JUNIPER DRIVE		
City : **Green Brook**			
State : **NJ**	Analysis Turnaround Time		
Zip Code : **08812**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
141-1A-2	9/11/25 to 9/12/25	1032	0915	-30	-5	70	70	-30	-6.7	10771	10282	6 L	4.16	VL042854.D	X				X			

Temperature (Fahrenheit)				
	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)				
	Ambient	Maximum	Minimum	
Start				
Stop				

** Submittal of this COC indicates approval of the analysis based on existing conditions.

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings:

Sampling site (State):

Quick Connector required : No

Canisters Shiped by:		Date/Time: 09/12/25	Canisters Received by:	Date/Time: 9/15/25	
Samples Relinquished by:		Date/Time: 9/13/25	Received by:	Date/Time: 9/13/25 1530	B2509029 - 4
Relinquished by:		Date/Time:	Received by:	Date/Time:	

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Laboratory Certification

Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

QA Control Code: A2070148

New Jersey Department of Environmental Protection

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Chemtech
~~NORCE~~
Field Sample Seal No.: Q3131
Case No.: CHADWICK SQUARE

Location: 284 Sheffield Street, Mountainside, NJ 7092
Title: Sample Custodian
Date Broken: 9/17/2025
Military Time Seal Broken: 15:30:00
Analytical Parameter/Fraction: TO-15

Sample No.	Aliquot/Extract No.	Sample No.	Aliquot/Extract No.
Q3131-01	141-1A-1		
Q3131-02	~~141-1A-2~~ 141-1A-2		

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
9/18/25	10:40	Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	

Distribution: White - Original (Sent With Report) Yellow - Contractor Archive Pink - Sample Custodian - Interim Copy

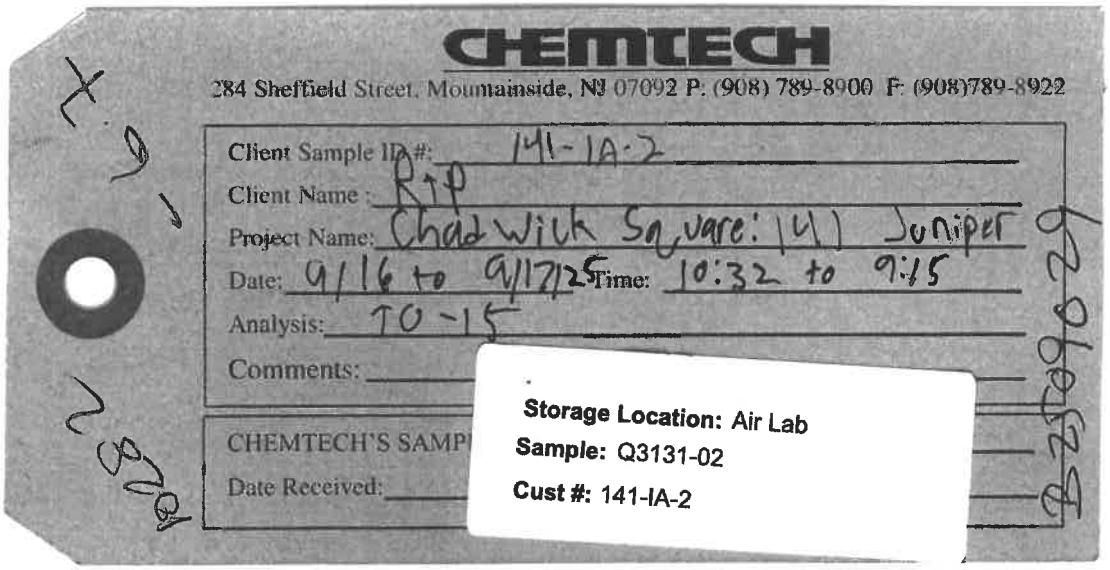
CHEMTECH 284 Sheffield Street Mountainside, NJ 07092

AIR SAMPLE PRESSURE & DILUTION LOGBOOK

Analyst Signature: _____ Supervisor Signature: _____

METHOD: TO-15 Pressure Gauge ID: _____

Date	Sample Number	Canister #	Initial Pressure psia	Initial Pressure Hg	Final Pressure psia	Final Pressure Hg	Dilution Factor	Comment
09/16/15	Q3112-01	10198	12.0	-5.5				SV
	Q3112-02	10606	11.0	-7.5				↓
↓	Q3112-03	10279	11.8	-5.9				↓
09/17/15	Q3130-01	10154	10.8	-8.0				SV
	Q3130-02	10197	12.4	-4.7				↓
	Q3131-01	10275	11.4	-6.7				↓
	Q3131-02	10282	11.4	-6.7				↓
	Q3132-01	10599	13.6	-2.2				↓
↓	Q3132-02	10294	11.4	-6.7				↓



CHEMTECH

284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922

Client Sample ID #: 141-1A-2

Client Name: RTP

Project Name: Chadwick Square: 141 Juniper

Date: 9/16 to 9/17/25 Time: 10:32 to 9:15

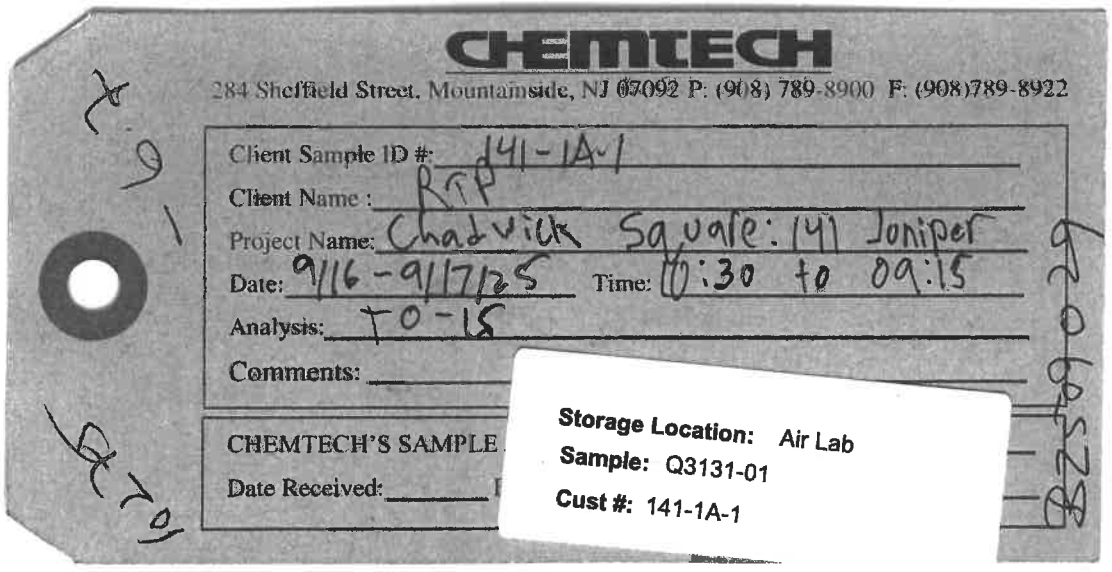
Analysis: TO-15

Comments:

CHEMTECH'S SAMP

Date Received:

Storage Location: Air Lab
Sample: Q3131-02
Cust #: 141-IA-2



CHEMTECH

284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922

Client Sample ID #: 141-1A-1

Client Name: RTP

Project Name: Chadwick Square: 141 Juniper

Date: 9/16-9/17/25 Time: 10:30 to 09:15

Analysis: TO-15

Comments:

CHEMTECH'S SAMPLE

Date Received:

Storage Location: Air Lab
Sample: Q3131-01
Cust #: 141-1A-1

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CASE NARRATIVE

RTP Environmental
Project Name: CHADWICK SQUARE
Project # N/A
Order ID # Q3131
Test Name: TO-15

A. Number of Samples and Date of Receipt:
2 Air samples were received on 09/17/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: TO-15. This data package contains results for TO-15.

C. Analytical Techniques:
The analysis performed on instrument MSVOA_L were done using GC column RTX-1, which is 60 meters, 0.32 mm id, 1.0 um df, Restek Cat. #10157. The Trap was supplied by Entech, glass bead and Tenax , Entech 7100A Preconcentrator.The analysis of TO-15 was based on method TO-15.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries were met for all analysis.
The Internal Standards Areas were met for all analysis.
The Retention Times were met for all analysis.

The RPD for {Q3130-02DUP} with File ID: VL042970.D met criteria except for 1,2-Dichloroethane[30.8%], Tetrachloroethene[200%] due to difference in results of Original and DUP.

The Blank Spike met requirements for all compounds.
The Blank analysis did not indicate the presence of lab contamination.

The %RSD is greater than 30% in the Initial Calibration method (VL092225AIR.M) for Methylene Chloride passing on Linear Regression.

The Tuning criteria met requirements.

Samples 141-1A-1, 141-1A-2 were diluted due to high concentrations.

E. Additional Comments:
Alliance Technical Group, LLC - Newark holds certification for the analytes "Bromodichloromethane, Chloroethane and Heptane". Currently, we are not eligible to

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report them, as we have not successfully completed the required Proficiency Testing (PT) study. We are actively engaged in the PT study process to gain reporting eligibility.

The Sample #141-1A-1, 141-1A-1DL, 141-1A-2,141-1A-2DL have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.
The not QT review data is reported in the Miscellaneous.

The Manual Integrations are performed for the followings.

Manual Integration Report			
Sequence	VL092225	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042950.D	m/p-Xylene	sam	9/23/2025 10:01:03 AM	MMDadoda	9/24/2025 2:16:17 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042951.D	1,1,2-Trichloroethane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042951.D	1,2-Dichloropropane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042951.D	1,4-Dioxane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software incorrectly

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VSTDICC002	VL042951.D	4-Methyl-2-Pentanone	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042951.D	m/p-Xylene	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042952.D	1,2-Dichloropropane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042952.D	1,4-Dioxane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042952.D	Bromodichloromethane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042952.D	cis-1,3-Dichloropropene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042952.D	Heptane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software incorrectly

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VSTDICC001	VL042952.D	m/p-Xylene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042952.D	t-1,3-Dichloropropene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	1,1,2-Trichloroethane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	1,4-Dioxane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	2,2,4-Trimethylpentane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	Benzyl Chloride	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	cis-1,3-Dichloropropene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly

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VSTDICC0.5	VL042953.D	Ethanol	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	Heptane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	m/p-Xylene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	Methyl Methacrylate	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	t-1,3-Dichloropropene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	Tetrachloroethene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042953.D	trans-1,2-Dichloroethene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software incorrectly

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VSTDICC0.1	VL042954.D	1,2-Dibromoethane	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042954.D	Carbon Tetrachloride	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042954.D	Naphthalene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042954.D	Tetrachloroethene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042954.D	Trichloroethene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042955.D	1,1,1-Trichloroethane	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042955.D	1,1,2,2-Tetrachloroethane	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software incorrectly

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VSTDICC0.03	VL042955.D	Carbon Tetrachloride	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042955.D	Tetrachloroethene	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042955.D	Trichloroethene	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software incorrectly
VSTDICC015	VL042956.D	m/p-Xylene	sam	9/23/2025 10:01:19 AM	MMDadoda	9/24/2025 2:16:27 AM	Peak Integrated by Software incorrectly
VSTDICV010	VL042957.D	m/p-Xylene	sam	9/23/2025 10:01:52 AM	MMDadoda	9/24/2025 2:16:29 AM	Peak Integrated by Software incorrectly
VL0922ABS01	VL042959.D	m/p-Xylene	sam	9/23/2025 10:01:29 AM	MMDadoda	9/24/2025 2:16:44 AM	Peak Integrated by Software incorrectly
Q3130-02DUP	VL042970.D	2,2,4-Trimethylpentane	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software incorrectly

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Q3130-02DUP	VL042970.D	Carbon Tetrachloride	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software incorrectly
Q3130-02DUP	VL042970.D	m/p-Xylene	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software incorrectly
Q3130-02DUP	VL042970.D	Propene	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software incorrectly
Q3130-02DUP	VL042970.D	Tetrachloroethene	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	1,2-Dichloroethane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	2-Hexanone	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	4-Methyl-2-Pentanone	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly

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Q3131-01	VL042974.D	Acetone	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	Carbon Tetrachloride	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	Chlorodifluoromethane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	Cyclohexane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	Heptane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01	VL042974.D	Propene	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software incorrectly
Q3131-01DL	VL042975.D	Acetone	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software incorrectly

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Q3131-01DL	VL042975.D	Isopropyl Alcohol	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software incorrectly
Q3131-01DL	VL042975.D	m/p-Xylene	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software incorrectly
Q3131-01DL	VL042975.D	Propene	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software incorrectly
Q3131-01DL	VL042975.D	Toluene	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software incorrectly
Q3131-02	VL042976.D	4-Methyl-2-Pentanone	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly
Q3131-02	VL042976.D	Acetone	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly
Q3131-02	VL042976.D	Carbon Tetrachloride	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly

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Q3131-02	VL042976.D	Chlorodifluoromethane	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly
Q3131-02	VL042976.D	Chloroform	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly
Q3131-02	VL042976.D	Heptane	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly
Q3131-02	VL042976.D	Propene	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly
Q3131-02	VL042976.D	Tetrahydrofuran	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software incorrectly
Q3131-02DL	VL042977.D	2,2,4-Trimethylpentane	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software incorrectly
Q3131-02DL	VL042977.D	Acetone	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software incorrectly

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Q3131-02DL	VL042977.D	Isopropyl Alcohol	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software incorrectly
Q3131-02DL	VL042977.D	m/p-Xylene	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software incorrectly
Q3131-02DL	VL042977.D	Toluene	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software incorrectly

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value**.** This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q3131**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: **SOHIL JODHANI** **Date:** **09/29/2025**

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LAB CHRONICLE

OrderID:	Q3131	**OrderDate:**	9/18/2025 9:15:00 AM
Client:	RTP Environmental	**Project:**	CHADWICK SQUARE
Contact:	David Gabel	**Location:**	Air Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3131-01	**141-1A-1**	**Air**			**09/17/25**			**09/17/25**
			TO-15	TO-15			09/23/25	
Q3131-01DL	**141-1A-1DL**	**Air**			**09/17/25**			**09/17/25**
			TO-15	TO-15			09/23/25	
Q3131-02	**141-1A-2**	**Air**			**09/17/25**			**09/17/25**
			TO-15	TO-15			09/23/25	
Q3131-02DL	**141-1A-2DL**	**Air**			**09/17/25**			**09/17/25**
			TO-15	TO-15			09/23/25	

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Hit Summary Sheet
SW-846

SDG No.: Q3131

Client: RTP Environmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	**141-1A-1**							
Q3131-01	141-1A-1	Air	Dichlorodifluoromethane	16.8		0.54	2.47	ug/m3
Q3131-01	141-1A-1	Air	Chloromethane	0.87	J	0.21	1.03	ug/m3
Q3131-01	141-1A-1	Air	Tetrahydrofuran	1.21	J	0.24	1.47	ug/m3
Q3131-01	141-1A-1	Air	Trichlorofluoromethane	2.19	J	0.96	2.81	ug/m3
Q3131-01	141-1A-1	Air	tert-Butyl alcohol	0.79	J	0.49	1.52	ug/m3
Q3131-01	141-1A-1	Air	Heptane	1.64	J	0.70	2.05	ug/m3
Q3131-01	141-1A-1	Air	Acetone	42.3	E	0.43	1.19	ug/m3
Q3131-01	141-1A-1	Air	Methylene Chloride	6.95		0.80	1.74	ug/m3
Q3131-01	141-1A-1	Air	Cyclohexane	1.72		0.76	1.72	ug/m3
Q3131-01	141-1A-1	Air	2-Butanone	4.42		0.18	1.47	ug/m3
Q3131-01	141-1A-1	Air	Carbon Tetrachloride	0.57		0.19	0.19	ug/m3
Q3131-01	141-1A-1	Air	Chloroform	0.63	J	0.49	2.44	ug/m3
Q3131-01	141-1A-1	Air	2,2,4-Trimethylpentane	5.14		0.65	2.34	ug/m3
Q3131-01	141-1A-1	Air	Benzene	2.11		0.26	1.60	ug/m3
Q3131-01	141-1A-1	Air	1,2-Dichloroethane	0.81	J	0.36	2.02	ug/m3
Q3131-01	141-1A-1	Air	4-Methyl-2-Pentanone	1.11	J	0.41	2.05	ug/m3
Q3131-01	141-1A-1	Air	Toluene	7.16		0.60	1.88	ug/m3
Q3131-01	141-1A-1	Air	Ethyl Benzene	1.74	J	0.83	2.17	ug/m3
Q3131-01	141-1A-1	Air	m/p-Xylene	6.52		1.78	4.34	ug/m3
Q3131-01	141-1A-1	Air	o-Xylene	2.35		0.91	2.17	ug/m3
Q3131-01	141-1A-1	Air	Styrene	1.02	J	0.68	2.13	ug/m3
Q3131-01	141-1A-1	Air	1,2,4-Trimethylbenzene	1.43	J	0.88	2.46	ug/m3
Q3131-01	141-1A-1	Air	Naphthalene	0.58		0.050	0.52	ug/m3
Q3131-01	141-1A-1	Air	Hexane	22.9		0.56	1.76	ug/m3
			Total Voc :	133				
			Total Concentration:	133				
Client ID:	**141-1A-1DL**							
Q3131-01DL	141-1A-1DL	Air	Dichlorodifluoromethane	18.8	JD	5.44	24.7	ug/m3
Q3131-01DL	141-1A-1DL	Air	Acetone	43.7	D	4.28	11.9	ug/m3
Q3131-01DL	141-1A-1DL	Air	2-Butanone	4.72	JD	1.65	14.8	ug/m3
Q3131-01DL	141-1A-1DL	Air	Toluene	6.41	JD	6.03	18.8	ug/m3
Q3131-01DL	141-1A-1DL	Air	Hexane	21.1	D	5.64	17.6	ug/m3
			Total Voc :	94.8				
			Total Concentration:	94.8				
Client ID:	**141-1A-2**							
Q3131-02	141-1A-2	Air	Dichlorodifluoromethane	18.8		0.54	2.47	ug/m3

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Hit Summary Sheet
SW-846

SDG No.: Q3131

Client: RTP Environmental

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q3131-02	141-1A-2	Air	Chloromethane	0.83	J	0.21	1.03	ug/m3
Q3131-02	141-1A-2	Air	Tetrahydrofuran	1.09	J	0.24	1.47	ug/m3
Q3131-02	141-1A-2	Air	Trichlorofluoromethane	2.42	J	0.96	2.81	ug/m3
Q3131-02	141-1A-2	Air	tert-Butyl alcohol	0.79	J	0.49	1.52	ug/m3
Q3131-02	141-1A-2	Air	Heptane	1.80	J	0.70	2.05	ug/m3
Q3131-02	141-1A-2	Air	Acetone	49.2	E	0.43	1.19	ug/m3
Q3131-02	141-1A-2	Air	Methylene Chloride	2.64		0.80	1.74	ug/m3
Q3131-02	141-1A-2	Air	Cyclohexane	1.89		0.76	1.72	ug/m3
Q3131-02	141-1A-2	Air	2-Butanone	4.13		0.18	1.47	ug/m3
Q3131-02	141-1A-2	Air	Carbon Tetrachloride	0.57		0.19	0.19	ug/m3
Q3131-02	141-1A-2	Air	Chloroform	0.68	J	0.49	2.44	ug/m3
Q3131-02	141-1A-2	Air	2,2,4-Trimethylpentane	6.07		0.65	2.34	ug/m3
Q3131-02	141-1A-2	Air	Benzene	2.30		0.26	1.60	ug/m3
Q3131-02	141-1A-2	Air	1,2-Dichloroethane	0.81	J	0.36	2.02	ug/m3
Q3131-02	141-1A-2	Air	4-Methyl-2-Pentanone	0.57	J	0.41	2.05	ug/m3
Q3131-02	141-1A-2	Air	Toluene	7.54		0.60	1.88	ug/m3
Q3131-02	141-1A-2	Air	Ethyl Benzene	1.91	J	0.83	2.17	ug/m3
Q3131-02	141-1A-2	Air	m/p-Xylene	7.38		1.78	4.34	ug/m3
Q3131-02	141-1A-2	Air	o-Xylene	2.65		0.91	2.17	ug/m3
Q3131-02	141-1A-2	Air	Styrene	0.98	J	0.68	2.13	ug/m3
Q3131-02	141-1A-2	Air	1,2,4-Trimethylbenzene	1.43	J	0.88	2.46	ug/m3
Q3131-02	141-1A-2	Air	Hexane	23.6		0.56	1.76	ug/m3
			Total Voc :	140				
			Total Concentration:	140				
Client ID:	**141-1A-2DL**							
Q3131-02DL	141-1A-2DL	Air	Dichlorodifluoromethane	20.8	JD	5.44	24.7	ug/m3
Q3131-02DL	141-1A-2DL	Air	Acetone	48.0	D	4.28	11.9	ug/m3
Q3131-02DL	141-1A-2DL	Air	2-Butanone	4.42	JD	1.65	14.8	ug/m3
Q3131-02DL	141-1A-2DL	Air	Toluene	7.16	JD	6.03	18.8	ug/m3
Q3131-02DL	141-1A-2DL	Air	Hexane	21.9	D	5.64	17.6	ug/m3
			Total Voc :	102				
			Total Concentration:	102				

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Project : CHADWICK SQUARE

Field Id Number : 141-1A-1

Laboratory Id Number : Q3131-01

Sampling Date : 09/17/25

Analysis Date : 09/23/25

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	3.4		16.8		
Chloromethane	74-87-3	50.49	0.42	J	0.87		
Vinyl Chloride	75-01-4	62.5	0.03	U	0.08		
Bromomethane	74-83-9	94.94	0.08	U	0.31		
Chloroethane	75-00-3	64.52	0.15	U	0.4		
Tetrahydrofuran	109-99-9	72.11	0.41	J	1.21		
Trichlorofluoromethane	75-69-4	137.4	0.39	J	2.19		
Dichlorotetrafluoroethane	76-14-2	170.9	0.15	U	1.05		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.14	U	1.07		
tert-Butyl alcohol	75-65-0	74.12	0.26	J	0.79		
Heptane	142-82-5	100.2	0.4	J	1.64		
1,1-Dichloroethene	75-35-4	96.94	0.15	U	0.59		
Acetone	67-64-1	58.08	17.8	E	42.3		
Carbon Disulfide	75-15-0	76.14	0.08	U	0.25		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.23	U	0.83		
Methylene Chloride	75-09-2	84.94	2		6.95		
trans-1,2-Dichloroethene	156-60-5	96.94	0.12	U	0.48		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.5		1.72		
2-Butanone	78-93-3	72.11	1.5		4.42		
Carbon Tetrachloride	56-23-5	153.8	0.09		0.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.1	U	0.4		
Chloroform	67-66-3	119.4	0.13	J	0.63		
1,1,1-Trichloroethane	71-55-6	133.4	0.02	U	0.11		
2,2,4-Trimethylpentane	540-84-1	114.2	1.1		5.14		
Benzene	71-43-2	78.11	0.66		2.11		
1,2-Dichloroethane	107-06-2	98.96	0.2	J	0.81		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.13	U	0.6		
Bromodichloromethane	75-27-4	163.8	0.06	U	0.4		
4-Methyl-2-Pentanone	108-10-1	100.2	0.27	J	1.11		
Toluene	108-88-3	92.14	1.9		7.16		
t-1,3-Dichloropropene	10061-02-6	111	0.15	U	0.68		
cis-1,3-Dichloropropene	10061-01-5	111	0.11	U	0.5		
1,1,2-Trichloroethane	79-00-5	133.4	0.08	U	0.44		

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Project : CHADWICK SQUARE **Sampling Date :** 09/17/25

Field Id Number : 141-1A-1 **Analysis Date :** 09/23/25

Laboratory Id Number : Q3131-01 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.09	U	0.77		
1,2-Dibromoethane	106-93-4	187.9	0.09	U	0.69		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.4	J	1.74		
m/p-Xylene	179601-23-1	106.2	1.5		6.52		
o-Xylene	95-47-6	106.2	0.54		2.35		
Styrene	100-42-5	104.1	0.24	J	1.02		
Bromoform	75-25-2	252.8	0.05	U	0.52		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.02	U	0.14		
2-Chlorotoluene	95-49-8	126.6	0.17	U	0.88		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.18	U	0.88		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.29	J	1.43		
1,3-Dichlorobenzene	541-73-1	147	0.05	U	0.3		
1,4-Dichlorobenzene	106-46-7	147	0.13	U	0.78		
1,2-Dichlorobenzene	95-50-1	147	0.13	U	0.78		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.21	U	1.56		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.13	U	1.39		
Naphthalene	91-20-3	128.17	0.11		0.58		
1,3-Butadiene	106-99-0	54.09	0.05	U	0.11		
4-Ethyltoluene	622-96-8	120.2	0.21	U	1.03		
Hexane	110-54-3	86.17	6.5		22.9		
Allyl Chloride	107-05-1	76.53	0.11	U	0.34		
1,4-Dioxane	123-91-1	88.12	0.22	U	0.79		
Methyl Methacrylate	80-62-6	100.117	0.14	U	0.57		

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Project : CHADWICK SQUARE
Sampling Date : 09/17/25
Field Id Number : 141-1A-1DL
Analysis Date : 09/23/25
Laboratory Id Number : Q3131-01DL
Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	3.8	JD	18.8		
Chloromethane	74-87-3	50.49	0.98	UD	2.02		
Vinyl Chloride	75-01-4	62.5	0.25	UD	0.64		
Bromomethane	74-83-9	94.94	0.77	UD	2.99		
Chloroethane	75-00-3	64.52	1.5	UD	3.96		
Tetrahydrofuran	109-99-9	72.11	0.8	UD	2.36		
Trichlorofluoromethane	75-69-4	137.4	1.7	UD	9.55		
Dichlorotetrafluoroethane	76-14-2	170.9	1.5	UD	10.5		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	1.4	UD	10.7		
tert-Butyl alcohol	75-65-0	74.12	1.6	UD	4.85		
Heptane	142-82-5	100.2	1.7	UD	6.97		
1,1-Dichloroethene	75-35-4	96.94	1.5	UD	5.95		
Acetone	67-64-1	58.08	18.4	D	43.7		
Carbon Disulfide	75-15-0	76.14	0.8	UD	2.49		
Methyl tert-Butyl Ether	1634-04-4	88.15	2.3	UD	8.29		
Methylene Chloride	75-09-2	84.94	2.3	UD	7.99		
trans-1,2-Dichloroethene	156-60-5	96.94	1.2	UD	4.76		
1,1-Dichloroethane	75-34-3	98.96	1.3	UD	5.26		
Cyclohexane	110-82-7	84.16	2.2	UD	7.57		
2-Butanone	78-93-3	72.11	1.6	JD	4.72		
Carbon Tetrachloride	56-23-5	153.8	0.25	UD	1.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.99	UD	3.93		
Chloroform	67-66-3	119.4	0.96	UD	4.69		
1,1,1-Trichloroethane	71-55-6	133.4	0.16	UD	0.87		
2,2,4-Trimethylpentane	540-84-1	114.2	1.4	UD	6.54		
Benzene	71-43-2	78.11	0.79	UD	2.52		
1,2-Dichloroethane	107-06-2	98.96	0.93	UD	3.76		
Trichloroethene	79-01-6	131.4	0.24	UD	1.29		
1,2-Dichloropropane	78-87-5	113	1.3	UD	6.01		
Bromodichloromethane	75-27-4	163.8	0.63	UD	4.22		
4-Methyl-2-Pentanone	108-10-1	100.2	0.97	UD	3.98		
Toluene	108-88-3	92.14	1.7	JD	6.41		
t-1,3-Dichloropropene	10061-02-6	111	1.5	UD	6.81		
cis-1,3-Dichloropropene	10061-01-5	111	1.1	UD	4.99		
1,1,2-Trichloroethane	79-00-5	133.4	0.81	UD	4.42		

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Project : CHADWICK SQUARE **Sampling Date :** 09/17/25

Field Id Number : 141-1A-1DL **Analysis Date :** 09/23/25

Laboratory Id Number : Q3131-01DL **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.85	UD	7.24		
1,2-Dibromoethane	106-93-4	187.9	0.85	UD	6.53		
Tetrachloroethene	127-18-4	165.8	0.15	UD	1.02		
Chlorobenzene	108-90-7	112.6	0.77	UD	3.55		
Ethyl Benzene	100-41-4	106.2	1.9	UD	8.25		
m/p-Xylene	179601-23-1	106.2	4.1	UD	17.8		
o-Xylene	95-47-6	106.2	2.1	UD	9.12		
Styrene	100-42-5	104.1	1.6	UD	6.81		
Bromoform	75-25-2	252.8	0.48	UD	4.96		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.18	UD	1.24		
2-Chlorotoluene	95-49-8	126.6	1.7	UD	8.8		
1,3,5-Trimethylbenzene	108-67-8	120.2	1.8	UD	8.85		
1,2,4-Trimethylbenzene	95-63-6	120.2	1.8	UD	8.85		
1,3-Dichlorobenzene	541-73-1	147	0.54	UD	3.25		
1,4-Dichlorobenzene	106-46-7	147	1.3	UD	7.82		
1,2-Dichlorobenzene	95-50-1	147	1.3	UD	7.82		
1,2,4-Trichlorobenzene	120-82-1	181.5	2.1	UD	15.6		
Hexachloro-1,3-Butadiene	87-68-3	260.8	1.3	UD	13.9		
Naphthalene	91-20-3	128.17	0.13	UD	0.68		
1,3-Butadiene	106-99-0	54.09	0.51	UD	1.13		
4-Ethyltoluene	622-96-8	120.2	2.1	UD	10.3		
Hexane	110-54-3	86.17	6	D	21.2		
Allyl Chloride	107-05-1	76.53	1.1	UD	3.44		
1,4-Dioxane	123-91-1	88.12	2.2	UD	7.93		
Methyl Methacrylate	80-62-6	100.117	1.4	UD	5.73		

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Project : CHADWICK SQUARE

Field Id Number : 141-1A-2

Laboratory Id Number : Q3131-02

Sampling Date : 09/17/25

Analysis Date : 09/23/25

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	3.8		18.8		
Chloromethane	74-87-3	50.49	0.4	J	0.83		
Vinyl Chloride	75-01-4	62.5	0.03	U	0.08		
Bromomethane	74-83-9	94.94	0.08	U	0.31		
Chloroethane	75-00-3	64.52	0.15	U	0.4		
Tetrahydrofuran	109-99-9	72.11	0.37	J	1.09		
Trichlorofluoromethane	75-69-4	137.4	0.43	J	2.42		
Dichlorotetrafluoroethane	76-14-2	170.9	0.15	U	1.05		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.14	U	1.07		
tert-Butyl alcohol	75-65-0	74.12	0.26	J	0.79		
Heptane	142-82-5	100.2	0.44	J	1.8		
1,1-Dichloroethene	75-35-4	96.94	0.15	U	0.59		
Acetone	67-64-1	58.08	20.7	E	49.2		
Carbon Disulfide	75-15-0	76.14	0.08	U	0.25		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.23	U	0.83		
Methylene Chloride	75-09-2	84.94	0.76		2.64		
trans-1,2-Dichloroethene	156-60-5	96.94	0.12	U	0.48		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.55		1.89		
2-Butanone	78-93-3	72.11	1.4		4.13		
Carbon Tetrachloride	56-23-5	153.8	0.09		0.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.1	U	0.4		
Chloroform	67-66-3	119.4	0.14	J	0.68		
1,1,1-Trichloroethane	71-55-6	133.4	0.02	U	0.11		
2,2,4-Trimethylpentane	540-84-1	114.2	1.3		6.07		
Benzene	71-43-2	78.11	0.72		2.3		
1,2-Dichloroethane	107-06-2	98.96	0.2	J	0.81		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.13	U	0.6		
Bromodichloromethane	75-27-4	163.8	0.06	U	0.4		
4-Methyl-2-Pentanone	108-10-1	100.2	0.14	J	0.57		
Toluene	108-88-3	92.14	2		7.54		
t-1,3-Dichloropropene	10061-02-6	111	0.15	U	0.68		
cis-1,3-Dichloropropene	10061-01-5	111	0.11	U	0.5		
1,1,2-Trichloroethane	79-00-5	133.4	0.08	U	0.44		

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Project : CHADWICK SQUARE **Sampling Date :** 09/17/25

Field Id Number : 141-1A-2 **Analysis Date :** 09/23/25

Laboratory Id Number : Q3131-02 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.09	U	0.77		
1,2-Dibromoethane	106-93-4	187.9	0.09	U	0.69		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.44	J	1.91		
m/p-Xylene	179601-23-1	106.2	1.7		7.38		
o-Xylene	95-47-6	106.2	0.61		2.65		
Styrene	100-42-5	104.1	0.23	J	0.98		
Bromoform	75-25-2	252.8	0.05	U	0.52		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.02	U	0.14		
2-Chlorotoluene	95-49-8	126.6	0.17	U	0.88		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.18	U	0.88		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.29	J	1.43		
1,3-Dichlorobenzene	541-73-1	147	0.05	U	0.3		
1,4-Dichlorobenzene	106-46-7	147	0.13	U	0.78		
1,2-Dichlorobenzene	95-50-1	147	0.13	U	0.78		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.21	U	1.56		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.13	U	1.39		
Naphthalene	91-20-3	128.17	0.01	U	0.05		
1,3-Butadiene	106-99-0	54.09	0.05	U	0.11		
4-Ethyltoluene	622-96-8	120.2	0.21	U	1.03		
Hexane	110-54-3	86.17	6.7		23.6		
Allyl Chloride	107-05-1	76.53	0.11	U	0.34		
1,4-Dioxane	123-91-1	88.12	0.22	U	0.79		
Methyl Methacrylate	80-62-6	100.117	0.14	U	0.57		

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Project : CHADWICK SQUARE

Field Id Number : 141-1A-2DL

Laboratory Id Number : Q3131-02DL

Sampling Date : 09/17/25

Analysis Date : 09/23/25

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	4.2	JD	20.8		
Chloromethane	74-87-3	50.49	0.98	UD	2.02		
Vinyl Chloride	75-01-4	62.5	0.25	UD	0.64		
Bromomethane	74-83-9	94.94	0.77	UD	2.99		
Chloroethane	75-00-3	64.52	1.5	UD	3.96		
Tetrahydrofuran	109-99-9	72.11	0.8	UD	2.36		
Trichlorofluoromethane	75-69-4	137.4	1.7	UD	9.55		
Dichlorotetrafluoroethane	76-14-2	170.9	1.5	UD	10.5		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	1.4	UD	10.7		
tert-Butyl alcohol	75-65-0	74.12	1.6	UD	4.85		
Heptane	142-82-5	100.2	1.7	UD	6.97		
1,1-Dichloroethene	75-35-4	96.94	1.5	UD	5.95		
Acetone	67-64-1	58.08	20.2	D	48.0		
Carbon Disulfide	75-15-0	76.14	0.8	UD	2.49		
Methyl tert-Butyl Ether	1634-04-4	88.15	2.3	UD	8.29		
Methylene Chloride	75-09-2	84.94	2.3	UD	7.99		
trans-1,2-Dichloroethene	156-60-5	96.94	1.2	UD	4.76		
1,1-Dichloroethane	75-34-3	98.96	1.3	UD	5.26		
Cyclohexane	110-82-7	84.16	2.2	UD	7.57		
2-Butanone	78-93-3	72.11	1.5	JD	4.42		
Carbon Tetrachloride	56-23-5	153.8	0.25	UD	1.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.99	UD	3.93		
Chloroform	67-66-3	119.4	0.96	UD	4.69		
1,1,1-Trichloroethane	71-55-6	133.4	0.16	UD	0.87		
2,2,4-Trimethylpentane	540-84-1	114.2	1.4	UD	6.54		
Benzene	71-43-2	78.11	0.79	UD	2.52		
1,2-Dichloroethane	107-06-2	98.96	0.93	UD	3.76		
Trichloroethene	79-01-6	131.4	0.24	UD	1.29		
1,2-Dichloropropane	78-87-5	113	1.3	UD	6.01		
Bromodichloromethane	75-27-4	163.8	0.63	UD	4.22		
4-Methyl-2-Pentanone	108-10-1	100.2	0.97	UD	3.98		
Toluene	108-88-3	92.14	1.9	JD	7.16		
t-1,3-Dichloropropene	10061-02-6	111	1.5	UD	6.81		
cis-1,3-Dichloropropene	10061-01-5	111	1.1	UD	4.99		
1,1,2-Trichloroethane	79-00-5	133.4	0.81	UD	4.42		

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Project : CHADWICK SQUARE **Sampling Date :** 09/17/25

Field Id Number : 141-1A-2DL **Analysis Date :** 09/23/25

Laboratory Id Number : Q3131-02DL **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.85	UD	7.24		
1,2-Dibromoethane	106-93-4	187.9	0.85	UD	6.53		
Tetrachloroethene	127-18-4	165.8	0.15	UD	1.02		
Chlorobenzene	108-90-7	112.6	0.77	UD	3.55		
Ethyl Benzene	100-41-4	106.2	1.9	UD	8.25		
m/p-Xylene	179601-23-1	106.2	4.1	UD	17.8		
o-Xylene	95-47-6	106.2	2.1	UD	9.12		
Styrene	100-42-5	104.1	1.6	UD	6.81		
Bromoform	75-25-2	252.8	0.48	UD	4.96		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.18	UD	1.24		
2-Chlorotoluene	95-49-8	126.6	1.7	UD	8.8		
1,3,5-Trimethylbenzene	108-67-8	120.2	1.8	UD	8.85		
1,2,4-Trimethylbenzene	95-63-6	120.2	1.8	UD	8.85		
1,3-Dichlorobenzene	541-73-1	147	0.54	UD	3.25		
1,4-Dichlorobenzene	106-46-7	147	1.3	UD	7.82		
1,2-Dichlorobenzene	95-50-1	147	1.3	UD	7.82		
1,2,4-Trichlorobenzene	120-82-1	181.5	2.1	UD	15.6		
Hexachloro-1,3-Butadiene	87-68-3	260.8	1.3	UD	13.9		
Naphthalene	91-20-3	128.17	0.13	UD	0.68		
1,3-Butadiene	106-99-0	54.09	0.51	UD	1.13		
4-Ethyltoluene	622-96-8	120.2	2.1	UD	10.3		
Hexane	110-54-3	86.17	6.2	D	21.8		
Allyl Chloride	107-05-1	76.53	1.1	UD	3.44		
1,4-Dioxane	123-91-1	88.12	2.2	UD	7.93		
Methyl Methacrylate	80-62-6	100.117	1.4	UD	5.73		

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Method	Matrix	Parameter	Instrument ID	Column ID	MDL (ppbv)	RL (ppbv)	MB Data	MB Datafile	StdevVal
TO-15	Air	1,1,1,2-Tetrachloroethane	MSVOA_L	RTX-1	0.089	0.50	0		0.028115408
TO-15	Air	1,1,1-Trichloroethane	MSVOA_L	RTX-1	0.016	0.030	0		0.005089672
TO-15	Air	1,1,2,2-Tetrachloroethane	MSVOA_L	RTX-1	0.018	0.030	0		0.005472877
TO-15	Air	1,1,2-Trichloroethane	MSVOA_L	RTX-1	0.081	0.50	0		0.02572751
TO-15	Air	1,1,2-Trichlorotrifluoroethane	MSVOA_L	RTX-1	0.14	0.50	0		0.042983939
TO-15	Air	1,1-Dichloroethane	MSVOA_L	RTX-1	0.13	0.50	0		0.040178175
TO-15	Air	1,1-Dichloroethene	MSVOA_L	RTX-1	0.15	0.50	0		0.047056197
TO-15	Air	1,2,4-Trichlorobenzene	MSVOA_L	RTX-1	0.21	0.50	0		0.064291005
TO-15	Air	1,2,4-Trimethylbenzene	MSVOA_L	RTX-1	0.18	0.50	0		0.054467115
TO-15	Air	1,2-Dibromoethane	MSVOA_L	RTX-1	0.085	0.10	0		0.026726124
TO-15	Air	1,2-Dichlorobenzene	MSVOA_L	RTX-1	0.13	0.50	0		0.040999419
TO-15	Air	1,2-Dichloroethane	MSVOA_L	RTX-1	0.093	0.50	0		0.029277002
TO-15	Air	1,2-Dichloropropane	MSVOA_L	RTX-1	0.13	0.50	0		0.039880775
TO-15	Air	1,3,5-Trimethylbenzene	MSVOA_L	RTX-1	0.18	0.50	0		0.054598099
TO-15	Air	1,3-Butadiene	MSVOA_L	RTX-1	0.051	0.50	0		0.016035675
TO-15	Air	1,3-Dichlorobenzene	MSVOA_L	RTX-1	0.054	0.50	0		0.017043362
TO-15	Air	1,4-Dichlorobenzene	MSVOA_L	RTX-1	0.13	0.50	0		0.039460649
TO-15	Air	1,4-Dioxane	MSVOA_L	RTX-1	0.22	0.50	0		0.067330033
TO-15	Air	2,2,4-Trimethylpentane	MSVOA_L	RTX-1	0.14	0.50	0		0.044131837
TO-15	Air	2-Butanone	MSVOA_L	RTX-1	0.056	0.50	0		0.017728105
TO-15	Air	2-Chlorotoluene	MSVOA_L	RTX-1	0.17	0.50	0		0.052599113
TO-15	Air	2-Hexanone	MSVOA_L	RTX-1	0.11	0.50	0		0.033523268
TO-15	Air	4-Ethyltoluene	MSVOA_L	RTX-1	0.21	0.50	0		0.066332496
TO-15	Air	4-Methyl-2-Pentanone	MSVOA_L	RTX-1	0.097	0.50	0		0.030783422
TO-15	Air	Acetone	MSVOA_L	RTX-1	0.18	0.50	0		0.055592052
TO-15	Air	Allyl Chloride	MSVOA_L	RTX-1	0.11	0.50	0		0.033380918
TO-15	Air	Benzene	MSVOA_L	RTX-1	0.079	0.50	0		0.025071327
TO-15	Air	Benzyl Chloride	MSVOA_L	RTX-1	0.089	0.50	0		0.028284271
TO-15	Air	Bromodichloromethane	MSVOA_L	RTX-1	0.063	0.50	0		0.019880596
TO-15	Air	Bromoethene	MSVOA_L	RTX-1	0.2	0.50	0		0.062678317
TO-15	Air	Bromoform	MSVOA_L	RTX-1	0.048	0.50	0		0.015118579
TO-15	Air	Bromomethane	MSVOA_L	RTX-1	0.077	0.50	0		0.024494897
TO-15	Air	Carbon Disulfide	MSVOA_L	RTX-1	0.08	0.50	0		0.02544836
TO-15	Air	Carbon Tetrachloride	MSVOA_L	RTX-1	0.025	0.030	0		0.007690439
TO-15	Air	Chlorobenzene	MSVOA_L	RTX-1	0.077	0.50	0		0.024397502
TO-15	Air	Chlorodifluoromethane	MSVOA_L	RTX-1	0.12	0.50	0		0.037859389
TO-15	Air	Chloroethane	MSVOA_L	RTX-1	0.15	0.50	0		0.045250625
TO-15	Air	Chloroform	MSVOA_L	RTX-1	0.096	0.50	0		0.030394235
TO-15	Air	Chloromethane	MSVOA_L	RTX-1	0.098	0.50	0		0.03101459
TO-15	Air	cis-1,2-Dichloroethene	MSVOA_L	RTX-1	0.099	0.50	0		0.031471832
TO-15	Air	cis-1,3-Dichloropropene	MSVOA_L	RTX-1	0.11	0.50	0		0.032071349
TO-15	Air	Cyclohexane	MSVOA_L	RTX-1	0.22	0.50	0		0.06972736
TO-15	Air	Dibromochloromethane	MSVOA_L	RTX-1	0.085	0.50	0		0.026726124
TO-15	Air	Dichlorodifluoromethane	MSVOA_L	RTX-1	0.11	0.50	0		0.033380918
TO-15	Air	Dichlorotetrafluoroethane	MSVOA_L	RTX-1	0.15	0.50	0		0.045460606
TO-15	Air	Ethanol	MSVOA_L	RTX-1	0.32	0.50	0		0.098848128
TO-15	Air	Ethyl Acetate	MSVOA_L	RTX-1	0.12	0.50	0		0.036384193
TO-15	Air	Ethyl Benzene	MSVOA_L	RTX-1	0.19	0.50	0		0.058554004
TO-15	Air	Heptane	MSVOA_L	RTX-1	0.17	0.50	0		0.051130086
TO-15	Air	Hexachloro-1,3-Butadiene	MSVOA_L	RTX-1	0.13	0.50	0		0.038297084
TO-15	Air	Hexane	MSVOA_L	RTX-1	0.16	0.50	0		0.04894117
TO-15	Air	Isopropyl Alcohol	MSVOA_L	RTX-1	0.23	0.50	0		0.070676998
TO-15	Air	Isopropylbenzene	MSVOA_L	RTX-1	0.16	0.50	0		0.048205908
TO-15	Air	m/p-Xylene	MSVOA_L	RTX-1	0.41	1.00	0		0.130091543
TO-15	Air	Methyl Methacrylate	MSVOA_L	RTX-1	0.14	0.50	0		0.044131837
TO-15	Air	Methyl tert-Butyl Ether	MSVOA_L	RTX-1	0.23	0.50	0		0.07296444
TO-15	Air	Methylene Chloride	MSVOA_L	RTX-1	0.23	0.50	0		0.07204496
TO-15	Air	Naphthalene	MSVOA_L	RTX-1	0.013	0.10	0		0.004076647
TO-15	Air	Naphthalene,2-methyl-	MSVOA_L	RTX-1	0.22	0.50	0		0.069213266
TO-15	Air	n-Butylbenzene	MSVOA_L	RTX-1	0.18	0.50	0		0.055805786
TO-15	Air	n-propylbenzene	MSVOA_L	RTX-1	0.2	0.50	0		0.06164414
TO-15	Air	o-Xylene	MSVOA_L	RTX-1	0.21	0.50	0		0.06491753
TO-15	Air	p-Isopropyltoluene	MSVOA_L	RTX-1	0.19	0.50	0		0.059561893
TO-15	Air	Propene	MSVOA_L	RTX-1	0.077	0.50	0		0.024397502
TO-15	Air	sec-Butylbenzene	MSVOA_L	RTX-1	0.2	0.50	0		0.061913919
TO-15	Air	Styrene	MSVOA_L	RTX-1	0.16	0.50	0		0.05
TO-15	Air	t-1,3-Dichloropropene	MSVOA_L	RTX-1	0.15	0.50	0		0.046496288
TO-15	Air	tert-Butyl alcohol	MSVOA_L	RTX-1	0.16	0.50	0		0.048892496
TO-15	Air	tert-Butylbenzene	MSVOA_L	RTX-1	0.22	0.50	0		0.067928534
TO-15	Air	Tetrachloroethene	MSVOA_L	RTX-1	0.015	0.030	0		0.004725816
TO-15	Air	Tetrahydrofuran	MSVOA_L	RTX-1	0.08	0.50	0		0.025166115
TO-15	Air	Toluene	MSVOA_L	RTX-1	0.16	0.50	0		0.050142654
TO-15	Air	trans-1,2-Dichloroethene	MSVOA_L	RTX-1	0.12	0.50	0		0.036968455
TO-15	Air	Trichloroethene	MSVOA_L	RTX-1	0.024	0.030	0		0.007587584
TO-15	Air	Trichlorofluoromethane	MSVOA_L	RTX-1	0.17	0.50	0		0.053452248
TO-15	Air	Vinyl Acetate	MSVOA_L	RTX-1	0.26	0.50	0		0.079671946
TO-15	Air	Vinyl Chloride	MSVOA_L	RTX-1	0.025	0.030	0		0.007955232

Students t Value	Spike_Amt_Added	Datafile1	Concentration1	Adate1	Datafile2	Concentration2	Adate2
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.03	VL041883.D	0.037	01102025T00:17:00	VL041884.D	0.04	01102025T00:47:00
3.143	0.03	VL041883.D	0.045	01102025T00:17:00	VL041884.D	0.04	01102025T00:47:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.54	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.5	01092025T21:16:00	VL041878.D	0.53	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.52	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.52	01092025T21:16:00	VL041878.D	0.54	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.49	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.52	01092025T21:16:00	VL041878.D	0.54	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.38	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.6	01092025T21:16:00	VL041878.D	0.62	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.31	01092025T21:16:00	VL041878.D	0.29	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.53	01092025T21:46:00
3.143	0.4	VL041877.D	0.36	01092025T21:16:00	VL041878.D	0.35	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.03	VL041883.D	0.036	01102025T00:17:00	VL041884.D	0.038	01102025T00:47:00
3.143	0.4	VL041877.D	0.5	01092025T21:16:00	VL041878.D	0.48	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.57	01092025T21:16:00	VL041878.D	0.59	01092025T21:46:00
3.143	0.4	VL041877.D	0.51	01092025T21:16:00	VL041878.D	0.5	01092025T21:46:00
3.143	0.4	VL041877.D	0.54	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.4	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.39	01092025T21:16:00	VL041878.D	0.4	01092025T21:46:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.51	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL042501.D	0.885	05062025T17:36:00	VL042502.D	0.76	05062025T18:07:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.43	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.43	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.49	01092025T21:16:00	VL041878.D	0.5	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.59	01092025T21:16:00	VL041878.D	0.6	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.91	01092025T21:16:00	VL041878.D	0.91	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.41	01092025T21:46:00
3.143	0.4	VL041877.D	0.4	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.4	VL041877.D	0.68	01092025T21:16:00	VL041878.D	0.61	01092025T21:46:00
3.143	0.04	VL042504.D	0.035	05062025T19:10:00	VL042505.D	0.04	05062025T19:42:00
3.143	0.4	VL041877.D	0.34	01092025T21:16:00	VL041878.D	0.34	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.44	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.44	01092025T21:46:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.48	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.4	VL041877.D	0.42	01092025T21:16:00	VL041878.D	0.4	01092025T21:46:00
3.143	0.4	VL041877.D	0.41	01092025T21:16:00	VL041878.D	0.36	01092025T21:46:00
3.143	0.4	VL041877.D	0.5	01092025T21:16:00	VL041878.D	0.45	01092025T21:46:00
3.143	0.4	VL041877.D	0.46	01092025T21:16:00	VL041878.D	0.46	01092025T21:46:00
3.143	0.03	VL041883.D	0.037	01102025T00:17:00	VL041884.D	0.04	01102025T00:47:00
3.143	0.4	VL041877.D	0.47	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.43	01092025T21:46:00
3.143	0.4	VL041877.D	0.45	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.03	VL041883.D	0.047	01102025T00:17:00	VL041884.D	0.047	01102025T00:47:00
3.143	0.4	VL041877.D	0.53	01092025T21:16:00	VL041878.D	0.52	01092025T21:46:00
3.143	0.4	VL041877.D	0.43	01092025T21:16:00	VL041878.D	0.47	01092025T21:46:00
3.143	0.03	VL042498.D	0.018	05062025T16:01:00	VL042500.D	0.032	05062025T17:04:00

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Datafile3	Concentration3	Adate3	Datafile4	Concentration4	Adate4	Datafile5	Concentration5
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.4
VL041885.D	0.038	01102025T01:18:00	VL041913.D	0.033	01152025T02:53:00	VL041914.D	0.037
VL041885.D	0.044	01102025T01:18:00	VL041913.D	0.033	01152025T02:53:00	VL041914.D	0.032
VL041879.D	0.48	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.55	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.57	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.48
VL041879.D	0.58	01092025T22:17:00	VL041909.D	0.49	01152025T00:52:00	VL041910.D	0.49
VL041879.D	0.48	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.39
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.43
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.43
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.46
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.43	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.51
VL041879.D	0.48	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.44
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.43	01152025T00:52:00	VL041910.D	0.41
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.39
VL041879.D	0.49	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.44
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.39	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.33
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.39	01152025T00:52:00	VL041910.D	0.37
VL041879.D	0.68	01092025T22:17:00	VL041909.D	0.53	01152025T00:52:00	VL041910.D	0.53
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.41
VL041879.D	0.28	01092025T22:17:00	VL041909.D	0.26	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.4	01152025T00:52:00	VL041910.D	0.4
VL041879.D	0.55	01092025T22:17:00	VL041909.D	0.44	01152025T00:52:00	VL041910.D	0.52
VL041879.D	0.37	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.41	01152025T00:52:00	VL041910.D	0.4
VL041885.D	0.048	01102025T01:18:00	VL041913.D	0.026	01152025T02:53:00	VL041914.D	0.033
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.46
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.46
VL041879.D	0.53	01092025T22:17:00	VL041909.D	0.52	01152025T00:52:00	VL041910.D	0.45
VL041879.D	0.49	01092025T22:17:00	VL041909.D	0.43	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.38	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.5	01092025T22:17:00	VL041909.D	0.35	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.41	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.56	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.56	01092025T22:17:00	VL041909.D	0.46	01152025T00:52:00	VL041910.D	0.46
VL042503.D	0.611	05062025T18:39:00	VL042518.D	0.831	05072025T15:02:00	VL042519.D	0.842
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.41	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.37
VL041879.D	0.51	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.43
VL041879.D	0.49	01092025T22:17:00	VL041909.D	0.42	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.63	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.5
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.38
VL041879.D	0.92	01092025T22:17:00	VL041909.D	0.72	01152025T00:52:00	VL041910.D	0.69
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.42	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.52
VL041879.D	0.63	01092025T22:17:00	VL041909.D	0.54	01152025T00:52:00	VL041910.D	0.57
VL042506.D	0.04	05062025T20:13:00	VL042521.D	0.031	05072025T16:49:00	VL042522.D	0.032
VL041879.D	0.33	01092025T22:17:00	VL041909.D	0.28	01152025T00:52:00	VL041910.D	0.25
VL041879.D	0.42	01092025T22:17:00	VL041909.D	0.33	01152025T00:52:00	VL041910.D	0.34
VL041879.D	0.43	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.33
VL041879.D	0.47	01092025T22:17:00	VL041909.D	0.35	01152025T00:52:00	VL041910.D	0.35
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.5	01152025T00:52:00	VL041910.D	0.48
VL041879.D	0.45	01092025T22:17:00	VL041909.D	0.38	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.38	01092025T22:17:00	VL041909.D	0.34	01152025T00:52:00	VL041910.D	0.31
VL041879.D	0.38	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.33
VL041879.D	0.52	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.41
VL041879.D	0.46	01092025T22:17:00	VL041909.D	0.36	01152025T00:52:00	VL041910.D	0.37
VL041885.D	0.034	01102025T01:18:00	VL041913.D	0.037	01152025T02:53:00	VL041914.D	0.034
VL041879.D	0.41	01092025T22:17:00	VL041909.D	0.41	01152025T00:52:00	VL041910.D	0.42
VL041879.D	0.44	01092025T22:17:00	VL041909.D	0.37	01152025T00:52:00	VL041910.D	0.36
VL041879.D	0.54	01092025T22:17:00	VL041909.D	0.47	01152025T00:52:00	VL041910.D	0.48
VL041885.D	0.035	01102025T01:18:00	VL041913.D	0.029	01152025T02:53:00	VL041914.D	0.033
VL041879.D	0.54	01092025T22:17:00	VL041909.D	0.45	01152025T00:52:00	VL041910.D	0.47
VL041879.D	0.56	01092025T22:17:00	VL041909.D	0.35	01152025T00:52:00	VL041910.D	0.44
VL042515.D	0.021	05072025T13:17:00	VL042516.D	0.021	05072025T13:50:00	VL042517.D	0.014

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Adate5	Datafile6	Concentration6	Adate6	Datafile7	Concentration7	Adate7	Department
01152025T01:23:00	VL041932.D	0.41	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.028	01212025T00:31:00	VL041940.D	0.027	01212025T09:44:00	VOC
01152025T03:23:00	VL041936.D	0.034	01212025T00:31:00	VL041940.D	0.034	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.44	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.4	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.49	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.49	01202025T22:30:00	VL041933.D	0.52	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.45	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.41	01202025T22:30:00	VL041933.D	0.37	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.46	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.36	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.31	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.38	01202025T22:30:00	VL041933.D	0.37	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.58	01202025T22:30:00	VL041933.D	0.54	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.43	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.29	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.42	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.39	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.47	01202025T22:30:00	VL041933.D	0.52	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.38	01202025T22:30:00	VL041933.D	0.38	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.029	01212025T00:31:00	VL041940.D	0.027	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.51	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.52	01202025T22:30:00	VL041933.D	0.49	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.47	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.35	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.37	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.38	01202025T22:30:00	VL041933.D	0.36	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.48	01202025T22:30:00	VL041933.D	0.51	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.45	01202025T22:30:00	VL041933.D	0.45	01202025T23:00:00	VOC
05072025T15:37:00	VL042520.D	0.766	05072025T16:13:00	VL042569.D	0.664	05212025T16:53:00	VOC
01152025T01:23:00	VL041932.D	0.39	01202025T22:30:00	VL041933.D	0.4	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.32	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.37	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.44	01202025T22:30:00	VL041933.D	0.43	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.4	01202025T22:30:00	VL041933.D	0.36	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.46	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.36	01202025T22:30:00	VL041933.D	0.35	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.64	01202025T22:30:00	VL041933.D	0.65	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.35	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
05072025T17:24:00	VL042523.D	0.03	05072025T17:58:00	VL042567.D	0.034	05212025T15:49:00	VOC
01152025T01:23:00	VL041932.D	0.2	01202025T22:30:00	VL041933.D	0.17	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.31	01202025T22:30:00	VL041933.D	0.33	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.32	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.32	01202025T22:30:00	VL041933.D	0.32	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.5	01202025T22:30:00	VL041933.D	0.48	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.3	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.27	01202025T22:30:00	VL041933.D	0.31	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.44	01202025T22:30:00	VL041933.D	0.38	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.3	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.026	01212025T00:31:00	VL041940.D	0.03	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.39	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.34	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.46	01202025T22:30:00	VL041933.D	0.44	01202025T23:00:00	VOC
01152025T03:23:00	VL041936.D	0.033	01212025T00:31:00	VL041940.D	0.03	01212025T09:44:00	VOC
01152025T01:23:00	VL041932.D	0.42	01202025T22:30:00	VL041933.D	0.41	01202025T23:00:00	VOC
01152025T01:23:00	VL041932.D	0.33	01202025T22:30:00	VL041933.D	0.37	01202025T23:00:00	VOC
05072025T14:29:00	VL042575.D	0.034	05222025T11:27:00	VL042576.D	0.032	05222025T11:59:00	VOC

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AVG Concentration	Recovery	Effective Date
0.43	108	5/22/2025
0.03	114	5/22/2025
0.04	125	5/22/2025
0.47	119	5/22/2025
0.50	125	5/22/2025
0.50	125	5/22/2025
0.50	125	5/22/2025
0.40	100	5/22/2025
0.40	100	5/22/2025
0.45	112	5/22/2025
0.48	120	5/22/2025
0.49	123	5/22/2025
0.48	119	5/22/2025
0.38	95	5/22/2025
0.51	128	5/22/2025
0.46	116	5/22/2025
0.45	112	5/22/2025
0.44	110	5/22/2025
0.42	105	5/22/2025
0.46	115	5/22/2025
0.40	100	5/22/2025
0.36	91	5/22/2025
0.37	93	5/22/2025
0.40	100	5/22/2025
0.58	146	5/22/2025
0.47	118	5/22/2025
0.45	111	5/22/2025
0.30	75	5/22/2025
0.42	106	5/22/2025
0.48	119	5/22/2025
0.35	86	5/22/2025
0.50	125	5/22/2025
0.41	102	5/22/2025
0.03	113	5/22/2025
0.48	121	5/22/2025
0.47	118	5/22/2025
0.52	130	5/22/2025
0.48	121	5/22/2025
0.50	126	5/22/2025
0.44	111	5/22/2025
0.36	91	5/22/2025
0.40	101	5/22/2025
0.38	95	5/22/2025
0.50	125	5/22/2025
0.49	123	5/22/2025
0.77	191	5/22/2025
0.42	106	5/22/2025
0.38	94	5/22/2025
0.40	100	5/22/2025
0.46	115	5/22/2025
0.43	106	5/22/2025
0.53	134	5/22/2025
0.40	101	5/22/2025
0.78	194	5/22/2025
0.38	95	5/22/2025
0.40	101	5/22/2025
0.57	143	5/22/2025
0.03	86	5/22/2025
0.27	68	5/22/2025
0.37	93	5/22/2025
0.38	95	5/22/2025
0.39	97	5/22/2025
0.38	95	5/22/2025
0.50	124	5/22/2025
0.40	100	5/22/2025
0.35	88	5/22/2025
0.35	86	5/22/2025
0.45	113	5/22/2025
0.39	98	5/22/2025
0.03	113	5/22/2025
0.42	105	5/22/2025
0.39	97	5/22/2025
0.48	120	5/22/2025
0.04	121	5/22/2025
0.48	119	5/22/2025
0.42	105	5/22/2025
0.02	82	5/22/2025

QC SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Surrogate Summary

SDG No.: Q3131

Client: RTP Environmental

Analytical Method: SWTO-15

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q3130-02DUP	131-1A-2DUP	1-Bromo-4-Fluorobenzene	10	10.2	102		70 (65)	130 (135)
Q3131-01	141-1A-1	1-Bromo-4-Fluorobenzene	10	10.5	105		70 (65)	130 (135)
Q3131-01DL	141-1A-1DL	1-Bromo-4-Fluorobenzene	10	10.1	101		70 (65)	130 (135)
Q3131-02	141-1A-2	1-Bromo-4-Fluorobenzene	10	10.2	102		70 (65)	130 (135)
Q3131-02DL	141-1A-2DL	1-Bromo-4-Fluorobenzene	10	10.2	102		70 (65)	130 (135)
VL0922ABL01	VL0922ABL01	1-Bromo-4-Fluorobenzene	10	10.0	100		70 (65)	130 (135)
VL0922ABS01	VL0922ABS01	1-Bromo-4-Fluorobenzene	10	10.0	100		70 (65)	130 (135)

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3131 **Analytical Method:** SWTO-15

Client: RTP Environmental **Datafile :** VL042959.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0922ABS01	Dichlorodifluoromethane	10	9.30	ppbv	93			40 (70)	160 (130)	
	Chloromethane	10	8.70	ppbv	87			40 (70)	160 (130)	
	Vinyl Chloride	10	8.40	ppbv	84			70 (70)	130 (130)	
	Bromomethane	10	8.30	ppbv	83			40 (70)	160 (130)	
	Chloroethane	10	8.80	ppbv	88			40 (70)	160 (130)	
	Tetrahydrofuran	10	9.30	ppbv	93			70 (70)	130 (130)	
	Trichlorofluoromethane	10	9.10	ppbv	91			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	9.00	ppbv	90			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	9.00	ppbv	90			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	9.00	ppbv	90			70 (70)	130 (130)	
	Heptane	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,1-Dichloroethene	10	9.00	ppbv	90			70 (70)	130 (130)	
	Acetone	10	7.40	ppbv	74			40 (70)	160 (130)	
	Carbon disulfide	10	8.80	ppbv	88			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	7.80	ppbv	78			70 (70)	130 (130)	
	Methylene Chloride	10	9.80	ppbv	98			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	8.90	ppbv	89			70 (70)	130 (130)	
	1,1-Dichloroethane	10	9.00	ppbv	90			70 (70)	130 (130)	
	Cyclohexane	10	9.30	ppbv	93			70 (70)	130 (130)	
	2-Butanone	10	9.20	ppbv	92			40 (70)	160 (130)	
	Carbon Tetrachloride	10	9.70	ppbv	97			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	9.30	ppbv	93			70 (70)	130 (130)	
	Chloroform	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	9.00	ppbv	90			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	9.40	ppbv	94			70 (70)	130 (130)	
	Benzene	10	9.60	ppbv	96			70 (70)	130 (130)	
	1,2-Dichloroethane	10	9.90	ppbv	99			70 (70)	130 (130)	
	Trichloroethene	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,2-Dichloropropane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Bromodichloromethane	10	9.90	ppbv	99			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	9.60	ppbv	96			40 (70)	160 (130)	
	Toluene	10	9.50	ppbv	95			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	9.50	ppbv	95			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	9.70	ppbv	97			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	9.60	ppbv	96			70 (70)	130 (130)	
	Dibromochloromethane	10	10.0	ppbv	100			70 (70)	130 (130)	
	1,2-Dibromoethane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Tetrachloroethene	10	8.70	ppbv	87			70 (70)	130 (130)	
	Chlorobenzene	10	9.40	ppbv	94			70 (70)	130 (130)	
	Ethyl Benzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	m/p-Xylene	20	18.9	ppbv	95			70 (70)	130 (130)	
	o-Xylene	10	9.40	ppbv	94			70 (70)	130 (130)	
	Styrene	10	9.60	ppbv	96			70 (70)	130 (130)	
	Bromoform	10	9.80	ppbv	98			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	8.90	ppbv	89			70 (70)	130 (130)	
	2-Chlorotoluene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	9.30	ppbv	93			70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	**Q3131**	**Analytical Method:**	**SWTO-15**
Client:	**RTP Environmental**	**Datafile :**	VL042959.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0922ABS01	1,3-Dichlorobenzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	10.0	ppbv	100			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	8.40	ppbv	84			70 (70)	130 (130)	
	Naphthalene	10	10.3	ppbv	103			40 (70)	160 (130)	
	1,3-Butadiene	10	8.10	ppbv	81			70 (70)	130 (130)	
	4-Ethyltoluene	10	9.30	ppbv	93			70 (70)	130 (130)	
	Hexane	10	9.10	ppbv	91			70 (70)	130 (130)	
	Allyl Chloride	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,4-Dioxane	10	9.30	ppbv	93			40 (70)	160 (130)	
	Methyl methacrylate	10	9.30	ppbv	93			70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

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Duplicate Sample Summary

Lab Sample Id :	Q3130-02DUP		Q3130-02	
Client Id :	131-1A-2DUP		131-1A-2	
DF :	1		1	
Datafile :	VL042970.D		VL042969.D	
Anal Date & Time :	09/22/2025	22:48	09/22/2025	22:11

Parameter	Result	Result	RPD
1,1,1-Trichloroethane	0	0	0
1,1,2,2-Tetrachloroethane	0	0	0
1,1,2-Trichloroethane	0	0	0
1,1,2-Trichlorotrifluoroethane	0	0	0
1,1-Dichloroethane	0	0	0
1,1-Dichloroethene	0	0	0
1,2,4-Trichlorobenzene	0	0	0
1,2,4-Trimethylbenzene	0	0	0
1,2-Dibromoethane	0	0	0
1,2-Dichlorobenzene	0	0	0
1,2-Dichloroethane	0.15	0.11	30.8 *
1,2-Dichloropropane	0	0	0
1,3,5-Trimethylbenzene	0	0	0
1,3-Butadiene	0	0	0
1,3-Dichlorobenzene	0	0	0
1,4-Dichlorobenzene	0	0	0
1,4-Dioxane	0	0	0
2,2,4-Trimethylpentane	0	0	0
2-Butanone	0.37	0.41	10.3
2-Chlorotoluene	0	0	0
4-Ethyltoluene	0	0	0
4-Methyl-2-Pentanone	0	0	0
Acetone	6.2	6.3	1.6
Allyl Chloride	0	0	0
Benzene	0.18	0.17	5.7
Bromodichloromethane	0	0	0
Bromoform	0	0	0
Bromomethane	0	0	0
Carbon Disulfide	0	0	0
Carbon Tetrachloride	0.07	0.06	15.4

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Duplicate Sample Summary

Lab Sample Id :	Q3130-02DUP		Q3130-02	
Client Id :	131-1A-2DUP		131-1A-2	
DF :	1		1	
Datafile :	VL042970.D		VL042969.D	
Anal Date & Time :	09/22/2025	22:48	09/22/2025	22:11

Parameter	Result	Result	RPD
Chlorobenzene	0	0	0
Chloroethane	0	0	0
Chloroform	0	0	0
Chloromethane	0.41	0.42	2.4
cis-1,2-Dichloroethene	0	0	0
cis-1,3-Dichloropropene	0	0	0
Cyclohexane	0	0	0
Dibromochloromethane	0	0	0
Dichlorodifluoromethane	0.43	0.46	6.7
Dichlorotetrafluoroethane	0	0	0
Ethyl Benzene	0	0	0
Heptane	0	0	0
Hexachloro-1,3-Butadiene	0	0	0
Hexane	2.4	2.4	0
m/p-Xylene	0	0	0
Methyl Methacrylate	0	0	0
Methyl tert-Butyl Ether	0	0	0
Methylene Chloride	2	2.1	4.9
Naphthalene	0.14	0.15	6.9
o-Xylene	0	0	0
Styrene	0	0	0
t-1,3-Dichloropropene	0	0	0
tert-Butyl alcohol	0.2	0.17	16.2
Tetrachloroethene	0	0.03	200 *
Tetrahydrofuran	0	0	0
Toluene	0.38	0.37	2.7
trans-1,2-Dichloroethene	0	0	0
Trichloroethene	0	0	0
Trichlorofluoromethane	0.23	0.22	4.4
Vinyl Chloride	0	0	0

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VOLATILE METHOD BLANK SUMMARY

Client ID: VL0922ABL01

Lab Name: Alliance | Contract: RTPE01

Lab Code: ACE | SDG NO.: Q3131

Lab File ID: VL042958.D | Lab Sample ID: VL0922ABL01

Date Analyzed: 09/22/2025 | Time Analyzed: 15:06

GC Column: RTX-1 ID: 0.32 (mm) | Heated Purge: (Y/N) N

Instrument ID: MSVOA_L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0922ABS01	VL0922ABS01	VL042959.D	09/22/2025
131-1A-2DUP	Q3130-02DUP	VL042970.D	09/22/2025
141-1A-1	Q3131-01	VL042974.D	09/23/2025
141-1A-1DL	Q3131-01DL	VL042975.D	09/23/2025
141-1A-2	Q3131-02	VL042976.D	09/23/2025
141-1A-2DL	Q3131-02DL	VL042977.D	09/23/2025

COMMENTS:

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Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance
Contract: RTPE01
Lab Code: ACE
SDG NO.: Q3131
Lab File ID: VL042949.D
BFB Injection Date: 09/22/2025
Instrument ID: MSVOA_L
BFB Injection Time: 08:55
GC Column: RTX-1 ID: 0.32 (mm)
Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	22.5
75	30.0 - 66.0% of mass 95	54.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	66.2
175	4.0 - 9.0% of mass 174	4.9 (7.4) 1
176	93.0 - 101.0% of mass 174	64 (96.6) 1
177	5.0 - 9.0% of mass 176	4.2 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICCC010	VSTDICCC010	VL042950.D	09/22/2025	09:39
VSTDICC002	VSTDICC002	VL042951.D	09/22/2025	10:14
VSTDICC001	VSTDICC001	VL042952.D	09/22/2025	10:48
VSTDICC0.5	VSTDICC0.5	VL042953.D	09/22/2025	11:22
VSTDICC0.1	VSTDICC0.1	VL042954.D	09/22/2025	11:56
VSTDICC0.03	VSTDICC0.03	VL042955.D	09/22/2025	12:30
VSTDICC015	VSTDICC015	VL042956.D	09/22/2025	13:05
VL0922ABL01	VL0922ABL01	VL042958.D	09/22/2025	15:06
VL0922ABS01	VL0922ABS01	VL042959.D	09/22/2025	15:52
131-1A-2DUP	Q3130-02DUP	VL042970.D	09/22/2025	22:48
141-1A-1	Q3131-01	VL042974.D	09/23/2025	01:11
141-1A-1DL	Q3131-01DL	VL042975.D	09/23/2025	01:46
141-1A-2	Q3131-02	VL042976.D	09/23/2025	02:22
141-1A-2DL	Q3131-02DL	VL042977.D	09/23/2025	02:57

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: RTPE01

Lab Code: ACE SDG NO.: Q3131

Lab File ID: VL042950.D Date Analyzed: 09/22/2025

Instrument ID: MSVOA_L Time Analyzed: 09:39

GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	170899	2.78	526679	3.95	486724	8.88
UPPER LIMIT	239259	3.11	737351	4.28	681414	9.21
LOWER LIMIT	102539	2.45	316007	3.62	292034	8.55
EPA SAMPLE NO.						
131-1A-2DUP	146991	2.79	437140	3.96	389571	8.88
141-1A-1	144572	2.79	424417	3.96	377395	8.89
141-1A-1DL	142766	2.79	419987	3.96	364182	8.89
141-1A-2	142688	2.79	412064	3.96	367269	8.88
141-1A-2DL	144383	2.79	412784	3.96	358472	8.88
VL0922ABL01	157278	2.79	497068	3.96	444461	8.88
VL0922ABS01	157611	2.79	475789	3.96	440323	8.88

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

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

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SAMPLE DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-1	SDG No.:	Q3131
Lab Sample ID:	Q3131-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042974.D	1		09/23/25 01:11	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	3.40	16.8		0.54	2.47
74-87-3	Chloromethane	0.42	0.87	J	0.21	1.03
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
74-83-9	Bromomethane	0.080	0.31	U	0.31	1.94
75-00-3	Chloroethane	0.15	0.40	U	0.40	1.32
109-99-9	Tetrahydrofuran	0.41	1.21	J	0.24	1.47
75-69-4	Trichlorofluoromethane	0.39	2.19	J	0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	0.14	1.07	U	1.07	3.83
76-14-2	Dichlorotetrafluoroethane	0.15	1.05	U	1.05	3.49
75-65-0	tert-Butyl alcohol	0.26	0.79	J	0.49	1.52
142-82-5	Heptane	0.40	1.64	J	0.70	2.05
75-35-4	1,1-Dichloroethene	0.15	0.59	U	0.59	1.98
67-64-1	Acetone	17.8	42.3	E	0.43	1.19
75-15-0	Carbon Disulfide	0.080	0.25	U	0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	0.23	0.83	U	0.83	1.80
75-09-2	Methylene Chloride	2.00	6.95		0.80	1.74
156-60-5	trans-1,2-Dichloroethene	0.12	0.48	U	0.48	1.98
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02
110-82-7	Cyclohexane	0.50	1.72		0.76	1.72
78-93-3	2-Butanone	1.50	4.42		0.18	1.47
56-23-5	Carbon Tetrachloride	0.090	0.57		0.19	0.19
156-59-2	cis-1,2-Dichloroethene	0.10	0.40	U	0.40	1.98
67-66-3	Chloroform	0.13	0.63	J	0.49	2.44
71-55-6	1,1,1-Trichloroethane	0.020	0.11	U	0.11	0.16
540-84-1	2,2,4-Trimethylpentane	1.10	5.14		0.65	2.34
71-43-2	Benzene	0.66	2.11		0.26	1.60
107-06-2	1,2-Dichloroethane	0.20	0.81	J	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
78-87-5	1,2-Dichloropropane	0.13	0.60	U	0.60	2.31
75-27-4	Bromodichloromethane	0.060	0.40	U	0.40	3.35
108-10-1	4-Methyl-2-Pentanone	0.27	1.11	J	0.41	2.05
108-88-3	Toluene	1.90	7.16		0.60	1.88
10061-02-6	t-1,3-Dichloropropene	0.15	0.68	U	0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	0.11	0.50	U	0.50	2.27
79-00-5	1,1,2-Trichloroethane	0.080	0.44	U	0.44	2.73

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Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-1	SDG No.:	Q3131
Lab Sample ID:	Q3131-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042974.D	1		09/23/25 01:11	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3	
124-48-1	Dibromochloromethane	0.090	0.77	U	0.77	4.26	
106-93-4	1,2-Dibromoethane	0.090	0.69	U	0.69	0.77	
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	
100-41-4	Ethyl Benzene	0.40	1.74	J	0.83	2.17	
179601-23-1	m/p-Xylene	1.50	6.52		1.78	4.34	
95-47-6	o-Xylene	0.54	2.35		0.91	2.17	
100-42-5	Styrene	0.24	1.02	J	0.68	2.13	
75-25-2	Bromoform	0.050	0.52	U	0.52	5.17	
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	
95-49-8	2-Chlorotoluene	0.17	0.88	U	0.88	2.59	
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	U	0.88	2.46	
95-63-6	1,2,4-Trimethylbenzene	0.29	1.43	J	0.88	2.46	
541-73-1	1,3-Dichlorobenzene	0.050	0.30	U	0.30	3.01	
106-46-7	1,4-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
95-50-1	1,2-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
120-82-1	1,2,4-Trichlorobenzene	0.21	1.56	U	1.56	3.71	
87-68-3	Hexachloro-1,3-Butadiene	0.13	1.39	U	1.39	5.33	
106-99-0	1,3-Butadiene	0.050	0.11	U	0.11	1.11	
91-20-3	Naphthalene	0.11	0.58		0.050	0.52	
622-96-8	4-Ethyltoluene	0.21	1.03	U	1.03	2.46	
110-54-3	Hexane	6.50	22.9		0.56	1.76	
107-05-1	Allyl Chloride	0.11	0.34	U	0.34	1.57	
123-91-1	1,4-Dioxane	0.22	0.79	U	0.79	1.80	
80-62-6	Methyl Methacrylate	0.14	0.57	U	0.57	2.05	
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.5			70 (65) - 130 (135)	105%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	145000		2.79			
540-36-3	1,4-Difluorobenzene	424000		3.962			
3114-55-4	Chlorobenzene-d5	377000		8.885			

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Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-1	SDG No.:	Q3131
Lab Sample ID:	Q3131-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042974.D	1		09/23/25 01:11	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042974.D
Acq On : 23 Sep 2025 01:11
Operator : SY/MD
Sample : Q3131-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 24 01:12:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	144572	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	424417	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	377395	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	294613	10.458	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	66916	3.441	ppbv		97
3) Chlorodifluoromethane	1.476	51	5787m	0.239	ppbv		
4) Chloromethane	1.534	50	3662	0.416	ppbv		97
9) Propene	1.489	41	45403m	4.306	ppbv		
10) Heptane	4.985	43	11334m	0.403	ppbv		
11) Trichlorofluoromethane	1.881	101	7357	0.392	ppbv		93
13) Ethanol	1.722	45	127657	124.813	ppbv		96
15) Acetone	1.835	43	334321m	17.755	ppbv		
17) tert-Butyl alcohol	2.046	59	5337	0.258	ppbv	#	72
19) Isopropyl Alcohol	1.887	45	23221	2.051	ppbv	#	1
20) Methylene Chloride	2.065	84	14219	1.997	ppbv		95
26) Hexane	2.829	57	140710	6.486	ppbv	#	43
29) Chloroform	2.855	83	3737	0.132	ppbv		94
30) Cyclohexane	3.865	84	9104m	0.502	ppbv		
34) 2-Butanone	2.560	43	44238	1.487	ppbv		99
35) Carbon Tetrachloride	3.771	117	2523m	0.091	ppbv		
36) Benzene	3.661	78	26130	0.656	ppbv	#	95
37) 1,2-Dichloroethane	3.224	62	4122m	0.197	ppbv		
41) Tetrahydrofuran	3.065	42	6951	0.407	ppbv	#	80
44) 2,2,4-Trimethylpentane	4.648	57	77020	1.119	ppbv	#	88
50) 4-Methyl-2-Pentanone	5.778	43	10779m	0.270	ppbv		
51) 2-Hexanone	7.451	43	8807m	0.277	ppbv		
53) Toluene	6.940	91	87271	1.850	ppbv		97
58) Ethyl Benzene	9.357	91	24797	0.400	ppbv		91
59) m/p-Xylene	9.535	91	75106	1.537	ppbv	#	100
60) o-Xylene	9.969	91	26261	0.538	ppbv		96
61) Styrene	9.875	104	5433	0.235	ppbv		99
73) 1,3,5-Trimethylbenzene	11.209	105	5102	0.103	ppbv		90
74) 1,2,4-Trimethylbenzene	11.536	105	15880	0.290	ppbv	#	62
79) Naphthalene	13.513	128	5520	0.114	ppbv	#	95

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

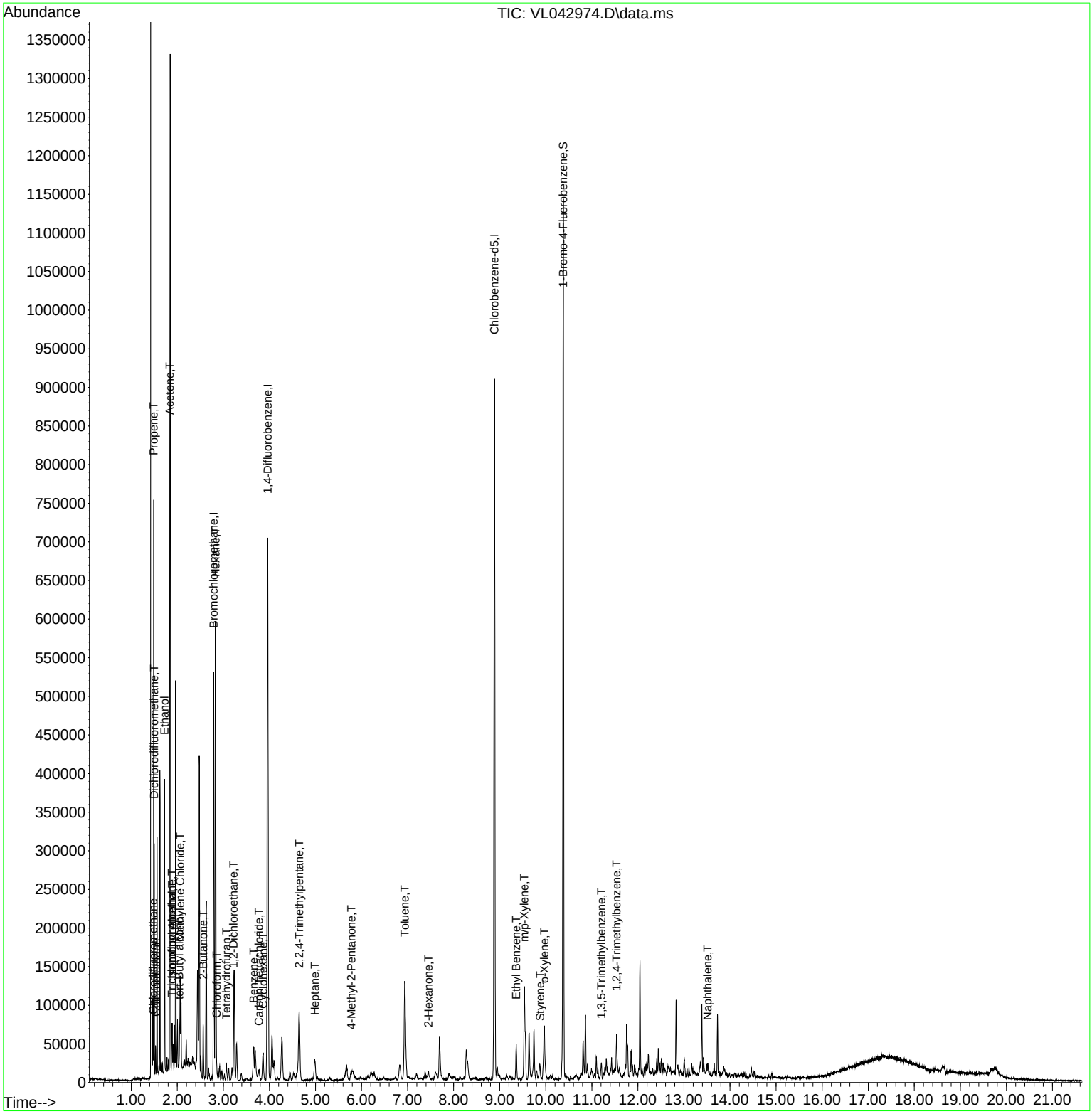
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042974.D
Acq On : 23 Sep 2025 01:11
Operator : SY/MD
Sample : Q3131-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

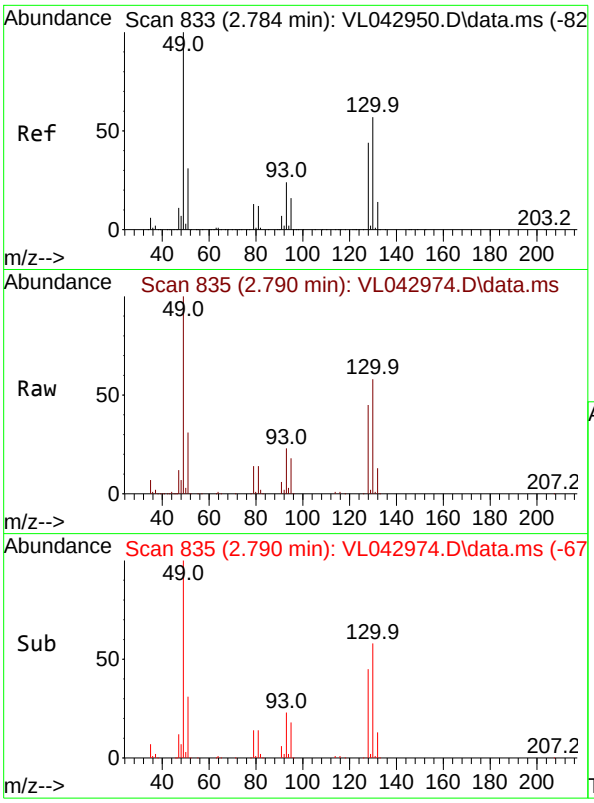
Quant Time: Sep 24 01:12:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

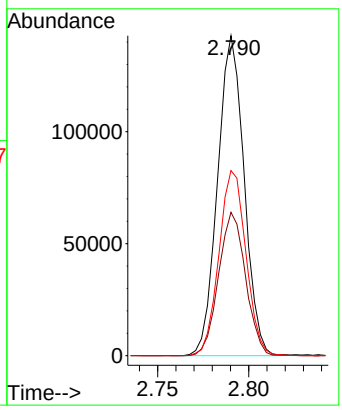




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 49 Resp: 14457

Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.9	68.8
130	58.9	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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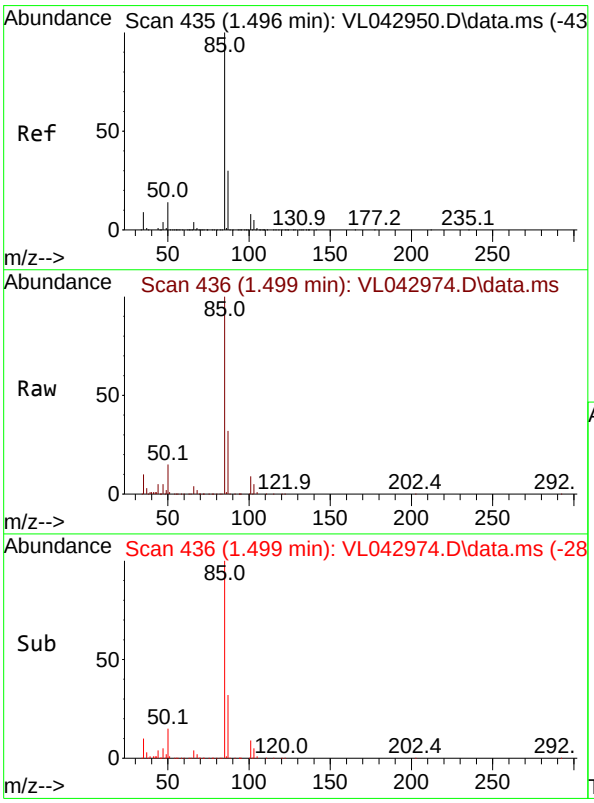
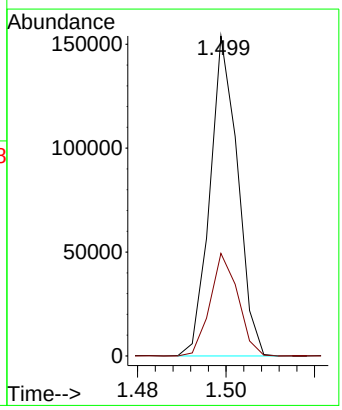
Supervised By :Semsettin Yesilyurt 09/24/2025

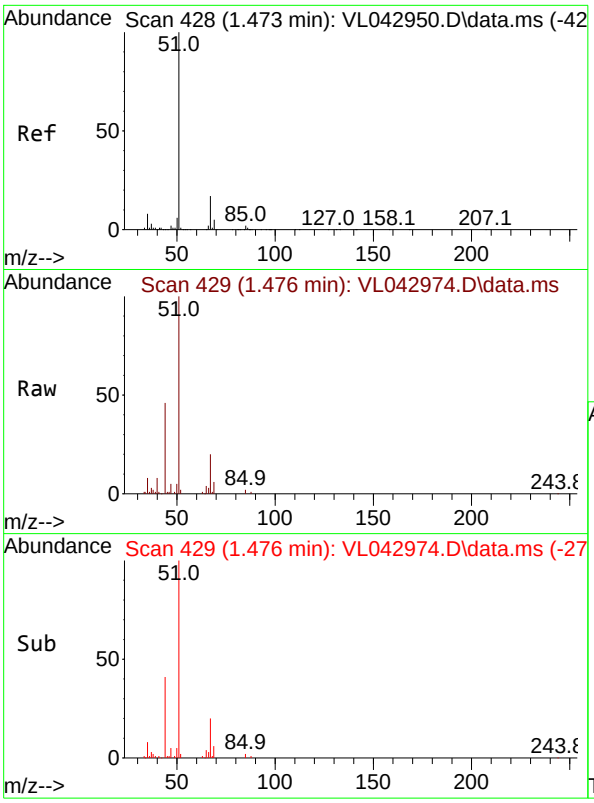


#2
Dichlorodifluoromethane
Concen: 3.441 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 85 Resp: 66916

Ion	Ratio	Lower	Upper
85	100		
87	32.1	24.3	36.5





#3
Chlorodifluoromethane
Concen: 0.239 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 51 Resp: 578

Ion	Ratio	Lower	Upper
51	100		
67	24.1	13.8	20.8

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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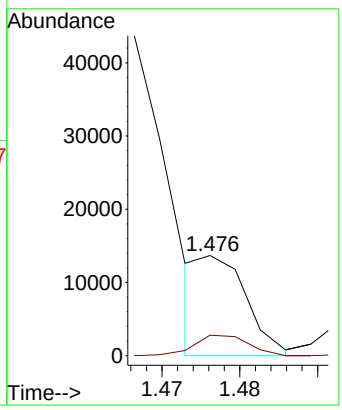
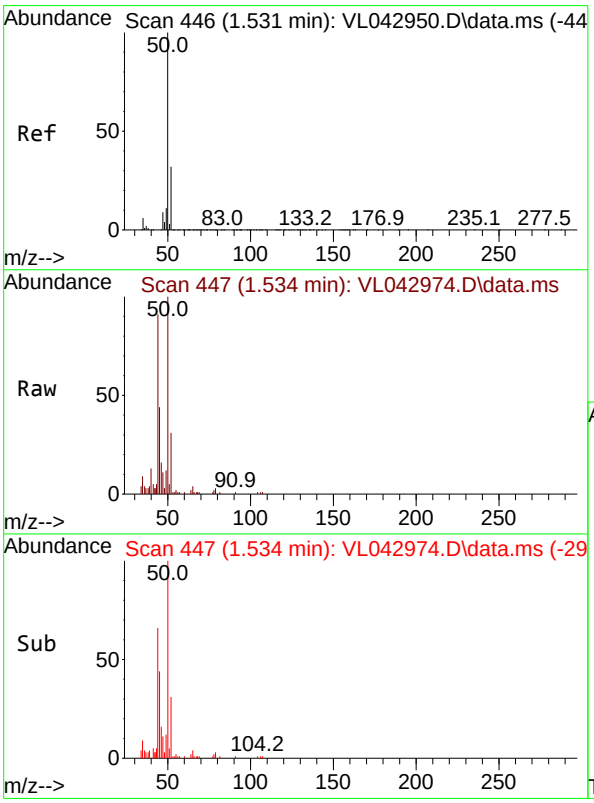
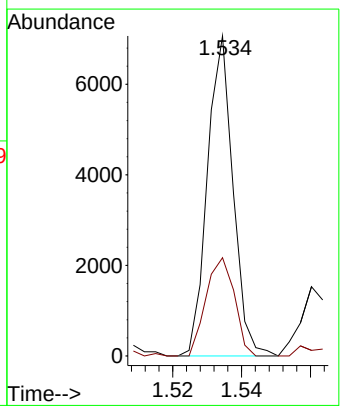


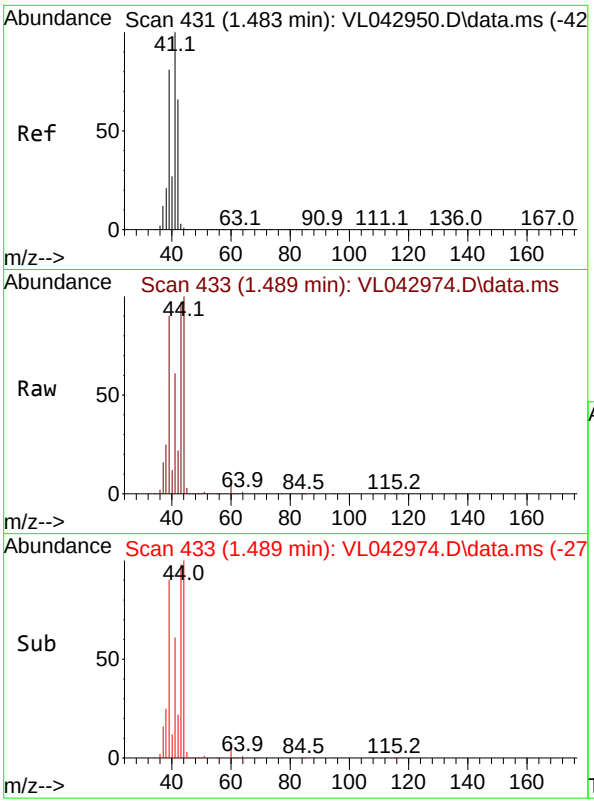


#4
Chloromethane
Concen: 0.416 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 50 Resp: 3662

Ion	Ratio	Lower	Upper
50	100		
52	30.7	25.9	38.9

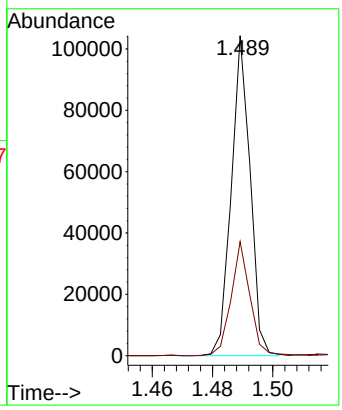




#9
Propene
Concen: 4.306 ppbv m
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 41 Resp: 4540

Ion	Ratio	Lower	Upper
41	100		
42	40.0	57.4	86.2#



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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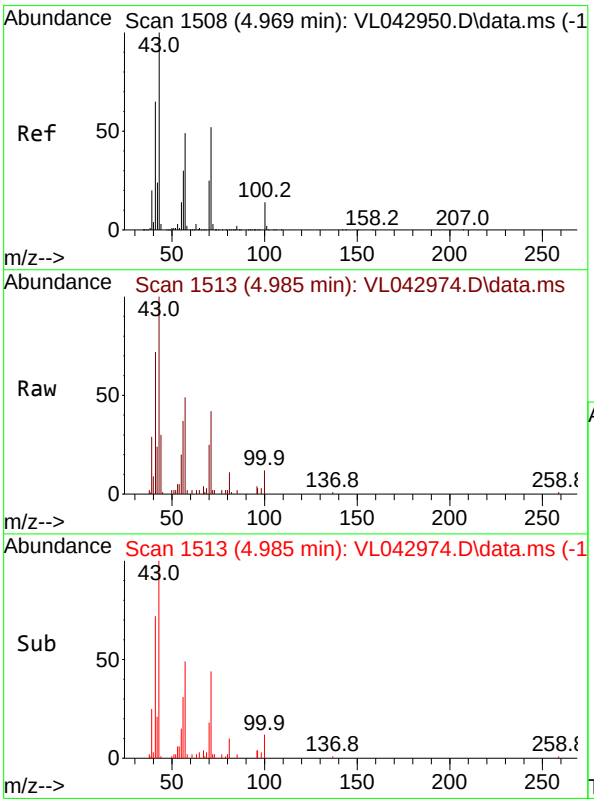
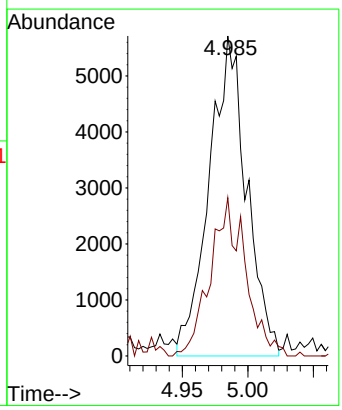
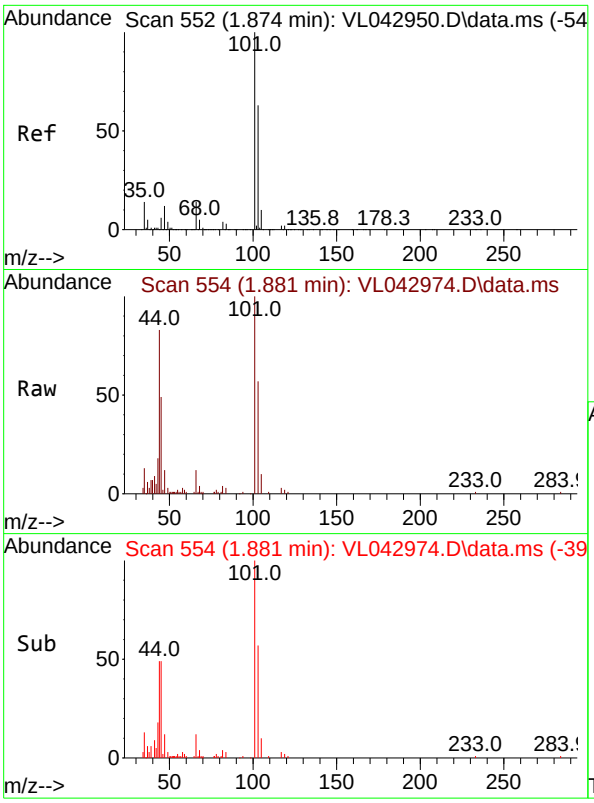


#10
Heptane
Concen: 0.403 ppbv m
RT: 4.985 min Scan# 1513
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 11334

Ion	Ratio	Lower	Upper
43	100		
57	0.0	38.6	57.8#

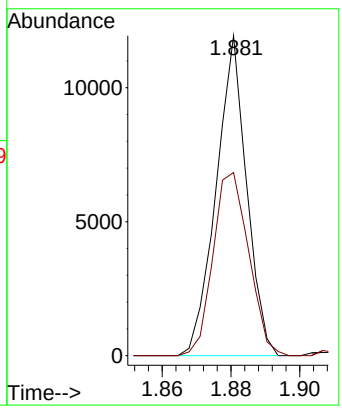




#11
Trichlorofluoromethane
Concen: 0.392 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:101 Resp: 735

Ion	Ratio	Lower	Upper
101	100		
103	57.3	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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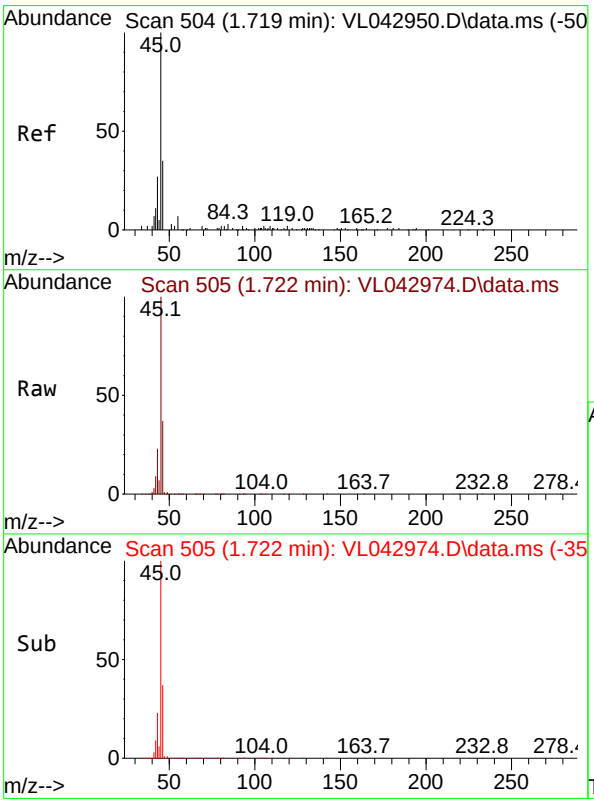
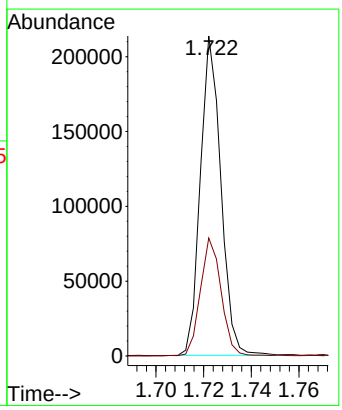
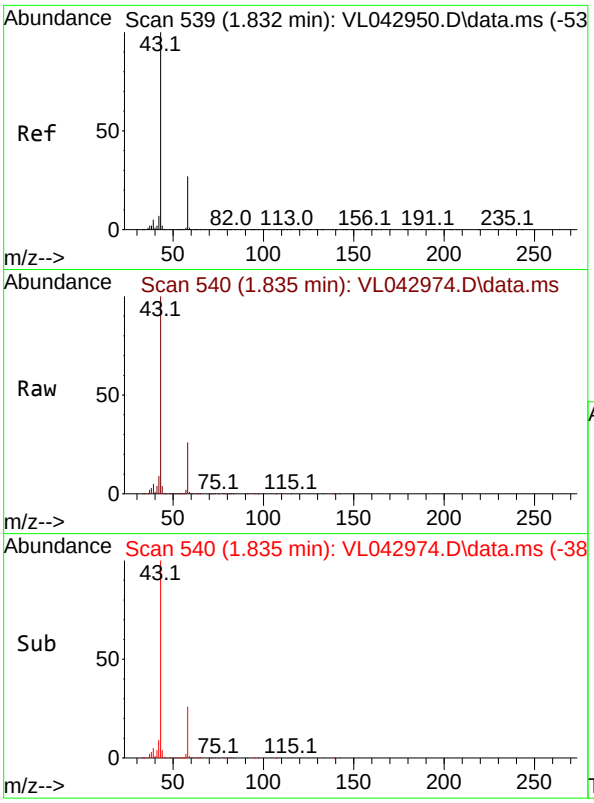


#13
Ethanol
Concen: 124.813 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 45 Resp: 127657

Ion	Ratio	Lower	Upper
45	100		
46	38.1	16.2	64.6

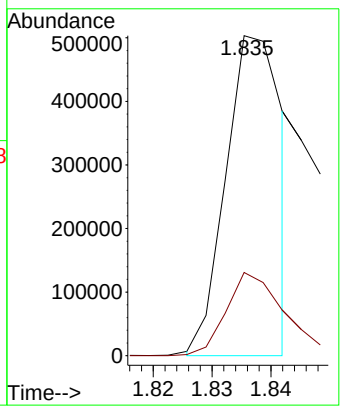




#15
Acetone
Concen: 17.755 ppbv m
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 33432

Ion	Ratio	Lower	Upper
43	100		
58	27.1	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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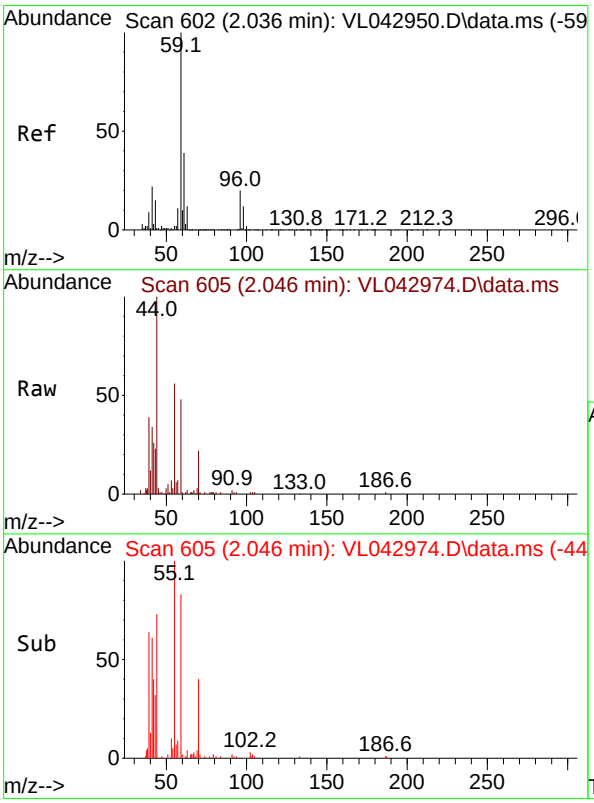
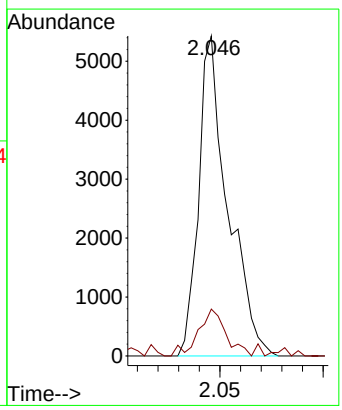
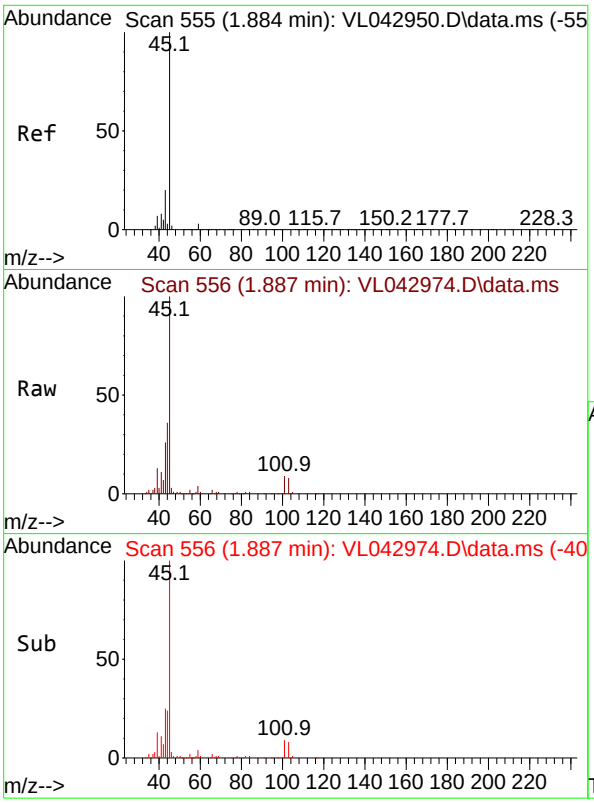


#17
tert-Butyl alcohol
Concen: 0.258 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 59 Resp: 5337

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.6	12.8#





#19
Isopropyl Alcohol
Concen: 2.051 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 45 Resp: 2322

Ion	Ratio	Lower	Upper
45	100		
58	392.1	31.0	46.6

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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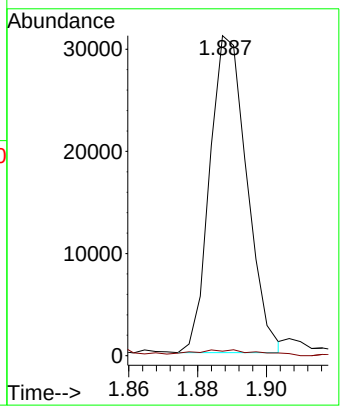
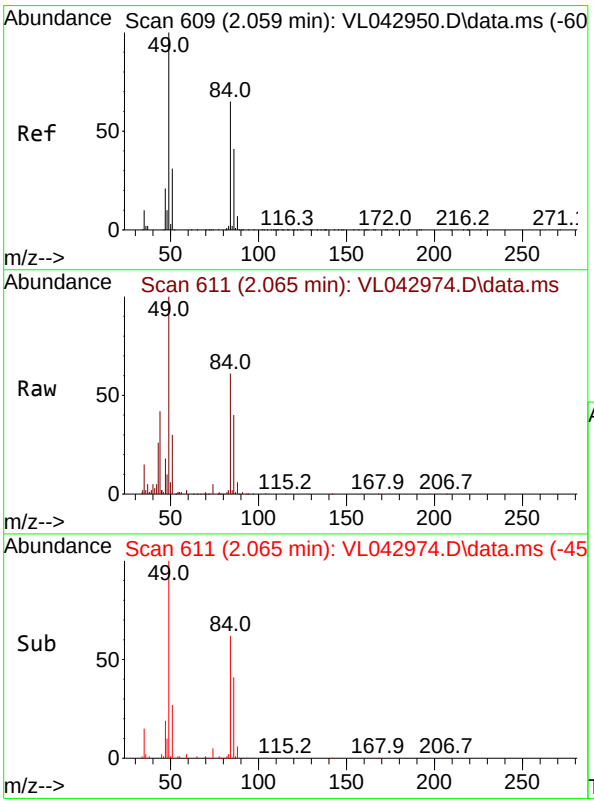
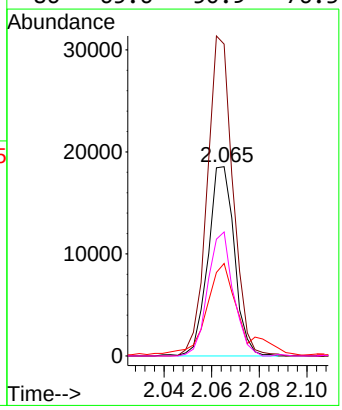


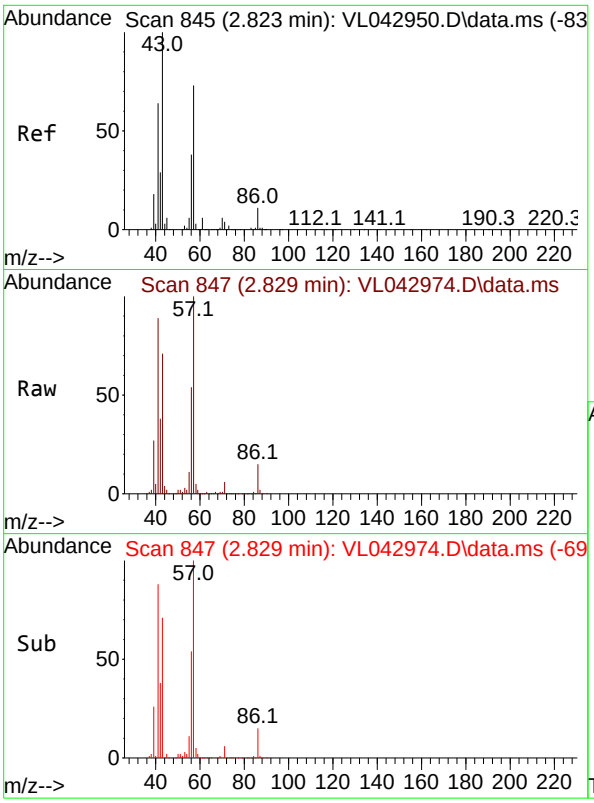


#20
Methylene Chloride
Concen: 1.997 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 84 Resp: 14219

Ion	Ratio	Lower	Upper
84	100		
49	163.8	124.1	186.1
51	46.0	39.8	59.8
86	65.6	50.9	76.3

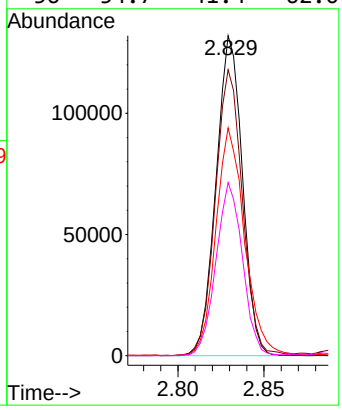




#26
Hexane
Concen: 6.486 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 57 Resp: 14071

Ion	Ratio	Lower	Upper
57	100		
41	91.9	71.7	107.5
43	77.9	180.8	271.2
56	54.7	41.4	62.0



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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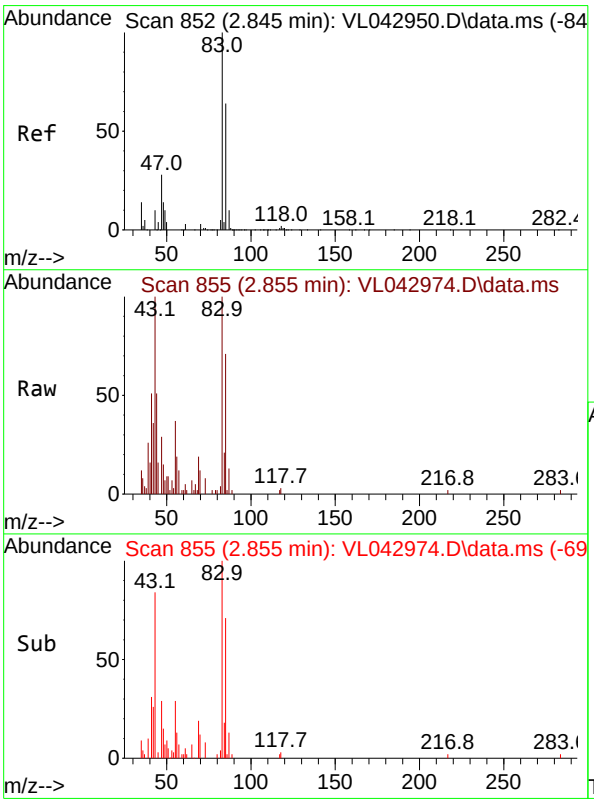
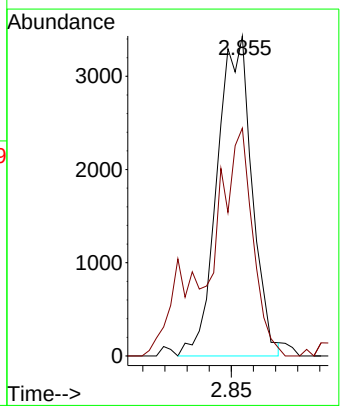
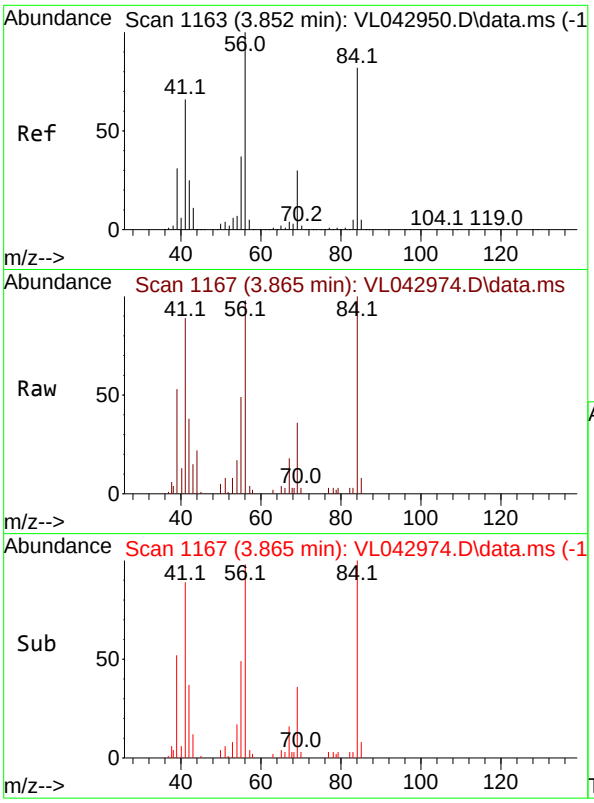


#29
Chloroform
Concen: 0.132 ppbv
RT: 2.855 min Scan# 855
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 83 Resp: 3737

Ion	Ratio	Lower	Upper
83	100		
85	68.6	51.2	76.8





#30
Cyclohexane
Concen: 0.502 ppbv m
RT: 3.865 min Scan# 11
Delta R.T. 0.013 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 84 Resp: 910

Ion	Ratio	Lower	Upper
84	100		
56	0.0	102.2	153.4#
41	0.0	65.6	98.4#

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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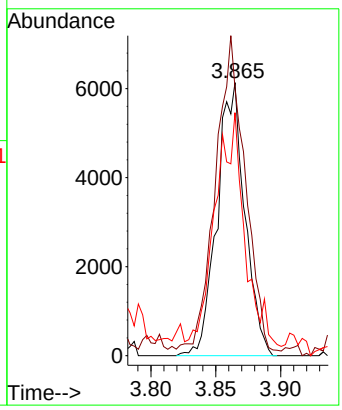
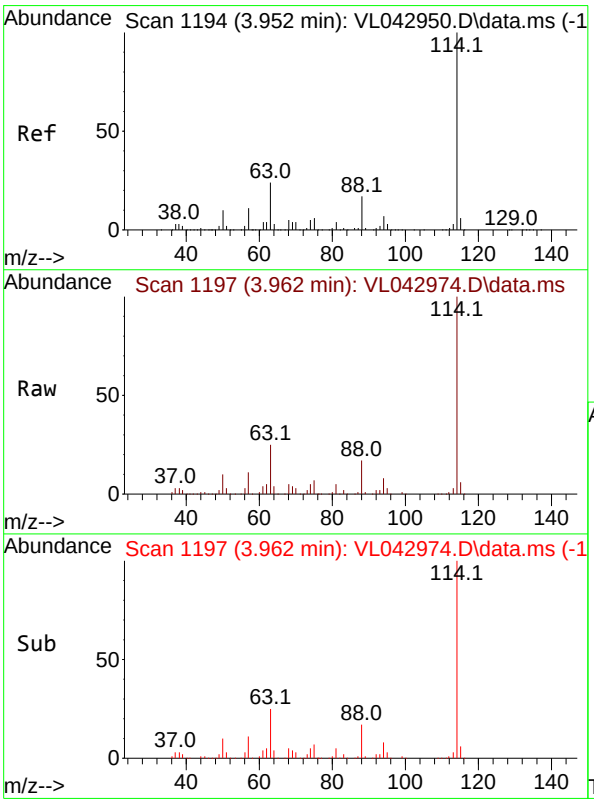
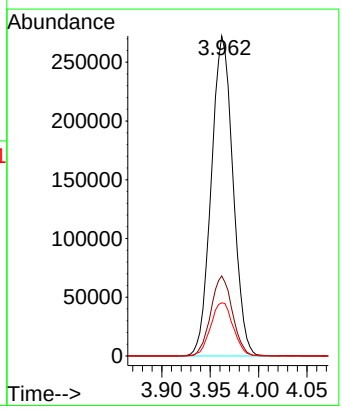


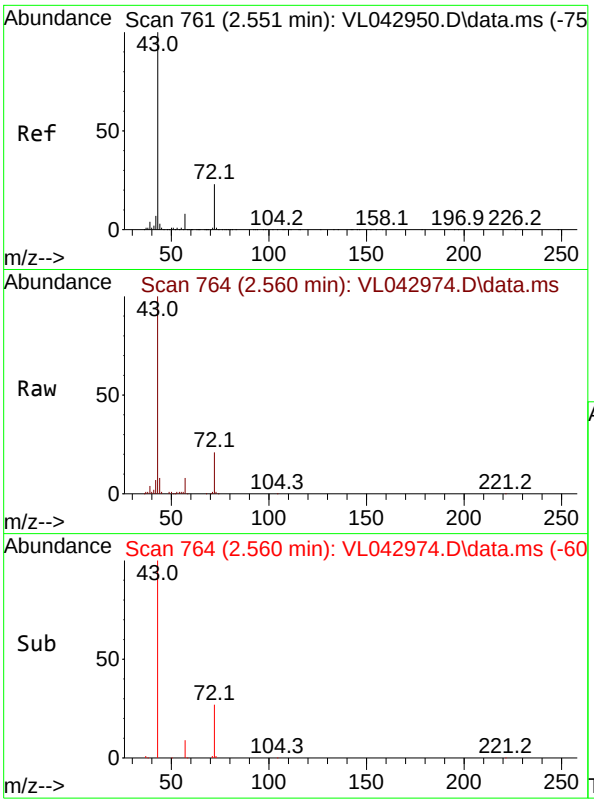


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:114 Resp: 424417

Ion	Ratio	Lower	Upper
114	100		
63	24.9	19.4	29.2
88	17.3	14.2	21.2





#34
2-Butanone
Concen: 1.487 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 4423

Ion	Ratio	Lower	Upper
43	100		
72	22.4	17.7	26.5

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

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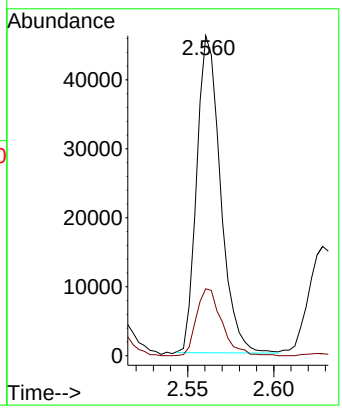
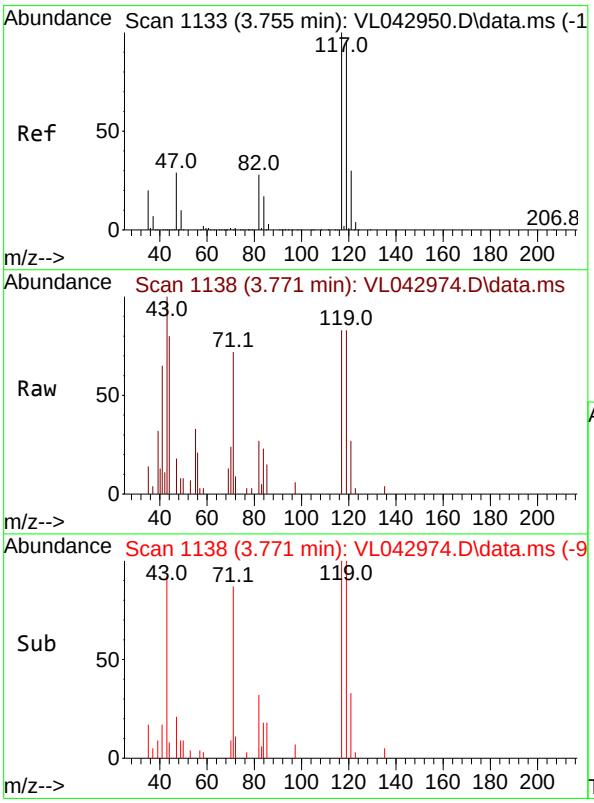
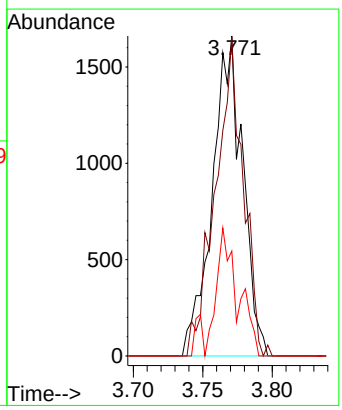


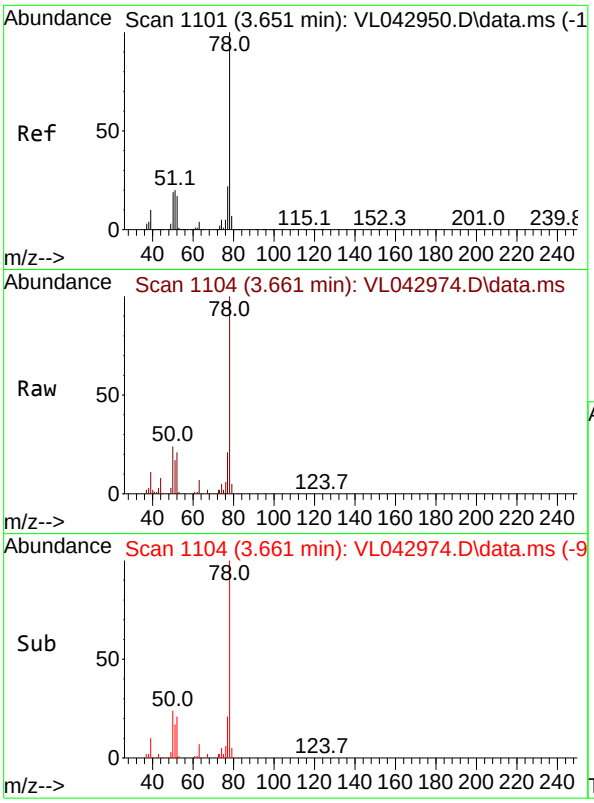


#35
Carbon Tetrachloride
Concen: 0.091 ppbv m
RT: 3.771 min Scan# 1138
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:117 Resp: 2523

Ion	Ratio	Lower	Upper
117	100		
119	99.5	76.9	115.3
121	32.8	23.7	35.5

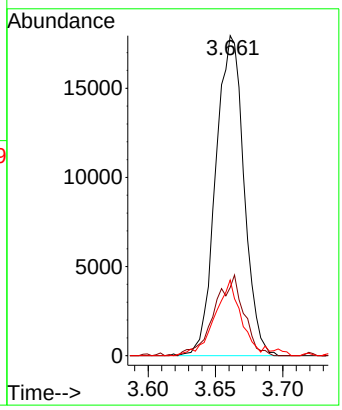




#36
Benzene
Concen: 0.656 ppbv
RT: 3.661 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 78 Resp: 2613

Ion	Ratio	Lower	Upper
78	100		
77	21.3	17.8	26.6
50	22.6	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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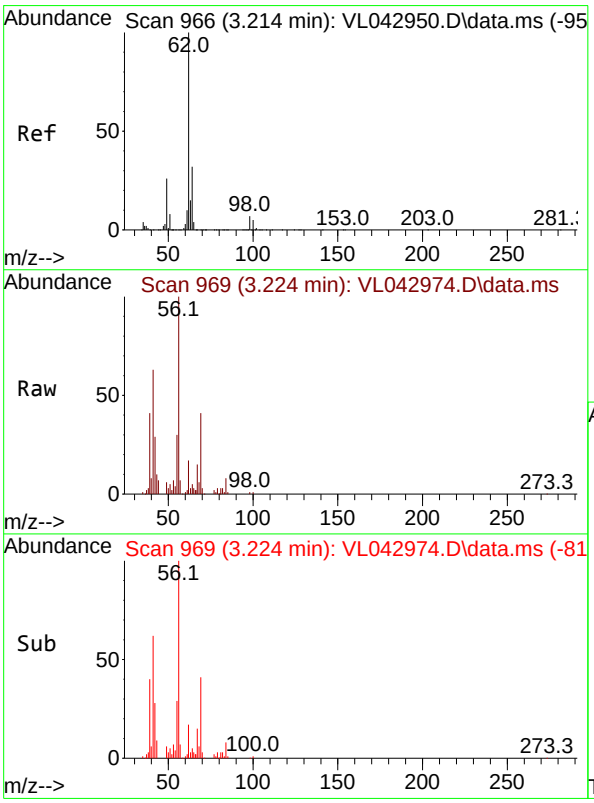
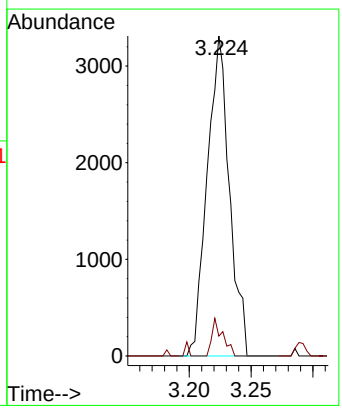
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

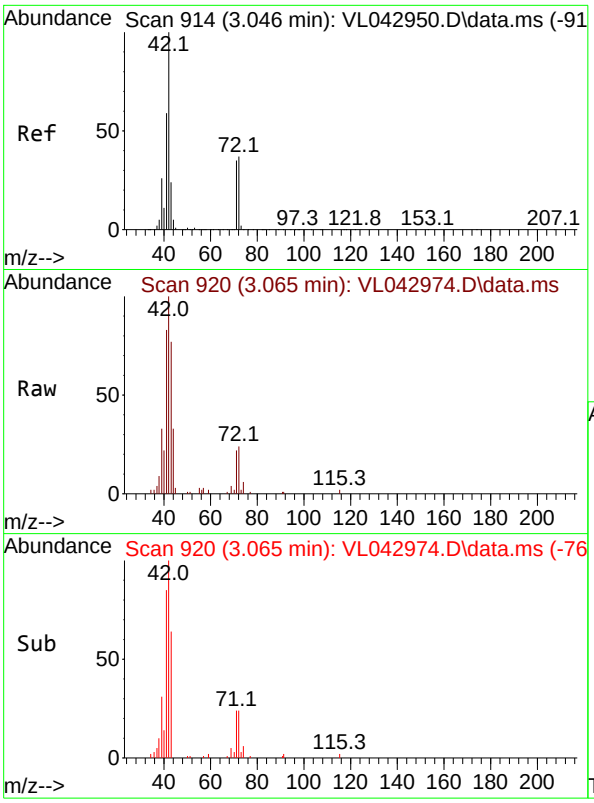


#37
1,2-Dichloroethane
Concen: 0.197 ppbv m
RT: 3.224 min Scan# 969
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 62 Resp: 4122

Ion	Ratio	Lower	Upper
62	100		
98	6.7	5.9	8.9

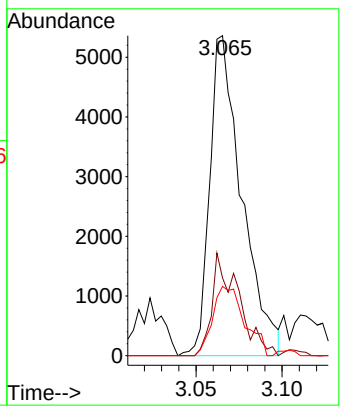




#41
Tetrahydrofuran
Concen: 0.407 ppbv
RT: 3.065 min Scan# 9
Delta R.T. 0.019 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 42 Resp: 695

Ion	Ratio	Lower	Upper
42	100		
72	27.6	30.0	45.0#
71	22.4	28.8	43.2#



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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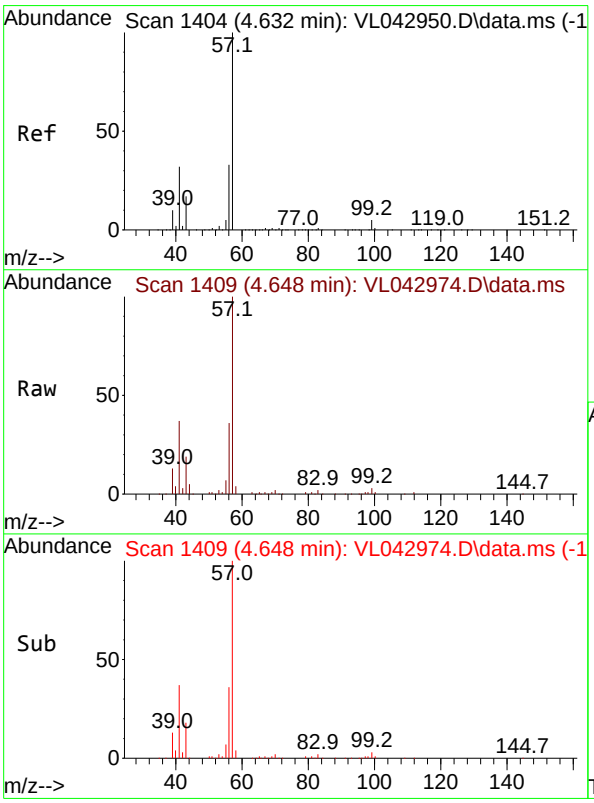
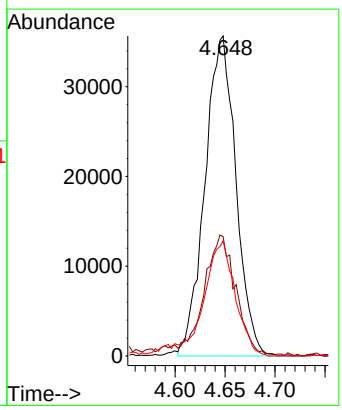
Supervised By :Semsettin Yesilyurt 09/24/2025

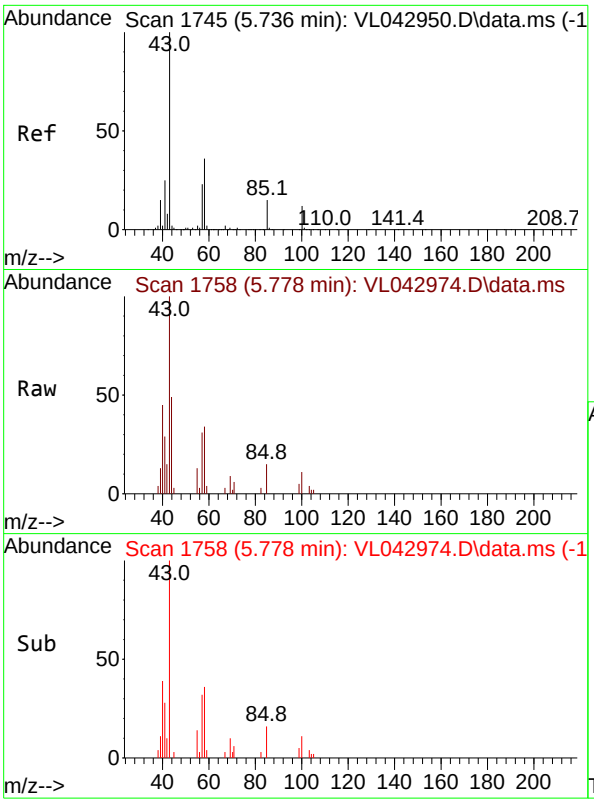


#44
2,2,4-Trimethylpentane
Concen: 1.119 ppbv
RT: 4.648 min Scan# 1409
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 57 Resp: 77020

Ion	Ratio	Lower	Upper
57	100		
41	40.1	25.5	38.3#
56	37.9	25.8	38.8





#50
4-Methyl-2-Pentanone
Concen: 0.270 ppbv m
RT: 5.778 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 1077

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.4	42.6#

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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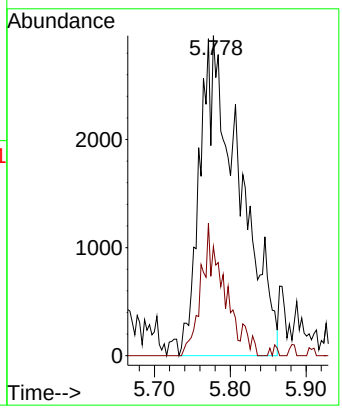
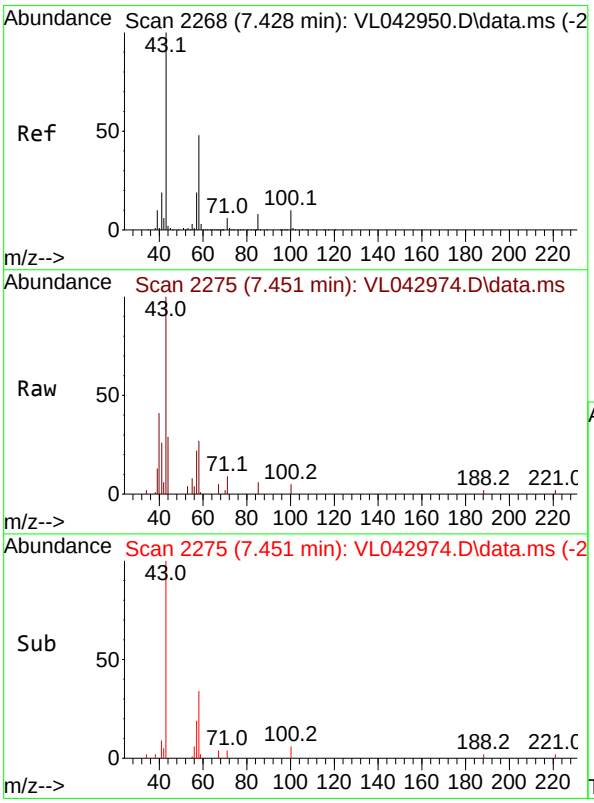
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

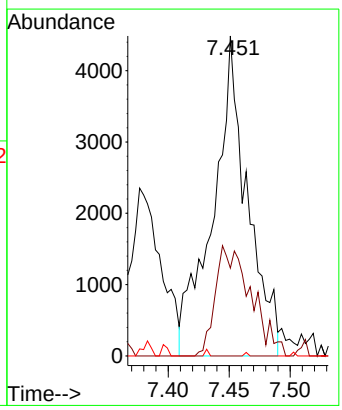


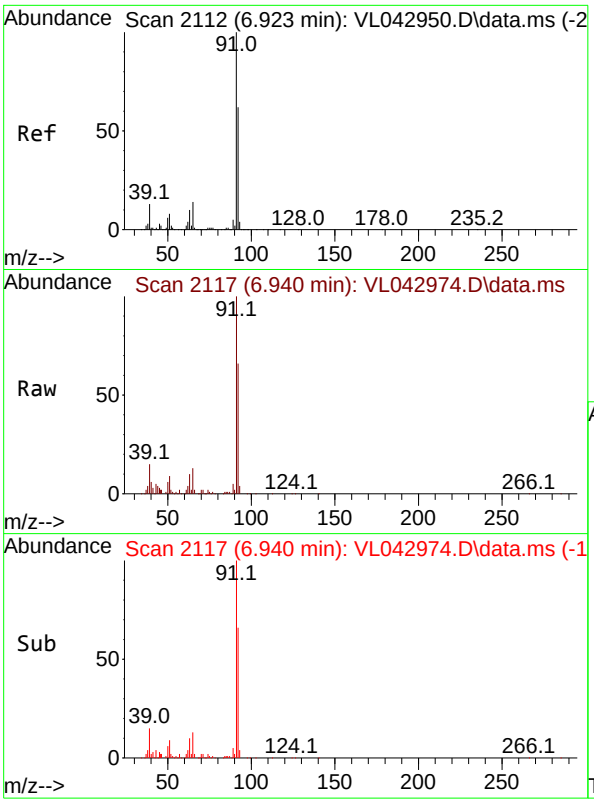


#51
2-Hexanone
Concen: 0.277 ppbv m
RT: 7.451 min Scan# 2275
Delta R.T. 0.023 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 8807

Ion	Ratio	Lower	Upper
43	100		
58	36.5	39.7	59.5#
98	0.2	0.1	0.1#

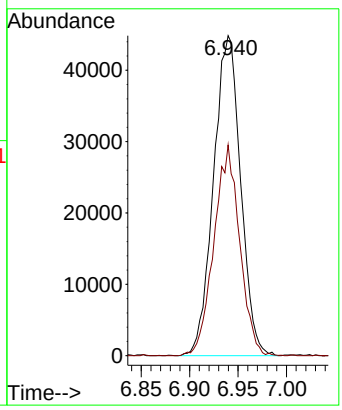




#53
Toluene
Concen: 1.850 ppbv
RT: 6.940 min Scan# 2
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 91 Resp: 8727

Ion	Ratio	Lower	Upper
91	100		
92	62.5	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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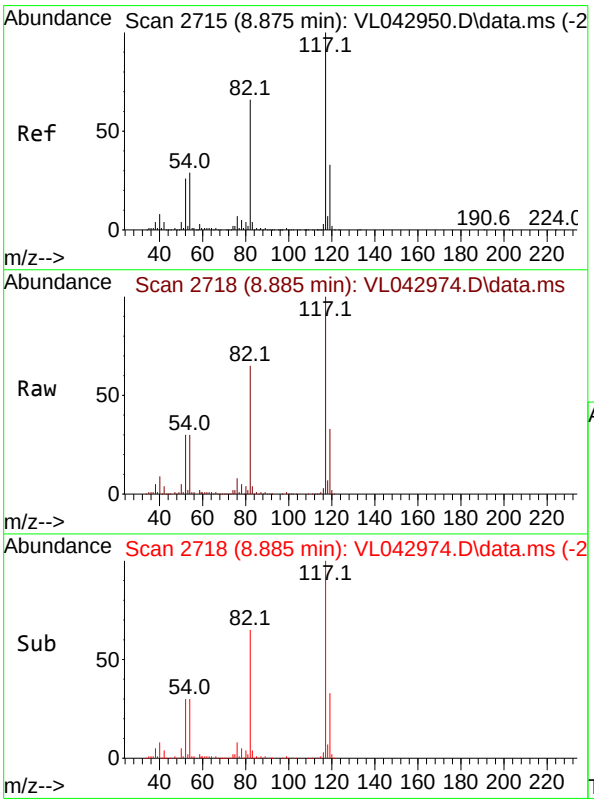
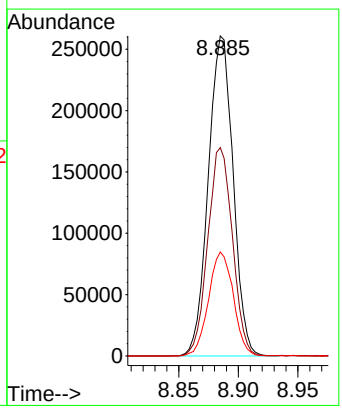
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

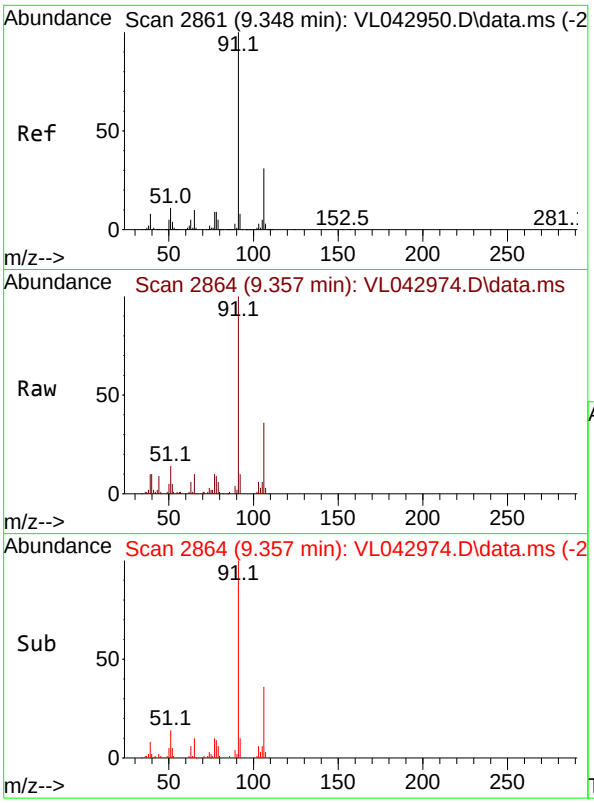


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:117 Resp: 377395

Ion	Ratio	Lower	Upper
117	100		
82	64.9	52.8	79.2
119	32.6	26.5	39.7





#58
Ethyl Benzene
Concen: 0.400 ppbv
RT: 9.357 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 91 Resp: 2479

Ion	Ratio	Lower	Upper
91	100		
106	35.9	24.6	37.0

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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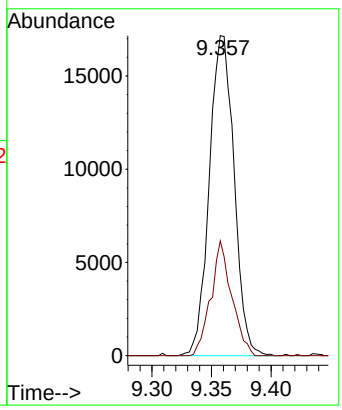
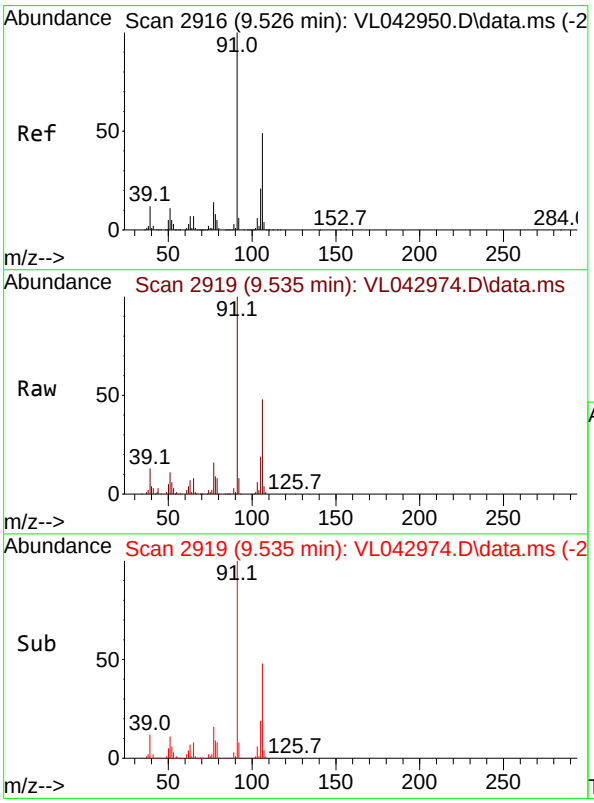
Supervised By :Semsettin Yesilyurt 09/24/2025

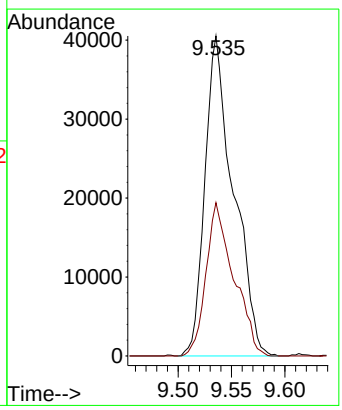


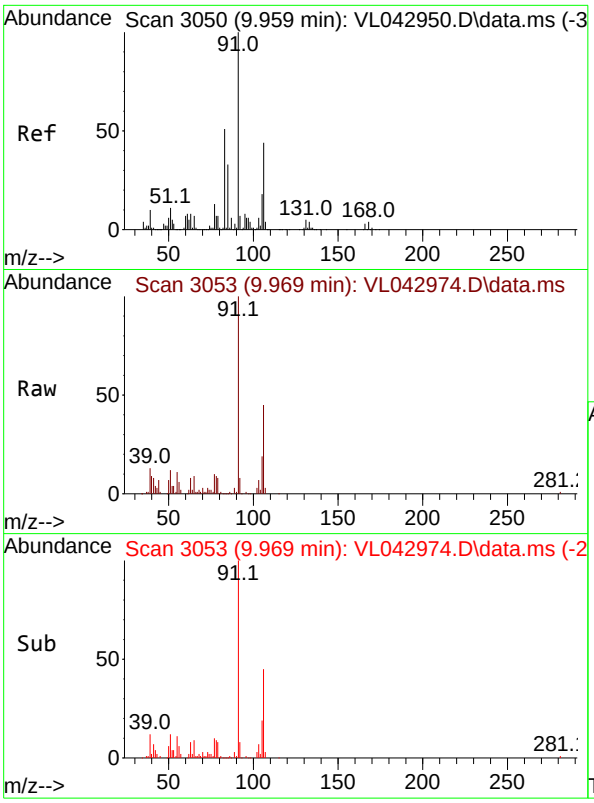


#59
m/p-Xylene
Concen: 1.537 ppbv
RT: 9.535 min Scan# 2919
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 91 Resp: 75106

Ion	Ratio	Lower	Upper
91	100		
106	46.6	0.0	0.0#

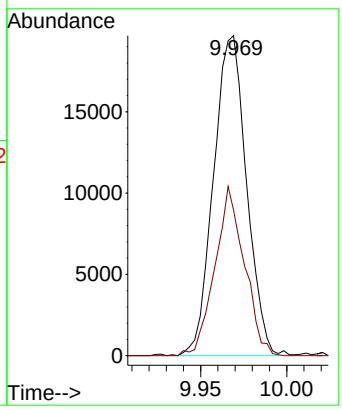




#60
o-Xylene
Concen: 0.538 ppbv
RT: 9.969 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 91 Resp: 2626

Ion	Ratio	Lower	Upper
91	100		
106	47.2	22.4	67.0



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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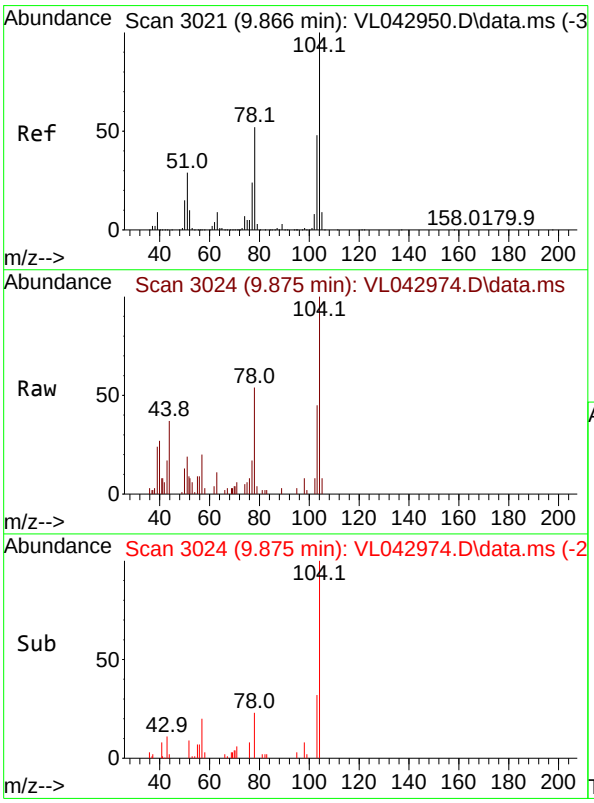
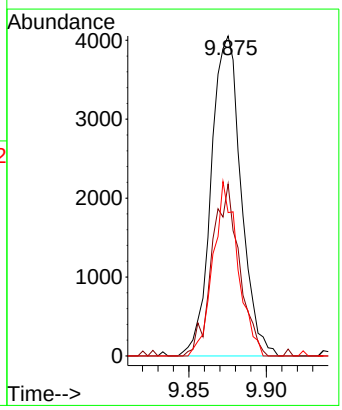
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

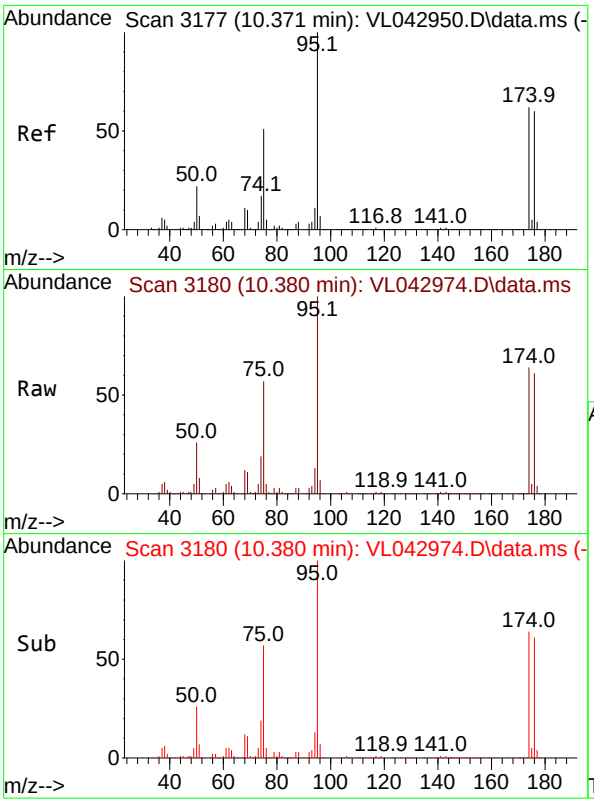


#61
Styrene
Concen: 0.235 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:104 Resp: 5433

Ion	Ratio	Lower	Upper
104	100		
78	49.3	39.9	59.9
103	45.3	36.9	55.3





#68
1-Bromo-4-Fluorobenzene
Concen: 10.458 ppbv
RT: 10.380 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 95 Resp: 29461

Ion	Ratio	Lower	Upper
95	100		
174	62.1	51.4	77.2
175	4.6	4.0	6.0

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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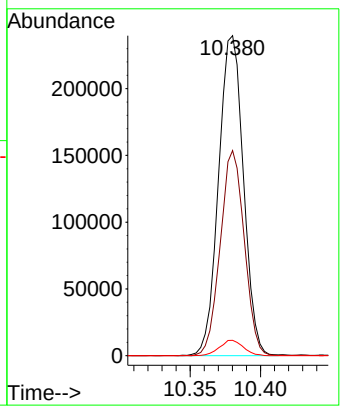
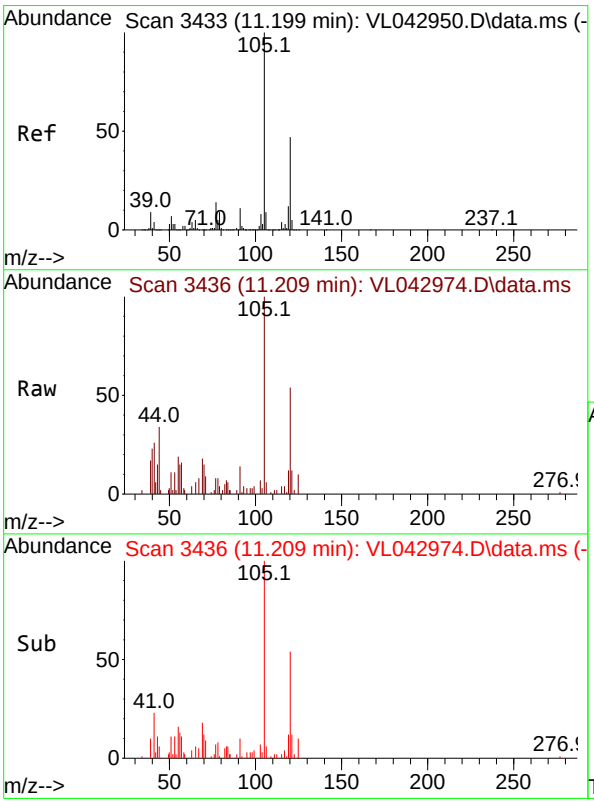
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

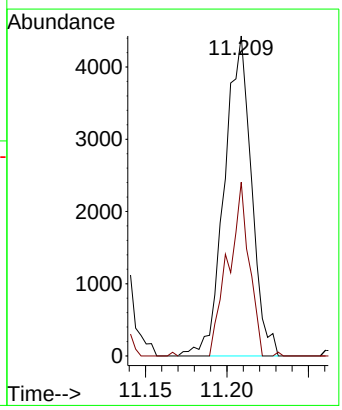


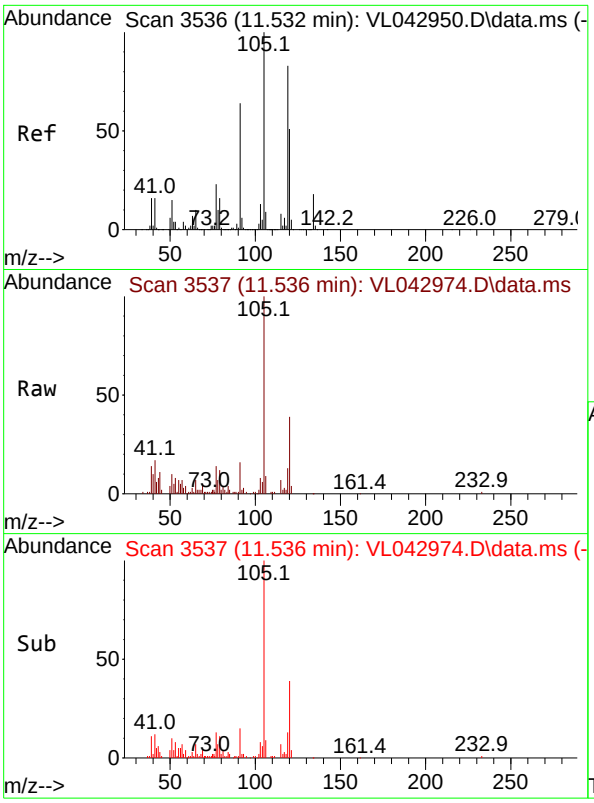


#73
1,3,5-Trimethylbenzene
Concen: 0.103 ppbv
RT: 11.209 min Scan# 3436
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:105 Resp: 5102

Ion	Ratio	Lower	Upper
105	100		
120	54.3	38.0	57.0

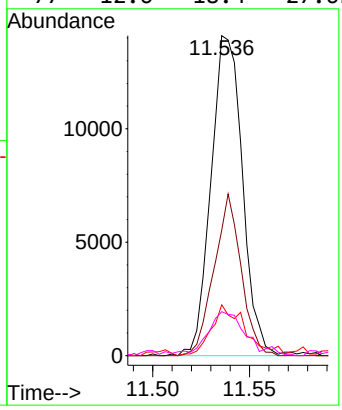




#74
1,2,4-Trimethylbenzene
Concen: 0.290 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:105 Resp: 1588

Ion	Ratio	Lower	Upper
105	100		
120	39.2	40.9	61.3#
91	15.9	51.2	76.8#
77	12.6	18.4	27.6#



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Manual Integrations
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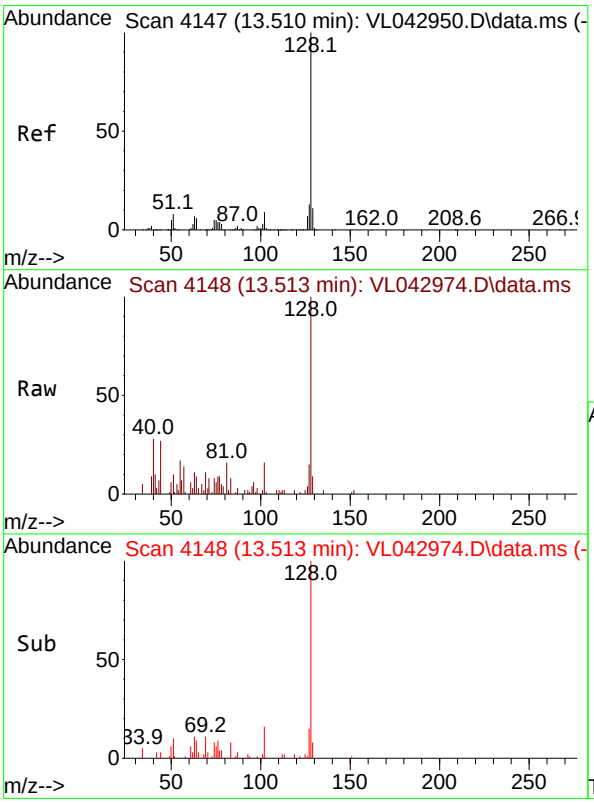
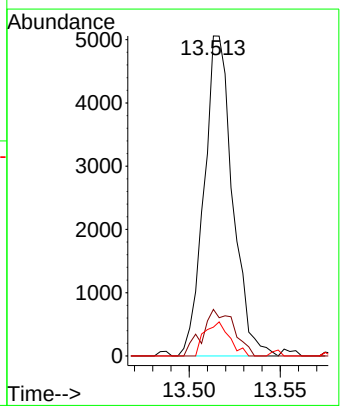
Supervised By :Semsettin Yesilyurt 09/24/2025



#79
Naphthalene
Concen: 0.114 ppbv
RT: 13.513 min Scan# 4148
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:128 Resp: 5520

Ion	Ratio	Lower	Upper
128	100		
127	14.5	10.6	15.8
129	9.0	9.0	13.6#



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-1DL	SDG No.:	Q3131
Lab Sample ID:	Q3131-01DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042975.D	10		09/23/25 01:46	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	3.80	18.8	JD	5.44	24.7
74-87-3	Chloromethane	0.98	2.02	UD	2.02	10.3
75-01-4	Vinyl Chloride	0.25	0.64	UD	0.64	0.77
74-83-9	Bromomethane	0.77	2.99	UD	2.99	19.4
75-00-3	Chloroethane	1.50	3.96	UD	3.96	13.2
109-99-9	Tetrahydrofuran	0.80	2.36	UD	2.36	14.8
75-69-4	Trichlorofluoromethane	1.70	9.55	UD	9.55	28.1
76-13-1	1,1,2-Trichlorotrifluoroethane	1.40	10.7	UD	10.7	38.3
76-14-2	Dichlorotetrafluoroethane	1.50	10.5	UD	10.5	35.0
75-65-0	tert-Butyl alcohol	1.60	4.85	UD	4.85	15.2
142-82-5	Heptane	1.70	6.97	UD	6.97	20.5
75-35-4	1,1-Dichloroethene	1.50	5.95	UD	5.95	19.8
67-64-1	Acetone	18.4	43.7	D	4.28	11.9
75-15-0	Carbon Disulfide	0.80	2.49	UD	2.49	15.6
1634-04-4	Methyl tert-Butyl Ether	2.30	8.29	UD	8.29	18.0
75-09-2	Methylene Chloride	2.30	7.99	UD	7.99	17.4
156-60-5	trans-1,2-Dichloroethene	1.20	4.76	UD	4.76	19.8
75-34-3	1,1-Dichloroethane	1.30	5.26	UD	5.26	20.2
110-82-7	Cyclohexane	2.20	7.57	UD	7.57	17.2
78-93-3	2-Butanone	1.60	4.72	JD	1.65	14.8
56-23-5	Carbon Tetrachloride	0.25	1.57	UD	1.57	1.89
156-59-2	cis-1,2-Dichloroethene	0.99	3.93	UD	3.93	19.8
67-66-3	Chloroform	0.96	4.69	UD	4.69	24.4
71-55-6	1,1,1-Trichloroethane	0.16	0.87	UD	0.87	1.64
540-84-1	2,2,4-Trimethylpentane	1.40	6.54	UD	6.54	23.4
71-43-2	Benzene	0.79	2.52	UD	2.52	16.0
107-06-2	1,2-Dichloroethane	0.93	3.76	UD	3.76	20.2
79-01-6	Trichloroethene	0.24	1.29	UD	1.29	1.61
78-87-5	1,2-Dichloropropane	1.30	6.01	UD	6.01	23.1
75-27-4	Bromodichloromethane	0.63	4.22	UD	4.22	33.5
108-10-1	4-Methyl-2-Pentanone	0.97	3.98	UD	3.98	20.5
108-88-3	Toluene	1.70	6.41	JD	6.03	18.8
10061-02-6	t-1,3-Dichloropropene	1.50	6.81	UD	6.81	22.7
10061-01-5	cis-1,3-Dichloropropene	1.10	4.99	UD	4.99	22.7
79-00-5	1,1,2-Trichloroethane	0.81	4.42	UD	4.42	27.3

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Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-1DL	SDG No.:	Q3131
Lab Sample ID:	Q3131-01DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042975.D	10		09/23/25 01:46	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3	
124-48-1	Dibromochloromethane	0.85	7.24	UD	7.24	42.6	
106-93-4	1,2-Dibromoethane	0.85	6.53	UD	6.53	7.69	
127-18-4	Tetrachloroethene	0.15	1.02	UD	1.02	2.03	
108-90-7	Chlorobenzene	0.77	3.55	UD	3.55	23.0	
100-41-4	Ethyl Benzene	1.90	8.25	UD	8.25	21.7	
179601-23-1	m/p-Xylene	4.10	17.8	UD	17.8	43.4	
95-47-6	o-Xylene	2.10	9.12	UD	9.12	21.7	
100-42-5	Styrene	1.60	6.81	UD	6.81	21.3	
75-25-2	Bromoform	0.48	4.96	UD	4.96	51.7	
79-34-5	1,1,2,2-Tetrachloroethane	0.18	1.24	UD	1.24	2.06	
95-49-8	2-Chlorotoluene	1.70	8.80	UD	8.80	25.9	
108-67-8	1,3,5-Trimethylbenzene	1.80	8.85	UD	8.85	24.6	
95-63-6	1,2,4-Trimethylbenzene	1.80	8.85	UD	8.85	24.6	
541-73-1	1,3-Dichlorobenzene	0.54	3.25	UD	3.25	30.1	
106-46-7	1,4-Dichlorobenzene	1.30	7.82	UD	7.82	30.1	
95-50-1	1,2-Dichlorobenzene	1.30	7.82	UD	7.82	30.1	
120-82-1	1,2,4-Trichlorobenzene	2.10	15.6	UD	15.6	37.1	
87-68-3	Hexachloro-1,3-Butadiene	1.30	13.9	UD	13.9	53.3	
106-99-0	1,3-Butadiene	0.51	1.13	UD	1.13	11.1	
91-20-3	Naphthalene	0.13	0.68	UD	0.68	5.24	
622-96-8	4-Ethyltoluene	2.10	10.3	UD	10.3	24.6	
110-54-3	Hexane	6.00	21.1	D	5.64	17.6	
107-05-1	Allyl Chloride	1.10	3.44	UD	3.44	15.7	
123-91-1	1,4-Dioxane	2.20	7.93	UD	7.93	18.0	
80-62-6	Methyl Methacrylate	1.40	5.73	UD	5.73	20.5	
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.1			70 (65) - 130 (135)	101%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	143000		2.79			
540-36-3	1,4-Difluorobenzene	420000		3.962			
3114-55-4	Chlorobenzene-d5	364000		8.885			

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-1DL	SDG No.:	Q3131
Lab Sample ID:	Q3131-01DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042975.D	10		09/23/25 01:46	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042975.D
Acq On : 23 Sep 2025 01:46
Operator : SY/MD
Sample : Q3131-01DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

Quant Time: Sep 24 01:13:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	142766	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	419987	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	364182	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	273620	10.065	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	7296	0.380	ppbv	98
9) Propene	1.489	41	5259m	0.505	ppbv	
13) Ethanol	1.726	45	13214	13.083	ppbv	100
15) Acetone	1.839	43	34284m	1.844	ppbv	
19) Isopropyl Alcohol	1.887	45	3202m	0.286	ppbv	
26) Hexane	2.829	57	12846	0.600	ppbv #	45
34) 2-Butanone	2.564	43	4708	0.160	ppbv	97
44) 2,2,4-Trimethylpentane	4.645	57	7639	0.112	ppbv #	77
53) Toluene	6.933	91	7971m	0.171	ppbv	
59) m/p-Xylene	9.532	91	6404m	0.136	ppbv	

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

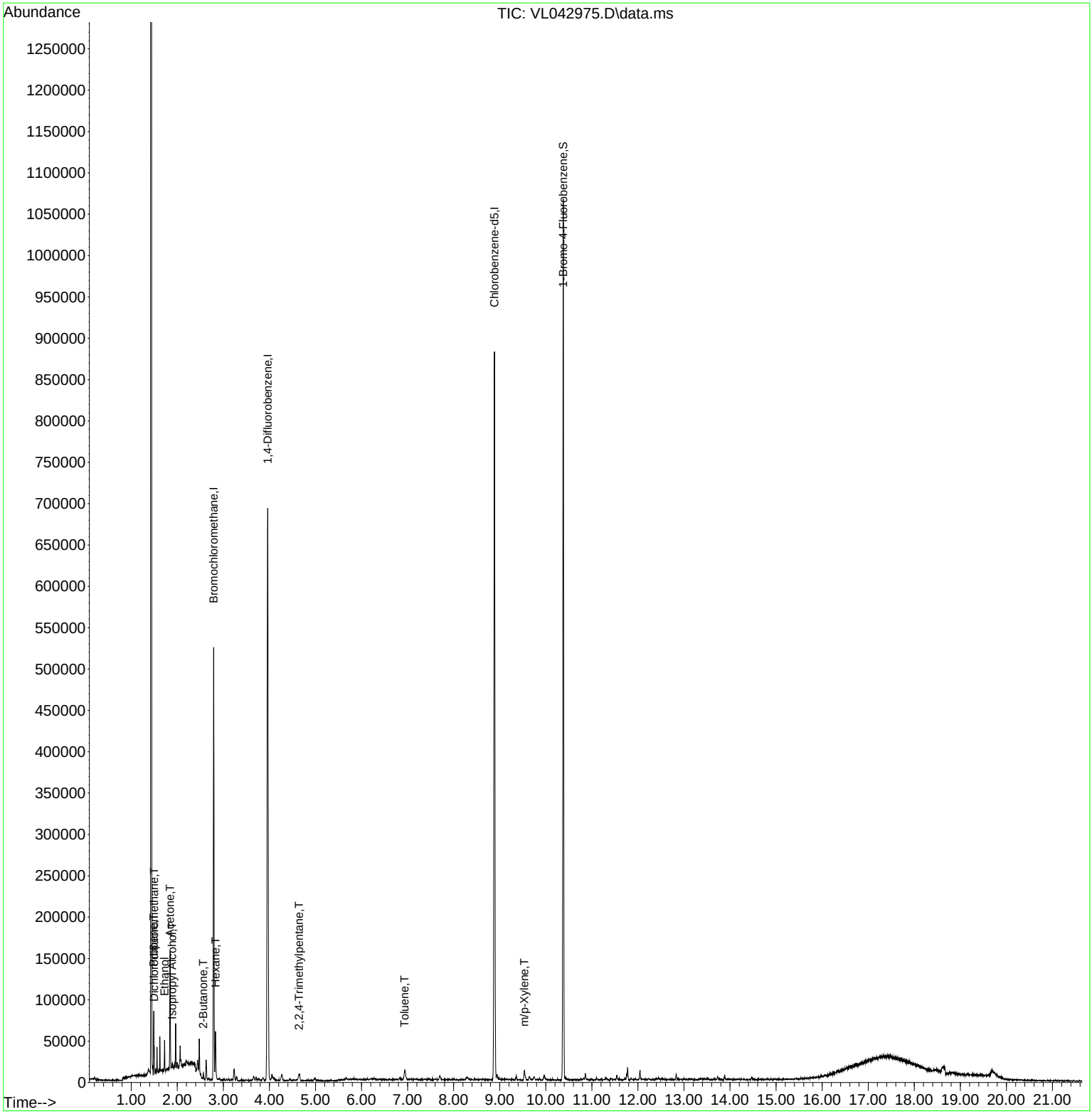
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042975.D
Acq On : 23 Sep 2025 01:46
Operator : SY/MD
Sample : Q3131-01DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

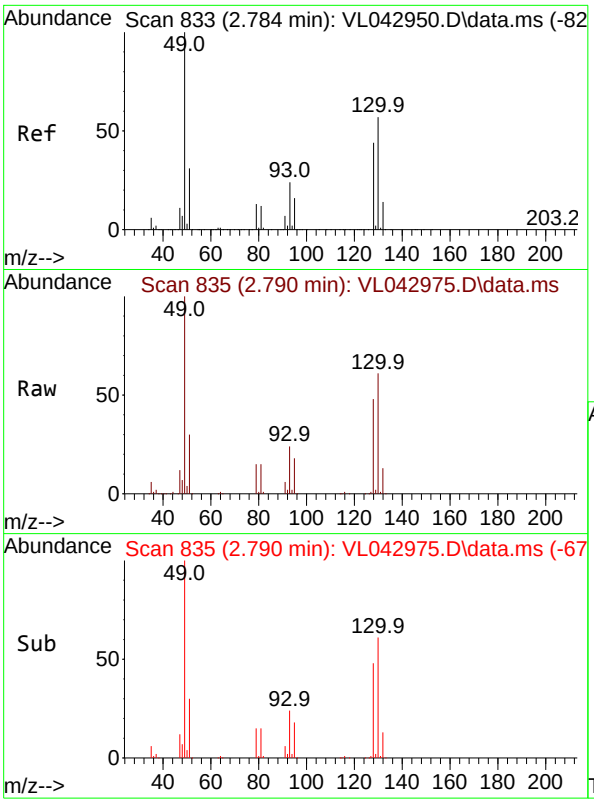
Quant Time: Sep 24 01:13:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

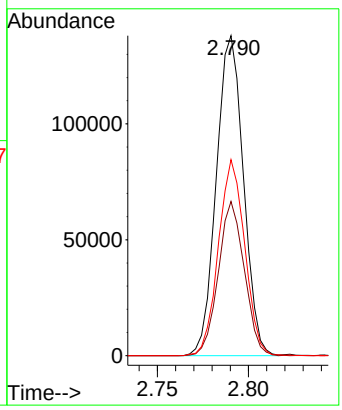




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 49 Resp: 14276

Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.9	68.8
130	59.5	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations
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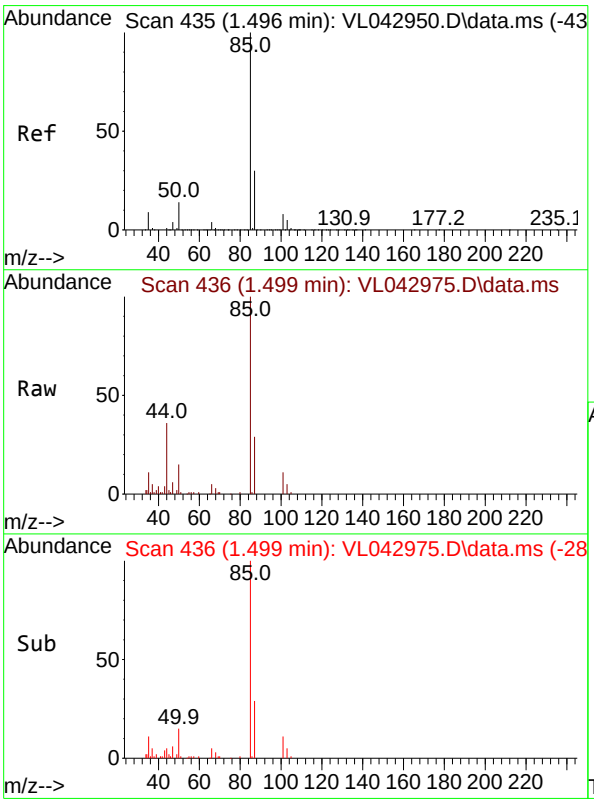
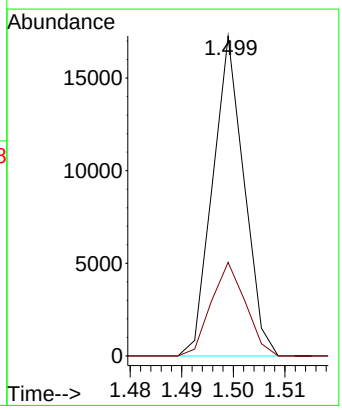
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

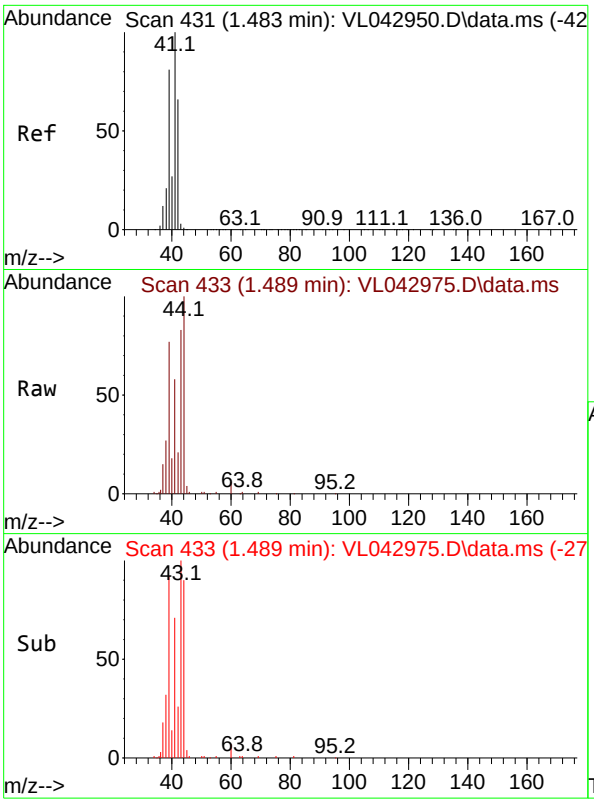


#2
Dichlorodifluoromethane
Concen: 0.380 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 85 Resp: 7296

Ion	Ratio	Lower	Upper
85	100		
87	29.2	24.3	36.5

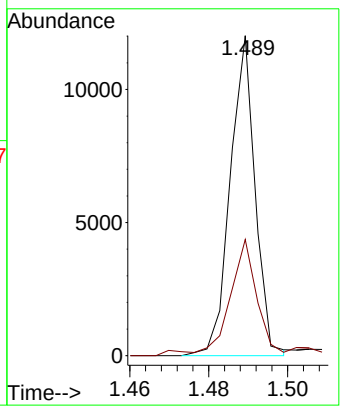




#9
Propene
Concen: 0.505 ppbv m
RT: 1.489 min Scan# 4
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 41 Resp: 525

Ion	Ratio	Lower	Upper
41	100		
42	42.7	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations
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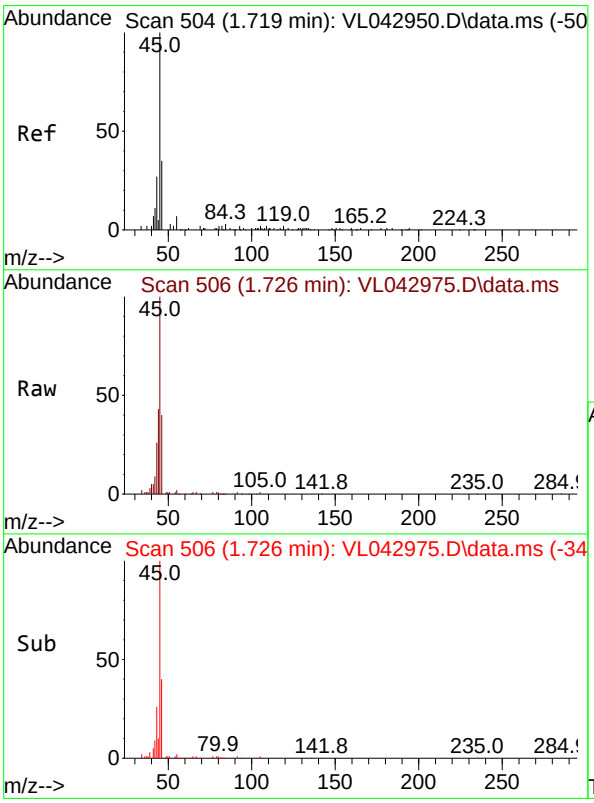
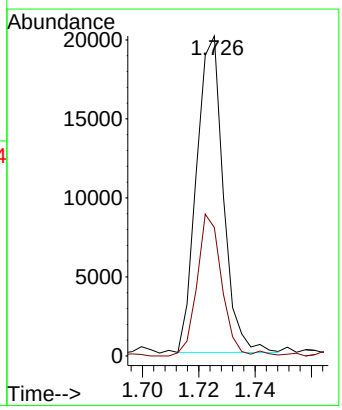
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

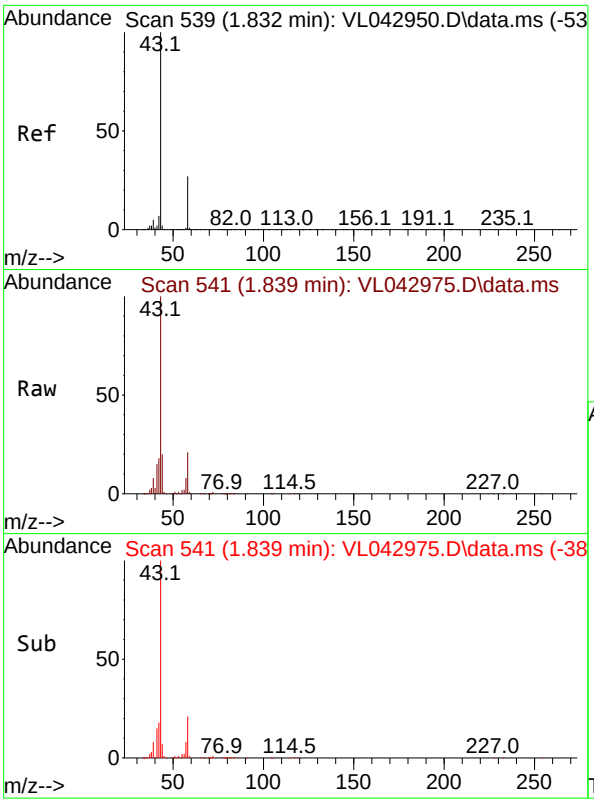


#13
Ethanol
Concen: 13.083 ppbv
RT: 1.726 min Scan# 506
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 45 Resp: 13214

Ion	Ratio	Lower	Upper
45	100		
46	40.6	16.2	64.6

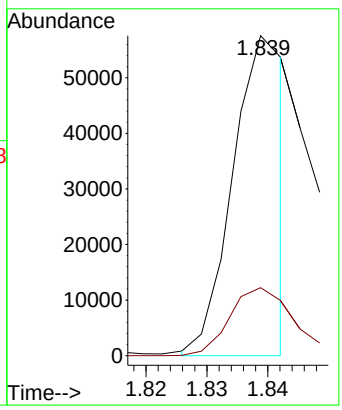




#15
Acetone
Concen: 1.844 ppbv m
RT: 1.839 min Scan# 54
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 43 Resp: 3428

Ion	Ratio	Lower	Upper
43	100		
58	26.7	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations
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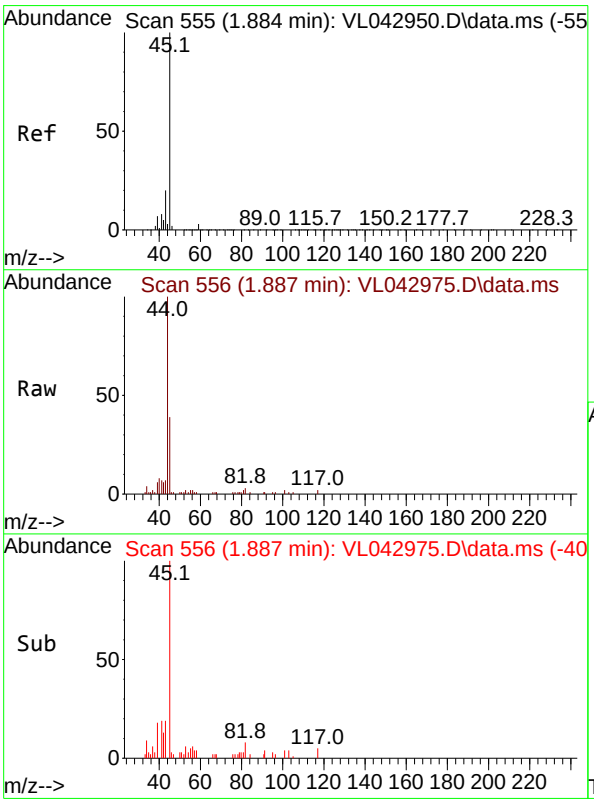
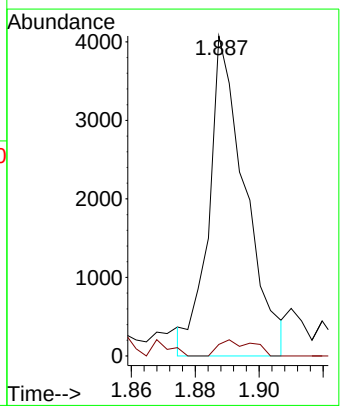
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

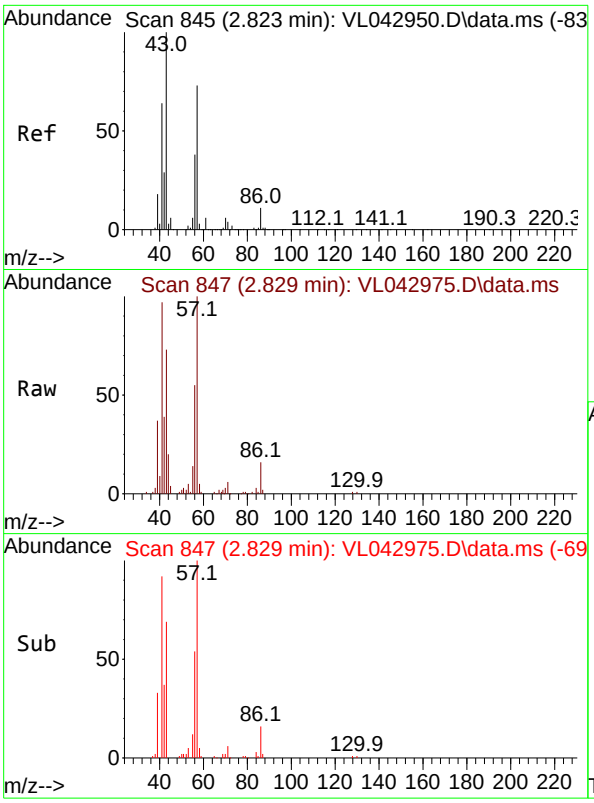


#19
Isopropyl Alcohol
Concen: 0.286 ppbv m
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 45 Resp: 3202

Ion	Ratio	Lower	Upper
45	100		
58	38.2	31.0	46.6

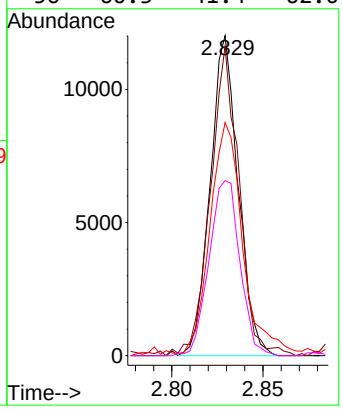




#26
Hexane
Concen: 0.600 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 57 Resp: 1284

Ion	Ratio	Lower	Upper
57	100		
41	97.8	71.7	107.5
43	88.9	180.8	271.2#
56	60.3	41.4	62.0



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations
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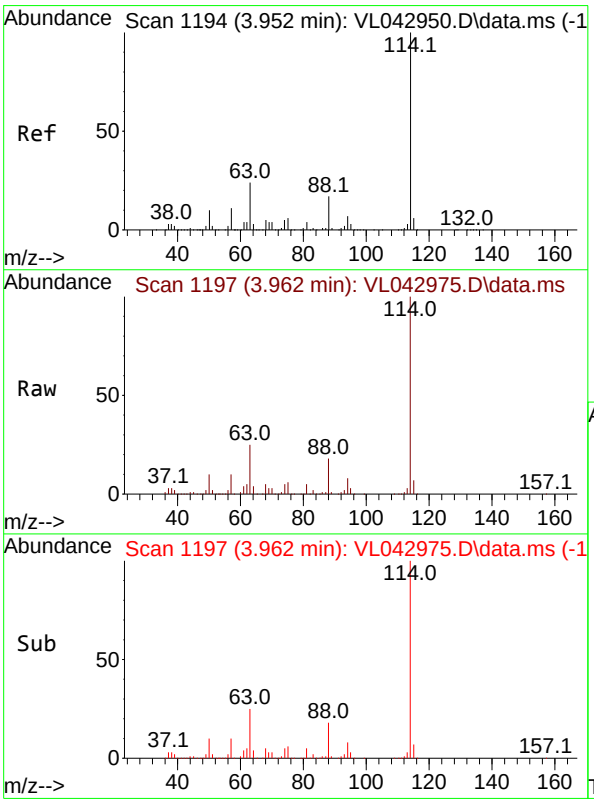
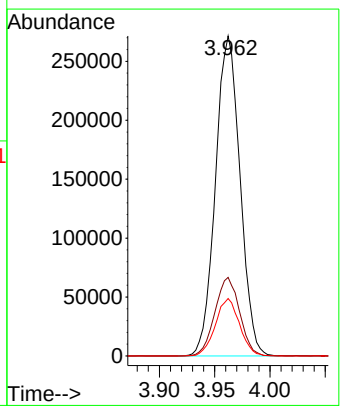
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

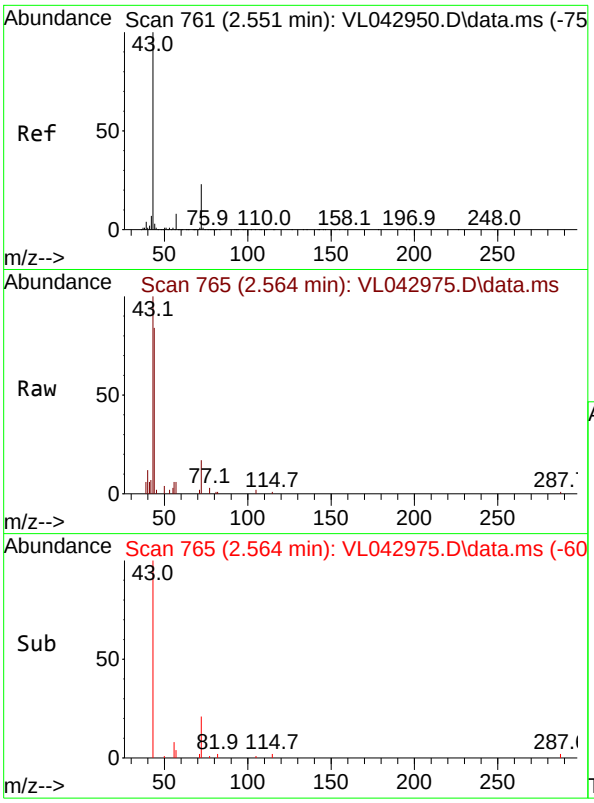


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion:114 Resp: 419987

Ion	Ratio	Lower	Upper
114	100		
63	24.7	19.4	29.2
88	17.7	14.2	21.2





#34
2-Butanone
Concen: 0.160 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

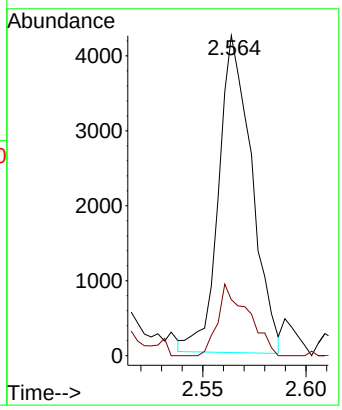
Tgt Ion: 43 Resp: 470

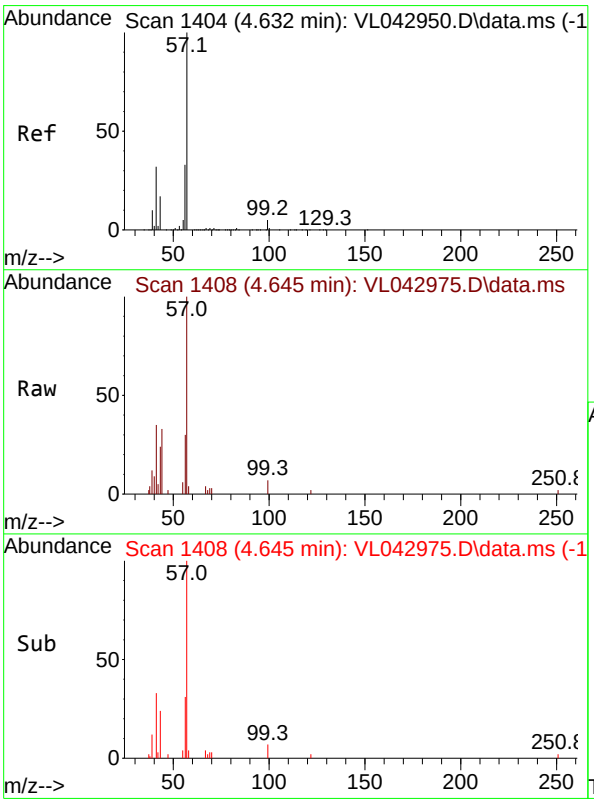
Ion	Ratio	Lower	Upper
43	100		
72	20.8	17.7	26.5

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

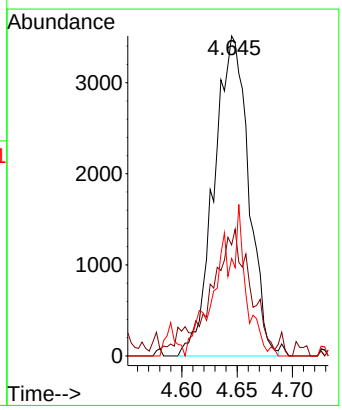


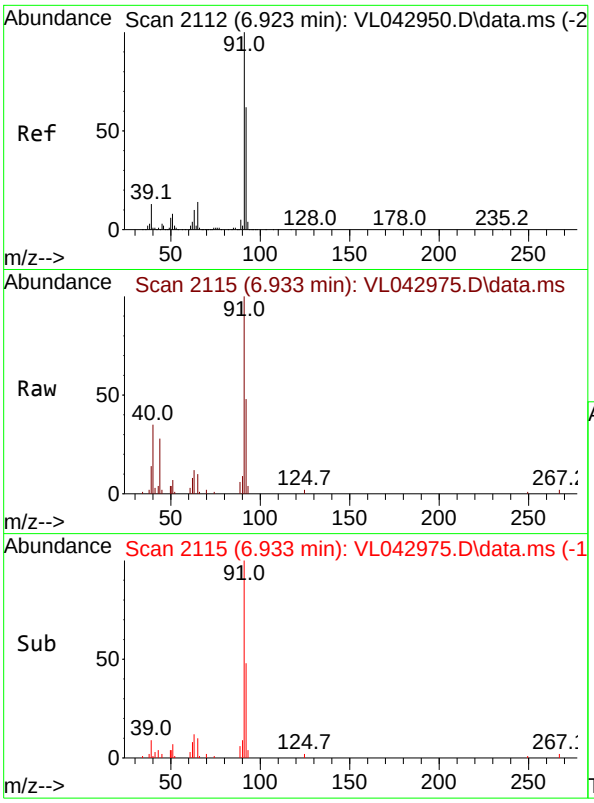


#44
2,2,4-Trimethylpentane
Concen: 0.112 ppbv
RT: 4.645 min Scan# 1408
Delta R.T. 0.013 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 57 Resp: 7639

Ion	Ratio	Lower	Upper
57	100		
41	49.9	25.5	38.3#
56	40.5	25.8	38.8#

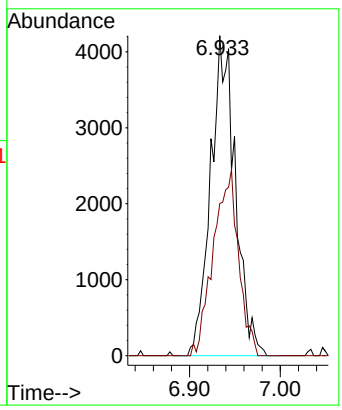




#53
Toluene
Concen: 0.171 ppbv m
RT: 6.933 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 91 Resp: 797

Ion	Ratio	Lower	Upper
91	100		
92	58.9	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations
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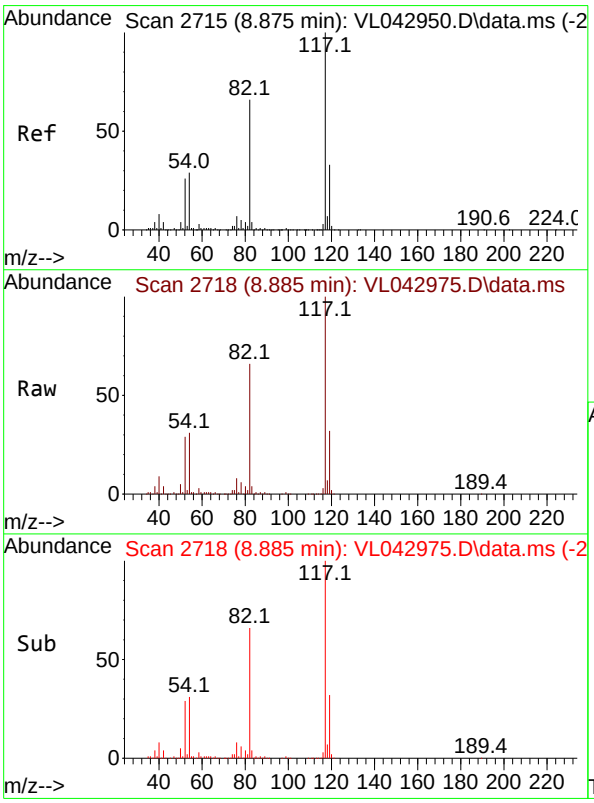
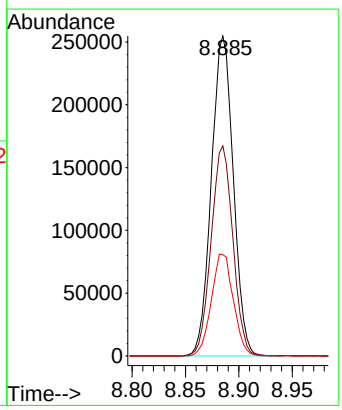
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

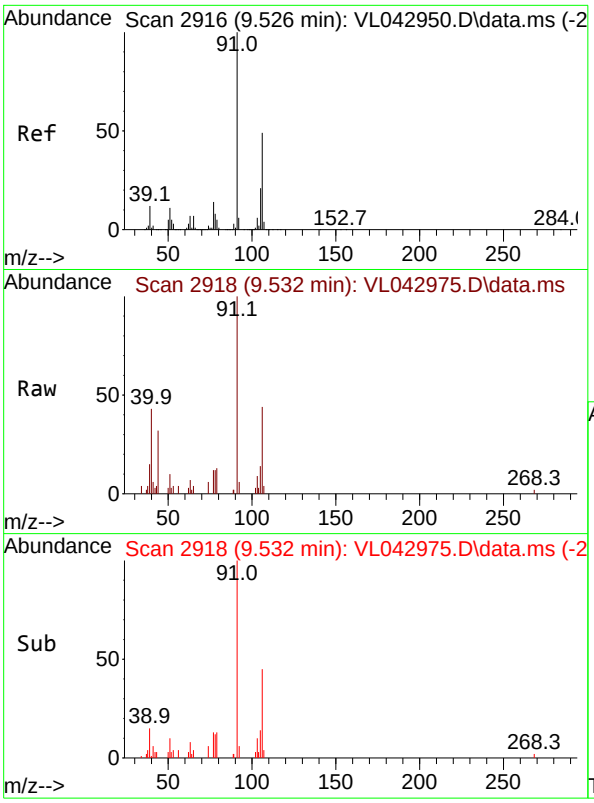


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion:117 Resp: 364182

Ion	Ratio	Lower	Upper
117	100		
82	65.0	52.8	79.2
119	32.0	26.5	39.7





#59
m/p-Xylene
Concen: 0.136 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 91 Resp: 640

Ion	Ratio	Lower	Upper
91	100		
106	48.8	0.0	0.0

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Manual Integrations
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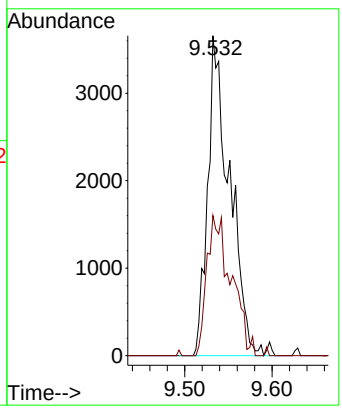
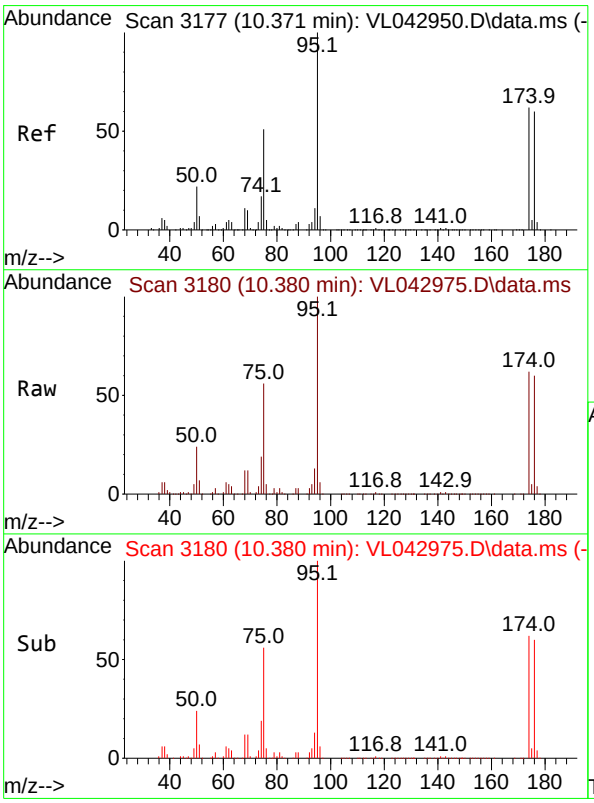
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

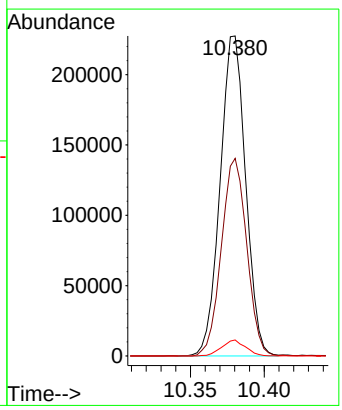




#68
1-Bromo-4-Fluorobenzene
Concen: 10.065 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 95 Resp: 273620

Ion	Ratio	Lower	Upper
95	100		
174	61.6	51.4	77.2
175	4.7	4.0	6.0



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-2	SDG No.:	Q3131
Lab Sample ID:	Q3131-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042976.D	1		09/23/25 02:22	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	3.80	18.8		0.54	2.47
74-87-3	Chloromethane	0.40	0.83	J	0.21	1.03
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
74-83-9	Bromomethane	0.080	0.31	U	0.31	1.94
75-00-3	Chloroethane	0.15	0.40	U	0.40	1.32
109-99-9	Tetrahydrofuran	0.37	1.09	J	0.24	1.47
75-69-4	Trichlorofluoromethane	0.43	2.42	J	0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	0.14	1.07	U	1.07	3.83
76-14-2	Dichlorotetrafluoroethane	0.15	1.05	U	1.05	3.49
75-65-0	tert-Butyl alcohol	0.26	0.79	J	0.49	1.52
142-82-5	Heptane	0.44	1.80	J	0.70	2.05
75-35-4	1,1-Dichloroethene	0.15	0.59	U	0.59	1.98
67-64-1	Acetone	20.7	49.2	E	0.43	1.19
75-15-0	Carbon Disulfide	0.080	0.25	U	0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	0.23	0.83	U	0.83	1.80
75-09-2	Methylene Chloride	0.76	2.64		0.80	1.74
156-60-5	trans-1,2-Dichloroethene	0.12	0.48	U	0.48	1.98
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02
110-82-7	Cyclohexane	0.55	1.89		0.76	1.72
78-93-3	2-Butanone	1.40	4.13		0.18	1.47
56-23-5	Carbon Tetrachloride	0.090	0.57		0.19	0.19
156-59-2	cis-1,2-Dichloroethene	0.10	0.40	U	0.40	1.98
67-66-3	Chloroform	0.14	0.68	J	0.49	2.44
71-55-6	1,1,1-Trichloroethane	0.020	0.11	U	0.11	0.16
540-84-1	2,2,4-Trimethylpentane	1.30	6.07		0.65	2.34
71-43-2	Benzene	0.72	2.30		0.26	1.60
107-06-2	1,2-Dichloroethane	0.20	0.81	J	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
78-87-5	1,2-Dichloropropane	0.13	0.60	U	0.60	2.31
75-27-4	Bromodichloromethane	0.060	0.40	U	0.40	3.35
108-10-1	4-Methyl-2-Pentanone	0.14	0.57	J	0.41	2.05
108-88-3	Toluene	2.00	7.54		0.60	1.88
10061-02-6	t-1,3-Dichloropropene	0.15	0.68	U	0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	0.11	0.50	U	0.50	2.27
79-00-5	1,1,2-Trichloroethane	0.080	0.44	U	0.44	2.73

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Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-2	SDG No.:	Q3131
Lab Sample ID:	Q3131-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042976.D	1		09/23/25 02:22	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3	
124-48-1	Dibromochloromethane	0.090	0.77	U	0.77	4.26	
106-93-4	1,2-Dibromoethane	0.090	0.69	U	0.69	0.77	
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	
100-41-4	Ethyl Benzene	0.44	1.91	J	0.83	2.17	
179601-23-1	m/p-Xylene	1.70	7.38		1.78	4.34	
95-47-6	o-Xylene	0.61	2.65		0.91	2.17	
100-42-5	Styrene	0.23	0.98	J	0.68	2.13	
75-25-2	Bromoform	0.050	0.52	U	0.52	5.17	
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	
95-49-8	2-Chlorotoluene	0.17	0.88	U	0.88	2.59	
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	U	0.88	2.46	
95-63-6	1,2,4-Trimethylbenzene	0.29	1.43	J	0.88	2.46	
541-73-1	1,3-Dichlorobenzene	0.050	0.30	U	0.30	3.01	
106-46-7	1,4-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
95-50-1	1,2-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
120-82-1	1,2,4-Trichlorobenzene	0.21	1.56	U	1.56	3.71	
87-68-3	Hexachloro-1,3-Butadiene	0.13	1.39	U	1.39	5.33	
106-99-0	1,3-Butadiene	0.050	0.11	U	0.11	1.11	
91-20-3	Naphthalene	0.010	0.050	U	0.050	0.52	
622-96-8	4-Ethyltoluene	0.21	1.03	U	1.03	2.46	
110-54-3	Hexane	6.70	23.6		0.56	1.76	
107-05-1	Allyl Chloride	0.11	0.34	U	0.34	1.57	
123-91-1	1,4-Dioxane	0.22	0.79	U	0.79	1.80	
80-62-6	Methyl Methacrylate	0.14	0.57	U	0.57	2.05	
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.2			70 (65) - 130 (135)	102%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	143000		2.787			
540-36-3	1,4-Difluorobenzene	412000		3.959			
3114-55-4	Chlorobenzene-d5	367000		8.882			

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Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-2	SDG No.:	Q3131
Lab Sample ID:	Q3131-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042976.D	1		09/23/25 02:22	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042976.D
Acq On : 23 Sep 2025 02:22
Operator : SY/MD
Sample : Q3131-02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Quant Time: Sep 24 01:13:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	142688	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	412064	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	367269	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	280234	10.222	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	72159	3.760	ppbv		94
3) Chlorodifluoromethane	1.470	51	6145m	0.257	ppbv		
4) Chloromethane	1.531	50	3494	0.402	ppbv		94
9) Propene	1.489	41	53781m	5.168	ppbv		
10) Heptane	4.985	43	12088m	0.435	ppbv		
11) Trichlorofluoromethane	1.877	101	7922	0.428	ppbv		99
13) Ethanol	1.722	45	128905	127.697	ppbv		96
15) Acetone	1.835	43	384118m	20.669	ppbv		
17) tert-Butyl alcohol	2.046	59	5375	0.264	ppbv	#	72
19) Isopropyl Alcohol	1.887	45	23113	2.069	ppbv	#	1
20) Methylene Chloride	2.062	84	7616m	0.755	ppbv		
26) Hexane	2.826	57	143051	6.681	ppbv	#	42
29) Chloroform	2.845	83	4013m	0.143	ppbv		
30) Cyclohexane	3.858	84	9777	0.546	ppbv		88
34) 2-Butanone	2.557	43	41609	1.441	ppbv		98
35) Carbon Tetrachloride	3.761	117	2429m	0.091	ppbv		
36) Benzene	3.658	78	27676	0.715	ppbv	#	91
37) 1,2-Dichloroethane	3.221	62	4116	0.202	ppbv		99
41) Tetrahydrofuran	3.068	42	6061m	0.365	ppbv		
44) 2,2,4-Trimethylpentane	4.641	57	84058	1.258	ppbv	#	89
50) 4-Methyl-2-Pentanone	5.771	43	5299m	0.137	ppbv		
53) Toluene	6.936	91	92307	2.015	ppbv		100
58) Ethyl Benzene	9.357	91	26614	0.441	ppbv		95
59) m/p-Xylene	9.532	91	80258	1.688	ppbv	#	100
60) o-Xylene	9.966	91	28894	0.608	ppbv		99
61) Styrene	9.869	104	5085	0.226	ppbv		95
73) 1,3,5-Trimethylbenzene	11.202	105	4817	0.100	ppbv		90
74) 1,2,4-Trimethylbenzene	11.536	105	15499	0.291	ppbv	#	66

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

Quantitation Report (QT Reviewed)

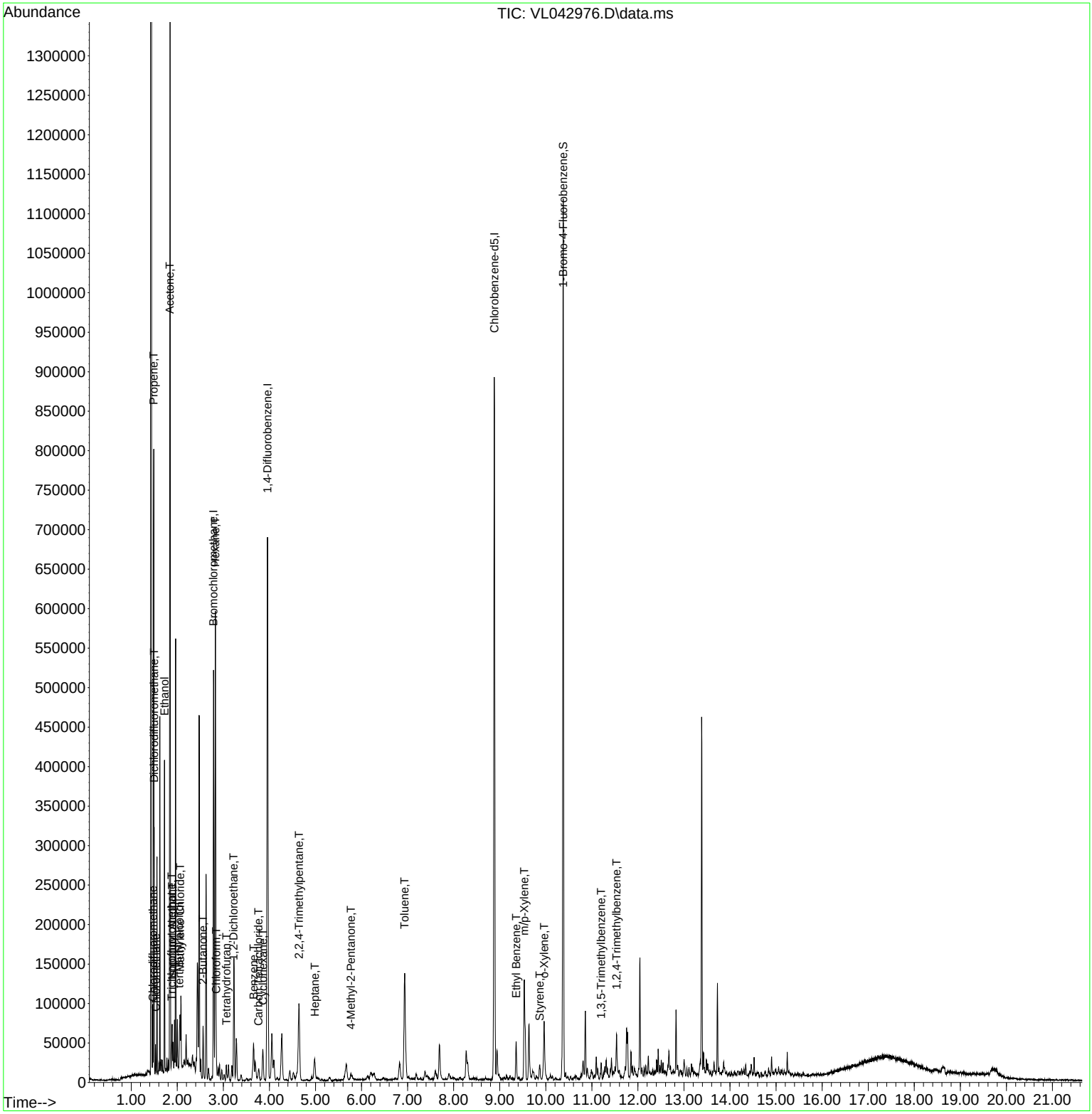
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042976.D
Acq On : 23 Sep 2025 02:22
Operator : SY/MD
Sample : Q3131-02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

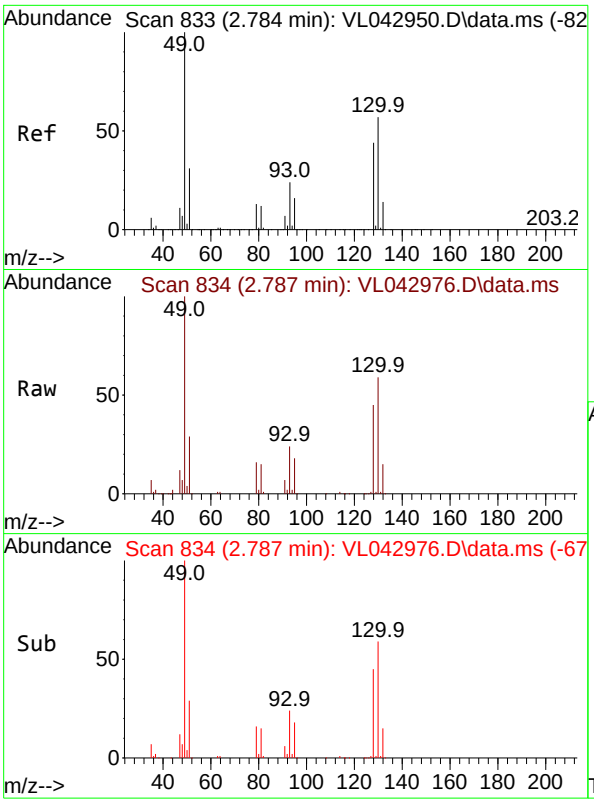
Quant Time: Sep 24 01:13:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

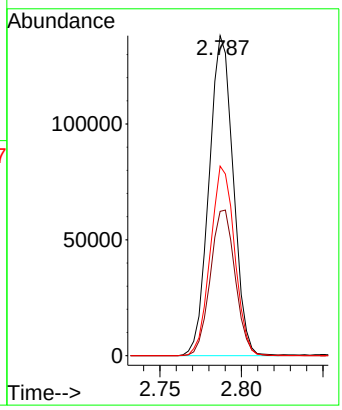




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 49 Resp: 14268

Ion	Ratio	Lower	Upper
49	100		
128	46.5	22.9	68.8
130	59.3	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
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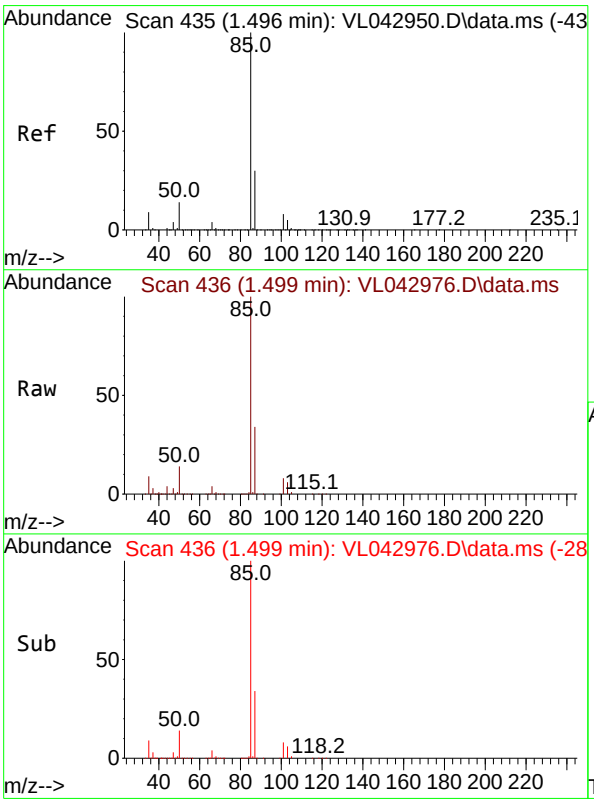
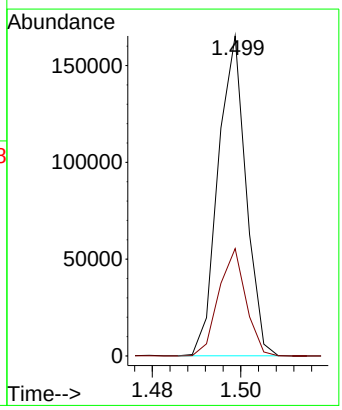
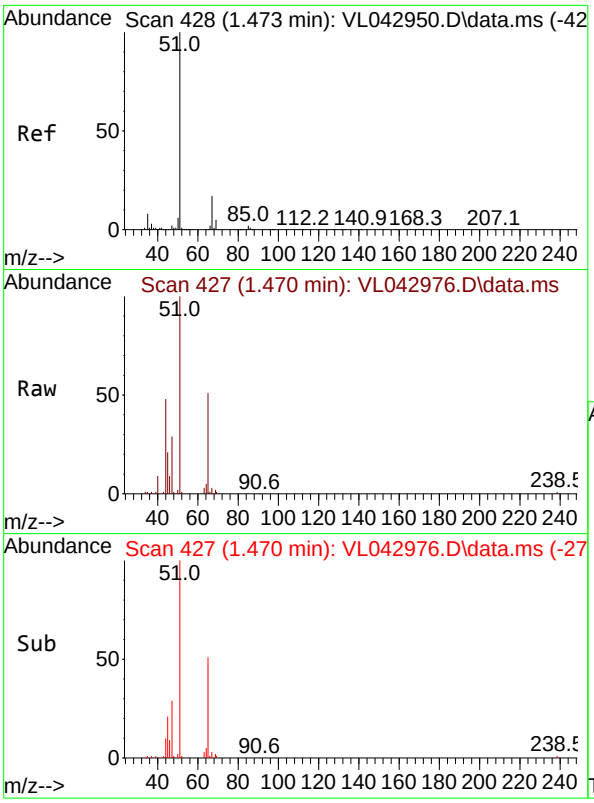


#2
Dichlorodifluoromethane
Concen: 3.760 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 85 Resp: 72159

Ion	Ratio	Lower	Upper
85	100		
87	33.6	24.3	36.5

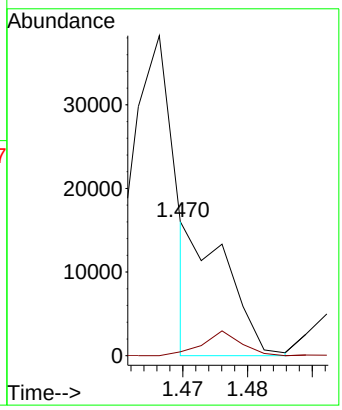




#3
Chlorodifluoromethane
Concen: 0.257 ppbv m
RT: 1.470 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 51 Resp: 614

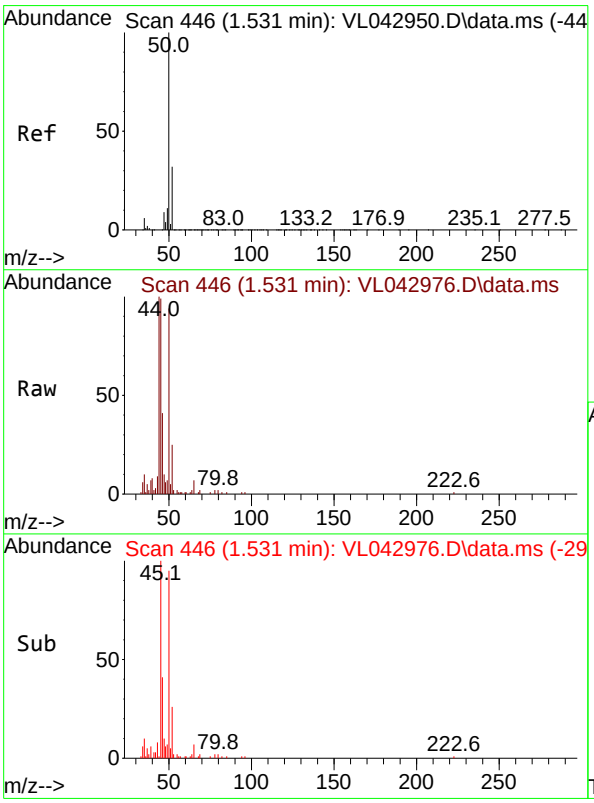
Ion	Ratio	Lower	Upper
51	100		
67	17.4	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
APPROVED

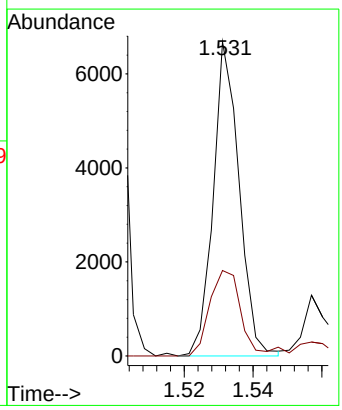
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

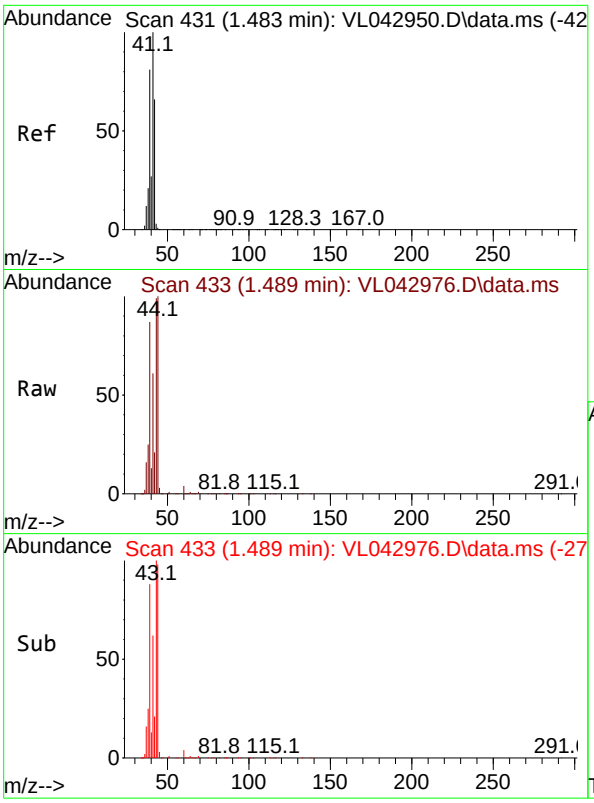


#4
Chloromethane
Concen: 0.402 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 50 Resp: 3494

Ion	Ratio	Lower	Upper
50	100		
52	29.2	25.9	38.9

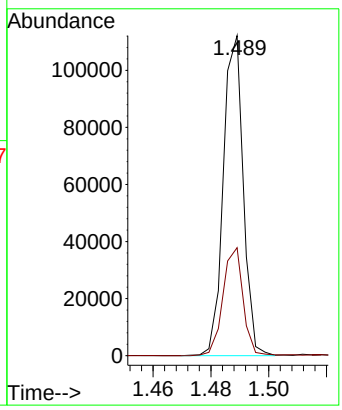




#9
Propene
Concen: 5.168 ppbv m
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 41 Resp: 5378

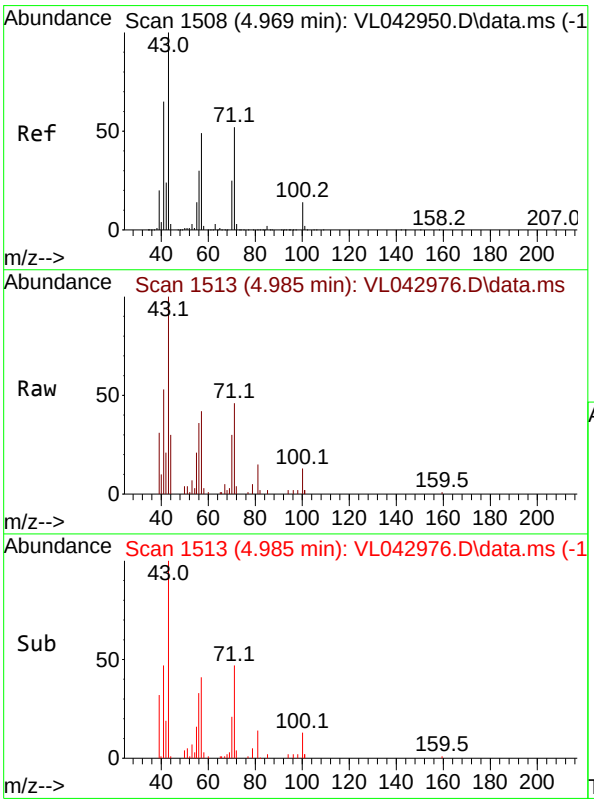
Ion	Ratio	Lower	Upper
41	100		
42	35.4	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
APPROVED

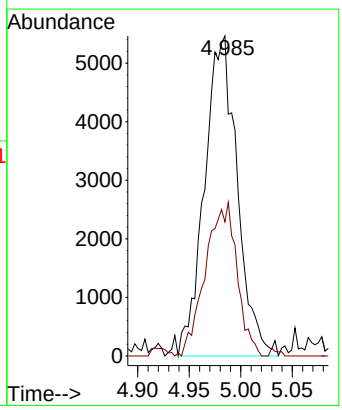
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

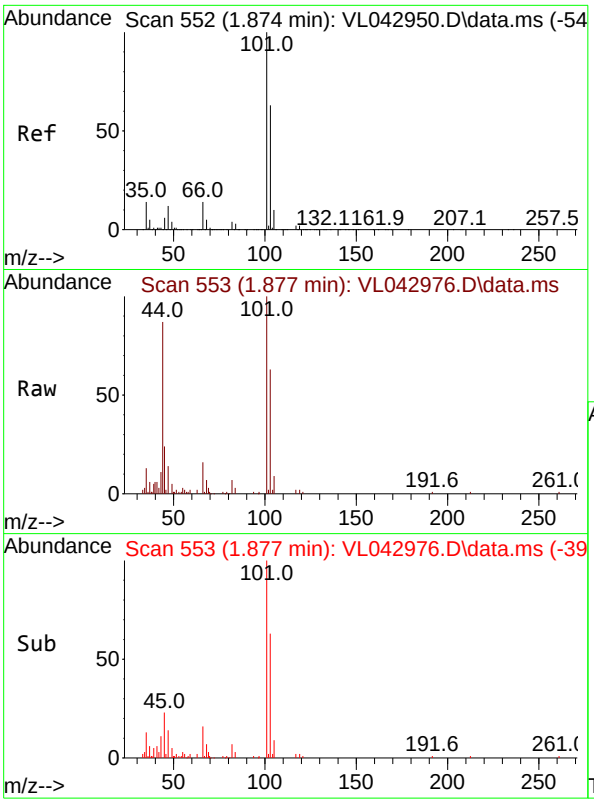


#10
Heptane
Concen: 0.435 ppbv m
RT: 4.985 min Scan# 1513
Delta R.T. 0.016 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 43 Resp: 12088

Ion	Ratio	Lower	Upper
43	100		
57	47.7	38.6	57.8





#11
Trichlorofluoromethane
Concen: 0.428 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

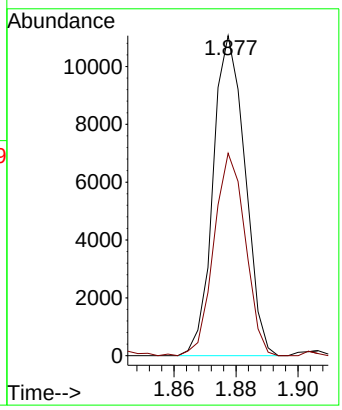
Tgt Ion:101 Resp: 792

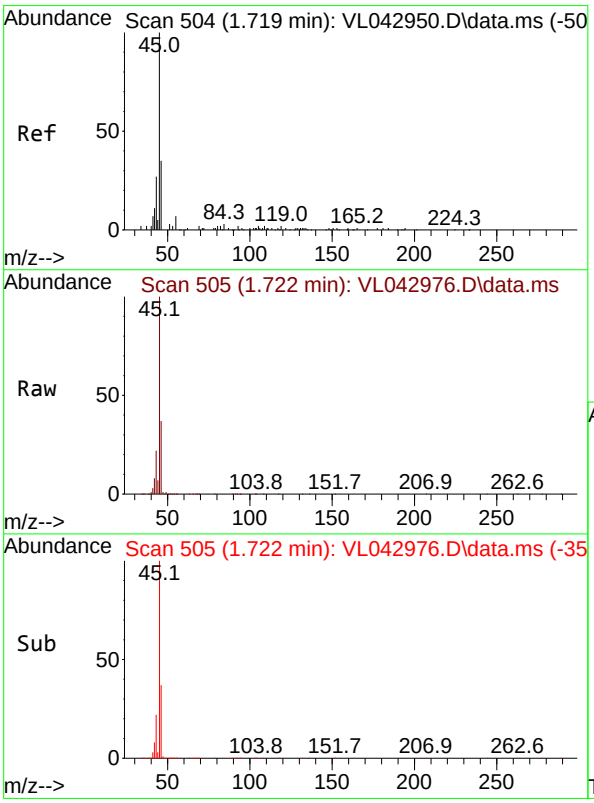
Ion	Ratio	Lower	Upper
101	100		
103	63.3	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

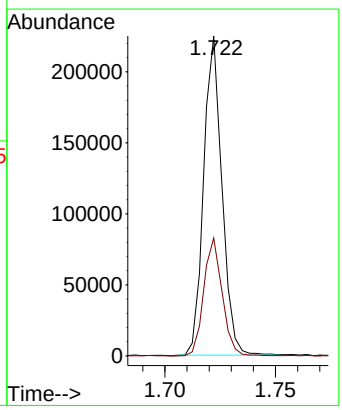


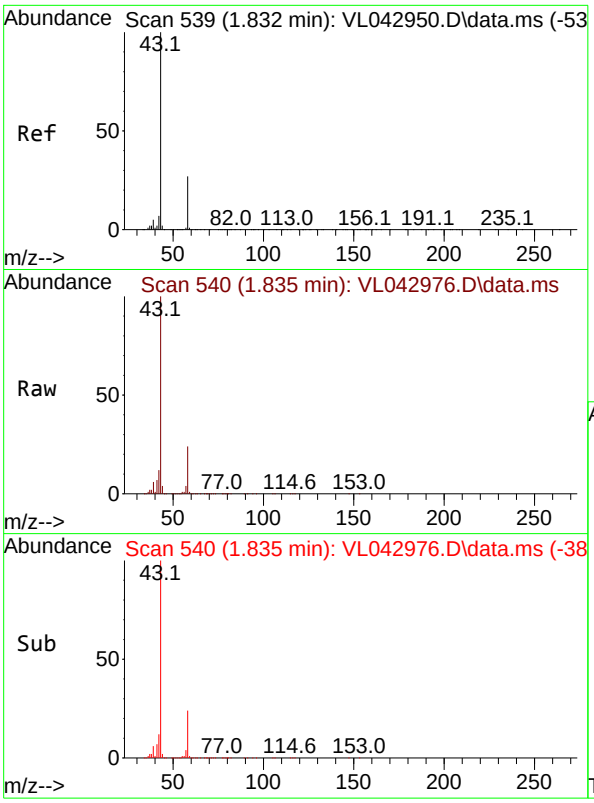


#13
Ethanol
Concen: 127.697 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 45 Resp: 128905

Ion	Ratio	Lower	Upper
45	100		
46	37.7	16.2	64.6

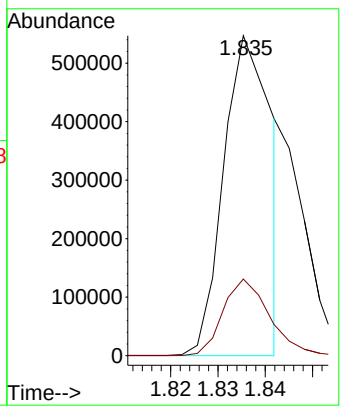




#15
Acetone
Concen: 20.669 ppbv m
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 43 Resp: 384118

Ion	Ratio	Lower	Upper
43	100		
58	23.5	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

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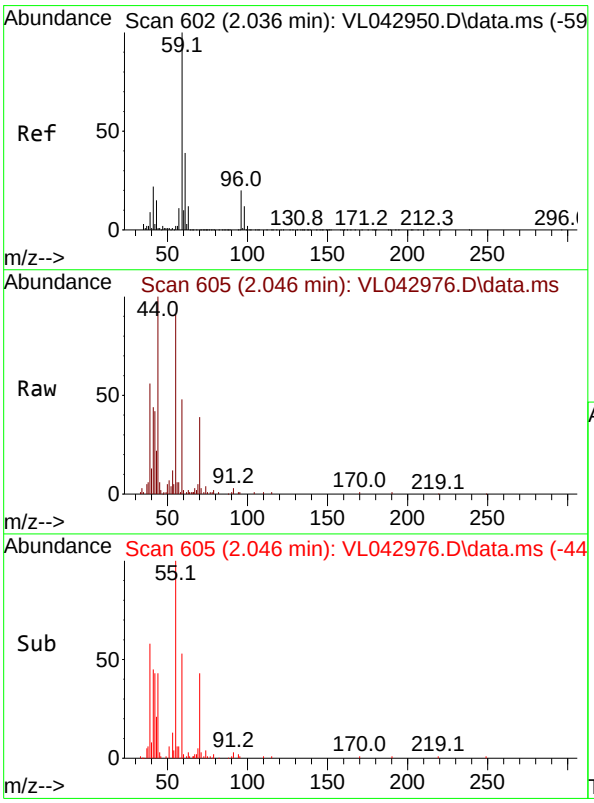
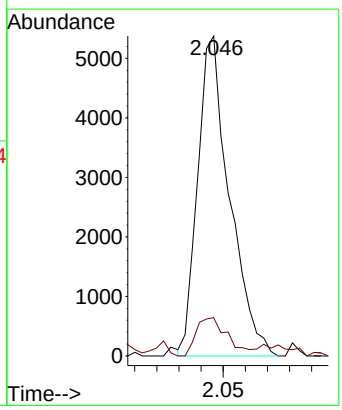
Supervised By :Semsettin Yesilyurt 09/24/2025

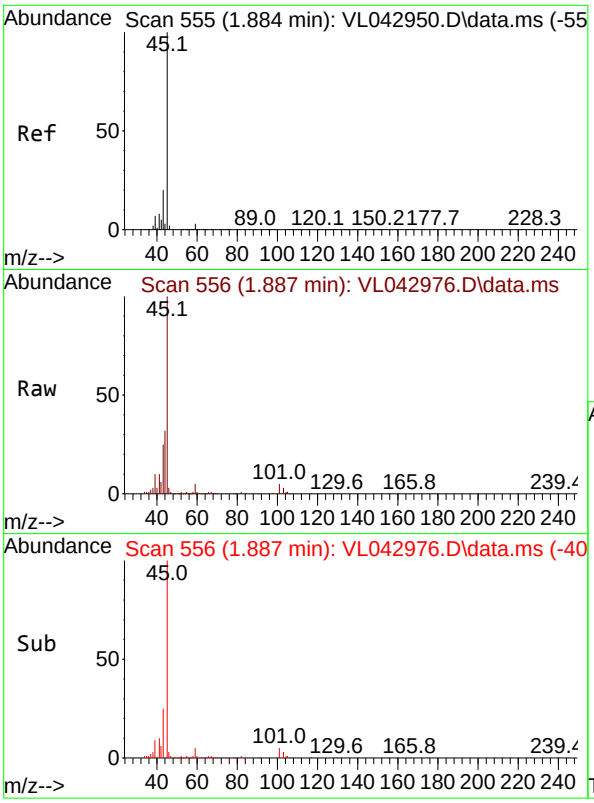


#17
tert-Butyl alcohol
Concen: 0.264 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 59 Resp: 5375

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.6	12.8#





#19
Isopropyl Alcohol
Concen: 2.069 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 45 Resp: 2311

Ion	Ratio	Lower	Upper
45	100		
58	390.5	31.0	46.6

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

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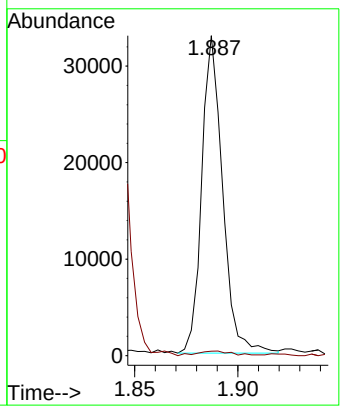
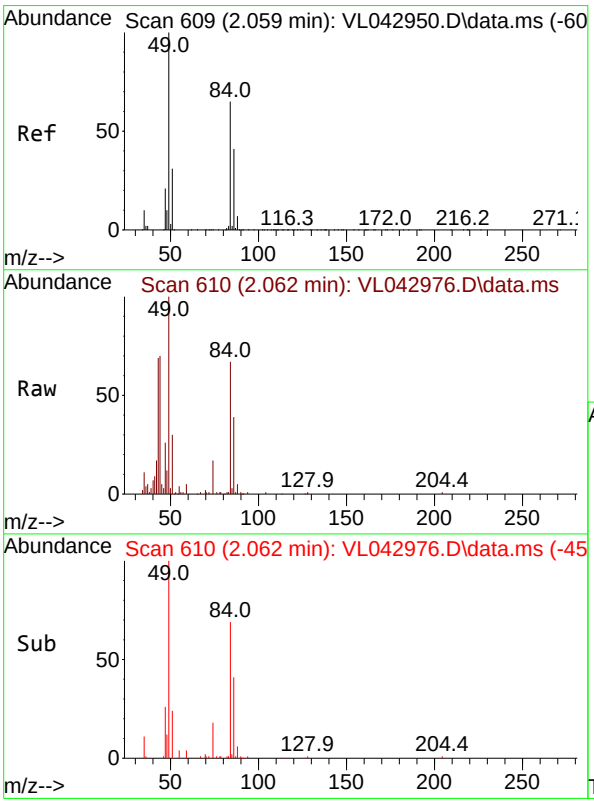
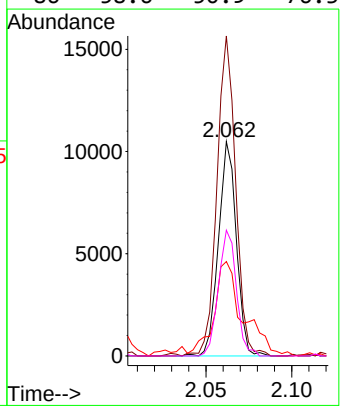


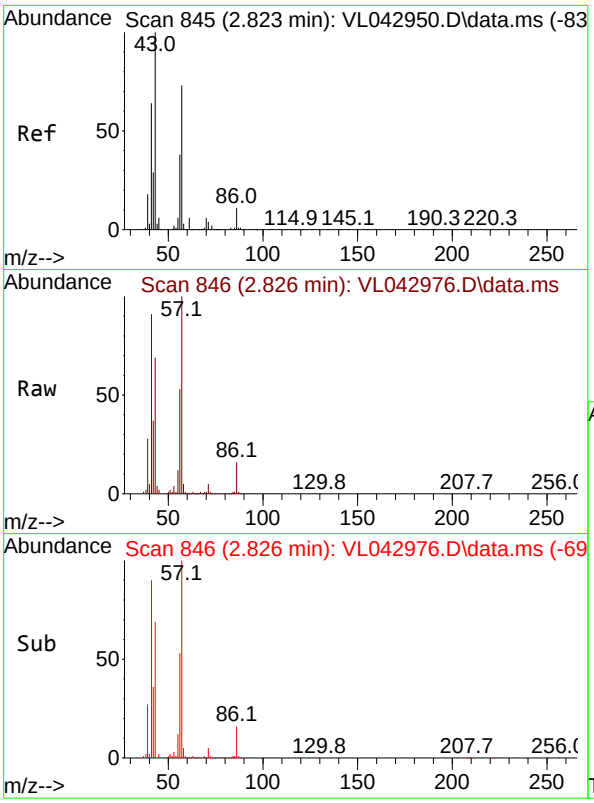


#20
Methylene Chloride
Concen: 0.755 ppbv m
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 84 Resp: 7616

Ion	Ratio	Lower	Upper
84	100		
49	149.3	124.1	186.1
51	44.0	39.8	59.8
86	58.6	50.9	76.3

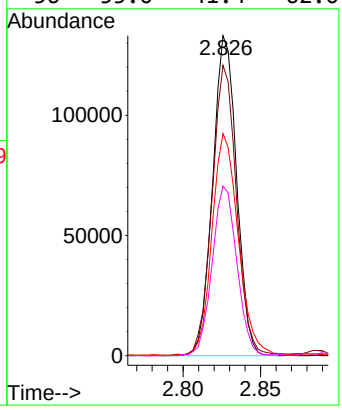




#26
Hexane
Concen: 6.681 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 57 Resp: 14305

Ion	Ratio	Lower	Upper
57	100		
41	92.8	71.7	107.5
43	77.0	180.8	271.2
56	55.0	41.4	62.0



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

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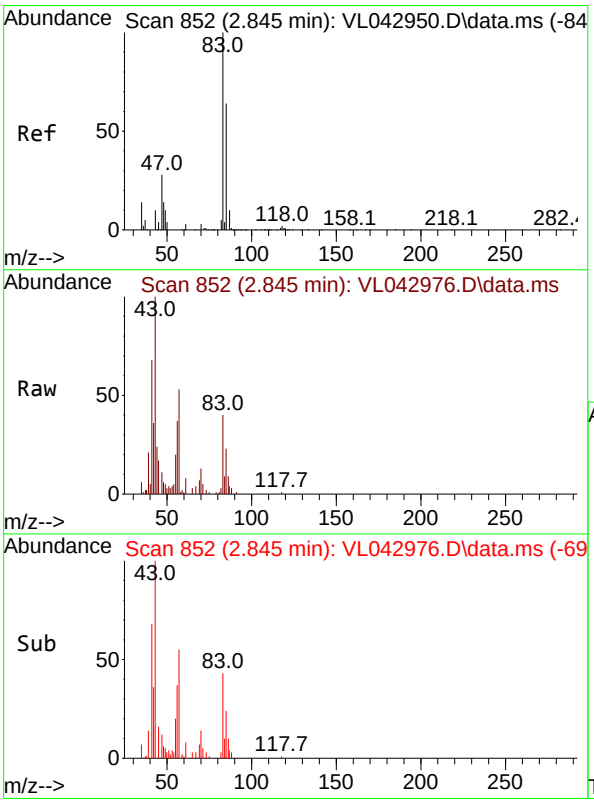
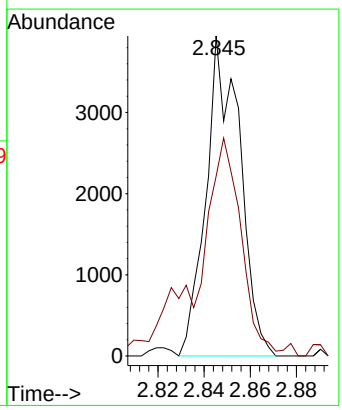
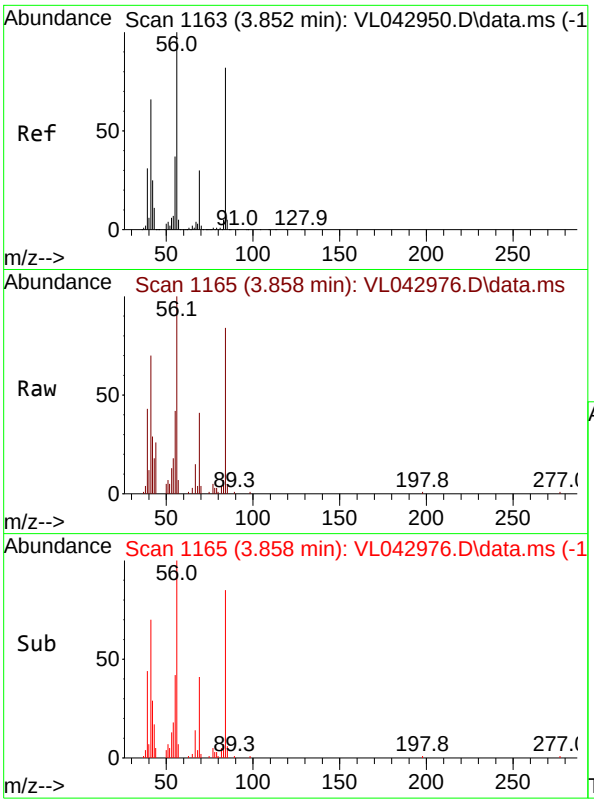


#29
Chloroform
Concen: 0.143 ppbv m
RT: 2.845 min Scan# 852
Delta R.T. -0.000 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 83 Resp: 4013

Ion	Ratio	Lower	Upper
83	100		
85	56.2	51.2	76.8





#30
Cyclohexane
Concen: 0.546 ppbv
RT: 3.858 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 84 Resp: 977

Ion	Ratio	Lower	Upper
84	100		
56	136.2	102.2	153.4
41	98.1	65.6	98.4

Instrument :
MSVOA_L
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141-1A-2

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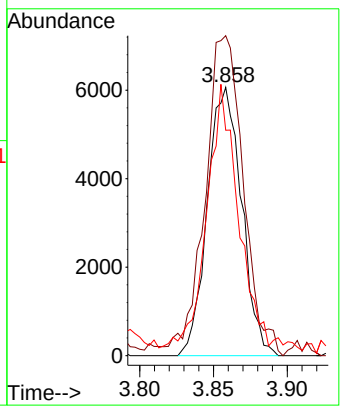
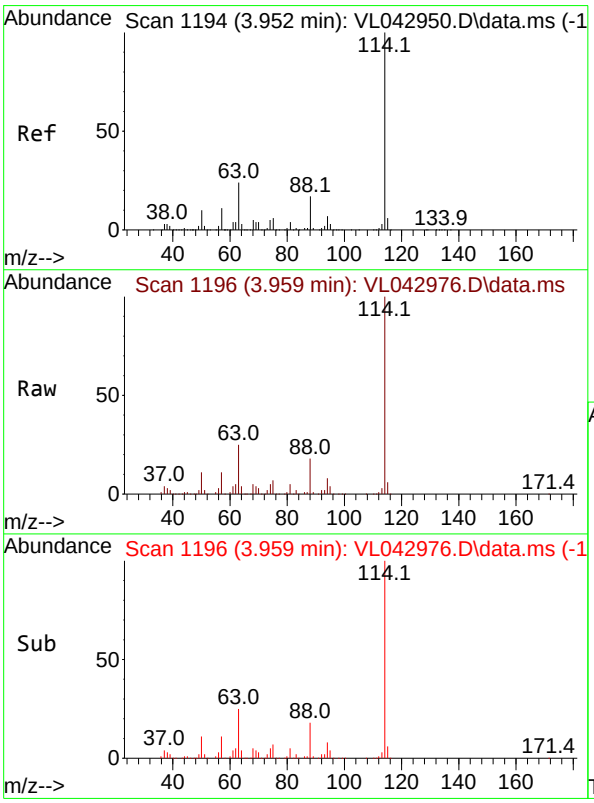
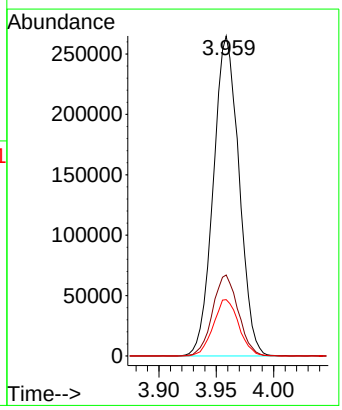


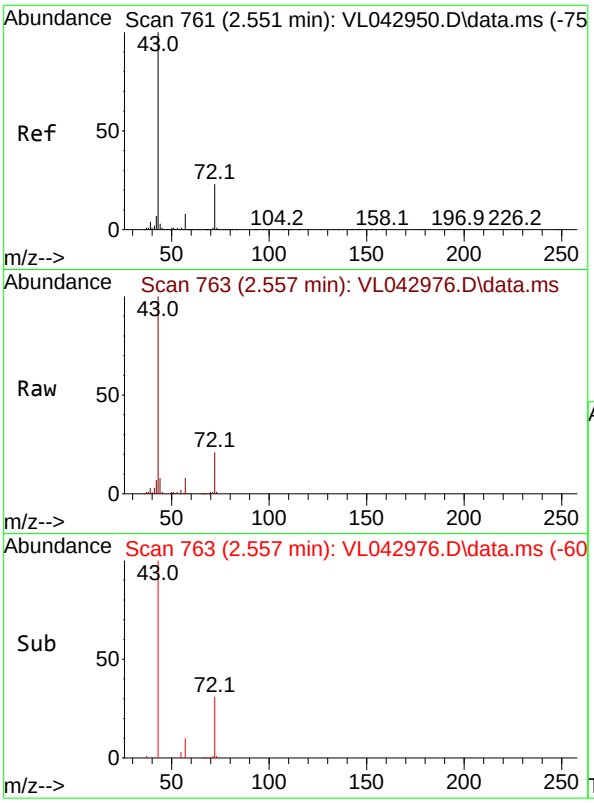


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:114 Resp: 412064

Ion	Ratio	Lower	Upper
114	100		
63	25.4	19.4	29.2
88	17.5	14.2	21.2





#34
2-Butanone
Concen: 1.441 ppbv
RT: 2.557 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 43 Resp: 4160

Ion	Ratio	Lower	Upper
43	100		
72	23.2	17.7	26.5

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

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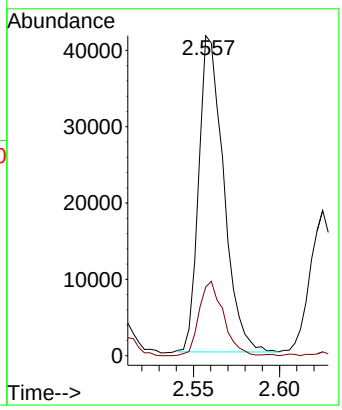
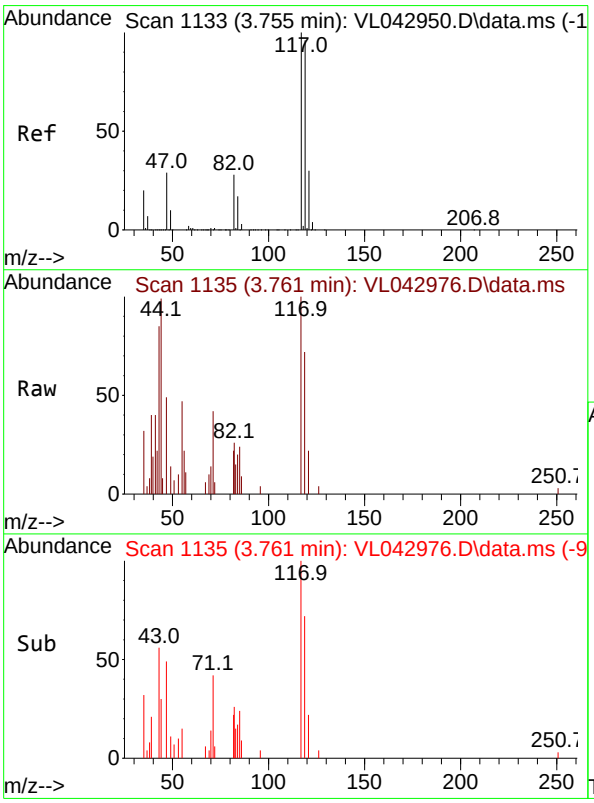
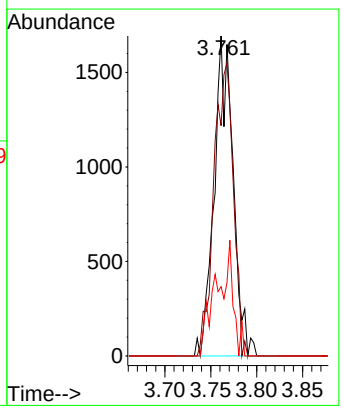


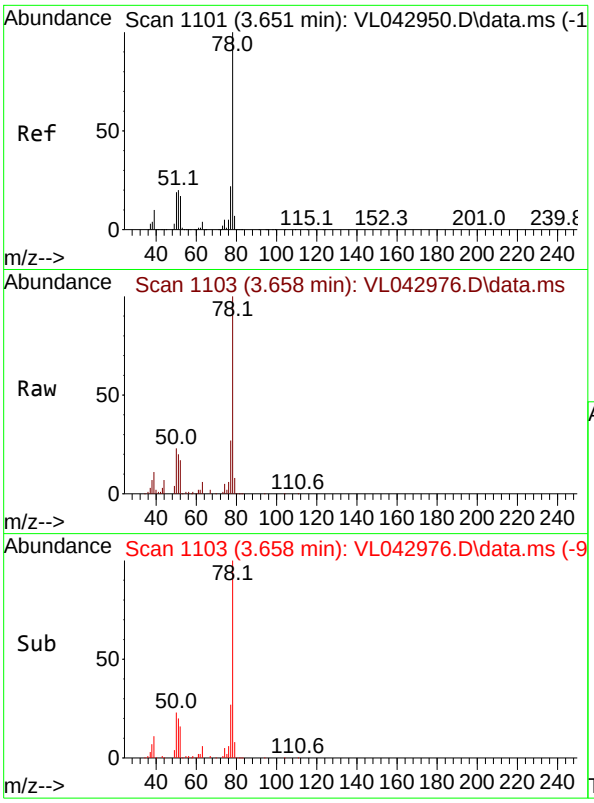


#35
Carbon Tetrachloride
Concen: 0.091 ppbv m
RT: 3.761 min Scan# 1135
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:117 Resp: 2429

Ion	Ratio	Lower	Upper
117	100		
119	71.9	76.9	115.3#
121	21.6	23.7	35.5#

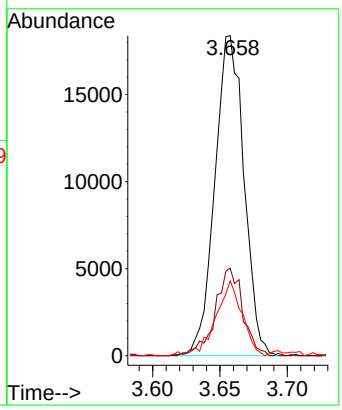




#36
Benzene
Concen: 0.715 ppbv
RT: 3.658 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 78 Resp: 2767

Ion	Ratio	Lower	Upper
78	100		
77	27.0	17.8	26.6
50	22.1	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
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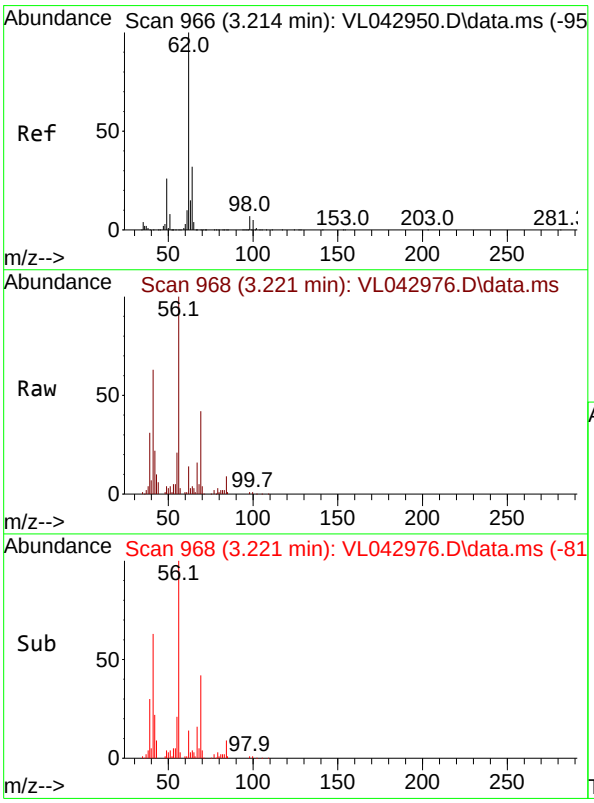
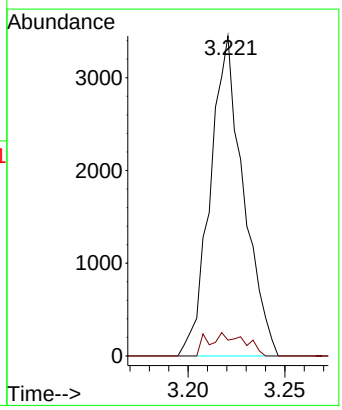
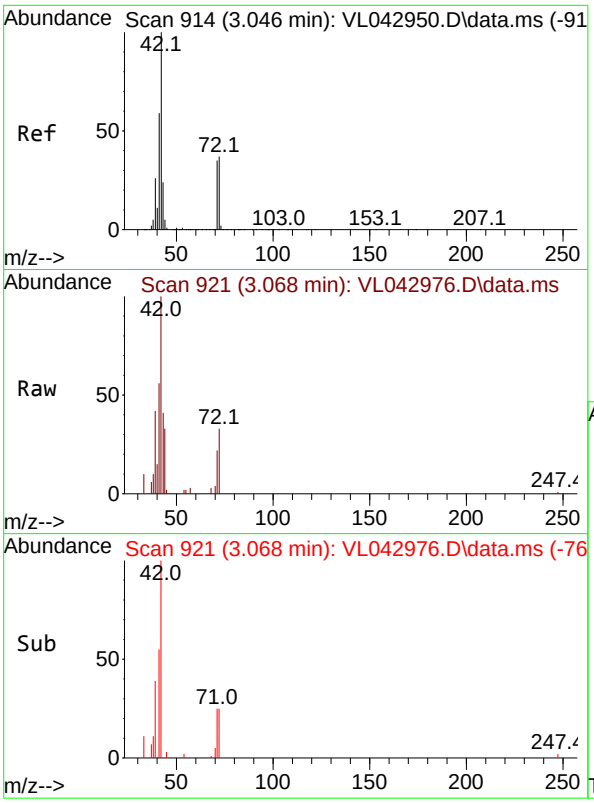


#37
1,2-Dichloroethane
Concen: 0.202 ppbv
RT: 3.221 min Scan# 968
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 62 Resp: 4116

Ion	Ratio	Lower	Upper
62	100		
98	7.8	5.9	8.9

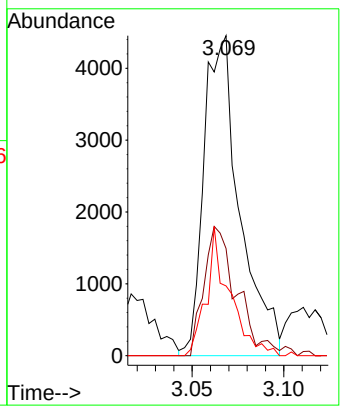




#41
Tetrahydrofuran
Concen: 0.365 ppbv m
RT: 3.068 min Scan# 9
Delta R.T. 0.022 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 42 Resp: 606

Ion	Ratio	Lower	Upper
42	100		
72	37.9	30.0	45.0
71	26.3	28.8	43.2#



Instrument :
MSVOA_L
ClientSampleId :
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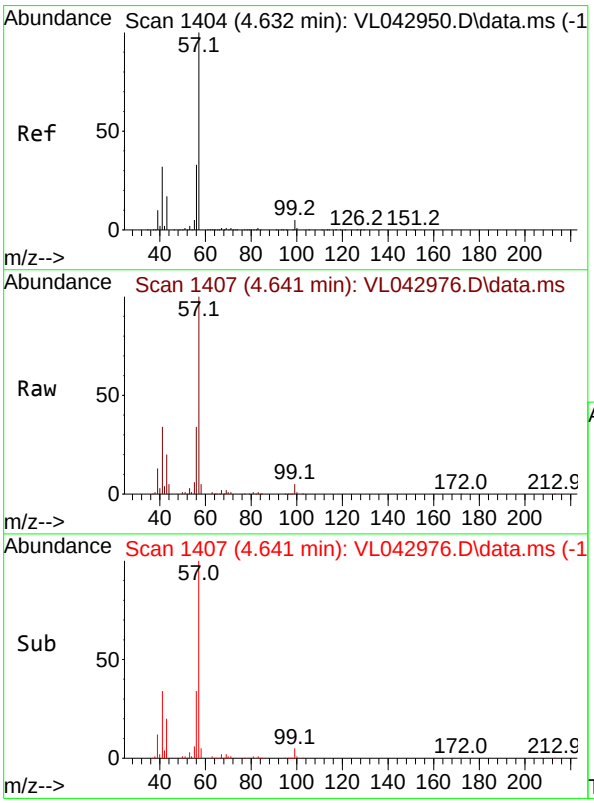
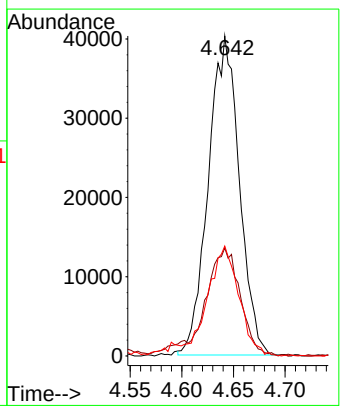
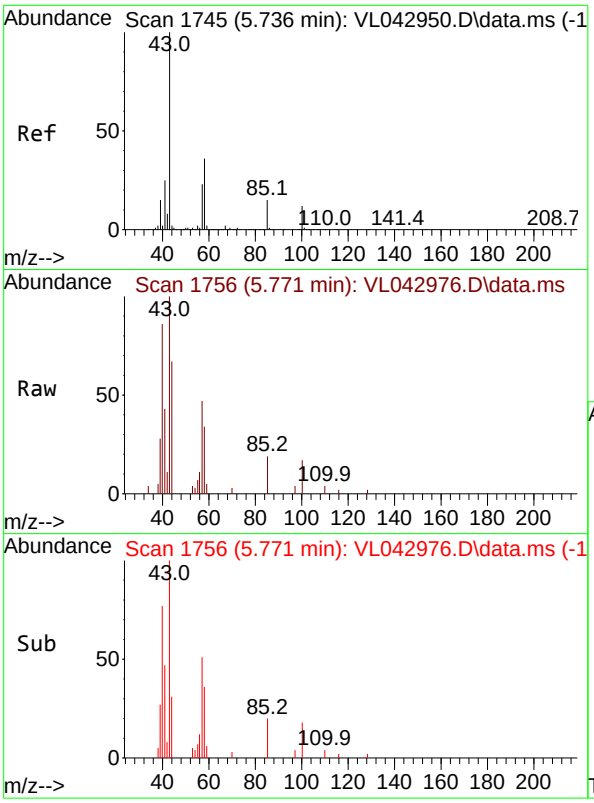


#44
2,2,4-Trimethylpentane
Concen: 1.258 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 57 Resp: 84058

Ion	Ratio	Lower	Upper
57	100		
41	39.0	25.5	38.3#
56	37.2	25.8	38.8





#50
4-Methyl-2-Pentanone
Concen: 0.137 ppbv m
RT: 5.771 min Scan# 1
Delta R.T. 0.035 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 43 Resp: 529

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.4	42.6

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

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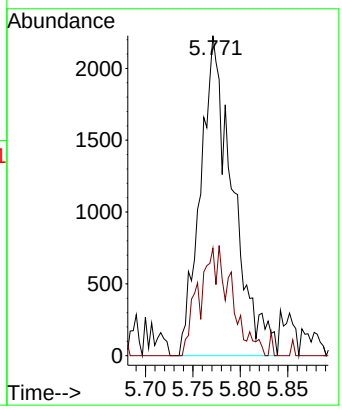
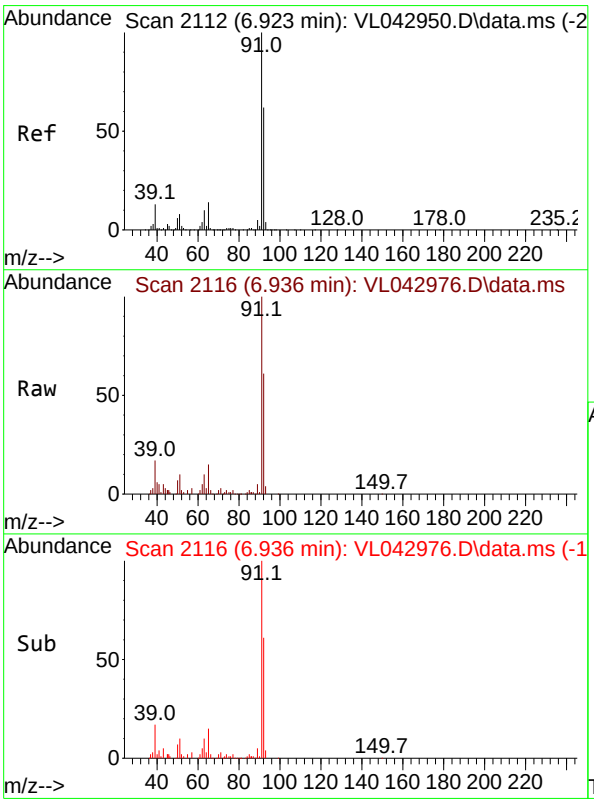
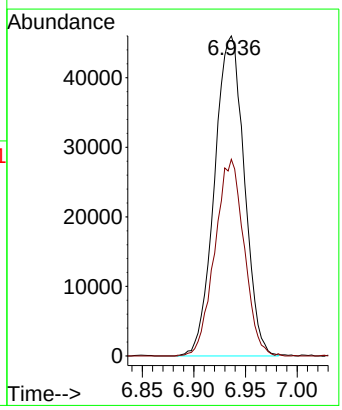


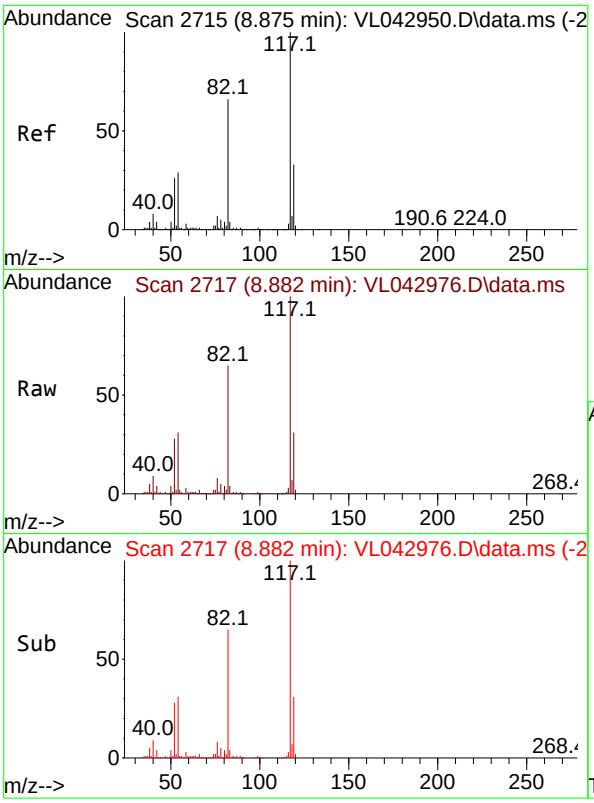


#53
Toluene
Concen: 2.015 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.013 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 91 Resp: 92307

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.2	72.2

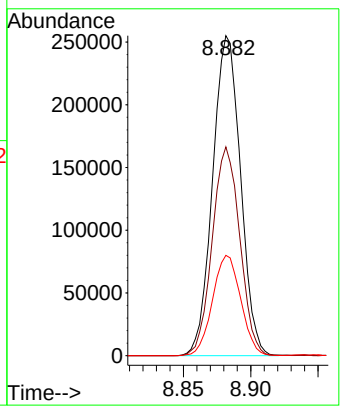




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:117 Resp: 36726

Ion	Ratio	Lower	Upper
117	100		
82	64.5	52.8	79.2
119	31.7	26.5	39.7



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

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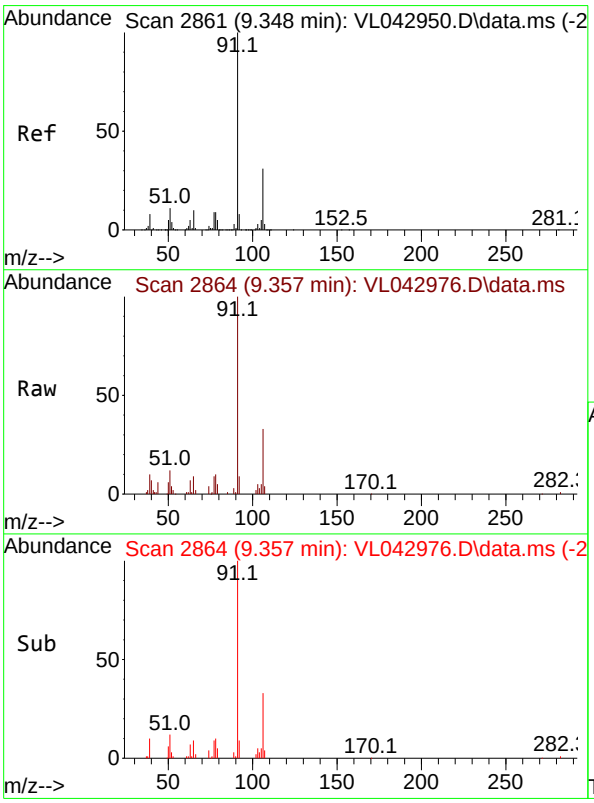
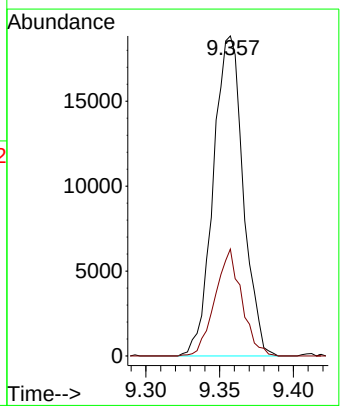
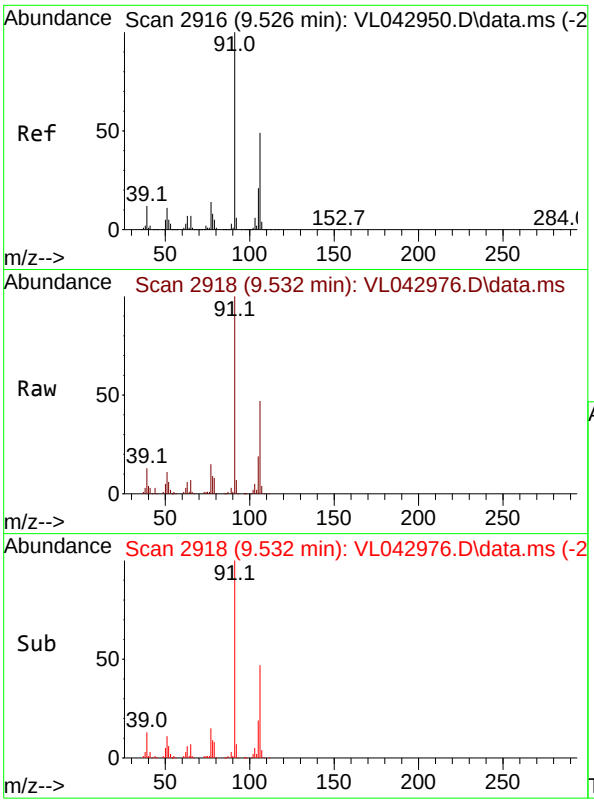


#58
Ethyl Benzene
Concen: 0.441 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.010 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 91 Resp: 26614

Ion	Ratio	Lower	Upper
91	100		
106	33.4	24.6	37.0

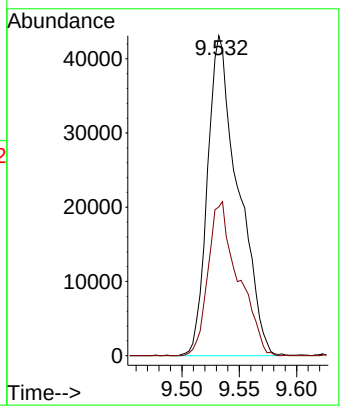




#59
m/p-Xylene
Concen: 1.688 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 91 Resp: 8025

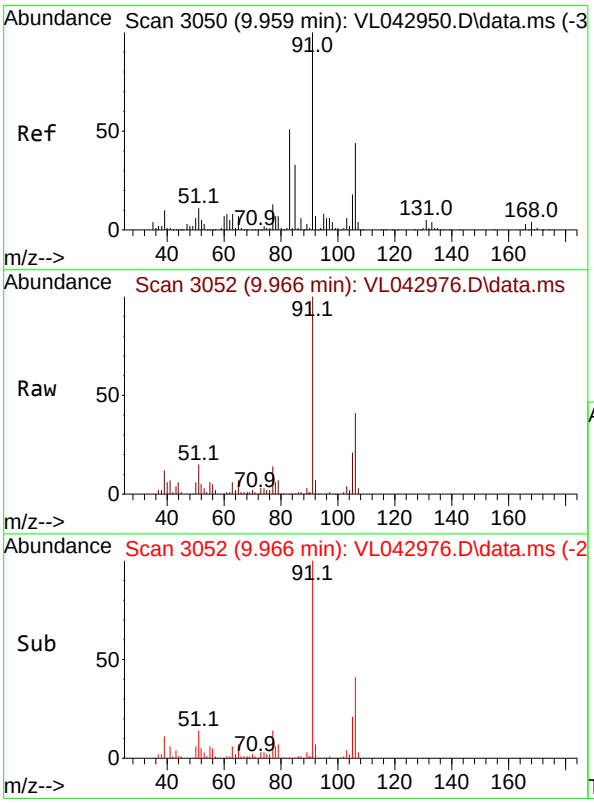
Ion	Ratio	Lower	Upper
91	100		
106	47.3	0.0	0.0



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
APPROVED

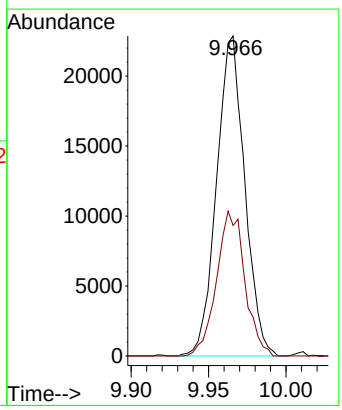
Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

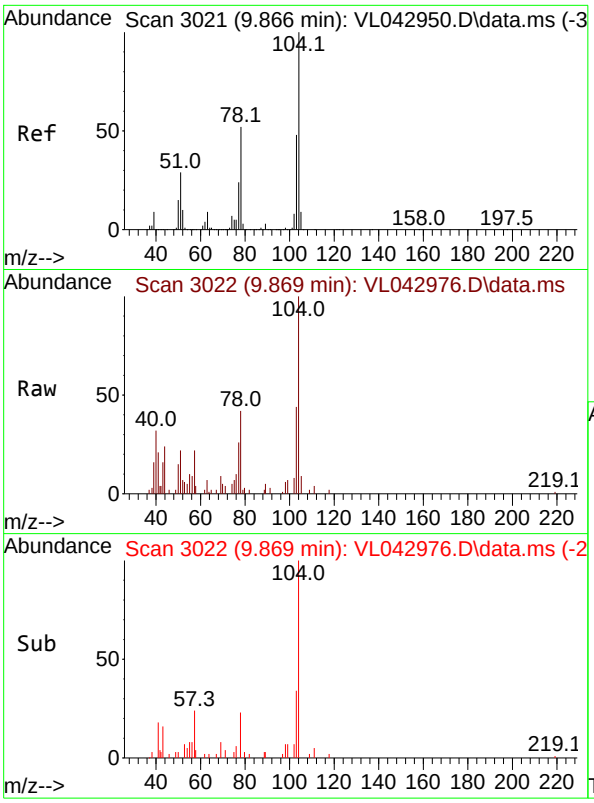


#60
o-Xylene
Concen: 0.608 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 91 Resp: 28894

Ion	Ratio	Lower	Upper
91	100		
106	45.5	22.4	67.0





#61
Styrene
Concen: 0.226 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

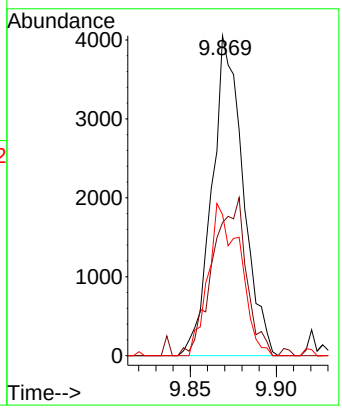
Tgt Ion:104 Resp: 508

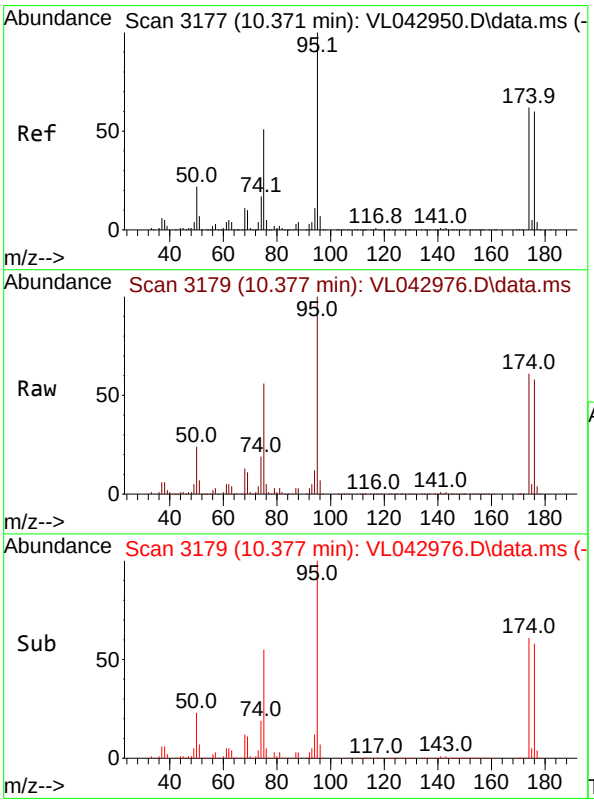
Ion	Ratio	Lower	Upper
104	100		
78	54.8	39.9	59.9
103	48.6	36.9	55.3

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

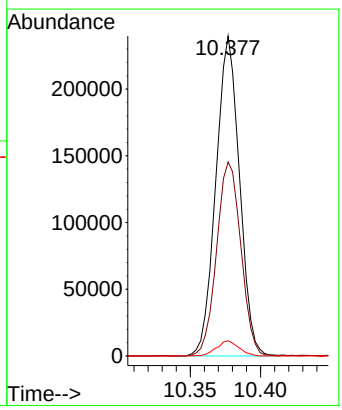


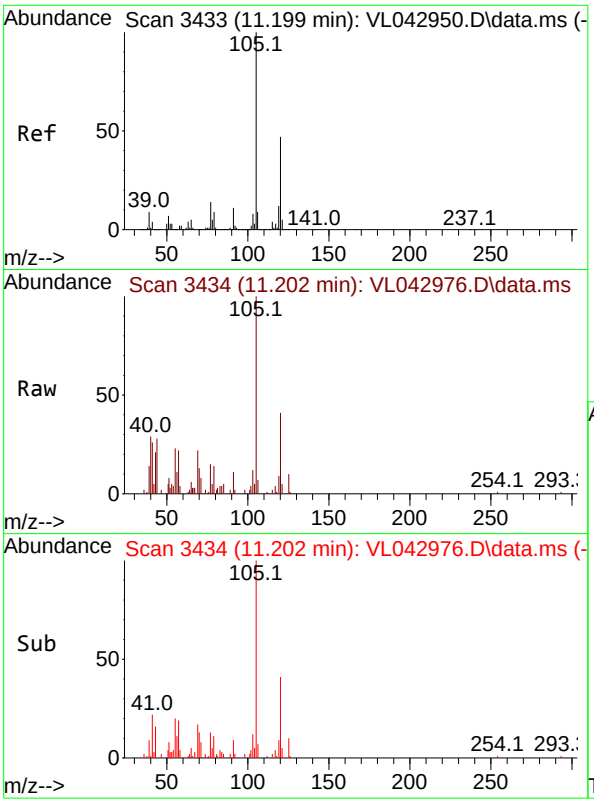


#68
1-Bromo-4-Fluorobenzene
Concen: 10.222 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 95 Resp: 280234

Ion	Ratio	Lower	Upper
95	100		
174	62.4	51.4	77.2
175	4.5	4.0	6.0





#73
1,3,5-Trimethylbenzene
Concen: 0.100 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

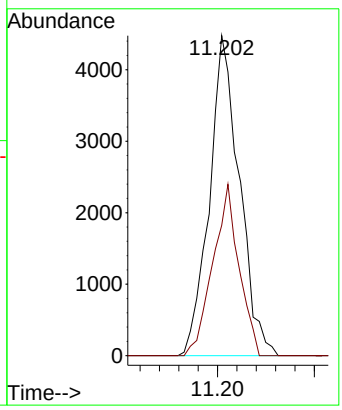
Tgt Ion:105 Resp: 481

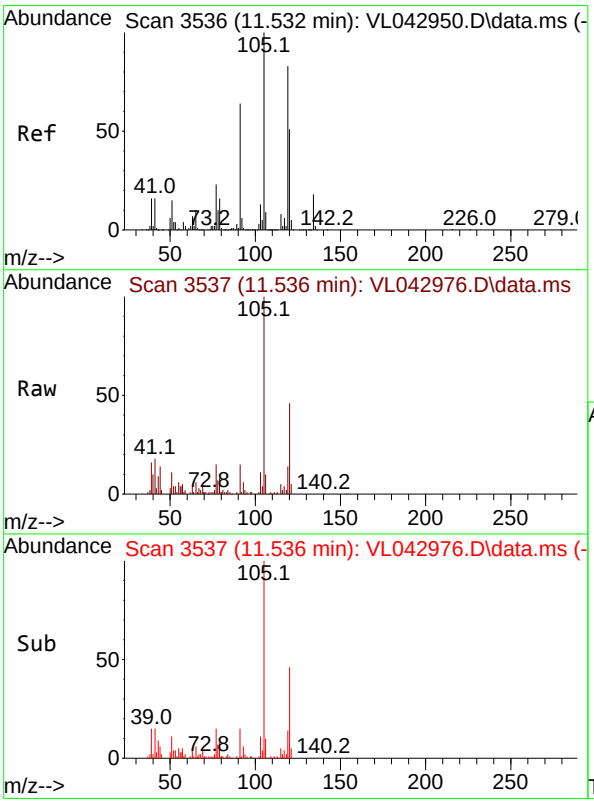
Ion	Ratio	Lower	Upper
105	100		
120	40.8	38.0	57.0

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

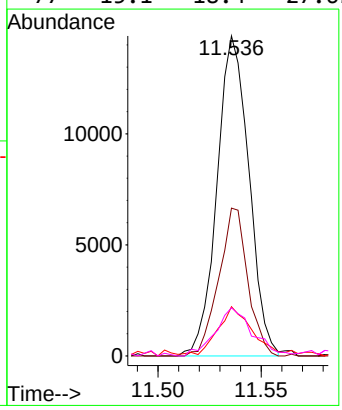




#74
1,2,4-Trimethylbenzene
Concen: 0.291 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:105 Resp: 15499

Ion	Ratio	Lower	Upper
105	100		
120	46.2	40.9	61.3
91	14.9	51.2	76.8#
77	15.1	18.4	27.6#



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-2DL	SDG No.:	Q3131
Lab Sample ID:	Q3131-02DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042977.D	10		09/23/25 02:57	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	4.20	20.8	JD	5.44	24.7
74-87-3	Chloromethane	0.98	2.02	UD	2.02	10.3
75-01-4	Vinyl Chloride	0.25	0.64	UD	0.64	0.77
74-83-9	Bromomethane	0.77	2.99	UD	2.99	19.4
75-00-3	Chloroethane	1.50	3.96	UD	3.96	13.2
109-99-9	Tetrahydrofuran	0.80	2.36	UD	2.36	14.8
75-69-4	Trichlorofluoromethane	1.70	9.55	UD	9.55	28.1
76-13-1	1,1,2-Trichlorotrifluoroethane	1.40	10.7	UD	10.7	38.3
76-14-2	Dichlorotetrafluoroethane	1.50	10.5	UD	10.5	35.0
75-65-0	tert-Butyl alcohol	1.60	4.85	UD	4.85	15.2
142-82-5	Heptane	1.70	6.97	UD	6.97	20.5
75-35-4	1,1-Dichloroethene	1.50	5.95	UD	5.95	19.8
67-64-1	Acetone	20.2	48.0	D	4.28	11.9
75-15-0	Carbon Disulfide	0.80	2.49	UD	2.49	15.6
1634-04-4	Methyl tert-Butyl Ether	2.30	8.29	UD	8.29	18.0
75-09-2	Methylene Chloride	2.30	7.99	UD	7.99	17.4
156-60-5	trans-1,2-Dichloroethene	1.20	4.76	UD	4.76	19.8
75-34-3	1,1-Dichloroethane	1.30	5.26	UD	5.26	20.2
110-82-7	Cyclohexane	2.20	7.57	UD	7.57	17.2
78-93-3	2-Butanone	1.50	4.42	JD	1.65	14.8
56-23-5	Carbon Tetrachloride	0.25	1.57	UD	1.57	1.89
156-59-2	cis-1,2-Dichloroethene	0.99	3.93	UD	3.93	19.8
67-66-3	Chloroform	0.96	4.69	UD	4.69	24.4
71-55-6	1,1,1-Trichloroethane	0.16	0.87	UD	0.87	1.64
540-84-1	2,2,4-Trimethylpentane	1.40	6.54	UD	6.54	23.4
71-43-2	Benzene	0.79	2.52	UD	2.52	16.0
107-06-2	1,2-Dichloroethane	0.93	3.76	UD	3.76	20.2
79-01-6	Trichloroethene	0.24	1.29	UD	1.29	1.61
78-87-5	1,2-Dichloropropane	1.30	6.01	UD	6.01	23.1
75-27-4	Bromodichloromethane	0.63	4.22	UD	4.22	33.5
108-10-1	4-Methyl-2-Pentanone	0.97	3.98	UD	3.98	20.5
108-88-3	Toluene	1.90	7.16	JD	6.03	18.8
10061-02-6	t-1,3-Dichloropropene	1.50	6.81	UD	6.81	22.7
10061-01-5	cis-1,3-Dichloropropene	1.10	4.99	UD	4.99	22.7
79-00-5	1,1,2-Trichloroethane	0.81	4.42	UD	4.42	27.3

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-2DL	SDG No.:	Q3131
Lab Sample ID:	Q3131-02DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042977.D	10		09/23/25 02:57	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3	
124-48-1	Dibromochloromethane	0.85	7.24	UD	7.24	42.6	
106-93-4	1,2-Dibromoethane	0.85	6.53	UD	6.53	7.69	
127-18-4	Tetrachloroethene	0.15	1.02	UD	1.02	2.03	
108-90-7	Chlorobenzene	0.77	3.55	UD	3.55	23.0	
100-41-4	Ethyl Benzene	1.90	8.25	UD	8.25	21.7	
179601-23-1	m/p-Xylene	4.10	17.8	UD	17.8	43.4	
95-47-6	o-Xylene	2.10	9.12	UD	9.12	21.7	
100-42-5	Styrene	1.60	6.81	UD	6.81	21.3	
75-25-2	Bromoform	0.48	4.96	UD	4.96	51.7	
79-34-5	1,1,2,2-Tetrachloroethane	0.18	1.24	UD	1.24	2.06	
95-49-8	2-Chlorotoluene	1.70	8.80	UD	8.80	25.9	
108-67-8	1,3,5-Trimethylbenzene	1.80	8.85	UD	8.85	24.6	
95-63-6	1,2,4-Trimethylbenzene	1.80	8.85	UD	8.85	24.6	
541-73-1	1,3-Dichlorobenzene	0.54	3.25	UD	3.25	30.1	
106-46-7	1,4-Dichlorobenzene	1.30	7.82	UD	7.82	30.1	
95-50-1	1,2-Dichlorobenzene	1.30	7.82	UD	7.82	30.1	
120-82-1	1,2,4-Trichlorobenzene	2.10	15.6	UD	15.6	37.1	
87-68-3	Hexachloro-1,3-Butadiene	1.30	13.9	UD	13.9	53.3	
106-99-0	1,3-Butadiene	0.51	1.13	UD	1.13	11.1	
91-20-3	Naphthalene	0.13	0.68	UD	0.68	5.24	
622-96-8	4-Ethyltoluene	2.10	10.3	UD	10.3	24.6	
110-54-3	Hexane	6.20	21.9	D	5.64	17.6	
107-05-1	Allyl Chloride	1.10	3.44	UD	3.44	15.7	
123-91-1	1,4-Dioxane	2.20	7.93	UD	7.93	18.0	
80-62-6	Methyl Methacrylate	1.40	5.73	UD	5.73	20.5	
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.2			70 (65) - 130 (135)	102%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	144000		2.787			
540-36-3	1,4-Difluorobenzene	413000		3.959			
3114-55-4	Chlorobenzene-d5	358000		8.881			

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Report of Analysis

Client:	RTP Environmental	Date Collected:	09/17/25
Project:	CHADWICK SQUARE	Date Received:	09/17/25
Client Sample ID:	141-1A-2DL	SDG No.:	Q3131
Lab Sample ID:	Q3131-02DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042977.D	10		09/23/25 02:57	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042977.D
Acq On : 23 Sep 2025 02:57
Operator : SY/MD
Sample : Q3131-02DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 24 01:14:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	144383	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	412784	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	358472	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	272808	10.195	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	8070	0.416	ppbv	100
9) Propene	1.489	41	5758	0.547	ppbv #	69
13) Ethanol	1.722	45	13003	12.730	ppbv	96
15) Acetone	1.839	43	37918m	2.016	ppbv	
19) Isopropyl Alcohol	1.887	45	3011m	0.266	ppbv	
26) Hexane	2.826	57	13368	0.617	ppbv #	42
34) 2-Butanone	2.560	43	4380	0.151	ppbv	97
44) 2,2,4-Trimethylpentane	4.645	57	8107m	0.121	ppbv	
53) Toluene	6.936	91	8717m	0.190	ppbv	
59) m/p-Xylene	9.532	91	7454m	0.161	ppbv	

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

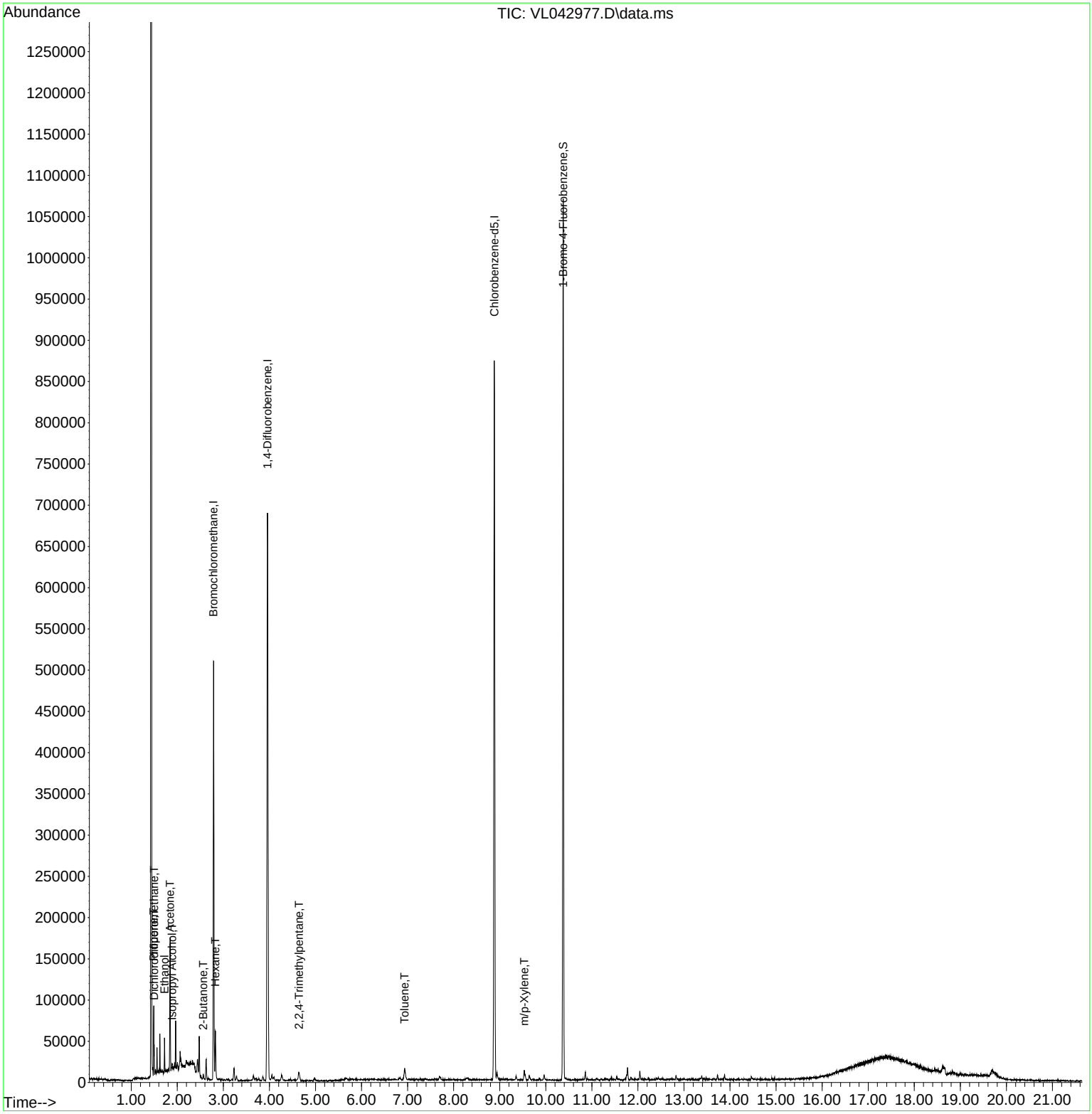
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042977.D
Acq On : 23 Sep 2025 02:57
Operator : SY/MD
Sample : Q3131-02DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

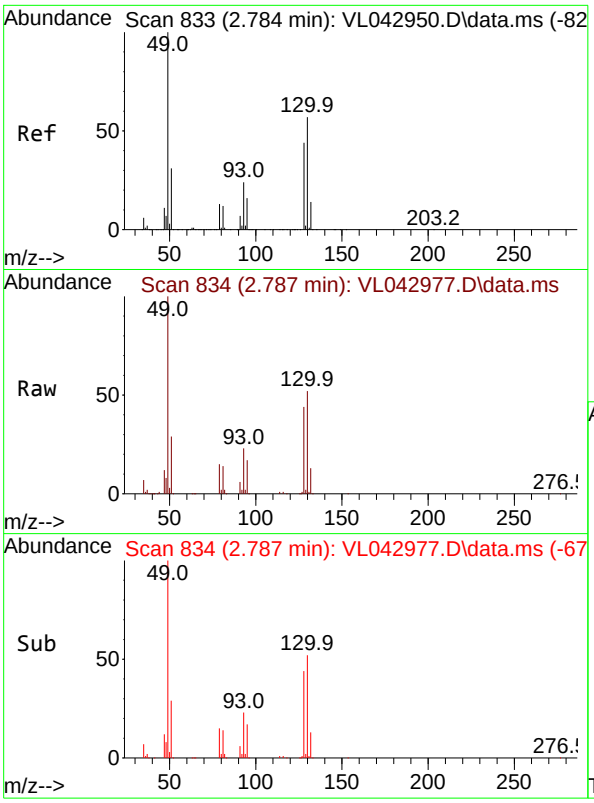
Quant Time: Sep 24 01:14:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

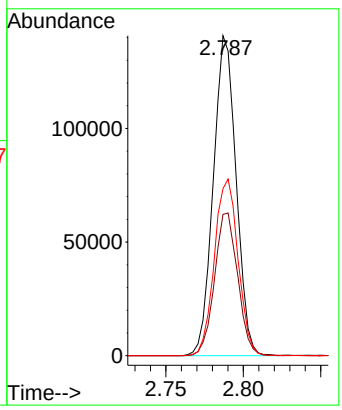




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 49 Resp: 14438

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.9	68.8
130	57.3	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
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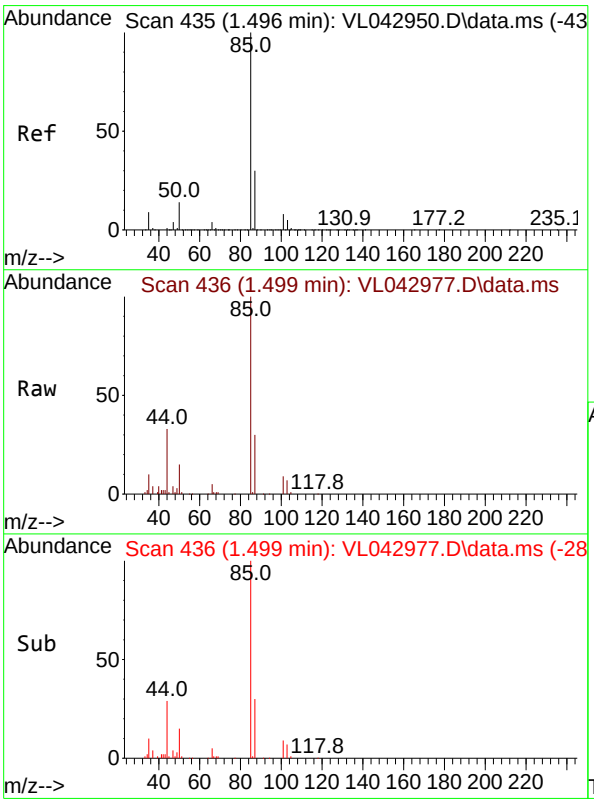
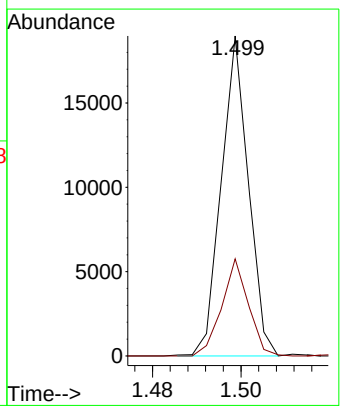
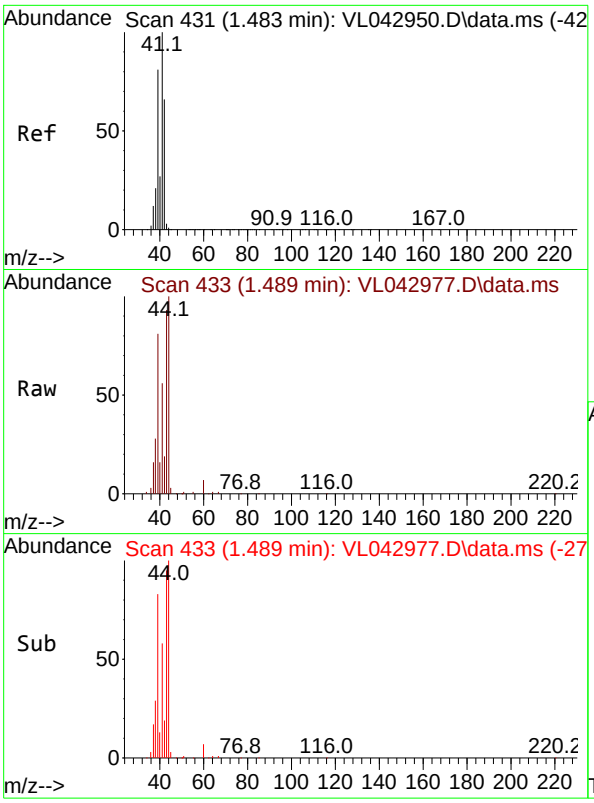


#2
Dichlorodifluoromethane
Concen: 0.416 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 85 Resp: 8070

Ion	Ratio	Lower	Upper
85	100		
87	30.3	24.3	36.5





#9
Propene
Concen: 0.547 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

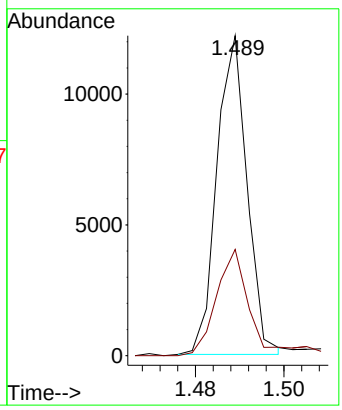
Tgt Ion: 41 Resp: 575

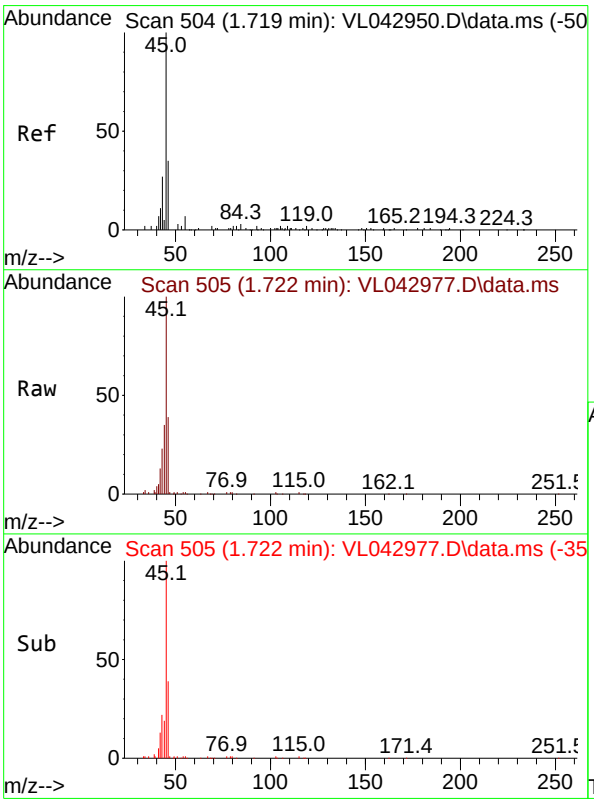
Ion	Ratio	Lower	Upper
41	100		
42	45.7	57.4	86.2

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 09/24/2025
Supervised By :Semsettin Yesilyurt 09/24/2025

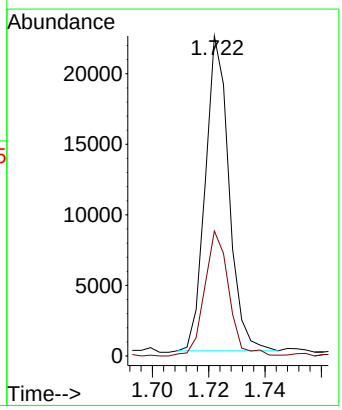


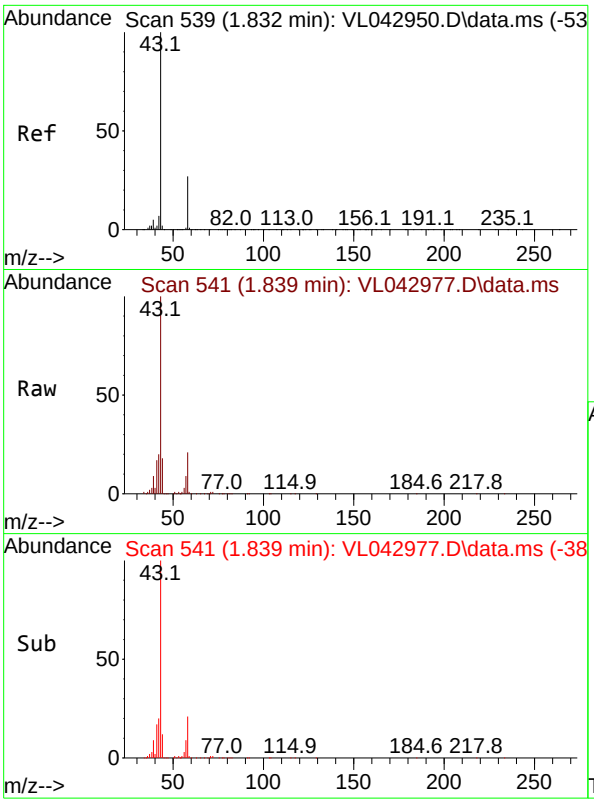


#13
Ethanol
Concen: 12.730 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 45 Resp: 13003

Ion	Ratio	Lower	Upper
45	100		
46	43.2	16.2	64.6





#15
Acetone
Concen: 2.016 ppbv m
RT: 1.839 min Scan# 54
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 43 Resp: 3791

Ion	Ratio	Lower	Upper
43	100		
58	27.6	22.3	33.5

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Manual Integrations
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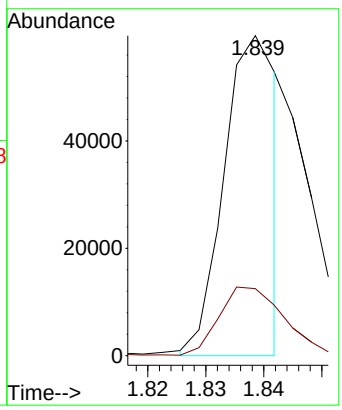
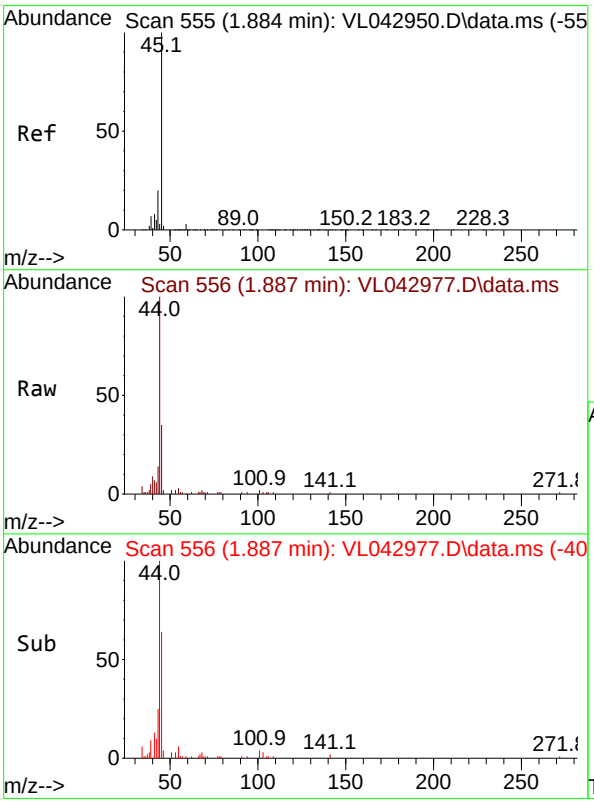
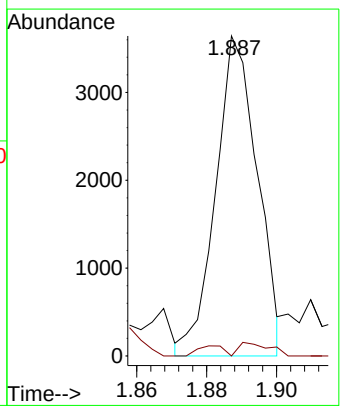


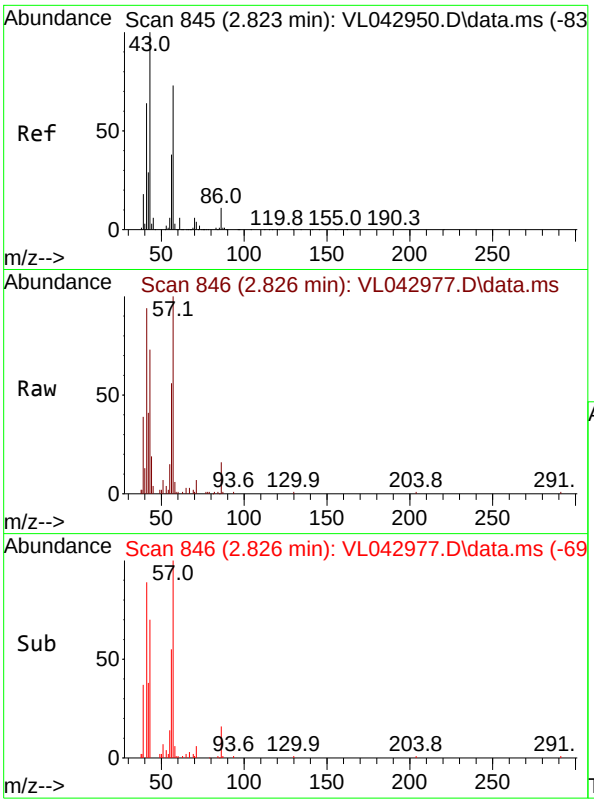


#19
Isopropyl Alcohol
Concen: 0.266 ppbv m
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 45 Resp: 3011

Ion	Ratio	Lower	Upper
45	100		
58	51.8	31.0	46.6#

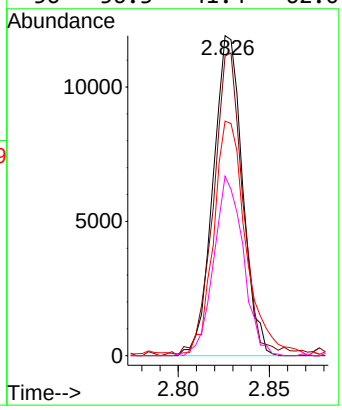




#26
Hexane
Concen: 0.617 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 57 Resp: 1336

Ion	Ratio	Lower	Upper
57	100		
41	98.2	71.7	107.5
43	79.9	180.8	271.2
56	56.3	41.4	62.0



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

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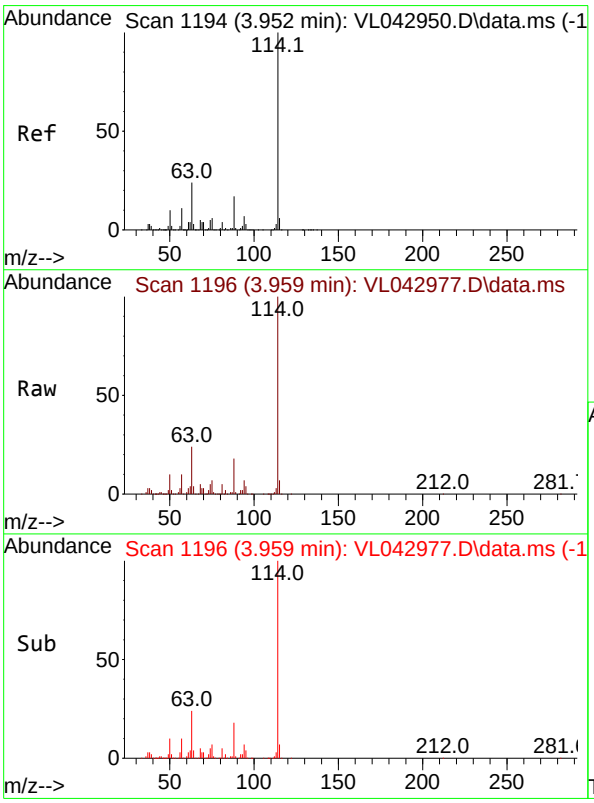
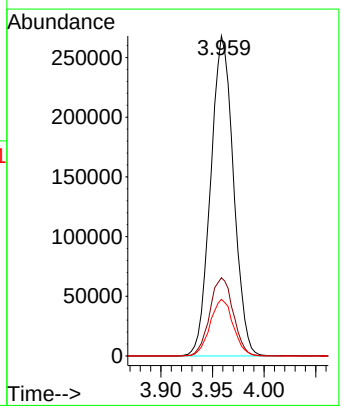
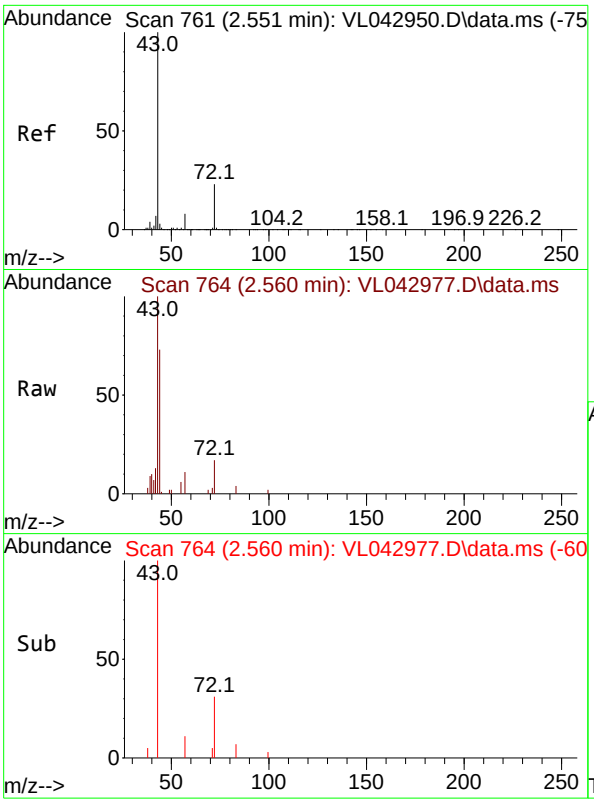


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion:114 Resp: 412784

Ion	Ratio	Lower	Upper
114	100		
63	25.1	19.4	29.2
88	17.9	14.2	21.2





#34
2-Butanone
Concen: 0.151 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.009 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 43 Resp: 438

Ion	Ratio	Lower	Upper
43	100		
72	23.7	17.7	26.5

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

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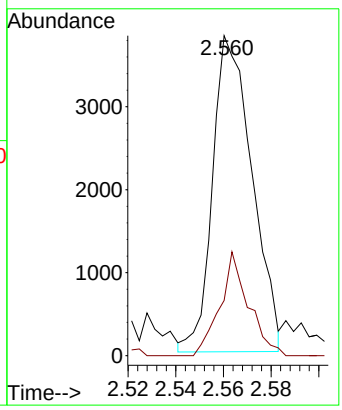
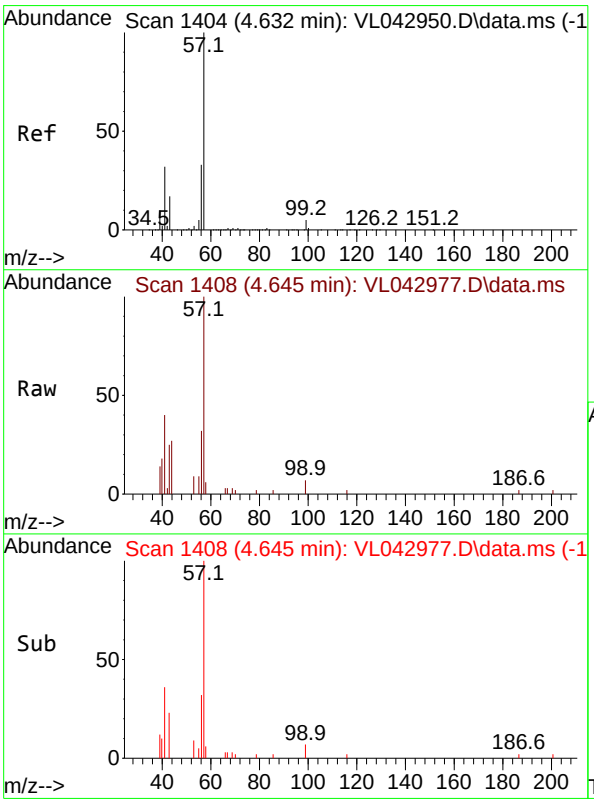
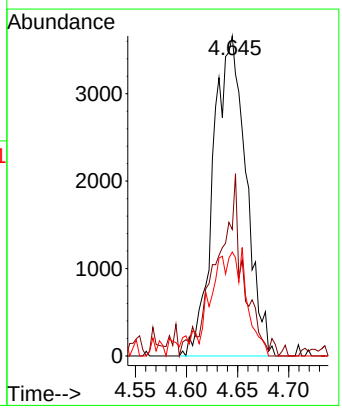


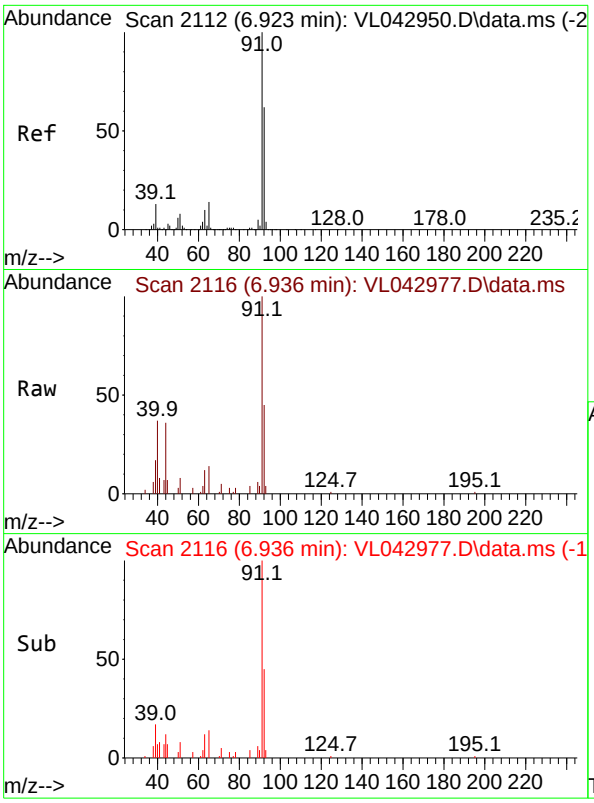


#44
2,2,4-Trimethylpentane
Concen: 0.121 ppbv m
RT: 4.645 min Scan# 1408
Delta R.T. 0.013 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 57 Resp: 8107

Ion	Ratio	Lower	Upper
57	100		
41	0.0	25.5	38.3#
56	0.0	25.8	38.8#

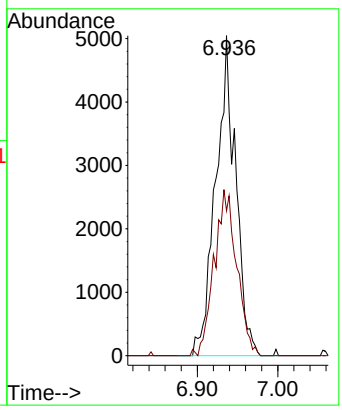




#53
Toluene
Concen: 0.190 ppbv m
RT: 6.936 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 91 Resp: 871

Ion	Ratio	Lower	Upper
91	100		
92	58.4	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

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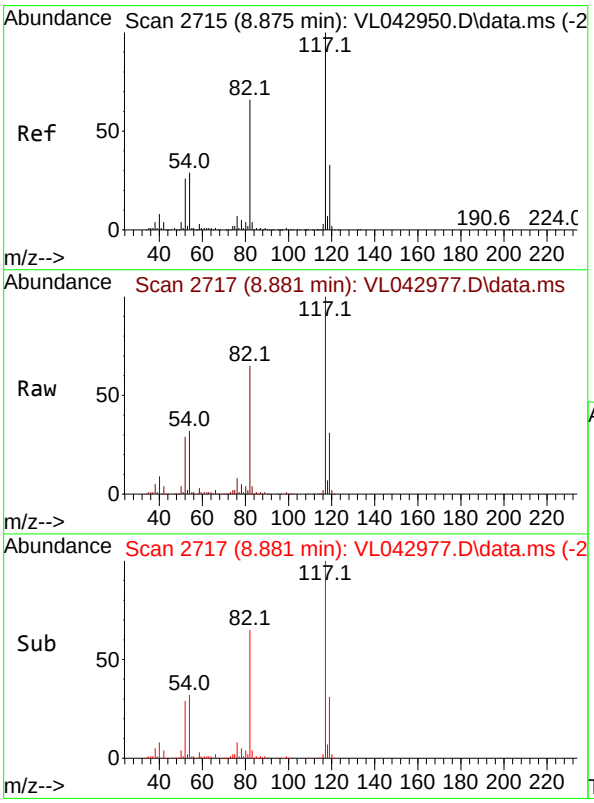
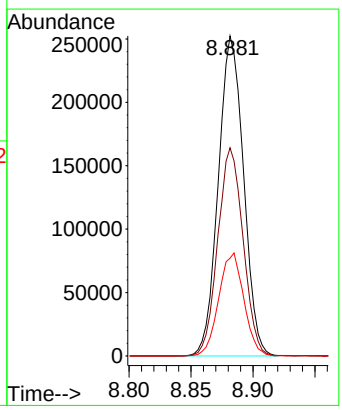
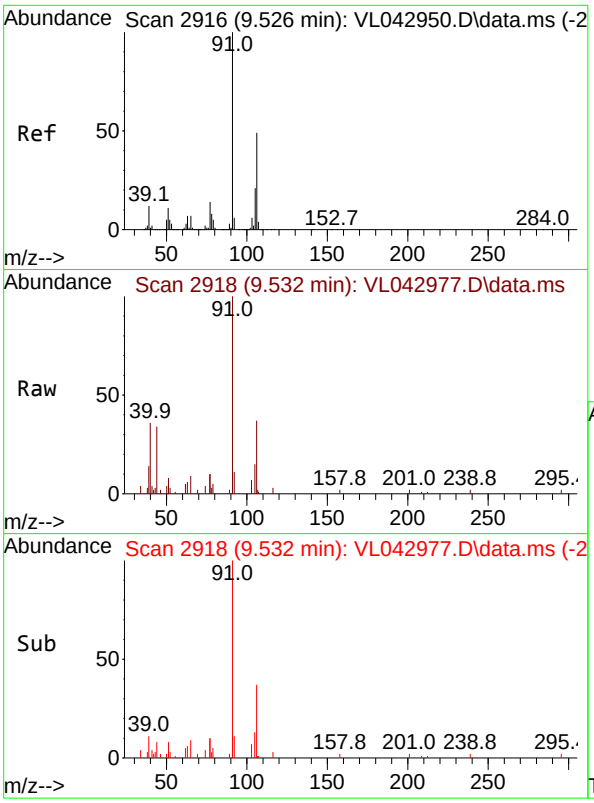


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion:117 Resp: 358472

Ion	Ratio	Lower	Upper
117	100		
82	65.2	52.8	79.2
119	32.0	26.5	39.7

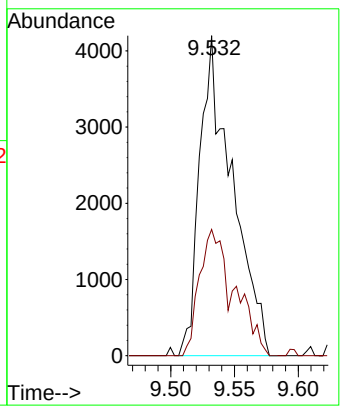




#59
m/p-Xylene
Concen: 0.161 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 91 Resp: 745

Ion	Ratio	Lower	Upper
91	100		
106	42.3	0.0	0.0



Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Manual Integrations
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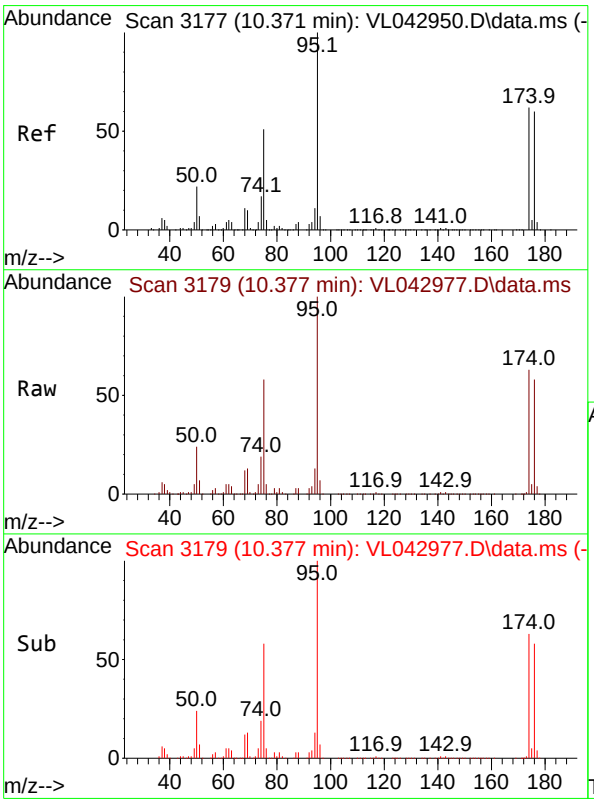
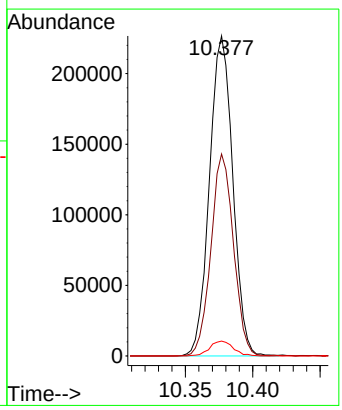


#68
1-Bromo-4-Fluorobenzene
Concen: 10.195 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 95 Resp: 272808

Ion	Ratio	Lower	Upper
95	100		
174	61.4	51.4	77.2
175	4.7	4.0	6.0



CALIBRATION SUMMARY

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL092225AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Sep 23 02:39:16 2025
Response Via : Initial Calibration

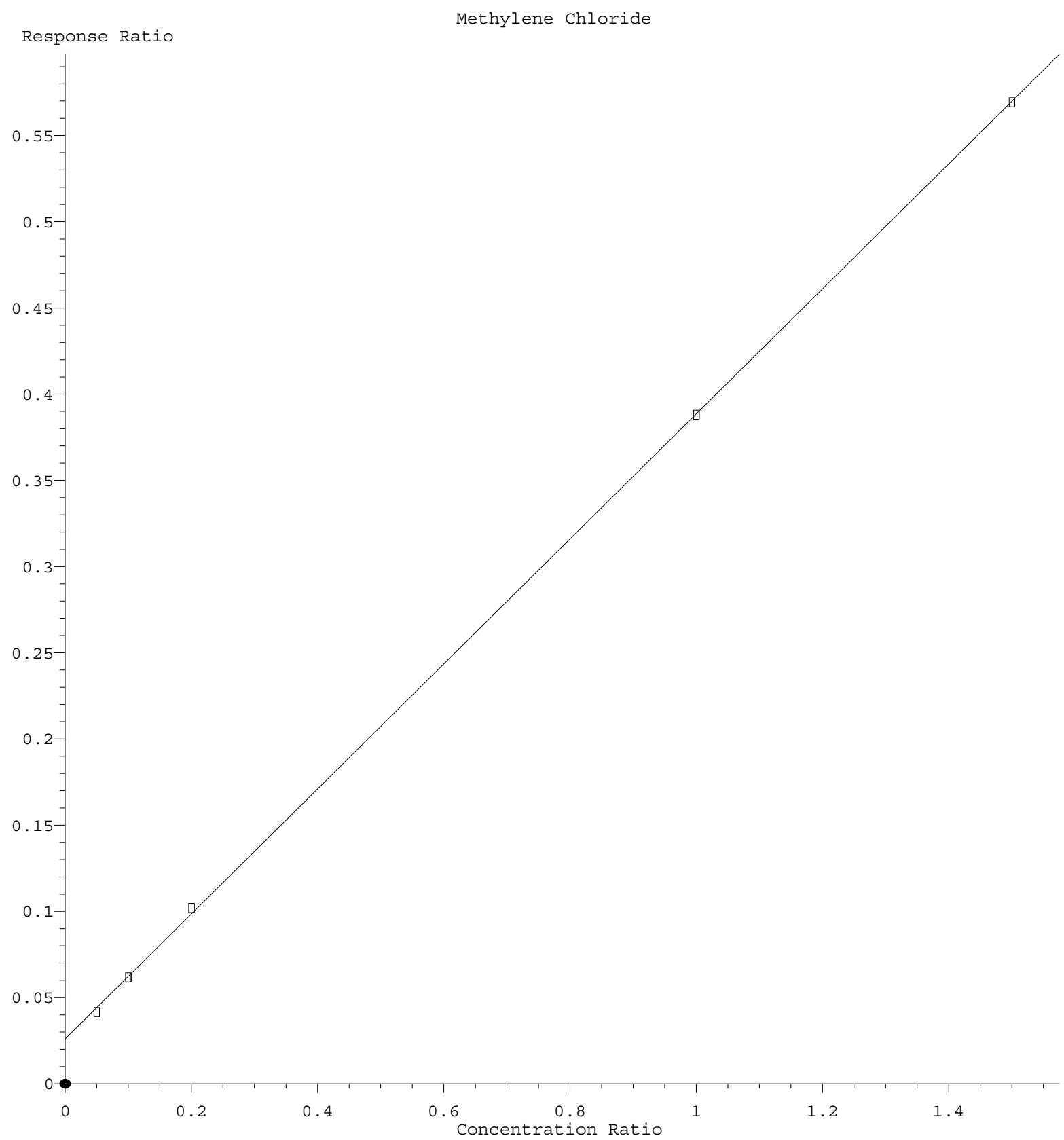
Calibration Files
0.03=VL042955.D 0.1 =VL042954.D 0.5 =VL042953.D 1 =VL042952.D 2 =VL042951.D 10 =VL042950.D 15 =VL042956.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.391	1.452	1.401	1.248	1.232	1.345	7.33
3)		Chlorodifluoro...			1.782	1.821	1.710	1.574	1.494	1.676	8.27
4)		Chloromethane			0.693	0.622	0.624	0.560	0.545	0.609	9.66
5)	T	Vinyl Chloride	0.729	0.562	0.529	0.567	0.524	0.470	0.472	0.550	15.95
6)	T	Bromomethane			0.224	0.215	0.200	0.166	0.167	0.194	13.76
7)		Chloroethane			0.234	0.238	0.212	0.196	0.189	0.214	10.33
8)	T	Dichlorotetraf...			1.227	1.239	1.180	1.047	1.047	1.148	8.24
9)	T	Propene			0.784	0.787	0.762	0.684	0.631	0.729	9.47
10)	T	Heptane			2.102	2.060	1.961	1.870	1.738	1.946	7.57
11)	T	Trichlorofluor...			1.354	1.376	1.346	1.199	1.210	1.297	6.58
12)	T	1,1,2-Trichlor...			1.130	1.117	1.068	0.963	0.973	1.050	7.48
13)		Ethanol			0.076	0.090	0.088	0.053	0.047	0.071	27.75
14)	T	Bromoethene			0.430	0.417	0.415	0.362	0.362	0.397	8.23
15)	T	Acetone			1.490	1.552	1.475	0.993	1.002	1.302	21.48
16)	T	1,3-Butadiene			0.751	0.675	0.607	0.520	0.519	0.614	16.41
17)		tert-Butyl alc...			1.587	1.544	1.398	1.351	1.262	1.429	9.47
18)	T	1,1-Dichloroet...			0.549	0.503	0.485	0.446	0.447	0.486	8.86
19)	T	Isopropyl Alcohol			0.898	0.813	0.818	0.718	0.667	0.783	11.61
20)	T	Methylene Chlo...			0.832	0.617	0.510	0.388	0.380	0.545	34.40
21)	T	Allyl Chloride			0.904	0.971	0.966	0.857	0.837	0.907	6.72
22)	T	trans-1,2-Dich...			0.589	0.612	0.556	0.507	0.499	0.552	8.98
23)	T	Vinyl Acetate			2.208	1.897	1.888	1.594	1.716	1.861	12.45
24)	T	1,1-Dichloroet...			1.147	1.172	1.109	0.993	0.996	1.083	7.76
25)	T	Ethyl Acetate			3.405	3.494	3.443	3.153	2.966	3.292	6.83
26)	T	Hexane			1.621	1.614	1.553	1.398	1.317	1.501	9.08
27)	T	Carbon Disulfide			1.395	1.436	1.396	1.271	1.232	1.346	6.59
28)	T	Methyl tert-Bu...			0.953	0.773	0.742	0.638	0.794	0.780	14.61
29)	T	Chloroform			2.078	2.042	2.038	1.848	1.804	1.962	6.42
30)	T	Cyclohexane			1.312	1.333	1.280	1.193	1.154	1.255	6.19
31)	T	cis-1,2-Dichlo...			1.443	1.464	1.465	1.357	1.300	1.406	5.26
32)	T	1,1,1-Trichlor...	2.724	2.087	2.017	2.164	2.071	1.902	1.868	2.119	13.51
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.744	0.731	0.741	0.655	0.633	0.701	7.52
35)	T	Carbon Tetrach...	0.734	0.616	0.660	0.665	0.657	0.610	0.617	0.651	6.63
36)	T	Benzene			0.974	0.970	0.972	0.898	0.881	0.939	4.84
37)	T	1,2-Dichloroet...			0.502	0.517	0.507	0.470	0.473	0.494	4.28
38)	T	Trichloroethene	0.527	0.495	0.481	0.467	0.452	0.426	0.419	0.467	8.20
39)	T	1,2-Dichloropr...			0.344	0.361	0.356	0.327	0.325	0.343	4.85

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL092225AIR.M

40)	T	1,4-Dioxane			0.173	0.172	0.163	0.148	0.141	0.159	8.95
41)	T	Tetrahydrofuran			0.427	0.407	0.419	0.389	0.372	0.403	5.57
42)	T	Bromodichlorom...			0.689	0.699	0.702	0.681	0.667	0.688	2.07
43)		Methyl Methacr...			0.406	0.396	0.396	0.368	0.355	0.384	5.61
44)	T	2,2,4-Trimethy...			1.705	1.660	1.690	1.563	1.492	1.622	5.64
45)	T	t-1,3-Dichloro...			0.403	0.414	0.421	0.409	0.402	0.410	1.99
46)	T	cis-1,3-Dichlo...			0.522	0.528	0.537	0.523	0.501	0.522	2.55
47)	T	1,1,2-Trichlor...			0.382	0.377	0.371	0.344	0.336	0.362	5.70
48)	T	Dibromochlorom...			0.572	0.586	0.600	0.571	0.568	0.580	2.36
49)	T	Bromoform			0.477	0.507	0.534	0.508	0.495	0.504	4.18
50)	T	4-Methyl-2-Pen...			0.928	0.949	0.988	0.934	0.897	0.939	3.51
51)	T	2-Hexanone			0.719	0.774	0.769	0.751	0.730	0.749	3.19
52)	T	Tetrachloroethene	0.436	0.404	0.356	0.355	0.351	0.325	0.315	0.363	11.76
53)	T	Toluene			1.155	1.137	1.156	1.078	1.031	1.111	4.95
54)	T	1,2-Dibromoethane		0.520	0.520	0.520	0.525	0.490	0.485	0.510	3.47
55)	I	Chlorobenzene-d5	----------ISTD----------								
56)		1,1,1,2-Tetrac...			0.497	0.486	0.505	0.458	0.447	0.479	5.28
57)	T	Chlorobenzene			0.968	0.978	0.944	0.853	0.822	0.913	7.75
58)	T	Ethyl Benzene			1.657	1.715	1.737	1.570	1.531	1.642	5.45
59)	T	m/p-Xylene			1.332	1.365	1.361	1.225	1.190	1.295	6.29
60)	T	o-Xylene			1.335	1.379	1.359	1.221	1.176	1.294	6.96
61)	T	Styrene			0.605	0.619	0.648	0.602	0.585	0.612	3.89
62)		Isopropylbenzene			2.010	2.059	2.028	1.803	1.744	1.929	7.49
63)	T	1,1,2,2-Tetrac...	0.806	0.722	0.688	0.675	0.673	0.610	0.586	0.680	10.66
64)		n-propylbenzene			0.531	0.529	0.523	0.473	0.463	0.504	6.51
65)		tert-Butylbenzene			1.836	1.839	1.842	1.557	1.503	1.715	9.91
66)	T	Benzyl Chloride			0.170	0.173	0.196	0.195	0.165	0.180	8.14
67)		sec-Butylbenzene			2.508	2.559	2.579	2.191	2.115	2.390	9.19
68)	S	1-Bromo-4-Fluo...	0.736	0.738	0.749	0.743	0.747	0.763	0.750	0.746	1.20
69)		p-Isopropyltol...			2.105	2.168	2.179	1.856	1.788	2.019	9.11
70)		n-Butylbenzene			1.929	2.108	2.136	1.881	1.803	1.971	7.36
71)		2-Chlorotoluene			1.543	1.504	1.528	1.373	1.333	1.456	6.61
72)	T	4-Ethyltoluene			1.715	1.686	1.703	1.523	1.476	1.621	6.92
73)	T	1,3,5-Trimethy...			1.333	1.346	1.399	1.263	1.231	1.314	5.12
74)	T	1,2,4-Trimethy...			1.534	1.522	1.558	1.349	1.294	1.451	8.34
75)	T	1,3-Dichlorobe...			0.918	0.954	0.956	0.845	0.827	0.900	6.72
76)	T	1,4-Dichlorobe...			0.922	0.914	0.959	0.845	0.829	0.894	6.12
77)	T	1,2-Dichlorobe...			0.874	0.914	0.918	0.796	0.780	0.856	7.61
78)	T	Hexachloro-1,3...			0.755	0.742	0.728	0.575	0.549	0.670	14.79
79)	T	Naphthalene		1.093	1.102	1.320	1.474	1.373	1.339	1.283	11.96
80)	T	Naphthalene,2-...			0.384	0.365	0.428	0.402	0.404	0.396	5.94
81)	T	1,2,4-Trichlor...			0.557	0.691	0.777	0.718	0.689	0.686	11.73

(#) = Out of Range



Response = 3.623e-001 * Amt + 2.601e-002
Coef of Det (r^2) = 0.999913 Curve Fit: Linear
Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL092225AIR.M
Calibration Table Last Updated: Tue Sep 23 02:39:16 2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042950.D
Acq On : 22 Sep 2025 09:39
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:08:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	170899	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	526679	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	486724	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	371195	10.217	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	213351	9.282	ppbv	100
3) Chlorodifluoromethane	1.473	51	269073	9.392	ppbv	100
4) Chloromethane	1.531	50	95679	9.196	ppbv	100
5) Vinyl Chloride	1.577	62	80350	8.543	ppbv	100
6) Bromomethane	1.667	94	28301	8.530	ppbv	100
7) Chloroethane	1.703	64	33446	9.158	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	178992	9.122	ppbv	100
9) Propene	1.483	41	116849	9.376	ppbv	100
10) Heptane	4.969	43	319577	9.560	ppbv	100
11) Trichlorofluoromethane	1.874	101	204850	9.243	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	164598	9.171	ppbv	100
13) Ethanol	1.719	45	9094	7.613	ppbv	100
14) Bromoethene	1.780	108	61824	9.111	ppbv	100
15) Acetone	1.832	43	169676	7.623	ppbv	100
16) 1,3-Butadiene	1.606	39	88812	8.459	ppbv	100
17) tert-Butyl alcohol	2.036	59	230853	9.456	ppbv	100
18) 1,1-Dichloroethene	2.030	96	76184	9.170	ppbv	100
19) Isopropyl Alcohol	1.884	45	122753	9.174	ppbv	100
20) Methylene Chloride	2.059	84	66314	9.992	ppbv	100
21) Allyl Chloride	2.094	41	146473	9.449	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	86580	9.172	ppbv	100
23) Vinyl Acetate	2.460	43	272378	8.566	ppbv	100
24) 1,1-Dichloroethane	2.405	63	169721	9.168	ppbv	100
25) Ethyl Acetate	2.829	43	538761	9.577	ppbv	100
26) Hexane	2.823	57	238896	9.316	ppbv	100
27) Carbon Disulfide	2.146	76	217259	9.446	ppbv	100
28) Methyl tert-Butyl Ether	2.434	73	108987	8.176	ppbv	100
29) Chloroform	2.845	83	315779	9.418	ppbv	100
30) Cyclohexane	3.852	84	203803	9.506	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	231907	9.654	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	325118	8.947	ppbv	100
34) 2-Butanone	2.551	43	344874	9.343	ppbv	100
35) Carbon Tetrachloride	3.755	117	321267	9.480	ppbv	100
36) Benzene	3.651	78	472855	9.561	ppbv	100
37) 1,2-Dichloroethane	3.214	62	247754	9.525	ppbv	100
38) Trichloroethene	4.541	130	224516	9.134	ppbv	100
39) 1,2-Dichloropropane	4.305	63	172059	9.523	ppbv	100
40) 1,4-Dioxane	4.570	88	77889	9.283	ppbv #	100
41) Tetrahydrofuran	3.046	42	204724	9.649	ppbv	100
42) Bromodichloromethane	4.480	83	358858	9.903	ppbv	100
43) Methyl Methacrylate	4.871	69	193676	9.646	ppbv	100
44) 2,2,4-Trimethylpentane	4.632	57	823031	9.631	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	215233	9.969	ppbv	100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042950.D
Acq On : 22 Sep 2025 09:39
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:08:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.590	75	275210	10.006	ppbv		100
47)	1,1,2-Trichloroethane	6.571	97	181329	9.498	ppbv		100
48)	Dibromochloromethane	7.383	129	300497	9.845	ppbv		100
49)	Bromoform	9.480	173	267814	10.087	ppbv		100
50)	4-Methyl-2-Pentanone	5.736	43	492068	9.920	ppbv		100
51)	2-Hexanone	7.428	43	395744	10.036	ppbv	#	100
52)	Tetrachloroethene	8.218	164	171294	8.951	ppbv		100
53)	Toluene	6.923	91	567779	9.699	ppbv		100
54)	1,2-Dibromoethane	7.645	107	257904	9.605	ppbv		100
56)	1,1,1,2-Tetrachloroethane	8.921	131	223066	9.575	ppbv		100
57)	Chlorobenzene	8.917	112	415238	9.345	ppbv		100
58)	Ethyl Benzene	9.348	91	764249	9.562	ppbv		100
59)	m/p-Xylene	9.526	91	1192566m	18.913	ppbv		
60)	o-Xylene	9.959	91	594329	9.437	ppbv		100
61)	Styrene	9.866	104	293111	9.840	ppbv		100
62)	Isopropylbenzene	10.536	105	877401	9.347	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.956	83	296678	8.963	ppbv		100
64)	n-propylbenzene	10.985	120	230432	9.394	ppbv		100
65)	tert-Butylbenzene	11.526	119	757958	9.078	ppbv		100
66)	Benzyl Chloride	11.610	91	94982	10.842	ppbv		100
67)	sec-Butylbenzene	11.762	105	1066409	9.166	ppbv		100
69)	p-Isopropyltoluene	11.921	119	903376	9.192	ppbv		100
70)	n-Butylbenzene	12.277	91	915624	9.543	ppbv		100
71)	2-Chlorotoluene	10.895	91	668239	9.428	ppbv		100
72)	4-Ethyltoluene	11.121	105	741298	9.398	ppbv		100
73)	1,3,5-Trimethylbenzene	11.199	105	614632	9.608	ppbv		100
74)	1,2,4-Trimethylbenzene	11.532	105	656535	9.294	ppbv		100
75)	1,3-Dichlorobenzene	11.604	146	411473	9.392	ppbv		100
76)	1,4-Dichlorobenzene	11.668	146	411464	9.456	ppbv		100
77)	1,2-Dichlorobenzene	11.944	146	387219	9.289	ppbv		100
78)	Hexachloro-1,3-Butadiene	13.876	225	280080	8.591	ppbv		100
79)	Naphthalene	13.510	128	668171	10.696	ppbv		100
80)	Naphthalene,2-methyl-	14.452	142	195695	10.142	ppbv		100
81)	1,2,4-Trichlorobenzene	13.436	180	349393	10.461	ppbv		100

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

Quantitation Report (QT Reviewed)

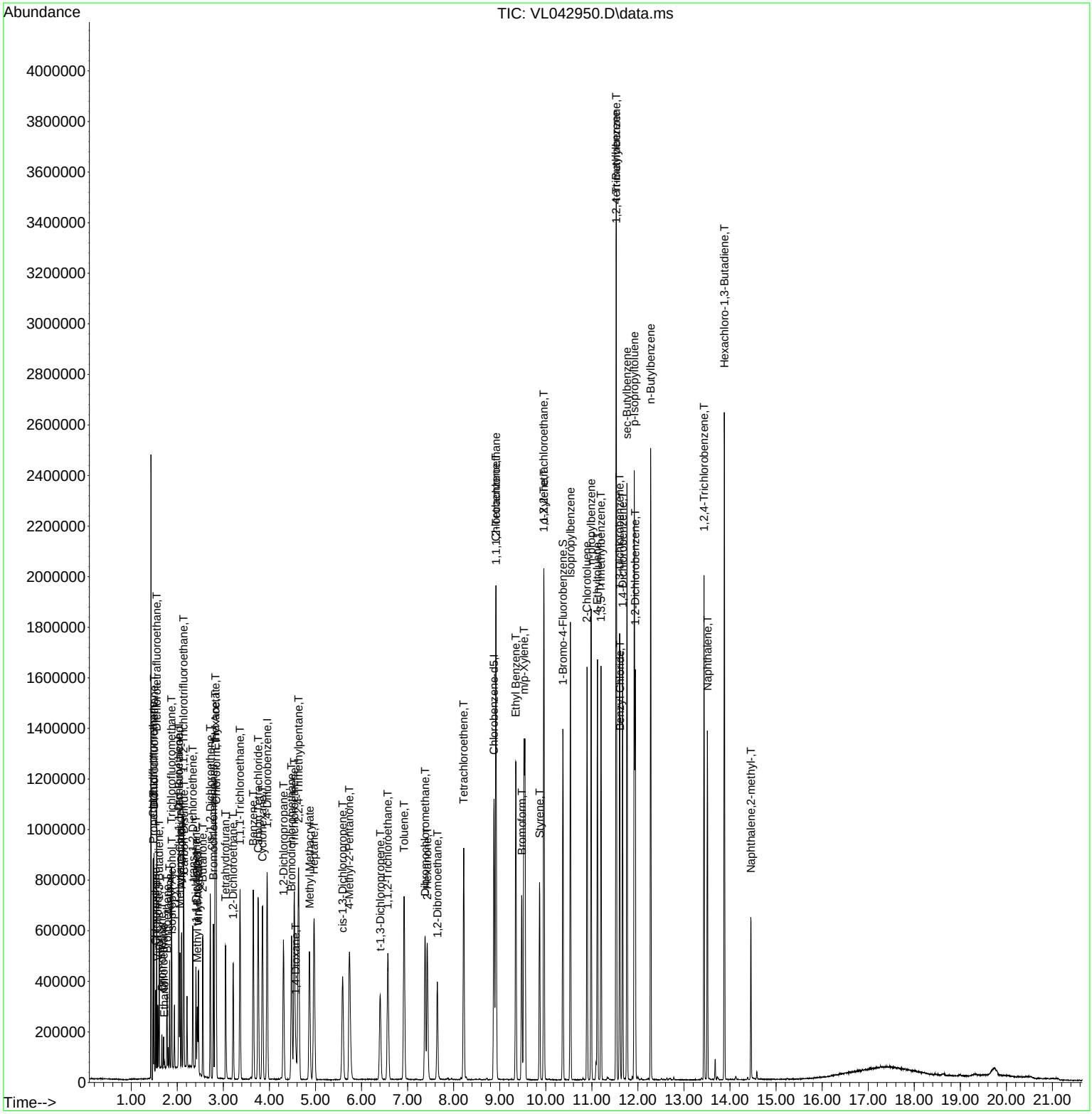
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042950.D
Acq On : 22 Sep 2025 09:39
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

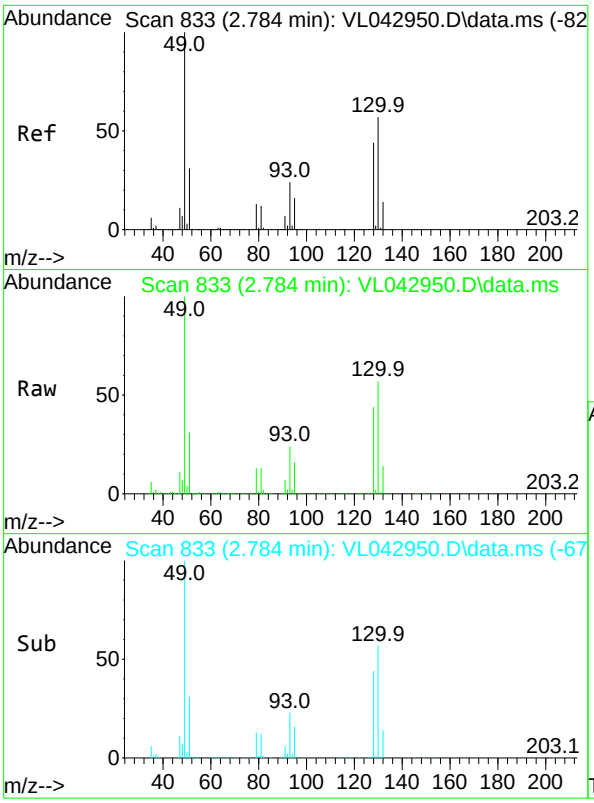
Quant Time: Sep 23 02:08:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

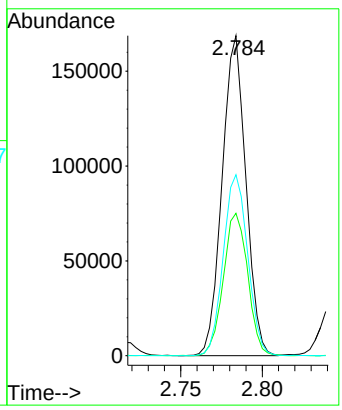




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 49 Resp: 17089

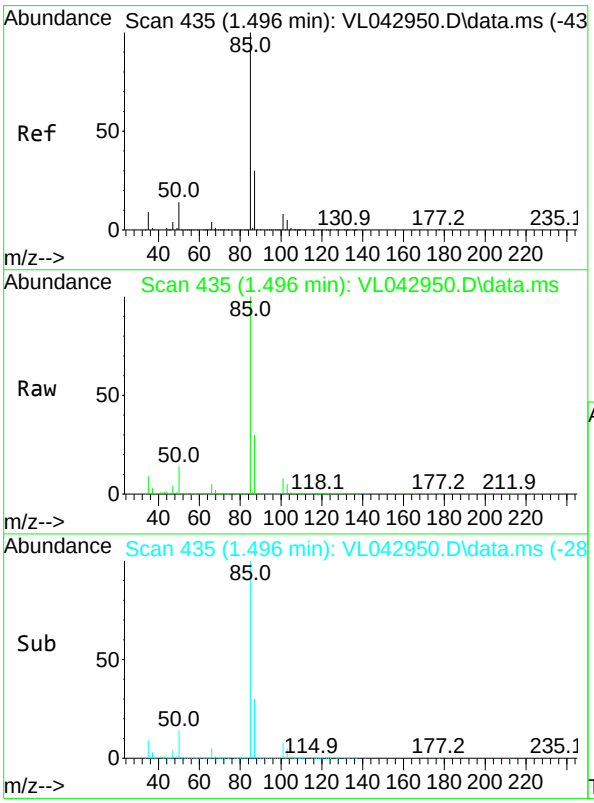
Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.9	68.8
130	58.2	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

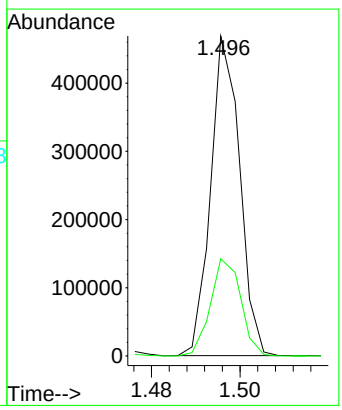
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

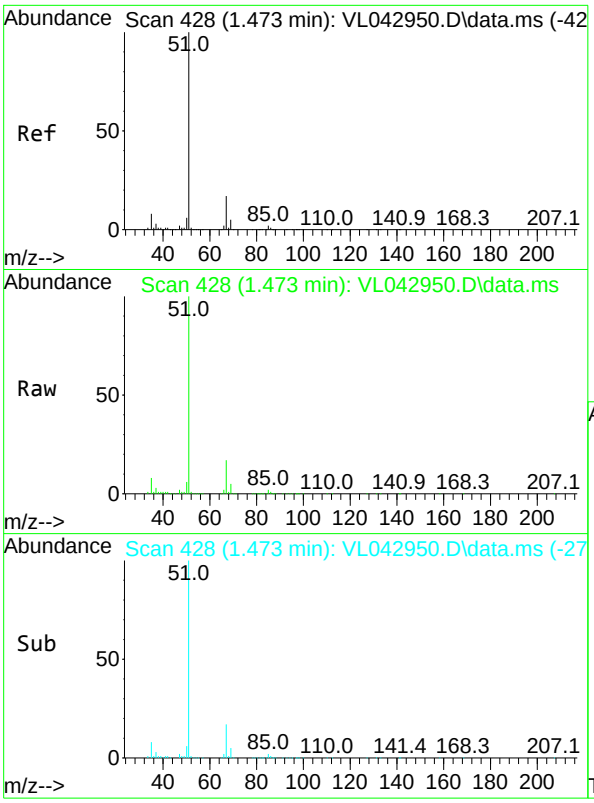


#2
Dichlorodifluoromethane
Concen: 9.282 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 85 Resp: 213351

Ion	Ratio	Lower	Upper
85	100		
87	30.4	24.3	36.5

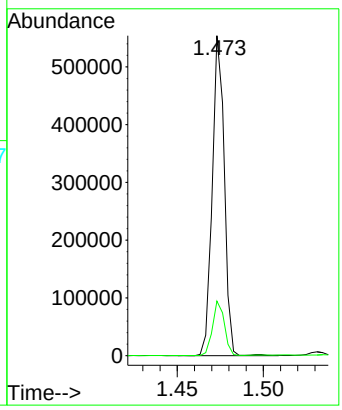




#3
Chlorodifluoromethane
Concen: 9.392 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 51 Resp: 26907

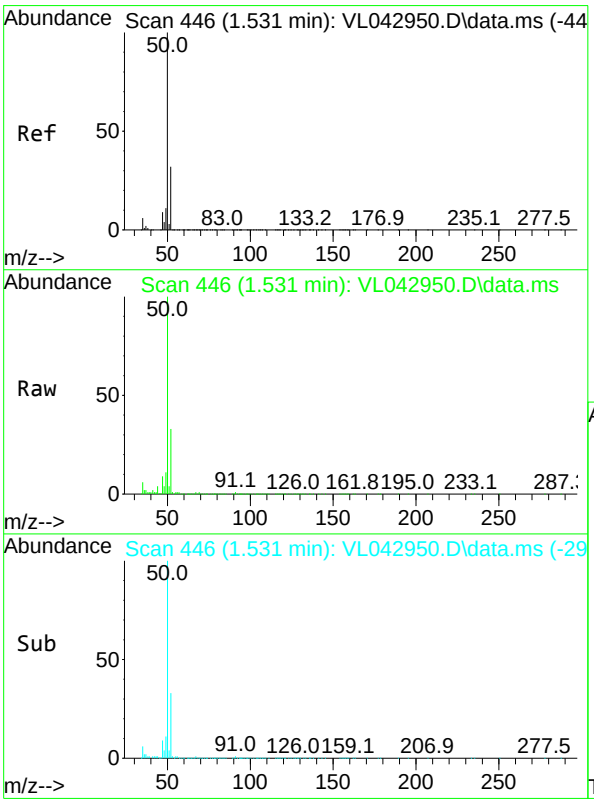
Ion	Ratio	Lower	Upper
51	100		
67	17.3	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

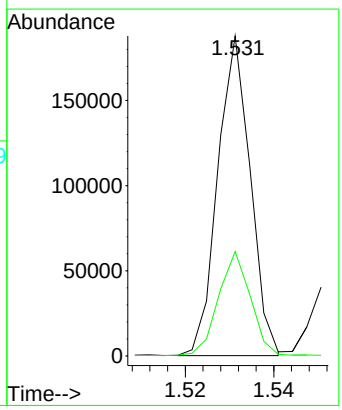
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

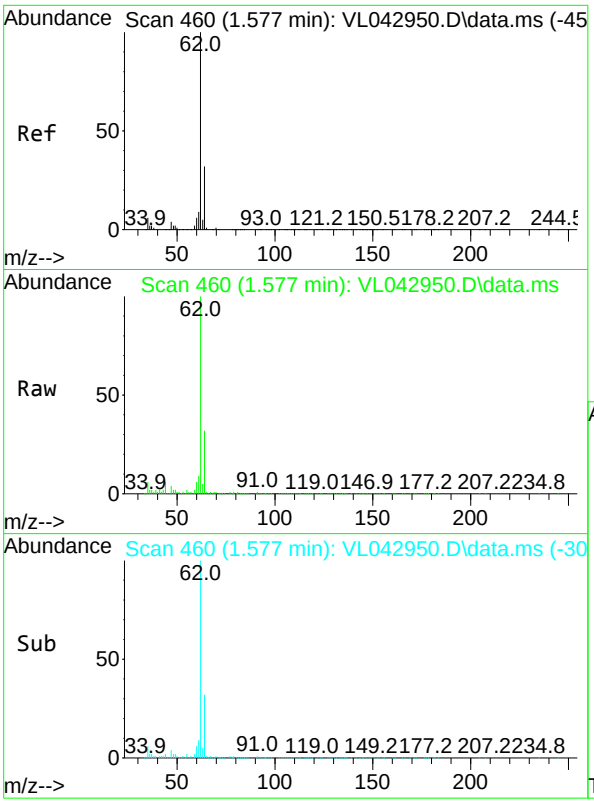


#4
Chloromethane
Concen: 9.196 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 50 Resp: 95679

Ion	Ratio	Lower	Upper
50	100		
52	32.4	25.9	38.9

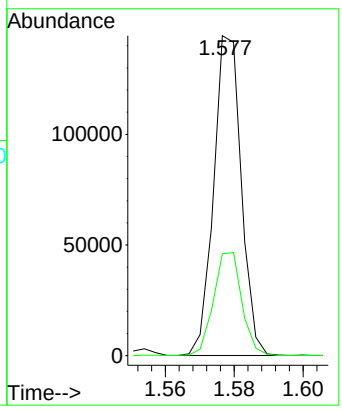




#5
Vinyl Chloride
Concen: 8.543 ppbv
RT: 1.577 min Scan# 4(
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 62 Resp: 8035(

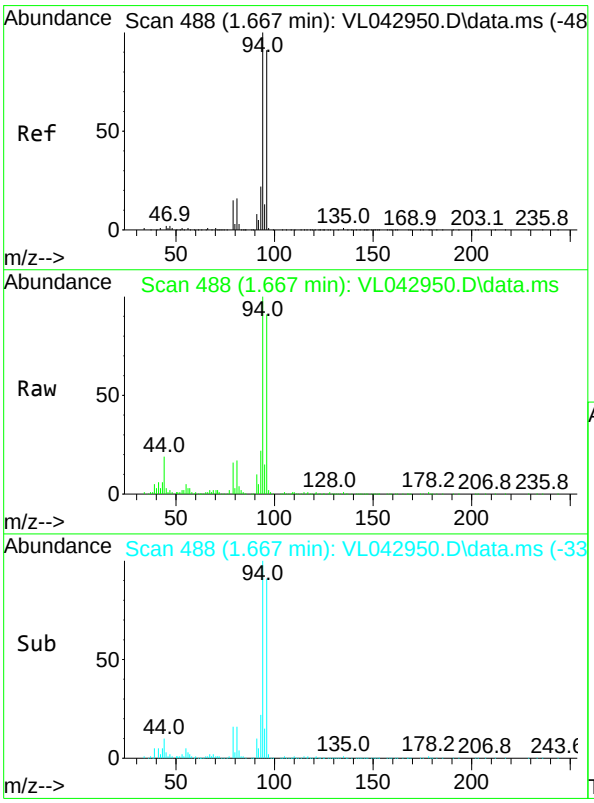
Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.4	38.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

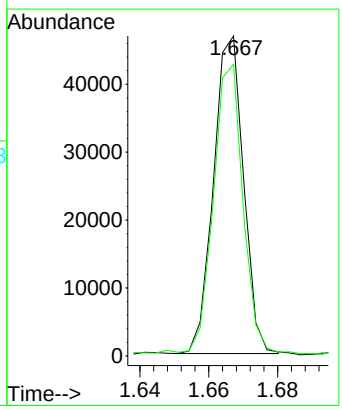
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

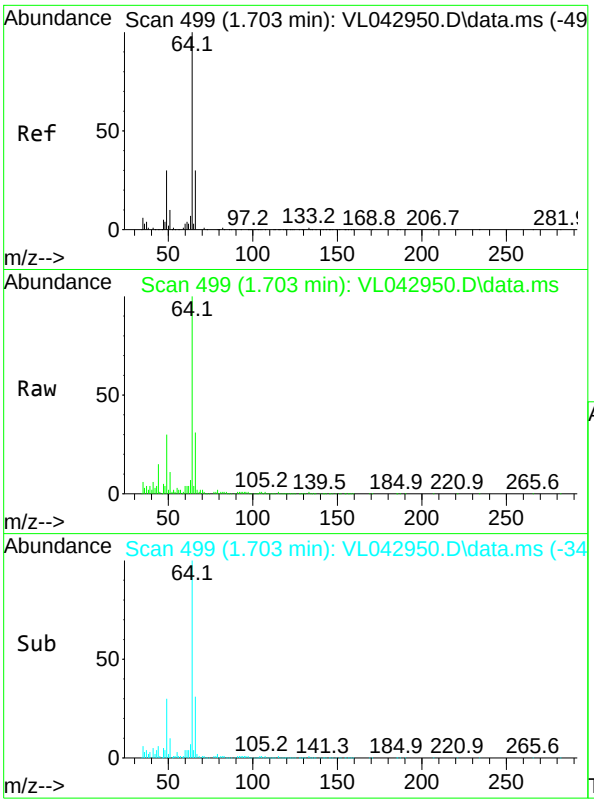


#6
Bromomethane
Concen: 8.530 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 94 Resp: 28301

Ion	Ratio	Lower	Upper
94	100		
96	90.7	72.6	108.8

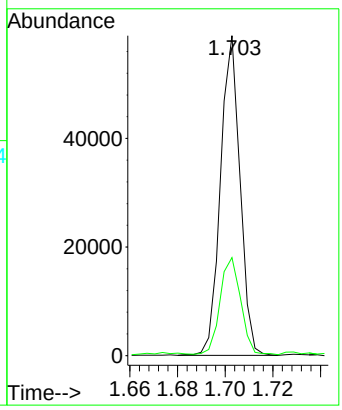




#7
Chloroethane
Concen: 9.158 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 64 Resp: 3344

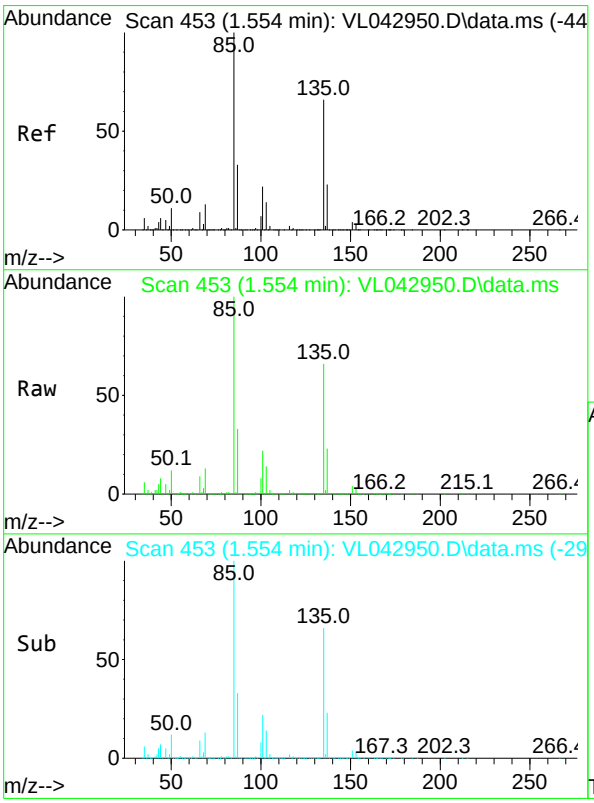
Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

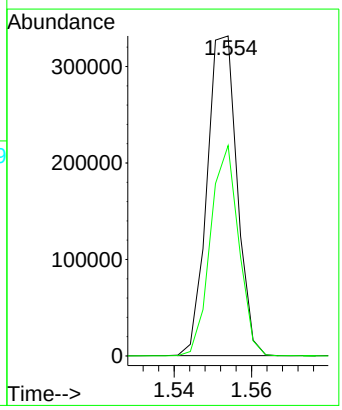
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

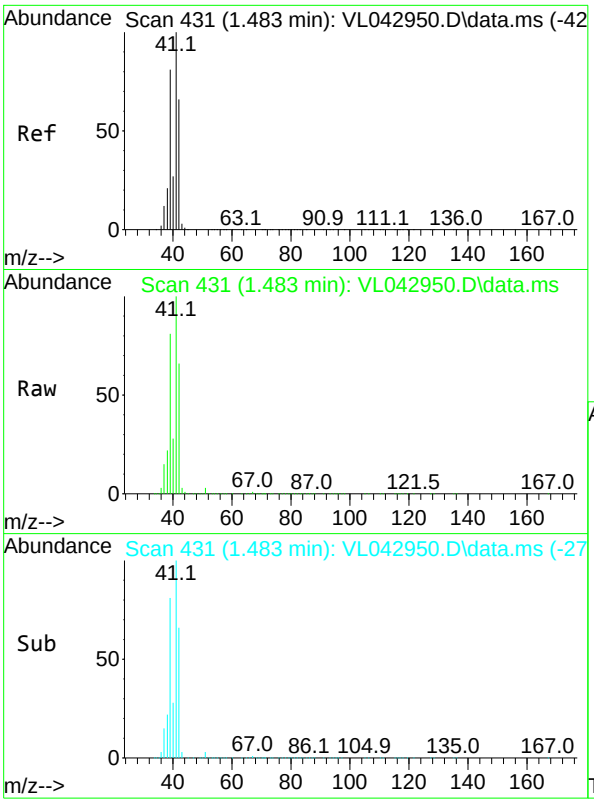


#8
Dichlorotetrafluoroethane
Concen: 9.122 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 85 Resp: 178992

Ion	Ratio	Lower	Upper
85	100		
135	62.1	49.7	74.5

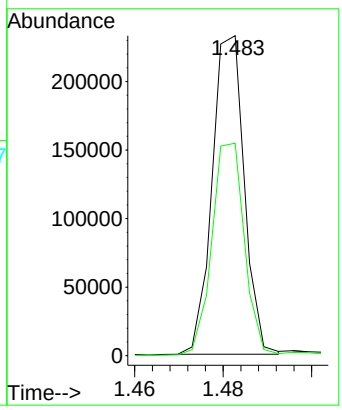




#9
Propene
Concen: 9.376 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 41 Resp: 11684

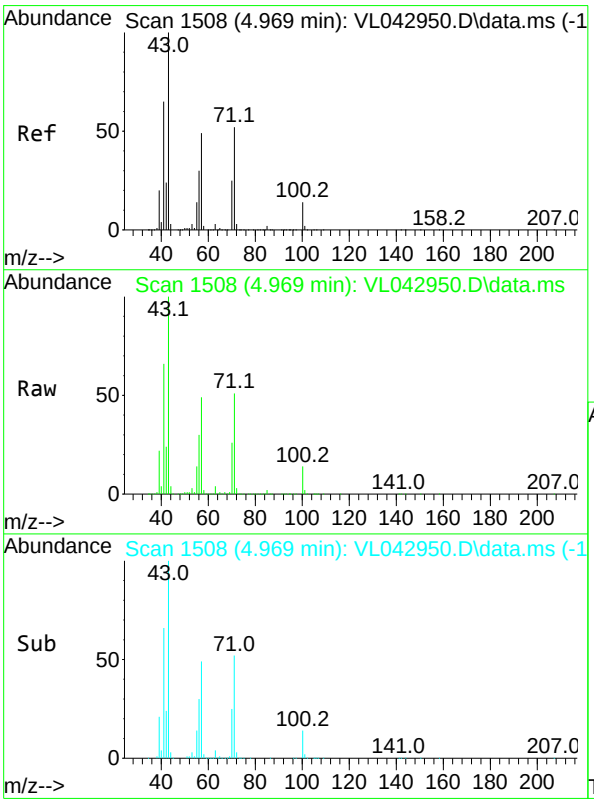
Ion	Ratio	Lower	Upper
41	100		
42	71.8	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

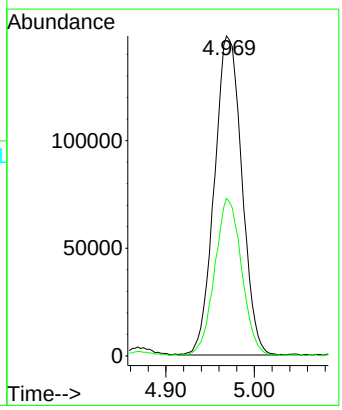
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

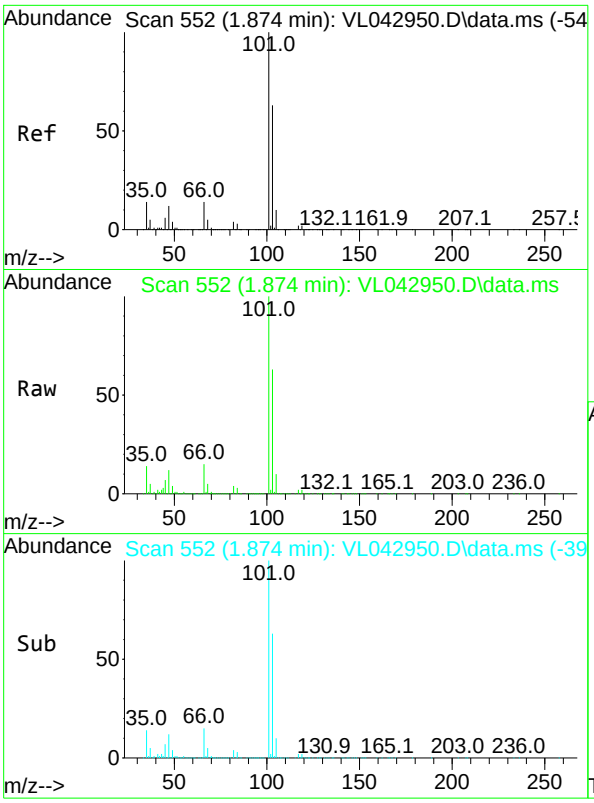


#10
Heptane
Concen: 9.560 ppbv
RT: 4.969 min Scan# 1508
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 319577

Ion	Ratio	Lower	Upper
43	100		
57	48.2	38.6	57.8

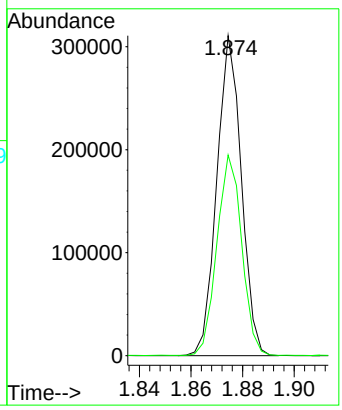




#11
Trichlorofluoromethane
Concen: 9.243 ppbv
RT: 1.874 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:101 Resp: 20485

Ion	Ratio	Lower	Upper
101	100		
103	62.6	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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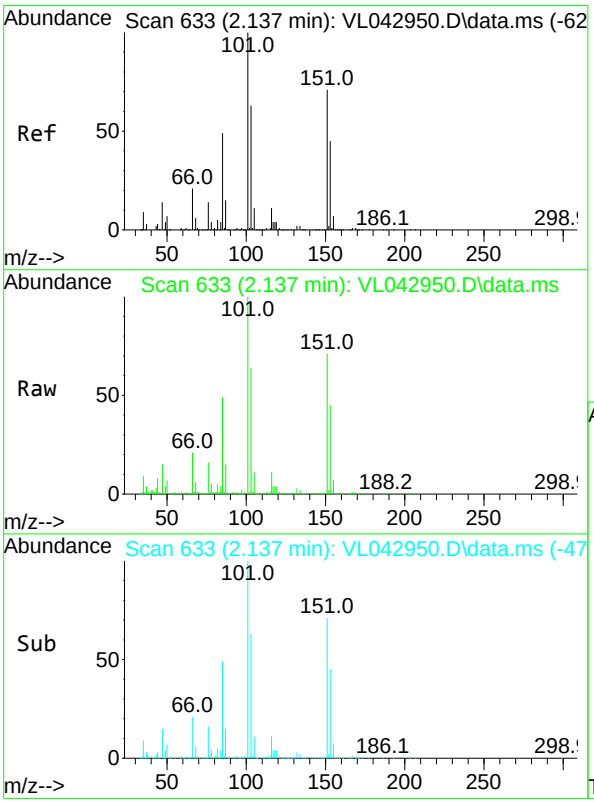
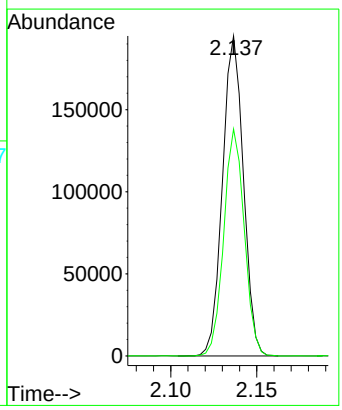
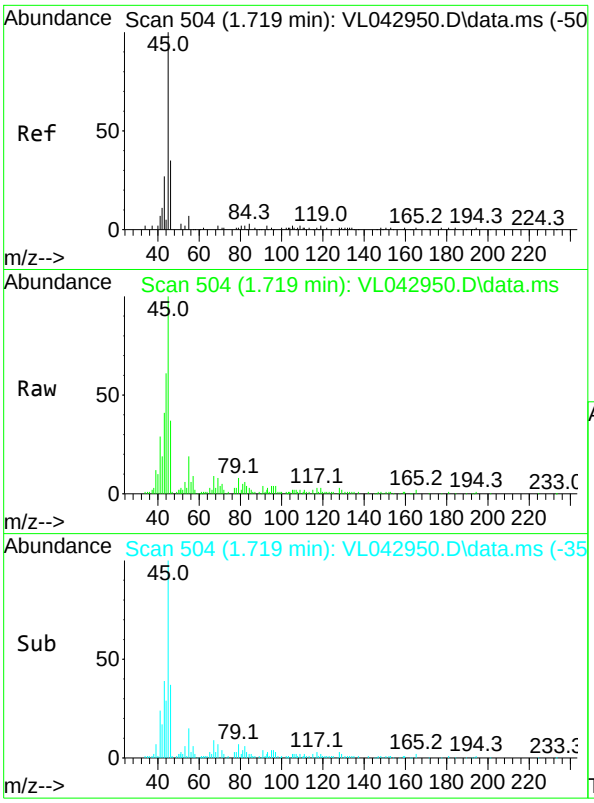


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.171 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:101 Resp: 164598

Ion	Ratio	Lower	Upper
101	100		
151	69.6	55.7	83.5

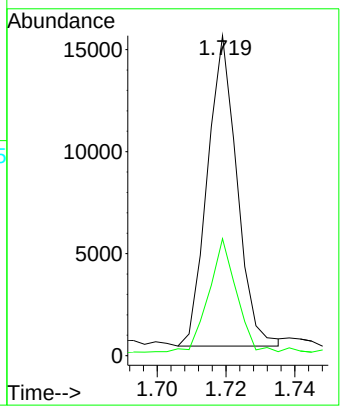




#13
Ethanol
Concen: 7.613 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 45 Resp: 909

Ion	Ratio	Lower	Upper
45	100		
46	40.4	16.2	64.6



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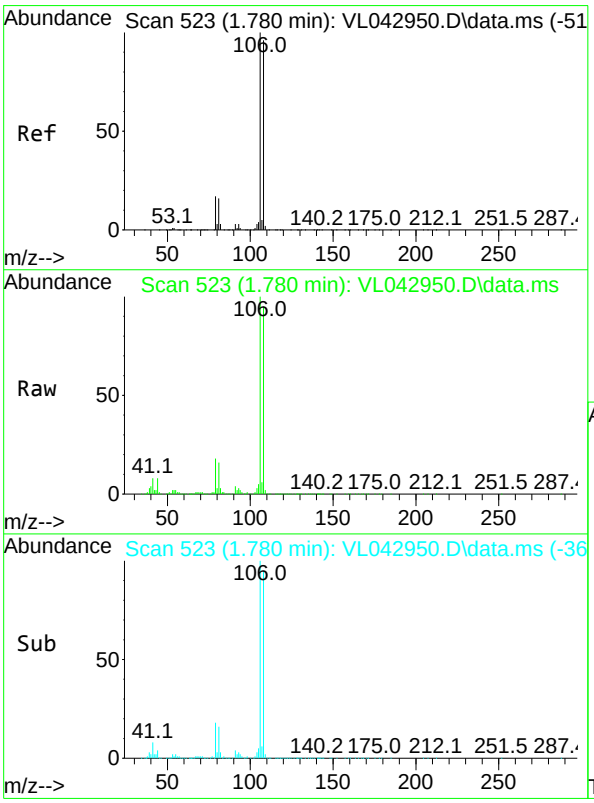
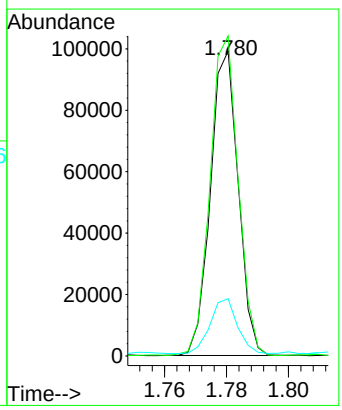
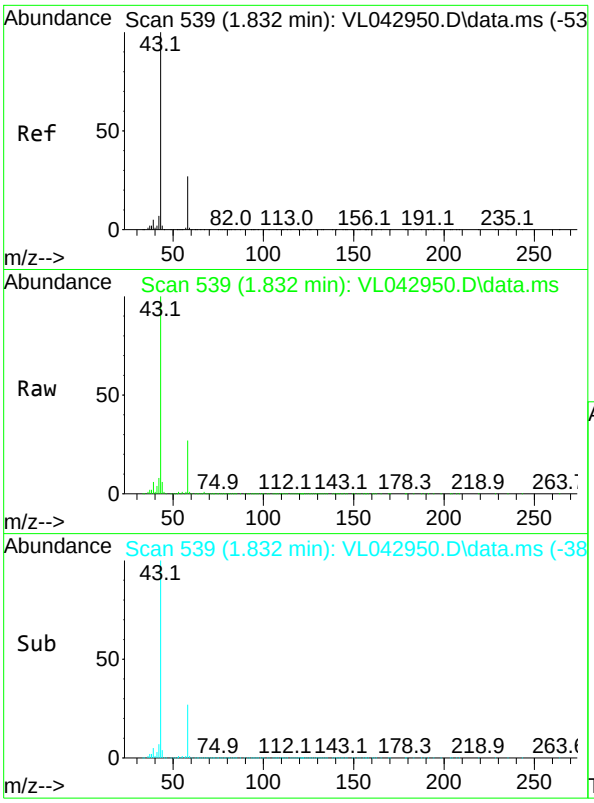


#14
Bromoethene
Concen: 9.111 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:108 Resp: 61824

Ion	Ratio	Lower	Upper
108	100		
106	107.5	86.0	129.0
79	17.7	14.2	21.2

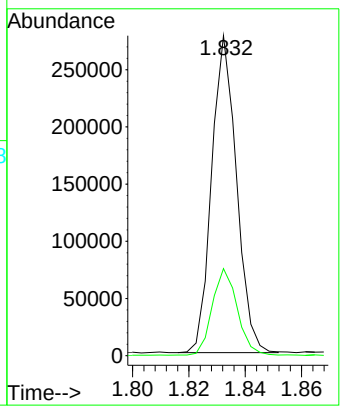




#15
Acetone
Concen: 7.623 ppbv
RT: 1.832 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 16967

Ion	Ratio	Lower	Upper
43	100		
58	27.9	22.3	33.5



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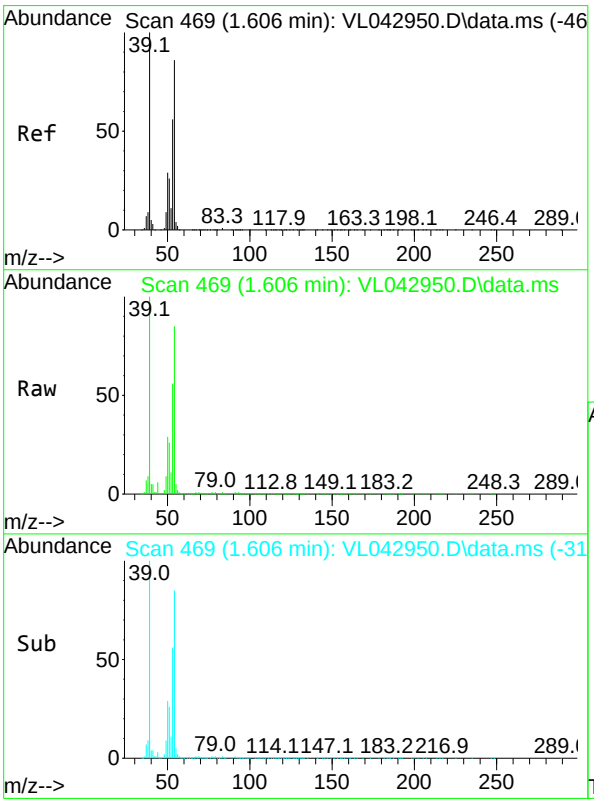
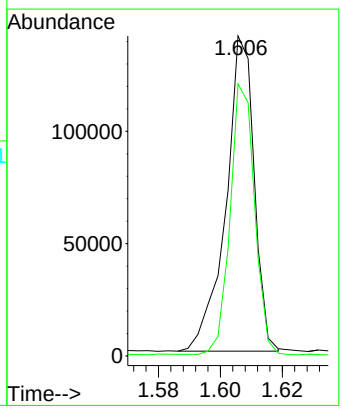
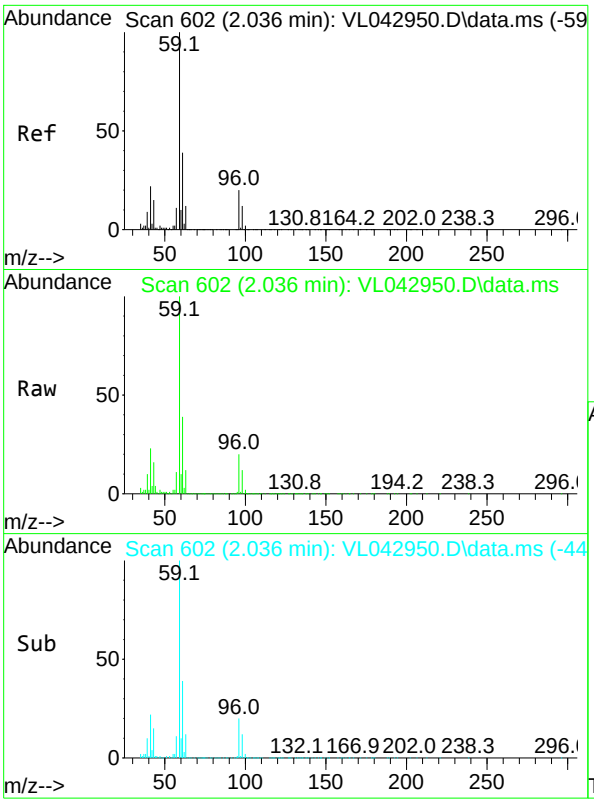


#16
1,3-Butadiene
Concen: 8.459 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 39 Resp: 88812

Ion	Ratio	Lower	Upper
39	100		
54	76.0	60.8	91.2

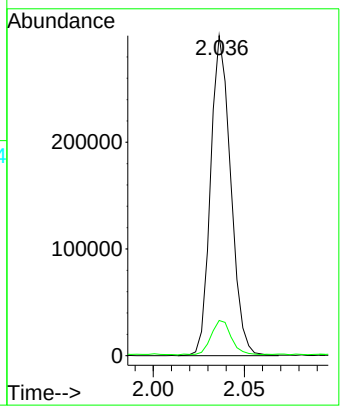




#17
tert-Butyl alcohol
Concen: 9.456 ppbv
RT: 2.036 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 59 Resp: 23085

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.6	12.8



Instrument :
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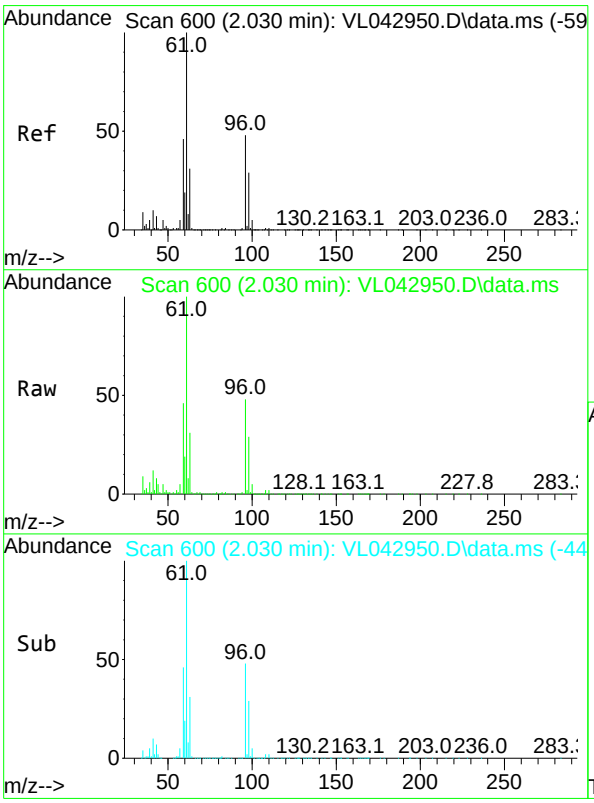
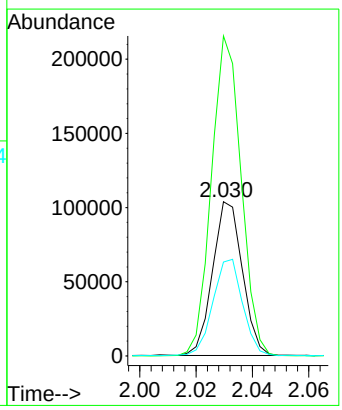
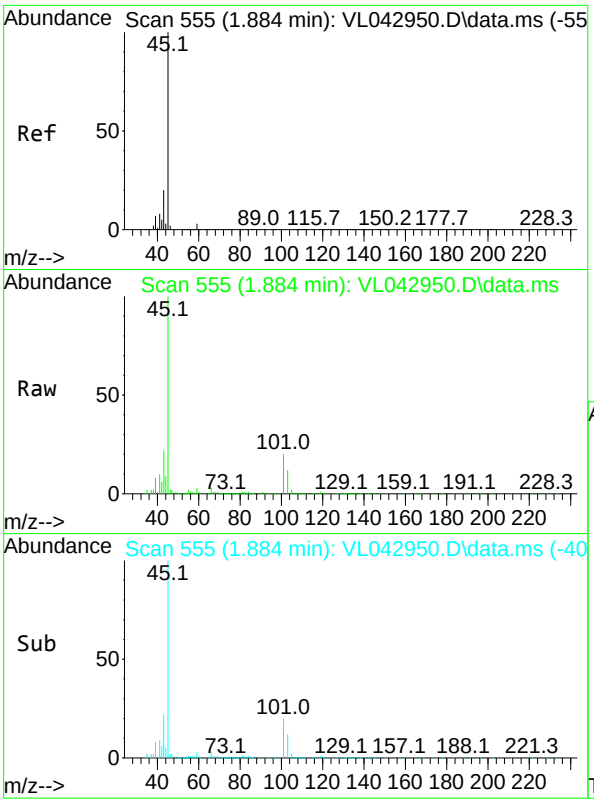


#18
1,1-Dichloroethene
Concen: 9.170 ppbv
RT: 2.030 min Scan# 600
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 96 Resp: 76184

Ion	Ratio	Lower	Upper
96	100		
61	207.8	166.2	249.4
98	60.8	48.6	73.0

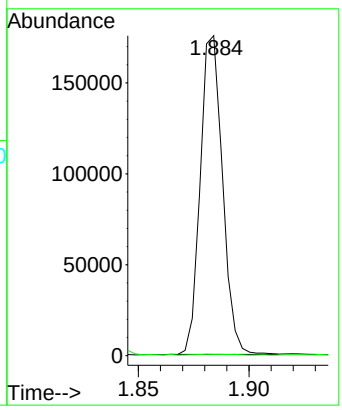




#19
Isopropyl Alcohol
Concen: 9.174 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 45 Resp: 12275

Ion	Ratio	Lower	Upper
45	100		
58	38.8	31.0	46.6



Instrument :
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ClientSampleId :
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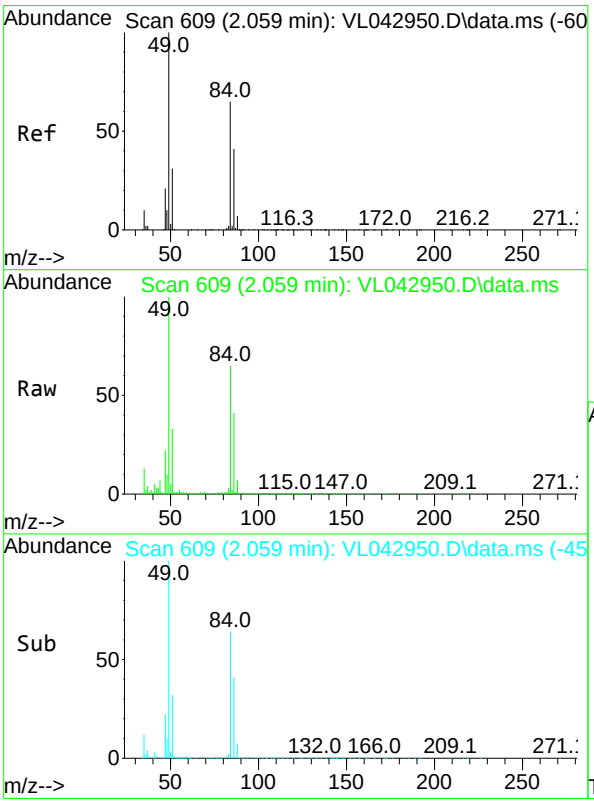
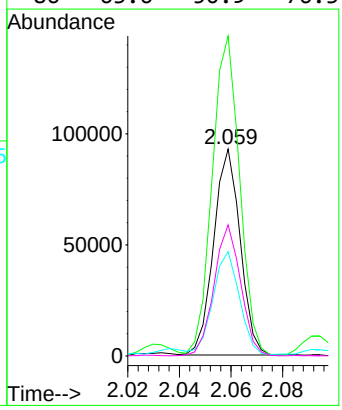
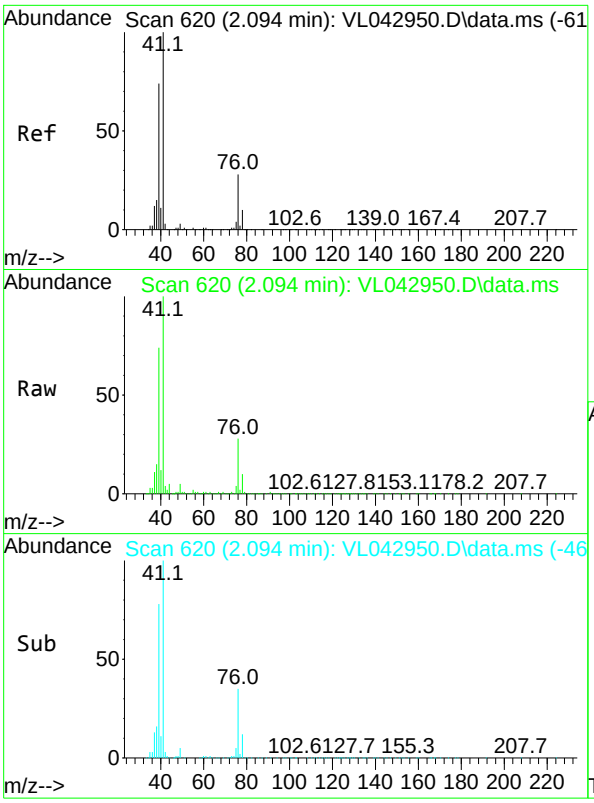


#20
Methylene Chloride
Concen: 9.992 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 84 Resp: 66314

Ion	Ratio	Lower	Upper
84	100		
49	155.1	124.1	186.1
51	49.8	39.8	59.8
86	63.6	50.9	76.3

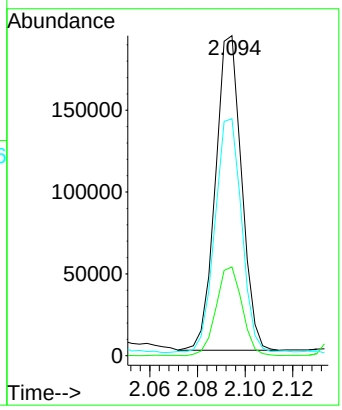




#21
Allyl Chloride
Concen: 9.449 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 41 Resp: 14647

Ion	Ratio	Lower	Upper
41	100		
76	27.9	22.3	33.5
39	76.6	61.3	91.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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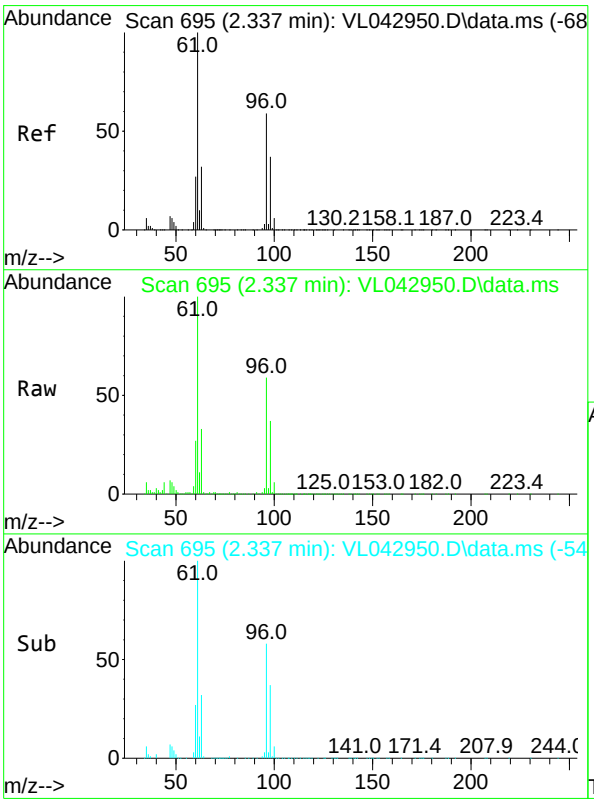
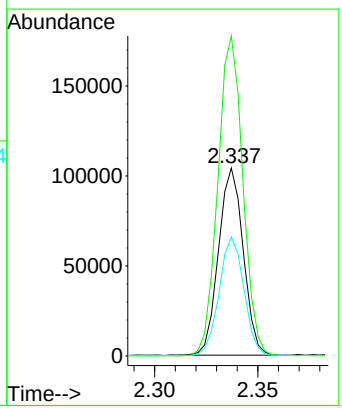
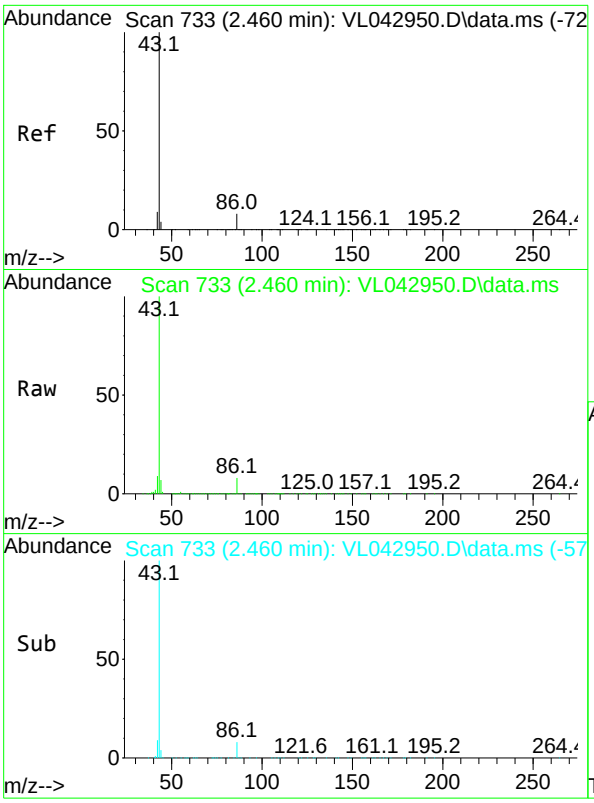


#22
trans-1,2-Dichloroethene
Concen: 9.172 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 96 Resp: 86580

Ion	Ratio	Lower	Upper
96	100		
61	170.6	136.5	204.7
98	63.3	50.6	76.0

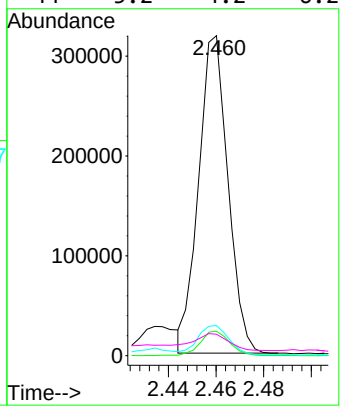




#23
Vinyl Acetate
Concen: 8.566 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 27237

Ion	Ratio	Lower	Upper
43	100		
86	7.7	6.2	9.2
42	9.2	7.4	11.0
44	5.2	4.2	6.2



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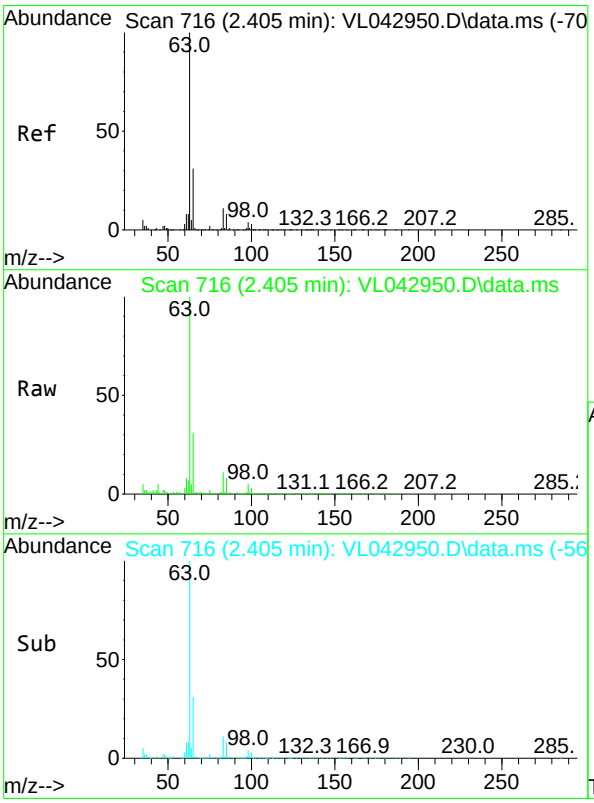
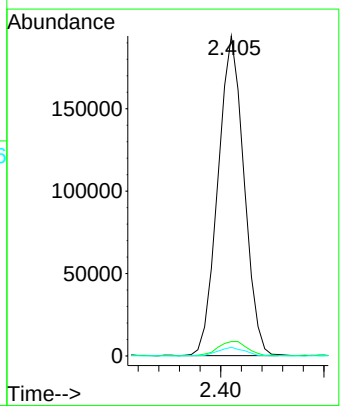
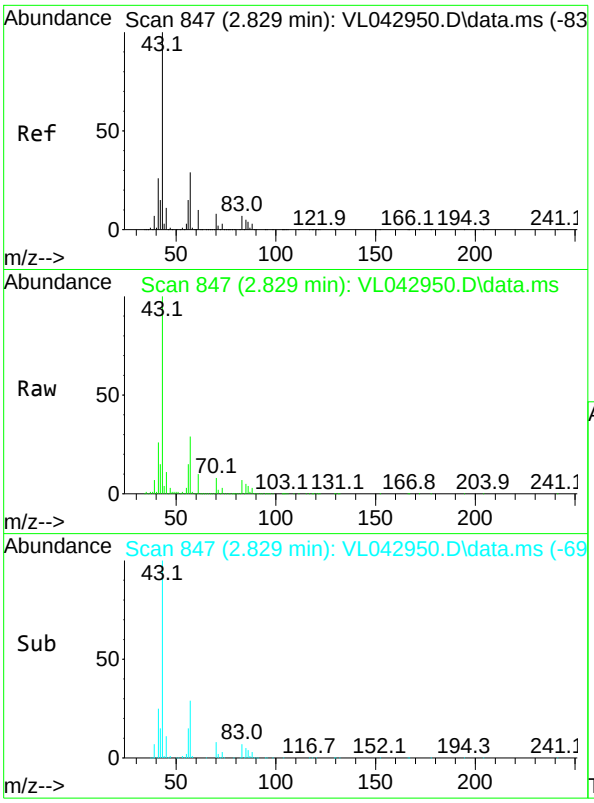


#24
1,1-Dichloroethane
Concen: 9.168 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 63 Resp: 169721

Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.2	6.6
100	2.7	1.4	4.0

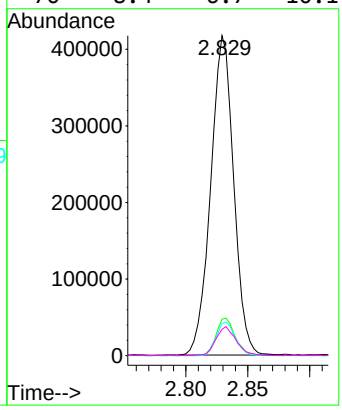




#25
Ethyl Acetate
Concen: 9.577 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 53876

Ion	Ratio	Lower	Upper
43	100		
45	9.6	7.7	11.5
61	8.9	7.1	10.7
70	8.4	6.7	10.1



Instrument :
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ClientSampleId :
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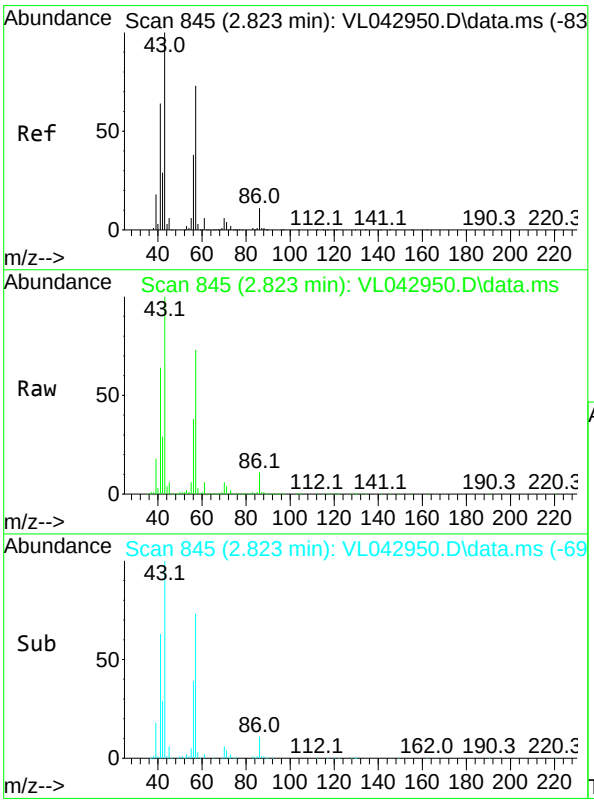
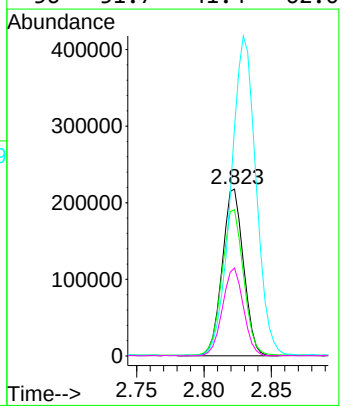
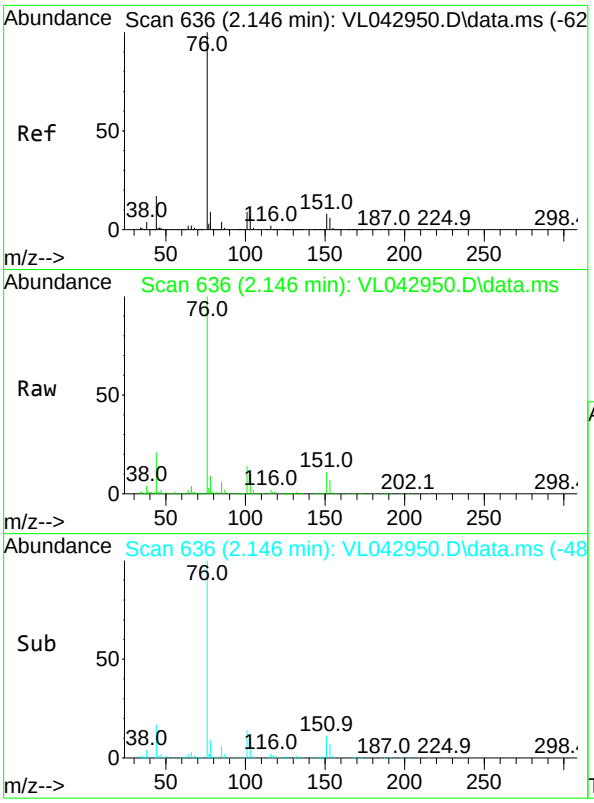


#26
Hexane
Concen: 9.316 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 57 Resp: 238896

Ion	Ratio	Lower	Upper
57	100		
41	89.6	71.7	107.5
43	226.0	180.8	271.2
56	51.7	41.4	62.0

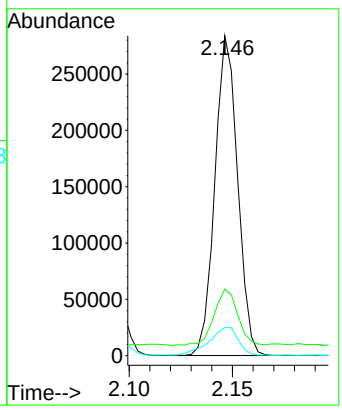




#27
Carbon Disulfide
Concen: 9.446 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 76 Resp: 21725

Ion	Ratio	Lower	Upper
76	100		
44	19.5	15.6	23.4
78	11.1	8.9	13.3



Instrument :
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ClientSampleId :
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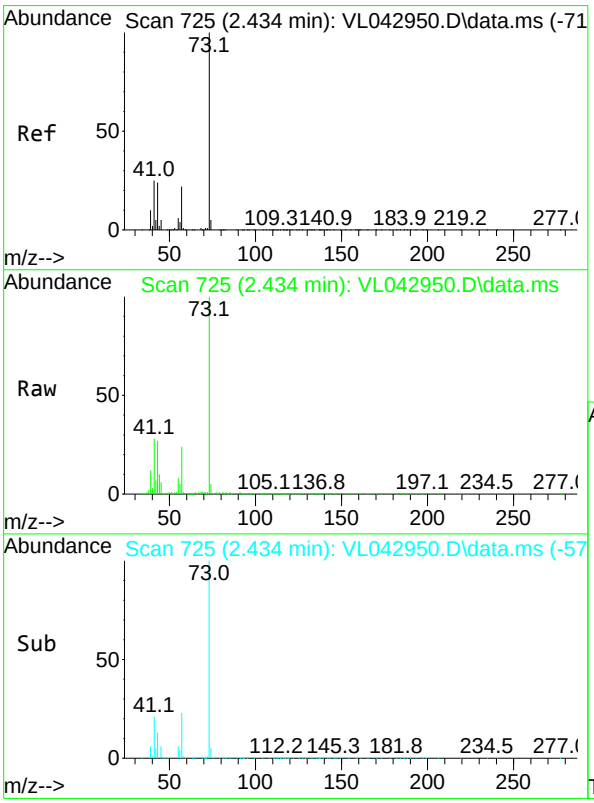
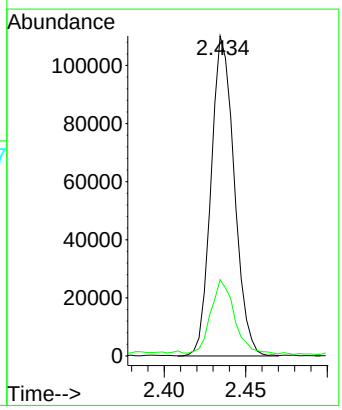
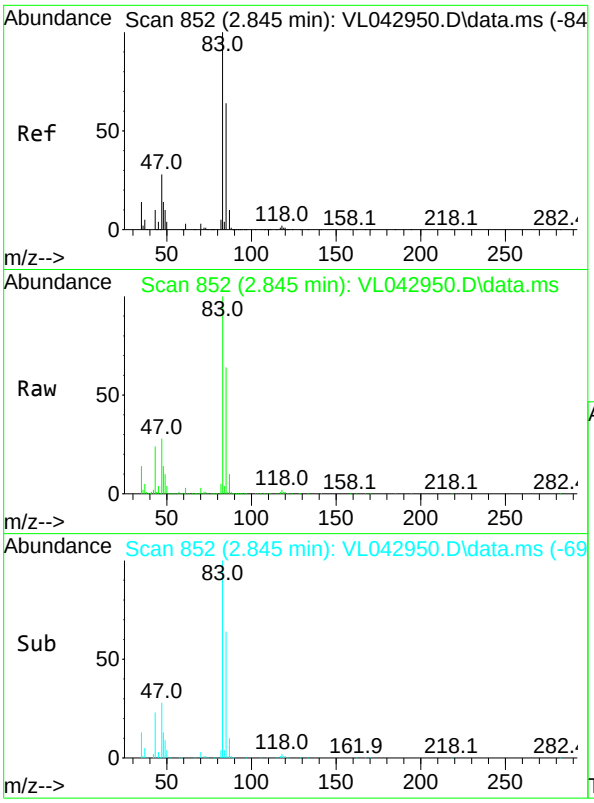


#28
Methyl tert-Butyl Ether
Concen: 8.176 ppbv
RT: 2.434 min Scan# 725
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 73 Resp: 108987

Ion	Ratio	Lower	Upper
73	100		
57	25.8	20.6	31.0

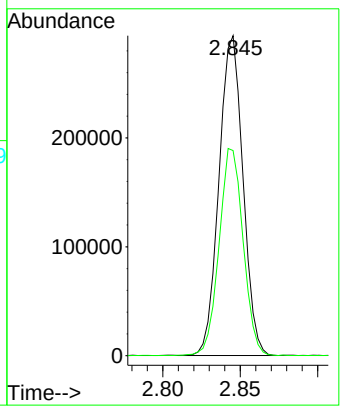




#29
Chloroform
Concen: 9.418 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 83 Resp: 31577

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.2	76.8



Instrument :
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ClientSampleId :
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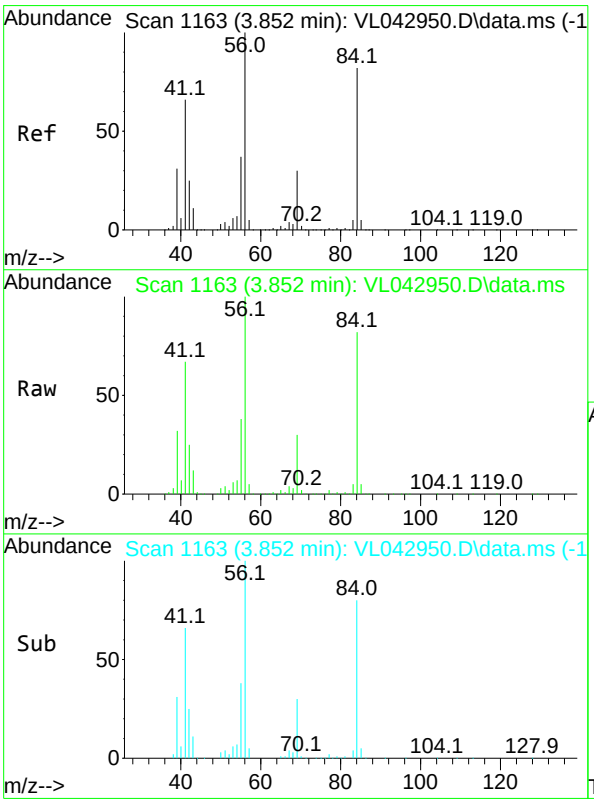
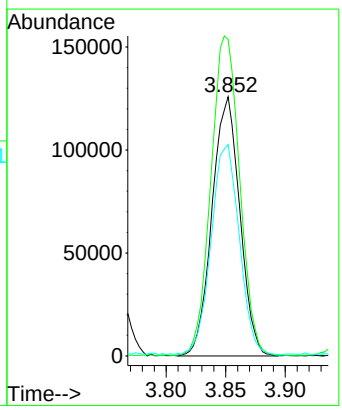
Supervised By :Mahesh Dadoda 09/24/2025

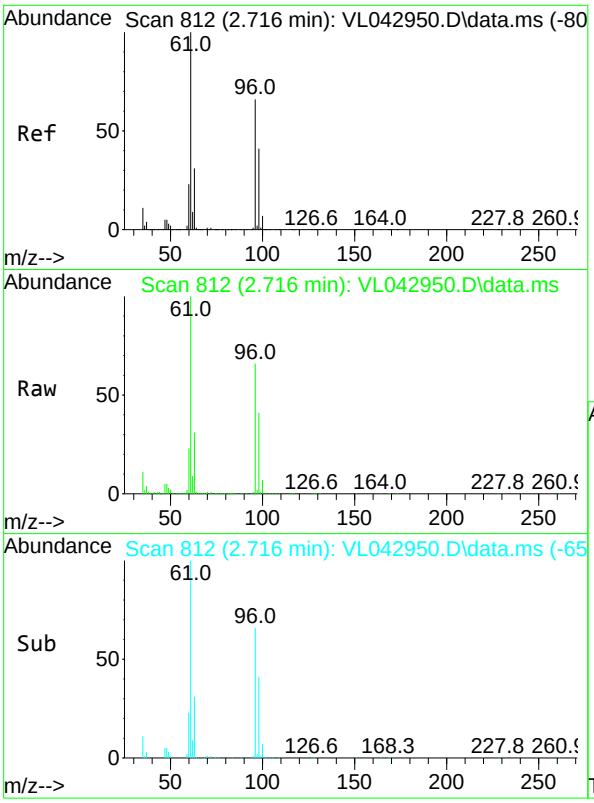


#30
Cyclohexane
Concen: 9.506 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 84 Resp: 203803

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.2	153.4
41	82.0	65.6	98.4

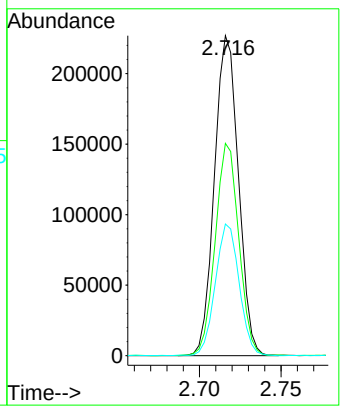




#31
cis-1,2-Dichloroethene
Concen: 9.654 ppbv
RT: 2.716 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 61 Resp: 23190

Ion	Ratio	Lower	Upper
61	100		
96	66.3	53.0	79.6
98	41.1	32.9	49.3



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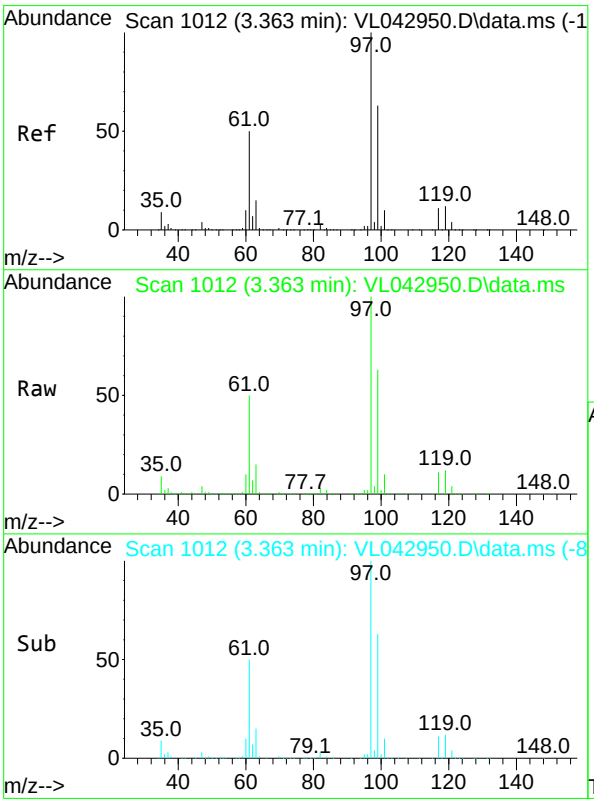
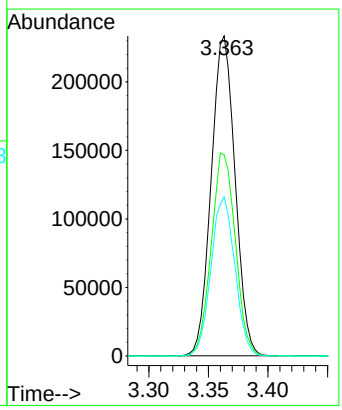
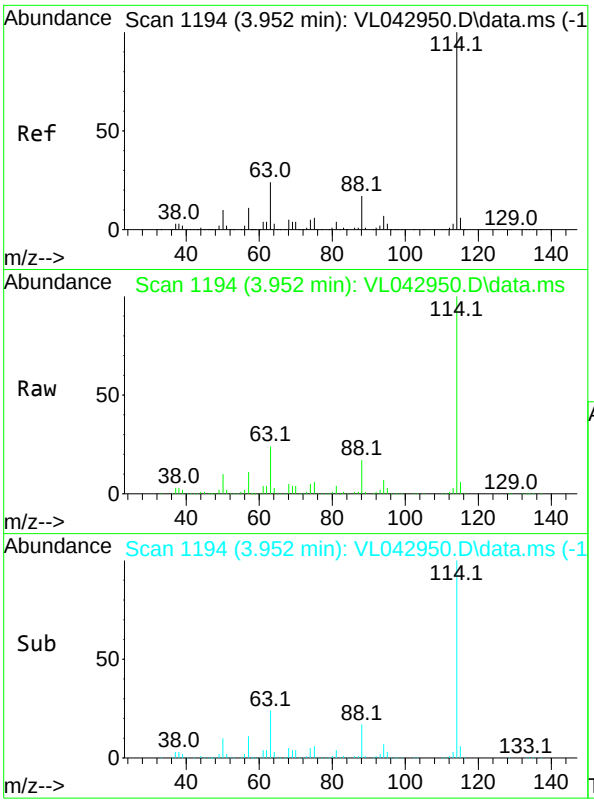


#32
1,1,1-Trichloroethane
Concen: 8.947 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 97 Resp: 325118

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.1	76.7
61	49.7	39.8	59.6

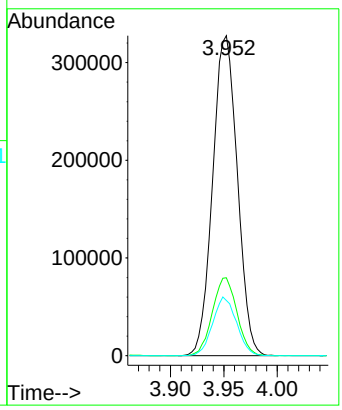




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:114 Resp: 52667

Ion	Ratio	Lower	Upper
114	100		
63	24.3	19.4	29.2
88	17.7	14.2	21.2



Instrument :
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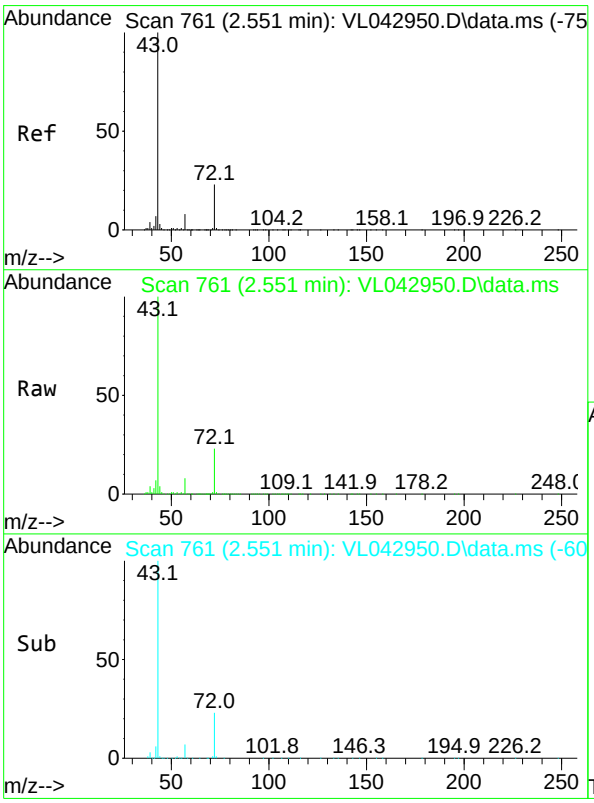
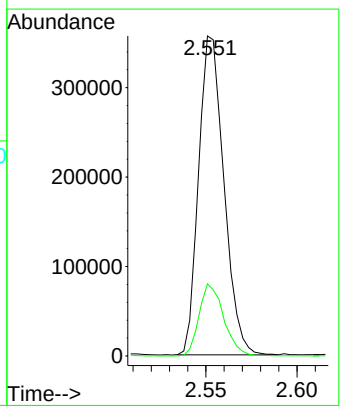
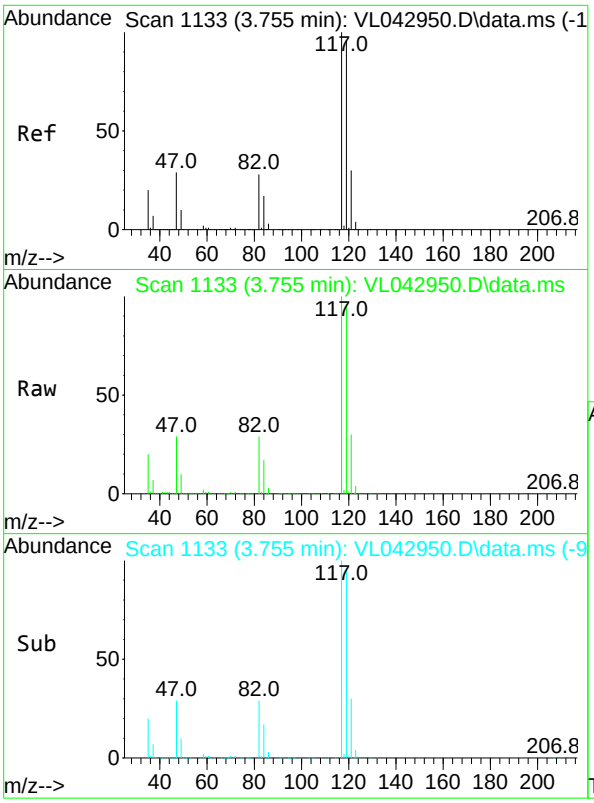


#34
2-Butanone
Concen: 9.343 ppbv
RT: 2.551 min Scan# 761
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 344874

Ion	Ratio	Lower	Upper
43	100		
72	22.1	17.7	26.5

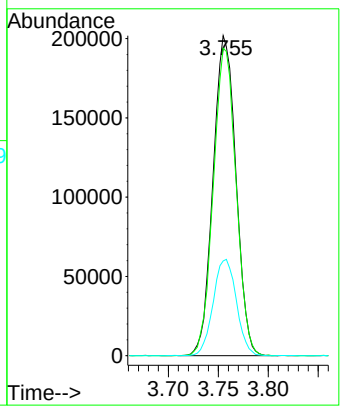




#35
Carbon Tetrachloride
Concen: 9.480 ppbv
RT: 3.755 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:117 Resp: 32126

Ion	Ratio	Lower	Upper
117	100		
119	96.1	76.9	115.3
121	29.6	23.7	35.5



Instrument :
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ClientSampleId :
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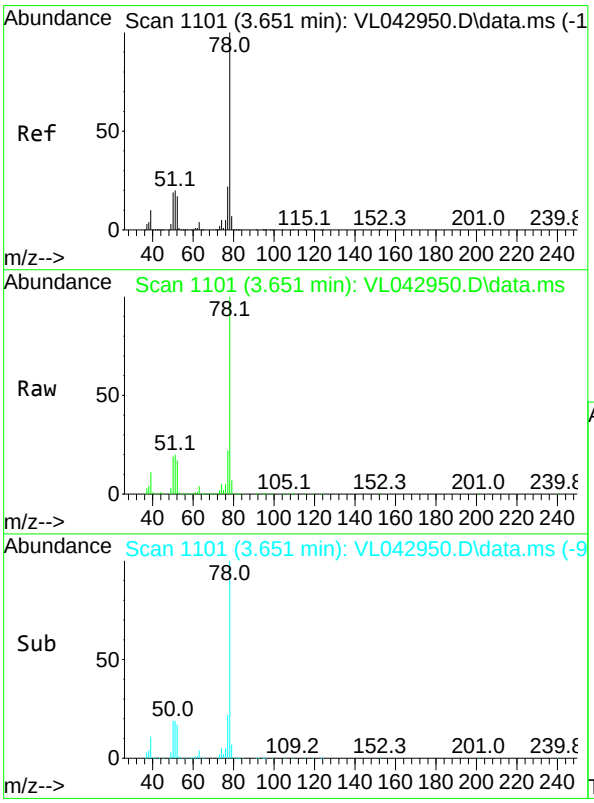
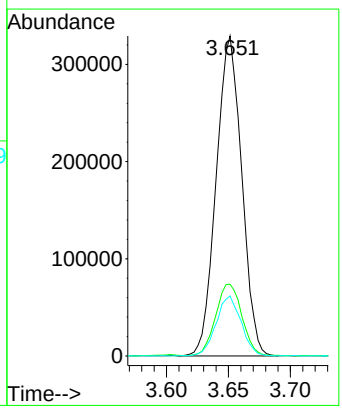
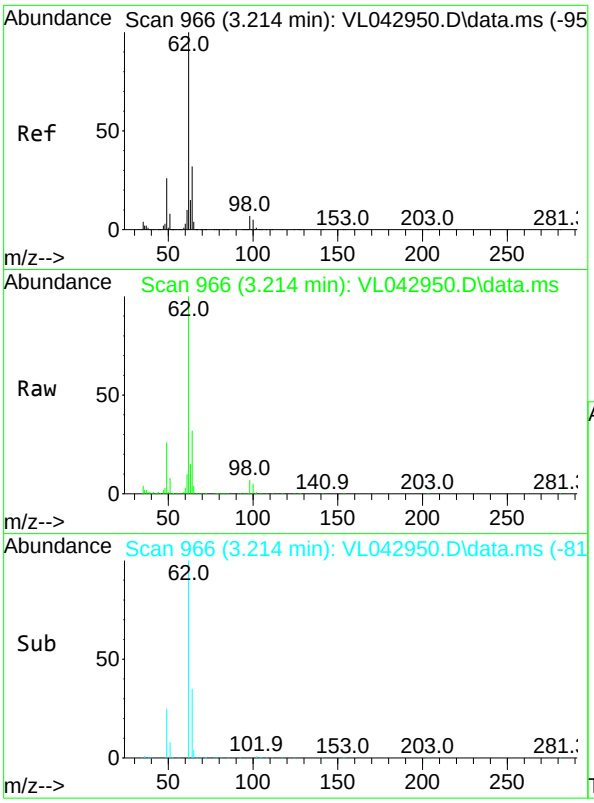


#36
Benzene
Concen: 9.561 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 78 Resp: 472855

Ion	Ratio	Lower	Upper
78	100		
77	22.2	17.8	26.6
50	18.7	15.0	22.4

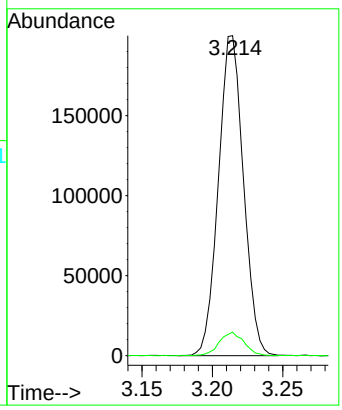




#37
1,2-Dichloroethane
Concen: 9.525 ppbv
RT: 3.214 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 62 Resp: 24775

Ion	Ratio	Lower	Upper
62	100		
98	7.4	5.9	8.9



Instrument :
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ClientSampleId :
VSTDICCC010

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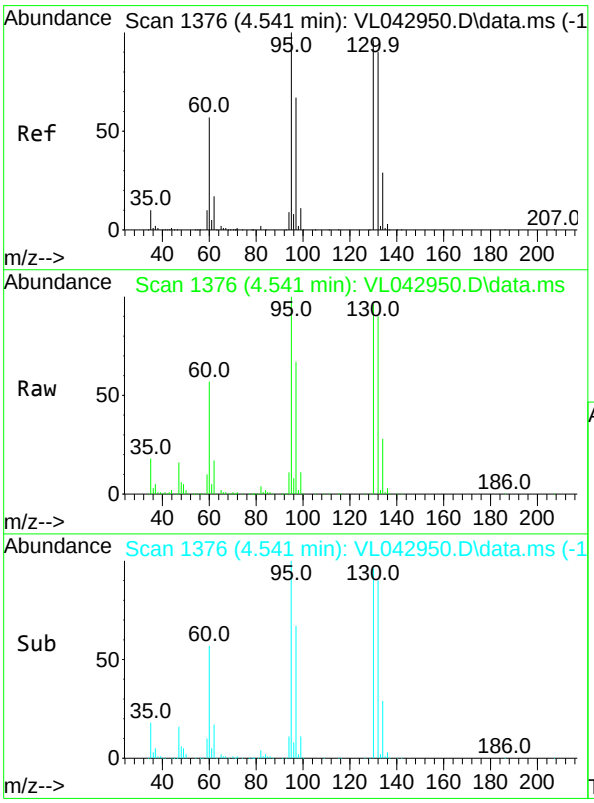
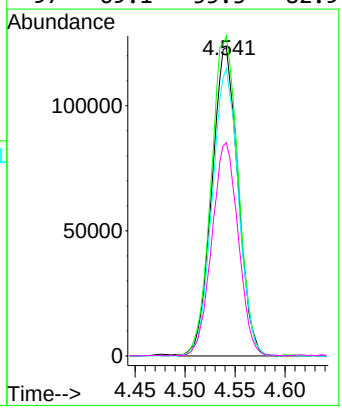
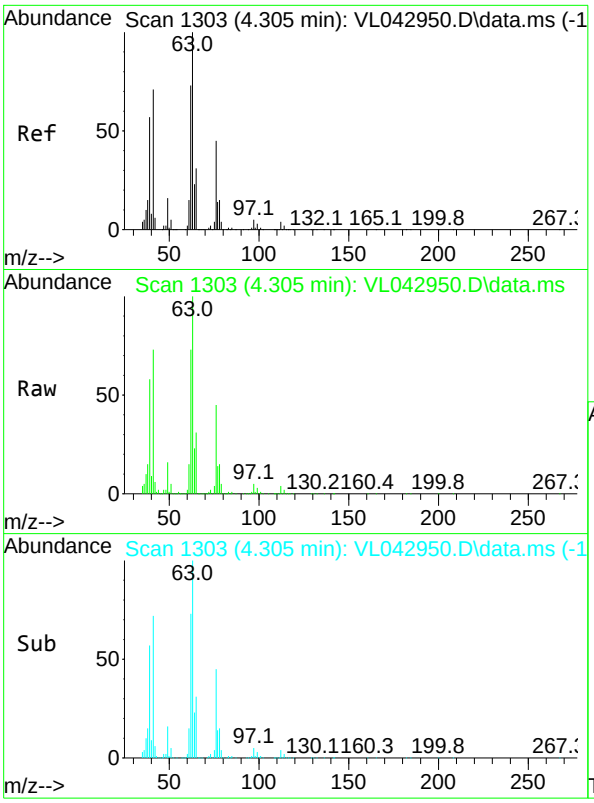


#38
Trichloroethene
Concen: 9.134 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:130 Resp: 224516

Ion	Ratio	Lower	Upper
130	100		
95	103.7	83.0	124.4
132	93.3	74.6	112.0
97	69.1	55.3	82.9

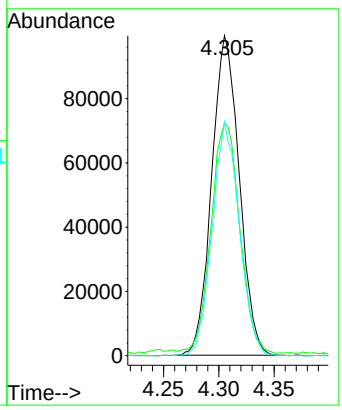




#39
1,2-Dichloropropane
Concen: 9.523 ppbv
RT: 4.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 63 Resp: 17205

Ion	Ratio	Lower	Upper
63	100		
41	71.9	57.5	86.3
62	73.1	58.5	87.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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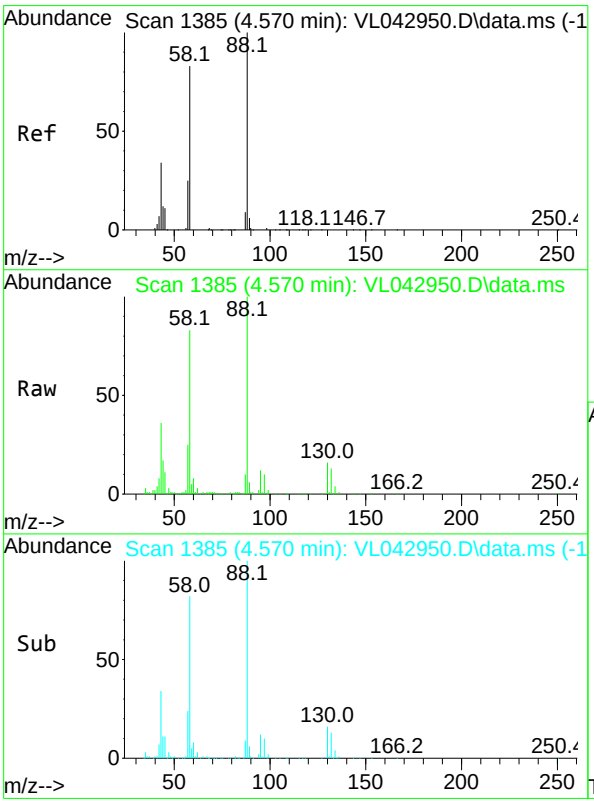
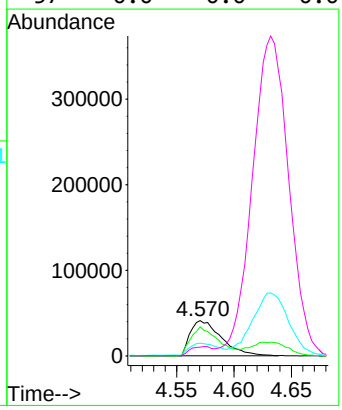
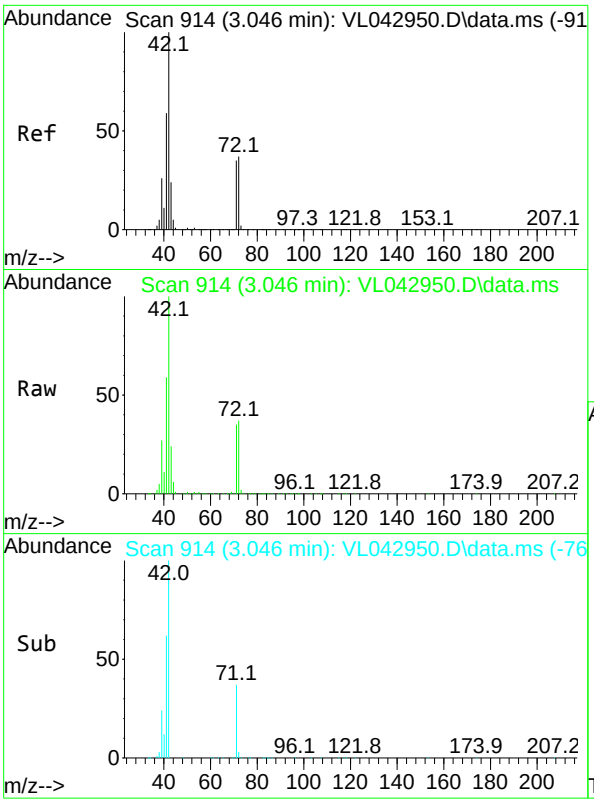


#40
1,4-Dioxane
Concen: 9.283 ppbv
RT: 4.570 min Scan# 1385
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 88 Resp: 77889

Ion	Ratio	Lower	Upper
88	100		
58	74.6	59.7	89.5
43	36.1	28.9	43.3
57	0.0	0.0	0.0





#41
Tetrahydrofuran
Concen: 9.649 ppbv
RT: 3.046 min Scan# 91
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 42 Resp: 20472

Ion	Ratio	Lower	Upper
42	100		
72	37.5	30.0	45.0
71	36.0	28.8	43.2

Instrument :
MSVOA_L
ClientSampleId :
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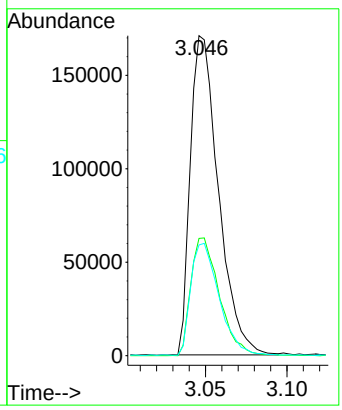
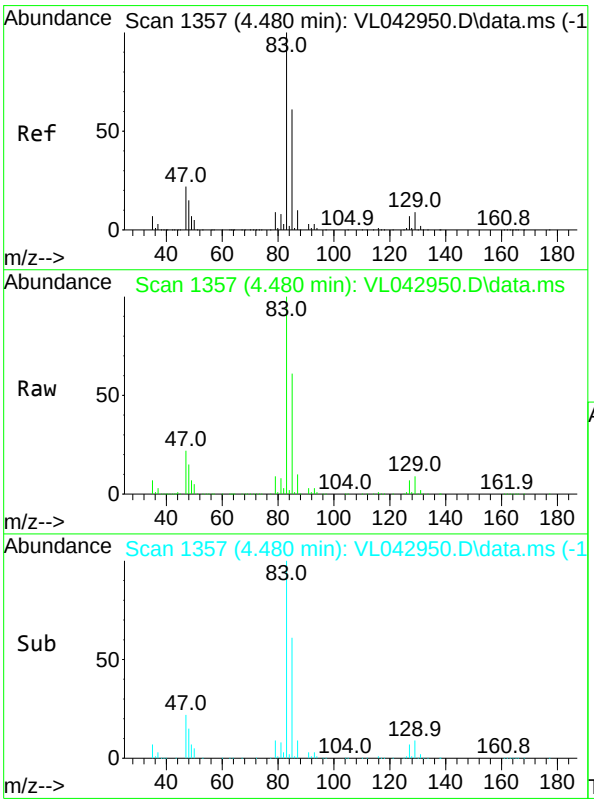
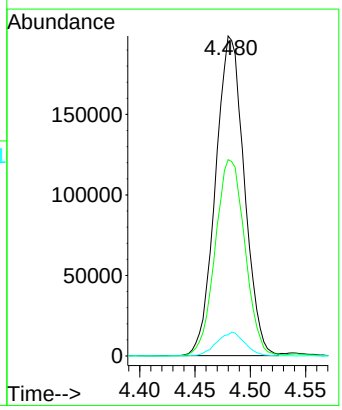


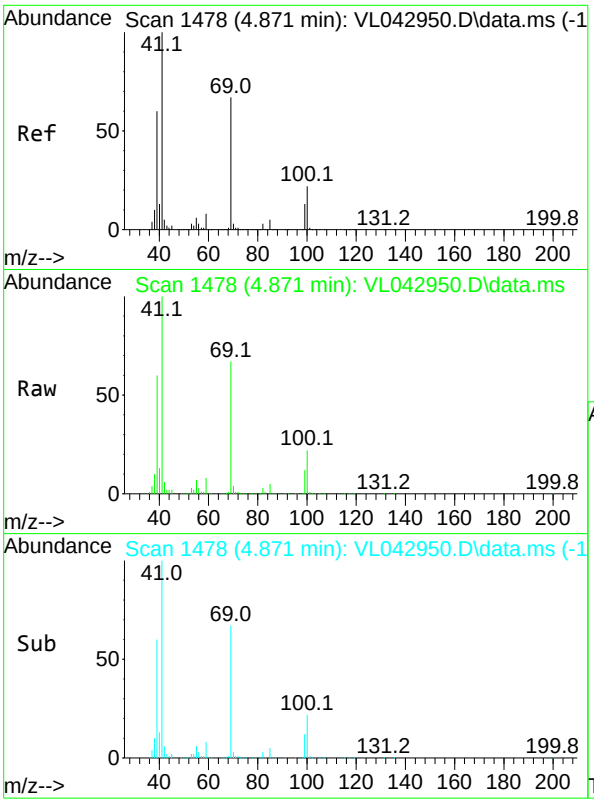


#42
Bromodichloromethane
Concen: 9.903 ppbv
RT: 4.480 min Scan# 1357
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 83 Resp: 358858

Ion	Ratio	Lower	Upper
83	100		
85	61.3	49.0	73.6
127	6.6	5.3	7.9

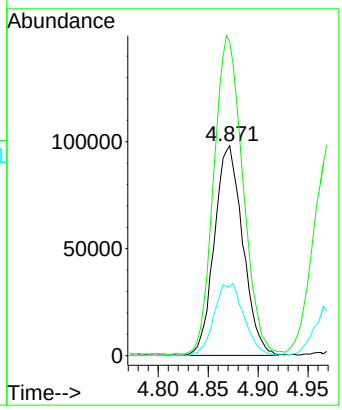




#43
Methyl Methacrylate
Concen: 9.646 ppbv
RT: 4.871 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 69 Resp: 19367

Ion	Ratio	Lower	Upper
69	100		
41	155.6	124.5	186.7
100	36.3	29.0	43.6



Instrument :
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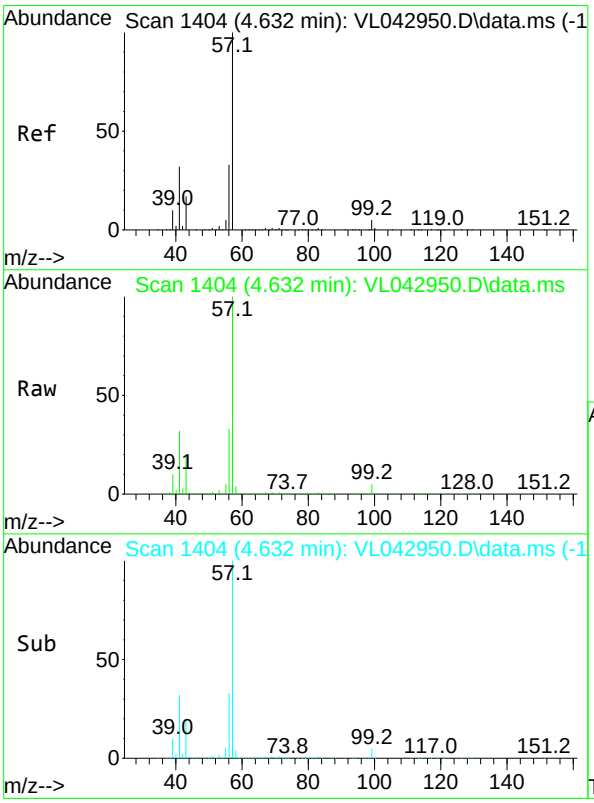
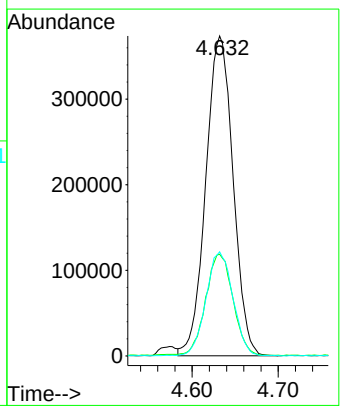
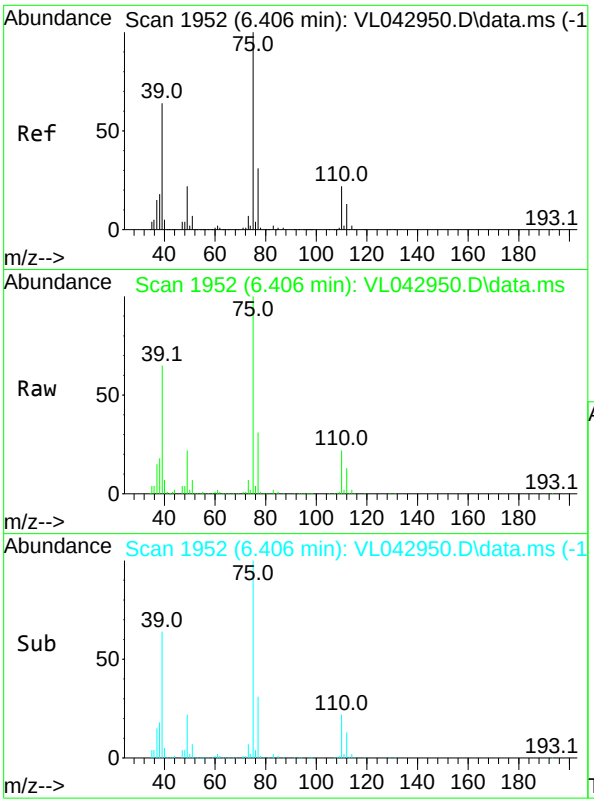


#44
2,2,4-Trimethylpentane
Concen: 9.631 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 57 Resp: 823031

Ion	Ratio	Lower	Upper
57	100		
41	31.9	25.5	38.3
56	32.3	25.8	38.8

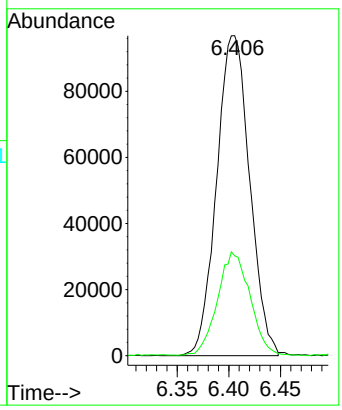




#45
t-1,3-Dichloropropene
Concen: 9.969 ppbv
RT: 6.406 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 75 Resp: 21523

Ion	Ratio	Lower	Upper
75	100		
77	31.2	25.0	37.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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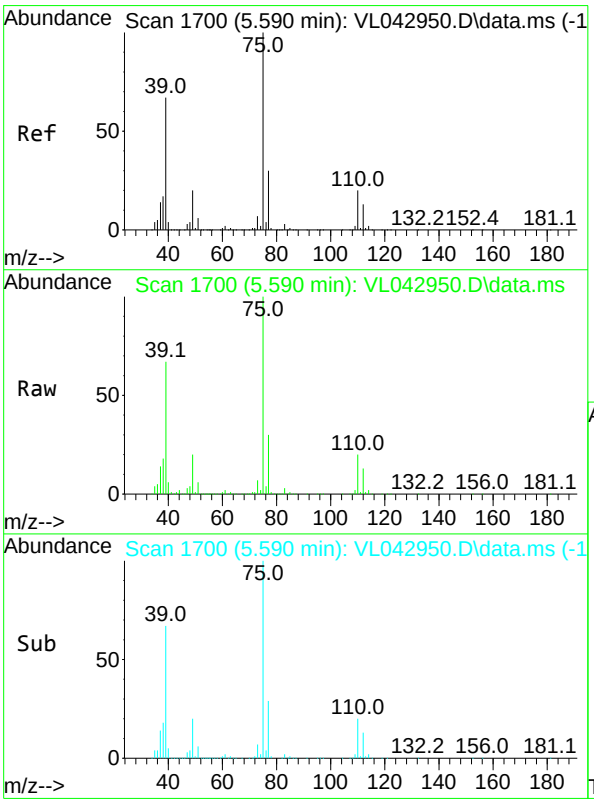
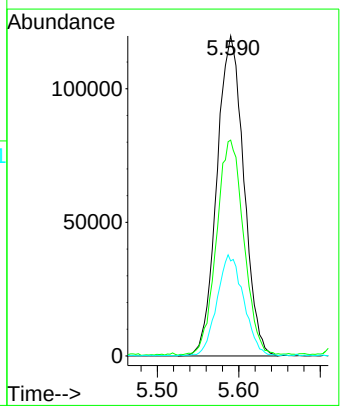
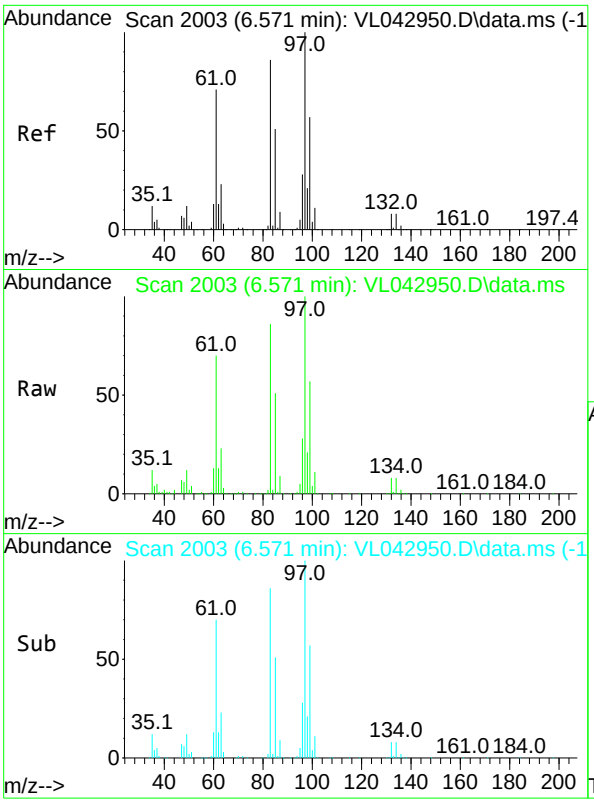


#46
cis-1,3-Dichloropropene
Concen: 10.006 ppbv
RT: 5.590 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 75 Resp: 275210

Ion	Ratio	Lower	Upper
75	100		
39	67.2	53.8	80.6
77	29.5	23.6	35.4

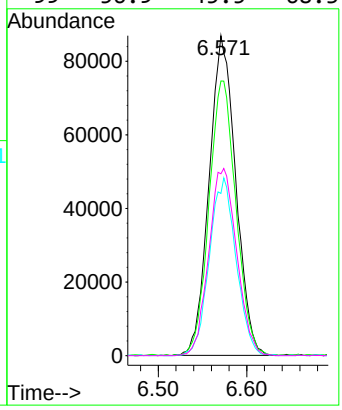




#47
1,1,2-Trichloroethane
Concen: 9.498 ppbv
RT: 6.571 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 97 Resp: 18132

Ion	Ratio	Lower	Upper
97	100		
83	85.9	68.7	103.1
85	50.7	40.6	60.8
99	56.9	45.5	68.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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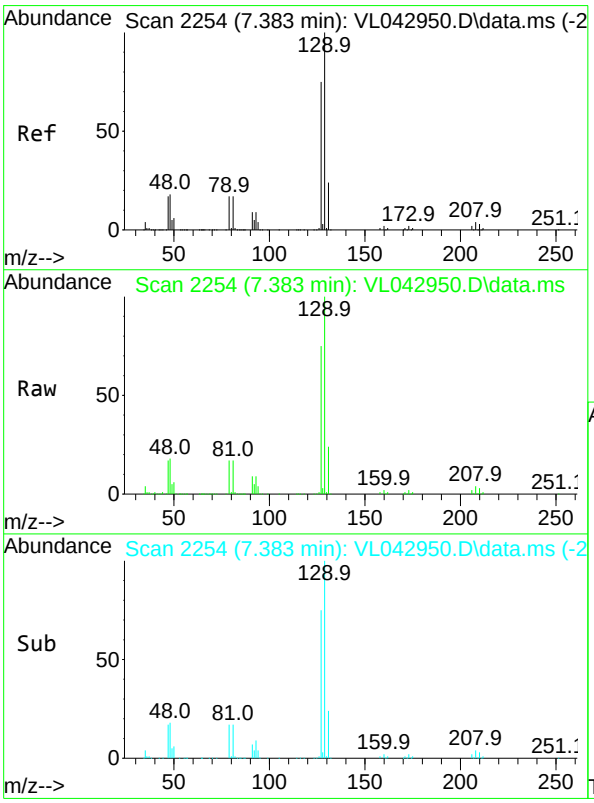
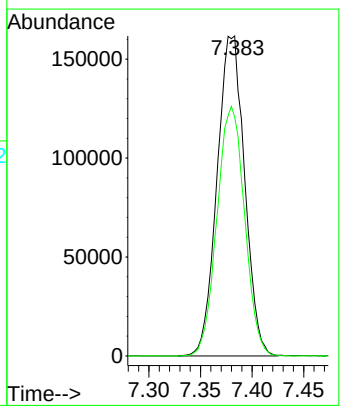
Supervised By :Mahesh Dadoda 09/24/2025

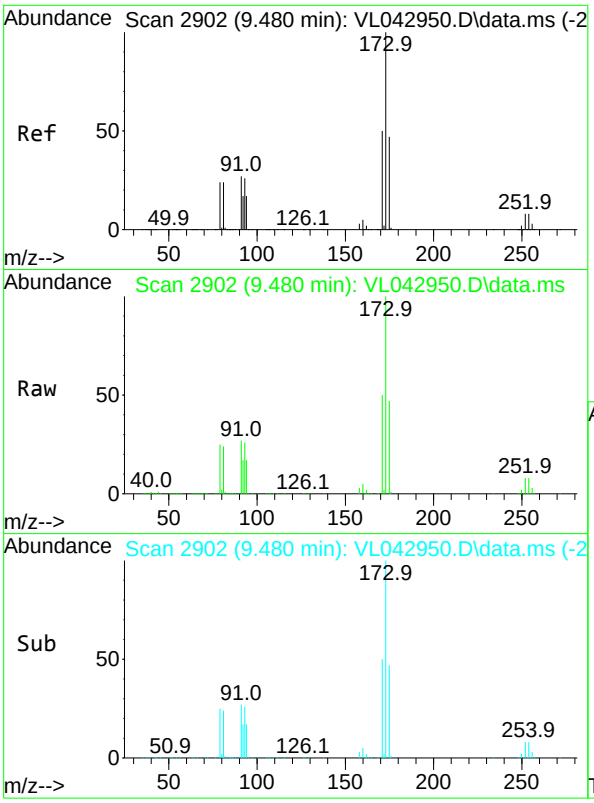


#48
Dibromochloromethane
Concen: 9.845 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:129 Resp: 300497

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2

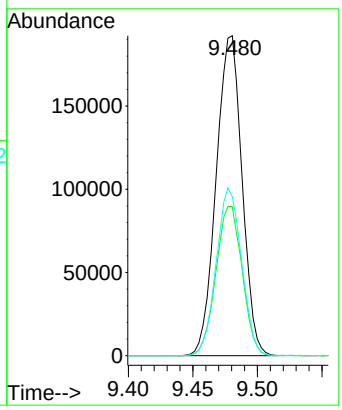




#49
Bromoform
Concen: 10.087 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:173 Resp: 26781

Ion	Ratio	Lower	Upper
173	100		
175	47.4	37.9	56.9
171	51.4	41.1	61.7



Instrument :
MSVOA_L
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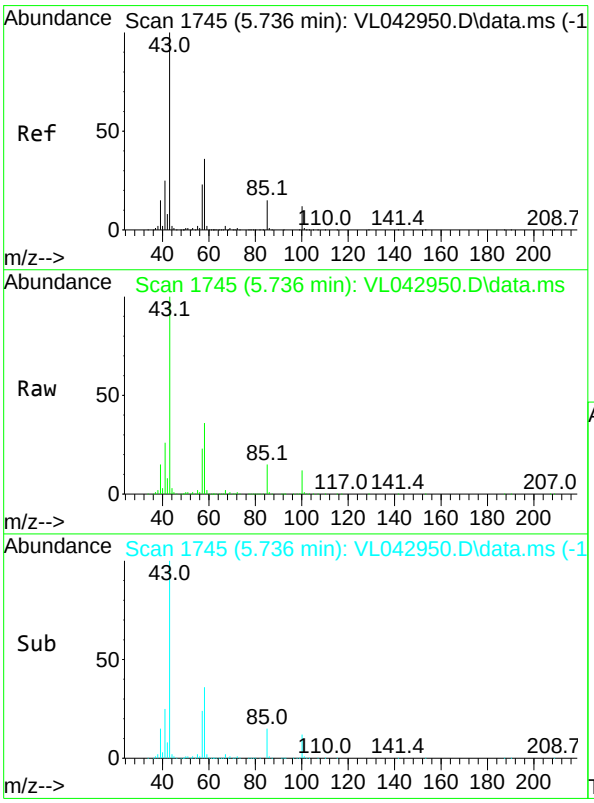
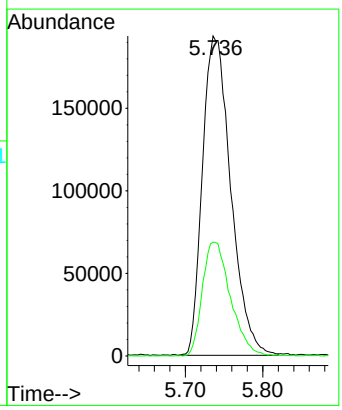
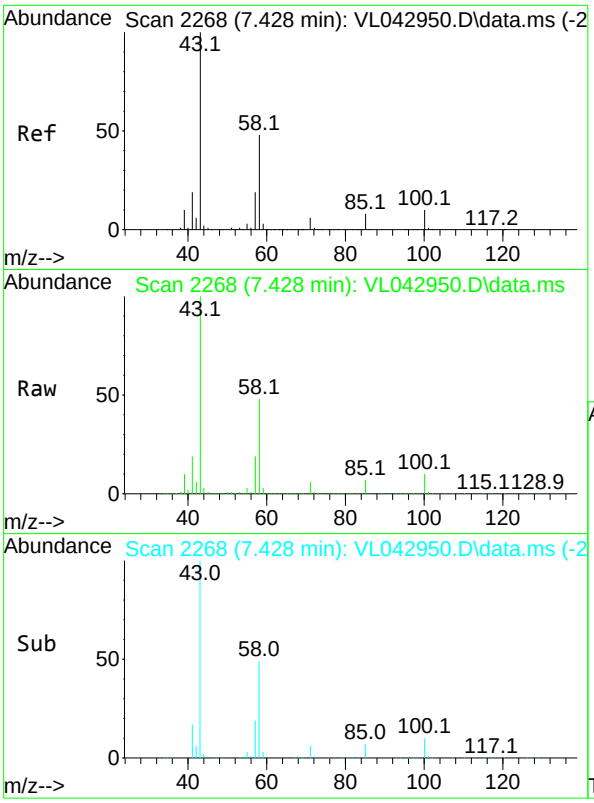


#50
4-Methyl-2-Pentanone
Concen: 9.920 ppbv
RT: 5.736 min Scan# 1745
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 492068

Ion	Ratio	Lower	Upper
43	100		
58	35.5	28.4	42.6

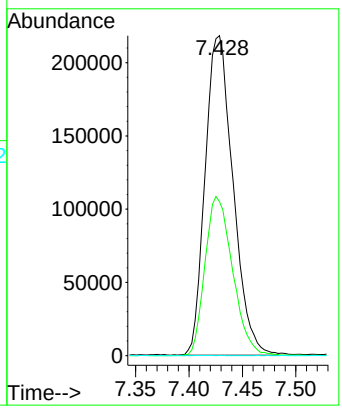




#51
2-Hexanone
Concen: 10.036 ppbv
RT: 7.428 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 39574

Ion	Ratio	Lower	Upper
43	100		
58	49.6	39.7	59.5
98	0.1	0.1	0.1



Instrument :
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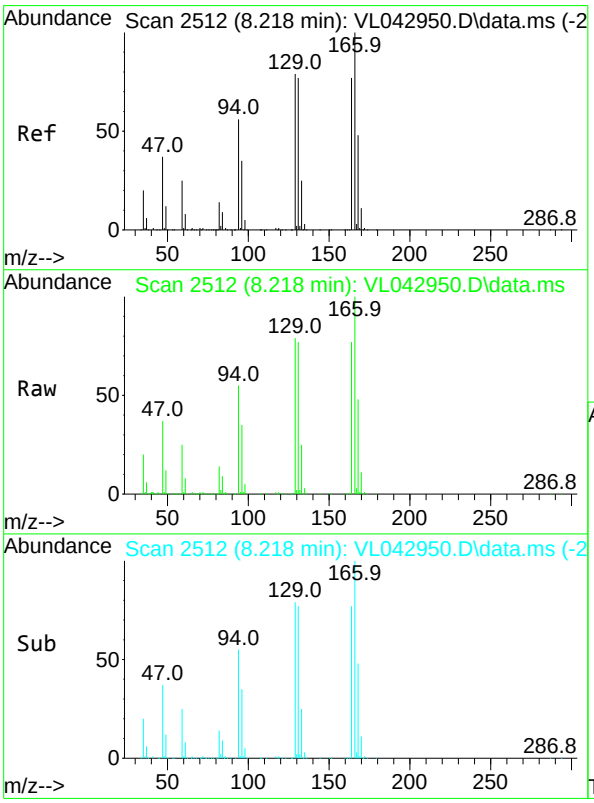
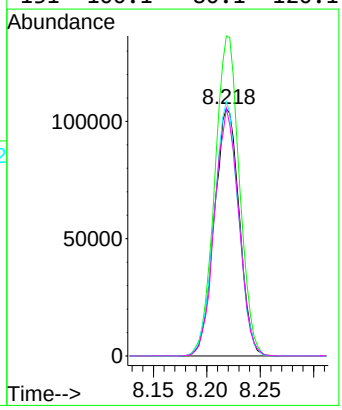
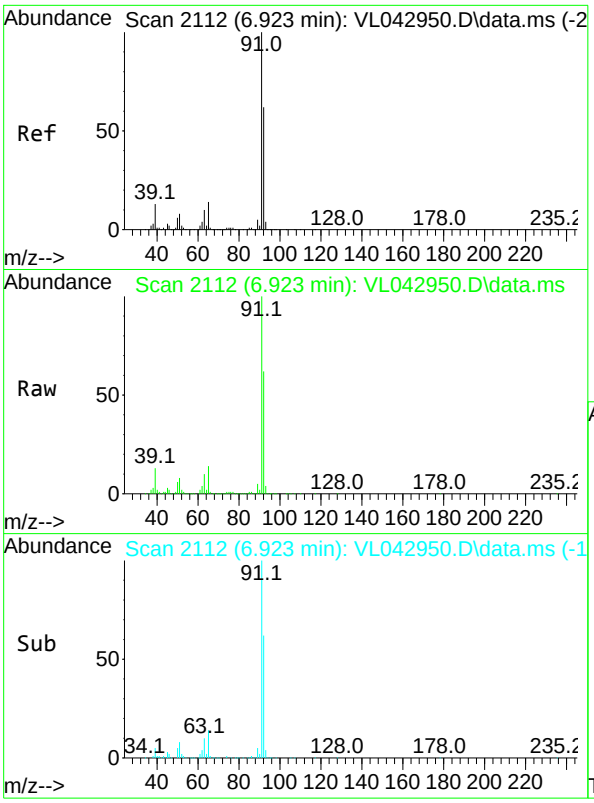


#52
Tetrachloroethene
Concen: 8.951 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:164 Resp: 171294

Ion	Ratio	Lower	Upper
164	100		
166	129.4	103.5	155.3
129	102.8	82.2	123.4
131	100.1	80.1	120.1

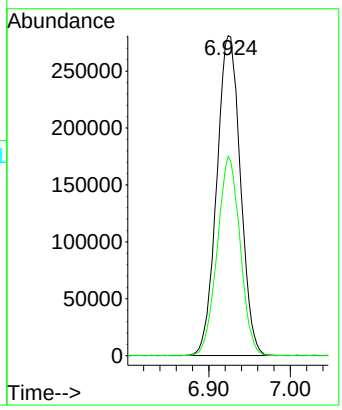




#53
Toluene
Concen: 9.699 ppbv
RT: 6.923 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 56777

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.2



Instrument :
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ClientSampleId :
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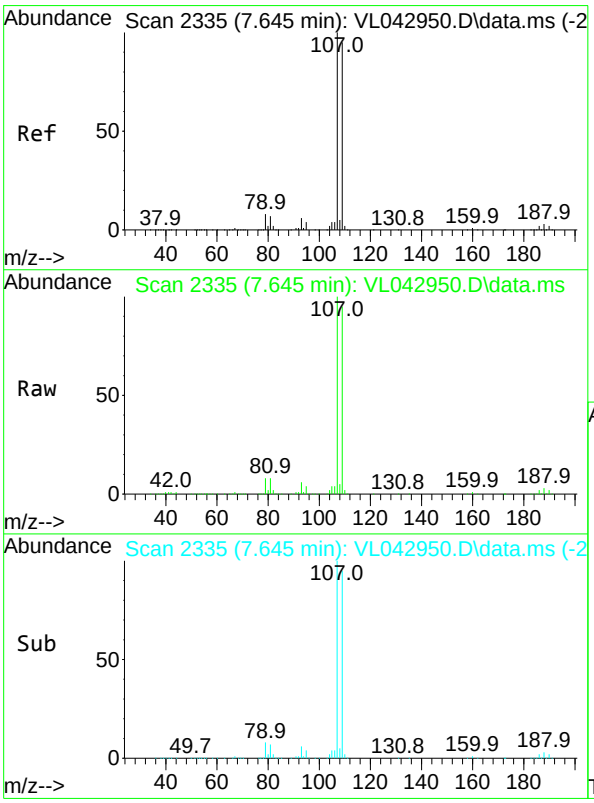
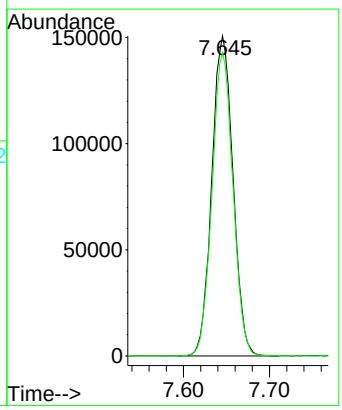
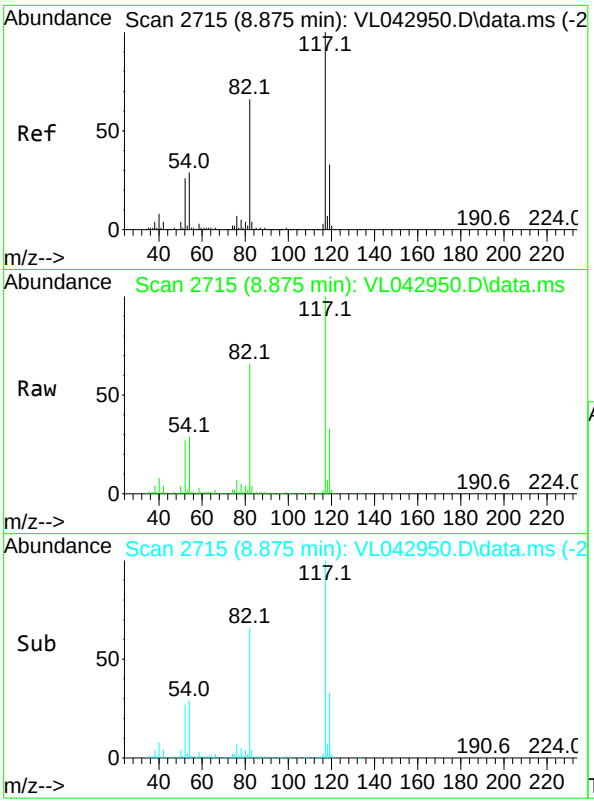


#54
1,2-Dibromoethane
Concen: 9.605 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:107 Resp: 257904

Ion	Ratio	Lower	Upper
107	100		
109	94.8	75.8	113.8





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:117 Resp: 48672

Ion	Ratio	Lower	Upper
117	100		
82	66.0	52.8	79.2
119	33.1	26.5	39.7

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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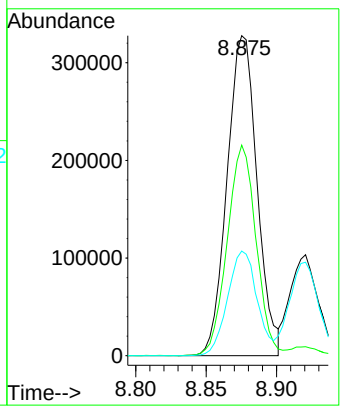
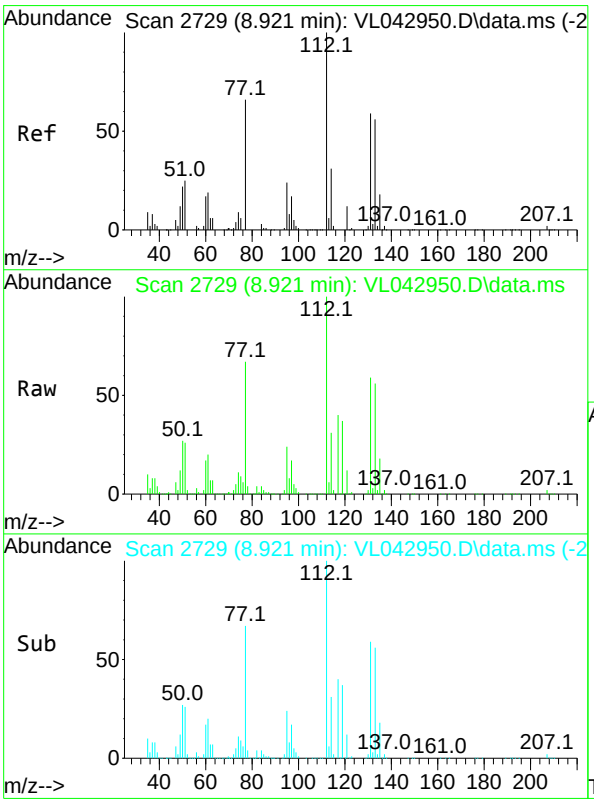
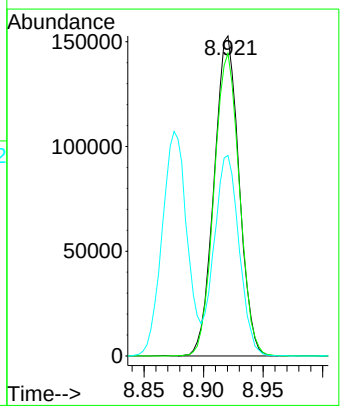


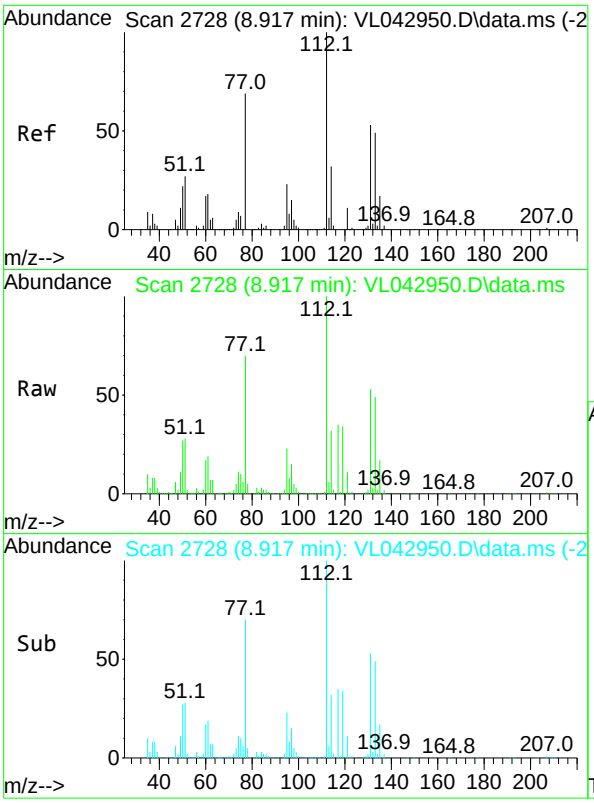


#56
1,1,1,2-Tetrachloroethane
Concen: 9.575 ppbv
RT: 8.921 min Scan# 2729
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:131 Resp: 223066

Ion	Ratio	Lower	Upper
131	100		
133	95.7	76.6	114.8
119	62.4	49.9	74.9

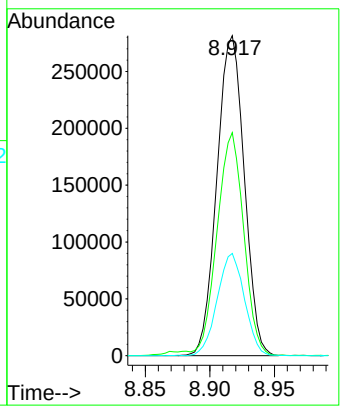




#57
Chlorobenzene
Concen: 9.345 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:112 Resp: 41523

Ion	Ratio	Lower	Upper
112	100		
77	69.6	55.7	83.5
114	31.8	28.6	35.0



Instrument :
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ClientSampleId :
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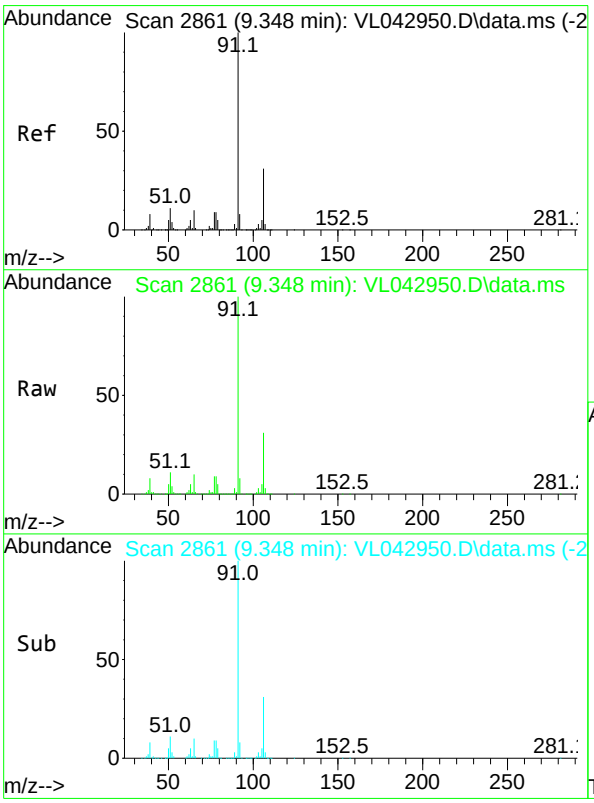
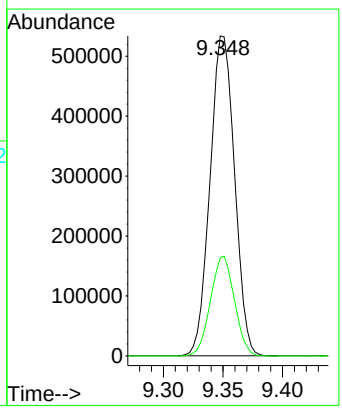
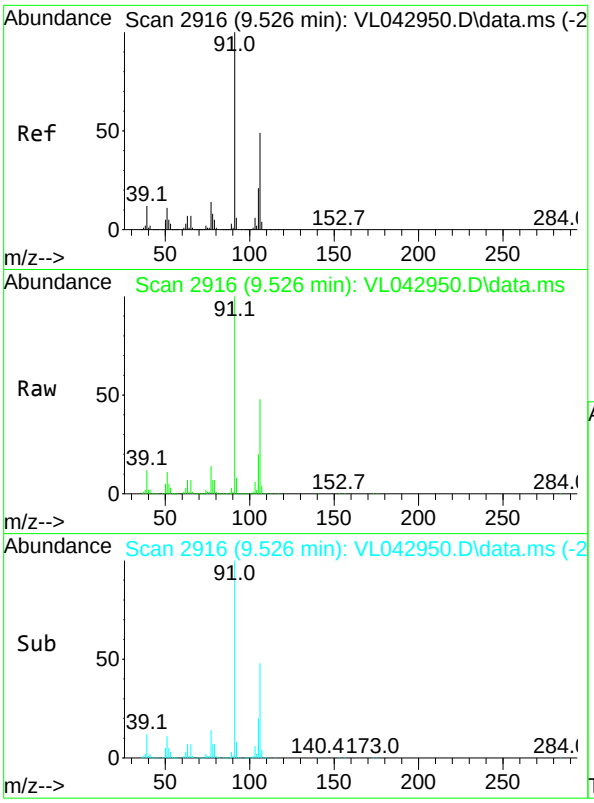


#58
Ethyl Benzene
Concen: 9.562 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 764249

Ion	Ratio	Lower	Upper
91	100		
106	30.8	24.6	37.0

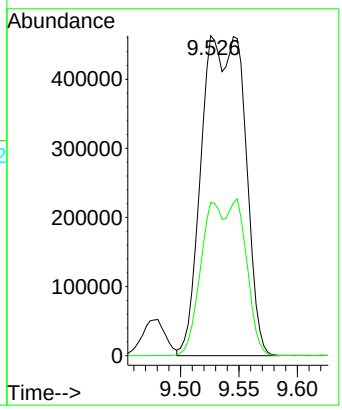




#59
m/p-Xylene
Concen: 18.913 ppbv m
RT: 9.526 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 119256

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0



Instrument :
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ClientSampleId :
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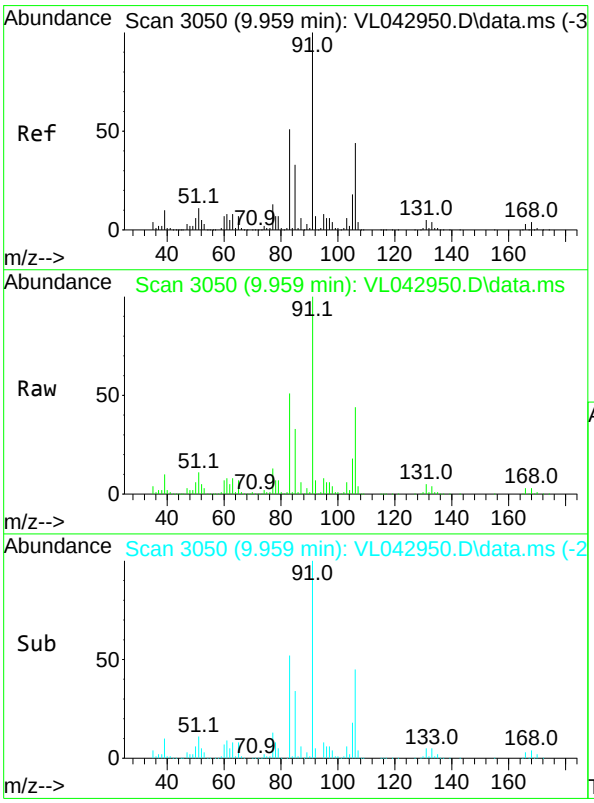
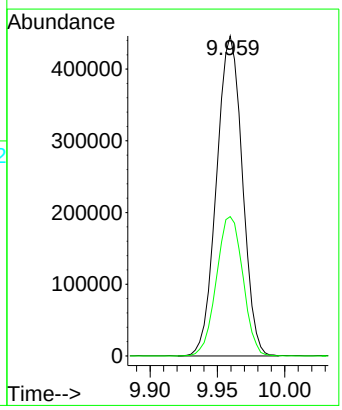
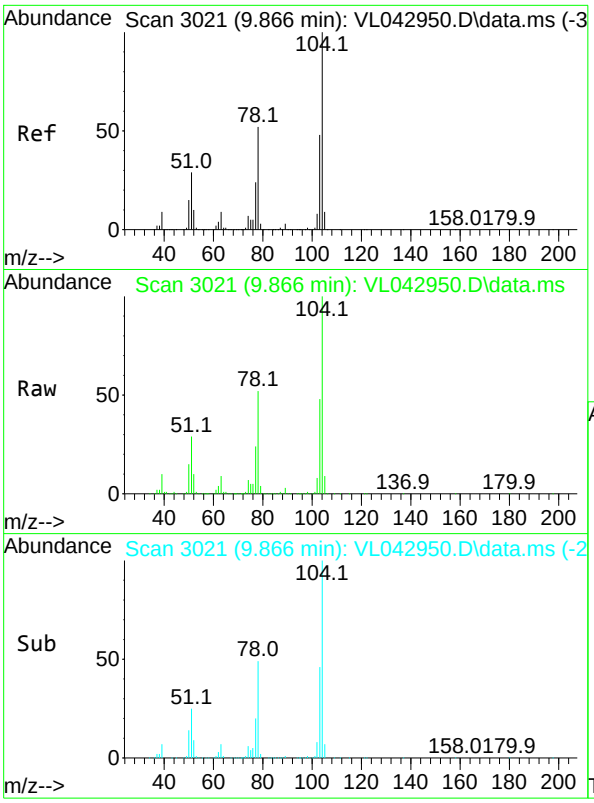


#60
o-Xylene
Concen: 9.437 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 594329

Ion	Ratio	Lower	Upper
91	100		
106	44.7	22.4	67.0





#61
Styrene
Concen: 9.840 ppbv
RT: 9.866 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:104 Resp: 29311

Ion	Ratio	Lower	Upper
104	100		
78	49.9	39.9	59.9
103	46.1	36.9	55.3

Instrument :
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ClientSampleId :
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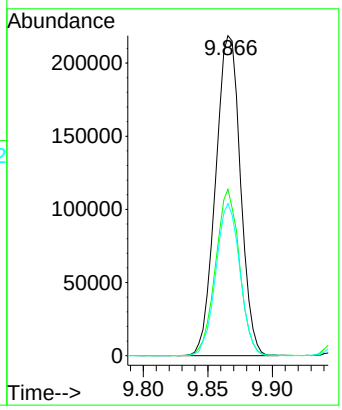
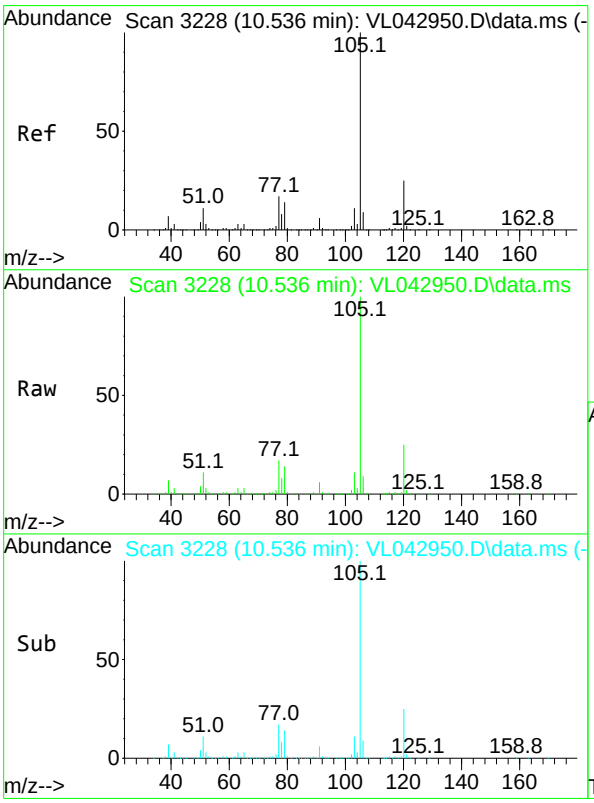
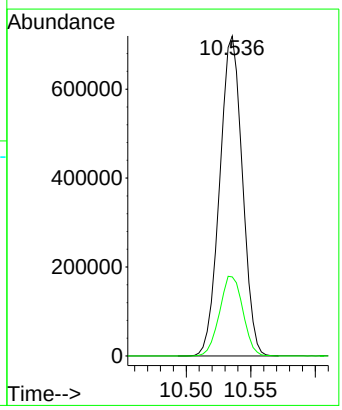


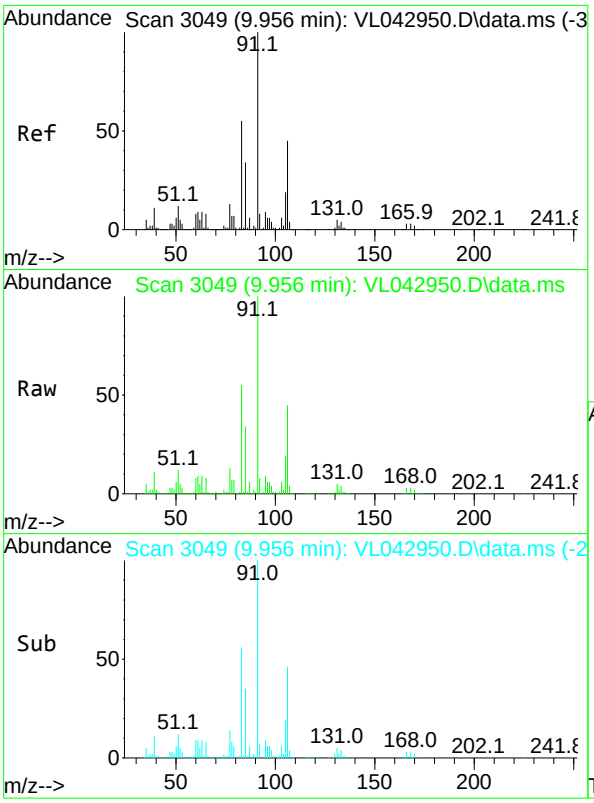


#62
Isopropylbenzene
Concen: 9.347 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 877401

Ion	Ratio	Lower	Upper
105	100		
120	25.7	20.6	30.8





#63
1,1,2,2-Tetrachloroethane
Concen: 8.963 ppbv
RT: 9.956 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 83 Resp: 29667

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.4	32.2	96.6

Instrument :
MSVOA_L
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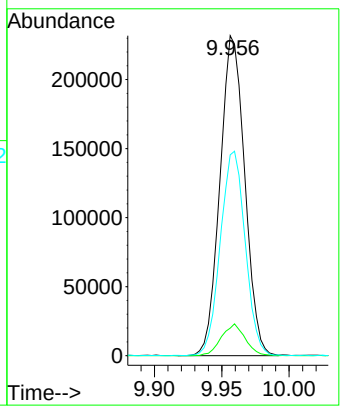
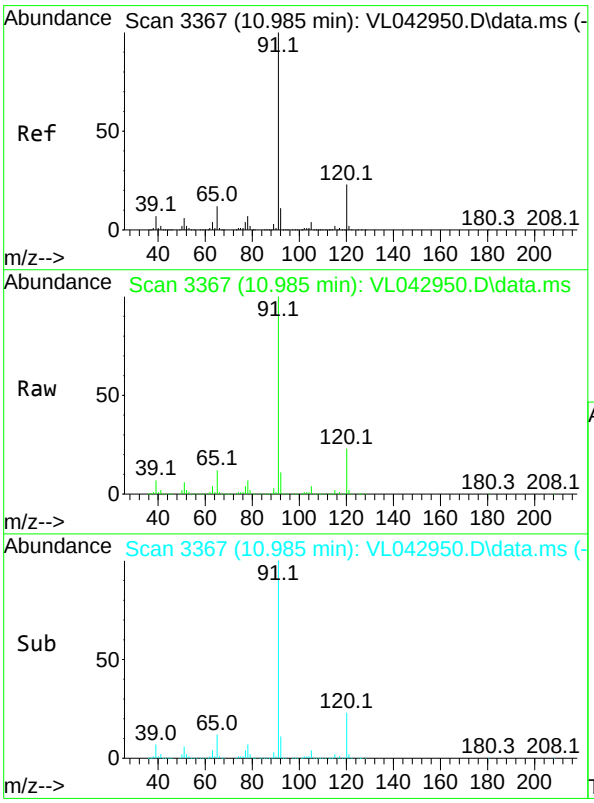
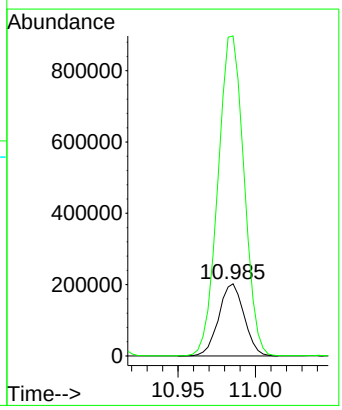


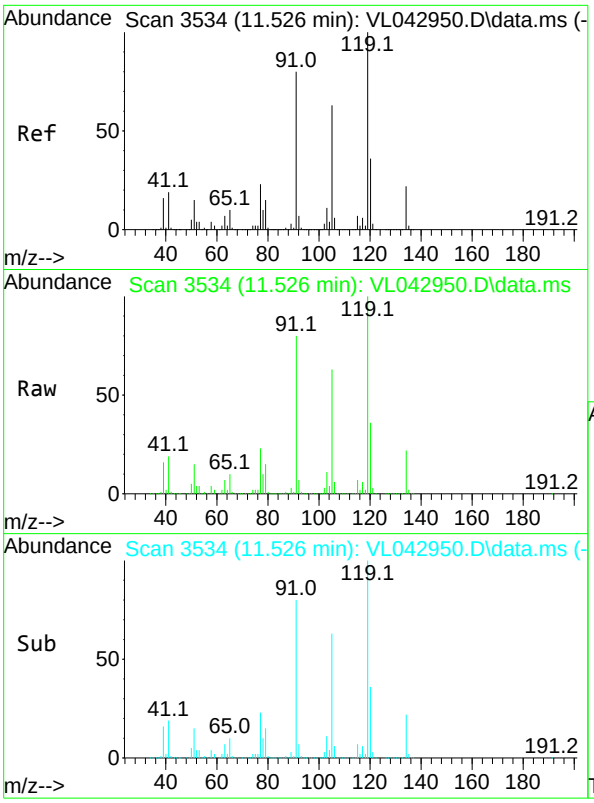


#64
n-propylbenzene
Concen: 9.394 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:120 Resp: 230432

Ion	Ratio	Lower	Upper
120	100		
91	456.1	364.9	547.3

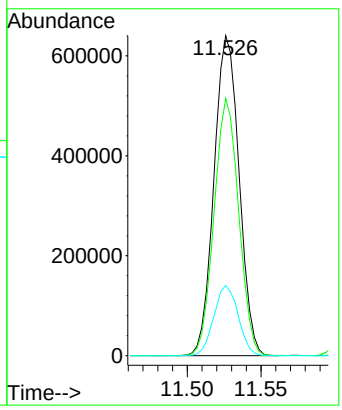




#65
tert-Butylbenzene
Concen: 9.078 ppbv
RT: 11.526 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:119 Resp: 75795

Ion	Ratio	Lower	Upper
119	100		
91	78.9	63.1	94.7
134	21.3	17.0	25.6



Instrument :
MSVOA_L
ClientSampleId :
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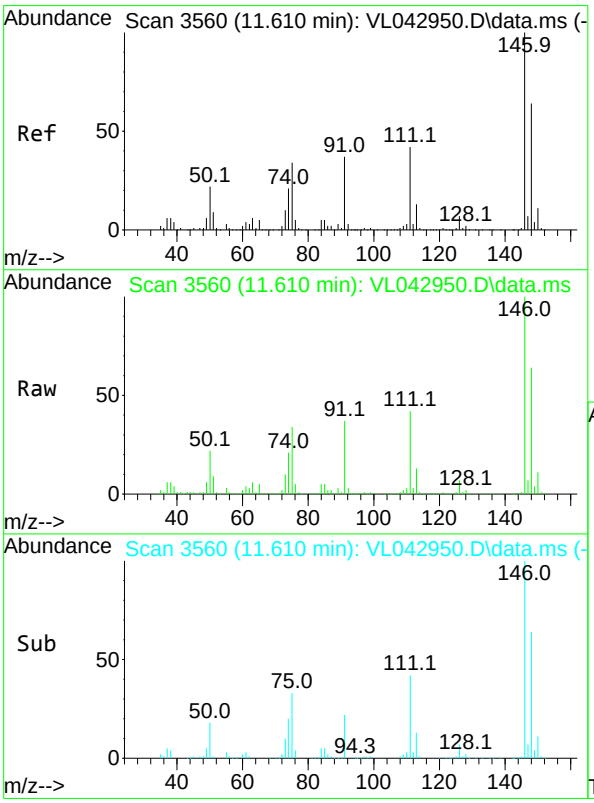
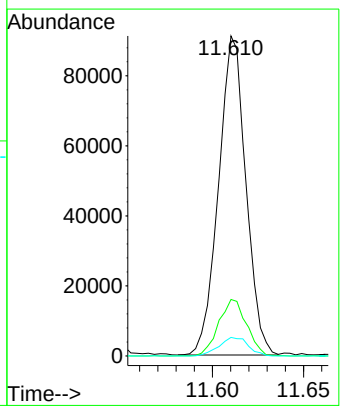
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

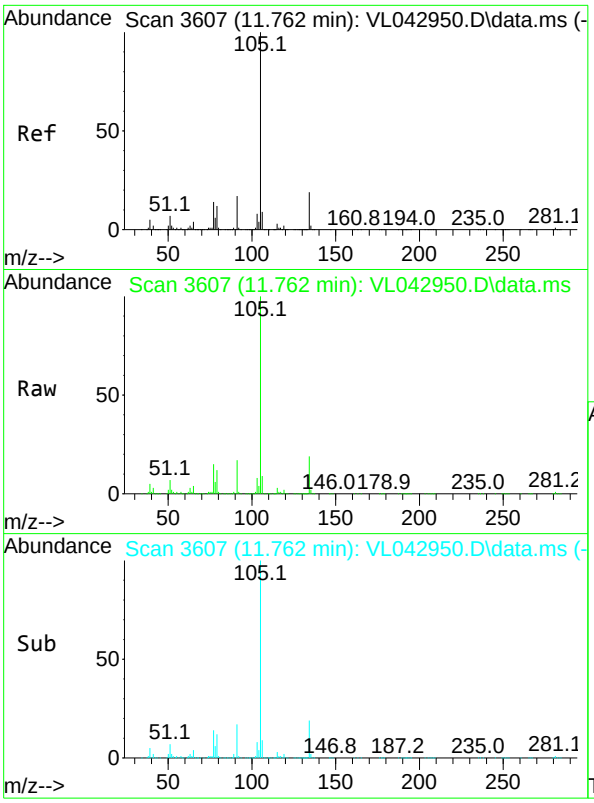


#66
Benzyl Chloride
Concen: 10.842 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 94982

Ion	Ratio	Lower	Upper
91	100		
126	18.2	14.6	21.8
128	6.2	5.0	7.4





#67
sec-Butylbenzene
Concen: 9.166 ppbv
RT: 11.762 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 106640

Ion	Ratio	Lower	Upper
105	100		
134	19.6	15.7	23.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 09/23/2025
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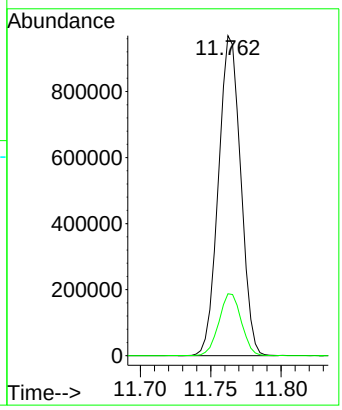
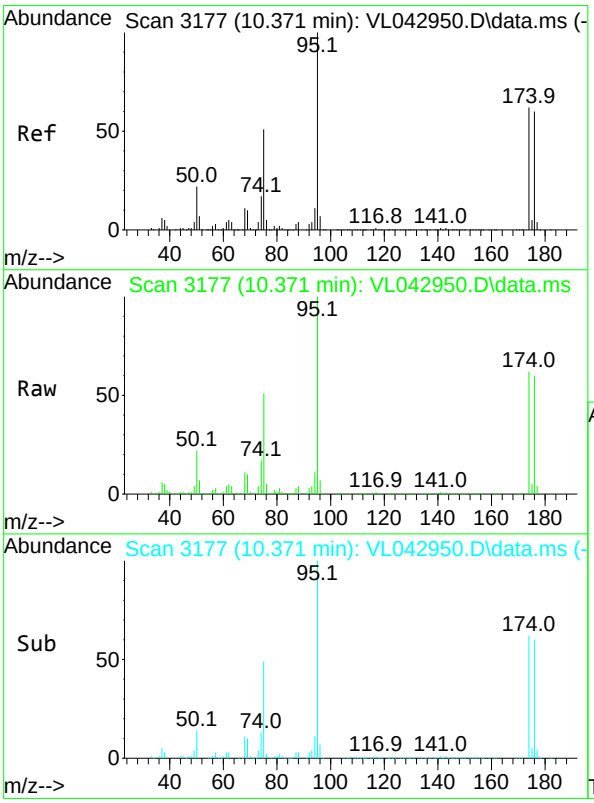
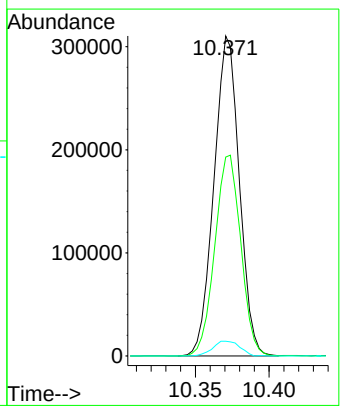


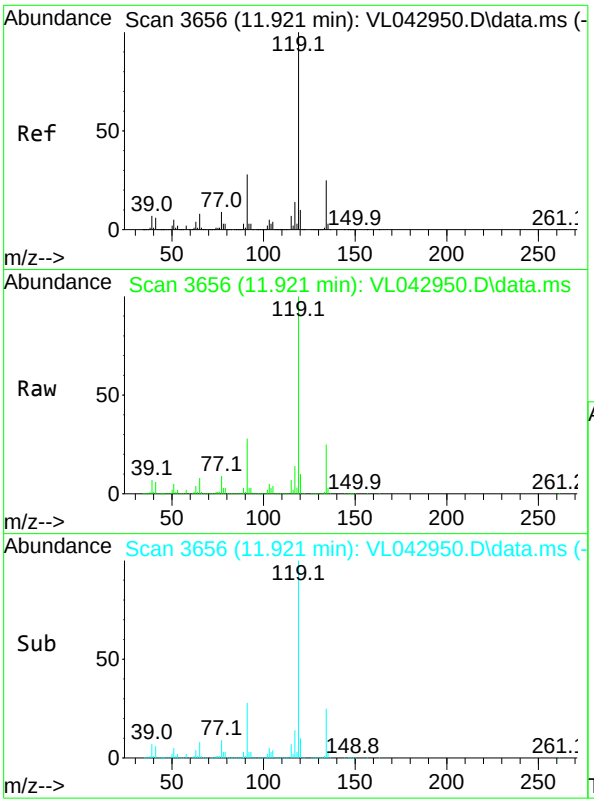


#68
1-Bromo-4-Fluorobenzene
Concen: 10.217 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 95 Resp: 371195

Ion	Ratio	Lower	Upper
95	100		
174	64.3	51.4	77.2
175	5.0	4.0	6.0

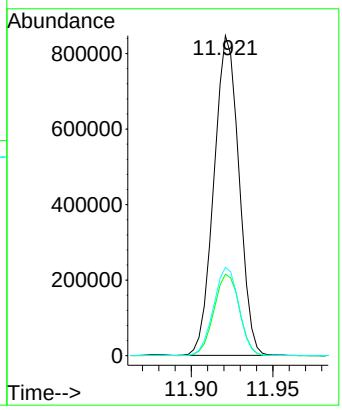




#69
p-Isopropyltoluene
Concen: 9.192 ppbv
RT: 11.921 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:119 Resp: 90337

Ion	Ratio	Lower	Upper
119	100		
134	26.2	21.0	31.4
91	27.9	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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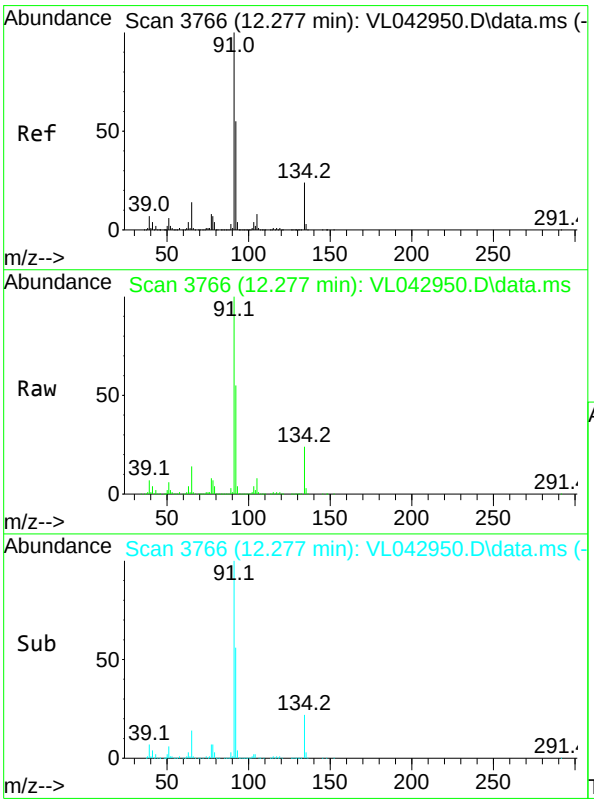
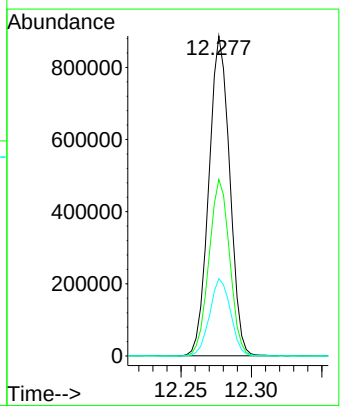
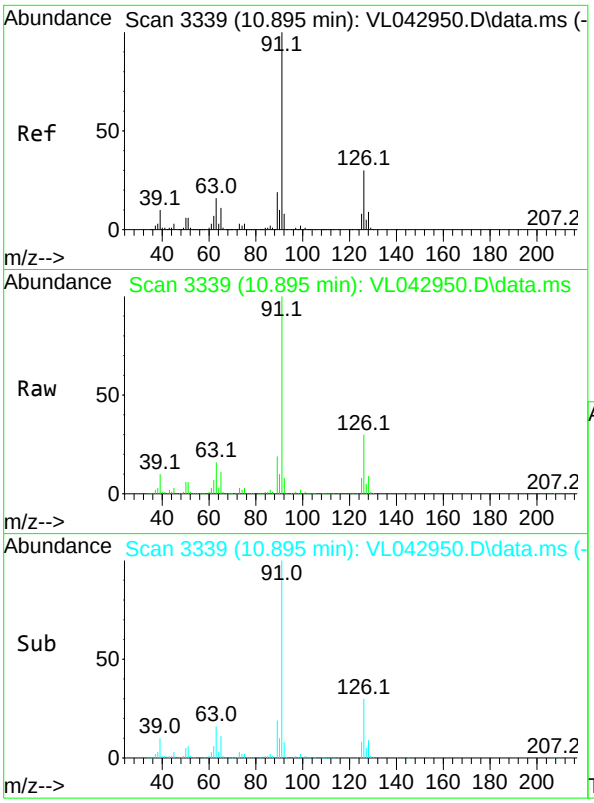


#70
n-Butylbenzene
Concen: 9.543 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 915624

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.0	66.0
134	24.3	19.4	29.2

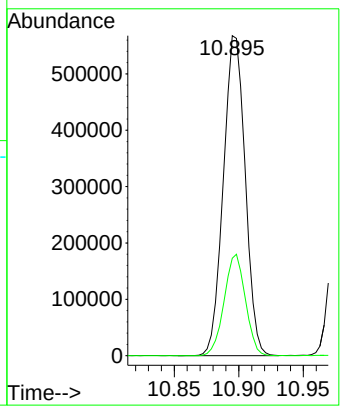




#71
2-Chlorotoluene
Concen: 9.428 ppbv
RT: 10.895 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 66823

Ion	Ratio	Lower	Upper
91	100		
126	30.8	12.3	49.3



Instrument :
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ClientSampleId :
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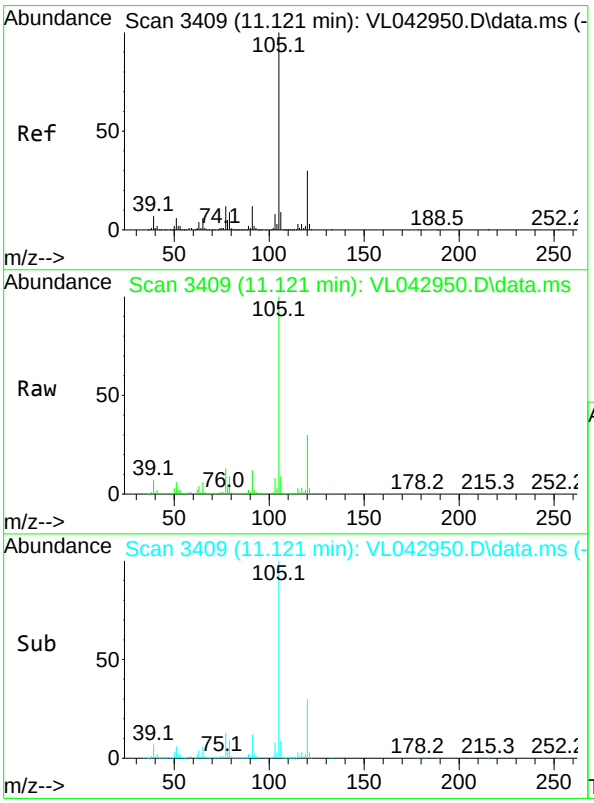
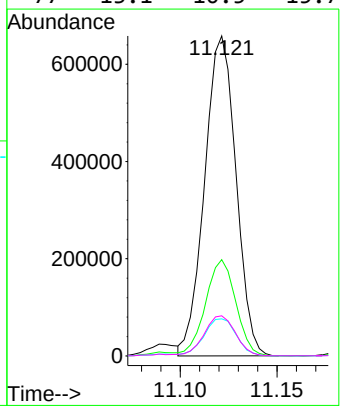
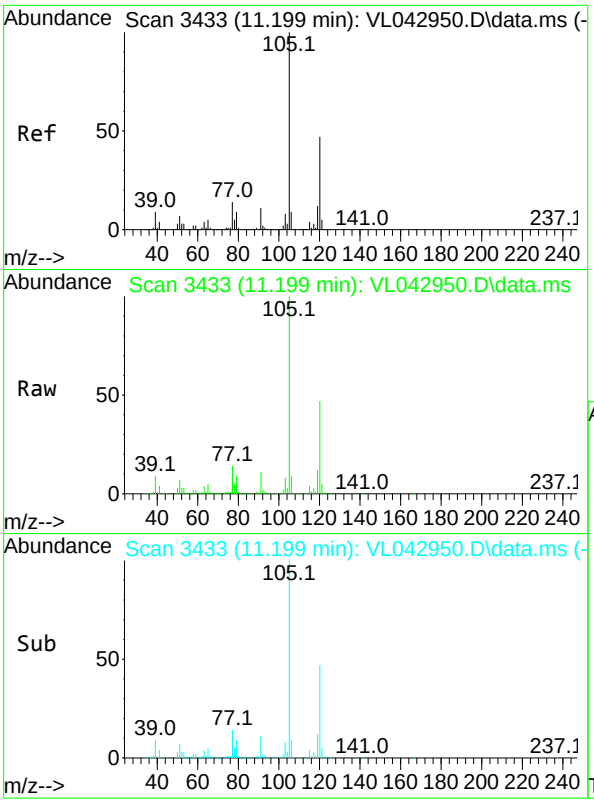


#72
4-Ethyltoluene
Concen: 9.398 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 741298

Ion	Ratio	Lower	Upper
105	100		
120	30.2	24.2	36.2
91	12.5	10.0	15.0
77	13.1	10.5	15.7

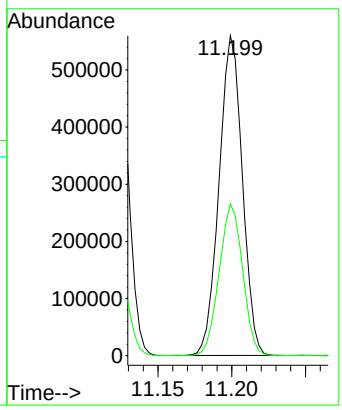




#73
1,3,5-Trimethylbenzene
Concen: 9.608 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 61463

Ion	Ratio	Lower	Upper
105	100		
120	47.5	38.0	57.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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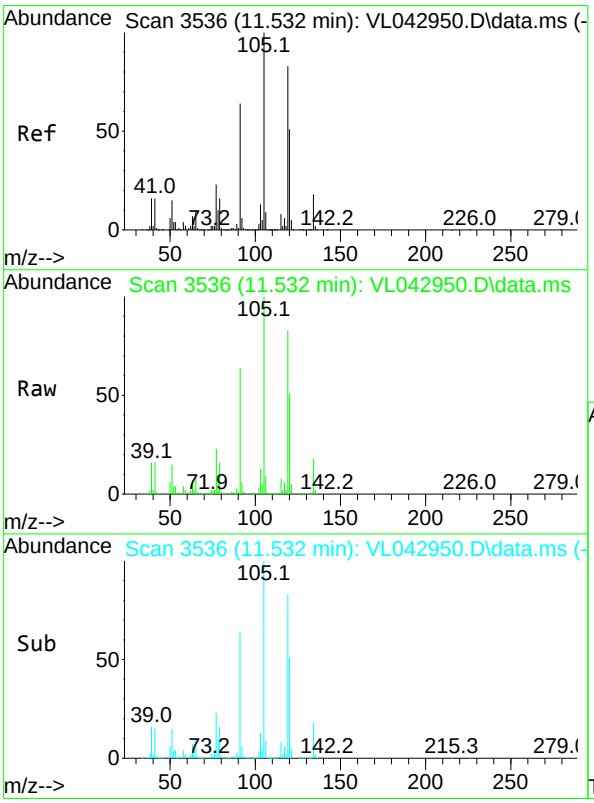
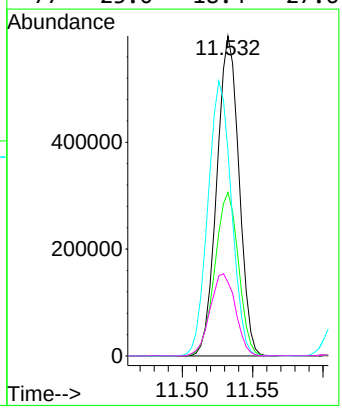
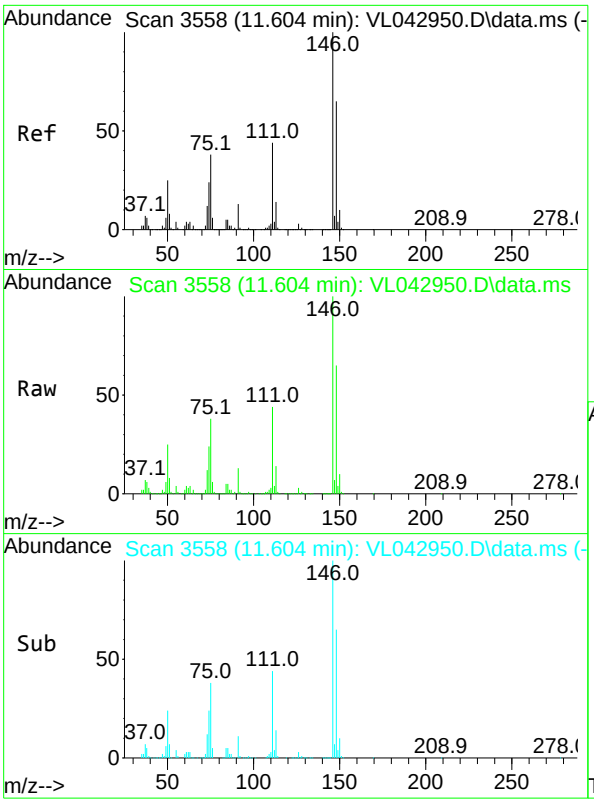


#74
1,2,4-Trimethylbenzene
Concen: 9.294 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 656535

Ion	Ratio	Lower	Upper
105	100		
120	51.1	40.9	61.3
91	64.0	51.2	76.8
77	23.0	18.4	27.6

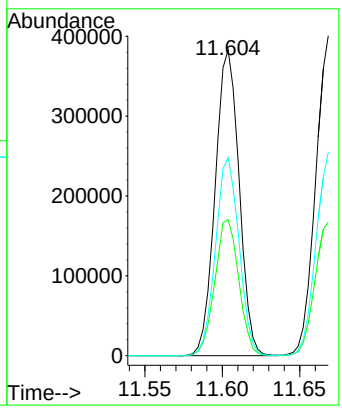




#75
1,3-Dichlorobenzene
Concen: 9.392 ppbv
RT: 11.604 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:146 Resp: 41147

Ion	Ratio	Lower	Upper
146	100		
111	44.6	22.3	66.9
148	63.7	31.9	95.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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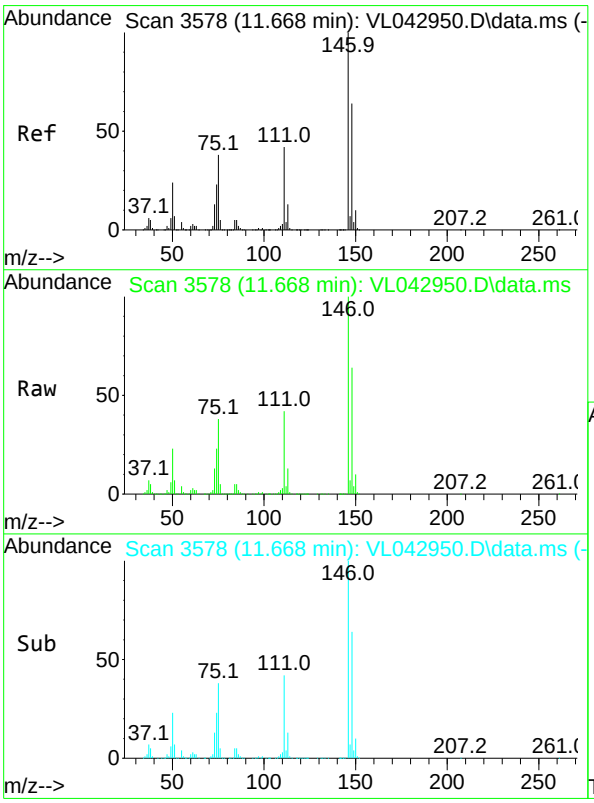
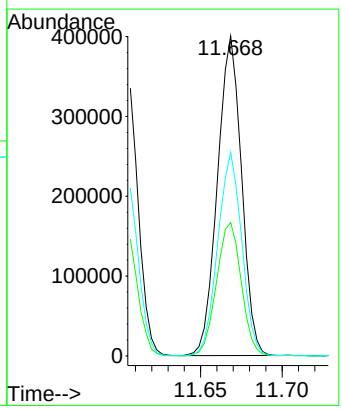
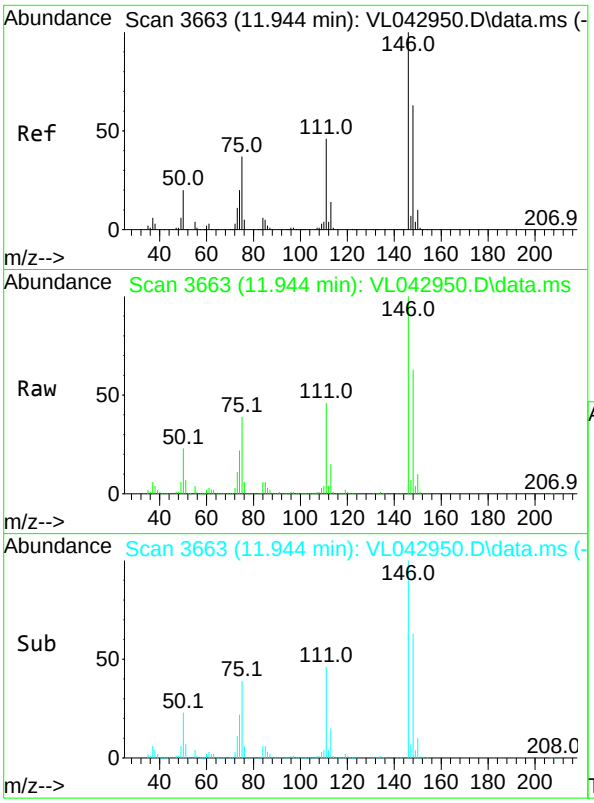


#76
1,4-Dichlorobenzene
Concen: 9.456 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:146 Resp: 411464

Ion	Ratio	Lower	Upper
146	100		
111	43.0	21.5	64.5
148	63.7	31.9	95.5

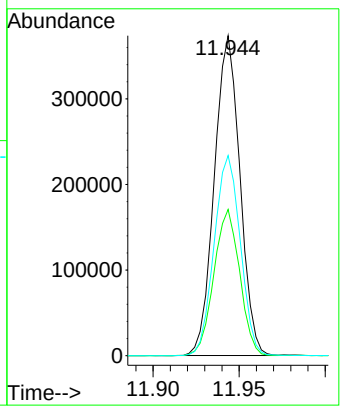




#77
1,2-Dichlorobenzene
Concen: 9.289 ppbv
RT: 11.944 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:146 Resp: 38721

Ion	Ratio	Lower	Upper
146	100		
111	46.2	23.1	69.3
148	64.0	32.0	96.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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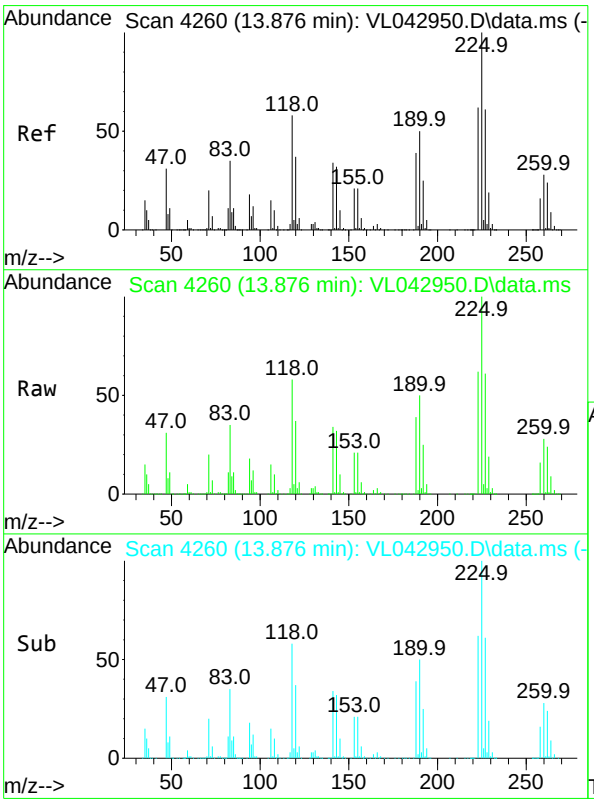
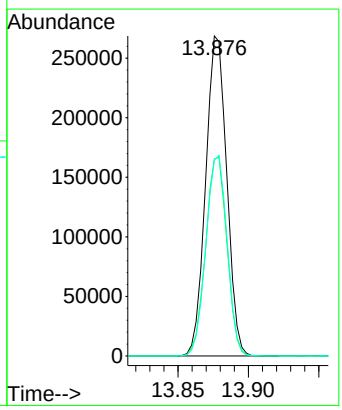
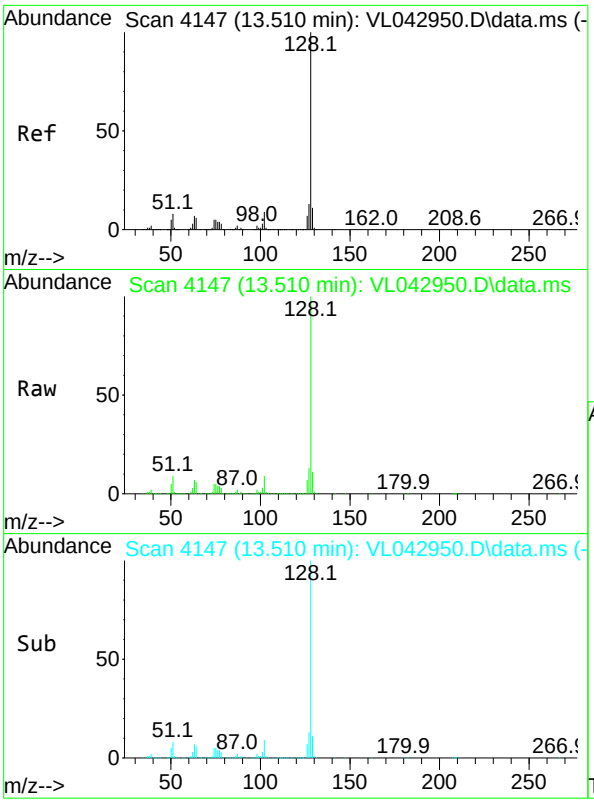


#78
Hexachloro-1,3-Butadiene
Concen: 8.591 ppbv
RT: 13.876 min Scan# 4260
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:225 Resp: 280080

Ion	Ratio	Lower	Upper
225	100		
223	62.6	50.1	75.1
227	63.0	50.4	75.6

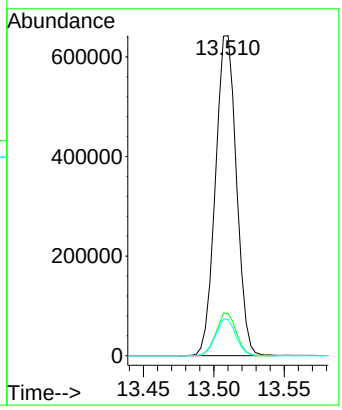




#79
Naphthalene
Concen: 10.696 ppbv
RT: 13.510 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:128 Resp: 66817

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	11.3	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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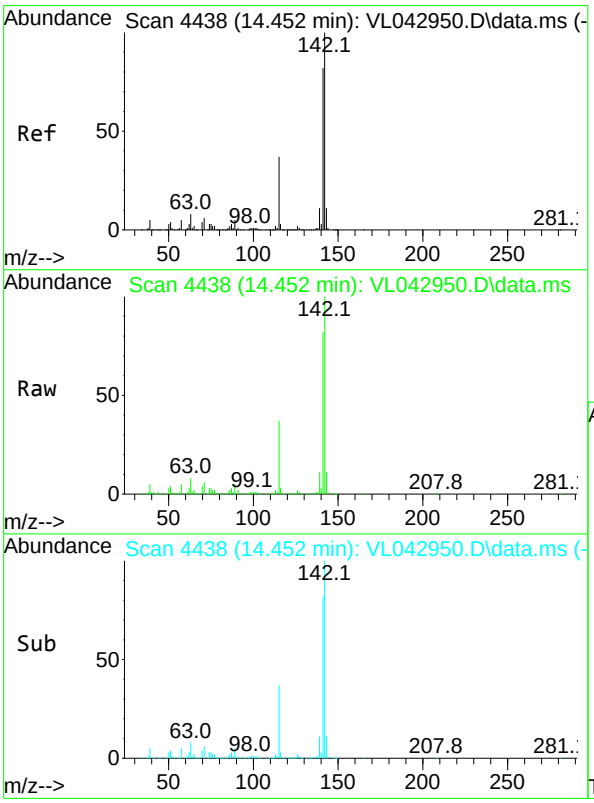
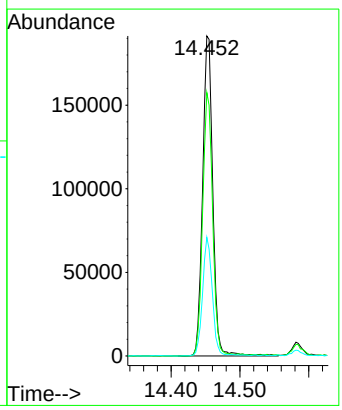
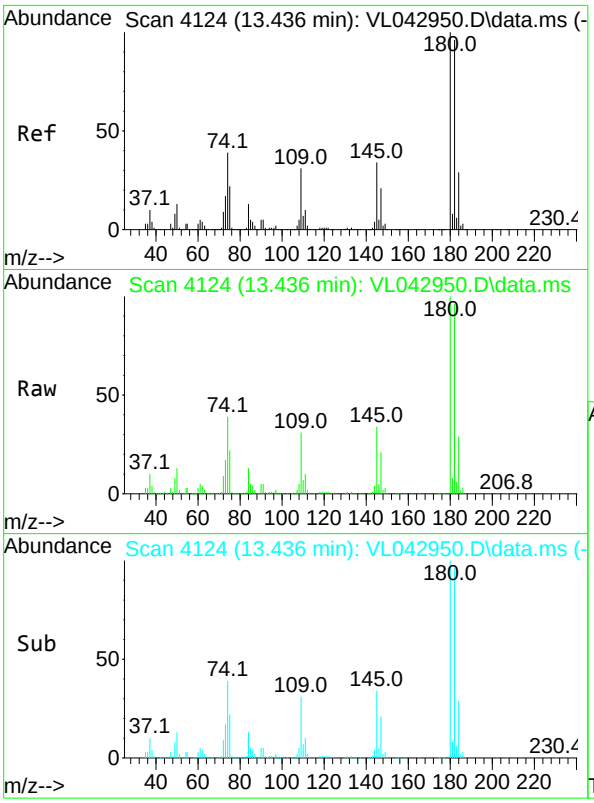


#80
Naphthalene,2-methyl-
Concen: 10.142 ppbv
RT: 14.452 min Scan# 4438
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:142 Resp: 195695

Ion	Ratio	Lower	Upper
142	100		
141	81.4	65.1	97.7
115	36.1	28.9	43.3

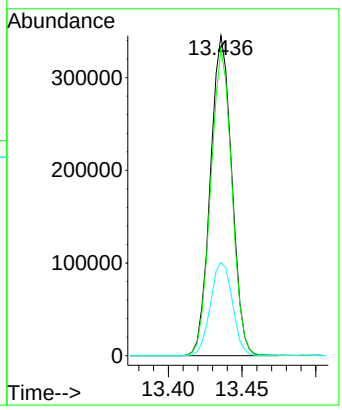




#81
1,2,4-Trichlorobenzene
Concen: 10.461 ppbv
RT: 13.436 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:180 Resp: 34939

Ion	Ratio	Lower	Upper
180	100		
182	94.6	75.7	113.5
184	29.9	23.9	35.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042951.D
Acq On : 22 Sep 2025 10:14
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:09:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	170758	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	524389	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	483821	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	361586	10.012	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	47851	2.083	ppbv		97
3) Chlorodifluoromethane	1.476	51	58395	2.040	ppbv		95
4) Chloromethane	1.534	50	21326	2.051	ppbv		99
5) Vinyl Chloride	1.580	62	17892	1.904	ppbv		98
6) Bromomethane	1.667	94	6816	2.056	ppbv		96
7) Chloroethane	1.706	64	7250	1.987	ppbv	#	85
8) Dichlorotetrafluoroethane	1.554	85	40306	2.056	ppbv		98
9) Propene	1.483	41	26007	2.088	ppbv		99
10) Heptane	4.978	43	66978	2.005	ppbv		99
11) Trichlorofluoromethane	1.877	101	45973	2.076	ppbv		94
12) 1,1,2-Trichlorotrifluo...	2.140	101	36490	2.035	ppbv		98
13) Ethanol	1.722	45	2989	2.504	ppbv		93
14) Bromoethene	1.784	108	14189	2.093	ppbv	#	96
15) Acetone	1.835	43	50357	2.264	ppbv		99
16) 1,3-Butadiene	1.609	39	20729	1.976	ppbv		94
17) tert-Butyl alcohol	2.042	59	47749	1.957	ppbv	#	93
18) 1,1-Dichloroethene	2.036	96	16572	1.996	ppbv		95
19) Isopropyl Alcohol	1.887	45	27930	2.089	ppbv	#	79
20) Methylene Chloride	2.062	84	17413	2.097	ppbv	#	84
21) Allyl Chloride	2.098	41	32985	2.130	ppbv		99
22) trans-1,2-Dichloroethene	2.340	96	18991	2.013	ppbv		98
23) Vinyl Acetate	2.463	43	64479	2.029	ppbv	#	98
24) 1,1-Dichloroethane	2.408	63	37865	2.047	ppbv		99
25) Ethyl Acetate	2.835	43	117567	2.092	ppbv		99
26) Hexane	2.826	57	53034	2.070	ppbv		98
27) Carbon Disulfide	2.153	76	47660	2.074	ppbv	#	60
28) Methyl tert-Butyl Ether	2.441	73	25348	1.903	ppbv		92
29) Chloroform	2.848	83	69599	2.077	ppbv		96
30) Cyclohexane	3.855	84	43725	2.041	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	50019	2.084	ppbv		95
32) 1,1,1-Trichloroethane	3.366	97	70729	1.948	ppbv		97
34) 2-Butanone	2.557	43	77689	2.114	ppbv		98
35) Carbon Tetrachloride	3.761	117	68858	2.041	ppbv		95
36) Benzene	3.658	78	101901	2.069	ppbv		97
37) 1,2-Dichloroethane	3.217	62	53130	2.052	ppbv		98
38) Trichloroethene	4.548	130	47424	1.938	ppbv		94
39) 1,2-Dichloropropane	4.308	63	37381m	2.078	ppbv		
40) 1,4-Dioxane	4.586	88	17074m	2.044	ppbv		
41) Tetrahydrofuran	3.056	42	43962	2.081	ppbv		98
42) Bromodichloromethane	4.486	83	73675	2.042	ppbv		98
43) Methyl Methacrylate	4.881	69	41527	2.077	ppbv		99
44) 2,2,4-Trimethylpentane	4.638	57	177242	2.083	ppbv		99
45) t-1,3-Dichloropropene	6.415	75	44171	2.055	ppbv		91

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042951.D
Acq On : 22 Sep 2025 10:14
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:09:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46)	cis-1,3-Dichloropropene	5.596	75	56335	2.057	ppbv	97
47)	1,1,2-Trichloroethane	6.577	97	38961m	2.050	ppbv	
48)	Dibromochloromethane	7.383	129	62968	2.072	ppbv	98
49)	Bromoform	9.480	173	56021	2.119	ppbv	99
50)	4-Methyl-2-Pentanone	5.755	43	103605m	2.098	ppbv	
51)	2-Hexanone	7.438	43	80620	2.053	ppbv	99
52)	Tetrachloroethene	8.224	164	36853	1.934	ppbv	94
53)	Toluene	6.933	91	121268	2.081	ppbv	100
54)	1,2-Dibromoethane	7.652	107	55022	2.058	ppbv	94
56)	1,1,1,2-Tetrachloroethane	8.920	131	48901	2.112	ppbv	98
57)	Chlorobenzene	8.924	112	91325	2.068	ppbv	94
58)	Ethyl Benzene	9.354	91	168063	2.115	ppbv	99
59)	m/p-Xylene	9.532	91	263362m	4.202	ppbv	
60)	o-Xylene	9.963	91	131507	2.101	ppbv	98
61)	Styrene	9.869	104	62748	2.119	ppbv	98
62)	Isopropylbenzene	10.539	105	196198	2.103	ppbv	100
63)	1,1,2,2-Tetrachloroethane	9.963	83	65089	1.978	ppbv	98
64)	n-propylbenzene	10.985	120	50569	2.074	ppbv	93
65)	tert-Butylbenzene	11.529	119	178218	2.147	ppbv	98
66)	Benzyl Chloride	11.613	91	18992	2.181	ppbv	98
67)	sec-Butylbenzene	11.765	105	249510	2.158	ppbv	100
69)	p-Isopropyltoluene	11.924	119	210808	2.158	ppbv	97
70)	n-Butylbenzene	12.280	91	206691	2.167	ppbv	100
71)	2-Chlorotoluene	10.898	91	147901	2.099	ppbv	100
72)	4-Ethyltoluene	11.124	105	164770	2.102	ppbv	99
73)	1,3,5-Trimethylbenzene	11.202	105	135344	2.128	ppbv	100
74)	1,2,4-Trimethylbenzene	11.536	105	150772	2.147	ppbv	98
75)	1,3-Dichlorobenzene	11.607	146	92487	2.124	ppbv	98
76)	1,4-Dichlorobenzene	11.671	146	92794	2.145	ppbv	99
77)	1,2-Dichlorobenzene	11.947	146	88825	2.144	ppbv	100
78)	Hexachloro-1,3-Butadiene	13.879	225	70481	2.175	ppbv	99
79)	Naphthalene	13.510	128	142653	2.297	ppbv	98
80)	Naphthalene,2-methyl-	14.458	142	41369	2.157	ppbv	98
81)	1,2,4-Trichlorobenzene	13.439	180	75139	2.263	ppbv	99

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

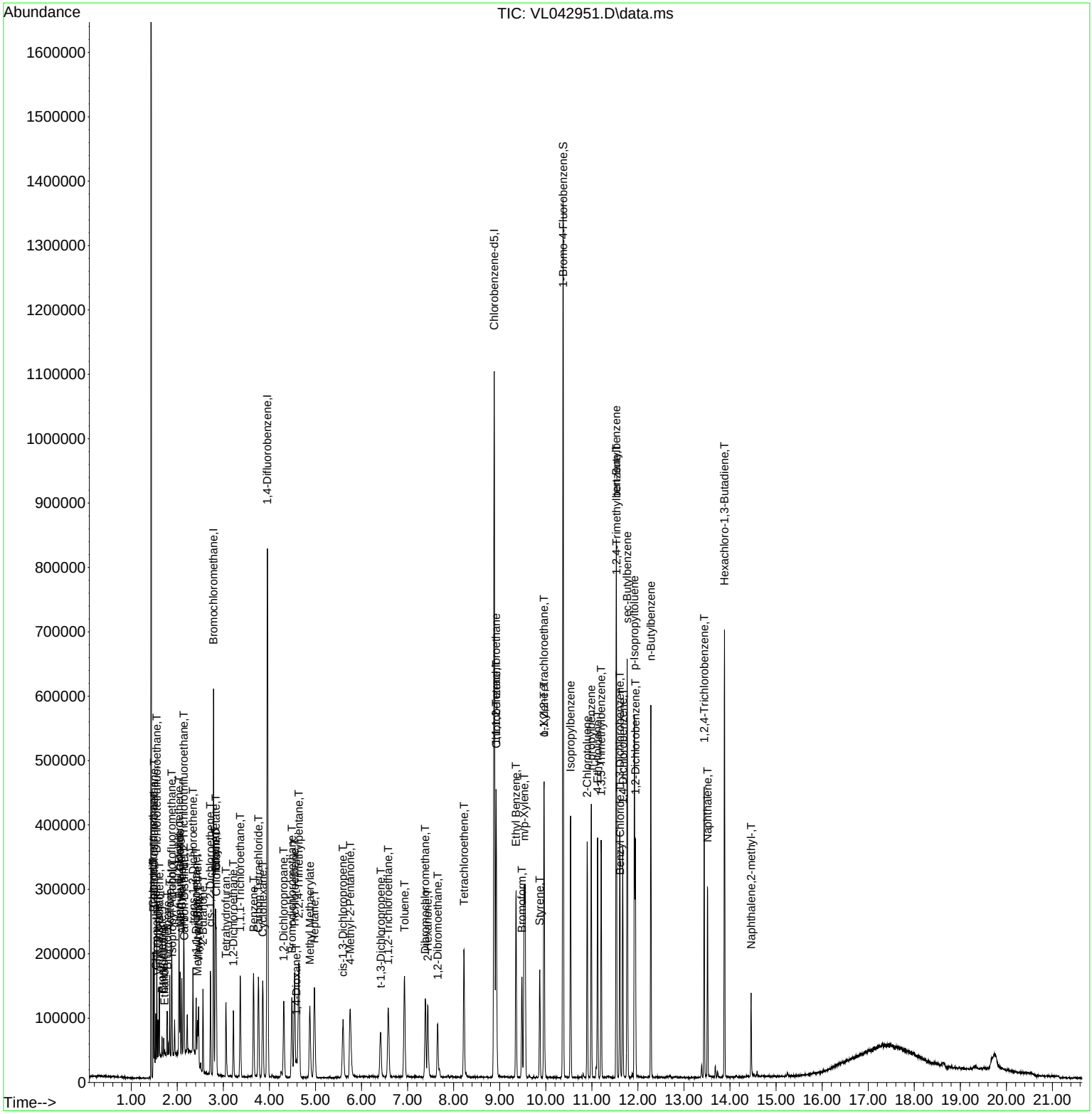
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042951.D
Acq On : 22 Sep 2025 10:14
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

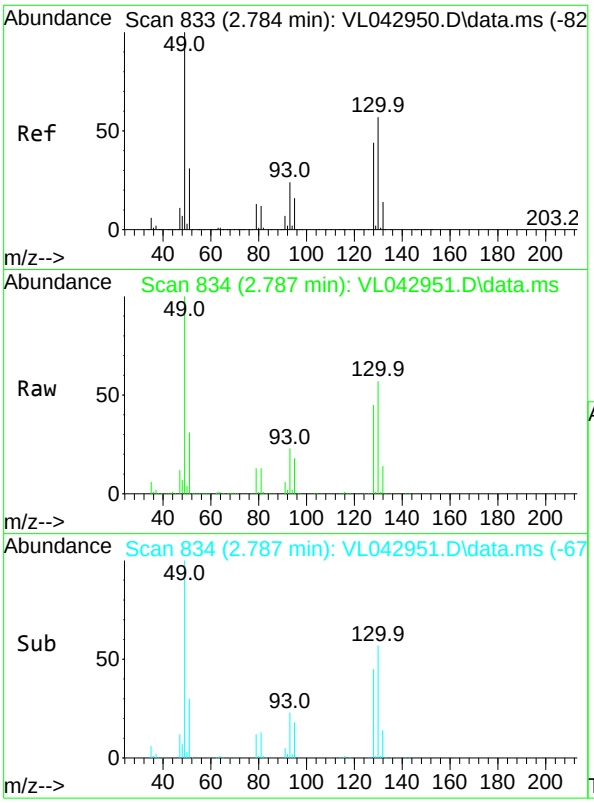
Quant Time: Sep 23 02:09:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

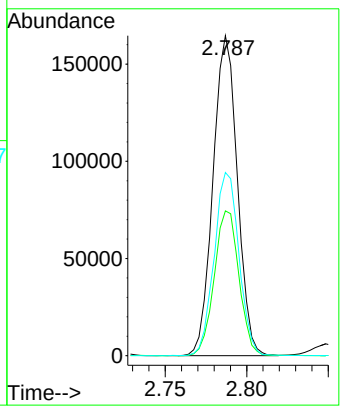




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 49 Resp: 17075

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	58.5	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

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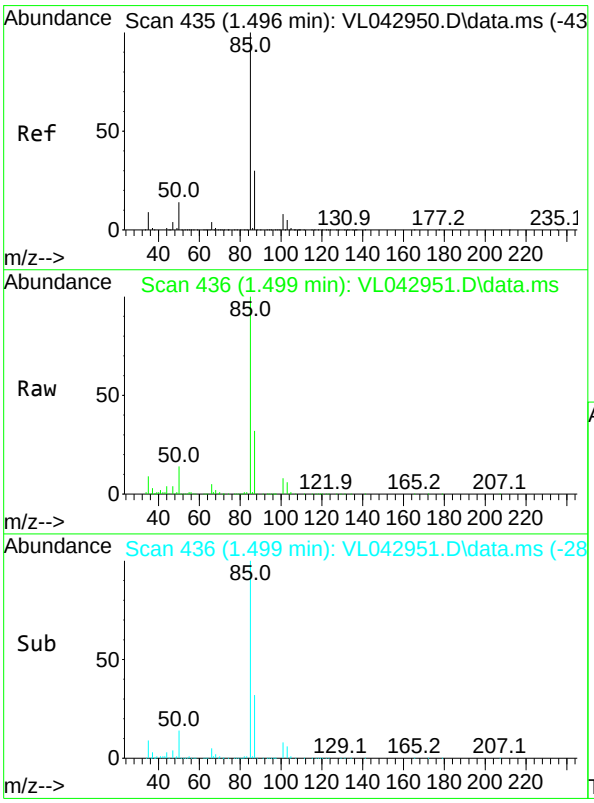
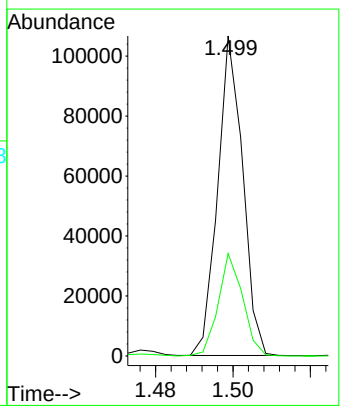
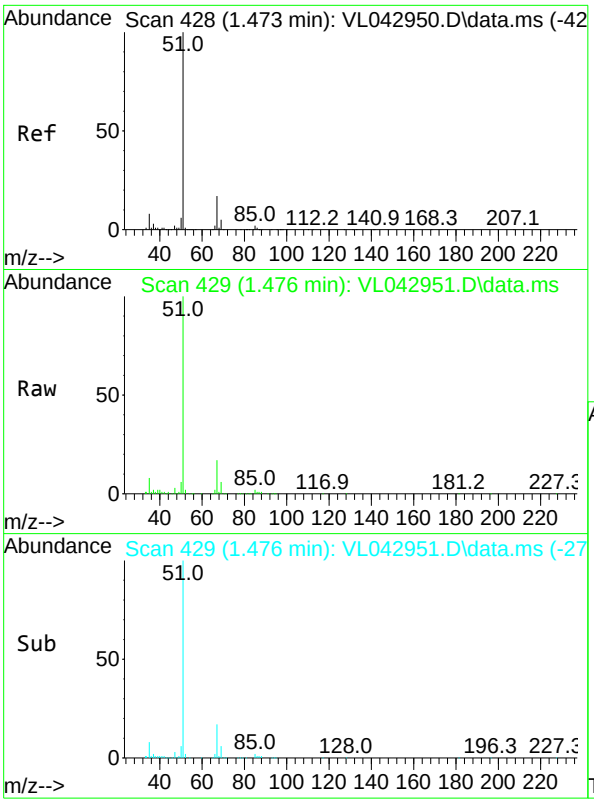


#2
Dichlorodifluoromethane
Concen: 2.083 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 85 Resp: 47851

Ion	Ratio	Lower	Upper
85	100		
87	32.0	24.3	36.5

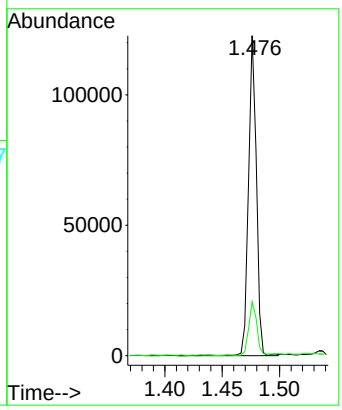




#3
Chlorodifluoromethane
Concen: 2.040 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 51 Resp: 5839

Ion	Ratio	Lower	Upper
51	100		
67	19.4	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
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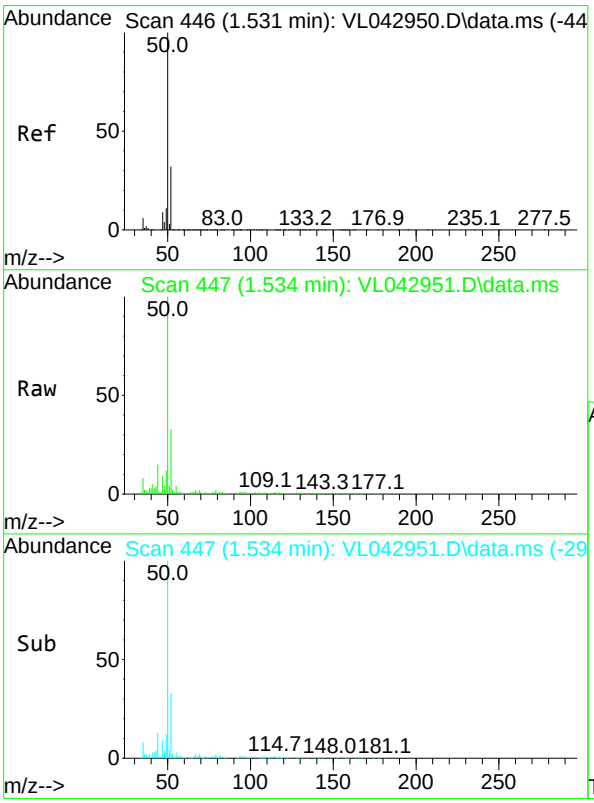
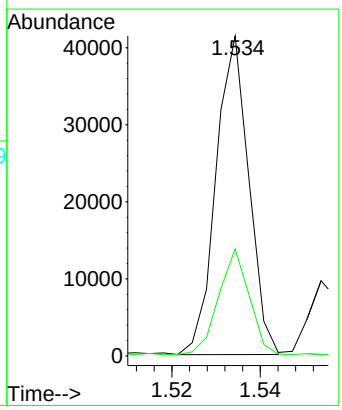
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

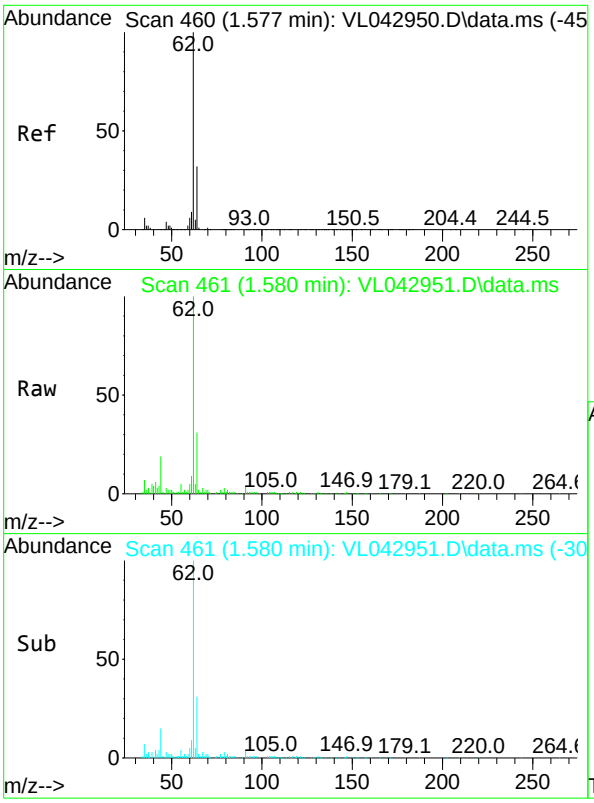


#4
Chloromethane
Concen: 2.051 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 50 Resp: 21326

Ion	Ratio	Lower	Upper
50	100		
52	33.2	25.9	38.9





#5
Vinyl Chloride
Concen: 1.904 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 62 Resp: 1789

Ion	Ratio	Lower	Upper
62	100		
64	30.8	25.4	38.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
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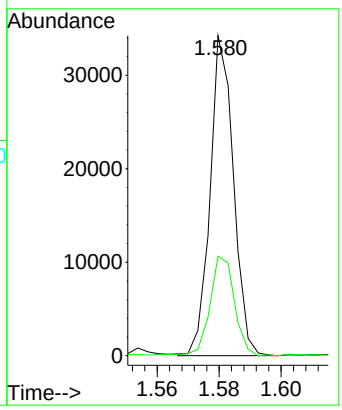
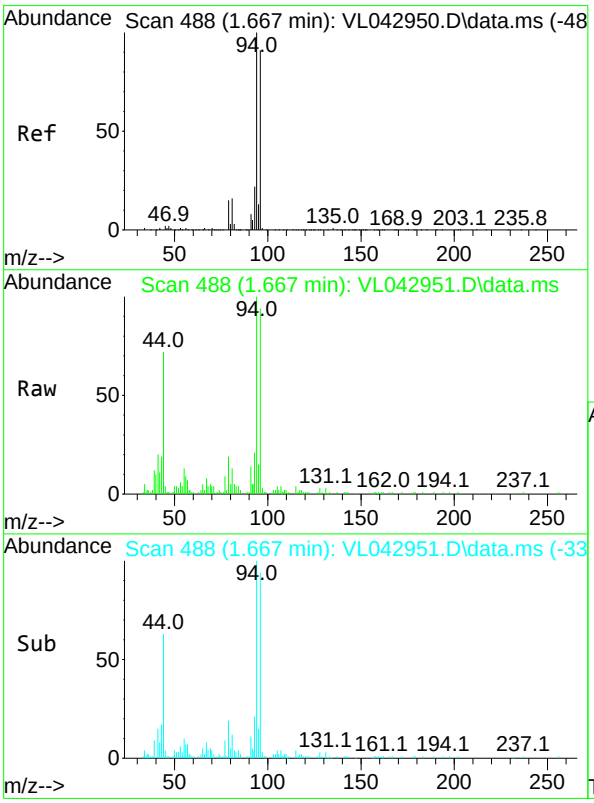
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

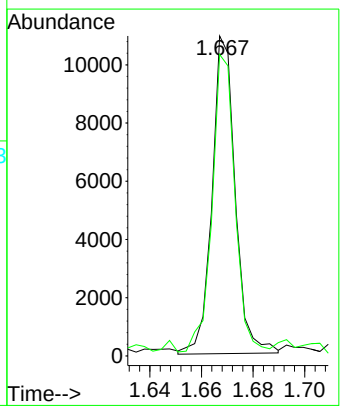


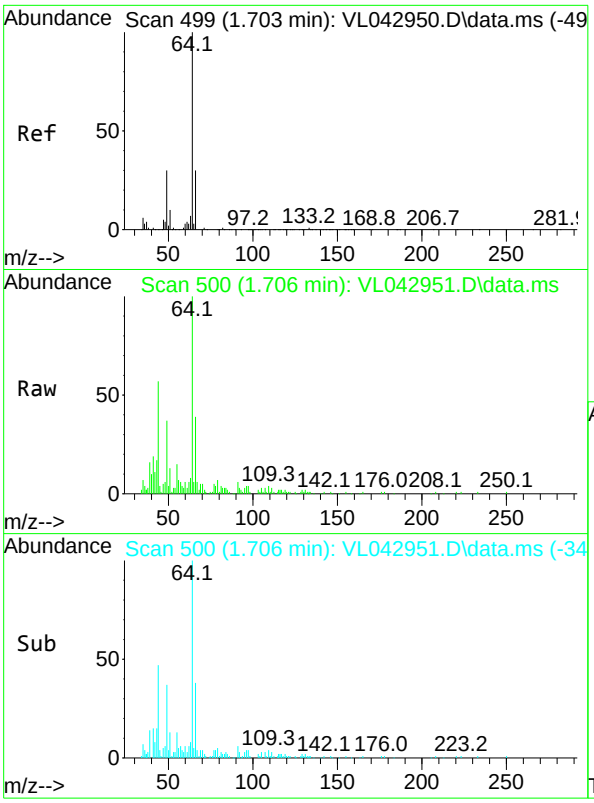


#6
Bromomethane
Concen: 2.056 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 94 Resp: 6816

Ion	Ratio	Lower	Upper
94	100		
96	94.4	72.6	108.8





#7
Chloroethane
Concen: 1.987 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

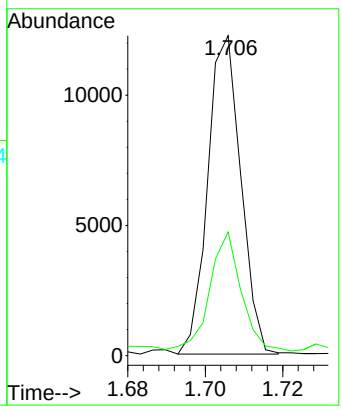
Tgt Ion: 64 Resp: 725

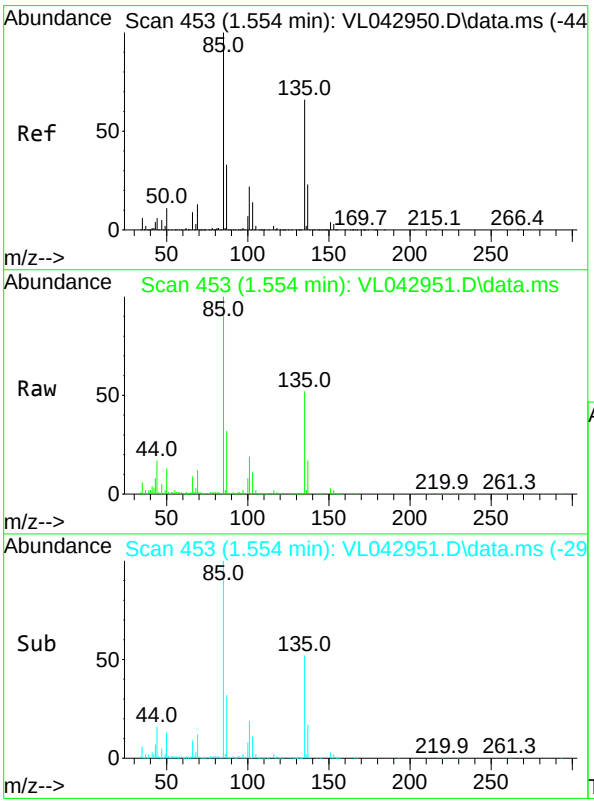
Ion	Ratio	Lower	Upper
64	100		
66	38.7	24.6	36.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

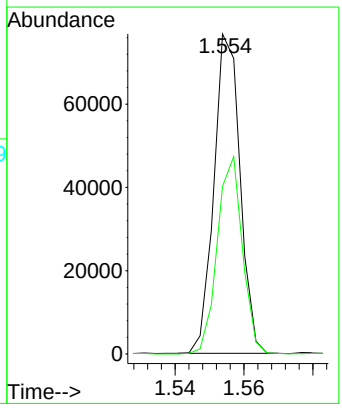


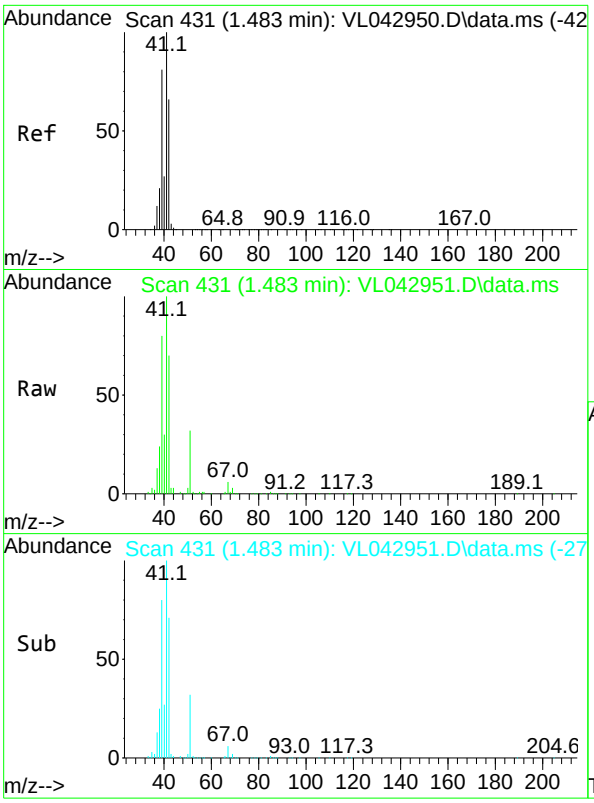


#8
Dichlorotetrafluoroethane
Concen: 2.056 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 85 Resp: 40306

Ion	Ratio	Lower	Upper
85	100		
135	60.2	49.7	74.5

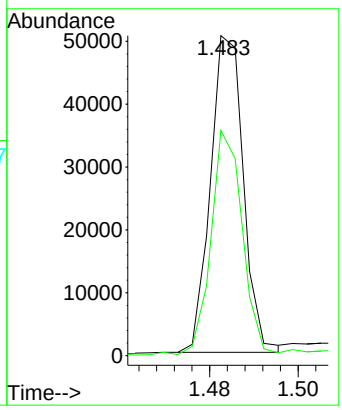




#9
Propene
Concen: 2.088 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 41 Resp: 2600

Ion	Ratio	Lower	Upper
41	100		
42	72.4	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
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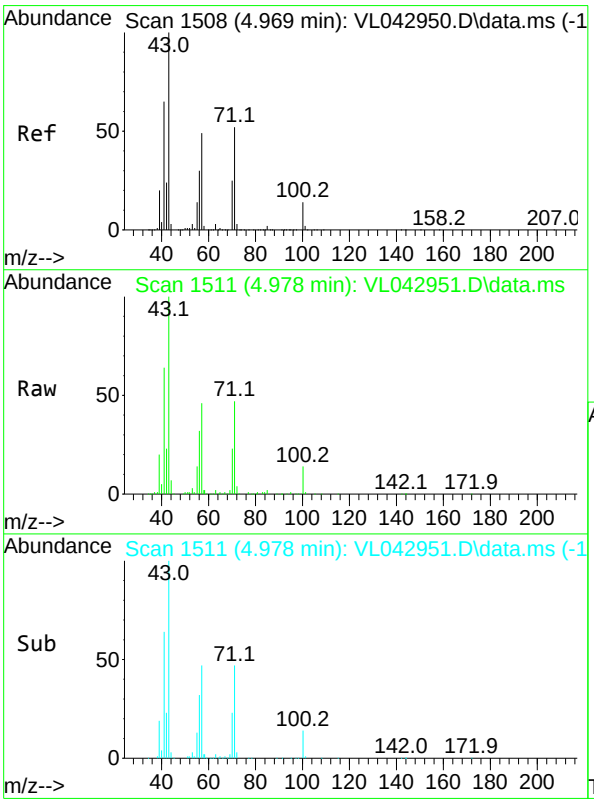
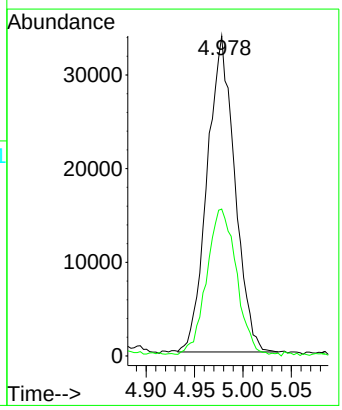
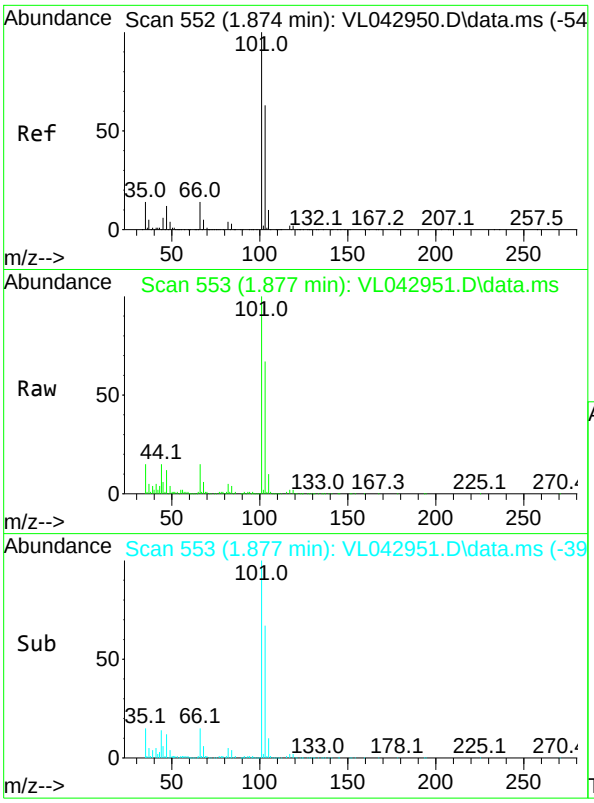


#10
Heptane
Concen: 2.005 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 66978

Ion	Ratio	Lower	Upper
43	100		
57	49.1	38.6	57.8

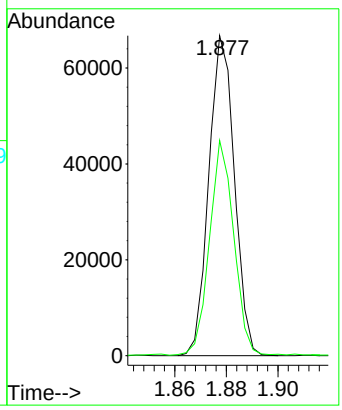




#11
Trichlorofluoromethane
Concen: 2.076 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:101 Resp: 4597

Ion	Ratio	Lower	Upper
101	100		
103	66.9	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
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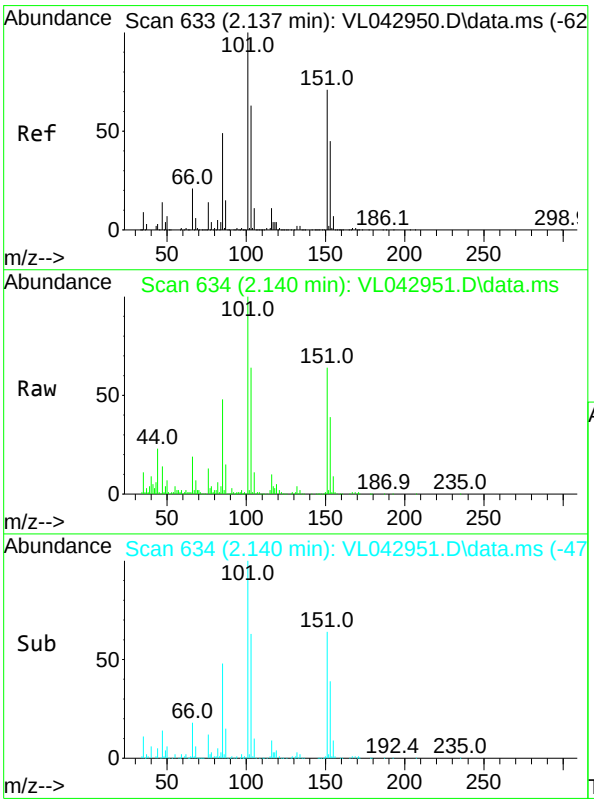
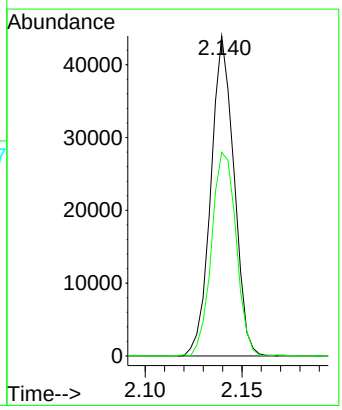
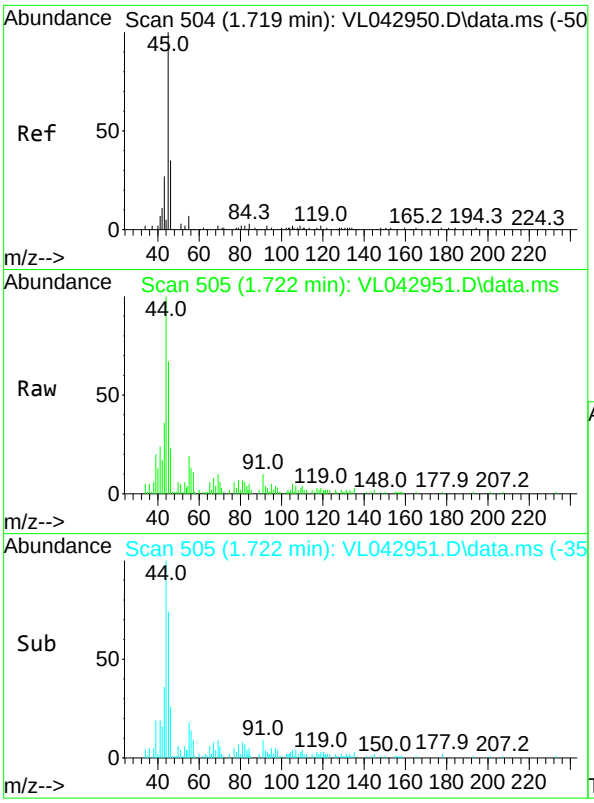


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.035 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:101 Resp: 36490

Ion	Ratio	Lower	Upper
101	100		
151	67.9	55.7	83.5

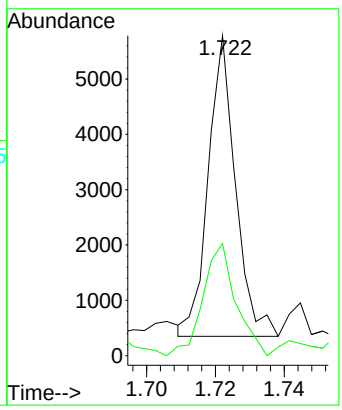




#13
Ethanol
Concen: 2.504 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 45 Resp: 298

Ion	Ratio	Lower	Upper
45	100		
46	36.0	16.2	64.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
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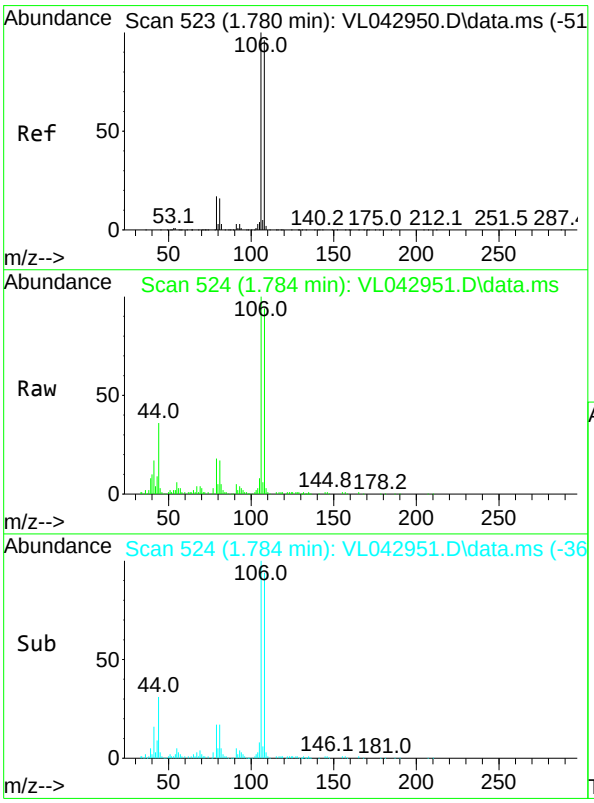
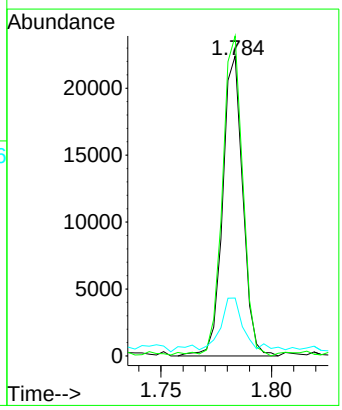
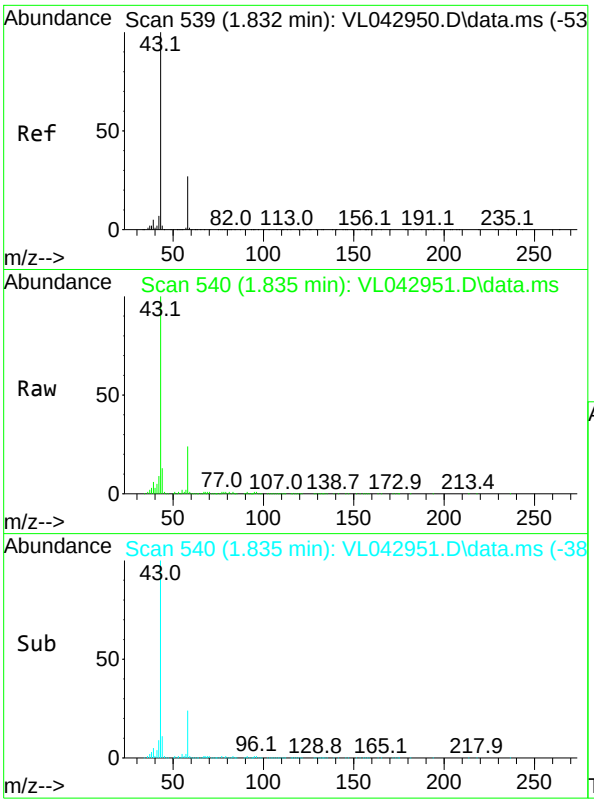


#14
Bromoethene
Concen: 2.093 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:108 Resp: 14189

Ion	Ratio	Lower	Upper
108	100		
106	109.5	86.0	129.0
79	26.5	14.2	21.2#

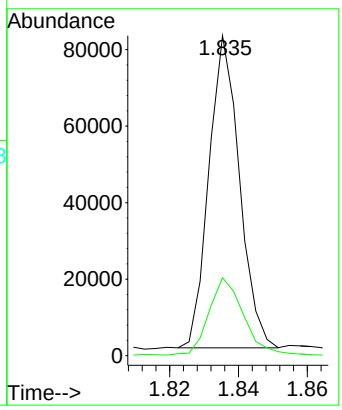




#15
Acetone
Concen: 2.264 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 5035

Ion	Ratio	Lower	Upper
43	100		
58	28.5	22.3	33.5



Instrument :
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ClientSampleId :
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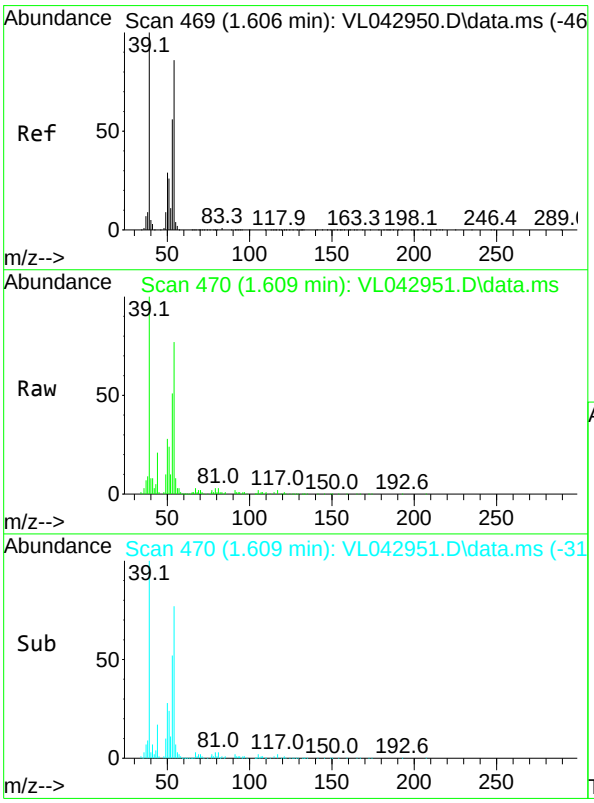
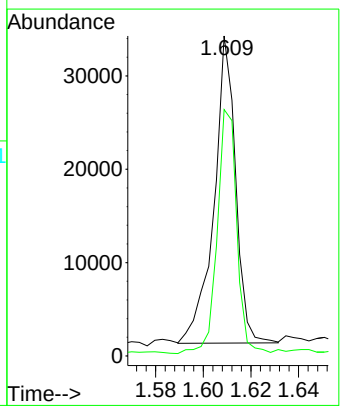
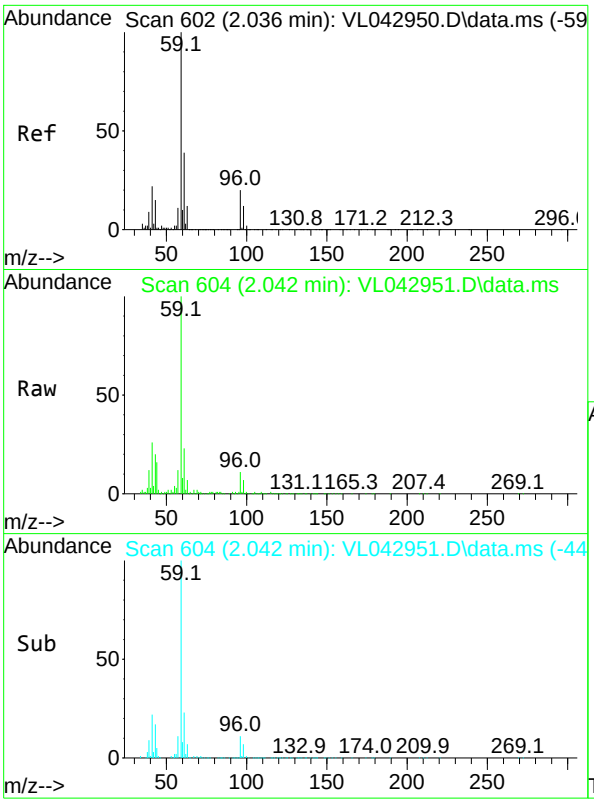


#16
1,3-Butadiene
Concen: 1.976 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 39 Resp: 20729

Ion	Ratio	Lower	Upper
39	100		
54	80.8	60.8	91.2





#17
tert-Butyl alcohol
Concen: 1.957 ppbv
RT: 2.042 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 59 Resp: 4774

Ion	Ratio	Lower	Upper
59	100		
57	13.4	8.6	12.8

Instrument :
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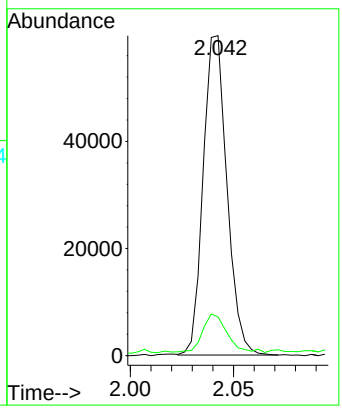
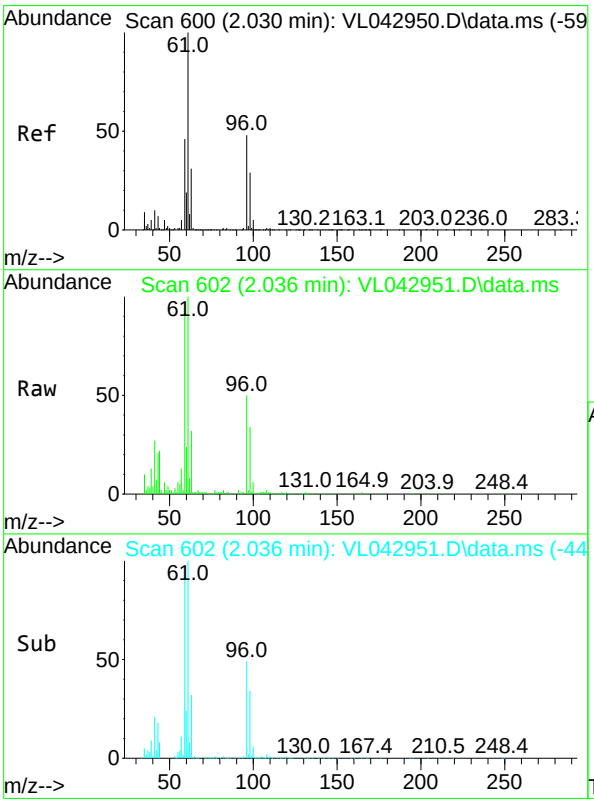
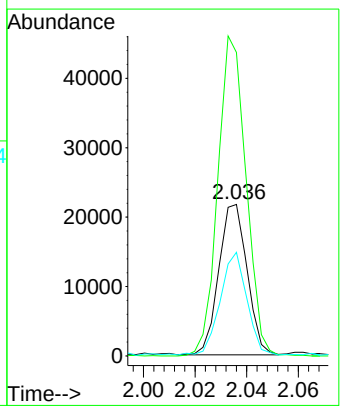


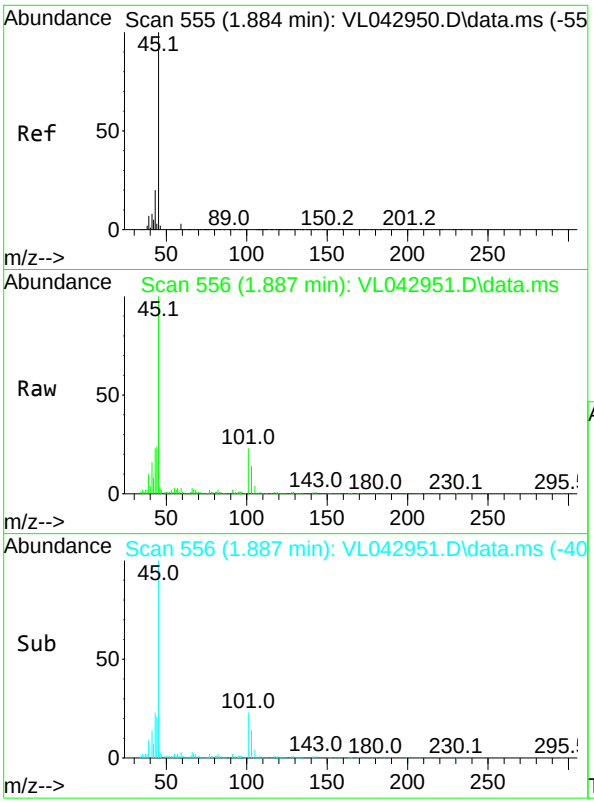


#18
1,1-Dichloroethene
Concen: 1.996 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 96 Resp: 16572

Ion	Ratio	Lower	Upper
96	100		
61	201.8	166.2	249.4
98	68.2	48.6	73.0

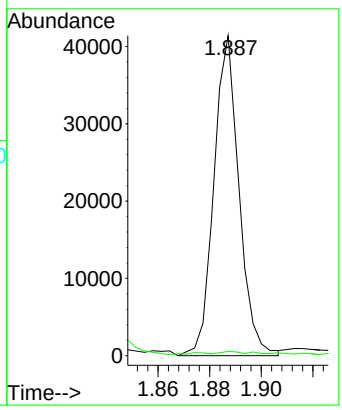




#19
Isopropyl Alcohol
Concen: 2.089 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 45 Resp: 2793

Ion	Ratio	Lower	Upper
45	100		
58	51.6	31.0	46.6#



Instrument :
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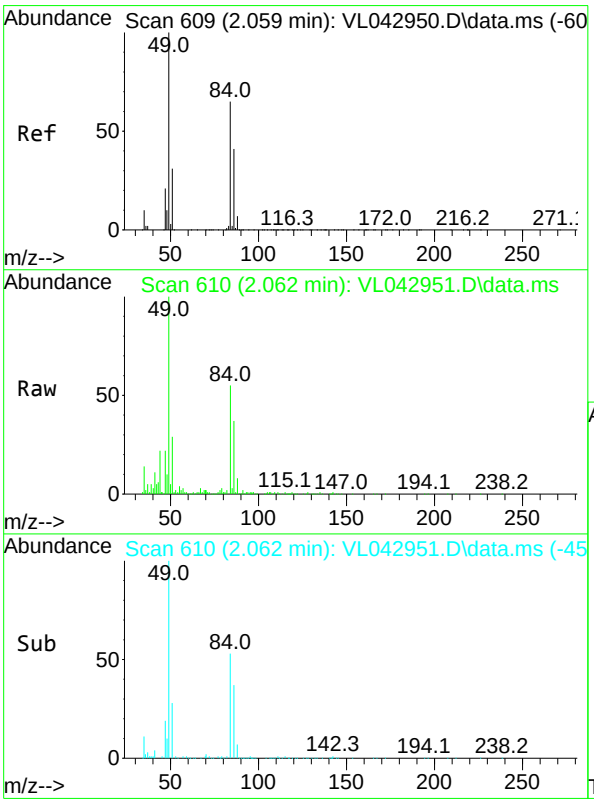
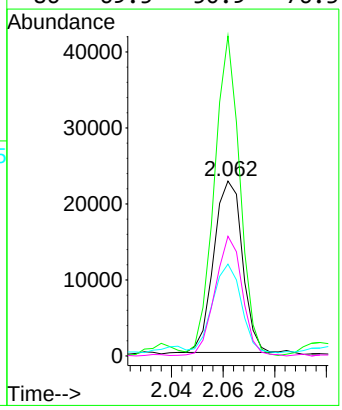
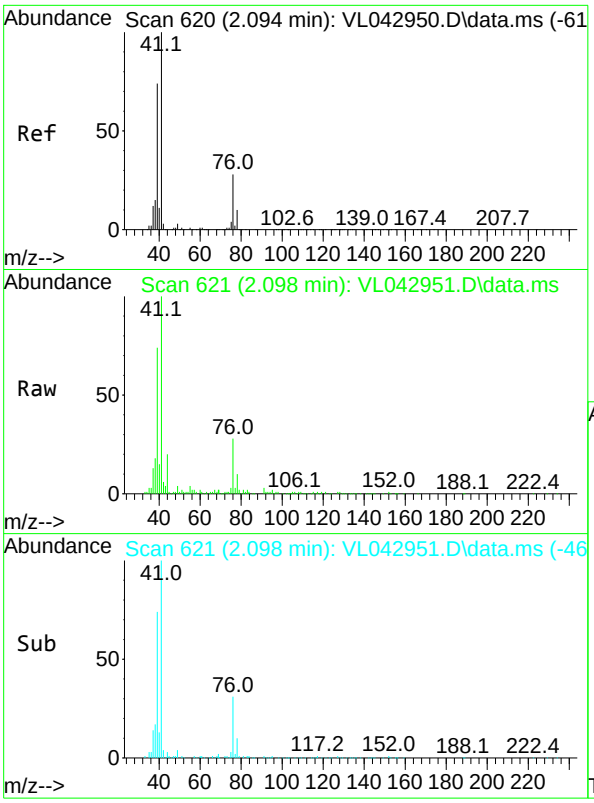


#20
Methylene Chloride
Concen: 2.097 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 84 Resp: 17413

Ion	Ratio	Lower	Upper
84	100		
49	186.6	124.1	186.1#
51	51.7	39.8	59.8
86	69.5	50.9	76.3





#21
Allyl Chloride
Concen: 2.130 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 41 Resp: 3298

Ion	Ratio	Lower	Upper
41	100		
76	27.9	22.3	33.5
39	76.0	61.3	91.9

Instrument :
MSVOA_L
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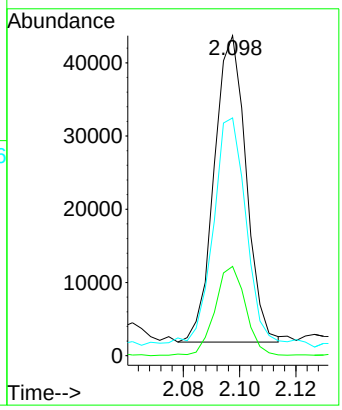
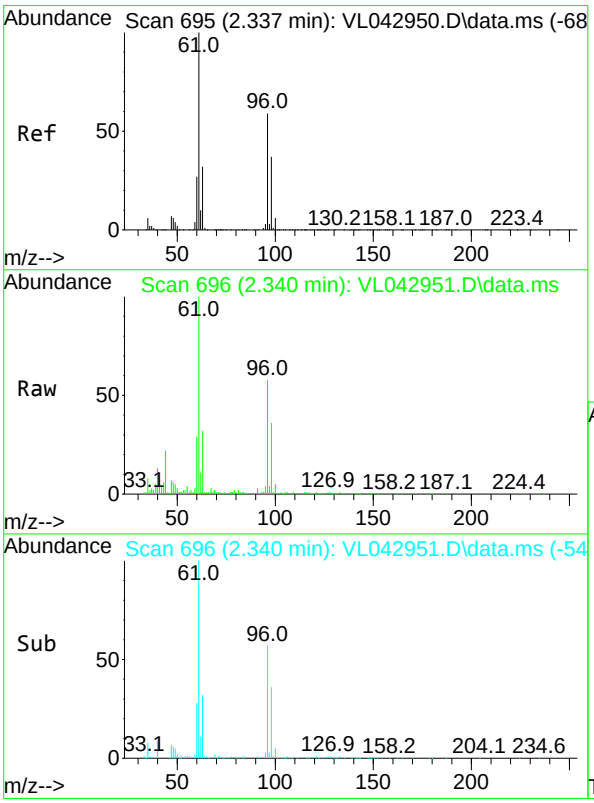
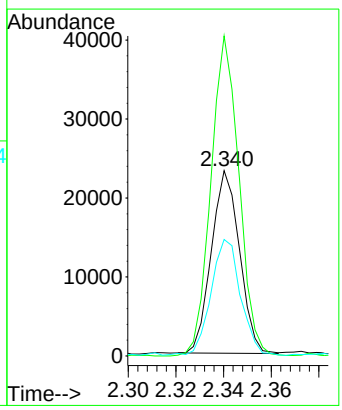


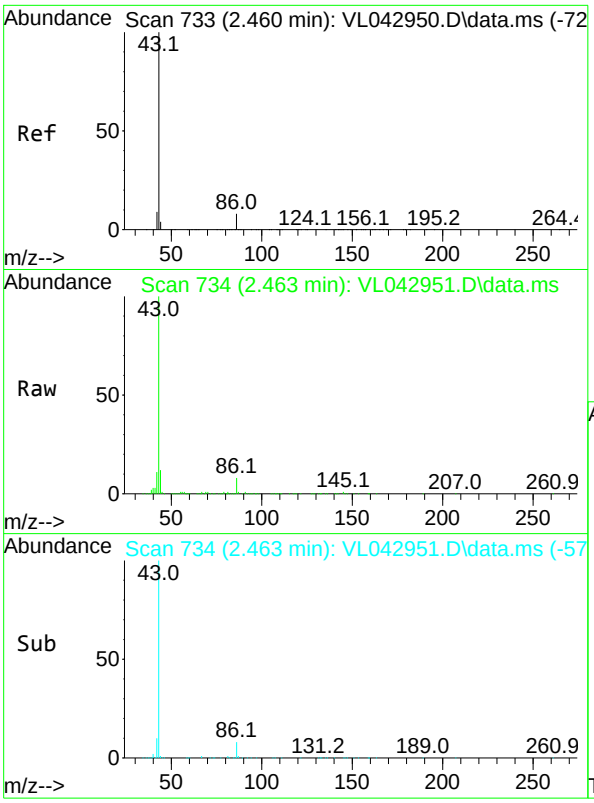


#22
trans-1,2-Dichloroethene
Concen: 2.013 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 96 Resp: 18991

Ion	Ratio	Lower	Upper
96	100		
61	175.1	136.5	204.7
98	63.3	50.6	76.0

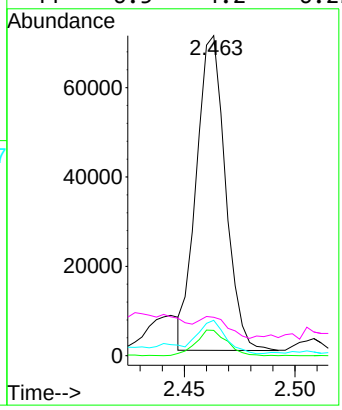




#23
Vinyl Acetate
Concen: 2.029 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 6447

Ion	Ratio	Lower	Upper
43	100		
86	8.0	6.2	9.2
42	10.3	7.4	11.0
44	6.5	4.2	6.2#



Instrument :
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ClientSampleId :
VSTDICC002

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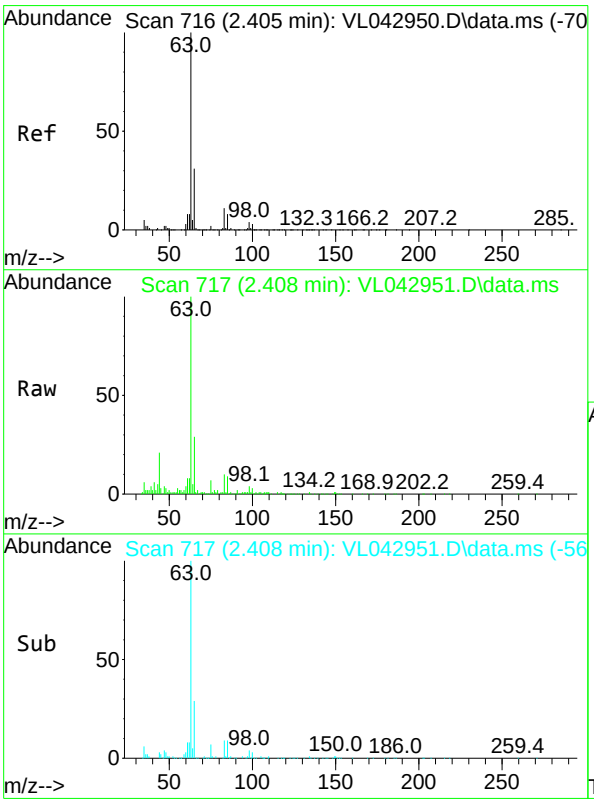
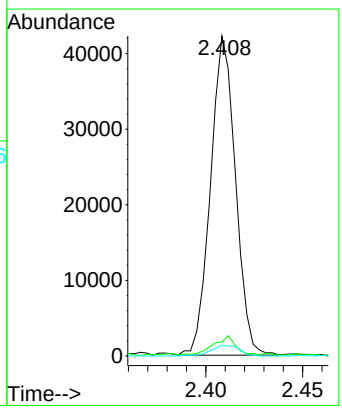
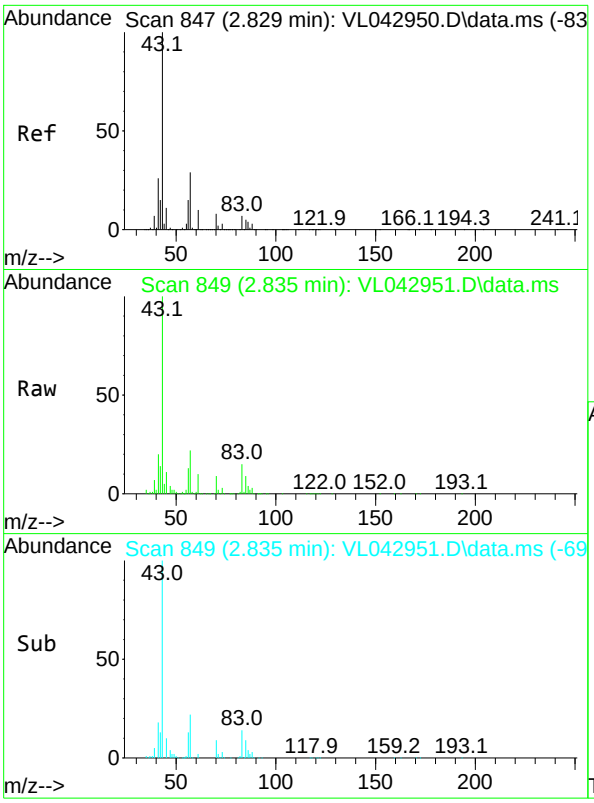


#24
1,1-Dichloroethane
Concen: 2.047 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 63 Resp: 37865

Ion	Ratio	Lower	Upper
63	100		
98	4.1	2.2	6.6
100	3.4	1.4	4.0

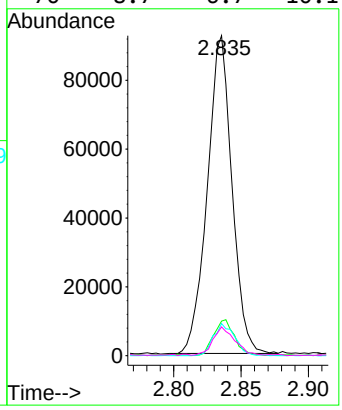




#25
Ethyl Acetate
Concen: 2.092 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 11756

Ion	Ratio	Lower	Upper
43	100		
45	10.4	7.7	11.5
61	8.8	7.1	10.7
70	8.7	6.7	10.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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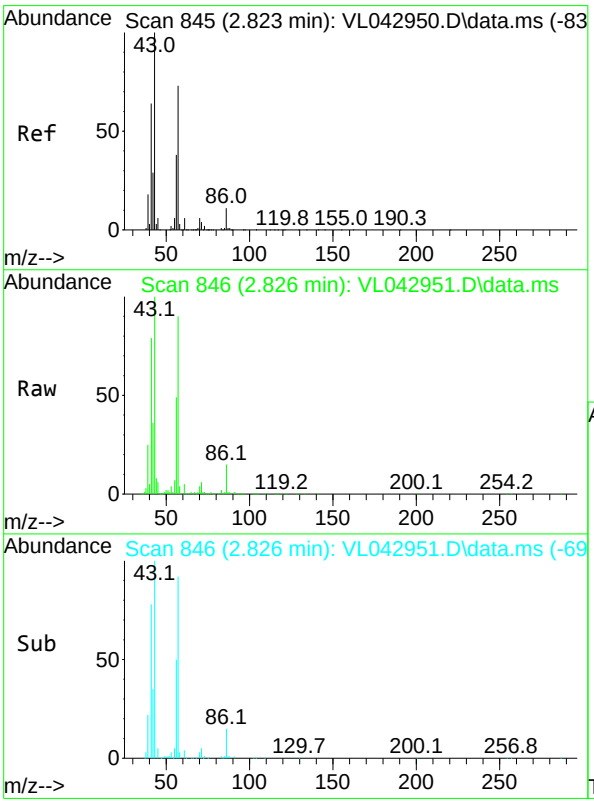
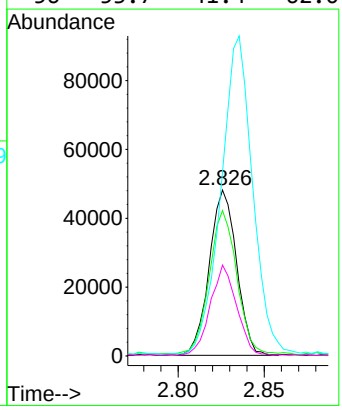
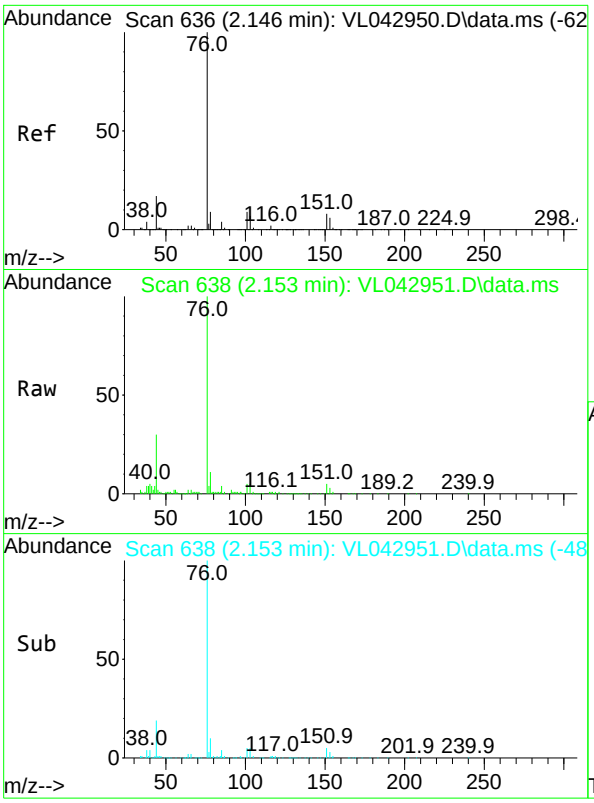


#26
Hexane
Concen: 2.070 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 57 Resp: 53034

Ion	Ratio	Lower	Upper
57	100		
41	88.1	71.7	107.5
43	223.2	180.8	271.2
56	53.7	41.4	62.0

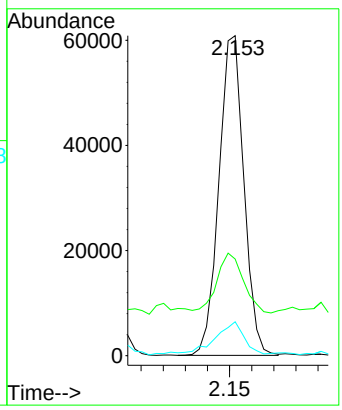




#27
Carbon Disulfide
Concen: 2.074 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 76 Resp: 4766

Ion	Ratio	Lower	Upper
76	100		
44	46.5	15.6	23.4
78	13.1	8.9	13.3



Instrument :
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ClientSampleId :
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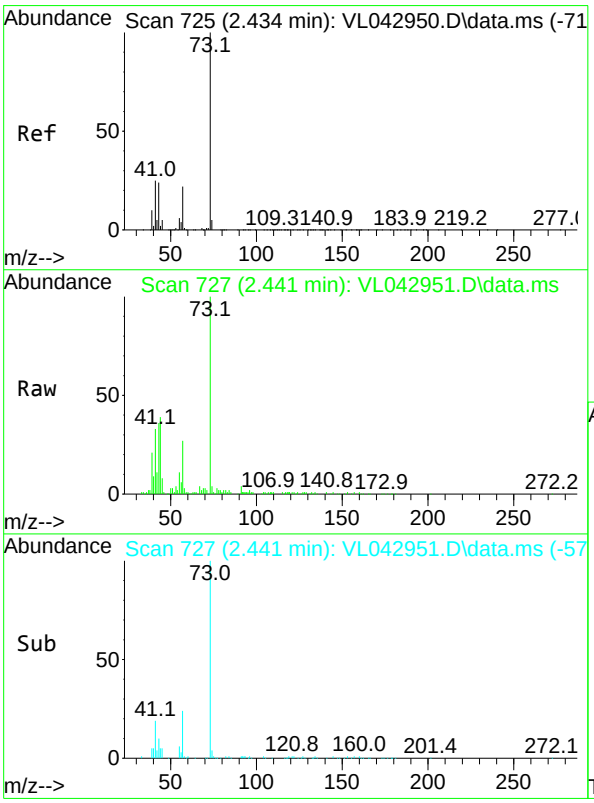
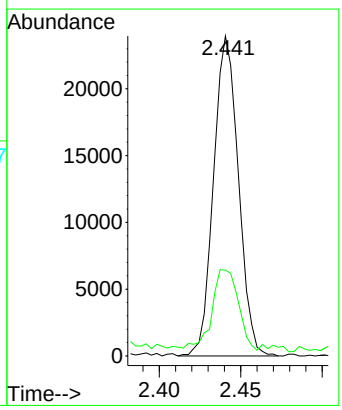
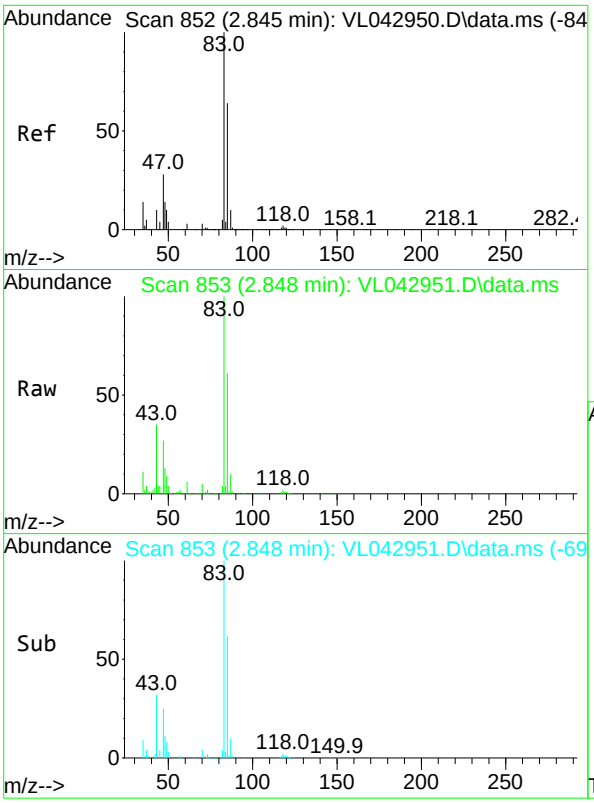


#28
Methyl tert-Butyl Ether
Concen: 1.903 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 73 Resp: 25348

Ion	Ratio	Lower	Upper
73	100		
57	29.8	20.6	31.0

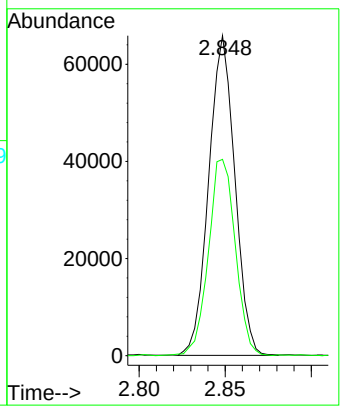




#29
Chloroform
Concen: 2.077 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 83 Resp: 6959

Ion	Ratio	Lower	Upper
83	100		
85	61.2	51.2	76.8



Instrument :
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ClientSampleId :
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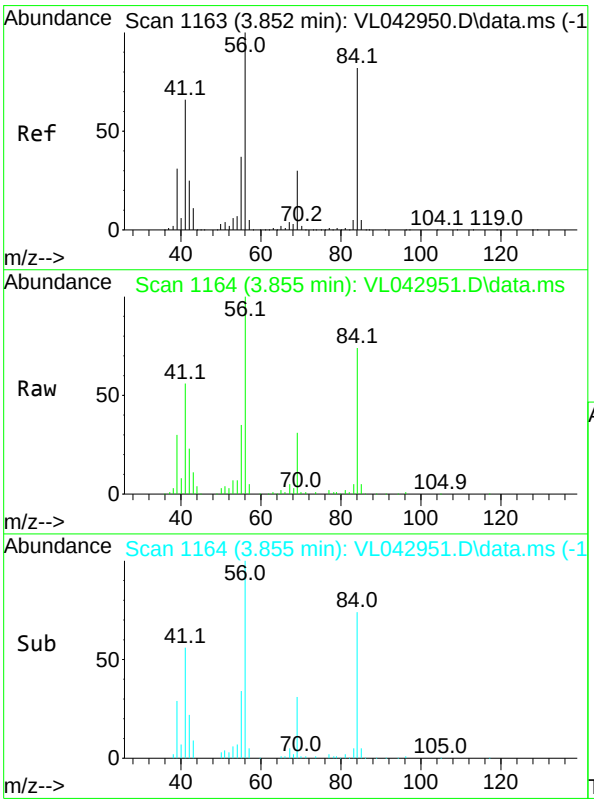
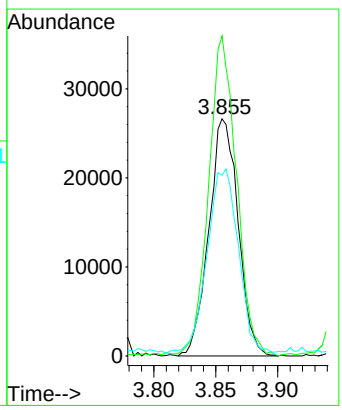
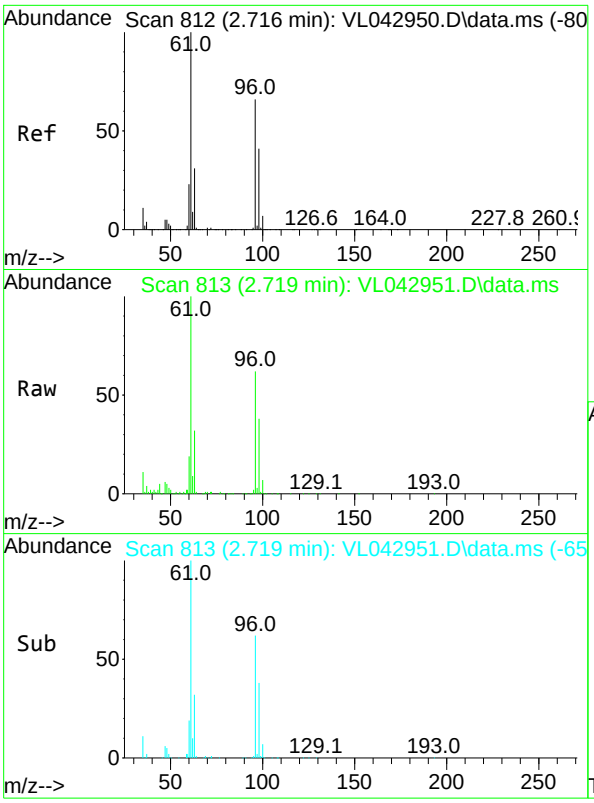


#30
Cyclohexane
Concen: 2.041 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 84 Resp: 43725

Ion	Ratio	Lower	Upper
84	100		
56	129.8	102.2	153.4
41	81.2	65.6	98.4

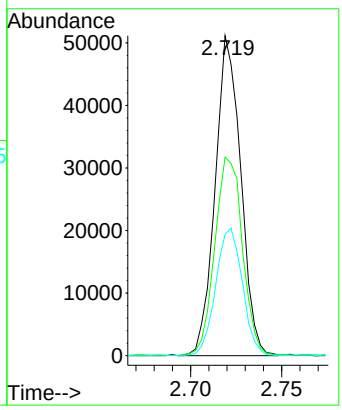




#31
cis-1,2-Dichloroethene
Concen: 2.084 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 61 Resp: 5001

Ion	Ratio	Lower	Upper
61	100		
96	61.9	53.0	79.6
98	37.9	32.9	49.3



Instrument :
MSVOA_L
ClientSampleId :
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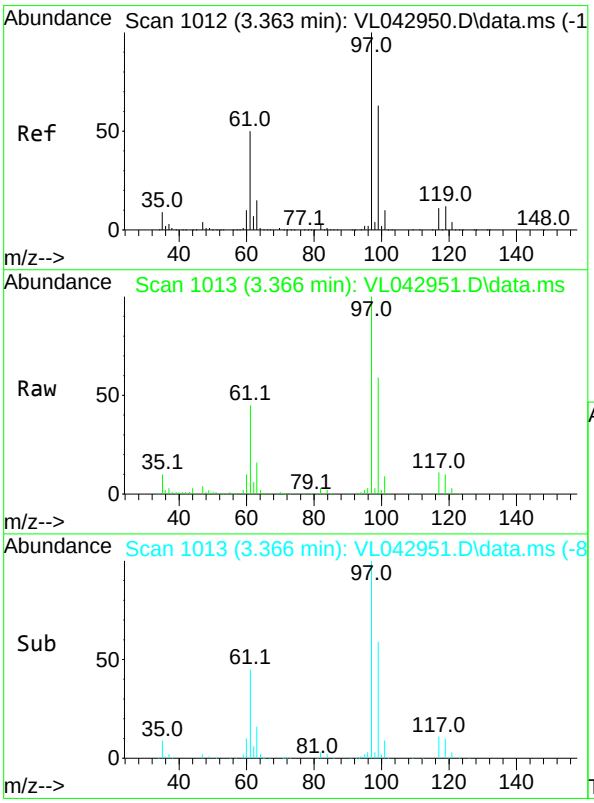
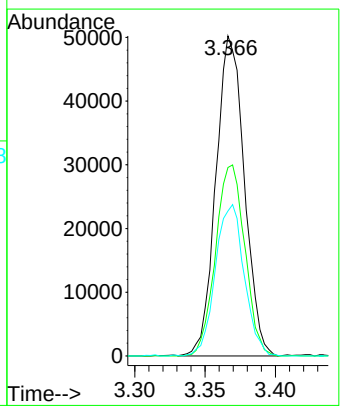
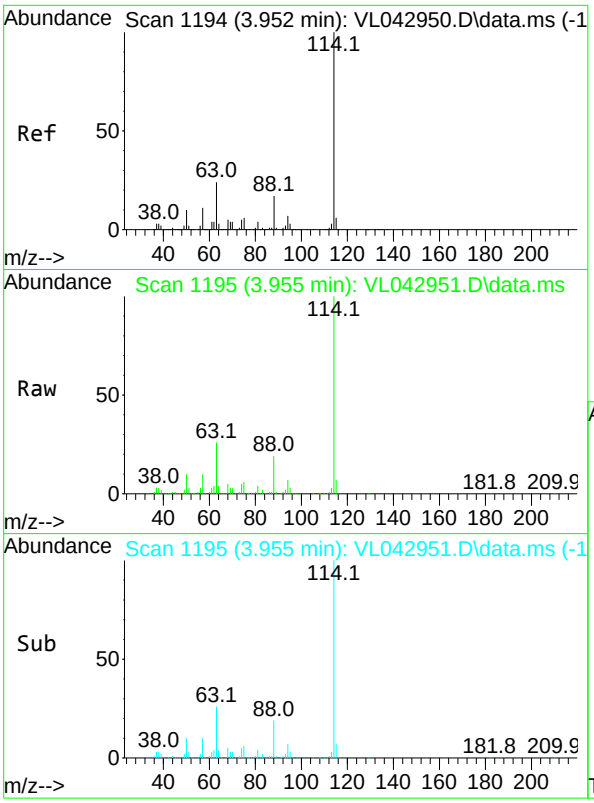


#32
1,1,1-Trichloroethane
Concen: 1.948 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 97 Resp: 70729

Ion	Ratio	Lower	Upper
97	100		
99	61.2	51.1	76.7
61	48.1	39.8	59.6

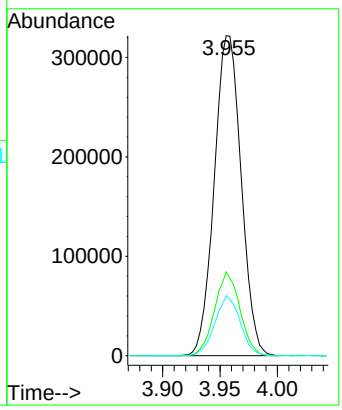




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:114 Resp: 52438

Ion	Ratio	Lower	Upper
114	100		
63	24.7	19.4	29.2
88	17.6	14.2	21.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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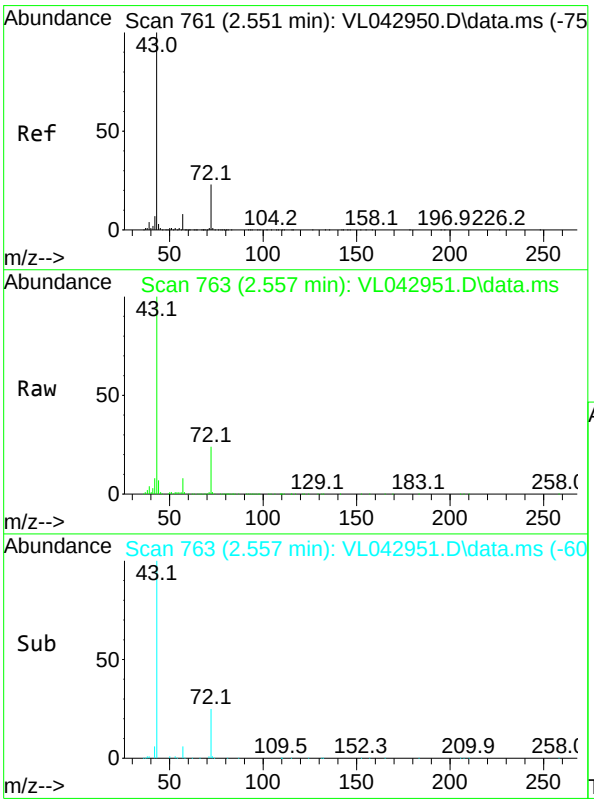
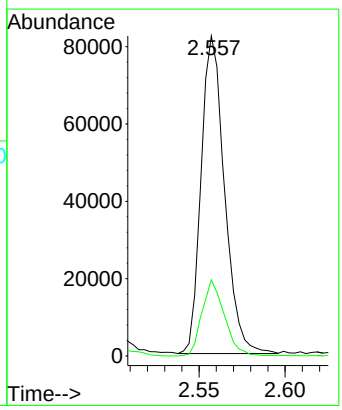
Supervised By :Mahesh Dadoda 09/24/2025

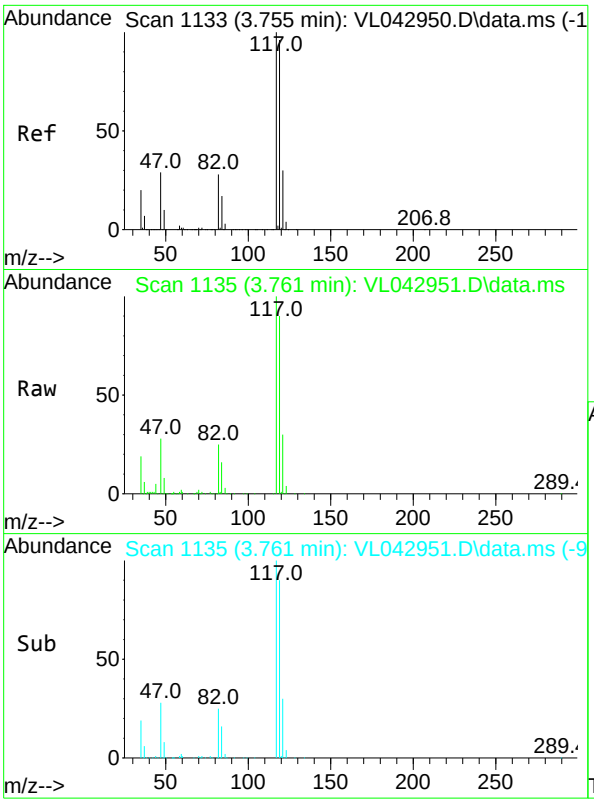


#34
2-Butanone
Concen: 2.114 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 77689

Ion	Ratio	Lower	Upper
43	100		
72	23.1	17.7	26.5

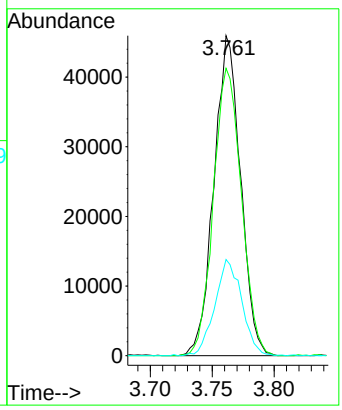




#35
Carbon Tetrachloride
Concen: 2.041 ppbv
RT: 3.761 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:117 Resp: 6885

Ion	Ratio	Lower	Upper
117	100		
119	89.8	76.9	115.3
121	30.0	23.7	35.5



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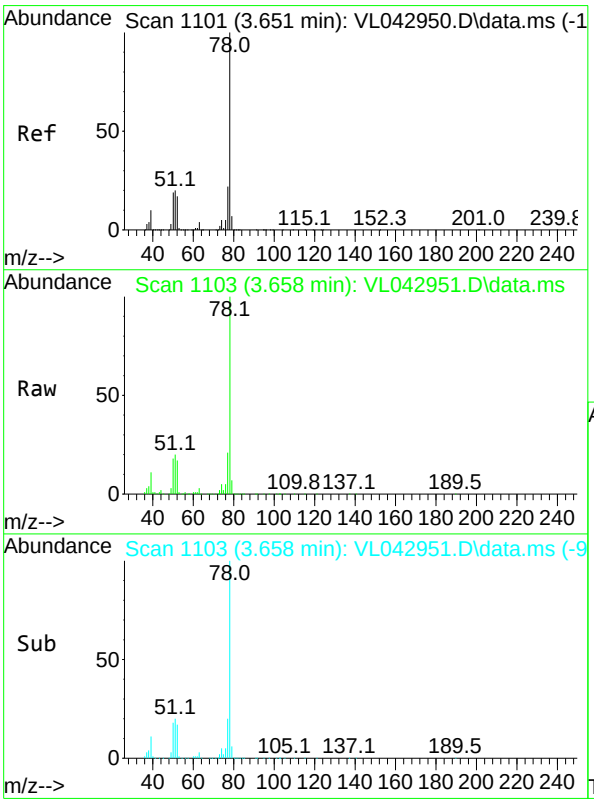
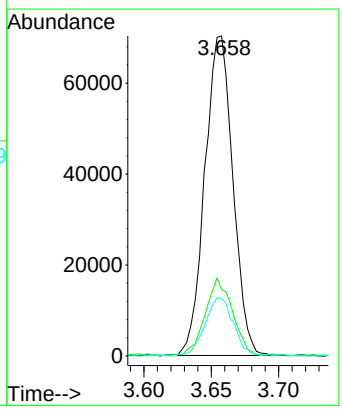
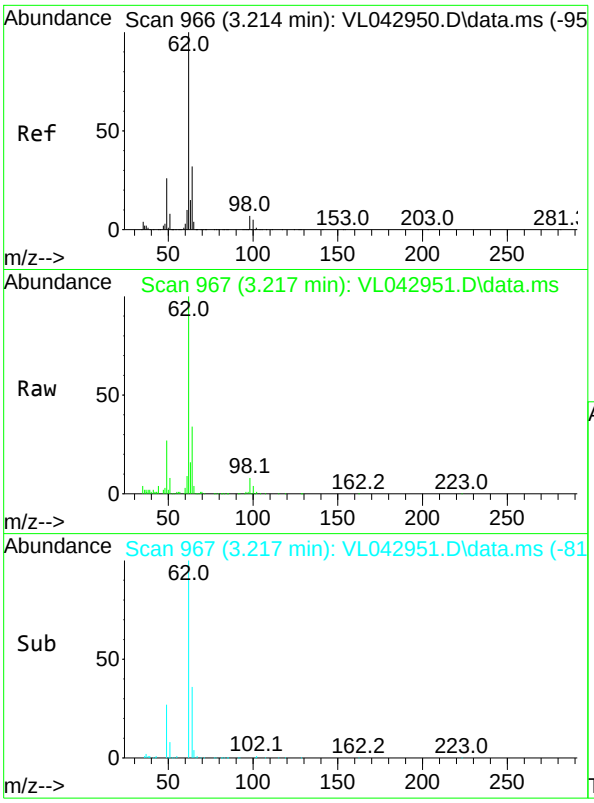


#36
Benzene
Concen: 2.069 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 78 Resp: 101901

Ion	Ratio	Lower	Upper
78	100		
77	20.5	17.8	26.6
50	17.7	15.0	22.4

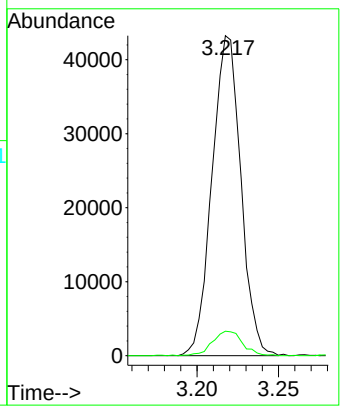




#37
1,2-Dichloroethane
Concen: 2.052 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 62 Resp: 5313

Ion	Ratio	Lower	Upper
62	100		
98	8.1	5.9	8.9



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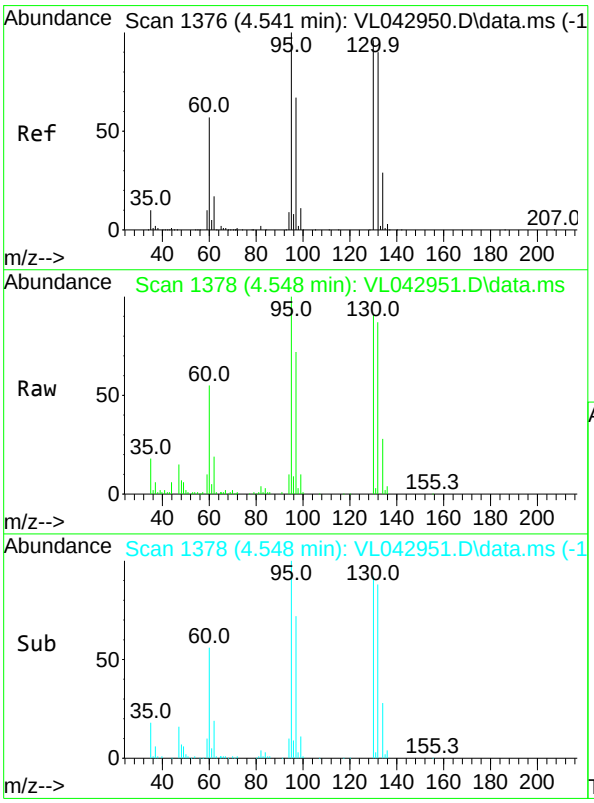
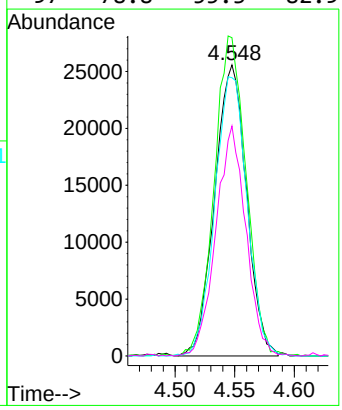
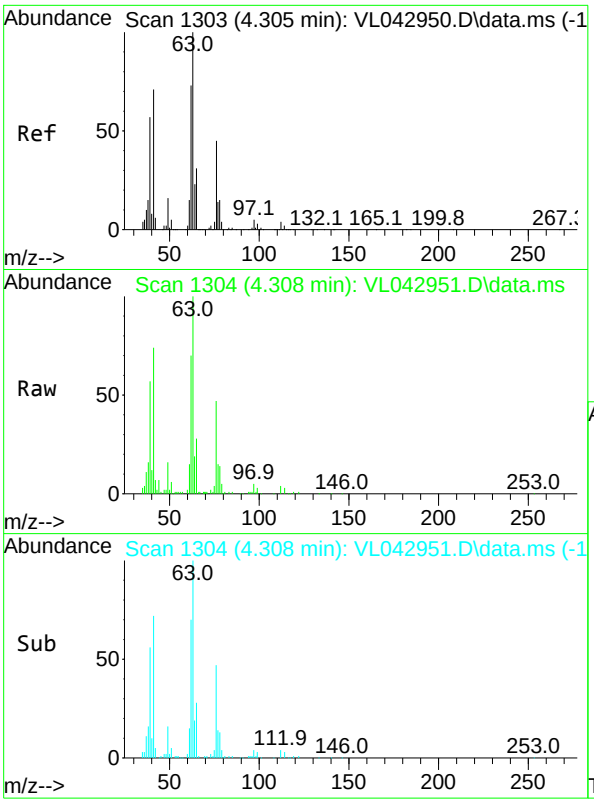


#38
Trichloroethene
Concen: 1.938 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:130 Resp: 47424

Ion	Ratio	Lower	Upper
130	100		
95	109.0	83.0	124.4
132	95.0	74.6	112.0
97	78.8	55.3	82.9

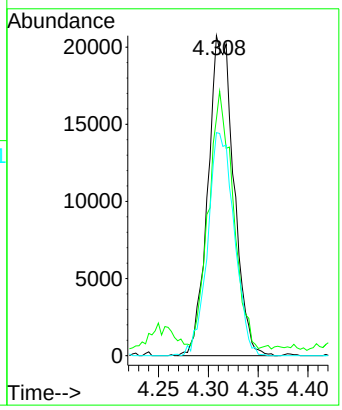




#39
1,2-Dichloropropane
Concen: 2.078 ppbv m
RT: 4.308 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 63 Resp: 3738

Ion	Ratio	Lower	Upper
63	100		
41	74.1	57.5	86.3
62	69.7	58.5	87.7



Instrument :
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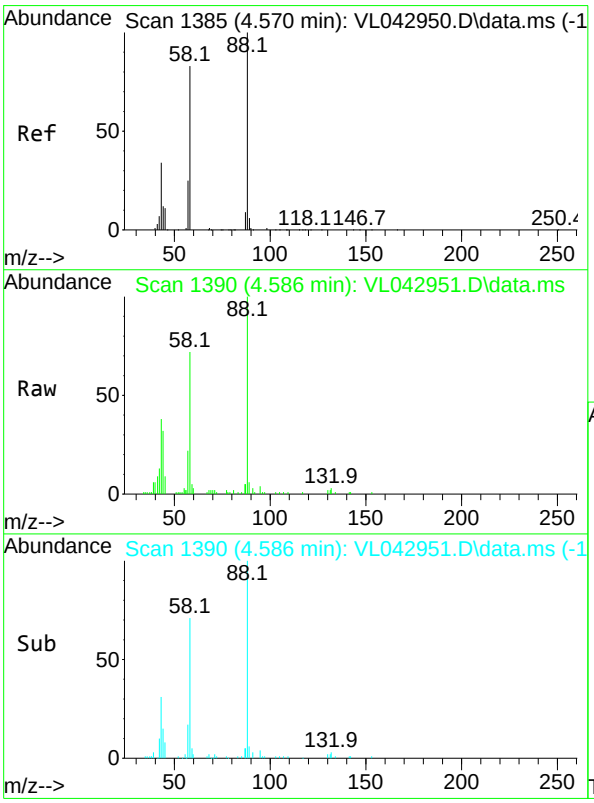
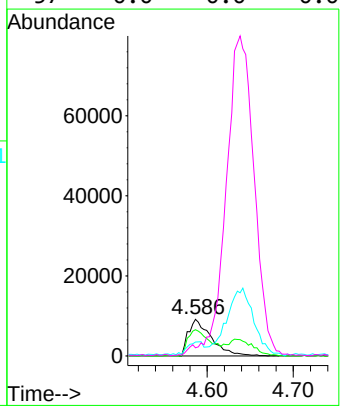
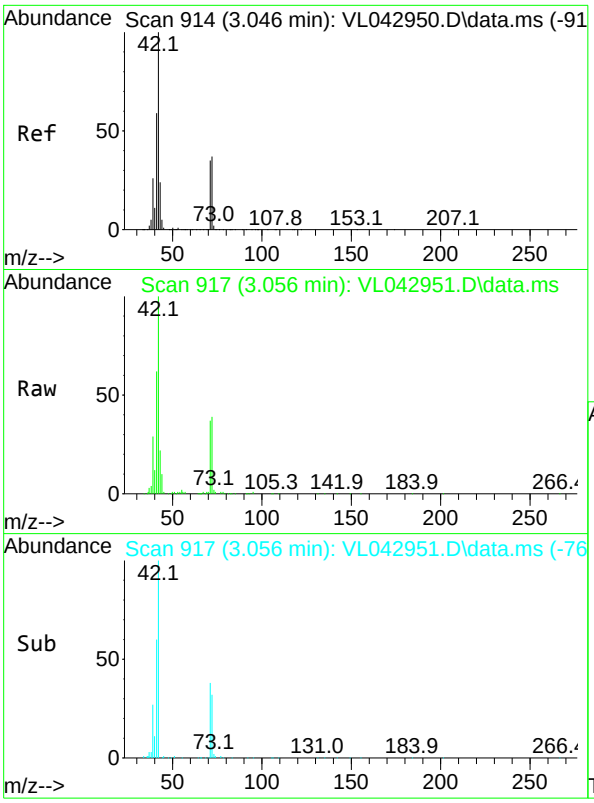


#40
1,4-Dioxane
Concen: 2.044 ppbv m
RT: 4.586 min Scan# 1390
Delta R.T. 0.016 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 88 Resp: 17074

Ion	Ratio	Lower	Upper
88	100		
58	72.4	59.7	89.5
43	0.0	28.9	43.3#
57	0.0	0.0	0.0

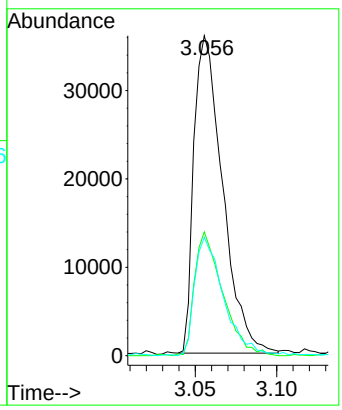




#41
Tetrahydrofuran
Concen: 2.081 ppbv
RT: 3.056 min Scan# 9
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 42 Resp: 4396

Ion	Ratio	Lower	Upper
42	100		
72	38.5	30.0	45.0
71	37.4	28.8	43.2



Instrument :
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ClientSampleId :
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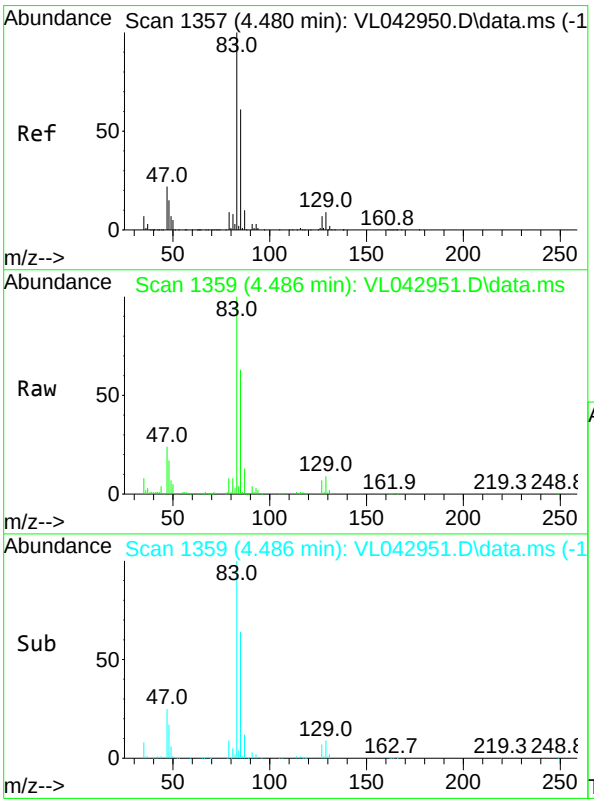
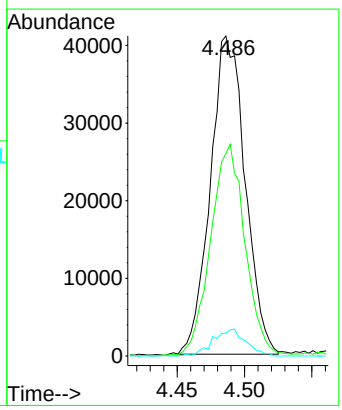
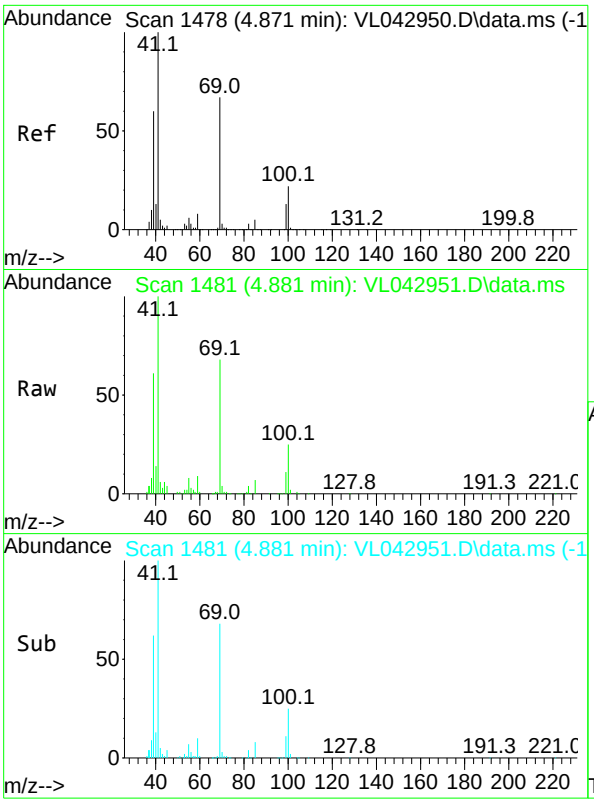


#42
Bromodichloromethane
Concen: 2.042 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 83 Resp: 73675

Ion	Ratio	Lower	Upper
83	100		
85	63.2	49.0	73.6
127	7.2	5.3	7.9

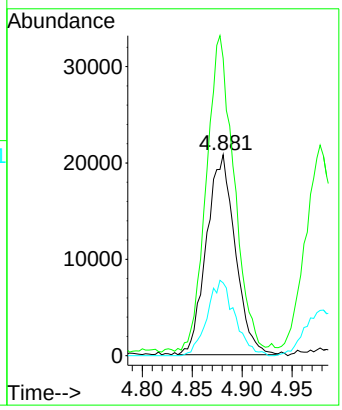




#43
Methyl Methacrylate
Concen: 2.077 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 69 Resp: 4152

Ion	Ratio	Lower	Upper
69	100		
41	153.8	124.5	186.7
100	36.3	29.0	43.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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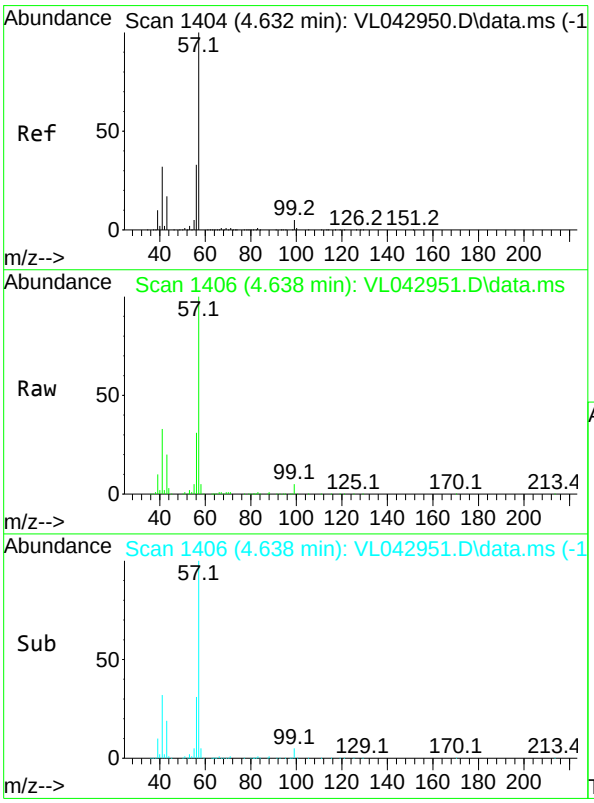
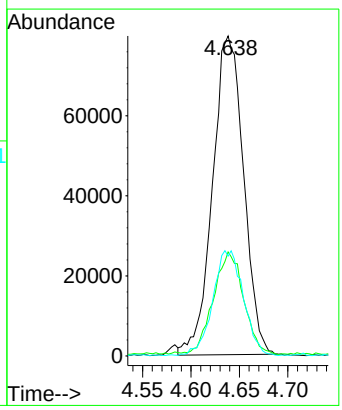
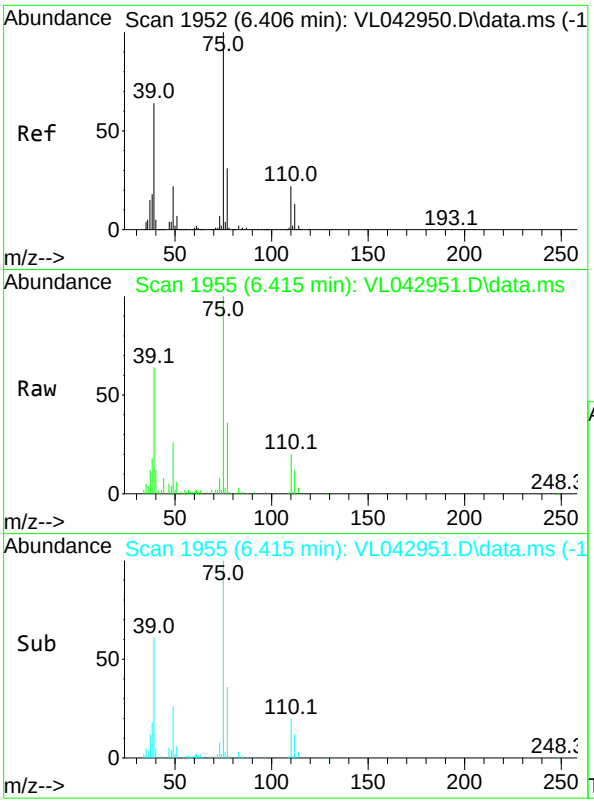


#44
2,2,4-Trimethylpentane
Concen: 2.083 ppbv
RT: 4.638 min Scan# 1406
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 57 Resp: 177242

Ion	Ratio	Lower	Upper
57	100		
41	32.9	25.5	38.3
56	32.5	25.8	38.8

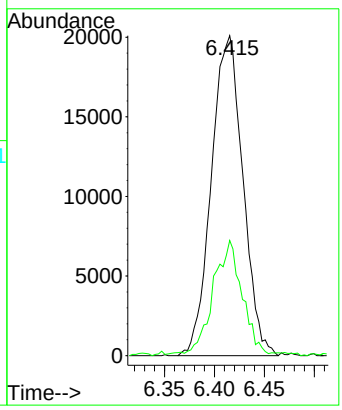




#45
t-1,3-Dichloropropene
Concen: 2.055 ppbv
RT: 6.415 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 75 Resp: 4417

Ion	Ratio	Lower	Upper
75	100		
77	36.0	25.0	37.4



Instrument :
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ClientSampleId :
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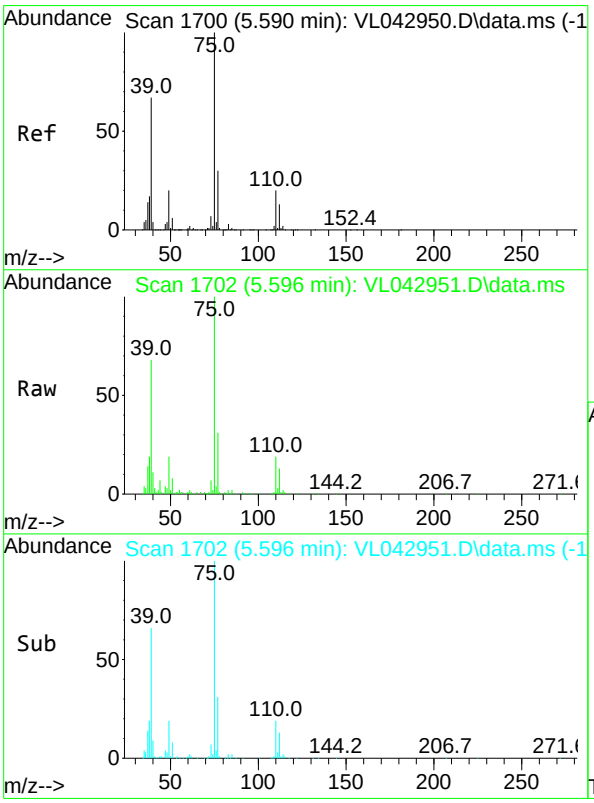
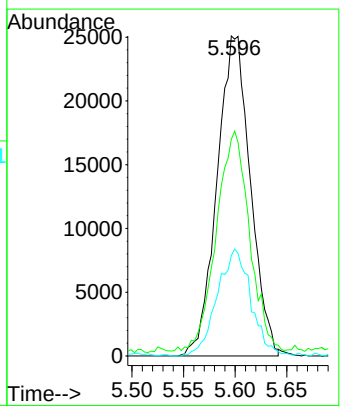
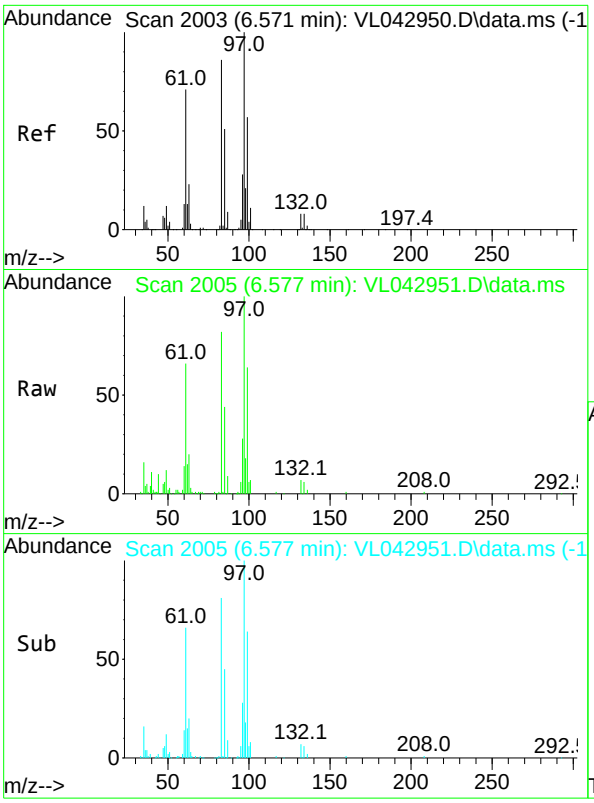


#46
cis-1,3-Dichloropropene
Concen: 2.057 ppbv
RT: 5.596 min Scan# 1702
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 75 Resp: 56335

Ion	Ratio	Lower	Upper
75	100		
39	64.9	53.8	80.6
77	31.4	23.6	35.4

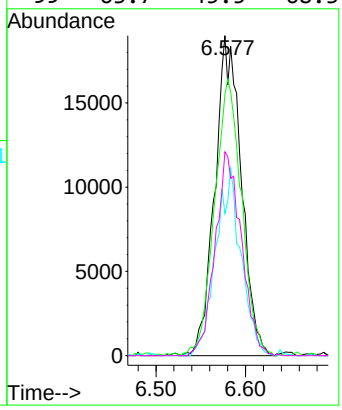




#47
1,1,2-Trichloroethane
Concen: 2.050 ppbv m
RT: 6.577 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 97 Resp: 3896

Ion	Ratio	Lower	Upper
97	100		
83	81.6	68.7	103.1
85	44.4	40.6	60.8
99	63.7	45.5	68.3



Instrument :
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ClientSampleId :
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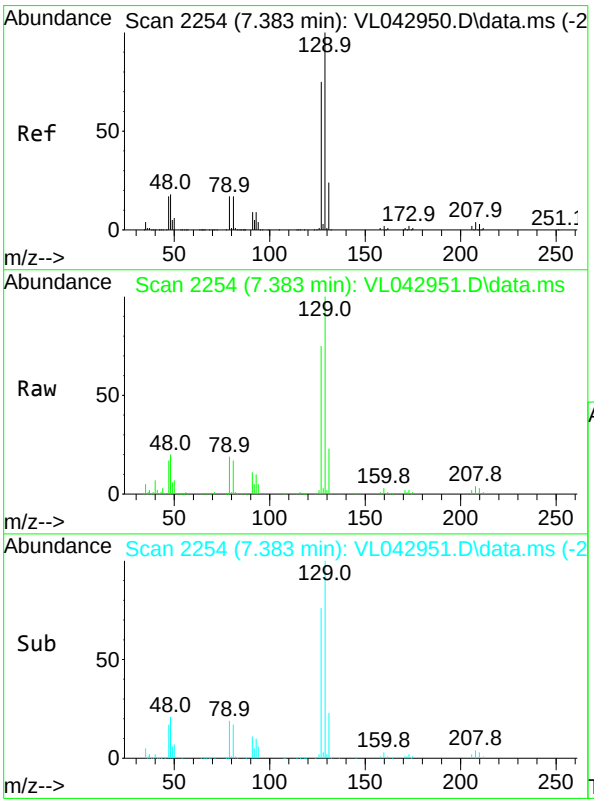
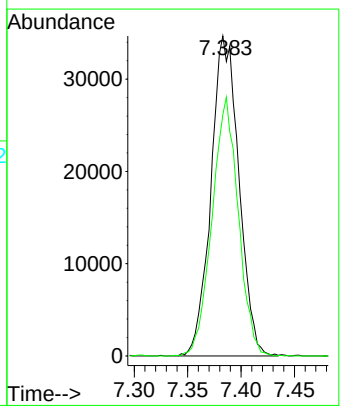
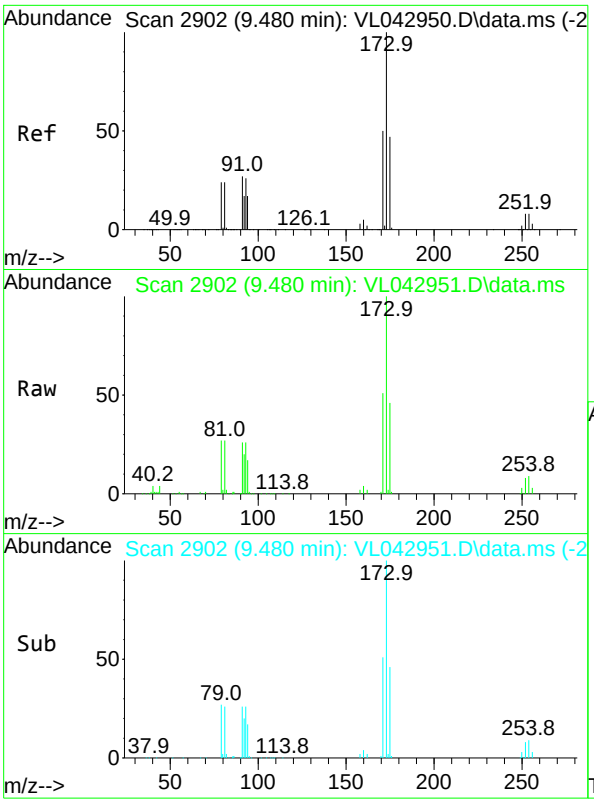


#48
Dibromochloromethane
Concen: 2.072 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:129 Resp: 62968

Ion	Ratio	Lower	Upper
129	100		
127	76.1	39.1	117.2

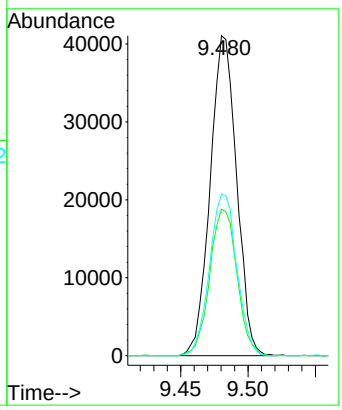




#49
Bromoform
Concen: 2.119 ppbv
RT: 9.480 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:173 Resp: 5602

Ion	Ratio	Lower	Upper
173	100		
175	47.3	37.9	56.9
171	52.1	41.1	61.7



Instrument :
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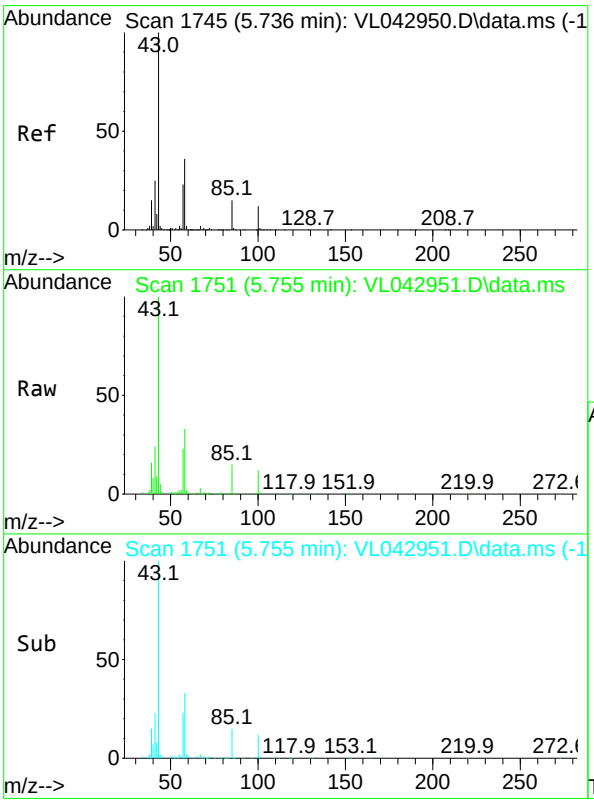
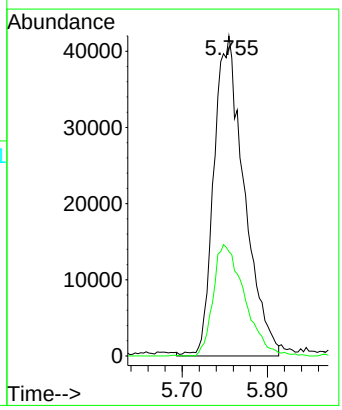
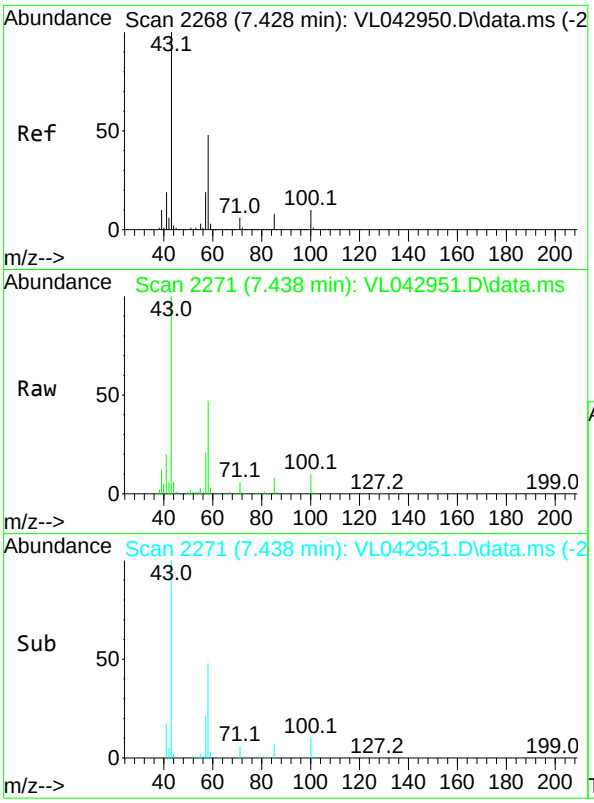


#50
4-Methyl-2-Pentanone
Concen: 2.098 ppbv m
RT: 5.755 min Scan# 1751
Delta R.T. 0.019 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 103605

Ion	Ratio	Lower	Upper
43	100		
58	36.1	28.4	42.6

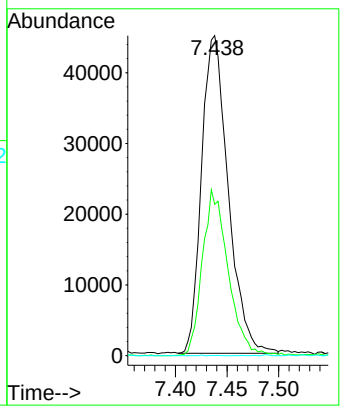




#51
2-Hexanone
Concen: 2.053 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 8062

Ion	Ratio	Lower	Upper
43	100		
58	50.6	39.7	59.5
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
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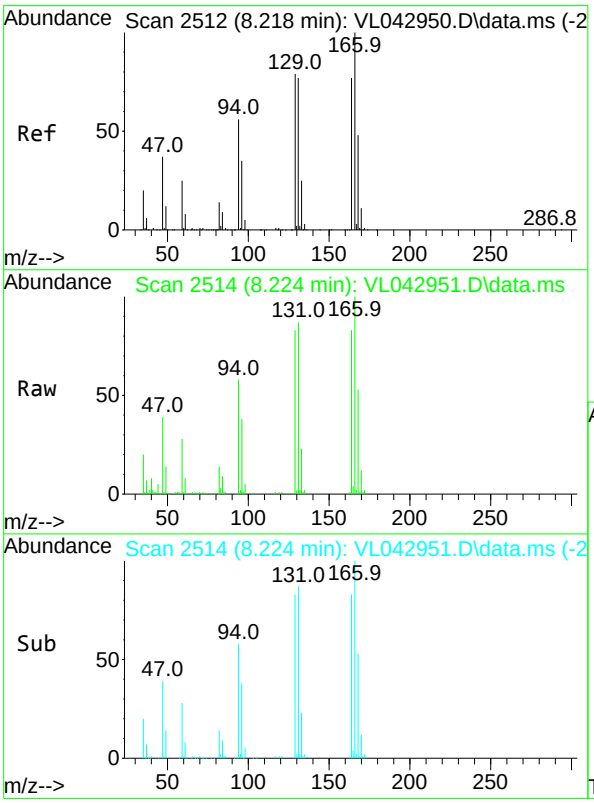
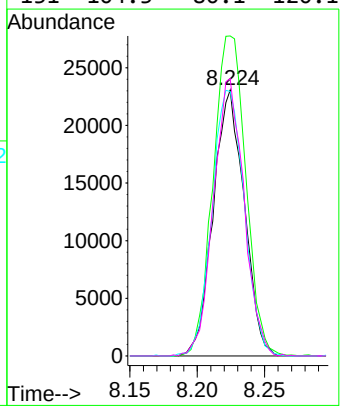
Supervised By :Mahesh Dadoda 09/24/2025

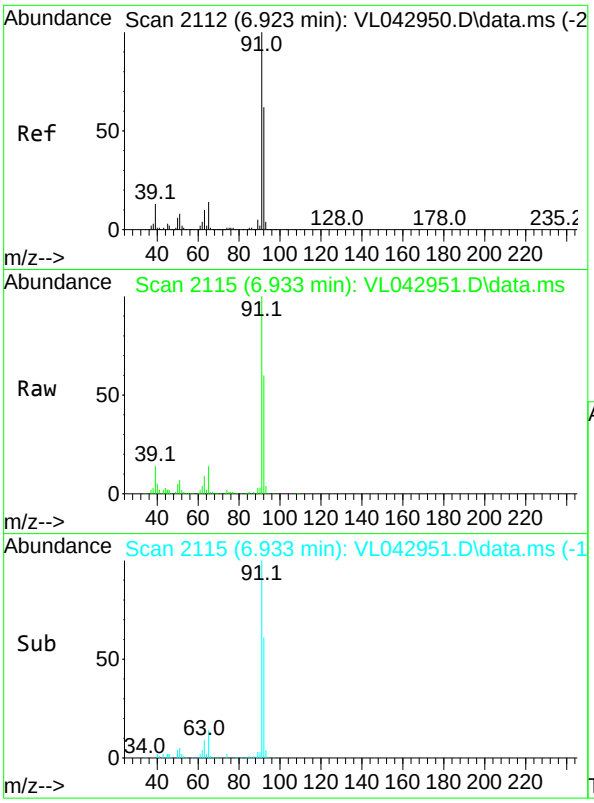


#52
Tetrachloroethene
Concen: 1.934 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:164 Resp: 36853

Ion	Ratio	Lower	Upper
164	100		
166	120.4	103.5	155.3
129	98.8	82.2	123.4
131	104.3	80.1	120.1

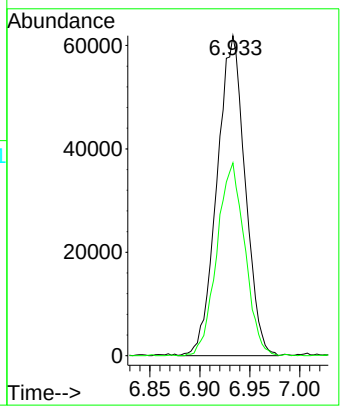




#53
Toluene
Concen: 2.081 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 12126

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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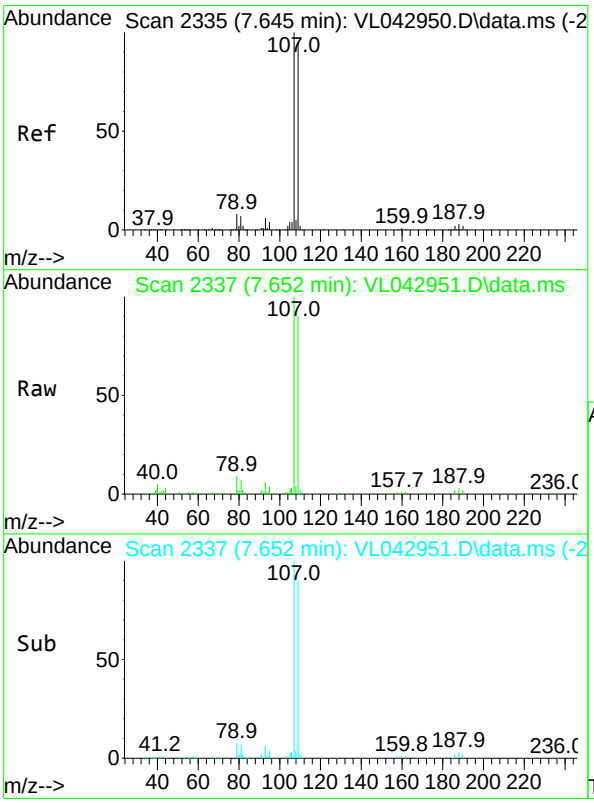
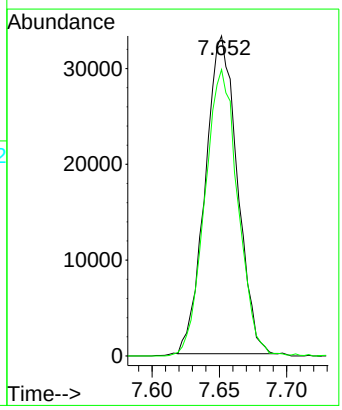
Supervised By :Mahesh Dadoda 09/24/2025

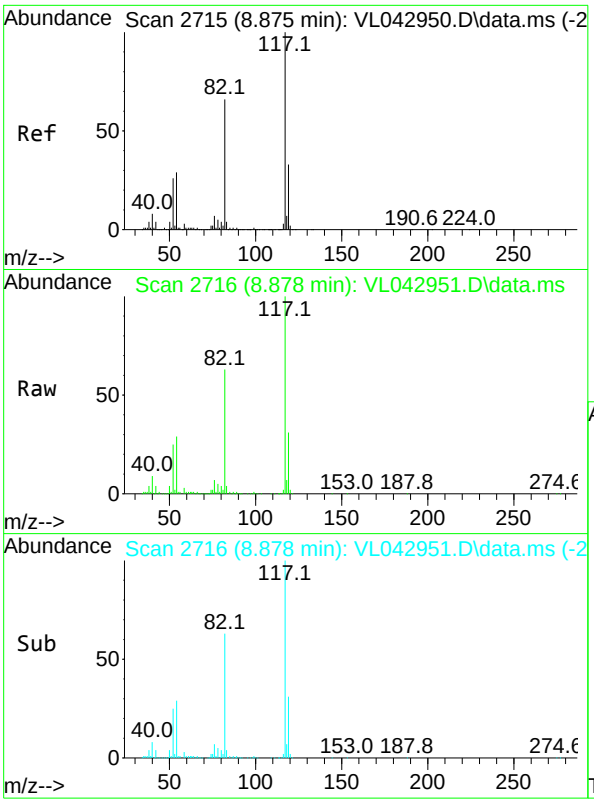


#54
1,2-Dibromoethane
Concen: 2.058 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:107 Resp: 55022

Ion	Ratio	Lower	Upper
107	100		
109	89.3	75.8	113.8

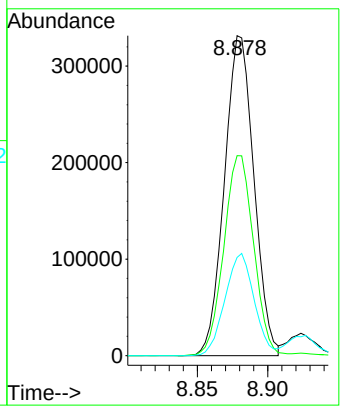




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:117 Resp: 48382

Ion	Ratio	Lower	Upper
117	100		
82	63.6	52.8	79.2
119	31.8	26.5	39.7



Instrument :
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ClientSampleId :
VSTDICC002

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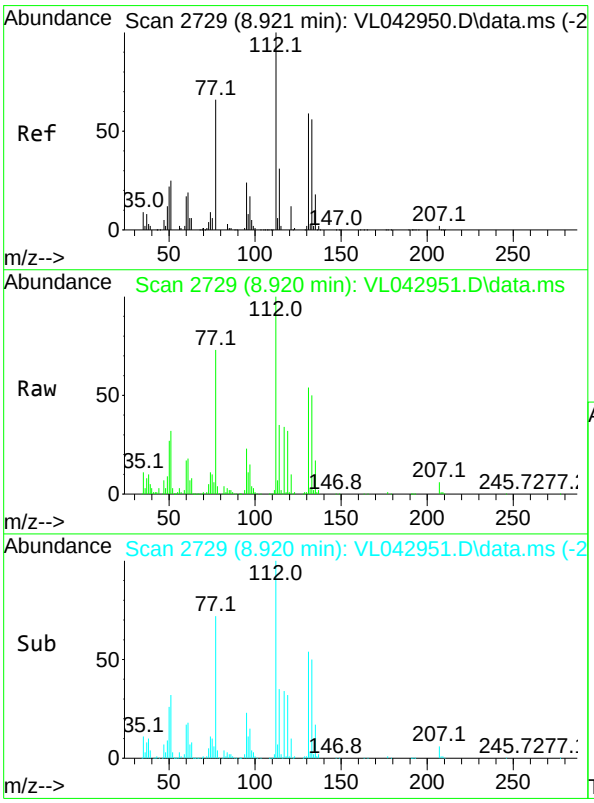
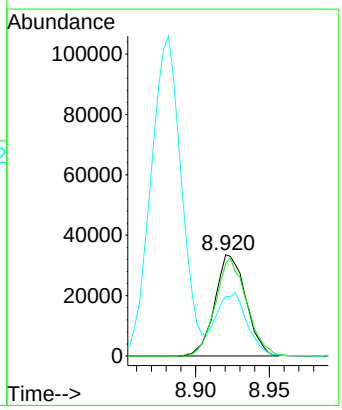
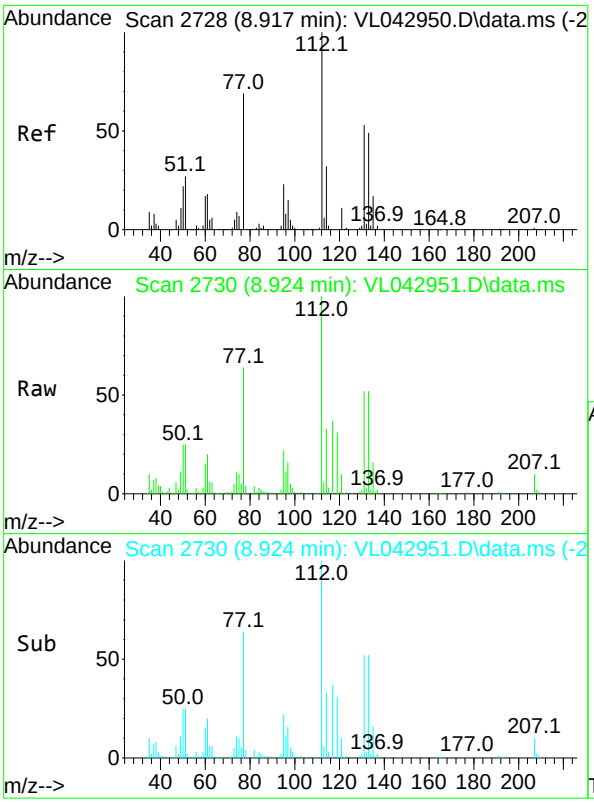


#56
1,1,1,2-Tetrachloroethane
Concen: 2.112 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:131 Resp: 48901

Ion	Ratio	Lower	Upper
131	100		
133	97.7	76.6	114.8
119	61.4	49.9	74.9

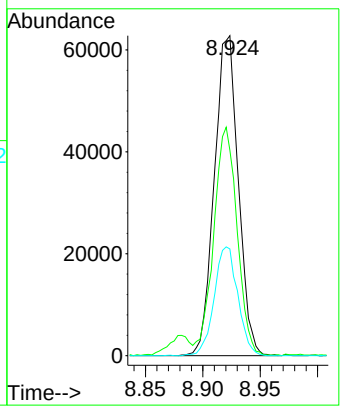




#57
Chlorobenzene
Concen: 2.068 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:112 Resp: 9132

Ion	Ratio	Lower	Upper
112	100		
77	63.9	55.7	83.5
114	33.4	28.6	35.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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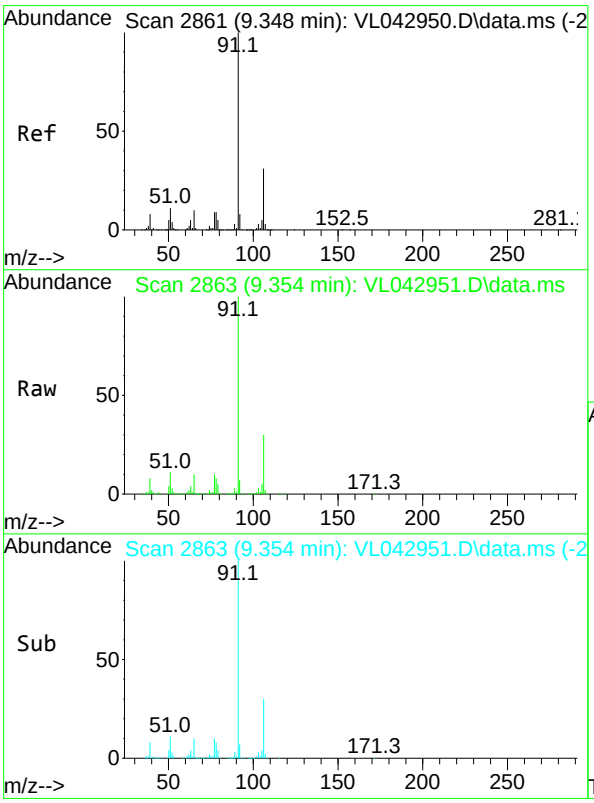
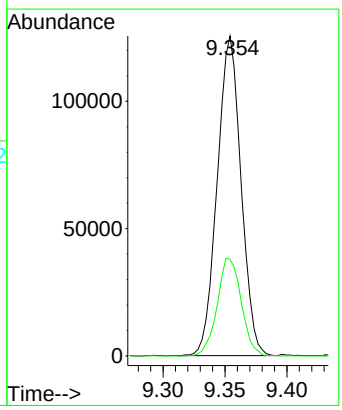
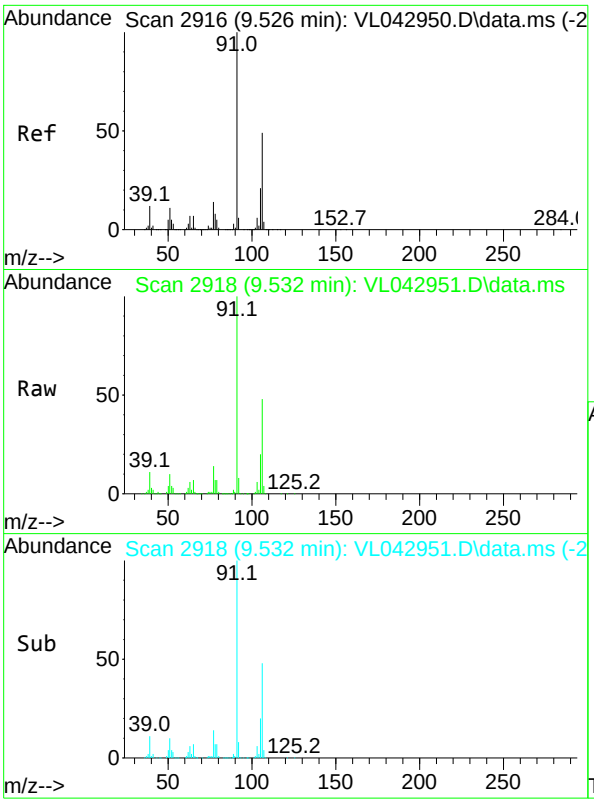


#58
Ethyl Benzene
Concen: 2.115 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 168063

Ion	Ratio	Lower	Upper
91	100		
106	30.3	24.6	37.0





#59
m/p-Xylene
Concen: 4.202 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 26336

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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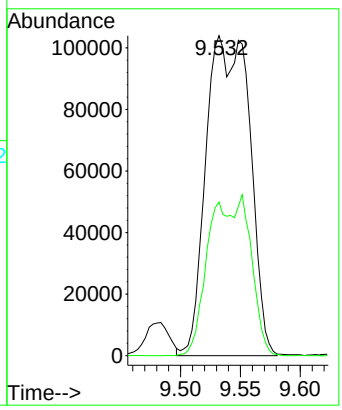
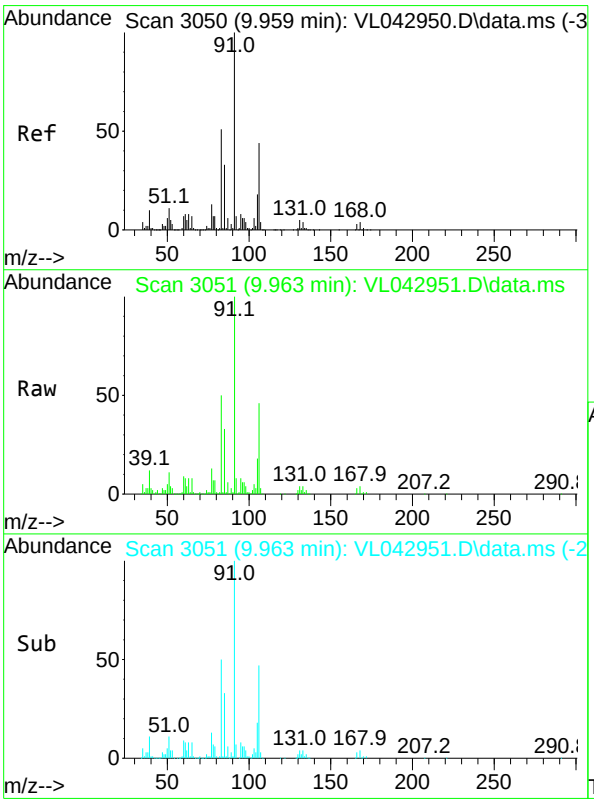
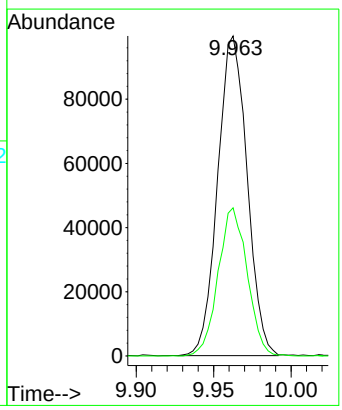


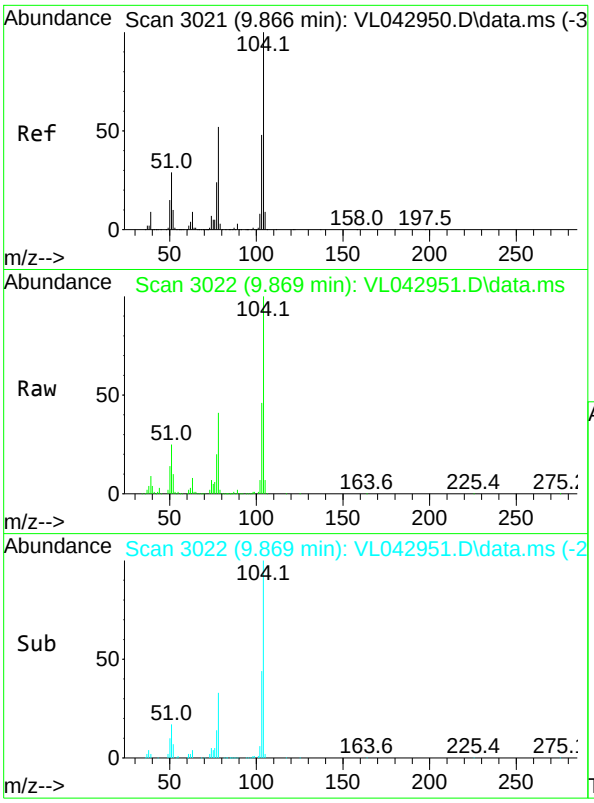


#60
o-Xylene
Concen: 2.101 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 131507

Ion	Ratio	Lower	Upper
91	100		
106	45.8	22.4	67.0





#61
Styrene
Concen: 2.119 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:104 Resp: 6274

Ion	Ratio	Lower	Upper
104	100		
78	47.7	39.9	59.9
103	46.3	36.9	55.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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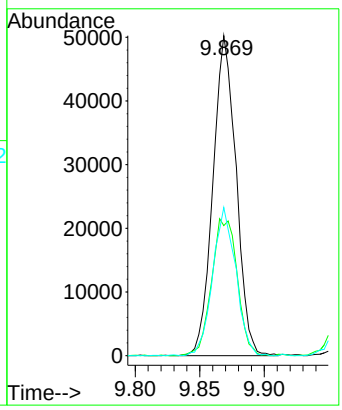
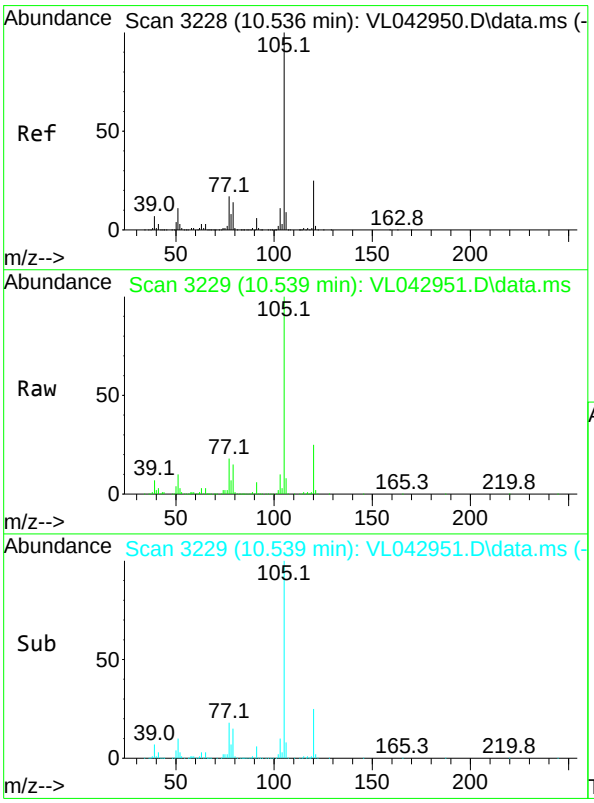
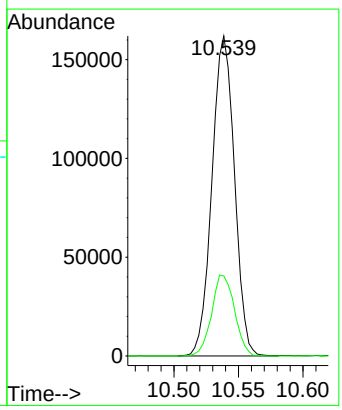


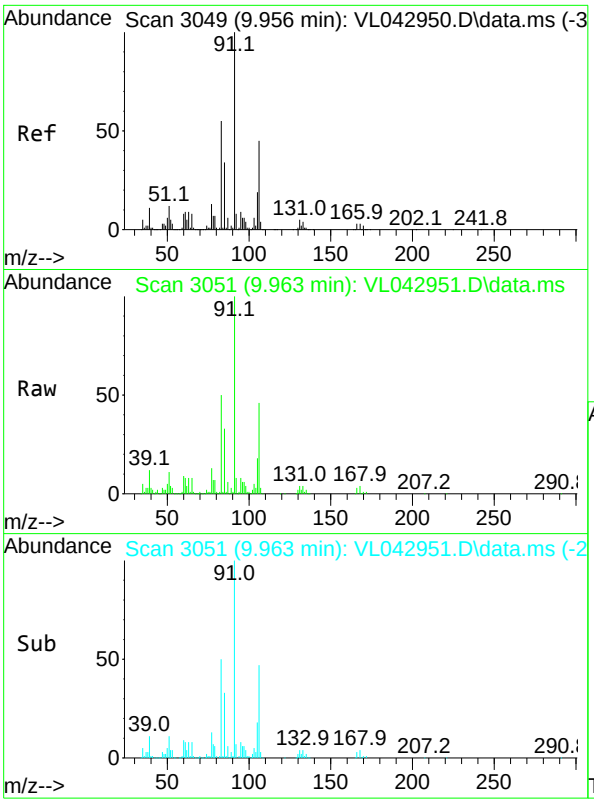


#62
Isopropylbenzene
Concen: 2.103 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 196198

Ion	Ratio	Lower	Upper
105	100		
120	25.7	20.6	30.8





#63
1,1,2,2-Tetrachloroethane
Concen: 1.978 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 83 Resp: 6508

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	65.9	32.2	96.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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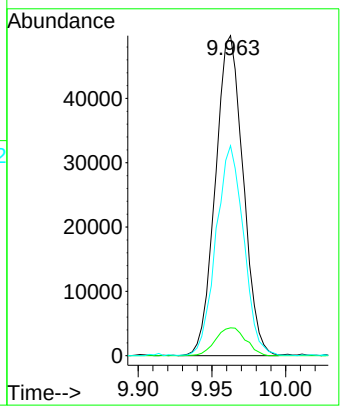
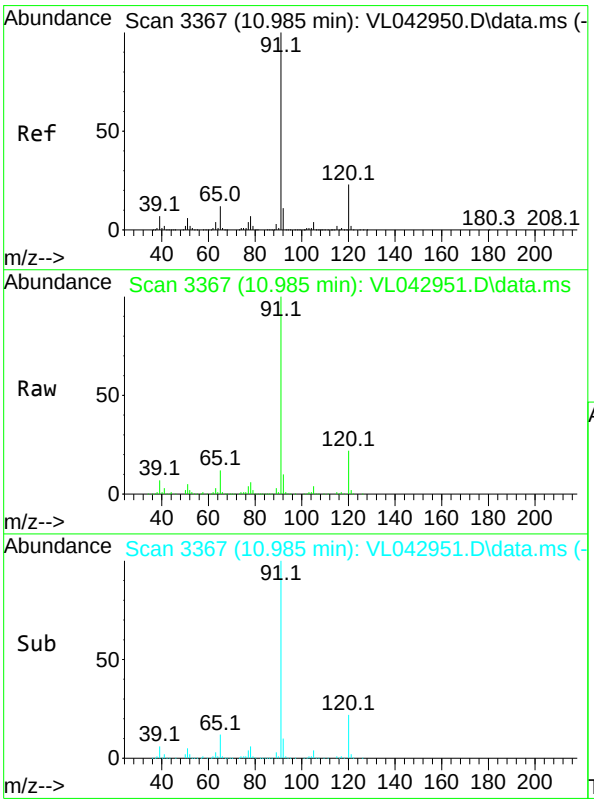
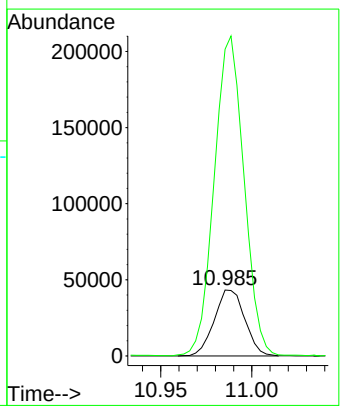


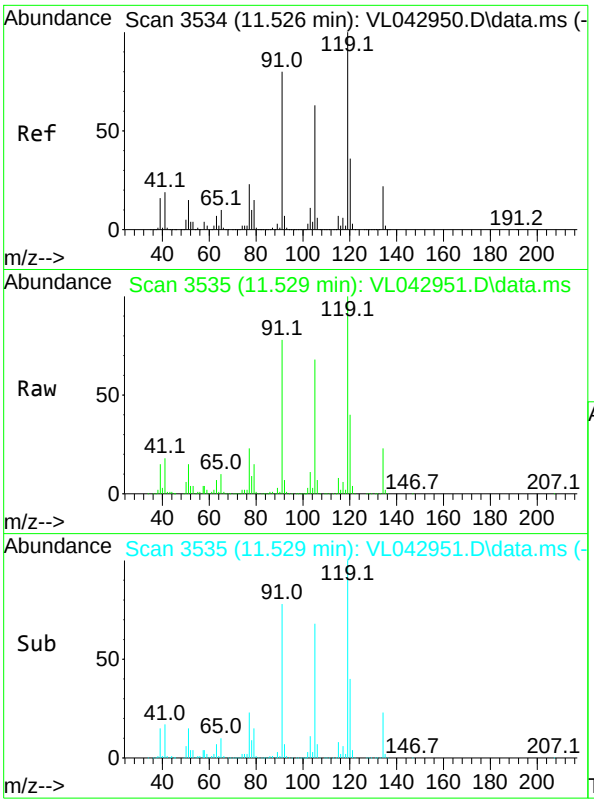


#64
n-propylbenzene
Concen: 2.074 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:120 Resp: 50569

Ion	Ratio	Lower	Upper
120	100		
91	474.1	364.9	547.3

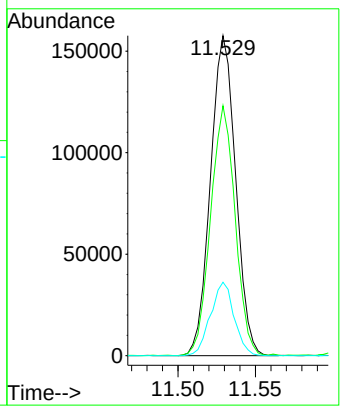




#65
tert-Butylbenzene
Concen: 2.147 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:119 Resp: 17821

Ion	Ratio	Lower	Upper
119	100		
91	76.4	63.1	94.7
134	21.5	17.0	25.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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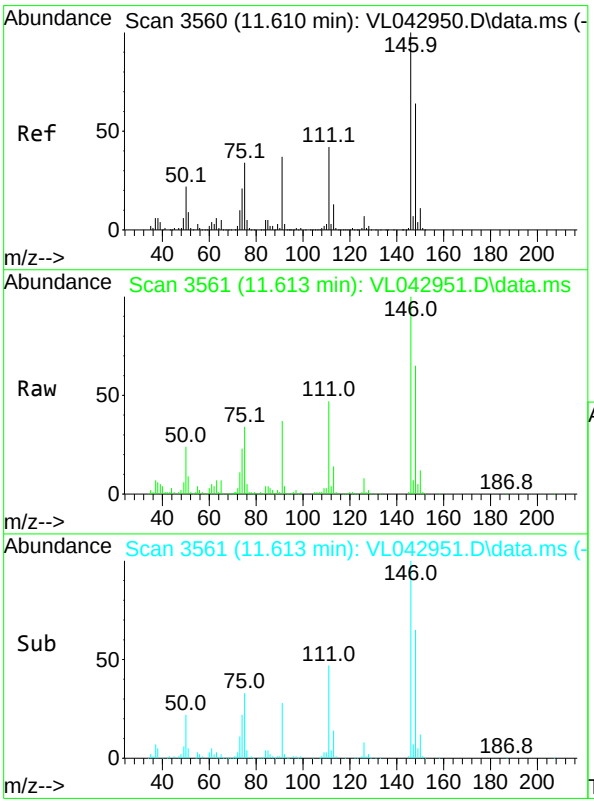
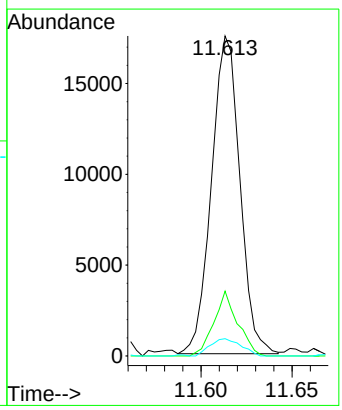
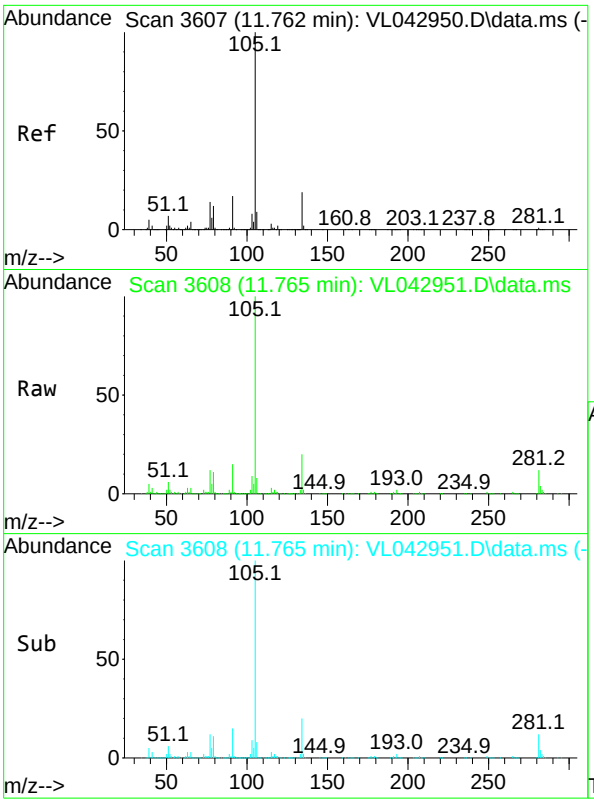


#66
Benzyl Chloride
Concen: 2.181 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 18992

Ion	Ratio	Lower	Upper
91	100		
126	17.1	14.6	21.8
128	6.0	5.0	7.4

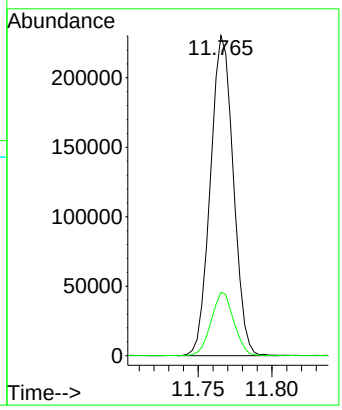




#67
sec-Butylbenzene
Concen: 2.158 ppbv
RT: 11.765 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 24951

Ion	Ratio	Lower	Upper
105	100		
134	19.6	15.7	23.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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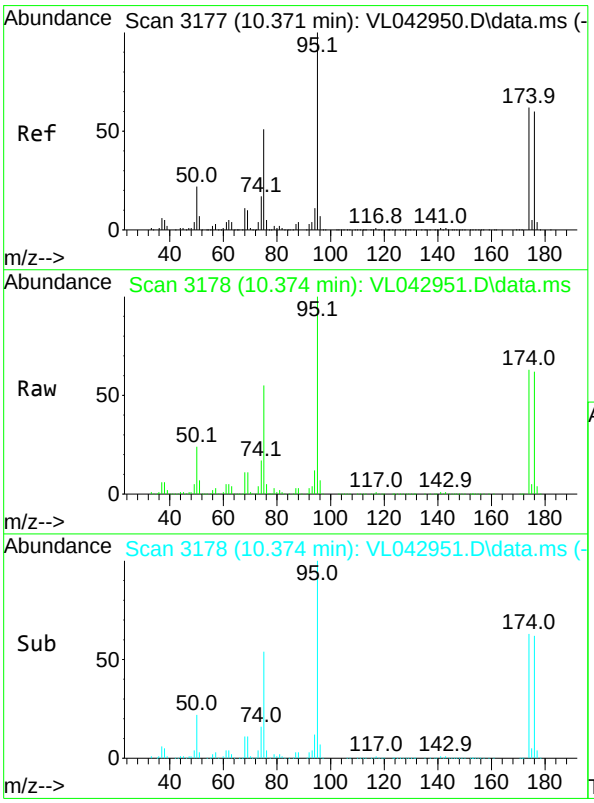
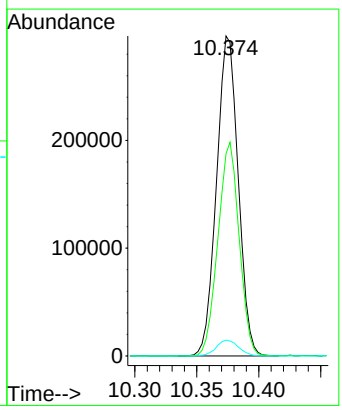
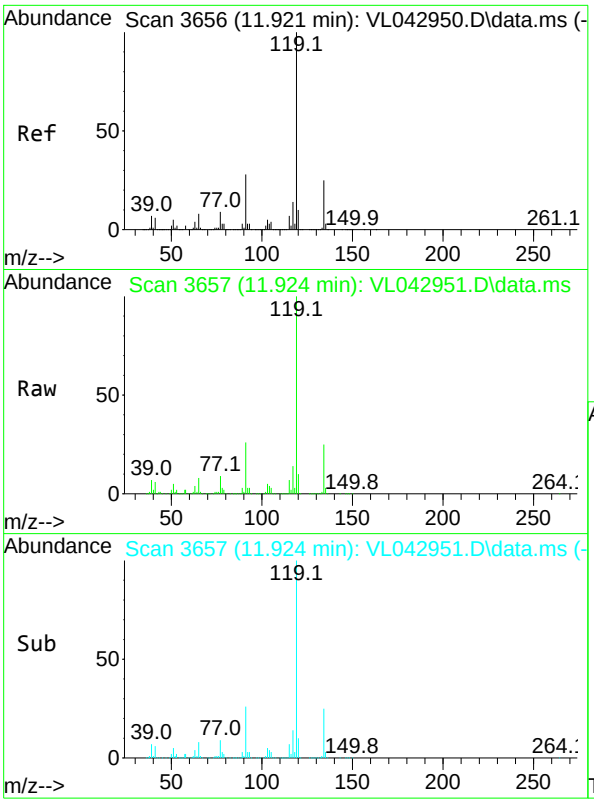


#68
1-Bromo-4-Fluorobenzene
Concen: 10.012 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 95 Resp: 361586

Ion	Ratio	Lower	Upper
95	100		
174	65.6	51.4	77.2
175	5.1	4.0	6.0





#69
p-Isopropyltoluene
Concen: 2.158 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:119 Resp: 21080

Ion	Ratio	Lower	Upper
119	100		
134	25.0	21.0	31.4
91	26.4	22.3	33.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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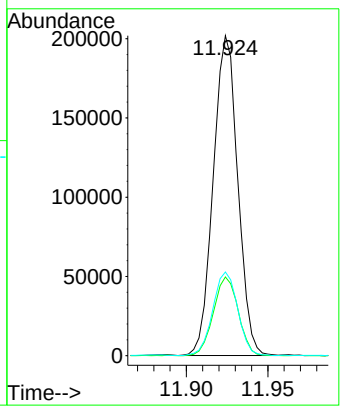
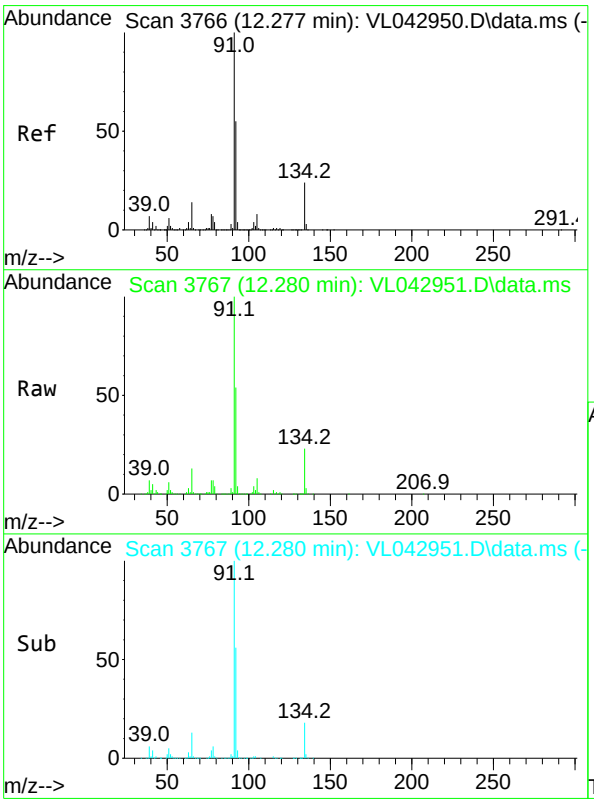
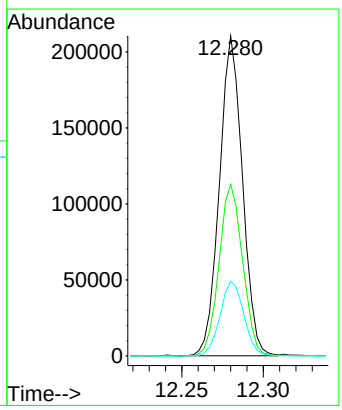


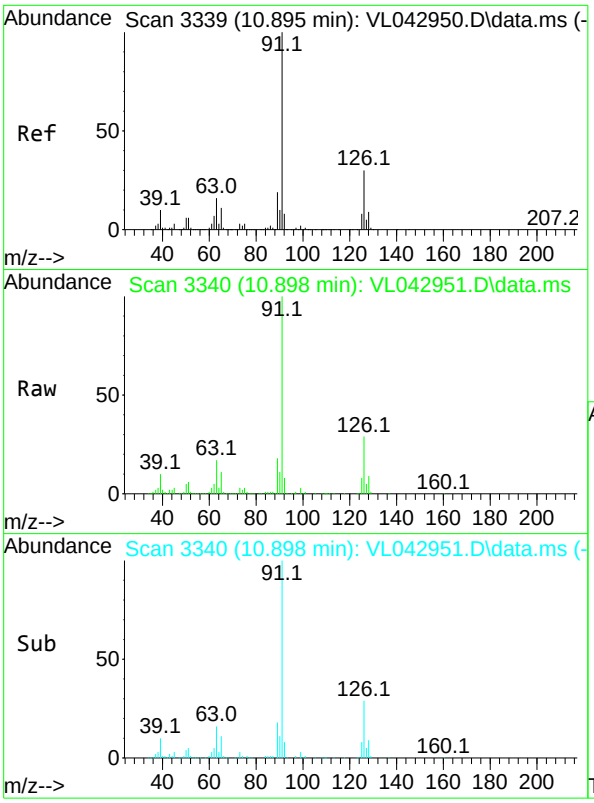


#70
n-Butylbenzene
Concen: 2.167 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 206691

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.0	66.0
134	24.1	19.4	29.2

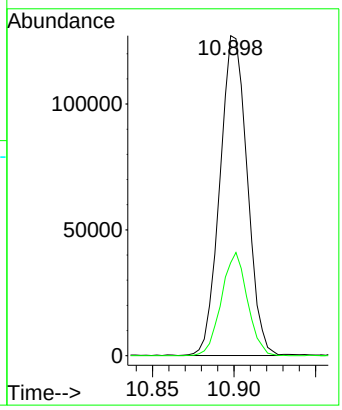




#71
2-Chlorotoluene
Concen: 2.099 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 14790

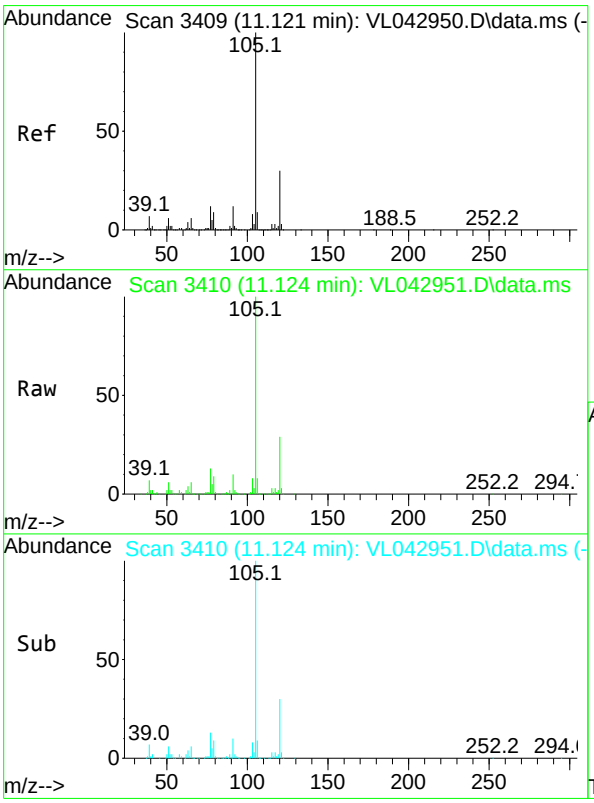
Ion	Ratio	Lower	Upper
91	100		
126	30.7	12.3	49.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

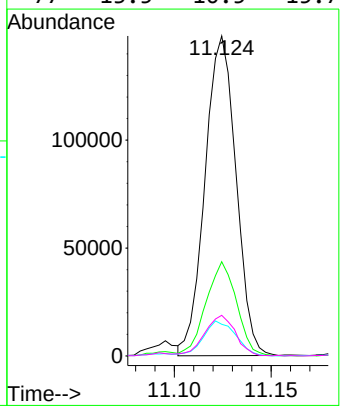
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

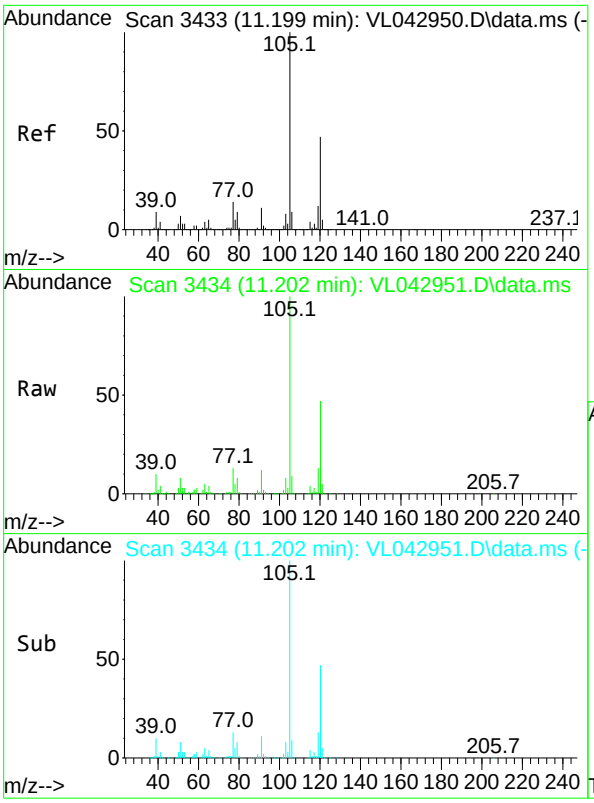


#72
4-Ethyltoluene
Concen: 2.102 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 164770

Ion	Ratio	Lower	Upper
105	100		
120	30.4	24.2	36.2
91	12.2	10.0	15.0
77	13.5	10.5	15.7

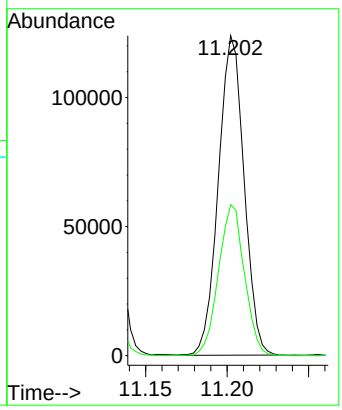




#73
1,3,5-Trimethylbenzene
Concen: 2.128 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 13534

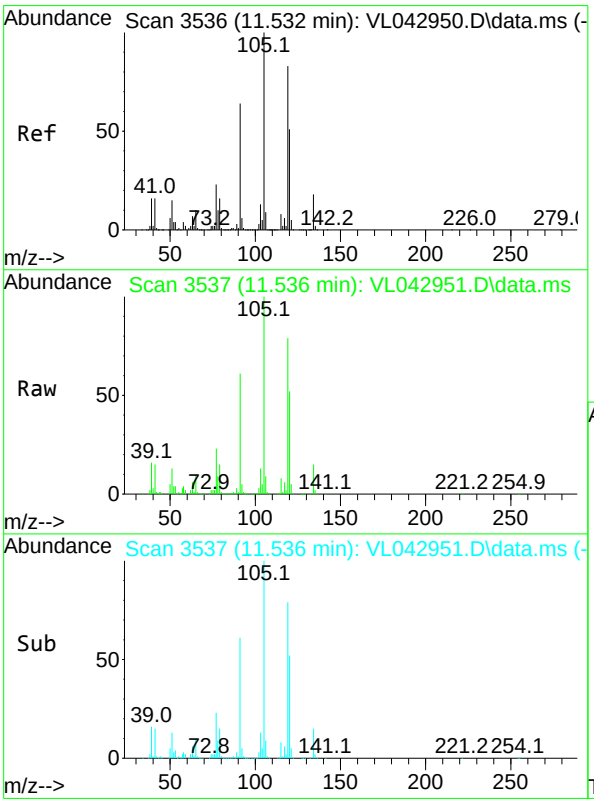
Ion	Ratio	Lower	Upper
105	100		
120	47.3	38.0	57.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

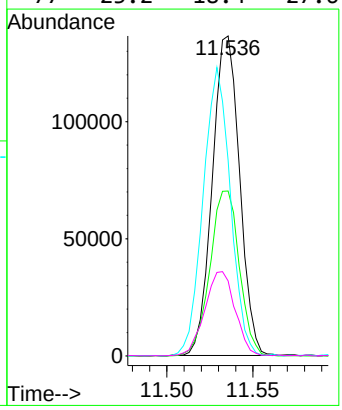
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

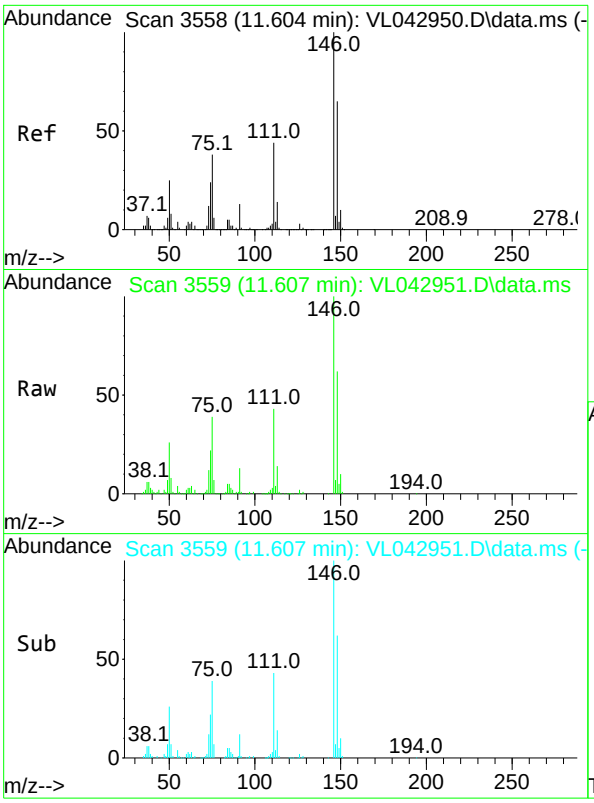


#74
1,2,4-Trimethylbenzene
Concen: 2.147 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 150772

Ion	Ratio	Lower	Upper
105	100		
120	51.6	40.9	61.3
91	61.0	51.2	76.8
77	23.2	18.4	27.6

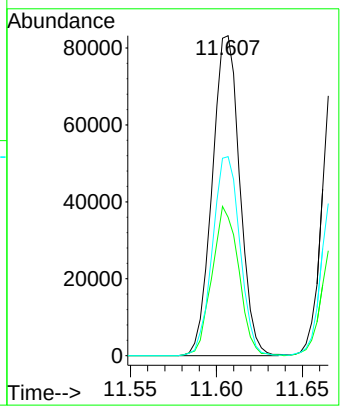




#75
1,3-Dichlorobenzene
Concen: 2.124 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:146 Resp: 9248

Ion	Ratio	Lower	Upper
146	100		
111	45.3	22.3	66.9
148	62.1	31.9	95.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
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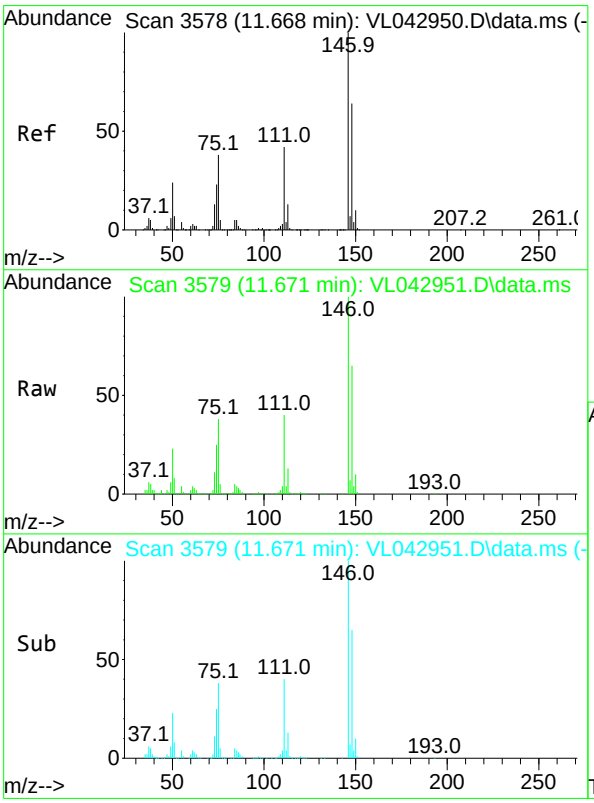
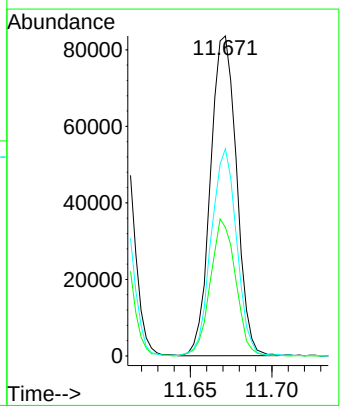
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

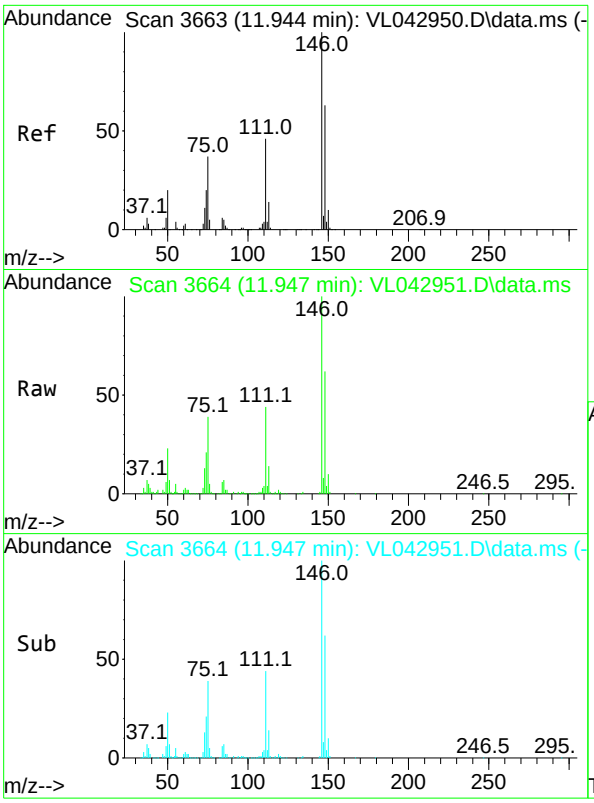


#76
1,4-Dichlorobenzene
Concen: 2.145 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:146 Resp: 92794

Ion	Ratio	Lower	Upper
146	100		
111	41.6	21.5	64.5
148	63.6	31.9	95.5

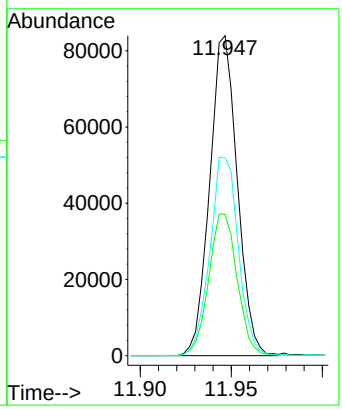




#77
1,2-Dichlorobenzene
Concen: 2.144 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:146 Resp: 8882

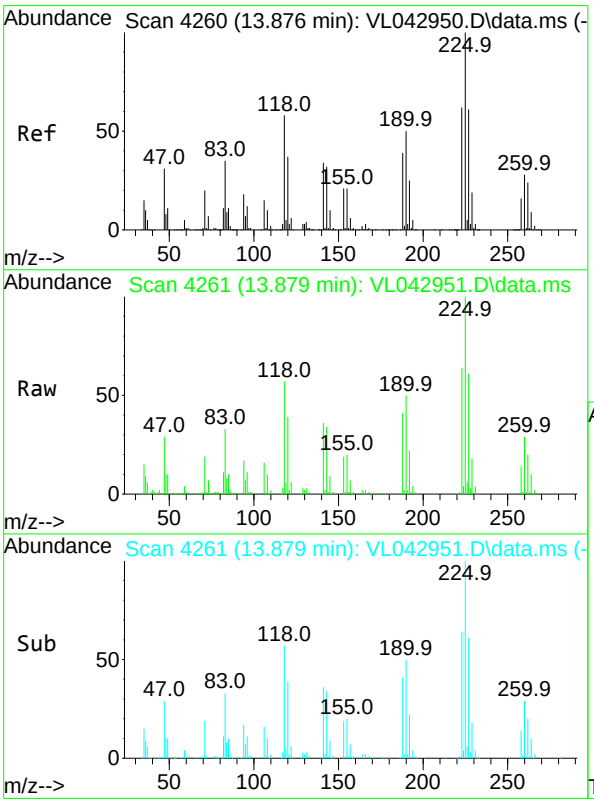
Ion	Ratio	Lower	Upper
146	100		
111	45.8	23.1	69.3
148	64.0	32.0	96.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

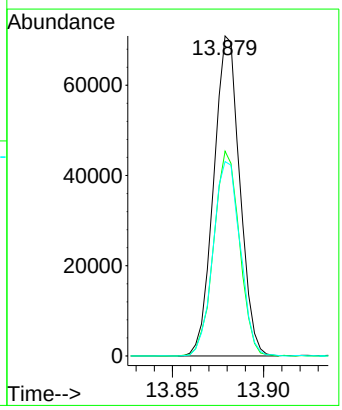
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

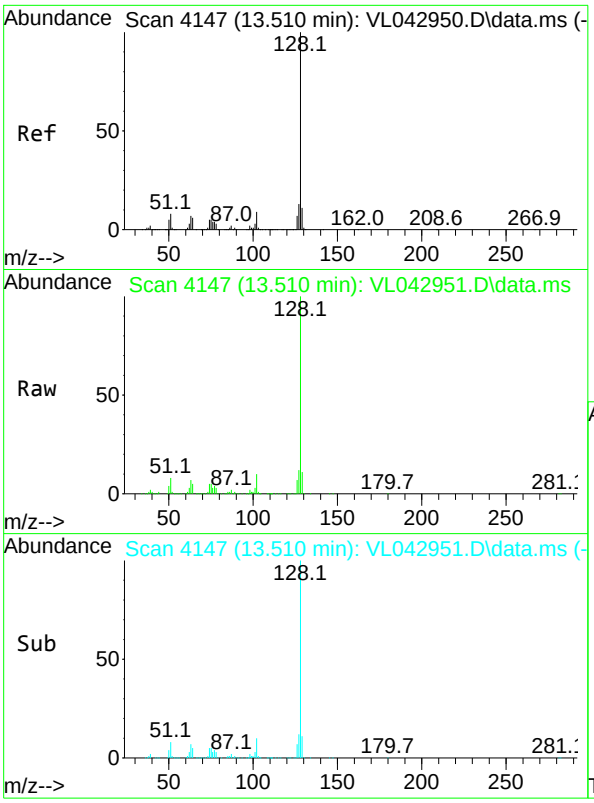


#78
Hexachloro-1,3-Butadiene
Concen: 2.175 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:225 Resp: 70481

Ion	Ratio	Lower	Upper
225	100		
223	63.3	50.1	75.1
227	63.3	50.4	75.6

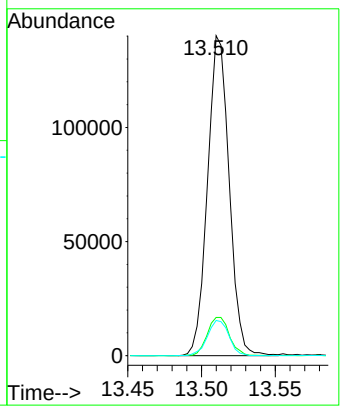




#79
Naphthalene
Concen: 2.297 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:128 Resp: 14265

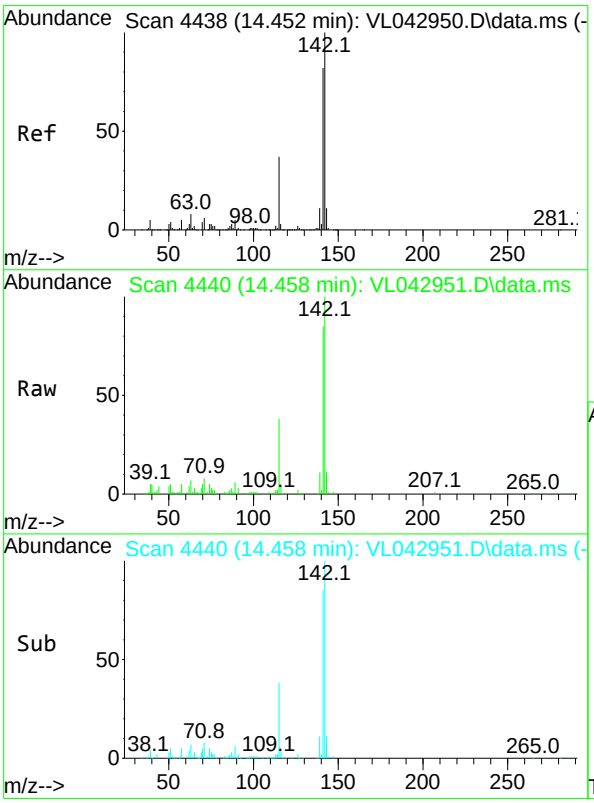
Ion	Ratio	Lower	Upper
128	100		
127	12.0	10.6	15.8
129	11.0	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

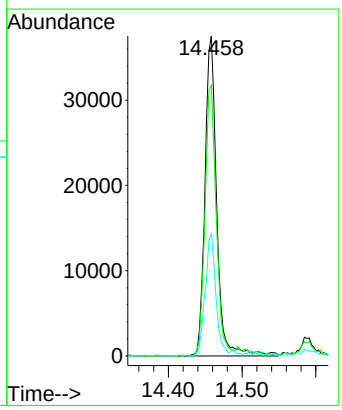
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

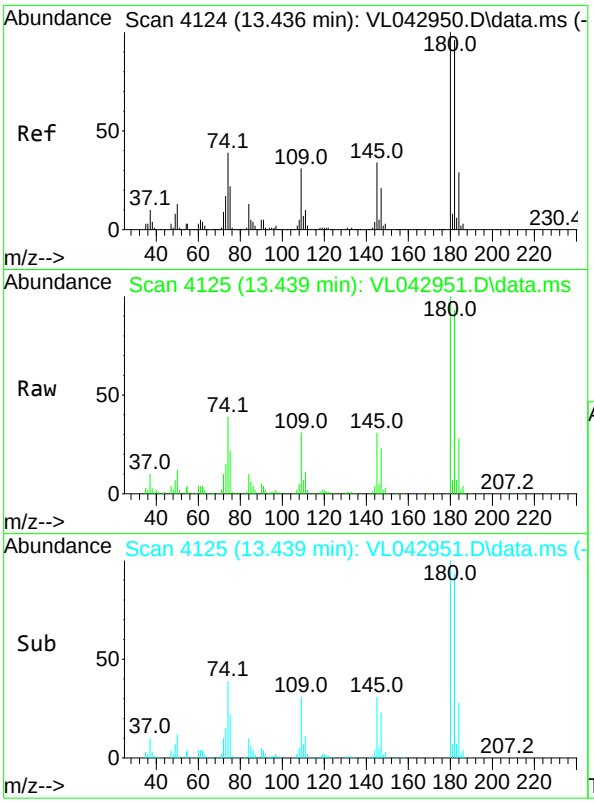


#80
Naphthalene,2-methyl-
Concen: 2.157 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:142 Resp: 41369

Ion	Ratio	Lower	Upper
142	100		
141	83.8	65.1	97.7
115	36.1	28.9	43.3

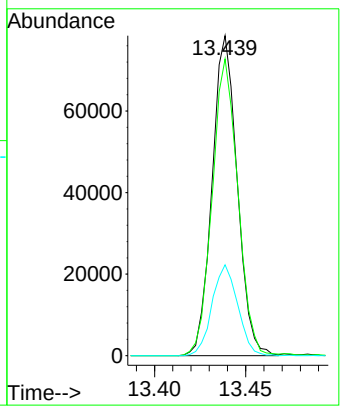




#81
1,2,4-Trichlorobenzene
Concen: 2.263 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:180 Resp: 7513

Ion	Ratio	Lower	Upper
180	100		
182	95.4	75.7	113.5
184	29.0	23.9	35.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042952.D
Acq On : 22 Sep 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:10:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	162797	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	511767	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	469265	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	348878	9.960	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	23644	1.080	ppbv	97
3) Chlorodifluoromethane	1.476	51	29646	1.086	ppbv	99
4) Chloromethane	1.531	50	10120	1.021	ppbv	97
5) Vinyl Chloride	1.580	62	9228	1.030	ppbv	99
6) Bromomethane	1.667	94	3493	1.105	ppbv	96
7) Chloroethane	1.703	64	3872	1.113	ppbv #	81
8) Dichlorotetrafluoroethane	1.554	85	20172	1.079	ppbv	97
9) Propene	1.482	41	12808	1.079	ppbv	92
10) Heptane	4.972	43	33540m	1.053	ppbv	
11) Trichlorofluoromethane	1.874	101	22397	1.061	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.136	101	18180	1.063	ppbv	99
13) Ethanol	1.719	45	1463	1.286	ppbv #	33
14) Bromoethene	1.780	108	6783	1.049	ppbv #	87
15) Acetone	1.832	43	25273	1.192	ppbv	99
16) 1,3-Butadiene	1.609	39	10993	1.099	ppbv	88
17) tert-Butyl alcohol	2.039	59	25141	1.081	ppbv #	88
18) 1,1-Dichloroethene	2.033	96	8192	1.035	ppbv	96
19) Isopropyl Alcohol	1.884	45	13241	1.039	ppbv #	41
20) Methylene Chloride	2.059	84	10045	0.985	ppbv	97
21) Allyl Chloride	2.094	41	15801	1.070	ppbv	95
22) trans-1,2-Dichloroethene	2.337	96	9960	1.108	ppbv	96
23) Vinyl Acetate	2.457	43	30884	1.020	ppbv #	96
24) 1,1-Dichloroethane	2.405	63	19077	1.082	ppbv	99
25) Ethyl Acetate	2.832	43	56877	1.061	ppbv	97
26) Hexane	2.822	57	26276	1.076	ppbv	96
27) Carbon Disulfide	2.149	76	23373	1.067	ppbv #	32
28) Methyl tert-Butyl Ether	2.441	73	12580	0.991	ppbv #	86
29) Chloroform	2.842	83	33240	1.041	ppbv	99
30) Cyclohexane	3.855	84	21707	1.063	ppbv	98
31) cis-1,2-Dichloroethene	2.716	61	23828	1.041	ppbv	96
32) 1,1,1-Trichloroethane	3.360	97	35233	1.018	ppbv	97
34) 2-Butanone	2.554	43	37431	1.044	ppbv	97
35) Carbon Tetrachloride	3.758	117	34016	1.033	ppbv	96
36) Benzene	3.651	78	49652	1.033	ppbv	100
37) 1,2-Dichloroethane	3.214	62	26482	1.048	ppbv	98
38) Trichloroethene	4.538	130	23906	1.001	ppbv	98
39) 1,2-Dichloropropane	4.311	63	18493m	1.053	ppbv	
40) 1,4-Dioxane	4.583	88	8804m	1.080	ppbv	
41) Tetrahydrofuran	3.055	42	20845	1.011	ppbv	98
42) Bromodichloromethane	4.480	83	35768m	1.016	ppbv	
43) Methyl Methacrylate	4.871	69	20289	1.040	ppbv	98
44) 2,2,4-Trimethylpentane	4.635	57	84970	1.023	ppbv	96
45) t-1,3-Dichloropropene	6.402	75	21210m	1.011	ppbv	

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042952.D
Acq On : 22 Sep 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:10:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.587	75	27025m	1.011	ppbv		
47)	1,1,2-Trichloroethane	6.574	97	19311	1.041	ppbv		96
48)	Dibromochloromethane	7.383	129	30015	1.012	ppbv		99
49)	Bromoform	9.477	173	25929	1.005	ppbv		98
50)	4-Methyl-2-Pentanone	5.748	43	48546	1.007	ppbv		98
51)	2-Hexanone	7.431	43	39627	1.034	ppbv	#	99
52)	Tetrachloroethene	8.218	164	18188	0.978	ppbv		97
53)	Toluene	6.926	91	58200	1.023	ppbv		100
54)	1,2-Dibromoethane	7.645	107	26608	1.020	ppbv		94
56)	1,1,1,2-Tetrachloroethane	8.920	131	22802	1.015	ppbv		94
57)	Chlorobenzene	8.914	112	45873	1.071	ppbv		98
58)	Ethyl Benzene	9.351	91	80473	1.044	ppbv		97
59)	m/p-Xylene	9.529	91	128139m	2.108	ppbv		
60)	o-Xylene	9.959	91	64703	1.066	ppbv		99
61)	Styrene	9.869	104	29061	1.012	ppbv		98
62)	Isopropylbenzene	10.535	105	96621	1.068	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.959	83	31695	0.993	ppbv		96
64)	n-propylbenzene	10.985	120	24820	1.049	ppbv		98
65)	tert-Butylbenzene	11.526	119	86303	1.072	ppbv		99
66)	Benzyl Chloride	11.610	91	8140	0.964	ppbv		100
67)	sec-Butylbenzene	11.762	105	120070	1.070	ppbv		100
69)	p-Isopropyltoluene	11.921	119	101749	1.074	ppbv		99
70)	n-Butylbenzene	12.277	91	98908	1.069	ppbv		99
71)	2-Chlorotoluene	10.895	91	70577	1.033	ppbv		98
72)	4-Ethyltoluene	11.121	105	79095	1.040	ppbv		99
73)	1,3,5-Trimethylbenzene	11.199	105	63174	1.024	ppbv		98
74)	1,2,4-Trimethylbenzene	11.532	105	71411	1.049	ppbv		95
75)	1,3-Dichlorobenzene	11.603	146	44769	1.060	ppbv		99
76)	1,4-Dichlorobenzene	11.668	146	42879	1.022	ppbv		97
77)	1,2-Dichlorobenzene	11.940	146	42911	1.068	ppbv		98
78)	Hexachloro-1,3-Butadiene	13.879	225	34798	1.107	ppbv		99
79)	Naphthalene	13.510	128	61925	1.028	ppbv		98
80)	Naphthalene,2-methyl-	14.455	142	17116	0.920	ppbv		97
81)	1,2,4-Trichlorobenzene	13.435	180	32411	1.007	ppbv		97

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

Quantitation Report (QT Reviewed)

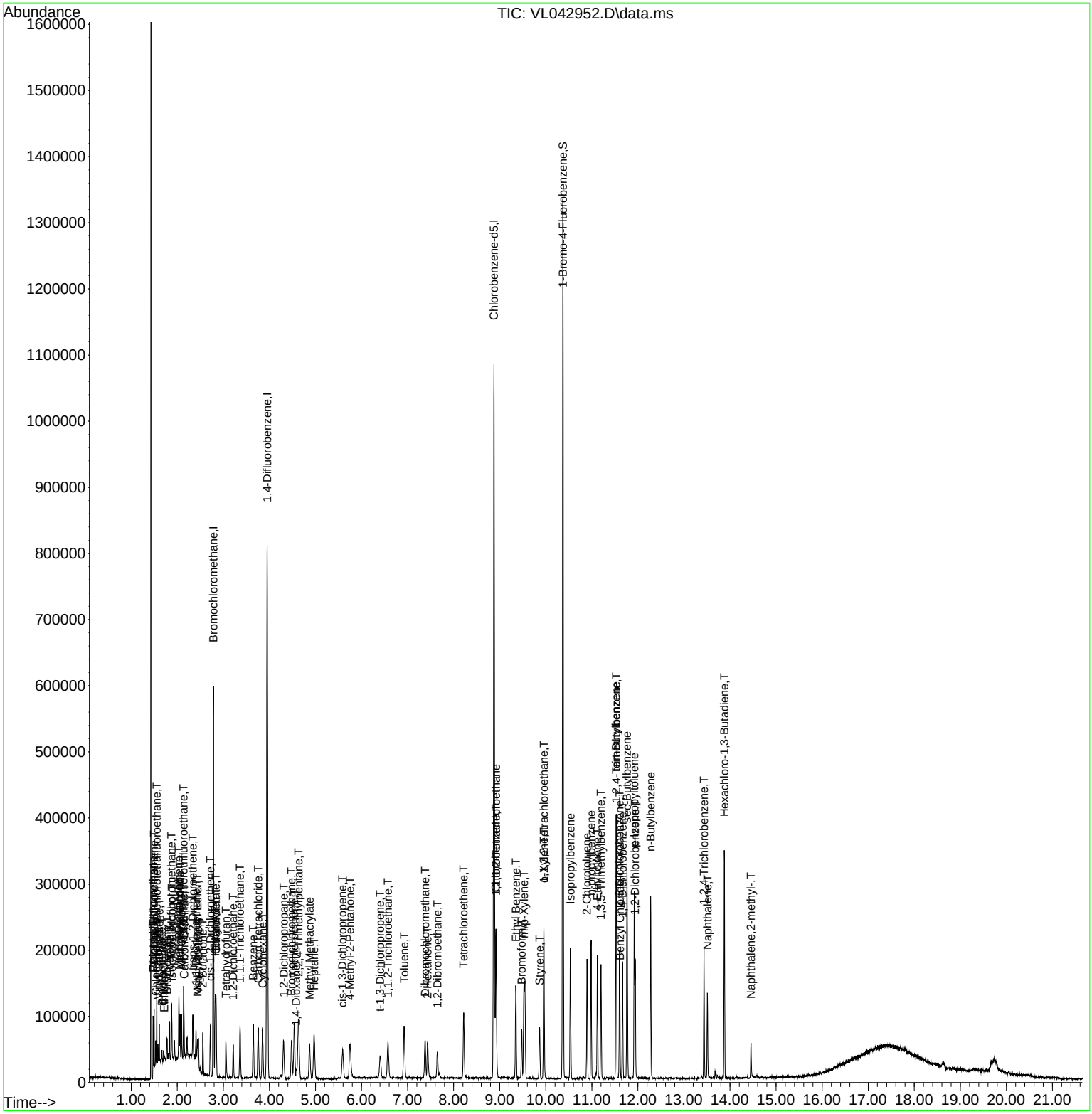
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042952.D
Acq On : 22 Sep 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

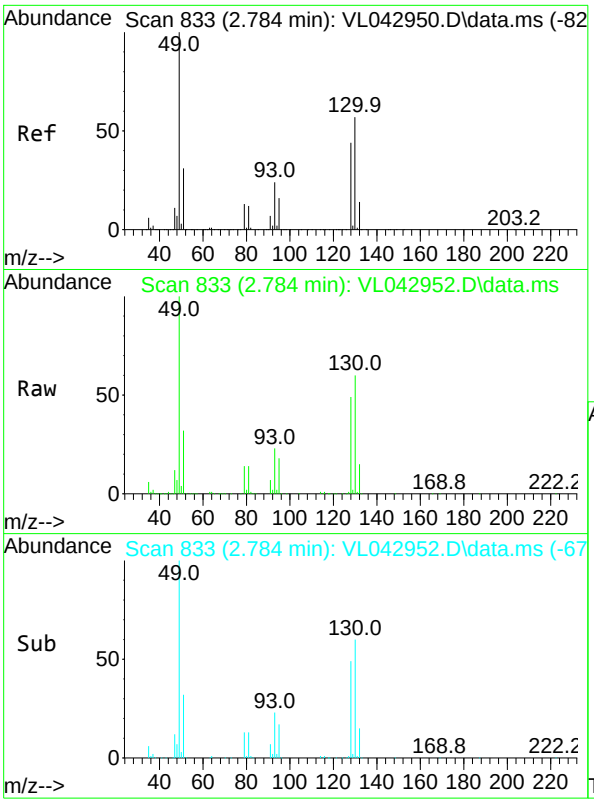
Quant Time: Sep 23 02:10:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

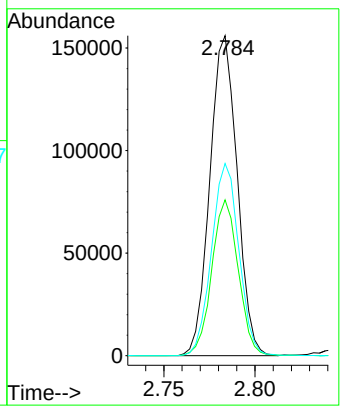




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 49 Resp: 16279

Ion	Ratio	Lower	Upper
49	100		
128	47.3	22.9	68.8
130	60.1	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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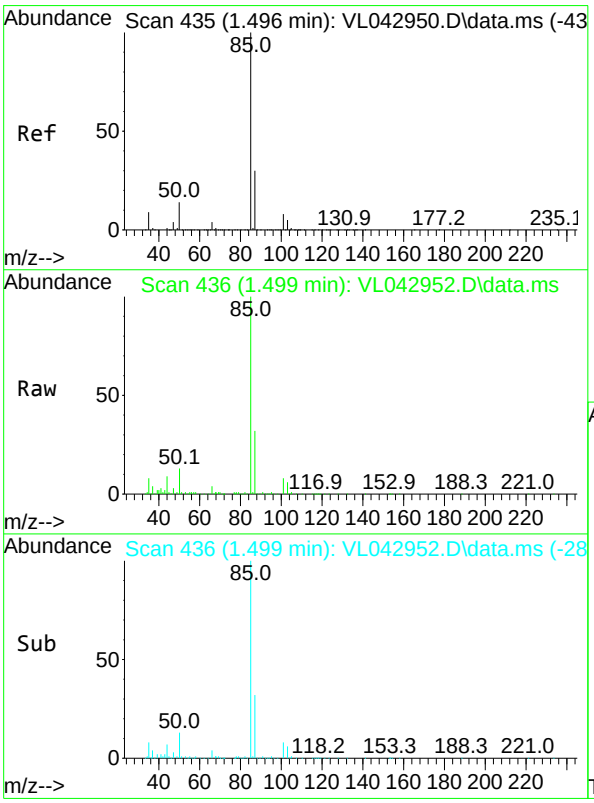
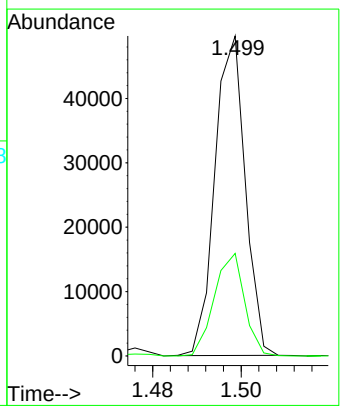
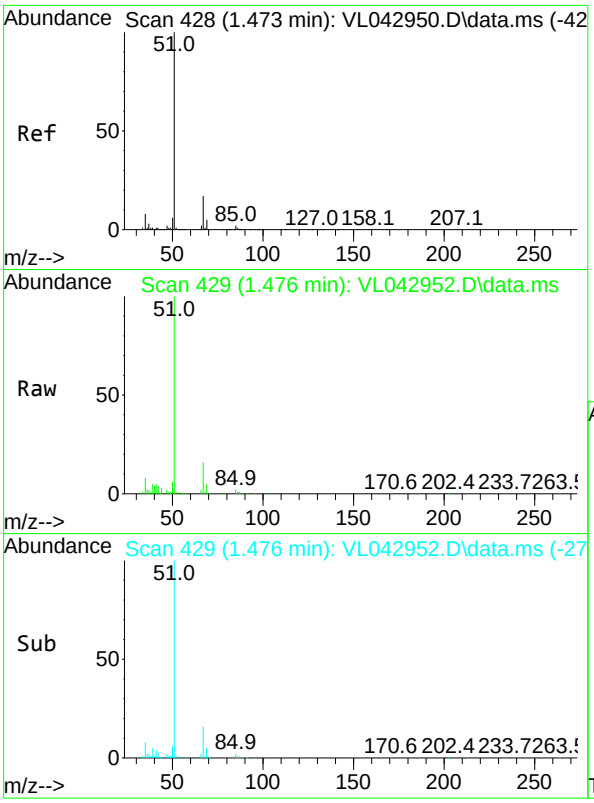


#2
Dichlorodifluoromethane
Concen: 1.080 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 85 Resp: 23644

Ion	Ratio	Lower	Upper
85	100		
87	32.1	24.3	36.5

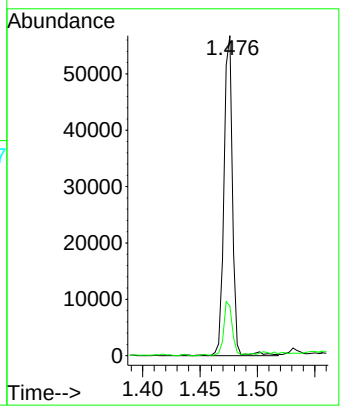




#3
Chlorodifluoromethane
Concen: 1.086 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 51 Resp: 2964

Ion	Ratio	Lower	Upper
51	100		
67	17.9	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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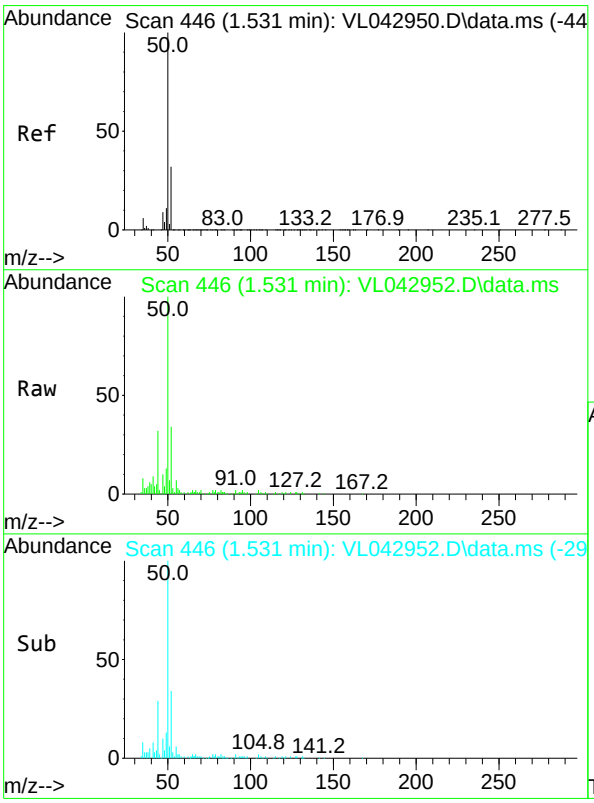
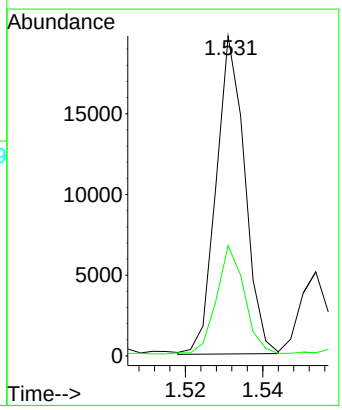
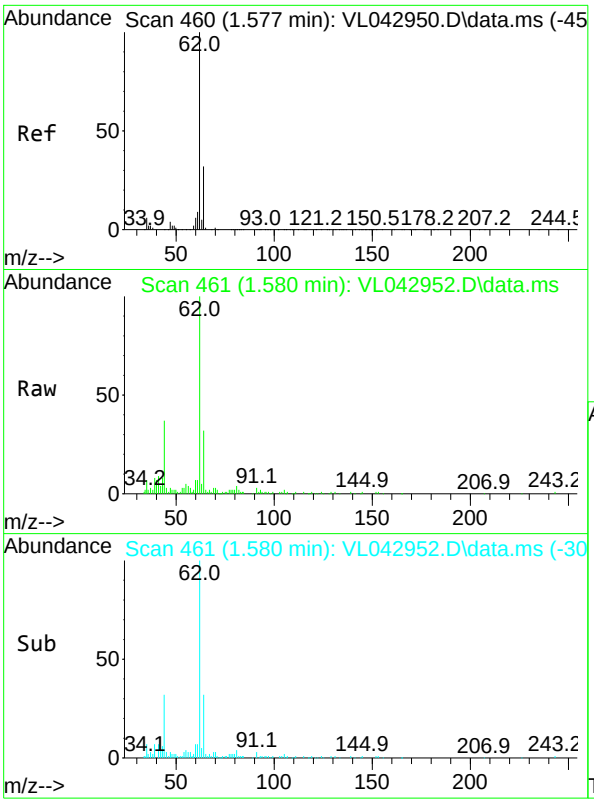


#4
Chloromethane
Concen: 1.021 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 50 Resp: 10120

Ion	Ratio	Lower	Upper
50	100		
52	33.9	25.9	38.9





#5
Vinyl Chloride
Concen: 1.030 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 62 Resp: 922

Ion	Ratio	Lower	Upper
62	100		
64	31.4	25.4	38.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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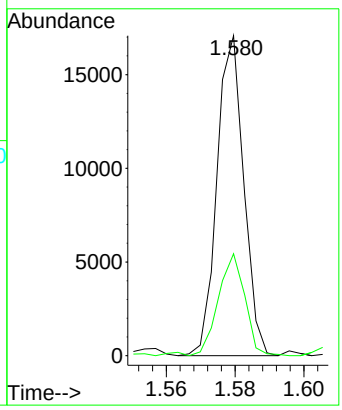
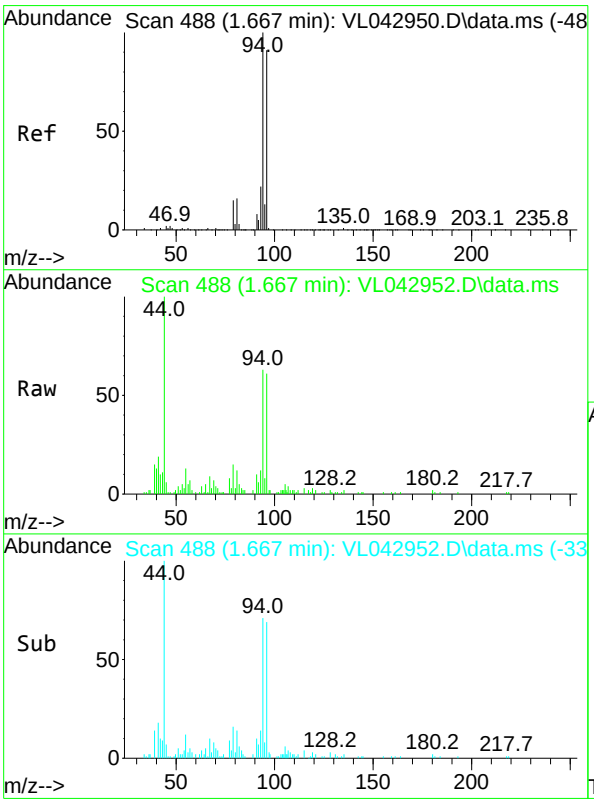
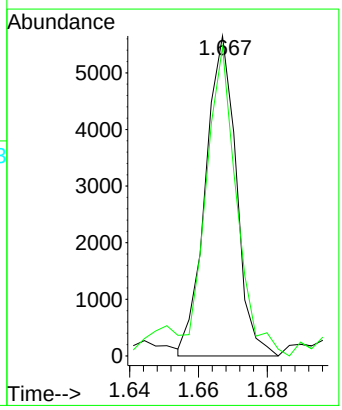


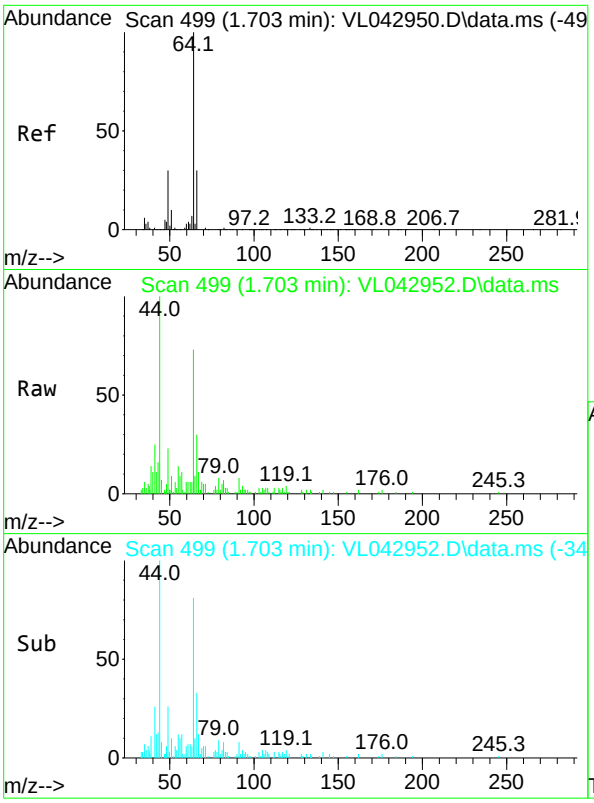


#6
Bromomethane
Concen: 1.105 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 94 Resp: 3493

Ion	Ratio	Lower	Upper
94	100		
96	94.4	72.6	108.8





#7
Chloroethane
Concen: 1.113 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 64 Resp: 387

Ion	Ratio	Lower	Upper
64	100		
66	41.0	24.6	36.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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Reviewed By :Semsettin Yesilyurt 09/23/2025
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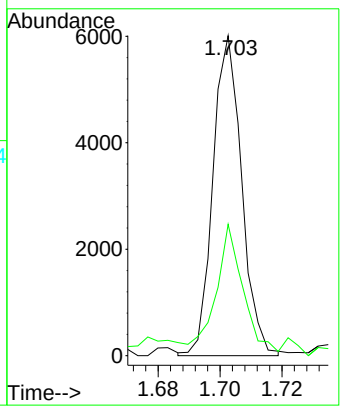
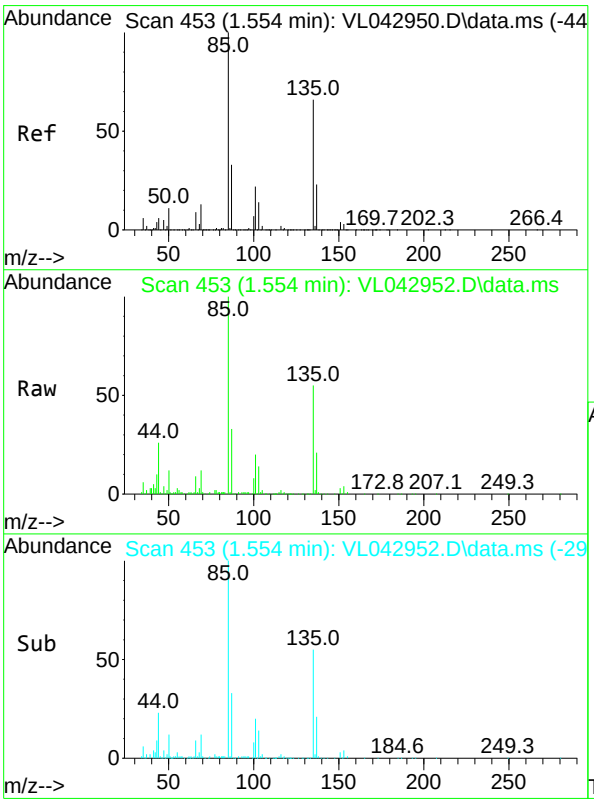
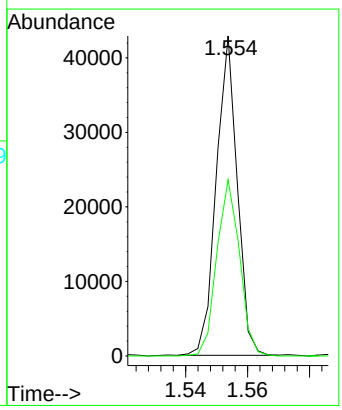


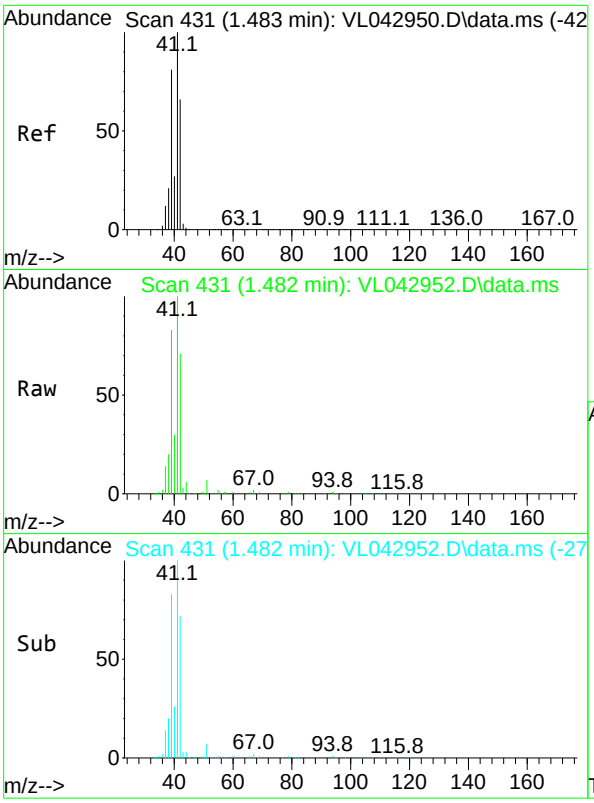


#8
Dichlorotetrafluoroethane
Concen: 1.079 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 85 Resp: 20172

Ion	Ratio	Lower	Upper
85	100		
135	59.9	49.7	74.5

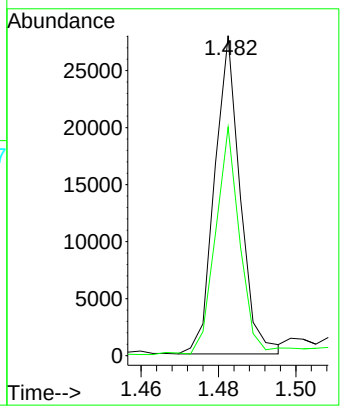




#9
Propene
Concen: 1.079 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 41 Resp: 1280

Ion	Ratio	Lower	Upper
41	100		
42	78.5	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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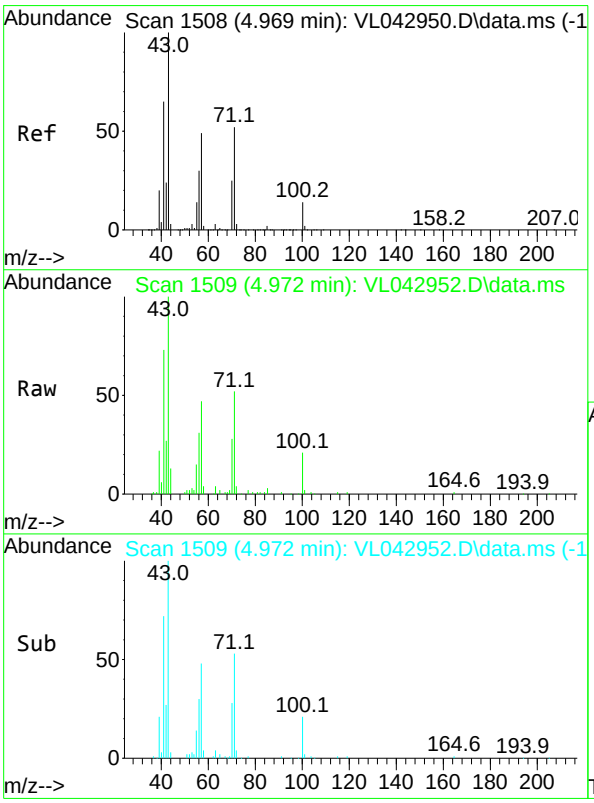
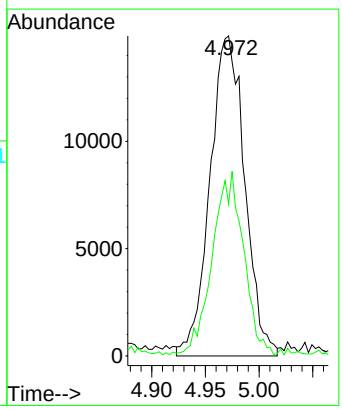
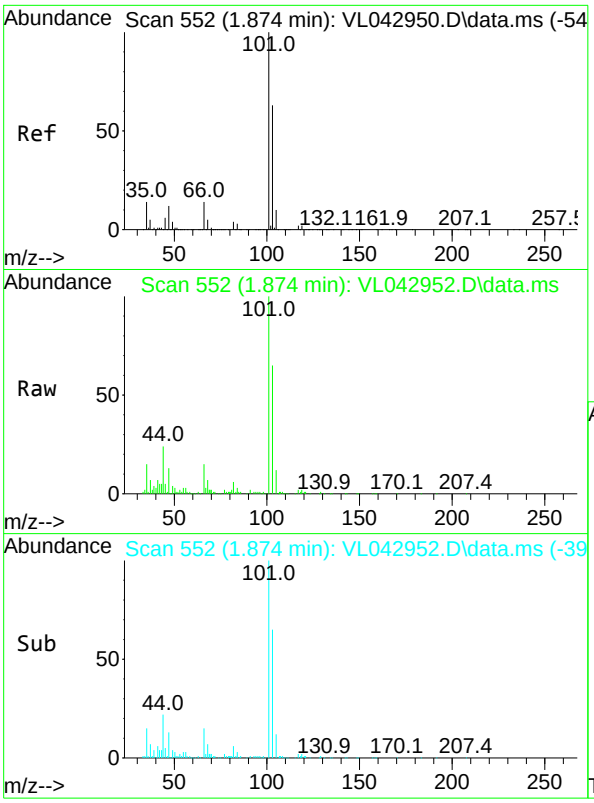


#10
Heptane
Concen: 1.053 ppbv m
RT: 4.972 min Scan# 1509
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 33540

Ion	Ratio	Lower	Upper
43	100		
57	52.5	38.6	57.8

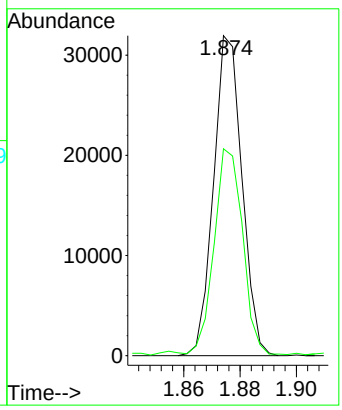




#11
Trichlorofluoromethane
Concen: 1.061 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:101 Resp: 2239

Ion	Ratio	Lower	Upper
101	100		
103	64.2	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
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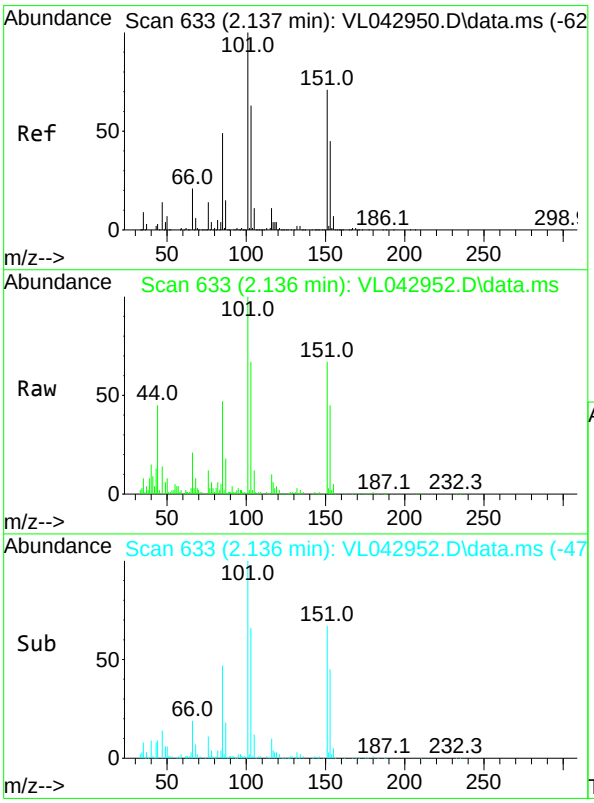
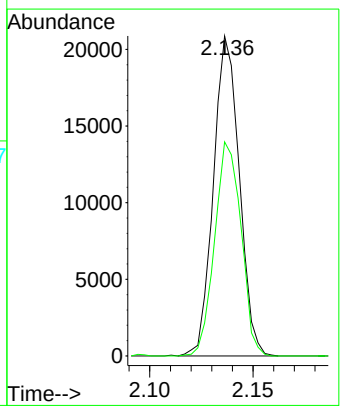
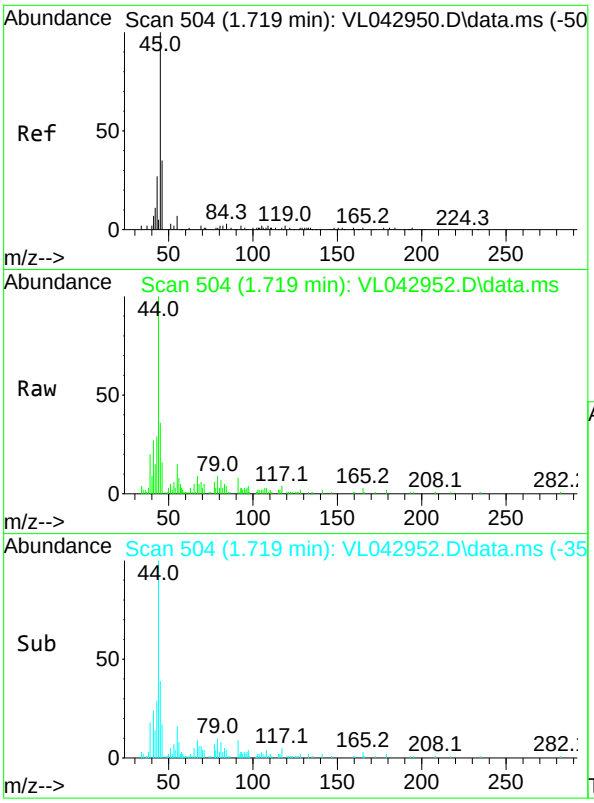


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.063 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:101 Resp: 18180

Ion	Ratio	Lower	Upper
101	100		
151	68.7	55.7	83.5





#13
Ethanol
Concen: 1.286 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 45 Resp: 146

Ion	Ratio	Lower	Upper
45	100		
46	82.0	16.2	64.6#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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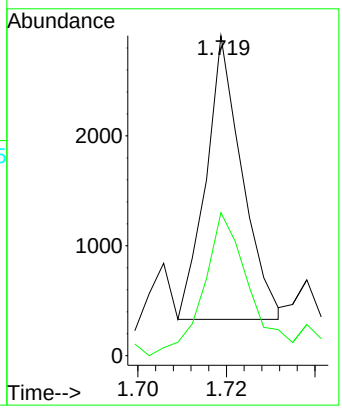
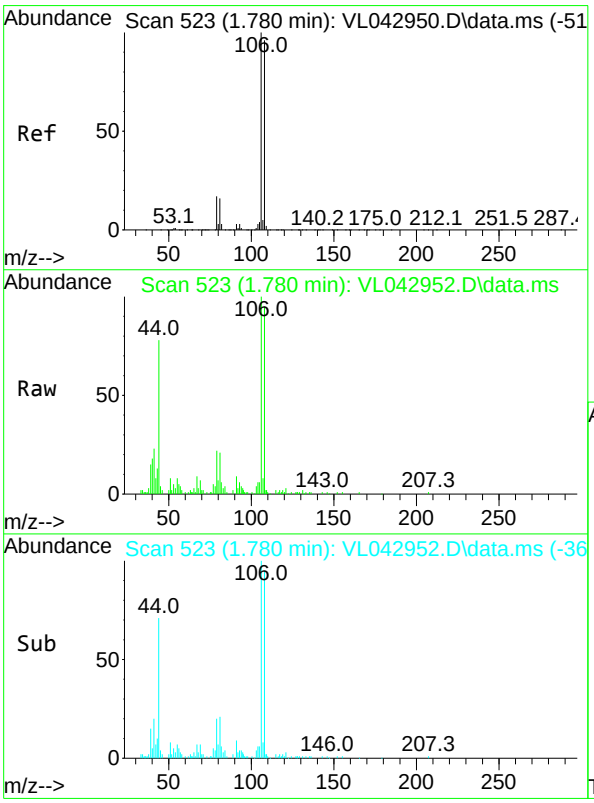
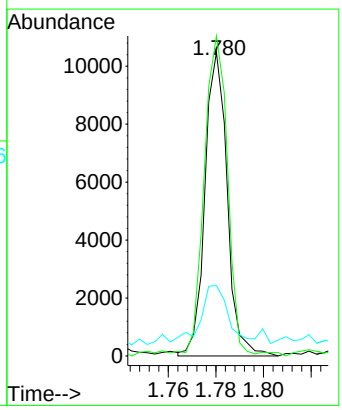


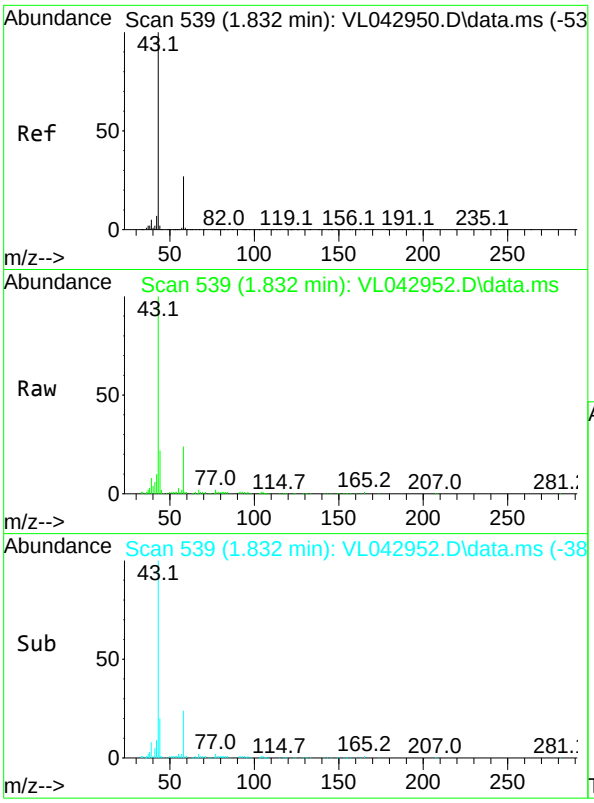


#14
Bromoethene
Concen: 1.049 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:108 Resp: 6783

Ion	Ratio	Lower	Upper
108	100		
106	110.6	86.0	129.0
79	50.8	14.2	21.2#

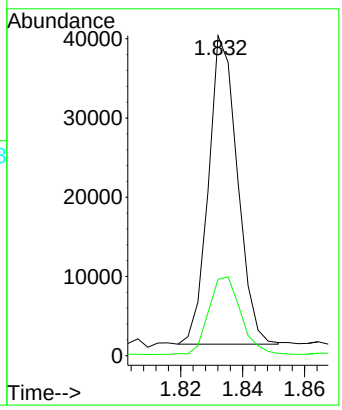




#15
Acetone
Concen: 1.192 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 2527

Ion	Ratio	Lower	Upper
43	100		
58	28.3	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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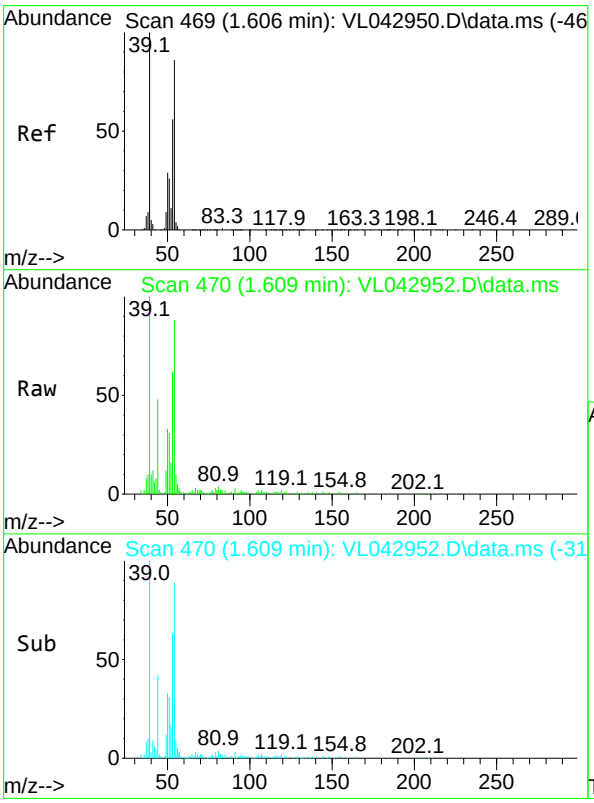
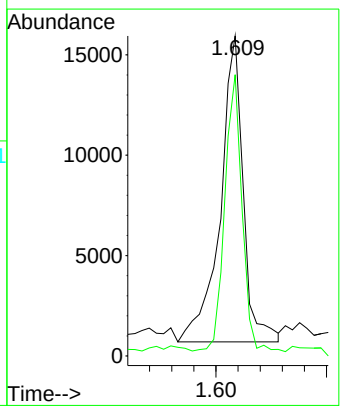
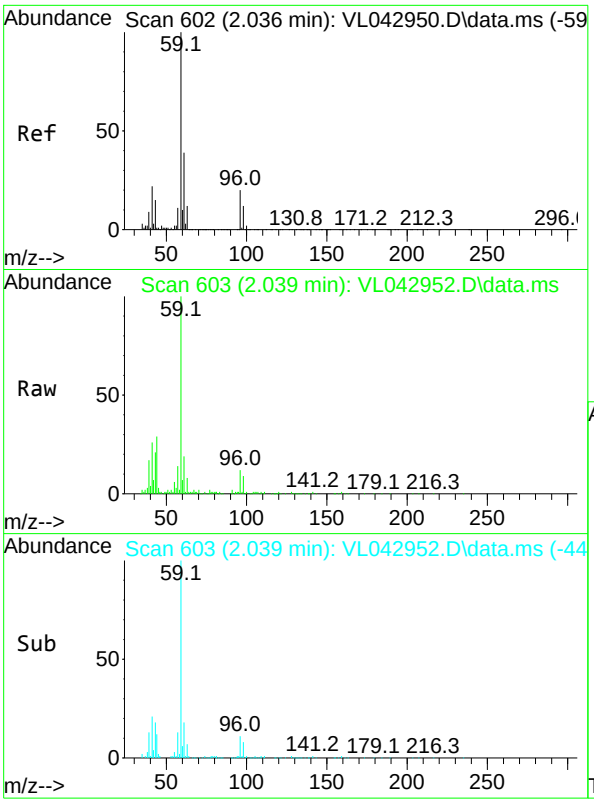


#16
1,3-Butadiene
Concen: 1.099 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 39 Resp: 10993

Ion	Ratio	Lower	Upper
39	100		
54	86.7	60.8	91.2

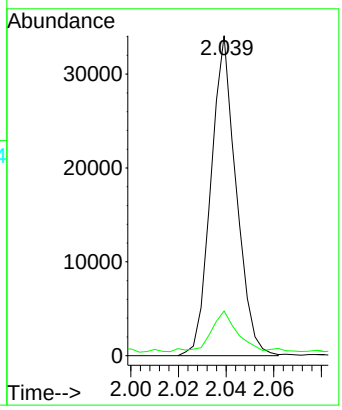




#17
tert-Butyl alcohol
Concen: 1.081 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 59 Resp: 2514

Ion	Ratio	Lower	Upper
59	100		
57	15.0	8.6	12.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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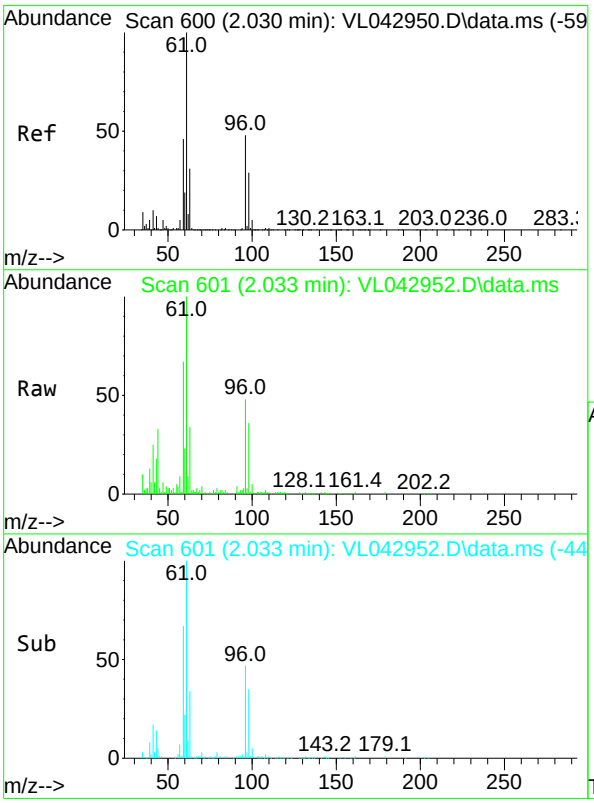
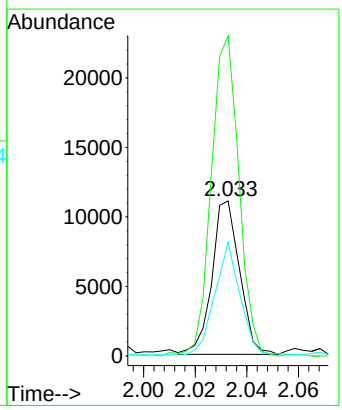
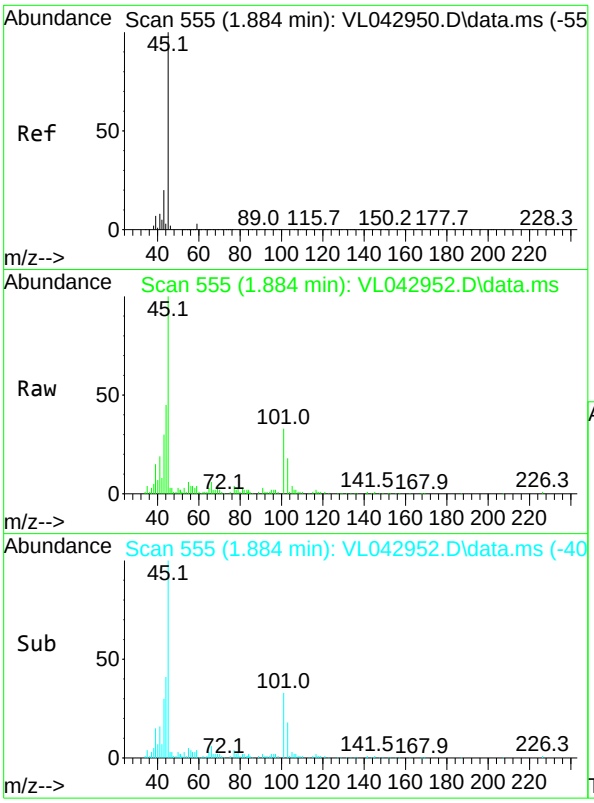


#18
1,1-Dichloroethene
Concen: 1.035 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 96 Resp: 8192

Ion	Ratio	Lower	Upper
96	100		
61	208.7	166.2	249.4
98	72.8	48.6	73.0





#19
Isopropyl Alcohol
Concen: 1.039 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 45 Resp: 1324

Ion	Ratio	Lower	Upper
45	100		
58	2.6	31.0	46.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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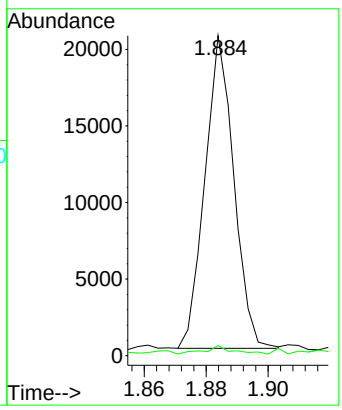
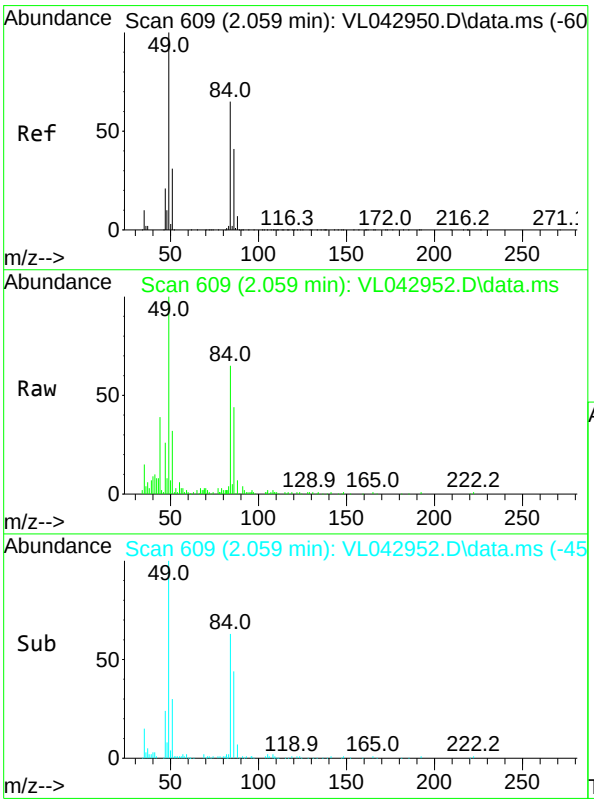
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

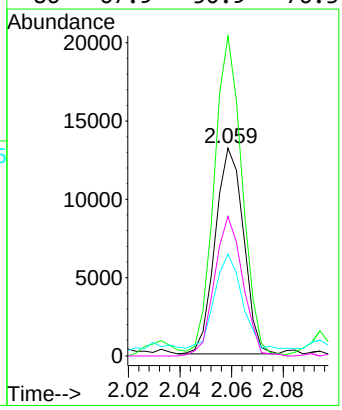


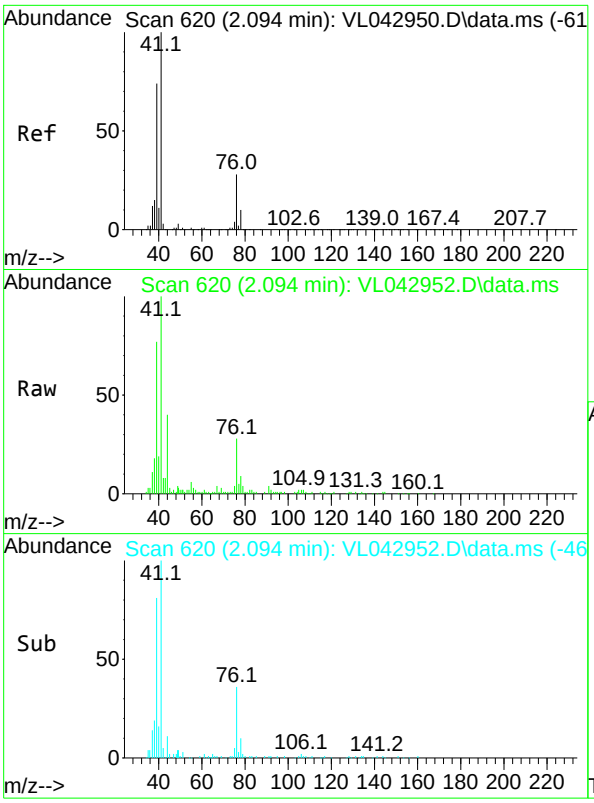


#20
Methylene Chloride
Concen: 0.985 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 84 Resp: 10045

Ion	Ratio	Lower	Upper
84	100		
49	154.6	124.1	186.1
51	45.9	39.8	59.8
86	67.9	50.9	76.3





#21
Allyl Chloride
Concen: 1.070 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 41 Resp: 1580

Ion	Ratio	Lower	Upper
41	100		
76	31.8	22.3	33.5
39	80.7	61.3	91.9

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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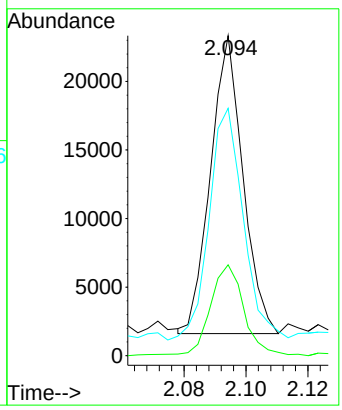
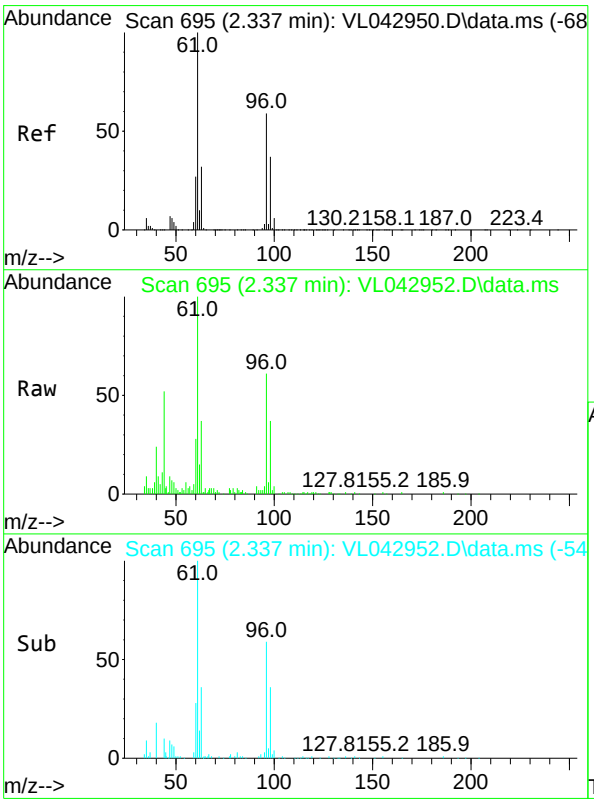
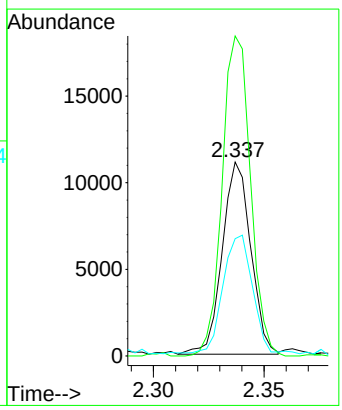


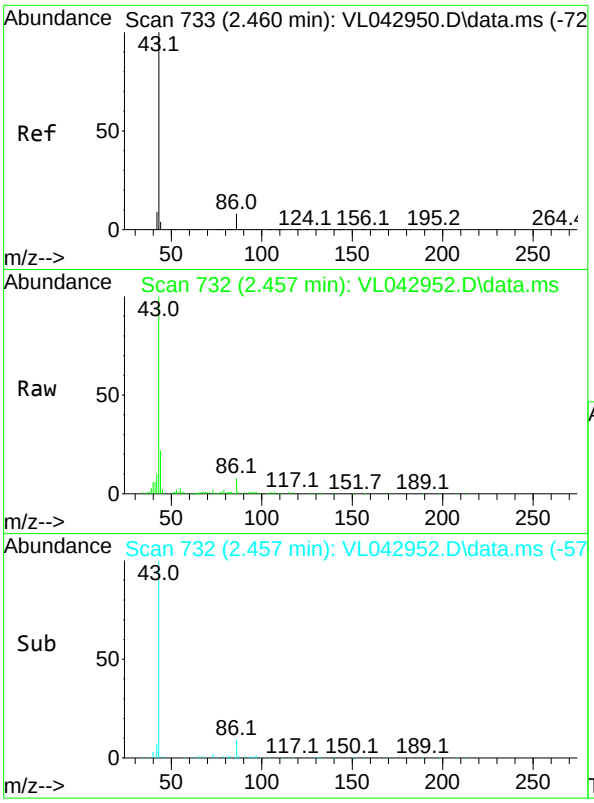


#22
trans-1,2-Dichloroethene
Concen: 1.108 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 96 Resp: 9960

Ion	Ratio	Lower	Upper
96	100		
61	166.5	136.5	204.7
98	59.4	50.6	76.0

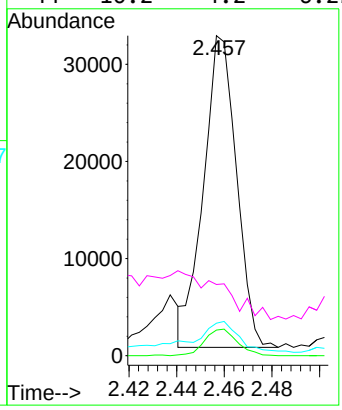




#23
Vinyl Acetate
Concen: 1.020 ppbv
RT: 2.457 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 3088

Ion	Ratio	Lower	Upper
43	100		
86	8.2	6.2	9.2
42	9.0	7.4	11.0
44	10.2	4.2	6.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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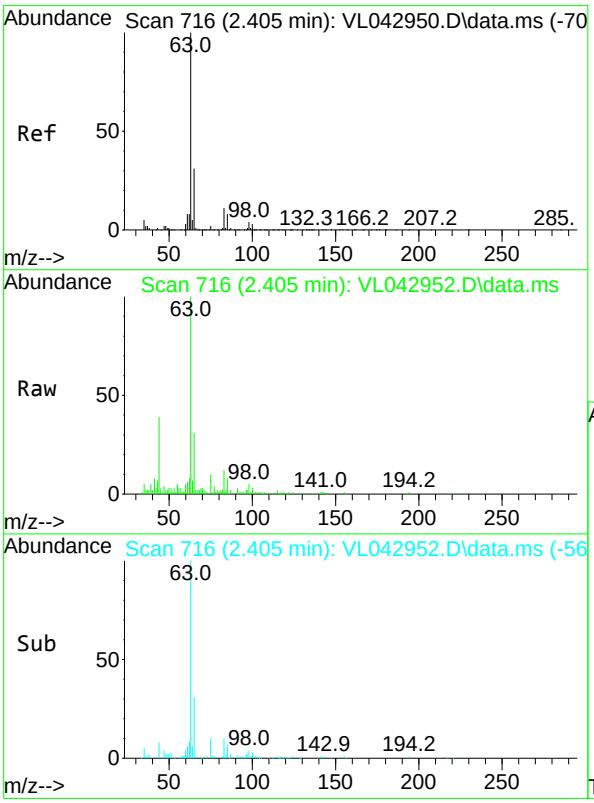
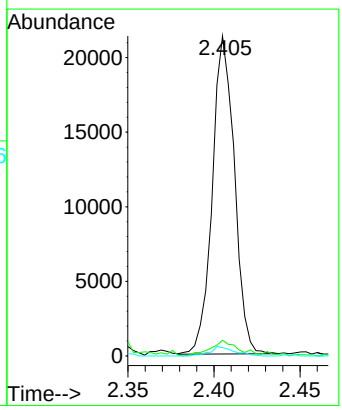
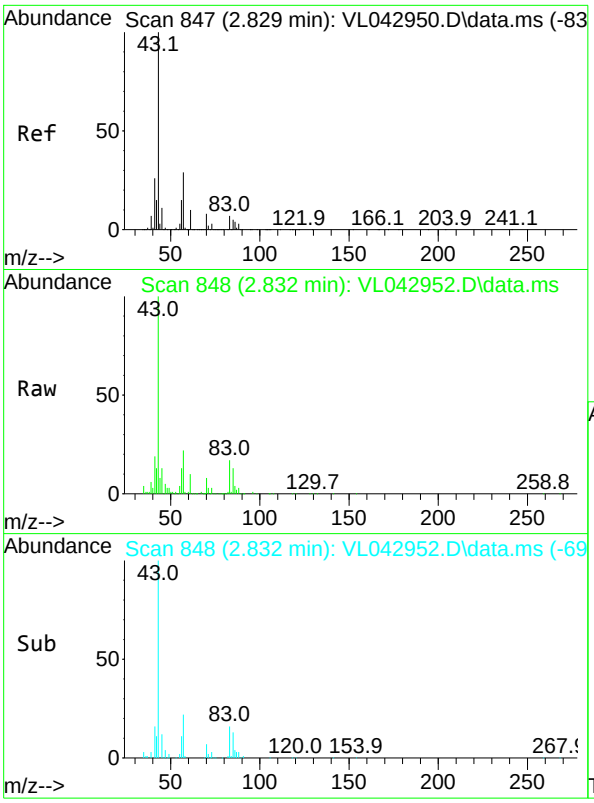


#24
1,1-Dichloroethane
Concen: 1.082 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 63 Resp: 19077

Ion	Ratio	Lower	Upper
63	100		
98	4.7	2.2	6.6
100	2.6	1.4	4.0

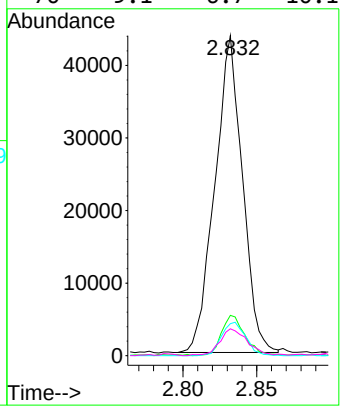




#25
Ethyl Acetate
Concen: 1.061 ppbv
RT: 2.832 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 5687

Ion	Ratio	Lower	Upper
43	100		
45	11.4	7.7	11.5
61	9.3	7.1	10.7
70	9.1	6.7	10.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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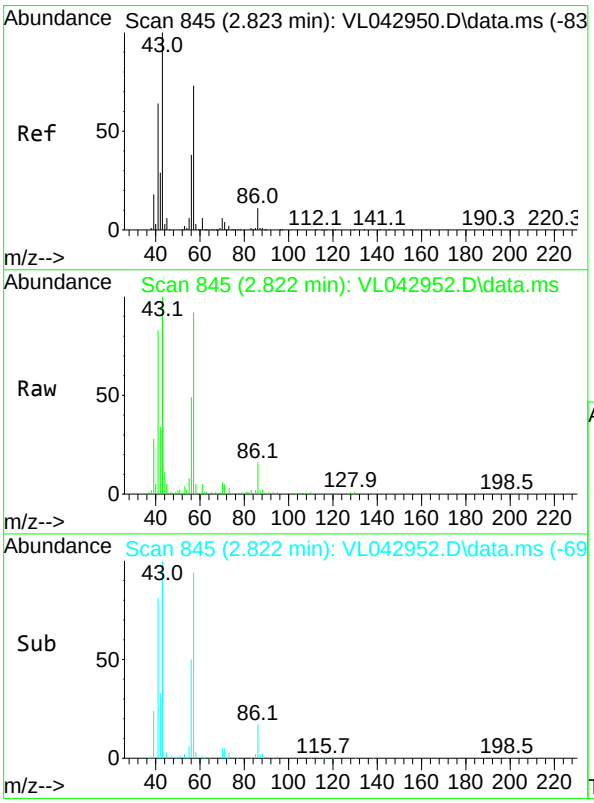
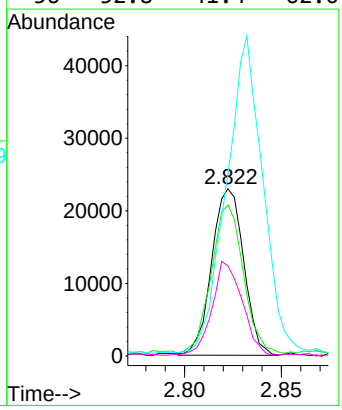
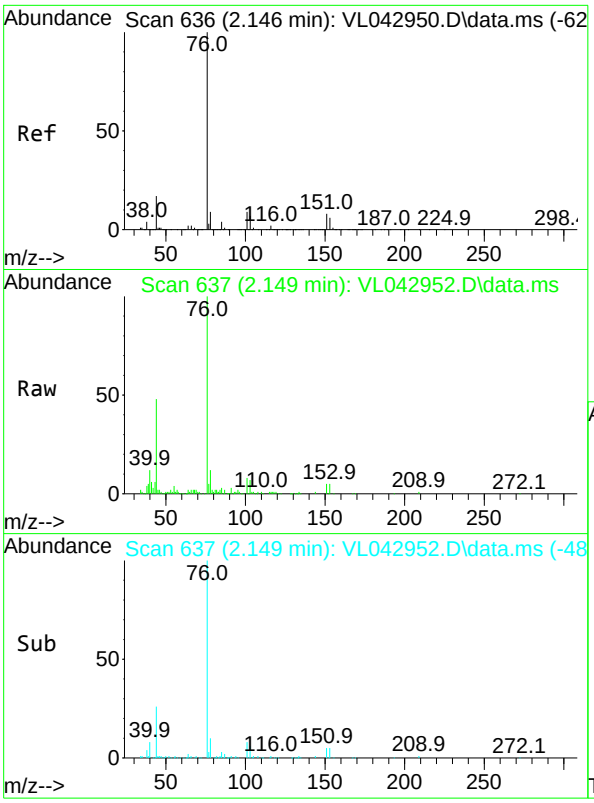


#26
Hexane
Concen: 1.076 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 57 Resp: 26276

Ion	Ratio	Lower	Upper
57	100		
41	95.7	71.7	107.5
43	221.0	180.8	271.2
56	52.8	41.4	62.0





#27
Carbon Disulfide
Concen: 1.067 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 76 Resp: 2337

Ion	Ratio	Lower	Upper
76	100		
44	66.3	15.6	23.4#
78	14.2	8.9	13.3#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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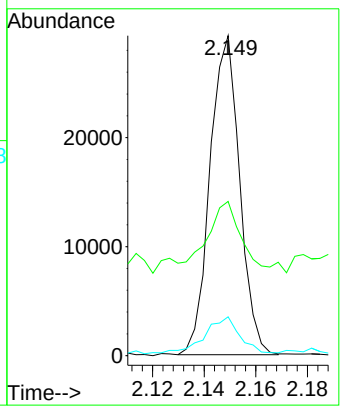
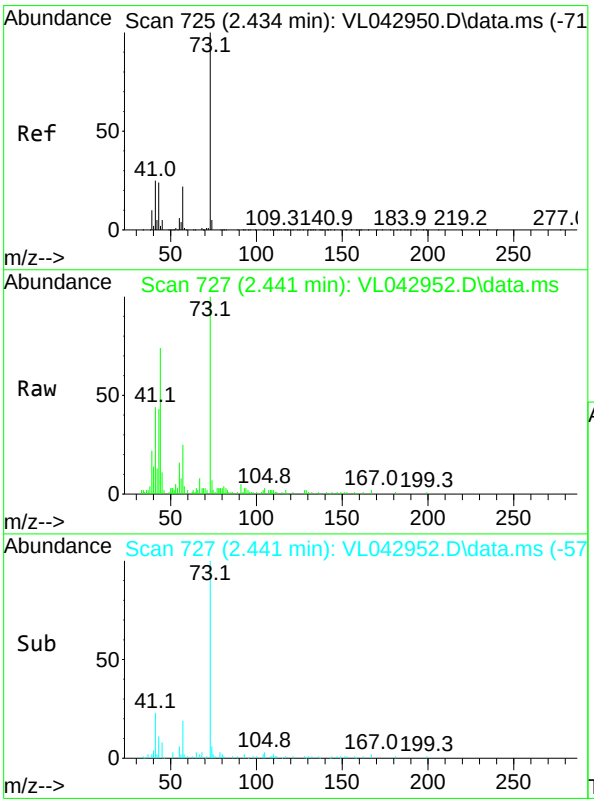
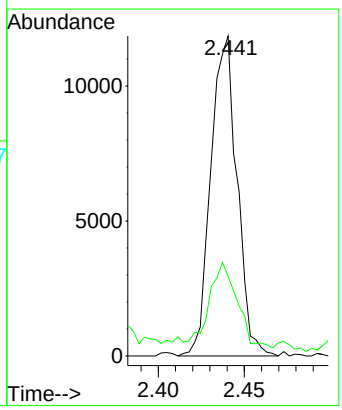


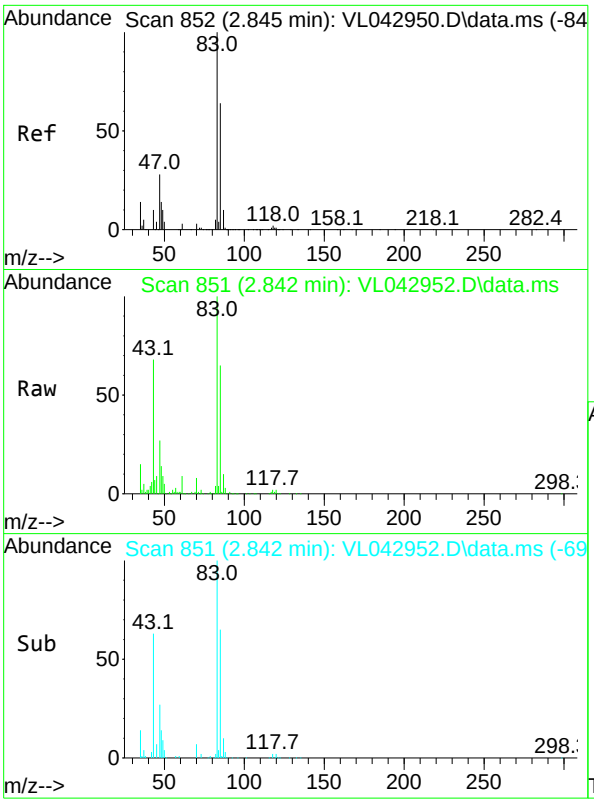


#28
Methyl tert-Butyl Ether
Concen: 0.991 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.006 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 73 Resp: 12580

Ion	Ratio	Lower	Upper
73	100		
57	33.0	20.6	31.0#





#29
Chloroform
Concen: 1.041 ppbv
RT: 2.842 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 83 Resp: 3324

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.2	76.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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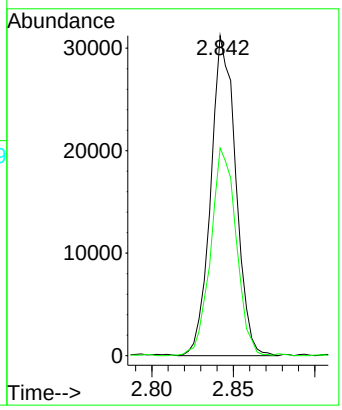
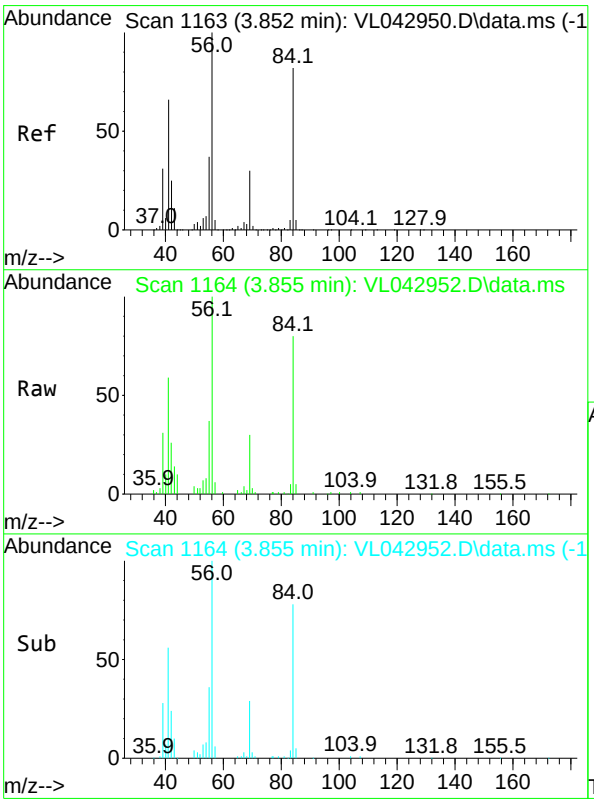
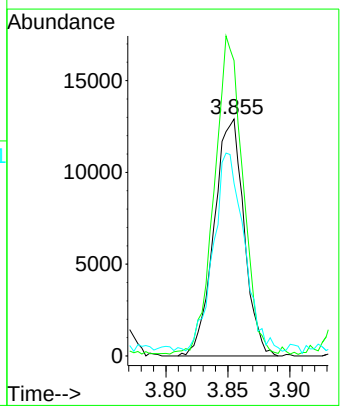


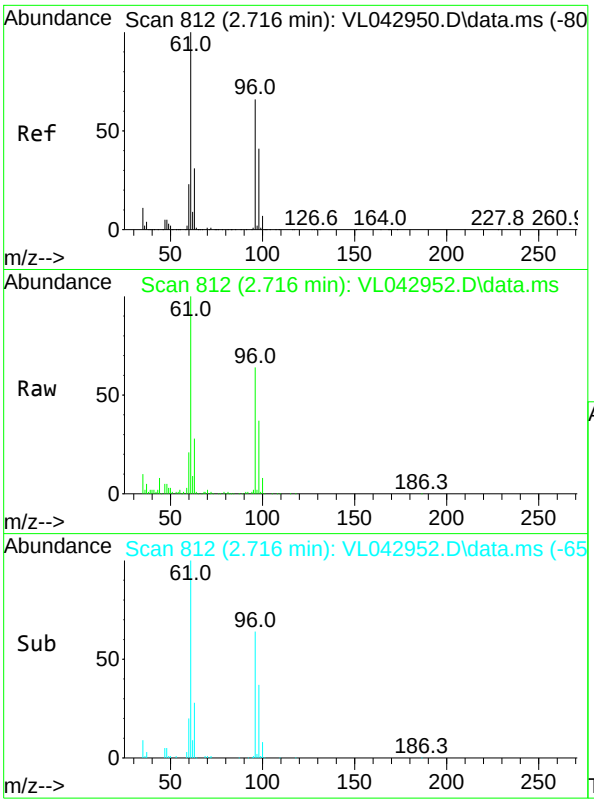


#30
Cyclohexane
Concen: 1.063 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 84 Resp: 21707

Ion	Ratio	Lower	Upper
84	100		
56	127.5	102.2	153.4
41	86.0	65.6	98.4

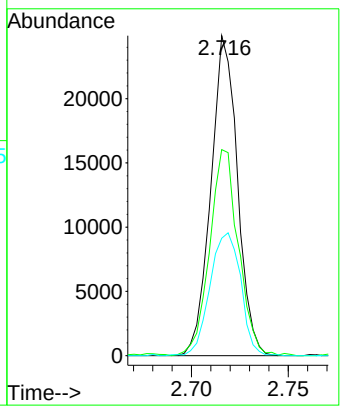




#31
cis-1,2-Dichloroethene
Concen: 1.041 ppbv
RT: 2.716 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 61 Resp: 2382

Ion	Ratio	Lower	Upper
61	100		
96	64.2	53.0	79.6
98	36.4	32.9	49.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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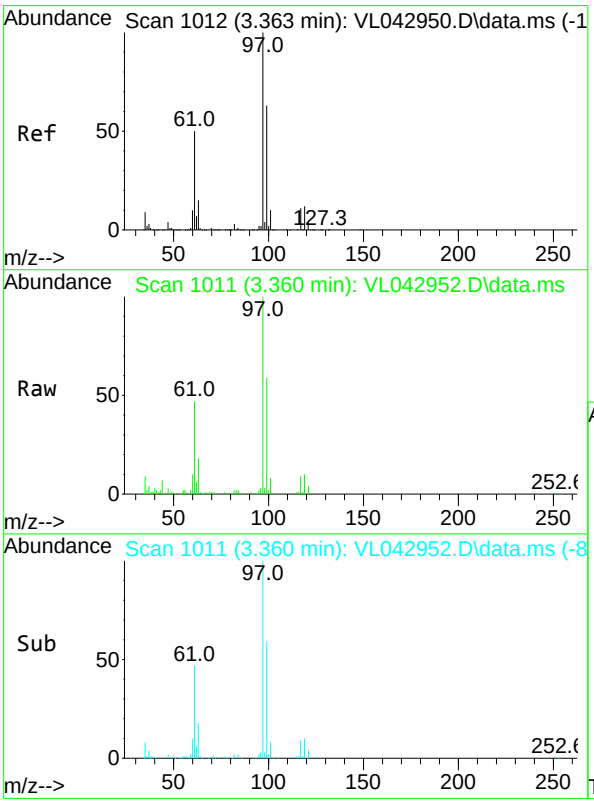
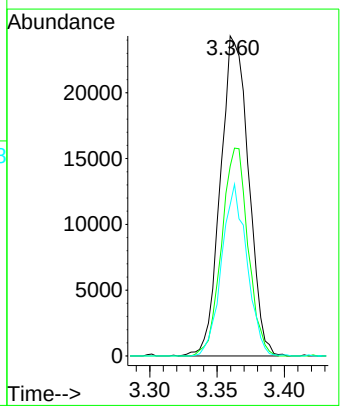
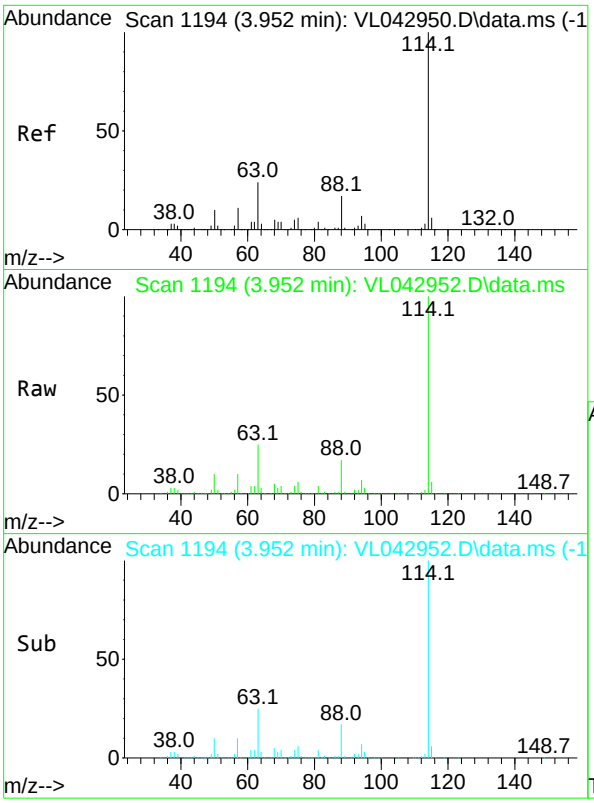


#32
1,1,1-Trichloroethane
Concen: 1.018 ppbv
RT: 3.360 min Scan# 1011
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 97 Resp: 35233

Ion	Ratio	Lower	Upper
97	100		
99	61.1	51.1	76.7
61	48.3	39.8	59.6





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:114 Resp: 51176

Ion	Ratio	Lower	Upper
114	100		
63	24.6	19.4	29.2
88	17.6	14.2	21.2

Instrument :
MSVOA_L
ClientSampleId :
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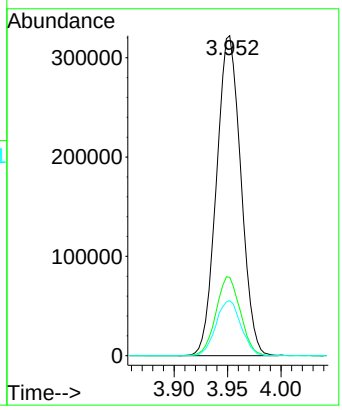
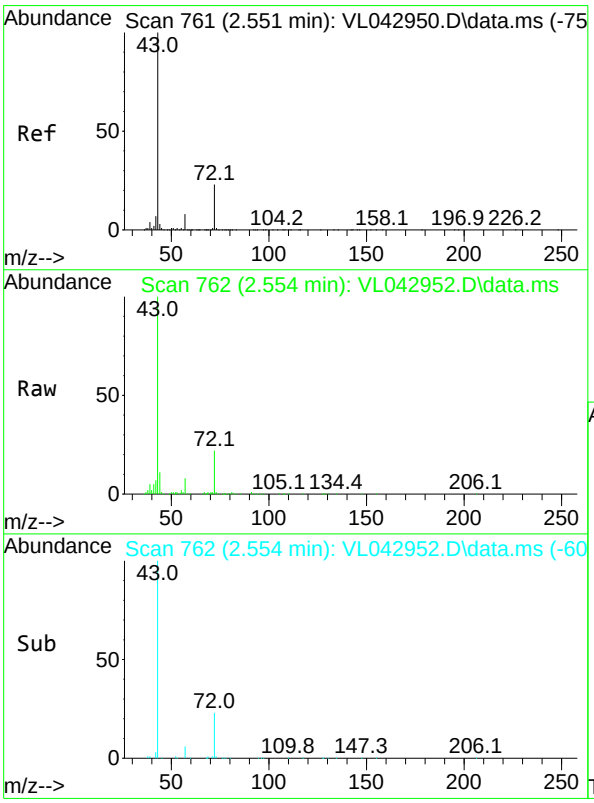
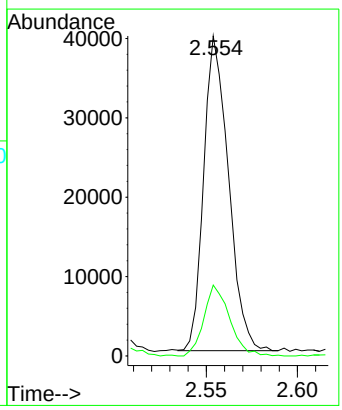


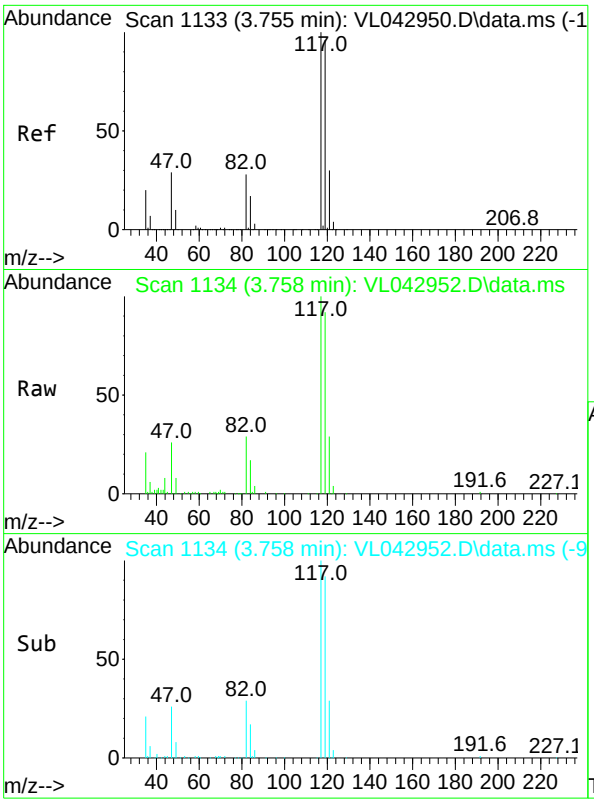


#34
2-Butanone
Concen: 1.044 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 37431

Ion	Ratio	Lower	Upper
43	100		
72	23.4	17.7	26.5

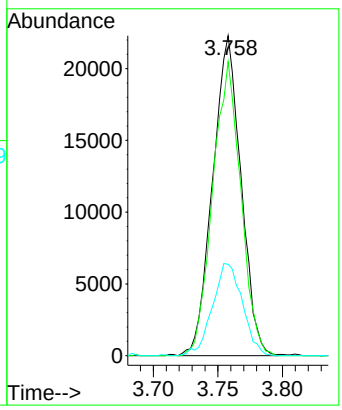




#35
Carbon Tetrachloride
Concen: 1.033 ppbv
RT: 3.758 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:117 Resp: 3401

Ion	Ratio	Lower	Upper
117	100		
119	91.9	76.9	115.3
121	28.5	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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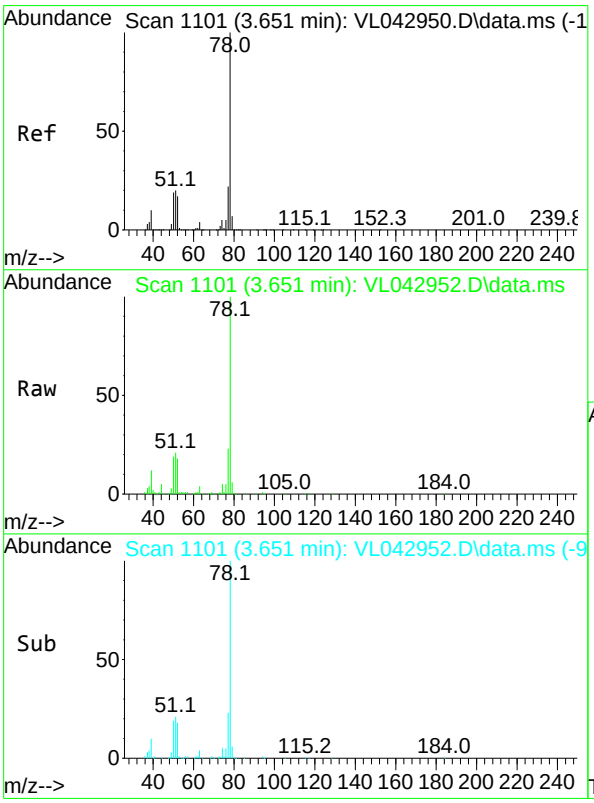
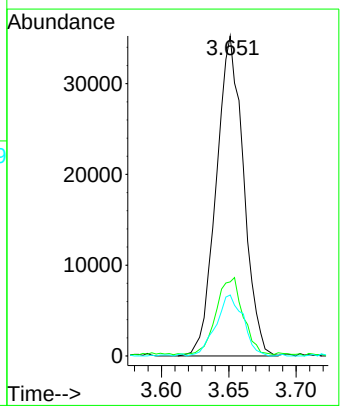
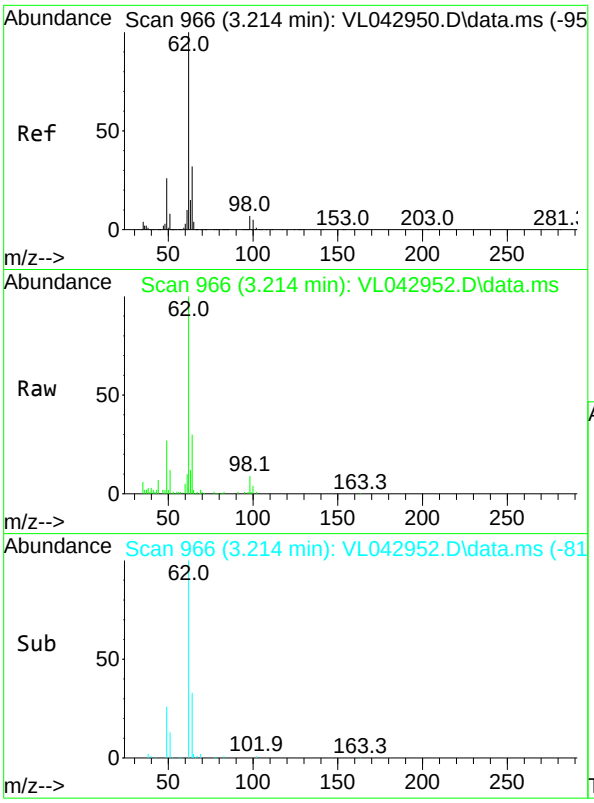


#36
Benzene
Concen: 1.033 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 78 Resp: 49652

Ion	Ratio	Lower	Upper
78	100		
77	22.4	17.8	26.6
50	18.8	15.0	22.4





#37
1,2-Dichloroethane
Concen: 1.048 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 62 Resp: 2648

Ion	Ratio	Lower	Upper
62	100		
98	8.0	5.9	8.9

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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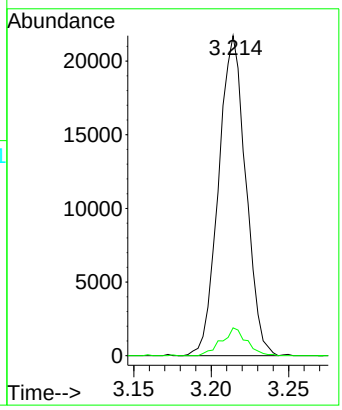
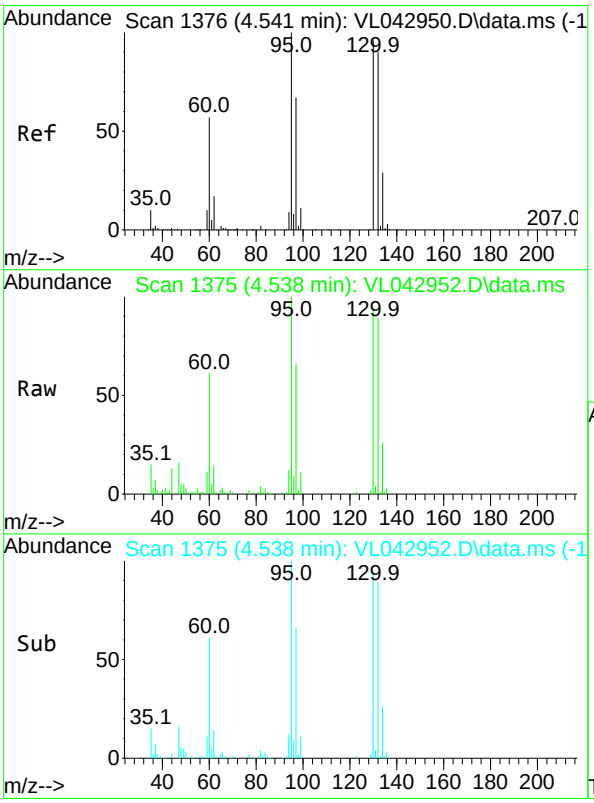
Supervised By :Mahesh Dadoda 09/24/2025

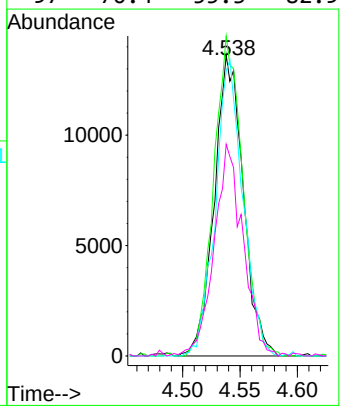


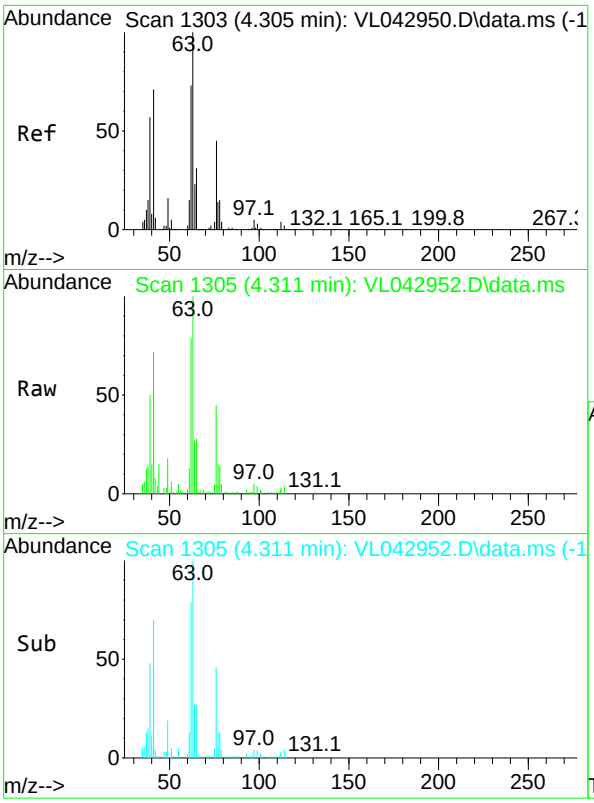


#38
Trichloroethene
Concen: 1.001 ppbv
RT: 4.538 min Scan# 1375
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:130 Resp: 23906

Ion	Ratio	Lower	Upper
130	100		
95	106.0	83.0	124.4
132	94.7	74.6	112.0
97	70.4	55.3	82.9

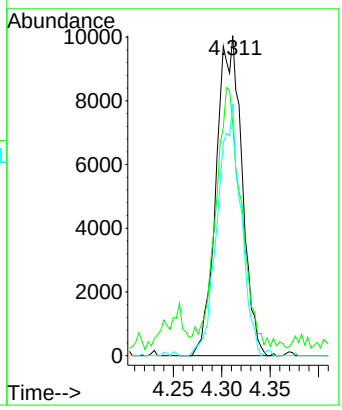




#39
1,2-Dichloropropane
Concen: 1.053 ppbv m
RT: 4.311 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 63 Resp: 1849

Ion	Ratio	Lower	Upper
63	100		
41	72.4	57.5	86.3
62	78.6	58.5	87.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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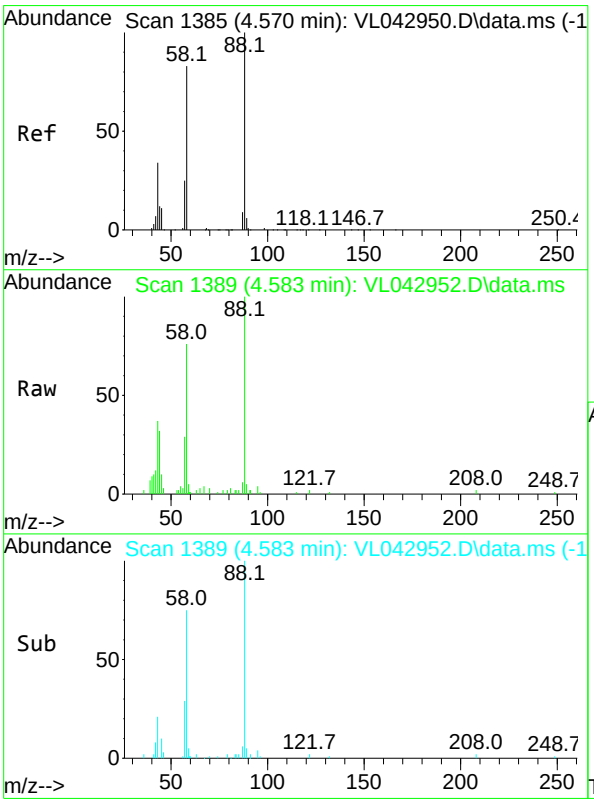
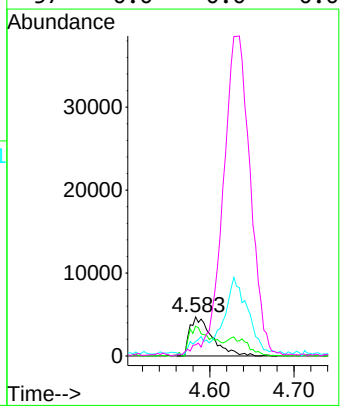
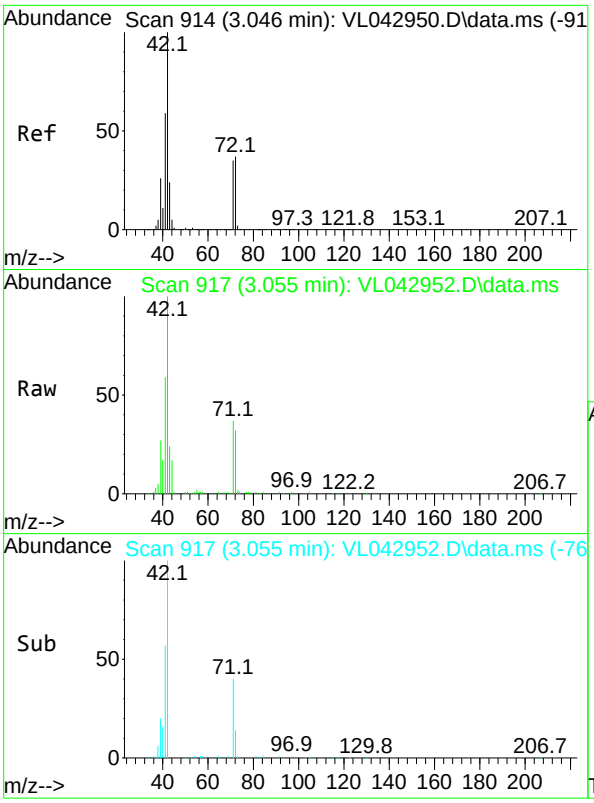


#40
1,4-Dioxane
Concen: 1.080 ppbv m
RT: 4.583 min Scan# 1389
Delta R.T. 0.013 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 88 Resp: 8804

Ion	Ratio	Lower	Upper
88	100		
58	76.4	59.7	89.5
43	9.7	28.9	43.3#
57	0.0	0.0	0.0

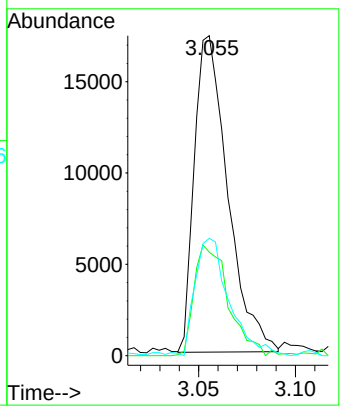




#41
Tetrahydrofuran
Concen: 1.011 ppbv
RT: 3.055 min Scan# 9
Delta R.T. 0.009 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 42 Resp: 2084

Ion	Ratio	Lower	Upper
42	100		
72	37.0	30.0	45.0
71	37.4	28.8	43.2



Instrument :
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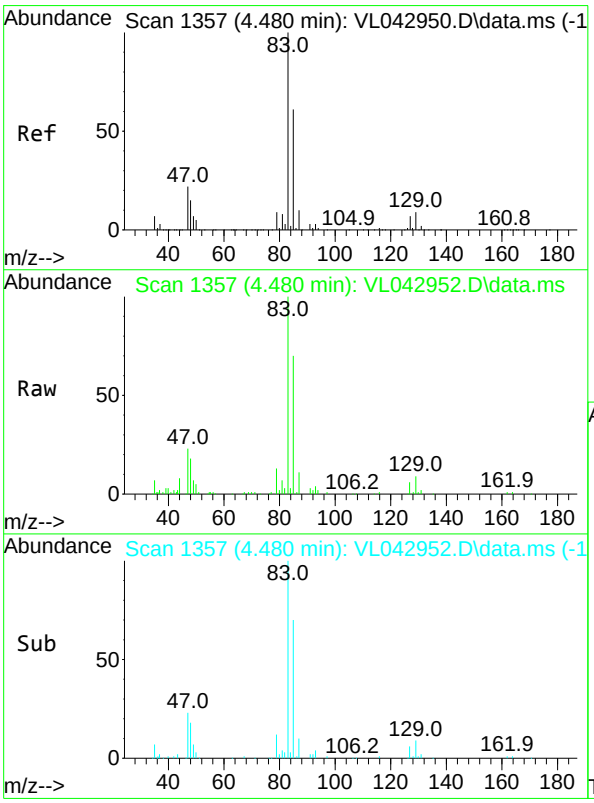
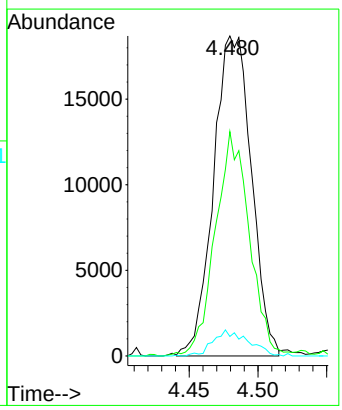
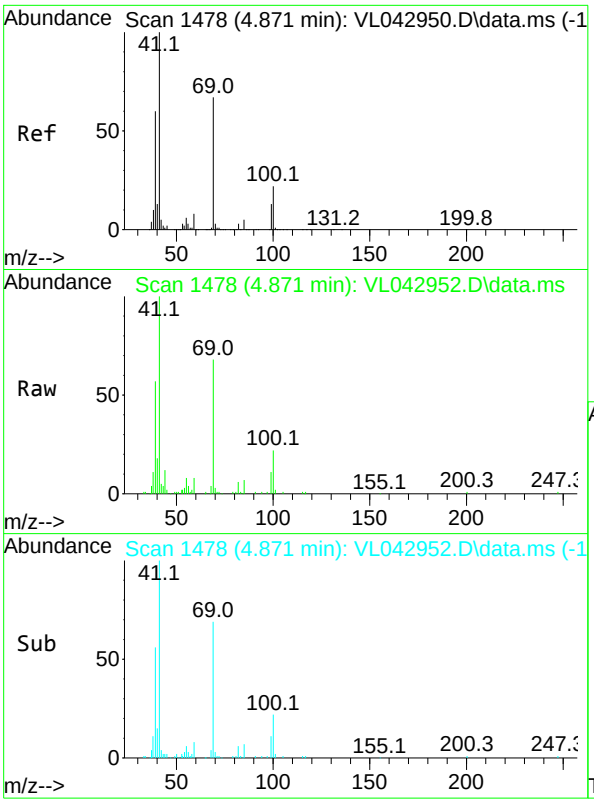


#42
Bromodichloromethane
Concen: 1.016 ppbv m
RT: 4.480 min Scan# 1357
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 83 Resp: 35768

Ion	Ratio	Lower	Upper
83	100		
85	70.1	49.0	73.6
127	6.1	5.3	7.9





#43
Methyl Methacrylate
Concen: 1.040 ppbv
RT: 4.871 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 69 Resp: 2028

Ion	Ratio	Lower	Upper
69	100		
41	152.1	124.5	186.7
100	36.8	29.0	43.6

Instrument :
MSVOA_L
ClientSampleId :
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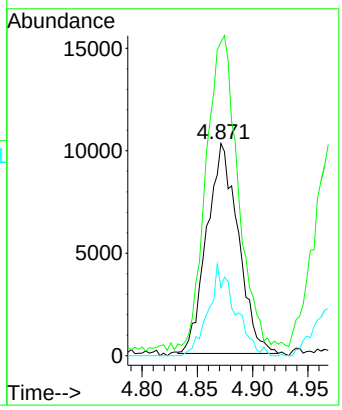
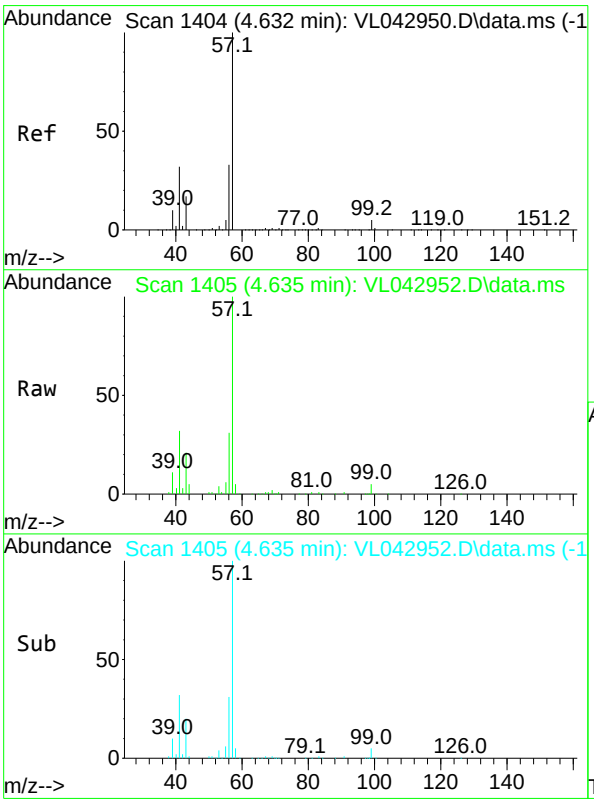
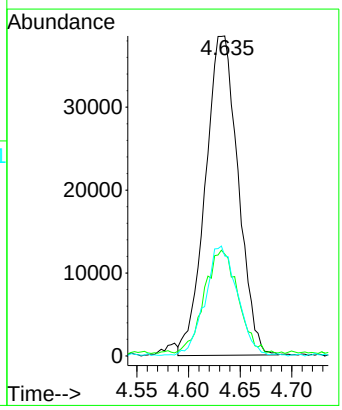


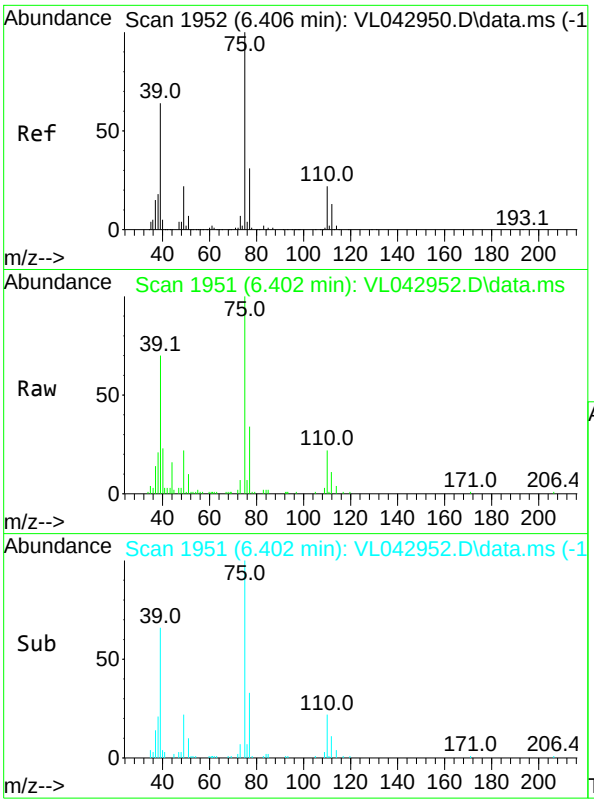


#44
2,2,4-Trimethylpentane
Concen: 1.023 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 57 Resp: 84970

Ion	Ratio	Lower	Upper
57	100		
41	34.1	25.5	38.3
56	34.4	25.8	38.8

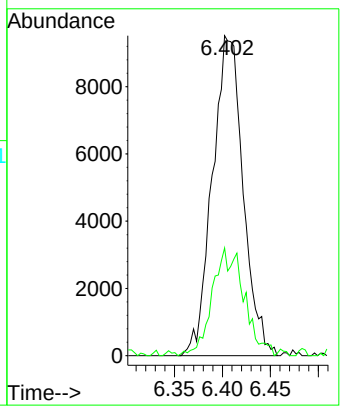




#45
t-1,3-Dichloropropene
Concen: 1.011 ppbv m
RT: 6.402 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 75 Resp: 2121

Ion	Ratio	Lower	Upper
75	100		
77	33.7	25.0	37.4



Instrument :
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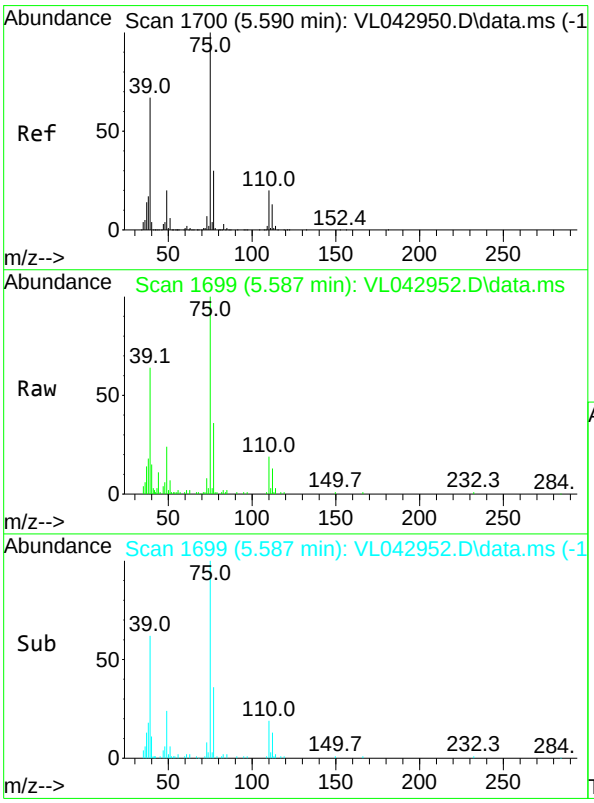
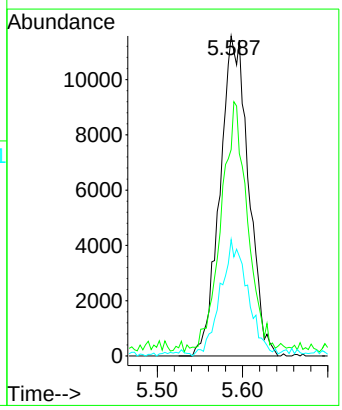
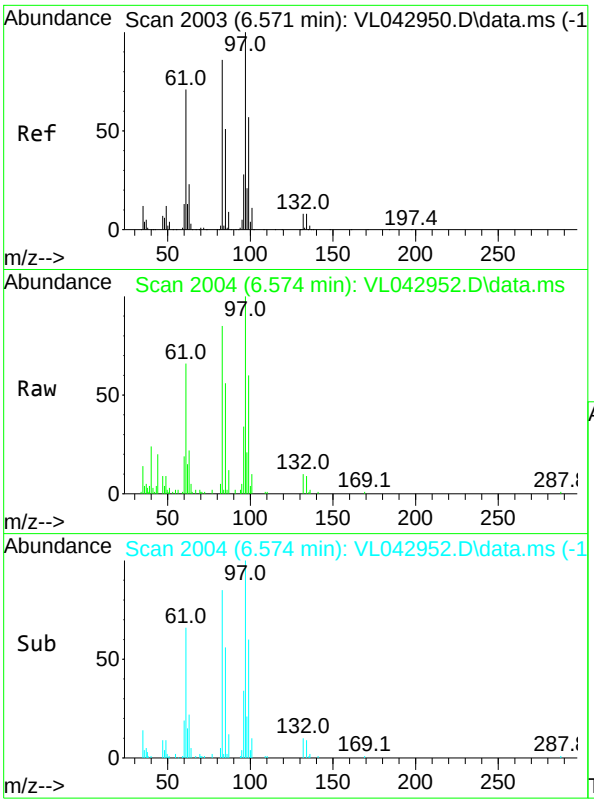


#46
cis-1,3-Dichloropropene
Concen: 1.011 ppbv m
RT: 5.587 min Scan# 1699
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 75 Resp: 27025

Ion	Ratio	Lower	Upper
75	100		
39	64.5	53.8	80.6
77	36.4	23.6	35.4#

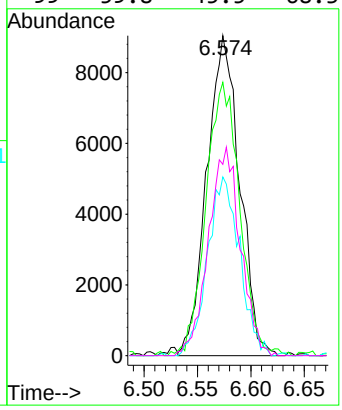




#47
1,1,2-Trichloroethane
Concen: 1.041 ppbv
RT: 6.574 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 97 Resp: 1931

Ion	Ratio	Lower	Upper
97	100		
83	83.9	68.7	103.1
85	55.9	40.6	60.8
99	59.8	45.5	68.3



Instrument :
MSVOA_L
ClientSampleId :
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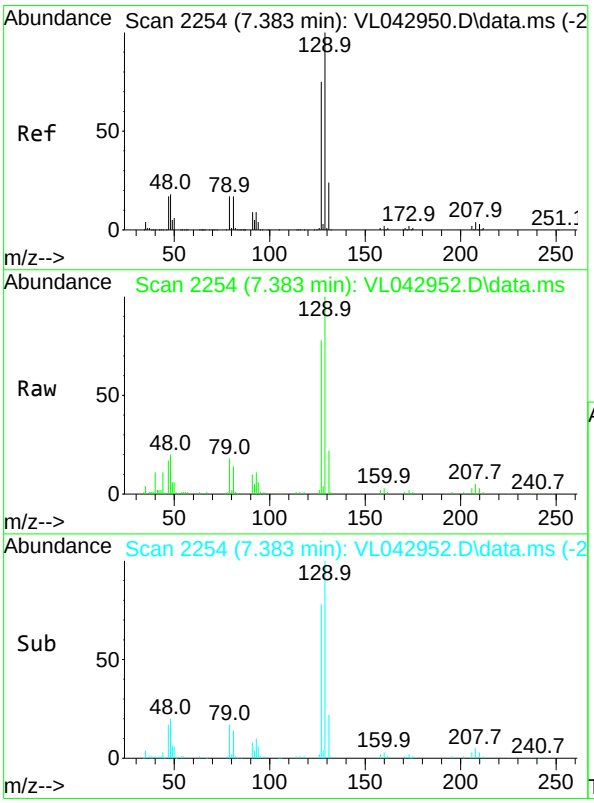
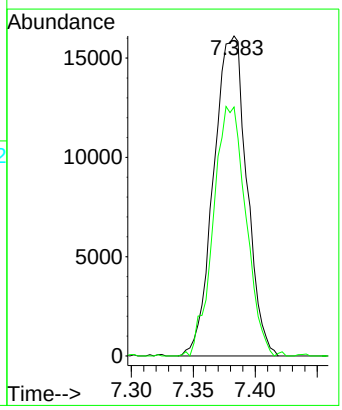
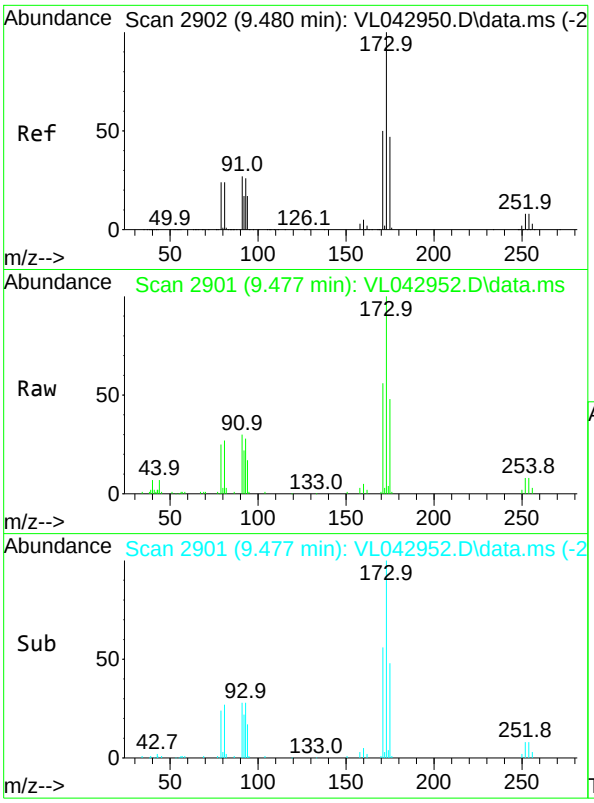


#48
Dibromochloromethane
Concen: 1.012 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:129 Resp: 30015

Ion	Ratio	Lower	Upper
129	100		
127	76.8	39.1	117.2

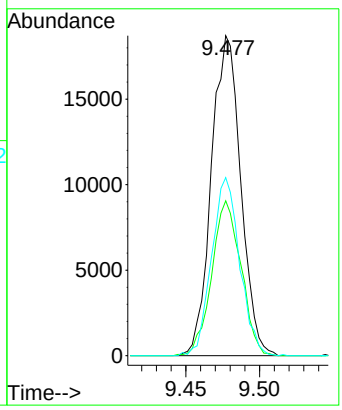




#49
Bromoform
Concen: 1.005 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:173 Resp: 2592

Ion	Ratio	Lower	Upper
173	100		
175	48.2	37.9	56.9
171	53.2	41.1	61.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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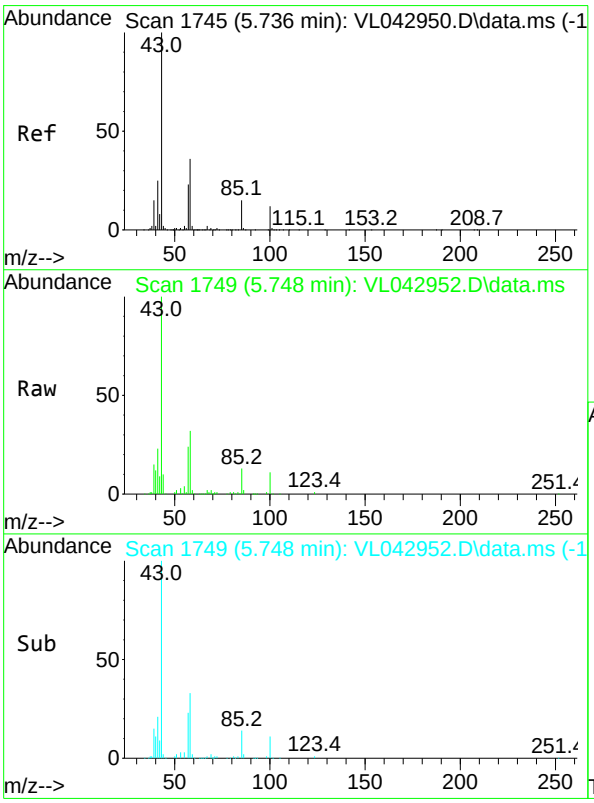
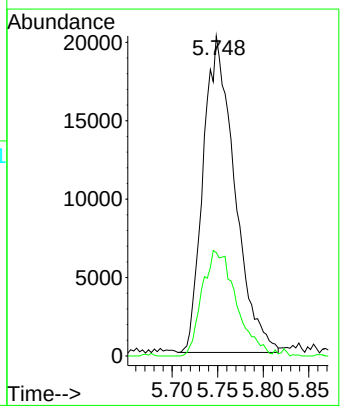
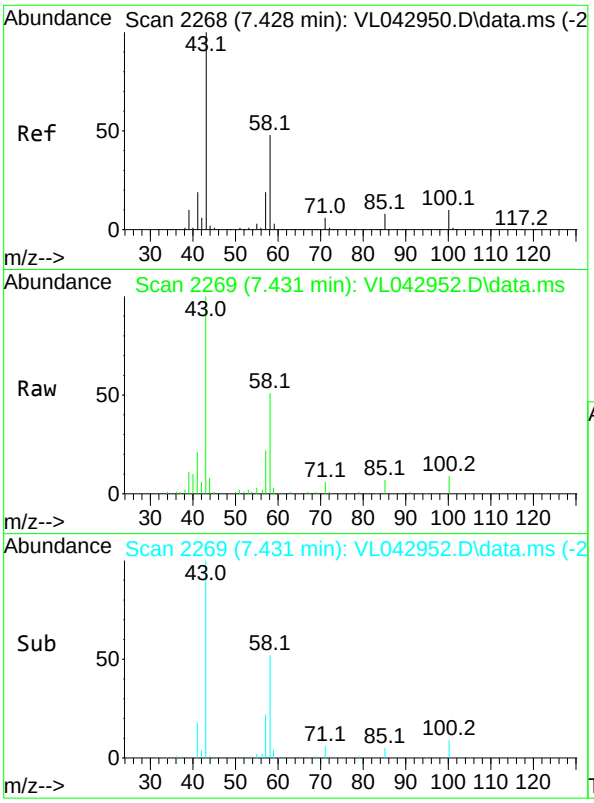


#50
4-Methyl-2-Pentanone
Concen: 1.007 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. 0.013 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 48546

Ion	Ratio	Lower	Upper
43	100		
58	36.5	28.4	42.6

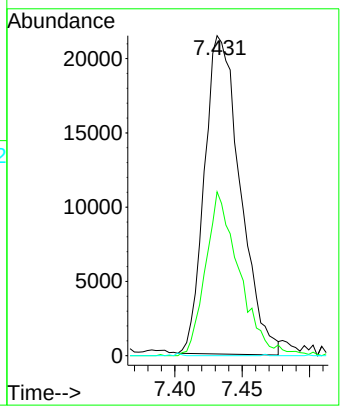




#51
2-Hexanone
Concen: 1.034 ppbv
RT: 7.431 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 3962

Ion	Ratio	Lower	Upper
43	100		
58	48.6	39.7	59.5
98	0.1	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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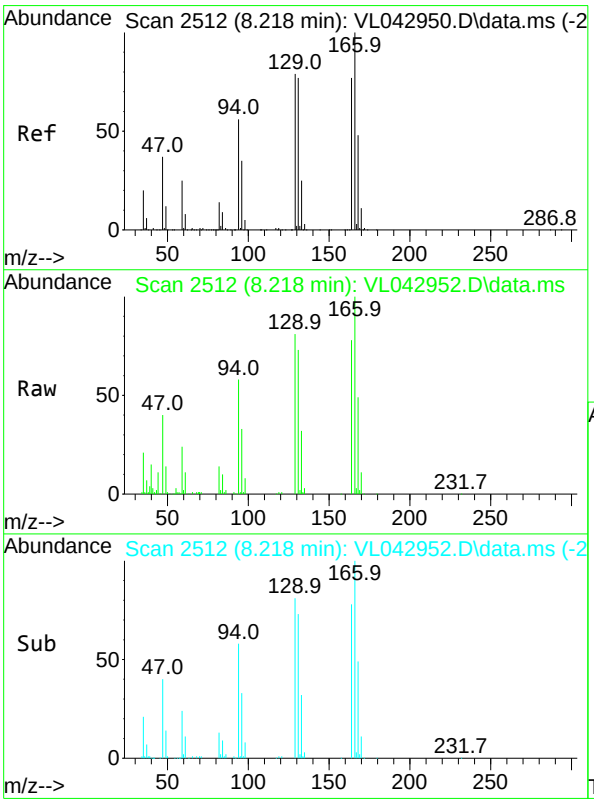
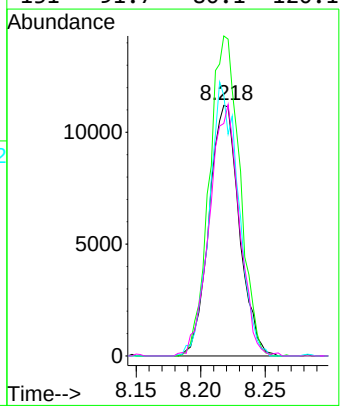
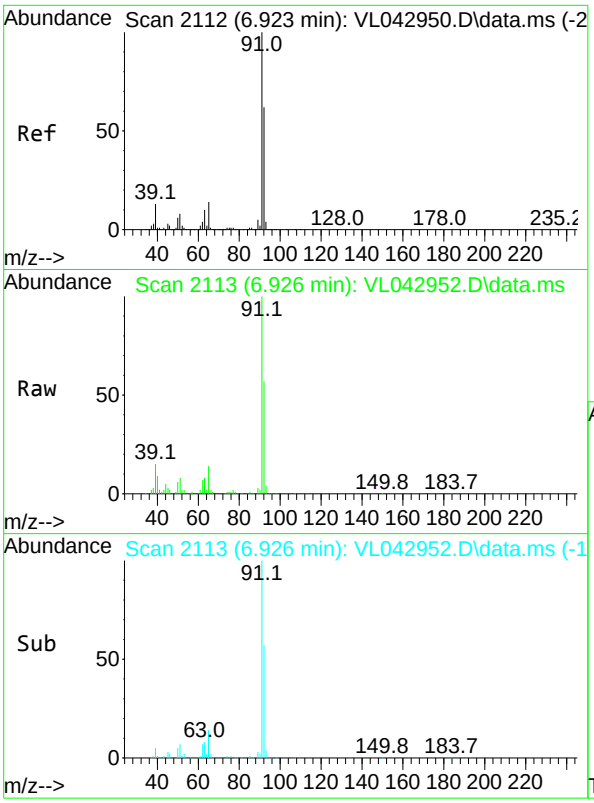


#52
Tetrachloroethene
Concen: 0.978 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:164 Resp: 18188

Ion	Ratio	Lower	Upper
164	100		
166	127.7	103.5	155.3
129	104.0	82.2	123.4
131	91.7	80.1	120.1

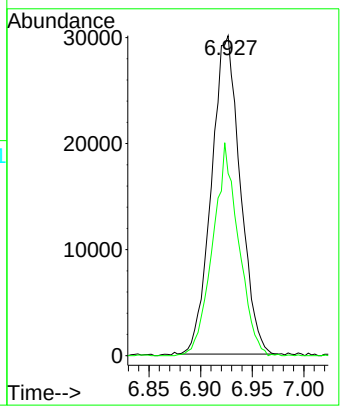




#53
Toluene
Concen: 1.023 ppbv
RT: 6.926 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 5820

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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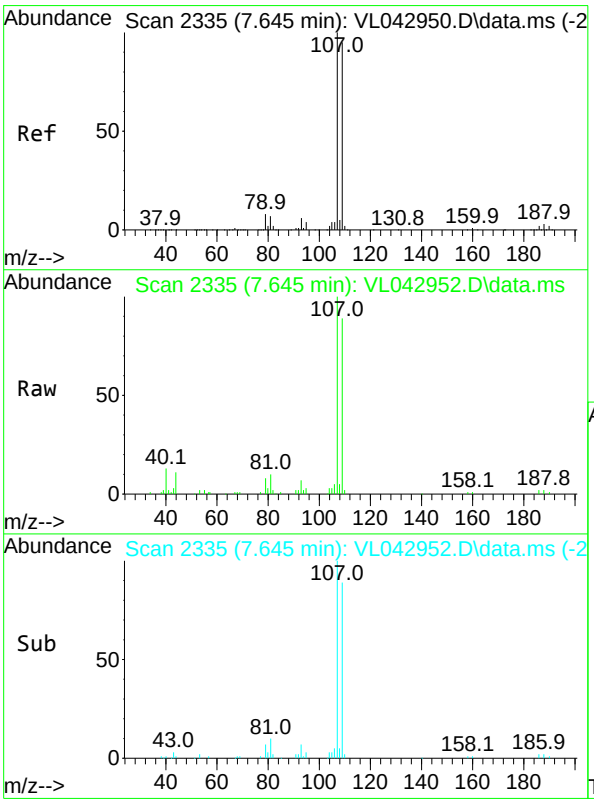
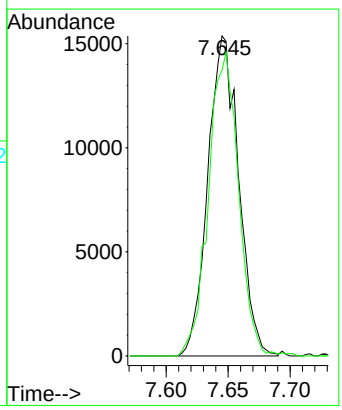
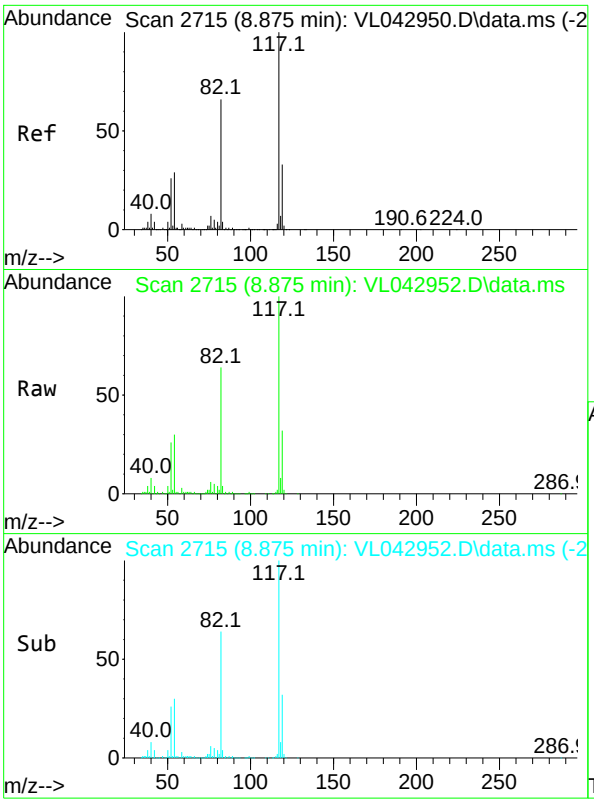


#54
1,2-Dibromoethane
Concen: 1.020 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:107 Resp: 26608

Ion	Ratio	Lower	Upper
107	100		
109	89.3	75.8	113.8

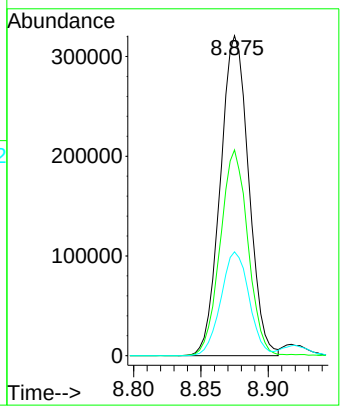




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:117 Resp: 46926

Ion	Ratio	Lower	Upper
117	100		
82	63.2	52.8	79.2
119	32.7	26.5	39.7



Instrument :
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ClientSampleId :
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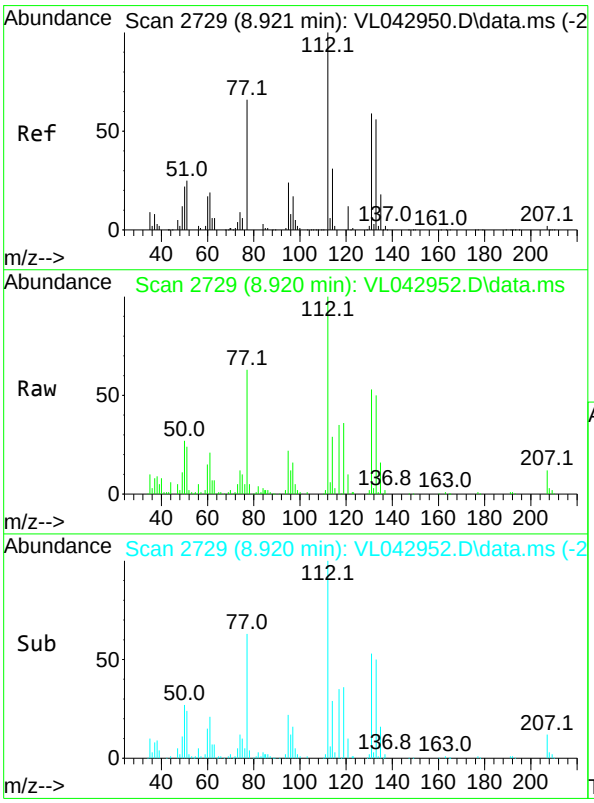
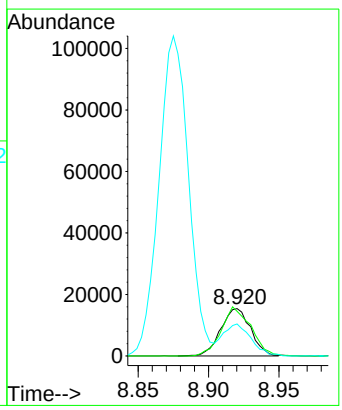
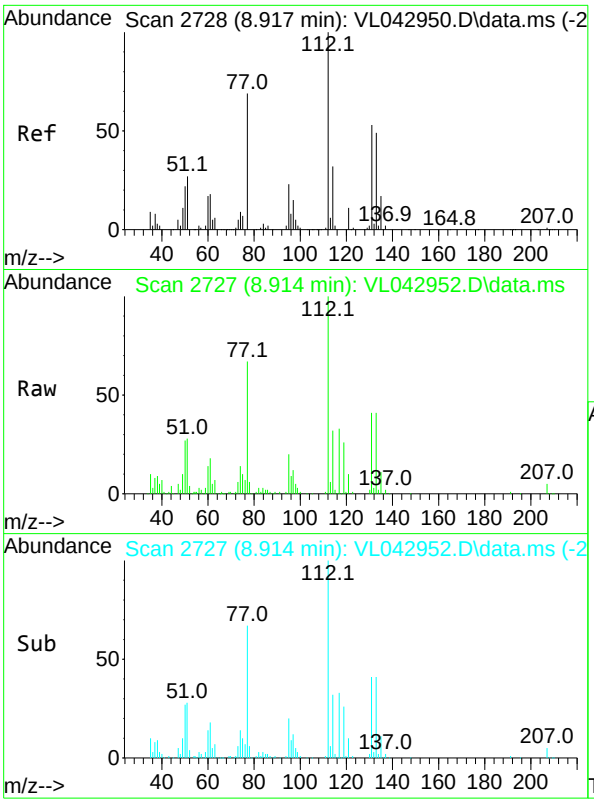


#56
1,1,1,2-Tetrachloroethane
Concen: 1.015 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:131 Resp: 22802

Ion	Ratio	Lower	Upper
131	100		
133	102.8	76.6	114.8
119	58.6	49.9	74.9

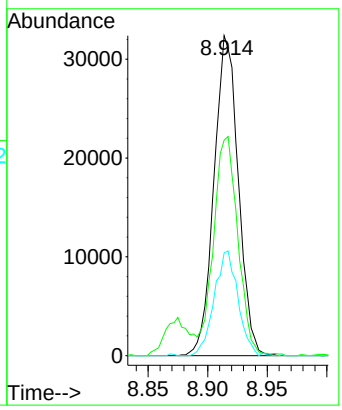




#57
Chlorobenzene
Concen: 1.071 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:112 Resp: 4587

Ion	Ratio	Lower	Upper
112	100		
77	66.9	55.7	83.5
114	32.1	28.6	35.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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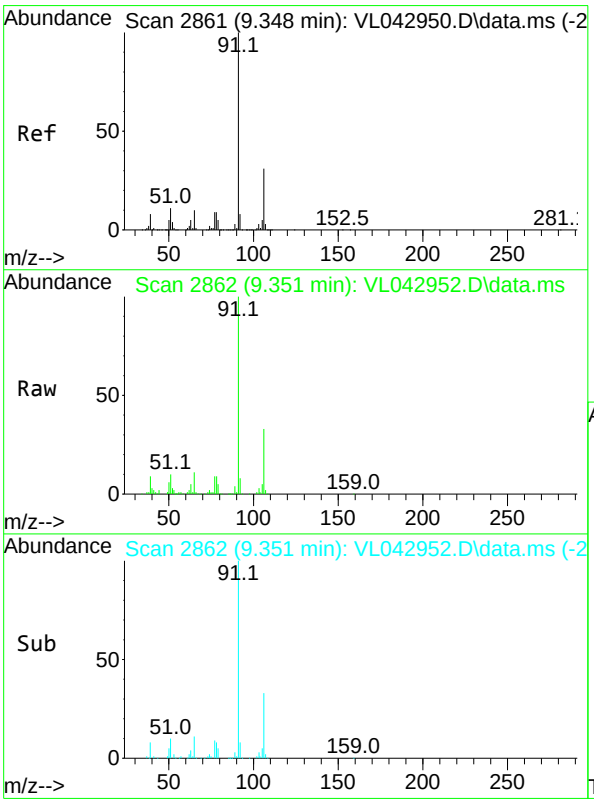
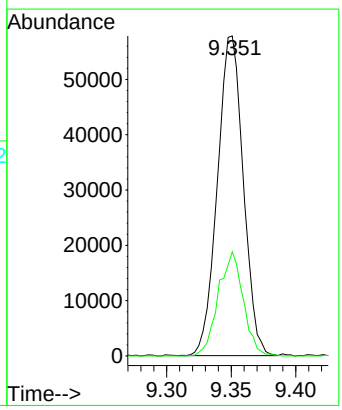
Supervised By :Mahesh Dadoda 09/24/2025

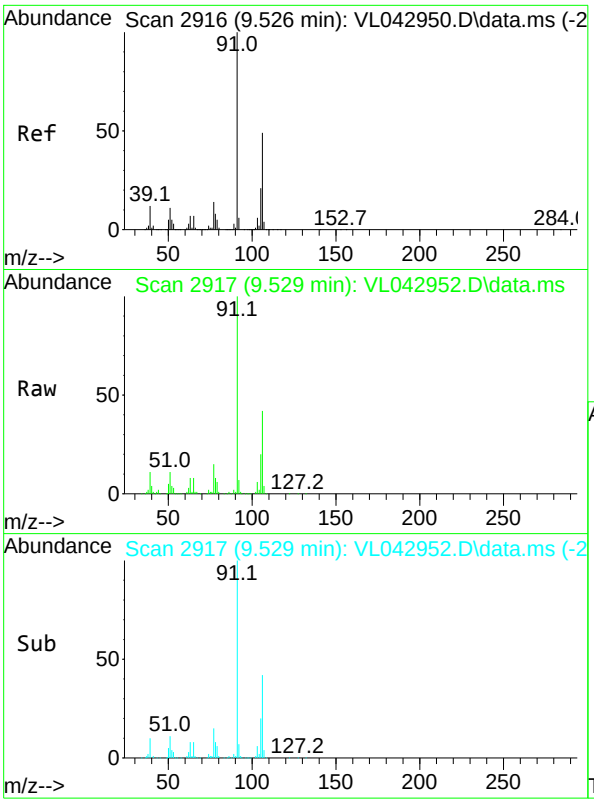


#58
Ethyl Benzene
Concen: 1.044 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 80473

Ion	Ratio	Lower	Upper
91	100		
106	32.6	24.6	37.0

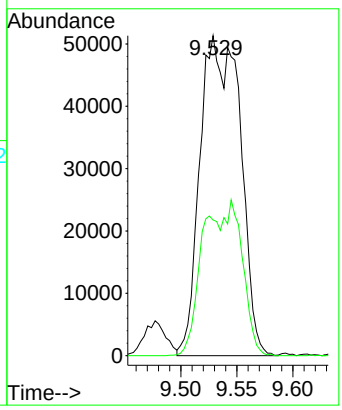




#59
m/p-Xylene
Concen: 2.108 ppbv m
RT: 9.529 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 12813

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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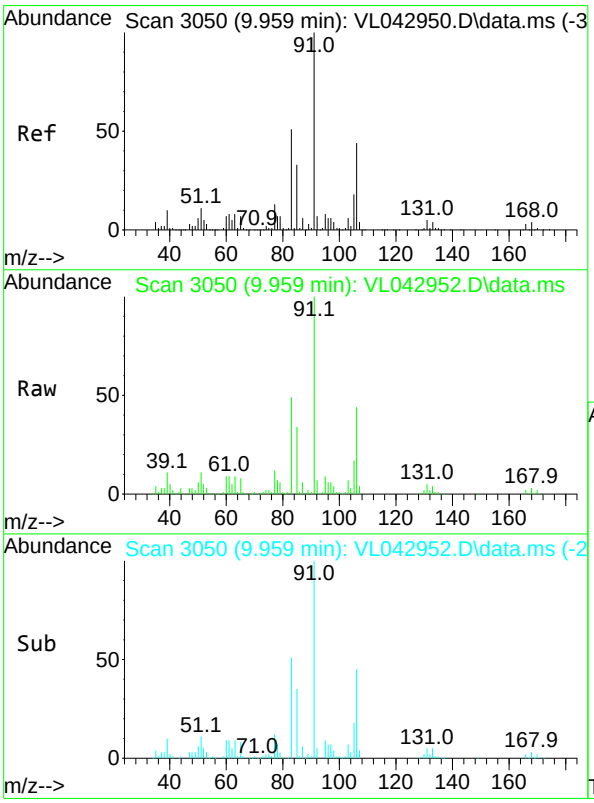
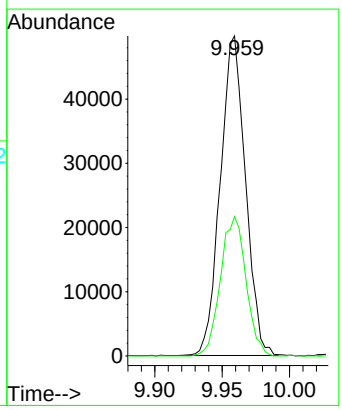
Supervised By :Mahesh Dadoda 09/24/2025

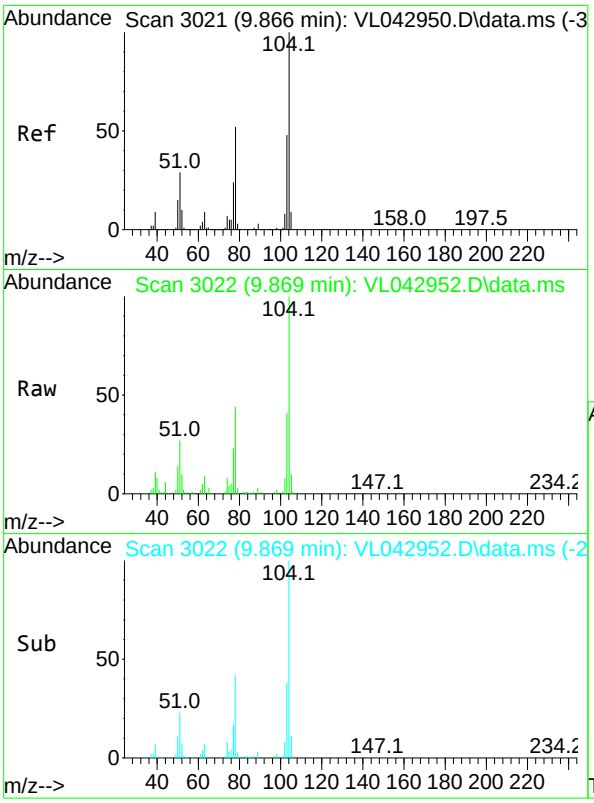


#60
o-Xylene
Concen: 1.066 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 64703

Ion	Ratio	Lower	Upper
91	100		
106	44.2	22.4	67.0

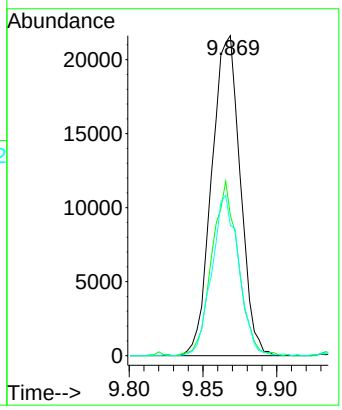




#61
Styrene
Concen: 1.012 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:104 Resp: 2906

Ion	Ratio	Lower	Upper
104	100		
78	50.8	39.9	59.9
103	47.7	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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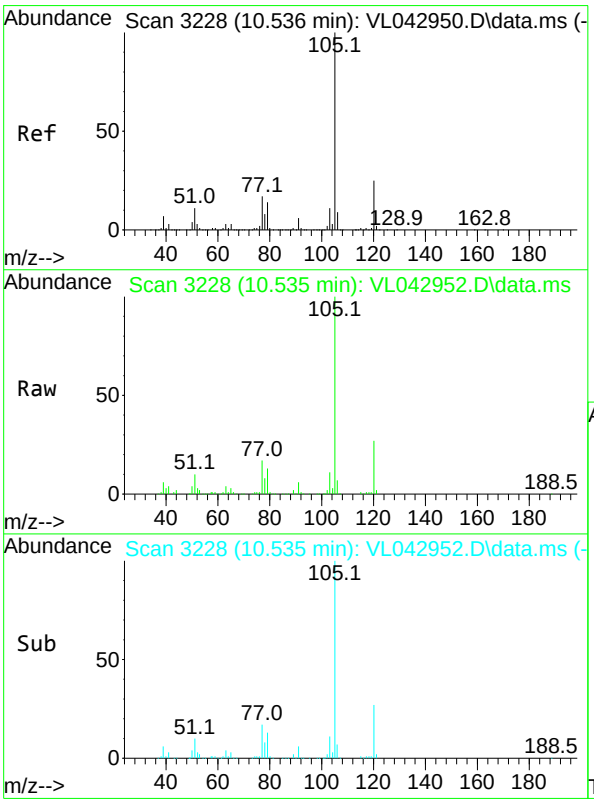
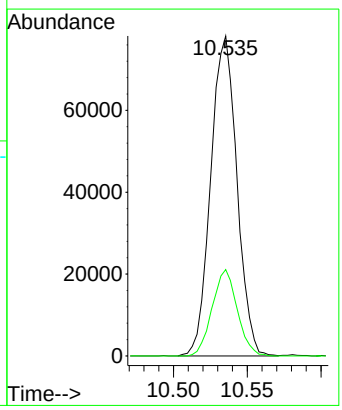
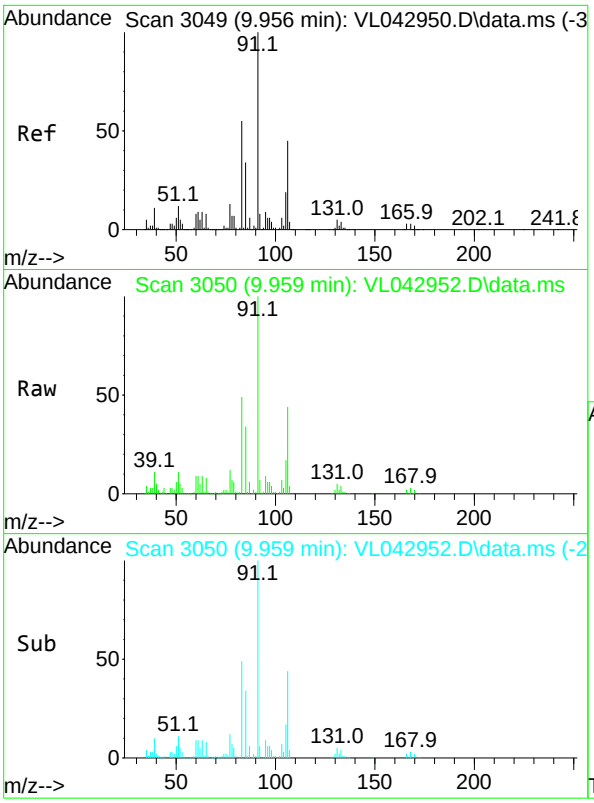


#62
Isopropylbenzene
Concen: 1.068 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 96621

Ion	Ratio	Lower	Upper
105	100		
120	25.8	20.6	30.8





#63
1,1,2,2-Tetrachloroethane
Concen: 0.993 ppbv
RT: 9.959 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 83 Resp: 3169

Ion	Ratio	Lower	Upper
83	100		
131	9.2	4.8	14.4
85	67.4	32.2	96.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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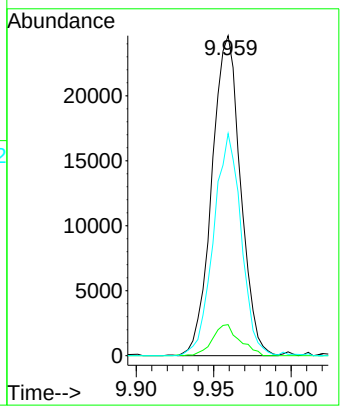
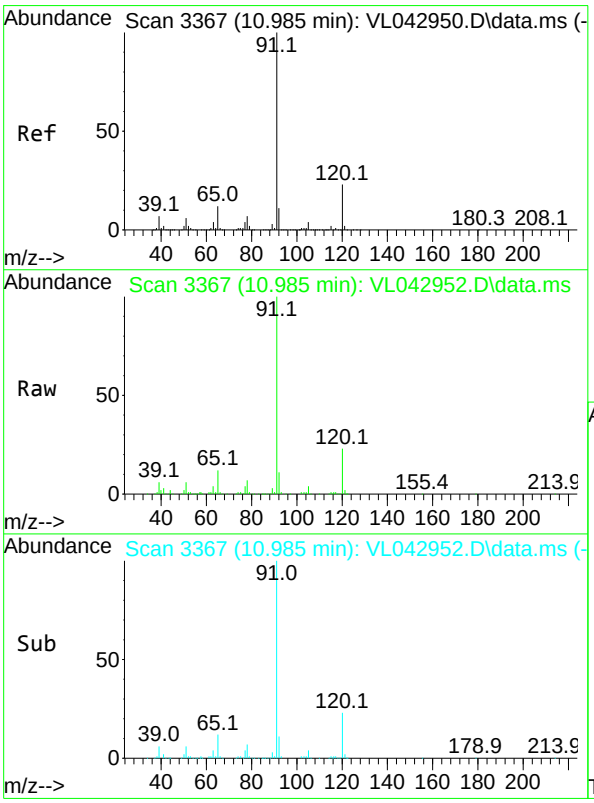
Supervised By :Mahesh Dadoda 09/24/2025

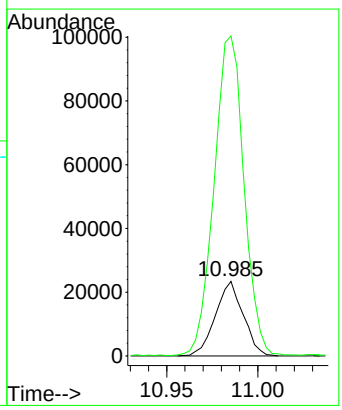


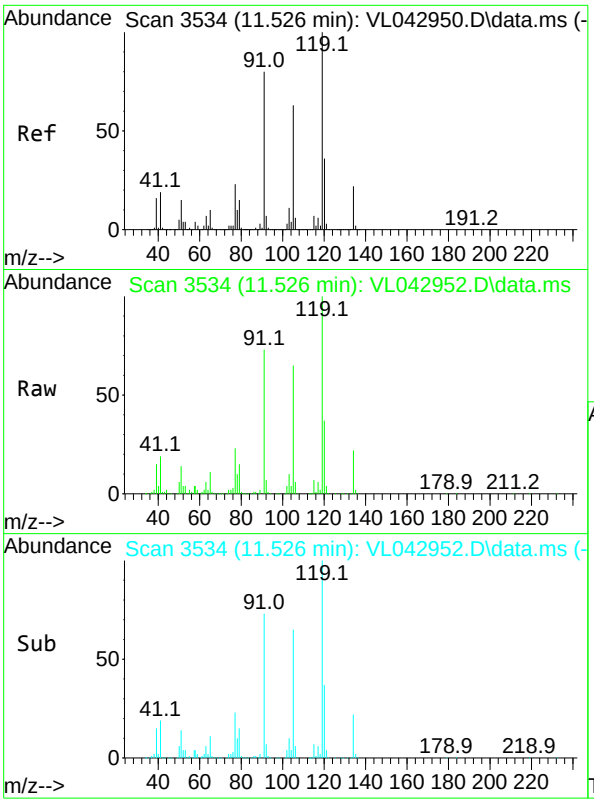


#64
n-propylbenzene
Concen: 1.049 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:120 Resp: 24820

Ion	Ratio	Lower	Upper
120	100		
91	461.0	364.9	547.3





#65
tert-Butylbenzene
Concen: 1.072 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:119 Resp: 8630

Ion	Ratio	Lower	Upper
119	100		
91	78.1	63.1	94.7
134	21.2	17.0	25.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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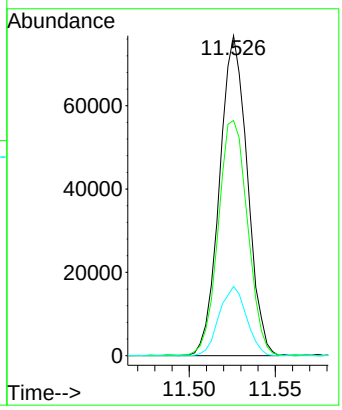
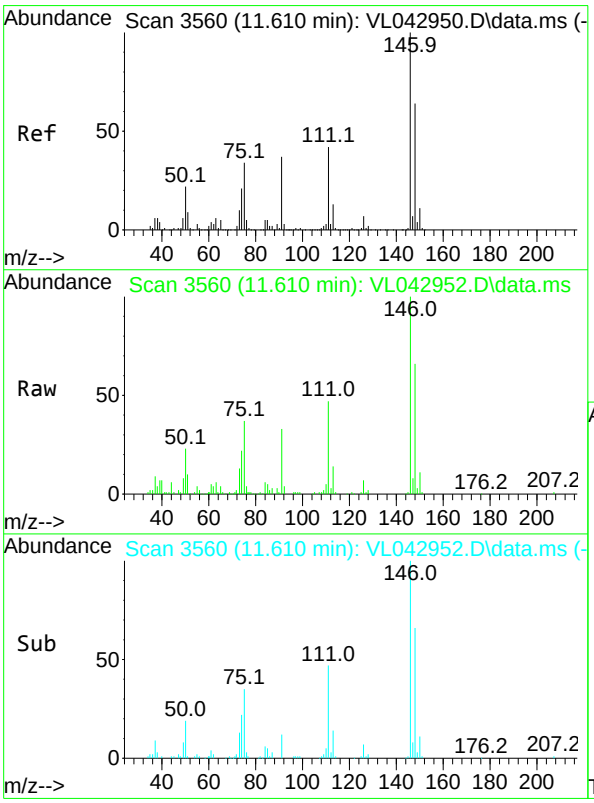
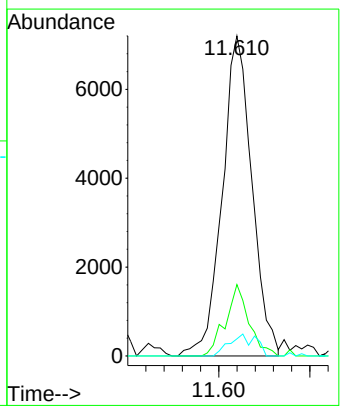


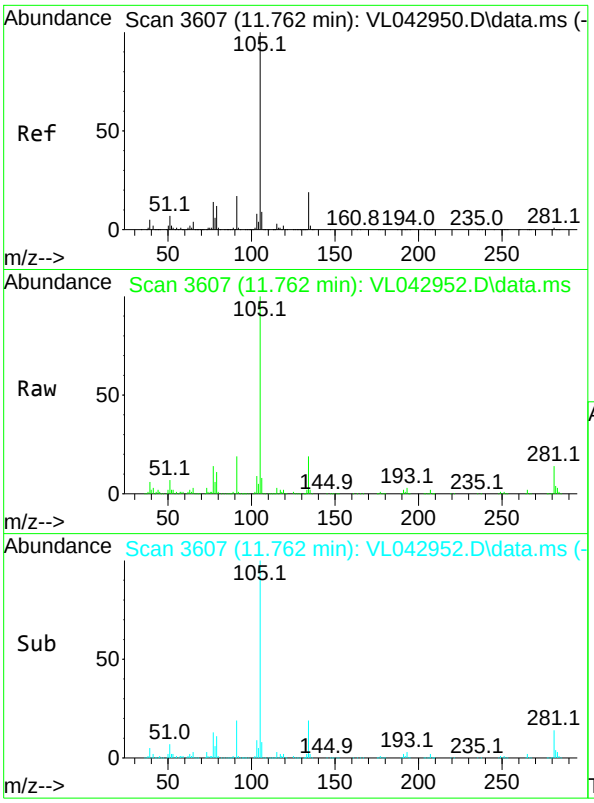


#66
Benzyl Chloride
Concen: 0.964 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 8140

Ion	Ratio	Lower	Upper
91	100		
126	17.9	14.6	21.8
128	6.2	5.0	7.4





#67
sec-Butylbenzene
Concen: 1.070 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 12007

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.7	23.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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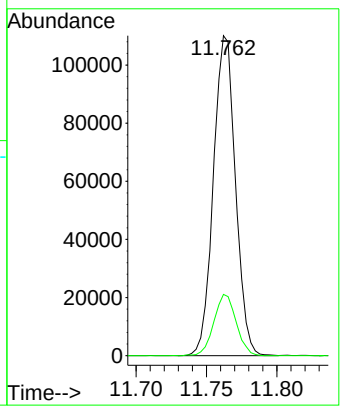
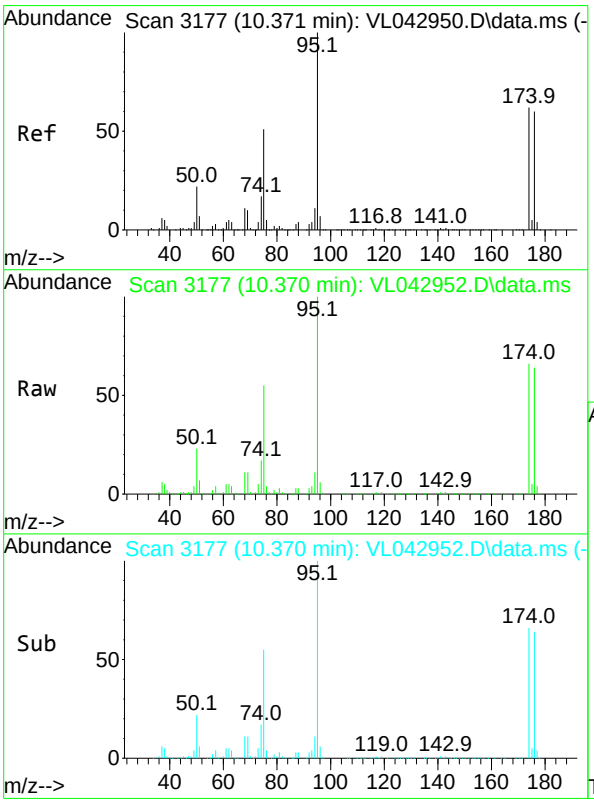
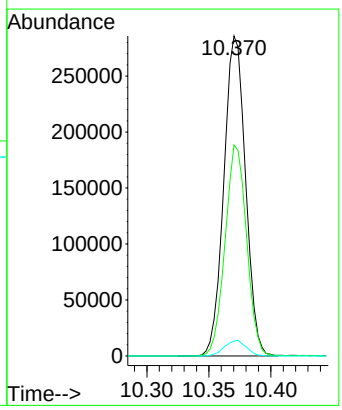


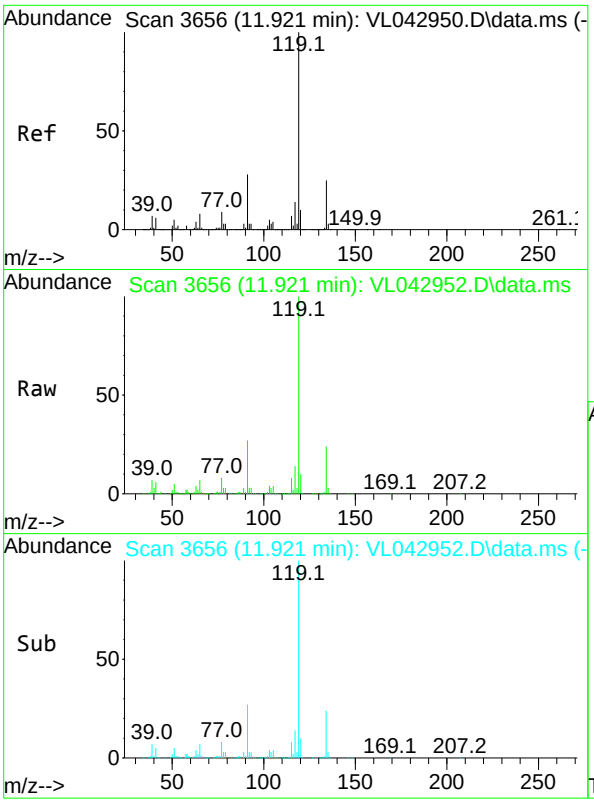


#68
1-Bromo-4-Fluorobenzene
Concen: 9.960 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 95 Resp: 348878

Ion	Ratio	Lower	Upper
95	100		
174	65.3	51.4	77.2
175	4.9	4.0	6.0

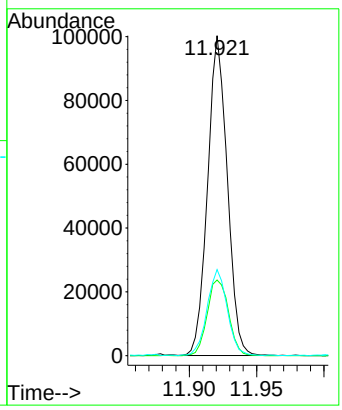




#69
p-Isopropyltoluene
Concen: 1.074 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:119 Resp: 10174

Ion	Ratio	Lower	Upper
119	100		
134	25.8	21.0	31.4
91	28.3	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
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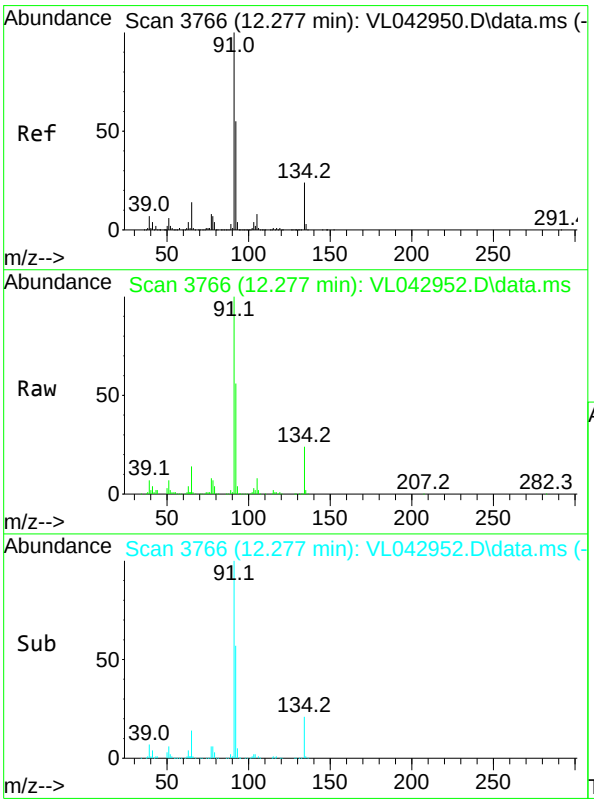
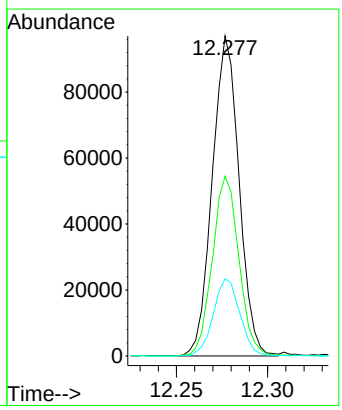
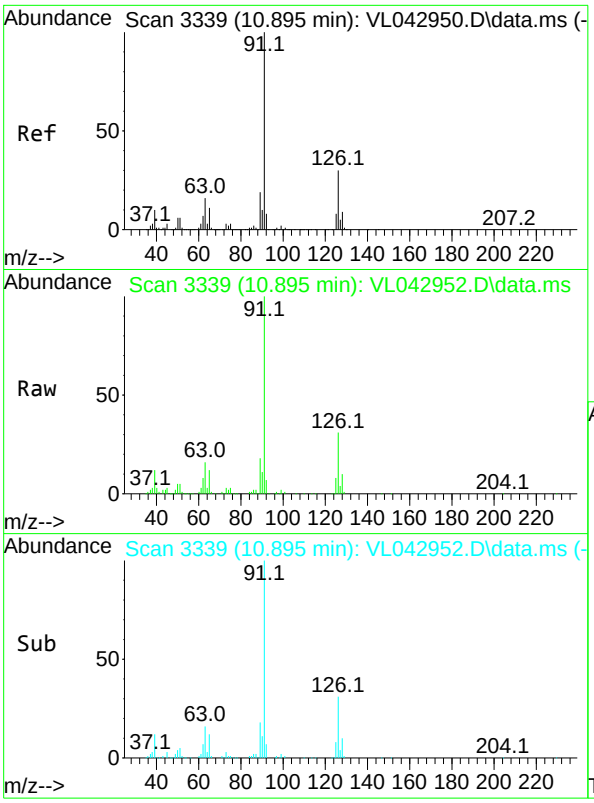


#70
n-Butylbenzene
Concen: 1.069 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 98908

Ion	Ratio	Lower	Upper
91	100		
92	56.0	44.0	66.0
134	24.0	19.4	29.2

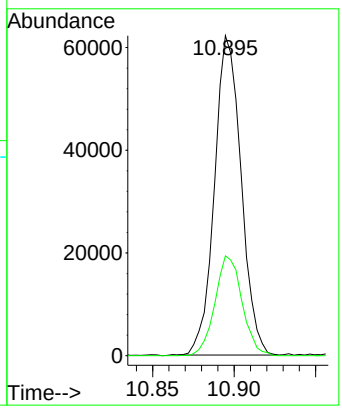




#71
2-Chlorotoluene
Concen: 1.033 ppbv
RT: 10.895 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 7057

Ion	Ratio	Lower	Upper
91	100		
126	31.8	12.3	49.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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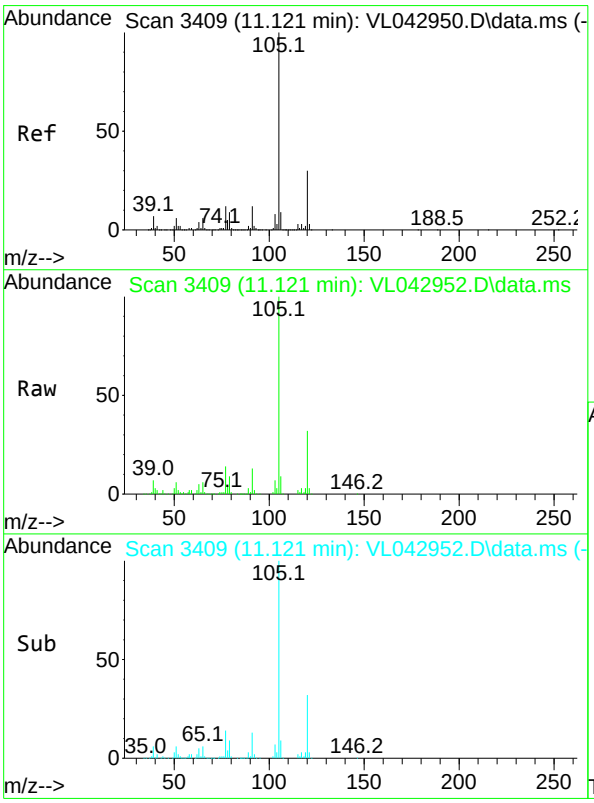
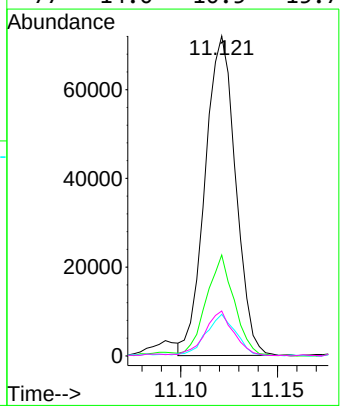
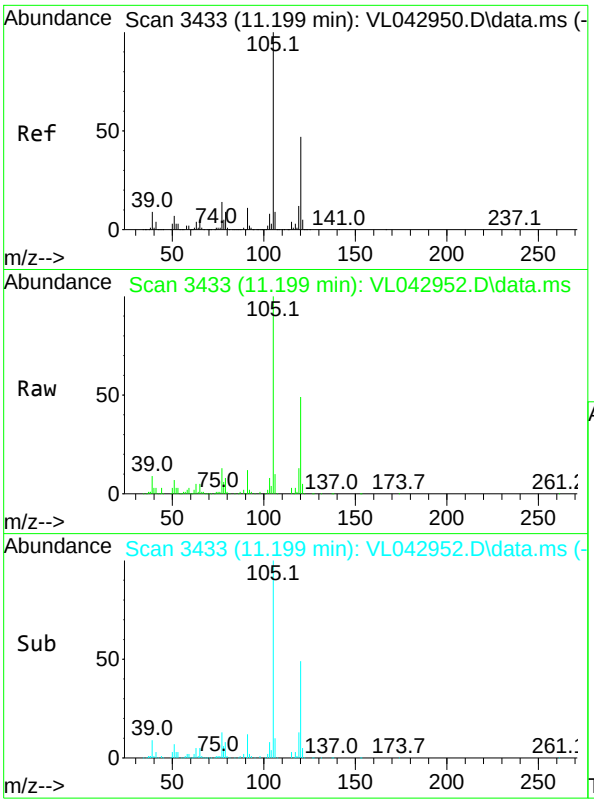


#72
4-Ethyltoluene
Concen: 1.040 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 79095

Ion	Ratio	Lower	Upper
105	100		
120	30.3	24.2	36.2
91	13.3	10.0	15.0
77	14.0	10.5	15.7

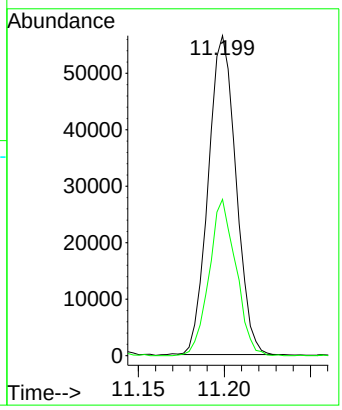




#73
1,3,5-Trimethylbenzene
Concen: 1.024 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 6317

Ion	Ratio	Lower	Upper
105	100		
120	48.8	38.0	57.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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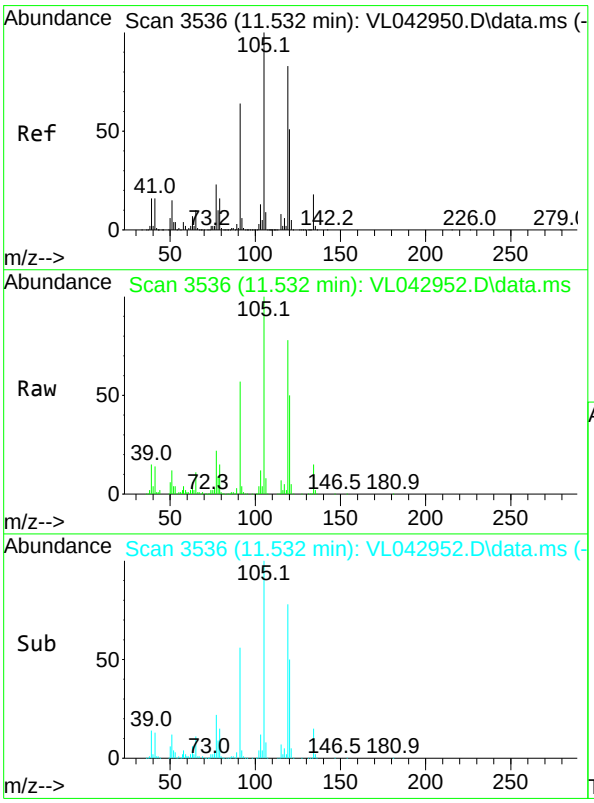
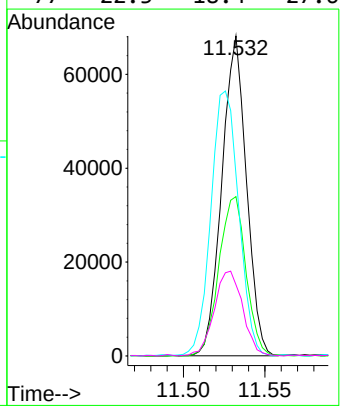
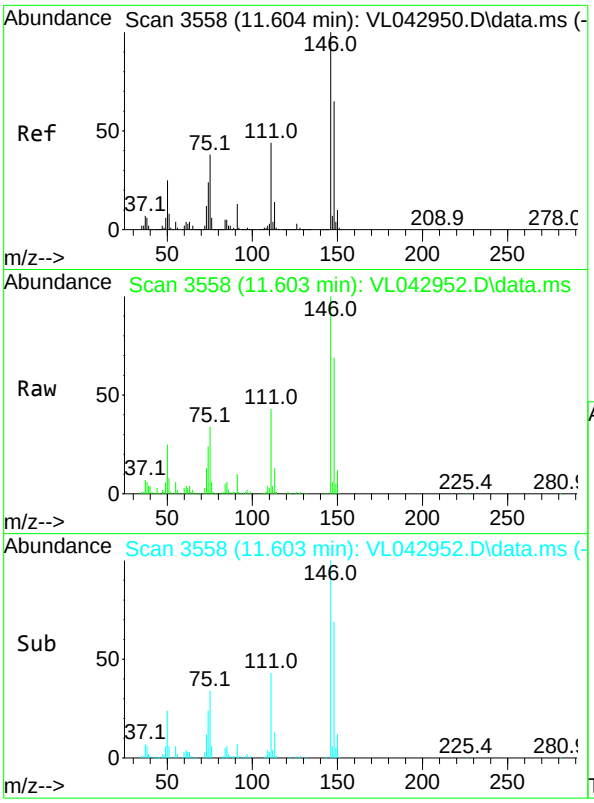


#74
1,2,4-Trimethylbenzene
Concen: 1.049 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 71411

Ion	Ratio	Lower	Upper
105	100		
120	49.9	40.9	61.3
91	56.6	51.2	76.8
77	22.3	18.4	27.6

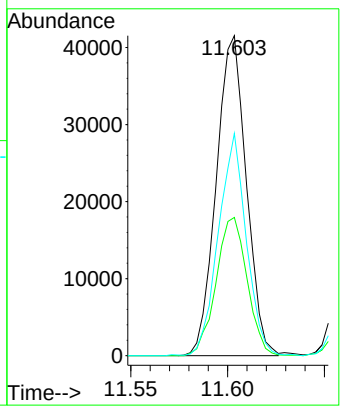




#75
1,3-Dichlorobenzene
Concen: 1.060 ppbv
RT: 11.603 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:146 Resp: 4476

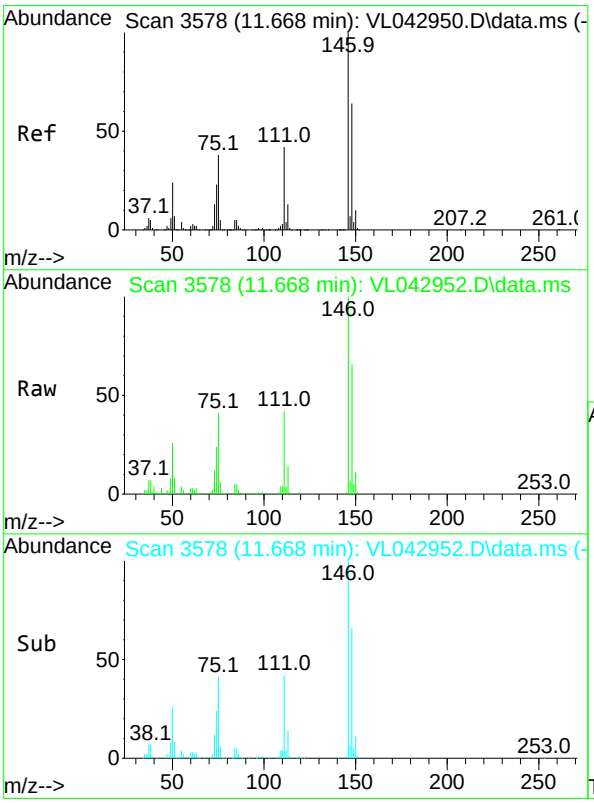
Ion	Ratio	Lower	Upper
146	100		
111	44.6	22.3	66.9
148	64.7	31.9	95.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

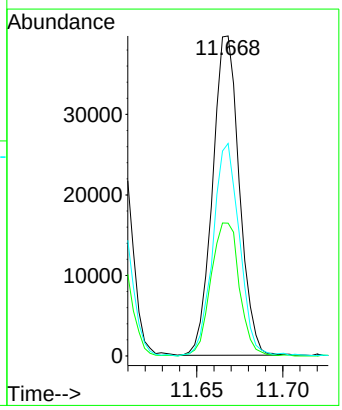
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

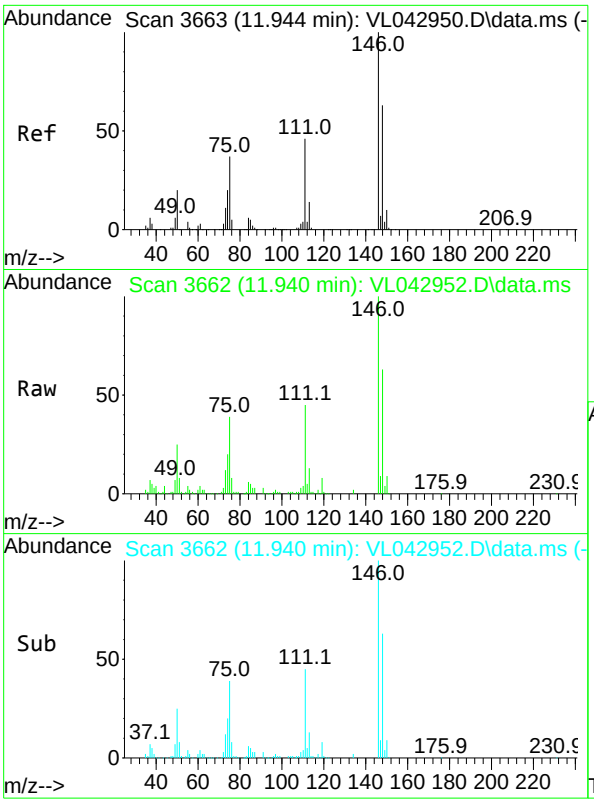


#76
1,4-Dichlorobenzene
Concen: 1.022 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:146 Resp: 42879

Ion	Ratio	Lower	Upper
146	100		
111	44.5	21.5	64.5
148	66.4	31.9	95.5

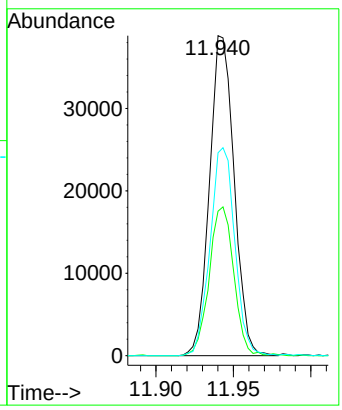




#77
1,2-Dichlorobenzene
Concen: 1.068 ppbv
RT: 11.940 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:146 Resp: 4291

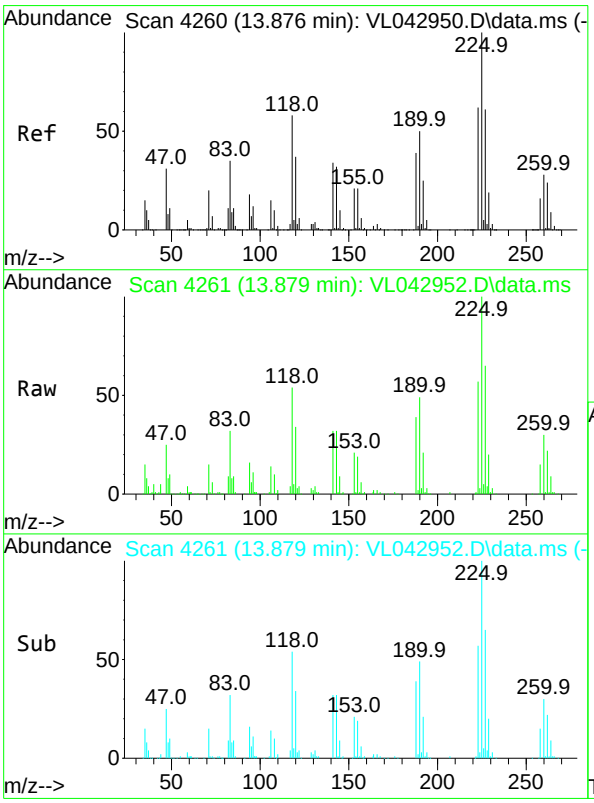
Ion	Ratio	Lower	Upper
146	100		
111	46.6	23.1	69.3
148	65.9	32.0	96.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

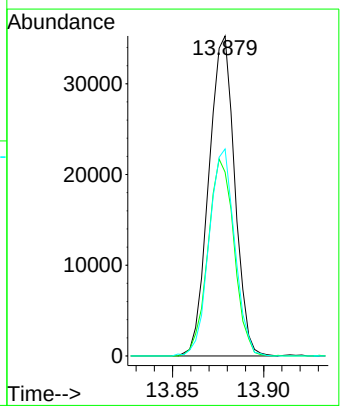
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

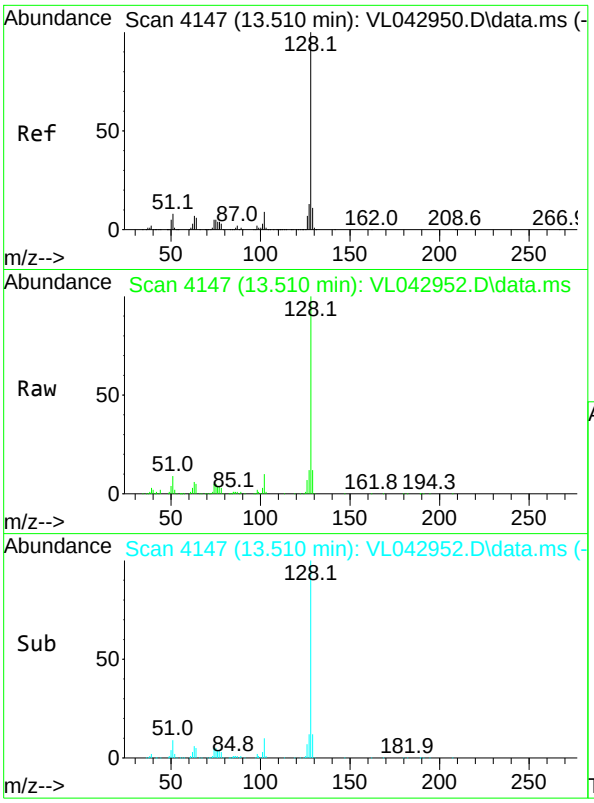


#78
Hexachloro-1,3-Butadiene
Concen: 1.107 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:225 Resp: 34798

Ion	Ratio	Lower	Upper
225	100		
223	62.0	50.1	75.1
227	64.0	50.4	75.6

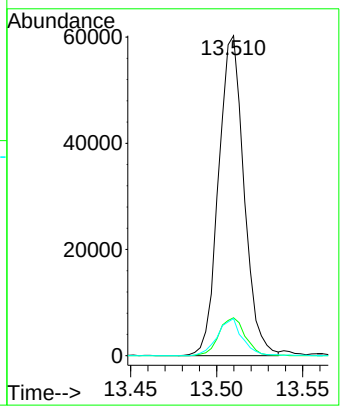




#79
Naphthalene
Concen: 1.028 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:128 Resp: 6192

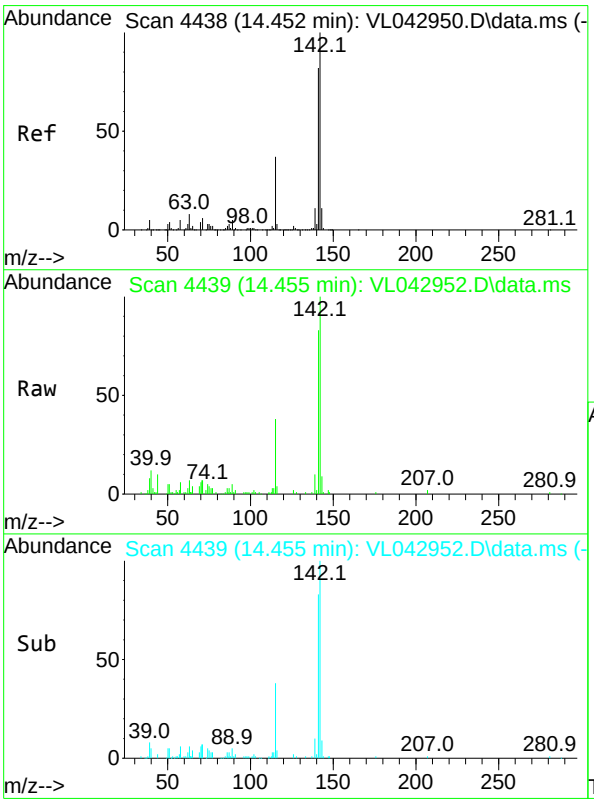
Ion	Ratio	Lower	Upper
128	100		
127	11.8	10.6	15.8
129	11.6	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

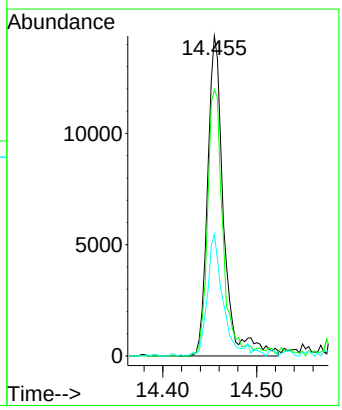
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

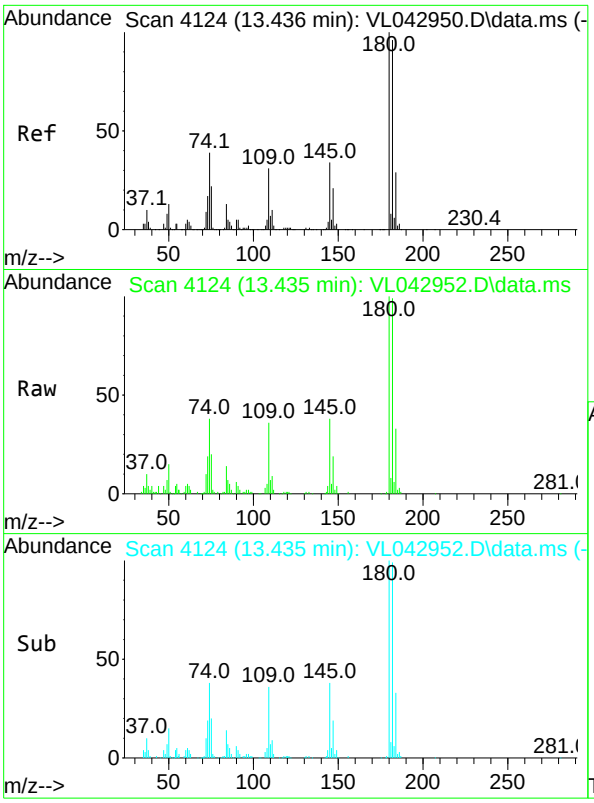


#80
Naphthalene,2-methyl-
Concen: 0.920 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:142 Resp: 17116

Ion	Ratio	Lower	Upper
142	100		
141	83.8	65.1	97.7
115	38.5	28.9	43.3

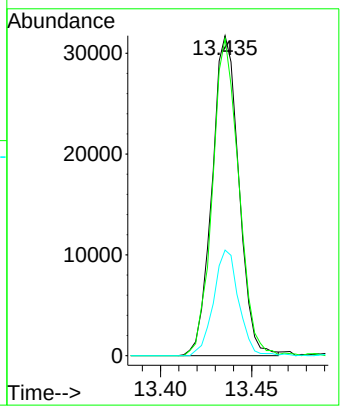




#81
1,2,4-Trichlorobenzene
Concen: 1.007 ppbv
RT: 13.435 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:180 Resp: 3241

Ion	Ratio	Lower	Upper
180	100		
182	98.0	75.7	113.5
184	31.2	23.9	35.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042953.D
Acq On : 22 Sep 2025 11:22
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:11:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	165435	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	509306	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	464091	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	347374	10.027	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	11508	0.517	ppbv	96
3) Chlorodifluoromethane	1.476	51	14744	0.532	ppbv #	90
4) Chloromethane	1.534	50	5729	0.569	ppbv	97
5) Vinyl Chloride	1.580	62	4373	0.480	ppbv	93
6) Bromomethane	1.667	94	1850	0.576	ppbv	100
7) Chloroethane	1.703	64	1936	0.548	ppbv #	87
8) Dichlorotetrafluoroethane	1.554	85	10149	0.534	ppbv	96
9) Propene	1.483	41	6482	0.537	ppbv	94
10) Heptane	4.978	43	17388m	0.537	ppbv	
11) Trichlorofluoromethane	1.877	101	11200	0.522	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.140	101	9346	0.538	ppbv	100
13) Ethanol	1.719	45	629m	0.544	ppbv	
14) Bromoethene	1.784	108	3553	0.541	ppbv #	84
15) Acetone	1.835	43	12326	0.572	ppbv #	86
16) 1,3-Butadiene	1.609	39	6215	0.611	ppbv #	82
17) tert-Butyl alcohol	2.043	59	13128	0.555	ppbv #	77
18) 1,1-Dichloroethene	2.033	96	4543	0.565	ppbv	93
19) Isopropyl Alcohol	1.887	45	7431	0.574	ppbv #	46
20) Methylene Chloride	2.062	84	6881	0.430	ppbv	87
21) Allyl Chloride	2.098	41	7481	0.499	ppbv #	69
22) trans-1,2-Dichloroethene	2.337	96	4869m	0.533	ppbv	
23) Vinyl Acetate	2.460	43	18264	0.593	ppbv #	95
24) 1,1-Dichloroethane	2.408	63	9484	0.529	ppbv #	98
25) Ethyl Acetate	2.836	43	28162	0.517	ppbv #	95
26) Hexane	2.823	57	13406	0.540	ppbv	98
27) Carbon Disulfide	2.149	76	11535	0.518	ppbv #	1
28) Methyl tert-Butyl Ether	2.441	73	7886	0.611	ppbv #	65
29) Chloroform	2.845	83	17188	0.530	ppbv	100
30) Cyclohexane	3.855	84	10856	0.523	ppbv	93
31) cis-1,2-Dichloroethene	2.719	61	11939	0.513	ppbv	99
32) 1,1,1-Trichloroethane	3.366	97	16684	0.474	ppbv	96
34) 2-Butanone	2.557	43	18948	0.531	ppbv	96
35) Carbon Tetrachloride	3.761	117	16799	0.513	ppbv	94
36) Benzene	3.654	78	24807	0.519	ppbv #	95
37) 1,2-Dichloroethane	3.217	62	12788	0.508	ppbv	100
38) Trichloroethene	4.544	130	12243	0.515	ppbv #	88
39) 1,2-Dichloropropane	4.315	63	8772	0.502	ppbv #	86
40) 1,4-Dioxane	4.599	88	4405m	0.543	ppbv	
41) Tetrahydrofuran	3.059	42	10871	0.530	ppbv	95
42) Bromodichloromethane	4.486	83	17552	0.501	ppbv	96
43) Methyl Methacrylate	4.881	69	10330m	0.532	ppbv	
44) 2,2,4-Trimethylpentane	4.642	57	43414m	0.525	ppbv	
45) t-1,3-Dichloropropene	6.409	75	10262m	0.492	ppbv	

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042953.D
Acq On : 22 Sep 2025 11:22
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:11:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.593	75	13304m	0.500	ppbv		
47)	1,1,2-Trichloroethane	6.580	97	9725m	0.527	ppbv		
48)	Dibromochloromethane	7.383	129	14563	0.493	ppbv		99
49)	Bromoform	9.480	173	12136	0.473	ppbv		97
50)	4-Methyl-2-Pentanone	5.761	43	23639	0.493	ppbv		95
51)	2-Hexanone	7.441	43	18322	0.480	ppbv	#	97
52)	Tetrachloroethene	8.218	164	9073m	0.490	ppbv		
53)	Toluene	6.927	91	29404	0.519	ppbv		99
54)	1,2-Dibromoethane	7.648	107	13233	0.510	ppbv		98
56)	1,1,1,2-Tetrachloroethane	8.924	131	11535	0.519	ppbv	#	1
57)	Chlorobenzene	8.920	112	22463	0.530	ppbv		91
58)	Ethyl Benzene	9.351	91	38459	0.505	ppbv		96
59)	m/p-Xylene	9.545	91	61801m	1.028	ppbv		
60)	o-Xylene	9.959	91	30976	0.516	ppbv		98
61)	Styrene	9.865	104	14048	0.495	ppbv		98
62)	Isopropylbenzene	10.535	105	46640	0.521	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.959	83	15974	0.506	ppbv		97
64)	n-propylbenzene	10.985	120	12333	0.527	ppbv		100
65)	tert-Butylbenzene	11.529	119	42595	0.535	ppbv		99
66)	Benzyl Chloride	11.613	91	3942m	0.472	ppbv		
67)	sec-Butylbenzene	11.765	105	58190	0.525	ppbv		99
69)	p-Isopropyltoluene	11.924	119	48855	0.521	ppbv		100
70)	n-Butylbenzene	12.280	91	44764	0.489	ppbv		100
71)	2-Chlorotoluene	10.898	91	35797	0.530	ppbv		96
72)	4-Ethyltoluene	11.125	105	39803	0.529	ppbv		99
73)	1,3,5-Trimethylbenzene	11.202	105	30932	0.507	ppbv		96
74)	1,2,4-Trimethylbenzene	11.532	105	35601	0.529	ppbv		97
75)	1,3-Dichlorobenzene	11.607	146	21307	0.510	ppbv		98
76)	1,4-Dichlorobenzene	11.668	146	21404	0.516	ppbv		98
77)	1,2-Dichlorobenzene	11.943	146	20279	0.510	ppbv		95
78)	Hexachloro-1,3-Butadiene	13.879	225	17515	0.563	ppbv		98
79)	Naphthalene	13.510	128	25577	0.429	ppbv		97
80)	Naphthalene,2-methyl-	14.458	142	8906	0.484	ppbv		92
81)	1,2,4-Trichlorobenzene	13.439	180	12920	0.406	ppbv		98

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

Quantitation Report (QT Reviewed)

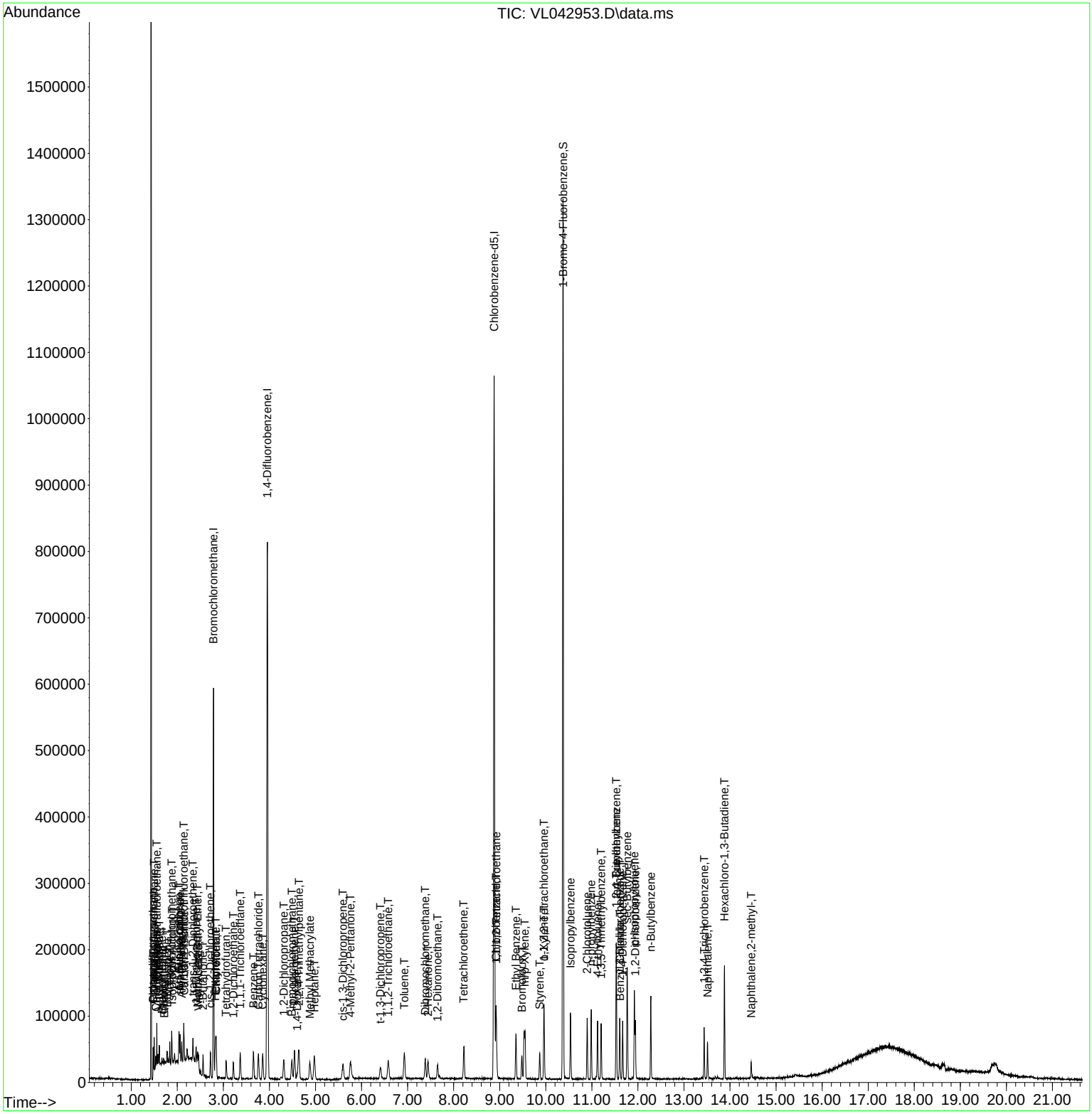
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042953.D
Acq On : 22 Sep 2025 11:22
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

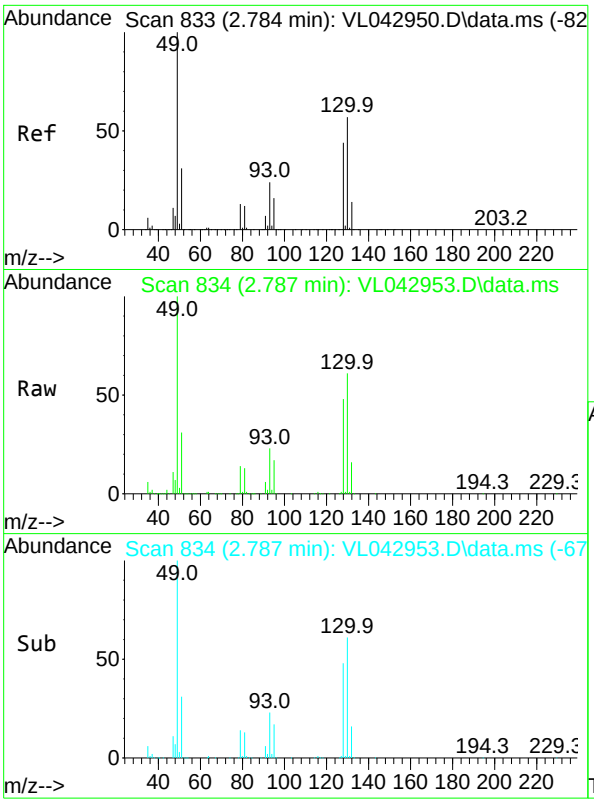
Quant Time: Sep 23 02:11:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 49 Resp: 16543

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	59.5	29.1	87.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
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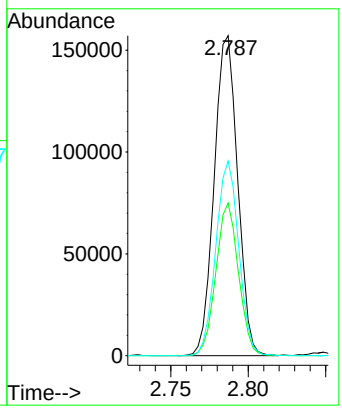
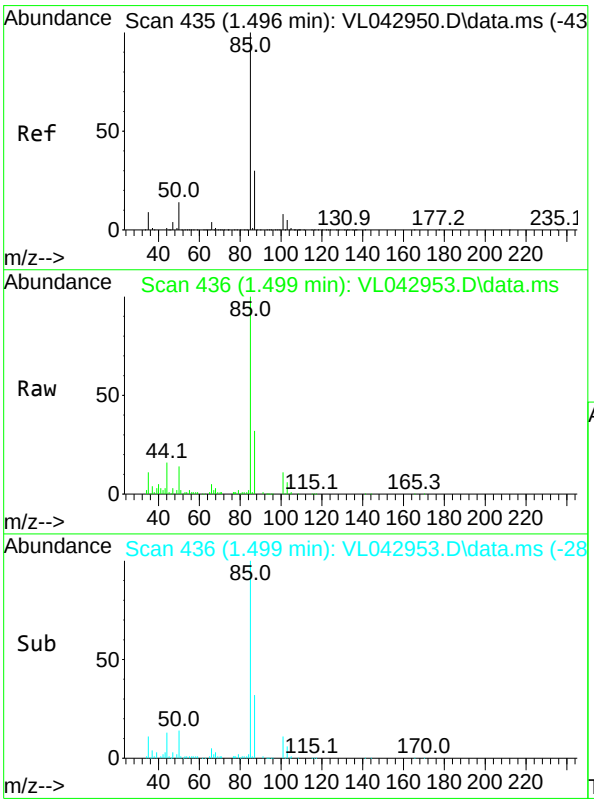
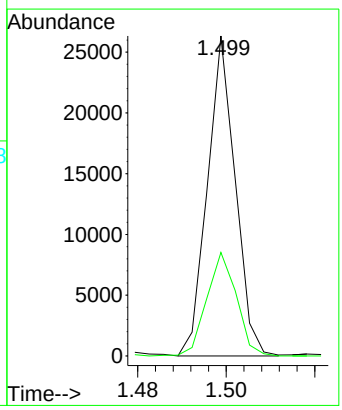


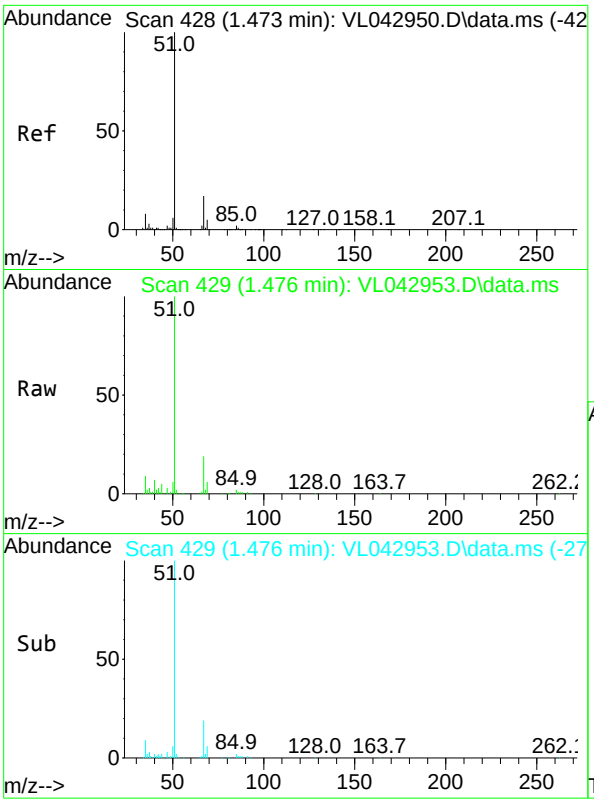


#2
Dichlorodifluoromethane
Concen: 0.517 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 85 Resp: 11508

Ion	Ratio	Lower	Upper
85	100		
87	32.4	24.3	36.5

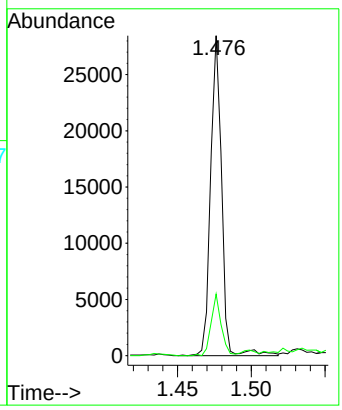




#3
Chlorodifluoromethane
Concen: 0.532 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 51 Resp: 1474

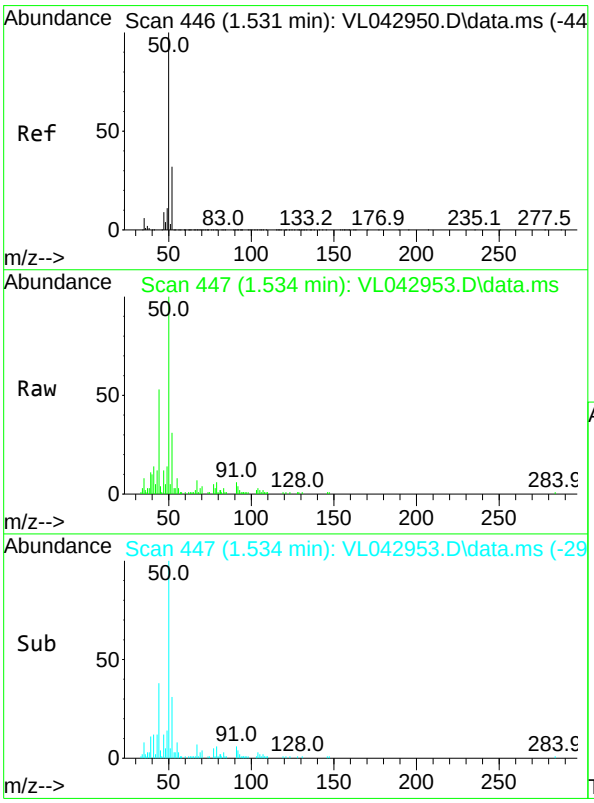
Ion	Ratio	Lower	Upper
51	100		
67	21.7	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

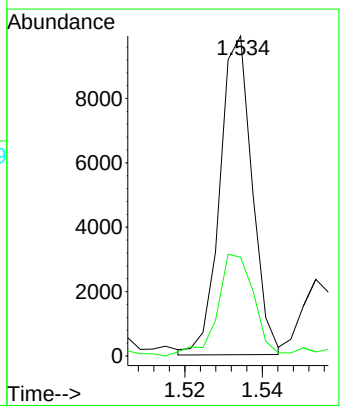
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

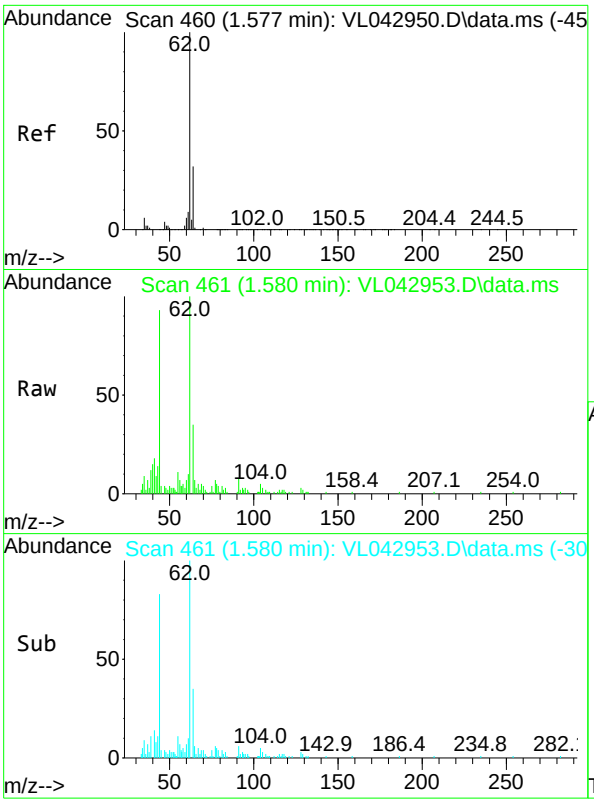


#4
Chloromethane
Concen: 0.569 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 50 Resp: 5729

Ion	Ratio	Lower	Upper
50	100		
52	30.5	25.9	38.9





#5
Vinyl Chloride
Concen: 0.480 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 62 Resp: 437

Ion	Ratio	Lower	Upper
62	100		
64	35.5	25.4	38.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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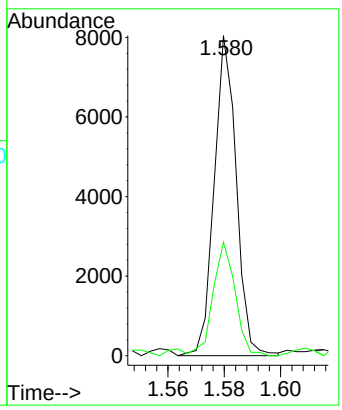
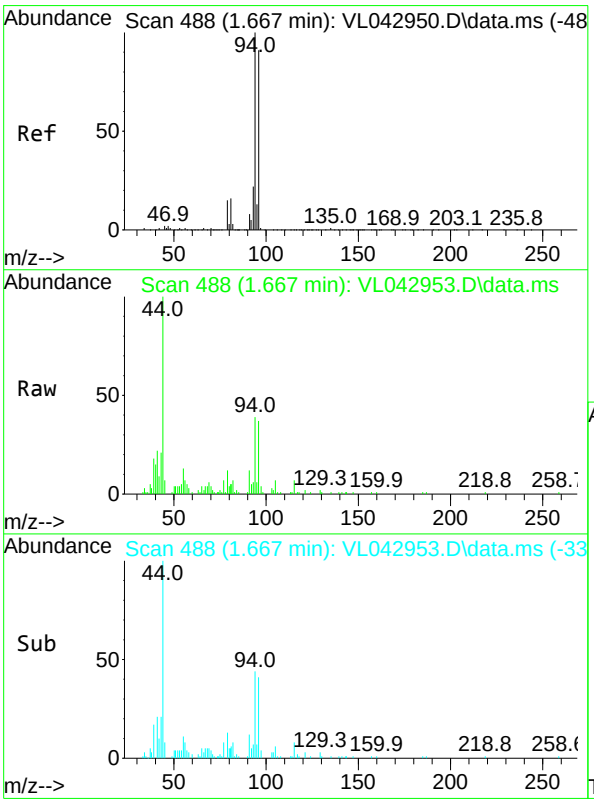
Supervised By :Mahesh Dadoda 09/24/2025

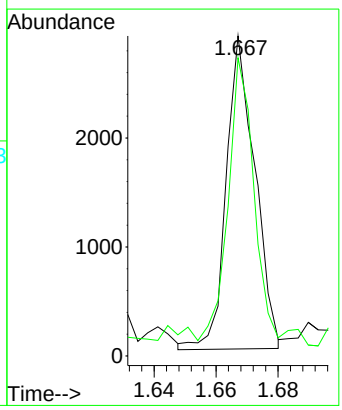


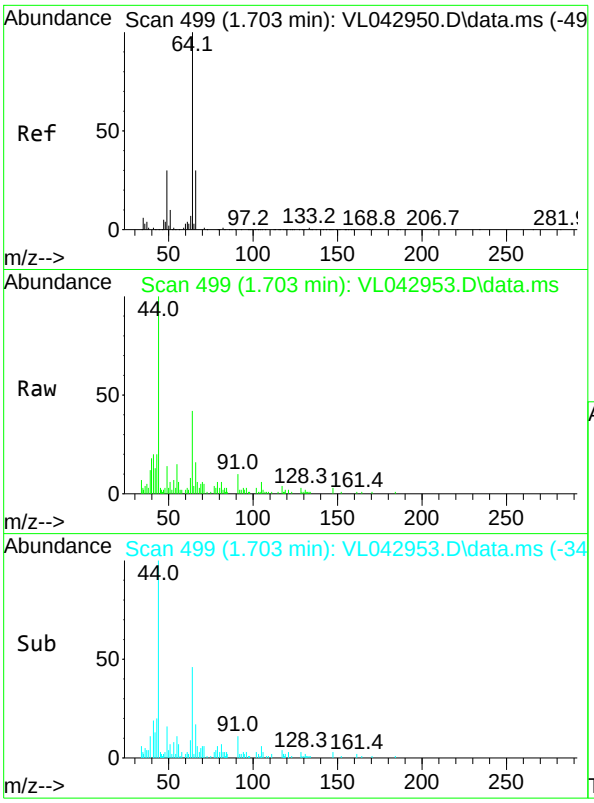


#6
Bromomethane
Concen: 0.576 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 94 Resp: 1850

Ion	Ratio	Lower	Upper
94	100		
96	90.9	72.6	108.8





#7
Chloroethane
Concen: 0.548 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 64 Resp: 193

Ion	Ratio	Lower	Upper
64	100		
66	37.9	24.6	36.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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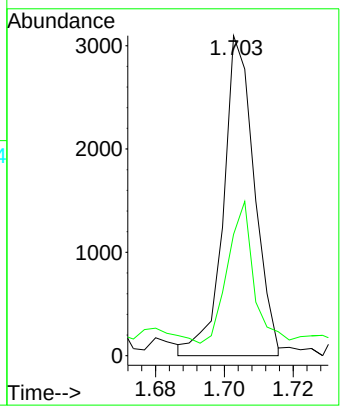
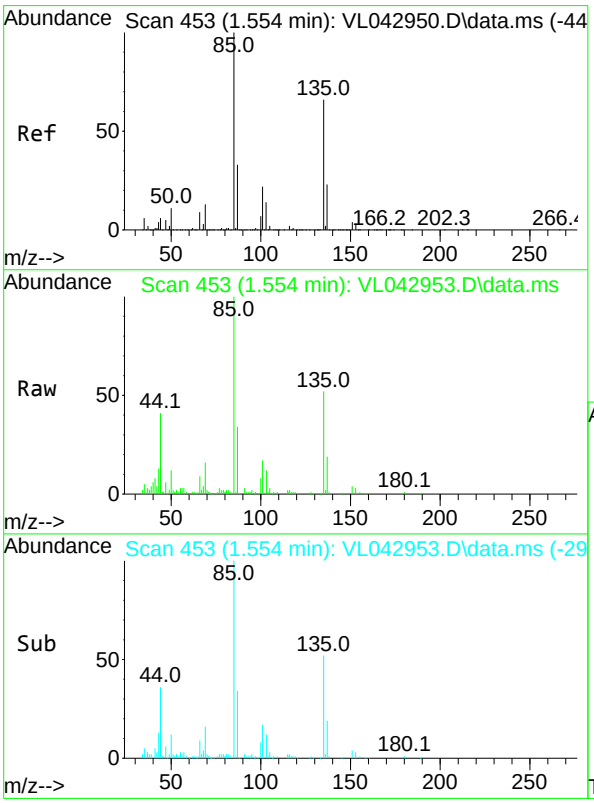
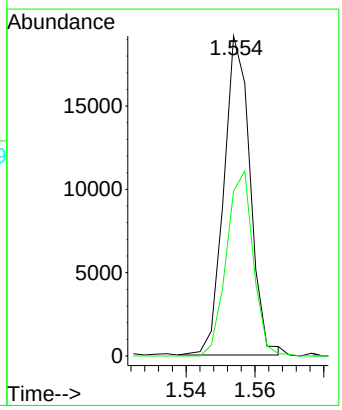


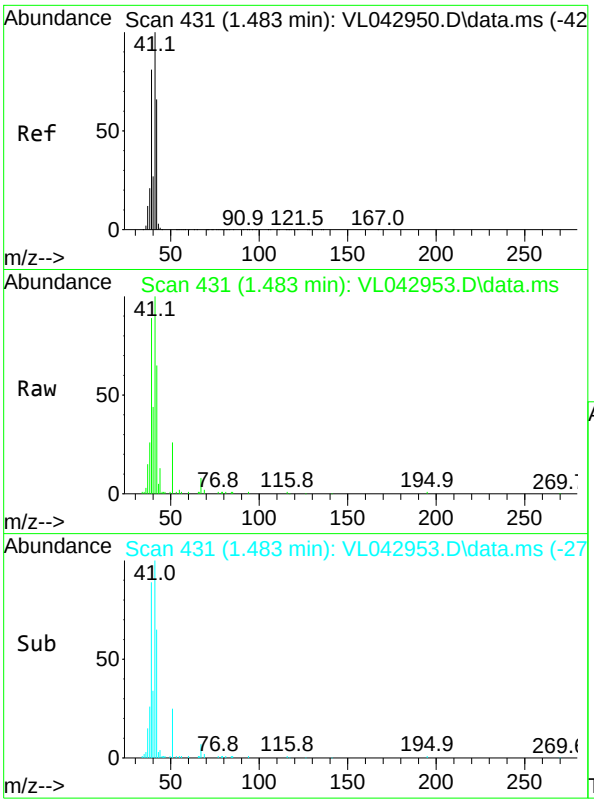


#8
Dichlorotetrafluoroethane
Concen: 0.534 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 85 Resp: 10149

Ion	Ratio	Lower	Upper
85	100		
135	59.1	49.7	74.5





#9
Propene
Concen: 0.537 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 41 Resp: 648

Ion	Ratio	Lower	Upper
41	100		
42	77.1	57.4	86.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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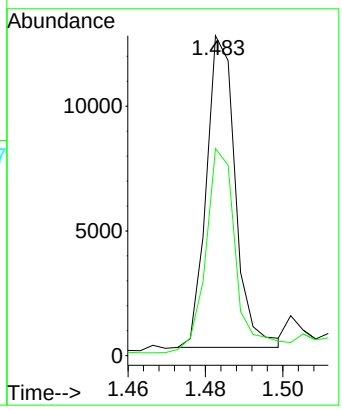
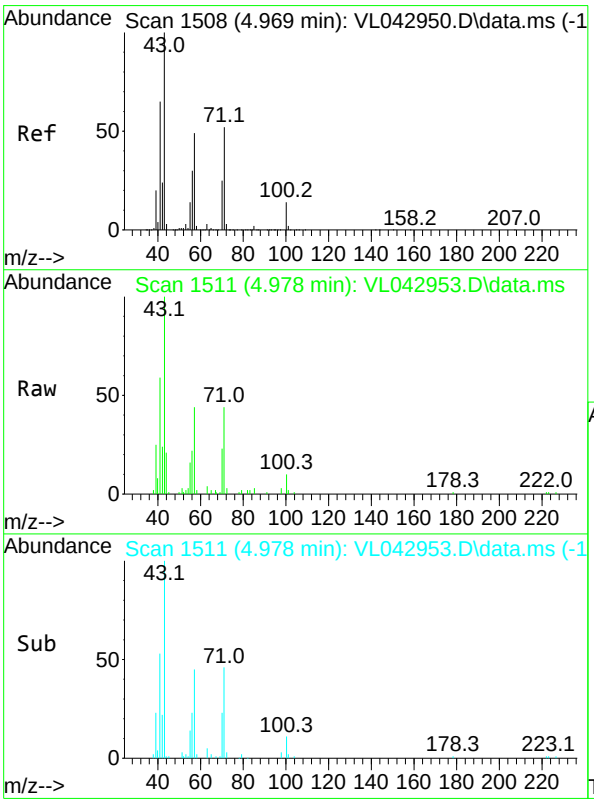
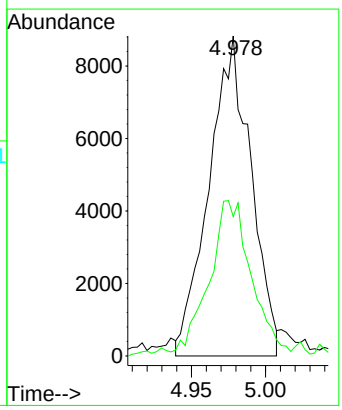


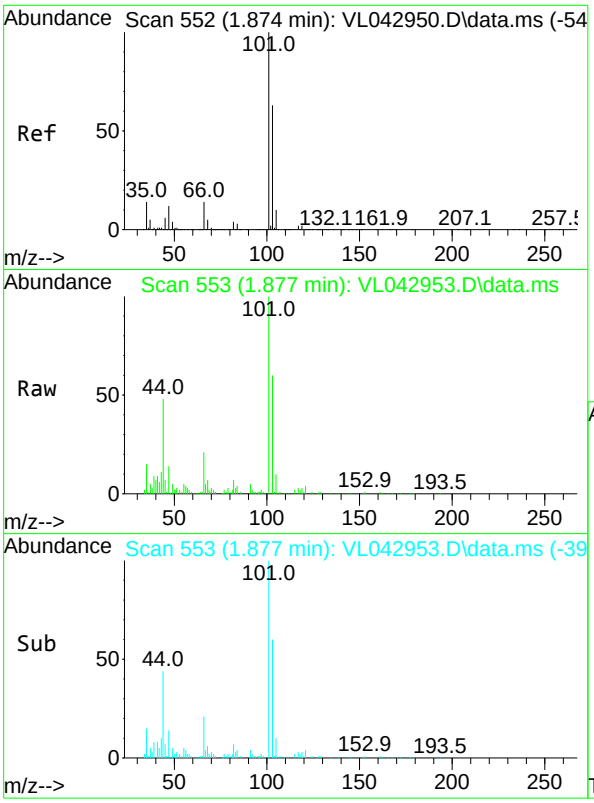


#10
Heptane
Concen: 0.537 ppbv m
RT: 4.978 min Scan# 1511
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 17388

Ion	Ratio	Lower	Upper
43	100		
57	49.0	38.6	57.8

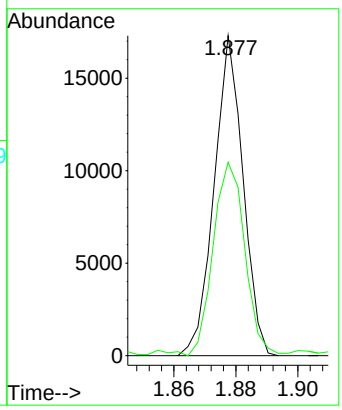




#11
Trichlorofluoromethane
Concen: 0.522 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:101 Resp: 1120

Ion	Ratio	Lower	Upper
101	100		
103	59.7	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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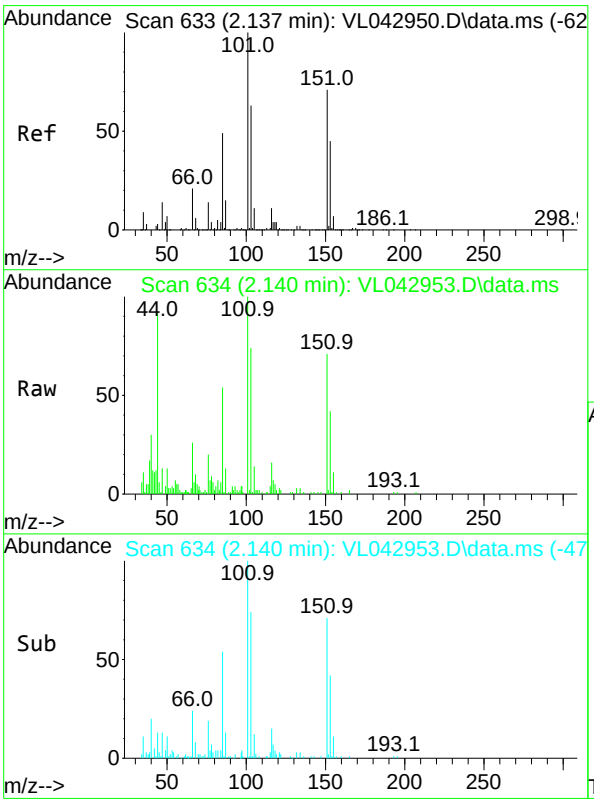
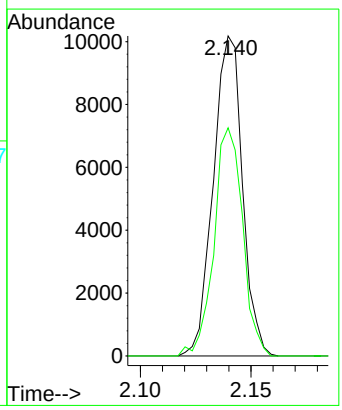
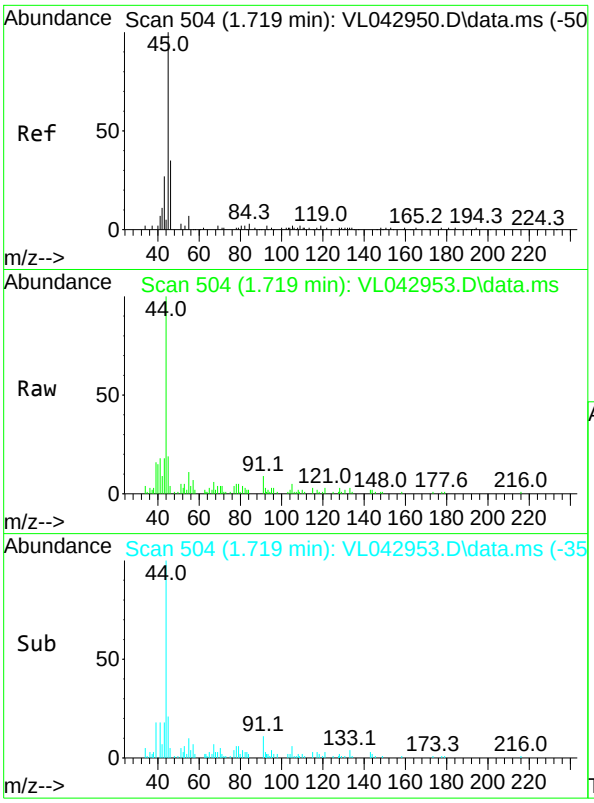


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.538 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:101 Resp: 9346

Ion	Ratio	Lower	Upper
101	100		
151	69.7	55.7	83.5





#13
Ethanol
Concen: 0.544 ppbv m
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 45 Resp: 62

Ion	Ratio	Lower	Upper
45	100		
46	140.9	16.2	64.6#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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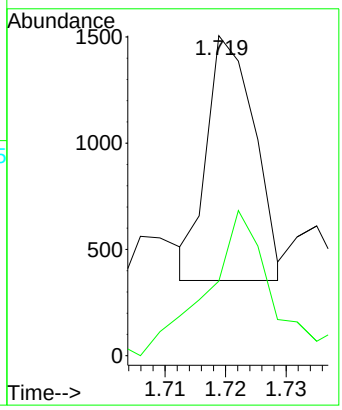
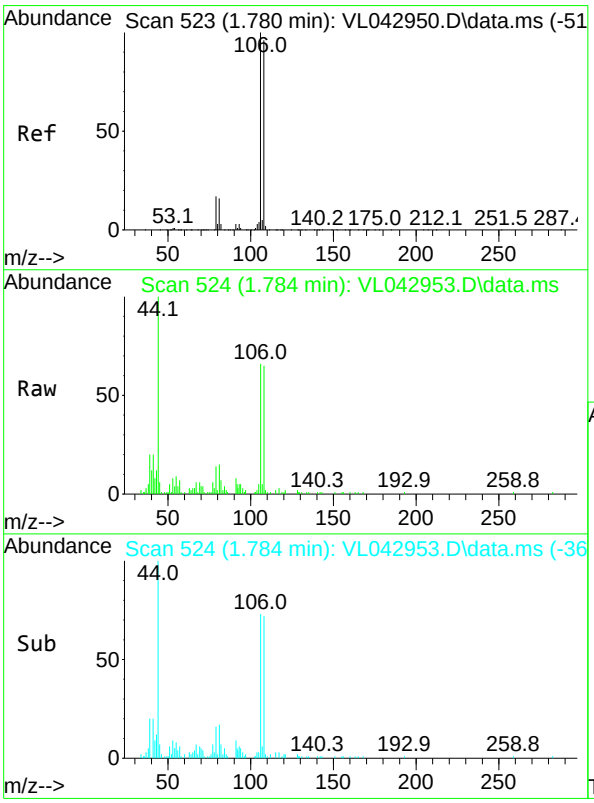
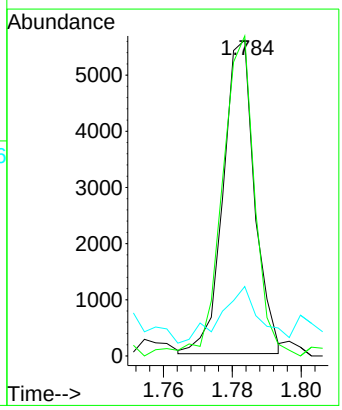


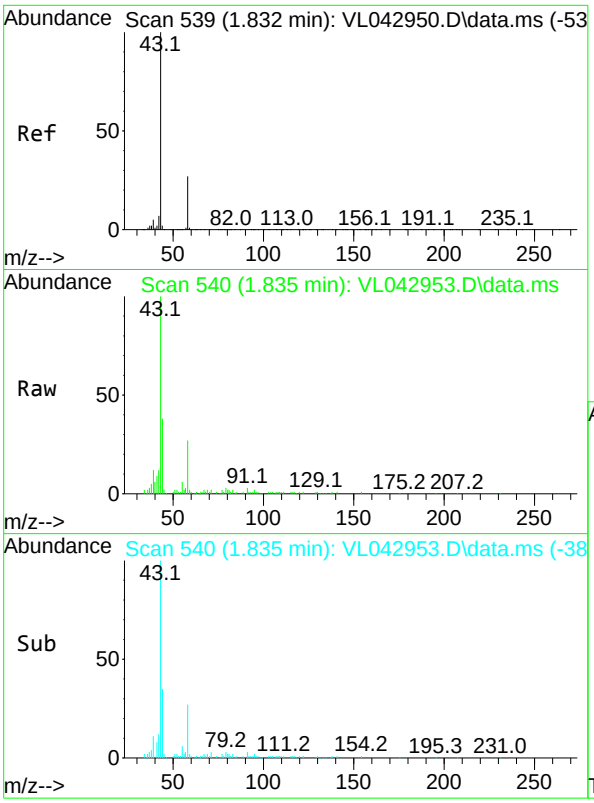


#14
Bromoethene
Concen: 0.541 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:108 Resp: 3553

Ion	Ratio	Lower	Upper
108	100		
106	115.9	86.0	129.0
79	46.0	14.2	21.2#





#15
Acetone
Concen: 0.572 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 1232

Ion	Ratio	Lower	Upper
43	100		
58	35.4	22.3	33.5#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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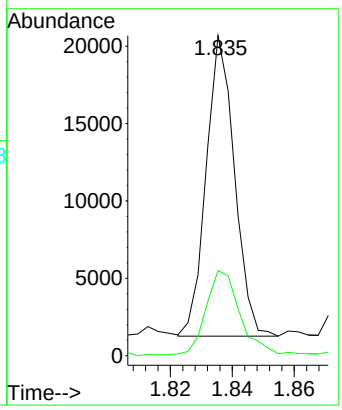
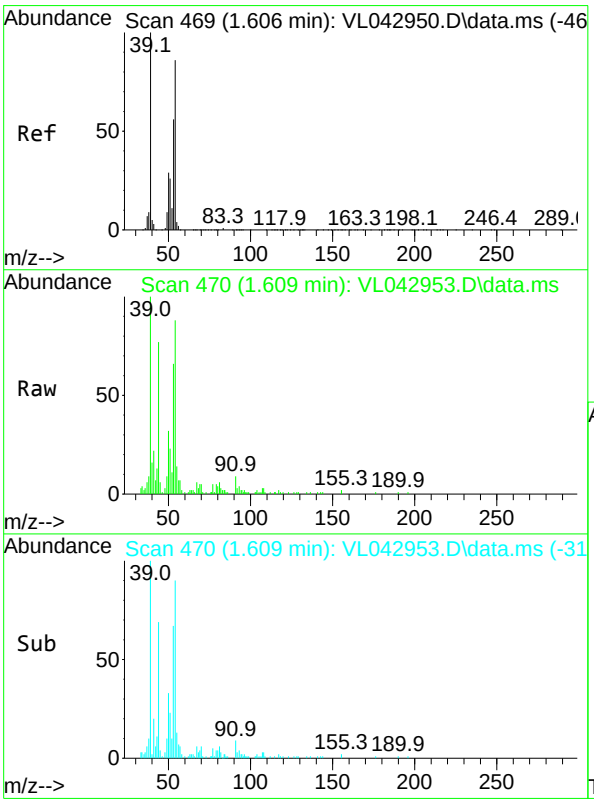
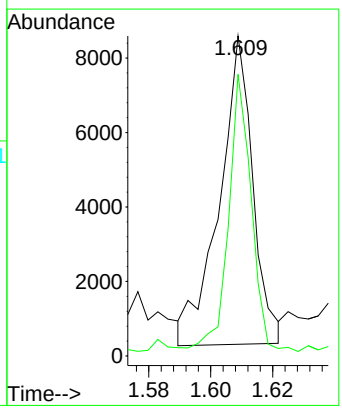


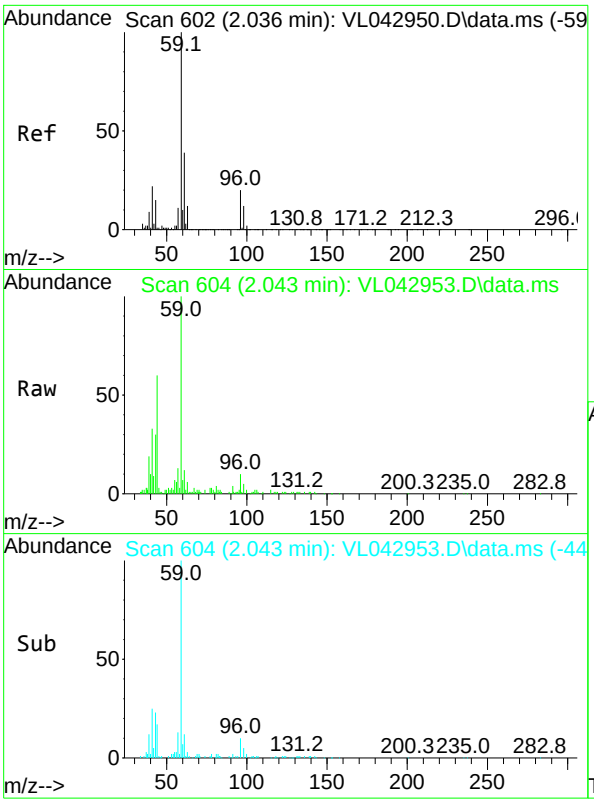


#16
1,3-Butadiene
Concen: 0.611 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 39 Resp: 6215

Ion	Ratio	Lower	Upper
39	100		
54	60.7	60.8	91.2#

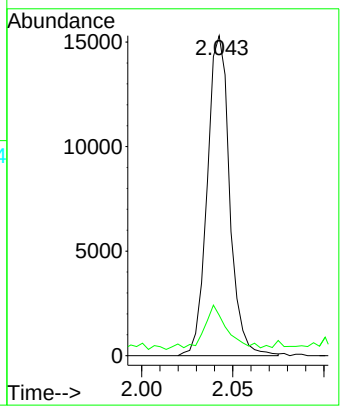




#17
tert-Butyl alcohol
Concen: 0.555 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 59 Resp: 1312

Ion	Ratio	Lower	Upper
59	100		
57	19.4	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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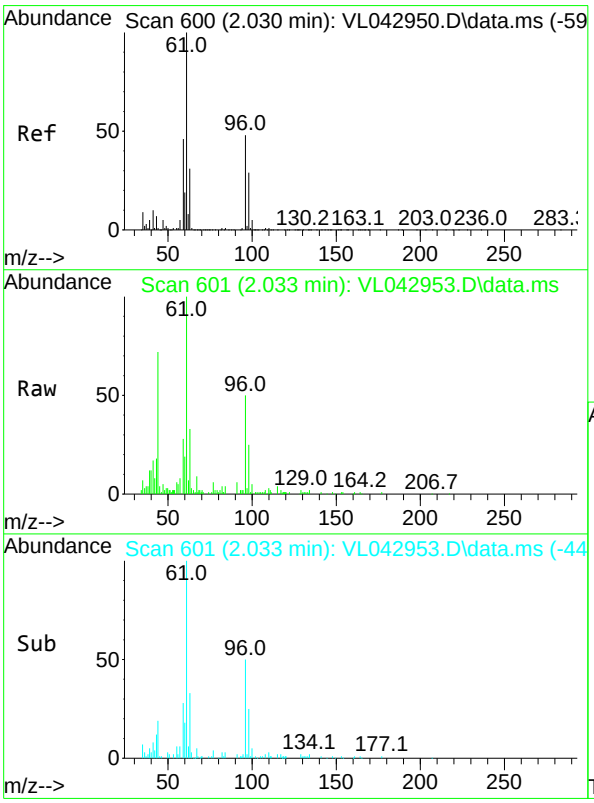
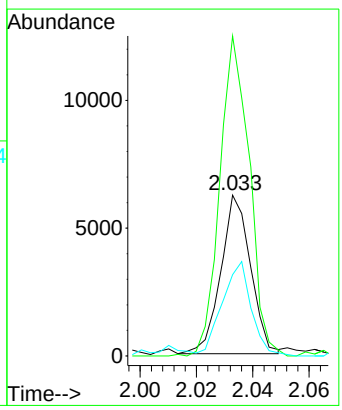
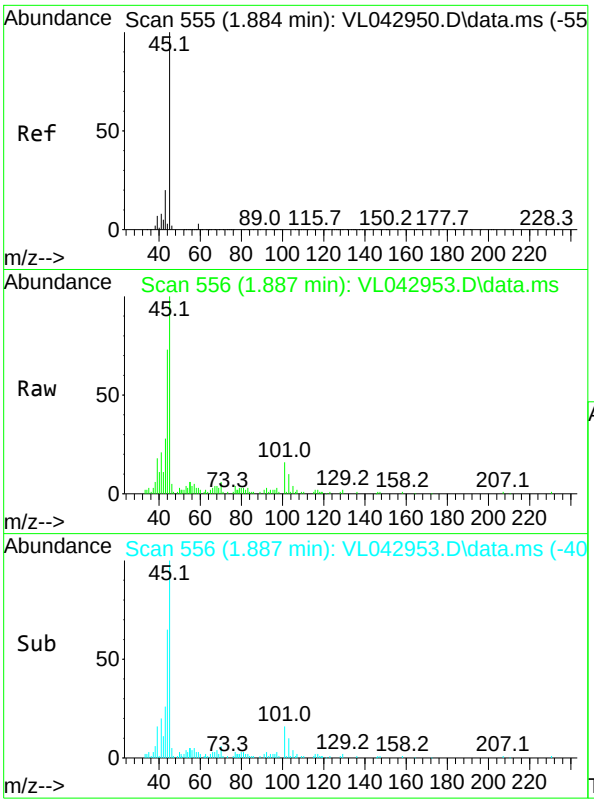


#18
1,1-Dichloroethene
Concen: 0.565 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 96 Resp: 4543

Ion	Ratio	Lower	Upper
96	100		
61	201.0	166.2	249.4
98	49.4	48.6	73.0





#19
Isopropyl Alcohol
Concen: 0.574 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 45 Resp: 743

Ion	Ratio	Lower	Upper
45	100		
58	6.1	31.0	46.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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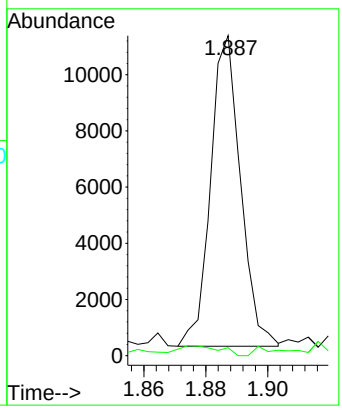
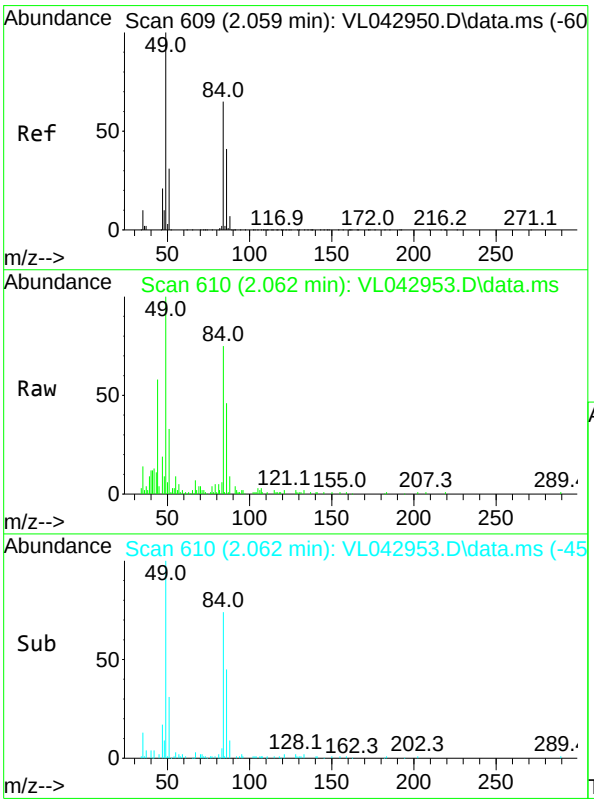
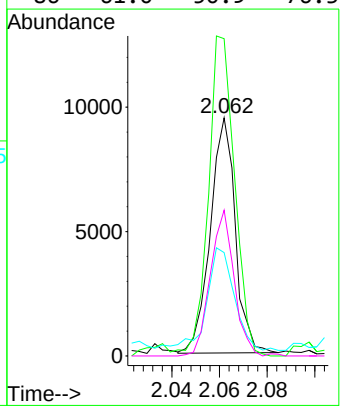


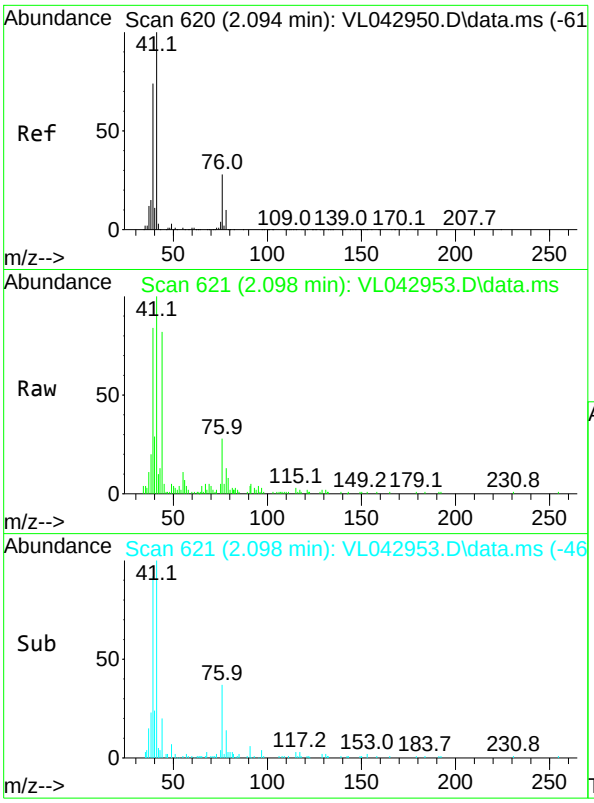


#20
Methylene Chloride
Concen: 0.430 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 84 Resp: 6881

Ion	Ratio	Lower	Upper
84	100		
49	132.8	124.1	186.1
51	40.9	39.8	59.8
86	61.0	50.9	76.3

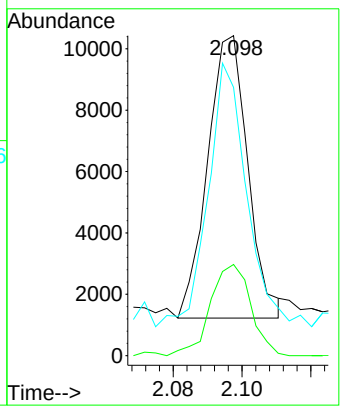




#21
Allyl Chloride
Concen: 0.499 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 41 Resp: 748

Ion	Ratio	Lower	Upper
41	100		
76	33.1	22.3	33.5
39	110.1	61.3	91.9#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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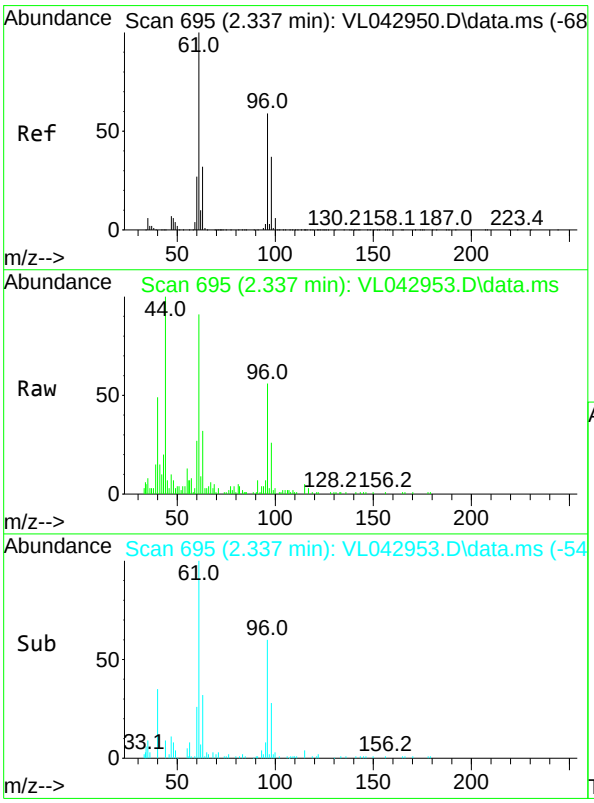
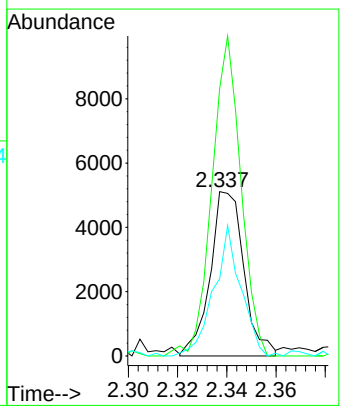
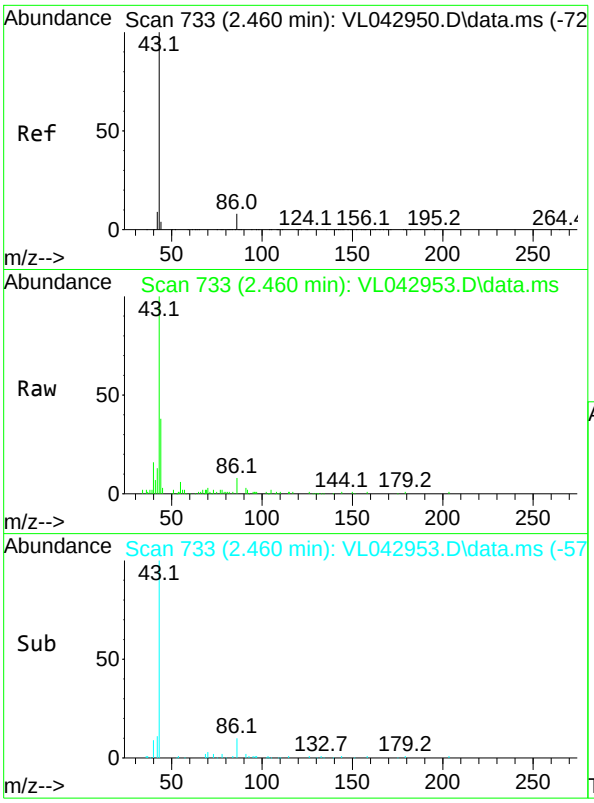


#22
trans-1,2-Dichloroethene
Concen: 0.533 ppbv m
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 96 Resp: 4869

Ion	Ratio	Lower	Upper
96	100		
61	162.8	136.5	204.7
98	46.9	50.6	76.0#

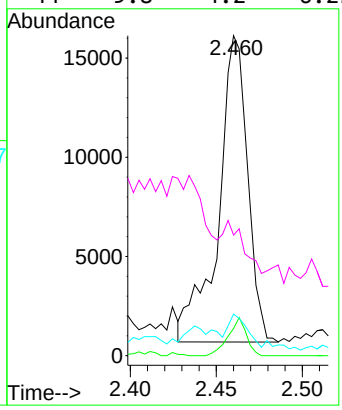




#23
Vinyl Acetate
Concen: 0.593 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 1826

Ion	Ratio	Lower	Upper
43	100		
86	8.9	6.2	9.2
42	10.1	7.4	11.0
44	9.8	4.2	6.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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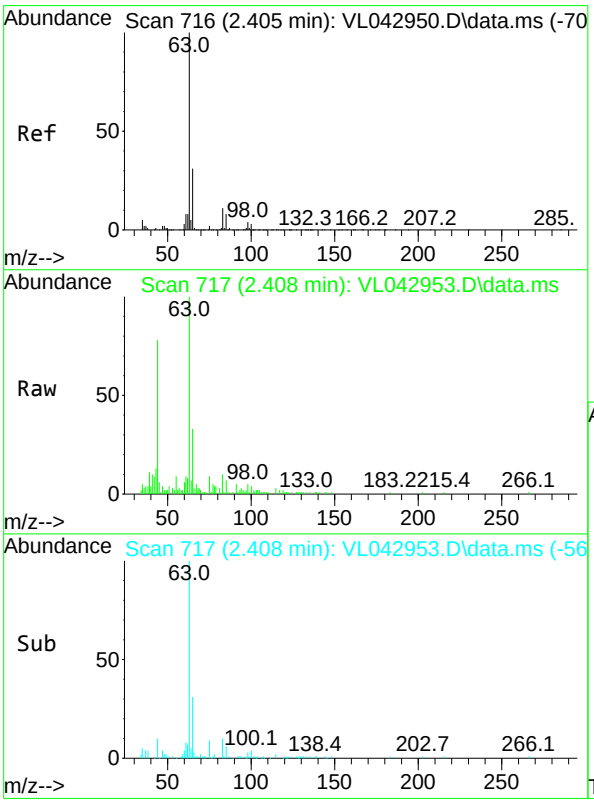
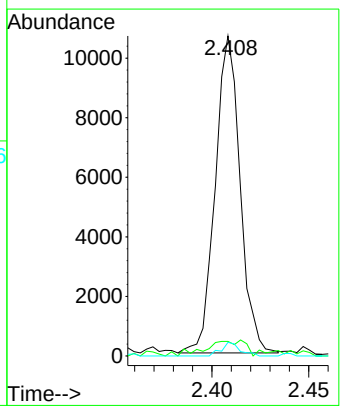
Supervised By :Mahesh Dadoda 09/24/2025

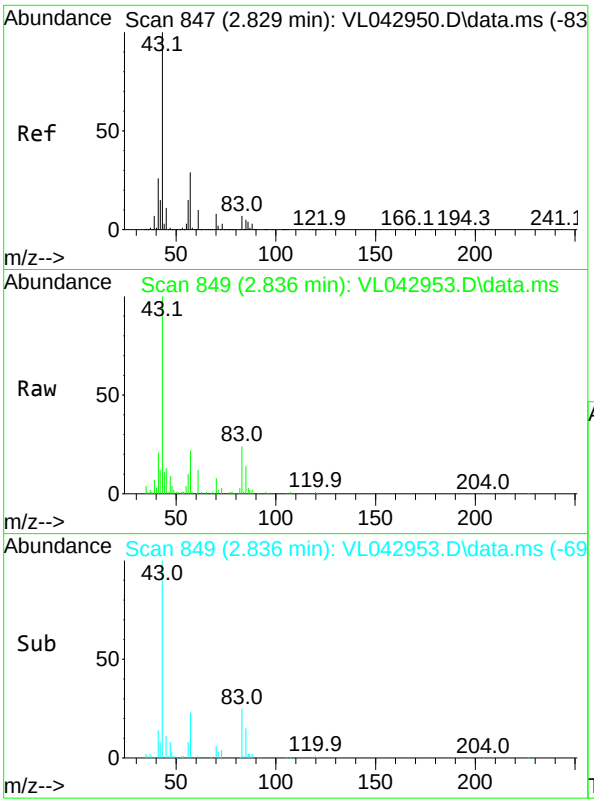


#24
1,1-Dichloroethane
Concen: 0.529 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 63 Resp: 9484

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.2	6.6
100	4.3	1.4	4.0#

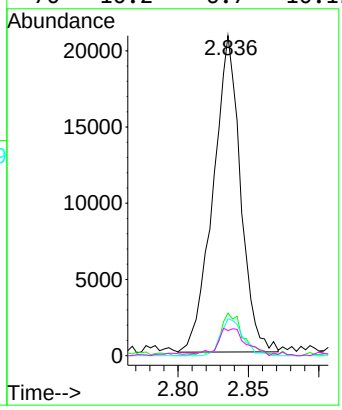




#25
Ethyl Acetate
Concen: 0.517 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 2816

Ion	Ratio	Lower	Upper
43	100		
45	12.3	7.7	11.5#
61	9.5	7.1	10.7
70	10.2	6.7	10.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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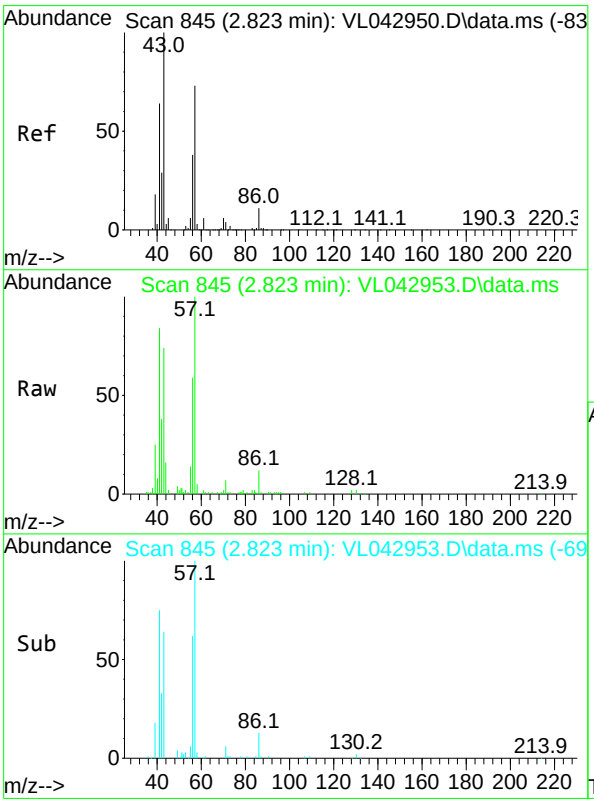
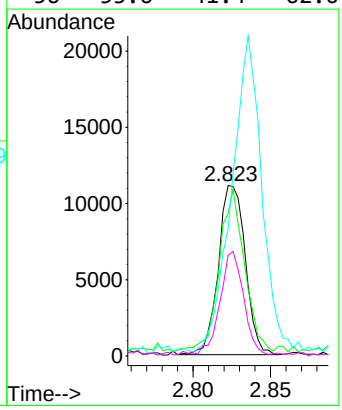
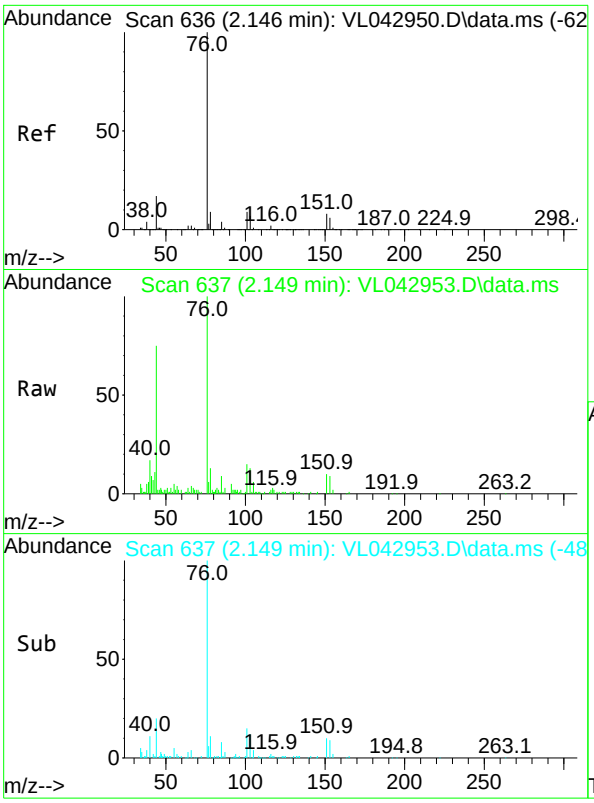


#26
Hexane
Concen: 0.540 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 57 Resp: 13406

Ion	Ratio	Lower	Upper
57	100		
41	92.4	71.7	107.5
43	224.5	180.8	271.2
56	53.6	41.4	62.0





#27
Carbon Disulfide
Concen: 0.518 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 76 Resp: 1153

Ion	Ratio	Lower	Upper
76	100		
44	134.4	15.6	23.4#
78	20.6	8.9	13.3#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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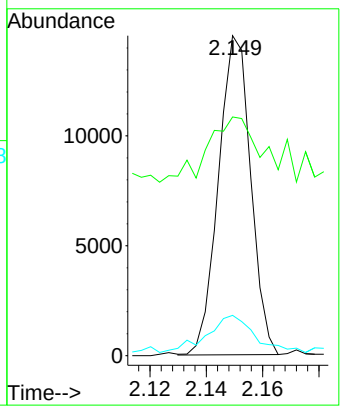
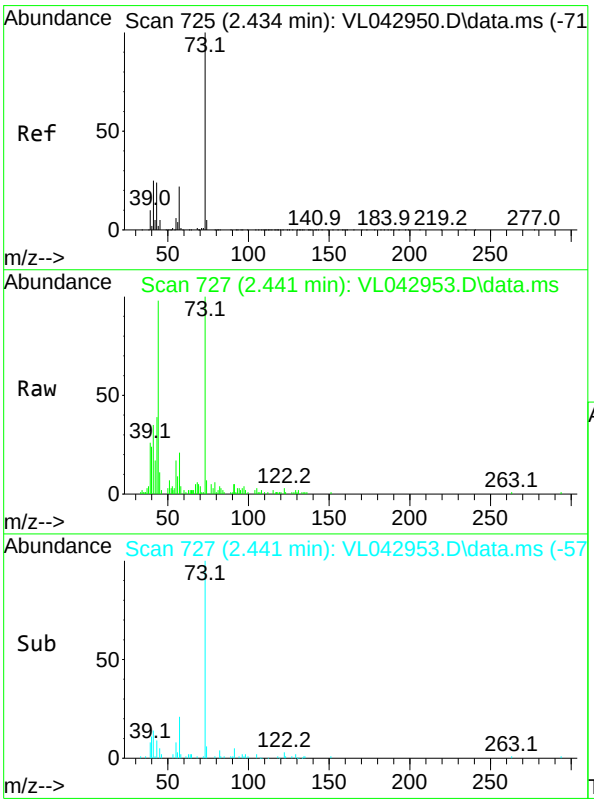
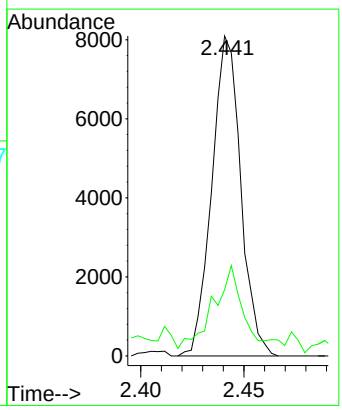


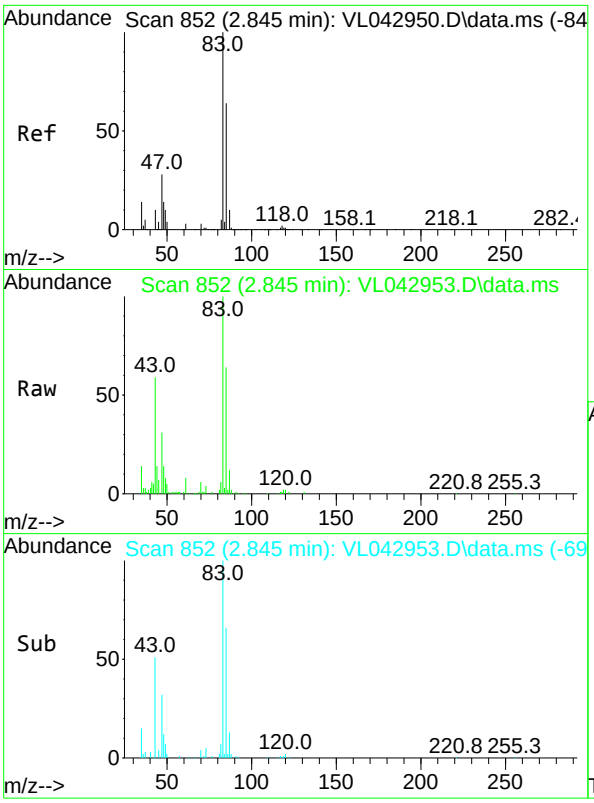


#28
Methyl tert-Butyl Ether
Concen: 0.611 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 73 Resp: 7886

Ion	Ratio	Lower	Upper
73	100		
57	43.4	20.6	31.0#

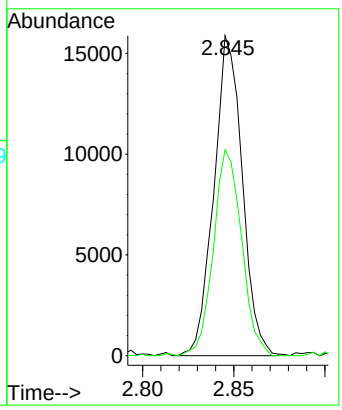




#29
Chloroform
Concen: 0.530 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 83 Resp: 1718

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.2	76.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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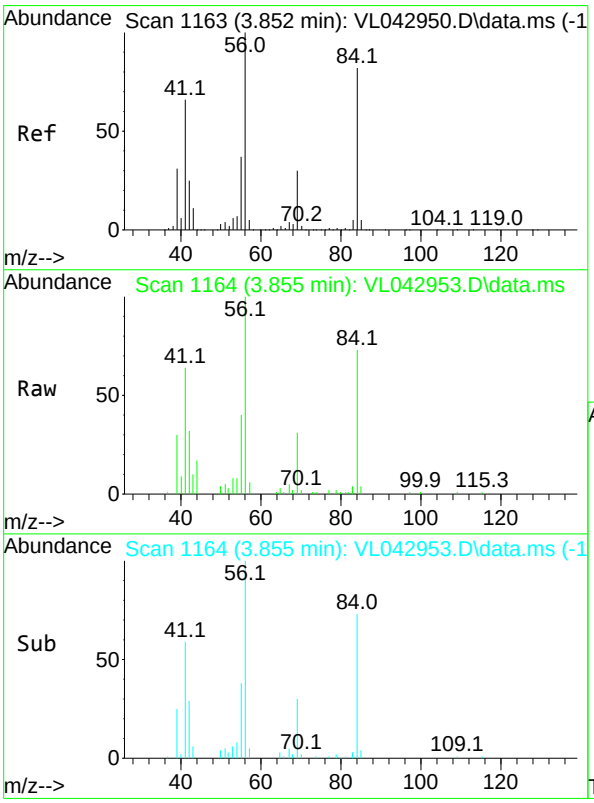
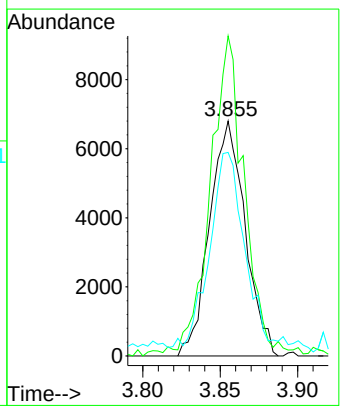
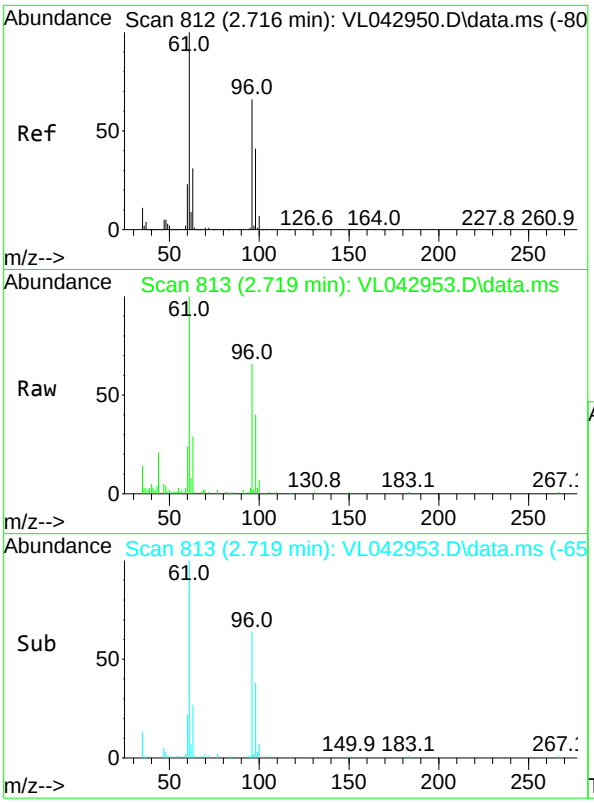


#30
Cyclohexane
Concen: 0.523 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 84 Resp: 10856

Ion	Ratio	Lower	Upper
84	100		
56	132.1	102.2	153.4
41	92.2	65.6	98.4

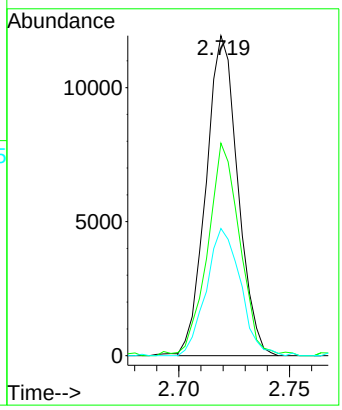




#31
cis-1,2-Dichloroethene
Concen: 0.513 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 61 Resp: 1193

Ion	Ratio	Lower	Upper
61	100		
96	65.7	53.0	79.6
98	39.7	32.9	49.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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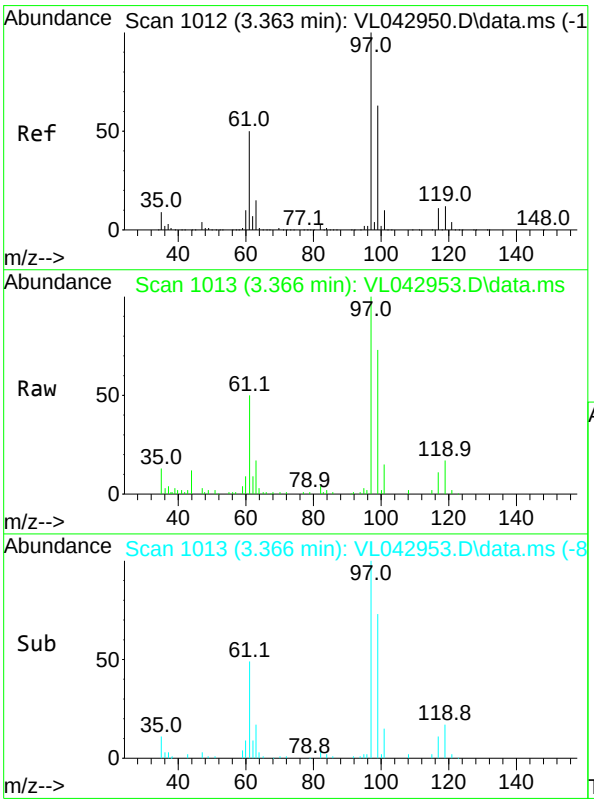
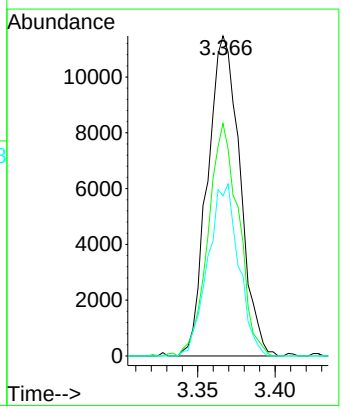
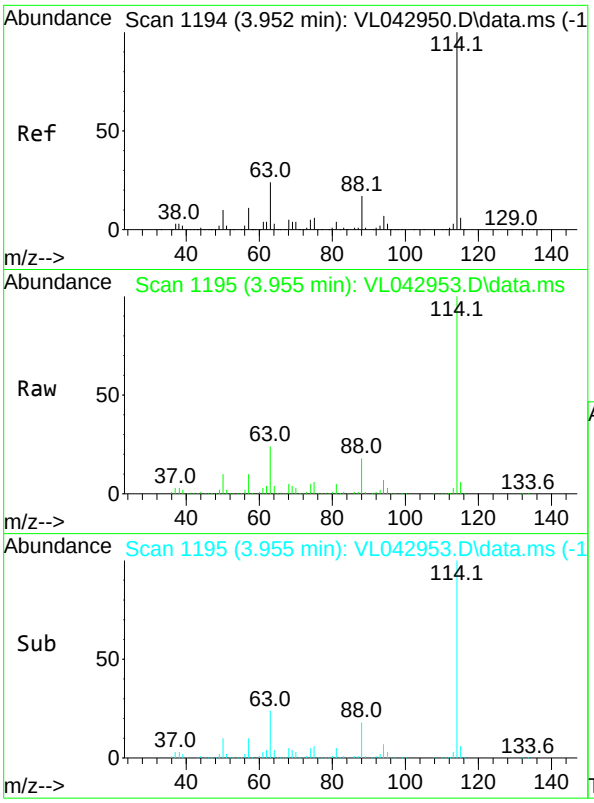


#32
1,1,1-Trichloroethane
Concen: 0.474 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 97 Resp: 16684

Ion	Ratio	Lower	Upper
97	100		
99	68.4	51.1	76.7
61	51.1	39.8	59.6

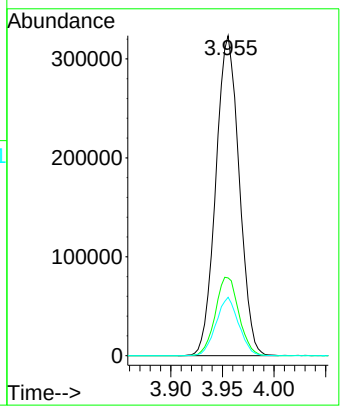




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:114 Resp: 50930

Ion	Ratio	Lower	Upper
114	100		
63	24.8	19.4	29.2
88	17.7	14.2	21.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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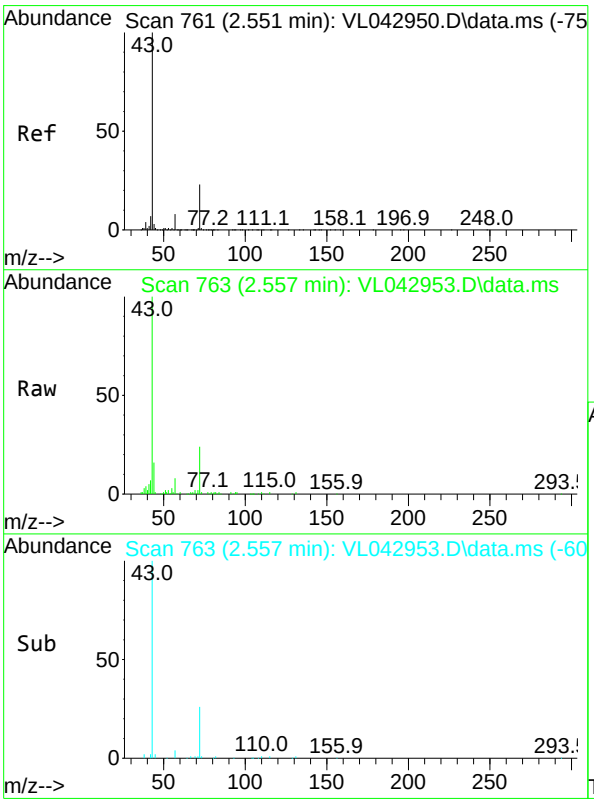
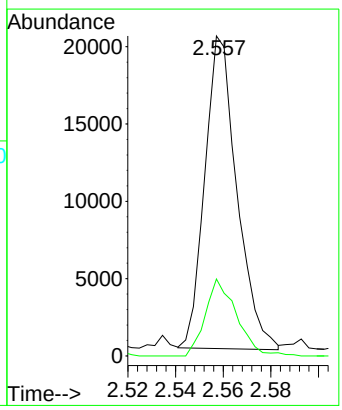
Supervised By :Mahesh Dadoda 09/24/2025

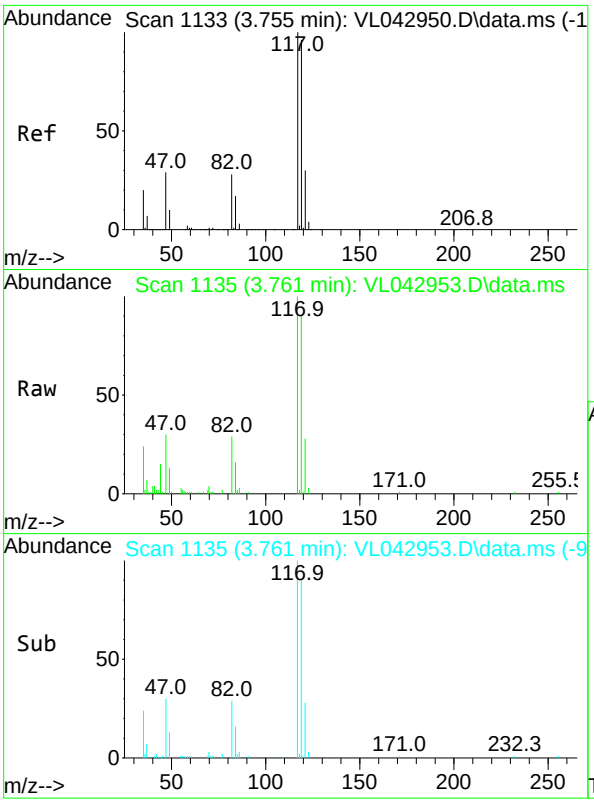


#34
2-Butanone
Concen: 0.531 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 18948

Ion	Ratio	Lower	Upper
43	100		
72	23.9	17.7	26.5

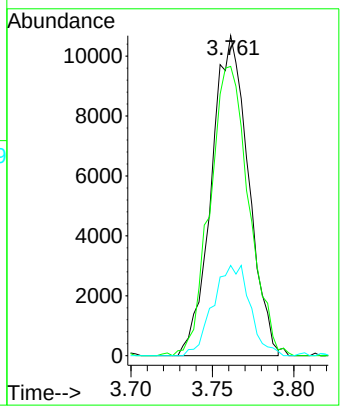




#35
Carbon Tetrachloride
Concen: 0.513 ppbv
RT: 3.761 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:117 Resp: 1679

Ion	Ratio	Lower	Upper
117	100		
119	88.9	76.9	115.3
121	28.2	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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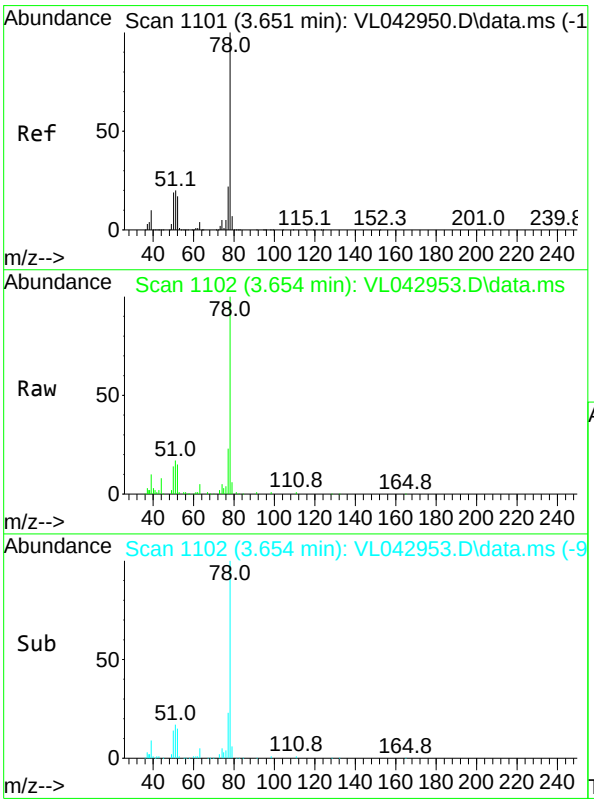
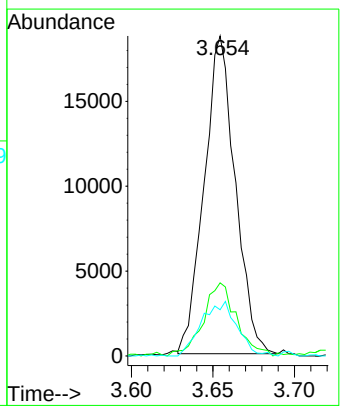
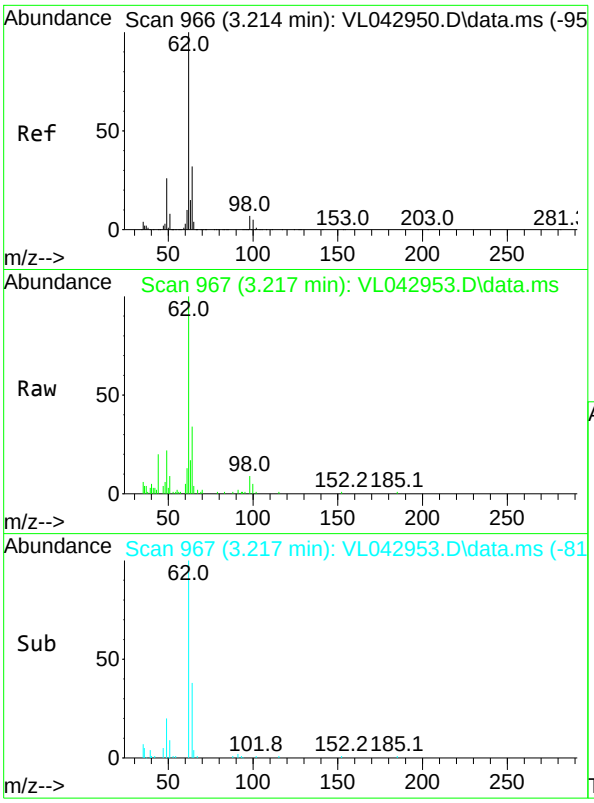


#36
Benzene
Concen: 0.519 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 78 Resp: 24807

Ion	Ratio	Lower	Upper
78	100		
77	21.4	17.8	26.6
50	14.5	15.0	22.4#

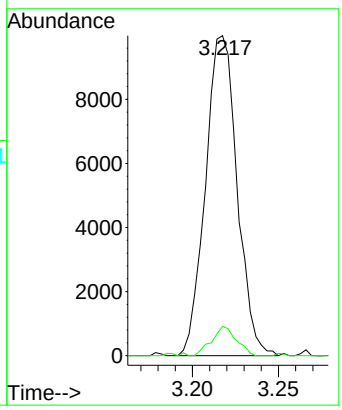




#37
1,2-Dichloroethane
Concen: 0.508 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 62 Resp: 1278

Ion	Ratio	Lower	Upper
62	100		
98	7.4	5.9	8.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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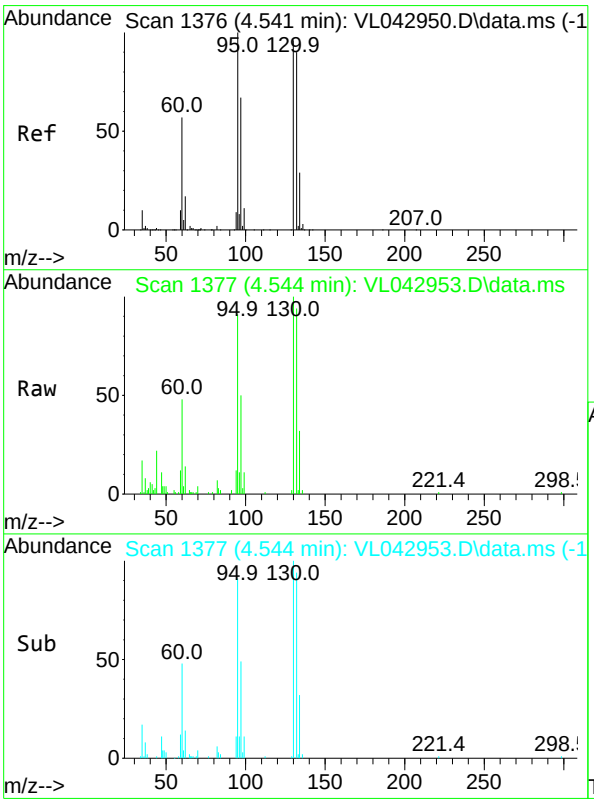
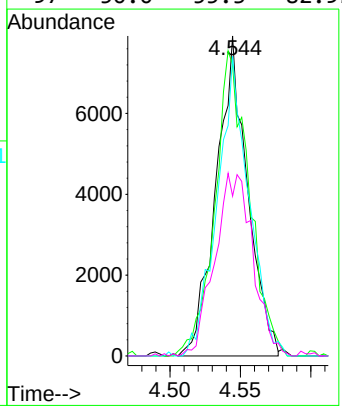
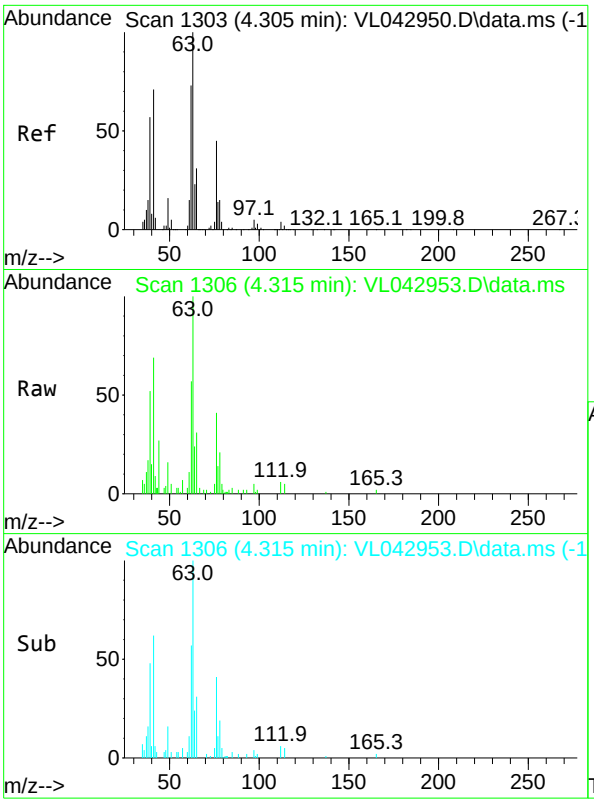


#38
Trichloroethene
Concen: 0.515 ppbv
RT: 4.544 min Scan# 1377
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:130 Resp: 12243

Ion	Ratio	Lower	Upper
130	100		
95	89.6	83.0	124.4
132	93.6	74.6	112.0
97	50.0	55.3	82.9#

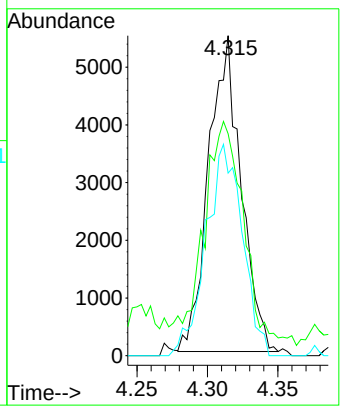




#39
1,2-Dichloropropane
Concen: 0.502 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 63 Resp: 877

Ion	Ratio	Lower	Upper
63	100		
41	64.7	57.5	86.3
62	56.5	58.5	87.7#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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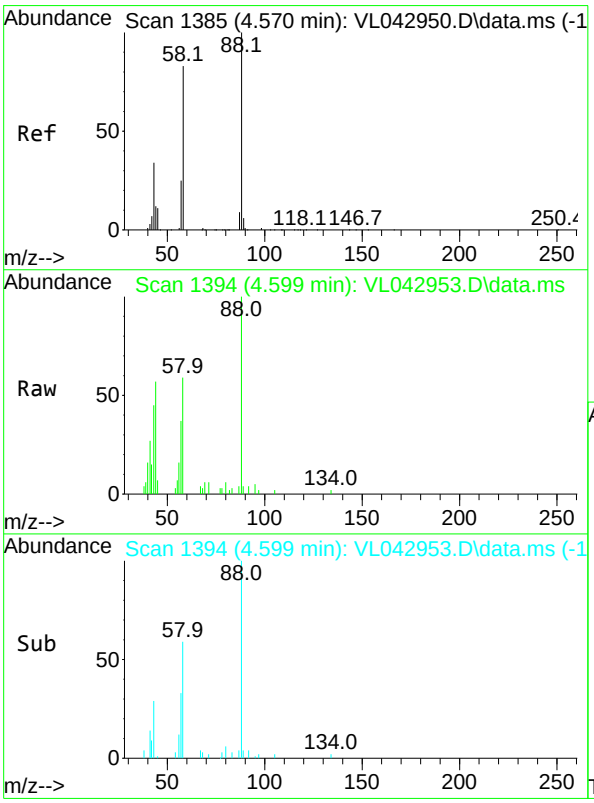
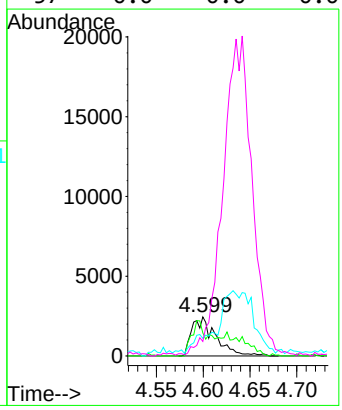
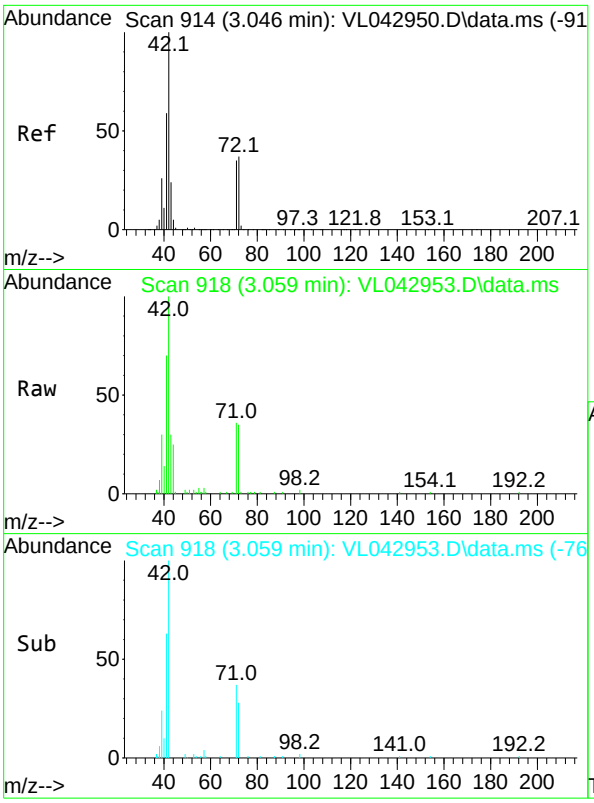


#40
1,4-Dioxane
Concen: 0.543 ppbv m
RT: 4.599 min Scan# 1394
Delta R.T. 0.029 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 88 Resp: 4405

Ion	Ratio	Lower	Upper
88	100		
58	123.7	59.7	89.5#
43	0.0	28.9	43.3#
57	0.0	0.0	0.0

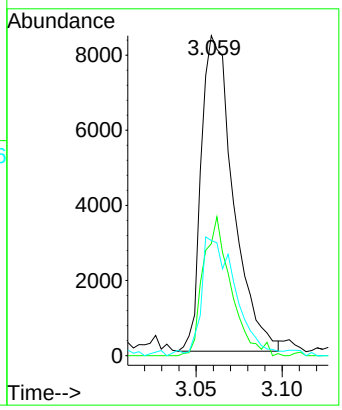




#41
Tetrahydrofuran
Concen: 0.530 ppbv
RT: 3.059 min Scan# 9
Delta R.T. 0.013 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 42 Resp: 1087

Ion	Ratio	Lower	Upper
42	100		
72	38.4	30.0	45.0
71	41.6	28.8	43.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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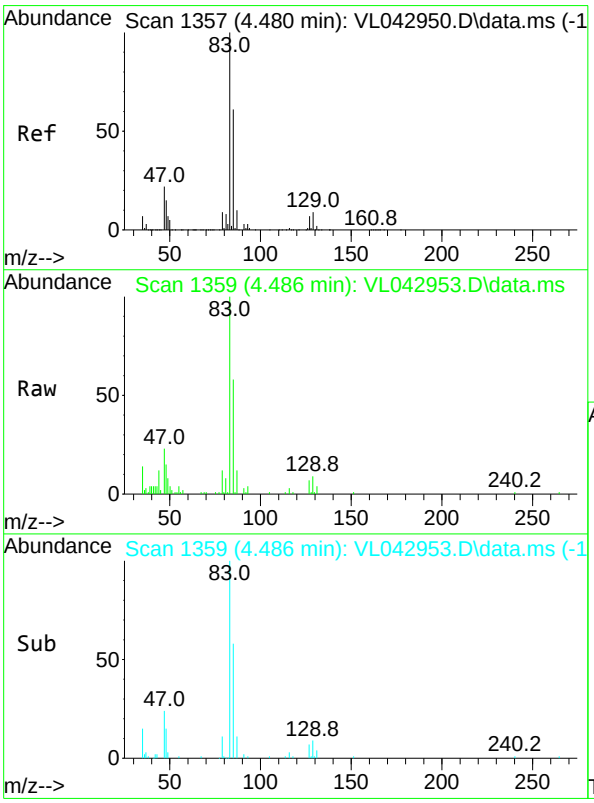
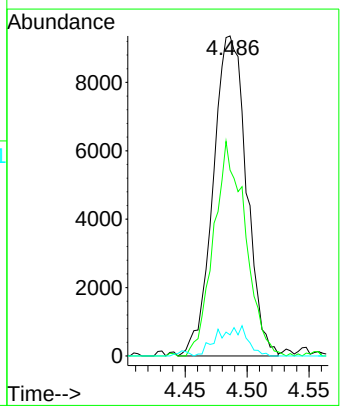
Supervised By :Mahesh Dadoda 09/24/2025

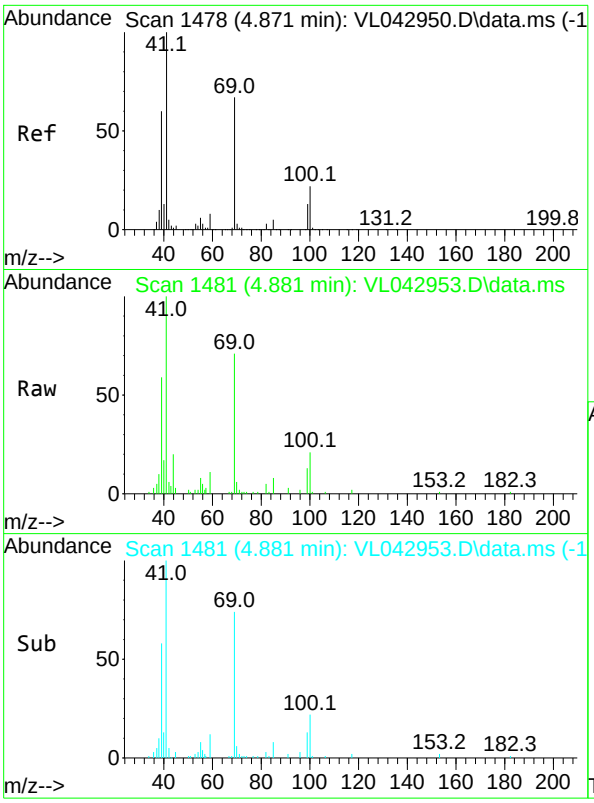


#42
Bromodichloromethane
Concen: 0.501 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 83 Resp: 17552

Ion	Ratio	Lower	Upper
83	100		
85	58.1	49.0	73.6
127	6.6	5.3	7.9

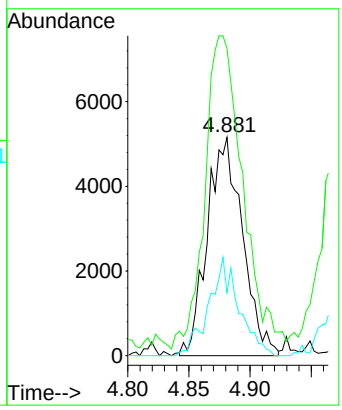




#43
Methyl Methacrylate
Concen: 0.532 ppbv m
RT: 4.881 min Scan# 14
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 69 Resp: 1033

Ion	Ratio	Lower	Upper
69	100		
41	151.9	124.5	186.7
100	38.3	29.0	43.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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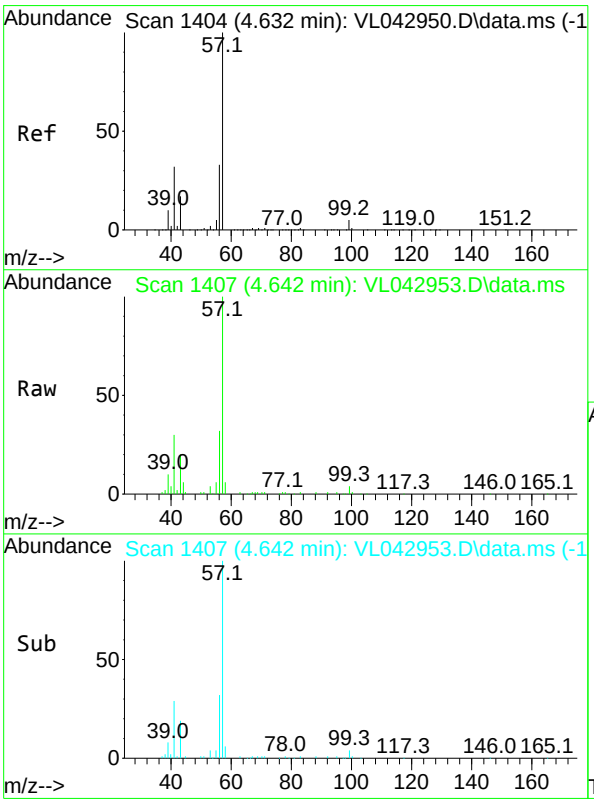
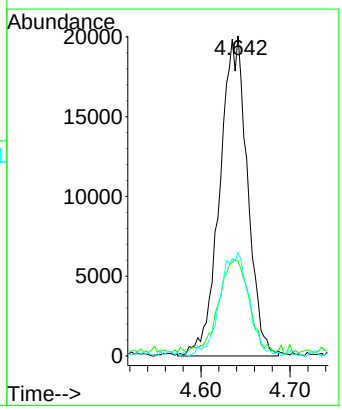
Supervised By :Mahesh Dadoda 09/24/2025

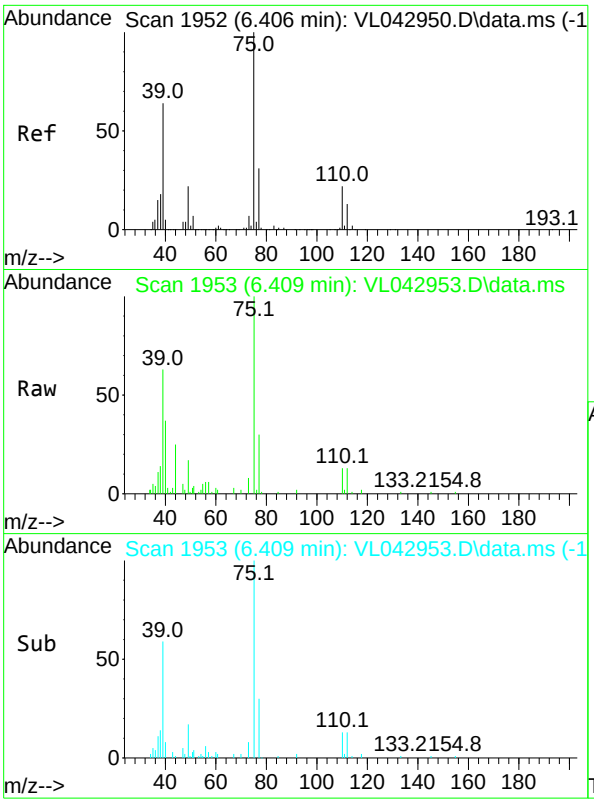


#44
2,2,4-Trimethylpentane
Concen: 0.525 ppbv m
RT: 4.642 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 57 Resp: 43414

Ion	Ratio	Lower	Upper
57	100		
41	31.9	25.5	38.3
56	33.8	25.8	38.8





#45
t-1,3-Dichloropropene
Concen: 0.492 ppbv m
RT: 6.409 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 75 Resp: 1026

Ion	Ratio	Lower	Upper
75	100		
77	29.7	25.0	37.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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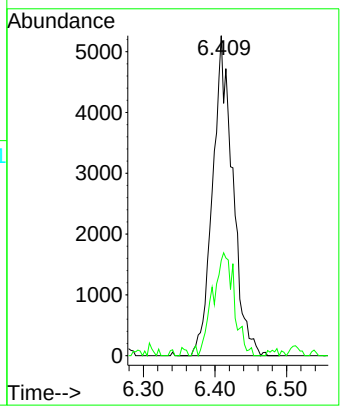
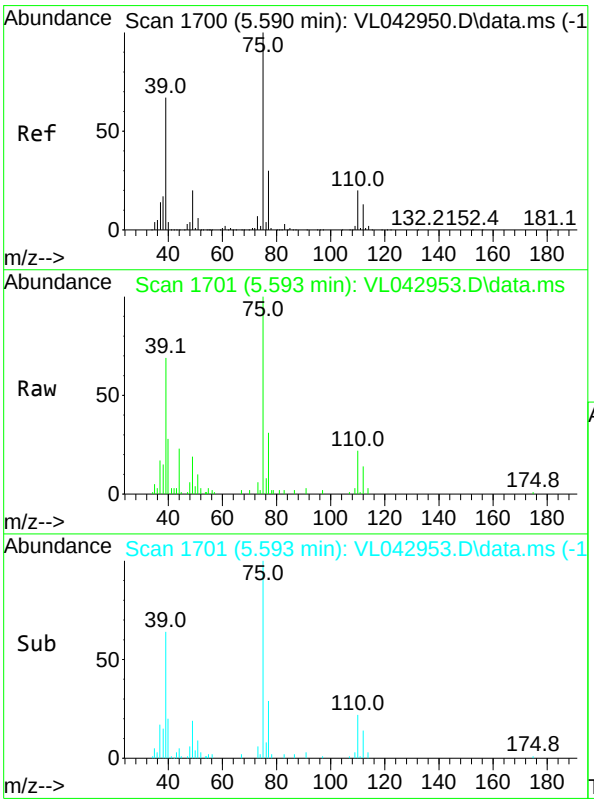
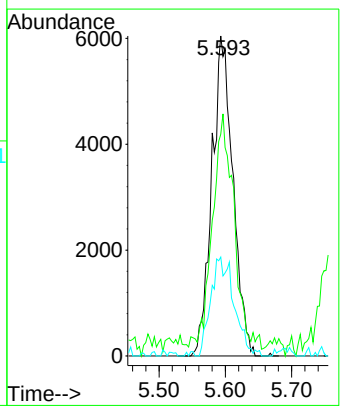


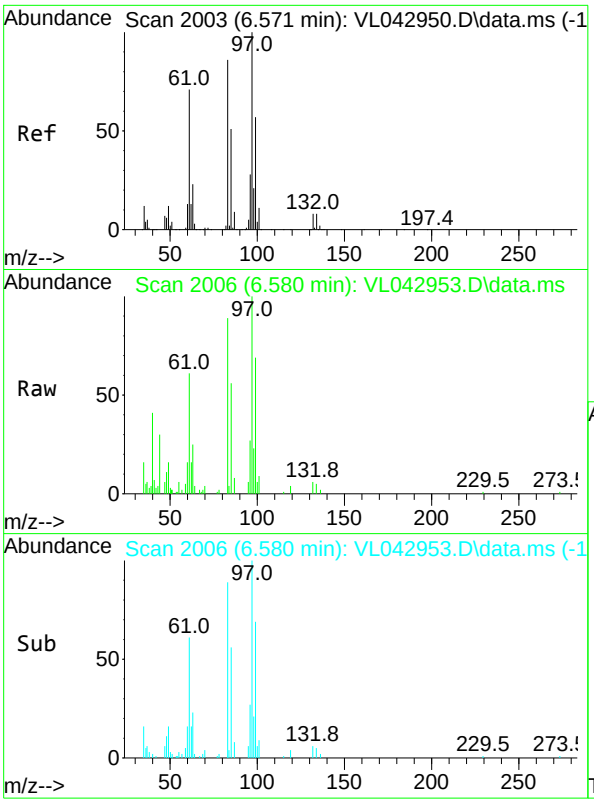


#46
cis-1,3-Dichloropropene
Concen: 0.500 ppbv m
RT: 5.593 min Scan# 1701
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 75 Resp: 13304

Ion	Ratio	Lower	Upper
75	100		
39	69.3	53.8	80.6
77	30.9	23.6	35.4

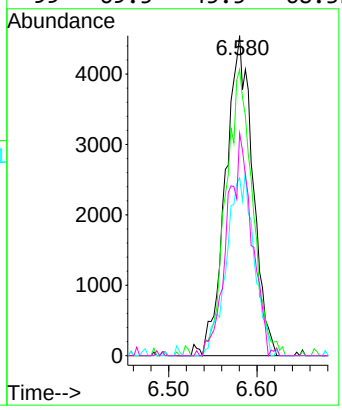




#47
1,1,2-Trichloroethane
Concen: 0.527 ppbv m
RT: 6.580 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 97 Resp: 972

Ion	Ratio	Lower	Upper
97	100		
83	89.4	68.7	103.1
85	55.6	40.6	60.8
99	69.5	45.5	68.3#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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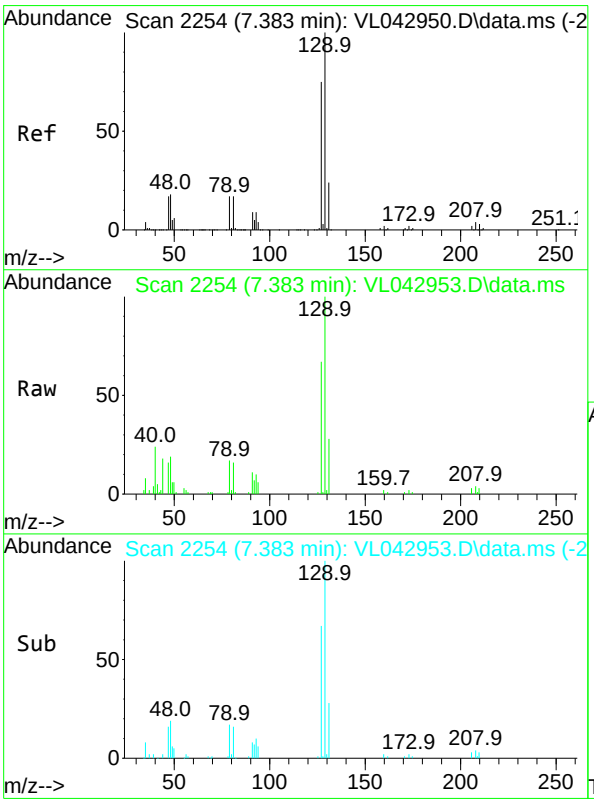
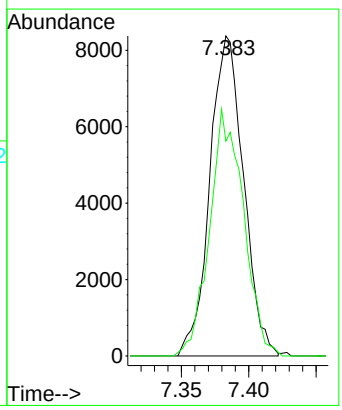
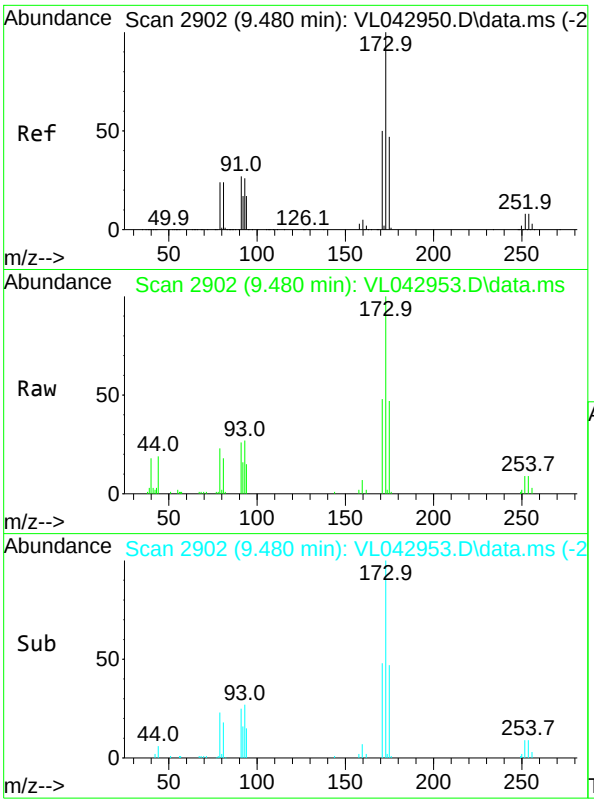


#48
Dibromochloromethane
Concen: 0.493 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:129 Resp: 14563

Ion	Ratio	Lower	Upper
129	100		
127	77.5	39.1	117.2





#49
Bromoform
Concen: 0.473 ppbv
RT: 9.480 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:173 Resp: 1213

Ion	Ratio	Lower	Upper
173	100		
175	50.2	37.9	56.9
171	49.8	41.1	61.7

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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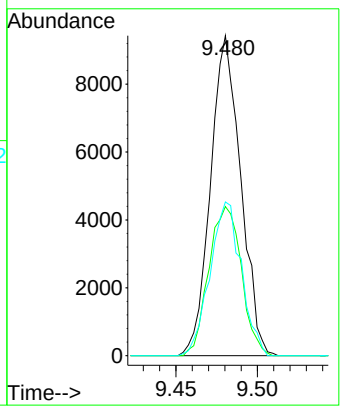
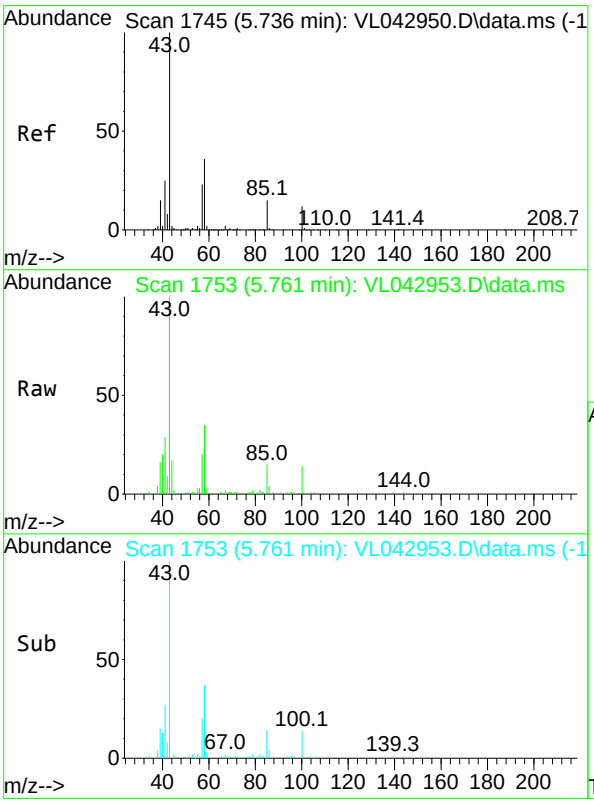
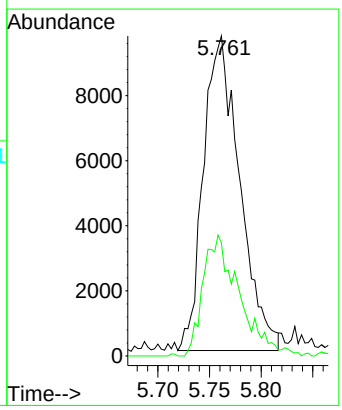


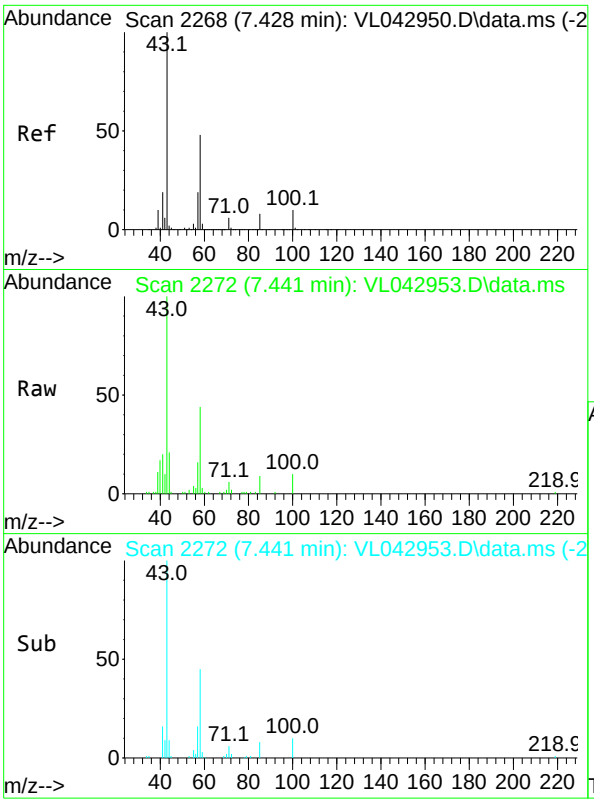


#50
4-Methyl-2-Pentanone
Concen: 0.493 ppbv
RT: 5.761 min Scan# 1753
Delta R.T. 0.026 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 23639

Ion	Ratio	Lower	Upper
43	100		
58	38.5	28.4	42.6





#51
2-Hexanone
Concen: 0.480 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 1832

Ion	Ratio	Lower	Upper
43	100		
58	51.8	39.7	59.5
98	0.2	0.1	0.1#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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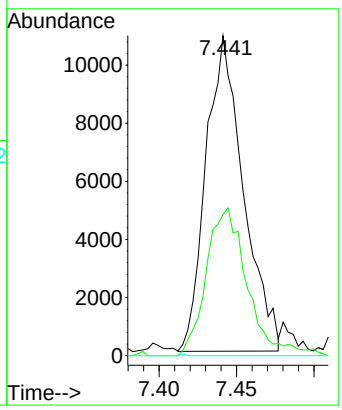
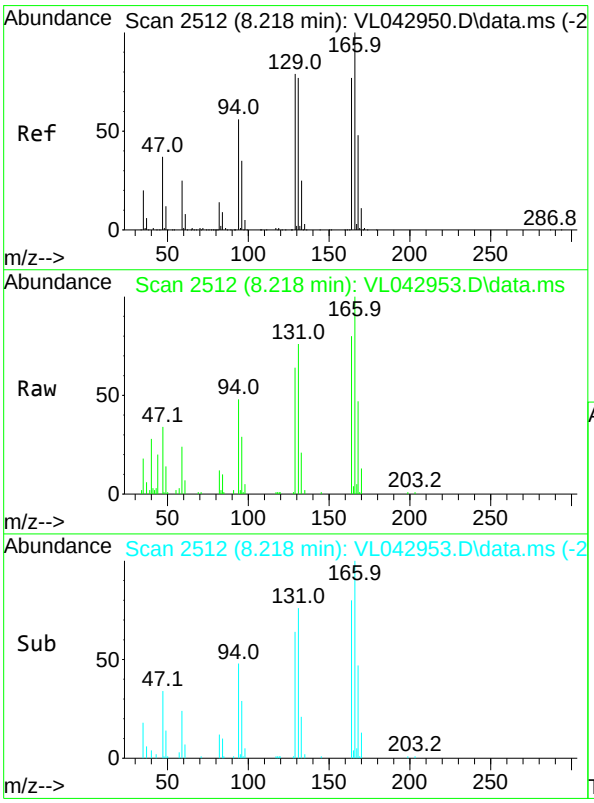
Supervised By :Mahesh Dadoda 09/24/2025

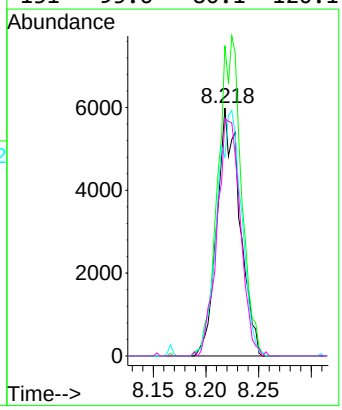


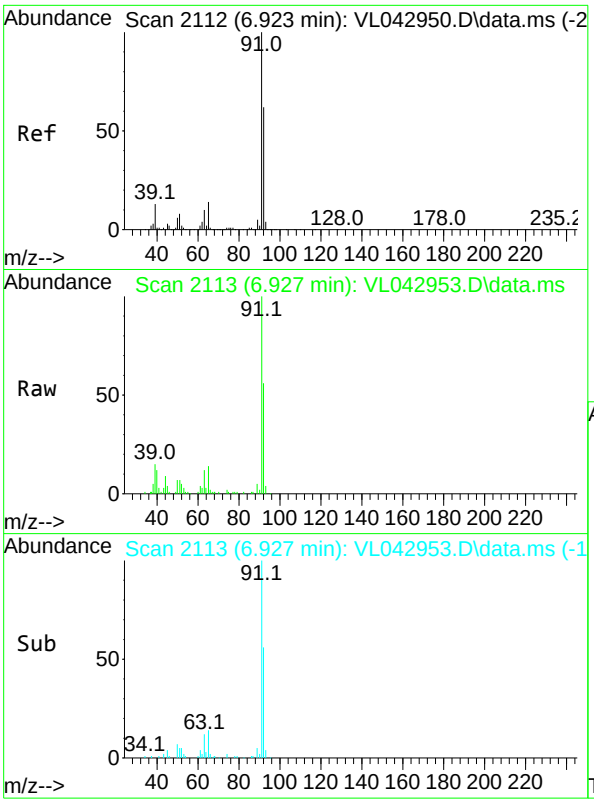


#52
Tetrachloroethene
Concen: 0.490 ppbv m
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:164 Resp: 9073

Ion	Ratio	Lower	Upper
164	100		
166	125.1	103.5	155.3
129	80.1	82.2	123.4#
131	95.6	80.1	120.1

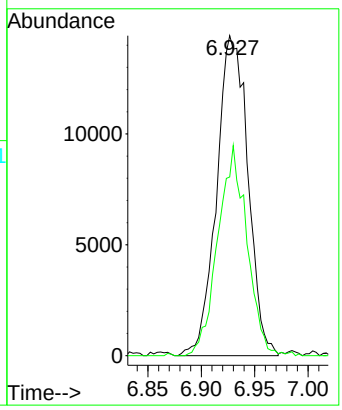




#53
Toluene
Concen: 0.519 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 2940

Ion	Ratio	Lower	Upper
91	100		
92	61.1	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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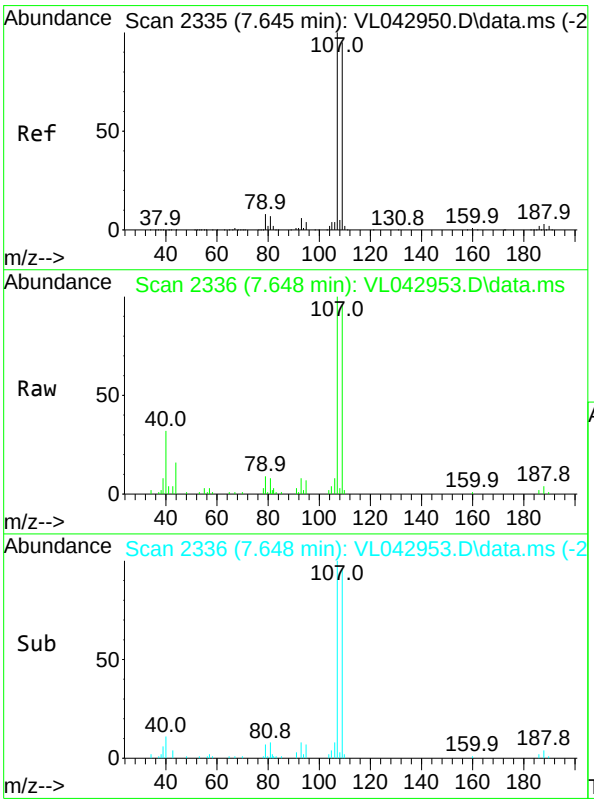
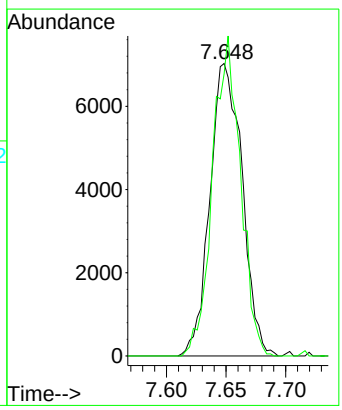
Supervised By :Mahesh Dadoda 09/24/2025

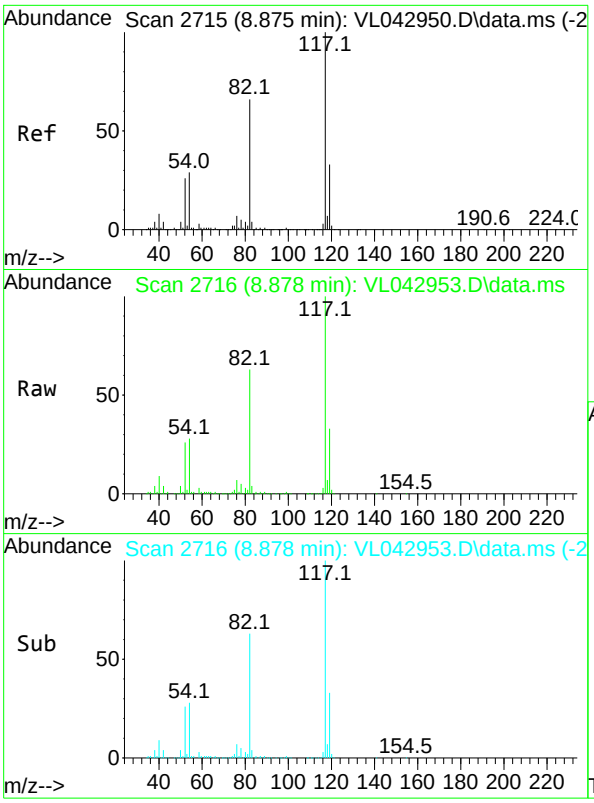


#54
1,2-Dibromoethane
Concen: 0.510 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:107 Resp: 13233

Ion	Ratio	Lower	Upper
107	100		
109	96.5	75.8	113.8

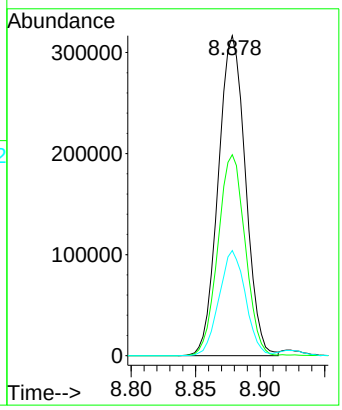




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:117 Resp: 46409

Ion	Ratio	Lower	Upper
117	100		
82	63.0	52.8	79.2
119	33.5	26.5	39.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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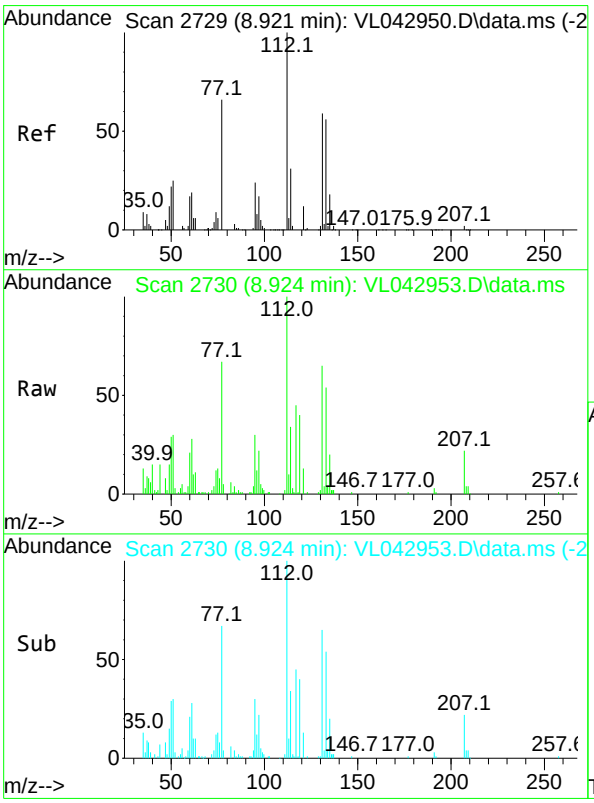
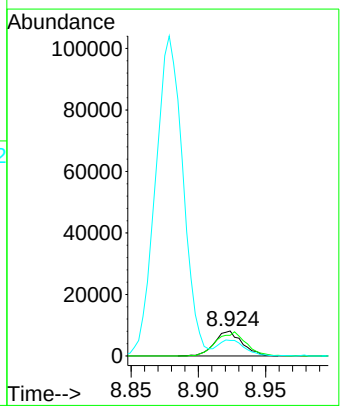
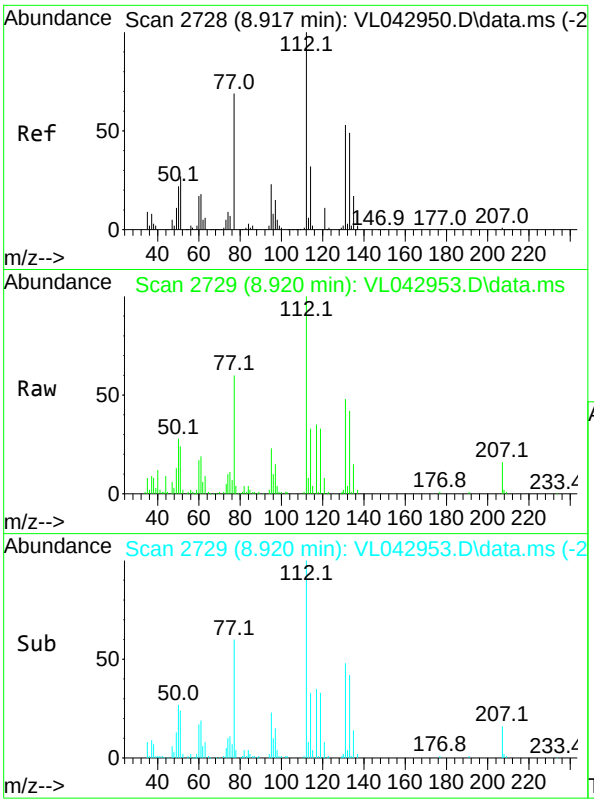


#56
1,1,1,2-Tetrachloroethane
Concen: 0.519 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:131 Resp: 11535

Ion	Ratio	Lower	Upper
131	100		
133	105.4	76.6	114.8
119	1350.8	49.9	74.9#

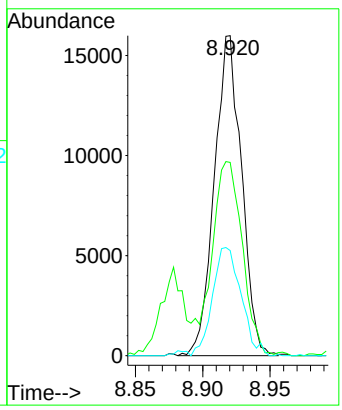




#57
Chlorobenzene
Concen: 0.530 ppbv
RT: 8.920 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:112 Resp: 2246

Ion	Ratio	Lower	Upper
112	100		
77	59.5	55.7	83.5
114	32.5	28.6	35.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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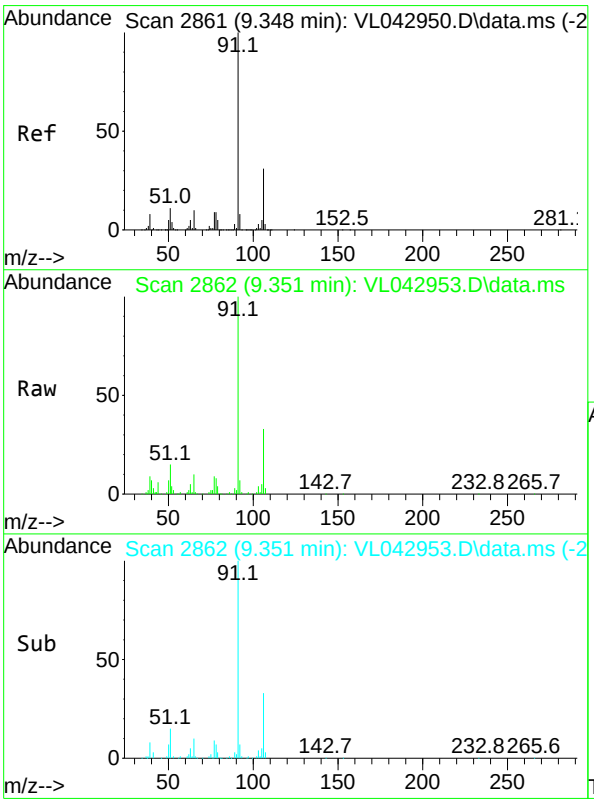
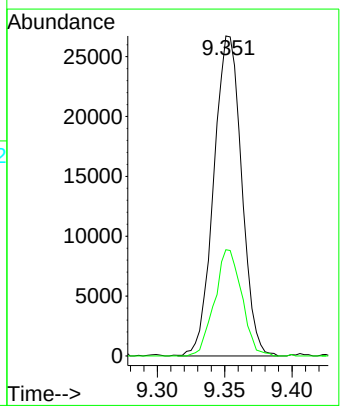
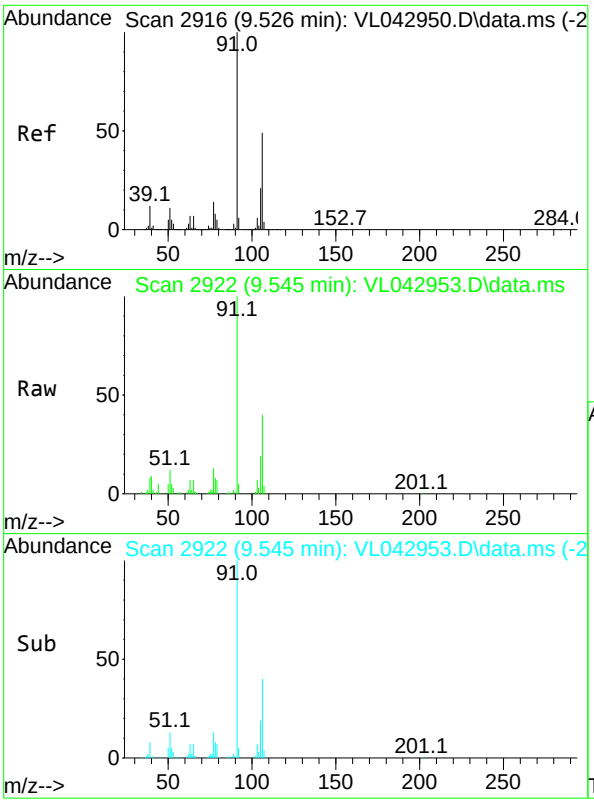


#58
Ethyl Benzene
Concen: 0.505 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 38459

Ion	Ratio	Lower	Upper
91	100		
106	33.2	24.6	37.0





#59
m/p-Xylene
Concen: 1.028 ppbv m
RT: 9.545 min Scan# 2
Delta R.T. 0.019 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 6180

Ion	Ratio	Lower	Upper
91	100		
106	49.3	0.0	0.0

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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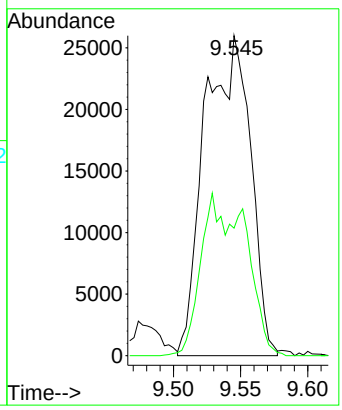
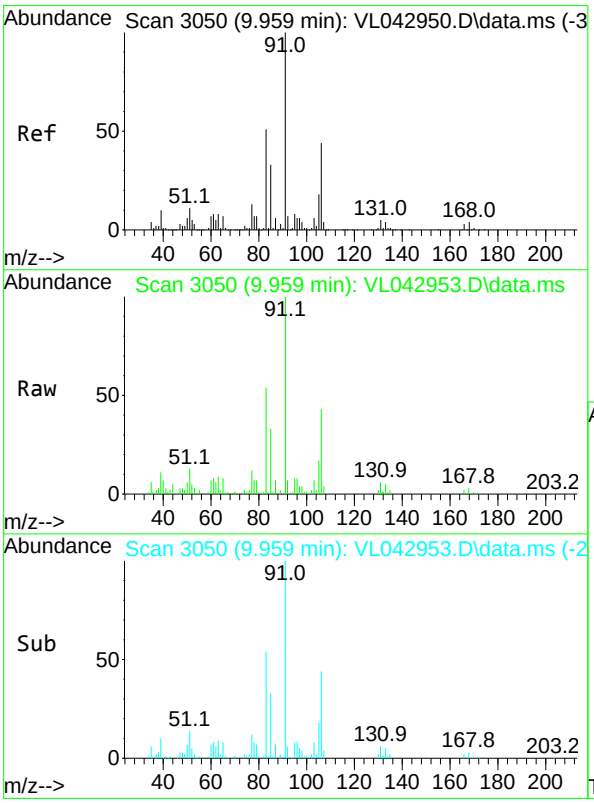
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

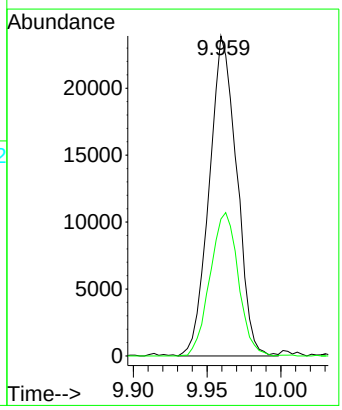


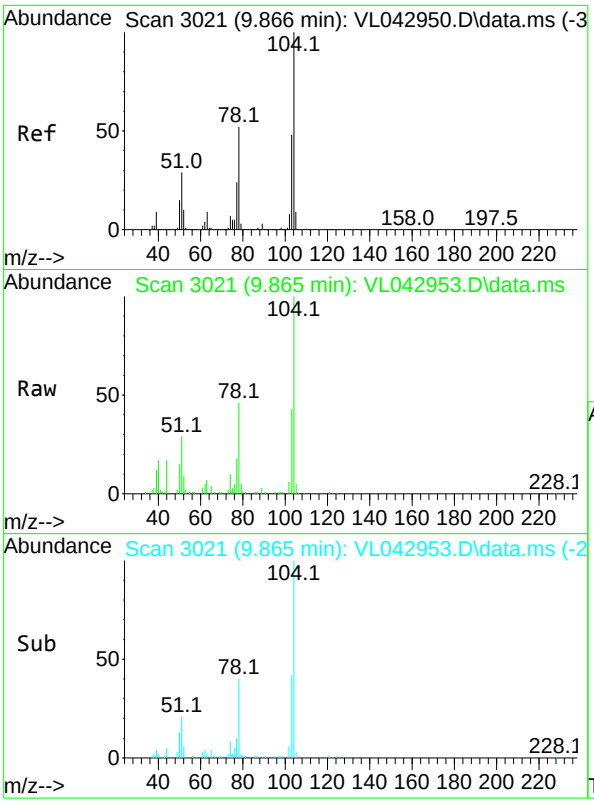


#60
o-Xylene
Concen: 0.516 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 30976

Ion	Ratio	Lower	Upper
91	100		
106	46.2	22.4	67.0

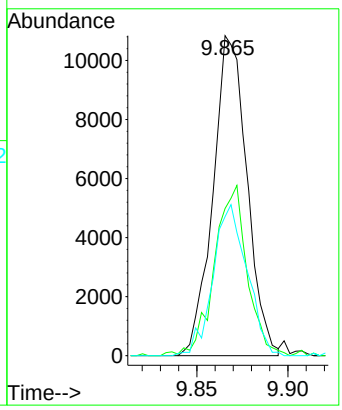




#61
Styrene
Concen: 0.495 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:104 Resp: 1404

Ion	Ratio	Lower	Upper
104	100		
78	51.8	39.9	59.9
103	47.6	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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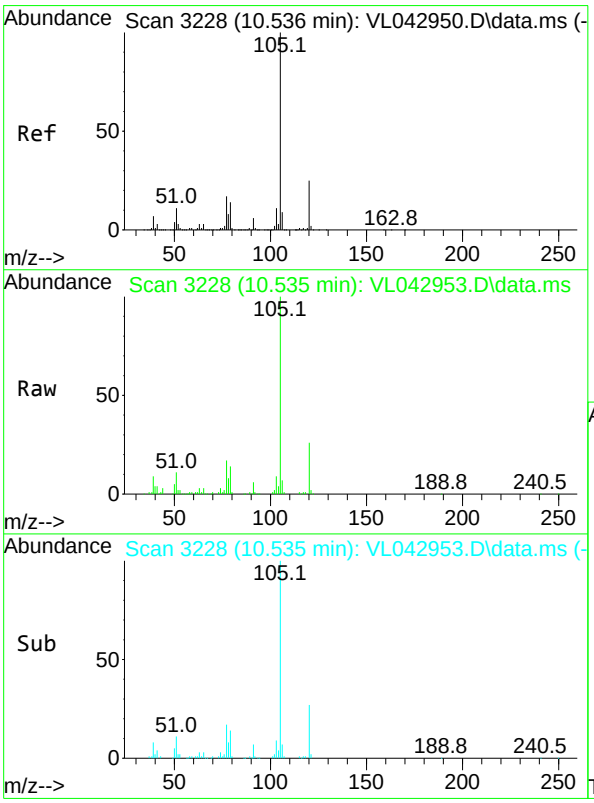
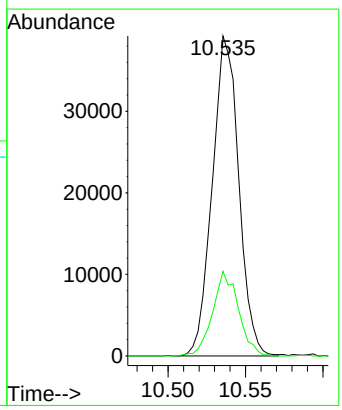
Supervised By :Mahesh Dadoda 09/24/2025

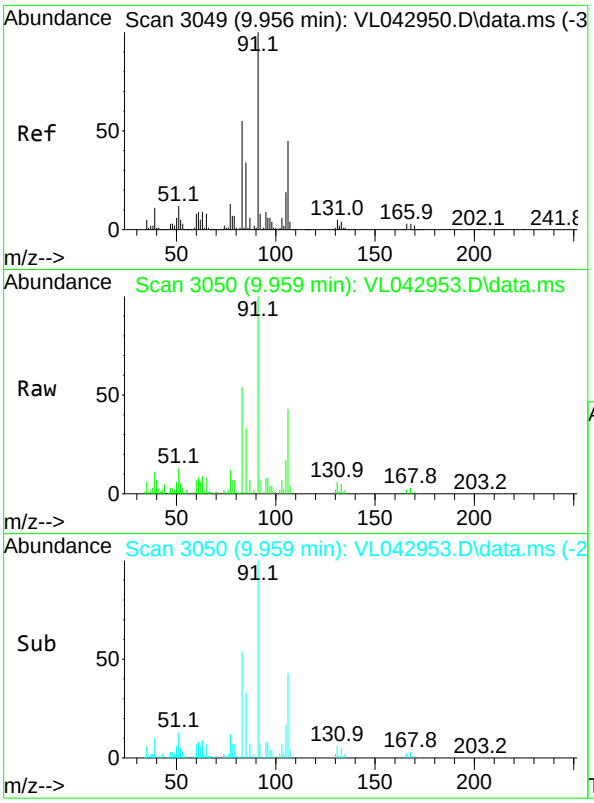


#62
Isopropylbenzene
Concen: 0.521 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 46640

Ion	Ratio	Lower	Upper
105	100		
120	25.9	20.6	30.8





#63
1,1,2,2-Tetrachloroethane
Concen: 0.506 ppbv
RT: 9.959 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 83 Resp: 1597

Ion	Ratio	Lower	Upper
83	100		
131	10.4	4.8	14.4
85	66.6	32.2	96.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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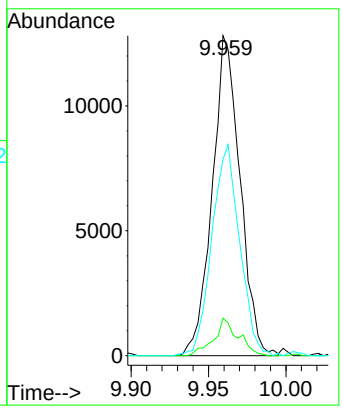
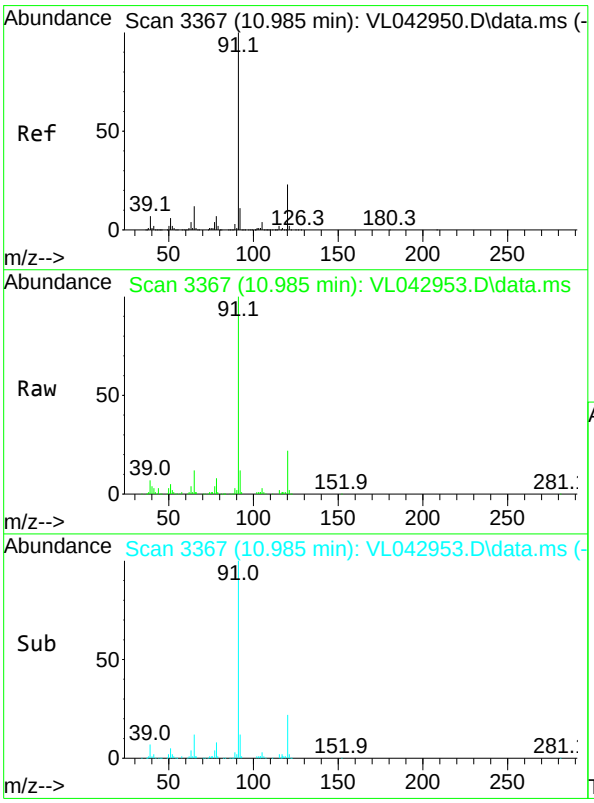
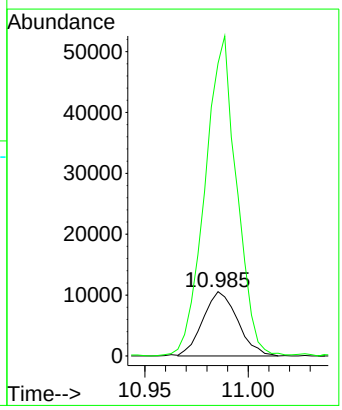


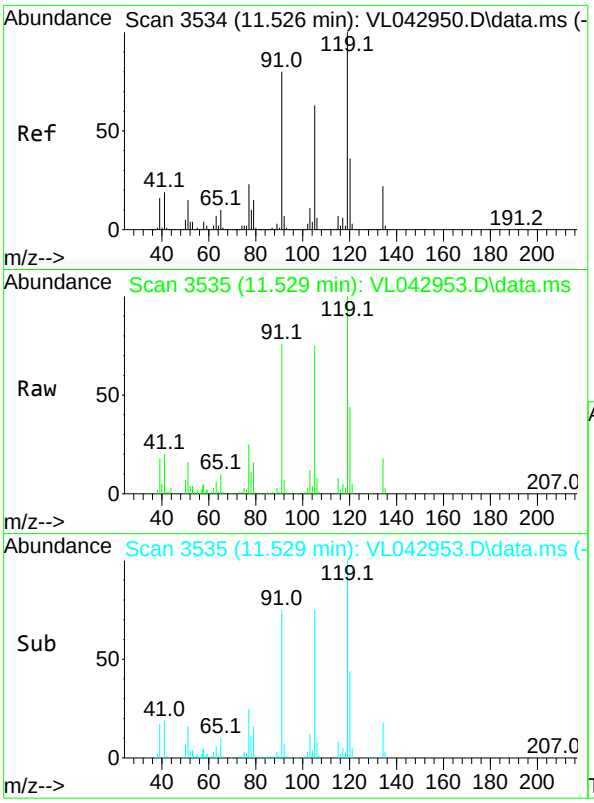


#64
n-propylbenzene
Concen: 0.527 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:120 Resp: 12333

Ion	Ratio	Lower	Upper
120	100		
91	456.5	364.9	547.3

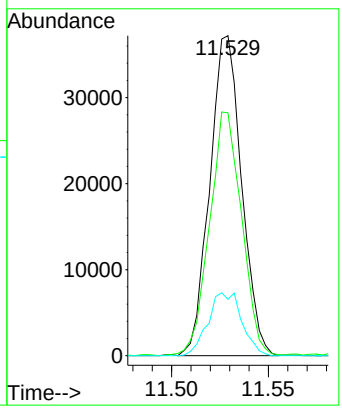




#65
tert-Butylbenzene
Concen: 0.535 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:119 Resp: 4259

Ion	Ratio	Lower	Upper
119	100		
91	77.7	63.1	94.7
134	20.9	17.0	25.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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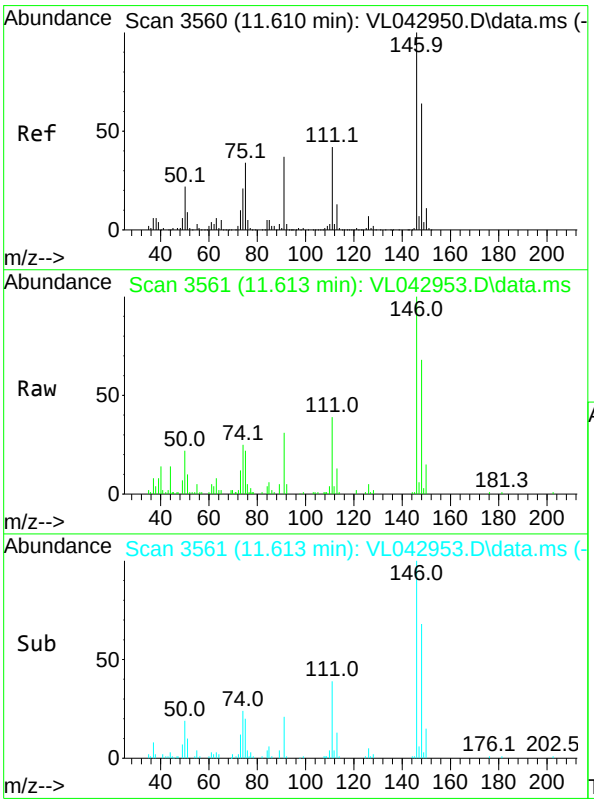
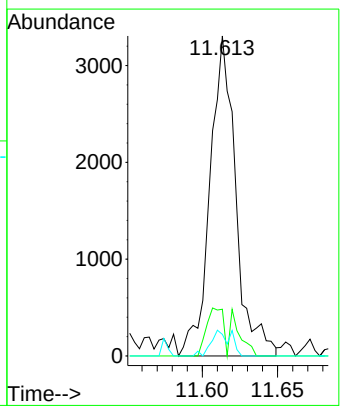
Supervised By :Mahesh Dadoda 09/24/2025

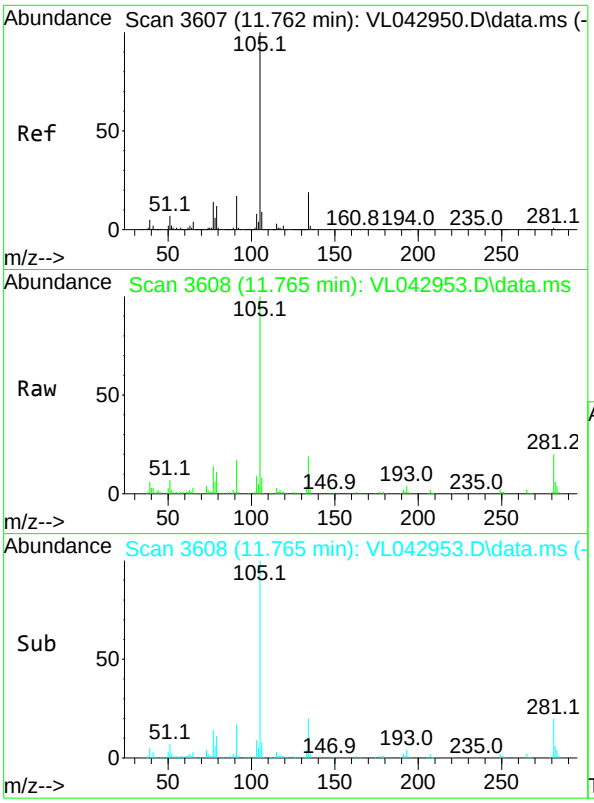


#66
Benzyl Chloride
Concen: 0.472 ppbv m
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 3942

Ion	Ratio	Lower	Upper
91	100		
126	15.3	14.6	21.8
128	6.1	5.0	7.4





#67
sec-Butylbenzene
Concen: 0.525 ppbv
RT: 11.765 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 5819

Ion	Ratio	Lower	Upper
105	100		
134	19.1	15.7	23.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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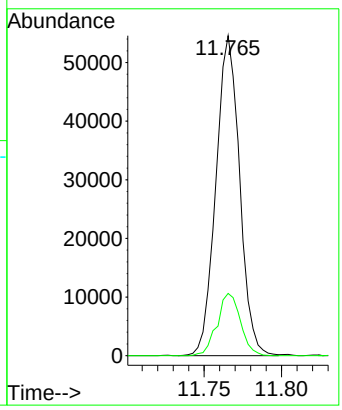
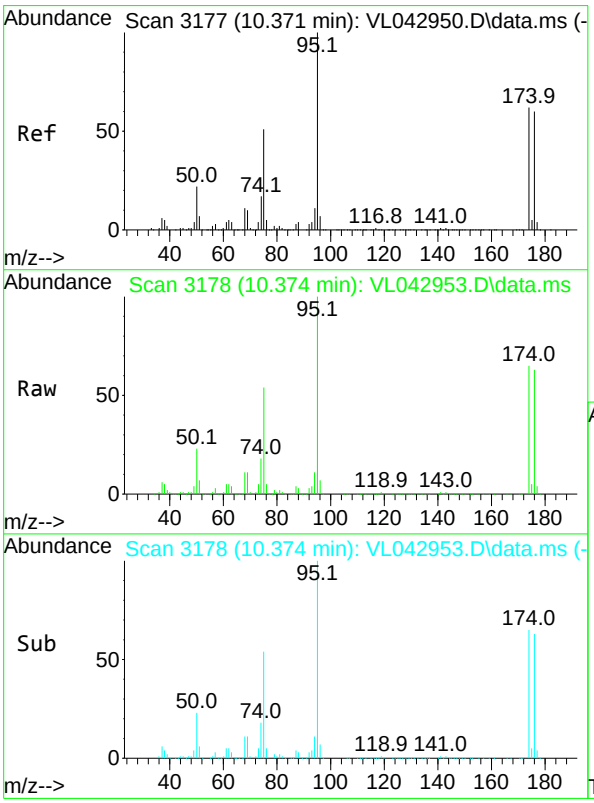
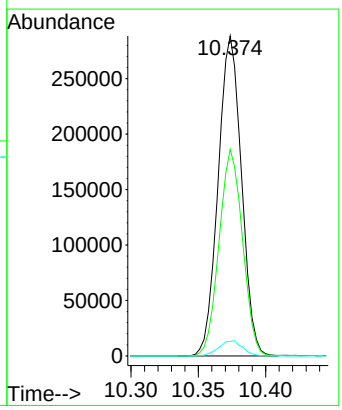


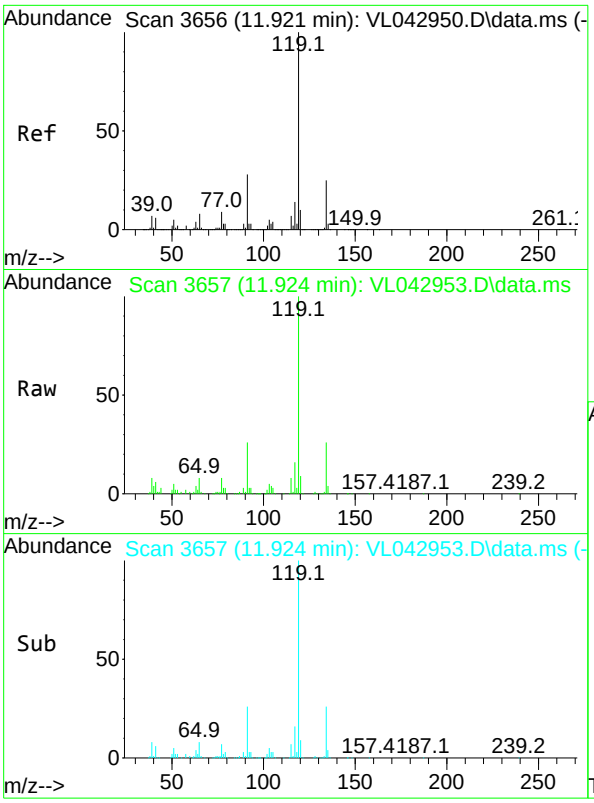


#68
1-Bromo-4-Fluorobenzene
Concen: 10.027 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 95 Resp: 347374

Ion	Ratio	Lower	Upper
95	100		
174	65.0	51.4	77.2
175	4.9	4.0	6.0

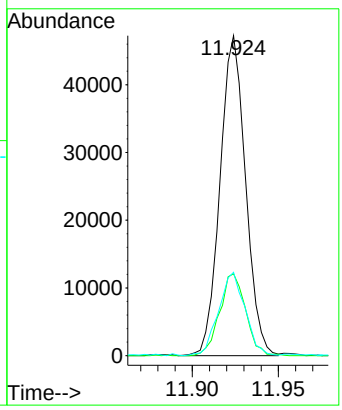




#69
p-Isopropyltoluene
Concen: 0.521 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:119 Resp: 4885

Ion	Ratio	Lower	Upper
119	100		
134	26.0	21.0	31.4
91	28.2	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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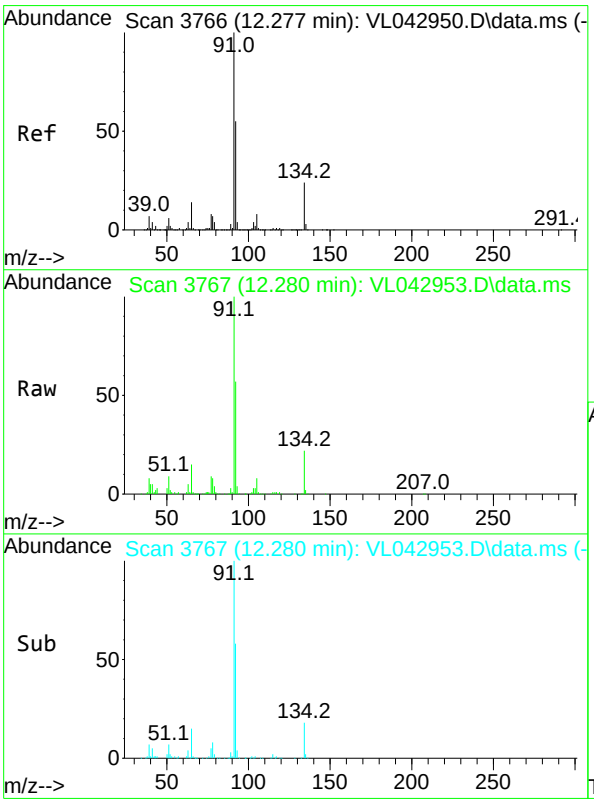
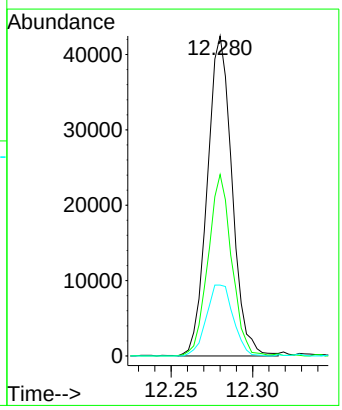
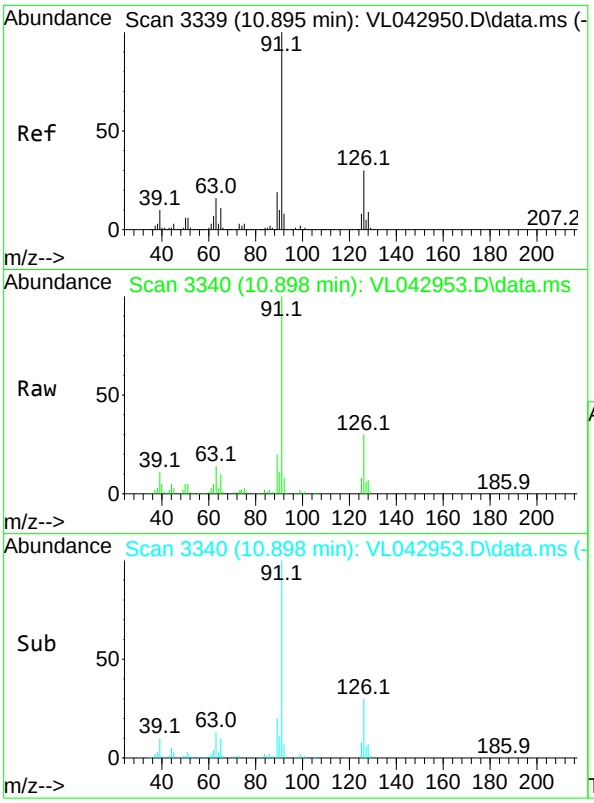


#70
n-Butylbenzene
Concen: 0.489 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 44764

Ion	Ratio	Lower	Upper
91	100		
92	54.7	44.0	66.0
134	24.4	19.4	29.2

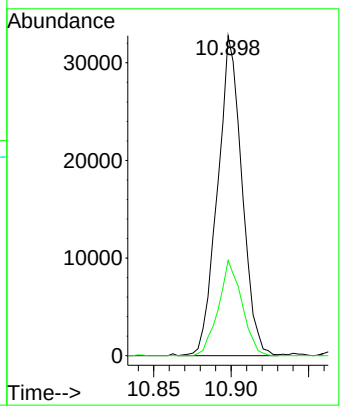




#71
2-Chlorotoluene
Concen: 0.530 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 3579

Ion	Ratio	Lower	Upper
91	100		
126	28.7	12.3	49.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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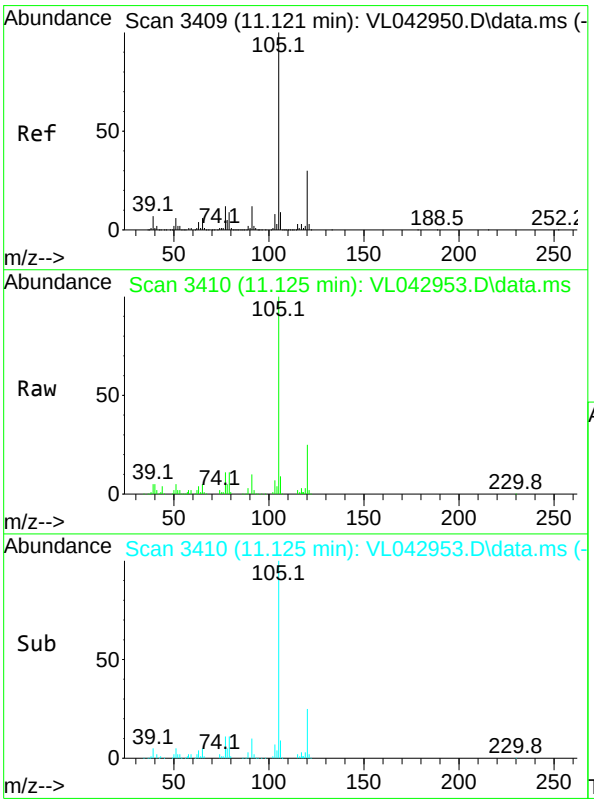
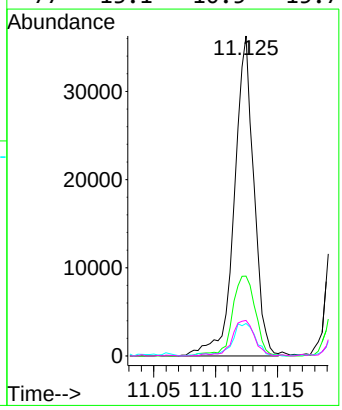
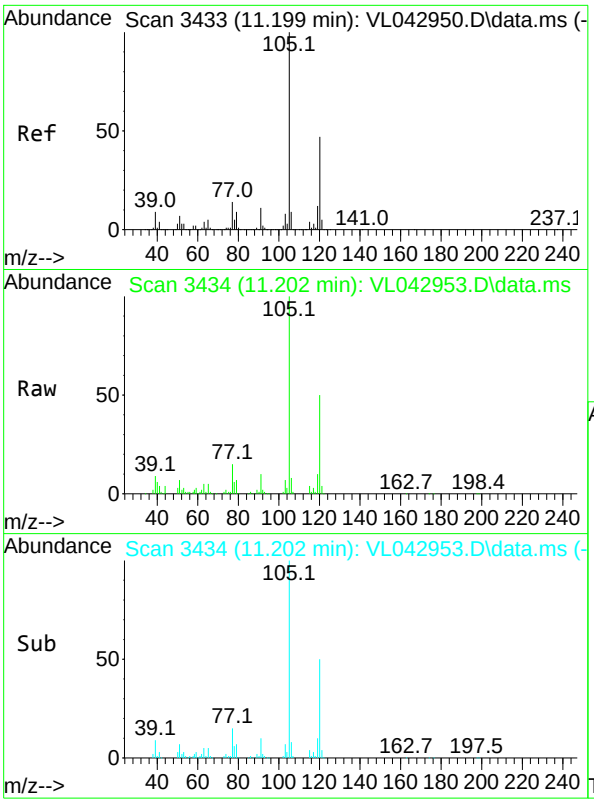


#72
4-Ethyltoluene
Concen: 0.529 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 39803

Ion	Ratio	Lower	Upper
105	100		
120	29.5	24.2	36.2
91	12.5	10.0	15.0
77	13.1	10.5	15.7

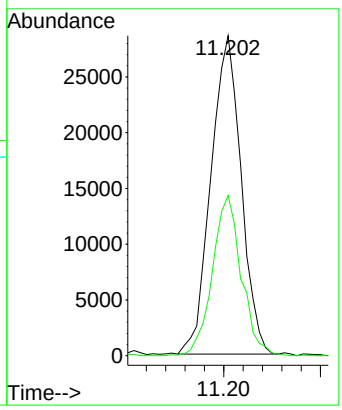




#73
1,3,5-Trimethylbenzene
Concen: 0.507 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 3093

Ion	Ratio	Lower	Upper
105	100		
120	50.1	38.0	57.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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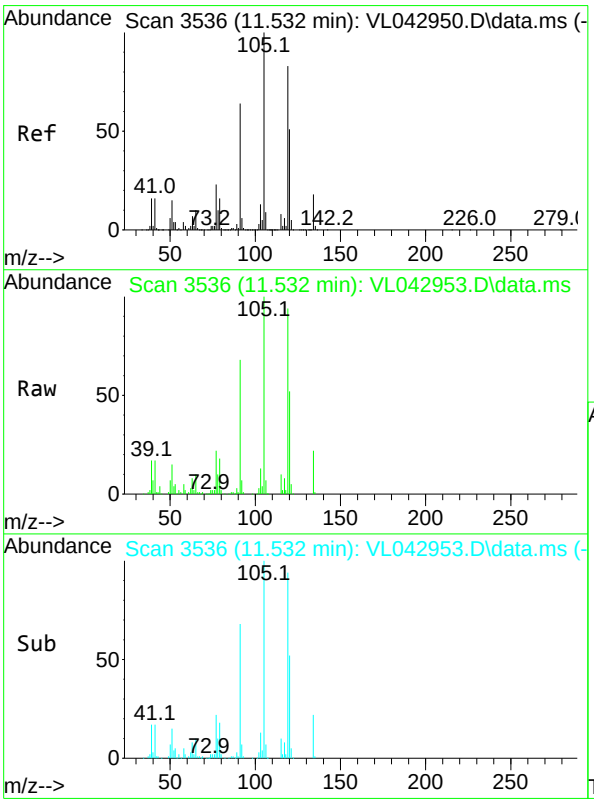
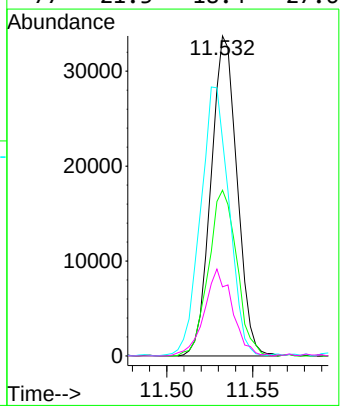
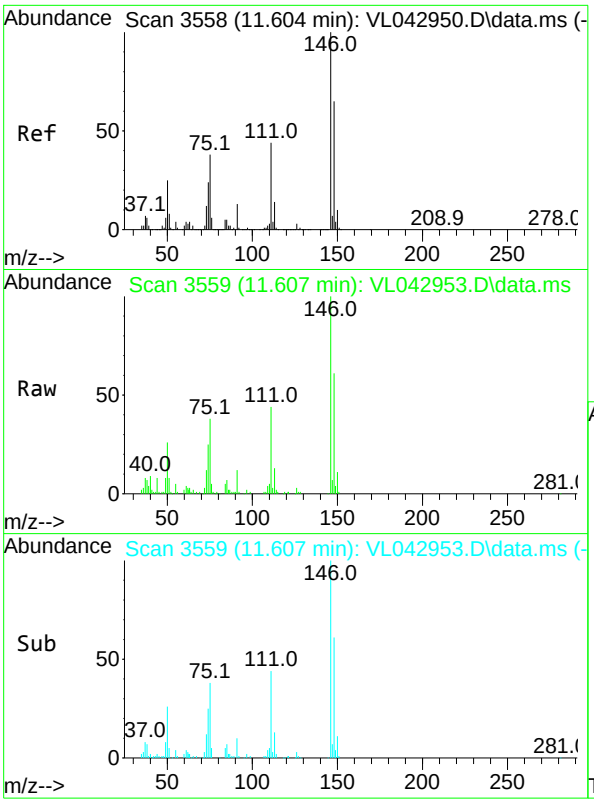


#74
1,2,4-Trimethylbenzene
Concen: 0.529 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 35601

Ion	Ratio	Lower	Upper
105	100		
120	51.8	40.9	61.3
91	66.9	51.2	76.8
77	21.3	18.4	27.6

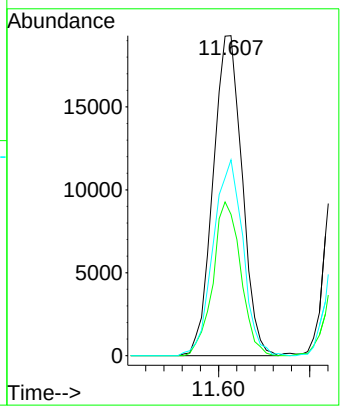




#75
1,3-Dichlorobenzene
Concen: 0.510 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:146 Resp: 2130

Ion	Ratio	Lower	Upper
146	100		
111	45.9	22.3	66.9
148	62.7	31.9	95.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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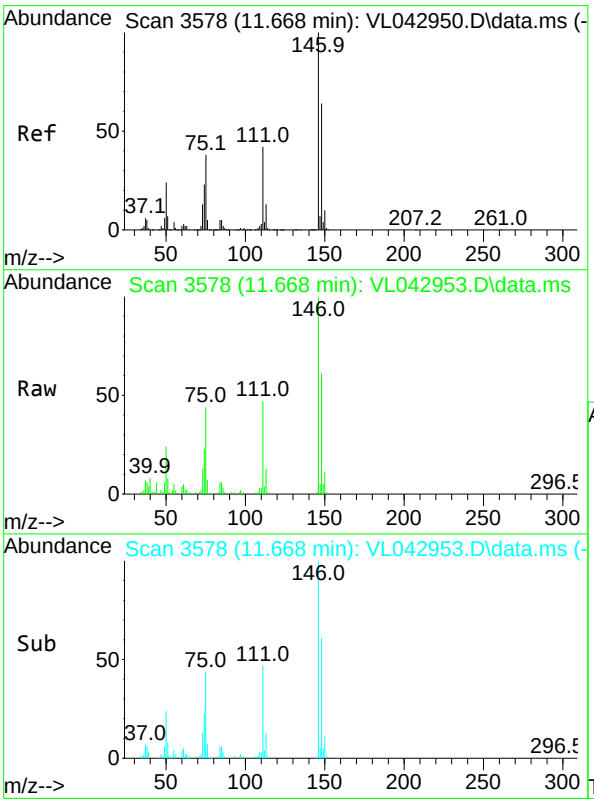
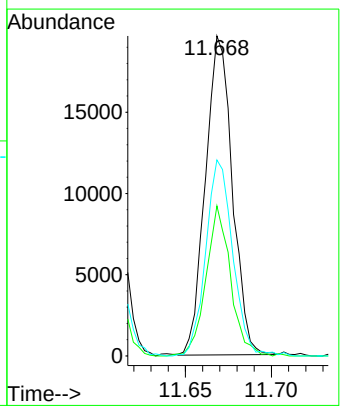
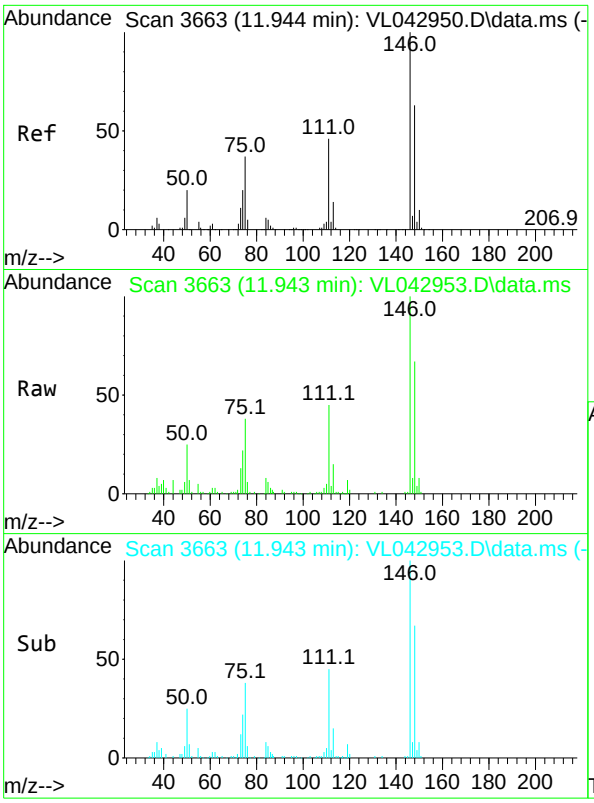


#76
1,4-Dichlorobenzene
Concen: 0.516 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:146 Resp: 21404

Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.5	64.5
148	61.6	31.9	95.5

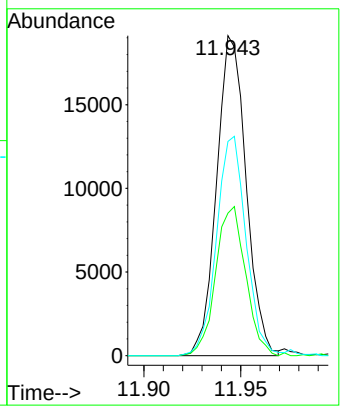




#77
1,2-Dichlorobenzene
Concen: 0.510 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:146 Resp: 2027

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.1	69.3
148	69.3	32.0	96.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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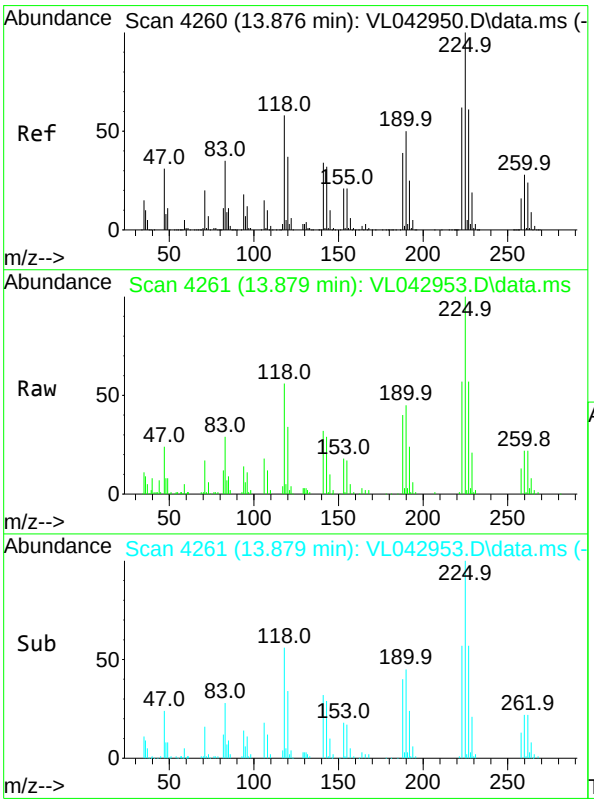
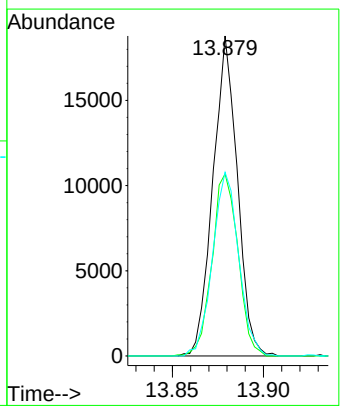
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

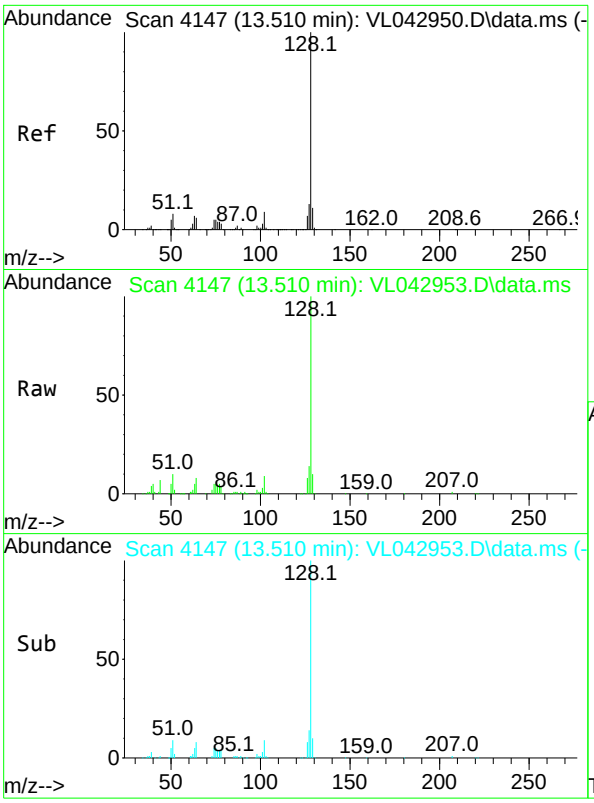


#78
Hexachloro-1,3-Butadiene
Concen: 0.563 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:225 Resp: 17515

Ion	Ratio	Lower	Upper
225	100		
223	60.4	50.1	75.1
227	61.5	50.4	75.6

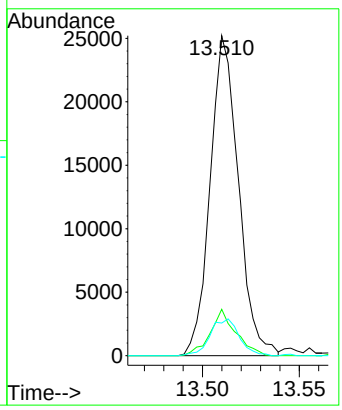




#79
Naphthalene
Concen: 0.429 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:128 Resp: 2557

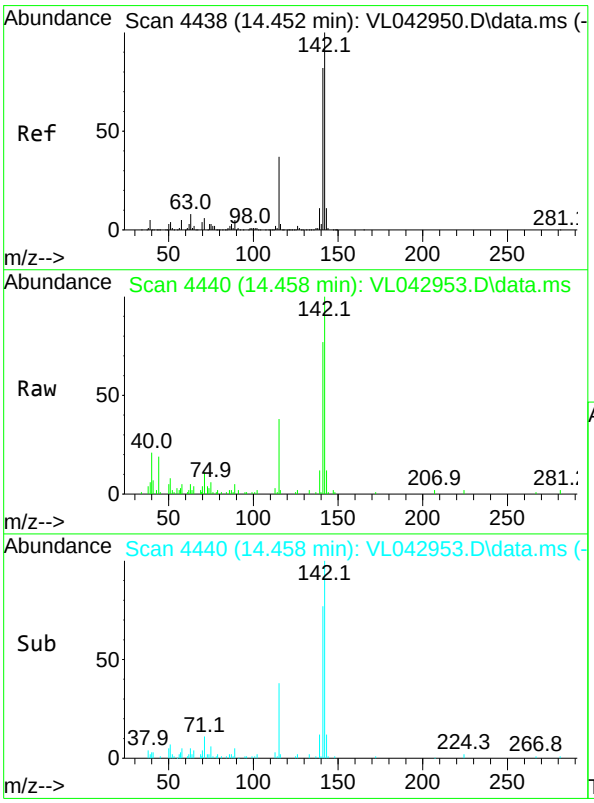
Ion	Ratio	Lower	Upper
128	100		
127	14.5	10.6	15.8
129	10.2	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

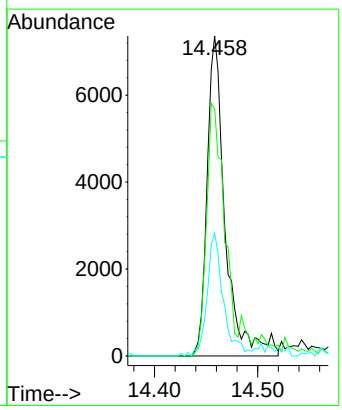
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

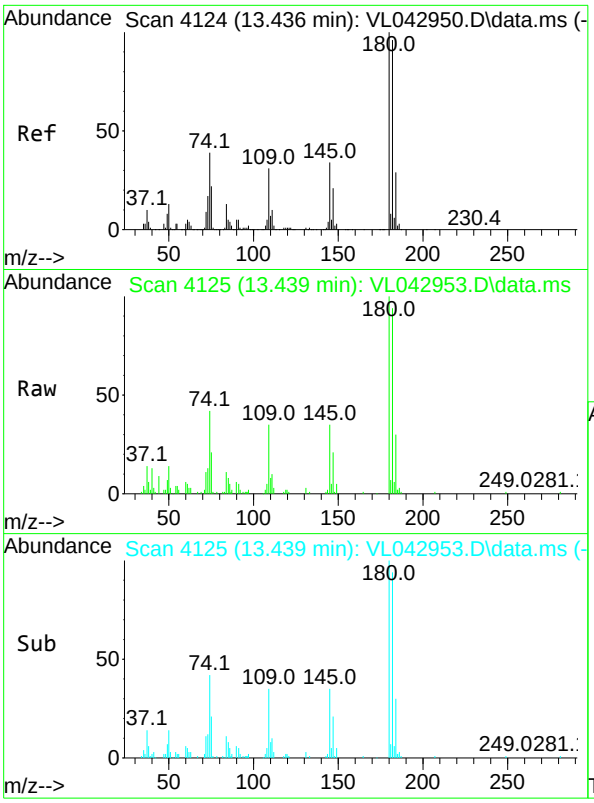


#80
Naphthalene,2-methyl-
Concen: 0.484 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:142 Resp: 8906

Ion	Ratio	Lower	Upper
142	100		
141	91.9	65.1	97.7
115	35.4	28.9	43.3

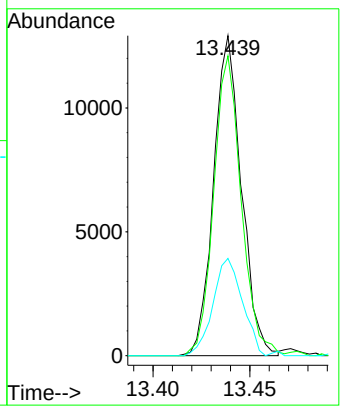




#81
1,2,4-Trichlorobenzene
Concen: 0.406 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:180 Resp: 1292

Ion	Ratio	Lower	Upper
180	100		
182	93.3	75.7	113.5
184	32.6	23.9	35.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042954.D
Acq On : 22 Sep 2025 11:56
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:12:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	163771	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	498673	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	457171	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	337196	9.881	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.800%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.580	62	920	0.102	ppbv #	75
32) 1,1,1-Trichloroethane	3.370	97	3418	0.098	ppbv	96
35) Carbon Tetrachloride	3.764	117	3071m	0.096	ppbv	
38) Trichloroethene	4.541	130	2470m	0.106	ppbv	
52) Tetrachloroethene	8.228	164	2013m	0.111	ppbv	
54) 1,2-Dibromoethane	7.655	107	2595m	0.102	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.966	83	3301	0.106	ppbv	97
79) Naphthalene	13.516	128	4997m	0.085	ppbv	

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

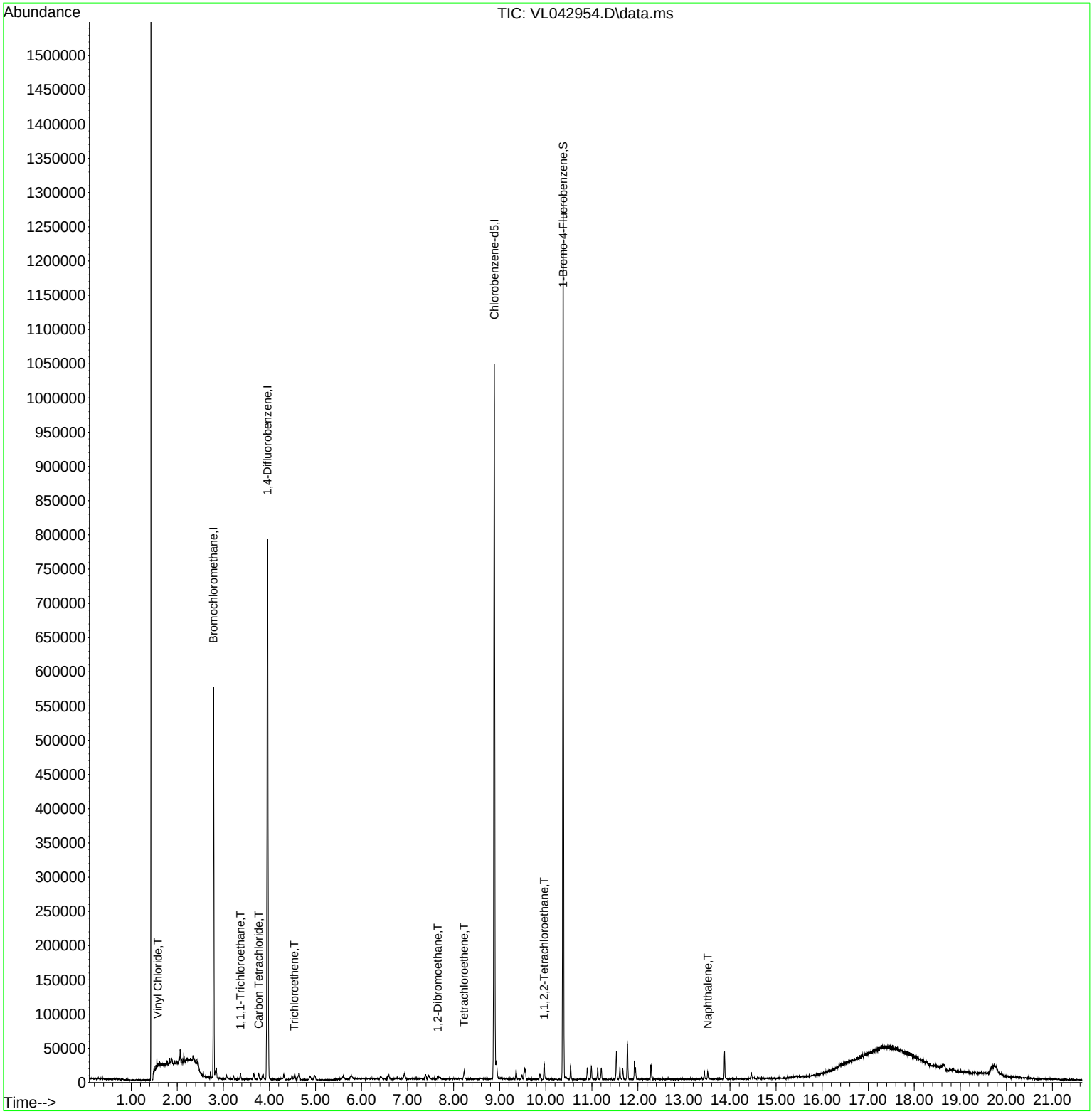
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042954.D
Acq On : 22 Sep 2025 11:56
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

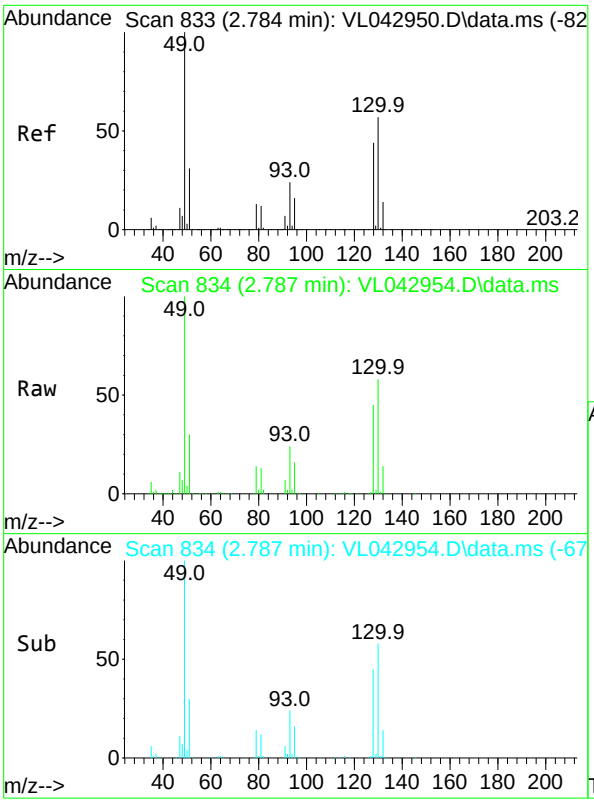
Quant Time: Sep 23 02:12:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

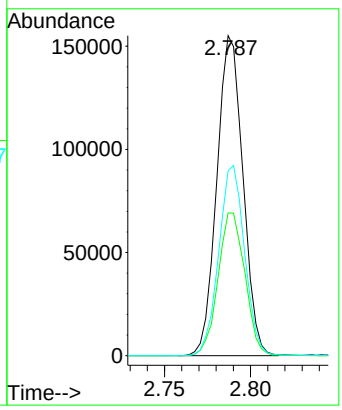




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 49 Resp: 16377

Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.9	68.8
130	59.0	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 09/23/2025
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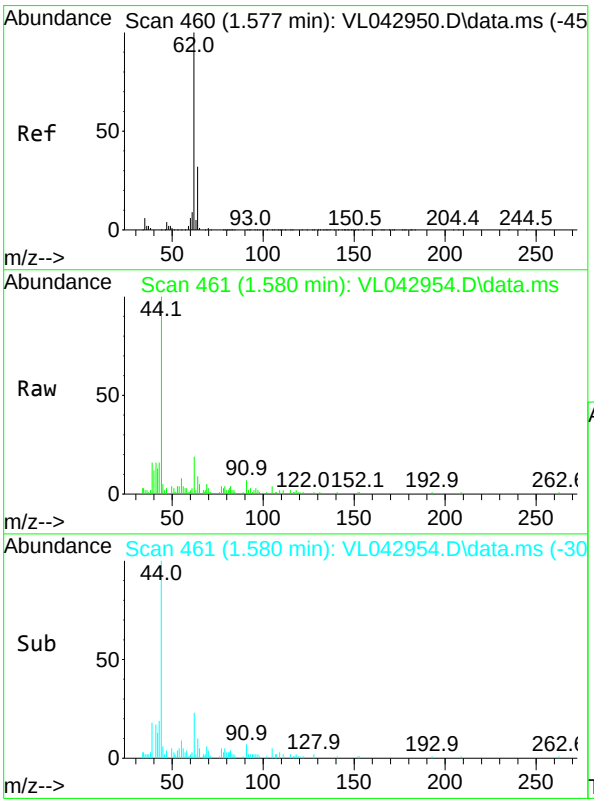
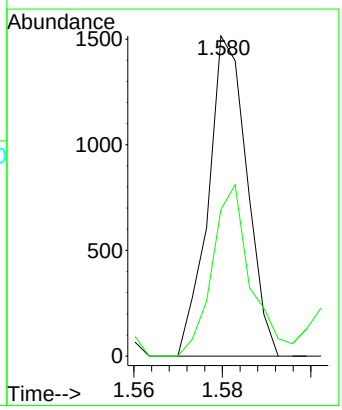
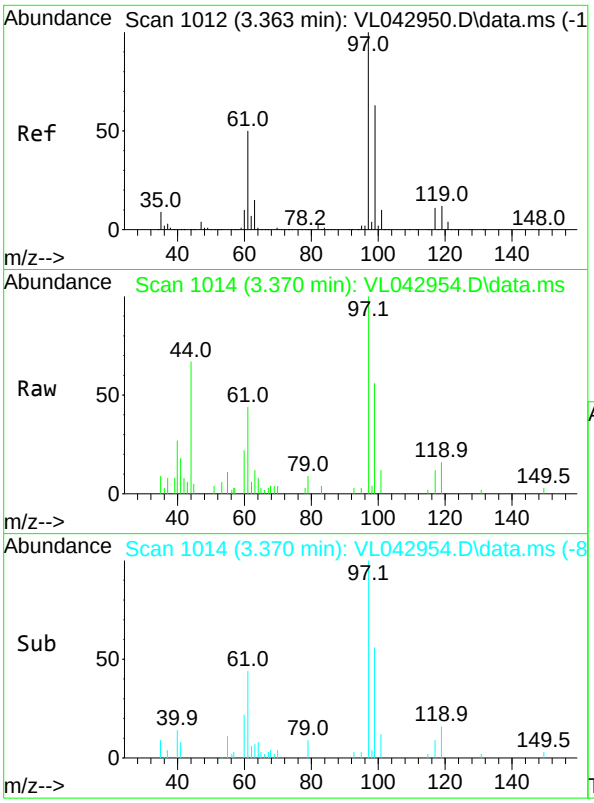


#5
Vinyl Chloride
Concen: 0.102 ppbv
RT: 1.580 min Scan# 461
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 62 Resp: 920

Ion	Ratio	Lower	Upper
62	100		
64	45.7	25.4	38.2#

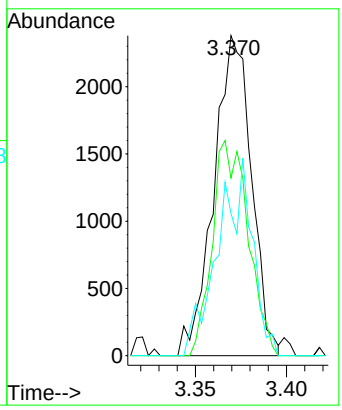




#32
1,1,1-Trichloroethane
Concen: 0.098 ppbv
RT: 3.370 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 97 Resp: 341

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.1	76.7
61	56.2	39.8	59.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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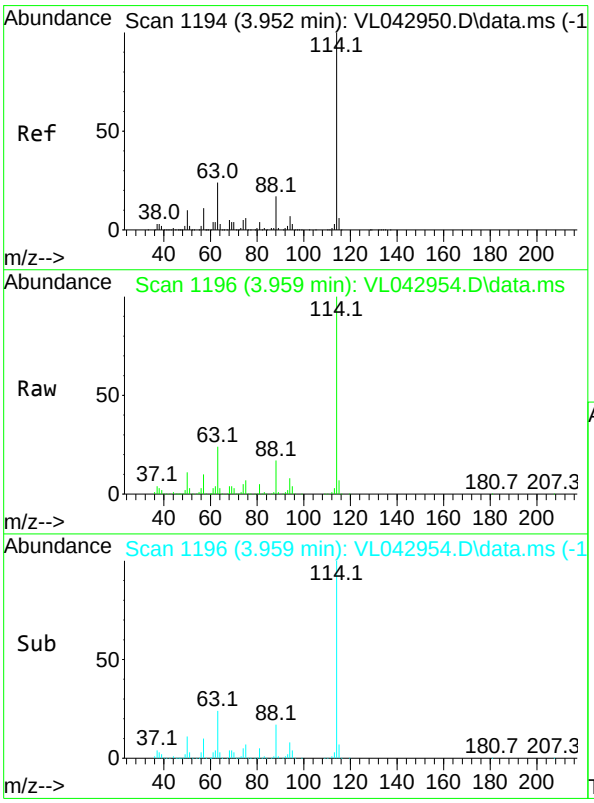
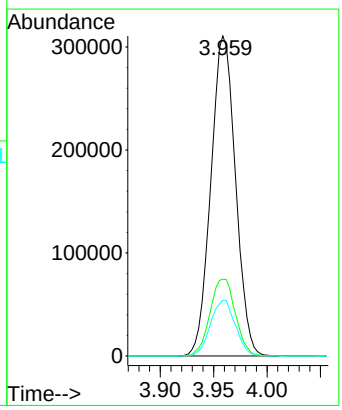
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

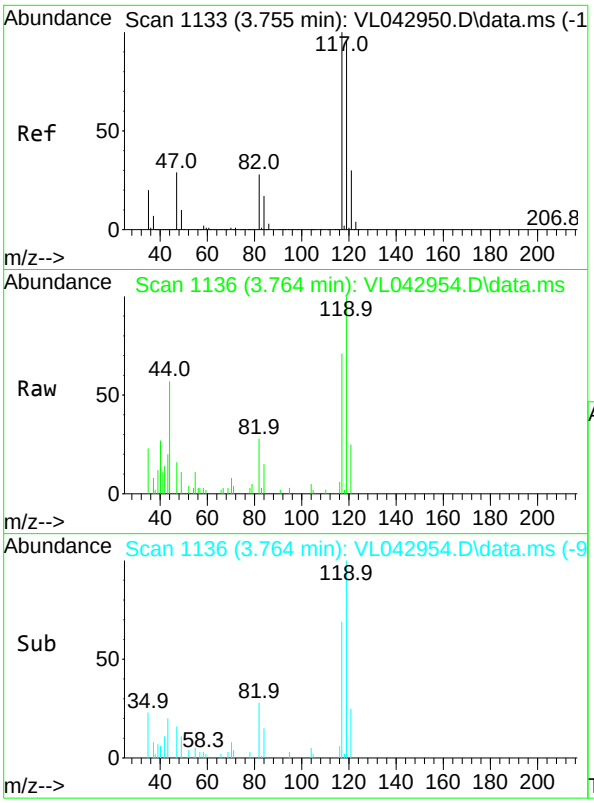


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:114 Resp: 498673

Ion	Ratio	Lower	Upper
114	100		
63	24.8	19.4	29.2
88	17.5	14.2	21.2

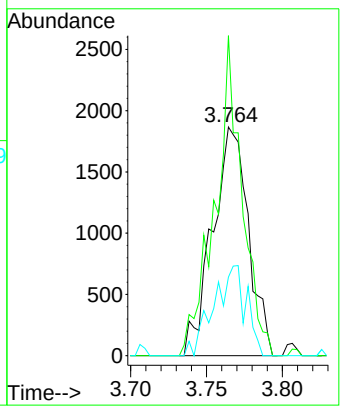




#35
Carbon Tetrachloride
Concen: 0.096 ppbv m
RT: 3.764 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:117 Resp: 307

Ion	Ratio	Lower	Upper
117	100		
119	139.9	76.9	115.3#
121	34.3	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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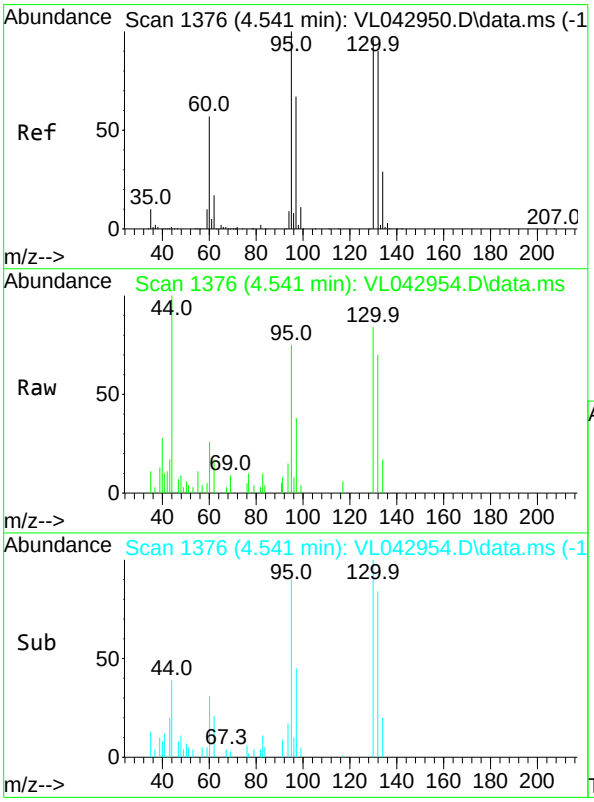
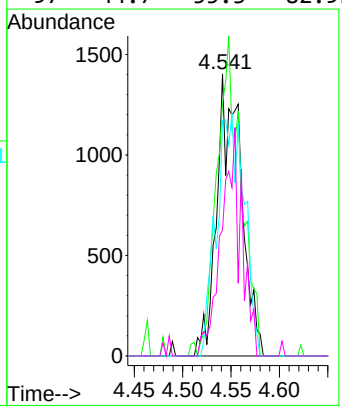
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

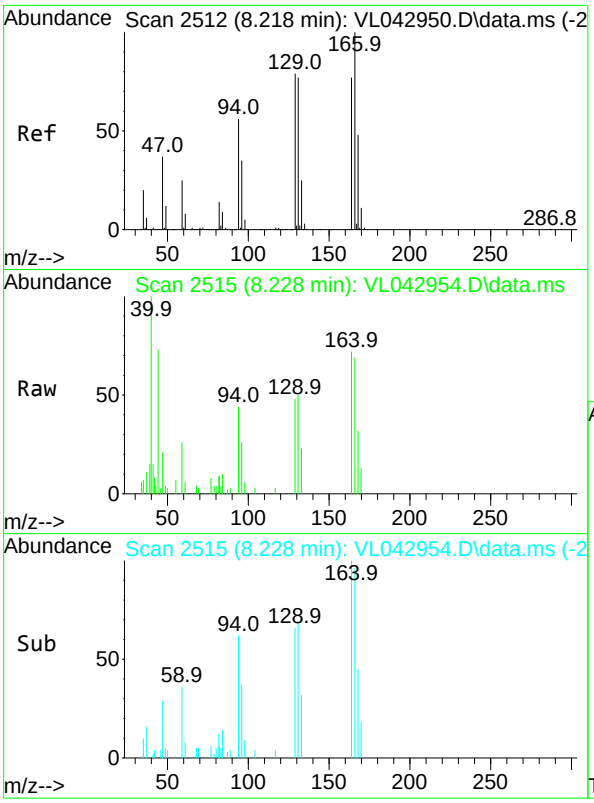


#38
Trichloroethene
Concen: 0.106 ppbv m
RT: 4.541 min Scan# 1376
Delta R.T. -0.000 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:130 Resp: 2470

Ion	Ratio	Lower	Upper
130	100		
95	89.6	83.0	124.4
132	83.6	74.6	112.0
97	44.7	55.3	82.9#

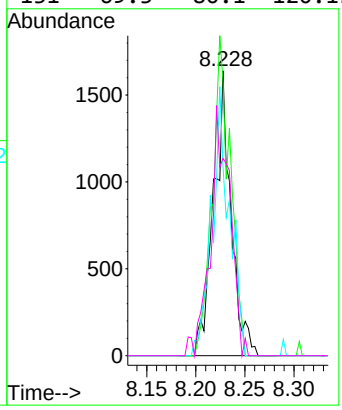




#52
Tetrachloroethene
Concen: 0.111 ppbv m
RT: 8.228 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:164 Resp: 201

Ion	Ratio	Lower	Upper
164	100		
166	96.3	103.5	155.3#
129	66.4	82.2	123.4#
131	69.3	80.1	120.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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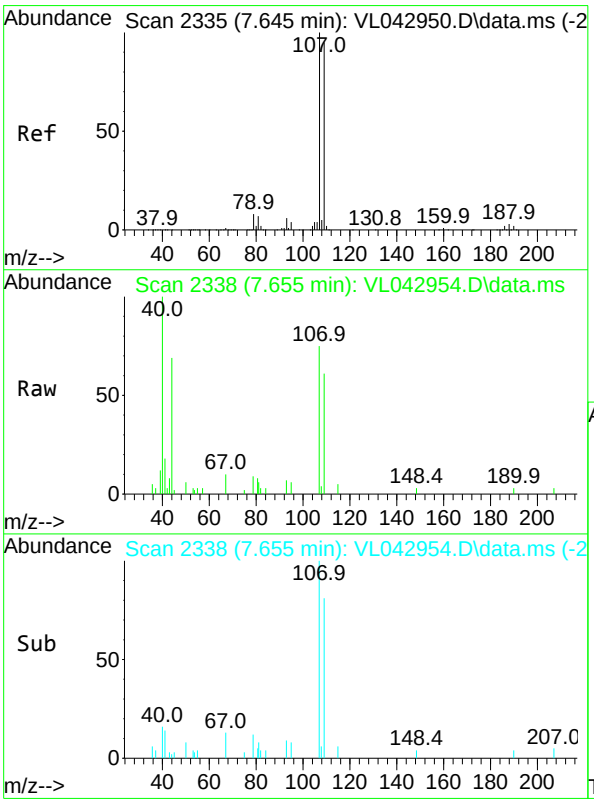
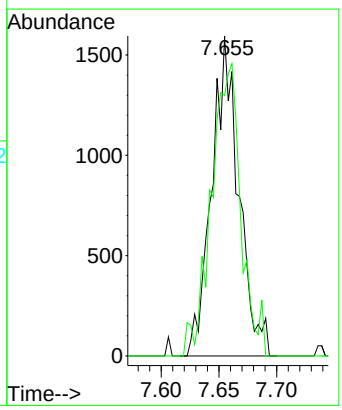
Supervised By :Mahesh Dadoda 09/24/2025

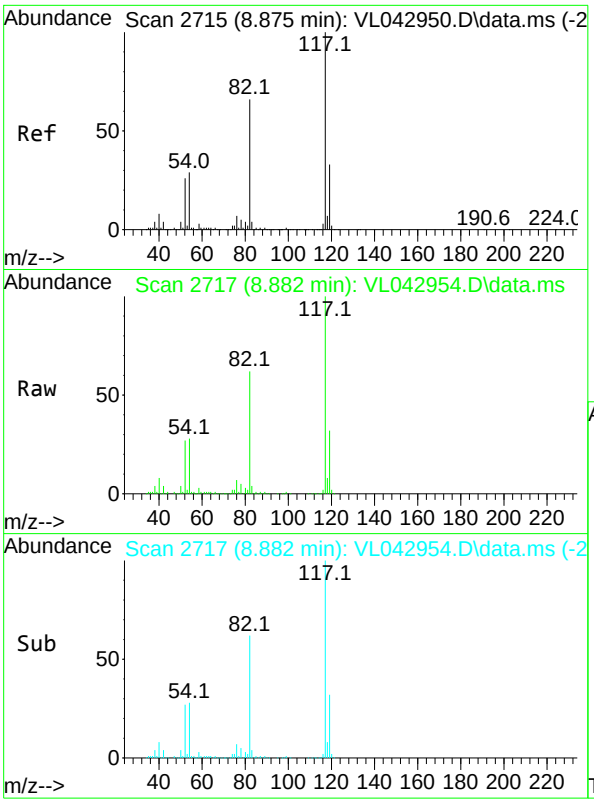


#54
1,2-Dibromoethane
Concen: 0.102 ppbv m
RT: 7.655 min Scan# 2338
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:107 Resp: 2595

Ion	Ratio	Lower	Upper
107	100		
109	81.4	75.8	113.8

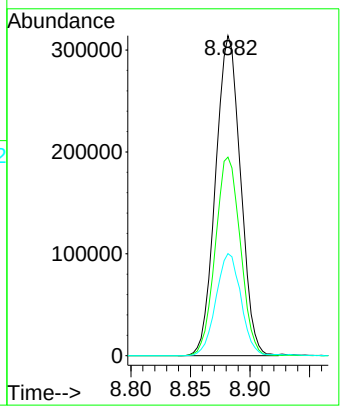




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:117 Resp: 45717

Ion	Ratio	Lower	Upper
117	100		
82	62.3	52.8	79.2
119	32.3	26.5	39.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 09/23/2025
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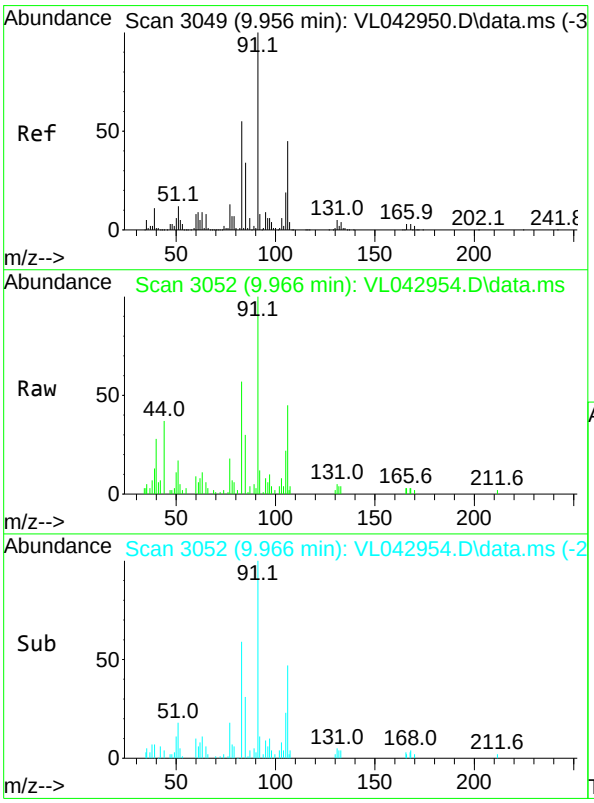
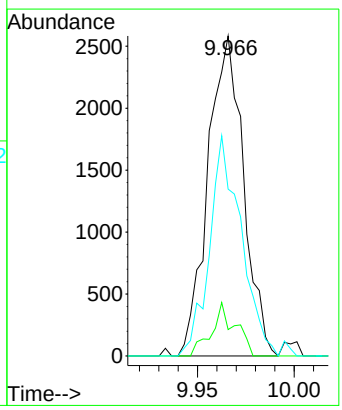
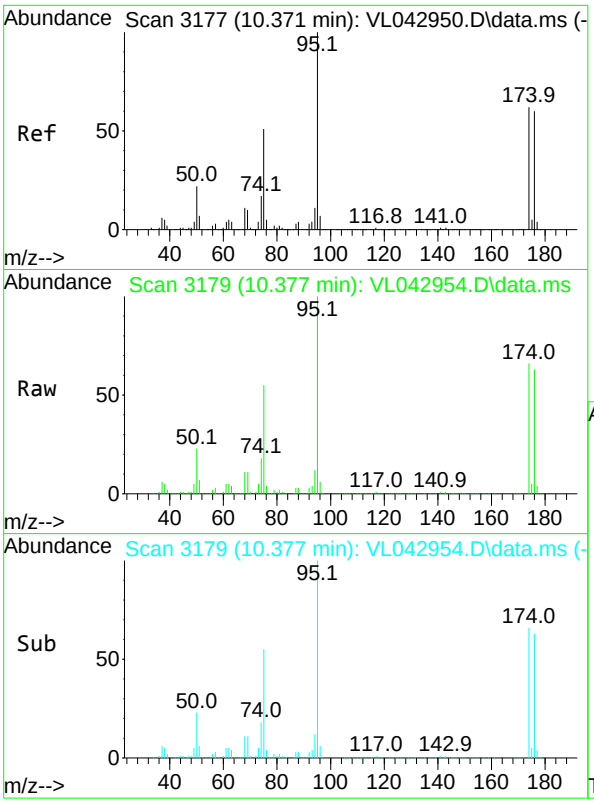


#63
1,1,2,2-Tetrachloroethane
Concen: 0.106 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 83 Resp: 3301

Ion	Ratio	Lower	Upper
83	100		
131	11.1	4.8	14.4
85	62.2	32.2	96.6

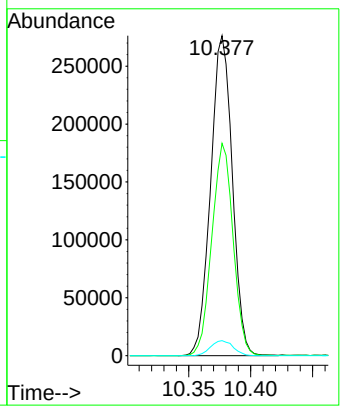




#68
1-Bromo-4-Fluorobenzene
Concen: 9.881 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 95 Resp: 33719

Ion	Ratio	Lower	Upper
95	100		
174	65.1	51.4	77.2
175	4.9	4.0	6.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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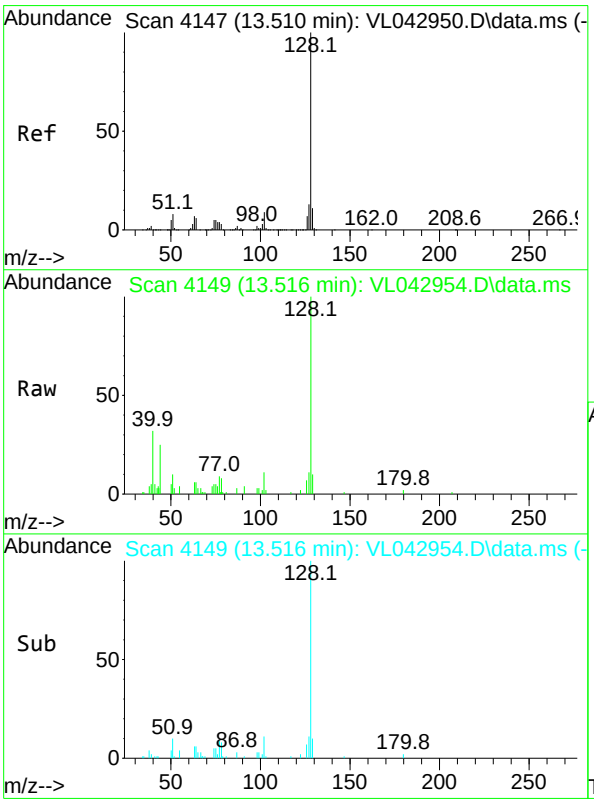
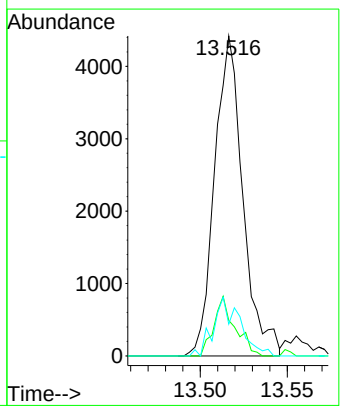
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#79
Naphthalene
Concen: 0.085 ppbv m
RT: 13.516 min Scan# 4149
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:128 Resp: 4997

Ion	Ratio	Lower	Upper
128	100		
127	11.1	10.6	15.8
129	10.0	9.0	13.6



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042955.D
Acq On : 22 Sep 2025 12:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:13:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	163615	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	504423	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	454013	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	334002	9.855	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.600%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.580	62	358	0.040	ppbv	# 53
32) 1,1,1-Trichloroethane	3.373	97	1337m	0.038	ppbv	
35) Carbon Tetrachloride	3.761	117	1110m	0.034	ppbv	
38) Trichloroethene	4.551	130	797m	0.034	ppbv	
52) Tetrachloroethene	8.231	164	660m	0.036	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.959	83	1098m	0.036	ppbv	

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

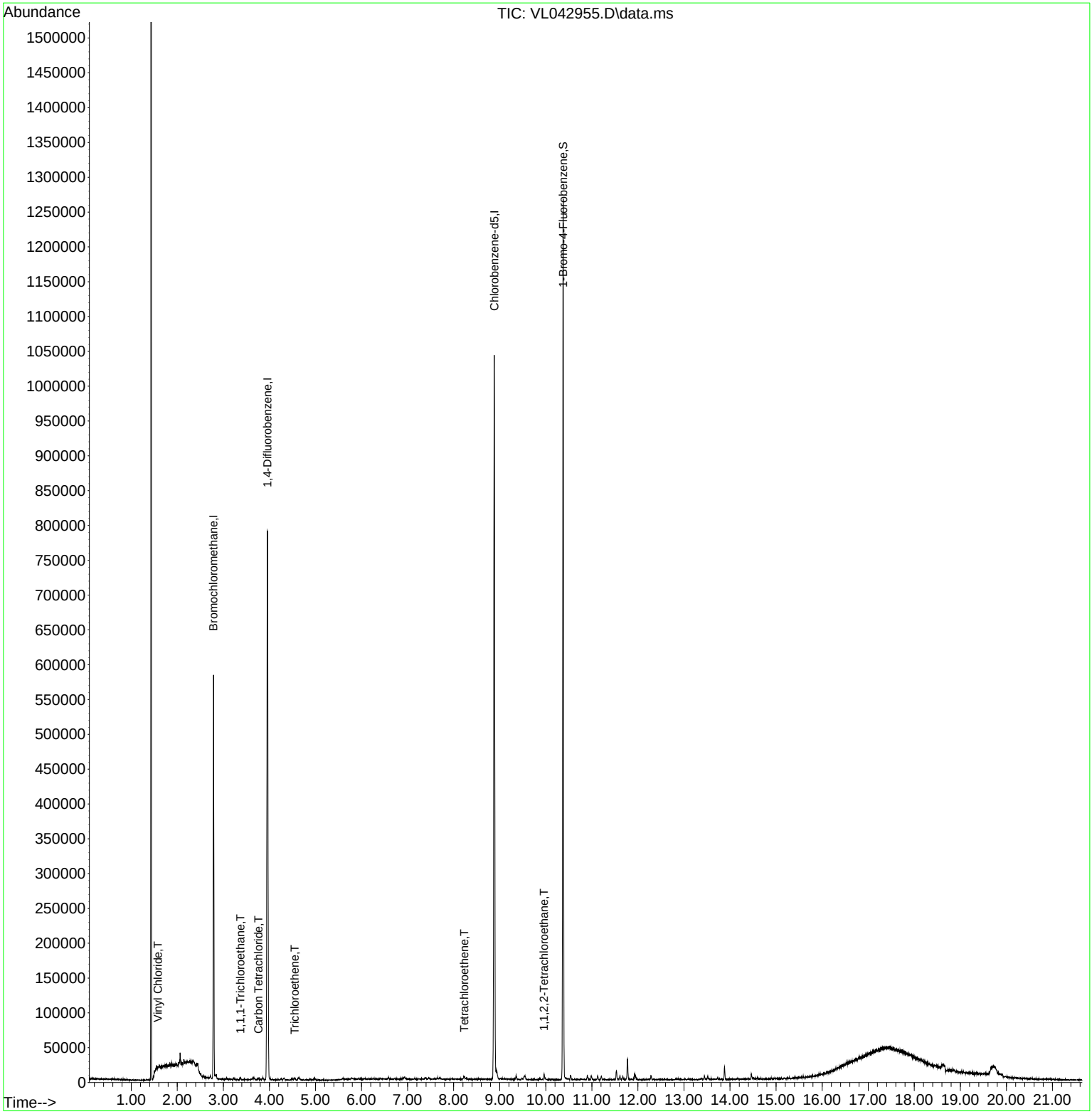
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042955.D
Acq On : 22 Sep 2025 12:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

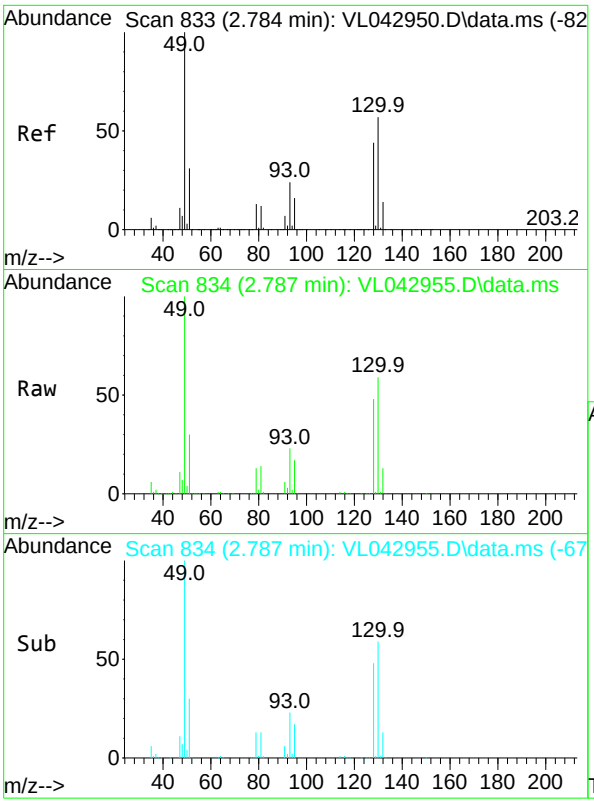
Quant Time: Sep 23 02:13:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

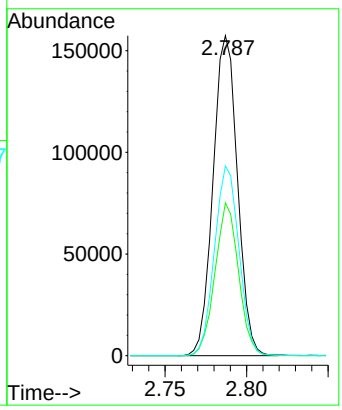




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 49 Resp: 16361

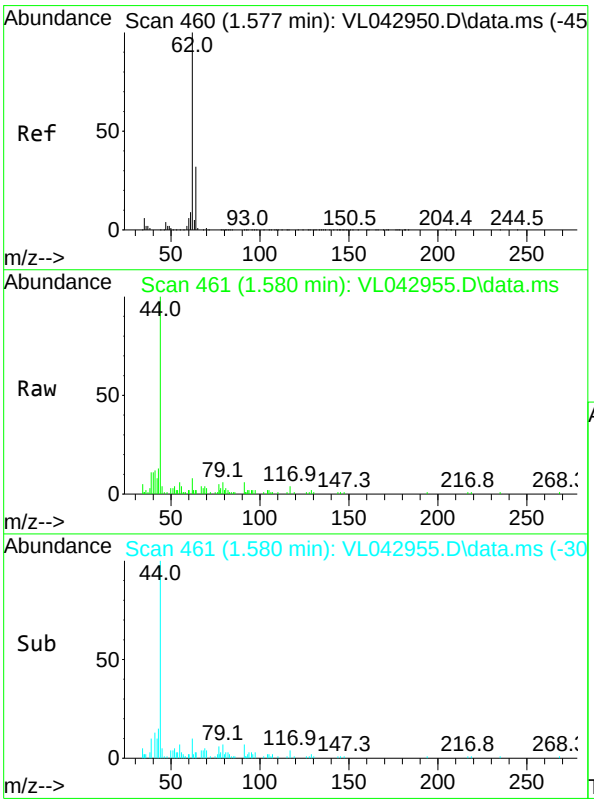
Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	59.5	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

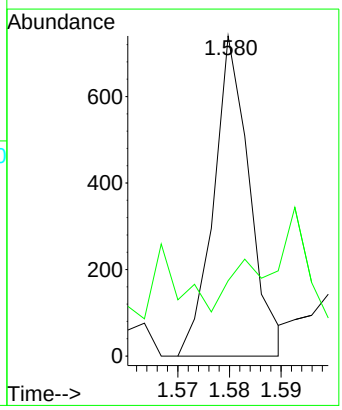
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

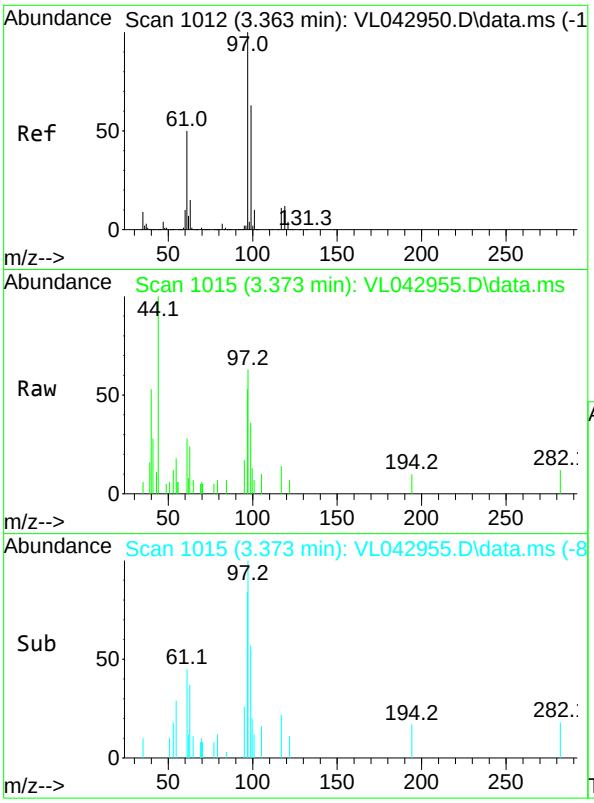


#5
Vinyl Chloride
Concen: 0.040 ppbv
RT: 1.580 min Scan# 461
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 62 Resp: 358

Ion	Ratio	Lower	Upper
62	100		
64	5.9	25.4	38.2#

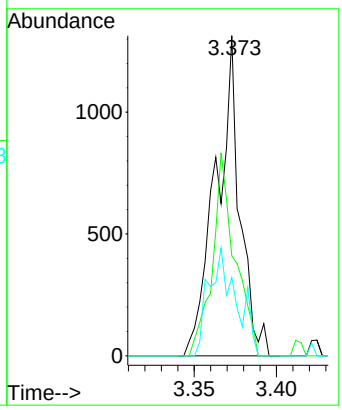




#32
1,1,1-Trichloroethane
Concen: 0.038 ppbv m
RT: 3.373 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 97 Resp: 133

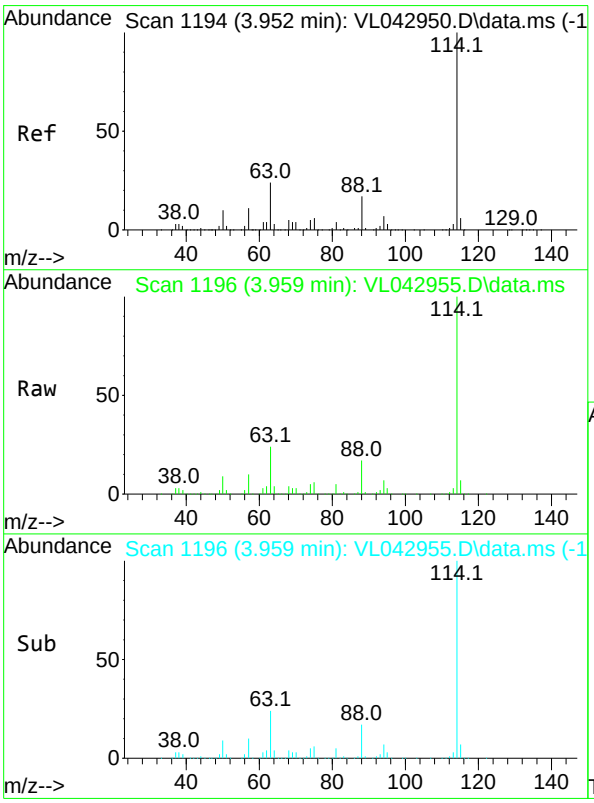
Ion	Ratio	Lower	Upper
97	100		
99	59.4	51.1	76.7
61	38.4	39.8	59.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

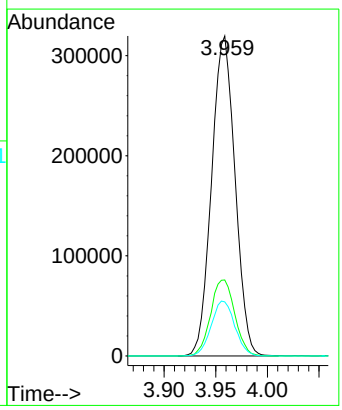
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

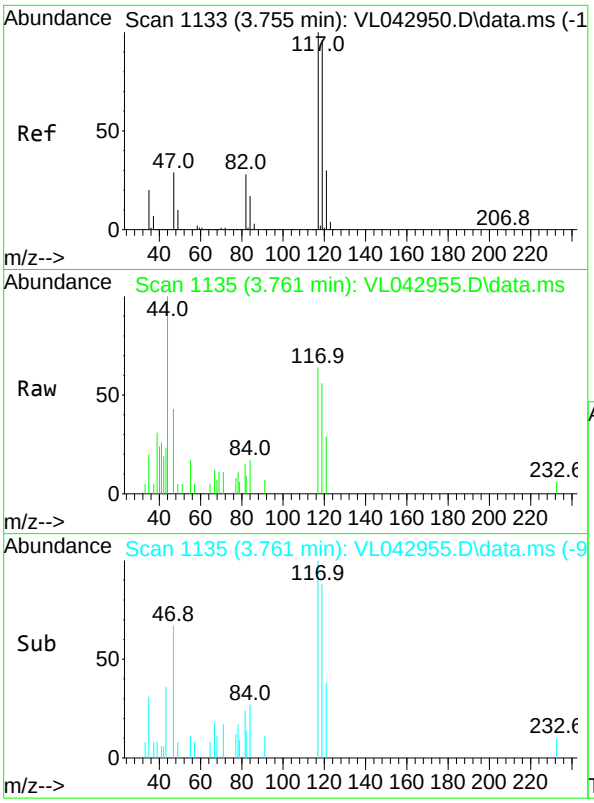


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:114 Resp: 504423

Ion	Ratio	Lower	Upper
114	100		
63	24.5	19.4	29.2
88	17.3	14.2	21.2

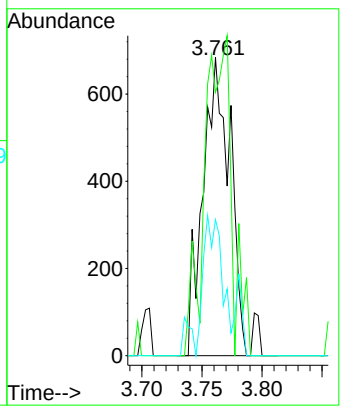




#35
Carbon Tetrachloride
Concen: 0.034 ppbv m
RT: 3.761 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:117 Resp: 111

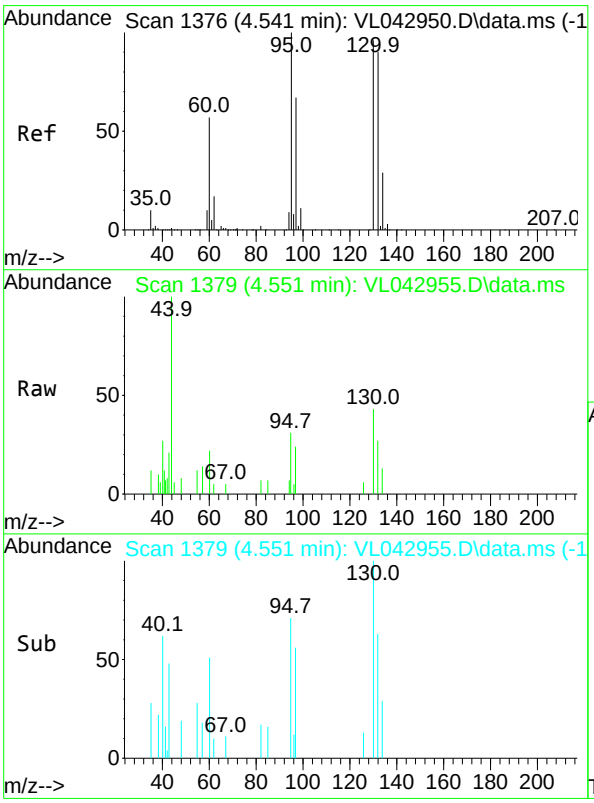
Ion	Ratio	Lower	Upper
117	100		
119	88.3	76.9	115.3
121	45.6	23.7	35.5#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

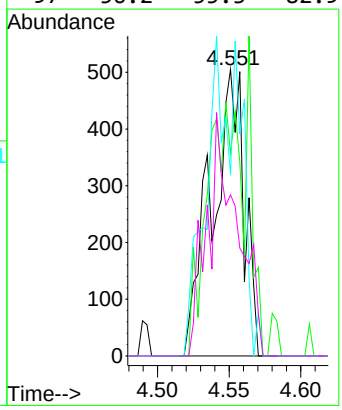
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

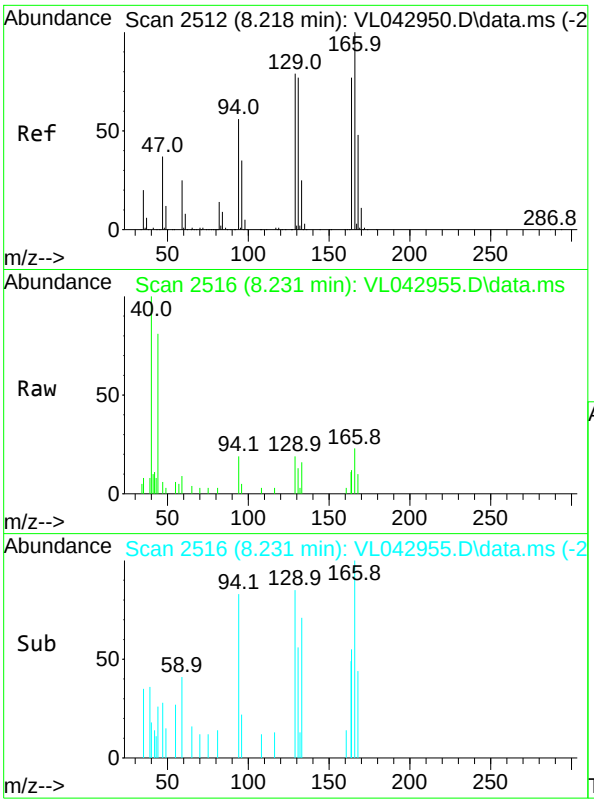


#38
Trichloroethene
Concen: 0.034 ppbv m
RT: 4.551 min Scan# 1379
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:130 Resp: 797

Ion	Ratio	Lower	Upper
130	100		
95	70.7	83.0	124.4#
132	63.4	74.6	112.0#
97	56.2	55.3	82.9

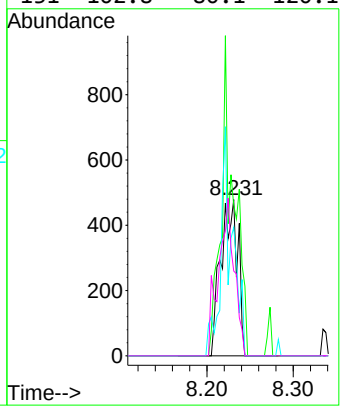




#52
Tetrachloroethene
Concen: 0.036 ppbv m
RT: 8.231 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:164 Resp: 66

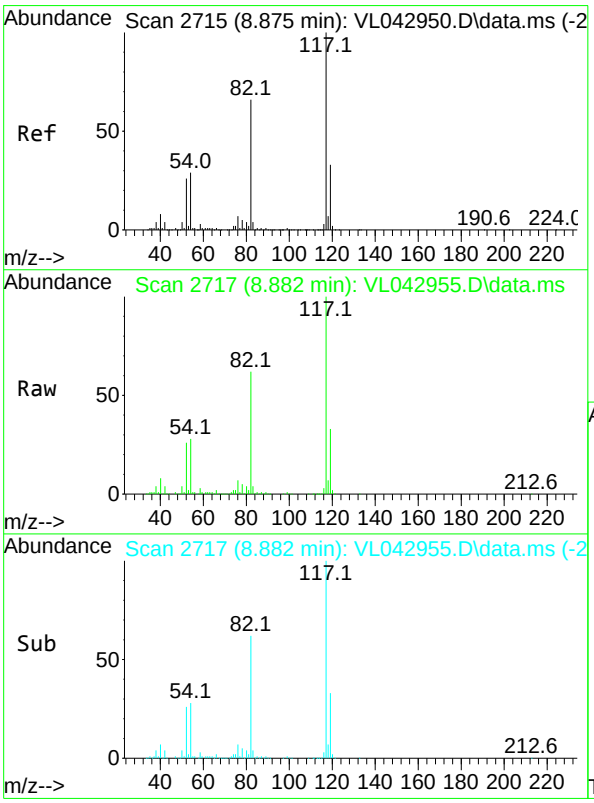
Ion	Ratio	Lower	Upper
164	100		
166	182.6	103.5	155.3#
129	155.3	82.2	123.4#
131	102.8	80.1	120.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

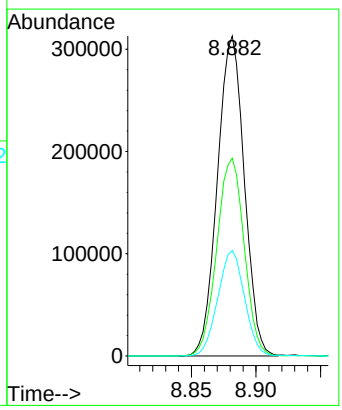
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

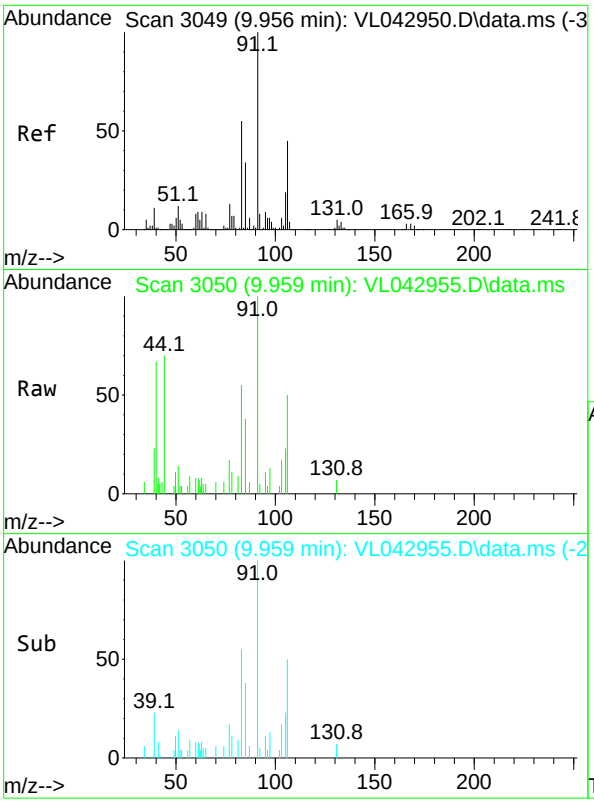


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:117 Resp: 454013

Ion	Ratio	Lower	Upper
117	100		
82	62.9	52.8	79.2
119	32.8	26.5	39.7

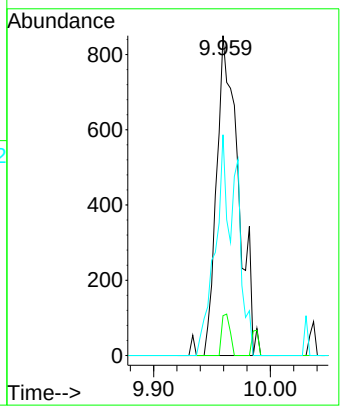




#63
1,1,2-Tetrachloroethane
Concen: 0.036 ppbv m
RT: 9.959 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 83 Resp: 109

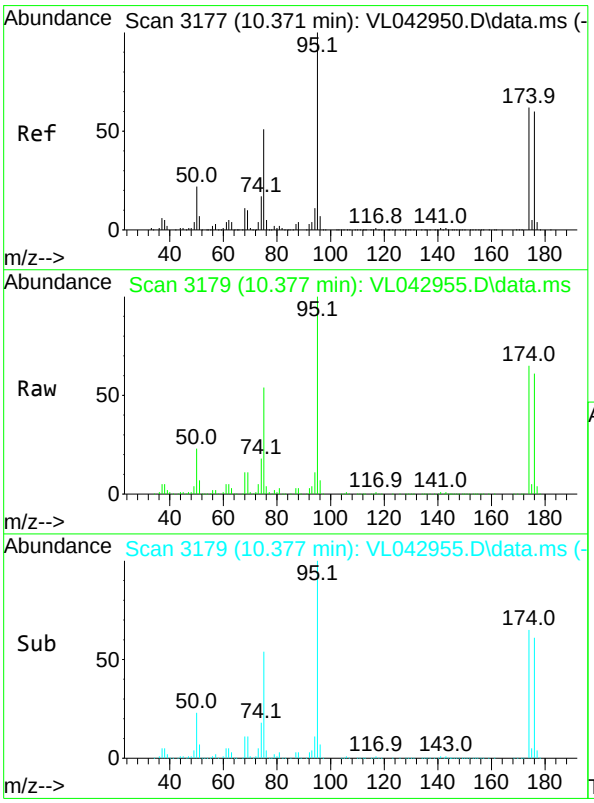
Ion	Ratio	Lower	Upper
83	100		
131	4.9	4.8	14.4
85	67.4	32.2	96.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

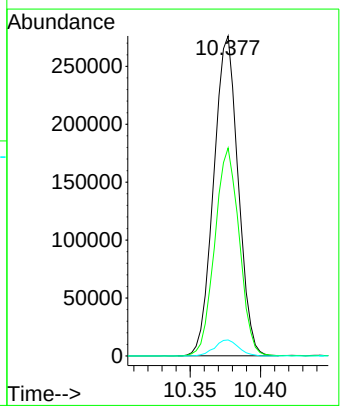
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 9.855 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 95 Resp: 334002

Ion	Ratio	Lower	Upper
95	100		
174	65.1	51.4	77.2
175	4.9	4.0	6.0



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042956.D
Acq On : 22 Sep 2025 13:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:14:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	162846	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	494779	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	458256	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	343752	10.049	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	300946	13.740	ppbv	97
3) Chlorodifluoromethane	1.476	51	364959	13.369	ppbv	100
4) Chloromethane	1.534	50	133240	13.439	ppbv	99
5) Vinyl Chloride	1.583	62	115257	12.860	ppbv	100
6) Bromomethane	1.670	94	40861	12.925	ppbv	94
7) Chloroethane	1.706	64	46081	13.241	ppbv	99
8) Dichlorotetrafluoroethane	1.557	85	255815	13.682	ppbv	98
9) Propene	1.486	41	154069	12.973	ppbv	94
10) Heptane	4.985	43	424500	13.327	ppbv	98
11) Trichlorofluoromethane	1.881	101	295479	13.991	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.143	101	237615	13.894	ppbv	99
13) Ethanol	1.722	45	11502	10.105	ppbv	99
14) Bromoethene	1.784	108	88375	13.668	ppbv	100
15) Acetone	1.835	43	244861	11.545	ppbv	97
16) 1,3-Butadiene	1.612	39	126670	12.661	ppbv	97
17) tert-Butyl alcohol	2.039	59	308347	13.255	ppbv	99
18) 1,1-Dichloroethene	2.036	96	109211	13.796	ppbv	99
19) Isopropyl Alcohol	1.887	45	162952	12.780	ppbv	100
20) Methylene Chloride	2.062	84	92708	14.996	ppbv	95
21) Allyl Chloride	2.098	41	204552	13.848	ppbv	100
22) trans-1,2-Dichloroethene	2.343	96	121815	13.542	ppbv	98
23) Vinyl Acetate	2.463	43	419251	13.837	ppbv	99
24) 1,1-Dichloroethane	2.411	63	243229	13.789	ppbv	99
25) Ethyl Acetate	2.835	43	724418	13.514	ppbv	99
26) Hexane	2.829	57	321710	13.166	ppbv	99
27) Carbon Disulfide	2.153	76	300931	13.731	ppbv	97
28) Methyl tert-Butyl Ether	2.444	73	193915	15.267	ppbv	94
29) Chloroform	2.852	83	440772	13.796	ppbv	98
30) Cyclohexane	3.858	84	281932	13.800	ppbv	98
31) cis-1,2-Dichloroethene	2.722	61	317456	13.869	ppbv	98
32) 1,1,1-Trichloroethane	3.369	97	456335	13.178	ppbv	99
34) 2-Butanone	2.557	43	469872	13.551	ppbv	99
35) Carbon Tetrachloride	3.764	117	457985	14.385	ppbv	97
36) Benzene	3.658	78	654205	14.080	ppbv	99
37) 1,2-Dichloroethane	3.221	62	350841	14.358	ppbv	100
38) Trichloroethene	4.548	130	310602	13.450	ppbv	97
39) 1,2-Dichloropropane	4.315	63	241323	14.218	ppbv	95
40) 1,4-Dioxane	4.580	88	104884	13.306	ppbv #	98
41) Tetrahydrofuran	3.052	42	276157	13.855	ppbv	99
42) Bromodichloromethane	4.489	83	495091	14.544	ppbv	98
43) Methyl Methacrylate	4.881	69	263659	13.979	ppbv	99
44) 2,2,4-Trimethylpentane	4.641	57	1107180	13.791	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	298019	14.694	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042956.D
Acq On : 22 Sep 2025 13:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:14:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	371770	14.389	ppbv	99
47) 1,1,2-Trichloroethane	6.583	97	249453	13.909	ppbv	96
48) Dibromochloromethane	7.389	129	421755	14.709	ppbv	99
49) Bromoform	9.487	173	367120	14.719	ppbv	99
50) 4-Methyl-2-Pentanone	5.748	43	666049	14.293	ppbv	100
51) 2-Hexanone	7.435	43	541611	14.620	ppbv	100
52) Tetrachloroethene	8.228	164	233980	13.015	ppbv	99
53) Toluene	6.936	91	765216	13.915	ppbv	98
54) 1,2-Dibromoethane	7.652	107	359750	14.261	ppbv	99
56) 1,1,1,2-Tetrachloroethane	8.927	131	306952	13.994	ppbv	99
57) Chlorobenzene	8.924	112	565065	13.507	ppbv	98
58) Ethyl Benzene	9.357	91	1052303	13.985	ppbv	99
59) m/p-Xylene	9.555	91	1636030m	27.557	ppbv	
60) o-Xylene	9.966	91	808098	13.629	ppbv	100
61) Styrene	9.872	104	401899	14.330	ppbv	99
62) Isopropylbenzene	10.542	105	1198767	13.564	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.966	83	403038	12.932	ppbv	100
64) n-propylbenzene	10.992	120	318541	13.793	ppbv	97
65) tert-Butylbenzene	11.532	119	1033382	13.146	ppbv	100
66) Benzyl Chloride	11.616	91	113549	13.767	ppbv	99
67) sec-Butylbenzene	11.769	105	1454158	13.276	ppbv	99
69) p-Isopropyltoluene	11.927	119	1228773	13.280	ppbv	100
70) n-Butylbenzene	12.283	91	1239042	13.716	ppbv	99
71) 2-Chlorotoluene	10.904	91	916456	13.733	ppbv	100
72) 4-Ethyltoluene	11.128	105	1014567	13.662	ppbv	99
73) 1,3,5-Trimethylbenzene	11.205	105	845958	14.046	ppbv	98
74) 1,2,4-Trimethylbenzene	11.539	105	889339	13.372	ppbv	97
75) 1,3-Dichlorobenzene	11.610	146	568597	13.785	ppbv	100
76) 1,4-Dichlorobenzene	11.675	146	570104	13.916	ppbv	99
77) 1,2-Dichlorobenzene	11.950	146	536286	13.665	ppbv	100
78) Hexachloro-1,3-Butadiene	13.882	225	377435	12.296	ppbv	99
79) Naphthalene	13.513	128	920123	15.645	ppbv	100
80) Naphthalene,2-methyl-	14.458	142	277792	15.290	ppbv	99
81) 1,2,4-Trichlorobenzene	13.442	180	473767	15.066	ppbv	99

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

Quantitation Report (QT Reviewed)

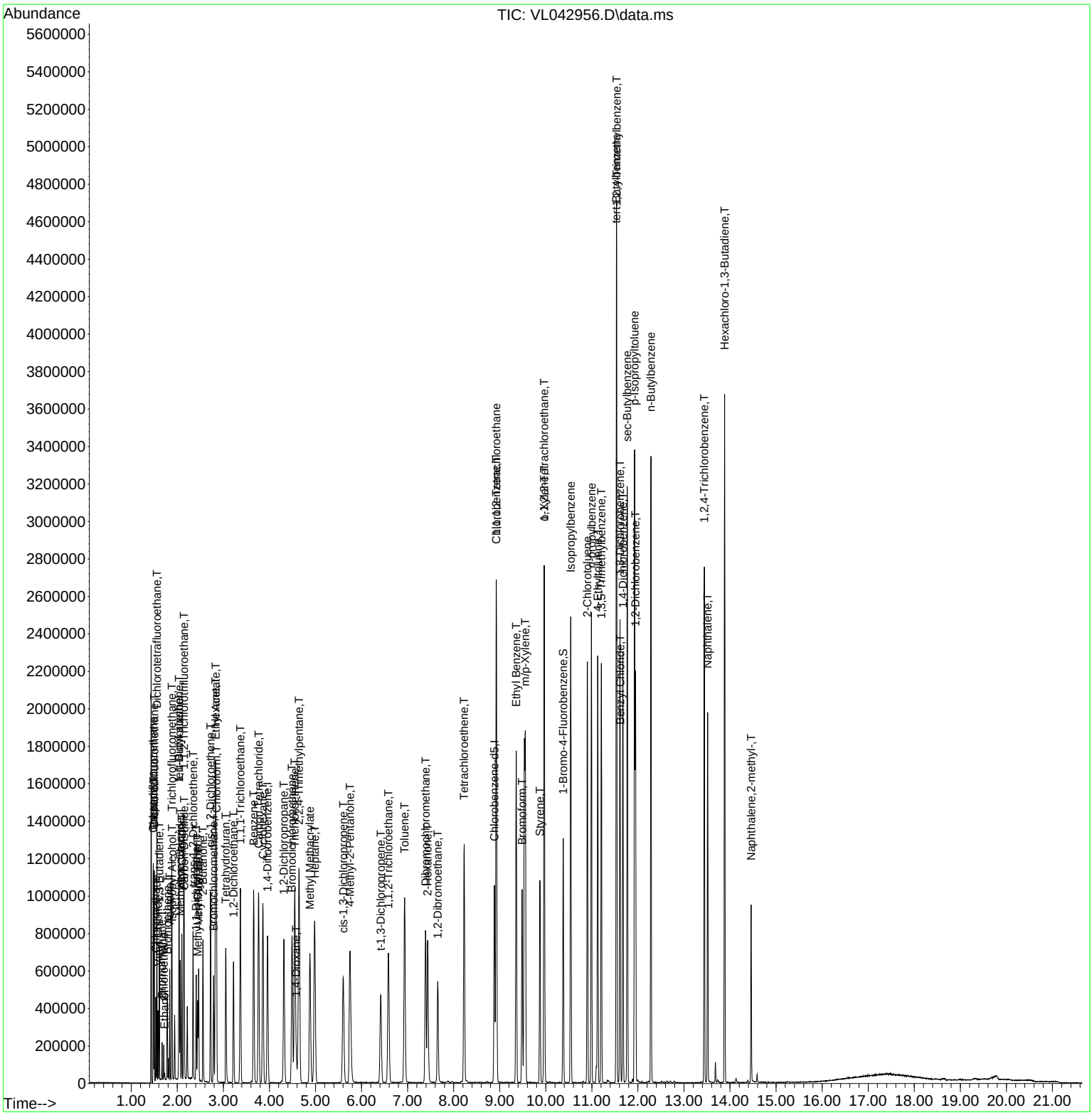
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042956.D
Acq On : 22 Sep 2025 13:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

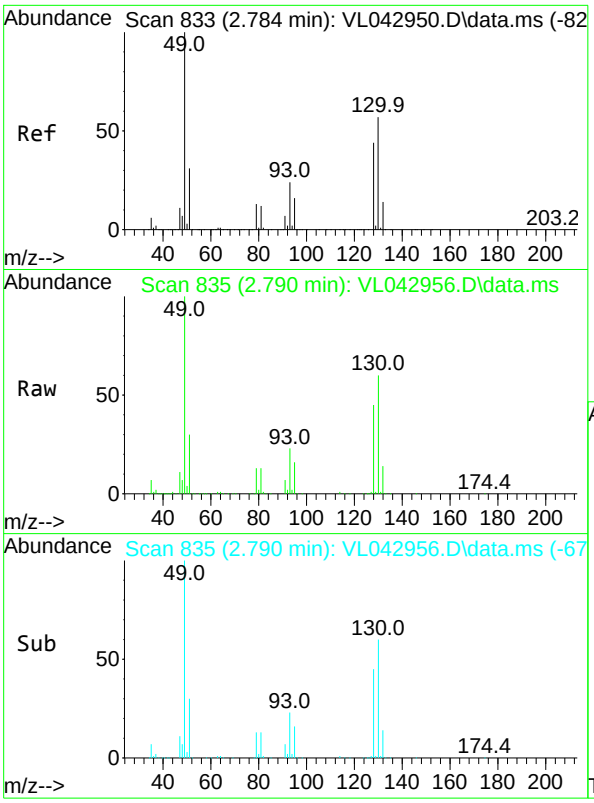
Quant Time: Sep 23 02:14:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

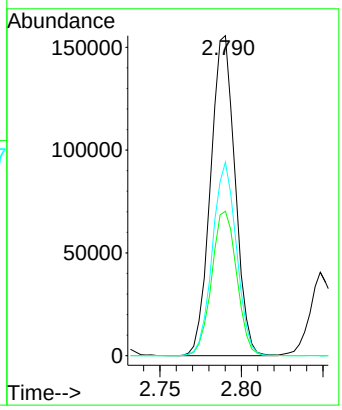




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 49 Resp: 16284

Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.9	68.8
130	59.1	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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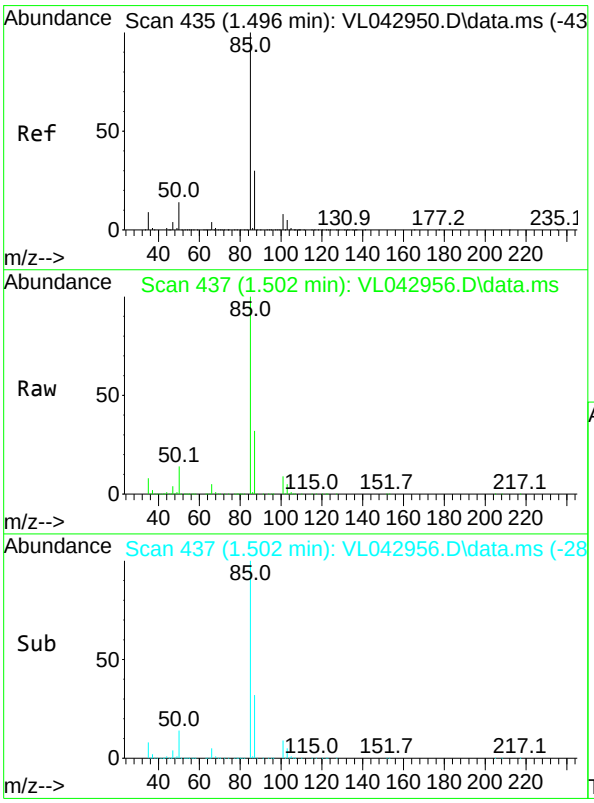
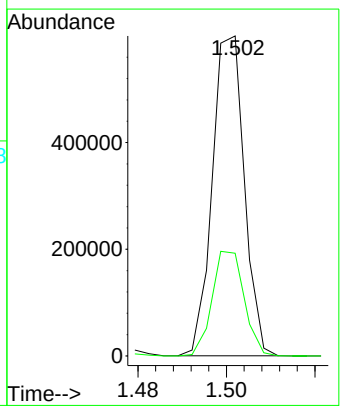
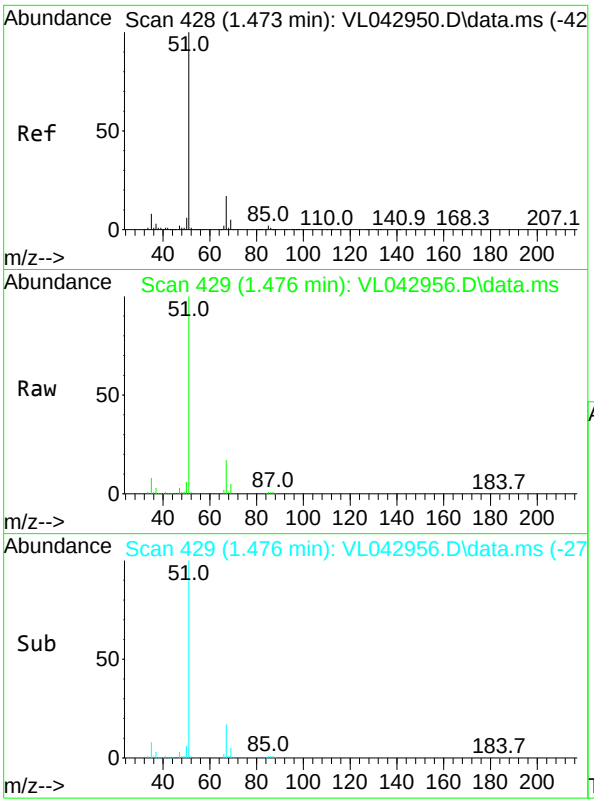


#2
Dichlorodifluoromethane
Concen: 13.740 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 85 Resp: 300946

Ion	Ratio	Lower	Upper
85	100		
87	32.1	24.3	36.5

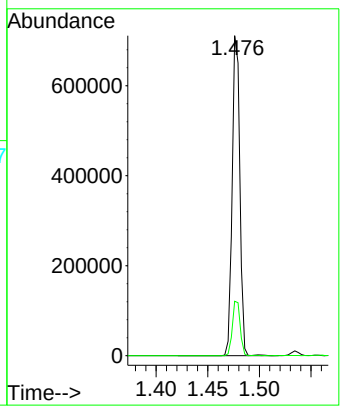




#3
Chlorodifluoromethane
Concen: 13.369 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 51 Resp: 36495

Ion	Ratio	Lower	Upper
51	100		
67	17.5	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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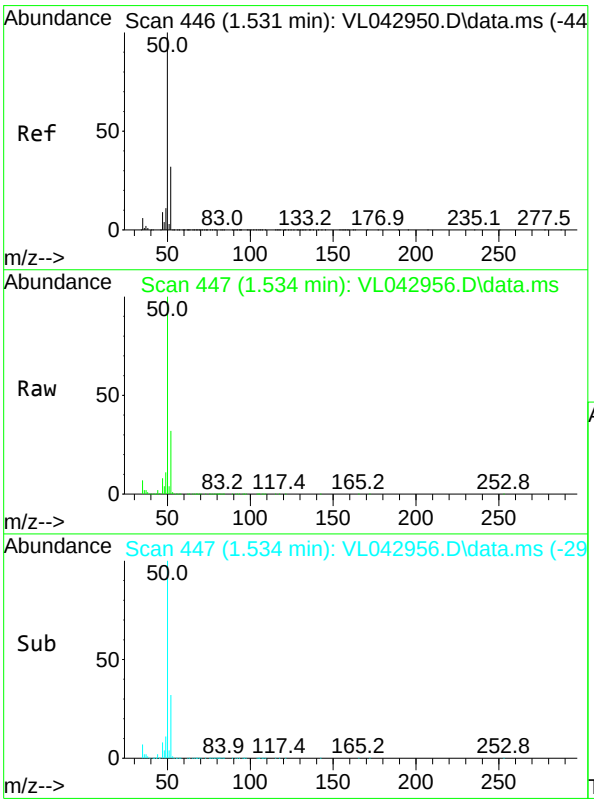
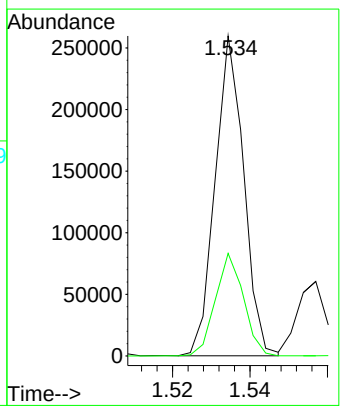
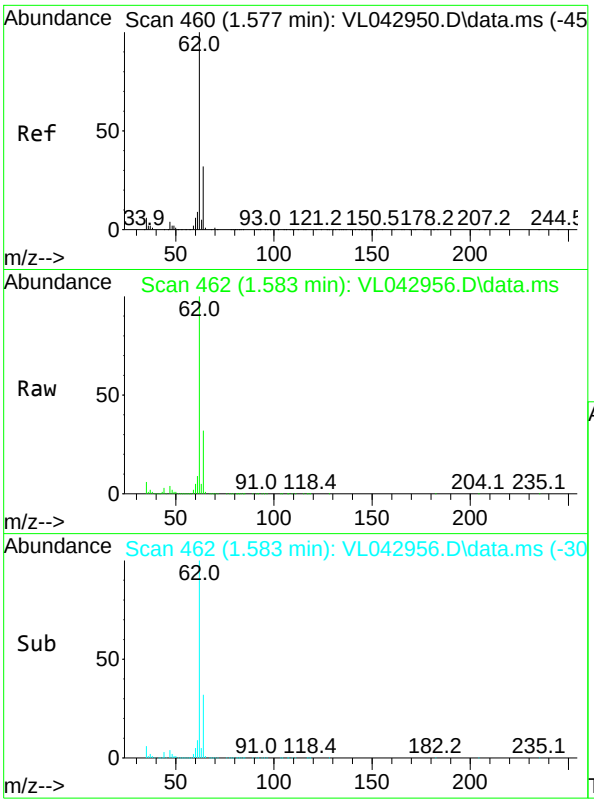


#4
Chloromethane
Concen: 13.439 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 50 Resp: 133240

Ion	Ratio	Lower	Upper
50	100		
52	32.0	25.9	38.9





#5
Vinyl Chloride
Concen: 12.860 ppbv
RT: 1.583 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 62 Resp: 11525

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.4	38.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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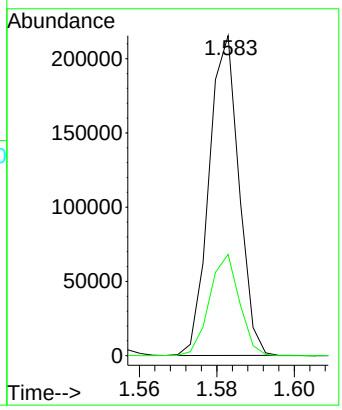
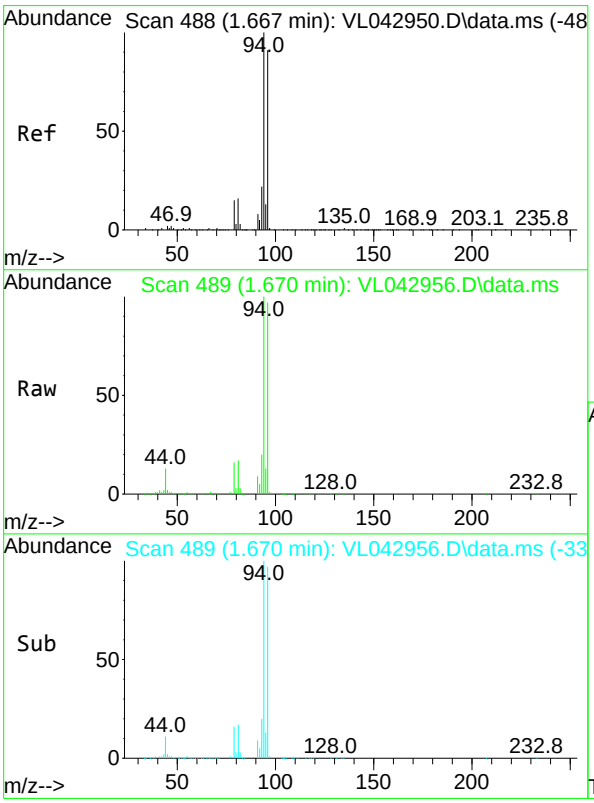
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

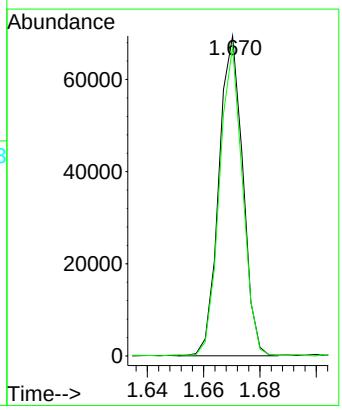


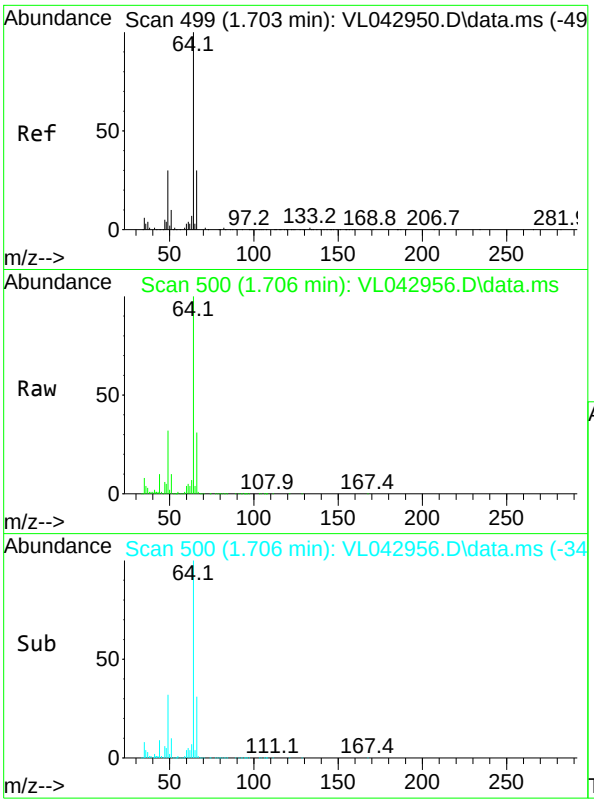


#6
Bromomethane
Concen: 12.925 ppbv
RT: 1.670 min Scan# 489
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 94 Resp: 40861

Ion	Ratio	Lower	Upper
94	100		
96	96.7	72.6	108.8

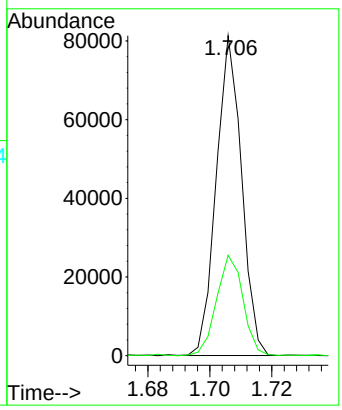




#7
Chloroethane
Concen: 13.241 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 64 Resp: 4608

Ion	Ratio	Lower	Upper
64	100		
66	31.3	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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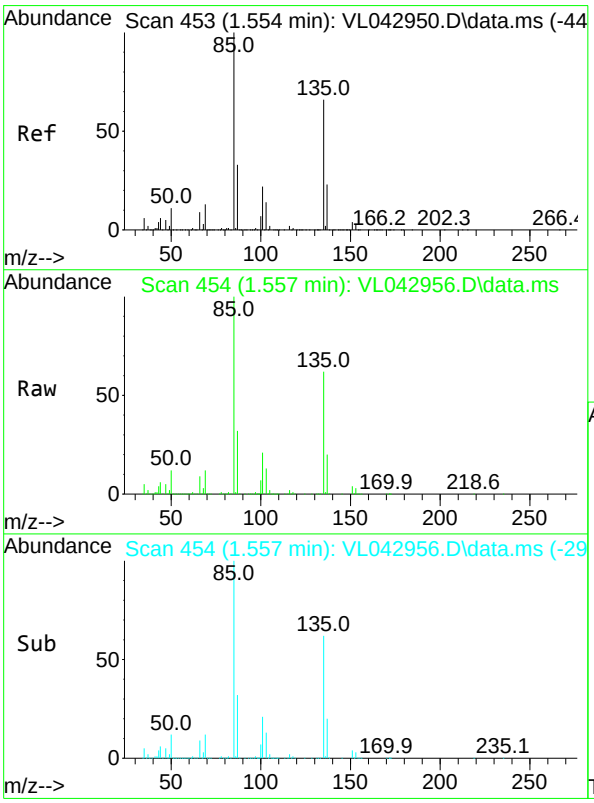
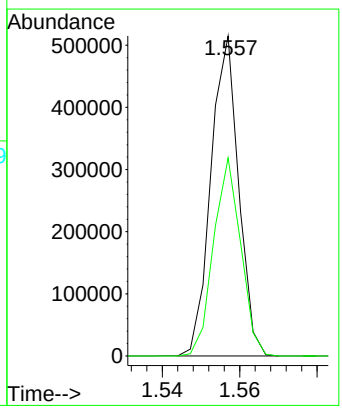
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

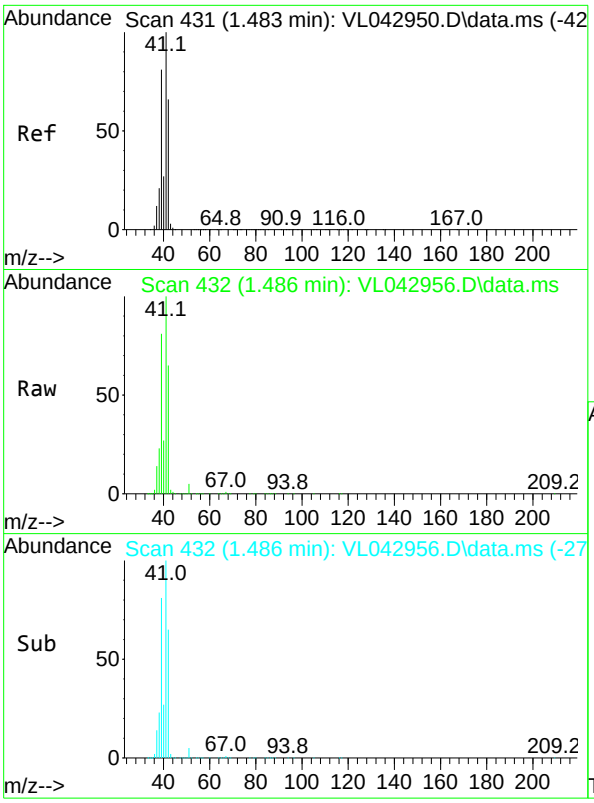


#8
Dichlorotetrafluoroethane
Concen: 13.682 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 85 Resp: 255815

Ion	Ratio	Lower	Upper
85	100		
135	60.8	49.7	74.5

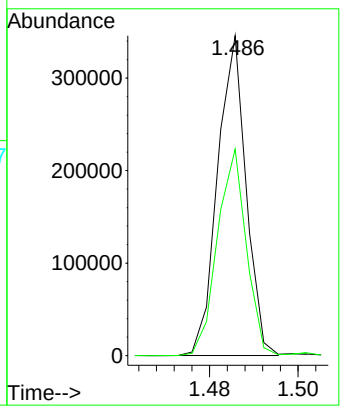




#9
Propene
Concen: 12.973 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 41 Resp: 15406

Ion	Ratio	Lower	Upper
41	100		
42	67.1	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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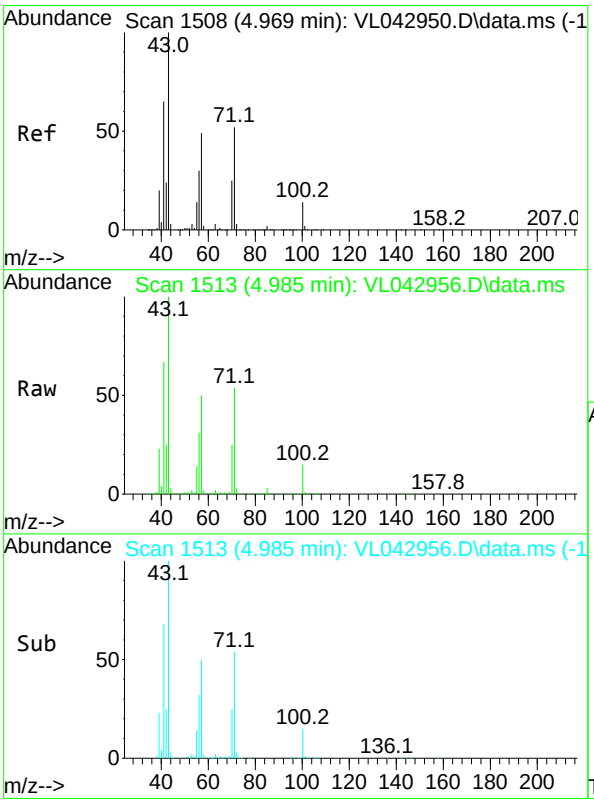
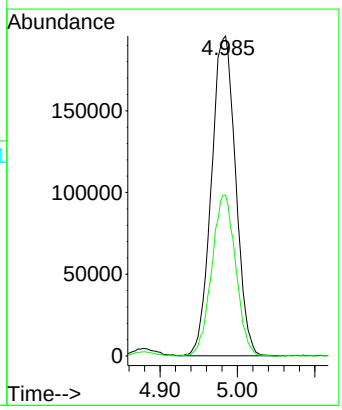
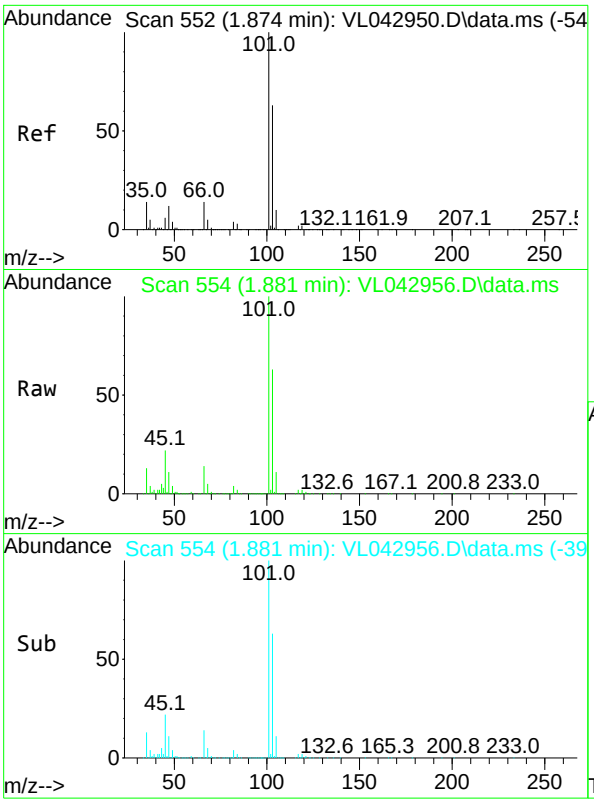


#10
Heptane
Concen: 13.327 ppbv
RT: 4.985 min Scan# 1513
Delta R.T. 0.016 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 424500

Ion	Ratio	Lower	Upper
43	100		
57	49.8	38.6	57.8

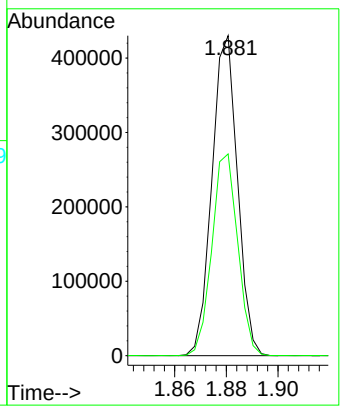




#11
Trichlorofluoromethane
Concen: 13.991 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:101 Resp: 29547

Ion	Ratio	Lower	Upper
101	100		
103	63.0	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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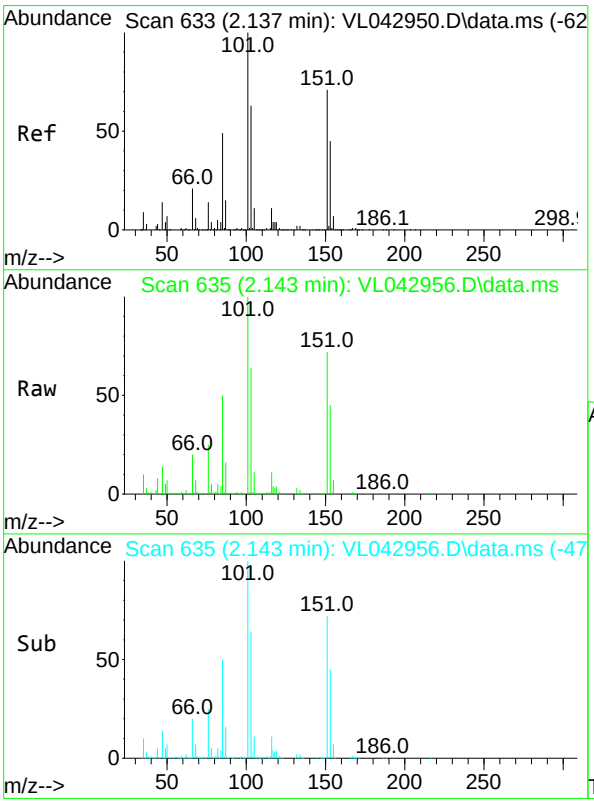
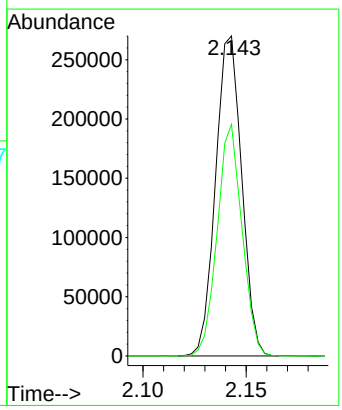
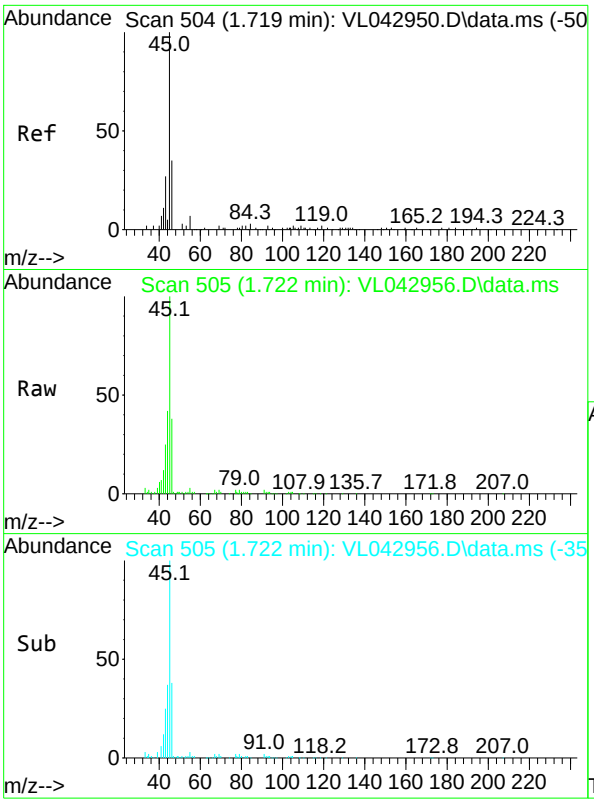


#12
1,1,2-Trichlorotrifluoroethane
Concen: 13.894 ppbv
RT: 2.143 min Scan# 635
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:101 Resp: 237615

Ion	Ratio	Lower	Upper
101	100		
151	68.7	55.7	83.5





#13
Ethanol
Concen: 10.105 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 45 Resp: 1150

Ion	Ratio	Lower	Upper
45	100		
46	39.5	16.2	64.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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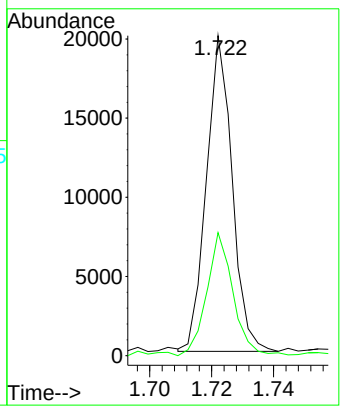
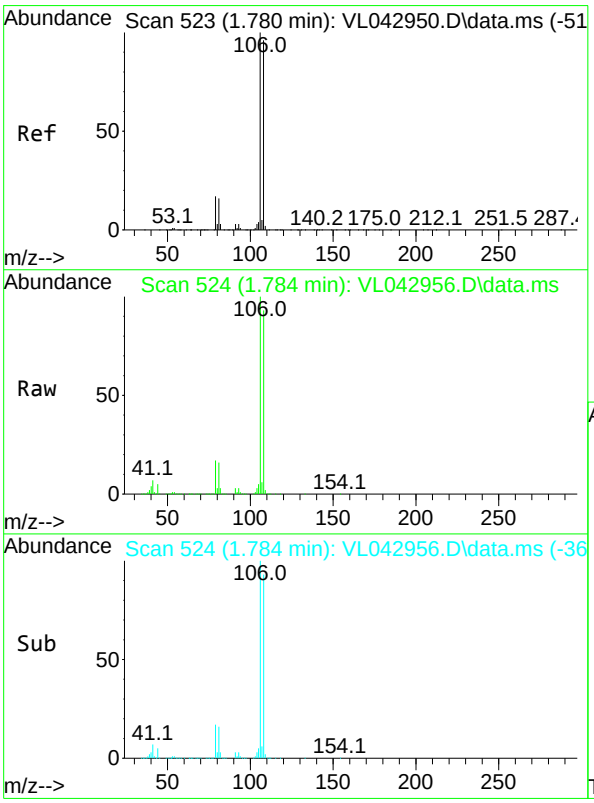
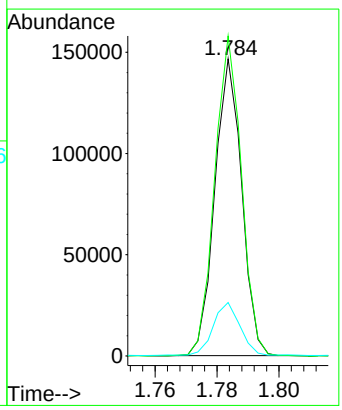


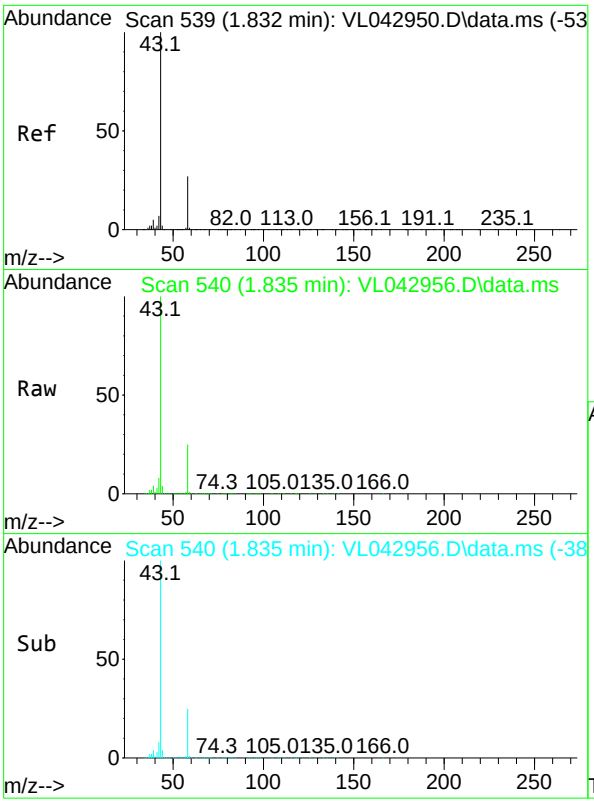


#14
Bromoethene
Concen: 13.668 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:108 Resp: 88375

Ion	Ratio	Lower	Upper
108	100		
106	107.4	86.0	129.0
79	18.1	14.2	21.2

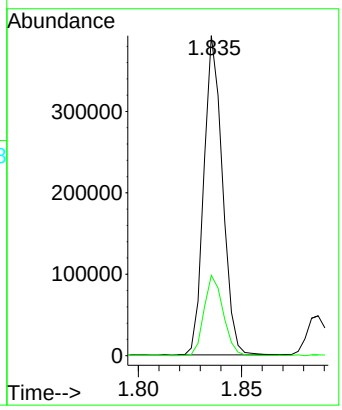




#15
Acetone
Concen: 11.545 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 24486

Ion	Ratio	Lower	Upper
43	100		
58	26.2	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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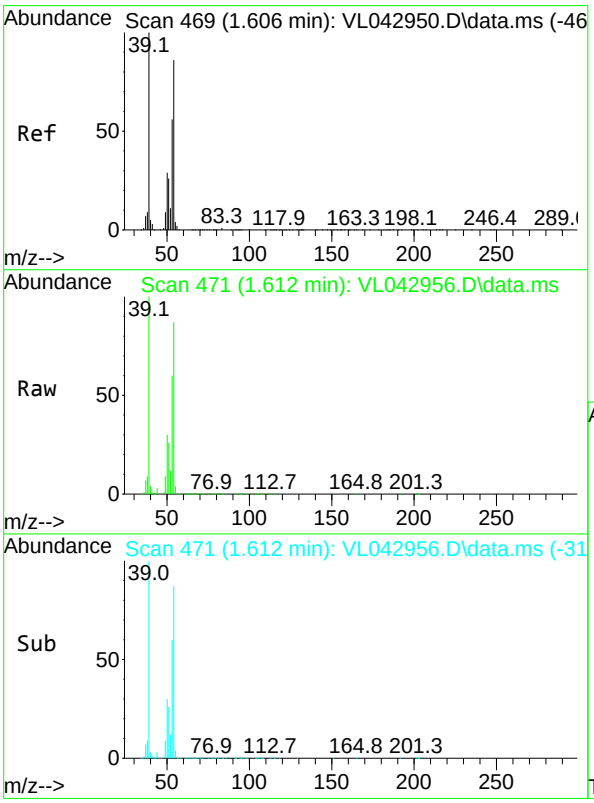
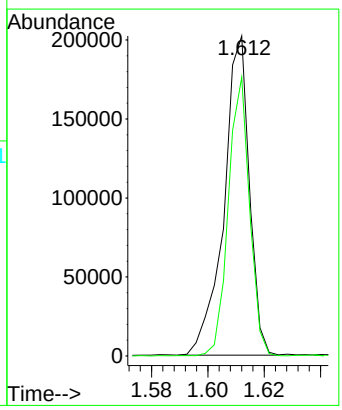
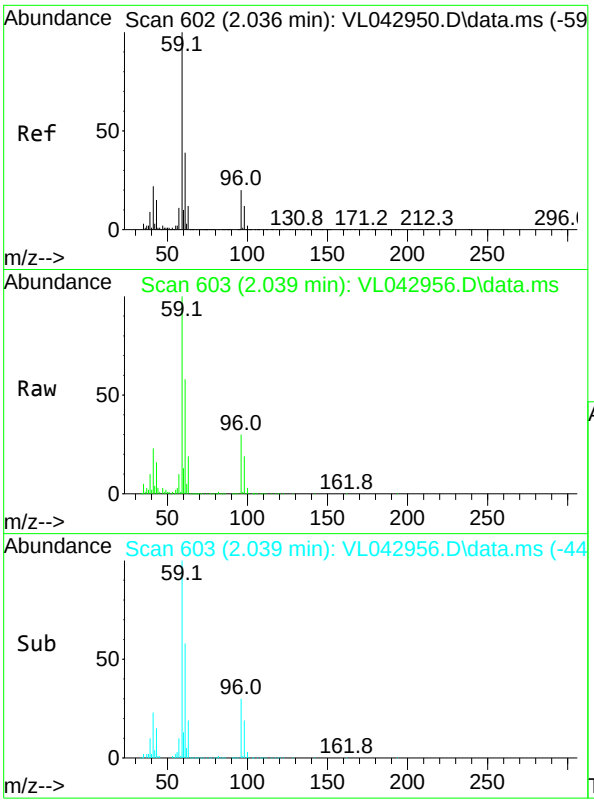


#16
1,3-Butadiene
Concen: 12.661 ppbv
RT: 1.612 min Scan# 471
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 39 Resp: 126670

Ion	Ratio	Lower	Upper
39	100		
54	73.2	60.8	91.2

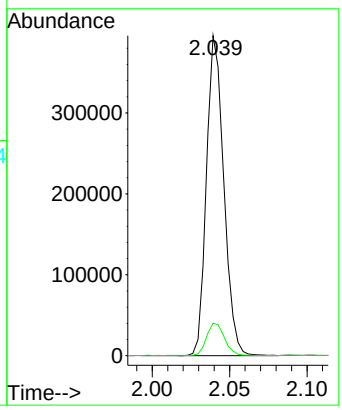




#17
tert-Butyl alcohol
Concen: 13.255 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 59 Resp: 30834

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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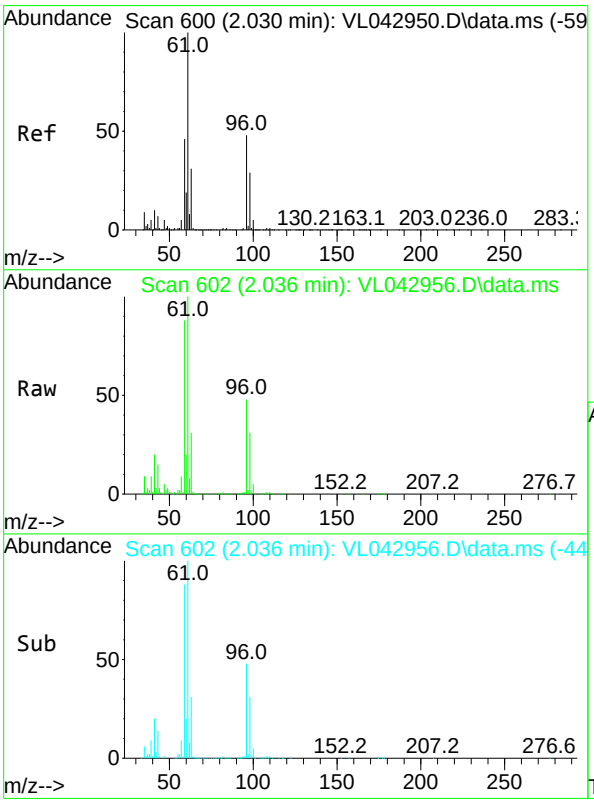
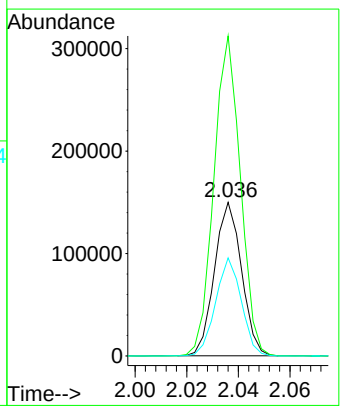
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

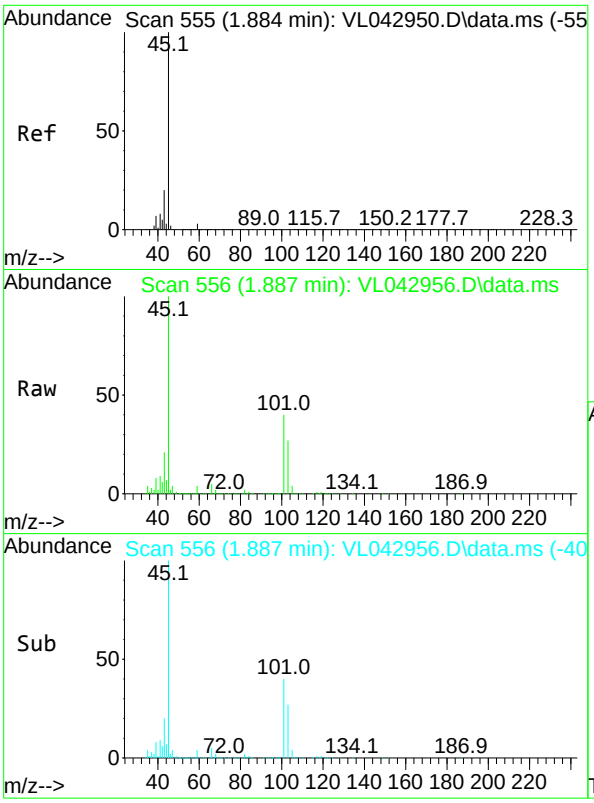


#18
1,1-Dichloroethene
Concen: 13.796 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 96 Resp: 109211

Ion	Ratio	Lower	Upper
96	100		
61	208.5	166.2	249.4
98	63.9	48.6	73.0





#19
Isopropyl Alcohol
Concen: 12.780 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 45 Resp: 16295

Ion	Ratio	Lower	Upper
45	100		
58	39.0	31.0	46.6

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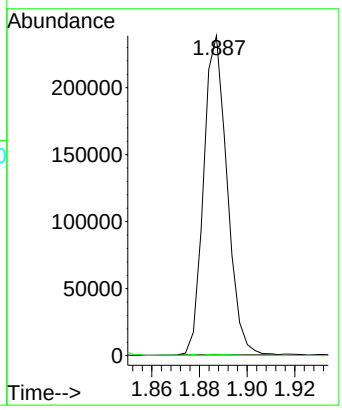
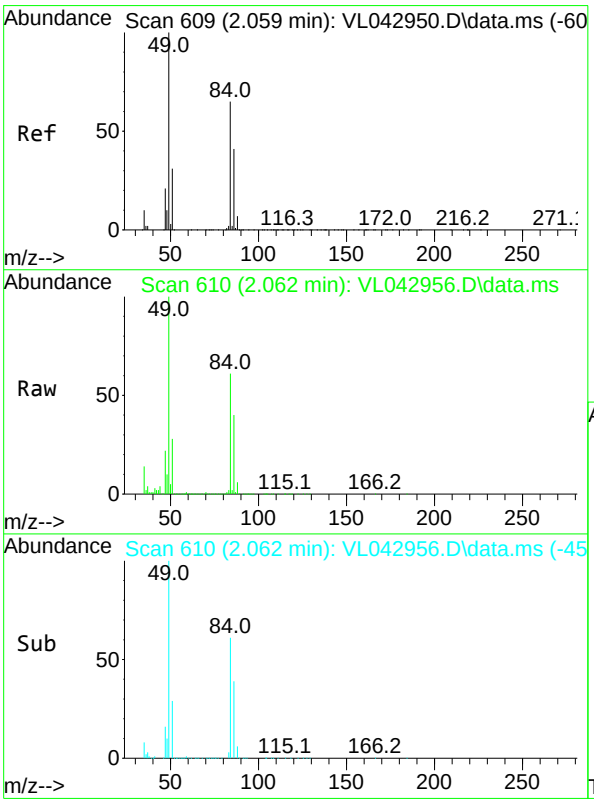
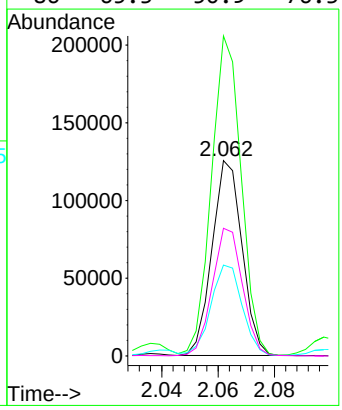


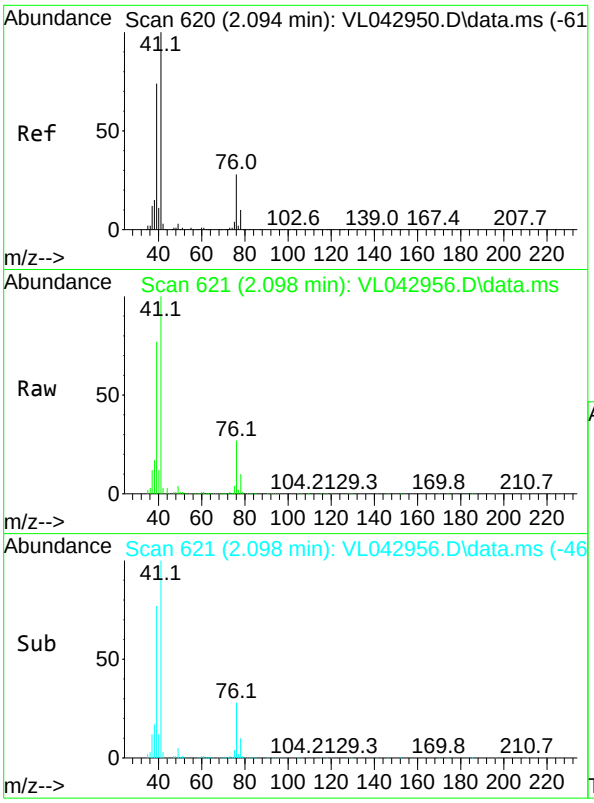


#20
Methylene Chloride
Concen: 14.996 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 84 Resp: 92708

Ion	Ratio	Lower	Upper
84	100		
49	163.6	124.1	186.1
51	46.4	39.8	59.8
86	65.3	50.9	76.3

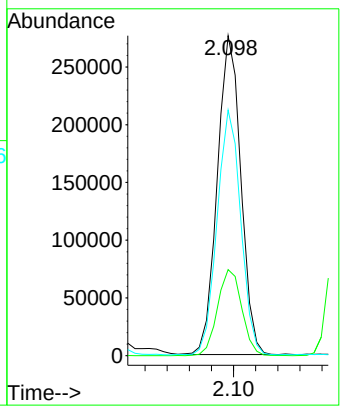




#21
Allyl Chloride
Concen: 13.848 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 41 Resp: 20455

Ion	Ratio	Lower	Upper
41	100		
76	27.8	22.3	33.5
39	76.9	61.3	91.9



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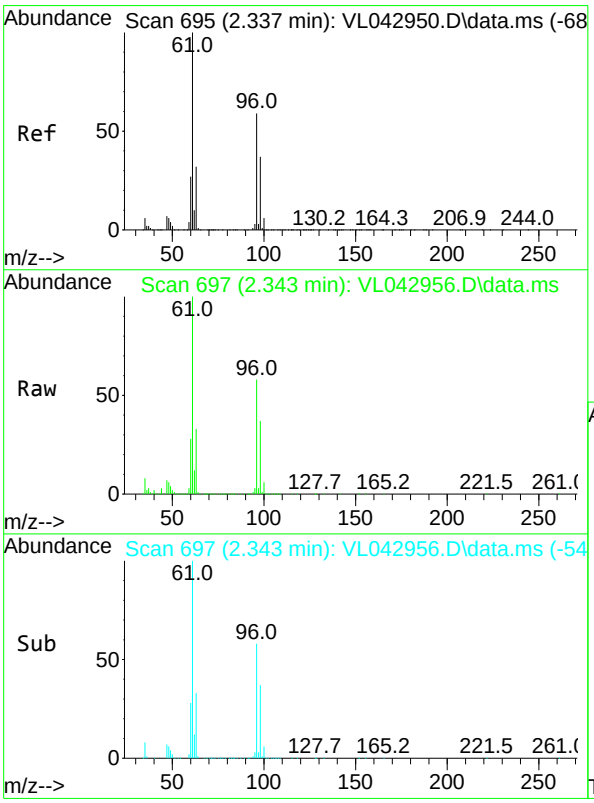
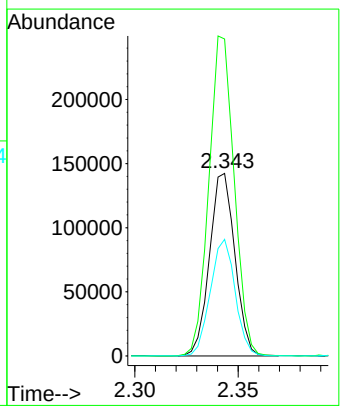
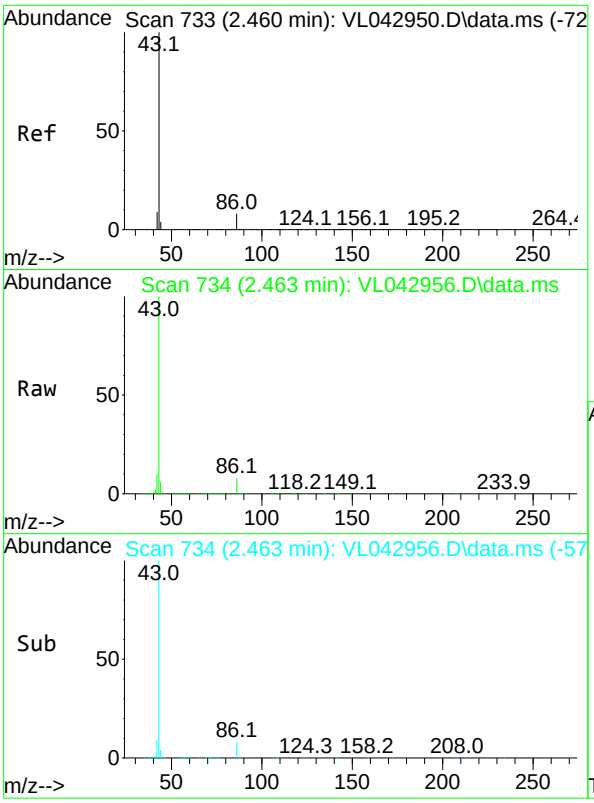


#22
trans-1,2-Dichloroethene
Concen: 13.542 ppbv
RT: 2.343 min Scan# 697
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 96 Resp: 121815

Ion	Ratio	Lower	Upper
96	100		
61	173.4	136.5	204.7
98	63.8	50.6	76.0

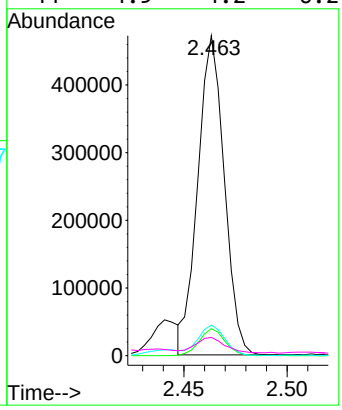




#23
Vinyl Acetate
Concen: 13.837 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 41925

Ion	Ratio	Lower	Upper
43	100		
86	8.5	6.2	9.2
42	9.5	7.4	11.0
44	4.9	4.2	6.2



Instrument :
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ClientSampleId :
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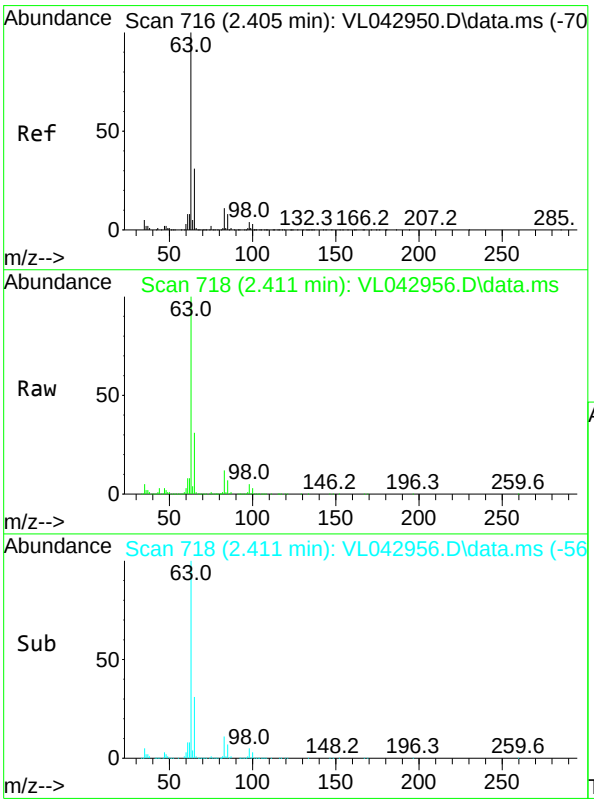
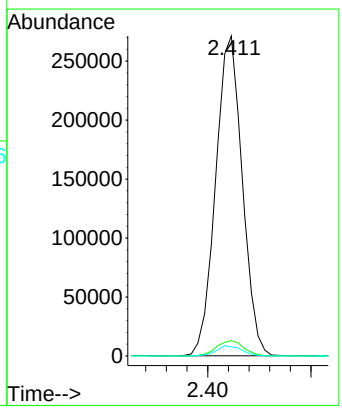
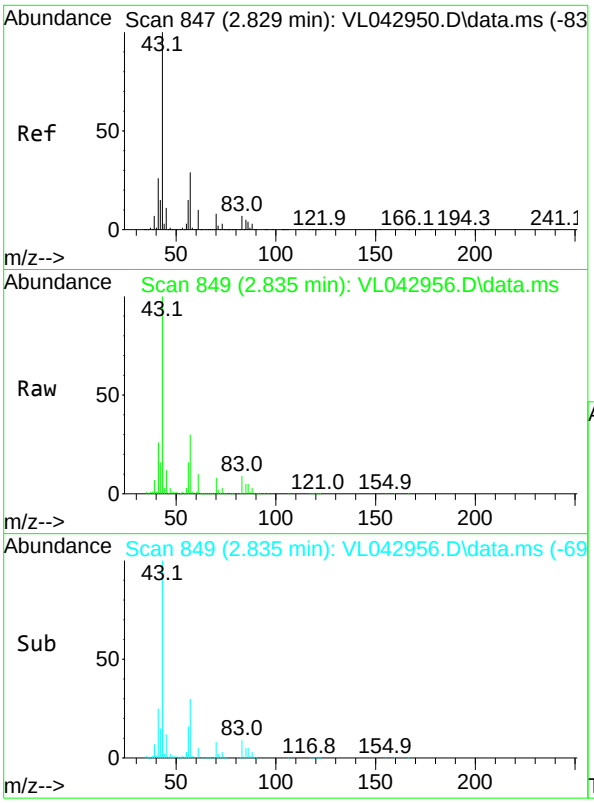


#24
1,1-Dichloroethane
Concen: 13.789 ppbv
RT: 2.411 min Scan# 718
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 63 Resp: 243229

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.2	6.6
100	2.9	1.4	4.0

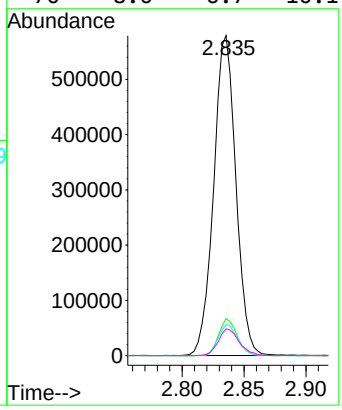




#25
Ethyl Acetate
Concen: 13.514 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 724418

Ion	Ratio	Lower	Upper
43	100		
45	9.7	7.7	11.5
61	8.6	7.1	10.7
70	8.0	6.7	10.1



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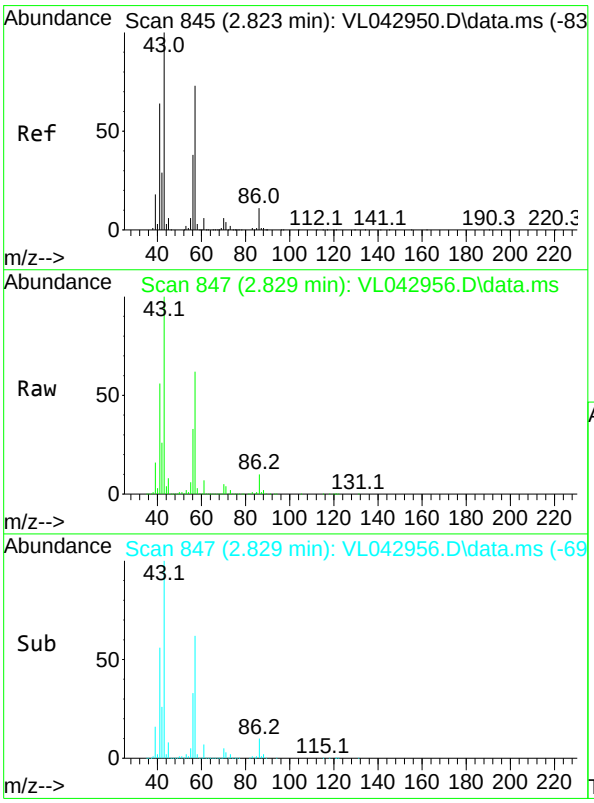
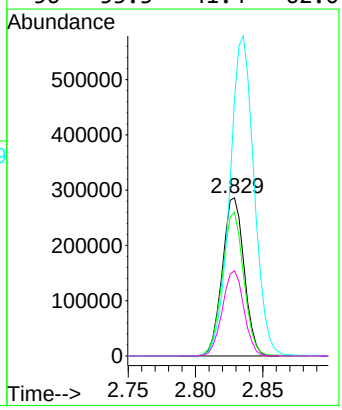
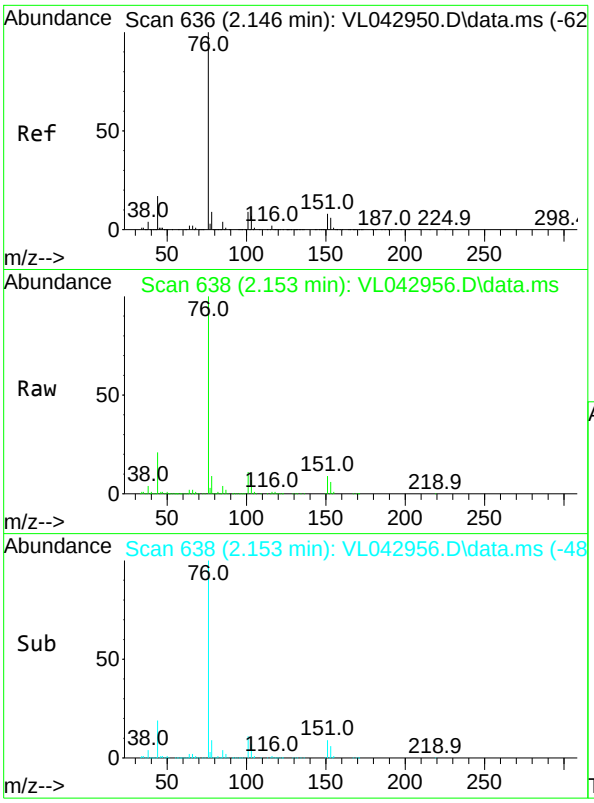


#26
Hexane
Concen: 13.166 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 57 Resp: 321710

Ion	Ratio	Lower	Upper
57	100		
41	90.2	71.7	107.5
43	225.8	180.8	271.2
56	53.3	41.4	62.0





#27
Carbon Disulfide
Concen: 13.731 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 76 Resp: 30093

Ion	Ratio	Lower	Upper
76	100		
44	21.4	15.6	23.4
78	11.8	8.9	13.3

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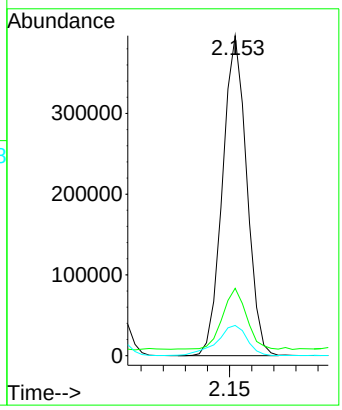
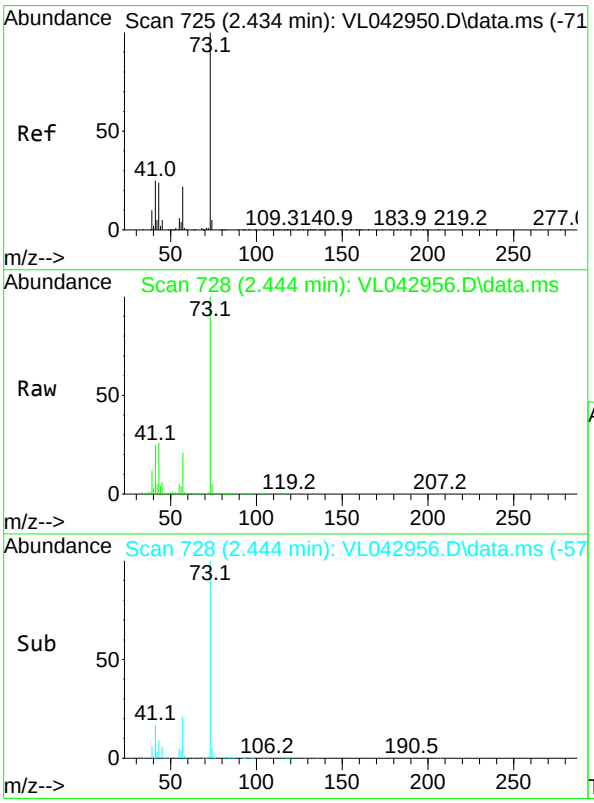
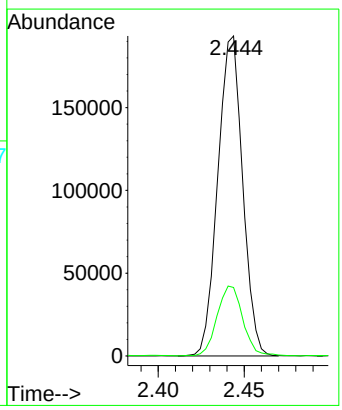


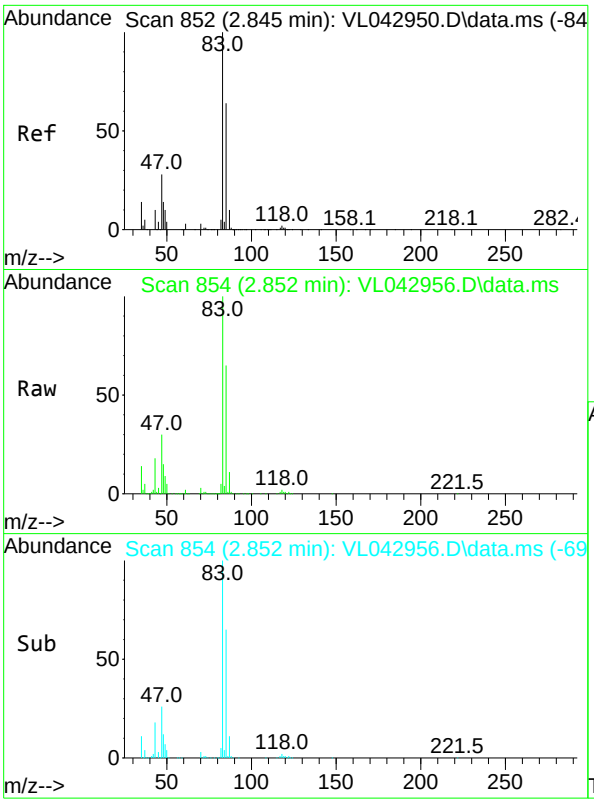


#28
Methyl tert-Butyl Ether
Concen: 15.267 ppbv
RT: 2.444 min Scan# 728
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 73 Resp: 193915

Ion	Ratio	Lower	Upper
73	100		
57	22.6	20.6	31.0





#29
Chloroform
Concen: 13.796 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 83 Resp: 44077

Ion	Ratio	Lower	Upper
83	100		
85	65.4	51.2	76.8

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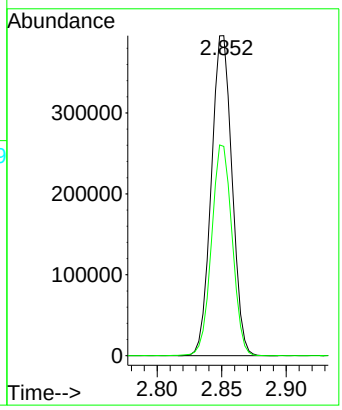
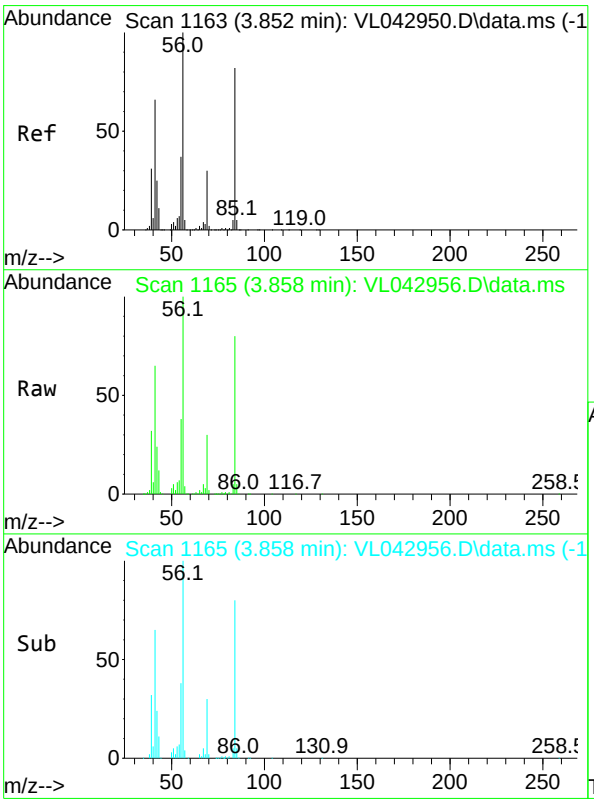
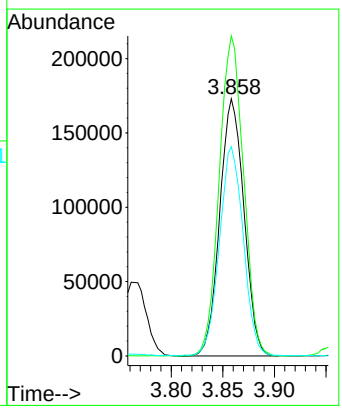


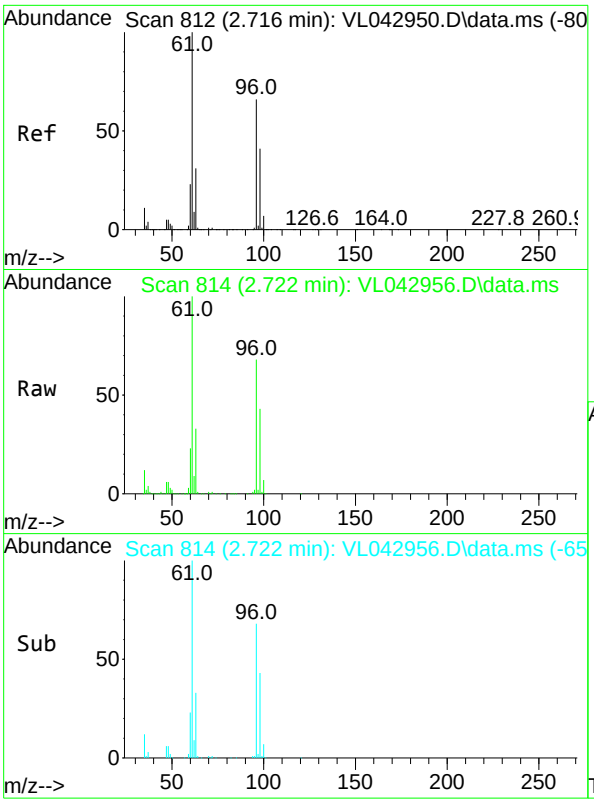


#30
Cyclohexane
Concen: 13.800 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 84 Resp: 281932

Ion	Ratio	Lower	Upper
84	100		
56	125.3	102.2	153.4
41	80.6	65.6	98.4

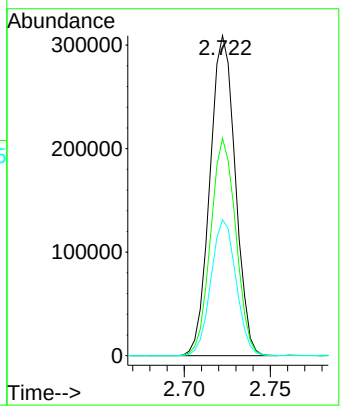




#31
cis-1,2-Dichloroethene
Concen: 13.869 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 61 Resp: 31745

Ion	Ratio	Lower	Upper
61	100		
96	67.9	53.0	79.6
98	42.5	32.9	49.3



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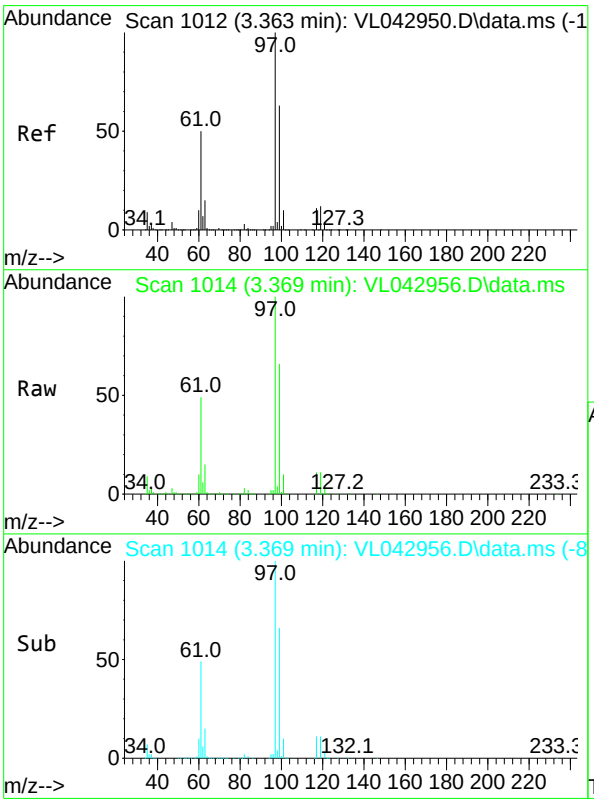
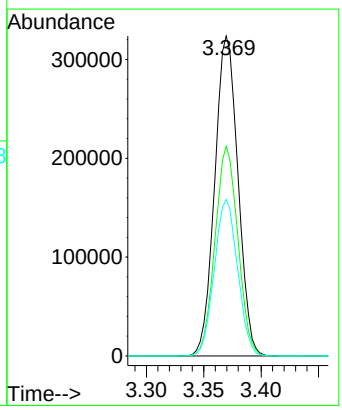
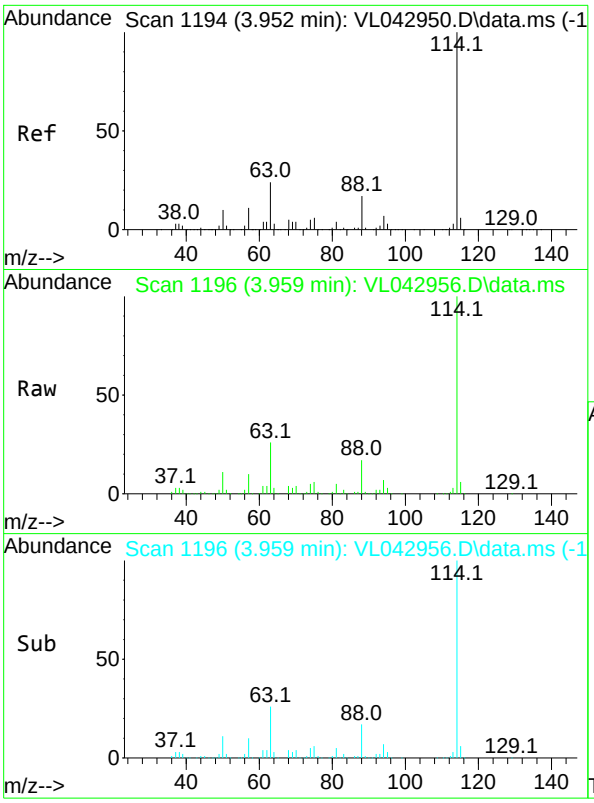


#32
1,1,1-Trichloroethane
Concen: 13.178 ppbv
RT: 3.369 min Scan# 1014
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 97 Resp: 456335

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.1	76.7
61	49.1	39.8	59.6

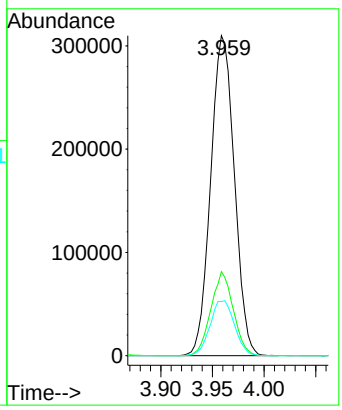




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:114 Resp: 49477

Ion	Ratio	Lower	Upper
114	100		
63	24.8	19.4	29.2
88	17.7	14.2	21.2



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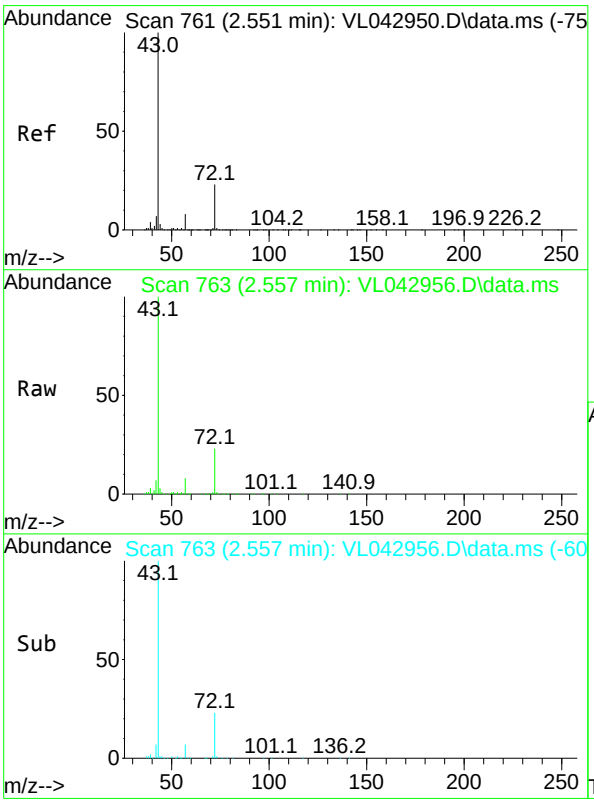
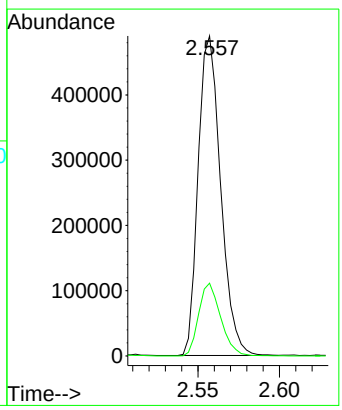
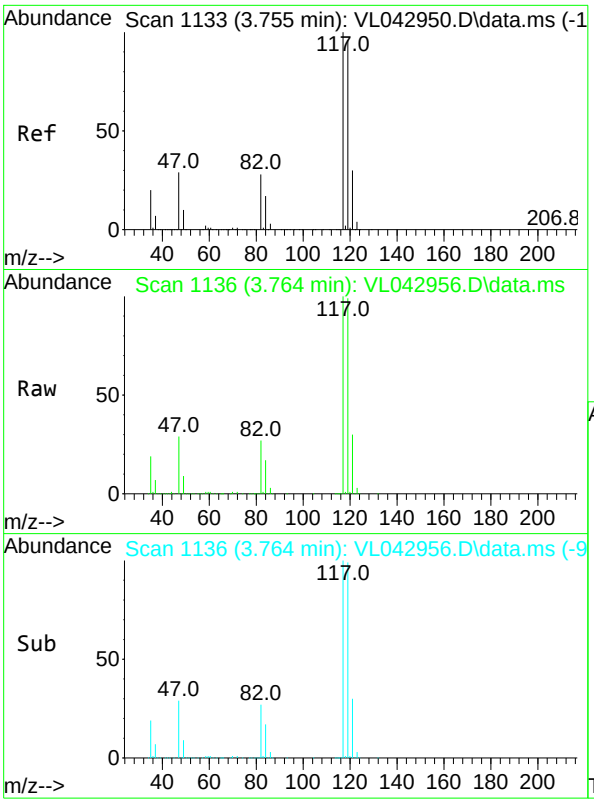


#34
2-Butanone
Concen: 13.551 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 469872

Ion	Ratio	Lower	Upper
43	100		
72	22.4	17.7	26.5

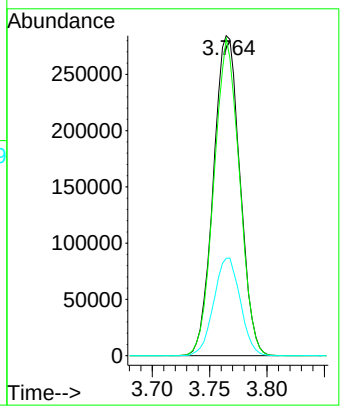




#35
Carbon Tetrachloride
Concen: 14.385 ppbv
RT: 3.764 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:117 Resp: 45798

Ion	Ratio	Lower	Upper
117	100		
119	99.0	76.9	115.3
121	30.4	23.7	35.5



Instrument :
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ClientSampleId :
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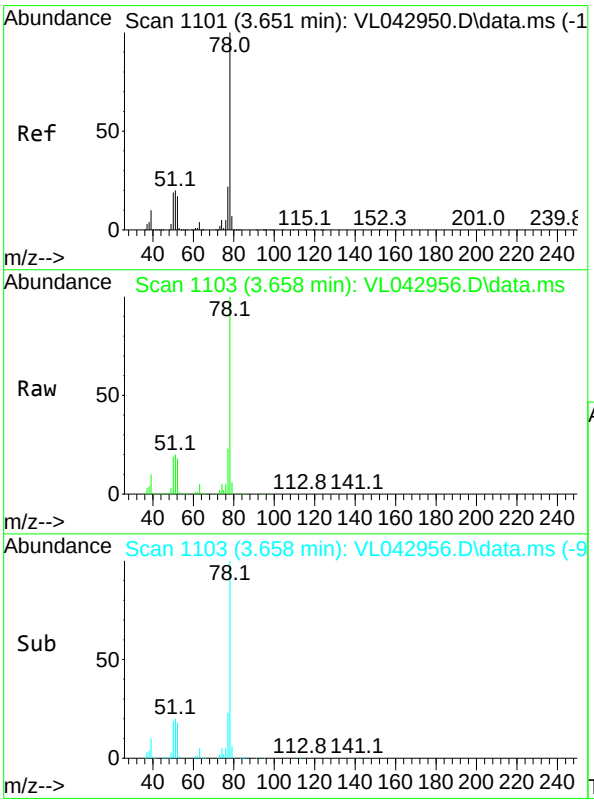
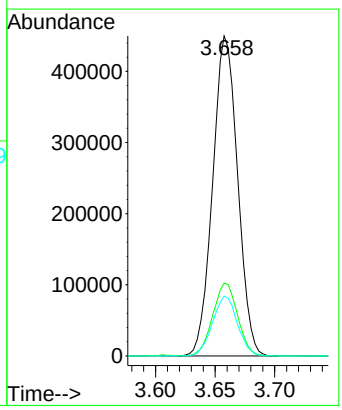
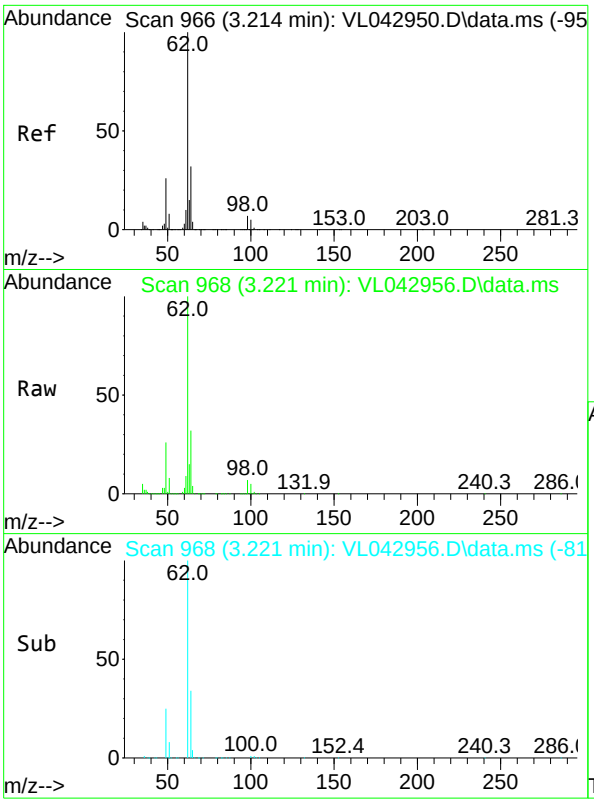


#36
Benzene
Concen: 14.080 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 78 Resp: 654205

Ion	Ratio	Lower	Upper
78	100		
77	22.7	17.8	26.6
50	18.7	15.0	22.4





#37
1,2-Dichloroethane
Concen: 14.358 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 62 Resp: 35084

Ion	Ratio	Lower	Upper
62	100		
98	7.3	5.9	8.9

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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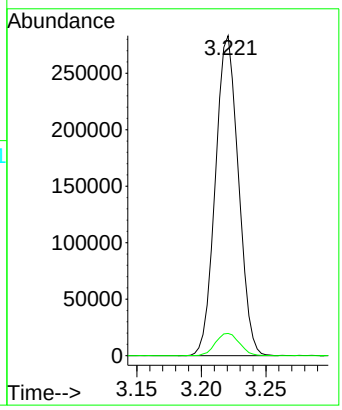
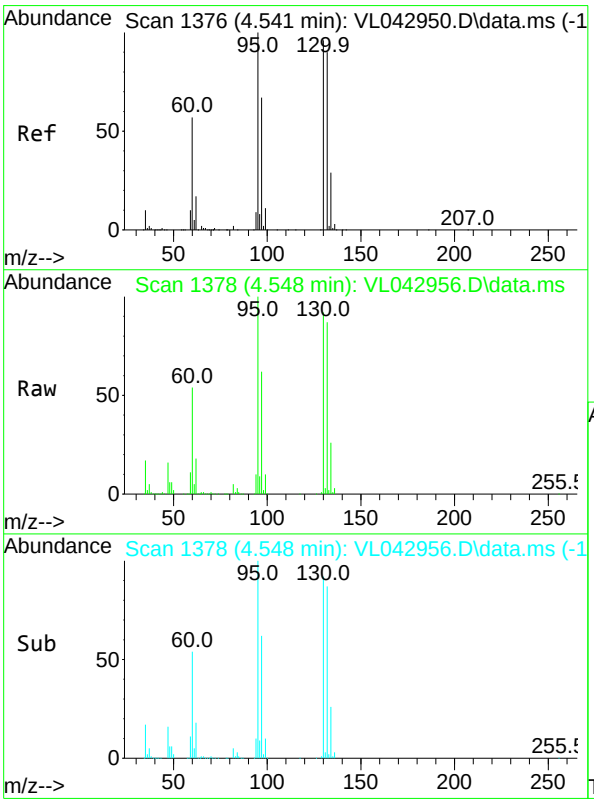
Supervised By :Mahesh Dadoda 09/24/2025

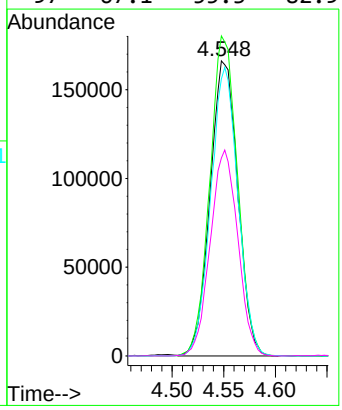


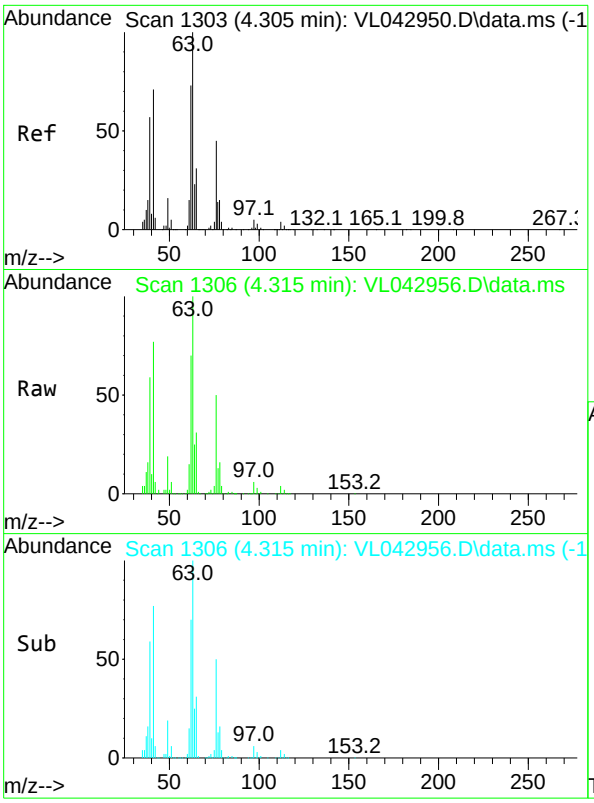


#38
Trichloroethene
Concen: 13.450 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:130 Resp: 310602

Ion	Ratio	Lower	Upper
130	100		
95	108.4	83.0	124.4
132	93.7	74.6	112.0
97	67.1	55.3	82.9

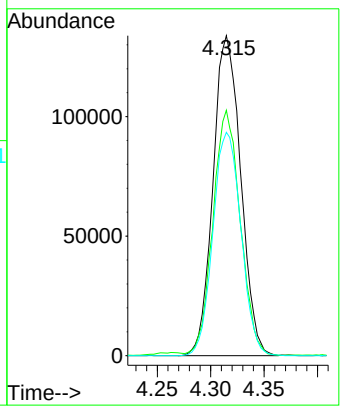




#39
1,2-Dichloropropane
Concen: 14.218 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 63 Resp: 24132

Ion	Ratio	Lower	Upper
63	100		
41	76.5	57.5	86.3
62	69.8	58.5	87.7



Instrument :
MSVOA_L
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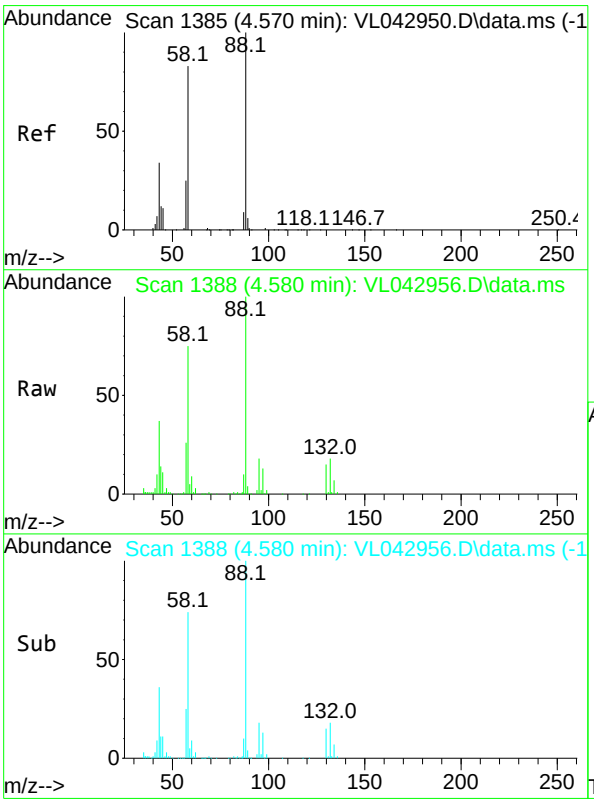
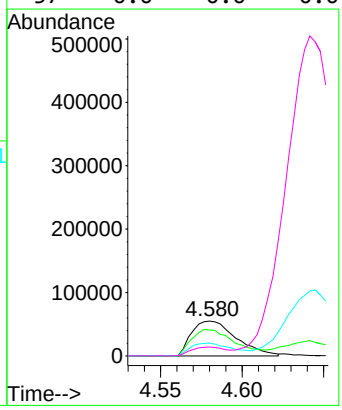
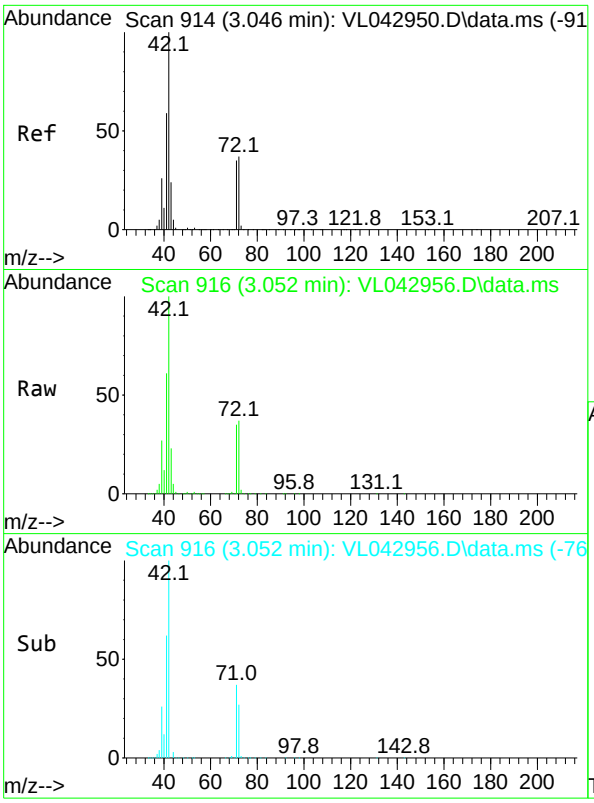


#40
1,4-Dioxane
Concen: 13.306 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 88 Resp: 104884

Ion	Ratio	Lower	Upper
88	100		
58	73.6	59.7	89.5
43	34.3	28.9	43.3
57	0.0	0.0	0.0

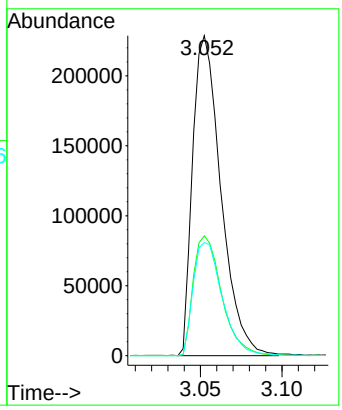




#41
Tetrahydrofuran
Concen: 13.855 ppbv
RT: 3.052 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 42 Resp: 27615

Ion	Ratio	Lower	Upper
42	100		
72	37.7	30.0	45.0
71	36.6	28.8	43.2



Instrument :
MSVOA_L
ClientSampleId :
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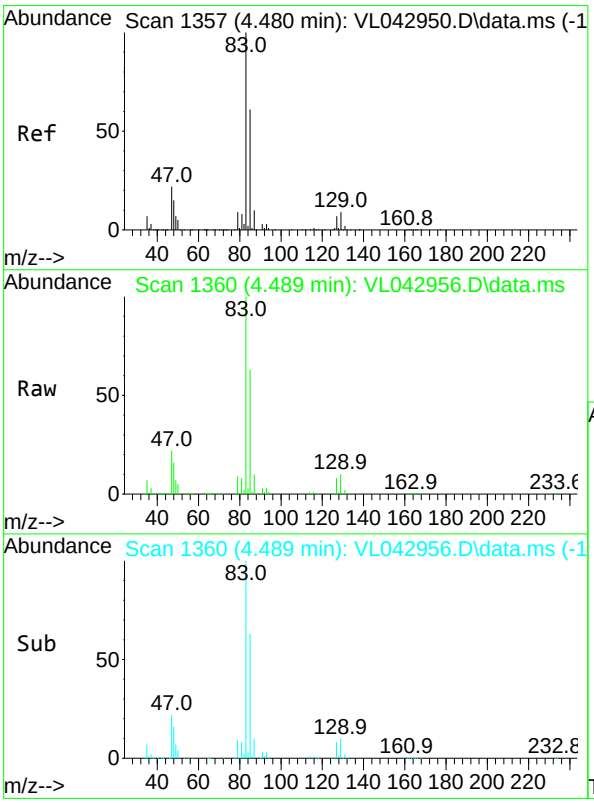
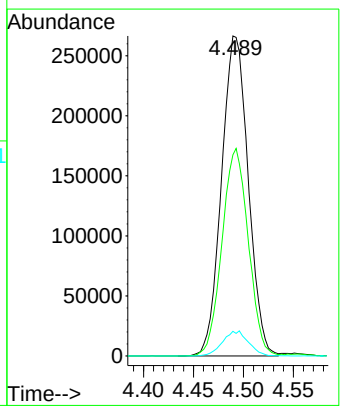
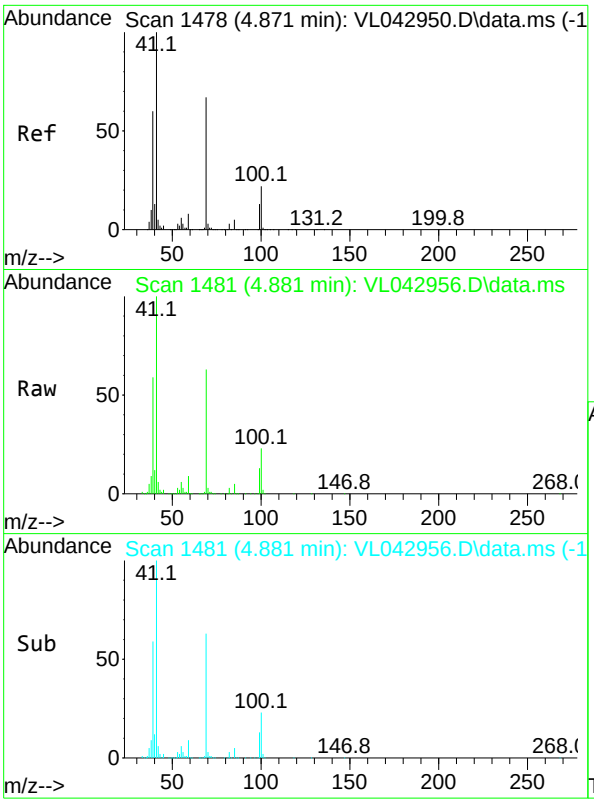


#42
Bromodichloromethane
Concen: 14.544 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 83 Resp: 495091

Ion	Ratio	Lower	Upper
83	100		
85	62.8	49.0	73.6
127	7.7	5.3	7.9

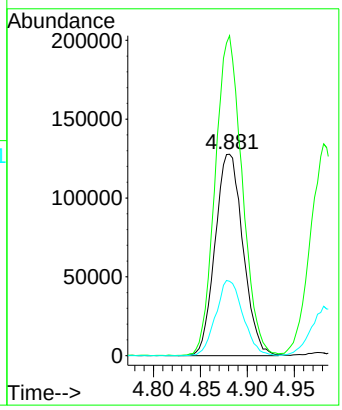




#43
Methyl Methacrylate
Concen: 13.979 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 69 Resp: 26365

Ion	Ratio	Lower	Upper
69	100		
41	153.6	124.5	186.7
100	36.4	29.0	43.6



Instrument :
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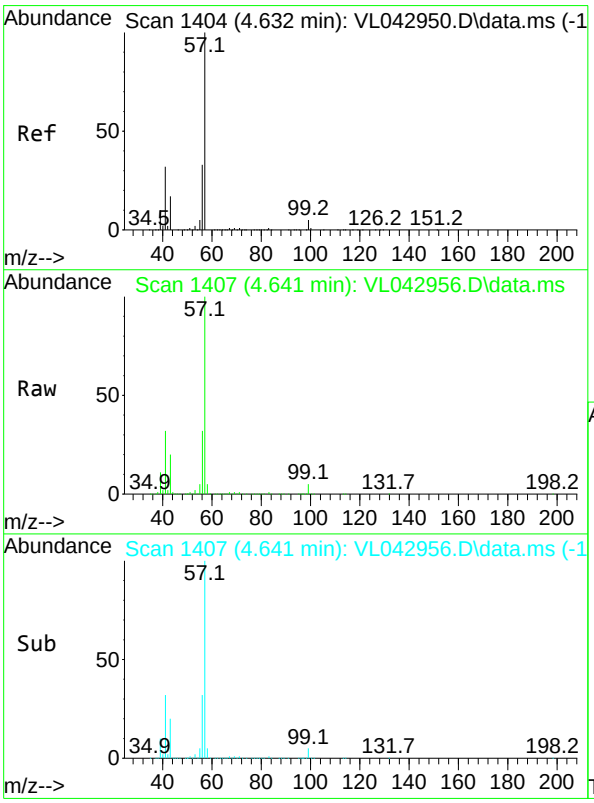
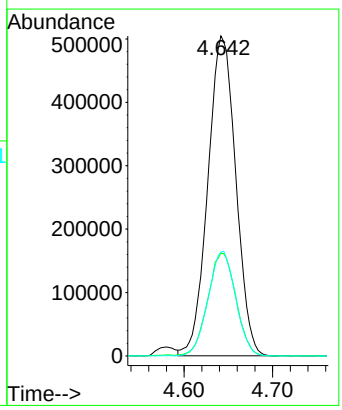
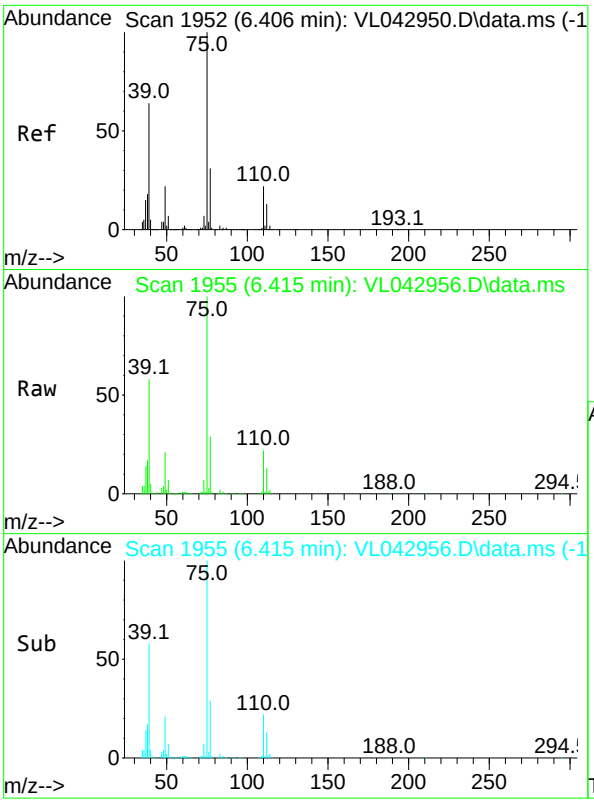


#44
2,2,4-Trimethylpentane
Concen: 13.791 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 57 Resp: 1107180

Ion	Ratio	Lower	Upper
57	100		
41	32.6	25.5	38.3
56	32.3	25.8	38.8

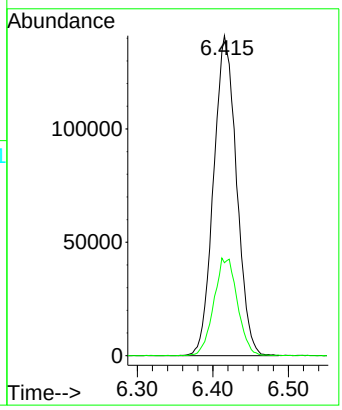




#45
t-1,3-Dichloropropene
Concen: 14.694 ppbv
RT: 6.415 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 75 Resp: 29801

Ion	Ratio	Lower	Upper
75	100		
77	29.0	25.0	37.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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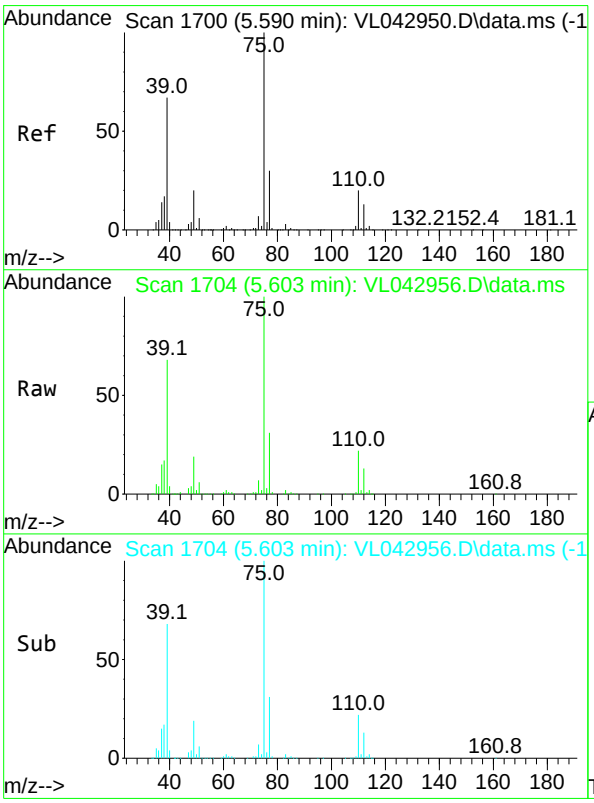
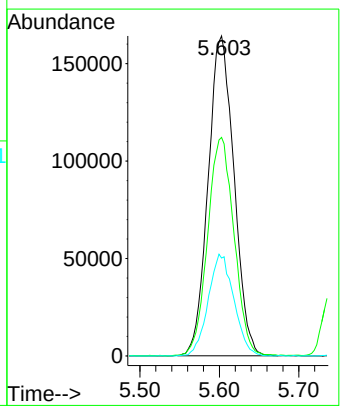
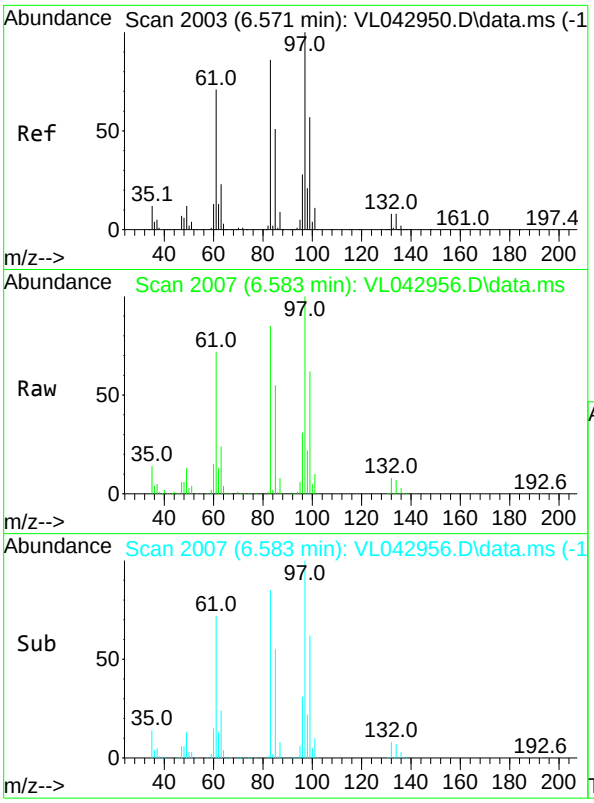


#46
cis-1,3-Dichloropropene
Concen: 14.389 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 75 Resp: 371770

Ion	Ratio	Lower	Upper
75	100		
39	68.2	53.8	80.6
77	30.5	23.6	35.4

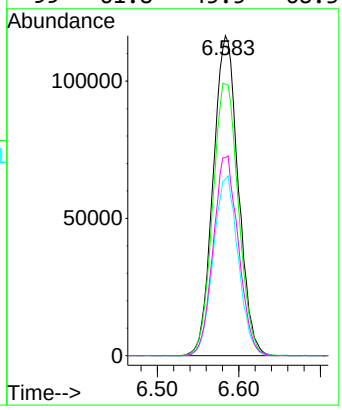




#47
1,1,2-Trichloroethane
Concen: 13.909 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 97 Resp: 24945

Ion	Ratio	Lower	Upper
97	100		
83	84.9	68.7	103.1
85	55.1	40.6	60.8
99	61.8	45.5	68.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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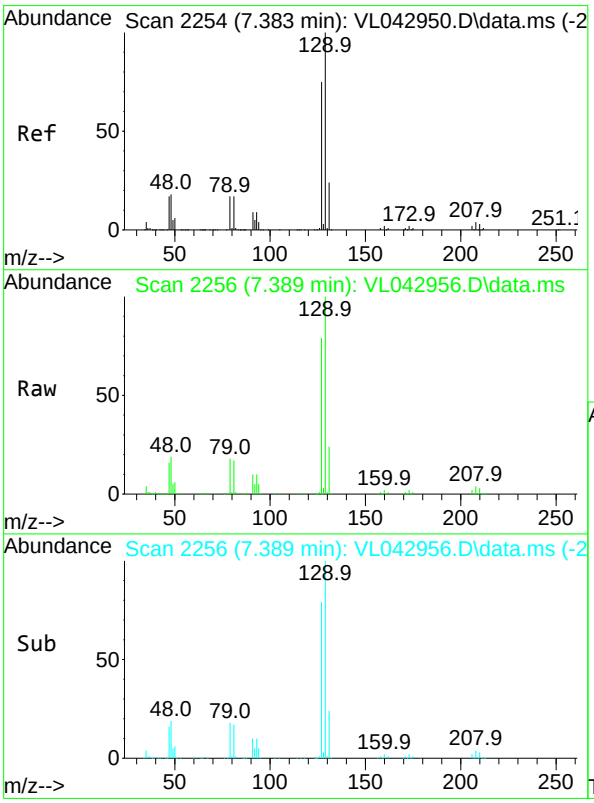
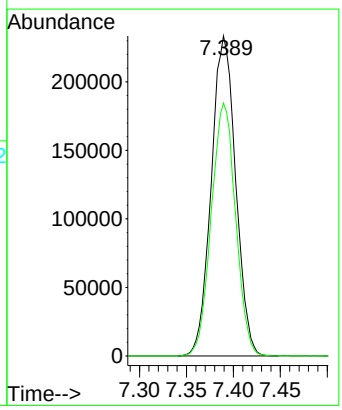
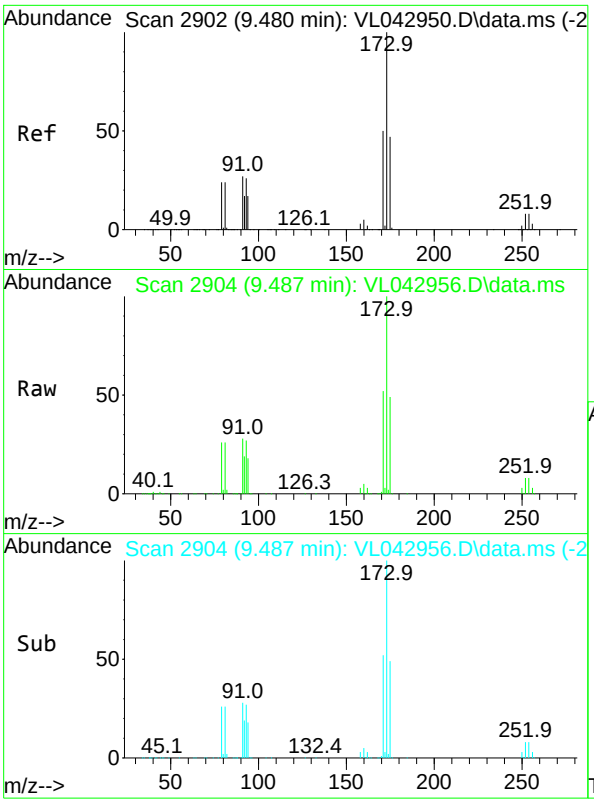


#48
Dibromochloromethane
Concen: 14.709 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:129 Resp: 421755

Ion	Ratio	Lower	Upper
129	100		
127	78.7	39.1	117.2

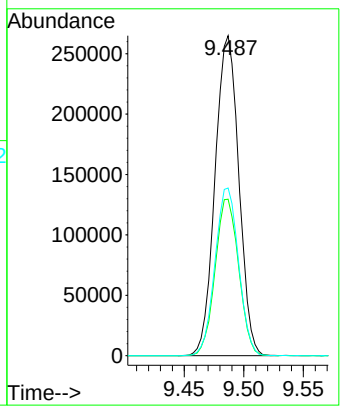




#49
Bromoform
Concen: 14.719 ppbv
RT: 9.487 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:173 Resp: 36712

Ion	Ratio	Lower	Upper
173	100		
175	48.6	37.9	56.9
171	52.0	41.1	61.7



Instrument :
MSVOA_L
ClientSampleId :
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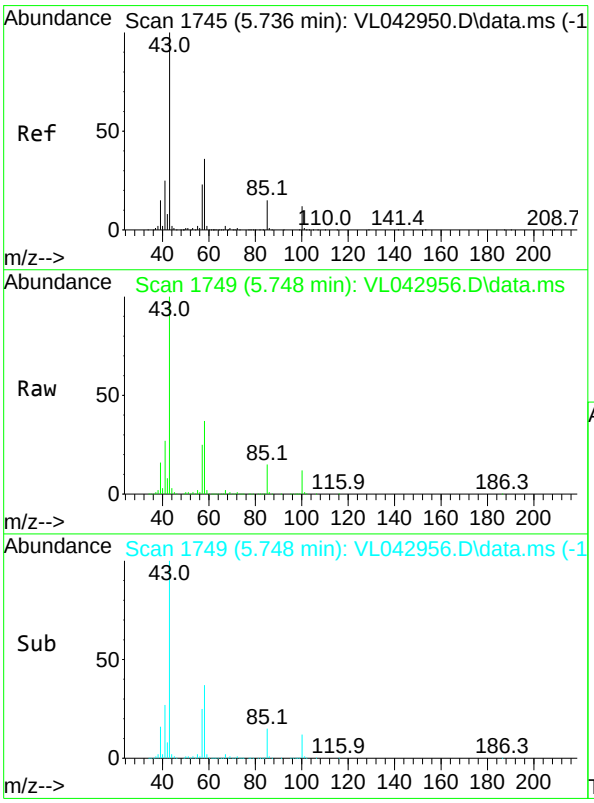
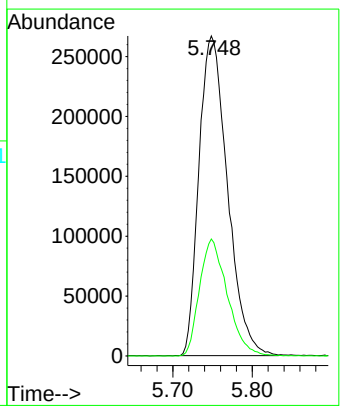
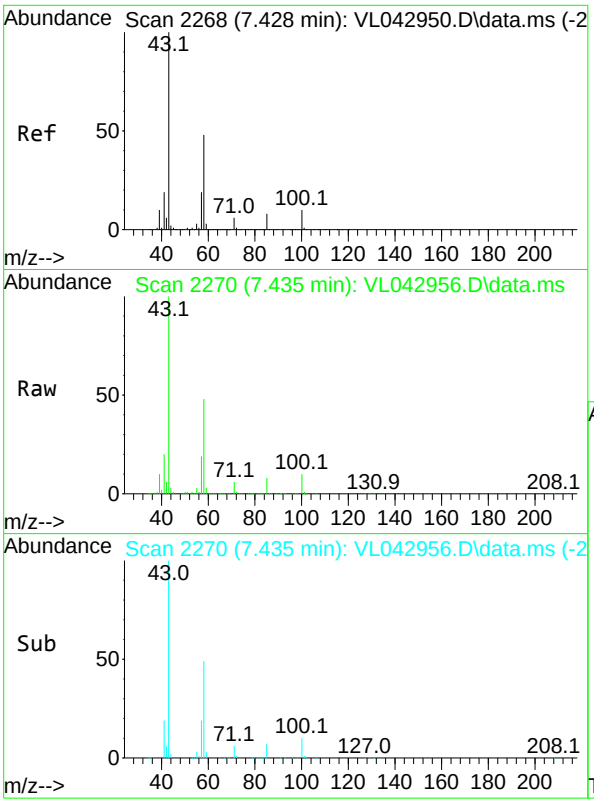


#50
4-Methyl-2-Pentanone
Concen: 14.293 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 666049

Ion	Ratio	Lower	Upper
43	100		
58	35.7	28.4	42.6





#51
2-Hexanone
Concen: 14.620 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 54161

Ion	Ratio	Lower	Upper
43	100		
58	49.4	39.7	59.5
98	0.1	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
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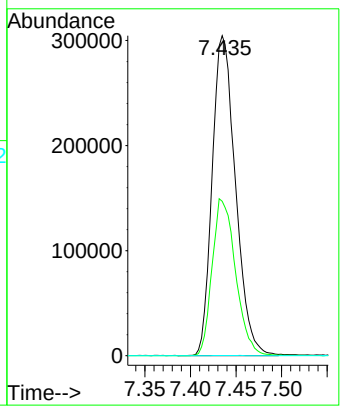
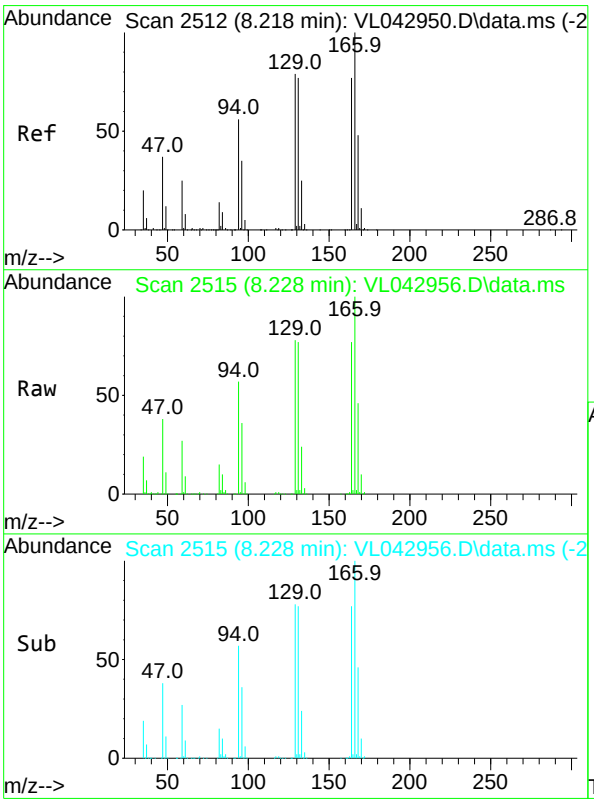
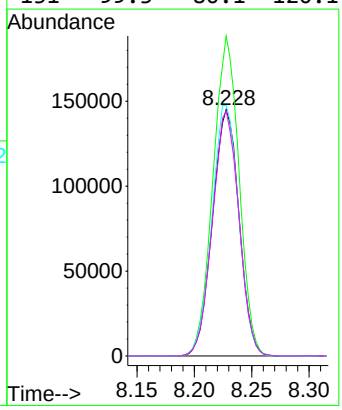


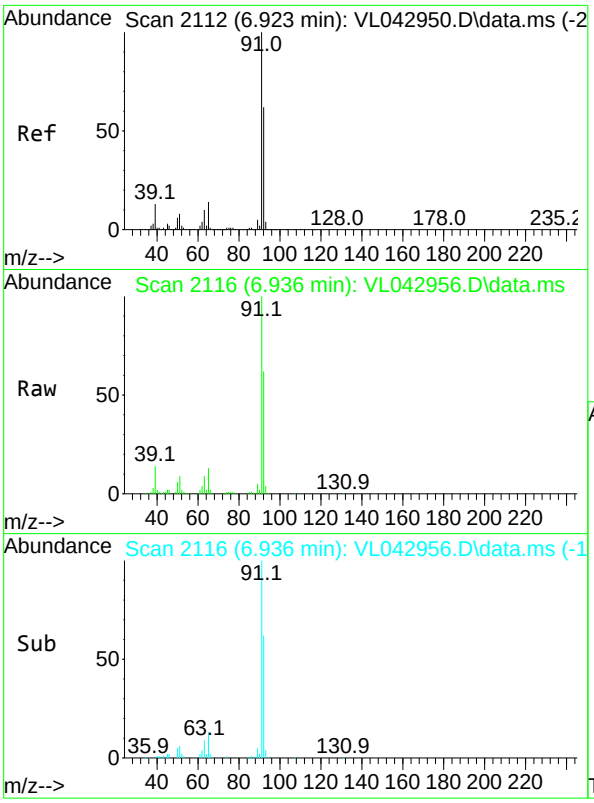


#52
Tetrachloroethene
Concen: 13.015 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:164 Resp: 233980

Ion	Ratio	Lower	Upper
164	100		
166	129.8	103.5	155.3
129	101.4	82.2	123.4
131	99.3	80.1	120.1

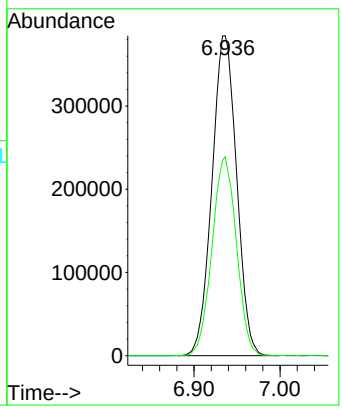




#53
Toluene
Concen: 13.915 ppbv
RT: 6.936 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 7652

Ion	Ratio	Lower	Upper
91	100		
92	61.5	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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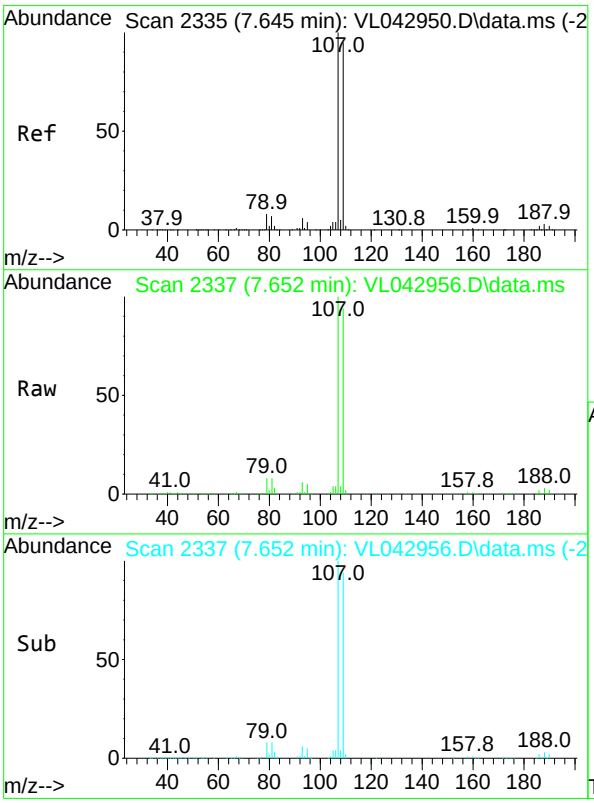
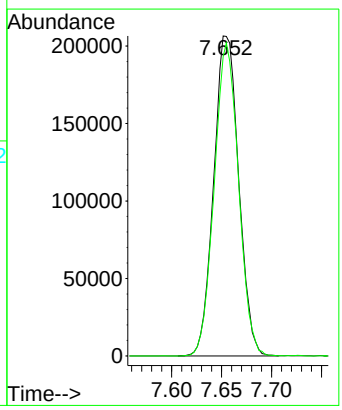
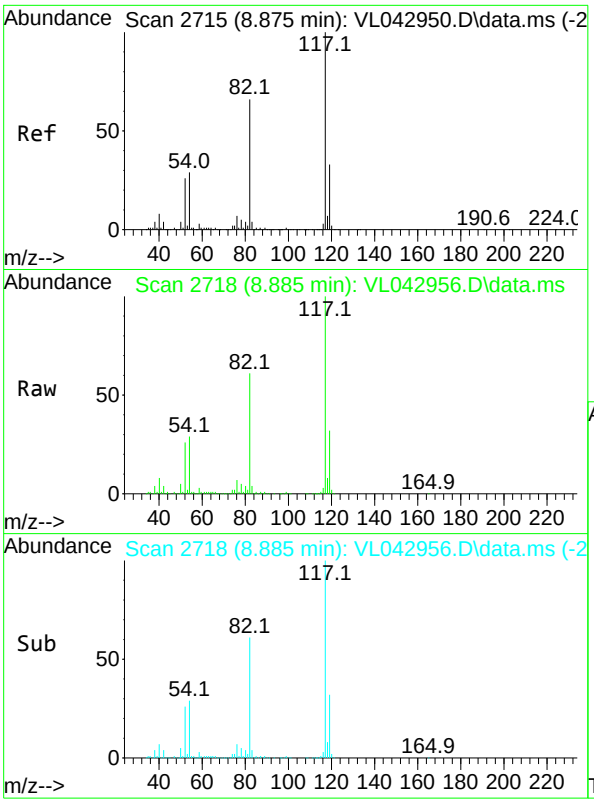


#54
1,2-Dibromoethane
Concen: 14.261 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:107 Resp: 359750

Ion	Ratio	Lower	Upper
107	100		
109	93.6	75.8	113.8

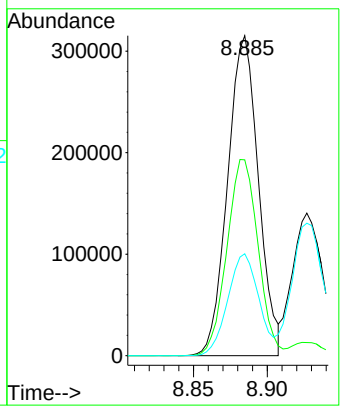




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:117 Resp: 45825

Ion	Ratio	Lower	Upper
117	100		
82	66.3	52.8	79.2
119	32.0	26.5	39.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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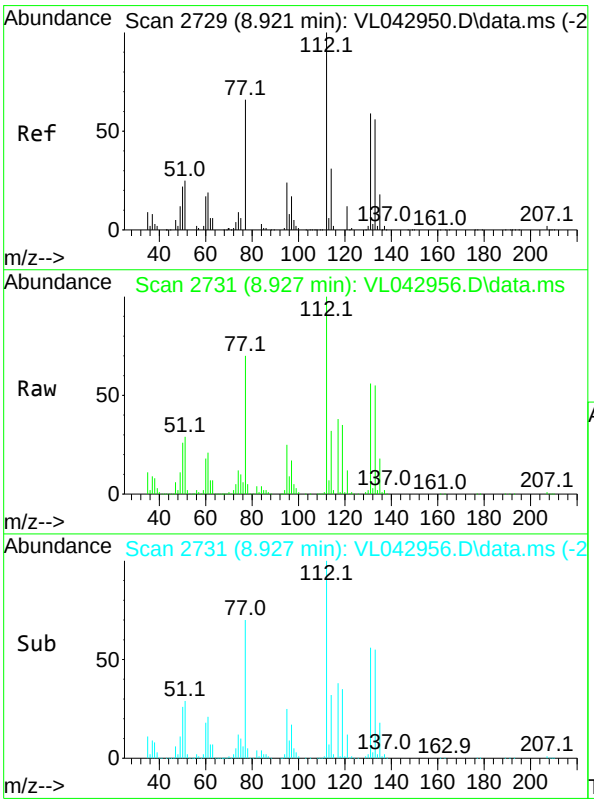
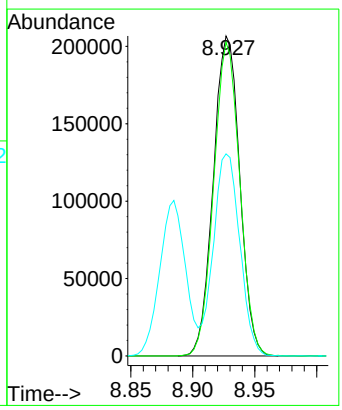
Supervised By :Mahesh Dadoda 09/24/2025

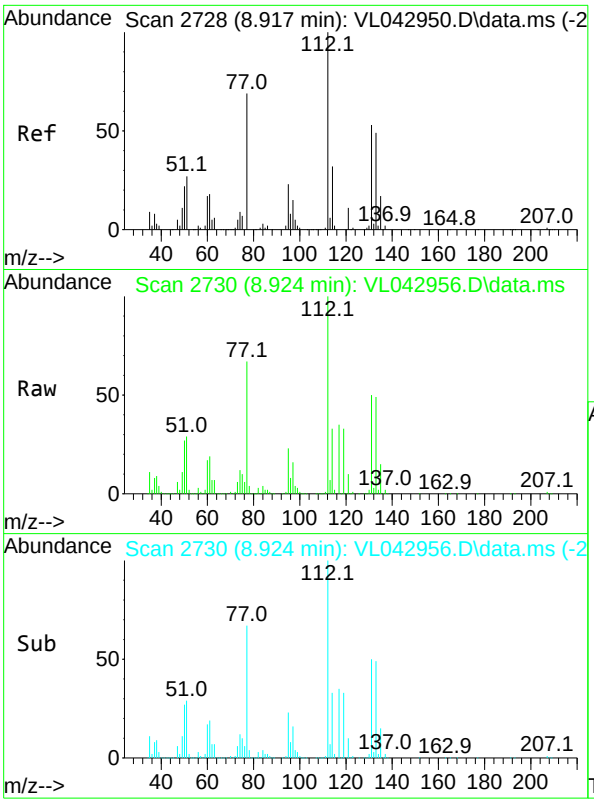


#56
1,1,1,2-Tetrachloroethane
Concen: 13.994 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:131 Resp: 306952

Ion	Ratio	Lower	Upper
131	100		
133	96.4	76.6	114.8
119	63.3	49.9	74.9





#57
Chlorobenzene
Concen: 13.507 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:112 Resp: 56506

Ion	Ratio	Lower	Upper
112	100		
77	67.4	55.7	83.5
114	32.5	28.6	35.0

Instrument :
MSVOA_L
ClientSampleId :
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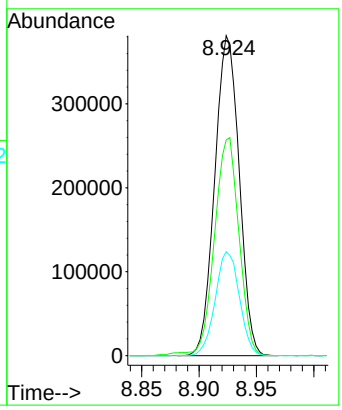
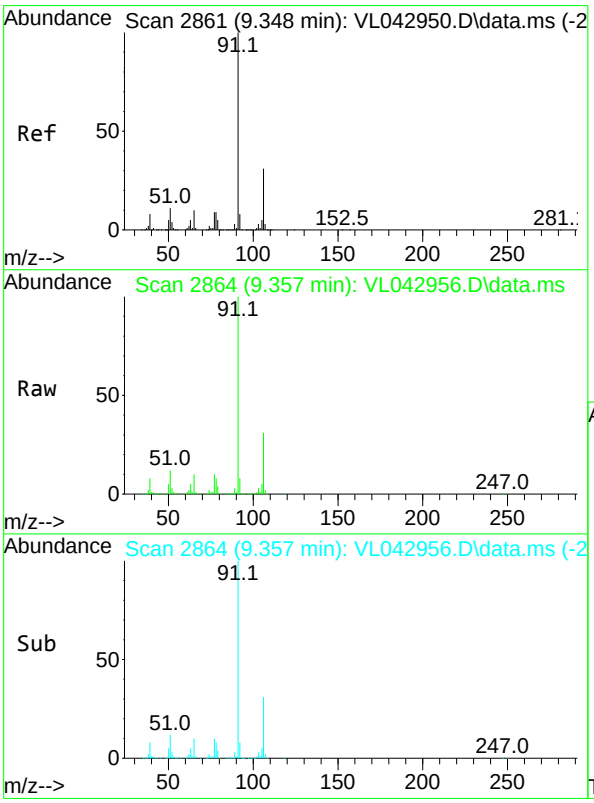
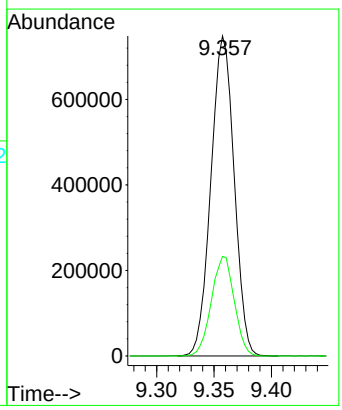


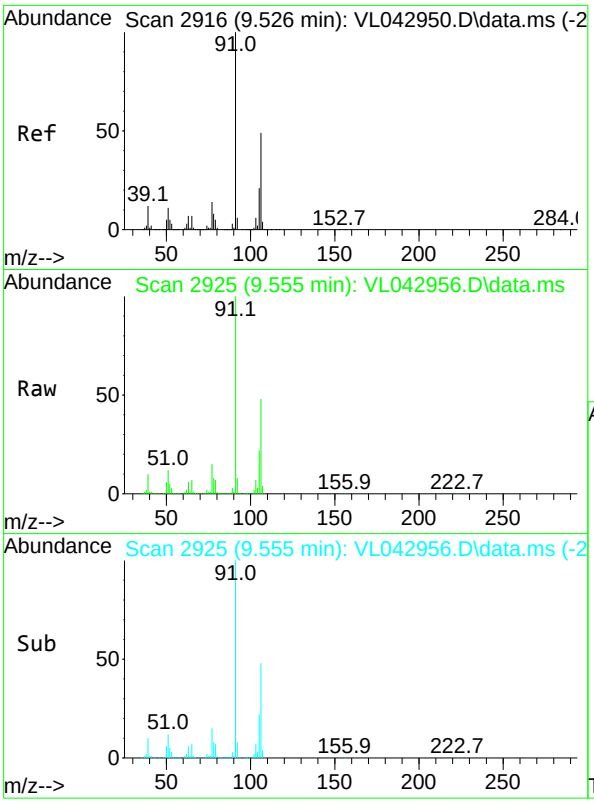


#58
Ethyl Benzene
Concen: 13.985 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 1052303

Ion	Ratio	Lower	Upper
91	100		
106	31.1	24.6	37.0

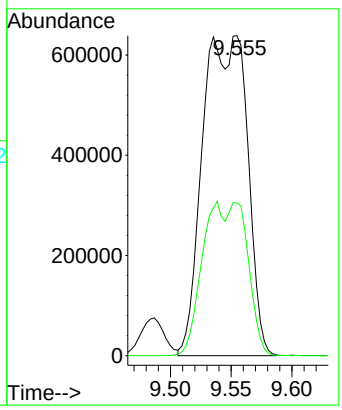




#59
m/p-Xylene
Concen: 27.557 ppbv m
RT: 9.555 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 163603

Ion	Ratio	Lower	Upper
91	100		
106	47.8	0.0	0.0



Instrument :
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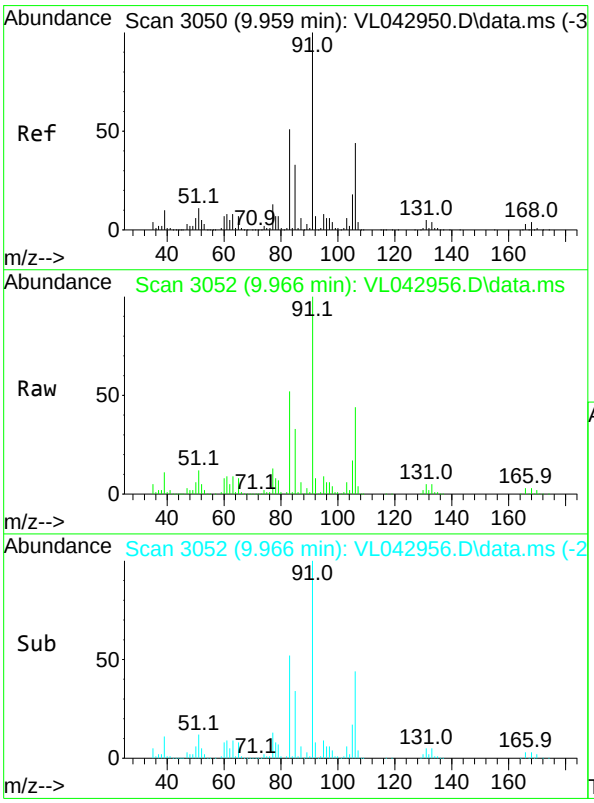
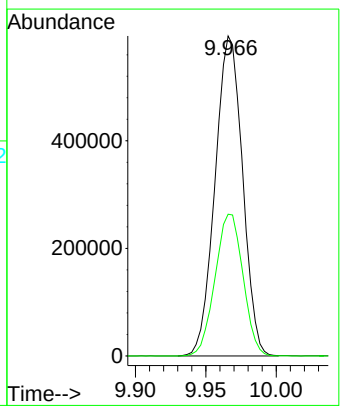
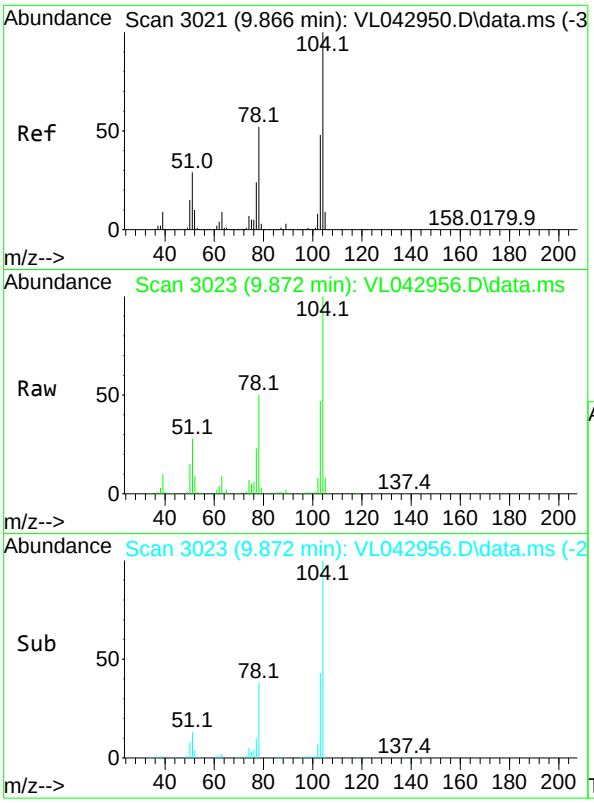


#60
o-Xylene
Concen: 13.629 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 808098

Ion	Ratio	Lower	Upper
91	100		
106	45.0	22.4	67.0

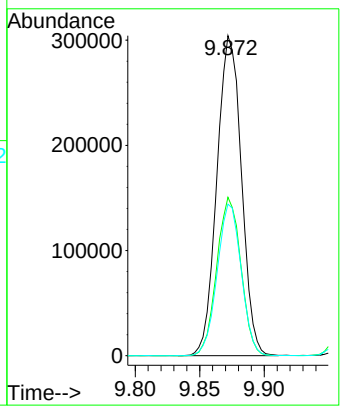




#61
Styrene
Concen: 14.330 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:104 Resp: 401899

Ion	Ratio	Lower	Upper
104	100		
78	48.8	39.9	59.9
103	46.5	36.9	55.3



Instrument :
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ClientSampleId :
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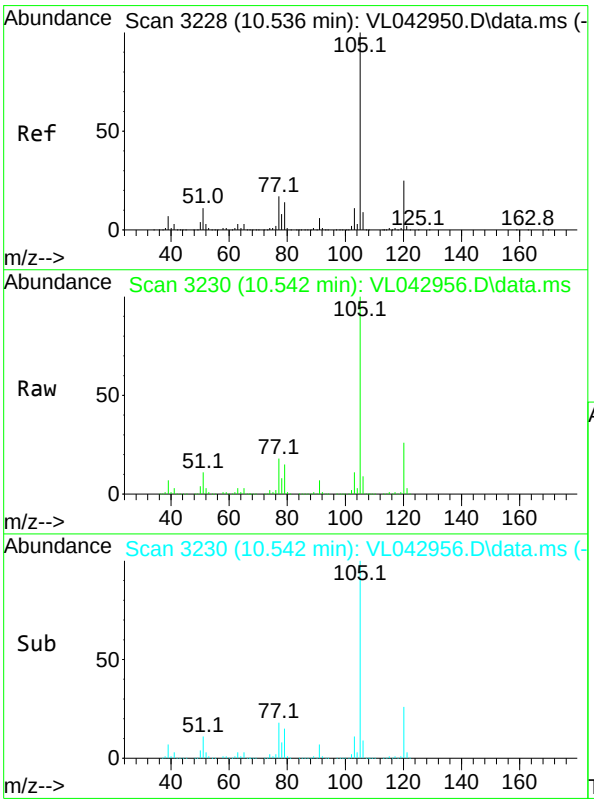
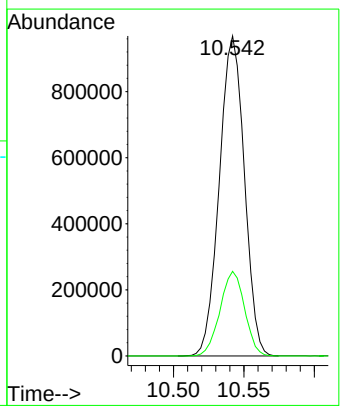
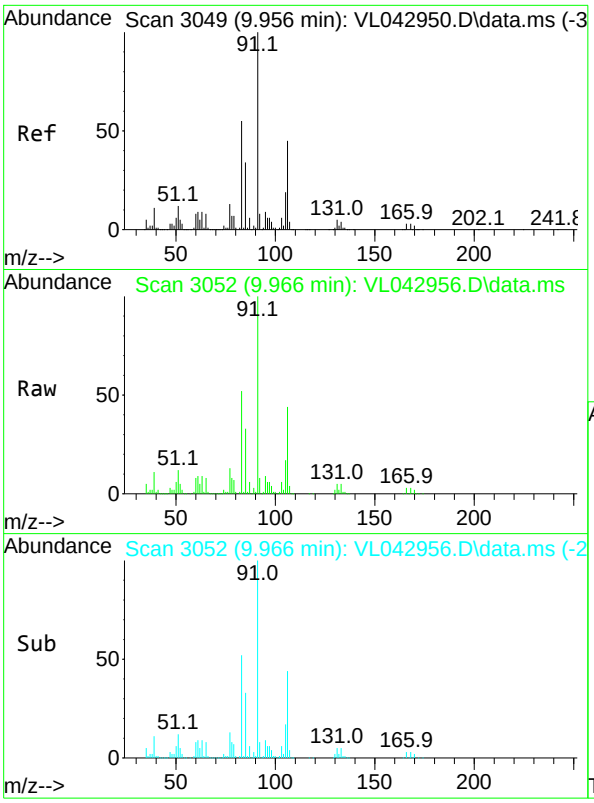


#62
Isopropylbenzene
Concen: 13.564 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 1198767

Ion	Ratio	Lower	Upper
105	100		
120	25.9	20.6	30.8





#63
1,1,2,2-Tetrachloroethane
Concen: 12.932 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 83 Resp: 40303

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.5	32.2	96.6

Instrument :
MSVOA_L
ClientSampleId :
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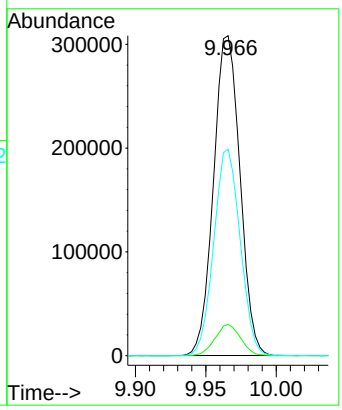
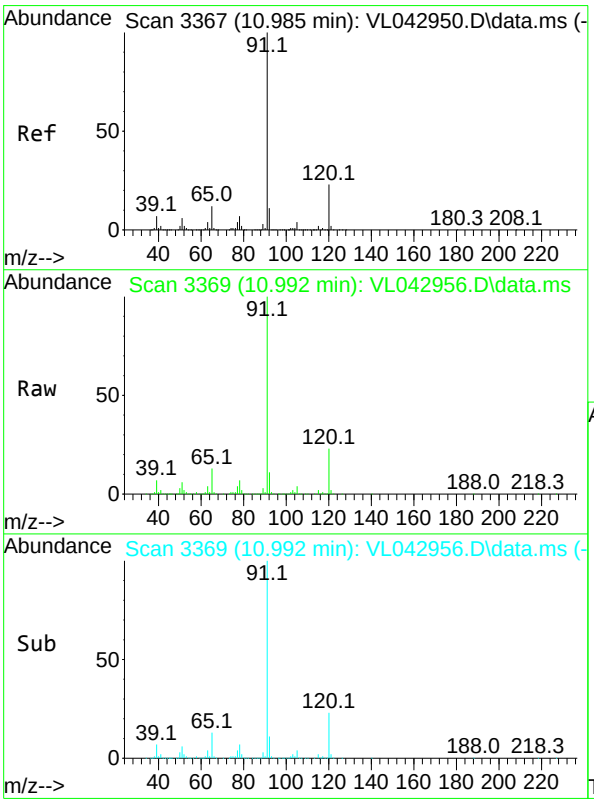
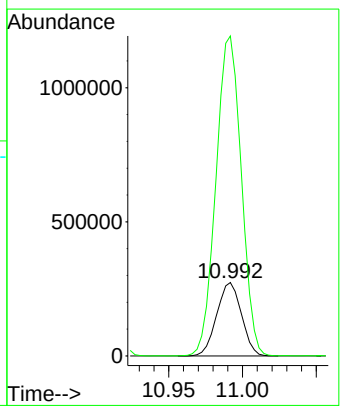


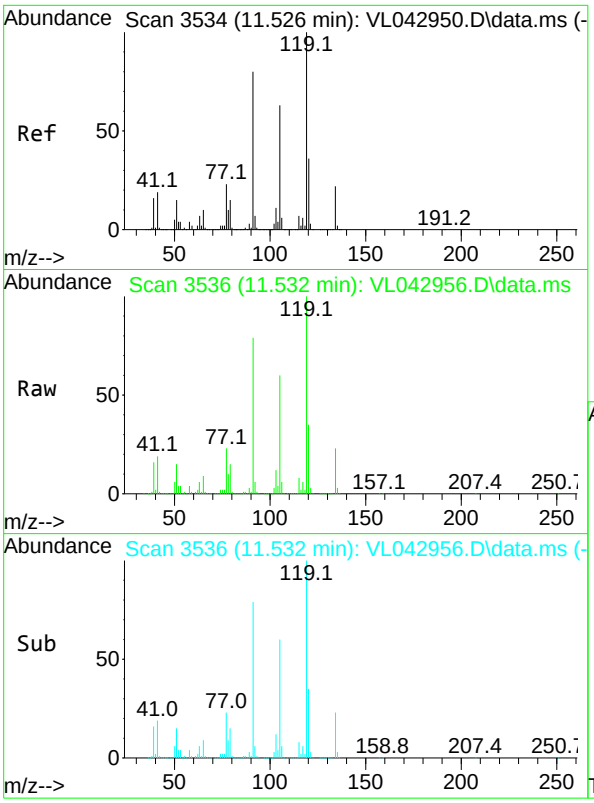


#64
n-propylbenzene
Concen: 13.793 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:120 Resp: 318541

Ion	Ratio	Lower	Upper
120	100		
91	448.5	364.9	547.3





#65
tert-Butylbenzene
Concen: 13.146 ppbv
RT: 11.532 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:119 Resp: 103338

Ion	Ratio	Lower	Upper
119	100		
91	78.8	63.1	94.7
134	21.4	17.0	25.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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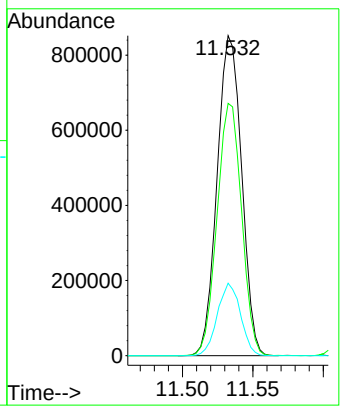
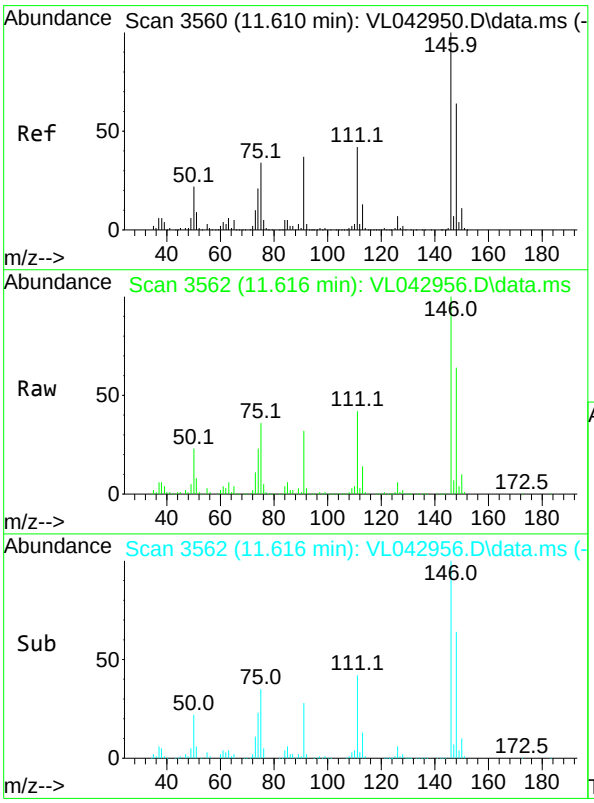
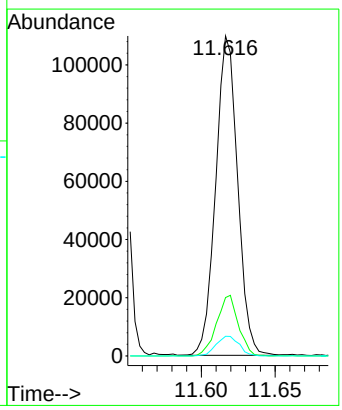


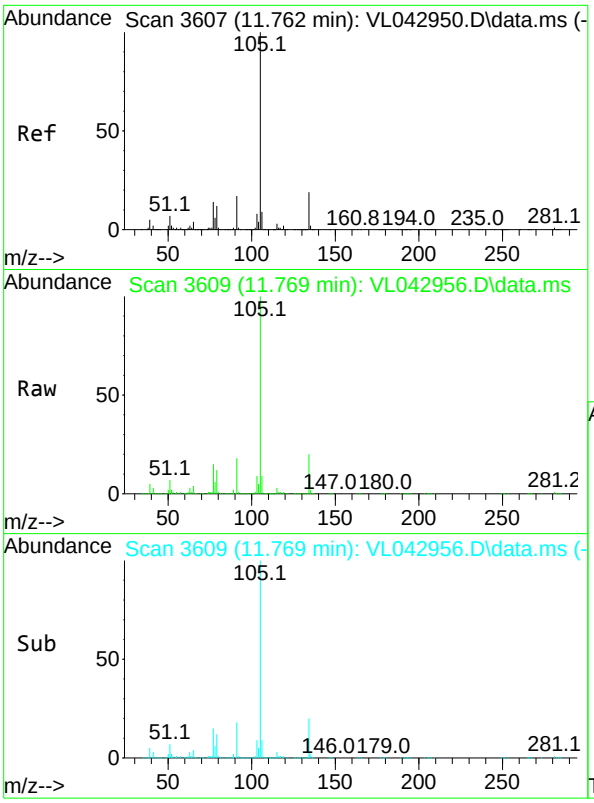


#66
Benzyl Chloride
Concen: 13.767 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 113549

Ion	Ratio	Lower	Upper
91	100		
126	18.8	14.6	21.8
128	6.5	5.0	7.4





#67
sec-Butylbenzene
Concen: 13.276 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 145415

Ion	Ratio	Lower	Upper
105	100		
134	19.3	15.7	23.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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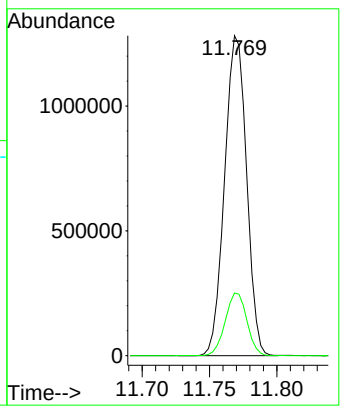
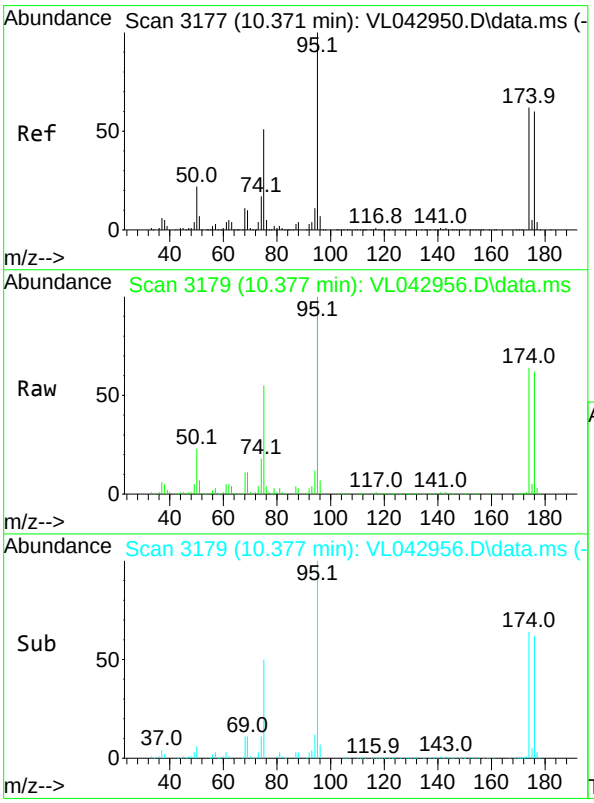
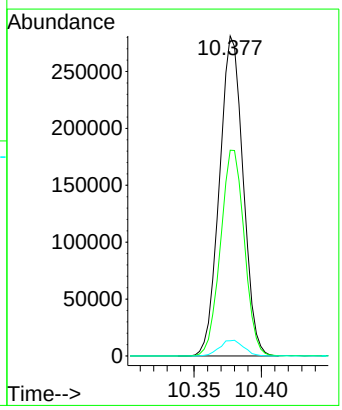


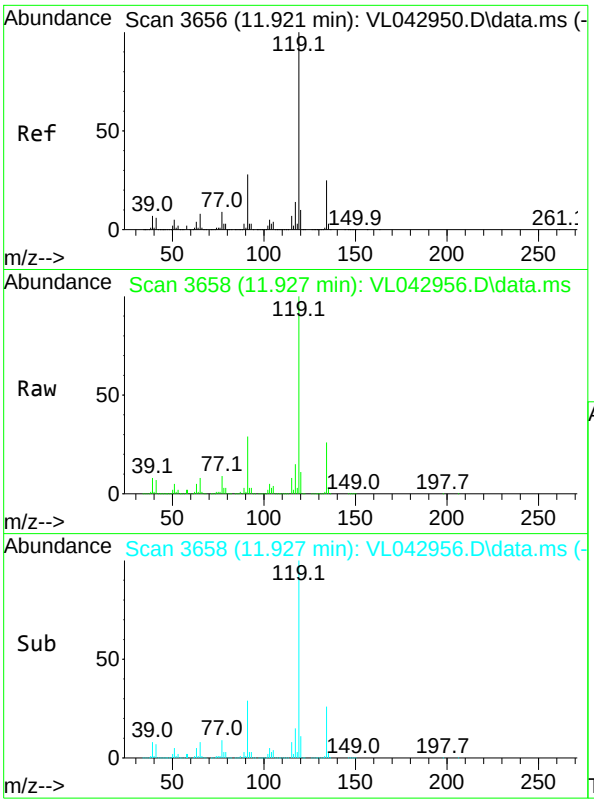


#68
1-Bromo-4-Fluorobenzene
Concen: 10.049 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 95 Resp: 343752

Ion	Ratio	Lower	Upper
95	100		
174	64.8	51.4	77.2
175	5.0	4.0	6.0





#69
p-Isopropyltoluene
Concen: 13.280 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:119 Resp: 122877

Ion	Ratio	Lower	Upper
119	100		
134	26.2	21.0	31.4
91	28.4	22.3	33.5

Instrument :
MSVOA_L
ClientSampleId :
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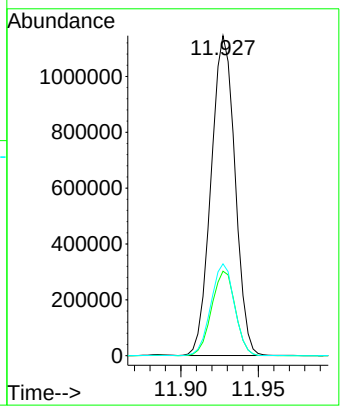
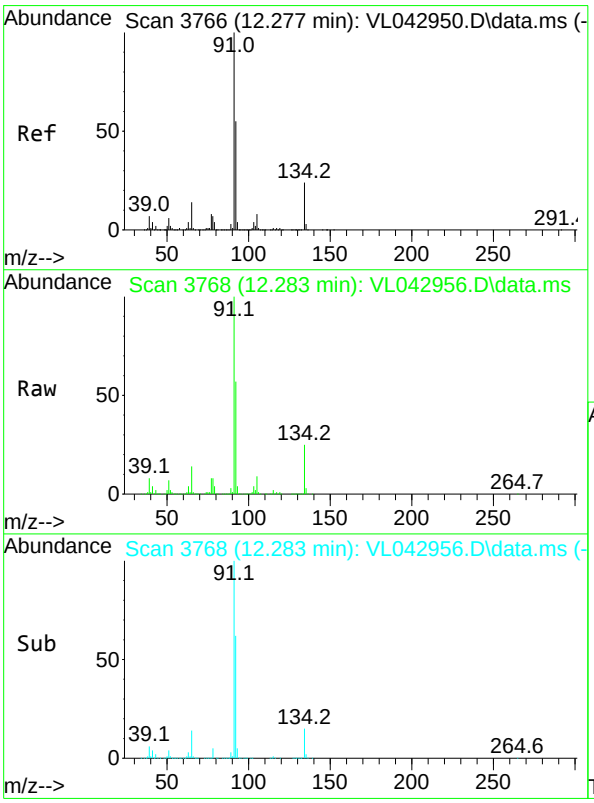
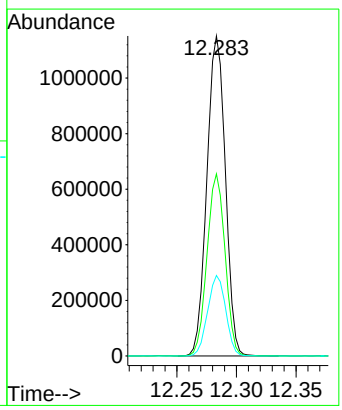


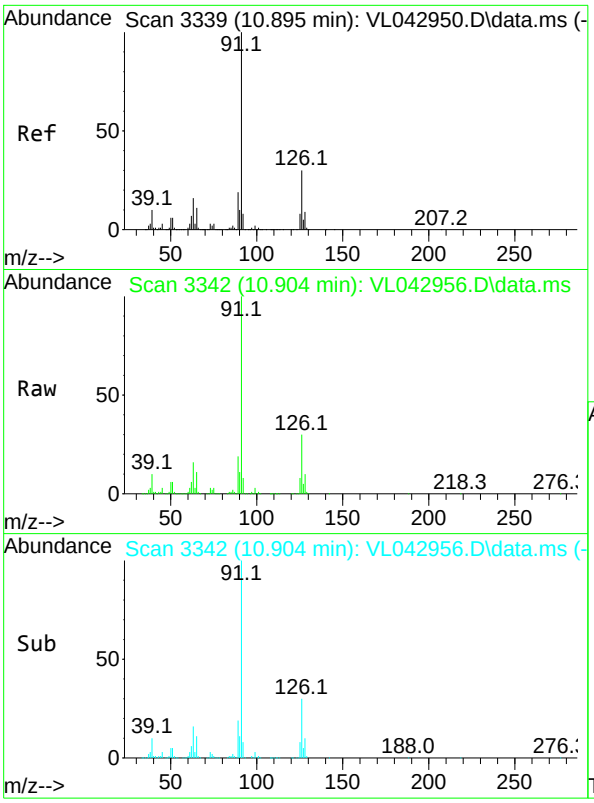


#70
n-Butylbenzene
Concen: 13.716 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 1239042

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.0	66.0
134	24.6	19.4	29.2

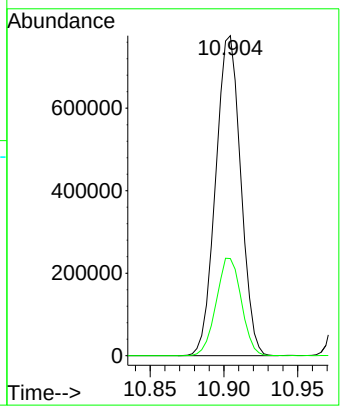




#71
2-Chlorotoluene
Concen: 13.733 ppbv
RT: 10.904 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 91645

Ion	Ratio	Lower	Upper
91	100		
126	30.6	12.3	49.3



Instrument :
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ClientSampleId :
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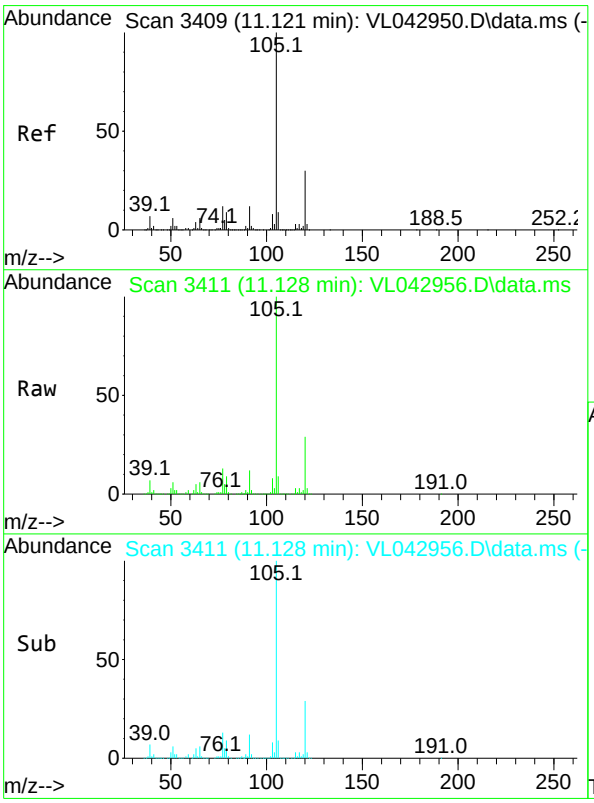
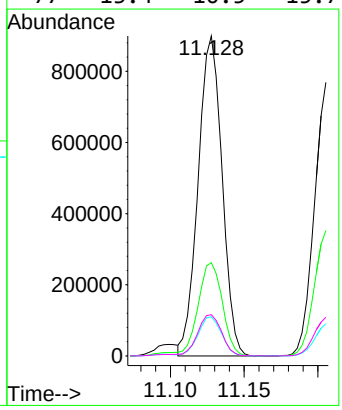
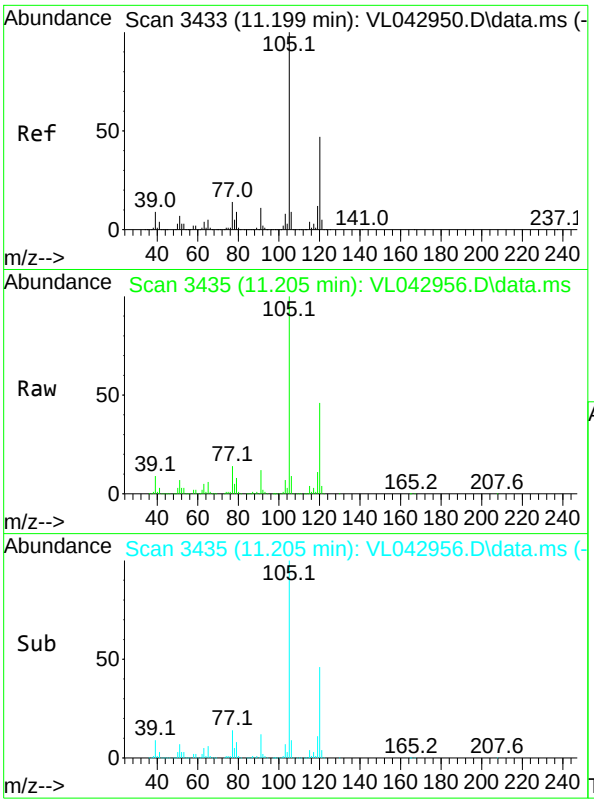


#72
4-Ethyltoluene
Concen: 13.662 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 1014567

Ion	Ratio	Lower	Upper
105	100		
120	30.4	24.2	36.2
91	12.7	10.0	15.0
77	13.4	10.5	15.7

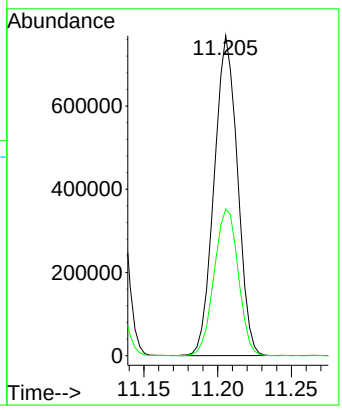




#73
1,3,5-Trimethylbenzene
Concen: 14.046 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 84595

Ion	Ratio	Lower	Upper
105	100		
120	45.8	38.0	57.0



Instrument :
MSVOA_L
ClientSampleId :
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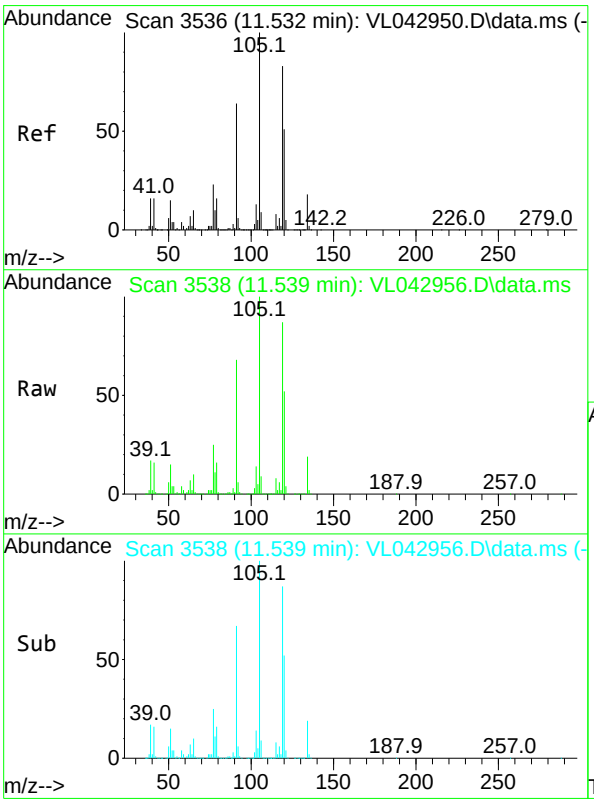
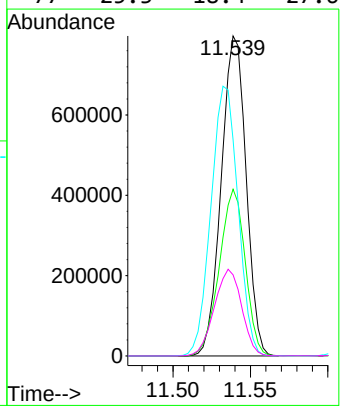
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

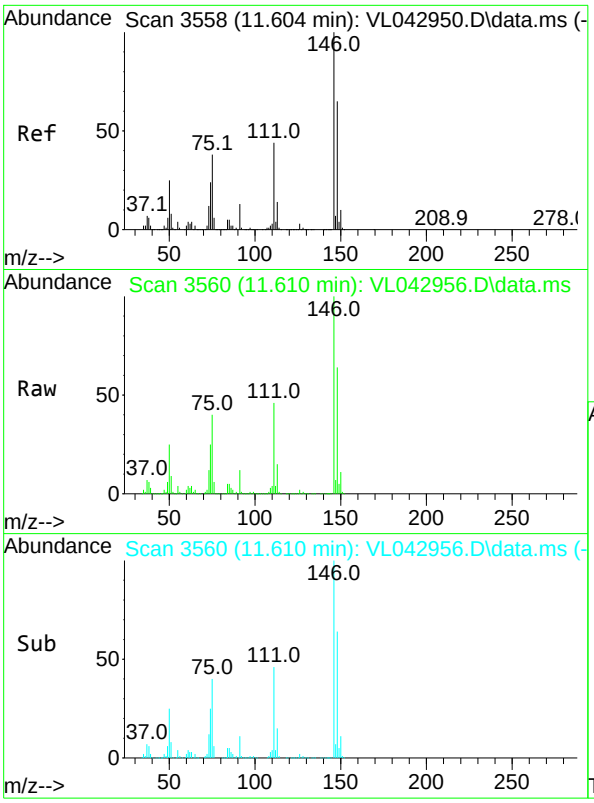


#74
1,2,4-Trimethylbenzene
Concen: 13.372 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 889339

Ion	Ratio	Lower	Upper
105	100		
120	52.1	40.9	61.3
91	67.4	51.2	76.8
77	25.3	18.4	27.6

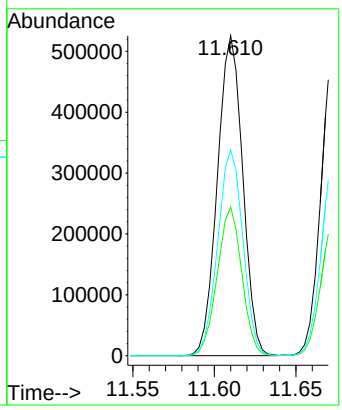




#75
1,3-Dichlorobenzene
Concen: 13.785 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:146 Resp: 56859

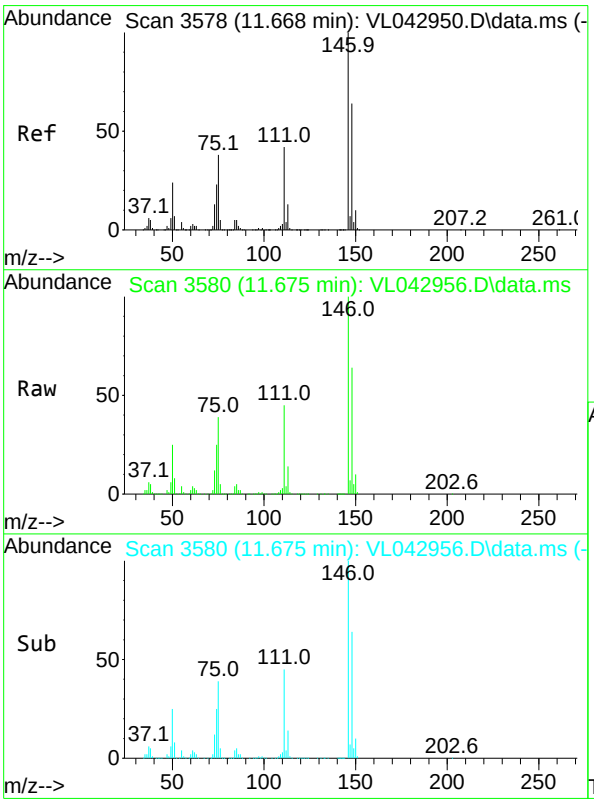
Ion	Ratio	Lower	Upper
146	100		
111	44.9	22.3	66.9
148	63.9	31.9	95.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

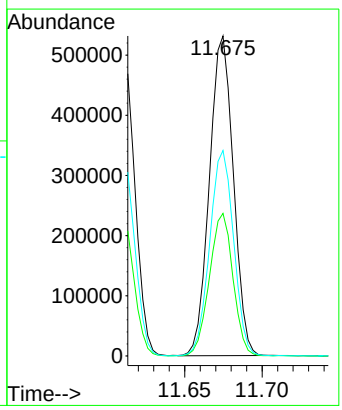
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

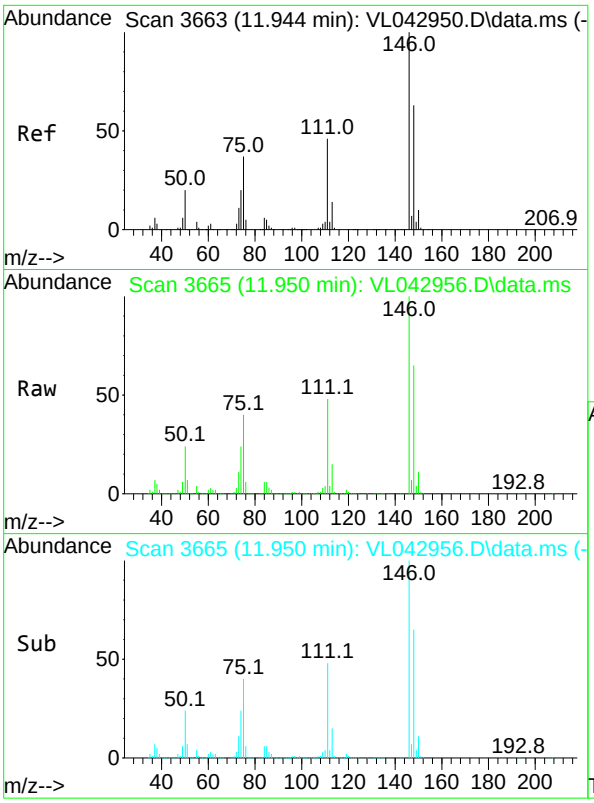


#76
1,4-Dichlorobenzene
Concen: 13.916 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:146 Resp: 570104

Ion	Ratio	Lower	Upper
146	100		
111	44.1	21.5	64.5
148	64.6	31.9	95.5

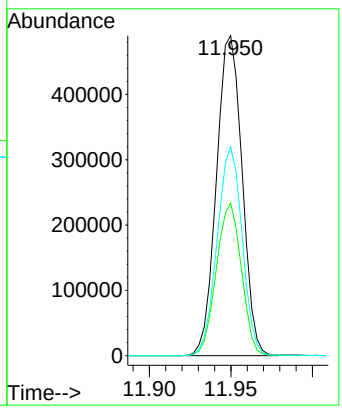




#77
1,2-Dichlorobenzene
Concen: 13.665 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:146 Resp: 53628

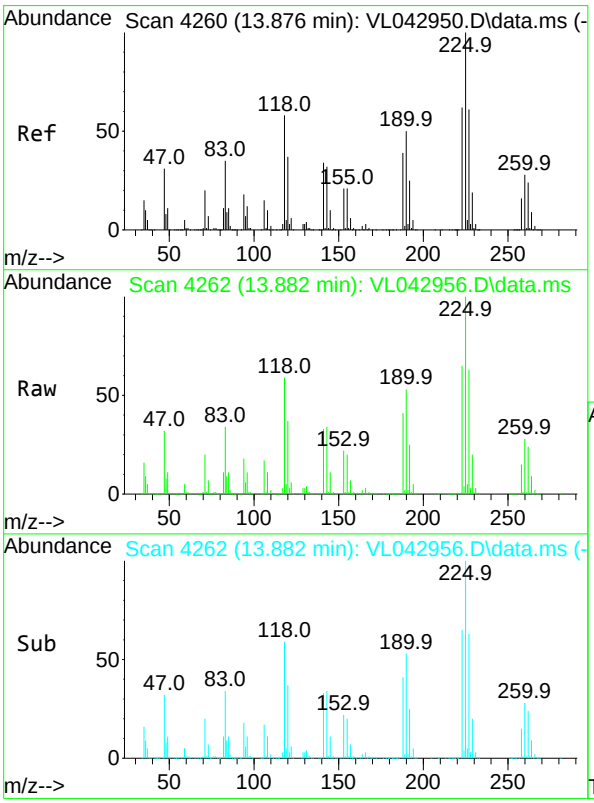
Ion	Ratio	Lower	Upper
146	100		
111	46.7	23.1	69.3
148	63.8	32.0	96.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

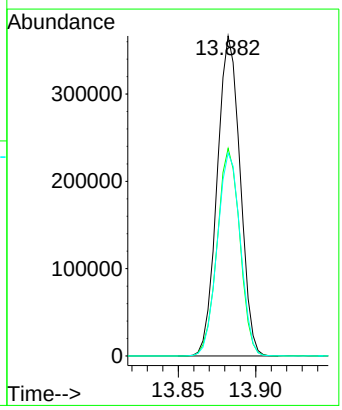
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

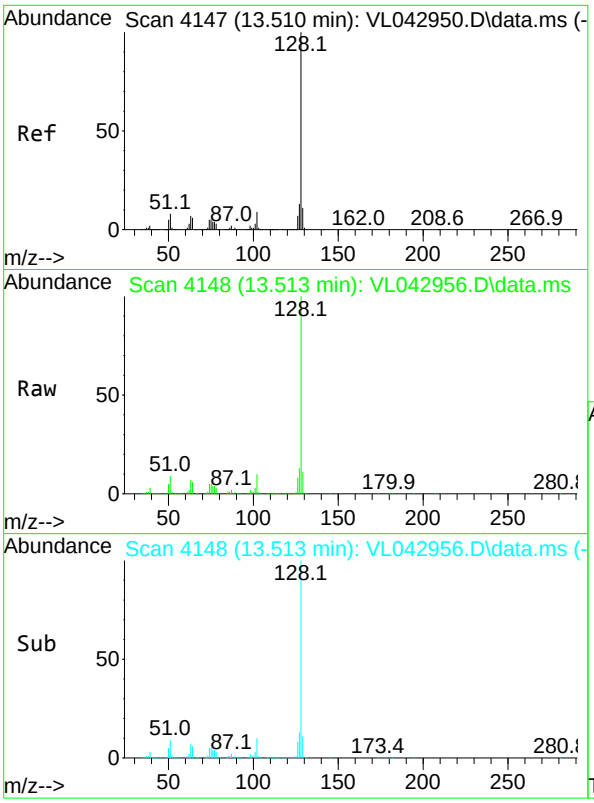


#78
Hexachloro-1,3-Butadiene
Concen: 12.296 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:225 Resp: 377435

Ion	Ratio	Lower	Upper
225	100		
223	64.0	50.1	75.1
227	63.7	50.4	75.6

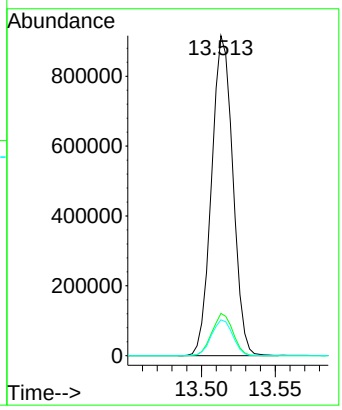




#79
Naphthalene
Concen: 15.645 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:128 Resp: 92012

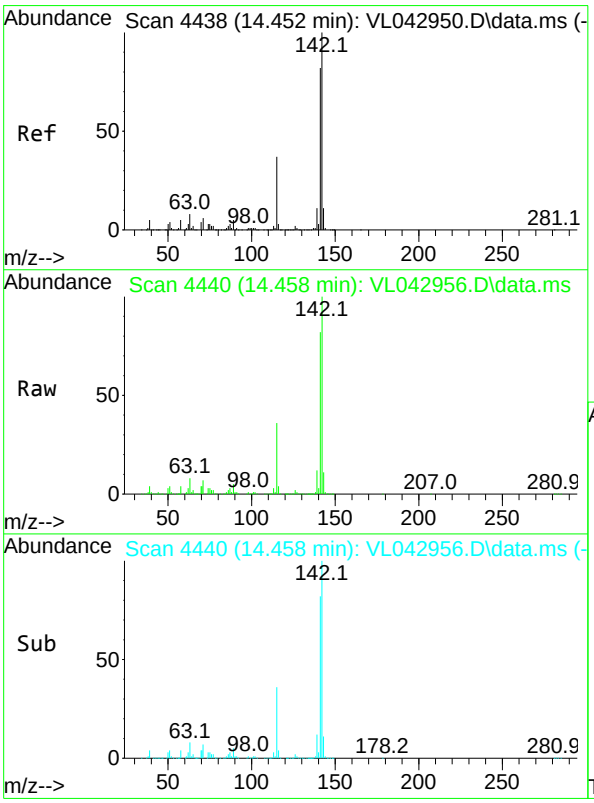
Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	11.2	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

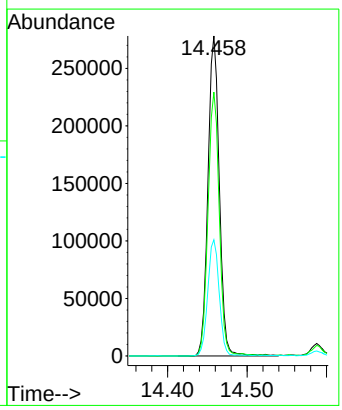
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

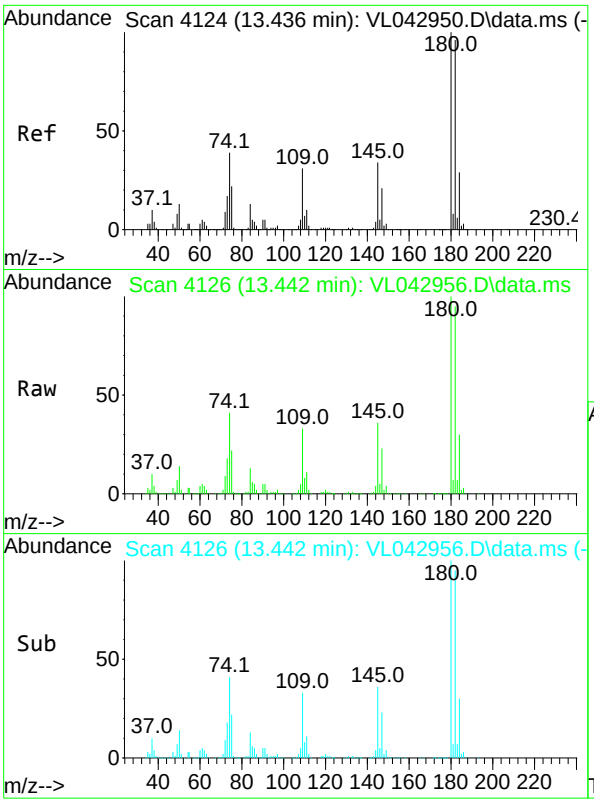


#80
Naphthalene,2-methyl-
Concen: 15.290 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:142 Resp: 277792

Ion	Ratio	Lower	Upper
142	100		
141	82.2	65.1	97.7
115	37.0	28.9	43.3

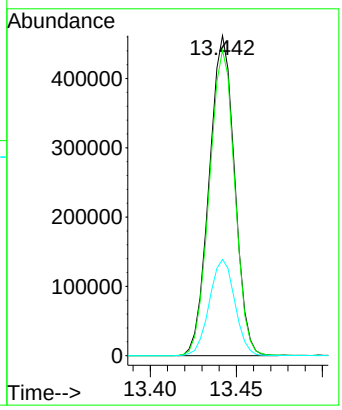




#81
1,2,4-Trichlorobenzene
Concen: 15.066 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:180 Resp: 47376

Ion	Ratio	Lower	Upper
180	100		
182	95.5	75.7	113.5
184	30.2	23.9	35.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	159826	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	493072	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	450930	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	338071	10.043	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	197861	9.204	ppbv	98
3) Chlorodifluoromethane	1.476	51	246838	9.213	ppbv	99
4) Chloromethane	1.535	50	85932	8.831	ppbv	100
5) Vinyl Chloride	1.580	62	74819	8.506	ppbv	98
6) Bromomethane	1.667	94	26463	8.529	ppbv	91
7) Chloroethane	1.706	64	30377	8.894	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	164255	8.951	ppbv	98
9) Propene	1.483	41	105822	9.079	ppbv	95
10) Heptane	4.982	43	284333	9.141	ppbv	99
11) Trichlorofluoromethane	1.878	101	189800	9.157	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	151398	9.020	ppbv	99
13) Ethanol	1.722	45	6606	5.842	ppbv	90
14) Bromoethene	1.781	108	55748	8.785	ppbv	98
15) Acetone	1.836	43	157306	7.557	ppbv	98
16) 1,3-Butadiene	1.609	39	80854	8.234	ppbv	98
17) tert-Butyl alcohol	2.040	59	206466	9.043	ppbv	100
18) 1,1-Dichloroethene	2.036	96	69181	8.904	ppbv	94
19) Isopropyl Alcohol	1.884	45	108171	8.644	ppbv	100
20) Methylene Chloride	2.062	84	61743	9.945	ppbv	98
21) Allyl Chloride	2.098	41	132878	9.166	ppbv	100
22) trans-1,2-Dichloroethene	2.341	96	78085	8.845	ppbv	98
23) Vinyl Acetate	2.464	43	280339	9.427	ppbv	99
24) 1,1-Dichloroethane	2.409	63	155861	9.003	ppbv	100
25) Ethyl Acetate	2.833	43	486993	9.256	ppbv	99
26) Hexane	2.826	57	216458	9.026	ppbv	99
27) Carbon Disulfide	2.150	76	196191	9.121	ppbv	98
28) Methyl tert-Butyl Ether	2.441	73	121564	9.752	ppbv	95
29) Chloroform	2.849	83	300507	9.583	ppbv	100
30) Cyclohexane	3.855	84	186186	9.286	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	213362	9.497	ppbv	99
32) 1,1,1-Trichloroethane	3.370	97	307237	9.071	ppbv	100
34) 2-Butanone	2.558	43	313801	9.081	ppbv	100
35) Carbon Tetrachloride	3.762	117	304293	9.479	ppbv	97
36) Benzene	3.655	78	435981	9.416	ppbv	98
37) 1,2-Dichloroethane	3.218	62	233305	9.581	ppbv	99
38) Trichloroethene	4.548	130	205431	8.927	ppbv	95
39) 1,2-Dichloropropane	4.312	63	160275	9.482	ppbv	95
40) 1,4-Dioxane	4.577	88	69659	8.863	ppbv #	95
41) Tetrahydrofuran	3.053	42	184258	9.277	ppbv	100
42) Bromodichloromethane	4.490	83	329680	9.721	ppbv	99
43) Methyl Methacrylate	4.878	69	172867	9.125	ppbv	99
44) 2,2,4-Trimethylpentane	4.642	57	738876	9.239	ppbv	99
45) t-1,3-Dichloropropene	6.416	75	188332	9.321	ppbv	97

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	244367	9.490	ppbv	99
47) 1,1,2-Trichloroethane	6.577	97	165721	9.279	ppbv	97
48) Dibromochloromethane	7.387	129	278090	9.732	ppbv	99
49) Bromoform	9.484	173	238337	9.589	ppbv	99
50) 4-Methyl-2-Pentanone	5.746	43	435845	9.411	ppbv	99
51) 2-Hexanone	7.435	43	352962	9.561	ppbv	100
52) Tetrachloroethene	8.225	164	155469	8.678	ppbv	98
53) Toluene	6.933	91	509968	9.306	ppbv	99
54) 1,2-Dibromoethane	7.652	107	237604	9.452	ppbv	96
56) 1,1,1,2-Tetrachloroethane	8.924	131	205811	9.536	ppbv	99
57) Chlorobenzene	8.924	112	379110	9.209	ppbv	99
58) Ethyl Benzene	9.354	91	698086	9.428	ppbv	100
59) m/p-Xylene	9.552	91	1092496m	18.715	ppbv	
60) o-Xylene	9.966	91	538861	9.236	ppbv	99
61) Styrene	9.872	104	264257	9.575	ppbv	99
62) Isopropylbenzene	10.539	105	802723	9.230	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.963	83	272416	8.883	ppbv	100
64) n-propylbenzene	10.989	120	214374	9.433	ppbv	99
65) tert-Butylbenzene	11.533	119	711319	9.196	ppbv	99
66) Benzyl Chloride	11.617	91	71896	8.858	ppbv	99
67) sec-Butylbenzene	11.769	105	995407	9.235	ppbv	99
69) p-Isopropyltoluene	11.928	119	848196	9.316	ppbv	99
70) n-Butylbenzene	12.280	91	834882	9.392	ppbv	100
71) 2-Chlorotoluene	10.902	91	611697	9.315	ppbv	100
72) 4-Ethyltoluene	11.125	105	686229	9.391	ppbv	100
73) 1,3,5-Trimethylbenzene	11.203	105	567874	9.582	ppbv	100
74) 1,2,4-Trimethylbenzene	11.536	105	607159	9.277	ppbv	92
75) 1,3-Dichlorobenzene	11.607	146	380822	9.382	ppbv	100
76) 1,4-Dichlorobenzene	11.672	146	380109	9.429	ppbv	99
77) 1,2-Dichlorobenzene	11.947	146	359995	9.322	ppbv	100
78) Hexachloro-1,3-Butadiene	13.883	225	249142	8.248	ppbv	100
79) Naphthalene	13.514	128	590759	10.208	ppbv	99
80) Naphthalene,2-methyl-	14.459	142	173023	9.678	ppbv	98
81) 1,2,4-Trichlorobenzene	13.439	180	304647	9.845	ppbv	98

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

Quantitation Report (QT Reviewed)

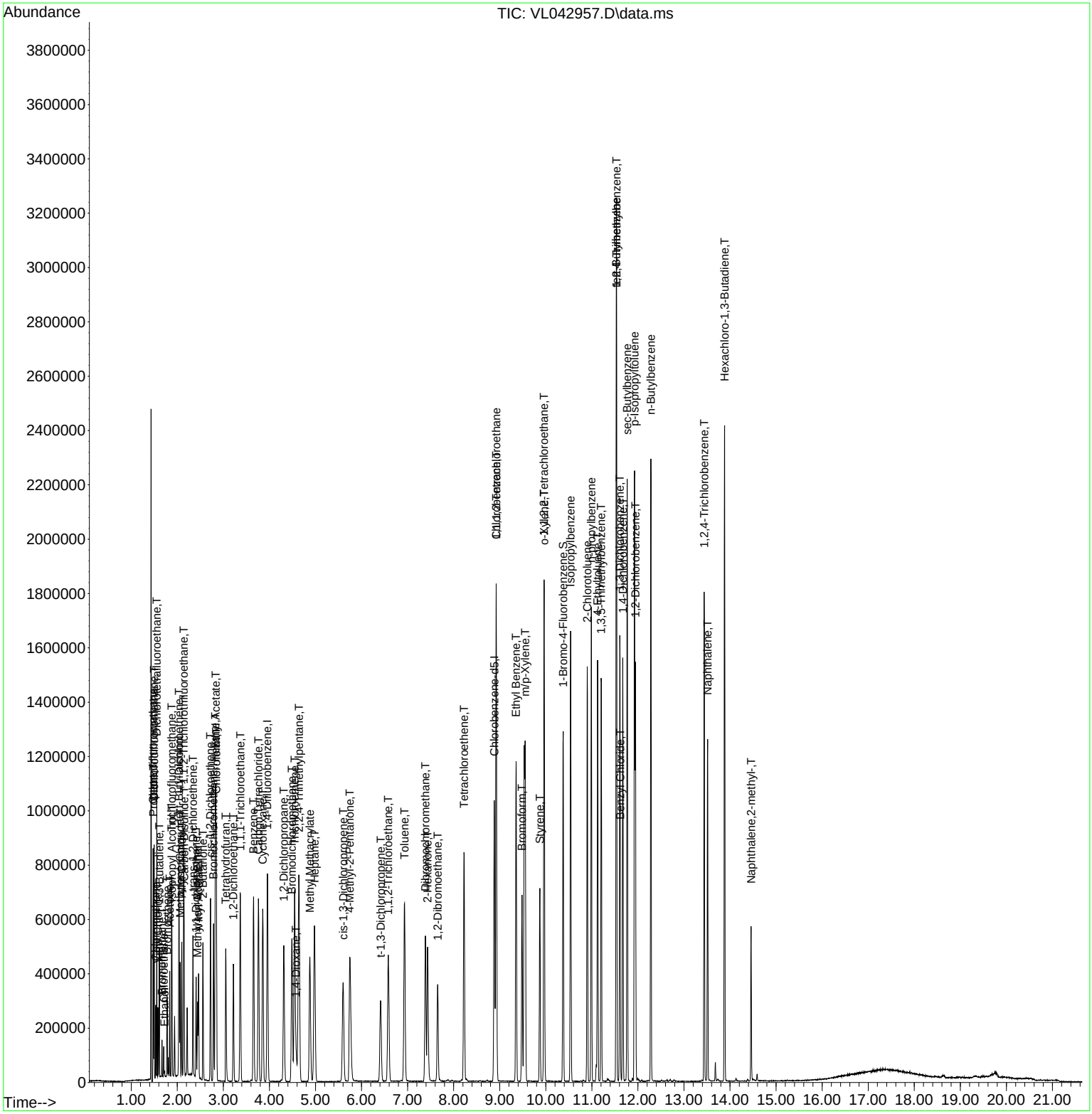
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

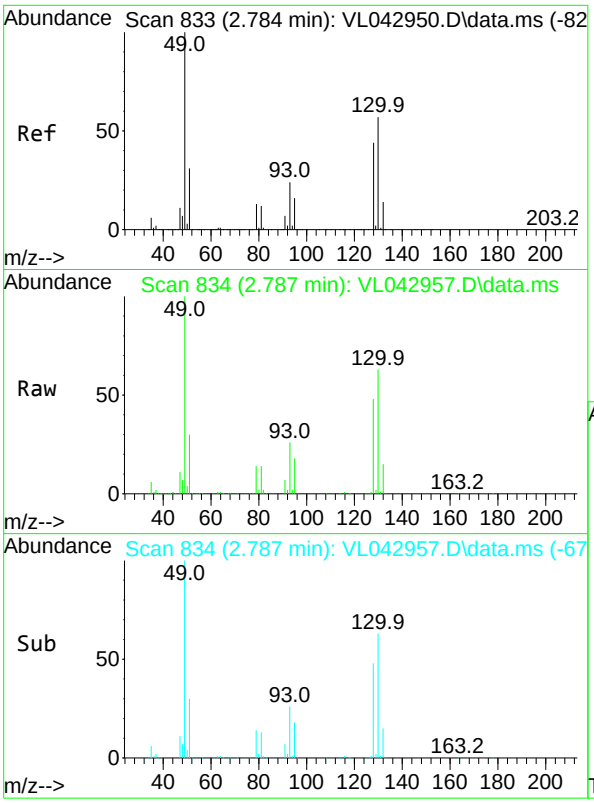
Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

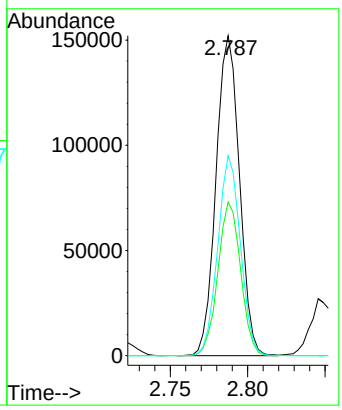




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 49 Resp: 15982

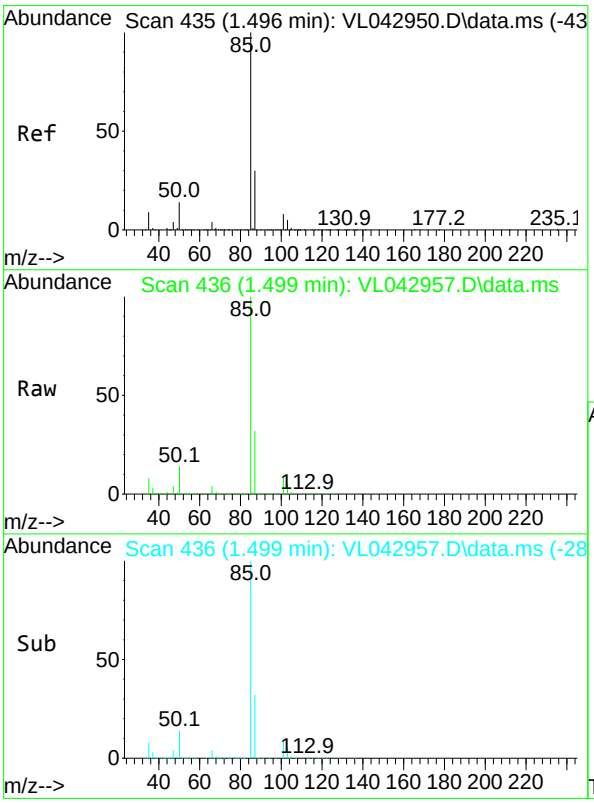
Ion	Ratio	Lower	Upper
49	100		
128	46.7	22.9	68.8
130	60.6	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Manual Integrations
APPROVED

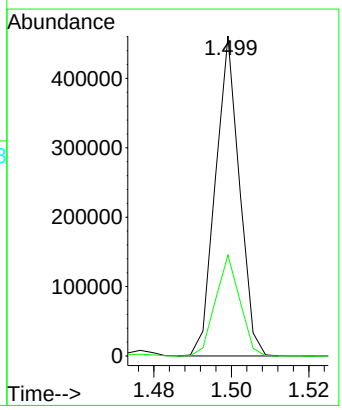
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

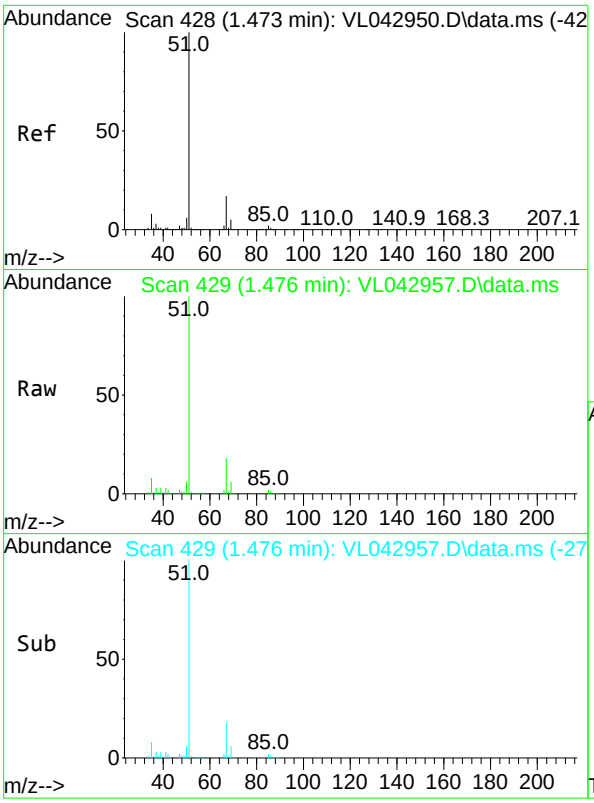


#2
Dichlorodifluoromethane
Concen: 9.204 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 85 Resp: 197861

Ion	Ratio	Lower	Upper
85	100		
87	31.6	24.3	36.5

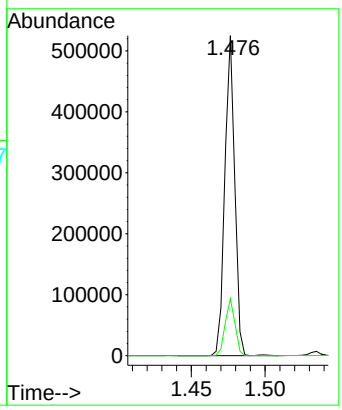




#3
Chlorodifluoromethane
Concen: 9.213 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 51 Resp: 24683

Ion	Ratio	Lower	Upper
51	100		
67	17.6	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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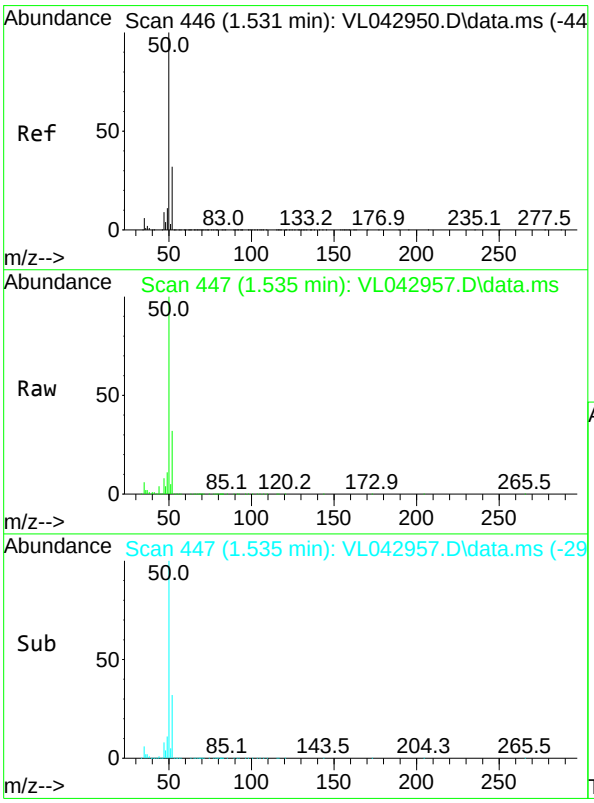
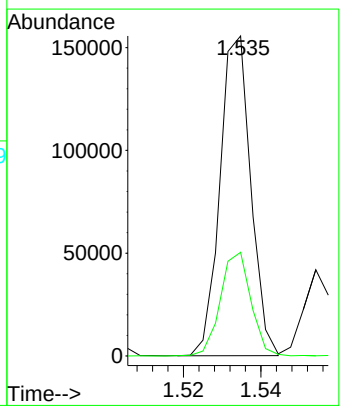
Supervised By :Mahesh Dadoda 09/24/2025

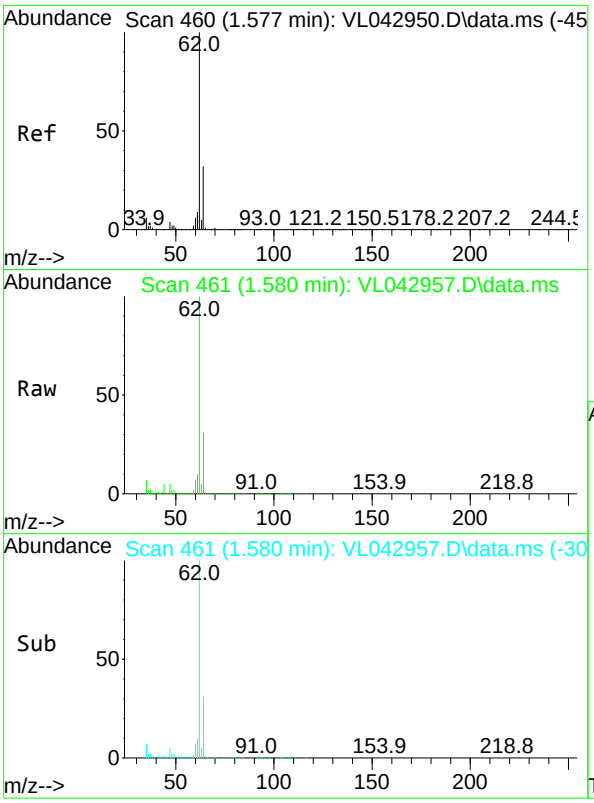


#4
Chloromethane
Concen: 8.831 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 50 Resp: 85932

Ion	Ratio	Lower	Upper
50	100		
52	32.4	25.9	38.9

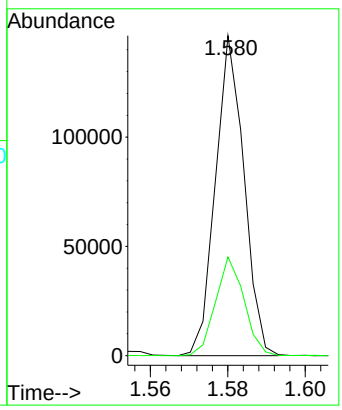




#5
Vinyl Chloride
Concen: 8.506 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 62 Resp: 7481

Ion	Ratio	Lower	Upper
62	100		
64	30.9	25.4	38.2



Instrument :
MSVOA_L
ClientSampleId :
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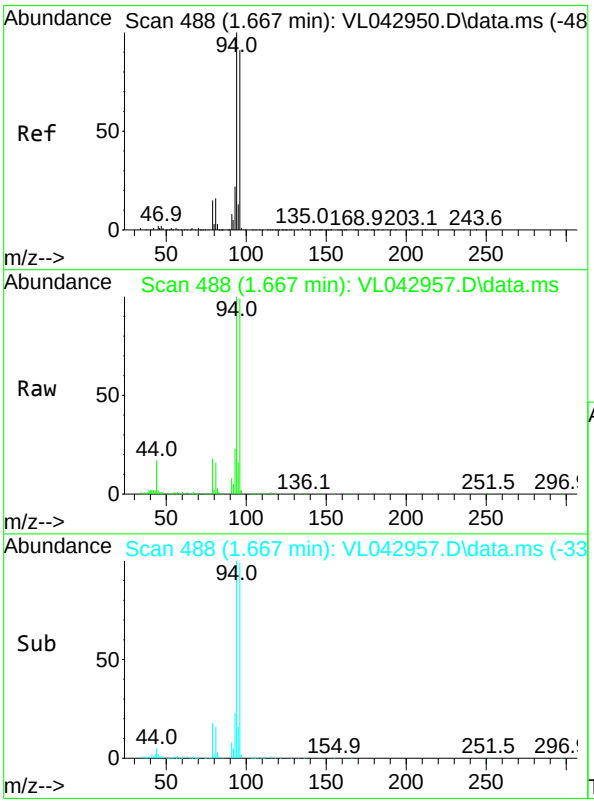
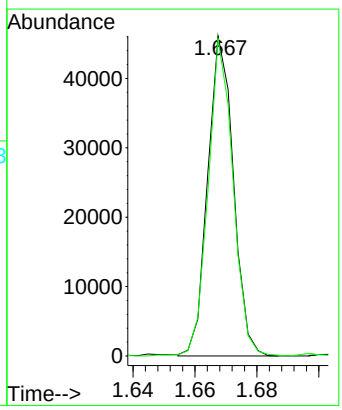
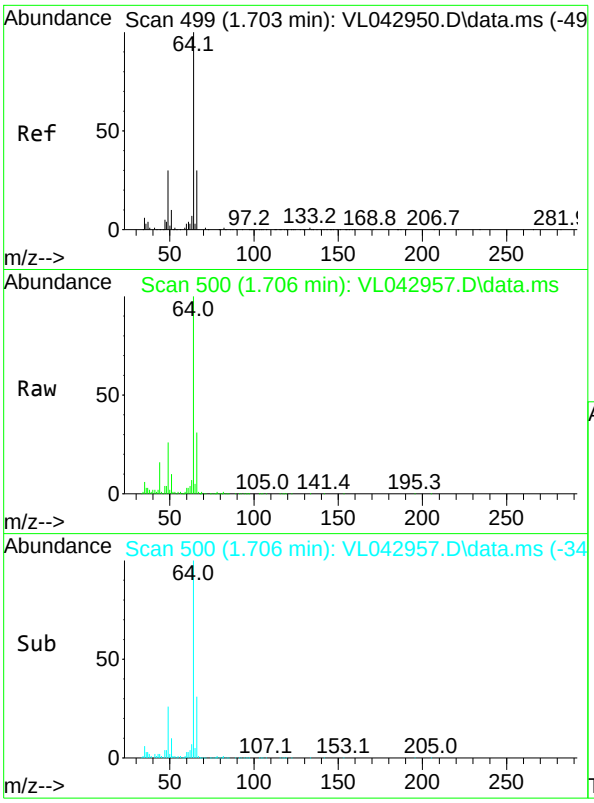


#6
Bromomethane
Concen: 8.529 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 94 Resp: 26463

Ion	Ratio	Lower	Upper
94	100		
96	98.8	72.6	108.8

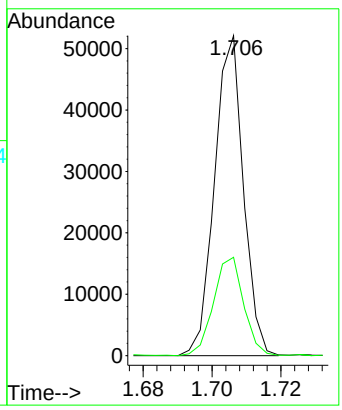




#7
Chloroethane
Concen: 8.894 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 64 Resp: 3037

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
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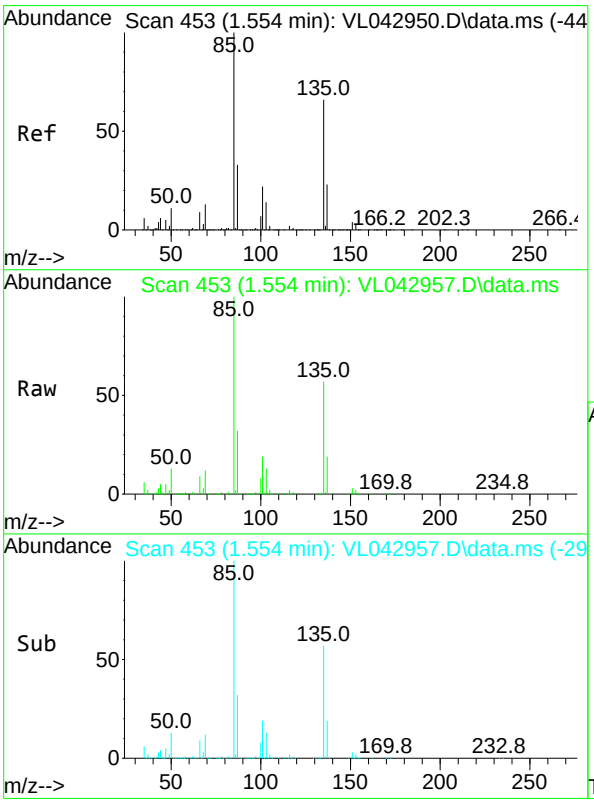
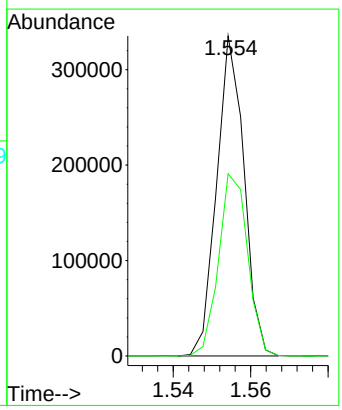
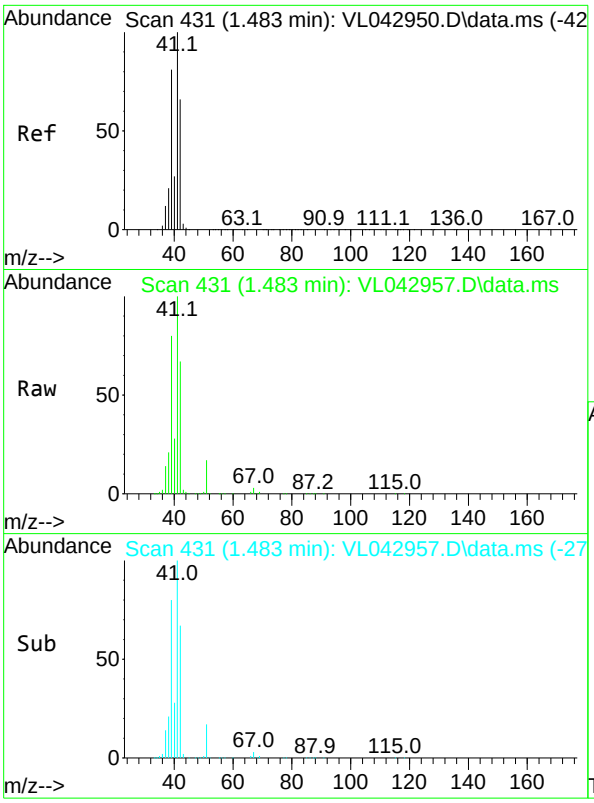


#8
Dichlorotetrafluoroethane
Concen: 8.951 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 85 Resp: 164255

Ion	Ratio	Lower	Upper
85	100		
135	60.7	49.7	74.5

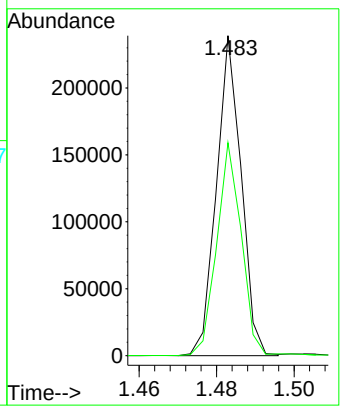




#9
Propene
Concen: 9.079 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 41 Resp: 10582

Ion	Ratio	Lower	Upper
41	100		
42	67.4	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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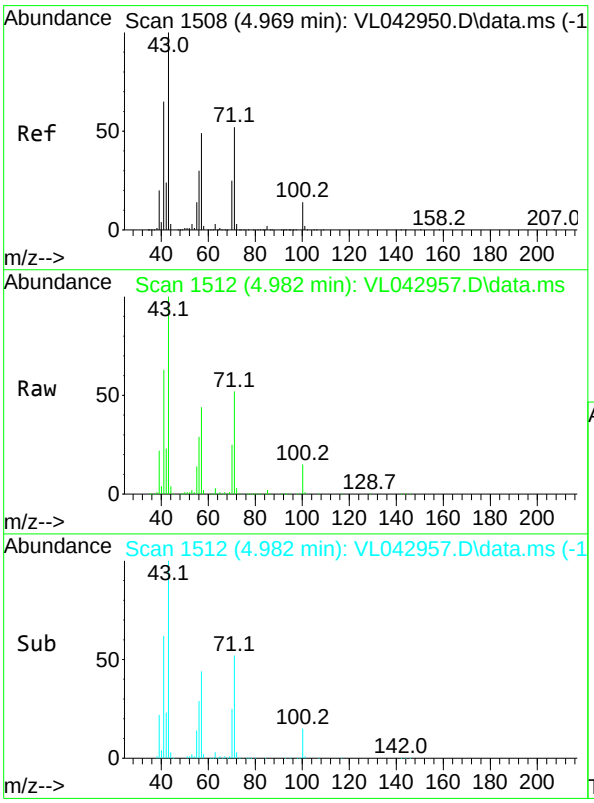
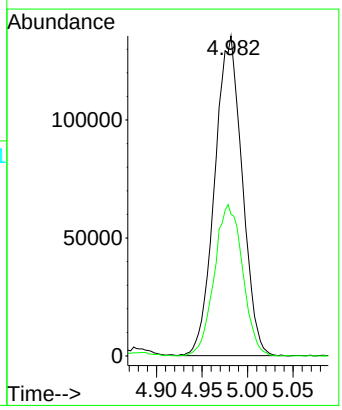
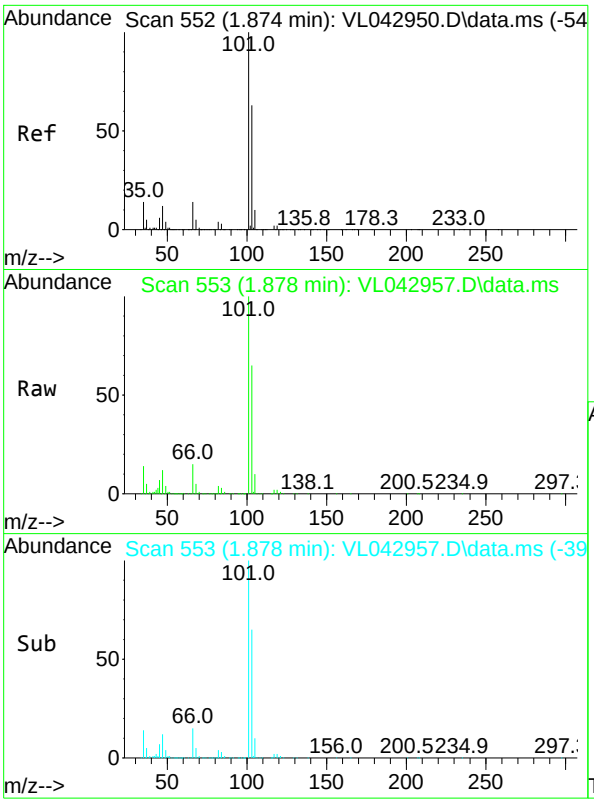


#10
Heptane
Concen: 9.141 ppbv
RT: 4.982 min Scan# 1512
Delta R.T. 0.013 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 284333

Ion	Ratio	Lower	Upper
43	100		
57	48.7	38.6	57.8





#11
Trichlorofluoromethane
Concen: 9.157 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:101 Resp: 18980

Ion	Ratio	Lower	Upper
101	100		
103	65.1	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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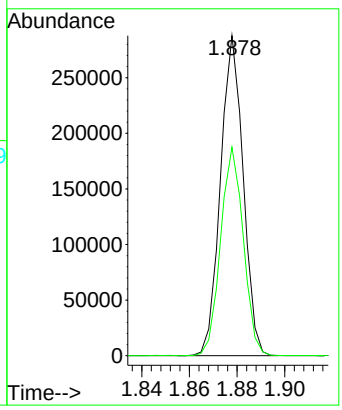
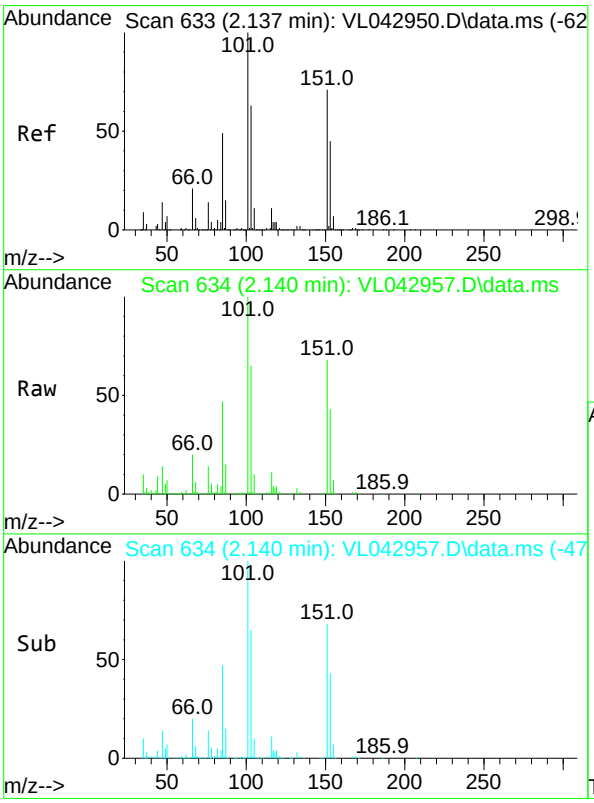
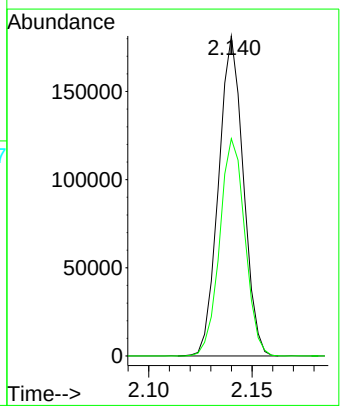


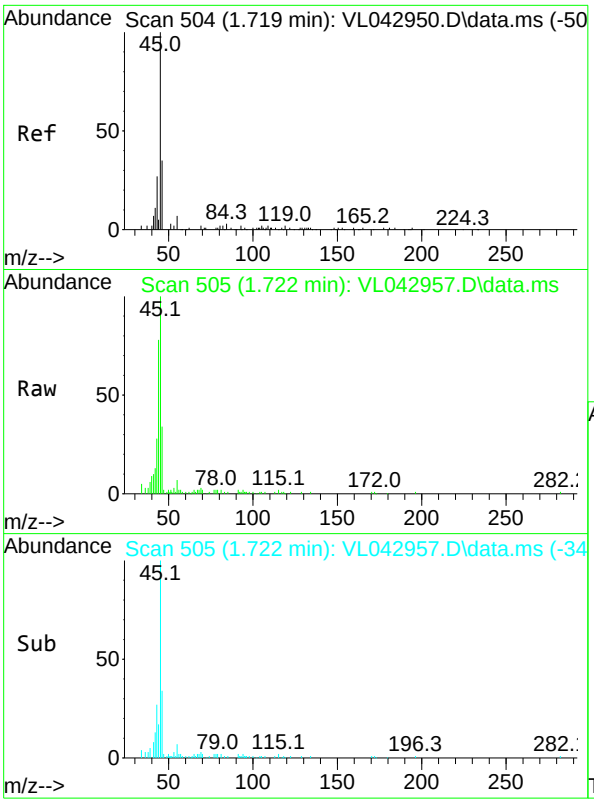


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.020 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:101 Resp: 151398

Ion	Ratio	Lower	Upper
101	100		
151	69.1	55.7	83.5





#13
Ethanol
Concen: 5.842 ppbv
RT: 1.722 min Scan# 5(
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 45 Resp: 660(

Ion	Ratio	Lower	Upper
45	100		
46	46.7	16.2	64.6

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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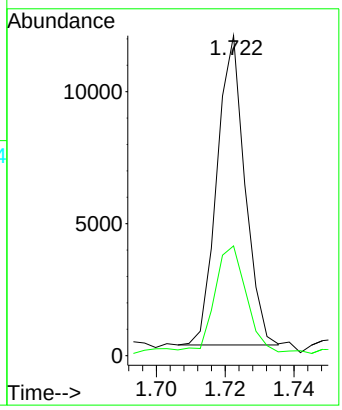
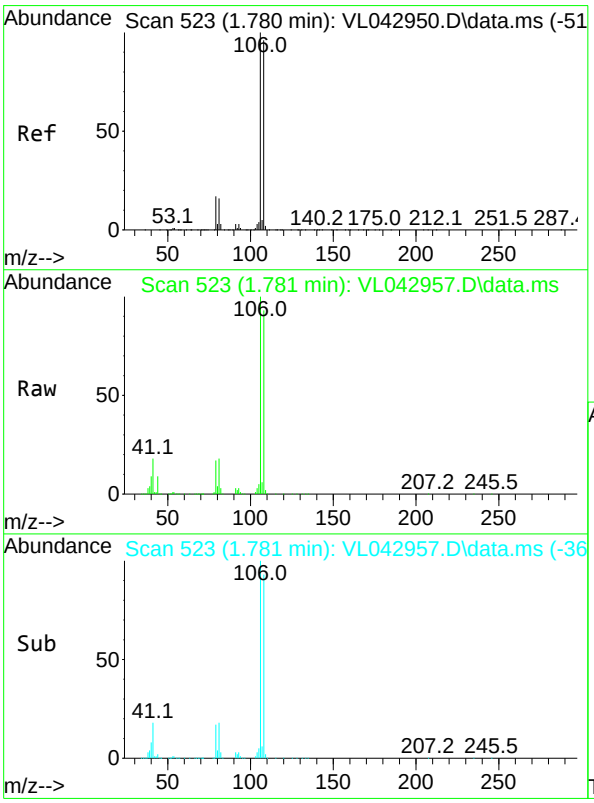
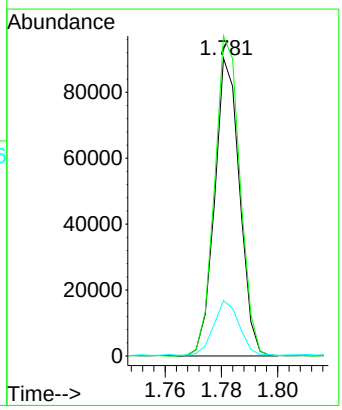


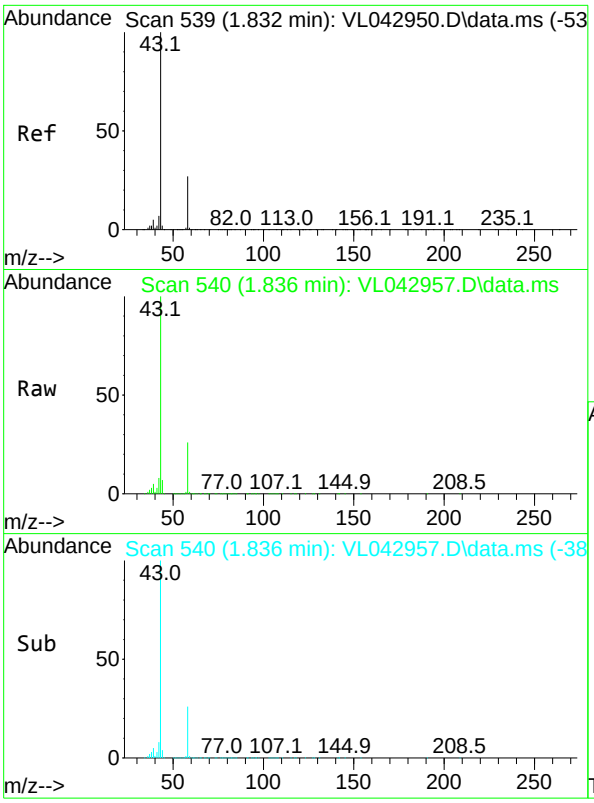


#14
Bromoethene
Concen: 8.785 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:108 Resp: 55748

Ion	Ratio	Lower	Upper
108	100		
106	109.3	86.0	129.0
79	19.7	14.2	21.2

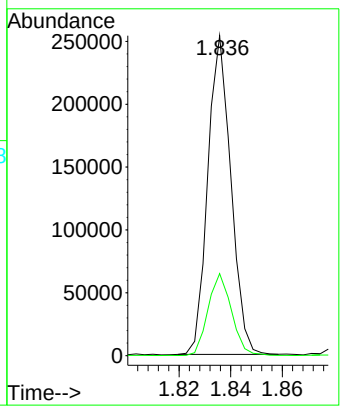




#15
Acetone
Concen: 7.557 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 15730

Ion	Ratio	Lower	Upper
43	100		
58	26.7	22.3	33.5



Instrument :
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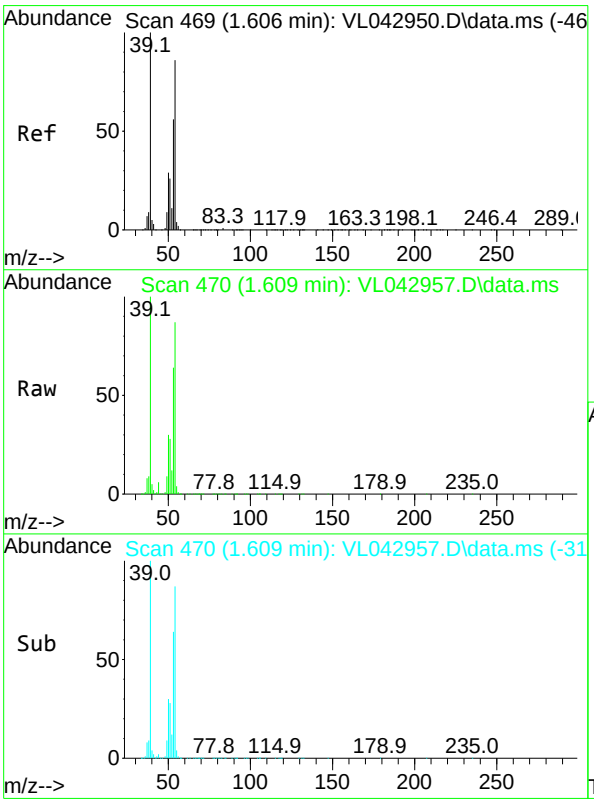
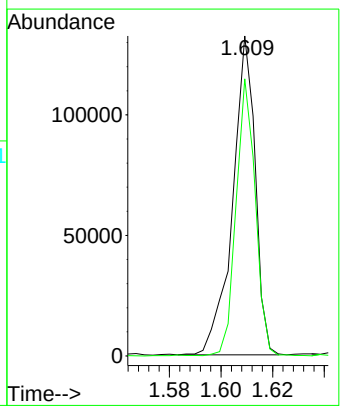
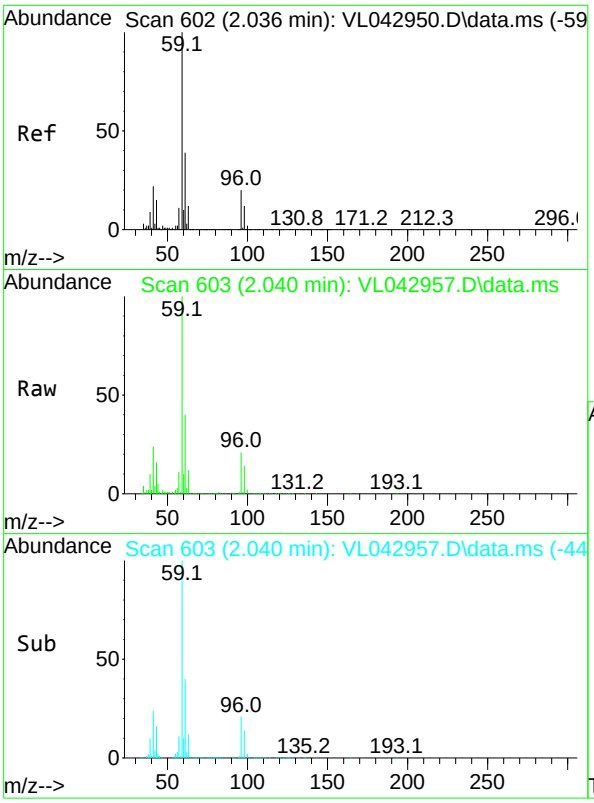


#16
1,3-Butadiene
Concen: 8.234 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 39 Resp: 80854

Ion	Ratio	Lower	Upper
39	100		
54	74.7	60.8	91.2

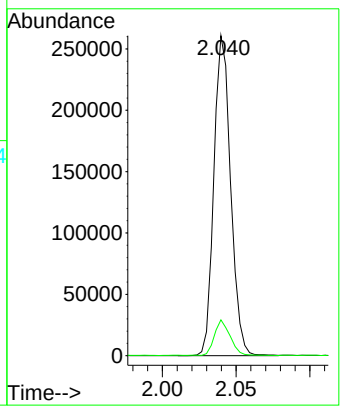




#17
tert-Butyl alcohol
Concen: 9.043 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 59 Resp: 20646

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.6	12.8



Instrument :
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ClientSampleId :
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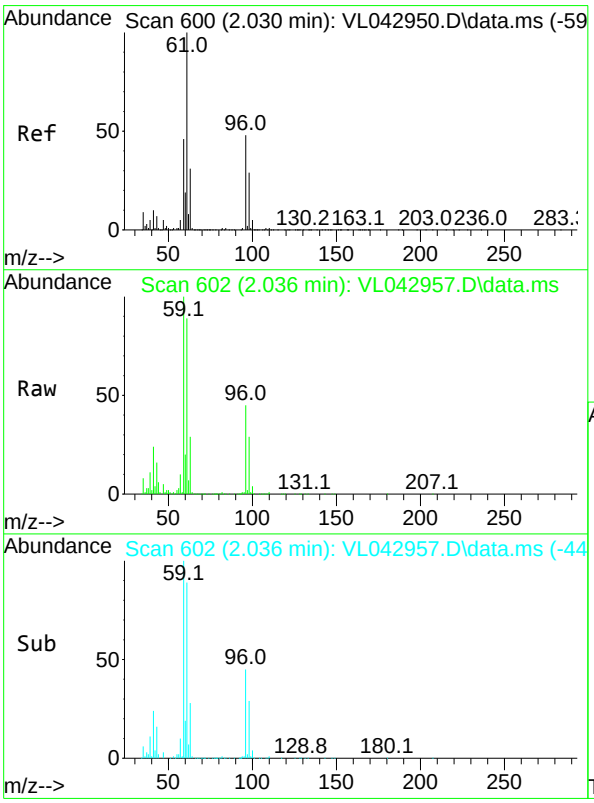
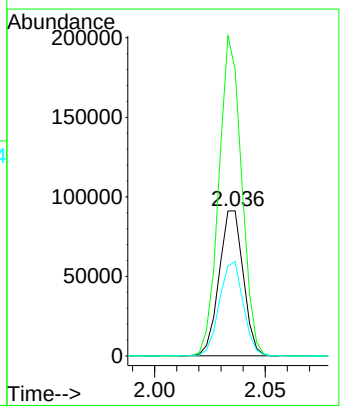
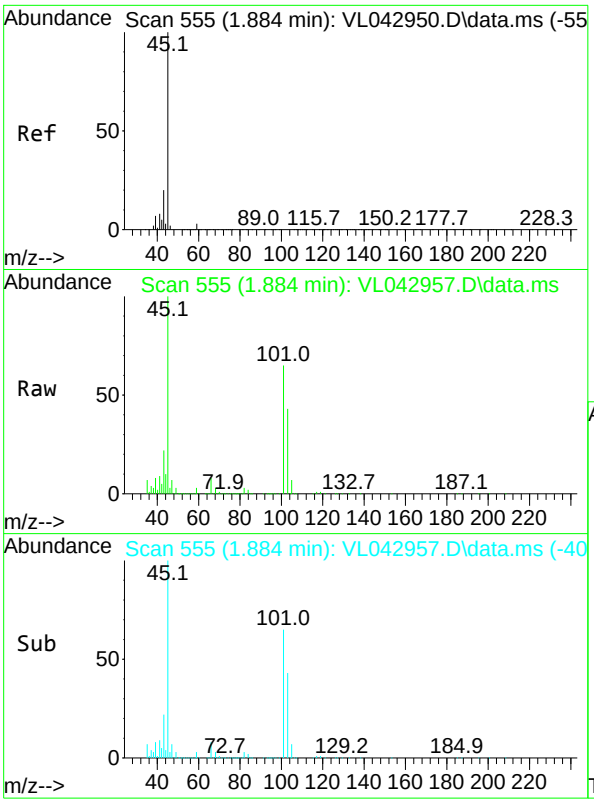


#18
1,1-Dichloroethene
Concen: 8.904 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 96 Resp: 69181

Ion	Ratio	Lower	Upper
96	100		
61	197.4	166.2	249.4
98	64.8	48.6	73.0

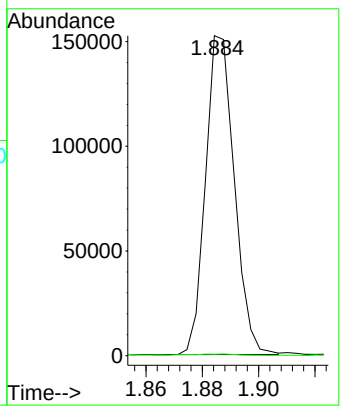




#19
Isopropyl Alcohol
Concen: 8.644 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 45 Resp: 10817

Ion	Ratio	Lower	Upper
45	100		
58	38.8	31.0	46.6



Instrument :
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ClientSampleId :
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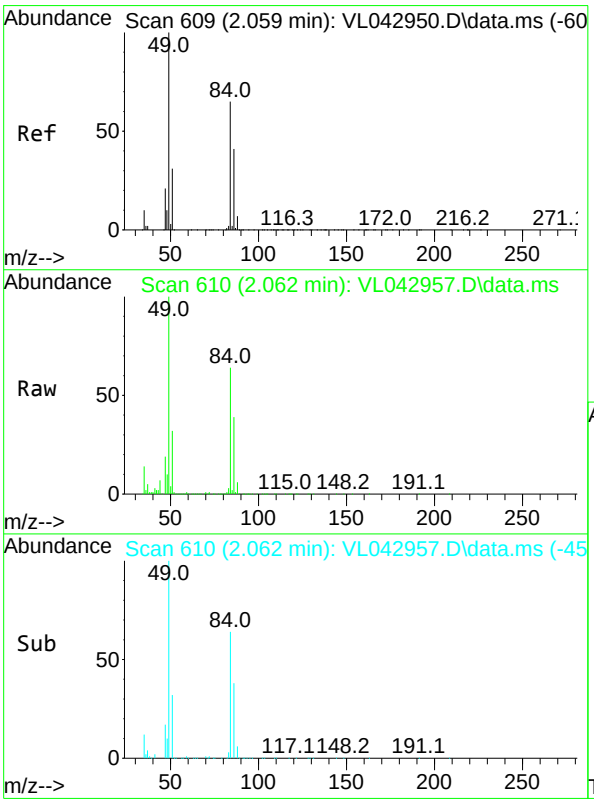
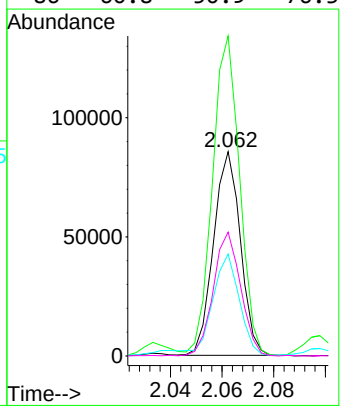
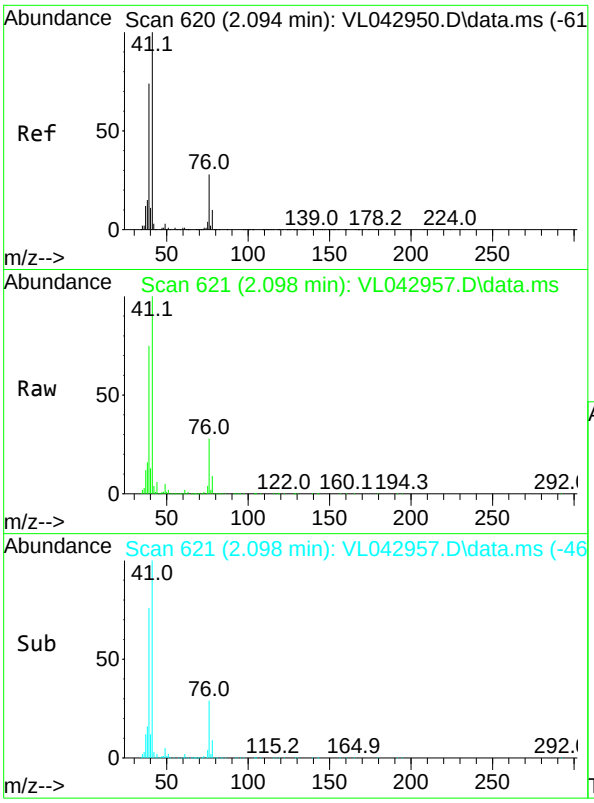


#20
Methylene Chloride
Concen: 9.945 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 84 Resp: 61743

Ion	Ratio	Lower	Upper
84	100		
49	156.9	124.1	186.1
51	49.6	39.8	59.8
86	60.8	50.9	76.3

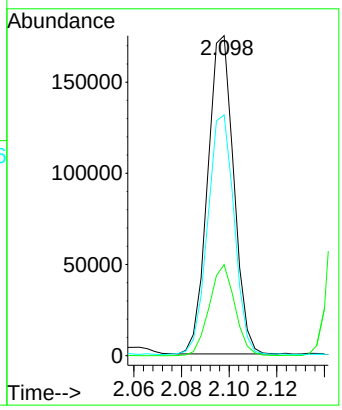




#21
Allyl Chloride
Concen: 9.166 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 41 Resp: 13287

Ion	Ratio	Lower	Upper
41	100		
76	28.0	22.3	33.5
39	76.4	61.3	91.9



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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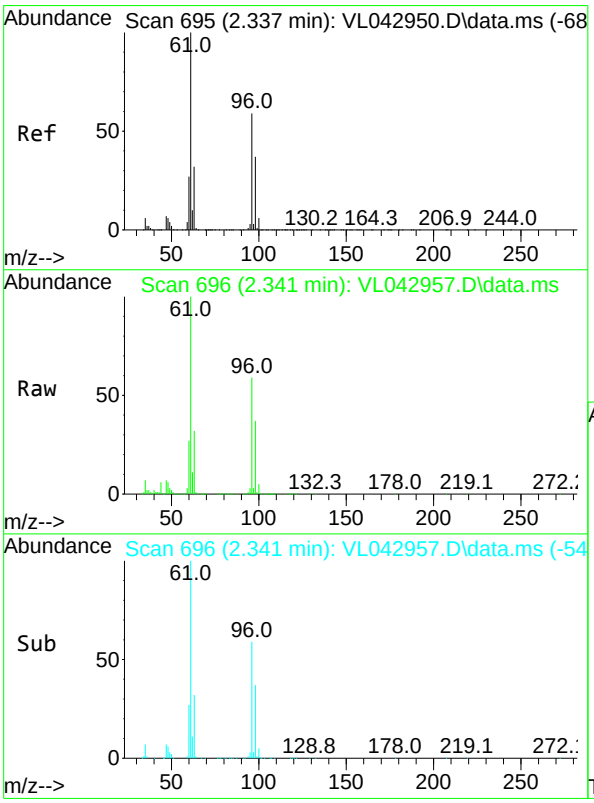
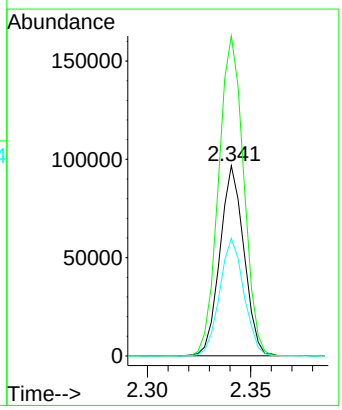
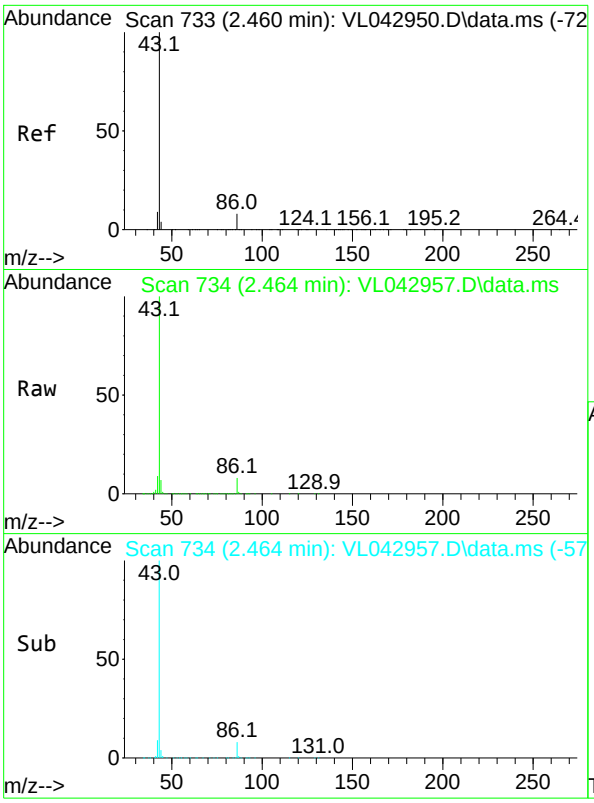


#22
trans-1,2-Dichloroethene
Concen: 8.845 ppbv
RT: 2.341 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 96 Resp: 78085

Ion	Ratio	Lower	Upper
96	100		
61	168.1	136.5	204.7
98	61.9	50.6	76.0

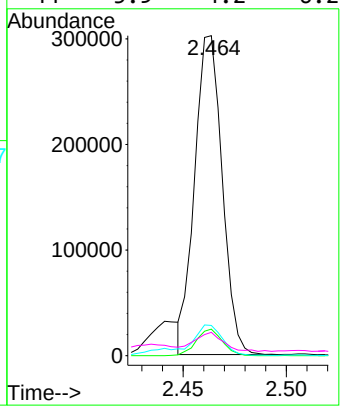




#23
Vinyl Acetate
Concen: 9.427 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 28033

Ion	Ratio	Lower	Upper
43	100		
86	8.3	6.2	9.2
42	9.4	7.4	11.0
44	5.9	4.2	6.2



Instrument :
MSVOA_L
ClientSampleId :
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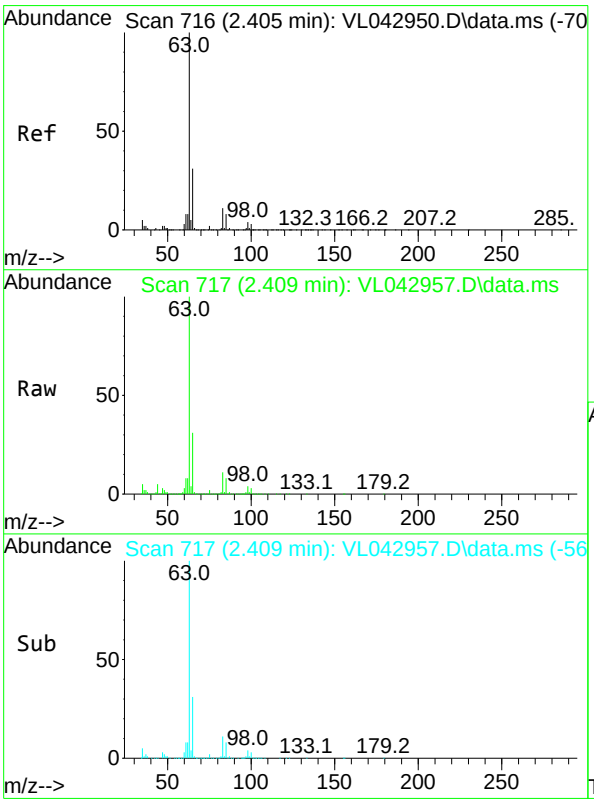
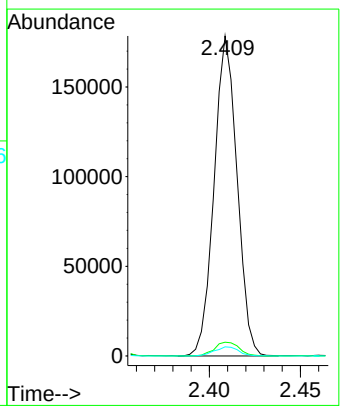
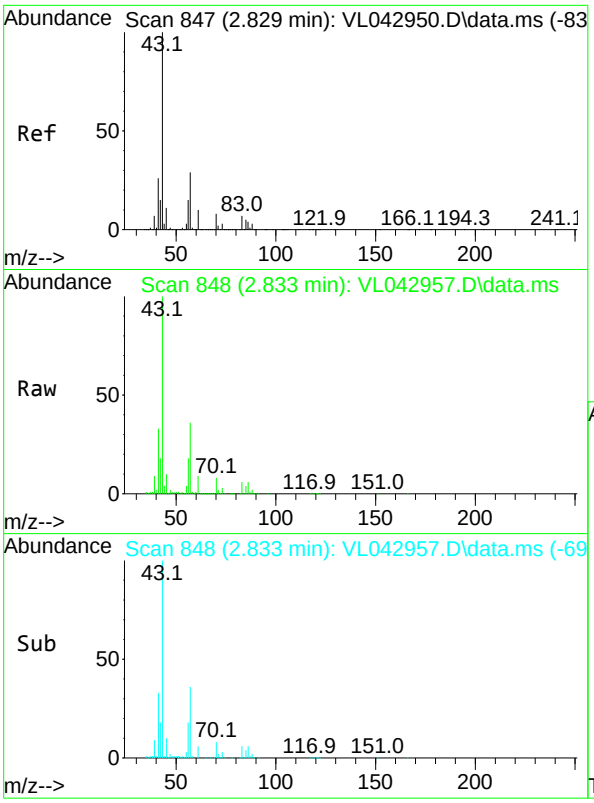


#24
1,1-Dichloroethane
Concen: 9.003 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 63 Resp: 155861

Ion	Ratio	Lower	Upper
63	100		
98	4.2	2.2	6.6
100	2.8	1.4	4.0

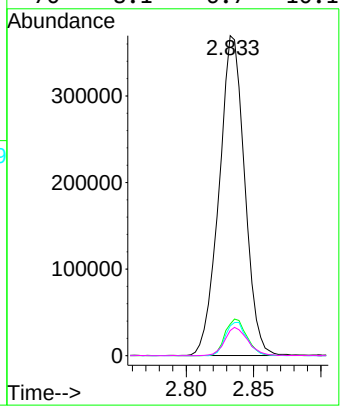




#25
Ethyl Acetate
Concen: 9.256 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 48699

Ion	Ratio	Lower	Upper
43	100		
45	9.8	7.7	11.5
61	8.9	7.1	10.7
70	8.1	6.7	10.1



Instrument :
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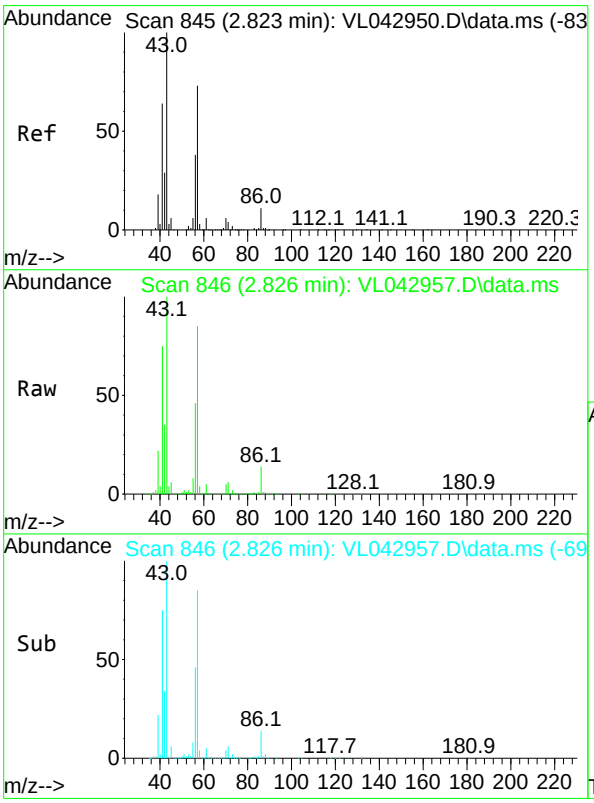
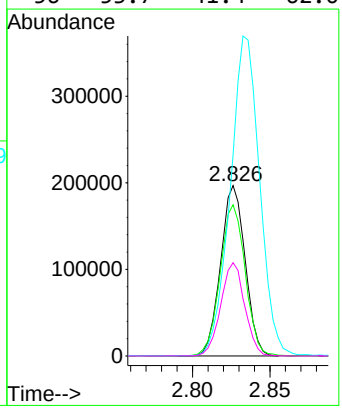
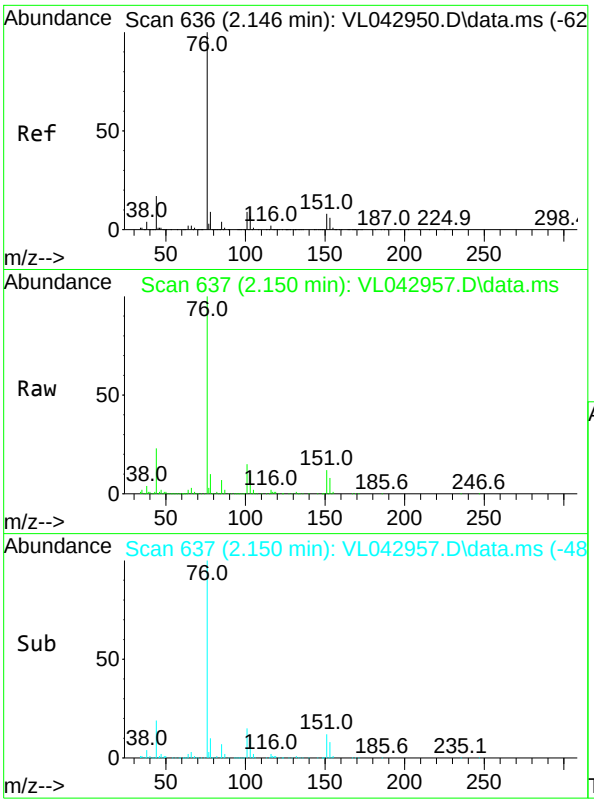


#26
Hexane
Concen: 9.026 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 57 Resp: 216458

Ion	Ratio	Lower	Upper
57	100		
41	90.9	71.7	107.5
43	226.2	180.8	271.2
56	53.7	41.4	62.0





#27
Carbon Disulfide
Concen: 9.121 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 76 Resp: 19619

Ion	Ratio	Lower	Upper
76	100		
44	20.2	15.6	23.4
78	12.1	8.9	13.3

Instrument :
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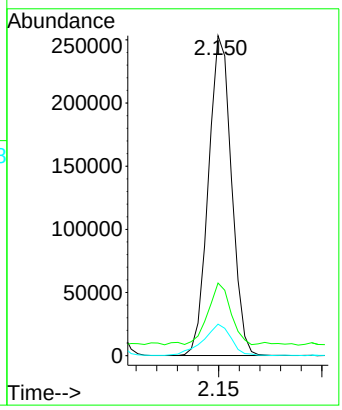
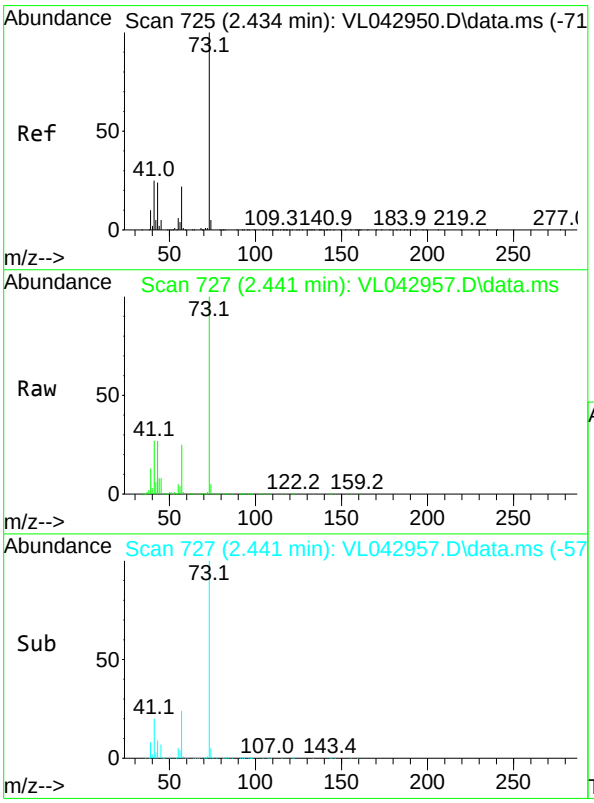
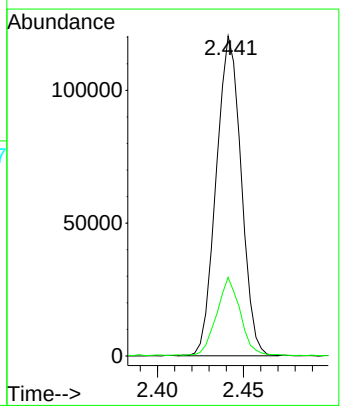


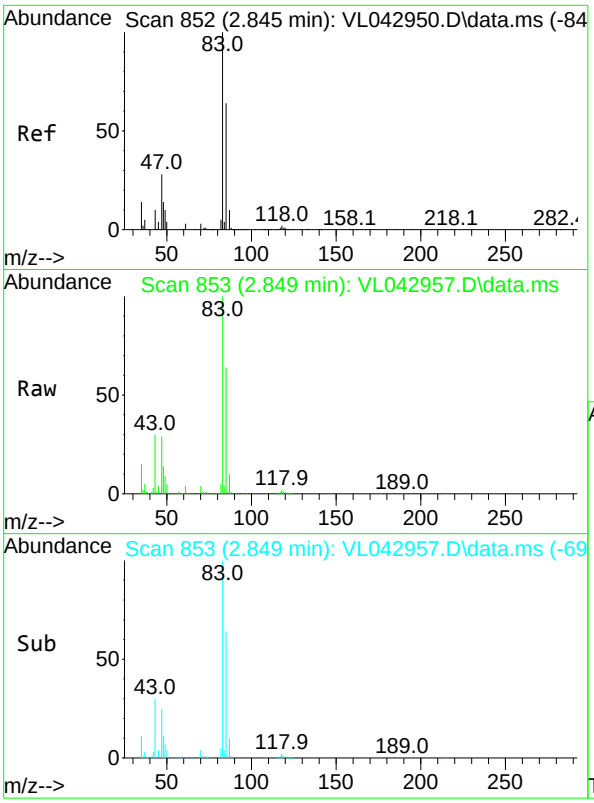


#28
Methyl tert-Butyl Ether
Concen: 9.752 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 73 Resp: 121564

Ion	Ratio	Lower	Upper
73	100		
57	23.3	20.6	31.0

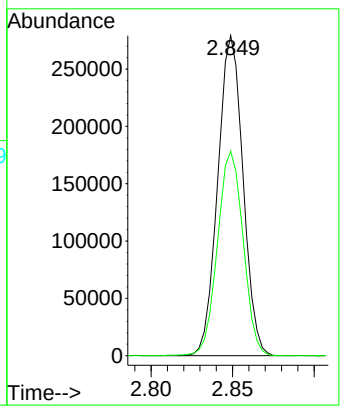




#29
Chloroform
Concen: 9.583 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 83 Resp: 30050

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.2	76.8



Instrument :
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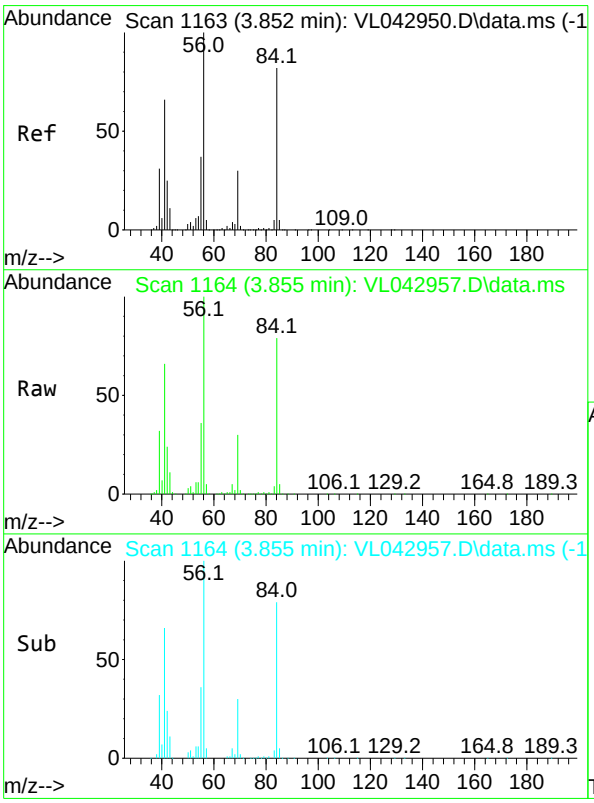
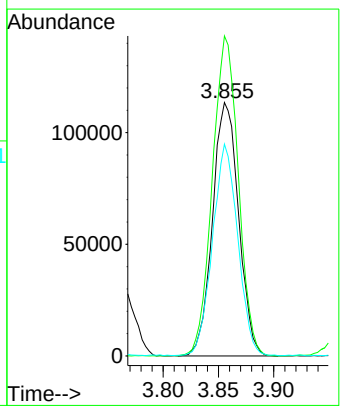
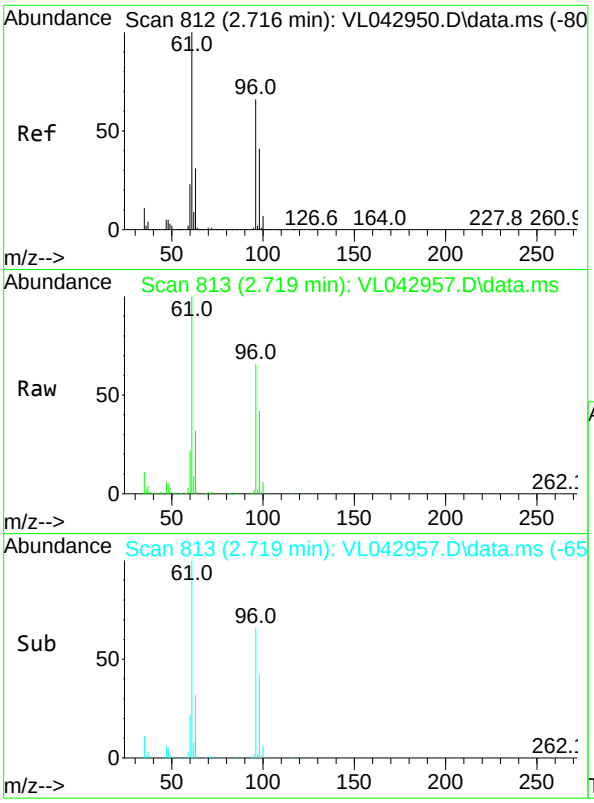


#30
Cyclohexane
Concen: 9.286 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 84 Resp: 186186

Ion	Ratio	Lower	Upper
84	100		
56	125.6	102.2	153.4
41	81.2	65.6	98.4

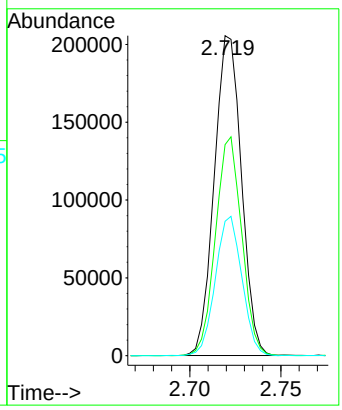




#31
cis-1,2-Dichloroethene
Concen: 9.497 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 61 Resp: 21336

Ion	Ratio	Lower	Upper
61	100		
96	65.9	53.0	79.6
98	42.0	32.9	49.3



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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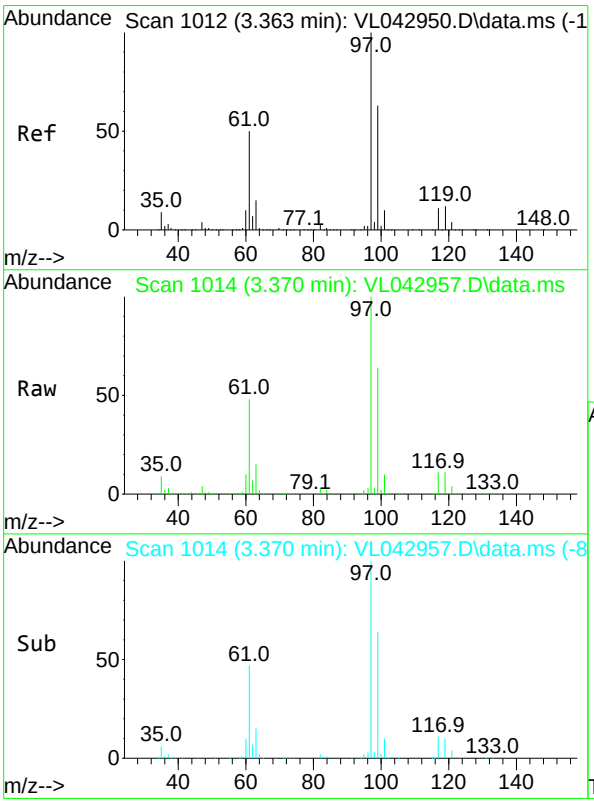
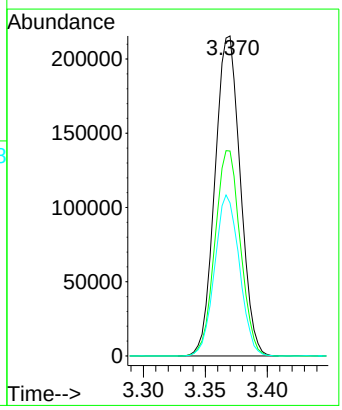
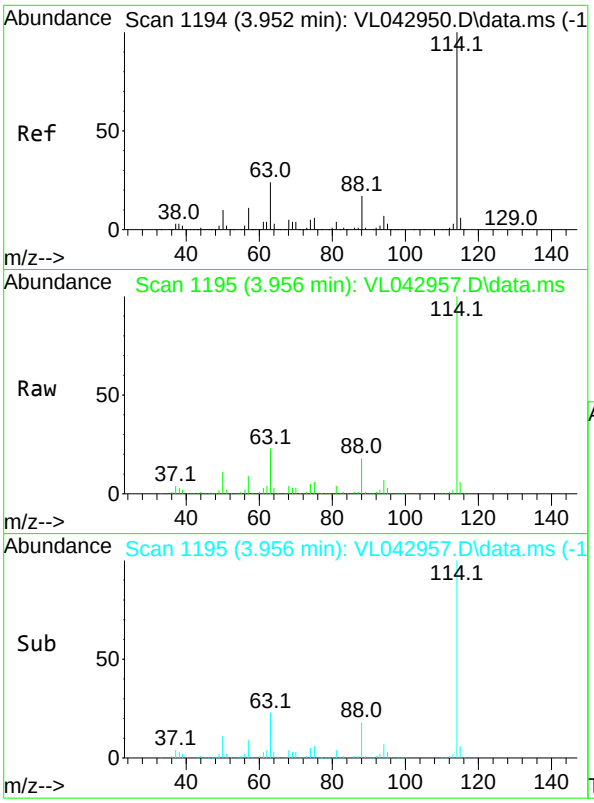


#32
1,1,1-Trichloroethane
Concen: 9.071 ppbv
RT: 3.370 min Scan# 1014
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 97 Resp: 307237

Ion	Ratio	Lower	Upper
97	100		
99	64.2	51.1	76.7
61	49.3	39.8	59.6





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:114 Resp: 49307

Ion	Ratio	Lower	Upper
114	100		
63	23.8	19.4	29.2
88	17.0	14.2	21.2

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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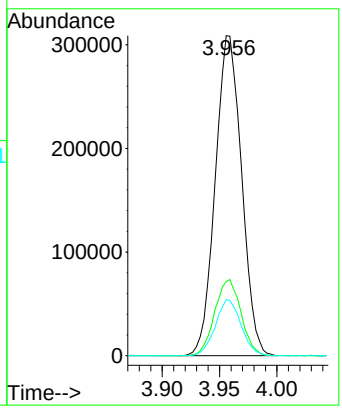
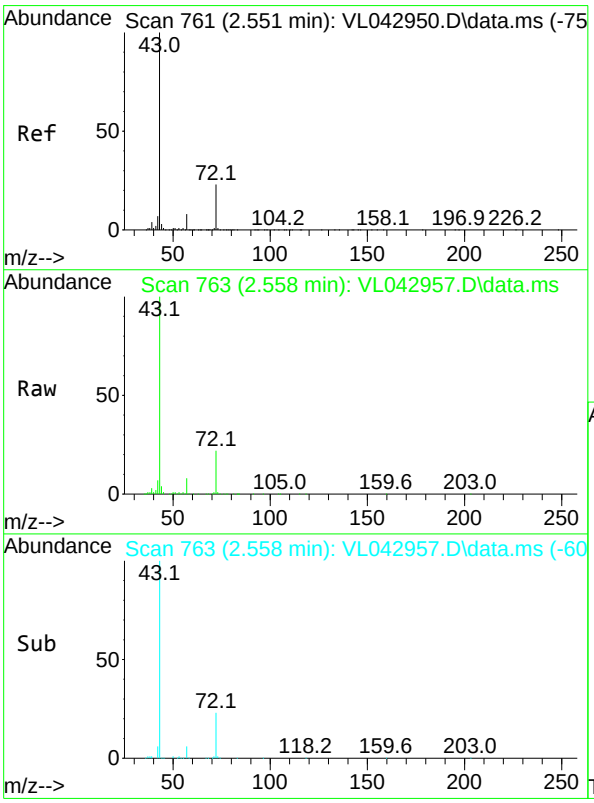
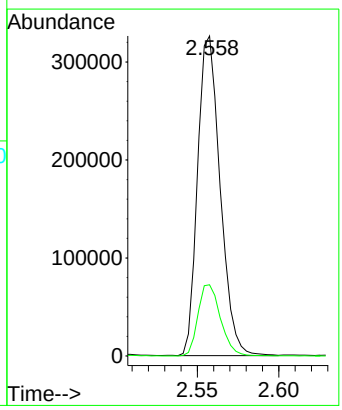


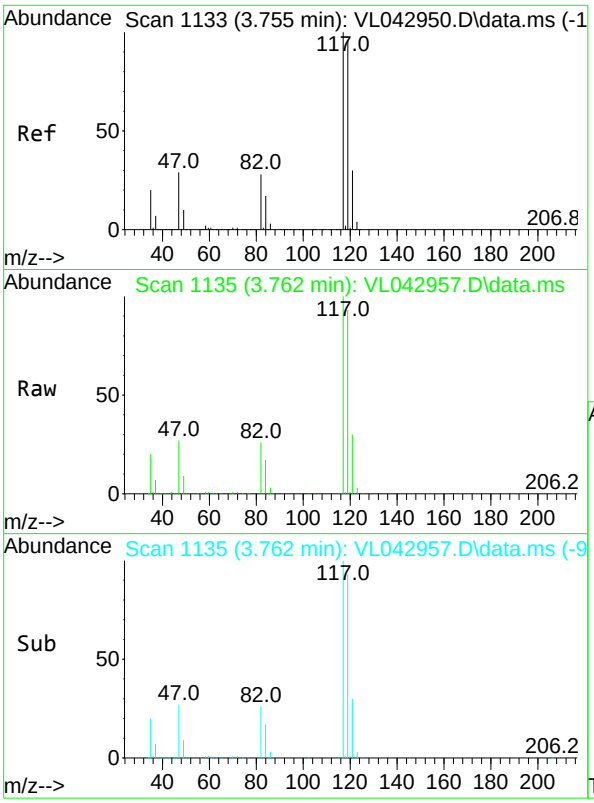


#34
2-Butanone
Concen: 9.081 ppbv
RT: 2.558 min Scan# 763
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 313801

Ion	Ratio	Lower	Upper
43	100		
72	22.3	17.7	26.5

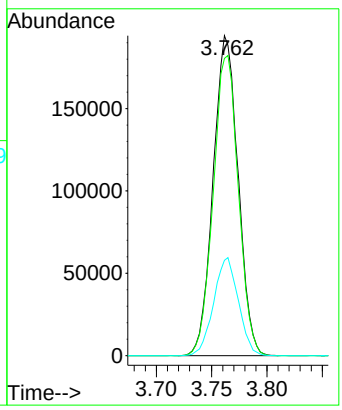




#35
Carbon Tetrachloride
Concen: 9.479 ppbv
RT: 3.762 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:117 Resp: 30429

Ion	Ratio	Lower	Upper
117	100		
119	92.9	76.9	115.3
121	29.8	23.7	35.5



Instrument :
MSVOA_L
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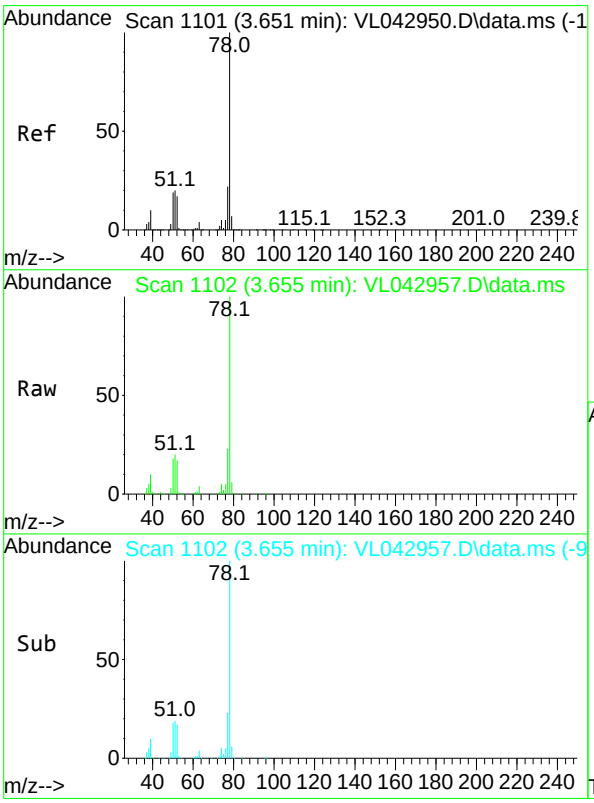
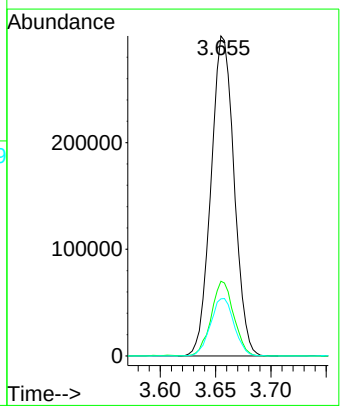
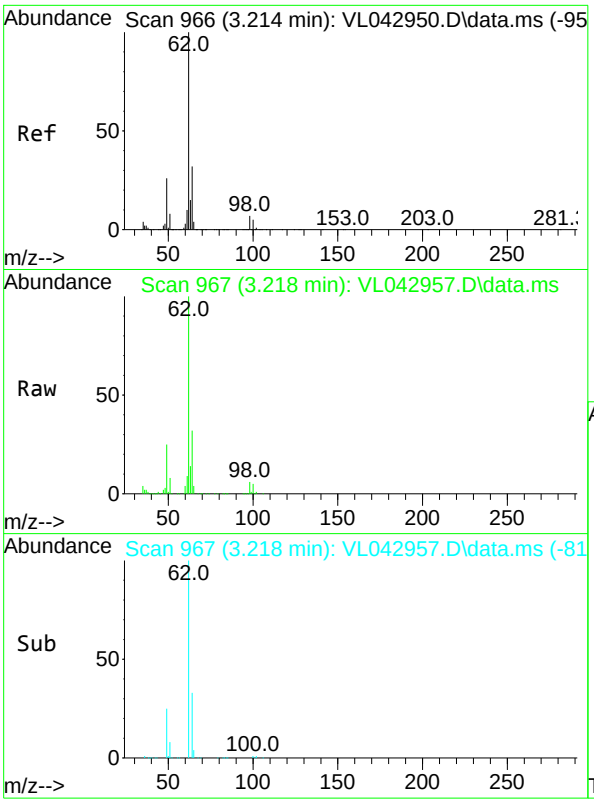


#36
Benzene
Concen: 9.416 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 78 Resp: 435981

Ion	Ratio	Lower	Upper
78	100		
77	23.3	17.8	26.6
50	17.9	15.0	22.4





#37
1,2-Dichloroethane
Concen: 9.581 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 62 Resp: 23330

Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.9	8.9

Instrument :
MSVOA_L
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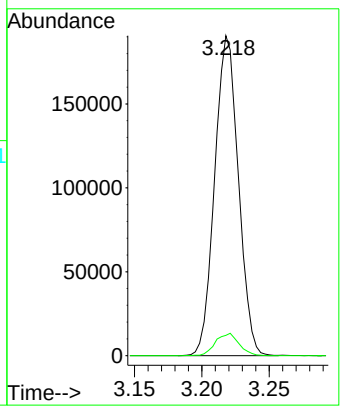
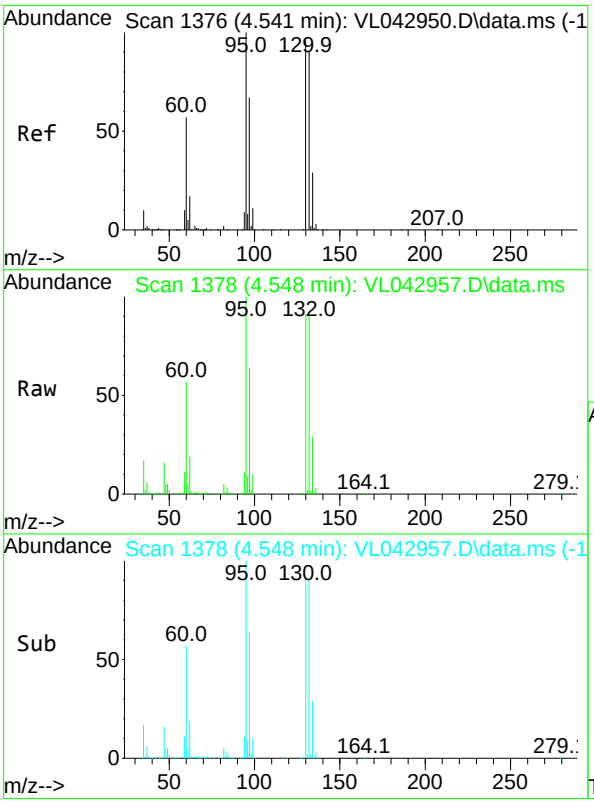
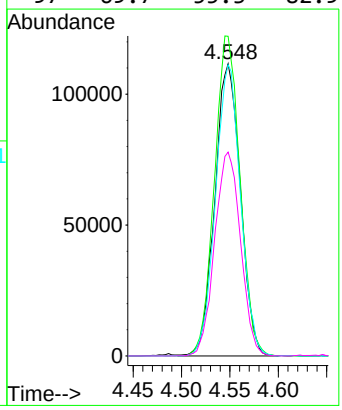


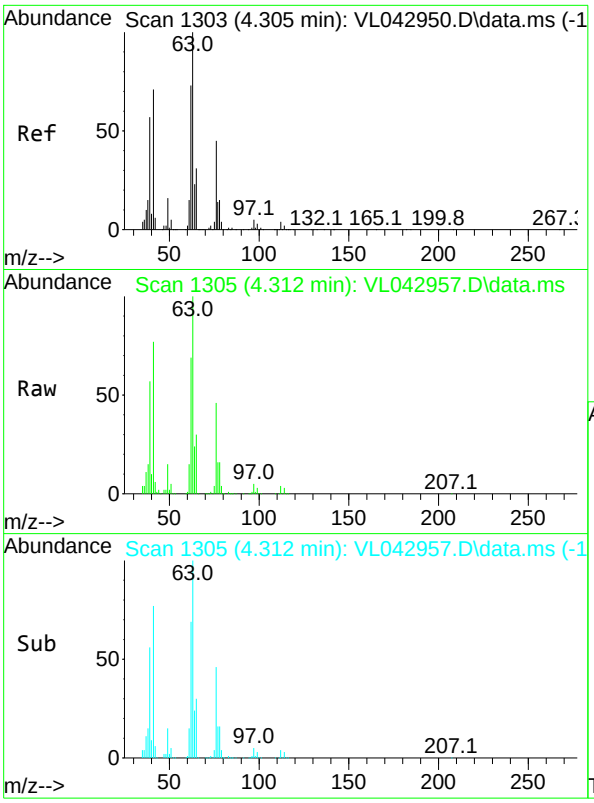


#38
Trichloroethene
Concen: 8.927 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:130 Resp: 205431

Ion	Ratio	Lower	Upper
130	100		
95	109.4	83.0	124.4
132	99.7	74.6	112.0
97	69.7	55.3	82.9

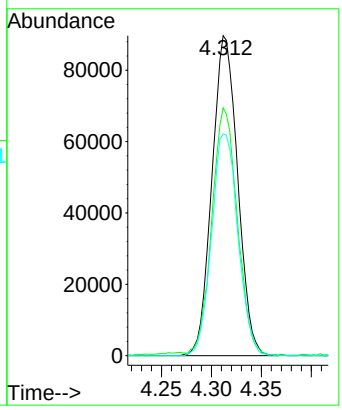




#39
1,2-Dichloropropane
Concen: 9.482 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 63 Resp: 16027

Ion	Ratio	Lower	Upper
63	100		
41	77.2	57.5	86.3
62	69.3	58.5	87.7



Instrument :
MSVOA_L
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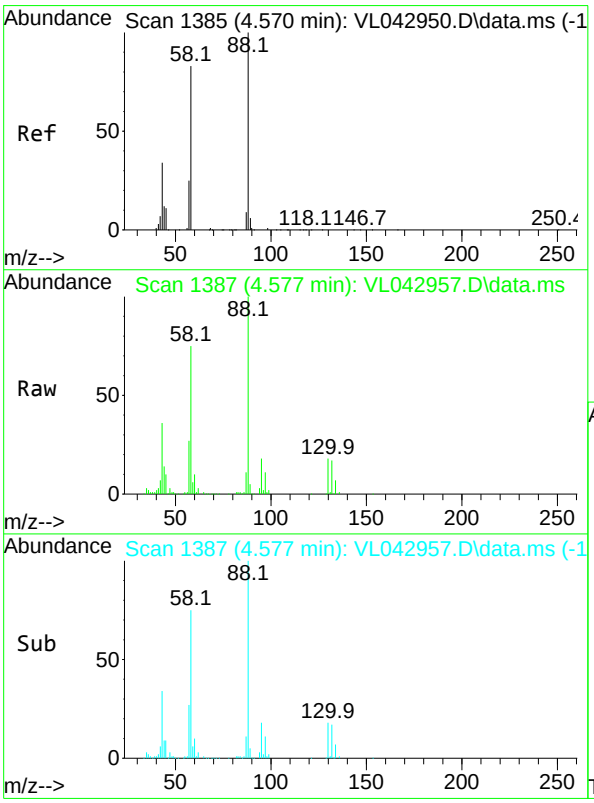
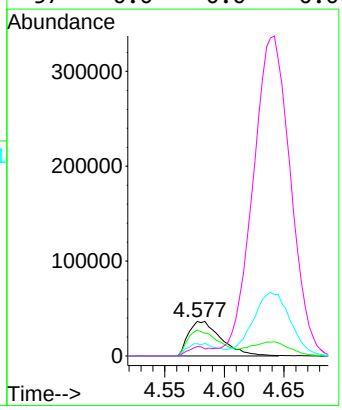
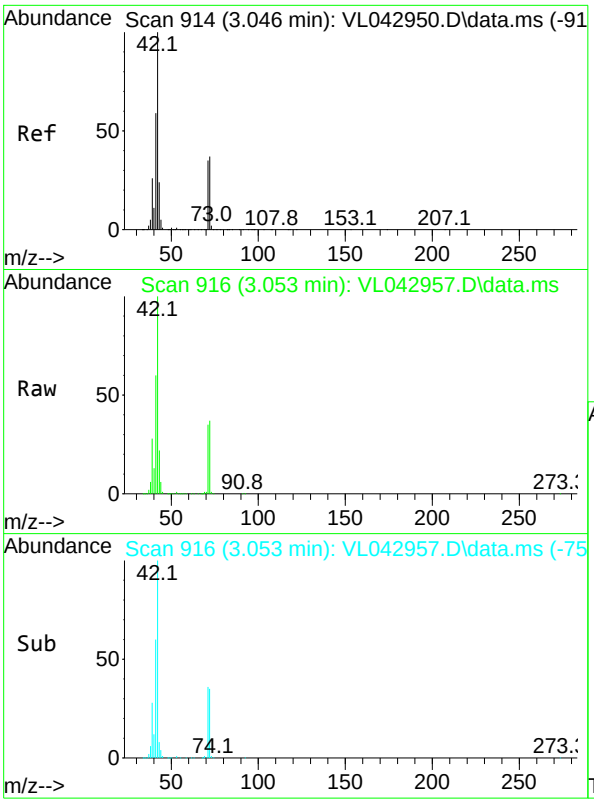


#40
1,4-Dioxane
Concen: 8.863 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 88 Resp: 69659

Ion	Ratio	Lower	Upper
88	100		
58	70.6	59.7	89.5
43	32.1	28.9	43.3
57	0.0	0.0	0.0

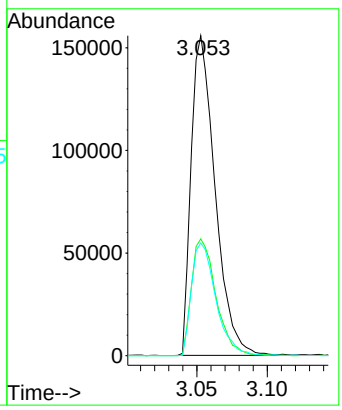




#41
Tetrahydrofuran
Concen: 9.277 ppbv
RT: 3.053 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 42 Resp: 18425

Ion	Ratio	Lower	Upper
42	100		
72	37.4	30.0	45.0
71	35.9	28.8	43.2



Instrument :
MSVOA_L
ClientSampleId :
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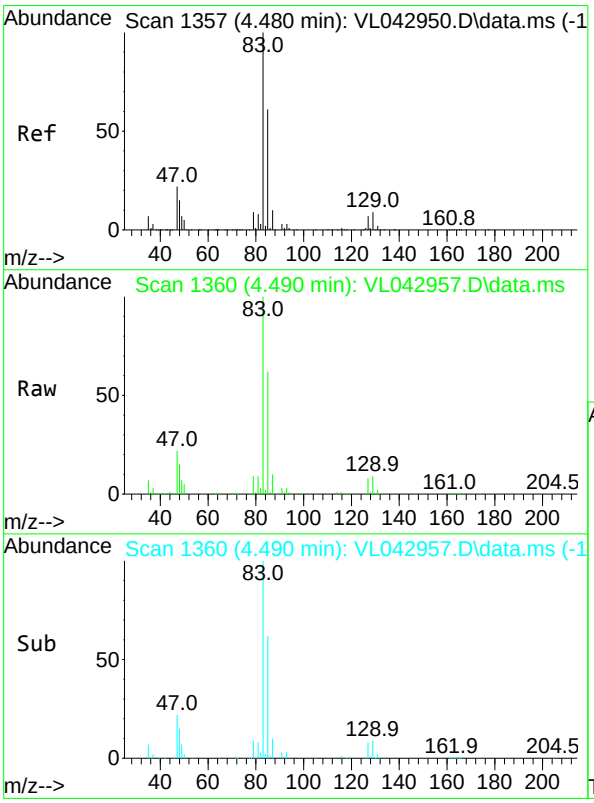
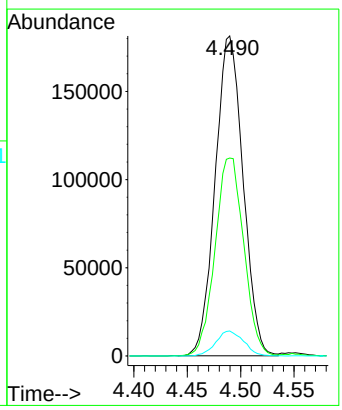
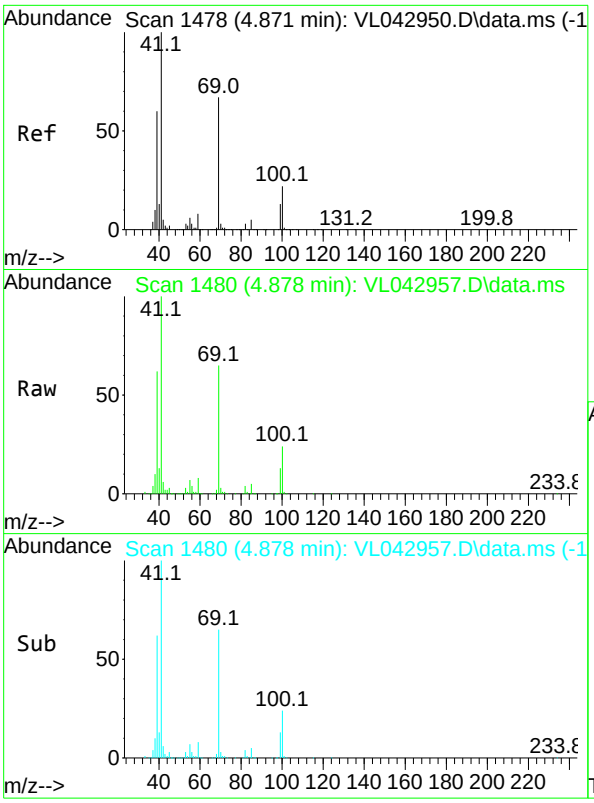


#42
Bromodichloromethane
Concen: 9.721 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 83 Resp: 329680

Ion	Ratio	Lower	Upper
83	100		
85	61.8	49.0	73.6
127	7.8	5.3	7.9

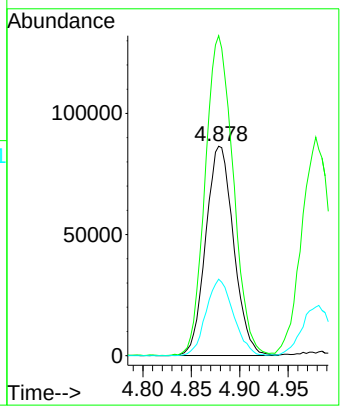




#43
Methyl Methacrylate
Concen: 9.125 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 69 Resp: 17286

Ion	Ratio	Lower	Upper
69	100		
41	153.4	124.5	186.7
100	36.1	29.0	43.6



Instrument :
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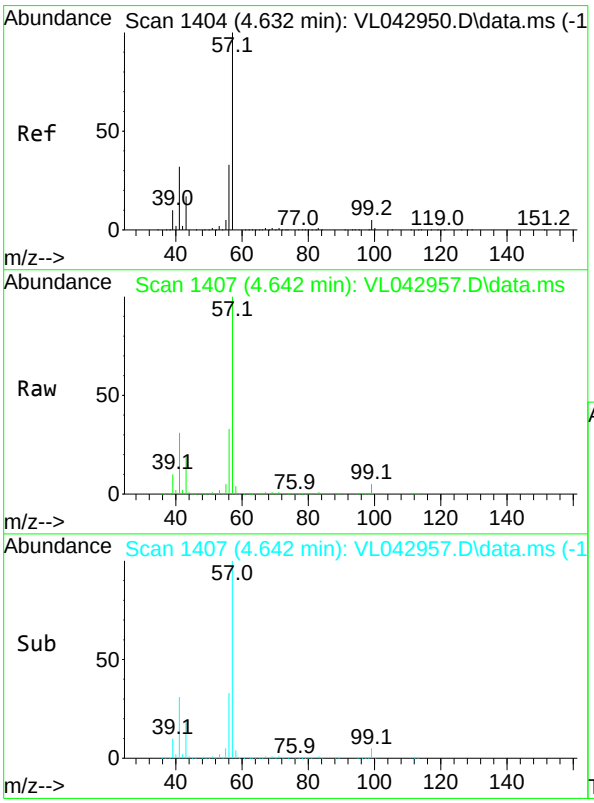
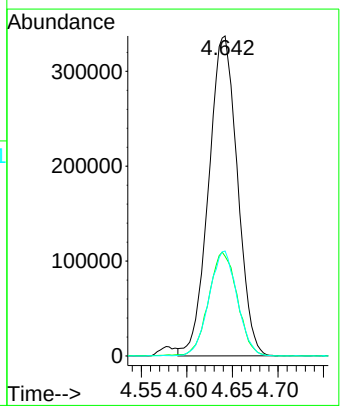
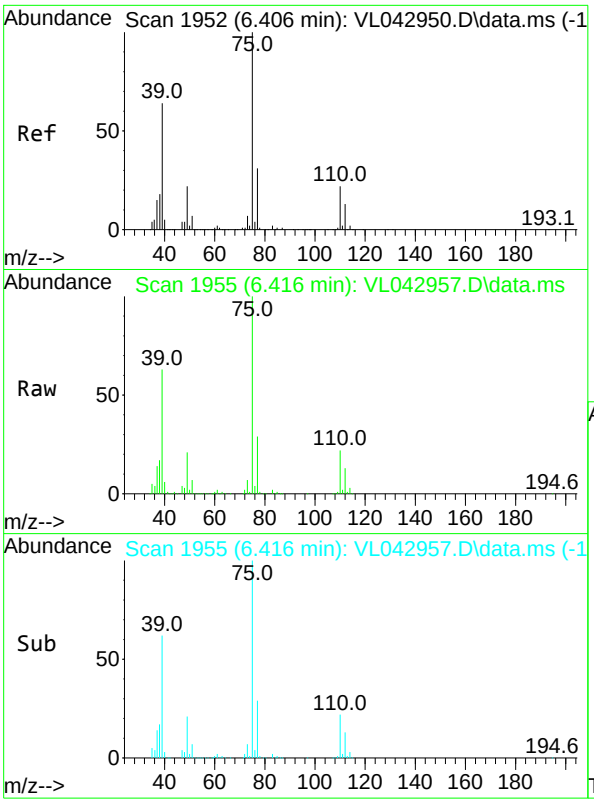


#44
2,2,4-Trimethylpentane
Concen: 9.239 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 57 Resp: 738876

Ion	Ratio	Lower	Upper
57	100		
41	32.5	25.5	38.3
56	32.3	25.8	38.8

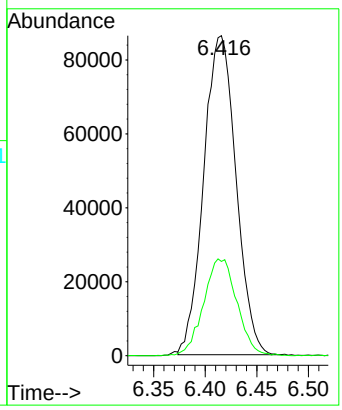




#45
t-1,3-Dichloropropene
Concen: 9.321 ppbv
RT: 6.416 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 75 Resp: 18833

Ion	Ratio	Lower	Upper
75	100		
77	29.5	25.0	37.4



Instrument :
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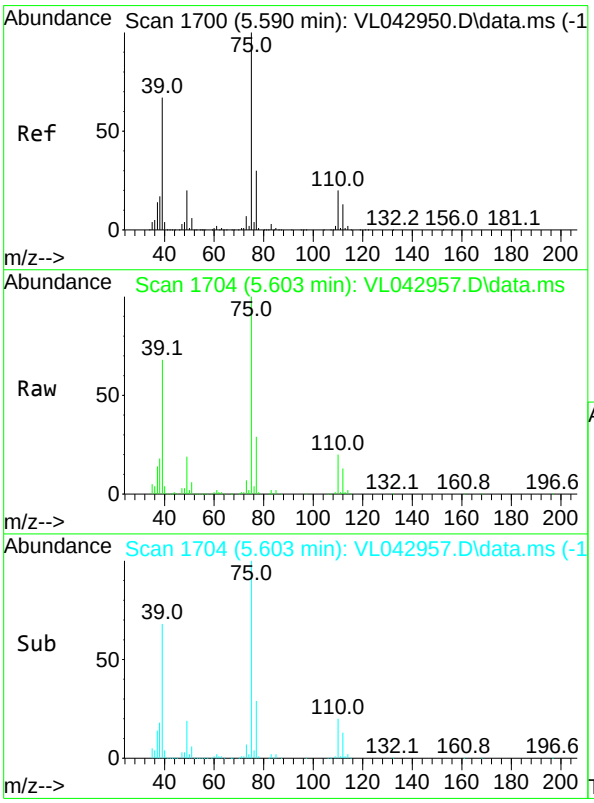
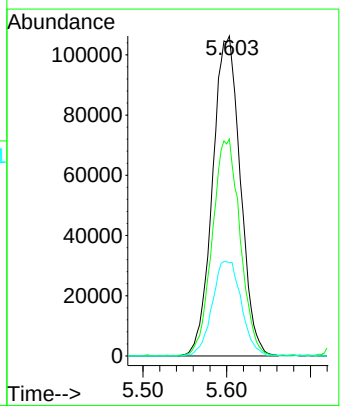
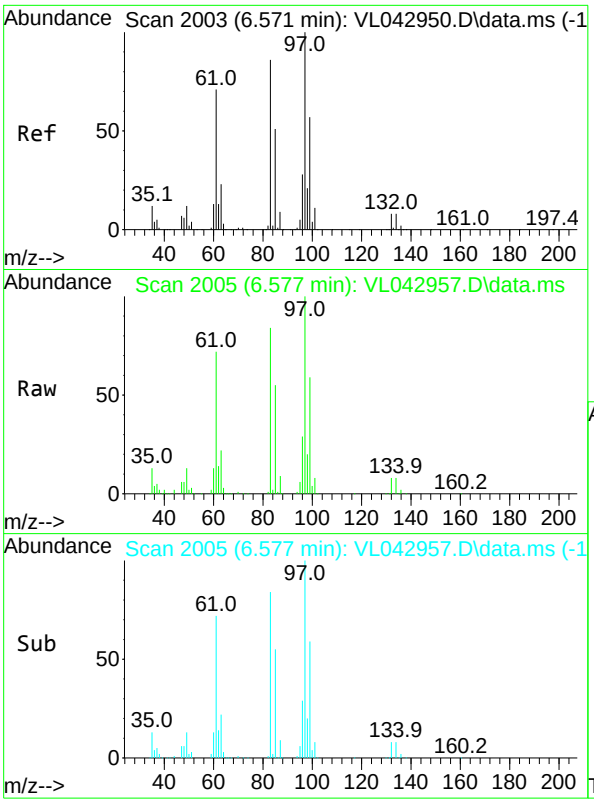


#46
cis-1,3-Dichloropropene
Concen: 9.490 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.013 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 75 Resp: 244367

Ion	Ratio	Lower	Upper
75	100		
39	67.6	53.8	80.6
77	29.1	23.6	35.4

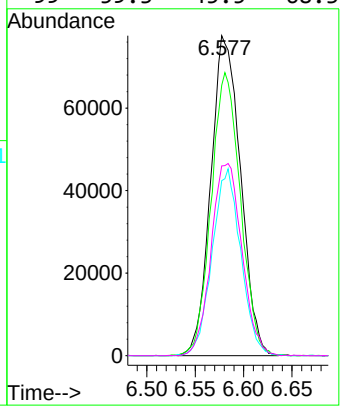




#47
1,1,2-Trichloroethane
Concen: 9.279 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 97 Resp: 16572

Ion	Ratio	Lower	Upper
97	100		
83	84.4	68.7	103.1
85	54.5	40.6	60.8
99	59.3	45.5	68.3



Instrument :
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ClientSampleId :
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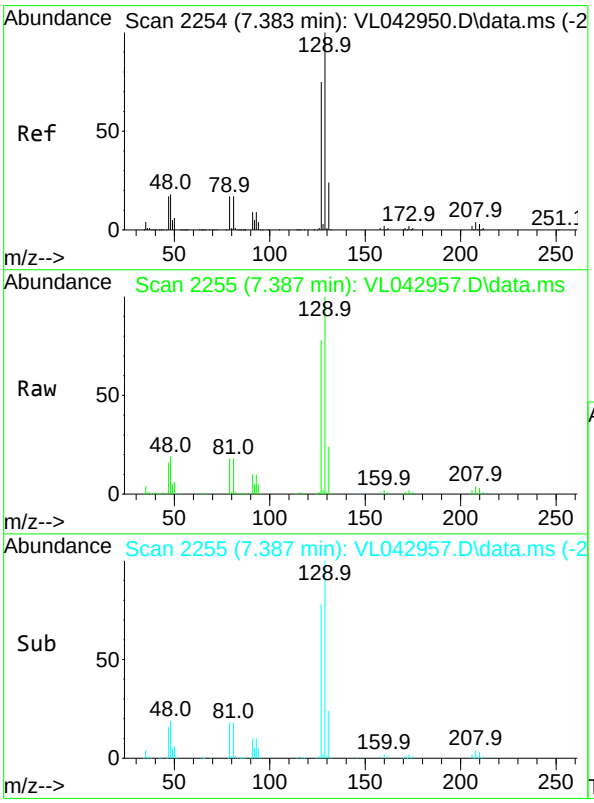
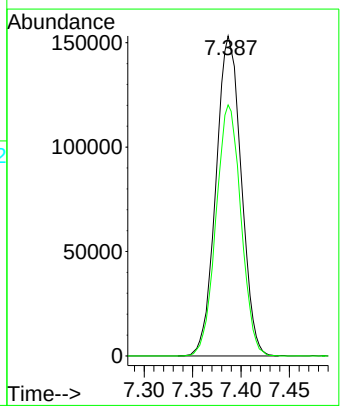
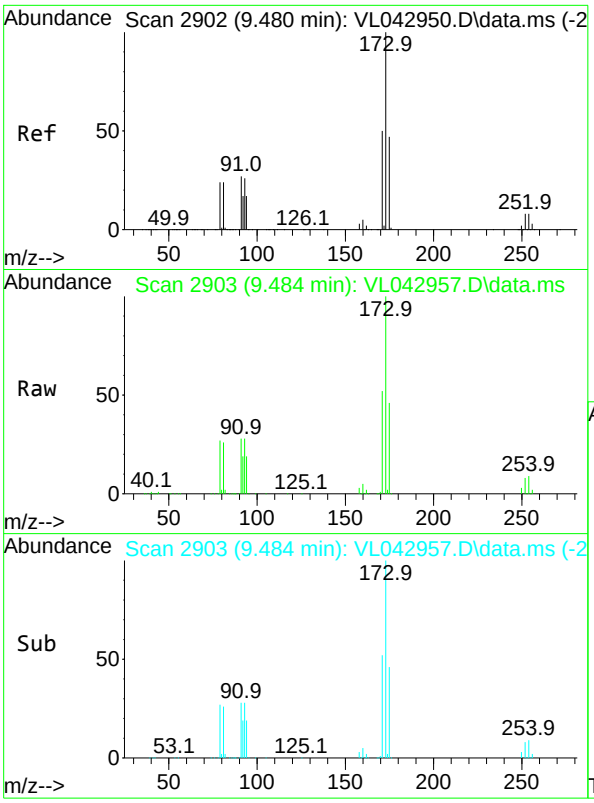


#48
Dibromochloromethane
Concen: 9.732 ppbv
RT: 7.387 min Scan# 2255
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:129 Resp: 278090

Ion	Ratio	Lower	Upper
129	100		
127	77.5	39.1	117.2

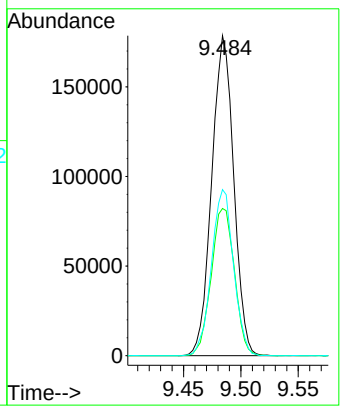




#49
Bromoform
Concen: 9.589 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:173 Resp: 23833

Ion	Ratio	Lower	Upper
173	100		
175	48.6	37.9	56.9
171	52.1	41.1	61.7



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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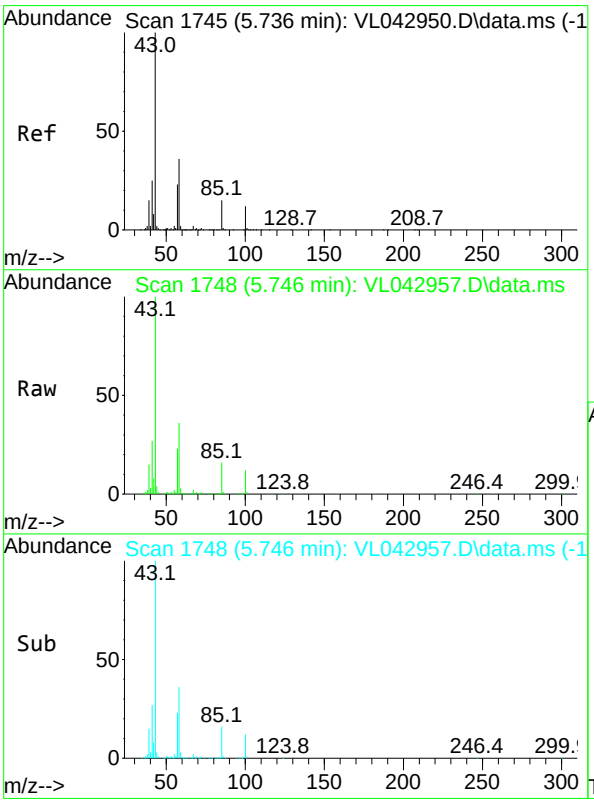
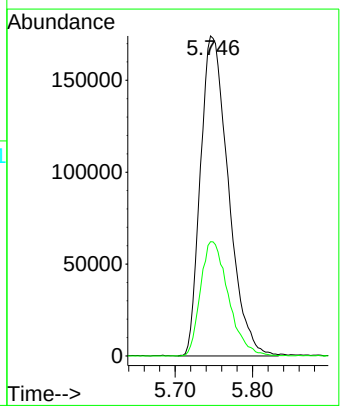
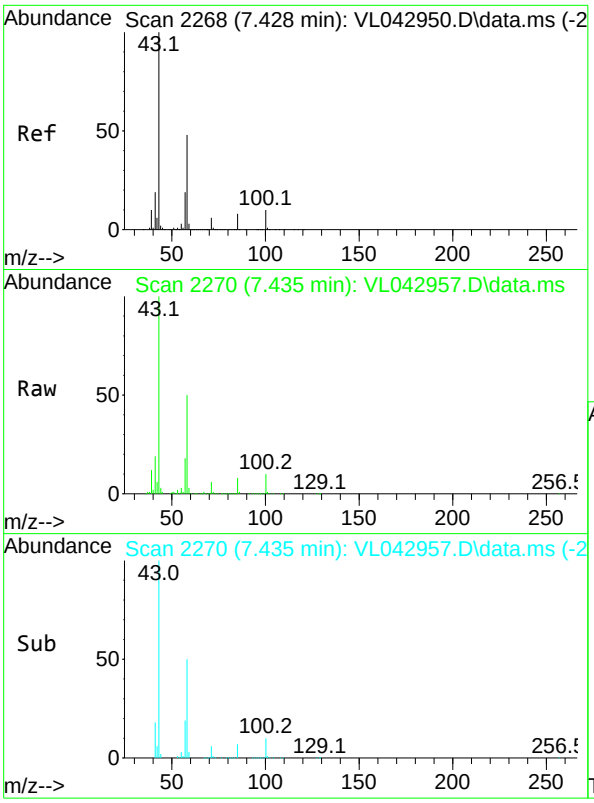


#50
4-Methyl-2-Pentanone
Concen: 9.411 ppbv
RT: 5.746 min Scan# 1748
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 435845

Ion	Ratio	Lower	Upper
43	100		
58	35.8	28.4	42.6

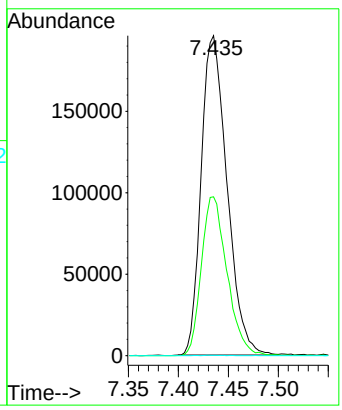




#51
2-Hexanone
Concen: 9.561 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 35296

Ion	Ratio	Lower	Upper
43	100		
58	49.5	39.7	59.5
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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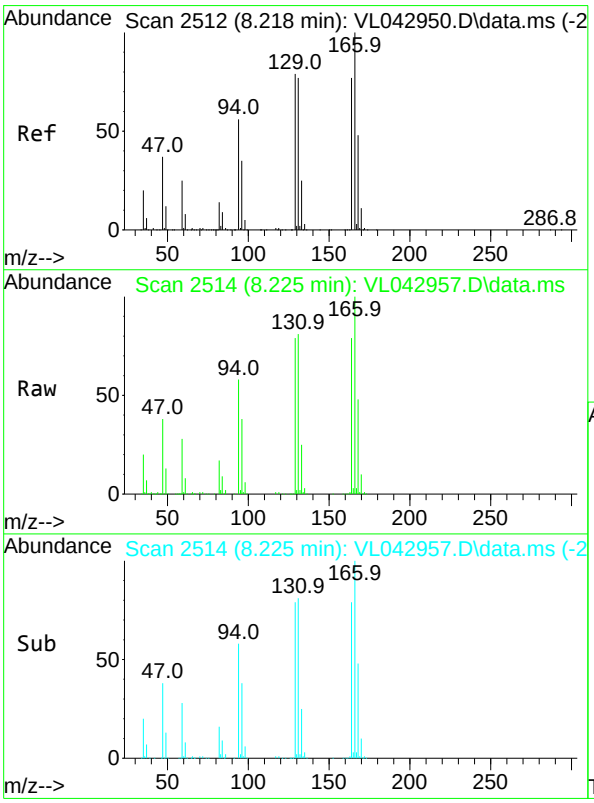
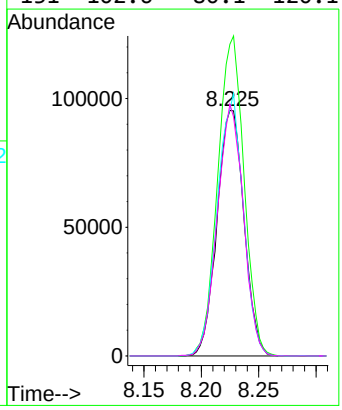
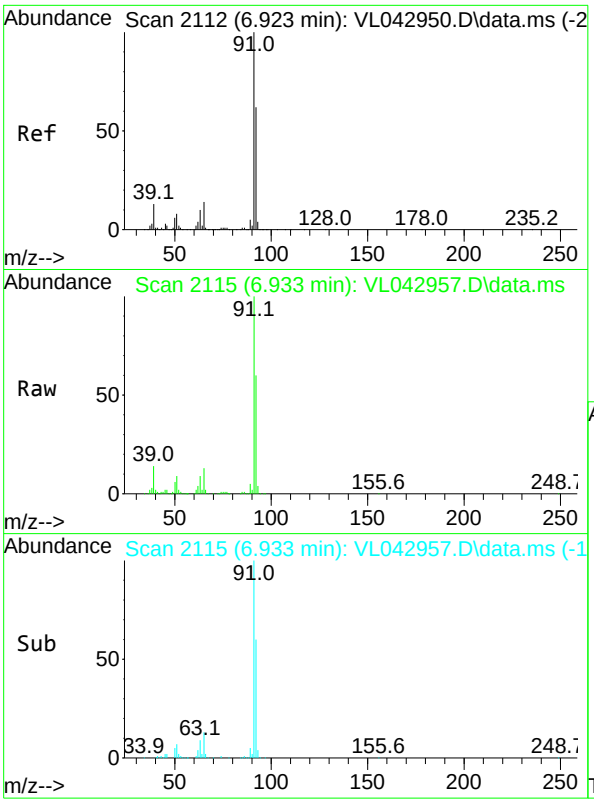


#52
Tetrachloroethene
Concen: 8.678 ppbv
RT: 8.225 min Scan# 2514
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:164 Resp: 155469

Ion	Ratio	Lower	Upper
164	100		
166	127.0	103.5	155.3
129	100.4	82.2	123.4
131	102.6	80.1	120.1





#53
Toluene
Concen: 9.306 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 50996

Ion	Ratio	Lower	Upper
91	100		
92	60.7	48.2	72.2

Instrument :
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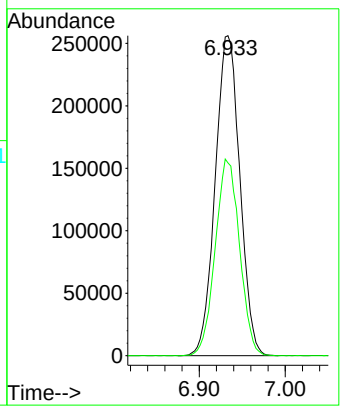
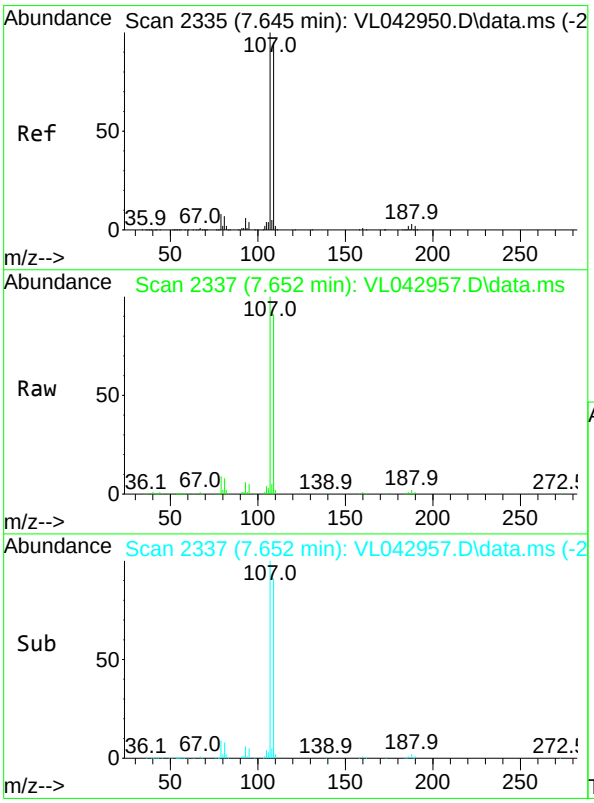
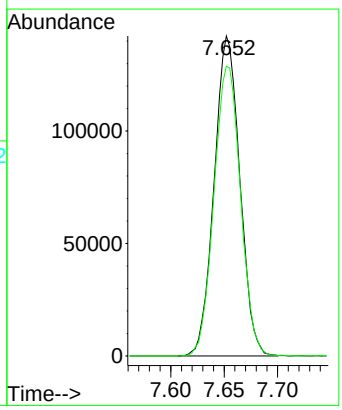


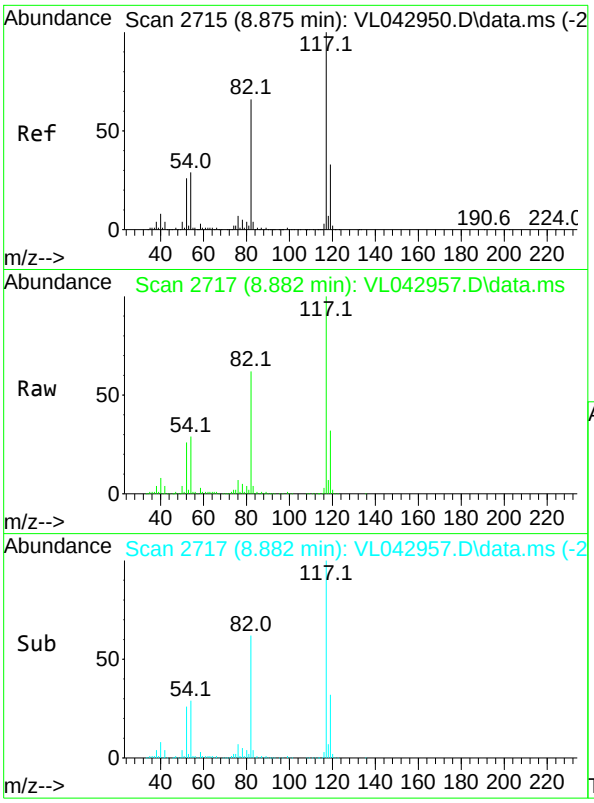


#54
1,2-Dibromoethane
Concen: 9.452 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:107 Resp: 237604

Ion	Ratio	Lower	Upper
107	100		
109	90.6	75.8	113.8

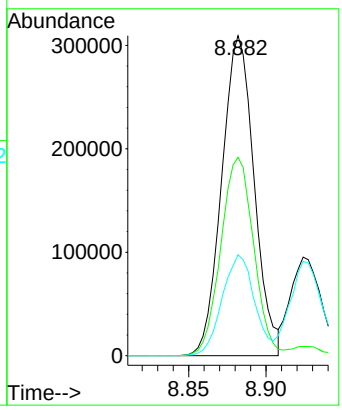




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:117 Resp: 45093

Ion	Ratio	Lower	Upper
117	100		
82	65.5	52.8	79.2
119	32.4	26.5	39.7



Instrument :
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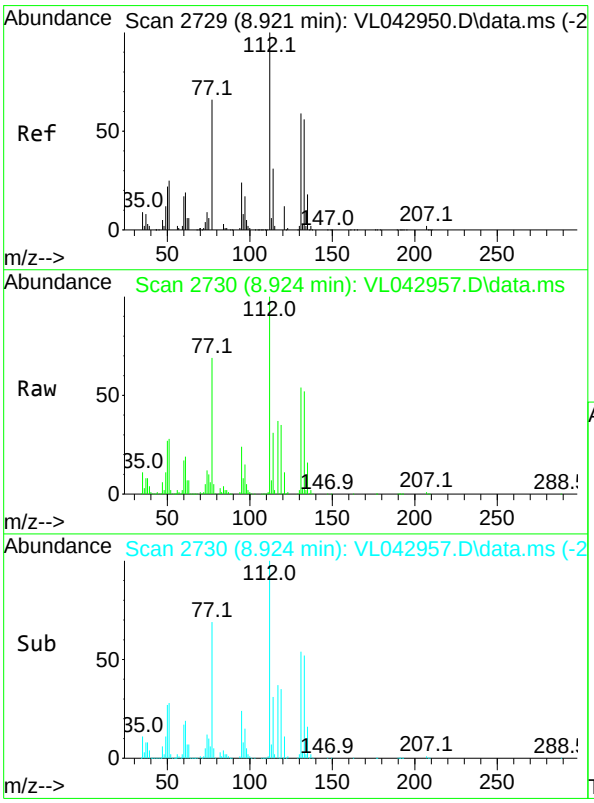
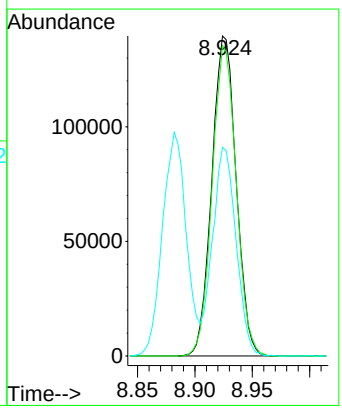
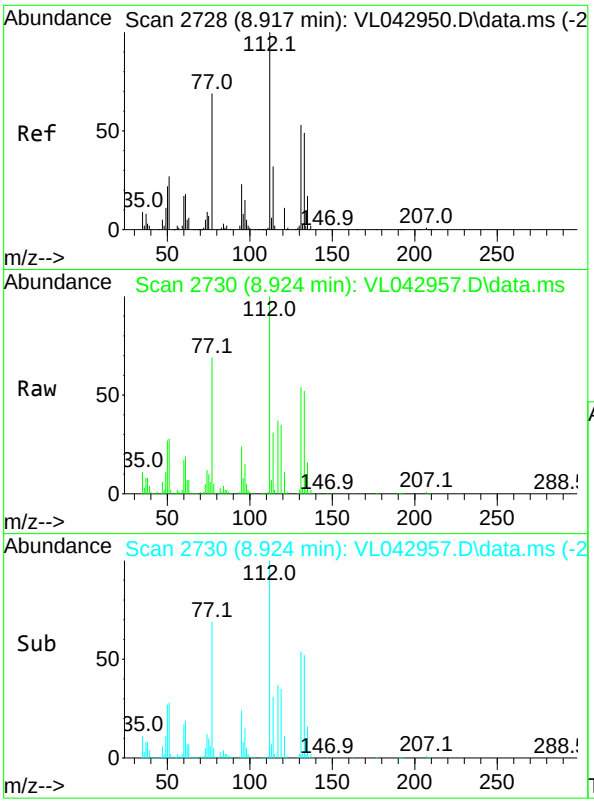


#56
1,1,1,2-Tetrachloroethane
Concen: 9.536 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:131 Resp: 205811

Ion	Ratio	Lower	Upper
131	100		
133	96.0	76.6	114.8
119	64.5	49.9	74.9

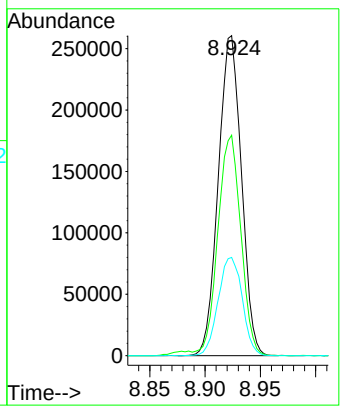




#57
Chlorobenzene
Concen: 9.209 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:112 Resp: 37911

Ion	Ratio	Lower	Upper
112	100		
77	68.9	55.7	83.5
114	30.7	28.6	35.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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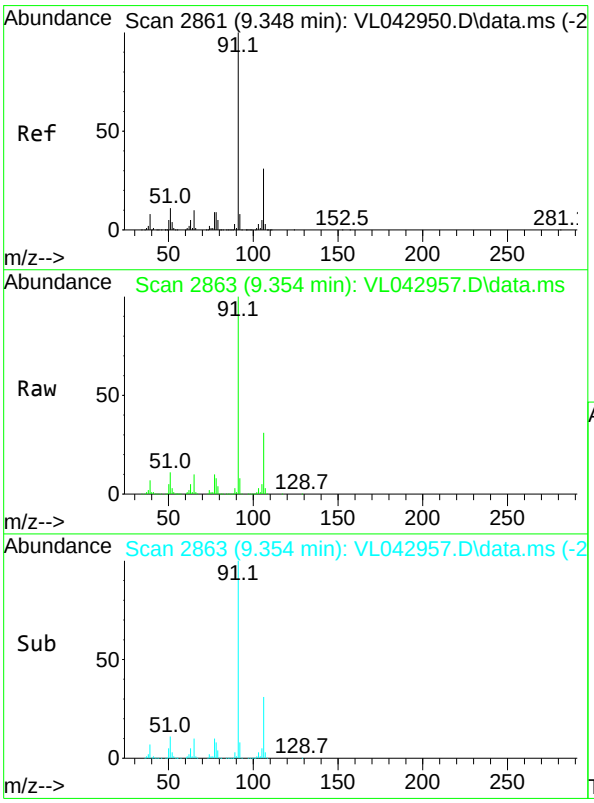
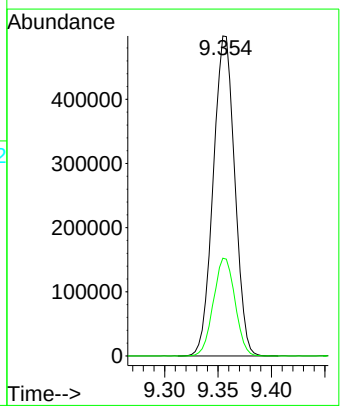
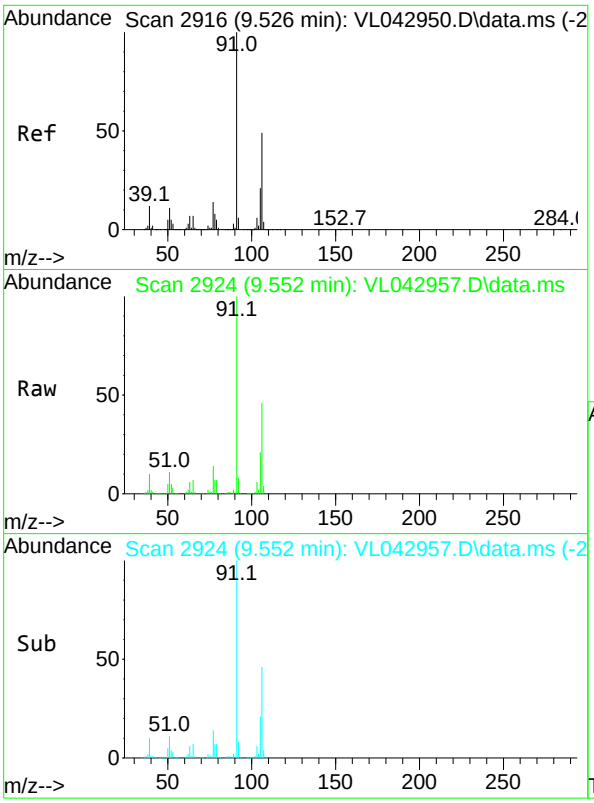


#58
Ethyl Benzene
Concen: 9.428 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 698086

Ion	Ratio	Lower	Upper
91	100		
106	30.6	24.6	37.0





#59
m/p-Xylene
Concen: 18.715 ppbv m
RT: 9.552 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 109249

Ion	Ratio	Lower	Upper
91	100		
106	47.5	0.0	0.0

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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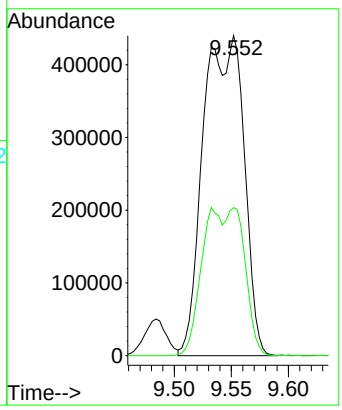
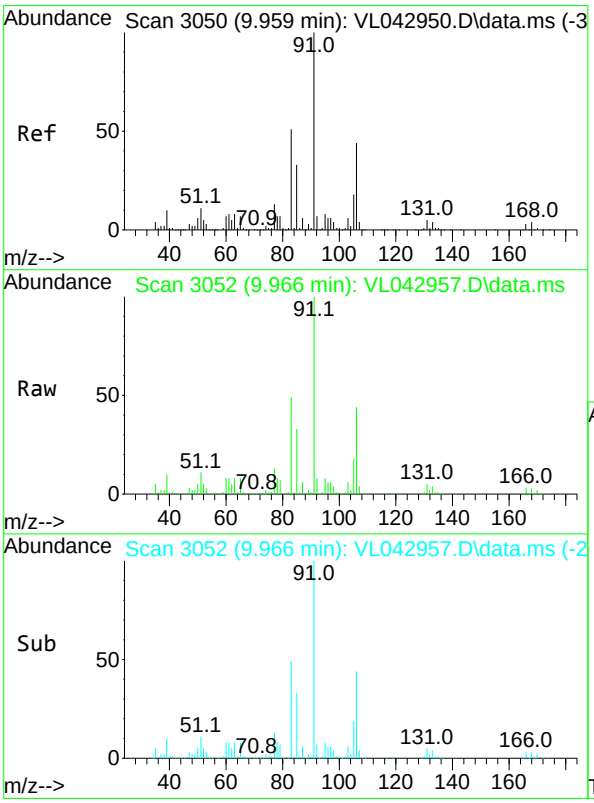
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

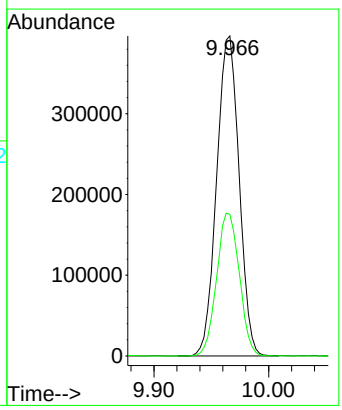


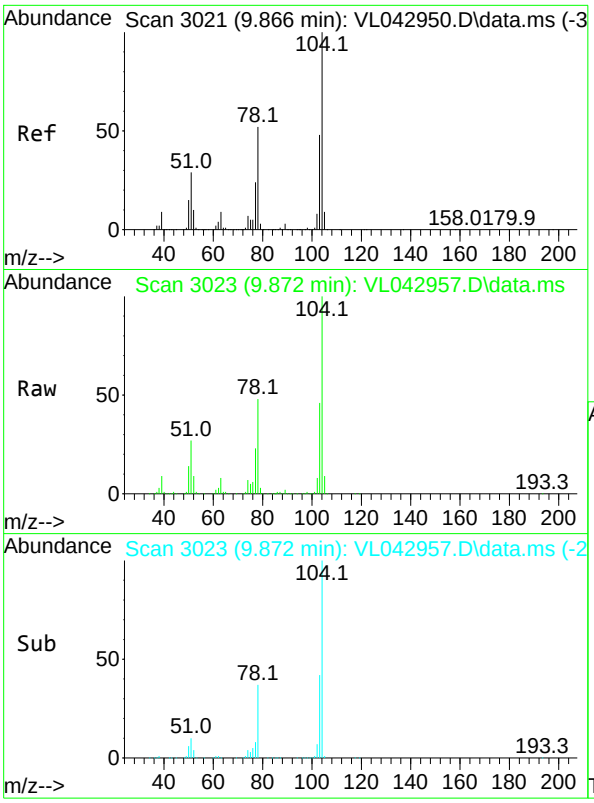


#60
o-Xylene
Concen: 9.236 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 538861

Ion	Ratio	Lower	Upper
91	100		
106	45.2	22.4	67.0

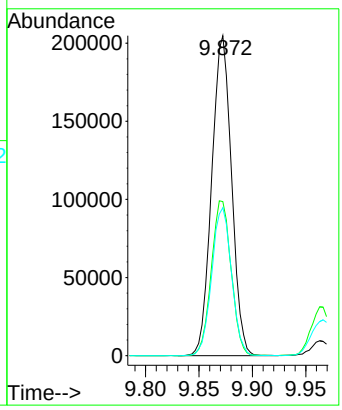




#61
Styrene
Concen: 9.575 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:104 Resp: 26425

Ion	Ratio	Lower	Upper
104	100		
78	48.5	39.9	59.9
103	46.3	36.9	55.3



Instrument :
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ClientSampleId :
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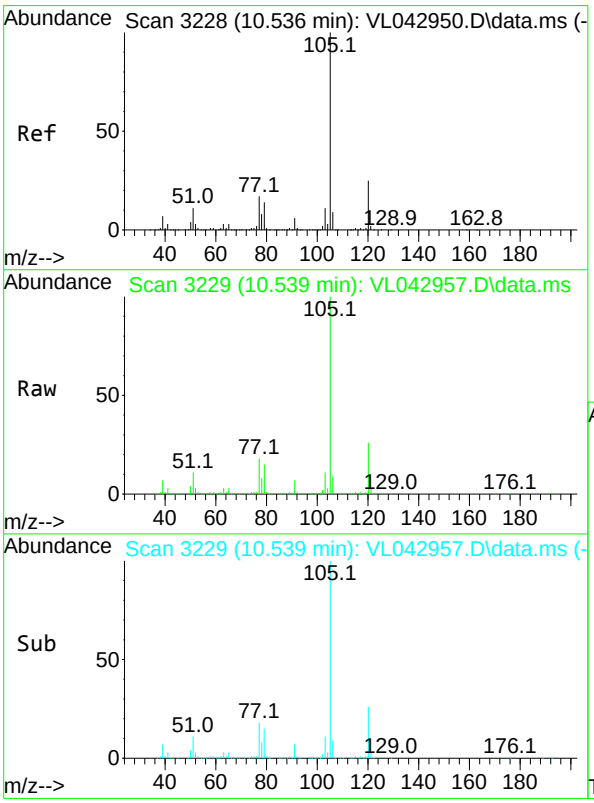
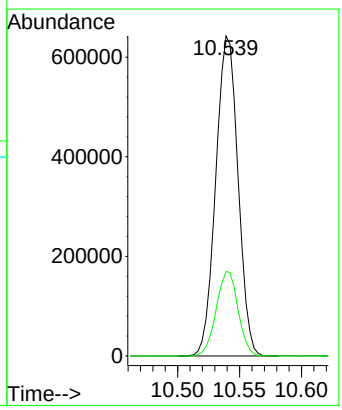
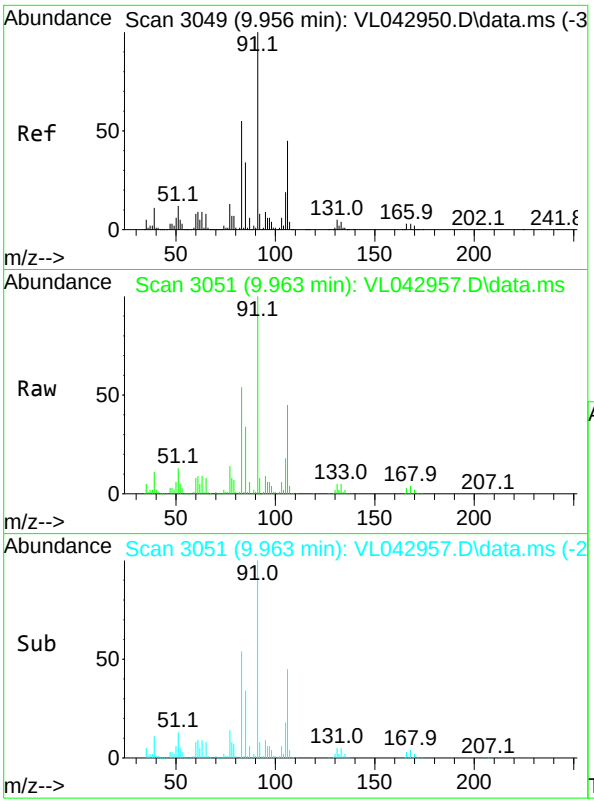


#62
Isopropylbenzene
Concen: 9.230 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 802723

Ion	Ratio	Lower	Upper
105	100		
120	26.0	20.6	30.8





#63
1,1,2,2-Tetrachloroethane
Concen: 8.883 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 83 Resp: 27241

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.7	32.2	96.6

Instrument :
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ClientSampleId :
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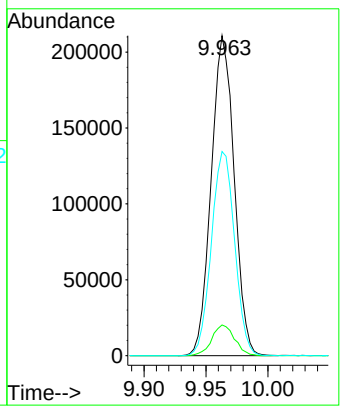
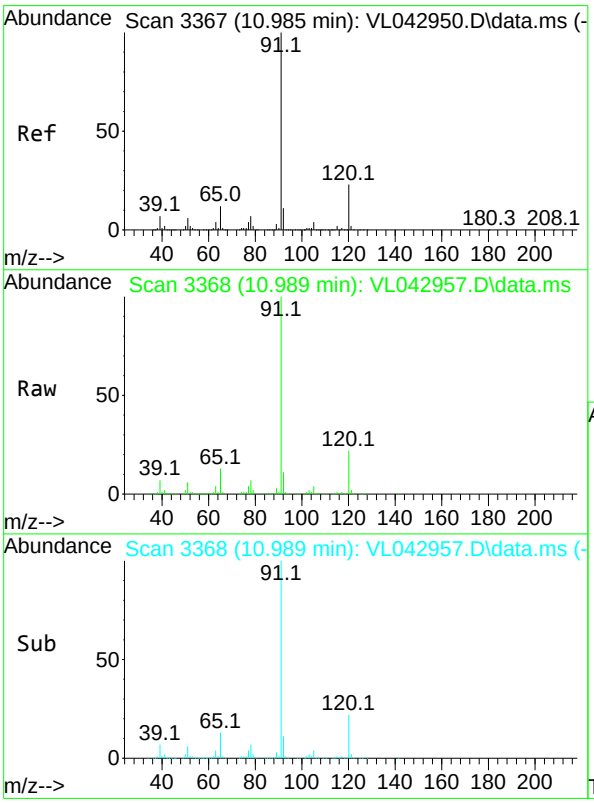
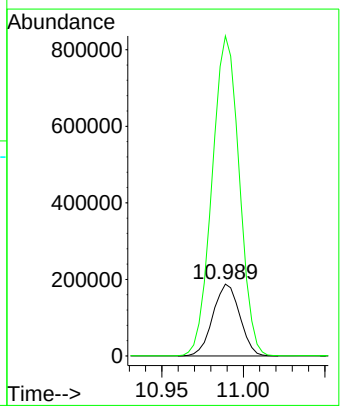


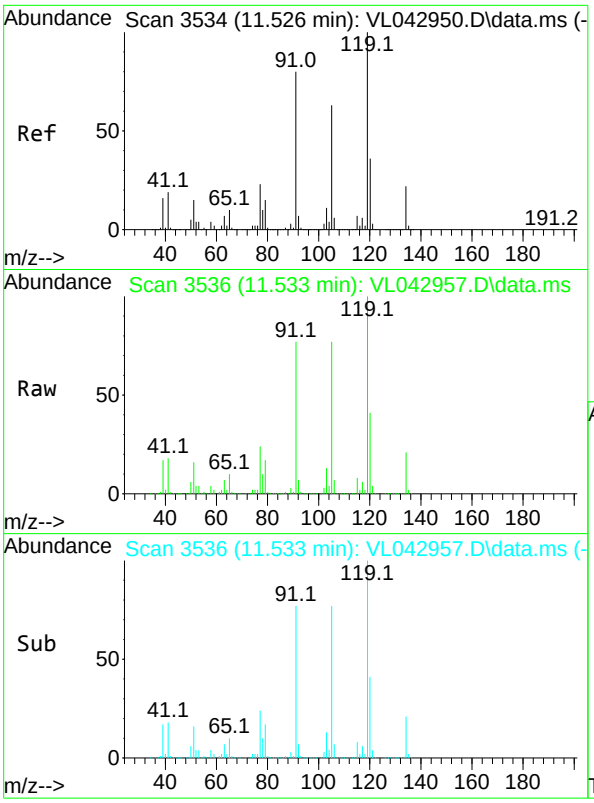


#64
n-propylbenzene
Concen: 9.433 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:120 Resp: 214374

Ion	Ratio	Lower	Upper
120	100		
91	452.3	364.9	547.3





#65
tert-Butylbenzene
Concen: 9.196 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:119 Resp: 71131

Ion	Ratio	Lower	Upper
119	100		
91	78.3	63.1	94.7
134	21.1	17.0	25.6

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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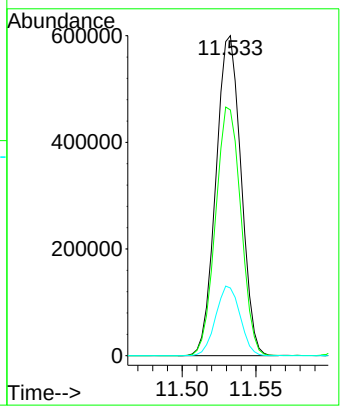
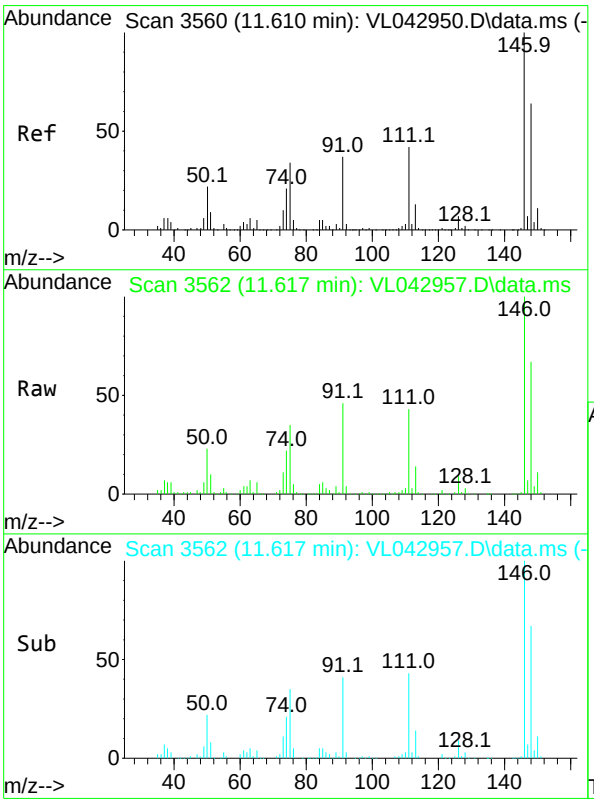
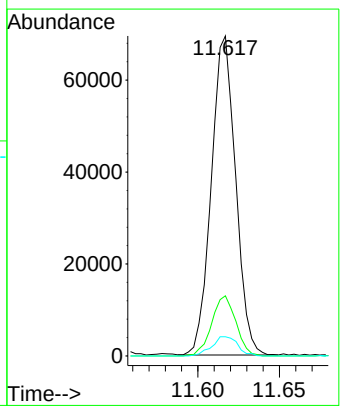


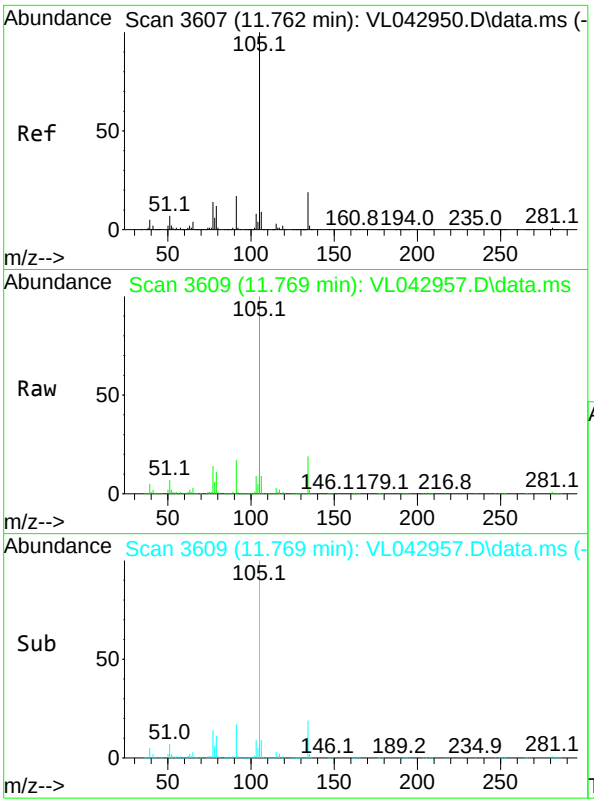


#66
Benzyl Chloride
Concen: 8.858 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 71896

Ion	Ratio	Lower	Upper
91	100		
126	18.8	14.6	21.8
128	6.4	5.0	7.4

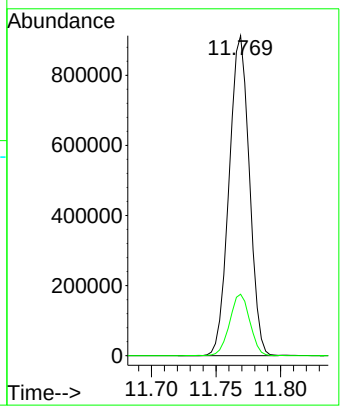




#67
sec-Butylbenzene
Concen: 9.235 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 99540

Ion	Ratio	Lower	Upper
105	100		
134	19.2	15.7	23.5



Instrument :
MSVOA_L
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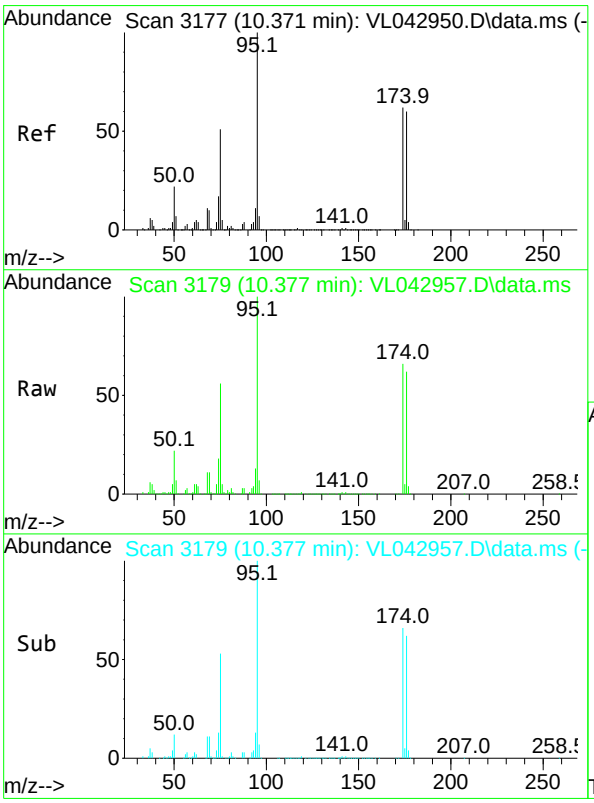
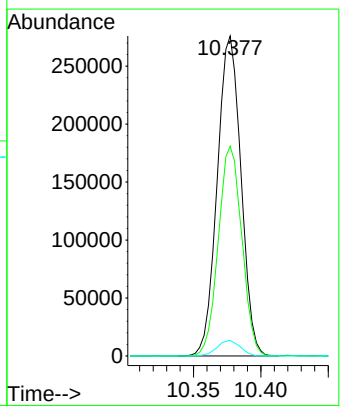
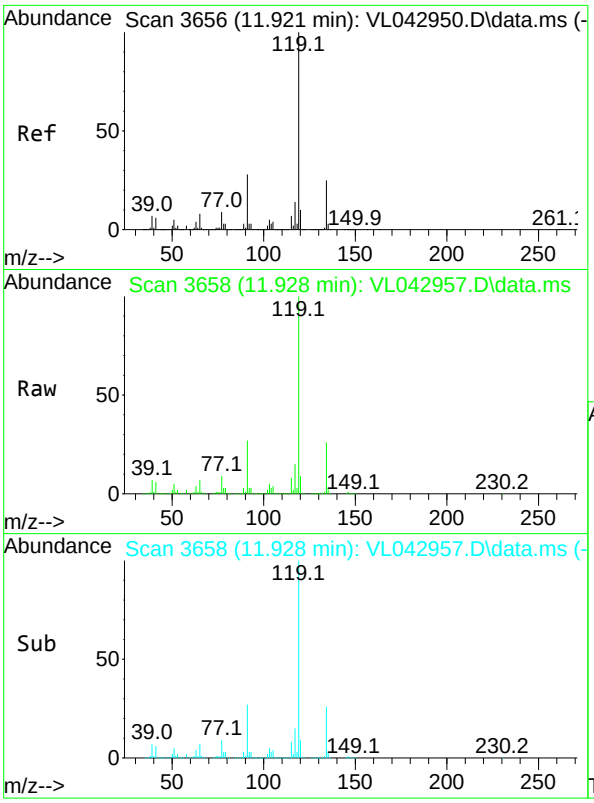


#68
1-Bromo-4-Fluorobenzene
Concen: 10.043 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 95 Resp: 338071

Ion	Ratio	Lower	Upper
95	100		
174	65.0	51.4	77.2
175	4.8	4.0	6.0

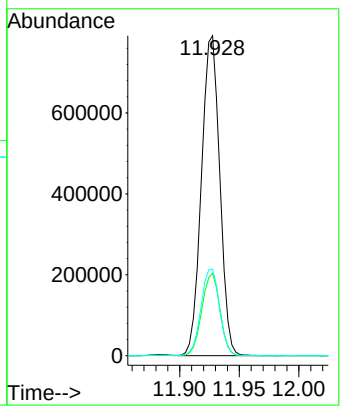




#69
p-Isopropyltoluene
Concen: 9.316 ppbv
RT: 11.928 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:119 Resp: 84819

Ion	Ratio	Lower	Upper
119	100		
134	25.6	21.0	31.4
91	27.5	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
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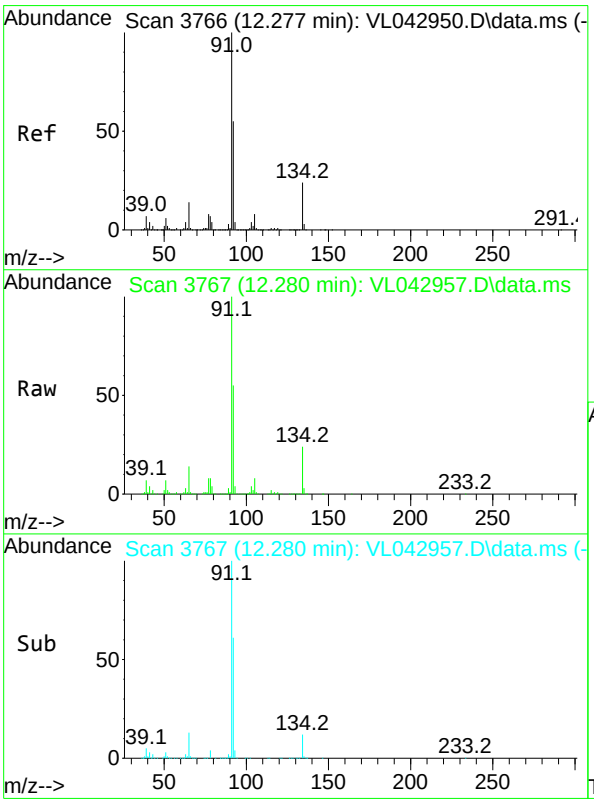
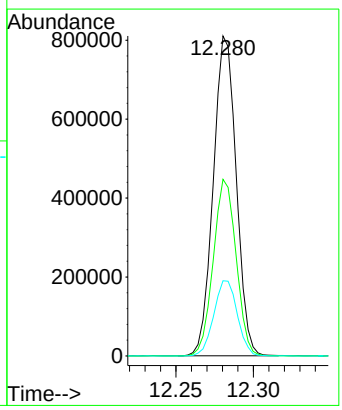
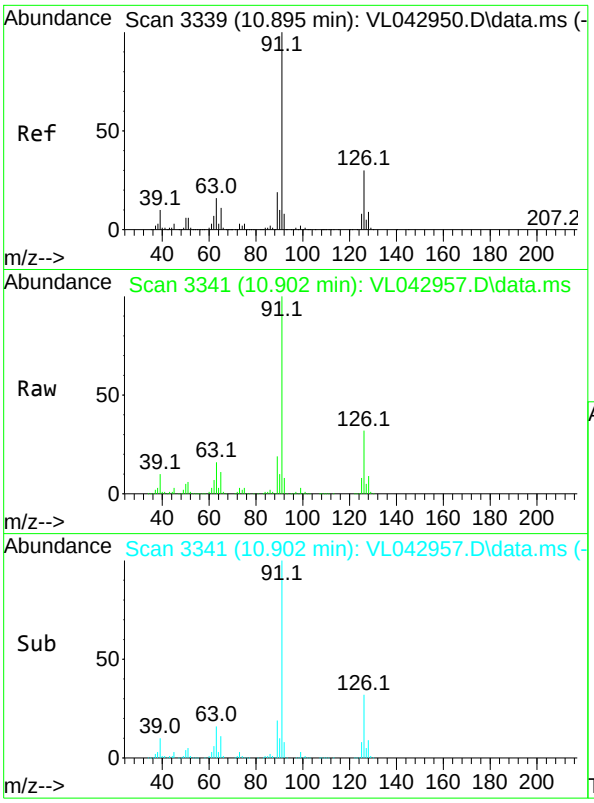


#70
n-Butylbenzene
Concen: 9.392 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 834882

Ion	Ratio	Lower	Upper
91	100		
92	55.2	44.0	66.0
134	24.2	19.4	29.2

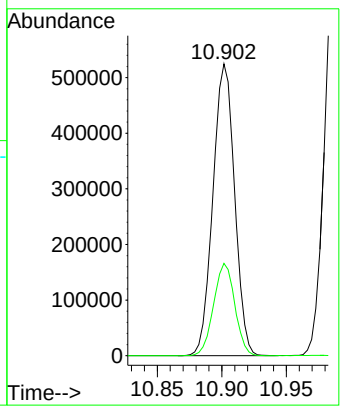




#71
2-Chlorotoluene
Concen: 9.315 ppbv
RT: 10.902 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 61169

Ion	Ratio	Lower	Upper
91	100		
126	30.9	12.3	49.3



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

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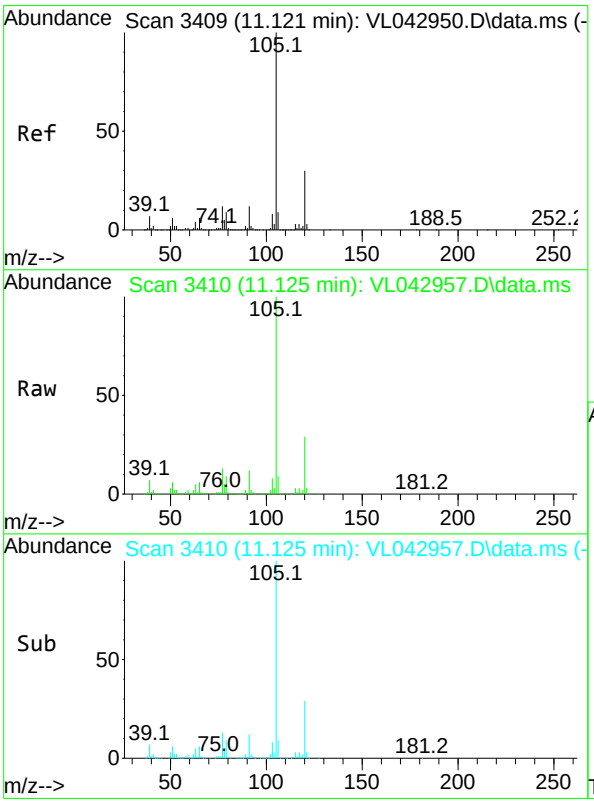
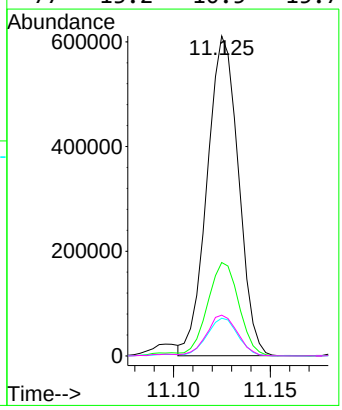
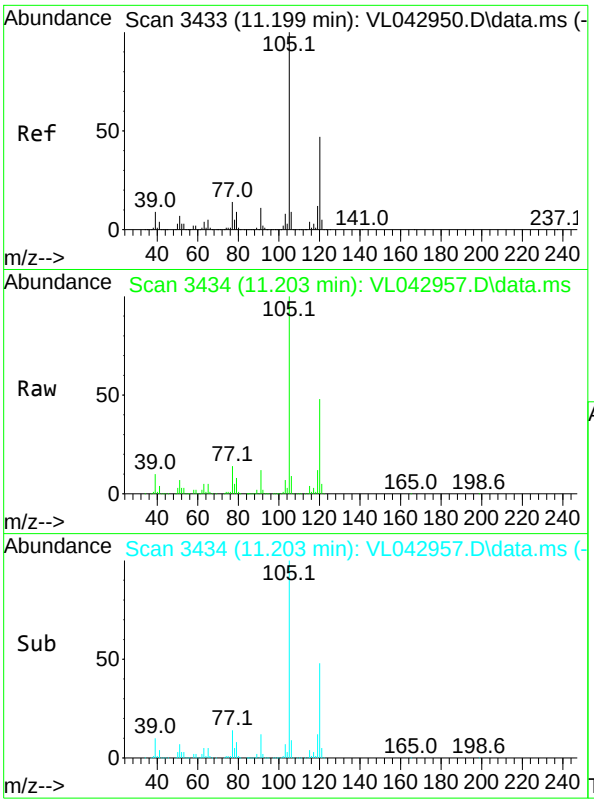


#72
4-Ethyltoluene
Concen: 9.391 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 686229

Ion	Ratio	Lower	Upper
105	100		
120	30.2	24.2	36.2
91	12.2	10.0	15.0
77	13.2	10.5	15.7





#73
1,3,5-Trimethylbenzene
Concen: 9.582 ppbv
RT: 11.203 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 56787

Ion	Ratio	Lower	Upper
105	100		
120	47.7	38.0	57.0

Instrument :
MSVOA_L
ClientSampleId :
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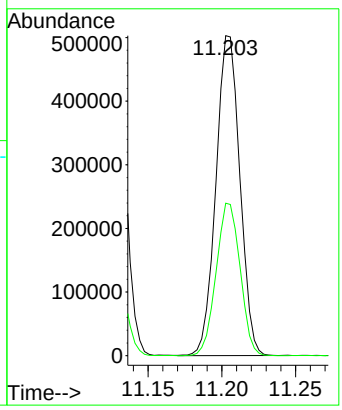
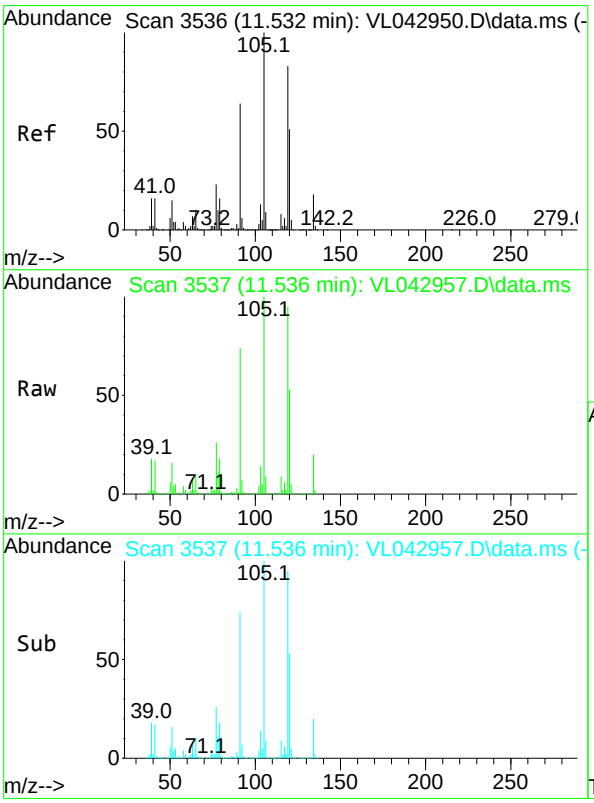
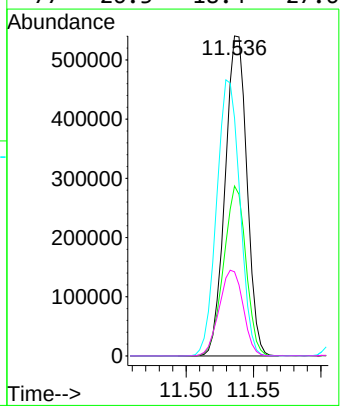


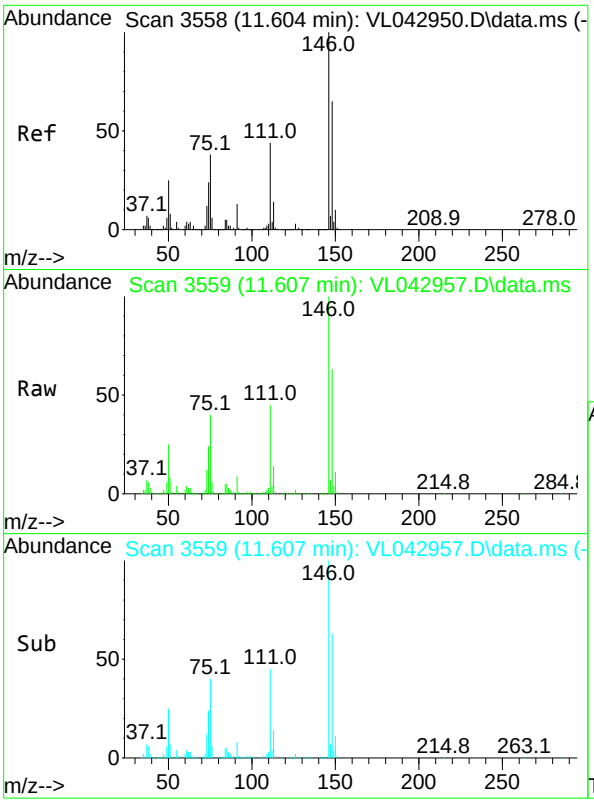


#74
1,2,4-Trimethylbenzene
Concen: 9.277 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 607159

Ion	Ratio	Lower	Upper
105	100		
120	53.1	40.9	61.3
91	74.4	51.2	76.8
77	26.3	18.4	27.6

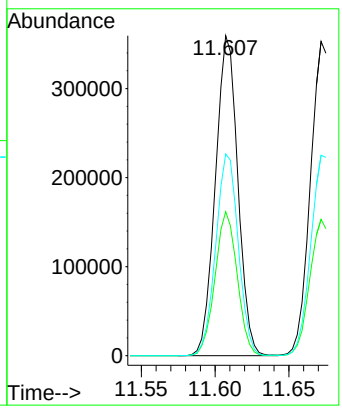




#75
1,3-Dichlorobenzene
Concen: 9.382 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:146 Resp: 38082

Ion	Ratio	Lower	Upper
146	100		
111	44.5	22.3	66.9
148	63.5	31.9	95.5



Instrument :
MSVOA_L
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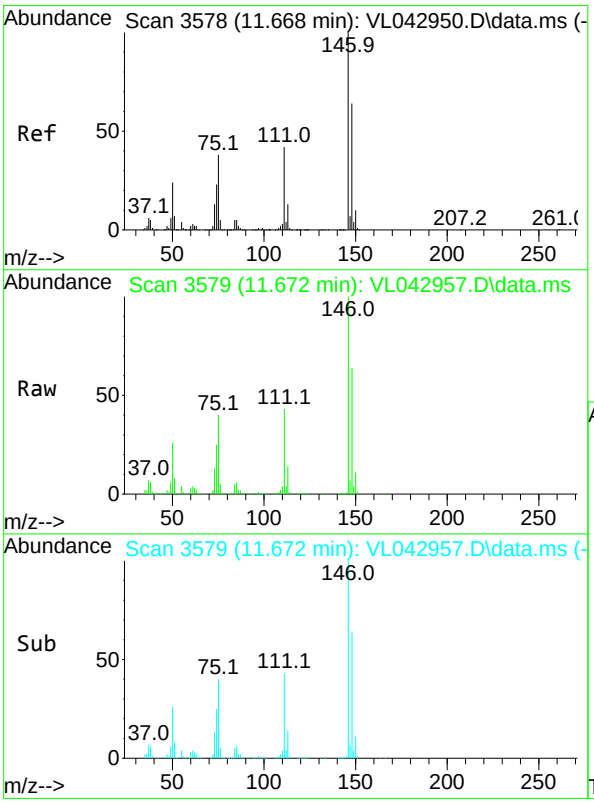
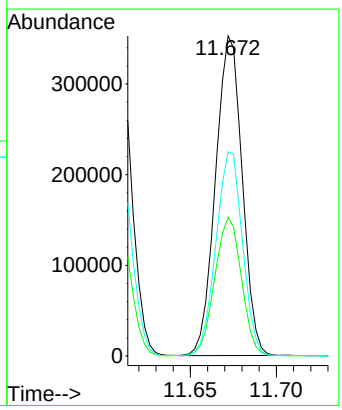
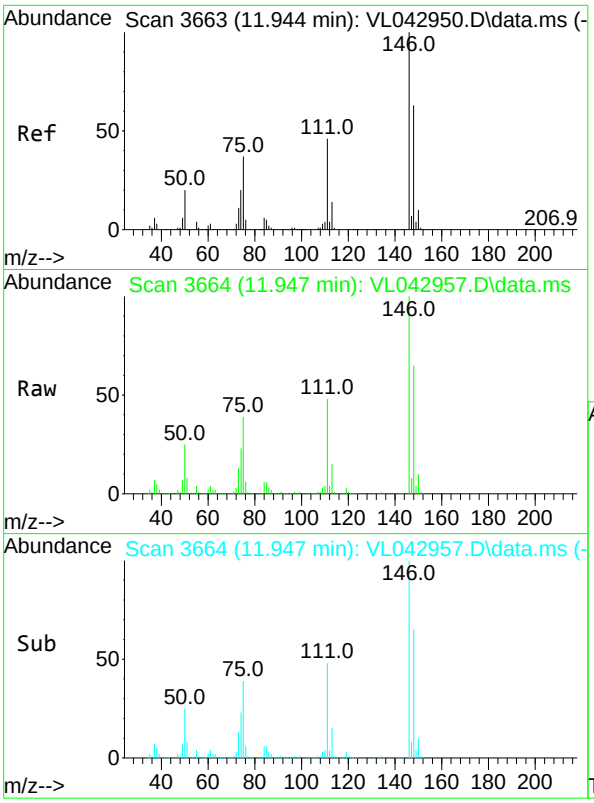


#76
1,4-Dichlorobenzene
Concen: 9.429 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:146 Resp: 380109

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.5	64.5
148	64.0	31.9	95.5





#77
1,2-Dichlorobenzene
Concen: 9.322 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:146 Resp: 35999

Ion	Ratio	Lower	Upper
146	100		
111	46.7	23.1	69.3
148	63.9	32.0	96.0

Instrument :
MSVOA_L
ClientSampleId :
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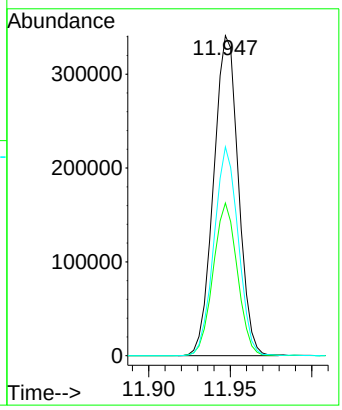
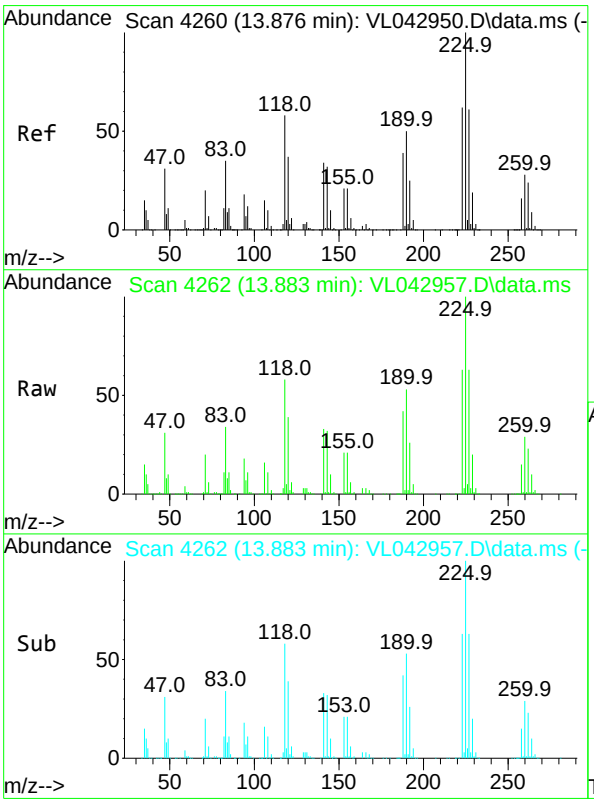
Supervised By :Mahesh Dadoda 09/24/2025

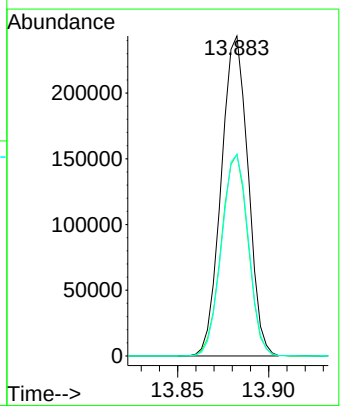


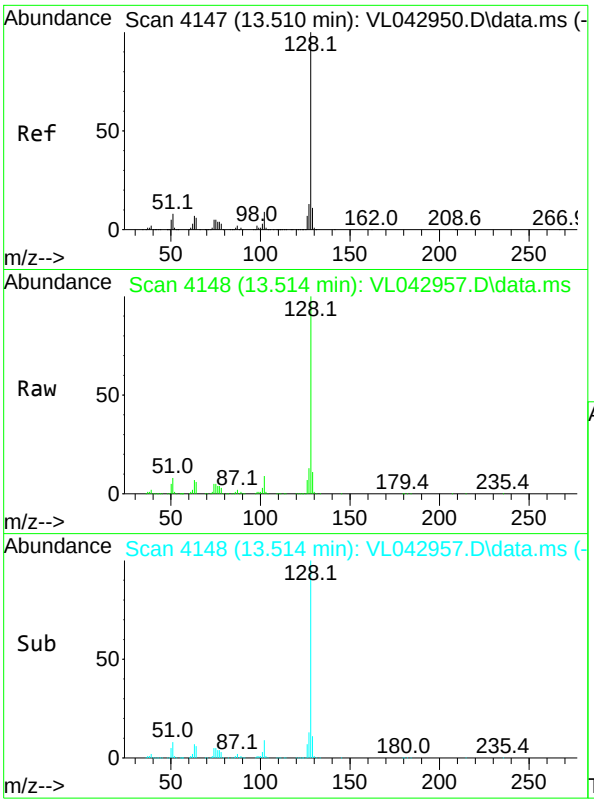


#78
Hexachloro-1,3-Butadiene
Concen: 8.248 ppbv
RT: 13.883 min Scan# 4262
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:225 Resp: 249142

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.1	75.1
227	63.0	50.4	75.6

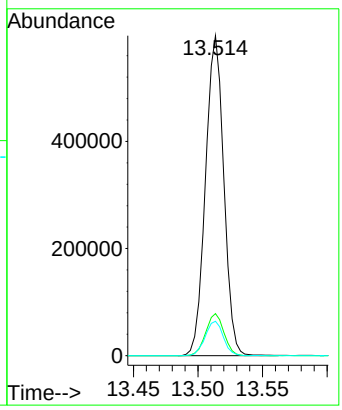




#79
Naphthalene
Concen: 10.208 ppbv
RT: 13.514 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:128 Resp: 59075

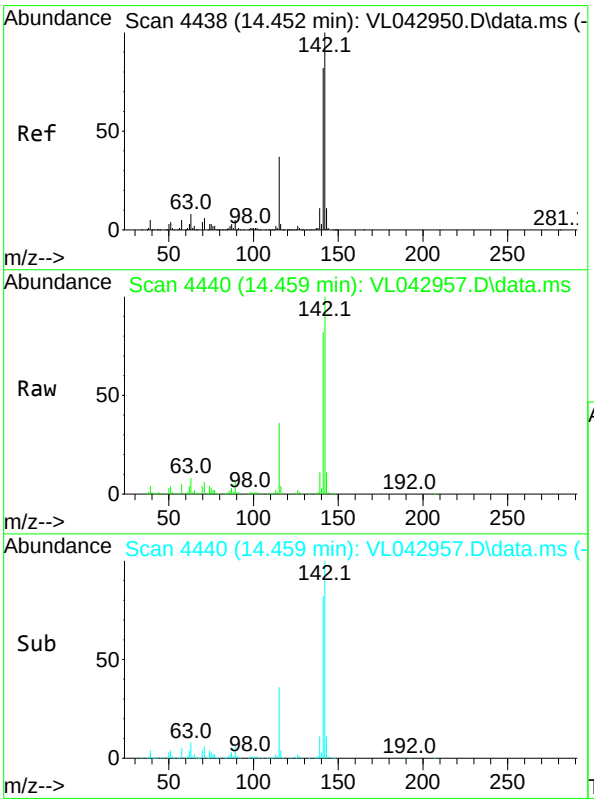
Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.6	15.8
129	10.7	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Manual Integrations
APPROVED

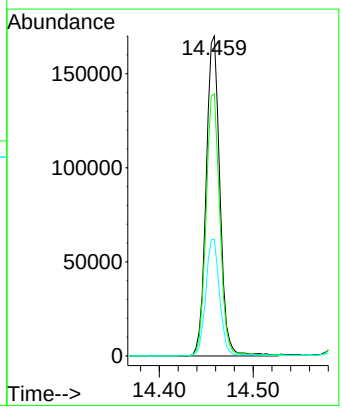
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

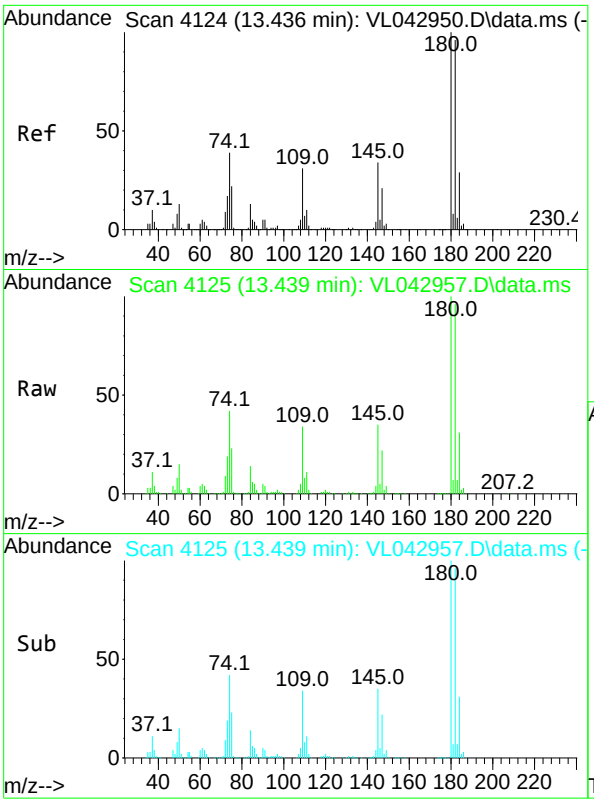


#80
Naphthalene,2-methyl-
Concen: 9.678 ppbv
RT: 14.459 min Scan# 4440
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:142 Resp: 173023

Ion	Ratio	Lower	Upper
142	100		
141	82.7	65.1	97.7
115	37.5	28.9	43.3

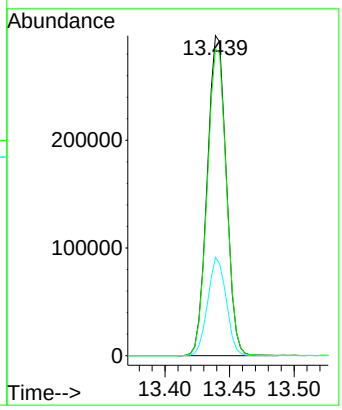




#81
1,2,4-Trichlorobenzene
Concen: 9.845 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:180 Resp: 30464

Ion	Ratio	Lower	Upper
180	100		
182	97.0	75.7	113.5
184	29.9	23.9	35.9



Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	94	0.00
2	T	Dichlorodifluoromethane	1.345	1.238	8.0	93	0.00
3		Chlorodifluoromethane	1.676	1.544	7.9	92	0.00
4		Chloromethane	0.609	0.538	11.7	90	0.00
5	T	Vinyl Chloride	0.550	0.468	14.9	93	0.00
6	T	Bromomethane	0.194	0.166	14.4	94	0.00
7		Chloroethane	0.214	0.190	11.2	91	0.00
8	T	Dichlorotetrafluoroethane	1.148	1.028	10.5	92	0.00
9	T	Propene	0.729	0.662	9.2	91	0.00
10	T	Heptane	1.946	1.779	8.6	89	0.01
11	T	Trichlorofluoromethane	1.297	1.188	8.4	93	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.050	0.947	9.8	92	0.00
13		Ethanol	0.071	0.041#	42.3#	73	0.00
14	T	Bromoethene	0.397	0.349	12.1	90	0.00
15	T	Acetone	1.302	0.984	24.4	93	0.00
16	T	1,3-Butadiene	0.614	0.506	17.6	91	0.00
17		tert-Butyl alcohol	1.429	1.292	9.6	89	0.00
18	T	1,1-Dichloroethene	0.486	0.433	10.9	91	0.00
19	T	Isopropyl Alcohol	0.783	0.677	13.5	88	0.00
20	T	Methylene Chloride	0.545	0.386	29.2	93	0.00
21	T	Allyl Chloride	0.907	0.831	8.4	91	0.00
22	T	trans-1,2-Dichloroethene	0.552	0.489	11.4	90	0.00
23	T	Vinyl Acetate	1.861	1.754	5.7	103	0.00
24	T	1,1-Dichloroethane	1.083	0.975	10.0	92	0.00
25	T	Ethyl Acetate	3.292	3.047	7.4	90	0.00
26	T	Hexane	1.501	1.354	9.8	91	0.00
27	T	Carbon Disulfide	1.346	1.228	8.8	90	0.00
28	T	Methyl tert-Butyl Ether	0.780	0.761	2.4	112	0.00
29	T	Chloroform	1.962	1.880	4.2	95	0.00
30	T	Cyclohexane	1.255	1.165	7.2	91	0.00
31	T	cis-1,2-Dichloroethene	1.406	1.335	5.0	92	0.00
32	T	1,1,1-Trichloroethane	2.119	1.922	9.3	95	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
34	T	2-Butanone	0.701	0.636	9.3	91	0.00
35	T	Carbon Tetrachloride	0.651	0.617	5.2	95	0.00
36	T	Benzene	0.939	0.884	5.9	92	0.00
37	T	1,2-Dichloroethane	0.494	0.473	4.3	94	0.00
38	T	Trichloroethene	0.467	0.417	10.7	91	0.00
39	T	1,2-Dichloropropane	0.343	0.325	5.2	93	0.00
40	T	1,4-Dioxane	0.159	0.141	11.3	89	0.00
41	T	Tetrahydrofuran	0.403	0.374	7.2	90	0.00
42	T	Bromodichloromethane	0.688	0.669	2.8	92	0.00
43		Methyl Methacrylate	0.384	0.351	8.6	89	0.00
44	T	2,2,4-Trimethylpentane	1.622	1.499	7.6	90	0.00
45	T	t-1,3-Dichloropropene	0.410	0.382	6.8	88	0.00
46	T	cis-1,3-Dichloropropene	0.522	0.496	5.0	89	0.01
47	T	1,1,2-Trichloroethane	0.362	0.336	7.2	91	0.00
48	T	Dibromochloromethane	0.580	0.564	2.8	93	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.504	0.483	4.2	89	0.00
50	T	4-Methyl-2-Pentanone	0.939	0.884	5.9	89	0.00
51	T	2-Hexanone	0.749	0.716	4.4	89	0.00
52	T	Tetrachloroethene	0.363	0.315	13.2	91	0.00
53	T	Toluene	1.111	1.034	6.9	90	0.00
54	T	1,2-Dibromoethane	0.510	0.482	5.5	92	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00
56		1,1,1,2-Tetrachloroethane	0.479	0.456	4.8	92	0.00
57	T	Chlorobenzene	0.913	0.841	7.9	91	0.00
58	T	Ethyl Benzene	1.642	1.548	5.7	91	0.00
59	T	m/p-Xylene	1.295	1.211	6.5	92	0.03
60	T	o-Xylene	1.294	1.195	7.7	91	0.00
61	T	Styrene	0.612	0.586	4.2	90	0.00
62		Isopropylbenzene	1.929	1.780	7.7	91	0.00
63	T	1,1,2,2-Tetrachloroethane	0.680	0.604	11.2	92	0.00
64		n-propylbenzene	0.504	0.475	5.8	93	0.00
65		tert-Butylbenzene	1.715	1.577	8.0	94	0.00
66	T	Benzyl Chloride	0.180	0.159	11.7	76	0.00
67		sec-Butylbenzene	2.390	2.207	7.7	93	0.00
68	S	1-Bromo-4-Fluorobenzene	0.746	0.750	-0.5	91	0.00
69		p-Isopropyltoluene	2.019	1.881	6.8	94	0.00
70		n-Butylbenzene	1.971	1.851	6.1	91	0.00
71		2-Chlorotoluene	1.456	1.357	6.8	92	0.00
72	T	4-Ethyltoluene	1.621	1.522	6.1	93	0.00
73	T	1,3,5-Trimethylbenzene	1.314	1.259	4.2	92	0.00
74	T	1,2,4-Trimethylbenzene	1.451	1.346	7.2	92	0.00
75	T	1,3-Dichlorobenzene	0.900	0.845	6.1	93	0.00
76	T	1,4-Dichlorobenzene	0.894	0.843	5.7	92	0.00
77	T	1,2-Dichlorobenzene	0.856	0.798	6.8	93	0.00
78	T	Hexachloro-1,3-Butadiene	0.670	0.553	17.5	89	0.00
79	T	Naphthalene	1.283	1.310	-2.1	88	0.00
80	T	Naphthalene,2-methyl-	0.396	0.384	3.0	88	0.00
81	T	1,2,4-Trichlorobenzene	0.686	0.676	1.5	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	10.000	10.000	0.0	94	0.00
2	T	Dichlorodifluoromethane	10.000	9.204	8.0	93	0.00
3		Chlorodifluoromethane	10.000	9.213	7.9	92	0.00
4		Chloromethane	10.000	8.831	11.7	90	0.00
5	T	Vinyl Chloride	10.000	8.506	14.9	93	0.00
6	T	Bromomethane	10.000	8.529	14.7	94	0.00
7		Chloroethane	10.000	8.894	11.1	91	0.00
8	T	Dichlorotetrafluoroethane	10.000	8.951	10.5	92	0.00
9	T	Propene	10.000	9.079	9.2	91	0.00
10	T	Heptane	10.000	9.141	8.6	89	0.01
11	T	Trichlorofluoromethane	10.000	9.157	8.4	93	0.00
12	T	1,1,2-Trichlorotrifluoroeth	10.000	9.020	9.8	92	0.00
13		Ethanol	10.000	5.842	41.6#	73	0.00
14	T	Bromoethene	10.000	8.785	12.1	90	0.00
15	T	Acetone	10.000	7.557	24.4	93	0.00
16	T	1,3-Butadiene	10.000	8.234	17.7	91	0.00
17		tert-Butyl alcohol	10.000	9.043	9.6	89	0.00
18	T	1,1-Dichloroethene	10.000	8.904	11.0	91	0.00
19	T	Isopropyl Alcohol	10.000	8.644	13.6	88	0.00
20	T	Methylene Chloride	10.000	9.945	0.5	93	0.00
21	T	Allyl Chloride	10.000	9.166	8.3	91	0.00
22	T	trans-1,2-Dichloroethene	10.000	8.845	11.5	90	0.00
23	T	Vinyl Acetate	10.000	9.427	5.7	103	0.00
24	T	1,1-Dichloroethane	10.000	9.003	10.0	92	0.00
25	T	Ethyl Acetate	10.000	9.256	7.4	90	0.00
26	T	Hexane	10.000	9.026	9.7	91	0.00
27	T	Carbon Disulfide	10.000	9.121	8.8	90	0.00
28	T	Methyl tert-Butyl Ether	10.000	9.752	2.5	112	0.00
29	T	Chloroform	10.000	9.583	4.2	95	0.00
30	T	Cyclohexane	10.000	9.286	7.1	91	0.00
31	T	cis-1,2-Dichloroethene	10.000	9.497	5.0	92	0.00
32	T	1,1,1-Trichloroethane	10.000	9.071	9.3	95	0.00
33	I	1,4-Difluorobenzene	10.000	10.000	0.0	94	0.00
34	T	2-Butanone	10.000	9.081	9.2	91	0.00
35	T	Carbon Tetrachloride	10.000	9.479	5.2	95	0.00
36	T	Benzene	10.000	9.416	5.8	92	0.00
37	T	1,2-Dichloroethane	10.000	9.581	4.2	94	0.00
38	T	Trichloroethene	10.000	8.927	10.7	91	0.00
39	T	1,2-Dichloropropane	10.000	9.482	5.2	93	0.00
40	T	1,4-Dioxane	10.000	8.863	11.4	89	0.00
41	T	Tetrahydrofuran	10.000	9.277	7.2	90	0.00
42	T	Bromodichloromethane	10.000	9.721	2.8	92	0.00
43		Methyl Methacrylate	10.000	9.125	8.8	89	0.00
44	T	2,2,4-Trimethylpentane	10.000	9.239	7.6	90	0.00
45	T	t-1,3-Dichloropropene	10.000	9.321	6.8	88	0.00
46	T	cis-1,3-Dichloropropene	10.000	9.490	5.1	89	0.01
47	T	1,1,2-Trichloroethane	10.000	9.279	7.2	91	0.00
48	T	Dibromochloromethane	10.000	9.732	2.7	93	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	Bromoform	10.000	9.589	4.1	89	0.00
50	T	4-Methyl-2-Pentanone	10.000	9.411	5.9	89	0.00
51	T	2-Hexanone	10.000	9.561	4.4	89	0.00
52	T	Tetrachloroethene	10.000	8.678	13.2	91	0.00
53	T	Toluene	10.000	9.306	6.9	90	0.00
54	T	1,2-Dibromoethane	10.000	9.452	5.5	92	0.00
55	I	Chlorobenzene-d5	10.000	10.000	0.0	93	0.00
56		1,1,1,2-Tetrachloroethane	10.000	9.536	4.6	92	0.00
57	T	Chlorobenzene	10.000	9.209	7.9	91	0.00
58	T	Ethyl Benzene	10.000	9.428	5.7	91	0.00
59	T	m/p-Xylene	20.000	18.715	6.4	92	0.03
60	T	o-Xylene	10.000	9.236	7.6	91	0.00
61	T	Styrene	10.000	9.575	4.3	90	0.00
62		Isopropylbenzene	10.000	9.230	7.7	91	0.00
63	T	1,1,2,2-Tetrachloroethane	10.000	8.883	11.2	92	0.00
64		n-propylbenzene	10.000	9.433	5.7	93	0.00
65		tert-Butylbenzene	10.000	9.196	8.0	94	0.00
66	T	Benzyl Chloride	10.000	8.858	11.4	76	0.00
67		sec-Butylbenzene	10.000	9.235	7.7	93	0.00
68	S	1-Bromo-4-Fluorobenzene	10.000	10.043	-0.4	91	0.00
69		p-Isopropyltoluene	10.000	9.316	6.8	94	0.00
70		n-Butylbenzene	10.000	9.392	6.1	91	0.00
71		2-Chlorotoluene	10.000	9.315	6.9	92	0.00
72	T	4-Ethyltoluene	10.000	9.391	6.1	93	0.00
73	T	1,3,5-Trimethylbenzene	10.000	9.582	4.2	92	0.00
74	T	1,2,4-Trimethylbenzene	10.000	9.277	7.2	92	0.00
75	T	1,3-Dichlorobenzene	10.000	9.382	6.2	93	0.00
76	T	1,4-Dichlorobenzene	10.000	9.429	5.7	92	0.00
77	T	1,2-Dichlorobenzene	10.000	9.322	6.8	93	0.00
78	T	Hexachloro-1,3-Butadiene	10.000	8.248	17.5	89	0.00
79	T	Naphthalene	10.000	10.208	-2.1	88	0.00
80	T	Naphthalene,2-methyl-	10.000	9.678	3.2	88	0.00
81	T	1,2,4-Trichlorobenzene	10.000	9.845	1.5	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QC SAMPLE DATA

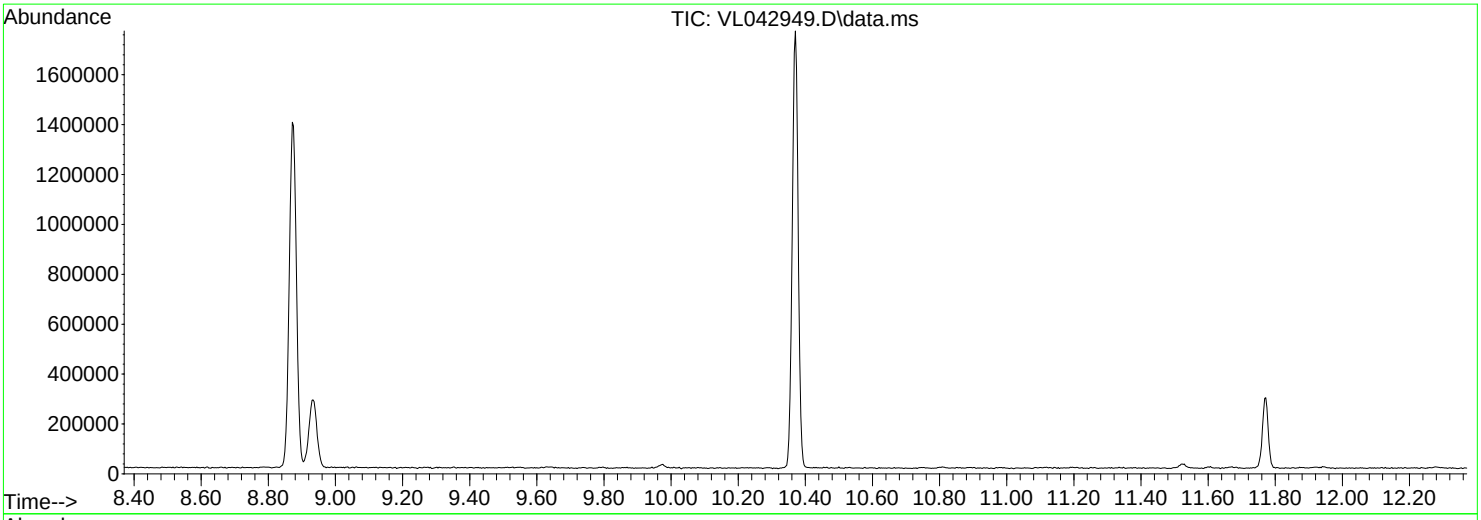
BFB

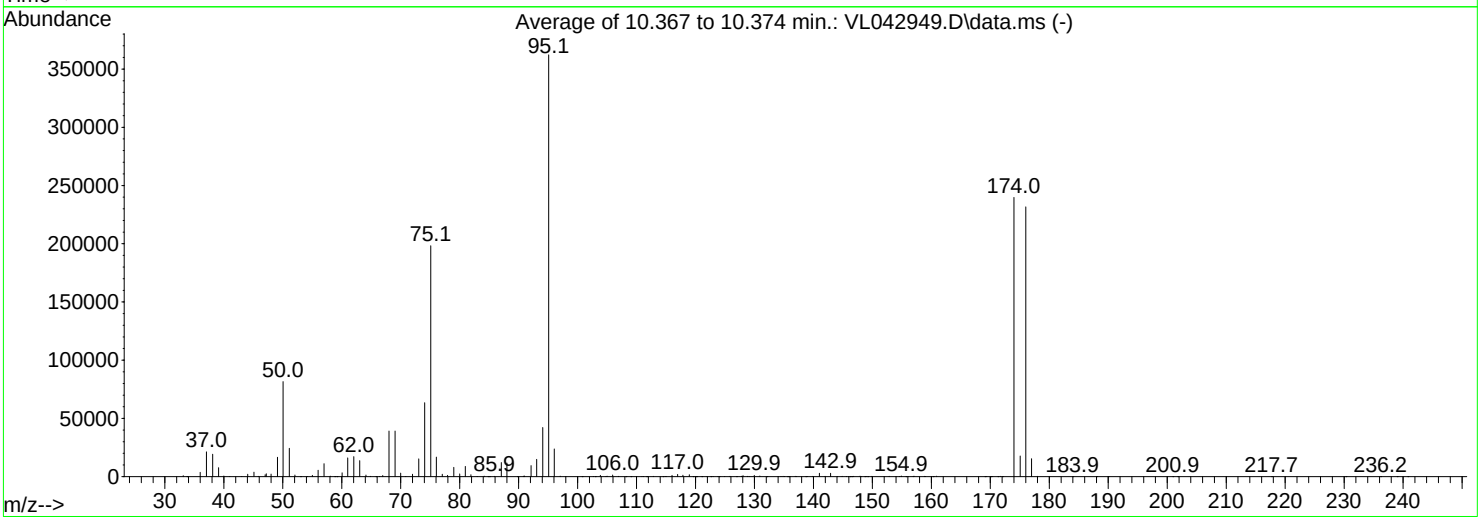
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042949.D
Acq On : 22 Sep 2025 08:55
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Sep 23 02:39:16 2025





AutoFind: Scans 3176, 3177, 3178; Background Corrected with Scan 3156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.5	81605	PASS
75	95	30	66	54.7	198315	PASS
95	95	100	100	100.0	362228	PASS
96	95	5	9	6.6	23817	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	66.2	239765	PASS
175	174	4	9	7.4	17693	PASS
176	174	93	101	96.6	231701	PASS
177	176	5	9	6.6	15367	PASS

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Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	VL0922ABL01	SDG No.:	Q3131
Lab Sample ID:	VL0922ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042958.D	1		09/22/25 15:06	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	0.11	0.54	U	0.54	2.47
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
74-83-9	Bromomethane	0.080	0.31	U	0.31	1.94
75-00-3	Chloroethane	0.15	0.40	U	0.40	1.32
109-99-9	Tetrahydrofuran	0.080	0.24	U	0.24	1.47
75-69-4	Trichlorofluoromethane	0.17	0.96	U	0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	0.14	1.07	U	1.07	3.83
76-14-2	Dichlorotetrafluoroethane	0.15	1.05	U	1.05	3.49
75-65-0	tert-Butyl alcohol	0.16	0.49	U	0.49	1.52
142-82-5	Heptane	0.17	0.70	U	0.70	2.05
75-35-4	1,1-Dichloroethene	0.15	0.59	U	0.59	1.98
67-64-1	Acetone	0.18	0.43	U	0.43	1.19
75-15-0	Carbon Disulfide	0.080	0.25	U	0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	0.23	0.83	U	0.83	1.80
75-09-2	Methylene Chloride	0.23	0.80	U	0.80	1.74
156-60-5	trans-1,2-Dichloroethene	0.12	0.48	U	0.48	1.98
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72
78-93-3	2-Butanone	0.060	0.18	U	0.18	1.47
56-23-5	Carbon Tetrachloride	0.030	0.19	U	0.19	0.19
156-59-2	cis-1,2-Dichloroethene	0.10	0.40	U	0.40	1.98
67-66-3	Chloroform	0.10	0.49	U	0.49	2.44
71-55-6	1,1,1-Trichloroethane	0.020	0.11	U	0.11	0.16
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	U	0.65	2.34
71-43-2	Benzene	0.080	0.26	U	0.26	1.60
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
78-87-5	1,2-Dichloropropane	0.13	0.60	U	0.60	2.31
75-27-4	Bromodichloromethane	0.060	0.40	U	0.40	3.35
108-10-1	4-Methyl-2-Pentanone	0.10	0.41	U	0.41	2.05
108-88-3	Toluene	0.16	0.60	U	0.60	1.88
10061-02-6	t-1,3-Dichloropropene	0.15	0.68	U	0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	0.11	0.50	U	0.50	2.27
79-00-5	1,1,2-Trichloroethane	0.080	0.44	U	0.44	2.73

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Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	VL0922ABL01	SDG No.:	Q3131
Lab Sample ID:	VL0922ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042958.D	1		09/22/25 15:06	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3	
124-48-1	Dibromochloromethane	0.090	0.77	U	0.77	4.26	
106-93-4	1,2-Dibromoethane	0.090	0.69	U	0.69	0.77	
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	
100-41-4	Ethyl Benzene	0.19	0.83	U	0.83	2.17	
179601-23-1	m/p-Xylene	0.41	1.78	U	1.78	4.34	
95-47-6	o-Xylene	0.21	0.91	U	0.91	2.17	
100-42-5	Styrene	0.16	0.68	U	0.68	2.13	
75-25-2	Bromoform	0.050	0.52	U	0.52	5.17	
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	
95-49-8	2-Chlorotoluene	0.17	0.88	U	0.88	2.59	
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	U	0.88	2.46	
95-63-6	1,2,4-Trimethylbenzene	0.18	0.88	U	0.88	2.46	
541-73-1	1,3-Dichlorobenzene	0.050	0.30	U	0.30	3.01	
106-46-7	1,4-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
95-50-1	1,2-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
120-82-1	1,2,4-Trichlorobenzene	0.21	1.56	U	1.56	3.71	
87-68-3	Hexachloro-1,3-Butadiene	0.13	1.39	U	1.39	5.33	
106-99-0	1,3-Butadiene	0.050	0.11	U	0.11	1.11	
91-20-3	Naphthalene	0.010	0.050	U	0.050	0.52	
622-96-8	4-Ethyltoluene	0.21	1.03	U	1.03	2.46	
110-54-3	Hexane	0.16	0.56	U	0.56	1.76	
107-05-1	Allyl Chloride	0.11	0.34	U	0.34	1.57	
123-91-1	1,4-Dioxane	0.22	0.79	U	0.79	1.80	
80-62-6	Methyl Methacrylate	0.14	0.57	U	0.57	2.05	
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.0			70 (65) - 130 (135)	100%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	157000		2.787			
540-36-3	1,4-Difluorobenzene	497000		3.959			
3114-55-4	Chlorobenzene-d5	444000		8.882			

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Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	VL0922ABL01	SDG No.:	Q3131
Lab Sample ID:	VL0922ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042958.D	1		09/22/25 15:06	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042958.D
Acq On : 22 Sep 2025 15:06
Operator : SY/MD
Sample : VL0922ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABL01

Quant Time: Sep 23 02:50:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

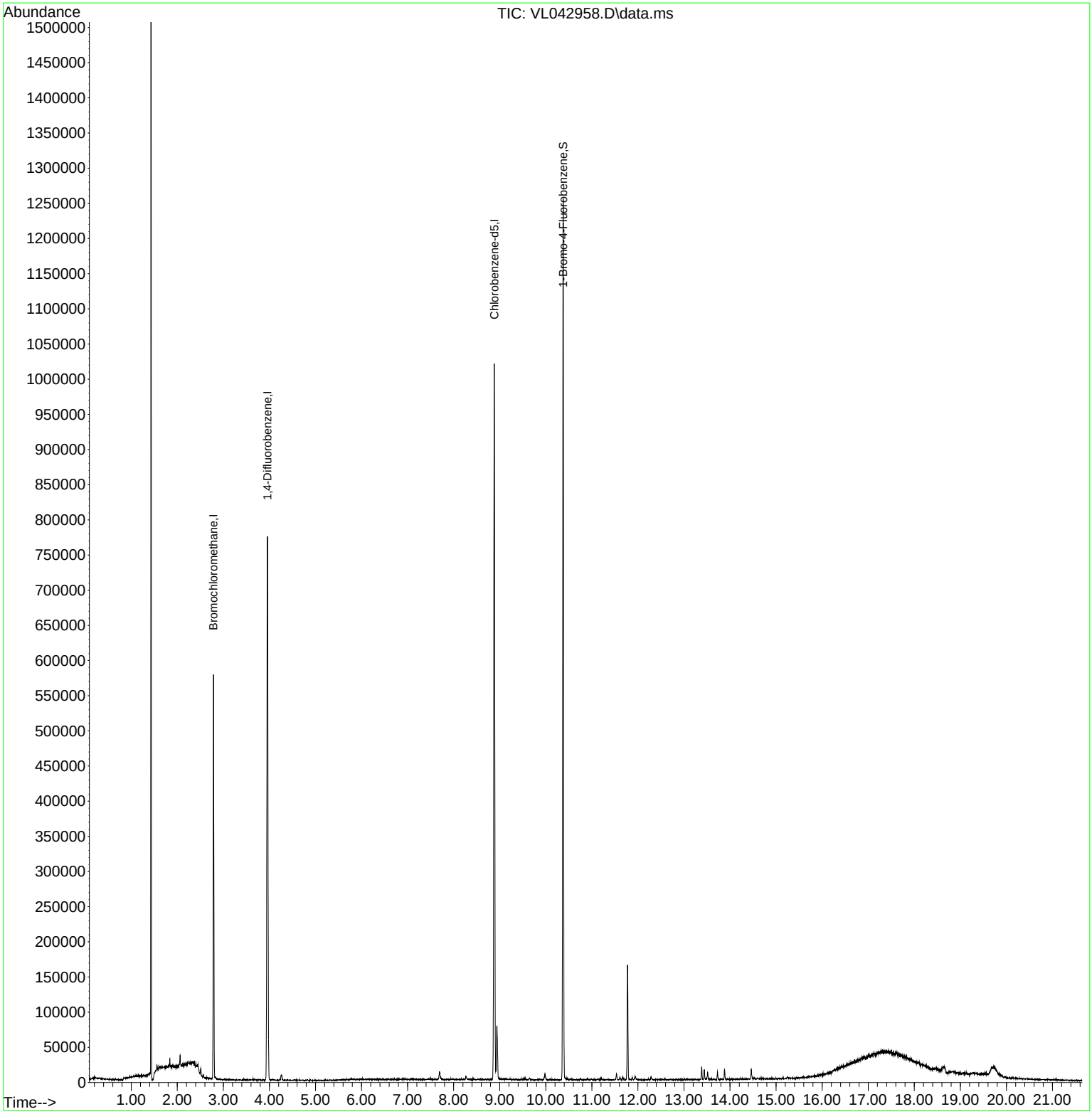
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	157278	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	497068	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	444461	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	332703	10.028	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%			
Target Compounds						Qvalue

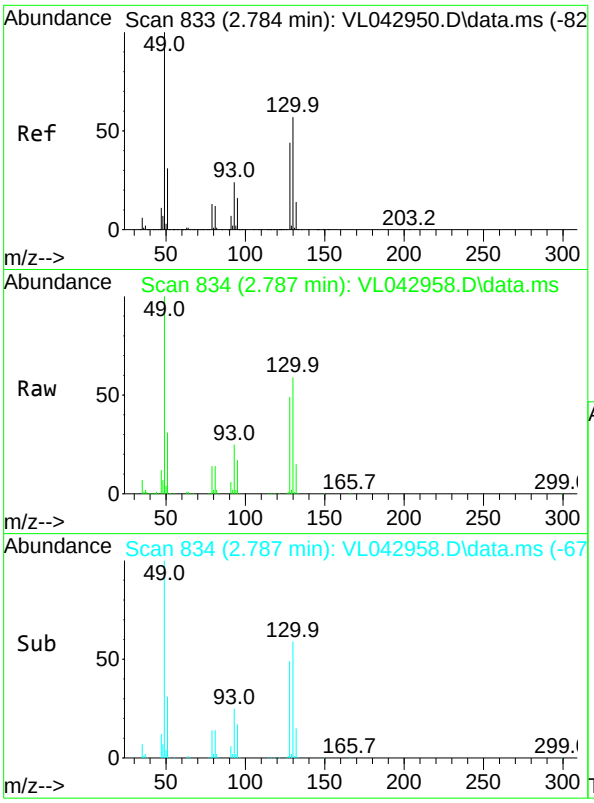
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042958.D
Acq On : 22 Sep 2025 15:06
Operator : SY/MD
Sample : VL0922ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABL01

Quant Time: Sep 23 02:50:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



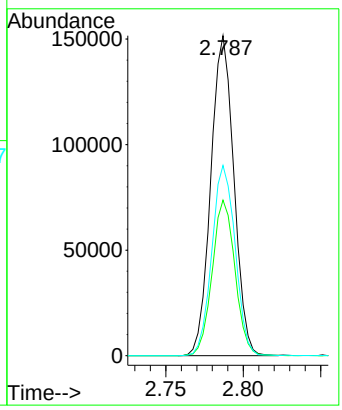


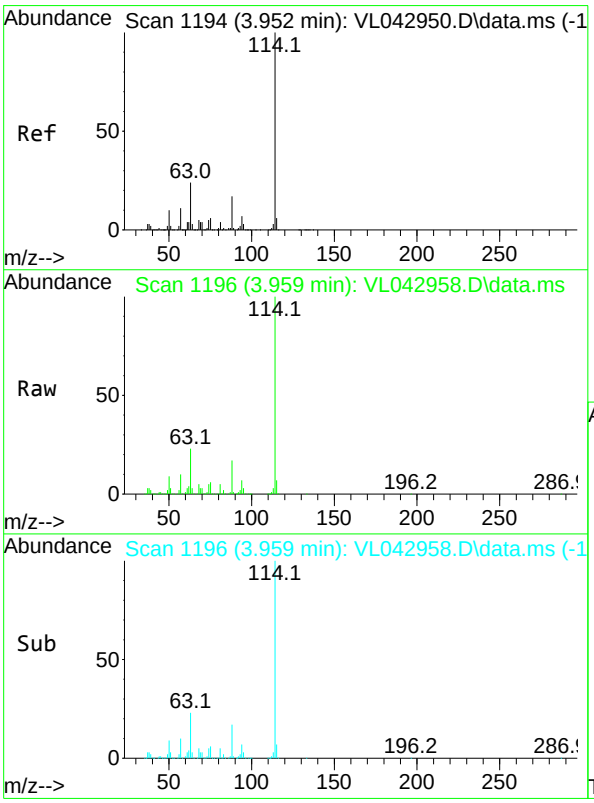
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042958.D
Acq: 22 Sep 2025 15:06

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABL01

Tgt Ion: 49 Resp: 157278

Ion	Ratio	Lower	Upper
49	100		
128	48.0	22.9	68.8
130	60.1	29.1	87.3

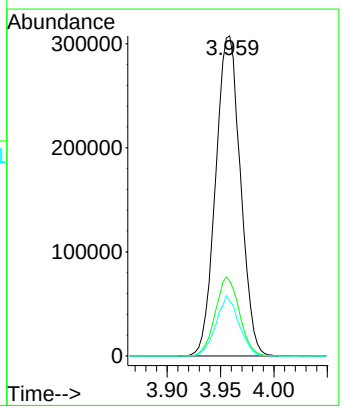


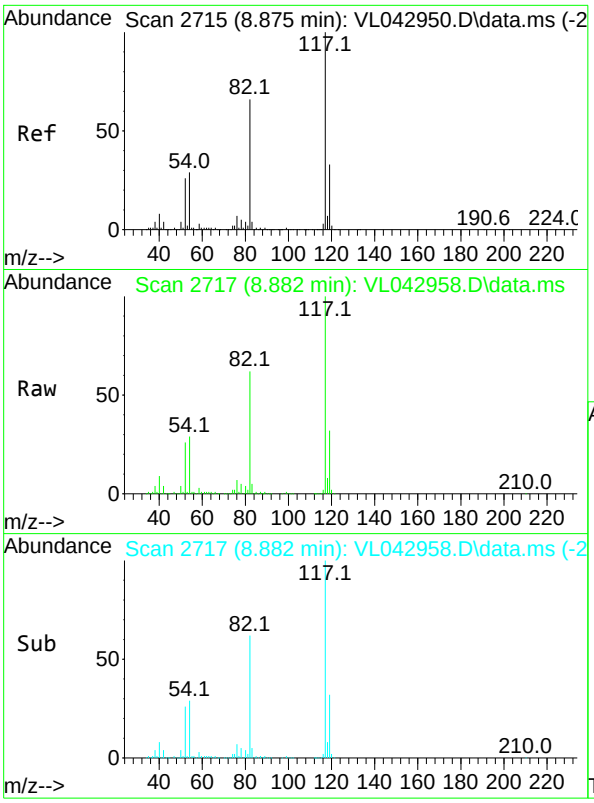


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042958.D
Acq: 22 Sep 2025 15:06

Tgt Ion:114 Resp: 497068

Ion	Ratio	Lower	Upper
114	100		
63	23.9	19.4	29.2
88	17.3	14.2	21.2



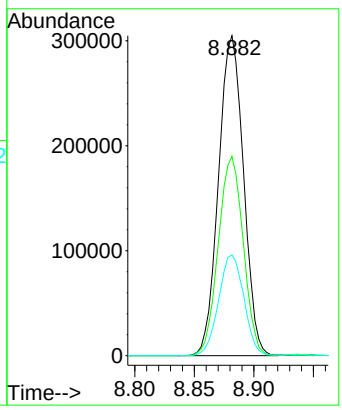


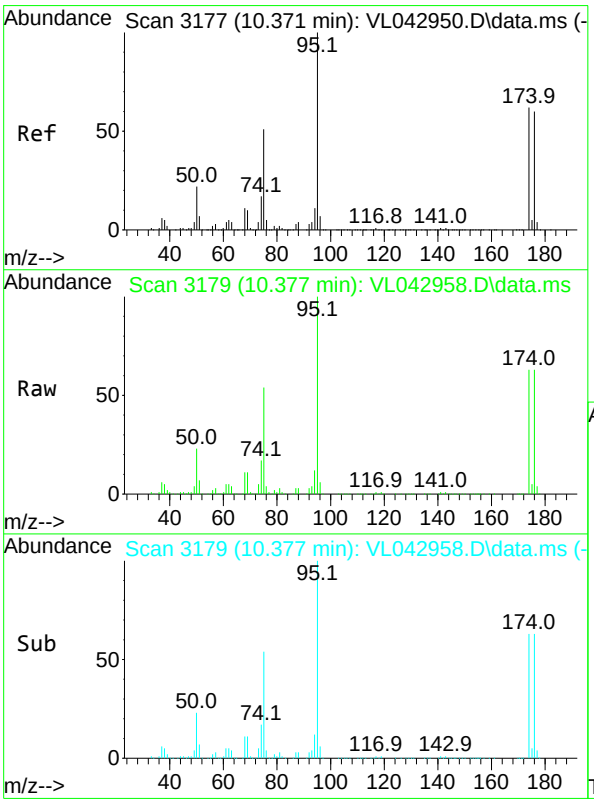
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042958.D
Acq: 22 Sep 2025 15:06

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABL01

Tgt Ion:117 Resp: 444461

Ion	Ratio	Lower	Upper
117	100		
82	62.4	52.8	79.2
119	31.8	26.5	39.7

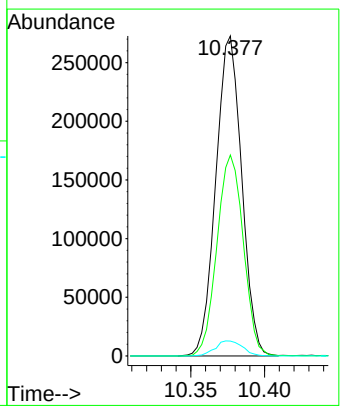




#68
1-Bromo-4-Fluorobenzene
Concen: 10.028 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042958.D
Acq: 22 Sep 2025 15:06

Tgt Ion: 95 Resp: 332703

Ion	Ratio	Lower	Upper
95	100		
174	64.0	51.4	77.2
175	5.0	4.0	6.0



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Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	VL0922ABS01	SDG No.:	Q3131
Lab Sample ID:	VL0922ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042959.D	1		09/22/25 15:52	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	9.30	46.0		0.54	2.47
74-87-3	Chloromethane	8.70	18.0		0.21	1.03
75-01-4	Vinyl Chloride	8.40	21.5		0.080	0.080
74-83-9	Bromomethane	8.30	32.2		0.31	1.94
75-00-3	Chloroethane	8.80	23.2		0.40	1.32
109-99-9	Tetrahydrofuran	9.30	27.4		0.24	1.47
75-69-4	Trichlorofluoromethane	9.10	51.1		0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	9.00	69.0		1.07	3.83
76-14-2	Dichlorotetrafluoroethane	9.00	62.9		1.05	3.49
75-65-0	tert-Butyl alcohol	9.00	27.3		0.49	1.52
142-82-5	Heptane	9.00	36.9		0.70	2.05
75-35-4	1,1-Dichloroethene	9.00	35.7		0.59	1.98
67-64-1	Acetone	7.40	17.6		0.43	1.19
75-15-0	Carbon Disulfide	8.80	27.4		0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	7.80	28.1		0.83	1.80
75-09-2	Methylene Chloride	9.80	34.0		0.80	1.74
156-60-5	trans-1,2-Dichloroethene	8.90	35.3		0.48	1.98
75-34-3	1,1-Dichloroethane	9.00	36.4		0.53	2.02
110-82-7	Cyclohexane	9.30	32.0		0.76	1.72
78-93-3	2-Butanone	9.20	27.1		0.18	1.47
56-23-5	Carbon Tetrachloride	9.70	61.0		0.19	0.19
156-59-2	cis-1,2-Dichloroethene	9.30	36.9		0.40	1.98
67-66-3	Chloroform	9.50	46.4		0.49	2.44
71-55-6	1,1,1-Trichloroethane	9.00	49.1		0.11	0.16
540-84-1	2,2,4-Trimethylpentane	9.40	43.9		0.65	2.34
71-43-2	Benzene	9.60	30.7		0.26	1.60
107-06-2	1,2-Dichloroethane	9.90	40.1		0.36	2.02
79-01-6	Trichloroethene	9.20	49.4		0.11	0.16
78-87-5	1,2-Dichloropropane	9.70	44.8		0.60	2.31
75-27-4	Bromodichloromethane	9.90	66.3		0.40	3.35
108-10-1	4-Methyl-2-Pentanone	9.60	39.3		0.41	2.05
108-88-3	Toluene	9.50	35.8		0.60	1.88
10061-02-6	t-1,3-Dichloropropene	9.50	43.1		0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	9.70	44.0		0.50	2.27
79-00-5	1,1,2-Trichloroethane	9.60	52.4		0.44	2.73

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Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	VL0922ABS01	SDG No.:	Q3131
Lab Sample ID:	VL0922ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042959.D	1		09/22/25 15:52	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3	
124-48-1	Dibromochloromethane	10.0	85.2		0.77	4.26	
106-93-4	1,2-Dibromoethane	9.70	74.5		0.69	0.77	
127-18-4	Tetrachloroethene	8.70	59.0		0.14	0.20	
108-90-7	Chlorobenzene	9.40	43.3		0.37	2.30	
100-41-4	Ethyl Benzene	9.50	41.3		0.83	2.17	
179601-23-1	m/p-Xylene	18.9	82.1		1.78	4.34	
95-47-6	o-Xylene	9.40	40.8		0.91	2.17	
100-42-5	Styrene	9.60	40.9		0.68	2.13	
75-25-2	Bromoform	9.80	101		0.52	5.17	
79-34-5	1,1,2,2-Tetrachloroethane	8.90	61.1		0.14	0.21	
95-49-8	2-Chlorotoluene	9.30	48.1		0.88	2.59	
108-67-8	1,3,5-Trimethylbenzene	9.50	46.7		0.88	2.46	
95-63-6	1,2,4-Trimethylbenzene	9.30	45.7		0.88	2.46	
541-73-1	1,3-Dichlorobenzene	9.30	55.9		0.30	3.01	
106-46-7	1,4-Dichlorobenzene	9.40	56.5		0.78	3.01	
95-50-1	1,2-Dichlorobenzene	9.30	55.9		0.78	3.01	
120-82-1	1,2,4-Trichlorobenzene	10.0	74.2		1.56	3.71	
87-68-3	Hexachloro-1,3-Butadiene	8.40	89.6		1.39	5.33	
106-99-0	1,3-Butadiene	8.10	17.9		0.11	1.11	
91-20-3	Naphthalene	10.3	54.0		0.050	0.52	
622-96-8	4-Ethyltoluene	9.30	45.7		1.03	2.46	
110-54-3	Hexane	9.10	32.1		0.56	1.76	
107-05-1	Allyl Chloride	9.00	28.2		0.34	1.57	
123-91-1	1,4-Dioxane	9.30	33.5		0.79	1.80	
80-62-6	Methyl Methacrylate	9.30	38.1		0.57	2.05	
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.0			70 (65) - 130 (135)	100%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	158000		2.787			
540-36-3	1,4-Difluorobenzene	476000		3.959			
3114-55-4	Chlorobenzene-d5	440000		8.882			

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	VL0922ABS01	SDG No.:	Q3131
Lab Sample ID:	VL0922ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042959.D	1		09/22/25 15:52	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042959.D
Acq On : 22 Sep 2025 15:52
Operator : SY/MD
Sample : VL0922ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:50:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	157611	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	475789	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	440323	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	329520	10.025	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	196098	9.250	ppbv	98
3) Chlorodifluoromethane	1.476	51	241019	9.122	ppbv	98
4) Chloromethane	1.531	50	83097	8.660	ppbv	99
5) Vinyl Chloride	1.580	62	72910	8.405	ppbv	100
6) Bromomethane	1.667	94	25316	8.274	ppbv	96
7) Chloroethane	1.703	64	29696	8.816	ppbv	96
8) Dichlorotetrafluoroethane	1.554	85	162369	8.972	ppbv	99
9) Propene	1.483	41	99904	8.692	ppbv	96
10) Heptane	4.978	43	277314	9.040	ppbv	98
11) Trichlorofluoromethane	1.878	101	186968	9.147	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	149089	9.007	ppbv	98
13) Ethanol	1.719	45	7189	6.447	ppbv	97
14) Bromoethene	1.781	108	55444	8.860	ppbv	99
15) Acetone	1.836	43	151513	7.381	ppbv	98
16) 1,3-Butadiene	1.609	39	78310	8.087	ppbv	100
17) tert-Butyl alcohol	2.040	59	202608	8.999	ppbv	100
18) 1,1-Dichloroethene	2.033	96	68641	8.959	ppbv	98
19) Isopropyl Alcohol	1.884	45	106256	8.610	ppbv	100
20) Methylene Chloride	2.062	84	60096	9.806	ppbv	97
21) Allyl Chloride	2.095	41	129200	9.037	ppbv	99
22) trans-1,2-Dichloroethene	2.341	96	77254	8.874	ppbv	100
23) Vinyl Acetate	2.464	43	248190	8.463	ppbv	99
24) 1,1-Dichloroethane	2.409	63	154444	9.046	ppbv	99
25) Ethyl Acetate	2.833	43	477860	9.210	ppbv	99
26) Hexane	2.826	57	215902	9.129	ppbv	98
27) Carbon Disulfide	2.150	76	187493	8.839	ppbv	99
28) Methyl tert-Butyl Ether	2.438	73	95760	7.790	ppbv	99
29) Chloroform	2.849	83	295049	9.541	ppbv	99
30) Cyclohexane	3.855	84	184610	9.336	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	206747	9.332	ppbv	99
32) 1,1,1-Trichloroethane	3.367	97	301400	9.024	ppbv	99
34) 2-Butanone	2.557	43	308258	9.245	ppbv	99
35) Carbon Tetrachloride	3.762	117	299002	9.653	ppbv	98
36) Benzene	3.655	78	427346	9.565	ppbv	99
37) 1,2-Dichloroethane	3.218	62	233446	9.935	ppbv	99
38) Trichloroethene	4.548	130	204031	9.189	ppbv	96
39) 1,2-Dichloropropane	4.315	63	157775	9.673	ppbv	98
40) 1,4-Dioxane	4.584	88	70833	9.339	ppbv #	95
41) Tetrahydrofuran	3.053	42	177879	9.281	ppbv	99
42) Bromodichloromethane	4.490	83	324757	9.924	ppbv	94
43) Methyl Methacrylate	4.878	69	169093	9.250	ppbv	99
44) 2,2,4-Trimethylpentane	4.639	57	725943	9.407	ppbv	100
45) t-1,3-Dichloropropene	6.412	75	185943	9.538	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042959.D
Acq On : 22 Sep 2025 15:52
Operator : SY/MD
Sample : VL0922ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:50:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46)	cis-1,3-Dichloropropene	5.603	75	240185	9.667	ppbv	98
47)	1,1,2-Trichloroethane	6.581	97	165106	9.580	ppbv	97
48)	Dibromochloromethane	7.387	129	275781	10.002	ppbv	99
49)	Bromoform	9.484	173	235060	9.800	ppbv	99
50)	4-Methyl-2-Pentanone	5.749	43	431031	9.645	ppbv	99
51)	2-Hexanone	7.435	43	343461	9.641	ppbv	100
52)	Tetrachloroethene	8.228	164	150483	8.705	ppbv	97
53)	Toluene	6.933	91	501548	9.484	ppbv	100
54)	1,2-Dibromoethane	7.652	107	235389	9.704	ppbv	100
56)	1,1,1,2-Tetrachloroethane	8.924	131	200560	9.516	ppbv	98
57)	Chlorobenzene	8.924	112	377524	9.392	ppbv	97
58)	Ethyl Benzene	9.354	91	686057	9.489	ppbv	99
59)	m/p-Xylene	9.532	91	1075186m	18.862	ppbv	
60)	o-Xylene	9.966	91	537008	9.426	ppbv	100
61)	Styrene	9.872	104	258756	9.602	ppbv	98
62)	Isopropylbenzene	10.539	105	787602	9.274	ppbv	99
63)	1,1,2,2-Tetrachloroethane	9.963	83	266223	8.890	ppbv	100
64)	n-propylbenzene	10.989	120	208358	9.389	ppbv	100
65)	tert-Butylbenzene	11.533	119	694033	9.188	ppbv	99
66)	Benzyl Chloride	11.617	91	64955	8.196	ppbv	99
67)	sec-Butylbenzene	11.769	105	974750	9.261	ppbv	99
69)	p-Isopropyltoluene	11.924	119	820532	9.229	ppbv	99
70)	n-Butylbenzene	12.280	91	818866	9.434	ppbv	100
71)	2-Chlorotoluene	10.902	91	598619	9.336	ppbv	100
72)	4-Ethyltoluene	11.125	105	665916	9.332	ppbv	100
73)	1,3,5-Trimethylbenzene	11.206	105	552039	9.539	ppbv	100
74)	1,2,4-Trimethylbenzene	11.536	105	592889	9.277	ppbv	95
75)	1,3-Dichlorobenzene	11.607	146	368544	9.299	ppbv	99
76)	1,4-Dichlorobenzene	11.672	146	369921	9.397	ppbv	99
77)	1,2-Dichlorobenzene	11.947	146	350261	9.288	ppbv	100
78)	Hexachloro-1,3-Butadiene	13.882	225	246743	8.366	ppbv	99
79)	Naphthalene	13.514	128	579760	10.259	ppbv	98
80)	Naphthalene,2-methyl-	14.455	142	167256	9.581	ppbv	98
81)	1,2,4-Trichlorobenzene	13.439	180	300876	9.958	ppbv	99

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

Quantitation Report (QT Reviewed)

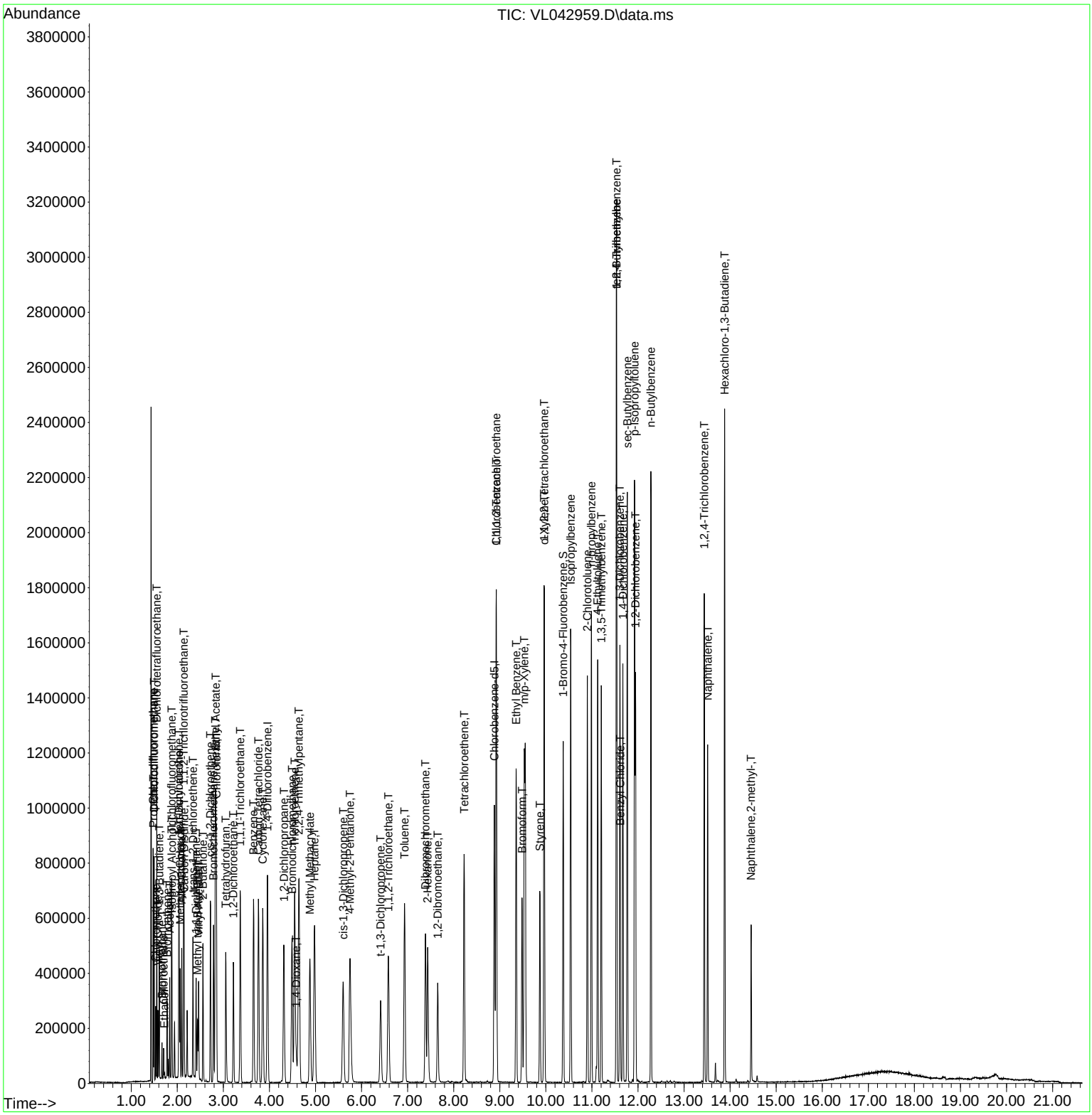
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042959.D
Acq On : 22 Sep 2025 15:52
Operator : SY/MD
Sample : VL0922ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

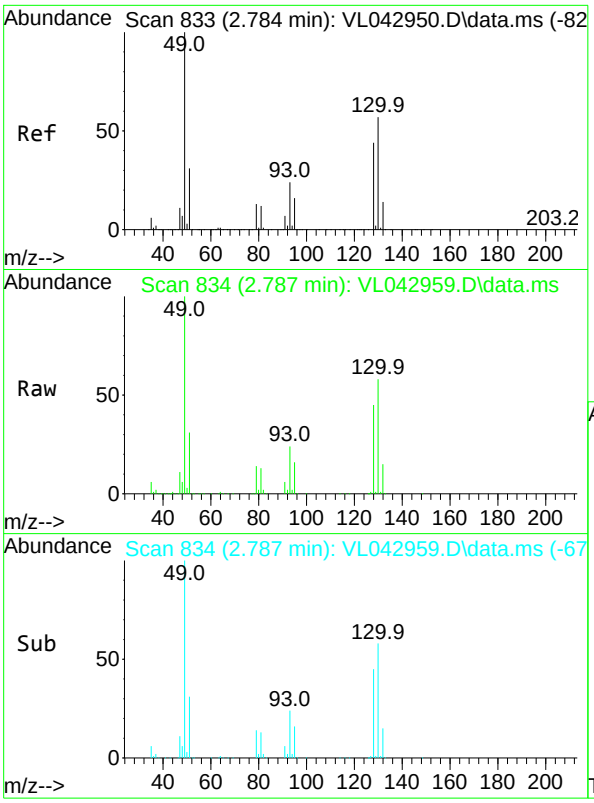
Quant Time: Sep 23 02:50:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

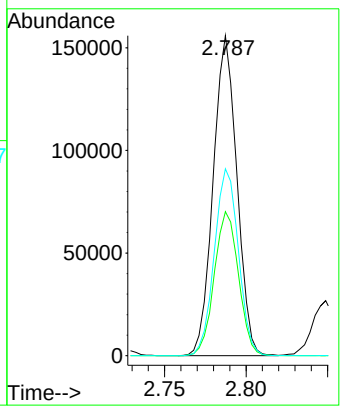




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 49 Resp: 15761

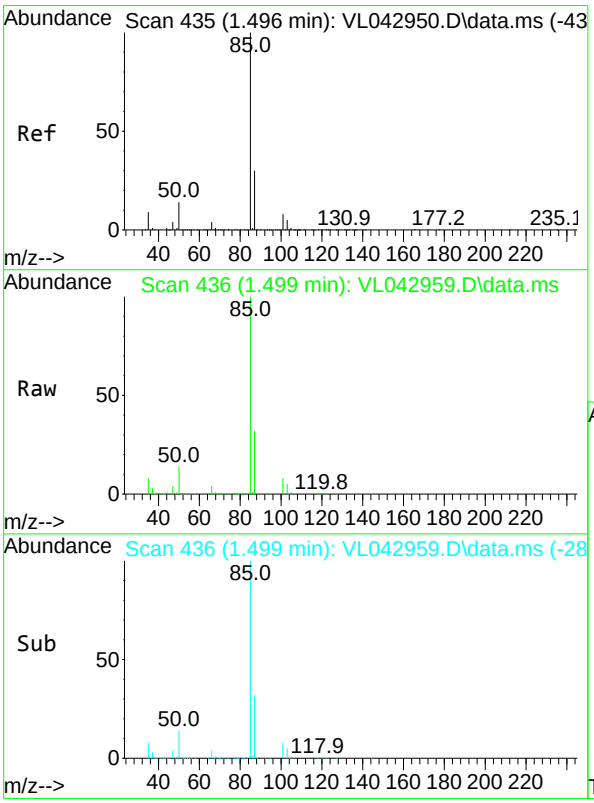
Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	59.3	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations
APPROVED

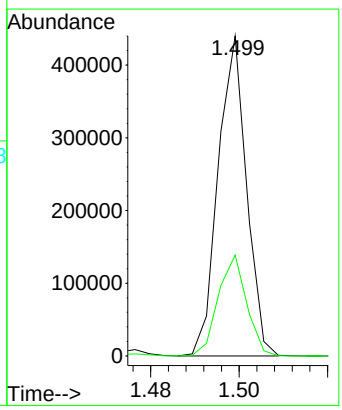
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

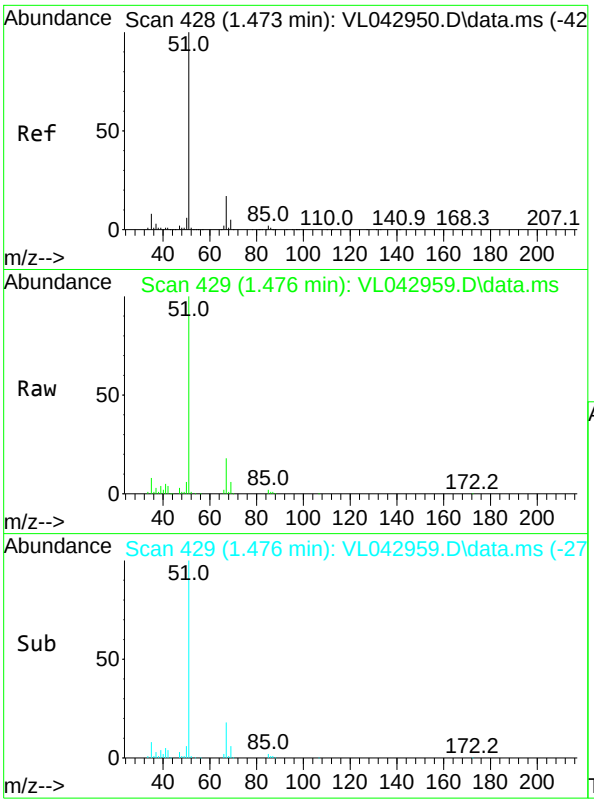


#2
Dichlorodifluoromethane
Concen: 9.250 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 85 Resp: 196098

Ion	Ratio	Lower	Upper
85	100		
87	31.5	24.3	36.5

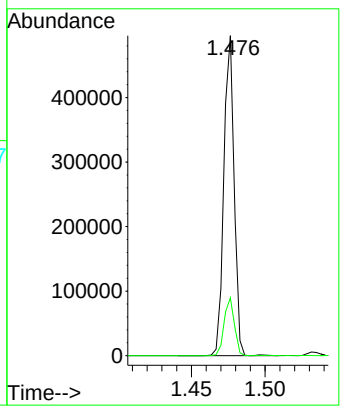




#3
Chlorodifluoromethane
Concen: 9.122 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 51 Resp: 24101

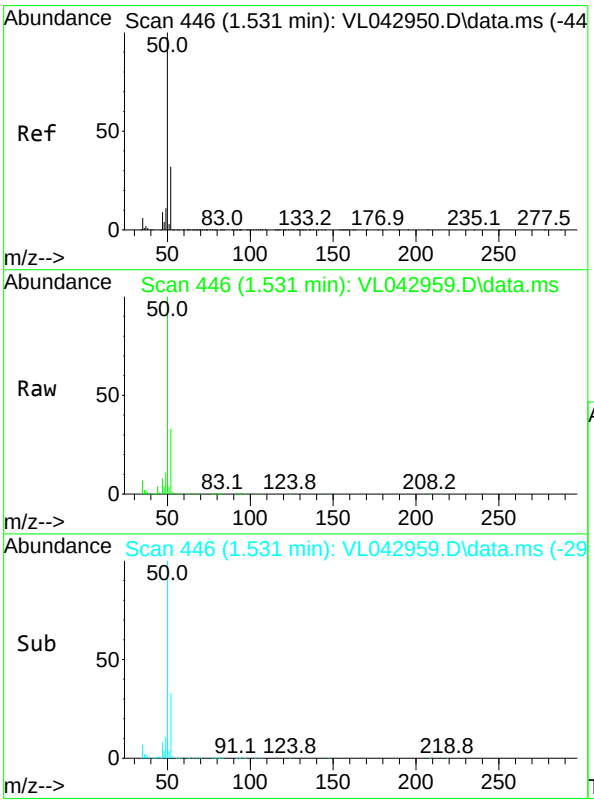
Ion	Ratio	Lower	Upper
51	100		
67	18.1	13.8	20.8



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations
APPROVED

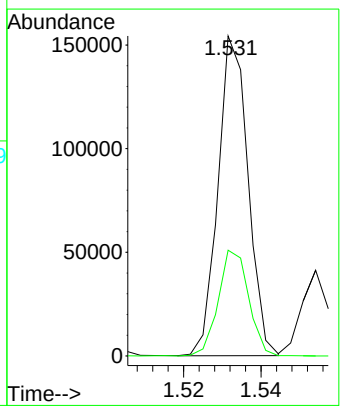
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

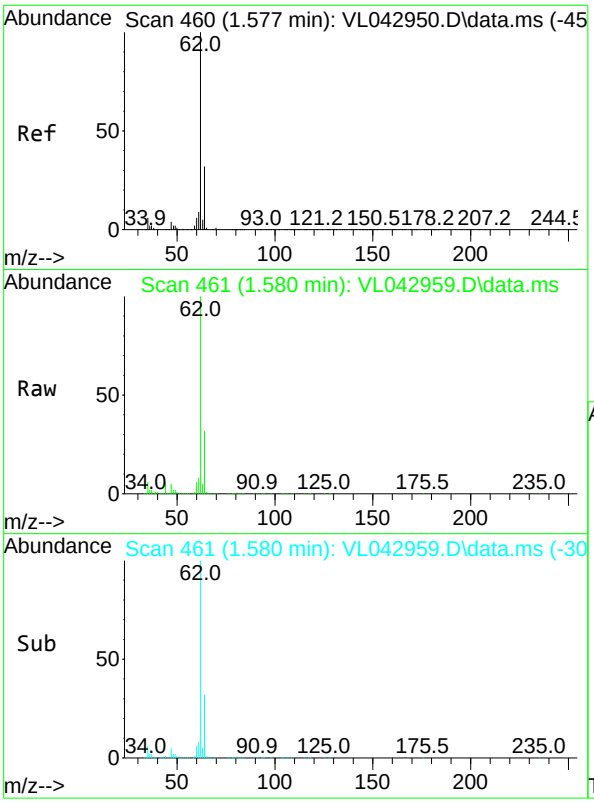


#4
Chloromethane
Concen: 8.660 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 50 Resp: 83097

Ion	Ratio	Lower	Upper
50	100		
52	33.0	25.9	38.9





#5
Vinyl Chloride
Concen: 8.405 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

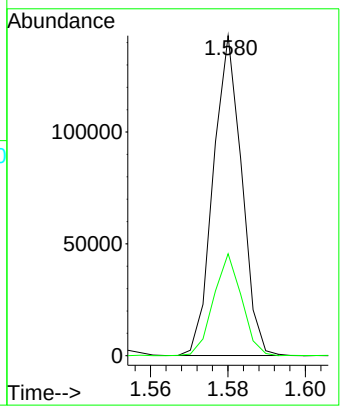
Tgt Ion: 62 Resp: 7291

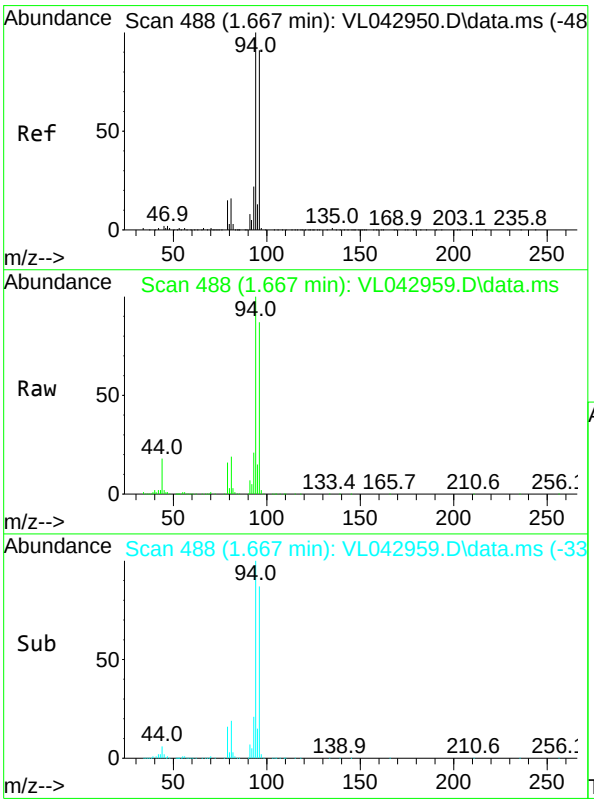
Ion	Ratio	Lower	Upper
62	100		
64	31.9	25.4	38.2

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

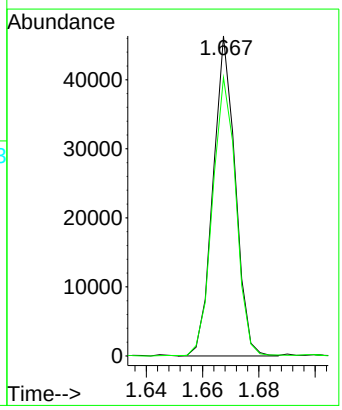


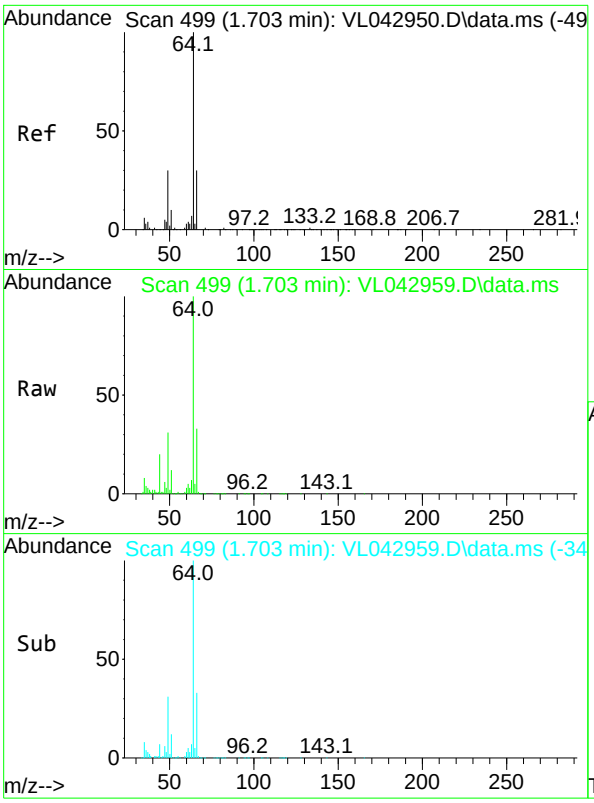


#6
Bromomethane
Concen: 8.274 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 94 Resp: 25316

Ion	Ratio	Lower	Upper
94	100		
96	86.9	72.6	108.8

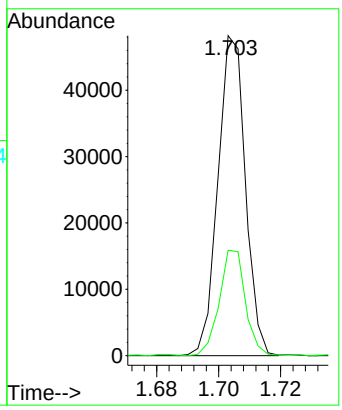




#7
Chloroethane
Concen: 8.816 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 64 Resp: 2969

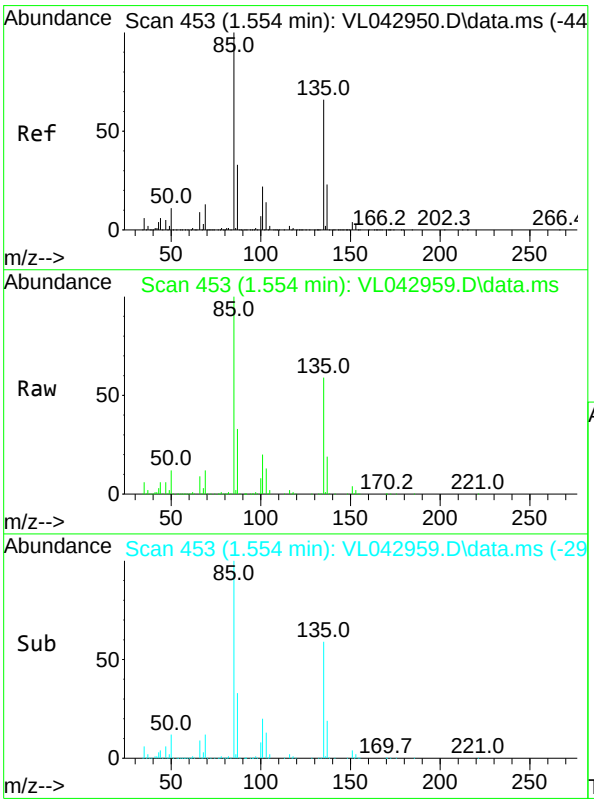
Ion	Ratio	Lower	Upper
64	100		
66	32.9	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations
APPROVED

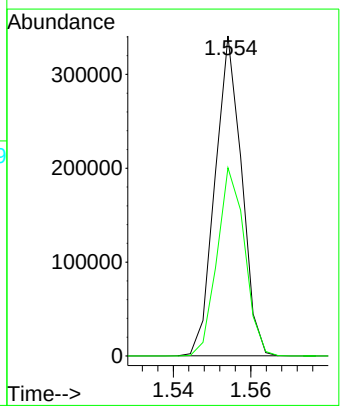
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

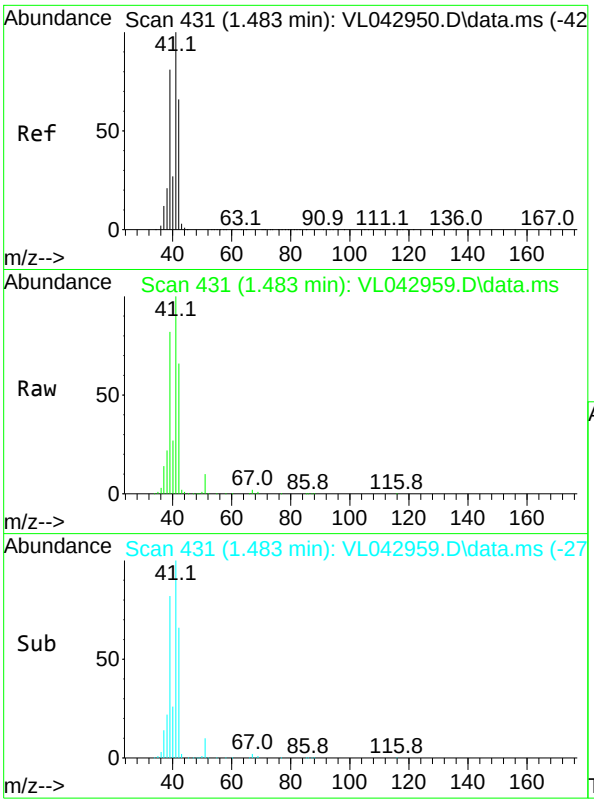


#8
Dichlorotetrafluoroethane
Concen: 8.972 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 85 Resp: 162369

Ion	Ratio	Lower	Upper
85	100		
135	61.3	49.7	74.5

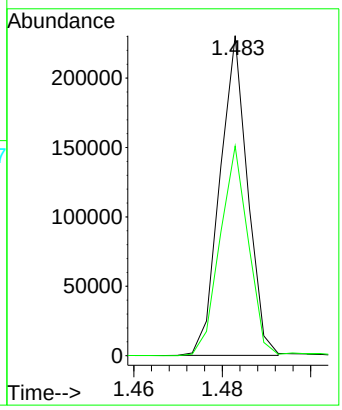




#9
Propene
Concen: 8.692 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 41 Resp: 9990

Ion	Ratio	Lower	Upper
41	100		
42	68.7	57.4	86.2



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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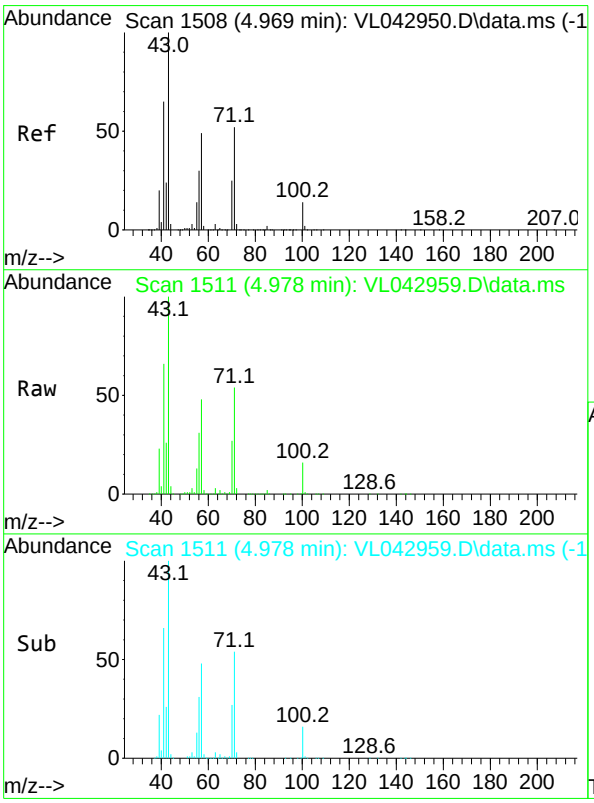
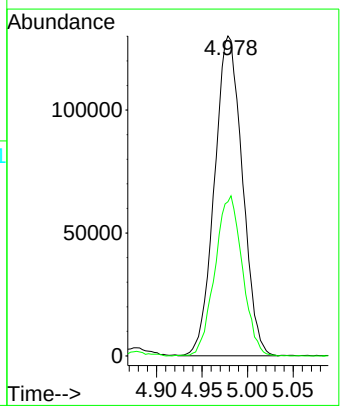
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

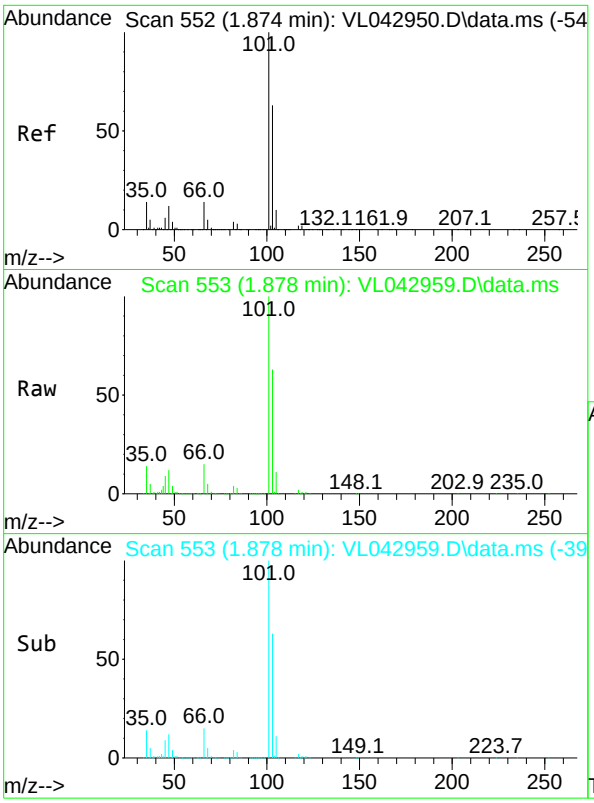


#10
Heptane
Concen: 9.040 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 277314

Ion	Ratio	Lower	Upper
43	100		
57	49.3	38.6	57.8





#11
Trichlorofluoromethane
Concen: 9.147 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:101 Resp: 18696

Ion	Ratio	Lower	Upper
101	100		
103	63.2	50.1	75.1

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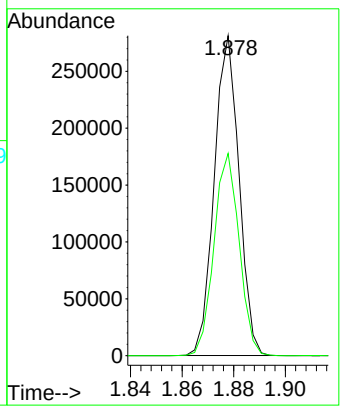
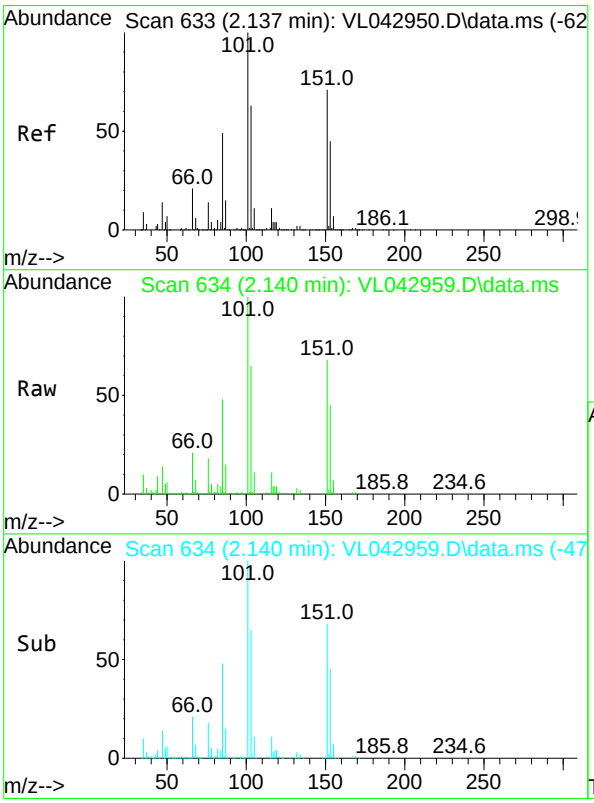
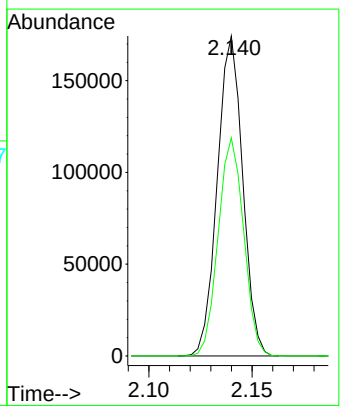


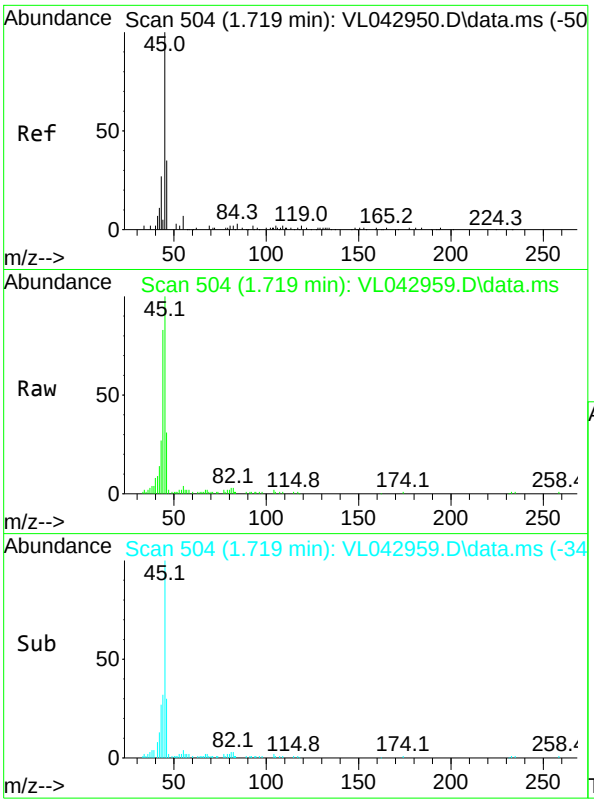


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.007 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:101 Resp: 149089

Ion	Ratio	Lower	Upper
101	100		
151	68.3	55.7	83.5

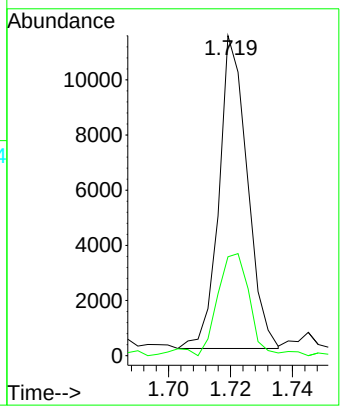




#13
Ethanol
Concen: 6.447 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 45 Resp: 718

Ion	Ratio	Lower	Upper
45	100		
46	38.5	16.2	64.6



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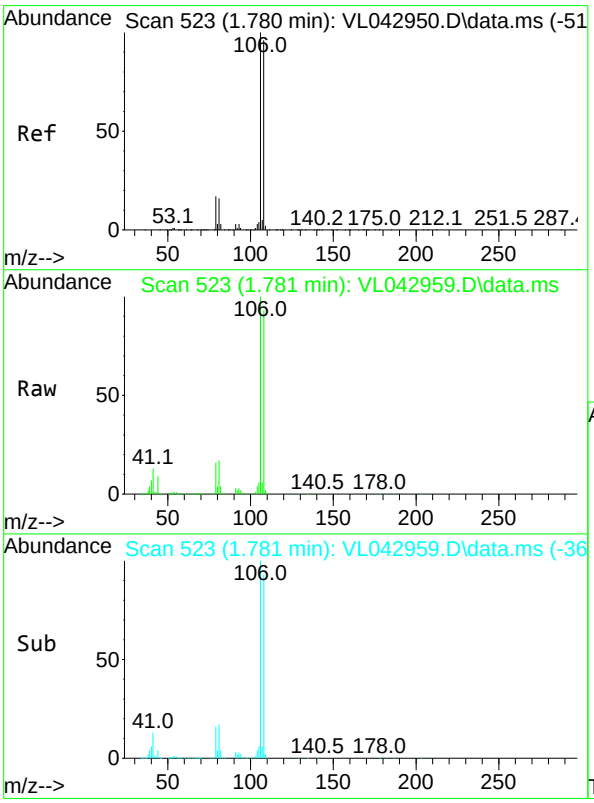
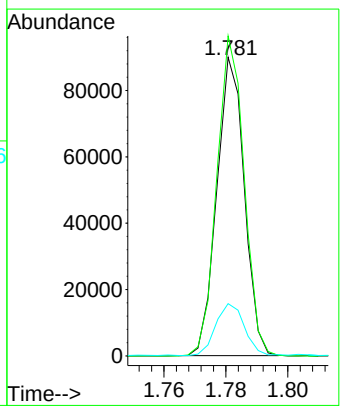
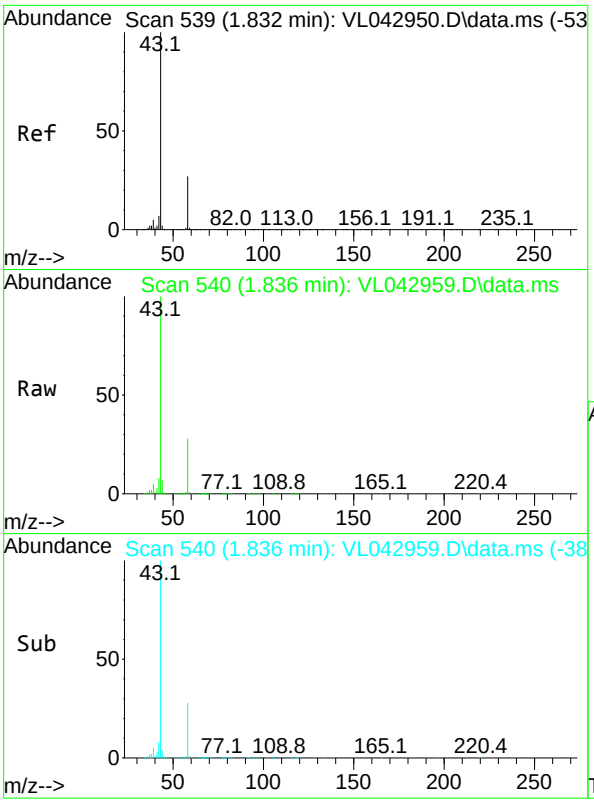


#14
Bromoethene
Concen: 8.860 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:108 Resp: 55444

Ion	Ratio	Lower	Upper
108	100		
106	106.5	86.0	129.0
79	18.9	14.2	21.2

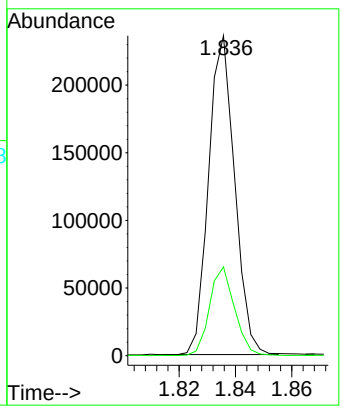




#15
Acetone
Concen: 7.381 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 15151

Ion	Ratio	Lower	Upper
43	100		
58	27.0	22.3	33.5



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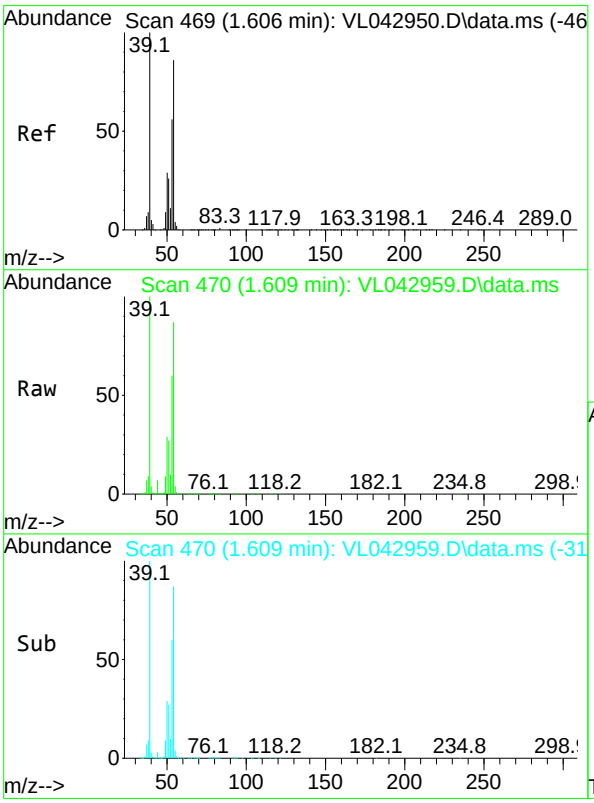
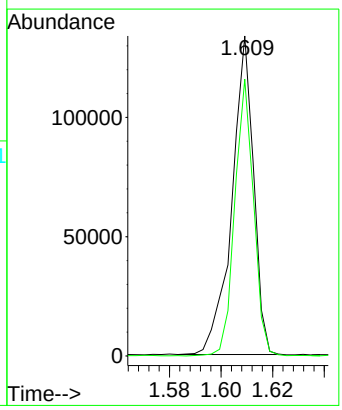
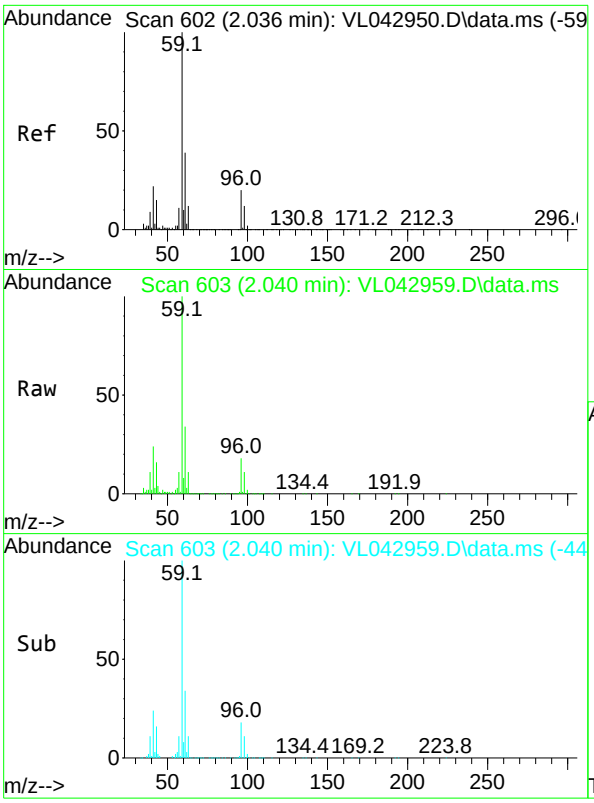


#16
1,3-Butadiene
Concen: 8.087 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 39 Resp: 78310

Ion	Ratio	Lower	Upper
39	100		
54	76.4	60.8	91.2

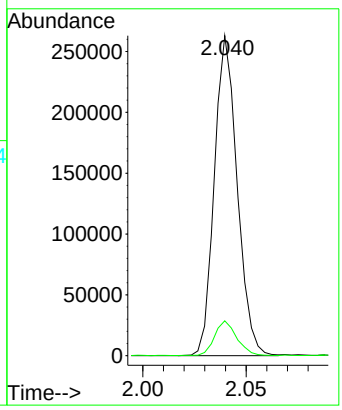




#17
tert-Butyl alcohol
Concen: 8.999 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 59 Resp: 20260

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.6	12.8



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ClientSampleId :
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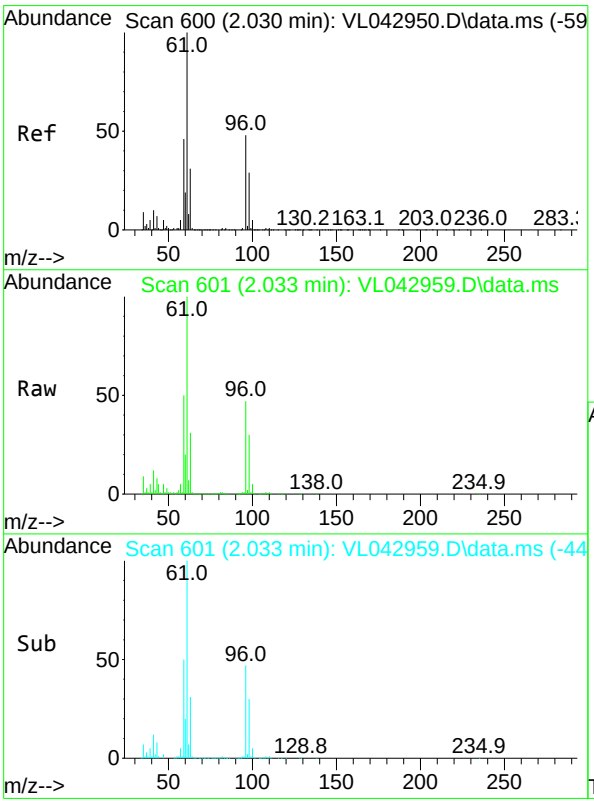
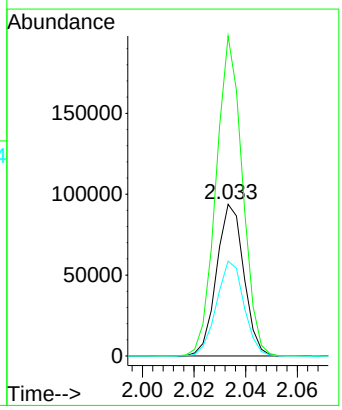
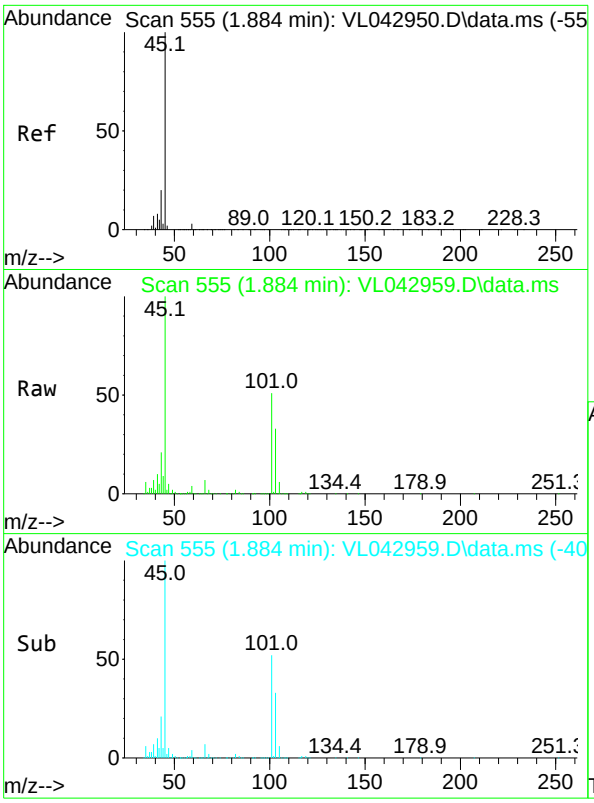


#18
1,1-Dichloroethene
Concen: 8.959 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 96 Resp: 68641

Ion	Ratio	Lower	Upper
96	100		
61	211.1	166.2	249.4
98	62.6	48.6	73.0

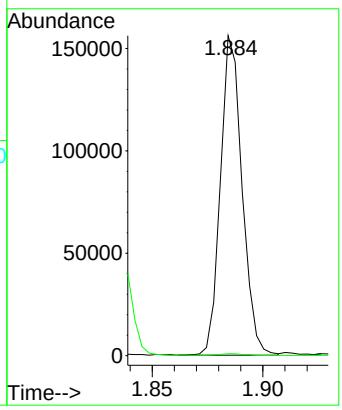




#19
Isopropyl Alcohol
Concen: 8.610 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 45 Resp: 10625

Ion	Ratio	Lower	Upper
45	100		
58	38.8	31.0	46.6



Instrument :
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ClientSampleId :
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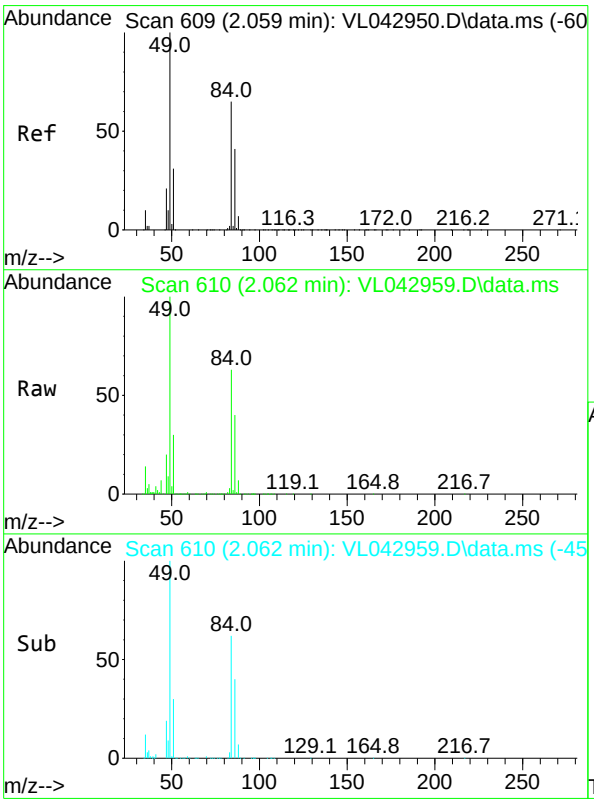
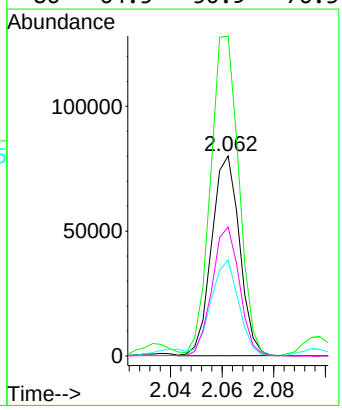
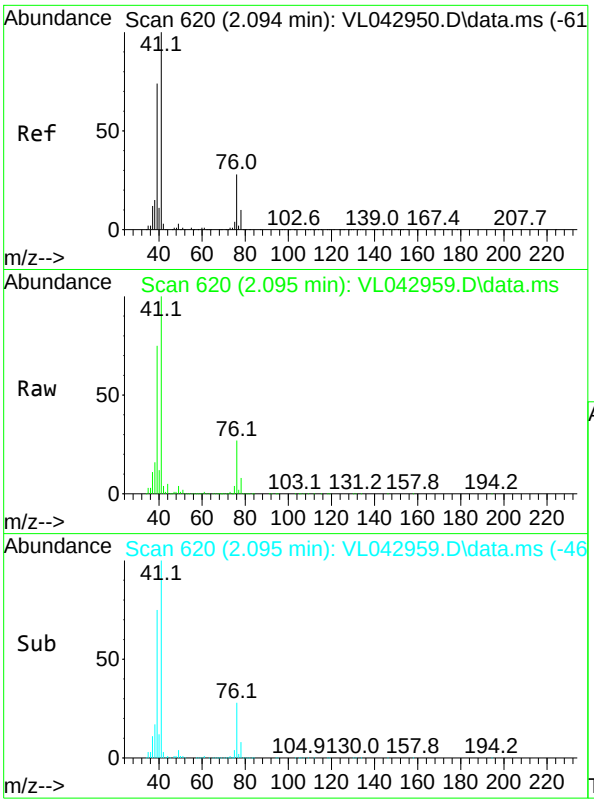


#20
Methylene Chloride
Concen: 9.806 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 84 Resp: 60096

Ion	Ratio	Lower	Upper
84	100		
49	160.2	124.1	186.1
51	47.7	39.8	59.8
86	64.5	50.9	76.3

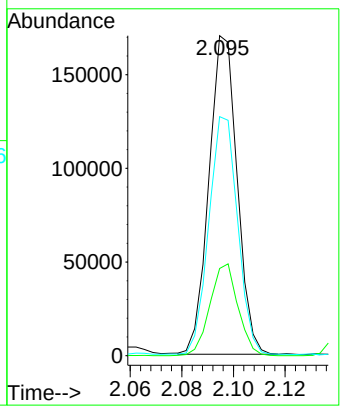




#21
Allyl Chloride
Concen: 9.037 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 41 Resp: 12920

Ion	Ratio	Lower	Upper
41	100		
76	28.6	22.3	33.5
39	76.2	61.3	91.9



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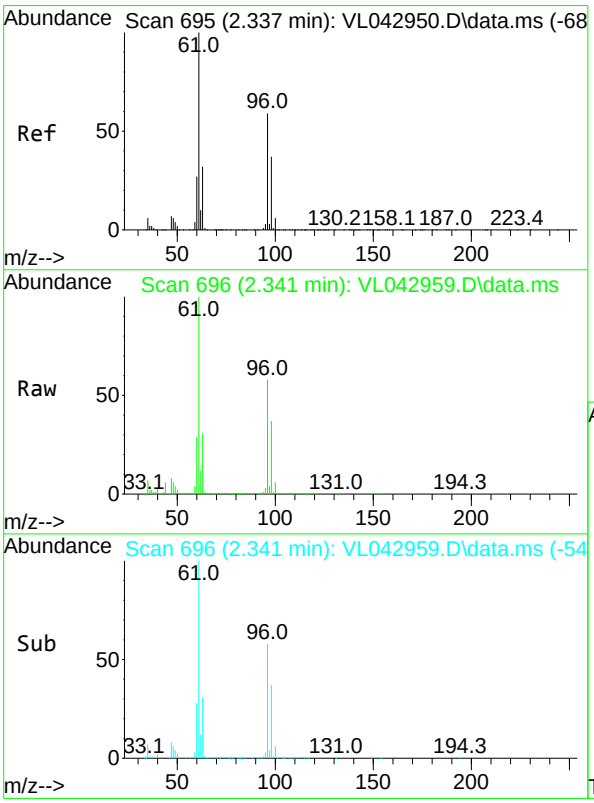
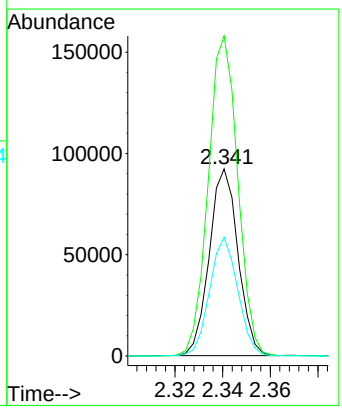
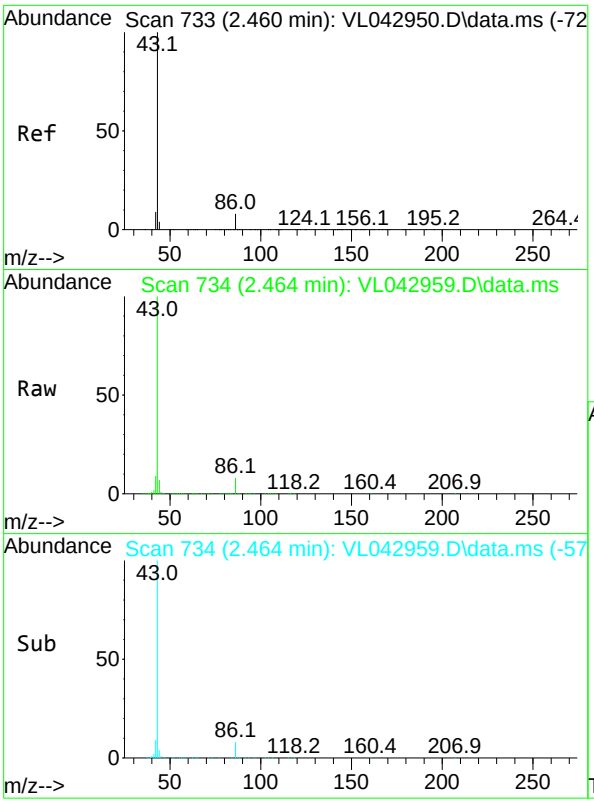


#22
trans-1,2-Dichloroethene
Concen: 8.874 ppbv
RT: 2.341 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 96 Resp: 77254

Ion	Ratio	Lower	Upper
96	100		
61	171.2	136.5	204.7
98	63.4	50.6	76.0

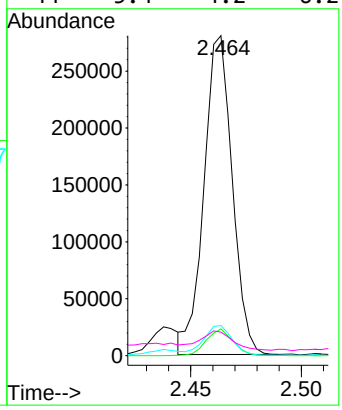




#23
Vinyl Acetate
Concen: 8.463 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 24819

Ion	Ratio	Lower	Upper
43	100		
86	8.3	6.2	9.2
42	9.3	7.4	11.0
44	5.4	4.2	6.2



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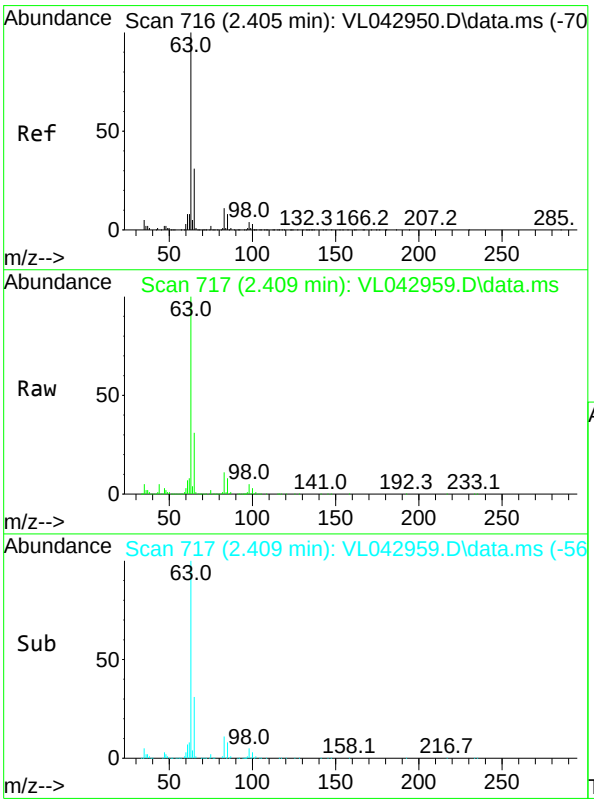
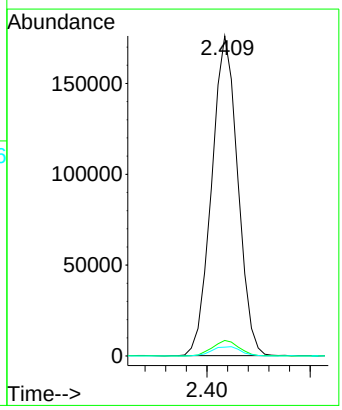
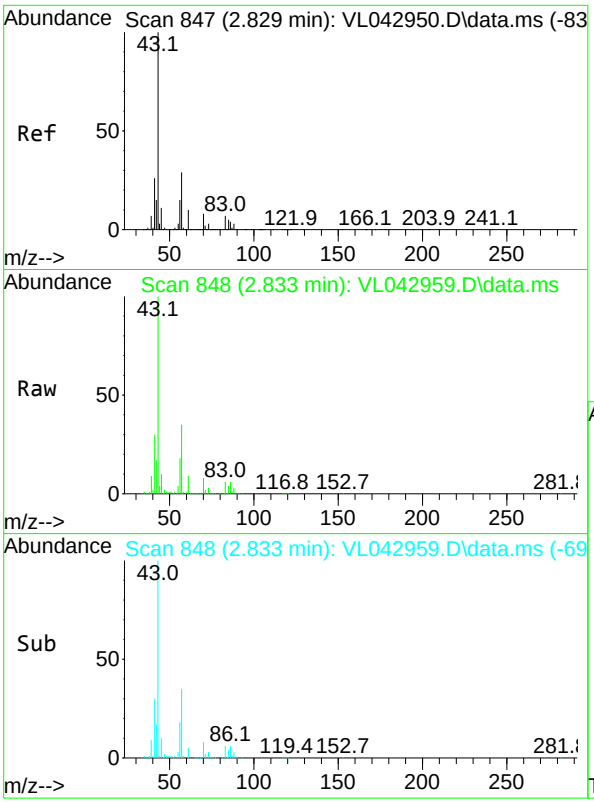


#24
1,1-Dichloroethane
Concen: 9.046 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 63 Resp: 154444

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.2	6.6
100	2.7	1.4	4.0

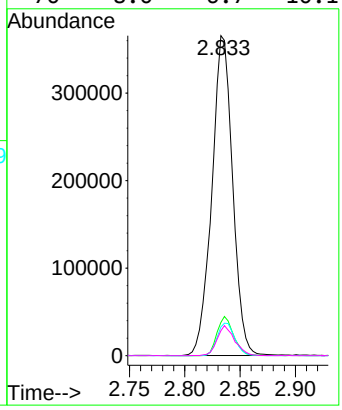




#25
Ethyl Acetate
Concen: 9.210 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 47786

Ion	Ratio	Lower	Upper
43	100		
45	9.8	7.7	11.5
61	8.7	7.1	10.7
70	8.0	6.7	10.1



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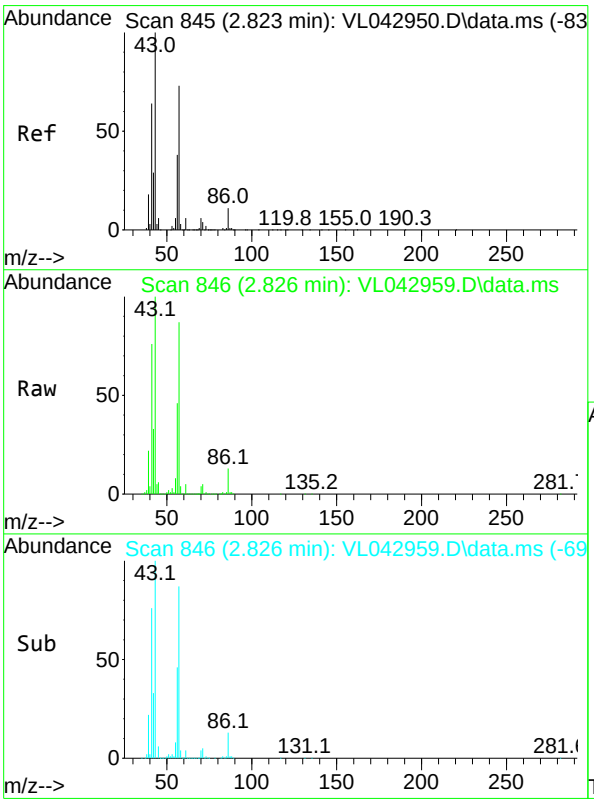
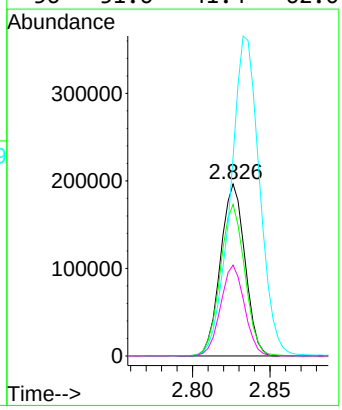
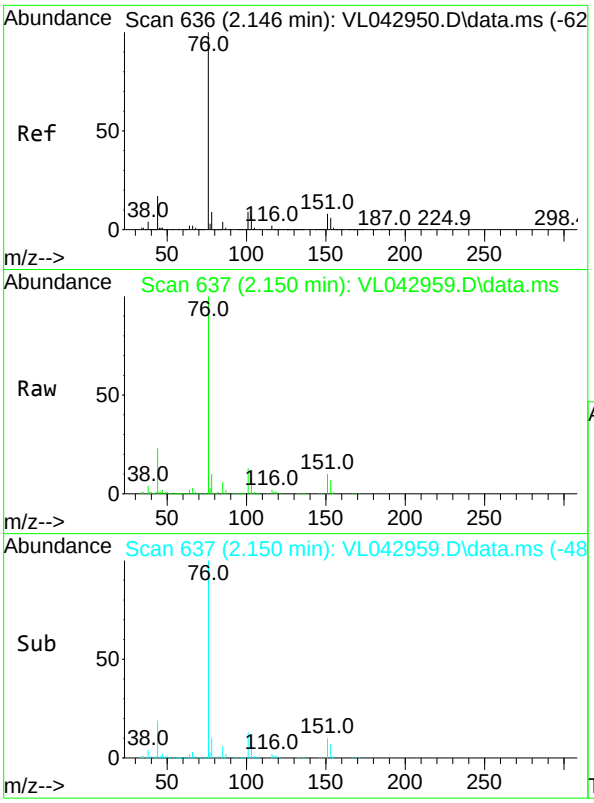


#26
Hexane
Concen: 9.129 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 57 Resp: 215902

Ion	Ratio	Lower	Upper
57	100		
41	89.1	71.7	107.5
43	221.9	180.8	271.2
56	51.6	41.4	62.0





#27
Carbon Disulfide
Concen: 8.839 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 76 Resp: 18749

Ion	Ratio	Lower	Upper
76	100		
44	20.1	15.6	23.4
78	11.6	8.9	13.3

Instrument :
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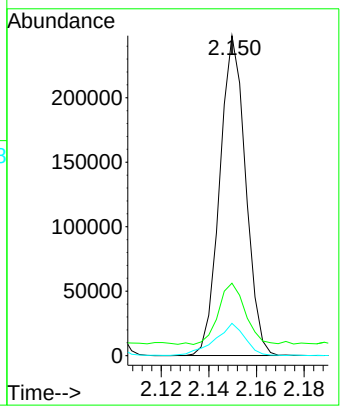
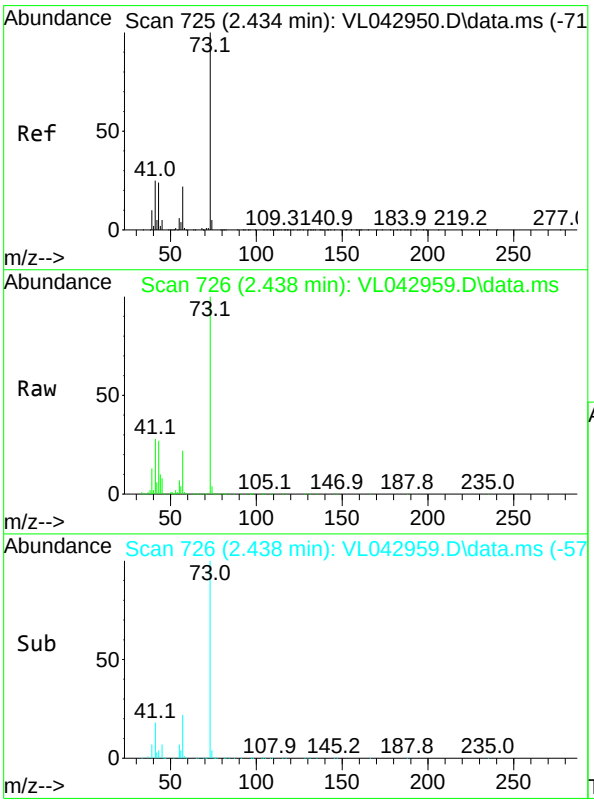
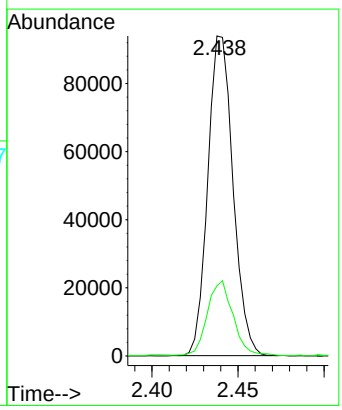


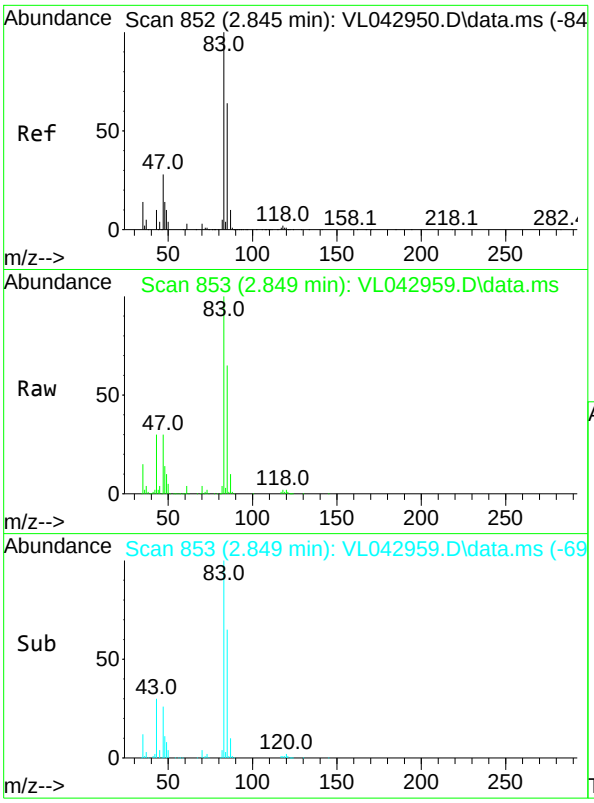


#28
Methyl tert-Butyl Ether
Concen: 7.790 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 73 Resp: 95760

Ion	Ratio	Lower	Upper
73	100		
57	25.1	20.6	31.0

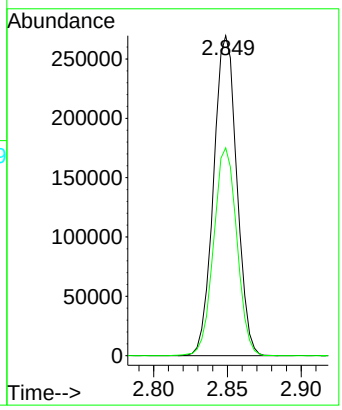




#29
Chloroform
Concen: 9.541 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 83 Resp: 29504

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.2	76.8



Instrument :
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ClientSampleId :
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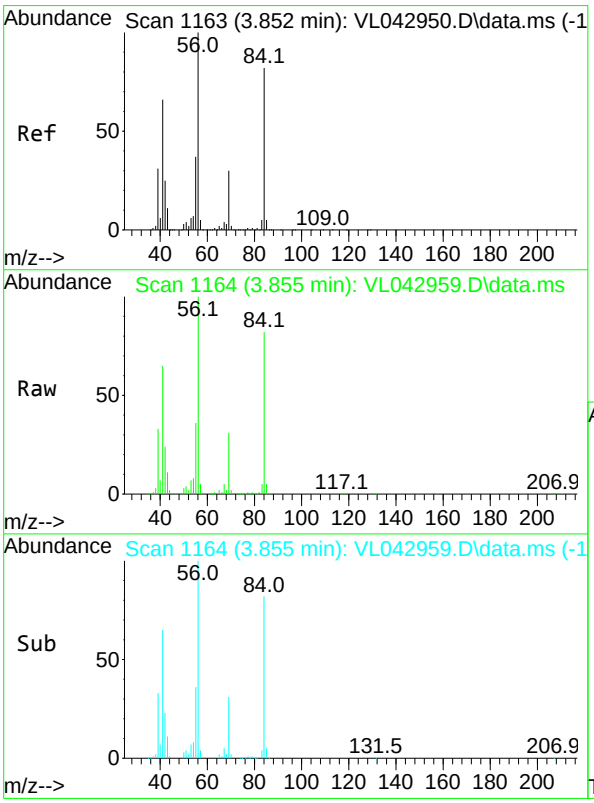
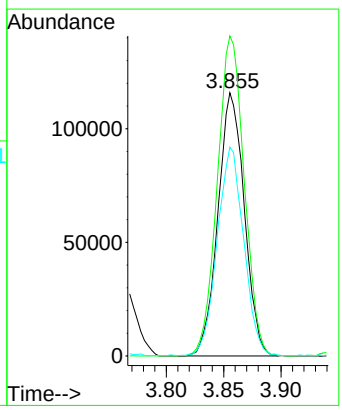
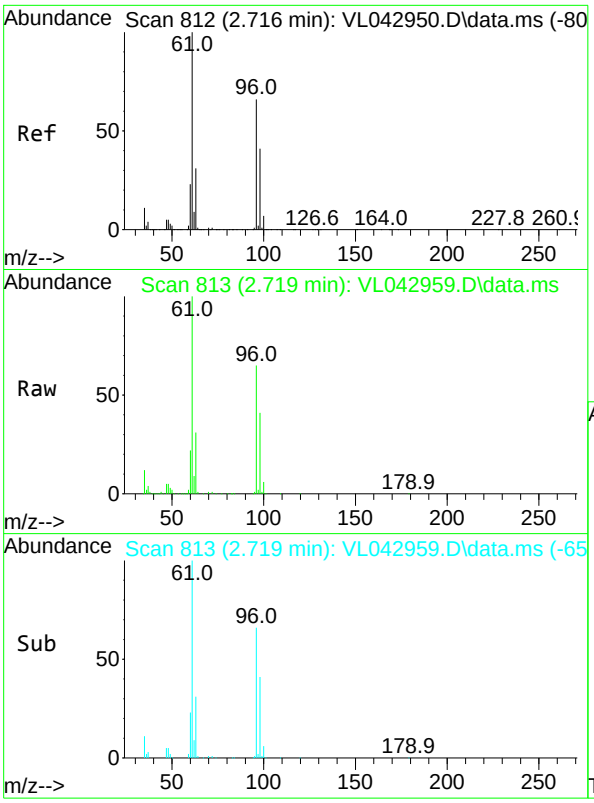


#30
Cyclohexane
Concen: 9.336 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 84 Resp: 184610

Ion	Ratio	Lower	Upper
84	100		
56	124.4	102.2	153.4
41	80.1	65.6	98.4

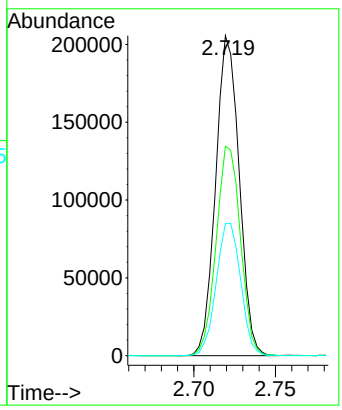




#31
cis-1,2-Dichloroethene
Concen: 9.332 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 61 Resp: 20674

Ion	Ratio	Lower	Upper
61	100		
96	65.5	53.0	79.6
98	41.2	32.9	49.3



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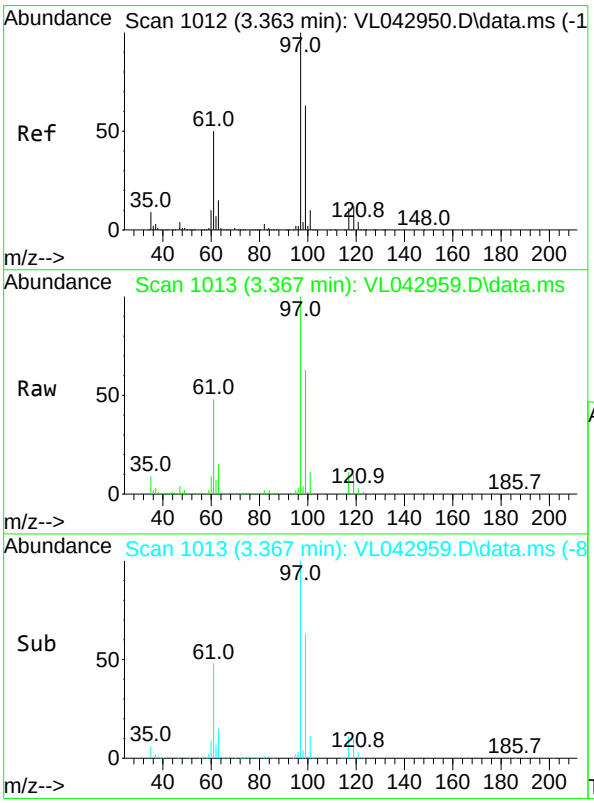
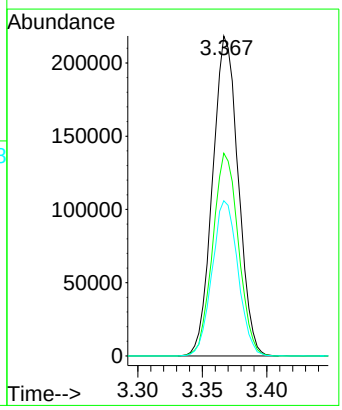
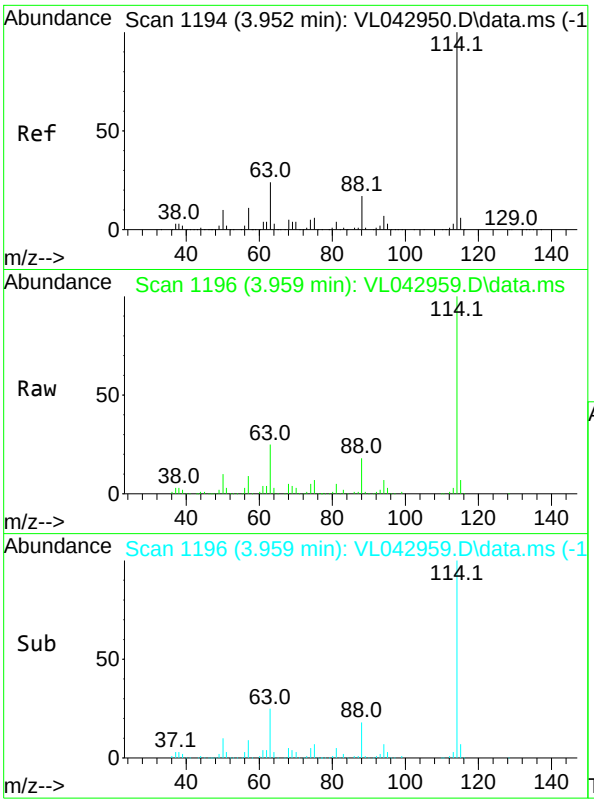


#32
1,1,1-Trichloroethane
Concen: 9.024 ppbv
RT: 3.367 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 97 Resp: 301400

Ion	Ratio	Lower	Upper
97	100		
99	63.6	51.1	76.7
61	48.8	39.8	59.6





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:114 Resp: 47578

Ion	Ratio	Lower	Upper
114	100		
63	24.6	19.4	29.2
88	17.8	14.2	21.2

Instrument :
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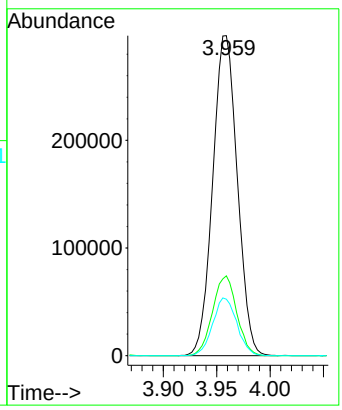
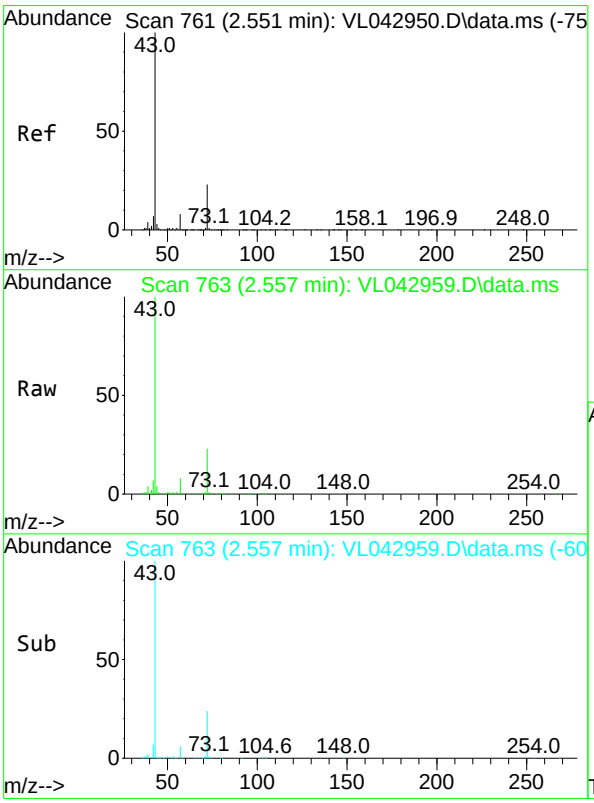
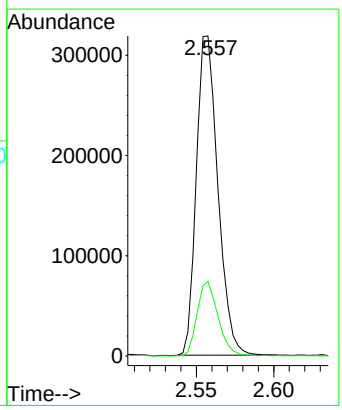


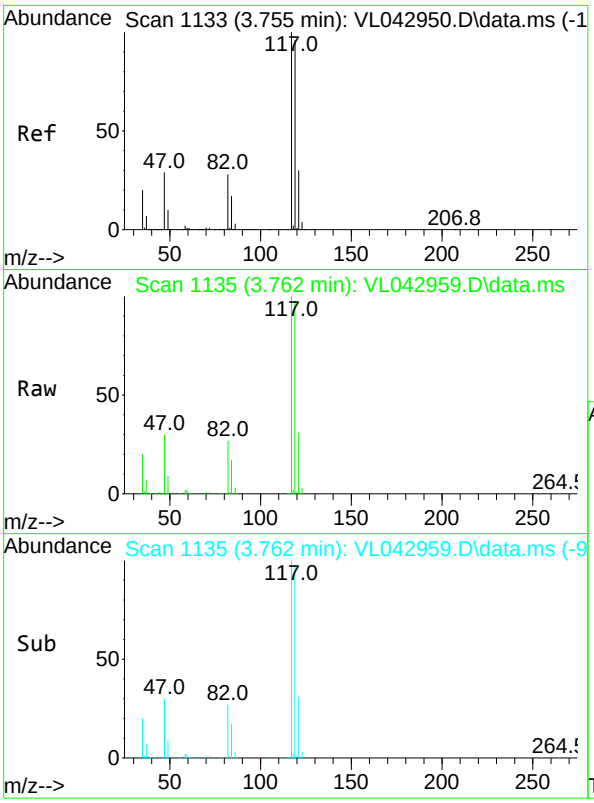


#34
2-Butanone
Concen: 9.245 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 308258

Ion	Ratio	Lower	Upper
43	100		
72	22.8	17.7	26.5

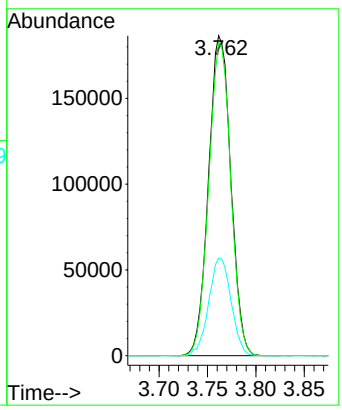




#35
Carbon Tetrachloride
Concen: 9.653 ppbv
RT: 3.762 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:117 Resp: 29900

Ion	Ratio	Lower	Upper
117	100		
119	97.8	76.9	115.3
121	30.6	23.7	35.5



Instrument :
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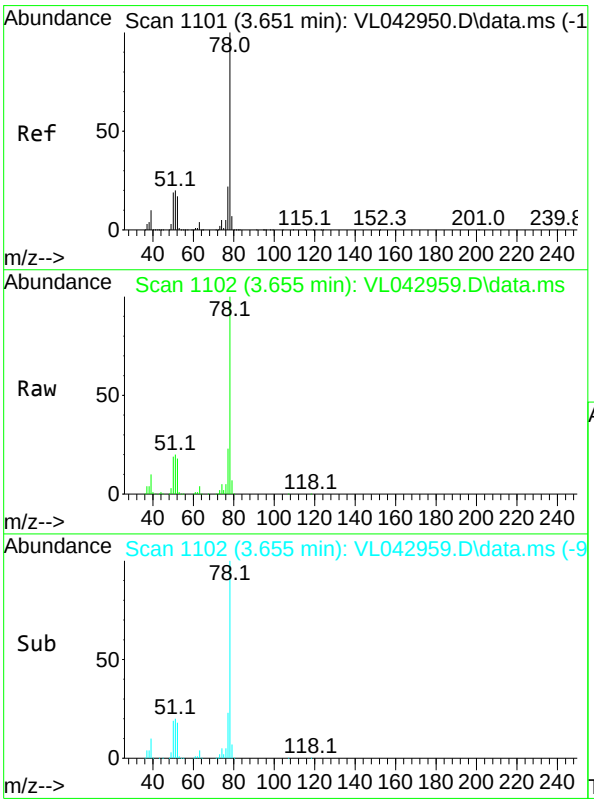
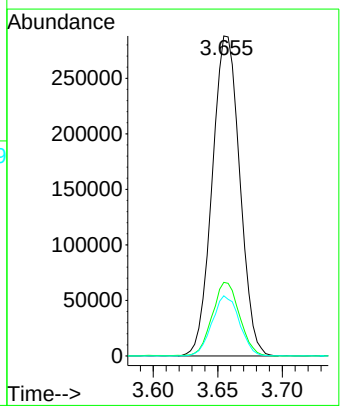
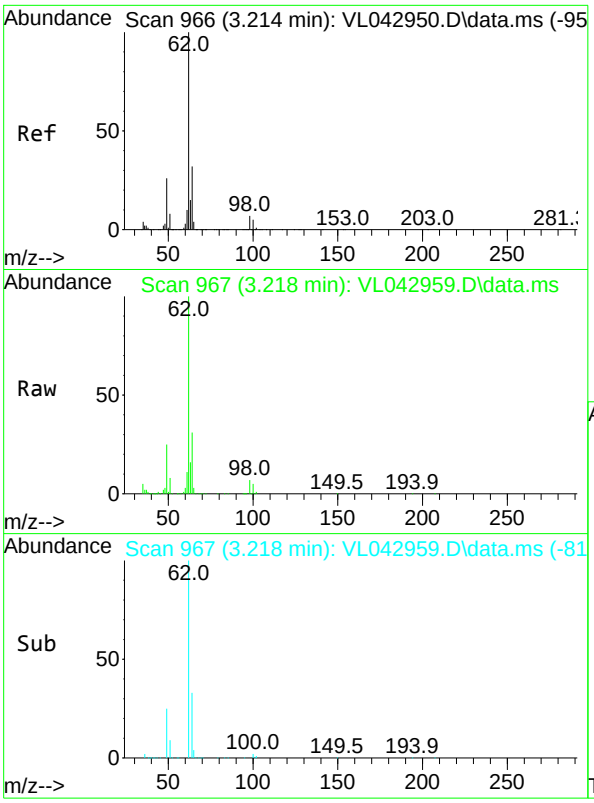


#36
Benzene
Concen: 9.565 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 78 Resp: 427346

Ion	Ratio	Lower	Upper
78	100		
77	23.0	17.8	26.6
50	18.8	15.0	22.4

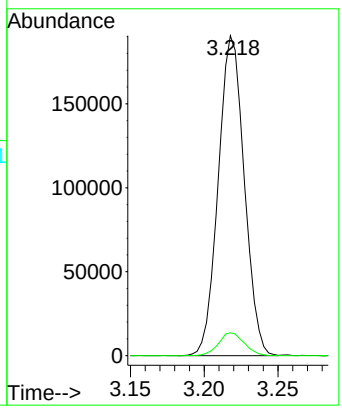




#37
1,2-Dichloroethane
Concen: 9.935 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 62 Resp: 23344

Ion	Ratio	Lower	Upper
62	100		
98	7.1	5.9	8.9



Instrument :
MSVOA_L
ClientSampleId :
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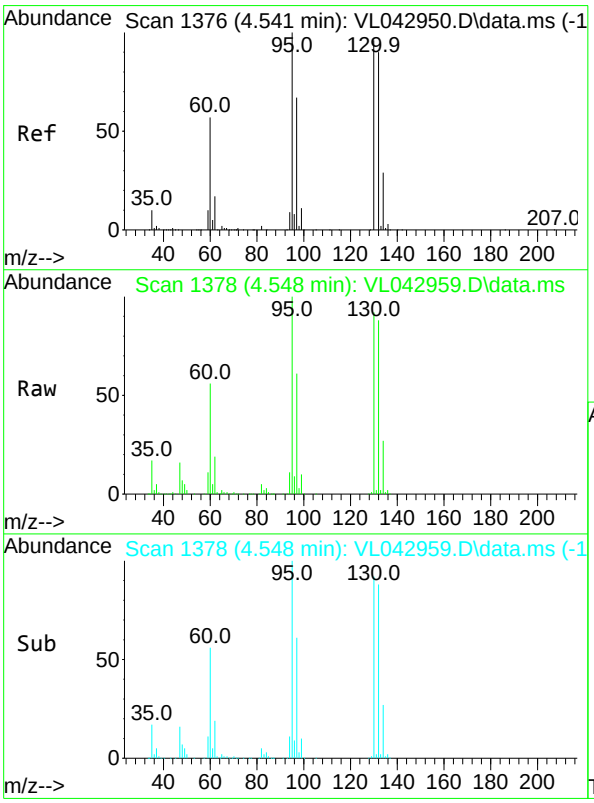
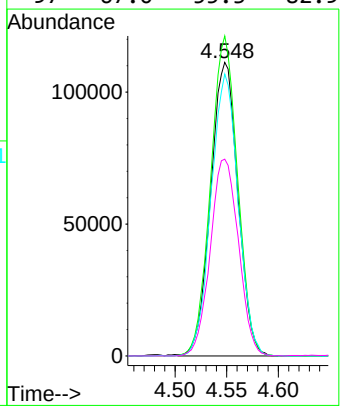
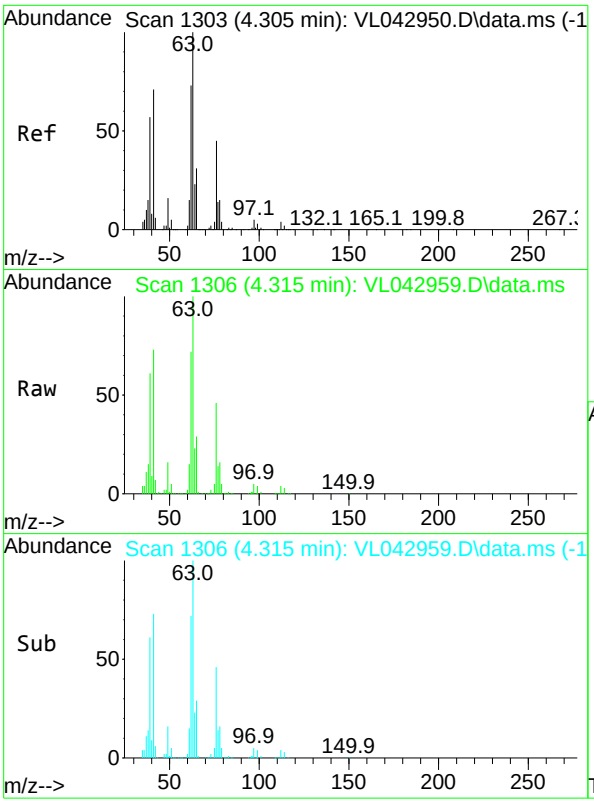


#38
Trichloroethene
Concen: 9.189 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:130 Resp: 204031

Ion	Ratio	Lower	Upper
130	100		
95	109.0	83.0	124.4
132	96.0	74.6	112.0
97	67.0	55.3	82.9

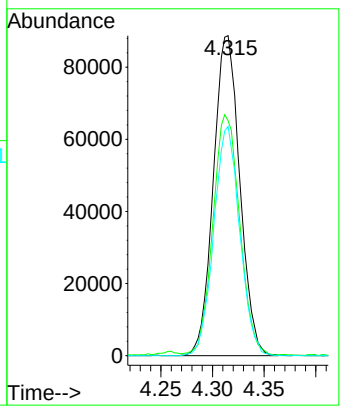




#39
1,2-Dichloropropane
Concen: 9.673 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 63 Resp: 15777

Ion	Ratio	Lower	Upper
63	100		
41	73.1	57.5	86.3
62	71.6	58.5	87.7



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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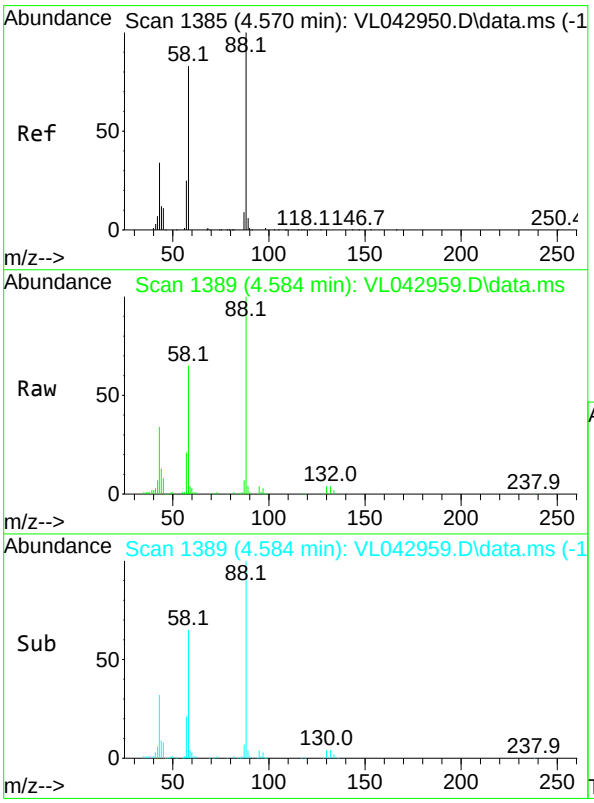
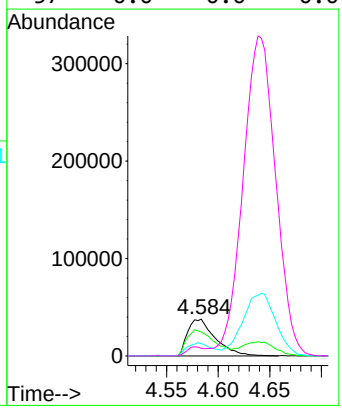
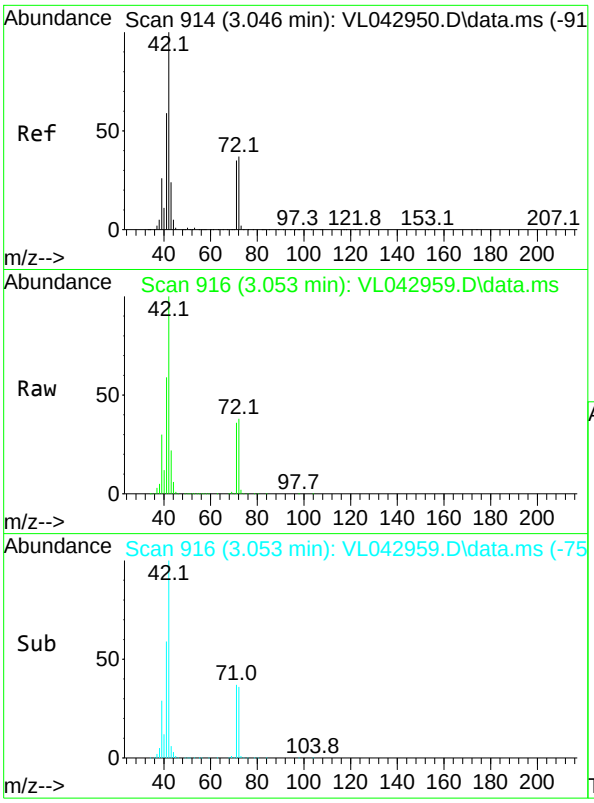


#40
1,4-Dioxane
Concen: 9.339 ppbv
RT: 4.584 min Scan# 1389
Delta R.T. 0.013 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 88 Resp: 70833

Ion	Ratio	Lower	Upper
88	100		
58	70.8	59.7	89.5
43	33.0	28.9	43.3
57	0.0	0.0	0.0

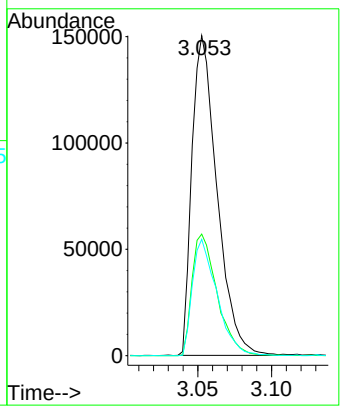




#41
Tetrahydrofuran
Concen: 9.281 ppbv
RT: 3.053 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 42 Resp: 17787

Ion	Ratio	Lower	Upper
42	100		
72	38.3	30.0	45.0
71	35.9	28.8	43.2



Instrument :
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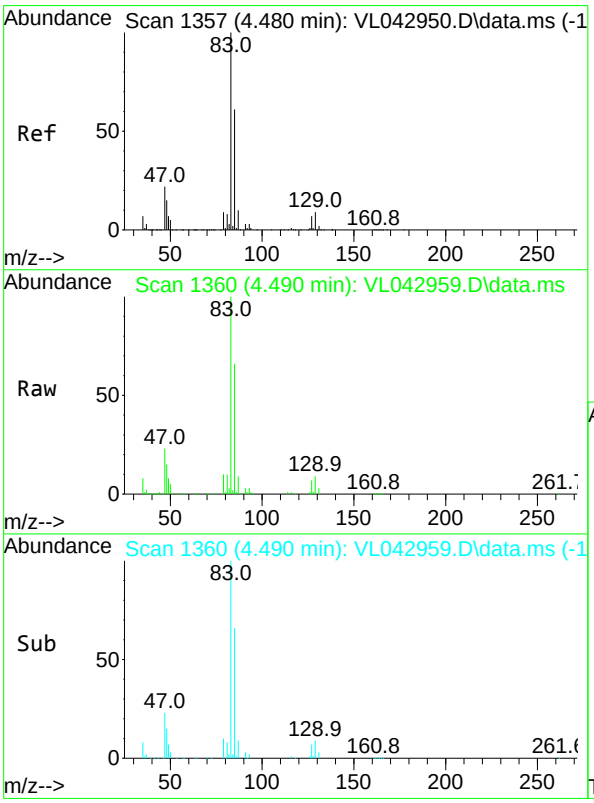
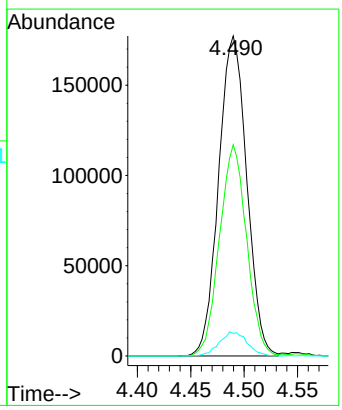
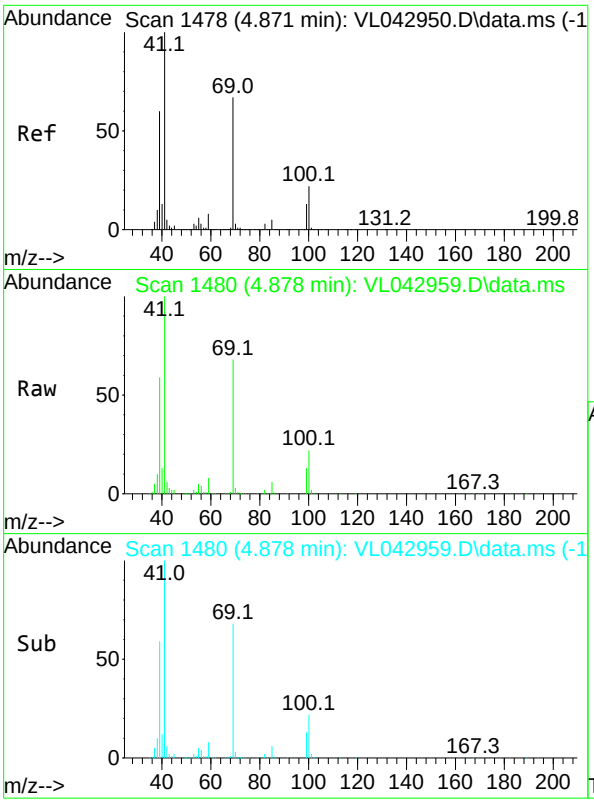


#42
Bromodichloromethane
Concen: 9.924 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 83 Resp: 324757

Ion	Ratio	Lower	Upper
83	100		
85	66.0	49.0	73.6
127	7.0	5.3	7.9

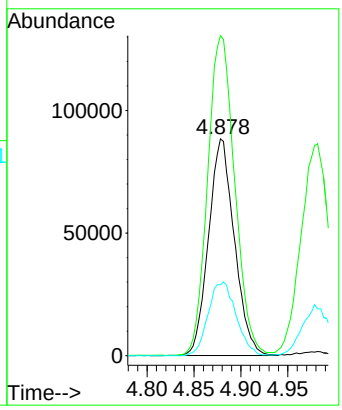




#43
Methyl Methacrylate
Concen: 9.250 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 69 Resp: 16909

Ion	Ratio	Lower	Upper
69	100		
41	154.7	124.5	186.7
100	36.8	29.0	43.6



Instrument :
MSVOA_L
ClientSampleId :
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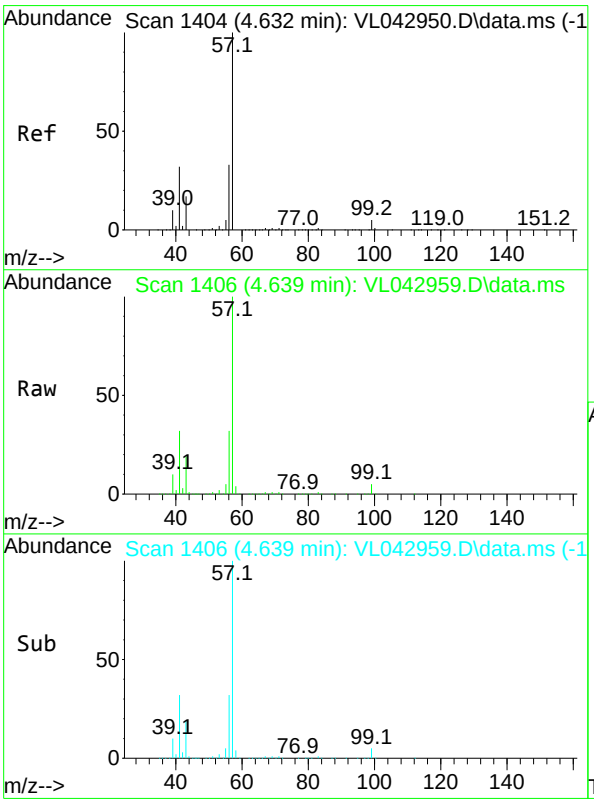
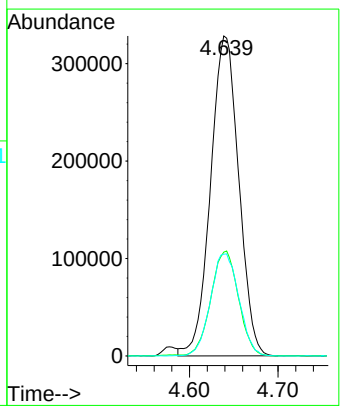
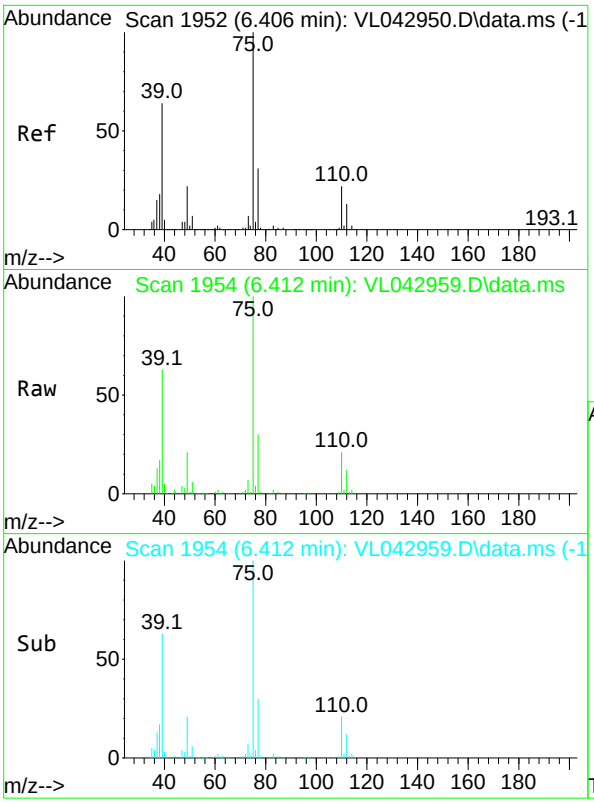


#44
2,2,4-Trimethylpentane
Concen: 9.407 ppbv
RT: 4.639 min Scan# 1406
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 57 Resp: 725943

Ion	Ratio	Lower	Upper
57	100		
41	32.3	25.5	38.3
56	32.3	25.8	38.8

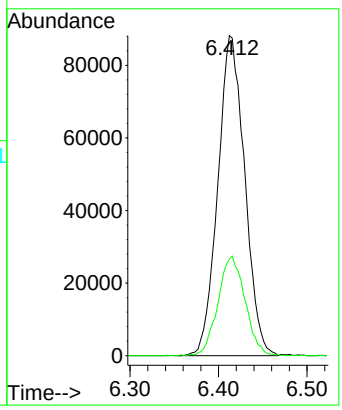




#45
t-1,3-Dichloropropene
Concen: 9.538 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 75 Resp: 18594

Ion	Ratio	Lower	Upper
75	100		
77	30.2	25.0	37.4



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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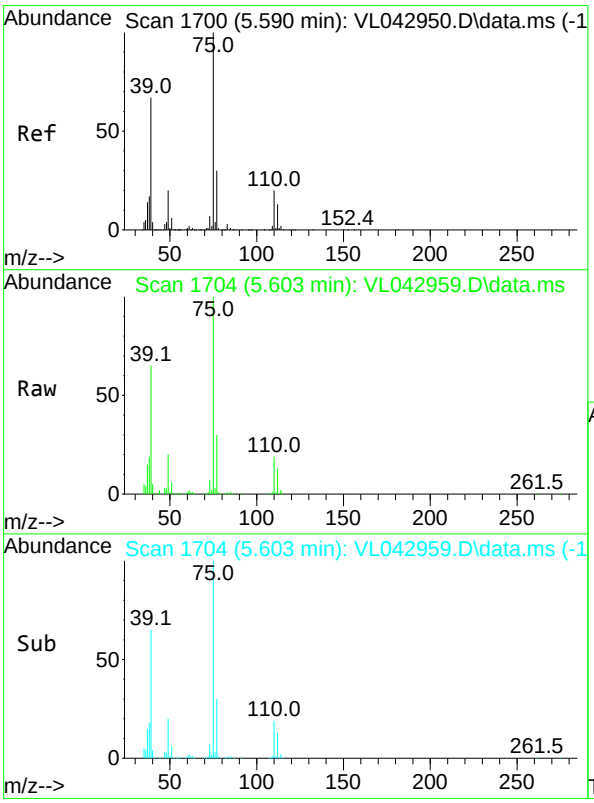
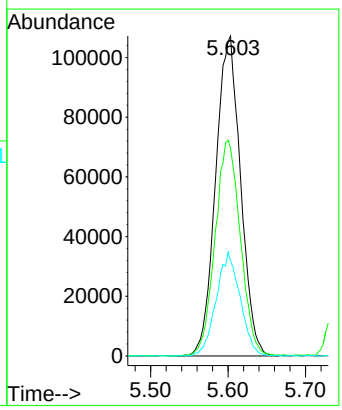
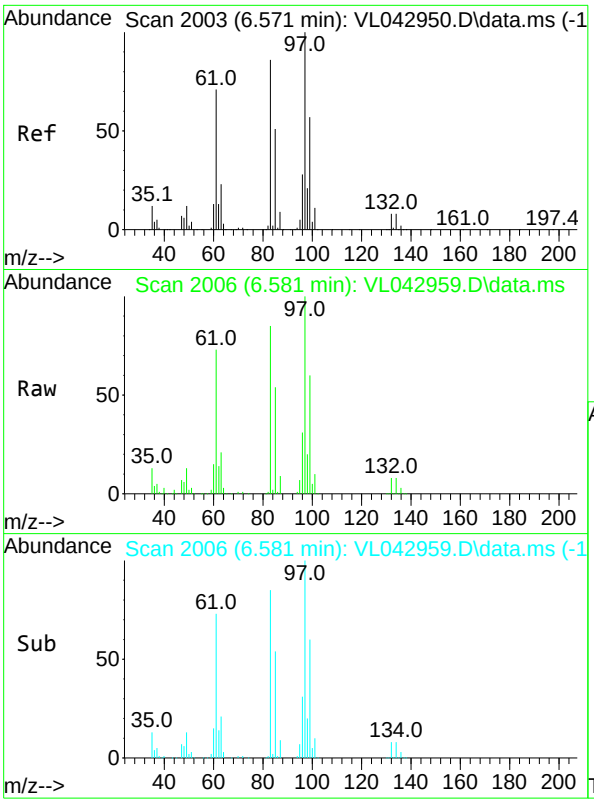


#46
cis-1,3-Dichloropropene
Concen: 9.667 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.013 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 75 Resp: 240185

Ion	Ratio	Lower	Upper
75	100		
39	64.8	53.8	80.6
77	29.7	23.6	35.4

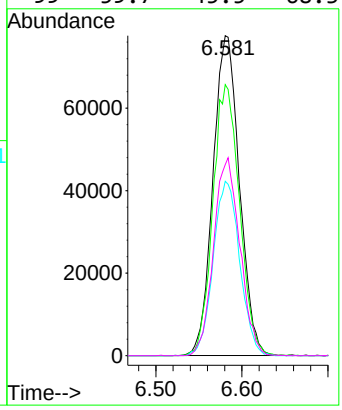




#47
1,1,2-Trichloroethane
Concen: 9.580 ppbv
RT: 6.581 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 97 Resp: 16510

Ion	Ratio	Lower	Upper
97	100		
83	84.8	68.7	103.1
85	54.5	40.6	60.8
99	59.7	45.5	68.3



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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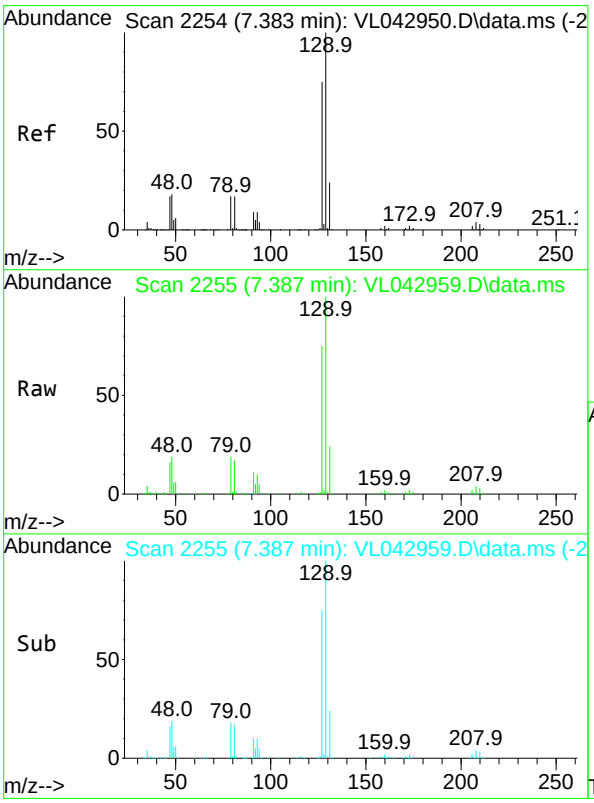
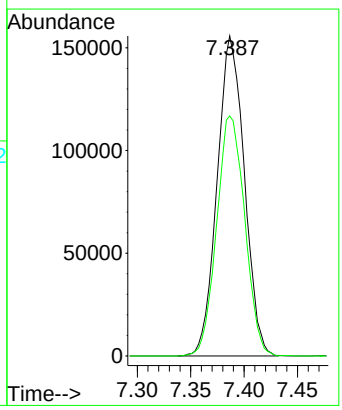
Supervised By :Mahesh Dadoda 09/24/2025

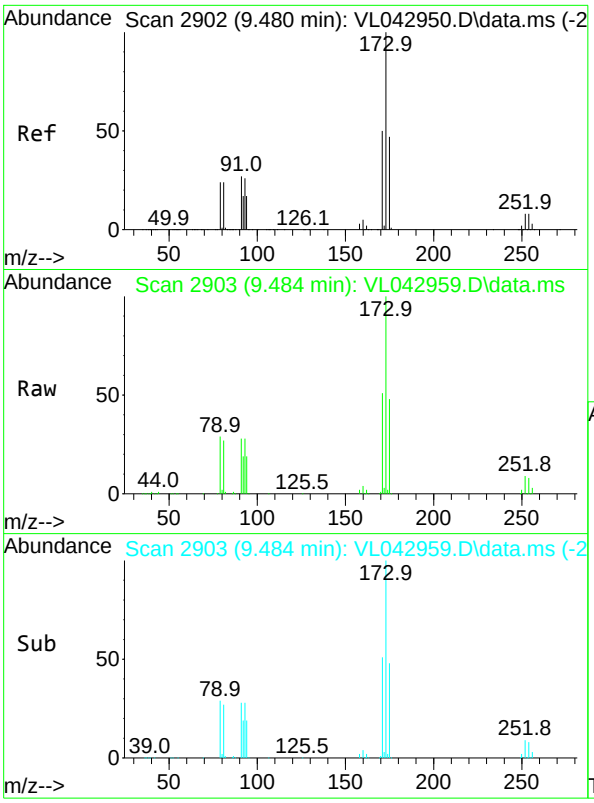


#48
Dibromochloromethane
Concen: 10.002 ppbv
RT: 7.387 min Scan# 2255
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:129 Resp: 275781

Ion	Ratio	Lower	Upper
129	100		
127	77.6	39.1	117.2

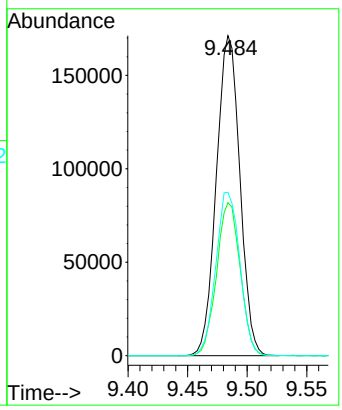




#49
Bromoform
Concen: 9.800 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:173 Resp: 23506

Ion	Ratio	Lower	Upper
173	100		
175	48.0	37.9	56.9
171	52.1	41.1	61.7



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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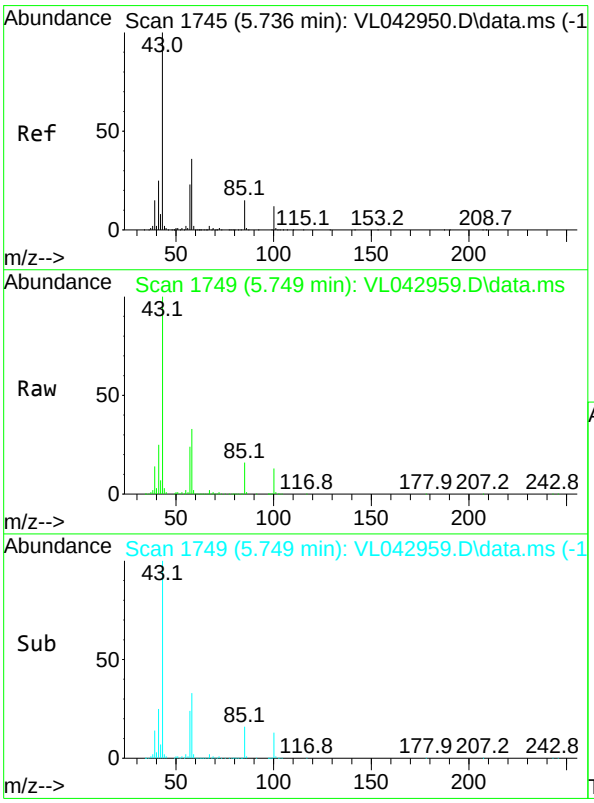
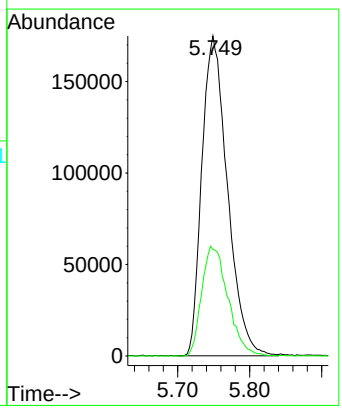
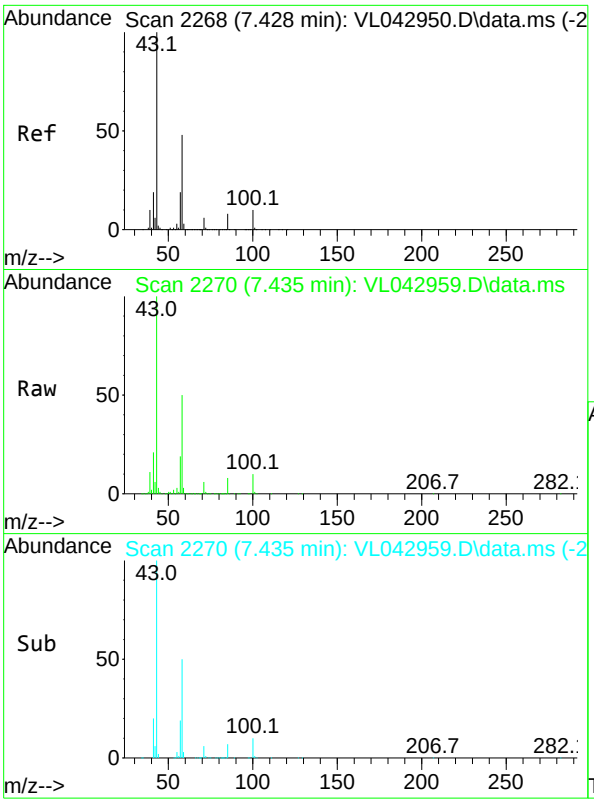


#50
4-Methyl-2-Pentanone
Concen: 9.645 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.013 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 431031

Ion	Ratio	Lower	Upper
43	100		
58	35.1	28.4	42.6

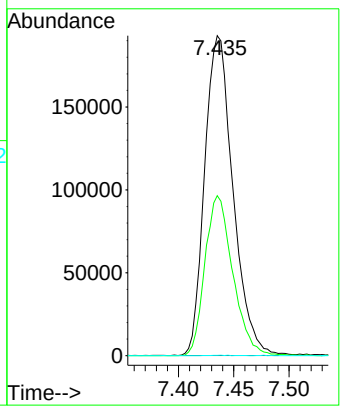




#51
2-Hexanone
Concen: 9.641 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 34346

Ion	Ratio	Lower	Upper
43	100		
58	49.4	39.7	59.5
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
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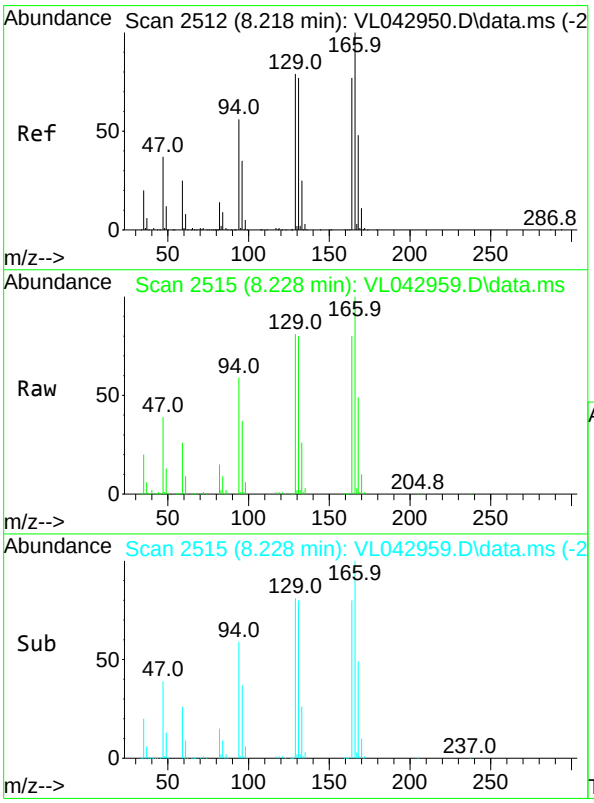
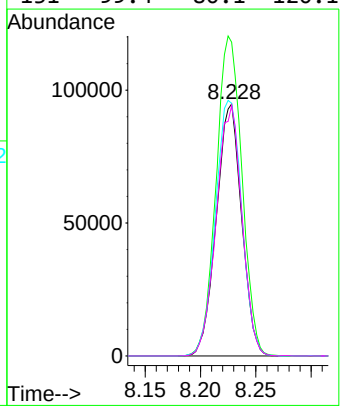
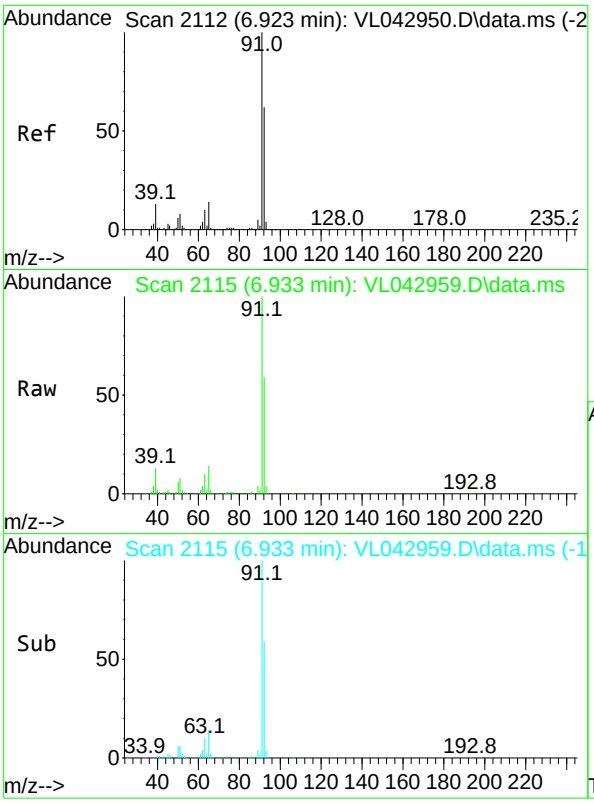


#52
Tetrachloroethene
Concen: 8.705 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:164 Resp: 150483

Ion	Ratio	Lower	Upper
164	100		
166	124.5	103.5	155.3
129	100.2	82.2	123.4
131	99.4	80.1	120.1

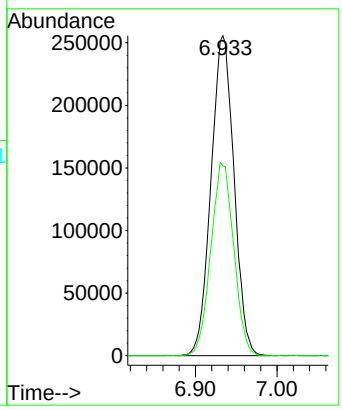




#53
Toluene
Concen: 9.484 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 50154

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.2



Instrument :
MSVOA_L
ClientSampleId :
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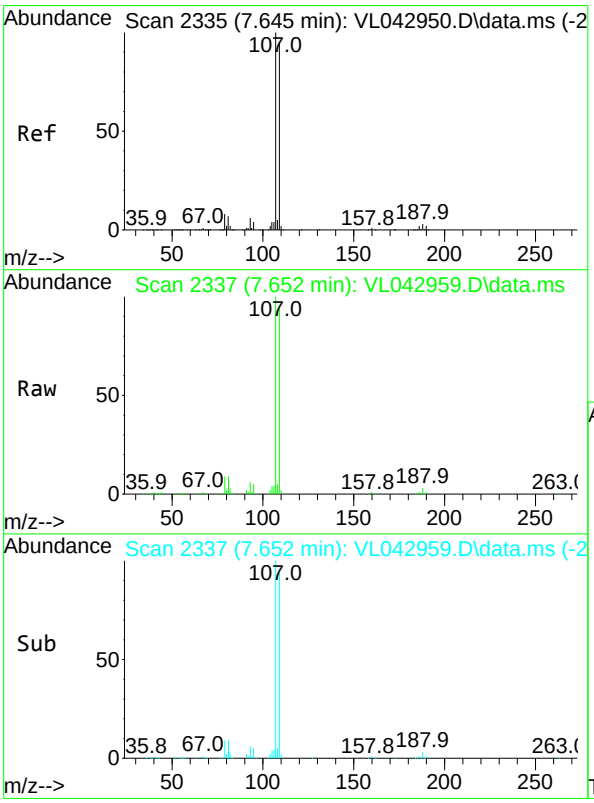
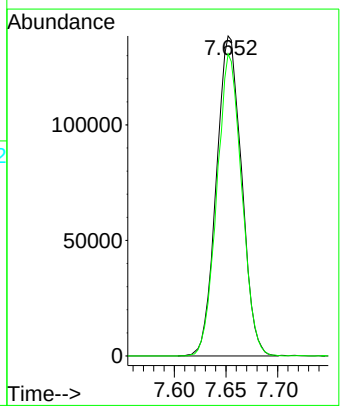
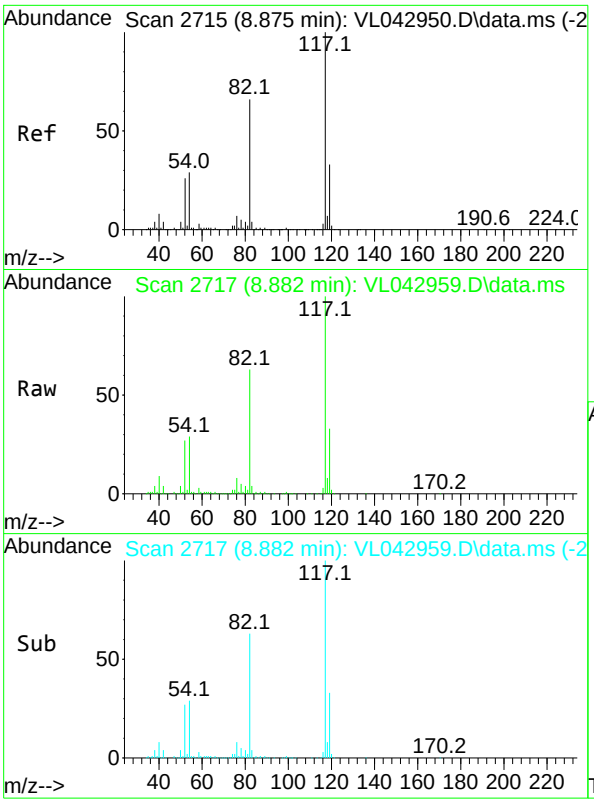


#54
1,2-Dibromoethane
Concen: 9.704 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:107 Resp: 235389

Ion	Ratio	Lower	Upper
107	100		
109	94.4	75.8	113.8

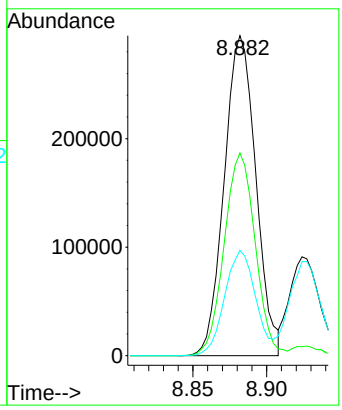




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:117 Resp: 44032

Ion	Ratio	Lower	Upper
117	100		
82	64.7	52.8	79.2
119	32.3	26.5	39.7



Instrument :
MSVOA_L
ClientSampleId :
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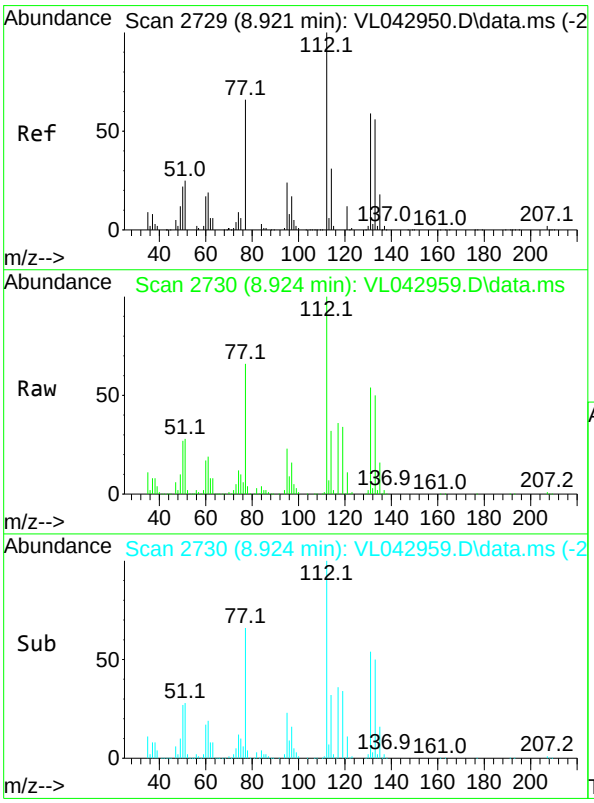
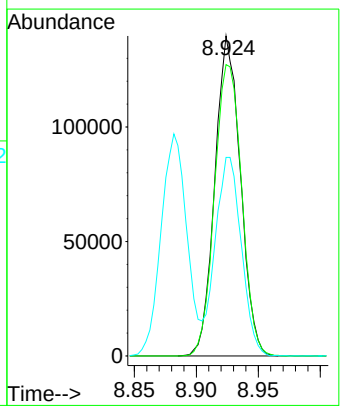
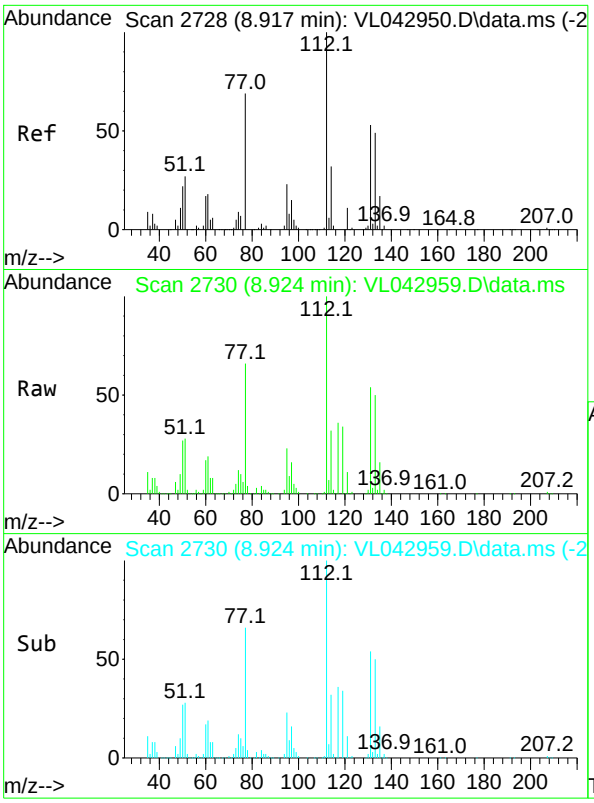


#56
1,1,1,2-Tetrachloroethane
Concen: 9.516 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:131 Resp: 200560

Ion	Ratio	Lower	Upper
131	100		
133	97.0	76.6	114.8
119	64.8	49.9	74.9

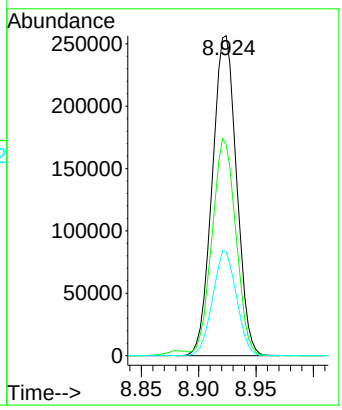




#57
Chlorobenzene
Concen: 9.392 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:112 Resp: 37752

Ion	Ratio	Lower	Upper
112	100		
77	65.9	55.7	83.5
114	32.4	28.6	35.0



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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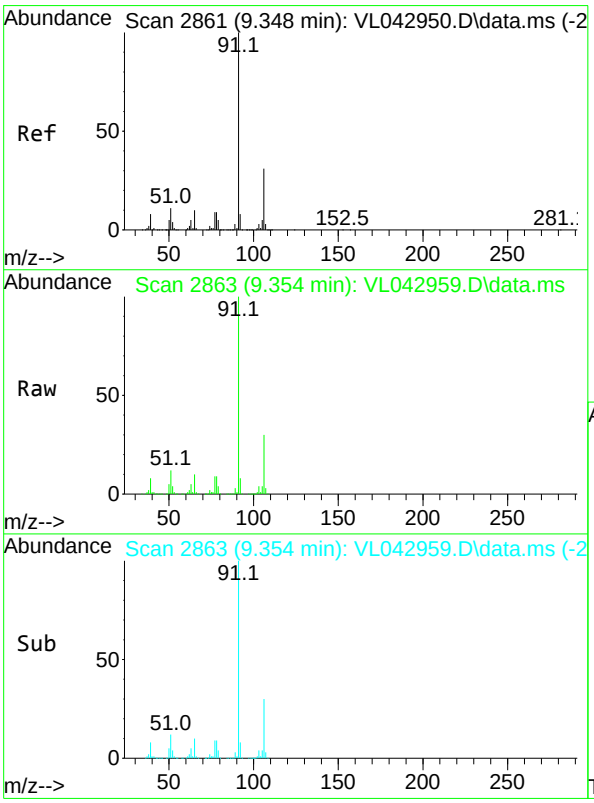
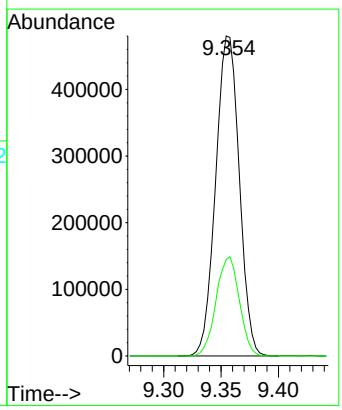
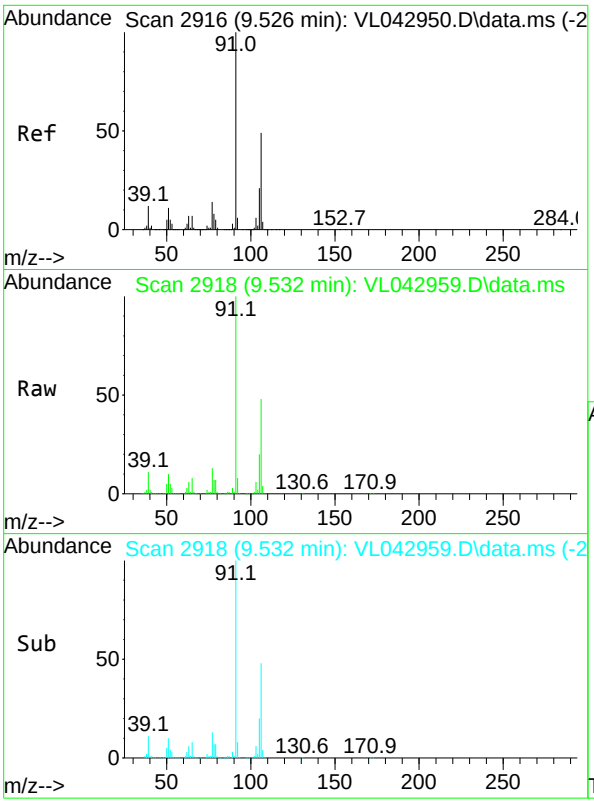


#58
Ethyl Benzene
Concen: 9.489 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 686057

Ion	Ratio	Lower	Upper
91	100		
106	30.1	24.6	37.0

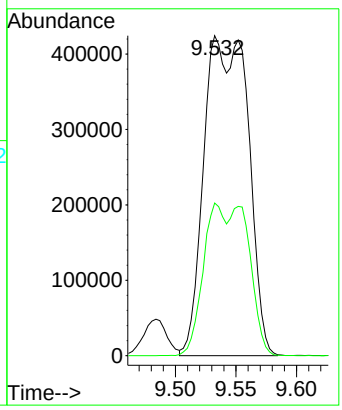




#59
m/p-Xylene
Concen: 18.862 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 107518

Ion	Ratio	Lower	Upper
91	100		
106	47.9	0.0	0.0



Instrument :
MSVOA_L
ClientSampleId :
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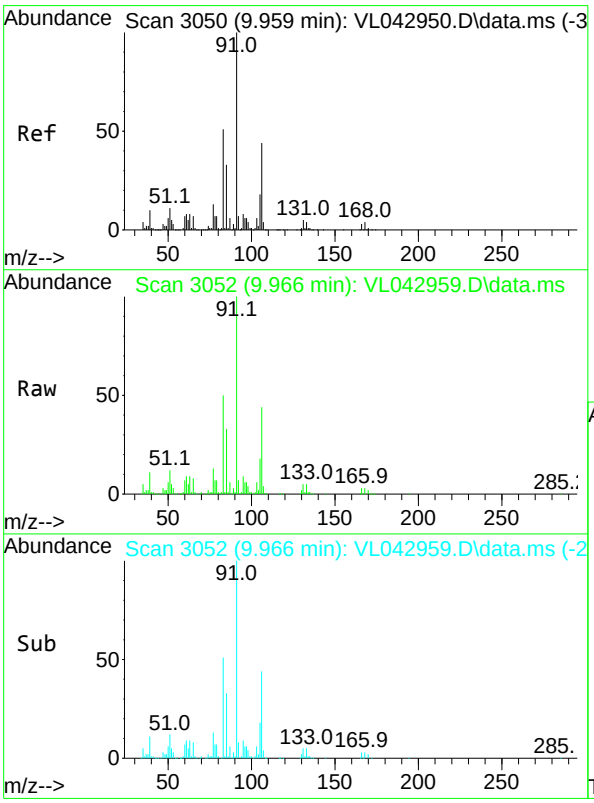
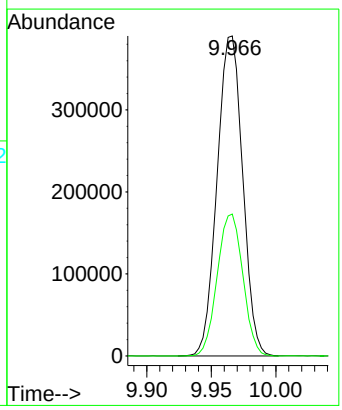
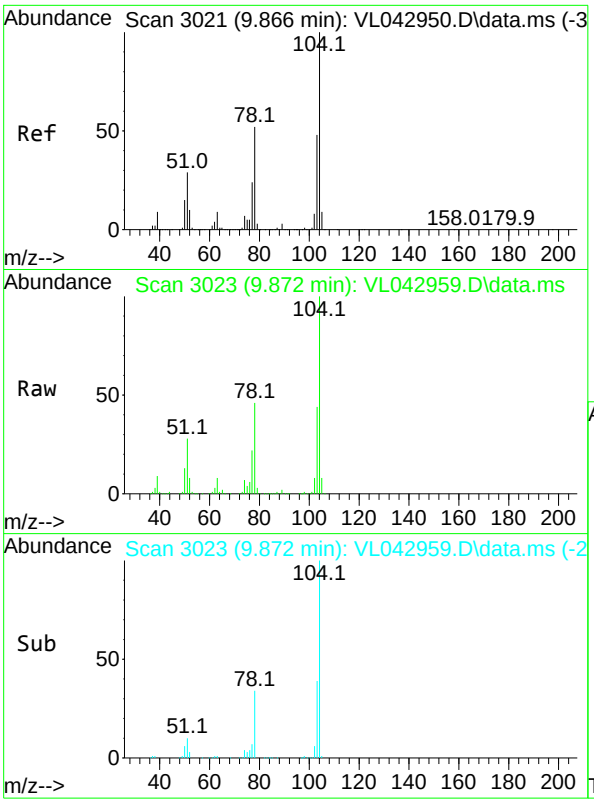


#60
o-Xylene
Concen: 9.426 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 537008

Ion	Ratio	Lower	Upper
91	100		
106	44.4	22.4	67.0

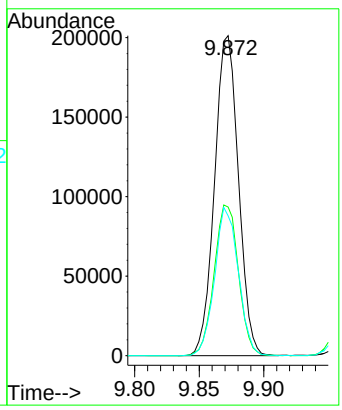




#61
Styrene
Concen: 9.602 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:104 Resp: 25875

Ion	Ratio	Lower	Upper
104	100		
78	48.0	39.9	59.9
103	46.0	36.9	55.3



Instrument :
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ClientSampleId :
VL0922ABS01

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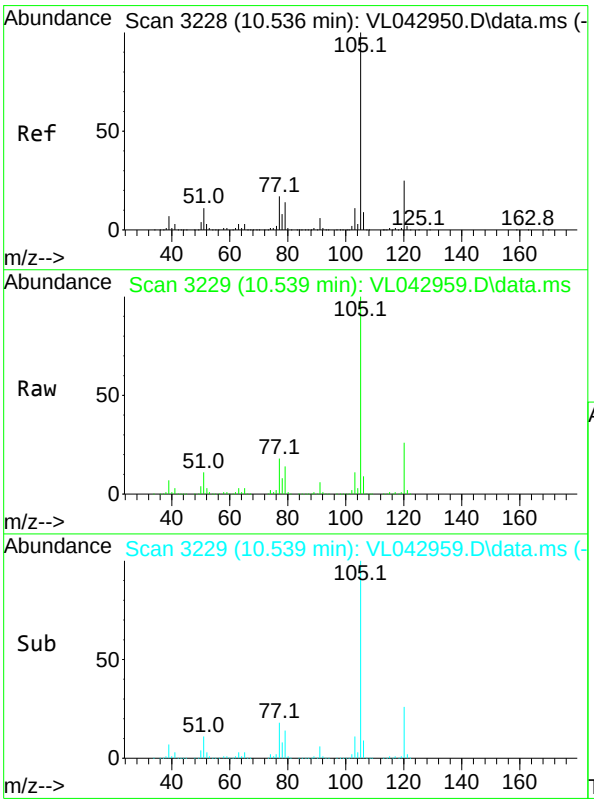
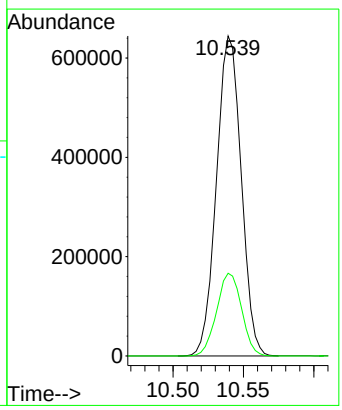
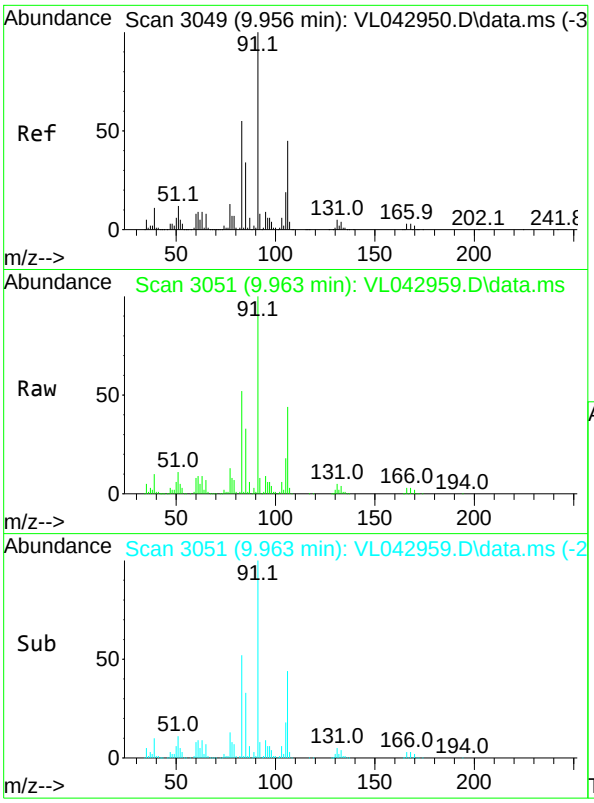


#62
Isopropylbenzene
Concen: 9.274 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 787602

Ion	Ratio	Lower	Upper
105	100		
120	26.1	20.6	30.8





#63
1,1,2,2-Tetrachloroethane
Concen: 8.890 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 83 Resp: 26622

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	64.5	32.2	96.6

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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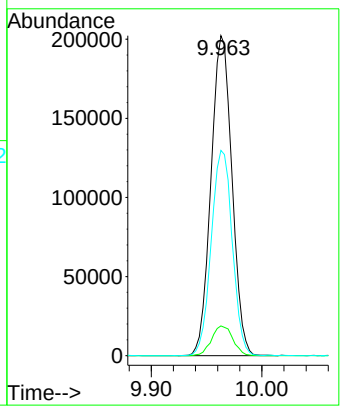
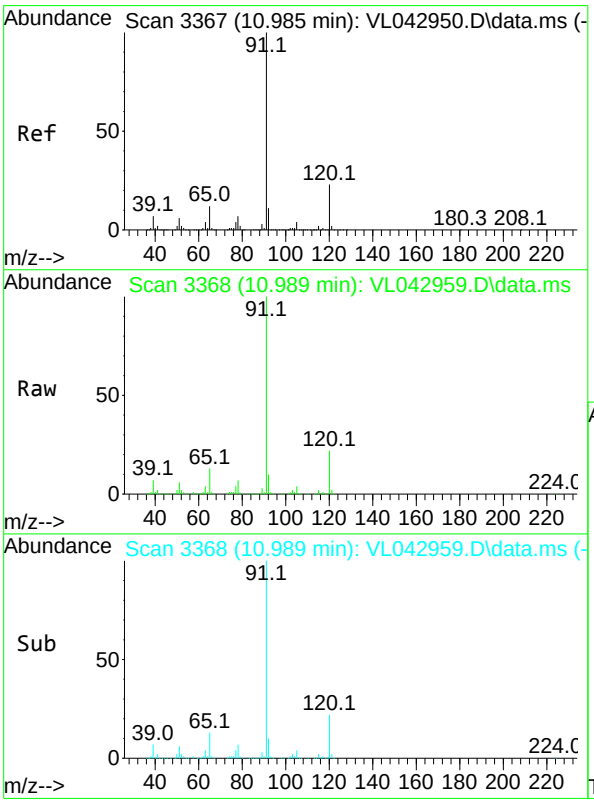
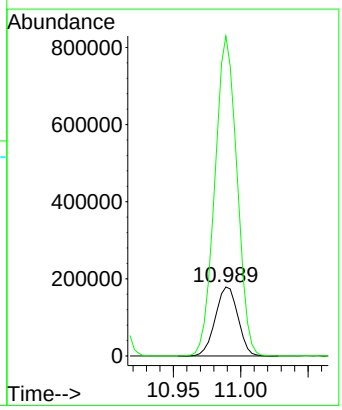


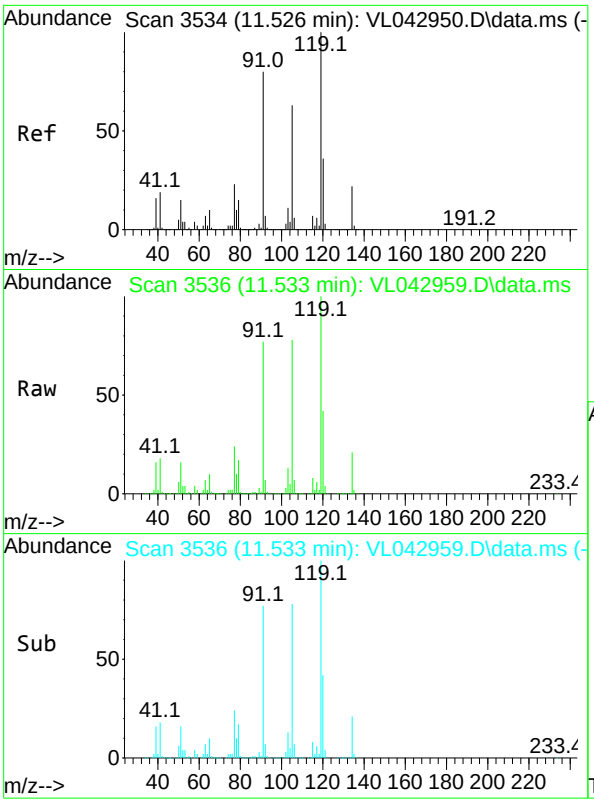


#64
n-propylbenzene
Concen: 9.389 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:120 Resp: 208358

Ion	Ratio	Lower	Upper
120	100		
91	454.9	364.9	547.3





#65
tert-Butylbenzene
Concen: 9.188 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:119 Resp: 69403

Ion	Ratio	Lower	Upper
119	100		
91	78.2	63.1	94.7
134	21.2	17.0	25.6

Instrument :
MSVOA_L
ClientSampleId :
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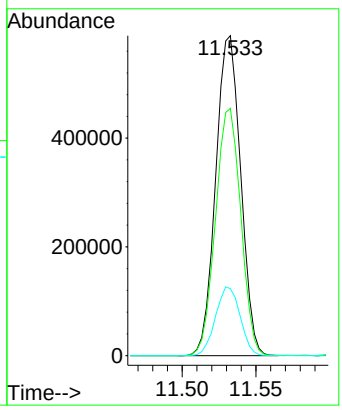
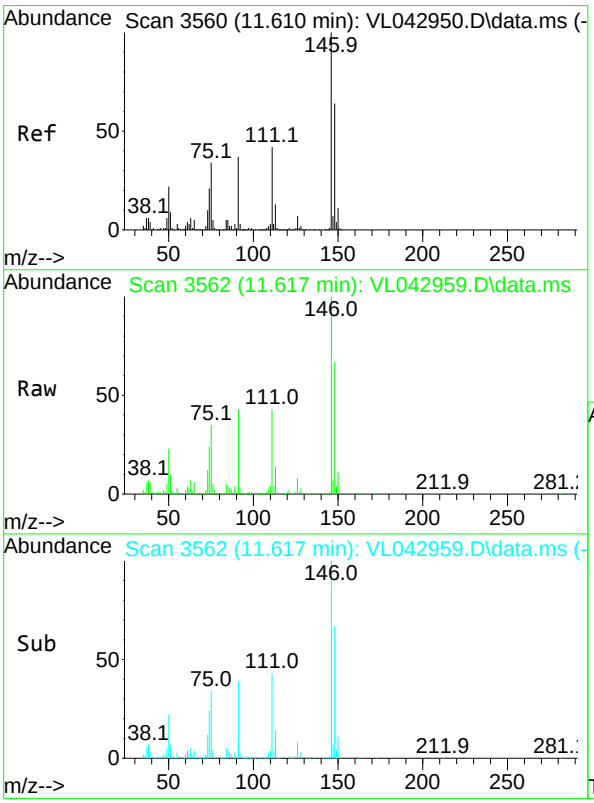
Supervised By :Mahesh Dadoda 09/24/2025

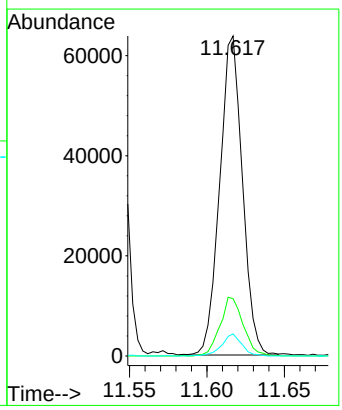


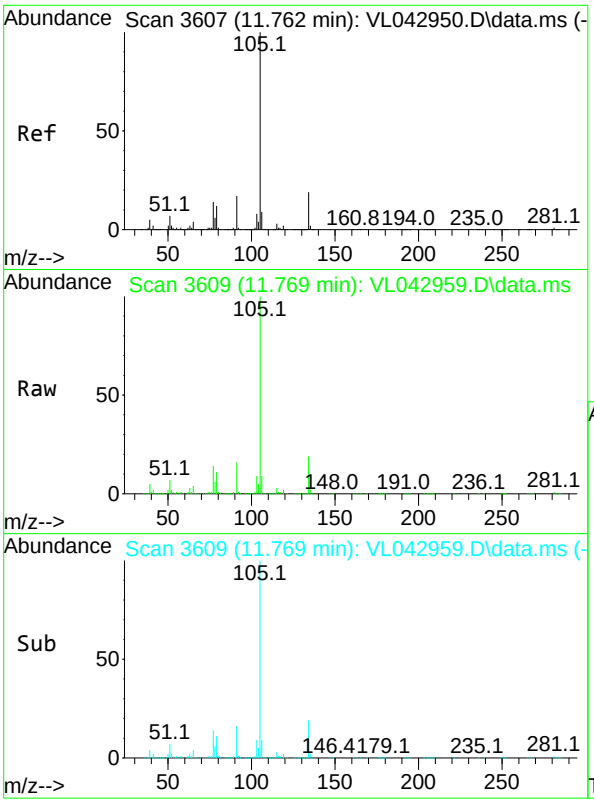


#66
Benzyl Chloride
Concen: 8.196 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 64955

Ion	Ratio	Lower	Upper
91	100		
126	18.8	14.6	21.8
128	6.2	5.0	7.4





#67
sec-Butylbenzene
Concen: 9.261 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 97475

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.7	23.5

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Manual Integrations
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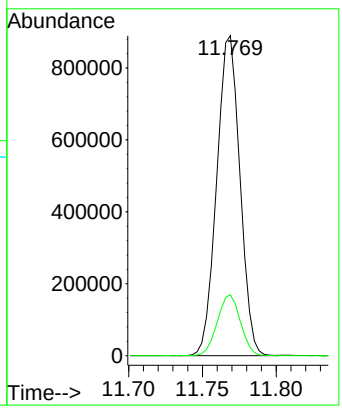
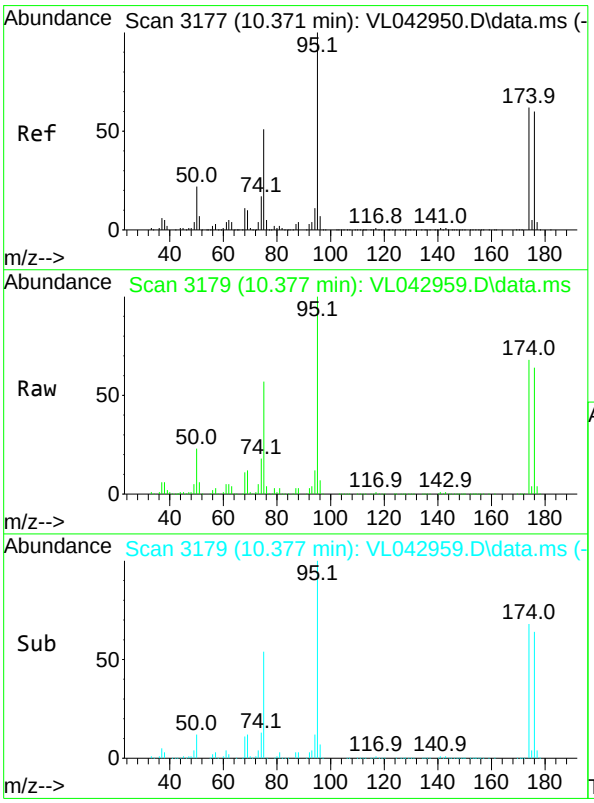
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

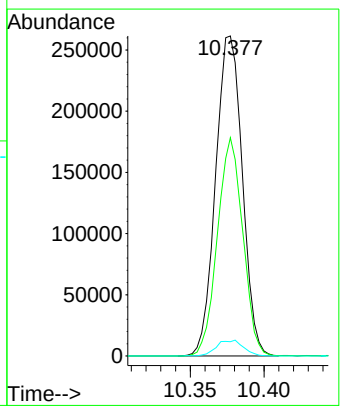


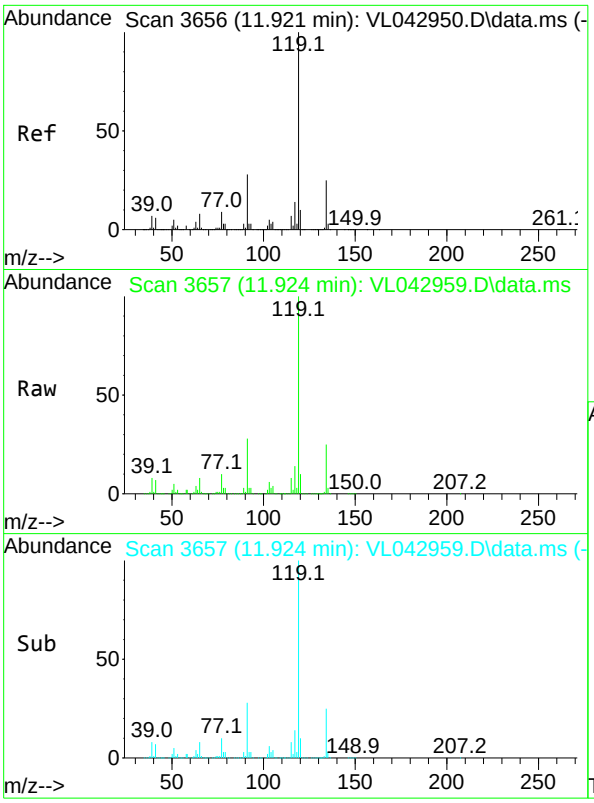


#68
1-Bromo-4-Fluorobenzene
Concen: 10.025 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 95 Resp: 329520

Ion	Ratio	Lower	Upper
95	100		
174	64.8	51.4	77.2
175	5.0	4.0	6.0

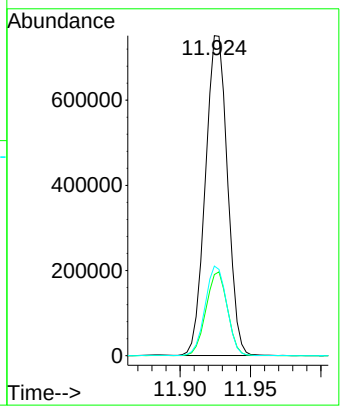




#69
p-Isopropyltoluene
Concen: 9.229 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:119 Resp: 82053

Ion	Ratio	Lower	Upper
119	100		
134	25.5	21.0	31.4
91	27.7	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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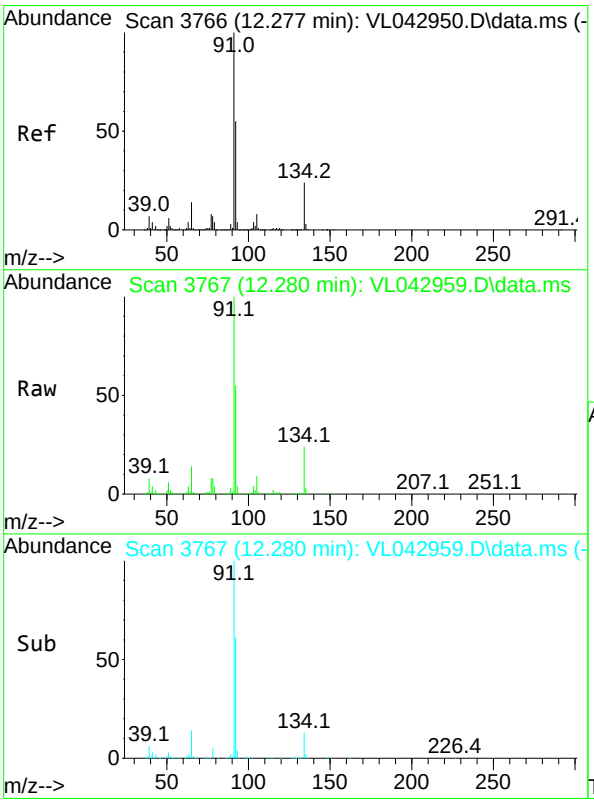
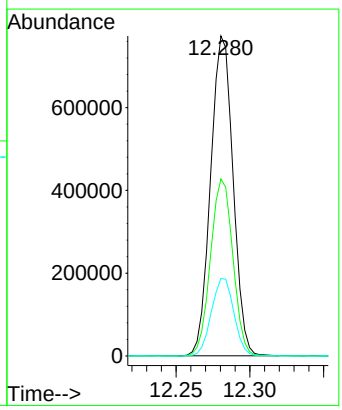
Supervised By :Mahesh Dadoda 09/24/2025

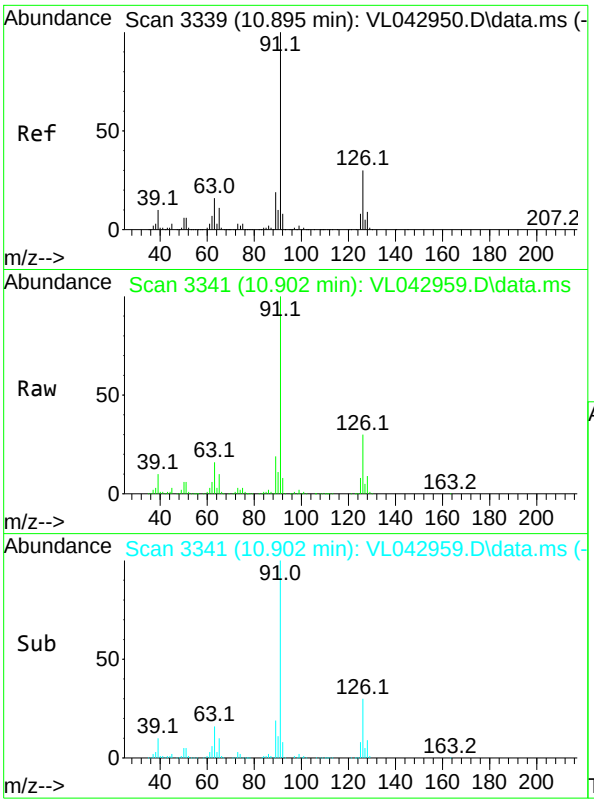


#70
n-Butylbenzene
Concen: 9.434 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 818866

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.0	66.0
134	24.3	19.4	29.2

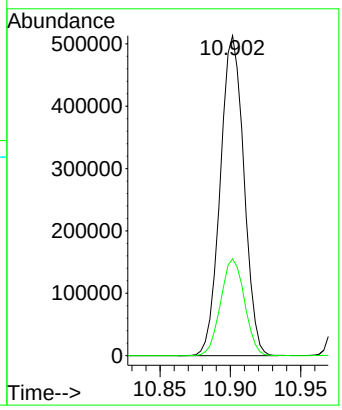




#71
2-Chlorotoluene
Concen: 9.336 ppbv
RT: 10.902 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 59861

Ion	Ratio	Lower	Upper
91	100		
126	30.6	12.3	49.3



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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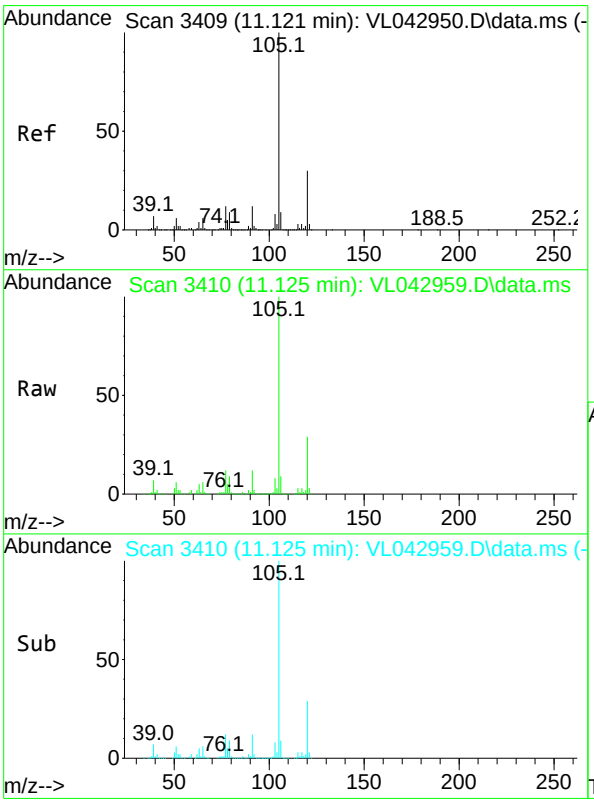
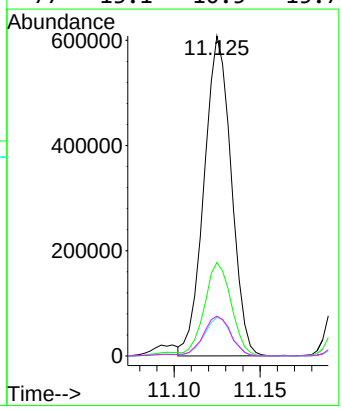
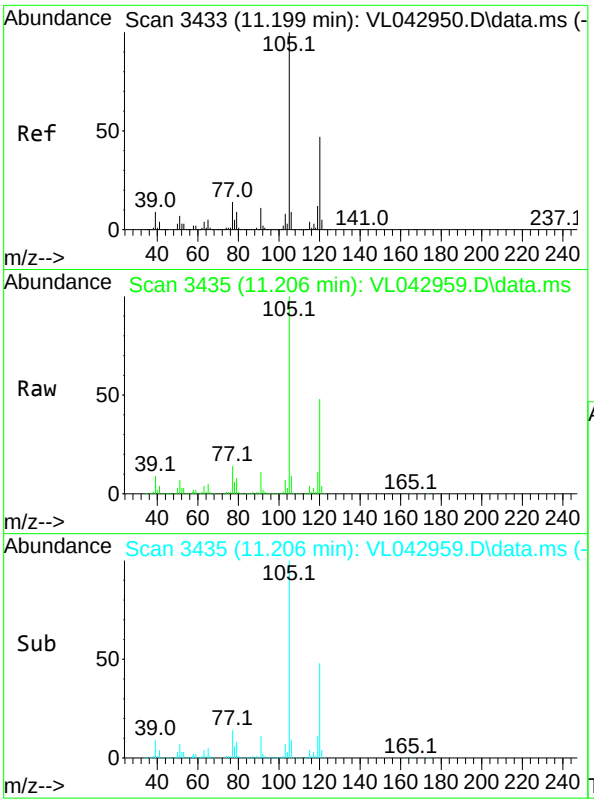


#72
4-Ethyltoluene
Concen: 9.332 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 665916

Ion	Ratio	Lower	Upper
105	100		
120	30.0	24.2	36.2
91	12.5	10.0	15.0
77	13.1	10.5	15.7





#73
1,3,5-Trimethylbenzene
Concen: 9.539 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 55203

Ion	Ratio	Lower	Upper
105	100		
120	47.7	38.0	57.0

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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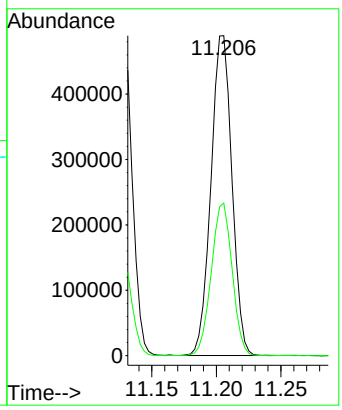
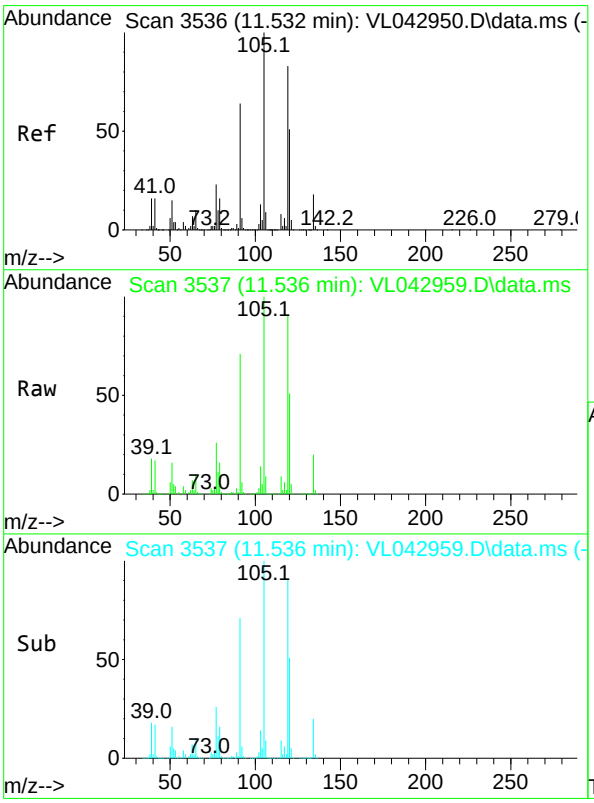
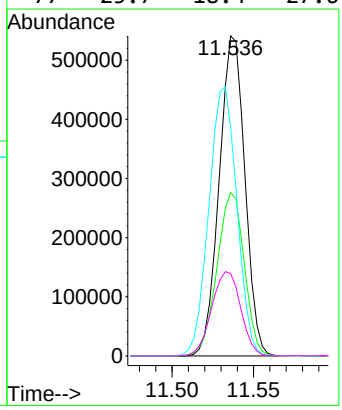


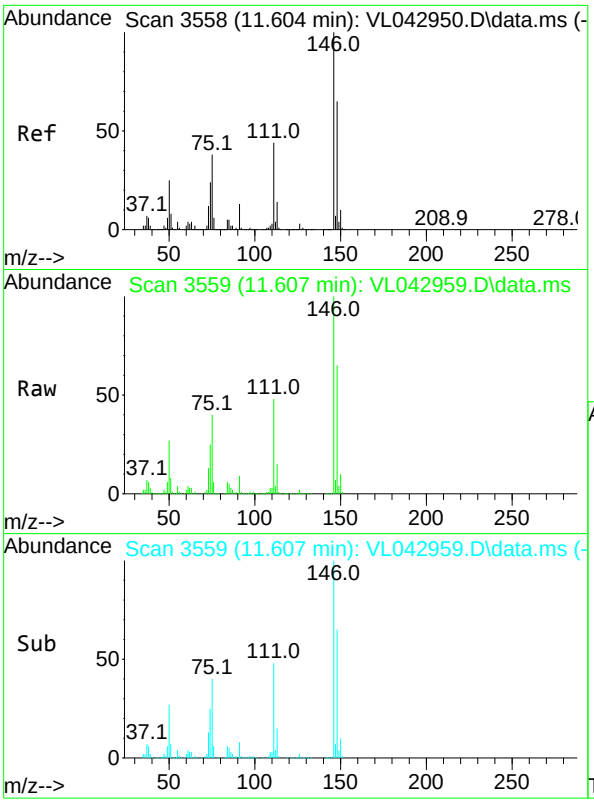


#74
1,2,4-Trimethylbenzene
Concen: 9.277 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 592889

Ion	Ratio	Lower	Upper
105	100		
120	51.0	40.9	61.3
91	71.2	51.2	76.8
77	25.7	18.4	27.6

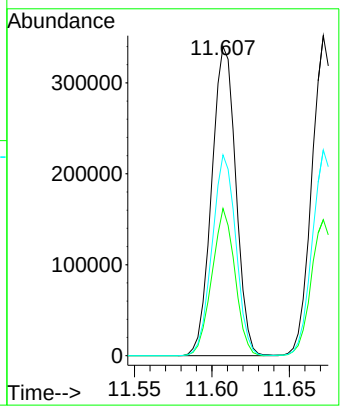




#75
1,3-Dichlorobenzene
Concen: 9.299 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:146 Resp: 36854

Ion	Ratio	Lower	Upper
146	100		
111	45.3	22.3	66.9
148	64.0	31.9	95.5



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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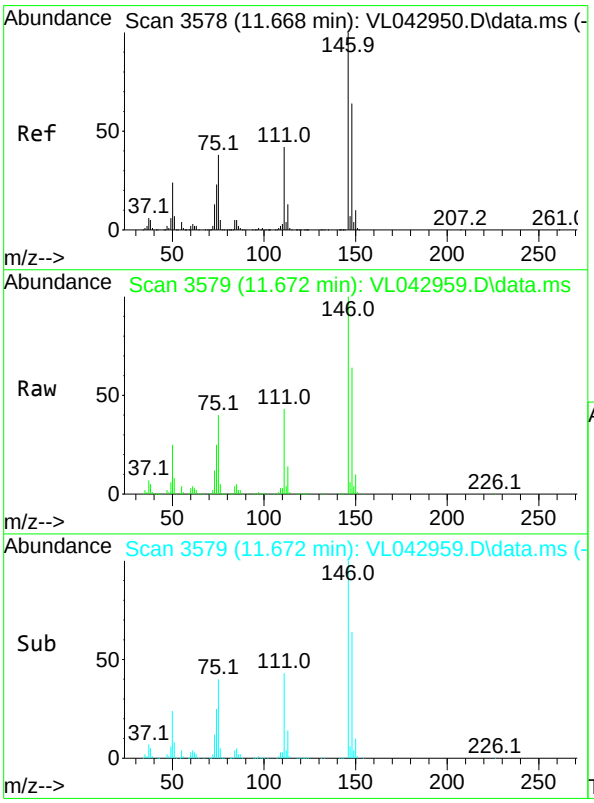
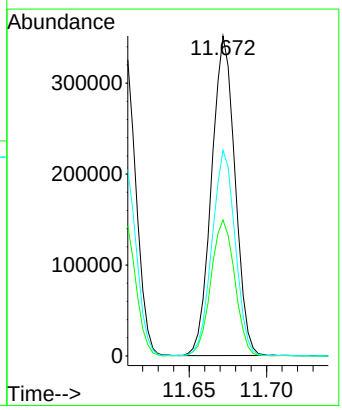
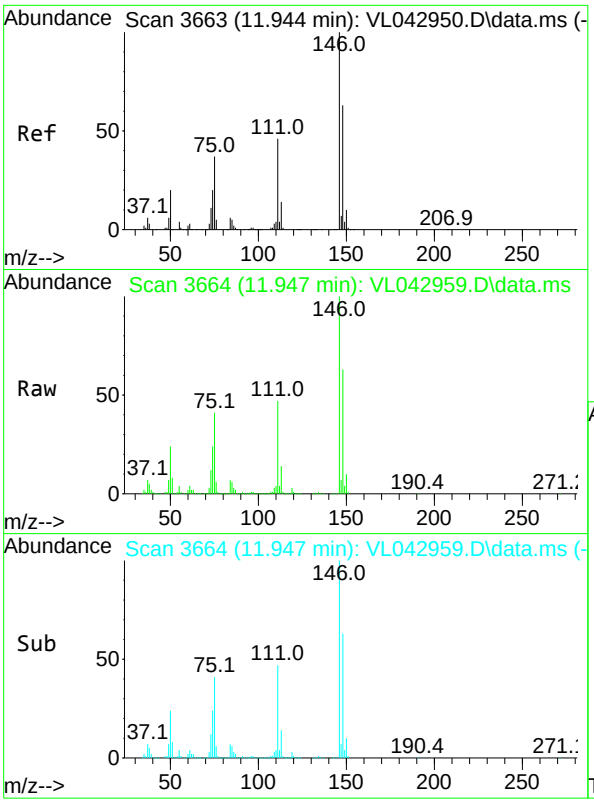


#76
1,4-Dichlorobenzene
Concen: 9.397 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:146 Resp: 369921

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.5	64.5
148	64.1	31.9	95.5

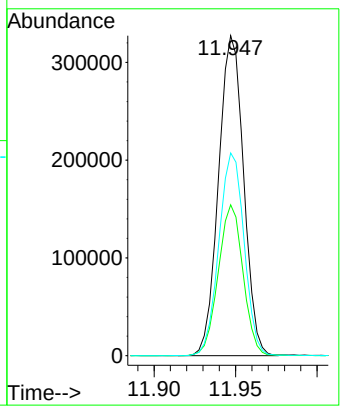




#77
1,2-Dichlorobenzene
Concen: 9.288 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:146 Resp: 35026

Ion	Ratio	Lower	Upper
146	100		
111	46.6	23.1	69.3
148	63.8	32.0	96.0



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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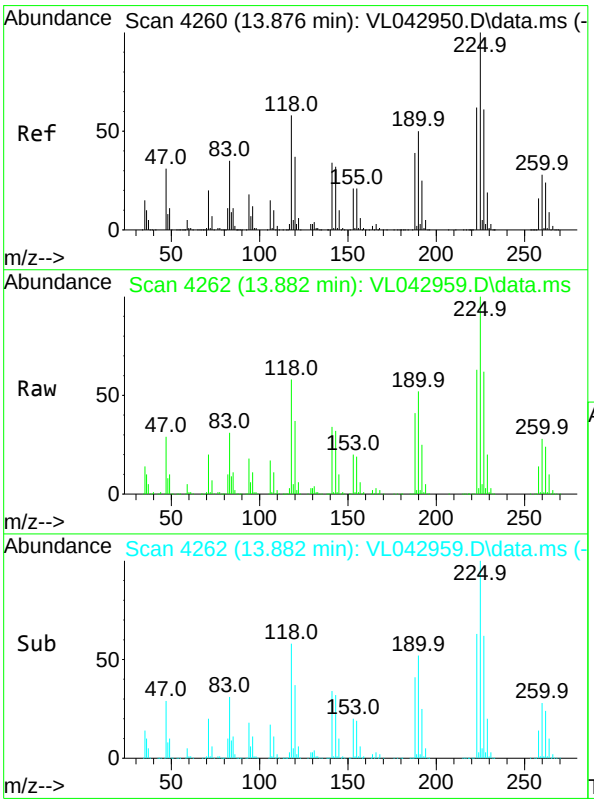
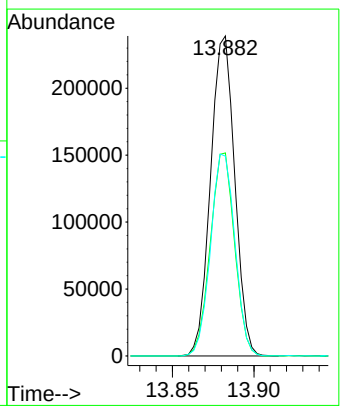
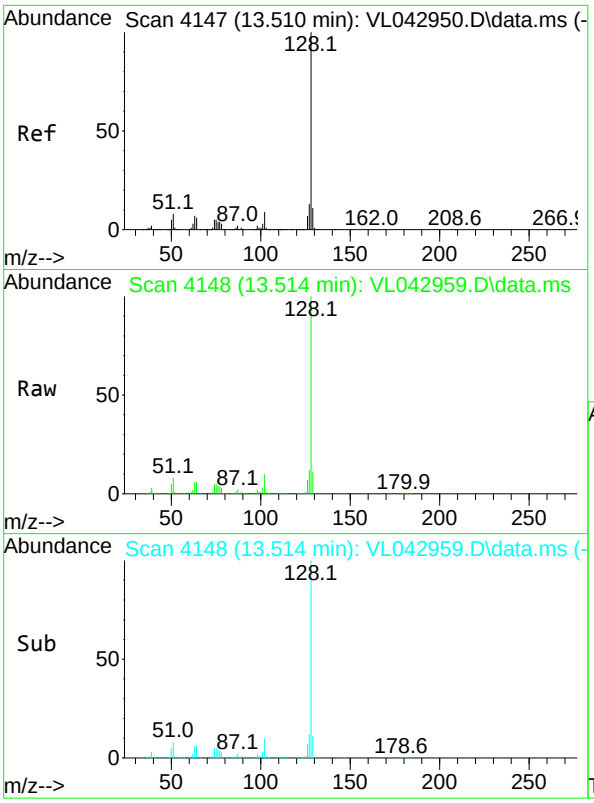


#78
Hexachloro-1,3-Butadiene
Concen: 8.366 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:225 Resp: 246743

Ion	Ratio	Lower	Upper
225	100		
223	63.7	50.1	75.1
227	63.6	50.4	75.6

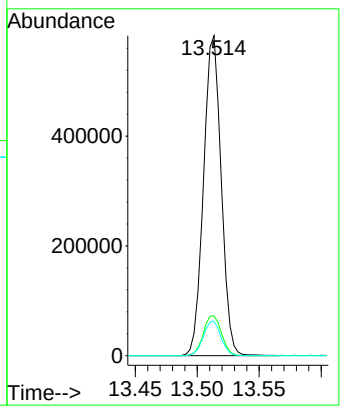




#79
Naphthalene
Concen: 10.259 ppbv
RT: 13.514 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:128 Resp: 57976

Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.6	15.8
129	10.8	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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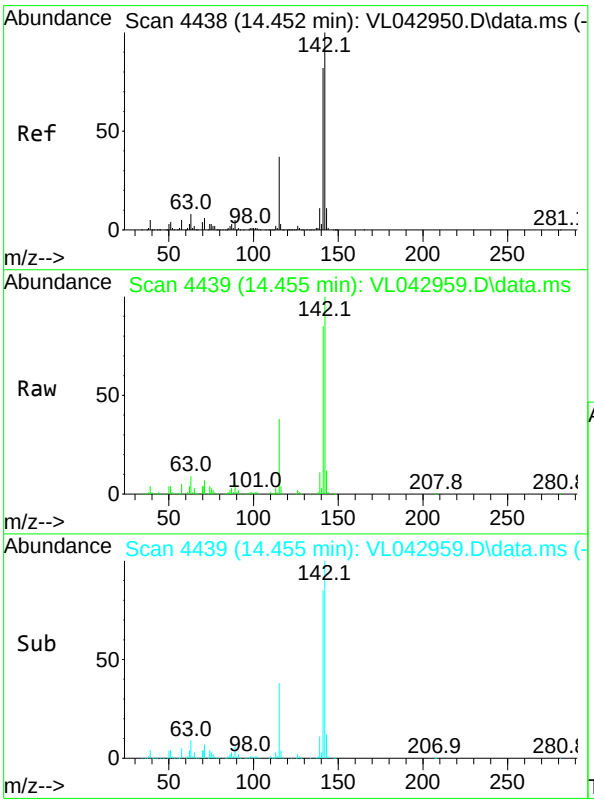
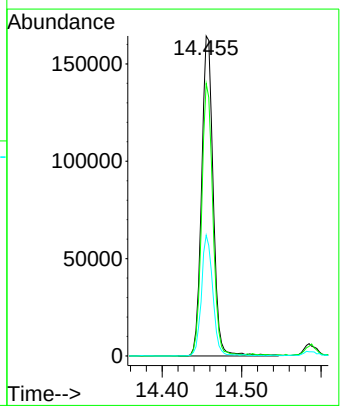
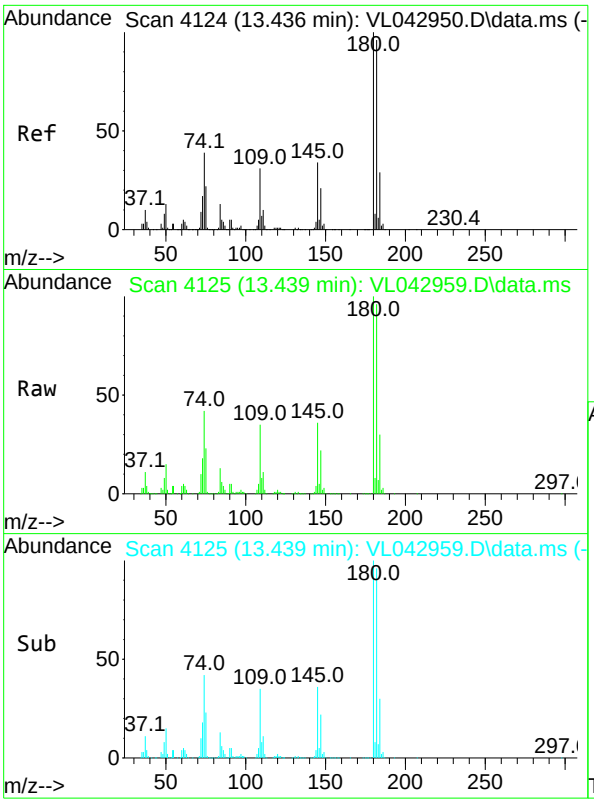


#80
Naphthalene,2-methyl-
Concen: 9.581 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:142 Resp: 167256

Ion	Ratio	Lower	Upper
142	100		
141	82.9	65.1	97.7
115	37.4	28.9	43.3

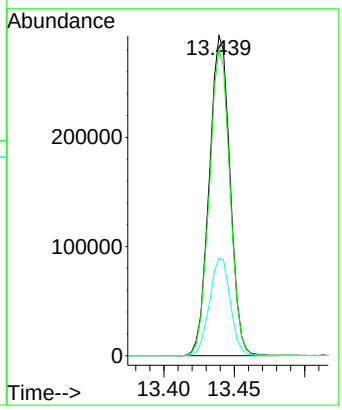




#81
1,2,4-Trichlorobenzene
Concen: 9.958 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:180 Resp: 30087

Ion	Ratio	Lower	Upper
180	100		
182	95.0	75.7	113.5
184	30.6	23.9	35.9



Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

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Supervised By :Mahesh Dadoda 09/24/2025

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	131-1A-2DUP	SDG No.:	Q3131
Lab Sample ID:	Q3130-02DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042970.D	1		09/22/25 22:48	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	0.43	2.13	J	0.54	2.47
74-87-3	Chloromethane	0.41	0.85	J	0.21	1.03
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
74-83-9	Bromomethane	0.080	0.31	U	0.31	1.94
75-00-3	Chloroethane	0.15	0.40	U	0.40	1.32
109-99-9	Tetrahydrofuran	0.080	0.24	U	0.24	1.47
75-69-4	Trichlorofluoromethane	0.23	1.29	J	0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	0.14	1.07	U	1.07	3.83
76-14-2	Dichlorotetrafluoroethane	0.15	1.05	U	1.05	3.49
75-65-0	tert-Butyl alcohol	0.20	0.61	J	0.49	1.52
142-82-5	Heptane	0.17	0.70	U	0.70	2.05
75-35-4	1,1-Dichloroethene	0.15	0.59	U	0.59	1.98
67-64-1	Acetone	6.20	14.7		0.43	1.19
75-15-0	Carbon Disulfide	0.080	0.25	U	0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	0.23	0.83	U	0.83	1.80
75-09-2	Methylene Chloride	2.00	6.95		0.80	1.74
156-60-5	trans-1,2-Dichloroethene	0.12	0.48	U	0.48	1.98
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72
78-93-3	2-Butanone	0.37	1.09	J	0.18	1.47
56-23-5	Carbon Tetrachloride	0.070	0.44		0.19	0.19
156-59-2	cis-1,2-Dichloroethene	0.10	0.40	U	0.40	1.98
67-66-3	Chloroform	0.10	0.49	U	0.49	2.44
71-55-6	1,1,1-Trichloroethane	0.020	0.11	U	0.11	0.16
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	U	0.65	2.34
71-43-2	Benzene	0.18	0.58	J	0.26	1.60
107-06-2	1,2-Dichloroethane	0.15	0.61	J	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
78-87-5	1,2-Dichloropropane	0.13	0.60	U	0.60	2.31
75-27-4	Bromodichloromethane	0.060	0.40	U	0.40	3.35
108-10-1	4-Methyl-2-Pentanone	0.10	0.41	U	0.41	2.05
108-88-3	Toluene	0.38	1.43	J	0.60	1.88
10061-02-6	t-1,3-Dichloropropene	0.15	0.68	U	0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	0.11	0.50	U	0.50	2.27
79-00-5	1,1,2-Trichloroethane	0.080	0.44	U	0.44	2.73

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	131-1A-2DUP	SDG No.:	Q3131
Lab Sample ID:	Q3130-02DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042970.D	1		09/22/25 22:48	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3	
124-48-1	Dibromochloromethane	0.090	0.77	U	0.77	4.26	
106-93-4	1,2-Dibromoethane	0.090	0.69	U	0.69	0.77	
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	
100-41-4	Ethyl Benzene	0.19	0.83	U	0.83	2.17	
179601-23-1	m/p-Xylene	0.41	1.78	U	1.78	4.34	
95-47-6	o-Xylene	0.21	0.91	U	0.91	2.17	
100-42-5	Styrene	0.16	0.68	U	0.68	2.13	
75-25-2	Bromoform	0.050	0.52	U	0.52	5.17	
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21	
95-49-8	2-Chlorotoluene	0.17	0.88	U	0.88	2.59	
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	U	0.88	2.46	
95-63-6	1,2,4-Trimethylbenzene	0.18	0.88	U	0.88	2.46	
541-73-1	1,3-Dichlorobenzene	0.050	0.30	U	0.30	3.01	
106-46-7	1,4-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
95-50-1	1,2-Dichlorobenzene	0.13	0.78	U	0.78	3.01	
120-82-1	1,2,4-Trichlorobenzene	0.21	1.56	U	1.56	3.71	
87-68-3	Hexachloro-1,3-Butadiene	0.13	1.39	U	1.39	5.33	
106-99-0	1,3-Butadiene	0.050	0.11	U	0.11	1.11	
91-20-3	Naphthalene	0.14	0.73		0.050	0.52	
622-96-8	4-Ethyltoluene	0.21	1.03	U	1.03	2.46	
110-54-3	Hexane	2.40	8.46		0.56	1.76	
107-05-1	Allyl Chloride	0.11	0.34	U	0.34	1.57	
123-91-1	1,4-Dioxane	0.22	0.79	U	0.79	1.80	
80-62-6	Methyl Methacrylate	0.14	0.57	U	0.57	2.05	
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.2			70 (65) - 130 (135)	102%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	147000		2.787			
540-36-3	1,4-Difluorobenzene	437000		3.959			
3114-55-4	Chlorobenzene-d5	390000		8.882			

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Fax : 908 789 8922

Report of Analysis

Client:	RTP Environmental	Date Collected:	
Project:	CHADWICK SQUARE	Date Received:	
Client Sample ID:	131-1A-2DUP	SDG No.:	Q3131
Lab Sample ID:	Q3130-02DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042970.D	1		09/22/25 22:48	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042970.D
Acq On : 22 Sep 2025 22:48
Operator : SY/MD
Sample : Q3130-02DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 23 02:57:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	146991	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	437140	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	389571	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	296189	10.185	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	8516	0.431	ppbv	92
4) Chloromethane	1.535	50	3652	0.408	ppbv	97
9) Propene	1.489	41	5695m	0.531	ppbv	
11) Trichlorofluoromethane	1.881	101	4422	0.232	ppbv	98
13) Ethanol	1.722	45	384814	370.048	ppbv	95
15) Acetone	1.836	43	118525	6.191	ppbv	96
17) tert-Butyl alcohol	2.043	59	4248m	0.202	ppbv	
20) Methylene Chloride	2.062	84	14366	1.980	ppbv	97
26) Hexane	2.829	57	53388	2.421	ppbv #	61
34) 2-Butanone	2.561	43	11487	0.375	ppbv #	86
35) Carbon Tetrachloride	3.758	117	2114m	0.074	ppbv	
36) Benzene	3.661	78	7565	0.184	ppbv #	90
37) 1,2-Dichloroethane	3.218	62	3337	0.155	ppbv #	93
44) 2,2,4-Trimethylpentane	4.645	57	8434m	0.119	ppbv	
53) Toluene	6.937	91	18244	0.375	ppbv	100
59) m/p-Xylene	9.532	91	8506m	0.169	ppbv	
79) Naphthalene	13.513	128	7088	0.142	ppbv	97

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

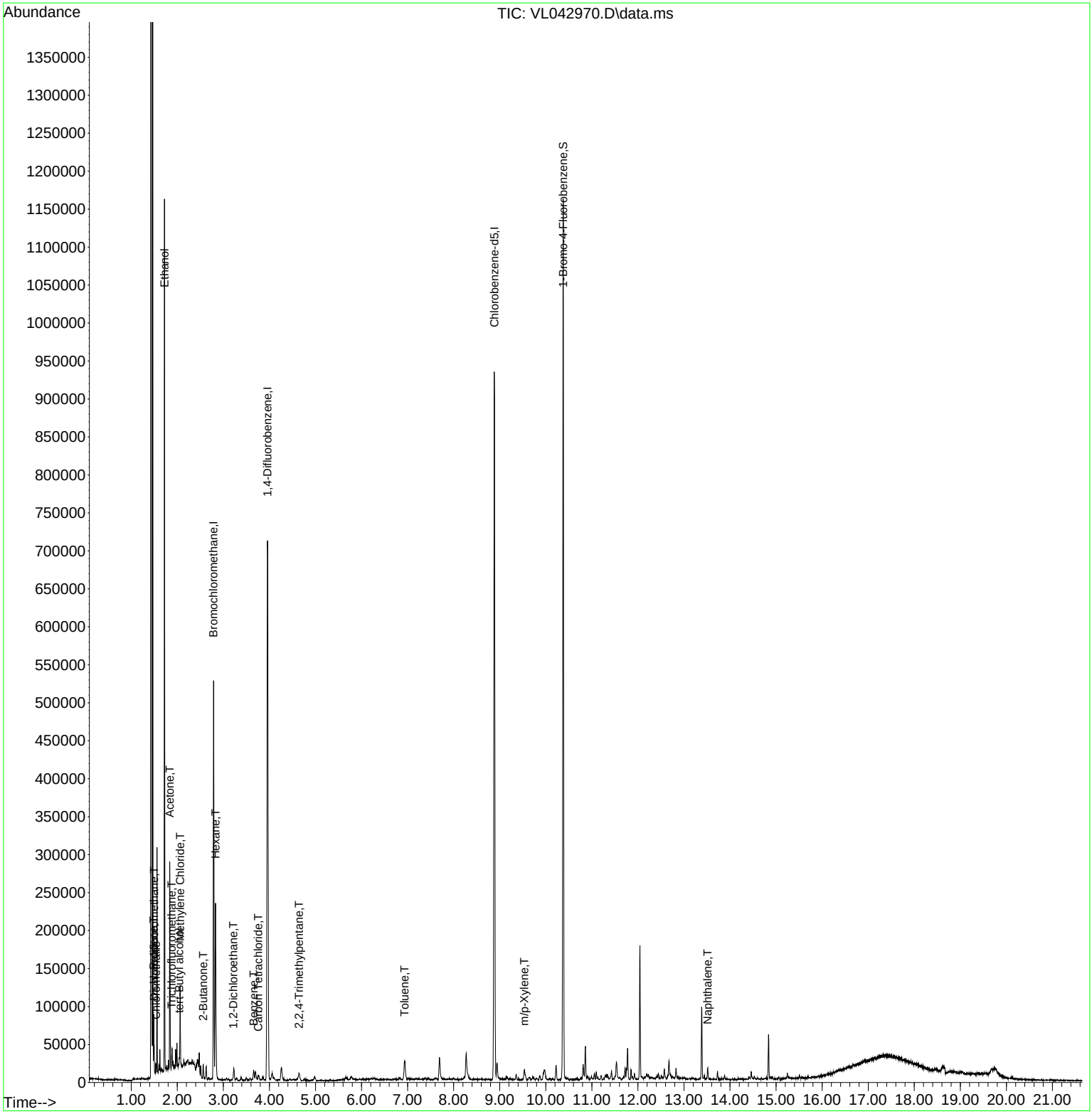
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042970.D
Acq On : 22 Sep 2025 22:48
Operator : SY/MD
Sample : Q3130-02DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

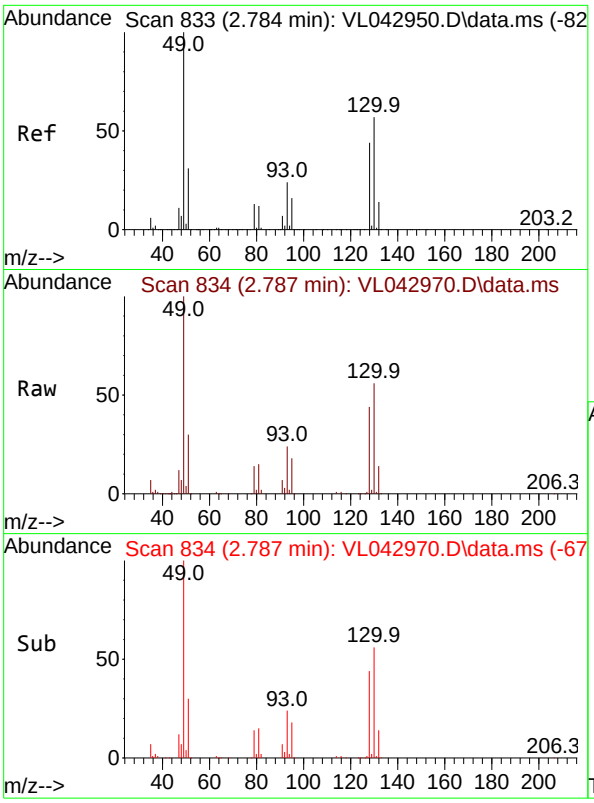
Quant Time: Sep 23 02:57:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

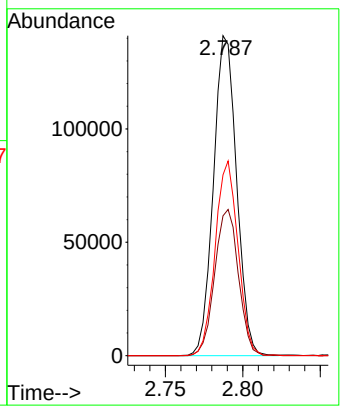




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 49 Resp: 14699

Ion	Ratio	Lower	Upper
49	100		
128	46.9	22.9	68.8
130	59.9	29.1	87.3



Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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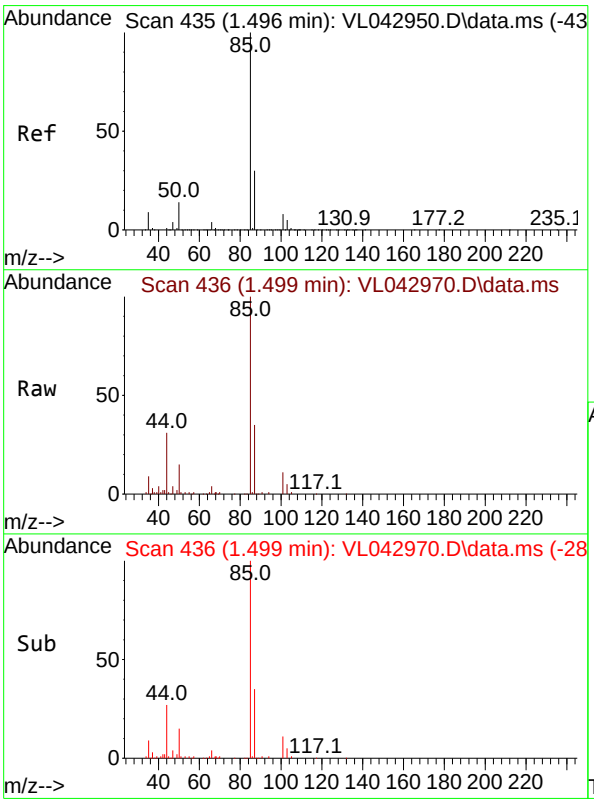
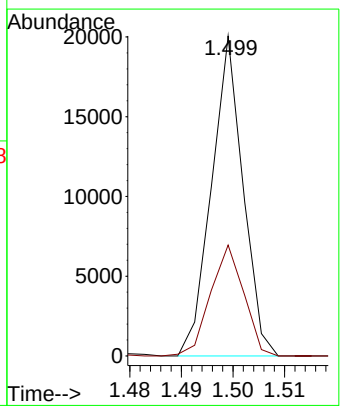
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

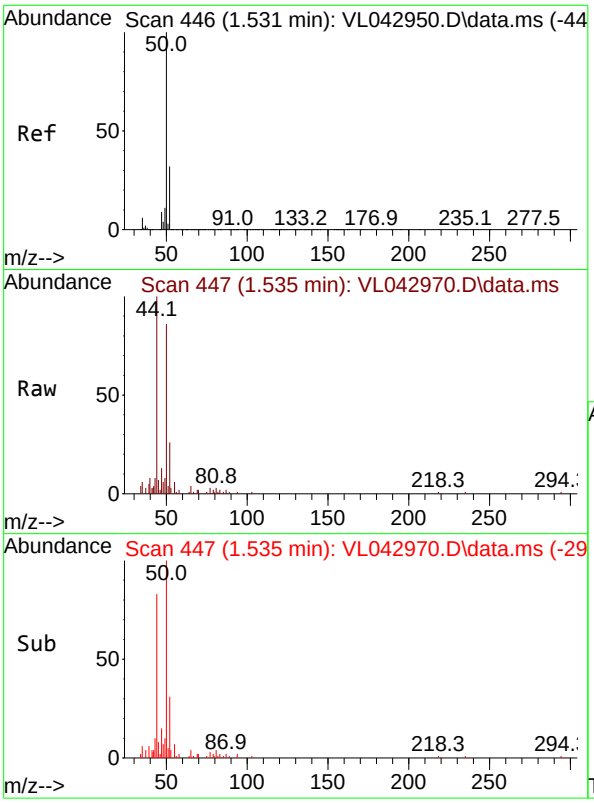


#2
Dichlorodifluoromethane
Concen: 0.431 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 85 Resp: 8516

Ion	Ratio	Lower	Upper
85	100		
87	34.7	24.3	36.5





#4
Chloromethane
Concen: 0.408 ppbv
RT: 1.535 min Scan# 44
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 50 Resp: 365

Ion	Ratio	Lower	Upper
50	100		
52	34.3	25.9	38.9

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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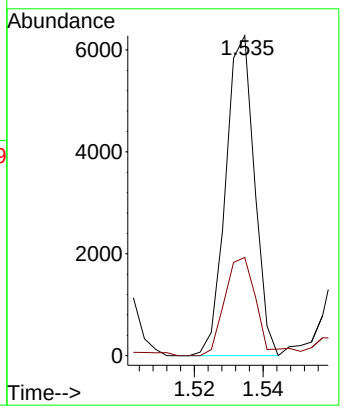
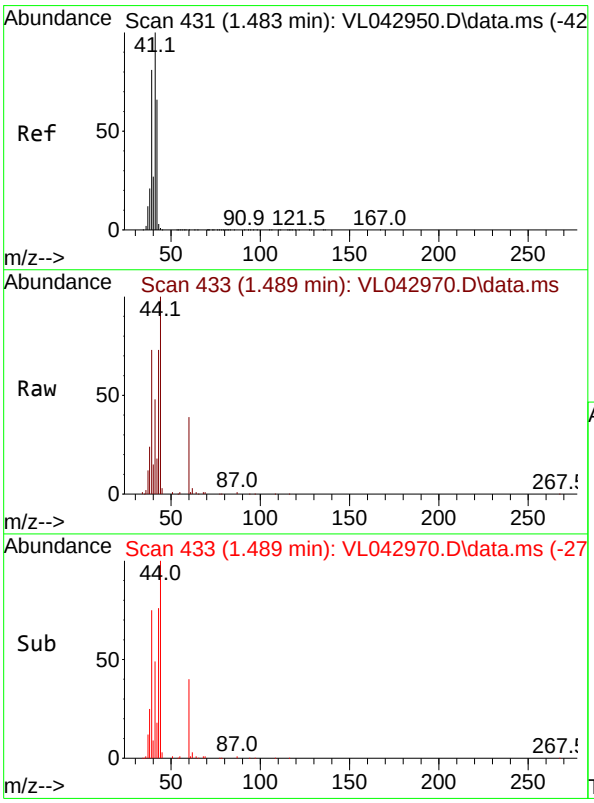
Supervised By :Mahesh Dadoda 09/24/2025

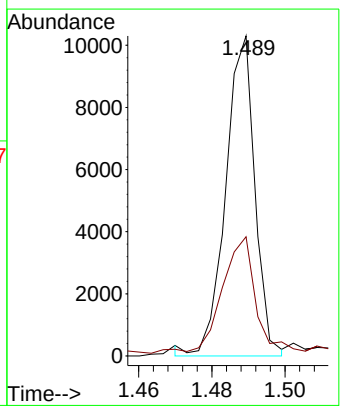


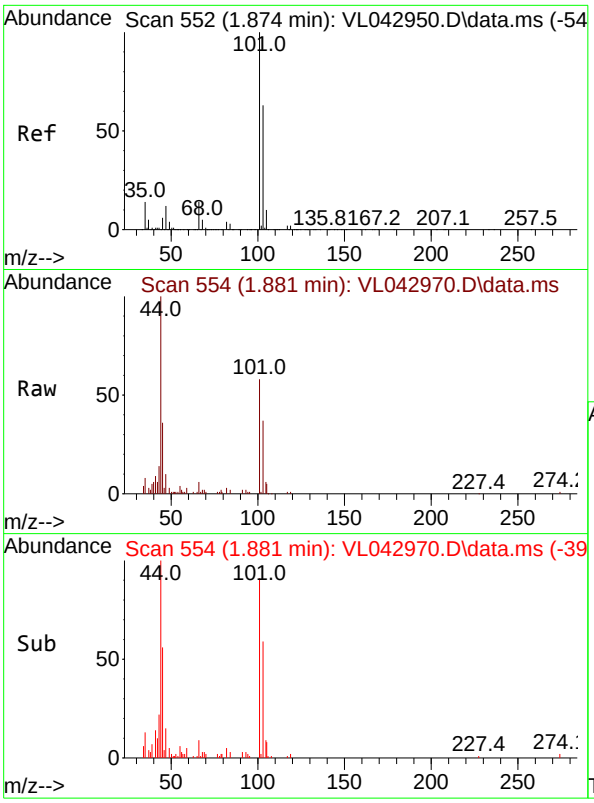


#9
Propene
Concen: 0.531 ppbv m
RT: 1.489 min Scan# 433
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 41 Resp: 5695

Ion	Ratio	Lower	Upper
41	100		
42	358.3	57.4	86.2#

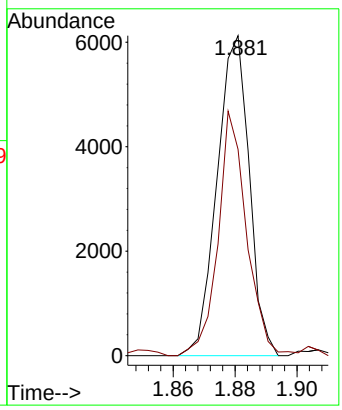




#11
Trichlorofluoromethane
Concen: 0.232 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion:101 Resp: 442

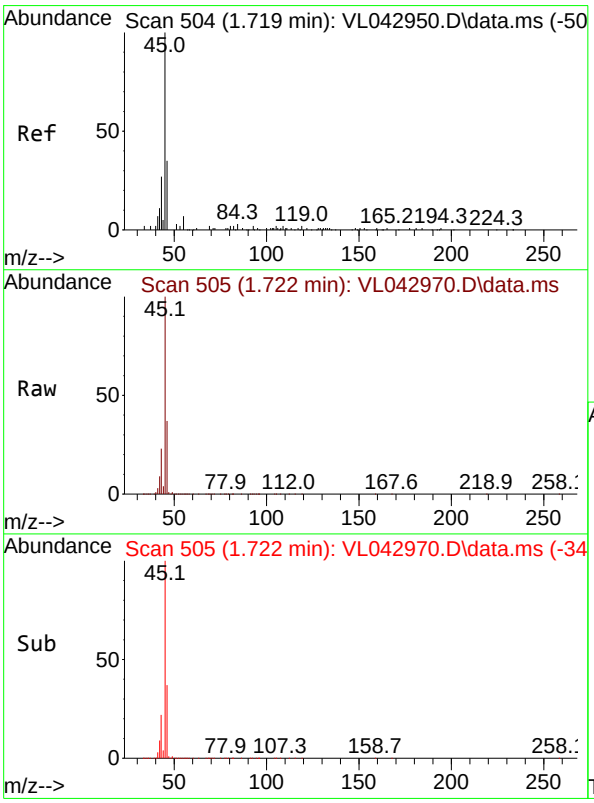
Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
APPROVED

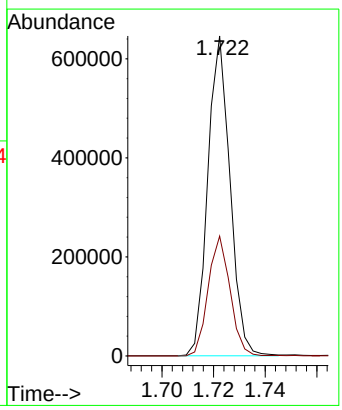
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

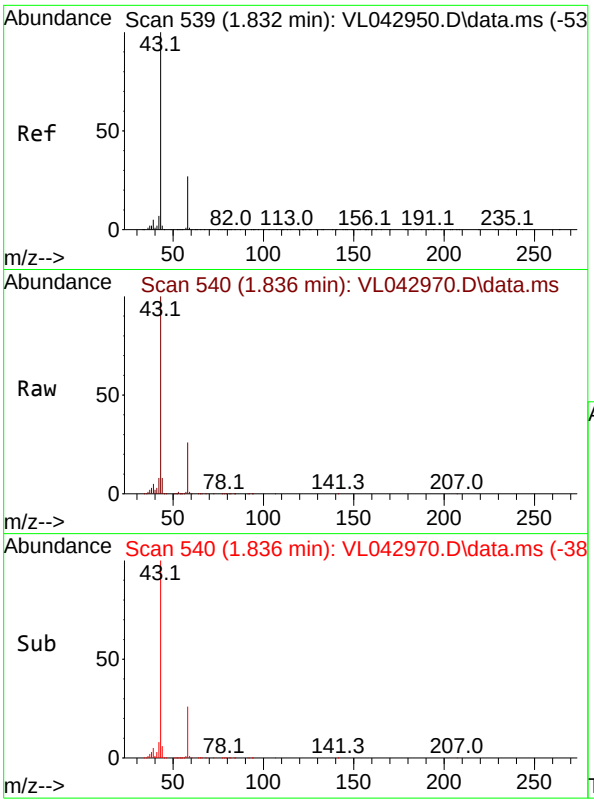


#13
Ethanol
Concen: 370.048 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 45 Resp: 384814

Ion	Ratio	Lower	Upper
45	100		
46	37.3	16.2	64.6

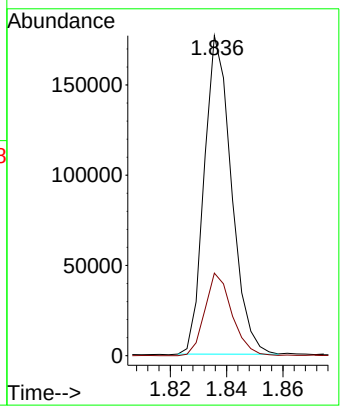




#15
Acetone
Concen: 6.191 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 43 Resp: 11852

Ion	Ratio	Lower	Upper
43	100		
58	25.8	22.3	33.5



Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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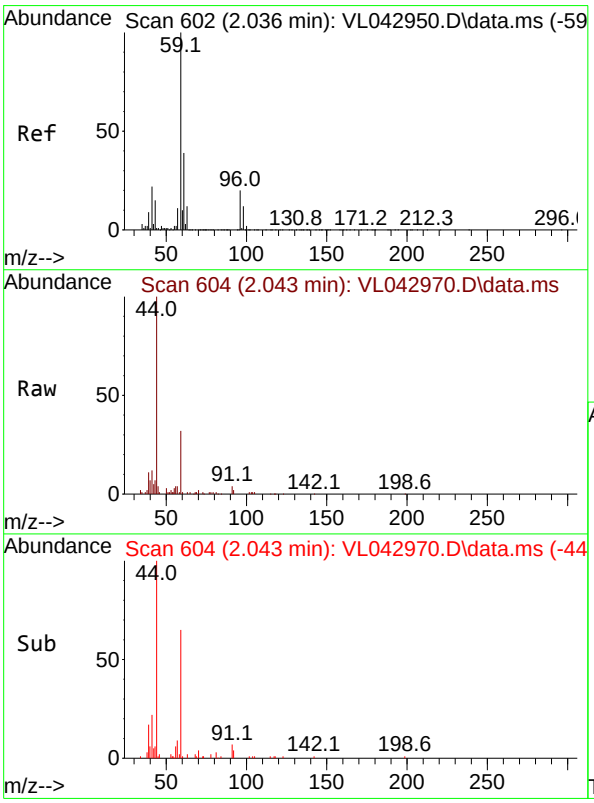
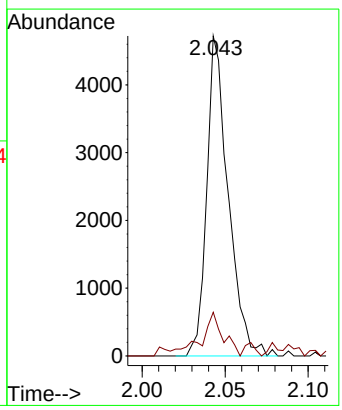
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

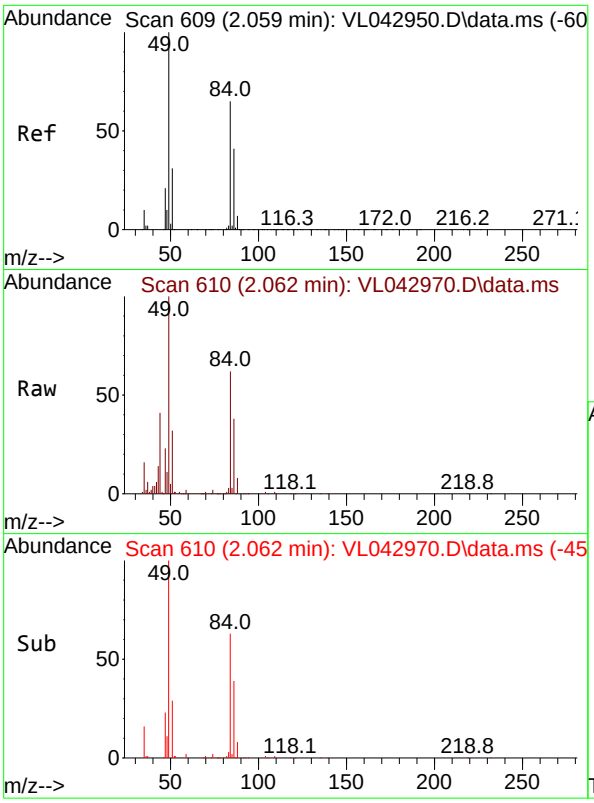


#17
tert-Butyl alcohol
Concen: 0.202 ppbv m
RT: 2.043 min Scan# 604
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 59 Resp: 4248

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.6	12.8#

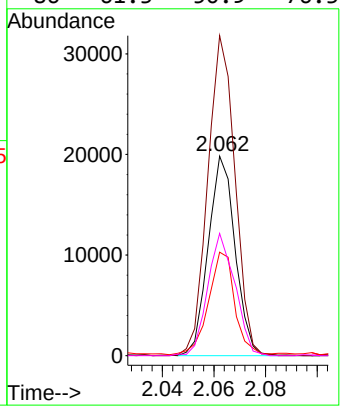




#20
Methylene Chloride
Concen: 1.980 ppbv
RT: 2.062 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 84 Resp: 1436

Ion	Ratio	Lower	Upper
84	100		
49	160.1	124.1	186.1
51	50.7	39.8	59.8
86	61.3	50.9	76.3



Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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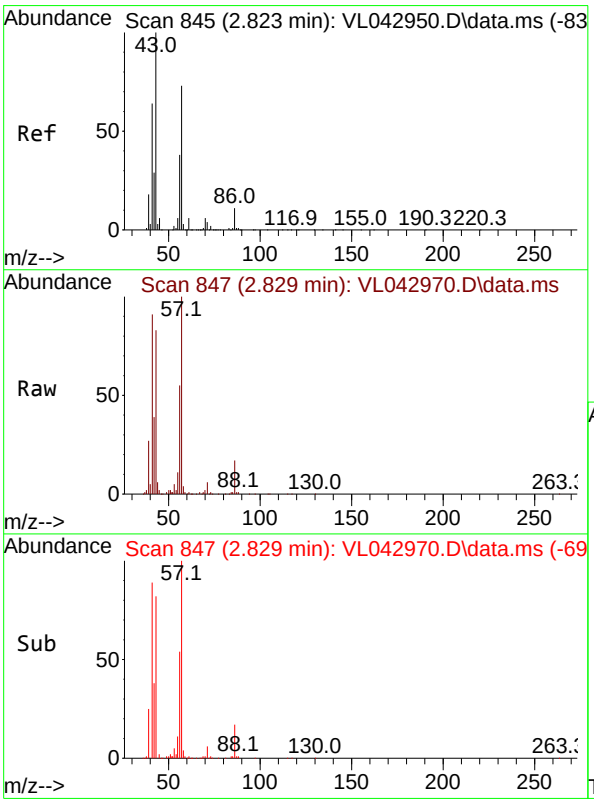
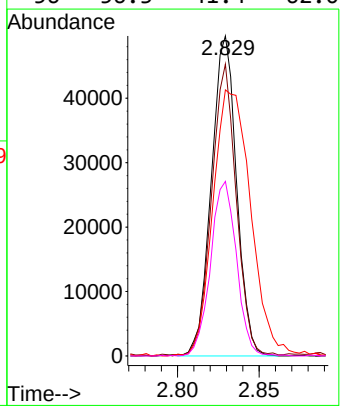
Supervised By :Mahesh Dadoda 09/24/2025

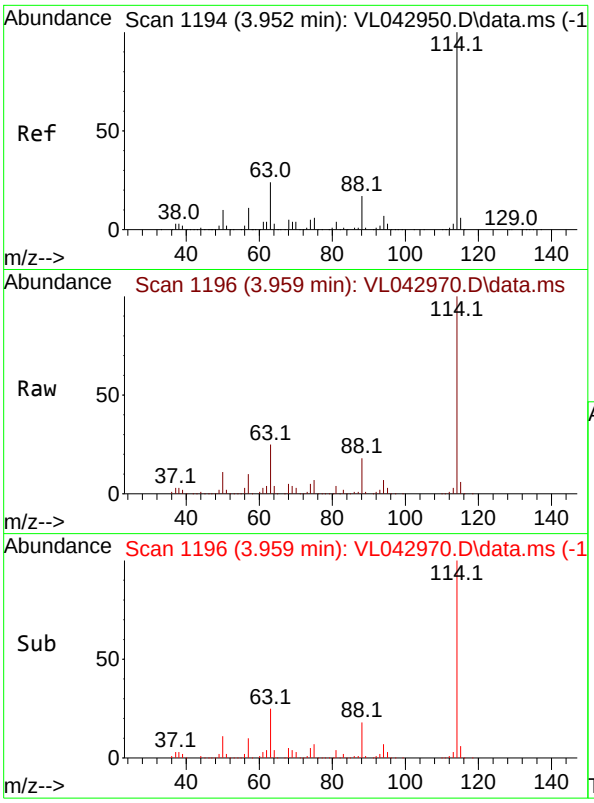


#26
Hexane
Concen: 2.421 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 57 Resp: 53388

Ion	Ratio	Lower	Upper
57	100		
41	89.4	71.7	107.5
43	124.3	180.8	271.2#
56	56.3	41.4	62.0





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

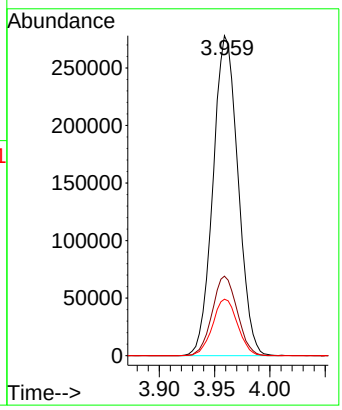
Tgt Ion:114 Resp: 43714

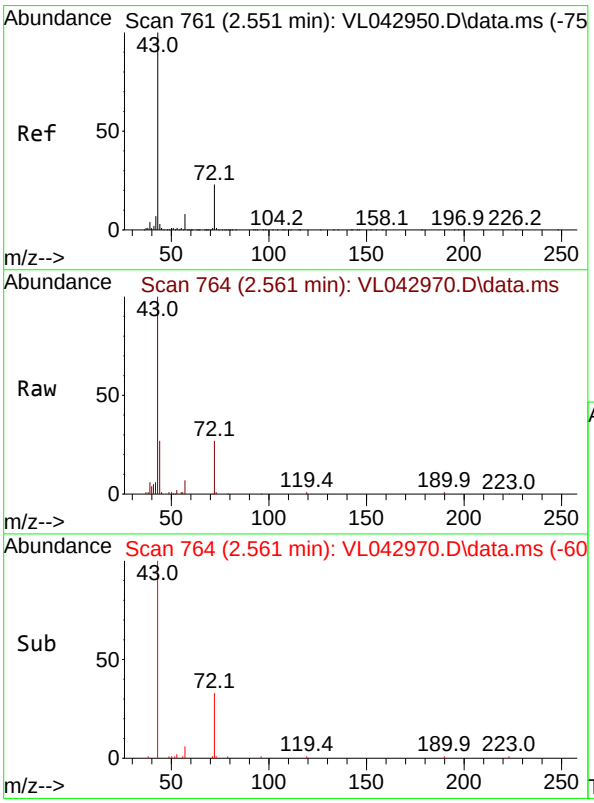
Ion	Ratio	Lower	Upper
114	100		
63	24.9	19.4	29.2
88	17.7	14.2	21.2

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

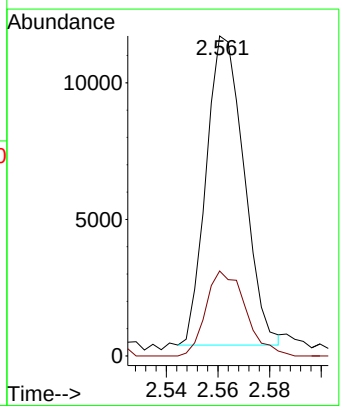


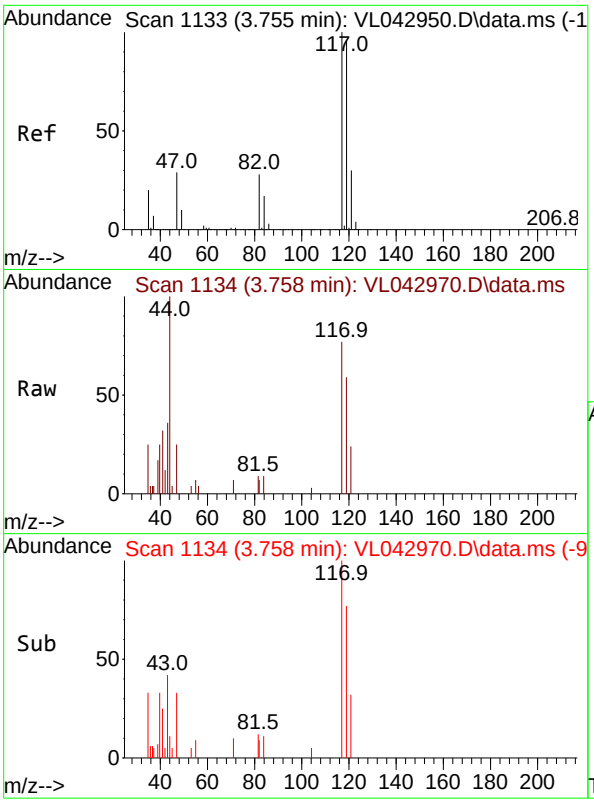


#34
2-Butanone
Concen: 0.375 ppbv
RT: 2.561 min Scan# 764
Delta R.T. 0.010 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 43 Resp: 11487

Ion	Ratio	Lower	Upper
43	100		
72	28.9	17.7	26.5#

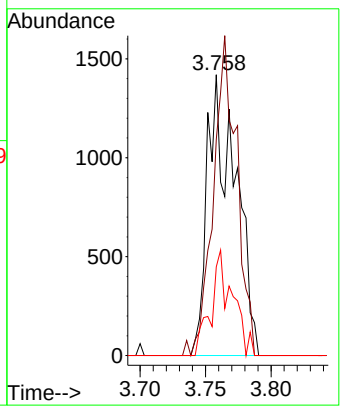




#35
Carbon Tetrachloride
Concen: 0.074 ppbv m
RT: 3.758 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion:117 Resp: 211

Ion	Ratio	Lower	Upper
117	100		
119	76.9	76.9	115.3
121	31.5	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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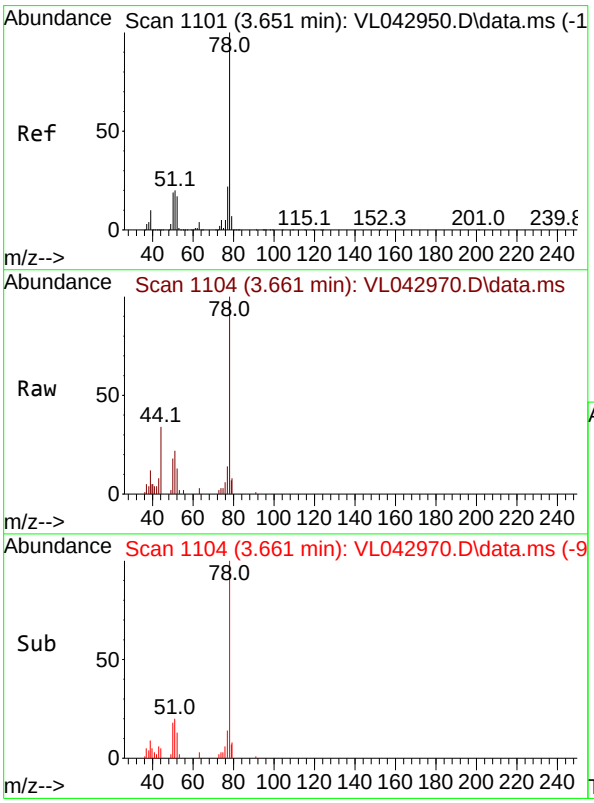
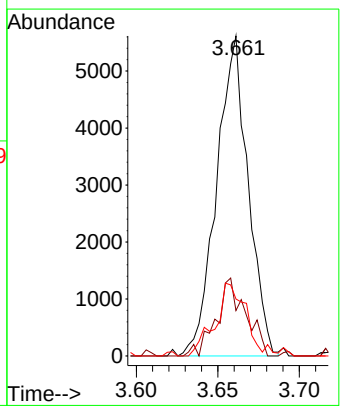
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

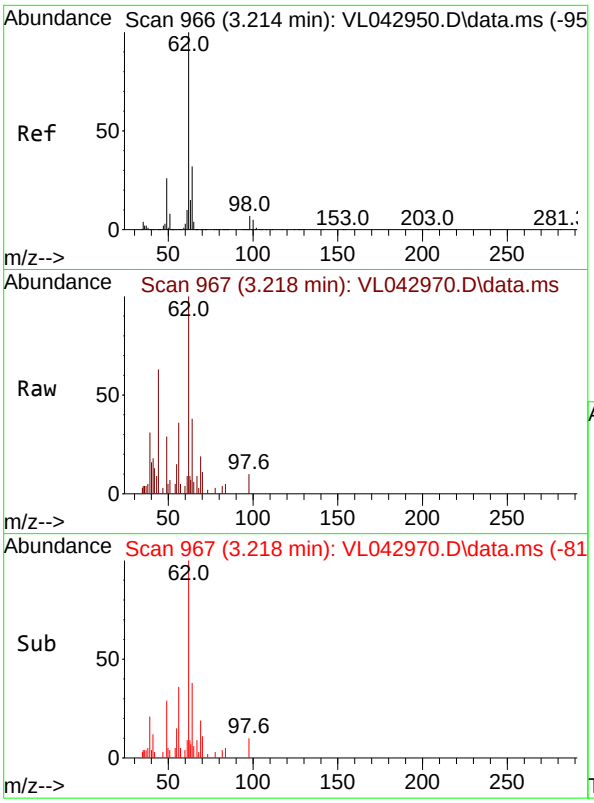


#36
Benzene
Concen: 0.184 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.010 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 78 Resp: 7565

Ion	Ratio	Lower	Upper
78	100		
77	14.2	17.8	26.6#
50	17.8	15.0	22.4

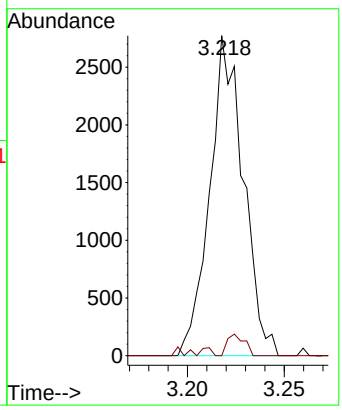




#37
1,2-Dichloroethane
Concen: 0.155 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 62 Resp: 333

Ion	Ratio	Lower	Upper
62	100		
98	5.0	5.9	8.9#



Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 09/23/2025
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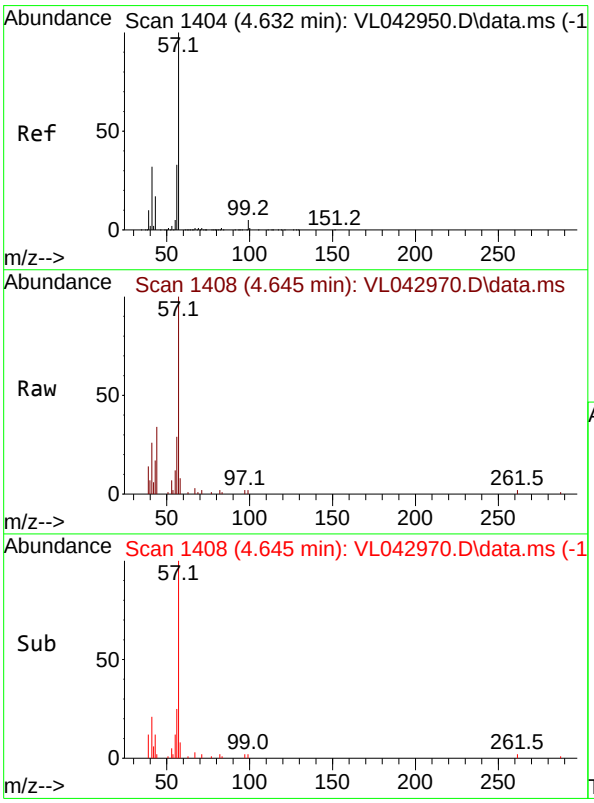
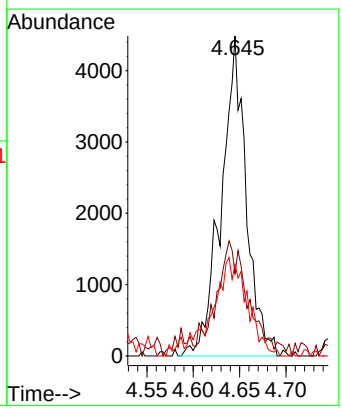
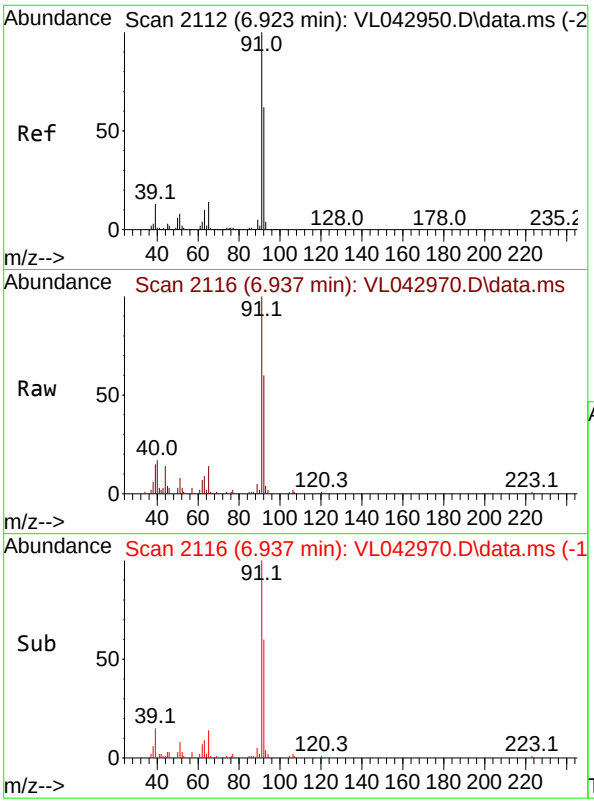


#44
2,2,4-Trimethylpentane
Concen: 0.119 ppbv m
RT: 4.645 min Scan# 1408
Delta R.T. 0.013 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 57 Resp: 8434

Ion	Ratio	Lower	Upper
57	100		
41	51.2	25.5	38.3#
56	43.8	25.8	38.8#





#53
Toluene
Concen: 0.375 ppbv
RT: 6.937 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 91 Resp: 1824

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.2

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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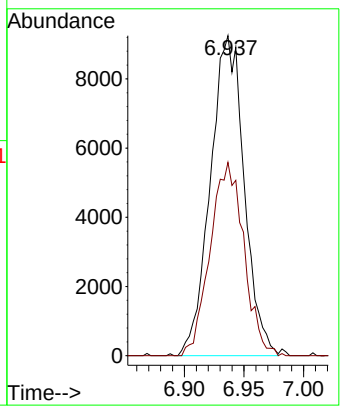
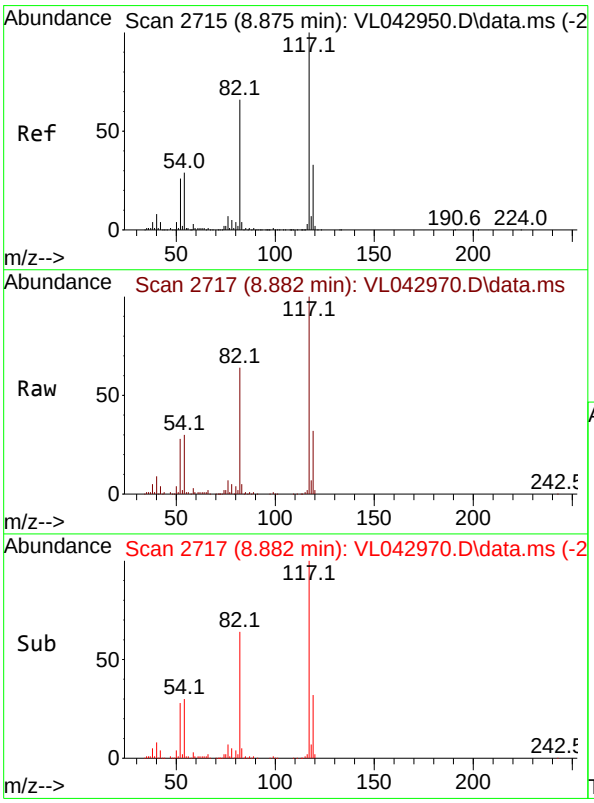
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

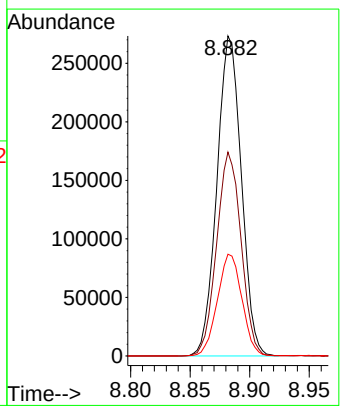


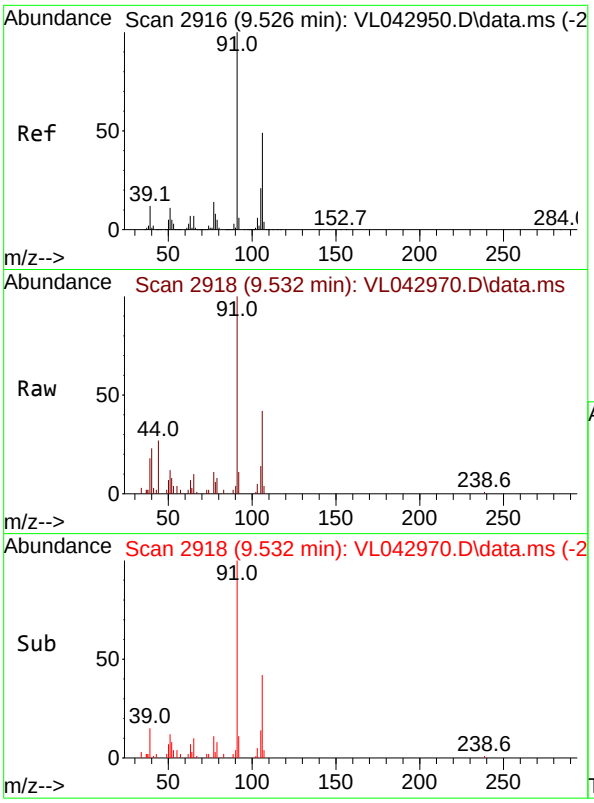


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion:117 Resp: 389571

Ion	Ratio	Lower	Upper
117	100		
82	63.8	52.8	79.2
119	32.1	26.5	39.7





#59
m/p-Xylene
Concen: 0.169 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 91 Resp: 850

Ion	Ratio	Lower	Upper
91	100		
106	46.1	0.0	0.0

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 09/23/2025
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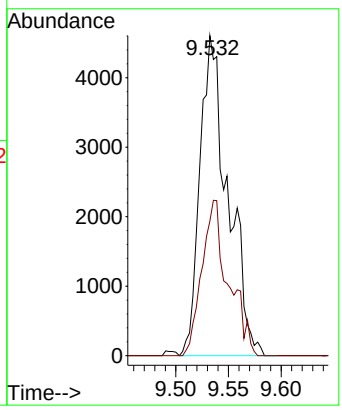
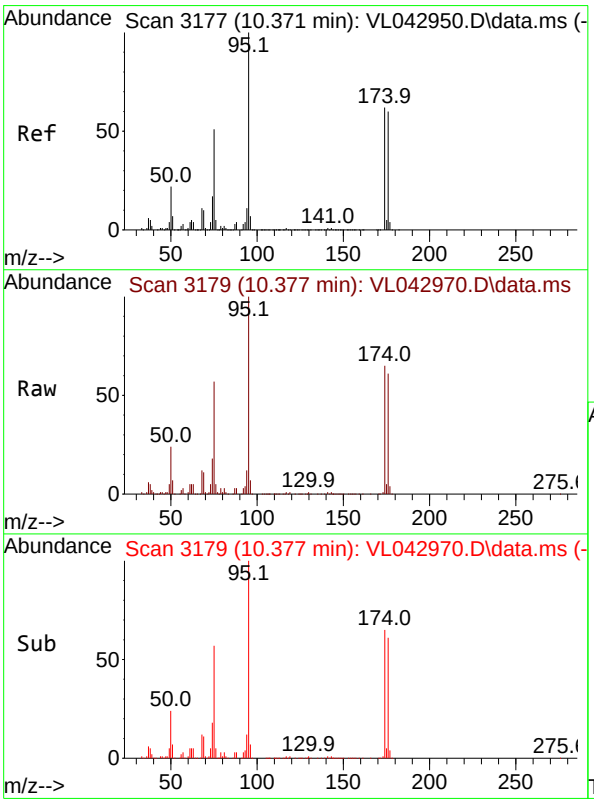
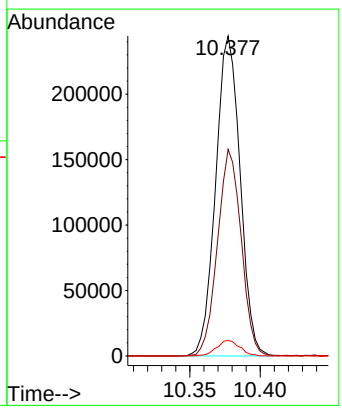


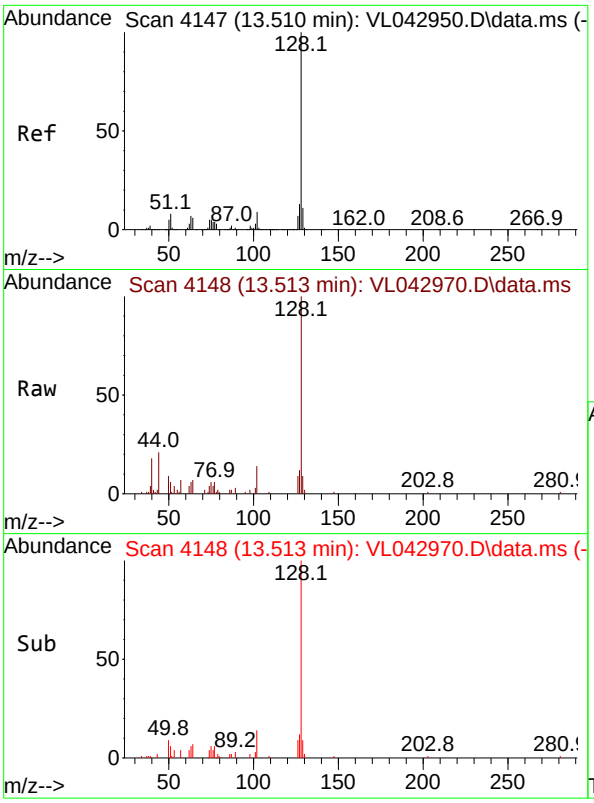


#68
1-Bromo-4-Fluorobenzene
Concen: 10.185 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 95 Resp: 296189

Ion	Ratio	Lower	Upper
95	100		
174	62.6	51.4	77.2
175	4.6	4.0	6.0

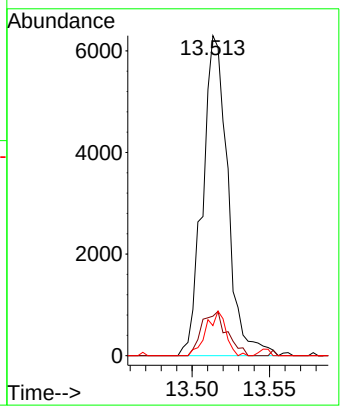




#79
Naphthalene
Concen: 0.142 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion:128 Resp: 708

Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.6	15.8
129	9.4	9.0	13.6



Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

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Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042950.D	m/p-Xylene	sam	9/23/2025 10:01:03 AM	MMDadoda	9/24/2025 2:16:17 AM	Peak Integrated by Software
VSTDICC002	VL042951.D	1,1,2-Trichloroethane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICC002	VL042951.D	1,2-Dichloropropane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICC002	VL042951.D	1,4-Dioxane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICC002	VL042951.D	4-Methyl-2-Pentanone	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICC002	VL042951.D	m/p-Xylene	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICC001	VL042952.D	1,2-Dichloropropane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICC001	VL042952.D	1,4-Dioxane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICC001	VL042952.D	Bromodichloromethane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICC001	VL042952.D	cis-1,3-Dichloropropene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICC001	VL042952.D	Heptane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICC001	VL042952.D	m/p-Xylene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICC001	VL042952.D	t-1,3-Dichloropropene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VL042953.D	1,1,2-Trichloroethane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	1,4-Dioxane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	2,2,4-Trimethylpentane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Benzyl Chloride	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	cis-1,3-Dichloropropene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Ethanol	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Heptane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	m/p-Xylene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Methyl Methacrylate	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	t-1,3-Dichloropropene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Tetrachloroethene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	trans-1,2-Dichloroethene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	1,2-Dibromoethane	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.1	VL042954.D	Carbon Tetrachloride	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	Naphthalene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	Tetrachloroethene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	Trichloroethene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	1,1,1-Trichloroethane	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	1,1,2,2-Tetrachloroethane	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	Carbon Tetrachloride	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	Tetrachloroethene	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	Trichloroethene	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC015	VL042956.D	m/p-Xylene	sam	9/23/2025 10:01:19 AM	MMDadoda	9/24/2025 2:16:27 AM	Peak Integrated by Software
VSTDICV010	VL042957.D	m/p-Xylene	sam	9/23/2025 10:01:52 AM	MMDadoda	9/24/2025 2:16:29 AM	Peak Integrated by Software
VL0922ABS01	VL042959.D	m/p-Xylene	sam	9/23/2025 10:01:29 AM	MMDadoda	9/24/2025 2:16:44 AM	Peak Integrated by Software
Q3130-02DUP	VL042970.D	2,2,4-Trimethylpentane	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q3130-02DUP	VL042970.D	Carbon Tetrachloride	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software
Q3130-02DUP	VL042970.D	m/p-Xylene	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software
Q3130-02DUP	VL042970.D	Propene	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software
Q3130-02DUP	VL042970.D	Tetrachloroethene	sam	9/23/2025 10:03:16 AM	MMDadoda	9/24/2025 2:17:13 AM	Peak Integrated by Software
Q3131-01	VL042974.D	1,2-Dichloroethane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	2-Hexanone	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	4-Methyl-2-Pentanone	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	Acetone	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	Carbon Tetrachloride	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	Chlorodifluoromethane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	Cyclohexane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	Heptane	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software
Q3131-01	VL042974.D	Propene	MMDadoda	9/24/2025 2:17:30 AM	SAM	9/24/2025 2:25:22 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q3131-01DL	VL042975.D	Acetone	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software
Q3131-01DL	VL042975.D	Isopropyl Alcohol	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software
Q3131-01DL	VL042975.D	m/p-Xylene	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software
Q3131-01DL	VL042975.D	Propene	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software
Q3131-01DL	VL042975.D	Toluene	MMDadoda	9/24/2025 2:17:35 AM	SAM	9/24/2025 2:25:25 AM	Peak Integrated by Software
Q3131-02	VL042976.D	4-Methyl-2-Pentanone	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software
Q3131-02	VL042976.D	Acetone	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software
Q3131-02	VL042976.D	Carbon Tetrachloride	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software
Q3131-02	VL042976.D	Chlorodifluoromethane	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software
Q3131-02	VL042976.D	Chloroform	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software
Q3131-02	VL042976.D	Heptane	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software
Q3131-02	VL042976.D	Propene	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software
Q3131-02	VL042976.D	Tetrahydrofuran	MMDadoda	9/24/2025 2:17:37 AM	SAM	9/24/2025 2:25:27 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q3131-02DL	VL042977.D	2,2,4-Trimethylpentane	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software
Q3131-02DL	VL042977.D	Acetone	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software
Q3131-02DL	VL042977.D	Isopropyl Alcohol	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software
Q3131-02DL	VL042977.D	m/p-Xylene	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software
Q3131-02DL	VL042977.D	Toluene	MMDadoda	9/24/2025 2:17:54 AM	SAM	9/24/2025 2:25:28 AM	Peak Integrated by Software

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Fax : 908 789 8922

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL092225

Review By	Mahesh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2676
Initial Calibration Stds	AP2673,AP2674,AP2675
CCC	AP2673
Internal Standard/PEM	AP2676
ICV/I.BLK	AP2671
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042949.D	22 Sep 2025 08:55	SY/MD	Ok
2	VSTDICCC010	VL042950.D	22 Sep 2025 09:39	SY/MD	Ok,M
3	VSTDICC002	VL042951.D	22 Sep 2025 10:14	SY/MD	Ok,M
4	VSTDICC001	VL042952.D	22 Sep 2025 10:48	SY/MD	Ok,M
5	VSTDICC0.5	VL042953.D	22 Sep 2025 11:22	SY/MD	Ok,M
6	VSTDICC0.1	VL042954.D	22 Sep 2025 11:56	SY/MD	Ok,M
7	VSTDICC0.03	VL042955.D	22 Sep 2025 12:30	SY/MD	Ok,M
8	VSTDICC015	VL042956.D	22 Sep 2025 13:05	SY/MD	Ok,M
9	VSTDICV010	VL042957.D	22 Sep 2025 14:15	SY/MD	Ok,M
10	VL0922ABL01	VL042958.D	22 Sep 2025 15:06	SY/MD	Ok
11	VL0922ABS01	VL042959.D	22 Sep 2025 15:52	SY/MD	Ok,M
12	Q3111-01	VL042960.D	22 Sep 2025 16:53	SY/MD	Dilution
13	Q3111-01DL	VL042961.D	22 Sep 2025 17:28	SY/MD	Ok,M
14	Q3112-01	VL042962.D	22 Sep 2025 18:04	SY/MD	Ok,M
15	Q3112-01DL	VL042963.D	22 Sep 2025 18:39	SY/MD	Not Ok
16	Q3112-02	VL042964.D	22 Sep 2025 19:14	SY/MD	Dilution
17	Q3112-02DL	VL042965.D	22 Sep 2025 19:49	SY/MD	Ok
18	Q3112-03	VL042966.D	22 Sep 2025 20:24	SY/MD	Ok,M
19	Q3112-03DL	VL042967.D	22 Sep 2025 20:59	SY/MD	Not Ok
20	VIBLK	VL042968.D	22 Sep 2025 21:35	SY/MD	Ok
21	Q3130-02	VL042969.D	22 Sep 2025 22:11	SY/MD	Ok,M

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL092225

Review By	Mahesh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2676
Initial Calibration Stds	AP2673,AP2674,AP2675
CCC	AP2673
Internal Standard/PEM	AP2676
ICV/I.BLK	AP2671
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q3130-02DUP	VL042970.D	22 Sep 2025 22:48	SY/MD	Ok,M
23	Q3130-02DL	VL042971.D	22 Sep 2025 23:23	SY/MD	Not Ok
24	Q3130-01	VL042972.D	23 Sep 2025 00:00	SY/MD	Ok,M
25	Q3130-01DL	VL042973.D	23 Sep 2025 00:35	SY/MD	Not Ok
26	Q3131-01	VL042974.D	23 Sep 2025 01:11	SY/MD	Dilution
27	Q3131-01DL	VL042975.D	23 Sep 2025 01:46	SY/MD	Ok,M
28	Q3131-02	VL042976.D	23 Sep 2025 02:22	SY/MD	Dilution
29	Q3131-02DL	VL042977.D	23 Sep 2025 02:57	SY/MD	Ok,M
30	Q3132-01	VL042978.D	23 Sep 2025 03:33	SY/MD	Dilution
31	Q3132-01DL	VL042979.D	23 Sep 2025 04:08	SY/MD	Ok,M
32	Q3132-02	VL042980.D	23 Sep 2025 04:44	SY/MD	Ok,M
33	Q3132-02DL	VL042981.D	23 Sep 2025 05:19	SY/MD	Not Ok

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL092225

Review By	Mahesh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2676
Initial Calibration Stds	AP2673,AP2674,AP2675
CCC	AP2673
Internal Standard/PEM	AP2676
ICV/I.BLK	AP2671
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042949.D	22 Sep 2025 08:55		SY/MD	Ok
2	VSTDICCC010	VSTDICCC010	VL042950.D	22 Sep 2025 09:39		SY/MD	Ok,M
3	VSTDICC002	VSTDICC002	VL042951.D	22 Sep 2025 10:14	LR-20	SY/MD	Ok,M
4	VSTDICC001	VSTDICC001	VL042952.D	22 Sep 2025 10:48		SY/MD	Ok,M
5	VSTDICC0.5	VSTDICC0.5	VL042953.D	22 Sep 2025 11:22		SY/MD	Ok,M
6	VSTDICC0.1	VSTDICC0.1	VL042954.D	22 Sep 2025 11:56		SY/MD	Ok,M
7	VSTDICC0.03	VSTDICC0.03	VL042955.D	22 Sep 2025 12:30		SY/MD	Ok,M
8	VSTDICC015	VSTDICC015	VL042956.D	22 Sep 2025 13:05		SY/MD	Ok,M
9	VSTDICV010	ICVVL092225	VL042957.D	22 Sep 2025 14:15	ICV failed for com.#13	SY/MD	Ok,M
10	VL0922ABL01	VL0922ABL01	VL042958.D	22 Sep 2025 15:06		SY/MD	Ok
11	VL0922ABS01	VL0922ABS01	VL042959.D	22 Sep 2025 15:52		SY/MD	Ok,M
12	Q3111-01	SV1	VL042960.D	22 Sep 2025 16:53	Need 40X	SY/MD	Dilution
13	Q3111-01DL	SV1DL	VL042961.D	22 Sep 2025 17:28		SY/MD	Ok,M
14	Q3112-01	SV1	VL042962.D	22 Sep 2025 18:04		SY/MD	Ok,M
15	Q3112-01DL	SV1DL	VL042963.D	22 Sep 2025 18:39	Not Required	SY/MD	Not Ok
16	Q3112-02	SV2	VL042964.D	22 Sep 2025 19:14	Need 40X	SY/MD	Dilution
17	Q3112-02DL	SV2DL	VL042965.D	22 Sep 2025 19:49		SY/MD	Ok
18	Q3112-03	SV3	VL042966.D	22 Sep 2025 20:24		SY/MD	Ok,M

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL092225

Review By	Mahesh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2676
Initial Calibration Stds	AP2673,AP2674,AP2675
CCC	AP2673
Internal Standard/PEM	AP2676
ICV/I.BLK	AP2671
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q3112-03DL	SV3DL	VL042967.D	22 Sep 2025 20:59	Not Required	SY/MD	Not Ok
20	VIBLK	VIBLK	VL042968.D	22 Sep 2025 21:35		SY/MD	Ok
21	Q3130-02	131-1A-2	VL042969.D	22 Sep 2025 22:11		SY/MD	Ok,M
22	Q3130-02DUP	131-1A-2DUP	VL042970.D	22 Sep 2025 22:48		SY/MD	Ok,M
23	Q3130-02DL	131-1A-2DL	VL042971.D	22 Sep 2025 23:23	Not Required	SY/MD	Not Ok
24	Q3130-01	131-1A-1	VL042972.D	23 Sep 2025 00:00		SY/MD	Ok,M
25	Q3130-01DL	131-1A-1DL	VL042973.D	23 Sep 2025 00:35	Not Required	SY/MD	Not Ok
26	Q3131-01	141-1A-1	VL042974.D	23 Sep 2025 01:11	Need 10X	SY/MD	Dilution
27	Q3131-01DL	141-1A-1DL	VL042975.D	23 Sep 2025 01:46		SY/MD	Ok,M
28	Q3131-02	141-1A-2	VL042976.D	23 Sep 2025 02:22	Need 10X	SY/MD	Dilution
29	Q3131-02DL	141-1A-2DL	VL042977.D	23 Sep 2025 02:57		SY/MD	Ok,M
30	Q3132-01	151-1A-1	VL042978.D	23 Sep 2025 03:33	Need 10X	SY/MD	Dilution
31	Q3132-01DL	151-1A-1DL	VL042979.D	23 Sep 2025 04:08		SY/MD	Ok,M
32	Q3132-02	151-1A-2	VL042980.D	23 Sep 2025 04:44		SY/MD	Ok,M
33	Q3132-02DL	151-1A-2DL	VL042981.D	23 Sep 2025 05:19	Not Required	SY/MD	Not Ok

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q3131

Test : TO-15

Prepbatch ID :

Sequence ID/Qc Batch ID: VL092225,

Standard ID :
AP2671,AP2673,AP2674,AP2675,AP2676,

Chemical ID :
A1117,A1138,A1139,A1140,

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Fax : 908 789 8922

Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2396	TO-15 15 PPBV CAL MIX	AP2671	09/17/2025	10/17/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/25/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1139 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2396	TO-15 15 PPBV CAL MIX	AP2673	09/22/2025	10/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/25/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1140 = Final Quantity: 30.000 psi

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2397	TO-15 -2 PPBV CAL.MIX	AP2674	09/22/2025	10/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/25/2025

FROM 26.00000psi of A1117 + 4.00000psi of AP2673 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2668	0.5 PPBV CAL.MIX	AP2675	09/22/2025	10/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/25/2025

FROM 29.00000psi of A1117 + 1.00000psi of AP2673 = Final Quantity: 30.000 psi

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
47	Internal Standard/Surrogate Mix-80 ppbv	AP2676	09/22/2025	10/22/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 09/25/2025

FROM 2.40000psi of A1138 + 27.60000psi of A1117 = Final Quantity: 30.000 psi

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
AIR LIQUIDE	365A-49 / AIR, Compressed	90402401186-01	04/01/2026	04/01/2022 / apatel	04/01/2022 / SAM	A1117

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CUSTOMGAS Solutions	TB500009-110 / TO-15 Internal Standard/Surrogate Standard	BC275465	12/16/2025	07/15/2025 / SAM	07/14/2025 / SAM	A1138

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CUSTOMGAS Solutions	TO15-80-6R-07092 / TO-15 Modified (80 comp) in Nitrogen (addition of 2-methylnaphthalene)	040424-003AR	04/16/2026	07/16/2025 / SAM	07/14/2025 / SAM	A1139

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CUSTOMGAS Solutions	TO15-80-6R-07092 / TO-15 Modified (80 comp) in Nitrogen (addition of 2-methylnaphthalene)	040424-003BR	04/16/2026	07/16/2025 / SAM	07/14/2025 / SAM	A1140

Rec: 07/14/25

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

A 1138

Certificate of Analysis

Customer:

Chem Tech
284 Sheffield Street
Mountainside, NJ 07092

Tel: (908) 789-8900

Cylinder Number: BC275465
Cylinder Size/CGA: 170/180SS
Fill Pressure: 1815 PSIA
Gas Volume: ~170 liters
Date of Mfg: 07/16/2024
Expiration Date: 012/16/2025

Ship To : Chem Tech
284 Sheffield Street
Mountainside, NJ 07092

Customer Number	Ship VIA	Job No.	Customer PO	Mixture Type
00107092NJ	Best Way	040424-003	240404-10	Gravimetric

Component	Nominal Concentration	Actual Concentration*	Mixture Type
Bromochloromethane	1 ppm	1.014 ppm +/- 0.02 ppm	Gravimetric Master Gas
4-Bromofluorobenzene	1 ppm	1.008 ppm +/- 0.02 ppm	
Chlorobenzene-D5	1 ppm	0.993 ppm +/- 0.02 ppm	
1,4-Difluorbenzene	1 ppm	0.979 ppm +/- 0.02 ppm	
Nitrogen	balance	balance	

NOTES:

Blend Tolerance: +/- 10 %

Analytical Tolerance: +/- 5 %

Traceability: NIST by weight set. NIST Traceability No MT001810.
Internal Standards by analysis

Reactive Mixtures: Analyzed twice with required agreement between analyses of 2%.
Required wait time between analyses of >7 days.

Caution: Do not use below 150 PSIG.

Analyst Name: Joseph A. Ernst

QA Signature:

Signature:

Date: 07/16/2024

*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.

Rec 07/14/25

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

A1139

Certificate of Analysis

Customer:

ChemTech
284 Sheffield Street
Mountianside, NJ 07092

Cylinder Number: BC315629
Cylinder Size/CGA: 170/180
Fill Pressure: 1815 PSIA
Gas Volume: 110 liters
Date of Mfg: 04/16/2025
Expiration Date: 04/16/2026
Lot Number: 040424-003AR

Ship To : Chemtech
284 Sheffield Street
Mountainside, NJ 07092

Customer Number	Ship VIA	Job No.	Customer PO	Mixture Type
00107092NJ	Best Way	040424-003R	240404-10	Gravimetric

Component	Nominal Concentration	Actual Concentration*	Mixture Type
Acetone	500 ppb	519 ppb +/- 50 ppb	Gravimetric Master Gas
Acetonitrile	500 ppb	537 ppb +/- 50 ppb	
Acrolein	500 ppb	542 ppb +/- 50 ppb	
Acrylonitrile	500 ppb	532 ppb +/- 50 ppb	
Allyl chloride	500 ppb	509 ppb +/- 50 ppb	
Benzene	500 ppb	486 ppb +/- 50 ppb	
Benzyl Chloride	500 ppb	492 ppb +/- 50 ppb	
Bromodichloromethane	500 ppb	512 ppb +/- 50 ppb	
Bromoform	500 ppb	497 ppb +/- 50 ppb	
1,3-Butadiene	500 ppb	506 ppb +/- 50 ppb	
tert-Butyl alcohol	500 ppb	529 ppb +/- 50 ppb	
n-Butyl benzene	500 ppb	527 ppb +/- 50 ppb	
sec-Butyl benzene	500 ppb	527 ppb +/- 50 ppb	
tert-Butyl benzene	500 ppb	527 ppb +/- 50 ppb	
Carbon disulfide	500 ppb	487 ppb +/- 50 ppb	
Carbon tetrachloride	500 ppb	509 ppb +/- 50 ppb	
Chlorobenzene	500 ppb	494 ppb +/- 50 ppb	
Chlorodibromomethane	500 ppb	490 ppb +/- 50 ppb	
Chloroform	500 ppb	495 ppb +/- 50 ppb	
2-Chlorotoluene	500 ppb	529 ppb +/- 50 ppb	
Cyclohexane	500 ppb	482 ppb +/- 50 ppb	
1,2-Dibromoethane	500 ppb	491 ppb +/- 50 ppb	
1,2-Dichlorobenzene	500 ppb	510 ppb +/- 50 ppb	
1,3-Dichlorobenzene	500 ppb	489 ppb +/- 50 ppb	
1,4-Dichlorobenzene	500 ppb	490 ppb +/- 50 ppb	
Dichlorodifluoromethane (R12)	500 ppb	508 ppb +/- 50 ppb	

1,1-Dichloroethane	500 ppb	494 ppb +/- 50 ppb	
1,2-Dichloroethane	500 ppb	499 ppb +/- 50 ppb	
1,1-Dichlororethylene	500 ppb	496 ppb +/- 50 ppb	
cis 1,2-Dichloroethylene	500 ppb	491 ppb +/- 50 ppb	
trans 1,2-Dichloroethylene	500 ppb	491 ppb +/- 50 ppb	
1,2-Dichloropropane	500 ppb	492 ppb +/- 50 ppb	
cis 1,3-Dichloropropylene	500 ppb	518 ppb +/- 50 ppb	
trans 1,3-Dichloropropylene	500 ppb	468 ppb +/- 50 ppb	
1,2-Dichlorotetrafluoroethane	500 ppb	507 ppb +/- 50 ppb	
1,4-Dioxane	500 ppb	486 ppb +/- 50 ppb	
Ethyl acetate	500 ppb	488 ppb +/- 50 ppb	
Ethyl Alcohol	500 ppb	552 ppb +/- 50 ppb	
Ethyl benzene	500 ppb	499 ppb +/- 50 ppb	
Ethyl Chloride	500 ppb	509 ppb +/- 50 ppb	
4-Ethyltoluene	500 ppb	488 ppb +/- 50 ppb	
n-Heptane	500 ppb	487 ppb +/- 50 ppb	
Hexachloro-1,3-butadiene	500 ppb	489 ppb +/- 50 ppb	
2-Hexanone	500 ppb	493 ppb +/- 50 ppb	
n-Hexane	500 ppb	485 ppb +/- 50 ppb	
Isopropyl alcohol	500 ppb	511 ppb +/- 50 ppb	
Isopropyl benzene	500 ppb	524 ppb +/- 50 ppb	
p-Isopropyl toluene	500 ppb	532 ppb +/- 50 ppb	
Methyl Bromide	500 ppb	505 ppb +/- 50 ppb	
Methyl Chloride	500 ppb	509 ppb +/- 50 ppb	
Methyl ethyl ketone	500 ppb	496 ppb +/- 50 ppb	
Methyl isobutyl ketone	500 ppb	493 ppb +/- 50 ppb	
Methyl methacrylate	500 ppb	529 ppb +/- 50 ppb	
Methyl tertiary butyl ether	500 ppb	483 ppb +/- 50 ppb	
Methylene chloride	500 ppb	498 ppb +/- 50 ppb	
Naphthalene	500 ppb	539 ppb +/- 50 ppb	
n-Propylbenzene	500 ppb	529 ppb +/- 50 ppb	
Propylene	500 ppb	508 ppb +/- 50 ppb	
Styrene	500 ppb	485 ppb +/- 50 ppb	
1,1,1,2-Tetrachloroethane	500 ppb	532 ppb +/- 50 ppb	
1,1,2,2-Tetrachloroethane	500 ppb	534 ppb +/- 50 ppb	
Tetrachloroethylene	500 ppb	487 ppb +/- 50 ppb	
Tetrahydrofuran	500 ppb	535 ppb +/- 50 ppb	
Toluene	500 ppb	491 ppb +/- 50 ppb	
1,2,4-Trichlorobenzene	500 ppb	494 ppb +/- 50 ppb	
1,1,1-Trichloroethane	500 ppb	494 ppb +/- 50 ppb	
1,1,2-Trichloroethane	500 ppb	494 ppb +/- 50 ppb	
Trichloroethylene	500 ppb	488 ppb +/- 50 ppb	
Trichlorofluoromethane	500 ppb	508 ppb +/- 50 ppb	
1,1,2-Trichlorotrifluoroethane	500 ppb	495 ppb +/- 50 ppb	
1,2,4-Trimethylbenzene	500 ppb	494 ppb +/- 50 ppb	
1,3,5-Trimethylbenzene	500 ppb	498 ppb +/- 50 ppb	
2,2,4- Trimethylpentane	500 ppb	489 ppb +/- 50 ppb	
Vinyl acetate	500 ppb	499 ppb +/- 50 ppb	
Vinyl bromide	500 ppb	501 ppb +/- 50 ppb	
Vinyl chloride	500 ppb	509 ppb +/- 50 ppb	
m-Xylene	500 ppb	495 ppb +/- 50 ppb	
o-Xylene	500 ppb	482 ppb +/- 50 ppb	
p-Xylene	500 ppb	488 ppb +/- 50 ppb	
2-Methyl Naphthalene	500 ppb	498 ppb +/- 50 ppb	
R-22	500 ppb	590 ppb +/- 50 ppb	
Nitrogen	balance	balance	

NOTES:	**Blend Tolerance:**	+/- 20 %
	Analytical Tolerance:	+/- 10 %
	Traceability:	NIST by weight set. NIST Traceability No MT001810. Internal Standards by analysis
	Reactive Mixtures:	Analyzed twice with required agreement between analyses of 2%. Required wait time between analyses of >7 days.
	Caution:	Do not use below 150 PSIG.

Analyst Name: Joseph A. Ernst

QA Signature:

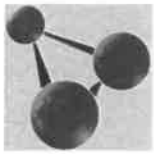
Signature:

Date: 04/16/2025

*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.

Rec 07/14/25

CUSTOMGAS
SOLUTIONS



1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

A1140

Certificate of Analysis

Customer:

ChemTech
284 Sheffield Street
Mountianside, NJ 07092

Cylinder Number: AD49101
Cylinder Size/CGA: 170/180
Fill Pressure: 1815 PSIA
Gas Volume: 110 liters
Date of Mfg: 04/16/2025
Expiration Date: 04/16/2026
Lot Number: 040424-003BR

Ship To : Chemtech
284 Sheffield Street
Mountainside, NJ 07092

Customer Number	Ship VIA	Job No.	Customer PO	Mixture Type
00107092NJ	Best Way	040424-003R	240404-10	Gravimetric

Component	Nominal Concentration	Actual Concentration*	Mixture Type
Acetone	500 ppb	460 ppb +/- 50 ppb	Gravimetric Master Gas
Acetonitrile	500 ppb	471 ppb +/- 50 ppb	
Acrolein	500 ppb	480 ppb +/- 50 ppb	
Acrylonitrile	500 ppb	476 ppb +/- 50 ppb	
Allyl chloride	500 ppb	453 ppb +/- 50 ppb	
Benzene	500 ppb	431 ppb +/- 50 ppb	
Benzyl Chloride	500 ppb	436 ppb +/- 50 ppb	
Bromodichloromethane	500 ppb	454 ppb +/- 50 ppb	
Bromoform	500 ppb	441 ppb +/- 50 ppb	
1,3-Butadiene	500 ppb	449 ppb +/- 50 ppb	
tert-Butyl alcohol	500 ppb	469 ppb +/- 50 ppb	
n-Butyl benzene	500 ppb	467 ppb +/- 50 ppb	
sec-Butyl benzene	500 ppb	467 ppb +/- 50 ppb	
tert-Butyl benzene	500 ppb	467 ppb +/- 50 ppb	
Carbon disulfide	500 ppb	432 ppb +/- 50 ppb	
Carbon tetrachloride	500 ppb	451 ppb +/- 50 ppb	
Chlorobenzene	500 ppb	438 ppb +/- 50 ppb	
Chlorodibromomethane	500 ppb	474 ppb +/- 50 ppb	
Chloroform	500 ppb	438 ppb +/- 50 ppb	
2-Chlorotoluene	500 ppb	469 ppb +/- 50 ppb	
Cyclohexane	500 ppb	430 ppb +/- 50 ppb	
1,2-Dibromoethane	500 ppb	437 ppb +/- 50 ppb	
1,2-Dichlorobenzene	500 ppb	454 ppb +/- 50 ppb	
1,3-Dichlorobenzene	500 ppb	435 ppb +/- 50 ppb	
1,4-Dichlorobenzene	500 ppb	476 ppb +/- 50 ppb	
Dichlorodifluoromethane (R12)	500 ppb	452 ppb +/- 50 ppb	

1,1-Dichloroethane	500 ppb	438 ppb +/- 50 ppb	
1,2-Dichloroethane	500 ppb	442 ppb +/- 50 ppb	
1,1-Dichlororethylene	500 ppb	439 ppb +/- 50 ppb	
cis 1,2-Dichloroethylene	500 ppb	435 ppb +/- 50 ppb	
trans 1,2-Dichloroethylene	500 ppb	435 ppb +/- 50 ppb	
1,2-Dichloropropane	500 ppb	436 ppb +/- 50 ppb	
cis 1,3-Dichloropropylene	500 ppb	460 ppb +/- 50 ppb	
trans 1,3-Dichloropropylene	500 ppb	415 ppb +/- 50 ppb	
1,2-Dichlorotetrafluoroethane	500 ppb	450 ppb +/- 50 ppb	
1,4-Dioxane	500 ppb	431 ppb +/- 50 ppb	
Ethyl acetate	500 ppb	433 ppb +/- 50 ppb	
Ethyl Alcohol	500 ppb	489 ppb +/- 50 ppb	
Ethyl benzene	500 ppb	442 ppb +/- 50 ppb	
Ethyl Chloride	500 ppb	451 ppb +/- 50 ppb	
4-Ethyltoluene	500 ppb	432 ppb +/- 50 ppb	
n-Heptane	500 ppb	434 ppb +/- 50 ppb	
Hexachloro-1,3-butadiene	500 ppb	436 ppb +/- 50 ppb	
2-Hexanone	500 ppb	437 ppb +/- 50 ppb	
n-Hexane	500 ppb	432 ppb +/- 50 ppb	
Isopropyl alcohol	500 ppb	455 ppb +/- 50 ppb	
Isopropyl benzene	500 ppb	465 ppb +/- 50 ppb	
p-Isopropyl toluene	500 ppb	530 ppb +/- 50 ppb	
Methyl Bromide	500 ppb	450 ppb +/- 50 ppb	
Methyl Chloride	500 ppb	453 ppb +/- 50 ppb	
Methyl ethyl ketone	500 ppb	442 ppb +/- 50 ppb	
Methyl isobutyl ketone	500 ppb	439 ppb +/- 50 ppb	
Methyl methacrylate	500 ppb	469 ppb +/- 50 ppb	
Methyl tertiary butyl ether	500 ppb	430 ppb +/- 50 ppb	
Methylene chloride	500 ppb	443 ppb +/- 50 ppb	
Naphthalene	500 ppb	478 ppb +/- 50 ppb	
n-Propylbenzene	500 ppb	525 ppb +/- 50 ppb	
Propylene	500 ppb	452 ppb +/- 50 ppb	
Styrene	500 ppb	432 ppb +/- 50 ppb	
1,1,1,2-Tetrachloroethane	500 ppb	471 ppb +/- 50 ppb	
1,1,2,2-Tetrachloroethane	500 ppb	431 ppb +/- 50 ppb	
Tetrachloroethylene	500 ppb	434 ppb +/- 50 ppb	
Tetrahydrofuran	500 ppb	477 ppb +/- 50 ppb	
Toluene	500 ppb	438 ppb +/- 50 ppb	
1,2,4-Trichlorobenzene	500 ppb	440 ppb +/- 50 ppb	
1,1,1-Trichloroethane	500 ppb	440 ppb +/- 50 ppb	
1,1,2-Trichloroethane	500 ppb	440 ppb +/- 50 ppb	
Trichloroethylene	500 ppb	435 ppb +/- 50 ppb	
Trichlorofluoromethane	500 ppb	453 ppb +/- 50 ppb	
1,1,2-Trichlorotrifluoroethane	500 ppb	441 ppb +/- 50 ppb	
1,2,4-Trimethylbenzene	500 ppb	440 ppb +/- 50 ppb	
1,3,5-Trimethylbenzene	500 ppb	444 ppb +/- 50 ppb	
2,2,4- Trimethylpentane	500 ppb	435 ppb +/- 50 ppb	
Vinyl acetate	500 ppb	444 ppb +/- 50 ppb	
Vinyl bromide	500 ppb	450 ppb +/- 50 ppb	
Vinyl chloride	500 ppb	451 ppb +/- 50 ppb	
m-Xylene	500 ppb	439 ppb +/- 50 ppb	
o-Xylene	500 ppb	427 ppb +/- 50 ppb	
p-Xylene	500 ppb	433 ppb +/- 50 ppb	
2-Methyl Naphthalene	500 ppb	497 ppb +/- 50 ppb	
R-22	500 ppb	435 ppb +/- 50 ppb	
Nitrogen	balance	balance	

NOTES:	**Blend Tolerance:**	+/- 20 %
	Analytical Tolerance:	+/- 10 %
	Traceability:	NIST by weight set. NIST Traceability No MT001810. Internal Standards by analysis
	Reactive Mixtures:	Analyzed twice with required agreement between analyses of 2%. Required wait time between analyses of >7 days.
	Caution:	Do not use below 150 PSIG.

Analyst Name: Joseph A. Ernst

QA Signature:

Signature:

Date: 04/16/2025

*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Process Report

Order ID : Q3131

Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
09/18/2025	B2509029	Q3131-02	-6.7	10282	6 L	10771		C2508002	**VL042854.D** Seq :VL081325 TUNE : VL042841.D ICAL : VL042847.D CCAL : VL042842.D MB : VL042850.D
09/18/2025	B2509029	Q3131-01	-6.7	10275	6 L	10478		C2508002	**VL042854.D** Seq :VL081325 TUNE : VL042841.D ICAL : VL042847.D CCAL : VL042842.D MB : VL042850.D

Canister Cleaning

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

Canister Batch : C2508002

Type of Canister : 6 L

Cleaning Date : 08/07/2025

Analyst : SAM

Oven Temperature : 125.0 c

Canister	Vaccum After Cleaning ("Hg)	Vaccum After Cleaning Date	Analysis Date	VAC 24Hr ("Hg)	Vaccum After 24hr Date	New Sample Number	QC Canister	File
10599	-30	08/08/2025	08/13/2025	-30	08/11/2025	Q3132-01	10282	VL042854.D
10294	-30	08/08/2025	08/13/2025	-30	08/11/2025	Q3132-02	10282	VL042854.D
10154	-30	08/08/2025	08/13/2025	-30	08/11/2025	Q3130-01	10282	VL042854.D
10197	-30	08/08/2025	08/13/2025	-30	08/11/2025	Q3130-02	10282	VL042854.D
10267	-30	08/08/2025	08/13/2025	-30	08/11/2025	Q3154-01	10282	VL042854.D
10282	-30	08/08/2025	08/13/2025	-30	08/11/2025	Q3131-02	10282	VL042854.D
10275	-30	08/08/2025	08/13/2025	-30	08/11/2025	Q3131-01	10282	VL042854.D

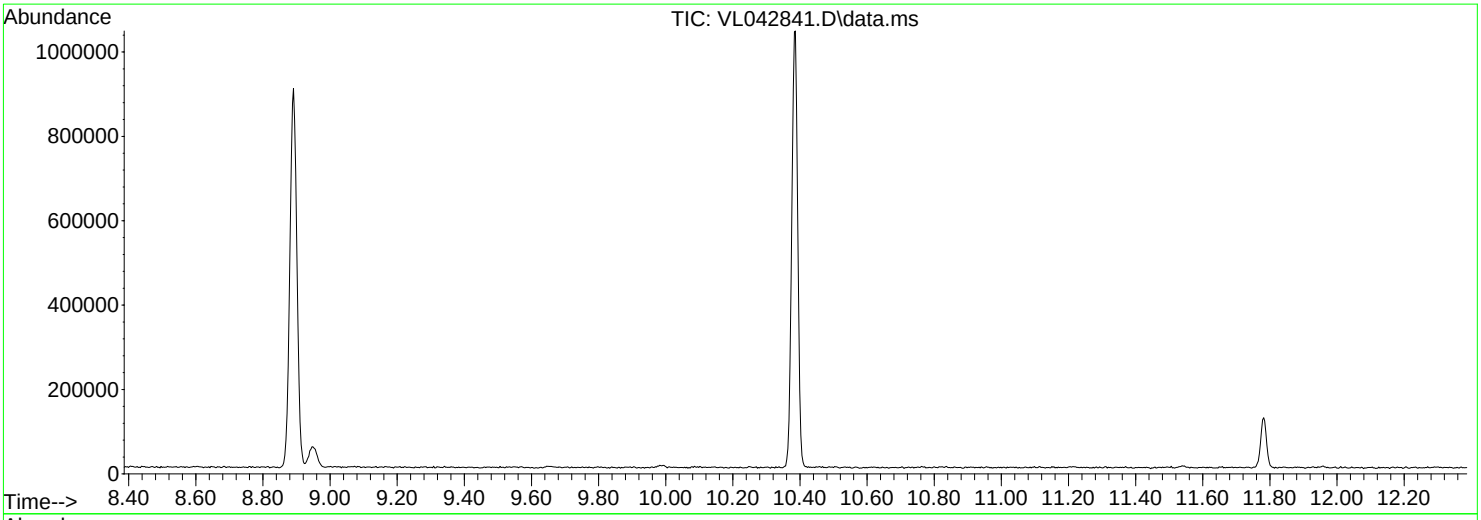
BFB

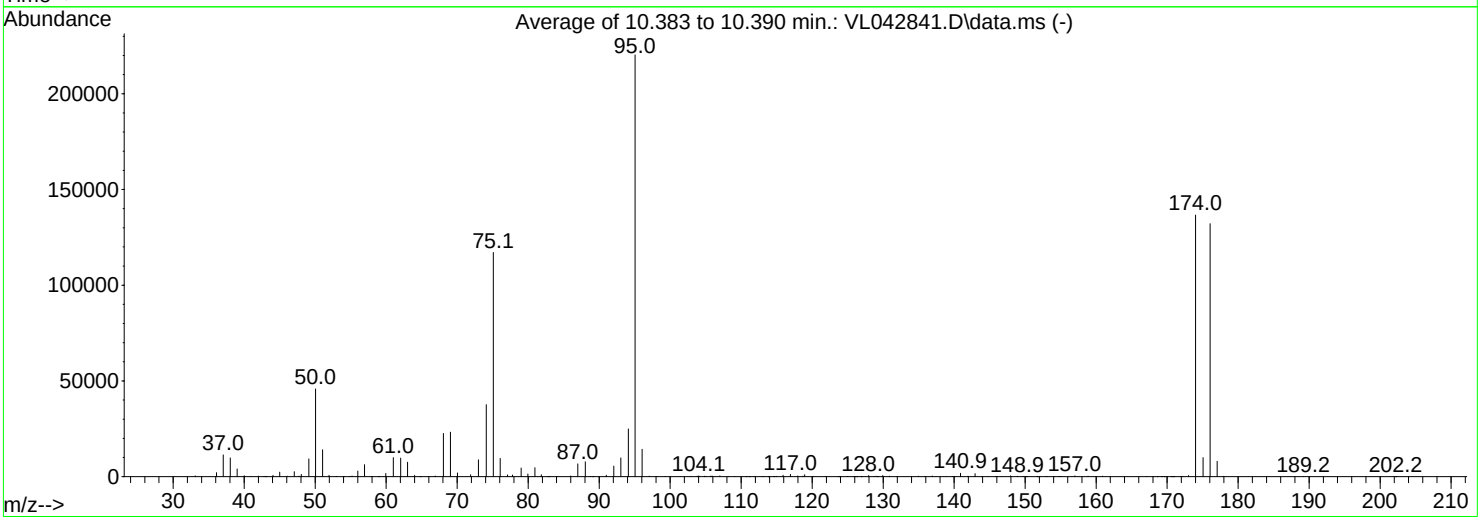
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042841.D
Acq On : 13 Aug 2025 07:45
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Thu Aug 14 02:12:54 2025





AutoFind: Scans 3181, 3182, 3183; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	20.8	45819	PASS
75	95	30	66	53.1	117101	PASS
95	95	100	100	100.0	220336	PASS
96	95	5	9	6.5	14308	PASS
173	174	0.00	2	0.4	581	PASS
174	95	50	120	62.0	136669	PASS
175	174	4	9	7.3	9984	PASS
176	174	93	101	96.7	132147	PASS
177	176	5	9	6.1	8054	PASS

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL081325AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Thu Aug 14 02:12:54 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL042847.D 0.1 =VL042846.D 0.5 =VL042845.D 1 =VL042844.D 2 =VL042843.D 10 =VL042842.D 15 =VL042848.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.566	1.525	1.511	1.343	1.383	1.466	6.61
3)		Chlorodifluoro...			1.752	1.621	1.714	1.509	1.504	1.620	7.05
4)		Chloromethane			0.648	0.618	0.606	0.533	0.551	0.591	8.09
5)	T	Vinyl Chloride	0.728	0.639	0.593	0.559	0.550	0.502	0.507	0.582	13.72
6)	T	Bromomethane			0.248	0.268	0.239	0.203	0.206	0.233	12.06
7)		Chloroethane			0.266	0.240	0.219	0.202	0.210	0.227	11.46
8)	T	Dichlorotetraf...			1.273	1.235	1.245	1.122	1.122	1.199	6.02
9)	T	Propene			0.824	0.692	0.715	0.656	0.611	0.700	11.40
10)	T	Heptane			2.009	2.011	1.917	1.718	1.713	1.874	7.96
11)	T	Trichlorofluor...			1.614	1.533	1.467	1.271	1.345	1.446	9.59
12)	T	1,1,2-Trichlor...			1.259	1.202	1.189	1.047	1.066	1.152	7.95
13)		Ethanol			0.089	0.069	0.070	0.046	0.047	0.064	27.87
14)	T	Bromoethene			0.462	0.416	0.436	0.381	0.391	0.417	7.89
15)	T	Acetone			1.708	1.475	1.476	0.950	1.005	1.323	24.92
16)	T	1,3-Butadiene			0.783	0.633	0.579	0.500	0.503	0.600	19.47
17)		tert-Butyl alc...			1.920	1.660	1.557	1.371	1.335	1.569	15.14
18)	T	1,1-Dichloroet...			0.552	0.509	0.532	0.469	0.472	0.507	7.21
19)	T	Isopropyl Alcohol			0.976	0.847	0.799	0.649	0.679	0.790	16.79
20)	T	Methylene Chlo...			0.792	0.596	0.544	0.414	0.425	0.554	27.79
21)	T	Allyl Chloride			1.122	0.902	0.945	0.850	0.854	0.935	11.98
22)	T	trans-1,2-Dich...			0.630	0.613	0.604	0.537	0.546	0.586	7.10
23)	T	Vinyl Acetate			2.161	1.733	1.849	1.663	1.689	1.819	11.22
24)	T	1,1-Dichloroet...			1.317	1.223	1.185	1.040	1.088	1.171	9.38
25)	T	Ethyl Acetate			3.491	3.346	3.324	2.932	2.914	3.202	8.19
26)	T	Hexane			1.557	1.552	1.522	1.392	1.366	1.478	6.19
27)	T	Carbon Disulfide			1.504	1.513	1.511	1.314	1.348	1.438	6.84
28)	T	Methyl tert-Bu...			0.833	0.747	0.817	0.661	0.710	0.754	9.61
29)	T	Chloroform			2.299	2.183	2.166	1.932	1.970	2.110	7.32
30)	T	Cyclohexane			1.425	1.283	1.340	1.214	1.217	1.296	6.87
31)	T	cis-1,2-Dichlo...			1.625	1.524	1.524	1.346	1.362	1.476	8.06
32)	T	1,1,1-Trichlor...	2.448	2.528	2.209	2.148	2.215	1.999	2.063	2.230	8.69
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.753	0.702	0.700	0.610	0.611	0.675	9.33
35)	T	Carbon Tetrach...	0.736	0.738	0.682	0.700	0.692	0.636	0.643	0.689	5.84
36)	T	Benzene			1.013	0.978	0.990	0.912	0.896	0.958	5.33
37)	T	1,2-Dichloroet...			0.512	0.516	0.503	0.483	0.488	0.500	2.87
38)	T	Trichloroethene	0.416	0.448	0.501	0.448	0.453	0.399	0.397	0.437	8.35
39)	T	1,2-Dichloropr...			0.378	0.365	0.356	0.324	0.326	0.350	6.84

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL081325AIR.M

40)	T	1,4-Dioxane		0.189	0.185	0.166	0.148	0.144	0.166	12.22
41)	T	Tetrahydrofuran		0.395	0.389	0.392	0.355	0.351	0.376	5.64
42)	T	Bromodichlorom...		0.786	0.742	0.777	0.708	0.714	0.745	4.77
43)		Methyl Methacr...		0.427	0.402	0.415	0.368	0.362	0.394	7.31
44)	T	2,2,4-Trimethy...		1.728	1.719	1.676	1.515	1.489	1.625	7.06
45)	T	t-1,3-Dichloro...		0.450	0.464	0.456	0.428	0.427	0.445	3.73
46)	T	cis-1,3-Dichlo...		0.568	0.559	0.578	0.539	0.529	0.555	3.67
47)	T	1,1,2-Trichlor...		0.395	0.382	0.386	0.341	0.348	0.371	6.52
48)	T	Dibromochlorom...		0.596	0.605	0.632	0.584	0.581	0.600	3.44
49)	T	Bromoform		0.466	0.514	0.535	0.491	0.467	0.495	6.07
50)	T	4-Methyl-2-Pen...		0.960	0.917	0.946	0.881	0.859	0.913	4.67
51)	T	2-Hexanone		0.723	0.737	0.750	0.699	0.683	0.718	3.82
52)	T	Tetrachloroethene	0.391	0.379	0.369	0.333	0.345	0.313	0.295	0.346	10.19
53)	T	Toluene		1.219	1.180	1.160	1.072	1.061	1.138	6.09
54)	T	1,2-Dibromoethane	0.599	0.549	0.532	0.552	0.506	0.512	0.542	6.24
55)	I	Chlorobenzene-d5	----------ISTD----------							
56)		1,1,1,2-Tetrac...		0.534	0.549	0.551	0.476	0.476	0.517	7.39
57)	T	Chlorobenzene		1.026	0.990	0.994	0.878	0.866	0.951	7.68
58)	T	Ethyl Benzene		1.854	1.866	1.838	1.636	1.630	1.765	6.84
59)	T	m/p-Xylene		1.447	1.454	1.455	1.283	1.277	1.383	6.81
60)	T	o-Xylene		1.532	1.472	1.445	1.266	1.242	1.391	9.31
61)	T	Styrene		0.711	0.677	0.660	0.610	0.601	0.652	7.09
62)		Isopropylbenzene		2.149	2.194	2.133	1.852	1.838	2.033	8.53
63)	T	1,1,2,2-Tetrac...	0.881	0.774	0.795	0.784	0.772	0.674	0.677	0.765	9.39
64)		n-propylbenzene		0.570	0.528	0.549	0.475	0.472	0.519	8.47
65)		tert-Butylbenzene		1.907	1.991	1.910	1.605	1.549	1.793	11.19
66)	T	Benzyl Chloride		0.232	0.226	0.246	0.227	0.207	0.228	6.21
67)		sec-Butylbenzene		2.669	2.754	2.706	2.250	2.202	2.516	10.62
68)	S	1-Bromo-4-Fluo...	0.736	0.746	0.755	0.760	0.744	0.755	0.754	0.750	1.09
69)		p-Isopropyltol...		2.338	2.372	2.328	1.905	1.856	2.160	11.85
70)		n-Butylbenzene		2.234	2.303	2.333	1.927	1.915	2.142	9.58
71)		2-Chlorotoluene		1.709	1.719	1.641	1.418	1.408	1.579	9.77
72)	T	4-Ethyltoluene		1.738	1.806	1.784	1.563	1.543	1.687	7.39
73)	T	1,3,5-Trimethy...		1.548	1.535	1.512	1.293	1.283	1.434	9.37
74)	T	1,2,4-Trimethy...		1.710	1.706	1.698	1.394	1.365	1.574	11.33
75)	T	1,3-Dichlorobe...		0.937	0.946	0.967	0.831	0.795	0.895	8.59
76)	T	1,4-Dichlorobe...		0.966	0.946	0.978	0.833	0.803	0.905	8.93
77)	T	1,2-Dichlorobe...		0.937	0.956	0.947	0.781	0.761	0.876	11.03
78)	T	Hexachloro-1,3...		0.814	0.845	0.804	0.572	0.556	0.718	19.74
79)	T	Naphthalene	1.174	1.383	1.647	1.746	1.315	1.300	1.427	15.50
80)	T	Naphthalene,2-...		0.430	0.554	0.708	0.478	0.497	0.533	20.15
81)	T	1,2,4-Trichlor...		0.623	0.797	0.855	0.661	0.650	0.717	14.24

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042842.D
Acq On : 13 Aug 2025 08:30
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:45:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	133104	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	413632	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	370372	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	279557	10.064	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	178799	9.166	ppbv	100
3) Chlorodifluoromethane	1.476	51	200866	9.306	ppbv	100
4) Chloromethane	1.534	50	70952	9.013	ppbv	100
5) Vinyl Chloride	1.583	62	66768	8.612	ppbv	100
6) Bromomethane	1.670	94	26964	8.698	ppbv	100
7) Chloroethane	1.706	64	26884	8.879	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	149341	9.355	ppbv	100
9) Propene	1.486	41	87352	9.380	ppbv	100
10) Heptane	4.988	43	228679	9.186	ppbv	100
11) Trichlorofluoromethane	1.881	101	169157	8.789	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.143	101	139340	9.083	ppbv	100
13) Ethanol	1.722	45	6172	6.690	ppbv	100
14) Bromoethene	1.784	108	50730	9.135	ppbv	100
15) Acetone	1.839	43	126419	7.180	ppbv	100
16) 1,3-Butadiene	1.612	39	66595	8.343	ppbv	100
17) tert-Butyl alcohol	2.043	59	182511	8.741	ppbv	100
18) 1,1-Dichloroethene	2.036	96	62397	9.252	ppbv	100
19) Isopropyl Alcohol	1.887	45	86367	8.213	ppbv	100
20) Methylene Chloride	2.065	84	55107	7.471	ppbv	100
21) Allyl Chloride	2.098	41	113105	9.093	ppbv	100
22) trans-1,2-Dichloroethene	2.344	96	71518	9.482	ppbv	100
23) Vinyl Acetate	2.467	43	221395	9.558	ppbv	100
24) 1,1-Dichloroethane	2.412	63	138444	8.885	ppbv	100
25) Ethyl Acetate	2.839	43	390295	9.159	ppbv	100
26) Hexane	2.829	57	185288	9.420	ppbv	100
27) Carbon Disulfide	2.153	76	174928	9.138	ppbv	100
28) Methyl tert-Butyl Ether	2.444	73	87929	8.767	ppbv	100
29) Chloroform	2.852	83	257176	9.158	ppbv	100
30) Cyclohexane	3.862	84	161540	9.367	ppbv	100
31) cis-1,2-Dichloroethene	2.726	61	179162	9.107	ppbv	100
32) 1,1,1-Trichloroethane	3.373	97	266021	8.946	ppbv	100
34) 2-Butanone	2.560	43	252300	9.033	ppbv	100
35) Carbon Tetrachloride	3.771	117	262983	9.222	ppbv	100
36) Benzene	3.664	78	377113	9.521	ppbv	100
37) 1,2-Dichloroethane	3.224	62	199762	9.653	ppbv	100
38) Trichloroethene	4.557	130	164881	9.115	ppbv	100
39) 1,2-Dichloropropane	4.324	63	133996	9.263	ppbv	100
40) 1,4-Dioxane	4.590	88	61378	9.064	ppbv #	100
41) Tetrahydrofuran	3.059	42	147025	9.442	ppbv	100
42) Bromodichloromethane	4.499	83	292909	9.499	ppbv	100
43) Methyl Methacrylate	4.891	69	152035	9.357	ppbv	100
44) 2,2,4-Trimethylpentane	4.648	57	626465	9.420	ppbv	100
45) t-1,3-Dichloropropene	6.425	75	177207	9.616	ppbv	100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042842.D
Acq On : 13 Aug 2025 08:30
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:45:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.609	75	222921	9.635	ppbv		100
47) 1,1,2-Trichloroethane	6.590	97	141105	9.215	ppbv		100
48) Dibromochloromethane	7.396	129	241553	9.739	ppbv		100
49) Bromoform	9.490	173	202975	9.923	ppbv		100
50) 4-Methyl-2-Pentanone	5.761	43	364306	9.616	ppbv		100
51) 2-Hexanone	7.441	43	289052	9.730	ppbv	#	100
52) Tetrachloroethene	8.234	164	129484	9.026	ppbv		100
53) Toluene	6.943	91	443400	9.407	ppbv		100
54) 1,2-Dibromoethane	7.661	107	209330	9.345	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.933	131	176135	9.196	ppbv		100
57) Chlorobenzene	8.930	112	325303	9.237	ppbv		100
58) Ethyl Benzene	9.364	91	605785	9.268	ppbv		100
59) m/p-Xylene	9.542	91	950548m	18.524	ppbv		
60) o-Xylene	9.972	91	469073	9.102	ppbv		100
61) Styrene	9.879	104	226056	9.362	ppbv		100
62) Isopropylbenzene	10.549	105	685983	9.108	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.972	83	249621	8.870	ppbv		100
64) n-propylbenzene	10.995	120	175986	9.158	ppbv		100
65) tert-Butylbenzene	11.539	119	594314	8.951	ppbv		100
66) Benzyl Chloride	11.620	91	84156	9.985	ppbv		100
67) sec-Butylbenzene	11.772	105	833378	8.943	ppbv		100
69) p-Isopropyltoluene	11.931	119	705700	8.820	ppbv		100
70) n-Butylbenzene	12.287	91	713713	8.995	ppbv		100
71) 2-Chlorotoluene	10.908	91	525235	8.981	ppbv		100
72) 4-Ethyltoluene	11.131	105	578931	9.267	ppbv		100
73) 1,3,5-Trimethylbenzene	11.209	105	478784	9.012	ppbv		100
74) 1,2,4-Trimethylbenzene	11.542	105	516253	8.853	ppbv		100
75) 1,3-Dichlorobenzene	11.613	146	307640	9.280	ppbv		100
76) 1,4-Dichlorobenzene	11.678	146	308542	9.203	ppbv		100
77) 1,2-Dichlorobenzene	11.953	146	289119	8.907	ppbv		100
78) Hexachloro-1,3-Butadiene	13.885	225	211996	7.968	ppbv		100
79) Naphthalene	13.516	128	487174	9.335	ppbv		100
80) Naphthalene,2-methyl-	14.462	142	176880	9.000	ppbv		100
81) 1,2,4-Trichlorobenzene	13.445	180	244998	9.220	ppbv		100

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

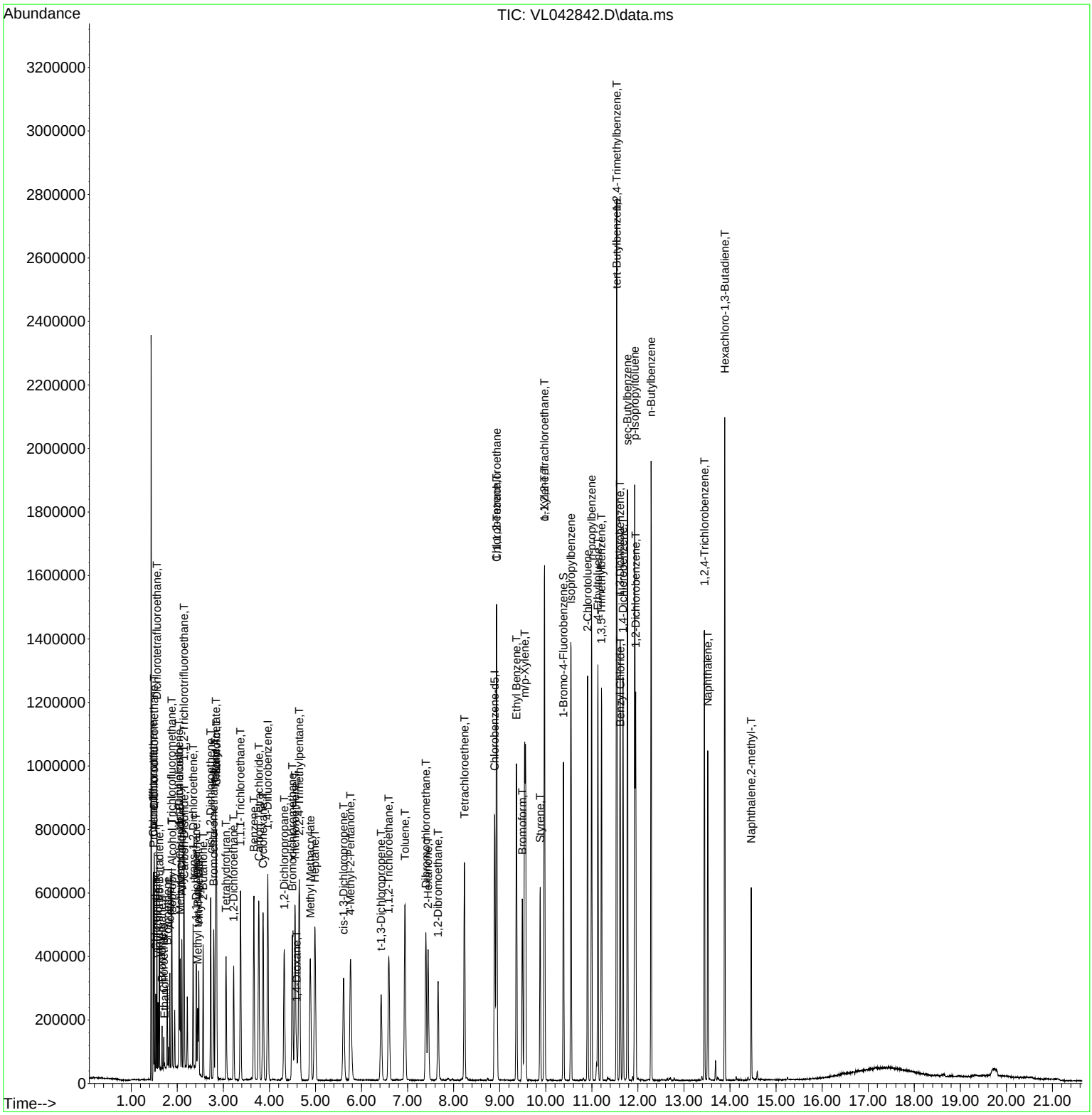
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042842.D
Acq On : 13 Aug 2025 08:30
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:45:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042843.D
Acq On : 13 Aug 2025 09:06
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:46:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.794	49	130555	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	408144	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	363830	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	270774	9.923	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	39443	2.061	ppbv	99
3) Chlorodifluoromethane	1.480	51	44759	2.114	ppbv	96
4) Chloromethane	1.535	50	15826	2.050	ppbv	99
5) Vinyl Chloride	1.583	62	14358	1.888	ppbv	97
6) Bromomethane	1.670	94	6248	2.055	ppbv	97
7) Chloroethane	1.706	64	5717	1.925	ppbv	94
8) Dichlorotetrafluoroethane	1.557	85	32496	2.075	ppbv	98
9) Propene	1.486	41	18678	2.045	ppbv	89
10) Heptane	4.991	43	50062	2.050	ppbv	97
11) Trichlorofluoromethane	1.881	101	38308	2.029	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.146	101	31052	2.064	ppbv	99
13) Ethanol	1.725	45	1817m	2.008	ppbv	
14) Bromoethene	1.784	108	11376	2.089	ppbv	96
15) Acetone	1.839	43	38531	2.231	ppbv	96
16) 1,3-Butadiene	1.612	39	15122	1.932	ppbv	98
17) tert-Butyl alcohol	2.046	59	40652	1.985	ppbv	97
18) 1,1-Dichloroethene	2.039	96	13883	2.099	ppbv	95
19) Isopropyl Alcohol	1.891	45	20866	2.023	ppbv #	39
20) Methylene Chloride	2.065	84	14204	1.963	ppbv #	92
21) Allyl Chloride	2.101	41	24662	2.021	ppbv	96
22) trans-1,2-Dichloroethene	2.344	96	15773	2.132	ppbv	96
23) Vinyl Acetate	2.467	43	48269	2.125	ppbv #	98
24) 1,1-Dichloroethane	2.415	63	30931	2.024	ppbv	98
25) Ethyl Acetate	2.842	43	86804	2.077	ppbv	98
26) Hexane	2.832	57	39735	2.060	ppbv	94
27) Carbon Disulfide	2.156	76	39466	2.102	ppbv #	15
28) Methyl tert-Butyl Ether	2.444	73	21341	2.169	ppbv	96
29) Chloroform	2.855	83	56553	2.053	ppbv	95
30) Cyclohexane	3.868	84	34992	2.069	ppbv	98
31) cis-1,2-Dichloroethene	2.726	61	39783	2.062	ppbv	95
32) 1,1,1-Trichloroethane	3.376	97	57837	1.983	ppbv	100
34) 2-Butanone	2.564	43	57172	2.075	ppbv	98
35) Carbon Tetrachloride	3.771	117	56459	2.007	ppbv	97
36) Benzene	3.664	78	80781	2.067	ppbv	98
37) 1,2-Dichloroethane	3.227	62	41034	2.010	ppbv	97
38) Trichloroethene	4.561	130	36990	2.072	ppbv #	86
39) 1,2-Dichloropropane	4.328	63	29059	2.036	ppbv	98
40) 1,4-Dioxane	4.606	88	13510m	2.022	ppbv	
41) Tetrahydrofuran	3.062	42	31994	2.082	ppbv	97
42) Bromodichloromethane	4.503	83	63436	2.085	ppbv	97
43) Methyl Methacrylate	4.888	69	33851m	2.111	ppbv	
44) 2,2,4-Trimethylpentane	4.655	57	136794	2.085	ppbv	98
45) t-1,3-Dichloropropene	6.428	75	37248	2.048	ppbv	90

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042843.D
Acq On : 13 Aug 2025 09:06
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:46:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.609	75	47201m	2.067	ppbv		
47)	1,1,2-Trichloroethane	6.593	97	31477m	2.083	ppbv		
48)	Dibromochloromethane	7.399	129	51620	2.109	ppbv		100
49)	Bromoform	9.493	173	43662	2.163	ppbv		99
50)	4-Methyl-2-Pentanone	5.768	43	77225	2.066	ppbv		99
51)	2-Hexanone	7.451	43	61210	2.088	ppbv	#	98
52)	Tetrachloroethene	8.234	164	28166	1.990	ppbv		92
53)	Toluene	6.946	91	94690	2.036	ppbv		98
54)	1,2-Dibromoethane	7.665	107	45071	2.039	ppbv		98
56)	1,1,1,2-Tetrachloroethane	8.933	131	40090	2.131	ppbv		97
57)	Chlorobenzene	8.933	112	72296	2.090	ppbv		97
58)	Ethyl Benzene	9.364	91	133719	2.083	ppbv		99
59)	m/p-Xylene	9.558	91	211704m	4.200	ppbv		
60)	o-Xylene	9.972	91	105125	2.077	ppbv		100
61)	Styrene	9.879	104	48027	2.025	ppbv		96
62)	Isopropylbenzene	10.545	105	155223	2.098	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.972	83	56139	2.031	ppbv		98
64)	n-propylbenzene	10.995	120	39922	2.115	ppbv		97
65)	tert-Butylbenzene	11.536	119	139019	2.132	ppbv		99
66)	Benzyl Chloride	11.623	91	17893	2.161	ppbv		97
67)	sec-Butylbenzene	11.772	105	196899	2.151	ppbv		98
69)	p-Isopropyltoluene	11.931	119	169429	2.156	ppbv		99
70)	n-Butylbenzene	12.287	91	169768	2.178	ppbv		99
71)	2-Chlorotoluene	10.908	91	119382	2.078	ppbv		99
72)	4-Ethyltoluene	11.131	105	129786	2.115	ppbv		99
73)	1,3,5-Trimethylbenzene	11.212	105	110043	2.109	ppbv		99
74)	1,2,4-Trimethylbenzene	11.542	105	123554	2.157	ppbv		97
75)	1,3-Dichlorobenzene	11.613	146	70330	2.160	ppbv		100
76)	1,4-Dichlorobenzene	11.678	146	71160	2.161	ppbv		99
77)	1,2-Dichlorobenzene	11.953	146	68944	2.162	ppbv		98
78)	Hexachloro-1,3-Butadiene	13.886	225	58509	2.239	ppbv		100
79)	Naphthalene	13.517	128	127025	2.478	ppbv		99
80)	Naphthalene,2-methyl-	14.462	142	51541	2.670	ppbv		100
81)	1,2,4-Trichlorobenzene	13.445	180	62216	2.384	ppbv		98

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

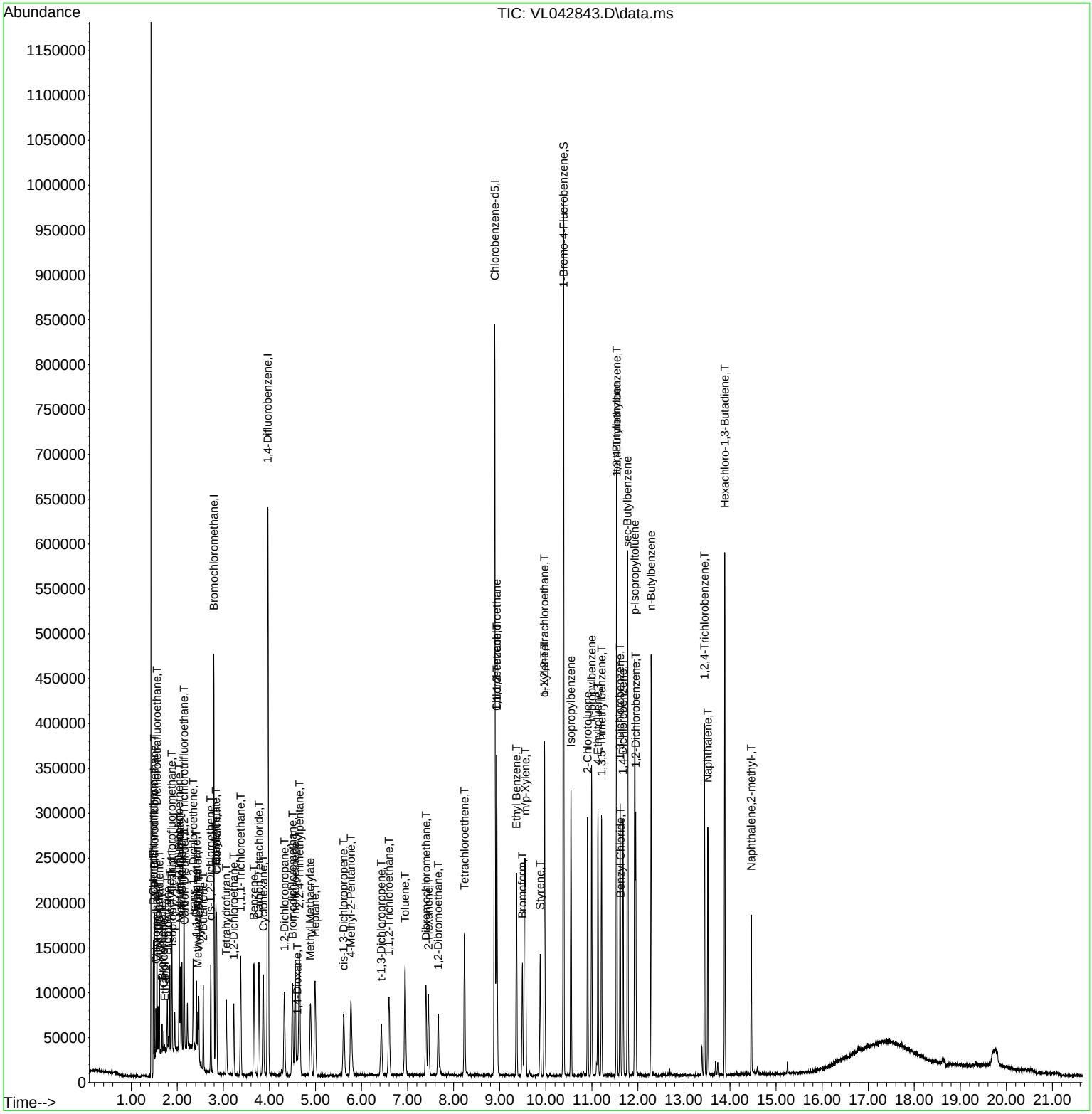
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042843.D
Acq On : 13 Aug 2025 09:06
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:46:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042844.D
Acq On : 13 Aug 2025 09:41
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:47:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.791	49	128542	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	400305	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	349577	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	265708	10.135	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	19603	1.041	ppbv	99
3) Chlorodifluoromethane	1.476	51	20833	0.999	ppbv	93
4) Chloromethane	1.535	50	7948	1.045	ppbv	96
5) Vinyl Chloride	1.583	62	7189	0.960	ppbv	96
6) Bromomethane	1.667	94	3446	1.151	ppbv	84
7) Chloroethane	1.706	64	3089	1.056	ppbv	93
8) Dichlorotetrafluoroethane	1.557	85	15872	1.030	ppbv	100
9) Propene	1.486	41	8897	0.989	ppbv	89
10) Heptane	4.985	43	25850m	1.075	ppbv	
11) Trichlorofluoromethane	1.881	101	19701	1.060	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.143	101	15446	1.043	ppbv	97
13) Ethanol	1.722	45	883m	0.991	ppbv	
14) Bromoethene	1.784	108	5343	0.996	ppbv #	78
15) Acetone	1.839	43	18961	1.115	ppbv	98
16) 1,3-Butadiene	1.609	39	8133	1.055	ppbv	98
17) tert-Butyl alcohol	2.046	59	21342	1.058	ppbv #	93
18) 1,1-Dichloroethene	2.040	96	6549	1.006	ppbv	93
19) Isopropyl Alcohol	1.888	45	10893	1.073	ppbv #	39
20) Methylene Chloride	2.062	84	7661	1.076	ppbv #	90
21) Allyl Chloride	2.098	41	11598	0.966	ppbv	88
22) trans-1,2-Dichloroethene	2.344	96	7882m	1.082	ppbv	
23) Vinyl Acetate	2.467	43	22270	0.996	ppbv #	96
24) 1,1-Dichloroethane	2.412	63	15727	1.045	ppbv	98
25) Ethyl Acetate	2.842	43	43007	1.045	ppbv	98
26) Hexane	2.829	57	19944	1.050	ppbv	92
27) Carbon Disulfide	2.153	76	19450	1.052	ppbv #	2
28) Methyl tert-Butyl Ether	2.444	73	9600	0.991	ppbv #	88
29) Chloroform	2.852	83	28055	1.034	ppbv	97
30) Cyclohexane	3.865	84	16492	0.990	ppbv	90
31) cis-1,2-Dichloroethene	2.723	61	19591	1.031	ppbv	98
32) 1,1,1-Trichloroethane	3.373	97	27607	0.961	ppbv	97
34) 2-Butanone	2.564	43	28105	1.040	ppbv	98
35) Carbon Tetrachloride	3.768	117	28008	1.015	ppbv	93
36) Benzene	3.661	78	39137	1.021	ppbv #	94
37) 1,2-Dichloroethane	3.224	62	20645	1.031	ppbv	97
38) Trichloroethene	4.555	130	17921	1.024	ppbv #	89
39) 1,2-Dichloropropane	4.325	63	14595m	1.042	ppbv	
40) 1,4-Dioxane	4.603	88	7386m	1.127	ppbv	
41) Tetrahydrofuran	3.062	42	15552	1.032	ppbv	94
42) Bromodichloromethane	4.499	83	29683	0.995	ppbv	99
43) Methyl Methacrylate	4.885	69	16073m	1.022	ppbv	
44) 2,2,4-Trimethylpentane	4.645	57	68813m	1.069	ppbv	
45) t-1,3-Dichloropropene	6.419	75	18580m	1.042	ppbv	

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042844.D
Acq On : 13 Aug 2025 09:41
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:47:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.610	75	22372	0.999	ppbv		94
47)	1,1,2-Trichloroethane	6.597	97	15295	1.032	ppbv		86
48)	Dibromochloromethane	7.396	129	24214	1.009	ppbv		99
49)	Bromoform	9.490	173	20579	1.040	ppbv		98
50)	4-Methyl-2-Pentanone	5.768	43	36710	1.001	ppbv		98
51)	2-Hexanone	7.451	43	29487	1.026	ppbv	#	99
52)	Tetrachloroethene	8.235	164	13322	0.960	ppbv		90
53)	Toluene	6.946	91	47256	1.036	ppbv		99
54)	1,2-Dibromoethane	7.665	107	21280	0.982	ppbv		99
56)	1,1,1,2-Tetrachloroethane	8.930	131	19176	1.061	ppbv		96
57)	Chlorobenzene	8.930	112	34617	1.041	ppbv	#	91
58)	Ethyl Benzene	9.361	91	65223	1.057	ppbv		95
59)	m/p-Xylene	9.558	91	101634m	2.098	ppbv		
60)	o-Xylene	9.969	91	51445	1.058	ppbv		99
61)	Styrene	9.879	104	23660	1.038	ppbv		100
62)	Isopropylbenzene	10.546	105	76708	1.079	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.969	83	27410	1.032	ppbv		98
64)	n-propylbenzene	10.995	120	18462	1.018	ppbv		90
65)	tert-Butylbenzene	11.536	119	69617	1.111	ppbv		99
66)	Benzyl Chloride	11.617	91	7900	0.993	ppbv		98
67)	sec-Butylbenzene	11.772	105	96288	1.095	ppbv		98
69)	p-Isopropyltoluene	11.931	119	82934	1.098	ppbv		99
70)	n-Butylbenzene	12.287	91	80511	1.075	ppbv		99
71)	2-Chlorotoluene	10.908	91	60086	1.089	ppbv		100
72)	4-Ethyltoluene	11.131	105	63147	1.071	ppbv		99
73)	1,3,5-Trimethylbenzene	11.206	105	53676	1.070	ppbv		95
74)	1,2,4-Trimethylbenzene	11.539	105	59633	1.083	ppbv		96
75)	1,3-Dichlorobenzene	11.610	146	33061	1.057	ppbv		98
76)	1,4-Dichlorobenzene	11.675	146	33064	1.045	ppbv		96
77)	1,2-Dichlorobenzene	11.950	146	33404	1.090	ppbv		98
78)	Hexachloro-1,3-Butadiene	13.886	225	29555	1.177	ppbv		95
79)	Naphthalene	13.517	128	57580	1.169	ppbv		97
80)	Naphthalene,2-methyl-	14.462	142	19375	1.045	ppbv		96
81)	1,2,4-Trichlorobenzene	13.442	180	27861	1.111	ppbv		99

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

Quantitation Report (QT Reviewed)

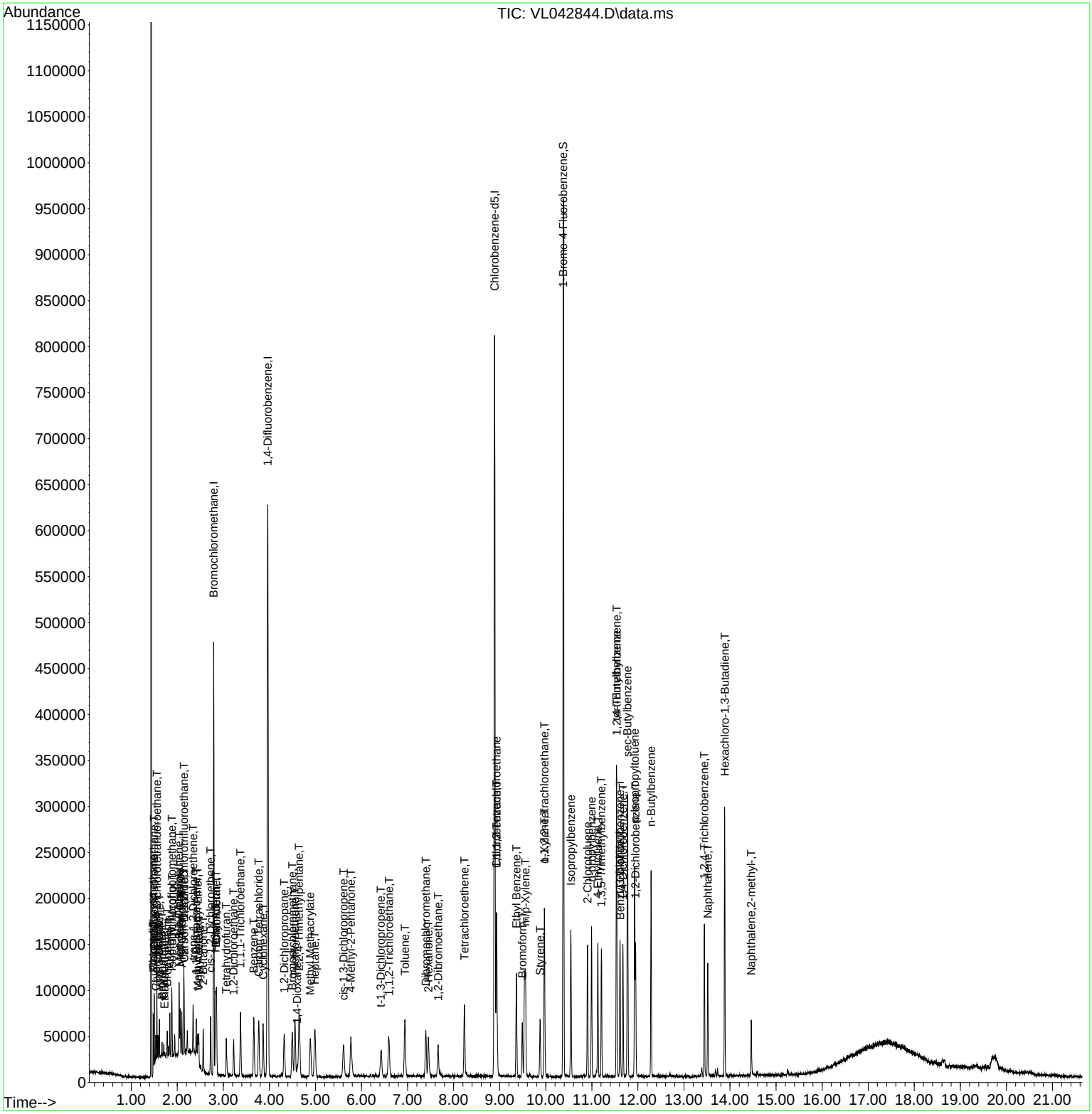
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042844.D
Acq On : 13 Aug 2025 09:41
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:47:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042845.D
Acq On : 13 Aug 2025 10:17
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:48:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	126879	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	396264	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.895	117	348005	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	262663	10.064	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	9937	0.534	ppbv	100
3) Chlorodifluoromethane	1.479	51	11115	0.540	ppbv	96
4) Chloromethane	1.538	50	4112	0.548	ppbv	90
5) Vinyl Chloride	1.586	62	3762	0.509	ppbv	94
6) Bromomethane	1.674	94	1576	0.533	ppbv	82
7) Chloroethane	1.709	64	1690	0.586	ppbv #	85
8) Dichlorotetrafluoroethane	1.557	85	8079	0.531	ppbv	95
9) Propene	1.489	41	5225	0.589	ppbv	91
10) Heptane	4.998	43	12747	0.537	ppbv	93
11) Trichlorofluoromethane	1.884	101	10238	0.558	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.146	101	7984	0.546	ppbv	98
13) Ethanol	1.725	45	562	0.639	ppbv #	1
14) Bromoethene	1.787	108	2932	0.554	ppbv #	85
15) Acetone	1.842	43	10836	0.646	ppbv	98
16) 1,3-Butadiene	1.612	39	4970	0.653	ppbv	99
17) tert-Butyl alcohol	2.049	59	12182	0.612	ppbv #	89
18) 1,1-Dichloroethene	2.039	96	3501	0.545	ppbv	92
19) Isopropyl Alcohol	1.891	45	6194	0.618	ppbv #	56
20) Methylene Chloride	2.069	84	5025	0.715	ppbv	90
21) Allyl Chloride	2.104	41	7120	0.600	ppbv #	76
22) trans-1,2-Dichloroethene	2.350	96	3996	0.556	ppbv	96
23) Vinyl Acetate	2.470	43	13709	0.621	ppbv #	98
24) 1,1-Dichloroethane	2.418	63	8354	0.562	ppbv #	96
25) Ethyl Acetate	2.845	43	22148	0.545	ppbv #	96
26) Hexane	2.832	57	9879	0.527	ppbv	85
27) Carbon Disulfide	2.156	76	9539	0.523	ppbv #	1
28) Methyl tert-Butyl Ether	2.447	73	5284	0.553	ppbv #	62
29) Chloroform	2.858	83	14586	0.545	ppbv	100
30) Cyclohexane	3.868	84	9037	0.550	ppbv	94
31) cis-1,2-Dichloroethene	2.729	61	10308	0.550	ppbv #	86
32) 1,1,1-Trichloroethane	3.379	97	14011	0.494	ppbv	97
34) 2-Butanone	2.567	43	14923	0.558	ppbv	100
35) Carbon Tetrachloride	3.774	117	13507	0.494	ppbv	97
36) Benzene	3.671	78	20073	0.529	ppbv	98
37) 1,2-Dichloroethane	3.230	62	10141	0.512	ppbv #	93
38) Trichloroethene	4.564	130	9918	0.572	ppbv #	88
39) 1,2-Dichloropropane	4.334	63	7491	0.541	ppbv	86
40) 1,4-Dioxane	4.613	88	3743m	0.577	ppbv	
41) Tetrahydrofuran	3.072	42	7827	0.525	ppbv	93
42) Bromodichloromethane	4.509	83	15580	0.527	ppbv #	94
43) Methyl Methacrylate	4.897	69	8461m	0.544	ppbv	
44) 2,2,4-Trimethylpentane	4.661	57	34237m	0.537	ppbv	
45) t-1,3-Dichloropropene	6.435	75	8911m	0.505	ppbv	

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042845.D
Acq On : 13 Aug 2025 10:17
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:48:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.622	75	11259m	0.508	ppbv		
47)	1,1,2-Trichloroethane	6.603	97	7835m	0.534	ppbv		
48)	Dibromochloromethane	7.406	129	11805	0.497	ppbv		100
49)	Bromoform	9.497	173	9232	0.471	ppbv		95
50)	4-Methyl-2-Pentanone	5.778	43	19028m	0.524	ppbv		
51)	2-Hexanone	7.458	43	14329	0.503	ppbv	#	99
52)	Tetrachloroethene	8.244	164	7304	0.531	ppbv	#	87
53)	Toluene	6.956	91	24155m	0.535	ppbv		
54)	1,2-Dibromoethane	7.668	107	10873	0.507	ppbv		90
56)	1,1,1,2-Tetrachloroethane	8.940	131	9300	0.517	ppbv	#	1
57)	Chlorobenzene	8.937	112	17845	0.539	ppbv	#	96
58)	Ethyl Benzene	9.370	91	32261	0.525	ppbv		99
59)	m/p-Xylene	9.561	91	50372m	1.045	ppbv		
60)	o-Xylene	9.979	91	26662	0.551	ppbv		100
61)	Styrene	9.885	104	12379	0.546	ppbv		95
62)	Isopropylbenzene	10.552	105	37401	0.529	ppbv		98
63)	1,1,2,2-Tetrachloroethane	9.976	83	13828	0.523	ppbv		95
64)	n-propylbenzene	10.998	120	9922	0.550	ppbv		98
65)	tert-Butylbenzene	11.542	119	33183	0.532	ppbv		97
66)	Benzyl Chloride	11.626	91	4039	0.510	ppbv	#	97
67)	sec-Butylbenzene	11.778	105	46433	0.530	ppbv		96
69)	p-Isopropyltoluene	11.934	119	40686	0.541	ppbv		99
70)	n-Butylbenzene	12.290	91	38867	0.521	ppbv		99
71)	2-Chlorotoluene	10.911	91	29736	0.541	ppbv		97
72)	4-Ethyltoluene	11.138	105	30234	0.515	ppbv		97
73)	1,3,5-Trimethylbenzene	11.212	105	26942	0.540	ppbv		99
74)	1,2,4-Trimethylbenzene	11.545	105	29750	0.543	ppbv		94
75)	1,3-Dichlorobenzene	11.617	146	16311	0.524	ppbv		95
76)	1,4-Dichlorobenzene	11.681	146	16803	0.533	ppbv		98
77)	1,2-Dichlorobenzene	11.956	146	16306	0.535	ppbv		97
78)	Hexachloro-1,3-Butadiene	13.885	225	14165	0.567	ppbv		99
79)	Naphthalene	13.520	128	24056	0.491	ppbv		96
80)	Naphthalene,2-methyl-	14.465	142	7482	0.405	ppbv		95
81)	1,2,4-Trichlorobenzene	13.449	180	10844	0.434	ppbv		97

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

Quantitation Report (QT Reviewed)

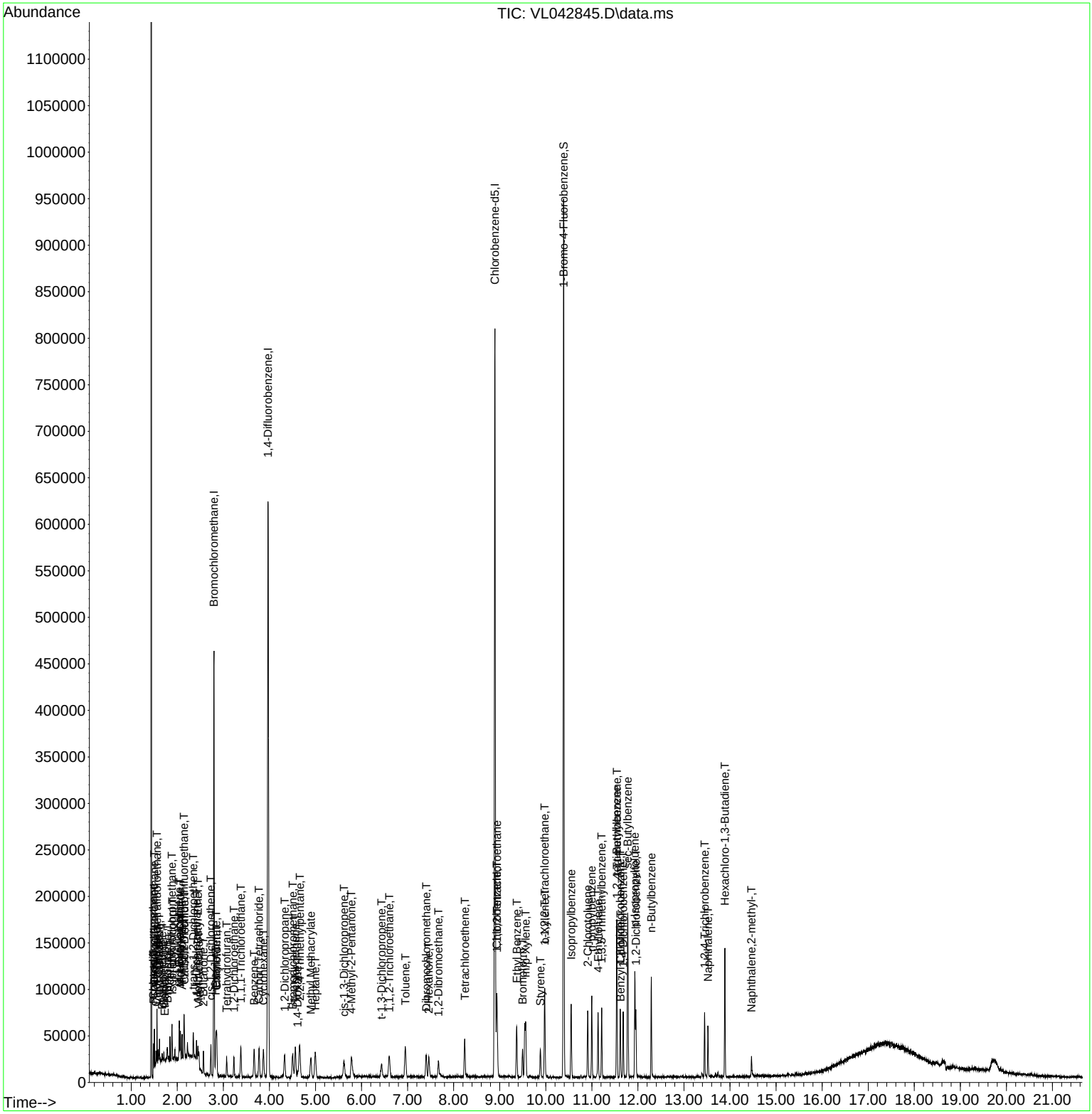
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042845.D
Acq On : 13 Aug 2025 10:17
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:48:25 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042846.D
Acq On : 13 Aug 2025 10:53
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:49:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	123711	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	390520	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	345073	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	257439	9.948	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.583	62	790	0.110	ppbv #	86
32) 1,1,1-Trichloroethane	3.373	97	3128m	0.113	ppbv	
35) Carbon Tetrachloride	3.774	117	2883	0.107	ppbv	89
38) Trichloroethene	4.557	130	1748m	0.102	ppbv	
52) Tetrachloroethene	8.234	164	1479m	0.109	ppbv	
54) 1,2-Dibromoethane	7.665	107	2339m	0.111	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.972	83	2672	0.102	ppbv	99
79) Naphthalene	13.520	128	4051m	0.083	ppbv	

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

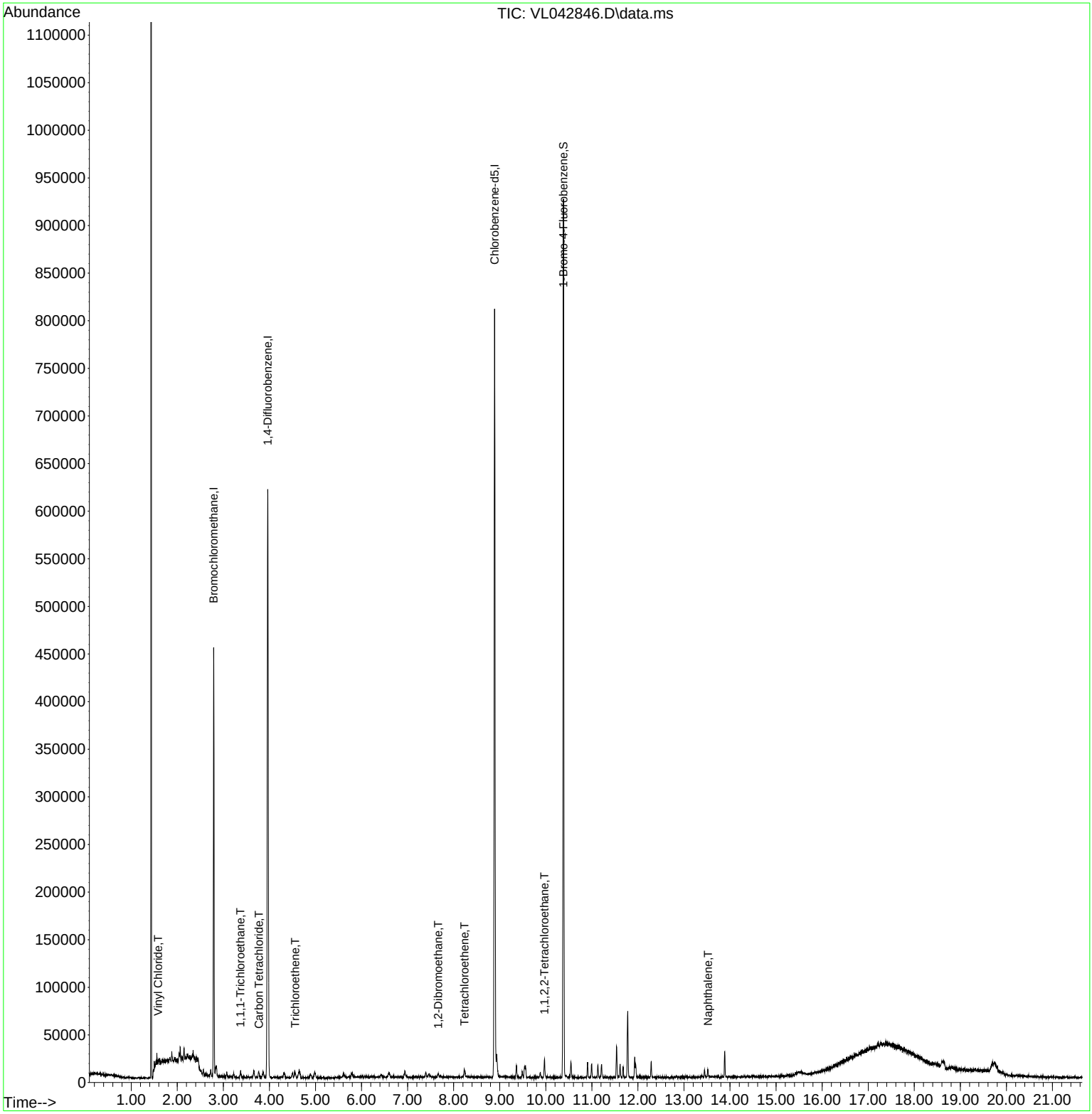
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042846.D
Acq On : 13 Aug 2025 10:53
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:49:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042847.D
Acq On : 13 Aug 2025 11:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:50:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	122705	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	390076	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.894	117	339700	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.386	95	250082	9.816	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.200%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.583	62	268	0.037	ppbv	# 81
32) 1,1,1-Trichloroethane	3.379	97	901m	0.033	ppbv	
35) Carbon Tetrachloride	3.774	117	861m	0.032	ppbv	
38) Trichloroethene	4.573	130	487m	0.029	ppbv	
52) Tetrachloroethene	8.241	164	458m	0.034	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.979	83	898m	0.035	ppbv	

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

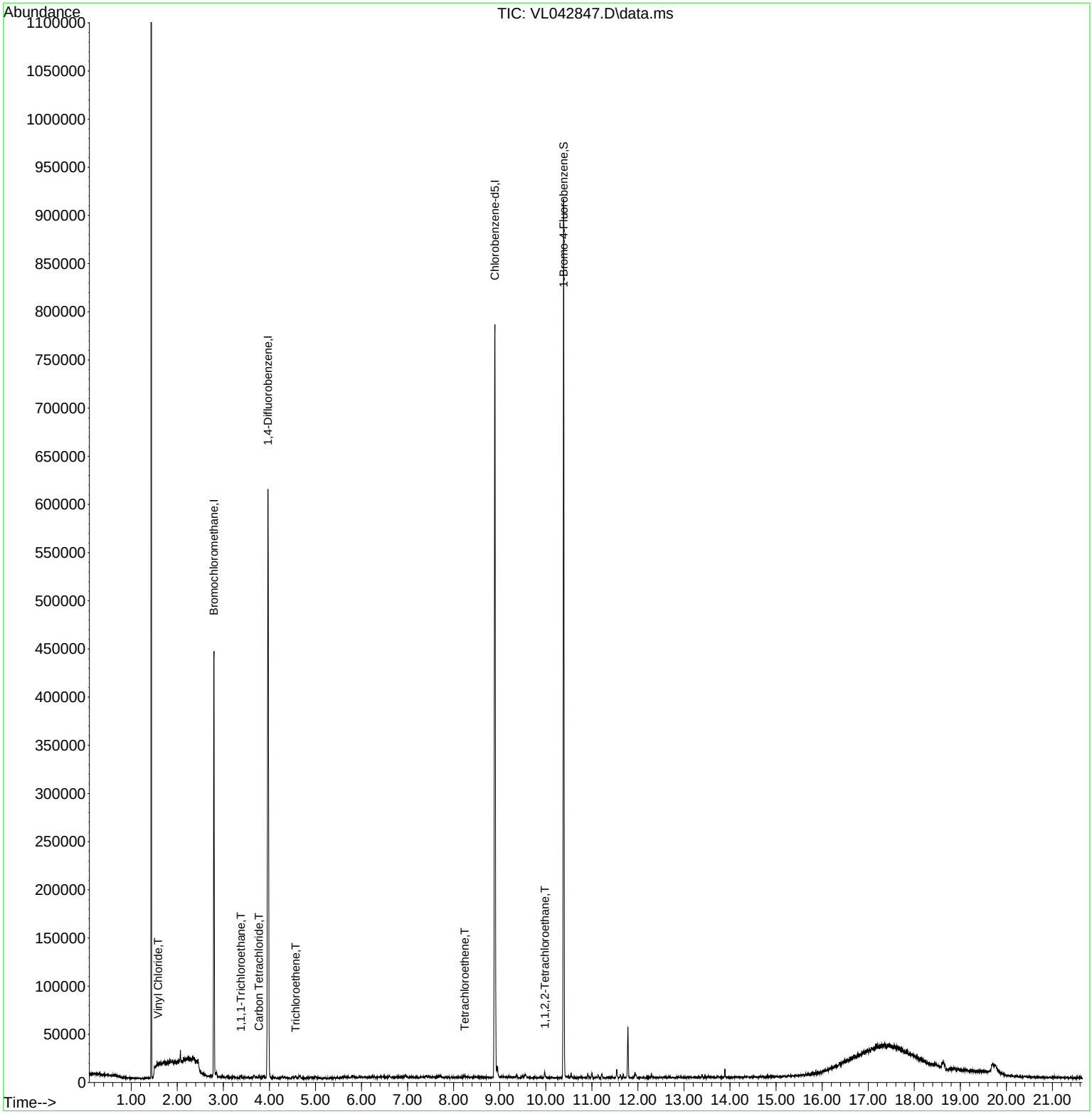
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042847.D
Acq On : 13 Aug 2025 11:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:50:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042848.D
Acq On : 13 Aug 2025 12:06
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:51:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.794	49	122073	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	380877	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.892	117	337876	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.384	95	254655	10.050	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	253151	14.150	ppbv	99
3) Chlorodifluoromethane	1.480	51	275350	13.910	ppbv	99
4) Chloromethane	1.535	50	100974	13.986	ppbv	99
5) Vinyl Chloride	1.583	62	92812	13.053	ppbv	100
6) Bromomethane	1.671	94	37740	13.275	ppbv	96
7) Chloroethane	1.706	64	38398	13.828	ppbv	97
8) Dichlorotetrafluoroethane	1.557	85	205386	14.029	ppbv	98
9) Propene	1.486	41	111824	13.094	ppbv	99
10) Heptane	4.988	43	313734	13.742	ppbv	99
11) Trichlorofluoromethane	1.881	101	246354	13.957	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.143	101	195231	13.877	ppbv	99
13) Ethanol	1.722	45	8534	10.086	ppbv	98
14) Bromoethene	1.784	108	71671	14.072	ppbv	99
15) Acetone	1.839	43	184116	11.402	ppbv	100
16) 1,3-Butadiene	1.612	39	92068	12.577	ppbv	100
17) tert-Butyl alcohol	2.043	59	244441	12.765	ppbv	100
18) 1,1-Dichloroethene	2.036	96	86349	13.961	ppbv	97
19) Isopropyl Alcohol	1.887	45	124270	12.885	ppbv	99
20) Methylene Chloride	2.065	84	77749	11.494	ppbv	97
21) Allyl Chloride	2.101	41	156318	13.703	ppbv	95
22) trans-1,2-Dichloroethene	2.344	96	100064	14.465	ppbv	95
23) Vinyl Acetate	2.467	43	309236	14.557	ppbv	98
24) 1,1-Dichloroethane	2.412	63	199276	13.944	ppbv	98
25) Ethyl Acetate	2.839	43	533600	13.653	ppbv	99
26) Hexane	2.833	57	250189	13.869	ppbv	98
27) Carbon Disulfide	2.153	76	246868	14.062	ppbv	99
28) Methyl tert-Butyl Ether	2.444	73	129978	14.131	ppbv	91
29) Chloroform	2.855	83	360661	14.003	ppbv	99
30) Cyclohexane	3.865	84	222820	14.088	ppbv	98
31) cis-1,2-Dichloroethene	2.726	61	249376	13.821	ppbv	96
32) 1,1,1-Trichloroethane	3.376	97	377739	13.851	ppbv	100
34) 2-Butanone	2.561	43	348815	13.563	ppbv	99
35) Carbon Tetrachloride	3.771	117	367354	13.990	ppbv	97
36) Benzene	3.664	78	511811	14.033	ppbv	99
37) 1,2-Dichloroethane	3.224	62	278934	14.639	ppbv	99
38) Trichloroethene	4.558	130	227091	13.634	ppbv	96
39) 1,2-Dichloropropane	4.325	63	186277	13.984	ppbv	95
40) 1,4-Dioxane	4.593	88	82385	13.212	ppbv #	91
41) Tetrahydrofuran	3.056	42	200751	14.001	ppbv	99
42) Bromodichloromethane	4.499	83	408089	14.372	ppbv	97
43) Methyl Methacrylate	4.888	69	206590	13.808	ppbv	99
44) 2,2,4-Trimethylpentane	4.652	57	850847	13.895	ppbv	99
45) t-1,3-Dichloropropene	6.428	75	244117	14.387	ppbv	99

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042848.D
Acq On : 13 Aug 2025 12:06
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:51:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46)	cis-1,3-Dichloropropene	5.616	75	302339	14.191	ppbv	98
47)	1,1,2-Trichloroethane	6.597	97	199067	14.118	ppbv	98
48)	Dibromochloromethane	7.399	129	331947	14.535	ppbv	99
49)	Bromoform	9.494	173	266732	14.162	ppbv	100
50)	4-Methyl-2-Pentanone	5.758	43	490917	14.073	ppbv	100
51)	2-Hexanone	7.448	43	389940	14.255	ppbv	100
52)	Tetrachloroethene	8.238	164	168712	12.772	ppbv	98
53)	Toluene	6.943	91	605941	13.961	ppbv	100
54)	1,2-Dibromoethane	7.665	107	292327	14.173	ppbv	97
56)	1,1,1,2-Tetrachloroethane	8.934	131	241293	13.810	ppbv	99
57)	Chlorobenzene	8.934	112	439109	13.668	ppbv	99
58)	Ethyl Benzene	9.364	91	826316	13.859	ppbv	99
59)	m/p-Xylene	9.561	91	1294381m	27.650	ppbv	
60)	o-Xylene	9.973	91	629445	13.389	ppbv	100
61)	Styrene	9.882	104	304560	13.827	ppbv	99
62)	Isopropylbenzene	10.549	105	931574	13.559	ppbv	99
63)	1,1,2,2-Tetrachloroethane	9.973	83	342890	13.356	ppbv	98
64)	n-propylbenzene	10.999	120	239209	13.646	ppbv	98
65)	tert-Butylbenzene	11.539	119	785250	12.965	ppbv	98
66)	Benzyl Chloride	11.623	91	104698	13.617	ppbv	99
67)	sec-Butylbenzene	11.775	105	1115979	13.127	ppbv	100
69)	p-Isopropyltoluene	11.931	119	940888	12.891	ppbv	98
70)	n-Butylbenzene	12.287	91	970700	13.410	ppbv	100
71)	2-Chlorotoluene	10.911	91	713696	13.378	ppbv	99
72)	4-Ethyltoluene	11.134	105	782057	13.722	ppbv	99
73)	1,3,5-Trimethylbenzene	11.212	105	650280	13.418	ppbv	99
74)	1,2,4-Trimethylbenzene	11.546	105	691709	13.003	ppbv	95
75)	1,3-Dichlorobenzene	11.617	146	402850	13.321	ppbv	99
76)	1,4-Dichlorobenzene	11.678	146	407214	13.314	ppbv	98
77)	1,2-Dichlorobenzene	11.953	146	385866	13.031	ppbv	99
78)	Hexachloro-1,3-Butadiene	13.886	225	281581	11.602	ppbv	99
79)	Naphthalene	13.517	128	658732	13.837	ppbv	100
80)	Naphthalene,2-methyl-	14.462	142	251753	14.042	ppbv	100
81)	1,2,4-Trichlorobenzene	13.445	180	329641	13.599	ppbv	100

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

Quantitation Report (QT Reviewed)

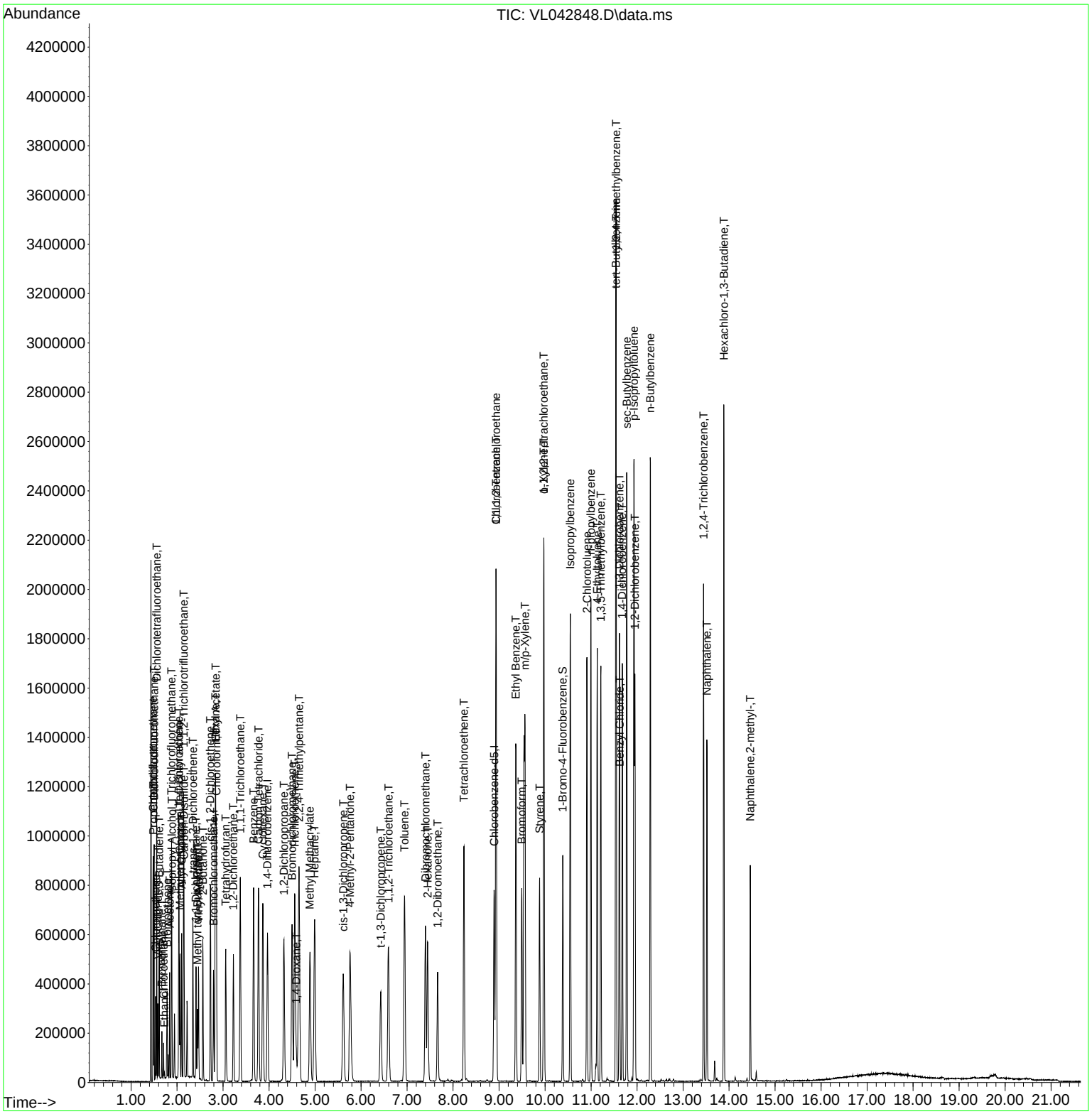
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042848.D
Acq On : 13 Aug 2025 12:06
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:51:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 01:44:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042849.D
Acq On : 13 Aug 2025 12:56
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 02:16:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL081325

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	122486	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	374448	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	333493	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	252268	10.086	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	163446	9.105	ppbv	96
3) Chlorodifluoromethane	1.476	51	185078	9.327	ppbv	100
4) Chloromethane	1.535	50	63634	8.784	ppbv	100
5) Vinyl Chloride	1.583	62	58729	8.232	ppbv	96
6) Bromomethane	1.670	94	25105	8.801	ppbv	97
7) Chloroethane	1.706	64	23293	8.360	ppbv	98
8) Dichlorotetrafluoroethane	1.557	85	135845	9.248	ppbv	99
9) Propene	1.483	41	76457	8.922	ppbv	97
10) Heptane	4.988	43	206333	8.990	ppbv	99
11) Trichlorofluoromethane	1.881	101	154211	8.707	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.143	101	124558	8.824	ppbv	99
13) Ethanol	1.722	45	6016	7.678	ppbv	96
14) Bromoethene	1.784	108	46528	9.105	ppbv	98
15) Acetone	1.839	43	119723	7.389	ppbv	99
16) 1,3-Butadiene	1.612	39	60853	8.285	ppbv	99
17) tert-Butyl alcohol	2.043	59	166457	8.663	ppbv	99
18) 1,1-Dichloroethene	2.036	96	56397	9.087	ppbv	94
19) Isopropyl Alcohol	1.887	45	78832	8.146	ppbv	98
20) Methylene Chloride	2.065	84	47793	7.041	ppbv	90
21) Allyl Chloride	2.098	41	102514	8.956	ppbv	97
22) trans-1,2-Dichloroethene	2.344	96	63932	8.904	ppbv	95
23) Vinyl Acetate	2.467	43	198083	8.891	ppbv #	97
24) 1,1-Dichloroethane	2.412	63	127660	8.903	ppbv	99
25) Ethyl Acetate	2.839	43	362325	9.240	ppbv	99
26) Hexane	2.829	57	167364	9.246	ppbv	97
27) Carbon Disulfide	2.153	76	155729	8.841	ppbv	99
28) Methyl tert-Butyl Ether	2.444	73	82126	8.898	ppbv	92
29) Chloroform	2.855	83	242320	9.377	ppbv	99
30) Cyclohexane	3.865	84	147417	9.289	ppbv	99
31) cis-1,2-Dichloroethene	2.726	61	166268	9.196	ppbv	99
32) 1,1,1-Trichloroethane	3.373	97	252813	9.256	ppbv	99
34) 2-Butanone	2.561	43	230961	9.135	ppbv	100
35) Carbon Tetrachloride	3.771	117	244671	9.478	ppbv	95
36) Benzene	3.664	78	343952	9.592	ppbv	98
37) 1,2-Dichloroethane	3.224	62	187160	9.991	ppbv	100
38) Trichloroethene	4.558	130	150693	9.202	ppbv	96
39) 1,2-Dichloropropane	4.324	63	123566	9.436	ppbv	97
40) 1,4-Dioxane	4.590	88	55292	8.879	ppbv #	93
41) Tetrahydrofuran	3.059	42	132108	9.372	ppbv	99
42) Bromodichloromethane	4.499	83	270154	9.678	ppbv	99
43) Methyl Methacrylate	4.888	69	136329	9.229	ppbv	99
44) 2,2,4-Trimethylpentane	4.648	57	565415	9.290	ppbv	100
45) t-1,3-Dichloropropene	6.428	75	160784	9.645	ppbv	100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042849.D
Acq On : 13 Aug 2025 12:56
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL081325

Quant Time: Aug 14 02:16:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.613	75	199988m	9.628	ppbv		
47) 1,1,2-Trichloroethane	6.597	97	132548	9.553	ppbv		99
48) Dibromochloromethane	7.399	129	217970	9.708	ppbv		100
49) Bromoform	9.493	173	174914	9.446	ppbv		99
50) 4-Methyl-2-Pentanone	5.765	43	322264	9.430	ppbv		100
51) 2-Hexanone	7.445	43	263321	9.791	ppbv	#	98
52) Tetrachloroethene	8.234	164	110828	8.544	ppbv		89
53) Toluene	6.946	91	398138	9.340	ppbv		100
54) 1,2-Dibromoethane	7.665	107	193340	9.535	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.937	131	160225	9.291	ppbv		99
57) Chlorobenzene	8.933	112	297375	9.378	ppbv		97
58) Ethyl Benzene	9.364	91	554015	9.414	ppbv		100
59) m/p-Xylene	9.561	91	865106m	18.754	ppbv		
60) o-Xylene	9.972	91	428721	9.239	ppbv		99
61) Styrene	9.879	104	203858	9.377	ppbv		100
62) Isopropylbenzene	10.549	105	624287	9.206	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.972	83	225237	8.826	ppbv		100
64) n-propylbenzene	10.998	120	158234	9.145	ppbv		97
65) tert-Butylbenzene	11.539	119	534795	8.946	ppbv		98
66) Benzyl Chloride	11.623	91	68533	9.031	ppbv		99
67) sec-Butylbenzene	11.775	105	762602	9.088	ppbv		100
69) p-Isopropyltoluene	11.934	119	634670	8.810	ppbv		98
70) n-Butylbenzene	12.287	91	647453	9.062	ppbv		99
71) 2-Chlorotoluene	10.908	91	485171	9.214	ppbv		98
72) 4-Ethyltoluene	11.131	105	525262	9.338	ppbv		100
73) 1,3,5-Trimethylbenzene	11.212	105	435705	9.108	ppbv		98
74) 1,2,4-Trimethylbenzene	11.542	105	469573	8.943	ppbv		94
75) 1,3-Dichlorobenzene	11.613	146	274876	9.209	ppbv		100
76) 1,4-Dichlorobenzene	11.678	146	270976	8.976	ppbv		99
77) 1,2-Dichlorobenzene	11.953	146	255347	8.736	ppbv		98
78) Hexachloro-1,3-Butadiene	13.886	225	186318	7.778	ppbv		97
79) Naphthalene	13.520	128	441940	9.284	ppbv		99
80) Naphthalene,2-methyl-	14.462	142	145644	8.188	ppbv		98
81) 1,2,4-Trichlorobenzene	13.445	180	215715	9.016	ppbv		99

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

Quantitation Report (QT Reviewed)

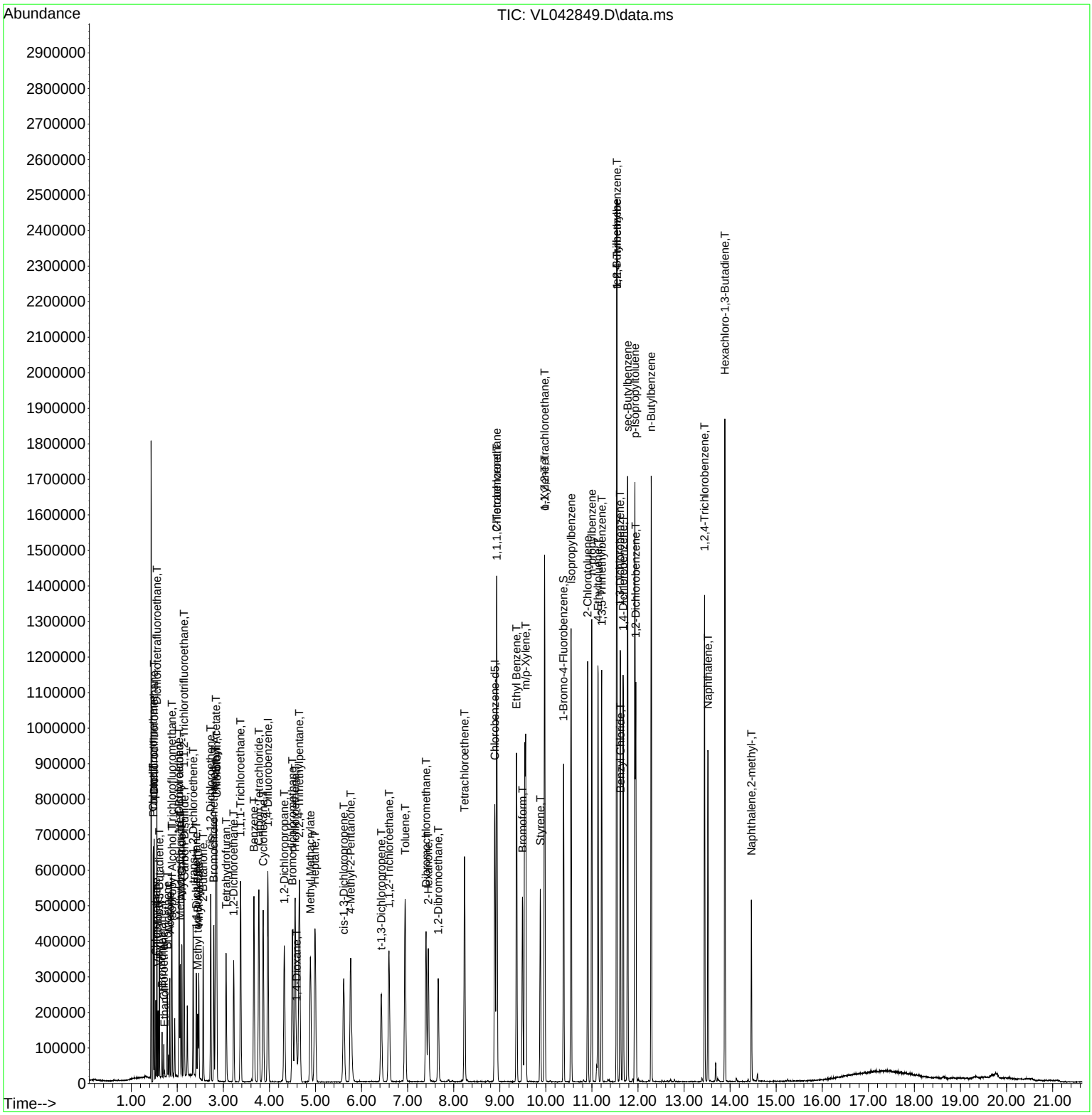
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042849.D
Acq On : 13 Aug 2025 12:56
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 02:16:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL081325

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042849.D
Acq On : 13 Aug 2025 12:56
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL081325

Quant Time: Aug 14 02:16:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	92	0.00
2	T	Dichlorodifluoromethane	1.466	1.334	9.0	91	0.00
3		Chlorodifluoromethane	1.620	1.511	6.7	92	0.00
4		Chloromethane	0.591	0.520	12.0	90	0.00
5	T	Vinyl Chloride	0.582	0.479	17.7	88	0.00
6	T	Bromomethane	0.233	0.205	12.0	93	0.00
7		Chloroethane	0.227	0.190	16.3	87	0.00
8	T	Dichlorotetrafluoroethane	1.199	1.109	7.5	91	0.00
9	T	Propene	0.700	0.624	10.9	88	0.00
10	T	Heptane	1.874	1.685	10.1	90	0.00
11	T	Trichlorofluoromethane	1.446	1.259	12.9	91	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.152	1.017	11.7	89	0.00
13		Ethanol	0.064	0.049#	23.4	97	0.00
14	T	Bromoethene	0.417	0.380	8.9	92	0.00
15	T	Acetone	1.323	0.977	26.2	95	0.00
16	T	1,3-Butadiene	0.600	0.497	17.2	91	0.00
17		tert-Butyl alcohol	1.569	1.359	13.4	91	0.00
18	T	1,1-Dichloroethene	0.507	0.460	9.3	90	0.00
19	T	Isopropyl Alcohol	0.790	0.644	18.5	91	0.00
20	T	Methylene Chloride	0.554	0.390	29.6	87	0.00
21	T	Allyl Chloride	0.935	0.837	10.5	91	0.00
22	T	trans-1,2-Dichloroethene	0.586	0.522	10.9	89	0.00
23	T	Vinyl Acetate	1.819	1.617	11.1	89	0.00
24	T	1,1-Dichloroethane	1.171	1.042	11.0	92	0.00
25	T	Ethyl Acetate	3.202	2.958	7.6	93	0.00
26	T	Hexane	1.478	1.366	7.6	90	0.00
27	T	Carbon Disulfide	1.438	1.271	11.6	89	0.00
28	T	Methyl tert-Butyl Ether	0.754	0.670	11.1	93	0.00
29	T	Chloroform	2.110	1.978	6.3	94	0.00
30	T	Cyclohexane	1.296	1.204	7.1	91	0.00
31	T	cis-1,2-Dichloroethene	1.476	1.357	8.1	93	0.00
32	T	1,1,1-Trichloroethane	2.230	2.064	7.4	95	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	91	0.00
34	T	2-Butanone	0.675	0.617	8.6	92	0.00
35	T	Carbon Tetrachloride	0.689	0.653	5.2	93	0.00
36	T	Benzene	0.958	0.919	4.1	91	0.00
37	T	1,2-Dichloroethane	0.500	0.500	0.0	94	0.00
38	T	Trichloroethene	0.437	0.402	8.0	91	0.00
39	T	1,2-Dichloropropane	0.350	0.330	5.7	92	0.00
40	T	1,4-Dioxane	0.166	0.148	10.8	90	0.00
41	T	Tetrahydrofuran	0.376	0.353	6.1	90	0.00
42	T	Bromodichloromethane	0.745	0.721	3.2	92	0.00
43		Methyl Methacrylate	0.394	0.364	7.6	90	0.00
44	T	2,2,4-Trimethylpentane	1.625	1.510	7.1	90	0.00
45	T	t-1,3-Dichloropropene	0.445	0.429	3.6	91	0.00
46	T	cis-1,3-Dichloropropene	0.555	0.534	3.8	90	0.00
47	T	1,1,2-Trichloroethane	0.371	0.354	4.6	94	0.00
48	T	Dibromochloromethane	0.600	0.582	3.0	90	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042849.D
Acq On : 13 Aug 2025 12:56
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL081325

Quant Time: Aug 14 02:16:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.495	0.467	5.7	86	0.00
50	T	4-Methyl-2-Pentanone	0.913	0.861	5.7	88	0.00
51	T	2-Hexanone	0.718	0.703	2.1	91	0.00
52	T	Tetrachloroethene	0.346	0.296	14.5	86	0.00
53	T	Toluene	1.138	1.063	6.6	90	0.00
54	T	1,2-Dibromoethane	0.542	0.516	4.8	92	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
56		1,1,1,2-Tetrachloroethane	0.517	0.480	7.2	91	0.00
57	T	Chlorobenzene	0.951	0.892	6.2	91	0.00
58	T	Ethyl Benzene	1.765	1.661	5.9	91	0.00
59	T	m/p-Xylene	1.383	1.297	6.2	91	0.02
60	T	o-Xylene	1.391	1.286	7.5	91	0.00
61	T	Styrene	0.652	0.611	6.3	90	0.00
62		Isopropylbenzene	2.033	1.872	7.9	91	0.00
63	T	1,1,2,2-Tetrachloroethane	0.765	0.675	11.8	90	0.00
64		n-propylbenzene	0.519	0.474	8.7	90	0.00
65		tert-Butylbenzene	1.793	1.604	10.5	90	0.00
66	T	Benzyl Chloride	0.228	0.206	9.6	81	0.00
67		sec-Butylbenzene	2.516	2.287	9.1	92	0.00
68	S	1-Bromo-4-Fluorobenzene	0.750	0.756	-0.8	90	0.00
69		p-Isopropyltoluene	2.160	1.903	11.9	90	0.00
70		n-Butylbenzene	2.142	1.941	9.4	91	0.00
71		2-Chlorotoluene	1.579	1.455	7.9	92	0.00
72	T	4-Ethyltoluene	1.687	1.575	6.6	91	0.00
73	T	1,3,5-Trimethylbenzene	1.434	1.306	8.9	91	0.00
74	T	1,2,4-Trimethylbenzene	1.574	1.408	10.5	91	0.00
75	T	1,3-Dichlorobenzene	0.895	0.824	7.9	89	0.00
76	T	1,4-Dichlorobenzene	0.905	0.813	10.2	88	0.00
77	T	1,2-Dichlorobenzene	0.876	0.766	12.6	88	0.00
78	T	Hexachloro-1,3-Butadiene	0.718	0.559	22.1	88	0.00
79	T	Naphthalene	1.427	1.325	7.1	91	0.00
80	T	Naphthalene,2-methyl-	0.533	0.437	18.0	82	0.00
81	T	1,2,4-Trichlorobenzene	0.717	0.647	9.8	88	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042850.D
Acq On : 13 Aug 2025 13:46
Operator : SY/MD
Sample : VL0813ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0813ABL01

Quant Time: Aug 14 02:17:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

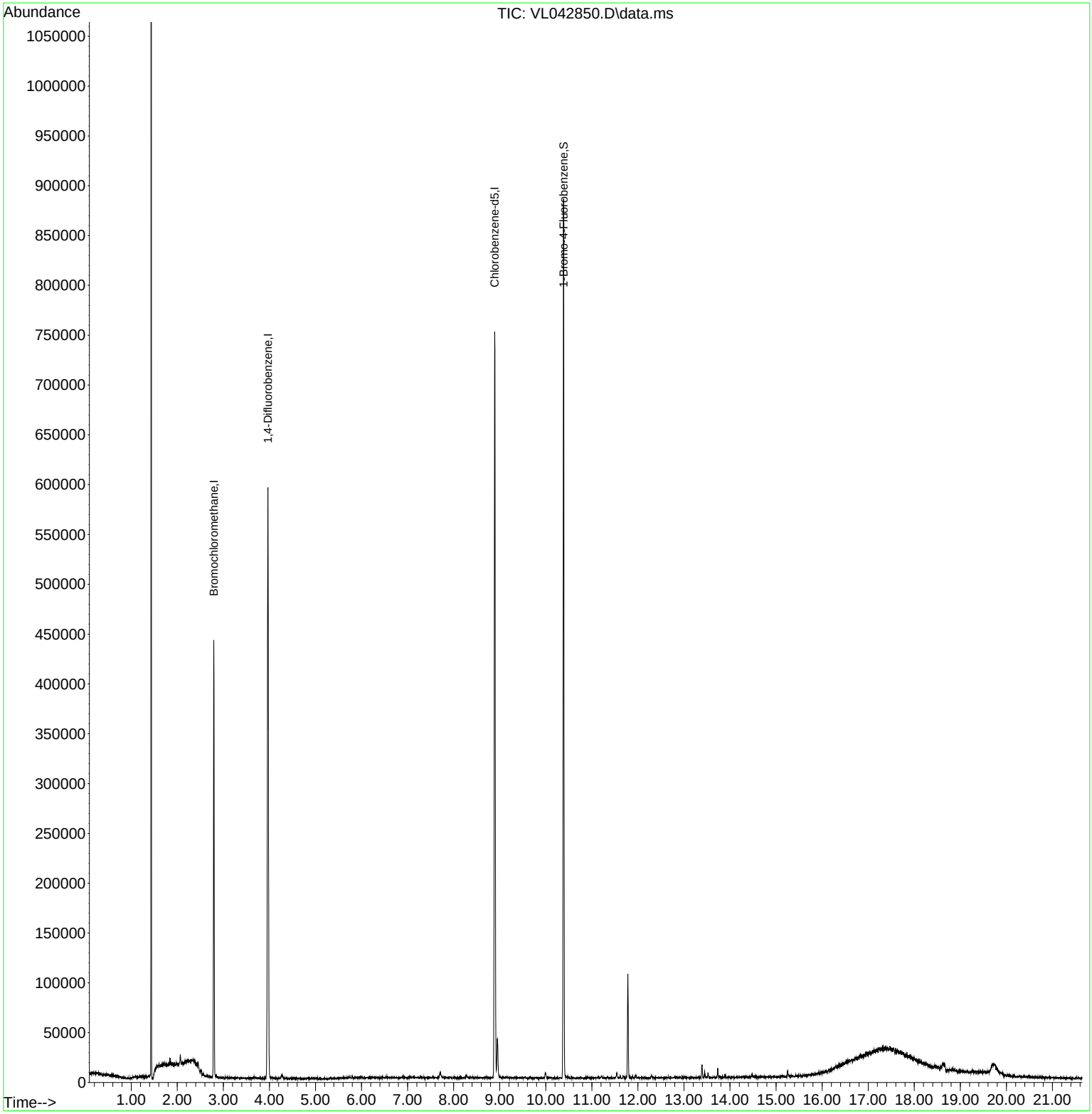
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	119946	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	373094	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	324853	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	243776	10.006	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.100%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042850.D
Acq On : 13 Aug 2025 13:46
Operator : SY/MD
Sample : VL0813ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0813ABL01

Quant Time: Aug 14 02:17:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042851.D
Acq On : 13 Aug 2025 14:32
Operator : SY/MD
Sample : VL0813ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0813ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

Quant Time: Aug 14 02:17:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	116881	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	368200	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.895	117	322291	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	244955	10.134	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	159958	9.338	ppbv	100
3) Chlorodifluoromethane	1.479	51	177225	9.360	ppbv	100
4) Chloromethane	1.534	50	62240	9.004	ppbv	99
5) Vinyl Chloride	1.583	62	59335	8.716	ppbv	99
6) Bromomethane	1.670	94	23152	8.505	ppbv	97
7) Chloroethane	1.706	64	23657	8.898	ppbv	91
8) Dichlorotetrafluoroethane	1.557	85	132763	9.471	ppbv	95
9) Propene	1.486	41	71030	8.686	ppbv	97
10) Heptane	4.991	43	199706	9.118	ppbv	98
11) Trichlorofluoromethane	1.881	101	153519	9.084	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.143	101	123905	9.198	ppbv	97
13) Ethanol	1.725	45	5608	7.501	ppbv	100
14) Bromoethene	1.784	108	45076	9.244	ppbv	98
15) Acetone	1.839	43	115155	7.448	ppbv	100
16) 1,3-Butadiene	1.612	39	58958	8.412	ppbv	99
17) tert-Butyl alcohol	2.043	59	158939	8.668	ppbv	99
18) 1,1-Dichloroethene	2.036	96	55494	9.371	ppbv	97
19) Isopropyl Alcohol	1.890	45	78860	8.540	ppbv	100
20) Methylene Chloride	2.065	84	48184	7.439	ppbv	90
21) Allyl Chloride	2.101	41	96710	8.854	ppbv	95
22) trans-1,2-Dichloroethene	2.347	96	62464	9.117	ppbv	94
23) Vinyl Acetate	2.467	43	206801	9.728	ppbv	99
24) 1,1-Dichloroethane	2.415	63	123052	8.993	ppbv	98
25) Ethyl Acetate	2.842	43	344281	9.200	ppbv	99
26) Hexane	2.832	57	159005	9.206	ppbv	97
27) Carbon Disulfide	2.156	76	153403	9.126	ppbv #	91
28) Methyl tert-Butyl Ether	2.444	73	84816	9.630	ppbv	93
29) Chloroform	2.855	83	234067	9.492	ppbv	99
30) Cyclohexane	3.865	84	140375	9.270	ppbv	99
31) cis-1,2-Dichloroethene	2.725	61	158712	9.199	ppbv	98
32) 1,1,1-Trichloroethane	3.376	97	245800	9.431	ppbv	100
34) 2-Butanone	2.560	43	224149	9.016	ppbv	100
35) Carbon Tetrachloride	3.771	117	235598	9.281	ppbv	96
36) Benzene	3.664	78	330026	9.360	ppbv	99
37) 1,2-Dichloroethane	3.227	62	181878	9.874	ppbv	98
38) Trichloroethene	4.557	130	144018	8.944	ppbv	95
39) 1,2-Dichloropropane	4.324	63	119442	9.275	ppbv	97
40) 1,4-Dioxane	4.593	88	54081m	8.832	ppbv	
41) Tetrahydrofuran	3.059	42	127578	9.204	ppbv	98
42) Bromodichloromethane	4.502	83	261380	9.522	ppbv	98
43) Methyl Methacrylate	4.894	69	131335	9.042	ppbv	98
44) 2,2,4-Trimethylpentane	4.648	57	540935	9.039	ppbv	100
45) t-1,3-Dichloropropene	6.431	75	152588	9.309	ppbv	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042851.D
Acq On : 13 Aug 2025 14:32
Operator : SY/MD
Sample : VL0813ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 02:17:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0813ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46)	cis-1,3-Dichloropropene	5.613	75	189646	9.285	ppbv	98
47)	1,1,2-Trichloroethane	6.597	97	127667	9.357	ppbv	97
48)	Dibromochloromethane	7.402	129	207804	9.412	ppbv	100
49)	Bromoform	9.493	173	168015	9.228	ppbv	100
50)	4-Methyl-2-Pentanone	5.768	43	312046	9.286	ppbv	100
51)	2-Hexanone	7.448	43	248690	9.404	ppbv	98
52)	Tetrachloroethene	8.238	164	107577	8.434	ppbv	94
53)	Toluene	6.949	91	386291	9.216	ppbv	100
54)	1,2-Dibromoethane	7.665	107	184932	9.275	ppbv	97
56)	1,1,1,2-Tetrachloroethane	8.937	131	156352	9.381	ppbv	98
57)	Chlorobenzene	8.933	112	285789	9.326	ppbv	98
58)	Ethyl Benzene	9.367	91	534013	9.389	ppbv	99
59)	m/p-Xylene	9.565	91	837335m	18.783	ppbv	
60)	o-Xylene	9.976	91	417423	9.308	ppbv	100
61)	Styrene	9.882	104	197790	9.414	ppbv	99
62)	Isopropylbenzene	10.548	105	607606	9.271	ppbv	98
63)	1,1,2,2-Tetrachloroethane	9.972	83	221716	8.990	ppbv	100
64)	n-propylbenzene	10.998	120	153914	9.205	ppbv	98
65)	tert-Butylbenzene	11.539	119	518992	8.983	ppbv	98
66)	Benzyl Chloride	11.623	91	62299	8.494	ppbv	99
67)	sec-Butylbenzene	11.775	105	741280	9.141	ppbv	99
69)	p-Isopropyltoluene	11.934	119	612316	8.795	ppbv	98
70)	n-Butylbenzene	12.290	91	629840	9.122	ppbv	98
71)	2-Chlorotoluene	10.911	91	467569	9.188	ppbv	98
72)	4-Ethyltoluene	11.134	105	505391	9.297	ppbv	99
73)	1,3,5-Trimethylbenzene	11.212	105	425759	9.210	ppbv	97
74)	1,2,4-Trimethylbenzene	11.545	105	456933	9.005	ppbv	97
75)	1,3-Dichlorobenzene	11.617	146	259541	8.997	ppbv	98
76)	1,4-Dichlorobenzene	11.681	146	261302	8.957	ppbv	99
77)	1,2-Dichlorobenzene	11.956	146	250432	8.866	ppbv	99
78)	Hexachloro-1,3-Butadiene	13.889	225	173363	7.488	ppbv	98
79)	Naphthalene	13.520	128	410796	8.930	ppbv	99
80)	Naphthalene,2-methyl-	14.462	142	145644	8.473	ppbv	98
81)	1,2,4-Trichlorobenzene	13.445	180	204023	8.824	ppbv	99

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

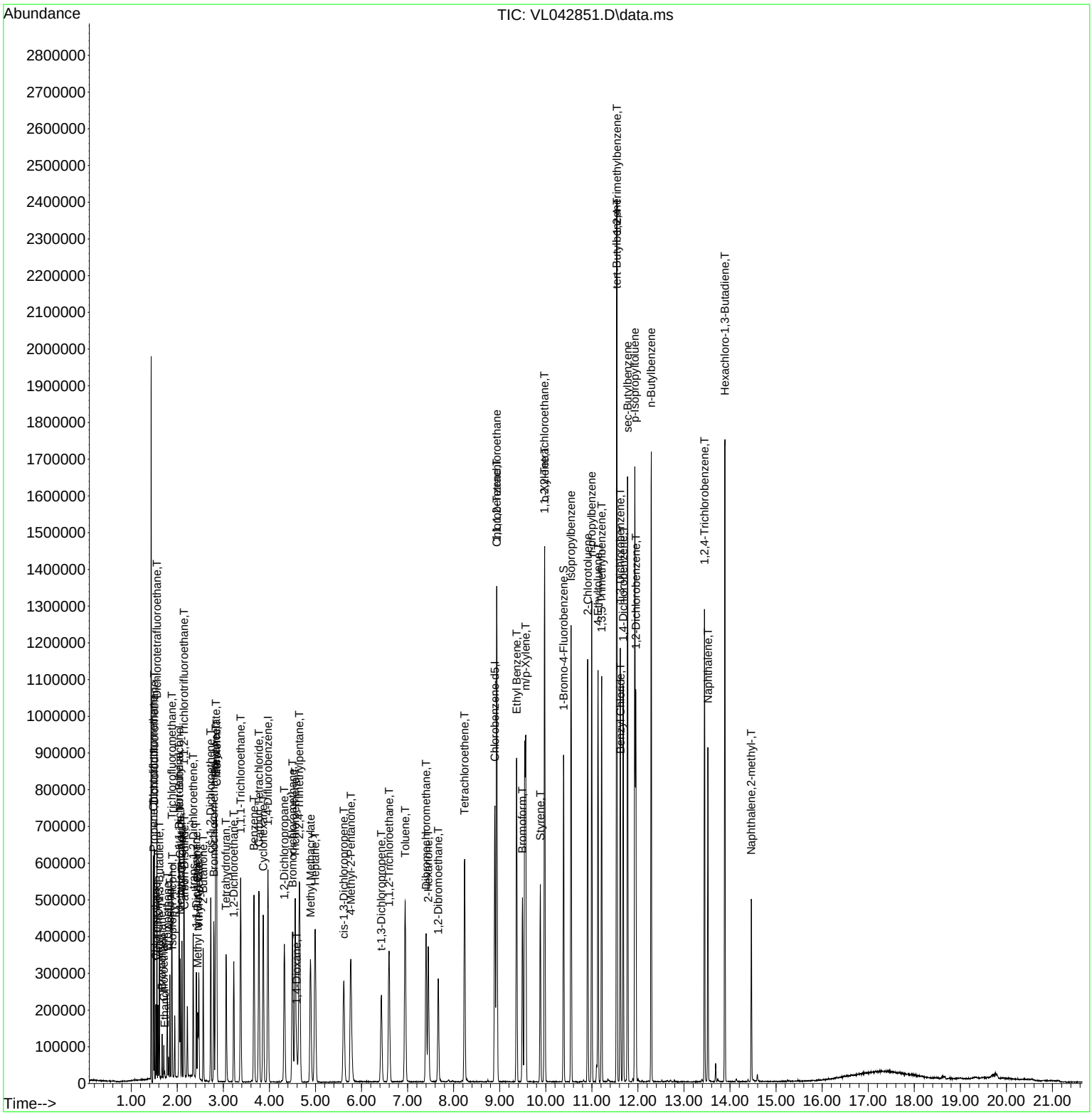
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042851.D
Acq On : 13 Aug 2025 14:32
Operator : SY/MD
Sample : VL0813ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 02:17:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0813ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 08/14/2025
Supervised By :Mahesh Dadoda 08/18/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042854.D
Acq On : 13 Aug 2025 16:27
Operator : SY/MD
Sample : QC080725 CAN10282
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC080725 CAN10282

Quant Time: Aug 14 02:18:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

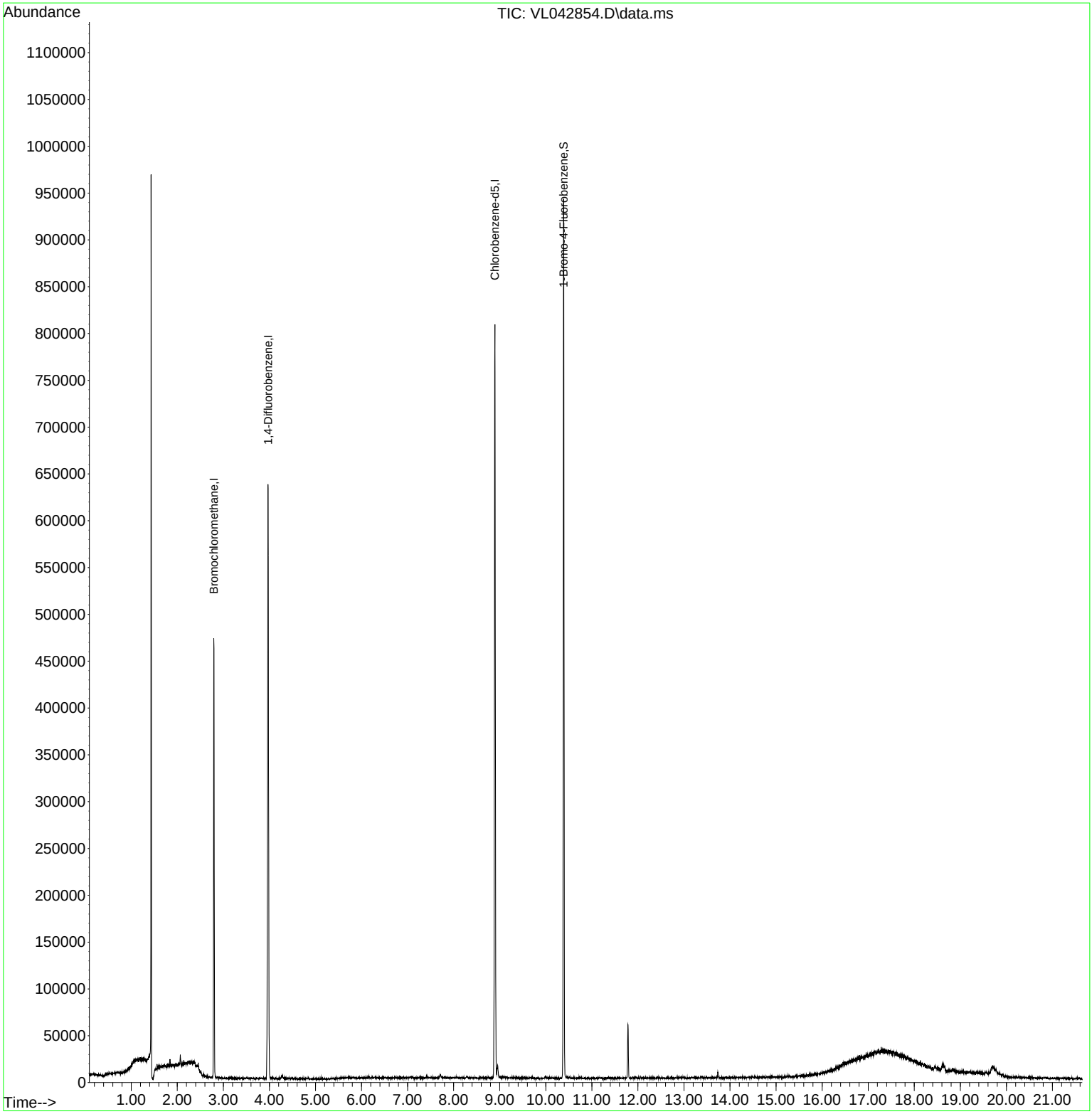
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.794	49	127975	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.972	114	396862	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.895	117	338731	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	257543	10.138	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.400%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081325\
Data File : VL042854.D
Acq On : 13 Aug 2025 16:27
Operator : SY/MD
Sample : QC080725 CAN10282
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC080725 CAN10282

Quant Time: Aug 14 02:18:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL081325

Review By	Semsettin Yesilyurt	Review On	8/14/2025 7:50:07 AM				
Supervise By	Mahesh Dadoda	Supervise On	8/18/2025 8:43:31 AM				
SubDirectory	VL081325	HP Acquire Method	TO15AIR.M		HP Processing Method	VL081325AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2655
Initial Calibration Stds	AP2650,AP2652,AP2653
CCC	AP2650
Internal Standard/PEM	AP2655
ICV/I.BLK	AP2654
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042841.D	13 Aug 2025 07:45	SY/MD	Ok
2	VSTDICCC010	VL042842.D	13 Aug 2025 08:30	SY/MD	Ok,M
3	VSTDICC002	VL042843.D	13 Aug 2025 09:06	SY/MD	Ok,M
4	VSTDICC001	VL042844.D	13 Aug 2025 09:41	SY/MD	Ok,M
5	VSTDICC0.5	VL042845.D	13 Aug 2025 10:17	SY/MD	Ok,M
6	VSTDICC0.1	VL042846.D	13 Aug 2025 10:53	SY/MD	Ok,M
7	VSTDICC0.03	VL042847.D	13 Aug 2025 11:30	SY/MD	Ok,M
8	VSTDICC015	VL042848.D	13 Aug 2025 12:06	SY/MD	Ok,M
9	VSTDICV010	VL042849.D	13 Aug 2025 12:56	SY/MD	Ok,M
10	VL0813ABL01	VL042850.D	13 Aug 2025 13:46	SY/MD	Ok
11	VL0813ABS01	VL042851.D	13 Aug 2025 14:32	SY/MD	Ok,M
12	Q2727-01DL2	VL042852.D	13 Aug 2025 15:10	SY/MD	Ok
13	Q2126-14 0.1 PPB LOQ	VL042853.D	13 Aug 2025 15:49	SY/MD	Ok,M
14	QC080725 CAN10282	VL042854.D	13 Aug 2025 16:27	SY/MD	Ok
15	Q2794-01	VL042855.D	13 Aug 2025 17:05	SY/MD	Dilution
16	Q2794-01DUP	VL042856.D	13 Aug 2025 17:43	SY/MD	Ok,M
17	Q2794-01DL	VL042857.D	13 Aug 2025 18:21	SY/MD	Ok,M
18	Q2794-02	VL042858.D	13 Aug 2025 18:58	SY/MD	Ok,M
19	Q2794-02DL	VL042859.D	13 Aug 2025 19:35	SY/MD	Not Ok
20	QC081125 CAN 10280	VL042860.D	13 Aug 2025 20:12	SY/MD	Ok
21	Q2834-01	VL042861.D	13 Aug 2025 20:49	SY/MD	Ok,M

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL081325

Review By	Semsettin Yesilyurt	Review On	8/14/2025 7:50:07 AM				
Supervise By	Mahesh Dadoda	Supervise On	8/18/2025 8:43:31 AM				
SubDirectory	VL081325	HP Acquire Method	TO15AIR.M		HP Processing Method	VL081325AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2655
Initial Calibration Stds	AP2650,AP2652,AP2653
CCC	AP2650
Internal Standard/PEM	AP2655
ICV/I.BLK	AP2654
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q2834-02	VL042862.D	13 Aug 2025 21:26	SY/MD	Ok,M
23	Q2834-02DL	VL042863.D	13 Aug 2025 22:02	SY/MD	Not Ok
24	VSTDCCC010	VL042864.D	13 Aug 2025 22:39	SY/MD	Ok,M

M : Manual Integration

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042950.D
Acq On : 22 Sep 2025 09:39
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Sep 23 02:08:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	170899	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	526679	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	486724	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	371195	10.217	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	213351	9.282	ppbv	100
3) Chlorodifluoromethane	1.473	51	269073	9.392	ppbv	100
4) Chloromethane	1.531	50	95679	9.196	ppbv	100
5) Vinyl Chloride	1.577	62	80350	8.543	ppbv	100
6) Bromomethane	1.667	94	28301	8.530	ppbv	100
7) Chloroethane	1.703	64	33446	9.158	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	178992	9.122	ppbv	100
9) Propene	1.483	41	116849	9.376	ppbv	100
10) Heptane	4.969	43	319577	9.560	ppbv	100
11) Trichlorofluoromethane	1.874	101	204850	9.243	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	164598	9.171	ppbv	100
13) Ethanol	1.719	45	9094	7.613	ppbv	100
14) Bromoethene	1.780	108	61824	9.111	ppbv	100
15) Acetone	1.832	43	169676	7.623	ppbv	100
16) 1,3-Butadiene	1.606	39	88812	8.459	ppbv	100
17) tert-Butyl alcohol	2.036	59	230853	9.456	ppbv	100
18) 1,1-Dichloroethene	2.030	96	76184	9.170	ppbv	100
19) Isopropyl Alcohol	1.884	45	122753	9.174	ppbv	100
20) Methylene Chloride	2.059	84	66314	9.992	ppbv	100
21) Allyl Chloride	2.094	41	146473	9.449	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	86580	9.172	ppbv	100
23) Vinyl Acetate	2.460	43	272378	8.566	ppbv	100
24) 1,1-Dichloroethane	2.405	63	169721	9.168	ppbv	100
25) Ethyl Acetate	2.829	43	538761	9.577	ppbv	100
26) Hexane	2.823	57	238896	9.316	ppbv	100
27) Carbon Disulfide	2.146	76	217259	9.446	ppbv	100
28) Methyl tert-Butyl Ether	2.434	73	108987	8.176	ppbv	100
29) Chloroform	2.845	83	315779	9.418	ppbv	100
30) Cyclohexane	3.852	84	203803	9.506	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	231907	9.654	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	325118	8.947	ppbv	100
34) 2-Butanone	2.551	43	344874	9.343	ppbv	100
35) Carbon Tetrachloride	3.755	117	321267	9.480	ppbv	100
36) Benzene	3.651	78	472855	9.561	ppbv	100
37) 1,2-Dichloroethane	3.214	62	247754	9.525	ppbv	100
38) Trichloroethene	4.541	130	224516	9.134	ppbv	100
39) 1,2-Dichloropropane	4.305	63	172059	9.523	ppbv	100
40) 1,4-Dioxane	4.570	88	77889	9.283	ppbv #	100
41) Tetrahydrofuran	3.046	42	204724	9.649	ppbv	100
42) Bromodichloromethane	4.480	83	358858	9.903	ppbv	100
43) Methyl Methacrylate	4.871	69	193676	9.646	ppbv	100
44) 2,2,4-Trimethylpentane	4.632	57	823031	9.631	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	215233	9.969	ppbv	100

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042950.D
Acq On : 22 Sep 2025 09:39
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Sep 23 02:08:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.590	75	275210	10.006	ppbv		100
47)	1,1,2-Trichloroethane	6.571	97	181329	9.498	ppbv		100
48)	Dibromochloromethane	7.383	129	300497	9.845	ppbv		100
49)	Bromoform	9.480	173	267814	10.087	ppbv		100
50)	4-Methyl-2-Pentanone	5.736	43	492068	9.920	ppbv		100
51)	2-Hexanone	7.428	43	395744	10.036	ppbv	#	100
52)	Tetrachloroethene	8.218	164	171294	8.951	ppbv		100
53)	Toluene	6.923	91	567779	9.699	ppbv		100
54)	1,2-Dibromoethane	7.645	107	257904	9.605	ppbv		100
56)	1,1,1,2-Tetrachloroethane	8.921	131	223066	9.575	ppbv		100
57)	Chlorobenzene	8.917	112	415238	9.345	ppbv		100
58)	Ethyl Benzene	9.348	91	764249	9.562	ppbv		100
59)	m/p-Xylene	9.526	91	600237	9.519	ppbv	#	100
60)	o-Xylene	9.959	91	594329	9.437	ppbv		100
61)	Styrene	9.866	104	293111	9.840	ppbv		100
62)	Isopropylbenzene	10.536	105	877401	9.347	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.956	83	296678	8.963	ppbv		100
64)	n-propylbenzene	10.985	120	230432	9.394	ppbv		100
65)	tert-Butylbenzene	11.526	119	757958	9.078	ppbv		100
66)	Benzyl Chloride	11.610	91	94982	10.842	ppbv		100
67)	sec-Butylbenzene	11.762	105	1066409	9.166	ppbv		100
69)	p-Isopropyltoluene	11.921	119	903376	9.192	ppbv		100
70)	n-Butylbenzene	12.277	91	915624	9.543	ppbv		100
71)	2-Chlorotoluene	10.895	91	668239	9.428	ppbv		100
72)	4-Ethyltoluene	11.121	105	741298	9.398	ppbv		100
73)	1,3,5-Trimethylbenzene	11.199	105	614632	9.608	ppbv		100
74)	1,2,4-Trimethylbenzene	11.532	105	656535	9.294	ppbv		100
75)	1,3-Dichlorobenzene	11.604	146	411473	9.392	ppbv		100
76)	1,4-Dichlorobenzene	11.668	146	411464	9.456	ppbv		100
77)	1,2-Dichlorobenzene	11.944	146	387219	9.289	ppbv		100
78)	Hexachloro-1,3-Butadiene	13.876	225	280080	8.591	ppbv		100
79)	Naphthalene	13.510	128	668171	10.696	ppbv		100
80)	Naphthalene,2-methyl-	14.452	142	195695	10.142	ppbv		100
81)	1,2,4-Trichlorobenzene	13.436	180	349393	10.461	ppbv		100

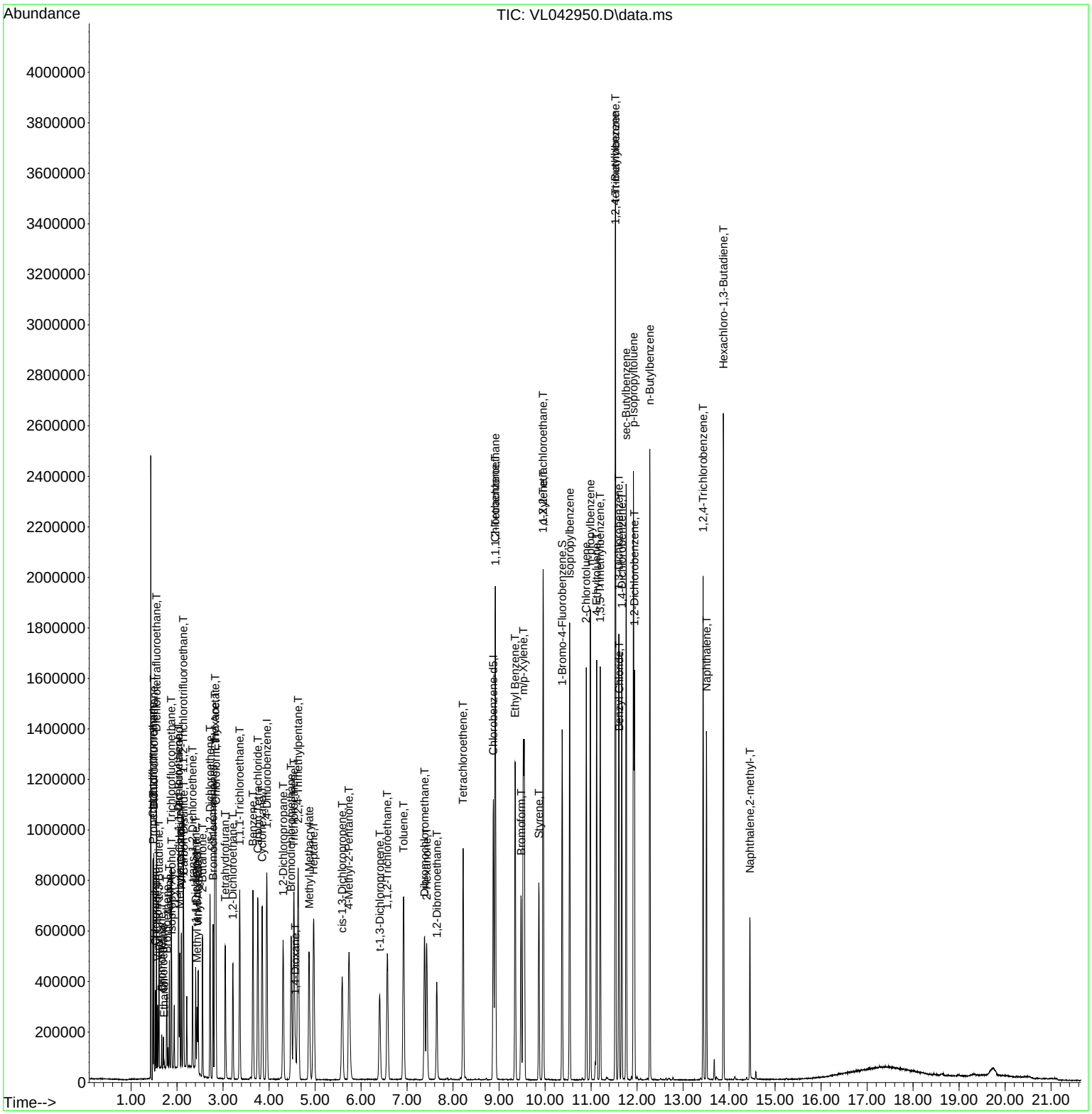
(#) = qualifier out of range (m) = manual integration (+) = signals summed

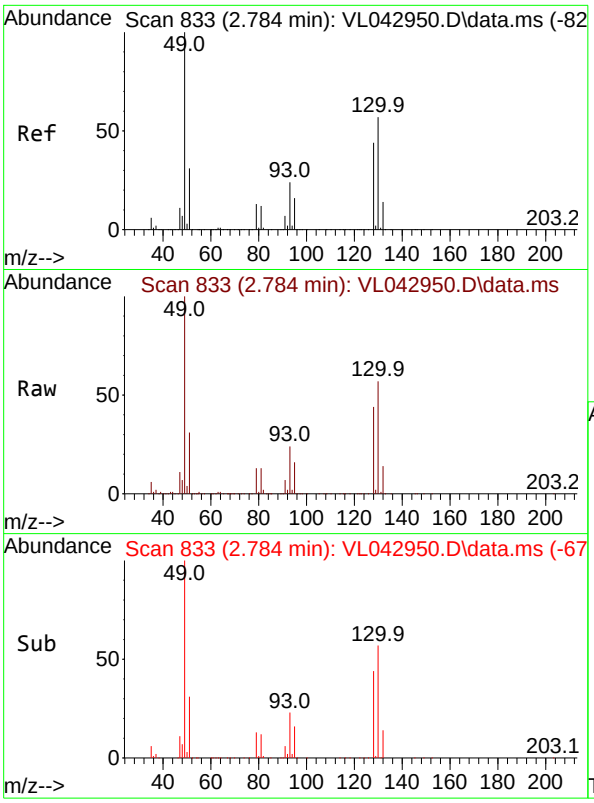
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042950.D
Acq On : 22 Sep 2025 09:39
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Sep 23 02:08:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



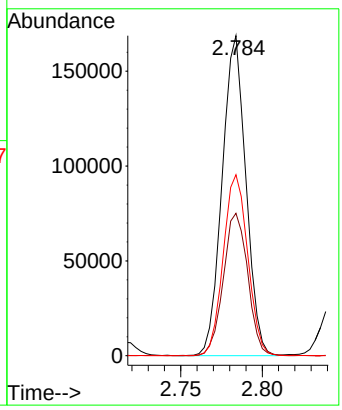


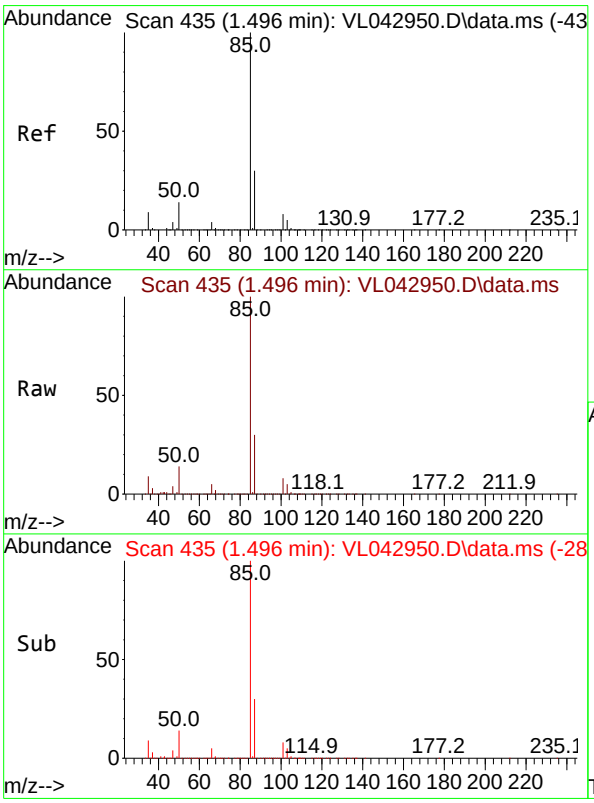
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 49 Resp: 170899

Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.9	68.8
130	58.2	29.1	87.3

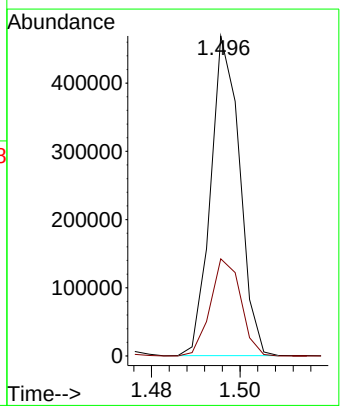


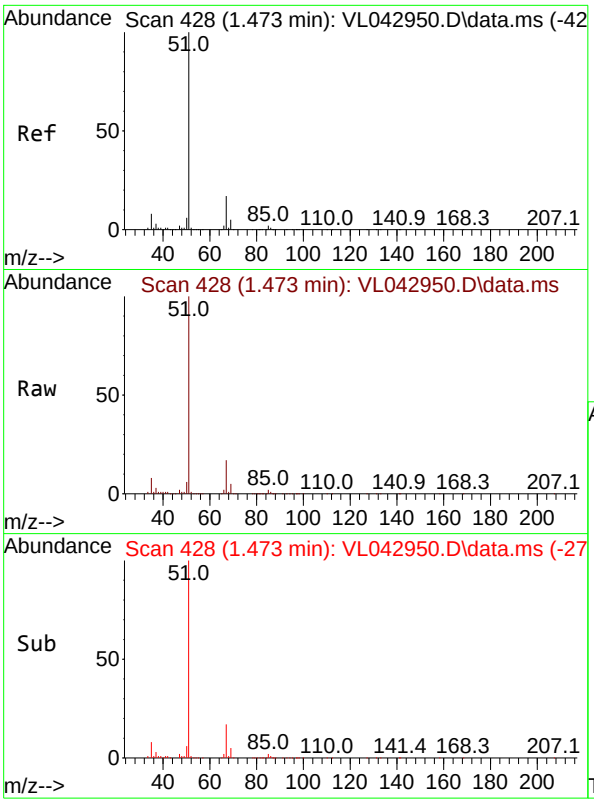


#2
Dichlorodifluoromethane
Concen: 9.282 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 85 Resp: 213351

Ion	Ratio	Lower	Upper
85	100		
87	30.4	24.3	36.5



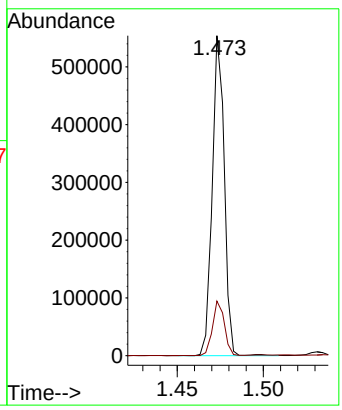


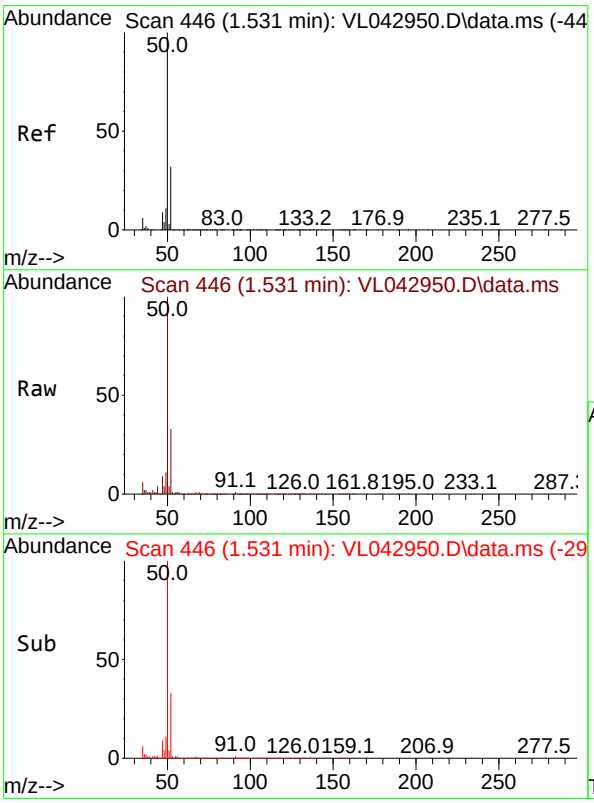
#3
Chlorodifluoromethane
Concen: 9.392 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 51 Resp: 269073

Ion	Ratio	Lower	Upper
51	100		
67	17.3	13.8	20.8

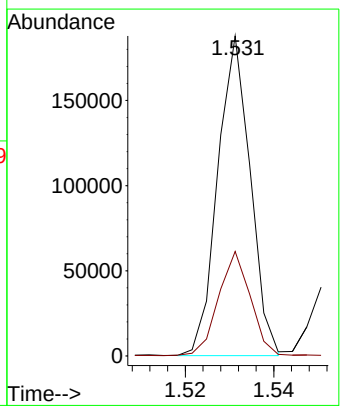


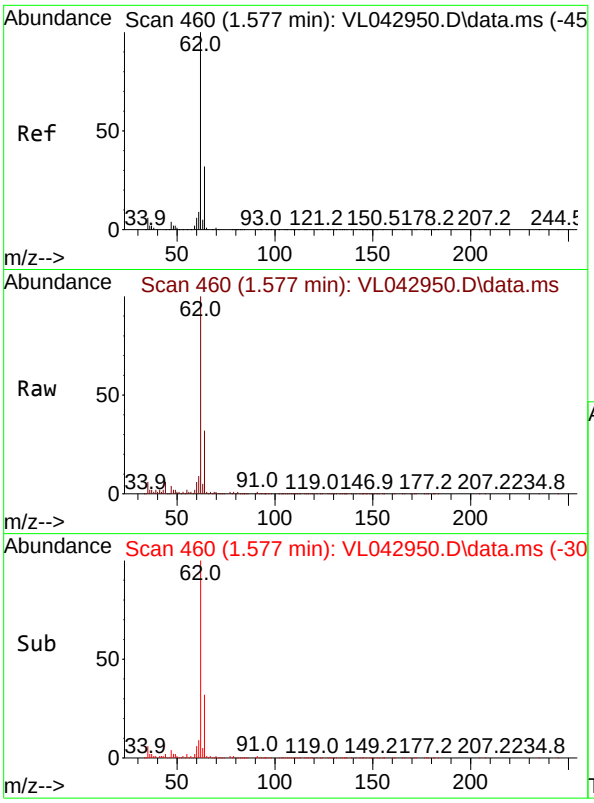


#4
Chloromethane
Concen: 9.196 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 50 Resp: 95679

Ion	Ratio	Lower	Upper
50	100		
52	32.4	25.9	38.9



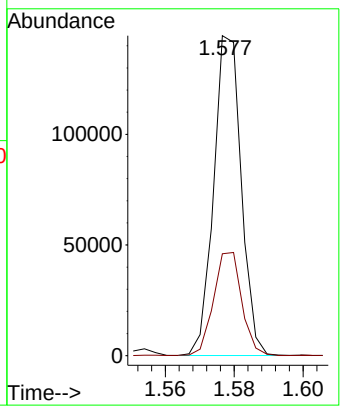


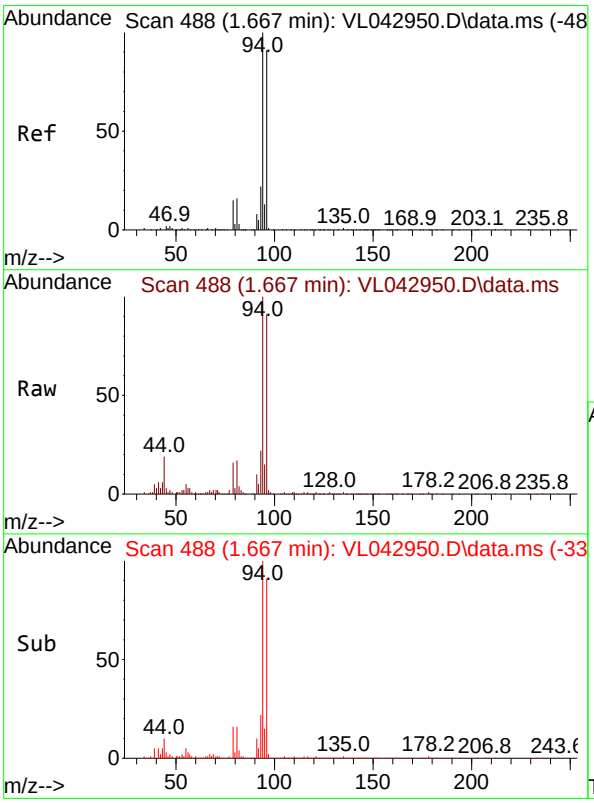
#5
Vinyl Chloride
Concen: 8.543 ppbv
RT: 1.577 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 80350

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.4	38.2

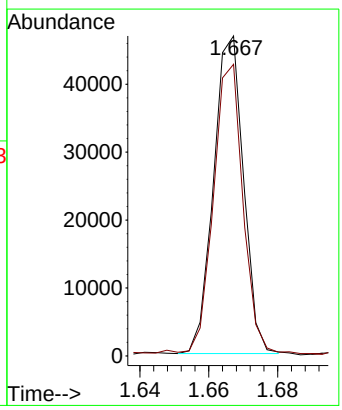


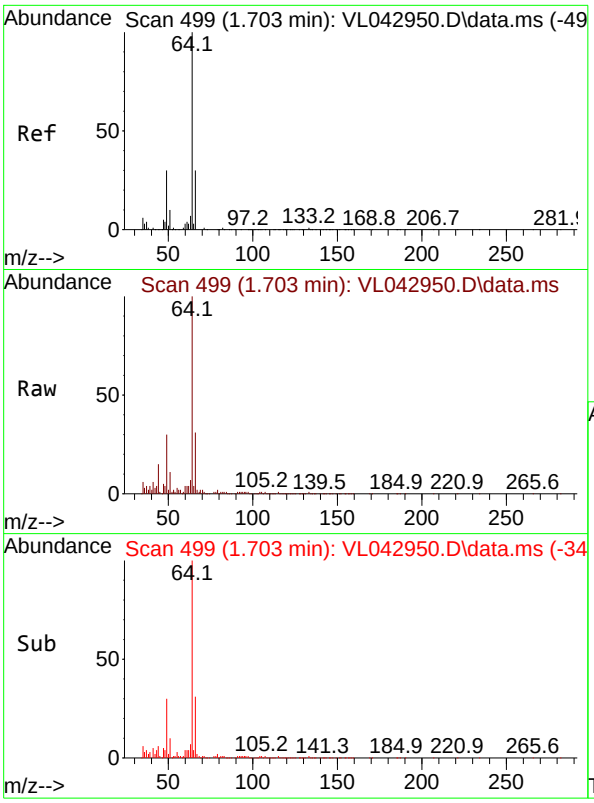


#6
Bromomethane
Concen: 8.530 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 94 Resp: 28301

Ion	Ratio	Lower	Upper
94	100		
96	90.7	72.6	108.8



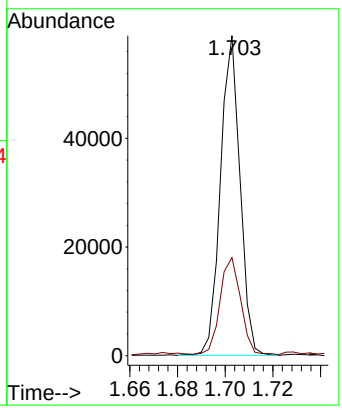


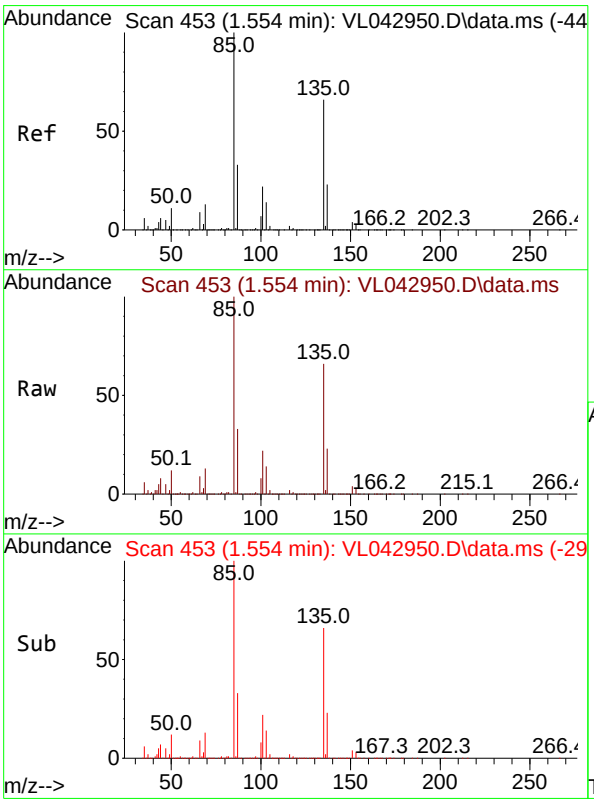
#7
Chloroethane
Concen: 9.158 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 64 Resp: 33446

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	36.8

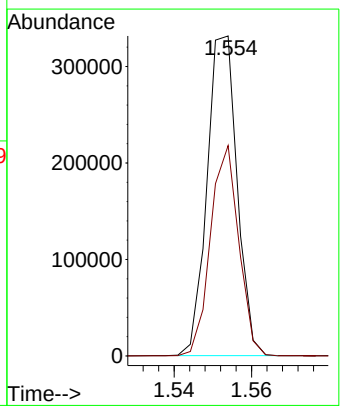


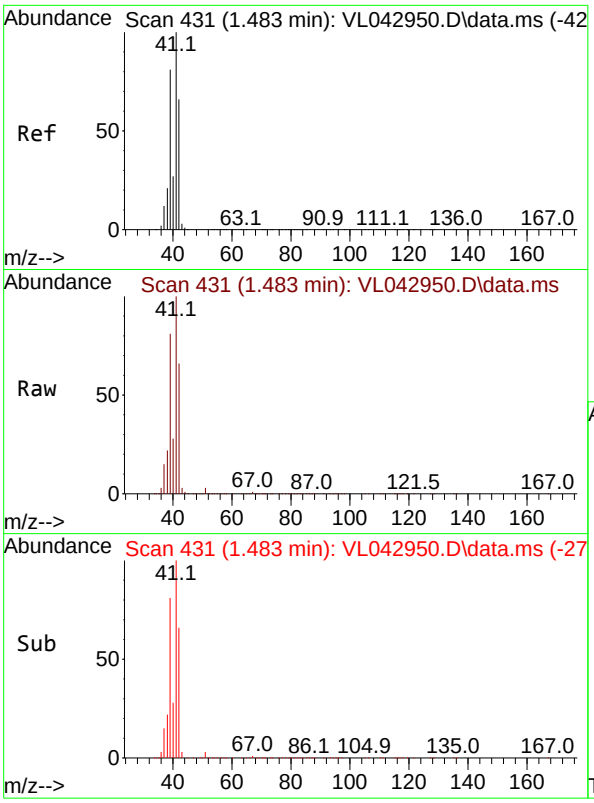


#8
Dichlorotetrafluoroethane
Concen: 9.122 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 85 Resp: 178992

Ion	Ratio	Lower	Upper
85	100		
135	62.1	49.7	74.5



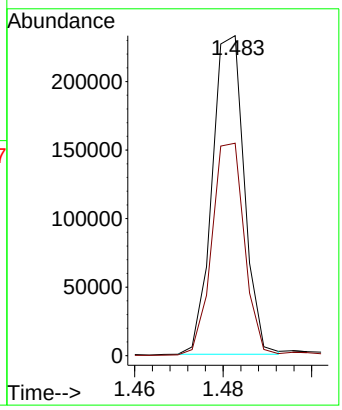


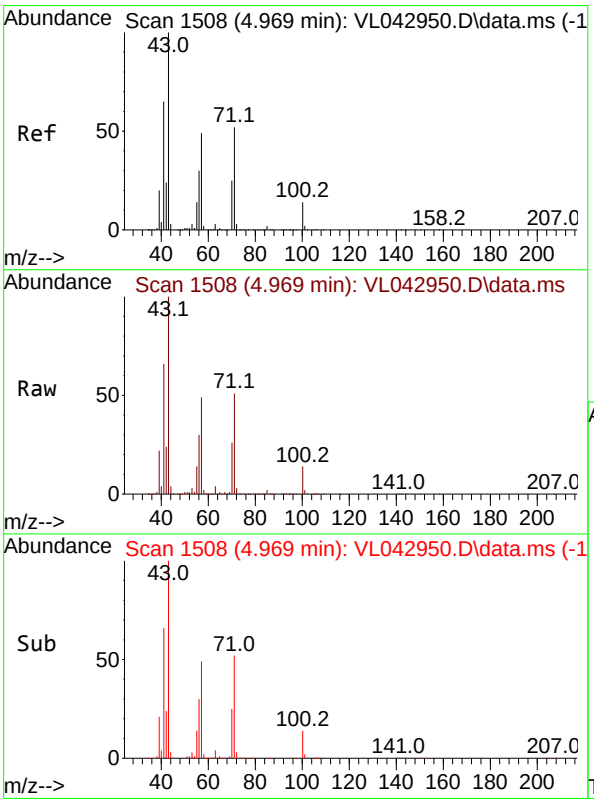
#9
Propene
Concen: 9.376 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 116849

Ion	Ratio	Lower	Upper
41	100		
42	71.8	57.4	86.2

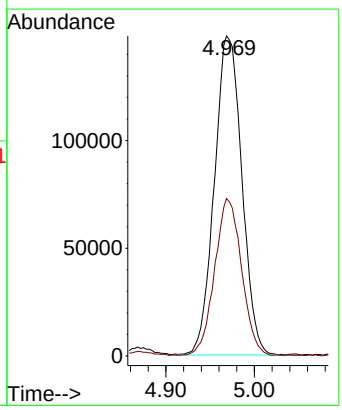


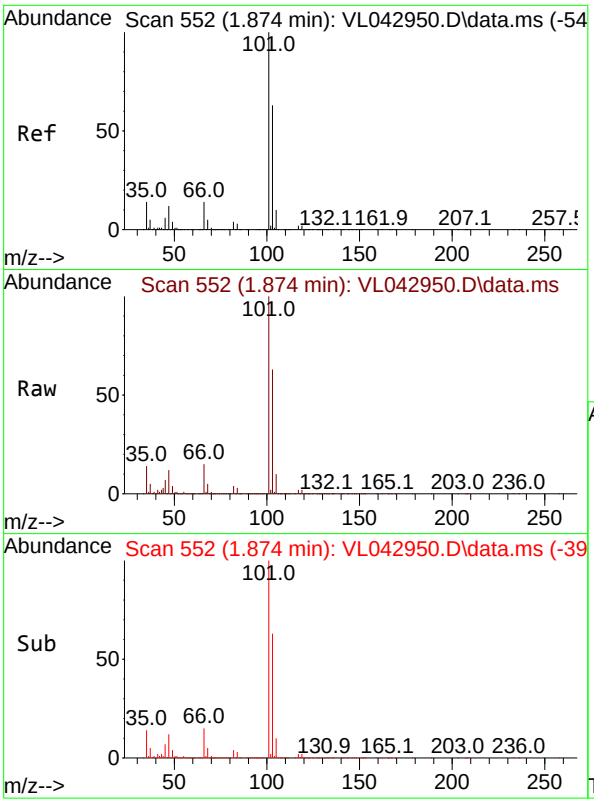


#10
Heptane
Concen: 9.560 ppbv
RT: 4.969 min Scan# 1508
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 319577

Ion	Ratio	Lower	Upper
43	100		
57	48.2	38.6	57.8



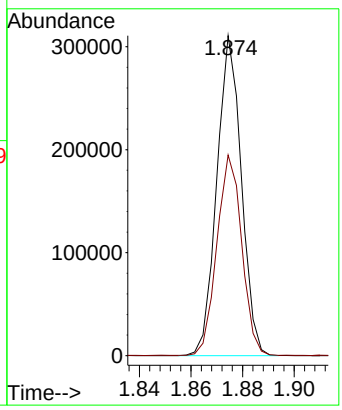


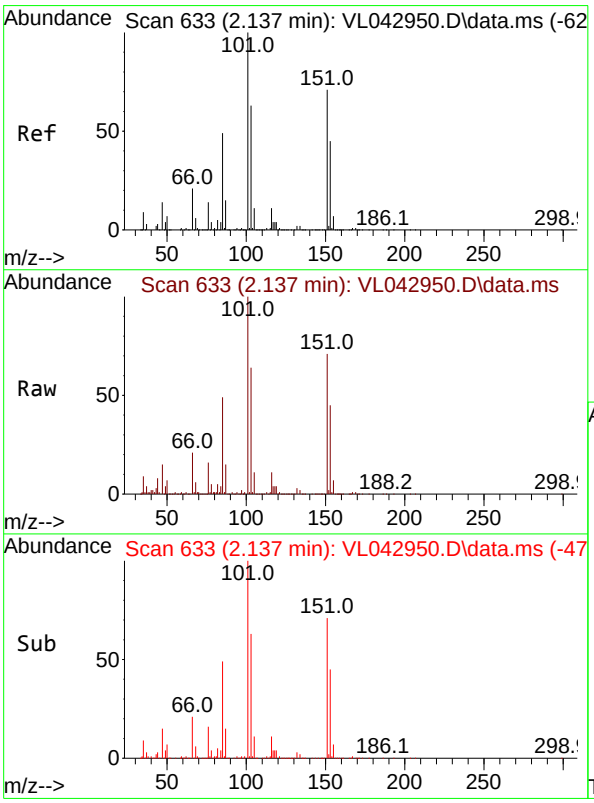
#11
Trichlorofluoromethane
Concen: 9.243 ppbv
RT: 1.874 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:101 Resp: 204850

Ion	Ratio	Lower	Upper
101	100		
103	62.6	50.1	75.1

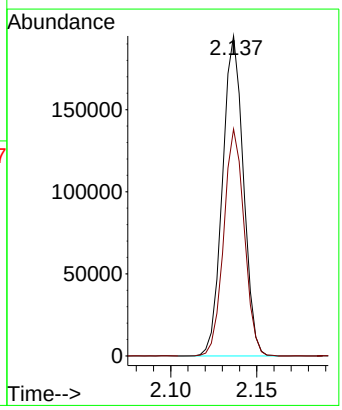


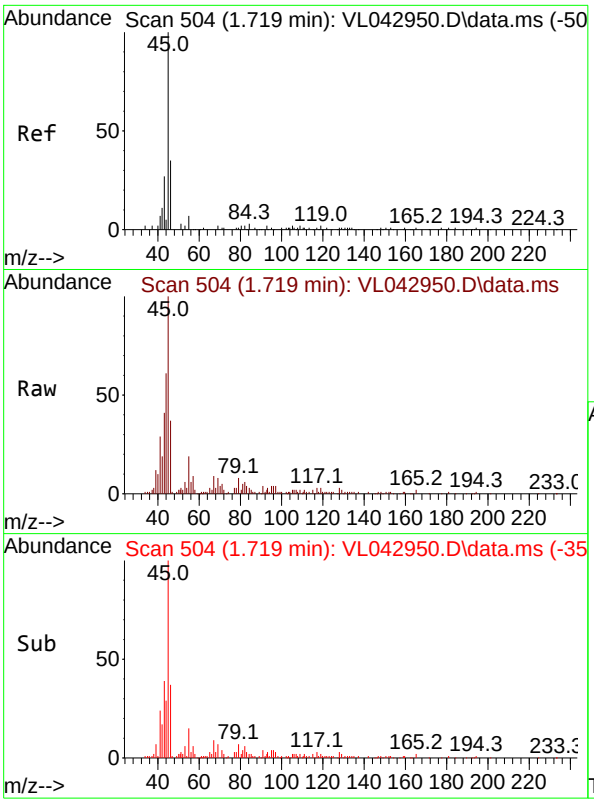


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.171 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:101 Resp: 164598

Ion	Ratio	Lower	Upper
101	100		
151	69.6	55.7	83.5



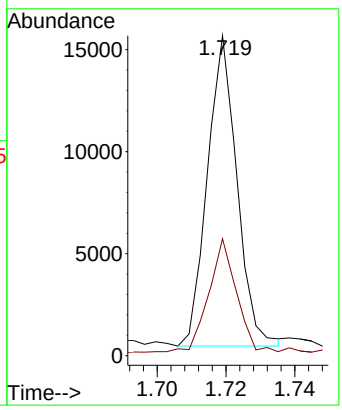


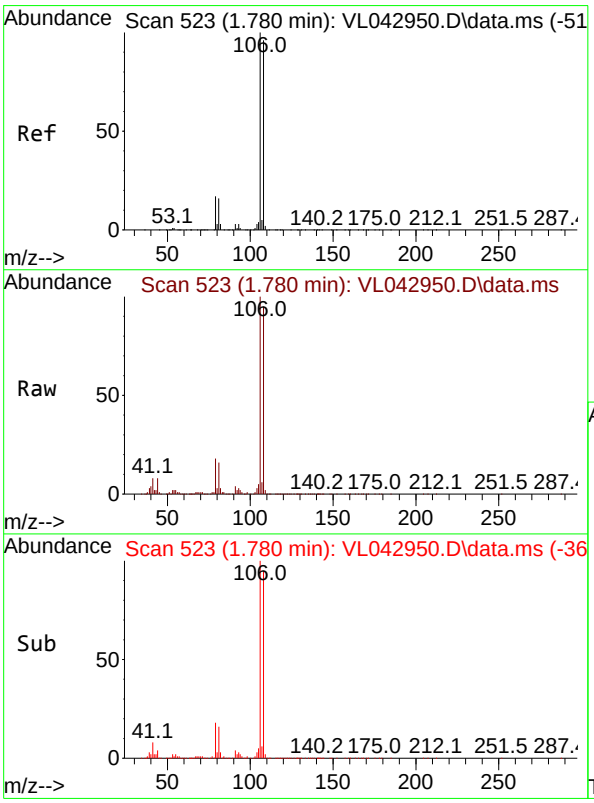
#13
Ethanol
Concen: 7.613 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 9094

Ion	Ratio	Lower	Upper
45	100		
46	40.4	16.2	64.6

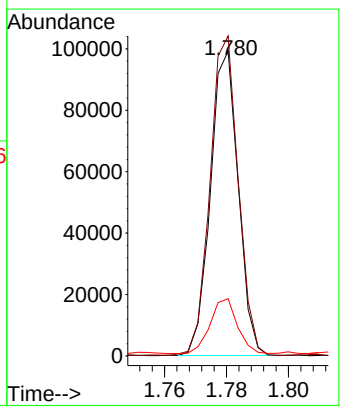


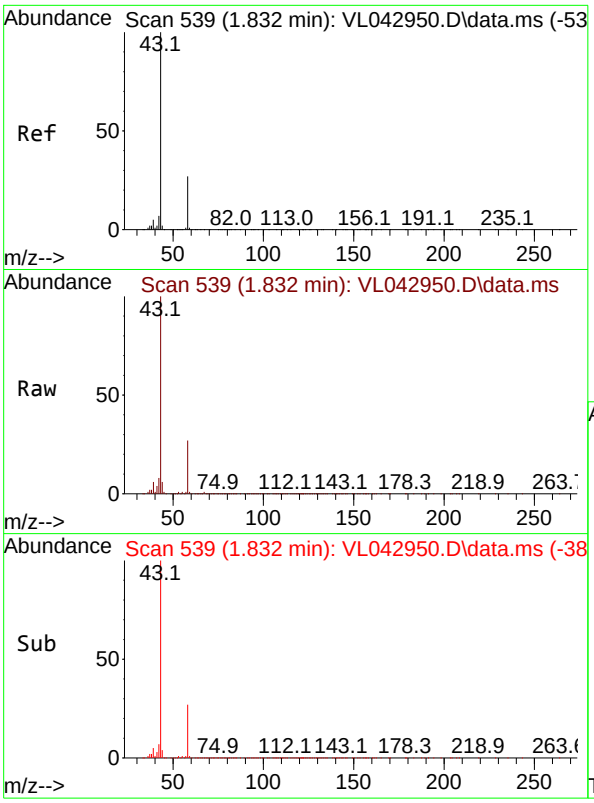


#14
Bromoethene
Concen: 9.111 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:108 Resp: 61824

Ion	Ratio	Lower	Upper
108	100		
106	107.5	86.0	129.0
79	17.7	14.2	21.2



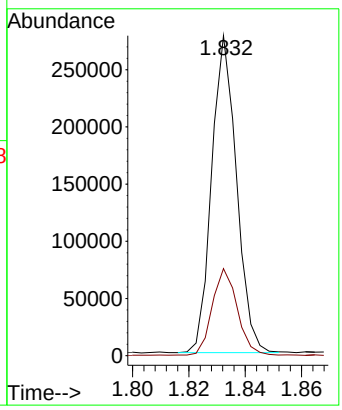


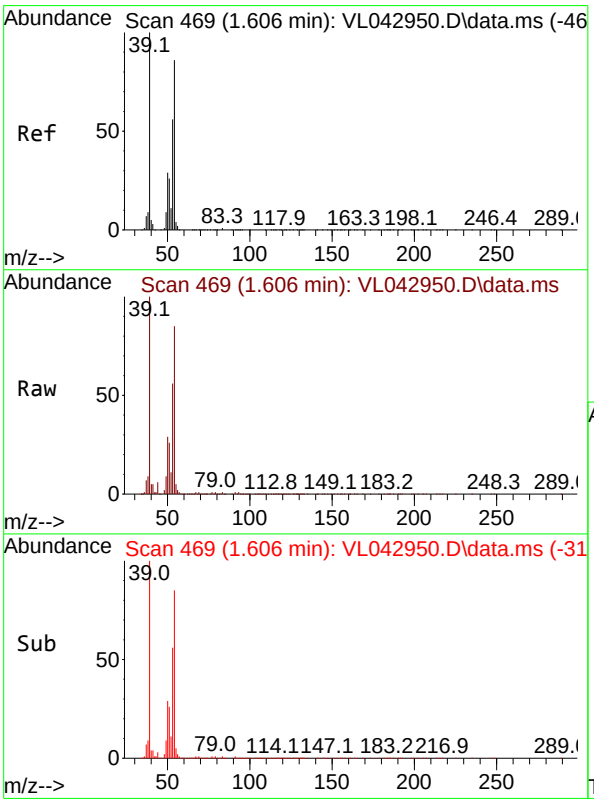
#15
Acetone
Concen: 7.623 ppbv
RT: 1.832 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 169676

Ion	Ratio	Lower	Upper
43	100		
58	27.9	22.3	33.5

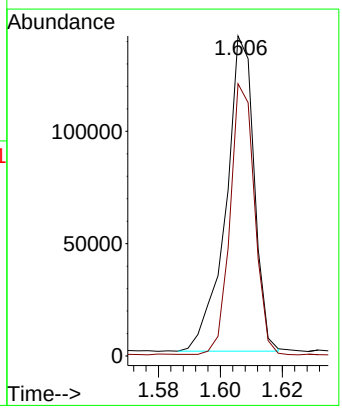


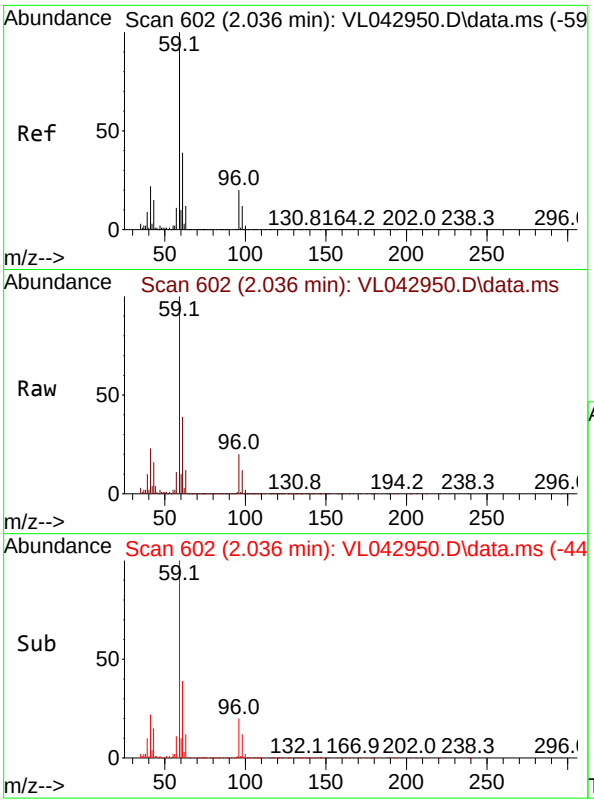


#16
1,3-Butadiene
Concen: 8.459 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 39 Resp: 88812

Ion	Ratio	Lower	Upper
39	100		
54	76.0	60.8	91.2



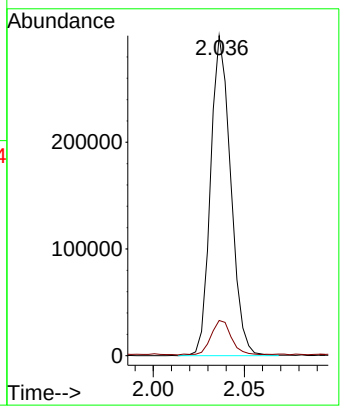


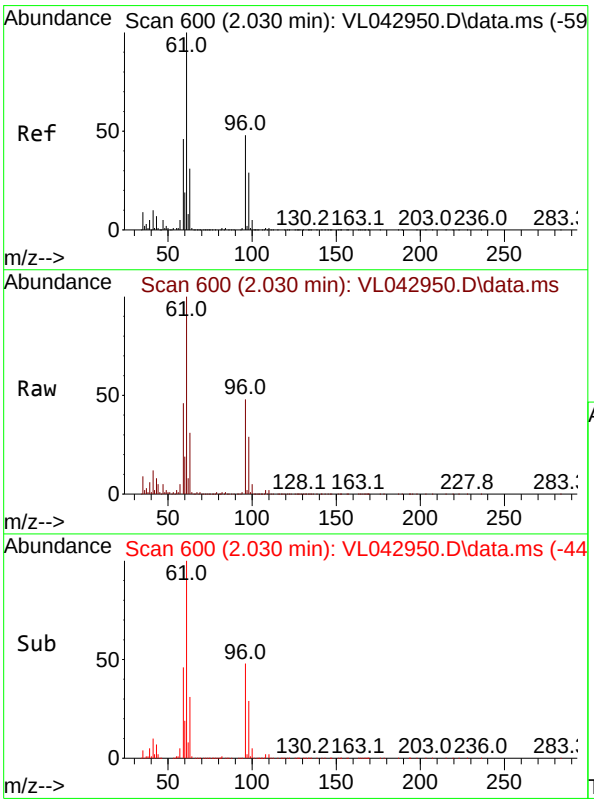
#17
tert-Butyl alcohol
Concen: 9.456 ppbv
RT: 2.036 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 59 Resp: 230853

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.6	12.8

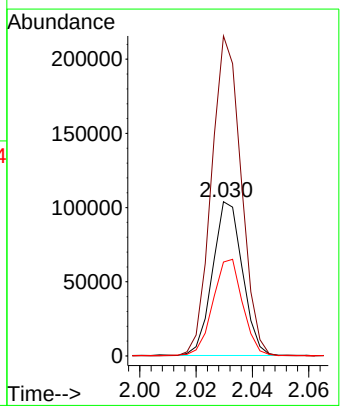


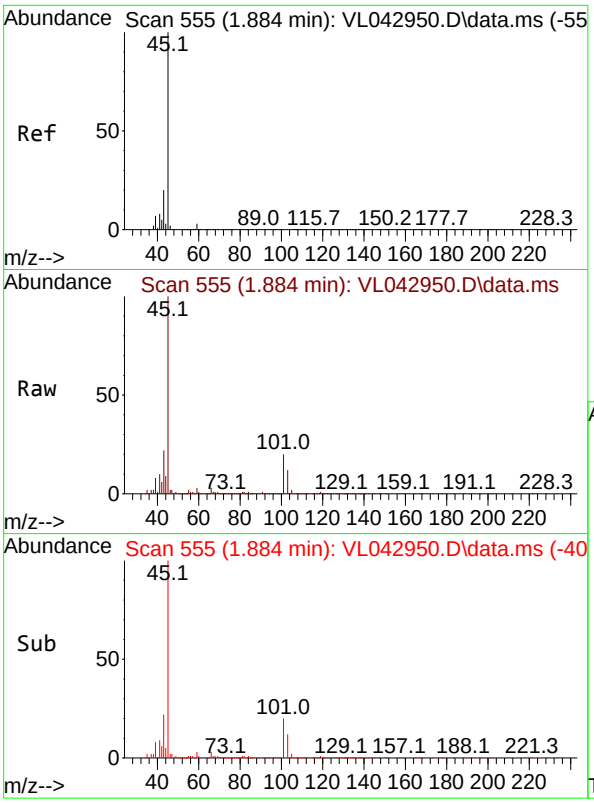


#18
1,1-Dichloroethene
Concen: 9.170 ppbv
RT: 2.030 min Scan# 600
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 96 Resp: 76184

Ion	Ratio	Lower	Upper
96	100		
61	207.8	166.2	249.4
98	60.8	48.6	73.0



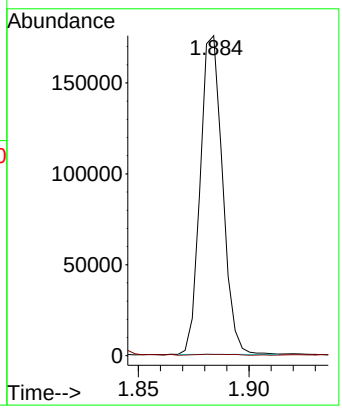


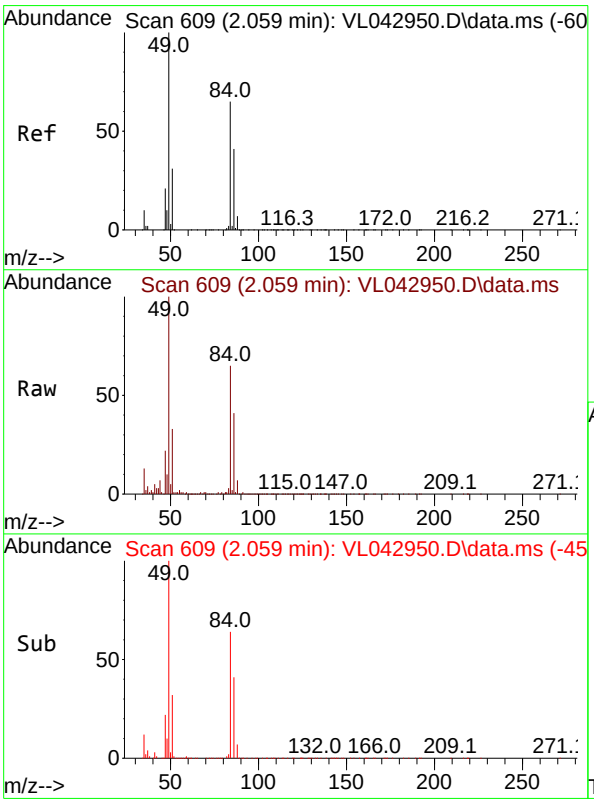
#19
Isopropyl Alcohol
Concen: 9.174 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 122753

Ion	Ratio	Lower	Upper
45	100		
58	38.8	31.0	46.6

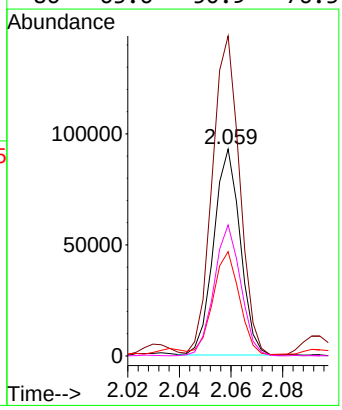


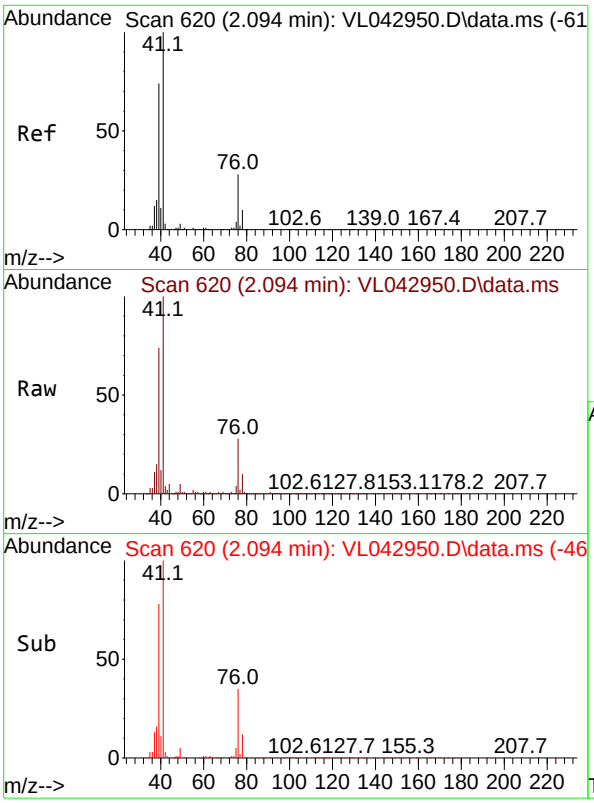


#20
Methylene Chloride
Concen: 9.992 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 84 Resp: 66314

Ion	Ratio	Lower	Upper
84	100		
49	155.1	124.1	186.1
51	49.8	39.8	59.8
86	63.6	50.9	76.3



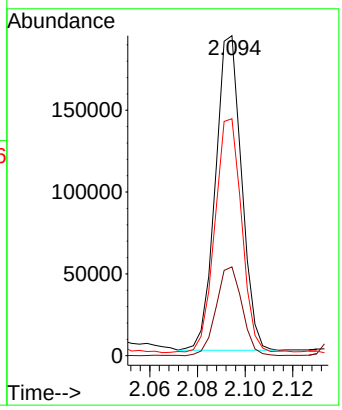


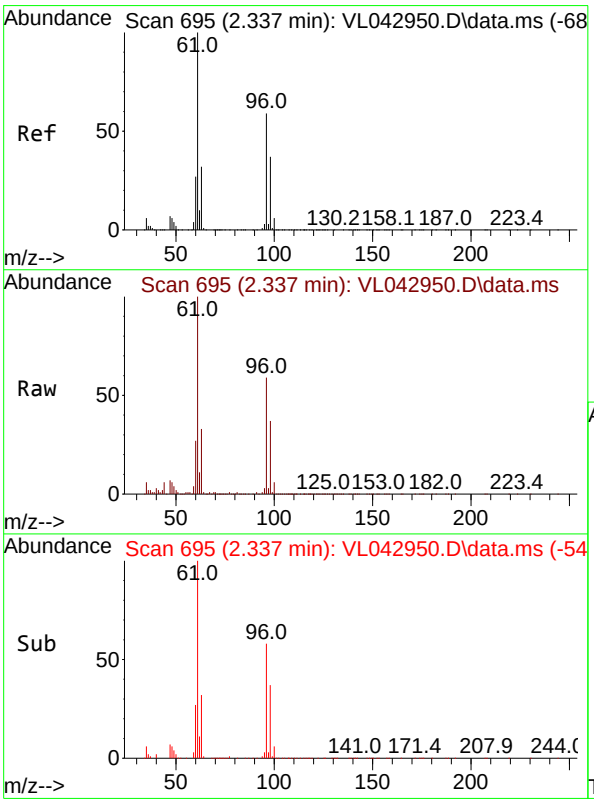
#21
Allyl Chloride
Concen: 9.449 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 146473

Ion	Ratio	Lower	Upper
41	100		
76	27.9	22.3	33.5
39	76.6	61.3	91.9

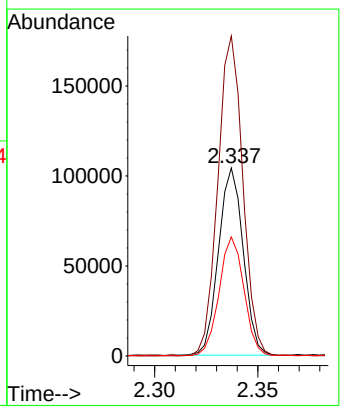


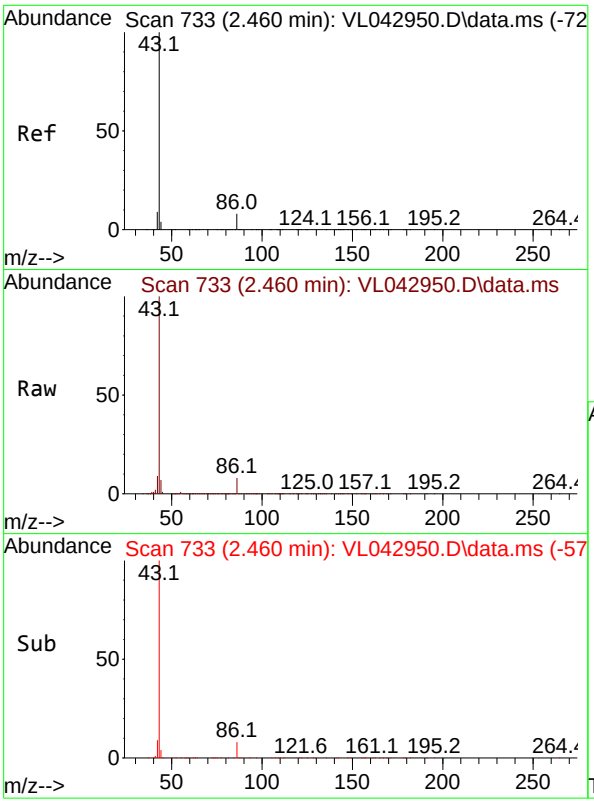


#22
trans-1,2-Dichloroethene
Concen: 9.172 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 96 Resp: 86580

Ion	Ratio	Lower	Upper
96	100		
61	170.6	136.5	204.7
98	63.3	50.6	76.0



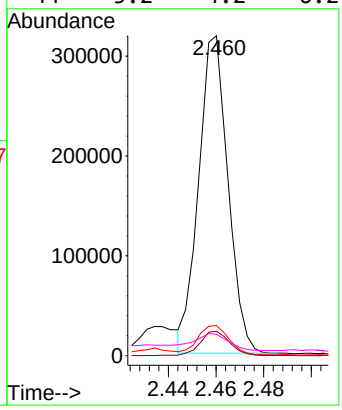


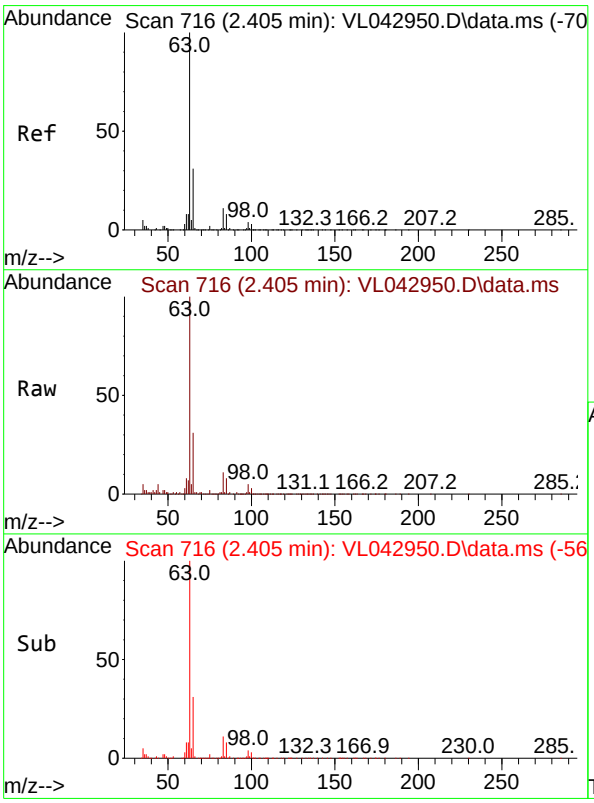
#23
Vinyl Acetate
Concen: 8.566 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 272378

Ion	Ratio	Lower	Upper
43	100		
86	7.7	6.2	9.2
42	9.2	7.4	11.0
44	5.2	4.2	6.2

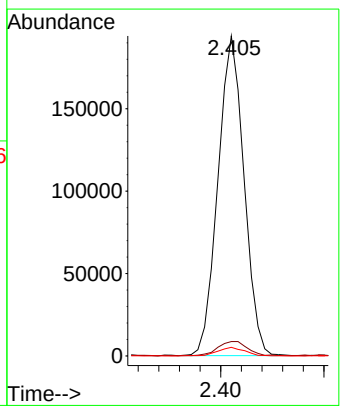


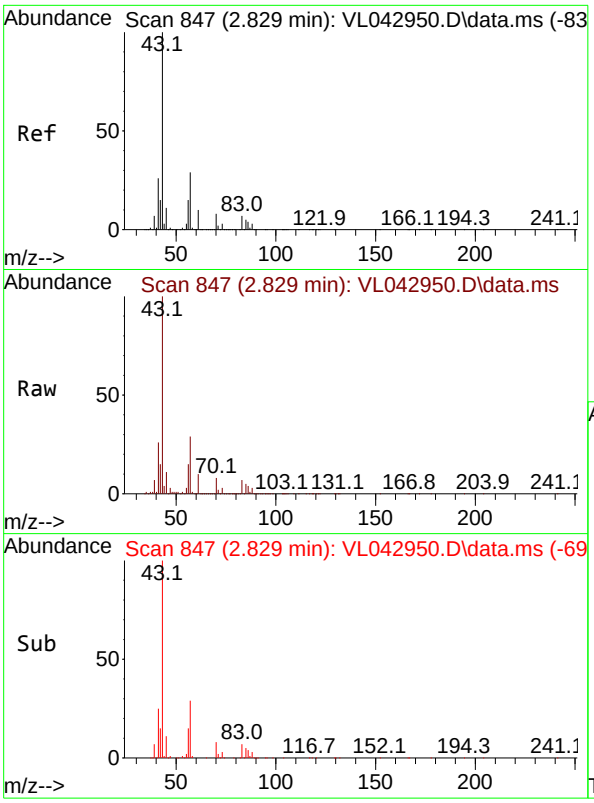


#24
1,1-Dichloroethane
Concen: 9.168 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 63 Resp: 169721

Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.2	6.6
100	2.7	1.4	4.0



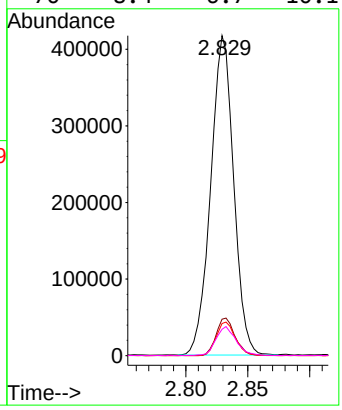


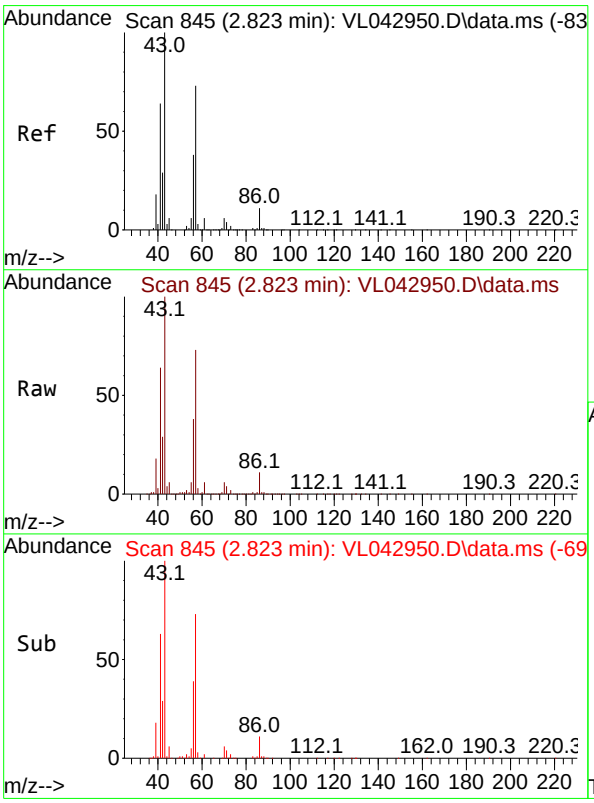
#25
Ethyl Acetate
Concen: 9.577 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 538761

Ion	Ratio	Lower	Upper
43	100		
45	9.6	7.7	11.5
61	8.9	7.1	10.7
70	8.4	6.7	10.1

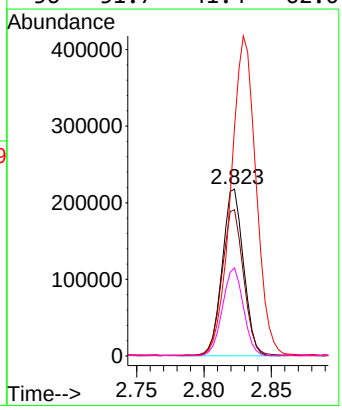


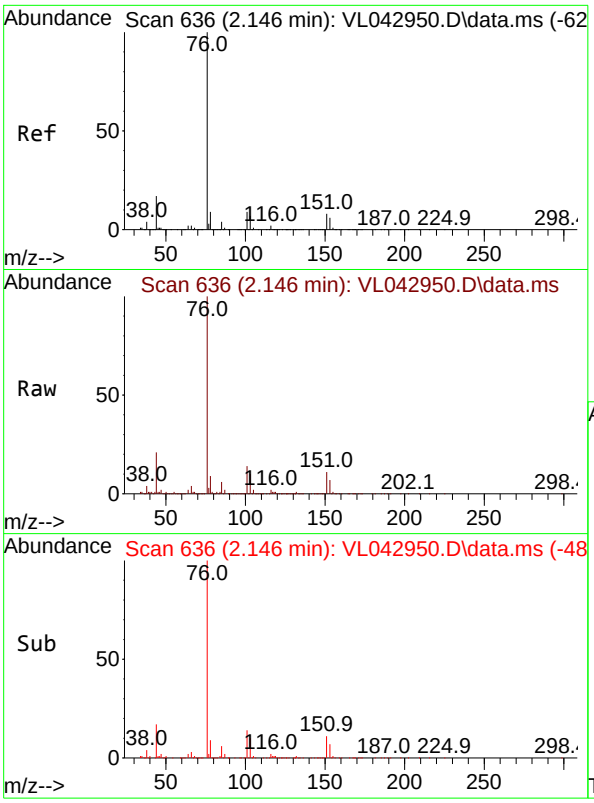


#26
Hexane
Concen: 9.316 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 57 Resp: 238896

Ion	Ratio	Lower	Upper
57	100		
41	89.6	71.7	107.5
43	226.0	180.8	271.2
56	51.7	41.4	62.0



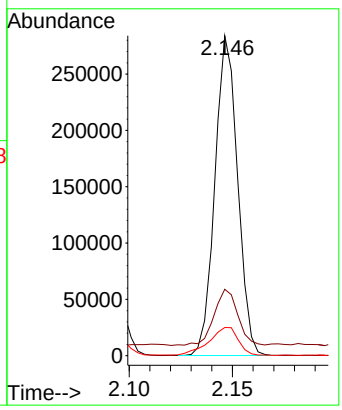


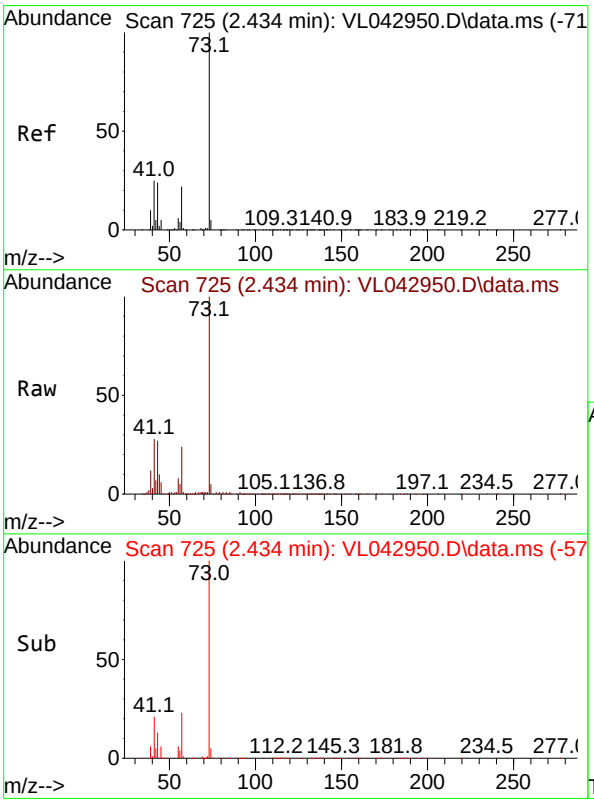
#27
Carbon Disulfide
Concen: 9.446 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 76 Resp: 217259

Ion	Ratio	Lower	Upper
76	100		
44	19.5	15.6	23.4
78	11.1	8.9	13.3

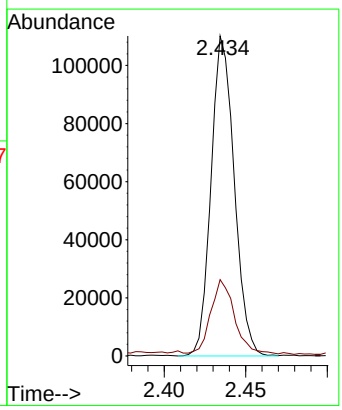


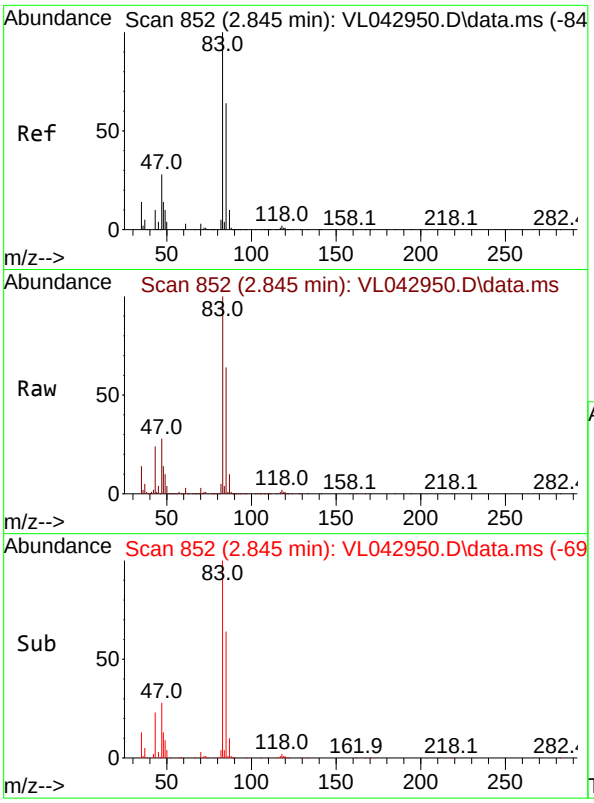


#28
Methyl tert-Butyl Ether
Concen: 8.176 ppbv
RT: 2.434 min Scan# 725
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 73 Resp: 108987

Ion	Ratio	Lower	Upper
73	100		
57	25.8	20.6	31.0



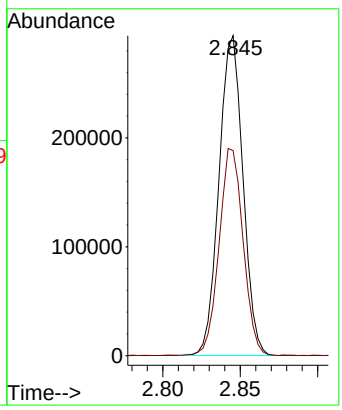


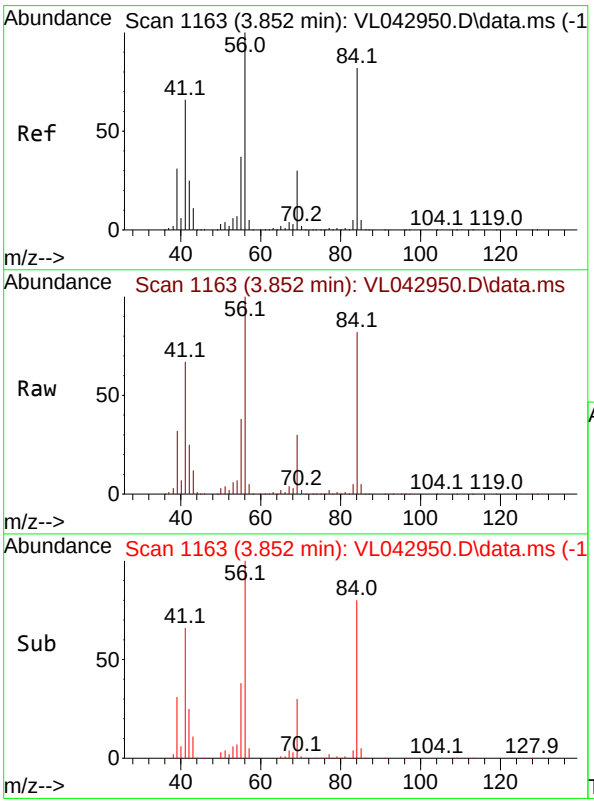
#29
Chloroform
Concen: 9.418 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 315779

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.2	76.8

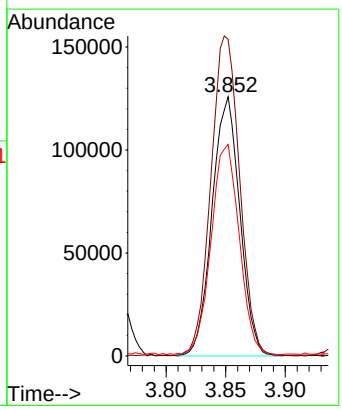


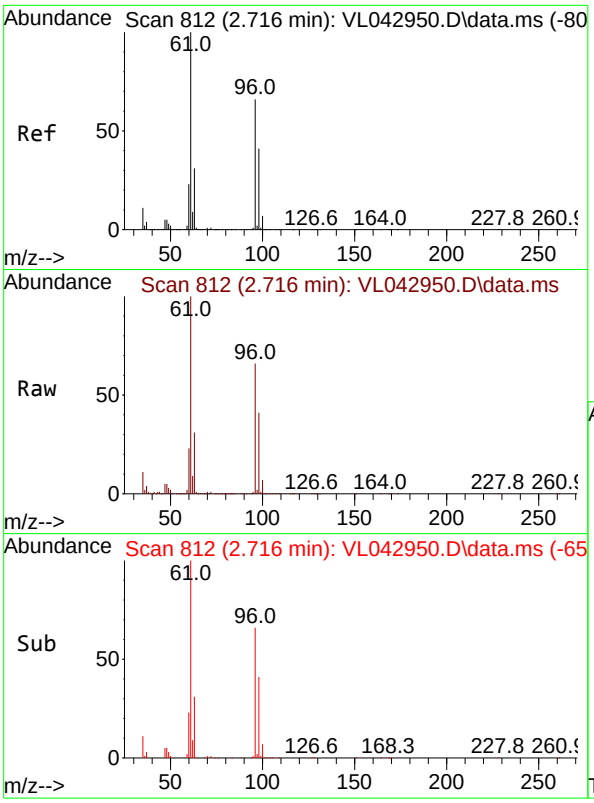


#30
Cyclohexane
Concen: 9.506 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 84 Resp: 203803

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.2	153.4
41	82.0	65.6	98.4



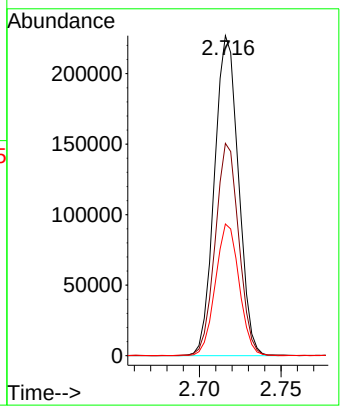


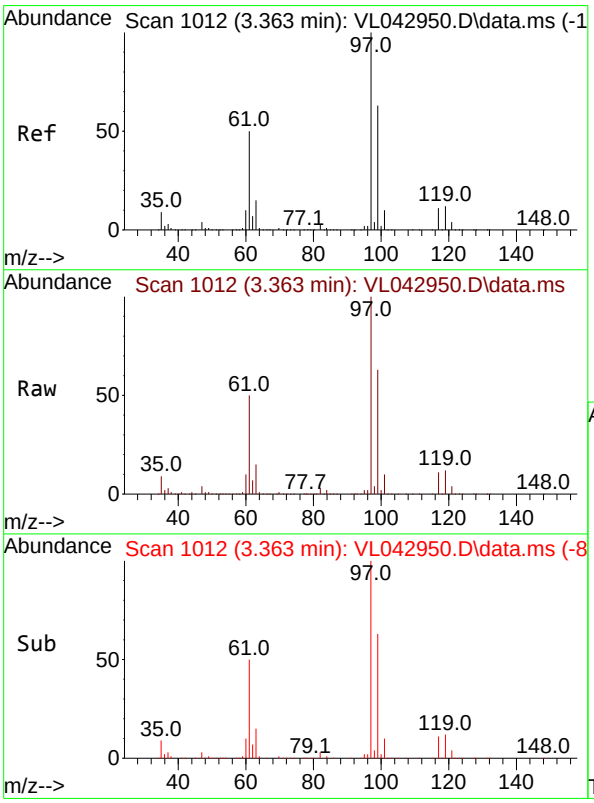
#31
cis-1,2-Dichloroethene
Concen: 9.654 ppbv
RT: 2.716 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 61 Resp: 231907

Ion	Ratio	Lower	Upper
61	100		
96	66.3	53.0	79.6
98	41.1	32.9	49.3

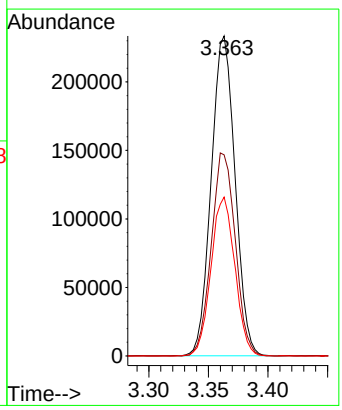


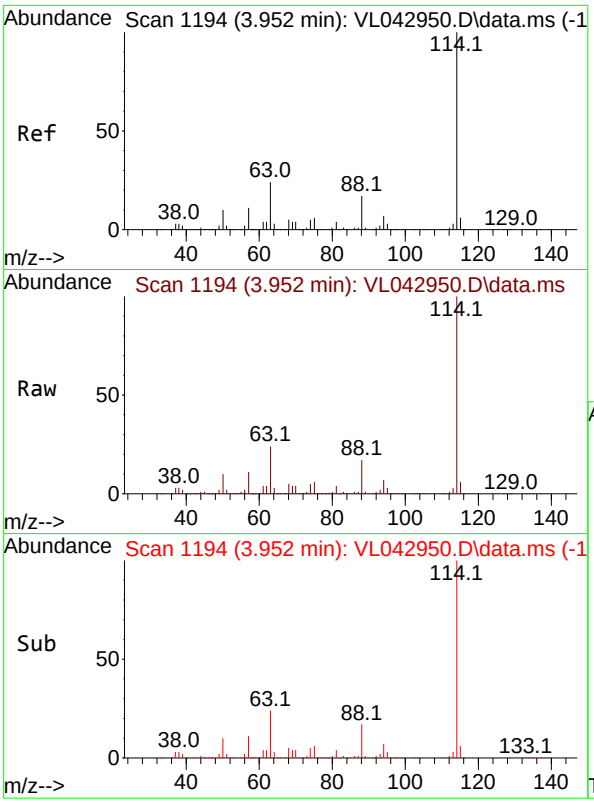


#32
1,1,1-Trichloroethane
Concen: 8.947 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 97 Resp: 325118

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.1	76.7
61	49.7	39.8	59.6



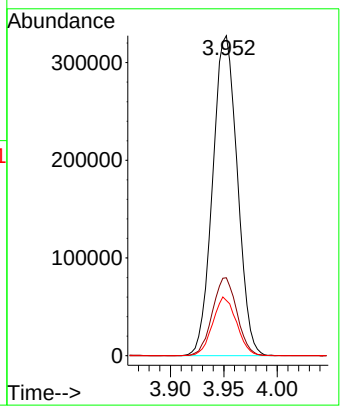


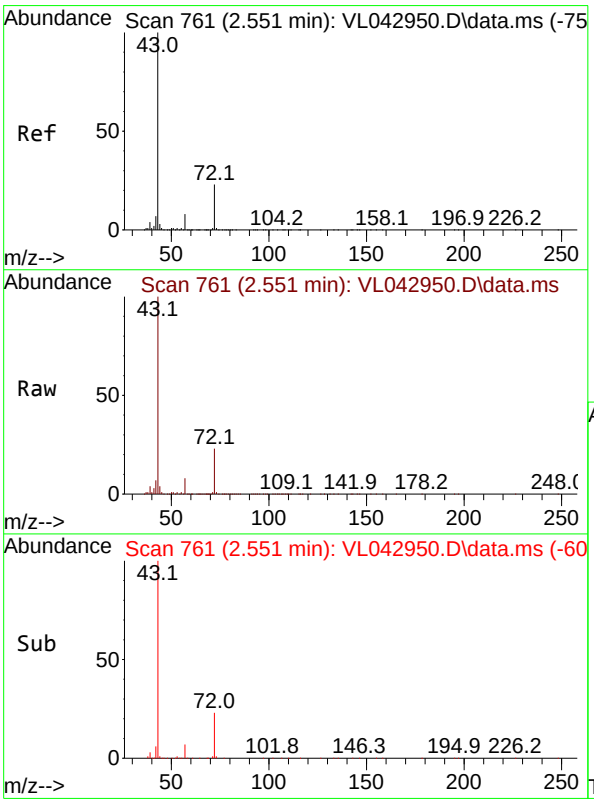
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:114 Resp: 526679

Ion	Ratio	Lower	Upper
114	100		
63	24.3	19.4	29.2
88	17.7	14.2	21.2

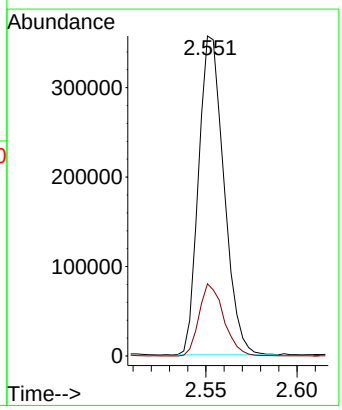


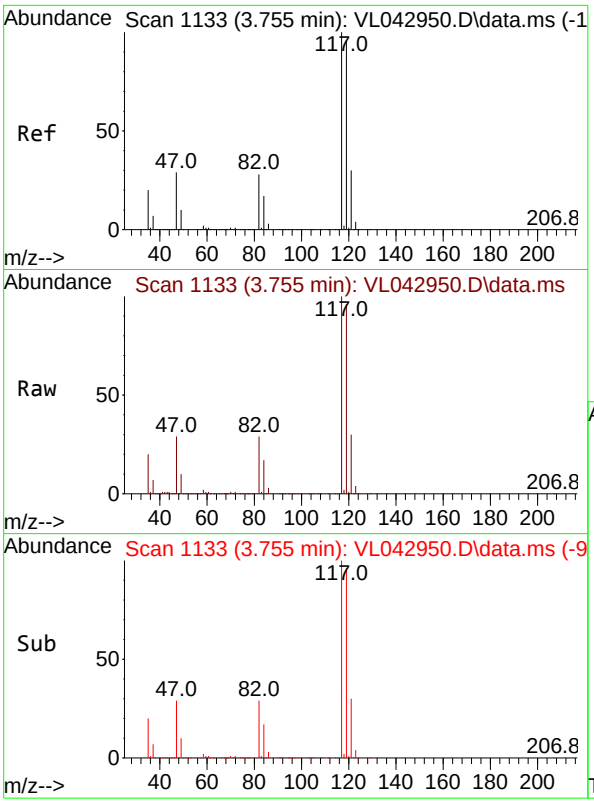


#34
2-Butanone
Concen: 9.343 ppbv
RT: 2.551 min Scan# 761
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 344874

Ion	Ratio	Lower	Upper
43	100		
72	22.1	17.7	26.5



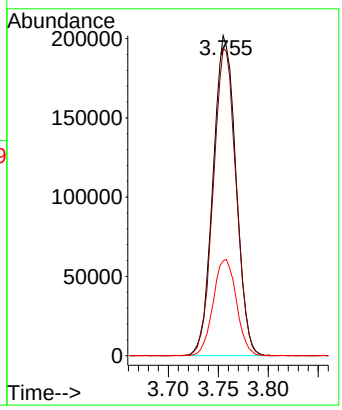


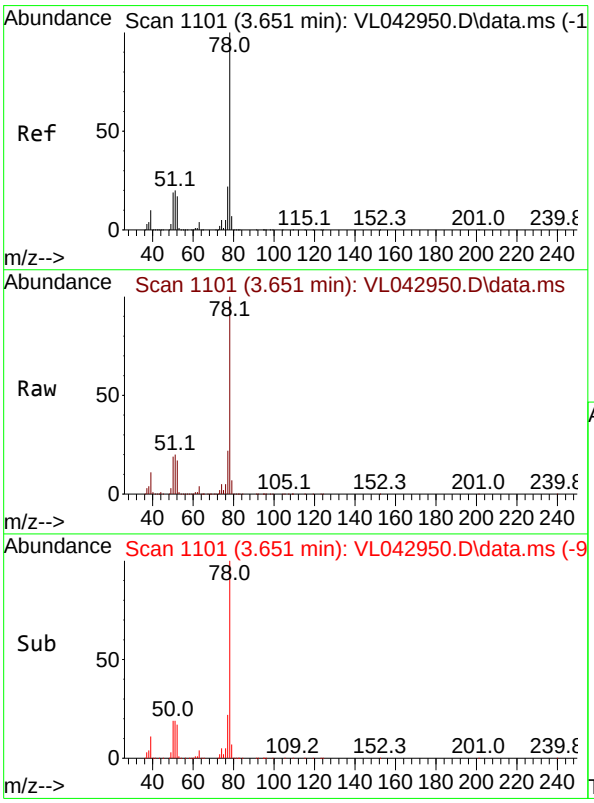
#35
Carbon Tetrachloride
Concen: 9.480 ppbv
RT: 3.755 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 321267

Ion	Ratio	Lower	Upper
117	100		
119	96.1	76.9	115.3
121	29.6	23.7	35.5

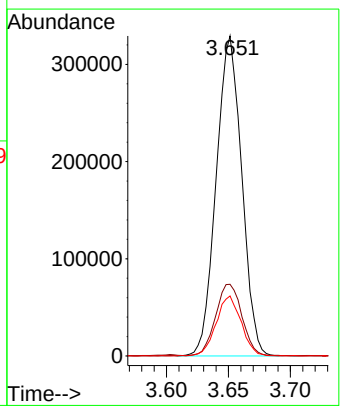


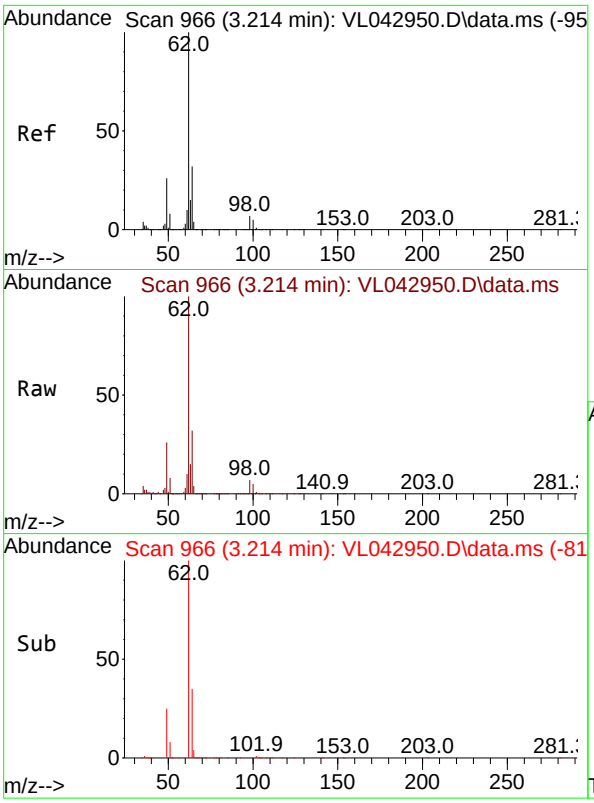


#36
Benzene
Concen: 9.561 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 78 Resp: 472855

Ion	Ratio	Lower	Upper
78	100		
77	22.2	17.8	26.6
50	18.7	15.0	22.4



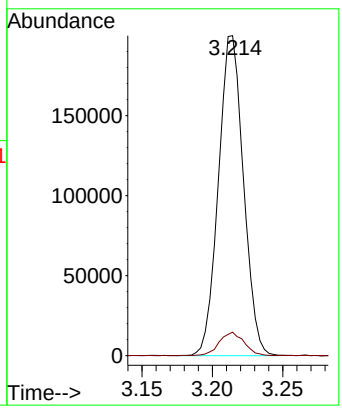


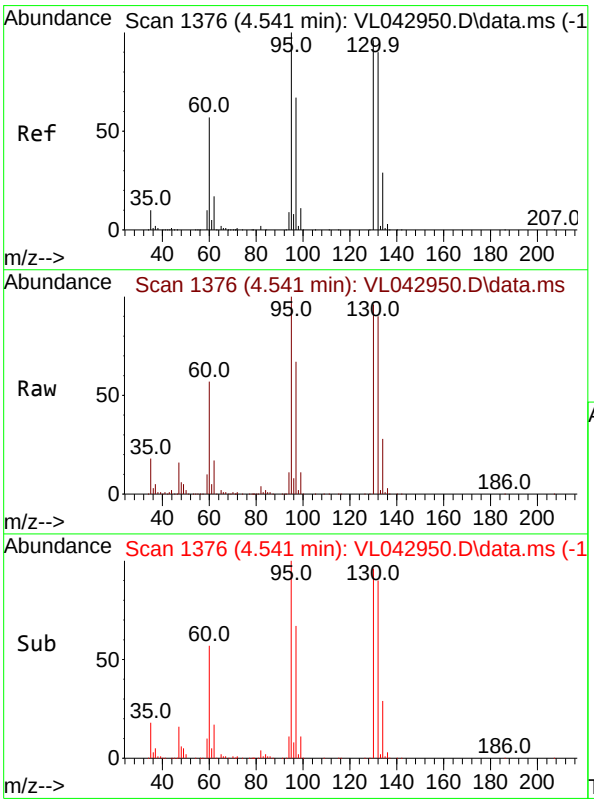
#37
1,2-Dichloroethane
Concen: 9.525 ppbv
RT: 3.214 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 247754

Ion	Ratio	Lower	Upper
62	100		
98	7.4	5.9	8.9

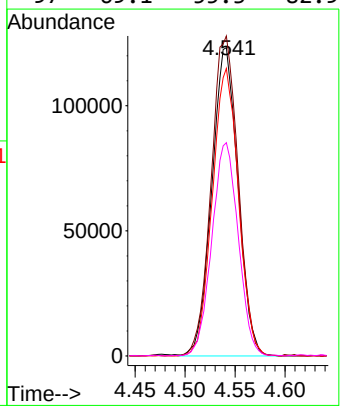


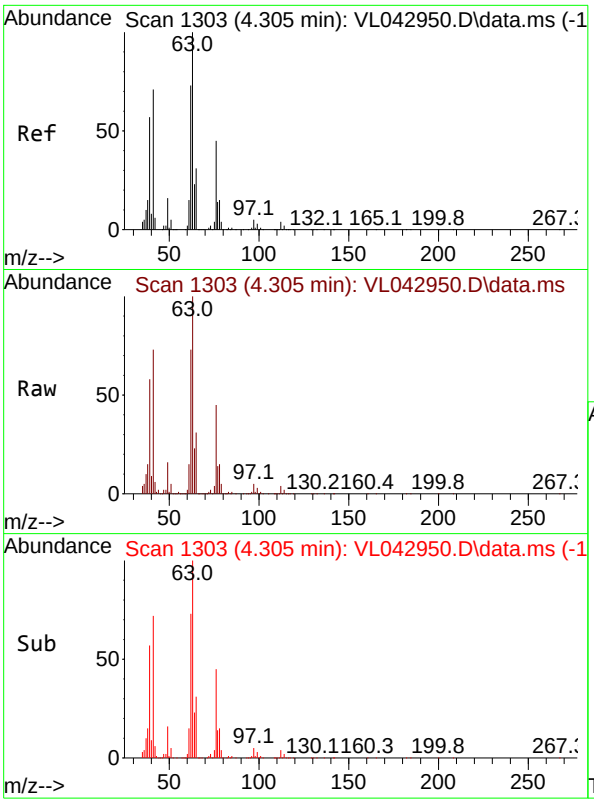


#38
Trichloroethene
Concen: 9.134 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:130 Resp: 224516

Ion	Ratio	Lower	Upper
130	100		
95	103.7	83.0	124.4
132	93.3	74.6	112.0
97	69.1	55.3	82.9



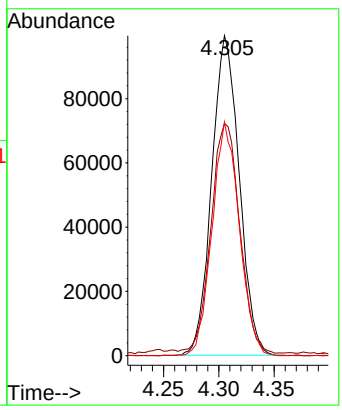


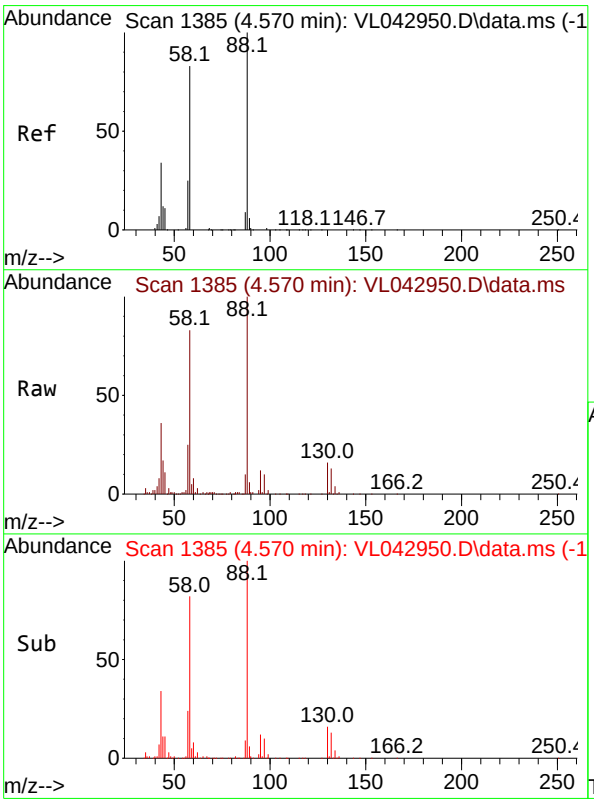
#39
1,2-Dichloropropane
Concen: 9.523 ppbv
RT: 4.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 63 Resp: 172059

Ion	Ratio	Lower	Upper
63	100		
41	71.9	57.5	86.3
62	73.1	58.5	87.7

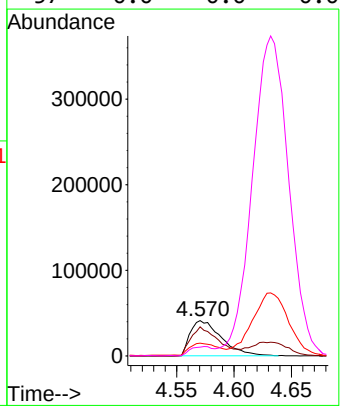


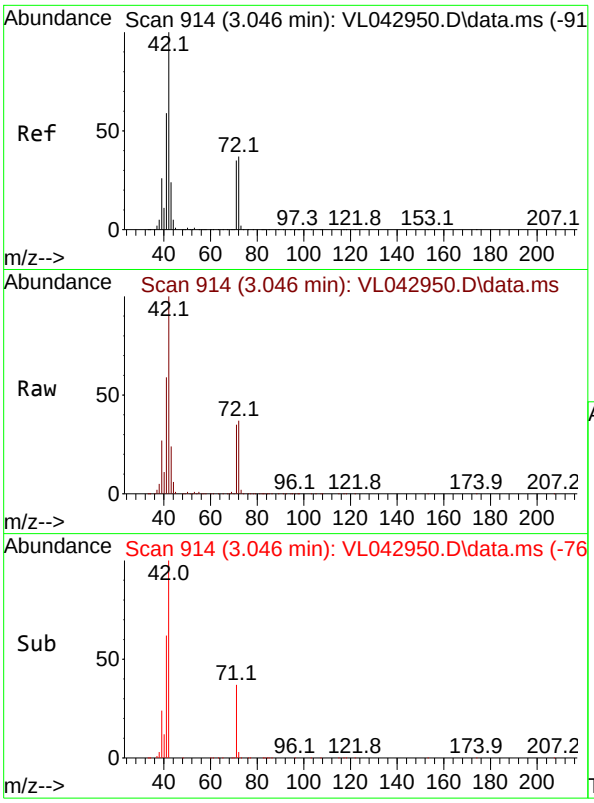


#40
1,4-Dioxane
Concen: 9.283 ppbv
RT: 4.570 min Scan# 1385
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 88 Resp: 77889

Ion	Ratio	Lower	Upper
88	100		
58	74.6	59.7	89.5
43	36.1	28.9	43.3
57	0.0	0.0	0.0



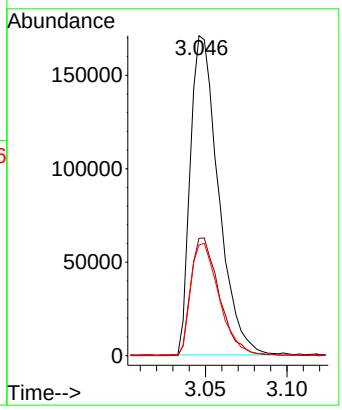


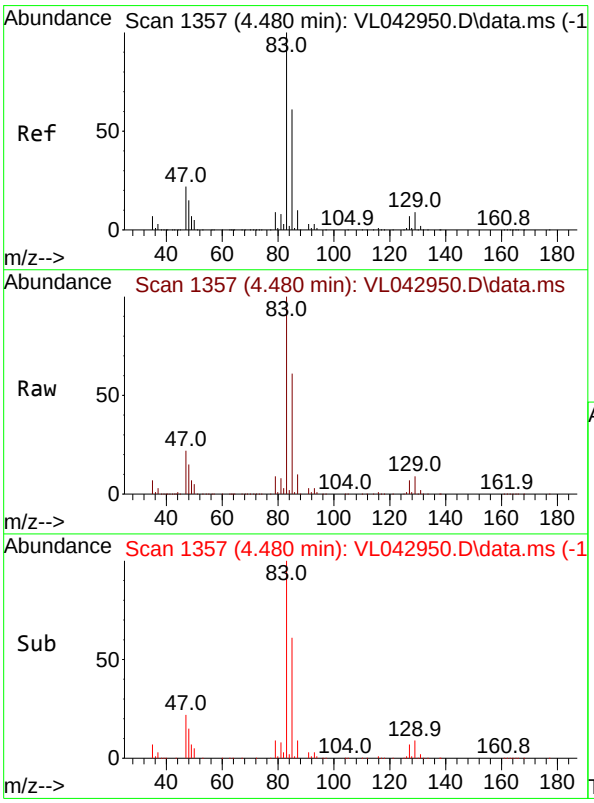
#41
Tetrahydrofuran
Concen: 9.649 ppbv
RT: 3.046 min Scan# 91
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 42 Resp: 204724

Ion	Ratio	Lower	Upper
42	100		
72	37.5	30.0	45.0
71	36.0	28.8	43.2

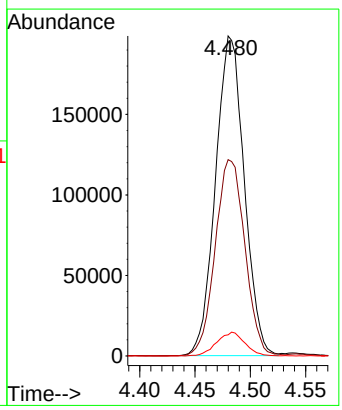


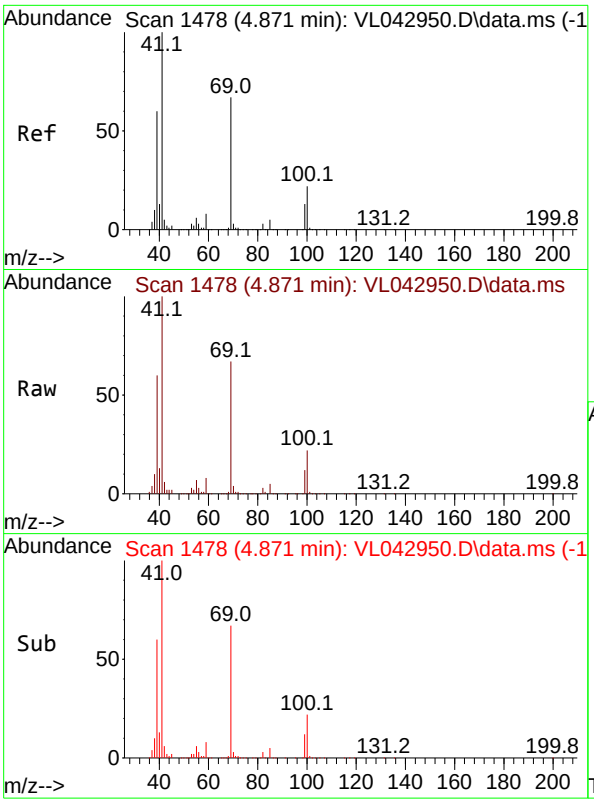


#42
Bromodichloromethane
Concen: 9.903 ppbv
RT: 4.480 min Scan# 1357
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 83 Resp: 358858

Ion	Ratio	Lower	Upper
83	100		
85	61.3	49.0	73.6
127	6.6	5.3	7.9



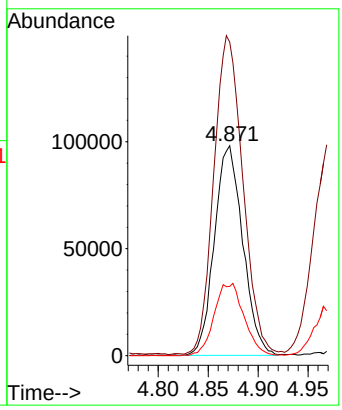


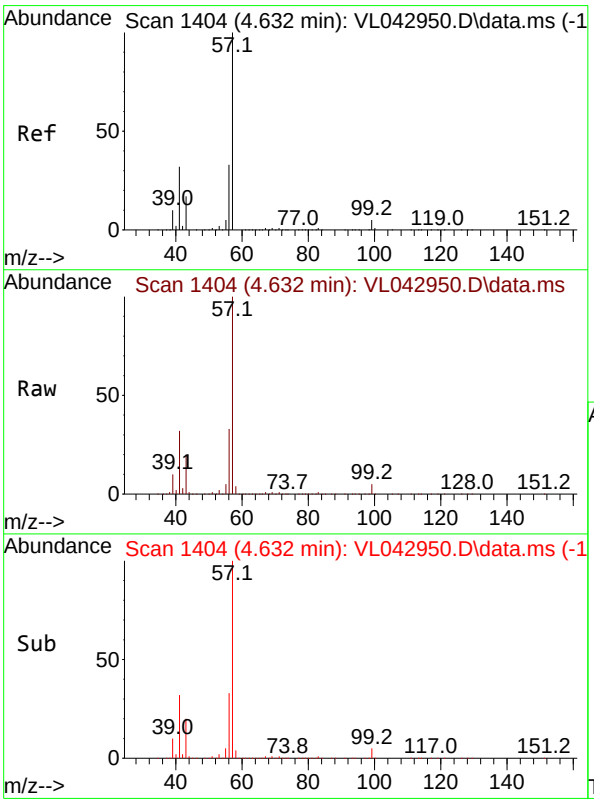
#43
Methyl Methacrylate
Concen: 9.646 ppbv
RT: 4.871 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 69 Resp: 193676

Ion	Ratio	Lower	Upper
69	100		
41	155.6	124.5	186.7
100	36.3	29.0	43.6

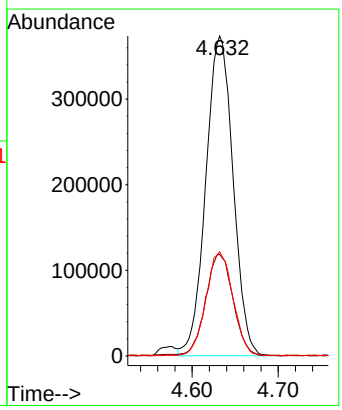


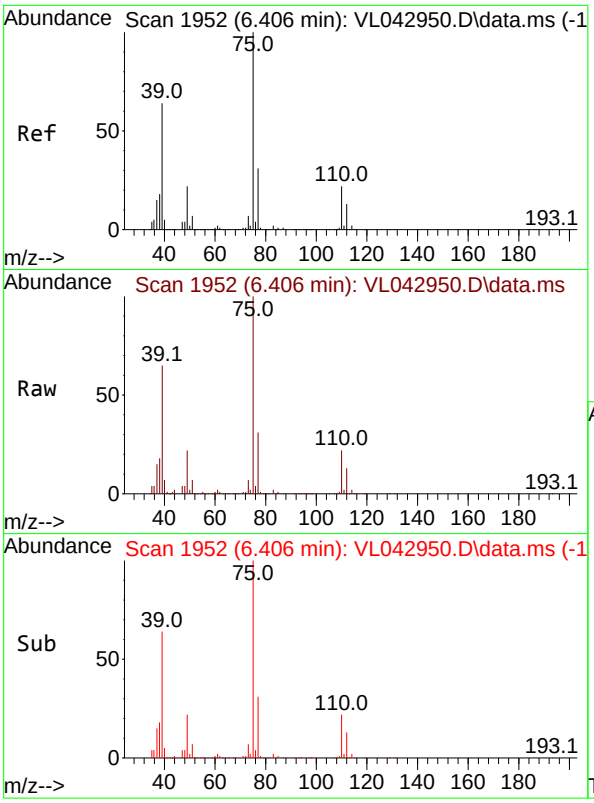


#44
2,2,4-Trimethylpentane
Concen: 9.631 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 57 Resp: 823031

Ion	Ratio	Lower	Upper
57	100		
41	31.9	25.5	38.3
56	32.3	25.8	38.8



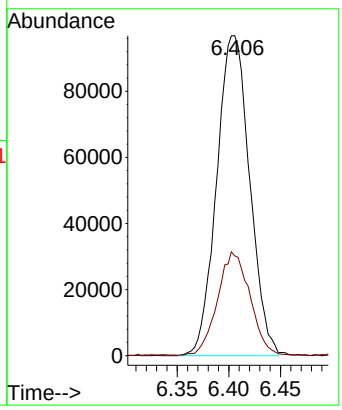


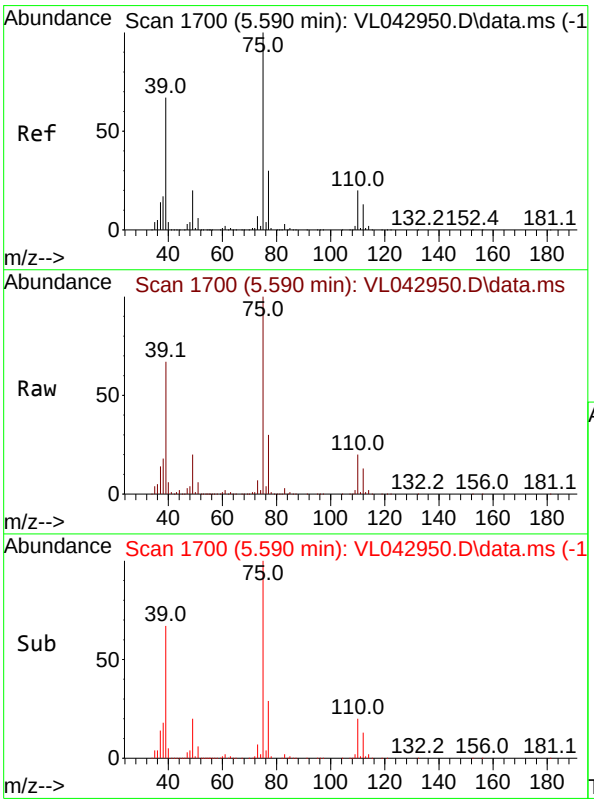
#45
t-1,3-Dichloropropene
Concen: 9.969 ppbv
RT: 6.406 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 75 Resp: 215233

Ion	Ratio	Lower	Upper
75	100		
77	31.2	25.0	37.4

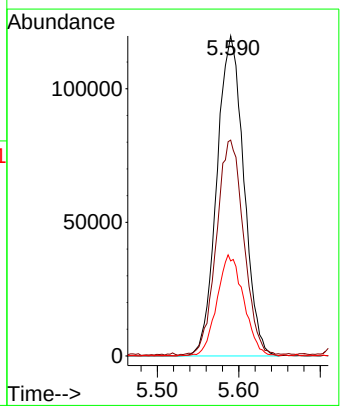


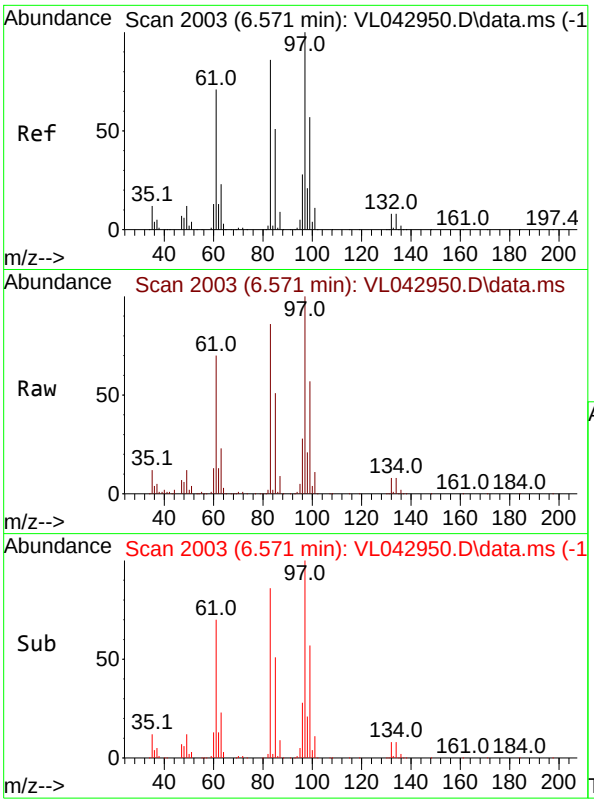


#46
cis-1,3-Dichloropropene
Concen: 10.006 ppbv
RT: 5.590 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 75 Resp: 275210

Ion	Ratio	Lower	Upper
75	100		
39	67.2	53.8	80.6
77	29.5	23.6	35.4



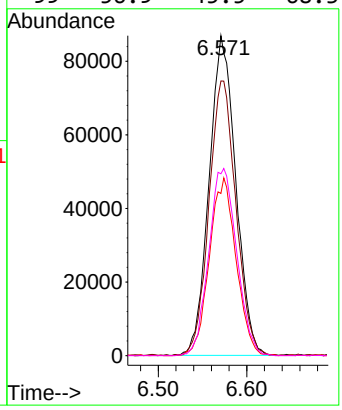


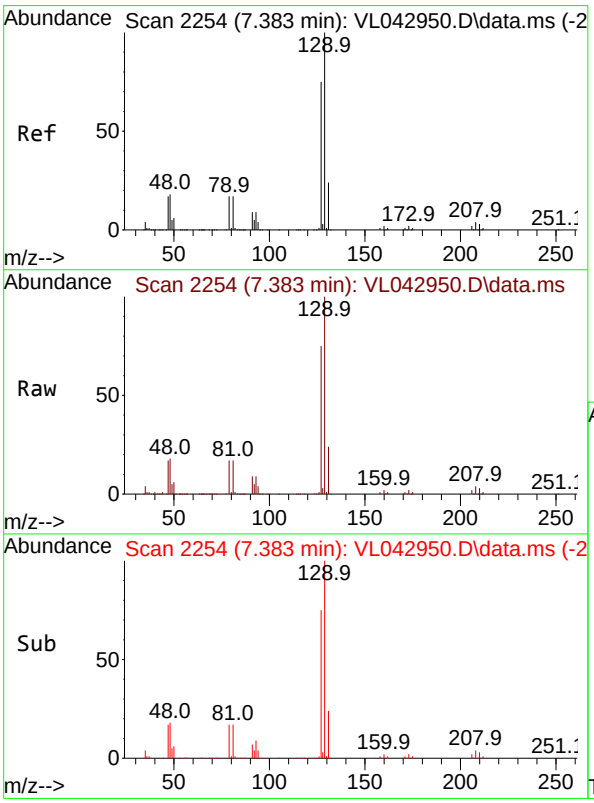
#47
1,1,2-Trichloroethane
Concen: 9.498 ppbv
RT: 6.571 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 97 Resp: 181329

Ion	Ratio	Lower	Upper
97	100		
83	85.9	68.7	103.1
85	50.7	40.6	60.8
99	56.9	45.5	68.3

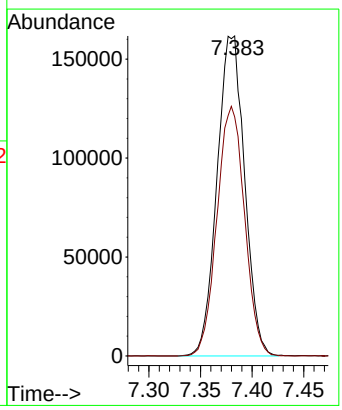


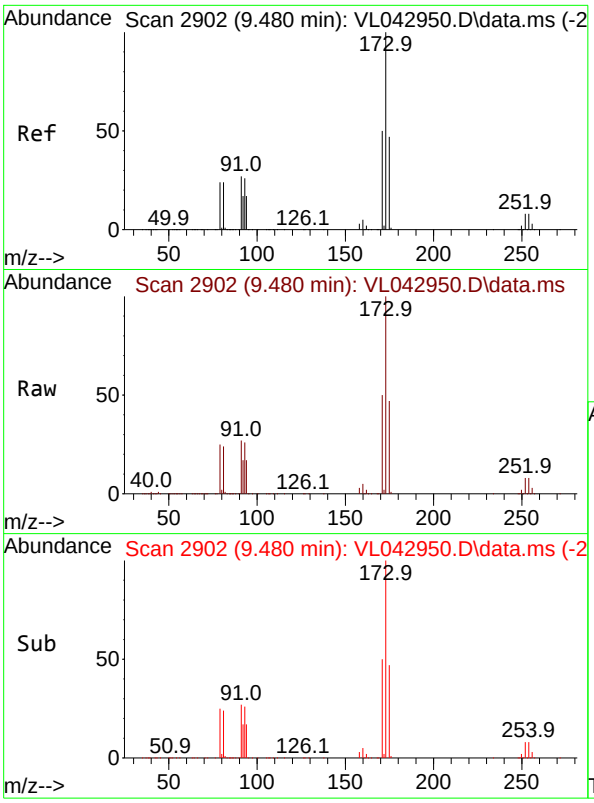


#48
Dibromochloromethane
Concen: 9.845 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:129 Resp: 300497

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2



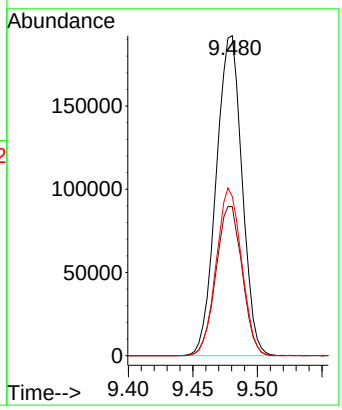


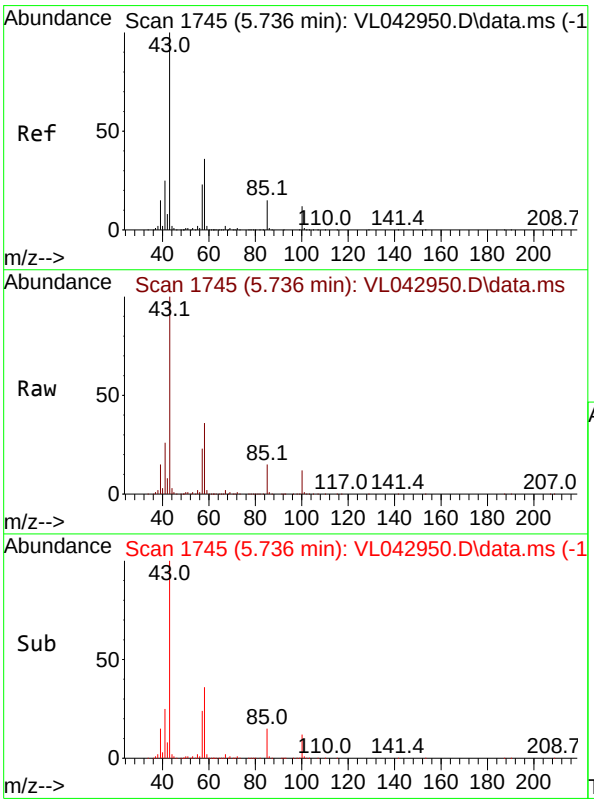
#49
Bromoform
Concen: 10.087 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:173 Resp: 267814

Ion	Ratio	Lower	Upper
173	100		
175	47.4	37.9	56.9
171	51.4	41.1	61.7

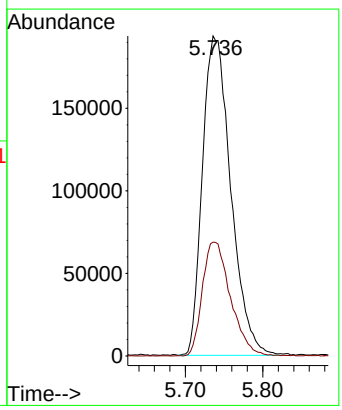


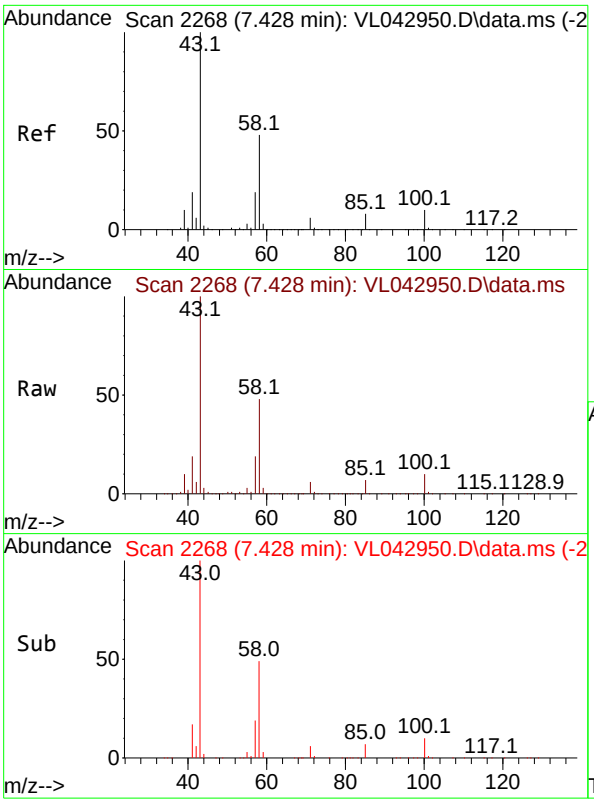


#50
4-Methyl-2-Pentanone
Concen: 9.920 ppbv
RT: 5.736 min Scan# 1745
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 43 Resp: 492068

Ion	Ratio	Lower	Upper
43	100		
58	35.5	28.4	42.6



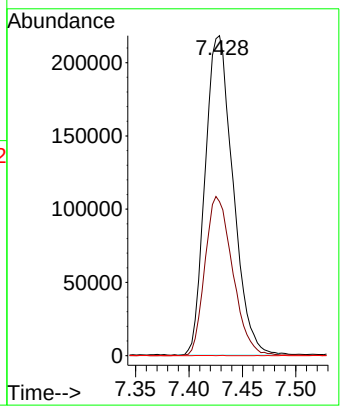


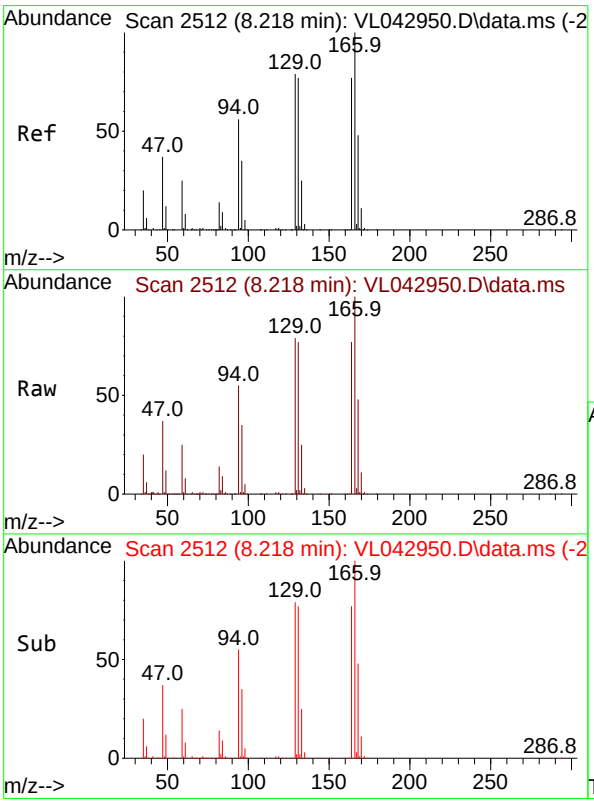
#51
2-Hexanone
Concen: 10.036 ppbv
RT: 7.428 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 395744

Ion	Ratio	Lower	Upper
43	100		
58	49.6	39.7	59.5
98	0.1	0.1	0.1#

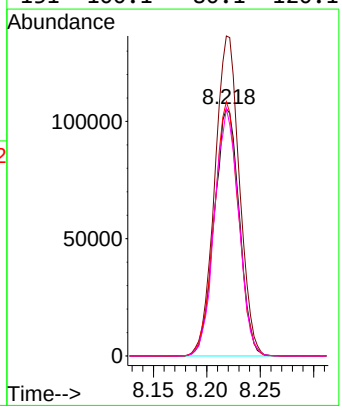


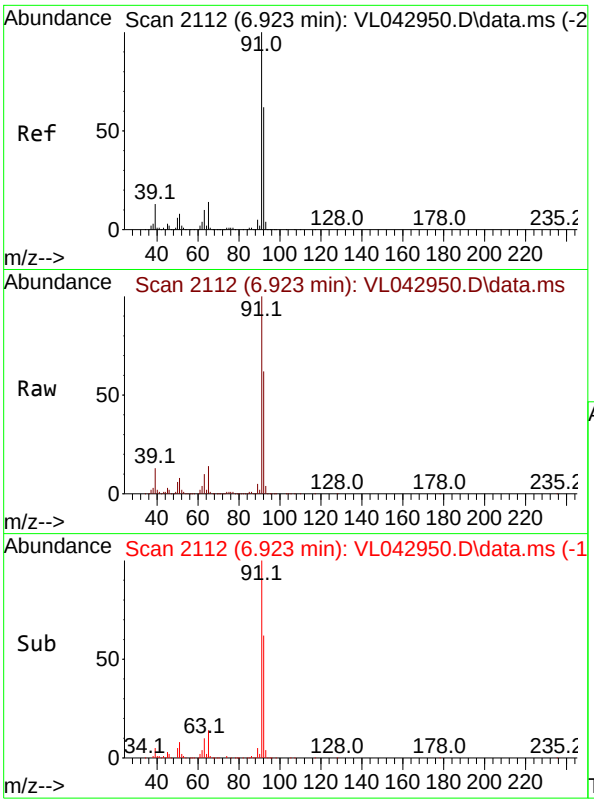


#52
Tetrachloroethene
Concen: 8.951 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:164 Resp: 171294

Ion	Ratio	Lower	Upper
164	100		
166	129.4	103.5	155.3
129	102.8	82.2	123.4
131	100.1	80.1	120.1



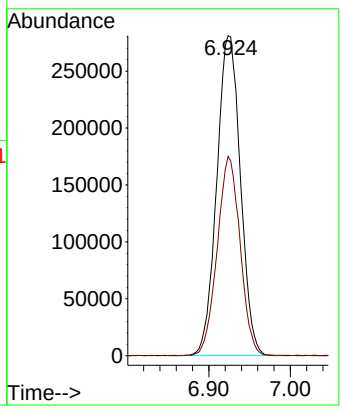


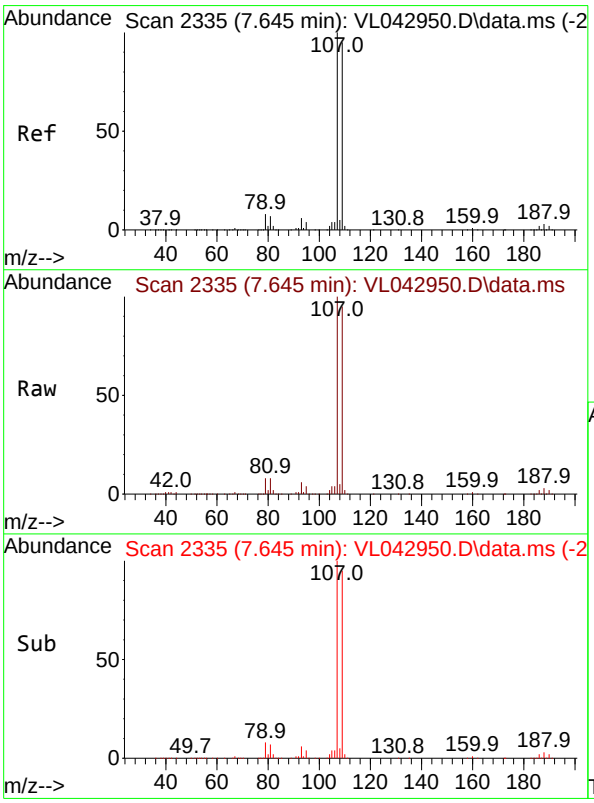
#53
Toluene
Concen: 9.699 ppbv
RT: 6.923 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 567779

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.2

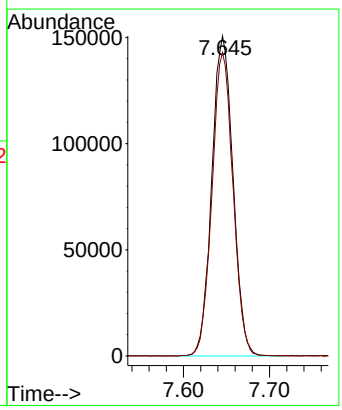


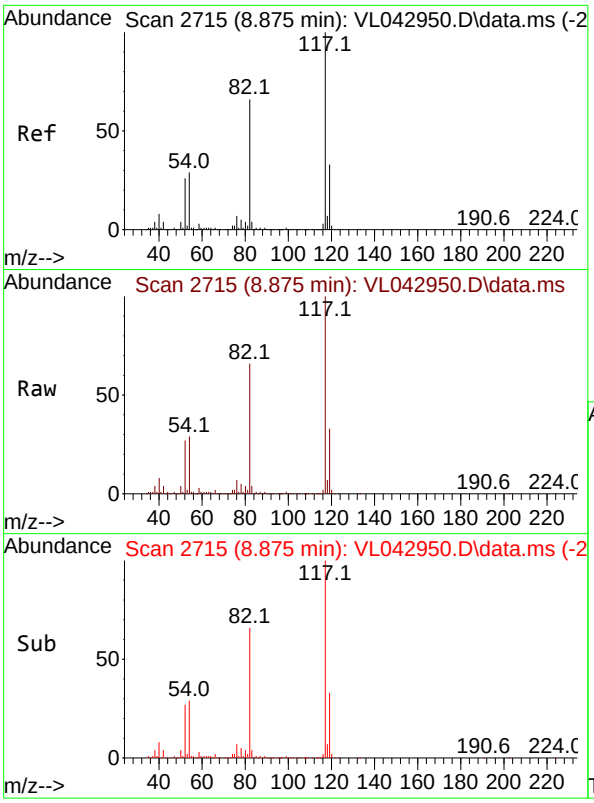


#54
1,2-Dibromoethane
Concen: 9.605 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:107 Resp: 257904

Ion	Ratio	Lower	Upper
107	100		
109	94.8	75.8	113.8



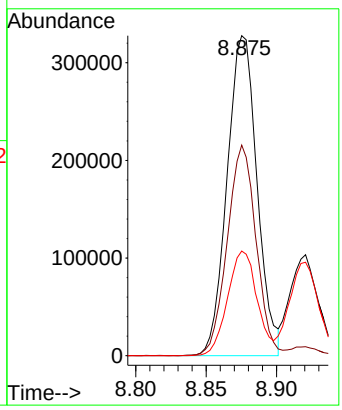


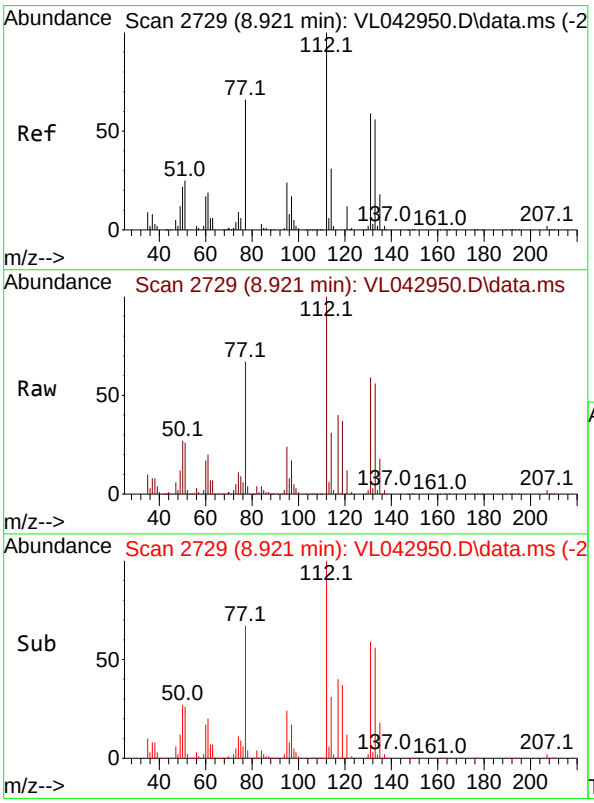
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 486724

Ion	Ratio	Lower	Upper
117	100		
82	66.0	52.8	79.2
119	33.1	26.5	39.7

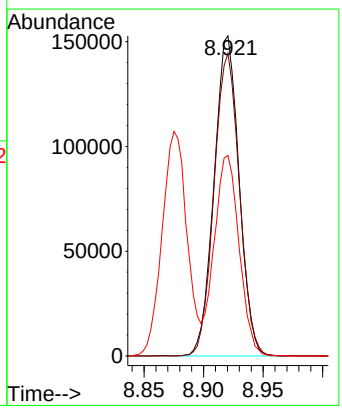


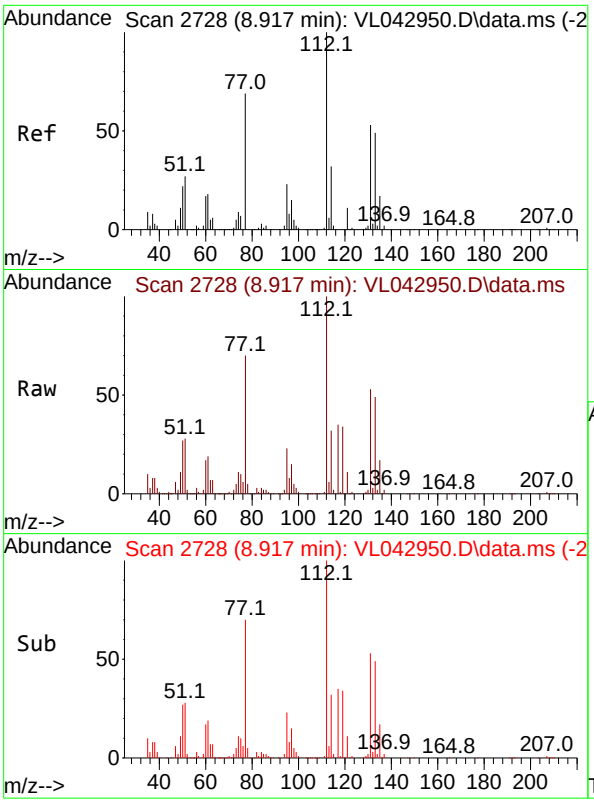


#56
1,1,1,2-Tetrachloroethane
Concen: 9.575 ppbv
RT: 8.921 min Scan# 2729
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:131 Resp: 223066

Ion	Ratio	Lower	Upper
131	100		
133	95.7	76.6	114.8
119	62.4	49.9	74.9



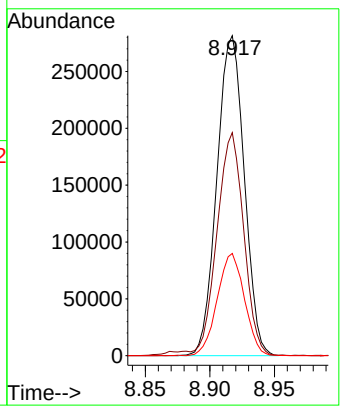


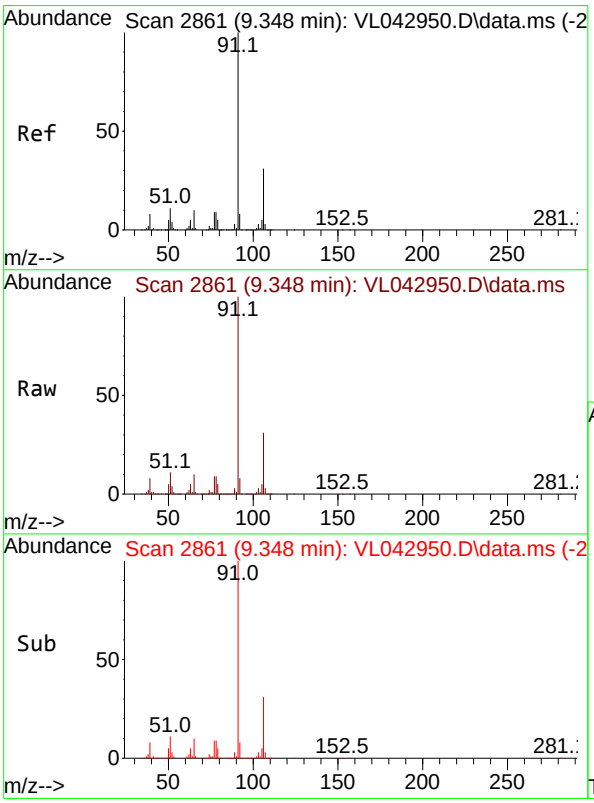
#57
Chlorobenzene
Concen: 9.345 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:112 Resp: 415238

Ion	Ratio	Lower	Upper
112	100		
77	69.6	55.7	83.5
114	31.8	28.6	35.0

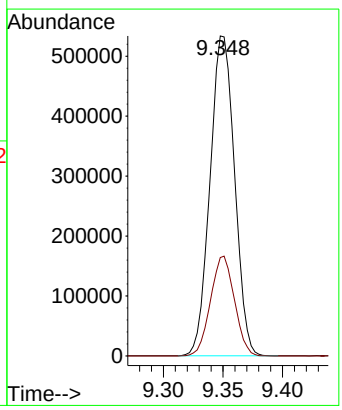


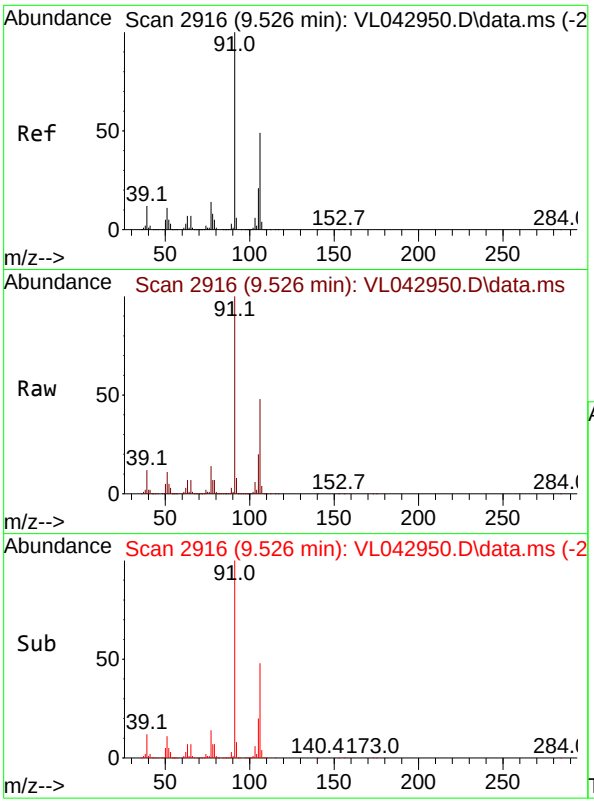


#58
Ethyl Benzene
Concen: 9.562 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 764249

Ion	Ratio	Lower	Upper
91	100		
106	30.8	24.6	37.0



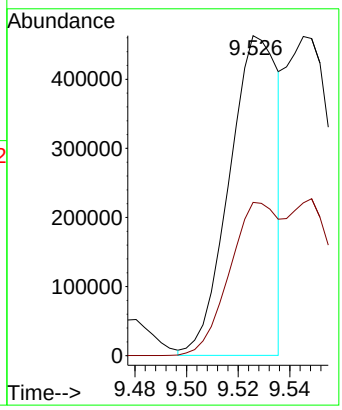


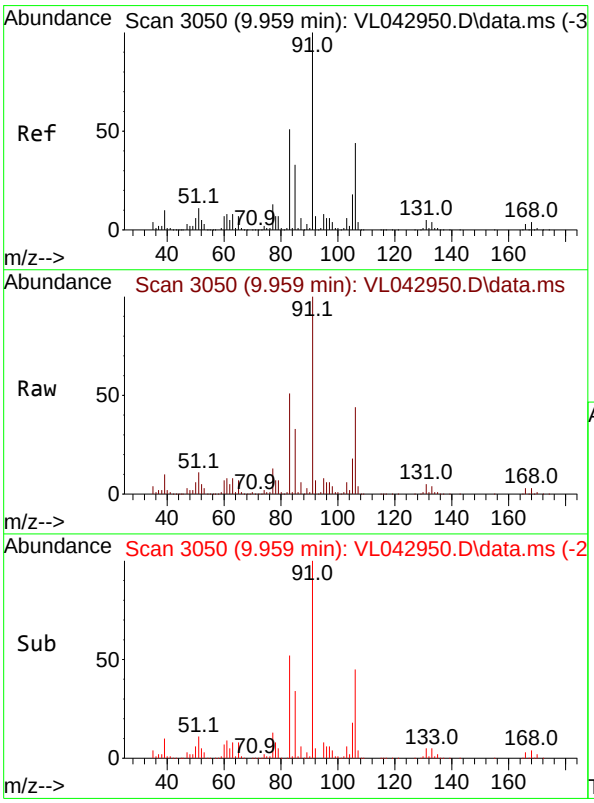
#59
m/p-Xylene
Concen: 9.519 ppbv
RT: 9.526 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 600237

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

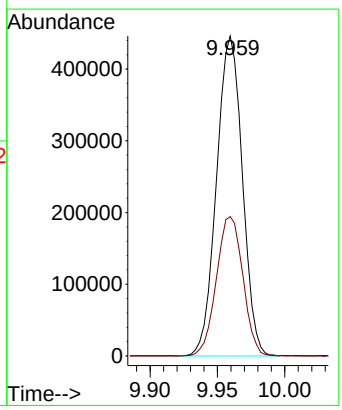


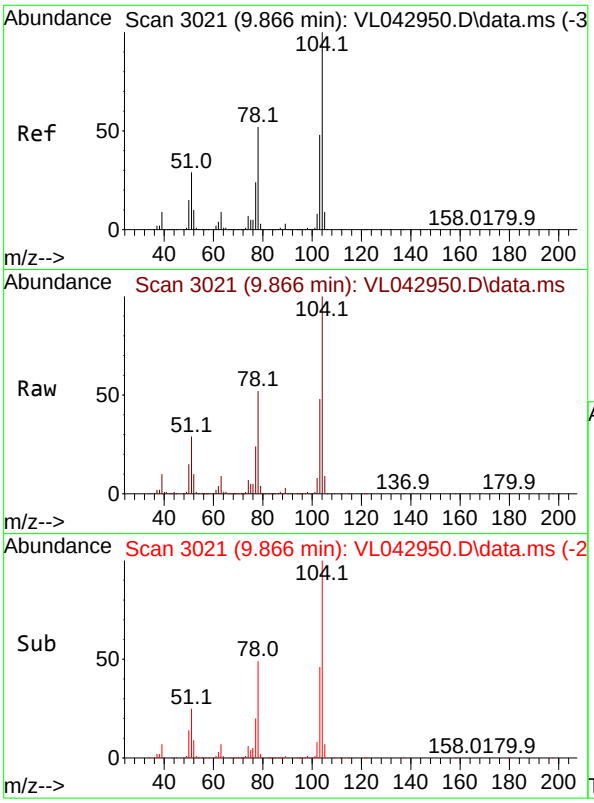


#60
o-Xylene
Concen: 9.437 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 594329

Ion	Ratio	Lower	Upper
91	100		
106	44.7	22.4	67.0



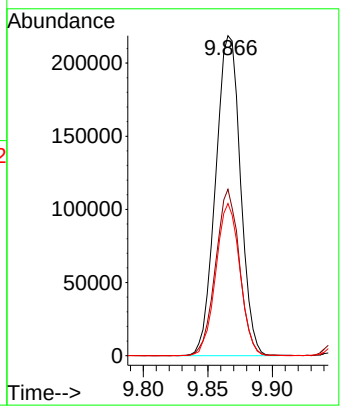


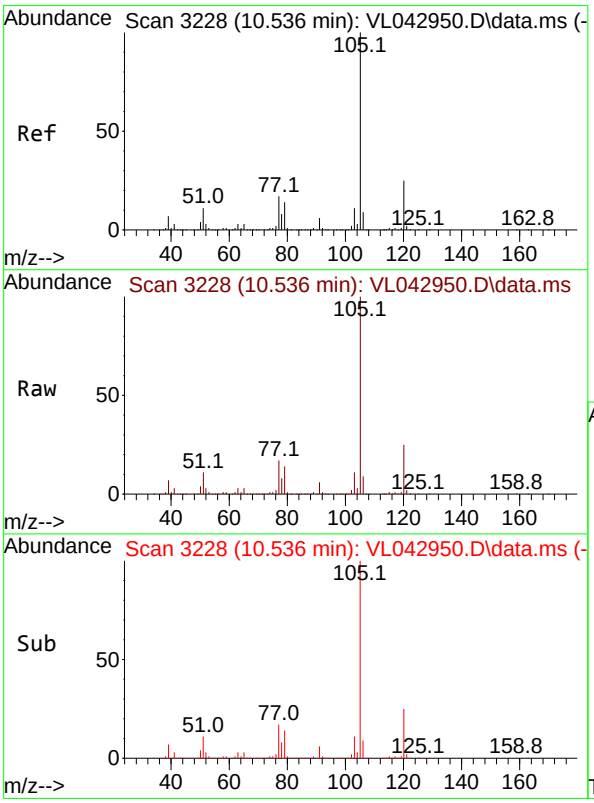
#61
Styrene
Concen: 9.840 ppbv
RT: 9.866 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:104 Resp: 293111

Ion	Ratio	Lower	Upper
104	100		
78	49.9	39.9	59.9
103	46.1	36.9	55.3

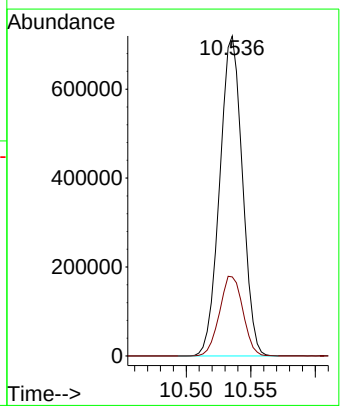


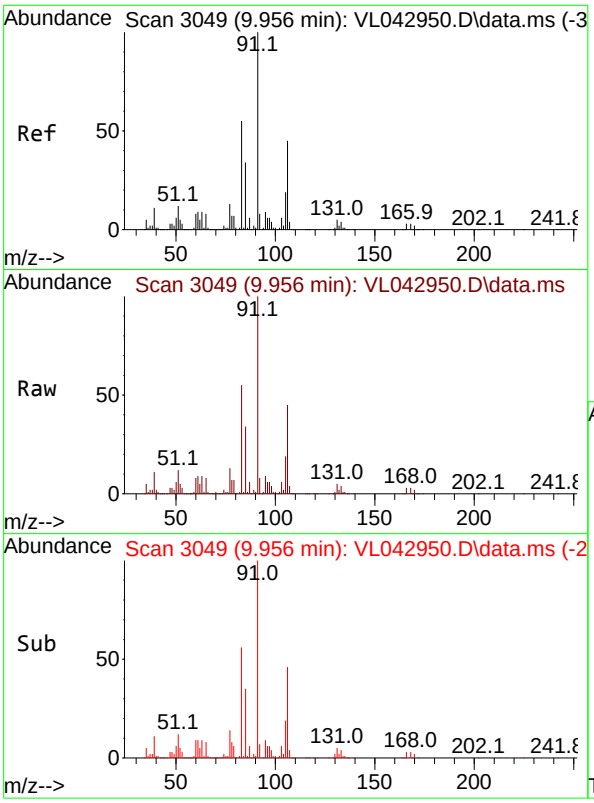


#62
Isopropylbenzene
Concen: 9.347 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 877401

Ion	Ratio	Lower	Upper
105	100		
120	25.7	20.6	30.8



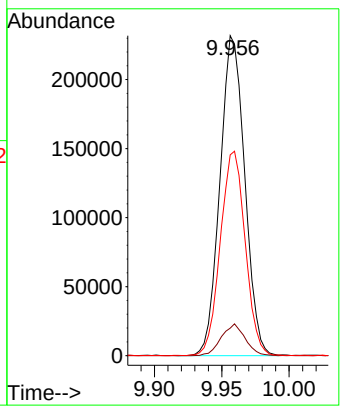


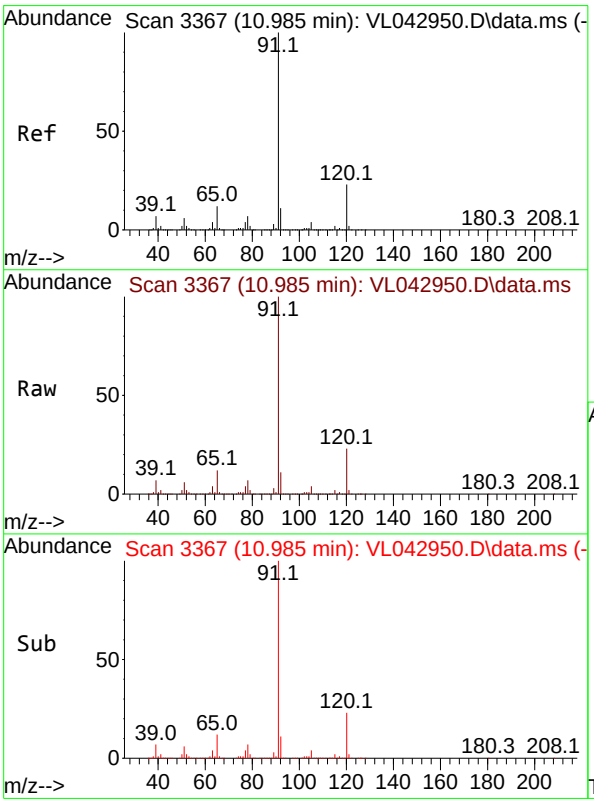
#63
1,1,2,2-Tetrachloroethane
Concen: 8.963 ppbv
RT: 9.956 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 296678

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.4	32.2	96.6

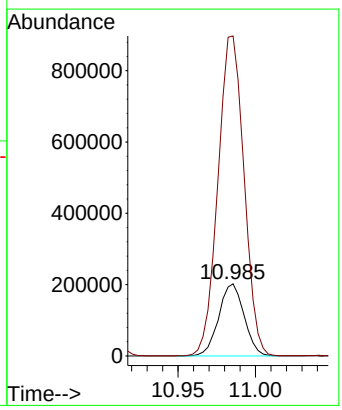


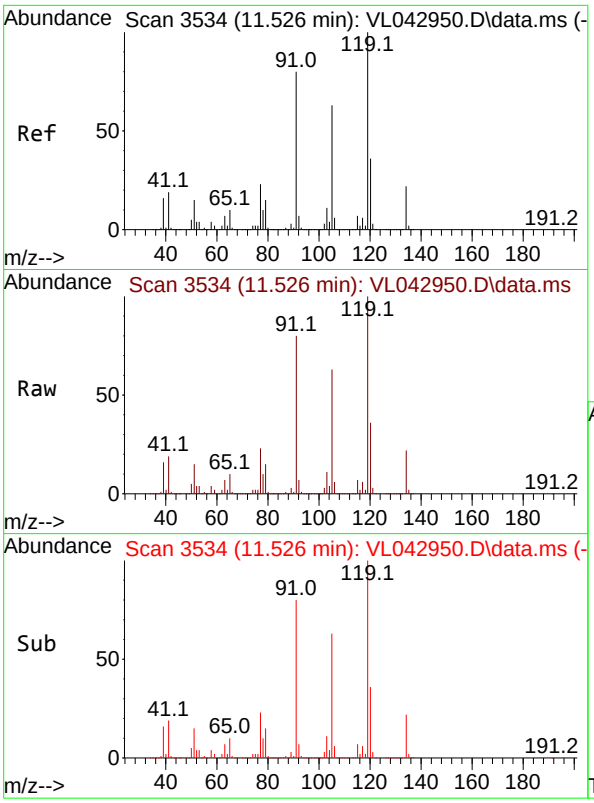


#64
n-propylbenzene
Concen: 9.394 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:120 Resp: 230432

Ion	Ratio	Lower	Upper
120	100		
91	456.1	364.9	547.3



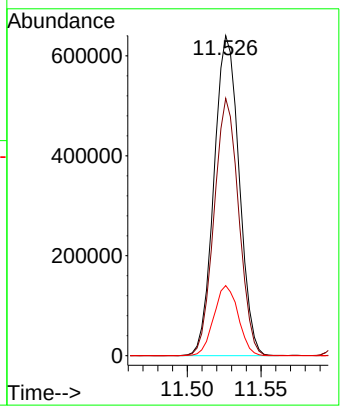


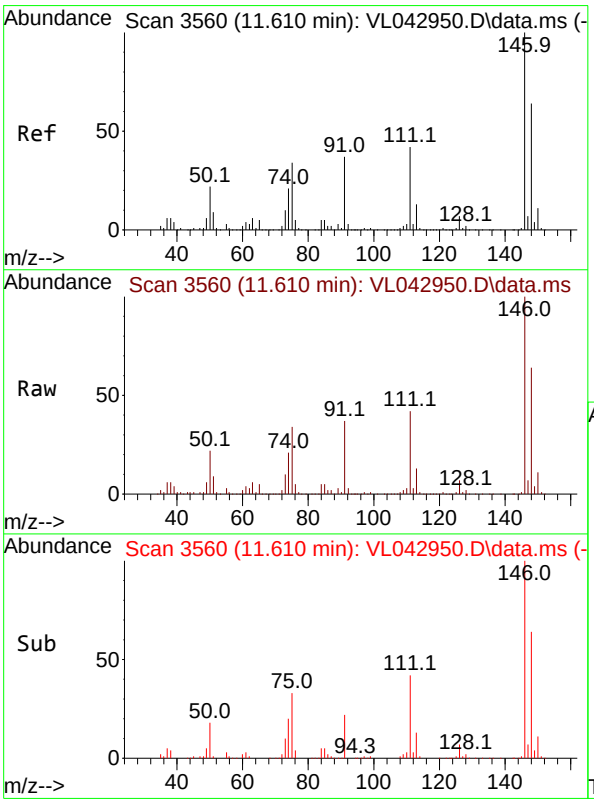
#65
tert-Butylbenzene
Concen: 9.078 ppbv
RT: 11.526 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 757958

Ion	Ratio	Lower	Upper
119	100		
91	78.9	63.1	94.7
134	21.3	17.0	25.6

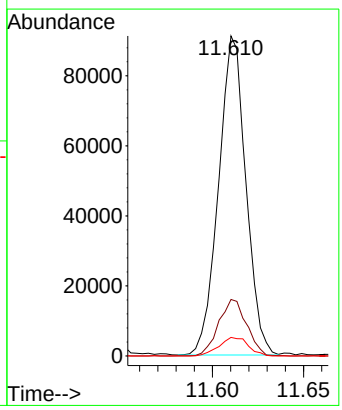


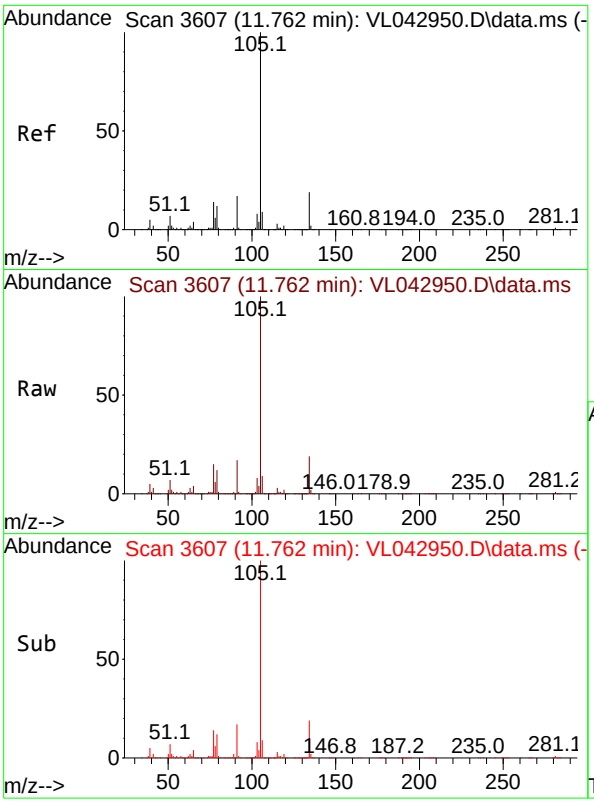


#66
Benzyl Chloride
Concen: 10.842 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 94982

Ion	Ratio	Lower	Upper
91	100		
126	18.2	14.6	21.8
128	6.2	5.0	7.4



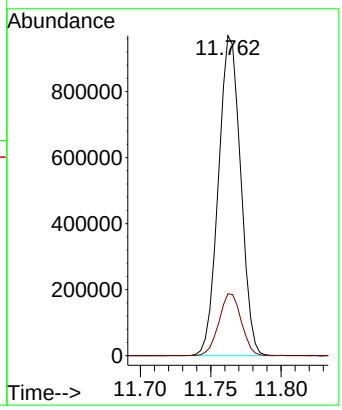


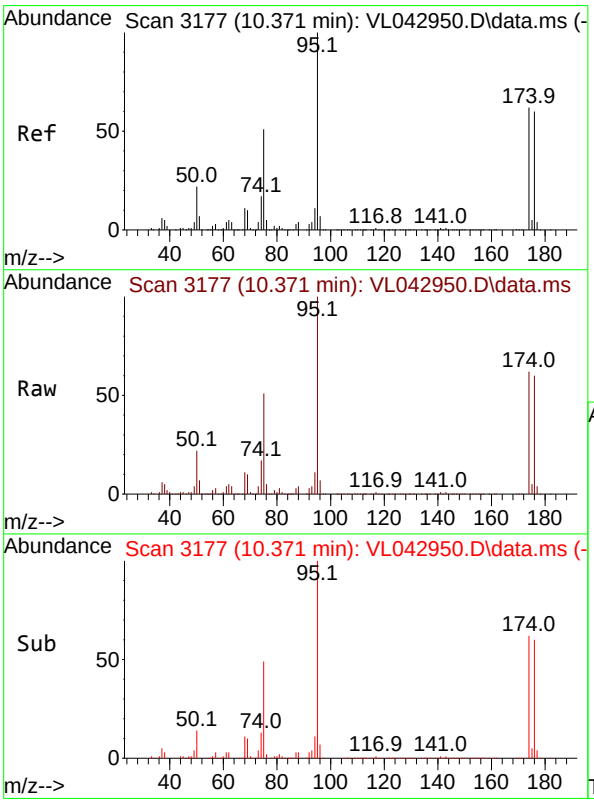
#67
sec-Butylbenzene
Concen: 9.166 ppbv
RT: 11.762 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 1066409

Ion	Ratio	Lower	Upper
105	100		
134	19.6	15.7	23.5

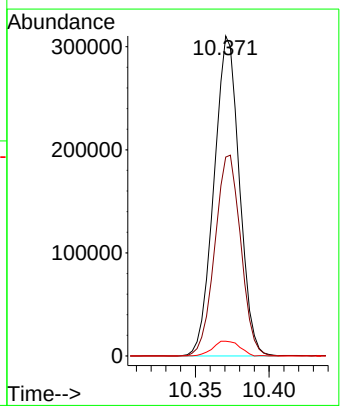


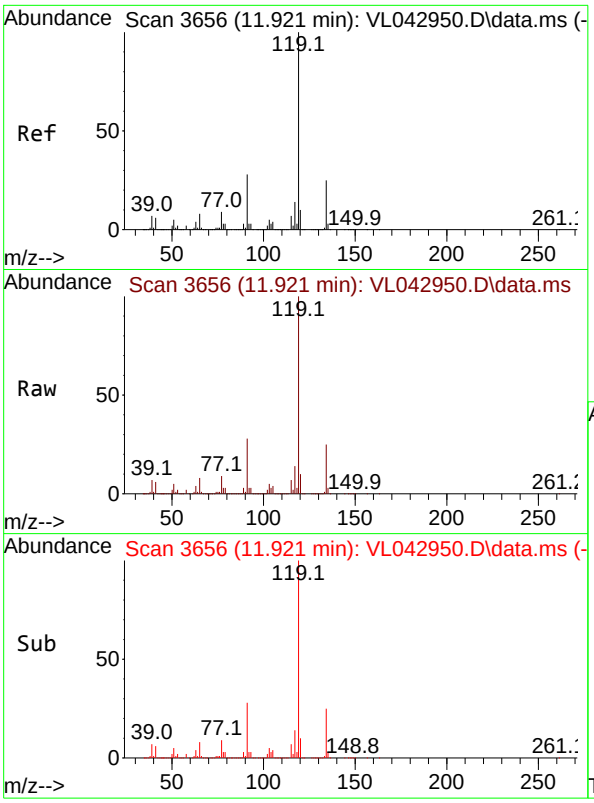


#68
1-Bromo-4-Fluorobenzene
Concen: 10.217 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 95 Resp: 371195

Ion	Ratio	Lower	Upper
95	100		
174	64.3	51.4	77.2
175	5.0	4.0	6.0



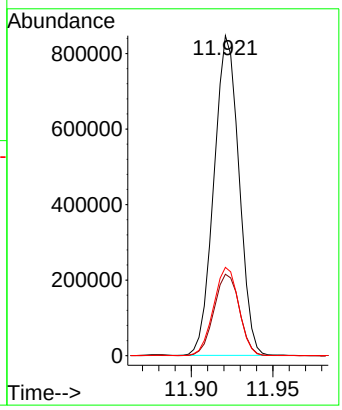


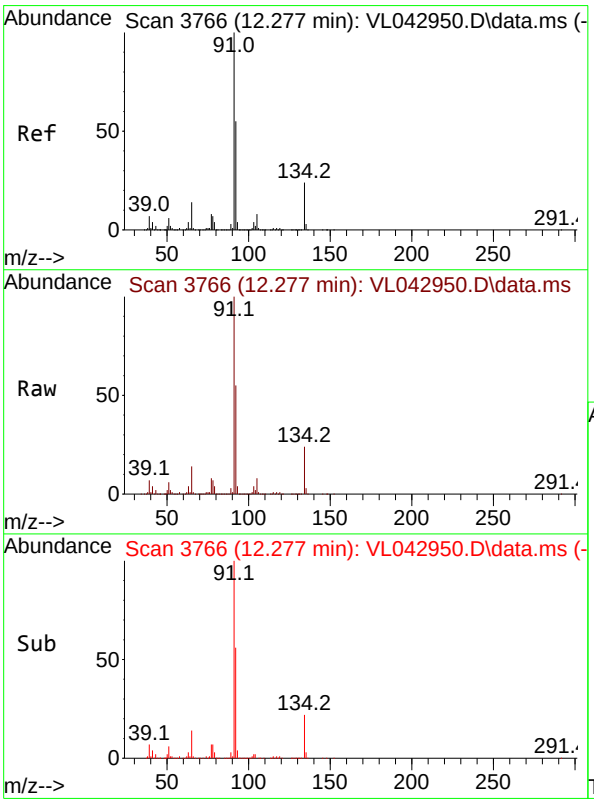
#69
p-Isopropyltoluene
Concen: 9.192 ppbv
RT: 11.921 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 903376

Ion	Ratio	Lower	Upper
119	100		
134	26.2	21.0	31.4
91	27.9	22.3	33.5

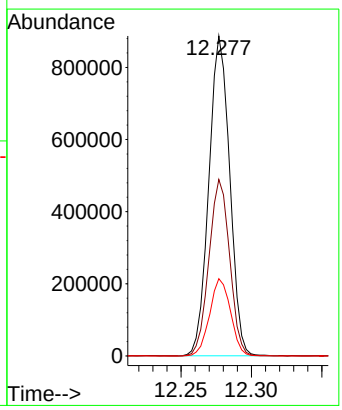


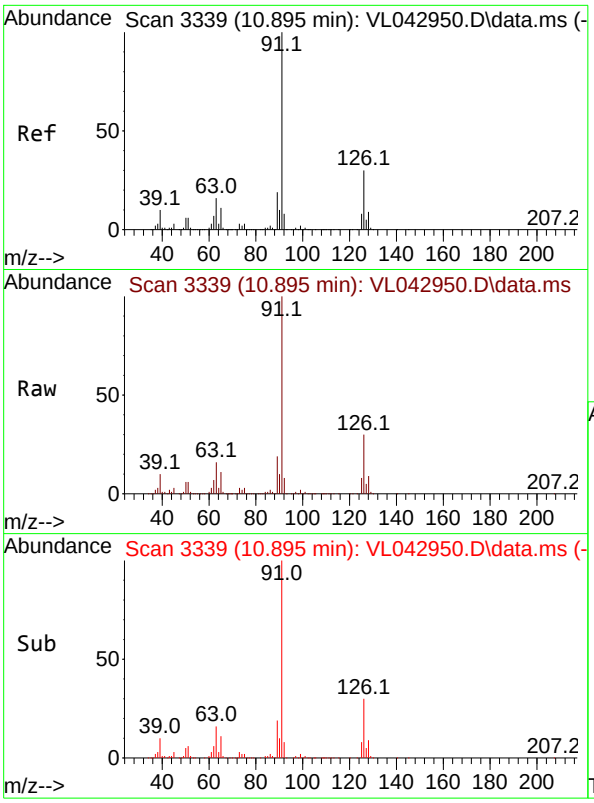


#70
n-Butylbenzene
Concen: 9.543 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion: 91 Resp: 915624

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.0	66.0
134	24.3	19.4	29.2



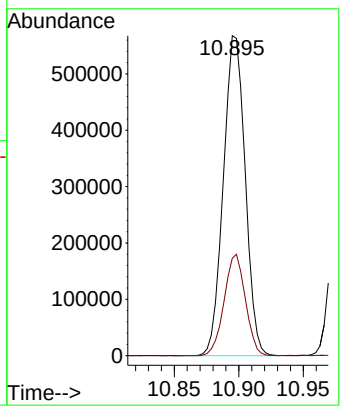


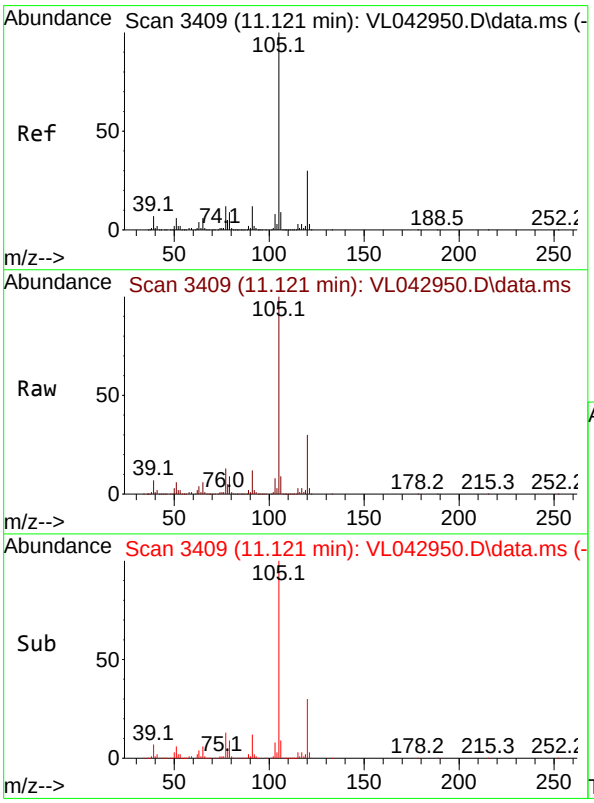
#71
2-Chlorotoluene
Concen: 9.428 ppbv
RT: 10.895 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 668239

Ion	Ratio	Lower	Upper
91	100		
126	30.8	12.3	49.3

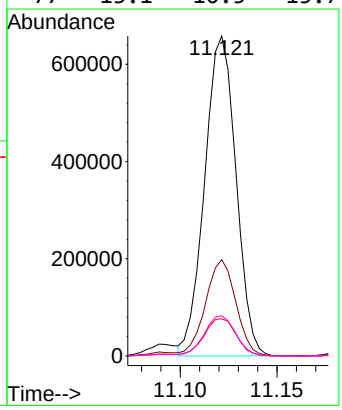


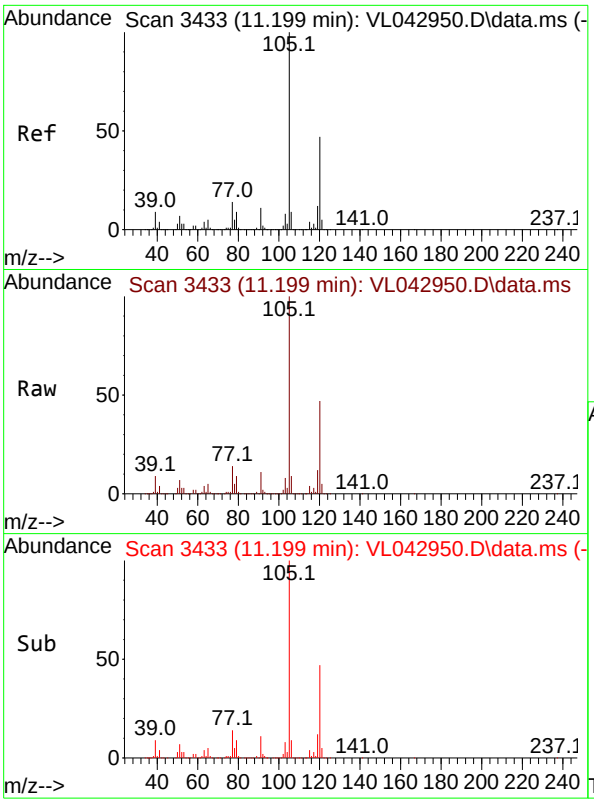


#72
4-Ethyltoluene
Concen: 9.398 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 741298

Ion	Ratio	Lower	Upper
105	100		
120	30.2	24.2	36.2
91	12.5	10.0	15.0
77	13.1	10.5	15.7



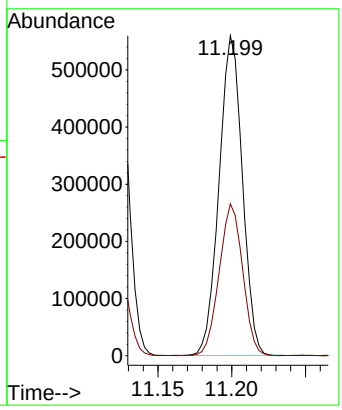


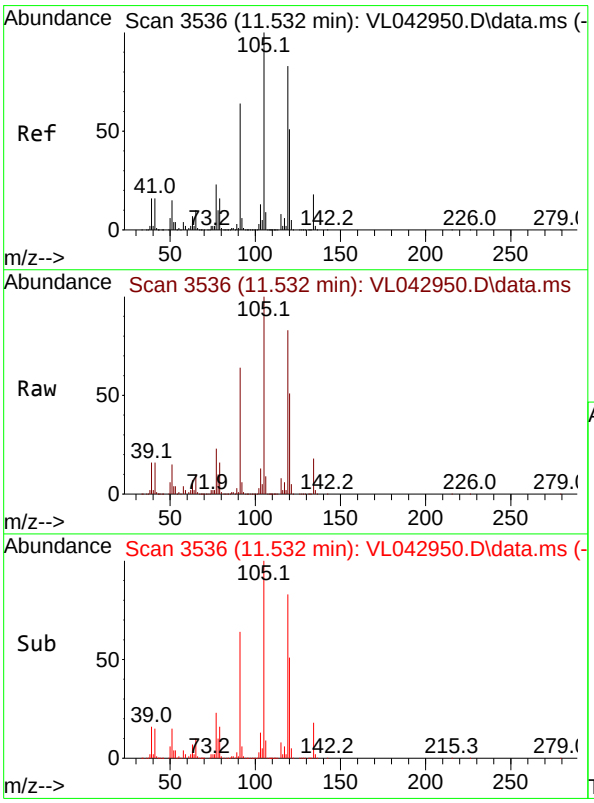
#73
1,3,5-Trimethylbenzene
Concen: 9.608 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 614632

Ion	Ratio	Lower	Upper
105	100		
120	47.5	38.0	57.0

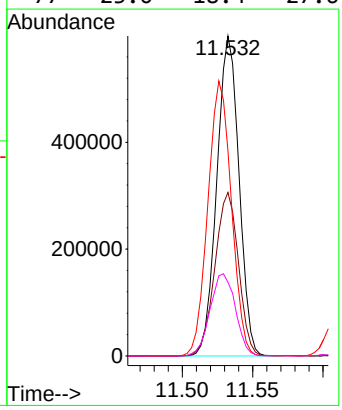


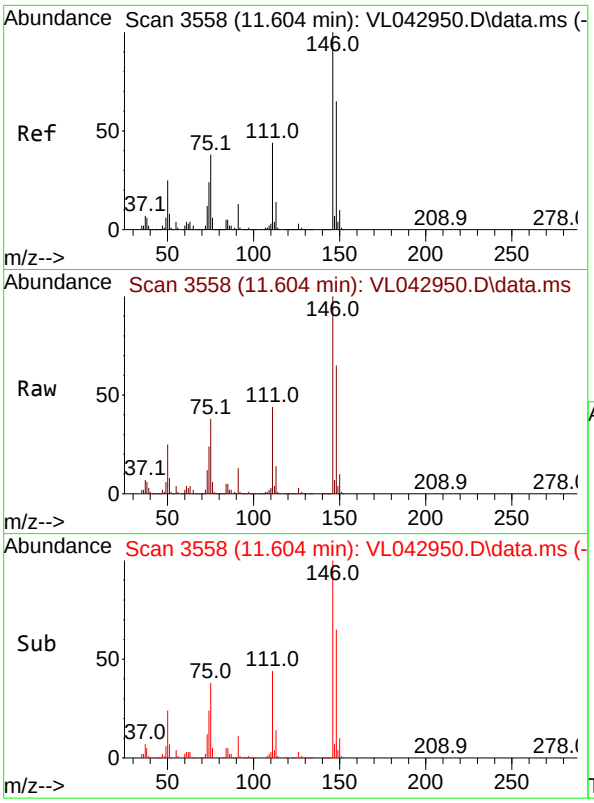


#74
1,2,4-Trimethylbenzene
Concen: 9.294 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:105 Resp: 656535

Ion	Ratio	Lower	Upper
105	100		
120	51.1	40.9	61.3
91	64.0	51.2	76.8
77	23.0	18.4	27.6



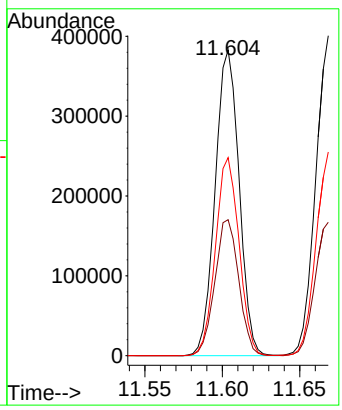


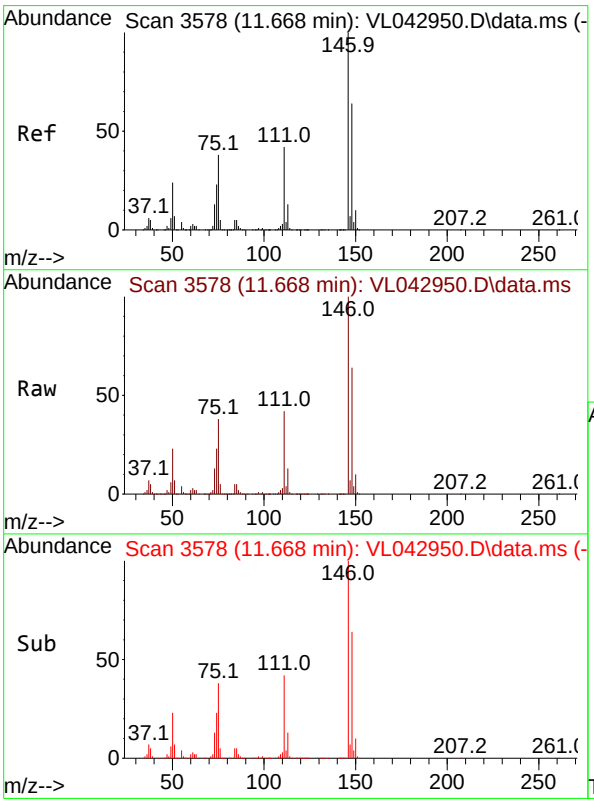
#75
1,3-Dichlorobenzene
Concen: 9.392 ppbv
RT: 11.604 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 411473

Ion	Ratio	Lower	Upper
146	100		
111	44.6	22.3	66.9
148	63.7	31.9	95.5

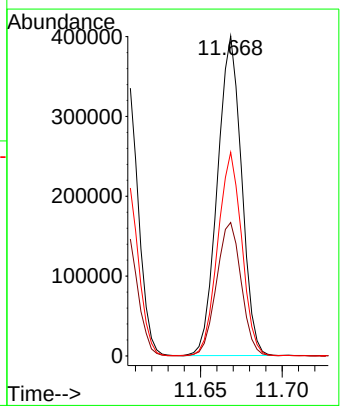


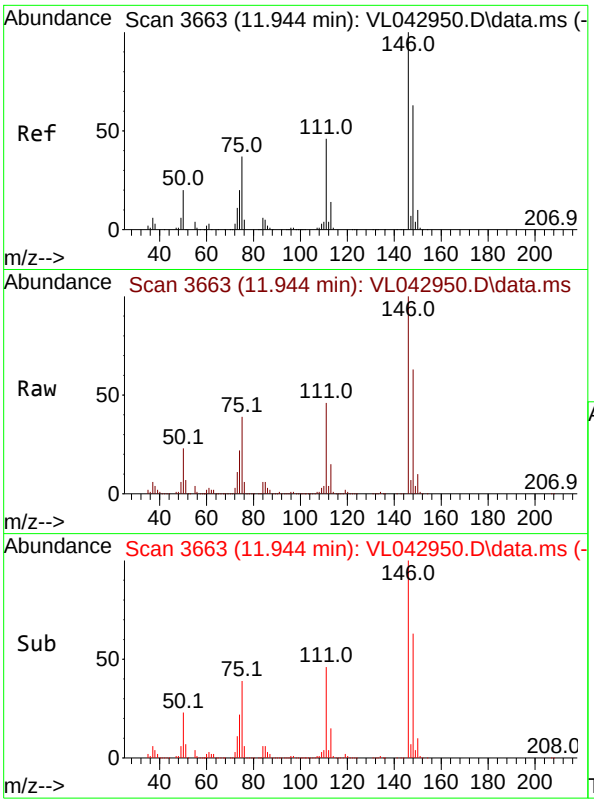


#76
1,4-Dichlorobenzene
Concen: 9.456 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:146 Resp: 411464

Ion	Ratio	Lower	Upper
146	100		
111	43.0	21.5	64.5
148	63.7	31.9	95.5



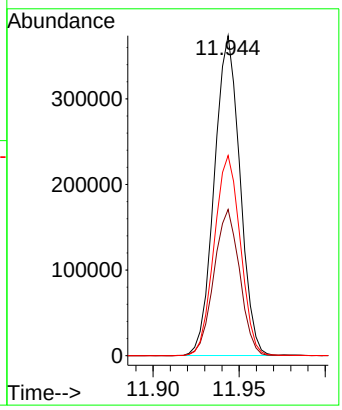


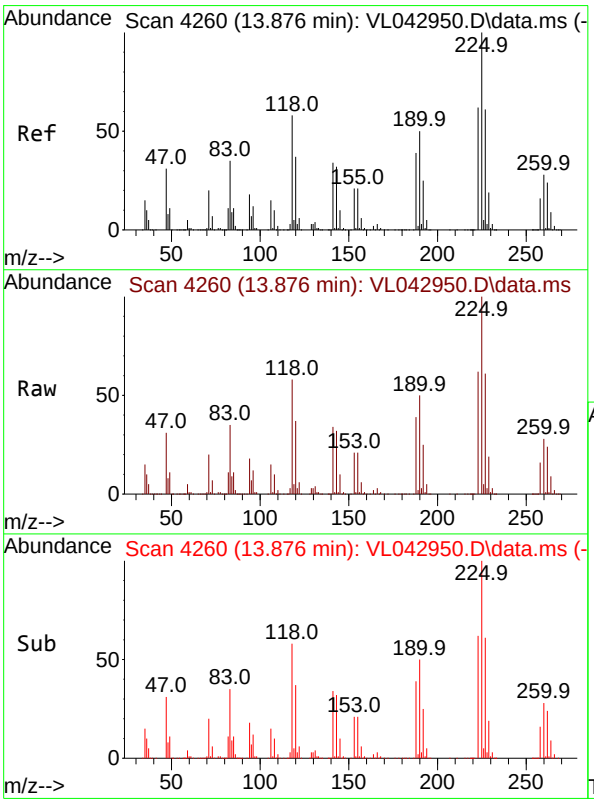
#77
1,2-Dichlorobenzene
Concen: 9.289 ppbv
RT: 11.944 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 387219

Ion	Ratio	Lower	Upper
146	100		
111	46.2	23.1	69.3
148	64.0	32.0	96.0

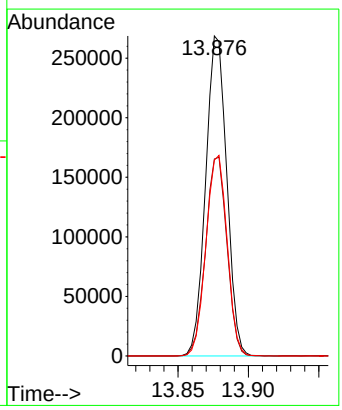


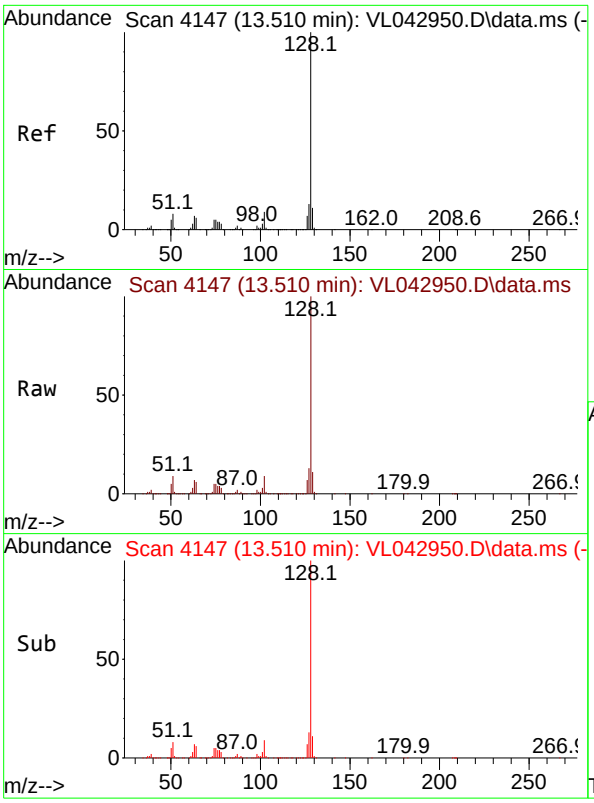


#78
Hexachloro-1,3-Butadiene
Concen: 8.591 ppbv
RT: 13.876 min Scan# 4260
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:225 Resp: 280080

Ion	Ratio	Lower	Upper
225	100		
223	62.6	50.1	75.1
227	63.0	50.4	75.6





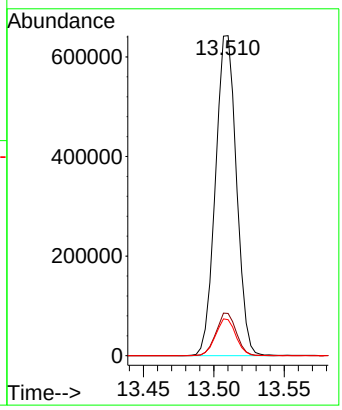
#79
Naphthalene
Concen: 10.696 ppbv
RT: 13.510 min Scan# 4

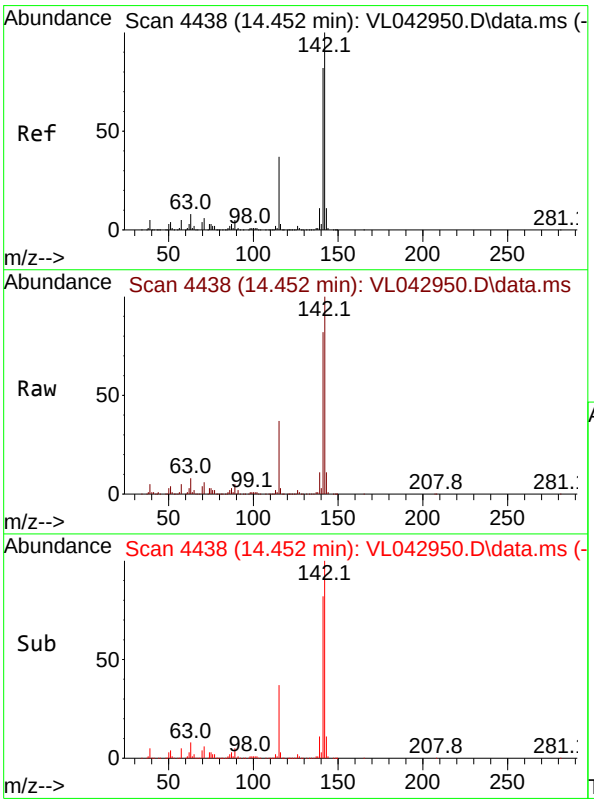
Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:128 Resp: 668171

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	11.3	9.0	13.6

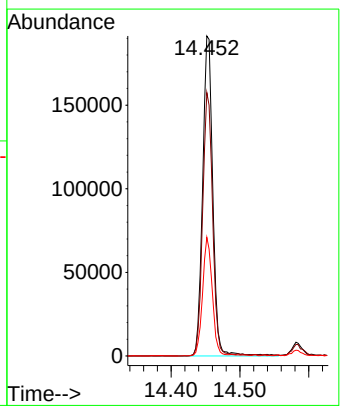


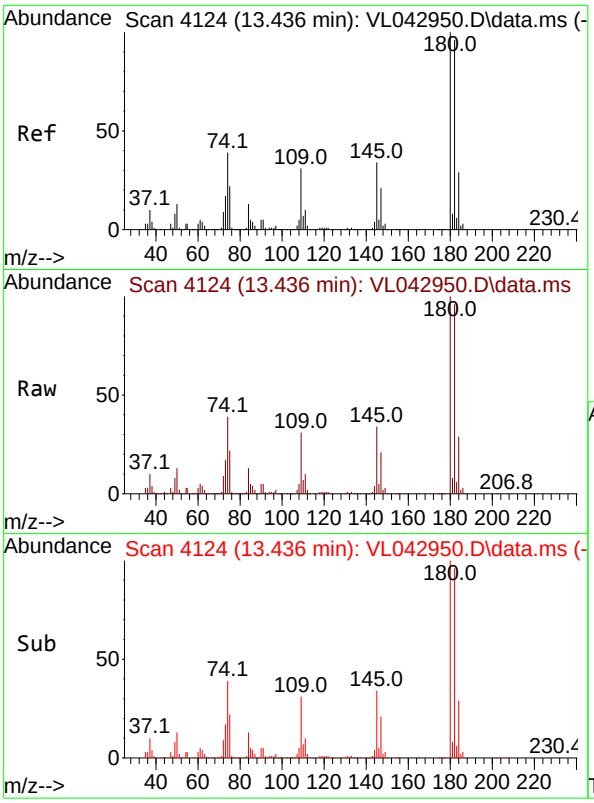


#80
Naphthalene,2-methyl-
Concen: 10.142 ppbv
RT: 14.452 min Scan# 4438
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Tgt Ion:142 Resp: 195695

Ion	Ratio	Lower	Upper
142	100		
141	81.4	65.1	97.7
115	36.1	28.9	43.3



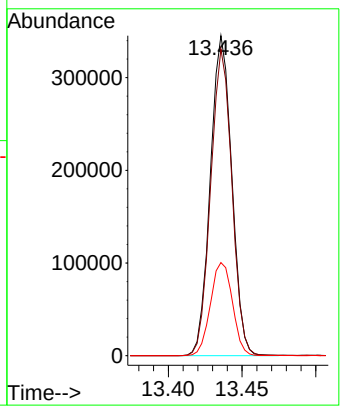


#81
1,2,4-Trichlorobenzene
Concen: 10.461 ppbv
RT: 13.436 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042950.D
Acq: 22 Sep 2025 09:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:180 Resp: 349393

Ion	Ratio	Lower	Upper
180	100		
182	94.6	75.7	113.5
184	29.9	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042951.D
Acq On : 22 Sep 2025 10:14
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Sep 23 02:09:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	170758	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	524389	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	483821	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	361586	10.012	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	47851	2.083	ppbv		97
3) Chlorodifluoromethane	1.476	51	58395	2.040	ppbv		95
4) Chloromethane	1.534	50	21326	2.051	ppbv		99
5) Vinyl Chloride	1.580	62	17892	1.904	ppbv		98
6) Bromomethane	1.667	94	6816	2.056	ppbv		96
7) Chloroethane	1.706	64	7250	1.987	ppbv	#	85
8) Dichlorotetrafluoroethane	1.554	85	40306	2.056	ppbv		98
9) Propene	1.483	41	26007	2.088	ppbv		99
10) Heptane	4.978	43	66978	2.005	ppbv		99
11) Trichlorofluoromethane	1.877	101	45973	2.076	ppbv		94
12) 1,1,2-Trichlorotrifluo...	2.140	101	36490	2.035	ppbv		98
13) Ethanol	1.722	45	2989	2.504	ppbv		93
14) Bromoethene	1.784	108	14189	2.093	ppbv	#	96
15) Acetone	1.835	43	50357	2.264	ppbv		99
16) 1,3-Butadiene	1.609	39	20729	1.976	ppbv		94
17) tert-Butyl alcohol	2.042	59	47749	1.957	ppbv	#	93
18) 1,1-Dichloroethene	2.036	96	16572	1.996	ppbv		95
19) Isopropyl Alcohol	1.887	45	27930	2.089	ppbv	#	79
20) Methylene Chloride	2.062	84	17413	2.097	ppbv	#	84
21) Allyl Chloride	2.098	41	32985	2.130	ppbv		99
22) trans-1,2-Dichloroethene	2.340	96	18991	2.013	ppbv		98
23) Vinyl Acetate	2.463	43	64479	2.029	ppbv	#	98
24) 1,1-Dichloroethane	2.408	63	37865	2.047	ppbv		99
25) Ethyl Acetate	2.835	43	117567	2.092	ppbv		99
26) Hexane	2.826	57	53034	2.070	ppbv		98
27) Carbon Disulfide	2.153	76	47660	2.074	ppbv	#	60
28) Methyl tert-Butyl Ether	2.441	73	25348	1.903	ppbv		92
29) Chloroform	2.848	83	69599	2.077	ppbv		96
30) Cyclohexane	3.855	84	43725	2.041	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	50019	2.084	ppbv		95
32) 1,1,1-Trichloroethane	3.366	97	70729	1.948	ppbv		97
34) 2-Butanone	2.557	43	77689	2.114	ppbv		98
35) Carbon Tetrachloride	3.761	117	68858	2.041	ppbv		95
36) Benzene	3.658	78	101901	2.069	ppbv		97
37) 1,2-Dichloroethane	3.217	62	53130	2.052	ppbv		98
38) Trichloroethene	4.548	130	47424	1.938	ppbv		94
39) 1,2-Dichloropropane	4.308	63	22120	1.230	ppbv		96
40) 1,4-Dioxane	4.586	88	15831	1.895	ppbv	#	77
41) Tetrahydrofuran	3.056	42	43962	2.081	ppbv		98
42) Bromodichloromethane	4.486	83	73675	2.042	ppbv		98
43) Methyl Methacrylate	4.881	69	41527	2.077	ppbv		99
44) 2,2,4-Trimethylpentane	4.638	57	177242	2.083	ppbv		99
45) t-1,3-Dichloropropene	6.415	75	44171	2.055	ppbv		91

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042951.D
Acq On : 22 Sep 2025 10:14
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Sep 23 02:09:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

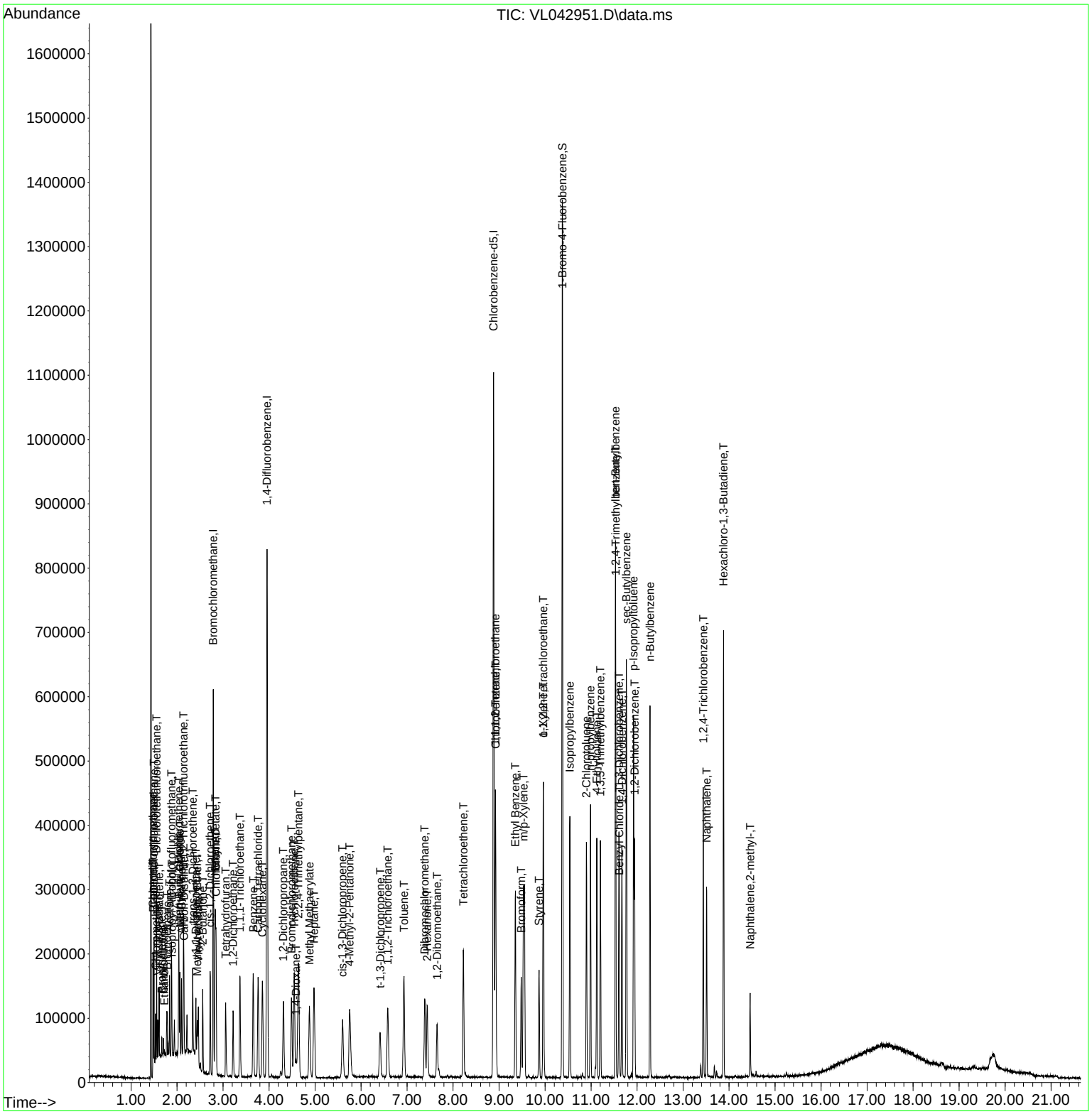
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.596	75	56335	2.057	ppbv		97
47) 1,1,2-Trichloroethane	6.577	97	20092	1.057	ppbv		92
48) Dibromochloromethane	7.383	129	62968	2.072	ppbv		98
49) Bromoform	9.480	173	56021	2.119	ppbv		99
50) 4-Methyl-2-Pentanone	5.748	43	44119	0.893	ppbv	#	16
51) 2-Hexanone	7.438	43	80620	2.053	ppbv		99
52) Tetrachloroethene	8.224	164	36853	1.934	ppbv		94
53) Toluene	6.933	91	121268	2.081	ppbv		100
54) 1,2-Dibromoethane	7.652	107	55022	2.058	ppbv		94
56) 1,1,1,2-Tetrachloroethane	8.920	131	48901	2.112	ppbv		98
57) Chlorobenzene	8.924	112	91325	2.068	ppbv		94
58) Ethyl Benzene	9.354	91	168063	2.115	ppbv		99
59) m/p-Xylene	9.532	91	130749	2.086	ppbv	#	100
60) o-Xylene	9.963	91	131507	2.101	ppbv		98
61) Styrene	9.869	104	62748	2.119	ppbv		98
62) Isopropylbenzene	10.539	105	196198	2.103	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.963	83	65089	1.978	ppbv		98
64) n-propylbenzene	10.985	120	50569	2.074	ppbv		93
65) tert-Butylbenzene	11.529	119	178218	2.147	ppbv		98
66) Benzyl Chloride	11.613	91	18992	2.181	ppbv		98
67) sec-Butylbenzene	11.765	105	249510	2.158	ppbv		100
69) p-Isopropyltoluene	11.924	119	210808	2.158	ppbv		97
70) n-Butylbenzene	12.280	91	206691	2.167	ppbv		100
71) 2-Chlorotoluene	10.898	91	147901	2.099	ppbv		100
72) 4-Ethyltoluene	11.124	105	164770	2.102	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	135344	2.128	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	150772	2.147	ppbv		98
75) 1,3-Dichlorobenzene	11.607	146	92487	2.124	ppbv		98
76) 1,4-Dichlorobenzene	11.671	146	92794	2.145	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	88825	2.144	ppbv		100
78) Hexachloro-1,3-Butadiene	13.879	225	70481	2.175	ppbv		99
79) Naphthalene	13.510	128	142653	2.297	ppbv		98
80) Naphthalene,2-methyl-	14.458	142	41369	2.157	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	75139	2.263	ppbv		99

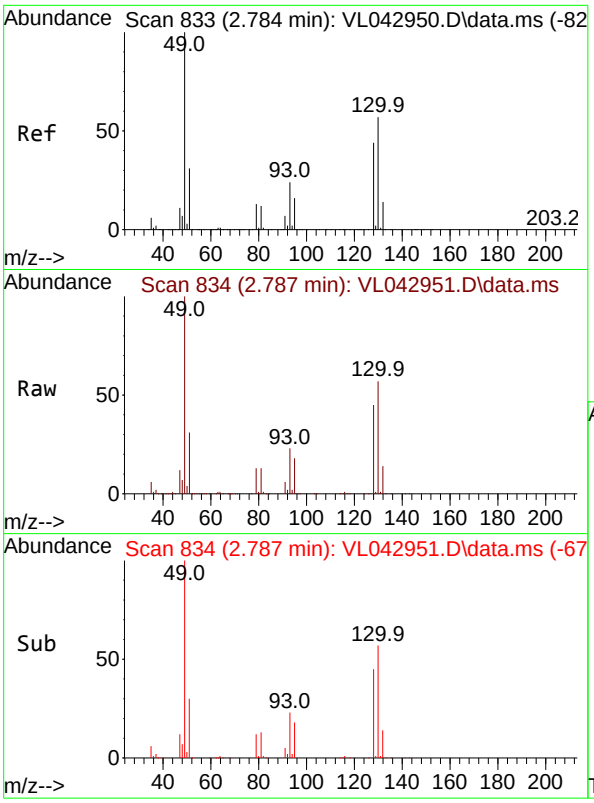
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042951.D
Acq On : 22 Sep 2025 10:14
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Sep 23 02:09:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



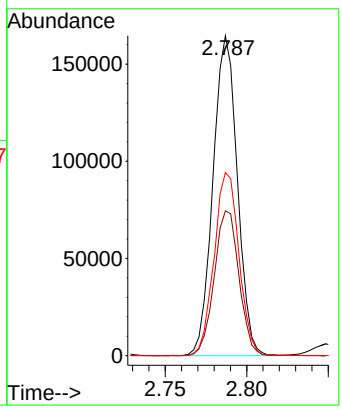


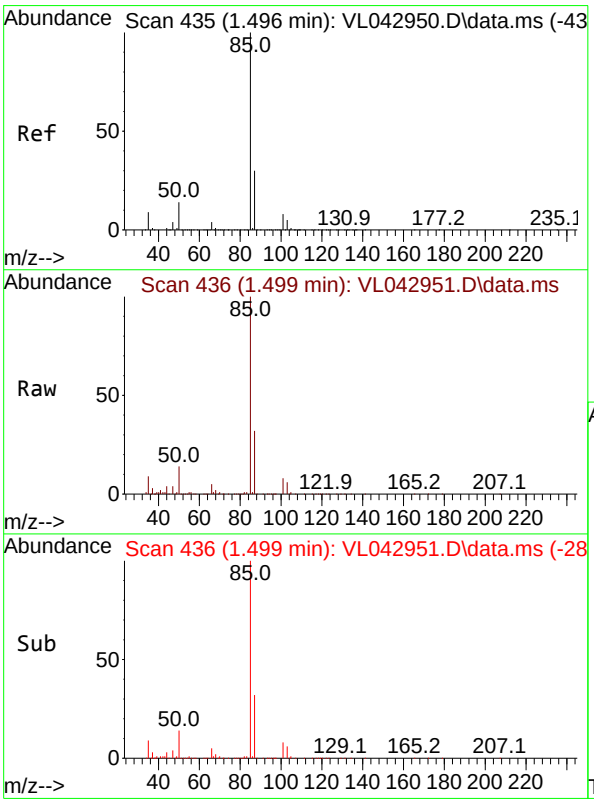
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 49 Resp: 170758

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	58.5	29.1	87.3

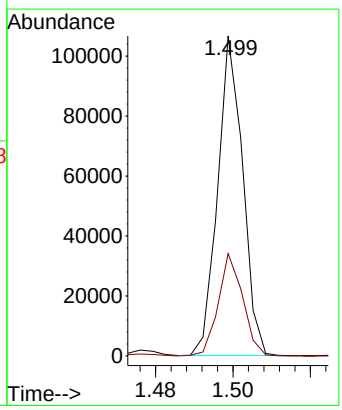


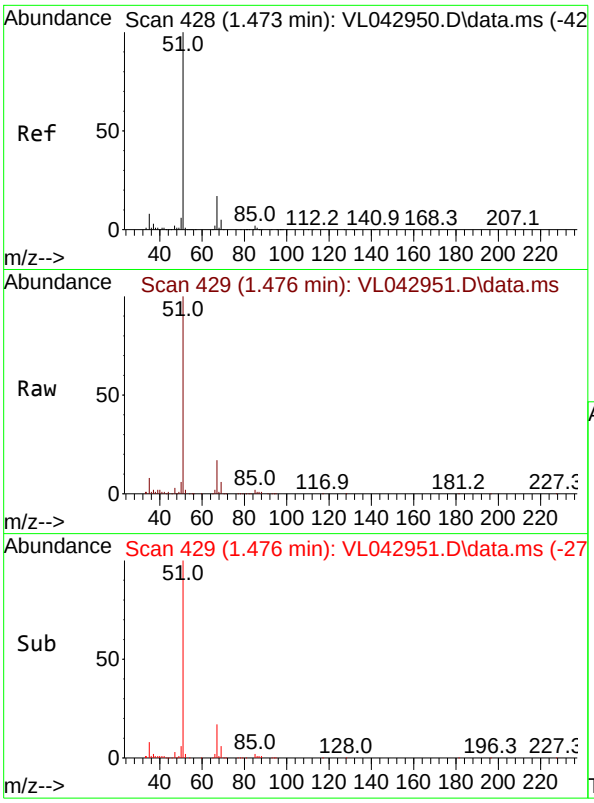


#2
Dichlorodifluoromethane
Concen: 2.083 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 85 Resp: 47851

Ion	Ratio	Lower	Upper
85	100		
87	32.0	24.3	36.5



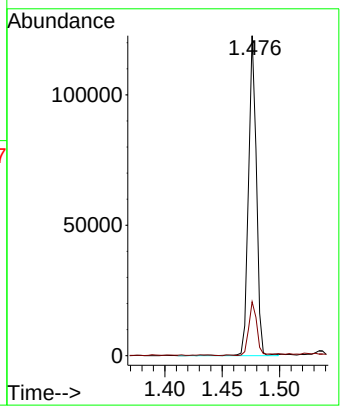


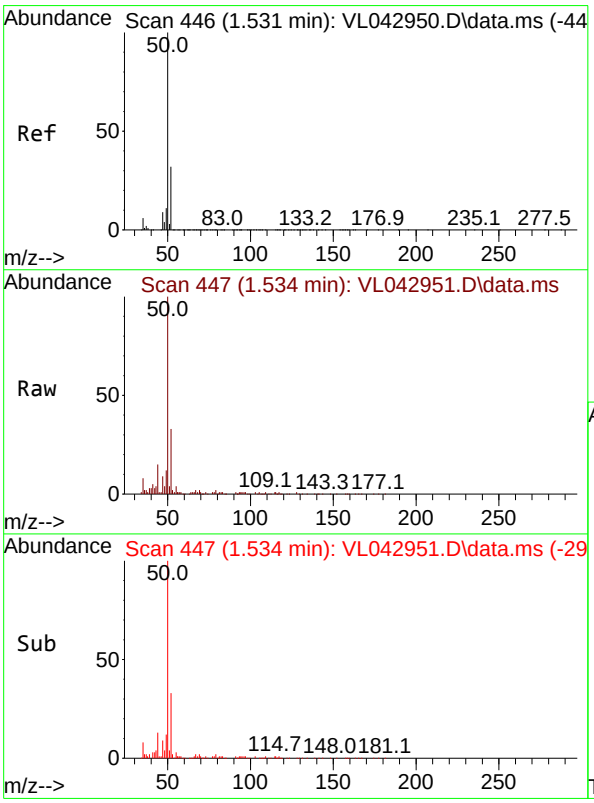
#3
Chlorodifluoromethane
Concen: 2.040 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 51 Resp: 58395

Ion	Ratio	Lower	Upper
51	100		
67	19.4	13.8	20.8

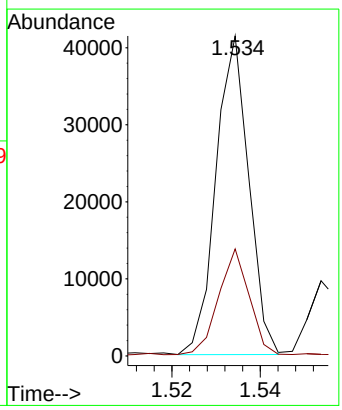


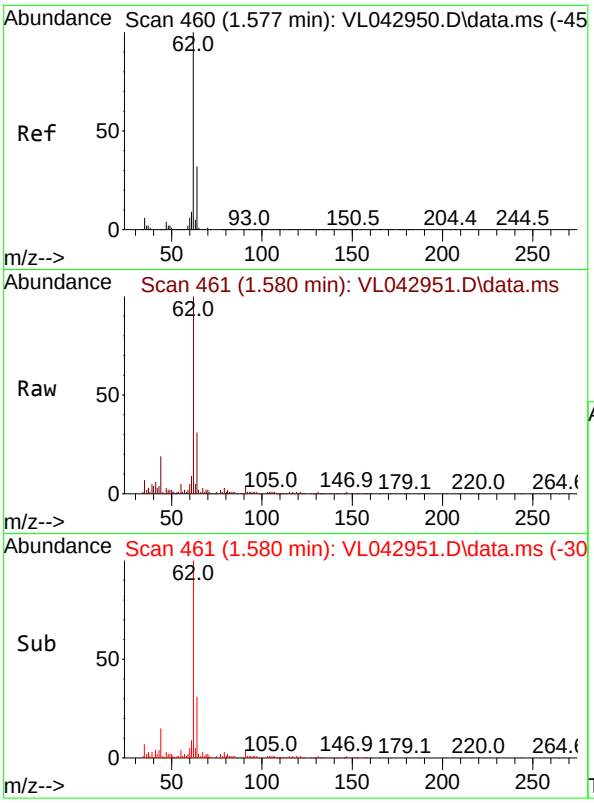


#4
Chloromethane
Concen: 2.051 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 50 Resp: 21326

Ion	Ratio	Lower	Upper
50	100		
52	33.2	25.9	38.9



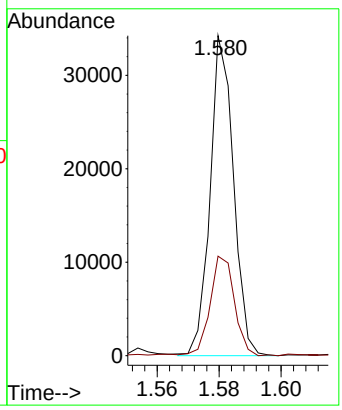


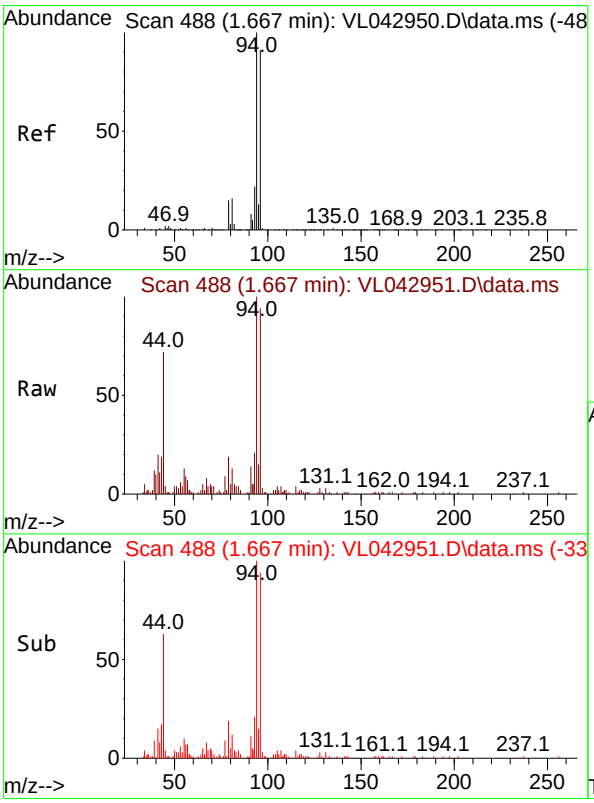
#5
Vinyl Chloride
Concen: 1.904 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 17892

Ion	Ratio	Lower	Upper
62	100		
64	30.8	25.4	38.2

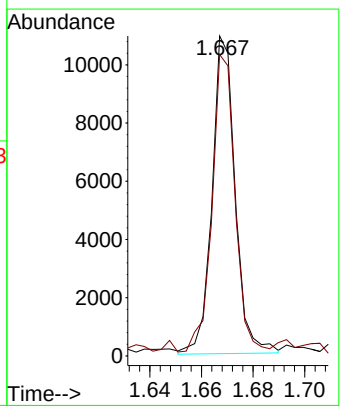


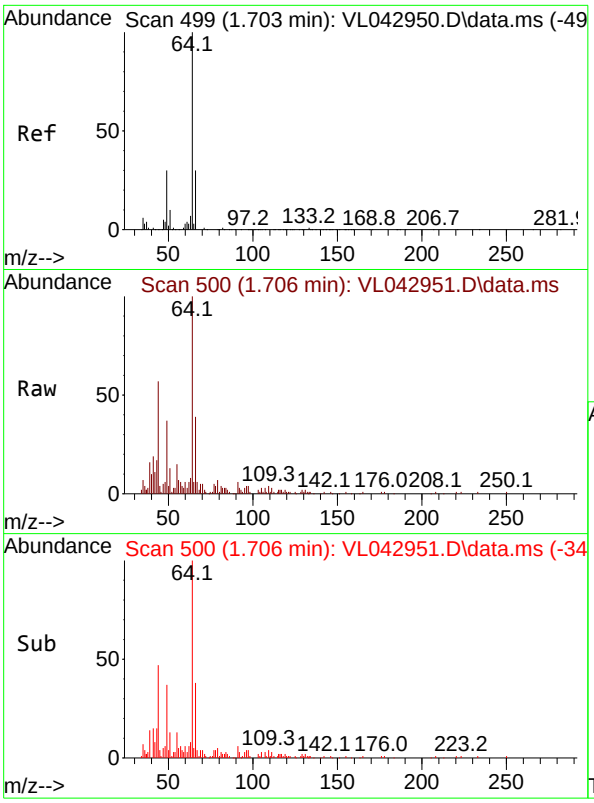


#6
Bromomethane
Concen: 2.056 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 94 Resp: 6816

Ion	Ratio	Lower	Upper
94	100		
96	94.4	72.6	108.8



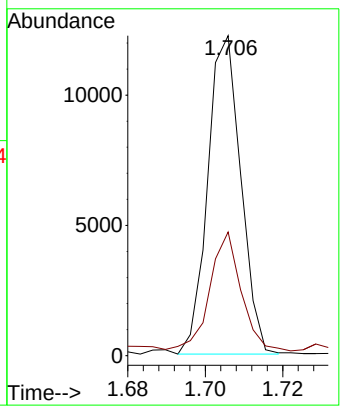


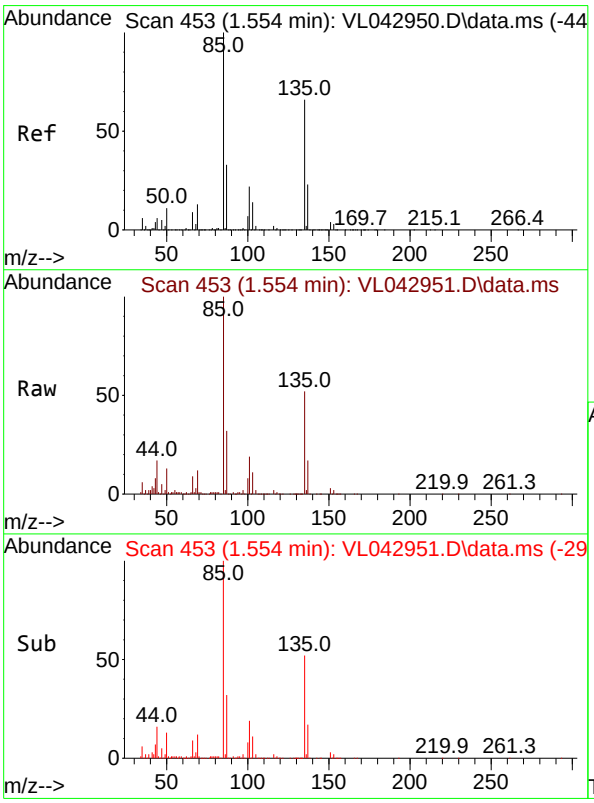
#7
Chloroethane
Concen: 1.987 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 64 Resp: 7250

Ion	Ratio	Lower	Upper
64	100		
66	38.7	24.6	36.8#

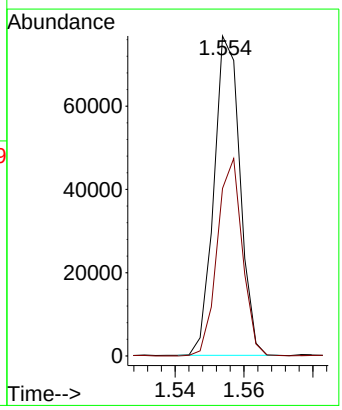


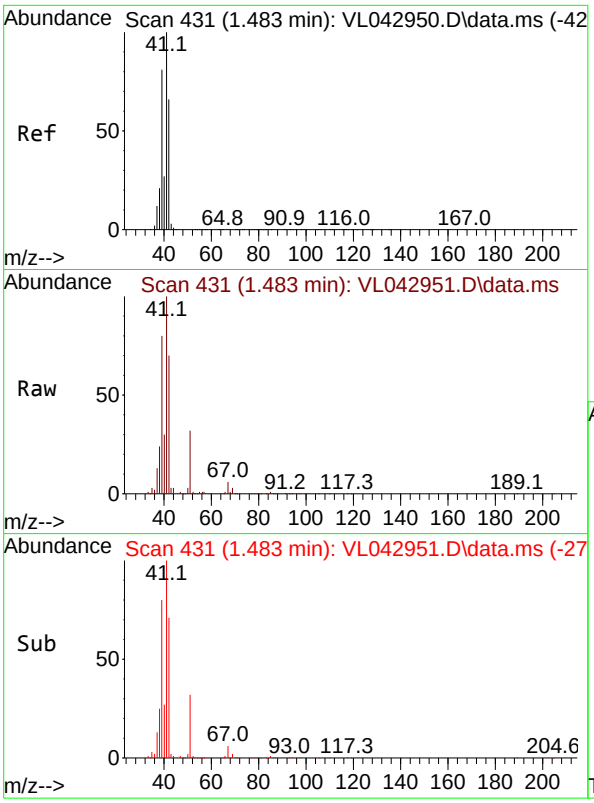


#8
Dichlorotetrafluoroethane
Concen: 2.056 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 85 Resp: 40306

Ion	Ratio	Lower	Upper
85	100		
135	60.2	49.7	74.5



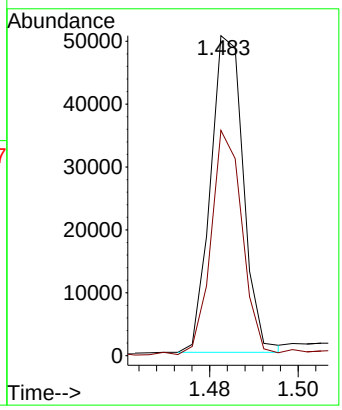


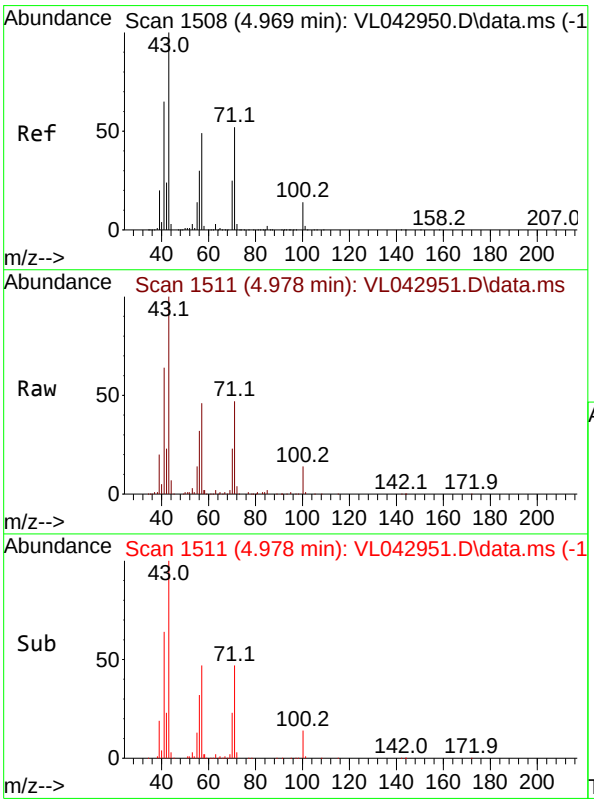
#9
Propene
Concen: 2.088 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 26007

Ion	Ratio	Lower	Upper
41	100		
42	72.4	57.4	86.2

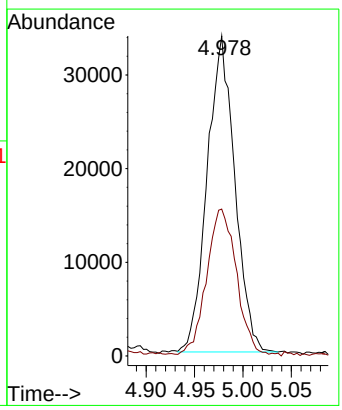


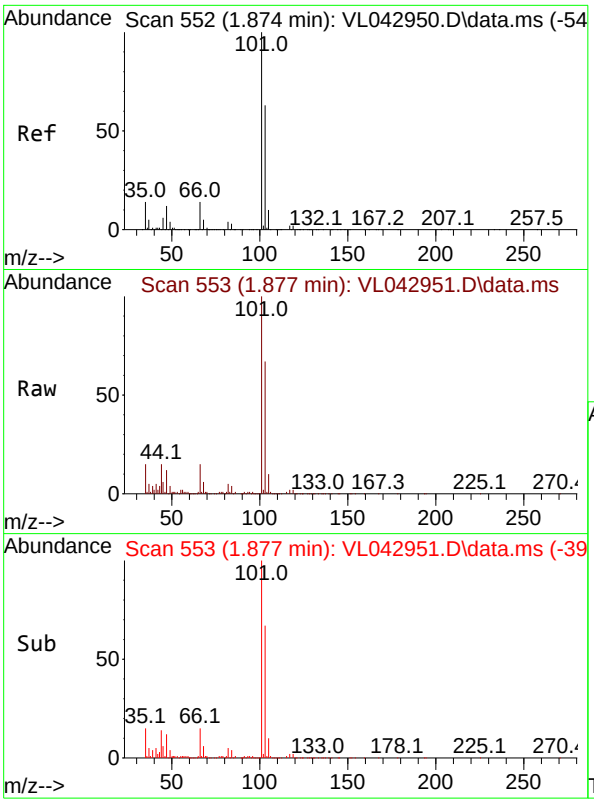


#10
Heptane
Concen: 2.005 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 66978

Ion	Ratio	Lower	Upper
43	100		
57	49.1	38.6	57.8



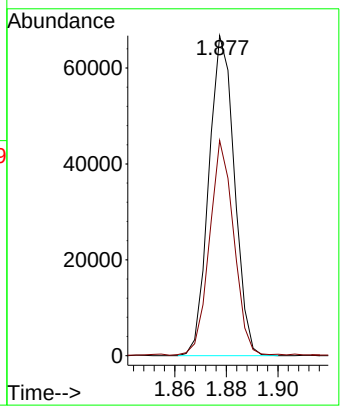


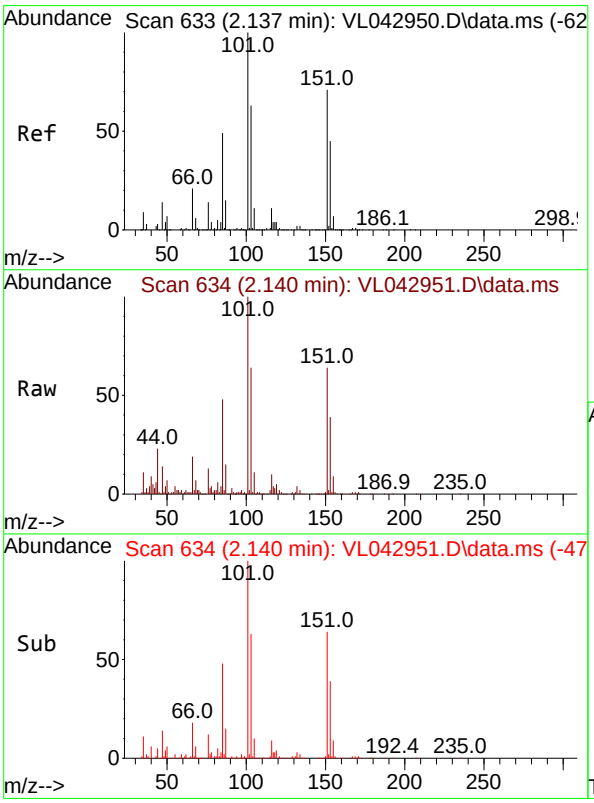
#11
Trichlorofluoromethane
Concen: 2.076 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:101 Resp: 45973

Ion	Ratio	Lower	Upper
101	100		
103	66.9	50.1	75.1

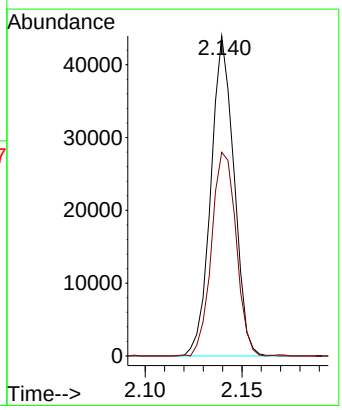


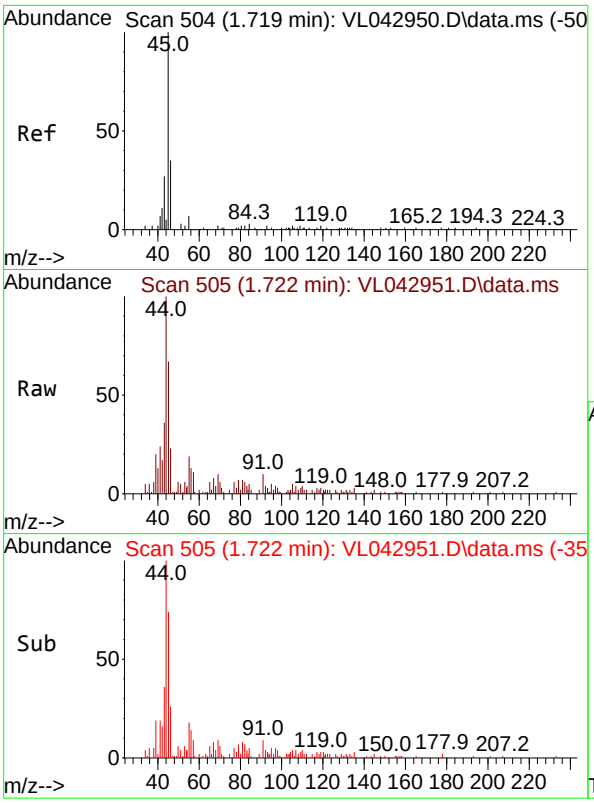


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.035 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:101 Resp: 36490

Ion	Ratio	Lower	Upper
101	100		
151	67.9	55.7	83.5



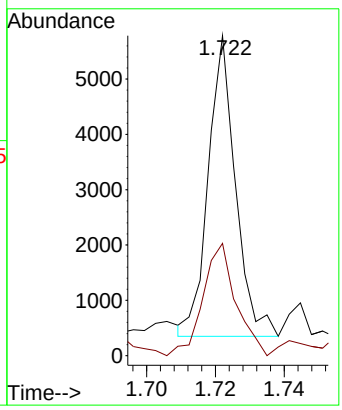


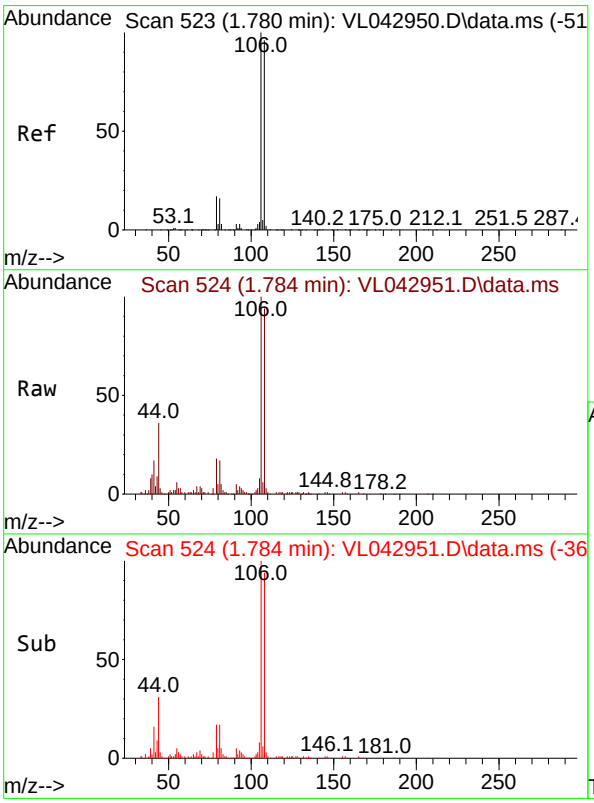
#13
Ethanol
Concen: 2.504 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 2989

Ion	Ratio	Lower	Upper
45	100		
46	36.0	16.2	64.6

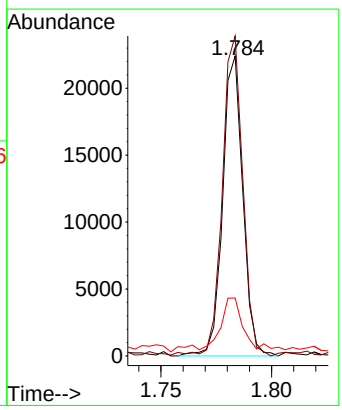


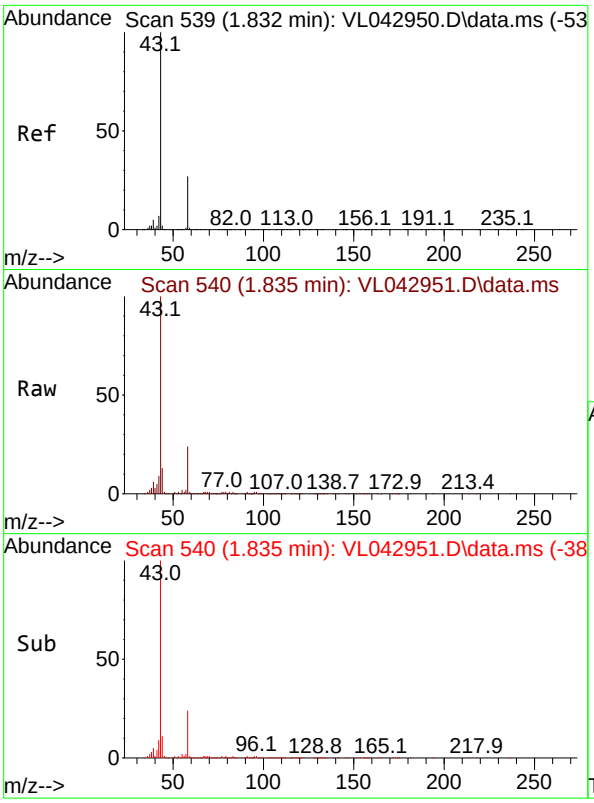


#14
Bromoethene
Concen: 2.093 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:108 Resp: 14189

Ion	Ratio	Lower	Upper
108	100		
106	109.5	86.0	129.0
79	26.5	14.2	21.2#



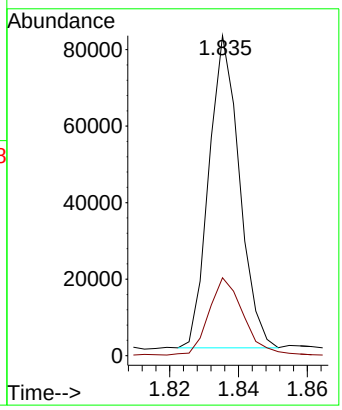


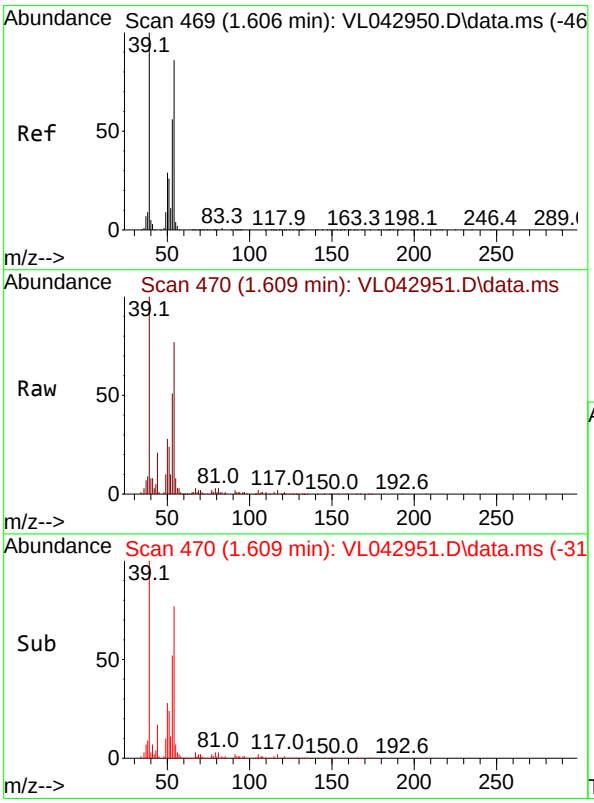
#15
Acetone
Concen: 2.264 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 50357

Ion	Ratio	Lower	Upper
43	100		
58	28.5	22.3	33.5

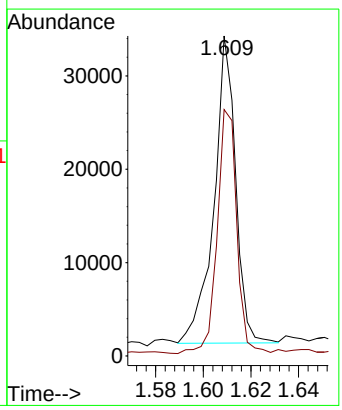


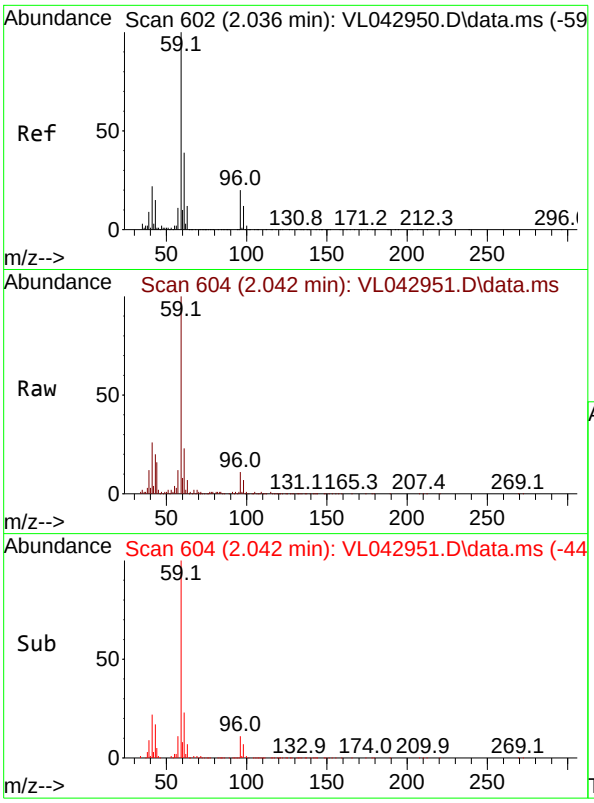


#16
1,3-Butadiene
Concen: 1.976 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 39 Resp: 20729

Ion	Ratio	Lower	Upper
39	100		
54	80.8	60.8	91.2



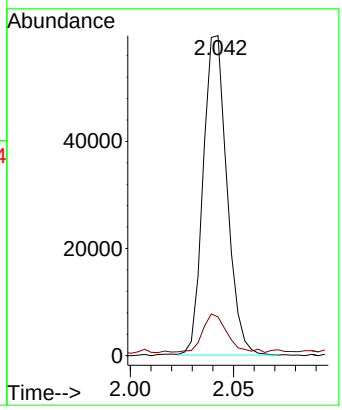


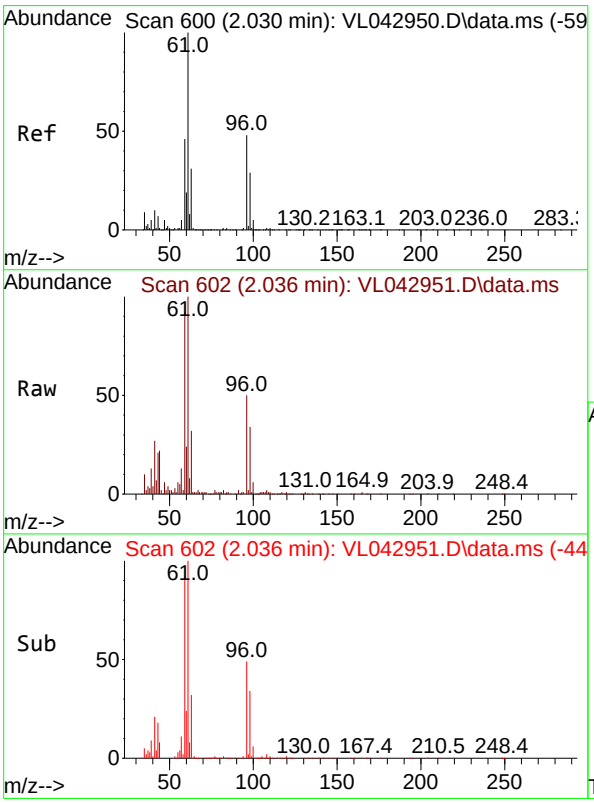
#17
tert-Butyl alcohol
Concen: 1.957 ppbv
RT: 2.042 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 59 Resp: 47749

Ion	Ratio	Lower	Upper
59	100		
57	13.4	8.6	12.8#

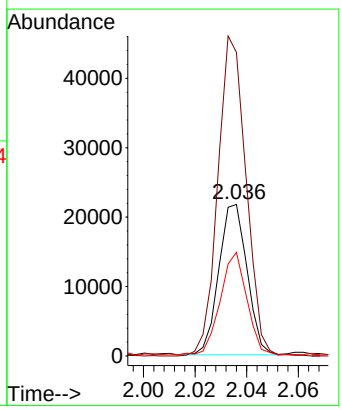


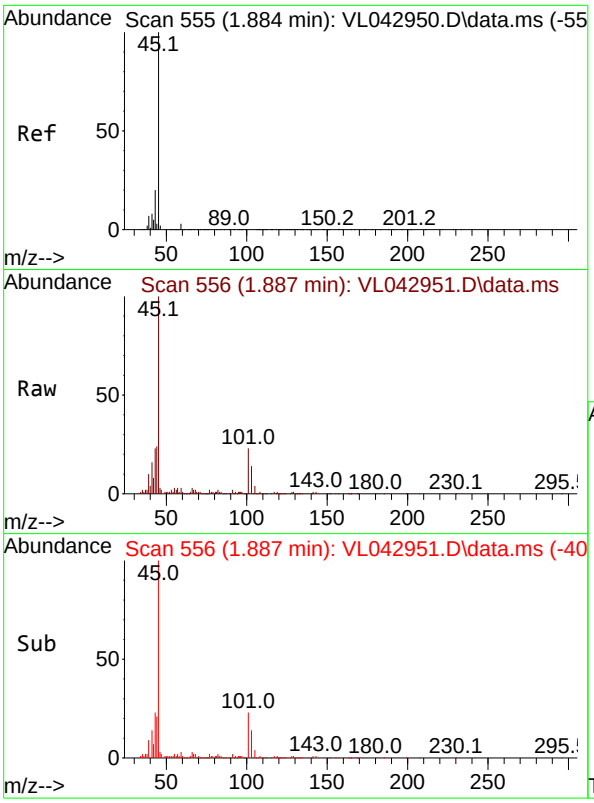


#18
1,1-Dichloroethene
Concen: 1.996 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 96 Resp: 16572

Ion	Ratio	Lower	Upper
96	100		
61	201.8	166.2	249.4
98	68.2	48.6	73.0



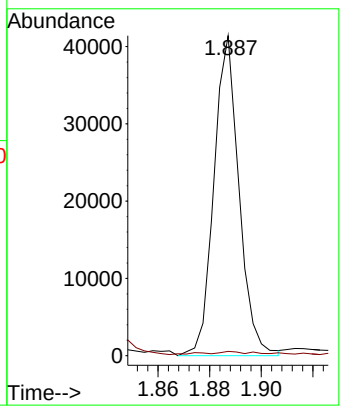


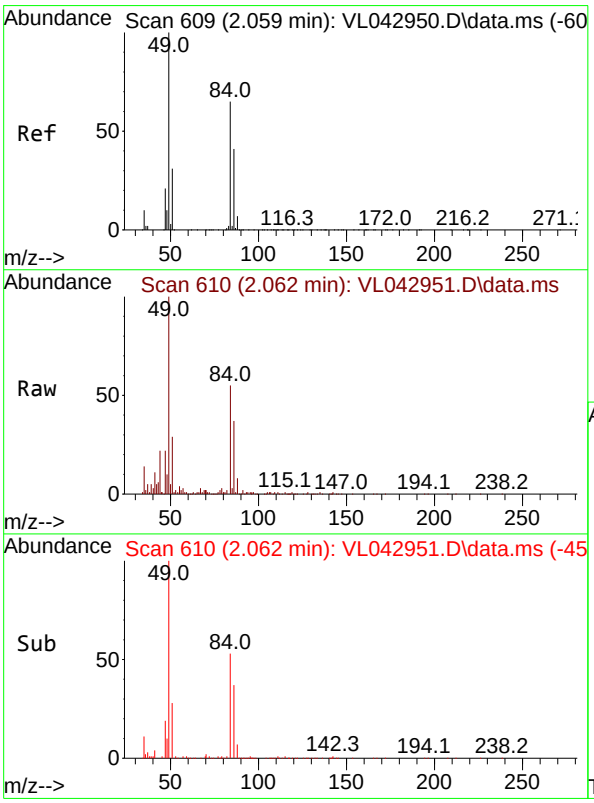
#19
Isopropyl Alcohol
Concen: 2.089 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 27930

Ion	Ratio	Lower	Upper
45	100		
58	51.6	31.0	46.6#

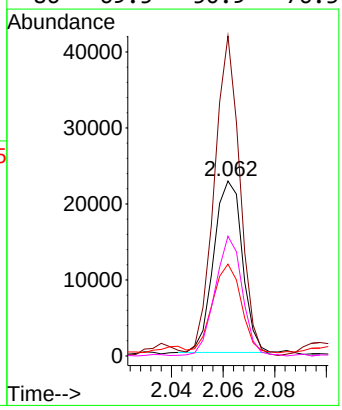


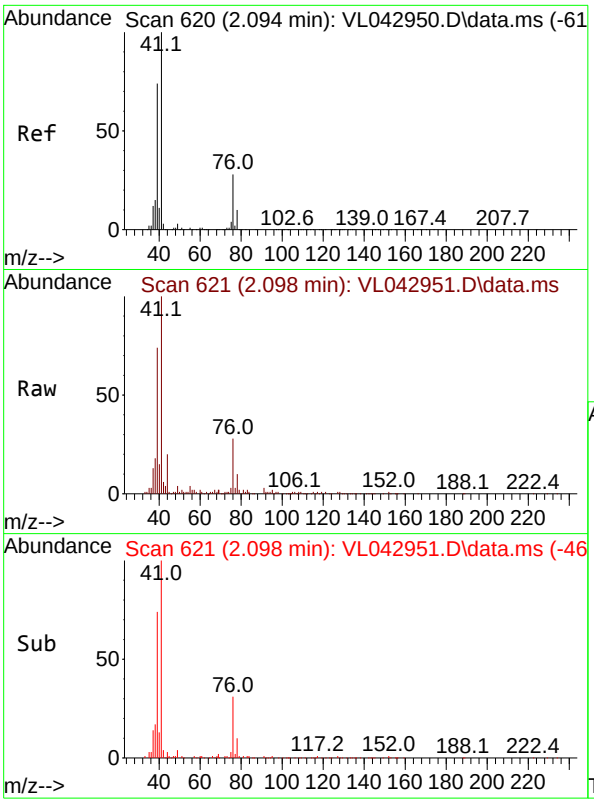


#20
Methylene Chloride
Concen: 2.097 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 84 Resp: 17413

Ion	Ratio	Lower	Upper
84	100		
49	186.6	124.1	186.1#
51	51.7	39.8	59.8
86	69.5	50.9	76.3



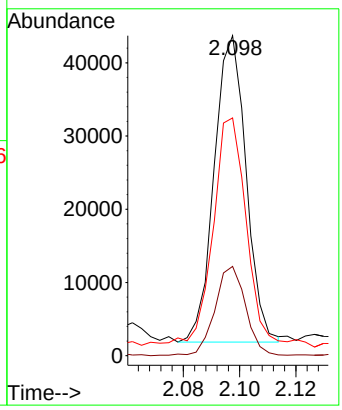


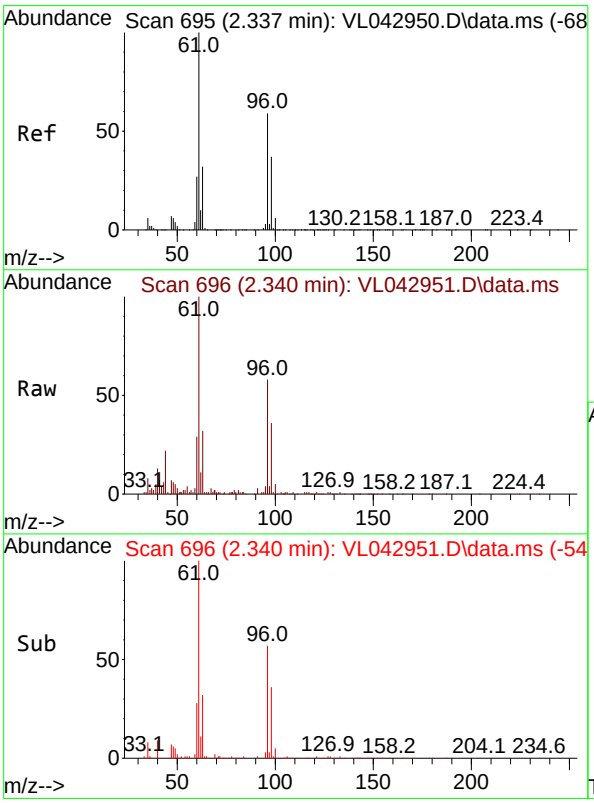
#21
Allyl Chloride
Concen: 2.130 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 32985

Ion	Ratio	Lower	Upper
41	100		
76	27.9	22.3	33.5
39	76.0	61.3	91.9

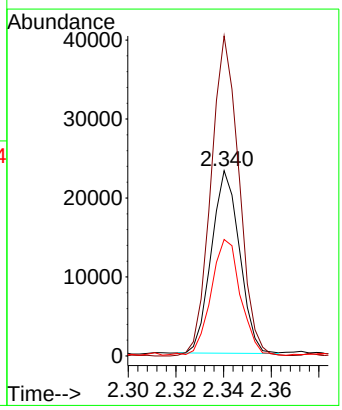


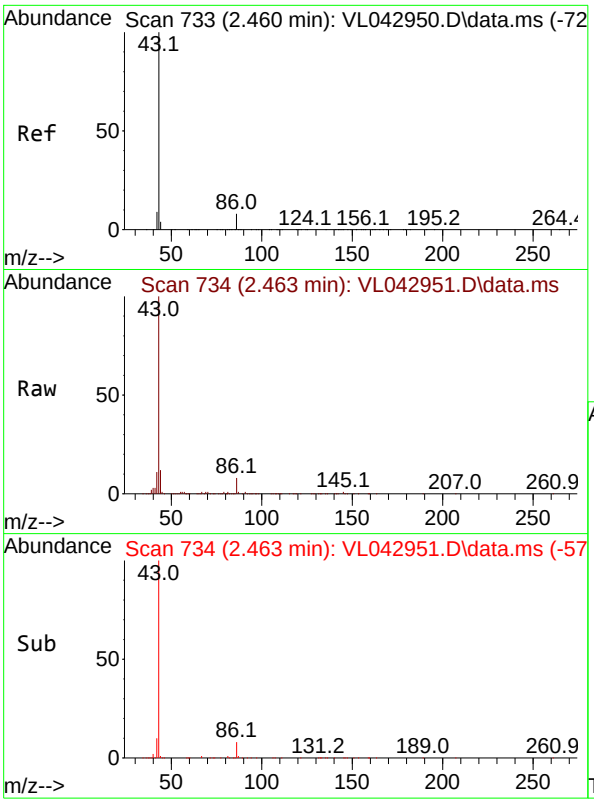


#22
trans-1,2-Dichloroethene
Concen: 2.013 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 96 Resp: 18991

Ion	Ratio	Lower	Upper
96	100		
61	175.1	136.5	204.7
98	63.3	50.6	76.0



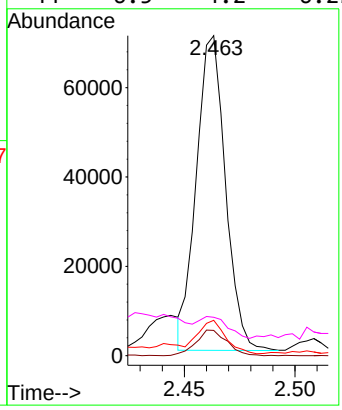


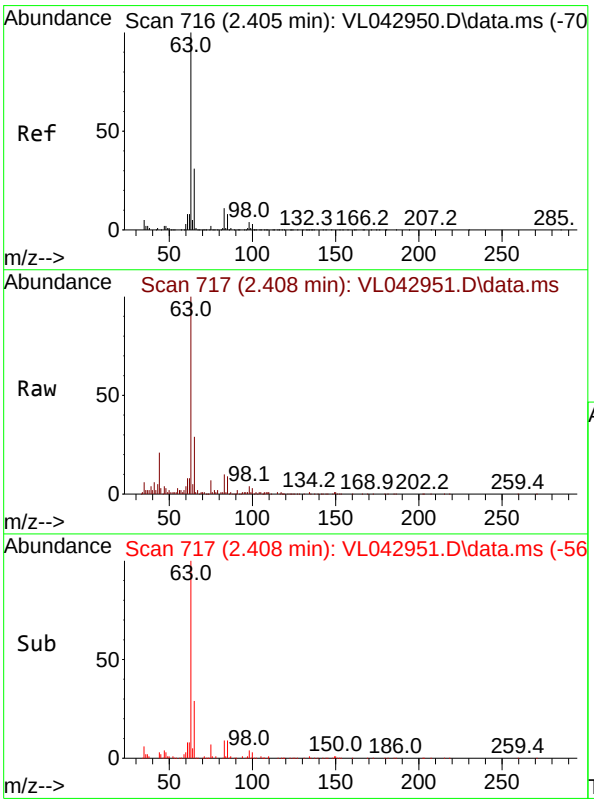
#23
Vinyl Acetate
Concen: 2.029 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 64479

Ion	Ratio	Lower	Upper
43	100		
86	8.0	6.2	9.2
42	10.3	7.4	11.0
44	6.5	4.2	6.2#

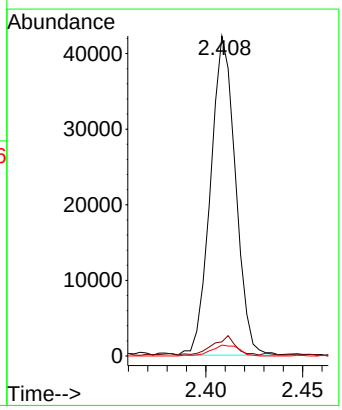


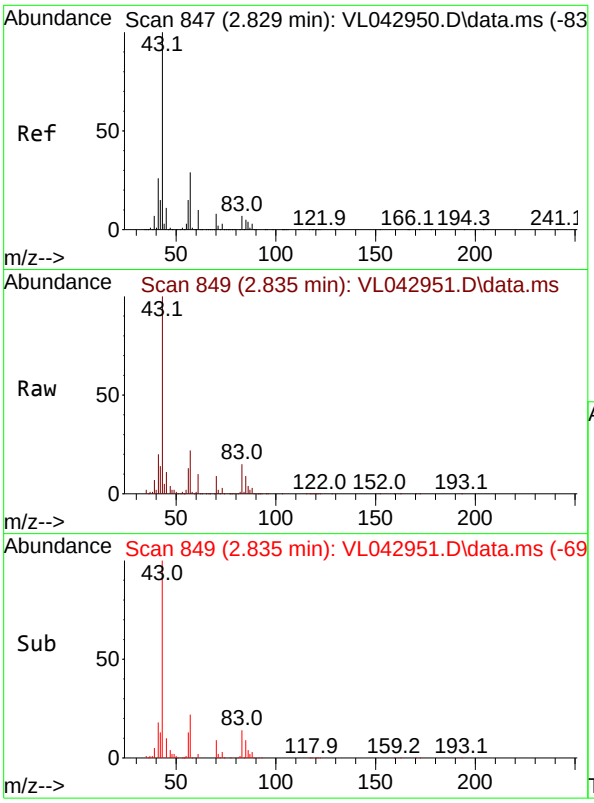


#24
1,1-Dichloroethane
Concen: 2.047 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 63 Resp: 37865

Ion	Ratio	Lower	Upper
63	100		
98	4.1	2.2	6.6
100	3.4	1.4	4.0



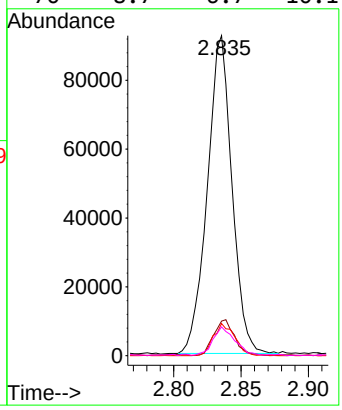


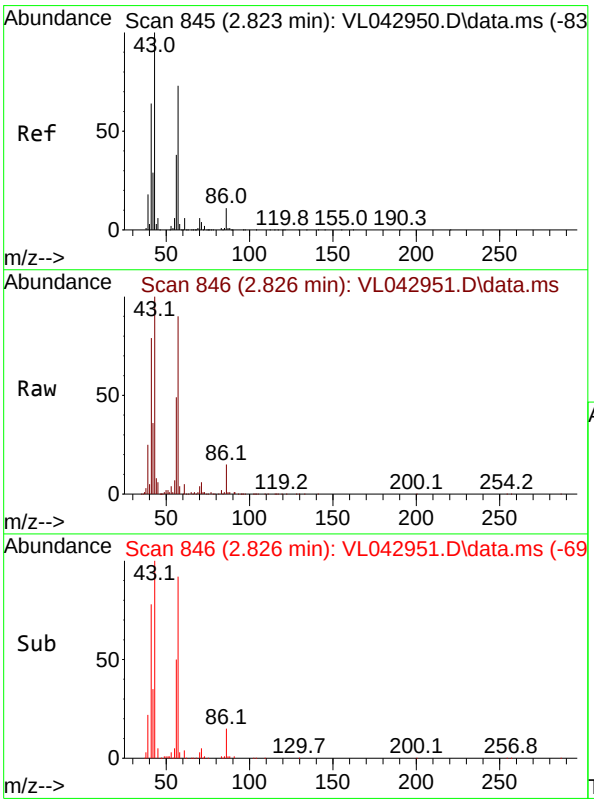
#25
Ethyl Acetate
Concen: 2.092 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 117567

Ion	Ratio	Lower	Upper
43	100		
45	10.4	7.7	11.5
61	8.8	7.1	10.7
70	8.7	6.7	10.1

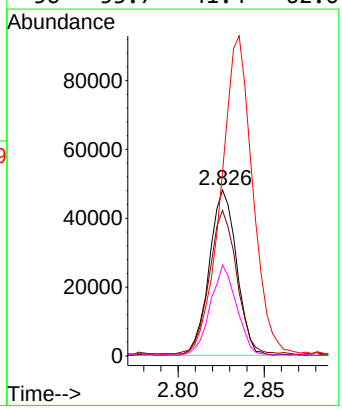


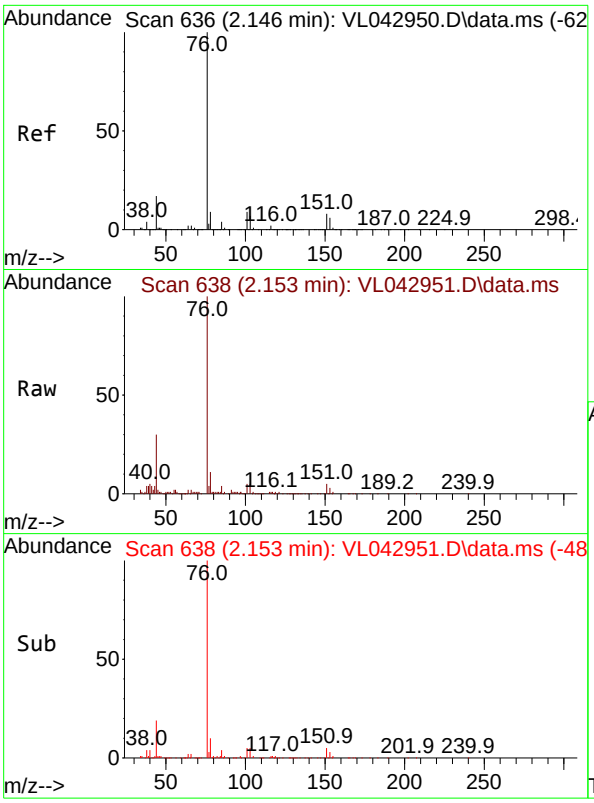


#26
Hexane
Concen: 2.070 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 57 Resp: 53034

Ion	Ratio	Lower	Upper
57	100		
41	88.1	71.7	107.5
43	223.2	180.8	271.2
56	53.7	41.4	62.0



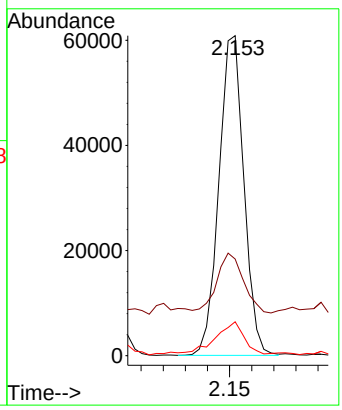


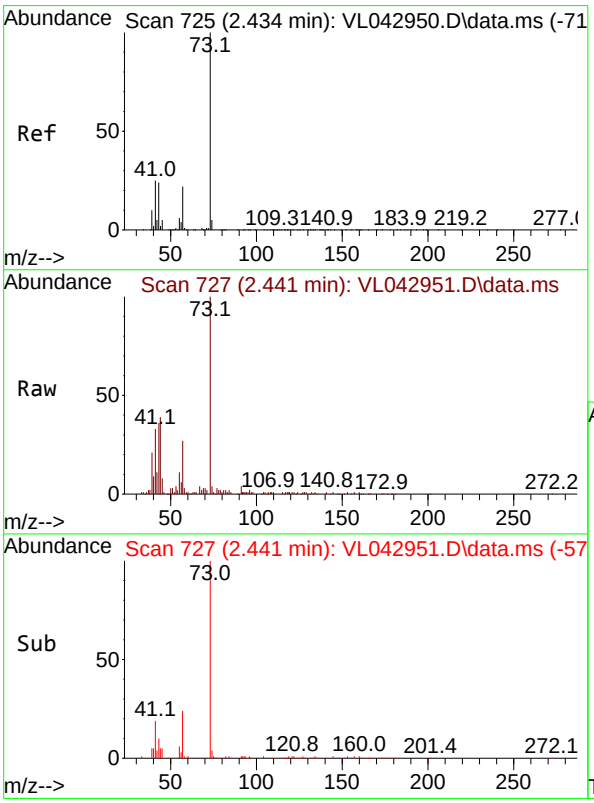
#27
Carbon Disulfide
Concen: 2.074 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 76 Resp: 47660

Ion	Ratio	Lower	Upper
76	100		
44	46.5	15.6	23.4#
78	13.1	8.9	13.3

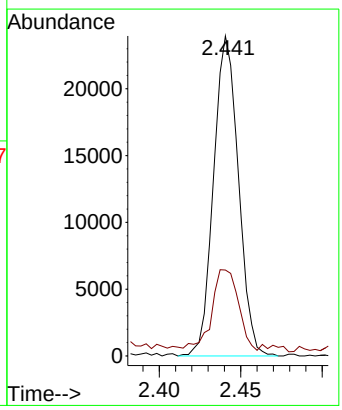


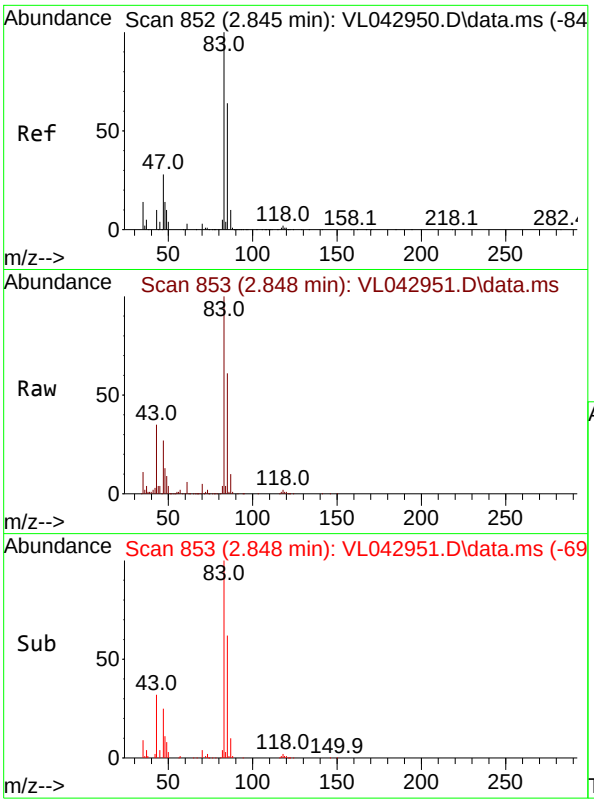


#28
Methyl tert-Butyl Ether
Concen: 1.903 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 73 Resp: 25348

Ion	Ratio	Lower	Upper
73	100		
57	29.8	20.6	31.0



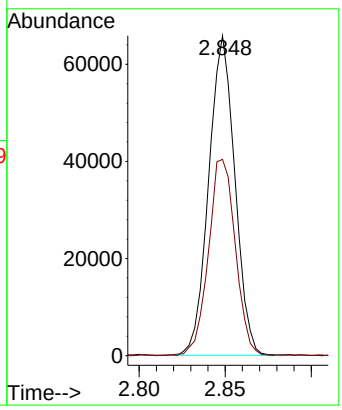


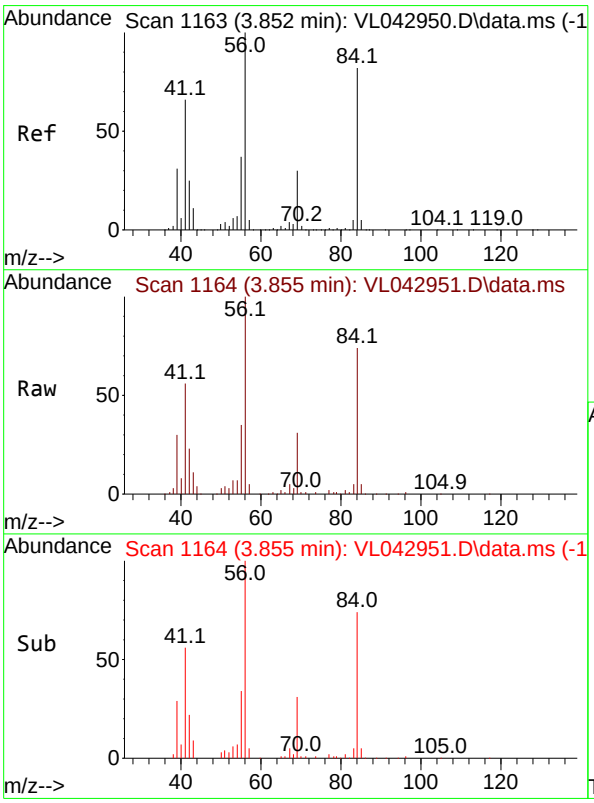
#29
Chloroform
Concen: 2.077 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 69599

Ion	Ratio	Lower	Upper
83	100		
85	61.2	51.2	76.8

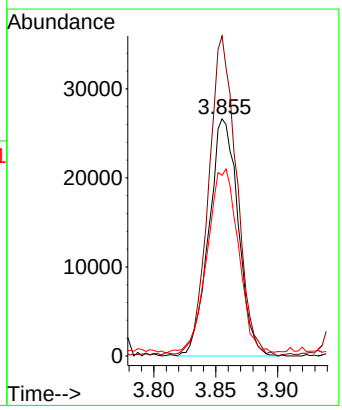


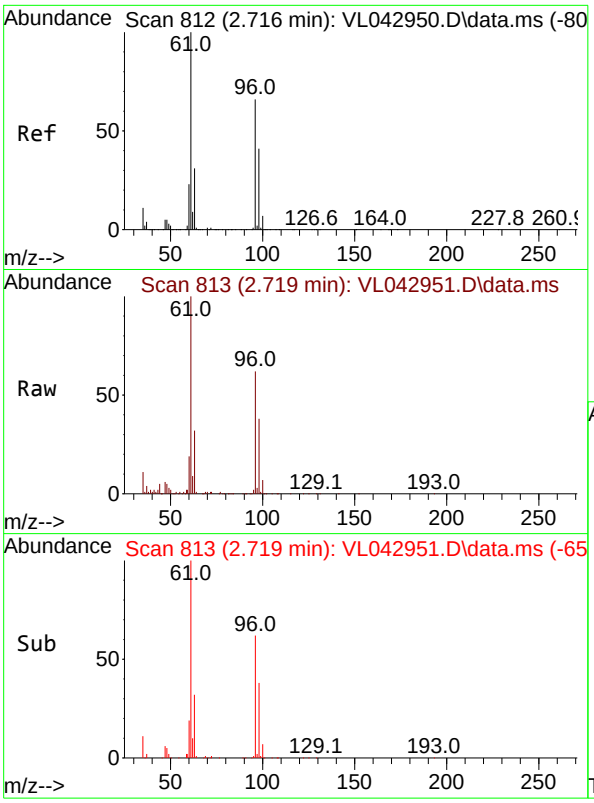


#30
Cyclohexane
Concen: 2.041 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 84 Resp: 43725

Ion	Ratio	Lower	Upper
84	100		
56	129.8	102.2	153.4
41	81.2	65.6	98.4



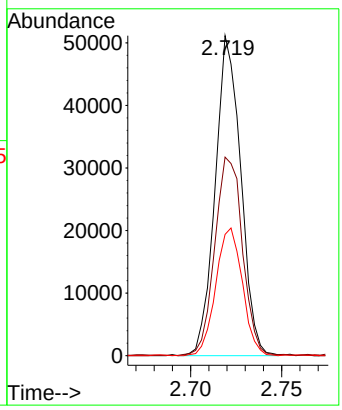


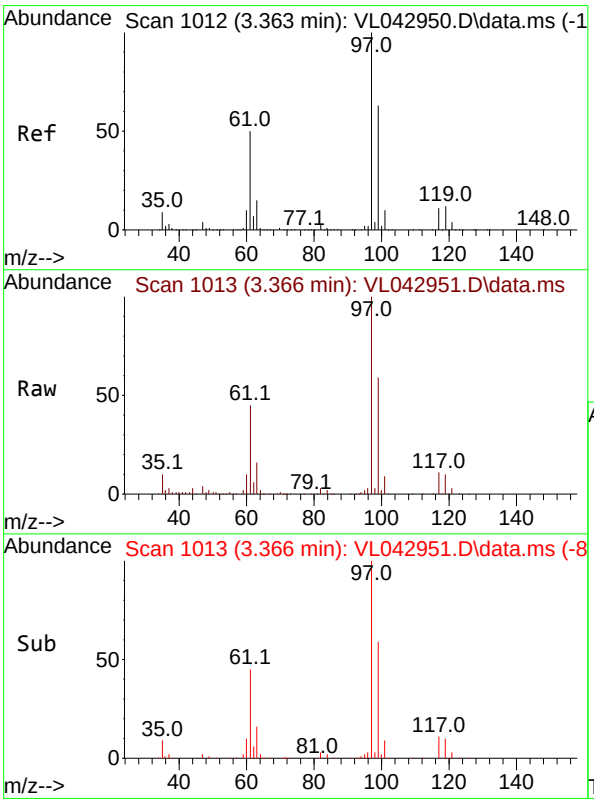
#31
cis-1,2-Dichloroethene
Concen: 2.084 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 61 Resp: 50019

Ion	Ratio	Lower	Upper
61	100		
96	61.9	53.0	79.6
98	37.9	32.9	49.3

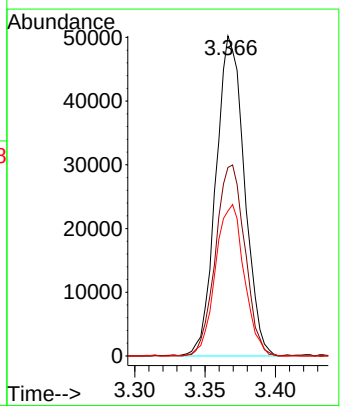


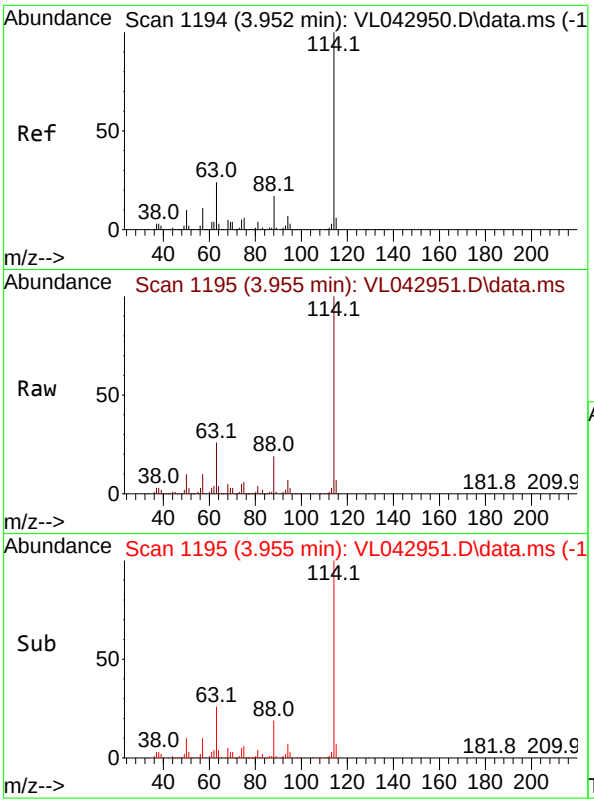


#32
1,1,1-Trichloroethane
Concen: 1.948 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 97 Resp: 70729

Ion	Ratio	Lower	Upper
97	100		
99	61.2	51.1	76.7
61	48.1	39.8	59.6



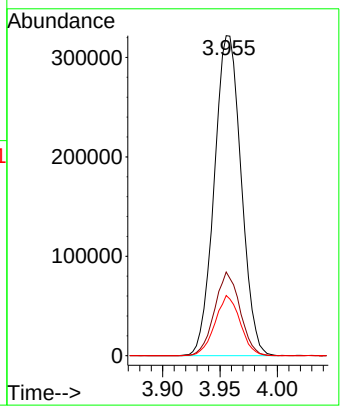


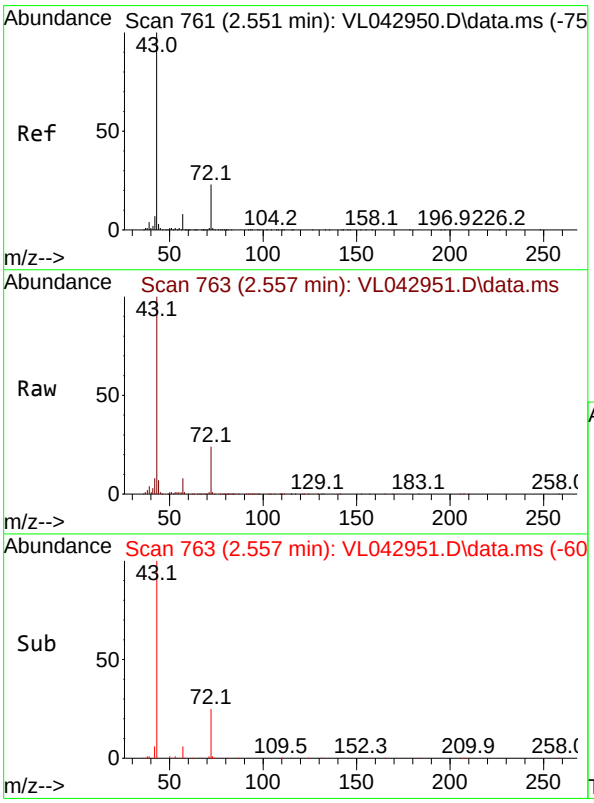
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:114 Resp: 524389

Ion	Ratio	Lower	Upper
114	100		
63	24.7	19.4	29.2
88	17.6	14.2	21.2

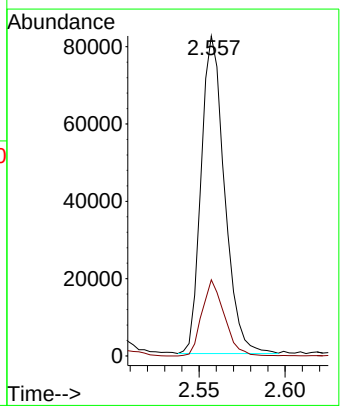


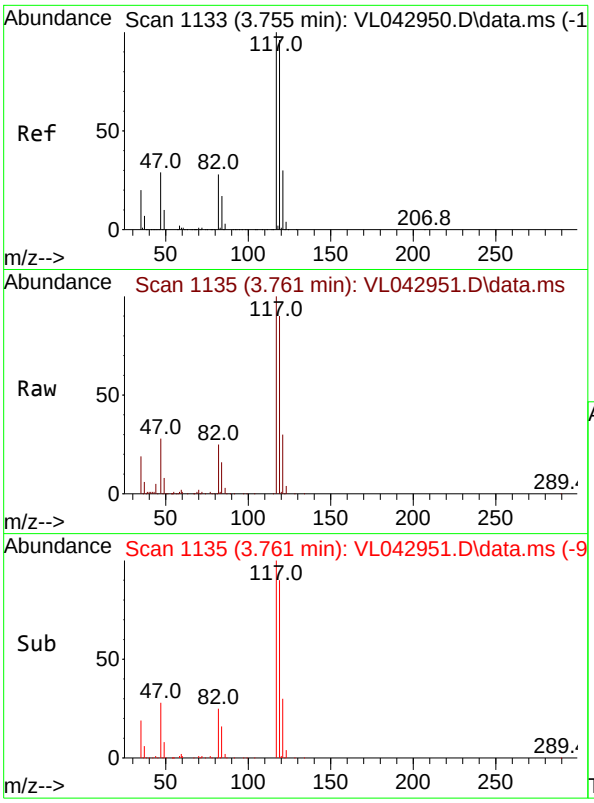


#34
2-Butanone
Concen: 2.114 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 77689

Ion	Ratio	Lower	Upper
43	100		
72	23.1	17.7	26.5



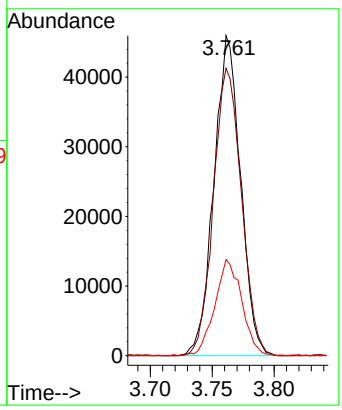


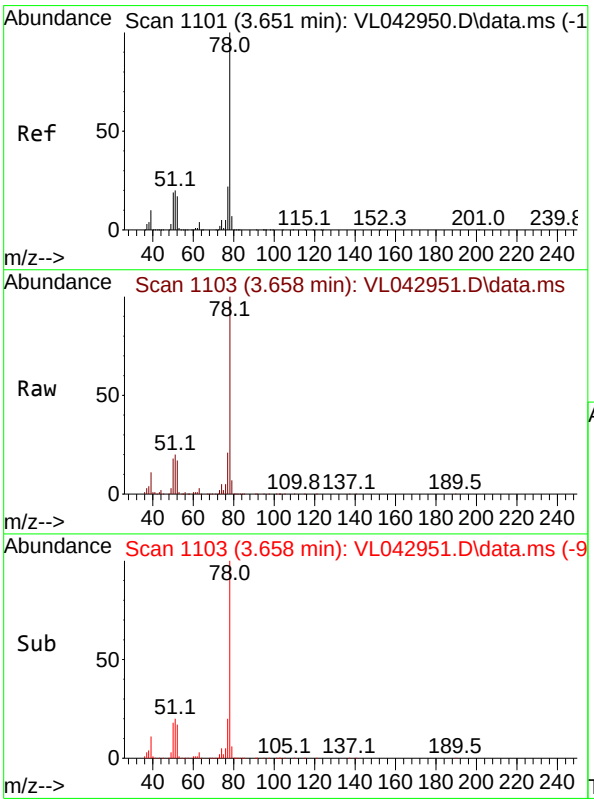
#35
Carbon Tetrachloride
Concen: 2.041 ppbv
RT: 3.761 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 68858

Ion	Ratio	Lower	Upper
117	100		
119	89.8	76.9	115.3
121	30.0	23.7	35.5

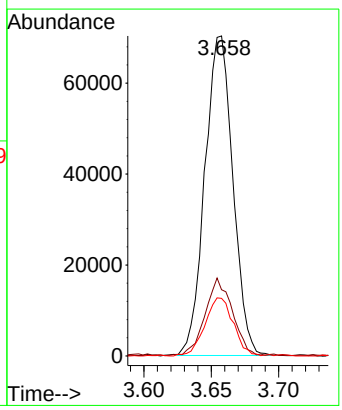


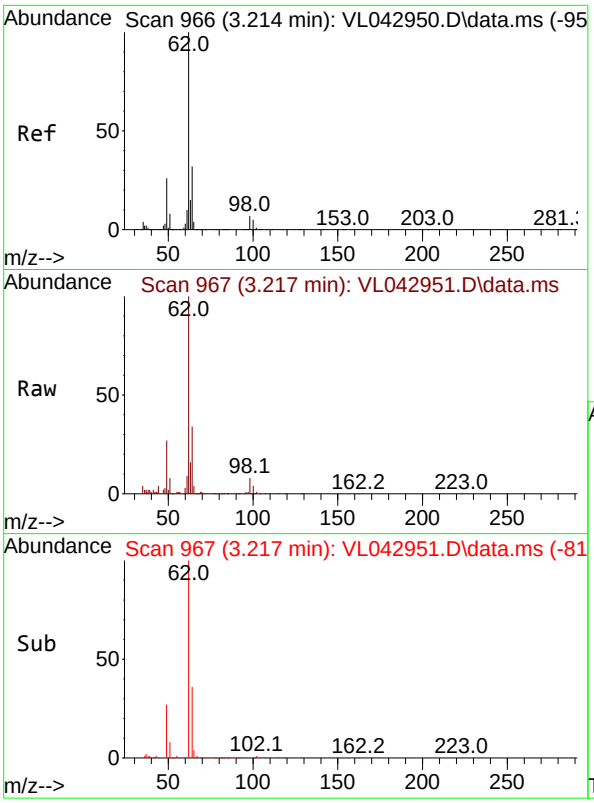


#36
Benzene
Concen: 2.069 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 78 Resp: 101901

Ion	Ratio	Lower	Upper
78	100		
77	20.5	17.8	26.6
50	17.7	15.0	22.4



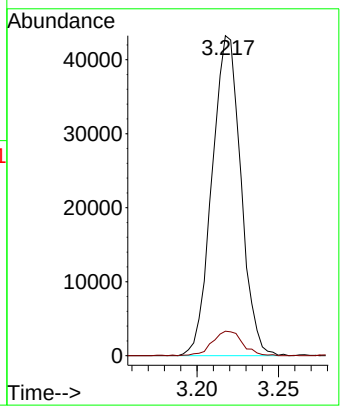


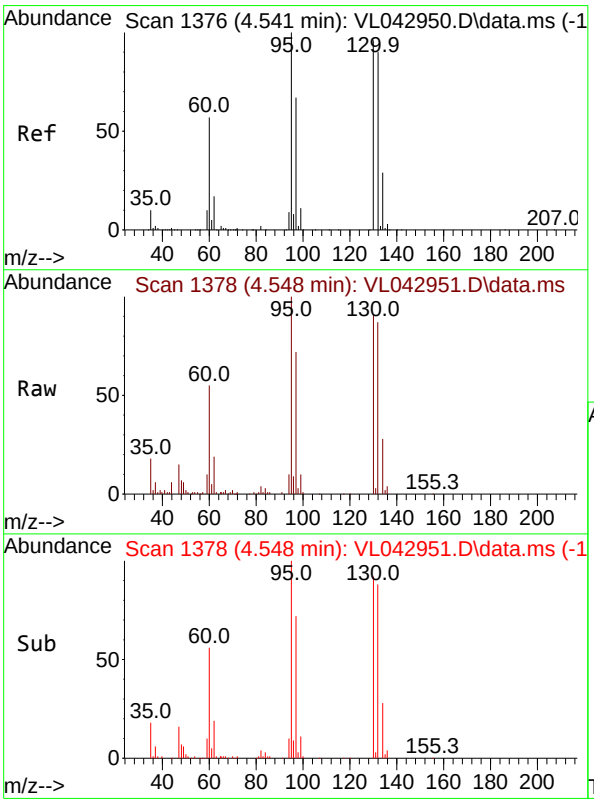
#37
1,2-Dichloroethane
Concen: 2.052 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 53130

Ion	Ratio	Lower	Upper
62	100		
98	8.1	5.9	8.9

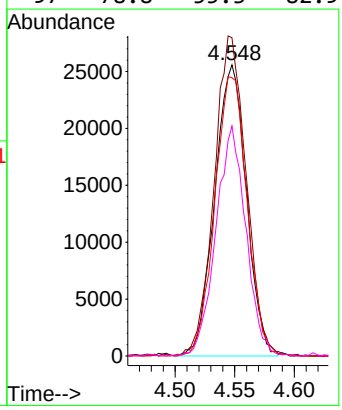


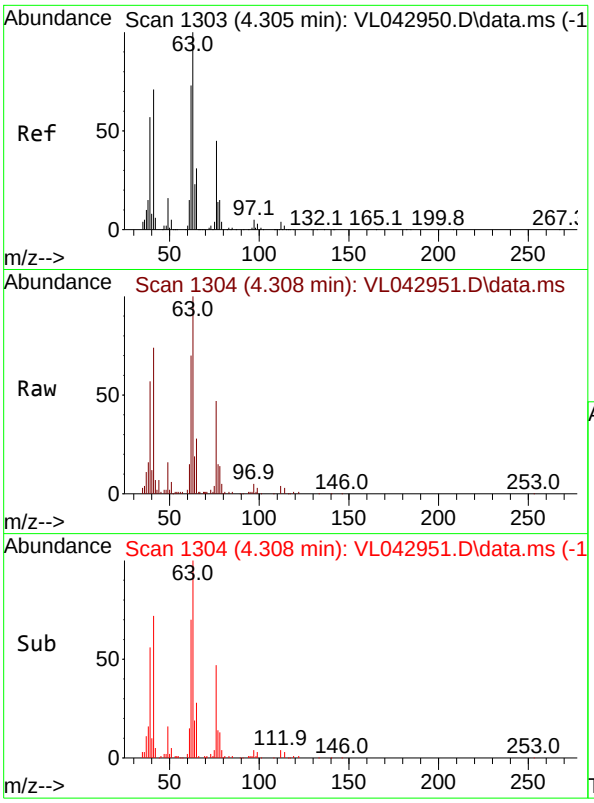


#38
Trichloroethene
Concen: 1.938 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:130 Resp: 47424

Ion	Ratio	Lower	Upper
130	100		
95	109.0	83.0	124.4
132	95.0	74.6	112.0
97	78.8	55.3	82.9



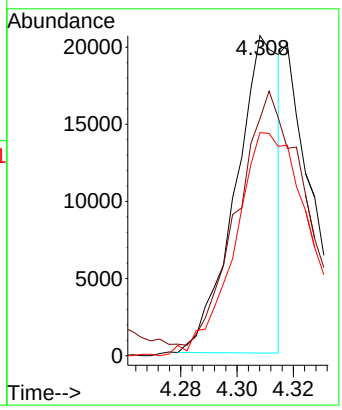


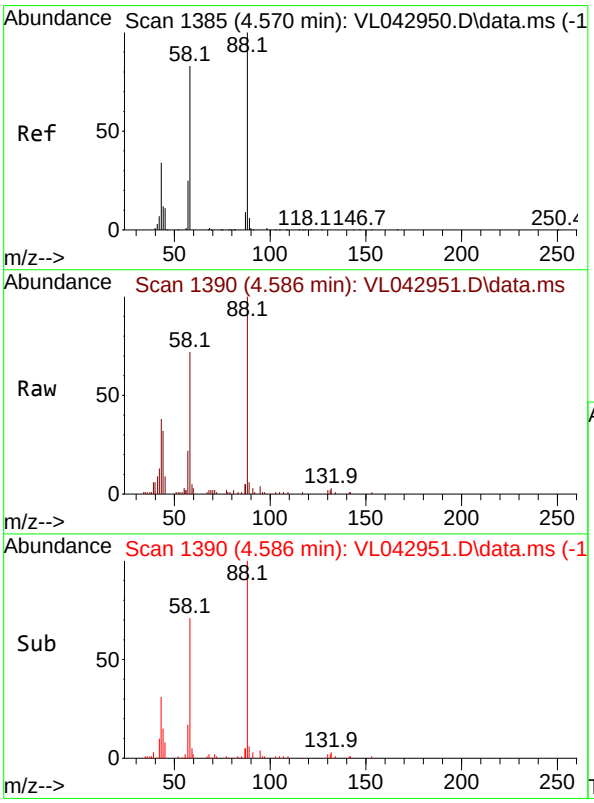
#39
1,2-Dichloropropane
Concen: 1.230 ppbv
RT: 4.308 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 63 Resp: 22120

Ion	Ratio	Lower	Upper
63	100		
41	71.2	57.5	86.3
62	67.2	58.5	87.7

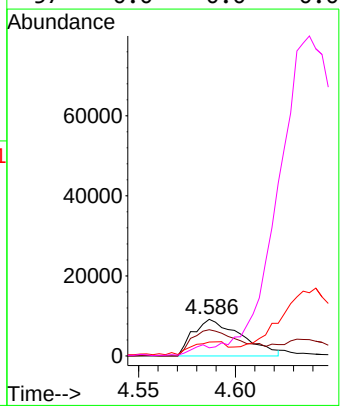


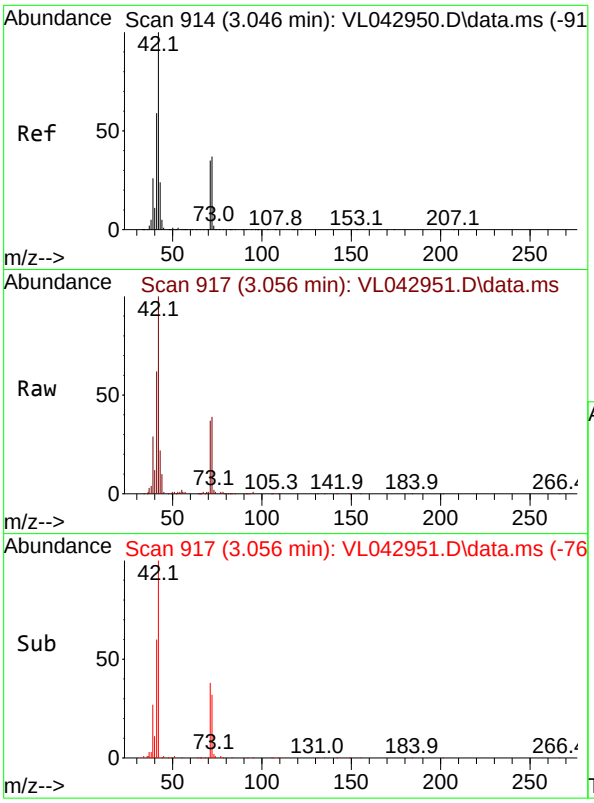


#40
1,4-Dioxane
Concen: 1.895 ppbv
RT: 4.586 min Scan# 1390
Delta R.T. 0.016 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 88 Resp: 15831

Ion	Ratio	Lower	Upper
88	100		
58	78.0	59.7	89.5
43	0.0	28.9	43.3#
57	0.0	0.0	0.0



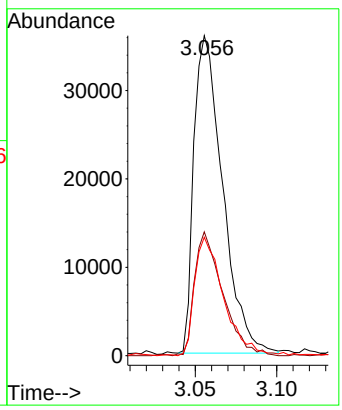


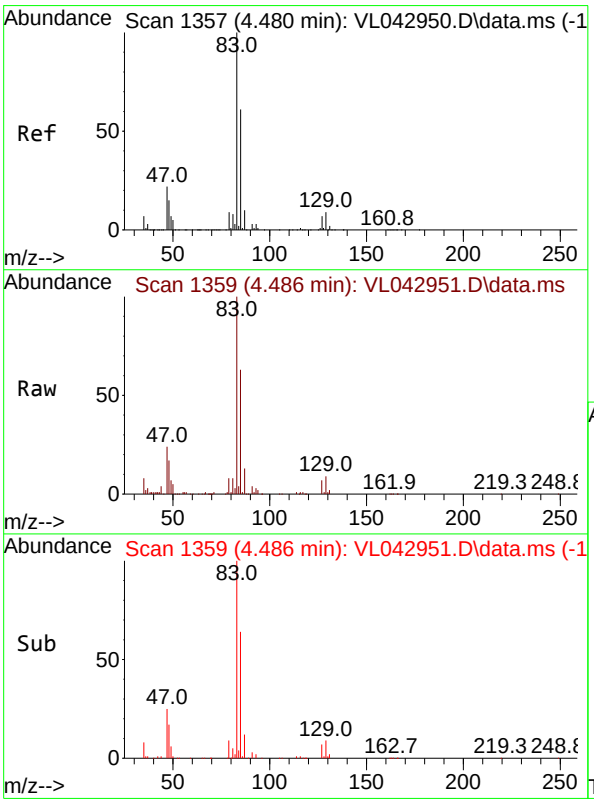
#41
Tetrahydrofuran
Concen: 2.081 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 42 Resp: 43962

Ion	Ratio	Lower	Upper
42	100		
72	38.5	30.0	45.0
71	37.4	28.8	43.2

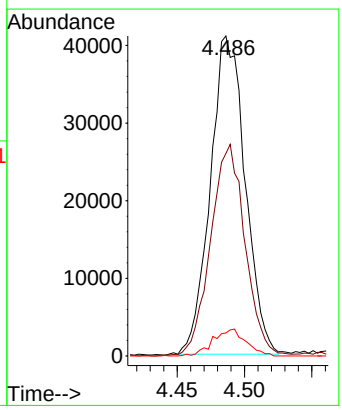


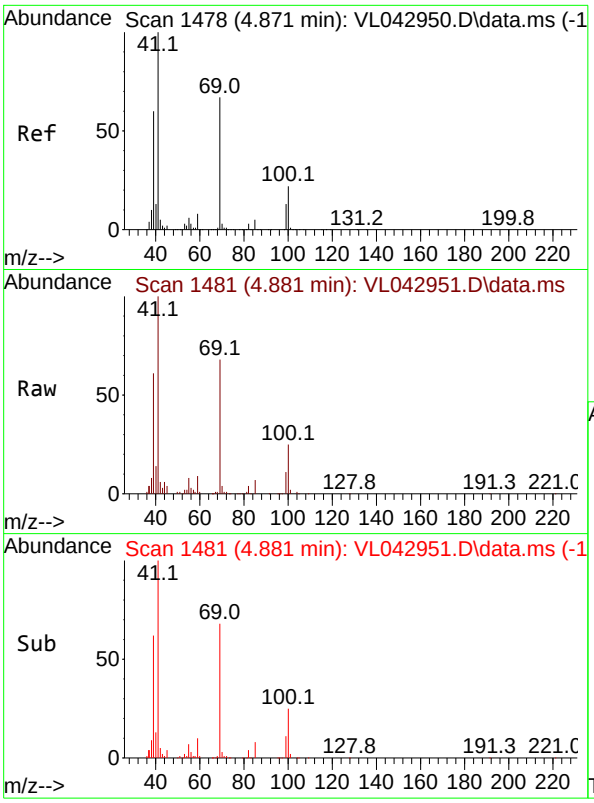


#42
Bromodichloromethane
Concen: 2.042 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 83 Resp: 73675

Ion	Ratio	Lower	Upper
83	100		
85	63.2	49.0	73.6
127	7.2	5.3	7.9



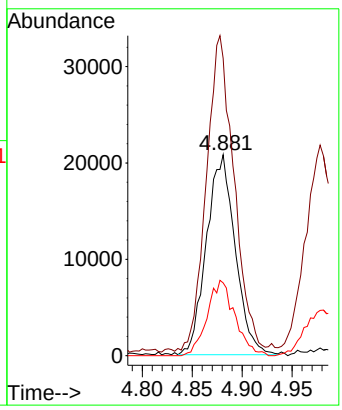


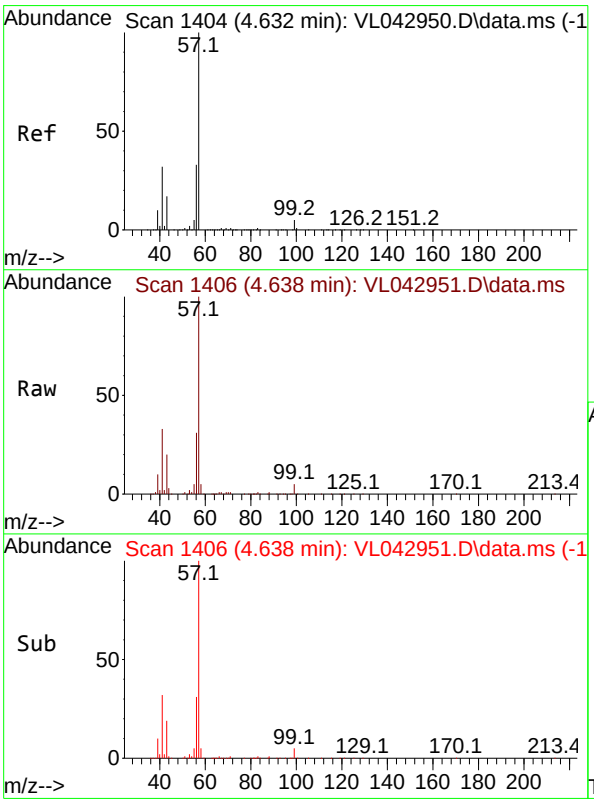
#43
Methyl Methacrylate
Concen: 2.077 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 69 Resp: 41527

Ion	Ratio	Lower	Upper
69	100		
41	153.8	124.5	186.7
100	36.3	29.0	43.6

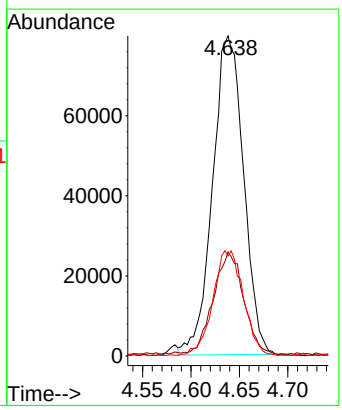


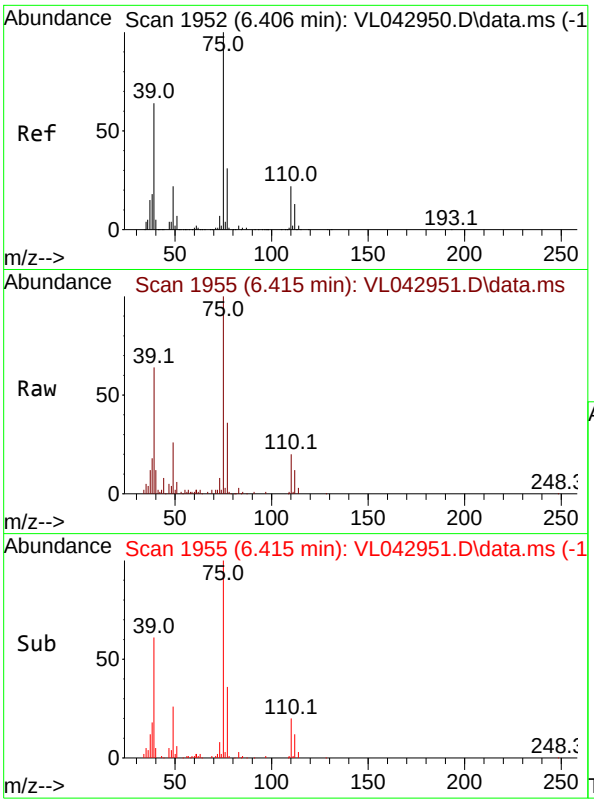


#44
2,2,4-Trimethylpentane
Concen: 2.083 ppbv
RT: 4.638 min Scan# 1406
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 57 Resp: 177242

Ion	Ratio	Lower	Upper
57	100		
41	32.9	25.5	38.3
56	32.5	25.8	38.8



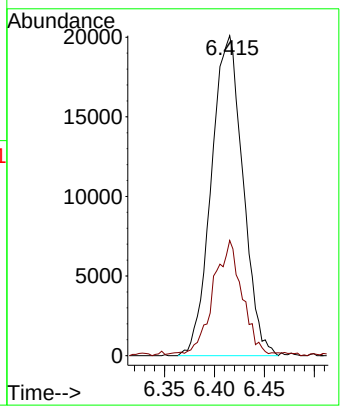


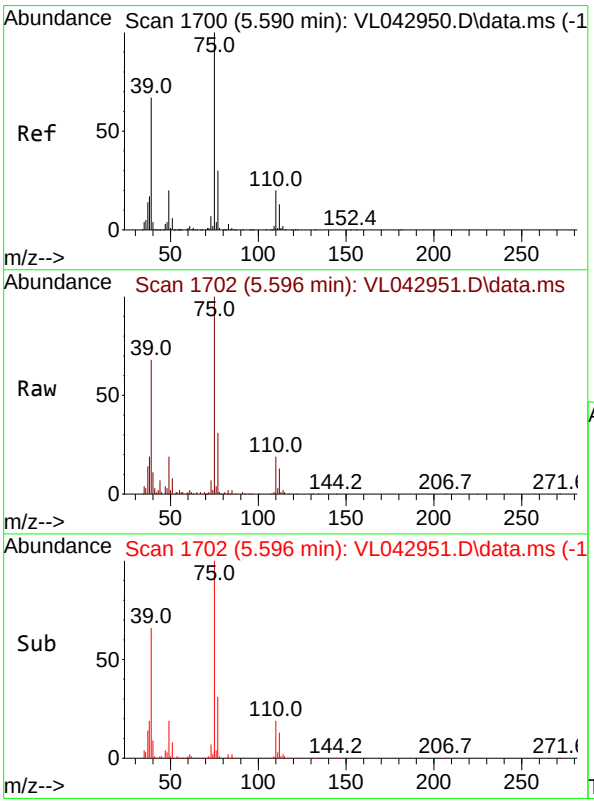
#45
t-1,3-Dichloropropene
Concen: 2.055 ppbv
RT: 6.415 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 75 Resp: 44171

Ion	Ratio	Lower	Upper
75	100		
77	36.0	25.0	37.4

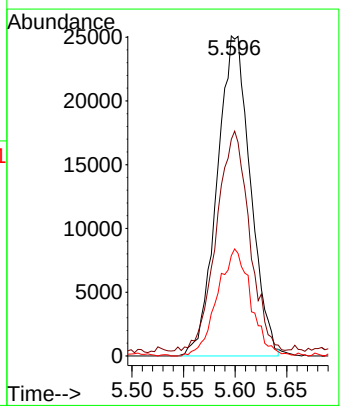


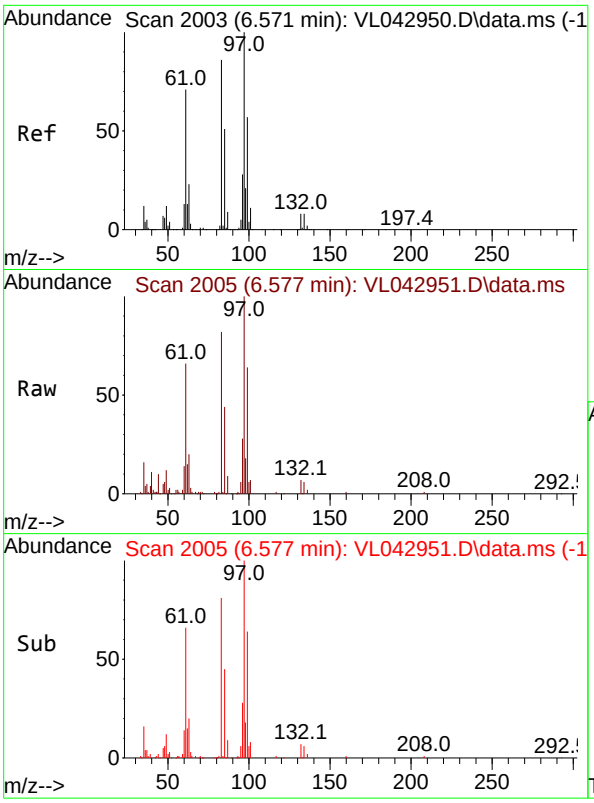


#46
cis-1,3-Dichloropropene
Concen: 2.057 ppbv
RT: 5.596 min Scan# 1702
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 75 Resp: 56335

Ion	Ratio	Lower	Upper
75	100		
39	64.9	53.8	80.6
77	31.4	23.6	35.4



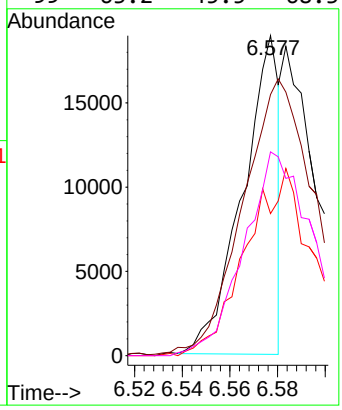


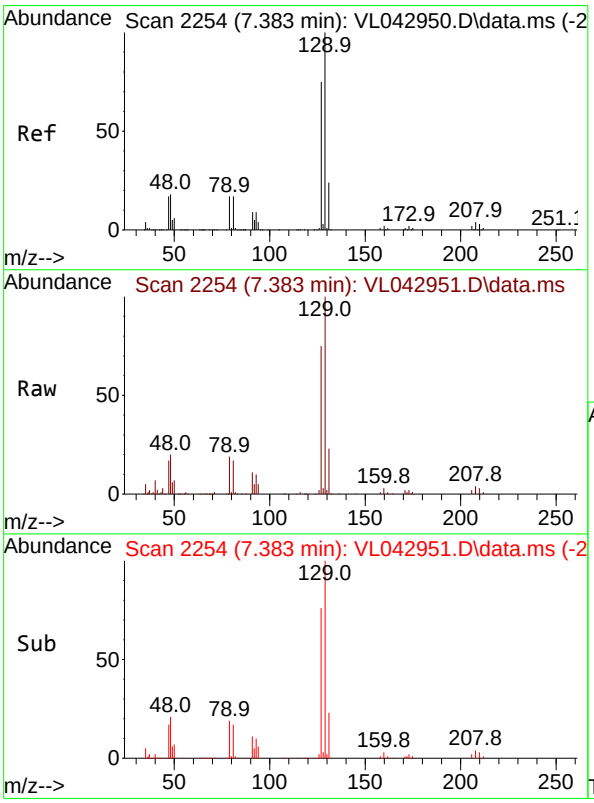
#47
1,1,2-Trichloroethane
Concen: 1.057 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 97 Resp: 20092

Ion	Ratio	Lower	Upper
97	100		
83	79.5	68.7	103.1
85	44.7	40.6	60.8
99	63.2	45.5	68.3

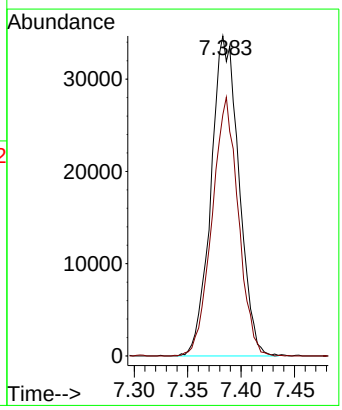


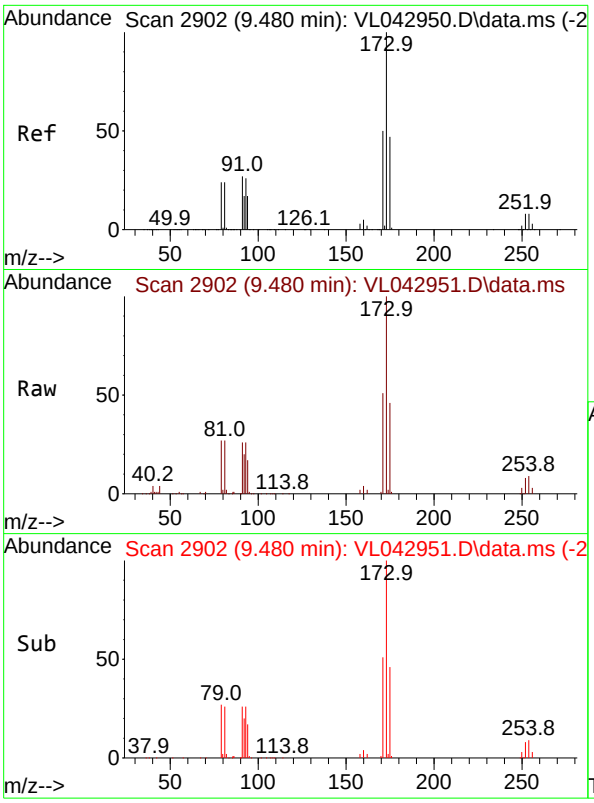


#48
Dibromochloromethane
Concen: 2.072 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:129 Resp: 62968

Ion	Ratio	Lower	Upper
129	100		
127	76.1	39.1	117.2



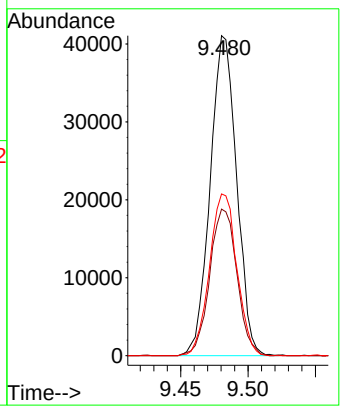


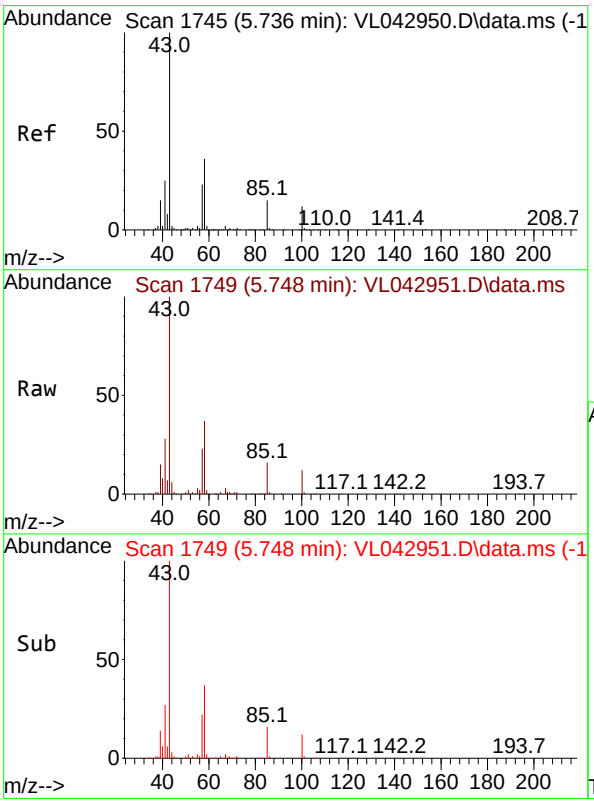
#49
Bromoform
Concen: 2.119 ppbv
RT: 9.480 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:173 Resp: 56021

Ion	Ratio	Lower	Upper
173	100		
175	47.3	37.9	56.9
171	52.1	41.1	61.7

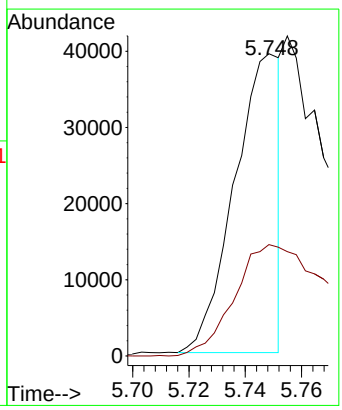


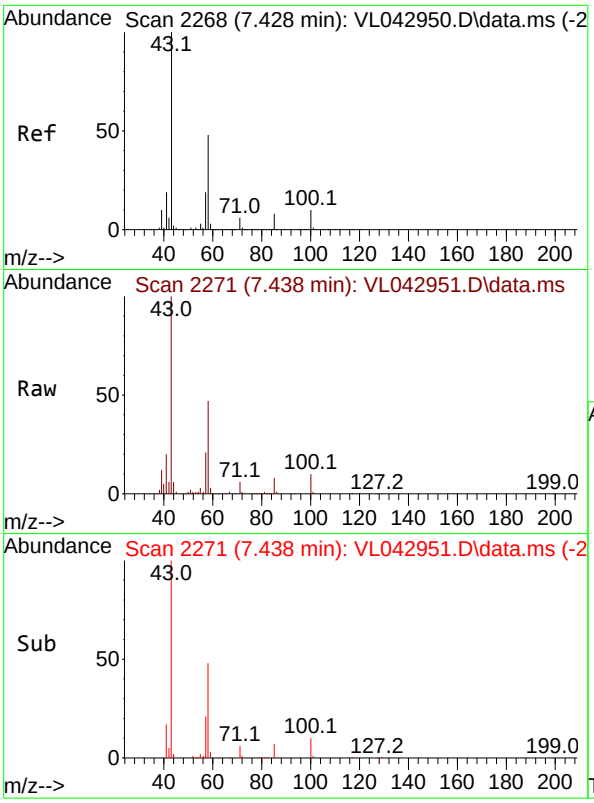


#50
4-Methyl-2-Pentanone
Concen: 0.893 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. 0.013 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 43 Resp: 44119

Ion	Ratio	Lower	Upper
43	100		
58	84.8	28.4	42.6#



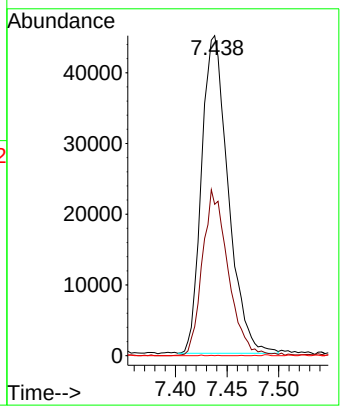


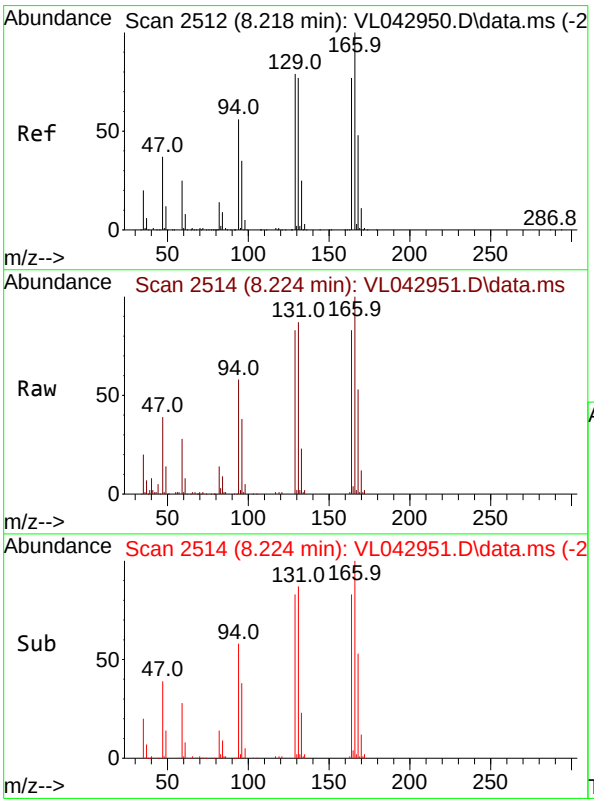
#51
2-Hexanone
Concen: 2.053 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 80620

Ion	Ratio	Lower	Upper
43	100		
58	50.6	39.7	59.5
98	0.1	0.1	0.1

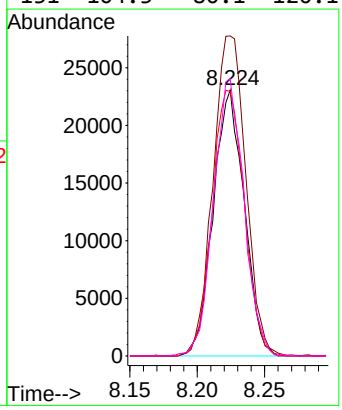


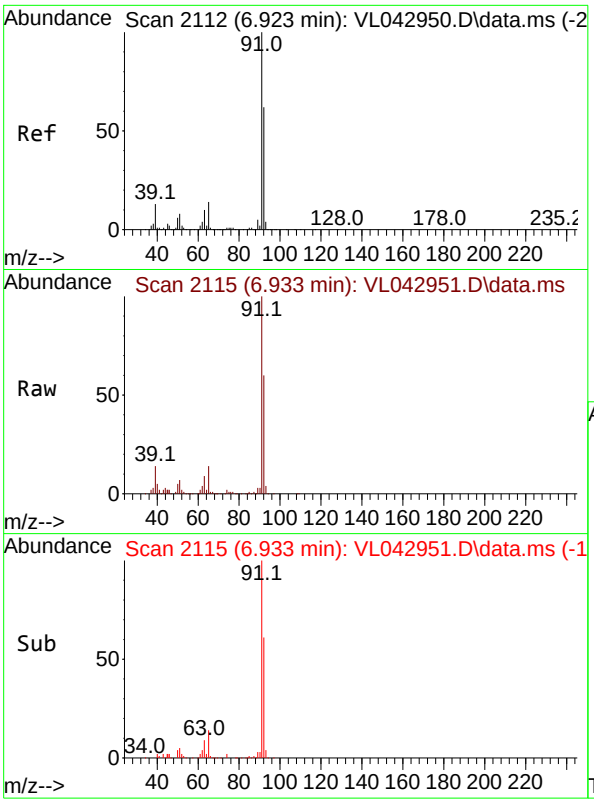


#52
Tetrachloroethene
Concen: 1.934 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:164 Resp: 36853

Ion	Ratio	Lower	Upper
164	100		
166	120.4	103.5	155.3
129	98.8	82.2	123.4
131	104.3	80.1	120.1



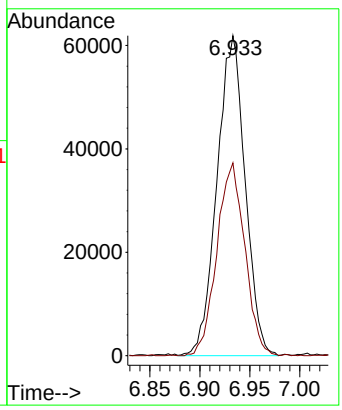


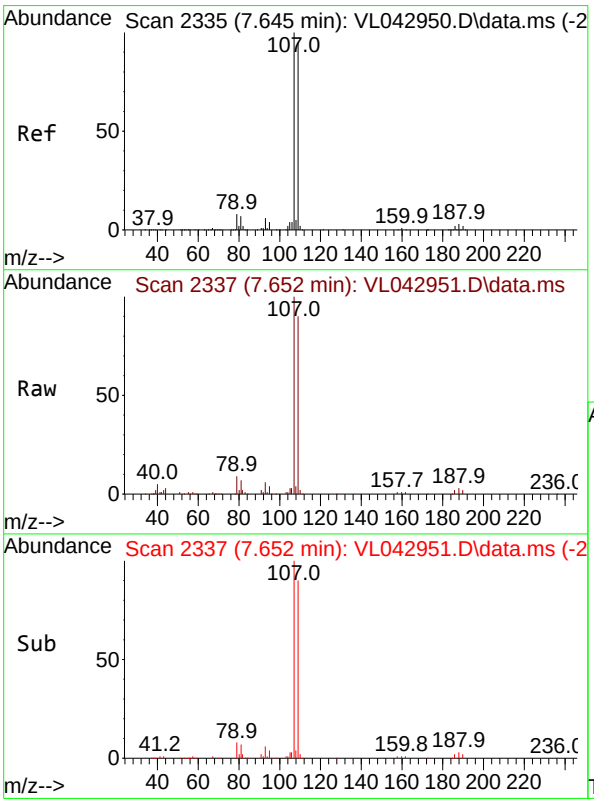
#53
Toluene
Concen: 2.081 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 121268

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.2

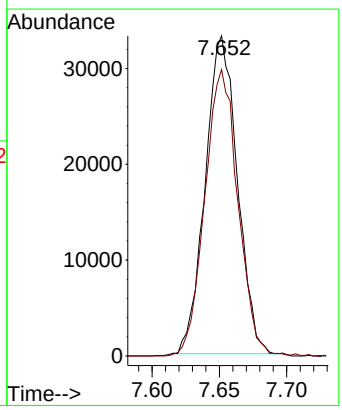


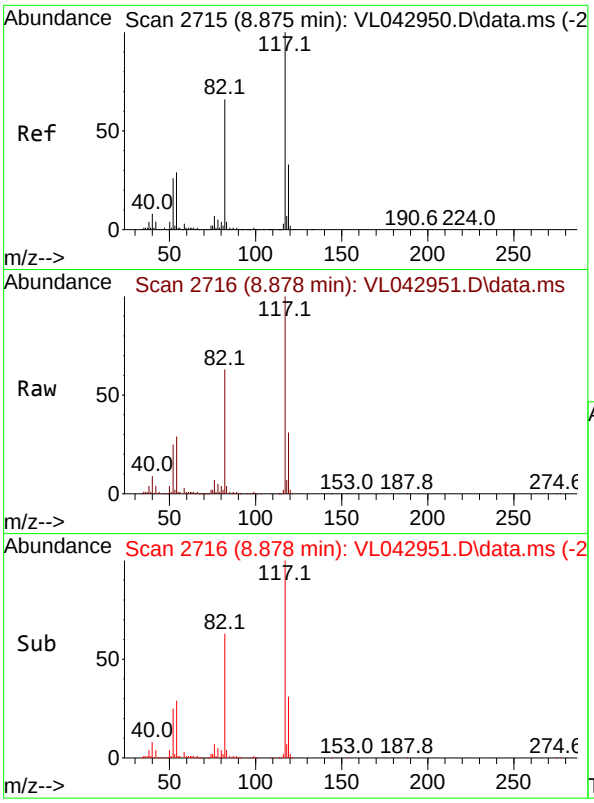


#54
1,2-Dibromoethane
Concen: 2.058 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:107 Resp: 55022

Ion	Ratio	Lower	Upper
107	100		
109	89.3	75.8	113.8



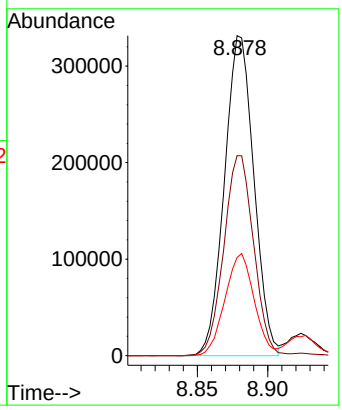


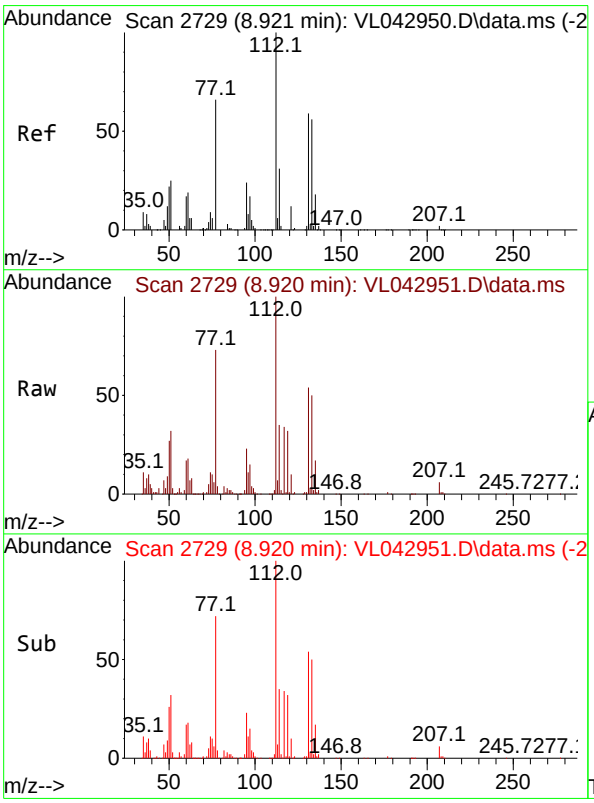
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 483821

Ion	Ratio	Lower	Upper
117	100		
82	63.6	52.8	79.2
119	31.8	26.5	39.7

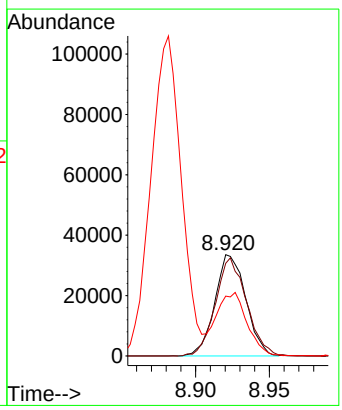


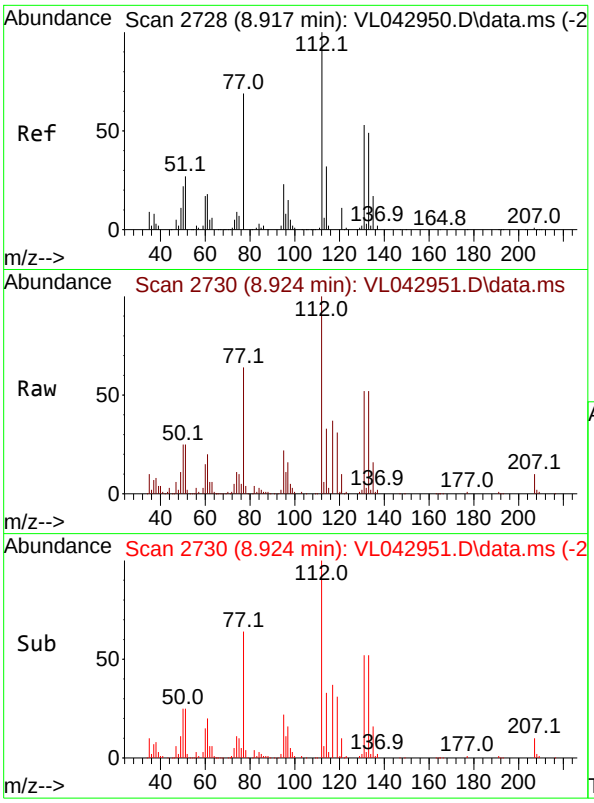


#56
1,1,1,2-Tetrachloroethane
Concen: 2.112 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:131 Resp: 48901

Ion	Ratio	Lower	Upper
131	100		
133	97.7	76.6	114.8
119	61.4	49.9	74.9



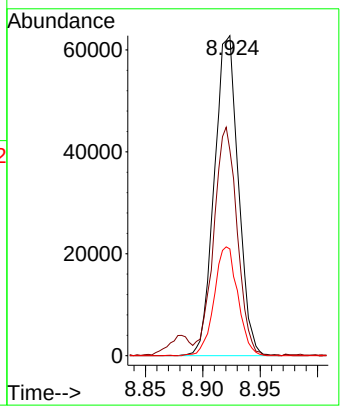


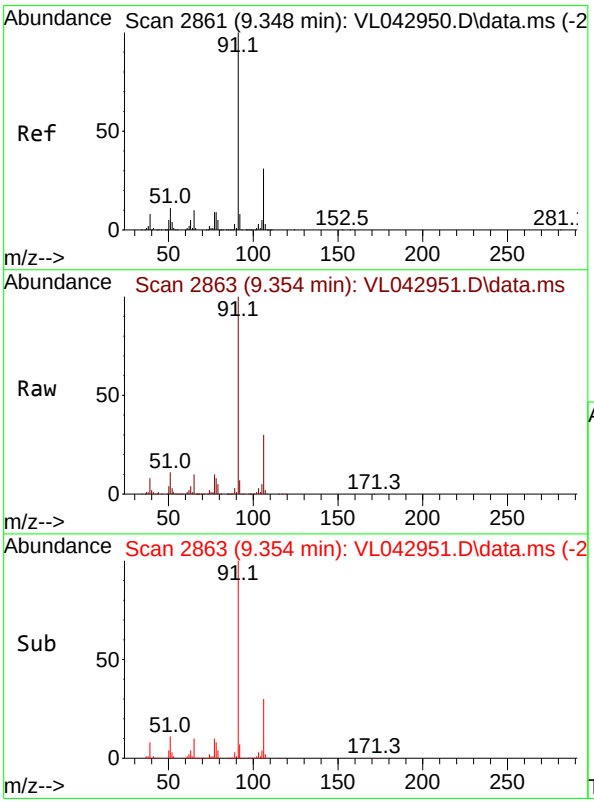
#57
Chlorobenzene
Concen: 2.068 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:112 Resp: 91325

Ion	Ratio	Lower	Upper
112	100		
77	63.9	55.7	83.5
114	33.4	28.6	35.0

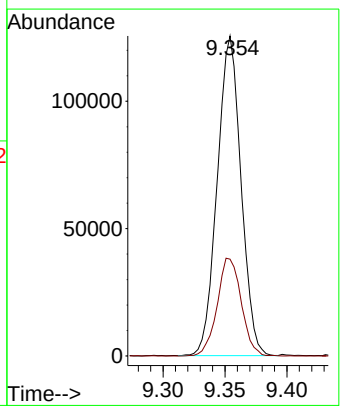


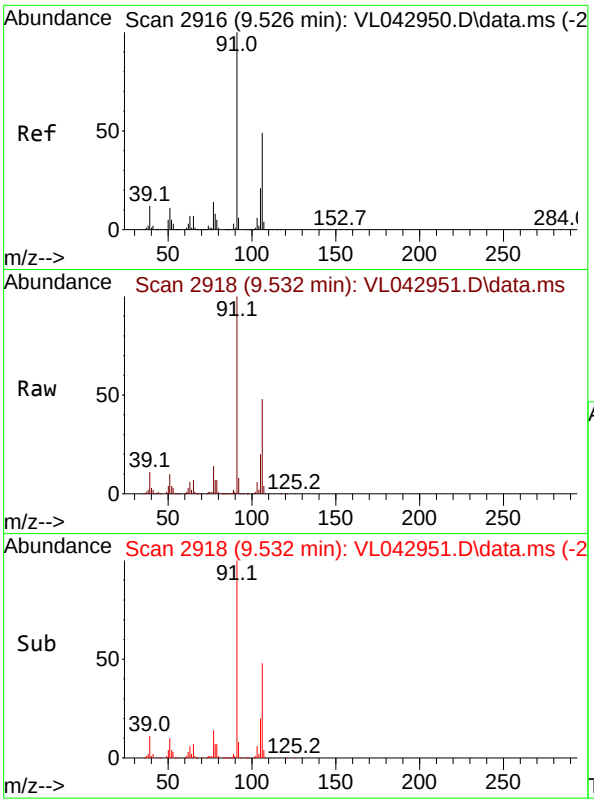


#58
Ethyl Benzene
Concen: 2.115 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 168063

Ion	Ratio	Lower	Upper
91	100		
106	30.3	24.6	37.0



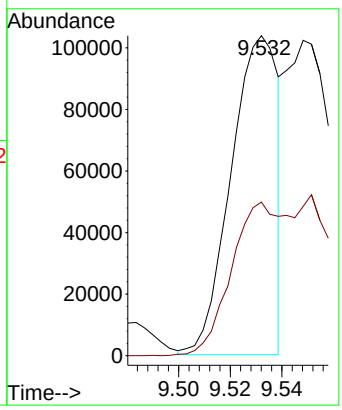


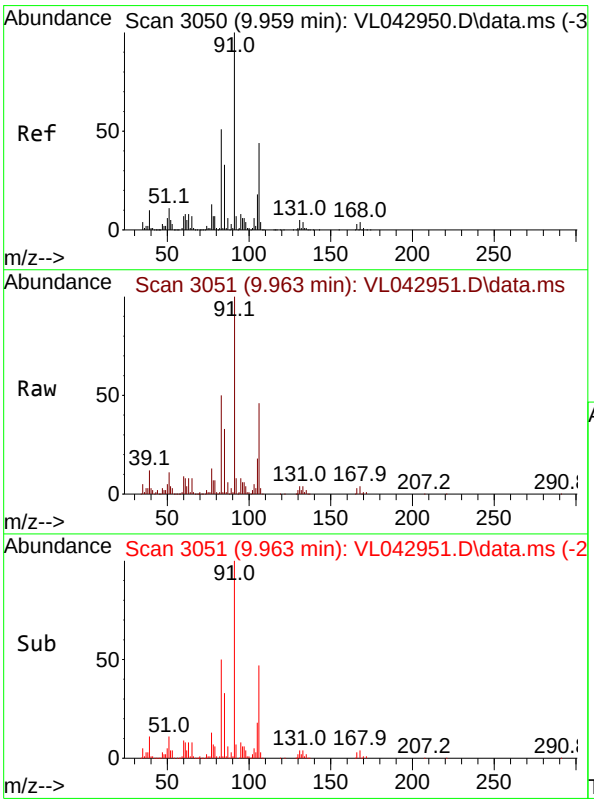
#59
m/p-Xylene
Concen: 2.086 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 130749

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

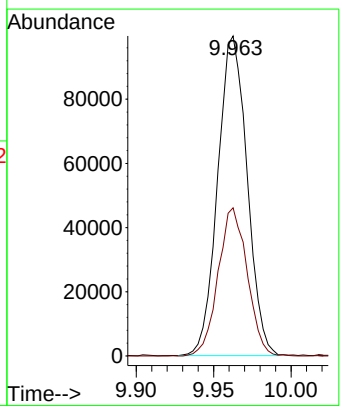


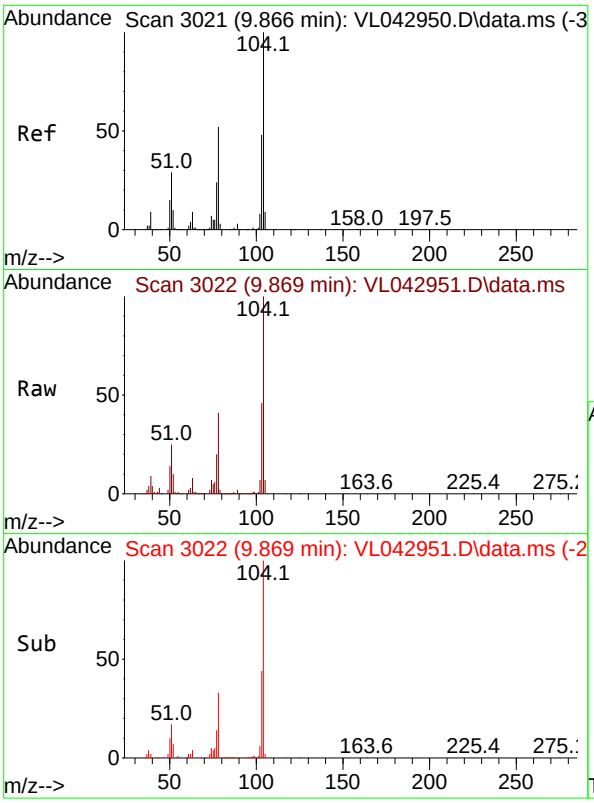


#60
o-Xylene
Concen: 2.101 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 131507

Ion	Ratio	Lower	Upper
91	100		
106	45.8	22.4	67.0



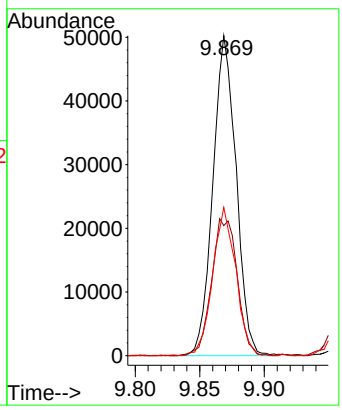


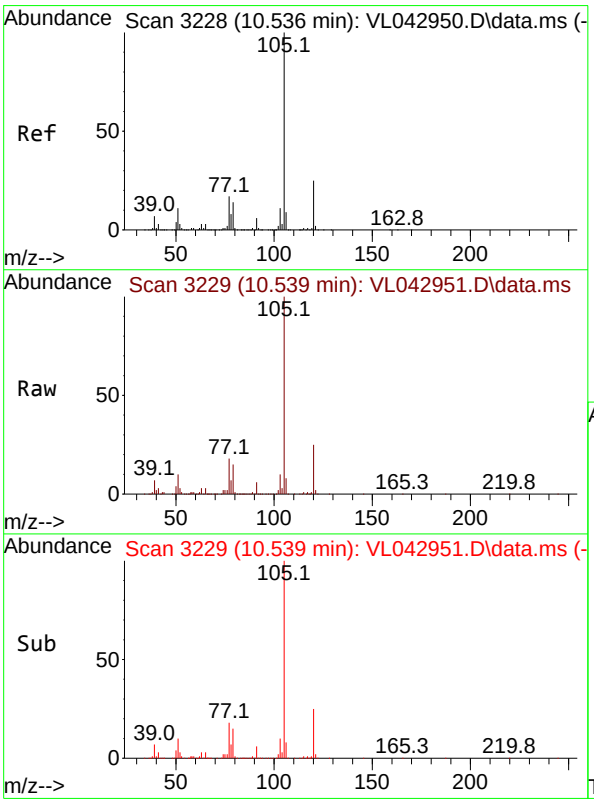
#61
Styrene
Concen: 2.119 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:104 Resp: 62748

Ion	Ratio	Lower	Upper
104	100		
78	47.7	39.9	59.9
103	46.3	36.9	55.3

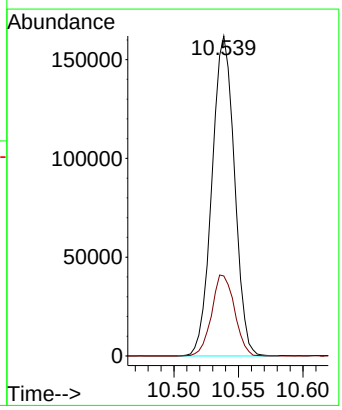


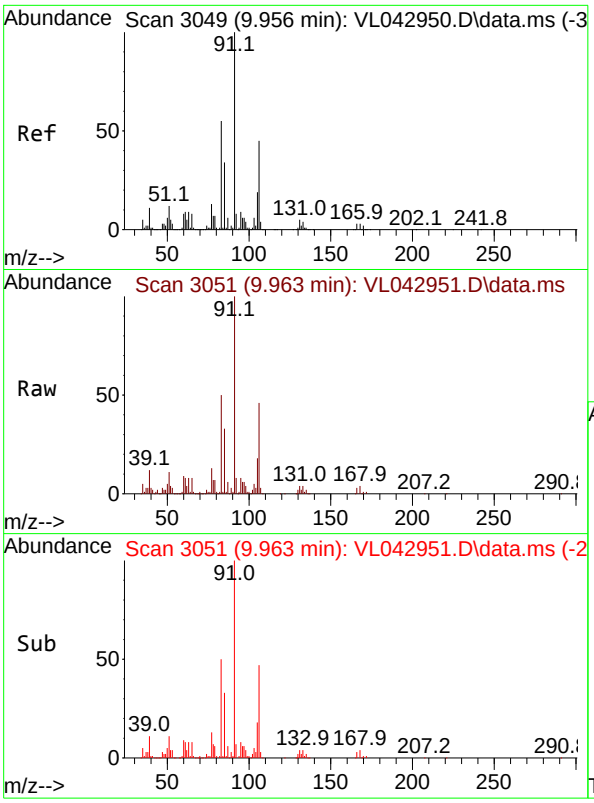


#62
Isopropylbenzene
Concen: 2.103 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 196198

Ion	Ratio	Lower	Upper
105	100		
120	25.7	20.6	30.8



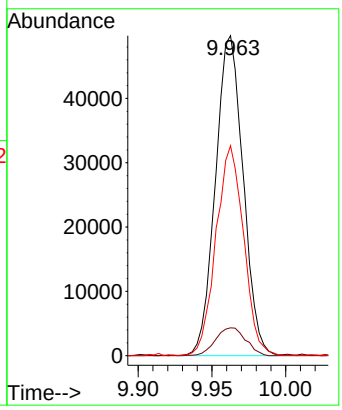


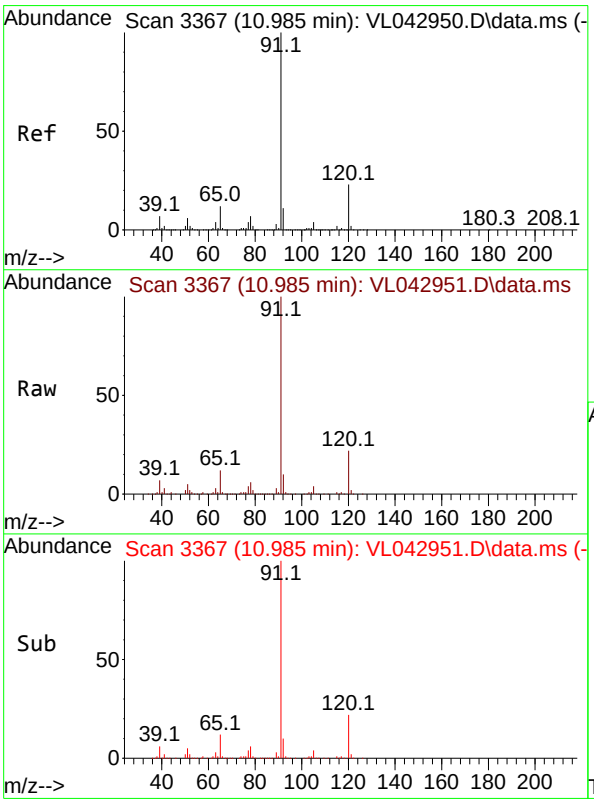
#63
1,1,2,2-Tetrachloroethane
Concen: 1.978 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 65089

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	65.9	32.2	96.6

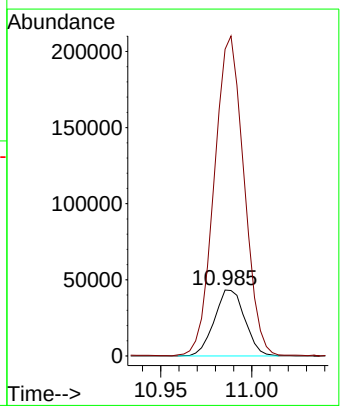


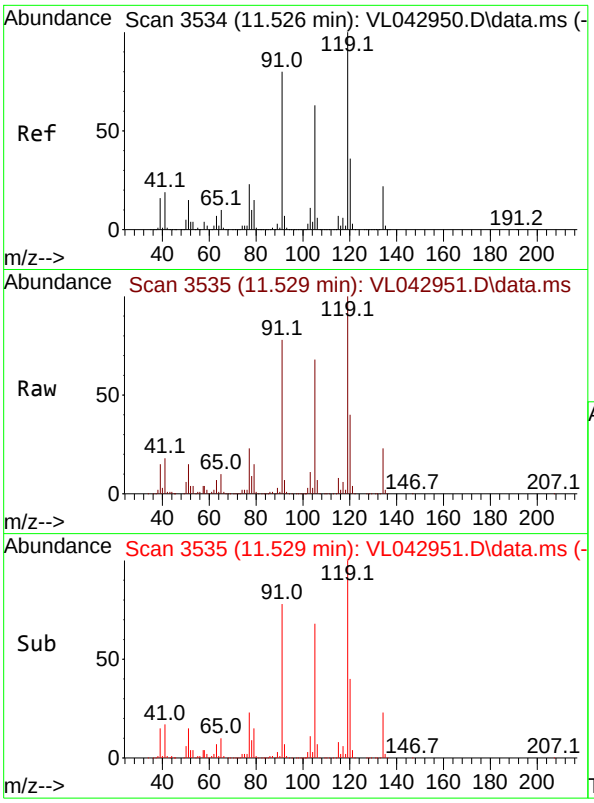


#64
n-propylbenzene
Concen: 2.074 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:120 Resp: 50569

Ion	Ratio	Lower	Upper
120	100		
91	474.1	364.9	547.3



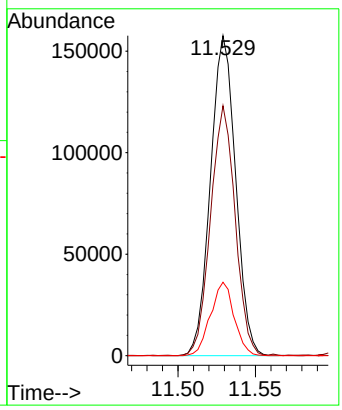


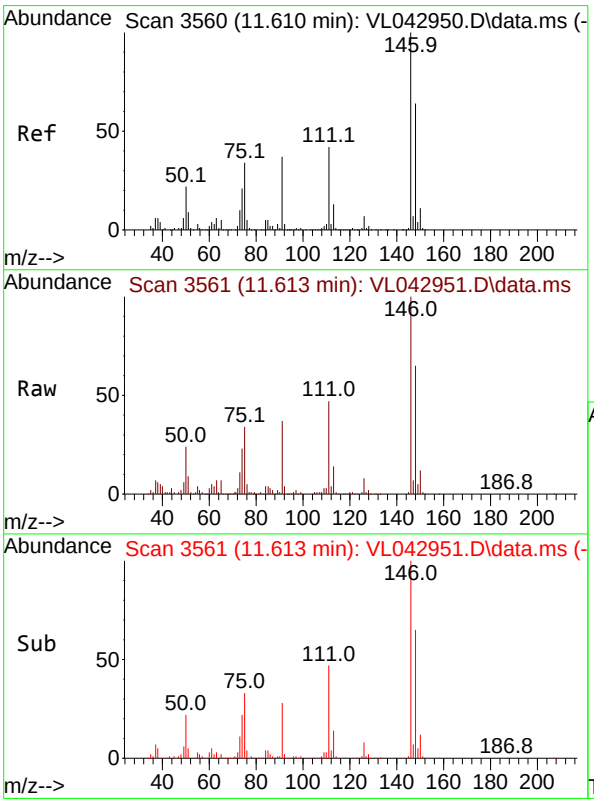
#65
tert-Butylbenzene
Concen: 2.147 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 178218

Ion	Ratio	Lower	Upper
119	100		
91	76.4	63.1	94.7
134	21.5	17.0	25.6

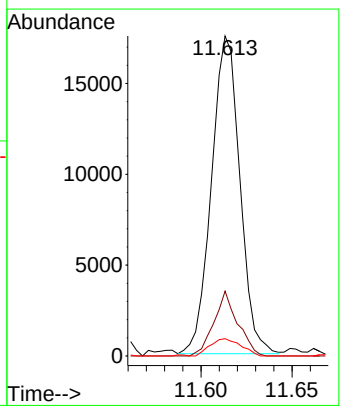


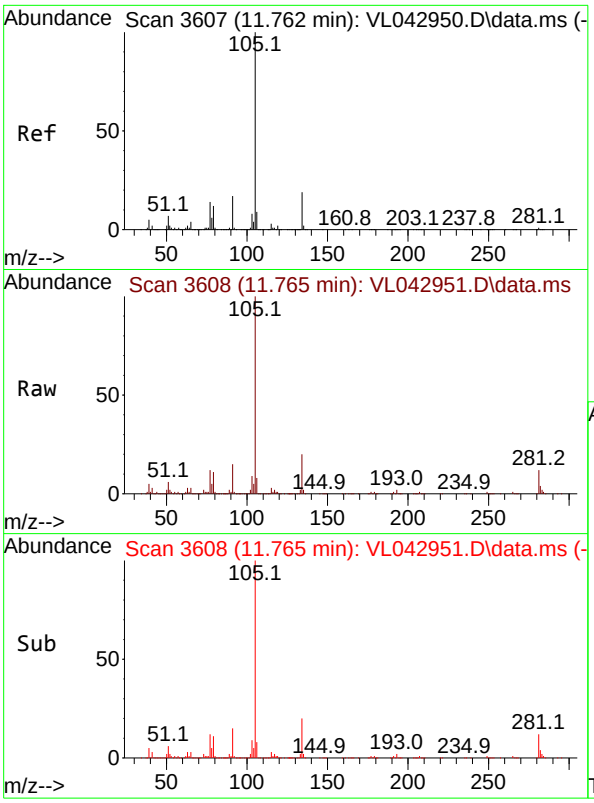


#66
Benzyl Chloride
Concen: 2.181 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 18992

Ion	Ratio	Lower	Upper
91	100		
126	17.1	14.6	21.8
128	6.0	5.0	7.4



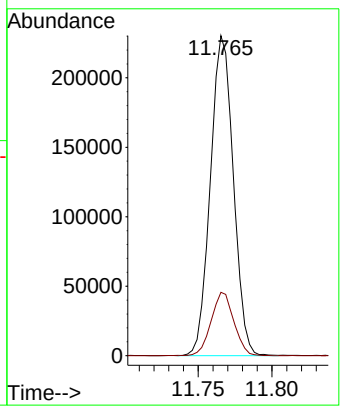


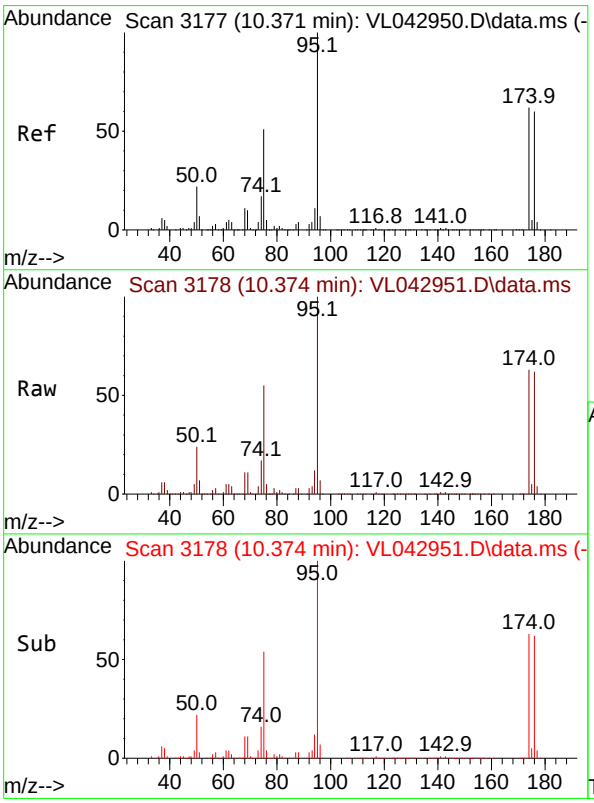
#67
sec-Butylbenzene
Concen: 2.158 ppbv
RT: 11.765 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 249510

Ion	Ratio	Lower	Upper
105	100		
134	19.6	15.7	23.5

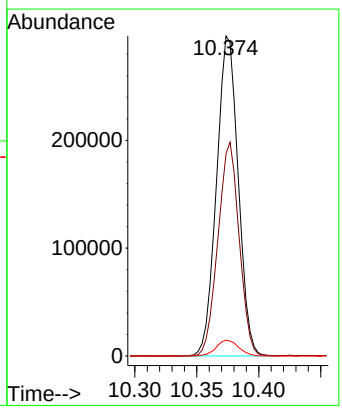


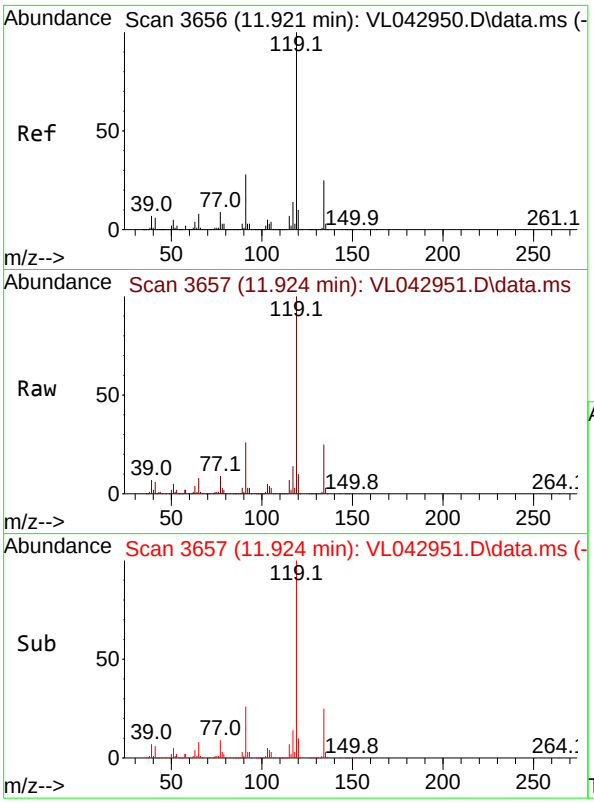


#68
1-Bromo-4-Fluorobenzene
Concen: 10.012 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 95 Resp: 361586

Ion	Ratio	Lower	Upper
95	100		
174	65.6	51.4	77.2
175	5.1	4.0	6.0



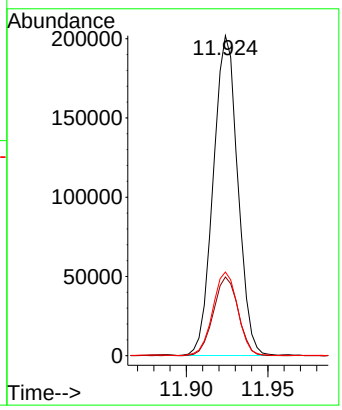


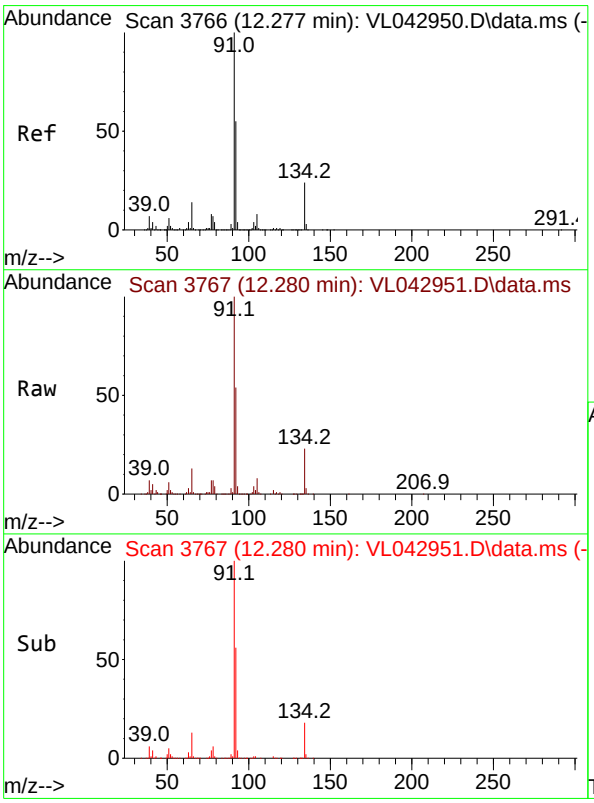
#69
p-Isopropyltoluene
Concen: 2.158 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 210808

Ion	Ratio	Lower	Upper
119	100		
134	25.0	21.0	31.4
91	26.4	22.3	33.5

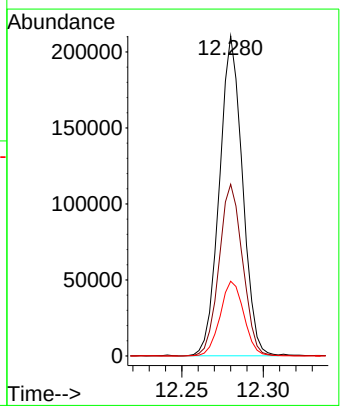


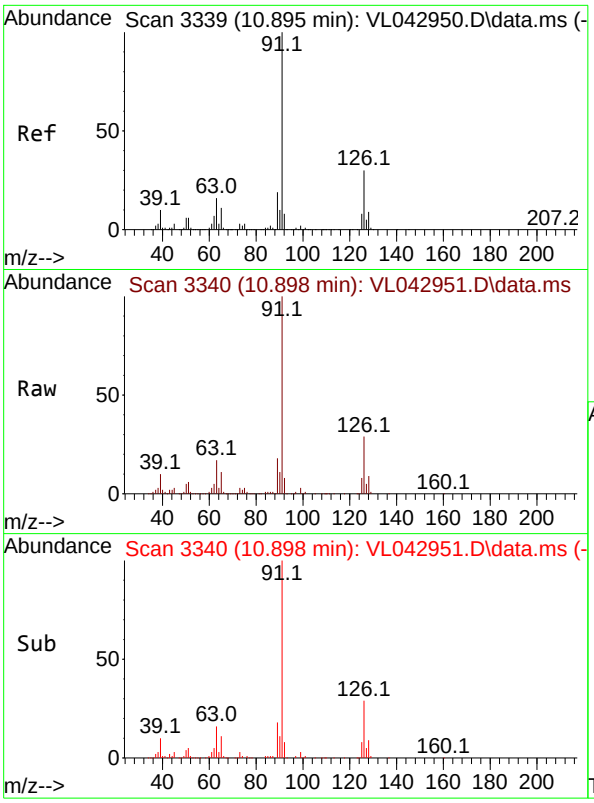


#70
n-Butylbenzene
Concen: 2.167 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion: 91 Resp: 206691

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.0	66.0
134	24.1	19.4	29.2



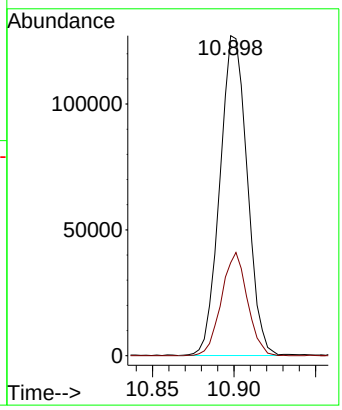


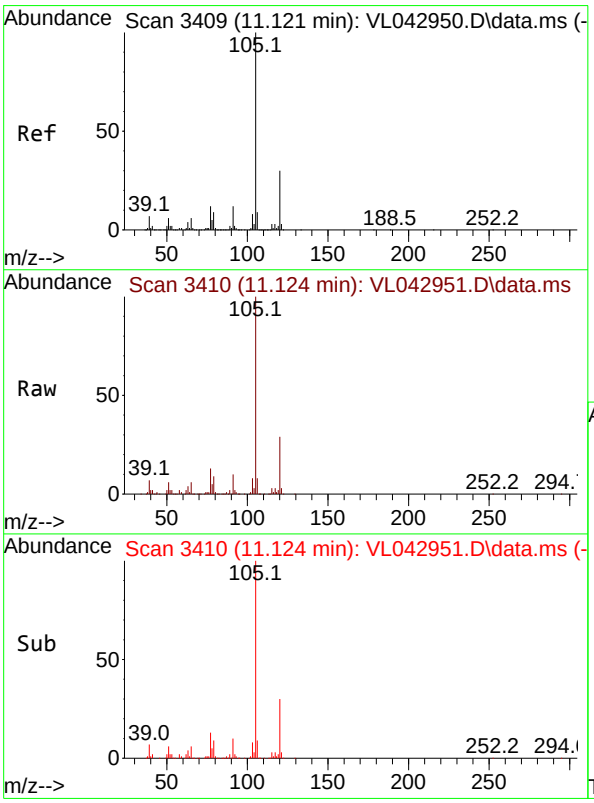
#71
2-Chlorotoluene
Concen: 2.099 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 147901

Ion	Ratio	Lower	Upper
91	100		
126	30.7	12.3	49.3

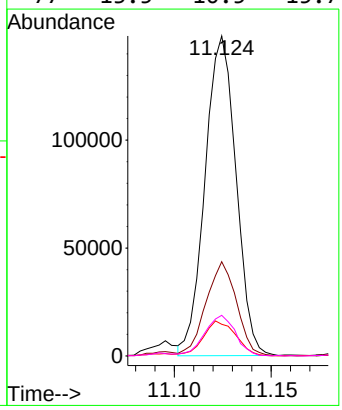


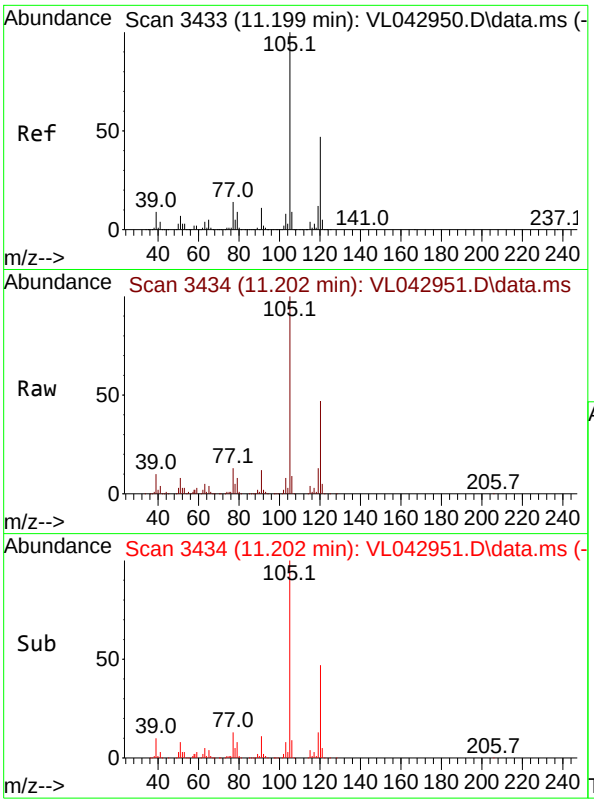


#72
4-Ethyltoluene
Concen: 2.102 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 164770

Ion	Ratio	Lower	Upper
105	100		
120	30.4	24.2	36.2
91	12.2	10.0	15.0
77	13.5	10.5	15.7



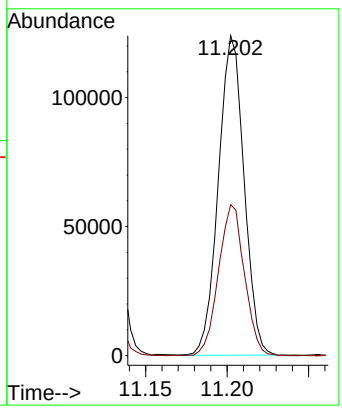


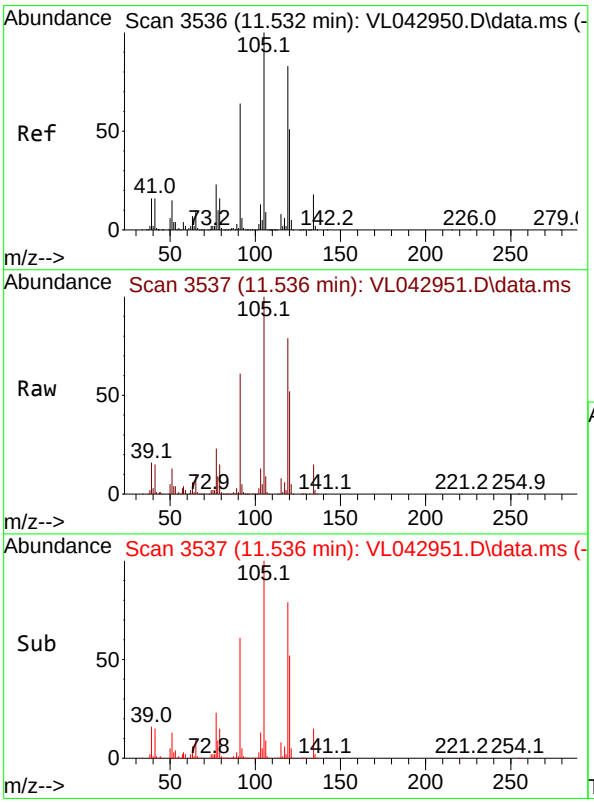
#73
1,3,5-Trimethylbenzene
Concen: 2.128 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 135344

Ion	Ratio	Lower	Upper
105	100		
120	47.3	38.0	57.0

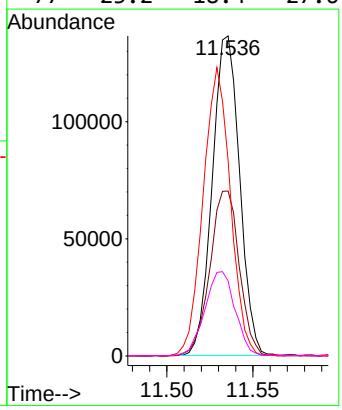


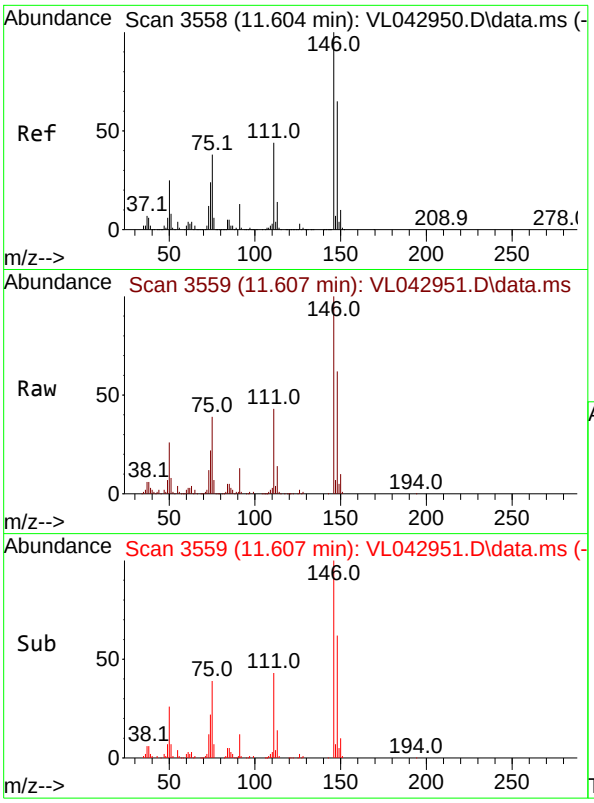


#74
1,2,4-Trimethylbenzene
Concen: 2.147 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:105 Resp: 150772

Ion	Ratio	Lower	Upper
105	100		
120	51.6	40.9	61.3
91	61.0	51.2	76.8
77	23.2	18.4	27.6



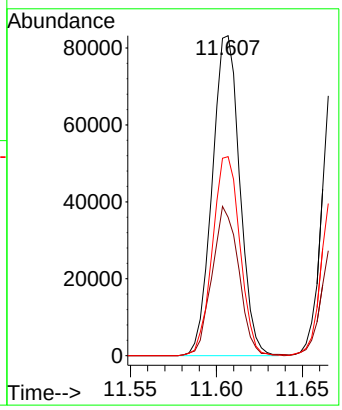


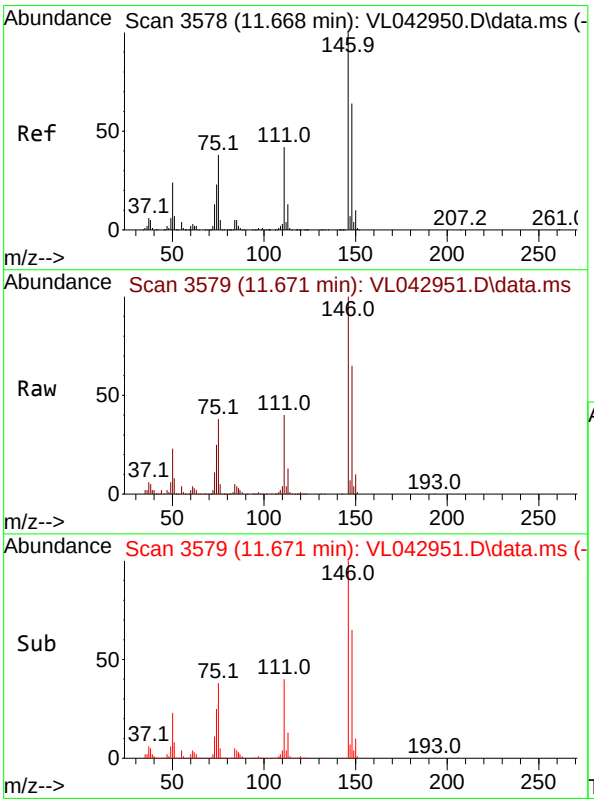
#75
1,3-Dichlorobenzene
Concen: 2.124 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 92487

Ion	Ratio	Lower	Upper
146	100		
111	45.3	22.3	66.9
148	62.1	31.9	95.5

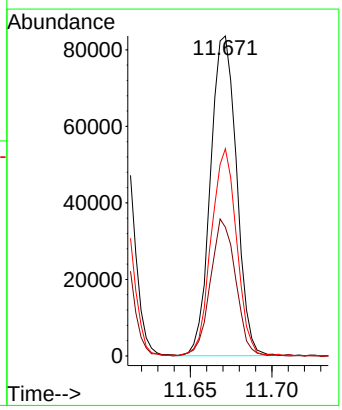


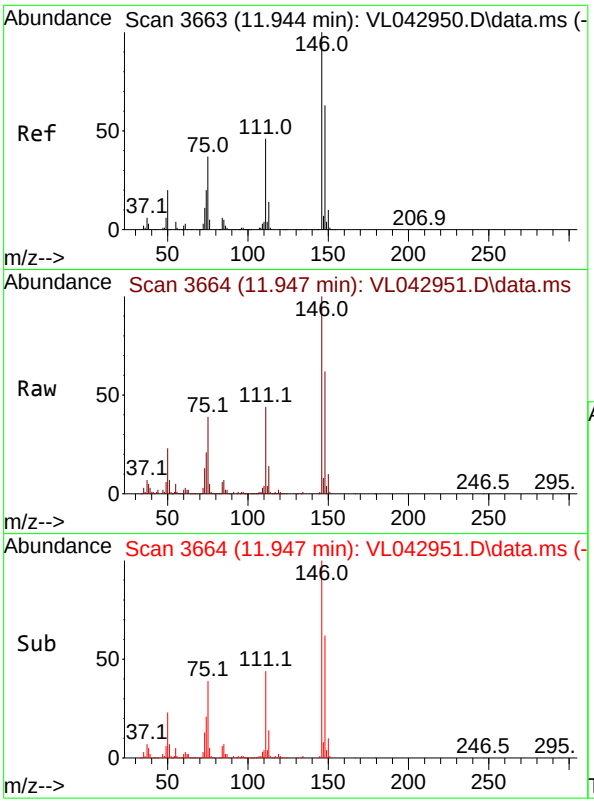


#76
1,4-Dichlorobenzene
Concen: 2.145 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:146 Resp: 92794

Ion	Ratio	Lower	Upper
146	100		
111	41.6	21.5	64.5
148	63.6	31.9	95.5



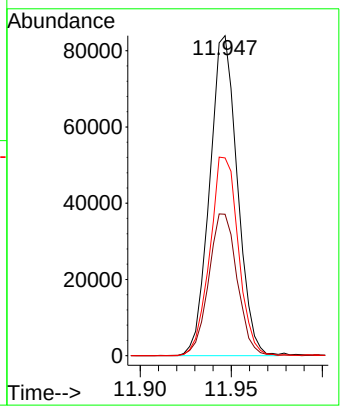


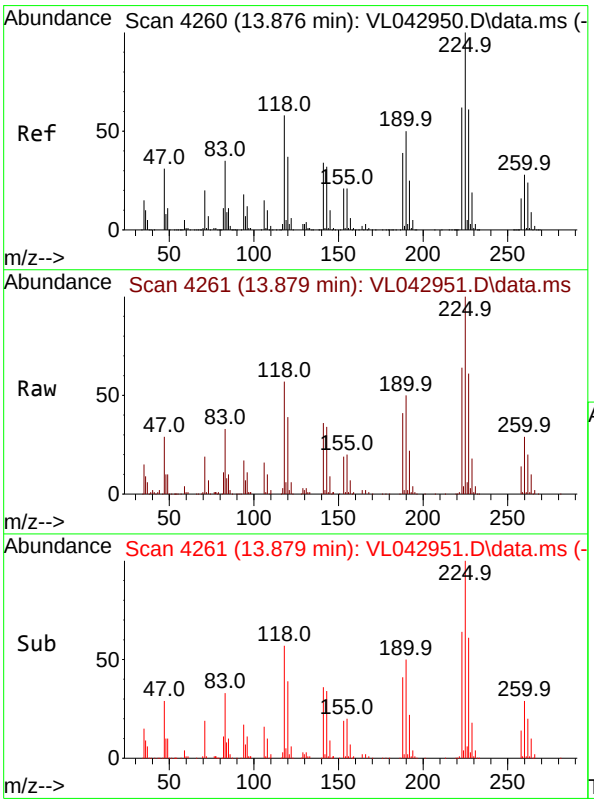
#77
1,2-Dichlorobenzene
Concen: 2.144 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 88825

Ion	Ratio	Lower	Upper
146	100		
111	45.8	23.1	69.3
148	64.0	32.0	96.0

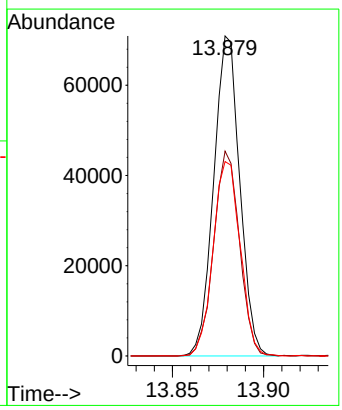


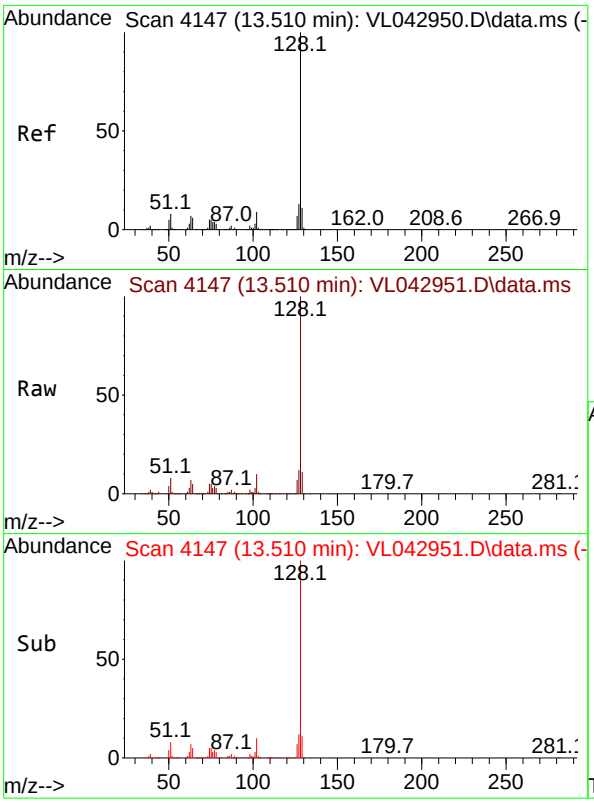


#78
Hexachloro-1,3-Butadiene
Concen: 2.175 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:225 Resp: 70481

Ion	Ratio	Lower	Upper
225	100		
223	63.3	50.1	75.1
227	63.3	50.4	75.6



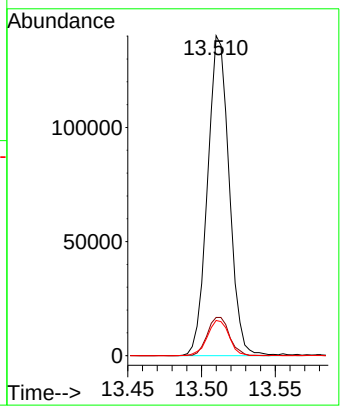


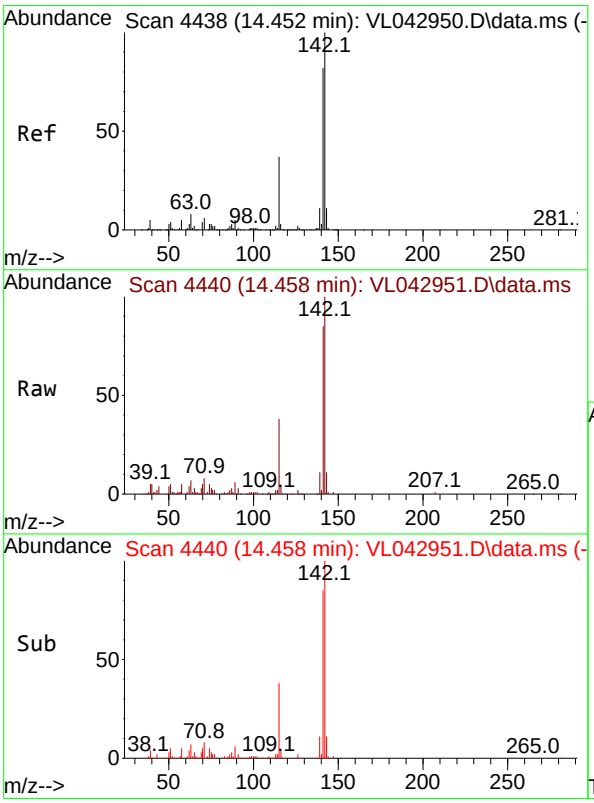
#79
Naphthalene
Concen: 2.297 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:128 Resp: 142653

Ion	Ratio	Lower	Upper
128	100		
127	12.0	10.6	15.8
129	11.0	9.0	13.6

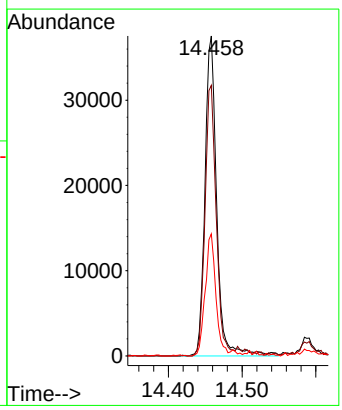


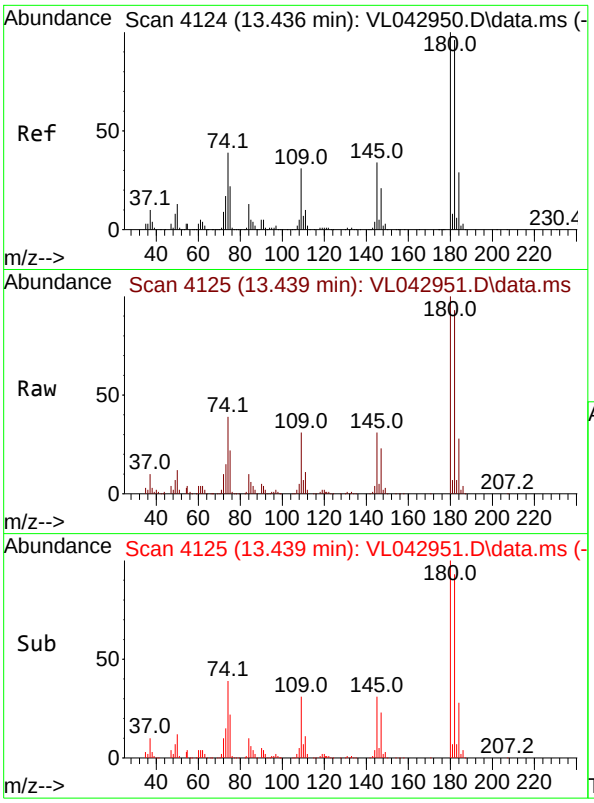


#80
Naphthalene,2-methyl-
Concen: 2.157 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.006 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Tgt Ion:142 Resp: 41369

Ion	Ratio	Lower	Upper
142	100		
141	83.8	65.1	97.7
115	36.1	28.9	43.3



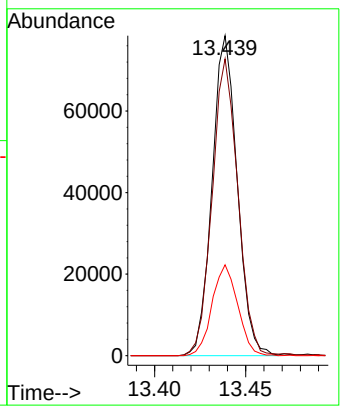


#81
1,2,4-Trichlorobenzene
Concen: 2.263 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042951.D
Acq: 22 Sep 2025 10:14

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:180 Resp: 75139

Ion	Ratio	Lower	Upper
180	100		
182	95.4	75.7	113.5
184	29.0	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042952.D
Acq On : 22 Sep 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Sep 23 02:10:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	162797	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	511767	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	469265	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	348878	9.960	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	23644	1.080	ppbv		97
3) Chlorodifluoromethane	1.476	51	29646	1.086	ppbv		99
4) Chloromethane	1.531	50	10120	1.021	ppbv		97
5) Vinyl Chloride	1.580	62	9228	1.030	ppbv		99
6) Bromomethane	1.667	94	3493	1.105	ppbv		96
7) Chloroethane	1.703	64	3872	1.113	ppbv	#	81
8) Dichlorotetrafluoroethane	1.554	85	20172	1.079	ppbv		97
9) Propene	1.482	41	12808	1.079	ppbv		92
10) Heptane	4.972	43	22885	0.719	ppbv	#	58
11) Trichlorofluoromethane	1.874	101	22397	1.061	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.136	101	18180	1.063	ppbv		99
13) Ethanol	1.719	45	1463	1.286	ppbv	#	33
14) Bromoethene	1.780	108	6783	1.049	ppbv	#	87
15) Acetone	1.832	43	25273	1.192	ppbv		99
16) 1,3-Butadiene	1.609	39	10993	1.099	ppbv		88
17) tert-Butyl alcohol	2.039	59	25141	1.081	ppbv	#	88
18) 1,1-Dichloroethene	2.033	96	8192	1.035	ppbv		96
19) Isopropyl Alcohol	1.884	45	13241	1.039	ppbv	#	41
20) Methylene Chloride	2.059	84	10045	0.985	ppbv		97
21) Allyl Chloride	2.094	41	15801	1.070	ppbv		95
22) trans-1,2-Dichloroethene	2.337	96	9960	1.108	ppbv		96
23) Vinyl Acetate	2.457	43	30884	1.020	ppbv	#	96
24) 1,1-Dichloroethane	2.405	63	19077	1.082	ppbv		99
25) Ethyl Acetate	2.832	43	56877	1.061	ppbv		97
26) Hexane	2.822	57	26276	1.076	ppbv		96
27) Carbon Disulfide	2.149	76	23373	1.067	ppbv	#	32
28) Methyl tert-Butyl Ether	2.441	73	12580	0.991	ppbv	#	86
29) Chloroform	2.842	83	33240	1.041	ppbv		99
30) Cyclohexane	3.855	84	21707	1.063	ppbv		98
31) cis-1,2-Dichloroethene	2.716	61	23828	1.041	ppbv		96
32) 1,1,1-Trichloroethane	3.360	97	35233	1.018	ppbv		97
34) 2-Butanone	2.554	43	37431	1.044	ppbv		97
35) Carbon Tetrachloride	3.758	117	34016	1.033	ppbv		96
36) Benzene	3.651	78	49652	1.033	ppbv		100
37) 1,2-Dichloroethane	3.214	62	26482	1.048	ppbv		98
38) Trichloroethene	4.538	130	23906	1.001	ppbv		98
39) 1,2-Dichloropropane	4.302	63	10275	0.585	ppbv		94
40) 1,4-Dioxane	4.583	88	3579	0.439	ppbv	#	3
41) Tetrahydrofuran	3.055	42	20845	1.011	ppbv		98
42) Bromodichloromethane	4.480	83	20848	0.592	ppbv		90
43) Methyl Methacrylate	4.871	69	20289	1.040	ppbv		98
44) 2,2,4-Trimethylpentane	4.635	57	84970	1.023	ppbv		96
45) t-1,3-Dichloropropene	6.402	75	11857	0.565	ppbv		96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042952.D
Acq On : 22 Sep 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Sep 23 02:10:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.596	75	10544	0.395	ppbv		94
47) 1,1,2-Trichloroethane	6.574	97	19311	1.041	ppbv		96
48) Dibromochloromethane	7.383	129	30015	1.012	ppbv		99
49) Bromoform	9.477	173	25929	1.005	ppbv		98
50) 4-Methyl-2-Pentanone	5.748	43	48546	1.007	ppbv		98
51) 2-Hexanone	7.431	43	39627	1.034	ppbv	#	99
52) Tetrachloroethene	8.218	164	18188	0.978	ppbv		97
53) Toluene	6.926	91	58200	1.023	ppbv		100
54) 1,2-Dibromoethane	7.645	107	26608	1.020	ppbv		94
56) 1,1,1,2-Tetrachloroethane	8.920	131	22802	1.015	ppbv		94
57) Chlorobenzene	8.914	112	45873	1.071	ppbv		98
58) Ethyl Benzene	9.351	91	80473	1.044	ppbv		97
59) m/p-Xylene	9.529	91	74868	1.231	ppbv	#	100
60) o-Xylene	9.959	91	64703	1.066	ppbv		99
61) Styrene	9.869	104	29061	1.012	ppbv		98
62) Isopropylbenzene	10.535	105	96621	1.068	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	31695	0.993	ppbv		96
64) n-propylbenzene	10.985	120	24820	1.049	ppbv		98
65) tert-Butylbenzene	11.526	119	86303	1.072	ppbv		99
66) Benzyl Chloride	11.610	91	8140	0.964	ppbv		100
67) sec-Butylbenzene	11.762	105	120070	1.070	ppbv		100
69) p-Isopropyltoluene	11.921	119	101749	1.074	ppbv		99
70) n-Butylbenzene	12.277	91	98908	1.069	ppbv		99
71) 2-Chlorotoluene	10.895	91	70577	1.033	ppbv		98
72) 4-Ethyltoluene	11.121	105	79095	1.040	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	63174	1.024	ppbv		98
74) 1,2,4-Trimethylbenzene	11.532	105	71411	1.049	ppbv		95
75) 1,3-Dichlorobenzene	11.603	146	44769	1.060	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	42879	1.022	ppbv		97
77) 1,2-Dichlorobenzene	11.940	146	42911	1.068	ppbv		98
78) Hexachloro-1,3-Butadiene	13.879	225	34798	1.107	ppbv		99
79) Naphthalene	13.510	128	61925	1.028	ppbv		98
80) Naphthalene,2-methyl-	14.455	142	17116	0.920	ppbv		97
81) 1,2,4-Trichlorobenzene	13.435	180	32411	1.007	ppbv		97

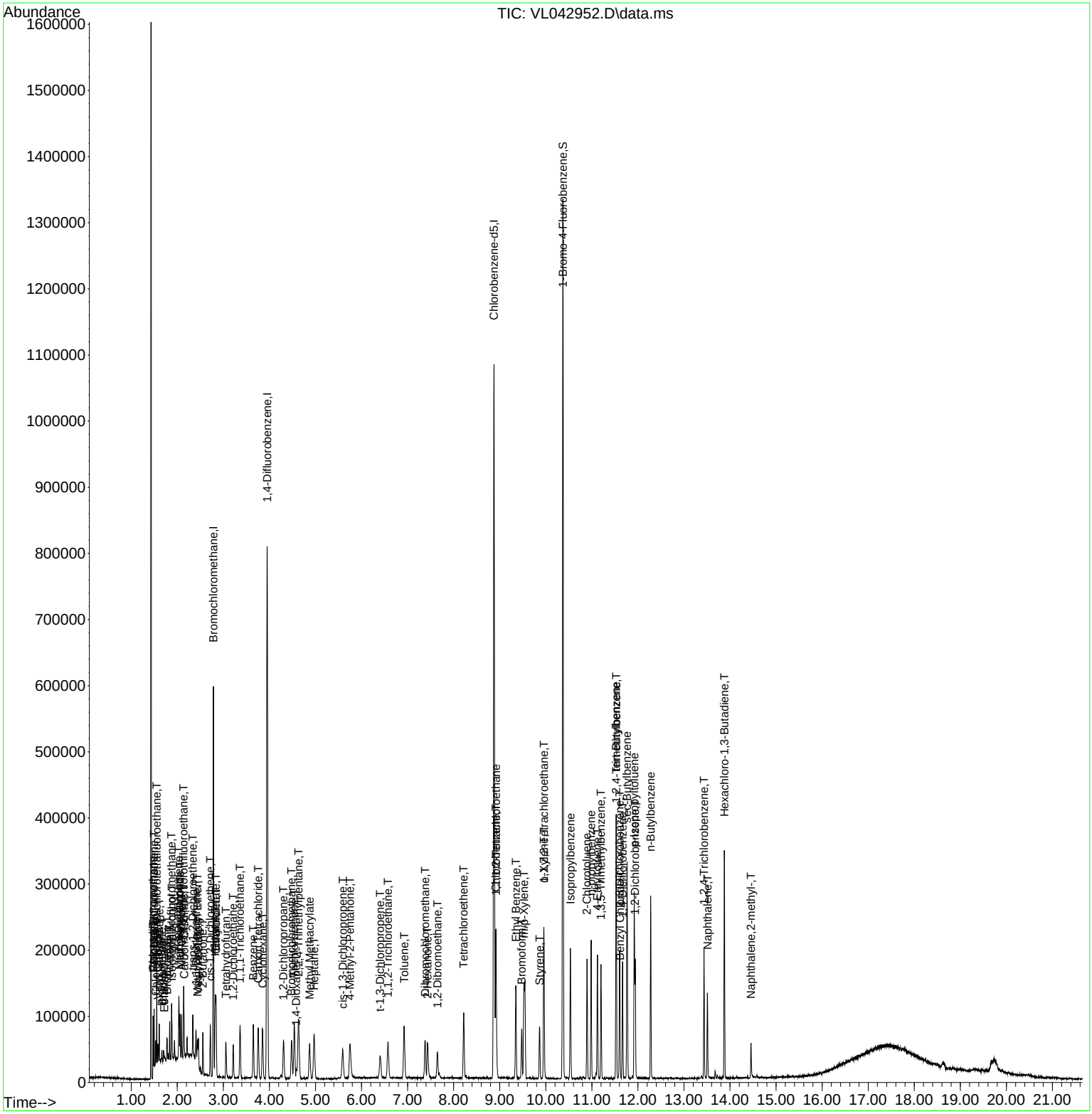
(#) = qualifier out of range (m) = manual integration (+) = signals summed

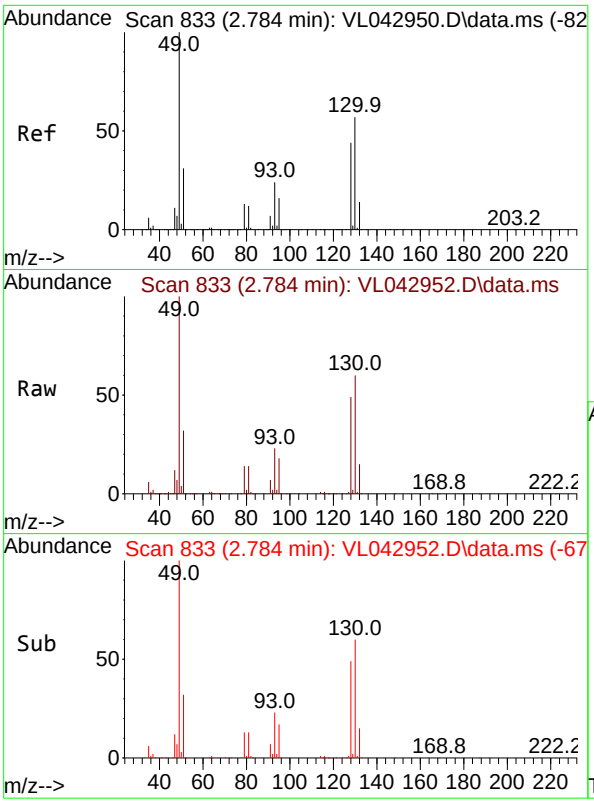
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042952.D
Acq On : 22 Sep 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Sep 23 02:10:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



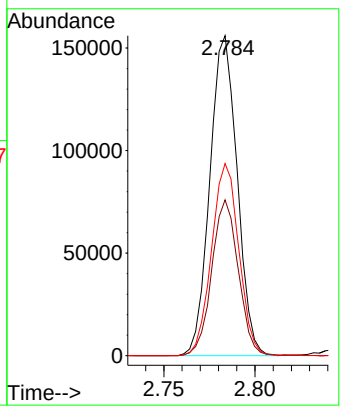


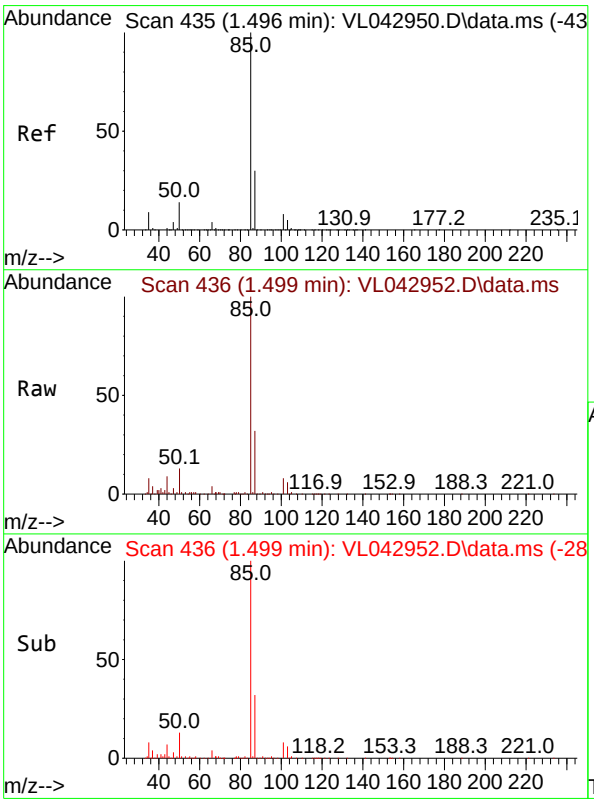
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 49 Resp: 162797

Ion	Ratio	Lower	Upper
49	100		
128	47.3	22.9	68.8
130	60.1	29.1	87.3

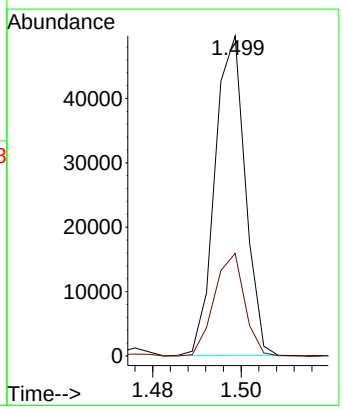


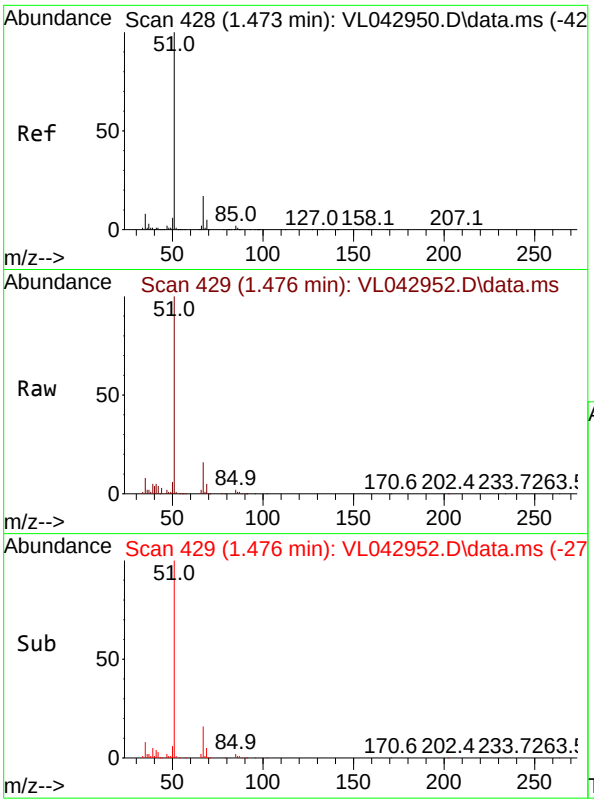


#2
Dichlorodifluoromethane
Concen: 1.080 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 85 Resp: 23644

Ion	Ratio	Lower	Upper
85	100		
87	32.1	24.3	36.5



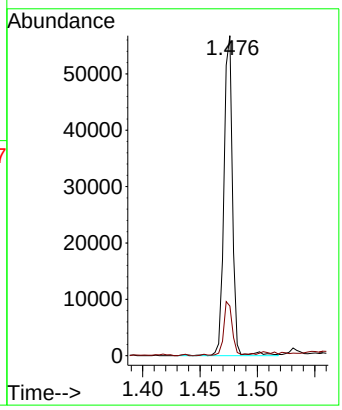


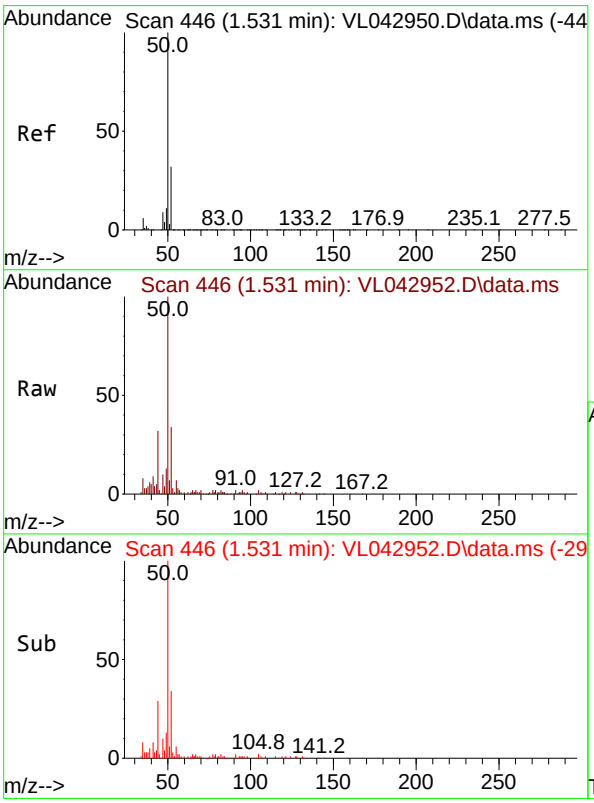
#3
Chlorodifluoromethane
Concen: 1.086 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 51 Resp: 29646

Ion	Ratio	Lower	Upper
51	100		
67	17.9	13.8	20.8

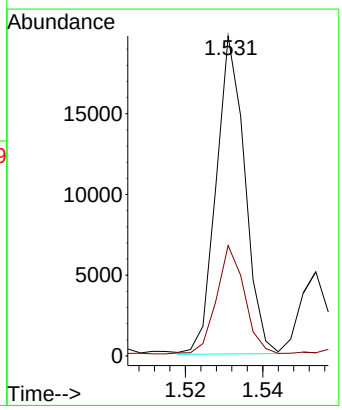


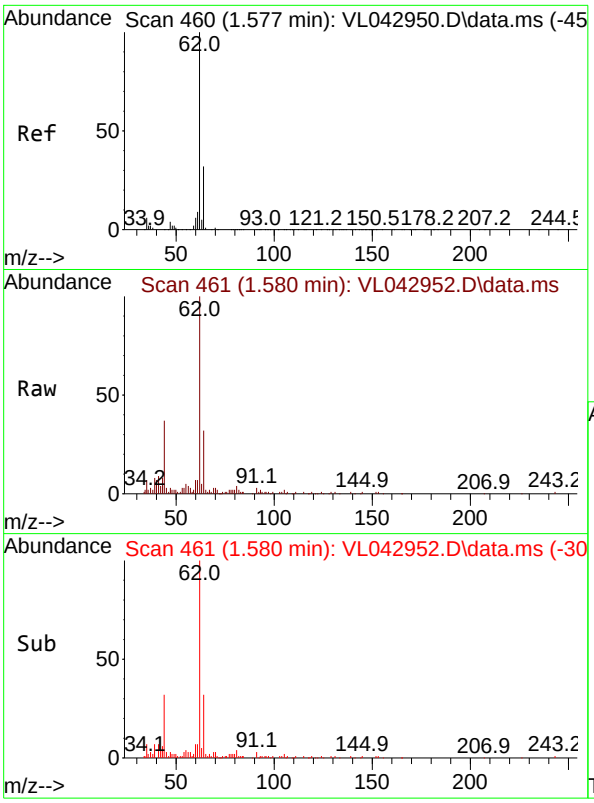


#4
Chloromethane
Concen: 1.021 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 50 Resp: 10120

Ion	Ratio	Lower	Upper
50	100		
52	33.9	25.9	38.9



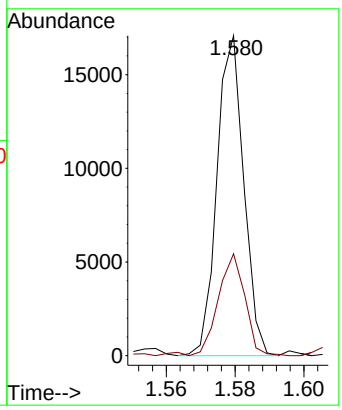


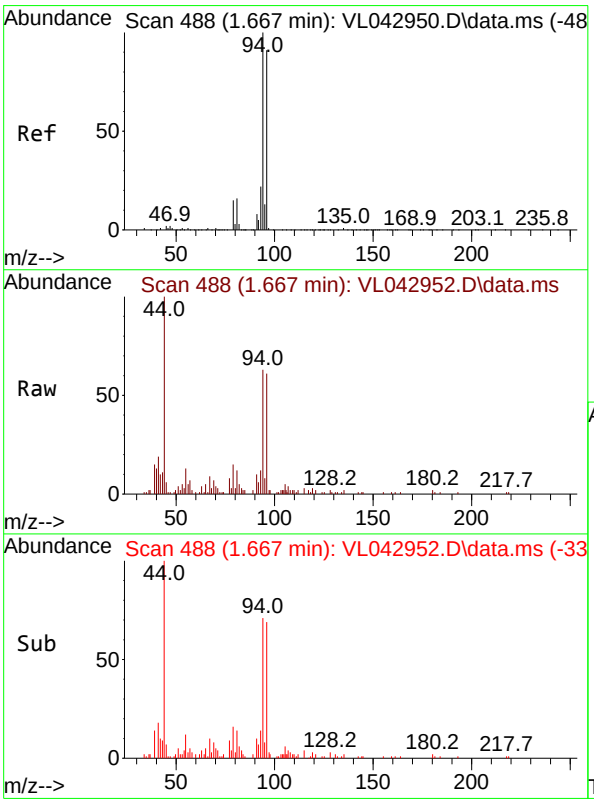
#5
Vinyl Chloride
Concen: 1.030 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 9228

Ion	Ratio	Lower	Upper
62	100		
64	31.4	25.4	38.2

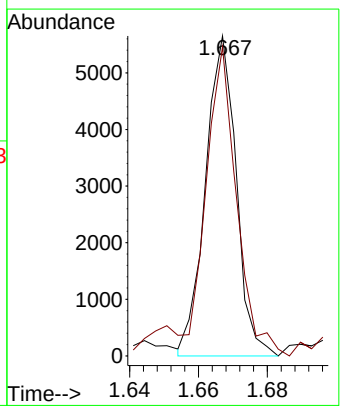


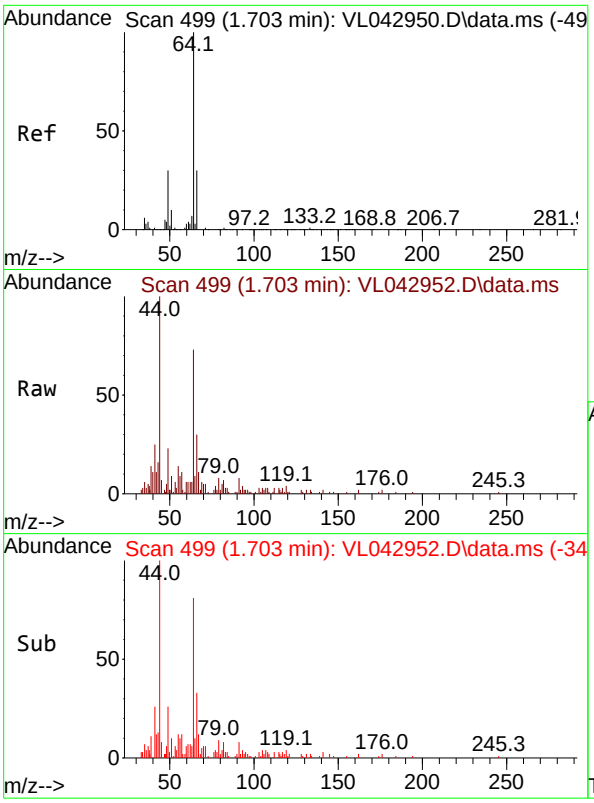


#6
Bromomethane
Concen: 1.105 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 94 Resp: 3493

Ion	Ratio	Lower	Upper
94	100		
96	94.4	72.6	108.8



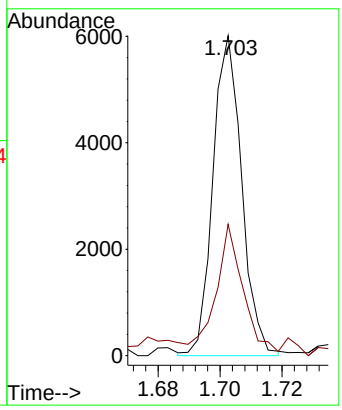


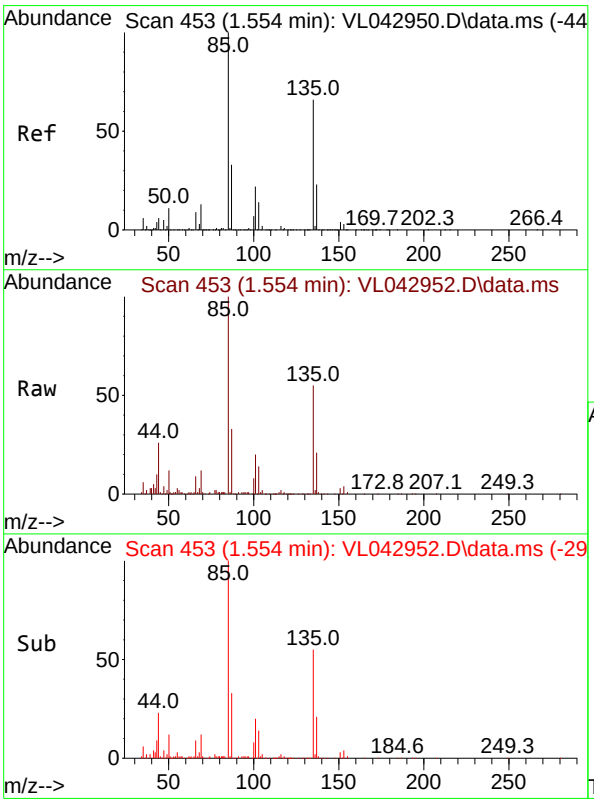
#7
Chloroethane
Concen: 1.113 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 64 Resp: 3872

Ion	Ratio	Lower	Upper
64	100		
66	41.0	24.6	36.8#

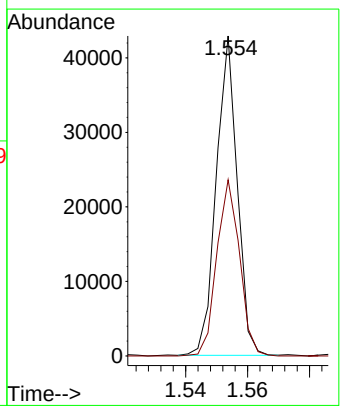


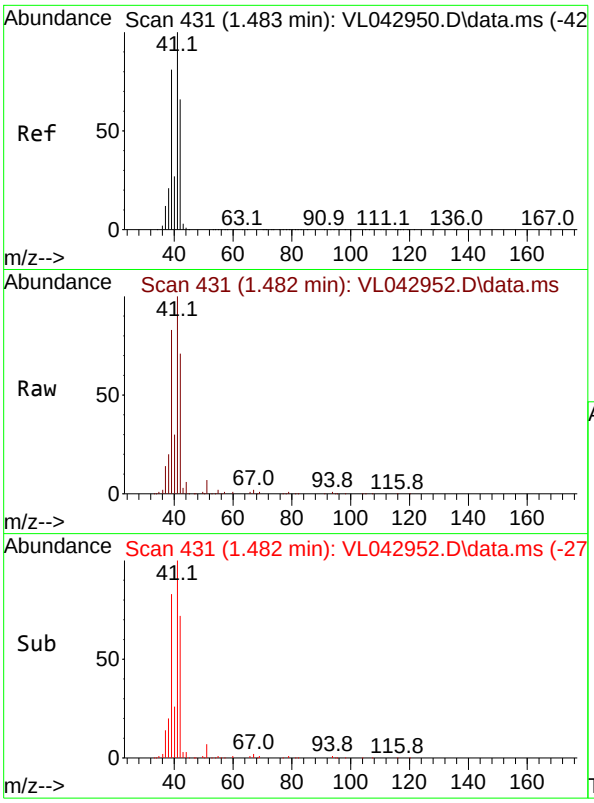


#8
Dichlorotetrafluoroethane
Concen: 1.079 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 85 Resp: 20172

Ion	Ratio	Lower	Upper
85	100		
135	59.9	49.7	74.5



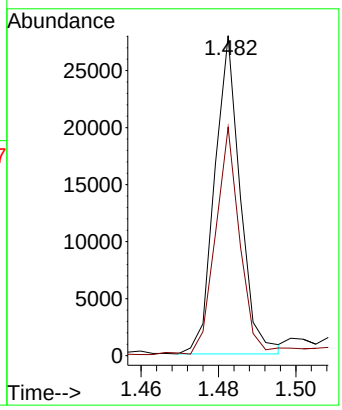


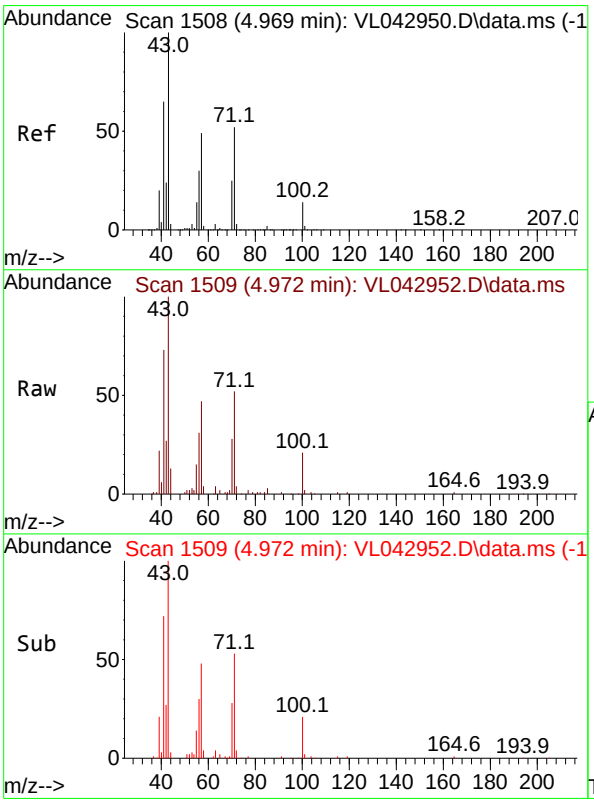
#9
Propene
Concen: 1.079 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 12808

Ion	Ratio	Lower	Upper
41	100		
42	78.5	57.4	86.2

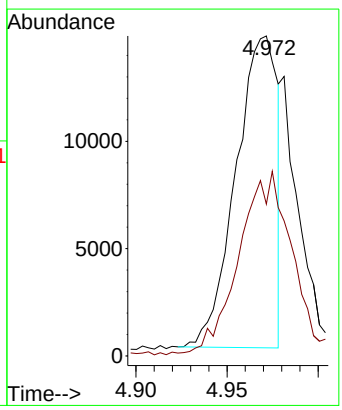


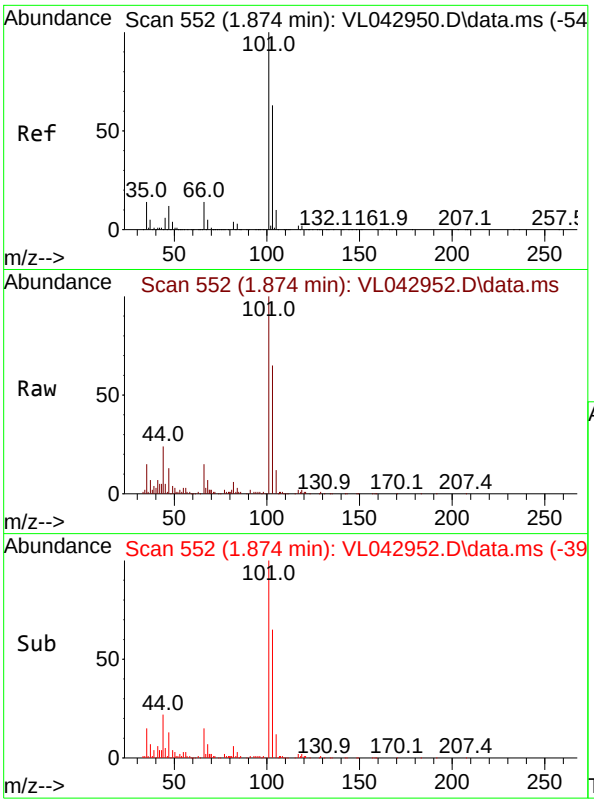


#10
Heptane
Concen: 0.719 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 22885

Ion	Ratio	Lower	Upper
43	100		
57	76.9	38.6	57.8#



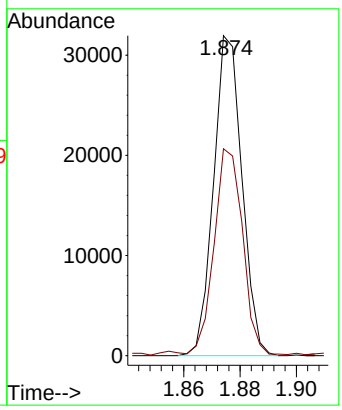


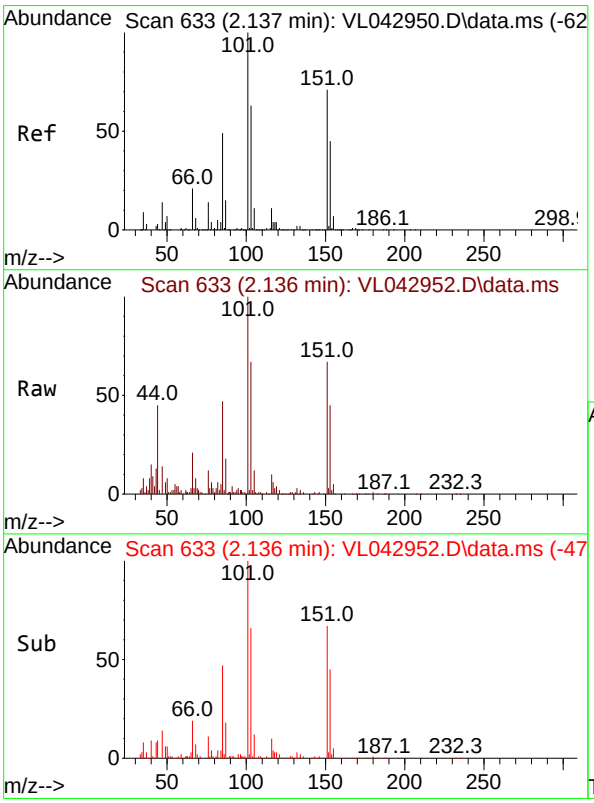
#11
Trichlorofluoromethane
Concen: 1.061 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:101 Resp: 22397

Ion	Ratio	Lower	Upper
101	100		
103	64.2	50.1	75.1

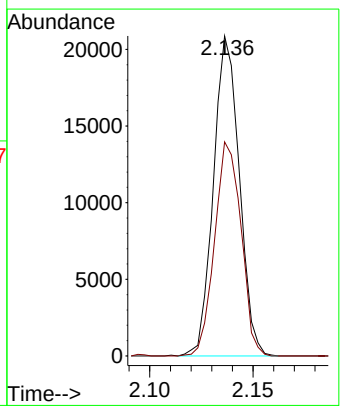


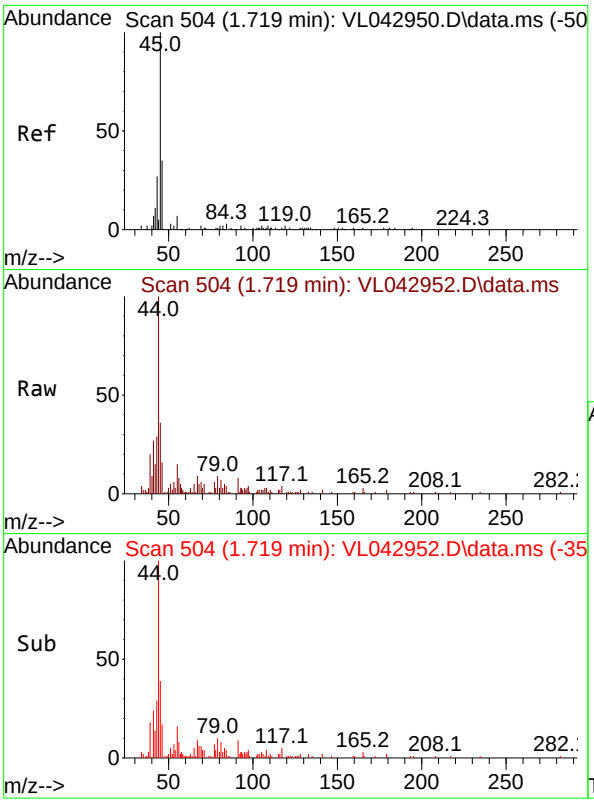


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.063 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:101 Resp: 18180

Ion	Ratio	Lower	Upper
101	100		
151	68.7	55.7	83.5



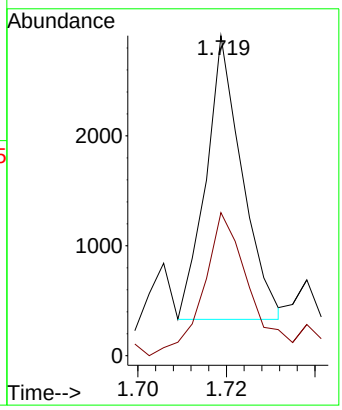


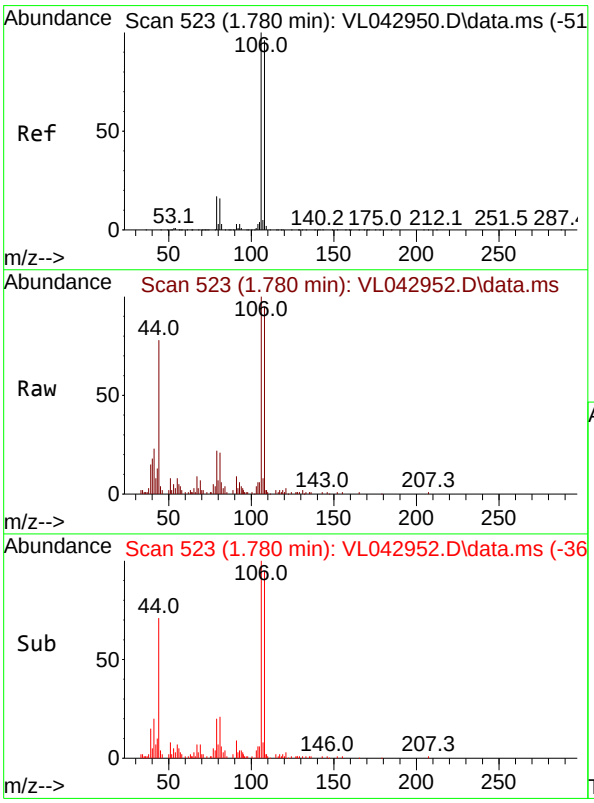
#13
Ethanol
Concen: 1.286 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 1463

Ion	Ratio	Lower	Upper
45	100		
46	82.0	16.2	64.6#

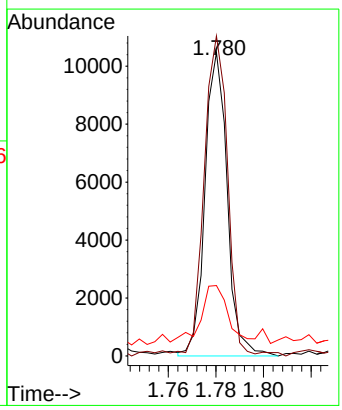


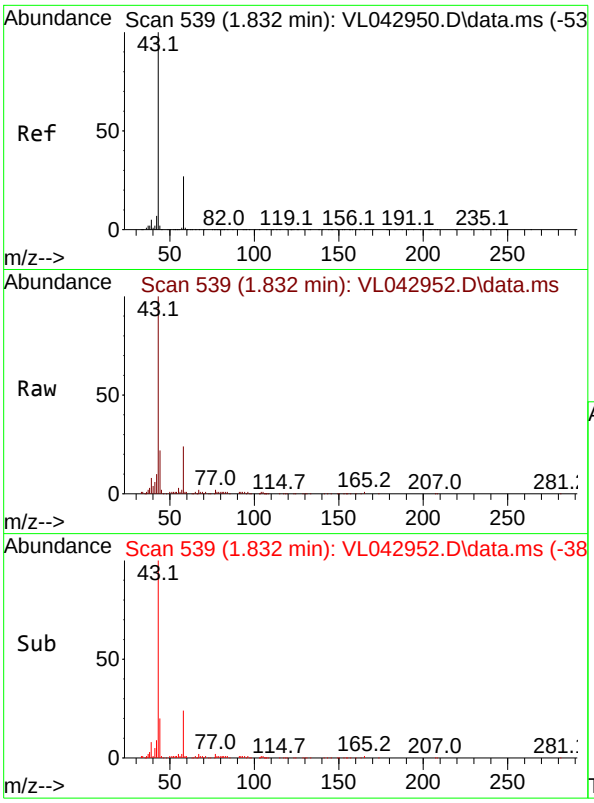


#14
Bromoethene
Concen: 1.049 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:108 Resp: 6783

Ion	Ratio	Lower	Upper
108	100		
106	110.6	86.0	129.0
79	50.8	14.2	21.2#



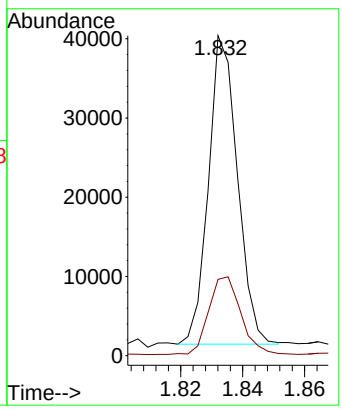


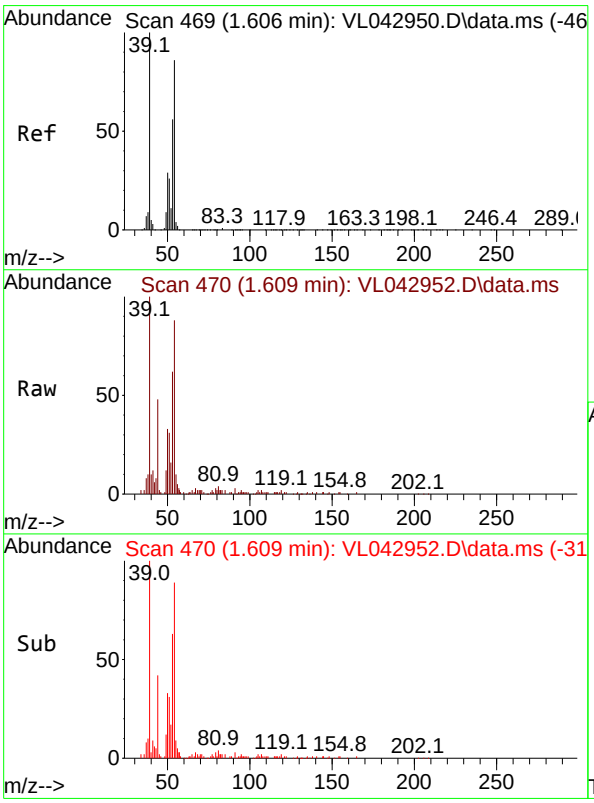
#15
Acetone
Concen: 1.192 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 25273

Ion	Ratio	Lower	Upper
43	100		
58	28.3	22.3	33.5

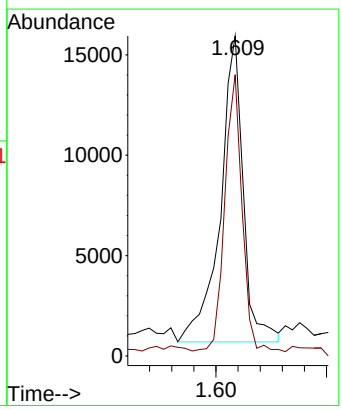


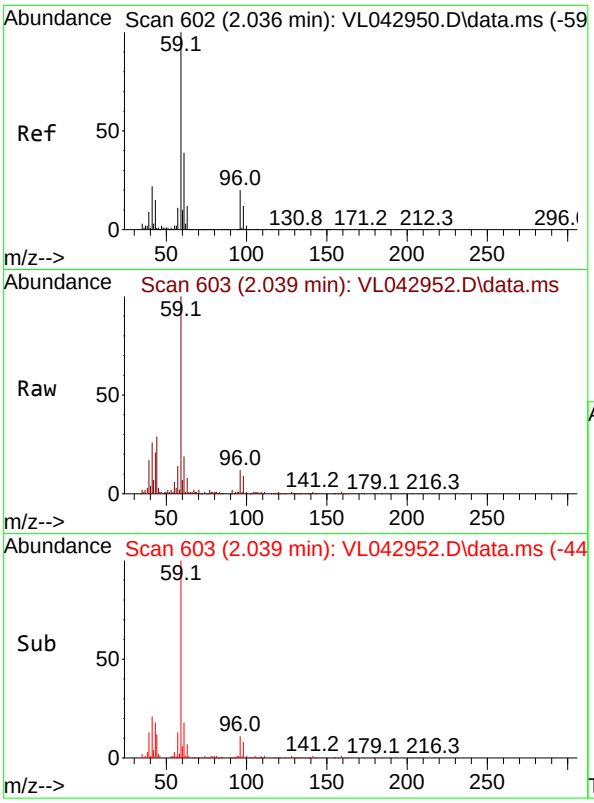


#16
1,3-Butadiene
Concen: 1.099 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 39 Resp: 10993

Ion	Ratio	Lower	Upper
39	100		
54	86.7	60.8	91.2



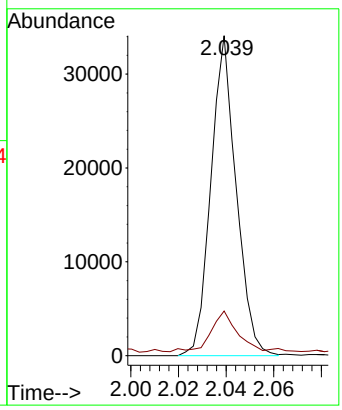


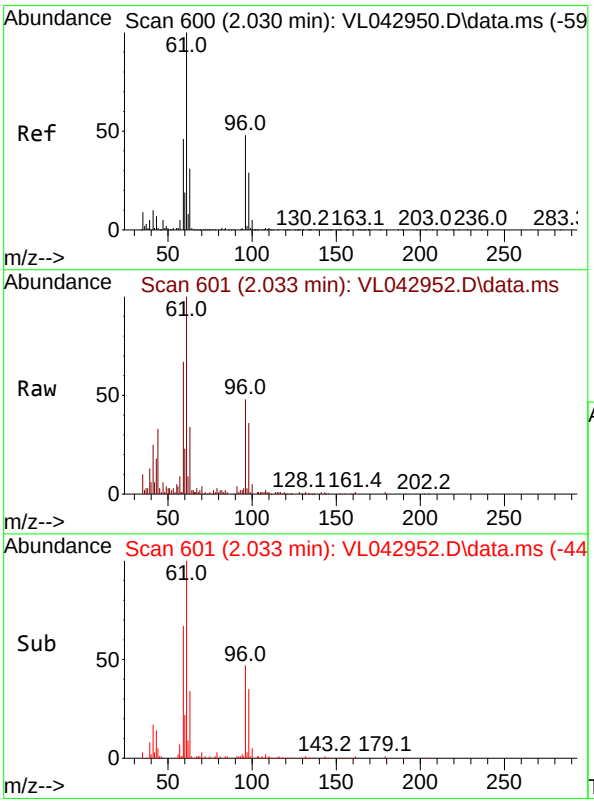
#17
tert-Butyl alcohol
Concen: 1.081 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 59 Resp: 25141

Ion	Ratio	Lower	Upper
59	100		
57	15.0	8.6	12.8#

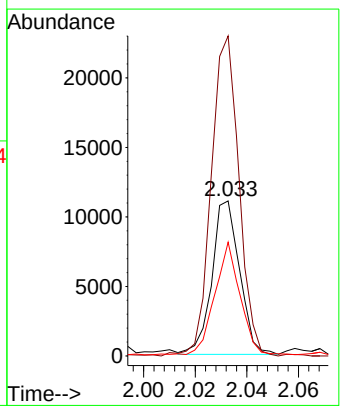


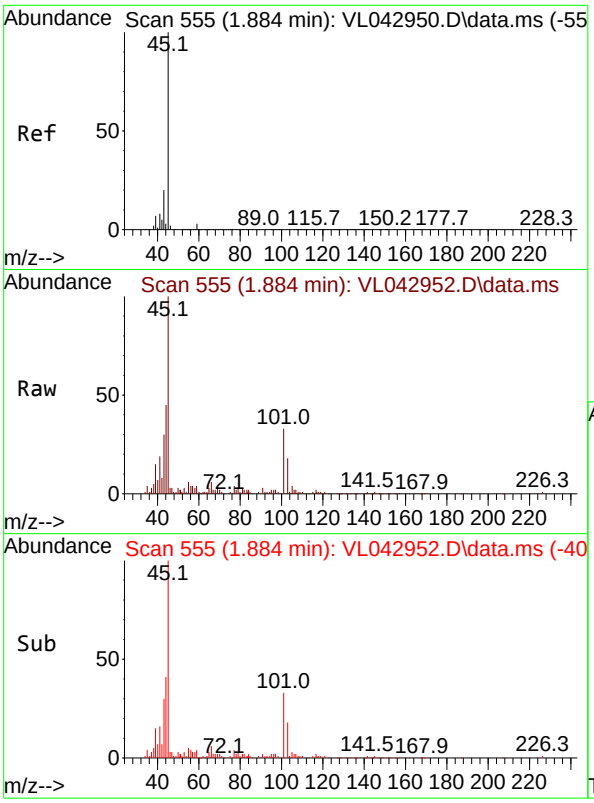


#18
1,1-Dichloroethene
Concen: 1.035 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 96 Resp: 8192

Ion	Ratio	Lower	Upper
96	100		
61	208.7	166.2	249.4
98	72.8	48.6	73.0



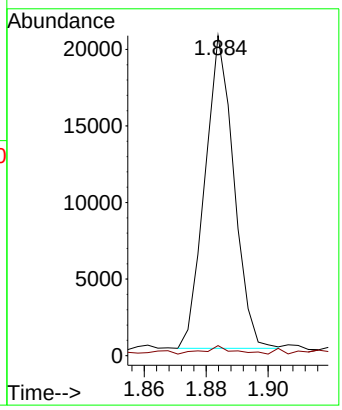


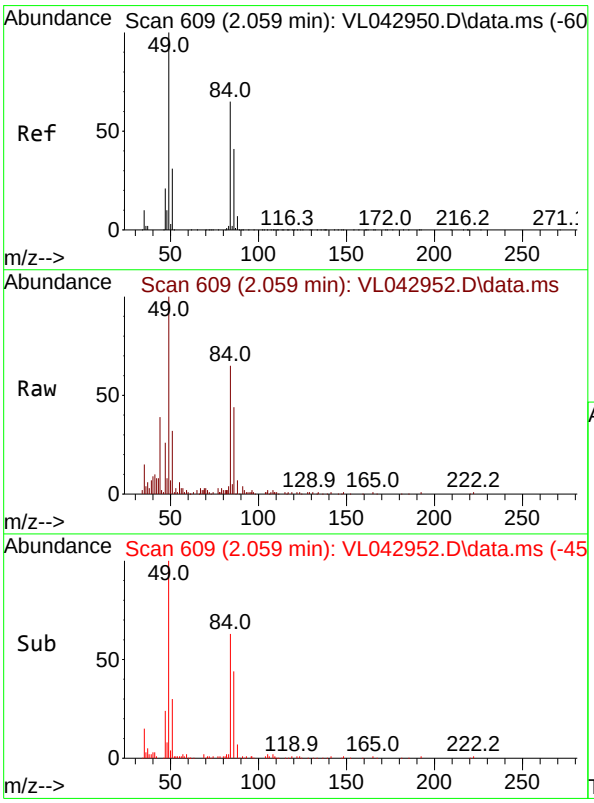
#19
Isopropyl Alcohol
Concen: 1.039 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 13241

Ion	Ratio	Lower	Upper
45	100		
58	2.6	31.0	46.6#

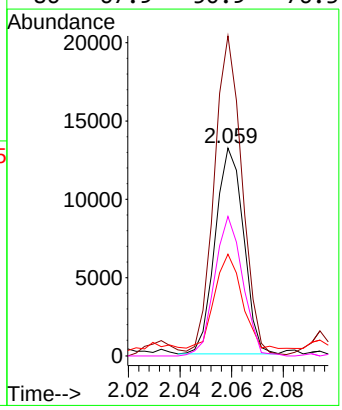


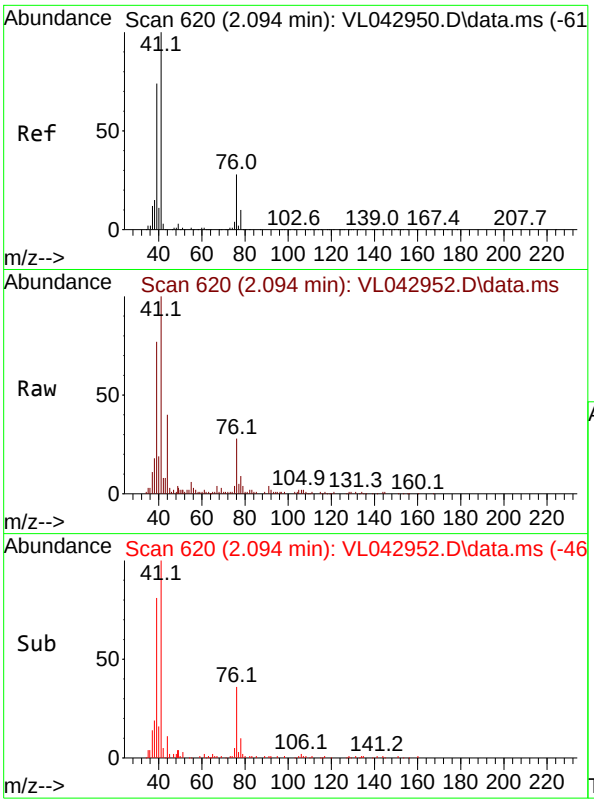


#20
Methylene Chloride
Concen: 0.985 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 84 Resp: 10045

Ion	Ratio	Lower	Upper
84	100		
49	154.6	124.1	186.1
51	45.9	39.8	59.8
86	67.9	50.9	76.3



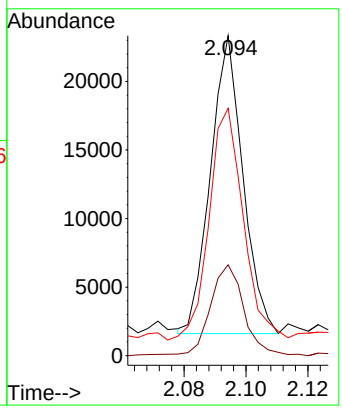


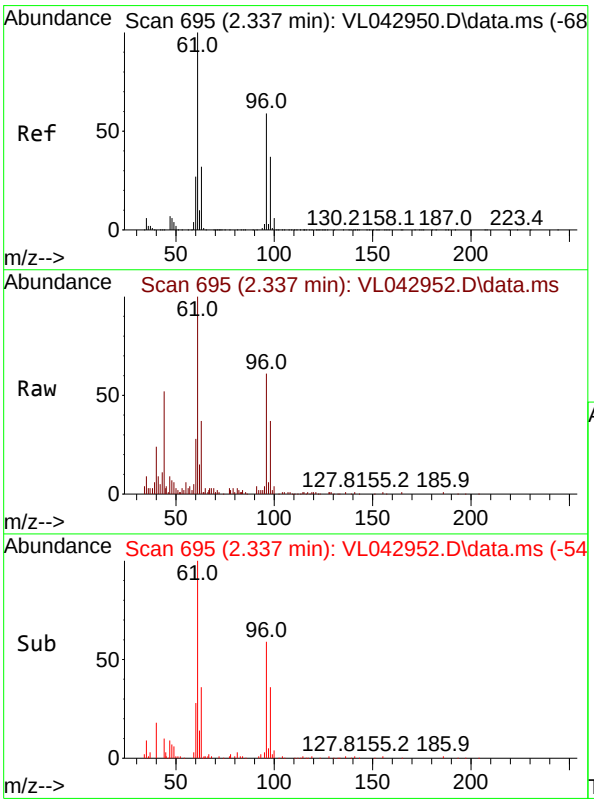
#21
Allyl Chloride
Concen: 1.070 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 15801

Ion	Ratio	Lower	Upper
41	100		
76	31.8	22.3	33.5
39	80.7	61.3	91.9

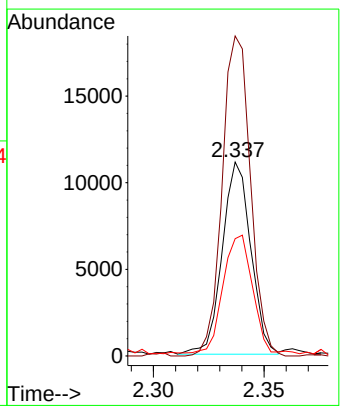


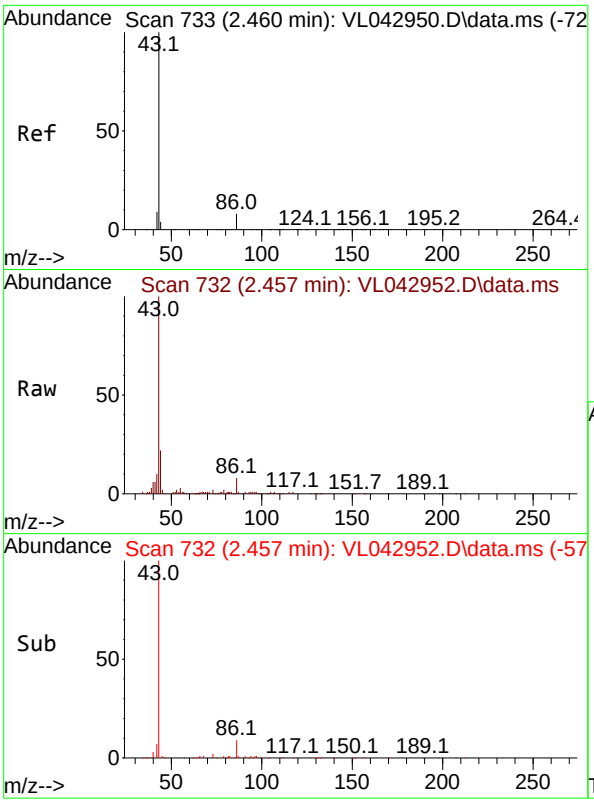


#22
trans-1,2-Dichloroethene
Concen: 1.108 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 96 Resp: 9960

Ion	Ratio	Lower	Upper
96	100		
61	166.5	136.5	204.7
98	59.4	50.6	76.0



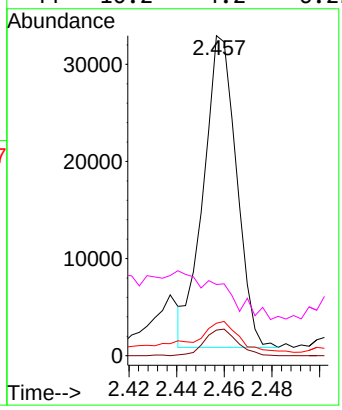


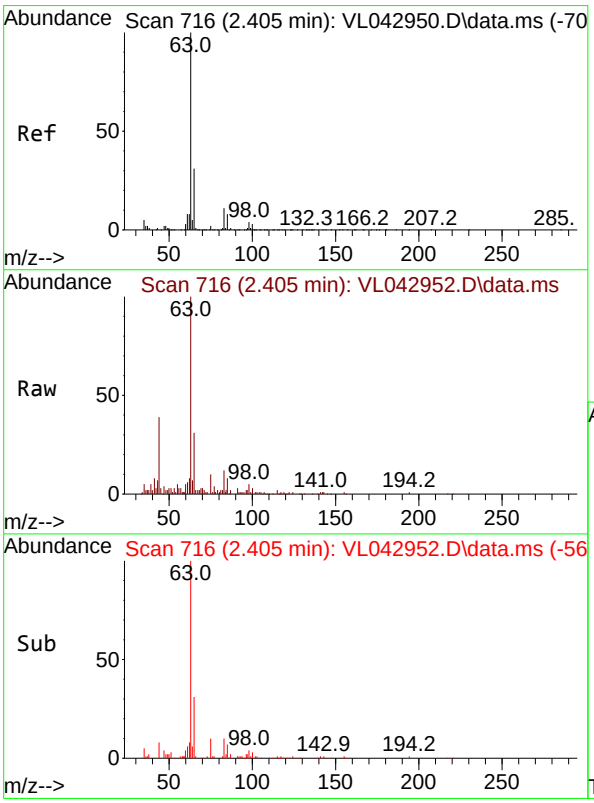
#23
Vinyl Acetate
Concen: 1.020 ppbv
RT: 2.457 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 30884

Ion	Ratio	Lower	Upper
43	100		
86	8.2	6.2	9.2
42	9.0	7.4	11.0
44	10.2	4.2	6.2#

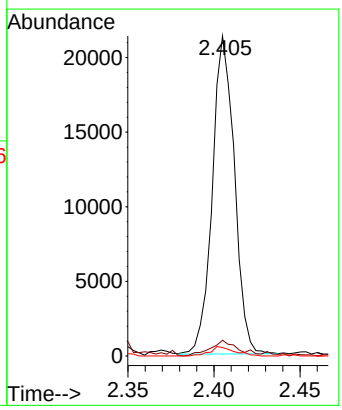


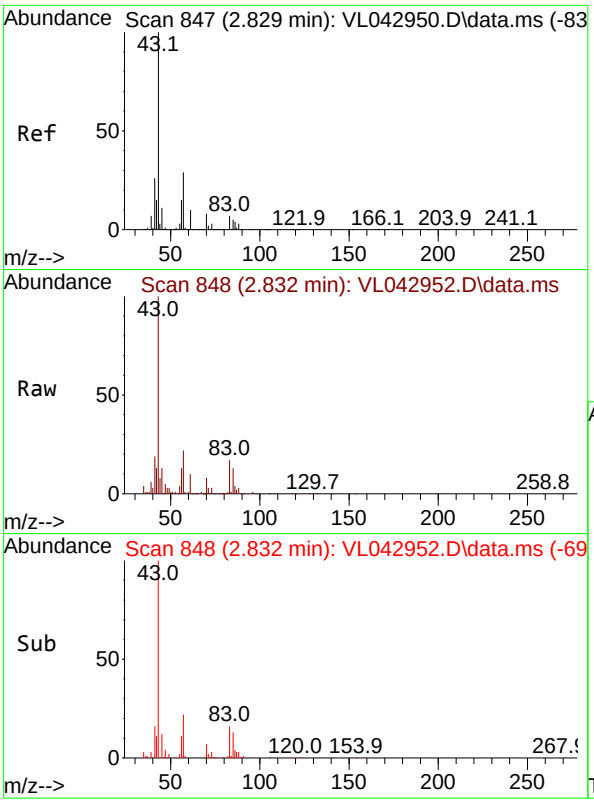


#24
1,1-Dichloroethane
Concen: 1.082 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 63 Resp: 19077

Ion	Ratio	Lower	Upper
63	100		
98	4.7	2.2	6.6
100	2.6	1.4	4.0



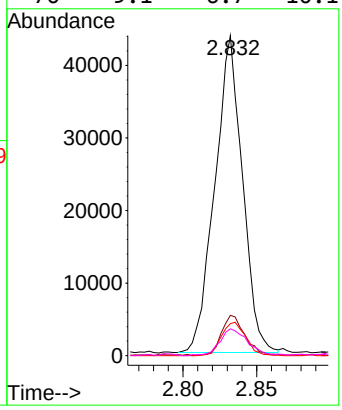


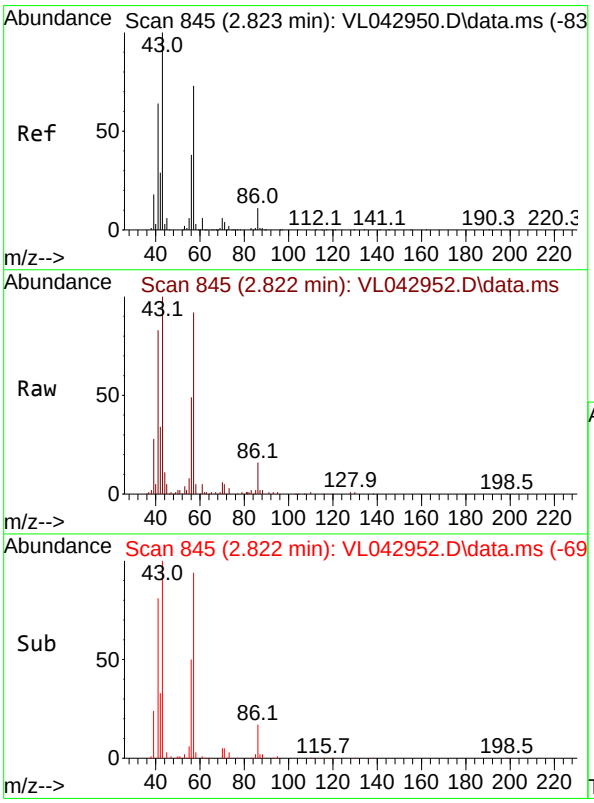
#25
Ethyl Acetate
Concen: 1.061 ppbv
RT: 2.832 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 56877

Ion	Ratio	Lower	Upper
43	100		
45	11.4	7.7	11.5
61	9.3	7.1	10.7
70	9.1	6.7	10.1

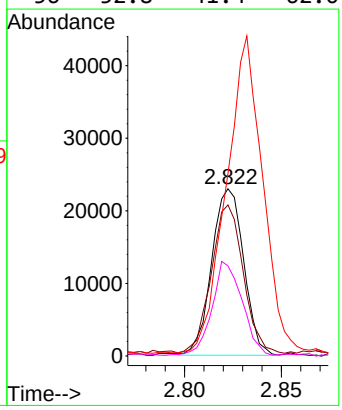


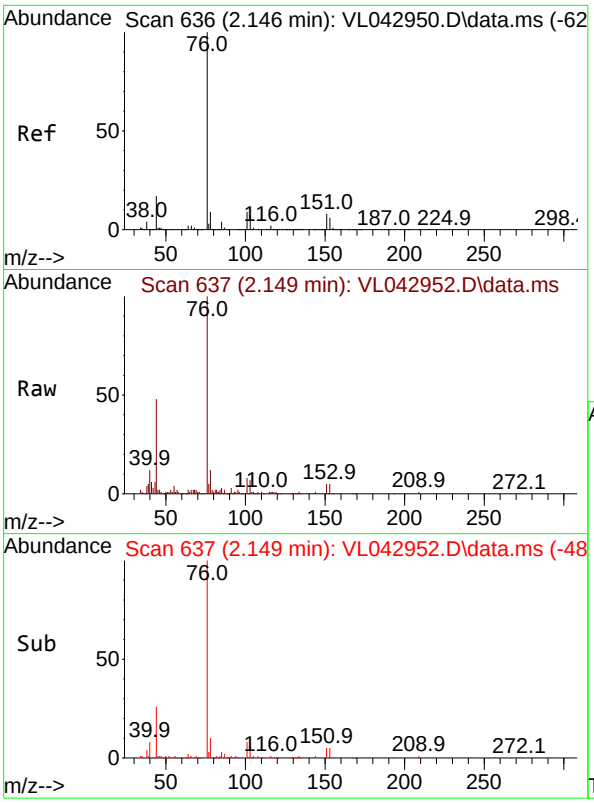


#26
Hexane
Concen: 1.076 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 57 Resp: 26276

Ion	Ratio	Lower	Upper
57	100		
41	95.7	71.7	107.5
43	221.0	180.8	271.2
56	52.8	41.4	62.0



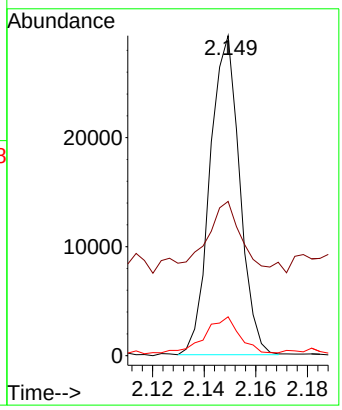


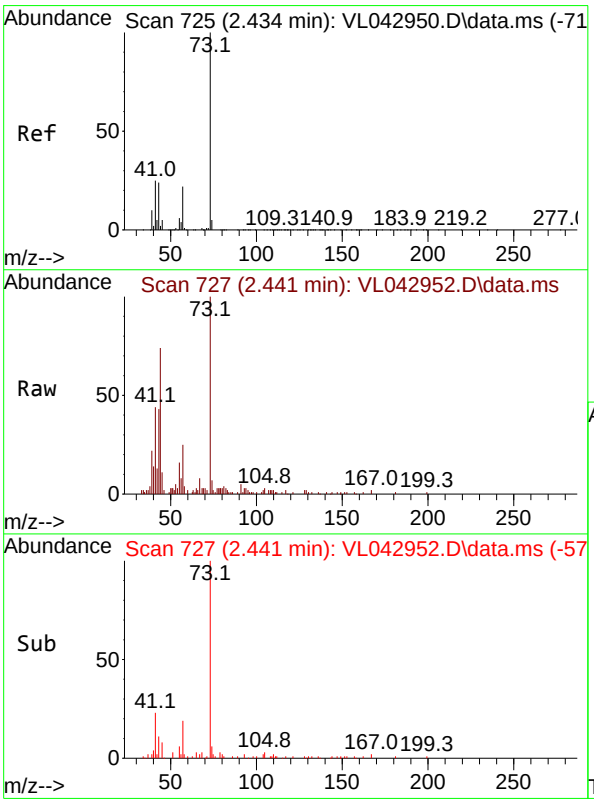
#27
Carbon Disulfide
Concen: 1.067 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 76 Resp: 23373

Ion	Ratio	Lower	Upper
76	100		
44	66.3	15.6	23.4#
78	14.2	8.9	13.3#

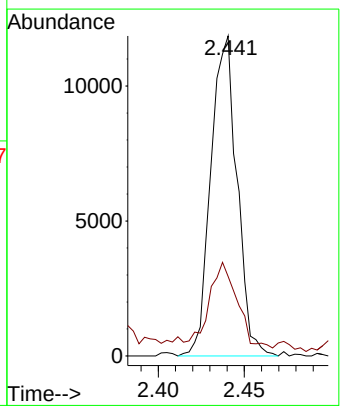


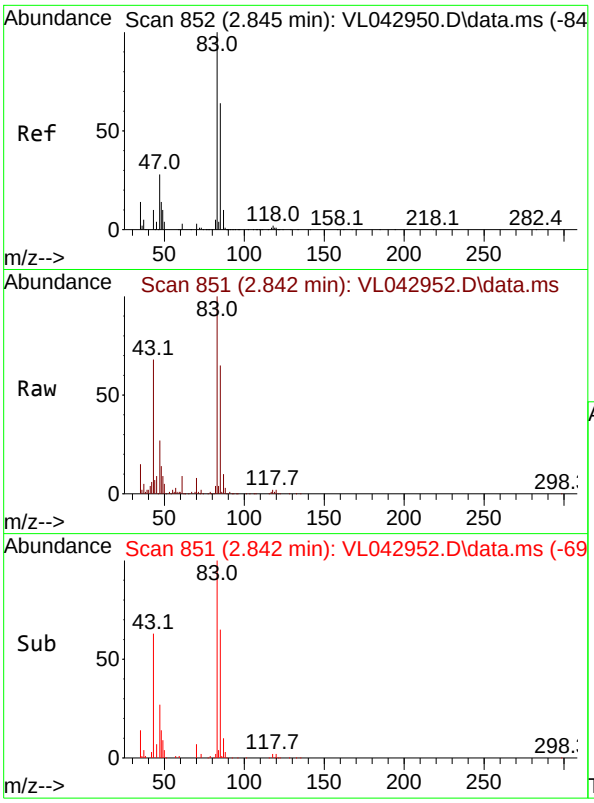


#28
Methyl tert-Butyl Ether
Concen: 0.991 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.006 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 73 Resp: 12580

Ion	Ratio	Lower	Upper
73	100		
57	33.0	20.6	31.0#



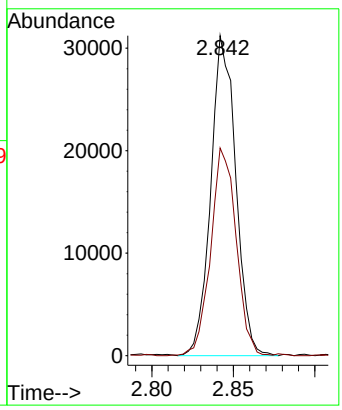


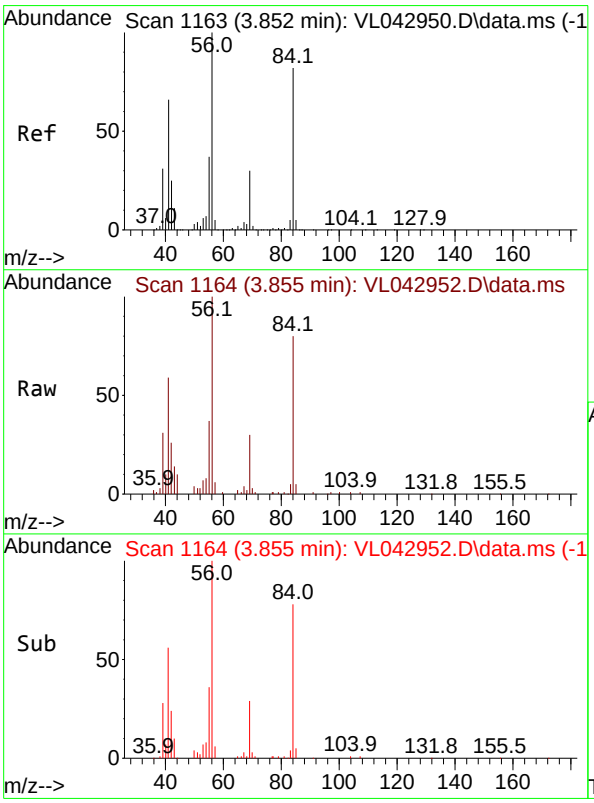
#29
Chloroform
Concen: 1.041 ppbv
RT: 2.842 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 33240

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.2	76.8

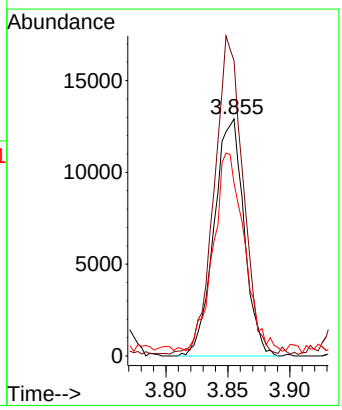


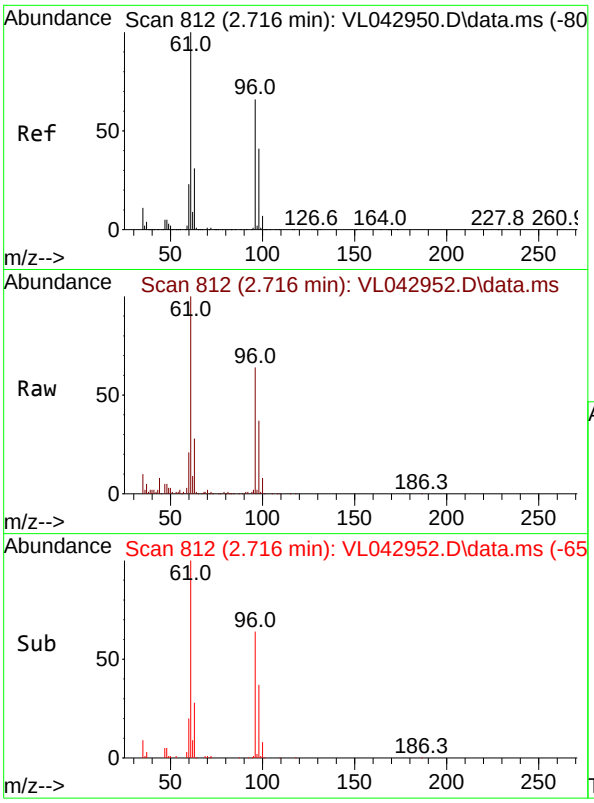


#30
Cyclohexane
Concen: 1.063 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 84 Resp: 21707

Ion	Ratio	Lower	Upper
84	100		
56	127.5	102.2	153.4
41	86.0	65.6	98.4



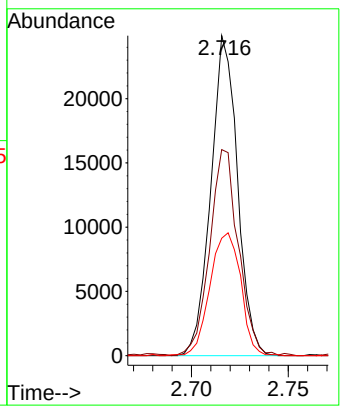


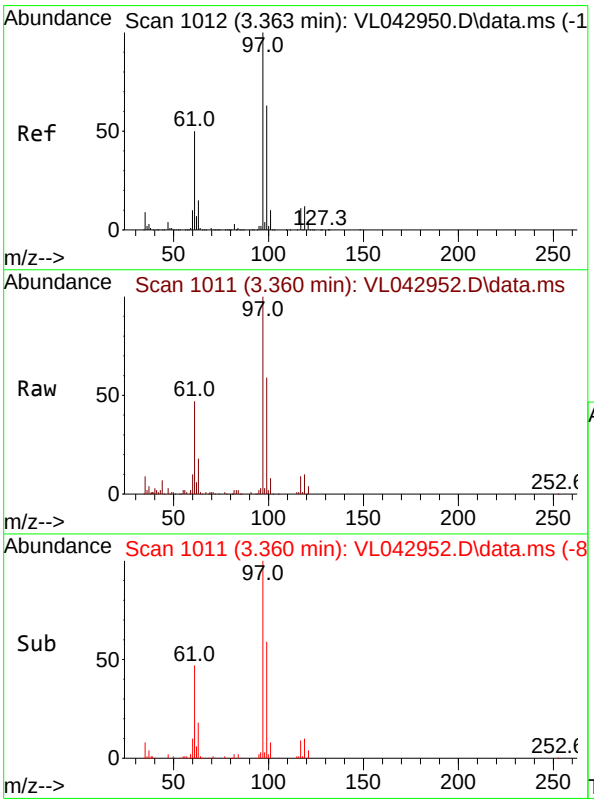
#31
cis-1,2-Dichloroethene
Concen: 1.041 ppbv
RT: 2.716 min Scan# 81
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 61 Resp: 23828

Ion	Ratio	Lower	Upper
61	100		
96	64.2	53.0	79.6
98	36.4	32.9	49.3

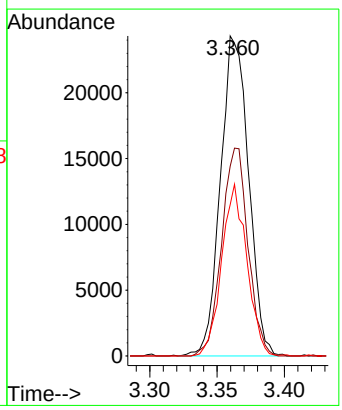


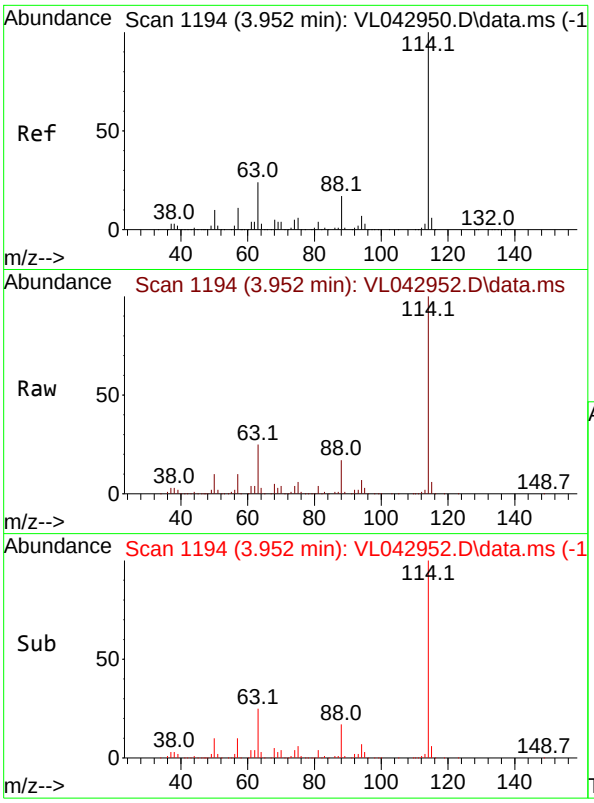


#32
1,1,1-Trichloroethane
Concen: 1.018 ppbv
RT: 3.360 min Scan# 1011
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 97 Resp: 35233

Ion	Ratio	Lower	Upper
97	100		
99	61.1	51.1	76.7
61	48.3	39.8	59.6



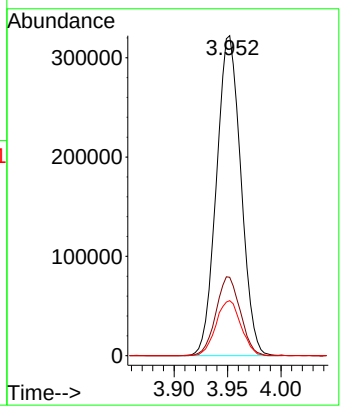


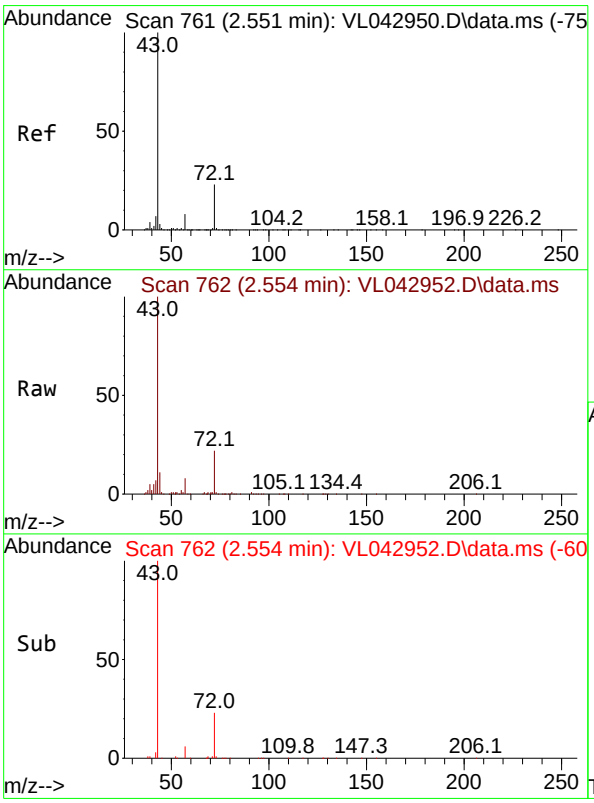
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:114 Resp: 511767

Ion	Ratio	Lower	Upper
114	100		
63	24.6	19.4	29.2
88	17.6	14.2	21.2

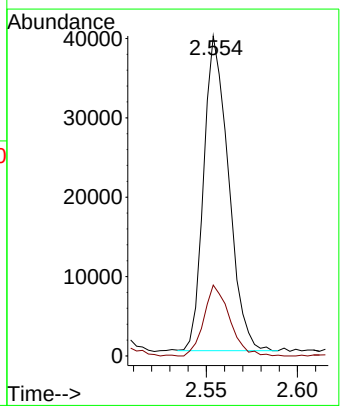


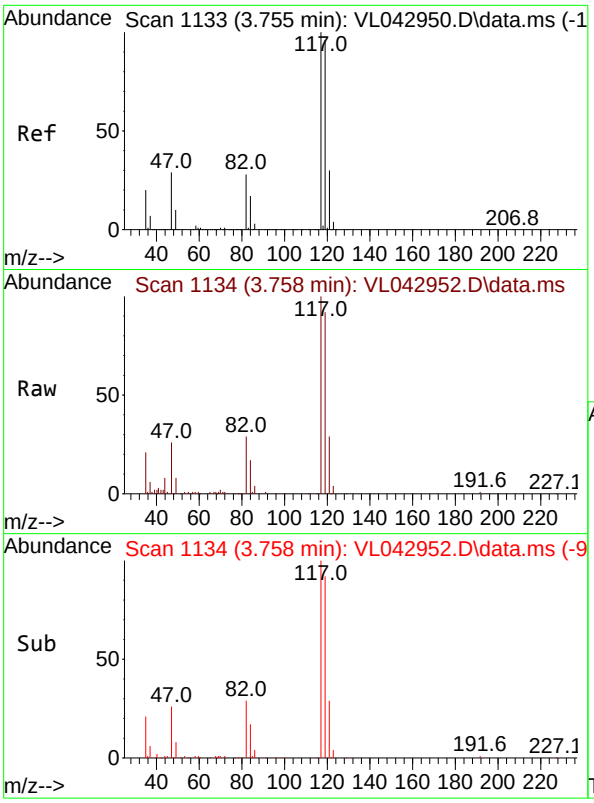


#34
2-Butanone
Concen: 1.044 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 37431

Ion	Ratio	Lower	Upper
43	100		
72	23.4	17.7	26.5



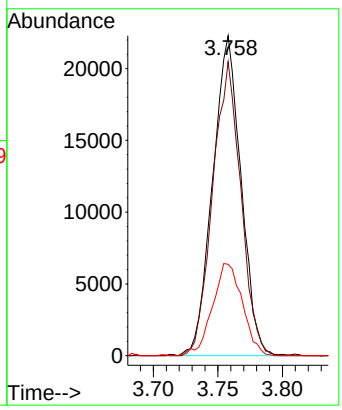


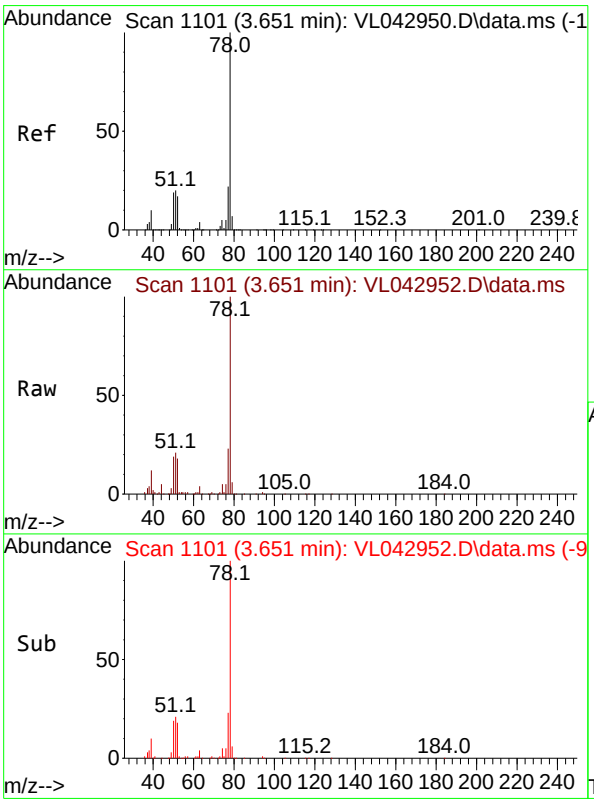
#35
Carbon Tetrachloride
Concen: 1.033 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 34016

Ion	Ratio	Lower	Upper
117	100		
119	91.9	76.9	115.3
121	28.5	23.7	35.5

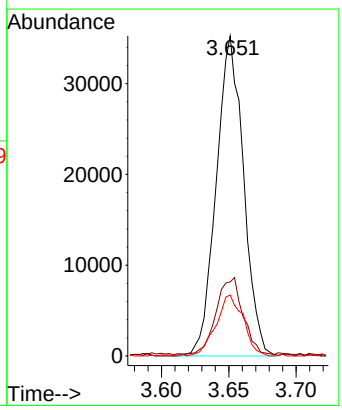


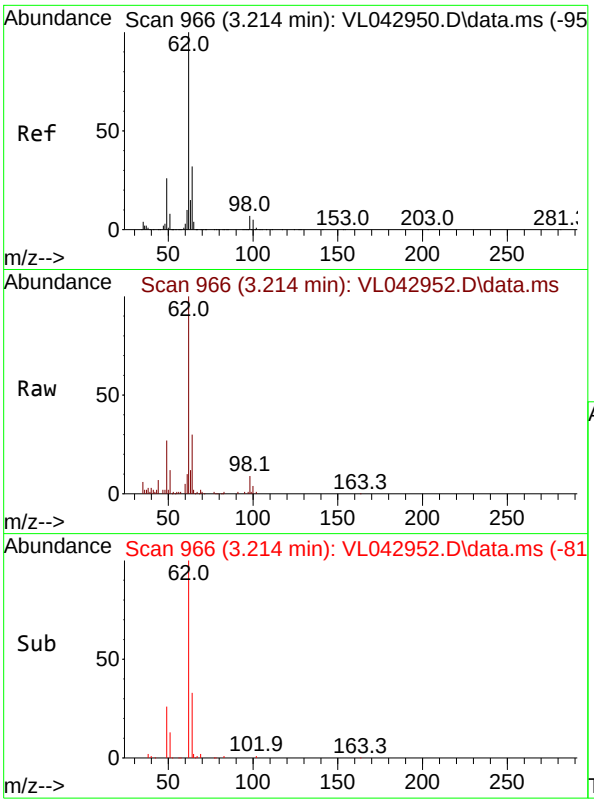


#36
Benzene
Concen: 1.033 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 78 Resp: 49652

Ion	Ratio	Lower	Upper
78	100		
77	22.4	17.8	26.6
50	18.8	15.0	22.4



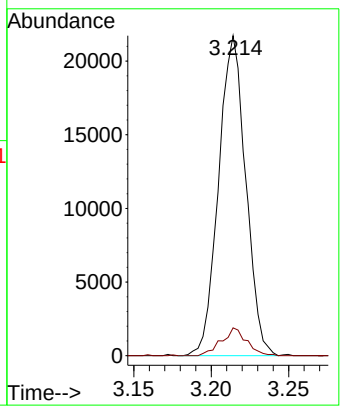


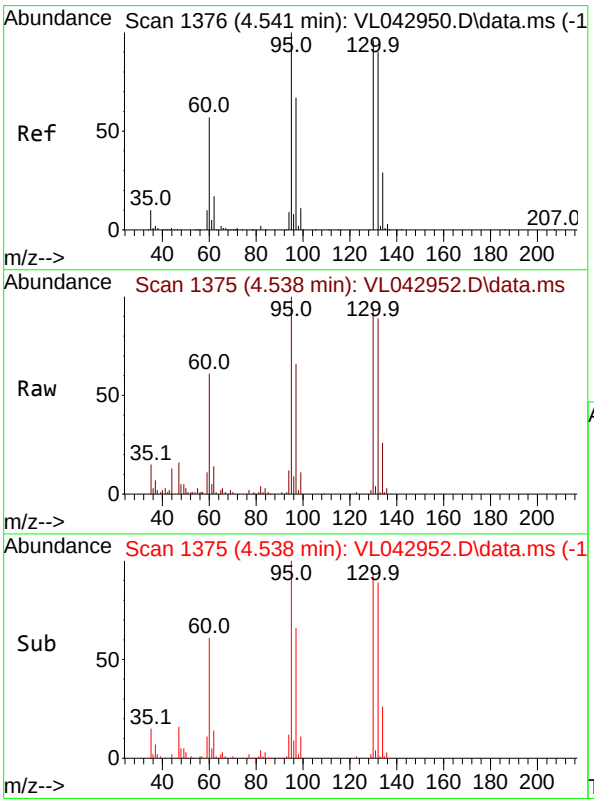
#37
1,2-Dichloroethane
Concen: 1.048 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 26482

Ion	Ratio	Lower	Upper
62	100		
98	8.0	5.9	8.9

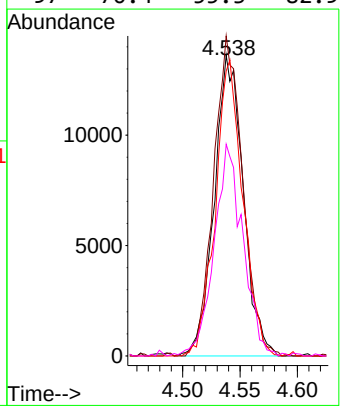


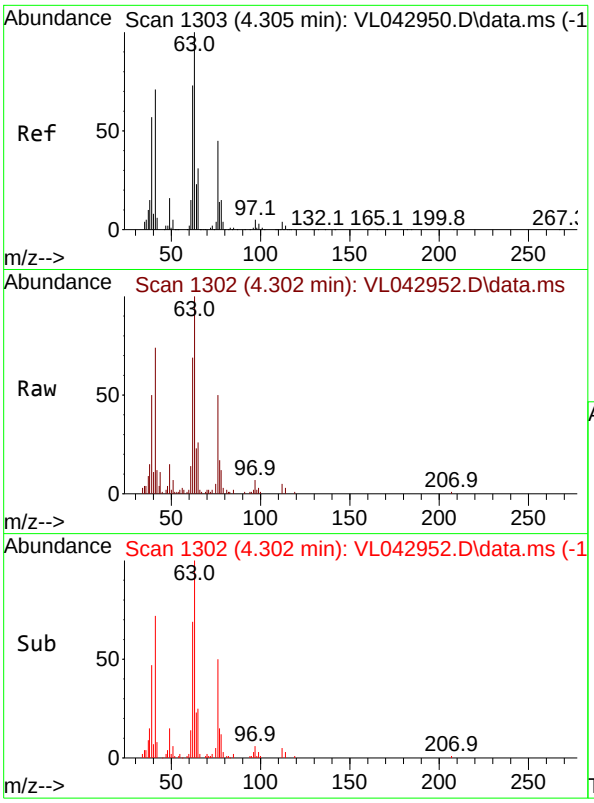


#38
Trichloroethene
Concen: 1.001 ppbv
RT: 4.538 min Scan# 1375
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:130 Resp: 23906

Ion	Ratio	Lower	Upper
130	100		
95	106.0	83.0	124.4
132	94.7	74.6	112.0
97	70.4	55.3	82.9



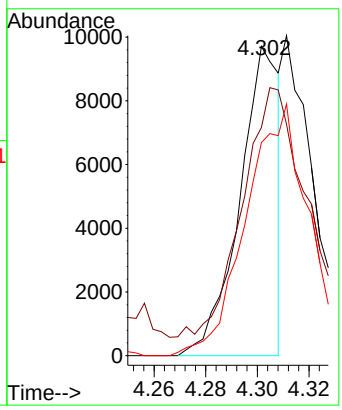


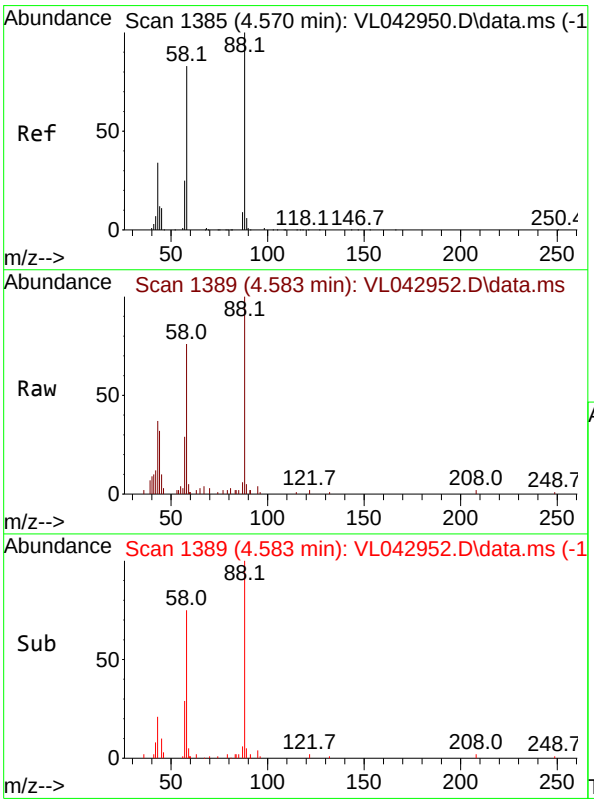
#39
1,2-Dichloropropane
Concen: 0.585 ppbv
RT: 4.302 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 63 Resp: 10275

Ion	Ratio	Lower	Upper
63	100		
41	67.7	57.5	86.3
62	67.8	58.5	87.7

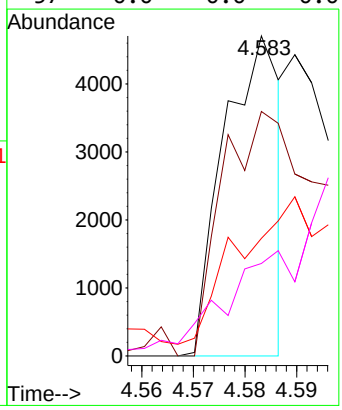


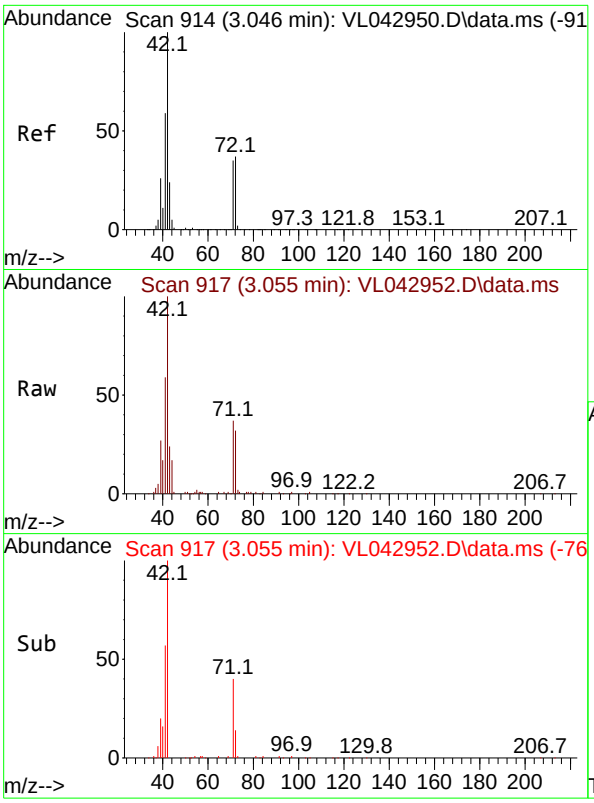


#40
1,4-Dioxane
Concen: 0.439 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.013 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 88 Resp: 3579

Ion	Ratio	Lower	Upper
88	100		
58	188.0	59.7	89.5#
43	23.8	28.9	43.3#
57	0.0	0.0	0.0



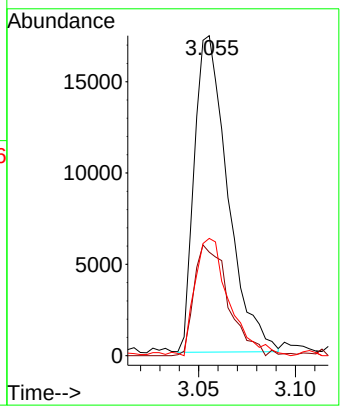


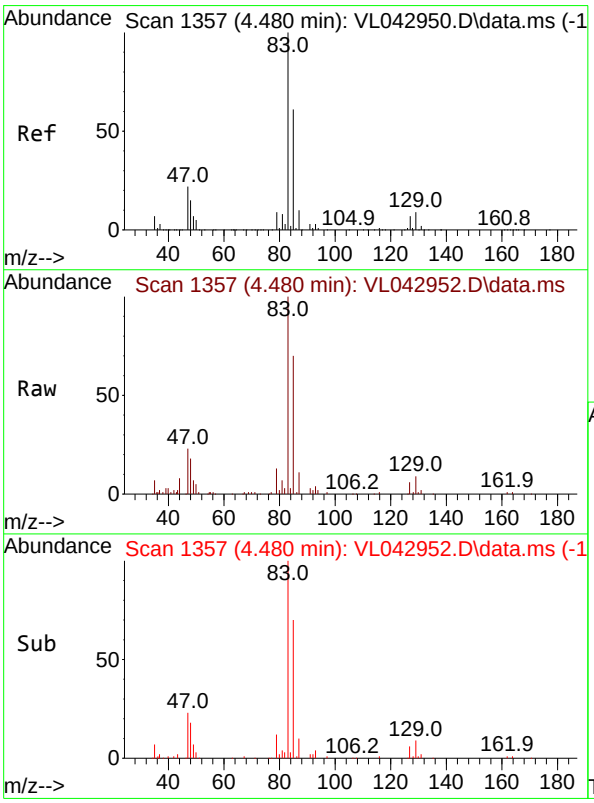
#41
Tetrahydrofuran
Concen: 1.011 ppbv
RT: 3.055 min Scan# 9
Delta R.T. 0.009 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 42 Resp: 20845

Ion	Ratio	Lower	Upper
42	100		
72	37.0	30.0	45.0
71	37.4	28.8	43.2

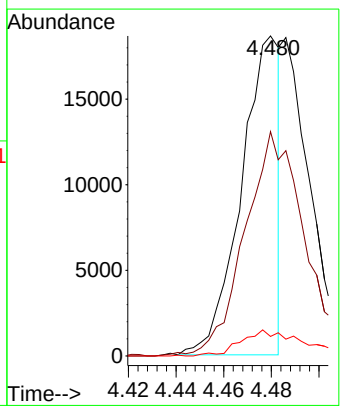


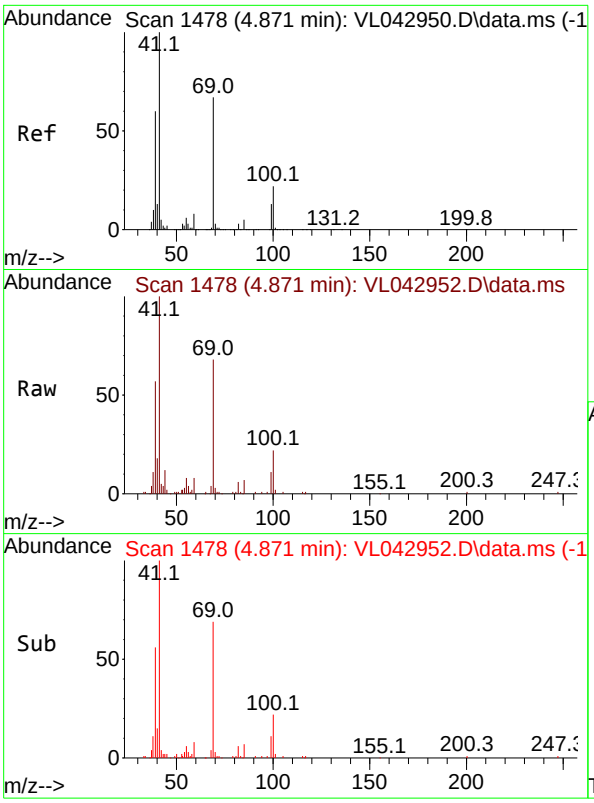


#42
Bromodichloromethane
Concen: 0.592 ppbv
RT: 4.480 min Scan# 1357
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 83 Resp: 20848

Ion	Ratio	Lower	Upper
83	100		
85	69.3	49.0	73.6
127	5.9	5.3	7.9



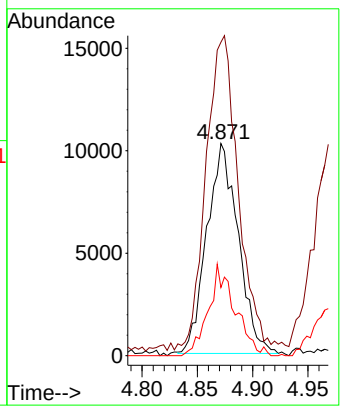


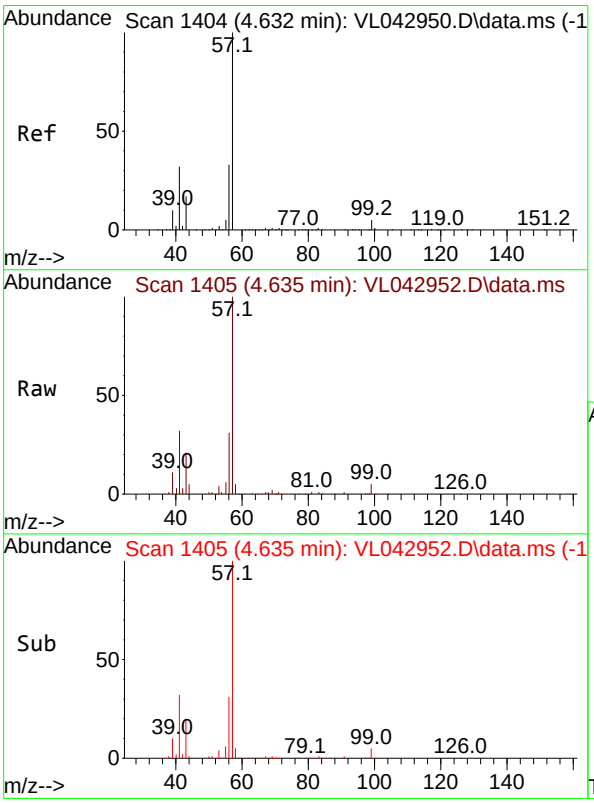
#43
Methyl Methacrylate
Concen: 1.040 ppbv
RT: 4.871 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 69 Resp: 20289

Ion	Ratio	Lower	Upper
69	100		
41	152.1	124.5	186.7
100	36.8	29.0	43.6

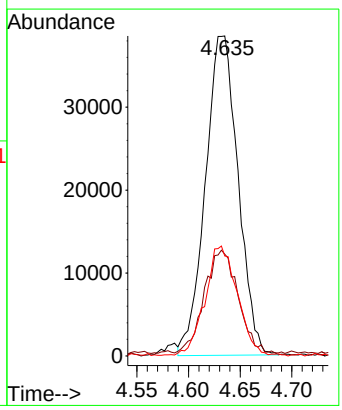


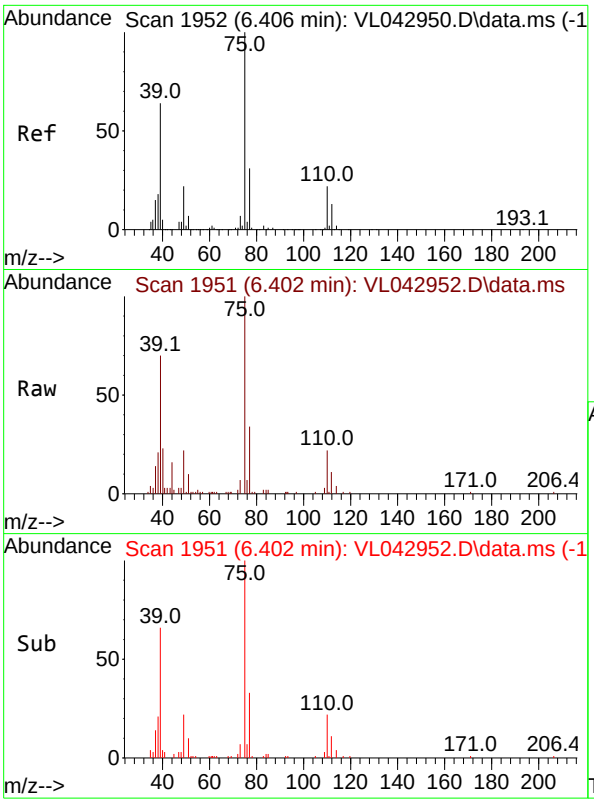


#44
2,2,4-Trimethylpentane
Concen: 1.023 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 57 Resp: 84970

Ion	Ratio	Lower	Upper
57	100		
41	34.1	25.5	38.3
56	34.4	25.8	38.8



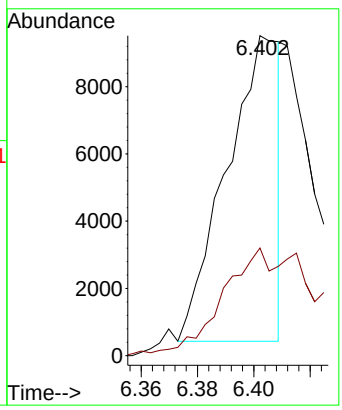


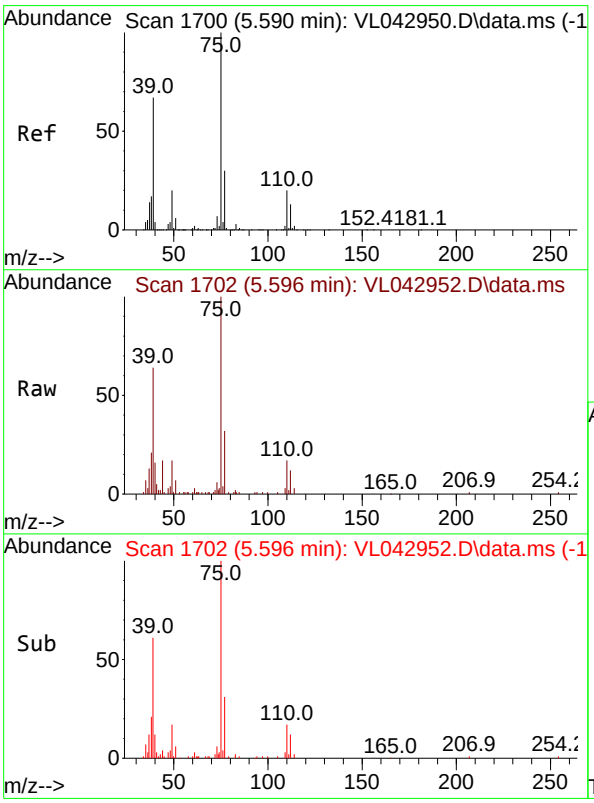
#45
t-1,3-Dichloropropene
Concen: 0.565 ppbv
RT: 6.402 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 75 Resp: 11857

Ion	Ratio	Lower	Upper
75	100		
77	33.7	25.0	37.4

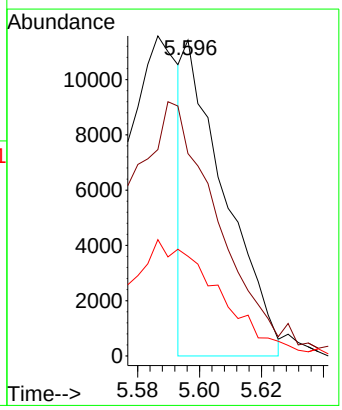


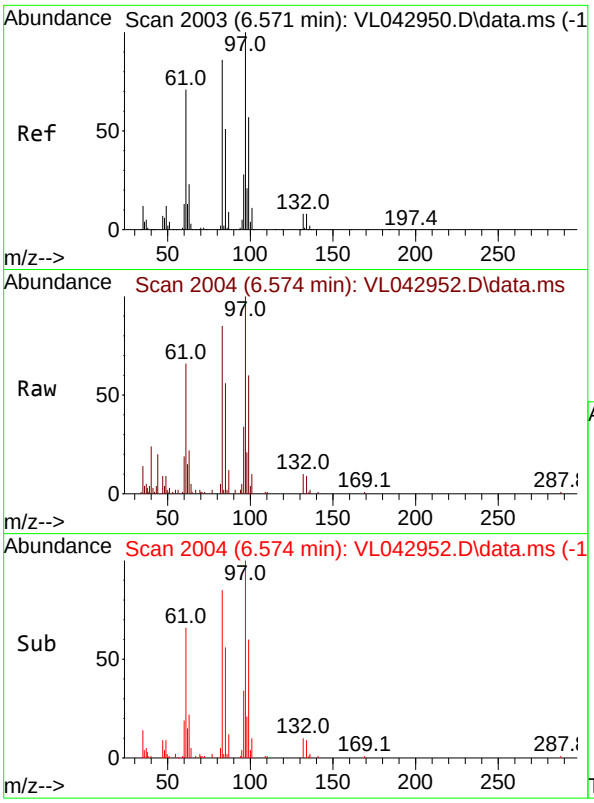


#46
cis-1,3-Dichloropropene
Concen: 0.395 ppbv
RT: 5.596 min Scan# 1702
Delta R.T. 0.006 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 75 Resp: 10544

Ion	Ratio	Lower	Upper
75	100		
39	61.2	53.8	80.6
77	28.4	23.6	35.4



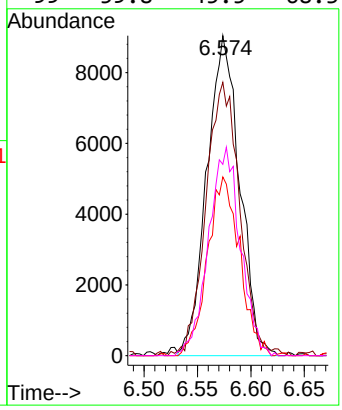


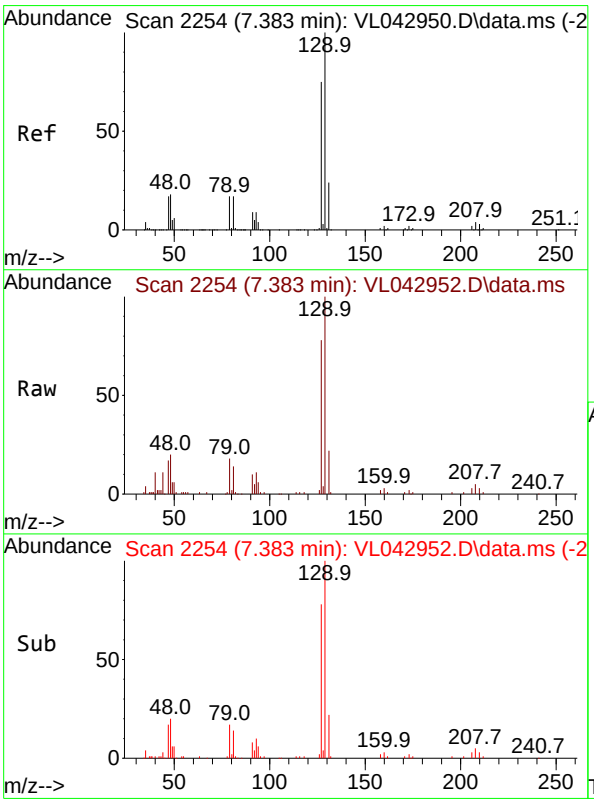
#47
1,1,2-Trichloroethane
Concen: 1.041 ppbv
RT: 6.574 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 97 Resp: 19311

Ion	Ratio	Lower	Upper
97	100		
83	83.9	68.7	103.1
85	55.9	40.6	60.8
99	59.8	45.5	68.3

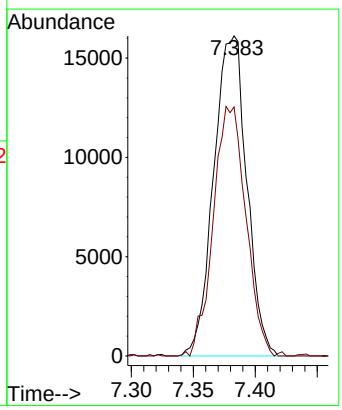


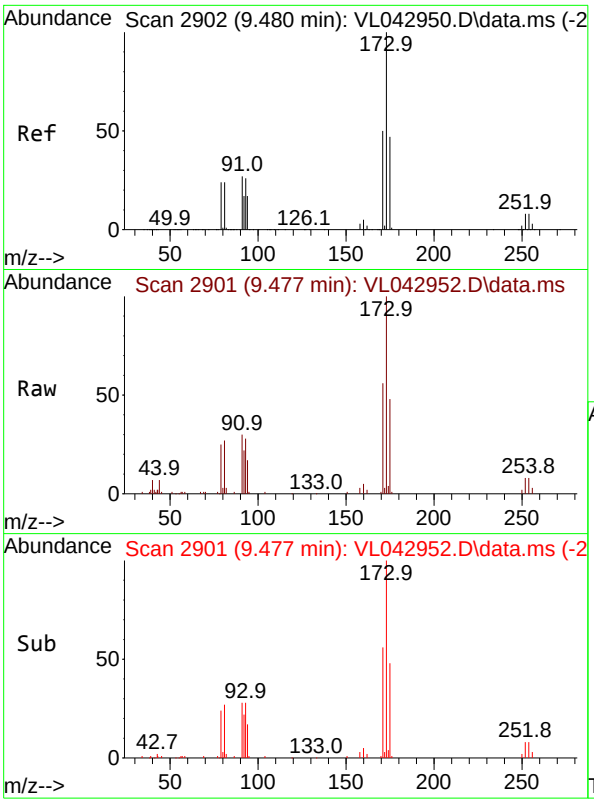


#48
Dibromochloromethane
Concen: 1.012 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:129 Resp: 30015

Ion	Ratio	Lower	Upper
129	100		
127	76.8	39.1	117.2



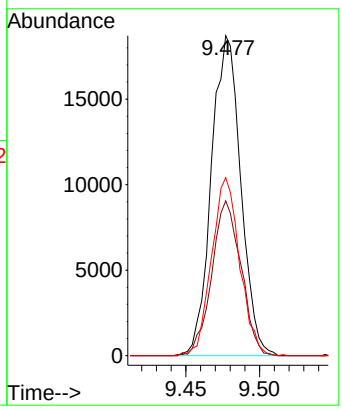


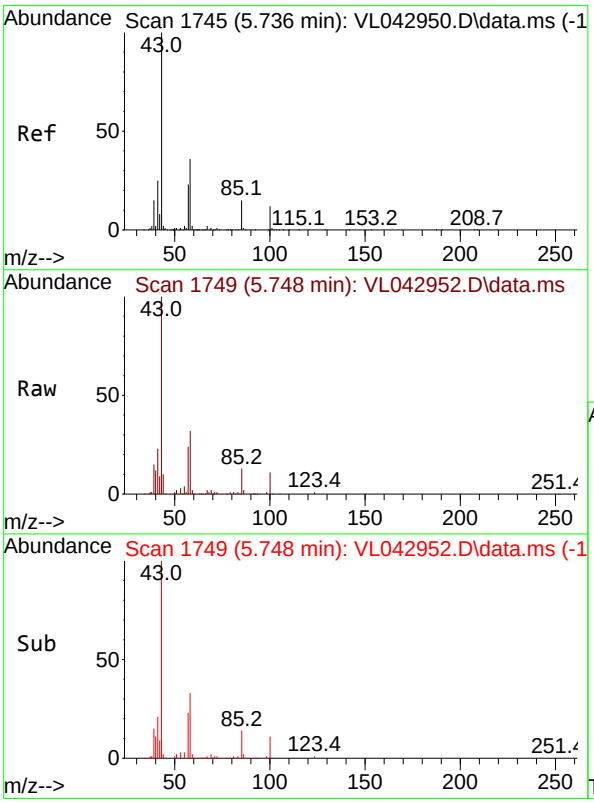
#49
Bromoform
Concen: 1.005 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:173 Resp: 25929

Ion	Ratio	Lower	Upper
173	100		
175	48.2	37.9	56.9
171	53.2	41.1	61.7

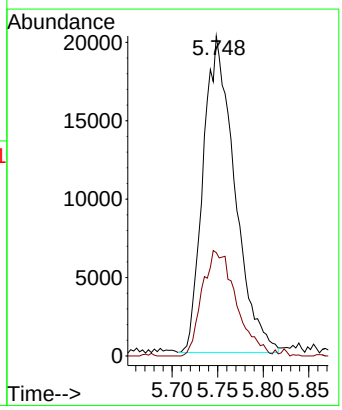


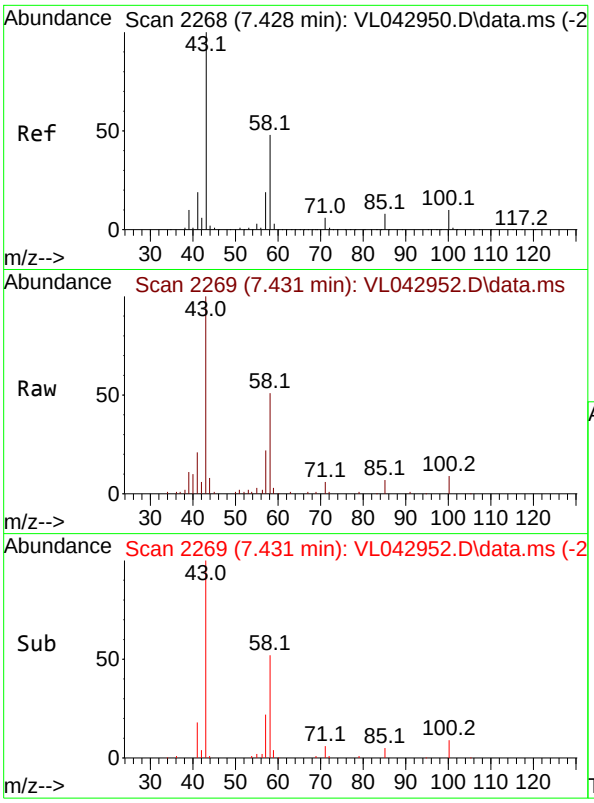


#50
4-Methyl-2-Pentanone
Concen: 1.007 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. 0.013 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 43 Resp: 48546

Ion	Ratio	Lower	Upper
43	100		
58	36.5	28.4	42.6



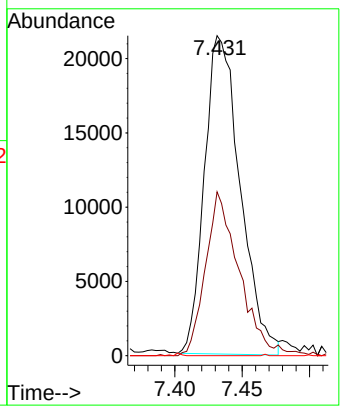


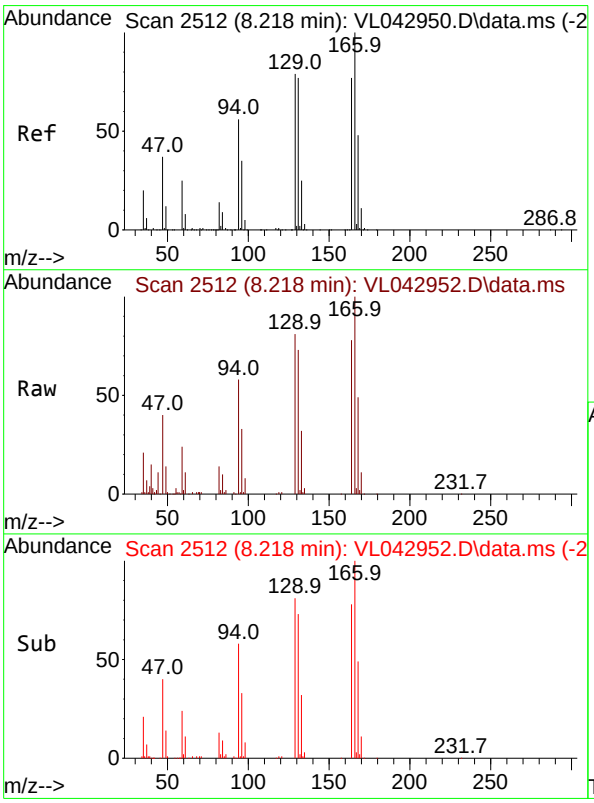
#51
2-Hexanone
Concen: 1.034 ppbv
RT: 7.431 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 39627

Ion	Ratio	Lower	Upper
43	100		
58	48.6	39.7	59.5
98	0.1	0.1	0.1#

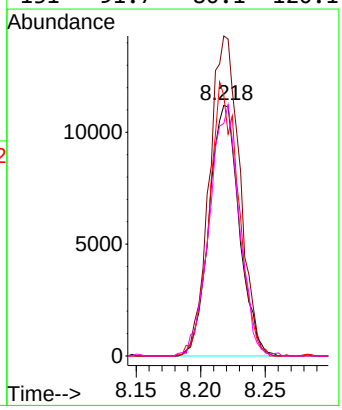


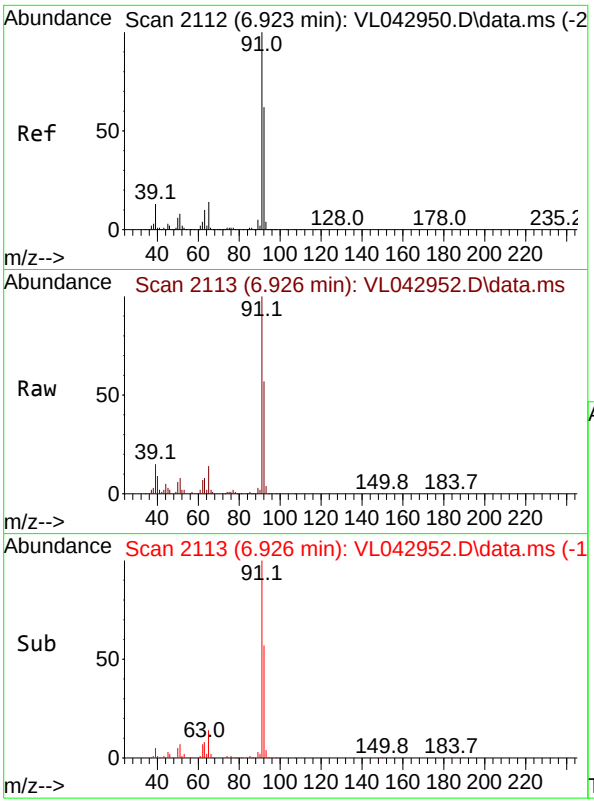


#52
Tetrachloroethene
Concen: 0.978 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:164 Resp: 18188

Ion	Ratio	Lower	Upper
164	100		
166	127.7	103.5	155.3
129	104.0	82.2	123.4
131	91.7	80.1	120.1



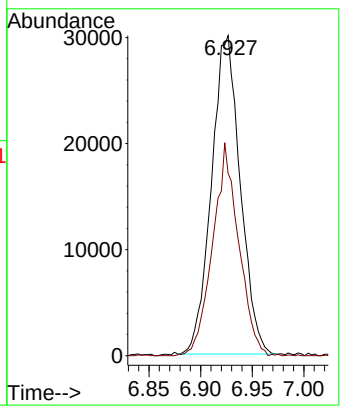


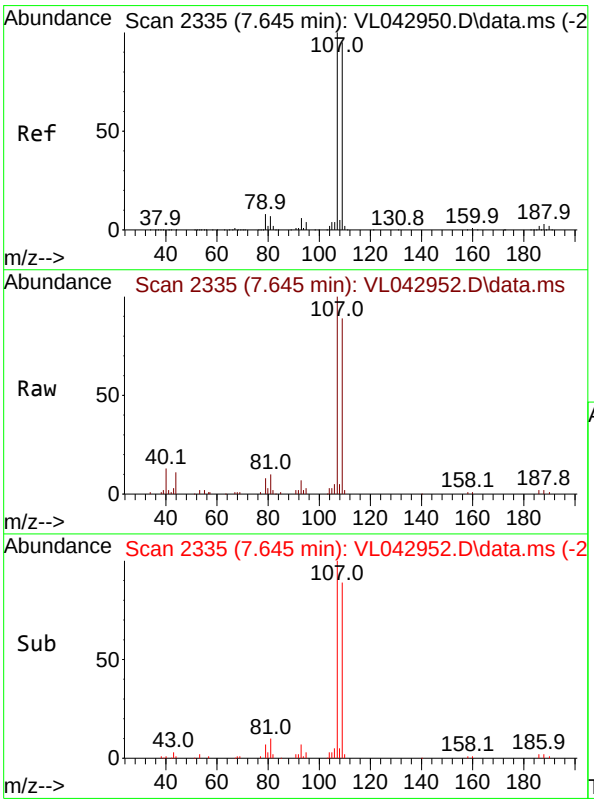
#53
Toluene
Concen: 1.023 ppbv
RT: 6.926 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 58200

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.2	72.2

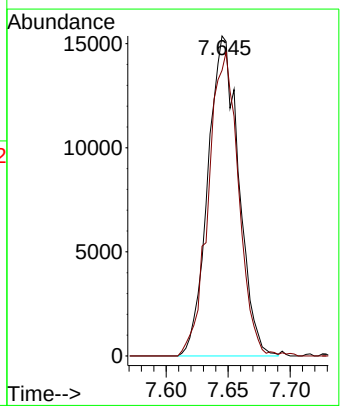


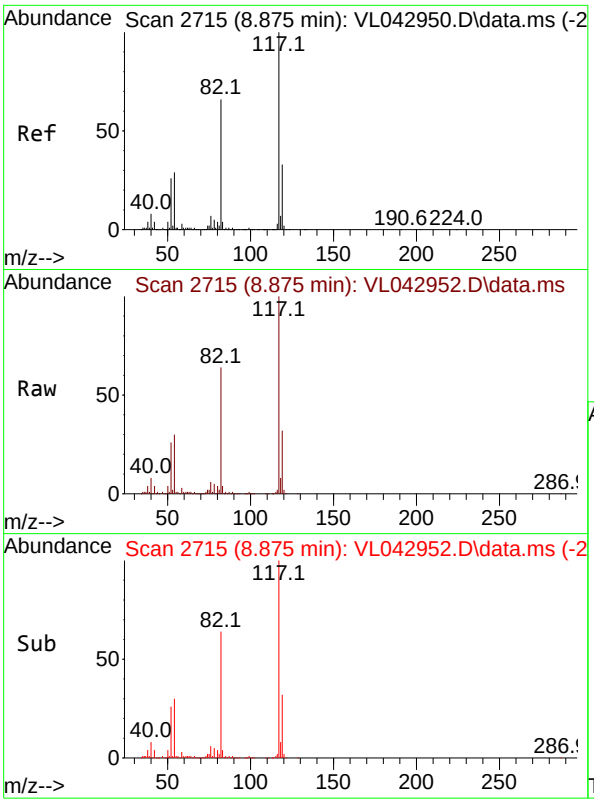


#54
1,2-Dibromoethane
Concen: 1.020 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:107 Resp: 26608

Ion	Ratio	Lower	Upper
107	100		
109	89.3	75.8	113.8



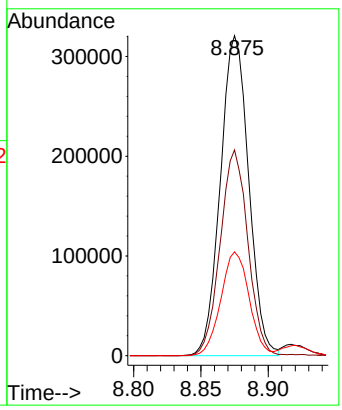


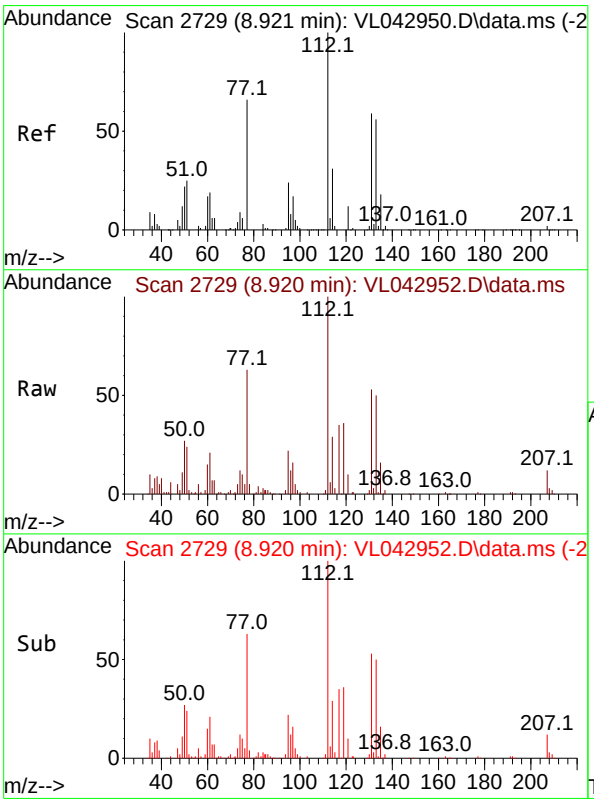
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 469265

Ion	Ratio	Lower	Upper
117	100		
82	63.2	52.8	79.2
119	32.7	26.5	39.7

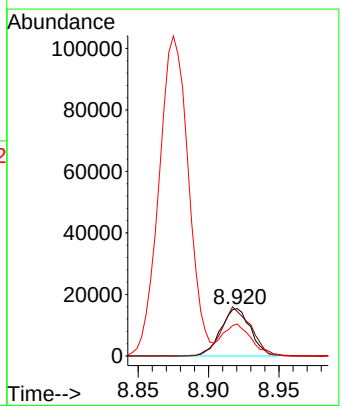


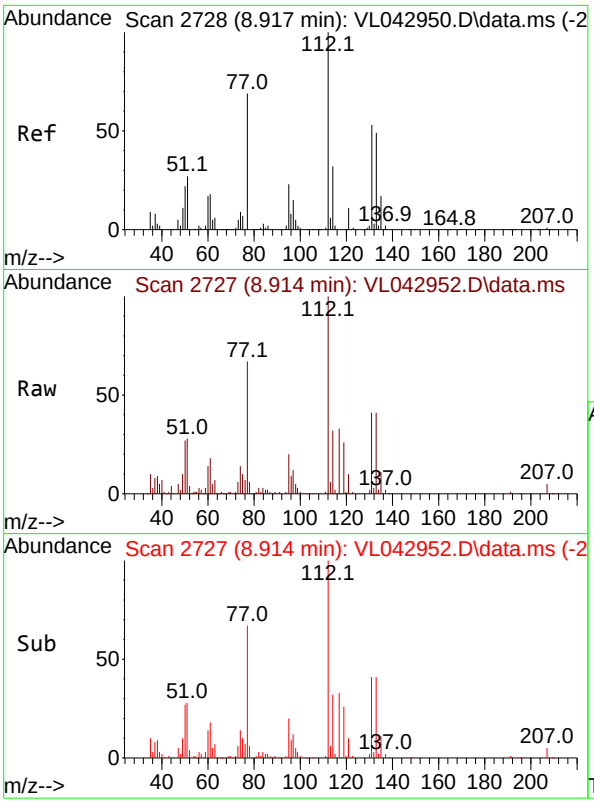


#56
1,1,1,2-Tetrachloroethane
Concen: 1.015 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:131 Resp: 22802

Ion	Ratio	Lower	Upper
131	100		
133	102.8	76.6	114.8
119	58.6	49.9	74.9



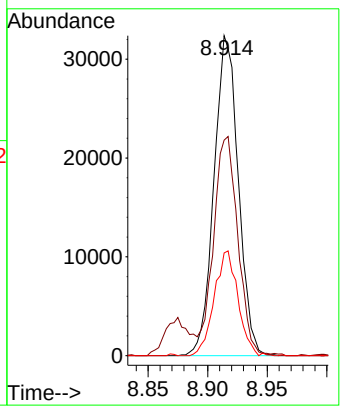


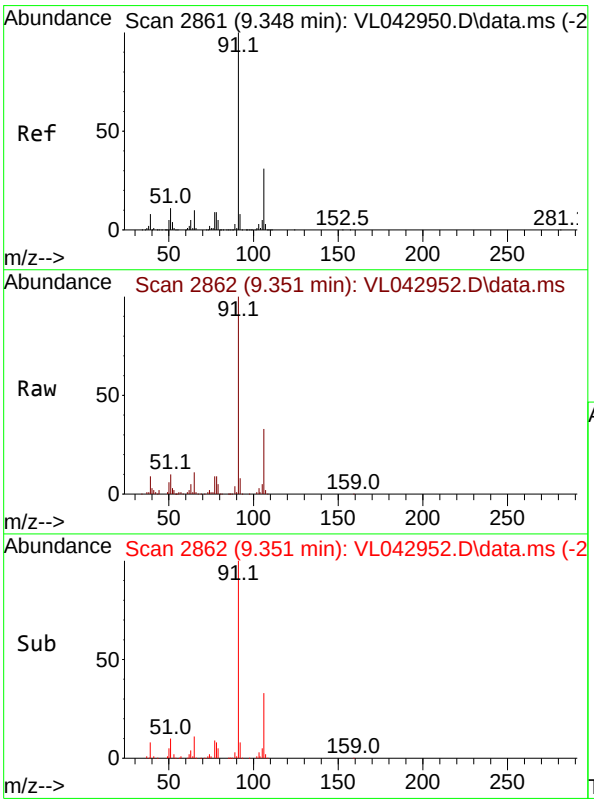
#57
Chlorobenzene
Concen: 1.071 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:112 Resp: 45873

Ion	Ratio	Lower	Upper
112	100		
77	66.9	55.7	83.5
114	32.1	28.6	35.0

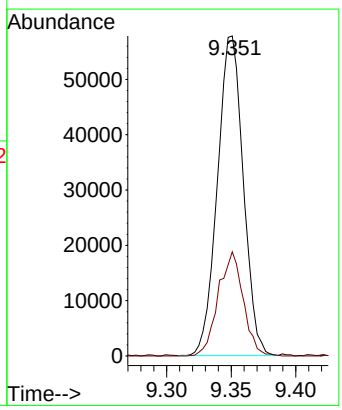


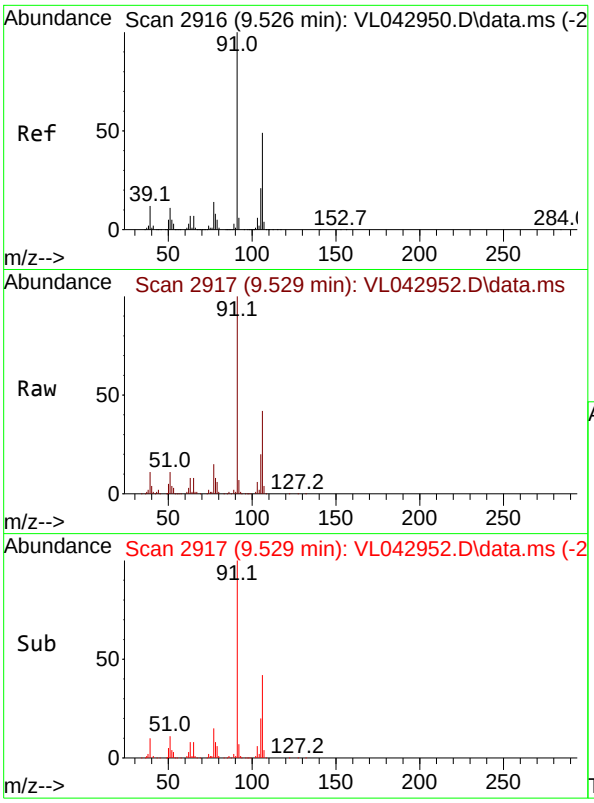


#58
Ethyl Benzene
Concen: 1.044 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 80473

Ion	Ratio	Lower	Upper
91	100		
106	32.6	24.6	37.0



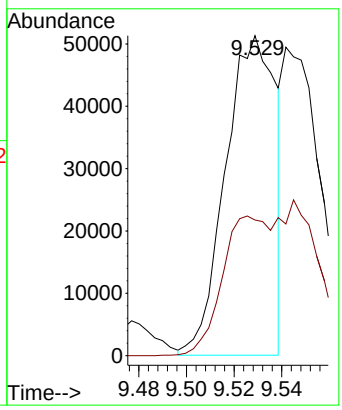


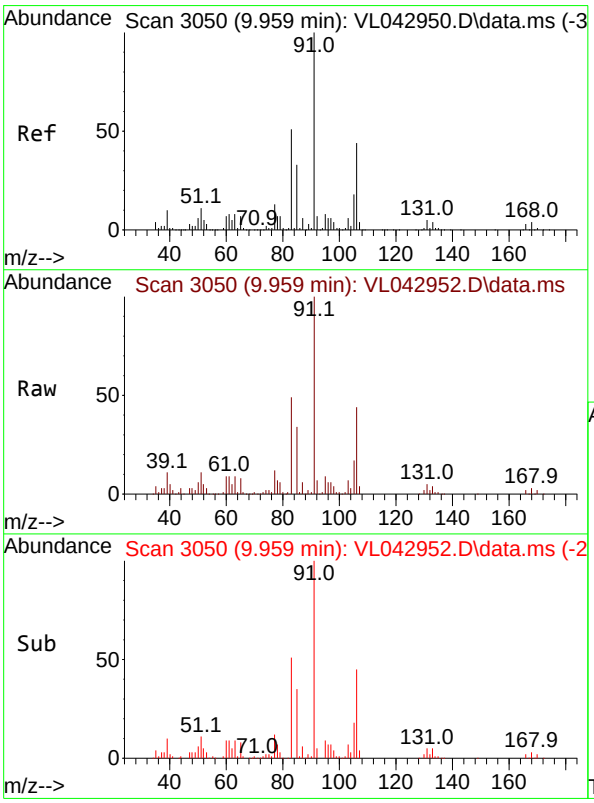
#59
m/p-Xylene
Concen: 1.231 ppbv
RT: 9.529 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 74868

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

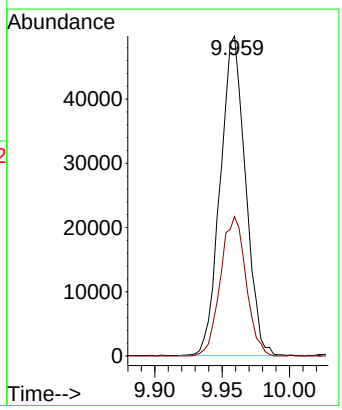


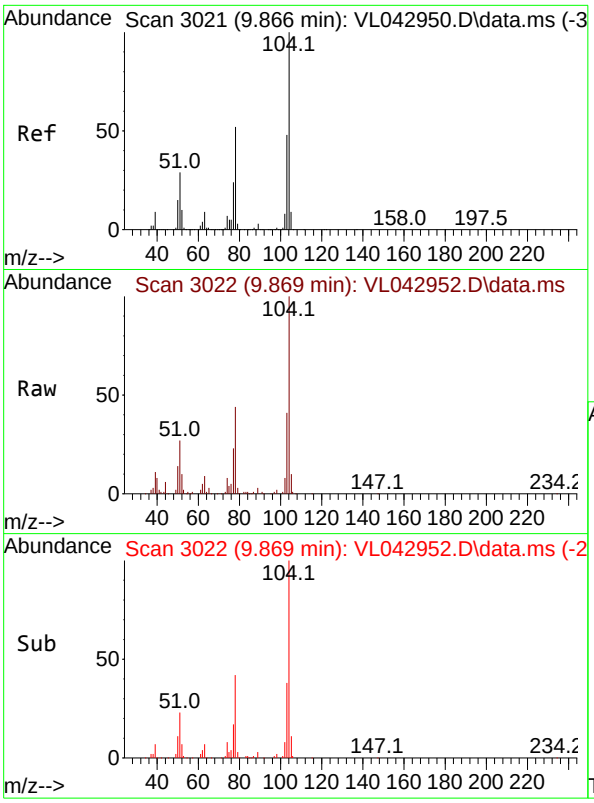


#60
o-Xylene
Concen: 1.066 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 64703

Ion	Ratio	Lower	Upper
91	100		
106	44.2	22.4	67.0



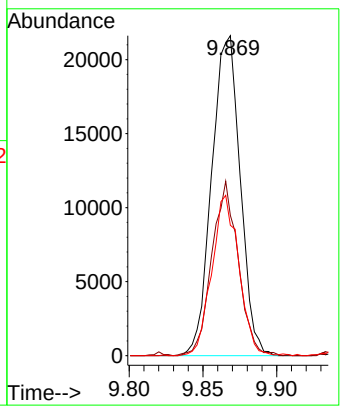


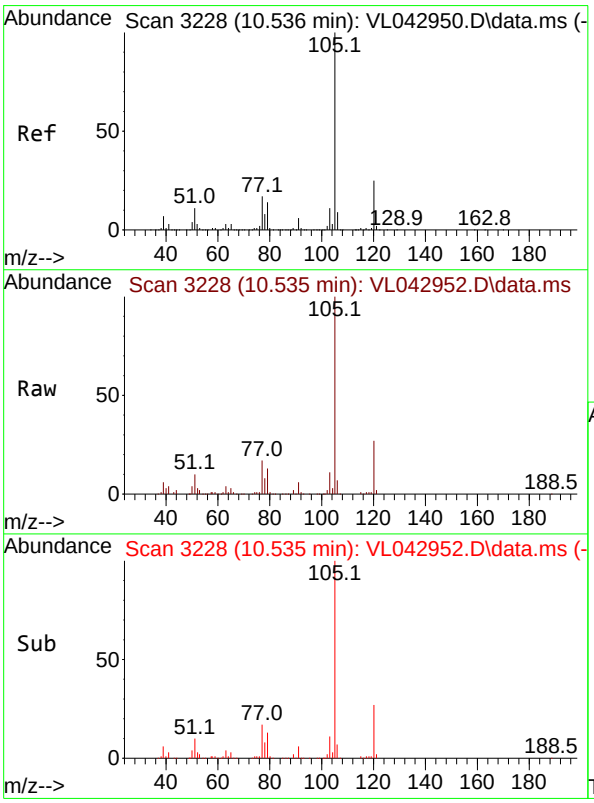
#61
Styrene
Concen: 1.012 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:104 Resp: 29061

Ion	Ratio	Lower	Upper
104	100		
78	50.8	39.9	59.9
103	47.7	36.9	55.3

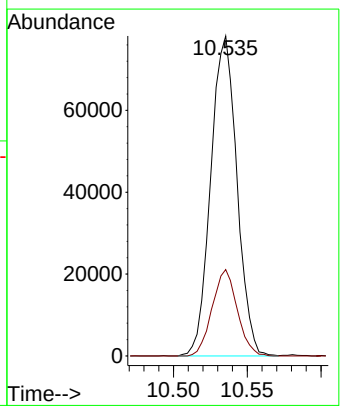


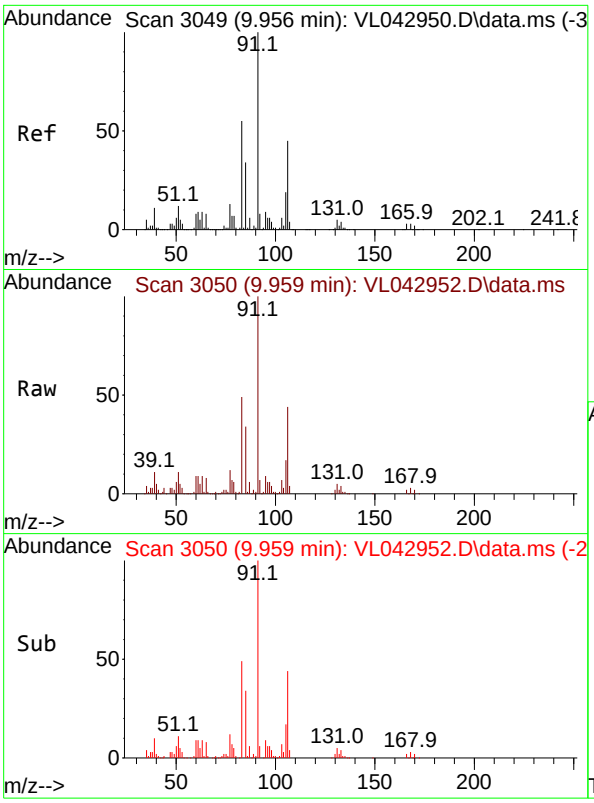


#62
Isopropylbenzene
Concen: 1.068 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 96621

Ion	Ratio	Lower	Upper
105	100		
120	25.8	20.6	30.8



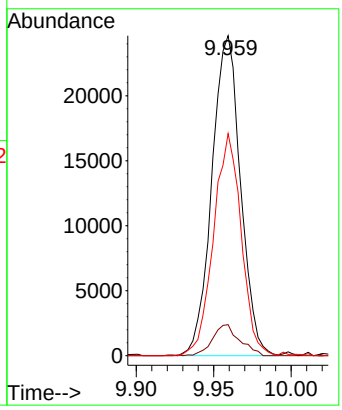


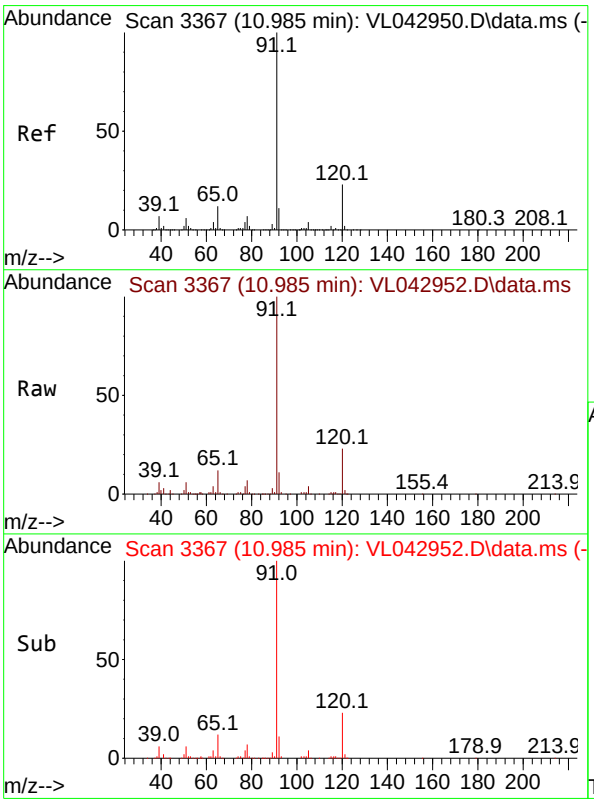
#63
1,1,2,2-Tetrachloroethane
Concen: 0.993 ppbv
RT: 9.959 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 31695

Ion	Ratio	Lower	Upper
83	100		
131	9.2	4.8	14.4
85	67.4	32.2	96.6

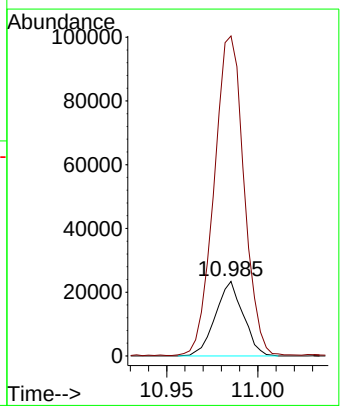


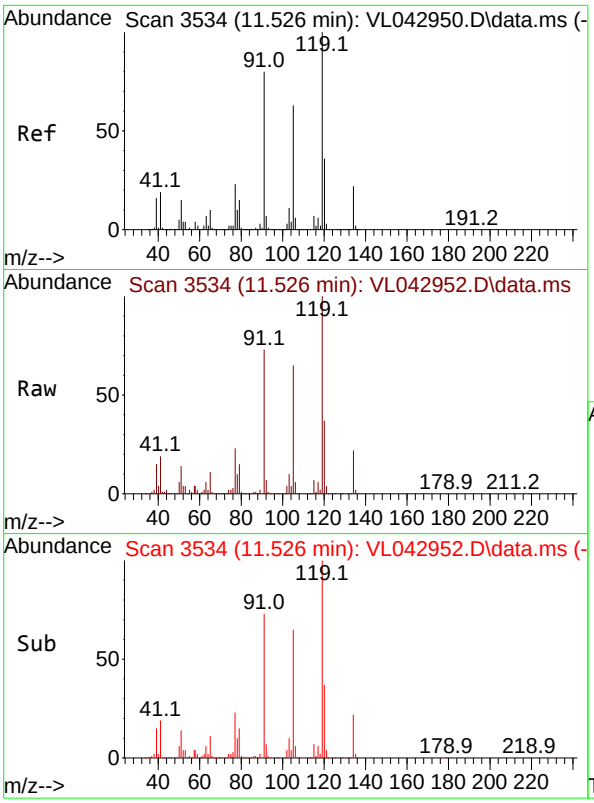


#64
n-propylbenzene
Concen: 1.049 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:120 Resp: 24820

Ion	Ratio	Lower	Upper
120	100		
91	461.0	364.9	547.3



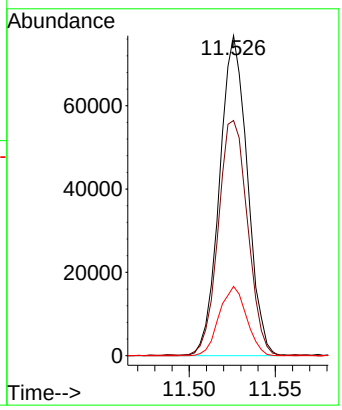


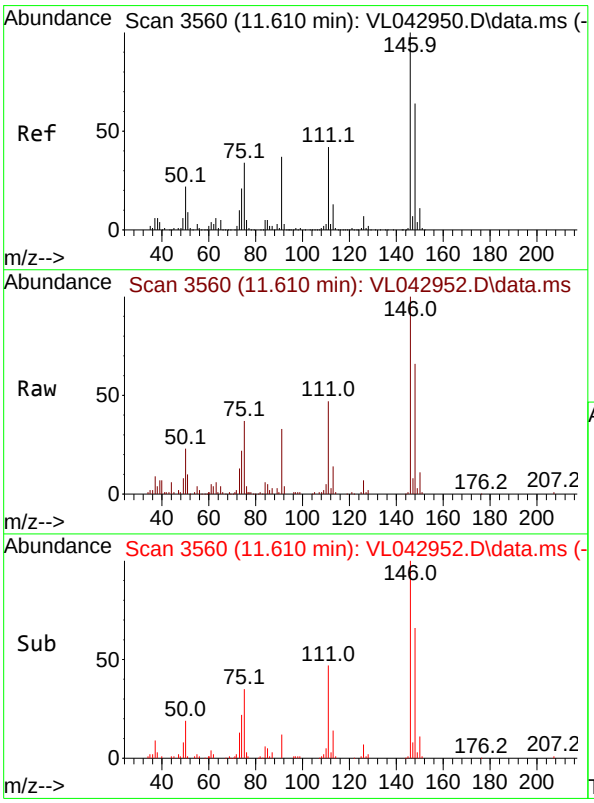
#65
tert-Butylbenzene
Concen: 1.072 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 86303

Ion	Ratio	Lower	Upper
119	100		
91	78.1	63.1	94.7
134	21.2	17.0	25.6

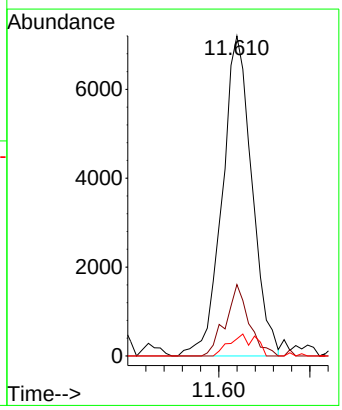


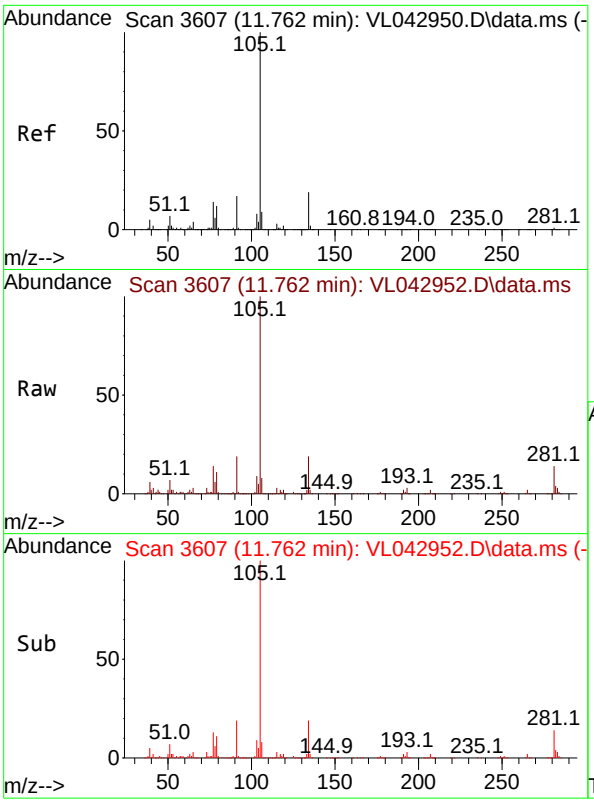


#66
Benzyl Chloride
Concen: 0.964 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 8140

Ion	Ratio	Lower	Upper
91	100		
126	17.9	14.6	21.8
128	6.2	5.0	7.4



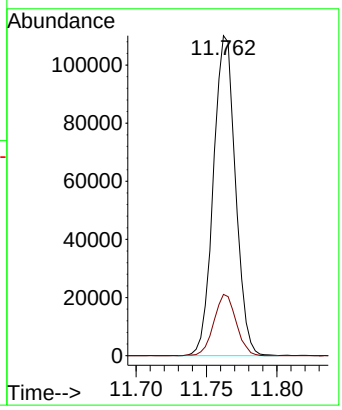


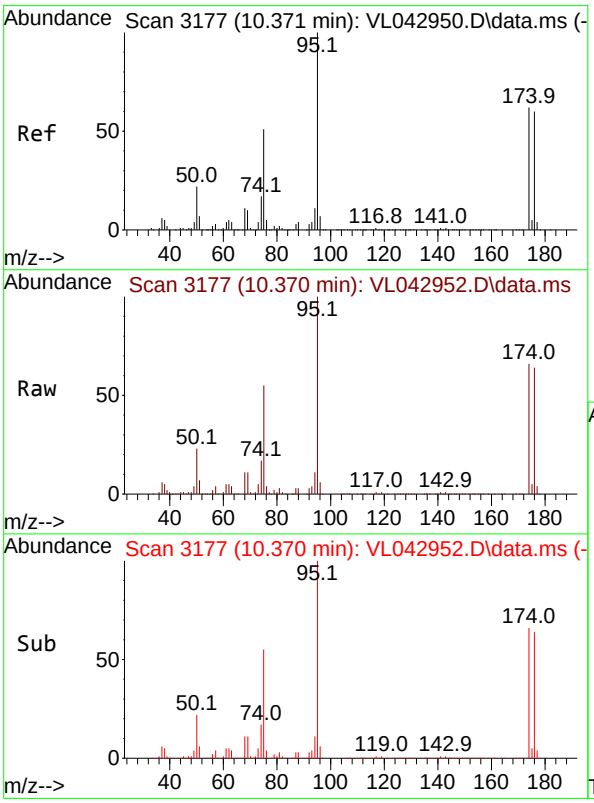
#67
sec-Butylbenzene
Concen: 1.070 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 120070

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.7	23.5

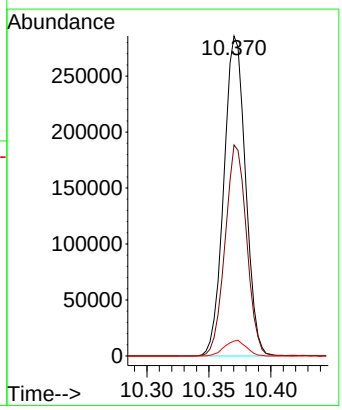


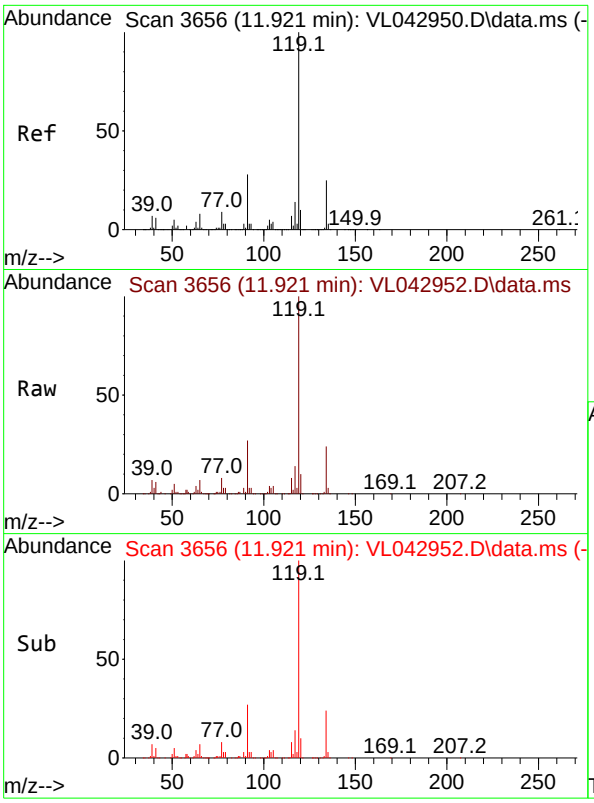


#68
1-Bromo-4-Fluorobenzene
Concen: 9.960 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 95 Resp: 348878

Ion	Ratio	Lower	Upper
95	100		
174	65.3	51.4	77.2
175	4.9	4.0	6.0



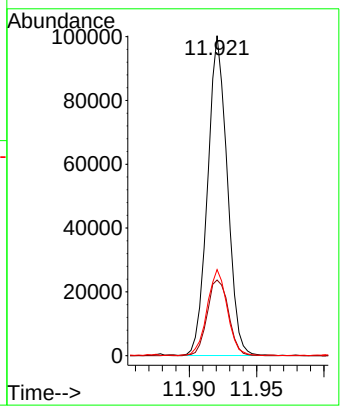


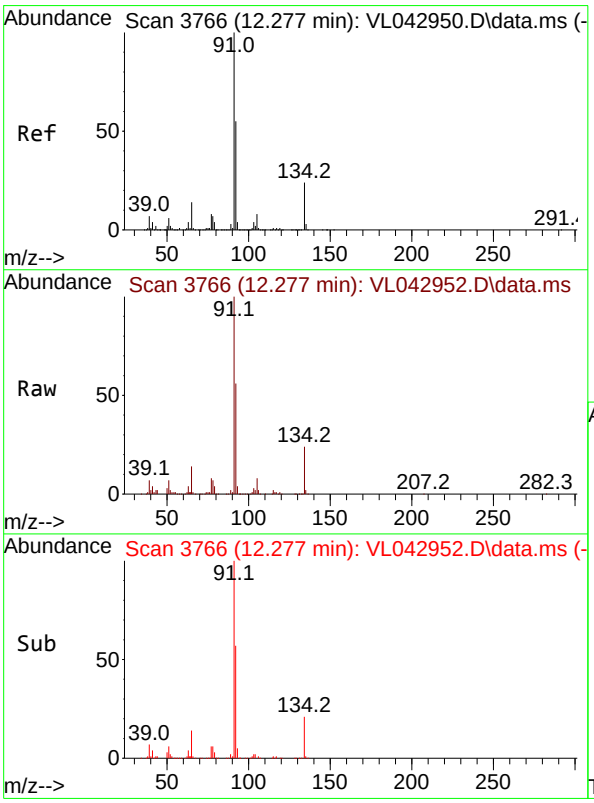
#69
p-Isopropyltoluene
Concen: 1.074 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 101749

Ion	Ratio	Lower	Upper
119	100		
134	25.8	21.0	31.4
91	28.3	22.3	33.5

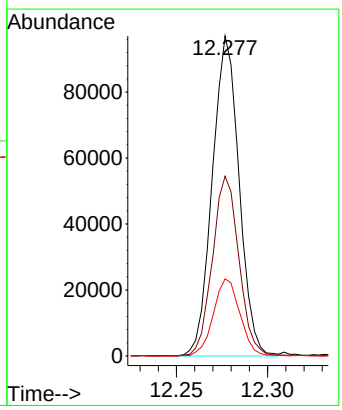


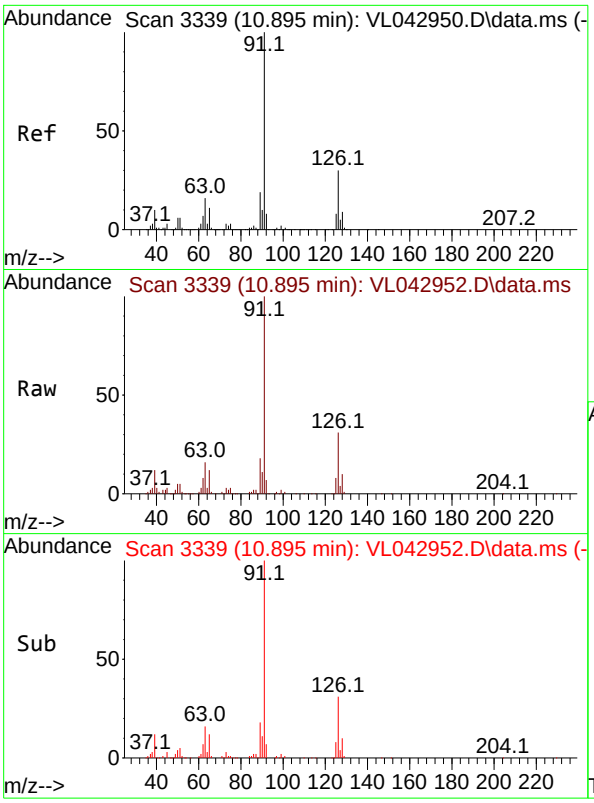


#70
n-Butylbenzene
Concen: 1.069 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion: 91 Resp: 98908

Ion	Ratio	Lower	Upper
91	100		
92	56.0	44.0	66.0
134	24.0	19.4	29.2



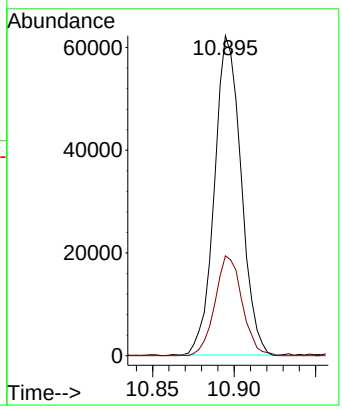


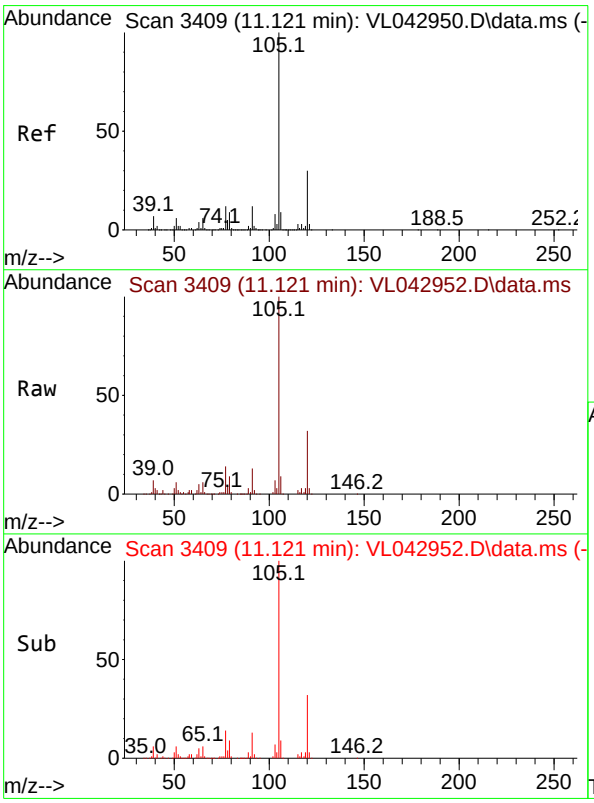
#71
2-Chlorotoluene
Concen: 1.033 ppbv
RT: 10.895 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 70577

Ion	Ratio	Lower	Upper
91	100		
126	31.8	12.3	49.3

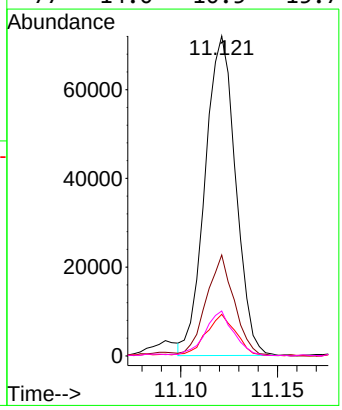


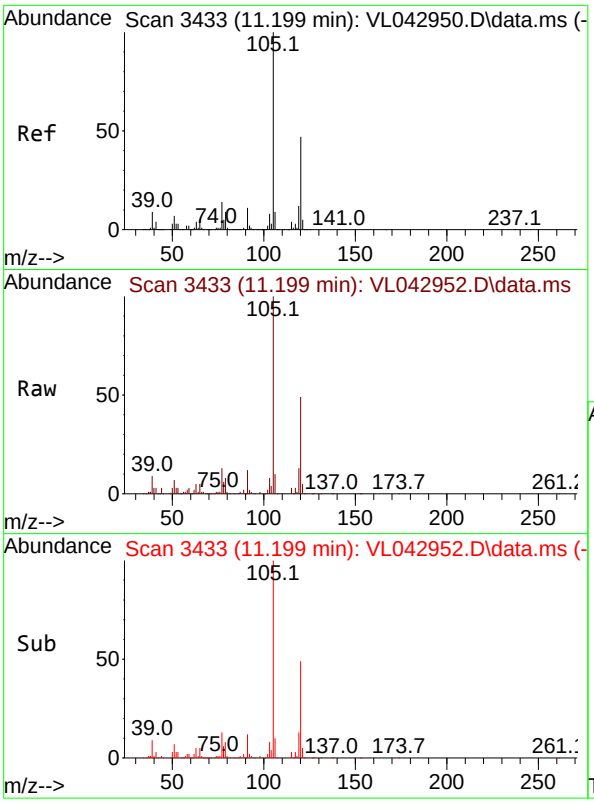


#72
4-Ethyltoluene
Concen: 1.040 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 79095

Ion	Ratio	Lower	Upper
105	100		
120	30.3	24.2	36.2
91	13.3	10.0	15.0
77	14.0	10.5	15.7



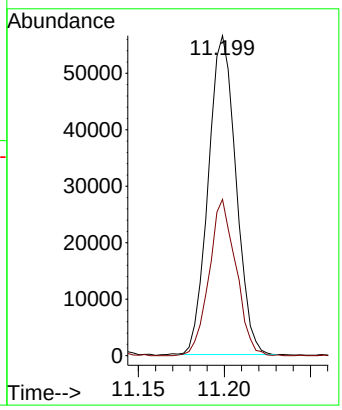


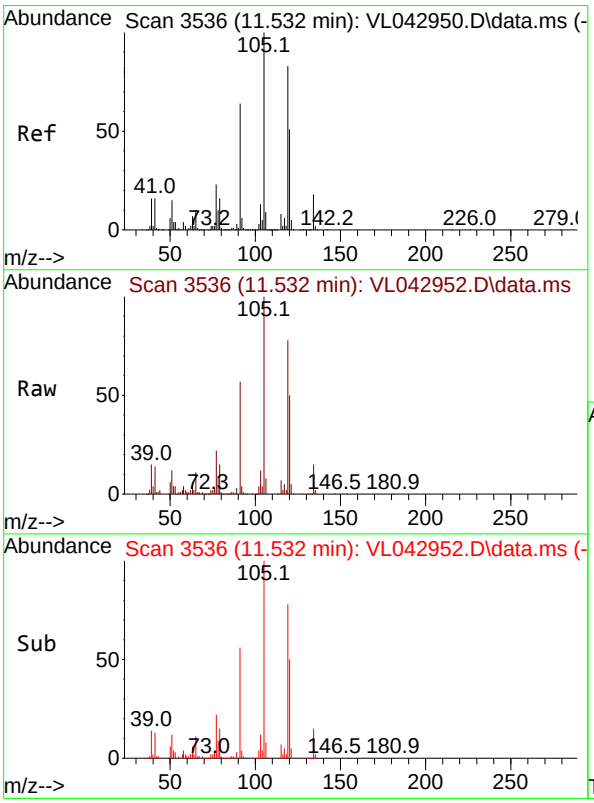
#73
1,3,5-Trimethylbenzene
Concen: 1.024 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 63174

Ion	Ratio	Lower	Upper
105	100		
120	48.8	38.0	57.0

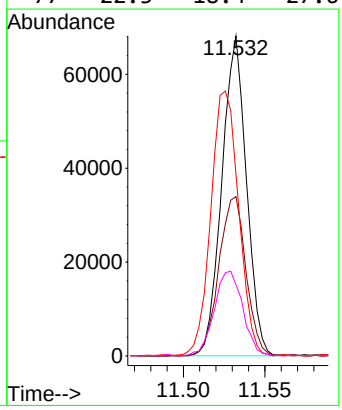


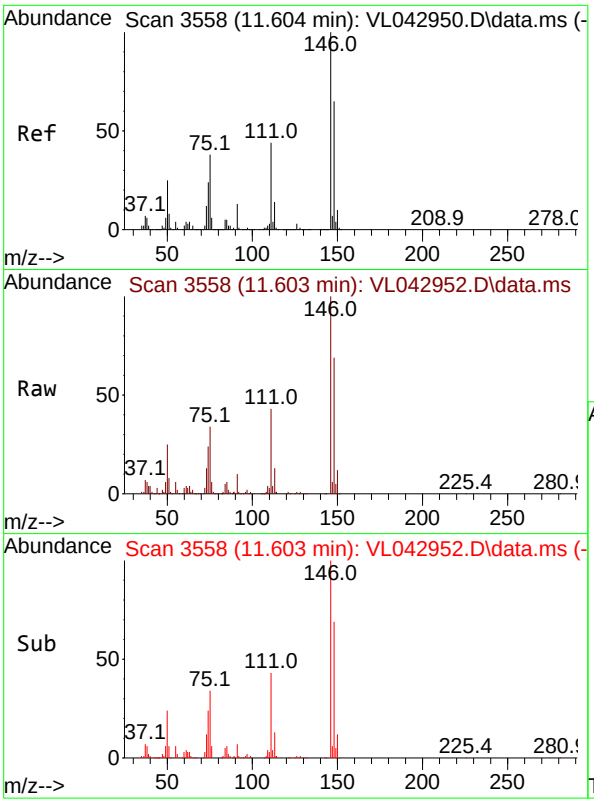


#74
1,2,4-Trimethylbenzene
Concen: 1.049 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:105 Resp: 71411

Ion	Ratio	Lower	Upper
105	100		
120	49.9	40.9	61.3
91	56.6	51.2	76.8
77	22.3	18.4	27.6



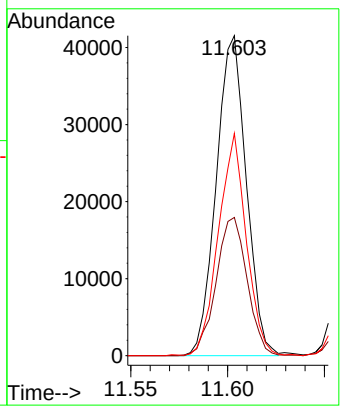


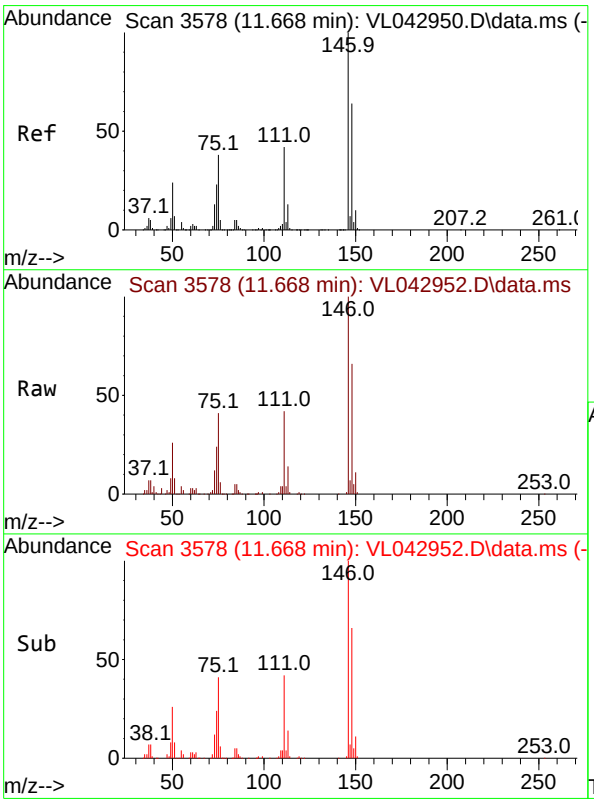
#75
1,3-Dichlorobenzene
Concen: 1.060 ppbv
RT: 11.603 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 44769

Ion	Ratio	Lower	Upper
146	100		
111	44.6	22.3	66.9
148	64.7	31.9	95.5

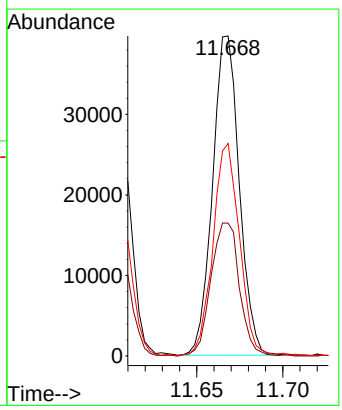


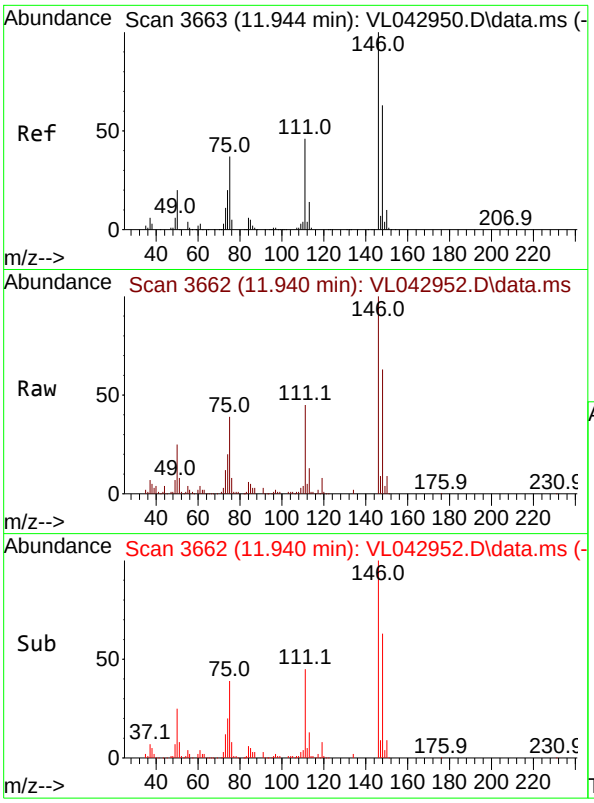


#76
1,4-Dichlorobenzene
Concen: 1.022 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:146 Resp: 42879

Ion	Ratio	Lower	Upper
146	100		
111	44.5	21.5	64.5
148	66.4	31.9	95.5



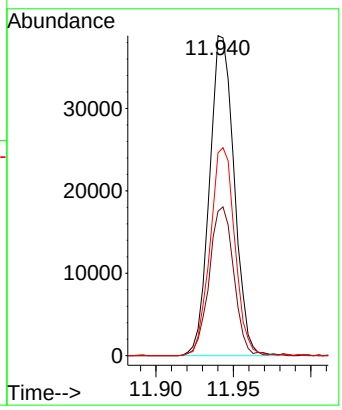


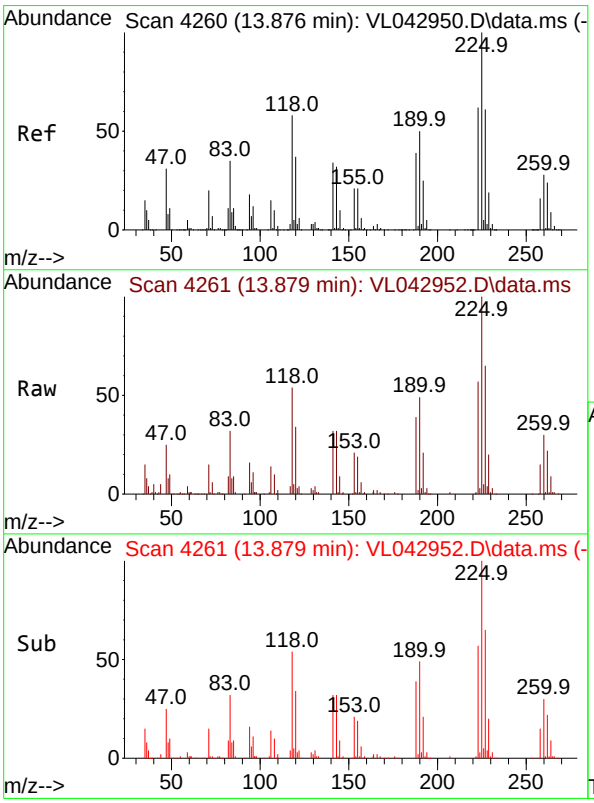
#77
1,2-Dichlorobenzene
Concen: 1.068 ppbv
RT: 11.940 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 42911

Ion	Ratio	Lower	Upper
146	100		
111	46.6	23.1	69.3
148	65.9	32.0	96.0

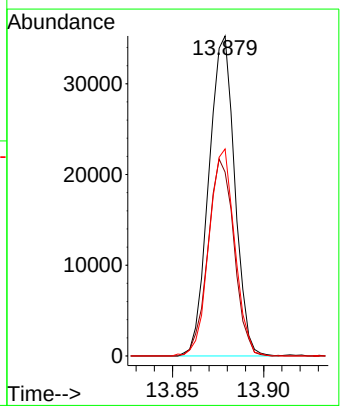


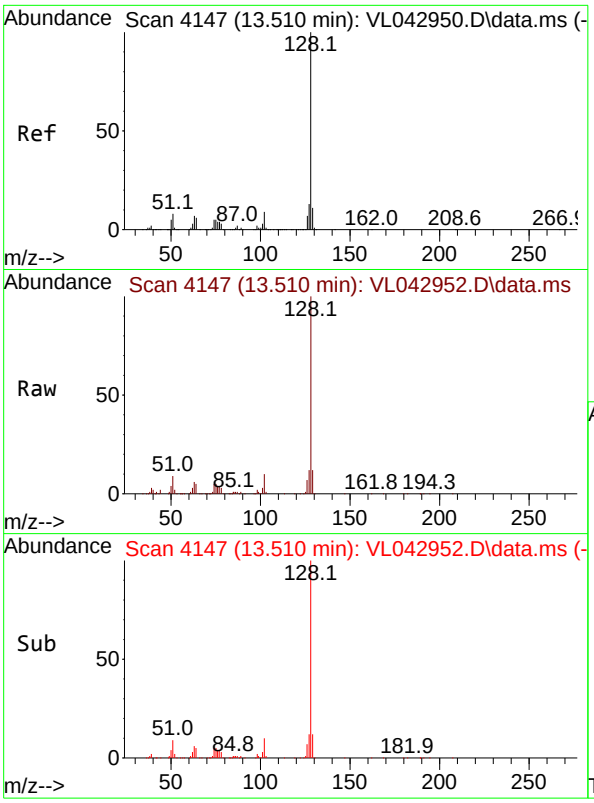


#78
Hexachloro-1,3-Butadiene
Concen: 1.107 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:225 Resp: 34798

Ion	Ratio	Lower	Upper
225	100		
223	62.0	50.1	75.1
227	64.0	50.4	75.6



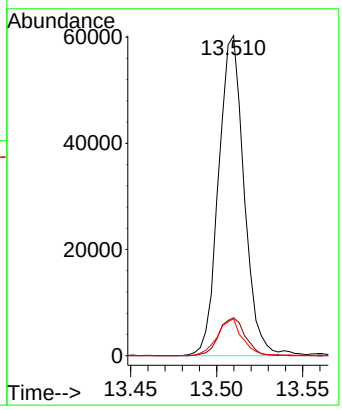


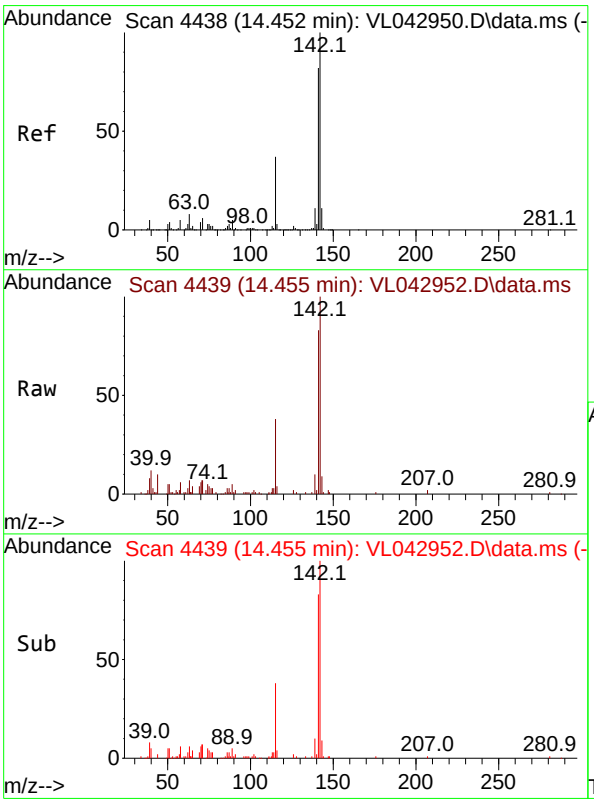
#79
Naphthalene
Concen: 1.028 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:128 Resp: 61925

Ion	Ratio	Lower	Upper
128	100		
127	11.8	10.6	15.8
129	11.6	9.0	13.6

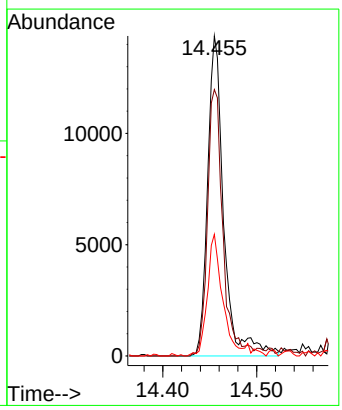


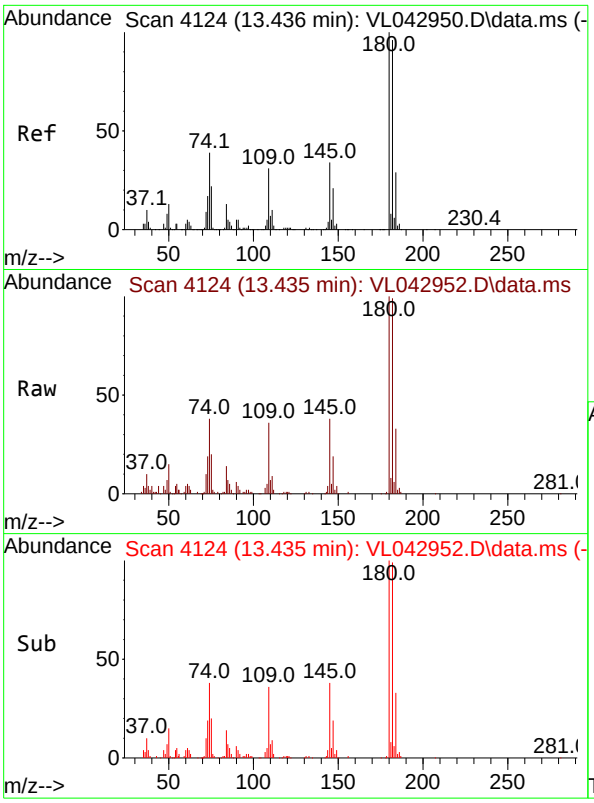


#80
Naphthalene,2-methyl-
Concen: 0.920 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.003 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Tgt Ion:142 Resp: 17116

Ion	Ratio	Lower	Upper
142	100		
141	83.8	65.1	97.7
115	38.5	28.9	43.3



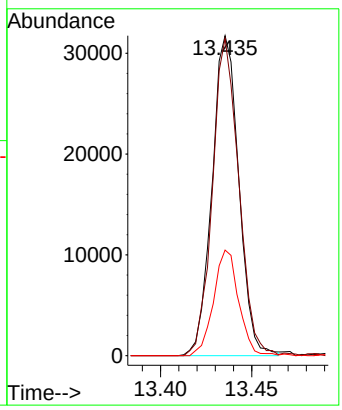


#81
1,2,4-Trichlorobenzene
Concen: 1.007 ppbv
RT: 13.435 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042952.D
Acq: 22 Sep 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:180 Resp: 32411

Ion	Ratio	Lower	Upper
180	100		
182	98.0	75.7	113.5
184	31.2	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042953.D
Acq On : 22 Sep 2025 11:22
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Sep 23 02:11:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	165435	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	509306	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	464091	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	347374	10.027	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	11508	0.517	ppbv	96
3) Chlorodifluoromethane	1.476	51	14744	0.532	ppbv #	90
4) Chloromethane	1.534	50	5729	0.569	ppbv	97
5) Vinyl Chloride	1.580	62	4373	0.480	ppbv	93
6) Bromomethane	1.667	94	1850	0.576	ppbv	100
7) Chloroethane	1.703	64	1936	0.548	ppbv #	87
8) Dichlorotetrafluoroethane	1.554	85	10149	0.534	ppbv	96
9) Propene	1.483	41	6482	0.537	ppbv	94
10) Heptane	4.978	43	12067	0.373	ppbv #	67
11) Trichlorofluoromethane	1.877	101	11200	0.522	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.140	101	9346	0.538	ppbv	100
13) Ethanol	1.887	45	7431	6.426	ppbv #	54
14) Bromoethene	1.784	108	3553	0.541	ppbv #	84
15) Acetone	1.835	43	12326	0.572	ppbv #	86
16) 1,3-Butadiene	1.609	39	6215	0.611	ppbv #	82
17) tert-Butyl alcohol	2.043	59	13128	0.555	ppbv #	77
18) 1,1-Dichloroethene	2.033	96	4543	0.565	ppbv	93
19) Isopropyl Alcohol	1.887	45	7431	0.574	ppbv #	46
20) Methylene Chloride	2.062	84	6881	0.430	ppbv	87
21) Allyl Chloride	2.098	41	7481	0.499	ppbv #	69
22) trans-1,2-Dichloroethene	2.719	96	7704	0.843	ppbv	89
23) Vinyl Acetate	2.460	43	18264	0.593	ppbv #	95
24) 1,1-Dichloroethane	2.408	63	9484	0.529	ppbv #	98
25) Ethyl Acetate	2.836	43	28162	0.517	ppbv #	95
26) Hexane	2.823	57	13406	0.540	ppbv	98
27) Carbon Disulfide	2.149	76	11535	0.518	ppbv #	1
28) Methyl tert-Butyl Ether	2.441	73	7886	0.611	ppbv #	65
29) Chloroform	2.845	83	17188	0.530	ppbv	100
30) Cyclohexane	3.855	84	10856	0.523	ppbv	93
31) cis-1,2-Dichloroethene	2.719	61	11939	0.513	ppbv	99
32) 1,1,1-Trichloroethane	3.366	97	16684	0.474	ppbv	96
34) 2-Butanone	2.557	43	18948	0.531	ppbv	96
35) Carbon Tetrachloride	3.761	117	16799	0.513	ppbv	94
36) Benzene	3.654	78	24807	0.519	ppbv #	95
37) 1,2-Dichloroethane	3.217	62	12788	0.508	ppbv	100
38) Trichloroethene	4.544	130	12243	0.515	ppbv #	88
39) 1,2-Dichloropropane	4.315	63	8772	0.502	ppbv #	86
40) 1,4-Dioxane	4.593	88	1641	0.202	ppbv #	1
41) Tetrahydrofuran	3.059	42	10871	0.530	ppbv	95
42) Bromodichloromethane	4.486	83	17552	0.501	ppbv	96
43) Methyl Methacrylate	4.881	69	7252	0.374	ppbv #	56
44) 2,2,4-Trimethylpentane	4.642	57	17345	0.210	ppbv #	10
45) t-1,3-Dichloropropene	6.409	75	5766	0.276	ppbv	97

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042953.D
Acq On : 22 Sep 2025 11:22
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Sep 23 02:11:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	10078	0.379	ppbv		98
47) 1,1,2-Trichloroethane	6.580	97	5868	0.318	ppbv	#	91
48) Dibromochloromethane	7.383	129	14563	0.493	ppbv		99
49) Bromoform	9.480	173	12136	0.473	ppbv		97
50) 4-Methyl-2-Pentanone	5.761	43	23639	0.493	ppbv		95
51) 2-Hexanone	7.441	43	18322	0.480	ppbv	#	97
52) Tetrachloroethene	8.228	164	4214	0.228	ppbv		94
53) Toluene	6.927	91	29404	0.519	ppbv		99
54) 1,2-Dibromoethane	7.648	107	13233	0.510	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.924	131	11535	0.519	ppbv	#	1
57) Chlorobenzene	8.920	112	22463	0.530	ppbv		91
58) Ethyl Benzene	9.351	91	38459	0.505	ppbv		96
59) m/p-Xylene	9.526	91	18667	0.310	ppbv	#	100
60) o-Xylene	9.959	91	30976	0.516	ppbv		98
61) Styrene	9.865	104	14048	0.495	ppbv		98
62) Isopropylbenzene	10.535	105	46640	0.521	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	15974	0.506	ppbv		97
64) n-propylbenzene	10.985	120	12333	0.527	ppbv		100
65) tert-Butylbenzene	11.529	119	42595	0.535	ppbv		99
66) Benzyl Chloride	11.613	91	3022	0.362	ppbv	#	96
67) sec-Butylbenzene	11.765	105	58190	0.525	ppbv		99
69) p-Isopropyltoluene	11.924	119	48855	0.521	ppbv		100
70) n-Butylbenzene	12.280	91	44764	0.489	ppbv		100
71) 2-Chlorotoluene	10.898	91	35797	0.530	ppbv		96
72) 4-Ethyltoluene	11.125	105	39803	0.529	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	30932	0.507	ppbv		96
74) 1,2,4-Trimethylbenzene	11.532	105	35601	0.529	ppbv		97
75) 1,3-Dichlorobenzene	11.607	146	21307	0.510	ppbv		98
76) 1,4-Dichlorobenzene	11.668	146	21404	0.516	ppbv		98
77) 1,2-Dichlorobenzene	11.943	146	20279	0.510	ppbv		95
78) Hexachloro-1,3-Butadiene	13.879	225	17515	0.563	ppbv		98
79) Naphthalene	13.510	128	25577	0.429	ppbv		97
80) Naphthalene,2-methyl-	14.458	142	8906	0.484	ppbv		92
81) 1,2,4-Trichlorobenzene	13.439	180	12920	0.406	ppbv		98

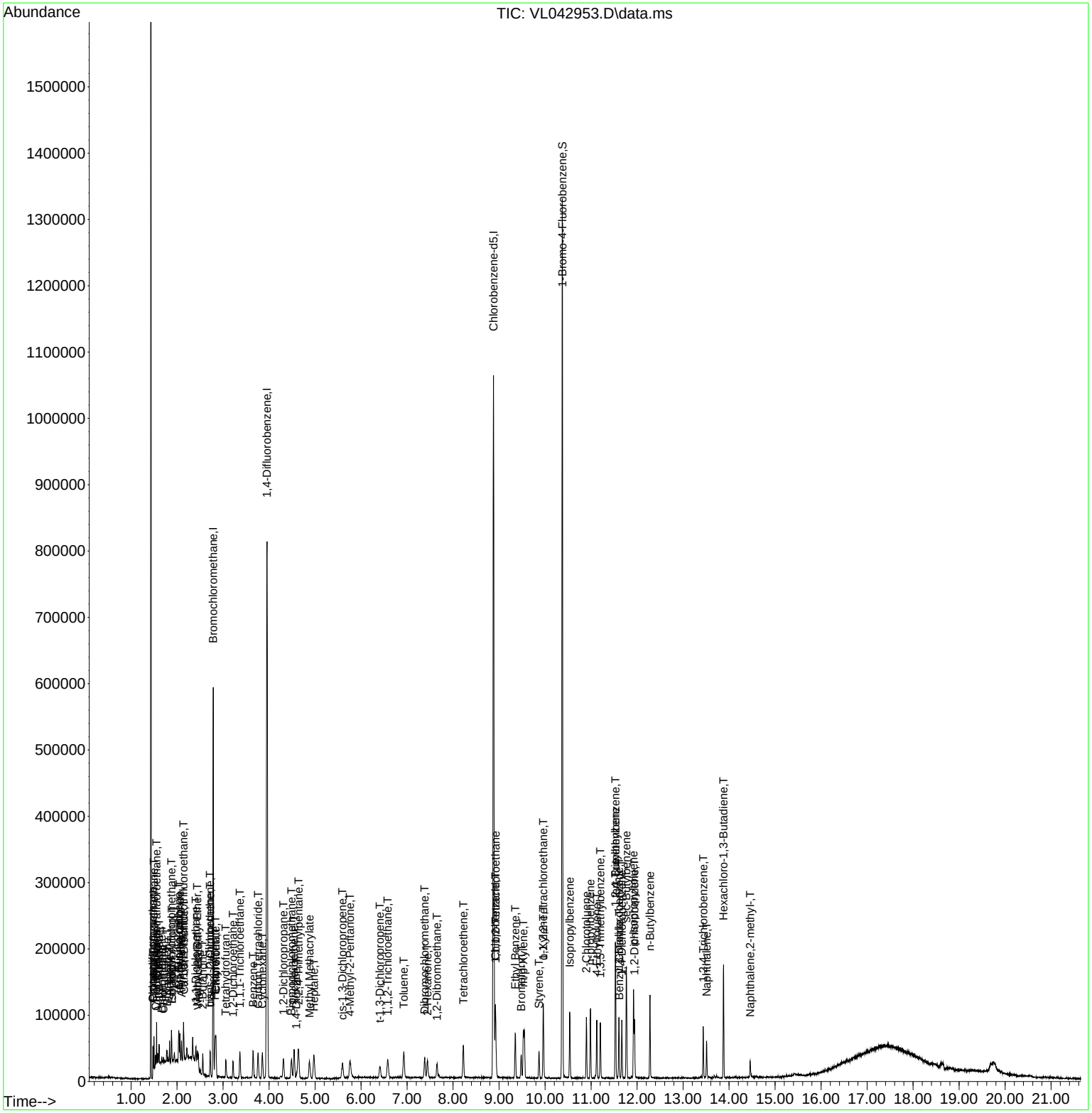
(#) = qualifier out of range (m) = manual integration (+) = signals summed

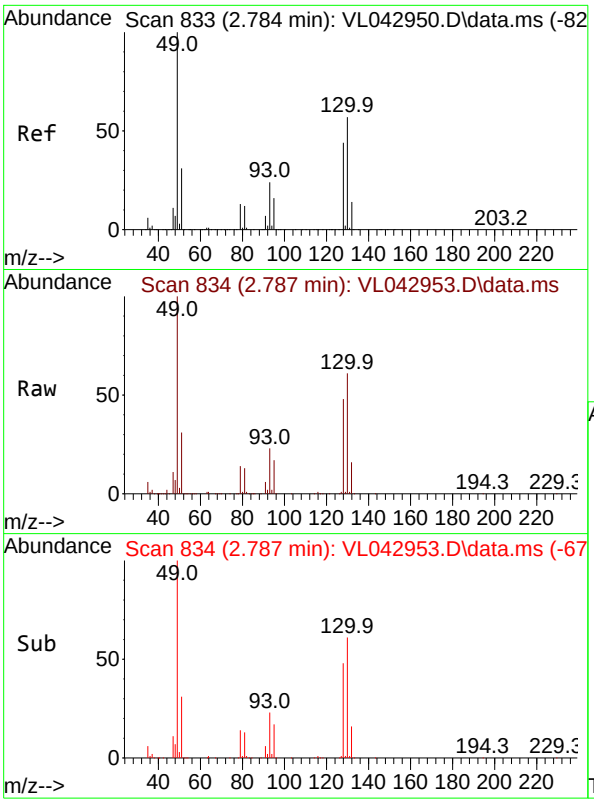
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042953.D
Acq On : 22 Sep 2025 11:22
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Sep 23 02:11:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



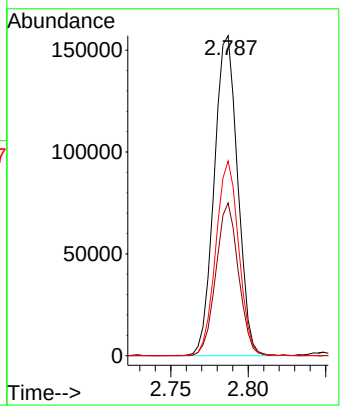


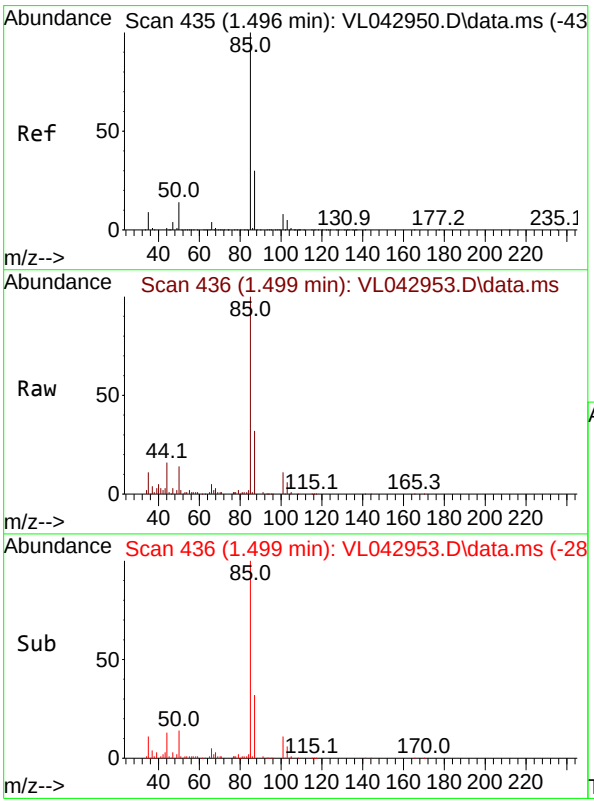
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 49 Resp: 165435

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	59.5	29.1	87.3

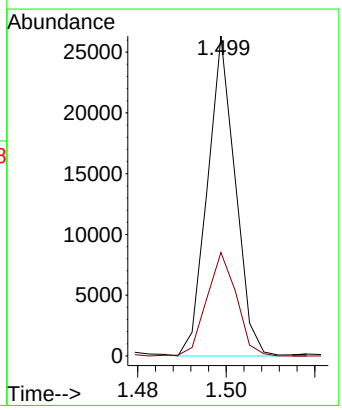


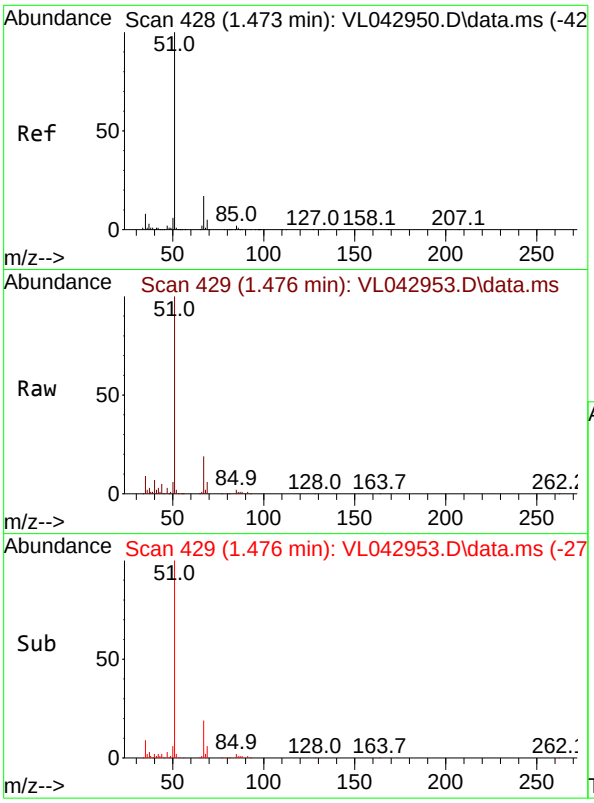


#2
Dichlorodifluoromethane
Concen: 0.517 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 85 Resp: 11508

Ion	Ratio	Lower	Upper
85	100		
87	32.4	24.3	36.5



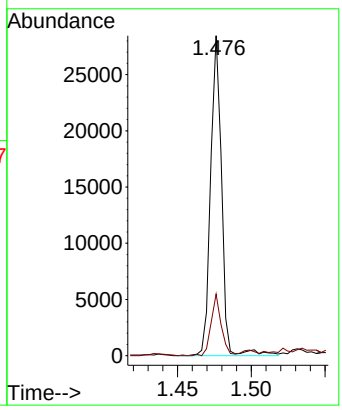


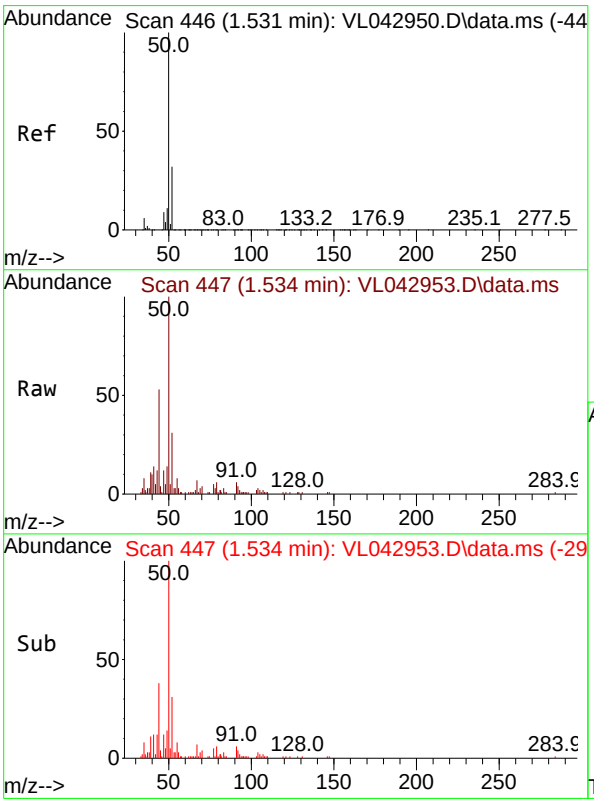
#3
Chlorodifluoromethane
Concen: 0.532 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 51 Resp: 14744

Ion	Ratio	Lower	Upper
51	100		
67	21.7	13.8	20.8#

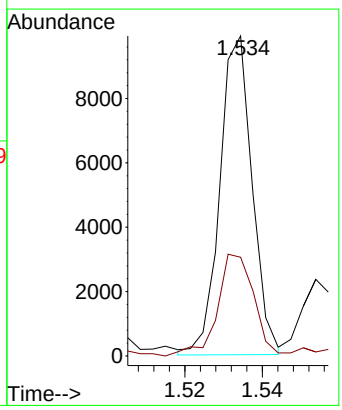


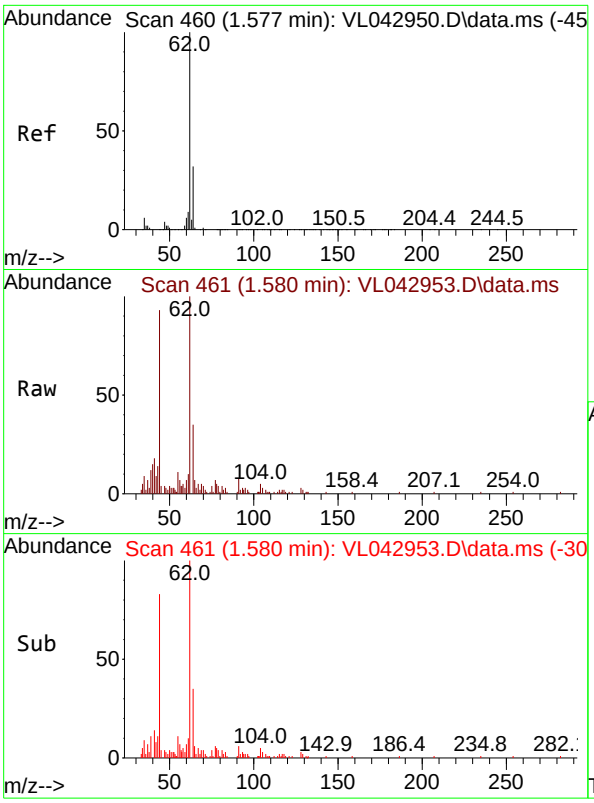


#4
Chloromethane
Concen: 0.569 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 50 Resp: 5729

Ion	Ratio	Lower	Upper
50	100		
52	30.5	25.9	38.9



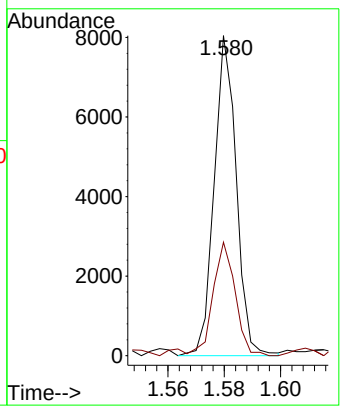


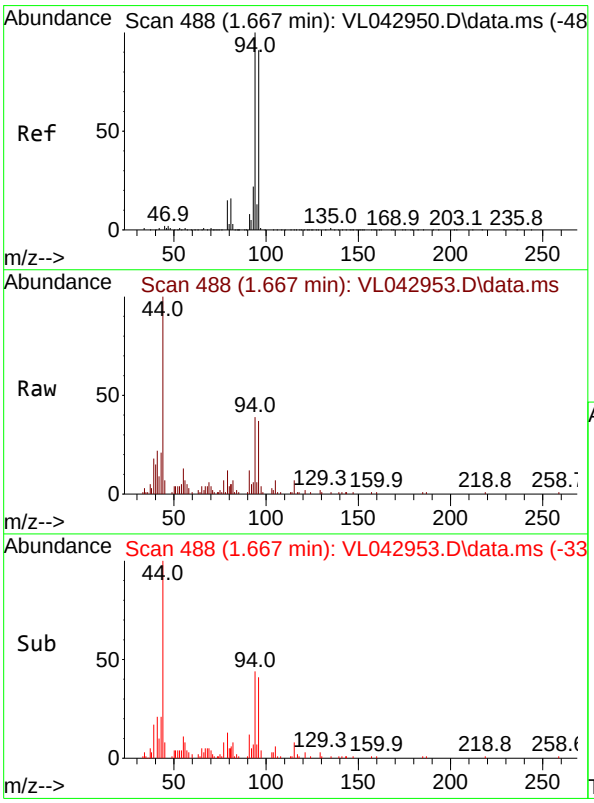
#5
Vinyl Chloride
Concen: 0.480 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 4373

Ion	Ratio	Lower	Upper
62	100		
64	35.5	25.4	38.2

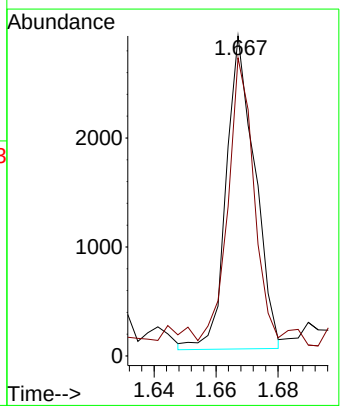


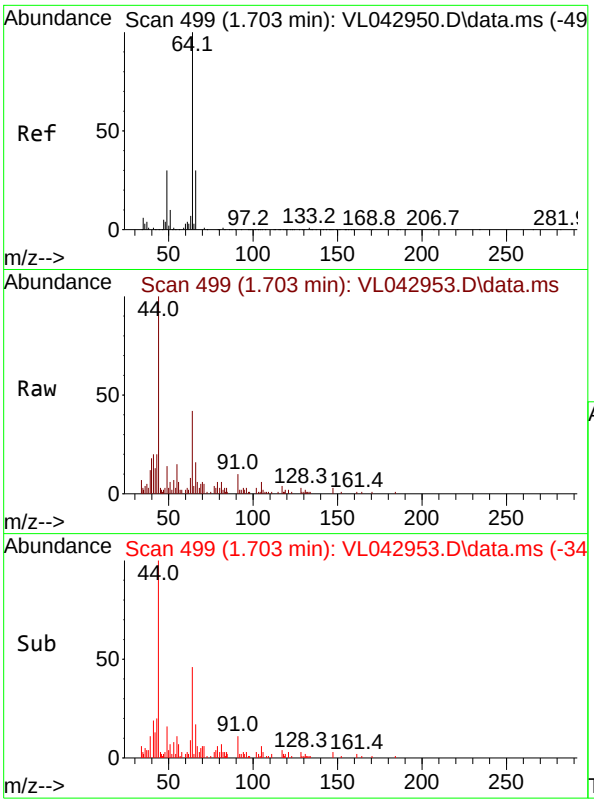


#6
Bromomethane
Concen: 0.576 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 94 Resp: 1850

Ion	Ratio	Lower	Upper
94	100		
96	90.9	72.6	108.8



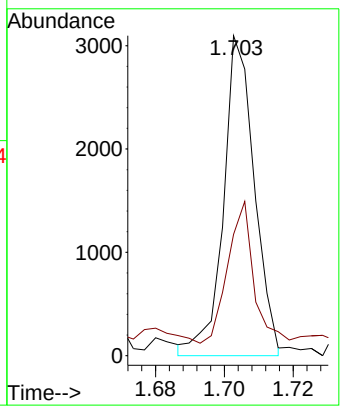


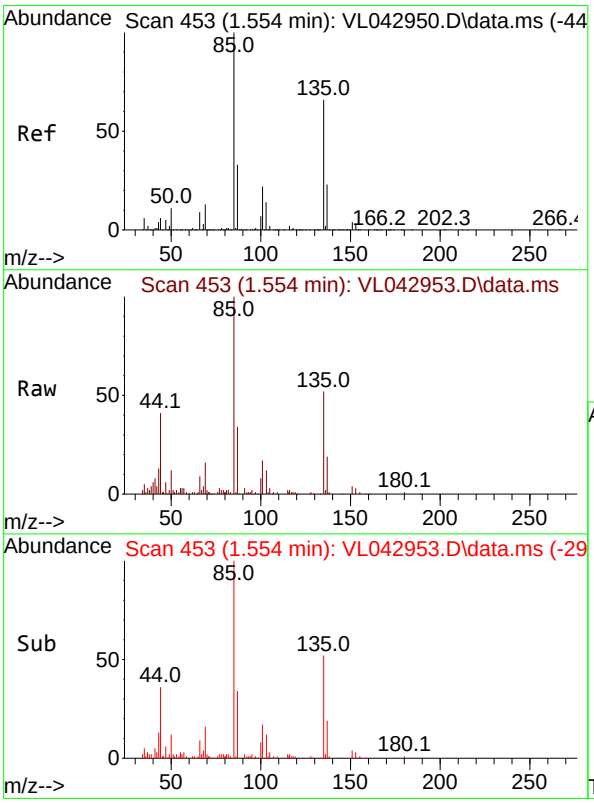
#7
Chloroethane
Concen: 0.548 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 64 Resp: 1936

Ion	Ratio	Lower	Upper
64	100		
66	37.9	24.6	36.8#

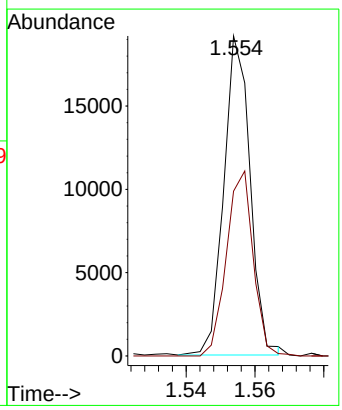


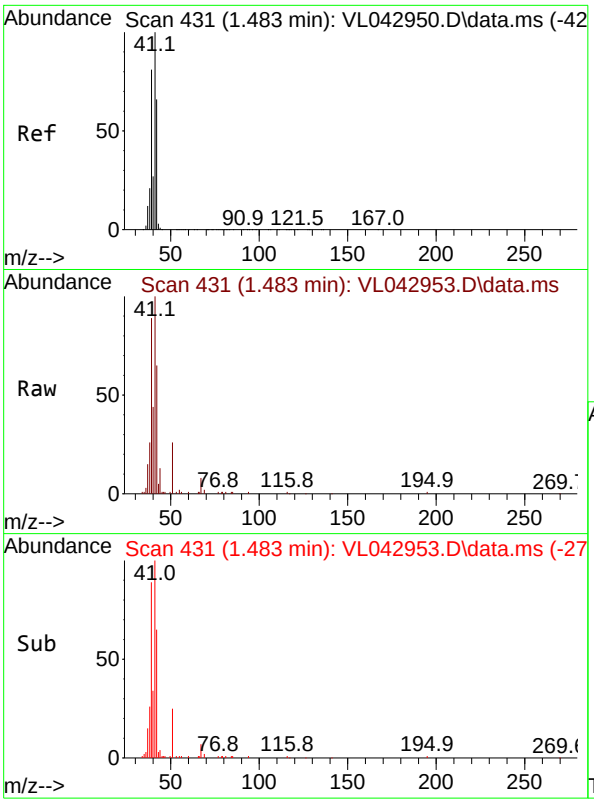


#8
Dichlorotetrafluoroethane
Concen: 0.534 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 85 Resp: 10149

Ion	Ratio	Lower	Upper
85	100		
135	59.1	49.7	74.5



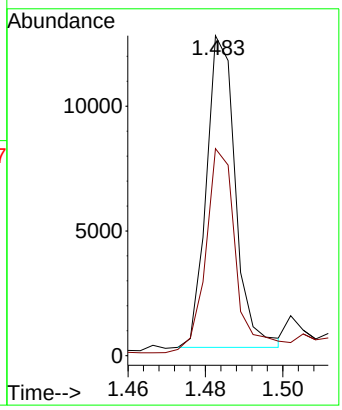


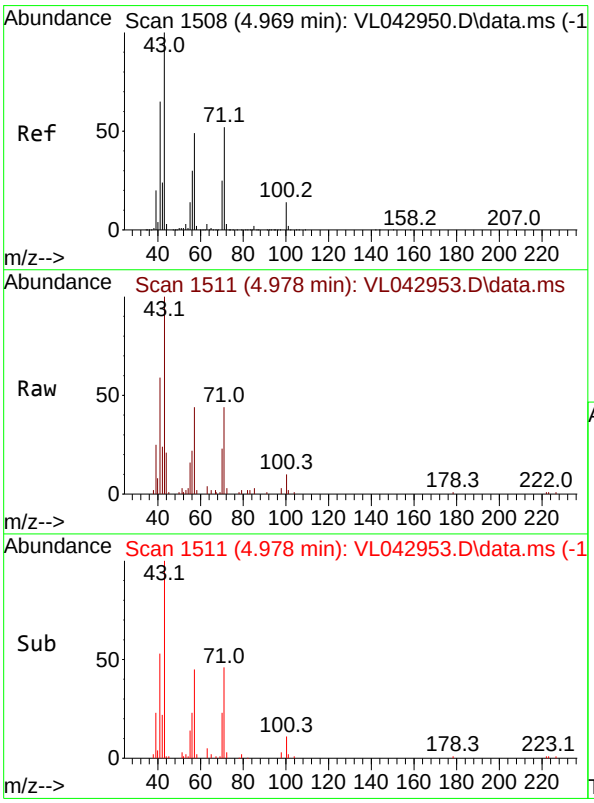
#9
Propene
Concen: 0.537 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 6482

Ion	Ratio	Lower	Upper
41	100		
42	77.1	57.4	86.2

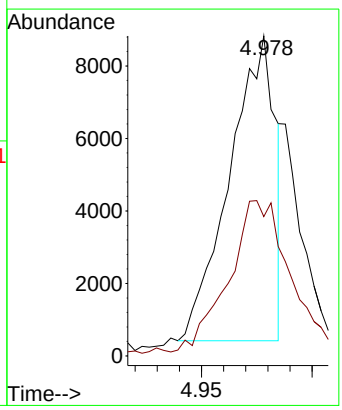


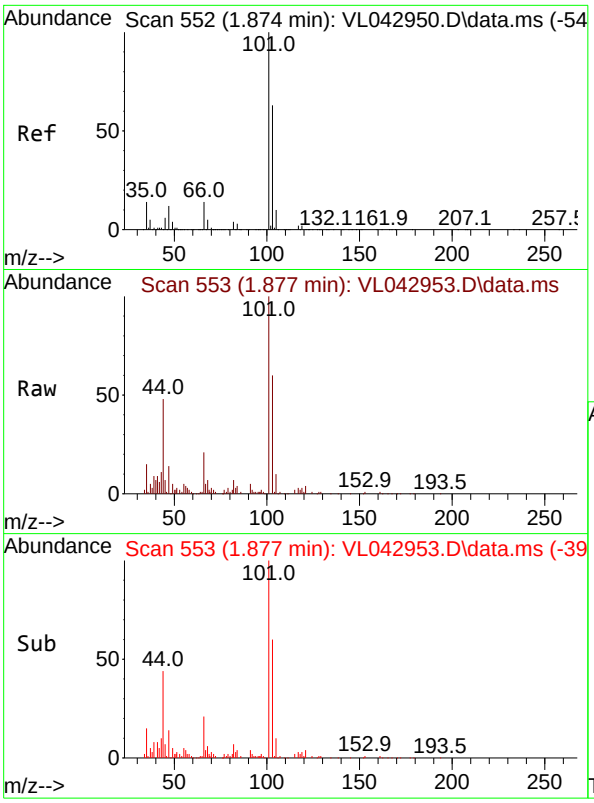


#10
Heptane
Concen: 0.373 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 12067

Ion	Ratio	Lower	Upper
43	100		
57	70.6	38.6	57.8#



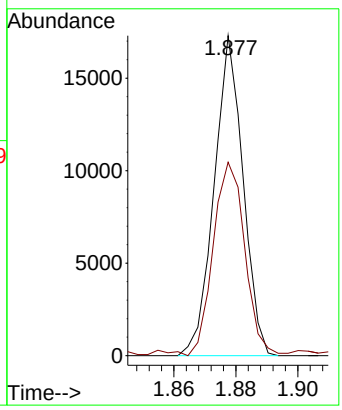


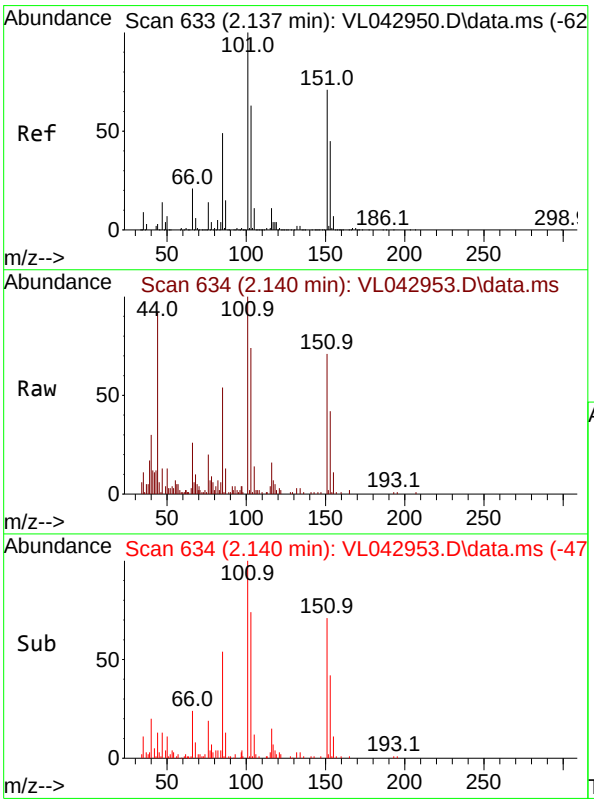
#11
Trichlorofluoromethane
Concen: 0.522 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:101 Resp: 11200

Ion	Ratio	Lower	Upper
101	100		
103	59.7	50.1	75.1

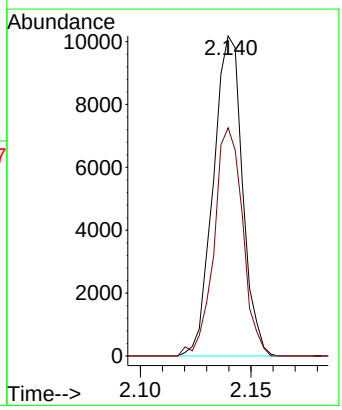


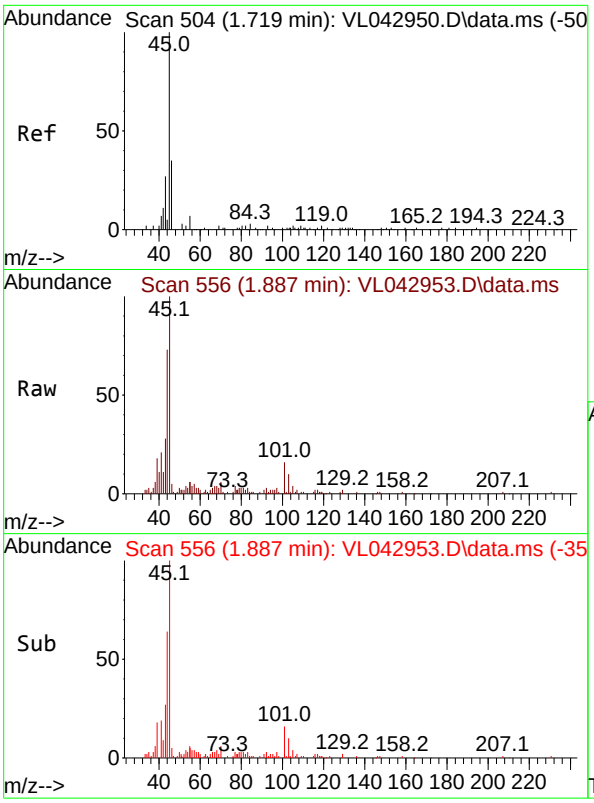


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.538 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:101 Resp: 9346

Ion	Ratio	Lower	Upper
101	100		
151	69.7	55.7	83.5



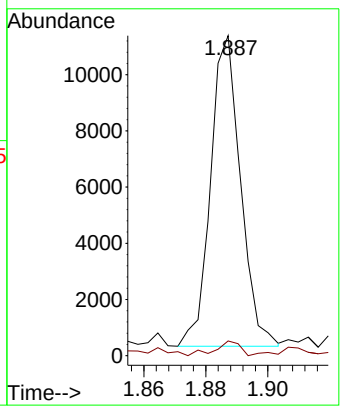


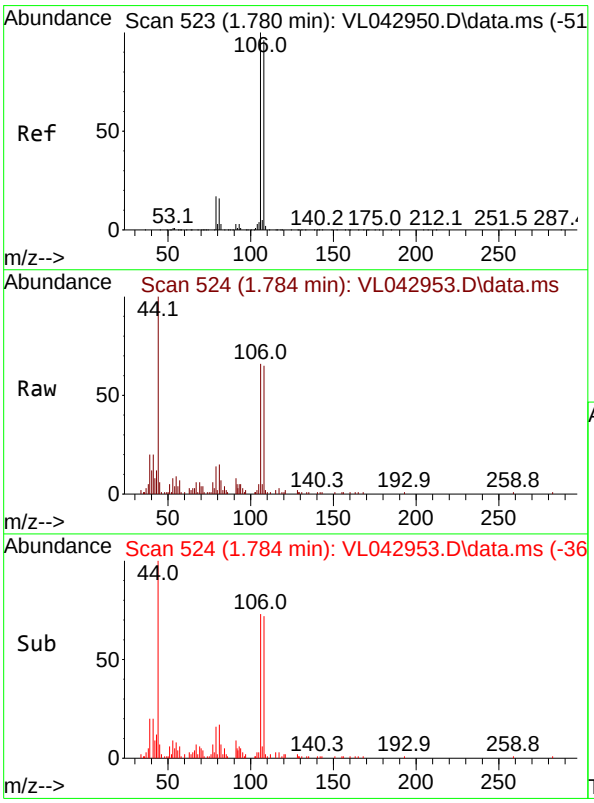
#13
Ethanol
Concen: 6.426 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.168 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 7431

Ion	Ratio	Lower	Upper
45	100		
46	11.9	16.2	64.6#

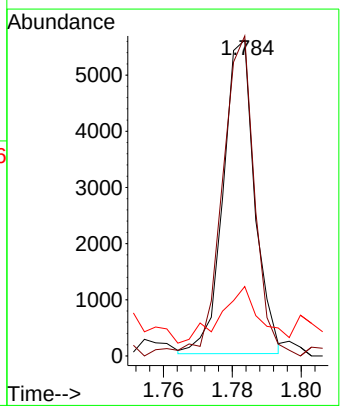


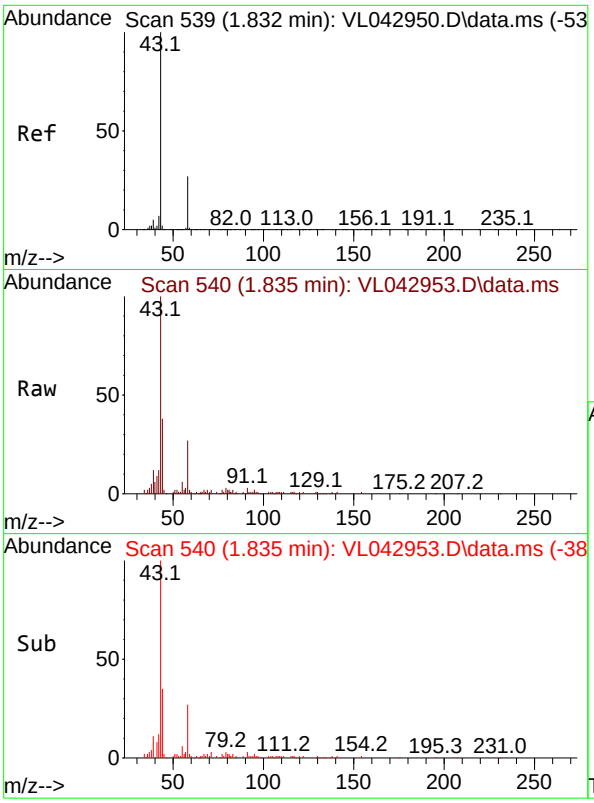


#14
Bromoethene
Concen: 0.541 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:108 Resp: 3553

Ion	Ratio	Lower	Upper
108	100		
106	115.9	86.0	129.0
79	46.0	14.2	21.2#



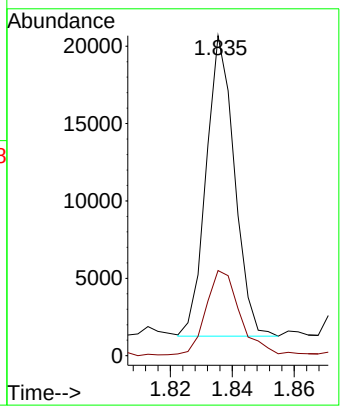


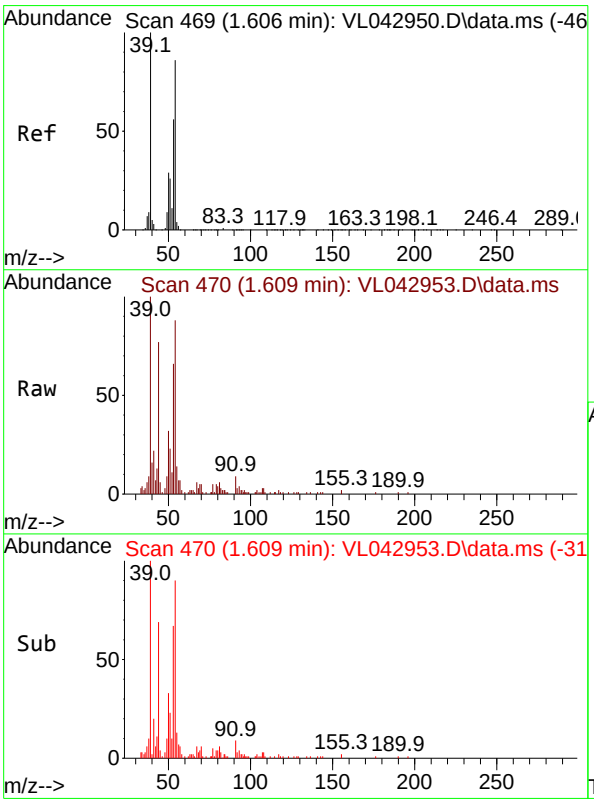
#15
Acetone
Concen: 0.572 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 12326

Ion	Ratio	Lower	Upper
43	100		
58	35.4	22.3	33.5#

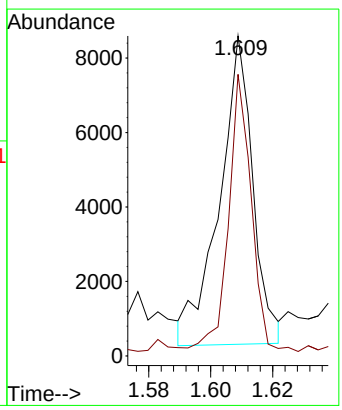


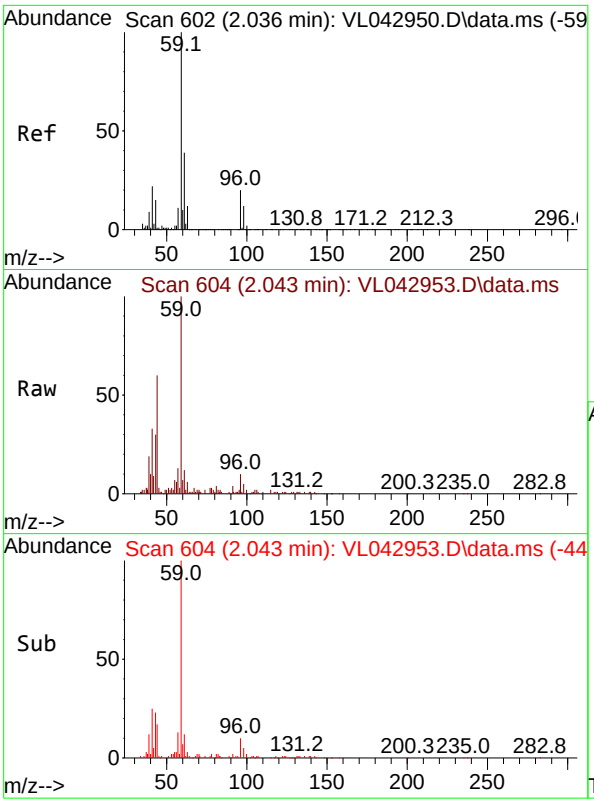


#16
1,3-Butadiene
Concen: 0.611 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 39 Resp: 6215

Ion	Ratio	Lower	Upper
39	100		
54	60.7	60.8	91.2#



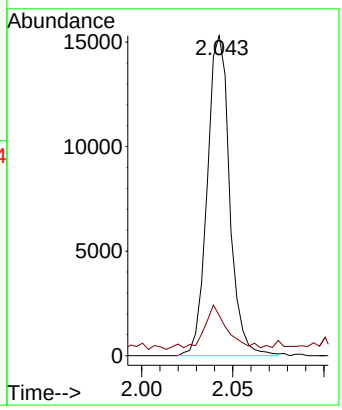


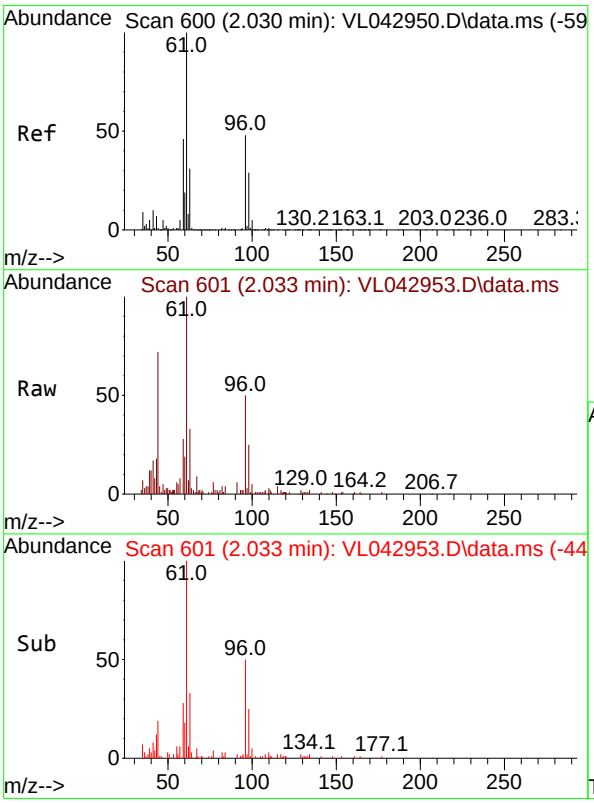
#17
tert-Butyl alcohol
Concen: 0.555 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 59 Resp: 13128

Ion	Ratio	Lower	Upper
59	100		
57	19.4	8.6	12.8#

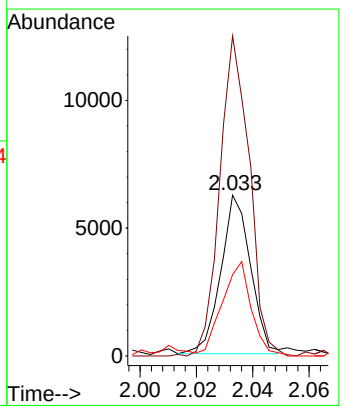


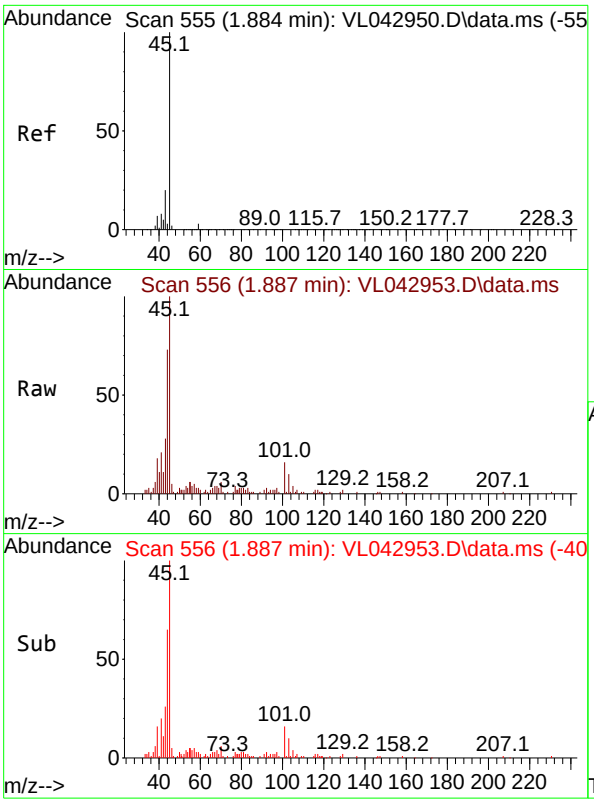


#18
1,1-Dichloroethene
Concen: 0.565 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 96 Resp: 4543

Ion	Ratio	Lower	Upper
96	100		
61	201.0	166.2	249.4
98	49.4	48.6	73.0



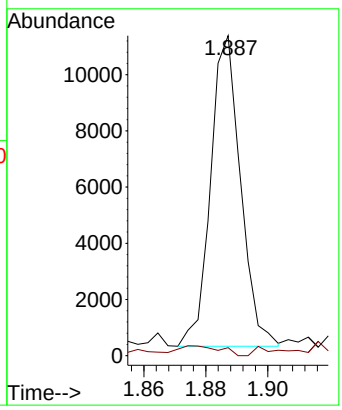


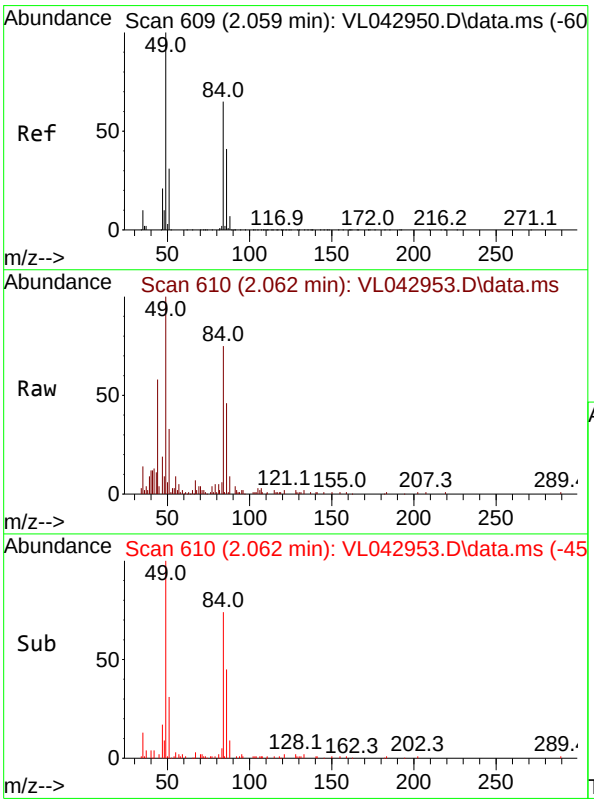
#19
Isopropyl Alcohol
Concen: 0.574 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 7431

Ion	Ratio	Lower	Upper
45	100		
58	6.1	31.0	46.6#

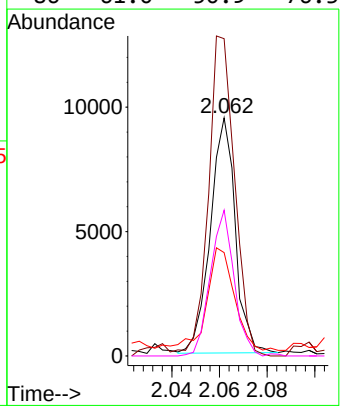


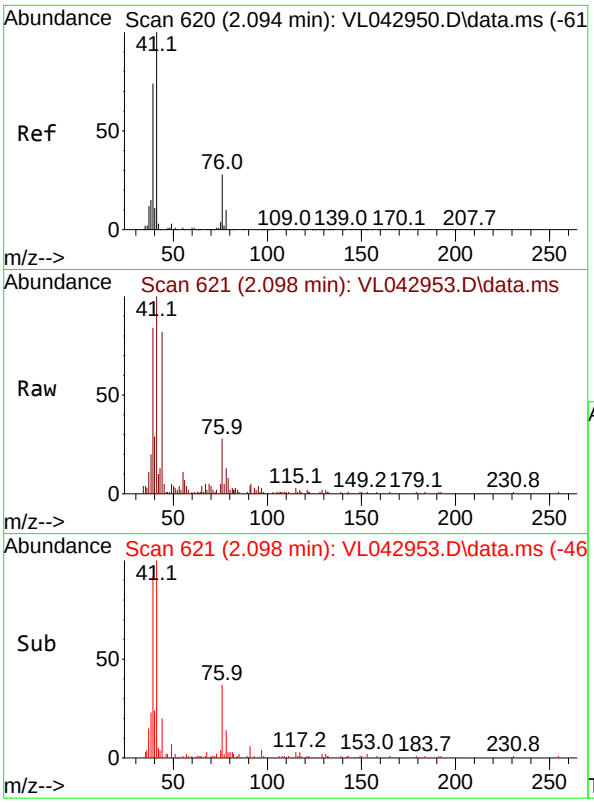


#20
Methylene Chloride
Concen: 0.430 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 84 Resp: 6881

Ion	Ratio	Lower	Upper
84	100		
49	132.8	124.1	186.1
51	40.9	39.8	59.8
86	61.0	50.9	76.3



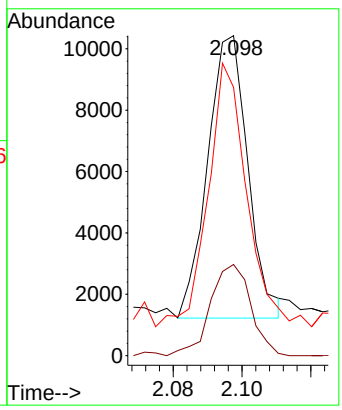


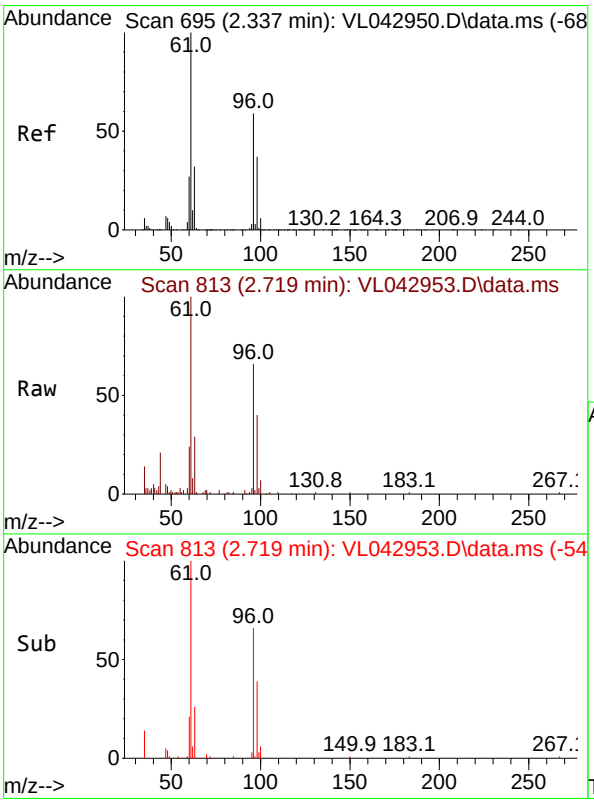
#21
Allyl Chloride
Concen: 0.499 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 7481

Ion	Ratio	Lower	Upper
41	100		
76	33.1	22.3	33.5
39	110.1	61.3	91.9#

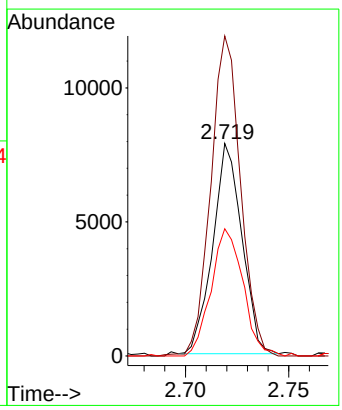


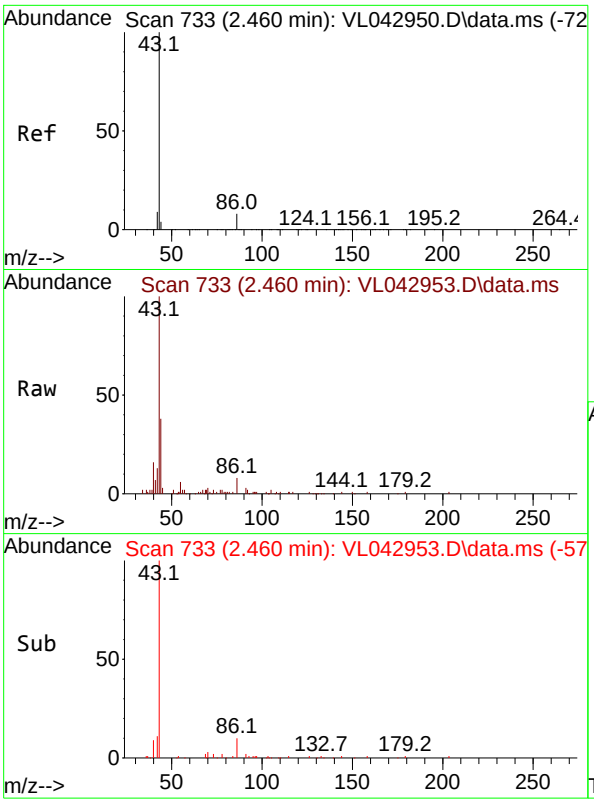


#22
trans-1,2-Dichloroethene
Concen: 0.843 ppbv
RT: 2.719 min Scan# 813
Delta R.T. 0.382 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 96 Resp: 7704

Ion	Ratio	Lower	Upper
96	100		
61	152.2	136.5	204.7
98	60.5	50.6	76.0



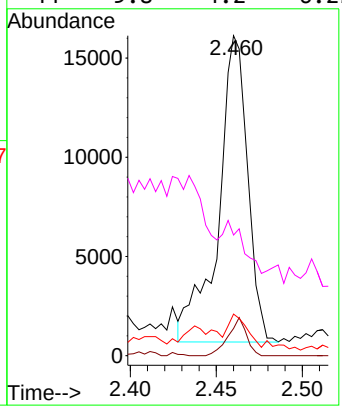


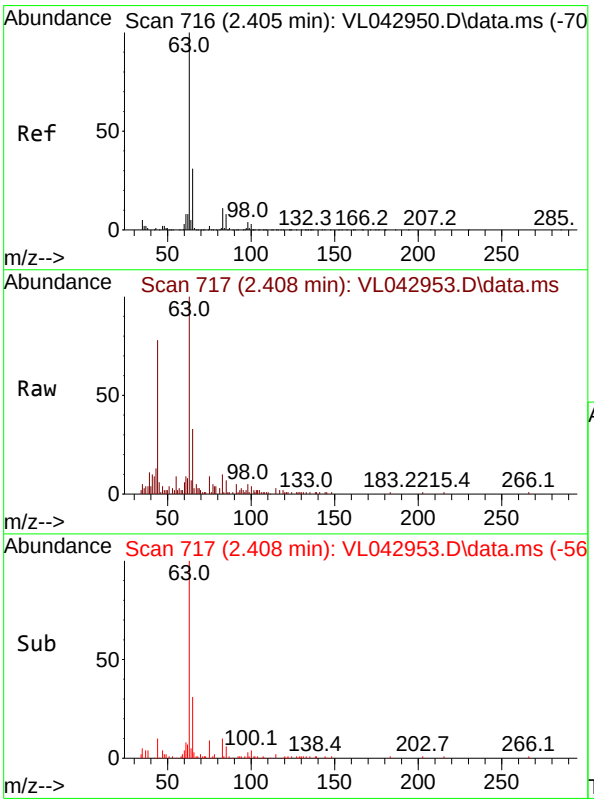
#23
Vinyl Acetate
Concen: 0.593 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 18264

Ion	Ratio	Lower	Upper
43	100		
86	8.9	6.2	9.2
42	10.1	7.4	11.0
44	9.8	4.2	6.2#

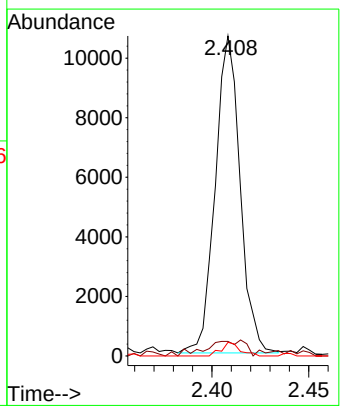


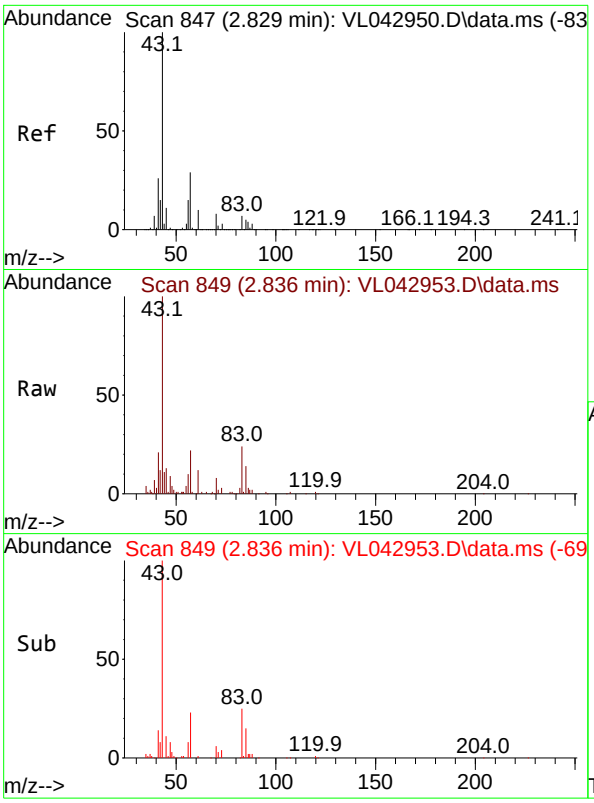


#24
1,1-Dichloroethane
Concen: 0.529 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 63 Resp: 9484

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.2	6.6
100	4.3	1.4	4.0#



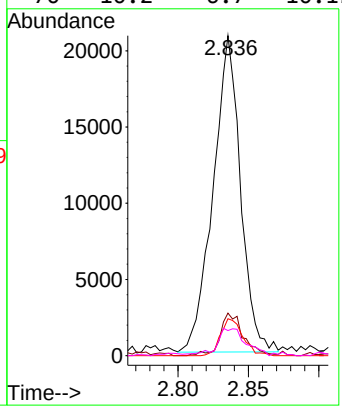


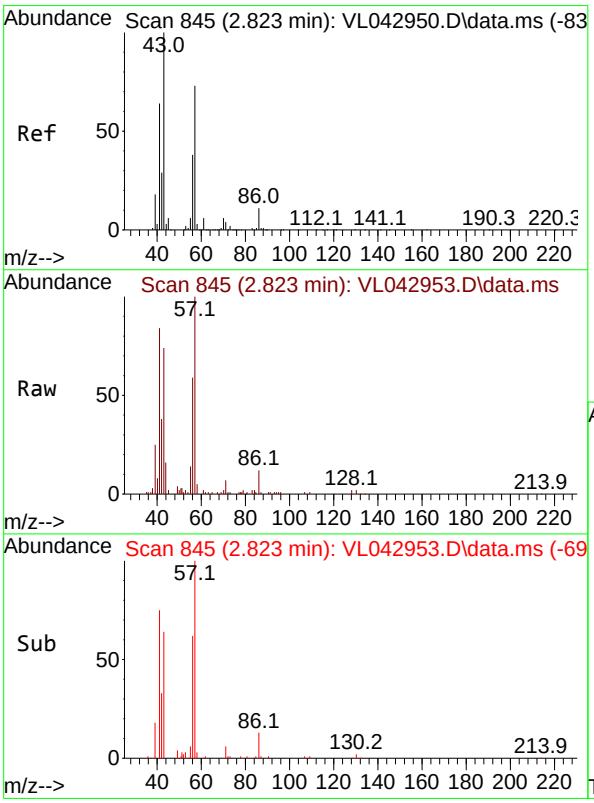
#25
Ethyl Acetate
Concen: 0.517 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 28162

Ion	Ratio	Lower	Upper
43	100		
45	12.3	7.7	11.5#
61	9.5	7.1	10.7
70	10.2	6.7	10.1#

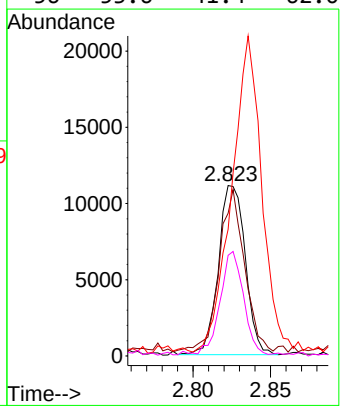


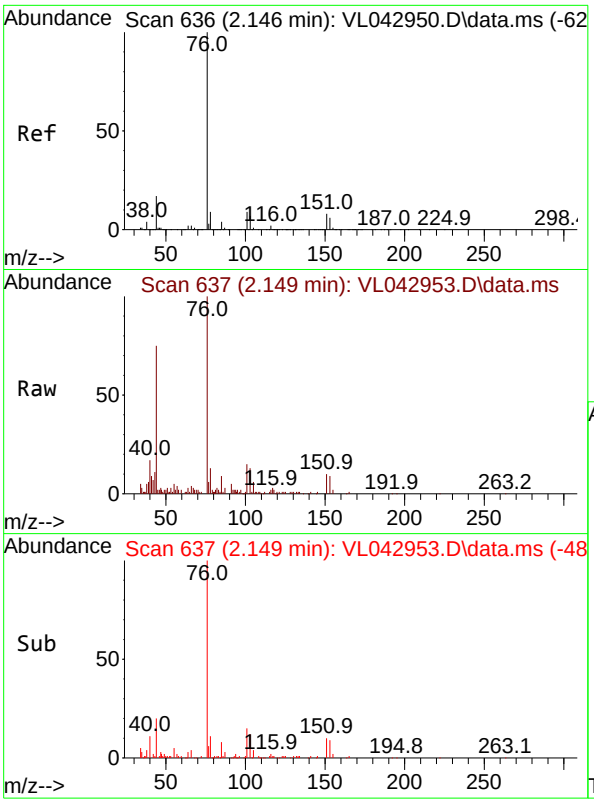


#26
Hexane
Concen: 0.540 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 57 Resp: 13406

Ion	Ratio	Lower	Upper
57	100		
41	92.4	71.7	107.5
43	224.5	180.8	271.2
56	53.6	41.4	62.0



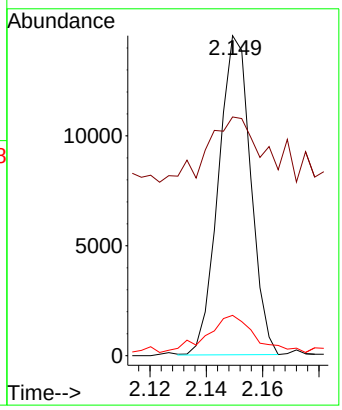


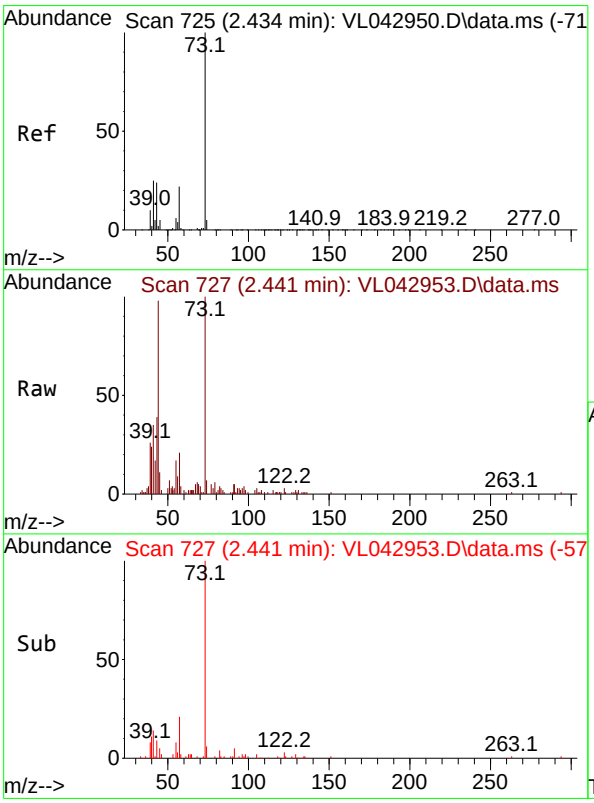
#27
Carbon Disulfide
Concen: 0.518 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 76 Resp: 11535

Ion	Ratio	Lower	Upper
76	100		
44	134.4	15.6	23.4#
78	20.6	8.9	13.3#

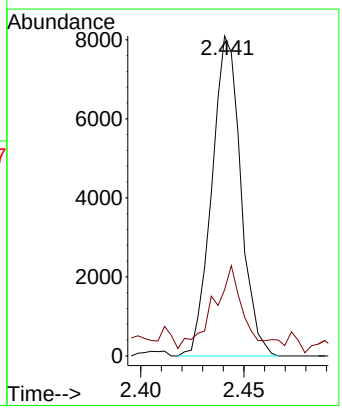


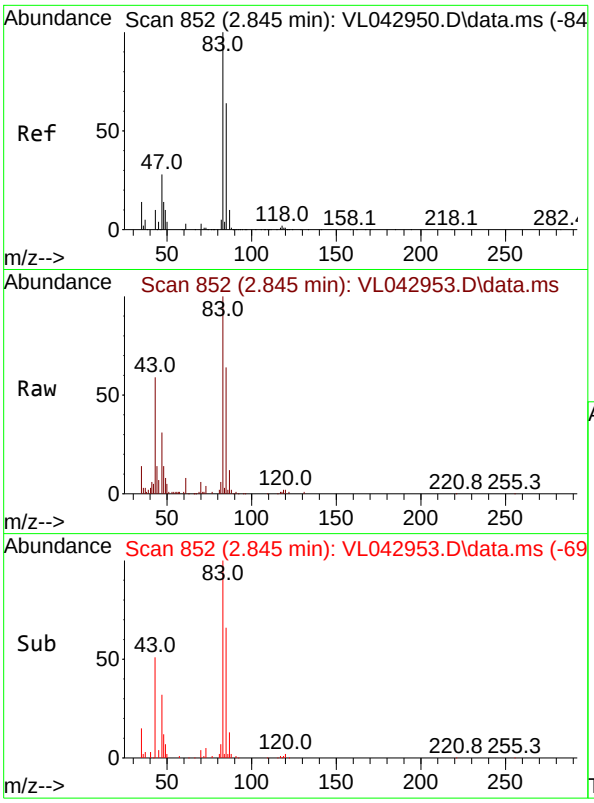


#28
Methyl tert-Butyl Ether
Concen: 0.611 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 73 Resp: 7886

Ion	Ratio	Lower	Upper
73	100		
57	43.4	20.6	31.0#



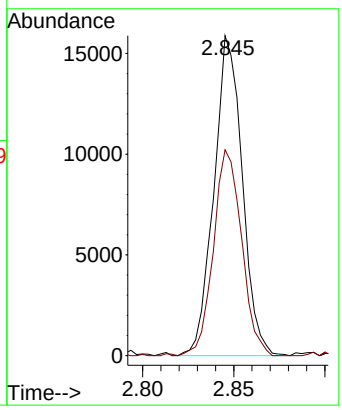


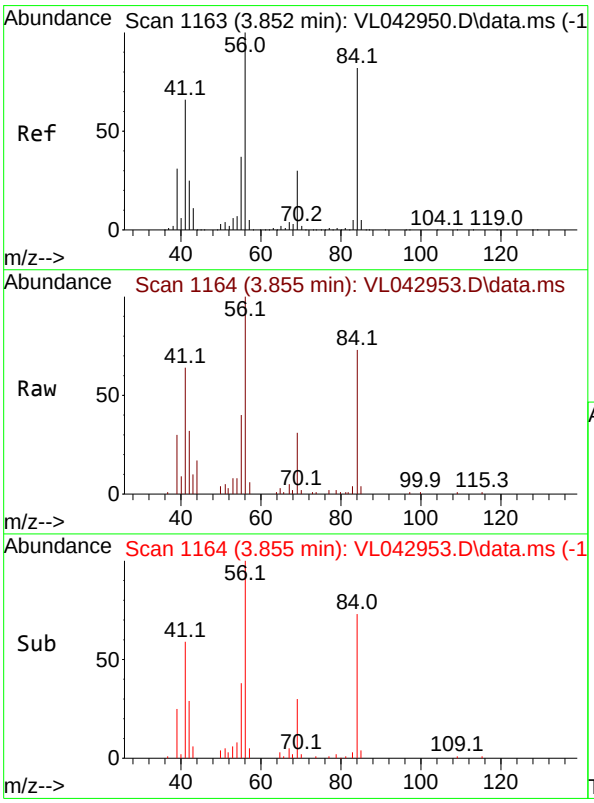
#29
Chloroform
Concen: 0.530 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 17188

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.2	76.8

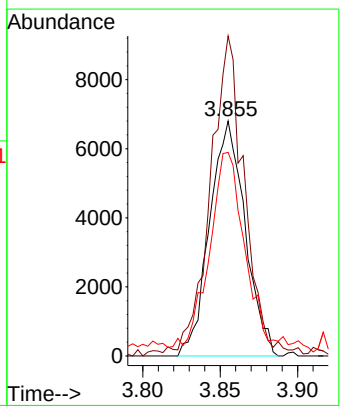


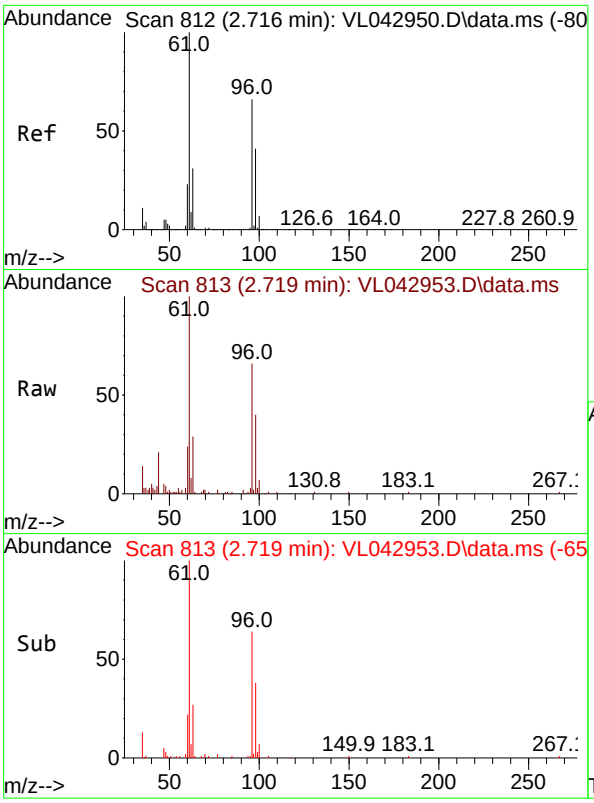


#30
Cyclohexane
Concen: 0.523 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 84 Resp: 10856

Ion	Ratio	Lower	Upper
84	100		
56	132.1	102.2	153.4
41	92.2	65.6	98.4



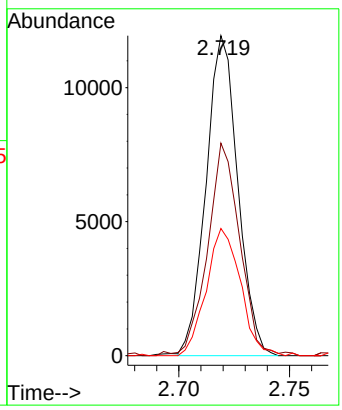


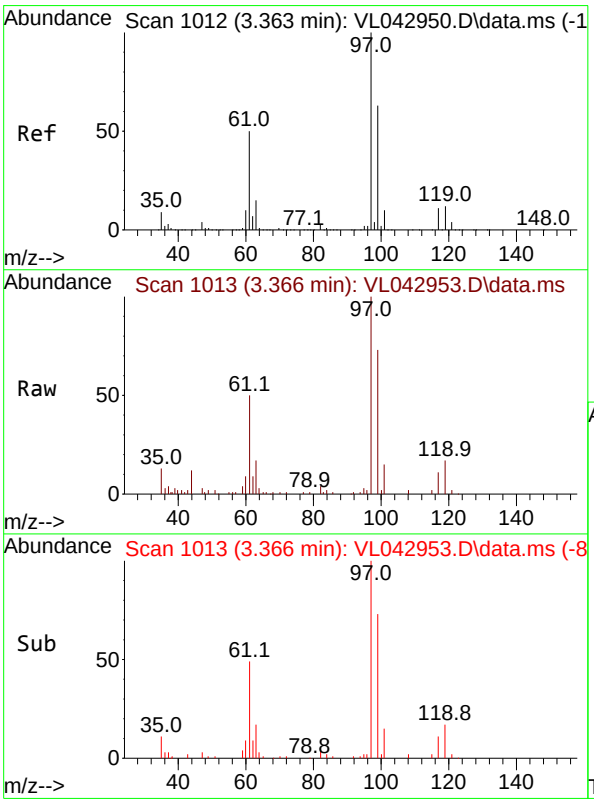
#31
cis-1,2-Dichloroethene
Concen: 0.513 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 61 Resp: 11939

Ion	Ratio	Lower	Upper
61	100		
96	65.7	53.0	79.6
98	39.7	32.9	49.3

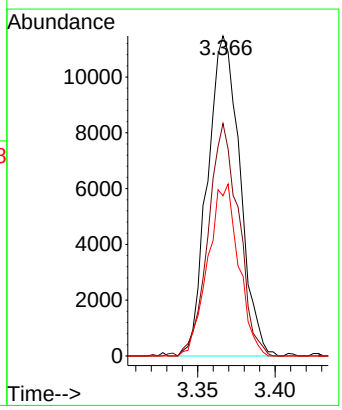


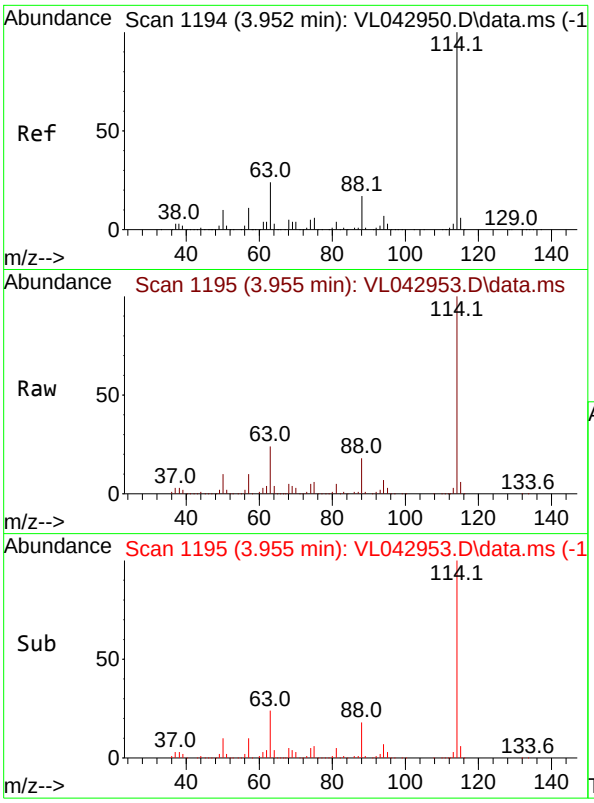


#32
1,1,1-Trichloroethane
Concen: 0.474 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 97 Resp: 16684

Ion	Ratio	Lower	Upper
97	100		
99	68.4	51.1	76.7
61	51.1	39.8	59.6



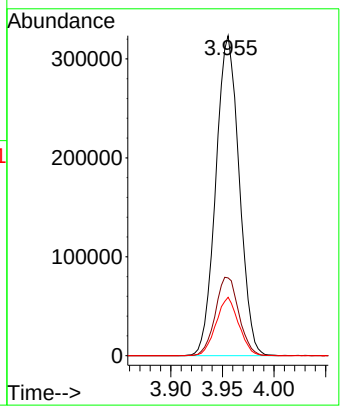


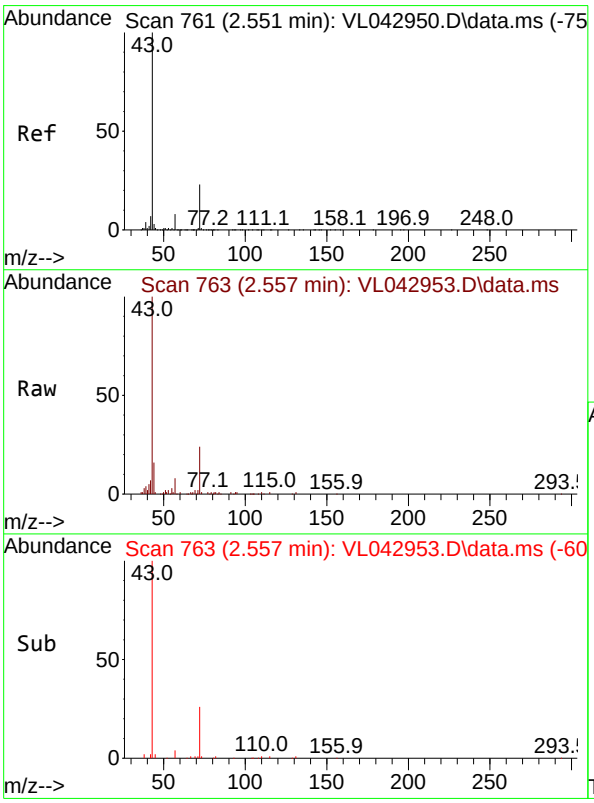
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:114 Resp: 509306

Ion	Ratio	Lower	Upper
114	100		
63	24.8	19.4	29.2
88	17.7	14.2	21.2

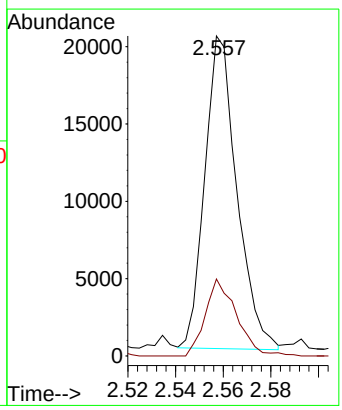


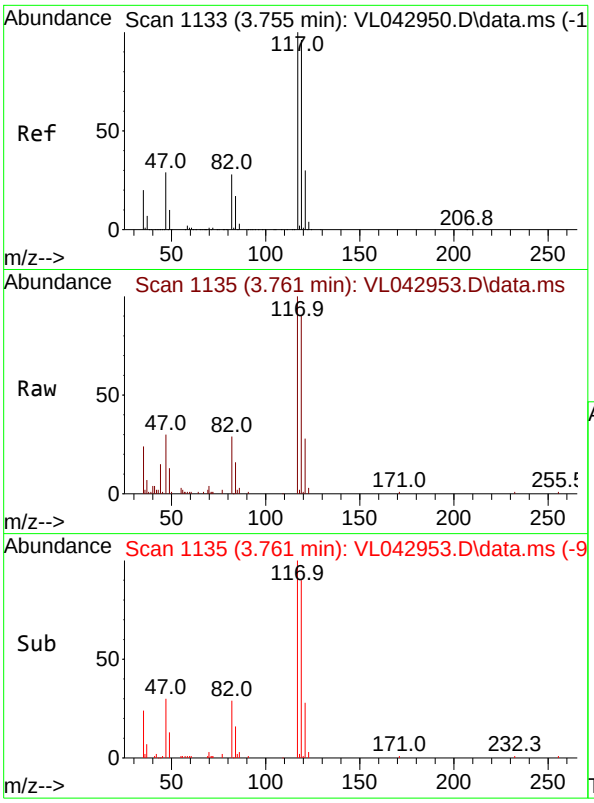


#34
2-Butanone
Concen: 0.531 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 18948

Ion	Ratio	Lower	Upper
43	100		
72	23.9	17.7	26.5



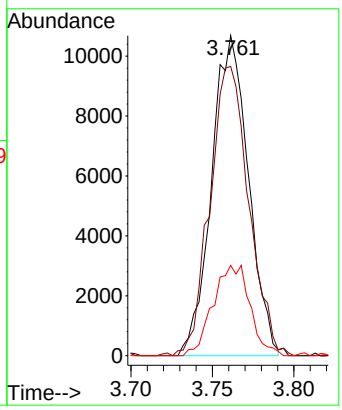


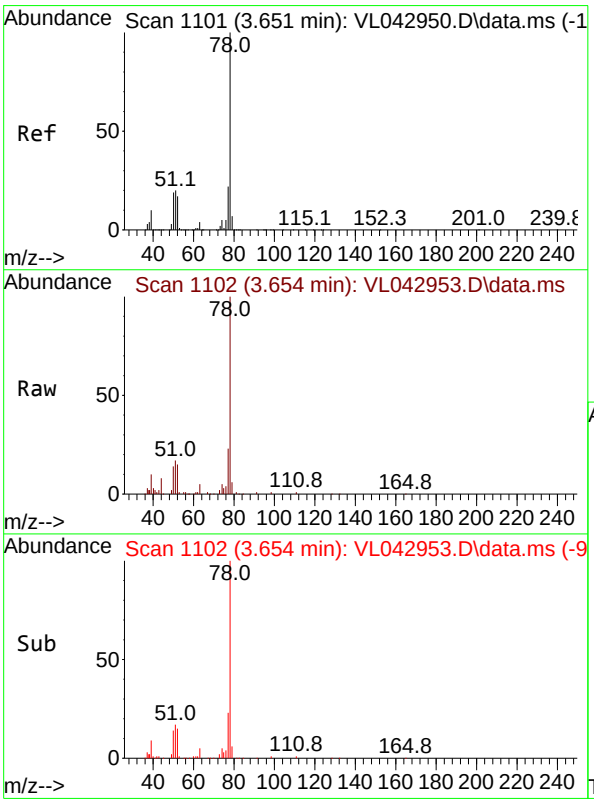
#35
Carbon Tetrachloride
Concen: 0.513 ppbv
RT: 3.761 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 16799

Ion	Ratio	Lower	Upper
117	100		
119	88.9	76.9	115.3
121	28.2	23.7	35.5

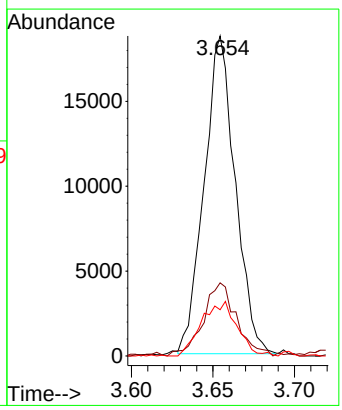


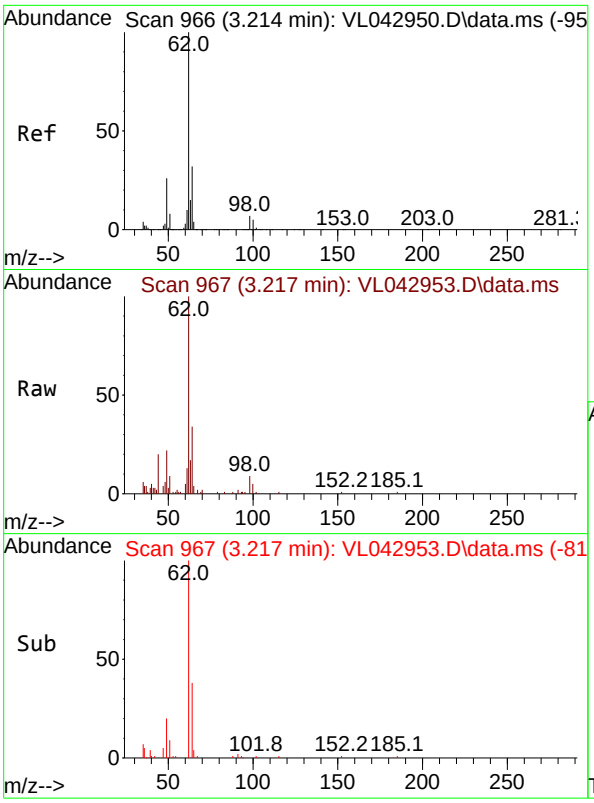


#36
Benzene
Concen: 0.519 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 78 Resp: 24807

Ion	Ratio	Lower	Upper
78	100		
77	21.4	17.8	26.6
50	14.5	15.0	22.4#



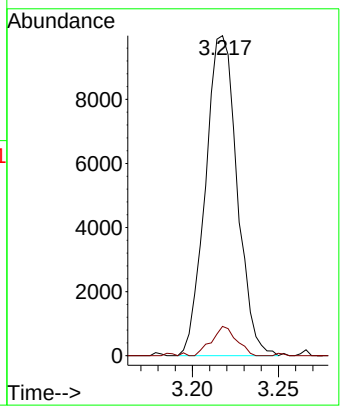


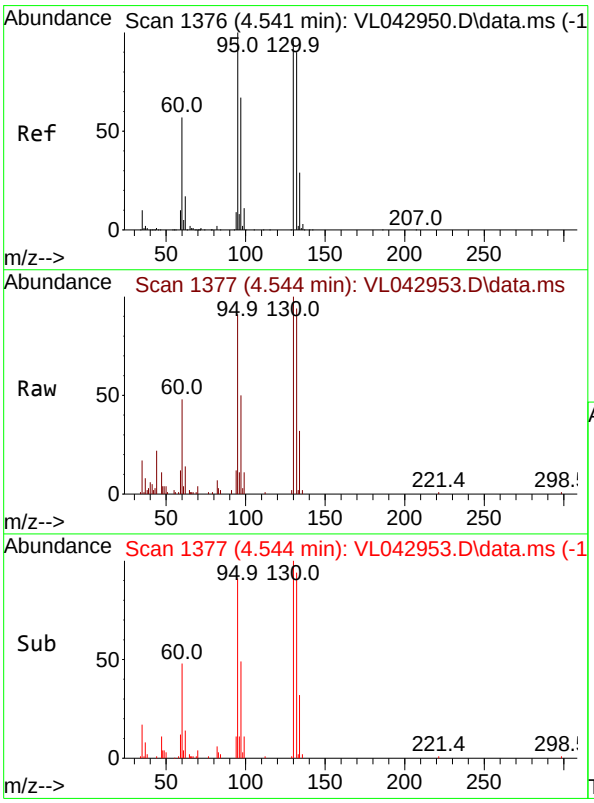
#37
1,2-Dichloroethane
Concen: 0.508 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 12788

Ion	Ratio	Lower	Upper
62	100		
98	7.4	5.9	8.9

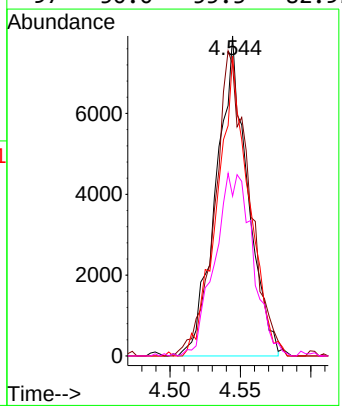


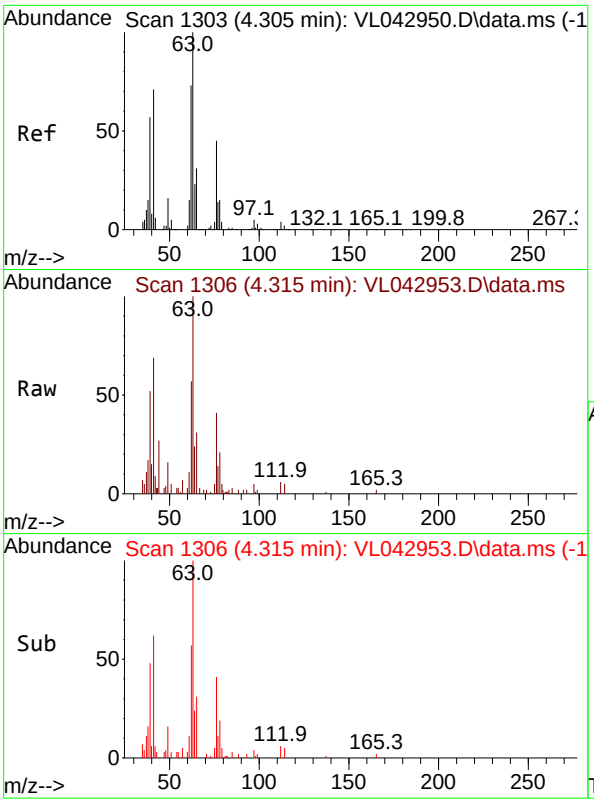


#38
Trichloroethene
Concen: 0.515 ppbv
RT: 4.544 min Scan# 1377
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:130 Resp: 12243

Ion	Ratio	Lower	Upper
130	100		
95	89.6	83.0	124.4
132	93.6	74.6	112.0
97	50.0	55.3	82.9#



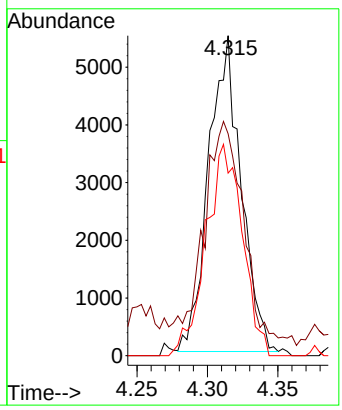


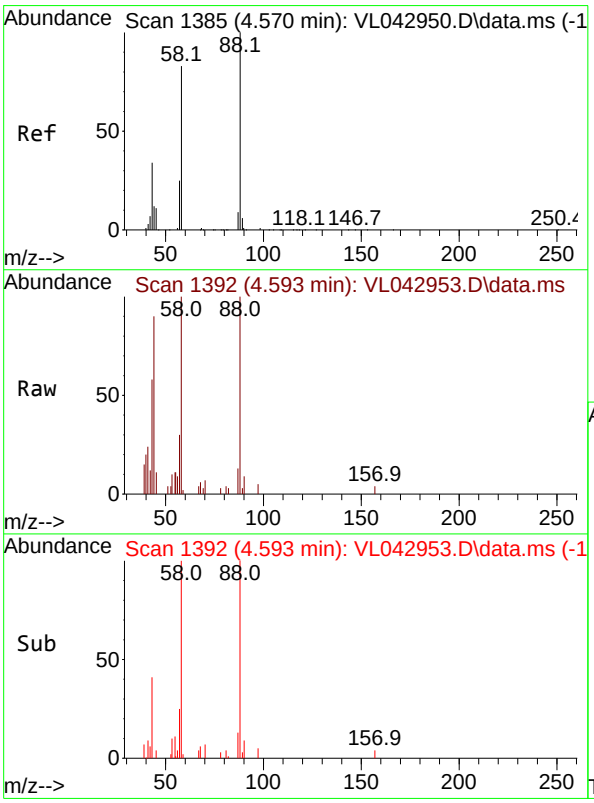
#39
1,2-Dichloropropane
Concen: 0.502 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 63 Resp: 8772

Ion	Ratio	Lower	Upper
63	100		
41	64.7	57.5	86.3
62	56.5	58.5	87.7#

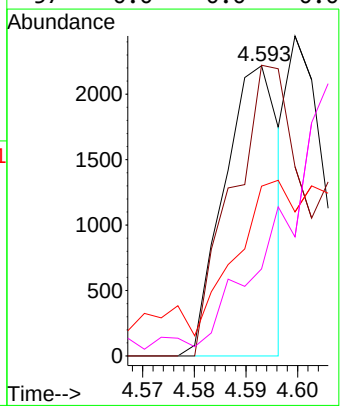


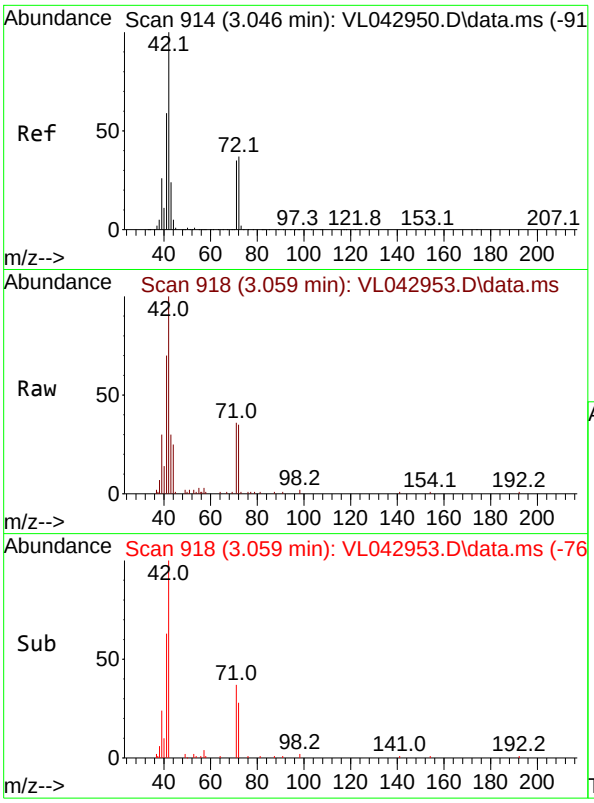


#40
1,4-Dioxane
Concen: 0.202 ppbv
RT: 4.593 min Scan# 1392
Delta R.T. 0.023 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 88 Resp: 1641

Ion	Ratio	Lower	Upper
88	100		
58	332.1	59.7	89.5#
43	0.0	28.9	43.3#
57	0.0	0.0	0.0



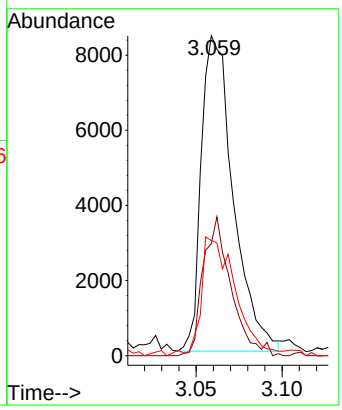


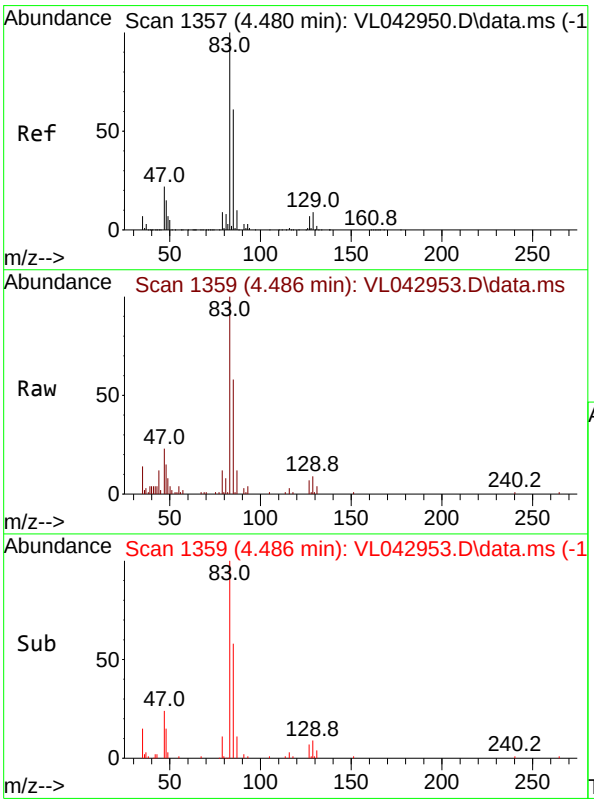
#41
Tetrahydrofuran
Concen: 0.530 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.013 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 42 Resp: 10871

Ion	Ratio	Lower	Upper
42	100		
72	38.4	30.0	45.0
71	41.6	28.8	43.2

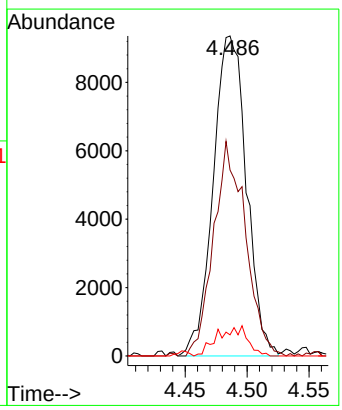


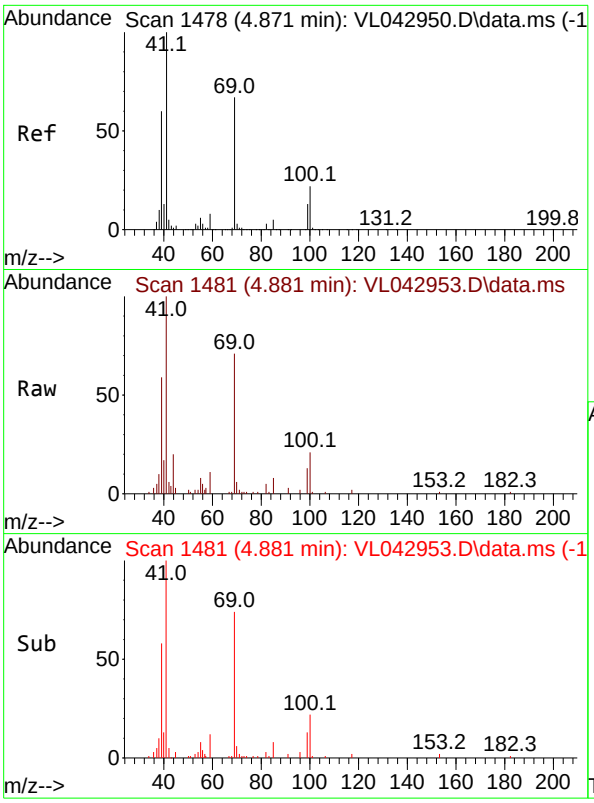


#42
Bromodichloromethane
Concen: 0.501 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 83 Resp: 17552

Ion	Ratio	Lower	Upper
83	100		
85	58.1	49.0	73.6
127	6.6	5.3	7.9



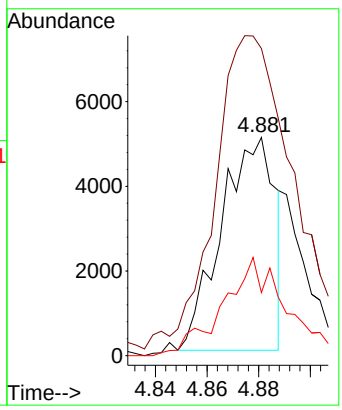


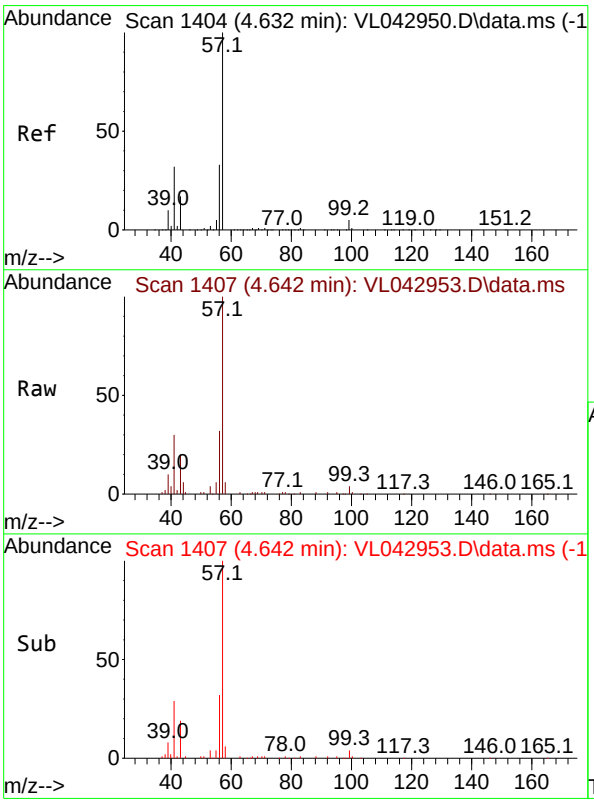
#43
Methyl Methacrylate
Concen: 0.374 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 69 Resp: 7252

Ion	Ratio	Lower	Upper
69	100		
41	216.4	124.5	186.7#
100	54.6	29.0	43.6#

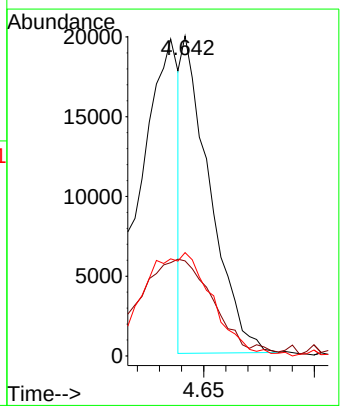


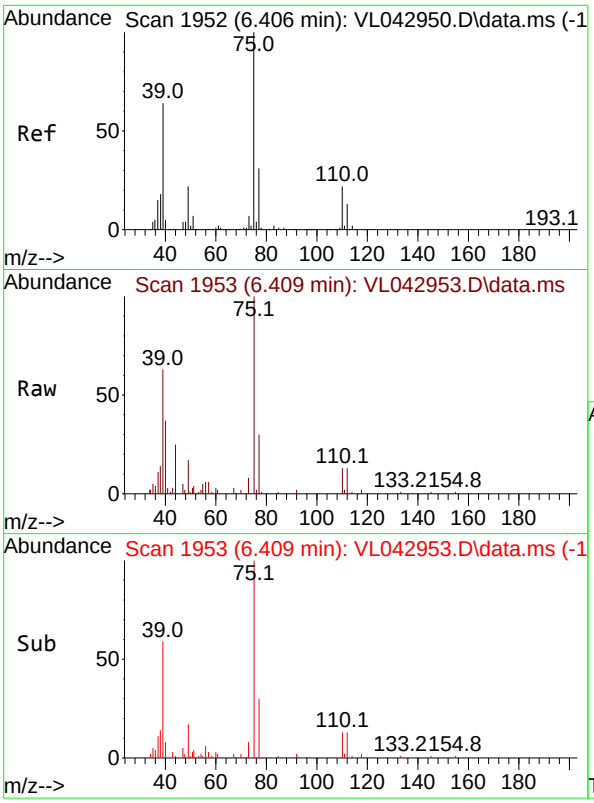


#44
2,2,4-Trimethylpentane
Concen: 0.210 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 57 Resp: 17345

Ion	Ratio	Lower	Upper
57	100		
41	79.9	25.5	38.3#
56	84.6	25.8	38.8#



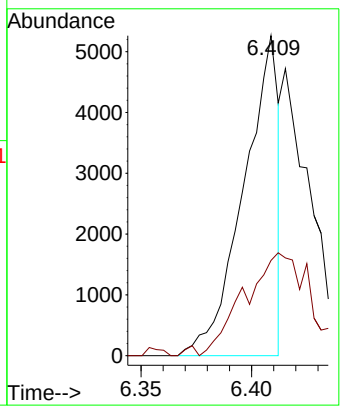


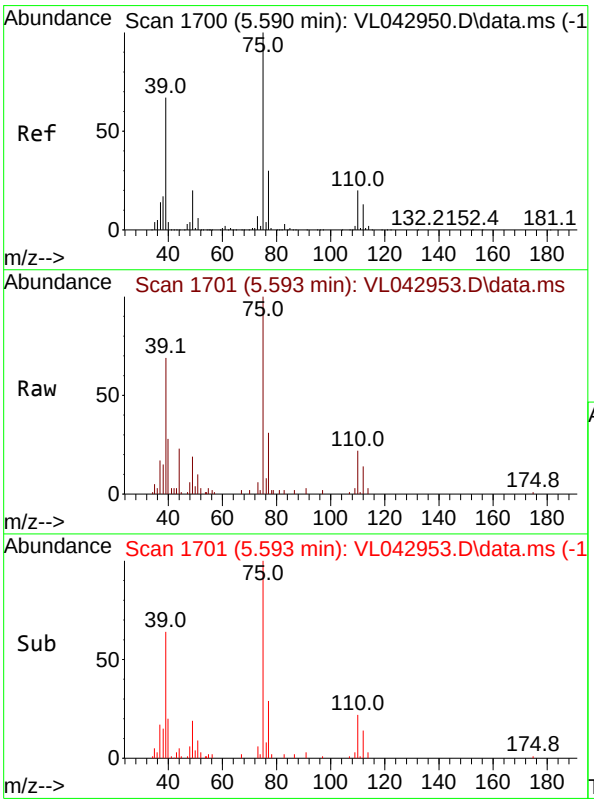
#45
t-1,3-Dichloropropene
Concen: 0.276 ppbv
RT: 6.409 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 75 Resp: 5766

Ion	Ratio	Lower	Upper
75	100		
77	29.7	25.0	37.4

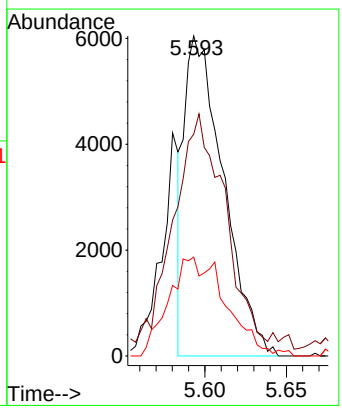


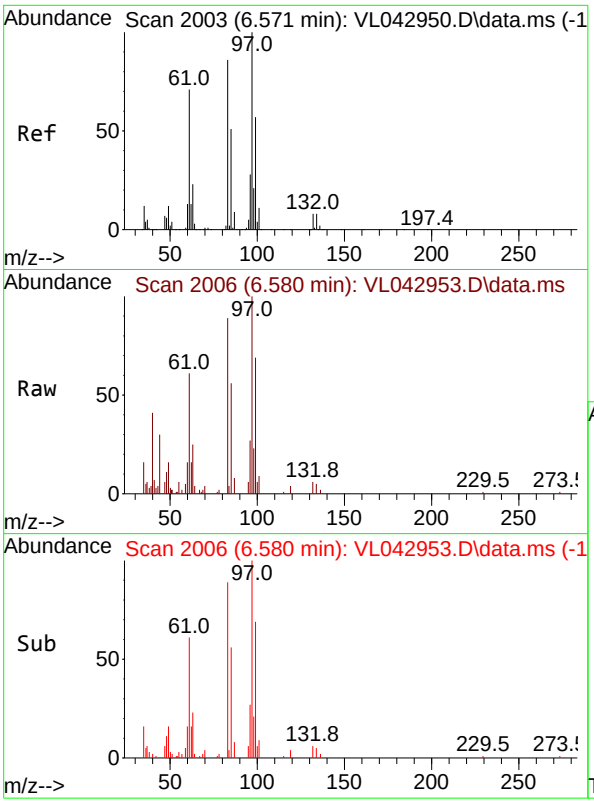


#46
cis-1,3-Dichloropropene
Concen: 0.379 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 75 Resp: 10078

Ion	Ratio	Lower	Upper
75	100		
39	64.8	53.8	80.6
77	29.0	23.6	35.4



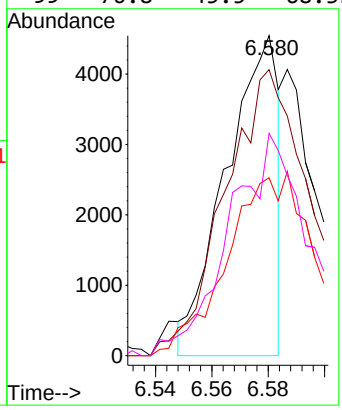


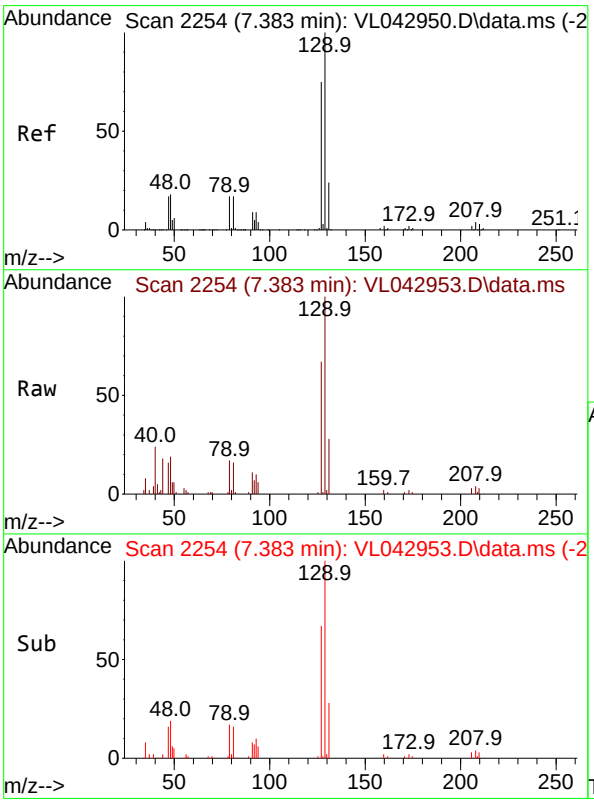
#47
1,1,2-Trichloroethane
Concen: 0.318 ppbv
RT: 6.580 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 97 Resp: 5868

Ion	Ratio	Lower	Upper
97	100		
83	91.6	68.7	103.1
85	52.5	40.6	60.8
99	70.8	45.5	68.3#

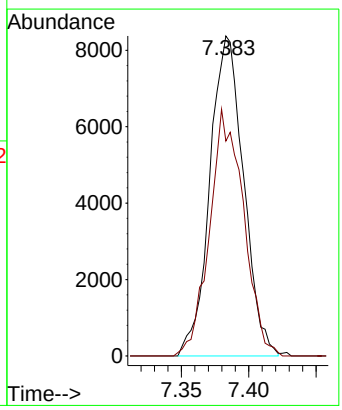


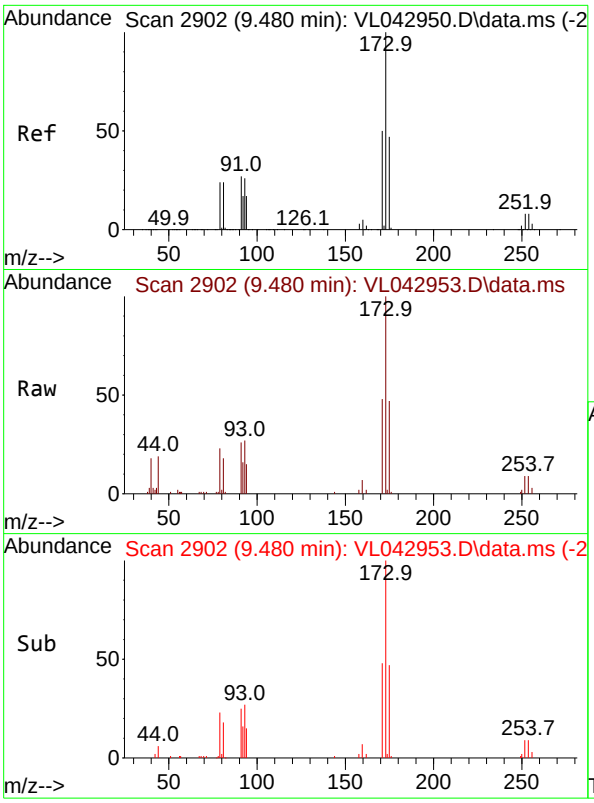


#48
Dibromochloromethane
Concen: 0.493 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:129 Resp: 14563

Ion	Ratio	Lower	Upper
129	100		
127	77.5	39.1	117.2



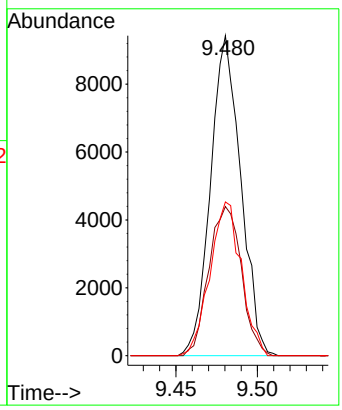


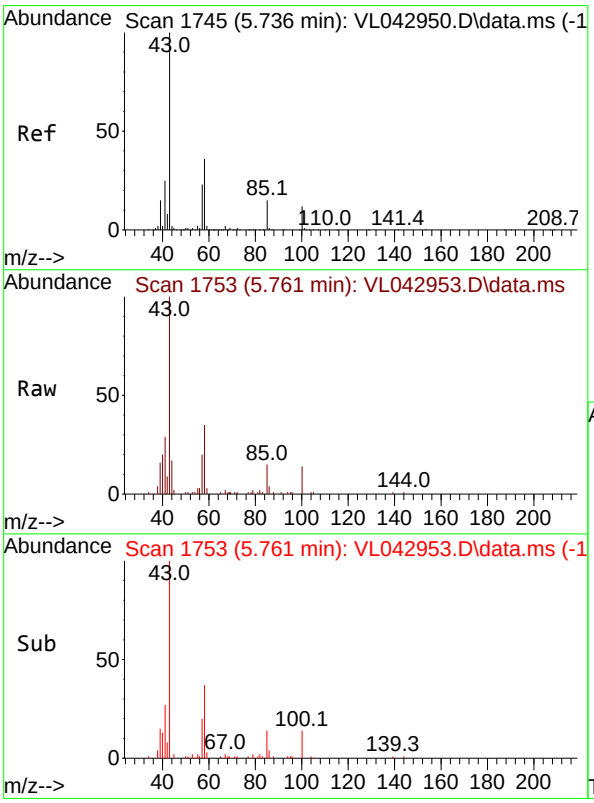
#49
Bromoform
Concen: 0.473 ppbv
RT: 9.480 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:173 Resp: 12136

Ion	Ratio	Lower	Upper
173	100		
175	50.2	37.9	56.9
171	49.8	41.1	61.7

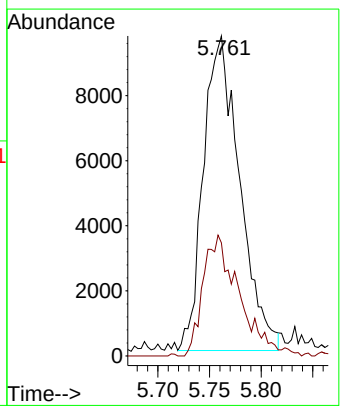


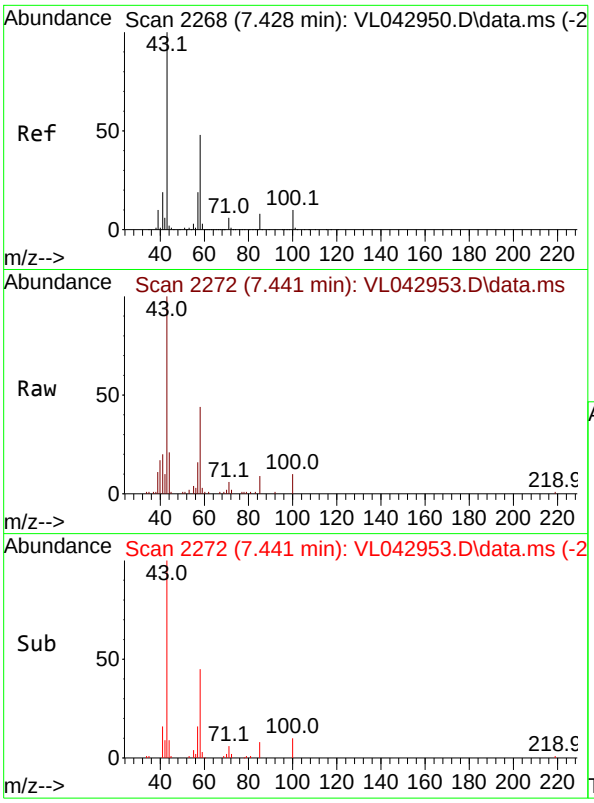


#50
4-Methyl-2-Pentanone
Concen: 0.493 ppbv
RT: 5.761 min Scan# 1753
Delta R.T. 0.026 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 43 Resp: 23639

Ion	Ratio	Lower	Upper
43	100		
58	38.5	28.4	42.6



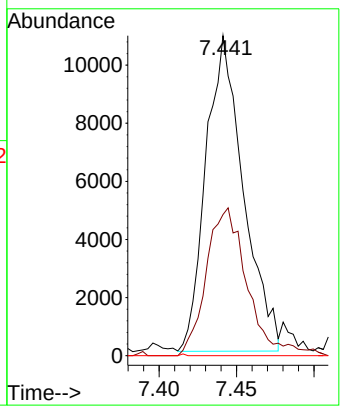


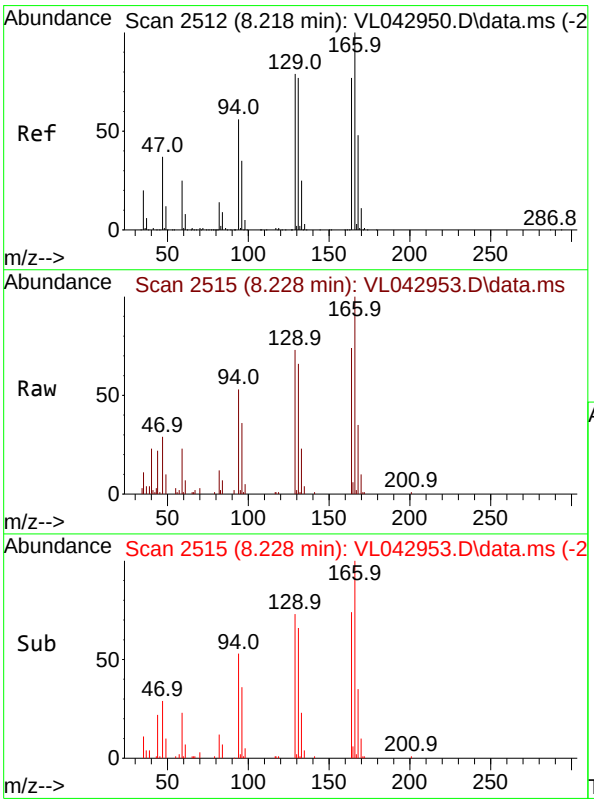
#51
2-Hexanone
Concen: 0.480 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 18322

Ion	Ratio	Lower	Upper
43	100		
58	51.8	39.7	59.5
98	0.2	0.1	0.1#

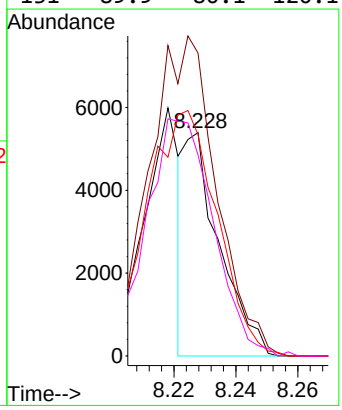


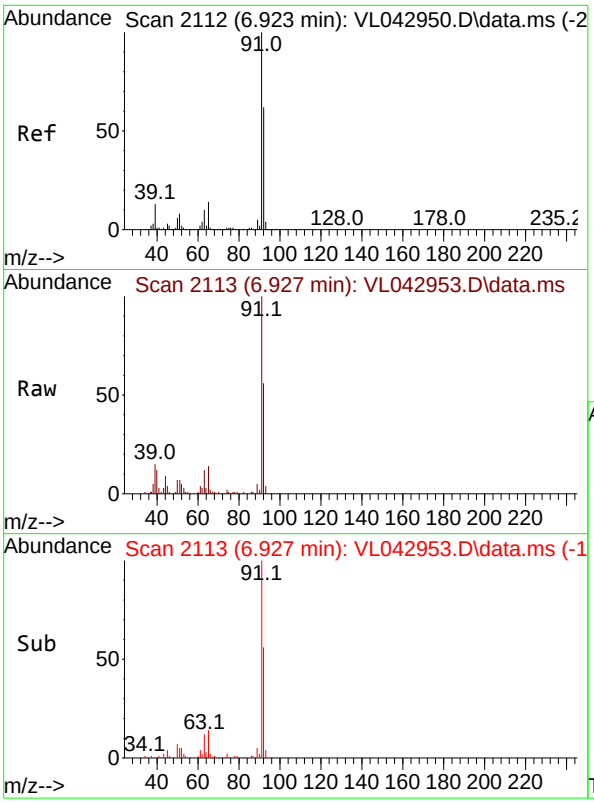


#52
Tetrachloroethene
Concen: 0.228 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.010 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:164 Resp: 4214

Ion	Ratio	Lower	Upper
164	100		
166	134.4	103.5	155.3
129	97.6	82.2	123.4
131	89.9	80.1	120.1



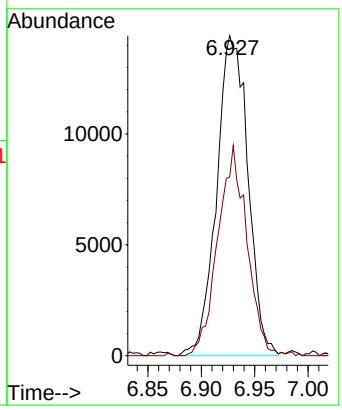


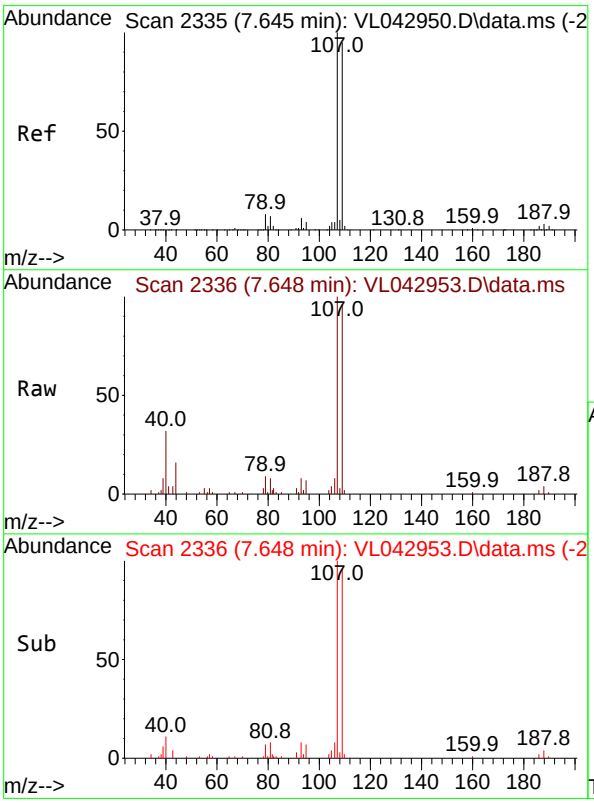
#53
Toluene
Concen: 0.519 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 29404

Ion	Ratio	Lower	Upper
91	100		
92	61.1	48.2	72.2

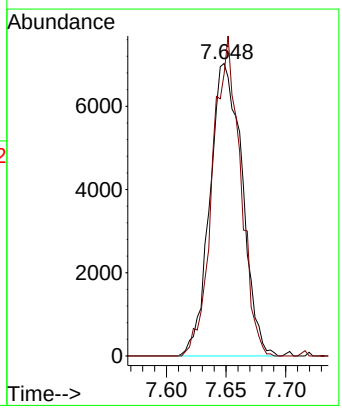


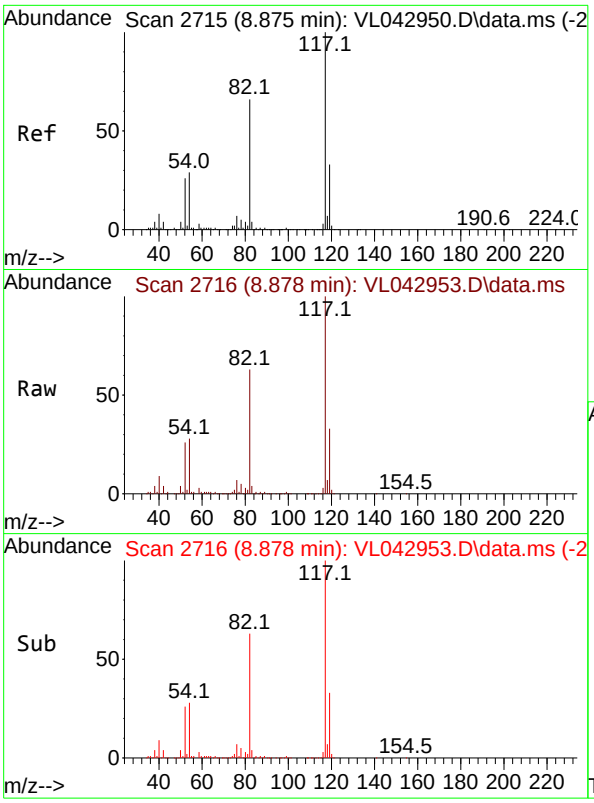


#54
1,2-Dibromoethane
Concen: 0.510 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:107 Resp: 13233

Ion	Ratio	Lower	Upper
107	100		
109	96.5	75.8	113.8



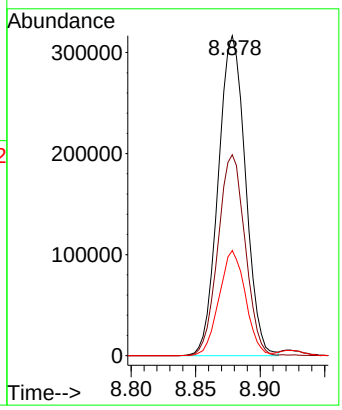


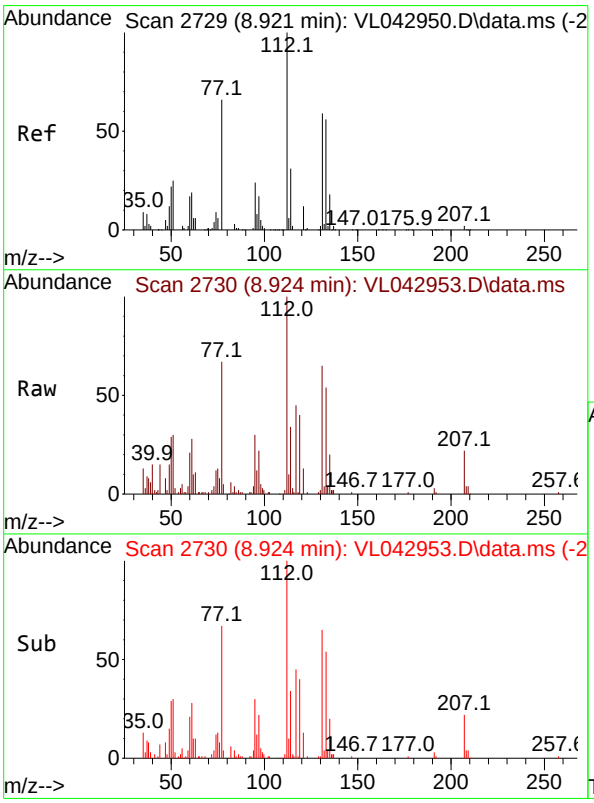
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 464091

Ion	Ratio	Lower	Upper
117	100		
82	63.0	52.8	79.2
119	33.5	26.5	39.7

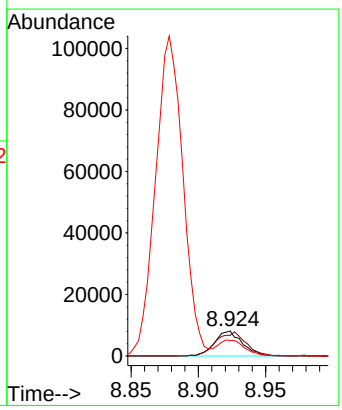


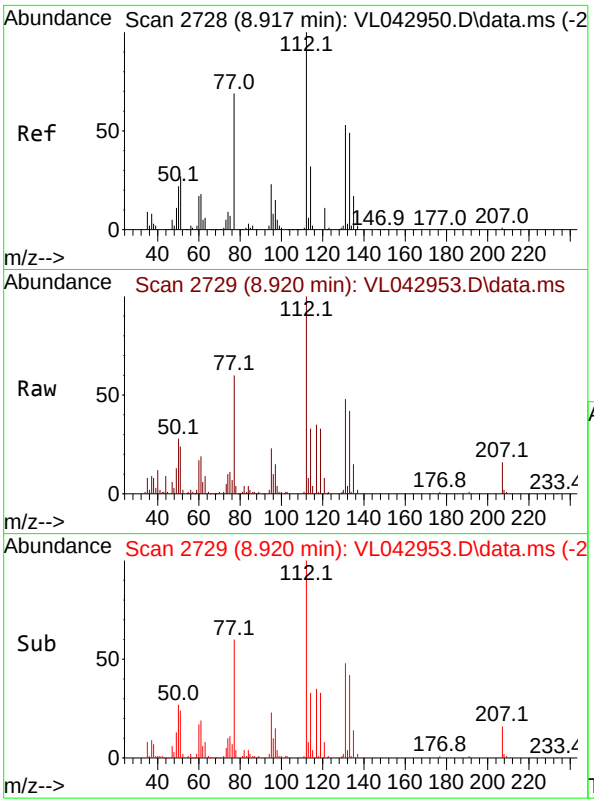


#56
1,1,1,2-Tetrachloroethane
Concen: 0.519 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:131 Resp: 11535

Ion	Ratio	Lower	Upper
131	100		
133	105.4	76.6	114.8
119	1350.8	49.9	74.9#



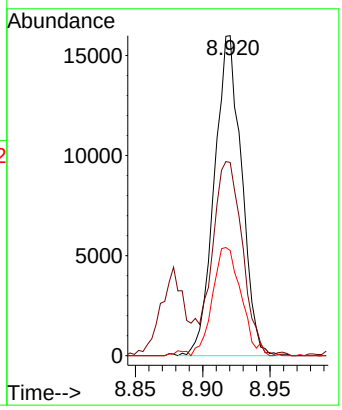


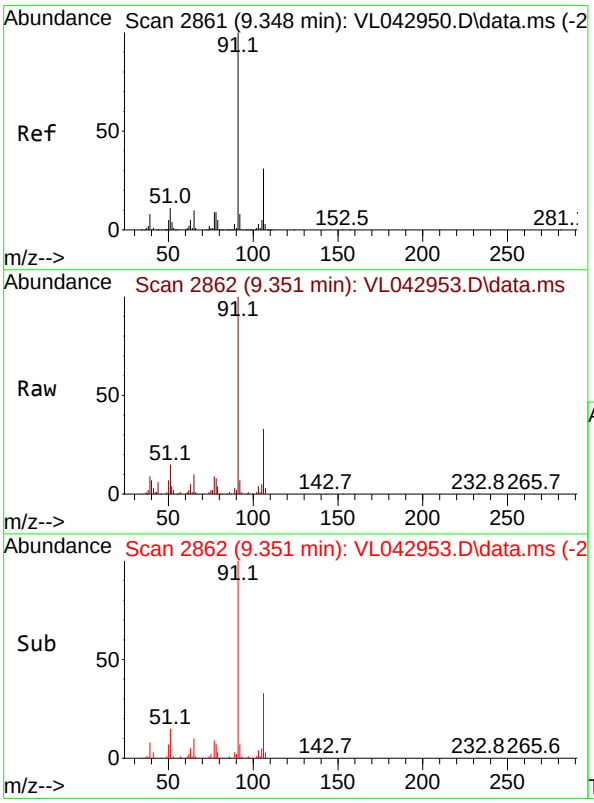
#57
Chlorobenzene
Concen: 0.530 ppbv
RT: 8.920 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:112 Resp: 22463

Ion	Ratio	Lower	Upper
112	100		
77	59.5	55.7	83.5
114	32.5	28.6	35.0

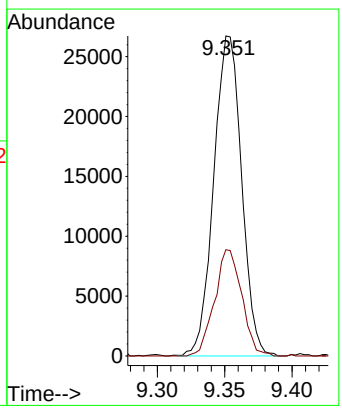


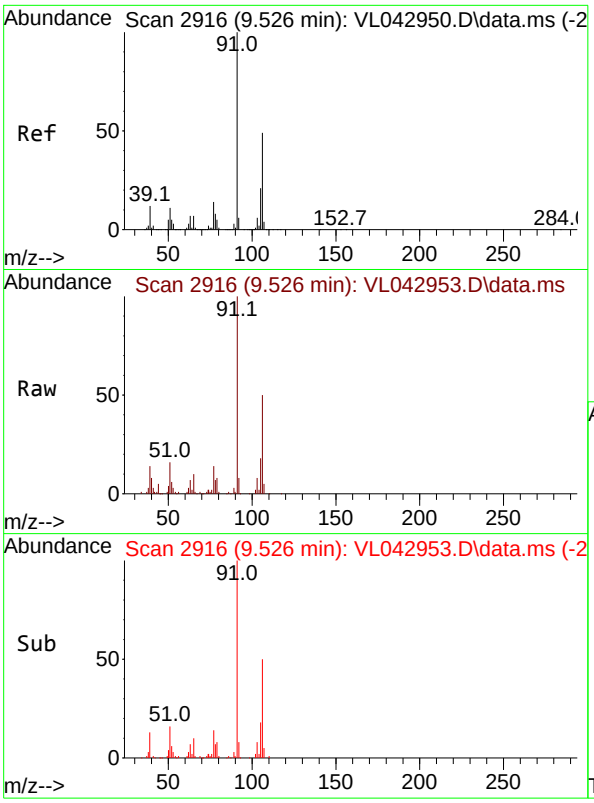


#58
Ethyl Benzene
Concen: 0.505 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 38459

Ion	Ratio	Lower	Upper
91	100		
106	33.2	24.6	37.0



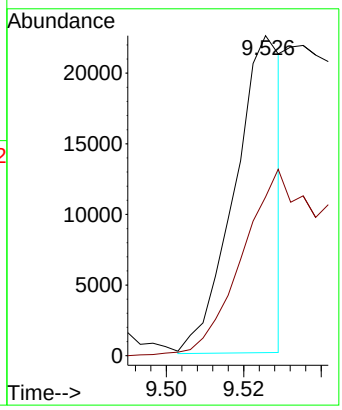


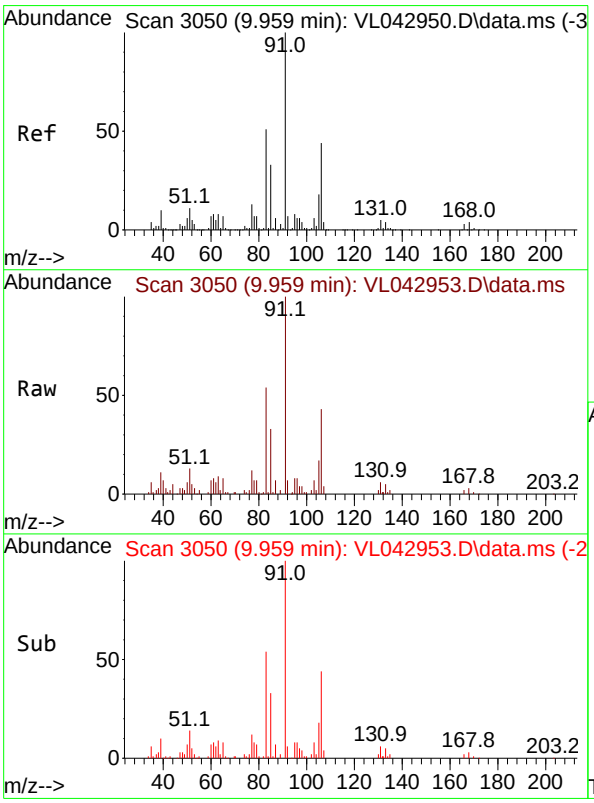
#59
m/p-Xylene
Concen: 0.310 ppbv
RT: 9.526 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 18667

Ion	Ratio	Lower	Upper
91	100		
106	163.2	0.0	0.0#

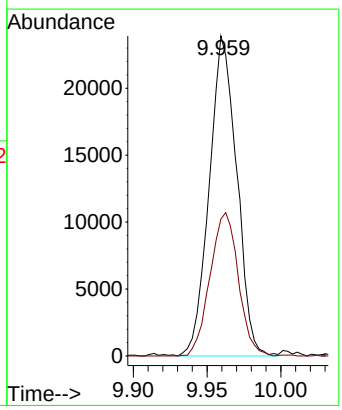


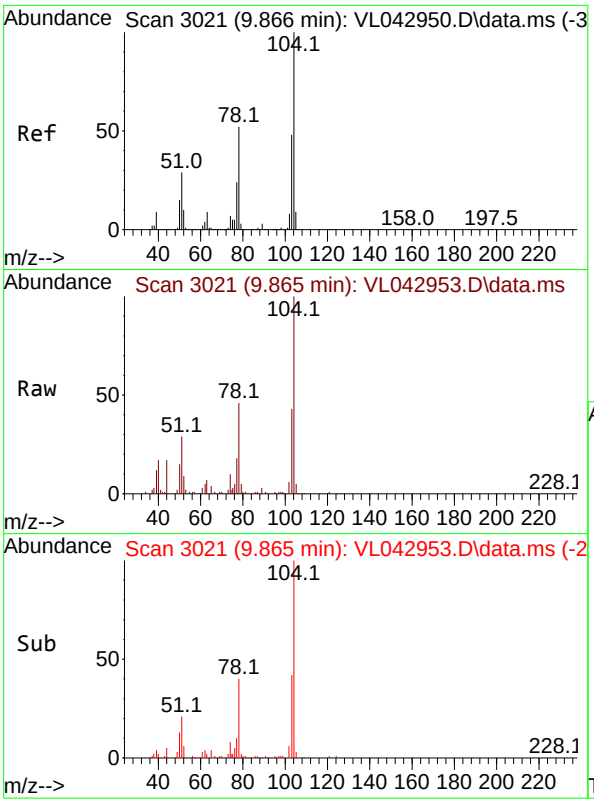


#60
o-Xylene
Concen: 0.516 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 30976

Ion	Ratio	Lower	Upper
91	100		
106	46.2	22.4	67.0



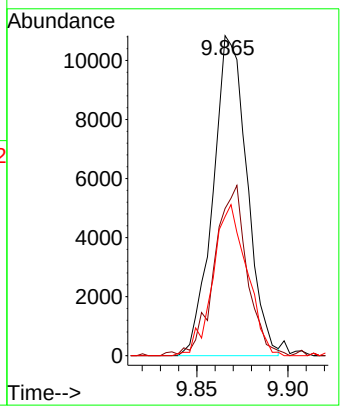


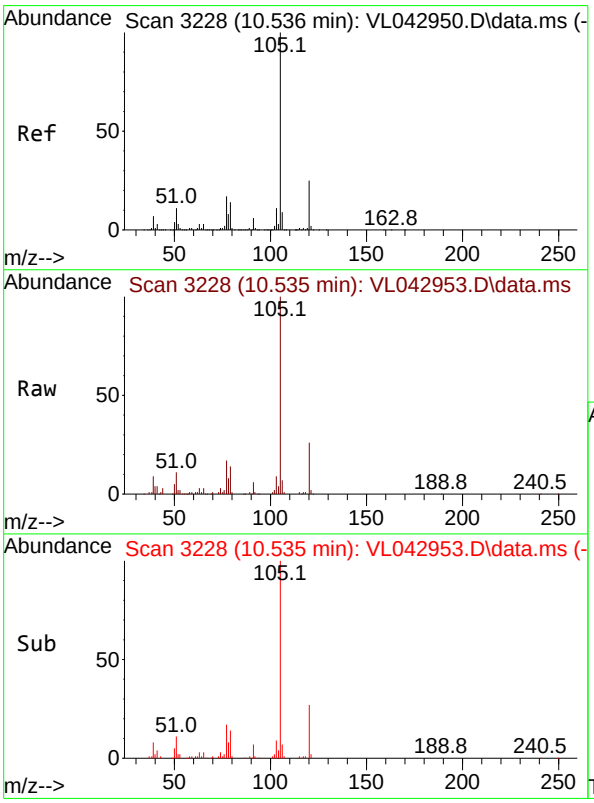
#61
Styrene
Concen: 0.495 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:104 Resp: 14048

Ion	Ratio	Lower	Upper
104	100		
78	51.8	39.9	59.9
103	47.6	36.9	55.3

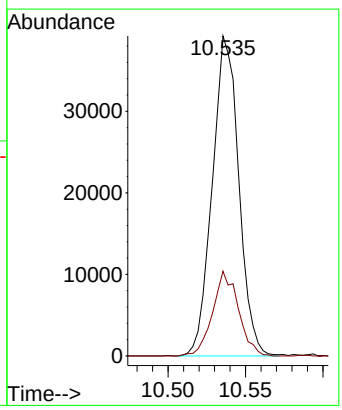


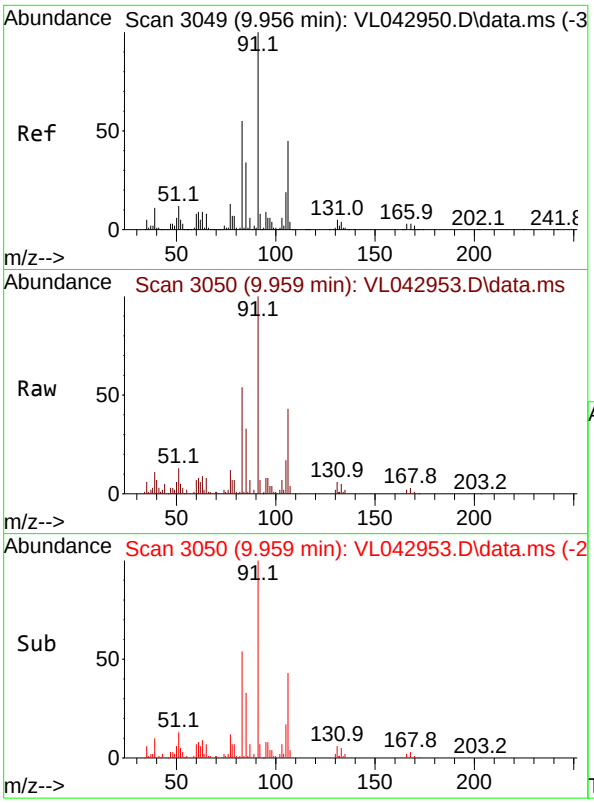


#62
Isopropylbenzene
Concen: 0.521 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 46640

Ion	Ratio	Lower	Upper
105	100		
120	25.9	20.6	30.8



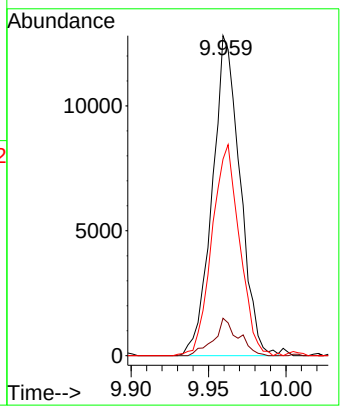


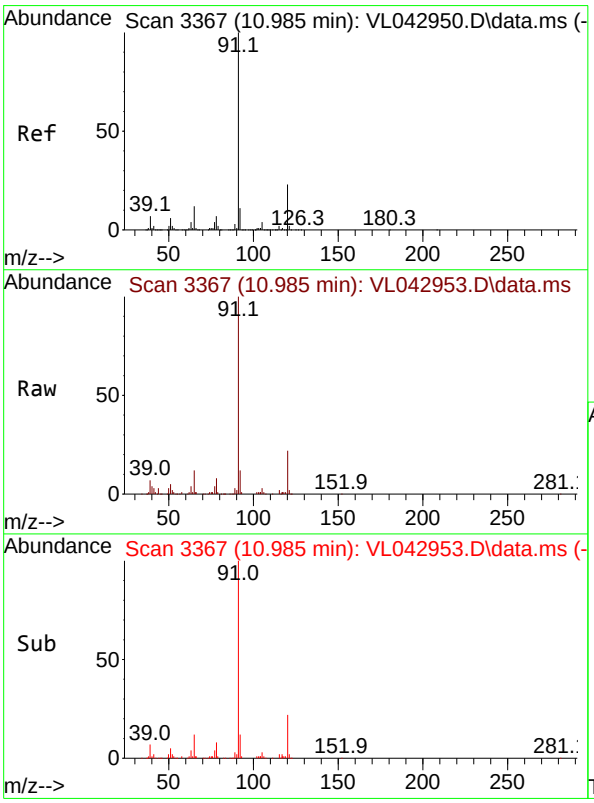
#63
1,1,2,2-Tetrachloroethane
Concen: 0.506 ppbv
RT: 9.959 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 15974

Ion	Ratio	Lower	Upper
83	100		
131	10.4	4.8	14.4
85	66.6	32.2	96.6

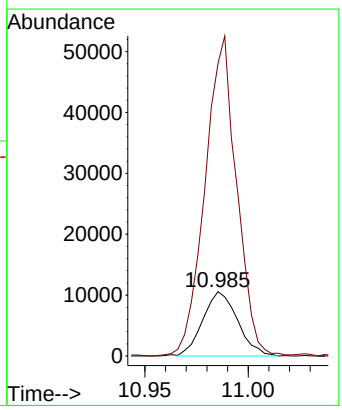


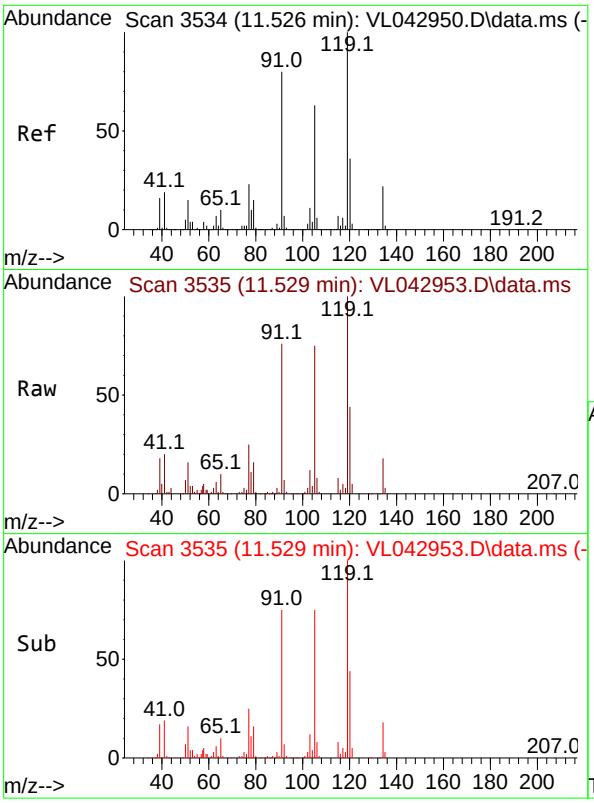


#64
n-propylbenzene
Concen: 0.527 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:120 Resp: 12333

Ion	Ratio	Lower	Upper
120	100		
91	456.5	364.9	547.3



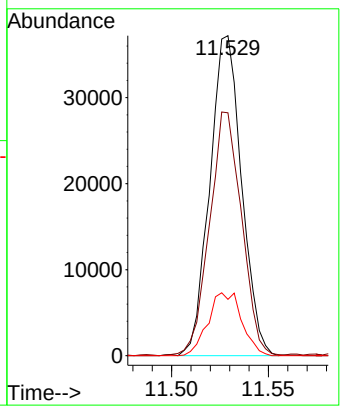


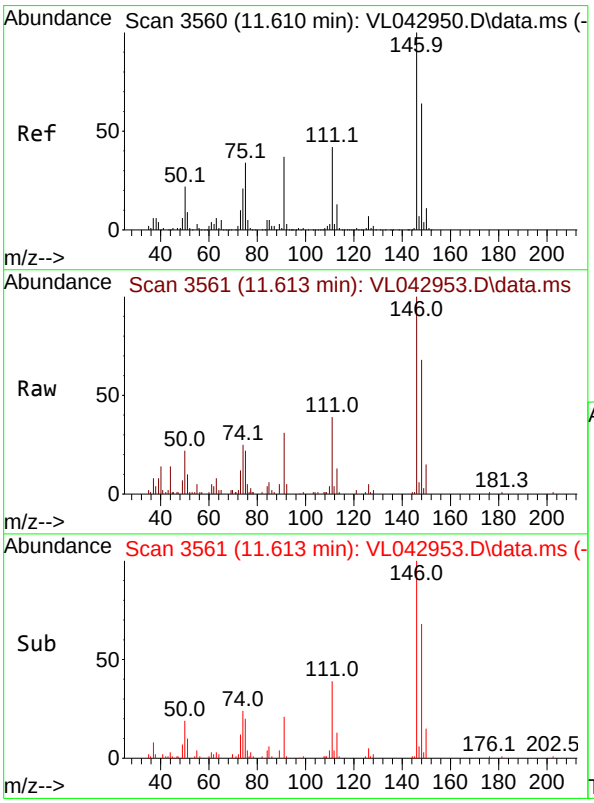
#65
tert-Butylbenzene
Concen: 0.535 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 42595

Ion	Ratio	Lower	Upper
119	100		
91	77.7	63.1	94.7
134	20.9	17.0	25.6

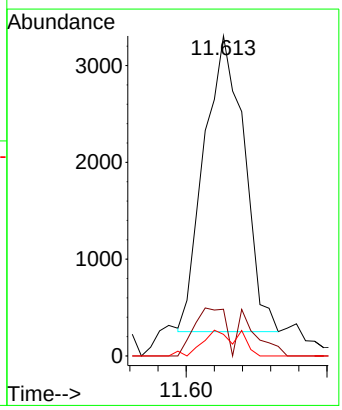


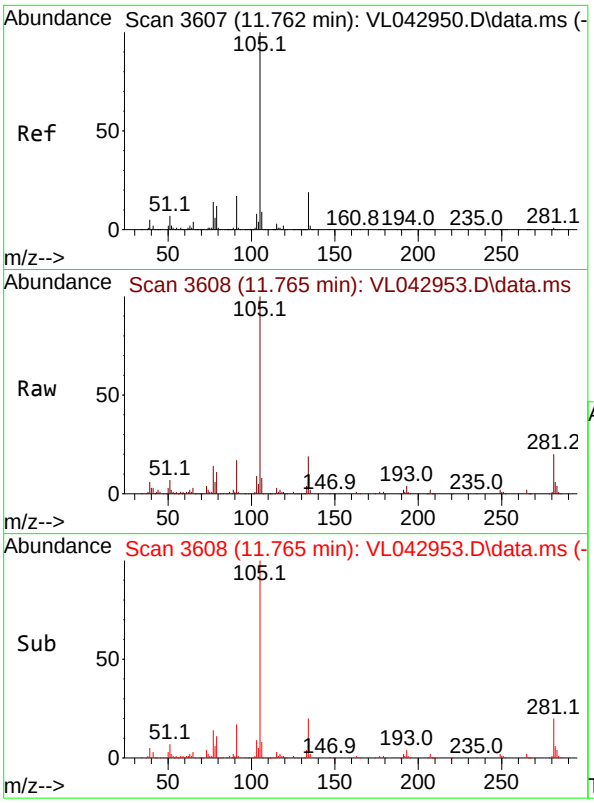


#66
Benzyl Chloride
Concen: 0.362 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 3022

Ion	Ratio	Lower	Upper
91	100		
126	20.0	14.6	21.8
128	8.0	5.0	7.4#



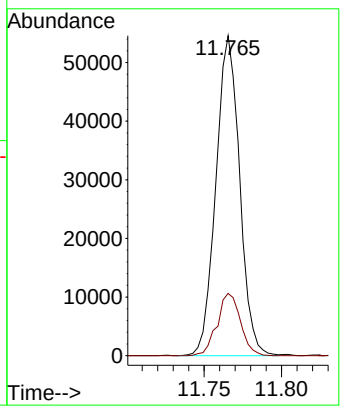


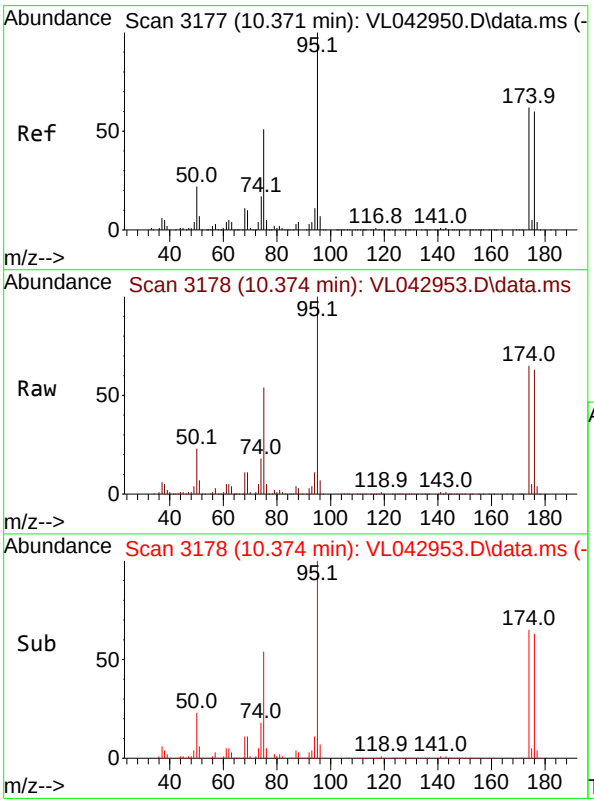
#67
sec-Butylbenzene
Concen: 0.525 ppbv
RT: 11.765 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 58190

Ion	Ratio	Lower	Upper
105	100		
134	19.1	15.7	23.5

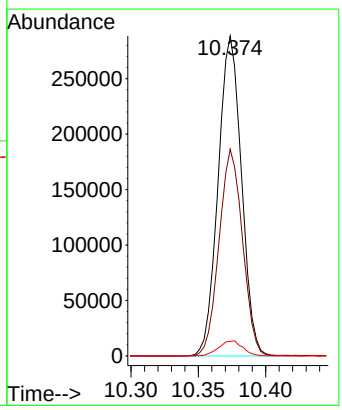


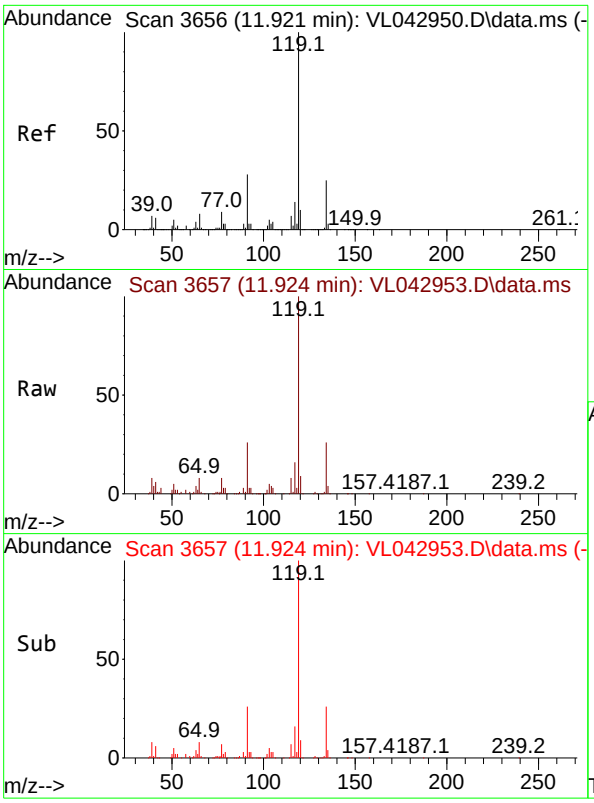


#68
1-Bromo-4-Fluorobenzene
Concen: 10.027 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 95 Resp: 347374

Ion	Ratio	Lower	Upper
95	100		
174	65.0	51.4	77.2
175	4.9	4.0	6.0



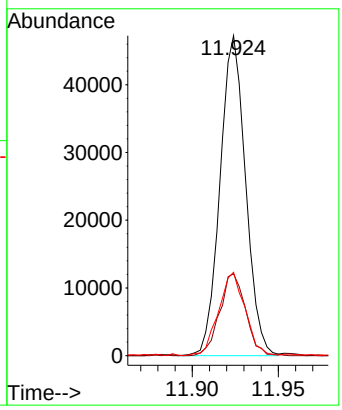


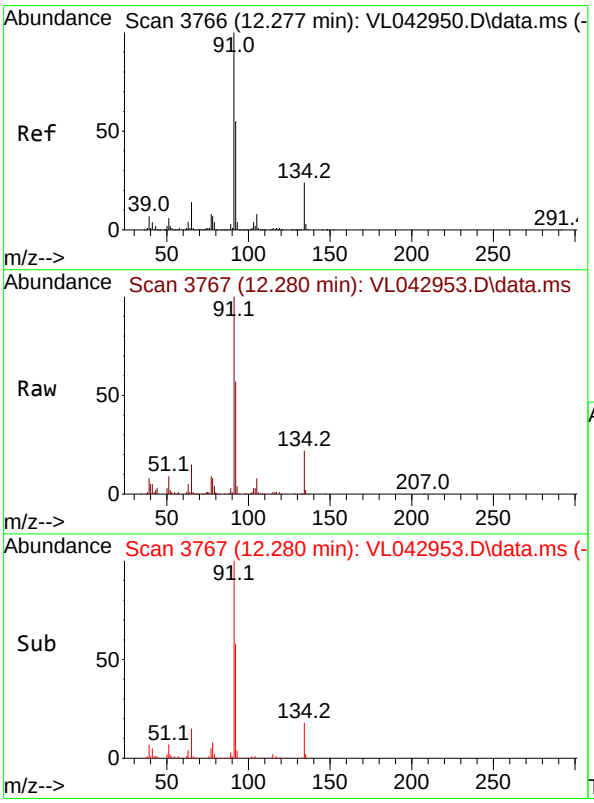
#69
p-Isopropyltoluene
Concen: 0.521 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 48855

Ion	Ratio	Lower	Upper
119	100		
134	26.0	21.0	31.4
91	28.2	22.3	33.5

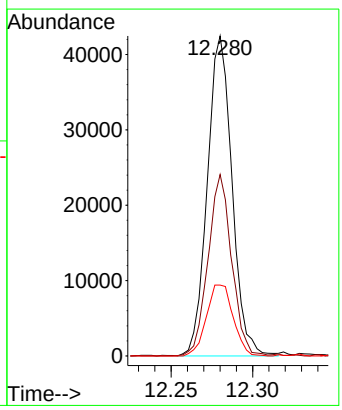


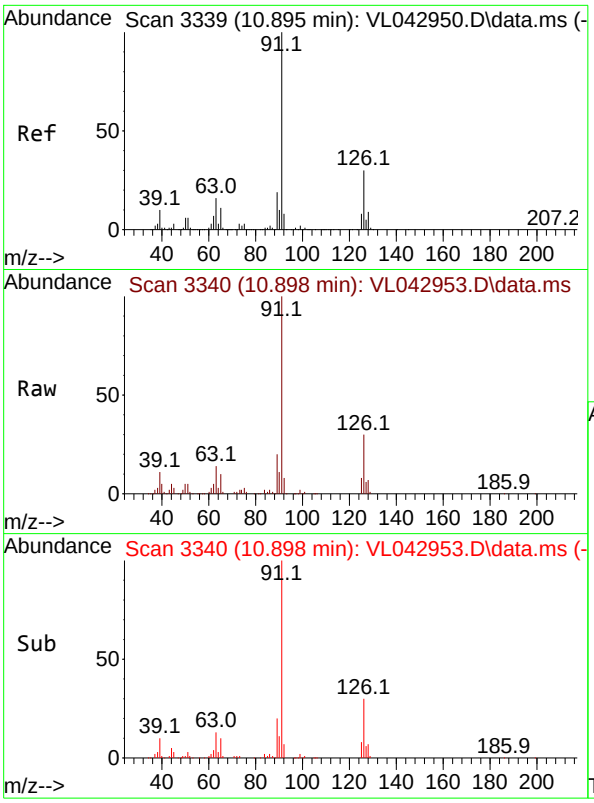


#70
n-Butylbenzene
Concen: 0.489 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion: 91 Resp: 44764

Ion	Ratio	Lower	Upper
91	100		
92	54.7	44.0	66.0
134	24.4	19.4	29.2



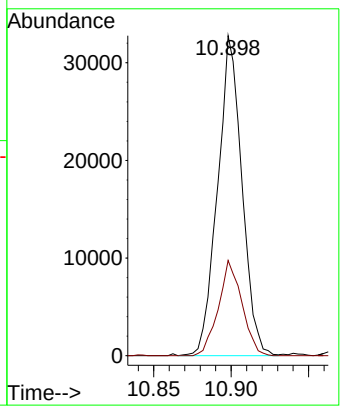


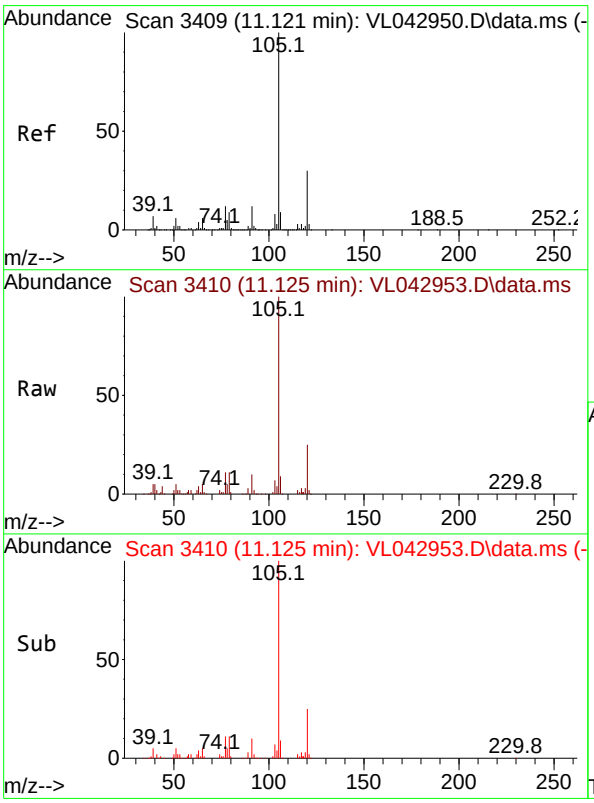
#71
2-Chlorotoluene
Concen: 0.530 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 35797

Ion	Ratio	Lower	Upper
91	100		
126	28.7	12.3	49.3

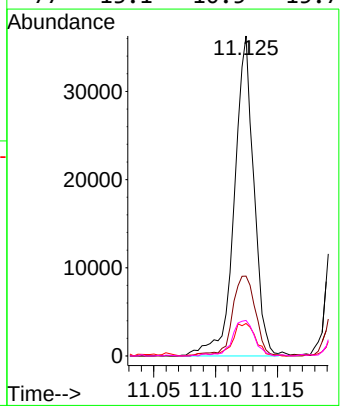


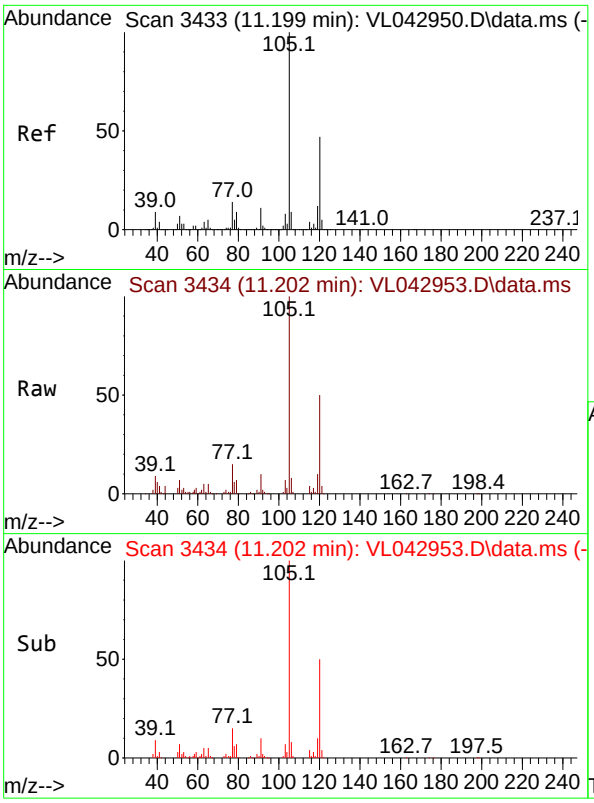


#72
4-Ethyltoluene
Concen: 0.529 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 39803

Ion	Ratio	Lower	Upper
105	100		
120	29.5	24.2	36.2
91	12.5	10.0	15.0
77	13.1	10.5	15.7



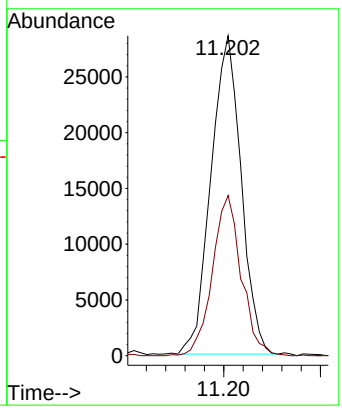


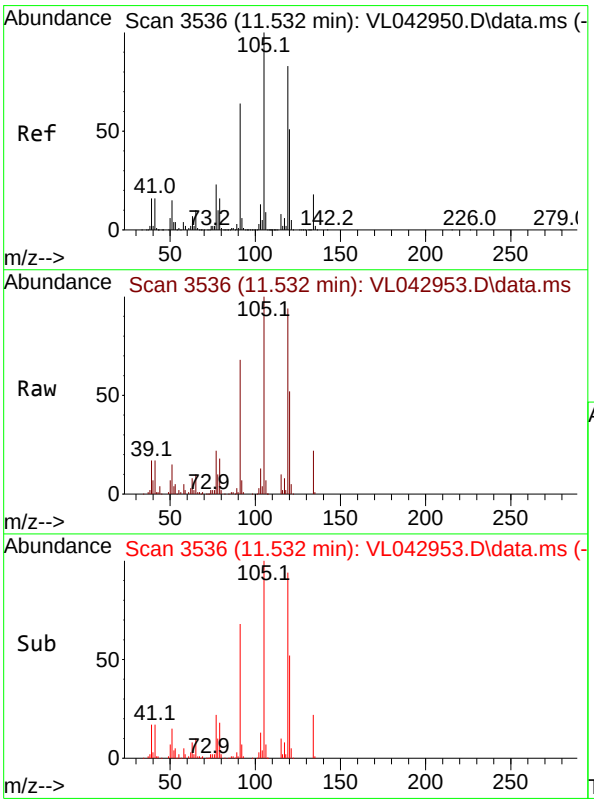
#73
1,3,5-Trimethylbenzene
Concen: 0.507 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 30932

Ion	Ratio	Lower	Upper
105	100		
120	50.1	38.0	57.0

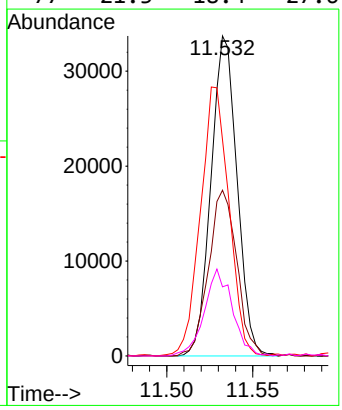


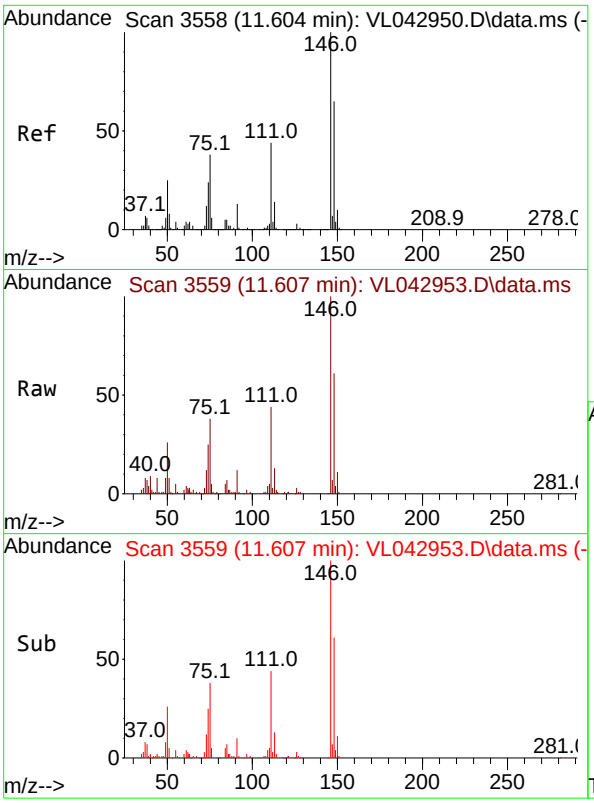


#74
1,2,4-Trimethylbenzene
Concen: 0.529 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:105 Resp: 35601

Ion	Ratio	Lower	Upper
105	100		
120	51.8	40.9	61.3
91	66.9	51.2	76.8
77	21.3	18.4	27.6



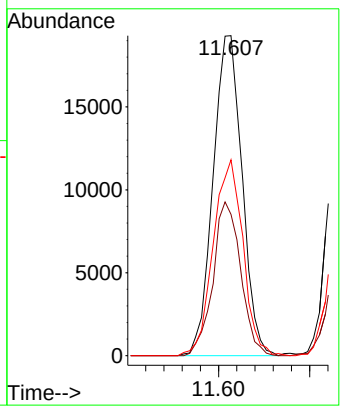


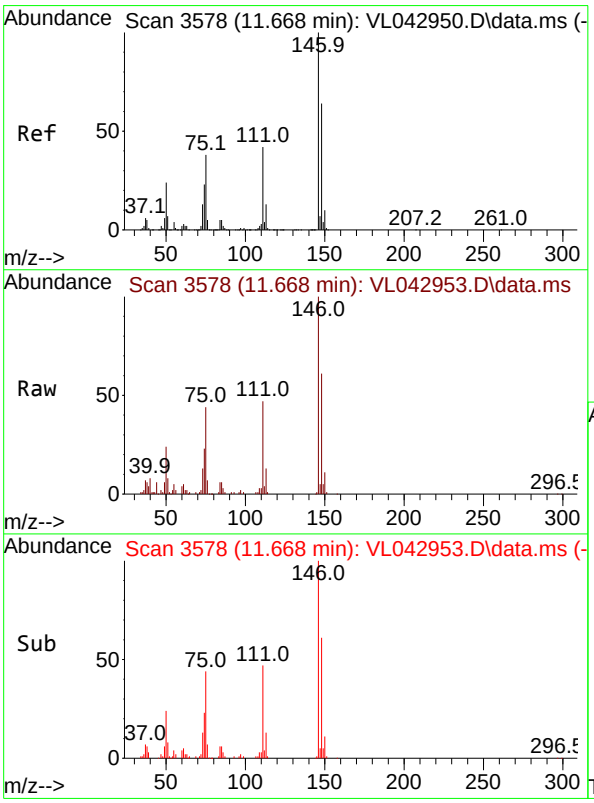
#75
1,3-Dichlorobenzene
Concen: 0.510 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 21307

Ion	Ratio	Lower	Upper
146	100		
111	45.9	22.3	66.9
148	62.7	31.9	95.5

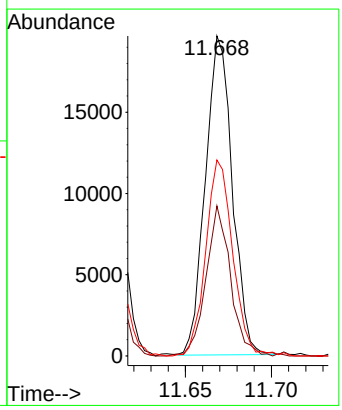


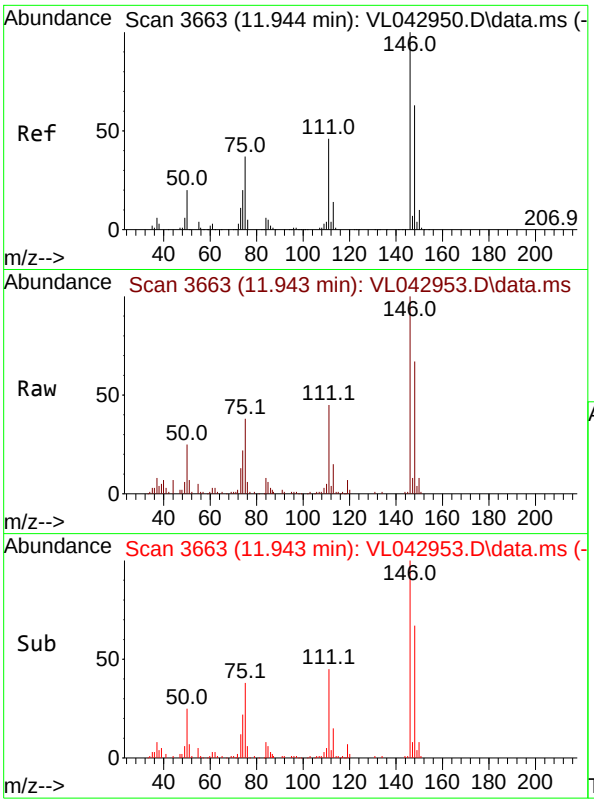


#76
1,4-Dichlorobenzene
Concen: 0.516 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:146 Resp: 21404

Ion	Ratio	Lower	Upper
146	100		
111	42.9	21.5	64.5
148	61.6	31.9	95.5



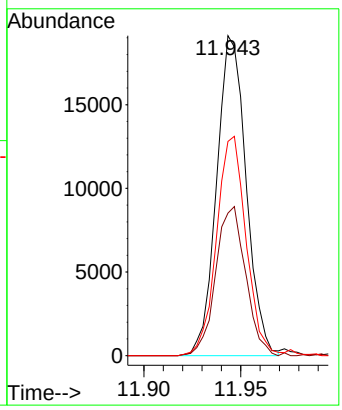


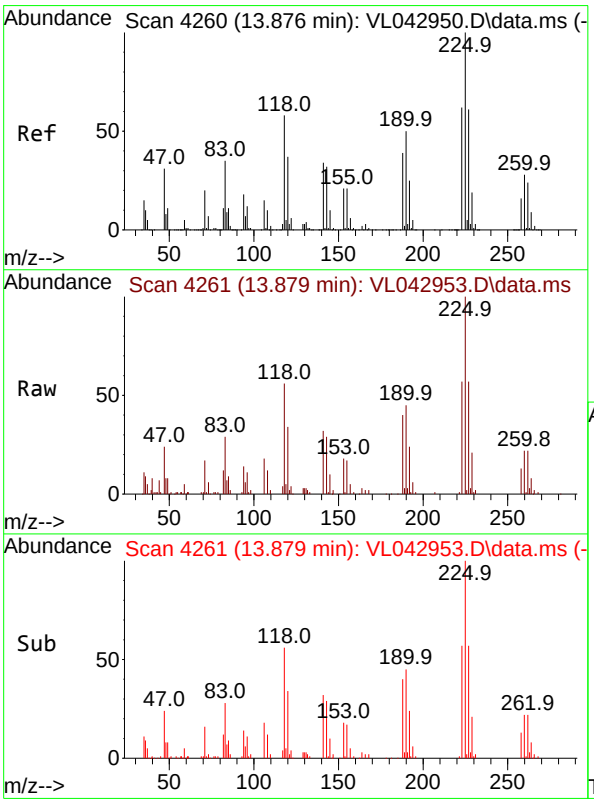
#77
1,2-Dichlorobenzene
Concen: 0.510 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 20279

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.1	69.3
148	69.3	32.0	96.0

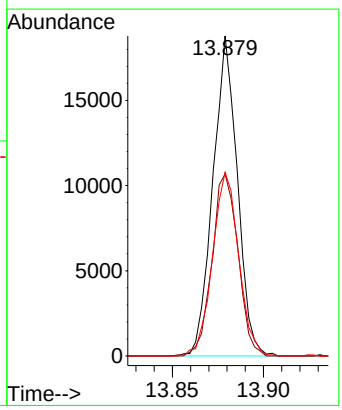


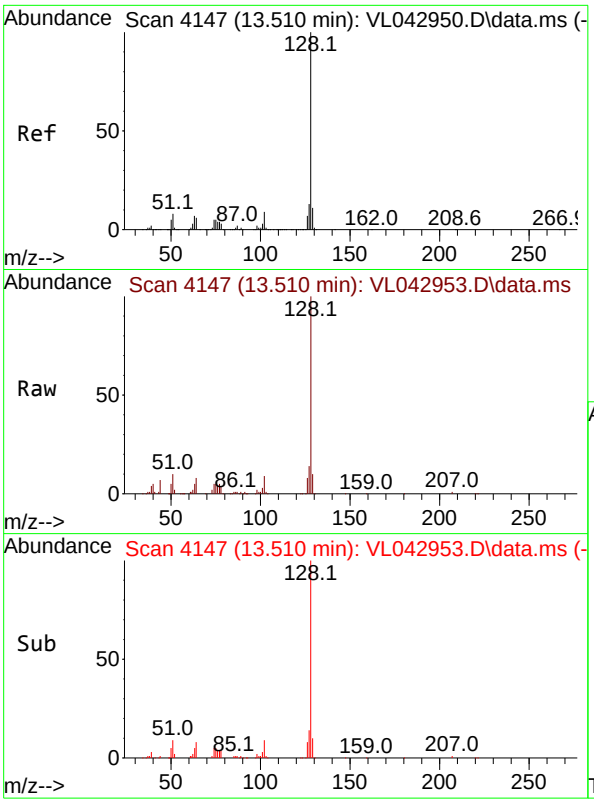


#78
Hexachloro-1,3-Butadiene
Concen: 0.563 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:225 Resp: 17515

Ion	Ratio	Lower	Upper
225	100		
223	60.4	50.1	75.1
227	61.5	50.4	75.6



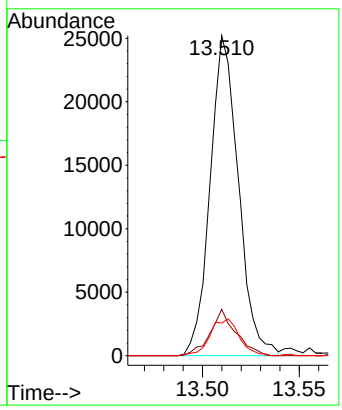


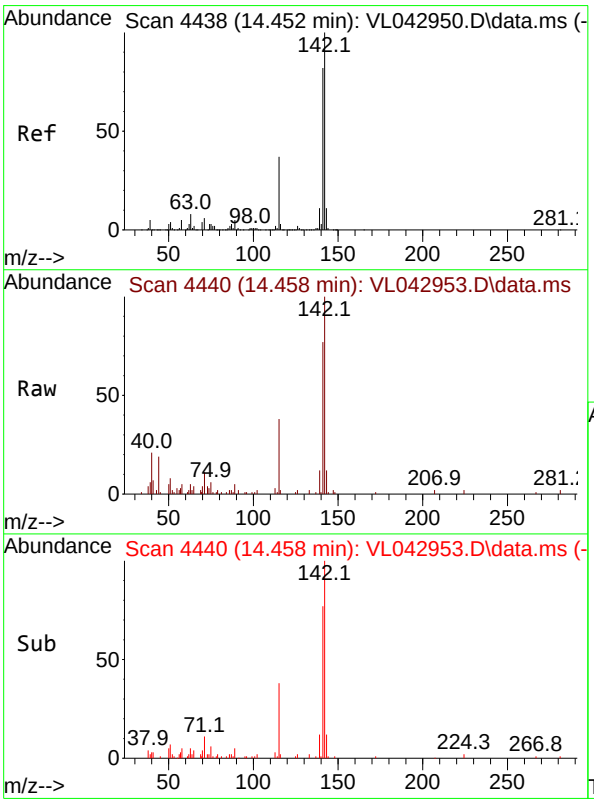
#79
Naphthalene
Concen: 0.429 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:128 Resp: 25577

Ion	Ratio	Lower	Upper
128	100		
127	14.5	10.6	15.8
129	10.2	9.0	13.6

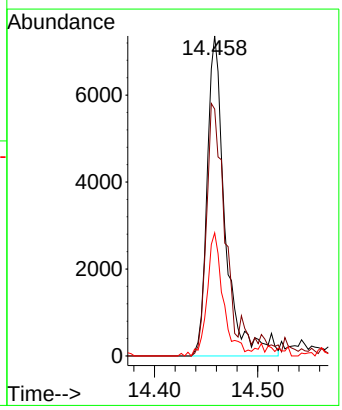


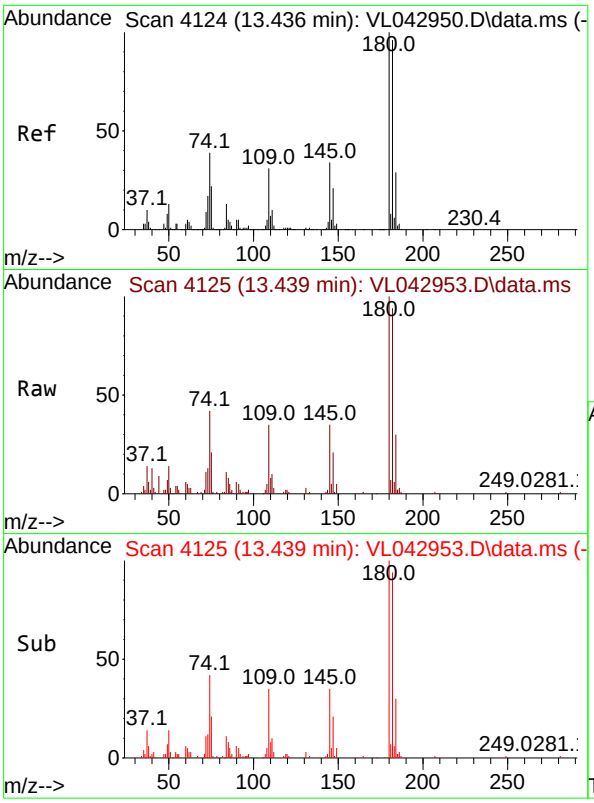


#80
Naphthalene,2-methyl-
Concen: 0.484 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.006 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Tgt Ion:142 Resp: 8906

Ion	Ratio	Lower	Upper
142	100		
141	91.9	65.1	97.7
115	35.4	28.9	43.3



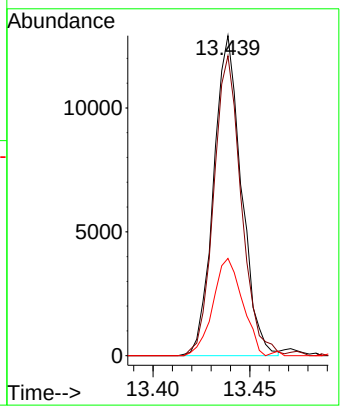


#81
1,2,4-Trichlorobenzene
Concen: 0.406 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042953.D
Acq: 22 Sep 2025 11:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:180 Resp: 12920

Ion	Ratio	Lower	Upper
180	100		
182	93.3	75.7	113.5
184	32.6	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042954.D
Acq On : 22 Sep 2025 11:56
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Sep 23 02:12:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	163771	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	498673	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	457171	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	337196	9.881	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	2310	0.105	ppbv	93
3) Chlorodifluoromethane	1.476	51	3144	0.115	ppbv #	62
4) Chloromethane	1.534	50	1320	0.132	ppbv #	79
5) Vinyl Chloride	1.580	62	920	0.102	ppbv #	75
6) Bromomethane	1.667	94	471	0.148	ppbv	96
7) Chloroethane	1.703	64	442	0.126	ppbv #	56
8) Dichlorotetrafluoroethane	1.557	85	1978	0.105	ppbv	93
9) Propene	1.434	41	264	0.022	ppbv	93
10) Heptane	4.975	43	2270	0.071	ppbv #	29
11) Trichlorofluoromethane	2.143	101	1891	0.089	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.143	101	1891	0.110	ppbv	99
13) Ethanol	1.890	45	1961	1.713	ppbv	88
14) Bromoethene	1.784	108	613	0.094	ppbv #	1
15) Acetone	1.835	43	5111	0.240	ppbv #	82
16) 1,3-Butadiene	1.612	39	1753	0.174	ppbv	87
17) tert-Butyl alcohol	2.042	59	2596	0.111	ppbv #	1
18) 1,1-Dichloroethene	2.036	96	1149	0.144	ppbv	77
19) Isopropyl Alcohol	1.890	45	1961	0.153	ppbv #	54
20) Methylene Chloride	2.065	84	3388	Below Cal	#	68
21) Allyl Chloride	2.098	41	2662	0.179	ppbv	91
22) trans-1,2-Dichloroethene	2.340	96	1199	0.133	ppbv	98
23) Vinyl Acetate	2.463	43	3599	0.118	ppbv #	76
24) 1,1-Dichloroethane	2.411	63	2202	0.124	ppbv #	97
25) Ethyl Acetate	2.842	43	6357	0.118	ppbv #	94
26) Hexane	2.829	57	2622	0.107	ppbv #	6
27) Carbon Disulfide	2.153	76	2391	0.108	ppbv #	1
28) Methyl tert-Butyl Ether	2.444	73	1171	0.092	ppbv #	1
29) Chloroform	2.848	83	3449	0.107	ppbv	90
30) Cyclohexane	3.861	84	1880	0.092	ppbv #	42
31) cis-1,2-Dichloroethene	2.340	61	1780	0.077	ppbv	88
32) 1,1,1-Trichloroethane	3.370	97	3418	0.098	ppbv	96
34) 2-Butanone	2.564	43	4230	0.121	ppbv	98
35) Carbon Tetrachloride	3.764	117	2806	0.087	ppbv #	66
36) Benzene	3.654	78	2876	0.061	ppbv #	94
37) 1,2-Dichloroethane	3.221	62	2858	0.116	ppbv #	96
38) Trichloroethene	4.548	130	471	0.020	ppbv #	37
39) 1,2-Dichloropropane	3.959	63	123686	7.230	ppbv #	25
40) 1,4-Dioxane	4.612	88	732	0.092	ppbv #	34
41) Tetrahydrofuran	3.068	42	2075	0.103	ppbv #	79
42) Bromodichloromethane	4.489	83	3539	0.103	ppbv #	90
43) Methyl Methacrylate	4.878	69	589	0.031	ppbv #	1
44) 2,2,4-Trimethylpentane	4.635	57	4291	0.053	ppbv #	43
45) t-1,3-Dichloropropene	6.418	75	999	0.049	ppbv #	27

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042954.D
Acq On : 22 Sep 2025 11:56
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Sep 23 02:12:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.596	75	1566	0.060	ppbv	#	61
47)	1,1,2-Trichloroethane	6.583	97	1588	0.088	ppbv	#	78
48)	Dibromochloromethane	7.393	129	1273	0.044	ppbv	#	10
49)	Bromoform	9.487	173	2105	0.084	ppbv		97
50)	4-Methyl-2-Pentanone	5.742	43	104	0.002	ppbv	#	39
51)	2-Hexanone	7.444	43	921	0.025	ppbv	#	28
52)	Tetrachloroethene	8.228	164	1022	0.056	ppbv	#	68
53)	Toluene	6.933	91	5973	0.108	ppbv		96
54)	1,2-Dibromoethane	7.655	107	2129	0.084	ppbv		81
56)	1,1,1,2-Tetrachloroethane	8.930	131	1250	0.057	ppbv	#	1
57)	Chlorobenzene	8.924	112	4812	0.115	ppbv	#	75
58)	Ethyl Benzene	9.354	91	8123	0.108	ppbv		97
59)	m/p-Xylene	9.532	91	7134	0.120	ppbv	#	100
60)	o-Xylene	9.966	91	6052	0.102	ppbv		93
61)	Styrene	9.878	104	2851	0.102	ppbv		91
62)	Isopropylbenzene	10.542	105	9236	0.105	ppbv		98
63)	1,1,2,2-Tetrachloroethane	9.966	83	3301	0.106	ppbv		97
64)	n-propylbenzene	10.989	120	2475	0.107	ppbv		95
65)	tert-Butylbenzene	11.529	119	8306	0.106	ppbv		95
66)	Benzyl Chloride	11.620	91	318	0.039	ppbv	#	65
67)	sec-Butylbenzene	11.769	105	11601	0.106	ppbv		95
69)	p-Isopropyltoluene	11.927	119	9493	0.103	ppbv		98
70)	n-Butylbenzene	12.283	91	8041	0.089	ppbv		96
71)	2-Chlorotoluene	10.898	91	4737	0.071	ppbv		73
72)	4-Ethyltoluene	11.124	105	7048	0.095	ppbv	#	95
73)	1,3,5-Trimethylbenzene	11.209	105	5976	0.099	ppbv		98
74)	1,2,4-Trimethylbenzene	11.536	105	6807	0.103	ppbv	#	75
75)	1,3-Dichlorobenzene	11.607	146	4130	0.100	ppbv		99
76)	1,4-Dichlorobenzene	11.671	146	3832	0.094	ppbv		95
77)	1,2-Dichlorobenzene	11.950	146	4083	0.104	ppbv		96
78)	Hexachloro-1,3-Butadiene	13.879	225	3820	0.125	ppbv		94
79)	Naphthalene	13.516	128	4836	0.082	ppbv		96
80)	Naphthalene,2-methyl-	14.461	142	4029	0.222	ppbv		90
81)	1,2,4-Trichlorobenzene	13.442	180	2055	0.066	ppbv		97

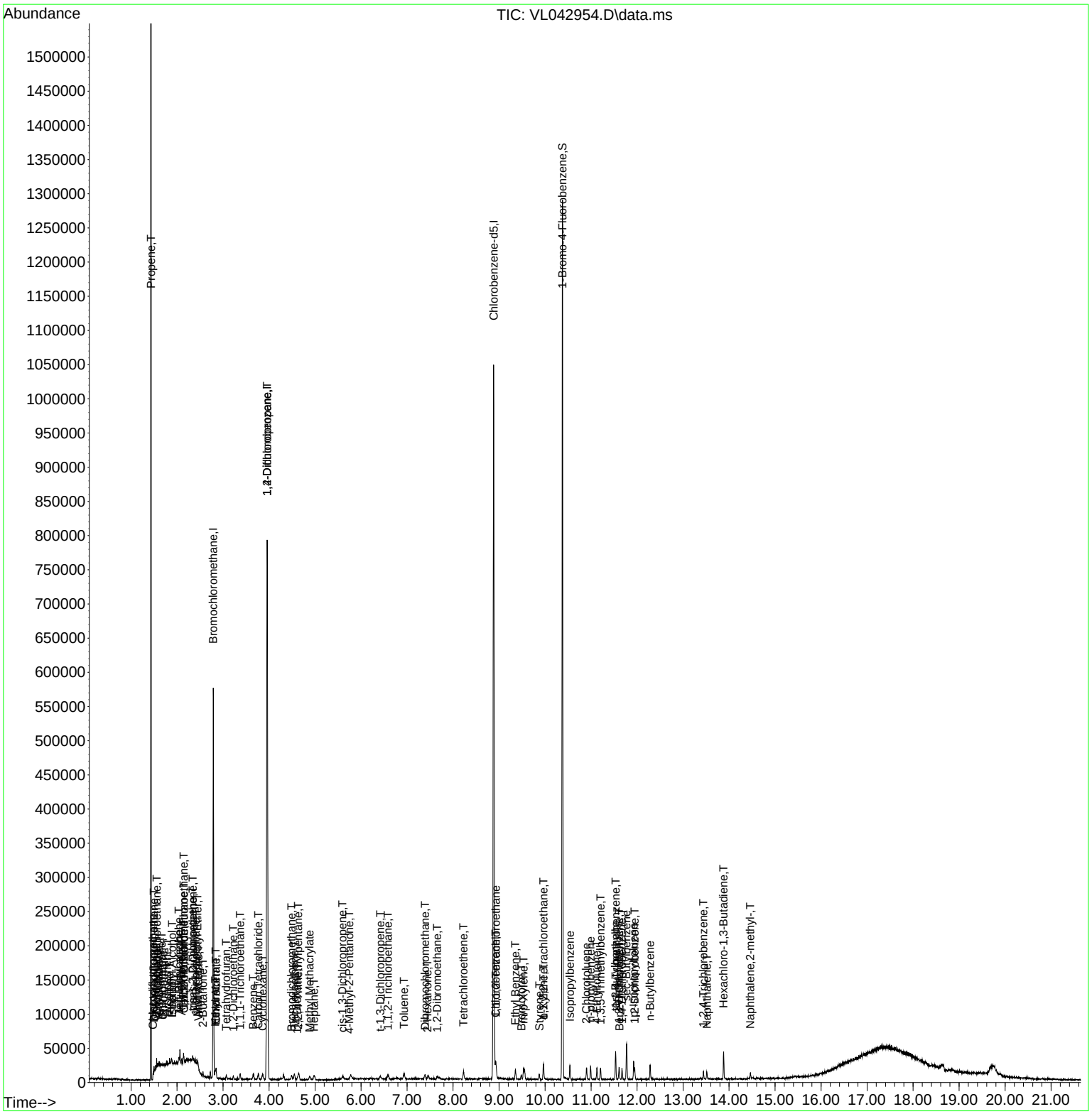
(#) = qualifier out of range (m) = manual integration (+) = signals summed

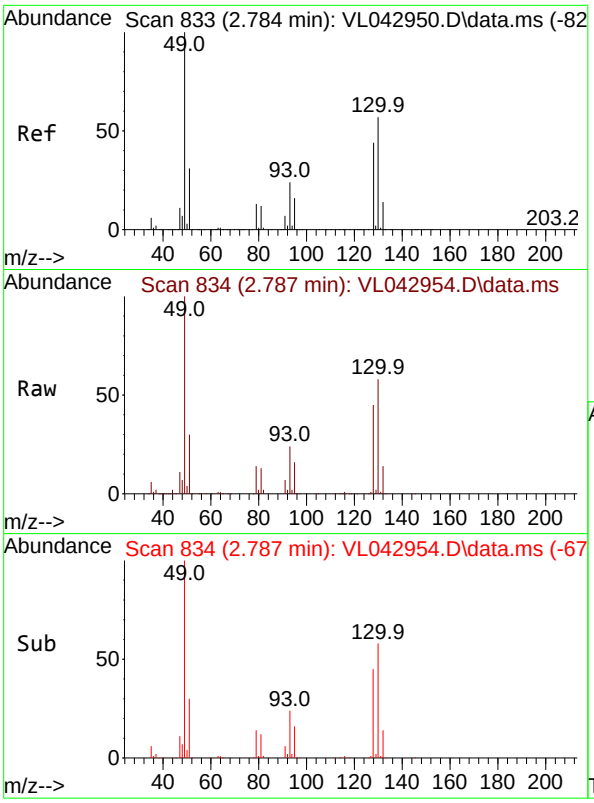
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042954.D
Acq On : 22 Sep 2025 11:56
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Sep 23 02:12:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



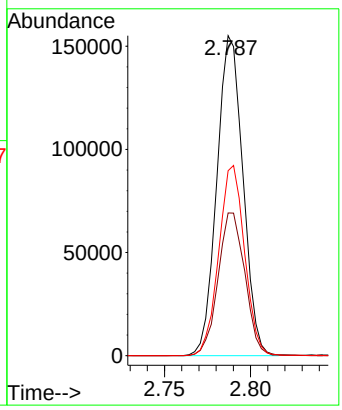


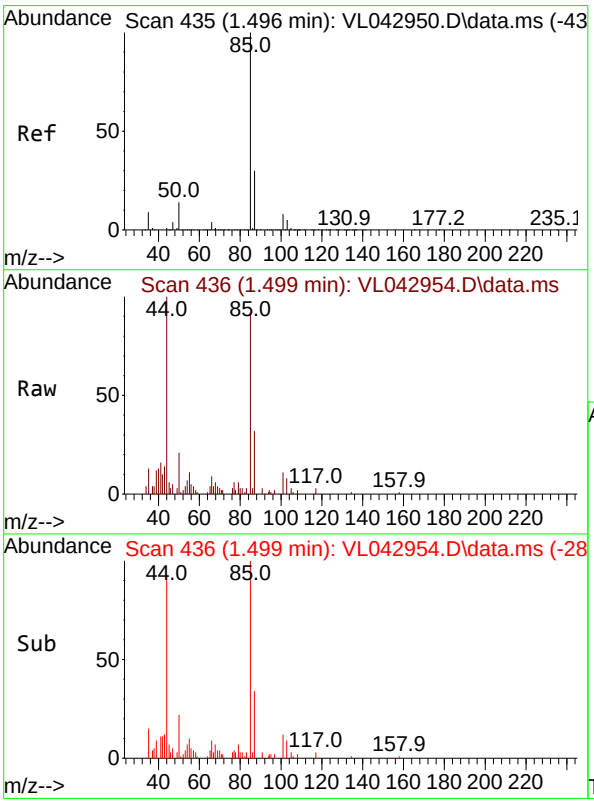
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 49 Resp: 163771

Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.9	68.8
130	59.0	29.1	87.3

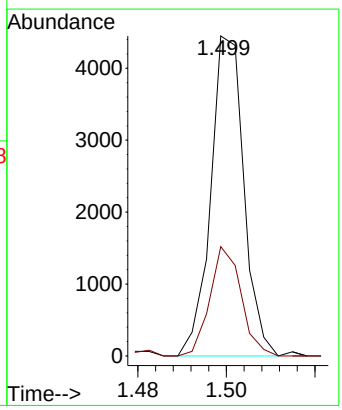


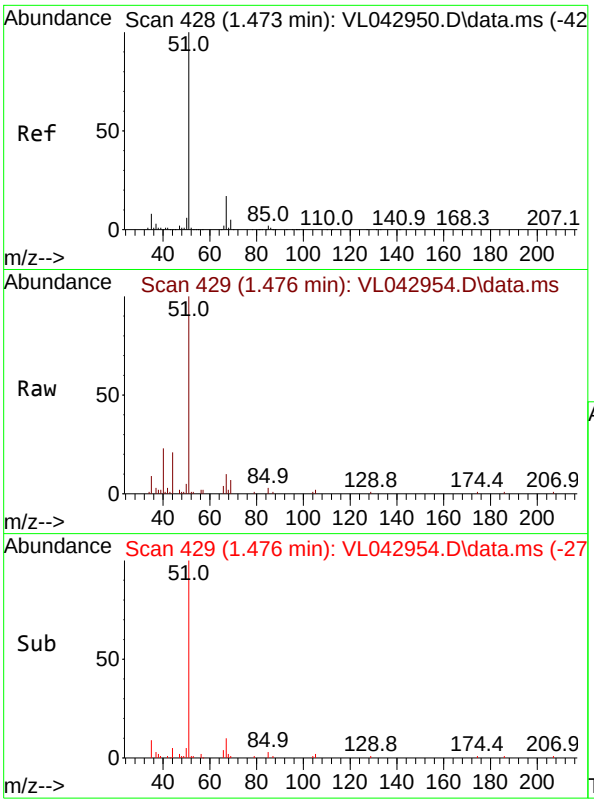


#2
Dichlorodifluoromethane
Concen: 0.105 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 85 Resp: 2310

Ion	Ratio	Lower	Upper
85	100		
87	34.2	24.3	36.5



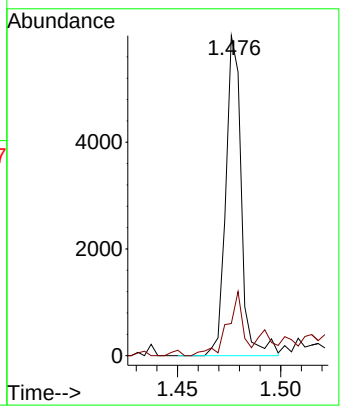


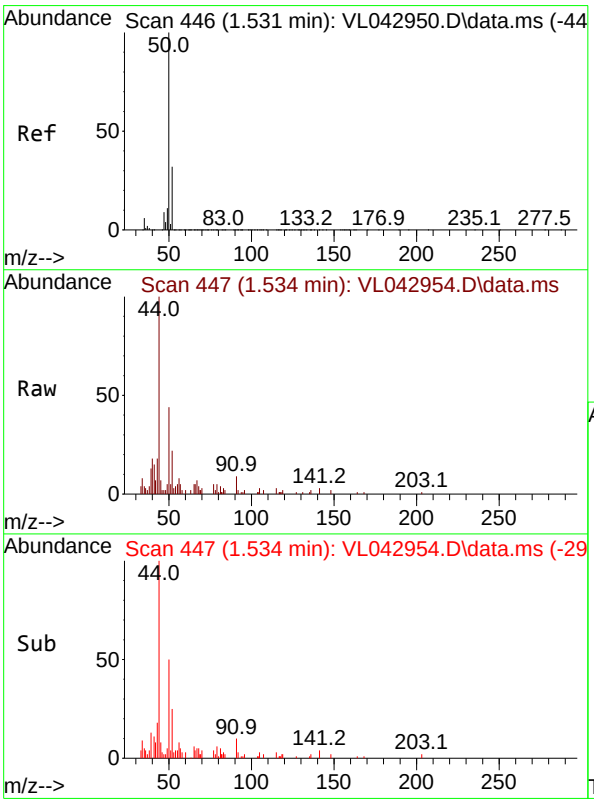
#3
Chlorodifluoromethane
Concen: 0.115 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 51 Resp: 3144

Ion	Ratio	Lower	Upper
51	100		
67	33.8	13.8	20.8#

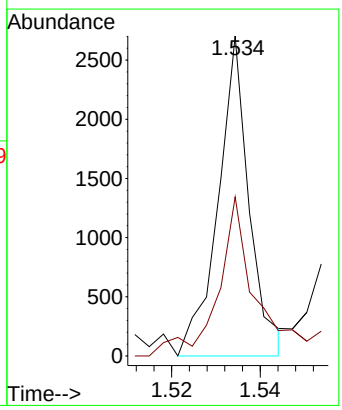


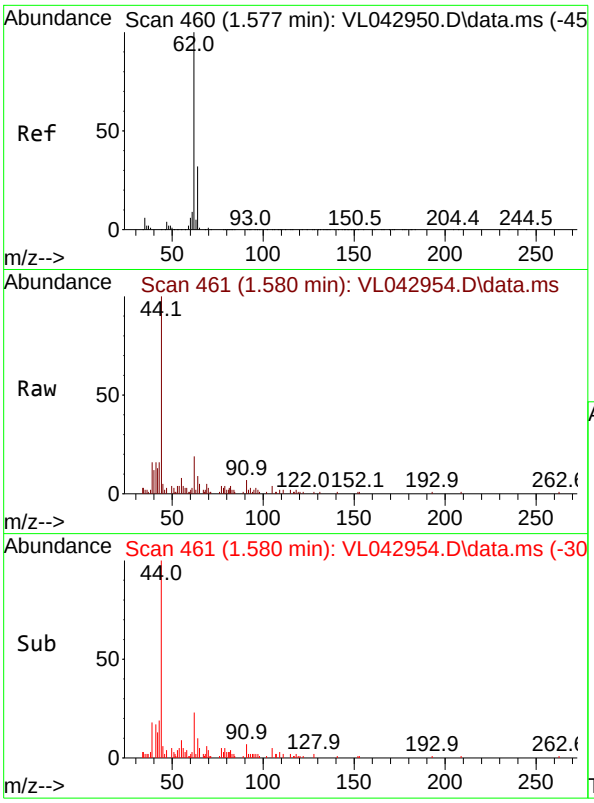


#4
Chloromethane
Concen: 0.132 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 50 Resp: 1320

Ion	Ratio	Lower	Upper
50	100		
52	43.9	25.9	38.9#



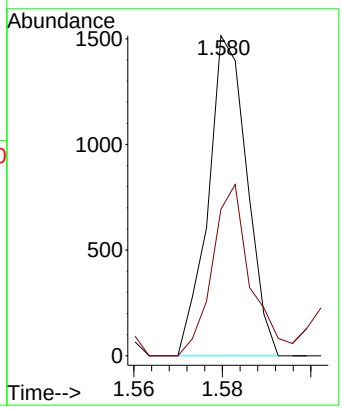


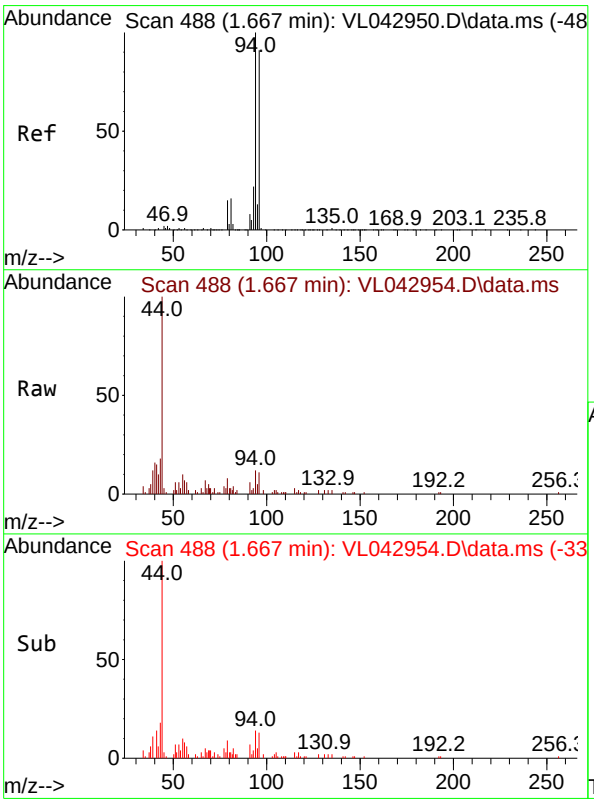
#5
Vinyl Chloride
Concen: 0.102 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 62 Resp: 920

Ion	Ratio	Lower	Upper
62	100		
64	45.7	25.4	38.2#

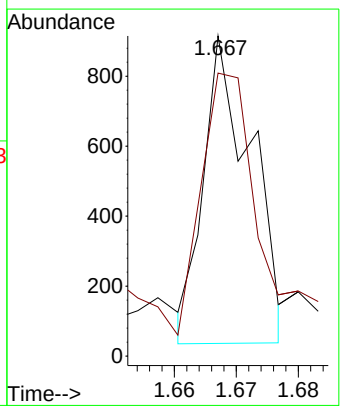


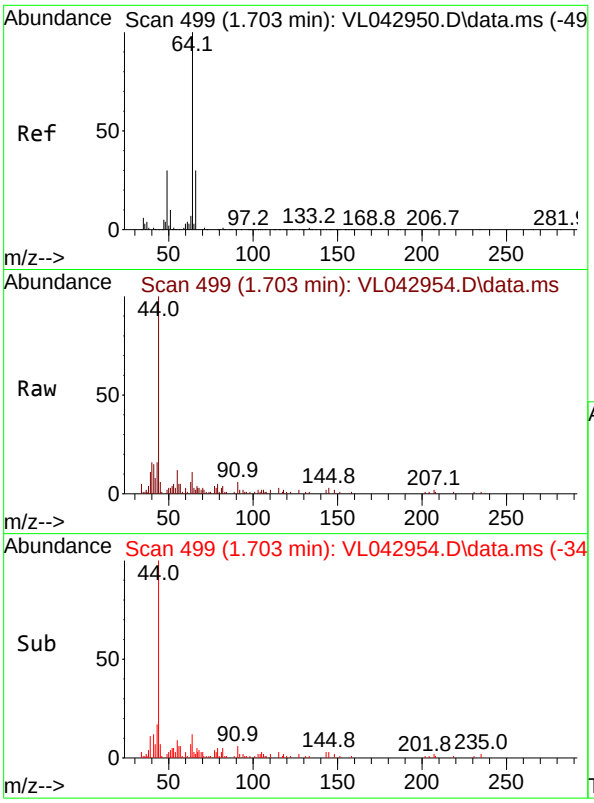


#6
Bromomethane
Concen: 0.148 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 94 Resp: 471

Ion	Ratio	Lower	Upper
94	100		
96	94.8	72.6	108.8



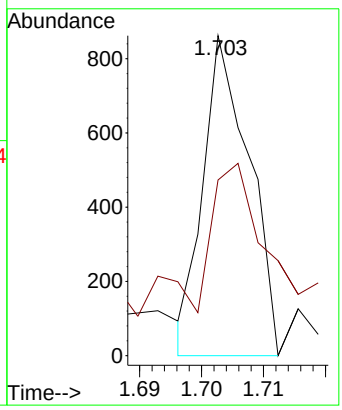


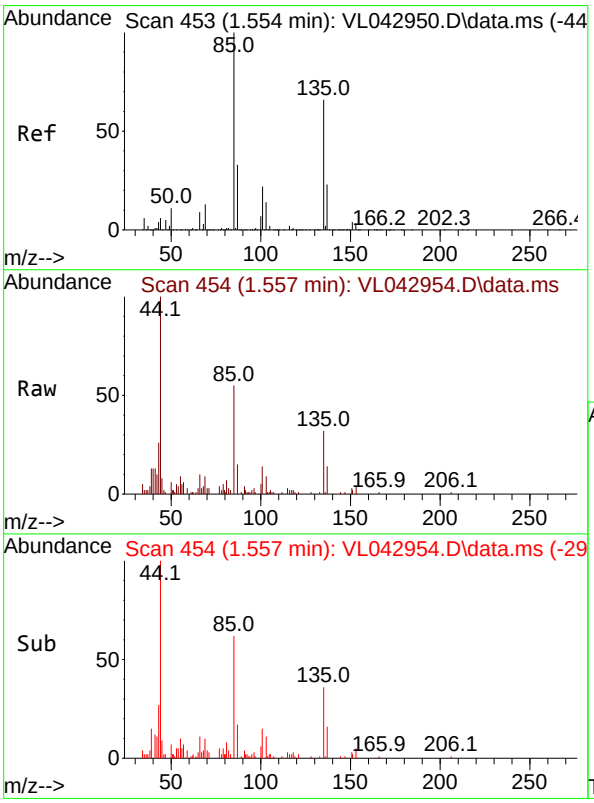
#7
Chloroethane
Concen: 0.126 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 64 Resp: 442

Ion	Ratio	Lower	Upper
64	100		
66	54.9	24.6	36.8#

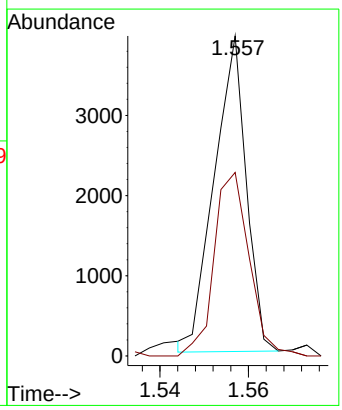


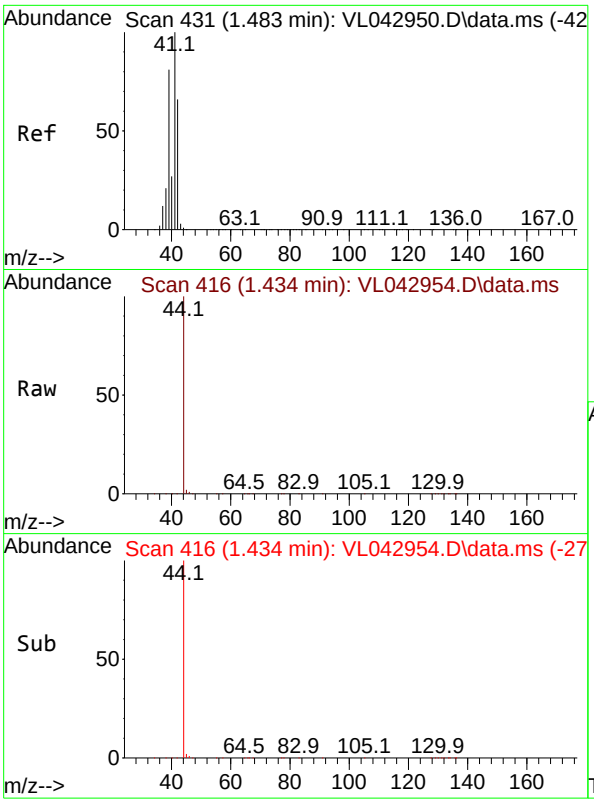


#8
Dichlorotetrafluoroethane
Concen: 0.105 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 85 Resp: 1978

Ion	Ratio	Lower	Upper
85	100		
135	67.7	49.7	74.5



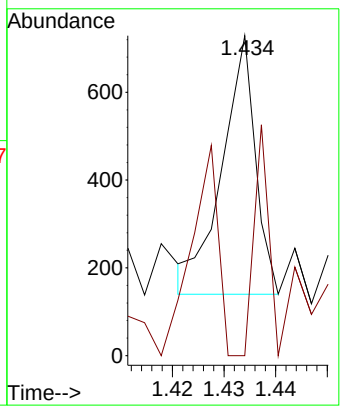


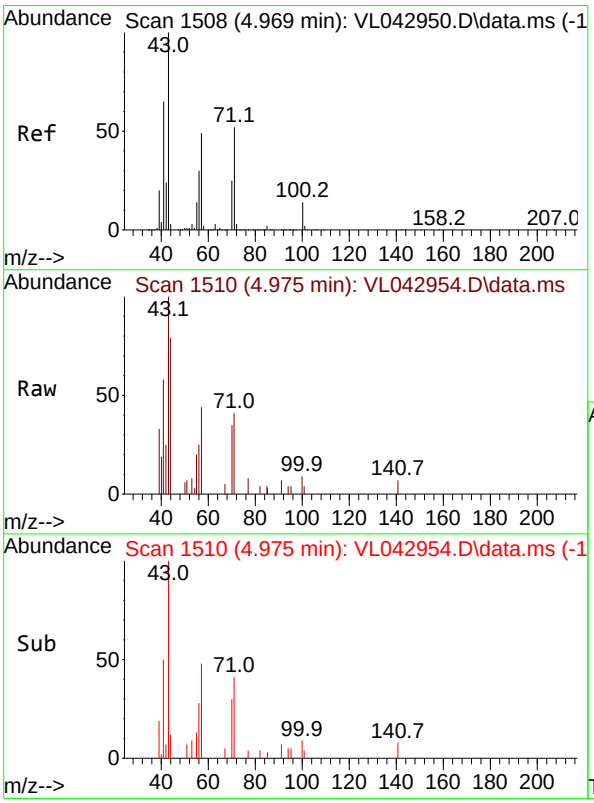
#9
Propene
Concen: 0.022 ppbv
RT: 1.434 min Scan# 4
Delta R.T. -0.049 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 41 Resp: 264

Ion	Ratio	Lower	Upper
41	100		
42	77.3	57.4	86.2

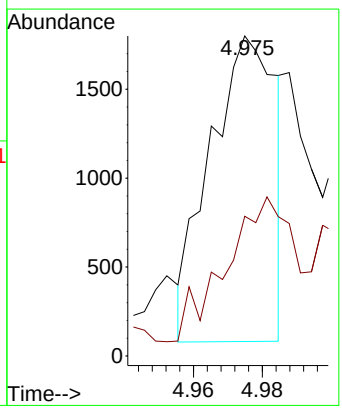


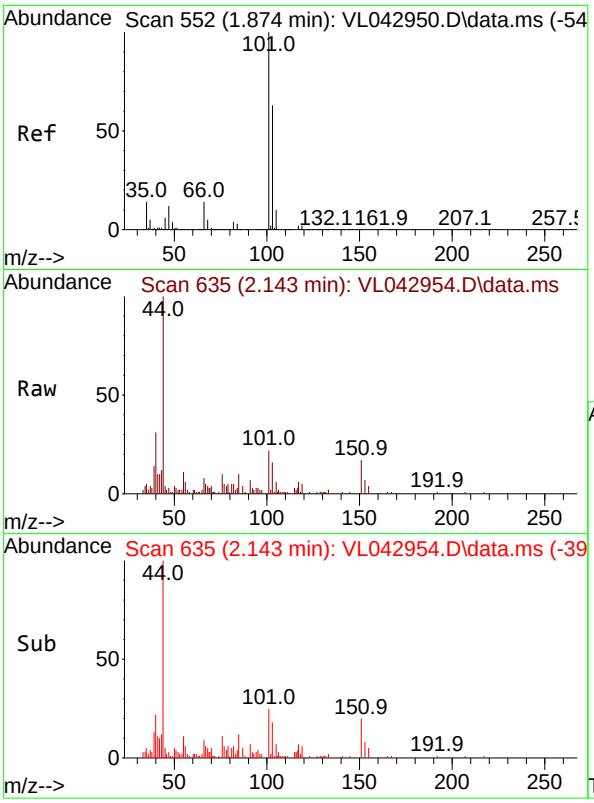


#10
Heptane
Concen: 0.071 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 43 Resp: 2270

Ion	Ratio	Lower	Upper
43	100		
57	0.0	38.6	57.8#



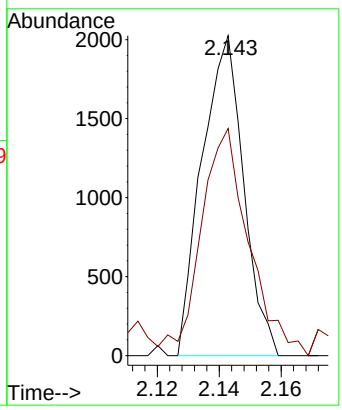


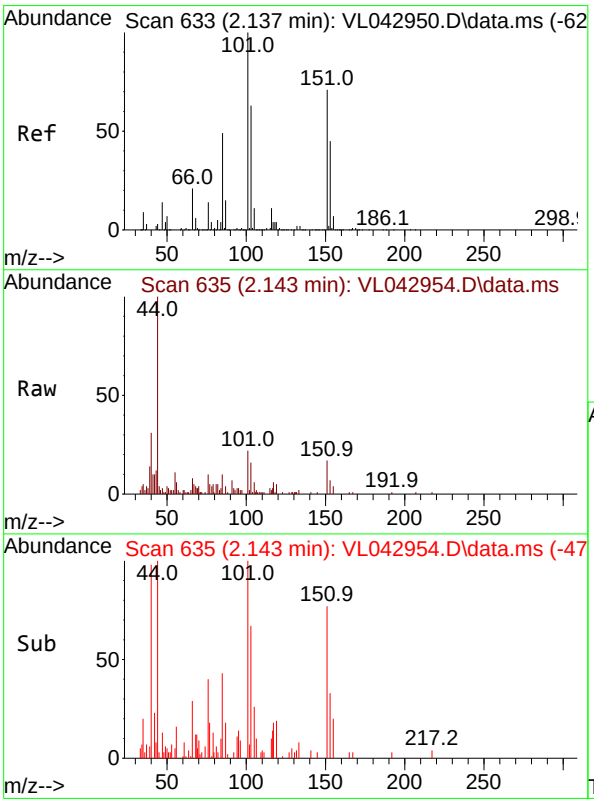
#11
Trichlorofluoromethane
Concen: 0.089 ppbv
RT: 2.143 min Scan# 6
Delta R.T. 0.268 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:101 Resp: 1891

Ion	Ratio	Lower	Upper
101	100		
103	66.6	50.1	75.1

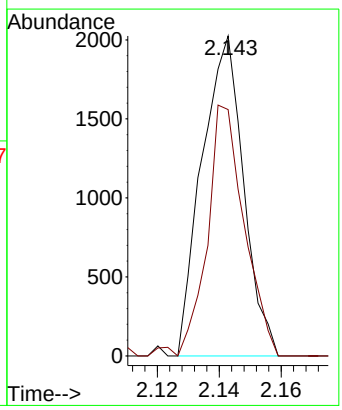


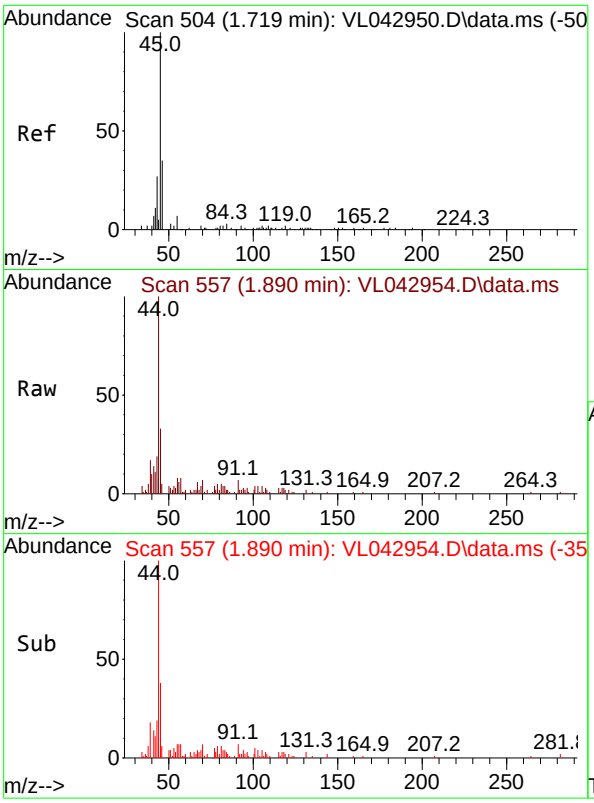


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.110 ppbv
RT: 2.143 min Scan# 635
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:101 Resp: 1891

Ion	Ratio	Lower	Upper
101	100		
151	70.7	55.7	83.5



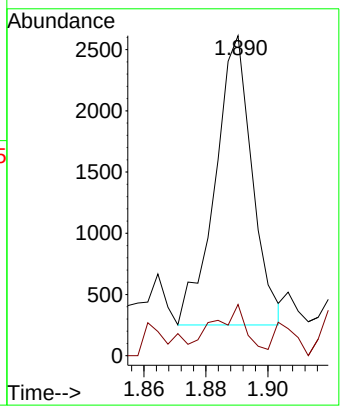


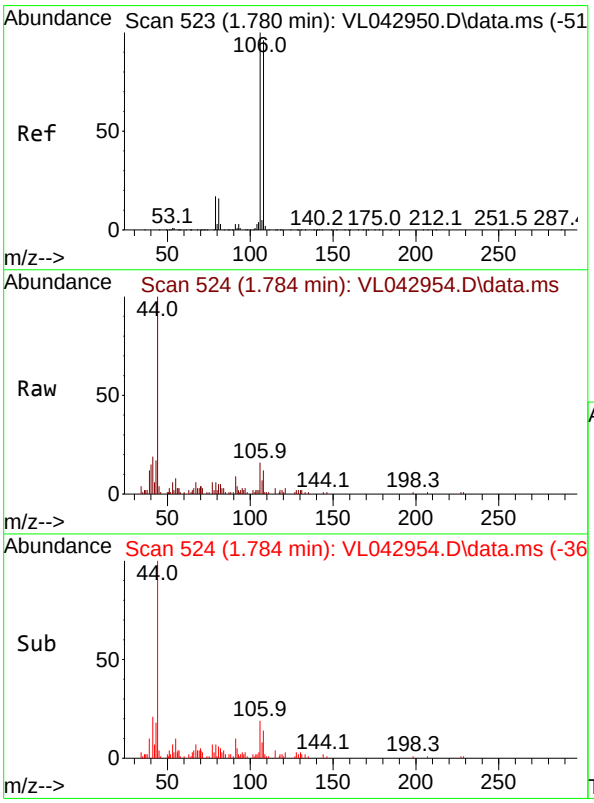
#13
Ethanol
Concen: 1.713 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.171 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 45 Resp: 1961

Ion	Ratio	Lower	Upper
45	100		
46	32.8	16.2	64.6

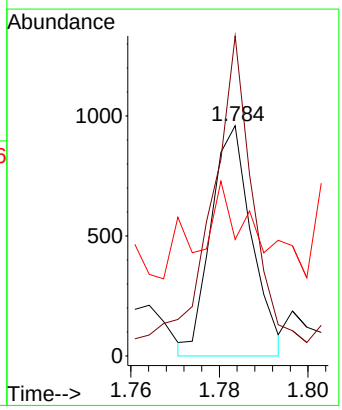


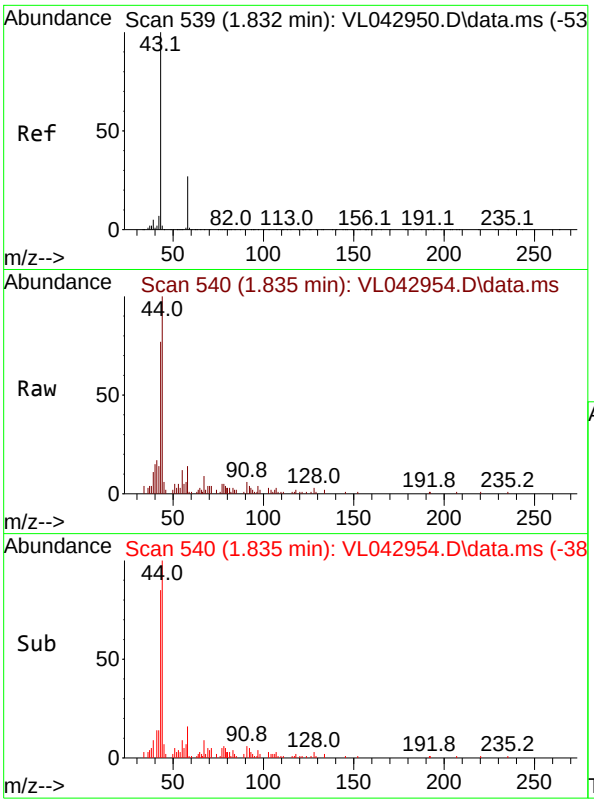


#14
Bromoethene
Concen: 0.094 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:108 Resp: 613

Ion	Ratio	Lower	Upper
108	100		
106	175.9	86.0	129.0#
79	154.5	14.2	21.2#



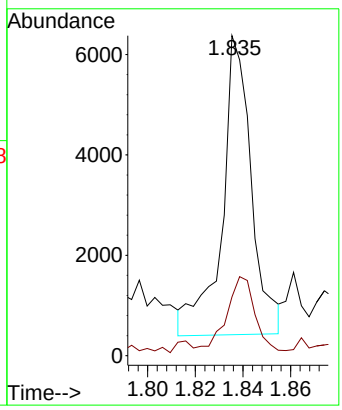


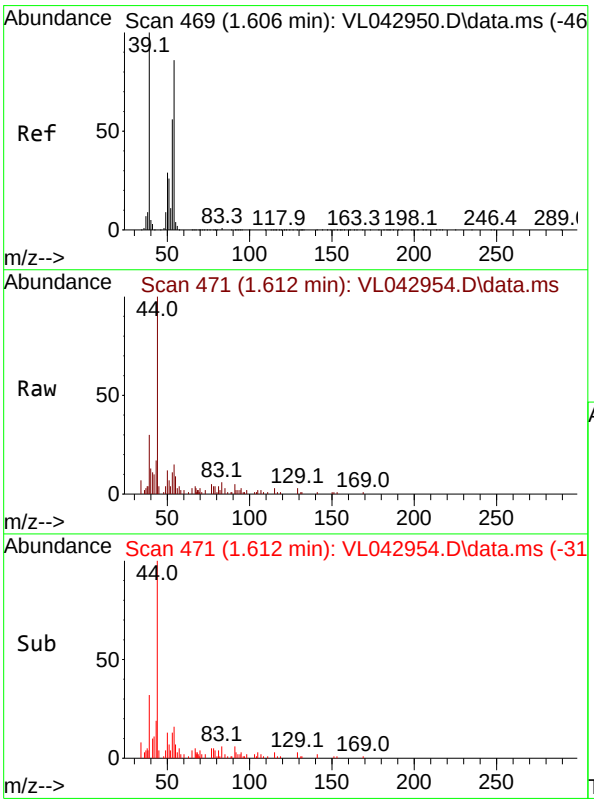
#15
Acetone
Concen: 0.240 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 43 Resp: 5111

Ion	Ratio	Lower	Upper
43	100		
58	37.2	22.3	33.5#

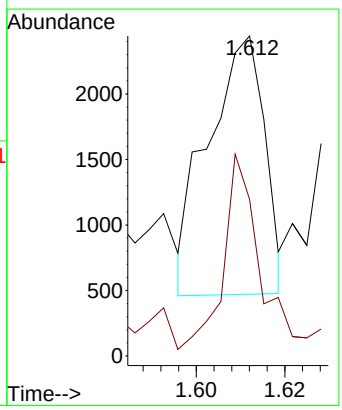


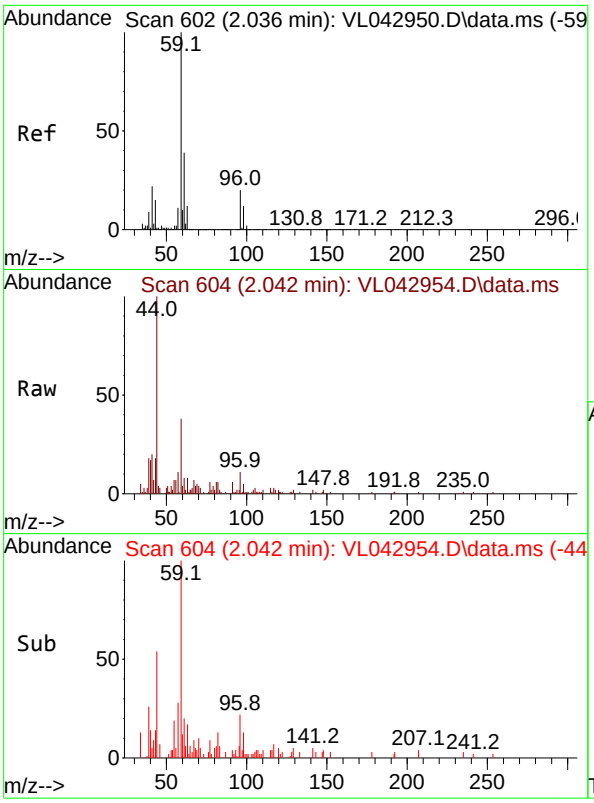


#16
1,3-Butadiene
Concen: 0.174 ppbv
RT: 1.612 min Scan# 471
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 39 Resp: 1753

Ion	Ratio	Lower	Upper
39	100		
54	87.3	60.8	91.2



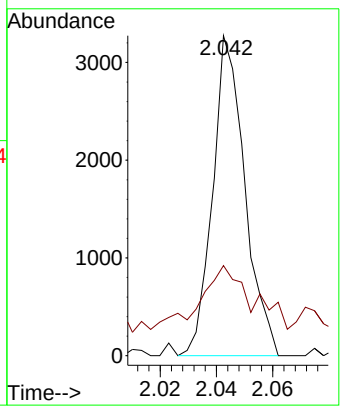


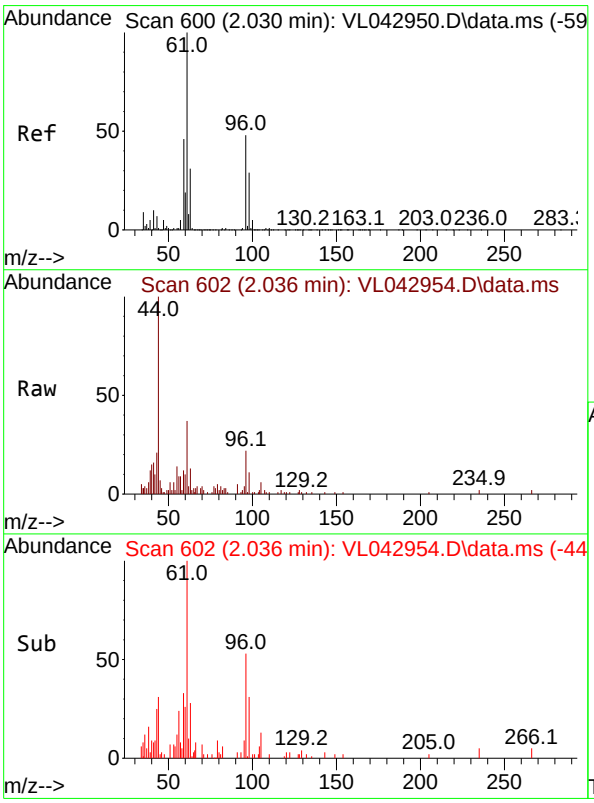
#17
tert-Butyl alcohol
Concen: 0.111 ppbv
RT: 2.042 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 59 Resp: 2596

Ion	Ratio	Lower	Upper
59	100		
57	66.0	8.6	12.8#

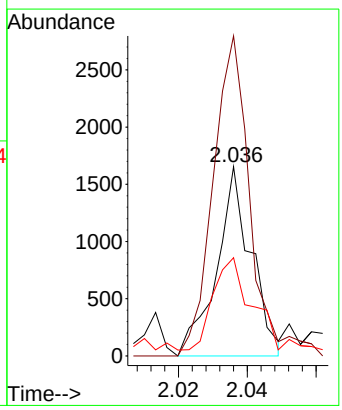


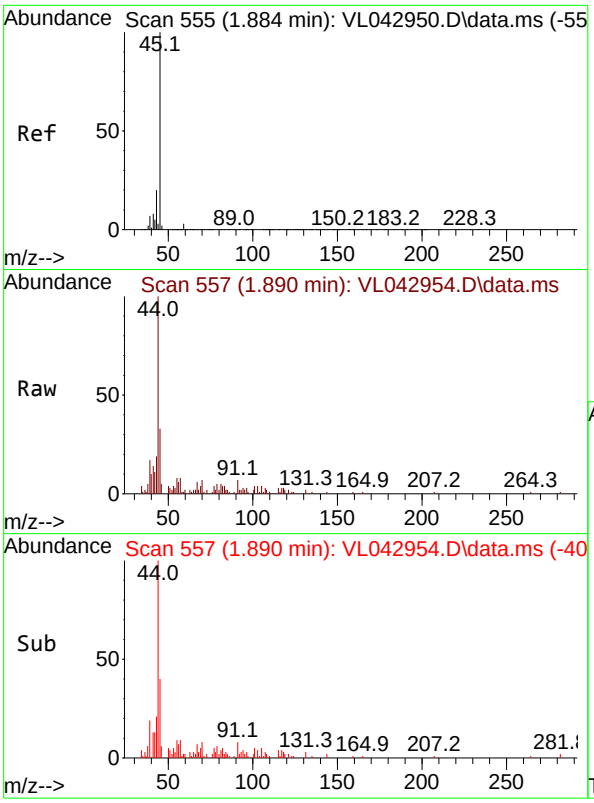


#18
1,1-Dichloroethene
Concen: 0.144 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 96 Resp: 1149

Ion	Ratio	Lower	Upper
96	100		
61	169.0	166.2	249.4
98	48.7	48.6	73.0



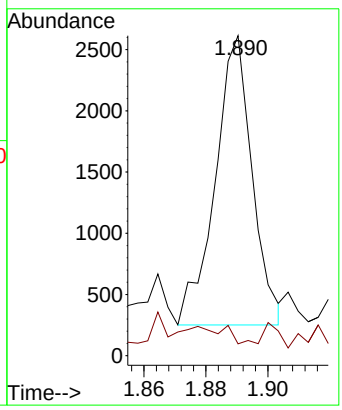


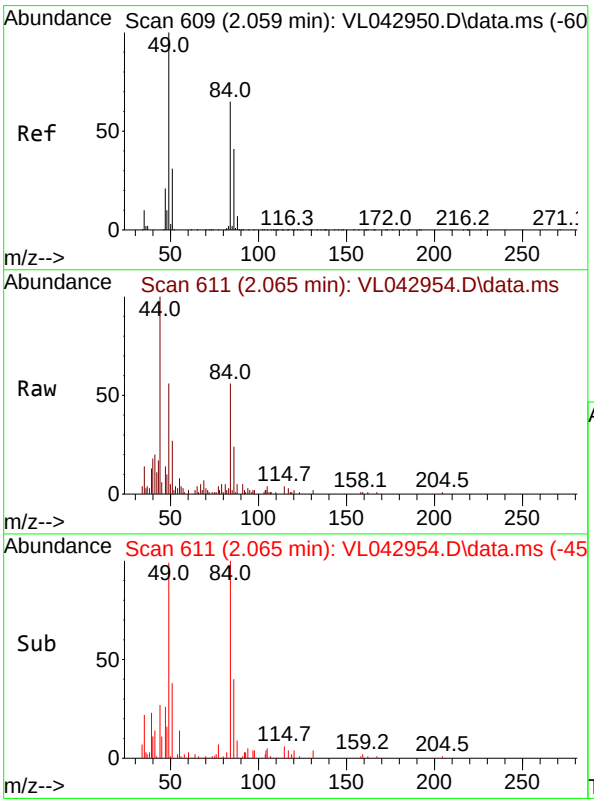
#19
Isopropyl Alcohol
Concen: 0.153 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 45 Resp: 1961

Ion	Ratio	Lower	Upper
45	100		
58	10.5	31.0	46.6#

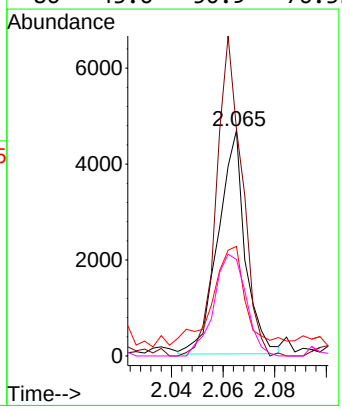


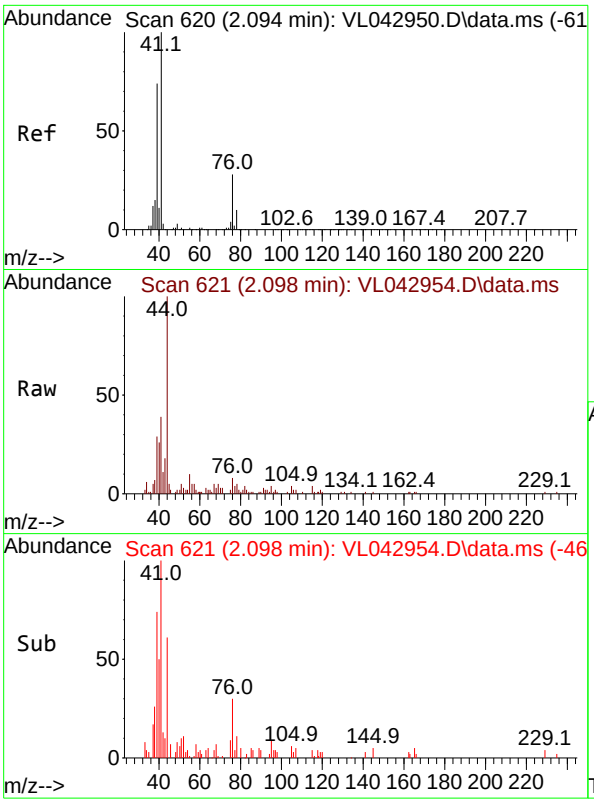


#20
Methylene Chloride
Concen: Below Cal
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 84 Resp: 3388

Ion	Ratio	Lower	Upper
84	100		
49	102.8	124.1	186.1#
51	41.6	39.8	59.8
86	43.6	50.9	76.3#



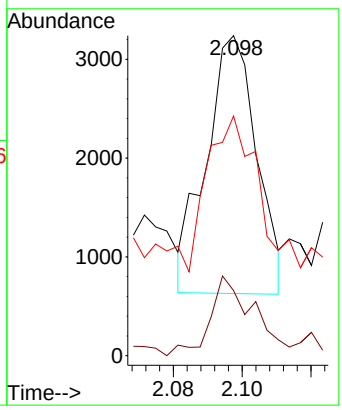


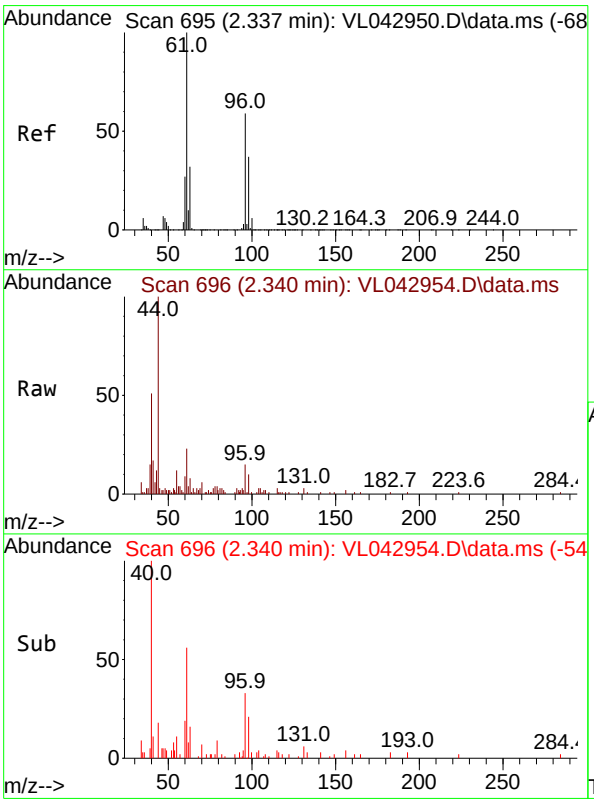
#21
Allyl Chloride
Concen: 0.179 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 41 Resp: 2662

Ion	Ratio	Lower	Upper
41	100		
76	32.2	22.3	33.5
39	68.1	61.3	91.9

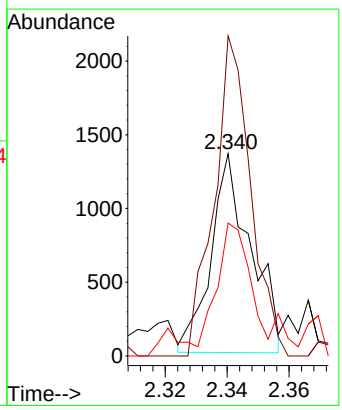


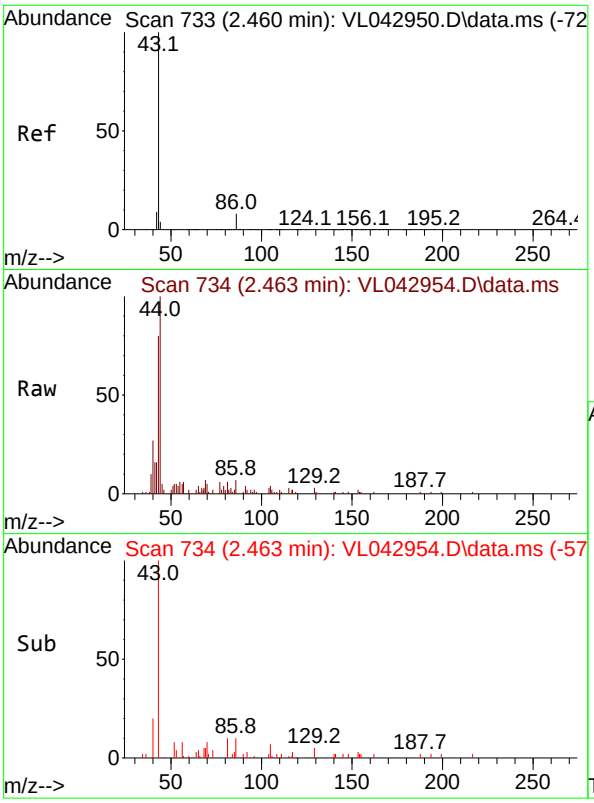


#22
trans-1,2-Dichloroethene
Concen: 0.133 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 96 Resp: 1199

Ion	Ratio	Lower	Upper
96	100		
61	167.4	136.5	204.7
98	62.5	50.6	76.0



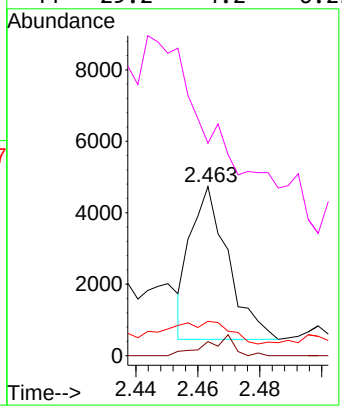


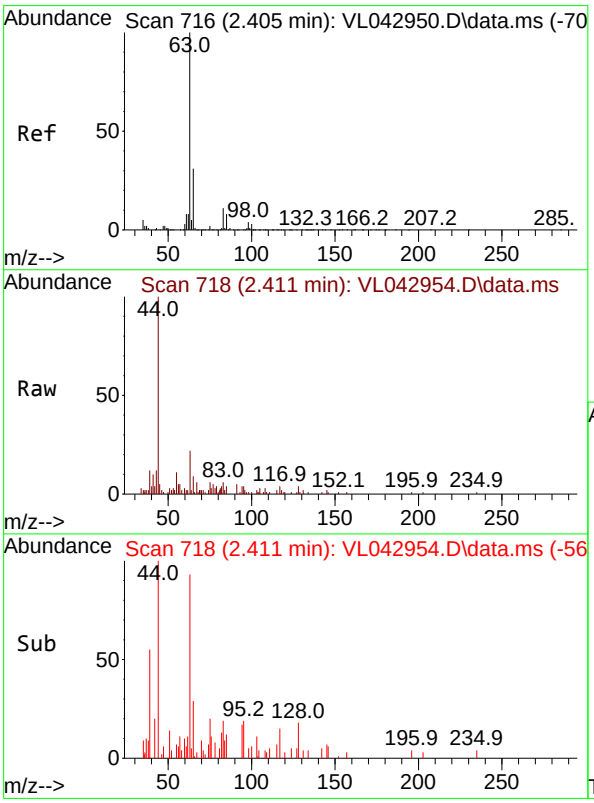
#23
Vinyl Acetate
Concen: 0.118 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 43 Resp: 3599

Ion	Ratio	Lower	Upper
43	100		
86	9.2	6.2	9.2
42	14.0	7.4	11.0#
44	29.2	4.2	6.2#

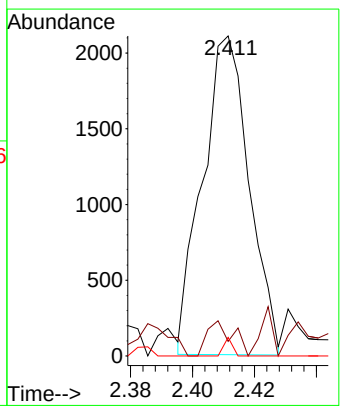


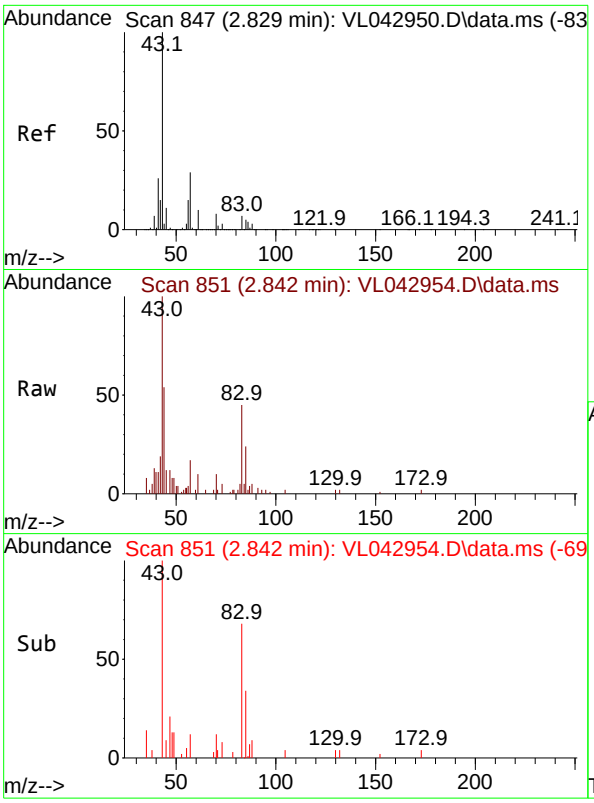


#24
1,1-Dichloroethane
Concen: 0.124 ppbv
RT: 2.411 min Scan# 718
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 63 Resp: 2202

Ion	Ratio	Lower	Upper
63	100		
98	4.3	2.2	6.6
100	5.5	1.4	4.0#



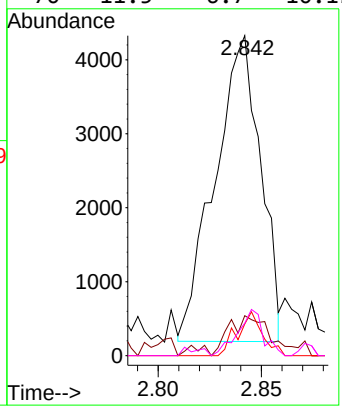


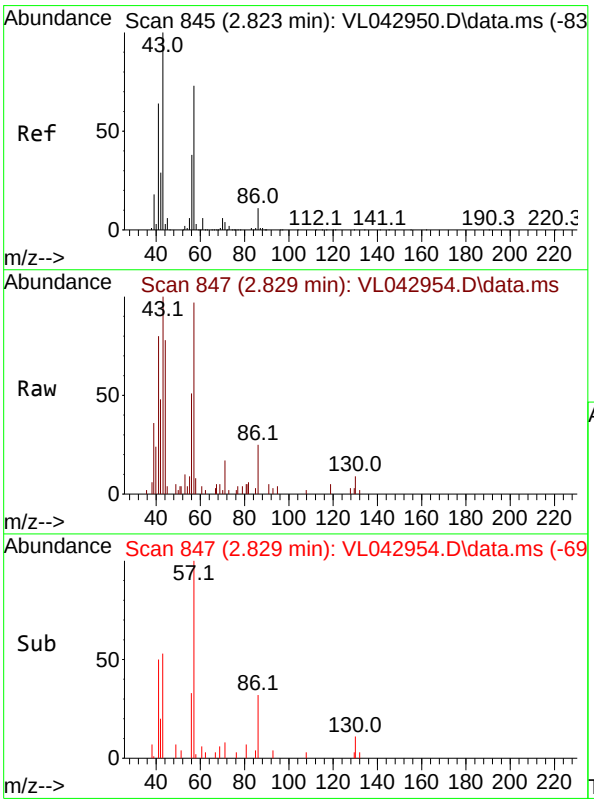
#25
Ethyl Acetate
Concen: 0.118 ppbv
RT: 2.842 min Scan# 8
Delta R.T. 0.013 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 43 Resp: 6357

Ion	Ratio	Lower	Upper
43	100		
45	12.5	7.7	11.5#
61	7.8	7.1	10.7
70	11.5	6.7	10.1#

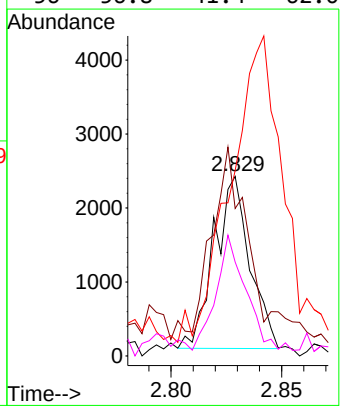


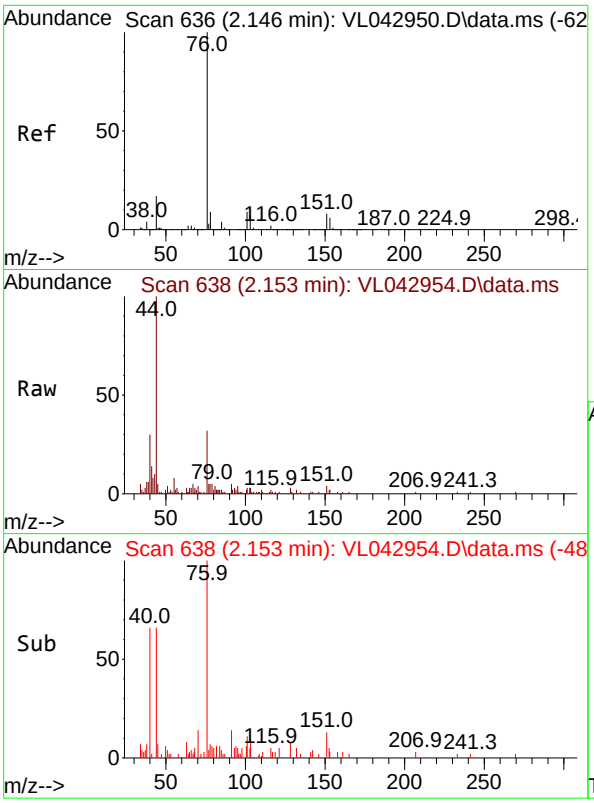


#26
Hexane
Concen: 0.107 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 57 Resp: 2622

Ion	Ratio	Lower	Upper
57	100		
41	118.9	71.7	107.5#
43	0.0	180.8	271.2#
56	56.8	41.4	62.0



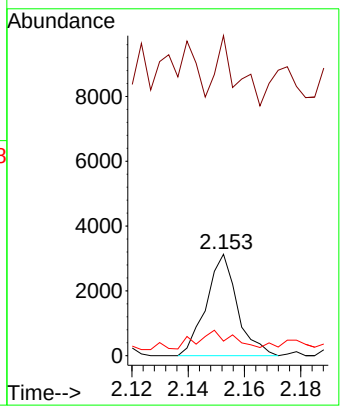


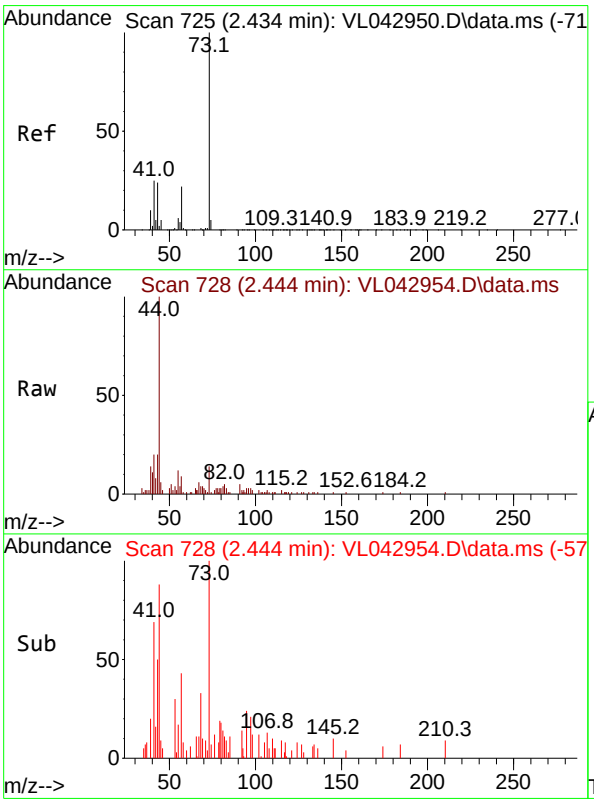
#27
Carbon Disulfide
Concen: 0.108 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 76 Resp: 2391

Ion	Ratio	Lower	Upper
76	100		
44	352.2	15.6	23.4#
78	59.1	8.9	13.3#

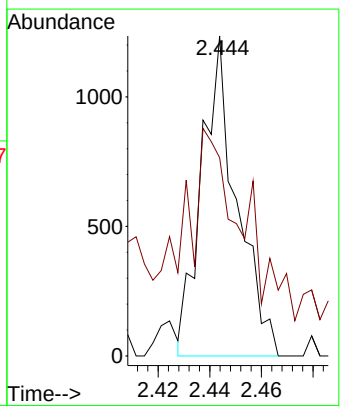


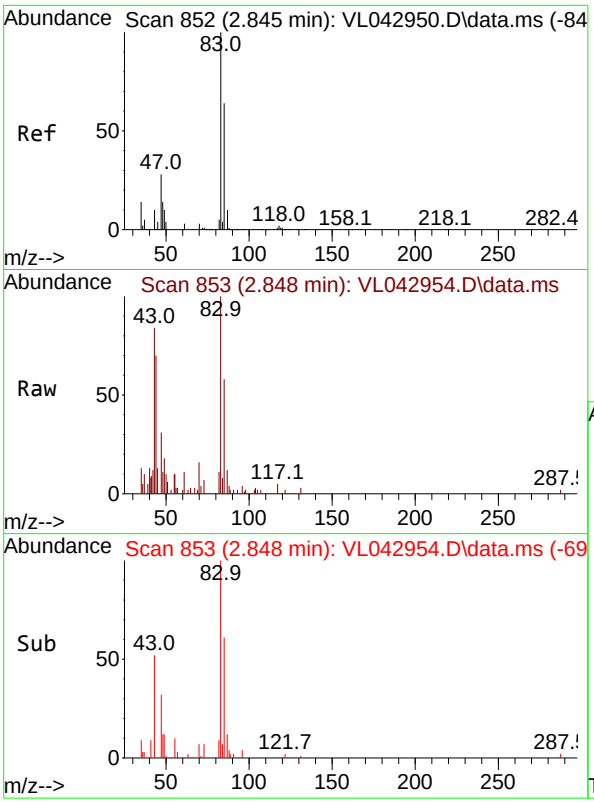


#28
Methyl tert-Butyl Ether
Concen: 0.092 ppbv
RT: 2.444 min Scan# 728
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 73 Resp: 1171

Ion	Ratio	Lower	Upper
73	100		
57	204.3	20.6	31.0#



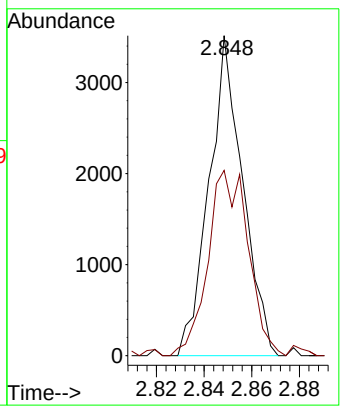


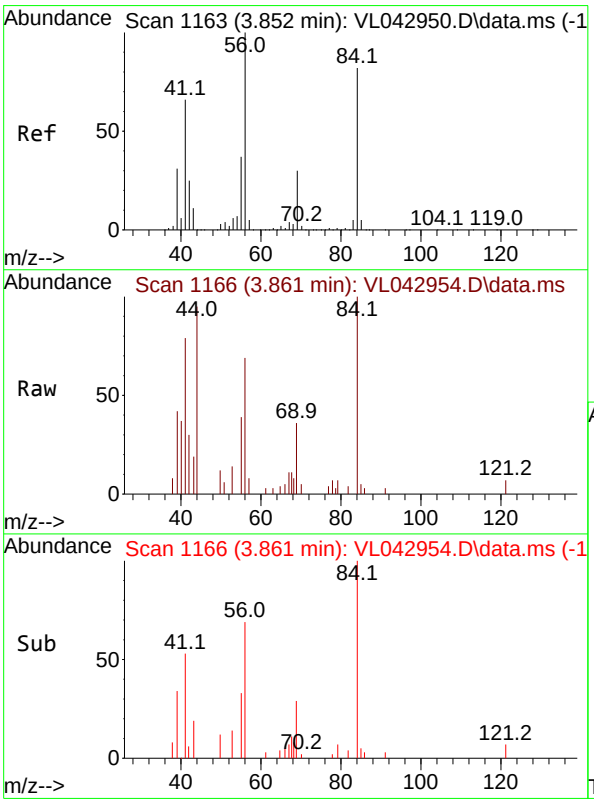
#29
Chloroform
Concen: 0.107 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 3449

Ion	Ratio	Lower	Upper
83	100		
85	56.3	51.2	76.8

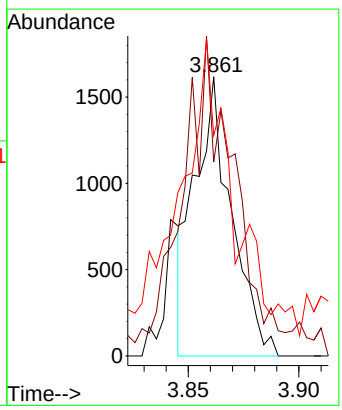


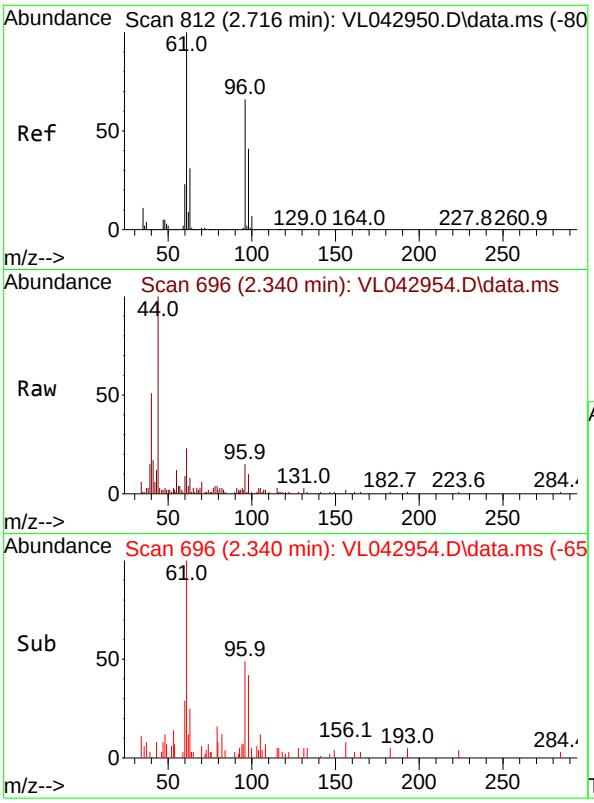


#30
Cyclohexane
Concen: 0.092 ppbv
RT: 3.861 min Scan# 1166
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 84 Resp: 1880

Ion	Ratio	Lower	Upper
84	100		
56	169.3	102.2	153.4#
41	164.8	65.6	98.4#



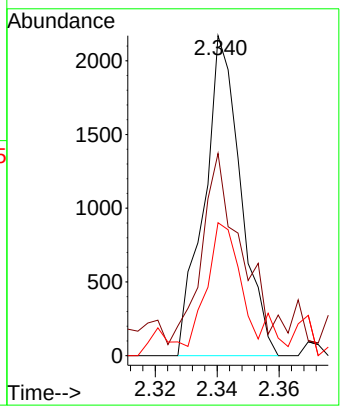


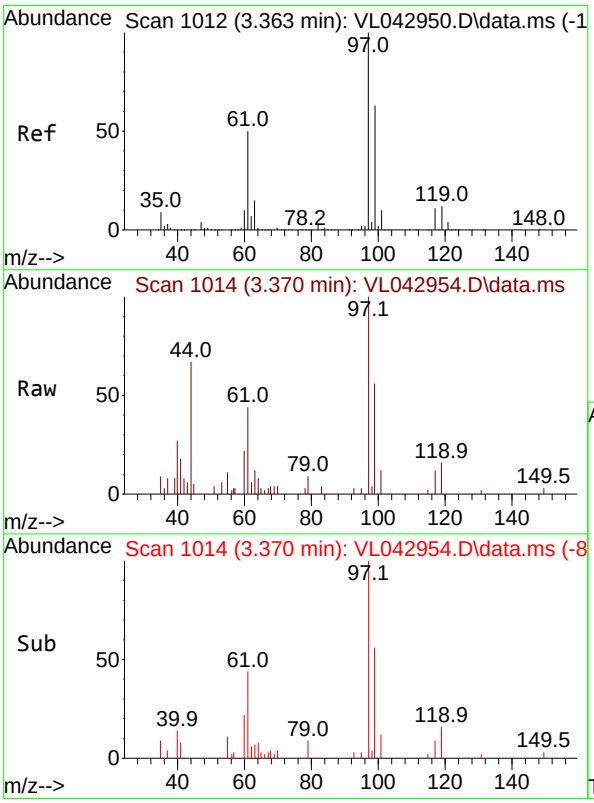
#31
cis-1,2-Dichloroethene
Concen: 0.077 ppbv
RT: 2.340 min Scan# 6
Delta R.T. -0.376 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 61 Resp: 1780

Ion	Ratio	Lower	Upper
61	100		
96	53.9	53.0	79.6
98	37.3	32.9	49.3

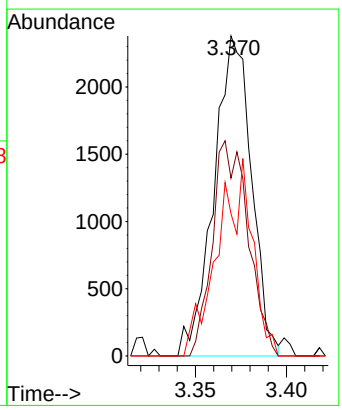


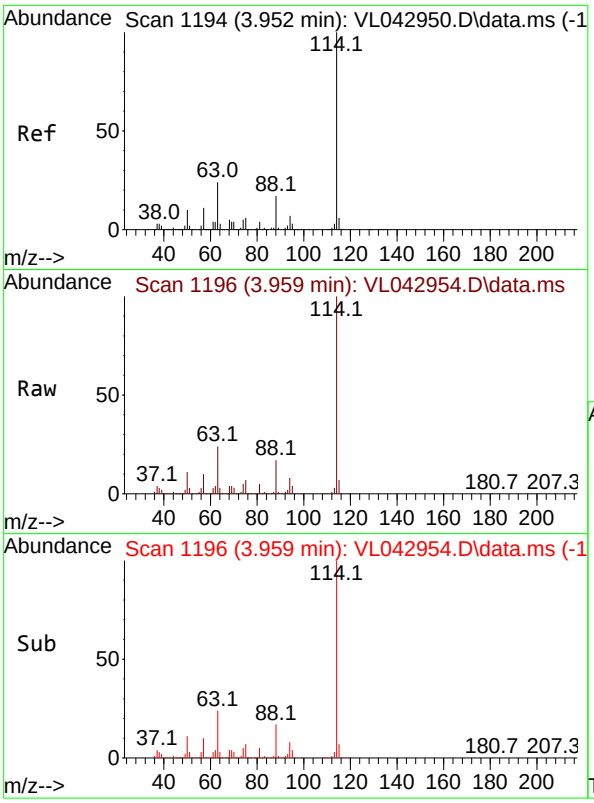


#32
1,1,1-Trichloroethane
Concen: 0.098 ppbv
RT: 3.370 min Scan# 1014
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 97 Resp: 3418

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.1	76.7
61	56.2	39.8	59.6



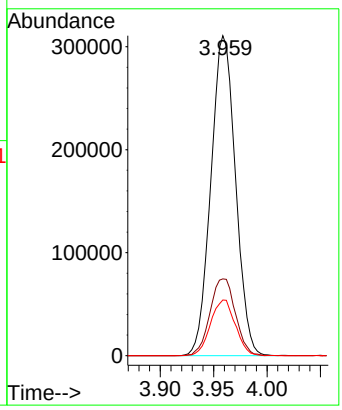


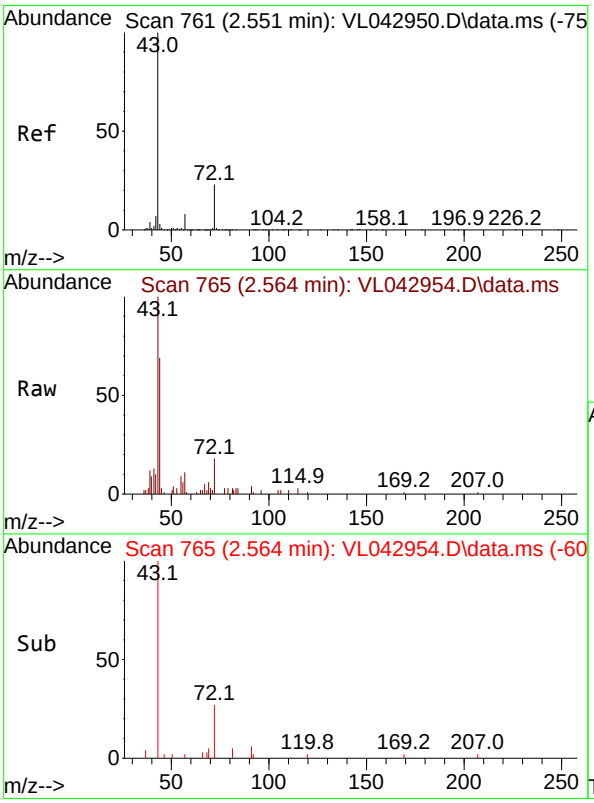
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:114 Resp: 498673

Ion	Ratio	Lower	Upper
114	100		
63	24.8	19.4	29.2
88	17.5	14.2	21.2

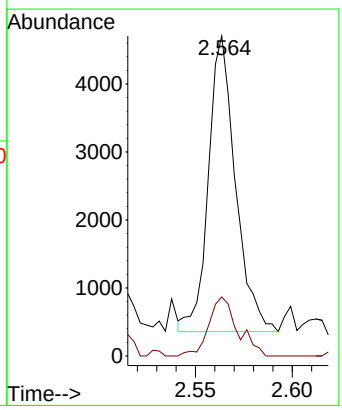


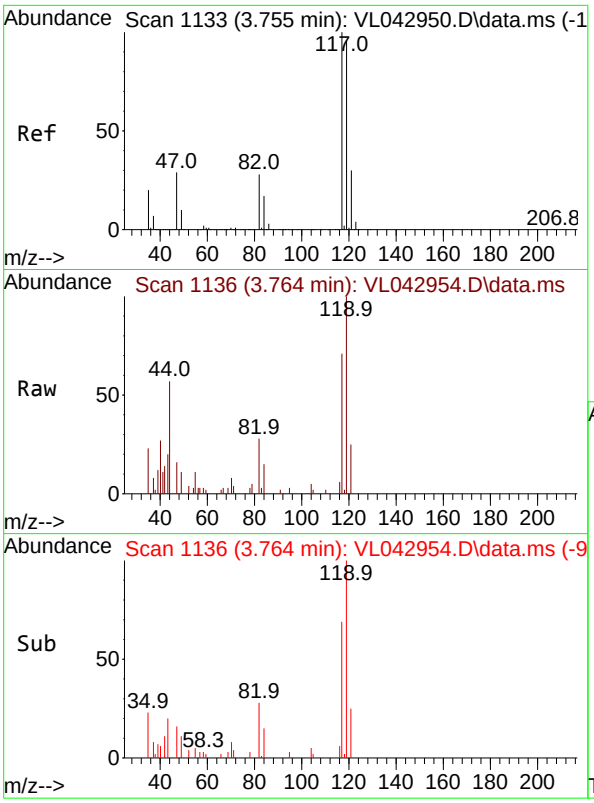


#34
2-Butanone
Concen: 0.121 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.013 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 43 Resp: 4230

Ion	Ratio	Lower	Upper
43	100		
72	21.1	17.7	26.5



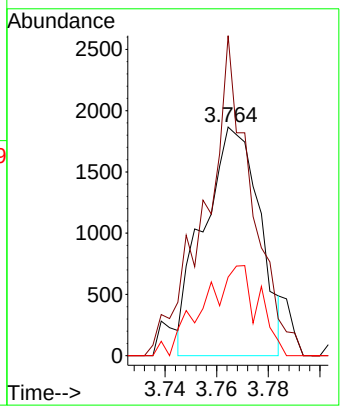


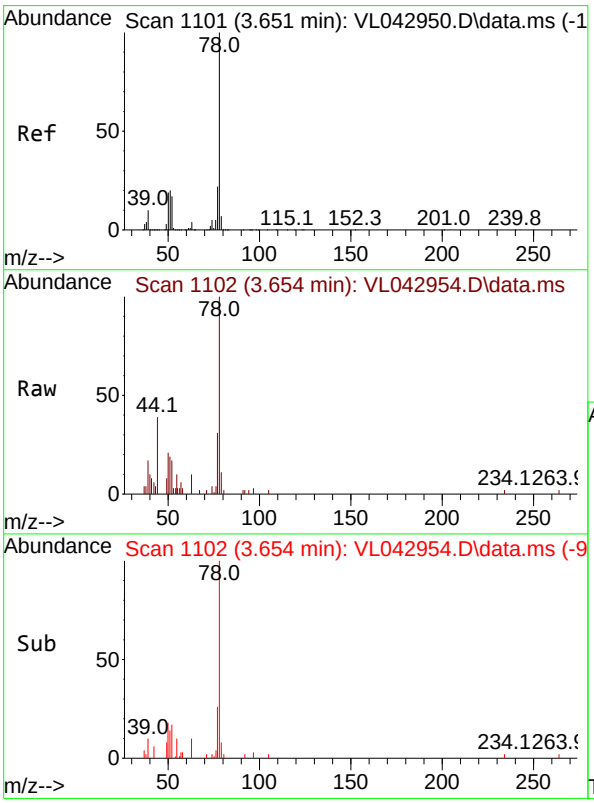
#35
Carbon Tetrachloride
Concen: 0.087 ppbv
RT: 3.764 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:117 Resp: 2806

Ion	Ratio	Lower	Upper
117	100		
119	139.0	76.9	115.3#
121	31.1	23.7	35.5

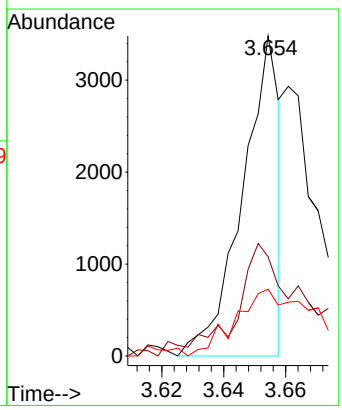


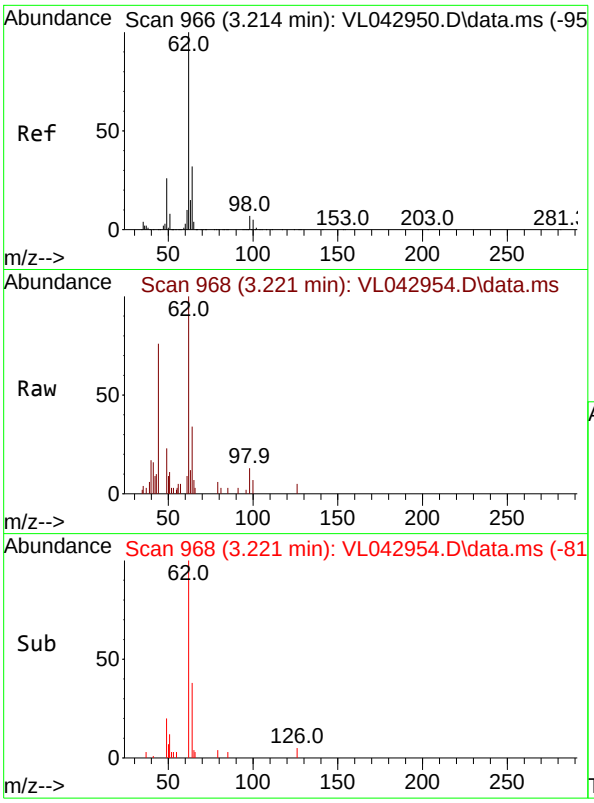


#36
Benzene
Concen: 0.061 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 78 Resp: 2876

Ion	Ratio	Lower	Upper
78	100		
77	27.7	17.8	26.6#
50	18.4	15.0	22.4



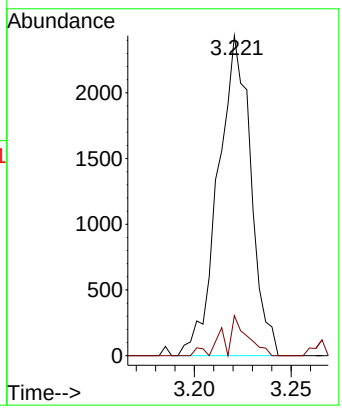


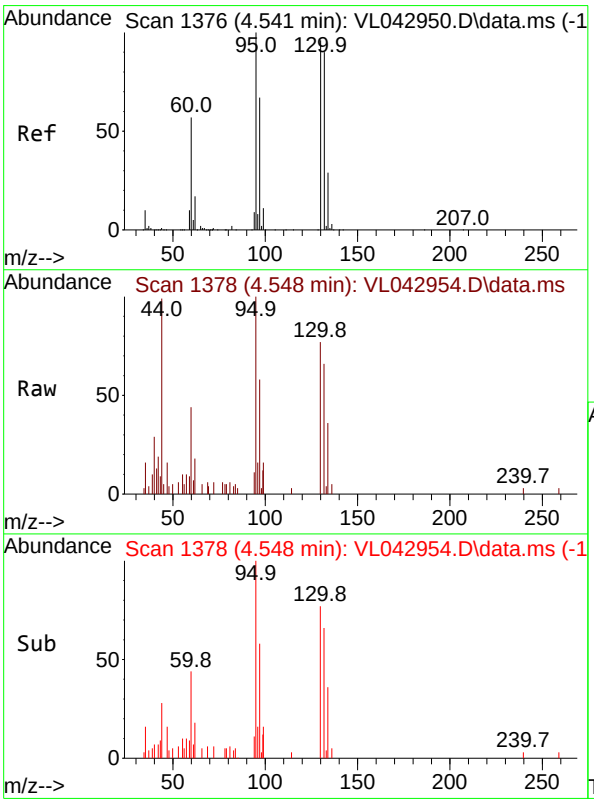
#37
1,2-Dichloroethane
Concen: 0.116 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 62 Resp: 2858

Ion	Ratio	Lower	Upper
62	100		
98	8.9	5.9	8.9#

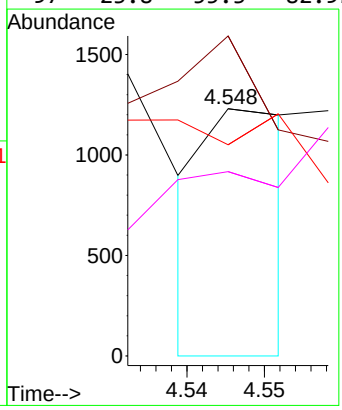


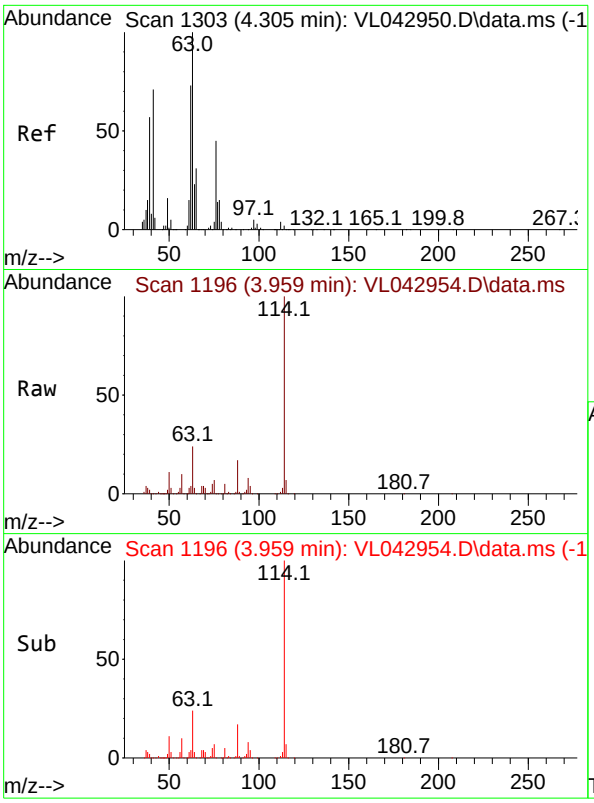


#38
Trichloroethene
Concen: 0.020 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:130 Resp: 471

Ion	Ratio	Lower	Upper
130	100		
95	140.7	83.0	124.4#
132	0.0	74.6	112.0#
97	23.8	55.3	82.9#



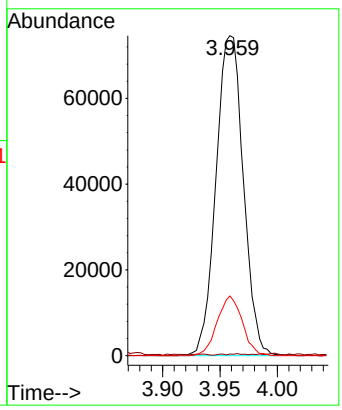


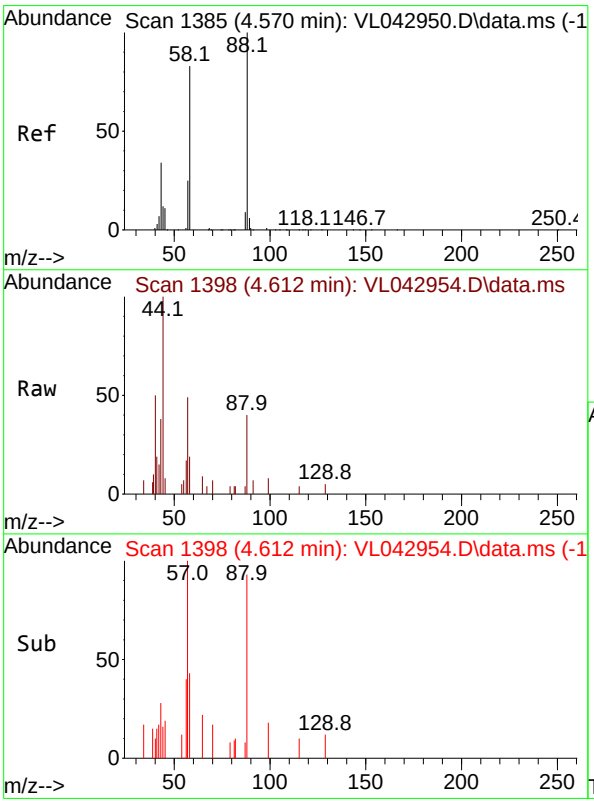
#39
1,2-Dichloropropane
Concen: 7.230 ppbv
RT: 3.959 min Scan# 1
Delta R.T. -0.346 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 63 Resp: 123686

Ion	Ratio	Lower	Upper
63	100		
41	0.1	57.5	86.3#
62	18.7	58.5	87.7#

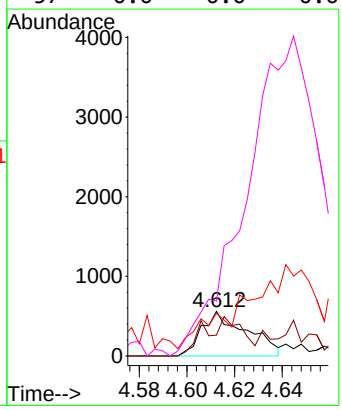


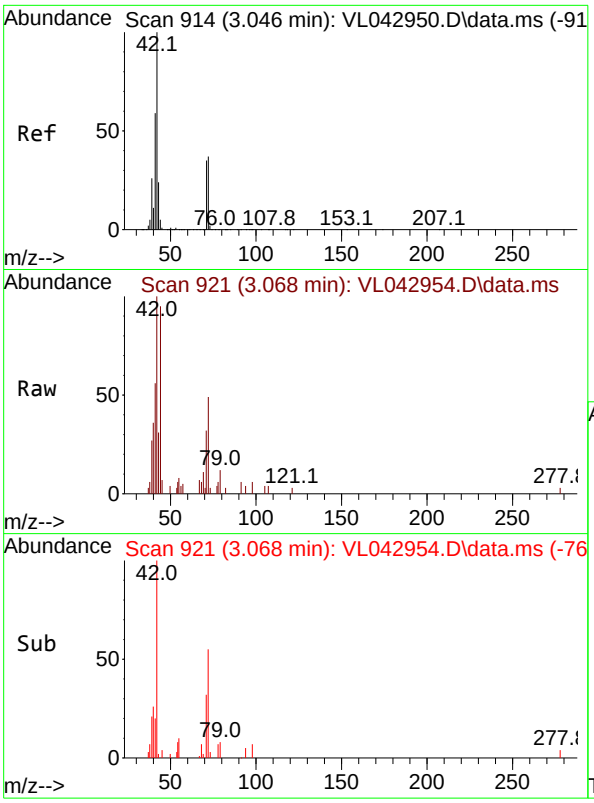


#40
1,4-Dioxane
Concen: 0.092 ppbv
RT: 4.612 min Scan# 1398
Delta R.T. 0.042 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 88 Resp: 732

Ion	Ratio	Lower	Upper
88	100		
58	145.8	59.7	89.5#
43	53.4	28.9	43.3#
57	0.0	0.0	0.0



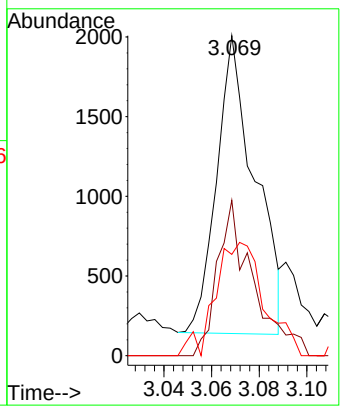


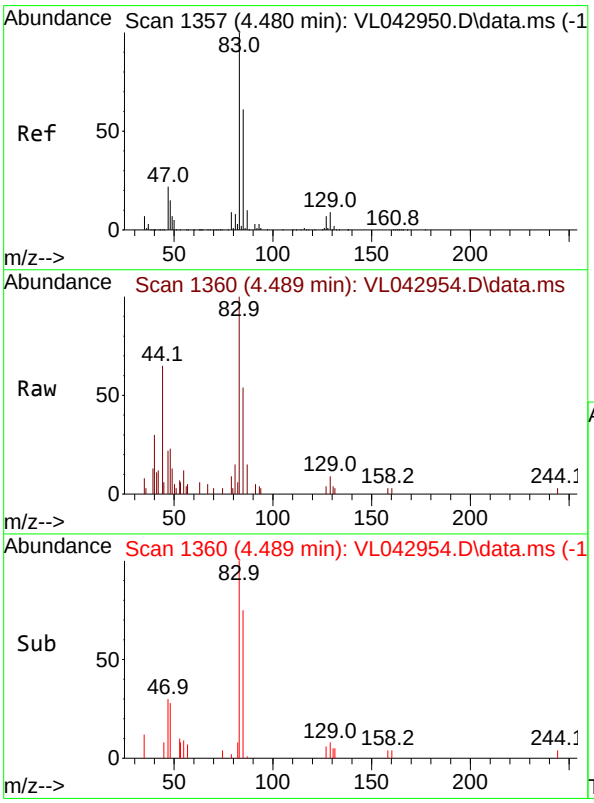
#41
Tetrahydrofuran
Concen: 0.103 ppbv
RT: 3.068 min Scan# 9
Delta R.T. 0.022 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 42 Resp: 2075

Ion	Ratio	Lower	Upper
42	100		
72	48.9	30.0	45.0#
71	49.2	28.8	43.2#

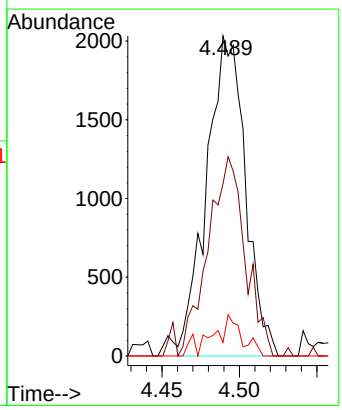


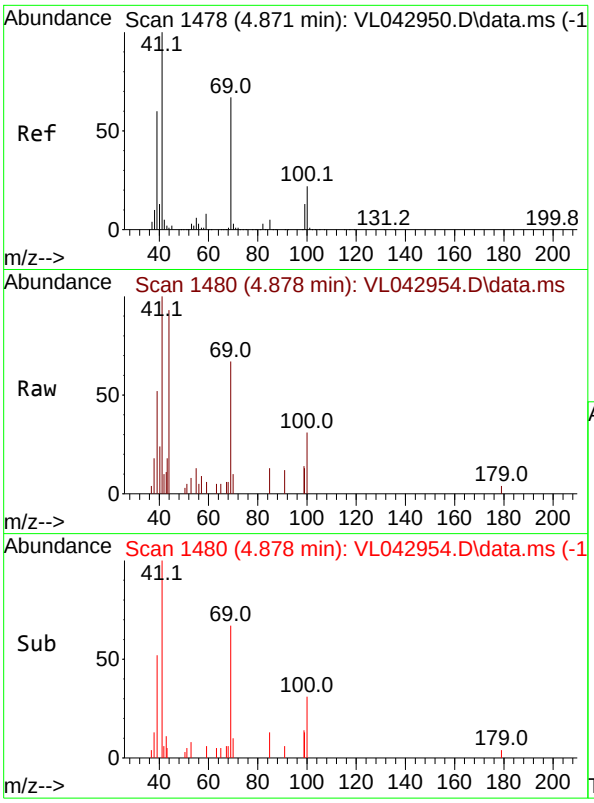


#42
Bromodichloromethane
Concen: 0.103 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 83 Resp: 3539

Ion	Ratio	Lower	Upper
83	100		
85	53.8	49.0	73.6
127	4.2	5.3	7.9#



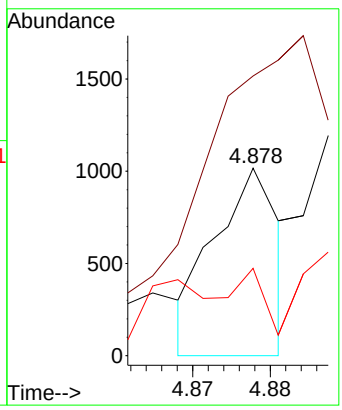


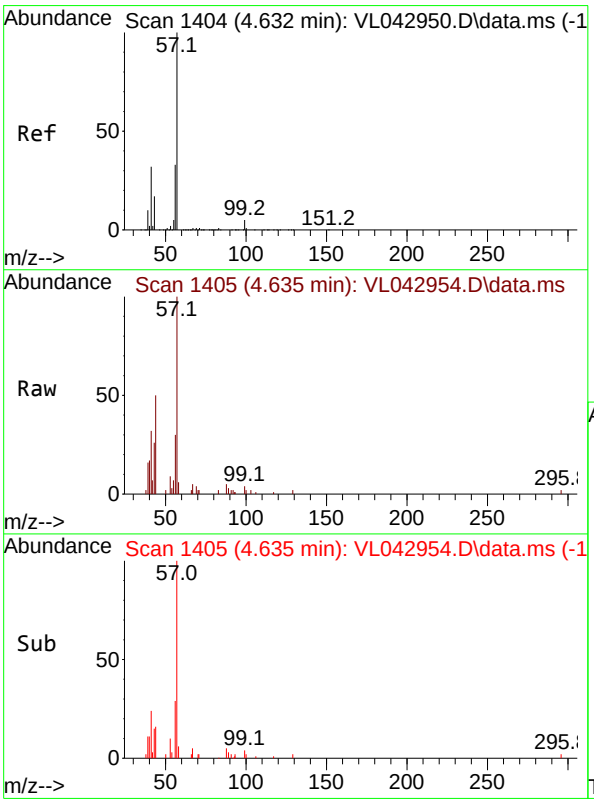
#43
Methyl Methacrylate
Concen: 0.031 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 69 Resp: 589

Ion	Ratio	Lower	Upper
69	100		
41	0.0	124.5	186.7#
100	0.0	29.0	43.6#

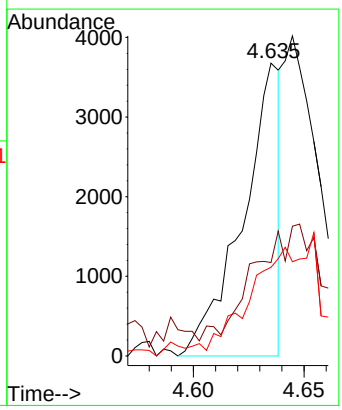


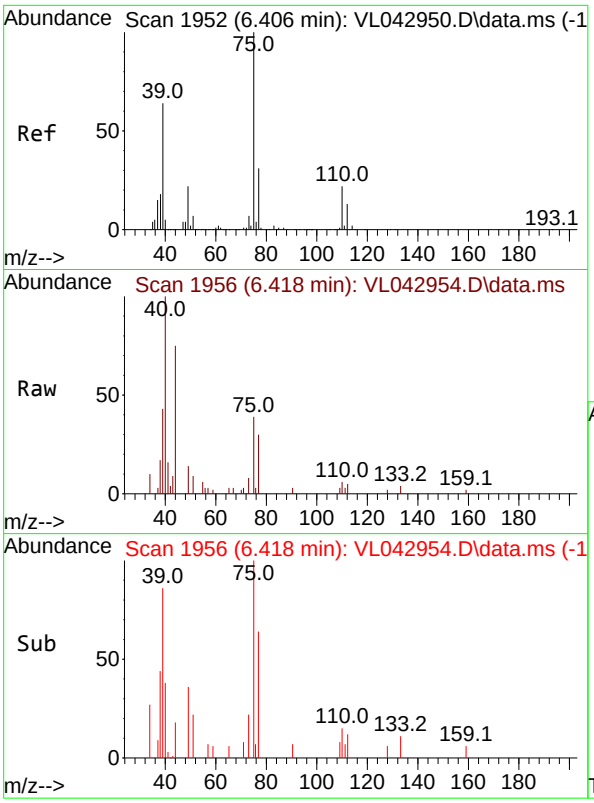


#44
2,2,4-Trimethylpentane
Concen: 0.053 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 57 Resp: 4291

Ion	Ratio	Lower	Upper
57	100		
41	0.0	25.5	38.3#
56	0.0	25.8	38.8#



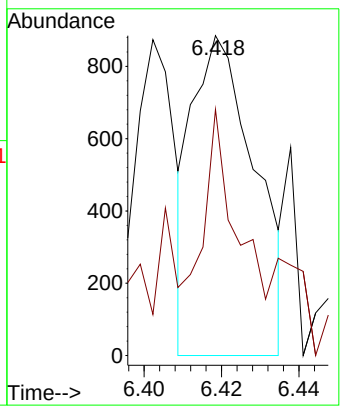


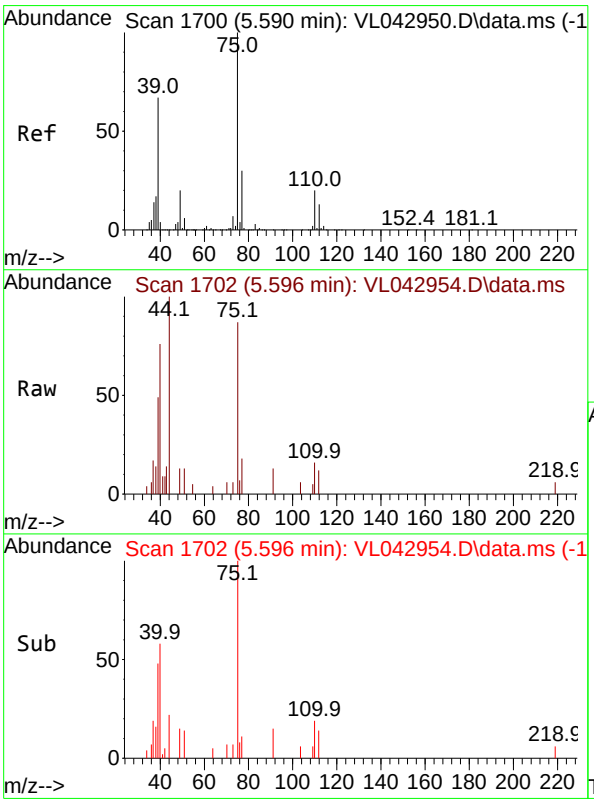
#45
t-1,3-Dichloropropene
Concen: 0.049 ppbv
RT: 6.418 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 75 Resp: 999

Ion	Ratio	Lower	Upper
75	100		
77	71.7	25.0	37.4#

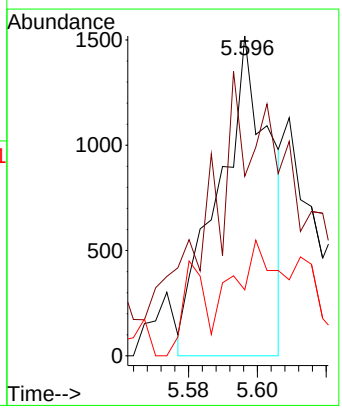


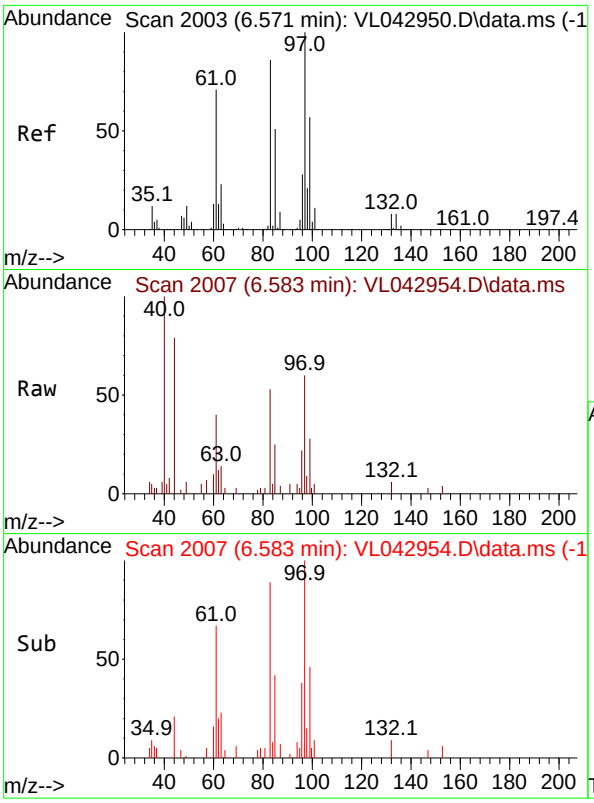


#46
cis-1,3-Dichloropropene
Concen: 0.060 ppbv
RT: 5.596 min Scan# 1702
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 75 Resp: 1566

Ion	Ratio	Lower	Upper
75	100		
39	30.6	53.8	80.6#
77	15.7	23.6	35.4#



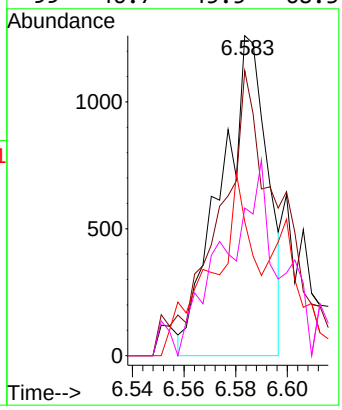


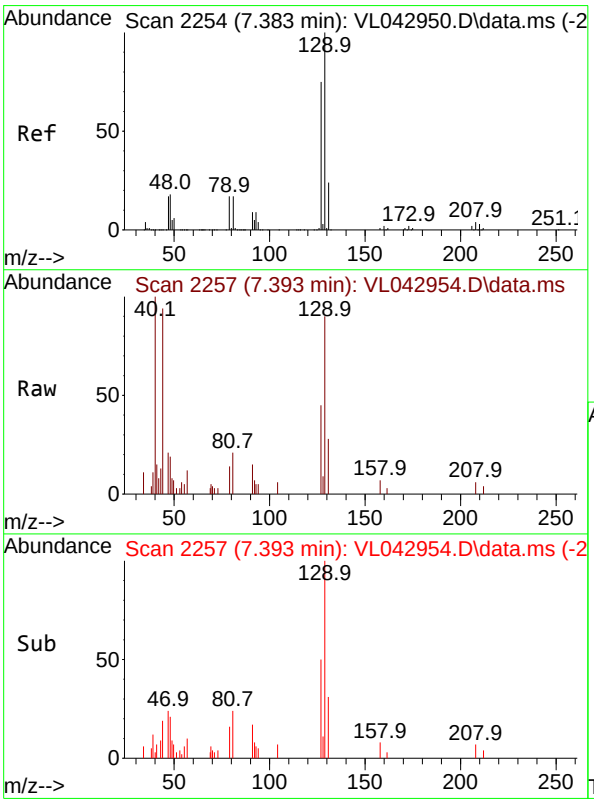
#47
1,1,2-Trichloroethane
Concen: 0.088 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 97 Resp: 1588

Ion	Ratio	Lower	Upper
97	100		
83	70.1	68.7	103.1
85	23.1	40.6	60.8#
99	46.7	45.5	68.3

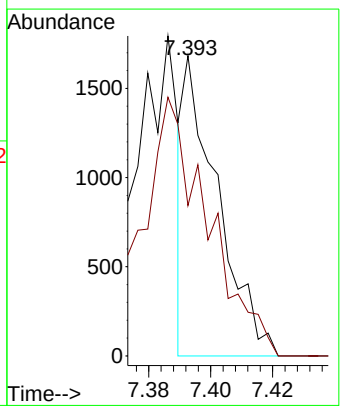


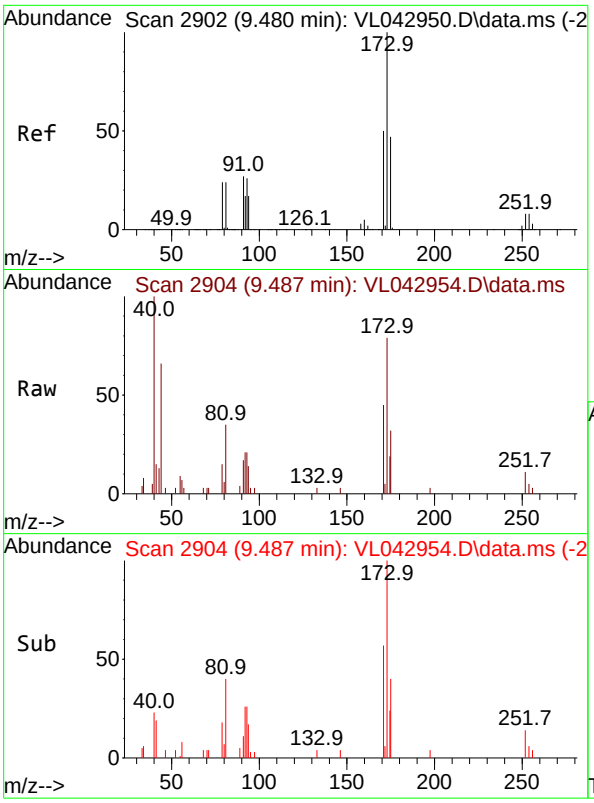


#48
Dibromochloromethane
Concen: 0.044 ppbv
RT: 7.393 min Scan# 2257
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:129 Resp: 1273

Ion	Ratio	Lower	Upper
129	100		
127	0.0	39.1	117.2#



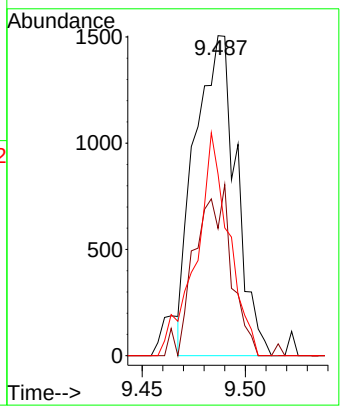


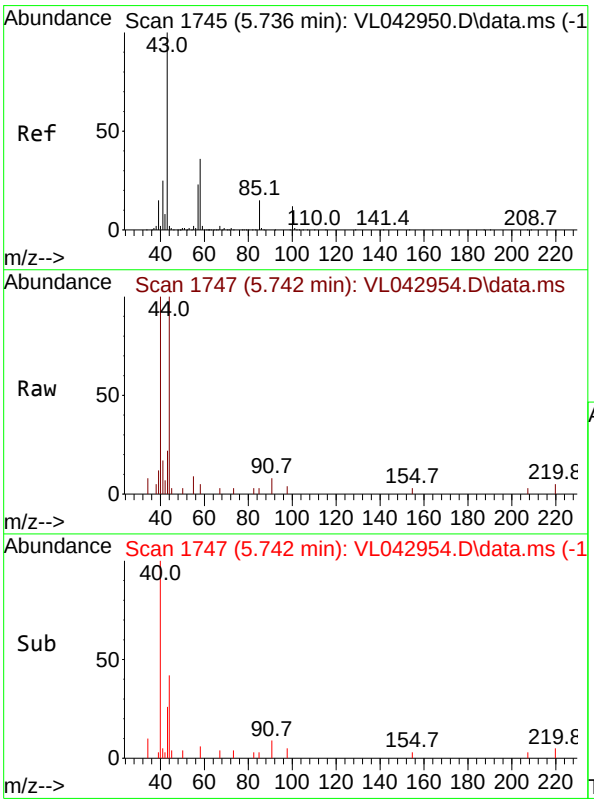
#49
Bromoform
Concen: 0.084 ppbv
RT: 9.487 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:173 Resp: 2105

Ion	Ratio	Lower	Upper
173	100		
175	46.7	37.9	56.9
171	54.8	41.1	61.7

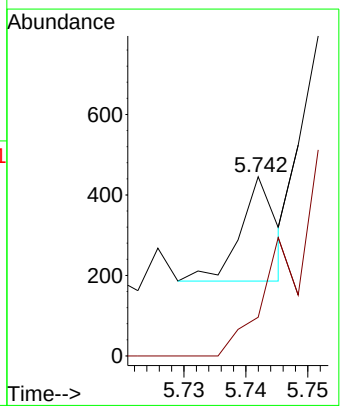


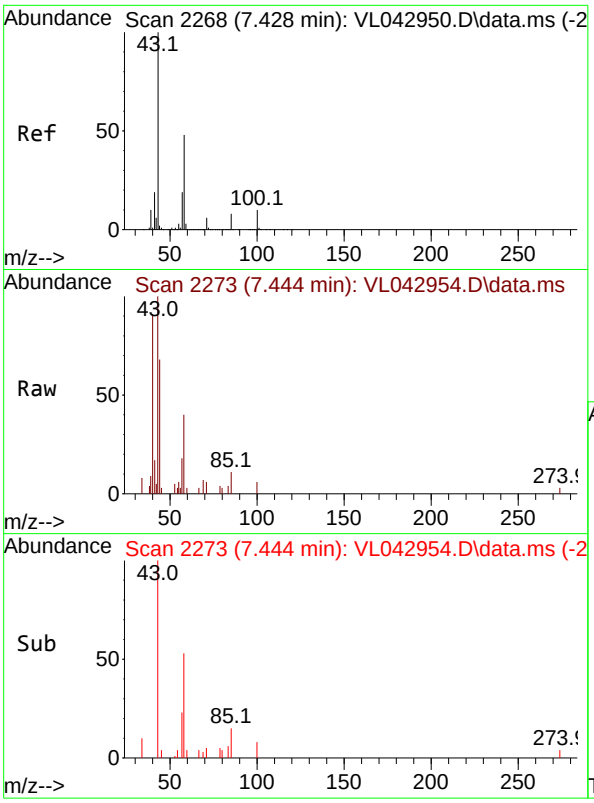


#50
4-Methyl-2-Pentanone
Concen: 0.002 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 43 Resp: 104

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.4	42.6#



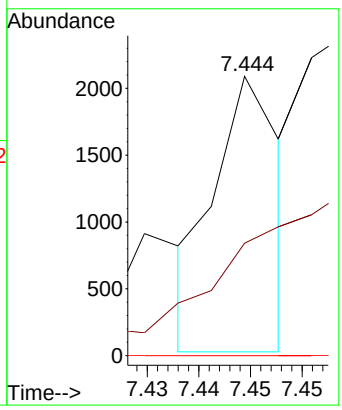


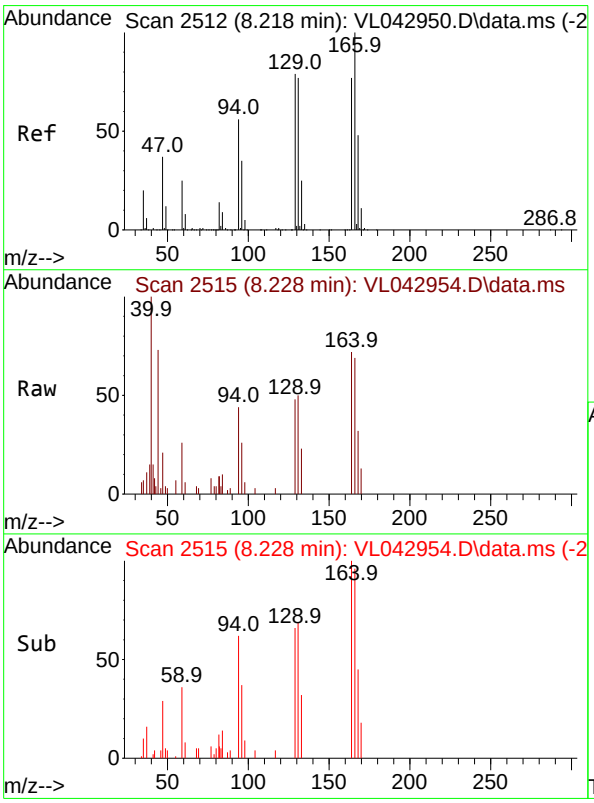
#51
2-Hexanone
Concen: 0.025 ppbv
RT: 7.444 min Scan# 2
Delta R.T. 0.016 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 43 Resp: 921

Ion	Ratio	Lower	Upper
43	100		
58	0.0	39.7	59.5#
98	0.0	0.1	0.1#

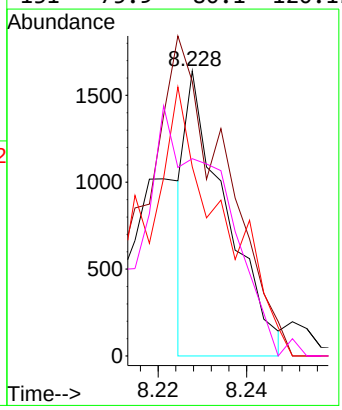


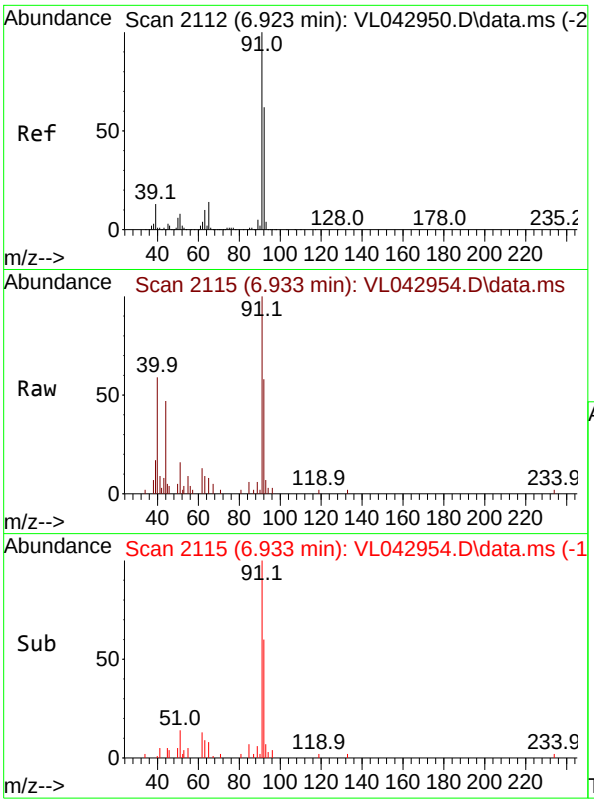


#52
Tetrachloroethene
Concen: 0.056 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:164 Resp: 1022

Ion	Ratio	Lower	Upper
164	100		
166	92.3	103.5	155.3#
129	61.7	82.2	123.4#
131	75.9	80.1	120.1#



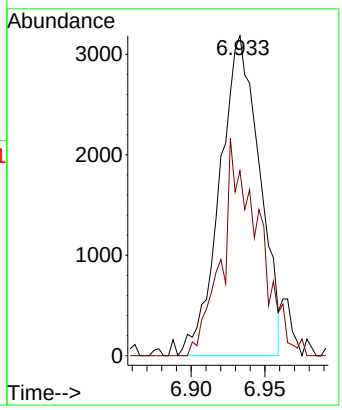


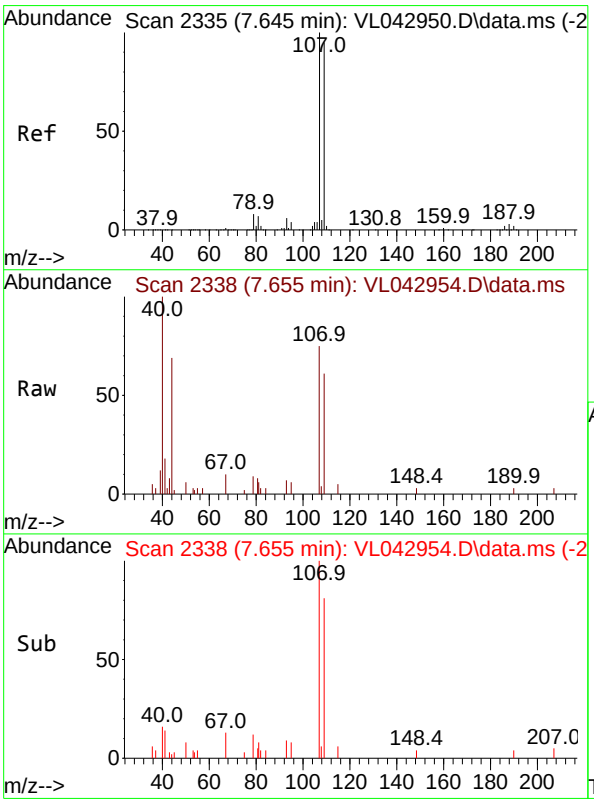
#53
Toluene
Concen: 0.108 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 5973

Ion	Ratio	Lower	Upper
91	100		
92	63.4	48.2	72.2

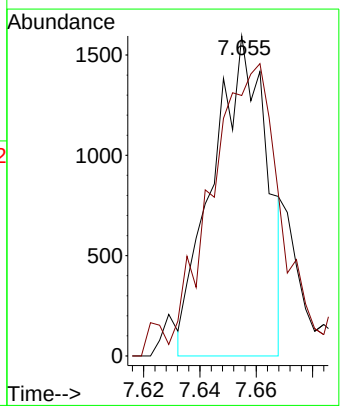


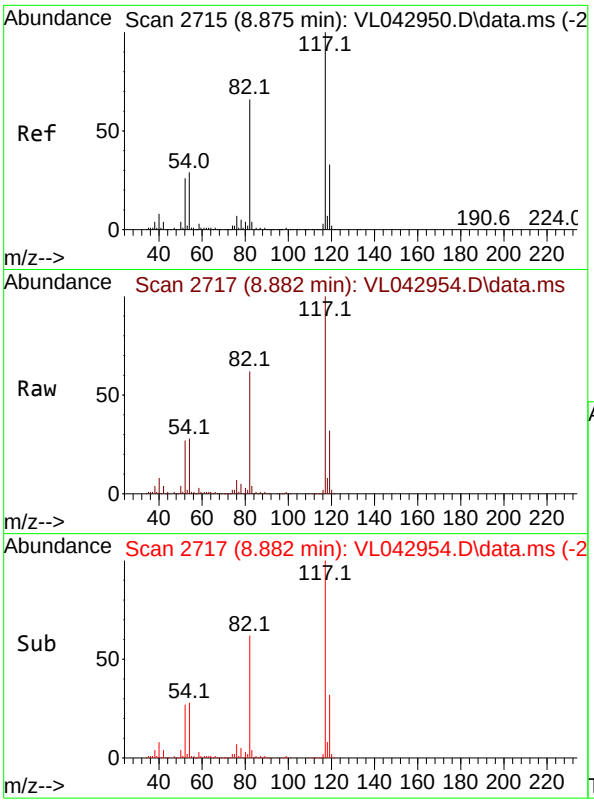


#54
1,2-Dibromoethane
Concen: 0.084 ppbv
RT: 7.655 min Scan# 2338
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:107 Resp: 2129

Ion	Ratio	Lower	Upper
107	100		
109	76.4	75.8	113.8



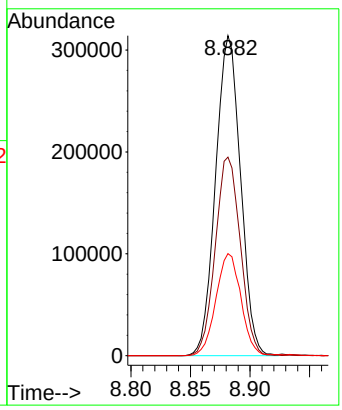


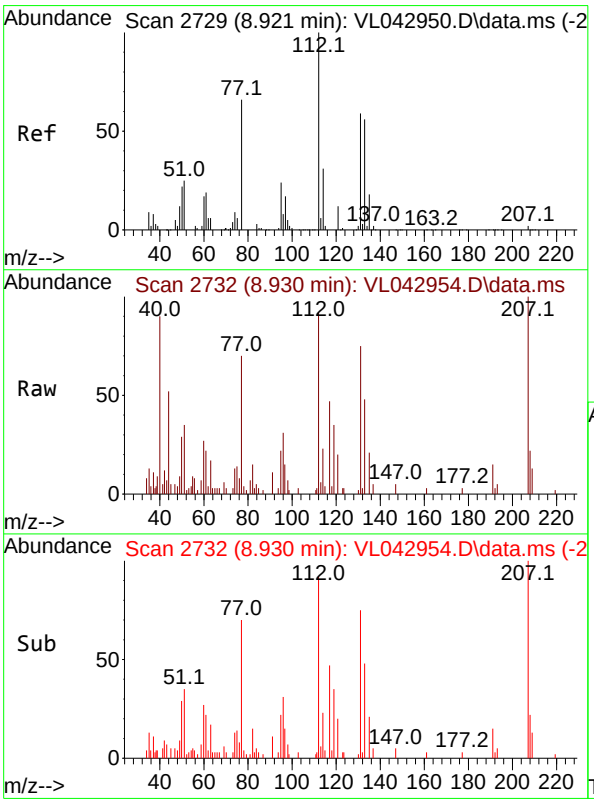
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:117 Resp: 457171

Ion	Ratio	Lower	Upper
117	100		
82	62.3	52.8	79.2
119	32.3	26.5	39.7

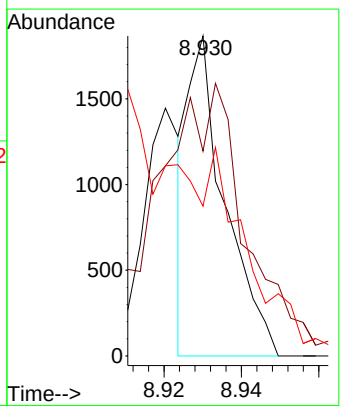


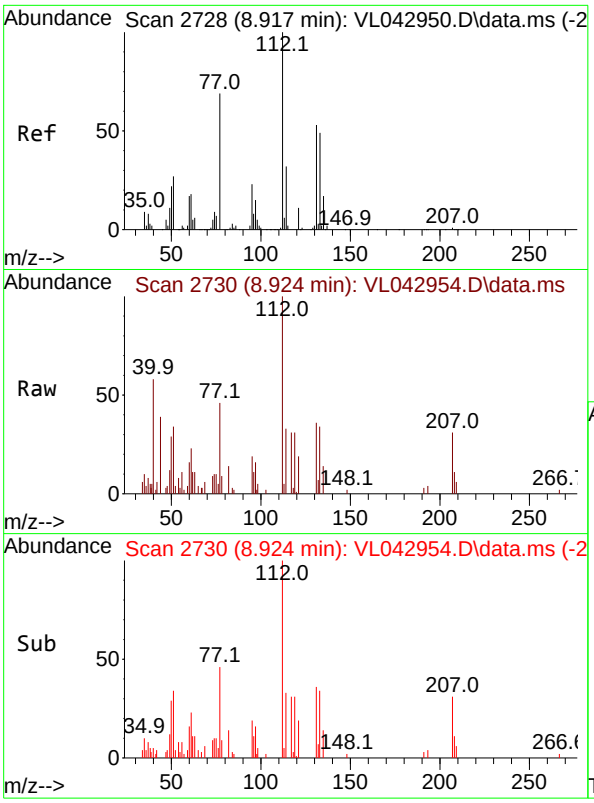


#56
1,1,1,2-Tetrachloroethane
Concen: 0.057 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:131 Resp: 1250

Ion	Ratio	Lower	Upper
131	100		
133	208.2	76.6	114.8#
119	0.0	49.9	74.9#



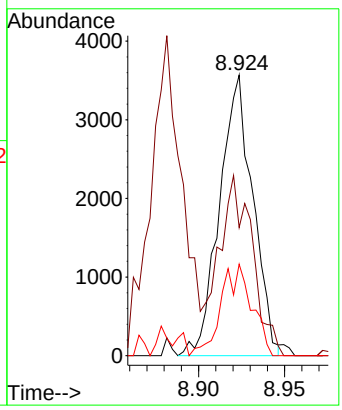


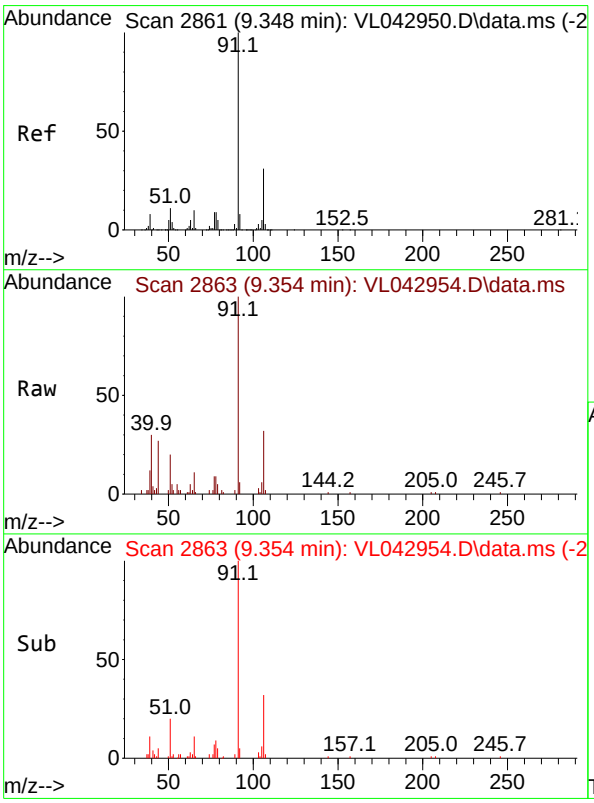
#57
Chlorobenzene
Concen: 0.115 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:112 Resp: 4812

Ion	Ratio	Lower	Upper
112	100		
77	40.2	55.7	83.5#
114	32.6	28.6	35.0

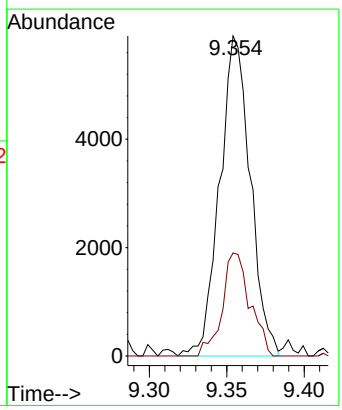


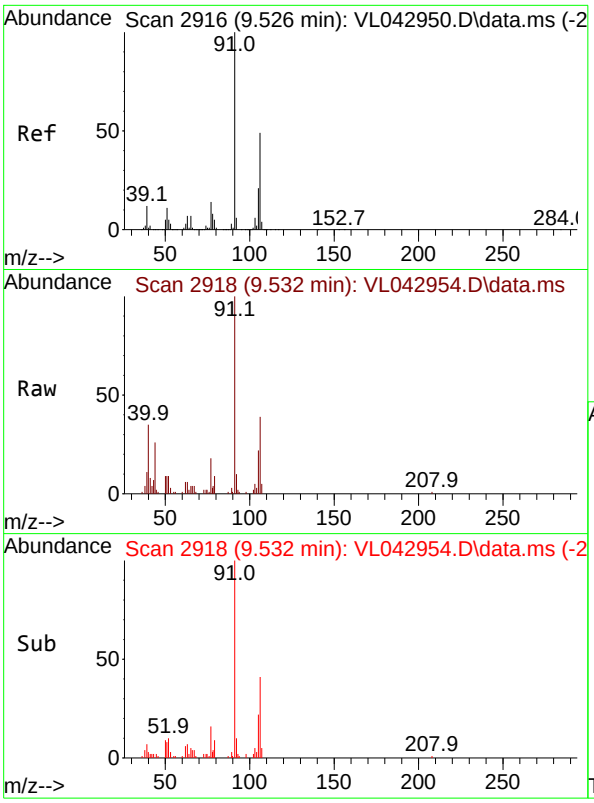


#58
Ethyl Benzene
Concen: 0.108 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 91 Resp: 8123

Ion	Ratio	Lower	Upper
91	100		
106	32.2	24.6	37.0



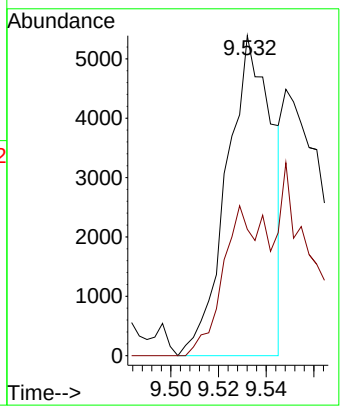


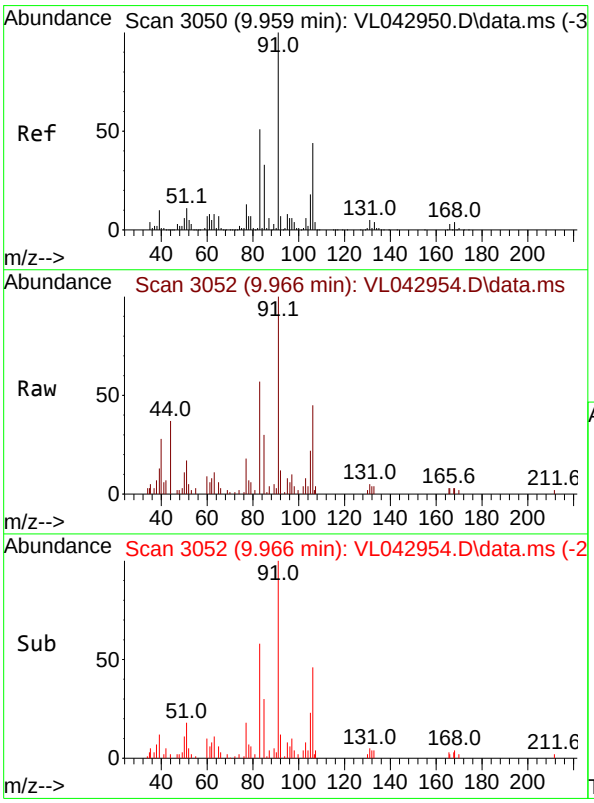
#59
m/p-Xylene
Concen: 0.120 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 7134

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

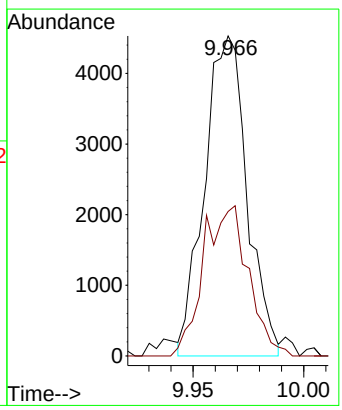


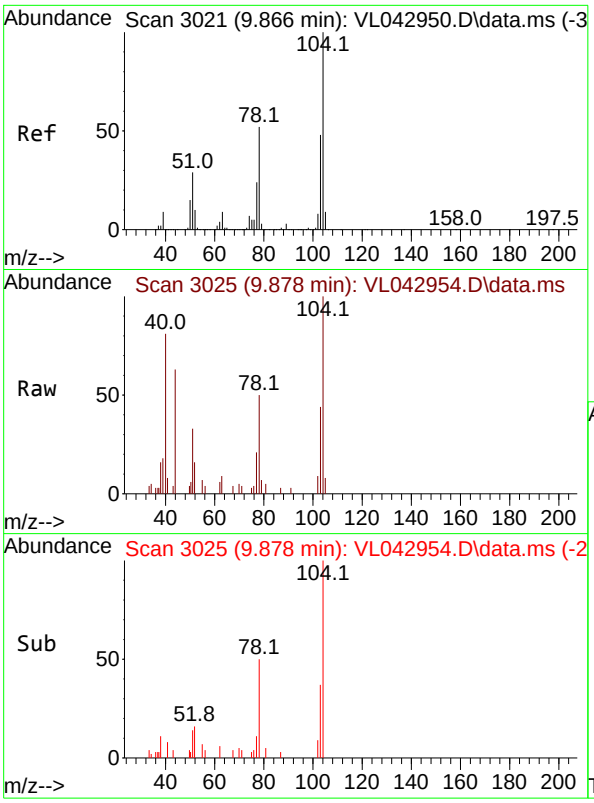


#60
o-Xylene
Concen: 0.102 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 91 Resp: 6052

Ion	Ratio	Lower	Upper
91	100		
106	49.6	22.4	67.0



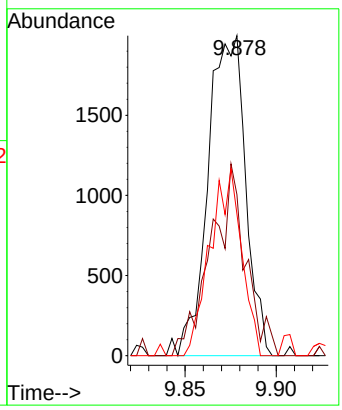


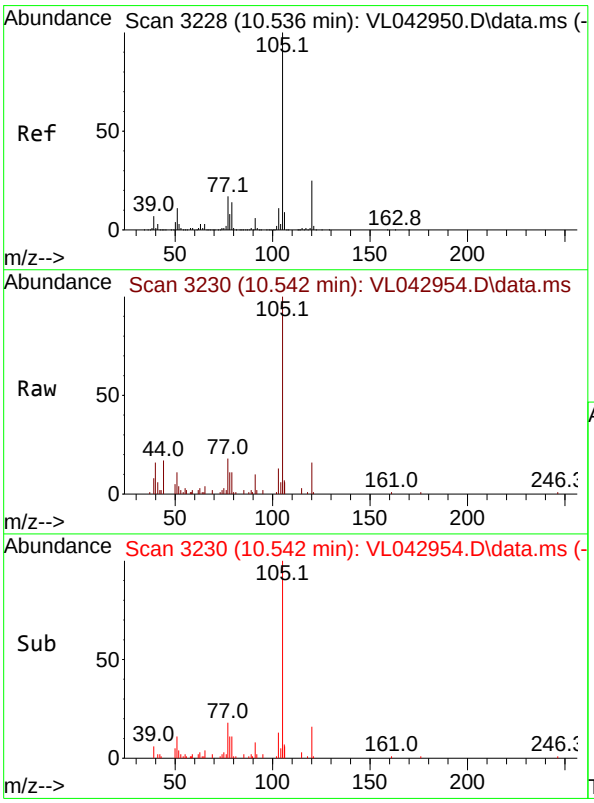
#61
Styrene
Concen: 0.102 ppbv
RT: 9.878 min Scan# 3
Delta R.T. 0.013 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:104 Resp: 2851

Ion	Ratio	Lower	Upper
104	100		
78	55.8	39.9	59.9
103	52.2	36.9	55.3

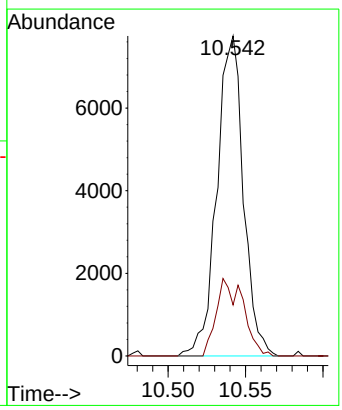


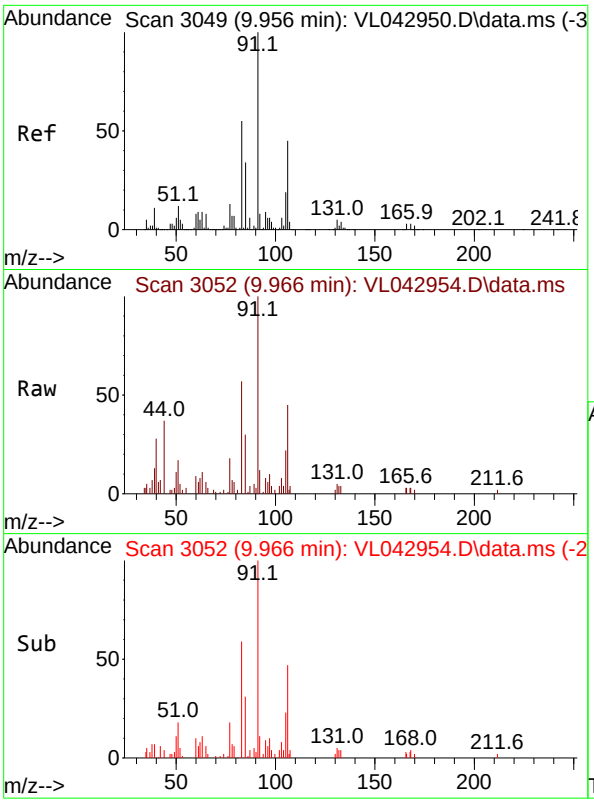


#62
Isopropylbenzene
Concen: 0.105 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:105 Resp: 9236

Ion	Ratio	Lower	Upper
105	100		
120	24.6	20.6	30.8



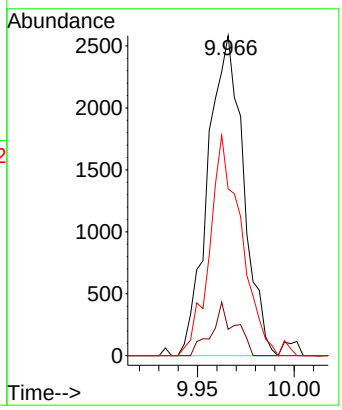


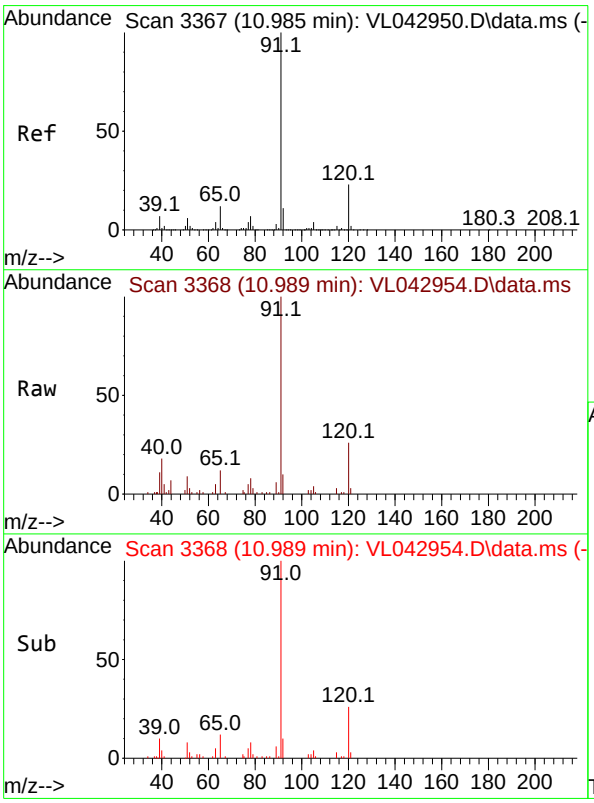
#63
1,1,2,2-Tetrachloroethane
Concen: 0.106 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 3301

Ion	Ratio	Lower	Upper
83	100		
131	11.1	4.8	14.4
85	62.2	32.2	96.6

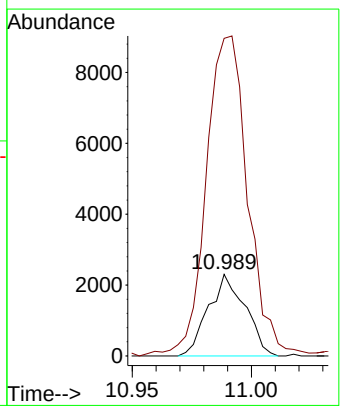


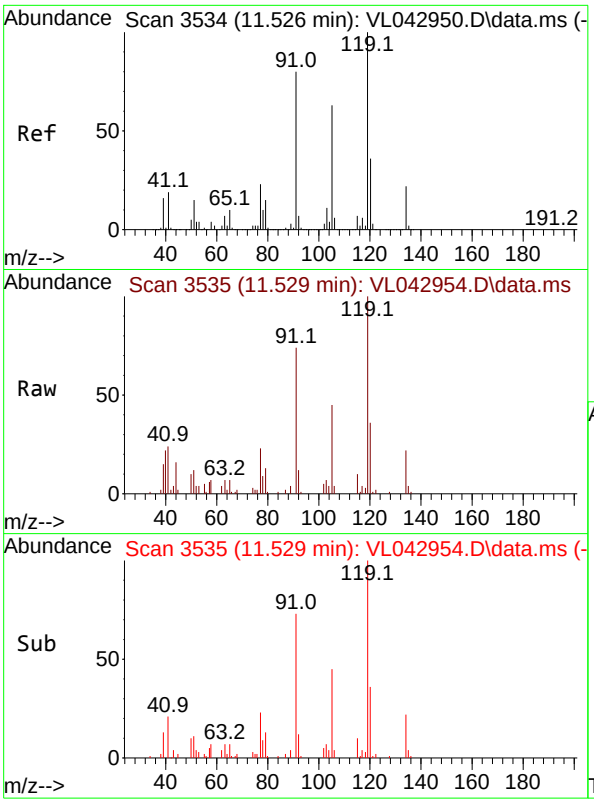


#64
n-propylbenzene
Concen: 0.107 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:120 Resp: 2475

Ion	Ratio	Lower	Upper
120	100		
91	443.6	364.9	547.3



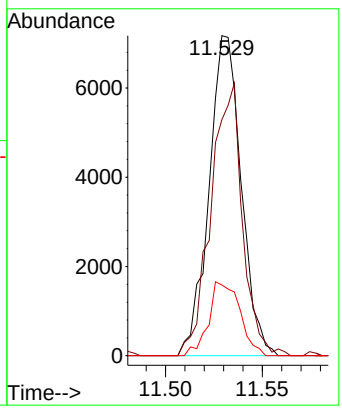


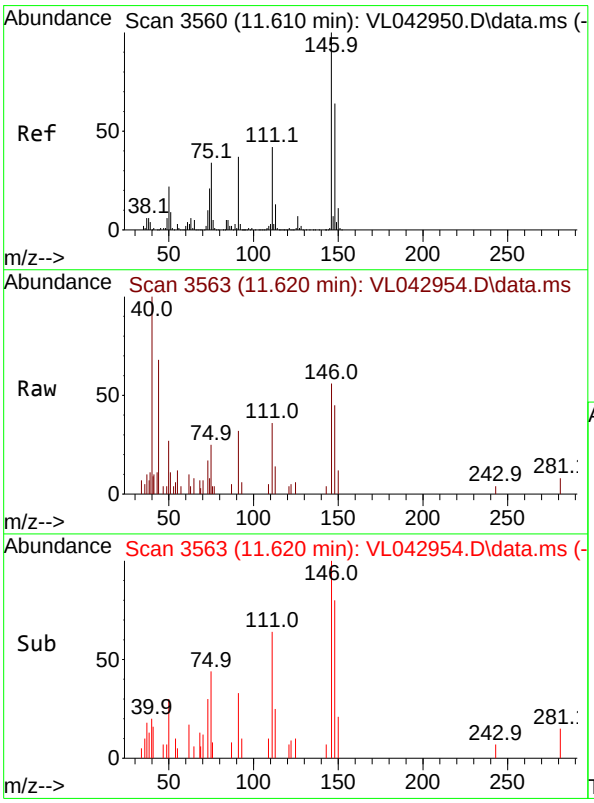
#65
tert-Butylbenzene
Concen: 0.106 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 8306

Ion	Ratio	Lower	Upper
119	100		
91	83.6	63.1	94.7
134	22.3	17.0	25.6

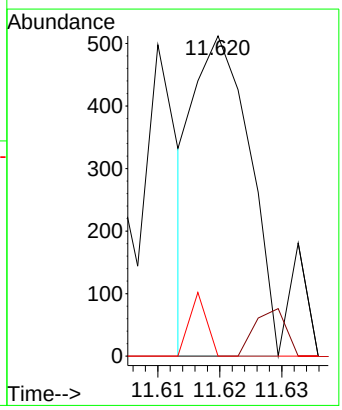


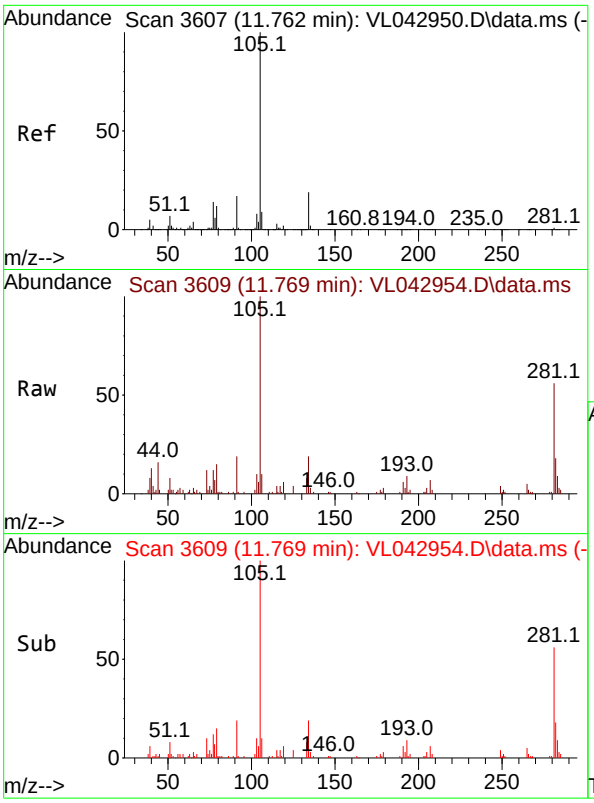


#66
Benzyl Chloride
Concen: 0.039 ppbv
RT: 11.620 min Scan# 3563
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 91 Resp: 318

Ion	Ratio	Lower	Upper
91	100		
126	0.0	14.6	21.8#
128	0.0	5.0	7.4#



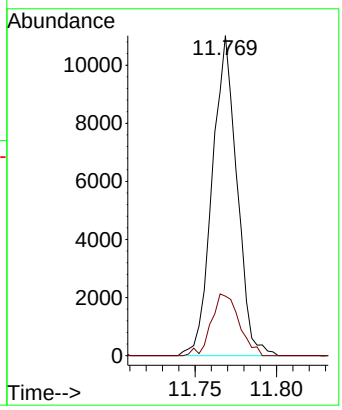


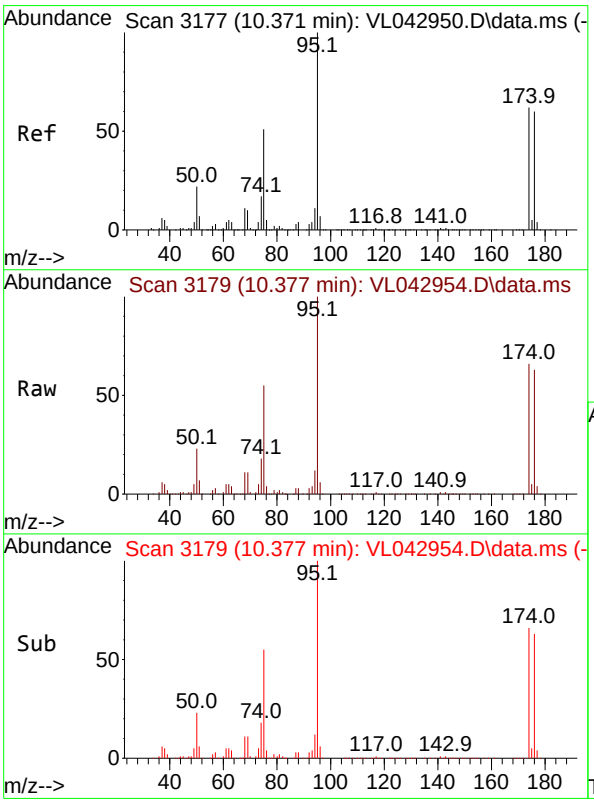
#67
sec-Butylbenzene
Concen: 0.106 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 11601

Ion	Ratio	Lower	Upper
105	100		
134	21.7	15.7	23.5

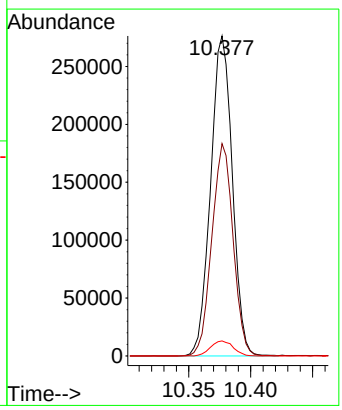


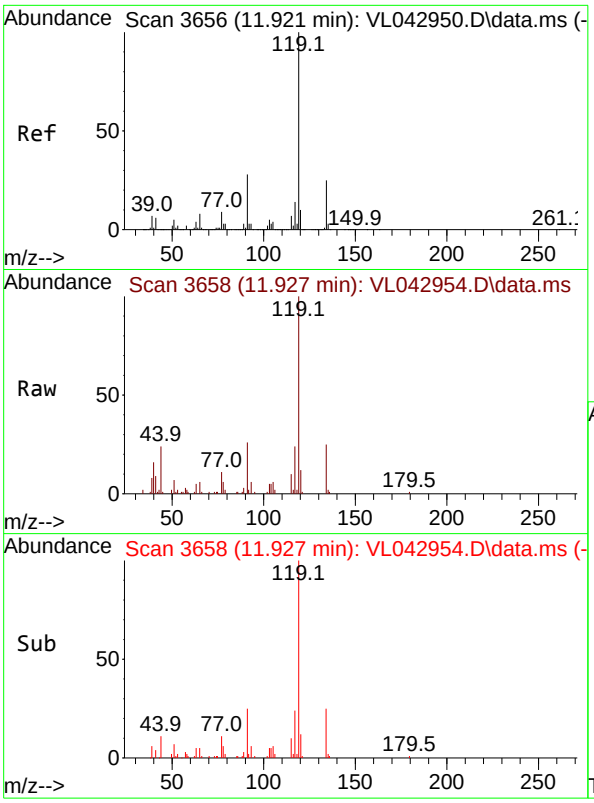


#68
1-Bromo-4-Fluorobenzene
Concen: 9.881 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 95 Resp: 337196

Ion	Ratio	Lower	Upper
95	100		
174	65.1	51.4	77.2
175	4.9	4.0	6.0



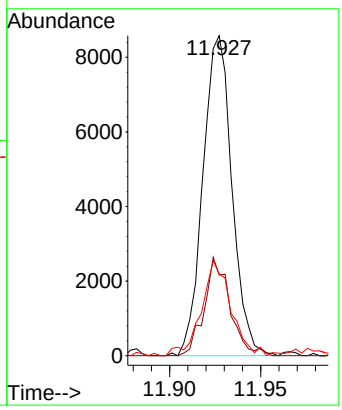


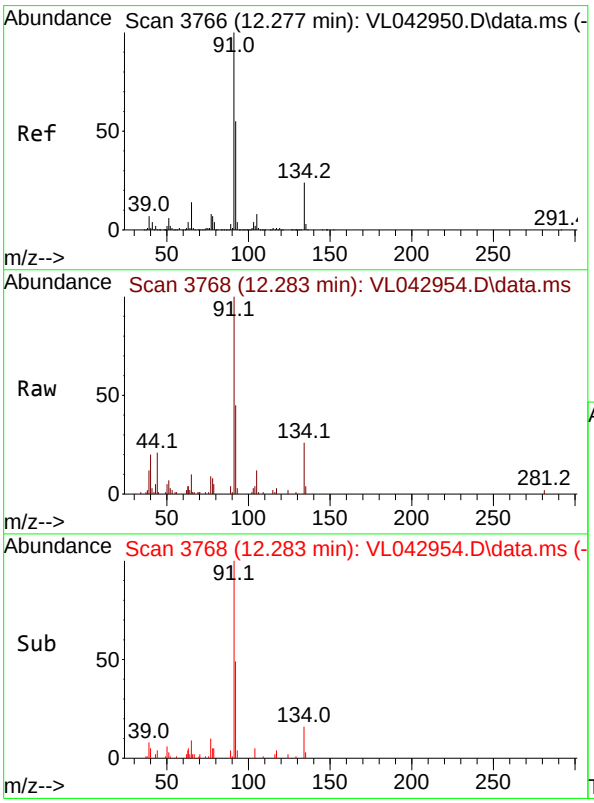
#69
p-Isopropyltoluene
Concen: 0.103 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 9493

Ion	Ratio	Lower	Upper
119	100		
134	27.3	21.0	31.4
91	28.9	22.3	33.5

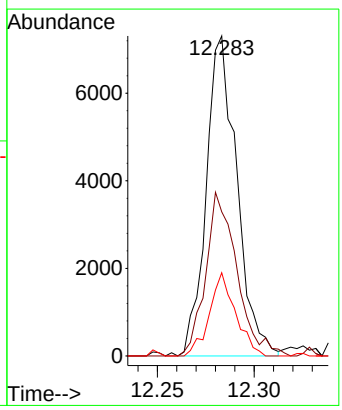


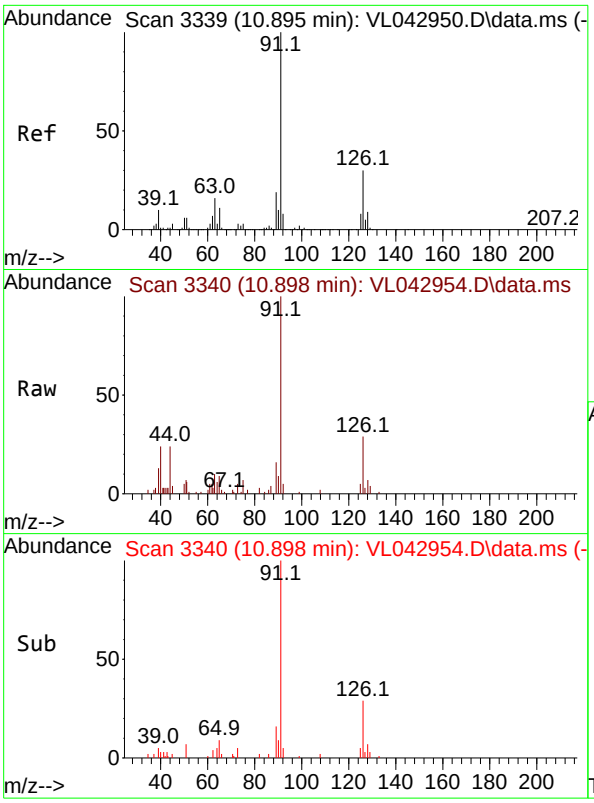


#70
n-Butylbenzene
Concen: 0.089 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion: 91 Resp: 8041

Ion	Ratio	Lower	Upper
91	100		
92	52.1	44.0	66.0
134	22.7	19.4	29.2



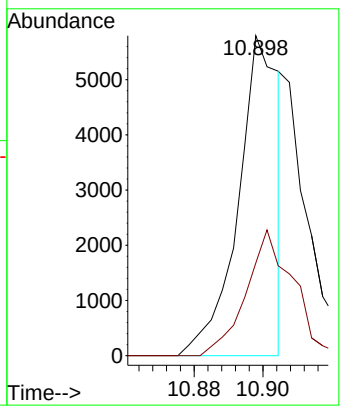


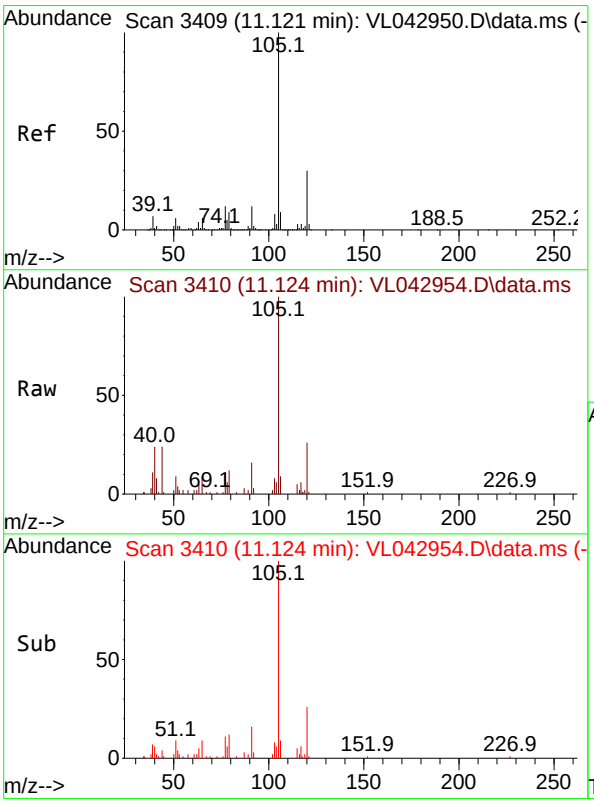
#71
2-Chlorotoluene
Concen: 0.071 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 4737

Ion	Ratio	Lower	Upper
91	100		
126	45.7	12.3	49.3

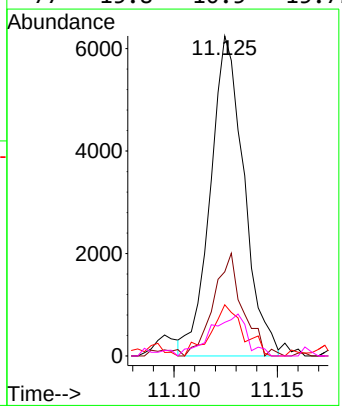


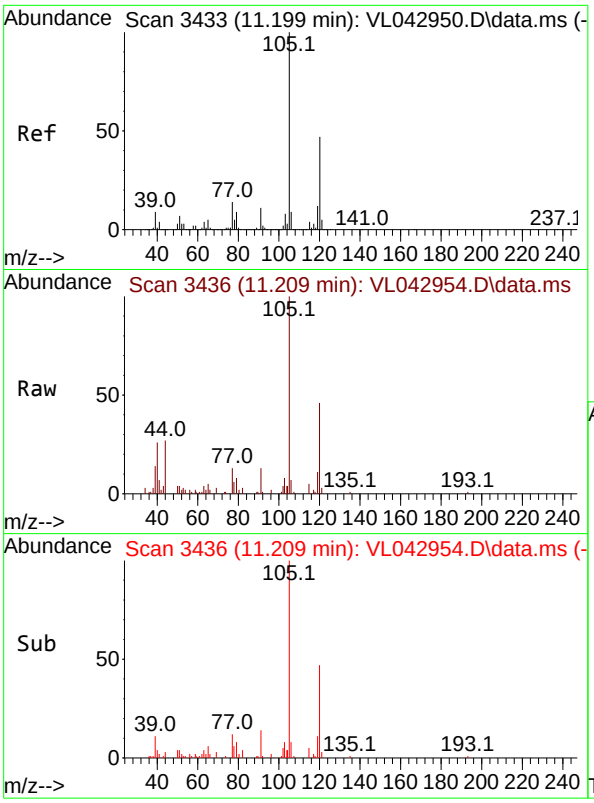


#72
4-Ethyltoluene
Concen: 0.095 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:105 Resp: 7048

Ion	Ratio	Lower	Upper
105	100		
120	29.3	24.2	36.2
91	17.8	10.0	15.0#
77	15.8	10.5	15.7#



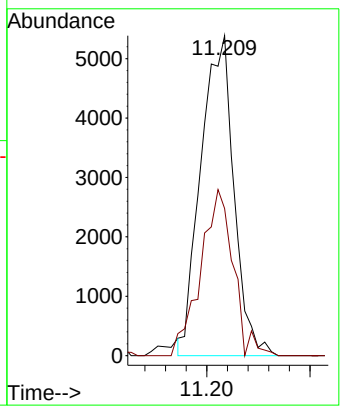


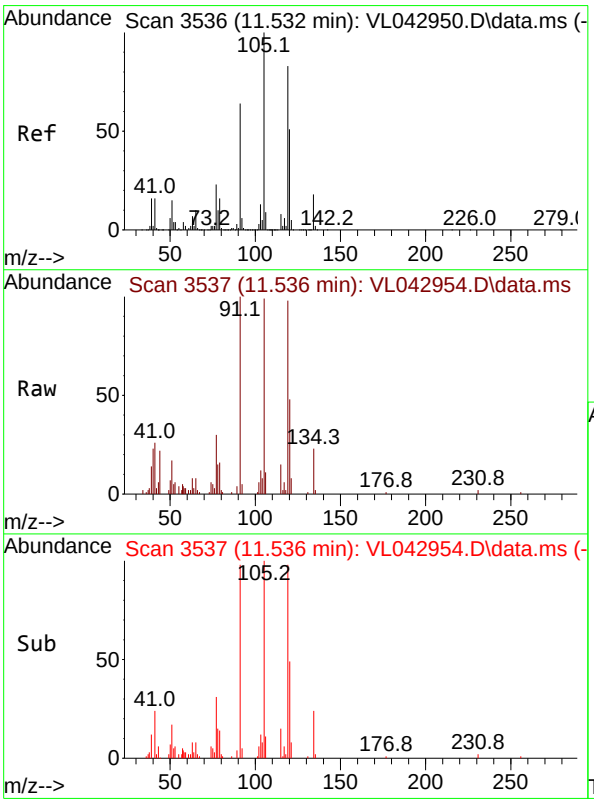
#73
1,3,5-Trimethylbenzene
Concen: 0.099 ppbv
RT: 11.209 min Scan# 34
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 5976

Ion	Ratio	Lower	Upper
105	100		
120	46.0	38.0	57.0

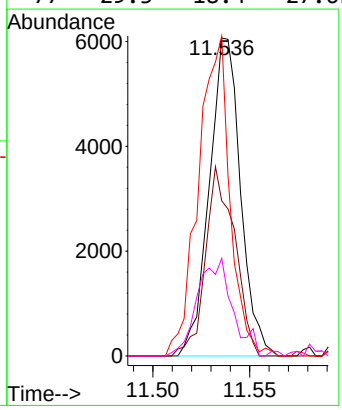


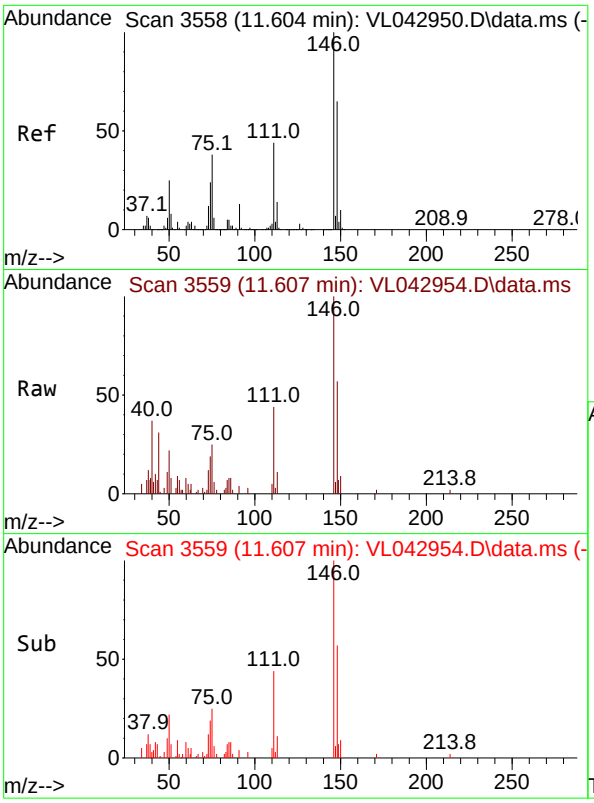


#74
1,2,4-Trimethylbenzene
Concen: 0.103 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:105 Resp: 6807

Ion	Ratio	Lower	Upper
105	100		
120	48.8	40.9	61.3
91	100.7	51.2	76.8#
77	29.3	18.4	27.6#



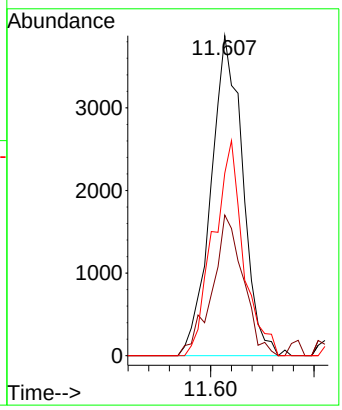


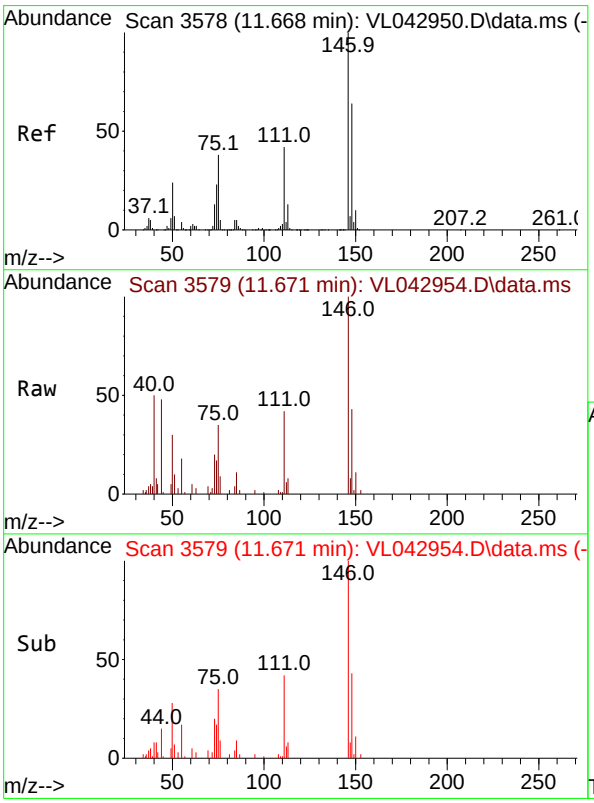
#75
1,3-Dichlorobenzene
Concen: 0.100 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 4130

Ion	Ratio	Lower	Upper
146	100		
111	43.2	22.3	66.9
148	63.8	31.9	95.5

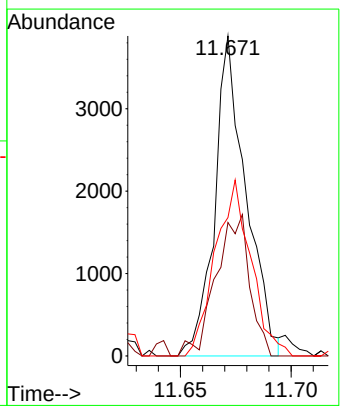


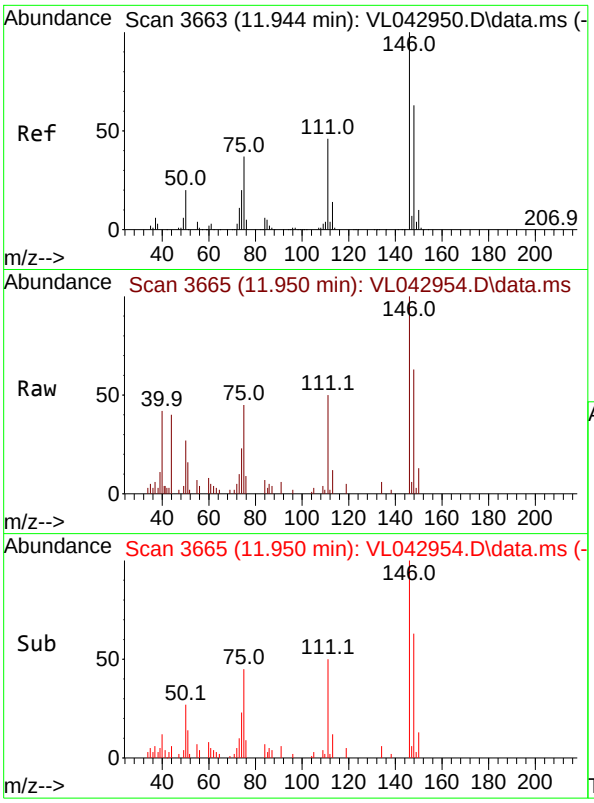


#76
1,4-Dichlorobenzene
Concen: 0.094 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:146 Resp: 3832

Ion	Ratio	Lower	Upper
146	100		
111	49.1	21.5	64.5
148	62.4	31.9	95.5



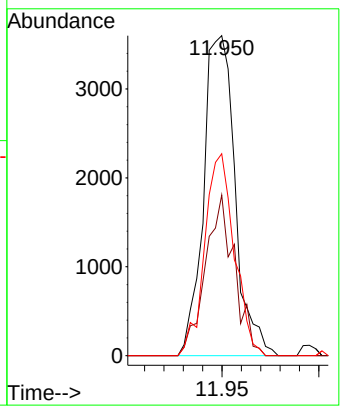


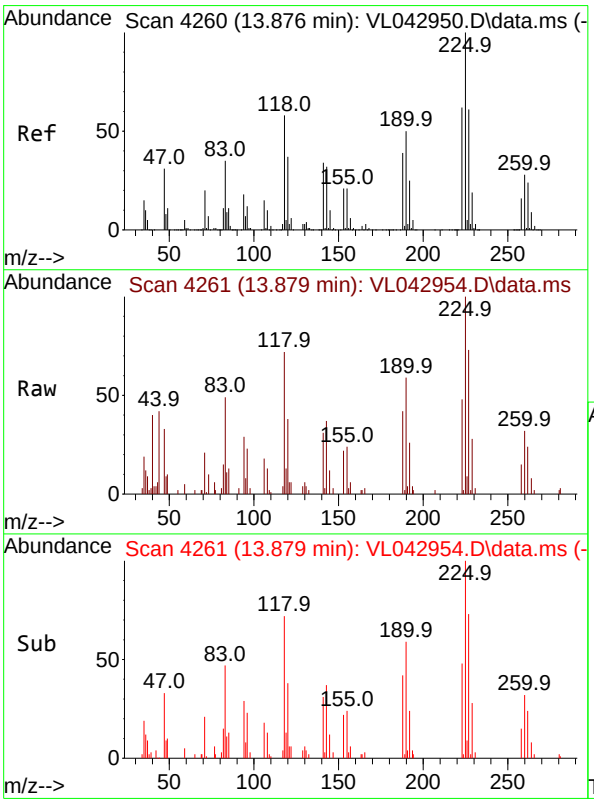
#77
1,2-Dichlorobenzene
Concen: 0.104 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 4083

Ion	Ratio	Lower	Upper
146	100		
111	46.2	23.1	69.3
148	59.3	32.0	96.0

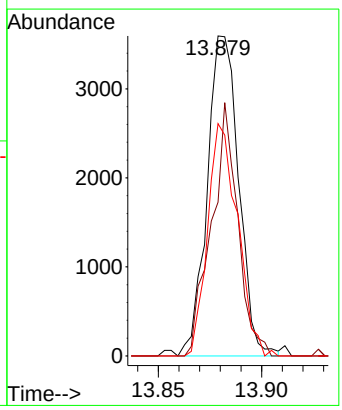


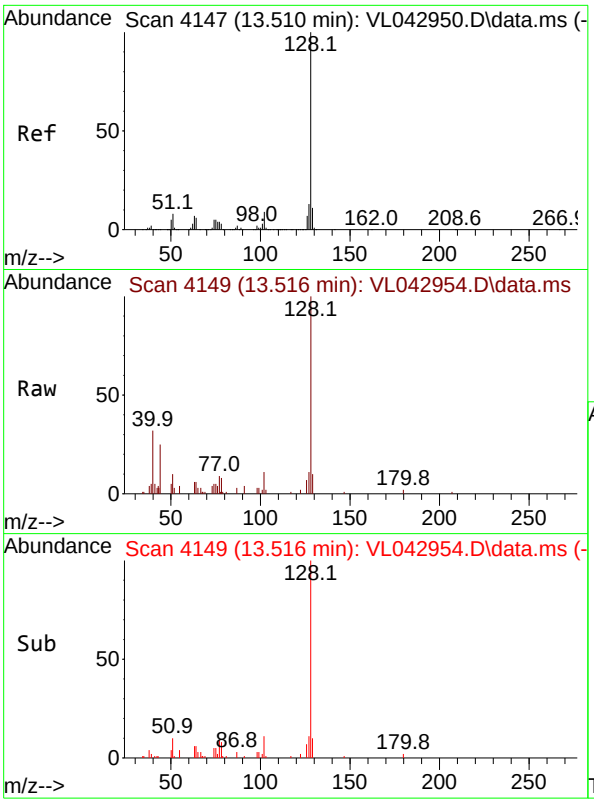


#78
Hexachloro-1,3-Butadiene
Concen: 0.125 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.003 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:225 Resp: 3820

Ion	Ratio	Lower	Upper
225	100		
223	66.1	50.1	75.1
227	68.7	50.4	75.6



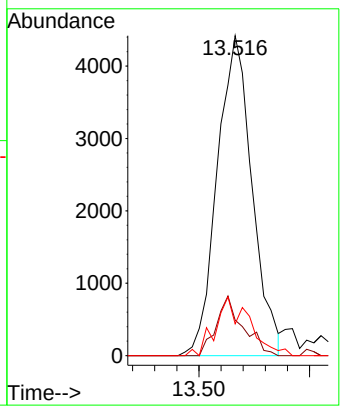


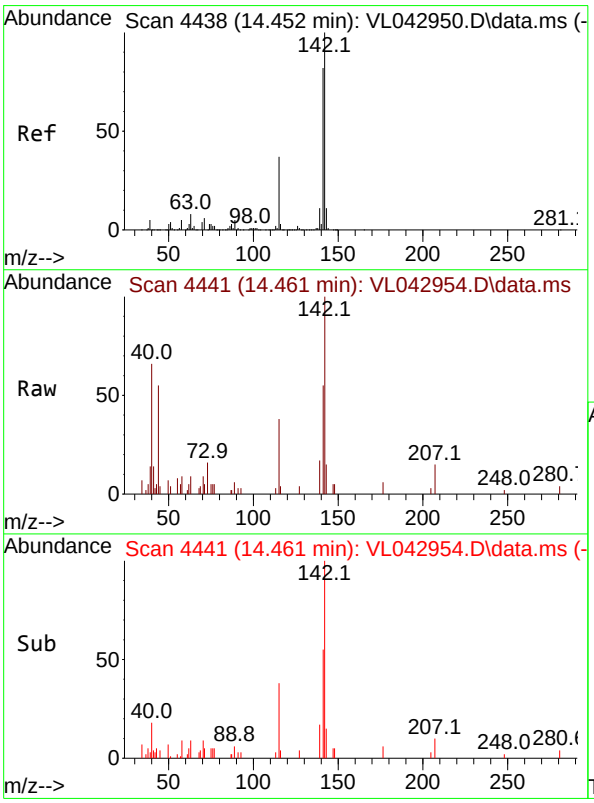
#79
Naphthalene
Concen: 0.082 ppbv
RT: 13.516 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:128 Resp: 4836

Ion	Ratio	Lower	Upper
128	100		
127	11.1	10.6	15.8
129	10.0	9.0	13.6

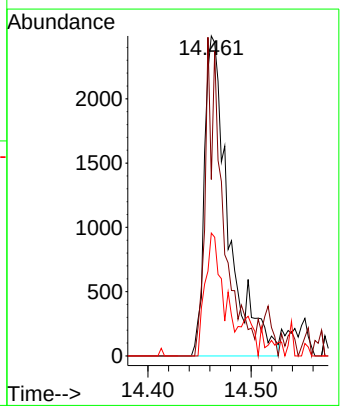


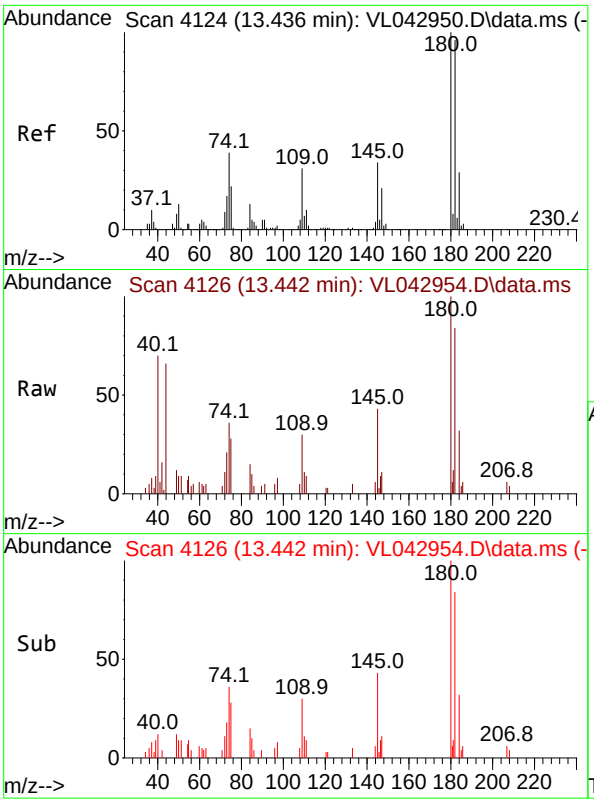


#80
Naphthalene,2-methyl-
Concen: 0.222 ppbv
RT: 14.461 min Scan# 4441
Delta R.T. 0.010 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Tgt Ion:142 Resp: 4029

Ion	Ratio	Lower	Upper
142	100		
141	70.2	65.1	97.7
115	37.7	28.9	43.3



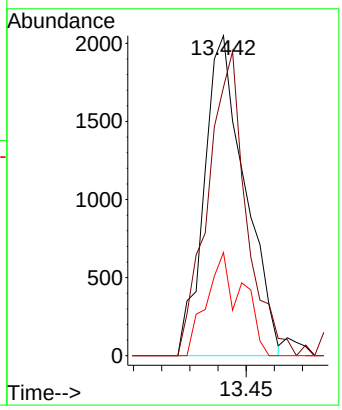


#81
1,2,4-Trichlorobenzene
Concen: 0.066 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042954.D
Acq: 22 Sep 2025 11:56

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:180 Resp: 2055

Ion	Ratio	Lower	Upper
180	100		
182	91.9	75.7	113.5
184	28.4	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042955.D
Acq On : 22 Sep 2025 12:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Sep 23 02:13:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	163615	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	504423	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	454013	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	334002	9.855	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	840	0.038	ppbv #	83
3) Chlorodifluoromethane	1.476	51	1668	0.061	ppbv	95
4) Chloromethane	1.534	50	568	0.057	ppbv	90
5) Vinyl Chloride	1.580	62	358	0.040	ppbv #	53
6) Bromomethane	1.670	94	96	0.030	ppbv	90
7) Chloroethane	1.709	64	249	0.071	ppbv #	80
8) Dichlorotetrafluoroethane	1.554	85	838	0.045	ppbv	93
9) Propene	1.483	41	829	0.069	ppbv #	1
10) Heptane	4.978	43	551	0.017	ppbv #	29
11) Trichlorofluoromethane	2.140	101	682	0.032	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.140	101	682	0.040	ppbv	86
13) Ethanol	1.890	45	664	0.581	ppbv #	35
14) Bromoethene	1.784	108	376	0.058	ppbv #	1
15) Acetone	1.839	43	2845	0.134	ppbv	93
16) 1,3-Butadiene	1.612	39	612	0.061	ppbv #	31
17) tert-Butyl alcohol	2.043	59	1183	0.051	ppbv #	1
18) 1,1-Dichloroethene	2.030	96	166	0.021	ppbv #	58
19) Isopropyl Alcohol	1.890	45	664	0.052	ppbv #	27
20) Methylene Chloride	2.062	84	2681	Below Cal		94
21) Allyl Chloride	2.098	41	1053	0.071	ppbv #	46
22) trans-1,2-Dichloroethene	2.340	96	370	0.041	ppbv #	92
23) Vinyl Acetate	2.460	43	1543	0.051	ppbv #	15
24) 1,1-Dichloroethane	2.412	63	470	0.027	ppbv #	89
25) Ethyl Acetate	2.829	43	303	0.006	ppbv #	75
26) Hexane	2.826	57	1295	0.053	ppbv #	2
27) Carbon Disulfide	2.153	76	851	0.039	ppbv #	1
28) Methyl tert-Butyl Ether	2.441	73	594	0.047	ppbv #	1
29) Chloroform	2.732	83	107	0.003	ppbv	99
30) Cyclohexane	3.862	84	190	0.009	ppbv #	1
31) cis-1,2-Dichloroethene	2.713	61	280	0.012	ppbv #	87
32) 1,1,1-Trichloroethane	3.363	97	562	0.016	ppbv #	18
34) 2-Butanone	2.557	43	1365	0.039	ppbv #	81
35) Carbon Tetrachloride	3.761	117	771	0.024	ppbv #	76
36) Benzene	3.654	78	2042	0.043	ppbv	99
37) 1,2-Dichloroethane	3.217	62	935	0.038	ppbv #	83
38) Trichloroethene	4.551	130	363	0.015	ppbv #	18
39) 1,2-Dichloropropane	3.959	63	123623	7.144	ppbv #	23
40) 1,4-Dioxane	4.619	88	180	0.022	ppbv #	8
41) Tetrahydrofuran	3.046	42	84	0.004	ppbv #	38
42) Bromodichloromethane	4.489	83	785	0.023	ppbv #	78
43) Methyl Methacrylate	4.884	69	399	0.021	ppbv #	1
44) 2,2,4-Trimethylpentane	4.635	57	1698	0.021	ppbv #	7
45) t-1,3-Dichloropropene	6.402	75	159	0.008	ppbv	97

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042955.D
Acq On : 22 Sep 2025 12:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Sep 23 02:13:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

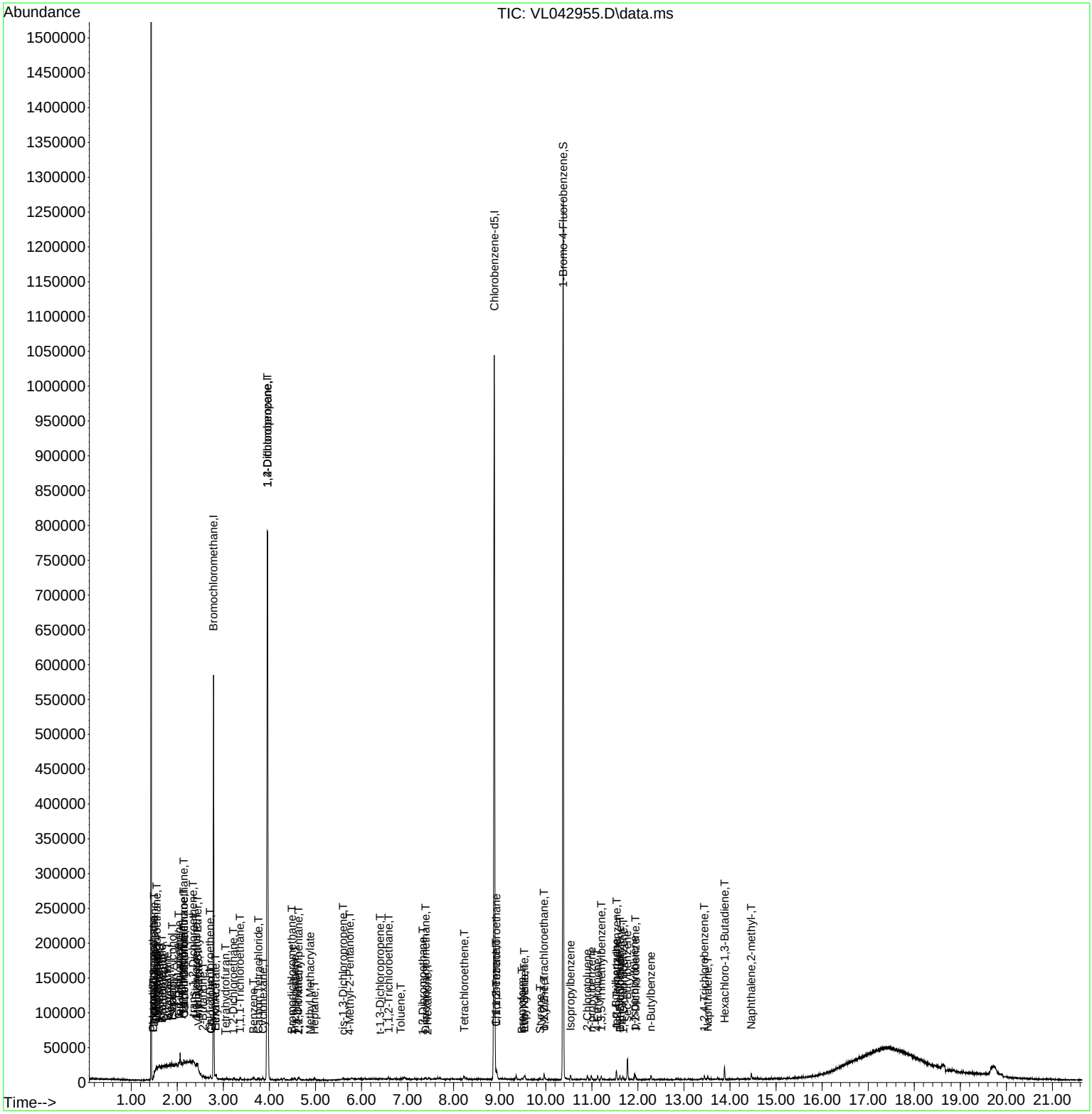
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.600	75	424	0.016	ppbv	#	29
47) 1,1,2-Trichloroethane	6.587	97	443	0.024	ppbv	#	37
48) Dibromochloromethane	7.393	129	612	0.021	ppbv	#	10
49) Bromoform	9.484	173	766	0.030	ppbv		96
50) 4-Methyl-2-Pentanone	5.742	43	53	0.001	ppbv	#	39
51) 2-Hexanone	7.435	43	189	0.005	ppbv	#	28
52) Tetrachloroethene	8.231	164	316	0.017	ppbv	#	54
53) Toluene	6.852	91	62	0.001	ppbv		94
54) 1,2-Dibromoethane	7.331	107	27	0.001	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.927	131	1008	0.046	ppbv	#	1
57) Chlorobenzene	8.920	112	1619	0.039	ppbv	#	70
58) Ethyl Benzene	9.532	91	2417	0.032	ppbv		96
59) m/p-Xylene	9.532	91	2417	0.041	ppbv	#	100
60) o-Xylene	9.966	91	2366	0.040	ppbv		92
61) Styrene	9.875	104	621	0.022	ppbv	#	41
62) Isopropylbenzene	10.539	105	3139	0.036	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.959	83	1006	0.033	ppbv		88
64) n-propylbenzene	10.992	120	745	0.033	ppbv		87
65) tert-Butylbenzene	11.526	119	2797	0.036	ppbv	#	96
66) Benzyl Chloride	11.613	91	103	0.013	ppbv	#	65
67) sec-Butylbenzene	11.765	105	3805	0.035	ppbv		92
69) p-Isopropyltoluene	11.924	119	2947	0.032	ppbv		92
70) n-Butylbenzene	12.283	91	2629	0.029	ppbv		91
71) 2-Chlorotoluene	10.901	91	2400	0.036	ppbv		98
72) 4-Ethyltoluene	11.125	105	2527	0.034	ppbv	#	86
73) 1,3,5-Trimethylbenzene	11.209	105	922	0.015	ppbv	#	70
74) 1,2,4-Trimethylbenzene	11.539	105	2411	0.037	ppbv	#	85
75) 1,3-Dichlorobenzene	11.610	146	1180	0.029	ppbv		81
76) 1,4-Dichlorobenzene	11.685	146	477	0.012	ppbv	#	2
77) 1,2-Dichlorobenzene	11.950	146	1283	0.033	ppbv		89
78) Hexachloro-1,3-Butadiene	13.882	225	1707	0.056	ppbv		96
79) Naphthalene	13.516	128	2391	0.041	ppbv	#	95
80) Naphthalene,2-methyl-	14.462	142	3144	0.175	ppbv		88
81) 1,2,4-Trichlorobenzene	13.442	180	939	0.030	ppbv	#	91

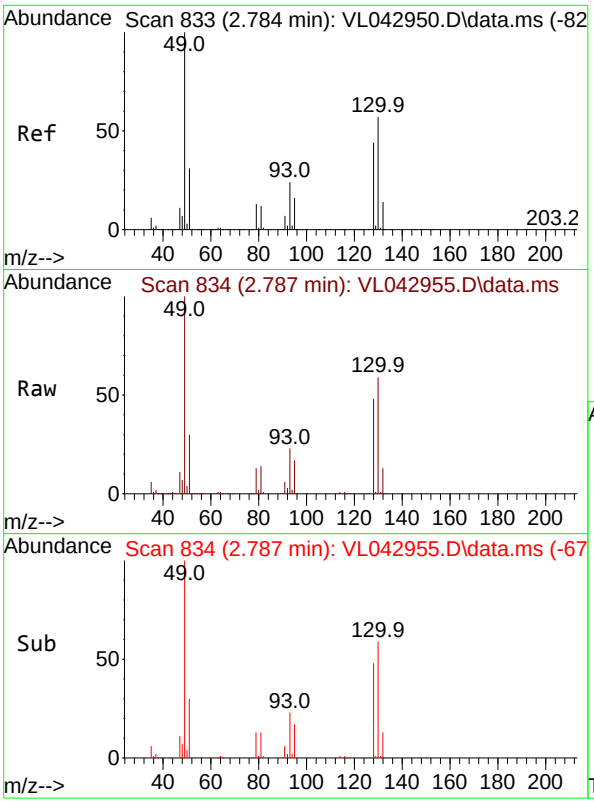
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042955.D
Acq On : 22 Sep 2025 12:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Sep 23 02:13:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



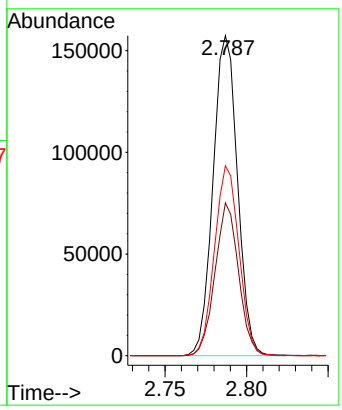


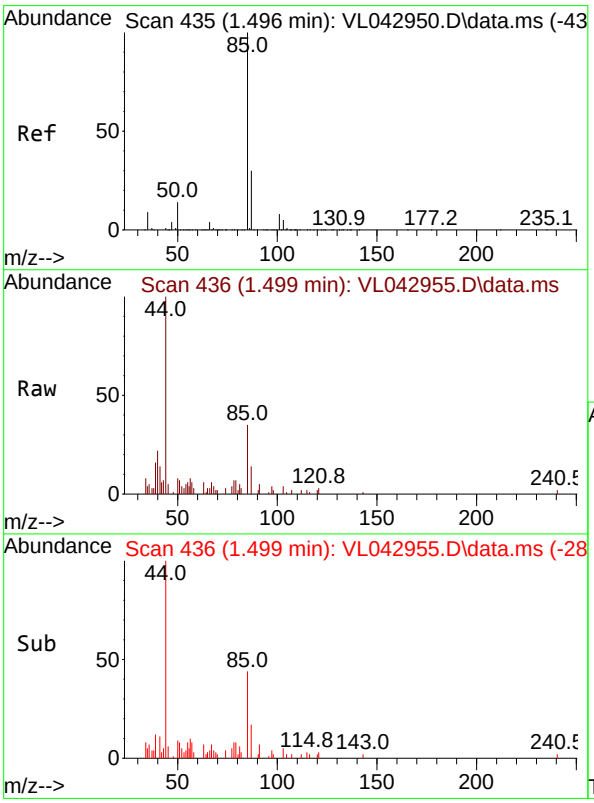
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 49 Resp: 163615

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	59.5	29.1	87.3

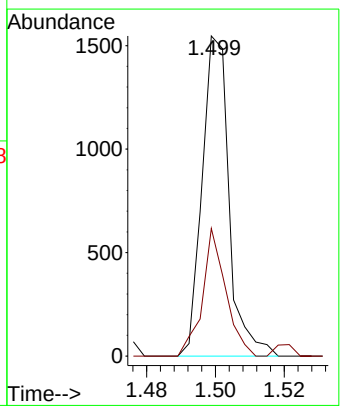


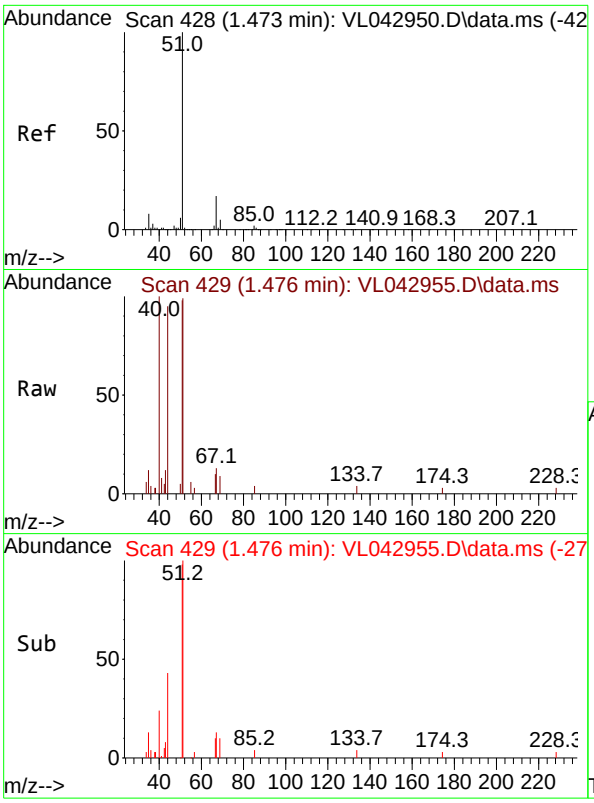


#2
Dichlorodifluoromethane
Concen: 0.038 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 85 Resp: 840

Ion	Ratio	Lower	Upper
85	100		
87	39.9	24.3	36.5#



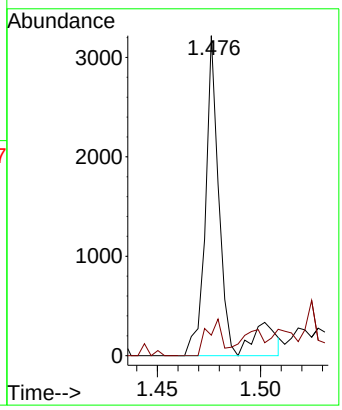


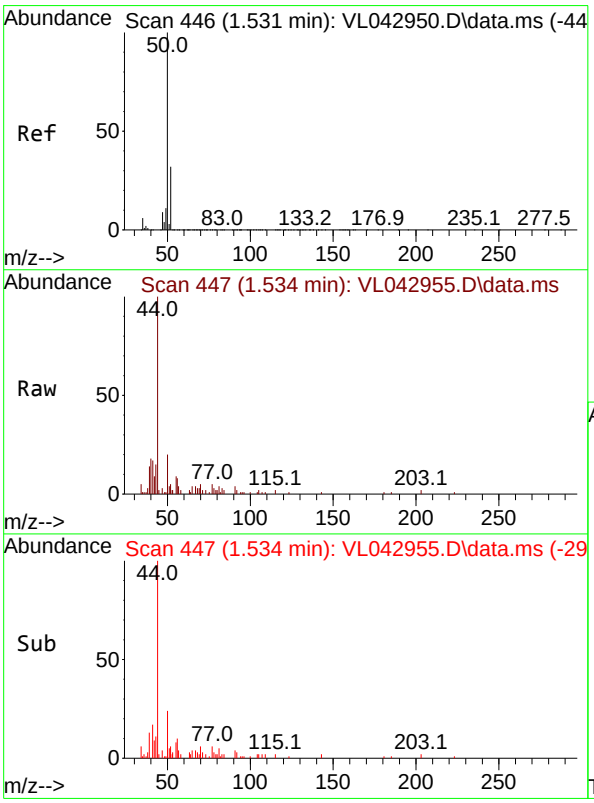
#3
Chlorodifluoromethane
Concen: 0.061 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 51 Resp: 1668

Ion	Ratio	Lower	Upper
51	100		
67	15.1	13.8	20.8

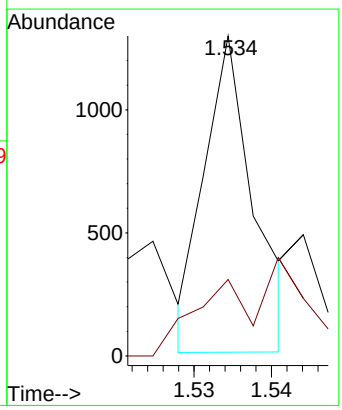


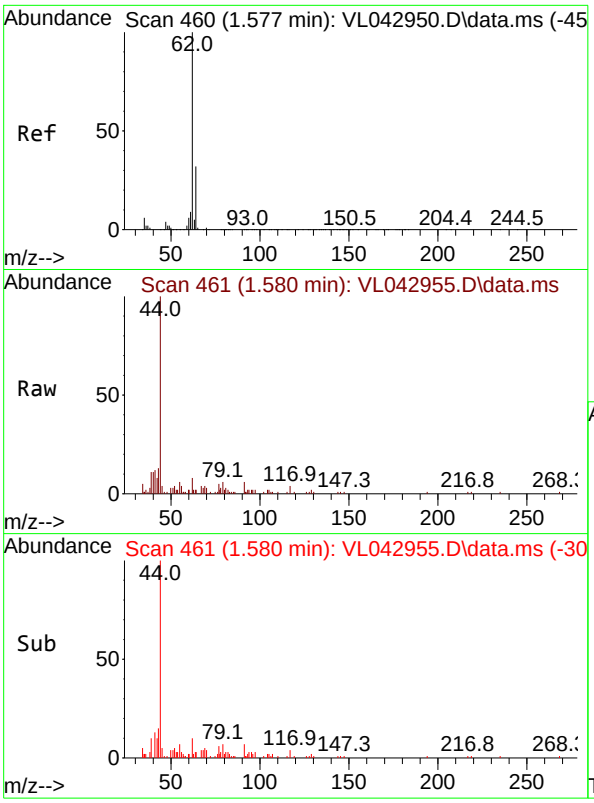


#4
Chloromethane
Concen: 0.057 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 50 Resp: 568

Ion	Ratio	Lower	Upper
50	100		
52	26.7	25.9	38.9



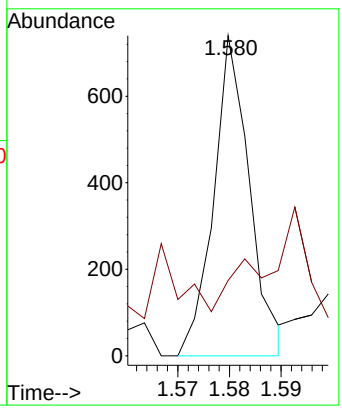


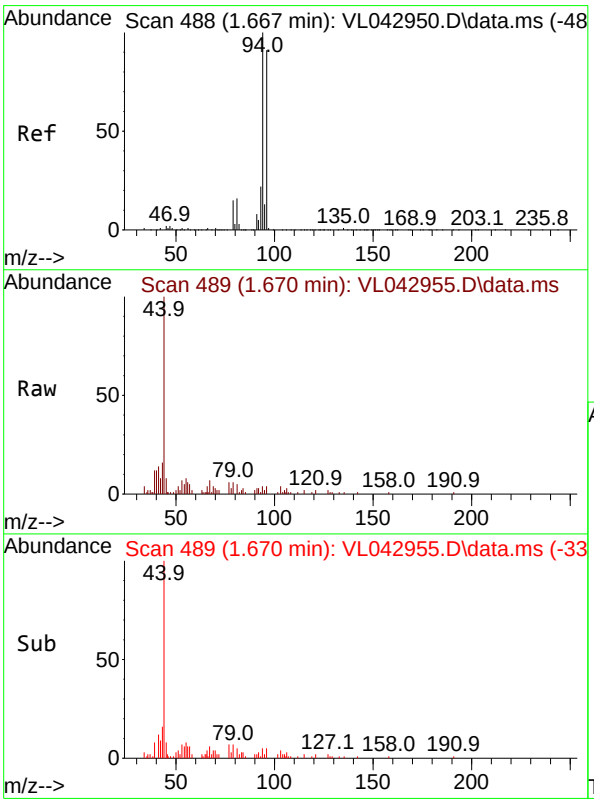
#5
Vinyl Chloride
Concen: 0.040 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 62 Resp: 358

Ion	Ratio	Lower	Upper
62	100		
64	5.9	25.4	38.2#

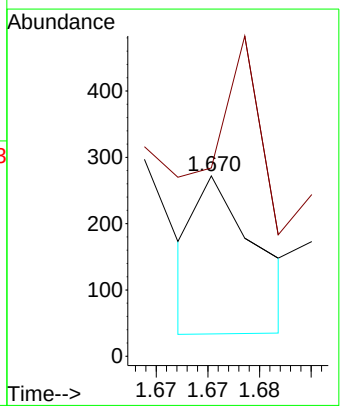


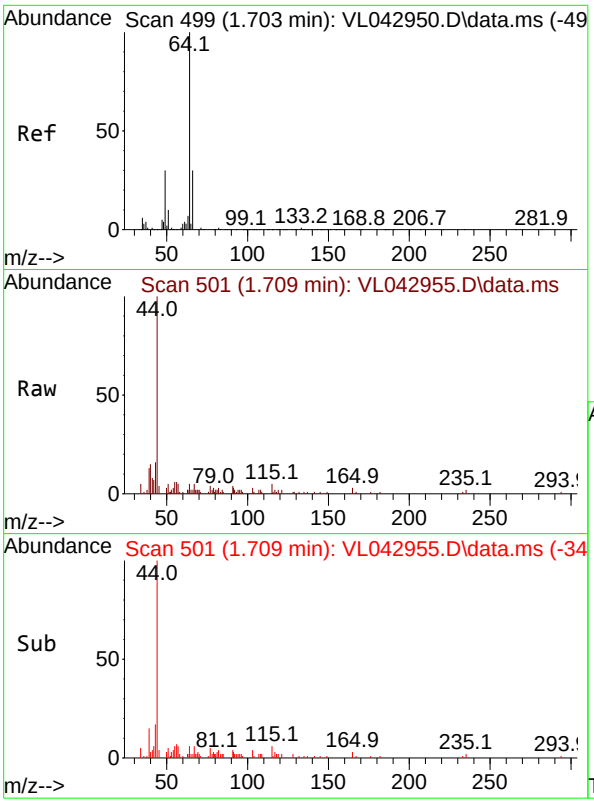


#6
Bromomethane
Concen: 0.030 ppbv
RT: 1.670 min Scan# 489
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 94 Resp: 96

Ion	Ratio	Lower	Upper
94	100		
96	81.5	72.6	108.8



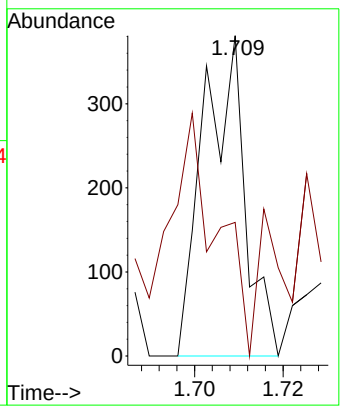


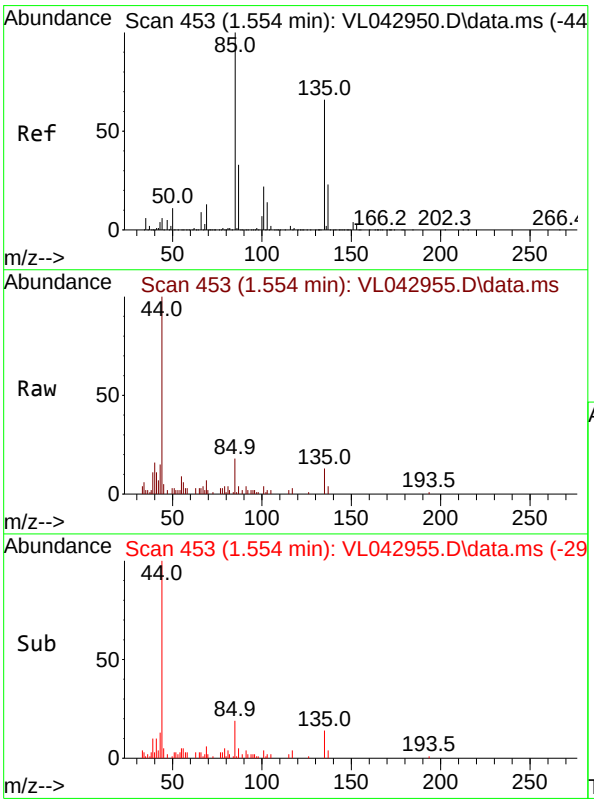
#7
Chloroethane
Concen: 0.071 ppbv
RT: 1.709 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 64 Resp: 249

Ion	Ratio	Lower	Upper
64	100		
66	41.7	24.6	36.8#

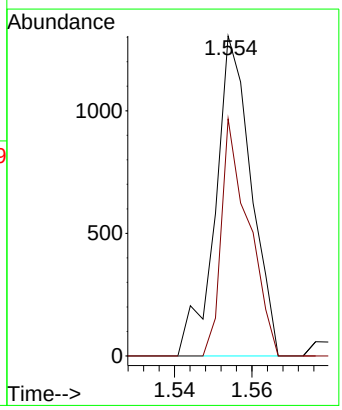


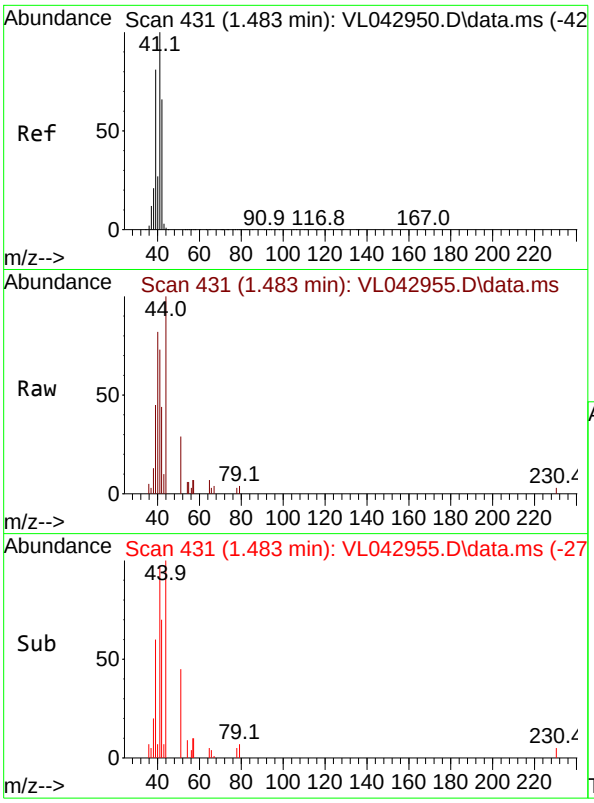


#8
Dichlorotetrafluoroethane
Concen: 0.045 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 85 Resp: 838

Ion	Ratio	Lower	Upper
85	100		
135	56.6	49.7	74.5



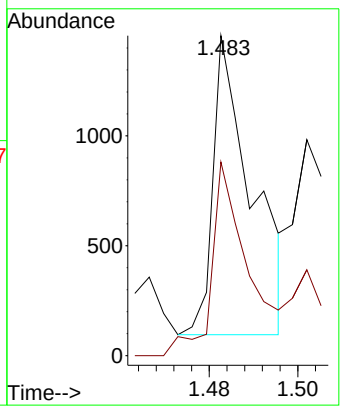


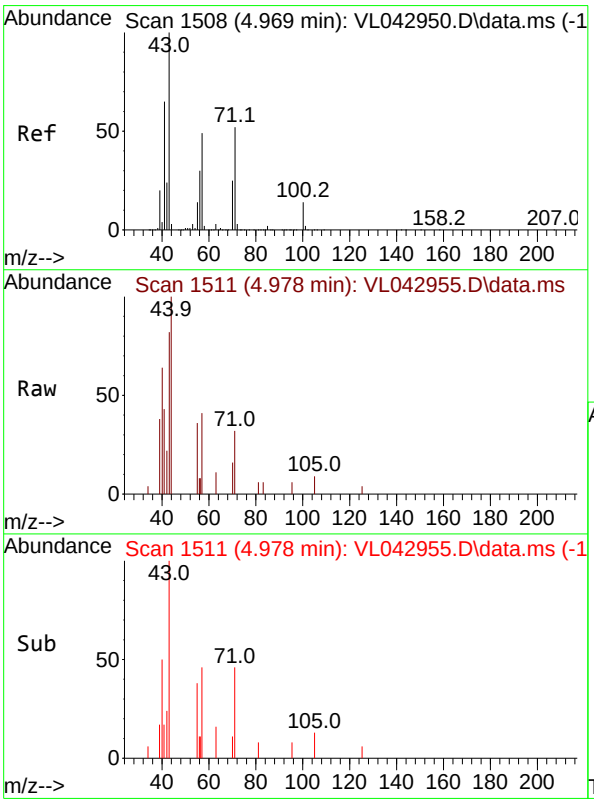
#9
Propene
Concen: 0.069 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 41 Resp: 829

Ion	Ratio	Lower	Upper
41	100		
42	343.2	57.4	86.2#

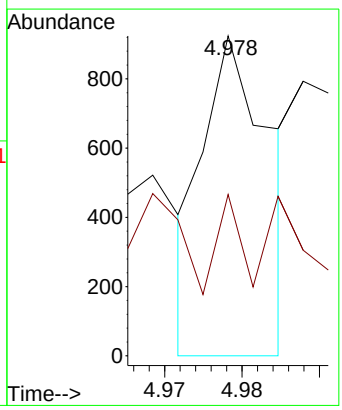


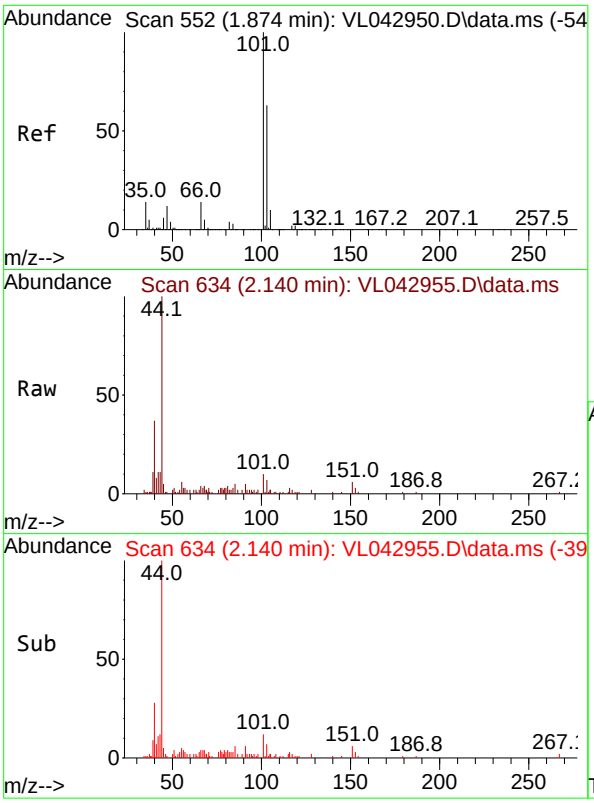


#10
Heptane
Concen: 0.017 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 43 Resp: 551

Ion	Ratio	Lower	Upper
43	100		
57	0.0	38.6	57.8#



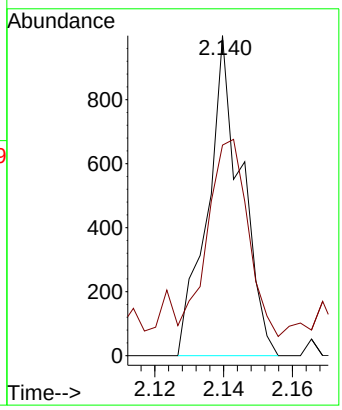


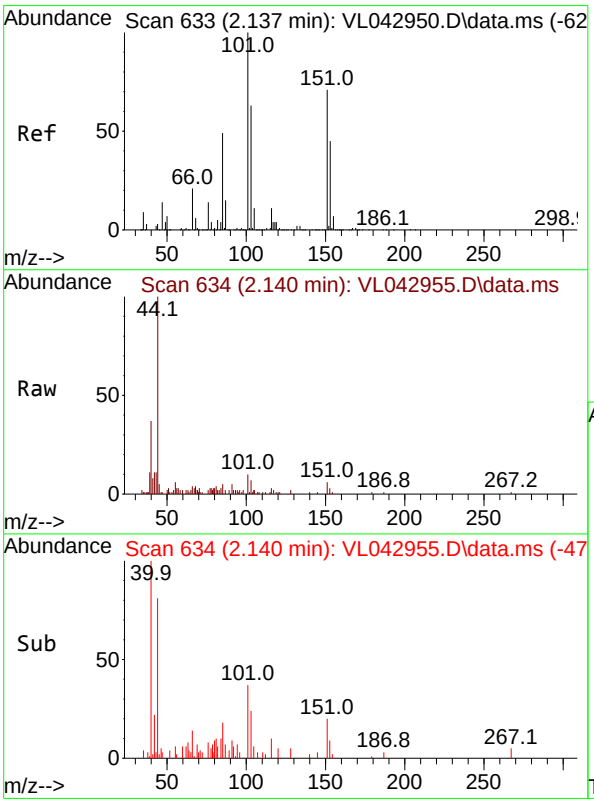
#11
Trichlorofluoromethane
Concen: 0.032 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.265 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:101 Resp: 682

Ion	Ratio	Lower	Upper
101	100		
103	59.8	50.1	75.1

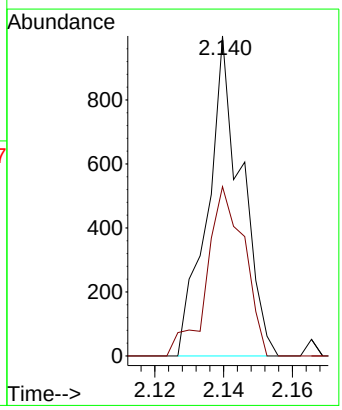


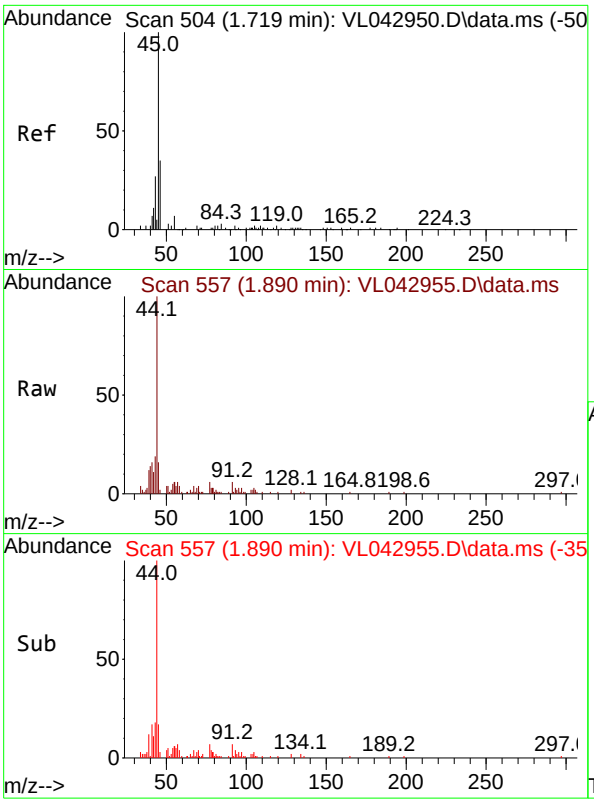


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.040 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:101 Resp: 682

Ion	Ratio	Lower	Upper
101	100		
151	58.2	55.7	83.5



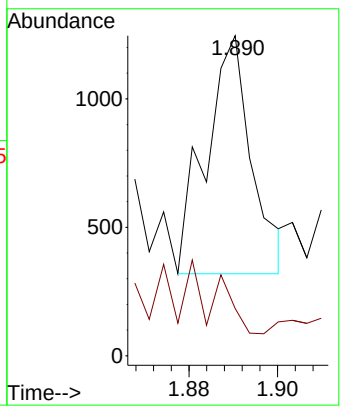


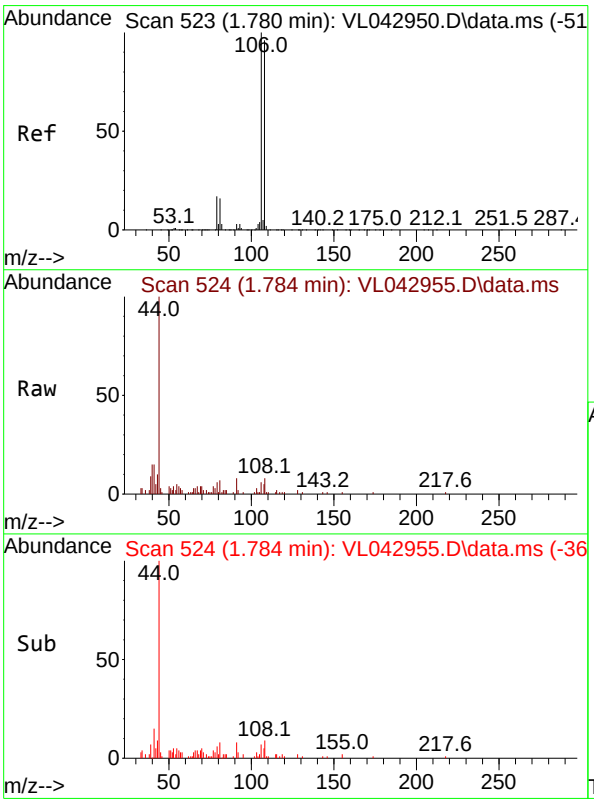
#13
Ethanol
Concen: 0.581 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.171 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 664

Ion	Ratio	Lower	Upper
45	100		
46	0.0	16.2	64.6#

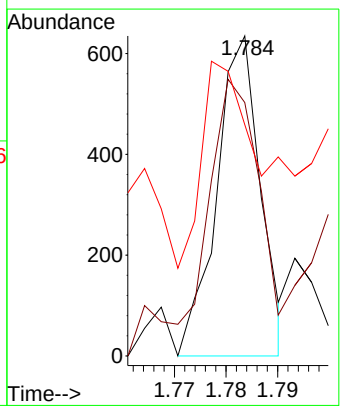


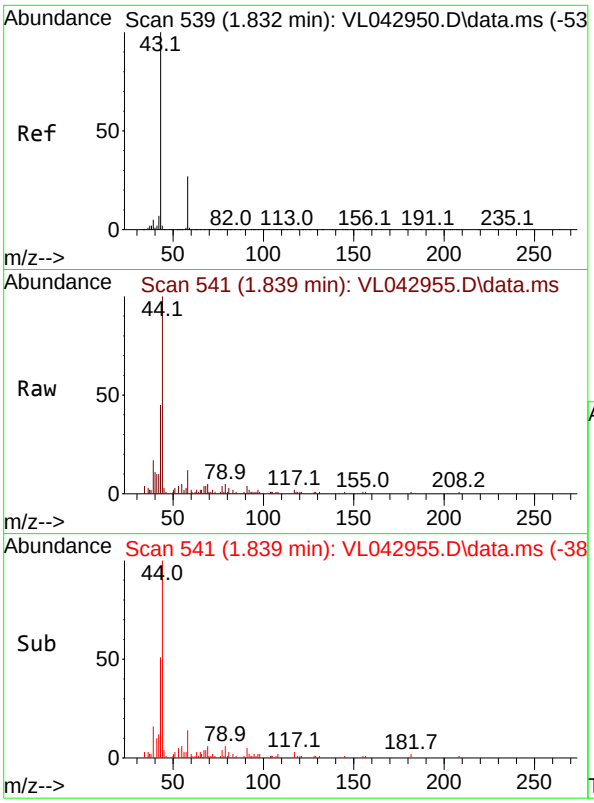


#14
Bromoethene
Concen: 0.058 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:108 Resp: 376

Ion	Ratio	Lower	Upper
108	100		
106	155.3	86.0	129.0#
79	269.9	14.2	21.2#



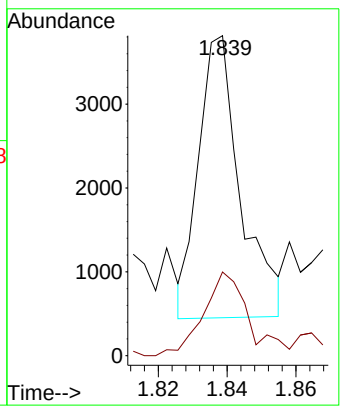


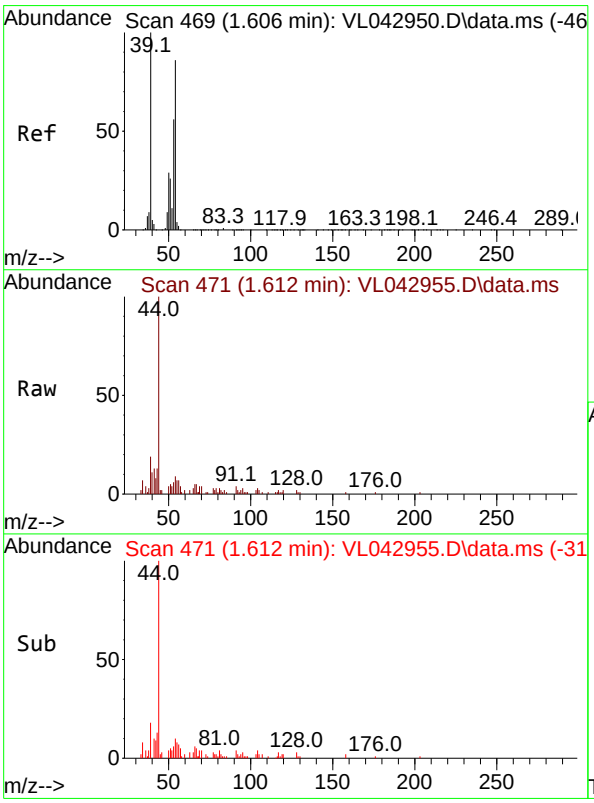
#15
Acetone
Concen: 0.134 ppbv
RT: 1.839 min Scan# 54
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 2845

Ion	Ratio	Lower	Upper
43	100		
58	31.6	22.3	33.5

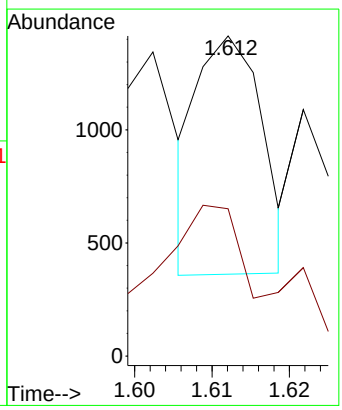


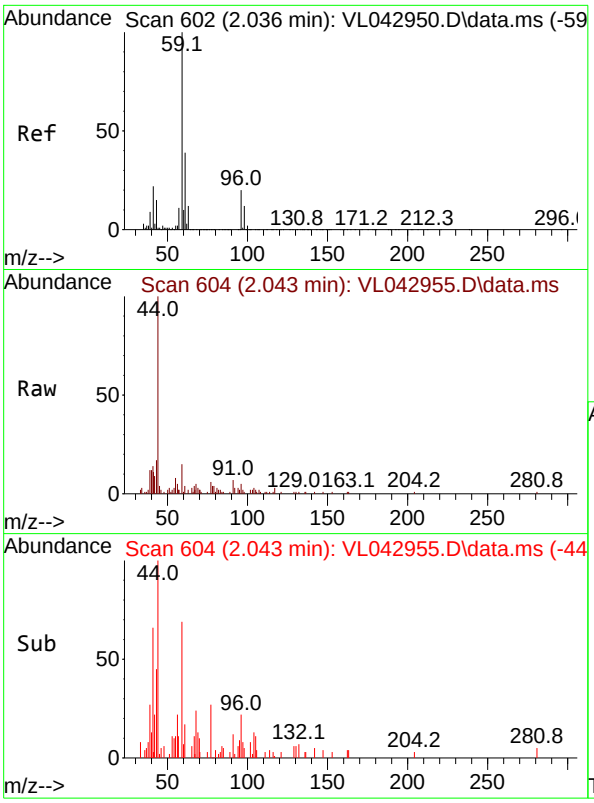


#16
1,3-Butadiene
Concen: 0.061 ppbv
RT: 1.612 min Scan# 471
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 39 Resp: 612

Ion	Ratio	Lower	Upper
39	100		
54	135.0	60.8	91.2#



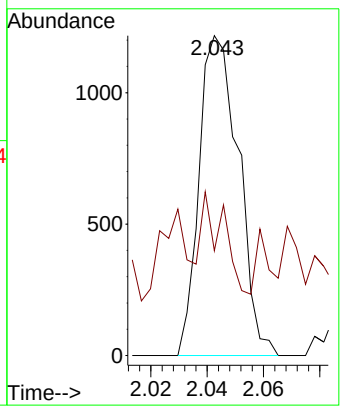


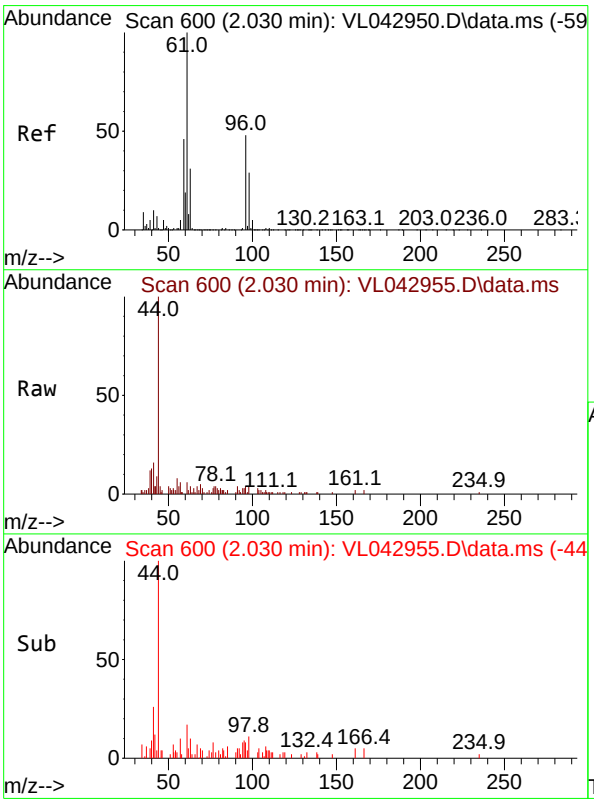
#17
tert-Butyl alcohol
Concen: 0.051 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 59 Resp: 1183

Ion	Ratio	Lower	Upper
59	100		
57	88.8	8.6	12.8#

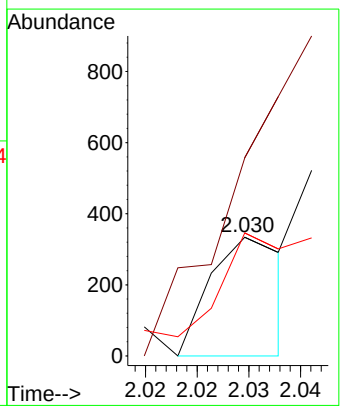


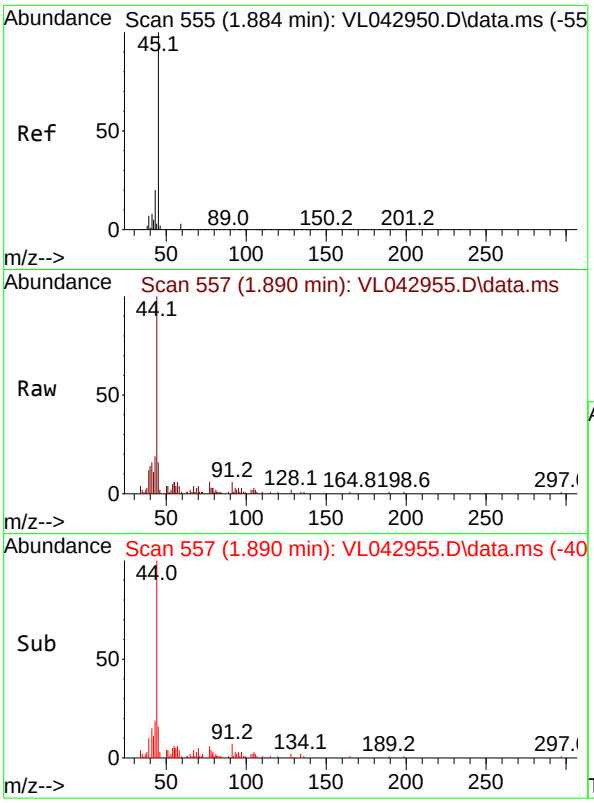


#18
1,1-Dichloroethene
Concen: 0.021 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 96 Resp: 166

Ion	Ratio	Lower	Upper
96	100		
61	139.8	166.2	249.4#
98	87.4	48.6	73.0#



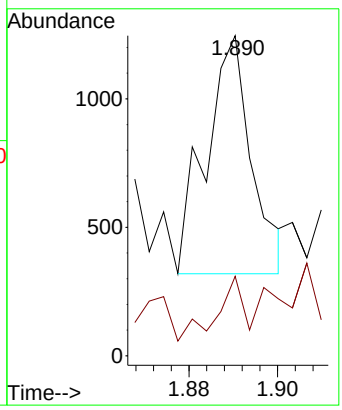


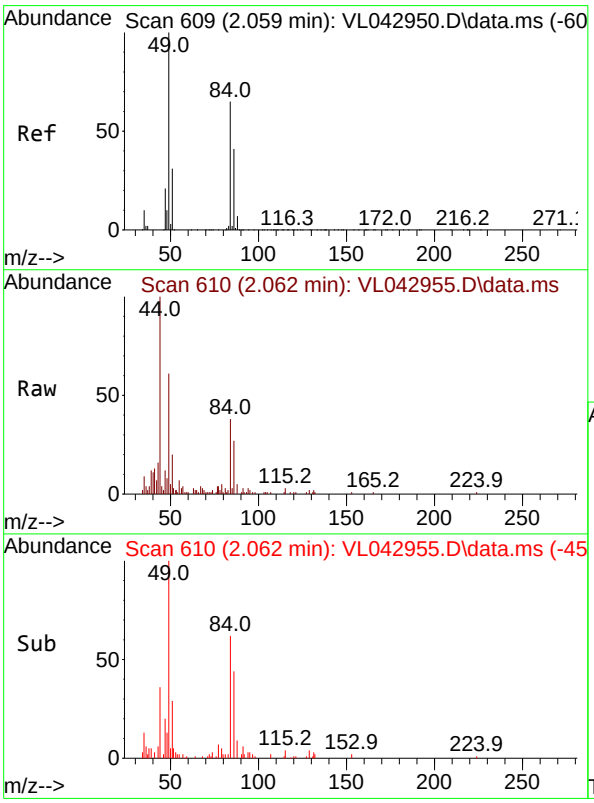
#19
Isopropyl Alcohol
Concen: 0.052 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 664

Ion	Ratio	Lower	Upper
45	100		
58	83.1	31.0	46.6#

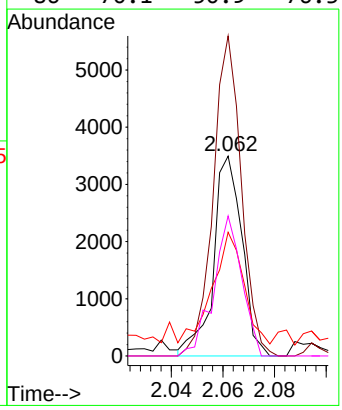


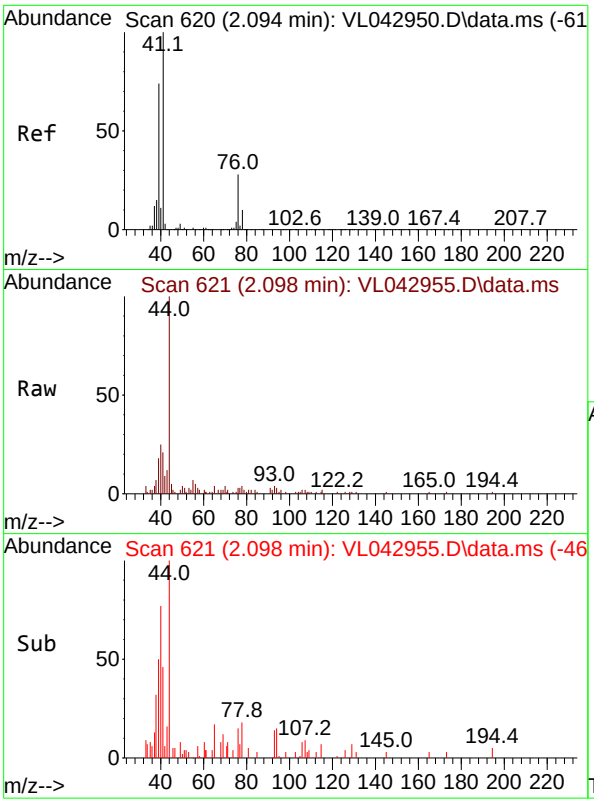


#20
Methylene Chloride
Concen: Below Cal
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 84 Resp: 2681

Ion	Ratio	Lower	Upper
84	100		
49	160.1	124.1	186.1
51	55.3	39.8	59.8
86	70.1	50.9	76.3



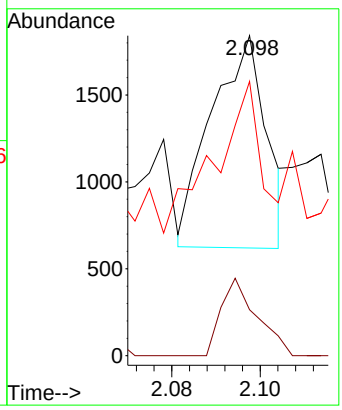


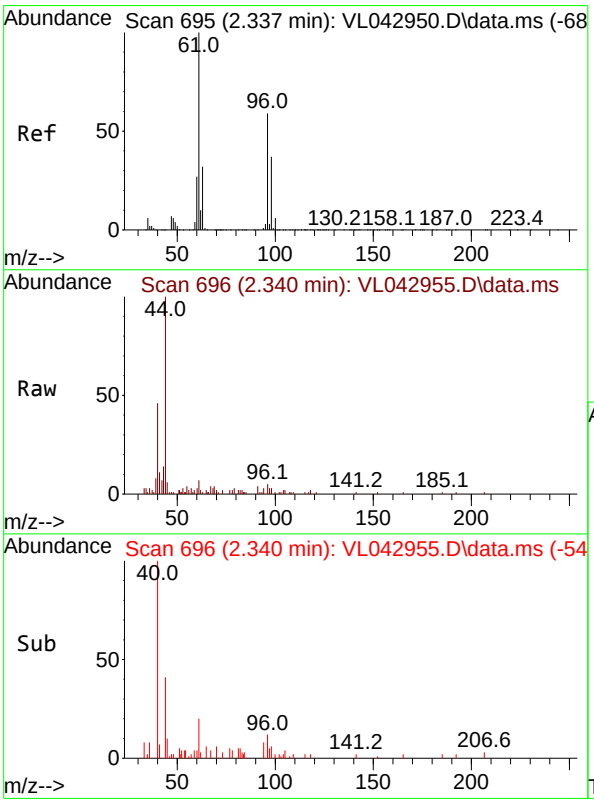
#21
Allyl Chloride
Concen: 0.071 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 41 Resp: 1053

Ion	Ratio	Lower	Upper
41	100		
76	23.8	22.3	33.5
39	137.6	61.3	91.9#

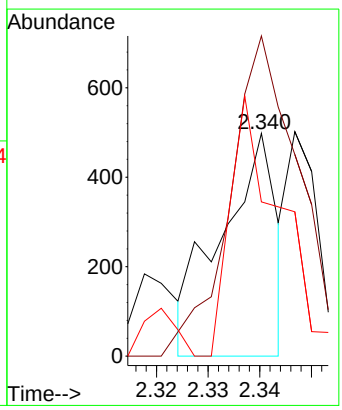


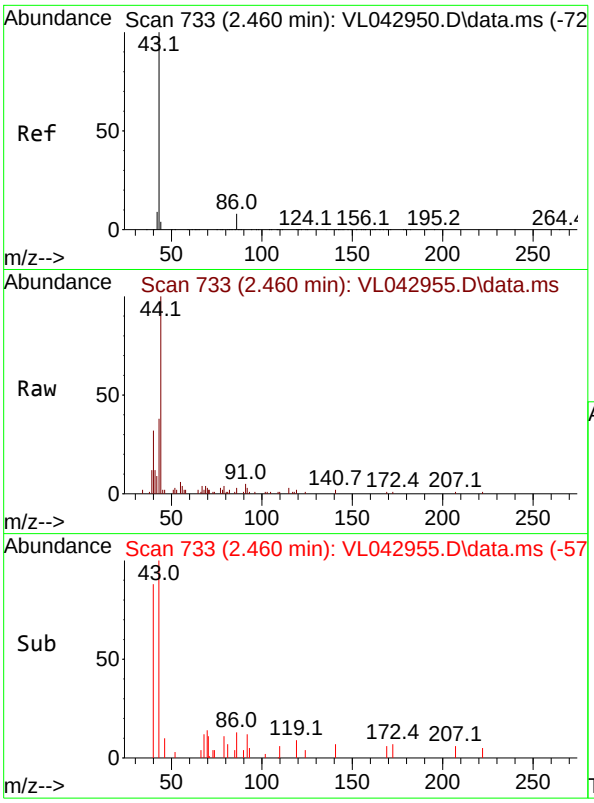


#22
trans-1,2-Dichloroethene
Concen: 0.041 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 96 Resp: 370

Ion	Ratio	Lower	Upper
96	100		
61	176.5	136.5	204.7
98	76.3	50.6	76.0#



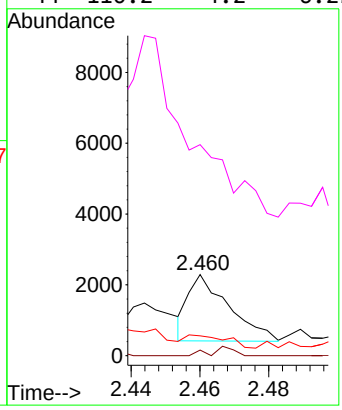


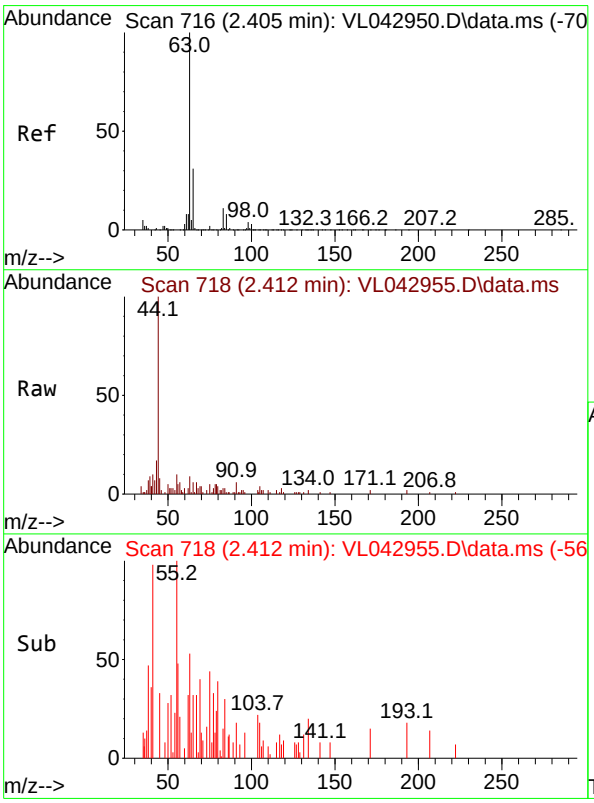
#23
Vinyl Acetate
Concen: 0.051 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 1543

Ion	Ratio	Lower	Upper
43	100		
86	8.6	6.2	9.2
42	18.0	7.4	11.0#
44	110.2	4.2	6.2#

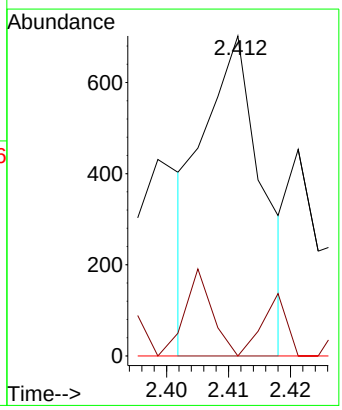


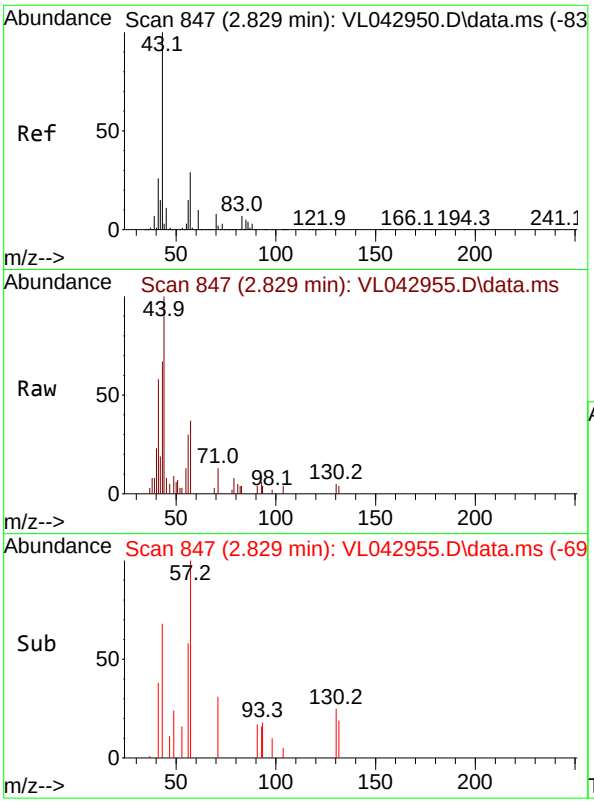


#24
1,1-Dichloroethane
Concen: 0.027 ppbv
RT: 2.412 min Scan# 718
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 63 Resp: 470

Ion	Ratio	Lower	Upper
63	100		
98	0.0	2.2	6.6#
100	0.0	1.4	4.0#



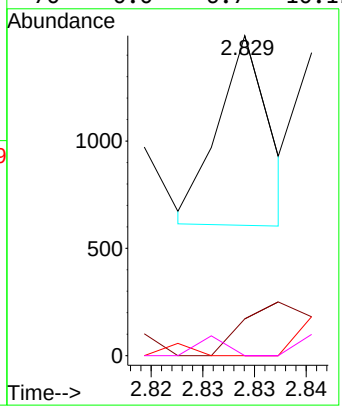


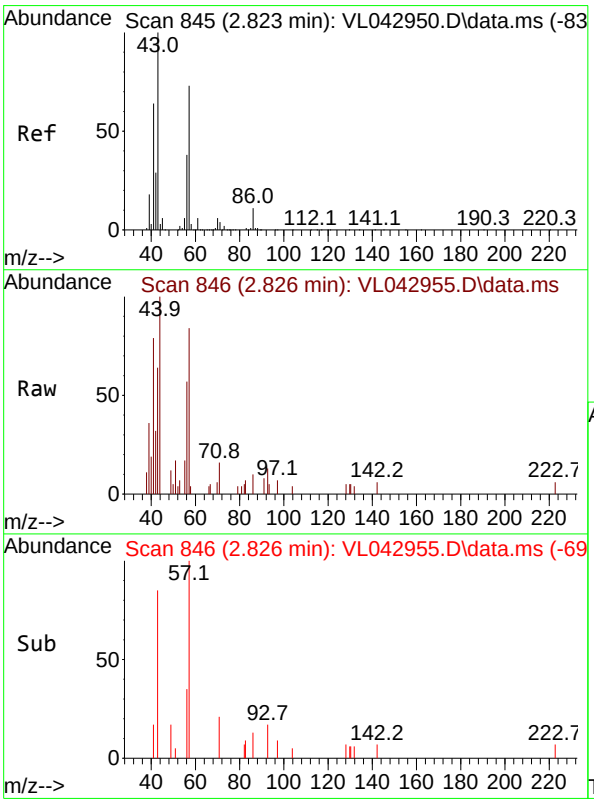
#25
Ethyl Acetate
Concen: 0.006 ppbv
RT: 2.829 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 303

Ion	Ratio	Lower	Upper
43	100		
45	0.0	7.7	11.5#
61	0.0	7.1	10.7#
70	0.0	6.7	10.1#

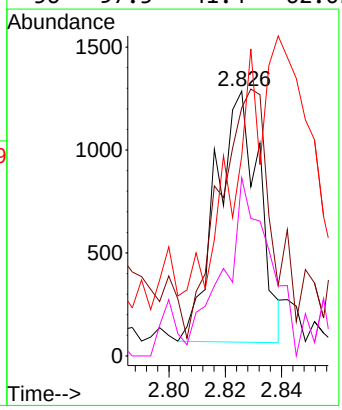


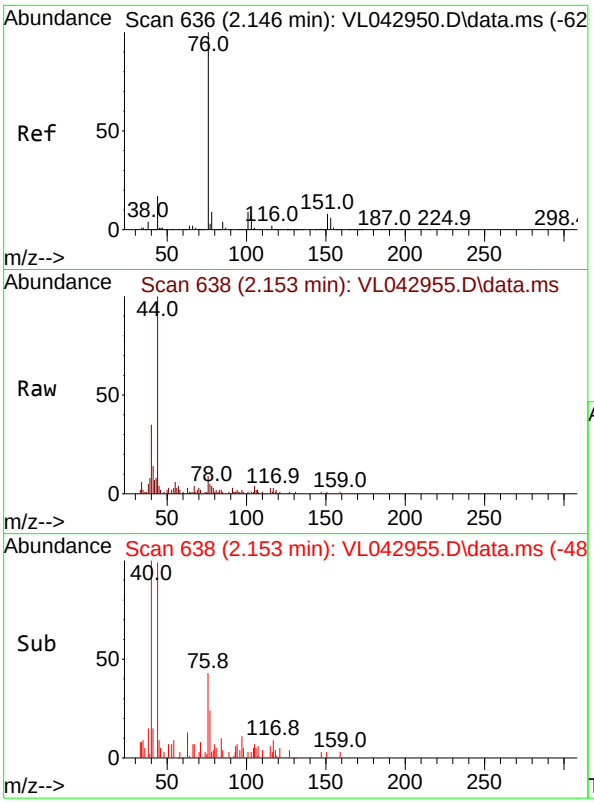


#26
Hexane
Concen: 0.053 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 57 Resp: 1295

Ion	Ratio	Lower	Upper
57	100		
41	103.6	71.7	107.5
43	0.0	180.8	271.2#
56	97.5	41.4	62.0#



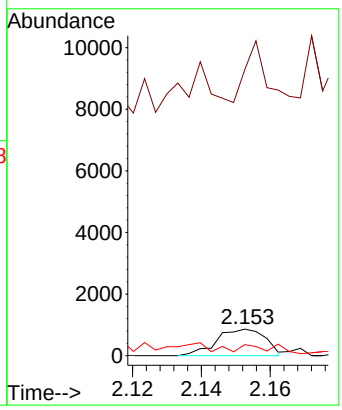


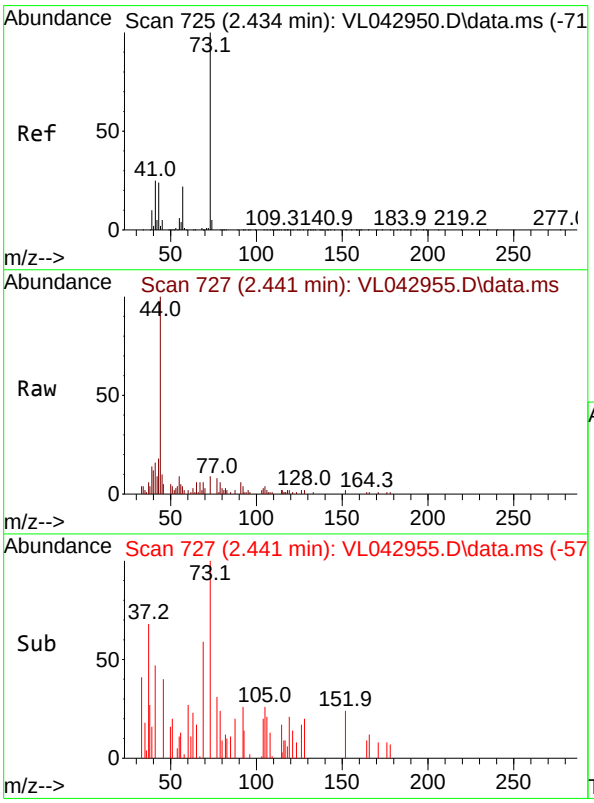
#27
Carbon Disulfide
Concen: 0.039 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 76 Resp: 851

Ion	Ratio	Lower	Upper
76	100		
44	791.7	15.6	23.4#
78	0.0	8.9	13.3#

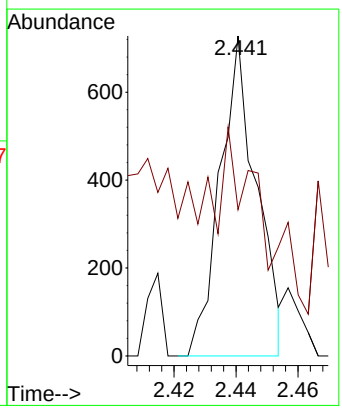


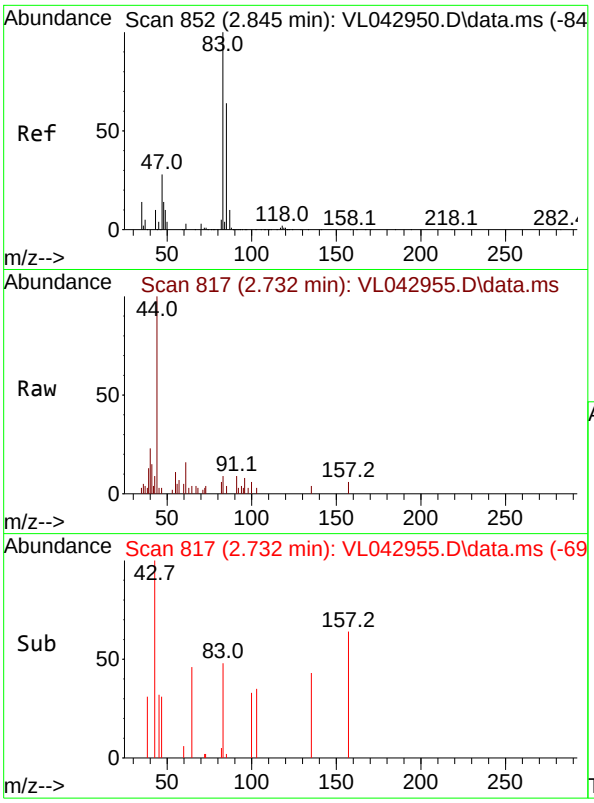


#28
Methyl tert-Butyl Ether
Concen: 0.047 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 73 Resp: 594

Ion	Ratio	Lower	Upper
73	100		
57	178.5	20.6	31.0#



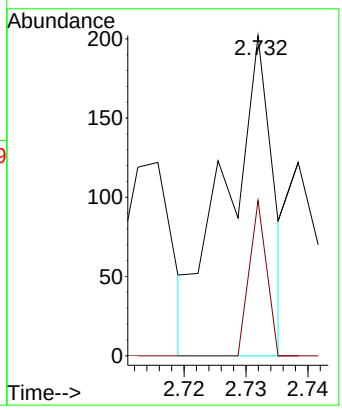


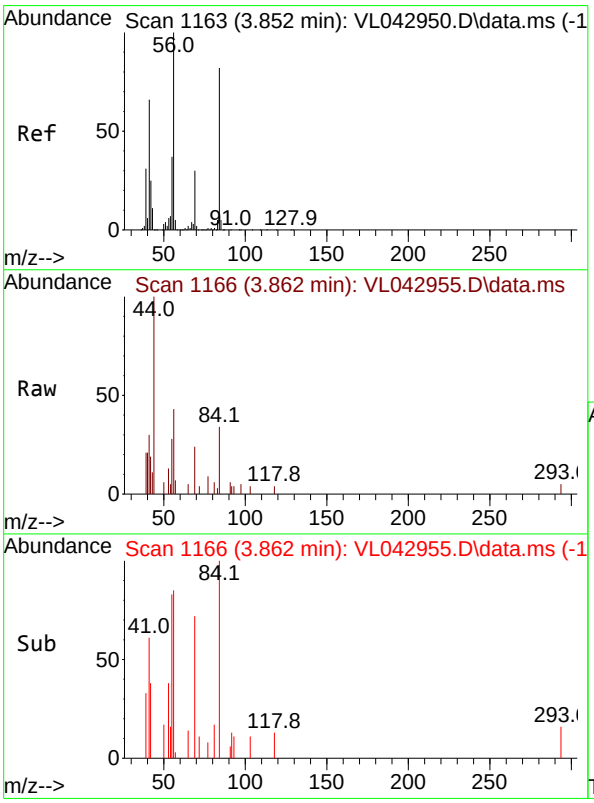
#29
Chloroform
Concen: 0.003 ppbv
RT: 2.732 min Scan# 8
Delta R.T. -0.113 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 83 Resp: 107

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.2	76.8

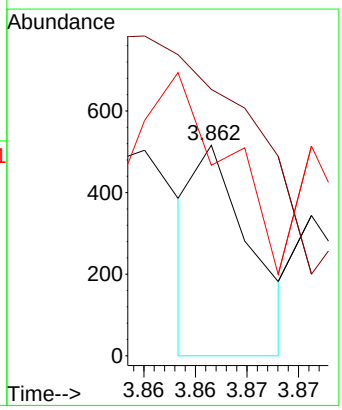


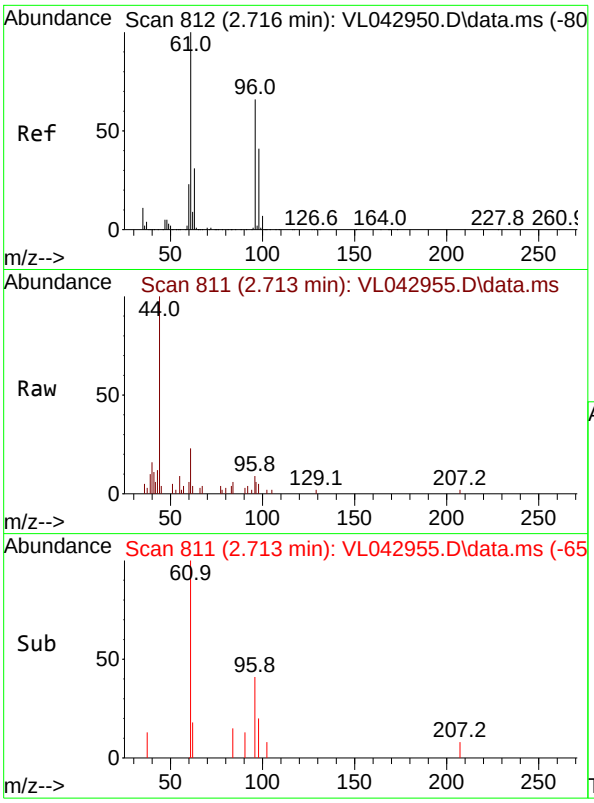


#30
Cyclohexane
Concen: 0.009 ppbv
RT: 3.862 min Scan# 1166
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 84 Resp: 190

Ion	Ratio	Lower	Upper
84	100		
56	849.5	102.2	153.4#
41	0.0	65.6	98.4#



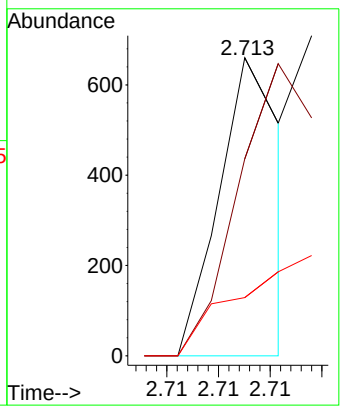


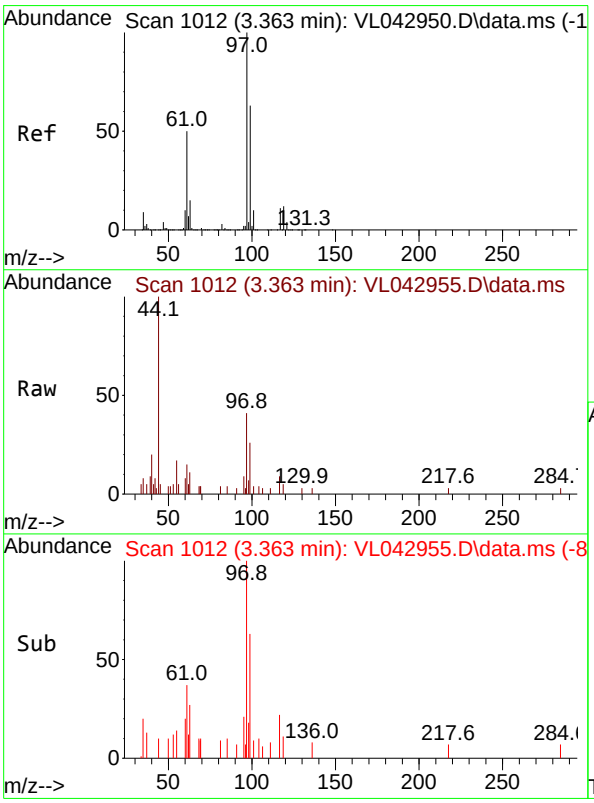
#31
cis-1,2-Dichloroethene
Concen: 0.012 ppbv
RT: 2.713 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 61 Resp: 280

Ion	Ratio	Lower	Upper
61	100		
96	66.1	53.0	79.6
98	19.5	32.9	49.3#

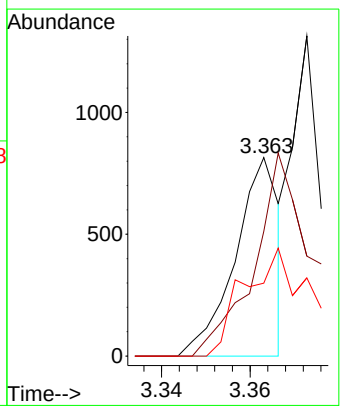


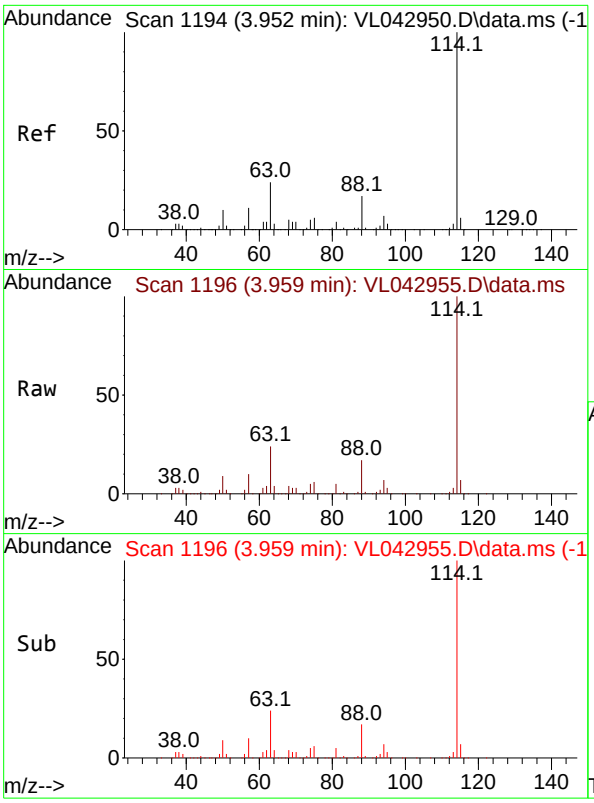


#32
1,1,1-Trichloroethane
Concen: 0.016 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 97 Resp: 562

Ion	Ratio	Lower	Upper
97	100		
99	141.3	51.1	76.7#
61	91.5	39.8	59.6#



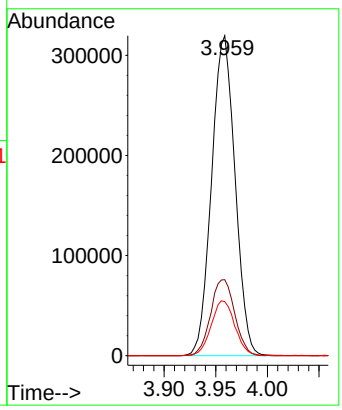


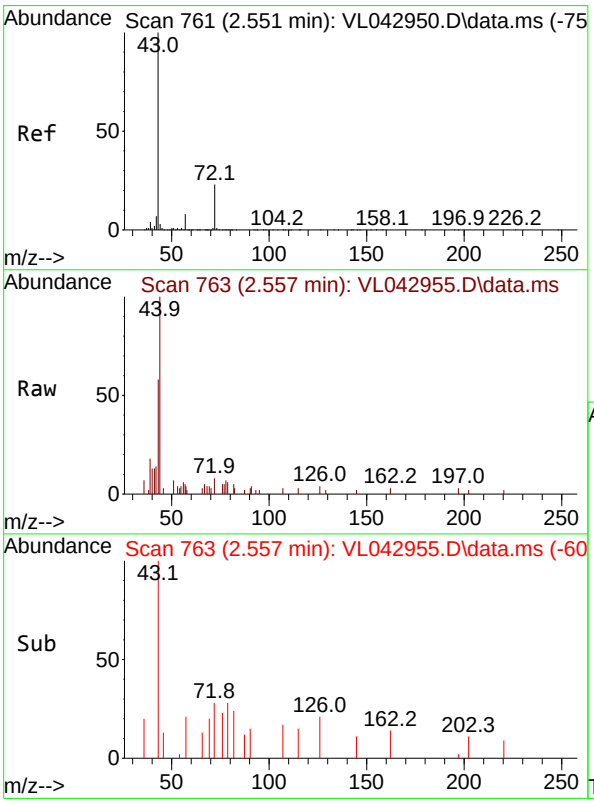
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:114 Resp: 504423

Ion	Ratio	Lower	Upper
114	100		
63	24.5	19.4	29.2
88	17.3	14.2	21.2

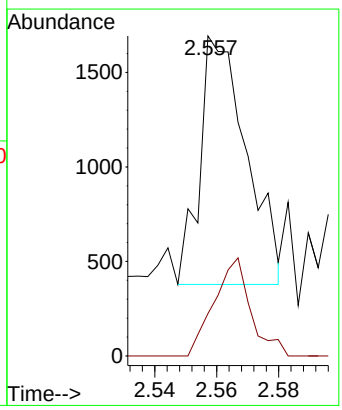


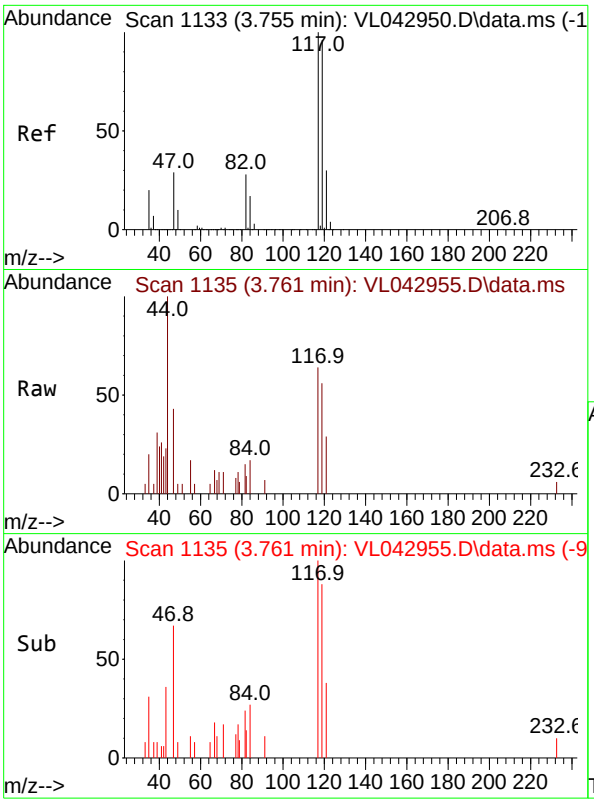


#34
2-Butanone
Concen: 0.039 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 43 Resp: 1365

Ion	Ratio	Lower	Upper
43	100		
72	31.1	17.7	26.5#



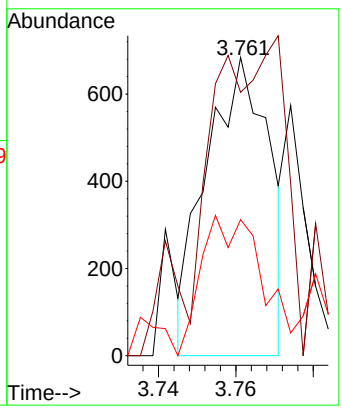


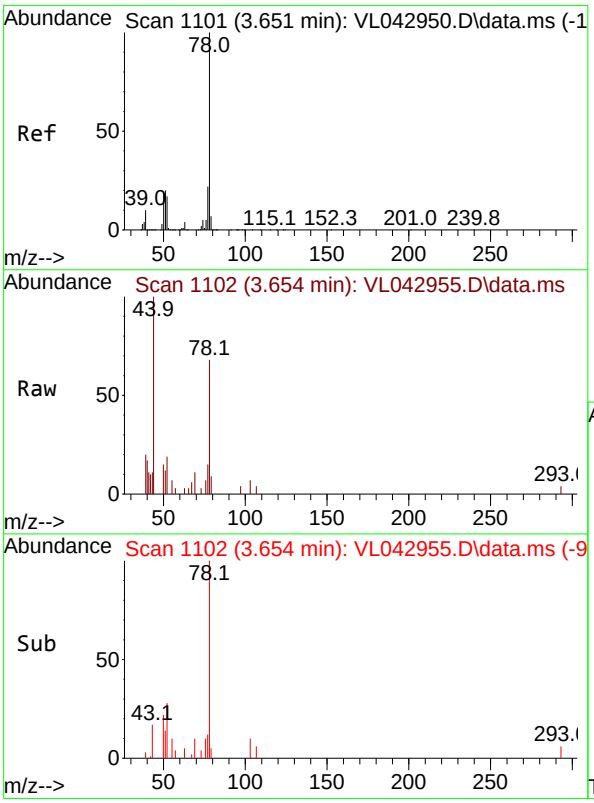
#35
Carbon Tetrachloride
Concen: 0.024 ppbv
RT: 3.761 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:117 Resp: 771

Ion	Ratio	Lower	Upper
117	100		
119	80.3	76.9	115.3
121	56.4	23.7	35.5#

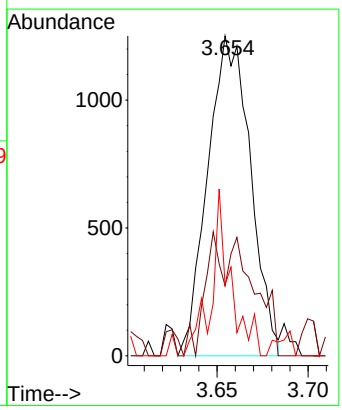


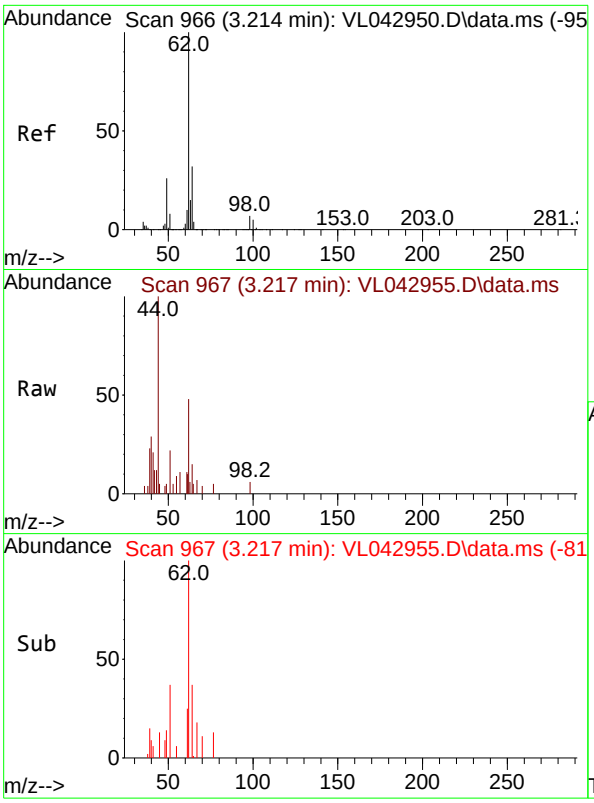


#36
Benzene
Concen: 0.043 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 78 Resp: 2042

Ion	Ratio	Lower	Upper
78	100		
77	21.9	17.8	26.6
50	17.9	15.0	22.4



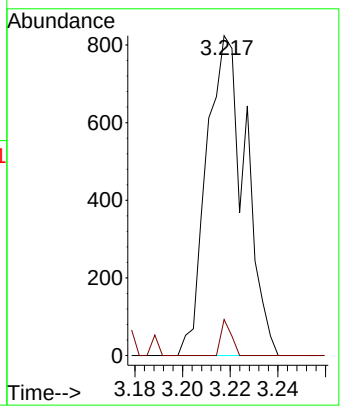


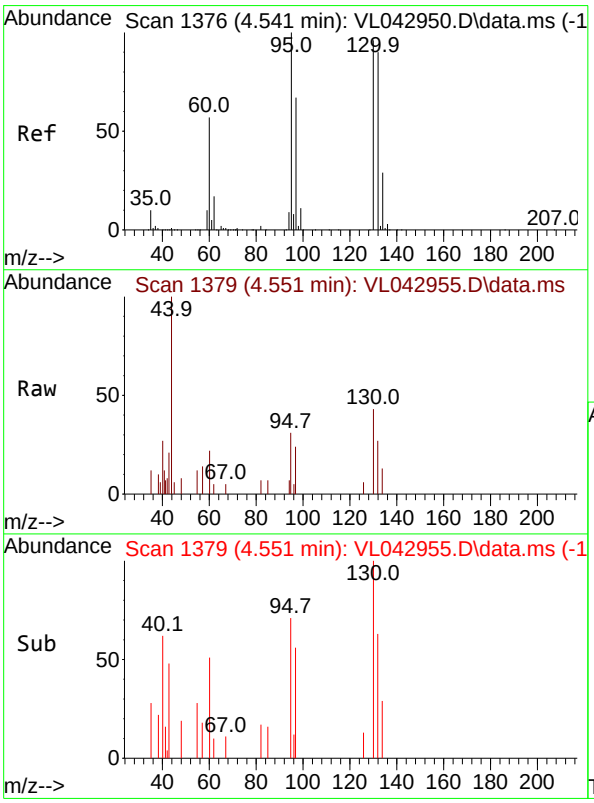
#37
1,2-Dichloroethane
Concen: 0.038 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 62 Resp: 935

Ion	Ratio	Lower	Upper
62	100		
98	1.4	5.9	8.9#

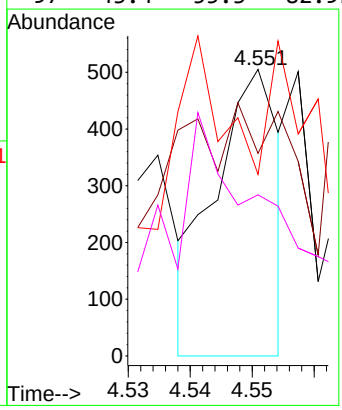


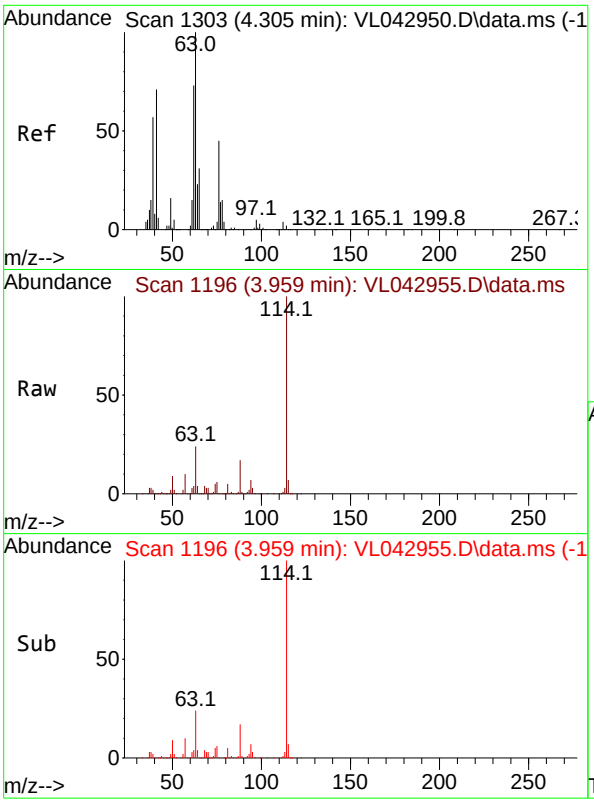


#38
Trichloroethene
Concen: 0.015 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:130 Resp: 363

Ion	Ratio	Lower	Upper
130	100		
95	0.0	83.0	124.4#
132	0.0	74.6	112.0#
97	43.4	55.3	82.9#



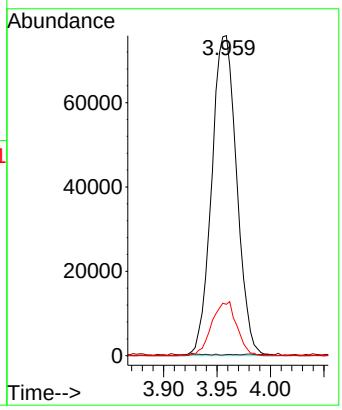


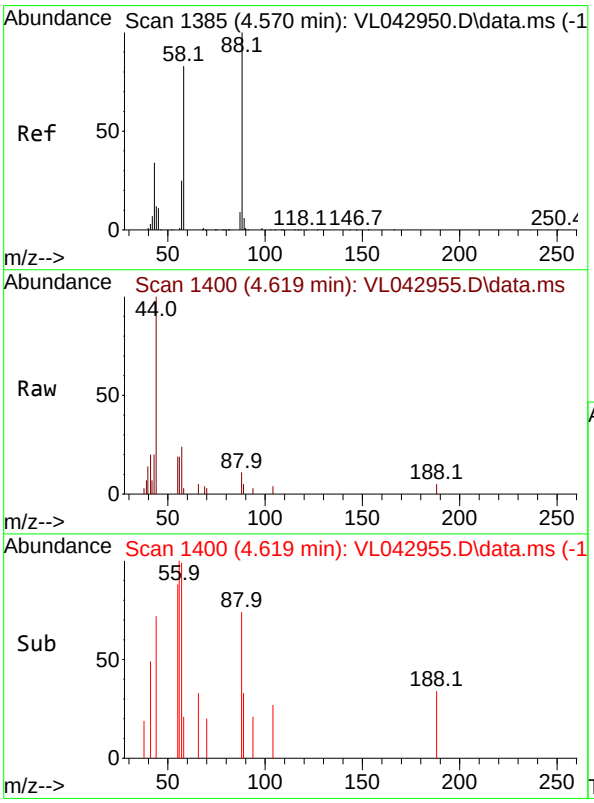
#39
1,2-Dichloropropane
Concen: 7.144 ppbv
RT: 3.959 min Scan# 1
Delta R.T. -0.346 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 63 Resp: 123623

Ion	Ratio	Lower	Upper
63	100		
41	0.0	57.5	86.3#
62	16.1	58.5	87.7#

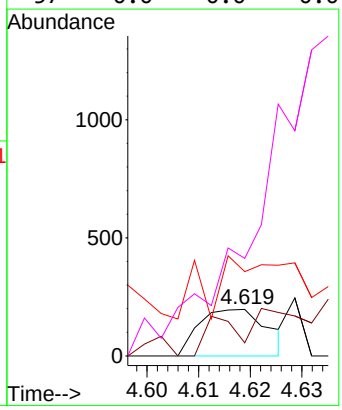


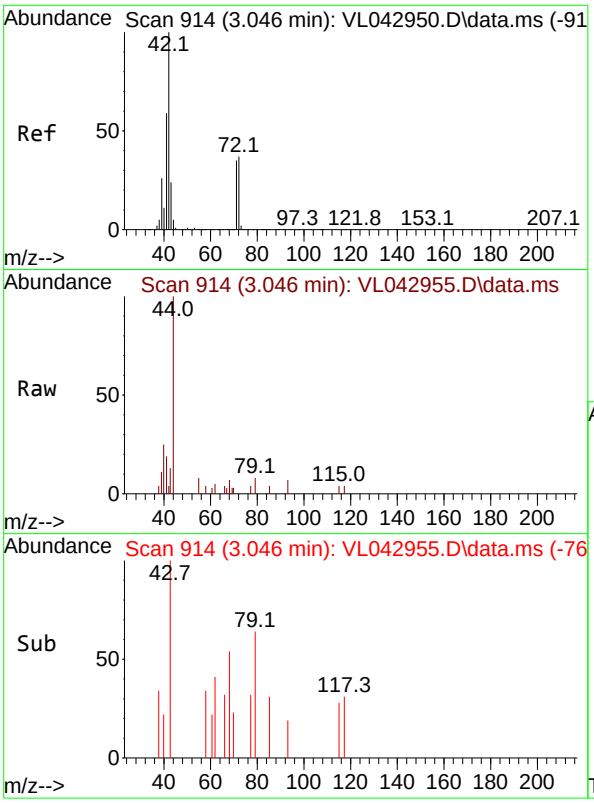


#40
1,4-Dioxane
Concen: 0.022 ppbv
RT: 4.619 min Scan# 1400
Delta R.T. 0.048 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 88 Resp: 180

Ion	Ratio	Lower	Upper
88	100		
58	0.0	59.7	89.5#
43	94.4	28.9	43.3#
57	0.0	0.0	0.0



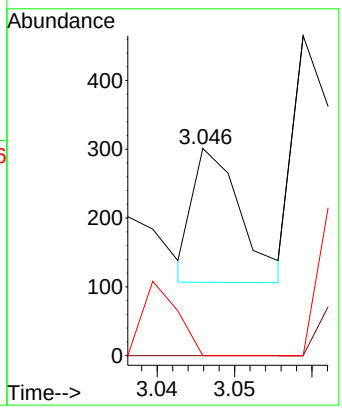


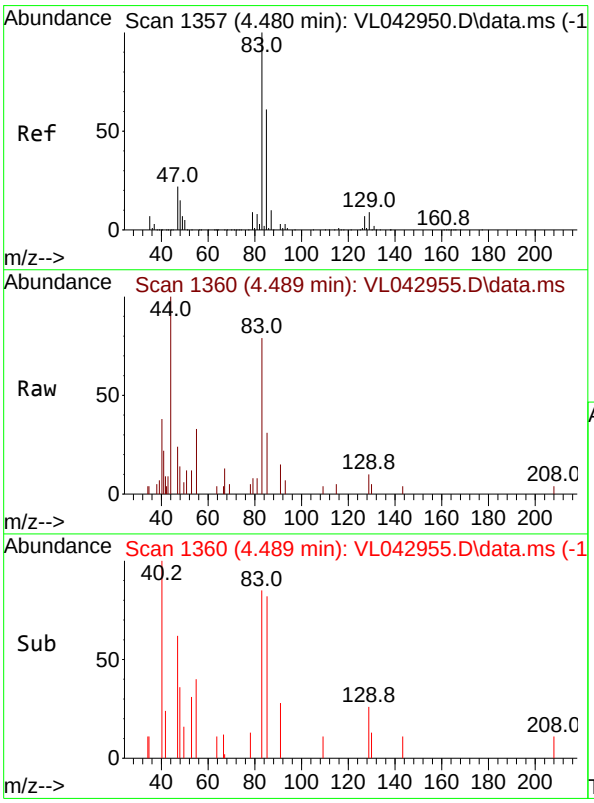
#41
Tetrahydrofuran
Concen: 0.004 ppbv
RT: 3.046 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 42 Resp: 84

Ion	Ratio	Lower	Upper
42	100		
72	0.0	30.0	45.0#
71	0.0	28.8	43.2#

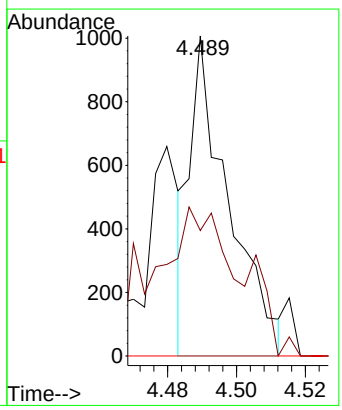


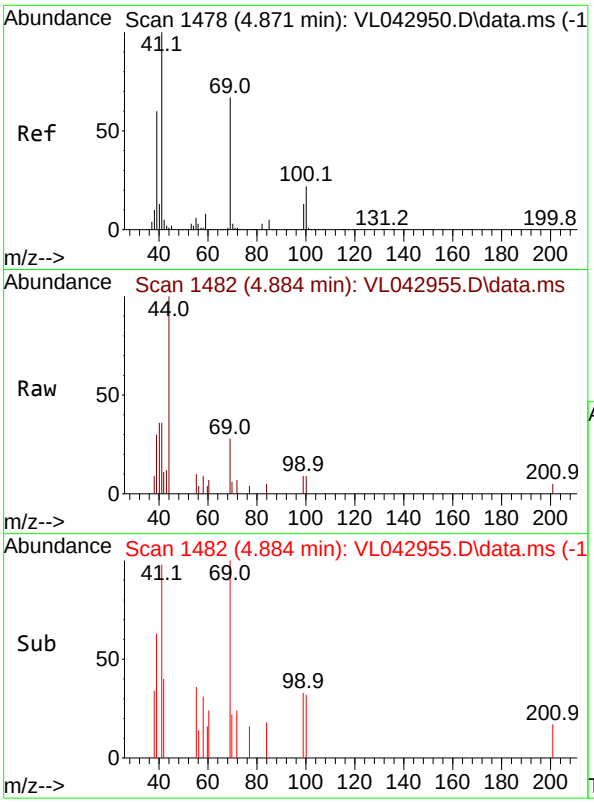


#42
Bromodichloromethane
Concen: 0.023 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 83 Resp: 785

Ion	Ratio	Lower	Upper
83	100		
85	44.3	49.0	73.6#
127	0.0	5.3	7.9#



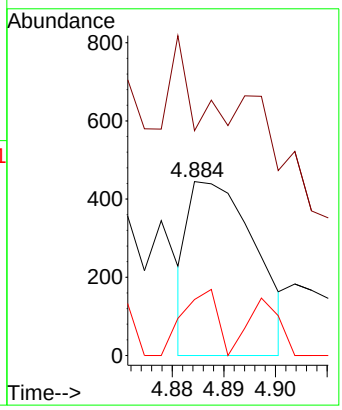


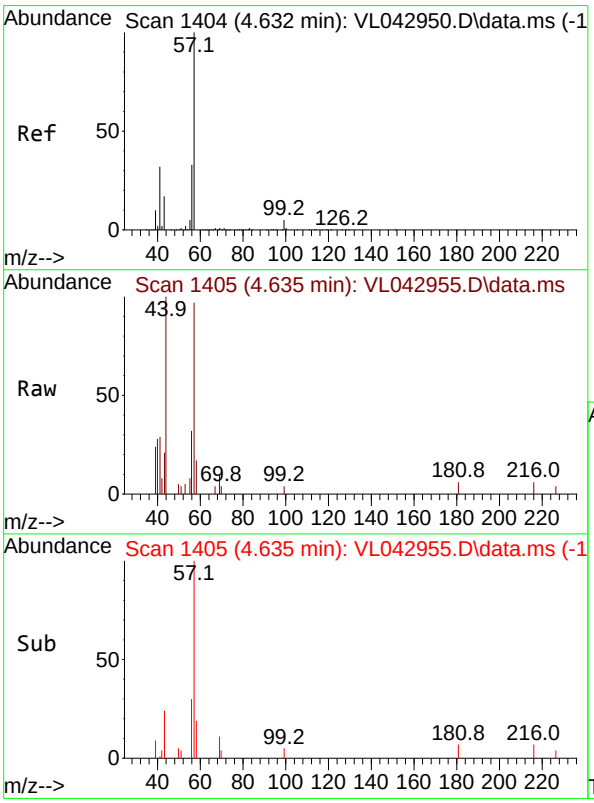
#43
Methyl Methacrylate
Concen: 0.021 ppbv
RT: 4.884 min Scan# 14
Delta R.T. 0.013 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 69 Resp: 399

Ion	Ratio	Lower	Upper
69	100		
41	527.8	124.5	186.7#
100	35.3	29.0	43.6

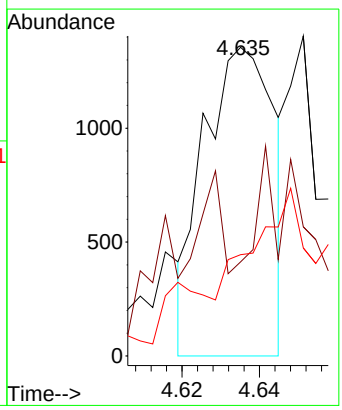


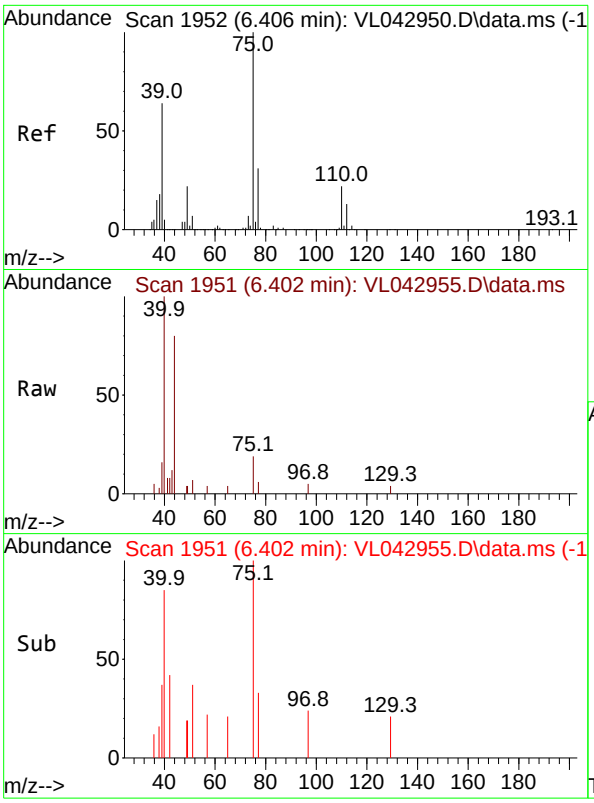


#44
2,2,4-Trimethylpentane
Concen: 0.021 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 57 Resp: 1698

Ion	Ratio	Lower	Upper
57	100		
41	103.9	25.5	38.3#
56	0.0	25.8	38.8#



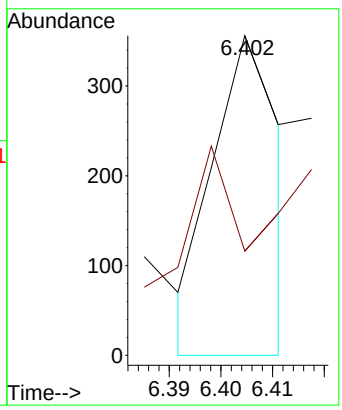


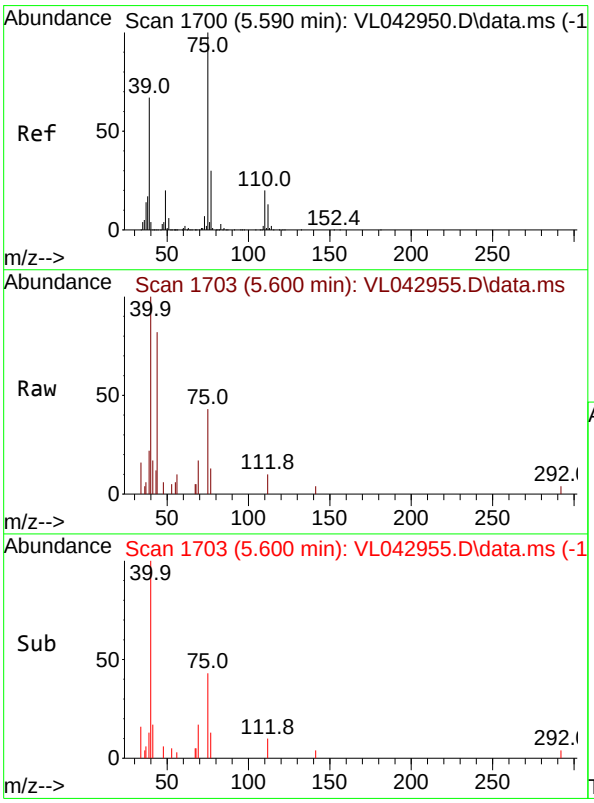
#45
t-1,3-Dichloropropene
Concen: 0.008 ppbv
RT: 6.402 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 75 Resp: 159

Ion	Ratio	Lower	Upper
75	100		
77	32.6	25.0	37.4

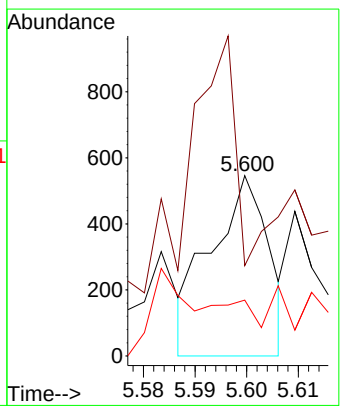


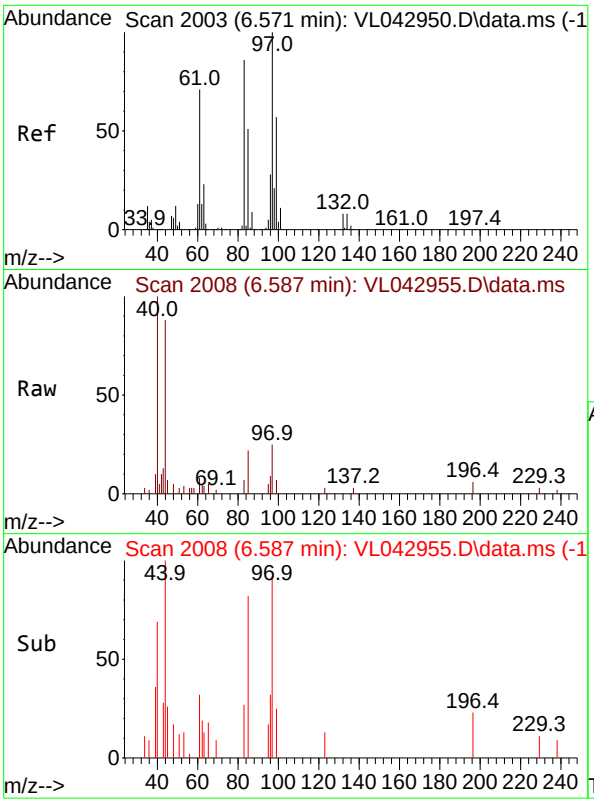


#46
cis-1,3-Dichloropropene
Concen: 0.016 ppbv
RT: 5.600 min Scan# 1703
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 75 Resp: 424

Ion	Ratio	Lower	Upper
75	100		
39	4.1	53.8	80.6#
77	0.0	23.6	35.4#



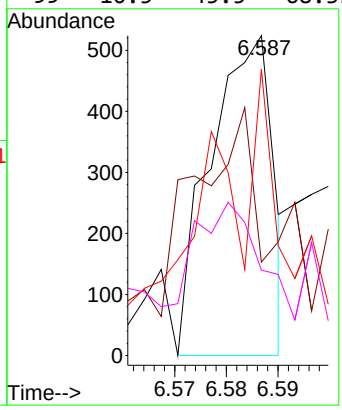


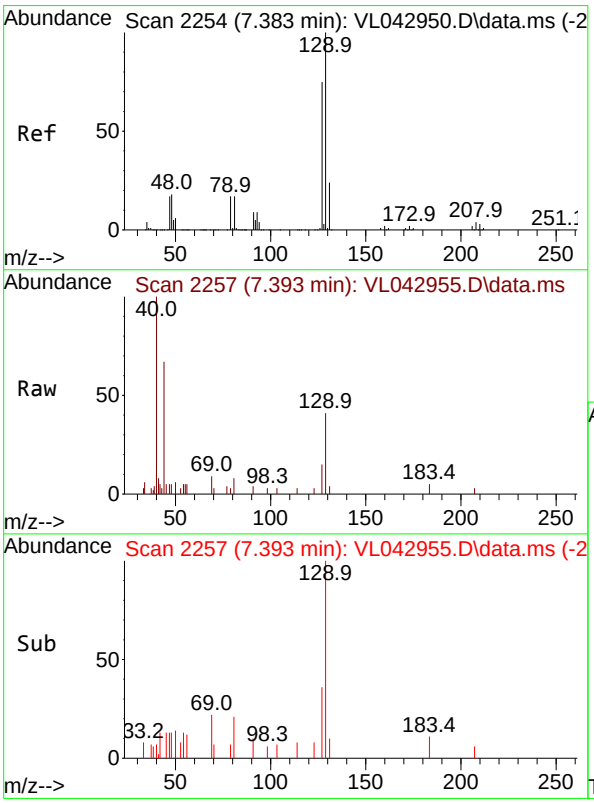
#47
1,1,2-Trichloroethane
Concen: 0.024 ppbv
RT: 6.587 min Scan# 2
Delta R.T. 0.016 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 97 Resp: 443

Ion	Ratio	Lower	Upper
97	100		
83	0.0	68.7	103.1#
85	59.5	40.6	60.8
99	10.5	45.5	68.3#

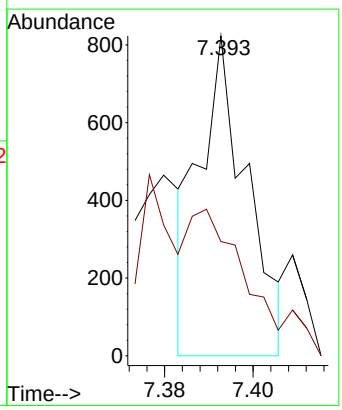


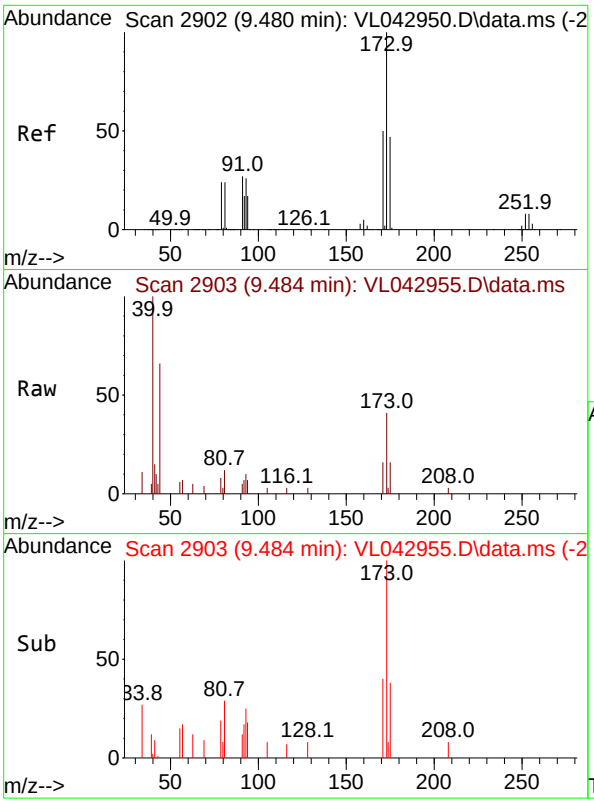


#48
Dibromochloromethane
Concen: 0.021 ppbv
RT: 7.393 min Scan# 2257
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:129 Resp: 612

Ion	Ratio	Lower	Upper
129	100		
127	0.0	39.1	117.2#



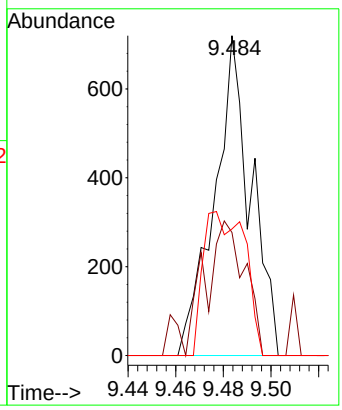


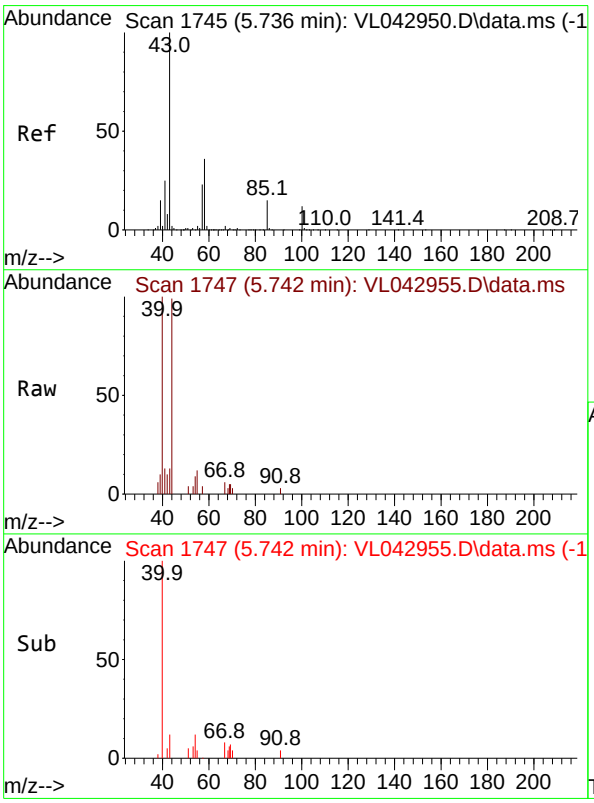
#49
Bromoform
Concen: 0.030 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:173 Resp: 766

Ion	Ratio	Lower	Upper
173	100		
175	53.1	37.9	56.9
171	51.4	41.1	61.7

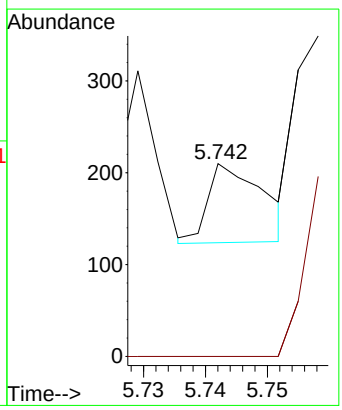


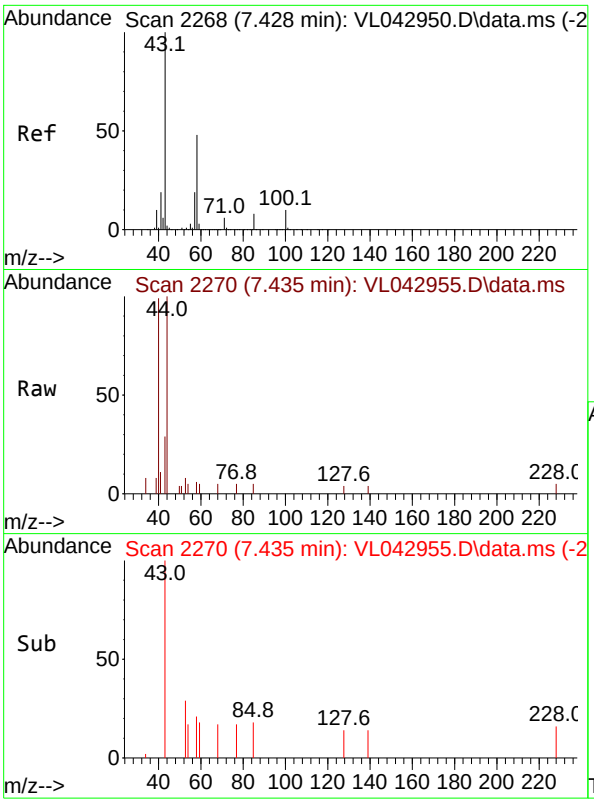


#50
4-Methyl-2-Pentanone
Concen: 0.001 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 43 Resp: 53

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.4	42.6#



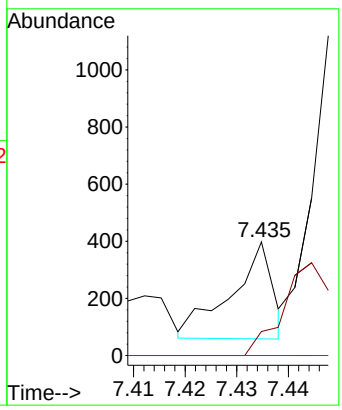


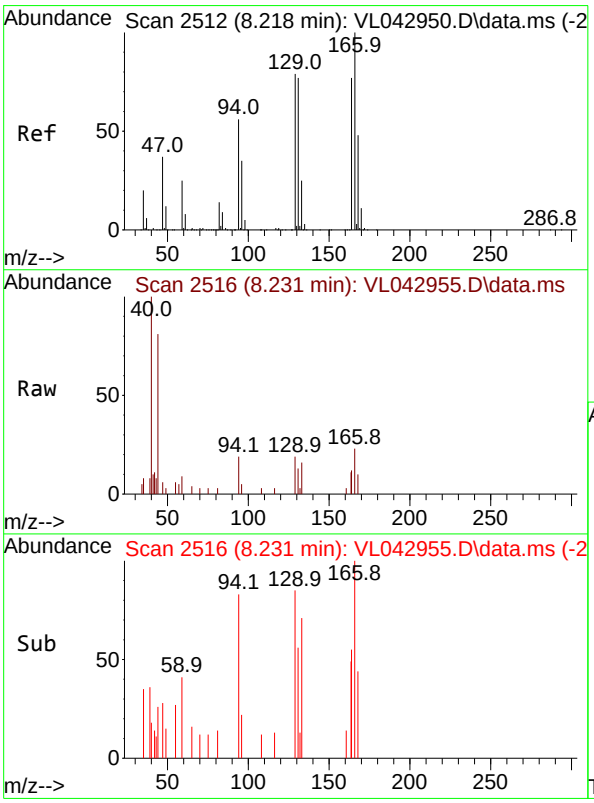
#51
2-Hexanone
Concen: 0.005 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 189

Ion	Ratio	Lower	Upper
43	100		
58	0.0	39.7	59.5#
98	0.0	0.1	0.1#

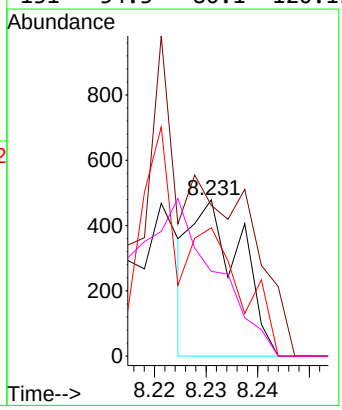


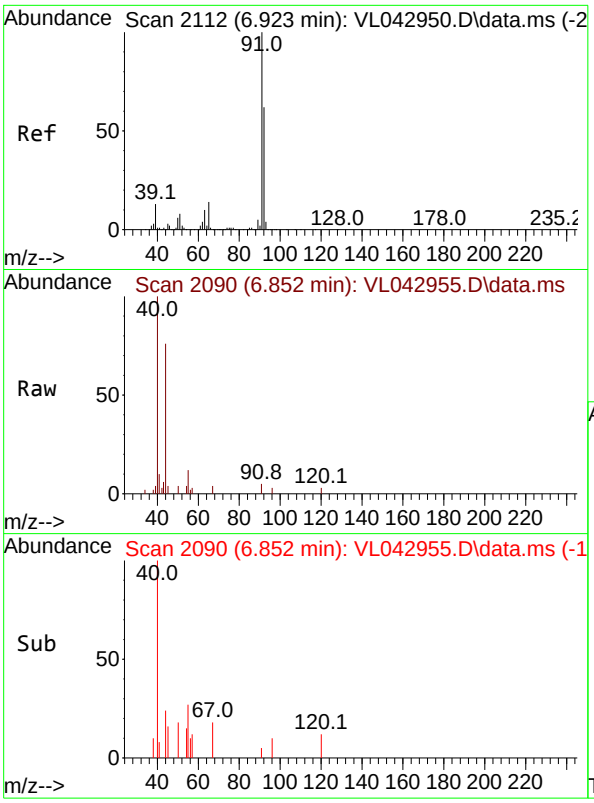


#52
Tetrachloroethene
Concen: 0.017 ppbv
RT: 8.231 min Scan# 2516
Delta R.T. 0.013 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:164 Resp: 316

Ion	Ratio	Lower	Upper
164	100		
166	52.0	103.5	155.3#
129	82.0	82.2	123.4#
131	54.3	80.1	120.1#



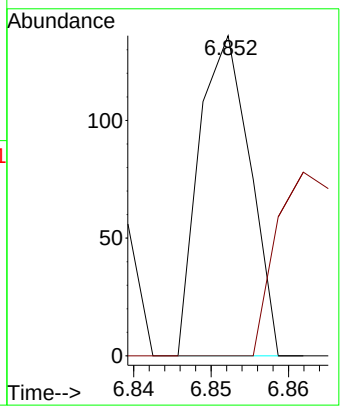


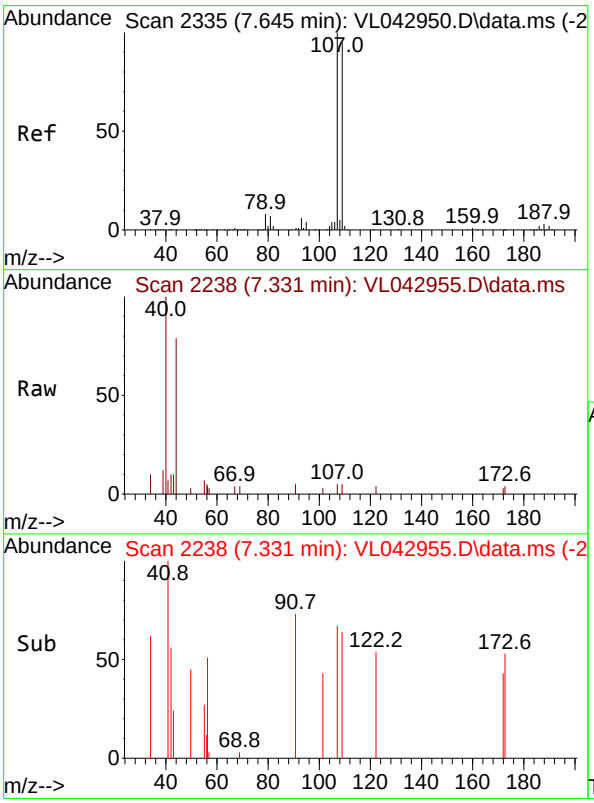
#53
Toluene
Concen: 0.001 ppbv
RT: 6.852 min Scan# 2
Delta R.T. -0.071 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 62

Ion	Ratio	Lower	Upper
91	100		
92	64.5	48.2	72.2

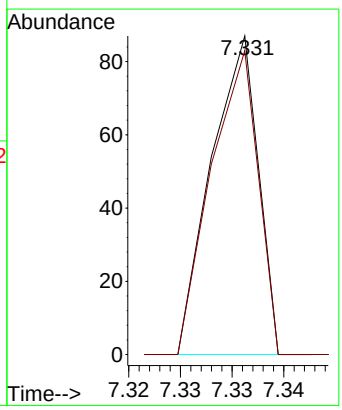


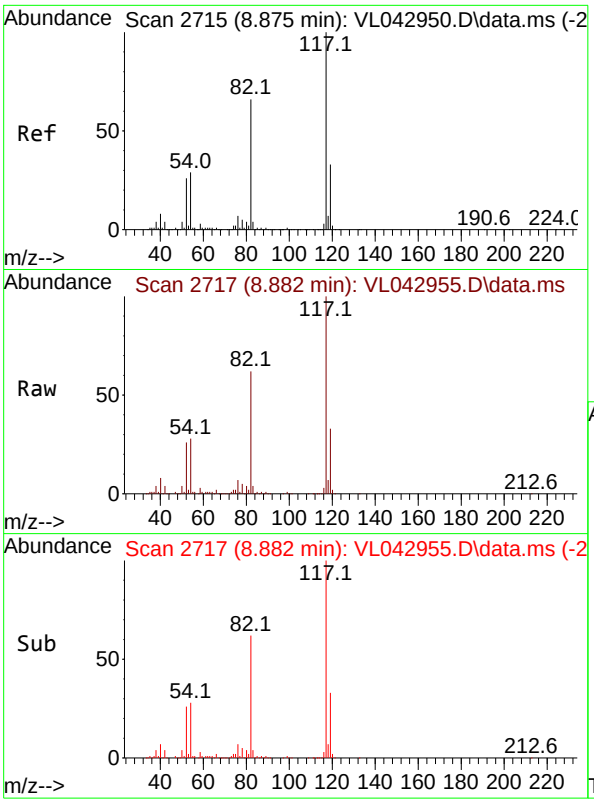


#54
1,2-Dibromoethane
Concen: 0.001 ppbv
RT: 7.331 min Scan# 2238
Delta R.T. -0.314 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:107 Resp: 27

Ion	Ratio	Lower	Upper
107	100		
109	95.4	75.8	113.8



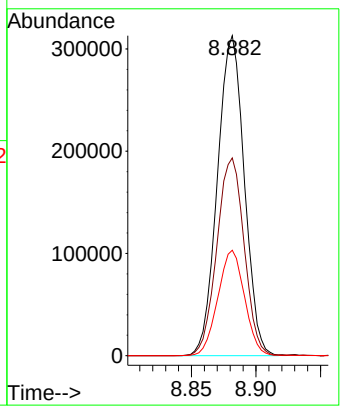


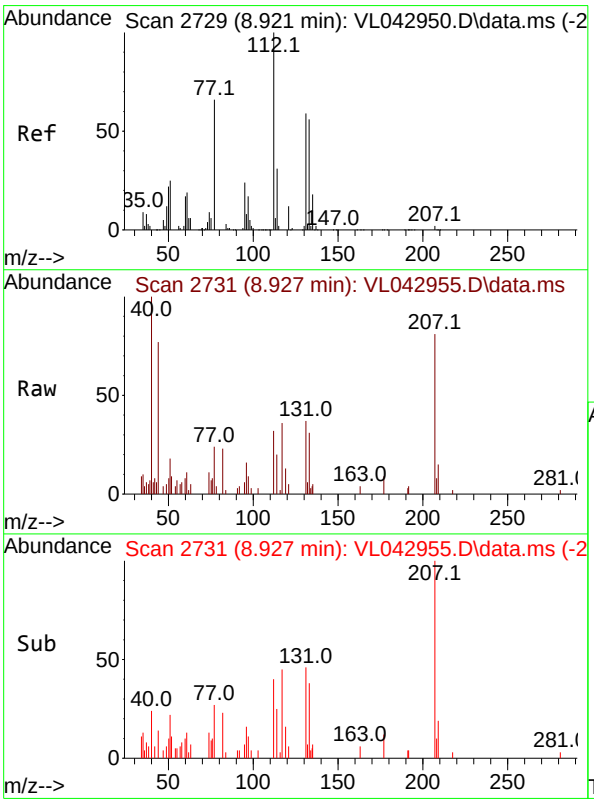
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:117 Resp: 454013

Ion	Ratio	Lower	Upper
117	100		
82	62.9	52.8	79.2
119	32.8	26.5	39.7

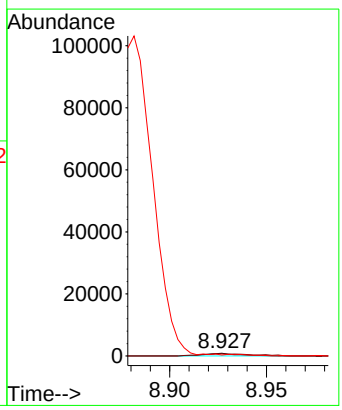


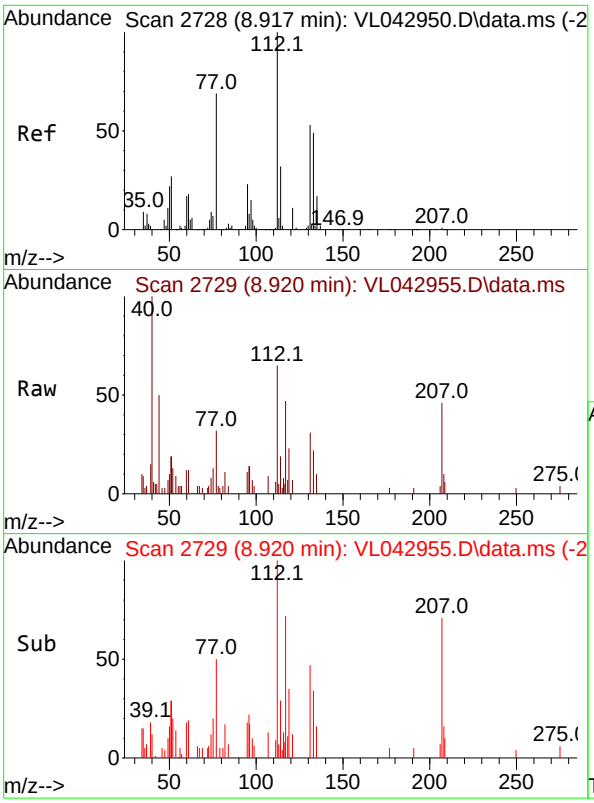


#56
1,1,1,2-Tetrachloroethane
Concen: 0.046 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:131 Resp: 1008

Ion	Ratio	Lower	Upper
131	100		
133	131.1	76.6	114.8#
119	14796.4	49.9	74.9#



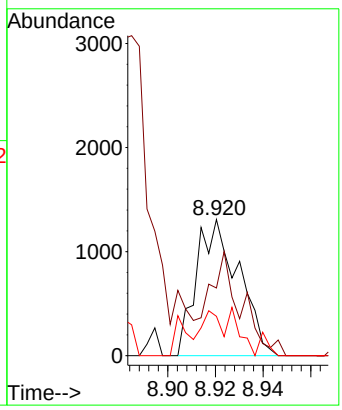


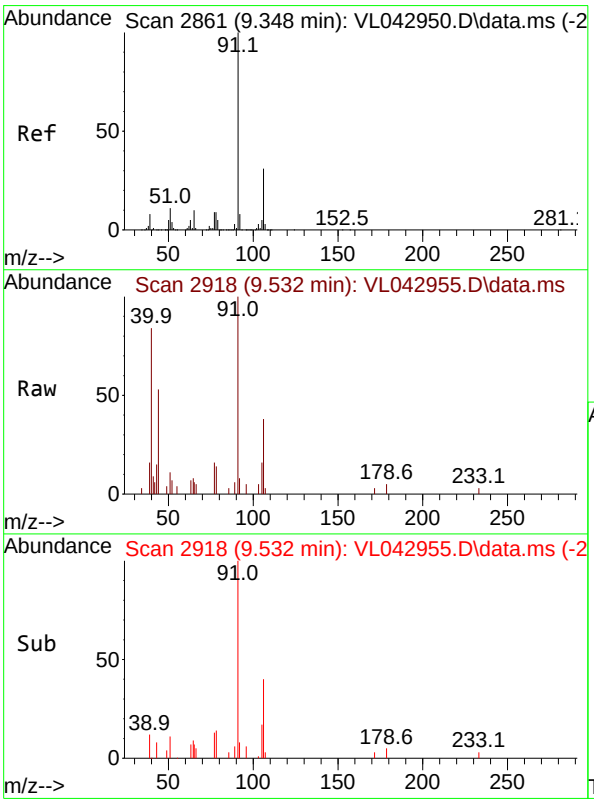
#57
Chlorobenzene
Concen: 0.039 ppbv
RT: 8.920 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:112 Resp: 1619

Ion	Ratio	Lower	Upper
112	100		
77	38.2	55.7	83.5#
114	24.4	28.6	35.0#

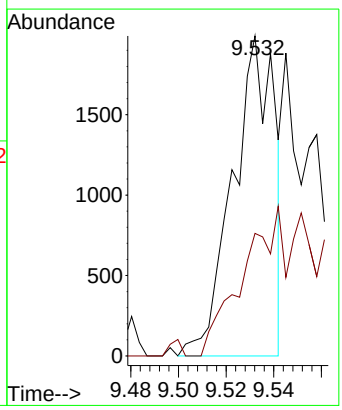


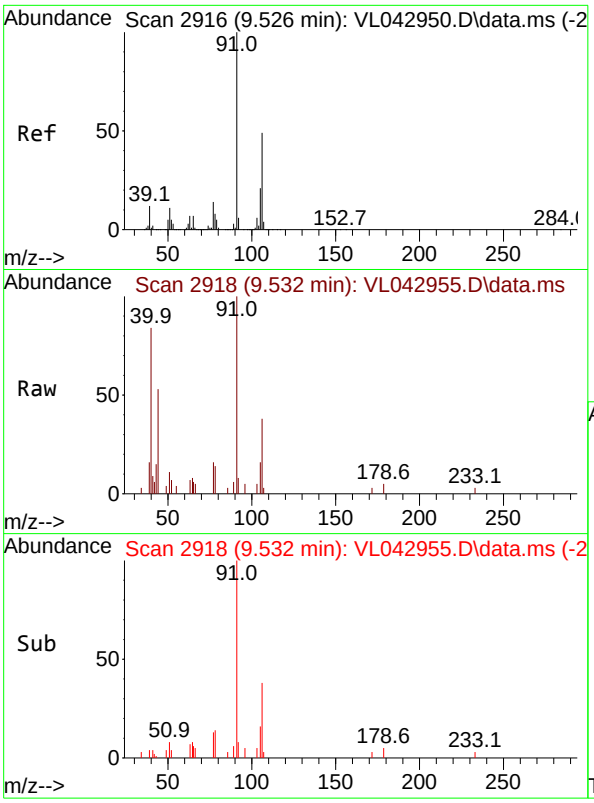


#58
Ethyl Benzene
Concen: 0.032 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. 0.184 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 91 Resp: 2417

Ion	Ratio	Lower	Upper
91	100		
106	33.2	24.6	37.0



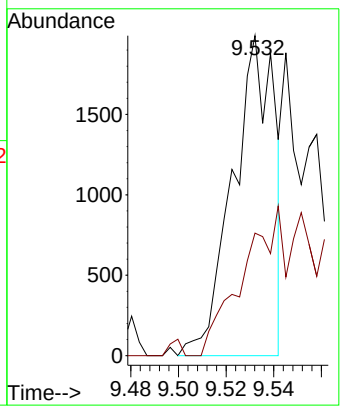


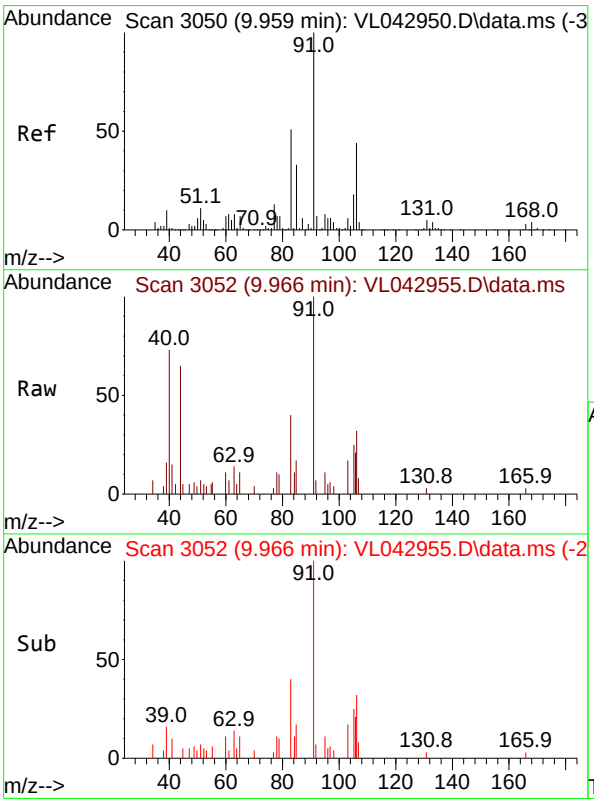
#59
m/p-Xylene
Concen: 0.041 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 2417

Ion	Ratio	Lower	Upper
91	100		
106	0.0	0.0	0.0

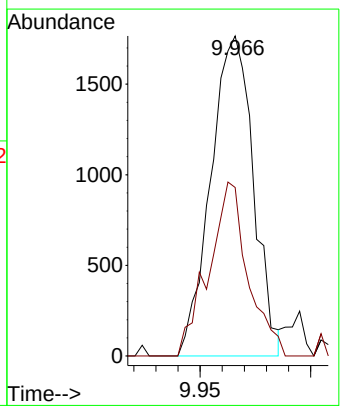


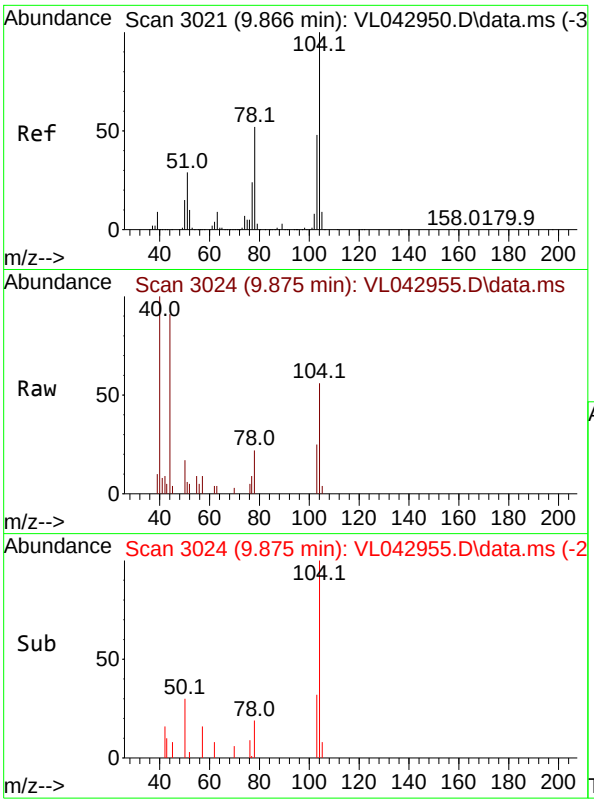


#60
o-Xylene
Concen: 0.040 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 91 Resp: 2366

Ion	Ratio	Lower	Upper
91	100		
106	49.9	22.4	67.0



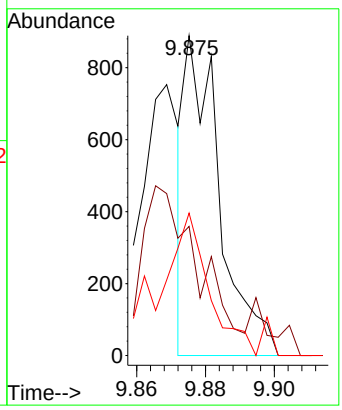


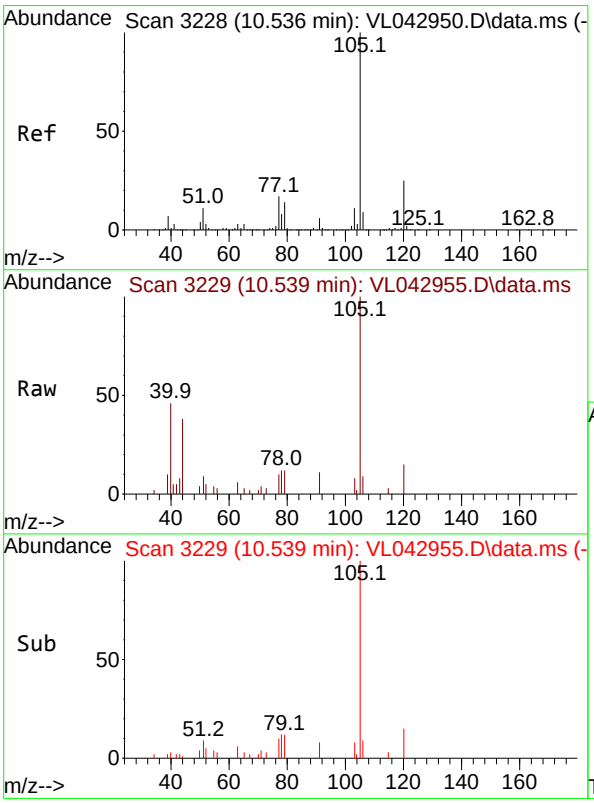
#61
Styrene
Concen: 0.022 ppbv
RT: 9.875 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:104 Resp: 621

Ion	Ratio	Lower	Upper
104	100		
78	0.0	39.9	59.9#
103	76.0	36.9	55.3#

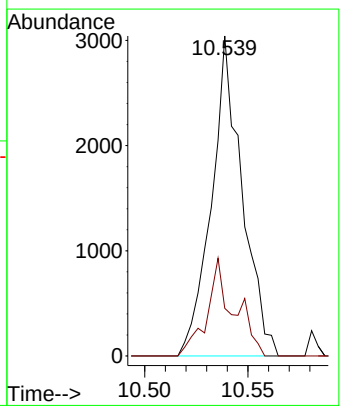


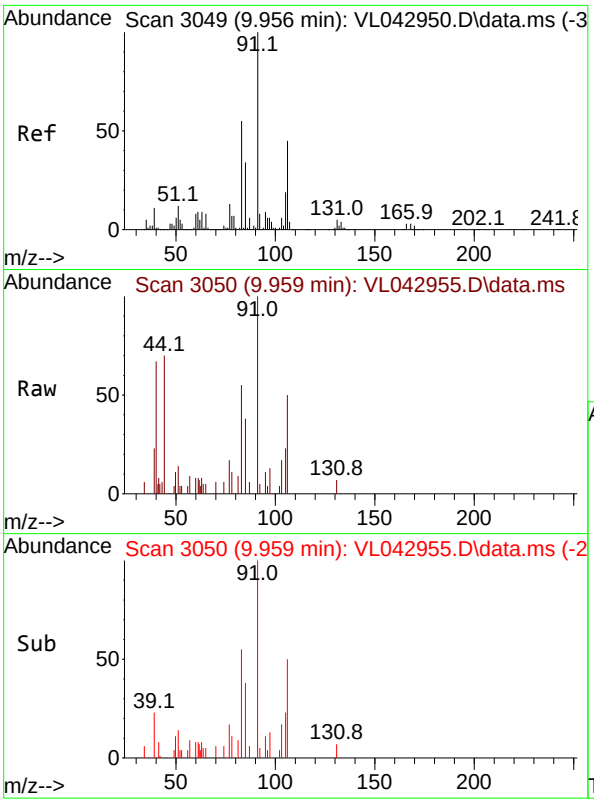


#62
Isopropylbenzene
Concen: 0.036 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:105 Resp: 3139

Ion	Ratio	Lower	Upper
105	100		
120	26.9	20.6	30.8



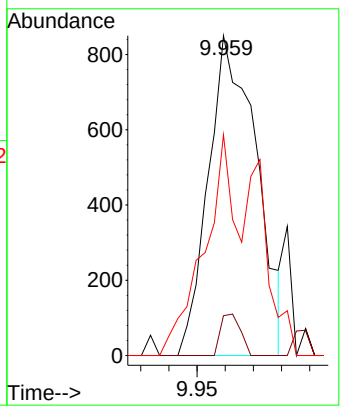


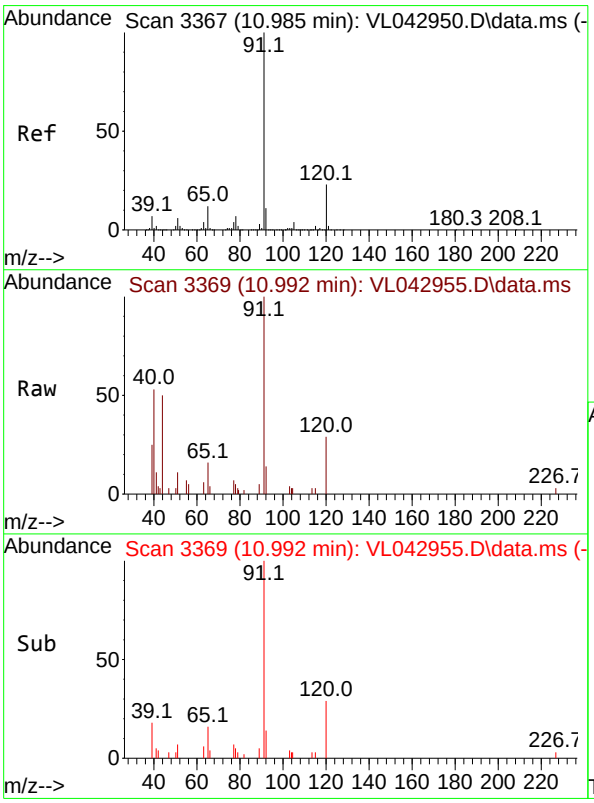
#63
1,1,2,2-Tetrachloroethane
Concen: 0.033 ppbv
RT: 9.959 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 83 Resp: 1006

Ion	Ratio	Lower	Upper
83	100		
131	5.4	4.8	14.4
85	73.6	32.2	96.6

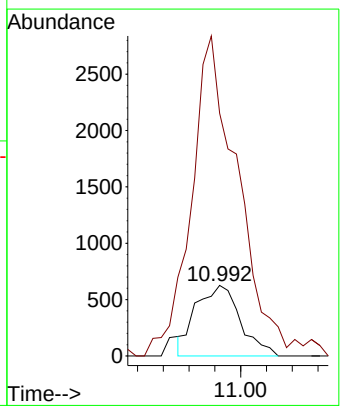


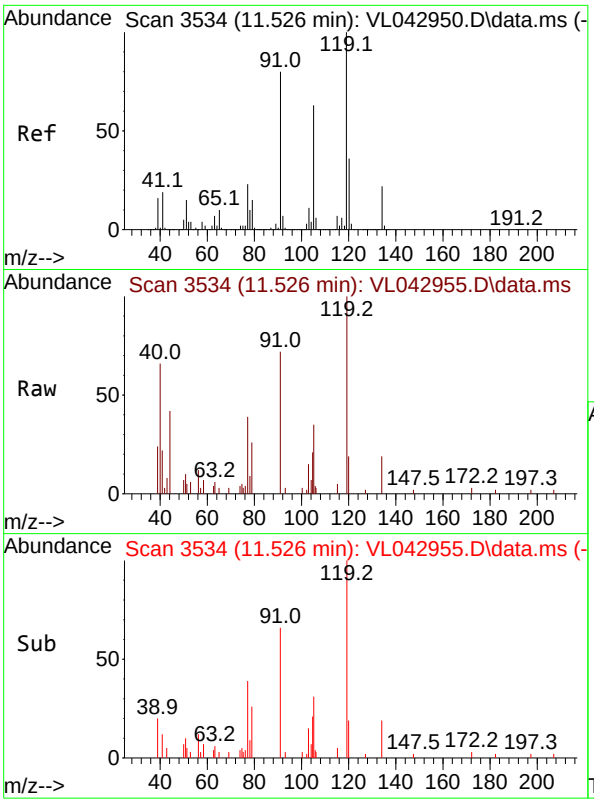


#64
n-propylbenzene
Concen: 0.033 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:120 Resp: 745

Ion	Ratio	Lower	Upper
120	100		
91	489.7	364.9	547.3



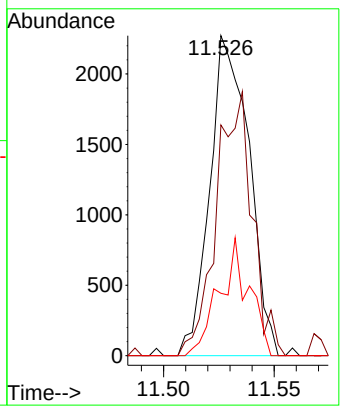


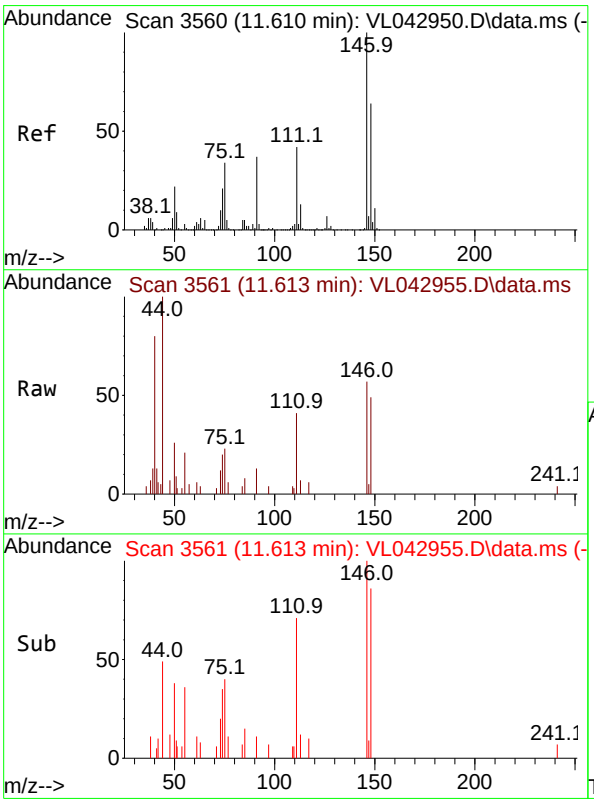
#65
tert-Butylbenzene
Concen: 0.036 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:119 Resp: 2797

Ion	Ratio	Lower	Upper
119	100		
91	77.9	63.1	94.7
134	27.9	17.0	25.6#

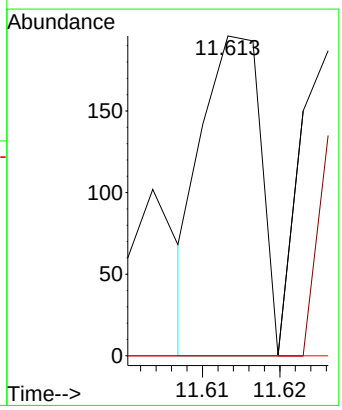


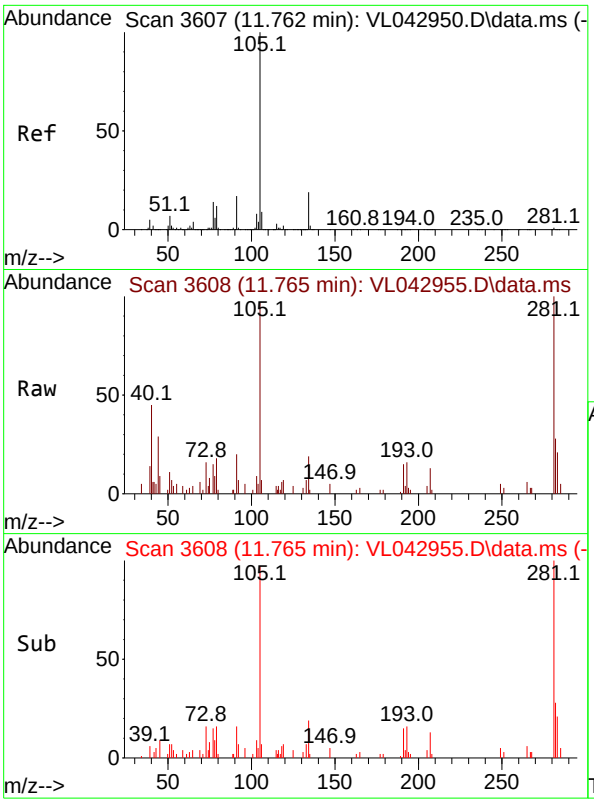


#66
Benzyl Chloride
Concen: 0.013 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 91 Resp: 103

Ion	Ratio	Lower	Upper
91	100		
126	0.0	14.6	21.8#
128	0.0	5.0	7.4#



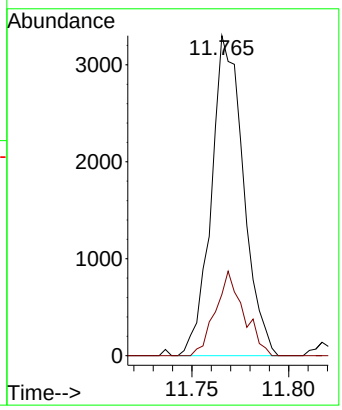


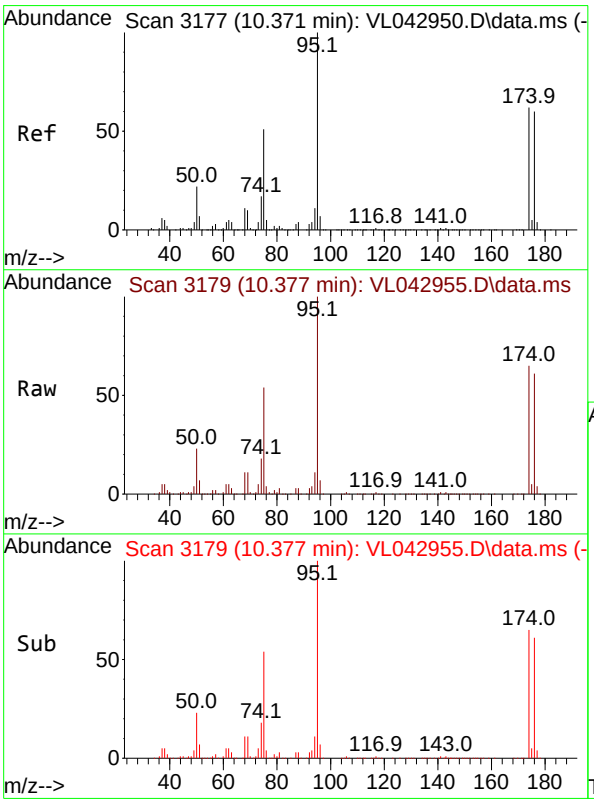
#67
sec-Butylbenzene
Concen: 0.035 ppbv
RT: 11.765 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 3805

Ion	Ratio	Lower	Upper
105	100		
134	23.3	15.7	23.5

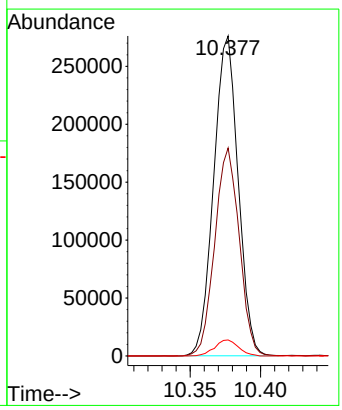


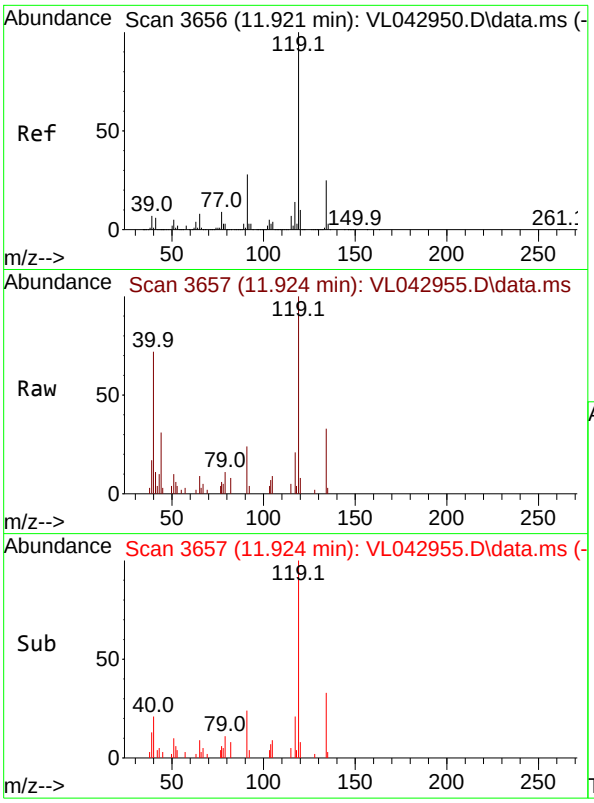


#68
1-Bromo-4-Fluorobenzene
Concen: 9.855 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 95 Resp: 334002

Ion	Ratio	Lower	Upper
95	100		
174	65.1	51.4	77.2
175	4.9	4.0	6.0



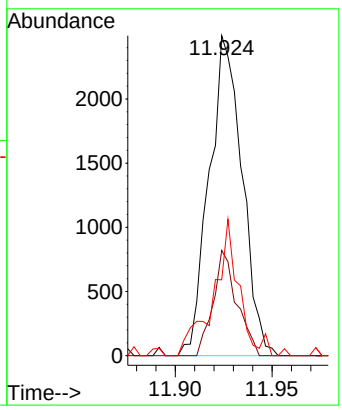


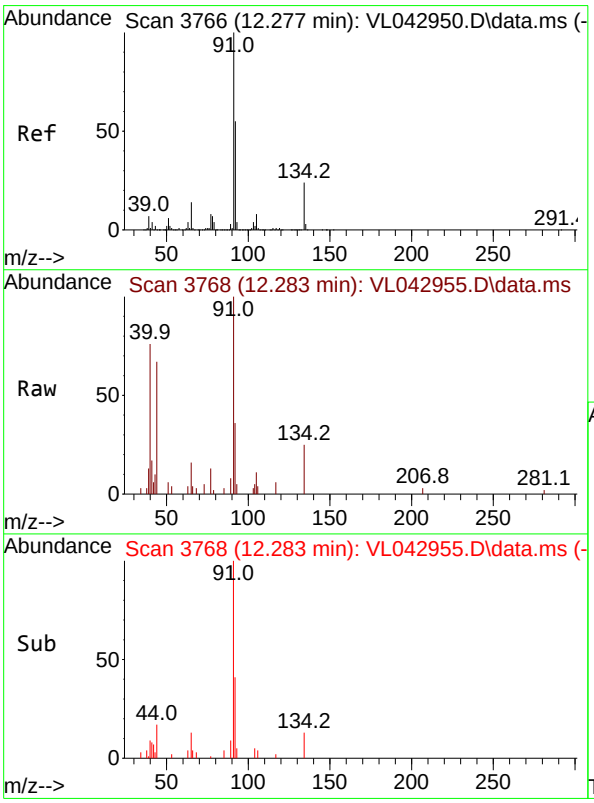
#69
p-Isopropyltoluene
Concen: 0.032 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:119 Resp: 2947

Ion	Ratio	Lower	Upper
119	100		
134	23.8	21.0	31.4
91	33.3	22.3	33.5

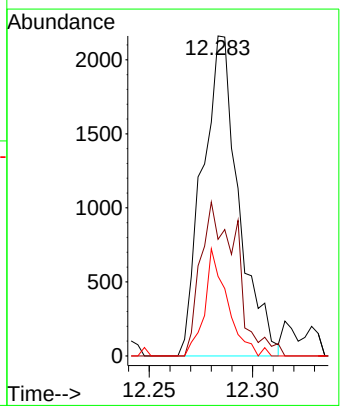


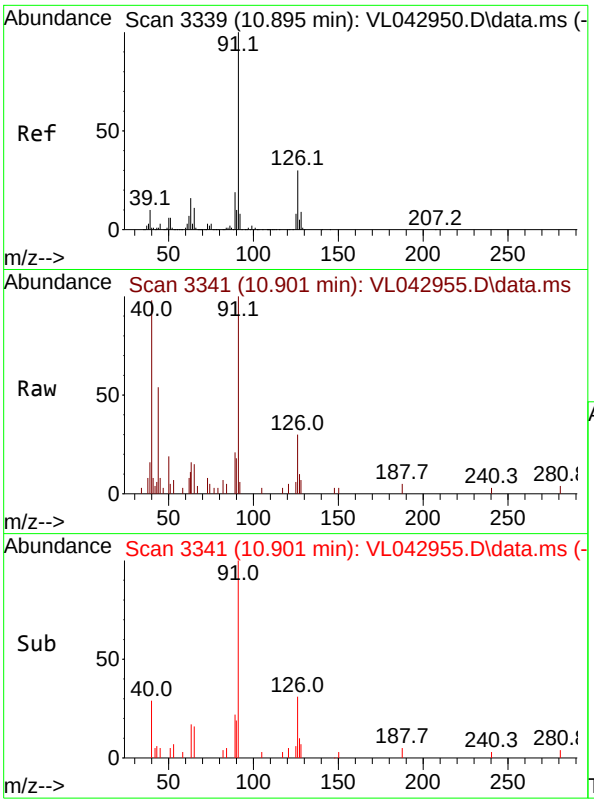


#70
n-Butylbenzene
Concen: 0.029 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion: 91 Resp: 2629

Ion	Ratio	Lower	Upper
91	100		
92	48.0	44.0	66.0
134	21.3	19.4	29.2



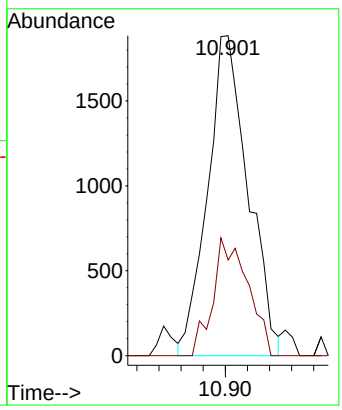


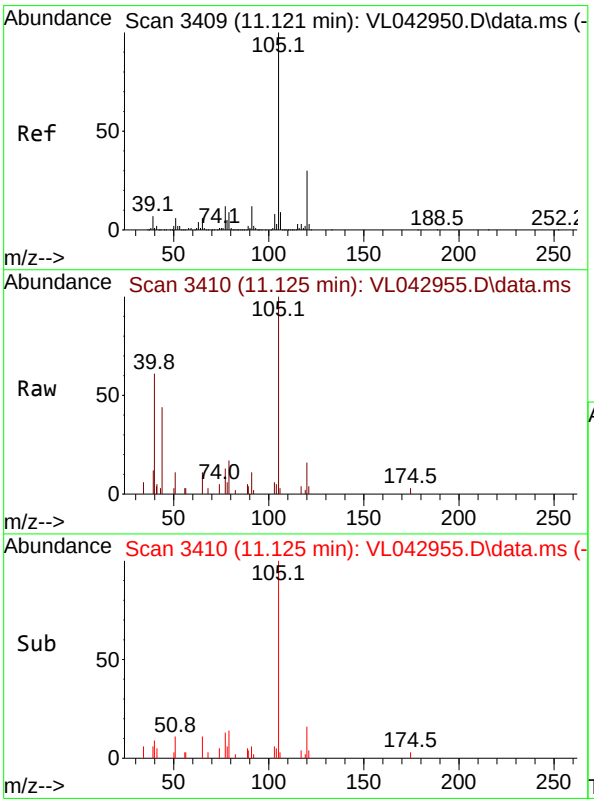
#71
2-Chlorotoluene
Concen: 0.036 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 2400

Ion	Ratio	Lower	Upper
91	100		
126	31.8	12.3	49.3

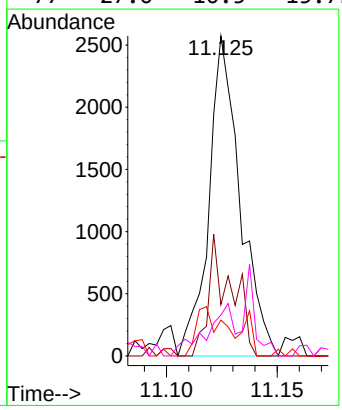


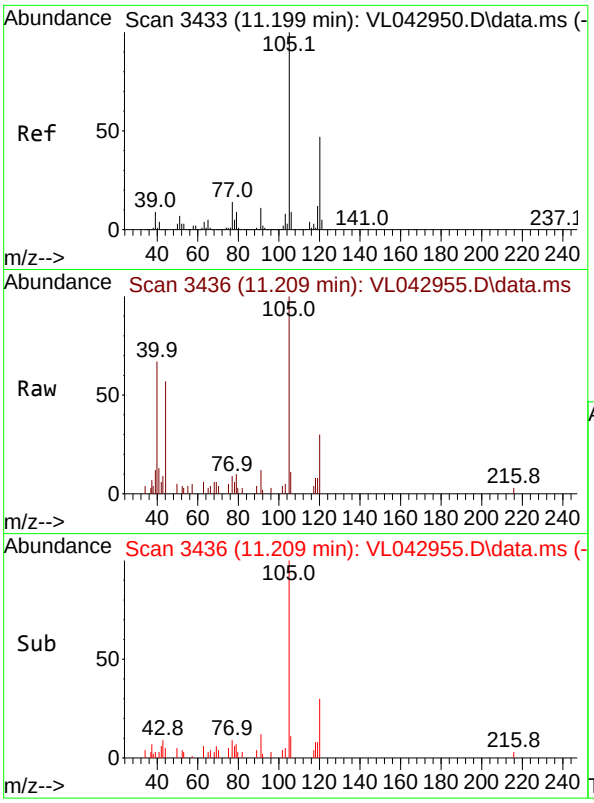


#72
4-Ethyltoluene
Concen: 0.034 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:105 Resp: 2527

Ion	Ratio	Lower	Upper
105	100		
120	28.8	24.2	36.2
91	21.0	10.0	15.0#
77	27.0	10.5	15.7#



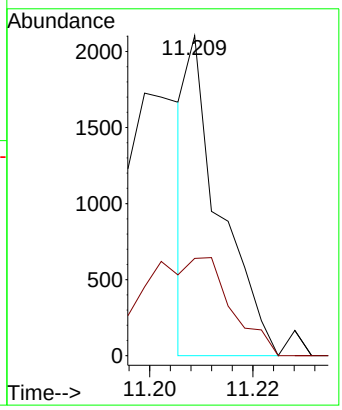


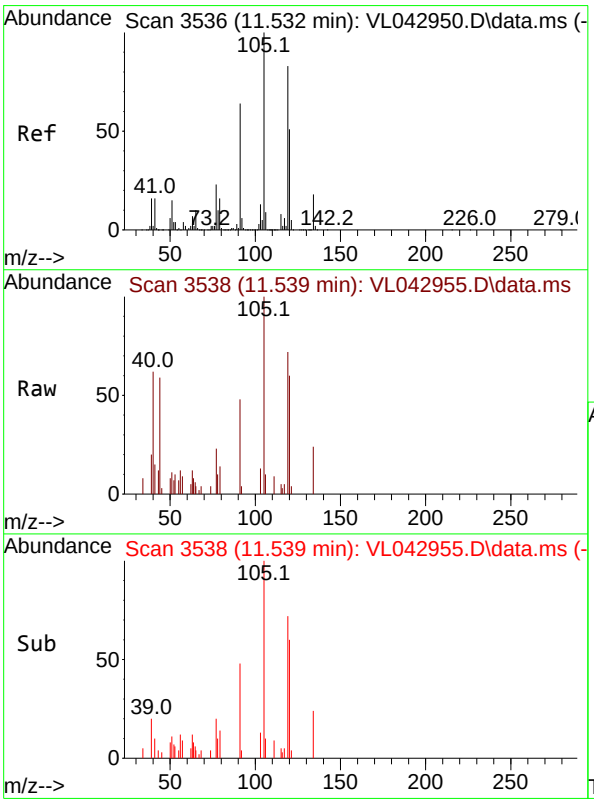
#73
1,3,5-Trimethylbenzene
Concen: 0.015 ppbv
RT: 11.209 min Scan# 34
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 922

Ion	Ratio	Lower	Upper
105	100		
120	27.4	38.0	57.0#

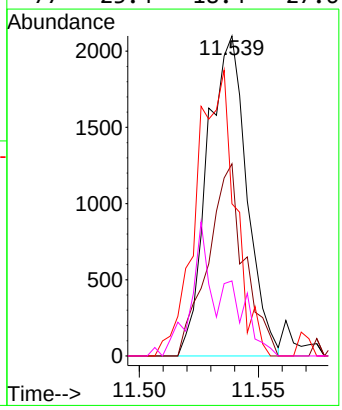


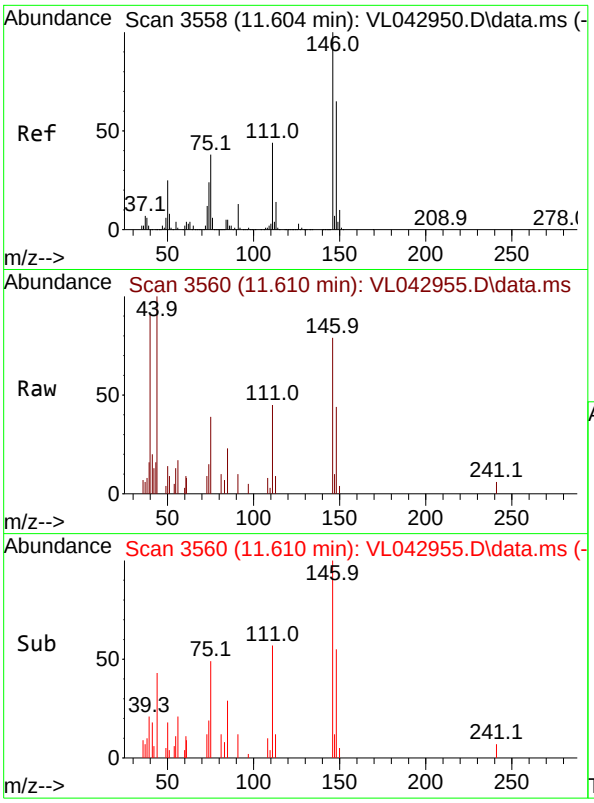


#74
1,2,4-Trimethylbenzene
Concen: 0.037 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:105 Resp: 2411

Ion	Ratio	Lower	Upper
105	100		
120	60.0	40.9	61.3
91	47.6	51.2	76.8#
77	23.4	18.4	27.6



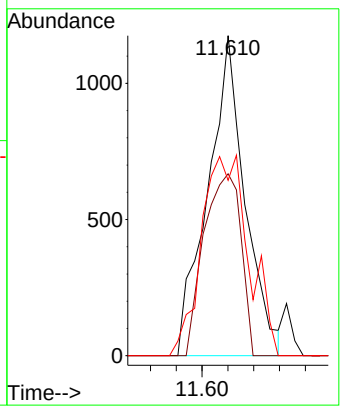


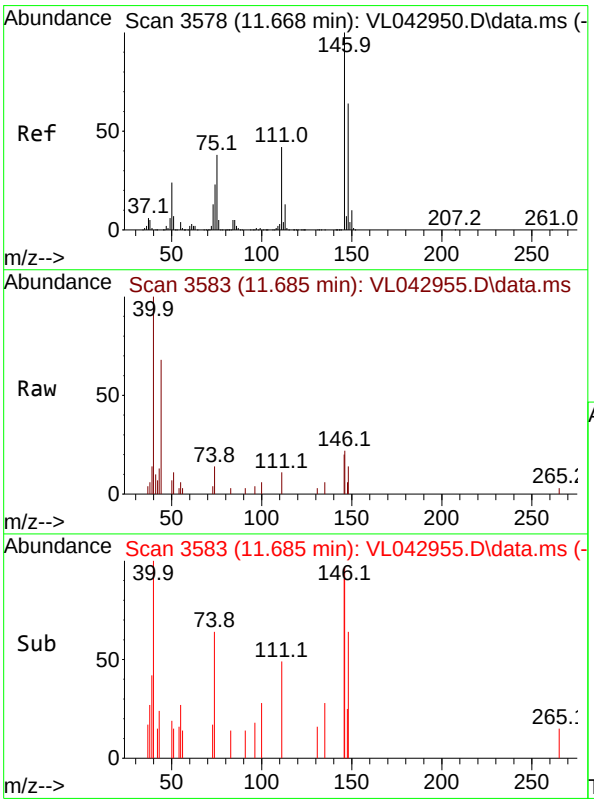
#75
1,3-Dichlorobenzene
Concen: 0.029 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:146 Resp: 1180

Ion	Ratio	Lower	Upper
146	100		
111	56.4	22.3	66.9
148	78.8	31.9	95.5

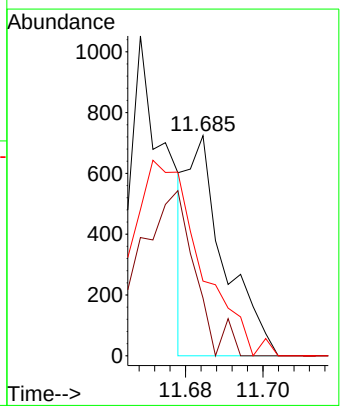


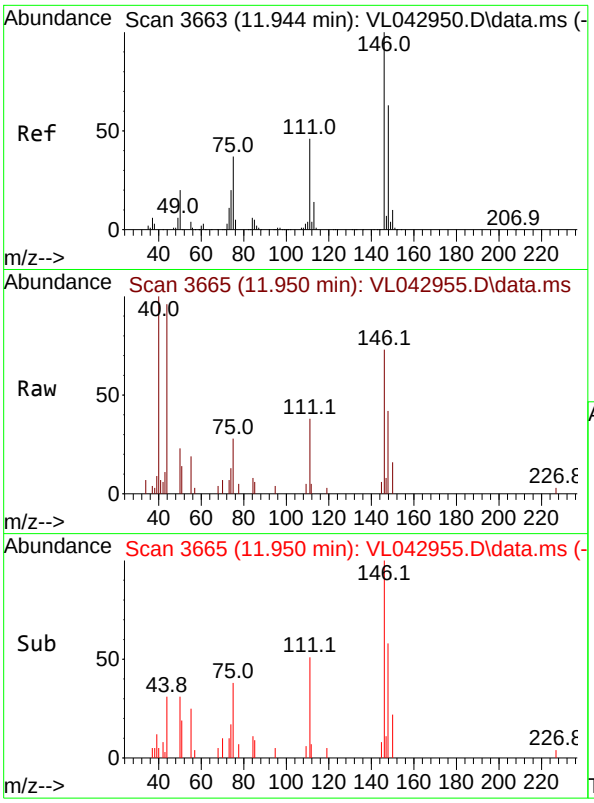


#76
1,4-Dichlorobenzene
Concen: 0.012 ppbv
RT: 11.685 min Scan# 3583
Delta R.T. 0.016 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:146 Resp: 477

Ion	Ratio	Lower	Upper
146	100		
111	121.6	21.5	64.5#
148	0.0	31.9	95.5#



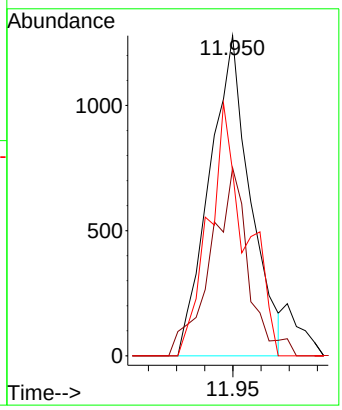


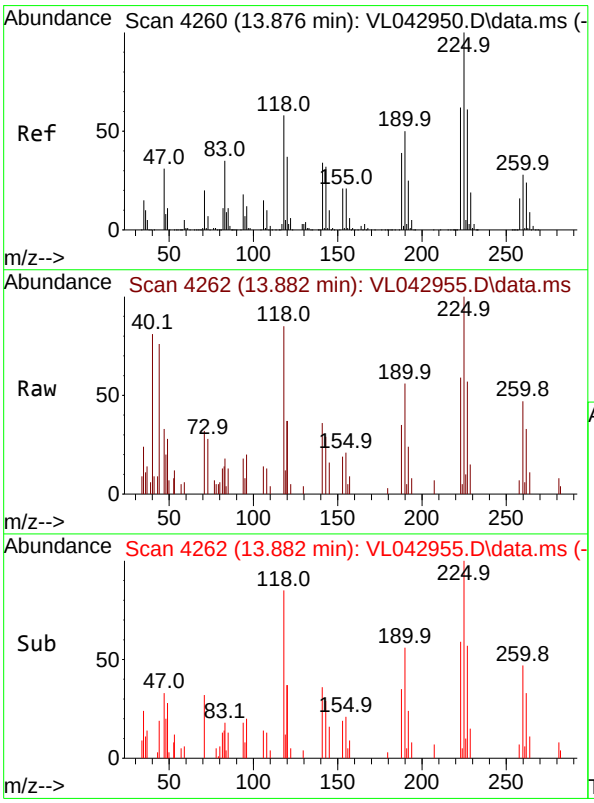
#77
1,2-Dichlorobenzene
Concen: 0.033 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:146 Resp: 1283

Ion	Ratio	Lower	Upper
146	100		
111	54.6	23.1	69.3
148	71.7	32.0	96.0

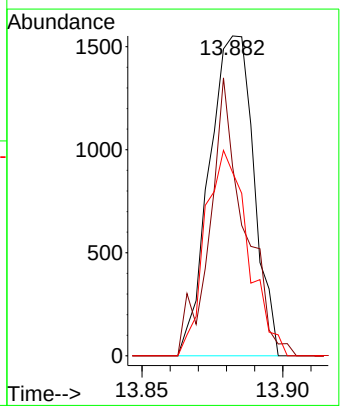


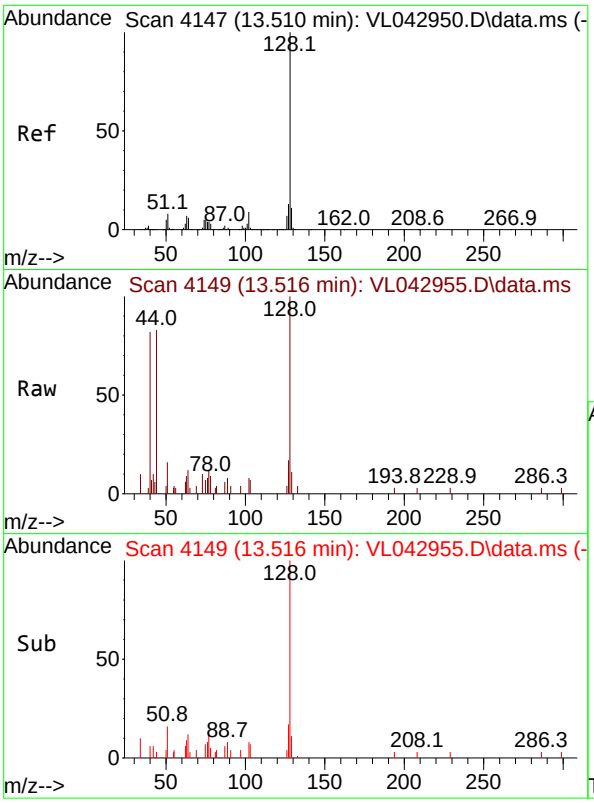


#78
Hexachloro-1,3-Butadiene
Concen: 0.056 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:225 Resp: 1707

Ion	Ratio	Lower	Upper
225	100		
223	67.0	50.1	75.1
227	61.9	50.4	75.6



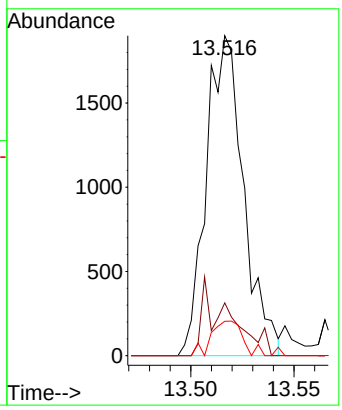


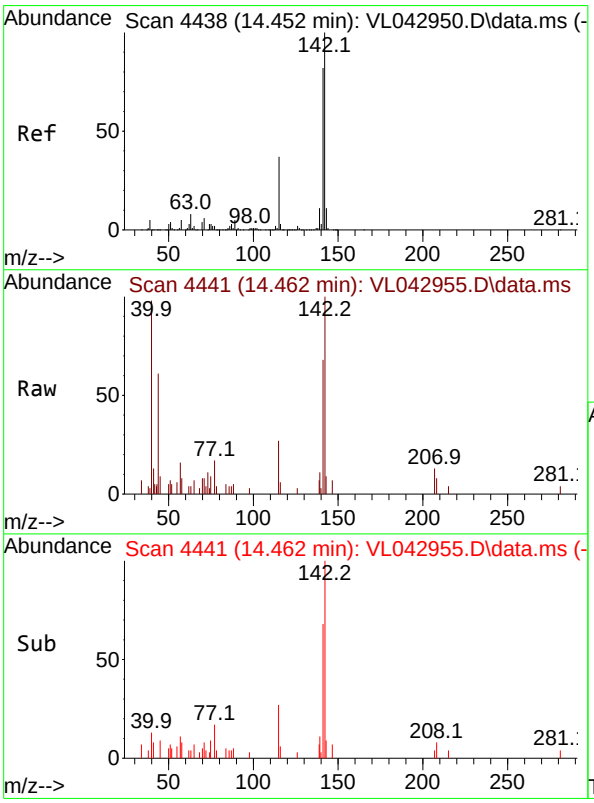
#79
Naphthalene
Concen: 0.041 ppbv
RT: 13.516 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:128 Resp: 2391

Ion	Ratio	Lower	Upper
128	100		
127	16.5	10.6	15.8#
129	10.7	9.0	13.6

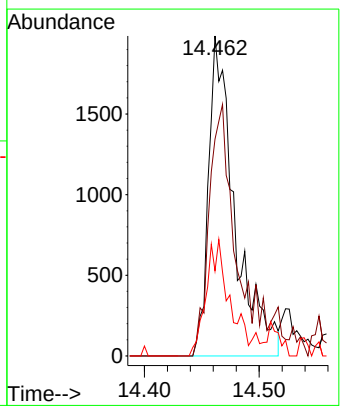


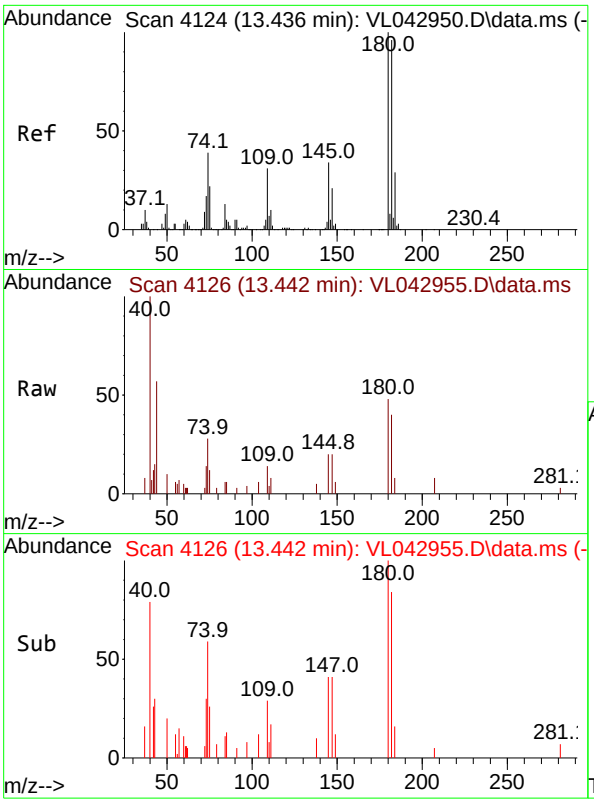


#80
Naphthalene,2-methyl-
Concen: 0.175 ppbv
RT: 14.462 min Scan# 4441
Delta R.T. 0.010 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Tgt Ion:142 Resp: 3144

Ion	Ratio	Lower	Upper
142	100		
141	93.4	65.1	97.7
115	40.9	28.9	43.3



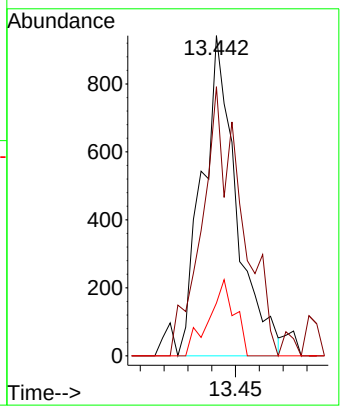


#81
1,2,4-Trichlorobenzene
Concen: 0.030 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042955.D
Acq: 22 Sep 2025 12:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:180 Resp: 939

Ion	Ratio	Lower	Upper
180	100		
182	99.9	75.7	113.5
184	18.0	23.9	35.9#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042956.D
Acq On : 22 Sep 2025 13:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Sep 23 02:14:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	162846	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	494779	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	458256	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	343752	10.049	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	300946	13.740	ppbv	97
3) Chlorodifluoromethane	1.476	51	364959	13.369	ppbv	100
4) Chloromethane	1.534	50	133240	13.439	ppbv	99
5) Vinyl Chloride	1.583	62	115257	12.860	ppbv	100
6) Bromomethane	1.670	94	40861	12.925	ppbv	94
7) Chloroethane	1.706	64	46081	13.241	ppbv	99
8) Dichlorotetrafluoroethane	1.557	85	255815	13.682	ppbv	98
9) Propene	1.486	41	154069	12.973	ppbv	94
10) Heptane	4.985	43	424500	13.327	ppbv	98
11) Trichlorofluoromethane	1.881	101	295479	13.991	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.143	101	237615	13.894	ppbv	99
13) Ethanol	1.722	45	11502	10.105	ppbv	99
14) Bromoethene	1.784	108	88375	13.668	ppbv	100
15) Acetone	1.835	43	244861	11.545	ppbv	97
16) 1,3-Butadiene	1.612	39	126670	12.661	ppbv	97
17) tert-Butyl alcohol	2.039	59	308347	13.255	ppbv	99
18) 1,1-Dichloroethene	2.036	96	109211	13.796	ppbv	99
19) Isopropyl Alcohol	1.887	45	162952	12.780	ppbv	100
20) Methylene Chloride	2.062	84	92708	14.996	ppbv	95
21) Allyl Chloride	2.098	41	204552	13.848	ppbv	100
22) trans-1,2-Dichloroethene	2.343	96	121815	13.542	ppbv	98
23) Vinyl Acetate	2.463	43	419251	13.837	ppbv	99
24) 1,1-Dichloroethane	2.411	63	243229	13.789	ppbv	99
25) Ethyl Acetate	2.835	43	724418	13.514	ppbv	99
26) Hexane	2.829	57	321710	13.166	ppbv	99
27) Carbon Disulfide	2.153	76	300931	13.731	ppbv	97
28) Methyl tert-Butyl Ether	2.444	73	193915	15.267	ppbv	94
29) Chloroform	2.852	83	440772	13.796	ppbv	98
30) Cyclohexane	3.858	84	281932	13.800	ppbv	98
31) cis-1,2-Dichloroethene	2.722	61	317456	13.869	ppbv	98
32) 1,1,1-Trichloroethane	3.369	97	456335	13.178	ppbv	99
34) 2-Butanone	2.557	43	469872	13.551	ppbv	99
35) Carbon Tetrachloride	3.764	117	457985	14.385	ppbv	97
36) Benzene	3.658	78	654205	14.080	ppbv	99
37) 1,2-Dichloroethane	3.221	62	350841	14.358	ppbv	100
38) Trichloroethene	4.548	130	310602	13.450	ppbv	97
39) 1,2-Dichloropropane	4.315	63	241323	14.218	ppbv	95
40) 1,4-Dioxane	4.580	88	104884	13.306	ppbv #	98
41) Tetrahydrofuran	3.052	42	276157	13.855	ppbv	99
42) Bromodichloromethane	4.489	83	495091	14.544	ppbv	98
43) Methyl Methacrylate	4.881	69	263659	13.979	ppbv	99
44) 2,2,4-Trimethylpentane	4.641	57	1107180	13.791	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	298019	14.694	ppbv	96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042956.D
Acq On : 22 Sep 2025 13:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Sep 23 02:14:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	371770	14.389	ppbv		99
47) 1,1,2-Trichloroethane	6.583	97	249453	13.909	ppbv		96
48) Dibromochloromethane	7.389	129	421755	14.709	ppbv		99
49) Bromoform	9.487	173	367120	14.719	ppbv		99
50) 4-Methyl-2-Pentanone	5.748	43	666049	14.293	ppbv		100
51) 2-Hexanone	7.435	43	541611	14.620	ppbv		100
52) Tetrachloroethene	8.228	164	233980	13.015	ppbv		99
53) Toluene	6.936	91	765216	13.915	ppbv		98
54) 1,2-Dibromoethane	7.652	107	359750	14.261	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.927	131	306952	13.994	ppbv		99
57) Chlorobenzene	8.924	112	565065	13.507	ppbv		98
58) Ethyl Benzene	9.357	91	1052303	13.985	ppbv		99
59) m/p-Xylene	9.535	91	880462	14.831	ppbv	#	100
60) o-Xylene	9.966	91	808098	13.629	ppbv		100
61) Styrene	9.872	104	401899	14.330	ppbv		99
62) Isopropylbenzene	10.542	105	1198767	13.564	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.966	83	403038	12.932	ppbv		100
64) n-propylbenzene	10.992	120	318541	13.793	ppbv		97
65) tert-Butylbenzene	11.532	119	1033382	13.146	ppbv		100
66) Benzyl Chloride	11.616	91	113549	13.767	ppbv		99
67) sec-Butylbenzene	11.769	105	1454158	13.276	ppbv		99
69) p-Isopropyltoluene	11.927	119	1228773	13.280	ppbv		100
70) n-Butylbenzene	12.283	91	1239042	13.716	ppbv		99
71) 2-Chlorotoluene	10.904	91	916456	13.733	ppbv		100
72) 4-Ethyltoluene	11.128	105	1014567	13.662	ppbv		99
73) 1,3,5-Trimethylbenzene	11.205	105	845958	14.046	ppbv		98
74) 1,2,4-Trimethylbenzene	11.539	105	889339	13.372	ppbv		97
75) 1,3-Dichlorobenzene	11.610	146	568597	13.785	ppbv		100
76) 1,4-Dichlorobenzene	11.675	146	570104	13.916	ppbv		99
77) 1,2-Dichlorobenzene	11.950	146	536286	13.665	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	377435	12.296	ppbv		99
79) Naphthalene	13.513	128	920123	15.645	ppbv		100
80) Naphthalene,2-methyl-	14.458	142	277792	15.290	ppbv		99
81) 1,2,4-Trichlorobenzene	13.442	180	473767	15.066	ppbv		99

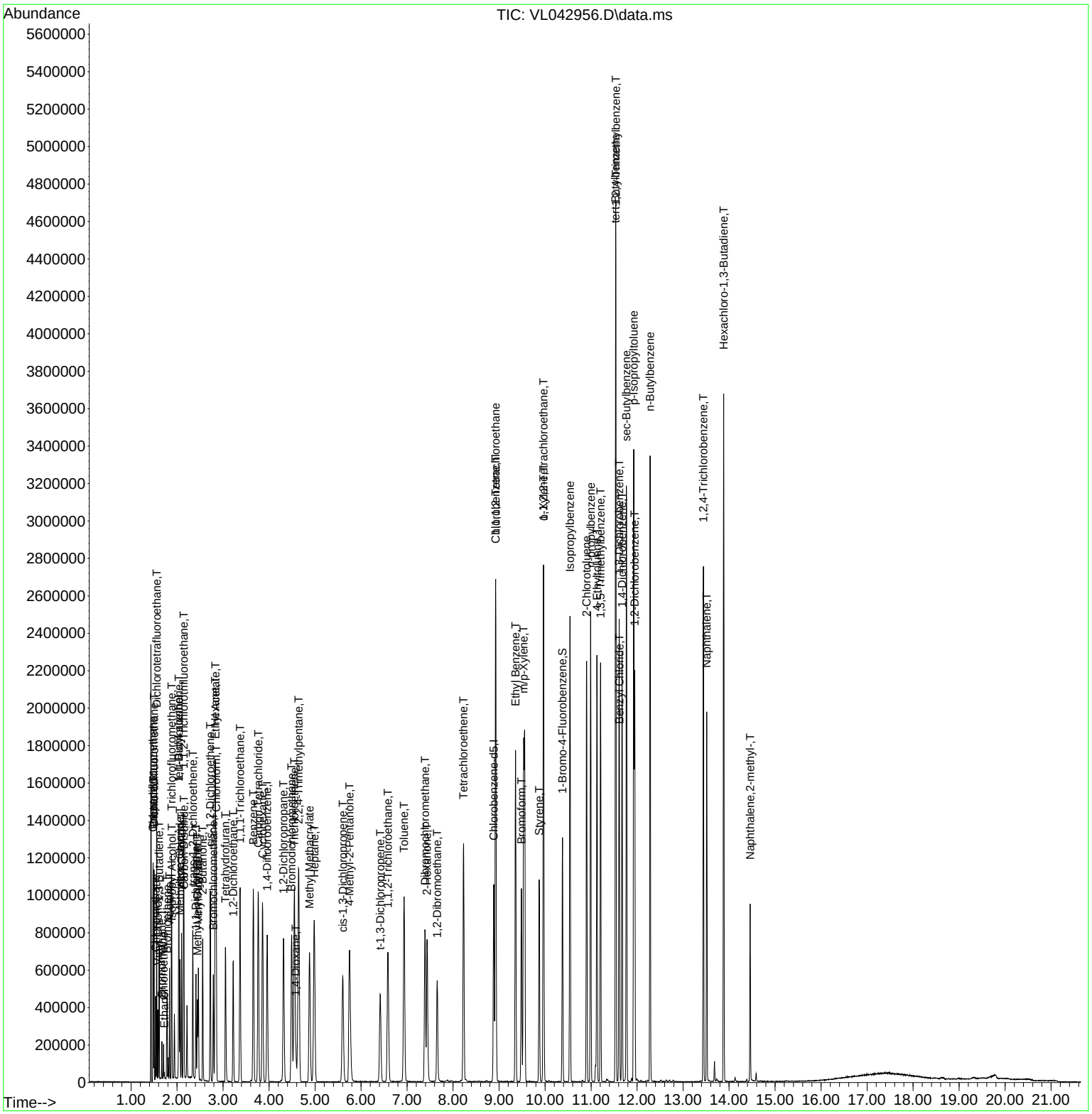
(#) = qualifier out of range (m) = manual integration (+) = signals summed

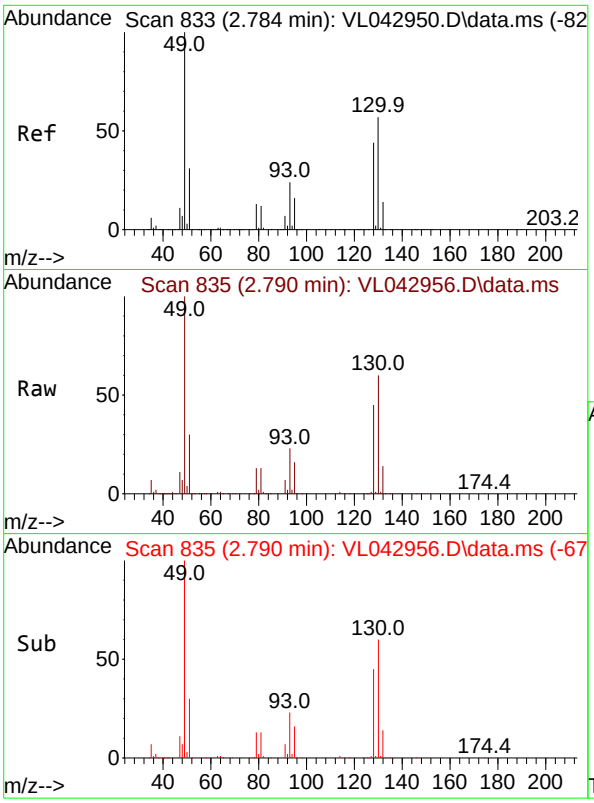
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042956.D
Acq On : 22 Sep 2025 13:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Sep 23 02:14:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



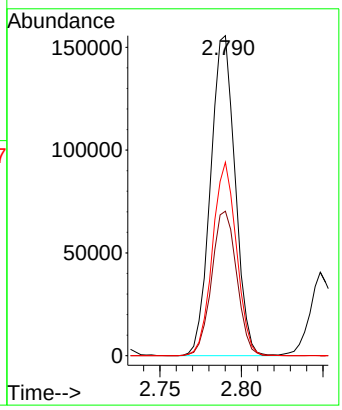


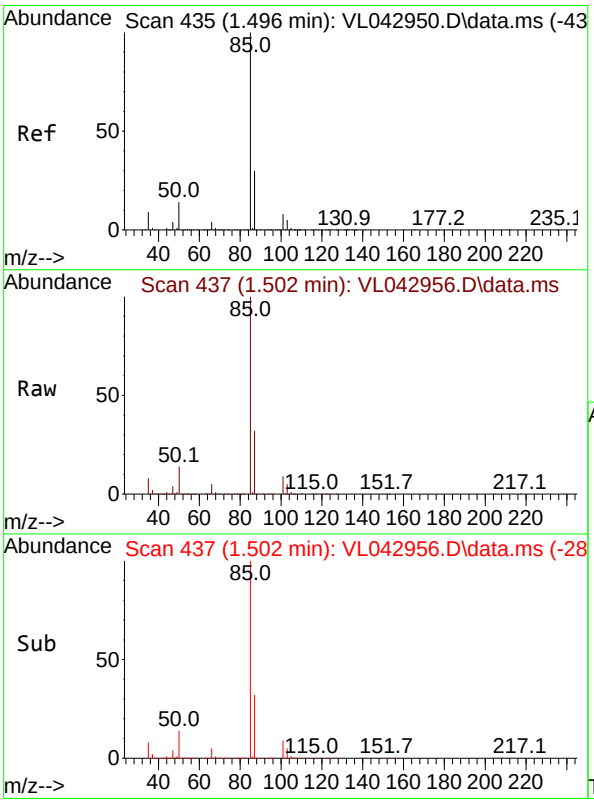
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 49 Resp: 162846

Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.9	68.8
130	59.1	29.1	87.3

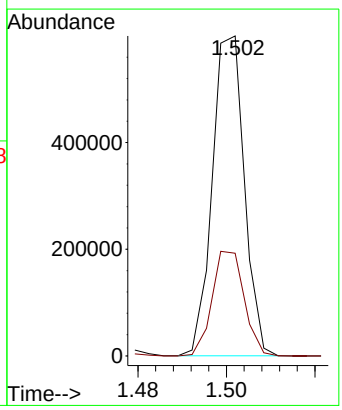


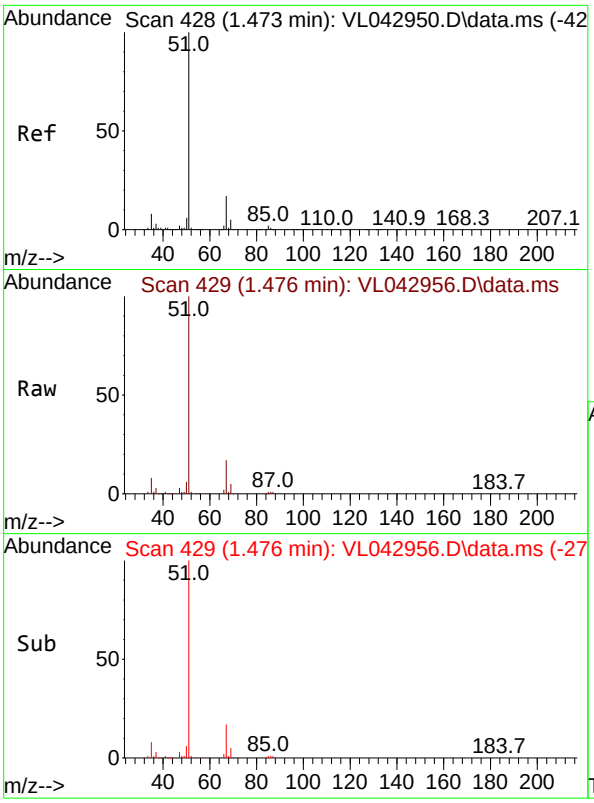


#2
Dichlorodifluoromethane
Concen: 13.740 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 85 Resp: 300946

Ion	Ratio	Lower	Upper
85	100		
87	32.1	24.3	36.5



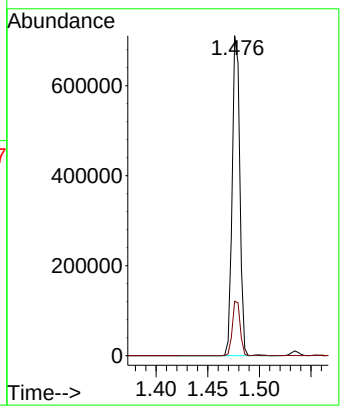


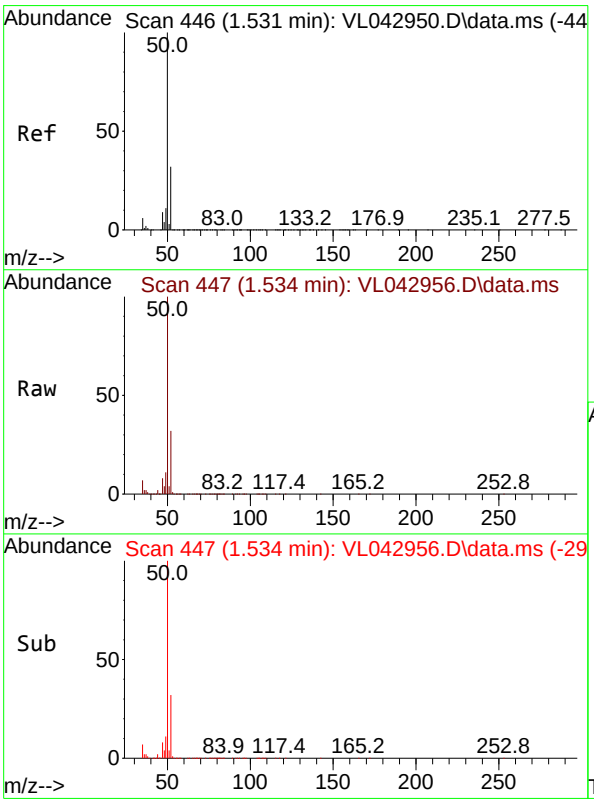
#3
Chlorodifluoromethane
Concen: 13.369 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 51 Resp: 364959

Ion	Ratio	Lower	Upper
51	100		
67	17.5	13.8	20.8

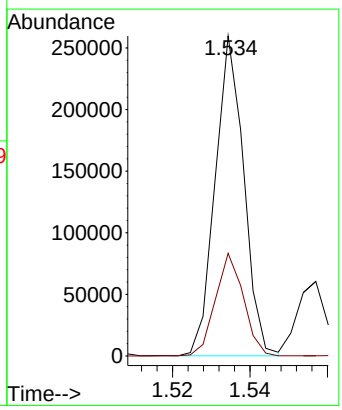


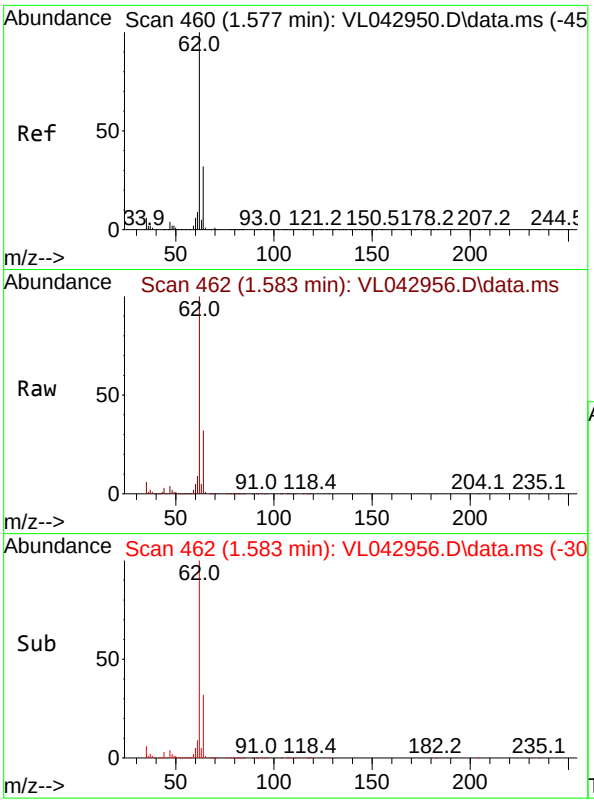


#4
Chloromethane
Concen: 13.439 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 50 Resp: 133240

Ion	Ratio	Lower	Upper
50	100		
52	32.0	25.9	38.9



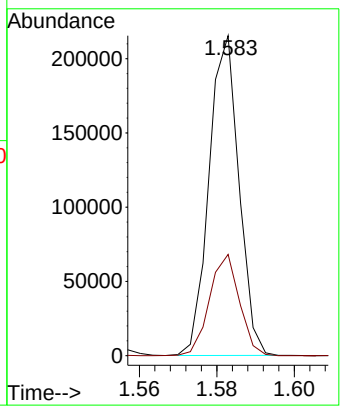


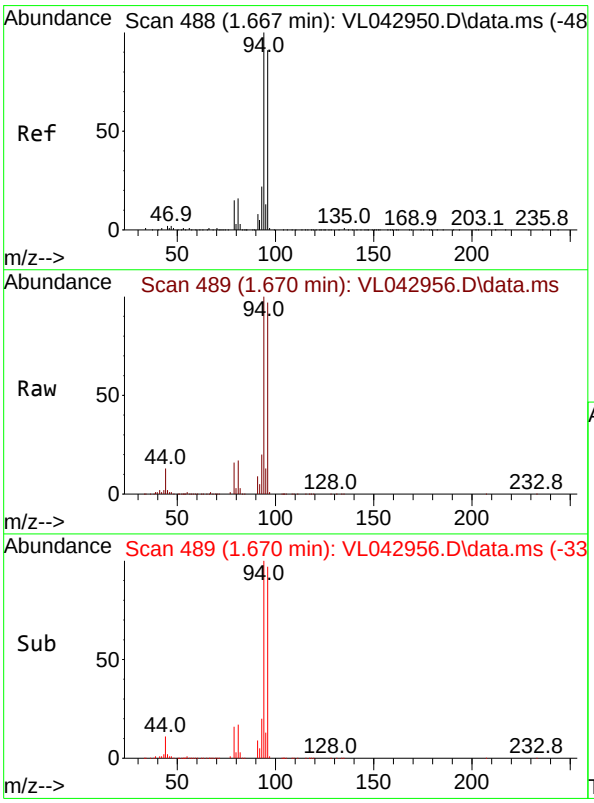
#5
Vinyl Chloride
Concen: 12.860 ppbv
RT: 1.583 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 115257

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.4	38.2

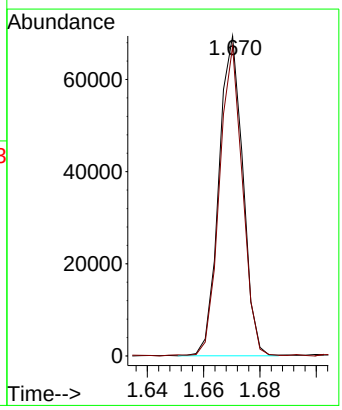


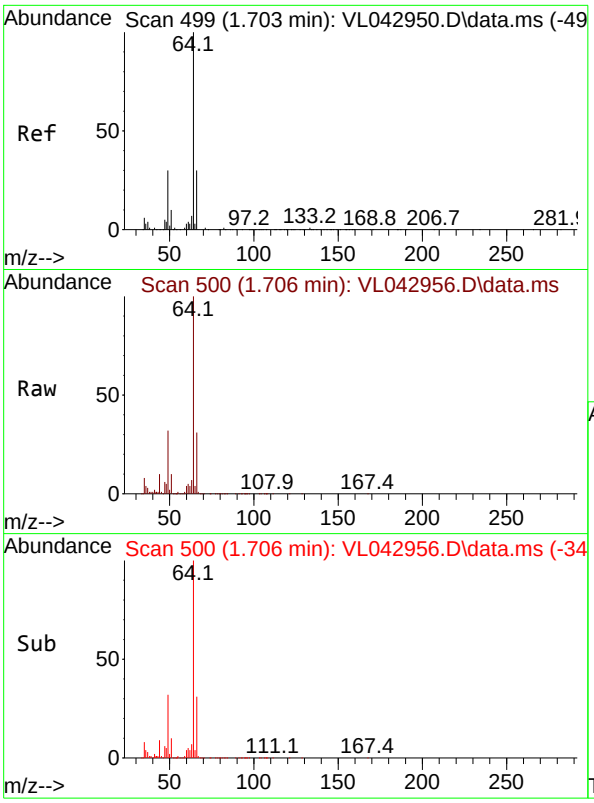


#6
Bromomethane
Concen: 12.925 ppbv
RT: 1.670 min Scan# 489
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 94 Resp: 40861

Ion	Ratio	Lower	Upper
94	100		
96	96.7	72.6	108.8



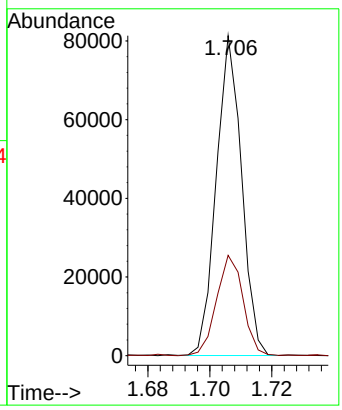


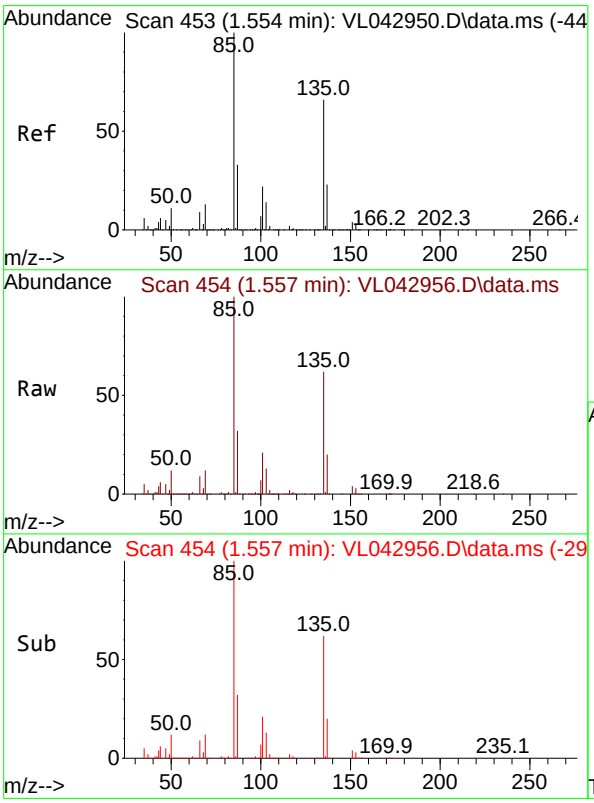
#7
Chloroethane
Concen: 13.241 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 64 Resp: 46081

Ion	Ratio	Lower	Upper
64	100		
66	31.3	24.6	36.8

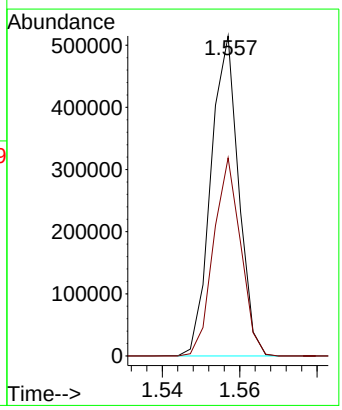


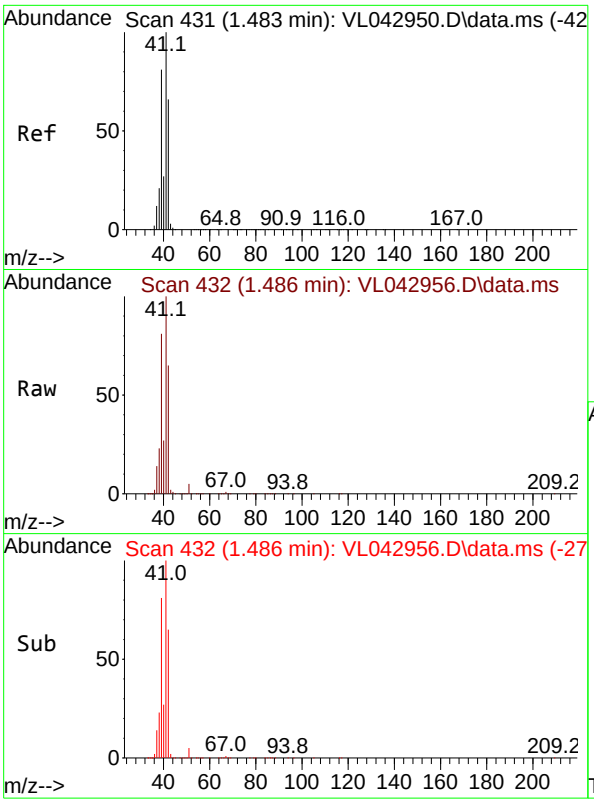


#8
Dichlorotetrafluoroethane
Concen: 13.682 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 85 Resp: 255815

Ion	Ratio	Lower	Upper
85	100		
135	60.8	49.7	74.5



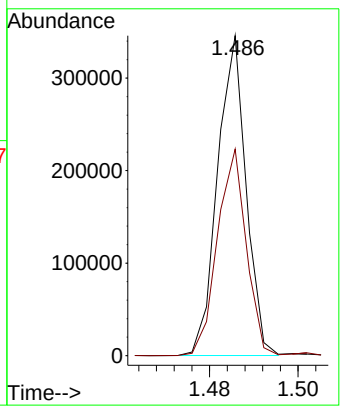


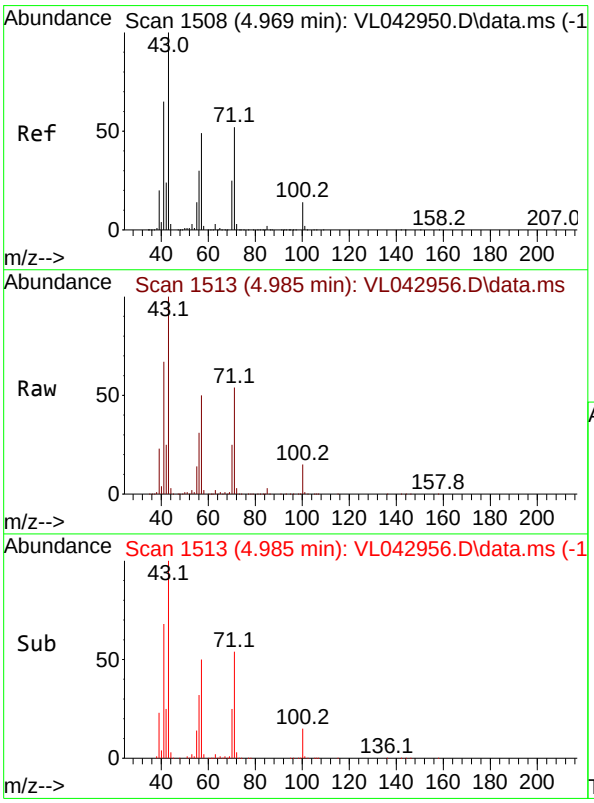
#9
Propene
Concen: 12.973 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 154069

Ion	Ratio	Lower	Upper
41	100		
42	67.1	57.4	86.2

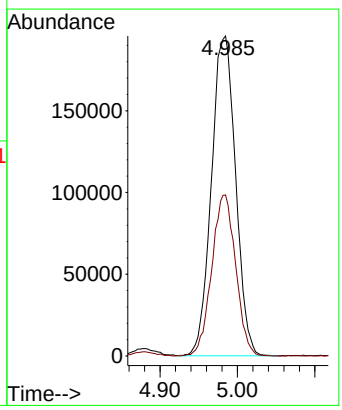


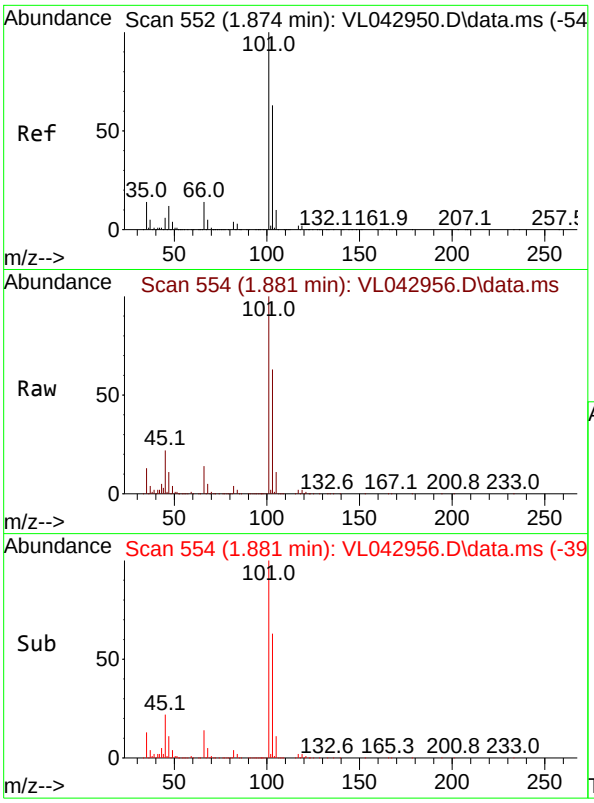


#10
Heptane
Concen: 13.327 ppbv
RT: 4.985 min Scan# 1513
Delta R.T. 0.016 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 424500

Ion	Ratio	Lower	Upper
43	100		
57	49.8	38.6	57.8



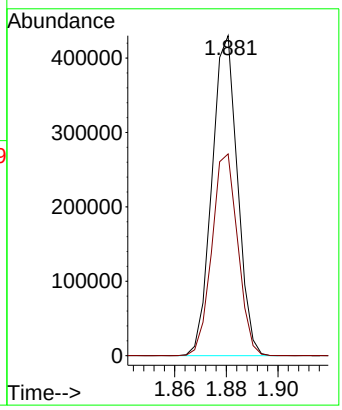


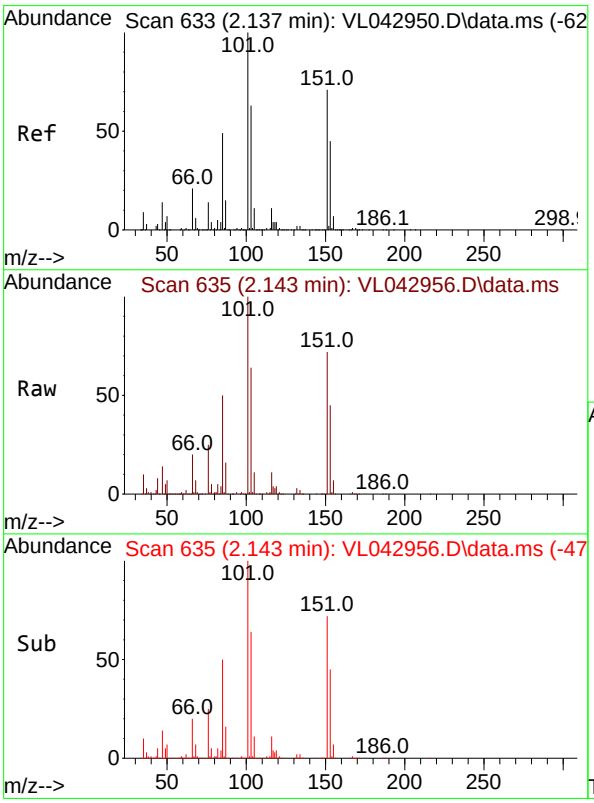
#11
Trichlorofluoromethane
Concen: 13.991 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:101 Resp: 295479

Ion	Ratio	Lower	Upper
101	100		
103	63.0	50.1	75.1

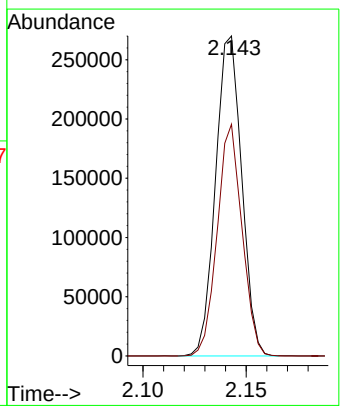


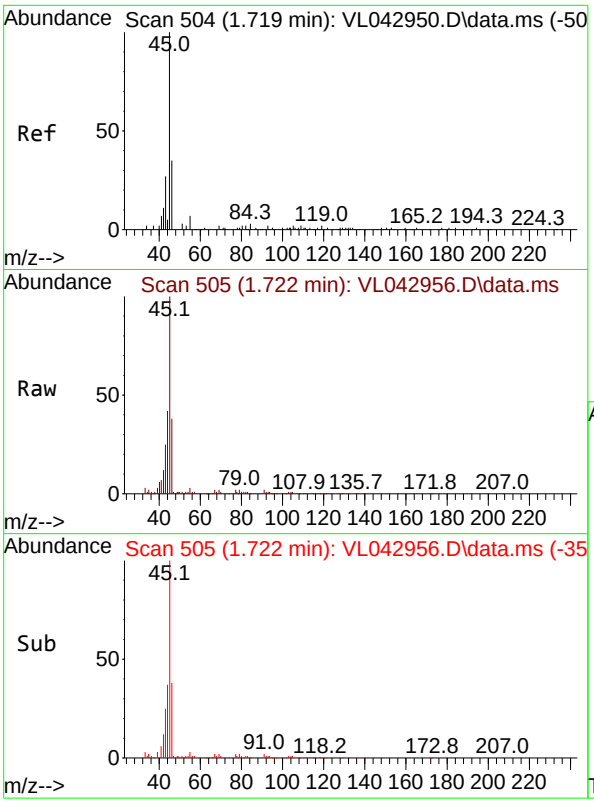


#12
1,1,2-Trichlorotrifluoroethane
Concen: 13.894 ppbv
RT: 2.143 min Scan# 635
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:101 Resp: 237615

Ion	Ratio	Lower	Upper
101	100		
151	68.7	55.7	83.5



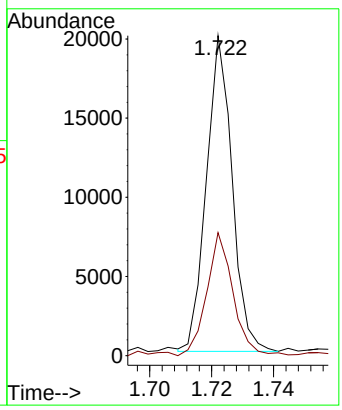


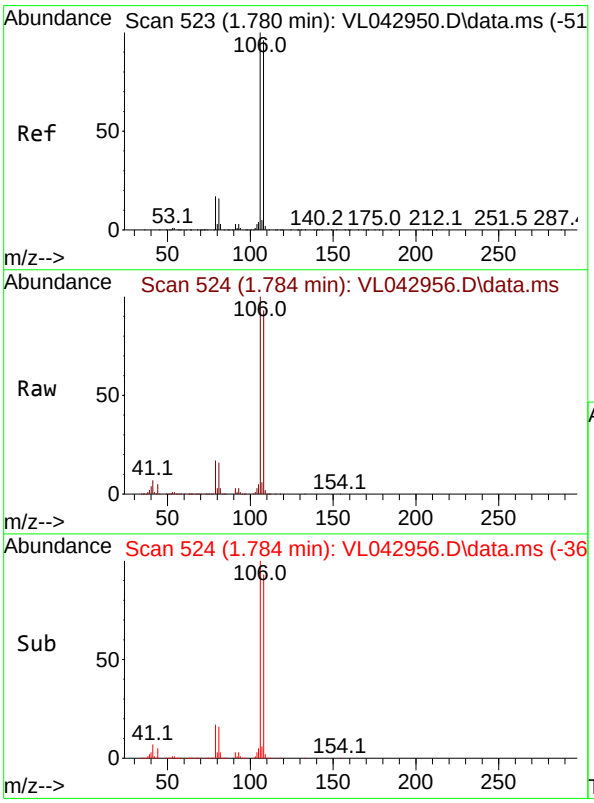
#13
Ethanol
Concen: 10.105 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 11502

Ion	Ratio	Lower	Upper
45	100		
46	39.5	16.2	64.6

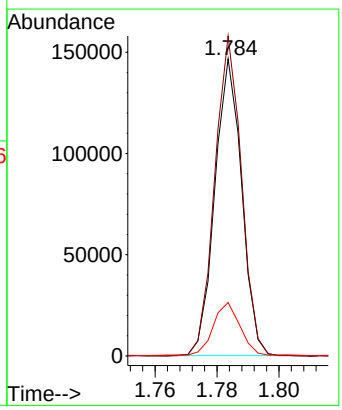


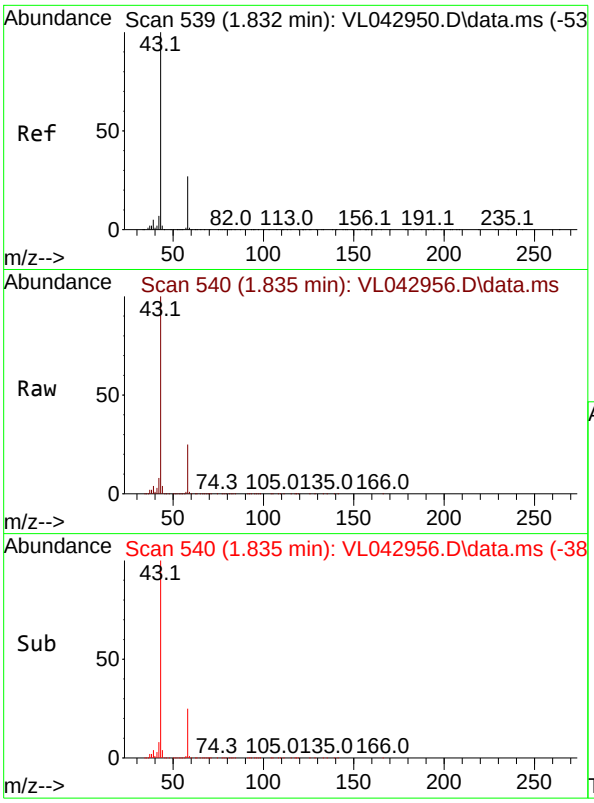


#14
Bromoethene
Concen: 13.668 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:108 Resp: 88375

Ion	Ratio	Lower	Upper
108	100		
106	107.4	86.0	129.0
79	18.1	14.2	21.2



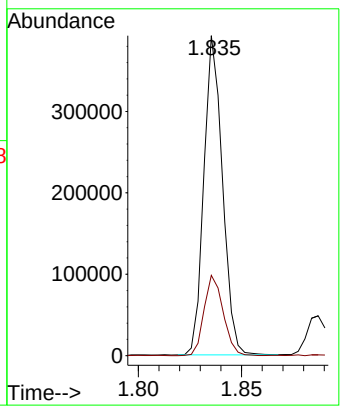


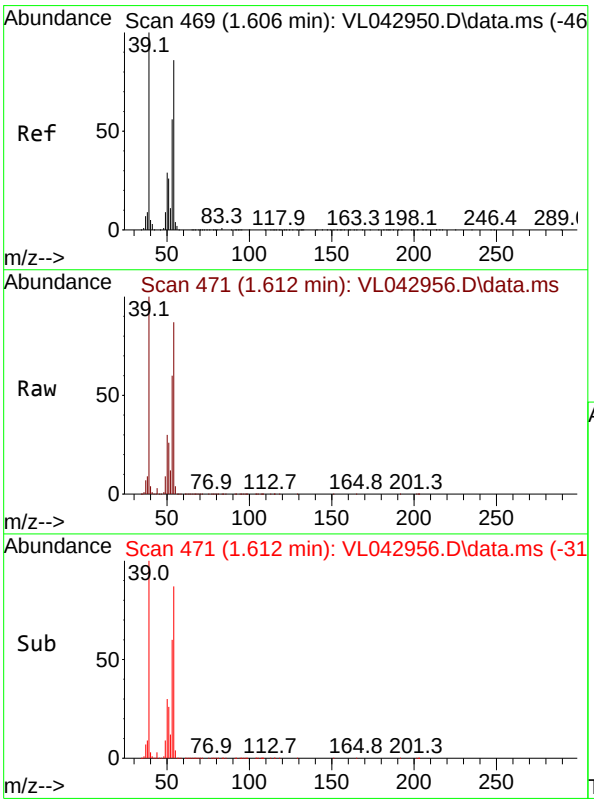
#15
Acetone
Concen: 11.545 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 244861

Ion	Ratio	Lower	Upper
43	100		
58	26.2	22.3	33.5

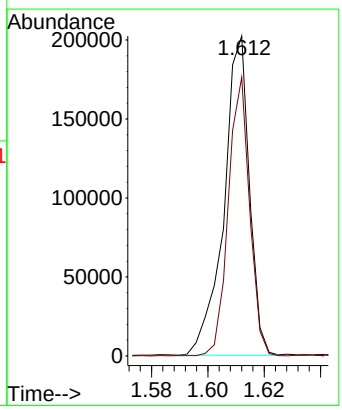


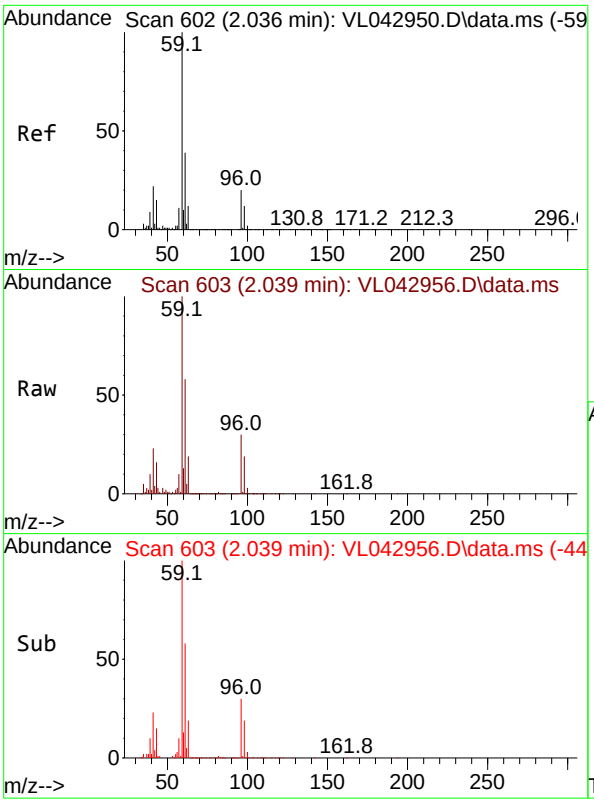


#16
1,3-Butadiene
Concen: 12.661 ppbv
RT: 1.612 min Scan# 471
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 39 Resp: 126670

Ion	Ratio	Lower	Upper
39	100		
54	73.2	60.8	91.2



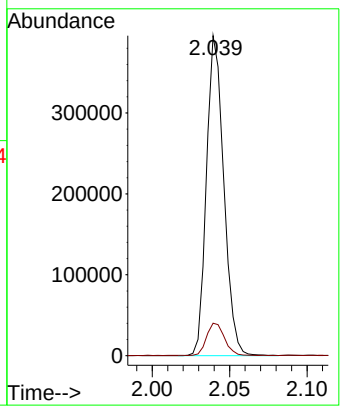


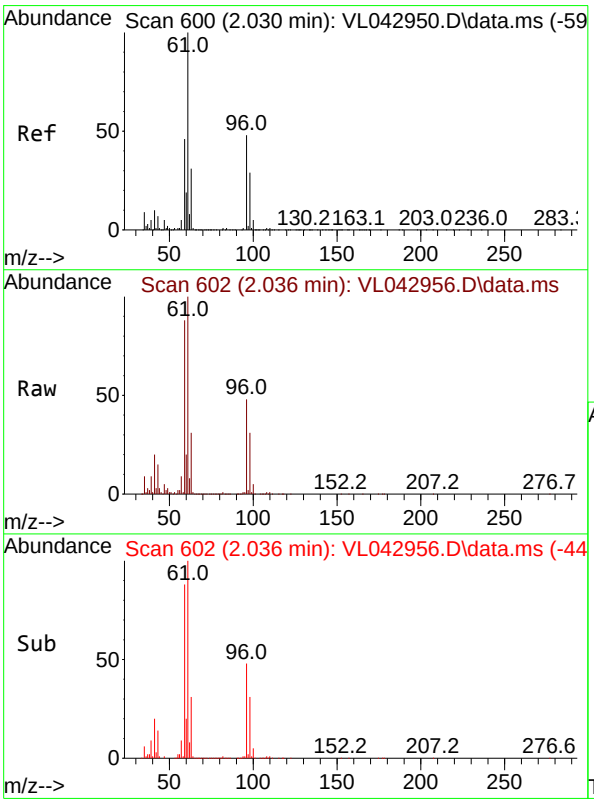
#17
tert-Butyl alcohol
Concen: 13.255 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 59 Resp: 308347

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.6	12.8

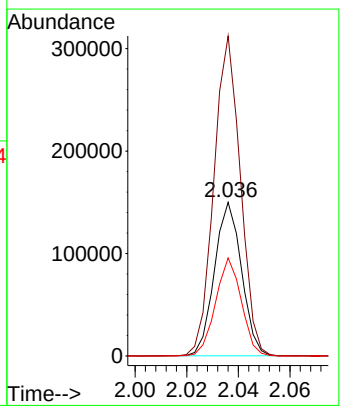


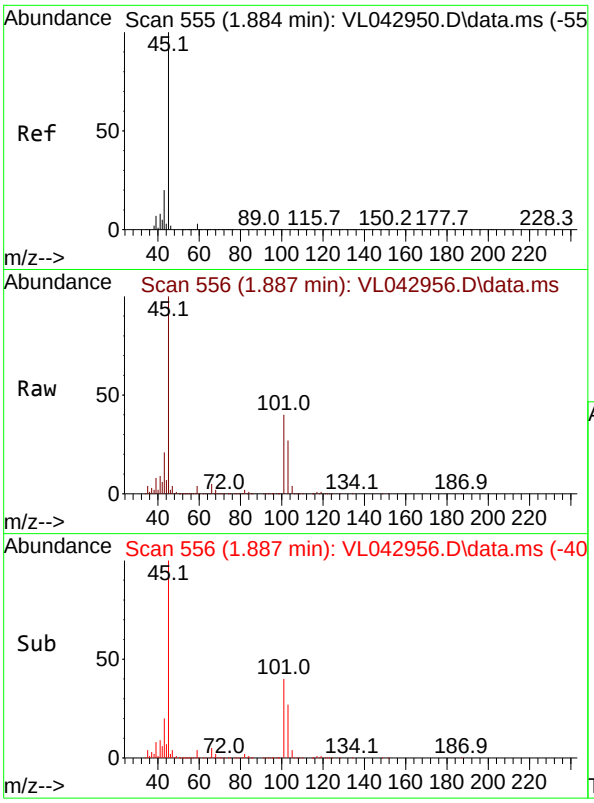


#18
1,1-Dichloroethene
Concen: 13.796 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 96 Resp: 109211

Ion	Ratio	Lower	Upper
96	100		
61	208.5	166.2	249.4
98	63.9	48.6	73.0



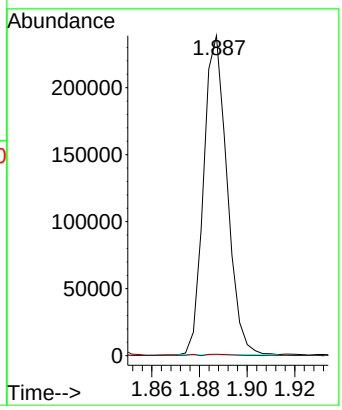


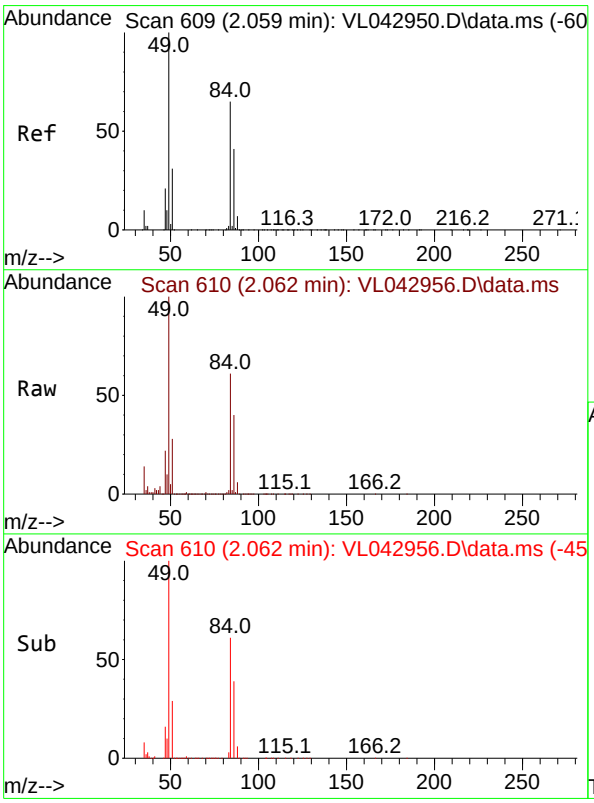
#19
Isopropyl Alcohol
Concen: 12.780 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 162952

Ion	Ratio	Lower	Upper
45	100		
58	39.0	31.0	46.6

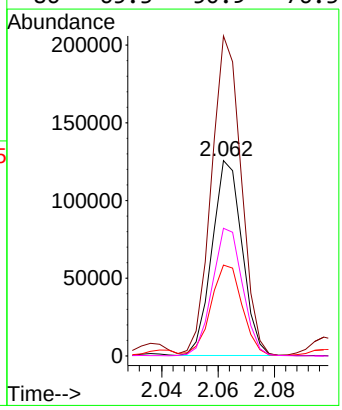


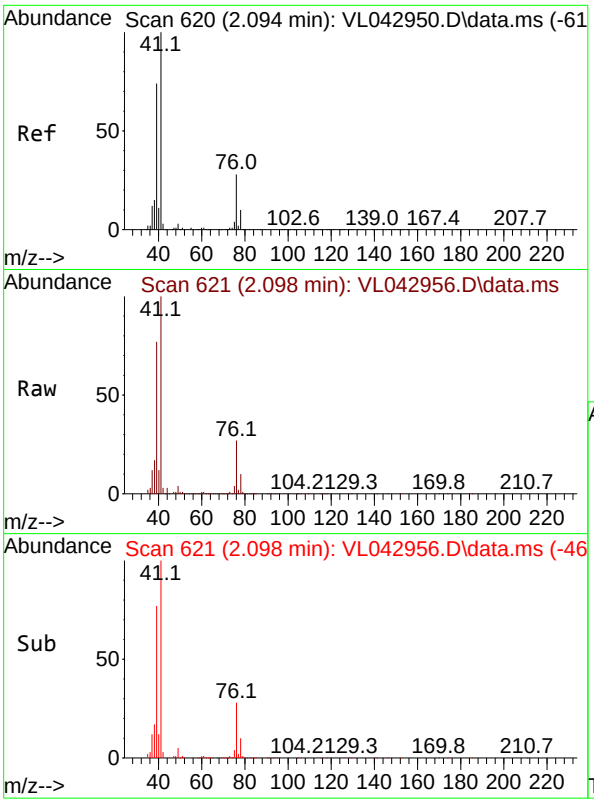


#20
Methylene Chloride
Concen: 14.996 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 84 Resp: 92708

Ion	Ratio	Lower	Upper
84	100		
49	163.6	124.1	186.1
51	46.4	39.8	59.8
86	65.3	50.9	76.3



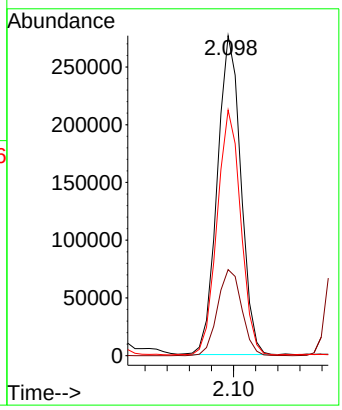


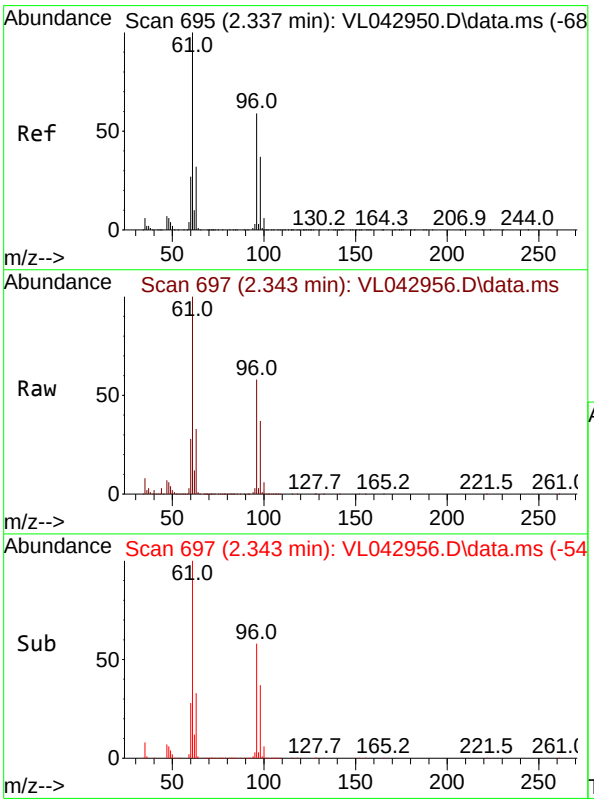
#21
Allyl Chloride
Concen: 13.848 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 204552

Ion	Ratio	Lower	Upper
41	100		
76	27.8	22.3	33.5
39	76.9	61.3	91.9

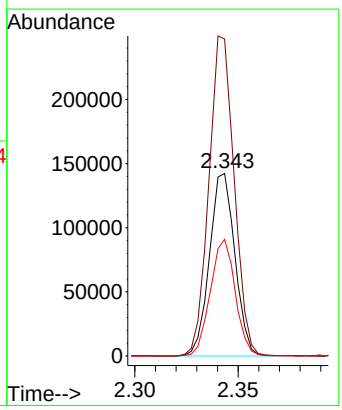


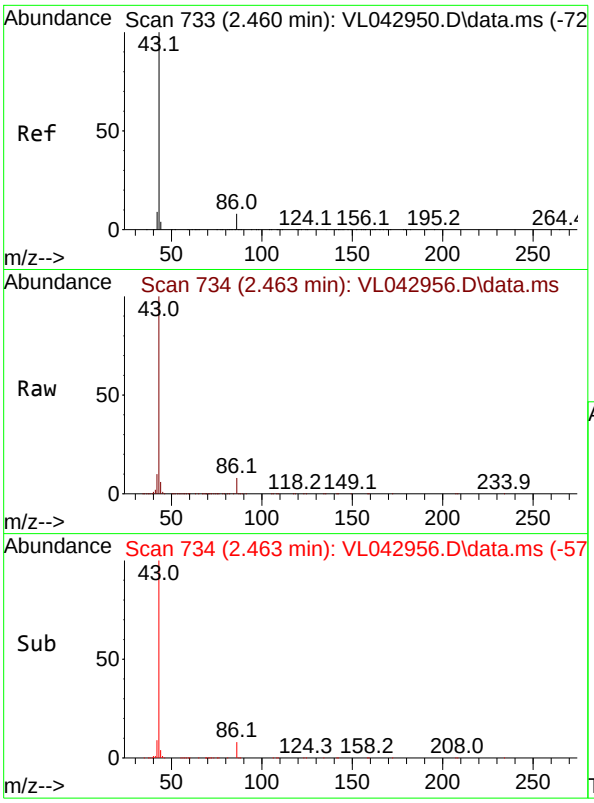


#22
trans-1,2-Dichloroethene
Concen: 13.542 ppbv
RT: 2.343 min Scan# 697
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 96 Resp: 121815

Ion	Ratio	Lower	Upper
96	100		
61	173.4	136.5	204.7
98	63.8	50.6	76.0



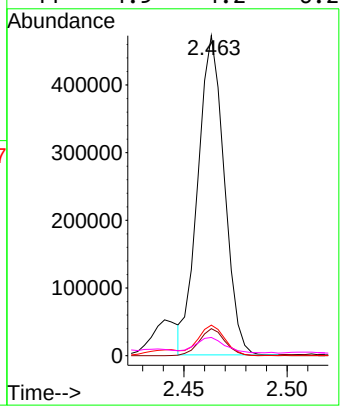


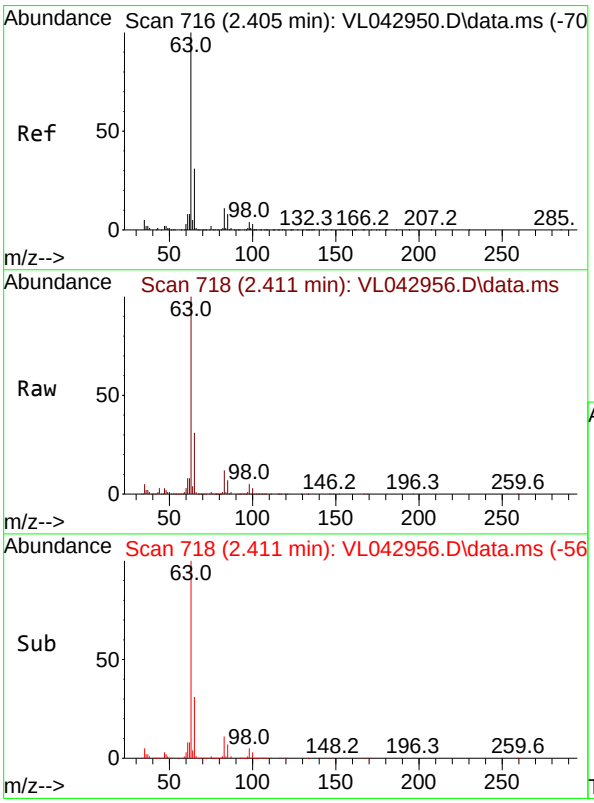
#23
Vinyl Acetate
Concen: 13.837 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 419251

Ion	Ratio	Lower	Upper
43	100		
86	8.5	6.2	9.2
42	9.5	7.4	11.0
44	4.9	4.2	6.2

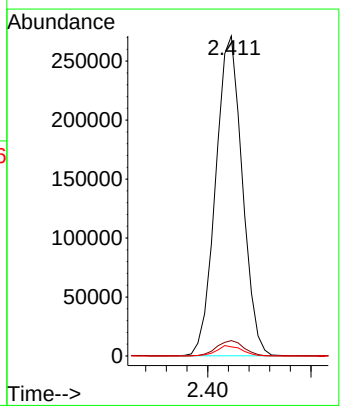


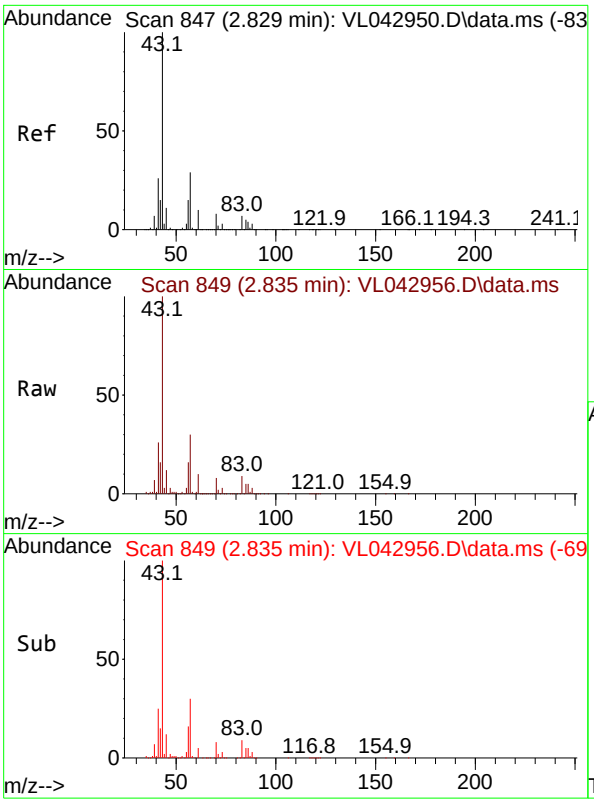


#24
1,1-Dichloroethane
Concen: 13.789 ppbv
RT: 2.411 min Scan# 718
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 63 Resp: 243229

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.2	6.6
100	2.9	1.4	4.0



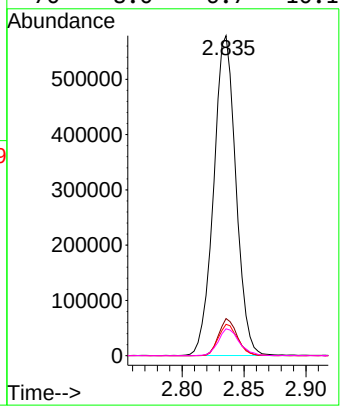


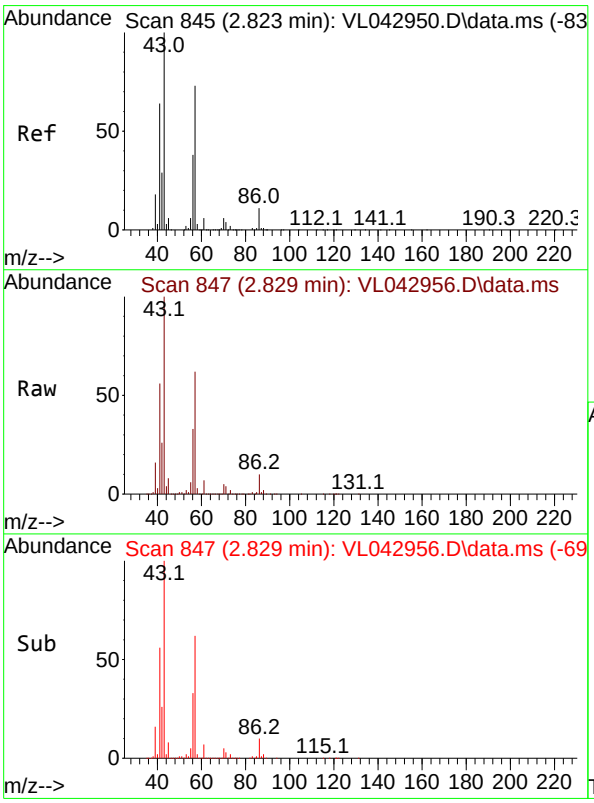
#25
Ethyl Acetate
Concen: 13.514 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 724418

Ion	Ratio	Lower	Upper
43	100		
45	9.7	7.7	11.5
61	8.6	7.1	10.7
70	8.0	6.7	10.1

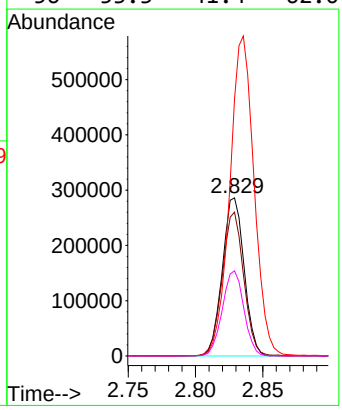


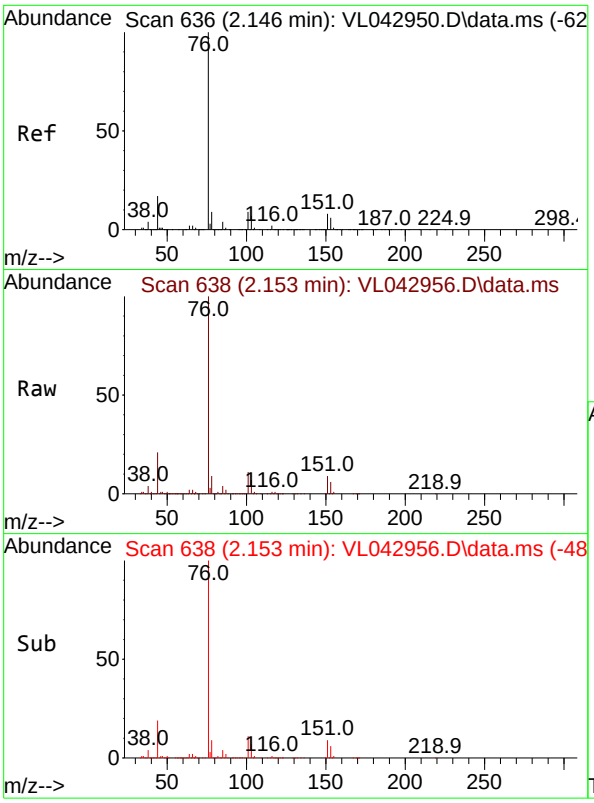


#26
Hexane
Concen: 13.166 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 57 Resp: 321710

Ion	Ratio	Lower	Upper
57	100		
41	90.2	71.7	107.5
43	225.8	180.8	271.2
56	53.3	41.4	62.0



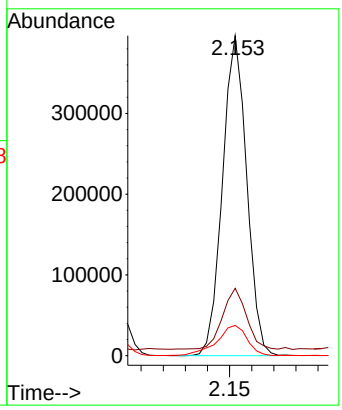


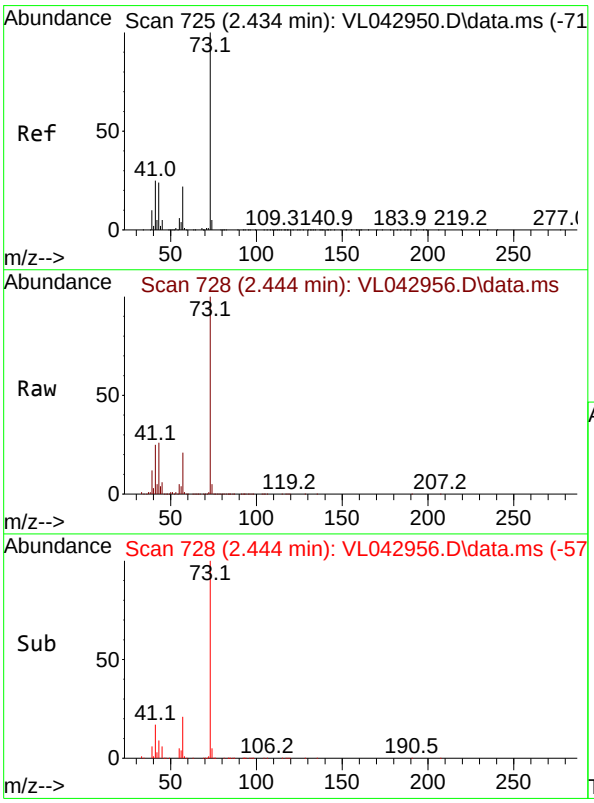
#27
Carbon Disulfide
Concen: 13.731 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 76 Resp: 300931

Ion	Ratio	Lower	Upper
76	100		
44	21.4	15.6	23.4
78	11.8	8.9	13.3

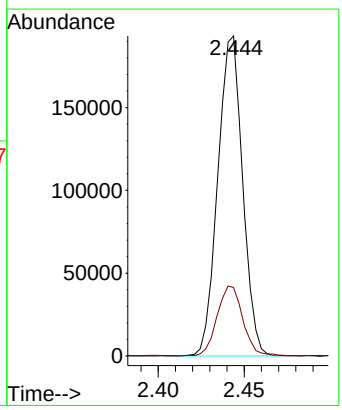


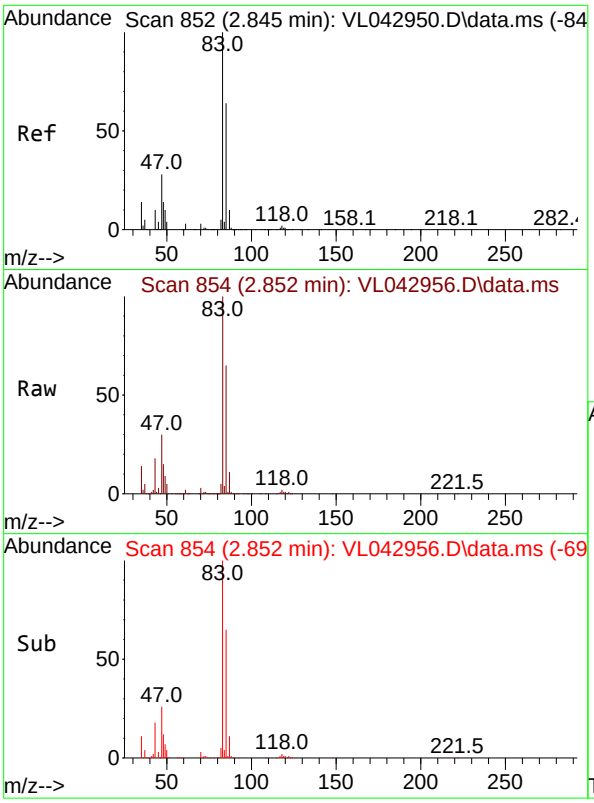


#28
Methyl tert-Butyl Ether
Concen: 15.267 ppbv
RT: 2.444 min Scan# 728
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 73 Resp: 193915

Ion	Ratio	Lower	Upper
73	100		
57	22.6	20.6	31.0



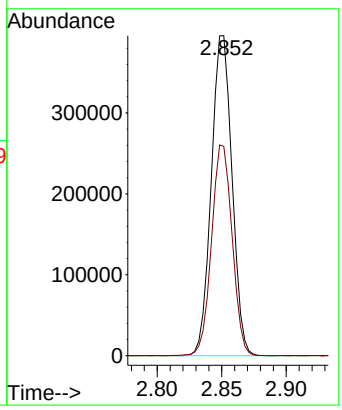


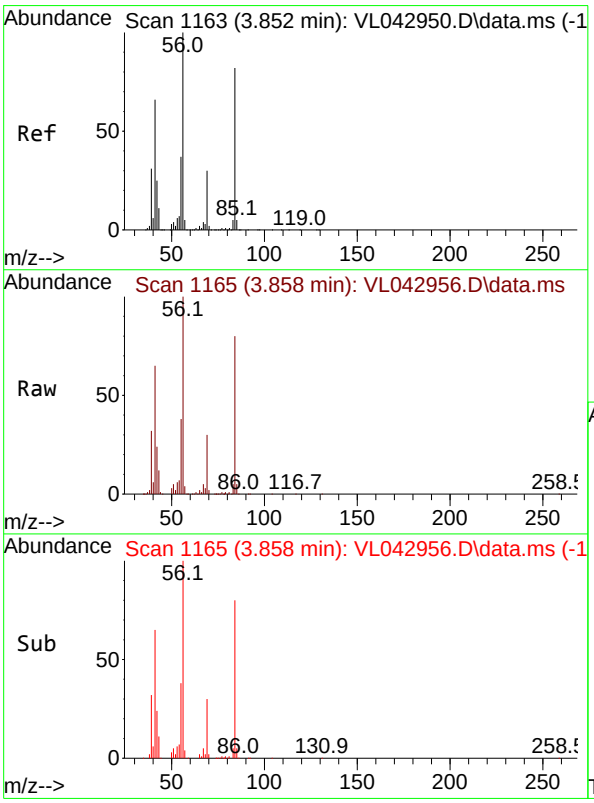
#29
Chloroform
Concen: 13.796 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 440772

Ion	Ratio	Lower	Upper
83	100		
85	65.4	51.2	76.8

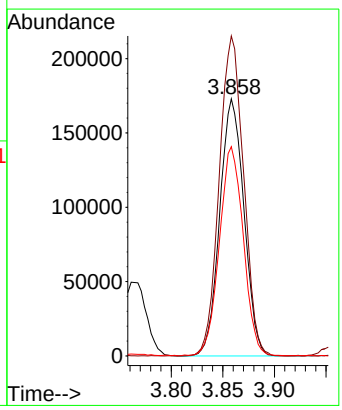


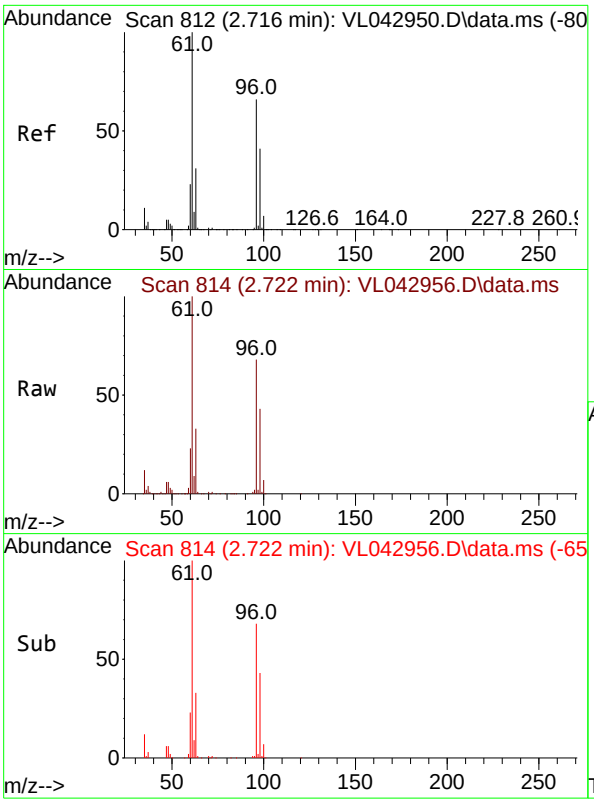


#30
Cyclohexane
Concen: 13.800 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 84 Resp: 281932

Ion	Ratio	Lower	Upper
84	100		
56	125.3	102.2	153.4
41	80.6	65.6	98.4



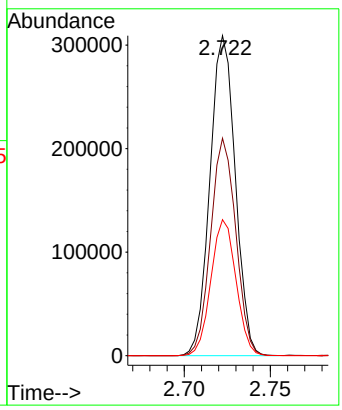


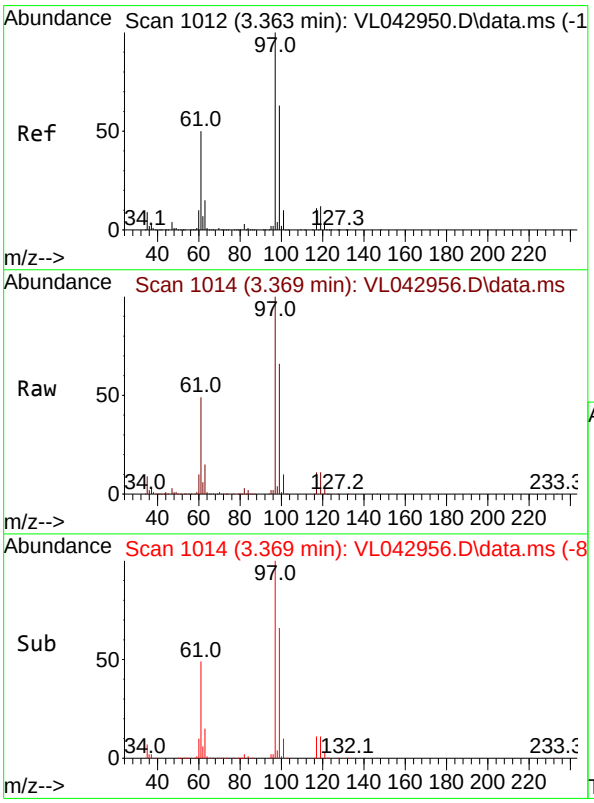
#31
cis-1,2-Dichloroethene
Concen: 13.869 ppbv
RT: 2.722 min Scan# 81
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 61 Resp: 317456

Ion	Ratio	Lower	Upper
61	100		
96	67.9	53.0	79.6
98	42.5	32.9	49.3

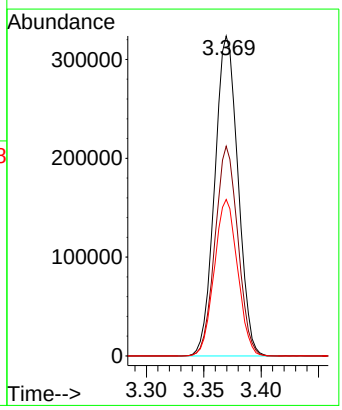


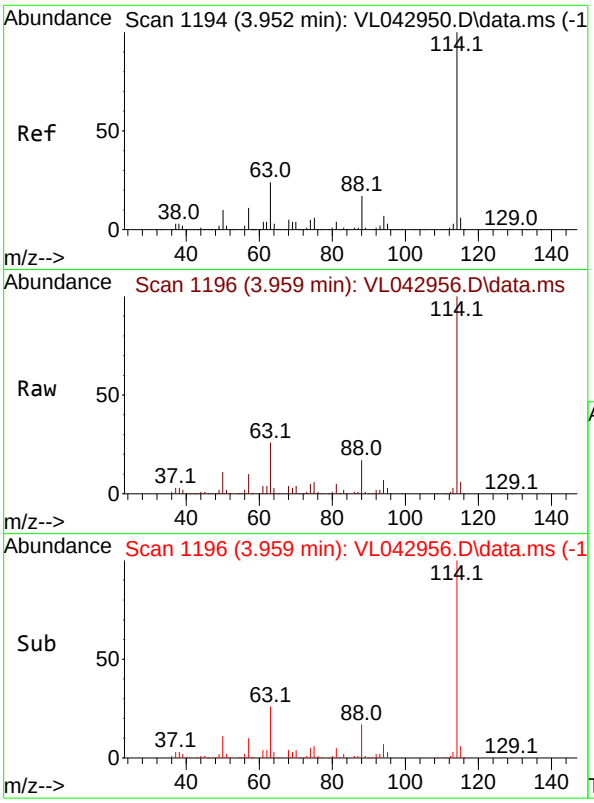


#32
1,1,1-Trichloroethane
Concen: 13.178 ppbv
RT: 3.369 min Scan# 1014
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 97 Resp: 456335

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.1	76.7
61	49.1	39.8	59.6



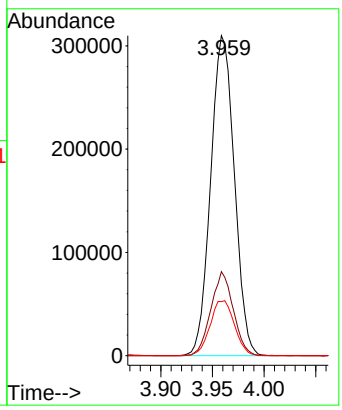


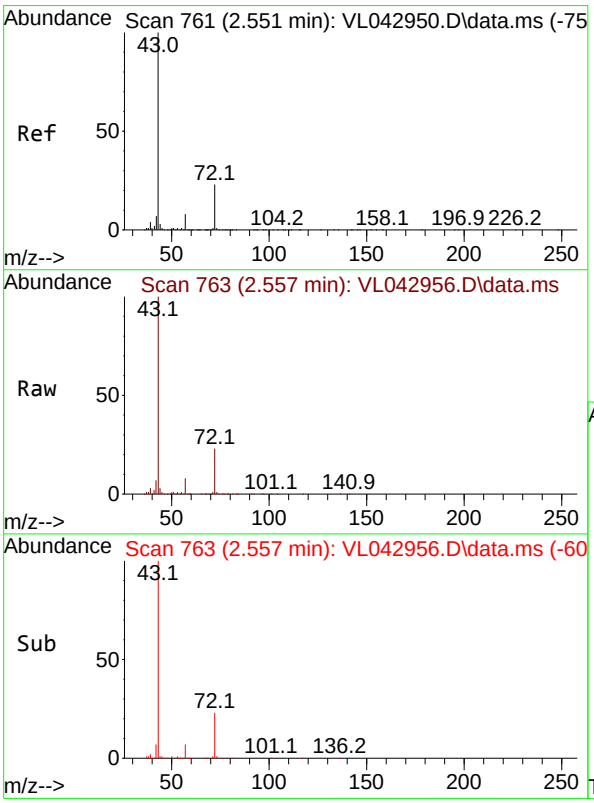
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:114 Resp: 494779

Ion	Ratio	Lower	Upper
114	100		
63	24.8	19.4	29.2
88	17.7	14.2	21.2

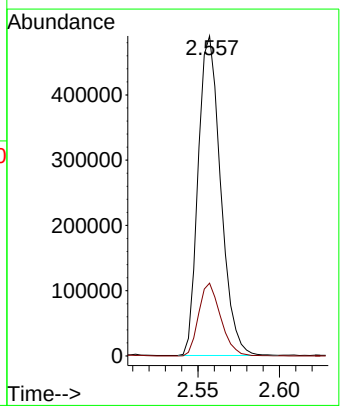


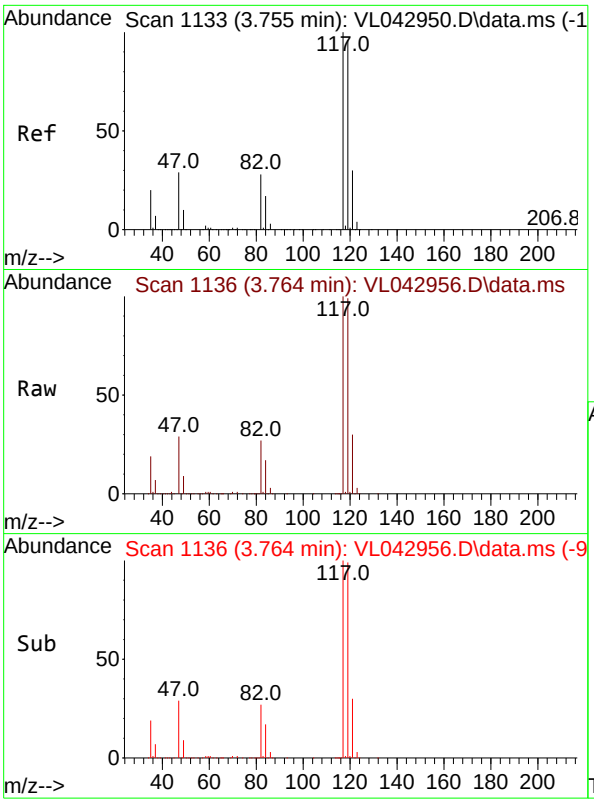


#34
2-Butanone
Concen: 13.551 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 469872

Ion	Ratio	Lower	Upper
43	100		
72	22.4	17.7	26.5



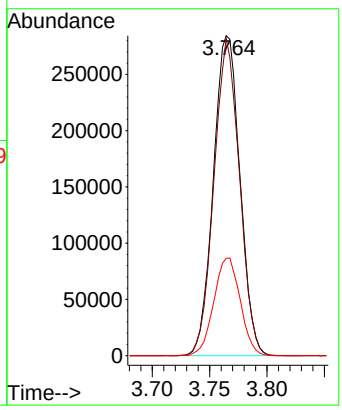


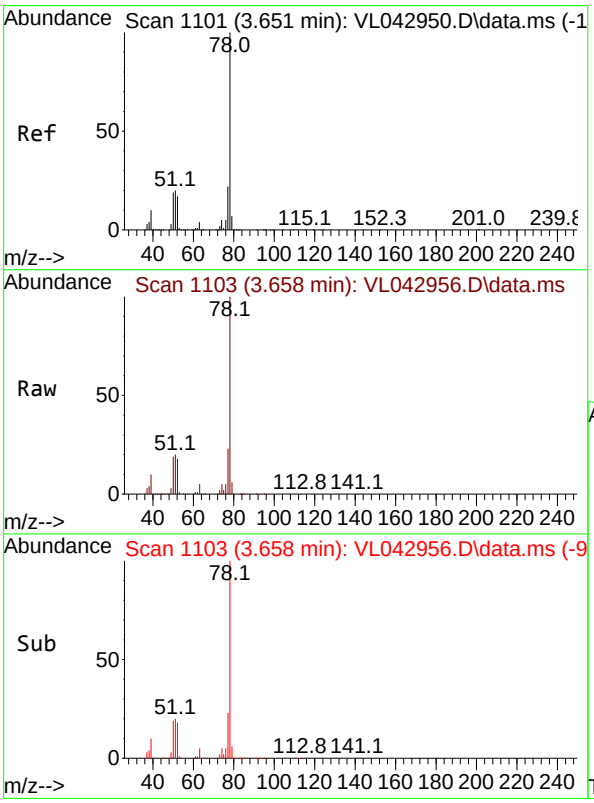
#35
Carbon Tetrachloride
Concen: 14.385 ppbv
RT: 3.764 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 457985

Ion	Ratio	Lower	Upper
117	100		
119	99.0	76.9	115.3
121	30.4	23.7	35.5

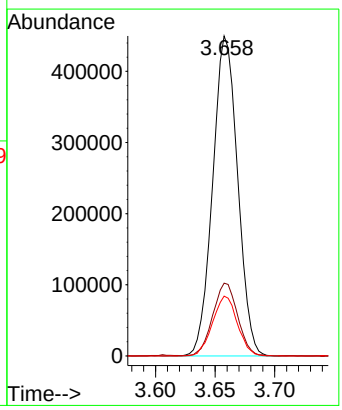


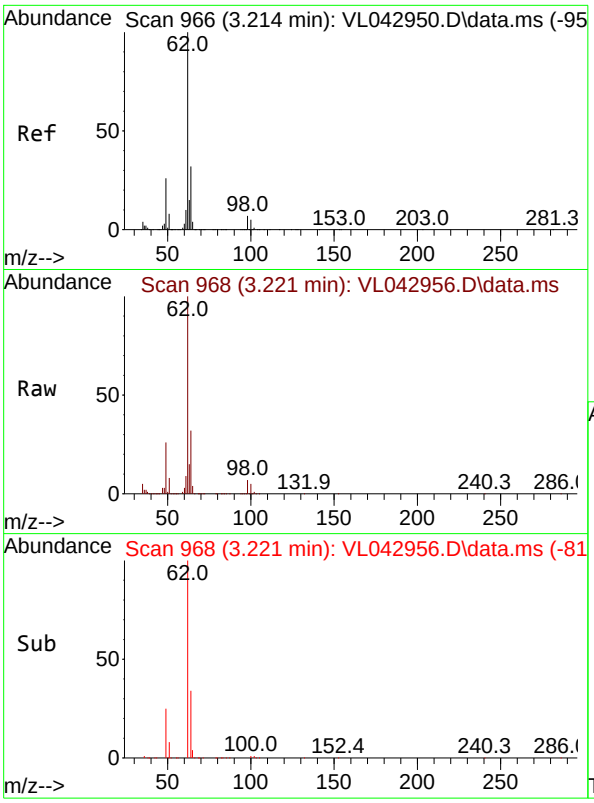


#36
Benzene
Concen: 14.080 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 78 Resp: 654205

Ion	Ratio	Lower	Upper
78	100		
77	22.7	17.8	26.6
50	18.7	15.0	22.4



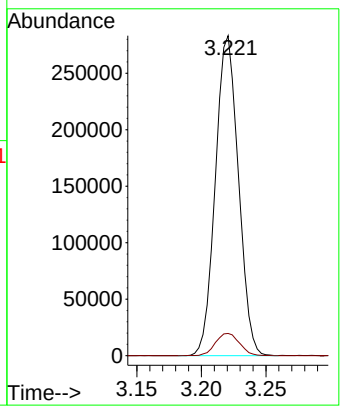


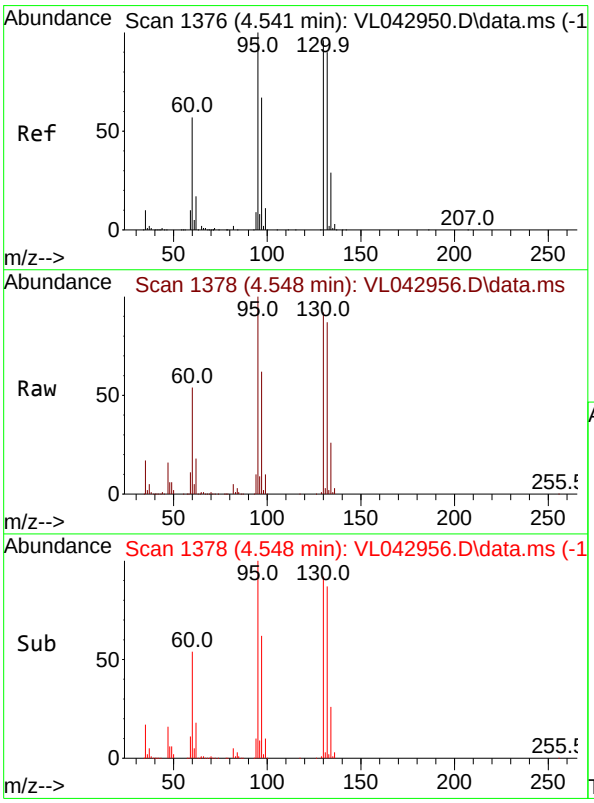
#37
1,2-Dichloroethane
Concen: 14.358 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 350841

Ion	Ratio	Lower	Upper
62	100		
98	7.3	5.9	8.9

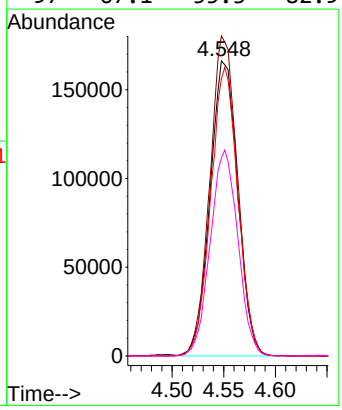


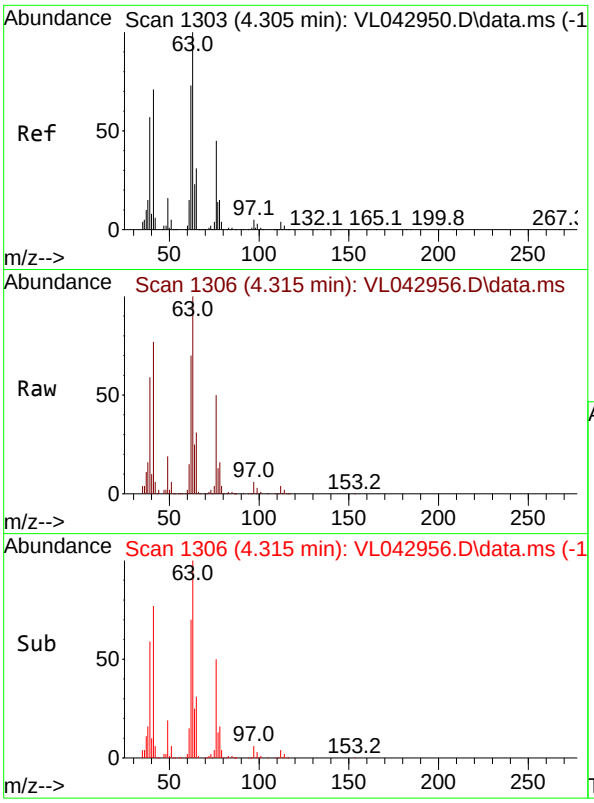


#38
Trichloroethene
Concen: 13.450 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:130 Resp: 310602

Ion	Ratio	Lower	Upper
130	100		
95	108.4	83.0	124.4
132	93.7	74.6	112.0
97	67.1	55.3	82.9



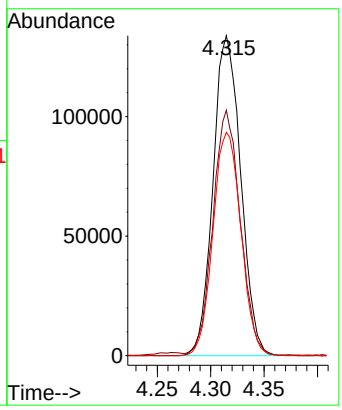


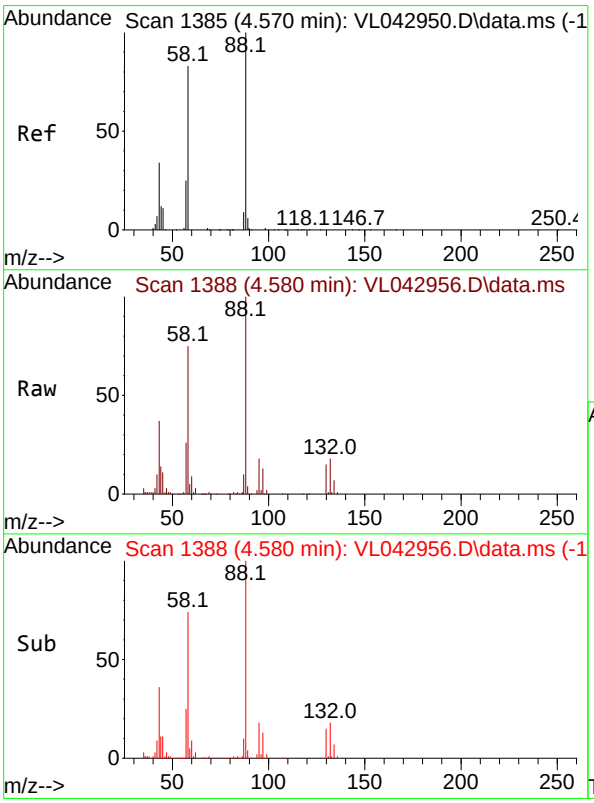
#39
1,2-Dichloropropane
Concen: 14.218 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 63 Resp: 241323

Ion	Ratio	Lower	Upper
63	100		
41	76.5	57.5	86.3
62	69.8	58.5	87.7

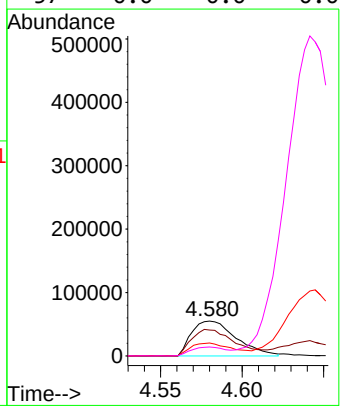


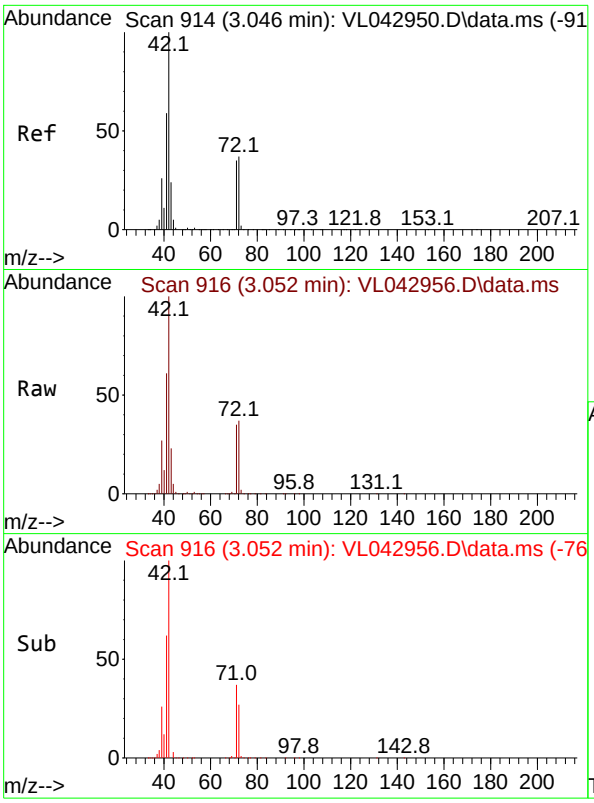


#40
1,4-Dioxane
Concen: 13.306 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 88 Resp: 104884

Ion	Ratio	Lower	Upper
88	100		
58	73.6	59.7	89.5
43	34.3	28.9	43.3
57	0.0	0.0	0.0



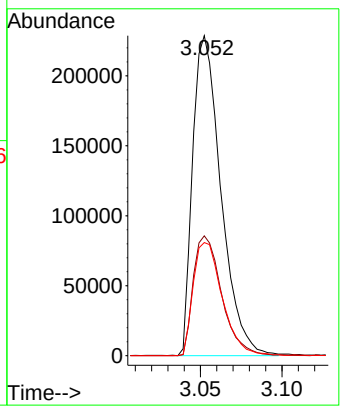


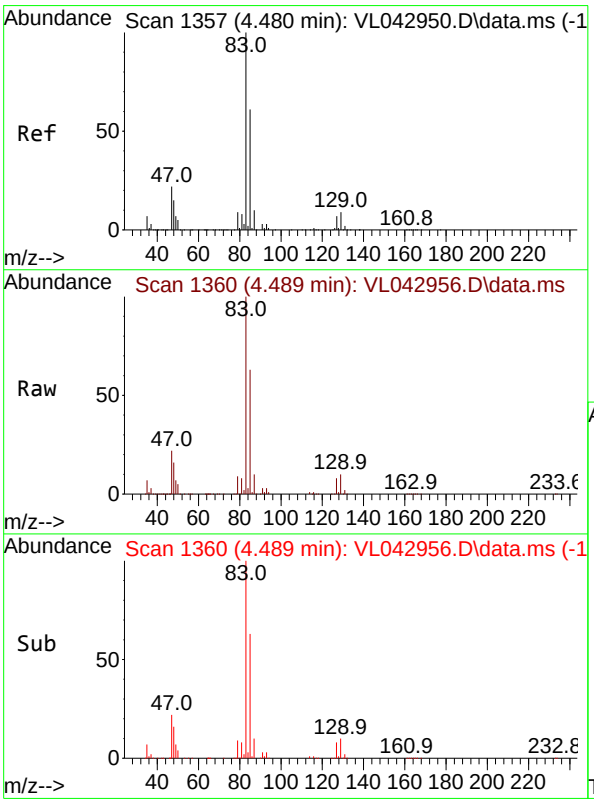
#41
Tetrahydrofuran
Concen: 13.855 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 42 Resp: 276157

Ion	Ratio	Lower	Upper
42	100		
72	37.7	30.0	45.0
71	36.6	28.8	43.2

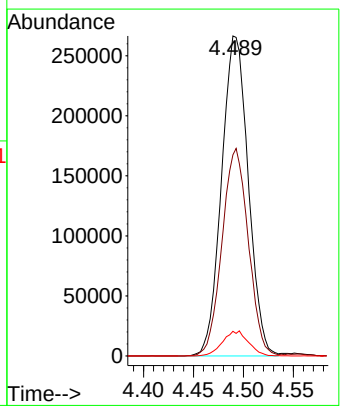


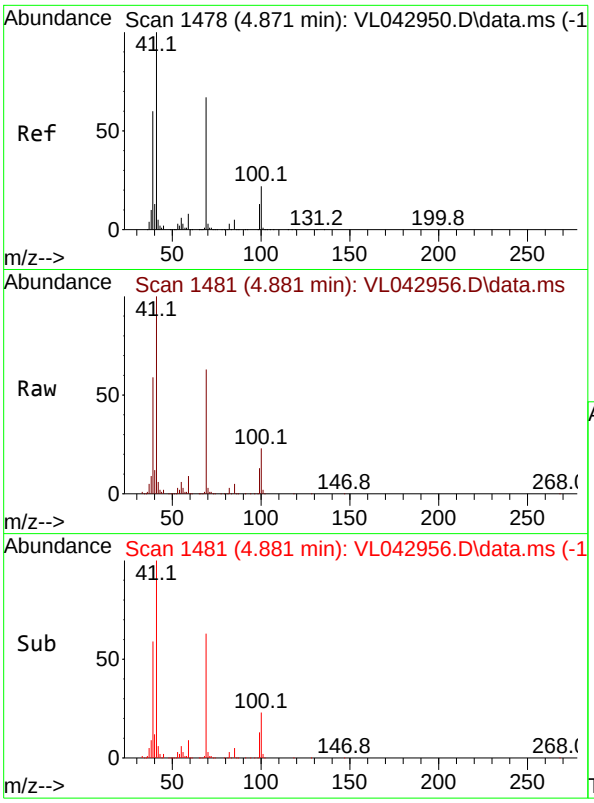


#42
Bromodichloromethane
Concen: 14.544 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 83 Resp: 495091

Ion	Ratio	Lower	Upper
83	100		
85	62.8	49.0	73.6
127	7.7	5.3	7.9



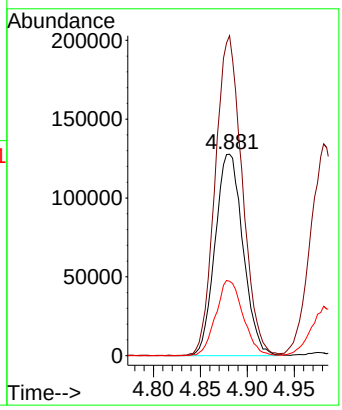


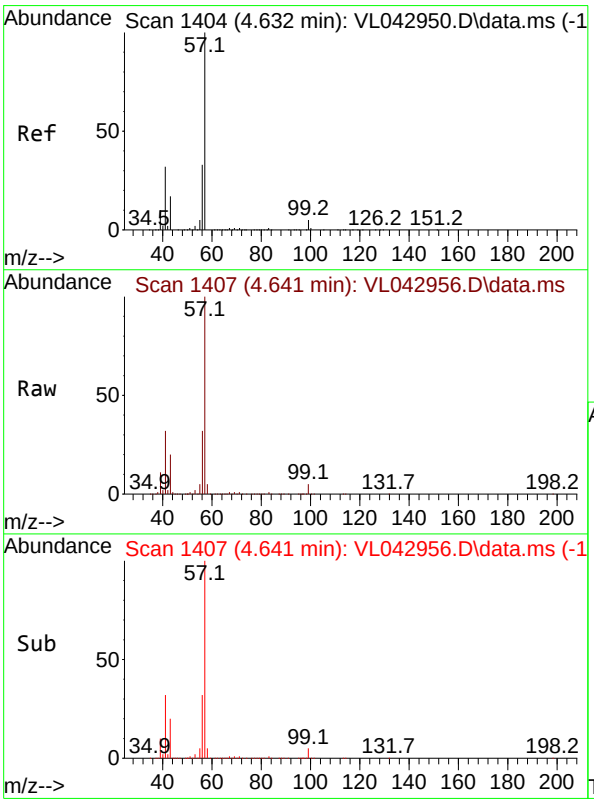
#43
Methyl Methacrylate
Concen: 13.979 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 69 Resp: 263659

Ion	Ratio	Lower	Upper
69	100		
41	153.6	124.5	186.7
100	36.4	29.0	43.6

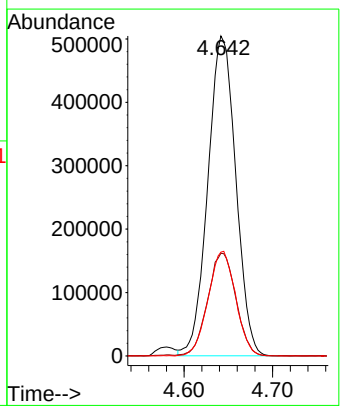


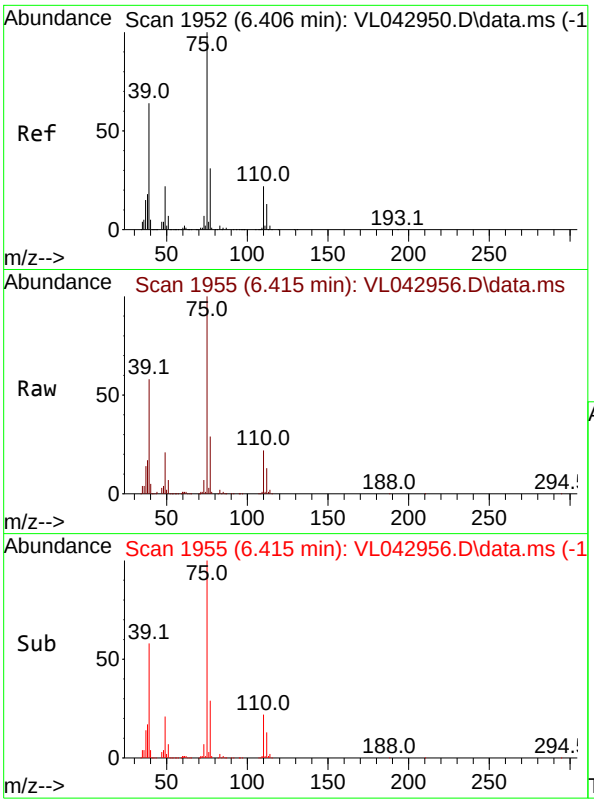


#44
2,2,4-Trimethylpentane
Concen: 13.791 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 57 Resp: 1107180

Ion	Ratio	Lower	Upper
57	100		
41	32.6	25.5	38.3
56	32.3	25.8	38.8



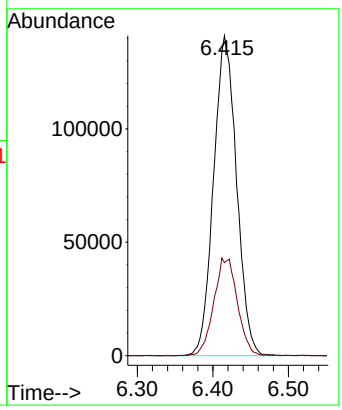


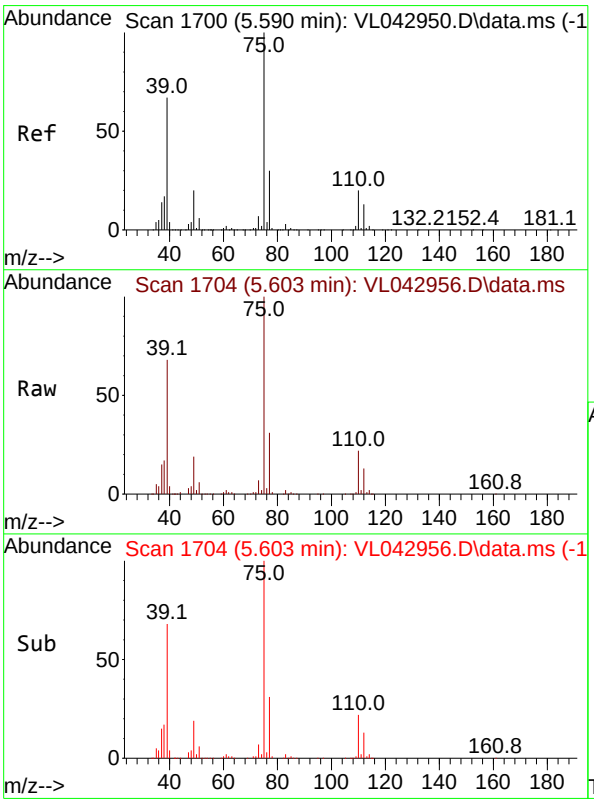
#45
t-1,3-Dichloropropene
Concen: 14.694 ppbv
RT: 6.415 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 75 Resp: 298019

Ion	Ratio	Lower	Upper
75	100		
77	29.0	25.0	37.4

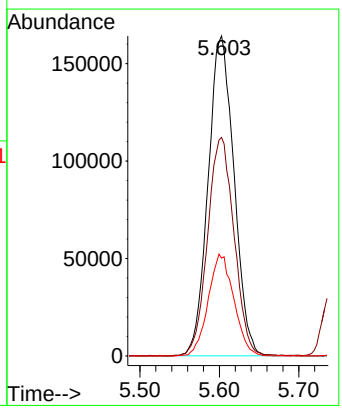


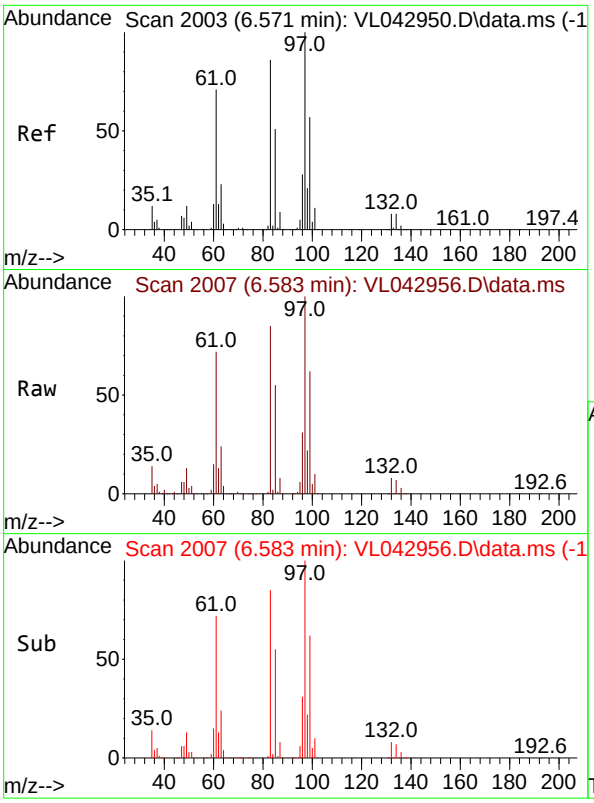


#46
cis-1,3-Dichloropropene
Concen: 14.389 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 75 Resp: 371770

Ion	Ratio	Lower	Upper
75	100		
39	68.2	53.8	80.6
77	30.5	23.6	35.4



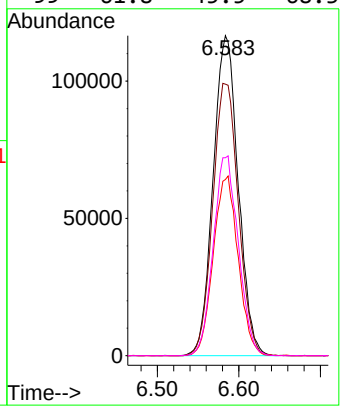


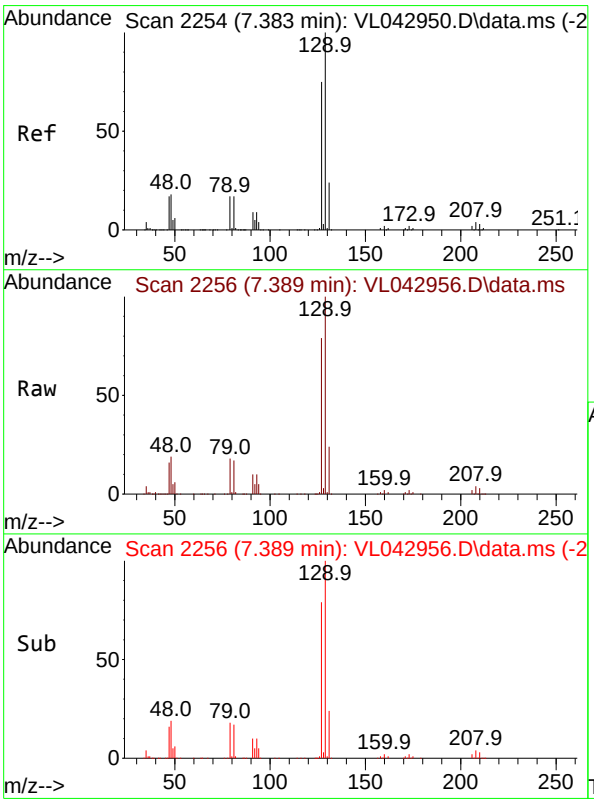
#47
1,1,2-Trichloroethane
Concen: 13.909 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 97 Resp: 249453

Ion	Ratio	Lower	Upper
97	100		
83	84.9	68.7	103.1
85	55.1	40.6	60.8
99	61.8	45.5	68.3

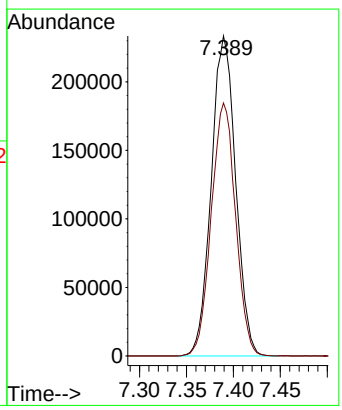


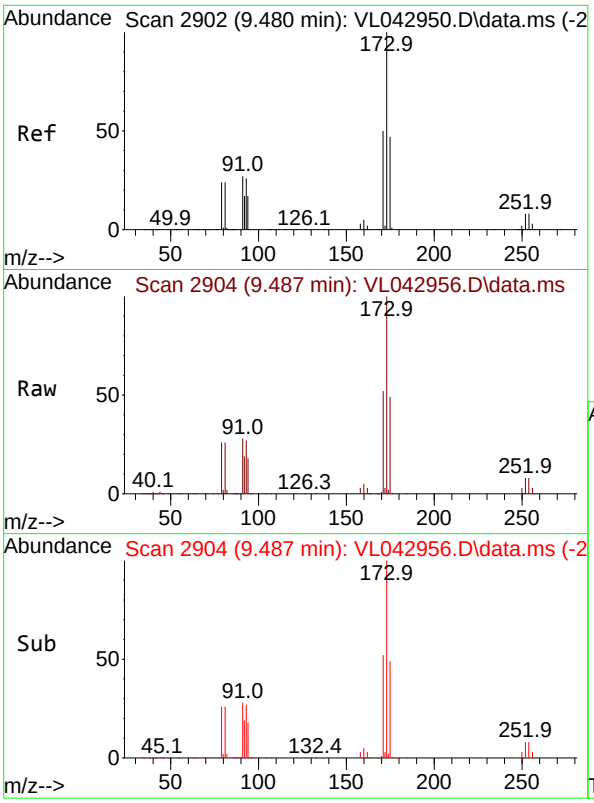


#48
Dibromochloromethane
Concen: 14.709 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:129 Resp: 421755

Ion	Ratio	Lower	Upper
129	100		
127	78.7	39.1	117.2



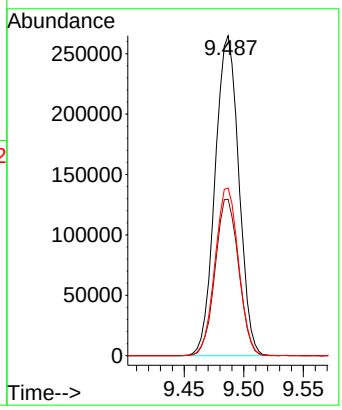


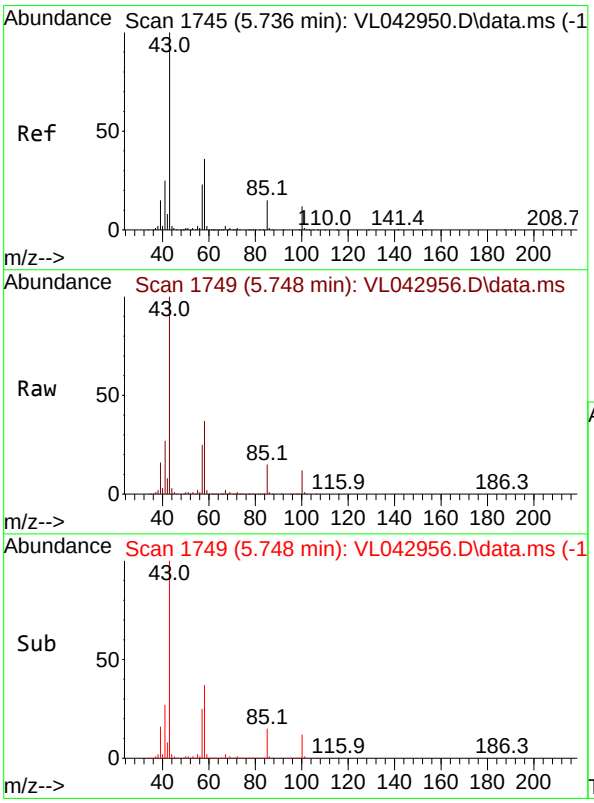
#49
Bromoform
Concen: 14.719 ppbv
RT: 9.487 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:173 Resp: 367120

Ion	Ratio	Lower	Upper
173	100		
175	48.6	37.9	56.9
171	52.0	41.1	61.7

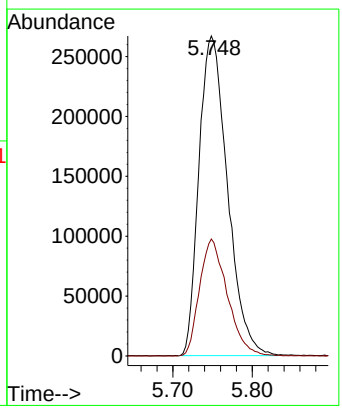


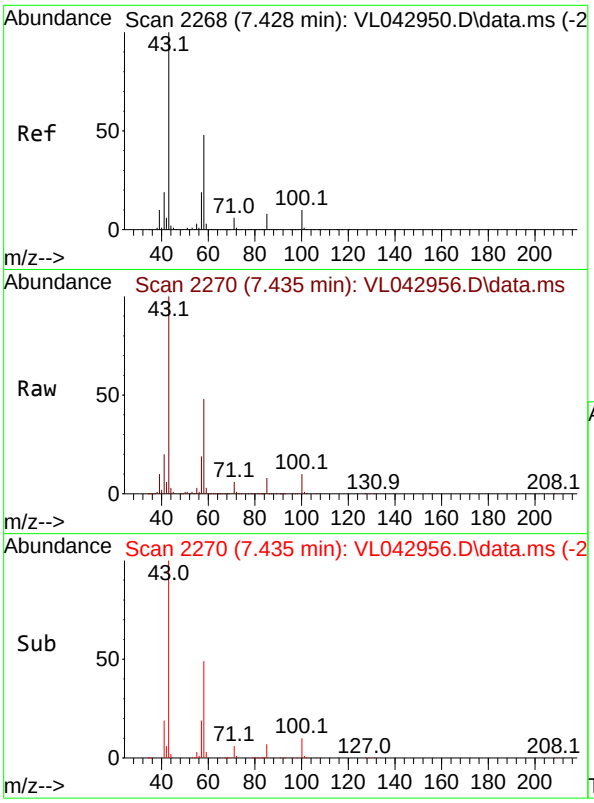


#50
4-Methyl-2-Pentanone
Concen: 14.293 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 43 Resp: 666049

Ion	Ratio	Lower	Upper
43	100		
58	35.7	28.4	42.6



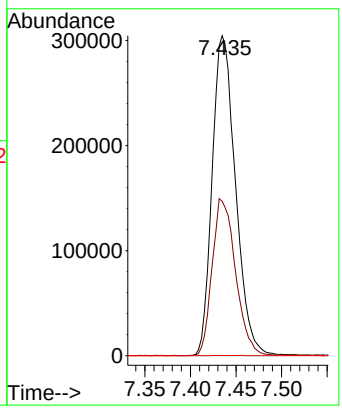


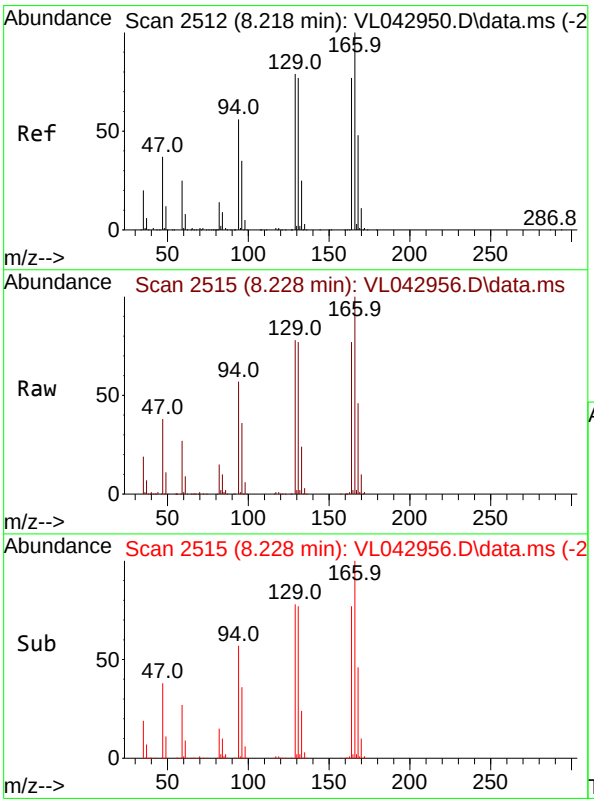
#51
2-Hexanone
Concen: 14.620 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 541611

Ion	Ratio	Lower	Upper
43	100		
58	49.4	39.7	59.5
98	0.1	0.1	0.1

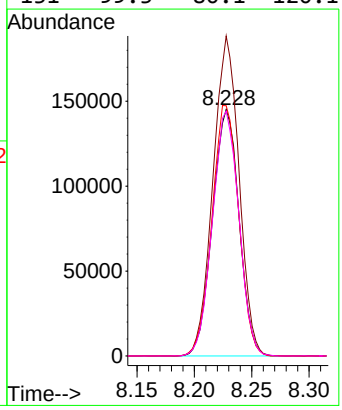


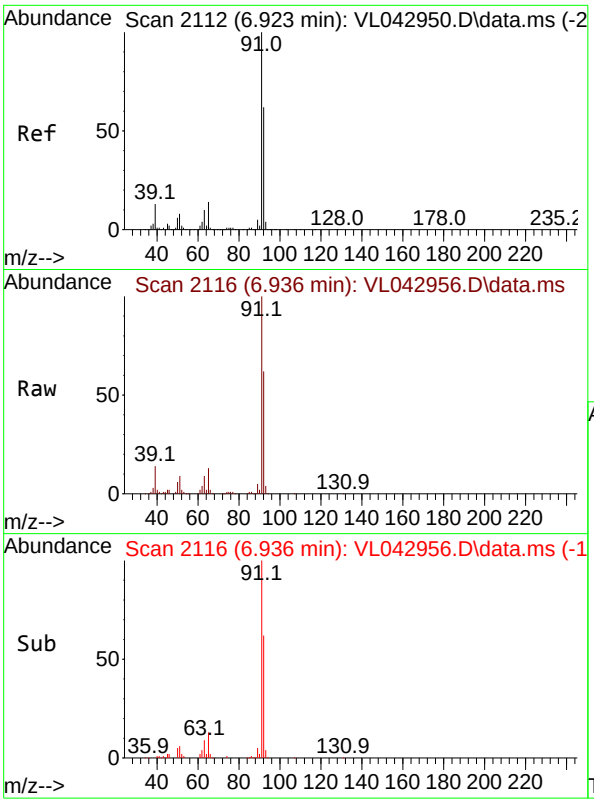


#52
Tetrachloroethene
Concen: 13.015 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:164 Resp: 233980

Ion	Ratio	Lower	Upper
164	100		
166	129.8	103.5	155.3
129	101.4	82.2	123.4
131	99.3	80.1	120.1



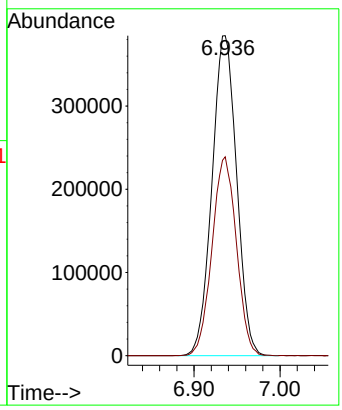


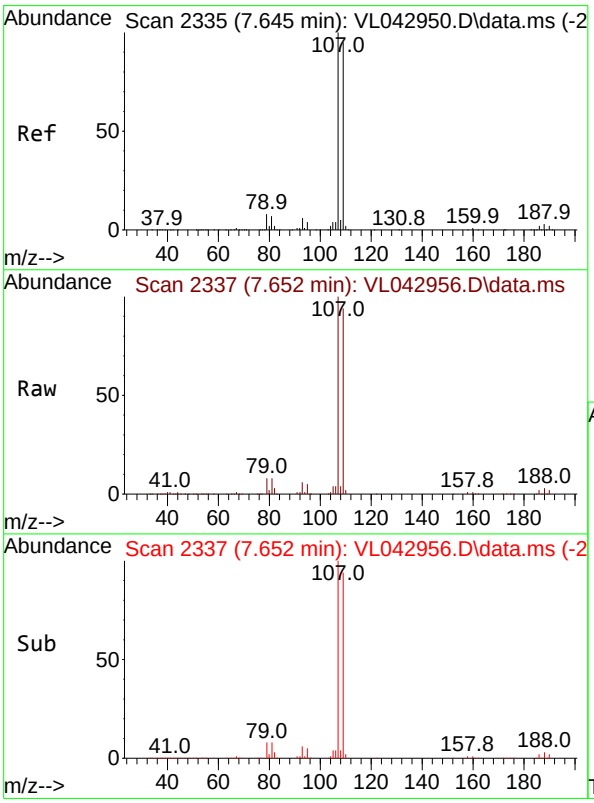
#53
Toluene
Concen: 13.915 ppbv
RT: 6.936 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 765216

Ion	Ratio	Lower	Upper
91	100		
92	61.5	48.2	72.2

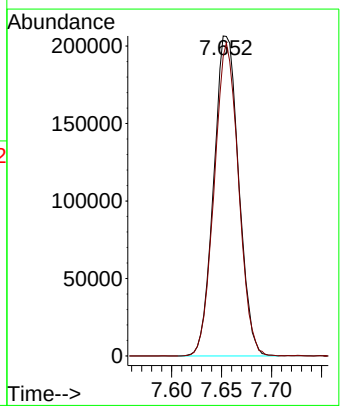


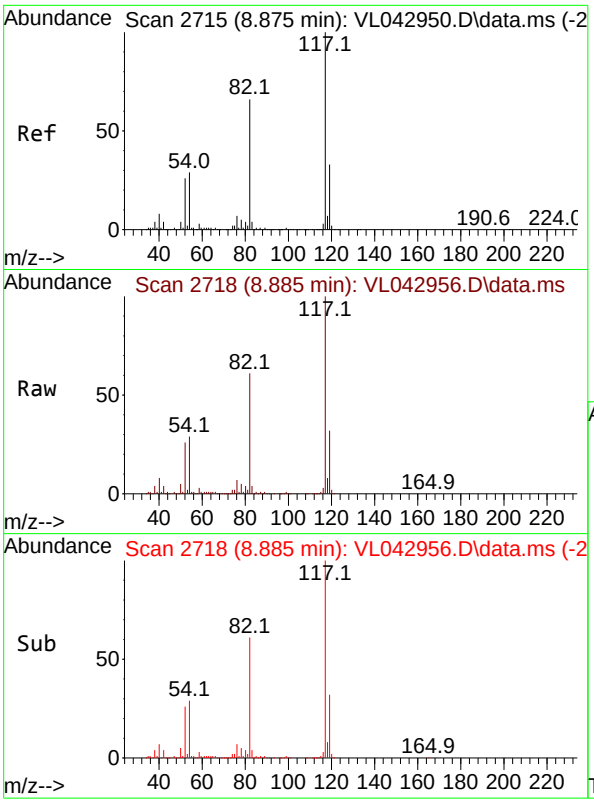


#54
1,2-Dibromoethane
Concen: 14.261 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:107 Resp: 359750

Ion	Ratio	Lower	Upper
107	100		
109	93.6	75.8	113.8



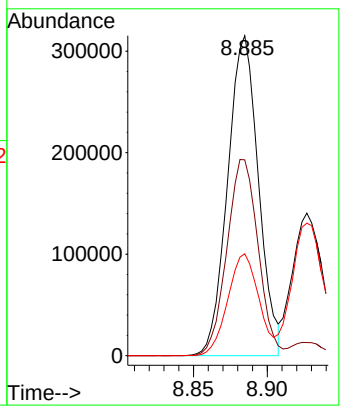


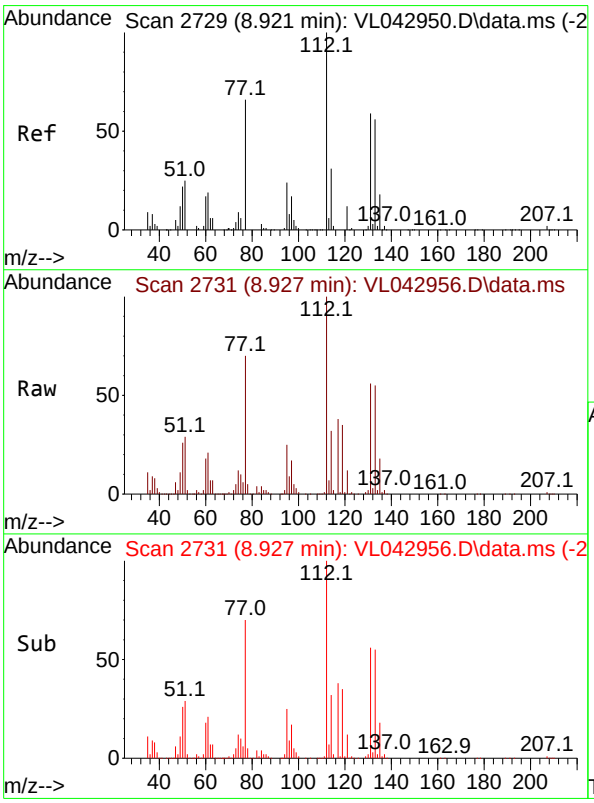
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 458256

Ion	Ratio	Lower	Upper
117	100		
82	66.3	52.8	79.2
119	32.0	26.5	39.7

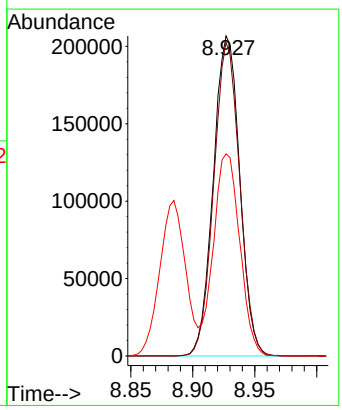


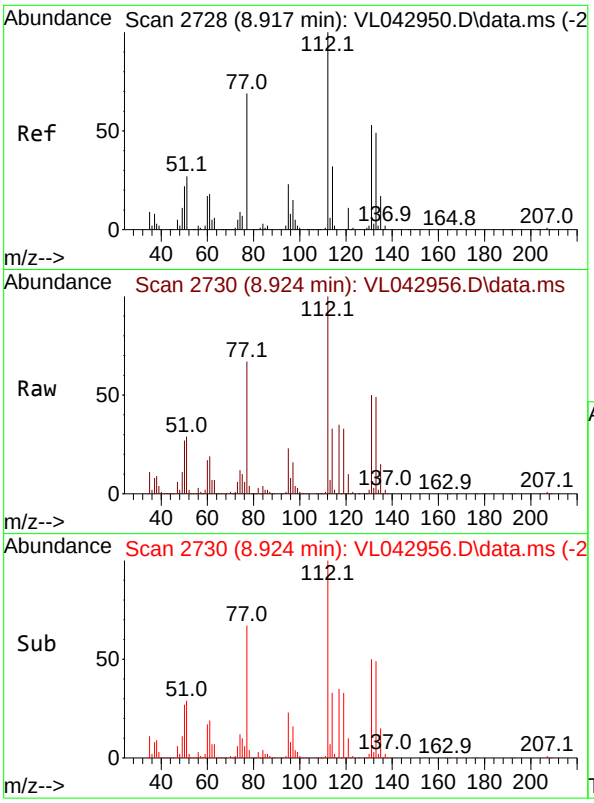


#56
1,1,1,2-Tetrachloroethane
Concen: 13.994 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:131 Resp: 306952

Ion	Ratio	Lower	Upper
131	100		
133	96.4	76.6	114.8
119	63.3	49.9	74.9



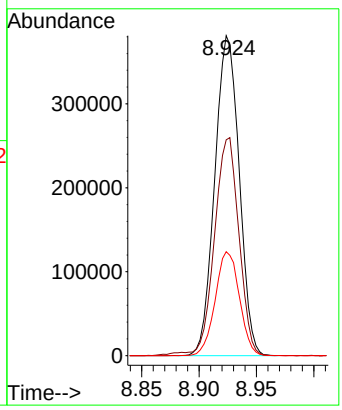


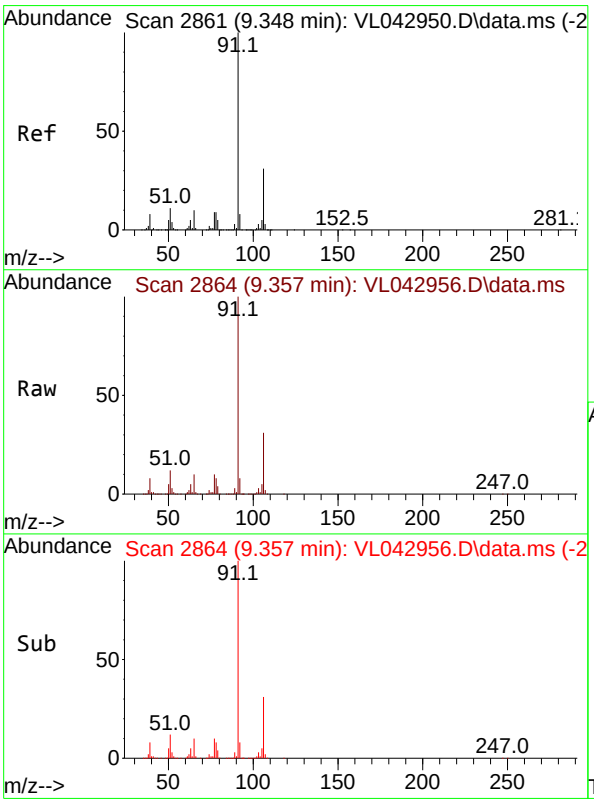
#57
Chlorobenzene
Concen: 13.507 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:112 Resp: 565065

Ion	Ratio	Lower	Upper
112	100		
77	67.4	55.7	83.5
114	32.5	28.6	35.0

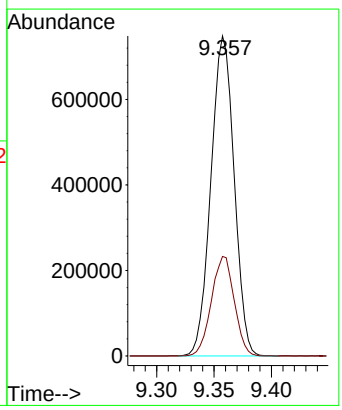


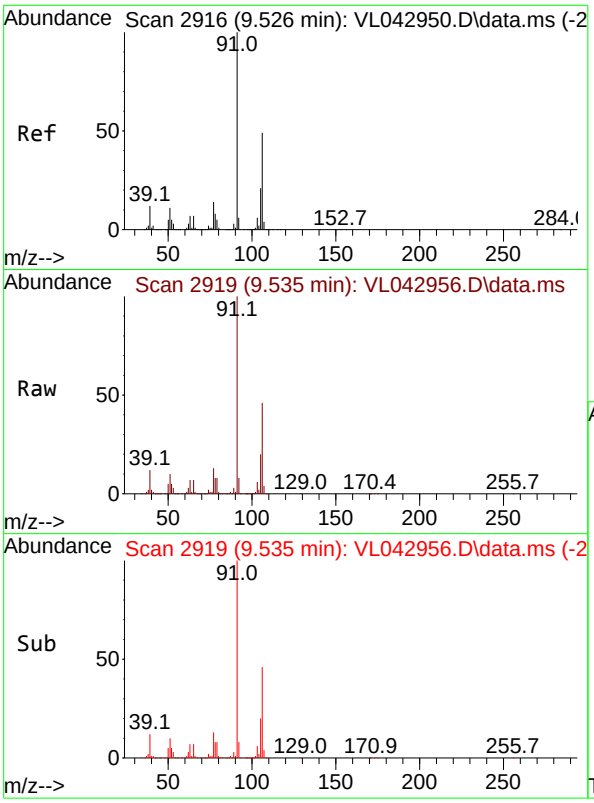


#58
Ethyl Benzene
Concen: 13.985 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 1052303

Ion	Ratio	Lower	Upper
91	100		
106	31.1	24.6	37.0



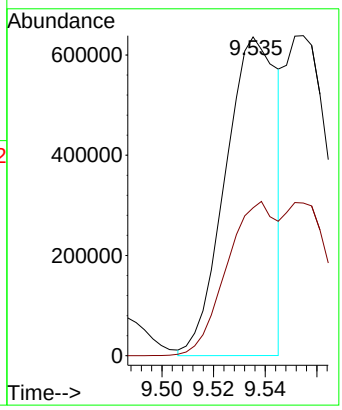


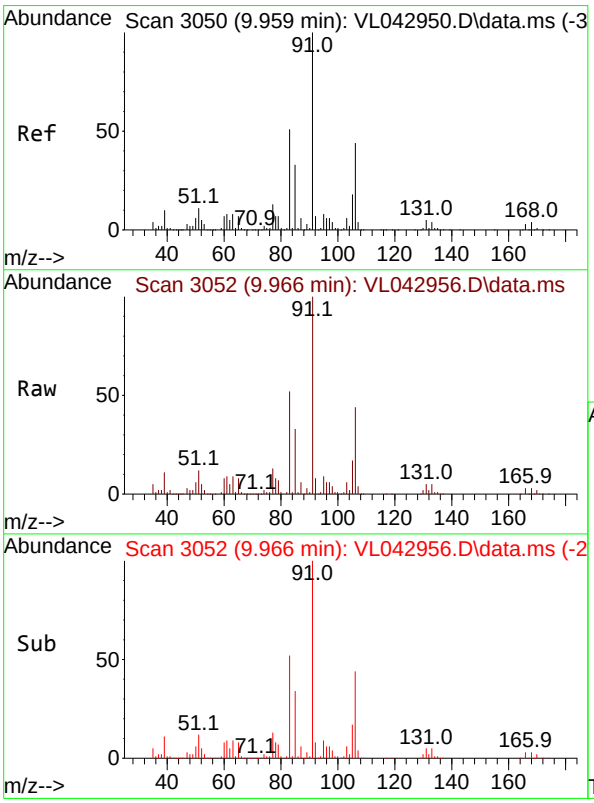
#59
m/p-Xylene
Concen: 14.831 ppbv
RT: 9.535 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 880462

Ion	Ratio	Lower	Upper
91	100		
106	88.7	0.0	0.0#

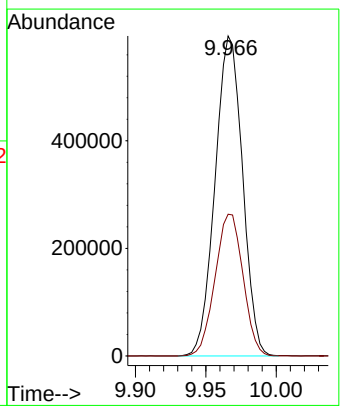


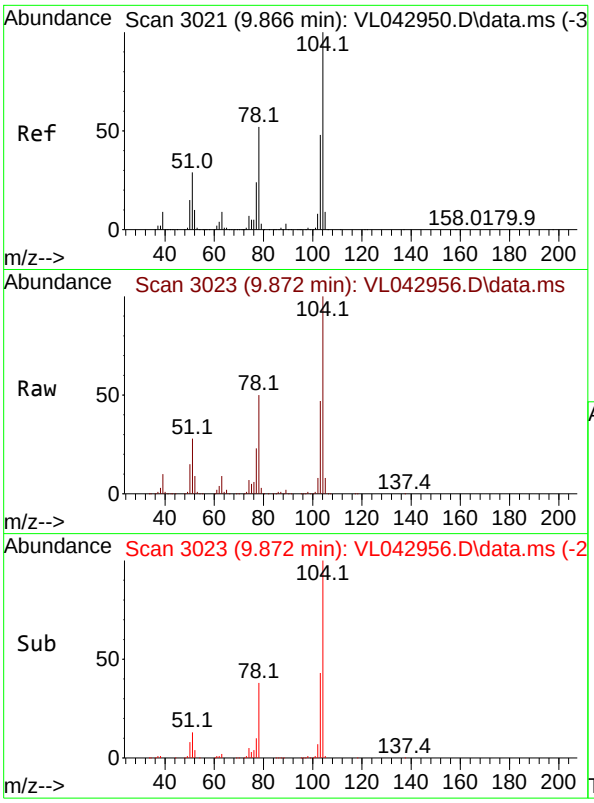


#60
o-Xylene
Concen: 13.629 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 808098

Ion	Ratio	Lower	Upper
91	100		
106	45.0	22.4	67.0



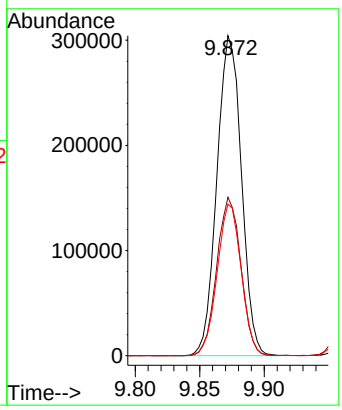


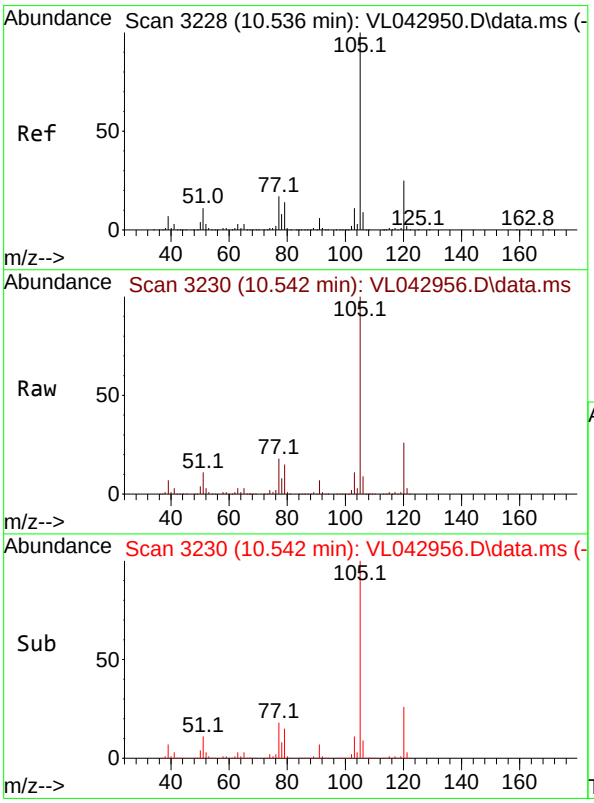
#61
Styrene
Concen: 14.330 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:104 Resp: 401899

Ion	Ratio	Lower	Upper
104	100		
78	48.8	39.9	59.9
103	46.5	36.9	55.3

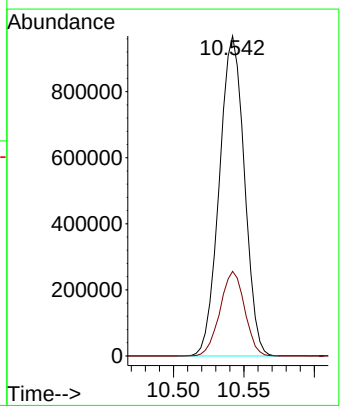


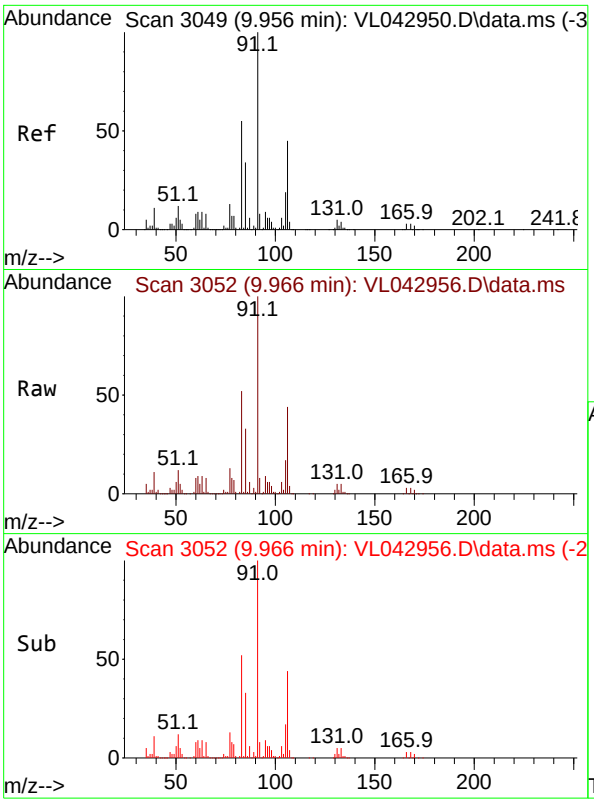


#62
Isopropylbenzene
Concen: 13.564 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 1198767

Ion	Ratio	Lower	Upper
105	100		
120	25.9	20.6	30.8



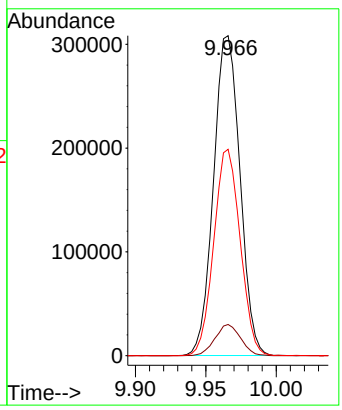


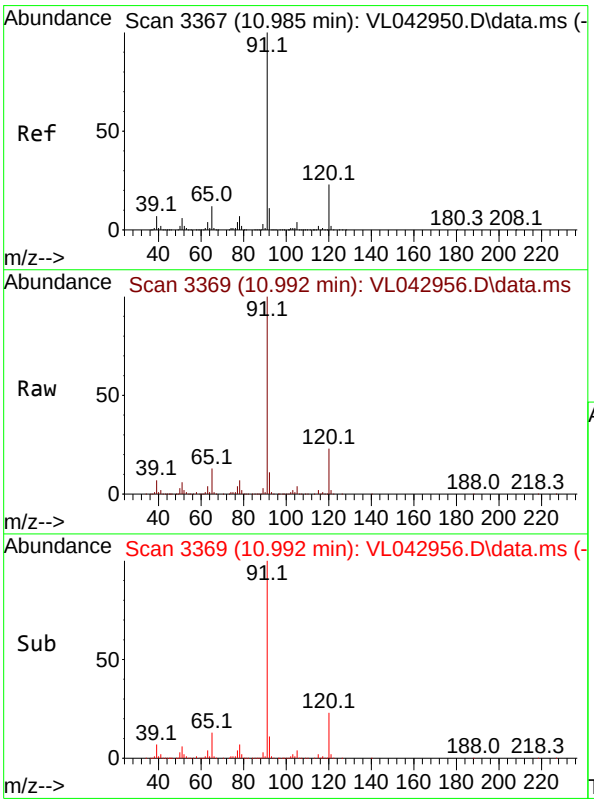
#63
1,1,2,2-Tetrachloroethane
Concen: 12.932 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 403038

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.5	32.2	96.6

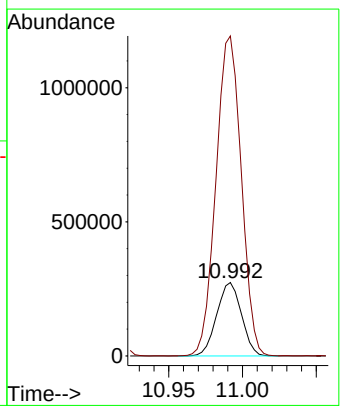


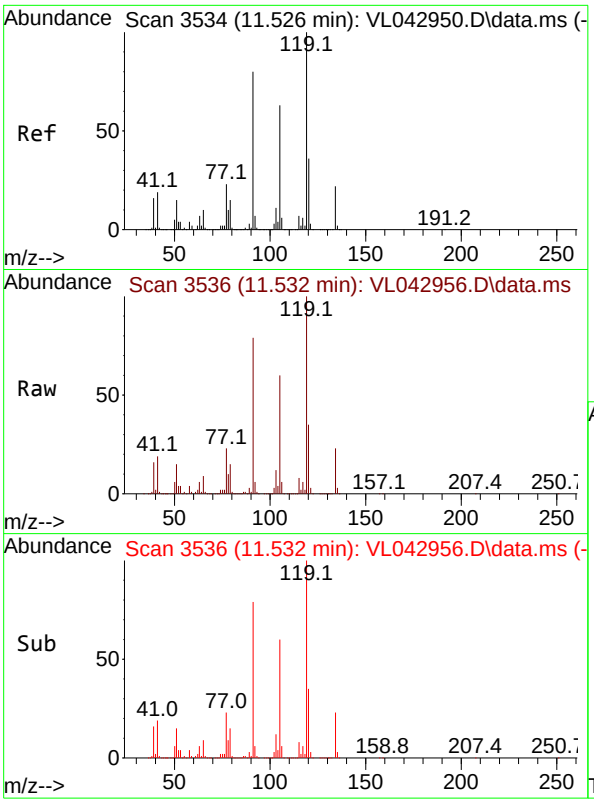


#64
n-propylbenzene
Concen: 13.793 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:120 Resp: 318541

Ion	Ratio	Lower	Upper
120	100		
91	448.5	364.9	547.3



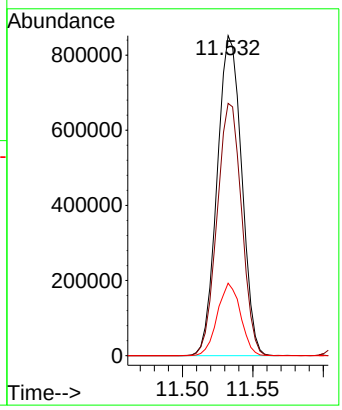


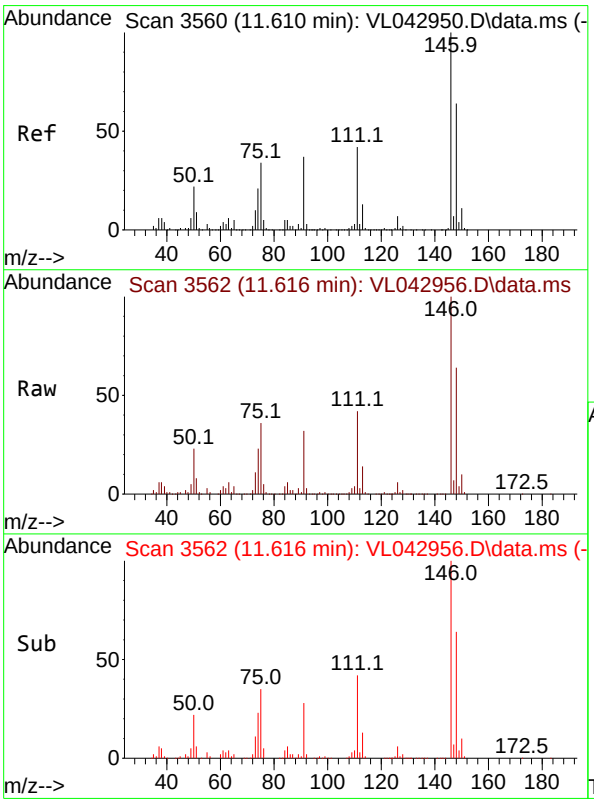
#65
tert-Butylbenzene
Concen: 13.146 ppbv
RT: 11.532 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 1033382

Ion	Ratio	Lower	Upper
119	100		
91	78.8	63.1	94.7
134	21.4	17.0	25.6

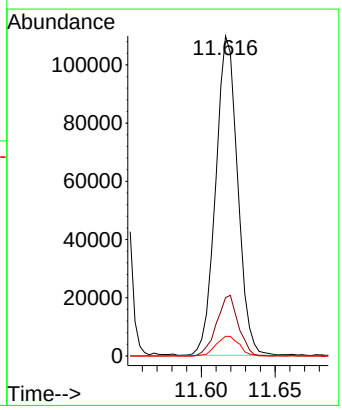


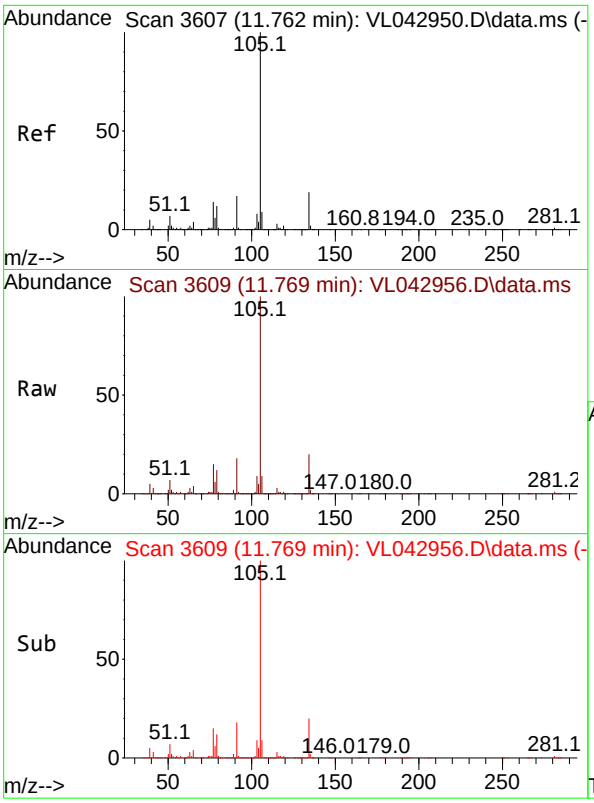


#66
Benzyl Chloride
Concen: 13.767 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 113549

Ion	Ratio	Lower	Upper
91	100		
126	18.8	14.6	21.8
128	6.5	5.0	7.4



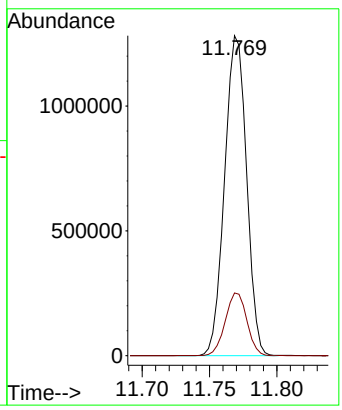


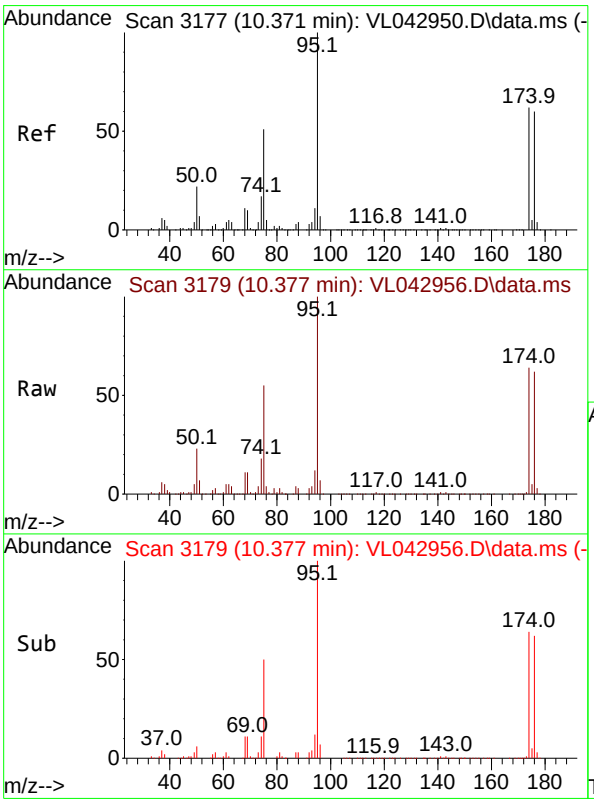
#67
sec-Butylbenzene
Concen: 13.276 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 1454158

Ion	Ratio	Lower	Upper
105	100		
134	19.3	15.7	23.5

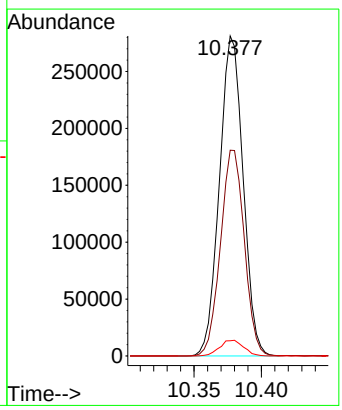


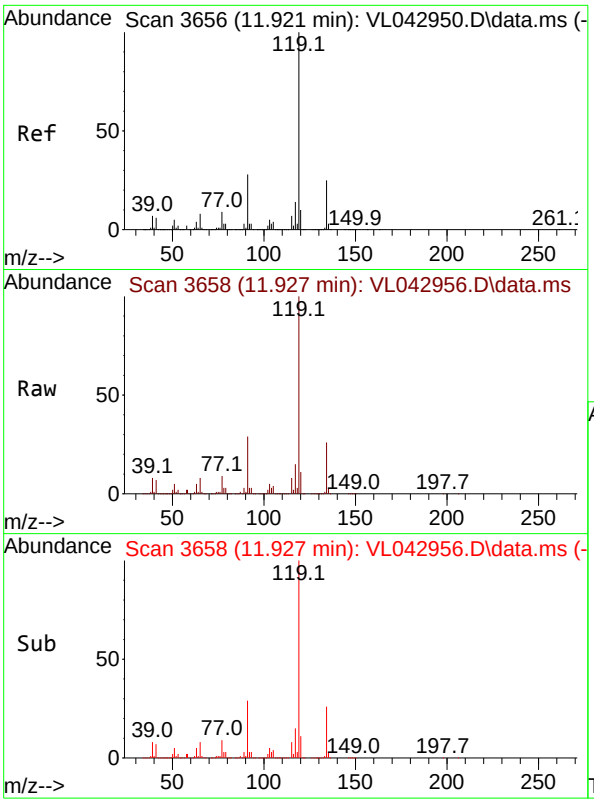


#68
1-Bromo-4-Fluorobenzene
Concen: 10.049 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 95 Resp: 343752

Ion	Ratio	Lower	Upper
95	100		
174	64.8	51.4	77.2
175	5.0	4.0	6.0



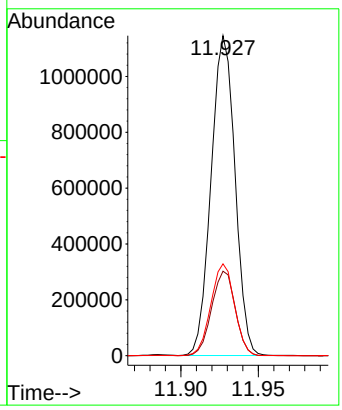


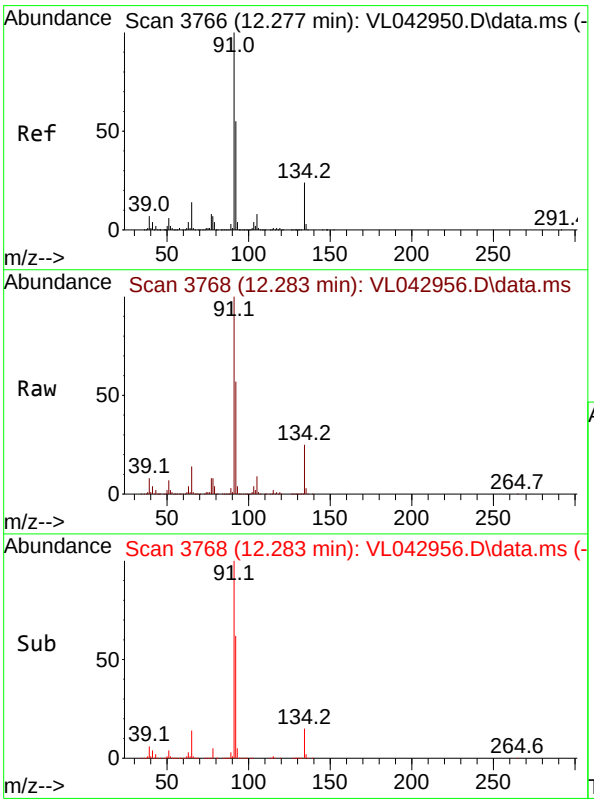
#69
p-Isopropyltoluene
Concen: 13.280 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 1228773

Ion	Ratio	Lower	Upper
119	100		
134	26.2	21.0	31.4
91	28.4	22.3	33.5

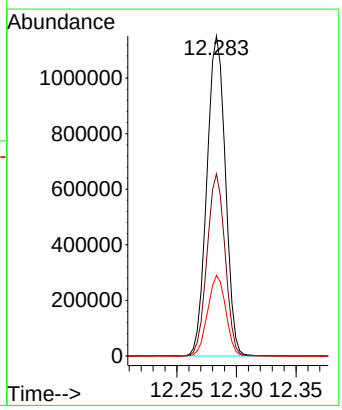


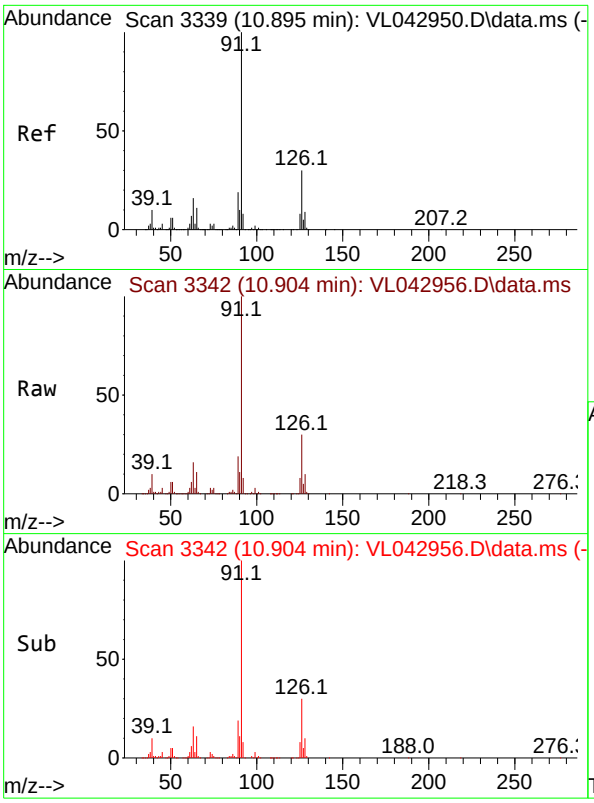


#70
n-Butylbenzene
Concen: 13.716 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion: 91 Resp: 1239042

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.0	66.0
134	24.6	19.4	29.2



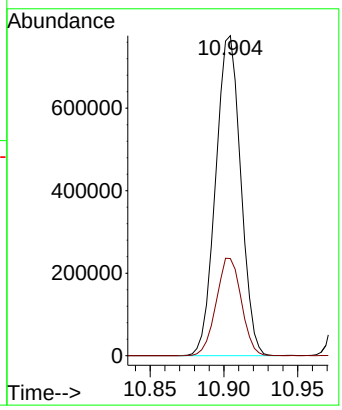


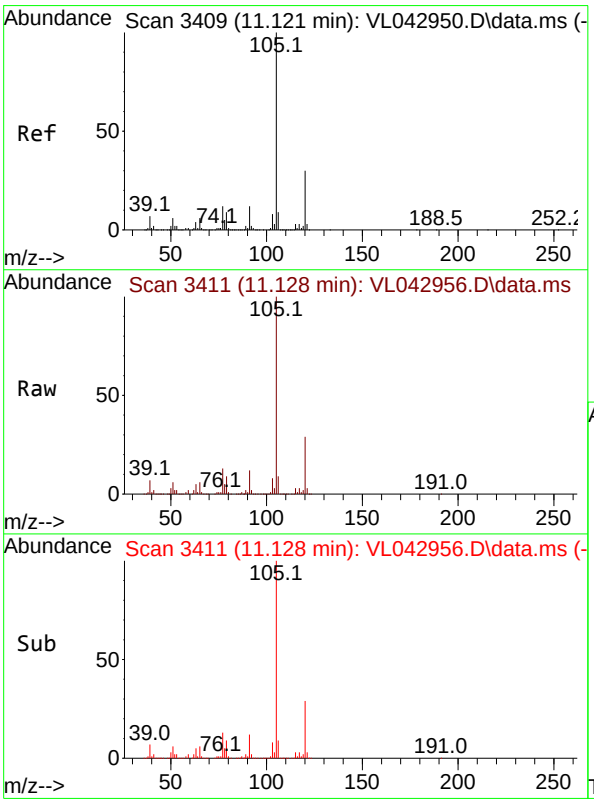
#71
2-Chlorotoluene
Concen: 13.733 ppbv
RT: 10.904 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 916456

Ion	Ratio	Lower	Upper
91	100		
126	30.6	12.3	49.3

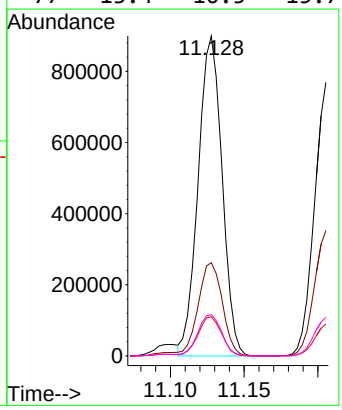


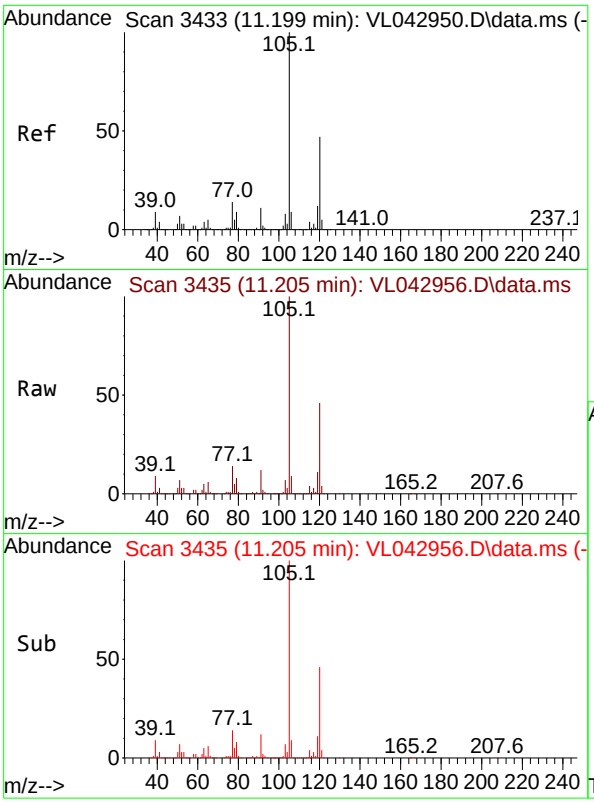


#72
4-Ethyltoluene
Concen: 13.662 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 1014567

Ion	Ratio	Lower	Upper
105	100		
120	30.4	24.2	36.2
91	12.7	10.0	15.0
77	13.4	10.5	15.7



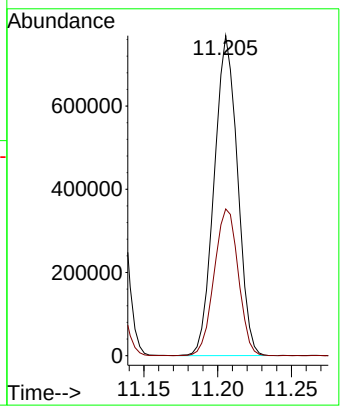


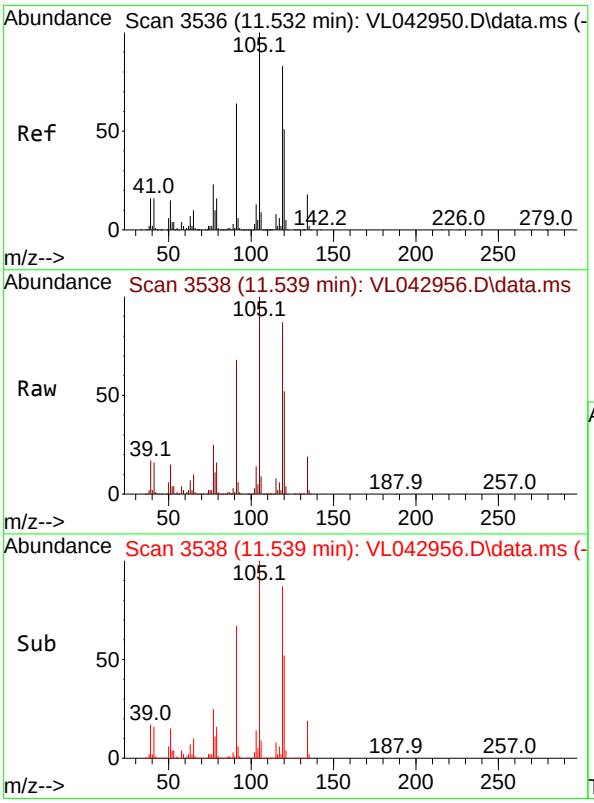
#73
1,3,5-Trimethylbenzene
Concen: 14.046 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 845958

Ion	Ratio	Lower	Upper
105	100		
120	45.8	38.0	57.0

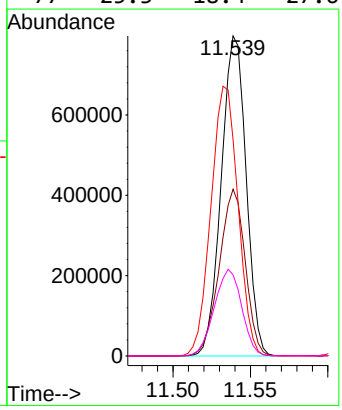


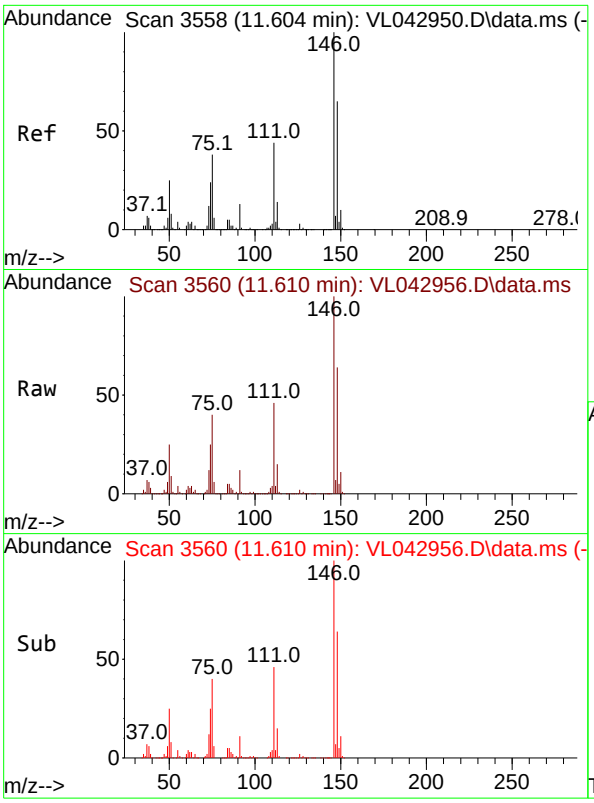


#74
1,2,4-Trimethylbenzene
Concen: 13.372 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:105 Resp: 889339

Ion	Ratio	Lower	Upper
105	100		
120	52.1	40.9	61.3
91	67.4	51.2	76.8
77	25.3	18.4	27.6



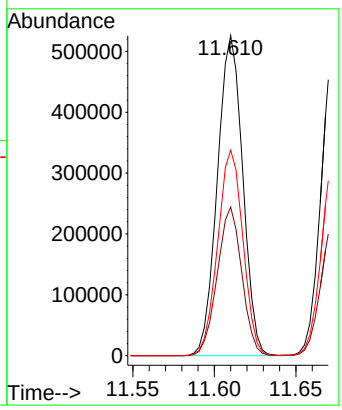


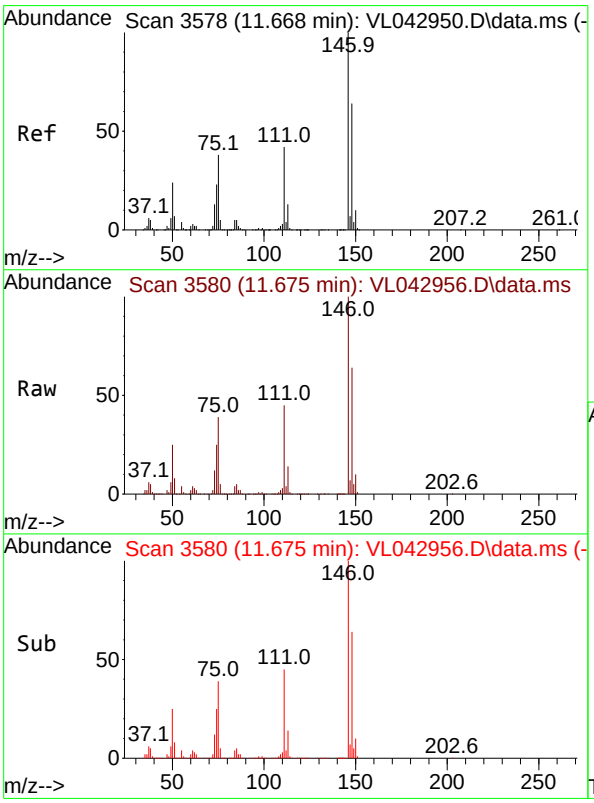
#75
1,3-Dichlorobenzene
Concen: 13.785 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 568597

Ion	Ratio	Lower	Upper
146	100		
111	44.9	22.3	66.9
148	63.9	31.9	95.5

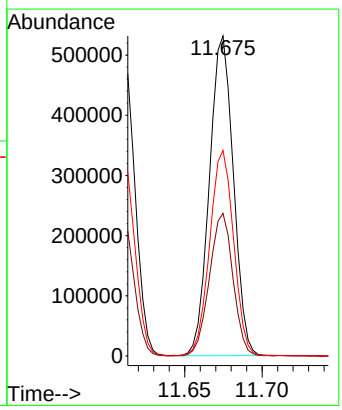


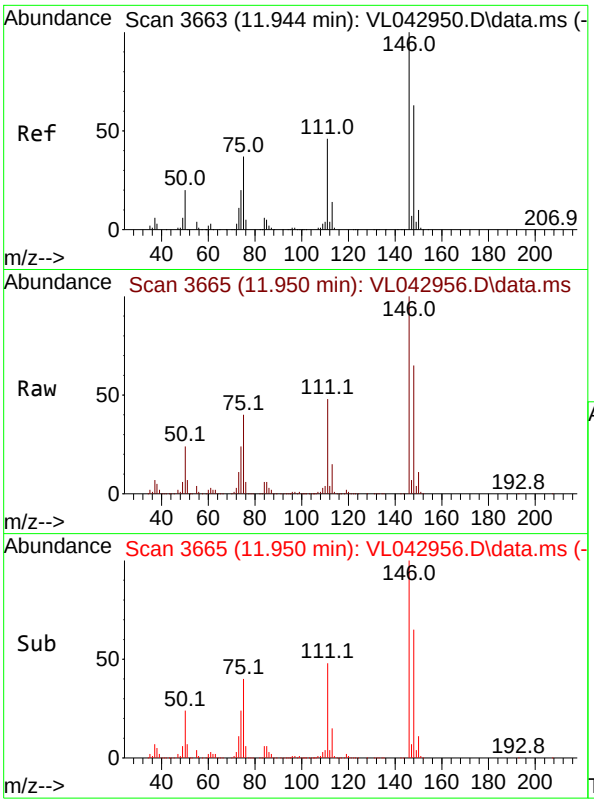


#76
1,4-Dichlorobenzene
Concen: 13.916 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:146 Resp: 570104

Ion	Ratio	Lower	Upper
146	100		
111	44.1	21.5	64.5
148	64.6	31.9	95.5



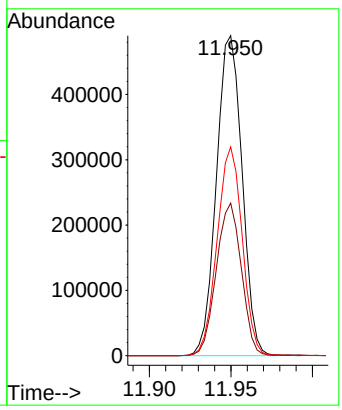


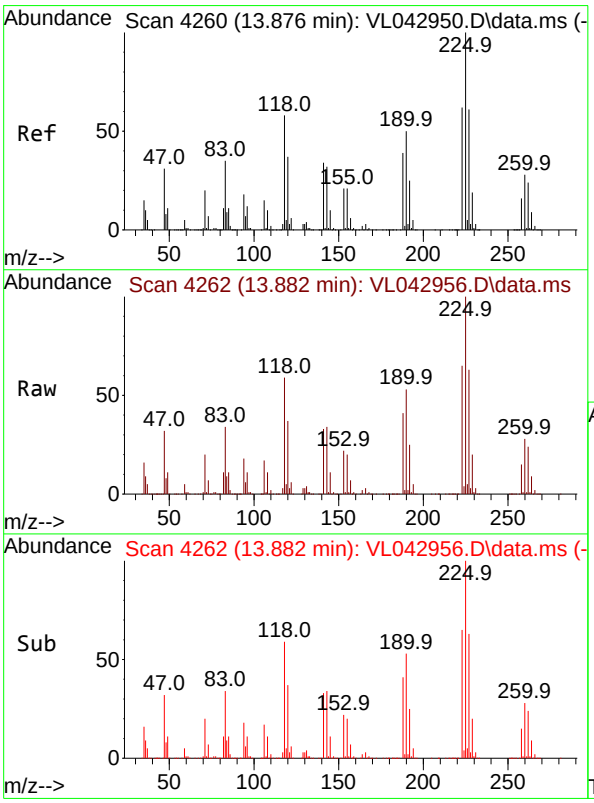
#77
1,2-Dichlorobenzene
Concen: 13.665 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 536286

Ion	Ratio	Lower	Upper
146	100		
111	46.7	23.1	69.3
148	63.8	32.0	96.0

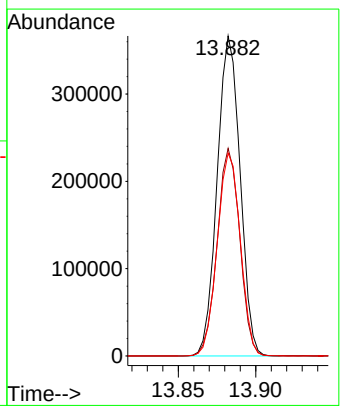


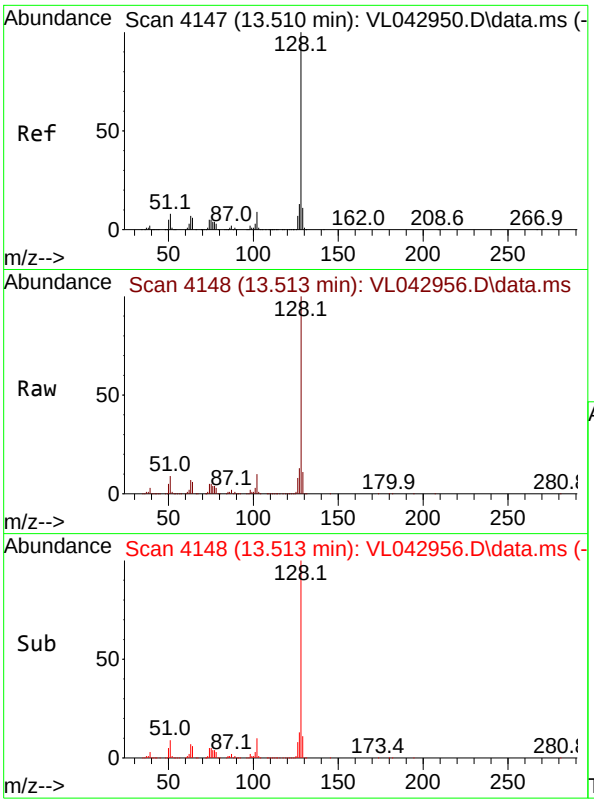


#78
Hexachloro-1,3-Butadiene
Concen: 12.296 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:225 Resp: 377435

Ion	Ratio	Lower	Upper
225	100		
223	64.0	50.1	75.1
227	63.7	50.4	75.6



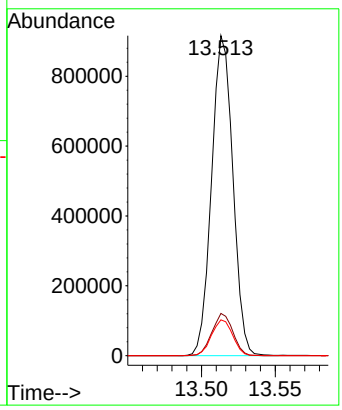


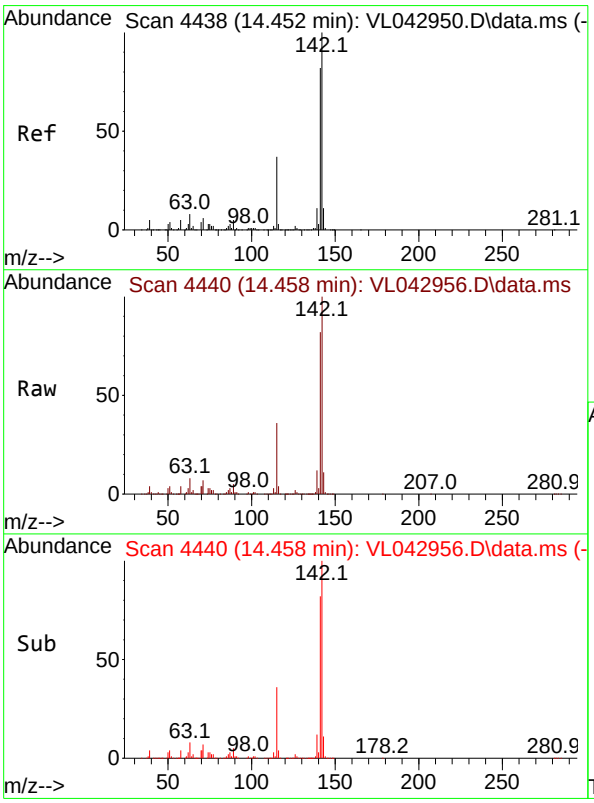
#79
Naphthalene
Concen: 15.645 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:128 Resp: 920123

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	11.2	9.0	13.6

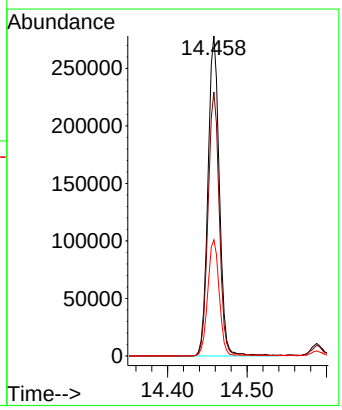


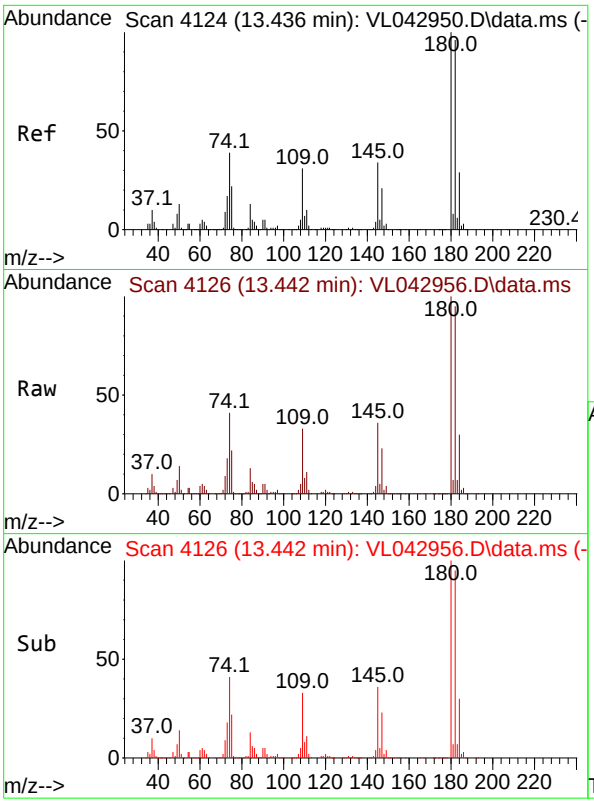


#80
Naphthalene,2-methyl-
Concen: 15.290 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Tgt Ion:142 Resp: 277792

Ion	Ratio	Lower	Upper
142	100		
141	82.2	65.1	97.7
115	37.0	28.9	43.3



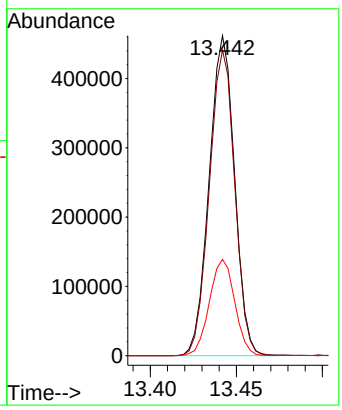


#81
1,2,4-Trichlorobenzene
Concen: 15.066 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042956.D
Acq: 22 Sep 2025 13:05

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:180 Resp: 473767

Ion	Ratio	Lower	Upper
180	100		
182	95.5	75.7	113.5
184	30.2	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	159826	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	493072	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	450930	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	338071	10.043	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	197861	9.204	ppbv	98
3) Chlorodifluoromethane	1.476	51	246838	9.213	ppbv	99
4) Chloromethane	1.535	50	85932	8.831	ppbv	100
5) Vinyl Chloride	1.580	62	74819	8.506	ppbv	98
6) Bromomethane	1.667	94	26463	8.529	ppbv	91
7) Chloroethane	1.706	64	30377	8.894	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	164255	8.951	ppbv	98
9) Propene	1.483	41	105822	9.079	ppbv	95
10) Heptane	4.982	43	284333	9.141	ppbv	99
11) Trichlorofluoromethane	1.878	101	189800	9.157	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	151398	9.020	ppbv	99
13) Ethanol	1.722	45	6606	5.842	ppbv	90
14) Bromoethene	1.781	108	55748	8.785	ppbv	98
15) Acetone	1.836	43	157306	7.557	ppbv	98
16) 1,3-Butadiene	1.609	39	80854	8.234	ppbv	98
17) tert-Butyl alcohol	2.040	59	206466	9.043	ppbv	100
18) 1,1-Dichloroethene	2.036	96	69181	8.904	ppbv	94
19) Isopropyl Alcohol	1.884	45	108171	8.644	ppbv	100
20) Methylene Chloride	2.062	84	61743	9.945	ppbv	98
21) Allyl Chloride	2.098	41	132878	9.166	ppbv	100
22) trans-1,2-Dichloroethene	2.341	96	78085	8.845	ppbv	98
23) Vinyl Acetate	2.464	43	280339	9.427	ppbv	99
24) 1,1-Dichloroethane	2.409	63	155861	9.003	ppbv	100
25) Ethyl Acetate	2.833	43	486993	9.256	ppbv	99
26) Hexane	2.826	57	216458	9.026	ppbv	99
27) Carbon Disulfide	2.150	76	196191	9.121	ppbv	98
28) Methyl tert-Butyl Ether	2.441	73	121564	9.752	ppbv	95
29) Chloroform	2.849	83	300507	9.583	ppbv	100
30) Cyclohexane	3.855	84	186186	9.286	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	213362	9.497	ppbv	99
32) 1,1,1-Trichloroethane	3.370	97	307237	9.071	ppbv	100
34) 2-Butanone	2.558	43	313801	9.081	ppbv	100
35) Carbon Tetrachloride	3.762	117	304293	9.479	ppbv	97
36) Benzene	3.655	78	435981	9.416	ppbv	98
37) 1,2-Dichloroethane	3.218	62	233305	9.581	ppbv	99
38) Trichloroethene	4.548	130	205431	8.927	ppbv	95
39) 1,2-Dichloropropane	4.312	63	160275	9.482	ppbv	95
40) 1,4-Dioxane	4.577	88	69659	8.863	ppbv #	95
41) Tetrahydrofuran	3.053	42	184258	9.277	ppbv	100
42) Bromodichloromethane	4.490	83	329680	9.721	ppbv	99
43) Methyl Methacrylate	4.878	69	172867	9.125	ppbv	99
44) 2,2,4-Trimethylpentane	4.642	57	738876	9.239	ppbv	99
45) t-1,3-Dichloropropene	6.416	75	188332	9.321	ppbv	97

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	244367	9.490	ppbv		99
47) 1,1,2-Trichloroethane	6.577	97	165721	9.279	ppbv		97
48) Dibromochloromethane	7.387	129	278090	9.732	ppbv		99
49) Bromoform	9.484	173	238337	9.589	ppbv		99
50) 4-Methyl-2-Pentanone	5.746	43	435845	9.411	ppbv		99
51) 2-Hexanone	7.435	43	352962	9.561	ppbv		100
52) Tetrachloroethene	8.225	164	155469	8.678	ppbv		98
53) Toluene	6.933	91	509968	9.306	ppbv		99
54) 1,2-Dibromoethane	7.652	107	237604	9.452	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.924	131	205811	9.536	ppbv		99
57) Chlorobenzene	8.924	112	379110	9.209	ppbv		99
58) Ethyl Benzene	9.354	91	698086	9.428	ppbv		100
59) m/p-Xylene	9.532	91	568845	9.744	ppbv	#	100
60) o-Xylene	9.966	91	538861	9.236	ppbv		99
61) Styrene	9.872	104	264257	9.575	ppbv		99
62) Isopropylbenzene	10.539	105	802723	9.230	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.963	83	272416	8.883	ppbv		100
64) n-propylbenzene	10.989	120	214374	9.433	ppbv		99
65) tert-Butylbenzene	11.533	119	711319	9.196	ppbv		99
66) Benzyl Chloride	11.617	91	71896	8.858	ppbv		99
67) sec-Butylbenzene	11.769	105	995407	9.235	ppbv		99
69) p-Isopropyltoluene	11.928	119	848196	9.316	ppbv		99
70) n-Butylbenzene	12.280	91	834882	9.392	ppbv		100
71) 2-Chlorotoluene	10.902	91	611697	9.315	ppbv		100
72) 4-Ethyltoluene	11.125	105	686229	9.391	ppbv		100
73) 1,3,5-Trimethylbenzene	11.203	105	567874	9.582	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	607159	9.277	ppbv		92
75) 1,3-Dichlorobenzene	11.607	146	380822	9.382	ppbv		100
76) 1,4-Dichlorobenzene	11.672	146	380109	9.429	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	359995	9.322	ppbv		100
78) Hexachloro-1,3-Butadiene	13.883	225	249142	8.248	ppbv		100
79) Naphthalene	13.514	128	590759	10.208	ppbv		99
80) Naphthalene,2-methyl-	14.459	142	173023	9.678	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	304647	9.845	ppbv		98

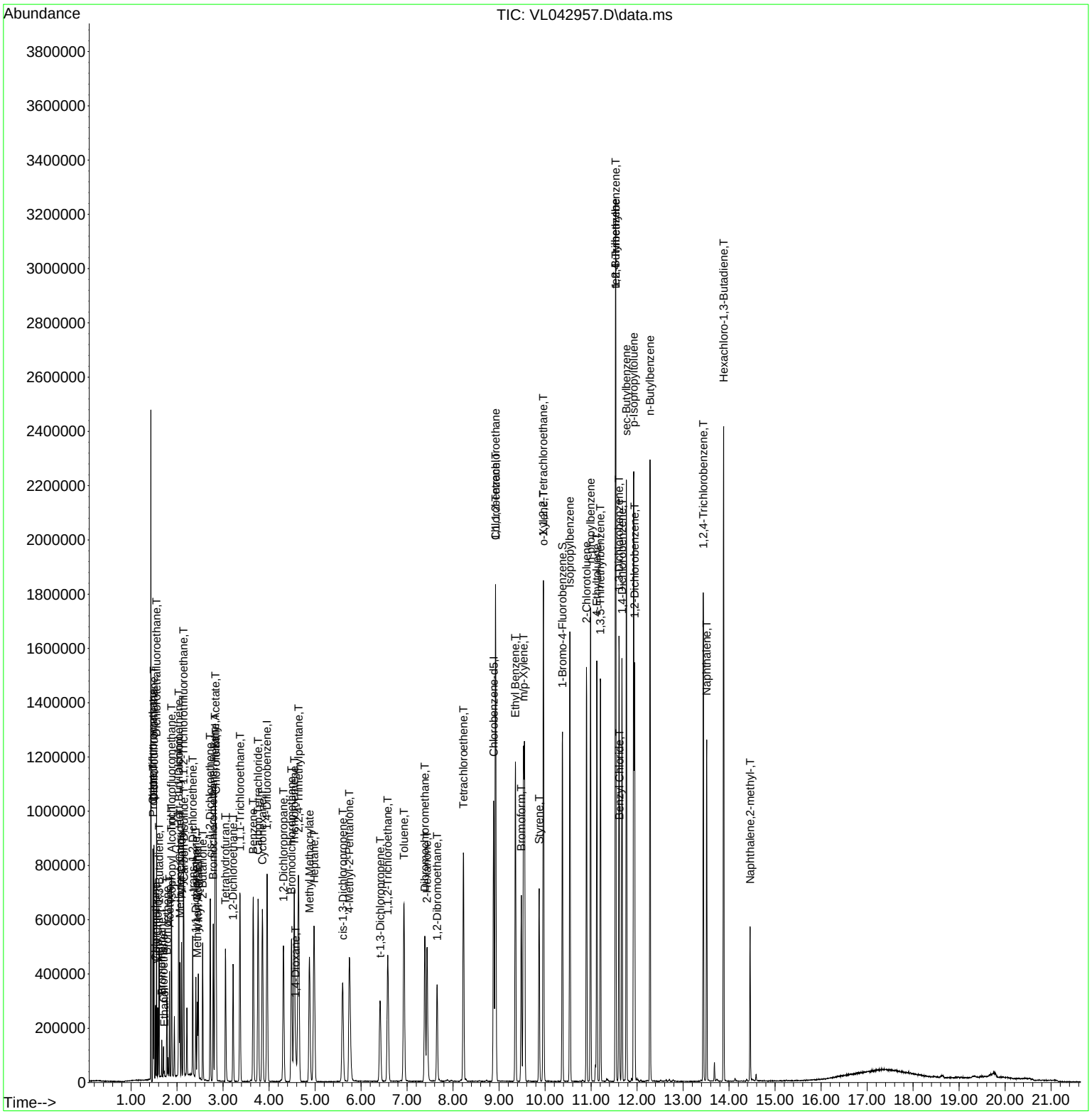
(#) = qualifier out of range (m) = manual integration (+) = signals summed

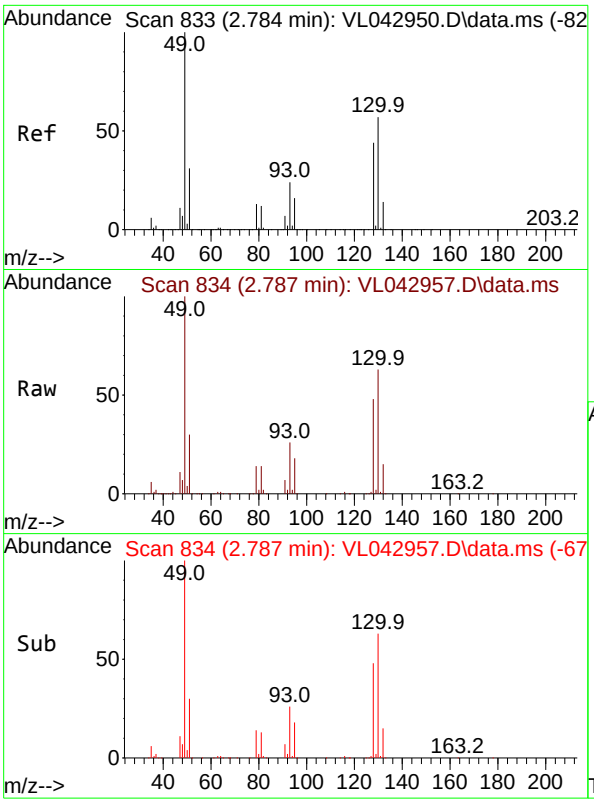
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042957.D
Acq On : 22 Sep 2025 14:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Quant Time: Sep 23 02:49:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



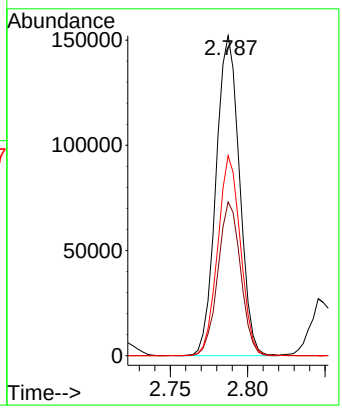


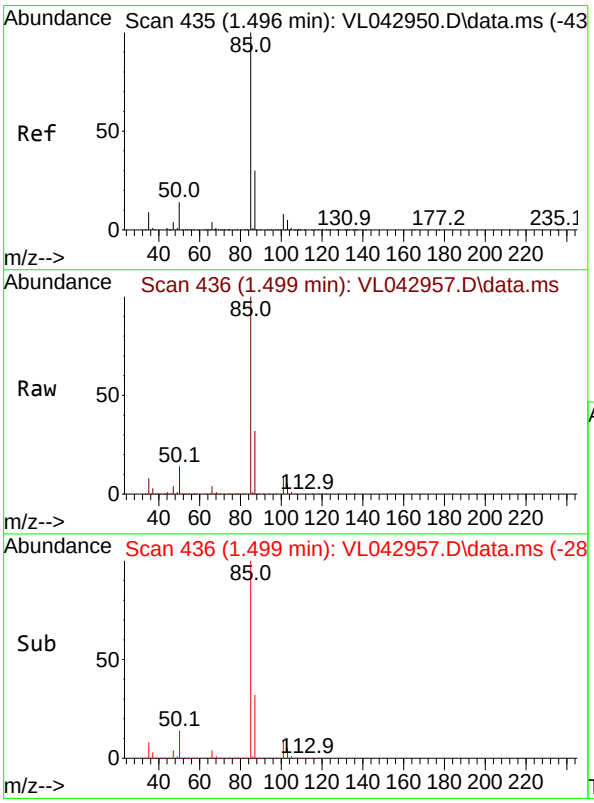
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 49 Resp: 159826

Ion	Ratio	Lower	Upper
49	100		
128	46.7	22.9	68.8
130	60.6	29.1	87.3

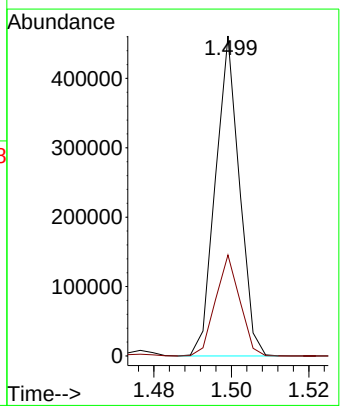


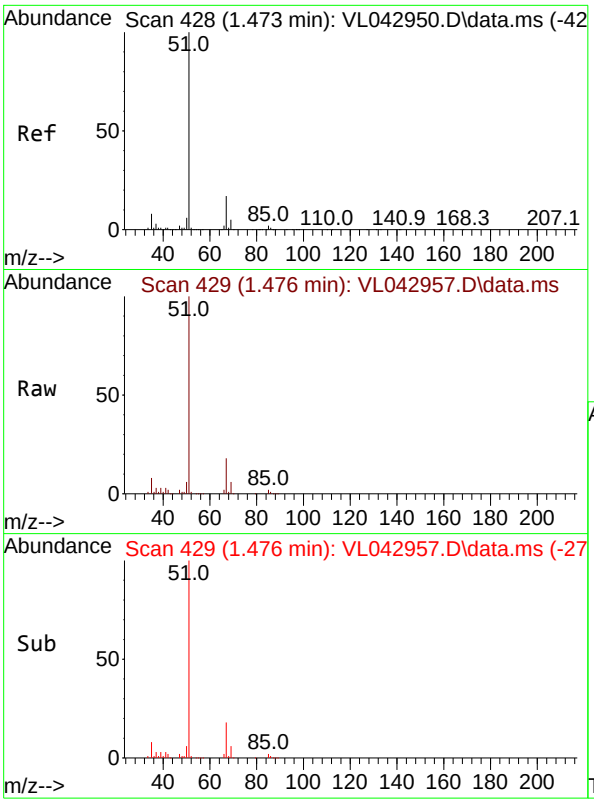


#2
Dichlorodifluoromethane
Concen: 9.204 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 85 Resp: 197861

Ion	Ratio	Lower	Upper
85	100		
87	31.6	24.3	36.5



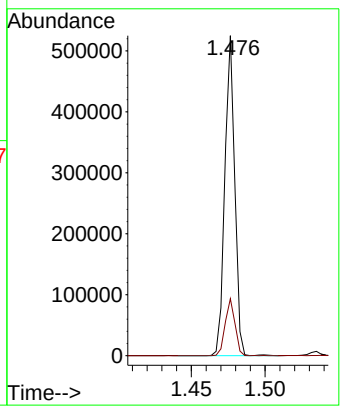


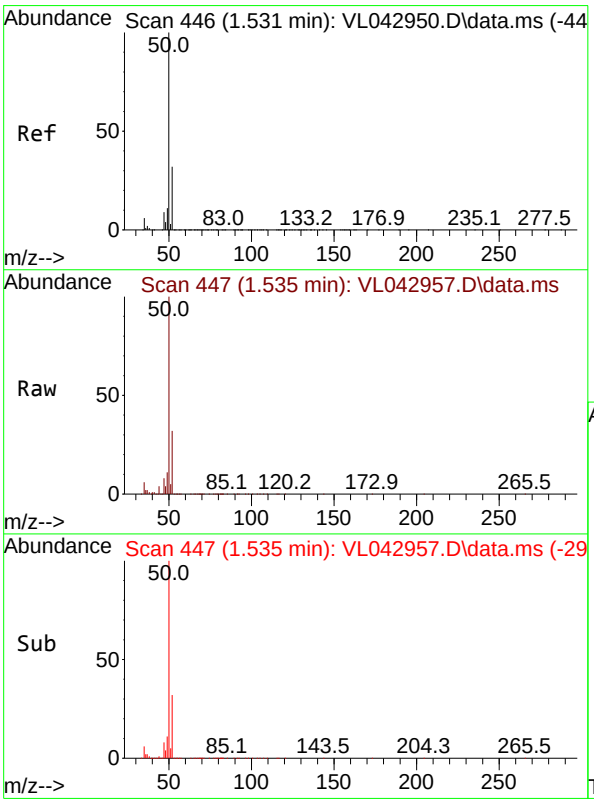
#3
Chlorodifluoromethane
Concen: 9.213 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 51 Resp: 246838

Ion	Ratio	Lower	Upper
51	100		
67	17.6	13.8	20.8

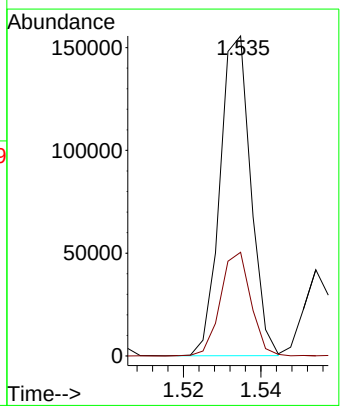


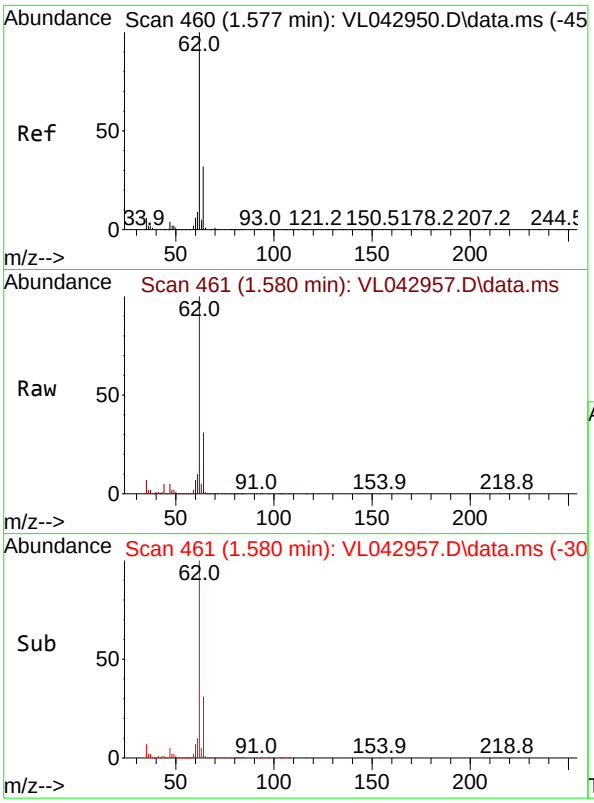


#4
Chloromethane
Concen: 8.831 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 50 Resp: 85932

Ion	Ratio	Lower	Upper
50	100		
52	32.4	25.9	38.9



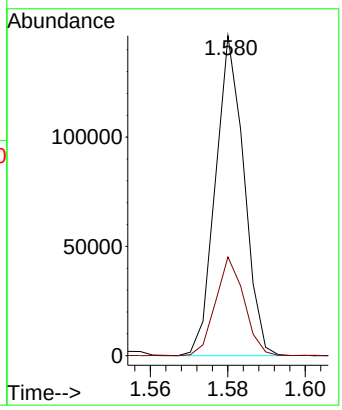


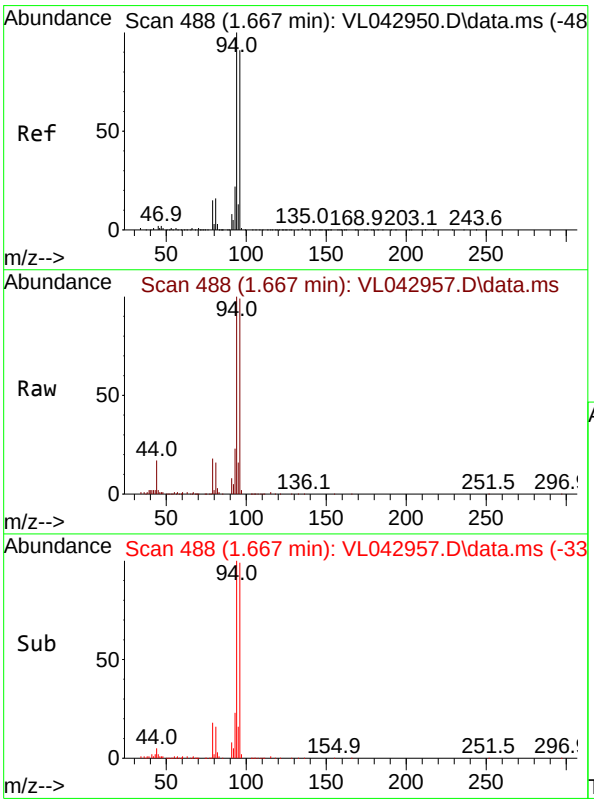
#5
Vinyl Chloride
Concen: 8.506 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 62 Resp: 74819

Ion	Ratio	Lower	Upper
62	100		
64	30.9	25.4	38.2

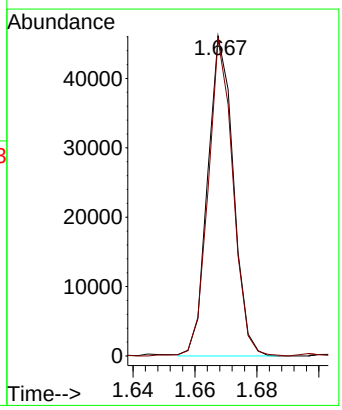


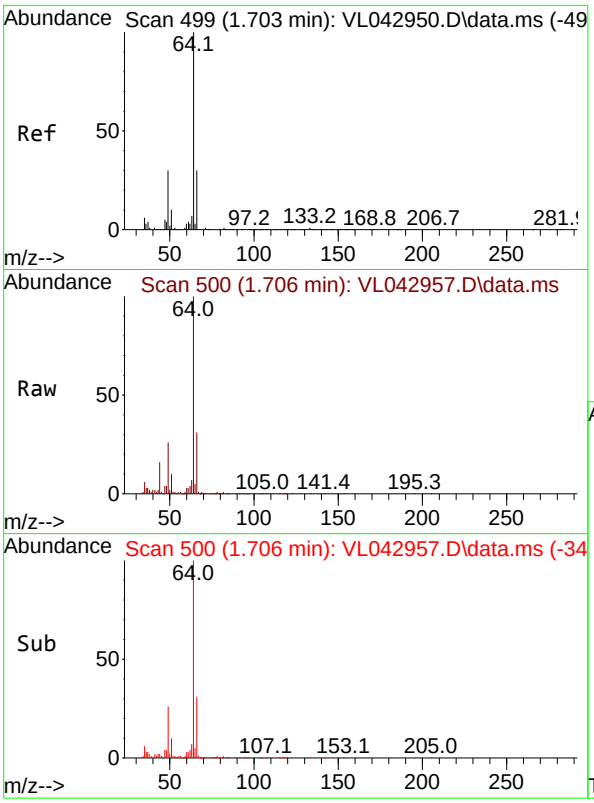


#6
Bromomethane
Concen: 8.529 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 94 Resp: 26463

Ion	Ratio	Lower	Upper
94	100		
96	98.8	72.6	108.8



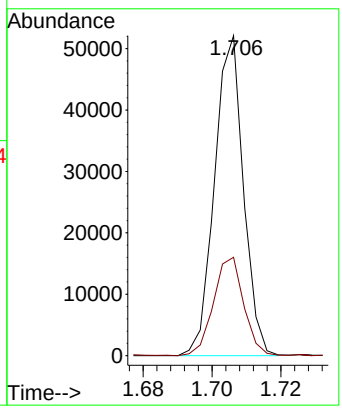


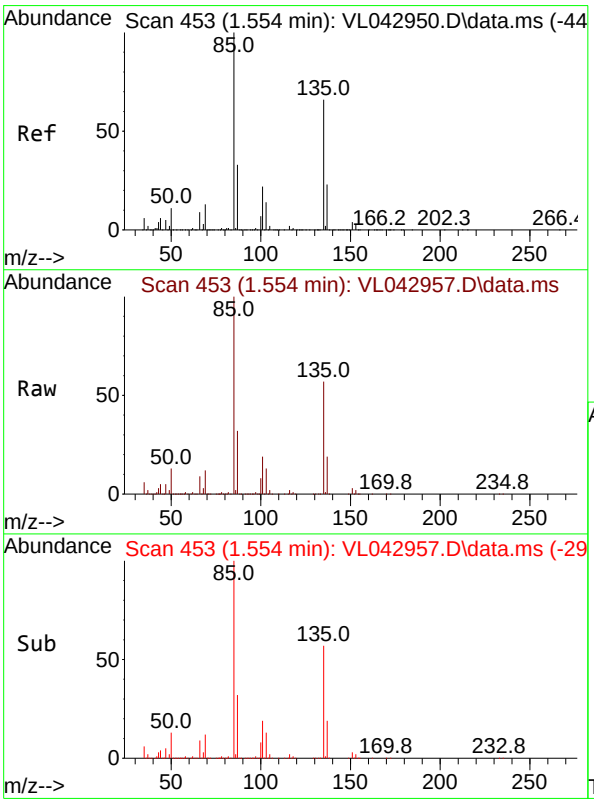
#7
Chloroethane
Concen: 8.894 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 64 Resp: 30377

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	36.8

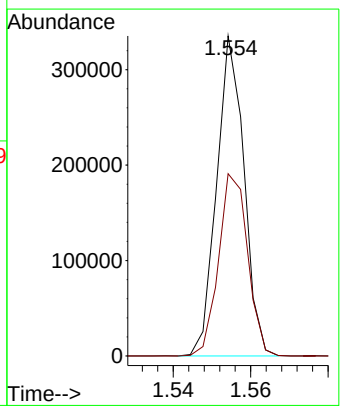


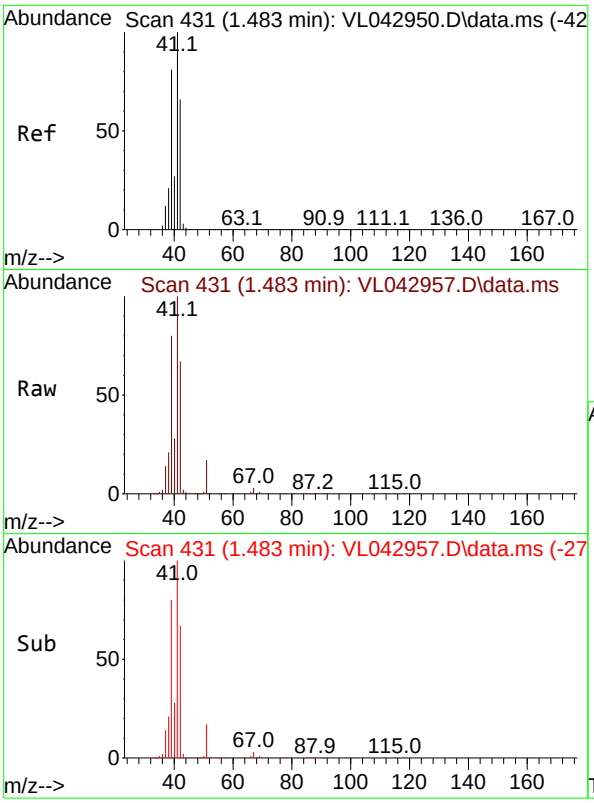


#8
Dichlorotetrafluoroethane
Concen: 8.951 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 85 Resp: 164255

Ion	Ratio	Lower	Upper
85	100		
135	60.7	49.7	74.5



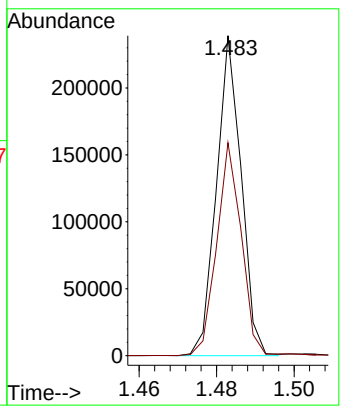


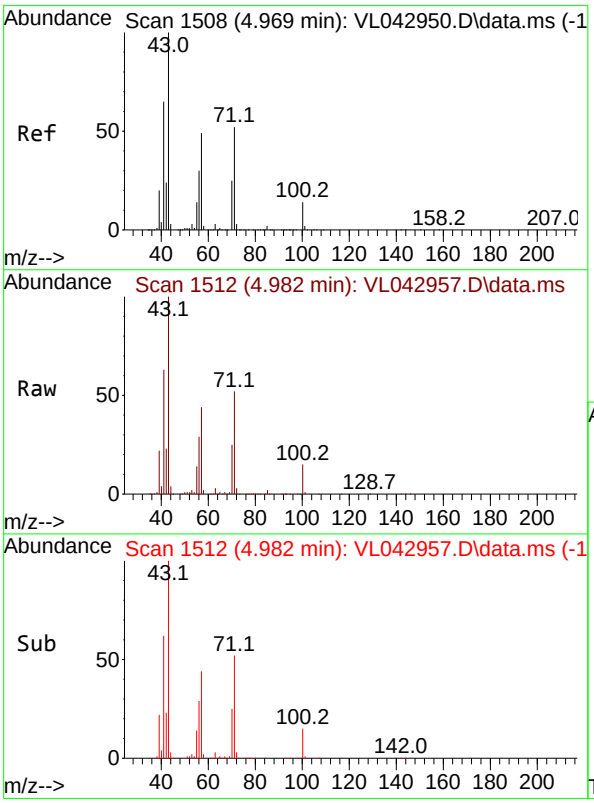
#9
Propene
Concen: 9.079 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 41 Resp: 105822

Ion	Ratio	Lower	Upper
41	100		
42	67.4	57.4	86.2

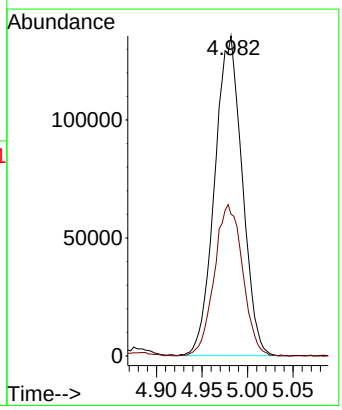


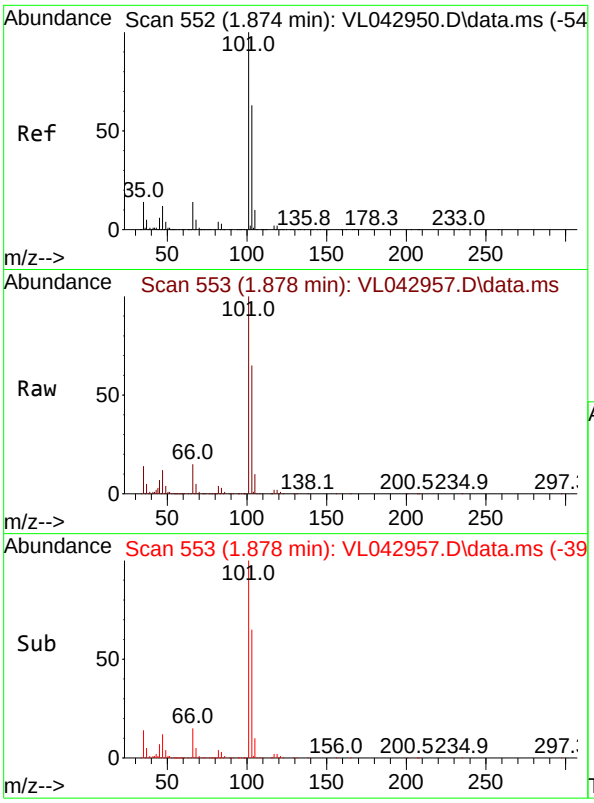


#10
Heptane
Concen: 9.141 ppbv
RT: 4.982 min Scan# 1512
Delta R.T. 0.013 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 284333

Ion	Ratio	Lower	Upper
43	100		
57	48.7	38.6	57.8



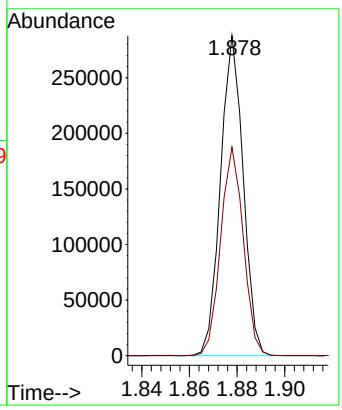


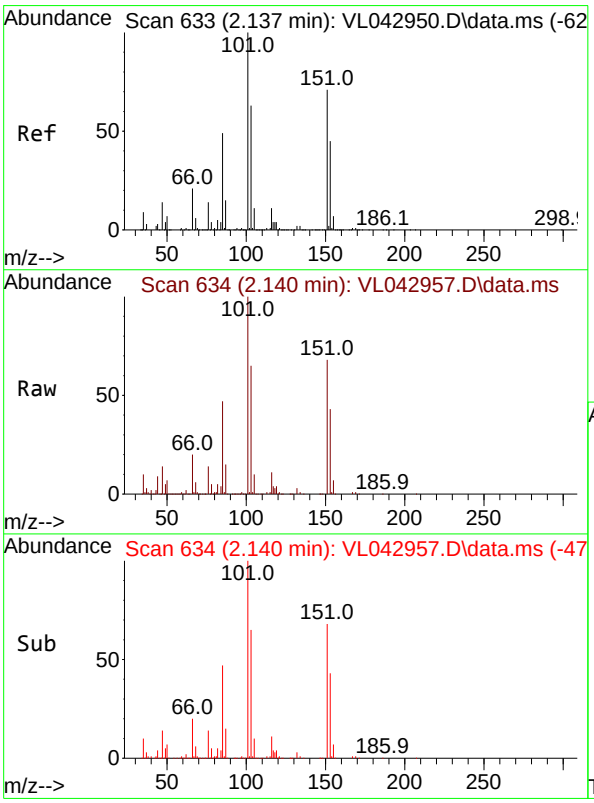
#11
Trichlorofluoromethane
Concen: 9.157 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:101 Resp: 189800

Ion	Ratio	Lower	Upper
101	100		
103	65.1	50.1	75.1

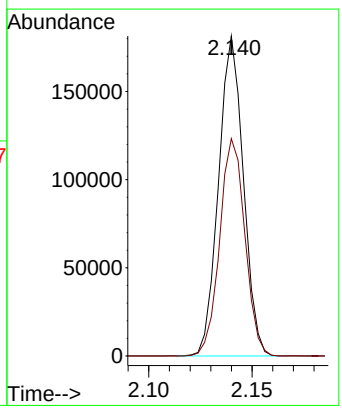


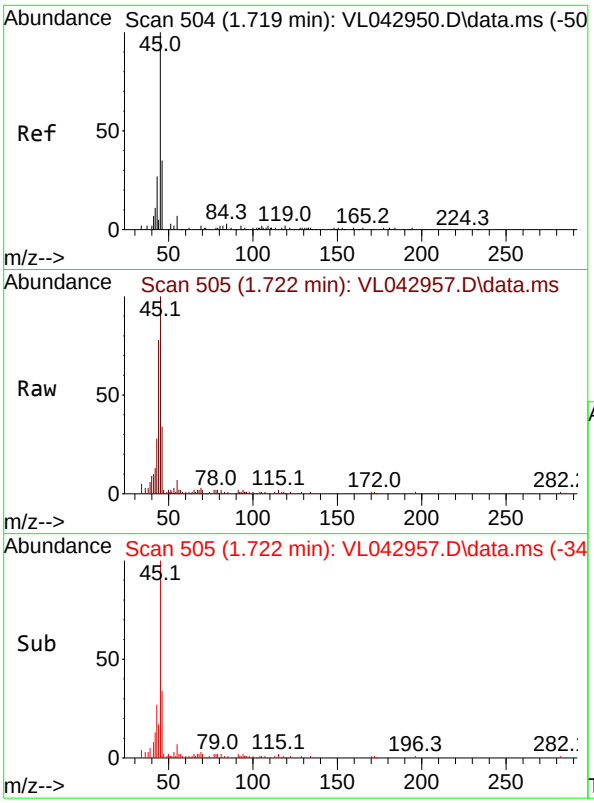


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.020 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:101 Resp: 151398

Ion	Ratio	Lower	Upper
101	100		
151	69.1	55.7	83.5



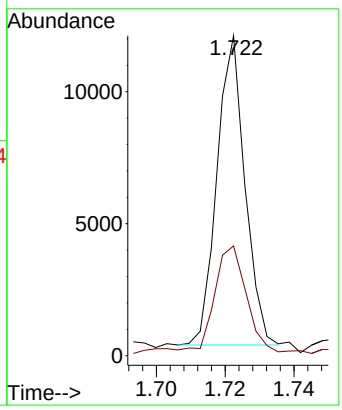


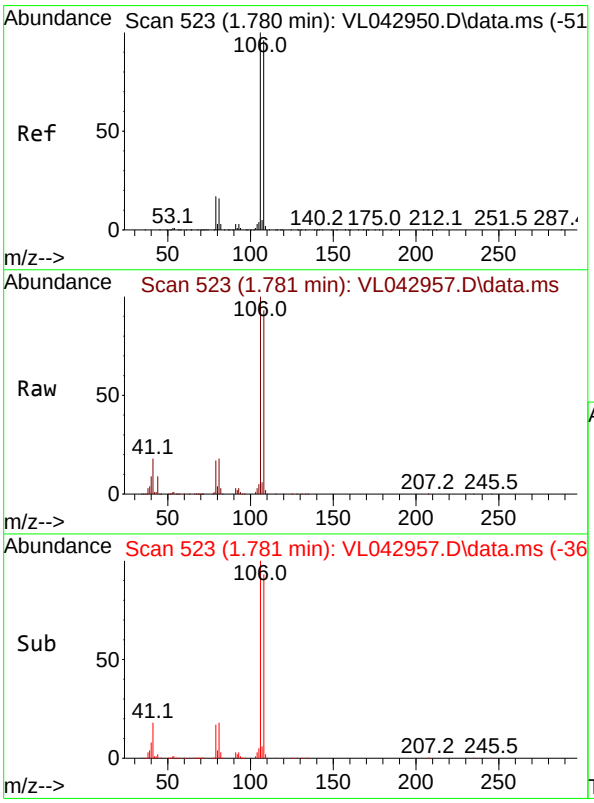
#13
Ethanol
Concen: 5.842 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 45 Resp: 6606

Ion	Ratio	Lower	Upper
45	100		
46	46.7	16.2	64.6

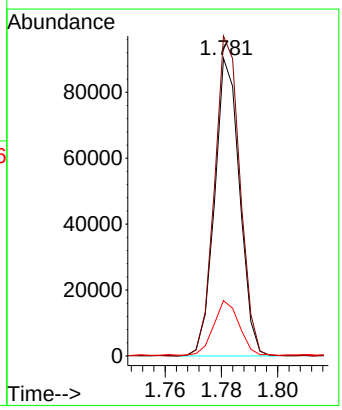


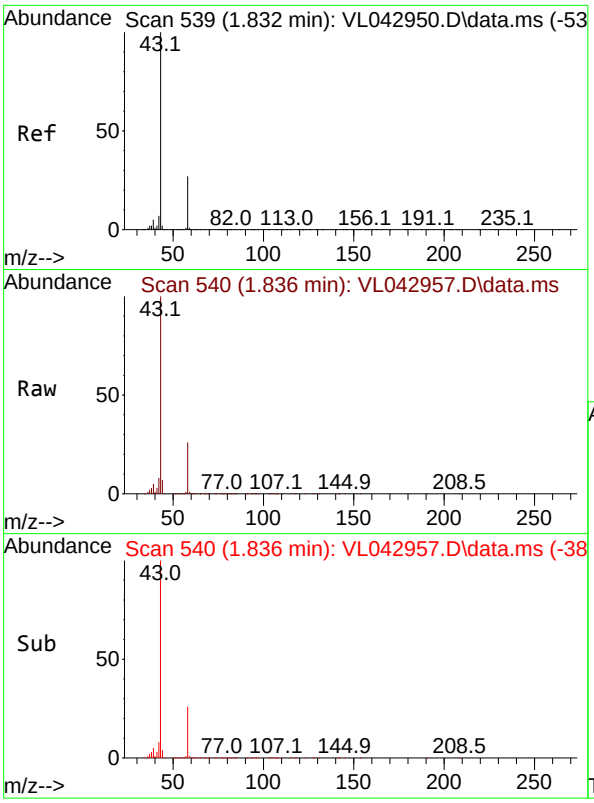


#14
Bromoethene
Concen: 8.785 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:108 Resp: 55748

Ion	Ratio	Lower	Upper
108	100		
106	109.3	86.0	129.0
79	19.7	14.2	21.2



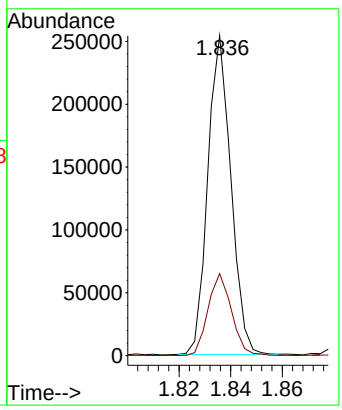


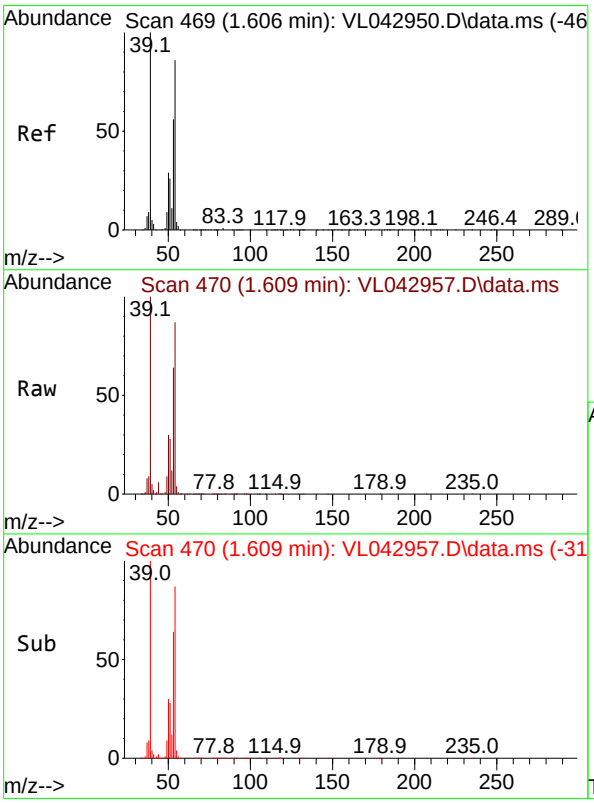
#15
Acetone
Concen: 7.557 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 43 Resp: 157306

Ion	Ratio	Lower	Upper
43	100		
58	26.7	22.3	33.5

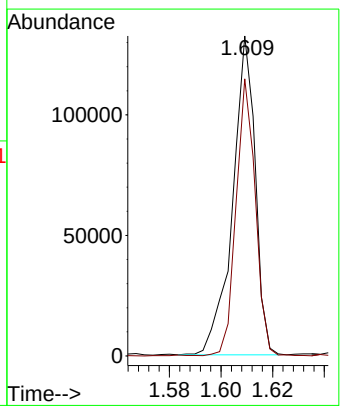


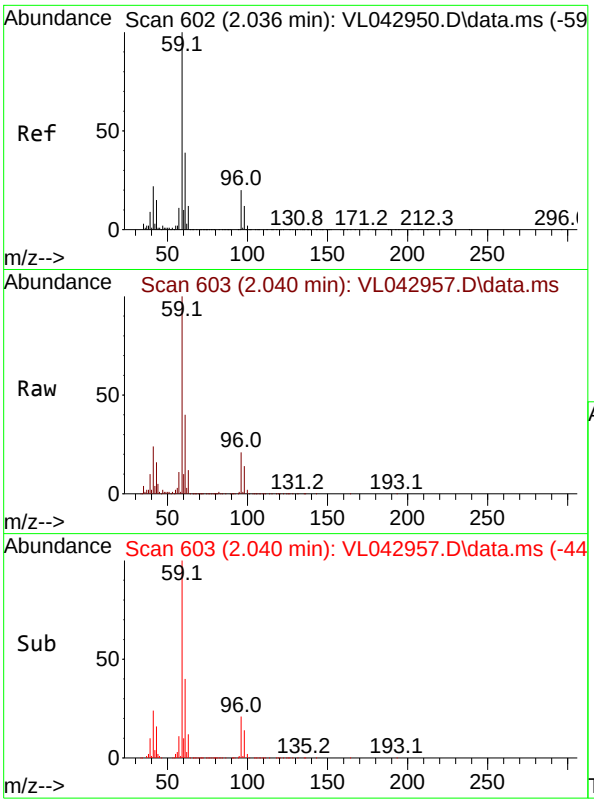


#16
1,3-Butadiene
Concen: 8.234 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 39 Resp: 80854

Ion	Ratio	Lower	Upper
39	100		
54	74.7	60.8	91.2



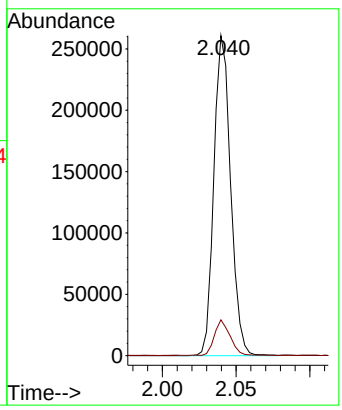


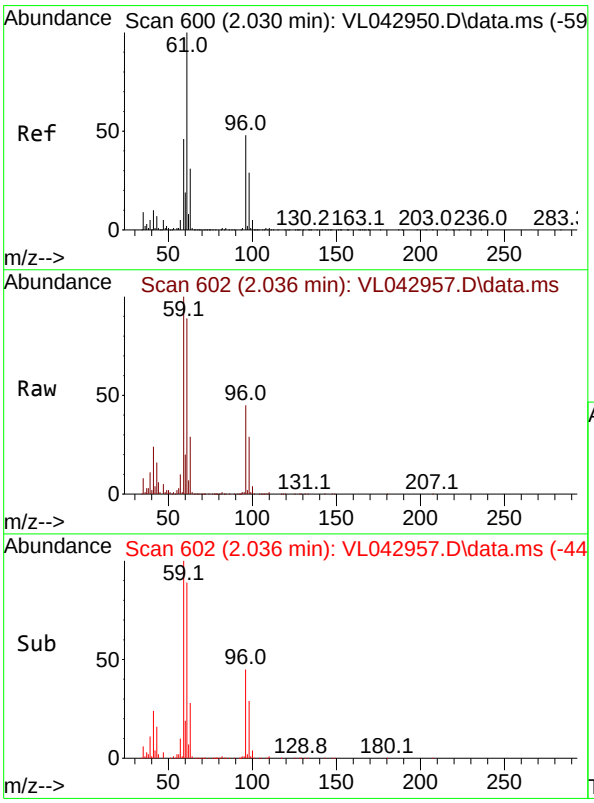
#17
tert-Butyl alcohol
Concen: 9.043 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 59 Resp: 206466

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.6	12.8

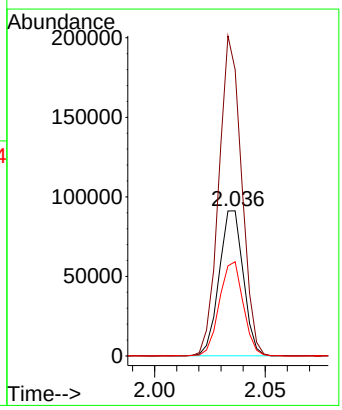


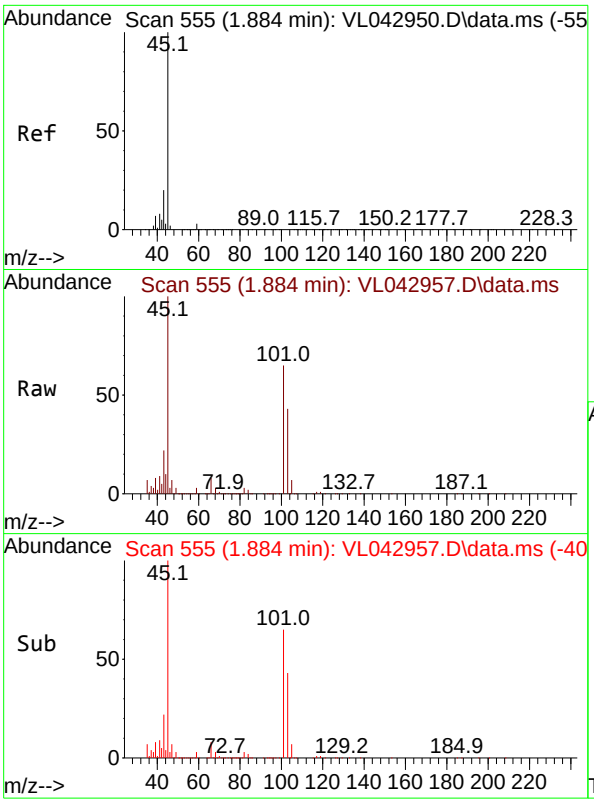


#18
1,1-Dichloroethene
Concen: 8.904 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 96 Resp: 69181

Ion	Ratio	Lower	Upper
96	100		
61	197.4	166.2	249.4
98	64.8	48.6	73.0



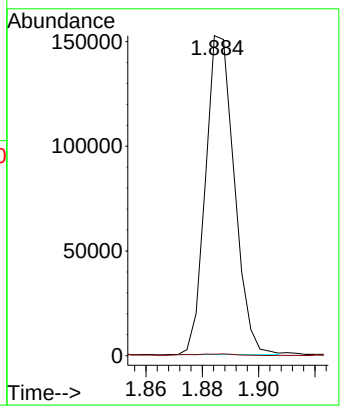


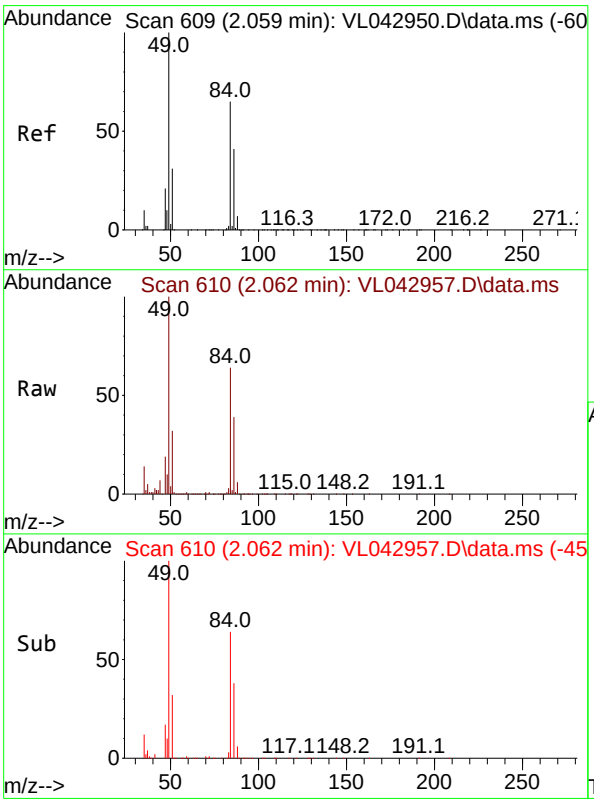
#19
Isopropyl Alcohol
Concen: 8.644 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 45 Resp: 108171

Ion	Ratio	Lower	Upper
45	100		
58	38.8	31.0	46.6

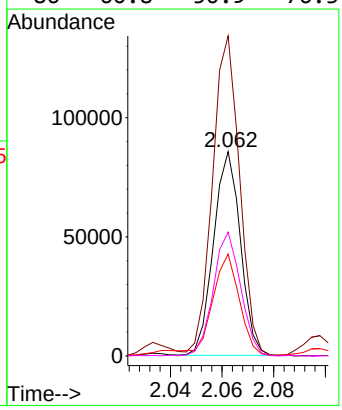


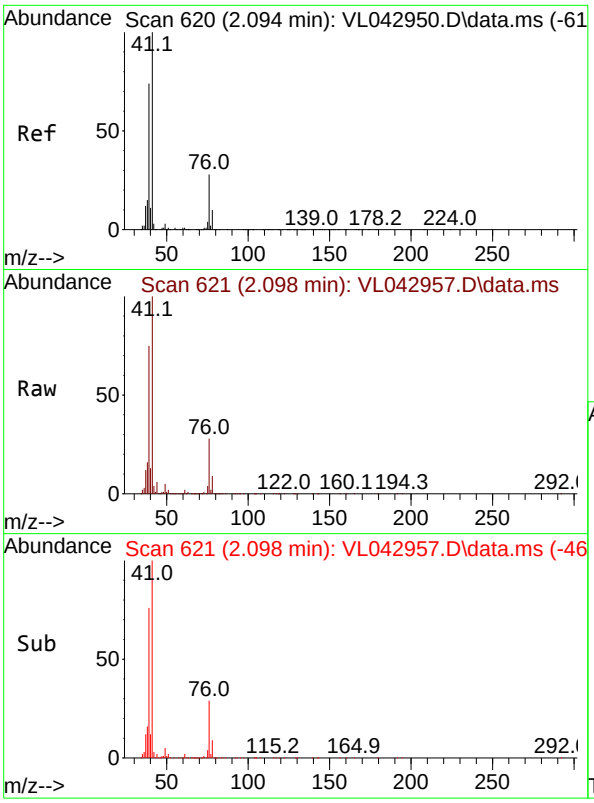


#20
Methylene Chloride
Concen: 9.945 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 84 Resp: 61743

Ion	Ratio	Lower	Upper
84	100		
49	156.9	124.1	186.1
51	49.6	39.8	59.8
86	60.8	50.9	76.3



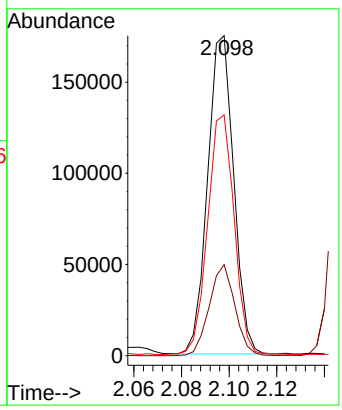


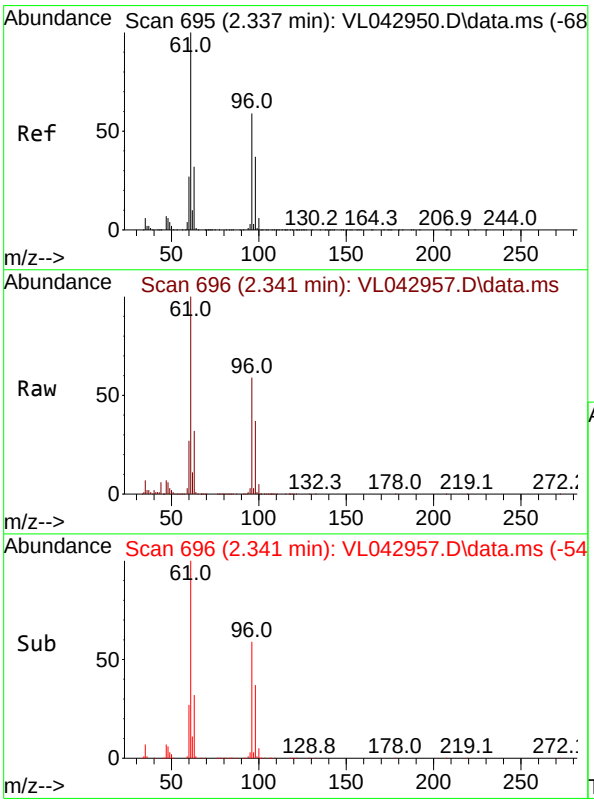
#21
Allyl Chloride
Concen: 9.166 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 41 Resp: 132878

Ion	Ratio	Lower	Upper
41	100		
76	28.0	22.3	33.5
39	76.4	61.3	91.9

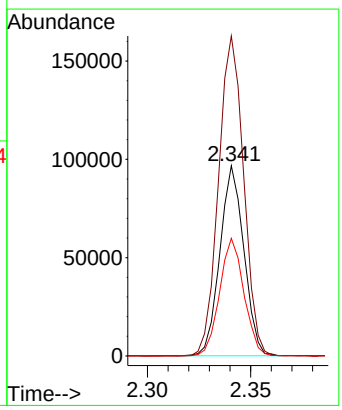


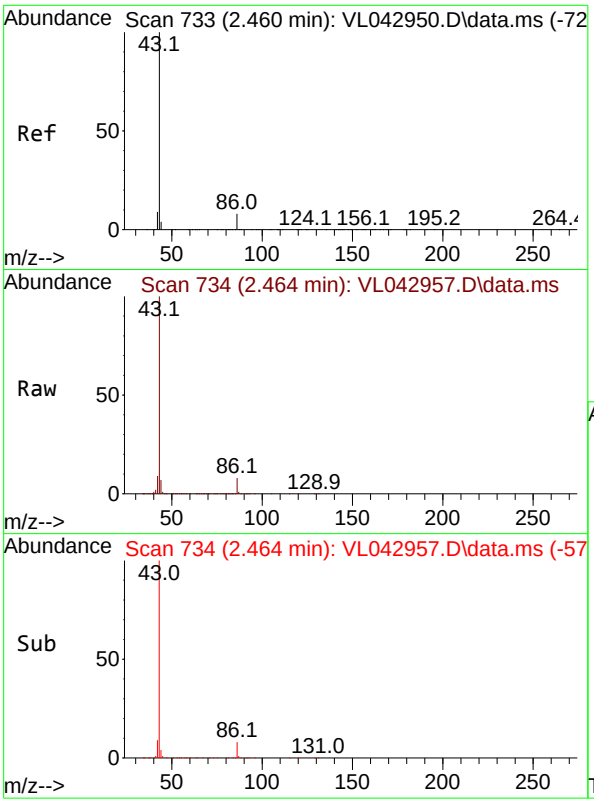


#22
trans-1,2-Dichloroethene
Concen: 8.845 ppbv
RT: 2.341 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 96 Resp: 78085

Ion	Ratio	Lower	Upper
96	100		
61	168.1	136.5	204.7
98	61.9	50.6	76.0



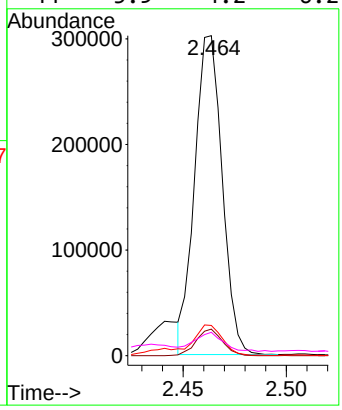


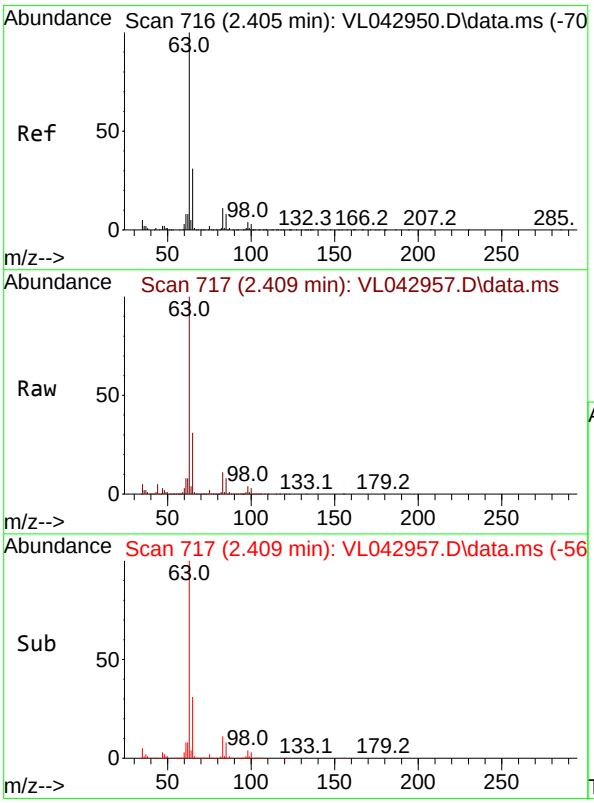
#23
Vinyl Acetate
Concen: 9.427 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 43 Resp: 280339

Ion	Ratio	Lower	Upper
43	100		
86	8.3	6.2	9.2
42	9.4	7.4	11.0
44	5.9	4.2	6.2

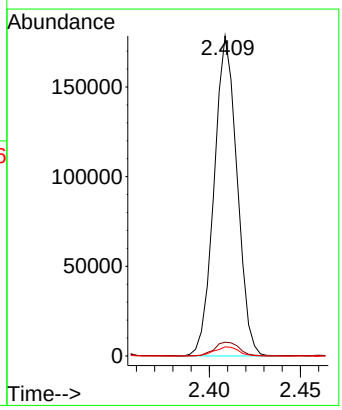


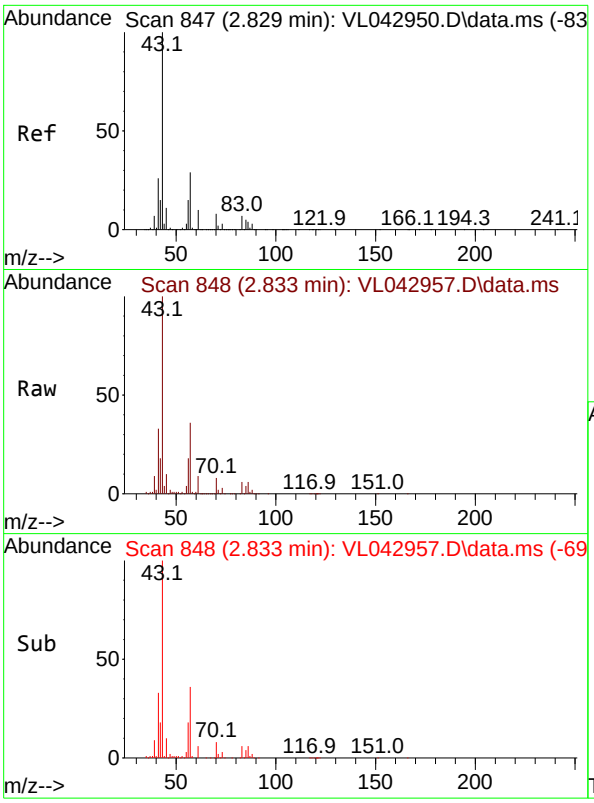


#24
1,1-Dichloroethane
Concen: 9.003 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 63 Resp: 155861

Ion	Ratio	Lower	Upper
63	100		
98	4.2	2.2	6.6
100	2.8	1.4	4.0



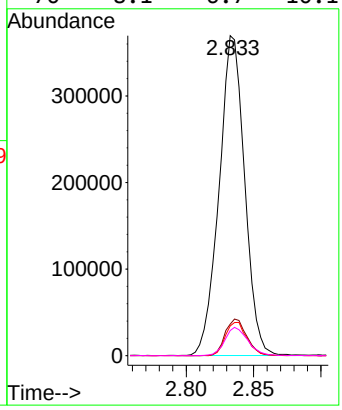


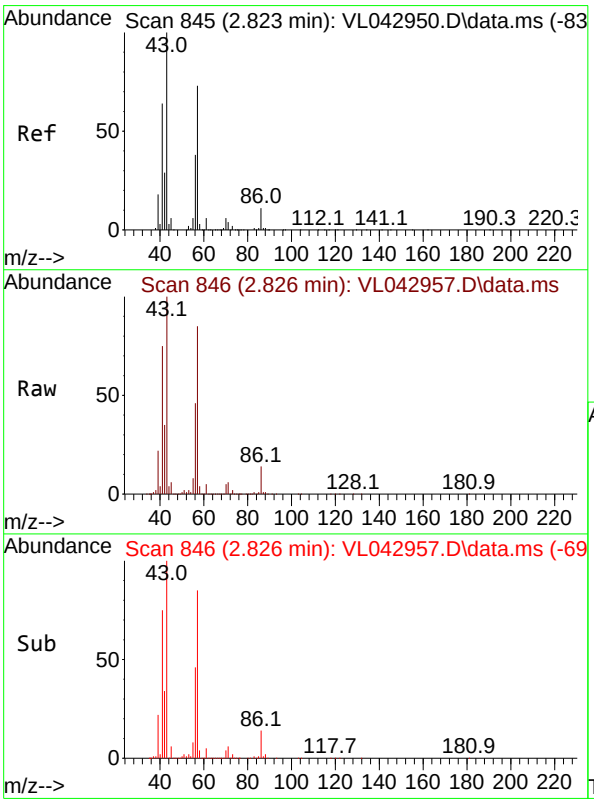
#25
Ethyl Acetate
Concen: 9.256 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 43 Resp: 486993

Ion	Ratio	Lower	Upper
43	100		
45	9.8	7.7	11.5
61	8.9	7.1	10.7
70	8.1	6.7	10.1

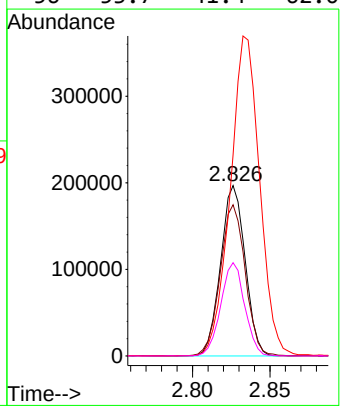


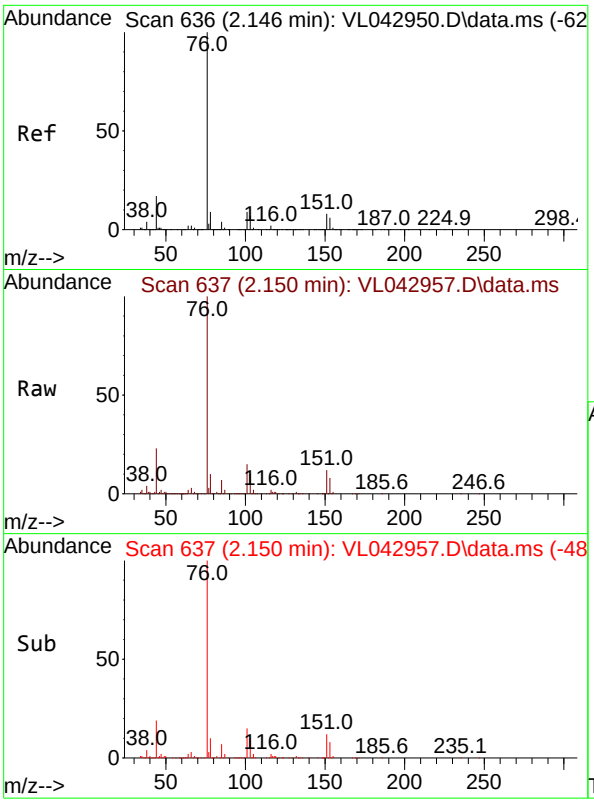


#26
Hexane
Concen: 9.026 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 57 Resp: 216458

Ion	Ratio	Lower	Upper
57	100		
41	90.9	71.7	107.5
43	226.2	180.8	271.2
56	53.7	41.4	62.0



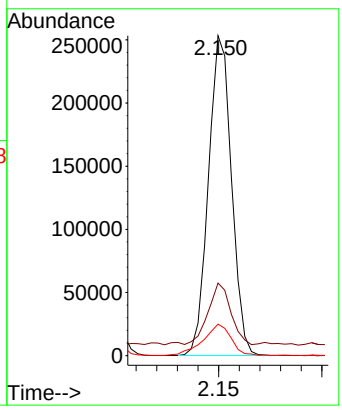


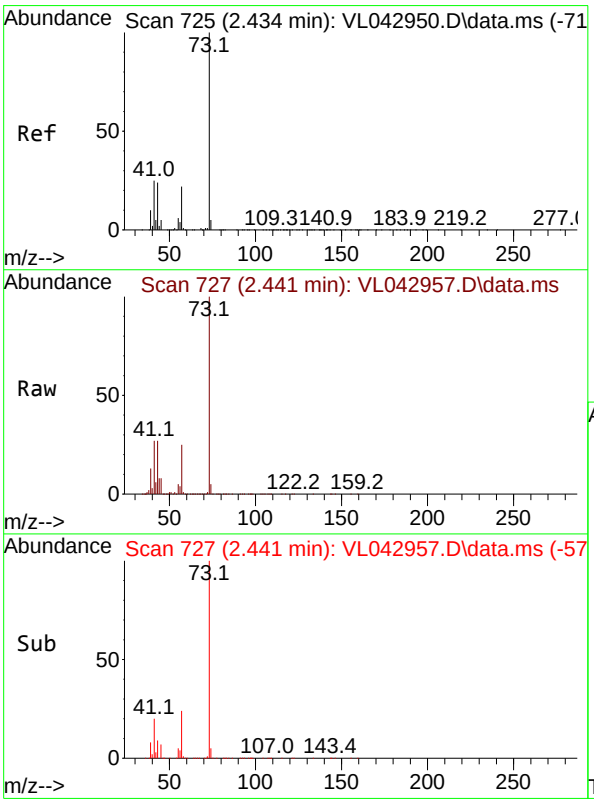
#27
Carbon Disulfide
Concen: 9.121 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 76 Resp: 196191

Ion	Ratio	Lower	Upper
76	100		
44	20.2	15.6	23.4
78	12.1	8.9	13.3

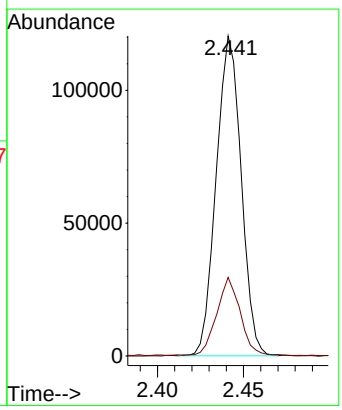


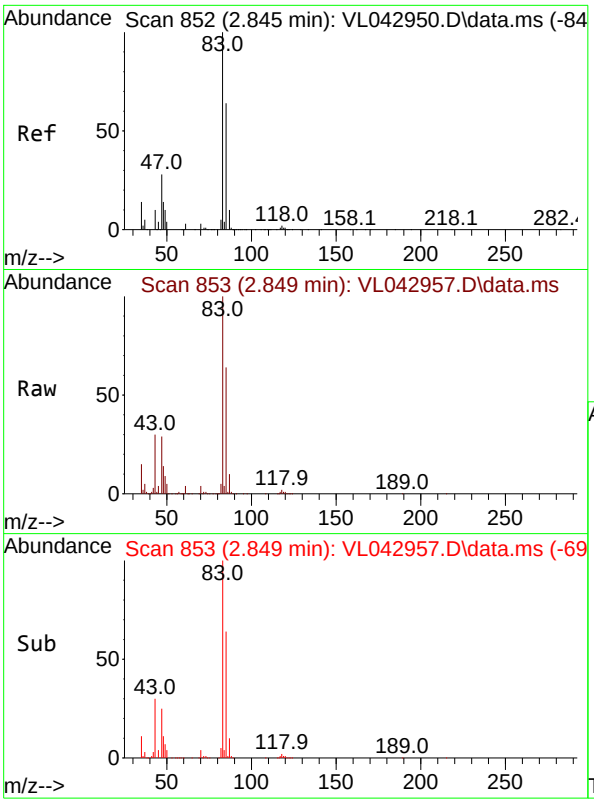


#28
Methyl tert-Butyl Ether
Concen: 9.752 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 73 Resp: 121564

Ion	Ratio	Lower	Upper
73	100		
57	23.3	20.6	31.0



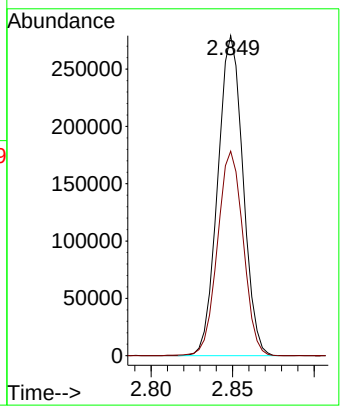


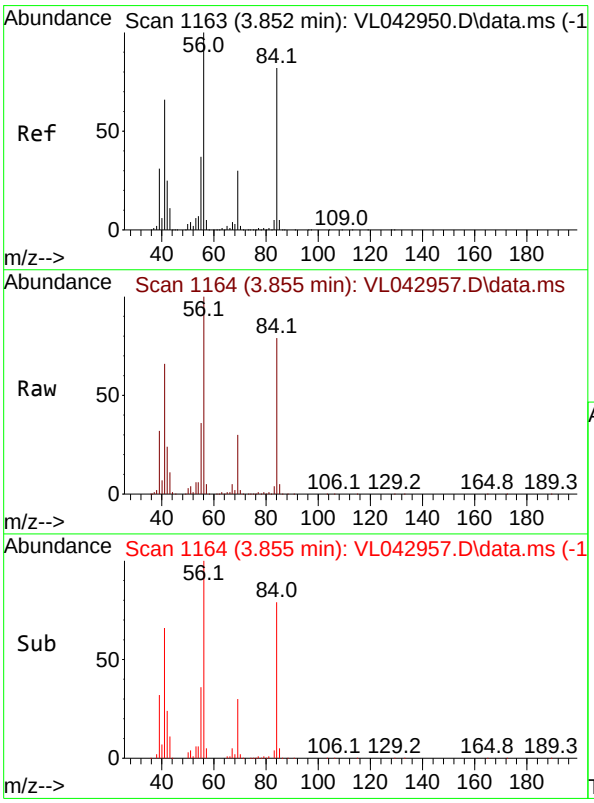
#29
Chloroform
Concen: 9.583 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 83 Resp: 300507

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.2	76.8

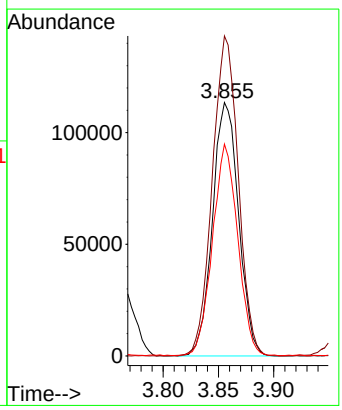


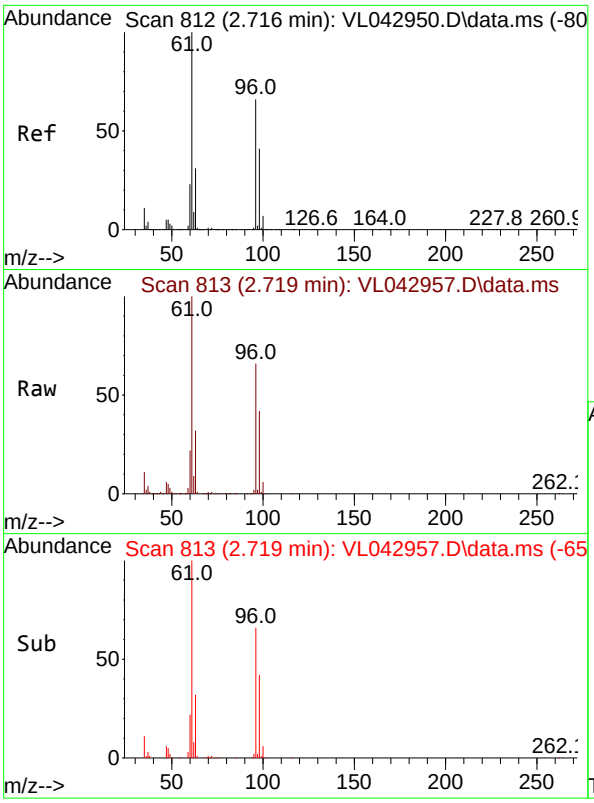


#30
Cyclohexane
Concen: 9.286 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 84 Resp: 186186

Ion	Ratio	Lower	Upper
84	100		
56	125.6	102.2	153.4
41	81.2	65.6	98.4



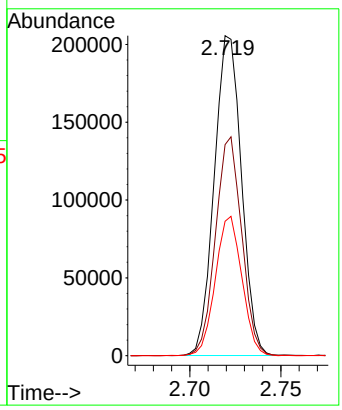


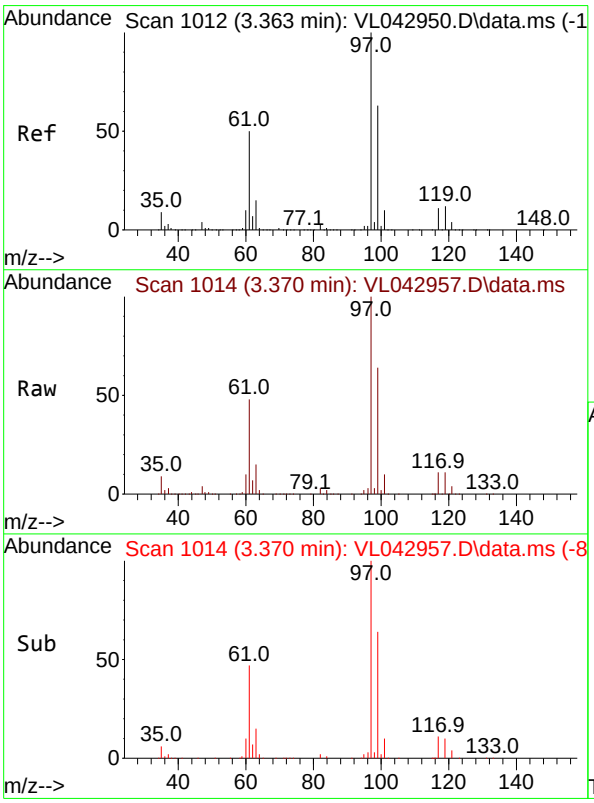
#31
cis-1,2-Dichloroethene
Concen: 9.497 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 61 Resp: 213362

Ion	Ratio	Lower	Upper
61	100		
96	65.9	53.0	79.6
98	42.0	32.9	49.3

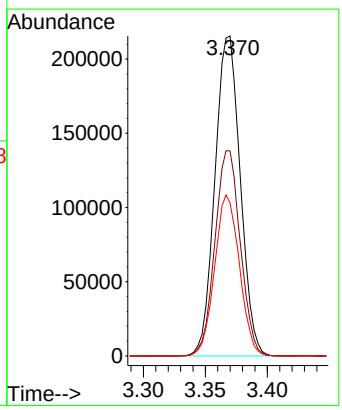


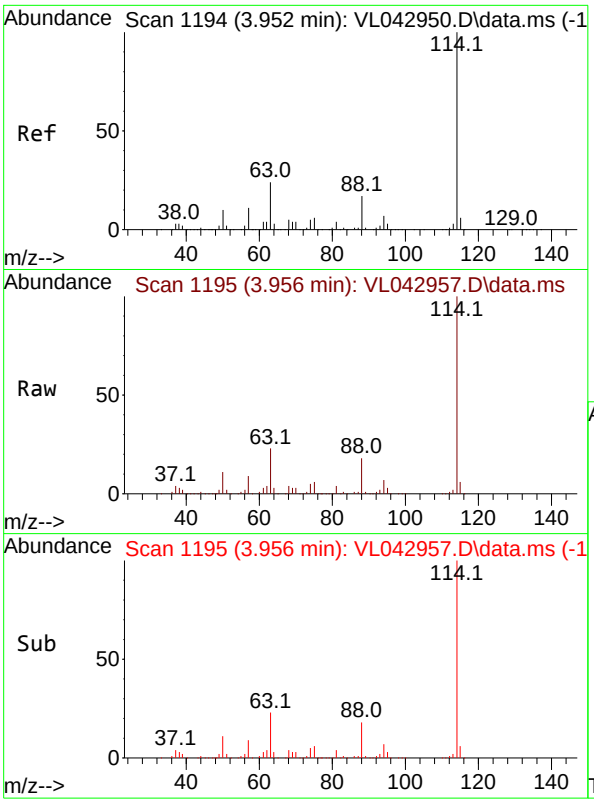


#32
1,1,1-Trichloroethane
Concen: 9.071 ppbv
RT: 3.370 min Scan# 1014
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 97 Resp: 307237

Ion	Ratio	Lower	Upper
97	100		
99	64.2	51.1	76.7
61	49.3	39.8	59.6



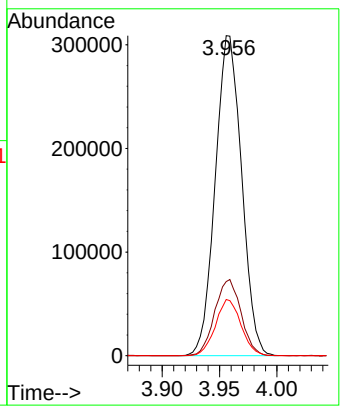


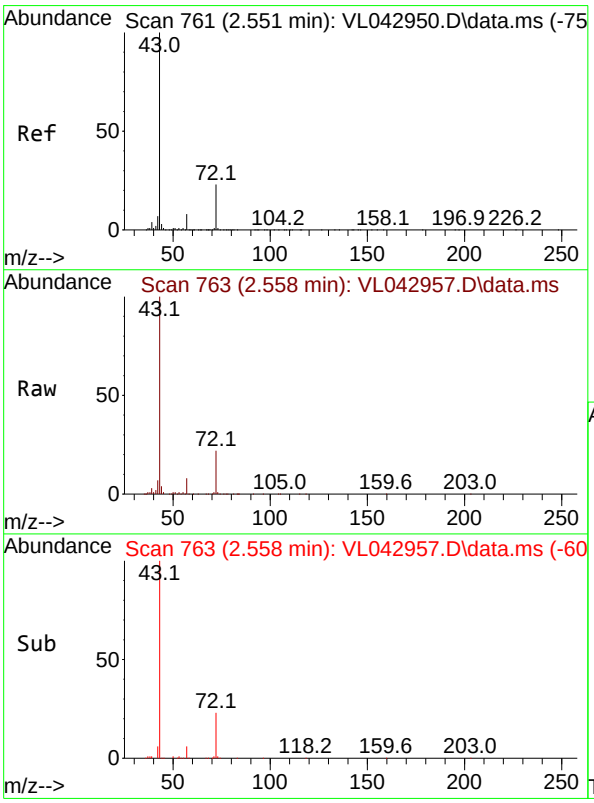
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:114 Resp: 493072

Ion	Ratio	Lower	Upper
114	100		
63	23.8	19.4	29.2
88	17.0	14.2	21.2

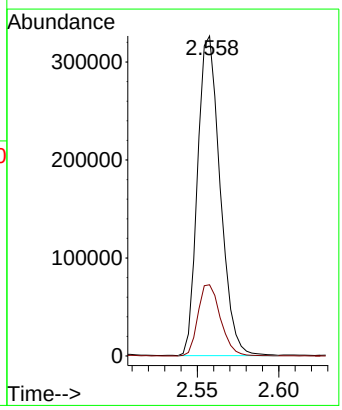


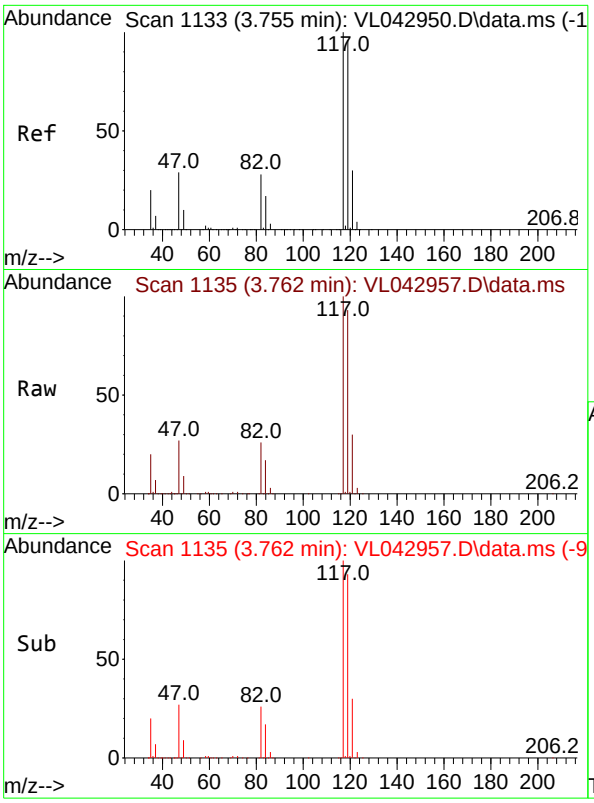


#34
2-Butanone
Concen: 9.081 ppbv
RT: 2.558 min Scan# 763
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 313801

Ion	Ratio	Lower	Upper
43	100		
72	22.3	17.7	26.5



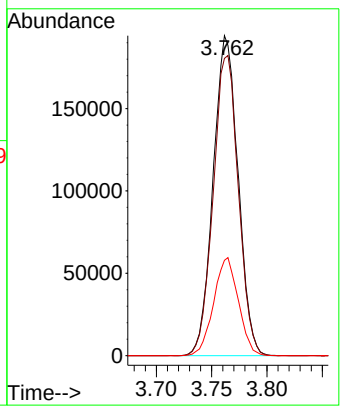


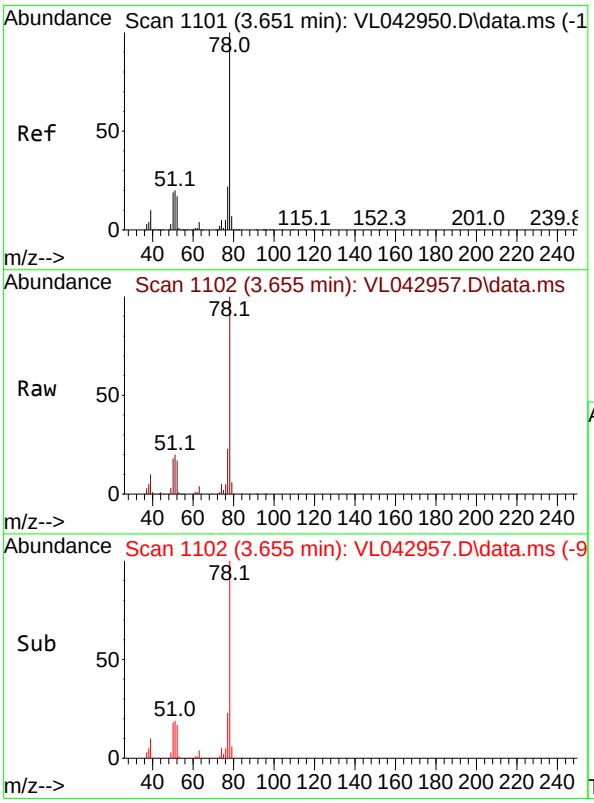
#35
Carbon Tetrachloride
Concen: 9.479 ppbv
RT: 3.762 min Scan# 11
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:117 Resp: 304293

Ion	Ratio	Lower	Upper
117	100		
119	92.9	76.9	115.3
121	29.8	23.7	35.5

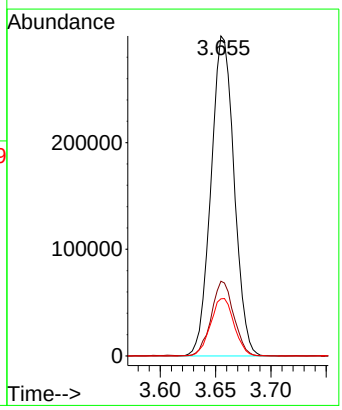


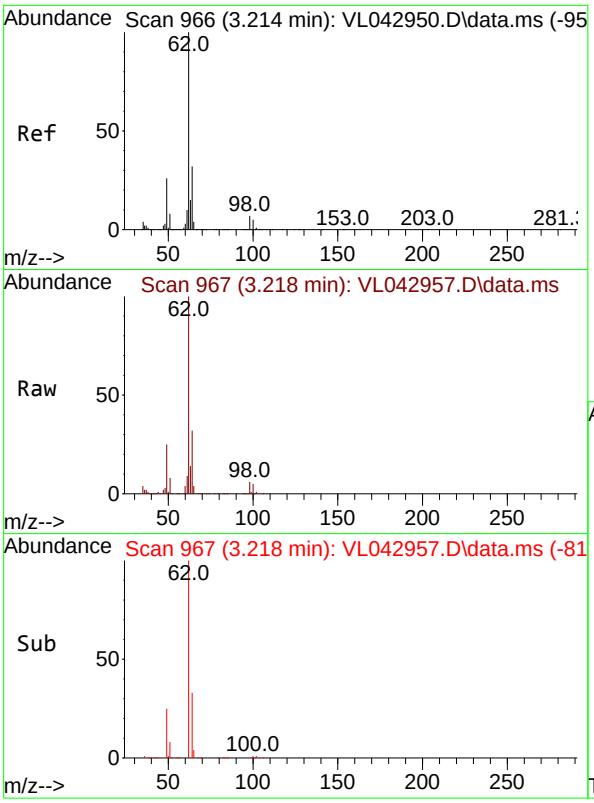


#36
Benzene
Concen: 9.416 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 78 Resp: 435981

Ion	Ratio	Lower	Upper
78	100		
77	23.3	17.8	26.6
50	17.9	15.0	22.4



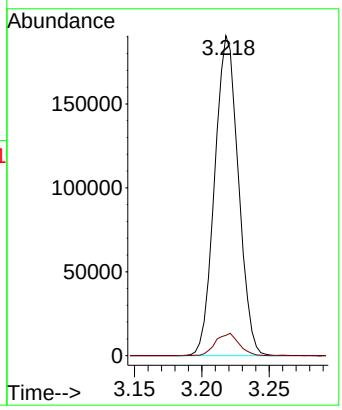


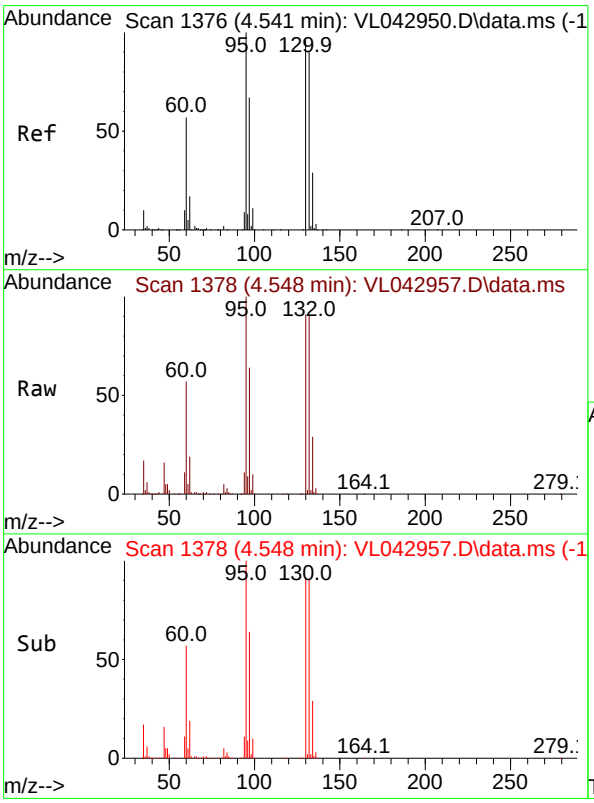
#37
1,2-Dichloroethane
Concen: 9.581 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 62 Resp: 233305

Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.9	8.9

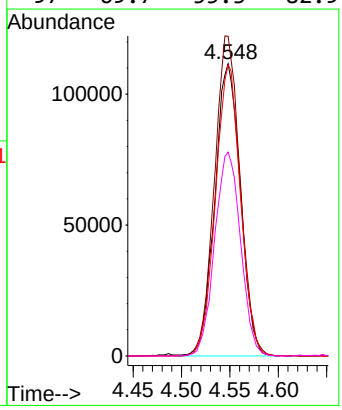


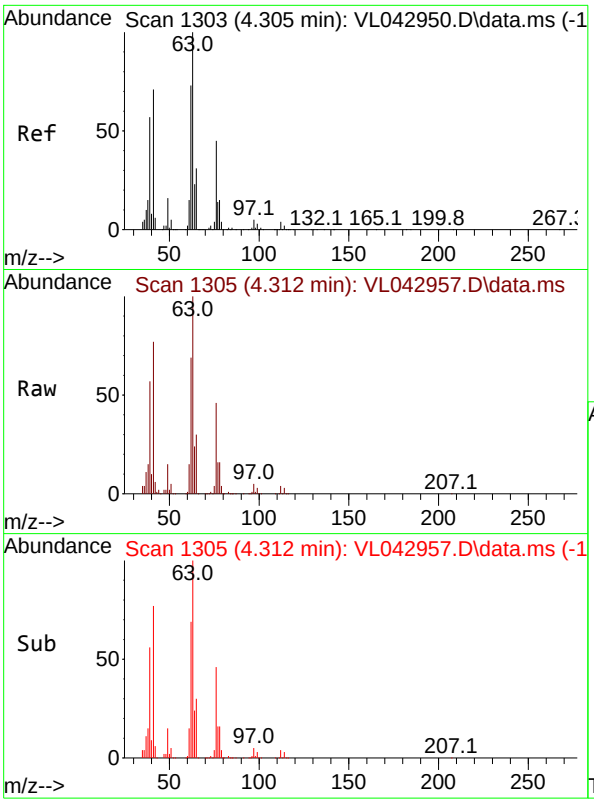


#38
Trichloroethene
Concen: 8.927 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:130 Resp: 205431

Ion	Ratio	Lower	Upper
130	100		
95	109.4	83.0	124.4
132	99.7	74.6	112.0
97	69.7	55.3	82.9



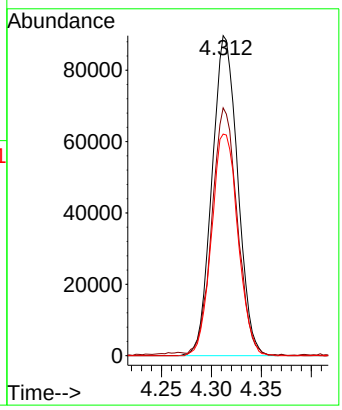


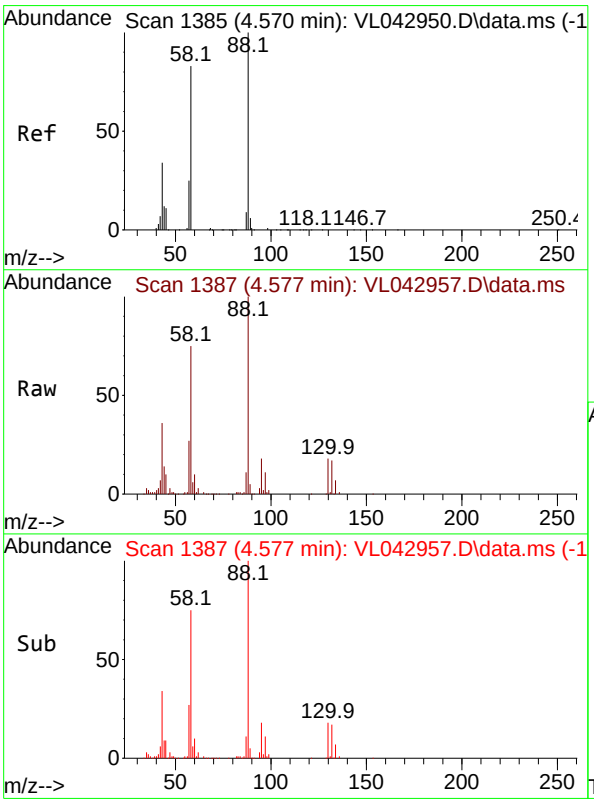
#39
1,2-Dichloropropane
Concen: 9.482 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 63 Resp: 160275

Ion	Ratio	Lower	Upper
63	100		
41	77.2	57.5	86.3
62	69.3	58.5	87.7

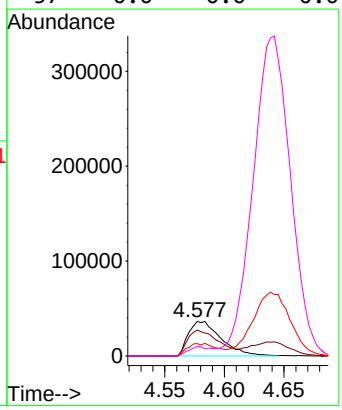


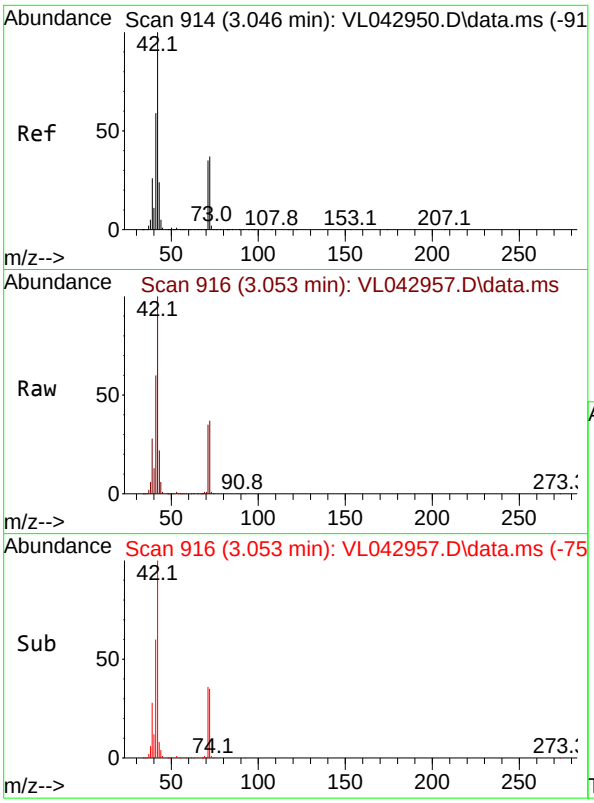


#40
1,4-Dioxane
Concen: 8.863 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 88 Resp: 69659

Ion	Ratio	Lower	Upper
88	100		
58	70.6	59.7	89.5
43	32.1	28.9	43.3
57	0.0	0.0	0.0



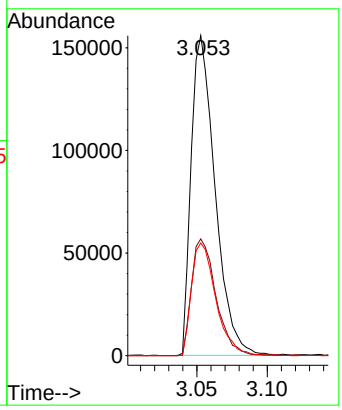


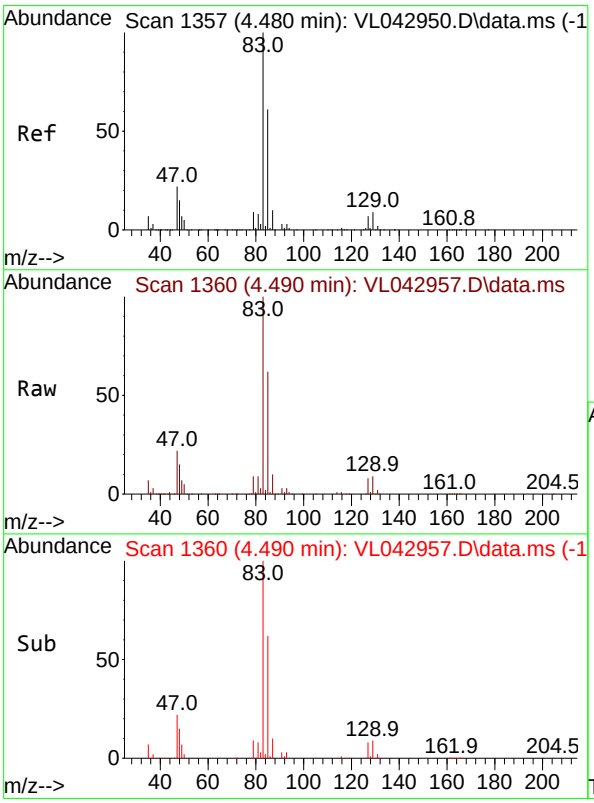
#41
Tetrahydrofuran
Concen: 9.277 ppbv
RT: 3.053 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 42 Resp: 184258

Ion	Ratio	Lower	Upper
42	100		
72	37.4	30.0	45.0
71	35.9	28.8	43.2

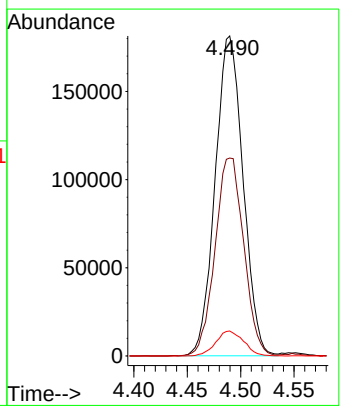


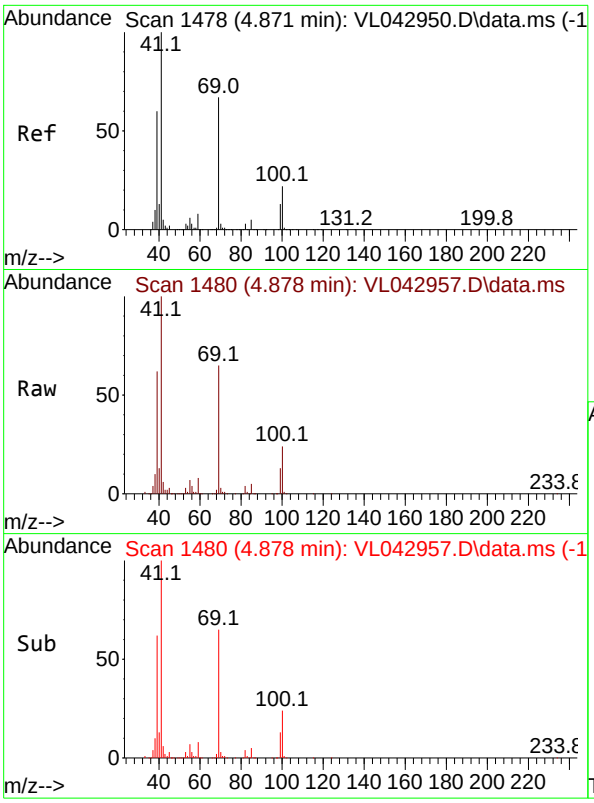


#42
Bromodichloromethane
Concen: 9.721 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 83 Resp: 329680

Ion	Ratio	Lower	Upper
83	100		
85	61.8	49.0	73.6
127	7.8	5.3	7.9



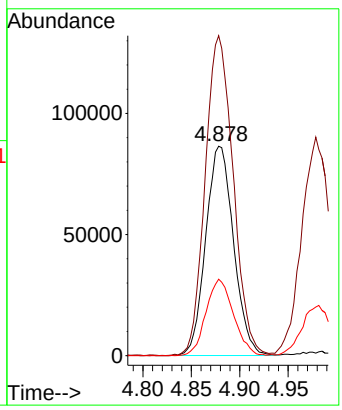


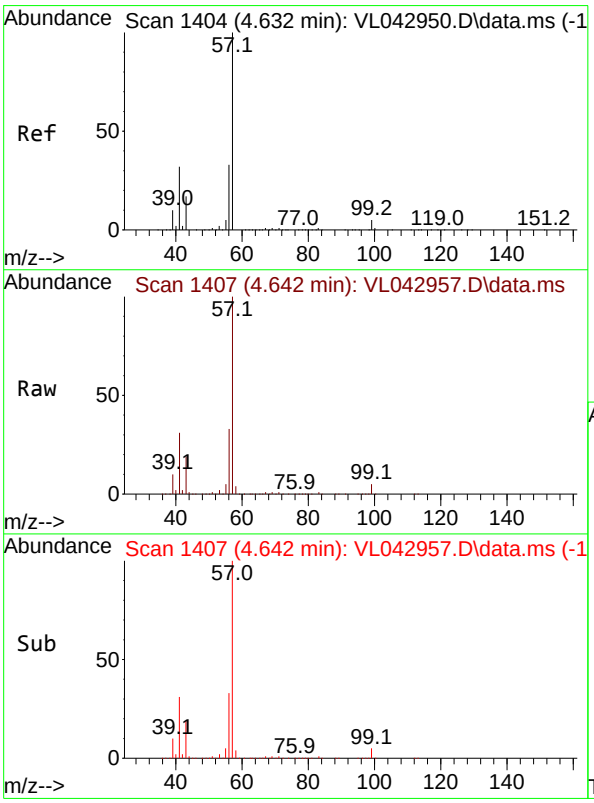
#43
Methyl Methacrylate
Concen: 9.125 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 69 Resp: 172867

Ion	Ratio	Lower	Upper
69	100		
41	153.4	124.5	186.7
100	36.1	29.0	43.6

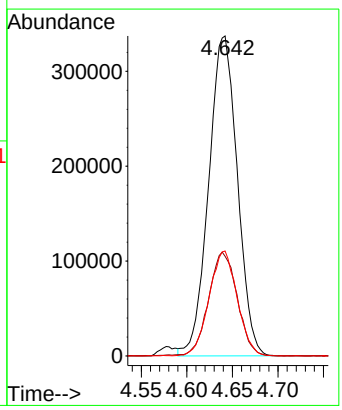


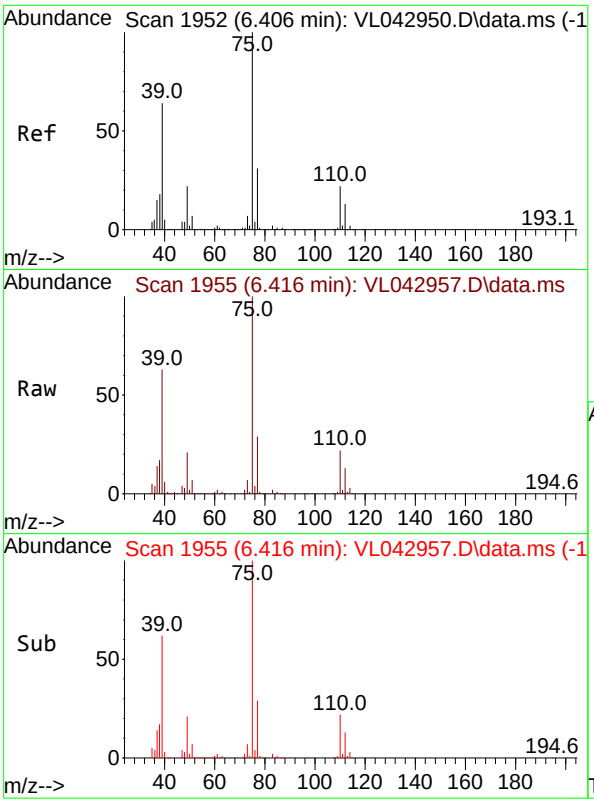


#44
2,2,4-Trimethylpentane
Concen: 9.239 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 57 Resp: 738876

Ion	Ratio	Lower	Upper
57	100		
41	32.5	25.5	38.3
56	32.3	25.8	38.8



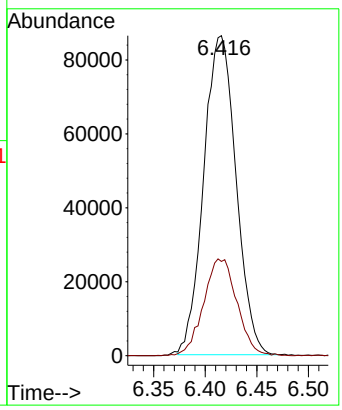


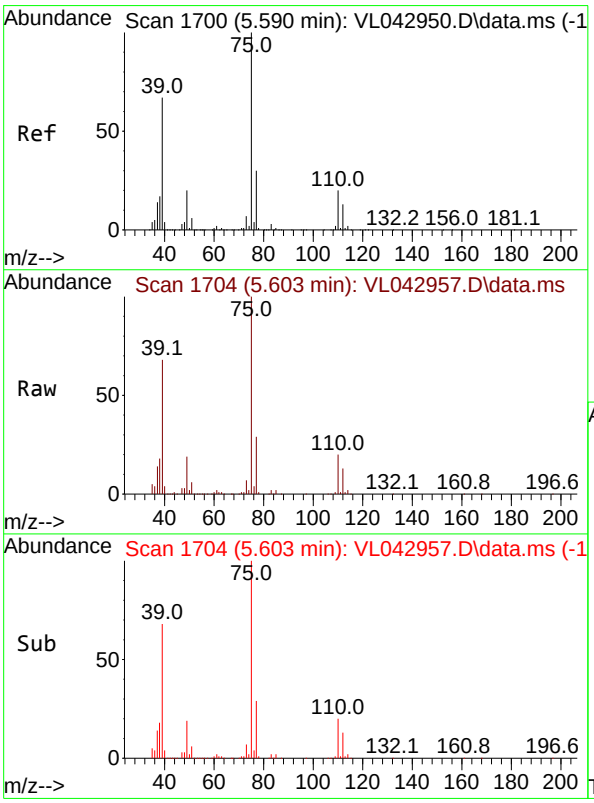
#45
t-1,3-Dichloropropene
Concen: 9.321 ppbv
RT: 6.416 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 75 Resp: 188332

Ion	Ratio	Lower	Upper
75	100		
77	29.5	25.0	37.4

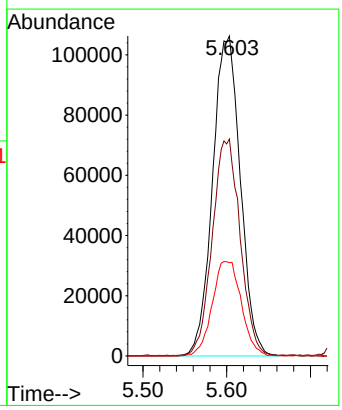


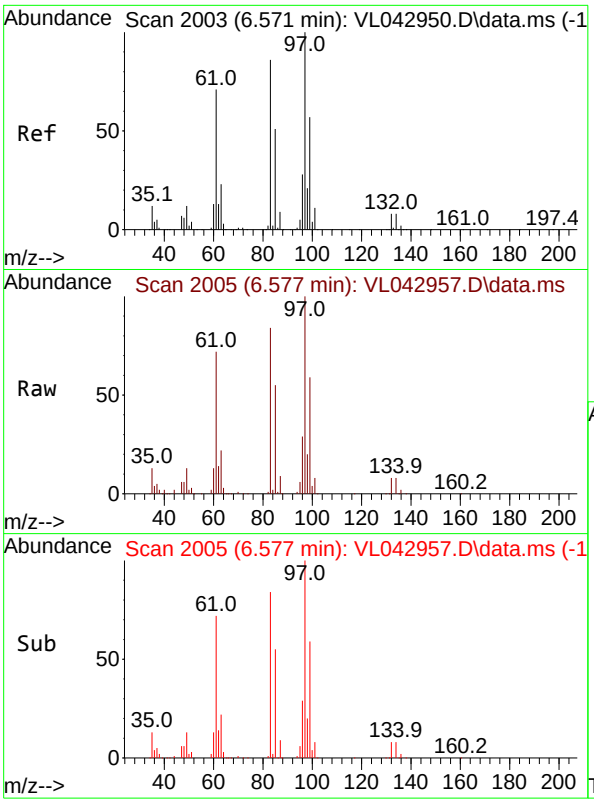


#46
cis-1,3-Dichloropropene
Concen: 9.490 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.013 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 75 Resp: 244367

Ion	Ratio	Lower	Upper
75	100		
39	67.6	53.8	80.6
77	29.1	23.6	35.4



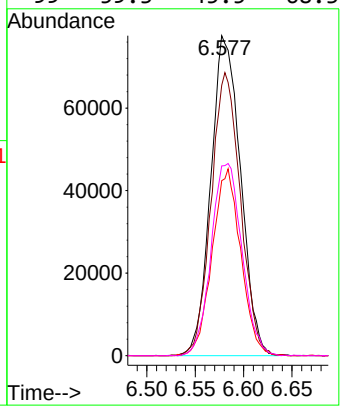


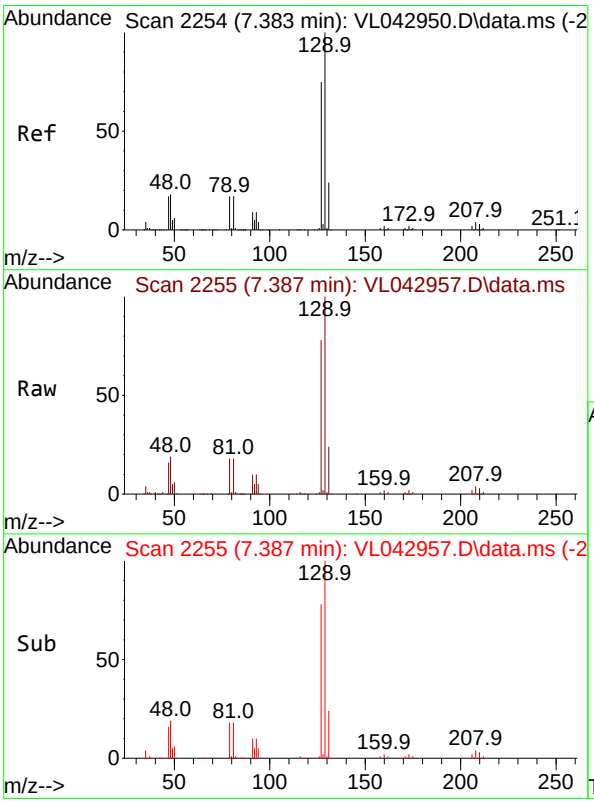
#47
1,1,2-Trichloroethane
Concen: 9.279 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 97 Resp: 165721

Ion	Ratio	Lower	Upper
97	100		
83	84.4	68.7	103.1
85	54.5	40.6	60.8
99	59.3	45.5	68.3

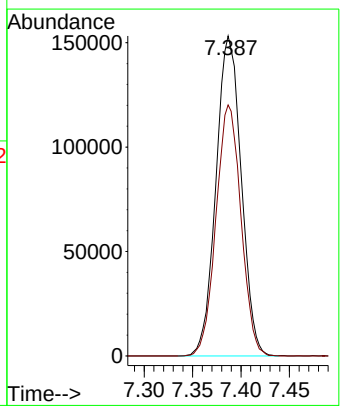


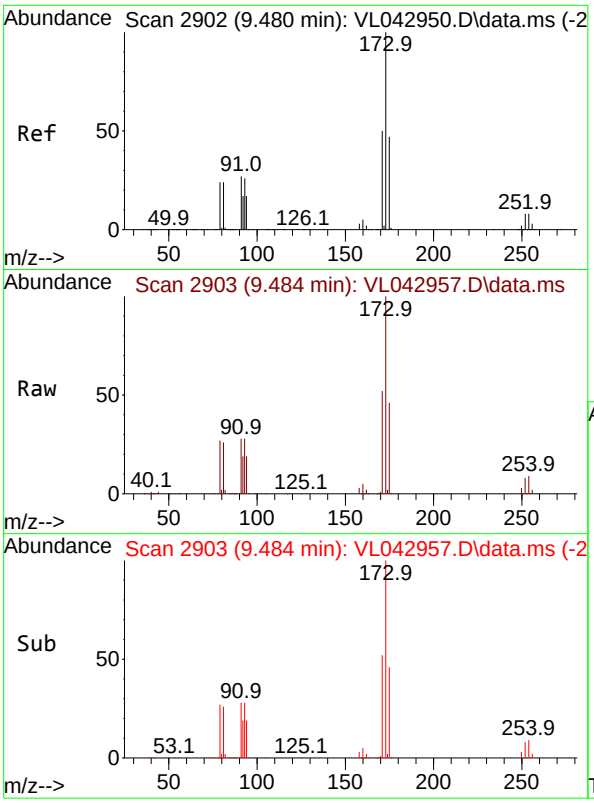


#48
Dibromochloromethane
Concen: 9.732 ppbv
RT: 7.387 min Scan# 2255
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:129 Resp: 278090

Ion	Ratio	Lower	Upper
129	100		
127	77.5	39.1	117.2



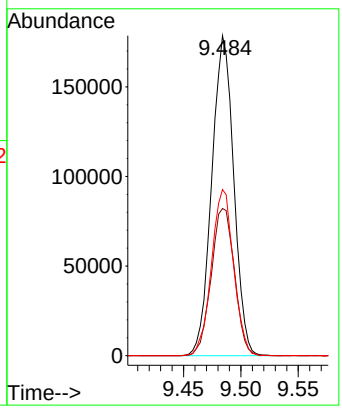


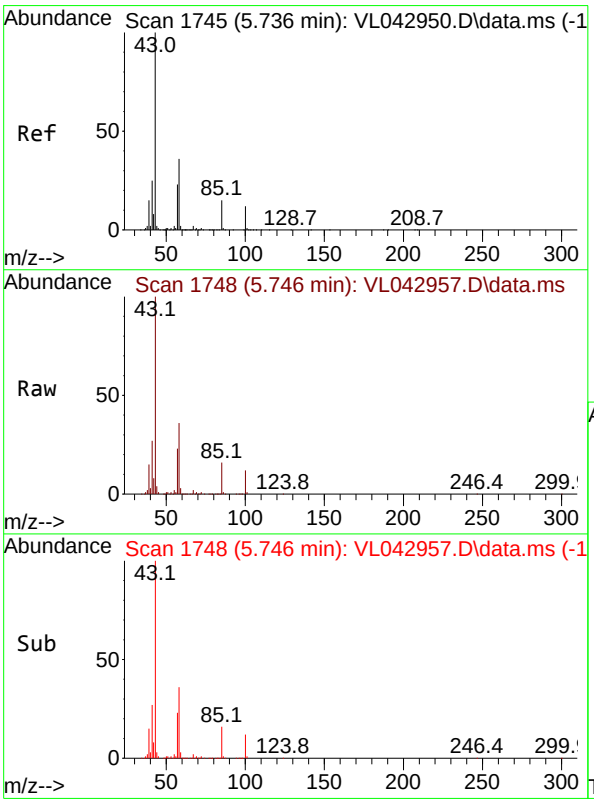
#49
Bromoform
Concen: 9.589 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:173 Resp: 238337

Ion	Ratio	Lower	Upper
173	100		
175	48.6	37.9	56.9
171	52.1	41.1	61.7

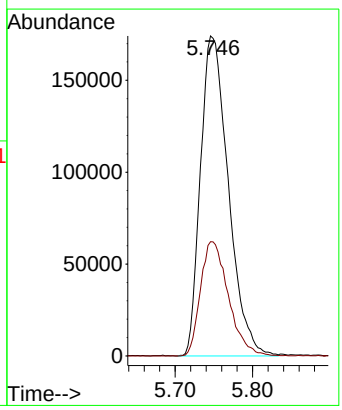


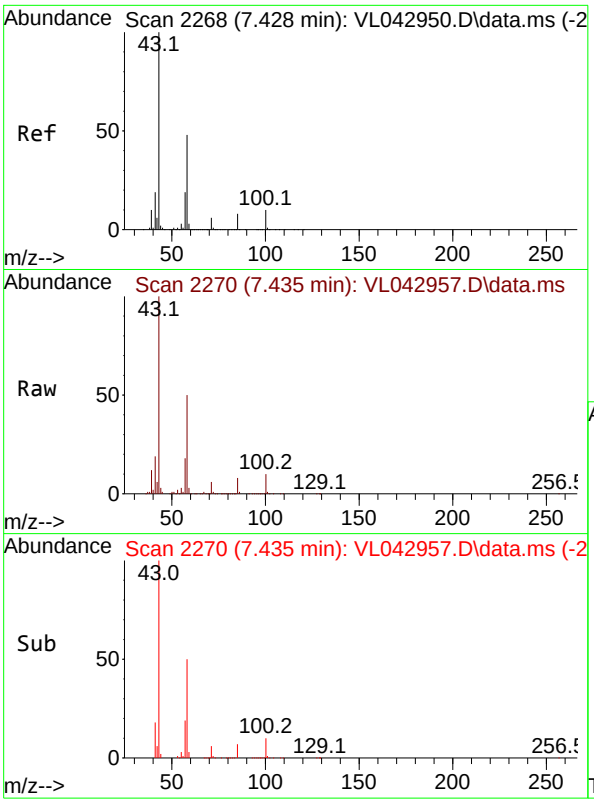


#50
4-Methyl-2-Pentanone
Concen: 9.411 ppbv
RT: 5.746 min Scan# 1748
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 43 Resp: 435845

Ion	Ratio	Lower	Upper
43	100		
58	35.8	28.4	42.6



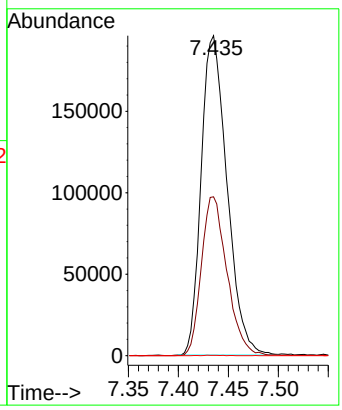


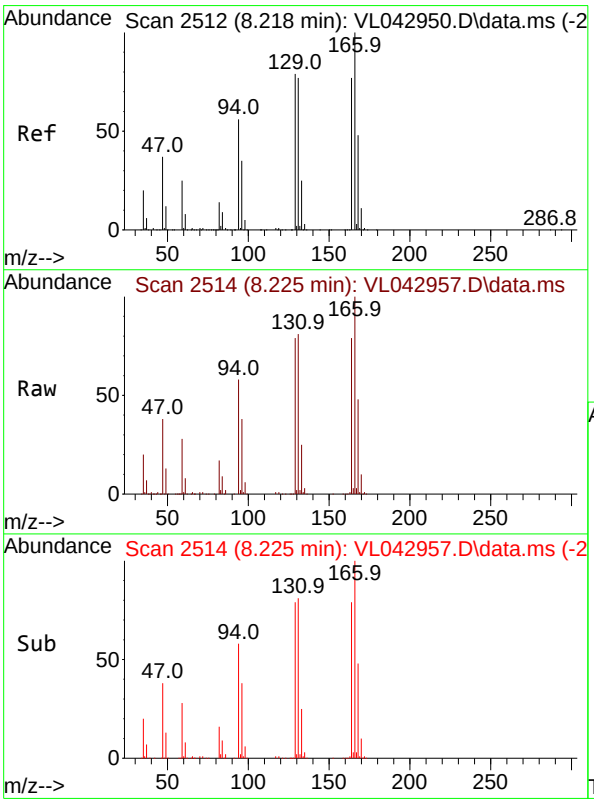
#51
2-Hexanone
Concen: 9.561 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 43 Resp: 352962

Ion	Ratio	Lower	Upper
43	100		
58	49.5	39.7	59.5
98	0.1	0.1	0.1

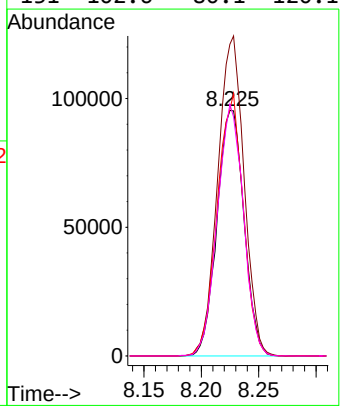


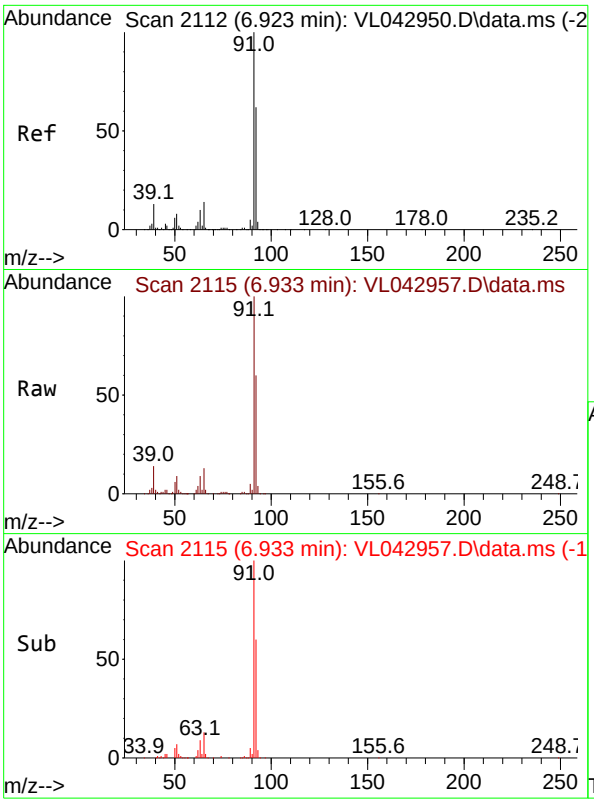


#52
Tetrachloroethene
Concen: 8.678 ppbv
RT: 8.225 min Scan# 2514
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:164 Resp: 155469

Ion	Ratio	Lower	Upper
164	100		
166	127.0	103.5	155.3
129	100.4	82.2	123.4
131	102.6	80.1	120.1



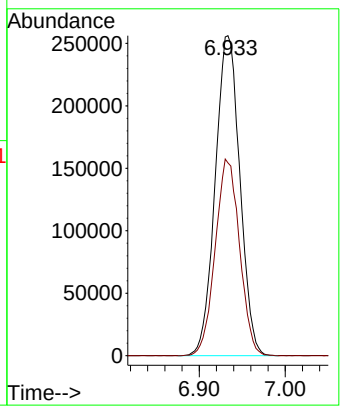


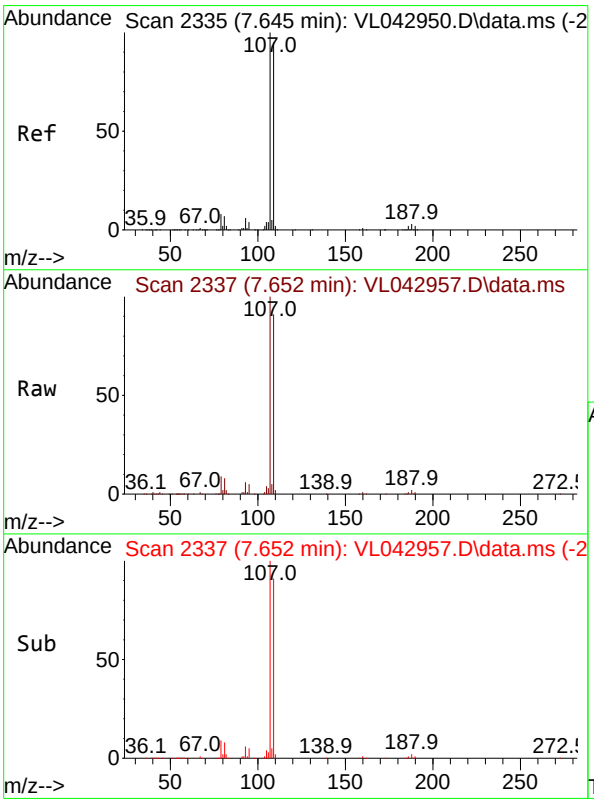
#53
Toluene
Concen: 9.306 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 91 Resp: 509968

Ion	Ratio	Lower	Upper
91	100		
92	60.7	48.2	72.2

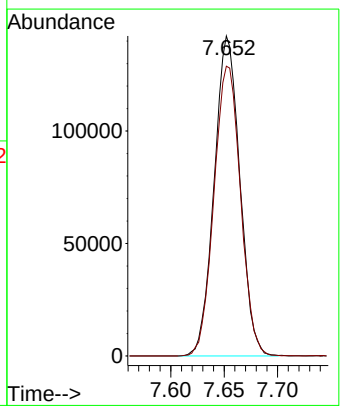


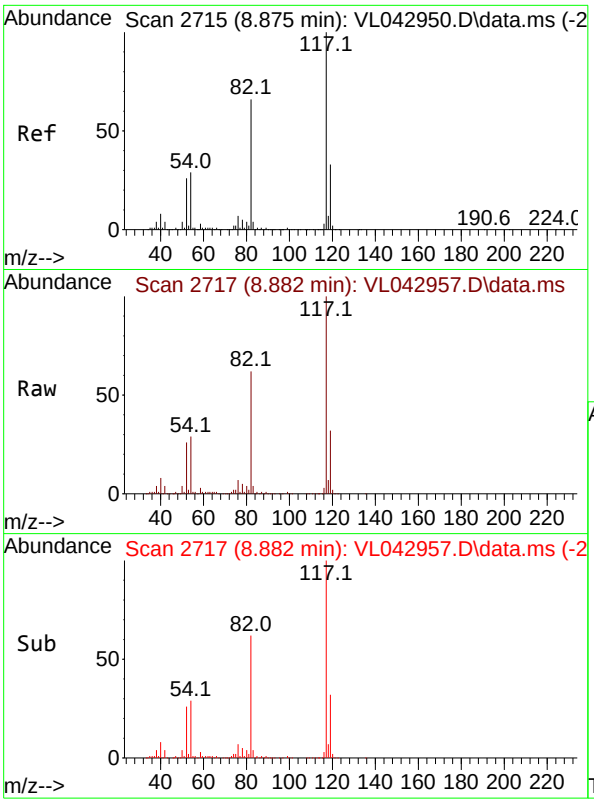


#54
1,2-Dibromoethane
Concen: 9.452 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:107 Resp: 237604

Ion	Ratio	Lower	Upper
107	100		
109	90.6	75.8	113.8



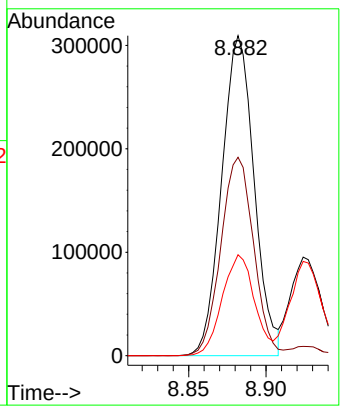


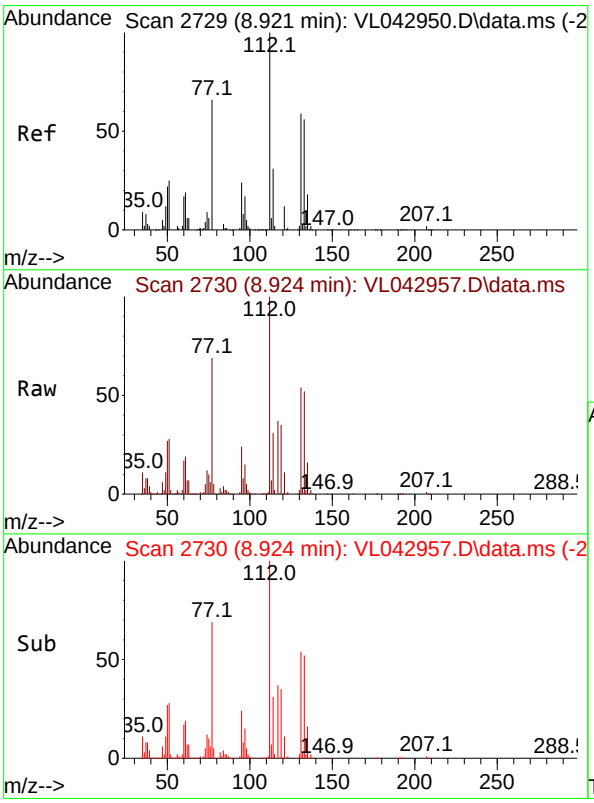
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:117 Resp: 450930

Ion	Ratio	Lower	Upper
117	100		
82	65.5	52.8	79.2
119	32.4	26.5	39.7

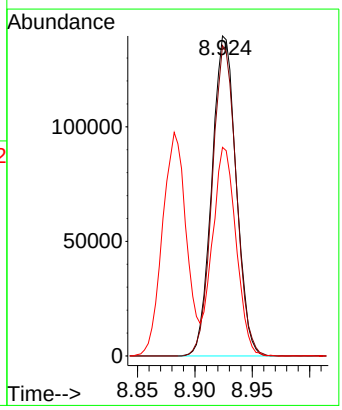


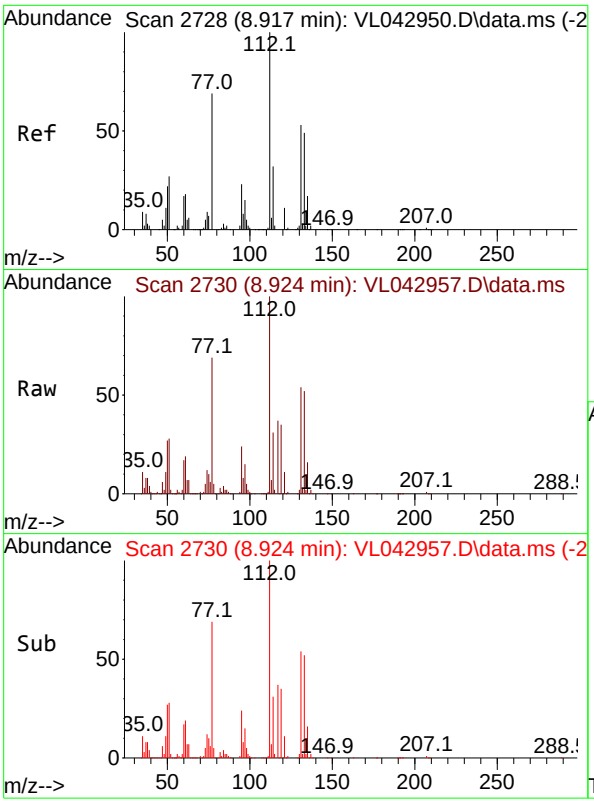


#56
1,1,1,2-Tetrachloroethane
Concen: 9.536 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:131 Resp: 205811

Ion	Ratio	Lower	Upper
131	100		
133	96.0	76.6	114.8
119	64.5	49.9	74.9



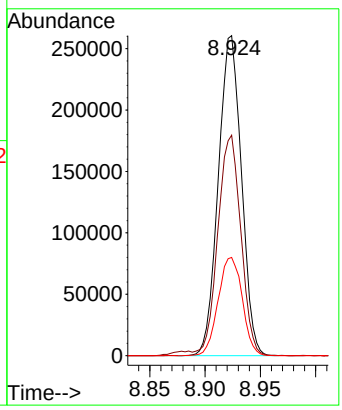


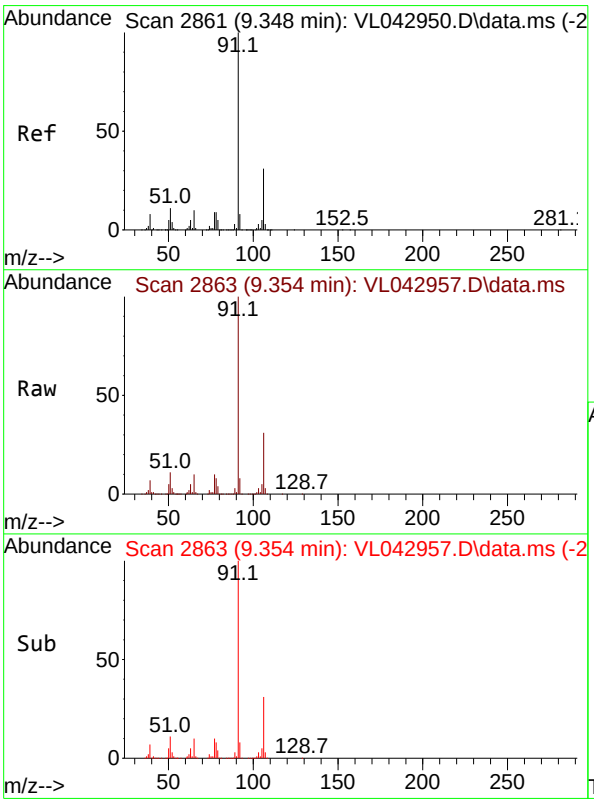
#57
Chlorobenzene
Concen: 9.209 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:112 Resp: 379110

Ion	Ratio	Lower	Upper
112	100		
77	68.9	55.7	83.5
114	30.7	28.6	35.0

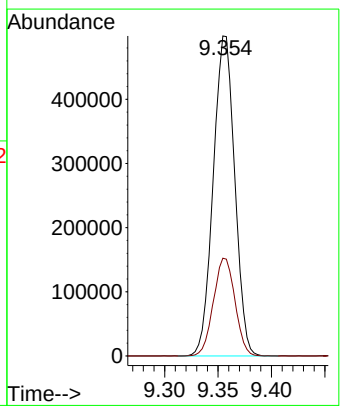


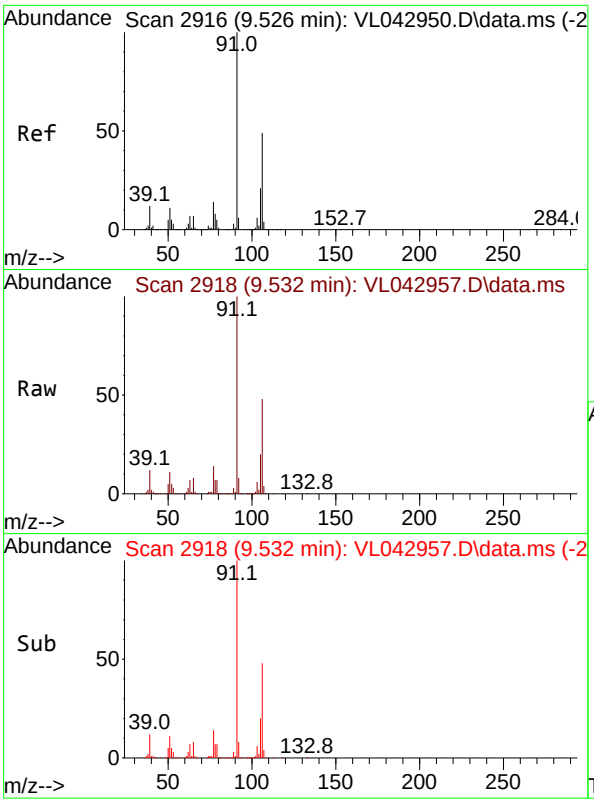


#58
Ethyl Benzene
Concen: 9.428 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 698086

Ion	Ratio	Lower	Upper
91	100		
106	30.6	24.6	37.0



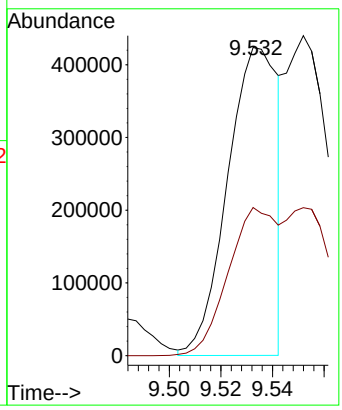


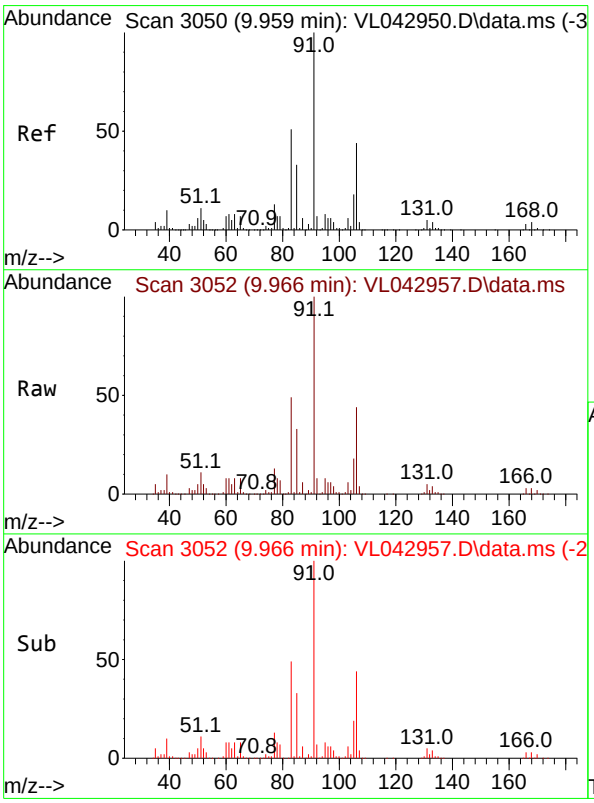
#59
m/p-Xylene
Concen: 9.744 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 91 Resp: 568845

Ion	Ratio	Lower	Upper
91	100		
106	91.2	0.0	0.0#

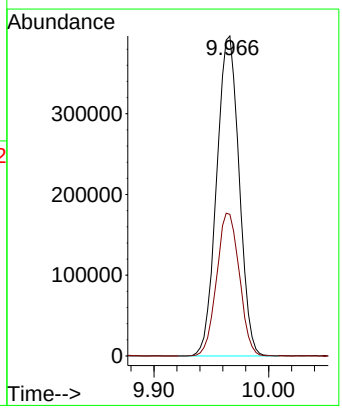


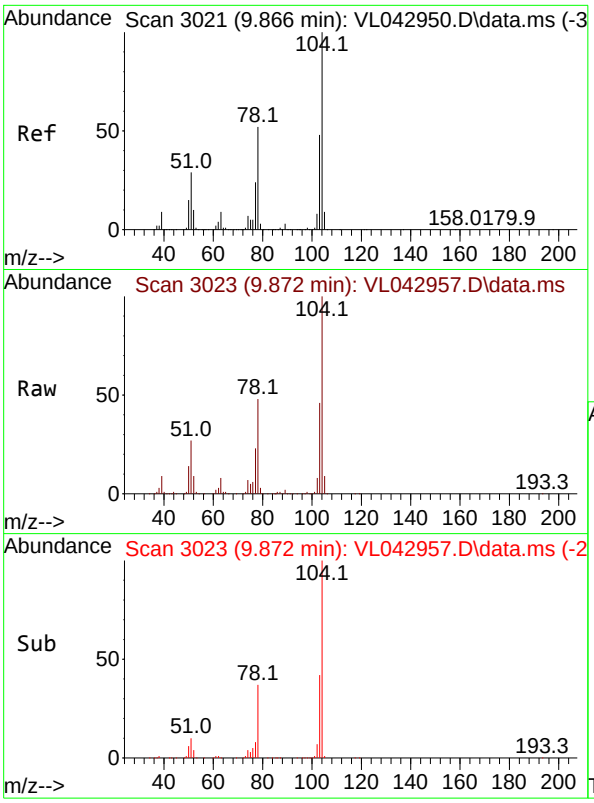


#60
o-Xylene
Concen: 9.236 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 538861

Ion	Ratio	Lower	Upper
91	100		
106	45.2	22.4	67.0



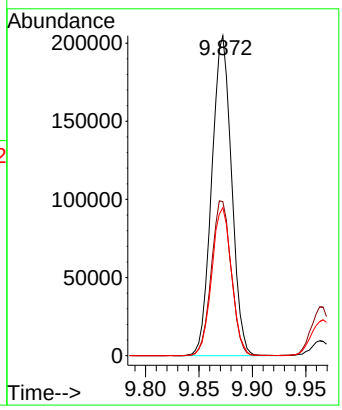


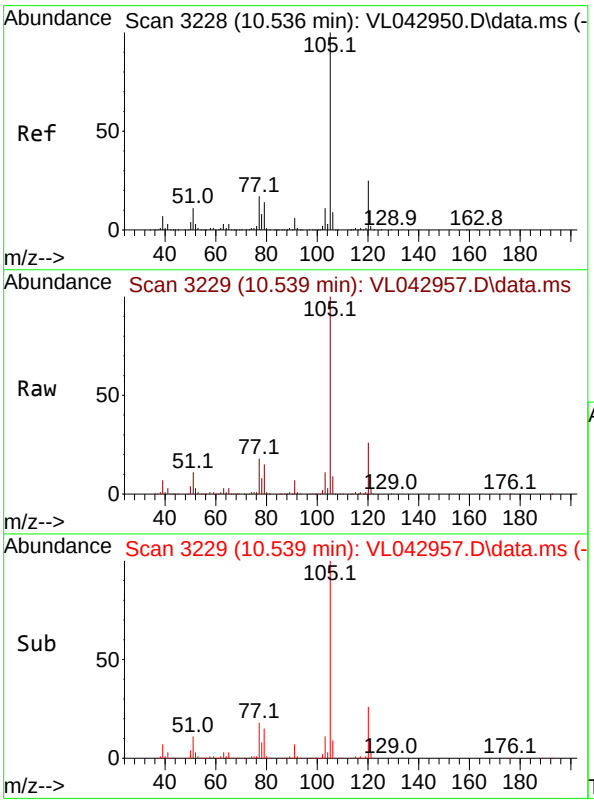
#61
Styrene
Concen: 9.575 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:104 Resp: 264257

Ion	Ratio	Lower	Upper
104	100		
78	48.5	39.9	59.9
103	46.3	36.9	55.3

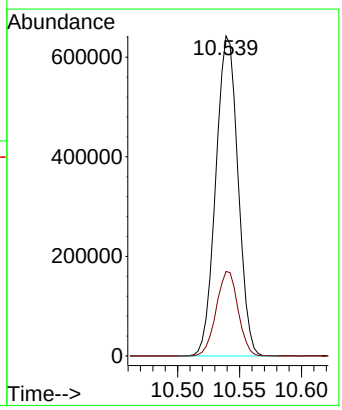


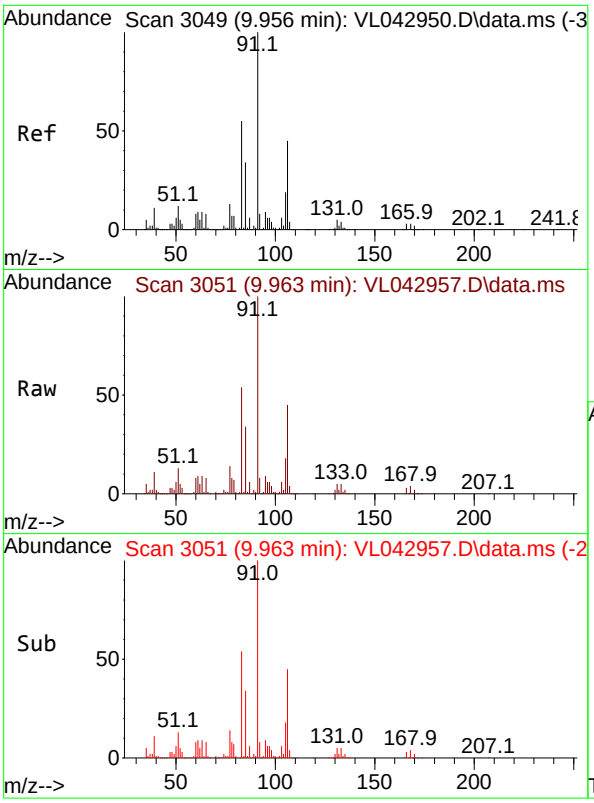


#62
Isopropylbenzene
Concen: 9.230 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 802723

Ion	Ratio	Lower	Upper
105	100		
120	26.0	20.6	30.8



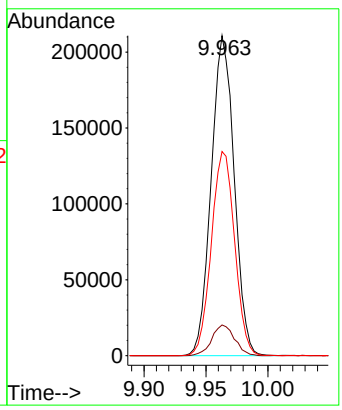


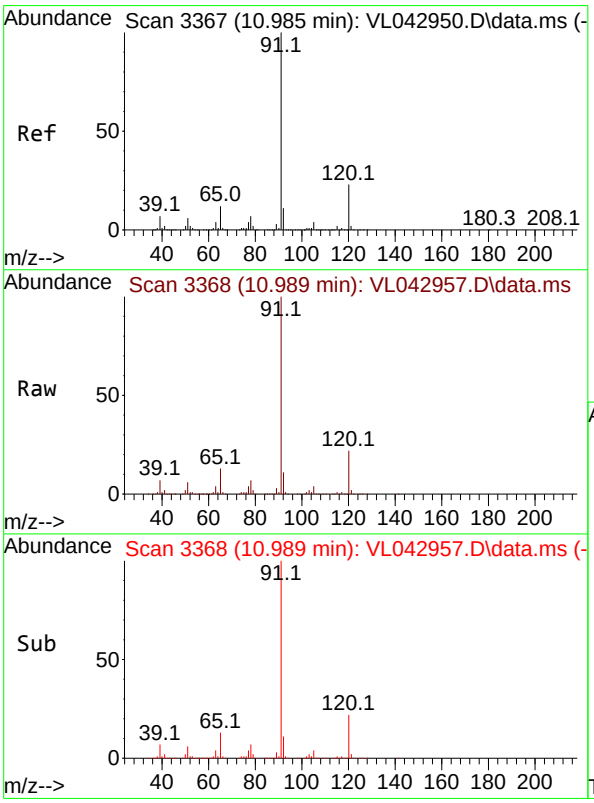
#63
1,1,2,2-Tetrachloroethane
Concen: 8.883 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 83 Resp: 272416

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.7	32.2	96.6

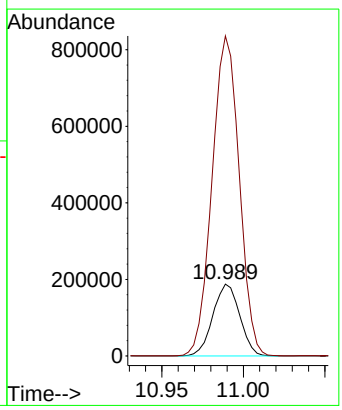


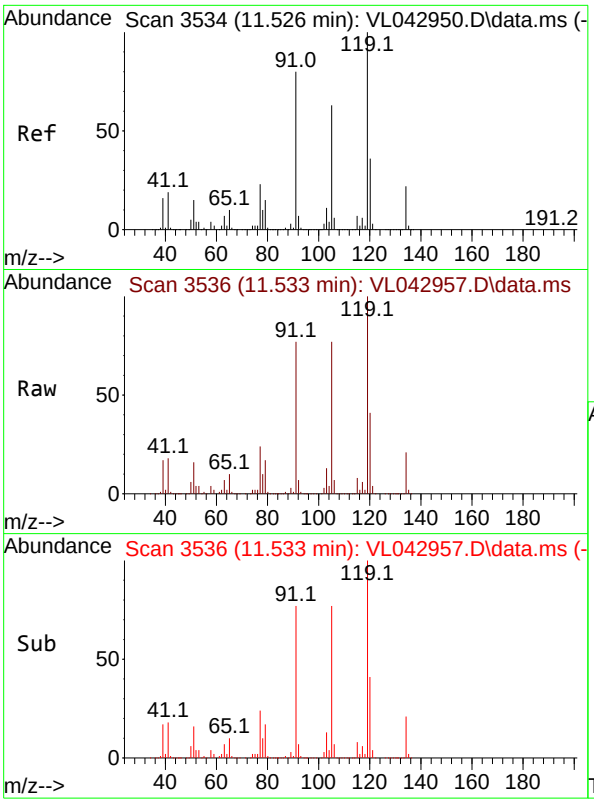


#64
n-propylbenzene
Concen: 9.433 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:120 Resp: 214374

Ion	Ratio	Lower	Upper
120	100		
91	452.3	364.9	547.3



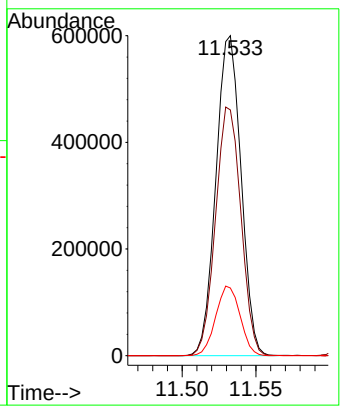


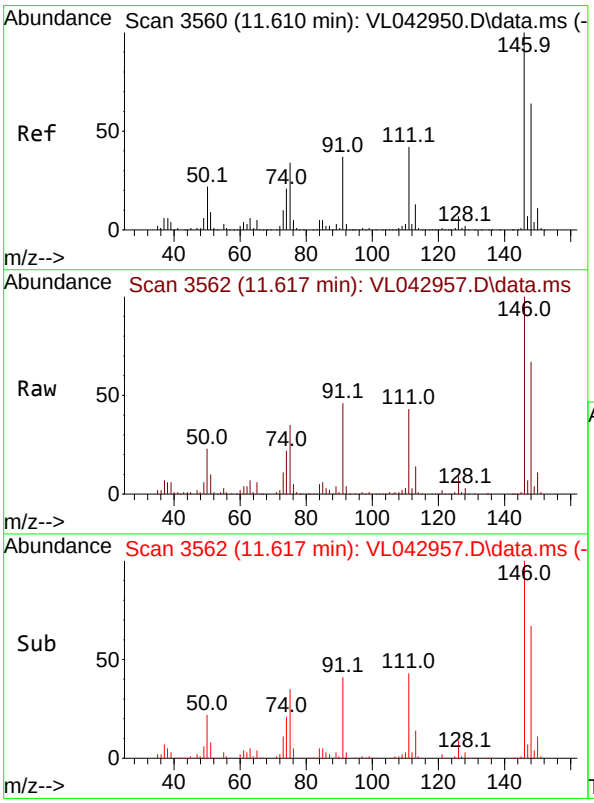
#65
tert-Butylbenzene
Concen: 9.196 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:119 Resp: 711319

Ion	Ratio	Lower	Upper
119	100		
91	78.3	63.1	94.7
134	21.1	17.0	25.6

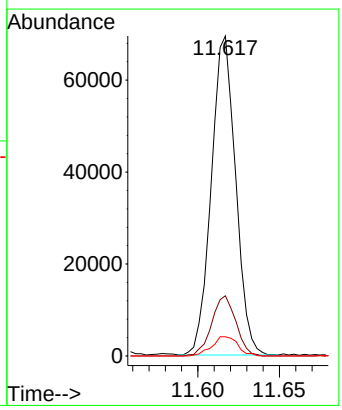


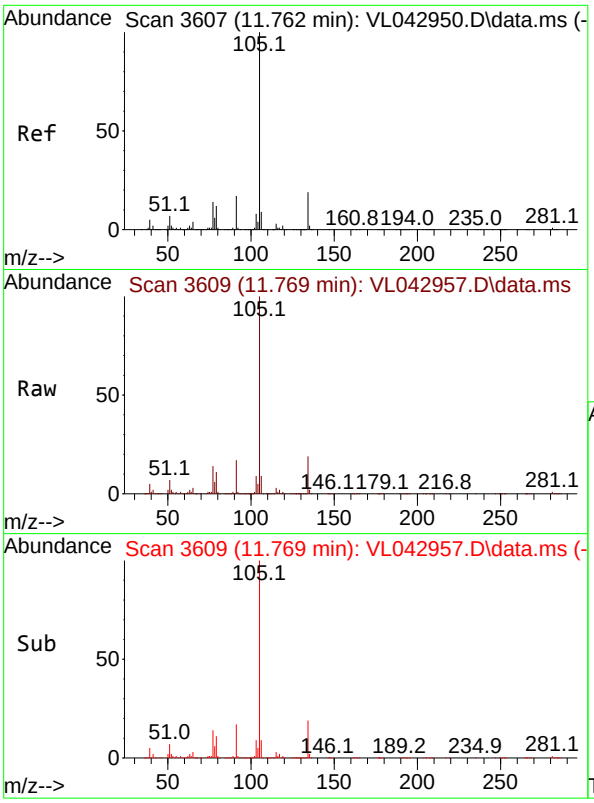


#66
Benzyl Chloride
Concen: 8.858 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 71896

Ion	Ratio	Lower	Upper
91	100		
126	18.8	14.6	21.8
128	6.4	5.0	7.4



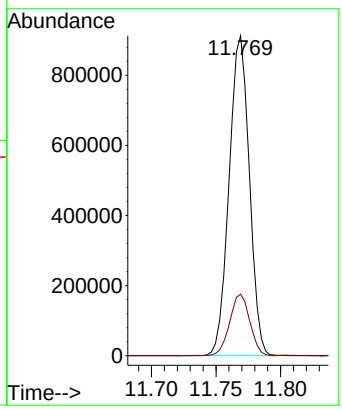


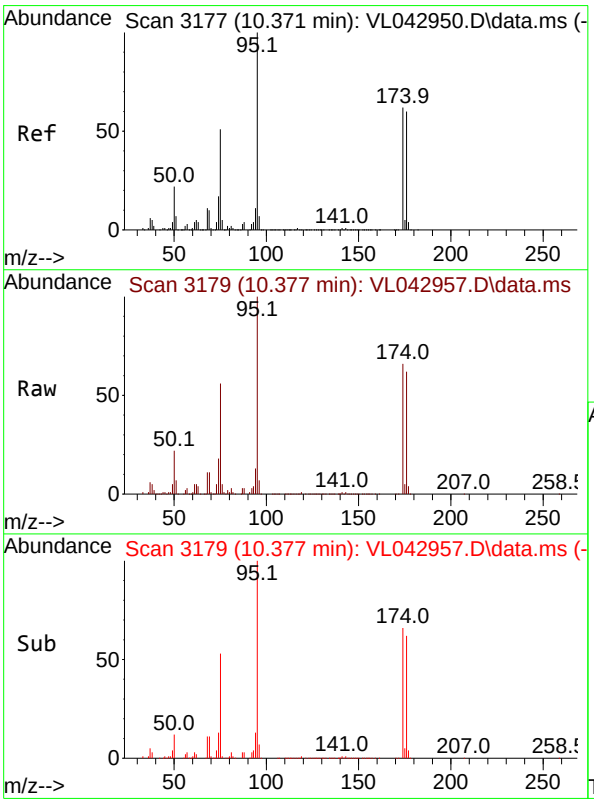
#67
sec-Butylbenzene
Concen: 9.235 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:105 Resp: 995407

Ion	Ratio	Lower	Upper
105	100		
134	19.2	15.7	23.5

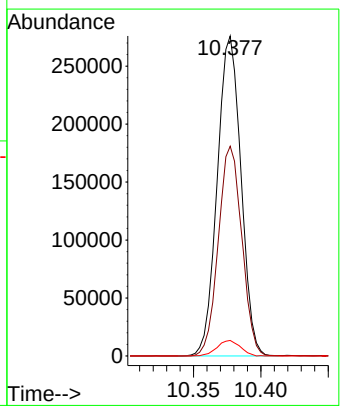


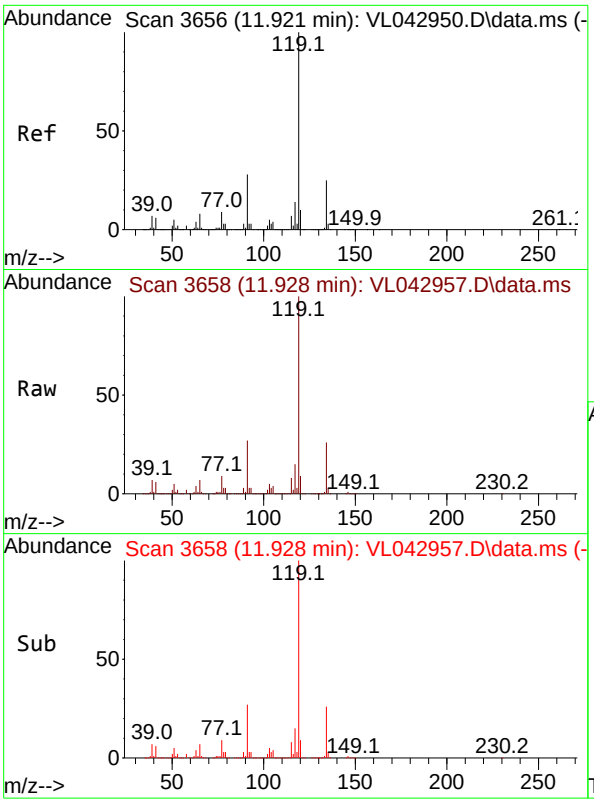


#68
1-Bromo-4-Fluorobenzene
Concen: 10.043 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 95 Resp: 338071

Ion	Ratio	Lower	Upper
95	100		
174	65.0	51.4	77.2
175	4.8	4.0	6.0



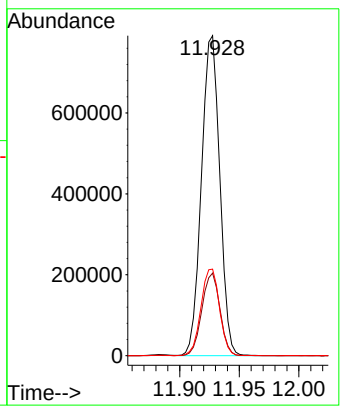


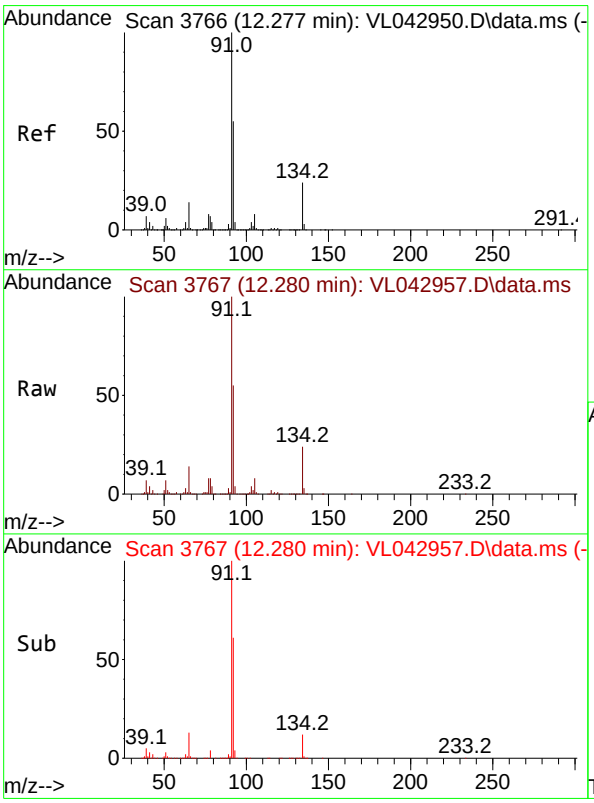
#69
p-Isopropyltoluene
Concen: 9.316 ppbv
RT: 11.928 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:119 Resp: 848196

Ion	Ratio	Lower	Upper
119	100		
134	25.6	21.0	31.4
91	27.5	22.3	33.5

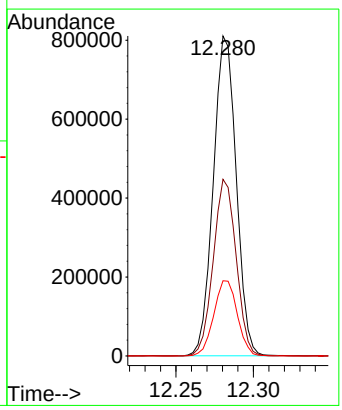


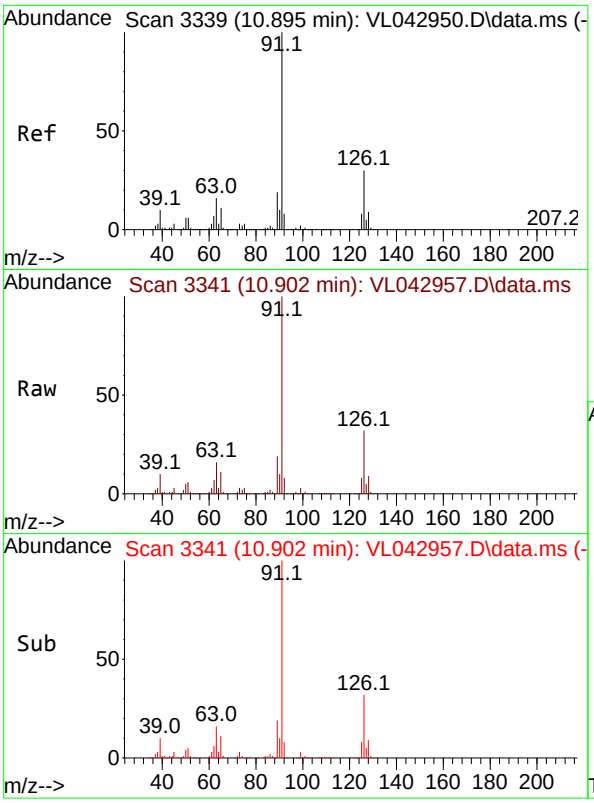


#70
n-Butylbenzene
Concen: 9.392 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion: 91 Resp: 834882

Ion	Ratio	Lower	Upper
91	100		
92	55.2	44.0	66.0
134	24.2	19.4	29.2



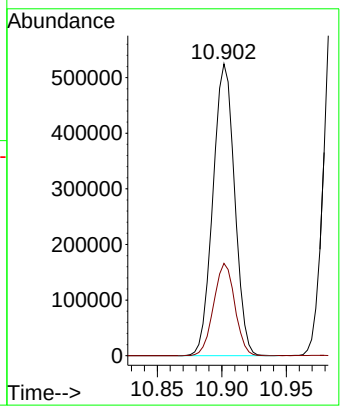


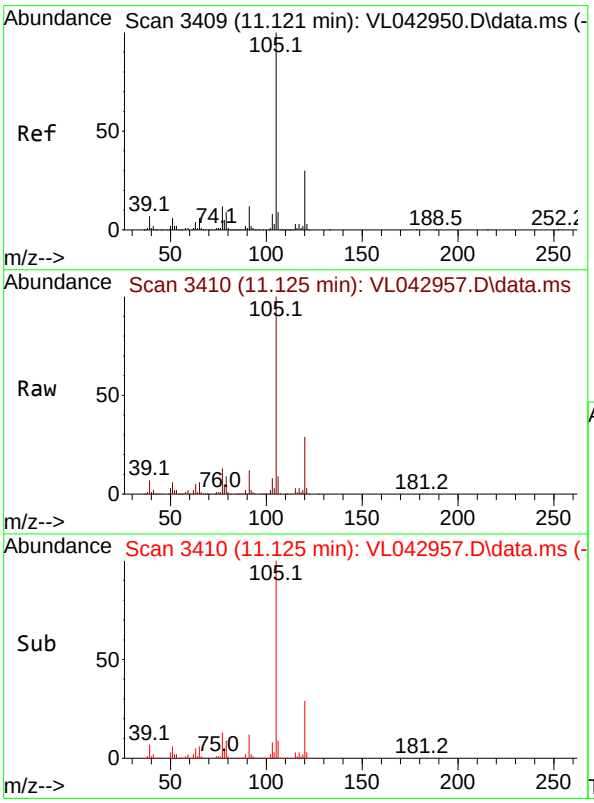
#71
2-Chlorotoluene
Concen: 9.315 ppbv
RT: 10.902 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion: 91 Resp: 611697

Ion	Ratio	Lower	Upper
91	100		
126	30.9	12.3	49.3

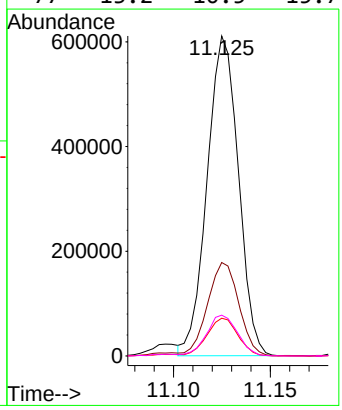


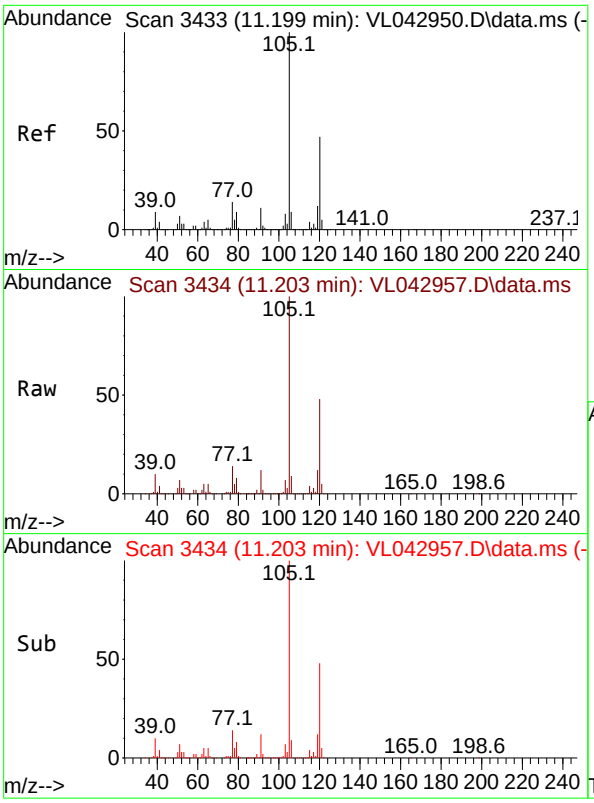


#72
4-Ethyltoluene
Concen: 9.391 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 686229

Ion	Ratio	Lower	Upper
105	100		
120	30.2	24.2	36.2
91	12.2	10.0	15.0
77	13.2	10.5	15.7



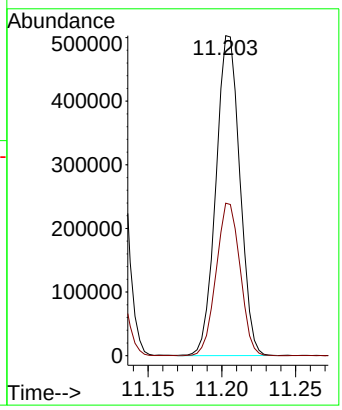


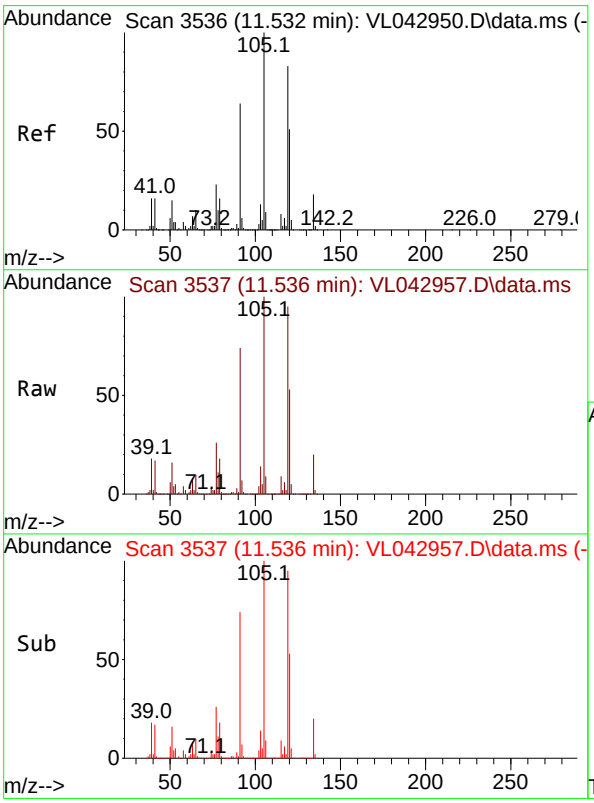
#73
1,3,5-Trimethylbenzene
Concen: 9.582 ppbv
RT: 11.203 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:105 Resp: 567874

Ion	Ratio	Lower	Upper
105	100		
120	47.7	38.0	57.0

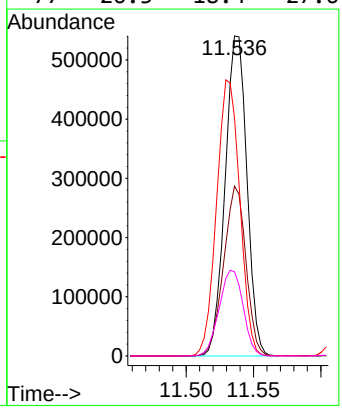


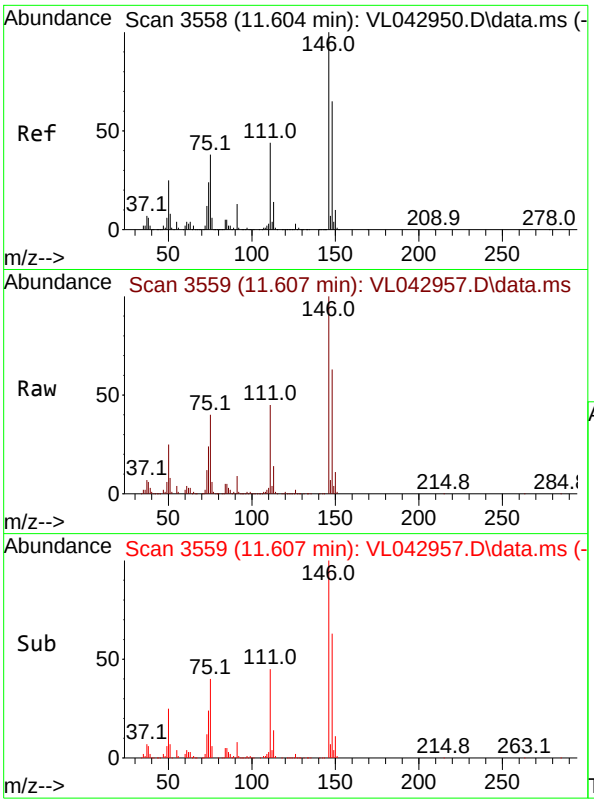


#74
1,2,4-Trimethylbenzene
Concen: 9.277 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:105 Resp: 607159

Ion	Ratio	Lower	Upper
105	100		
120	53.1	40.9	61.3
91	74.4	51.2	76.8
77	26.3	18.4	27.6



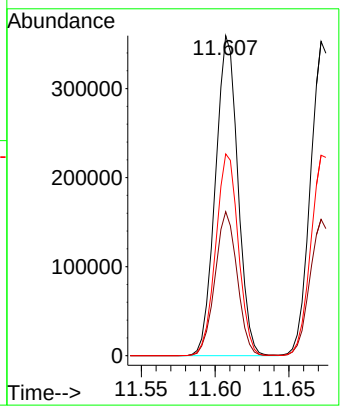


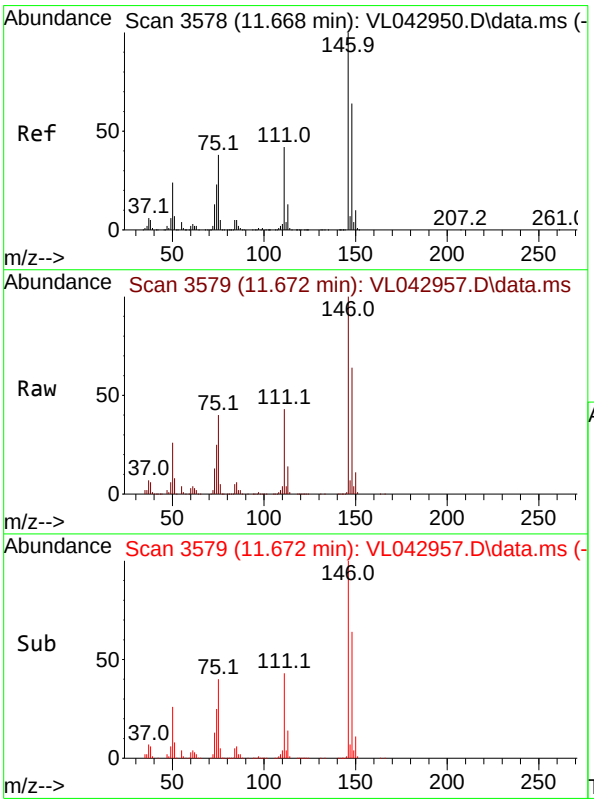
#75
1,3-Dichlorobenzene
Concen: 9.382 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:146 Resp: 380822

Ion	Ratio	Lower	Upper
146	100		
111	44.5	22.3	66.9
148	63.5	31.9	95.5

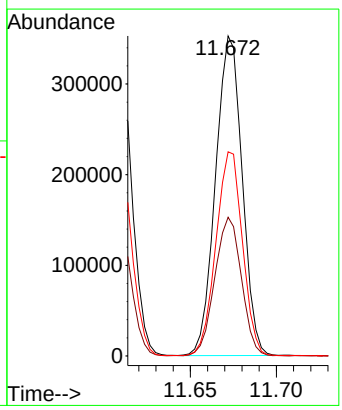


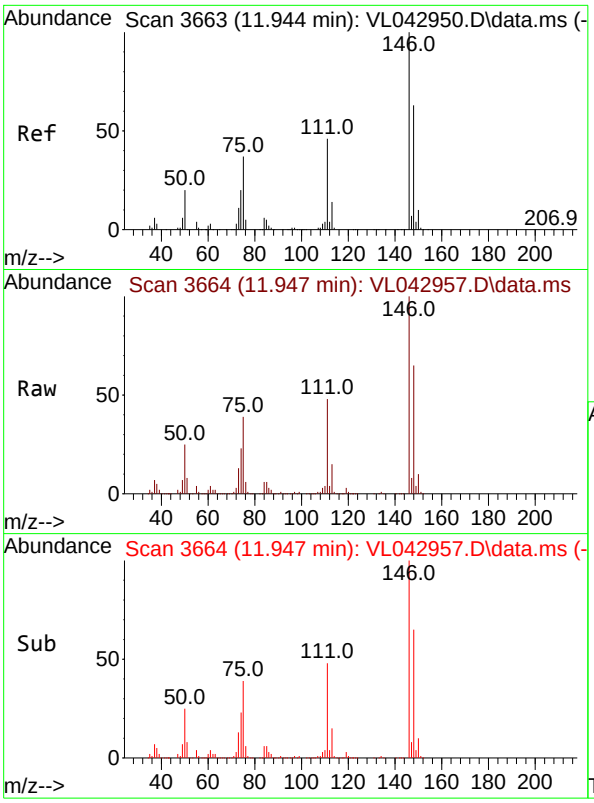


#76
1,4-Dichlorobenzene
Concen: 9.429 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:146 Resp: 380109

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.5	64.5
148	64.0	31.9	95.5



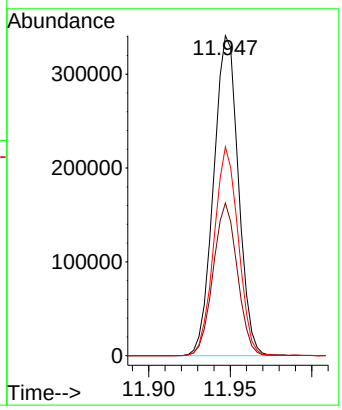


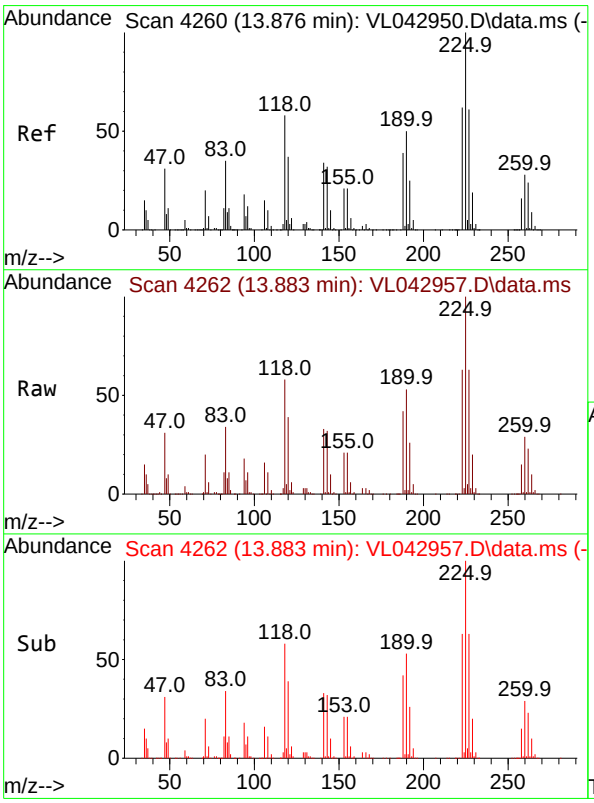
#77
1,2-Dichlorobenzene
Concen: 9.322 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:146 Resp: 359995

Ion	Ratio	Lower	Upper
146	100		
111	46.7	23.1	69.3
148	63.9	32.0	96.0

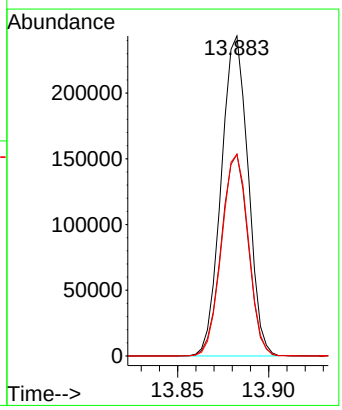


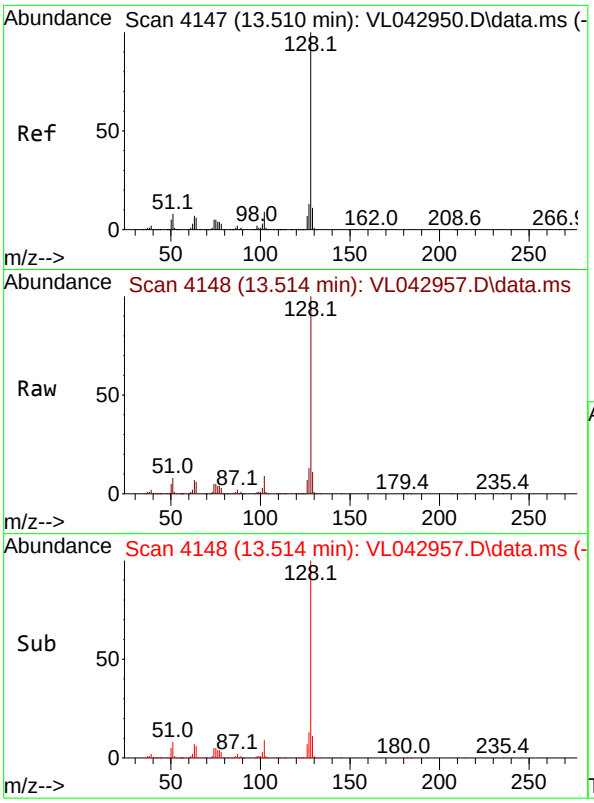


#78
Hexachloro-1,3-Butadiene
Concen: 8.248 ppbv
RT: 13.883 min Scan# 4262
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:225 Resp: 249142

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.1	75.1
227	63.0	50.4	75.6



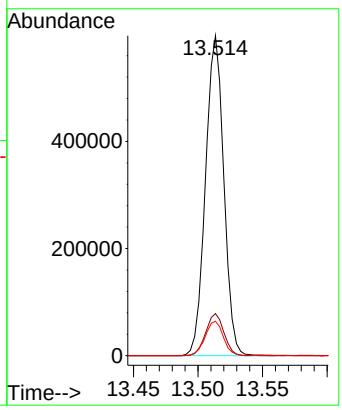


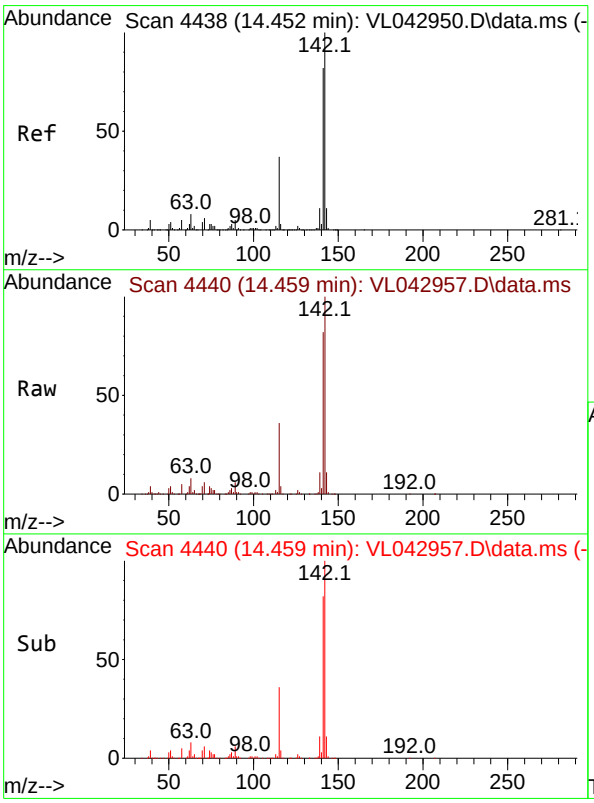
#79
Naphthalene
Concen: 10.208 ppbv
RT: 13.514 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:128 Resp: 590759

Ion	Ratio	Lower	Upper
128	100		
127	13.1	10.6	15.8
129	10.7	9.0	13.6

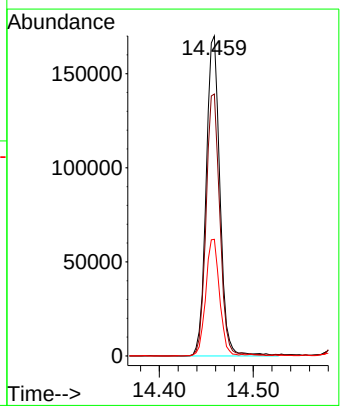


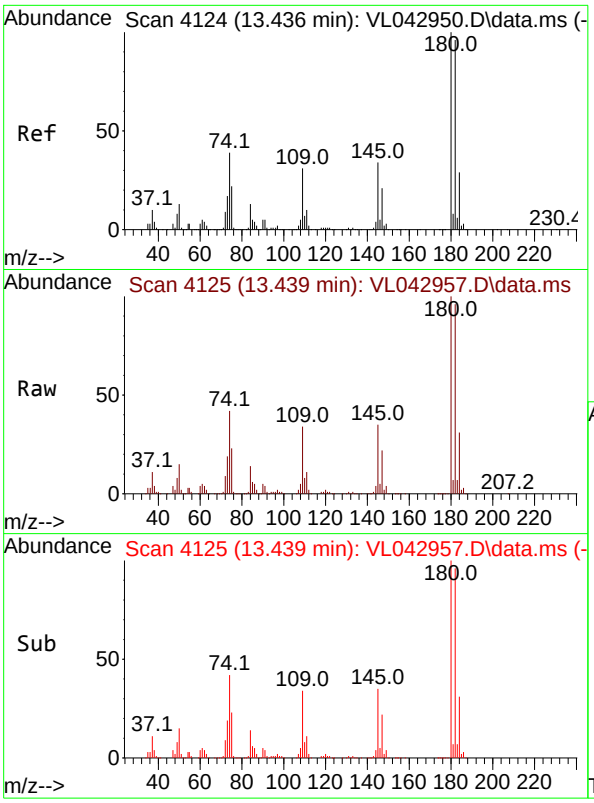


#80
Naphthalene,2-methyl-
Concen: 9.678 ppbv
RT: 14.459 min Scan# 4440
Delta R.T. 0.007 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Tgt Ion:142 Resp: 173023

Ion	Ratio	Lower	Upper
142	100		
141	82.7	65.1	97.7
115	37.5	28.9	43.3



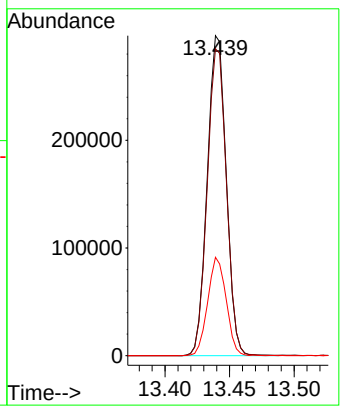


#81
1,2,4-Trichlorobenzene
Concen: 9.845 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042957.D
Acq: 22 Sep 2025 14:15

Instrument :
MSVOA_L
ClientSampleId :
ICVVL092225

Tgt Ion:180 Resp: 304647

Ion	Ratio	Lower	Upper
180	100		
182	97.0	75.7	113.5
184	29.9	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042959.D
Acq On : 22 Sep 2025 15:52
Operator : SY/MD
Sample : VL0922ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Quant Time: Sep 23 02:50:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	157611	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	475789	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	440323	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	329520	10.025	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	196098	9.250	ppbv	98
3) Chlorodifluoromethane	1.476	51	241019	9.122	ppbv	98
4) Chloromethane	1.531	50	83097	8.660	ppbv	99
5) Vinyl Chloride	1.580	62	72910	8.405	ppbv	100
6) Bromomethane	1.667	94	25316	8.274	ppbv	96
7) Chloroethane	1.703	64	29696	8.816	ppbv	96
8) Dichlorotetrafluoroethane	1.554	85	162369	8.972	ppbv	99
9) Propene	1.483	41	99904	8.692	ppbv	96
10) Heptane	4.978	43	277314	9.040	ppbv	98
11) Trichlorofluoromethane	1.878	101	186968	9.147	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	149089	9.007	ppbv	98
13) Ethanol	1.719	45	7189	6.447	ppbv	97
14) Bromoethene	1.781	108	55444	8.860	ppbv	99
15) Acetone	1.836	43	151513	7.381	ppbv	98
16) 1,3-Butadiene	1.609	39	78310	8.087	ppbv	100
17) tert-Butyl alcohol	2.040	59	202608	8.999	ppbv	100
18) 1,1-Dichloroethene	2.033	96	68641	8.959	ppbv	98
19) Isopropyl Alcohol	1.884	45	106256	8.610	ppbv	100
20) Methylene Chloride	2.062	84	60096	9.806	ppbv	97
21) Allyl Chloride	2.095	41	129200	9.037	ppbv	99
22) trans-1,2-Dichloroethene	2.341	96	77254	8.874	ppbv	100
23) Vinyl Acetate	2.464	43	248190	8.463	ppbv	99
24) 1,1-Dichloroethane	2.409	63	154444	9.046	ppbv	99
25) Ethyl Acetate	2.833	43	477860	9.210	ppbv	99
26) Hexane	2.826	57	215902	9.129	ppbv	98
27) Carbon Disulfide	2.150	76	187493	8.839	ppbv	99
28) Methyl tert-Butyl Ether	2.438	73	95760	7.790	ppbv	99
29) Chloroform	2.849	83	295049	9.541	ppbv	99
30) Cyclohexane	3.855	84	184610	9.336	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	206747	9.332	ppbv	99
32) 1,1,1-Trichloroethane	3.367	97	301400	9.024	ppbv	99
34) 2-Butanone	2.557	43	308258	9.245	ppbv	99
35) Carbon Tetrachloride	3.762	117	299002	9.653	ppbv	98
36) Benzene	3.655	78	427346	9.565	ppbv	99
37) 1,2-Dichloroethane	3.218	62	233446	9.935	ppbv	99
38) Trichloroethene	4.548	130	204031	9.189	ppbv	96
39) 1,2-Dichloropropane	4.315	63	157775	9.673	ppbv	98
40) 1,4-Dioxane	4.584	88	70833	9.339	ppbv #	95
41) Tetrahydrofuran	3.053	42	177879	9.281	ppbv	99
42) Bromodichloromethane	4.490	83	324757	9.924	ppbv	94
43) Methyl Methacrylate	4.878	69	169093	9.250	ppbv	99
44) 2,2,4-Trimethylpentane	4.639	57	725943	9.407	ppbv	100
45) t-1,3-Dichloropropene	6.412	75	185943	9.538	ppbv	98

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042959.D
Acq On : 22 Sep 2025 15:52
Operator : SY/MD
Sample : VL0922ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Quant Time: Sep 23 02:50:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	240185	9.667	ppbv		98
47) 1,1,2-Trichloroethane	6.581	97	165106	9.580	ppbv		97
48) Dibromochloromethane	7.387	129	275781	10.002	ppbv		99
49) Bromoform	9.484	173	235060	9.800	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	431031	9.645	ppbv		99
51) 2-Hexanone	7.435	43	343461	9.641	ppbv		100
52) Tetrachloroethene	8.228	164	150483	8.705	ppbv		97
53) Toluene	6.933	91	501548	9.484	ppbv		100
54) 1,2-Dibromoethane	7.652	107	235389	9.704	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.924	131	200560	9.516	ppbv		98
57) Chlorobenzene	8.924	112	377524	9.392	ppbv		97
58) Ethyl Benzene	9.354	91	686057	9.489	ppbv		99
59) m/p-Xylene	9.532	91	564158	9.897	ppbv	#	100
60) o-Xylene	9.966	91	537008	9.426	ppbv		100
61) Styrene	9.872	104	258756	9.602	ppbv		98
62) Isopropylbenzene	10.539	105	787602	9.274	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.963	83	266223	8.890	ppbv		100
64) n-propylbenzene	10.989	120	208358	9.389	ppbv		100
65) tert-Butylbenzene	11.533	119	694033	9.188	ppbv		99
66) Benzyl Chloride	11.617	91	64955	8.196	ppbv		99
67) sec-Butylbenzene	11.769	105	974750	9.261	ppbv		99
69) p-Isopropyltoluene	11.924	119	820532	9.229	ppbv		99
70) n-Butylbenzene	12.280	91	818866	9.434	ppbv		100
71) 2-Chlorotoluene	10.902	91	598619	9.336	ppbv		100
72) 4-Ethyltoluene	11.125	105	665916	9.332	ppbv		100
73) 1,3,5-Trimethylbenzene	11.206	105	552039	9.539	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	592889	9.277	ppbv		95
75) 1,3-Dichlorobenzene	11.607	146	368544	9.299	ppbv		99
76) 1,4-Dichlorobenzene	11.672	146	369921	9.397	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	350261	9.288	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	246743	8.366	ppbv		99
79) Naphthalene	13.514	128	579760	10.259	ppbv		98
80) Naphthalene,2-methyl-	14.455	142	167256	9.581	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	300876	9.958	ppbv		99

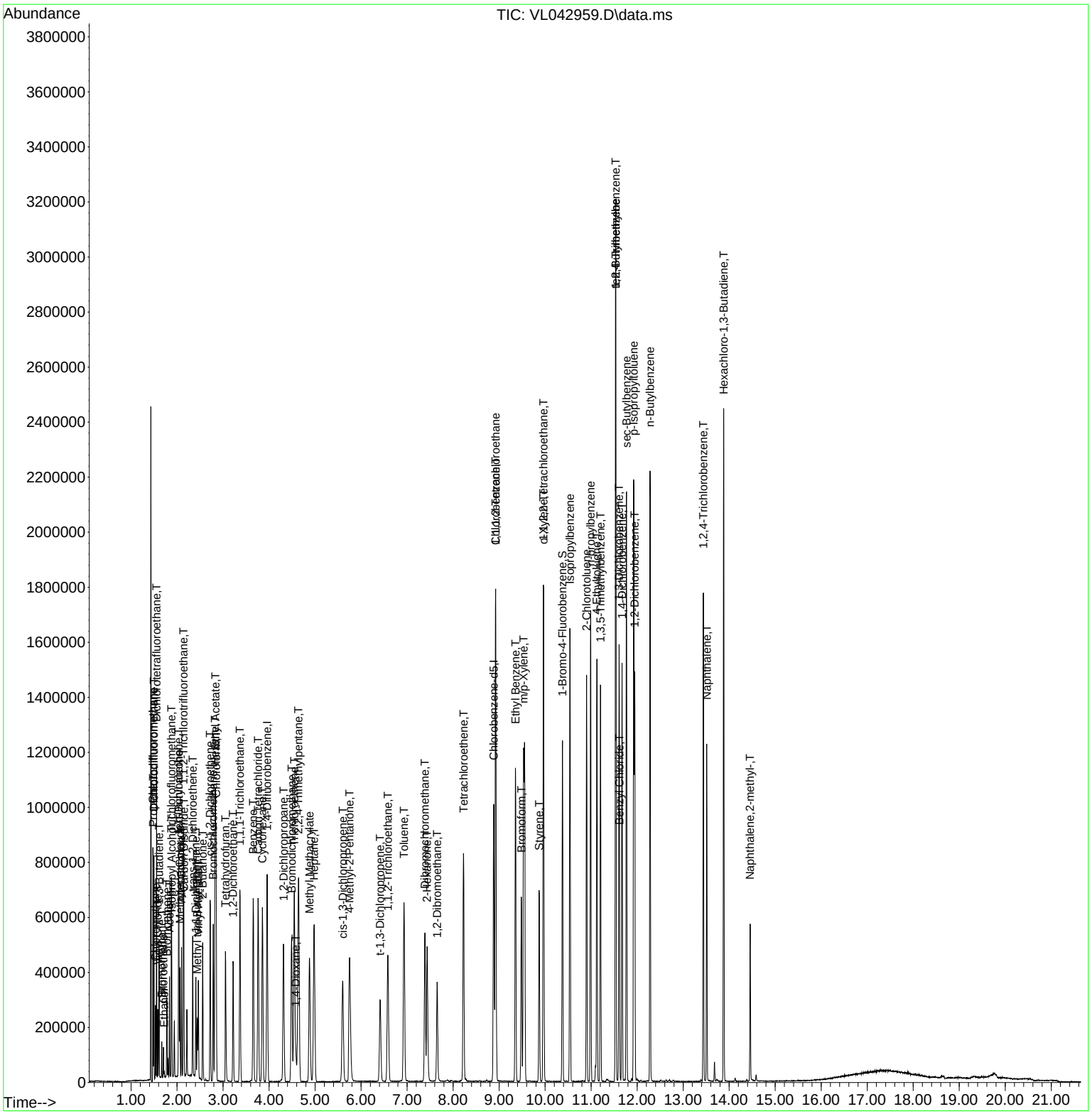
(#) = qualifier out of range (m) = manual integration (+) = signals summed

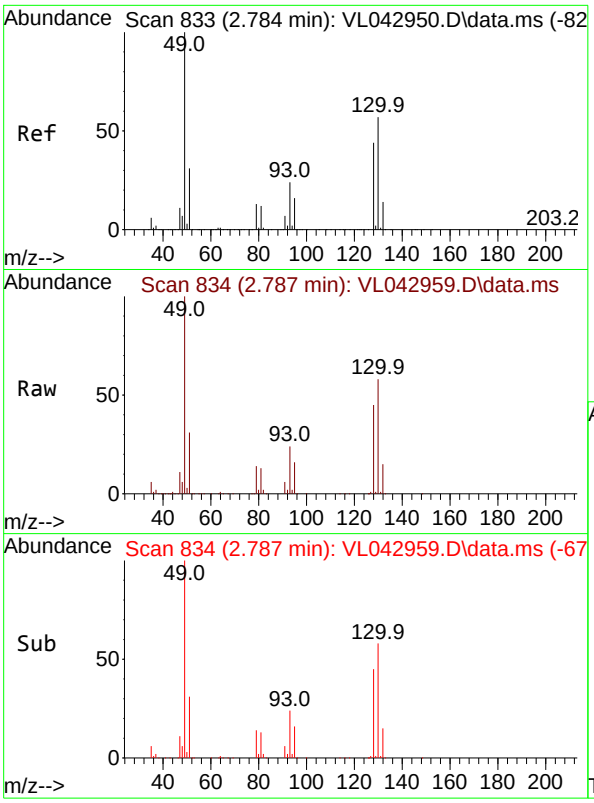
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042959.D
Acq On : 22 Sep 2025 15:52
Operator : SY/MD
Sample : VL0922ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Quant Time: Sep 23 02:50:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



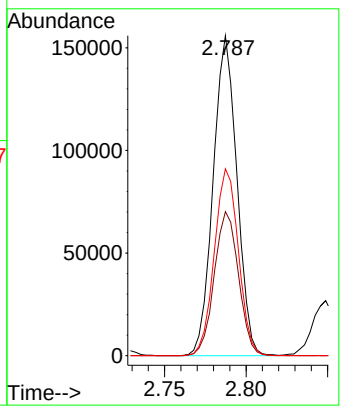


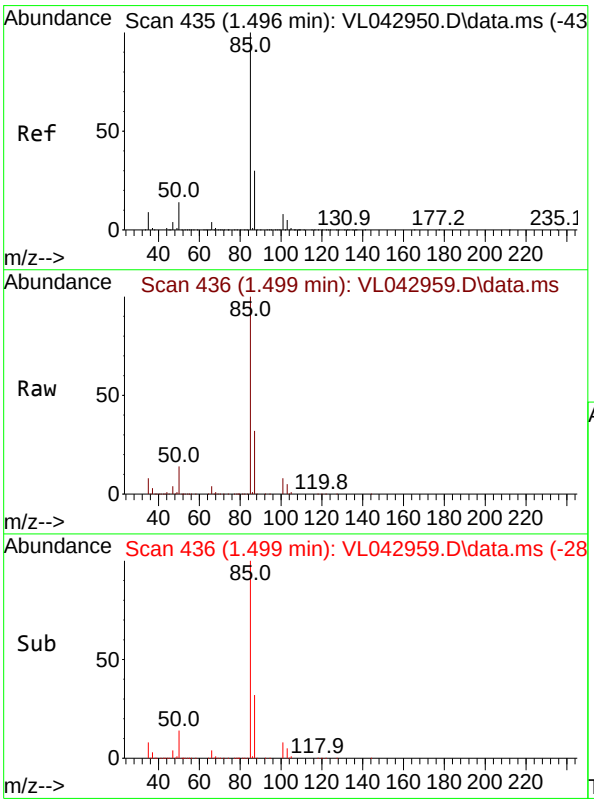
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 49 Resp: 157611

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.8
130	59.3	29.1	87.3

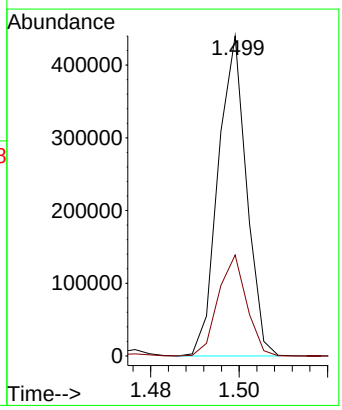


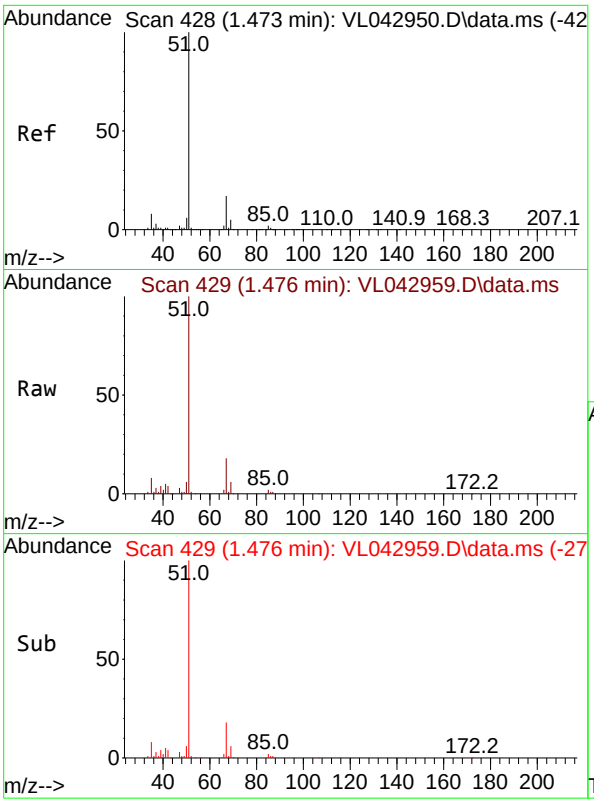


#2
Dichlorodifluoromethane
Concen: 9.250 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 85 Resp: 196098

Ion	Ratio	Lower	Upper
85	100		
87	31.5	24.3	36.5



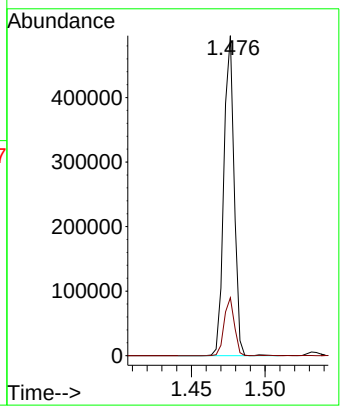


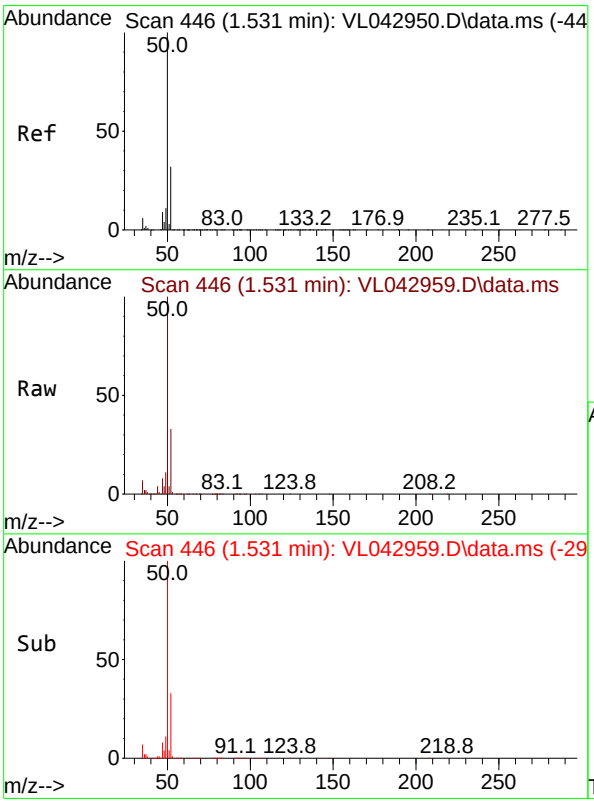
#3
Chlorodifluoromethane
Concen: 9.122 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 51 Resp: 241019

Ion	Ratio	Lower	Upper
51	100		
67	18.1	13.8	20.8

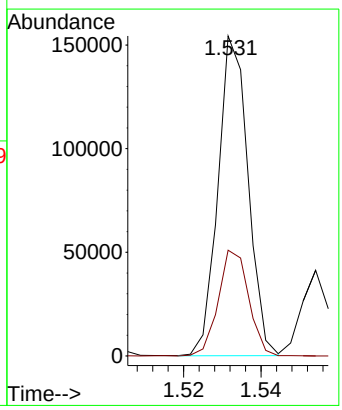


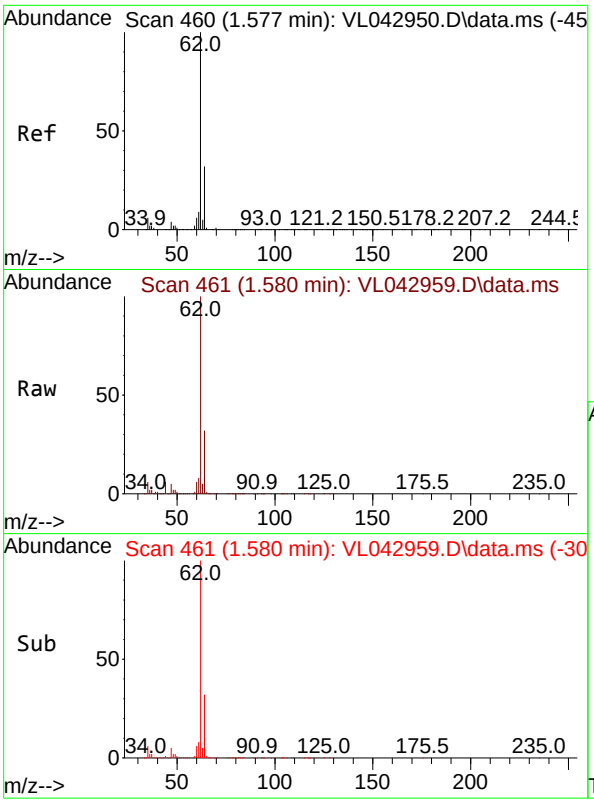


#4
Chloromethane
Concen: 8.660 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 50 Resp: 83097

Ion	Ratio	Lower	Upper
50	100		
52	33.0	25.9	38.9



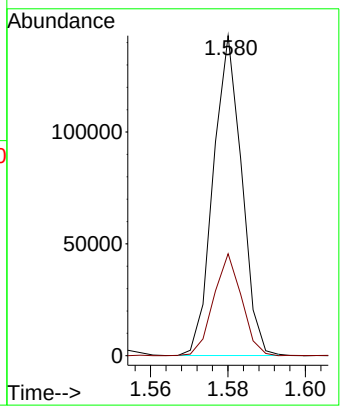


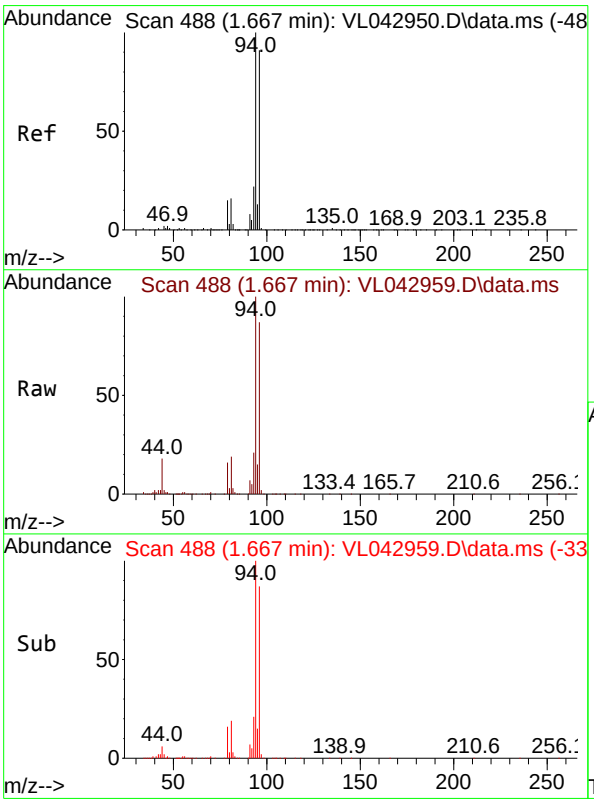
#5
Vinyl Chloride
Concen: 8.405 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 62 Resp: 72910

Ion	Ratio	Lower	Upper
62	100		
64	31.9	25.4	38.2

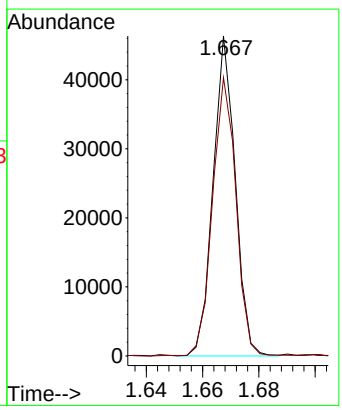


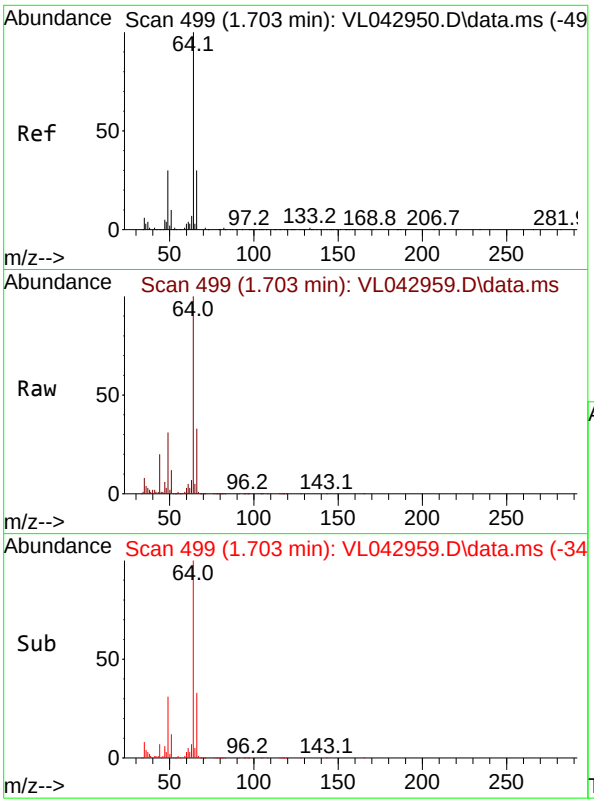


#6
Bromomethane
Concen: 8.274 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 94 Resp: 25316

Ion	Ratio	Lower	Upper
94	100		
96	86.9	72.6	108.8



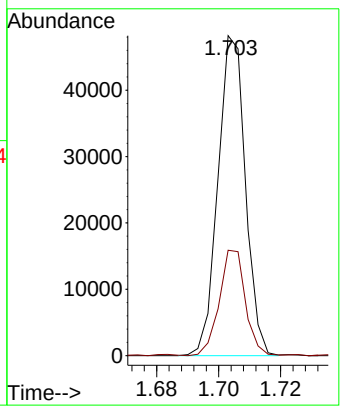


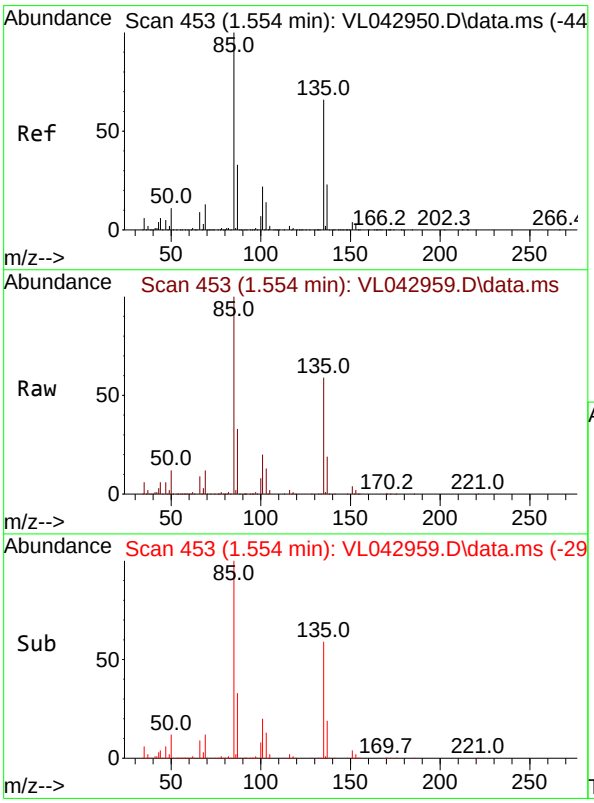
#7
Chloroethane
Concen: 8.816 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 64 Resp: 29696

Ion	Ratio	Lower	Upper
64	100		
66	32.9	24.6	36.8

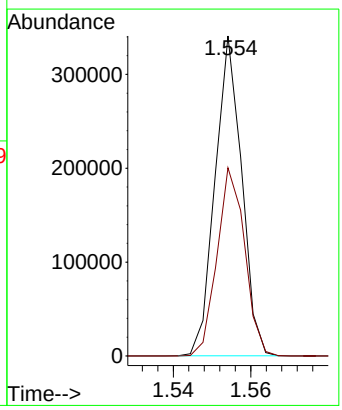


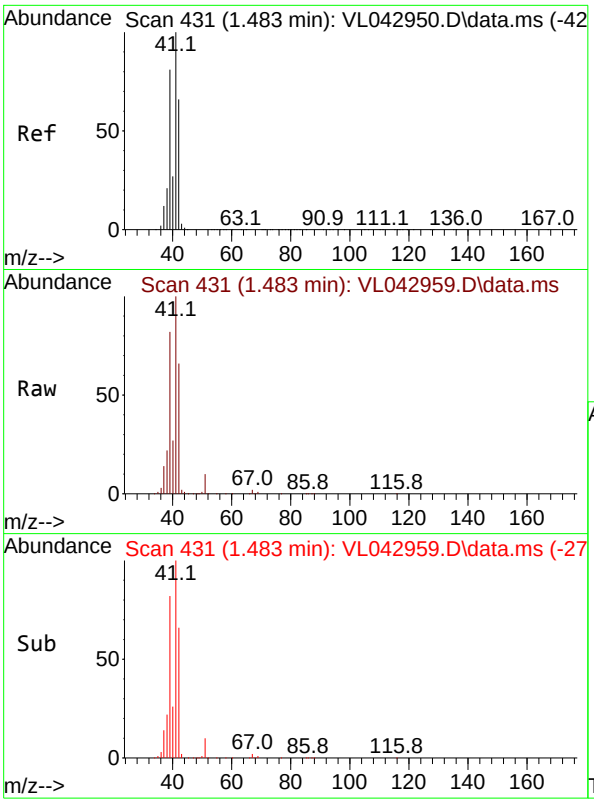


#8
Dichlorotetrafluoroethane
Concen: 8.972 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 85 Resp: 162369

Ion	Ratio	Lower	Upper
85	100		
135	61.3	49.7	74.5



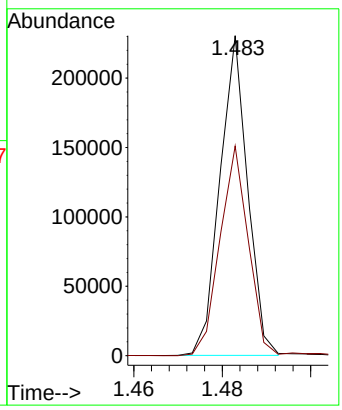


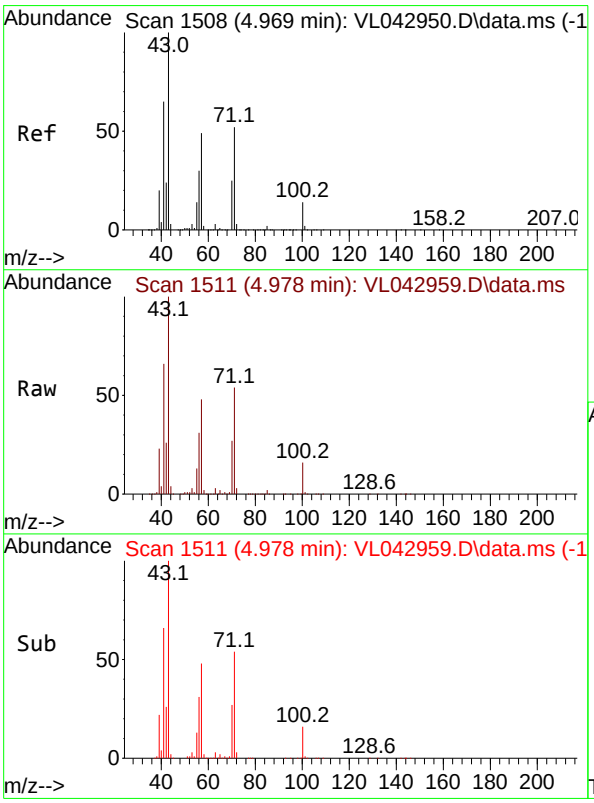
#9
Propene
Concen: 8.692 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 41 Resp: 99904

Ion	Ratio	Lower	Upper
41	100		
42	68.7	57.4	86.2

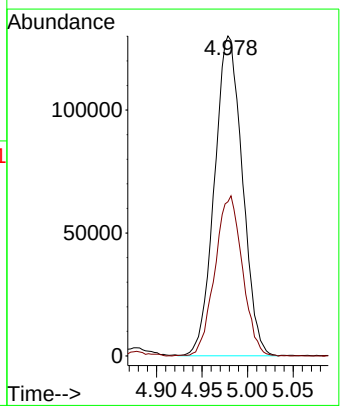


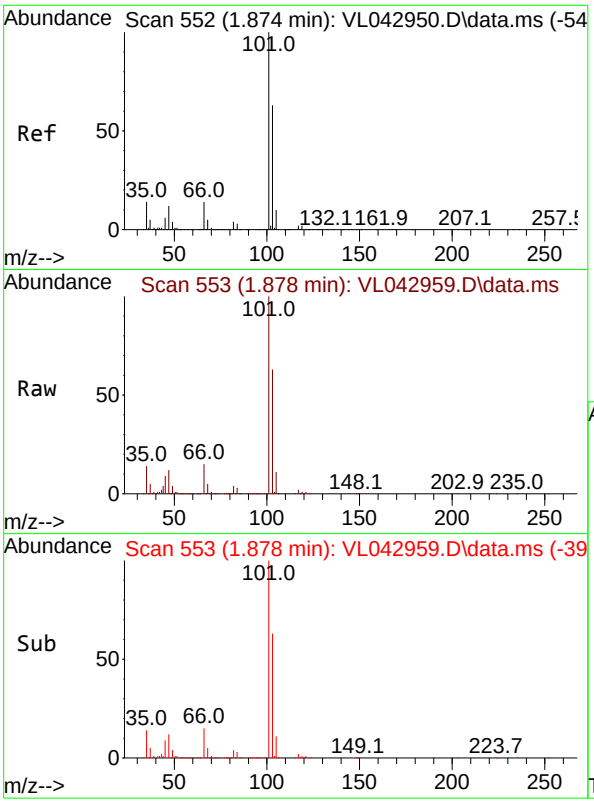


#10
Heptane
Concen: 9.040 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 277314

Ion	Ratio	Lower	Upper
43	100		
57	49.3	38.6	57.8



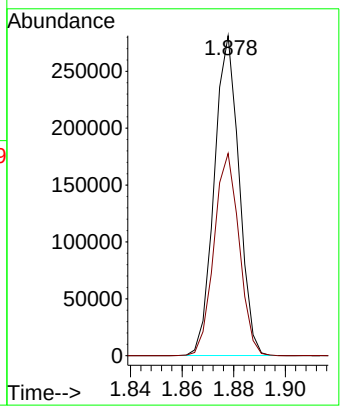


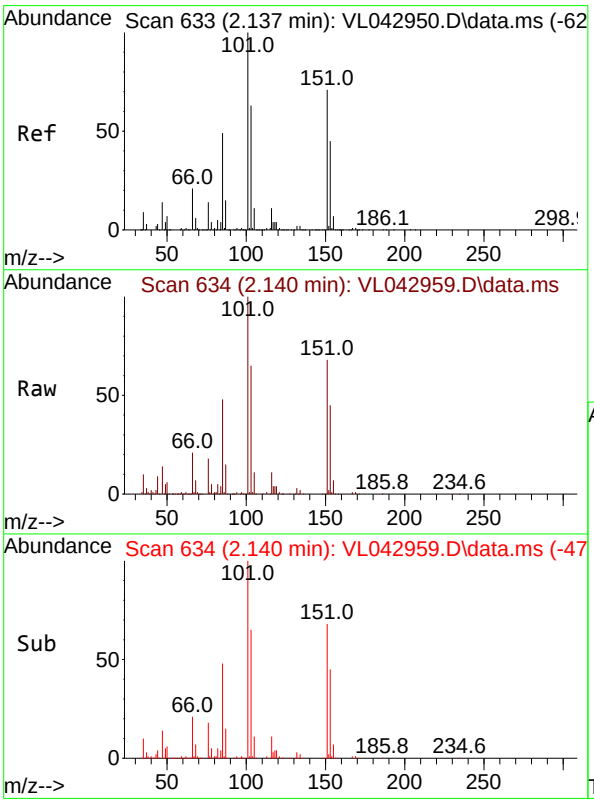
#11
Trichlorofluoromethane
Concen: 9.147 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:101 Resp: 186968

Ion	Ratio	Lower	Upper
101	100		
103	63.2	50.1	75.1

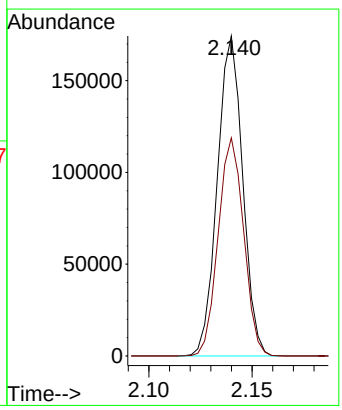


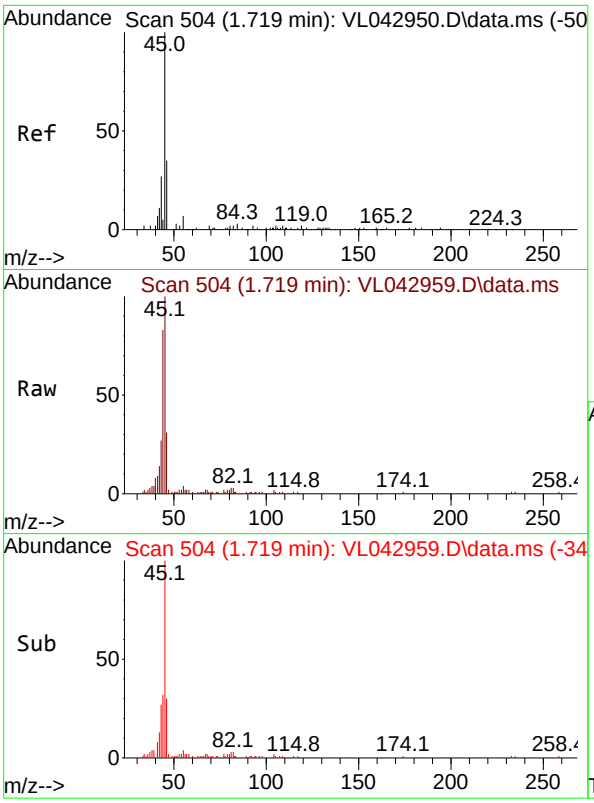


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.007 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:101 Resp: 149089

Ion	Ratio	Lower	Upper
101	100		
151	68.3	55.7	83.5



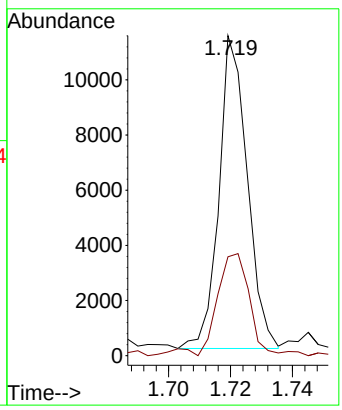


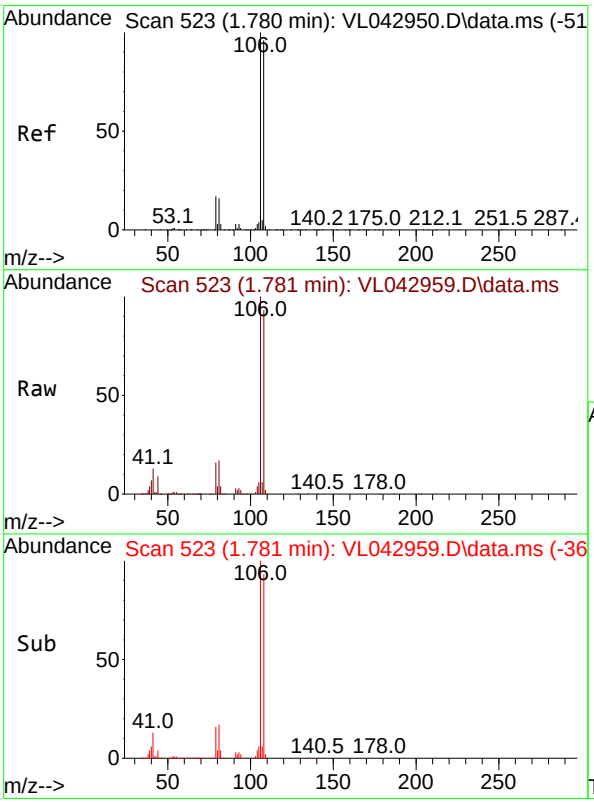
#13
Ethanol
Concen: 6.447 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 45 Resp: 7189

Ion	Ratio	Lower	Upper
45	100		
46	38.5	16.2	64.6

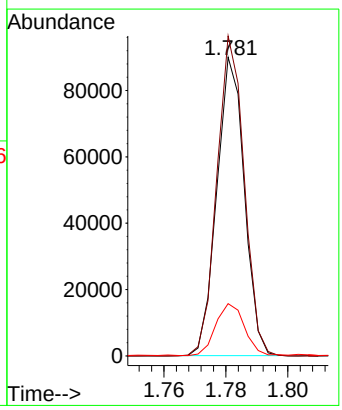


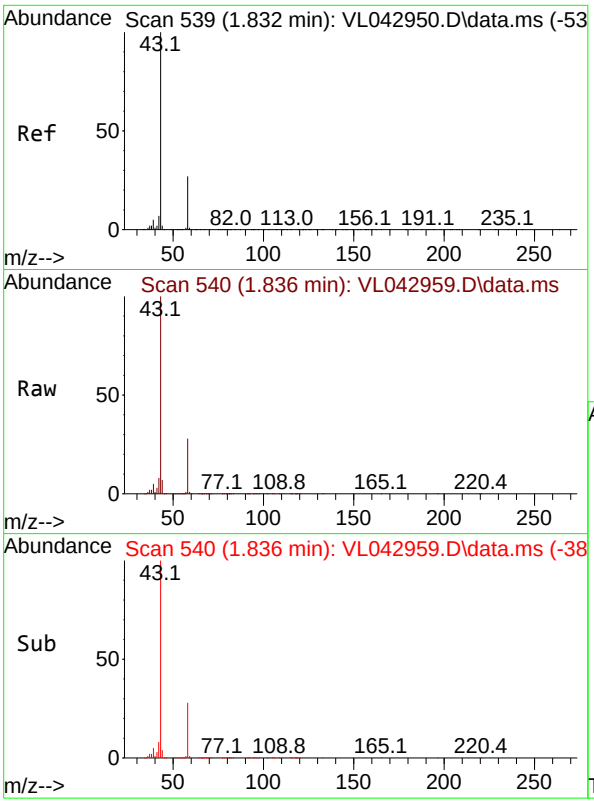


#14
Bromoethene
Concen: 8.860 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:108 Resp: 55444

Ion	Ratio	Lower	Upper
108	100		
106	106.5	86.0	129.0
79	18.9	14.2	21.2



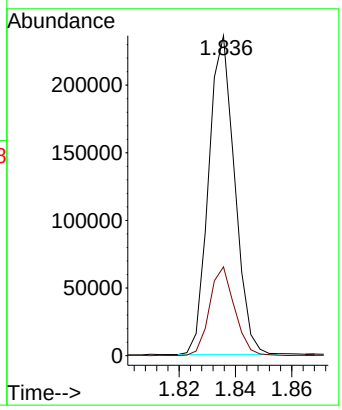


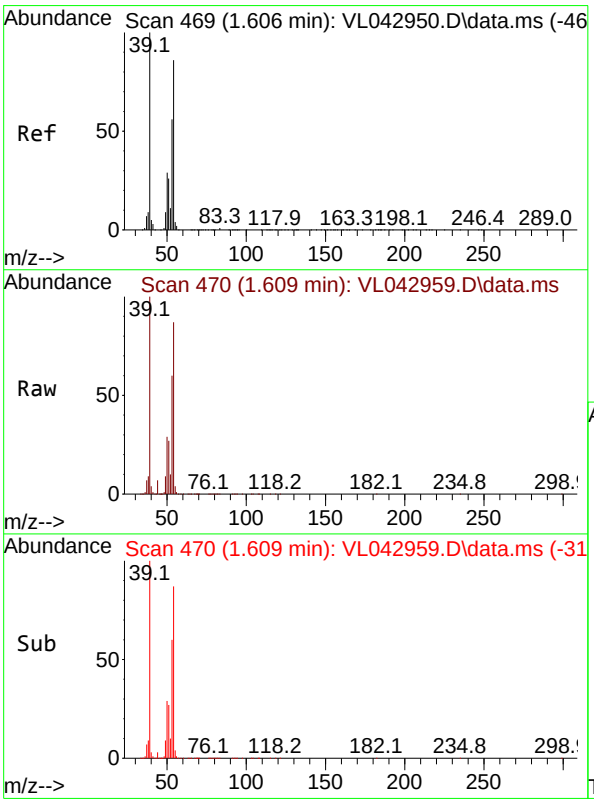
#15
Acetone
Concen: 7.381 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 43 Resp: 151513

Ion	Ratio	Lower	Upper
43	100		
58	27.0	22.3	33.5

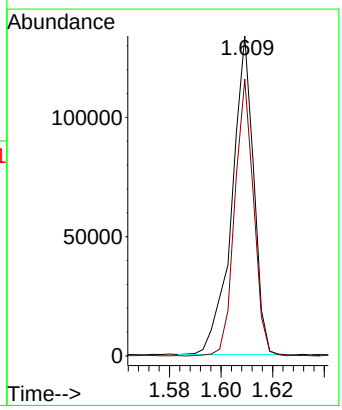


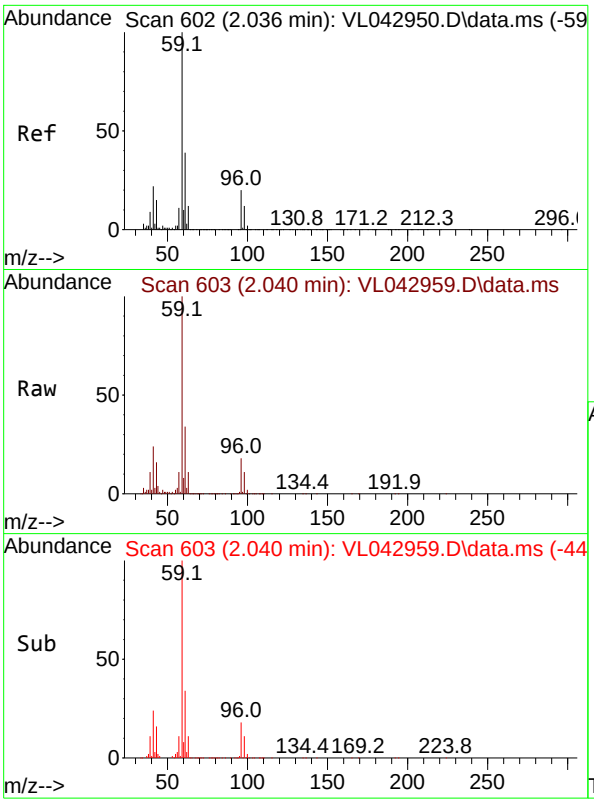


#16
1,3-Butadiene
Concen: 8.087 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 39 Resp: 78310

Ion	Ratio	Lower	Upper
39	100		
54	76.4	60.8	91.2



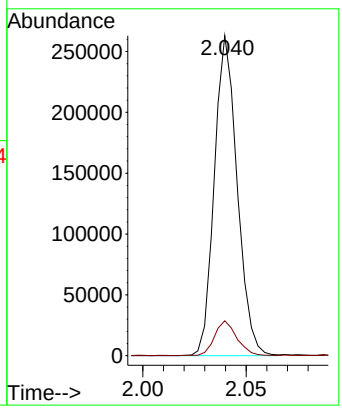


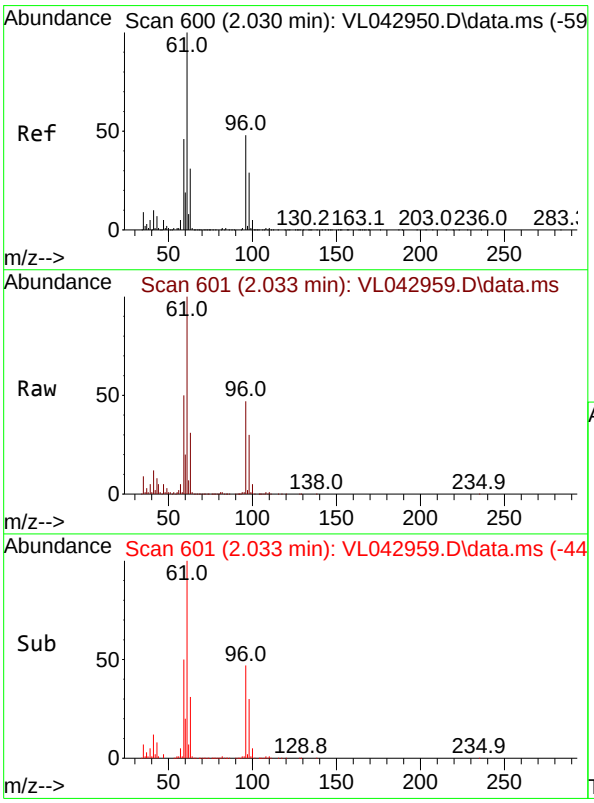
#17
tert-Butyl alcohol
Concen: 8.999 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 59 Resp: 202608

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.6	12.8

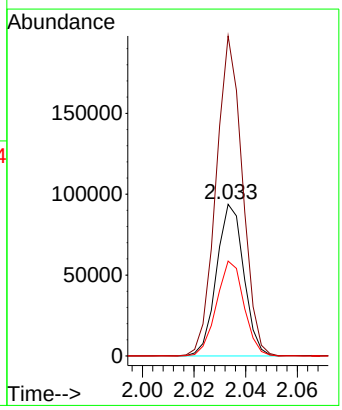


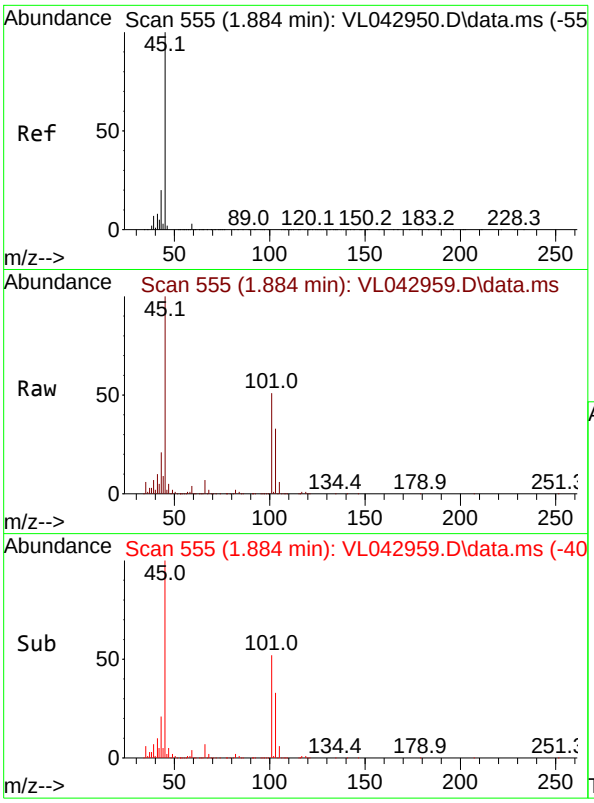


#18
1,1-Dichloroethene
Concen: 8.959 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 96 Resp: 68641

Ion	Ratio	Lower	Upper
96	100		
61	211.1	166.2	249.4
98	62.6	48.6	73.0



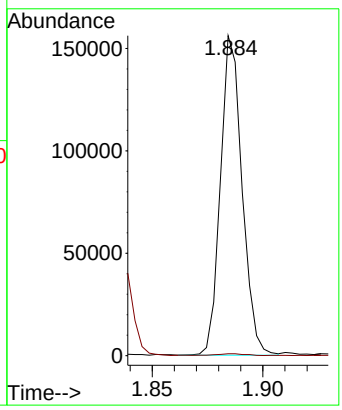


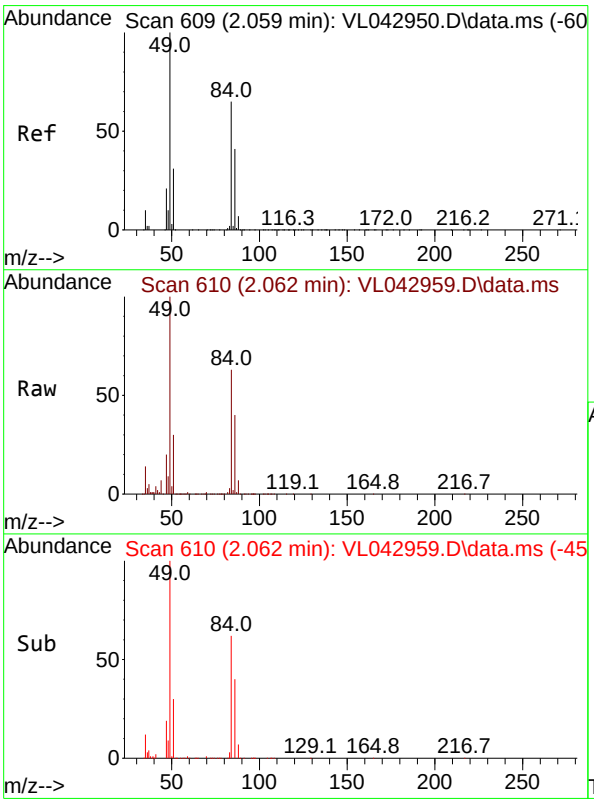
#19
Isopropyl Alcohol
Concen: 8.610 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 45 Resp: 106256

Ion	Ratio	Lower	Upper
45	100		
58	38.8	31.0	46.6

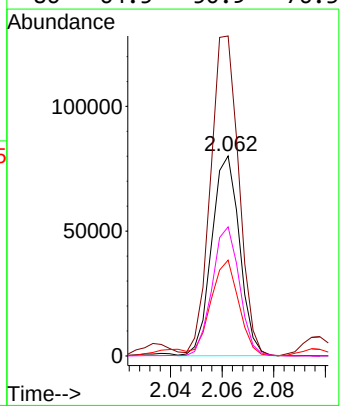


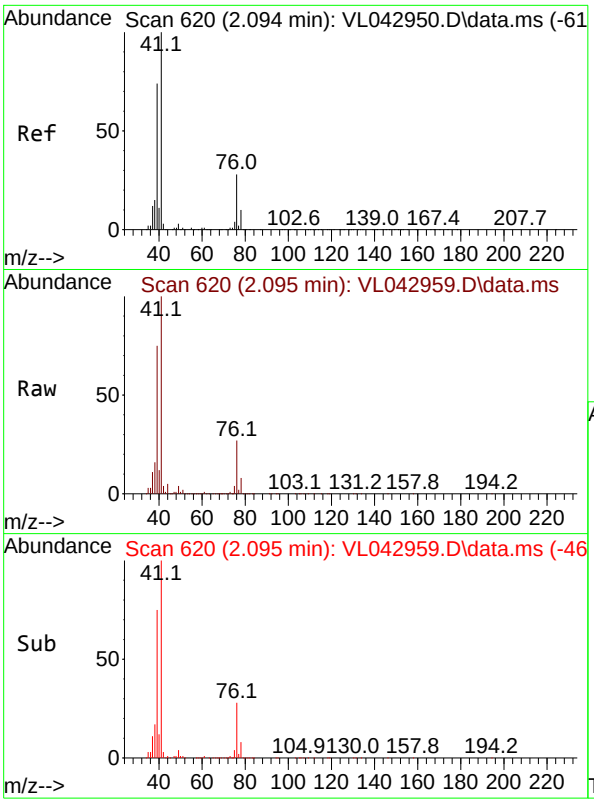


#20
Methylene Chloride
Concen: 9.806 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 84 Resp: 60096

Ion	Ratio	Lower	Upper
84	100		
49	160.2	124.1	186.1
51	47.7	39.8	59.8
86	64.5	50.9	76.3



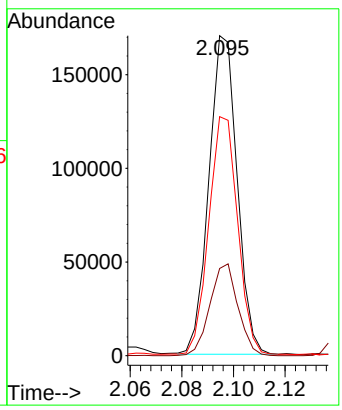


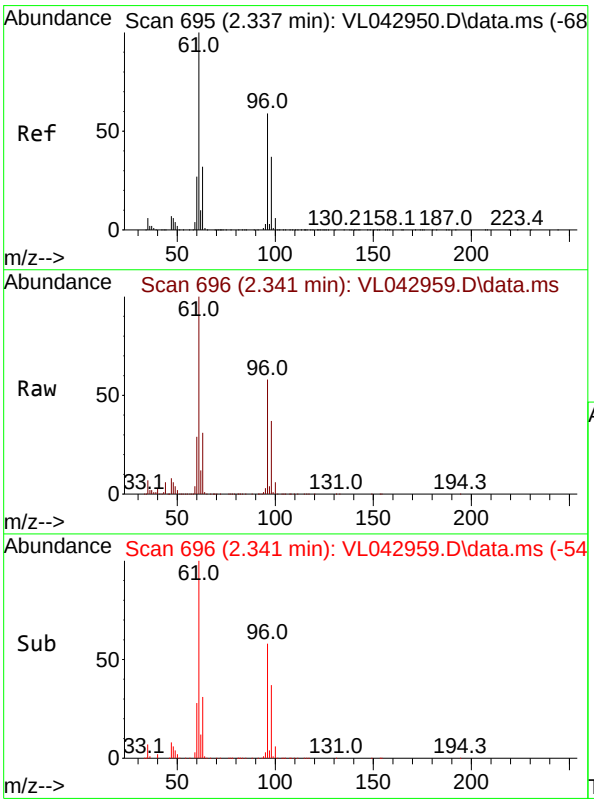
#21
Allyl Chloride
Concen: 9.037 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 41 Resp: 129200

Ion	Ratio	Lower	Upper
41	100		
76	28.6	22.3	33.5
39	76.2	61.3	91.9

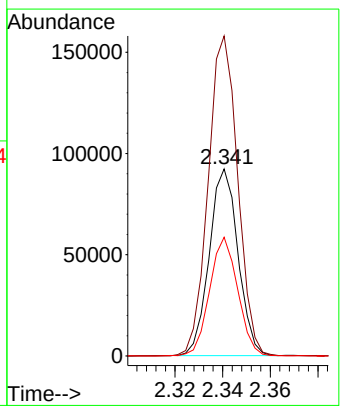


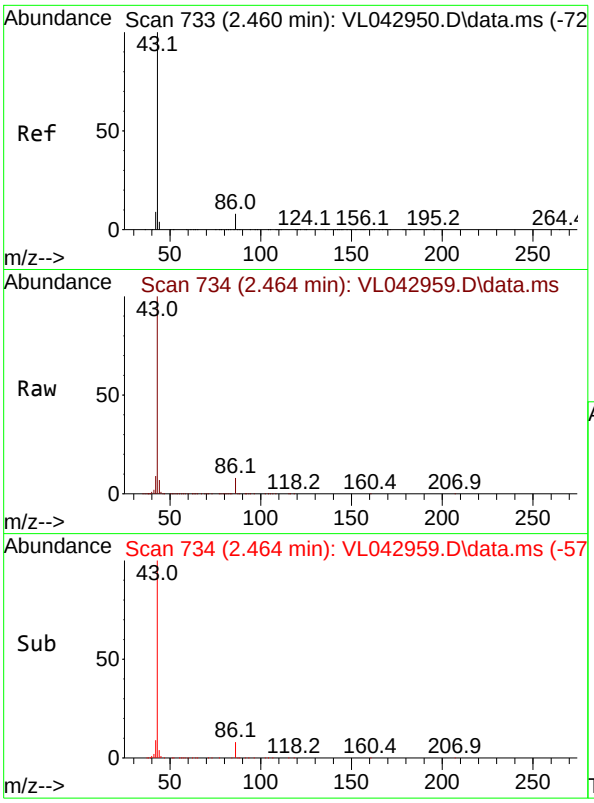


#22
trans-1,2-Dichloroethene
Concen: 8.874 ppbv
RT: 2.341 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 96 Resp: 77254

Ion	Ratio	Lower	Upper
96	100		
61	171.2	136.5	204.7
98	63.4	50.6	76.0



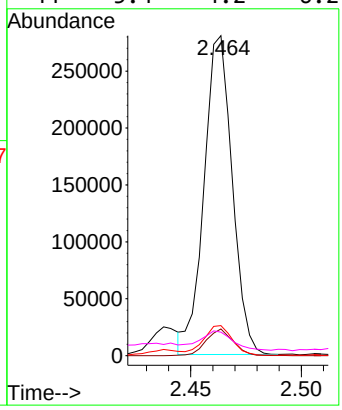


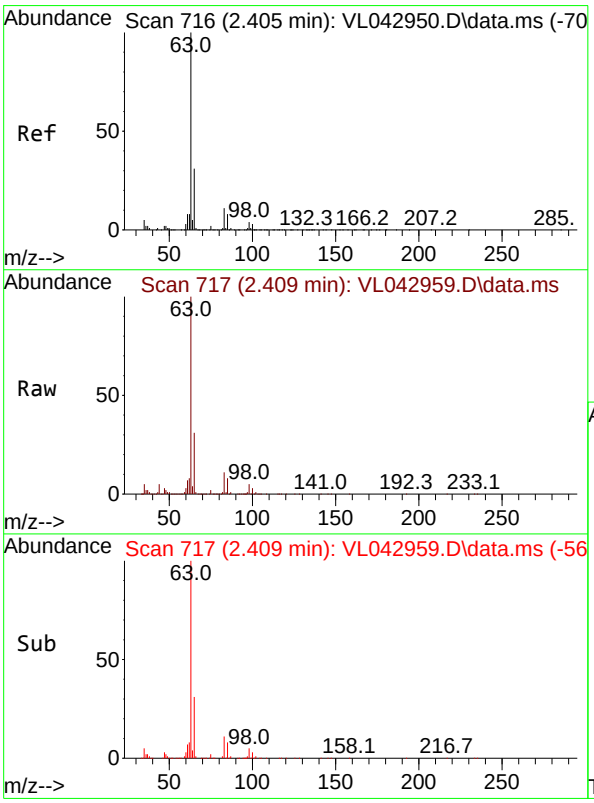
#23
Vinyl Acetate
Concen: 8.463 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 43 Resp: 248190

Ion	Ratio	Lower	Upper
43	100		
86	8.3	6.2	9.2
42	9.3	7.4	11.0
44	5.4	4.2	6.2

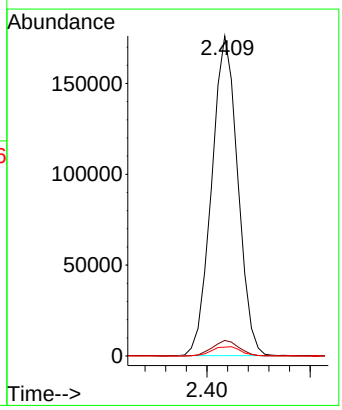


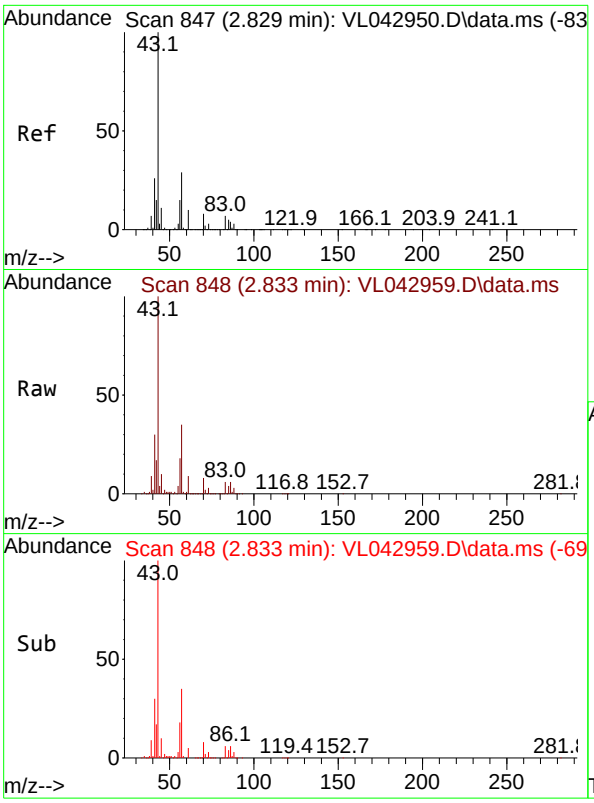


#24
1,1-Dichloroethane
Concen: 9.046 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 63 Resp: 154444

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.2	6.6
100	2.7	1.4	4.0



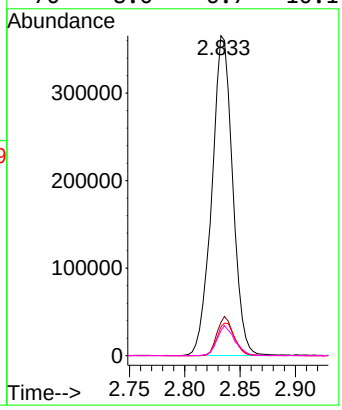


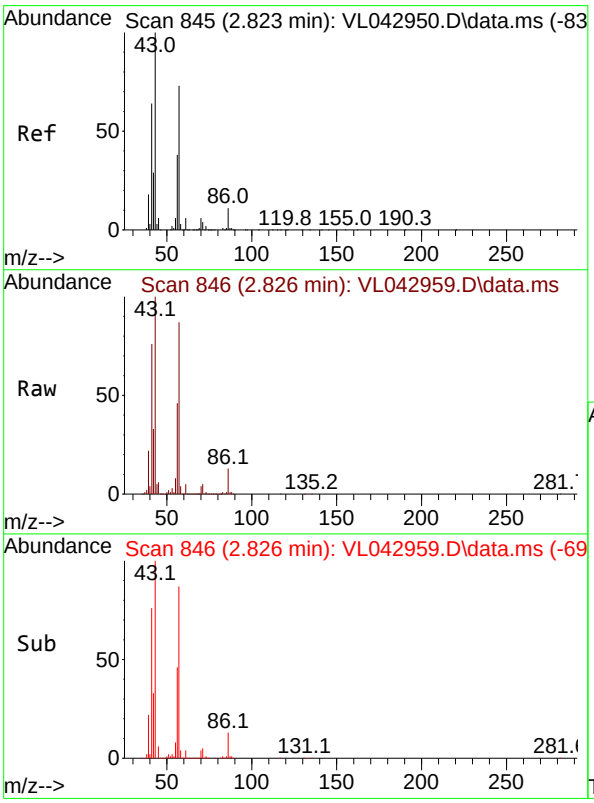
#25
Ethyl Acetate
Concen: 9.210 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 43 Resp: 477860

Ion	Ratio	Lower	Upper
43	100		
45	9.8	7.7	11.5
61	8.7	7.1	10.7
70	8.0	6.7	10.1

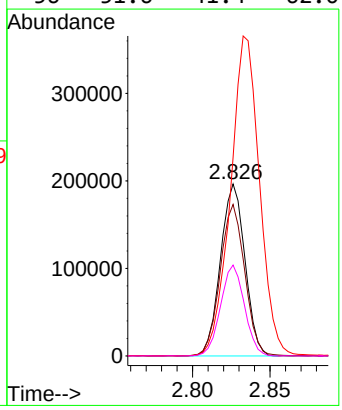


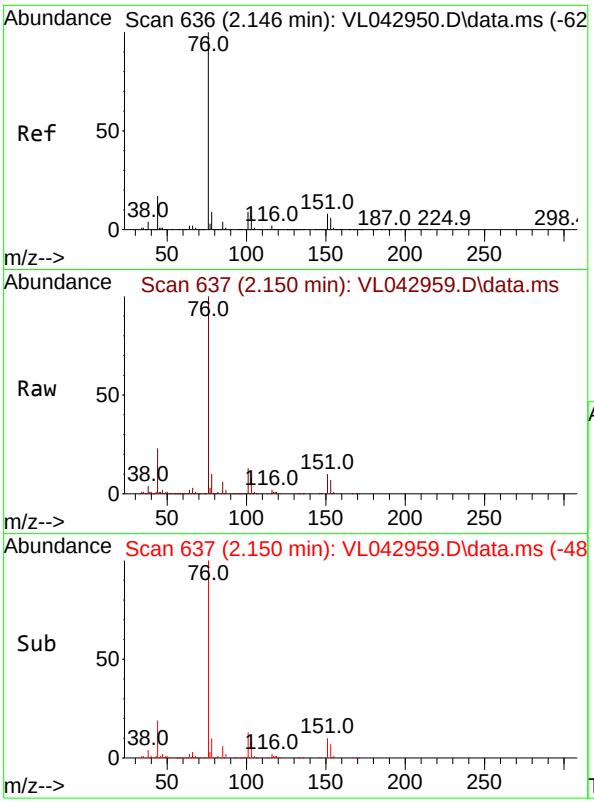


#26
Hexane
Concen: 9.129 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 57 Resp: 215902

Ion	Ratio	Lower	Upper
57	100		
41	89.1	71.7	107.5
43	221.9	180.8	271.2
56	51.6	41.4	62.0



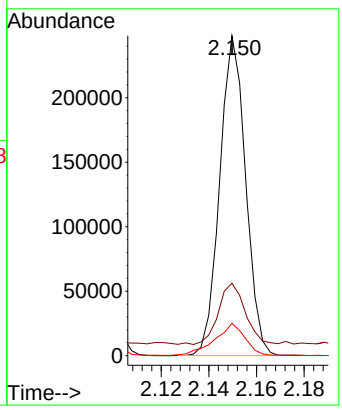


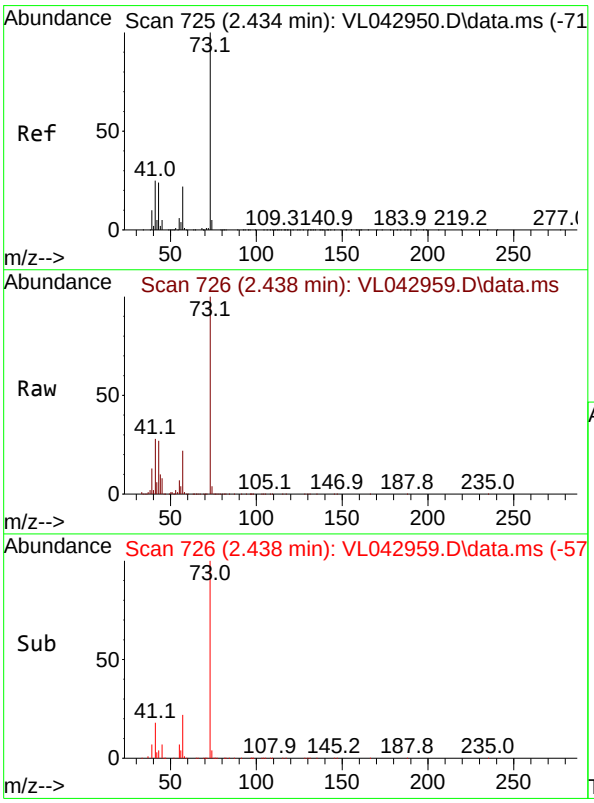
#27
Carbon Disulfide
Concen: 8.839 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 76 Resp: 187493

Ion	Ratio	Lower	Upper
76	100		
44	20.1	15.6	23.4
78	11.6	8.9	13.3

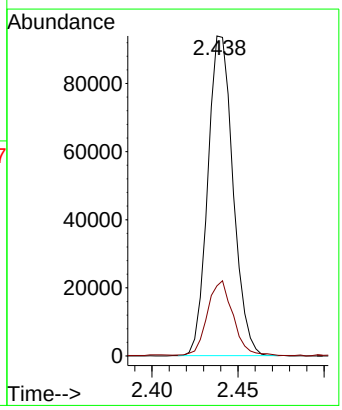


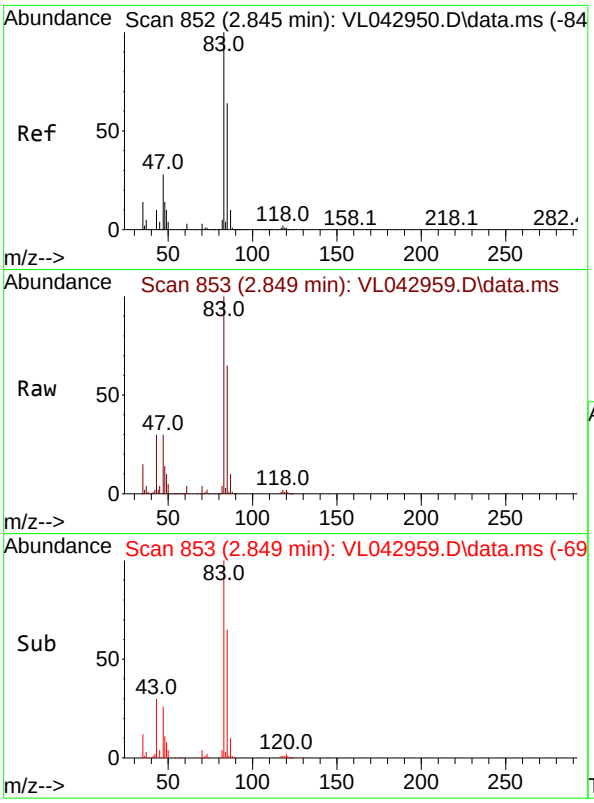


#28
Methyl tert-Butyl Ether
Concen: 7.790 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 73 Resp: 95760

Ion	Ratio	Lower	Upper
73	100		
57	25.1	20.6	31.0



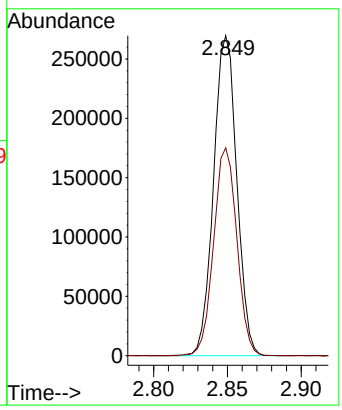


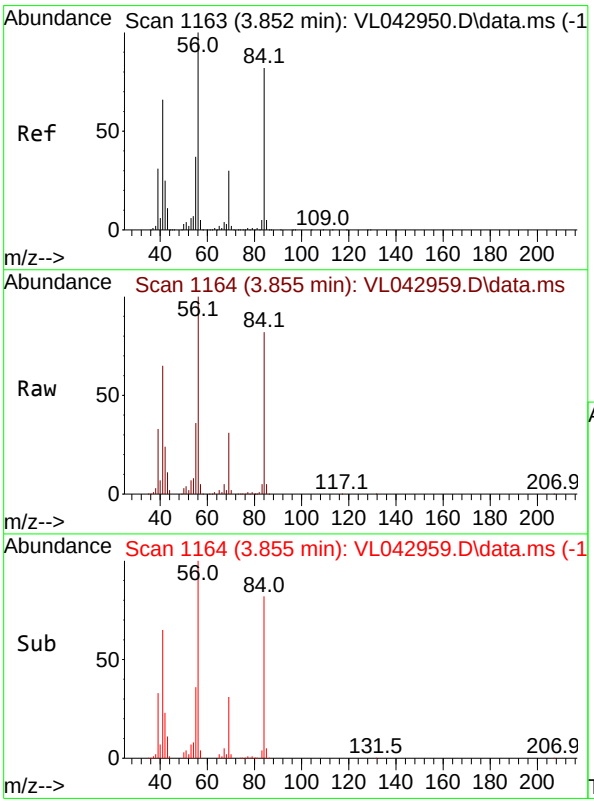
#29
Chloroform
Concen: 9.541 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 83 Resp: 295049

Ion	Ratio	Lower	Upper
83	100		
85	64.9	51.2	76.8

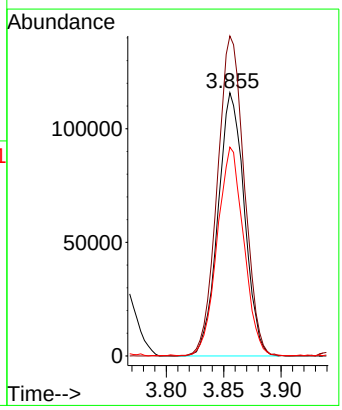


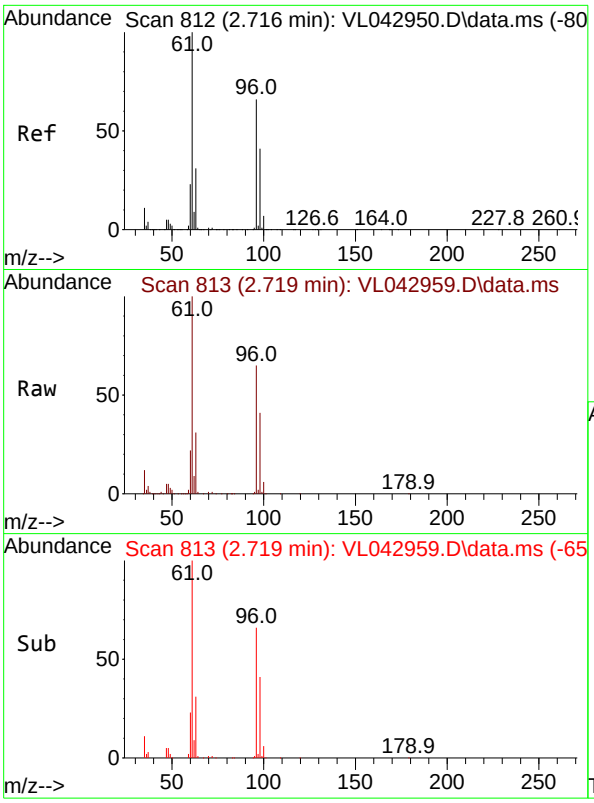


#30
Cyclohexane
Concen: 9.336 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 84 Resp: 184610

Ion	Ratio	Lower	Upper
84	100		
56	124.4	102.2	153.4
41	80.1	65.6	98.4



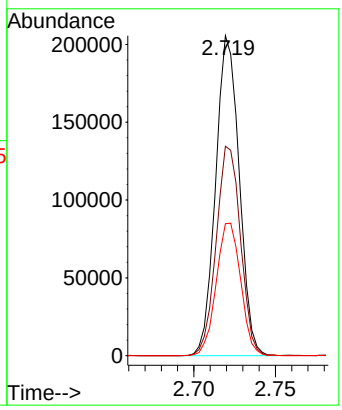


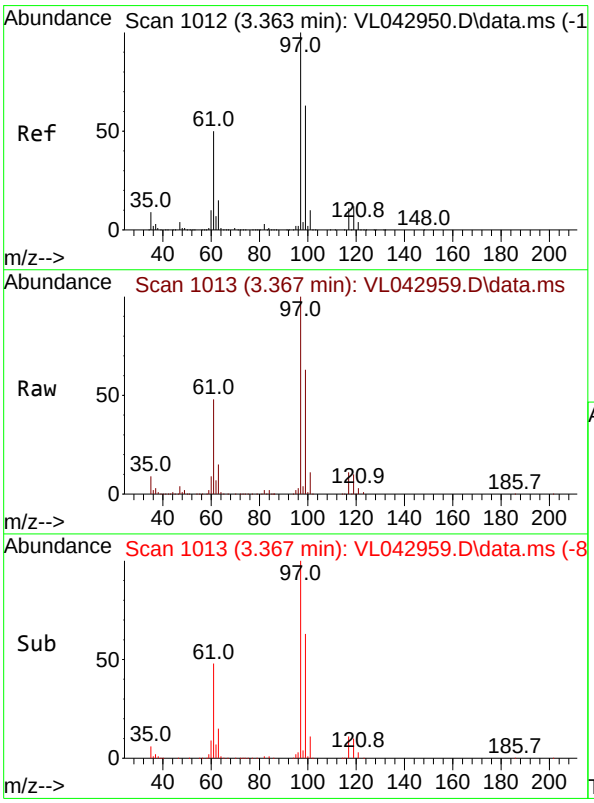
#31
cis-1,2-Dichloroethene
Concen: 9.332 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 61 Resp: 206747

Ion	Ratio	Lower	Upper
61	100		
96	65.5	53.0	79.6
98	41.2	32.9	49.3

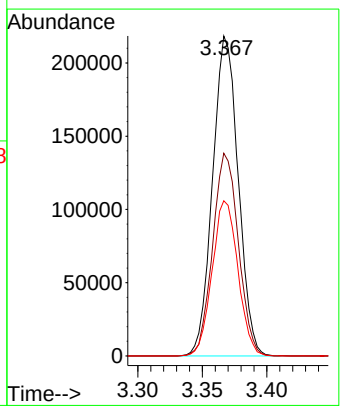


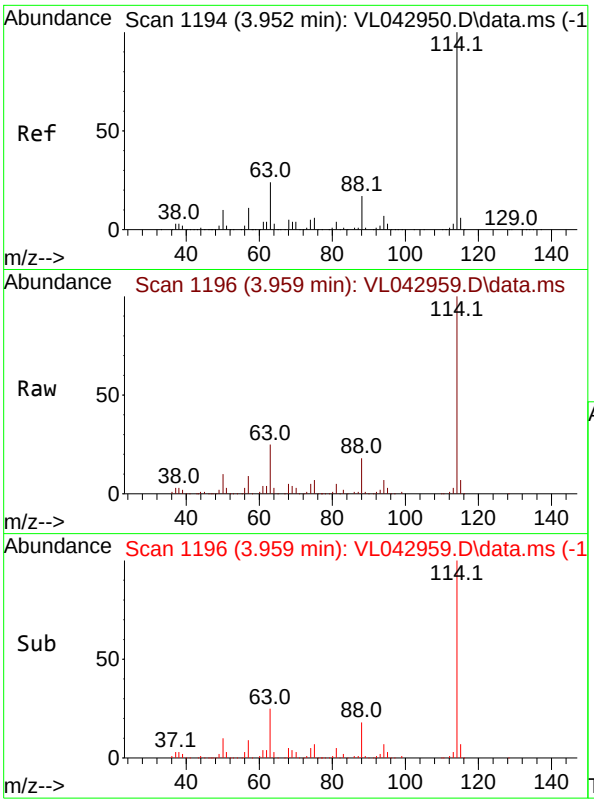


#32
1,1,1-Trichloroethane
Concen: 9.024 ppbv
RT: 3.367 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 97 Resp: 301400

Ion	Ratio	Lower	Upper
97	100		
99	63.6	51.1	76.7
61	48.8	39.8	59.6



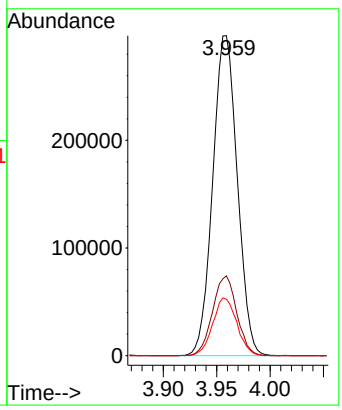


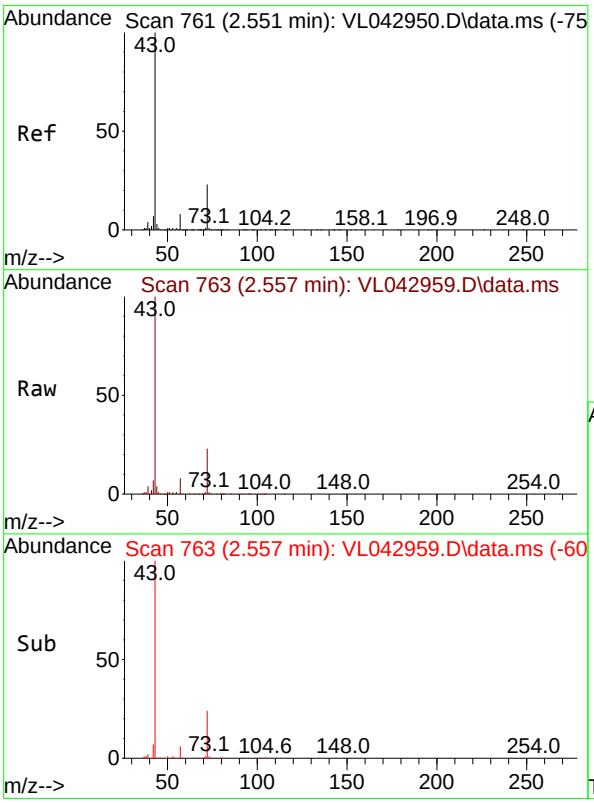
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:114 Resp: 475789

Ion	Ratio	Lower	Upper
114	100		
63	24.6	19.4	29.2
88	17.8	14.2	21.2

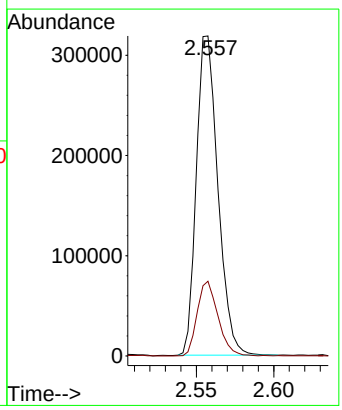


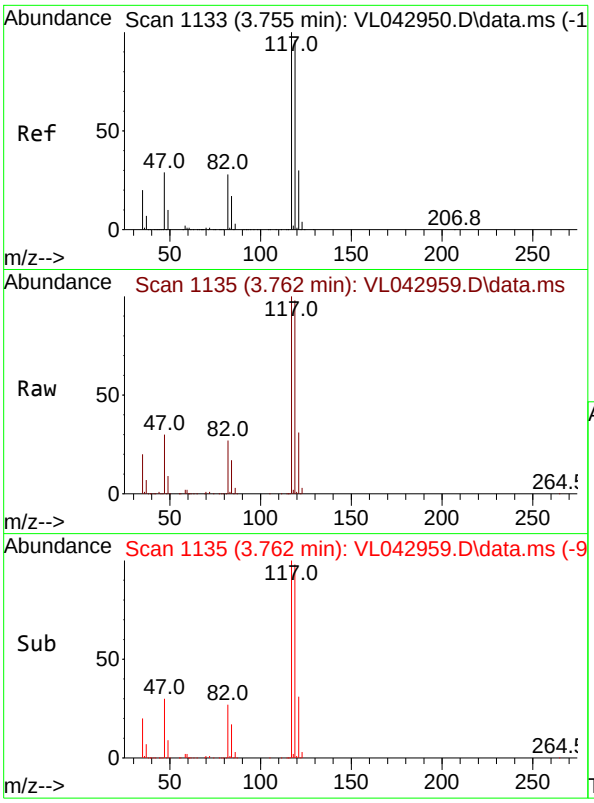


#34
2-Butanone
Concen: 9.245 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 308258

Ion	Ratio	Lower	Upper
43	100		
72	22.8	17.7	26.5



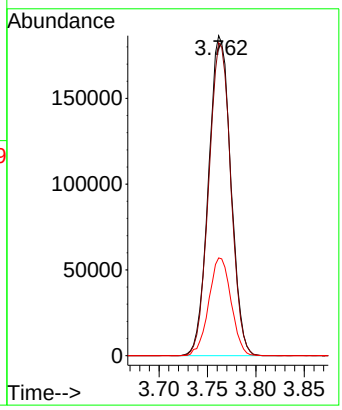


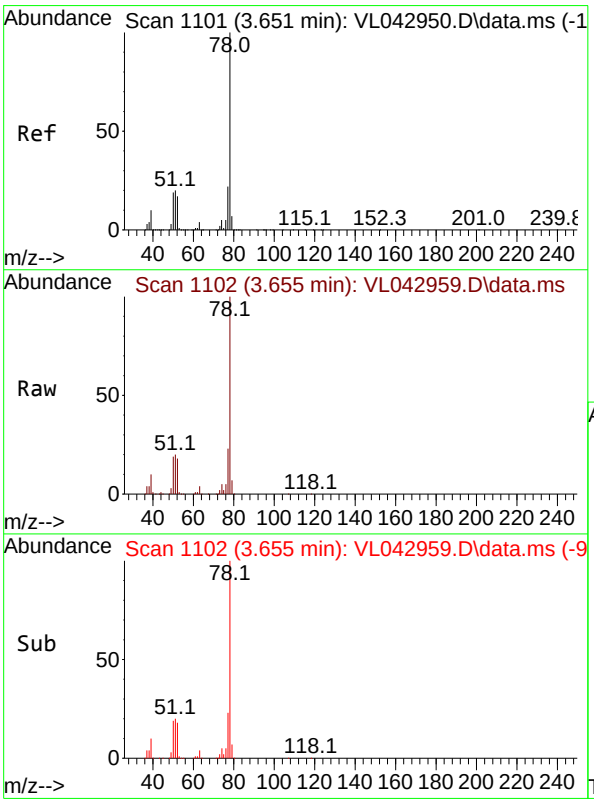
#35
Carbon Tetrachloride
Concen: 9.653 ppbv
RT: 3.762 min Scan# 11
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:117 Resp: 299002

Ion	Ratio	Lower	Upper
117	100		
119	97.8	76.9	115.3
121	30.6	23.7	35.5

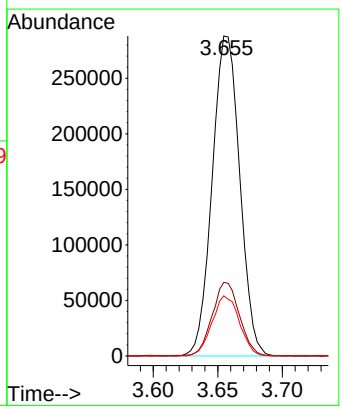


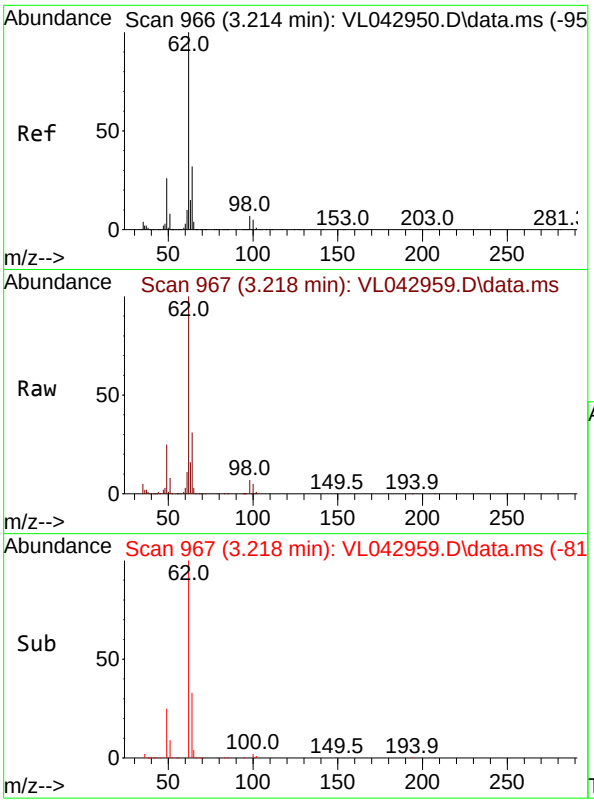


#36
Benzene
Concen: 9.565 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 78 Resp: 427346

Ion	Ratio	Lower	Upper
78	100		
77	23.0	17.8	26.6
50	18.8	15.0	22.4



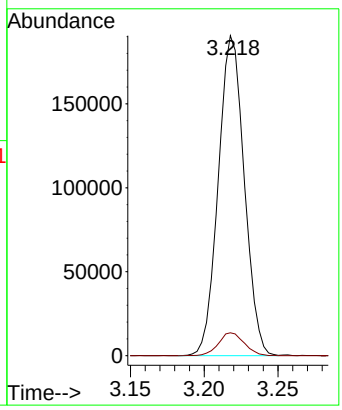


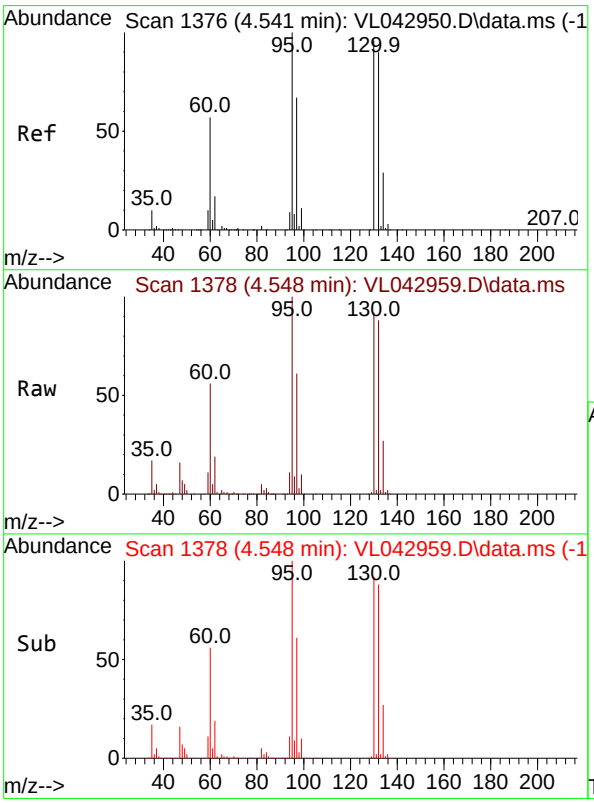
#37
1,2-Dichloroethane
Concen: 9.935 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 62 Resp: 233446

Ion	Ratio	Lower	Upper
62	100		
98	7.1	5.9	8.9

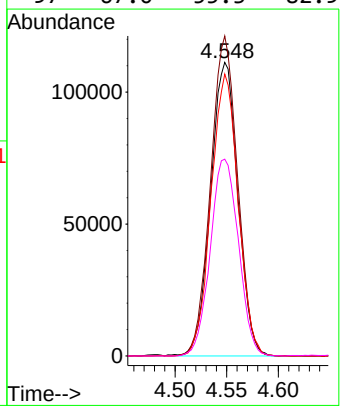


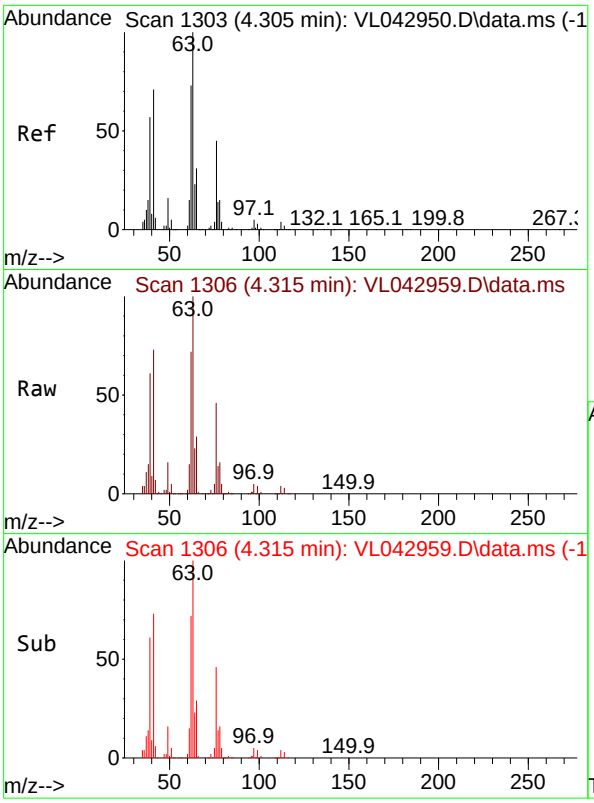


#38
Trichloroethene
Concen: 9.189 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:130 Resp: 204031

Ion	Ratio	Lower	Upper
130	100		
95	109.0	83.0	124.4
132	96.0	74.6	112.0
97	67.0	55.3	82.9



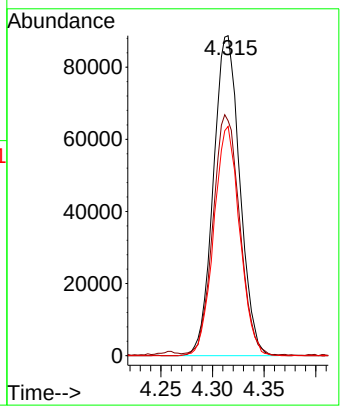


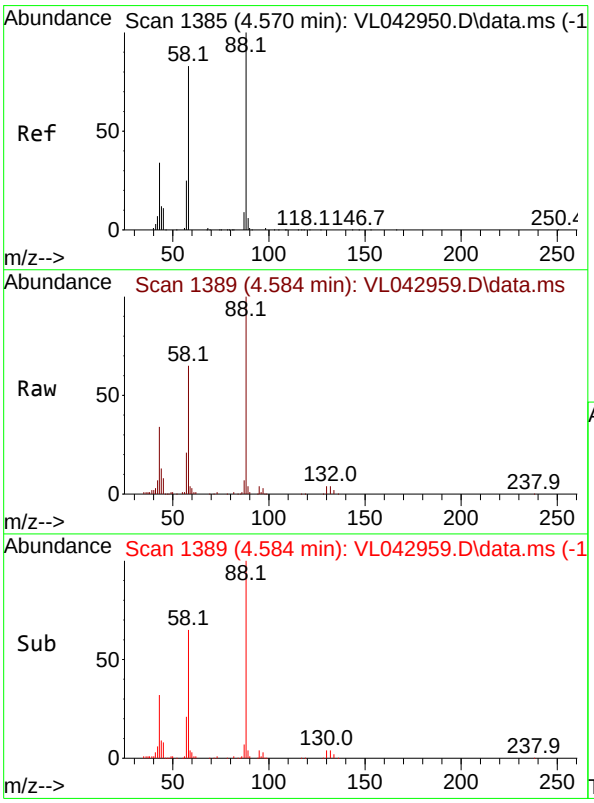
#39
1,2-Dichloropropane
Concen: 9.673 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 63 Resp: 157775

Ion	Ratio	Lower	Upper
63	100		
41	73.1	57.5	86.3
62	71.6	58.5	87.7

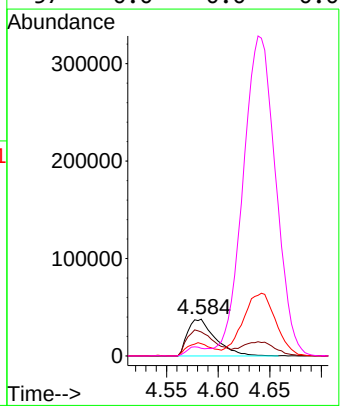


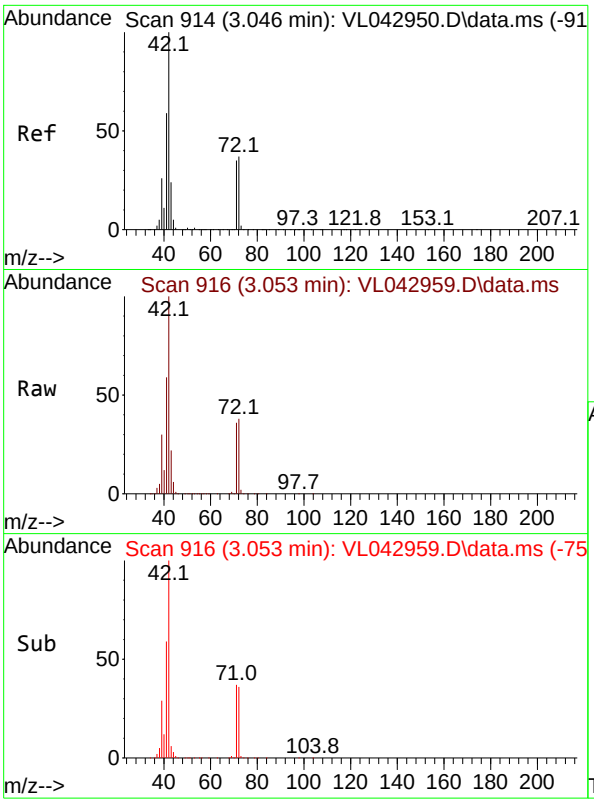


#40
1,4-Dioxane
Concen: 9.339 ppbv
RT: 4.584 min Scan# 1389
Delta R.T. 0.013 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 88 Resp: 70833

Ion	Ratio	Lower	Upper
88	100		
58	70.8	59.7	89.5
43	33.0	28.9	43.3
57	0.0	0.0	0.0



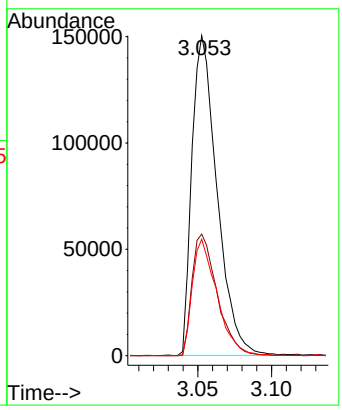


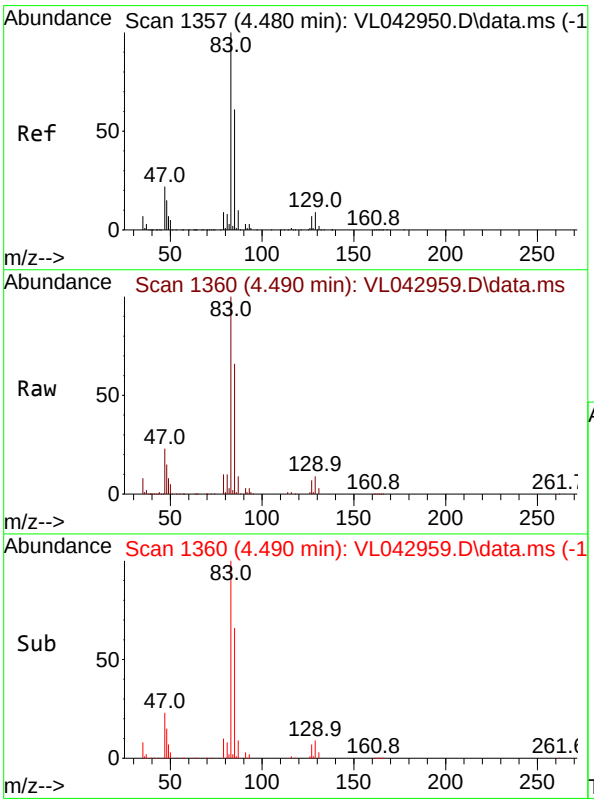
#41
Tetrahydrofuran
Concen: 9.281 ppbv
RT: 3.053 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 42 Resp: 177879

Ion	Ratio	Lower	Upper
42	100		
72	38.3	30.0	45.0
71	35.9	28.8	43.2

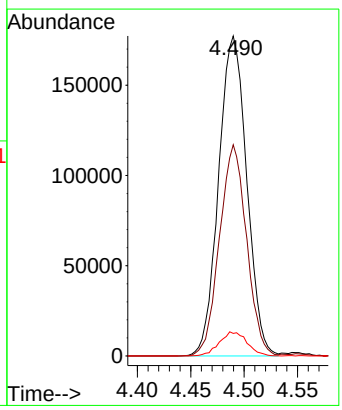


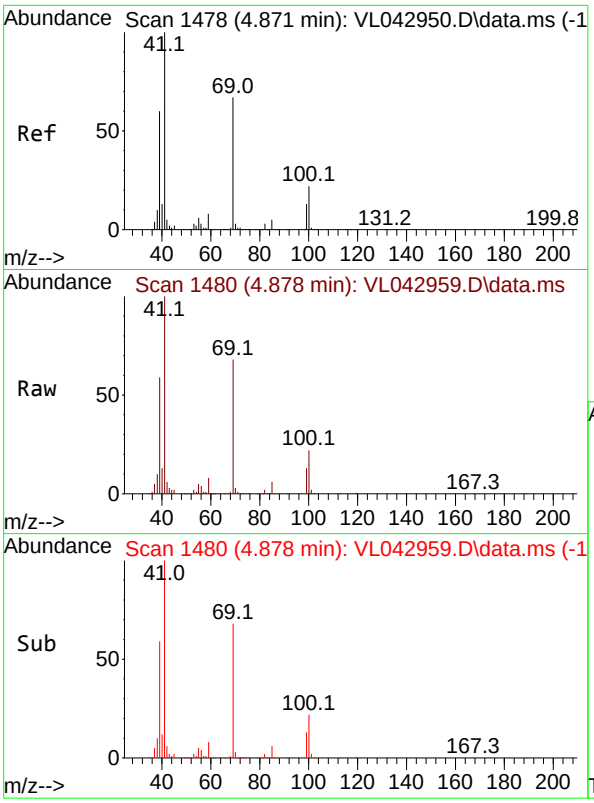


#42
Bromodichloromethane
Concen: 9.924 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 83 Resp: 324757

Ion	Ratio	Lower	Upper
83	100		
85	66.0	49.0	73.6
127	7.0	5.3	7.9



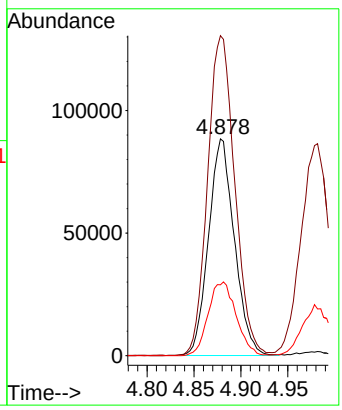


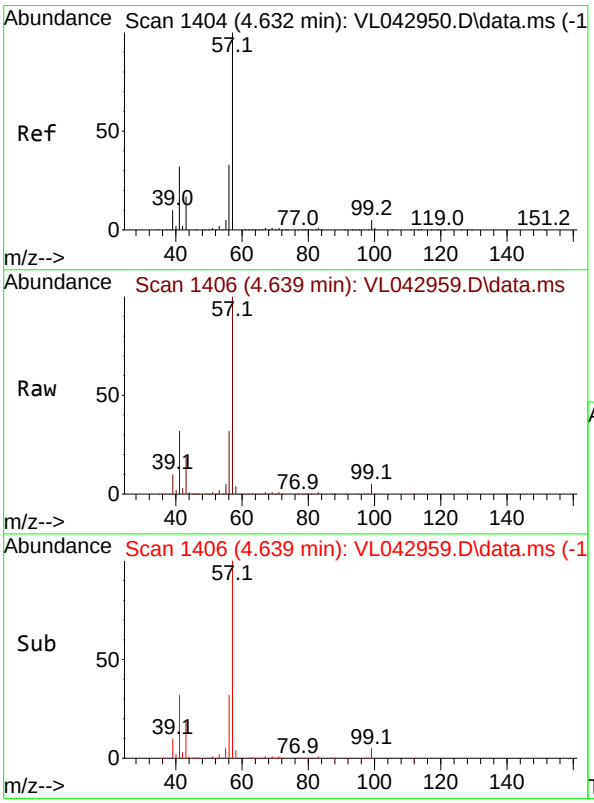
#43
Methyl Methacrylate
Concen: 9.250 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 69 Resp: 169093

Ion	Ratio	Lower	Upper
69	100		
41	154.7	124.5	186.7
100	36.8	29.0	43.6

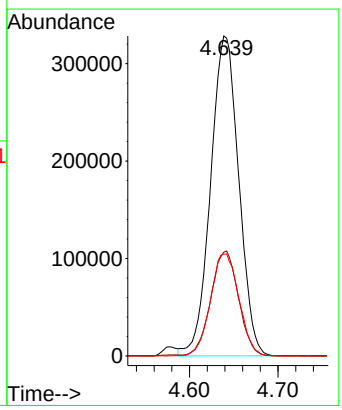


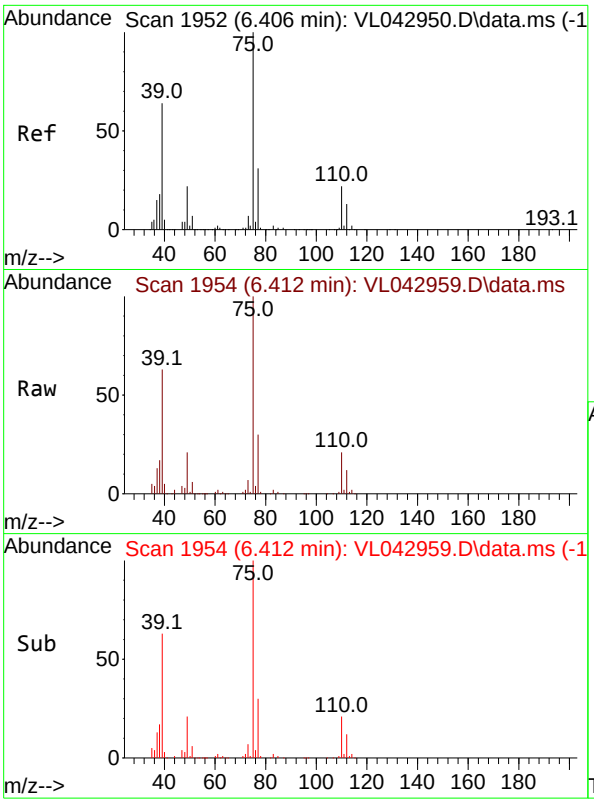


#44
2,2,4-Trimethylpentane
Concen: 9.407 ppbv
RT: 4.639 min Scan# 1406
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 57 Resp: 725943

Ion	Ratio	Lower	Upper
57	100		
41	32.3	25.5	38.3
56	32.3	25.8	38.8



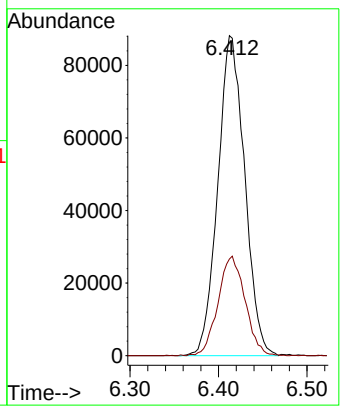


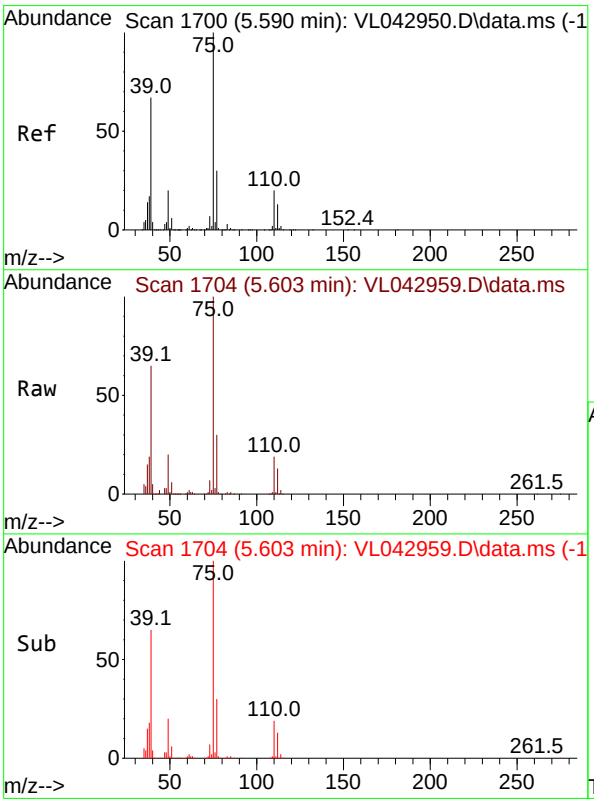
#45
t-1,3-Dichloropropene
Concen: 9.538 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 75 Resp: 185943

Ion	Ratio	Lower	Upper
75	100		
77	30.2	25.0	37.4

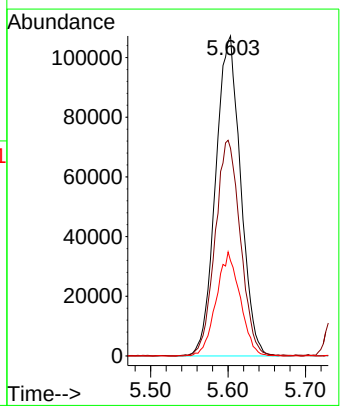


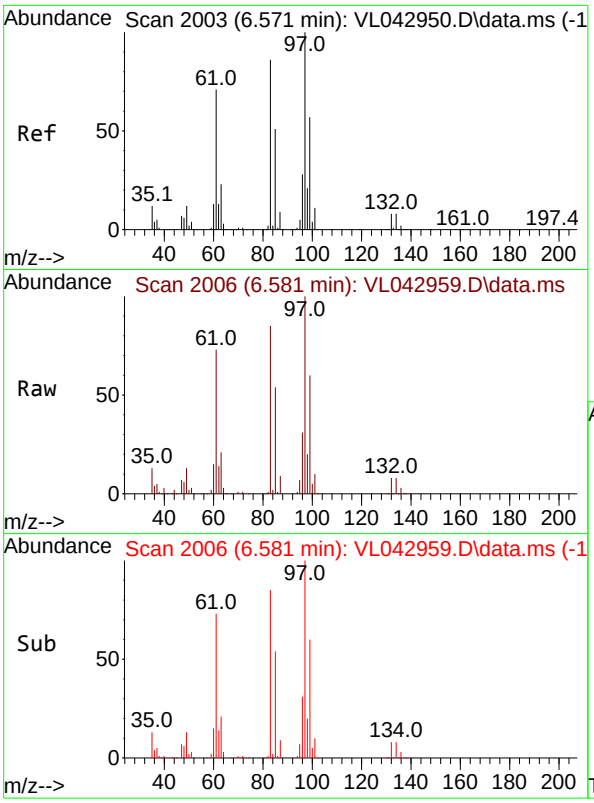


#46
cis-1,3-Dichloropropene
Concen: 9.667 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.013 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 75 Resp: 240185

Ion	Ratio	Lower	Upper
75	100		
39	64.8	53.8	80.6
77	29.7	23.6	35.4



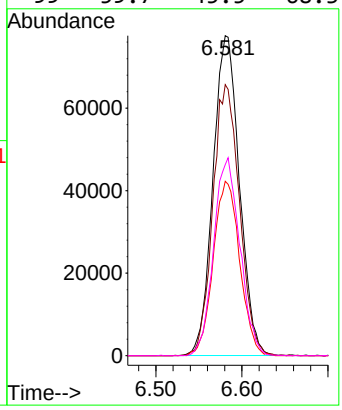


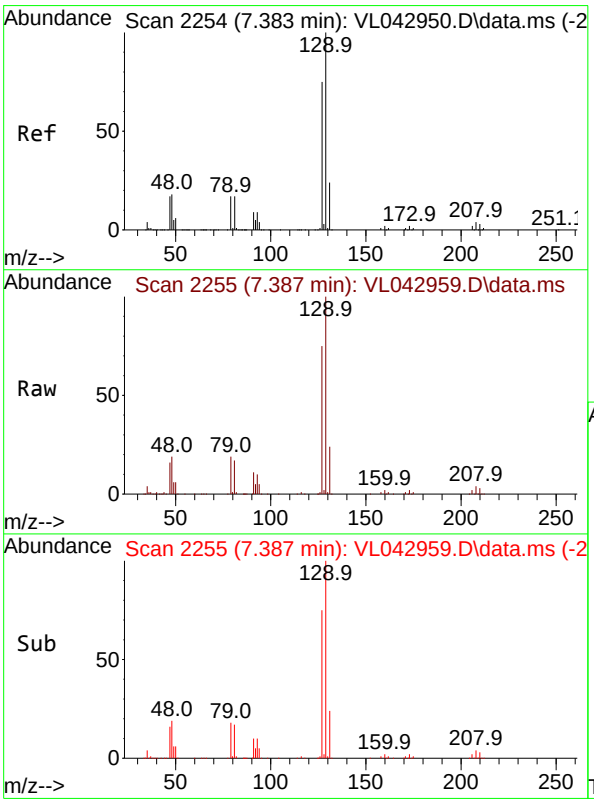
#47
1,1,2-Trichloroethane
Concen: 9.580 ppbv
RT: 6.581 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 97 Resp: 165106

Ion	Ratio	Lower	Upper
97	100		
83	84.8	68.7	103.1
85	54.5	40.6	60.8
99	59.7	45.5	68.3

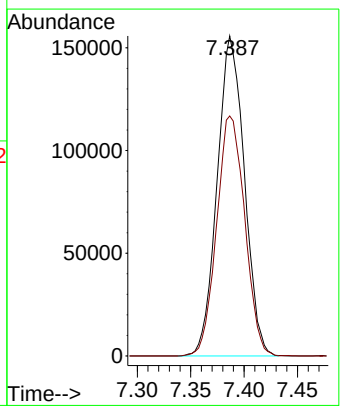


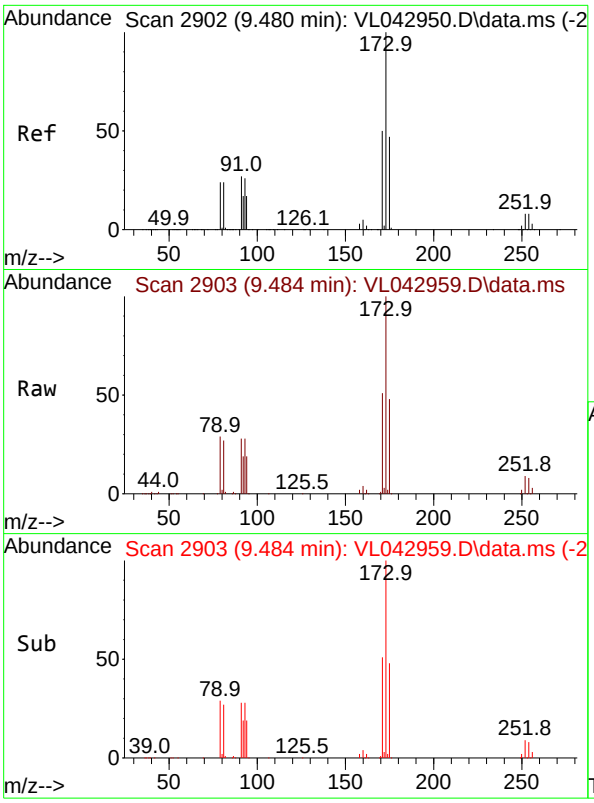


#48
Dibromochloromethane
Concen: 10.002 ppbv
RT: 7.387 min Scan# 2255
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:129 Resp: 275781

Ion	Ratio	Lower	Upper
129	100		
127	77.6	39.1	117.2



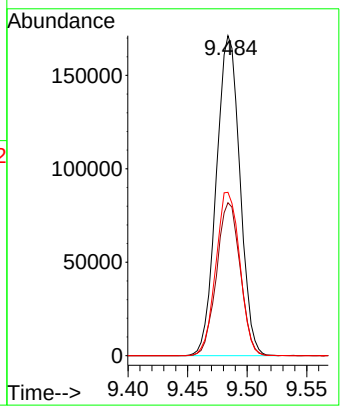


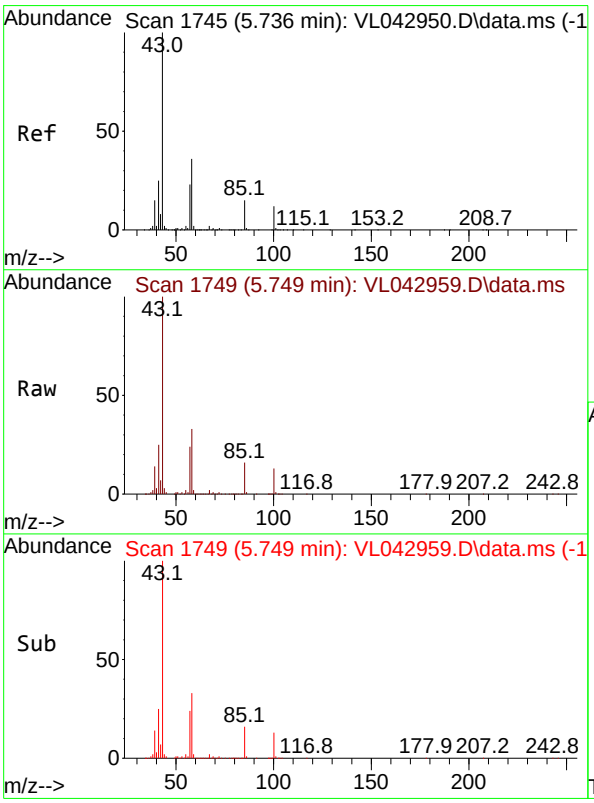
#49
Bromoform
Concen: 9.800 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:173 Resp: 235060

Ion	Ratio	Lower	Upper
173	100		
175	48.0	37.9	56.9
171	52.1	41.1	61.7

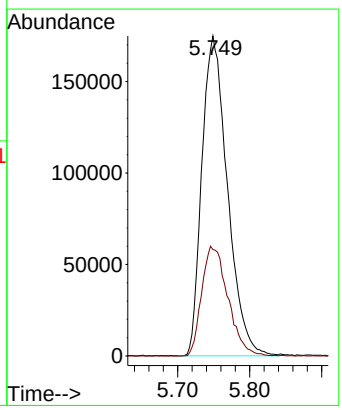


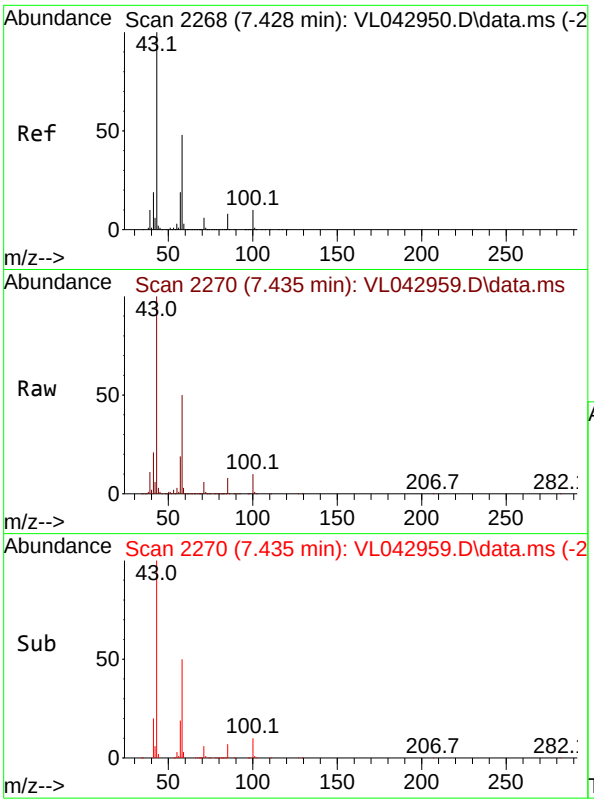


#50
4-Methyl-2-Pentanone
Concen: 9.645 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.013 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 43 Resp: 431031

Ion	Ratio	Lower	Upper
43	100		
58	35.1	28.4	42.6



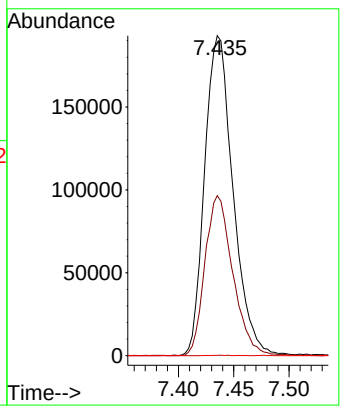


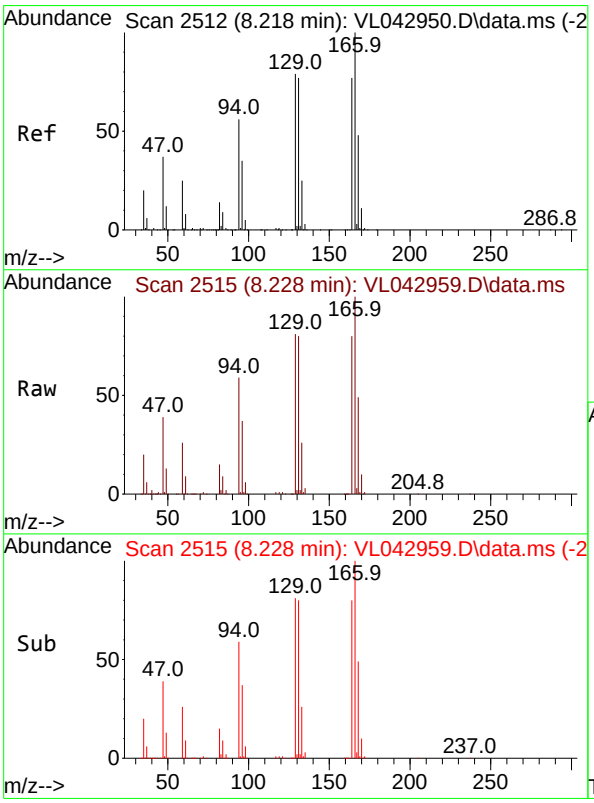
#51
2-Hexanone
Concen: 9.641 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 43 Resp: 343461

Ion	Ratio	Lower	Upper
43	100		
58	49.4	39.7	59.5
98	0.1	0.1	0.1

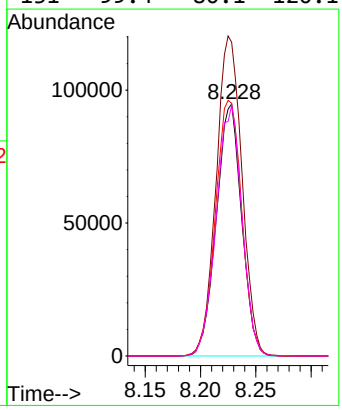


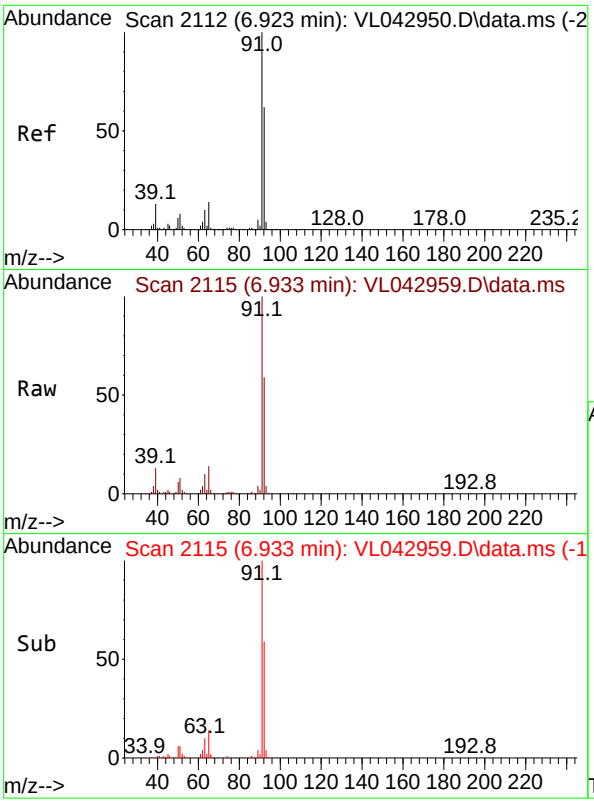


#52
Tetrachloroethene
Concen: 8.705 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:164 Resp: 150483

Ion	Ratio	Lower	Upper
164	100		
166	124.5	103.5	155.3
129	100.2	82.2	123.4
131	99.4	80.1	120.1



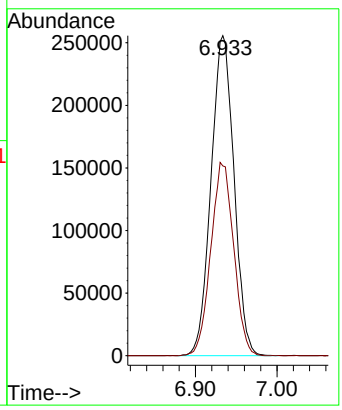


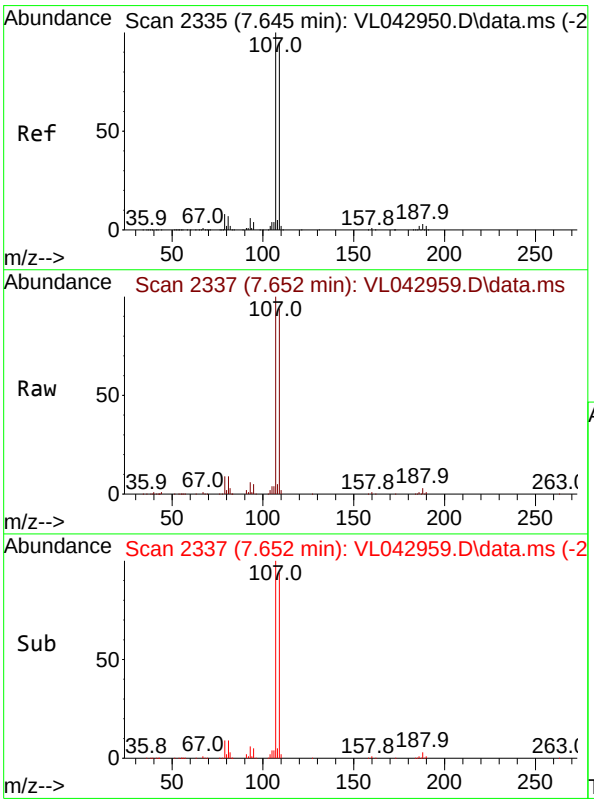
#53
Toluene
Concen: 9.484 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 91 Resp: 501548

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.2

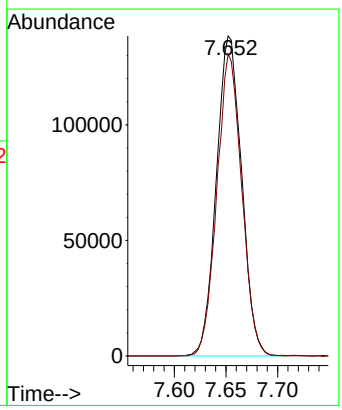


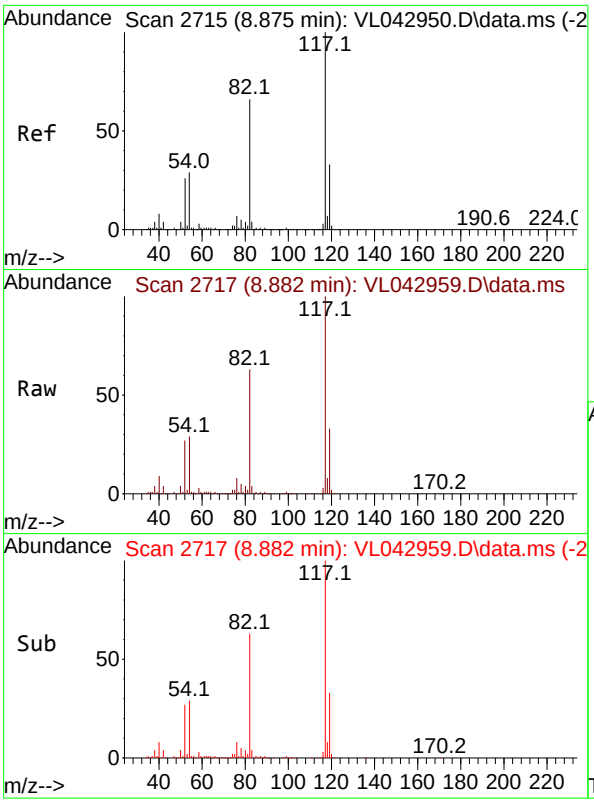


#54
1,2-Dibromoethane
Concen: 9.704 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:107 Resp: 235389

Ion	Ratio	Lower	Upper
107	100		
109	94.4	75.8	113.8



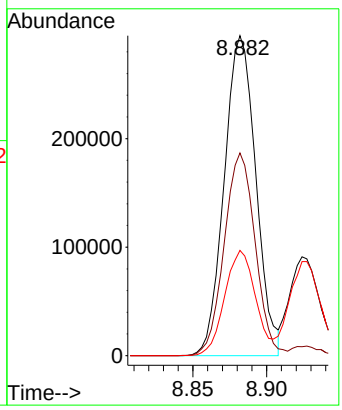


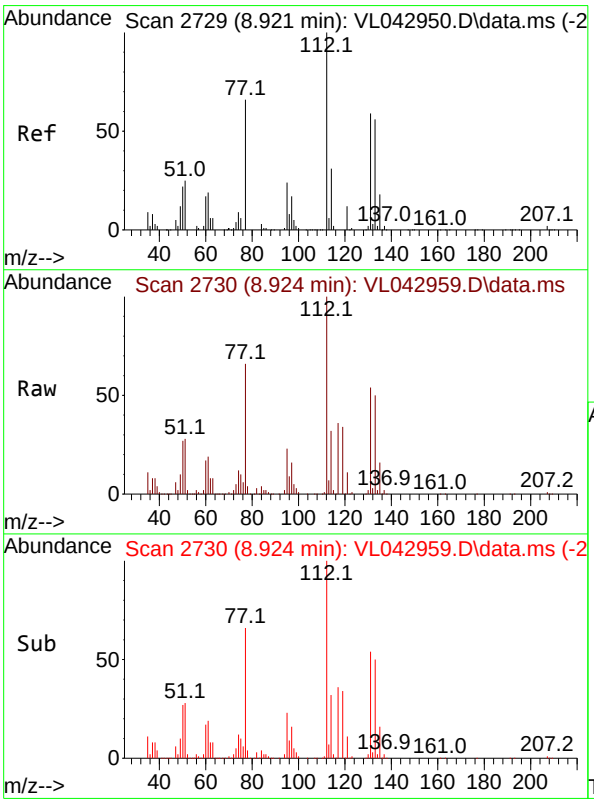
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:117 Resp: 440323

Ion	Ratio	Lower	Upper
117	100		
82	64.7	52.8	79.2
119	32.3	26.5	39.7

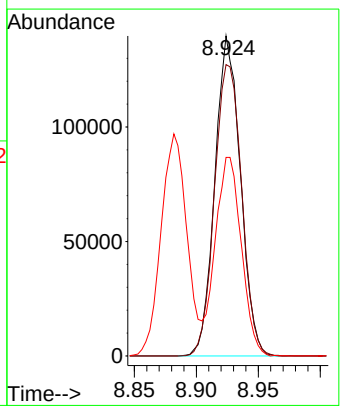


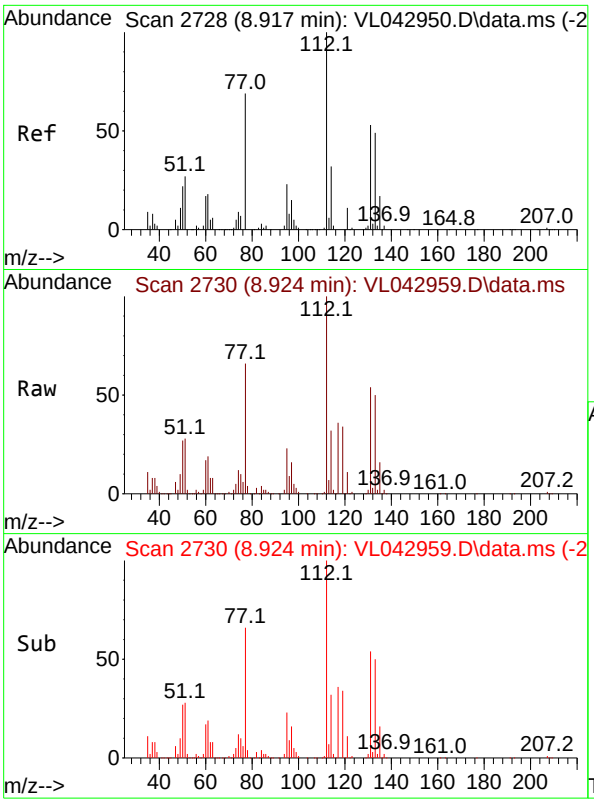


#56
1,1,1,2-Tetrachloroethane
Concen: 9.516 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:131 Resp: 200560

Ion	Ratio	Lower	Upper
131	100		
133	97.0	76.6	114.8
119	64.8	49.9	74.9



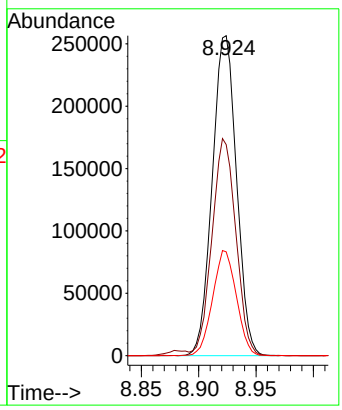


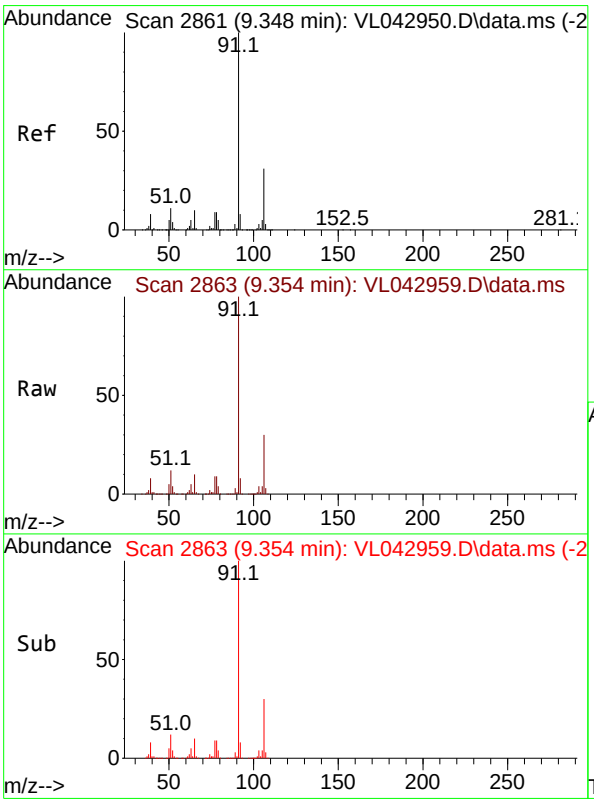
#57
Chlorobenzene
Concen: 9.392 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:112 Resp: 377524

Ion	Ratio	Lower	Upper
112	100		
77	65.9	55.7	83.5
114	32.4	28.6	35.0

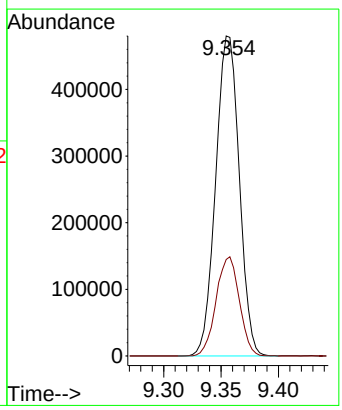


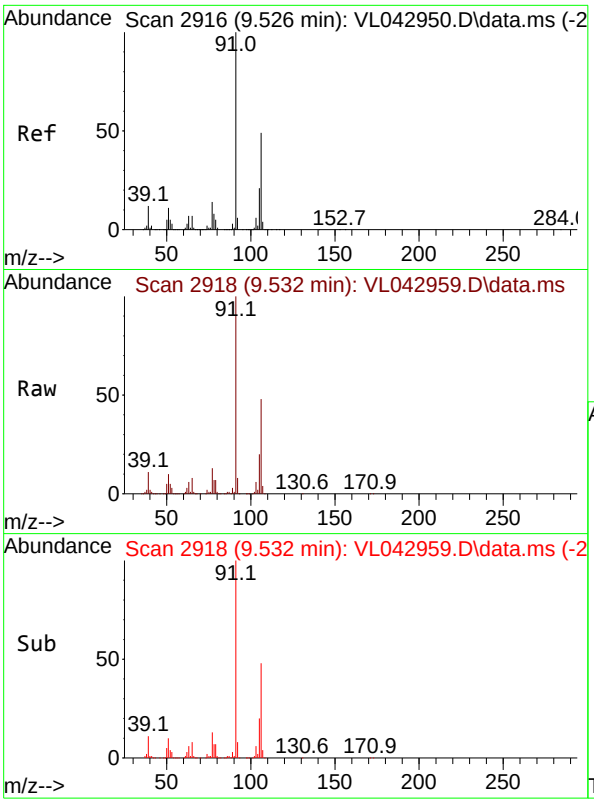


#58
Ethyl Benzene
Concen: 9.489 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 686057

Ion	Ratio	Lower	Upper
91	100		
106	30.1	24.6	37.0



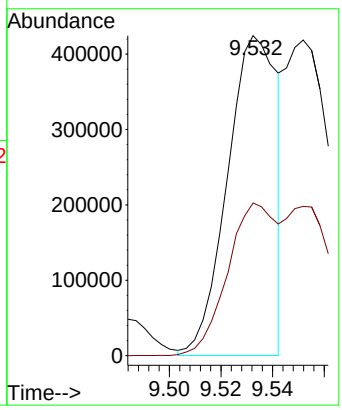


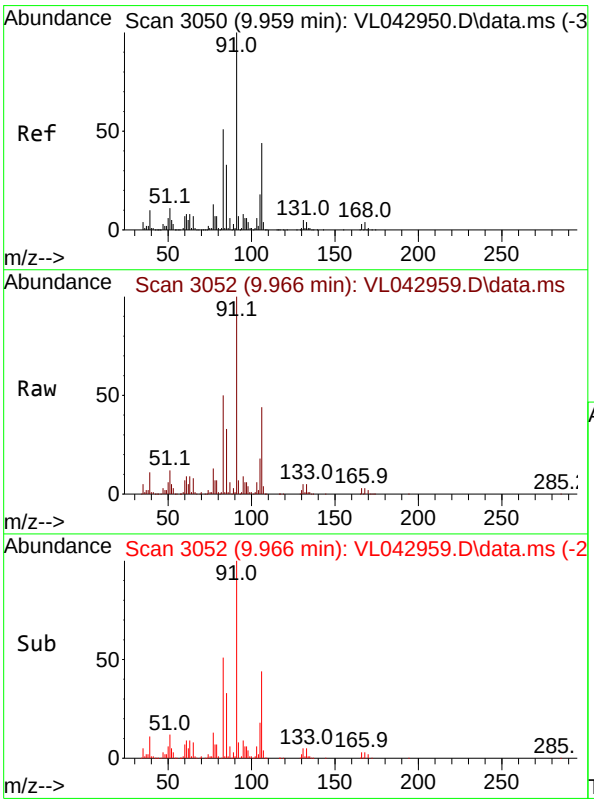
#59
m/p-Xylene
Concen: 9.897 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 91 Resp: 564158

Ion	Ratio	Lower	Upper
91	100		
106	91.3	0.0	0.0#

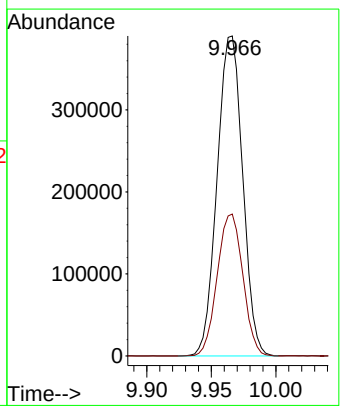


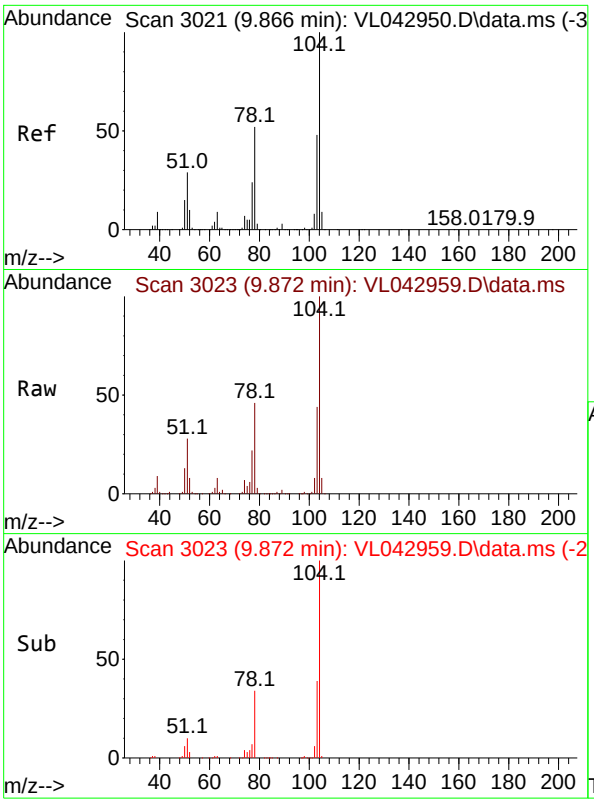


#60
o-Xylene
Concen: 9.426 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 537008

Ion	Ratio	Lower	Upper
91	100		
106	44.4	22.4	67.0



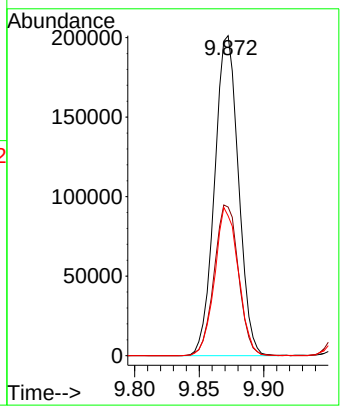


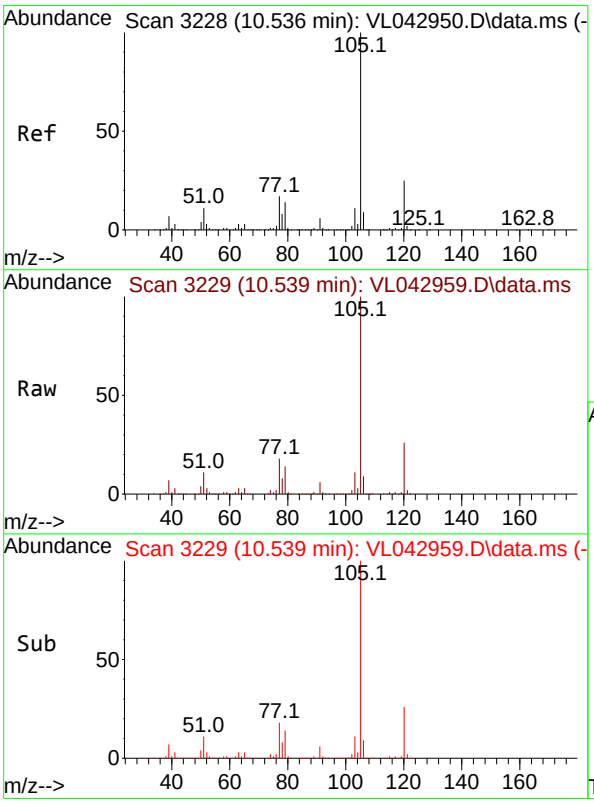
#61
Styrene
Concen: 9.602 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:104 Resp: 258756

Ion	Ratio	Lower	Upper
104	100		
78	48.0	39.9	59.9
103	46.0	36.9	55.3

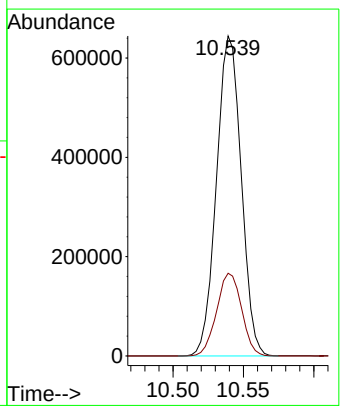


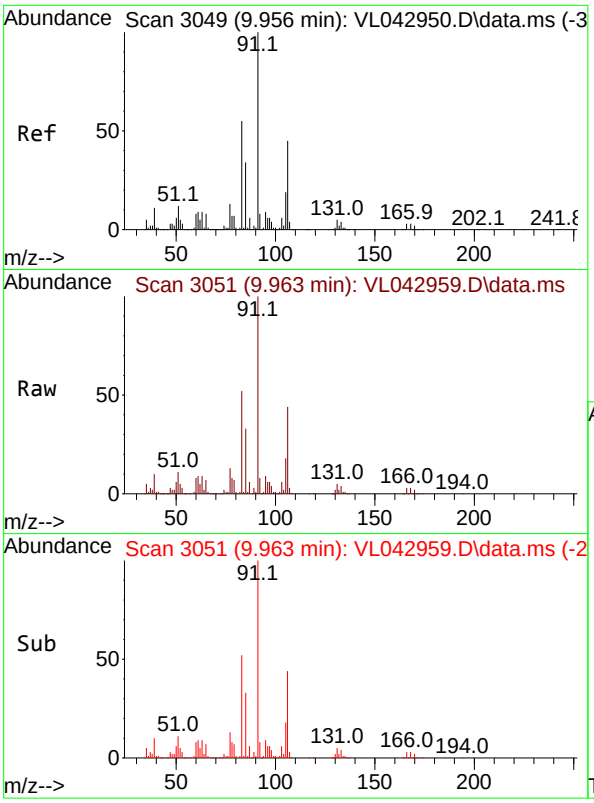


#62
Isopropylbenzene
Concen: 9.274 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 787602

Ion	Ratio	Lower	Upper
105	100		
120	26.1	20.6	30.8



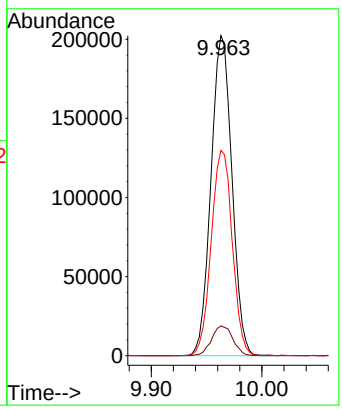


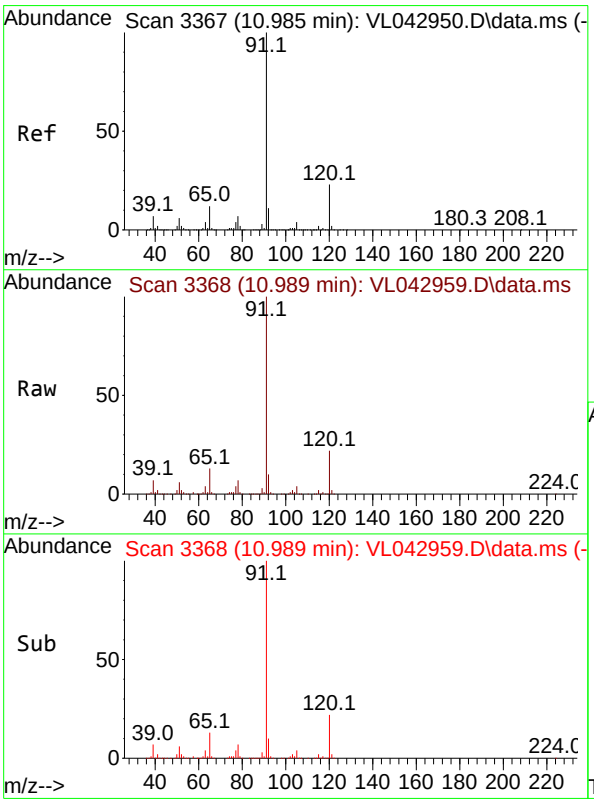
#63
1,1,2,2-Tetrachloroethane
Concen: 8.890 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 83 Resp: 266223

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	64.5	32.2	96.6

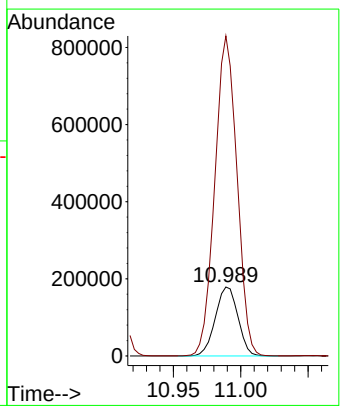


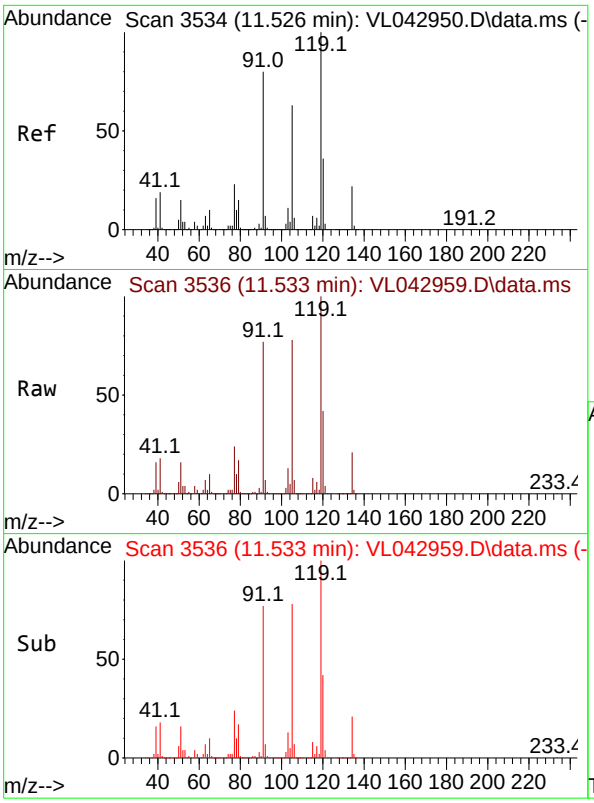


#64
n-propylbenzene
Concen: 9.389 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:120 Resp: 208358

Ion	Ratio	Lower	Upper
120	100		
91	454.9	364.9	547.3



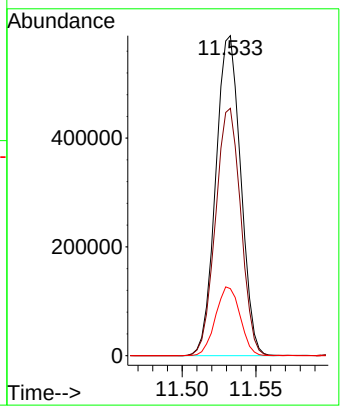


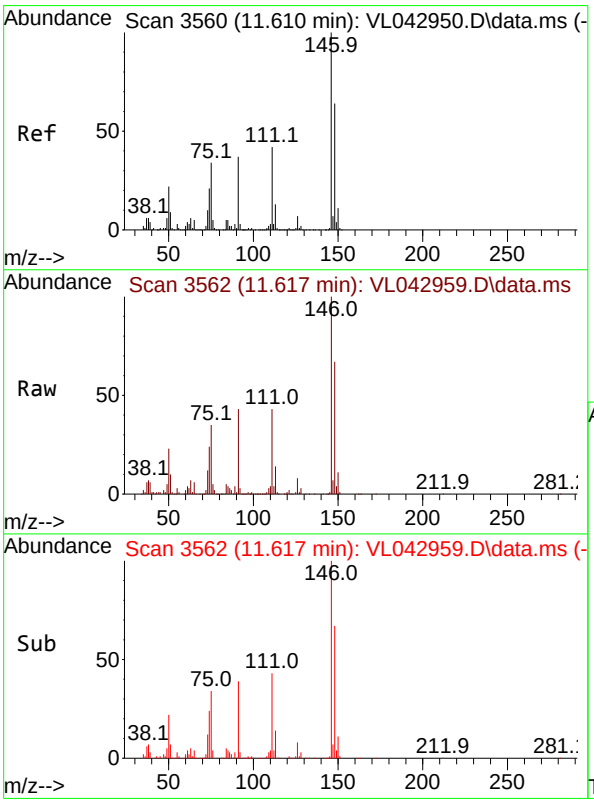
#65
tert-Butylbenzene
Concen: 9.188 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:119 Resp: 694033

Ion	Ratio	Lower	Upper
119	100		
91	78.2	63.1	94.7
134	21.2	17.0	25.6

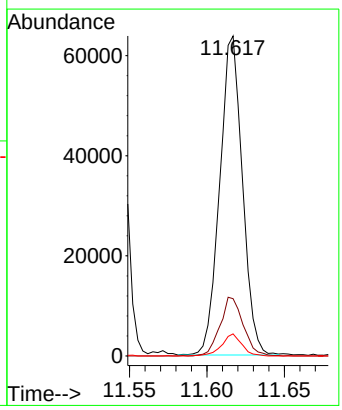


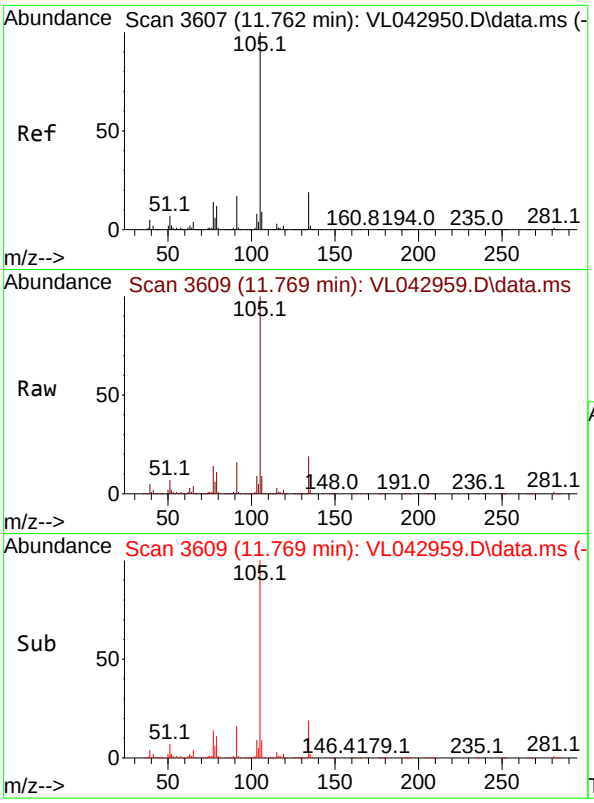


#66
Benzyl Chloride
Concen: 8.196 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 64955

Ion	Ratio	Lower	Upper
91	100		
126	18.8	14.6	21.8
128	6.2	5.0	7.4



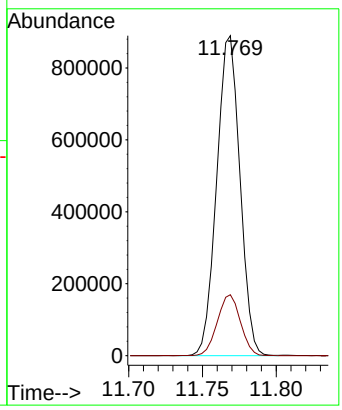


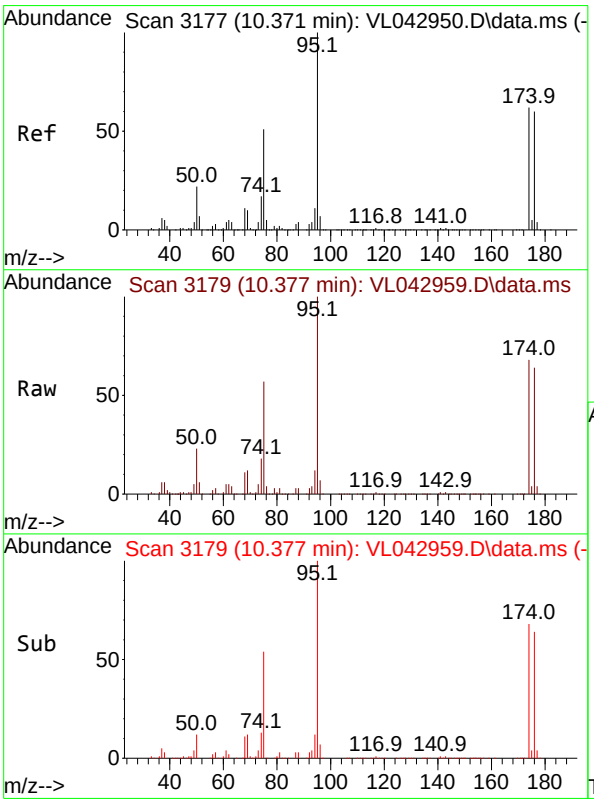
#67
sec-Butylbenzene
Concen: 9.261 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:105 Resp: 974750

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.7	23.5

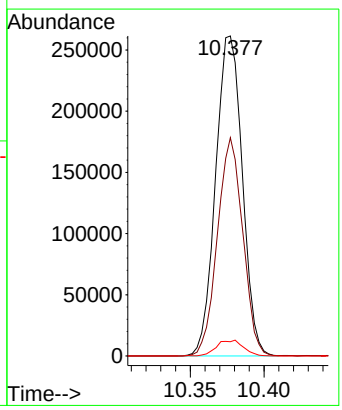


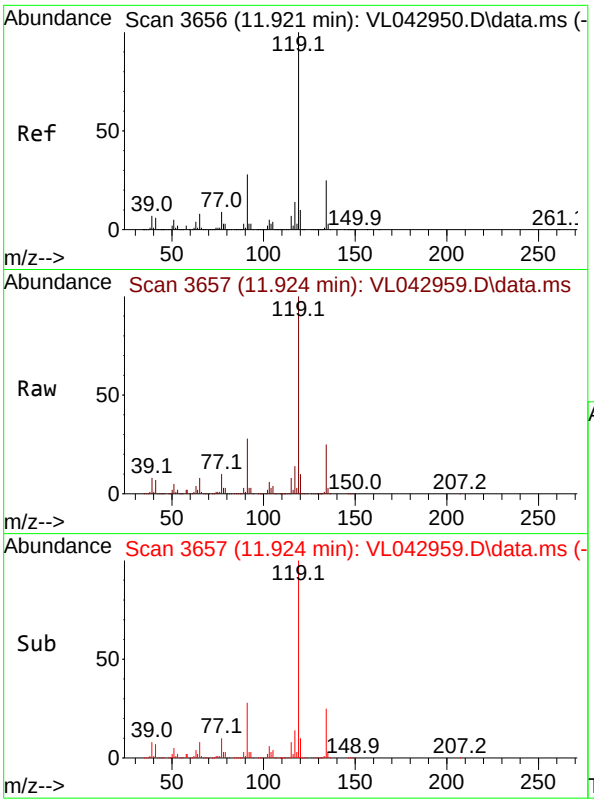


#68
1-Bromo-4-Fluorobenzene
Concen: 10.025 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 95 Resp: 329520

Ion	Ratio	Lower	Upper
95	100		
174	64.8	51.4	77.2
175	5.0	4.0	6.0



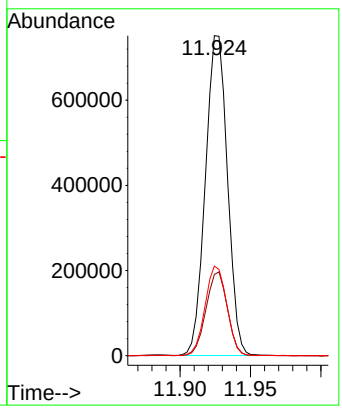


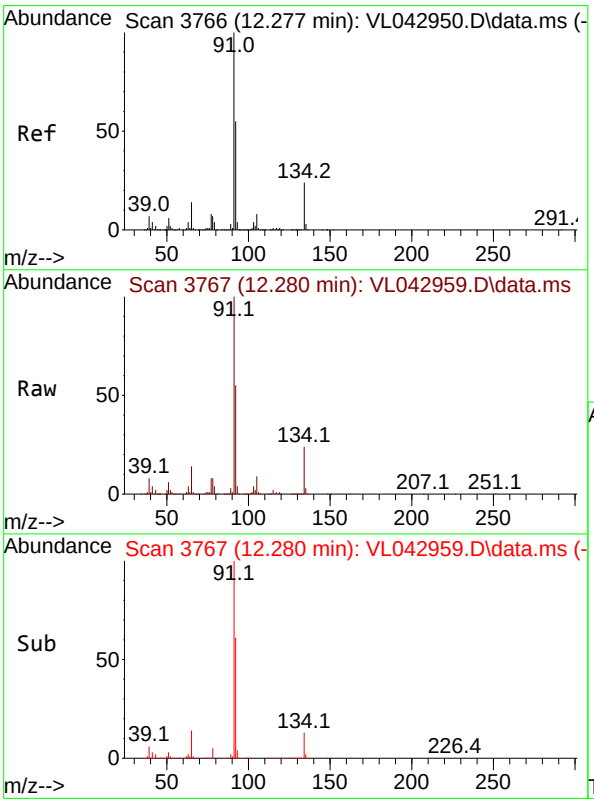
#69
p-Isopropyltoluene
Concen: 9.229 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:119 Resp: 820532

Ion	Ratio	Lower	Upper
119	100		
134	25.5	21.0	31.4
91	27.7	22.3	33.5

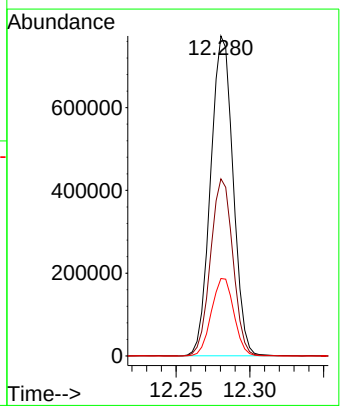


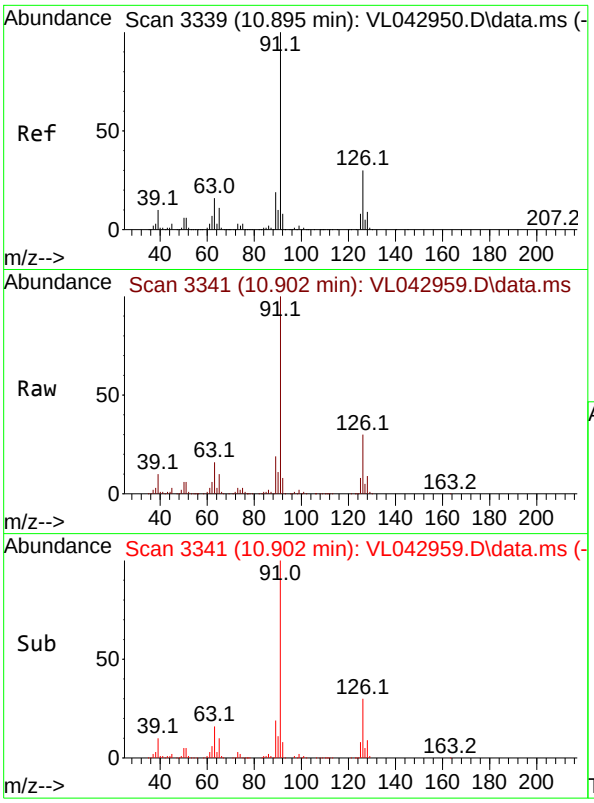


#70
n-Butylbenzene
Concen: 9.434 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion: 91 Resp: 818866

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.0	66.0
134	24.3	19.4	29.2



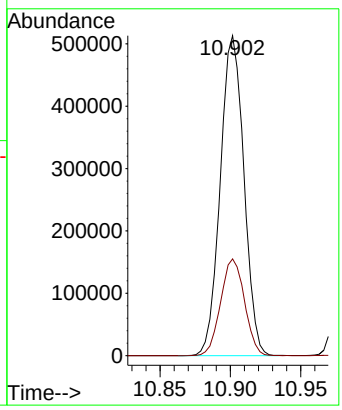


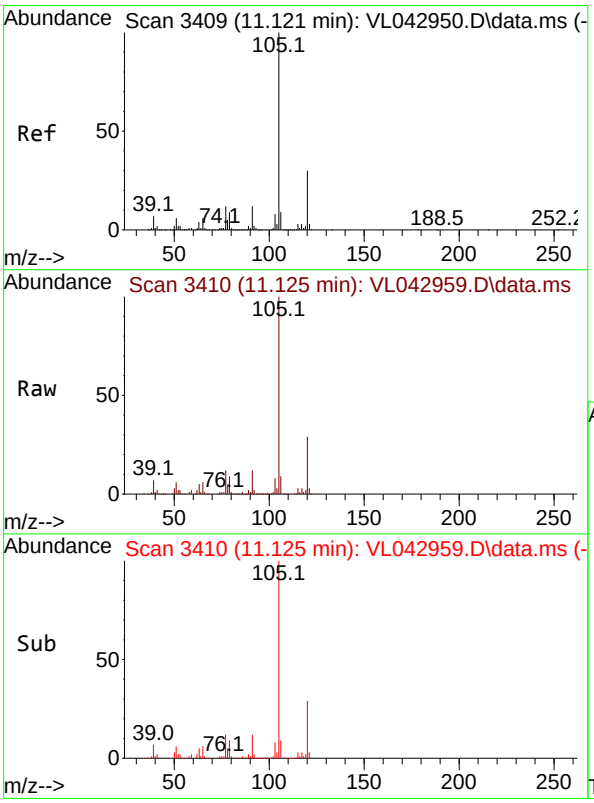
#71
2-Chlorotoluene
Concen: 9.336 ppbv
RT: 10.902 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion: 91 Resp: 598619

Ion	Ratio	Lower	Upper
91	100		
126	30.6	12.3	49.3

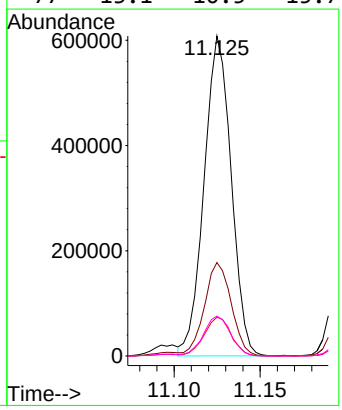


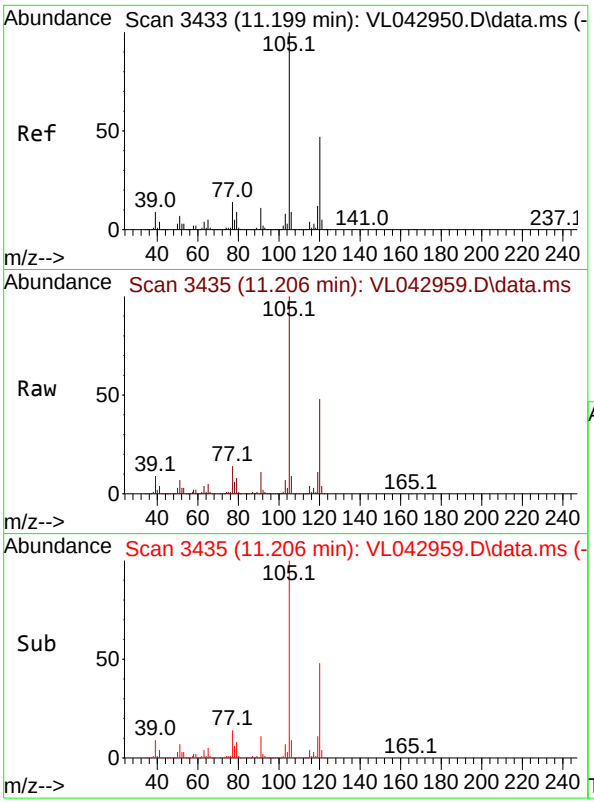


#72
4-Ethyltoluene
Concen: 9.332 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 665916

Ion	Ratio	Lower	Upper
105	100		
120	30.0	24.2	36.2
91	12.5	10.0	15.0
77	13.1	10.5	15.7



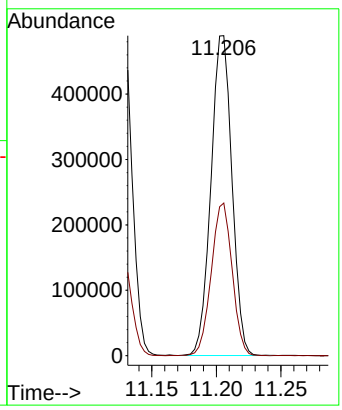


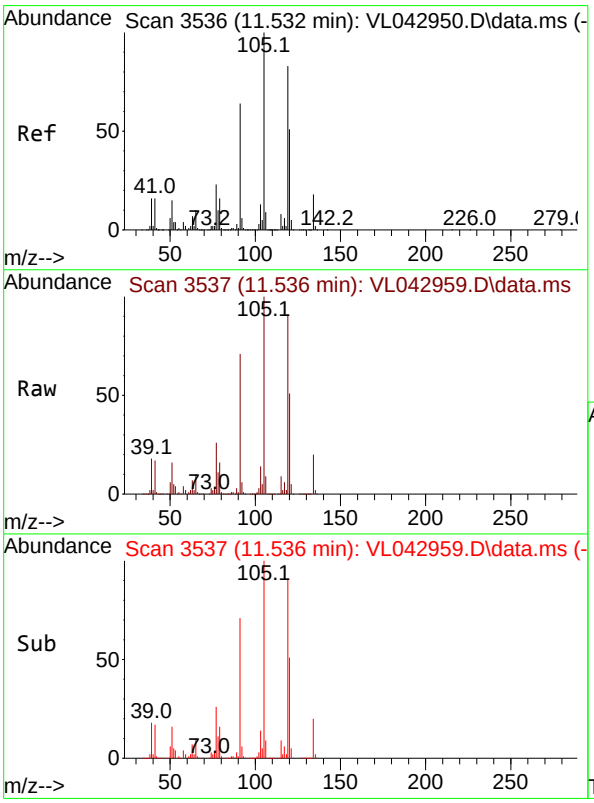
#73
1,3,5-Trimethylbenzene
Concen: 9.539 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:105 Resp: 552039

Ion	Ratio	Lower	Upper
105	100		
120	47.7	38.0	57.0

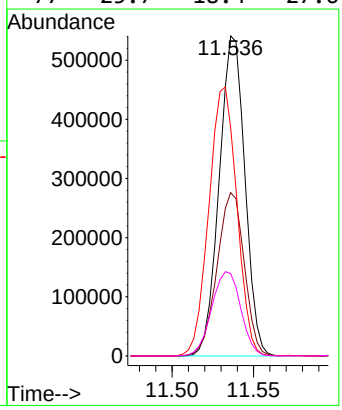


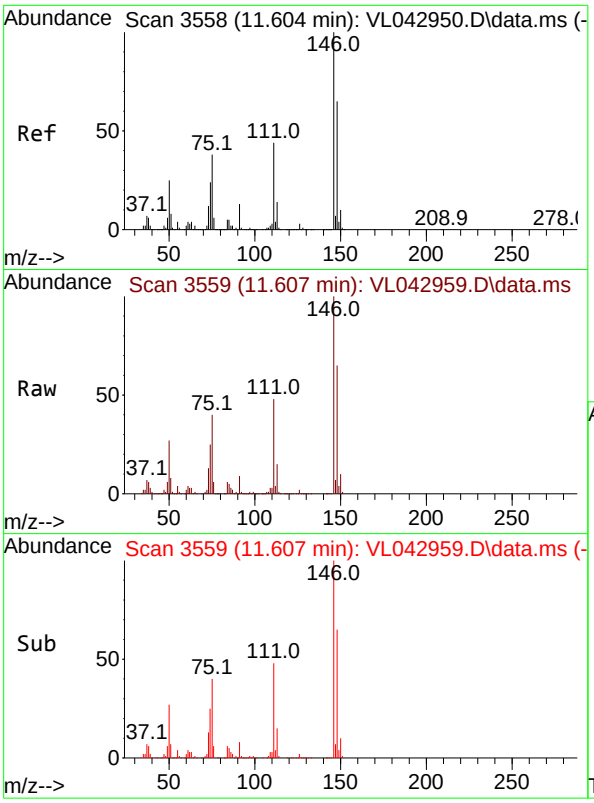


#74
1,2,4-Trimethylbenzene
Concen: 9.277 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:105 Resp: 592889

Ion	Ratio	Lower	Upper
105	100		
120	51.0	40.9	61.3
91	71.2	51.2	76.8
77	25.7	18.4	27.6



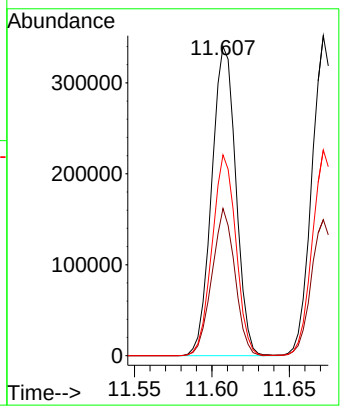


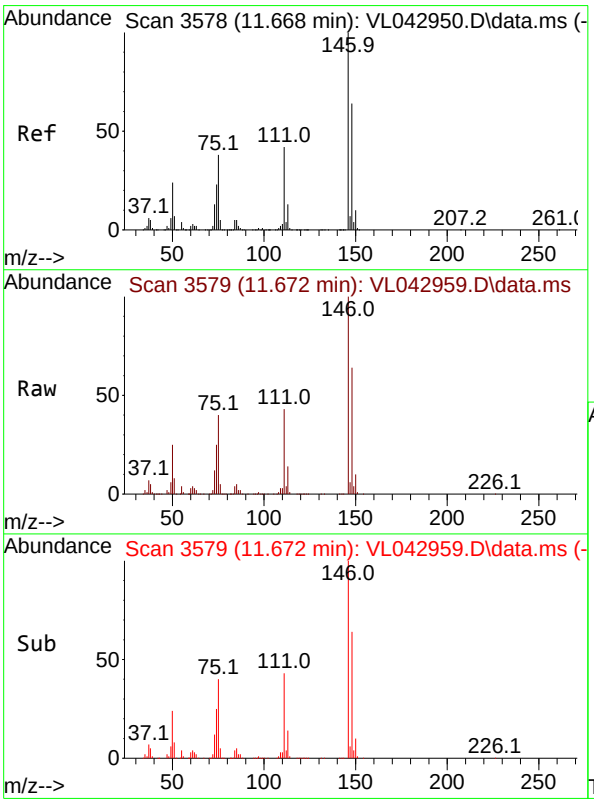
#75
1,3-Dichlorobenzene
Concen: 9.299 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:146 Resp: 368544

Ion	Ratio	Lower	Upper
146	100		
111	45.3	22.3	66.9
148	64.0	31.9	95.5

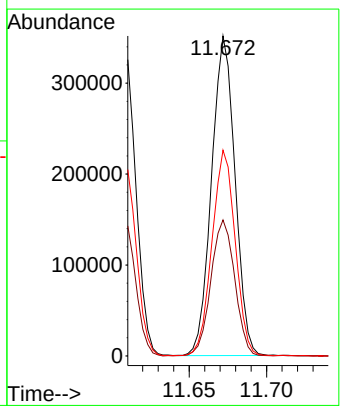


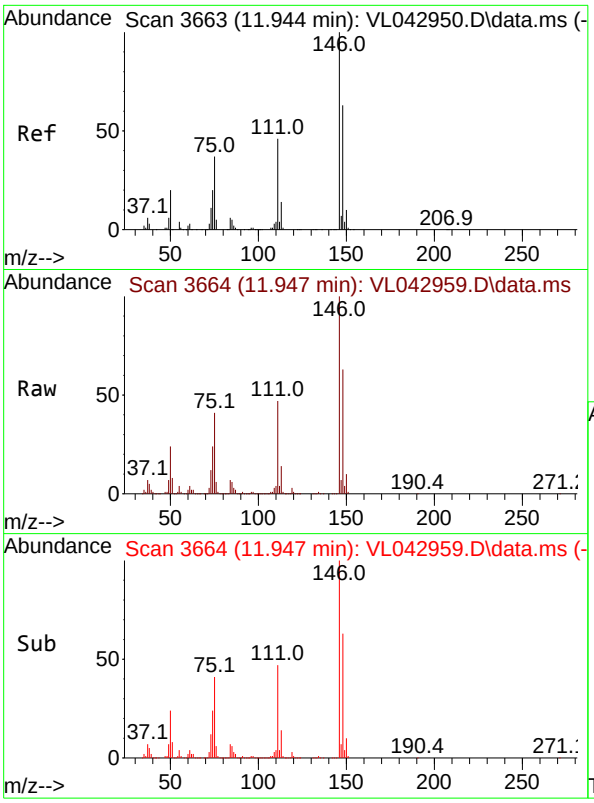


#76
1,4-Dichlorobenzene
Concen: 9.397 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:146 Resp: 369921

Ion	Ratio	Lower	Upper
146	100		
111	43.5	21.5	64.5
148	64.1	31.9	95.5



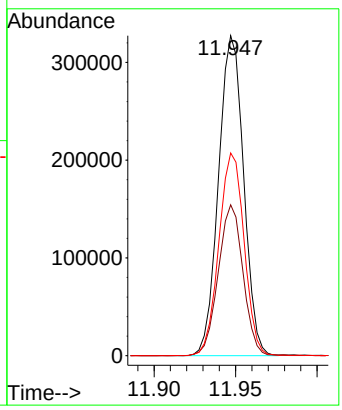


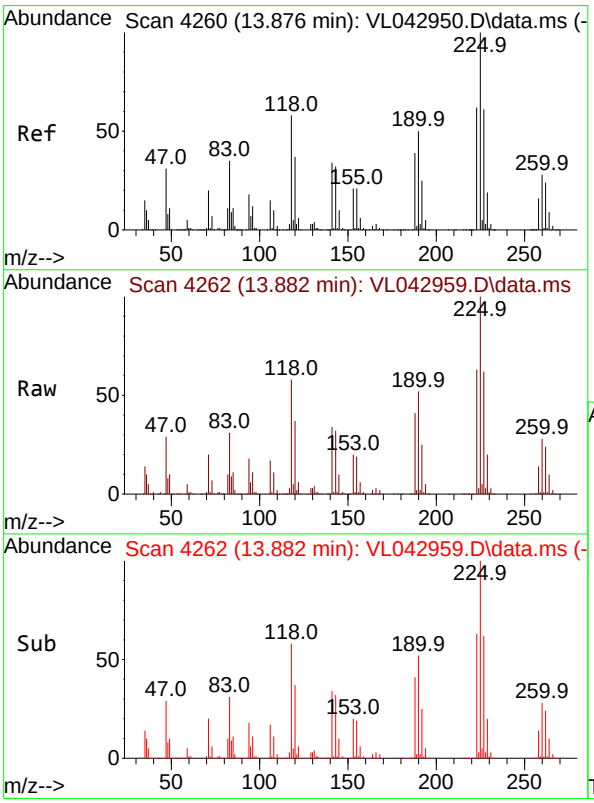
#77
1,2-Dichlorobenzene
Concen: 9.288 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:146 Resp: 350261

Ion	Ratio	Lower	Upper
146	100		
111	46.6	23.1	69.3
148	63.8	32.0	96.0

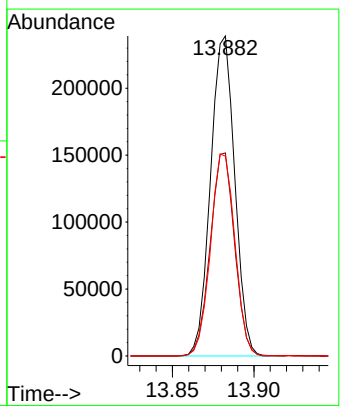


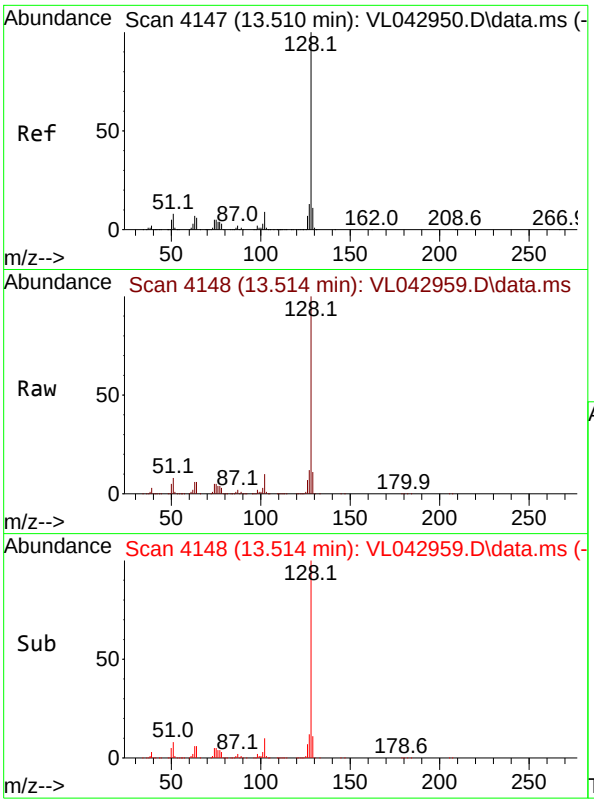


#78
Hexachloro-1,3-Butadiene
Concen: 8.366 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.007 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:225 Resp: 246743

Ion	Ratio	Lower	Upper
225	100		
223	63.7	50.1	75.1
227	63.6	50.4	75.6



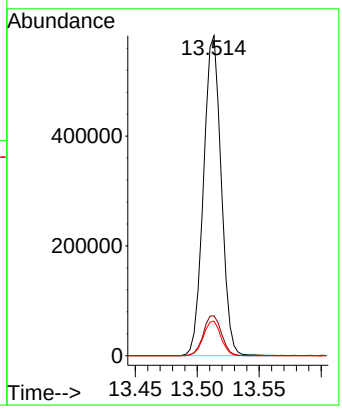


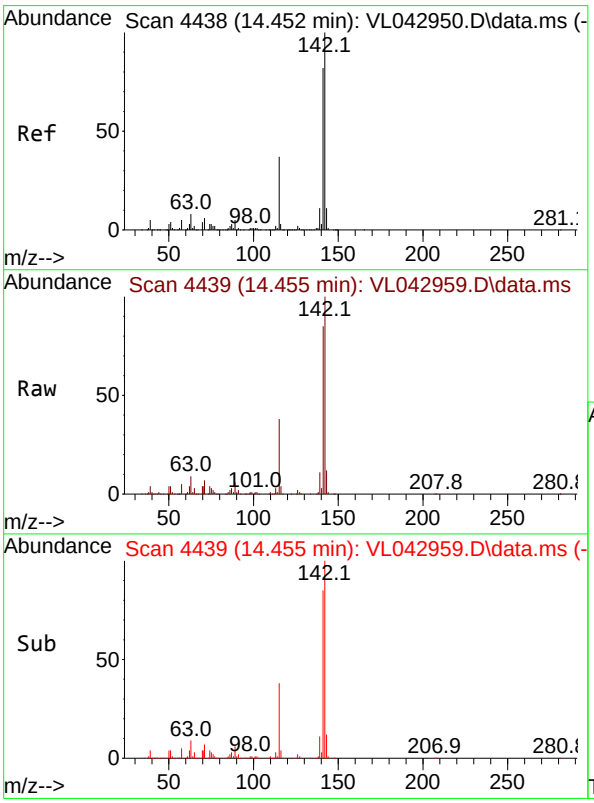
#79
Naphthalene
Concen: 10.259 ppbv
RT: 13.514 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:128 Resp: 579760

Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.6	15.8
129	10.8	9.0	13.6

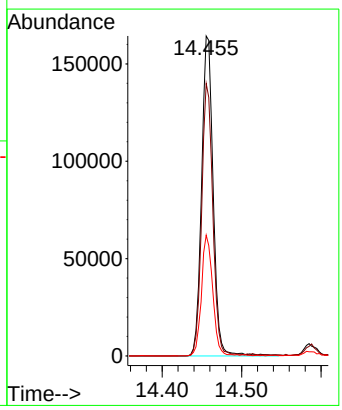


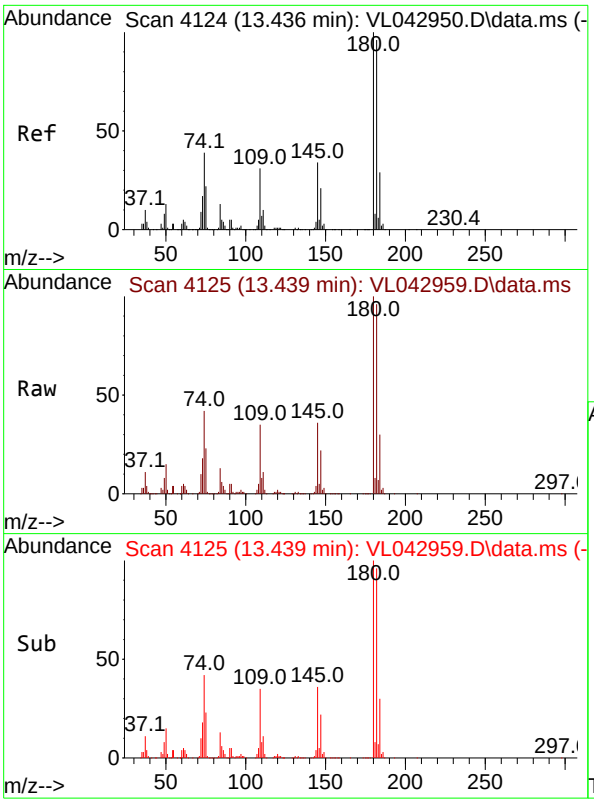


#80
Naphthalene,2-methyl-
Concen: 9.581 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Tgt Ion:142 Resp: 167256

Ion	Ratio	Lower	Upper
142	100		
141	82.9	65.1	97.7
115	37.4	28.9	43.3



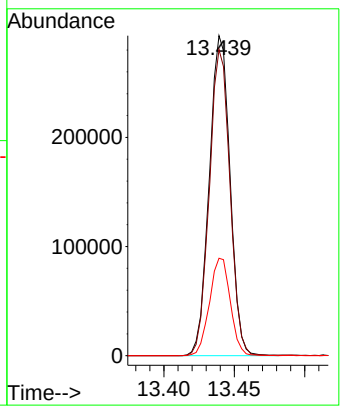


#81
1,2,4-Trichlorobenzene
Concen: 9.958 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042959.D
Acq: 22 Sep 2025 15:52

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABS01

Tgt Ion:180 Resp: 300876

Ion	Ratio	Lower	Upper
180	100		
182	95.0	75.7	113.5
184	30.6	23.9	35.9



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042970.D
Acq On : 22 Sep 2025 22:48
Operator : SY/MD
Sample : Q3130-02DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Quant Time: Sep 23 02:57:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	146991	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	437140	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	389571	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	296189	10.185	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	8516	0.431	ppbv		92
3) Chlorodifluoromethane	1.467	51	561845	22.801	ppbv	#	61
4) Chloromethane	1.535	50	3652	0.408	ppbv		97
6) Bromomethane	1.671	94	148	0.052	ppbv	#	73
7) Chloroethane	1.467	64	27415	8.727	ppbv		96
9) Propene	1.561	41	25773	2.404	ppbv		91
11) Trichlorofluoromethane	1.881	101	4422	0.232	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.140	101	952	0.062	ppbv		96
13) Ethanol	1.722	45	384814	370.048	ppbv		95
15) Acetone	1.836	43	118525	6.191	ppbv		96
16) 1,3-Butadiene	1.599	39	1408	0.156	ppbv	#	61
17) tert-Butyl alcohol	2.043	59	4197	0.200	ppbv	#	82
19) Isopropyl Alcohol	1.887	45	9512	0.826	ppbv	#	1
20) Methylene Chloride	2.062	84	14366	1.980	ppbv		97
23) Vinyl Acetate	2.454	43	9099	0.333	ppbv	#	91
25) Ethyl Acetate	2.829	43	65319	1.350	ppbv	#	92
26) Hexane	2.829	57	53388	2.421	ppbv	#	61
30) Cyclohexane	3.852	84	763	0.041	ppbv	#	1
31) cis-1,2-Dichloroethene	2.839	61	3462	0.168	ppbv	#	24
34) 2-Butanone	2.561	43	11487	0.375	ppbv	#	86
35) Carbon Tetrachloride	3.758	117	1168	0.041	ppbv		84
36) Benzene	3.661	78	7565	0.184	ppbv	#	90
37) 1,2-Dichloroethane	3.218	62	3337	0.155	ppbv	#	93
39) 1,2-Dichloropropane	3.959	63	108795	7.260	ppbv	#	23
44) 2,2,4-Trimethylpentane	4.645	57	6315	0.089	ppbv	#	44
53) Toluene	6.937	91	18244	0.375	ppbv		100
58) Ethyl Benzene	9.358	91	3940	0.062	ppbv		89
59) m/p-Xylene	9.532	91	6145	0.122	ppbv	#	100
60) o-Xylene	9.963	91	3183	0.063	ppbv		95
61) Styrene	9.879	104	1637	0.069	ppbv		90
73) 1,3,5-Trimethylbenzene	11.202	105	1741	0.034	ppbv	#	81
74) 1,2,4-Trimethylbenzene	11.536	105	5151	0.091	ppbv	#	68
79) Naphthalene	13.513	128	7088	0.142	ppbv		97
80) Naphthalene,2-methyl-	14.459	142	3693	0.239	ppbv		94

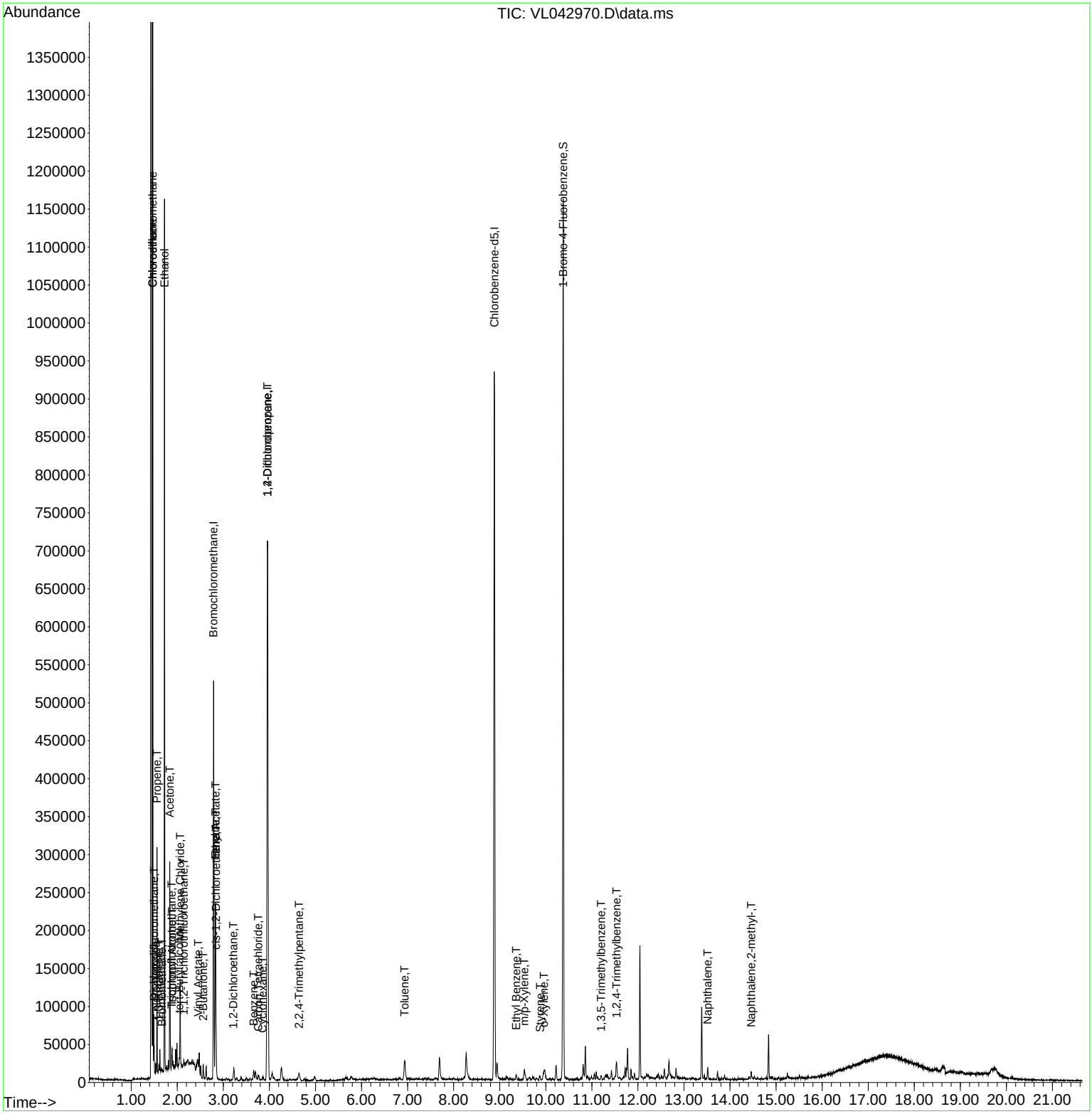
(#) = qualifier out of range (m) = manual integration (+) = signals summed

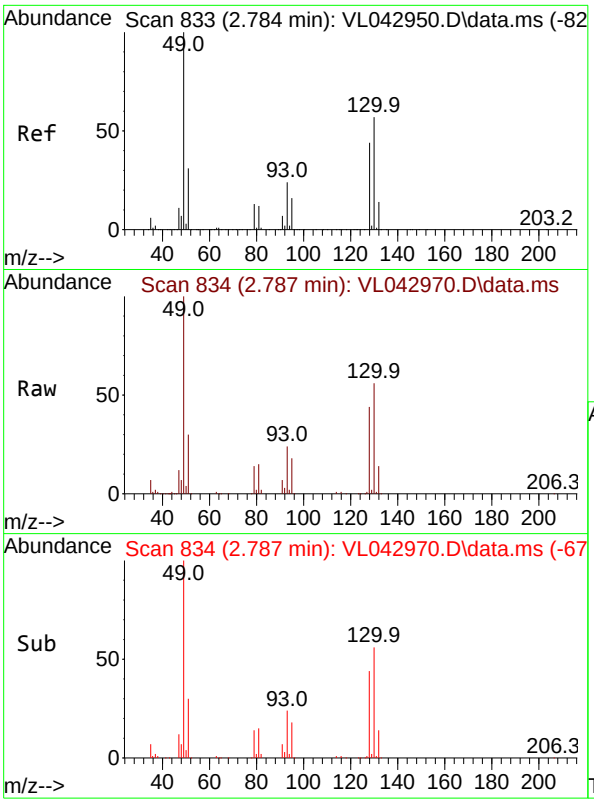
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042970.D
Acq On : 22 Sep 2025 22:48
Operator : SY/MD
Sample : Q3130-02DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Quant Time: Sep 23 02:57:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



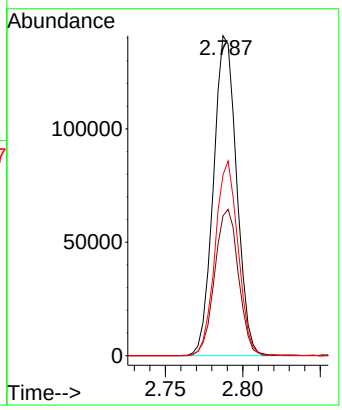


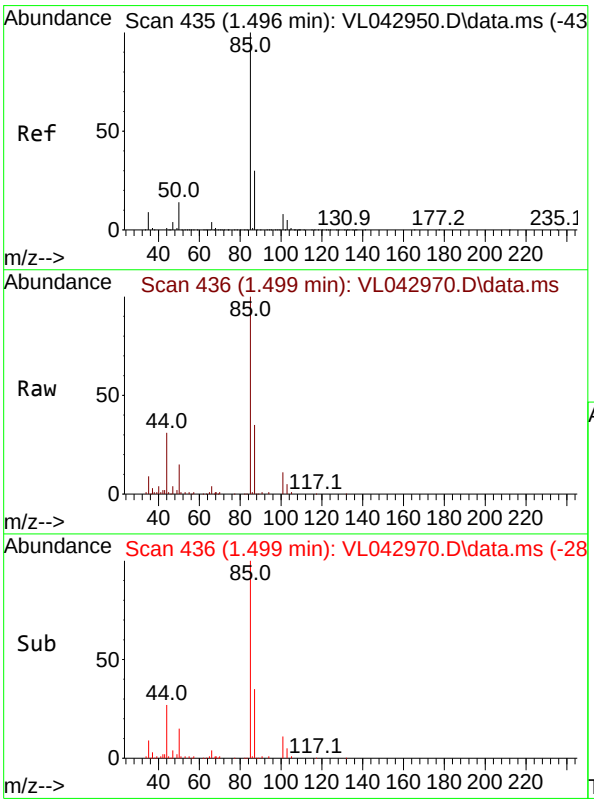
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 49 Resp: 146991

Ion	Ratio	Lower	Upper
49	100		
128	46.9	22.9	68.8
130	59.9	29.1	87.3

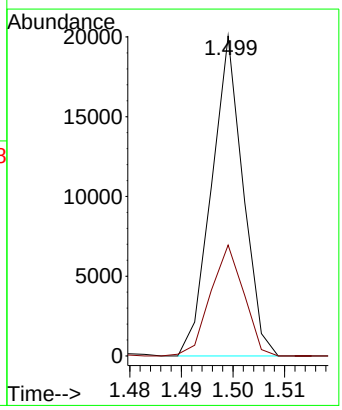


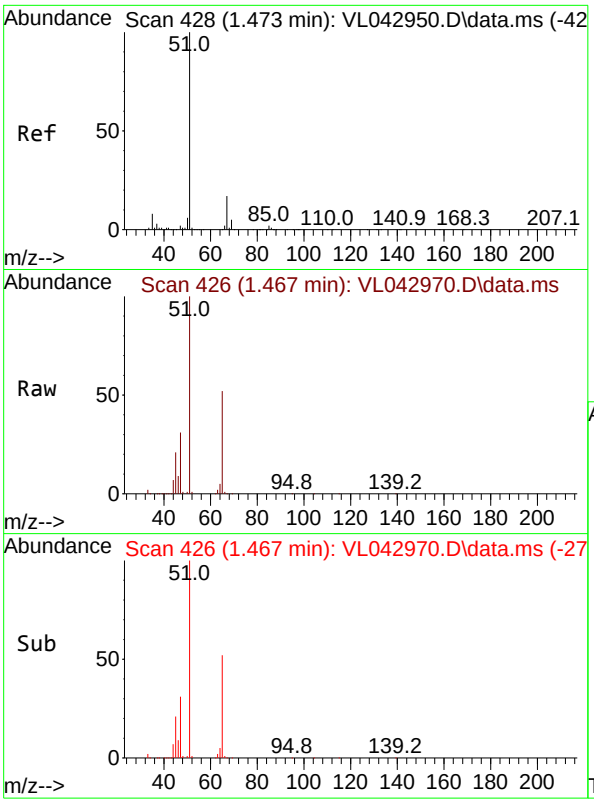


#2
Dichlorodifluoromethane
Concen: 0.431 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 85 Resp: 8516

Ion	Ratio	Lower	Upper
85	100		
87	34.7	24.3	36.5



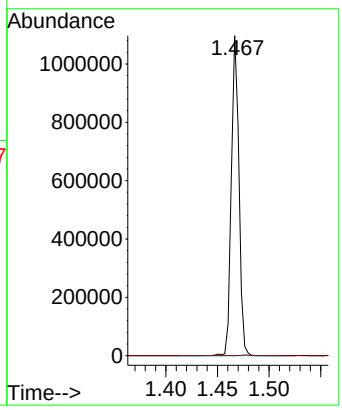


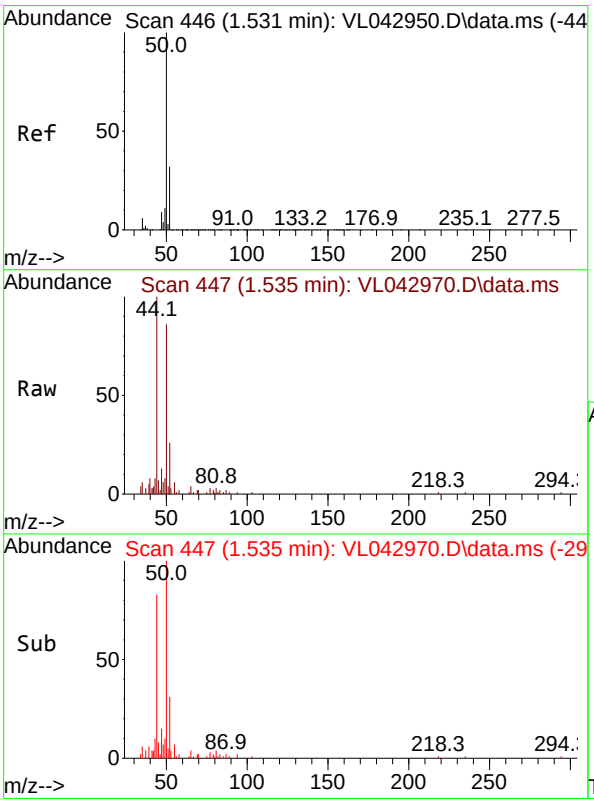
#3
Chlorodifluoromethane
Concen: 22.801 ppbv
RT: 1.467 min Scan# 4
Delta R.T. -0.006 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 51 Resp: 561845

Ion	Ratio	Lower	Upper
51	100		
67	0.2	13.8	20.8#

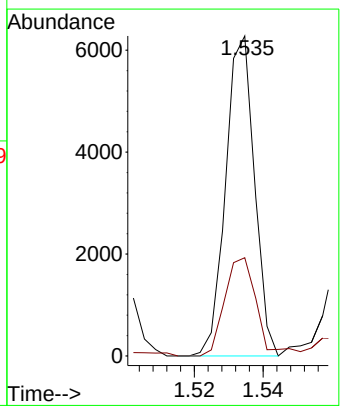


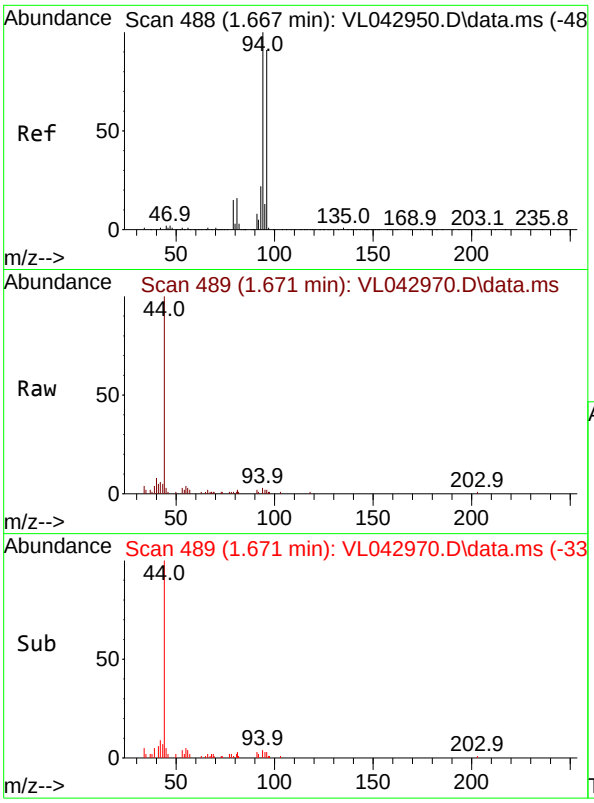


#4
Chloromethane
Concen: 0.408 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 50 Resp: 3652

Ion	Ratio	Lower	Upper
50	100		
52	34.3	25.9	38.9



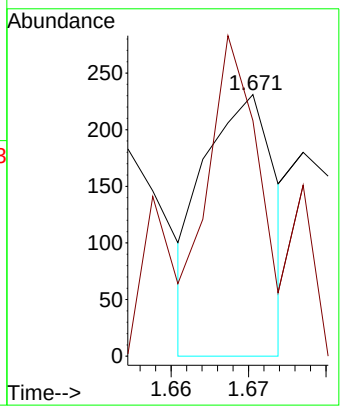


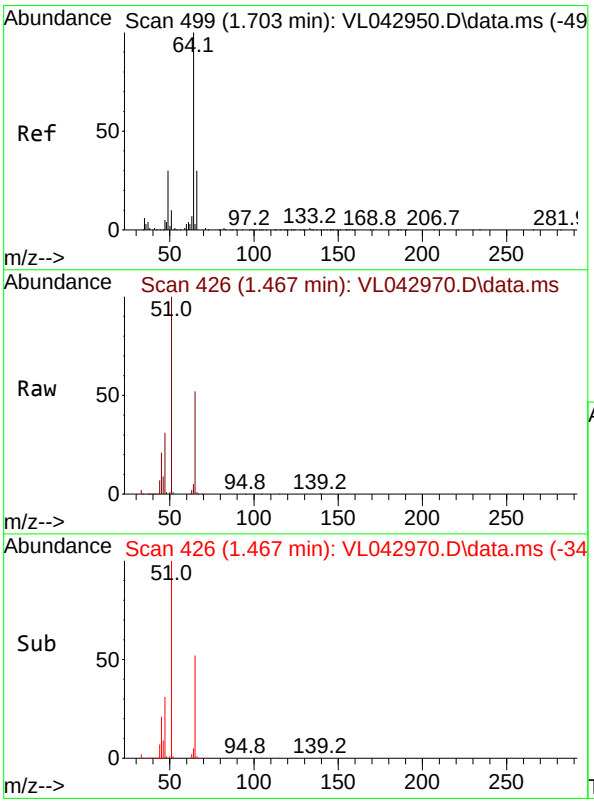
#6
Bromomethane
Concen: 0.052 ppbv
RT: 1.671 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 94 Resp: 148

Ion	Ratio	Lower	Upper
94	100		
96	116.0	72.6	108.8#

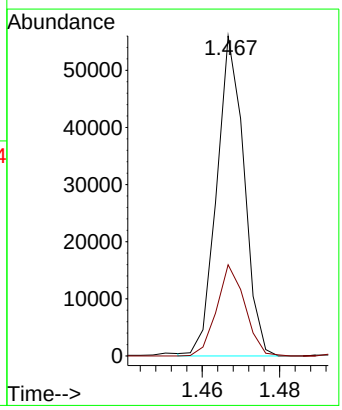


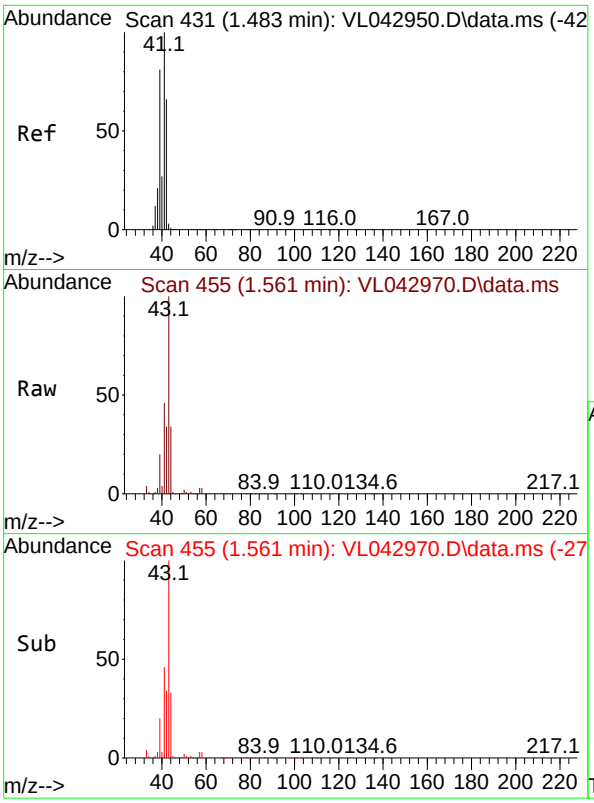


#7
Chloroethane
Concen: 8.727 ppbv
RT: 1.467 min Scan# 426
Delta R.T. -0.236 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 64 Resp: 27415

Ion	Ratio	Lower	Upper
64	100		
66	28.5	24.6	36.8



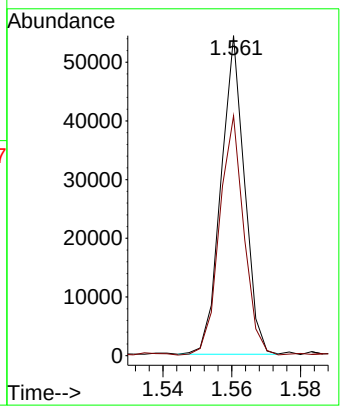


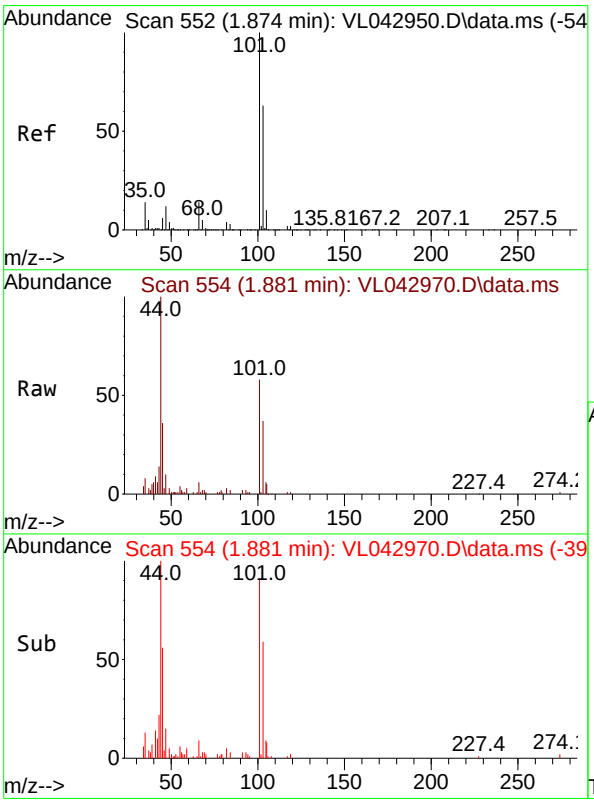
#9
Propene
Concen: 2.404 ppbv
RT: 1.561 min Scan# 4
Delta R.T. 0.078 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 41 Resp: 25773

Ion	Ratio	Lower	Upper
41	100		
42	79.2	57.4	86.2

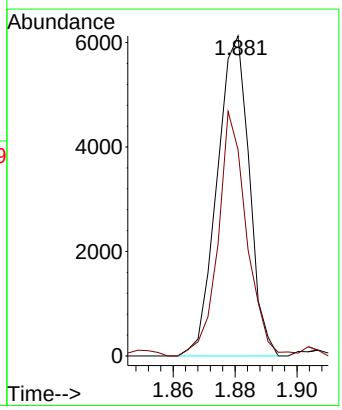


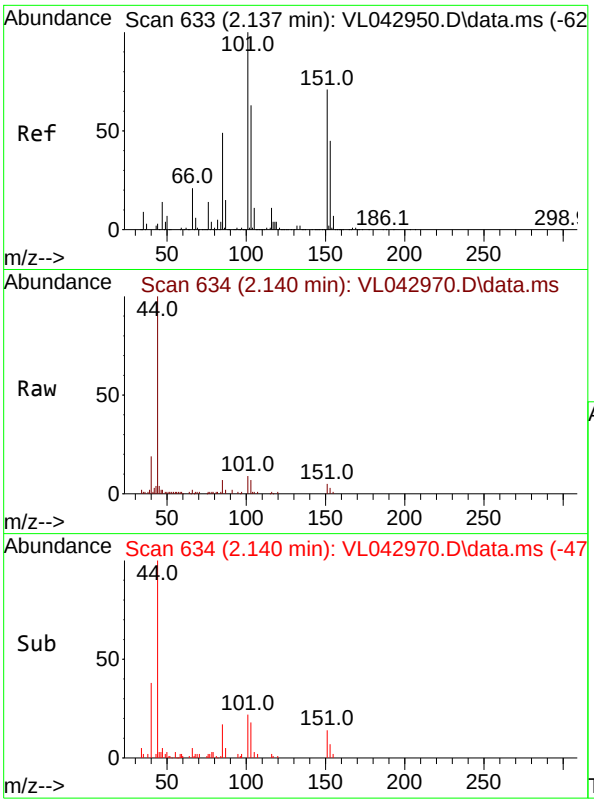


#11
Trichlorofluoromethane
Concen: 0.232 ppbv
RT: 1.881 min Scan# 554
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion:101 Resp: 4422

Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.1	75.1



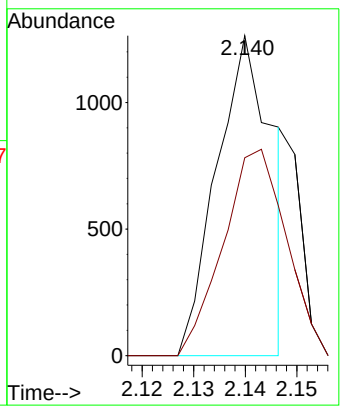


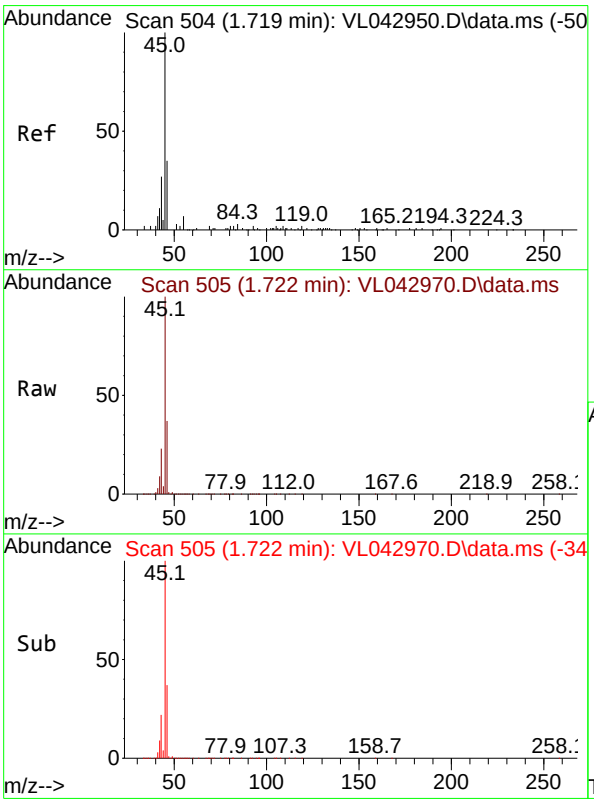
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.062 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion:101 Resp: 952

Ion	Ratio	Lower	Upper
101	100		
151	72.8	55.7	83.5

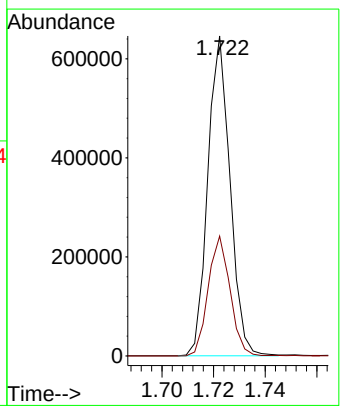


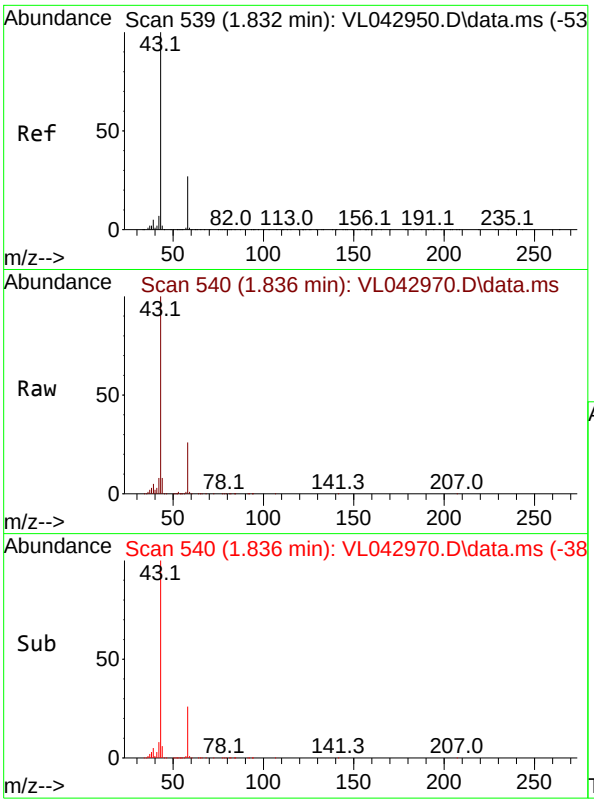


#13
Ethanol
Concen: 370.048 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 45 Resp: 384814

Ion	Ratio	Lower	Upper
45	100		
46	37.3	16.2	64.6



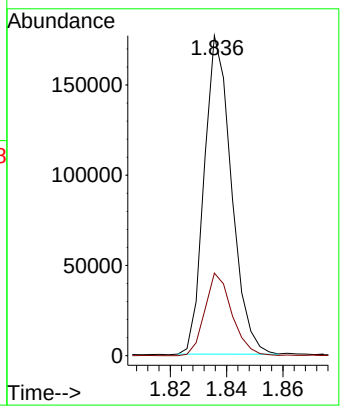


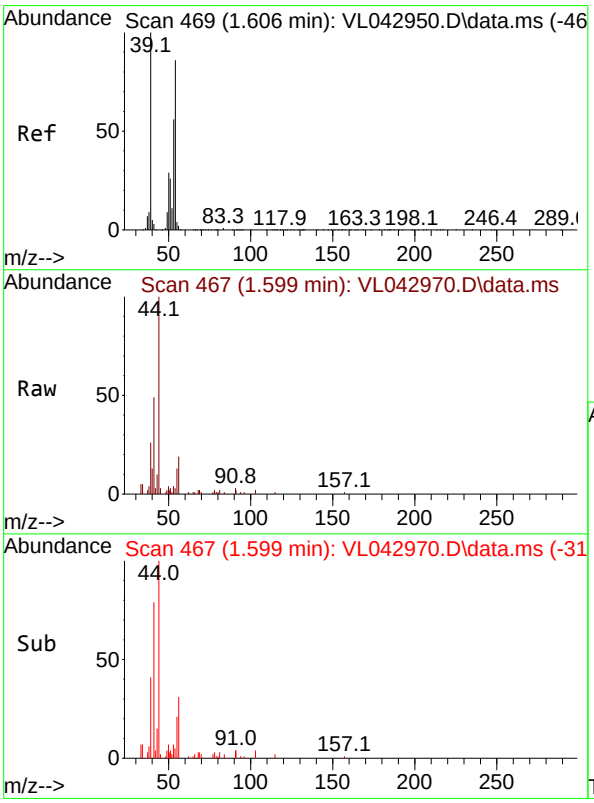
#15
Acetone
Concen: 6.191 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 43 Resp: 118525

Ion	Ratio	Lower	Upper
43	100		
58	25.8	22.3	33.5

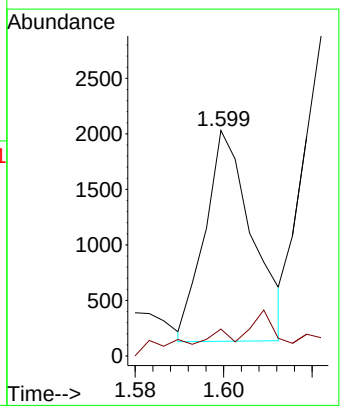


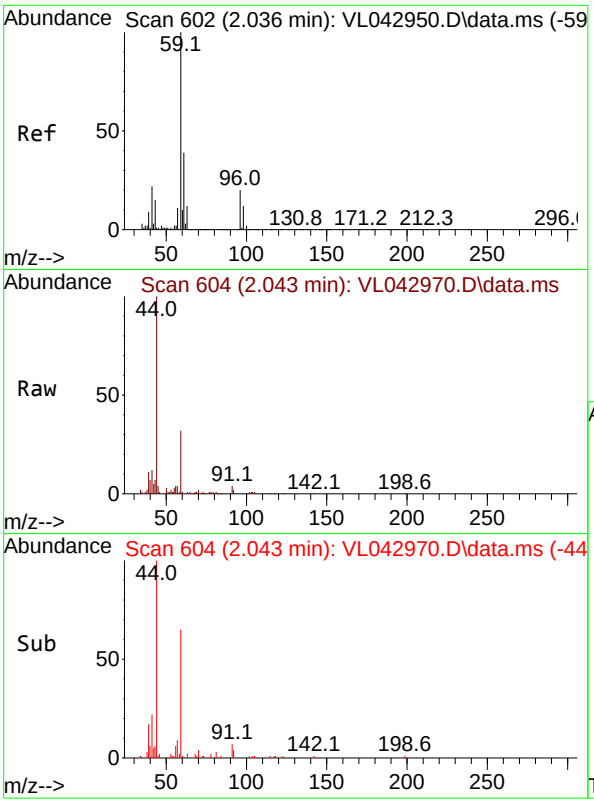


#16
1,3-Butadiene
Concen: 0.156 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.006 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 39 Resp: 1408

Ion	Ratio	Lower	Upper
39	100		
54	42.8	60.8	91.2#



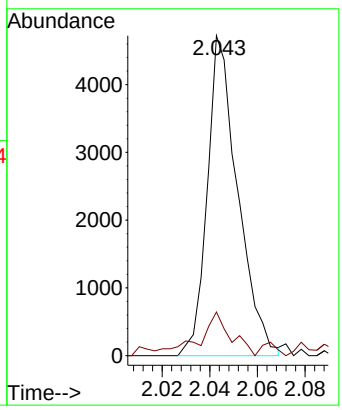


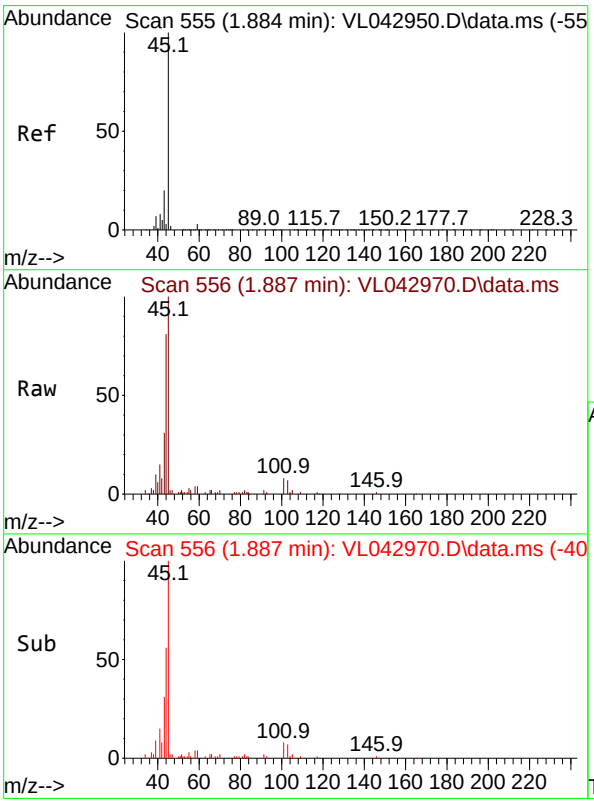
#17
tert-Butyl alcohol
Concen: 0.200 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 59 Resp: 4197

Ion	Ratio	Lower	Upper
59	100		
57	17.4	8.6	12.8#

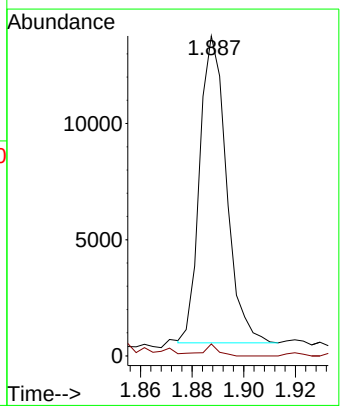


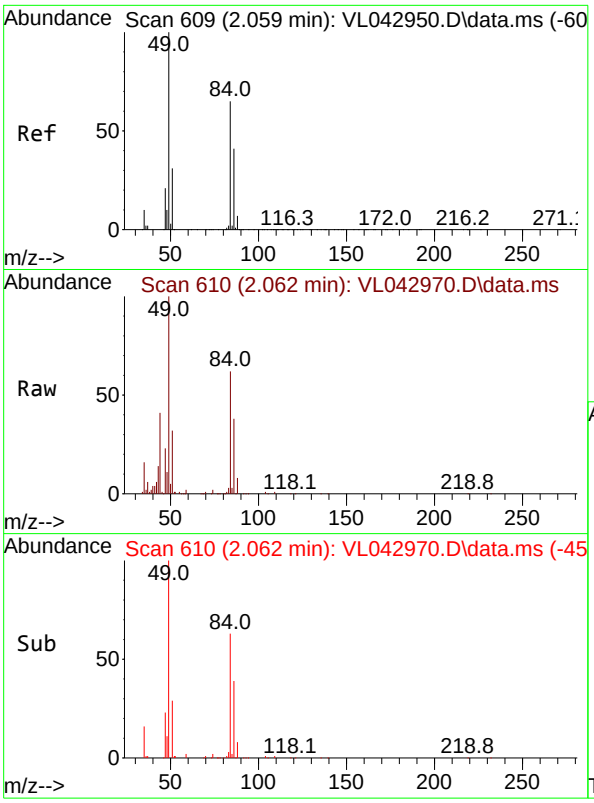


#19
Isopropyl Alcohol
Concen: 0.826 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 45 Resp: 9512

Ion	Ratio	Lower	Upper
45	100		
58	326.6	31.0	46.6#



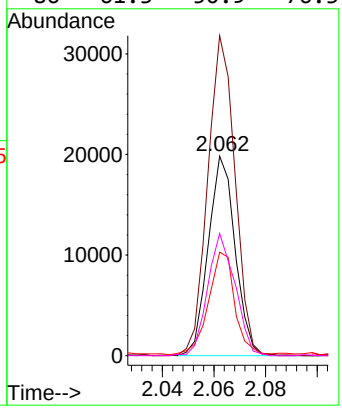


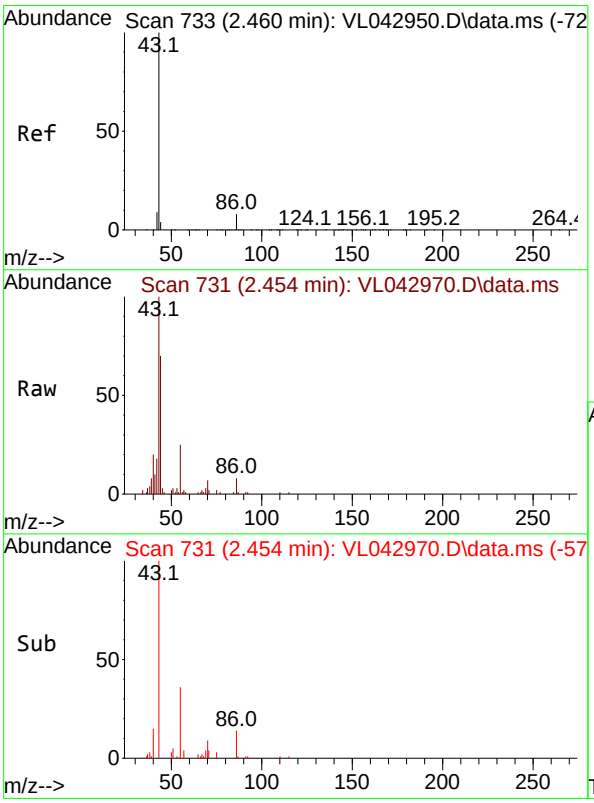
#20
Methylene Chloride
Concen: 1.980 ppbv
RT: 2.062 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 84 Resp: 14366

Ion	Ratio	Lower	Upper
84	100		
49	160.1	124.1	186.1
51	50.7	39.8	59.8
86	61.3	50.9	76.3

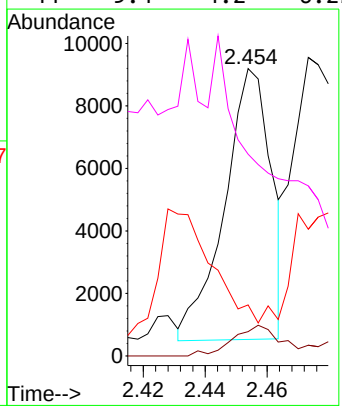


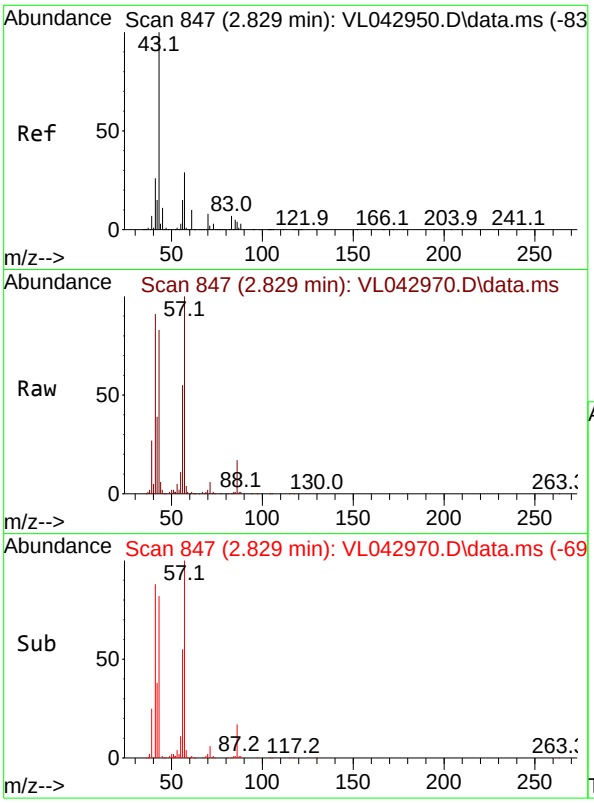


#23
Vinyl Acetate
Concen: 0.333 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.006 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 43 Resp: 9099

Ion	Ratio	Lower	Upper
43	100		
86	9.4	6.2	9.2#
42	5.6	7.4	11.0#
44	9.4	4.2	6.2#



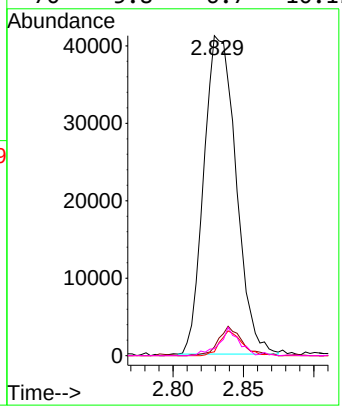


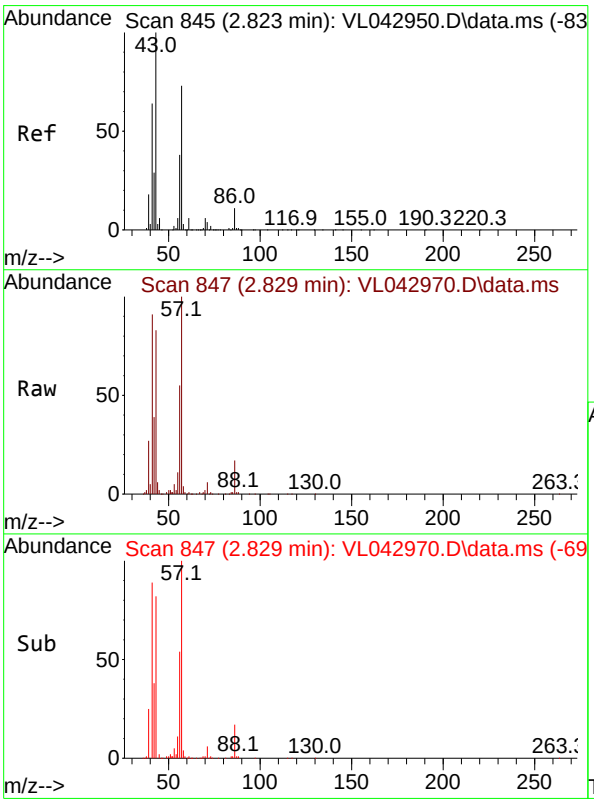
#25
Ethyl Acetate
Concen: 1.350 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 43 Resp: 65319

Ion	Ratio	Lower	Upper
43	100		
45	7.1	7.7	11.5#
61	5.4	7.1	10.7#
70	5.8	6.7	10.1#

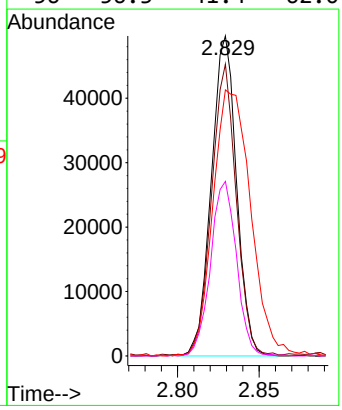


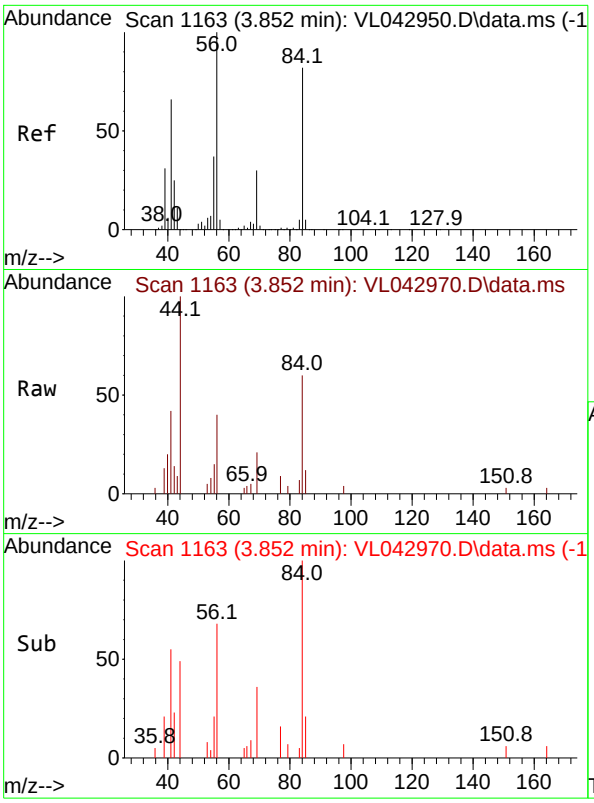


#26
Hexane
Concen: 2.421 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 57 Resp: 53388

Ion	Ratio	Lower	Upper
57	100		
41	89.4	71.7	107.5
43	124.3	180.8	271.2#
56	56.3	41.4	62.0



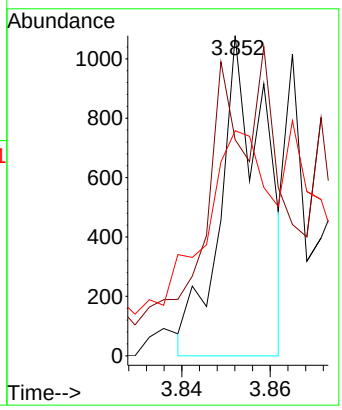


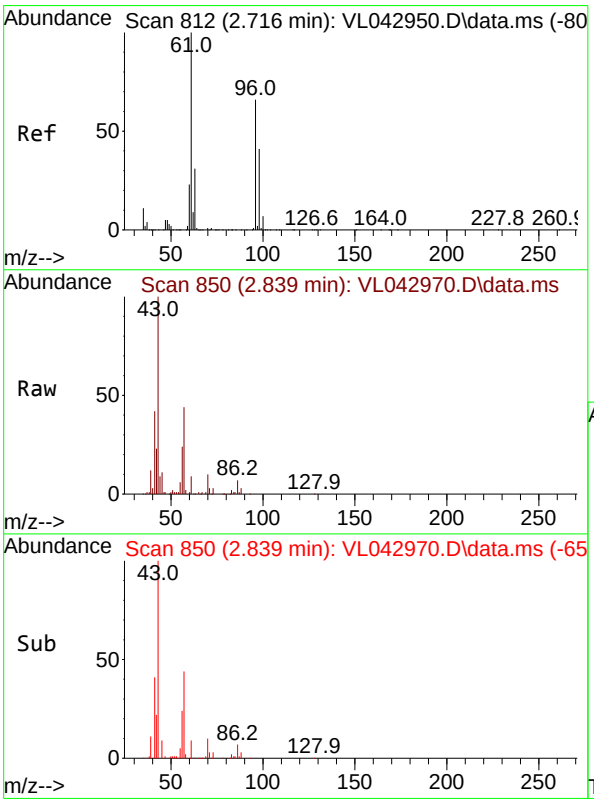
#30
Cyclohexane
Concen: 0.041 ppbv
RT: 3.852 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 84 Resp: 763

Ion	Ratio	Lower	Upper
84	100		
56	0.0	102.2	153.4#
41	0.0	65.6	98.4#

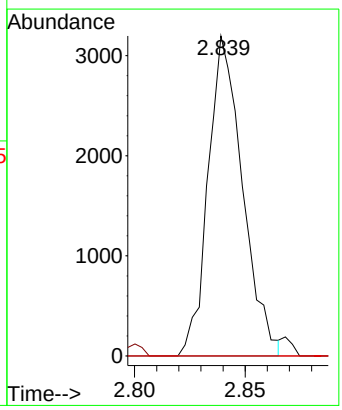


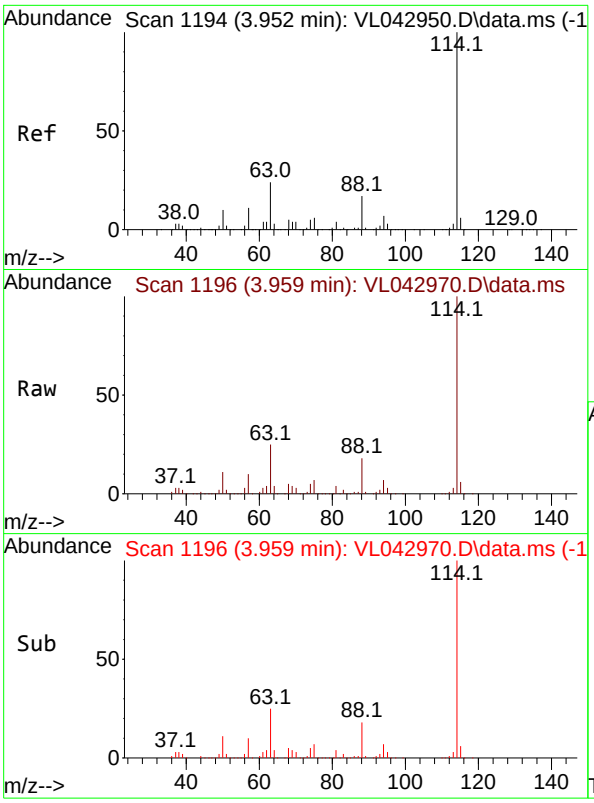


#31
cis-1,2-Dichloroethene
Concen: 0.168 ppbv
RT: 2.839 min Scan# 850
Delta R.T. 0.123 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 61 Resp: 3462

Ion	Ratio	Lower	Upper
61	100		
96	0.0	53.0	79.6#
98	0.0	32.9	49.3#



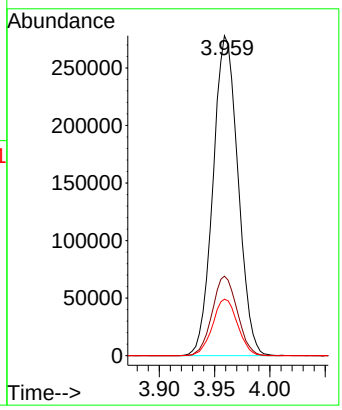


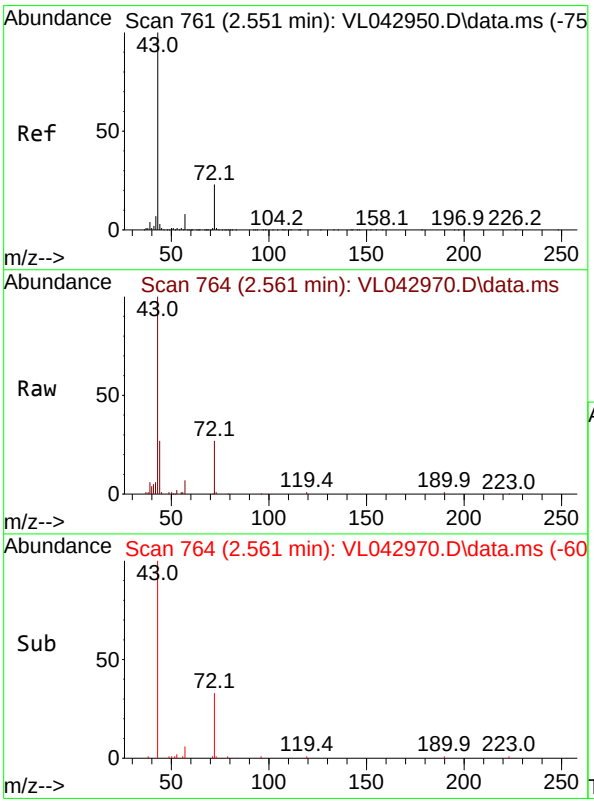
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion:114 Resp: 437140

Ion	Ratio	Lower	Upper
114	100		
63	24.9	19.4	29.2
88	17.7	14.2	21.2

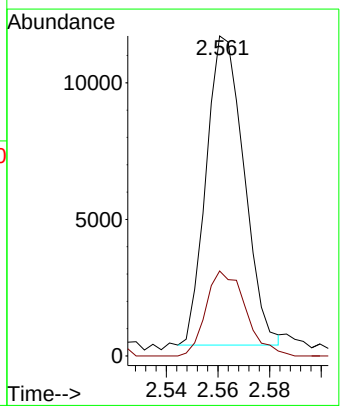


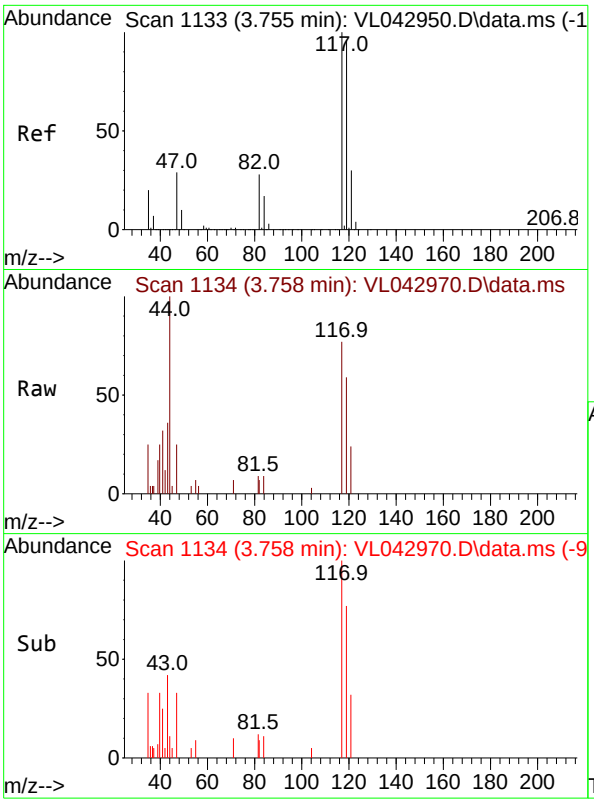


#34
2-Butanone
Concen: 0.375 ppbv
RT: 2.561 min Scan# 764
Delta R.T. 0.010 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 43 Resp: 11487

Ion	Ratio	Lower	Upper
43	100		
72	28.9	17.7	26.5#



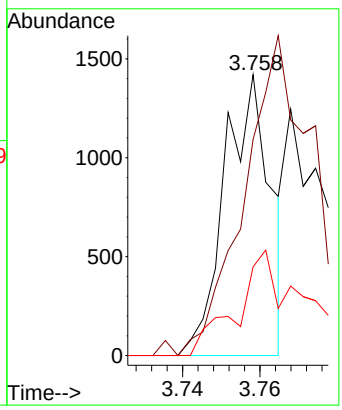


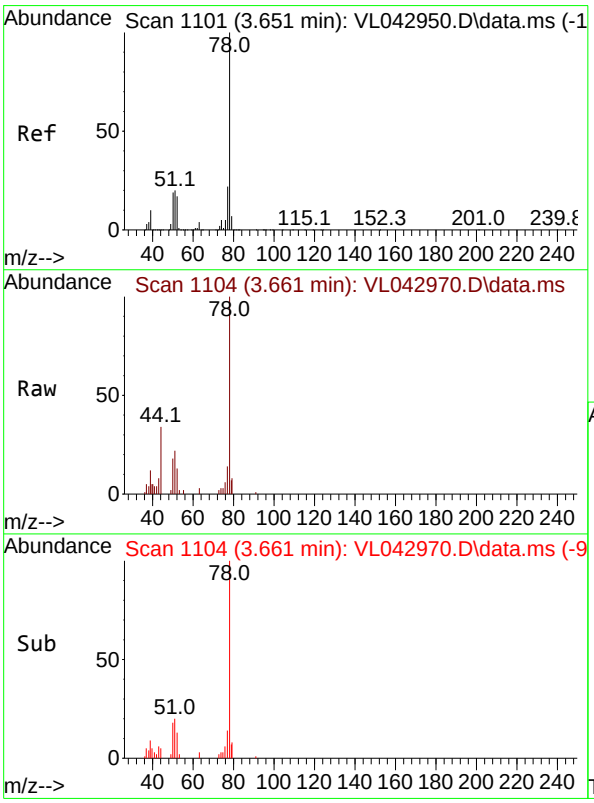
#35
Carbon Tetrachloride
Concen: 0.041 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion:117 Resp: 1168

Ion	Ratio	Lower	Upper
117	100		
119	76.9	76.9	115.3
121	31.5	23.7	35.5

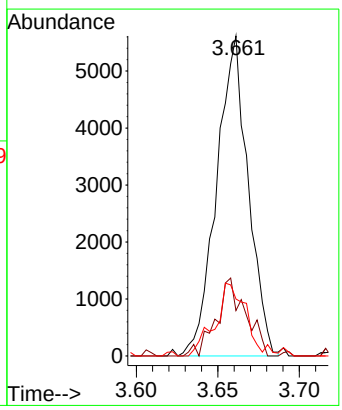


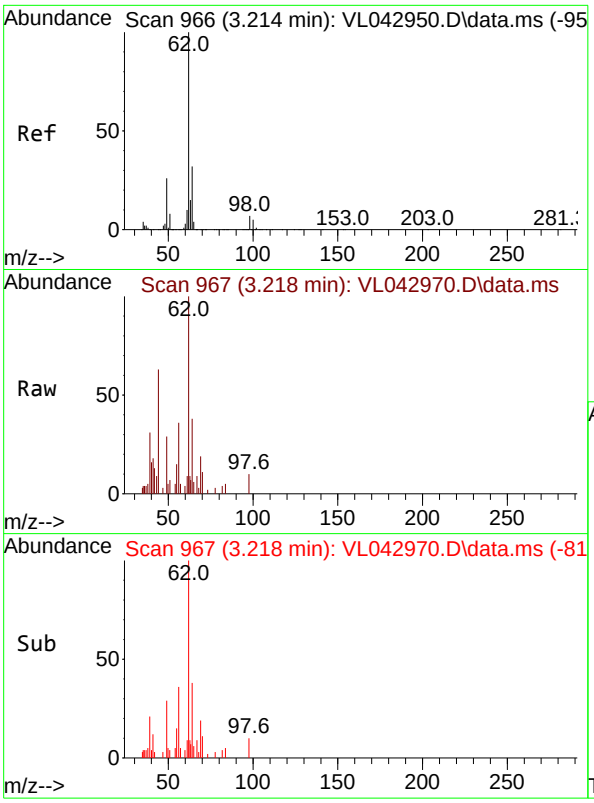


#36
Benzene
Concen: 0.184 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.010 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 78 Resp: 7565

Ion	Ratio	Lower	Upper
78	100		
77	14.2	17.8	26.6#
50	17.8	15.0	22.4



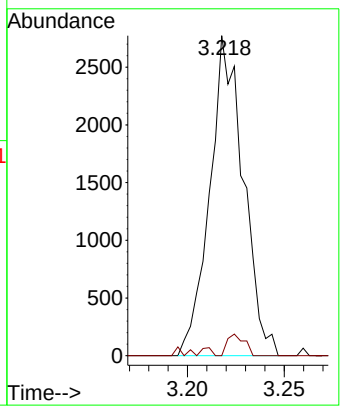


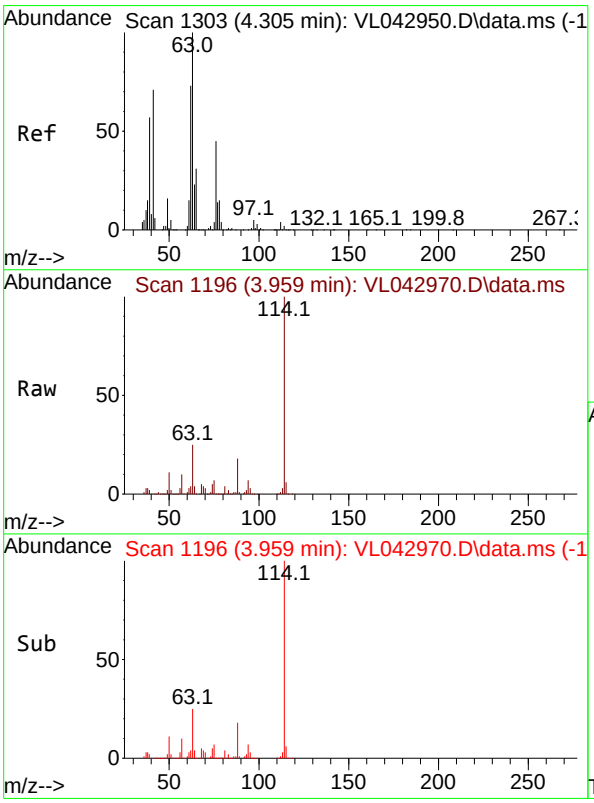
#37
1,2-Dichloroethane
Concen: 0.155 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 62 Resp: 3337

Ion	Ratio	Lower	Upper
62	100		
98	5.0	5.9	8.9#

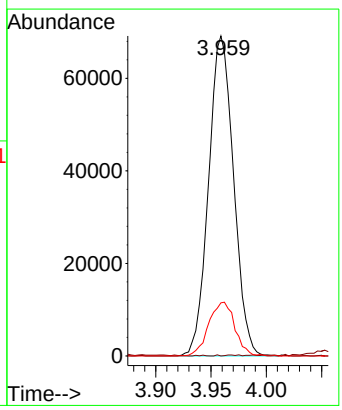


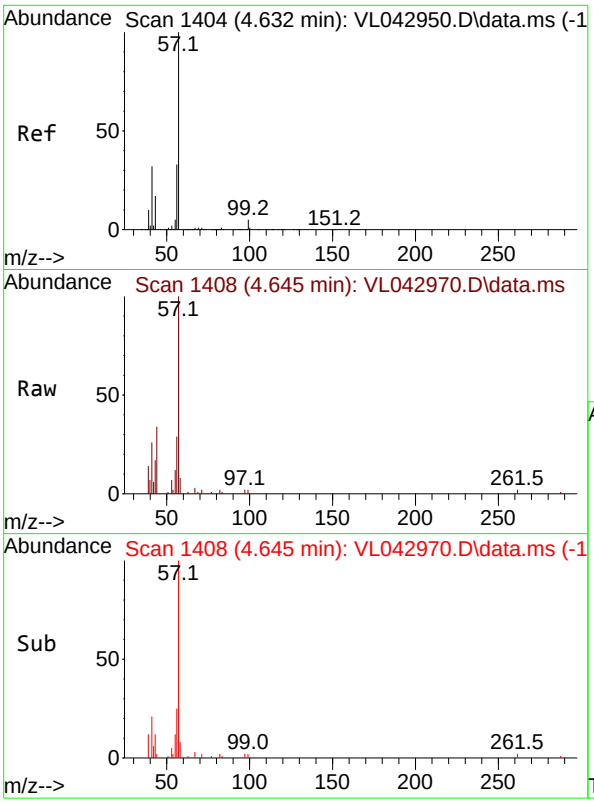


#39
1,2-Dichloropropane
Concen: 7.260 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.346 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 63 Resp: 108795

Ion	Ratio	Lower	Upper
63	100		
41	0.0	57.5	86.3#
62	16.6	58.5	87.7#



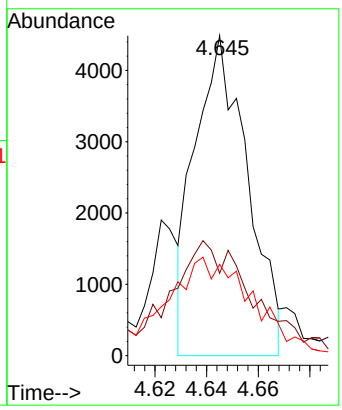


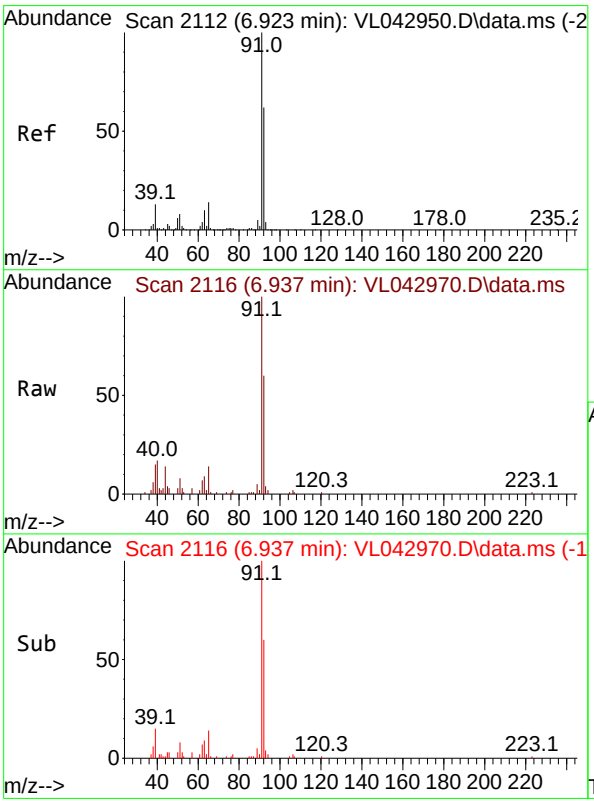
#44
2,2,4-Trimethylpentane
Concen: 0.089 ppbv
RT: 4.645 min Scan# 14
Delta R.T. 0.013 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 57 Resp: 6315

Ion	Ratio	Lower	Upper
57	100		
41	68.4	25.5	38.3#
56	58.5	25.8	38.8#

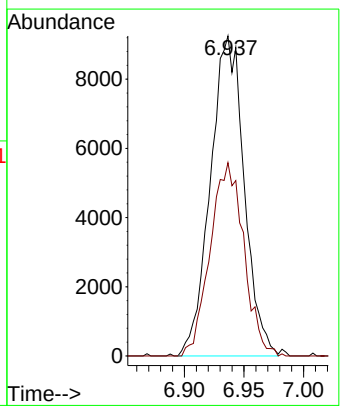


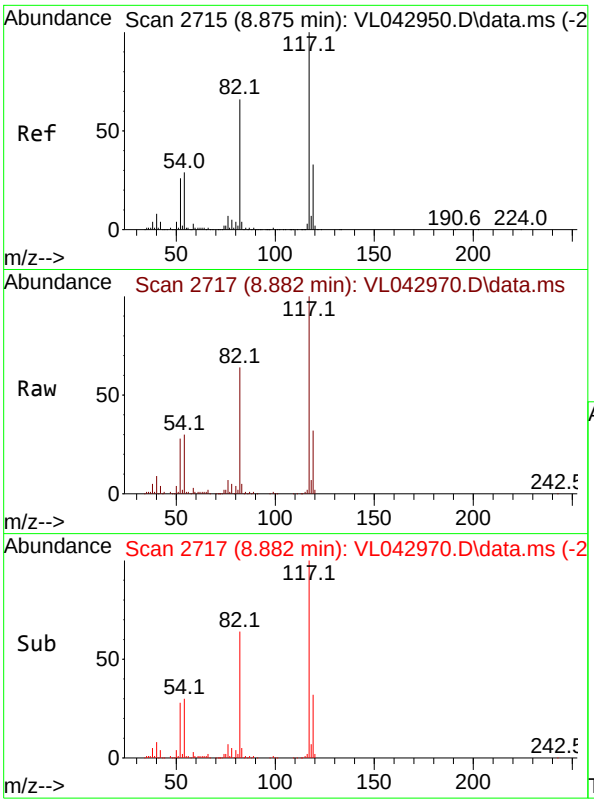


#53
Toluene
Concen: 0.375 ppbv
RT: 6.937 min Scan# 2116
Delta R.T. 0.013 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 91 Resp: 18244

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.2



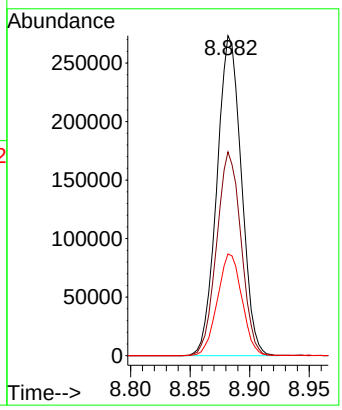


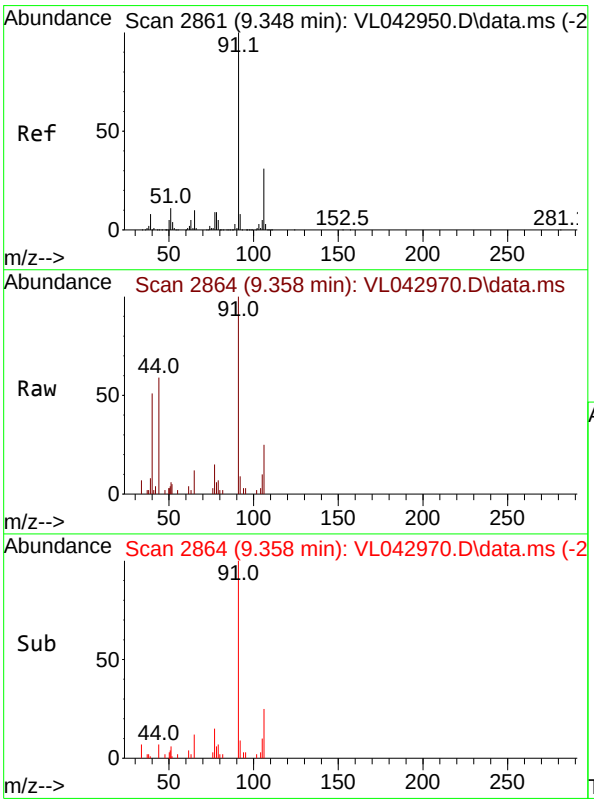
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion:117 Resp: 389571

Ion	Ratio	Lower	Upper
117	100		
82	63.8	52.8	79.2
119	32.1	26.5	39.7

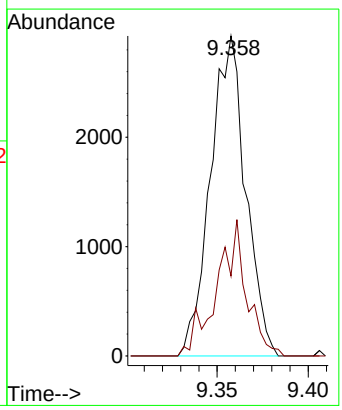


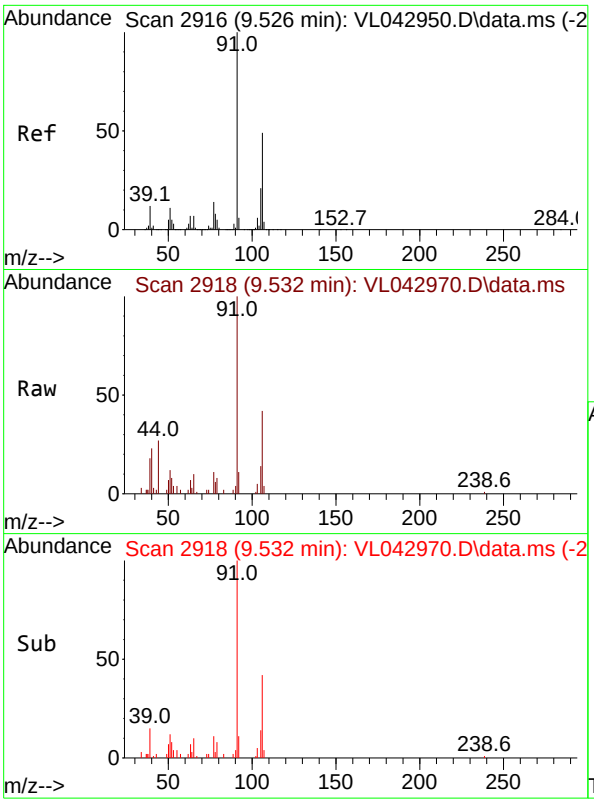


#58
Ethyl Benzene
Concen: 0.062 ppbv
RT: 9.358 min Scan# 2864
Delta R.T. 0.010 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 91 Resp: 3940

Ion	Ratio	Lower	Upper
91	100		
106	25.0	24.6	37.0



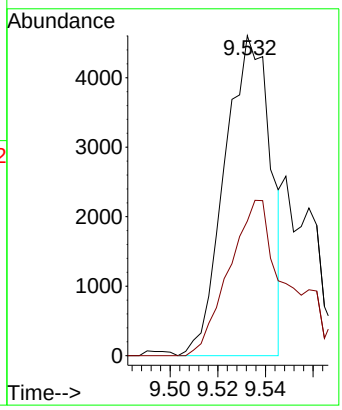


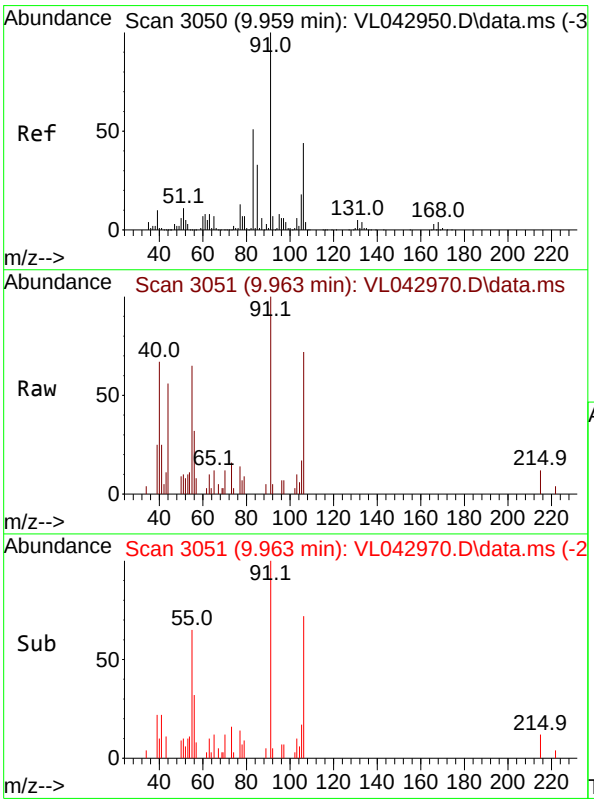
#59
m/p-Xylene
Concen: 0.122 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion: 91 Resp: 6145

Ion	Ratio	Lower	Upper
91	100		
106	63.8	0.0	0.0#

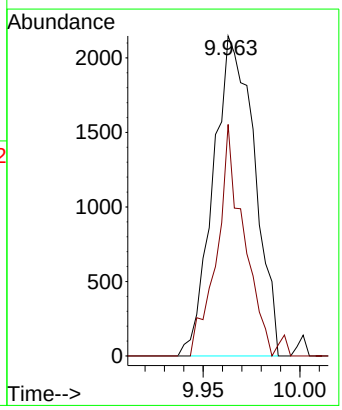


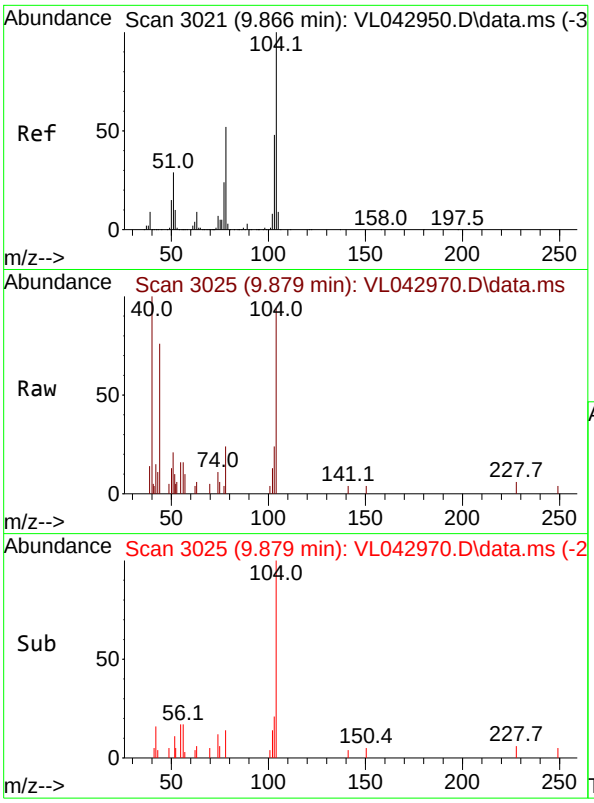


#60
o-Xylene
Concen: 0.063 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 91 Resp: 3183

Ion	Ratio	Lower	Upper
91	100		
106	48.2	22.4	67.0



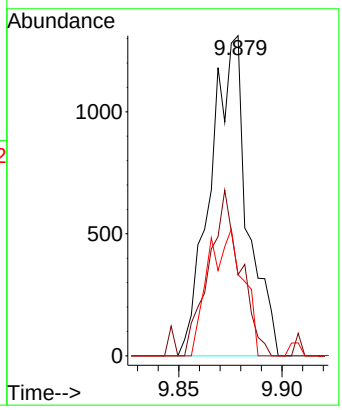


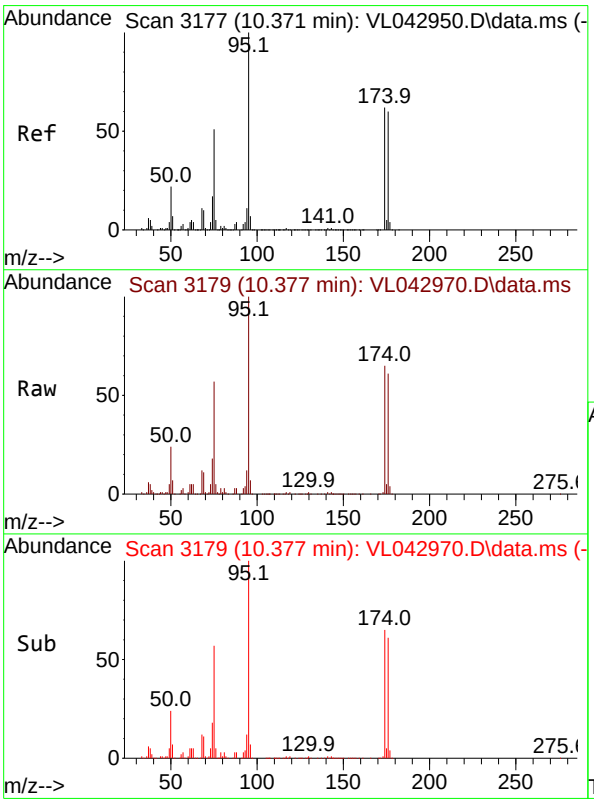
#61
Styrene
Concen: 0.069 ppbv
RT: 9.879 min Scan# 3
Delta R.T. 0.013 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion:104 Resp: 1637

Ion	Ratio	Lower	Upper
104	100		
78	45.4	39.9	59.9
103	37.3	36.9	55.3

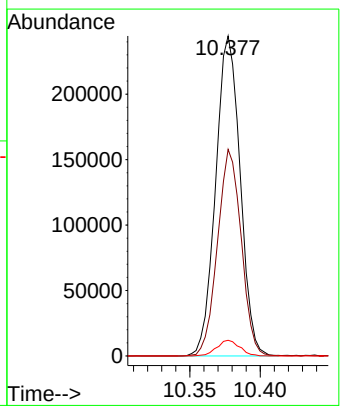


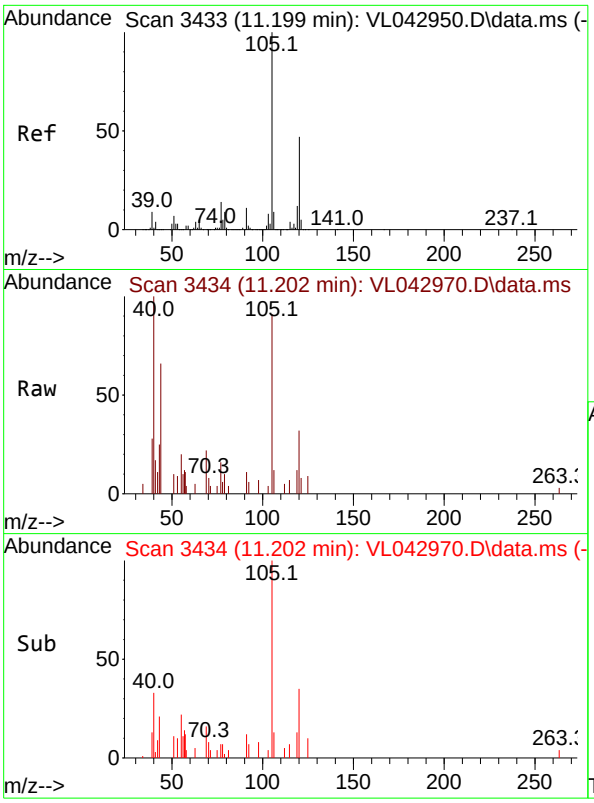


#68
1-Bromo-4-Fluorobenzene
Concen: 10.185 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion: 95 Resp: 296189

Ion	Ratio	Lower	Upper
95	100		
174	62.6	51.4	77.2
175	4.6	4.0	6.0



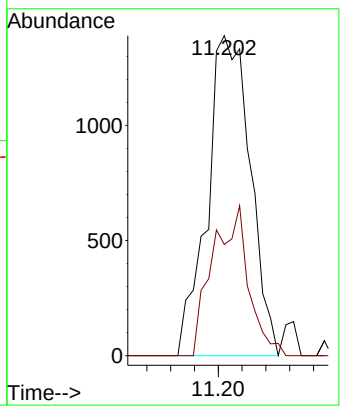


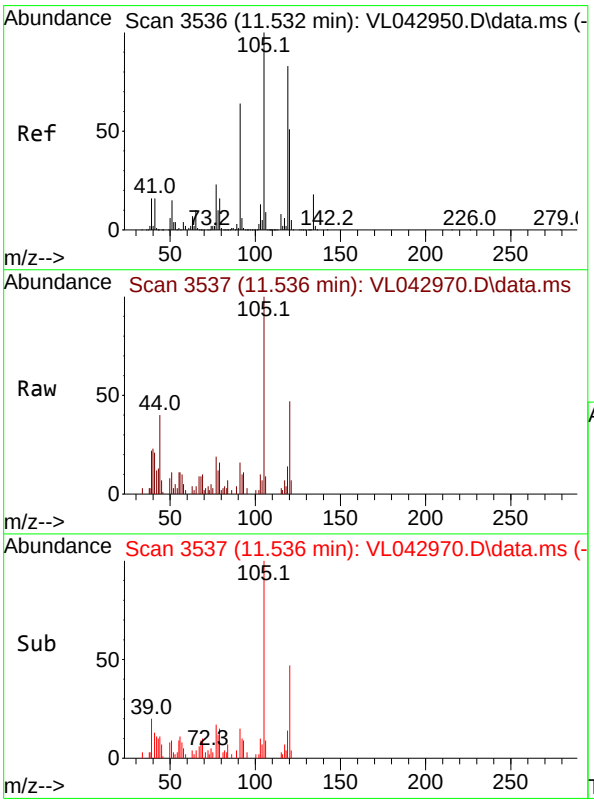
#73
1,3,5-Trimethylbenzene
Concen: 0.034 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion:105 Resp: 1741

Ion	Ratio	Lower	Upper
105	100		
120	34.7	38.0	57.0#

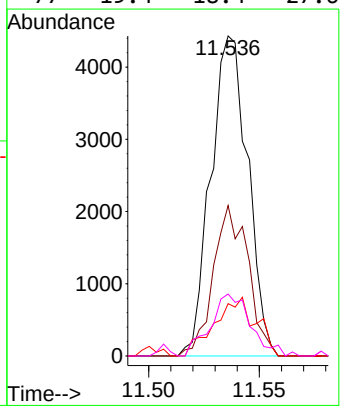


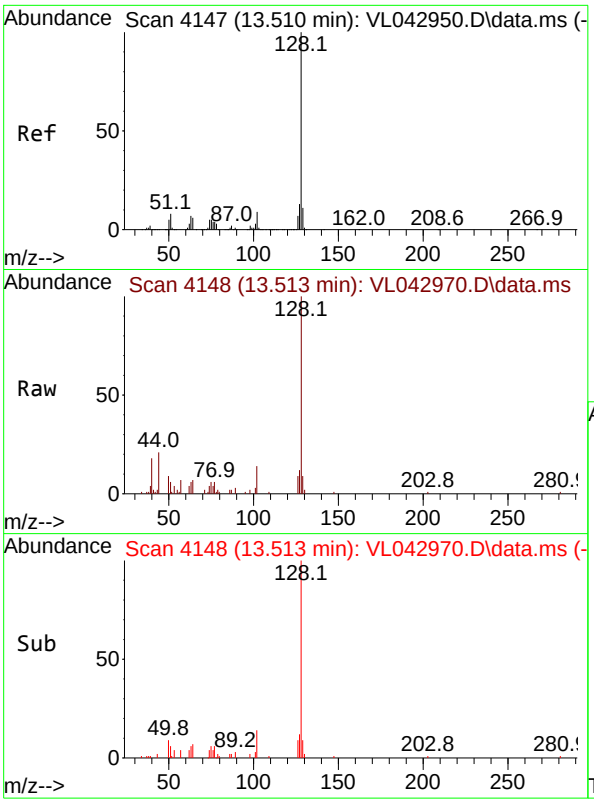


#74
1,2,4-Trimethylbenzene
Concen: 0.091 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion:105 Resp: 5151

Ion	Ratio	Lower	Upper
105	100		
120	47.0	40.9	61.3
91	16.3	51.2	76.8#
77	19.4	18.4	27.6



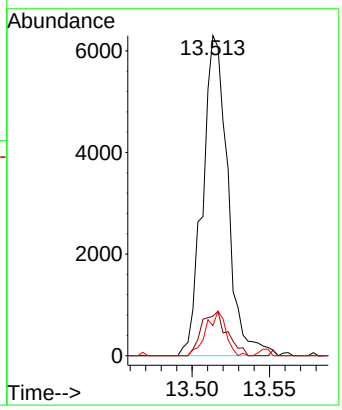


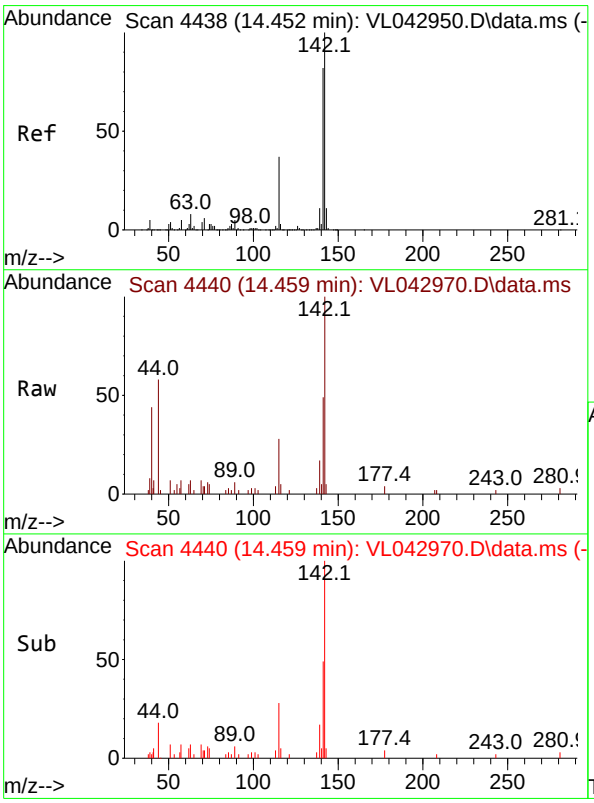
#79
Naphthalene
Concen: 0.142 ppbv
RT: 13.513 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Instrument :
MSVOA_L
ClientSampleId :
131-1A-2DUP

Tgt Ion:128 Resp: 7088

Ion	Ratio	Lower	Upper
128	100		
127	12.4	10.6	15.8
129	9.4	9.0	13.6

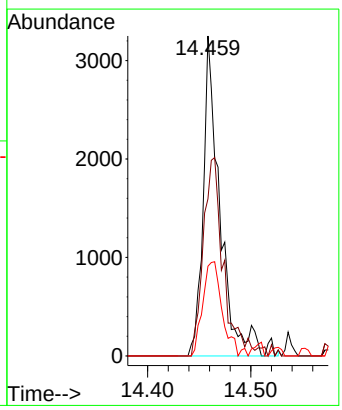




#80
Naphthalene,2-methyl-
Concen: 0.239 ppbv
RT: 14.459 min Scan# 4440
Delta R.T. 0.007 min
Lab File: VL042970.D
Acq: 22 Sep 2025 22:48

Tgt Ion:142 Resp: 3693

Ion	Ratio	Lower	Upper
142	100		
141	74.9	65.1	97.7
115	34.1	28.9	43.3



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042974.D
Acq On : 23 Sep 2025 01:11
Operator : SY/MD
Sample : Q3131-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Quant Time: Sep 24 01:12:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	144572	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	424417	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	377395	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	294613	10.458	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	66916	3.441	ppbv		97
3) Chlorodifluoromethane	1.466	51	31168	1.286	ppbv	#	71
4) Chloromethane	1.534	50	3662	0.416	ppbv		97
5) Vinyl Chloride	1.489	62	285	0.036	ppbv	#	1
8) Dichlorotetrafluoroethane	1.499	85	66916	4.031	ppbv	#	20
9) Propene	1.560	41	21863	2.074	ppbv		86
10) Heptane	4.975	43	3991	0.142	ppbv	#	29
11) Trichlorofluoromethane	1.881	101	7357	0.392	ppbv		93
12) 1,1,2-Trichlorotrifluo...	2.143	101	1027	0.068	ppbv		100
13) Ethanol	1.722	45	127657	124.813	ppbv		96
15) Acetone	1.835	43	496921	26.390	ppbv	#	82
16) 1,3-Butadiene	1.602	39	1495	0.168	ppbv	#	11
17) tert-Butyl alcohol	2.046	59	5337	0.258	ppbv	#	72
19) Isopropyl Alcohol	1.887	45	23221	2.051	ppbv	#	1
20) Methylene Chloride	2.065	84	14219	1.997	ppbv		95
21) Allyl Chloride	2.081	41	7454	0.568	ppbv	#	62
23) Vinyl Acetate	2.476	43	128074	4.761	ppbv	#	48
25) Ethyl Acetate	2.829	43	109430	2.299	ppbv	#	84
26) Hexane	2.829	57	140710	6.486	ppbv	#	43
27) Carbon Disulfide	2.156	76	1103	0.057	ppbv	#	1
29) Chloroform	2.855	83	3737	0.132	ppbv		94
30) Cyclohexane	3.858	84	4917	0.271	ppbv	#	1
34) 2-Butanone	2.560	43	44238	1.487	ppbv		99
35) Carbon Tetrachloride	3.771	117	1911	0.069	ppbv		96
36) Benzene	3.661	78	26130	0.656	ppbv	#	95
37) 1,2-Dichloroethane	3.224	62	4005	0.191	ppbv		99
39) 1,2-Dichloropropane	3.962	63	105522	7.252	ppbv	#	24
41) Tetrahydrofuran	3.065	42	6951	0.407	ppbv	#	80
44) 2,2,4-Trimethylpentane	4.648	57	77020	1.119	ppbv	#	88
51) 2-Hexanone	7.451	43	5040	0.159	ppbv	#	79
53) Toluene	6.940	91	87271	1.850	ppbv		97
58) Ethyl Benzene	9.357	91	24797	0.400	ppbv		91
59) m/p-Xylene	9.535	91	75106	1.537	ppbv	#	100
60) o-Xylene	9.969	91	26261	0.538	ppbv		96
61) Styrene	9.875	104	5433	0.235	ppbv		99
65) tert-Butylbenzene	11.536	119	2027	0.031	ppbv	#	25
69) p-Isopropyltoluene	11.924	119	5064	0.066	ppbv		95
72) 4-Ethyltoluene	11.131	105	4926	0.081	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.209	105	5102	0.103	ppbv		90
74) 1,2,4-Trimethylbenzene	11.536	105	15880	0.290	ppbv	#	62
79) Naphthalene	13.513	128	5520	0.114	ppbv	#	95
80) Naphthalene,2-methyl-	14.462	142	4230	0.283	ppbv		94

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042974.D
Acq On : 23 Sep 2025 01:11
Operator : SY/MD
Sample : Q3131-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Quant Time: Sep 24 01:12:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

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

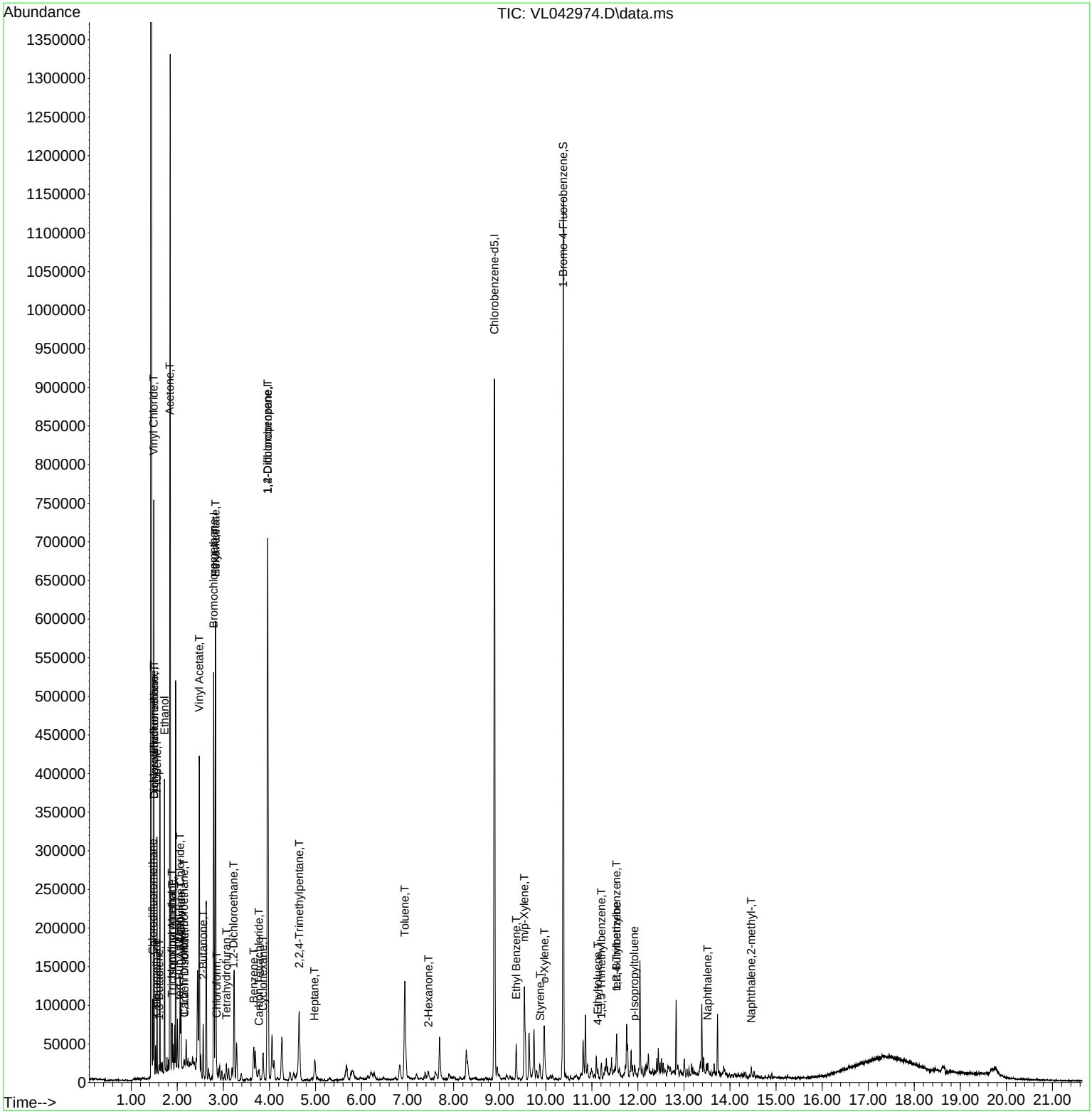
(#) = qualifier out of range (m) = manual integration (+) = signals summed

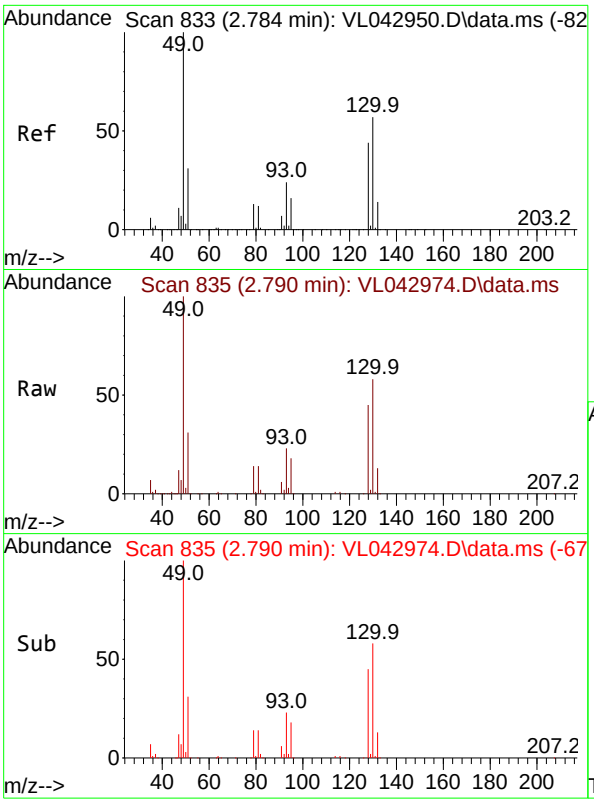
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042974.D
Acq On : 23 Sep 2025 01:11
Operator : SY/MD
Sample : Q3131-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Quant Time: Sep 24 01:12:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



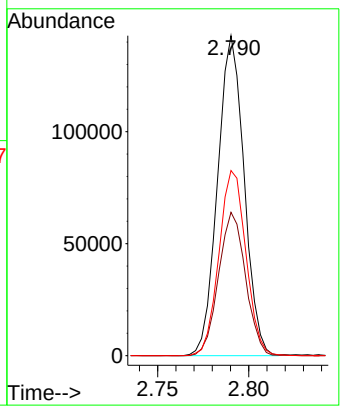


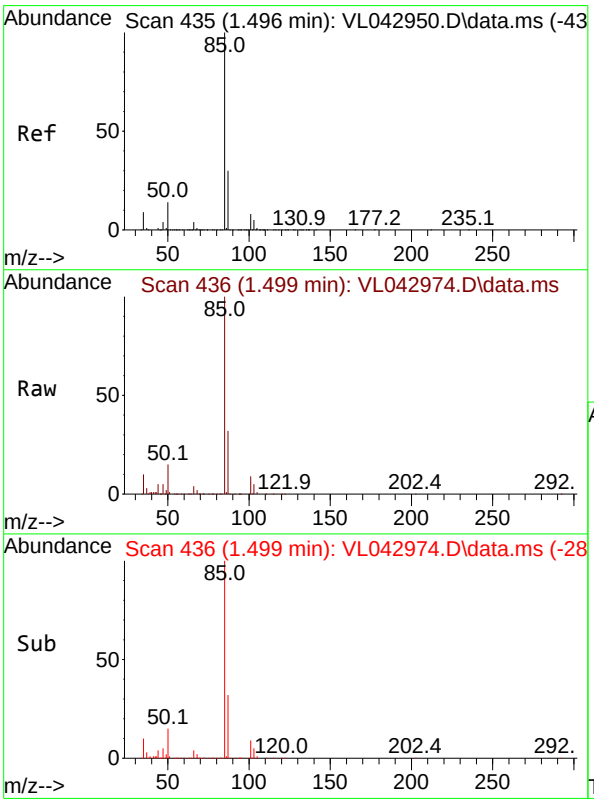
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 49 Resp: 144572

Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.9	68.8
130	58.9	29.1	87.3

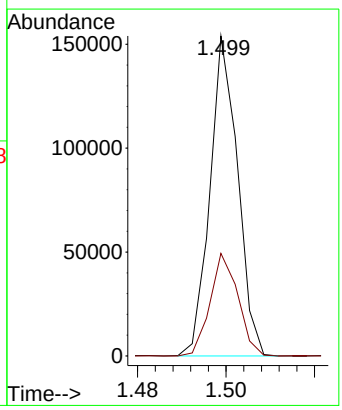


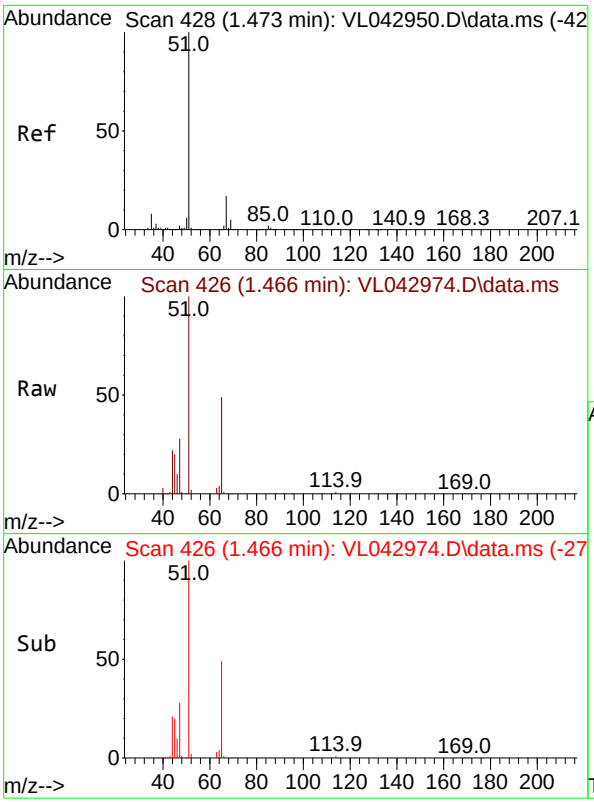


#2
Dichlorodifluoromethane
Concen: 3.441 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 85 Resp: 66916

Ion	Ratio	Lower	Upper
85	100		
87	32.1	24.3	36.5



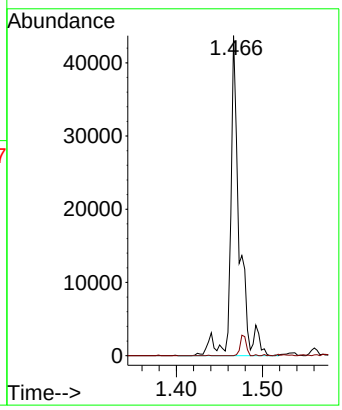


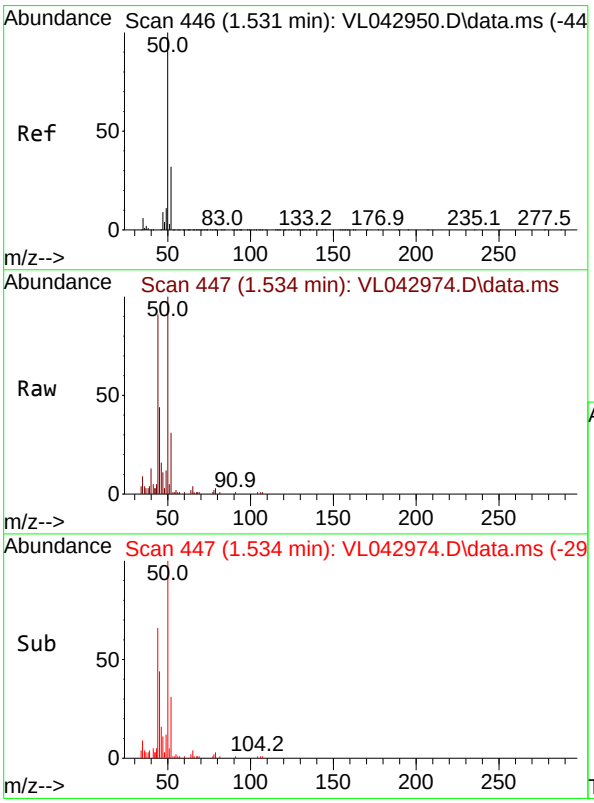
#3
Chlorodifluoromethane
Concen: 1.286 ppbv
RT: 1.466 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 51 Resp: 31168

Ion	Ratio	Lower	Upper
51	100		
67	4.5	13.8	20.8#

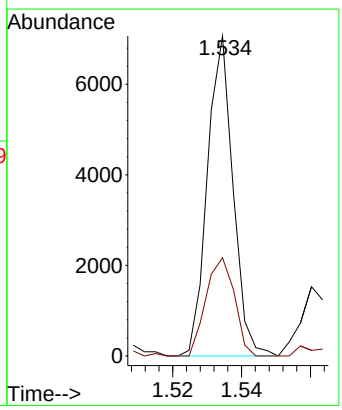


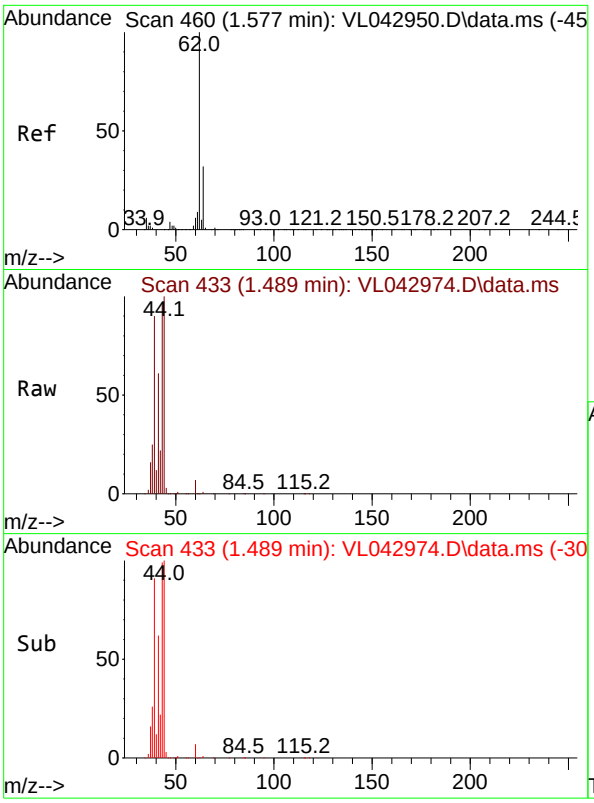


#4
Chloromethane
Concen: 0.416 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 50 Resp: 3662

Ion	Ratio	Lower	Upper
50	100		
52	30.7	25.9	38.9



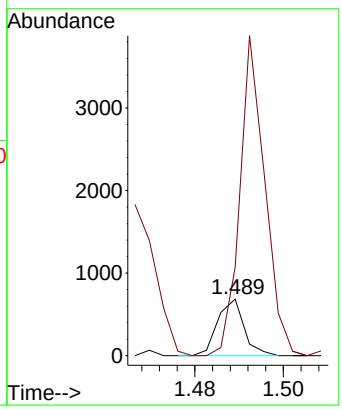


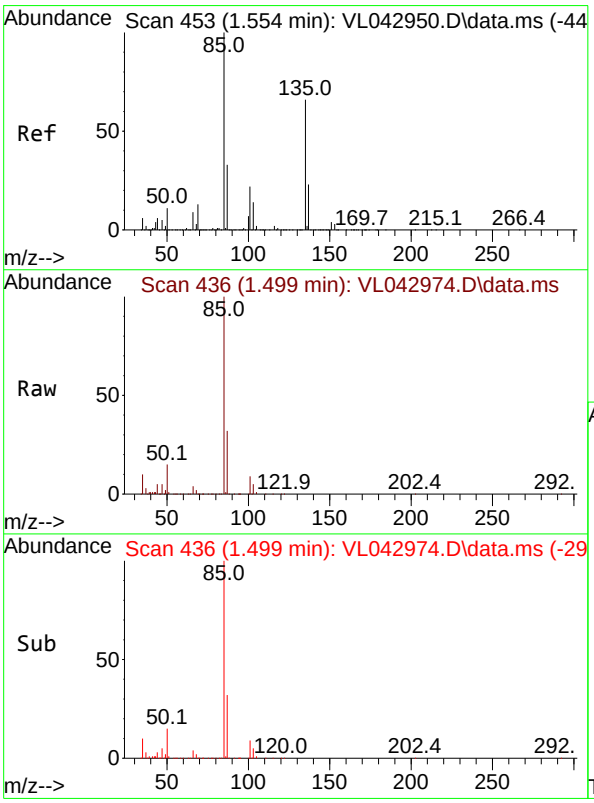
#5
Vinyl Chloride
Concen: 0.036 ppbv
RT: 1.489 min Scan# 4
Delta R.T. -0.087 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 62 Resp: 285

Ion	Ratio	Lower	Upper
62	100		
64	148.1	25.4	38.2#

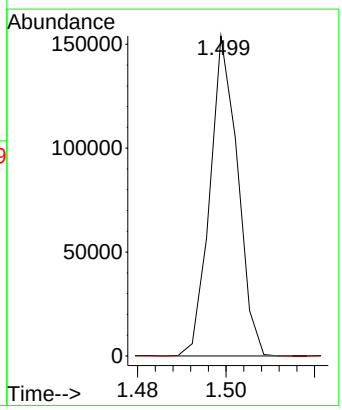


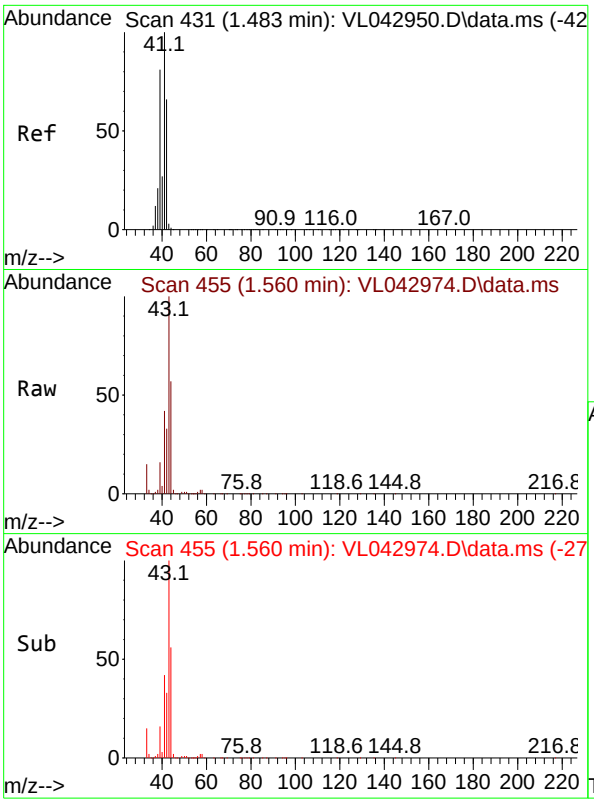


#8
Dichlorotetrafluoroethane
Concen: 4.031 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.055 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 85 Resp: 66916

Ion	Ratio	Lower	Upper
85	100		
135	0.3	49.7	74.5#



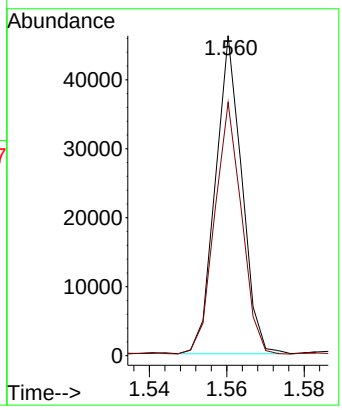


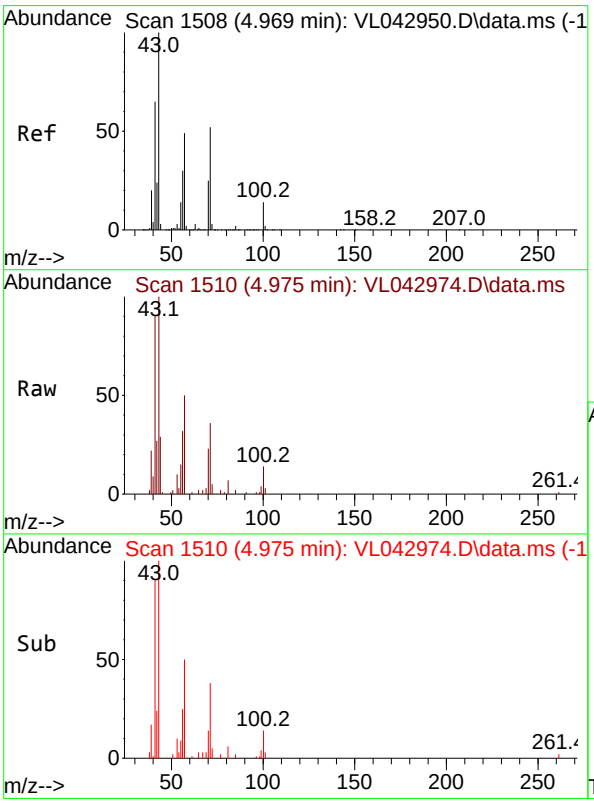
#9
Propene
Concen: 2.074 ppbv
RT: 1.560 min Scan# 4
Delta R.T. 0.078 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 41 Resp: 21863

Ion	Ratio	Lower	Upper
41	100		
42	83.2	57.4	86.2

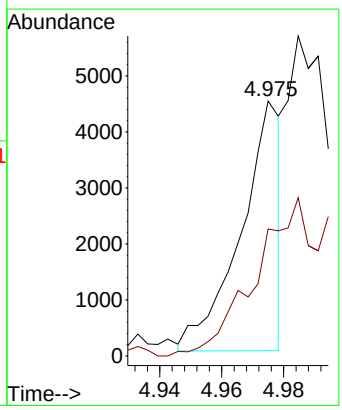


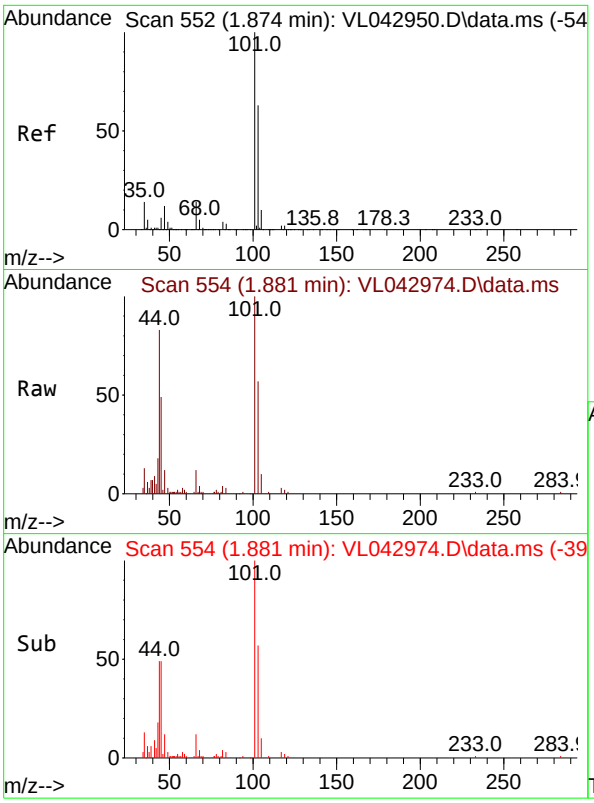


#10
Heptane
Concen: 0.142 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 3991

Ion	Ratio	Lower	Upper
43	100		
57	0.0	38.6	57.8#



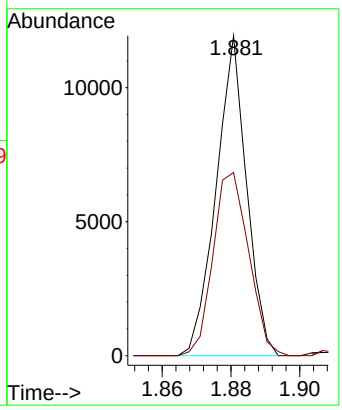


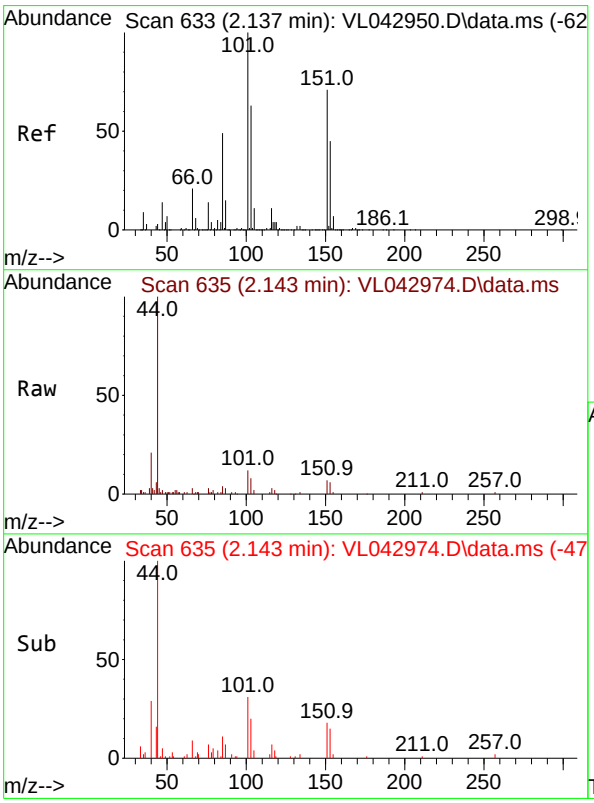
#11
Trichlorofluoromethane
Concen: 0.392 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion:101 Resp: 7357

Ion	Ratio	Lower	Upper
101	100		
103	57.3	50.1	75.1

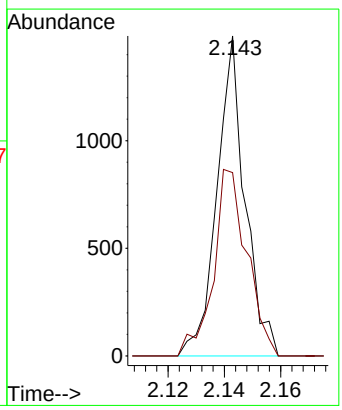


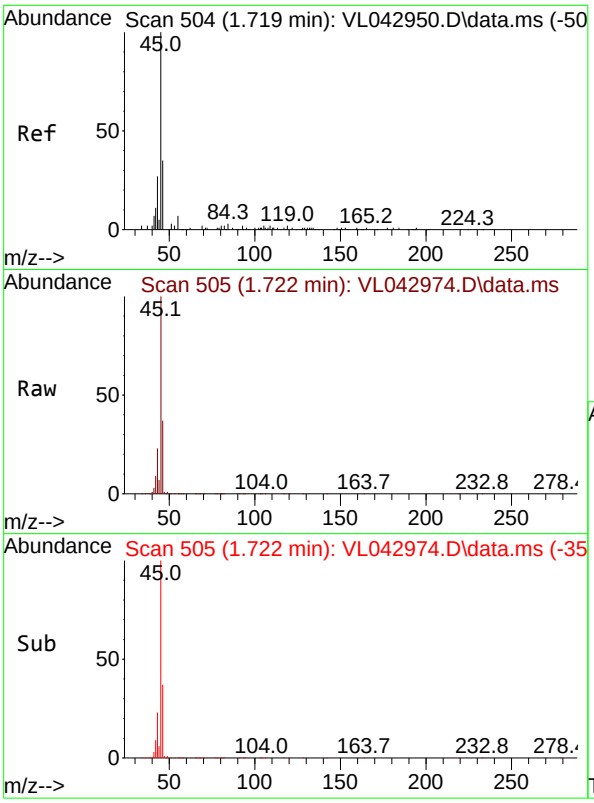


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.068 ppbv
RT: 2.143 min Scan# 635
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:101 Resp: 1027

Ion	Ratio	Lower	Upper
101	100		
151	69.5	55.7	83.5



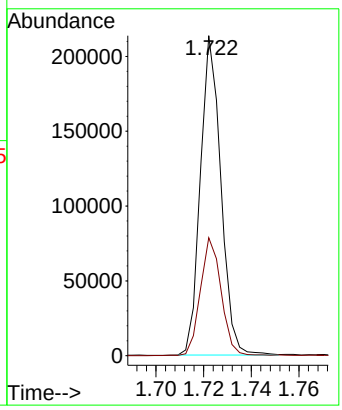


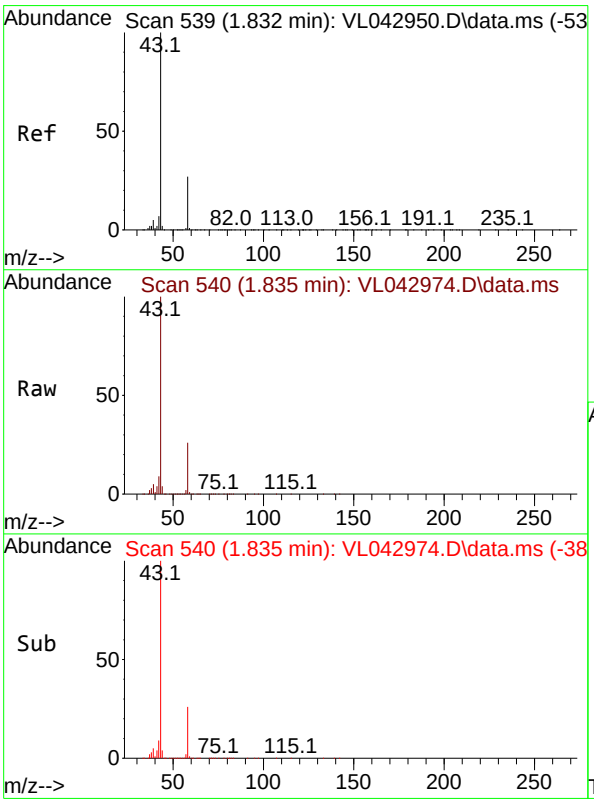
#13
Ethanol
Concen: 124.813 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 45 Resp: 127657

Ion	Ratio	Lower	Upper
45	100		
46	38.1	16.2	64.6

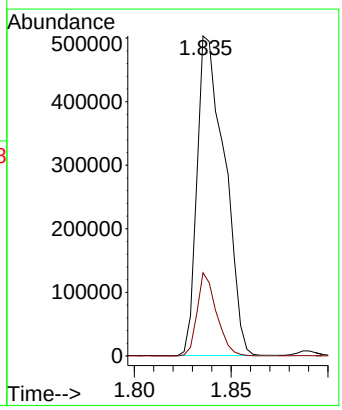


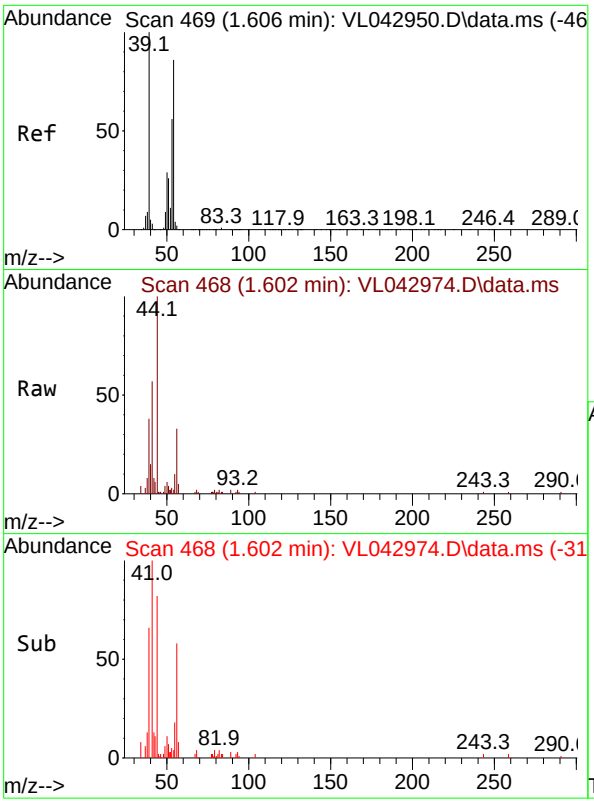


#15
Acetone
Concen: 26.390 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 496921

Ion	Ratio	Lower	Upper
43	100		
58	18.2	22.3	33.5#



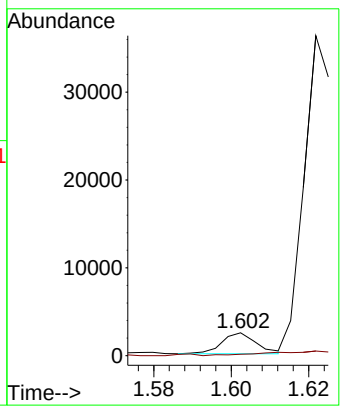


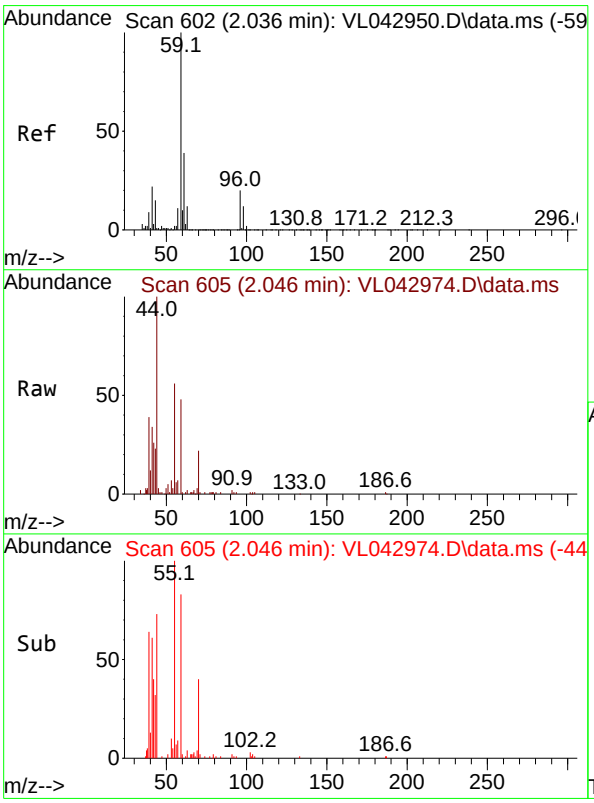
#16
1,3-Butadiene
Concen: 0.168 ppbv
RT: 1.602 min Scan# 4(
Delta R.T. -0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 39 Resp: 1495

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.8	91.2#

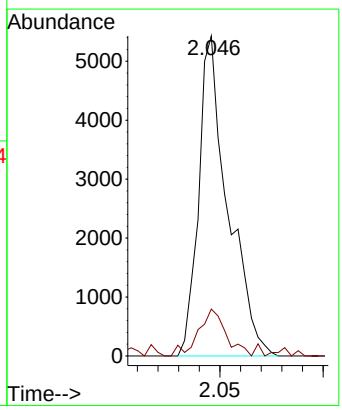


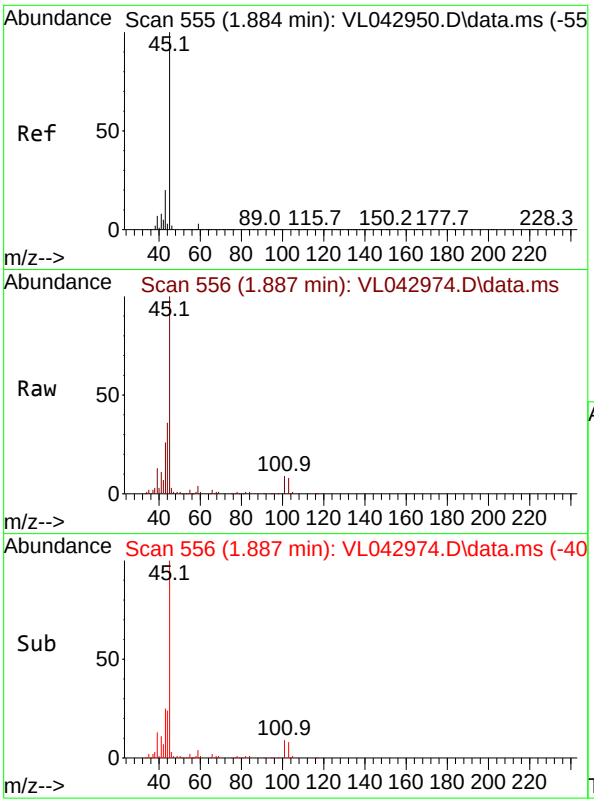


#17
tert-Butyl alcohol
Concen: 0.258 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 59 Resp: 5337

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.6	12.8#



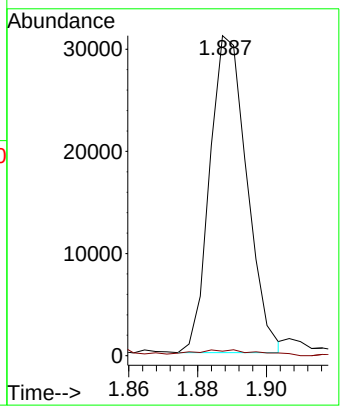


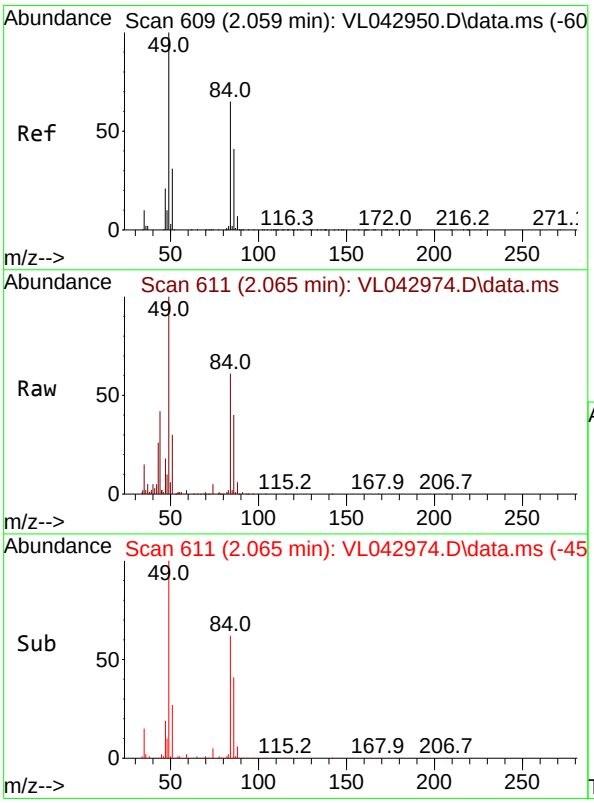
#19
Isopropyl Alcohol
Concen: 2.051 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 45 Resp: 23221

Ion	Ratio	Lower	Upper
45	100		
58	392.1	31.0	46.6#

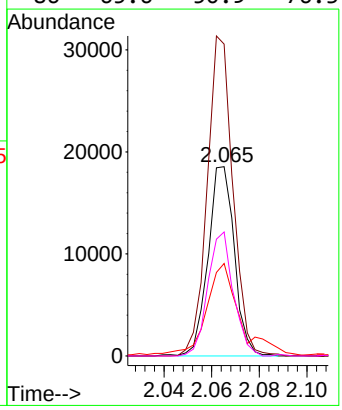


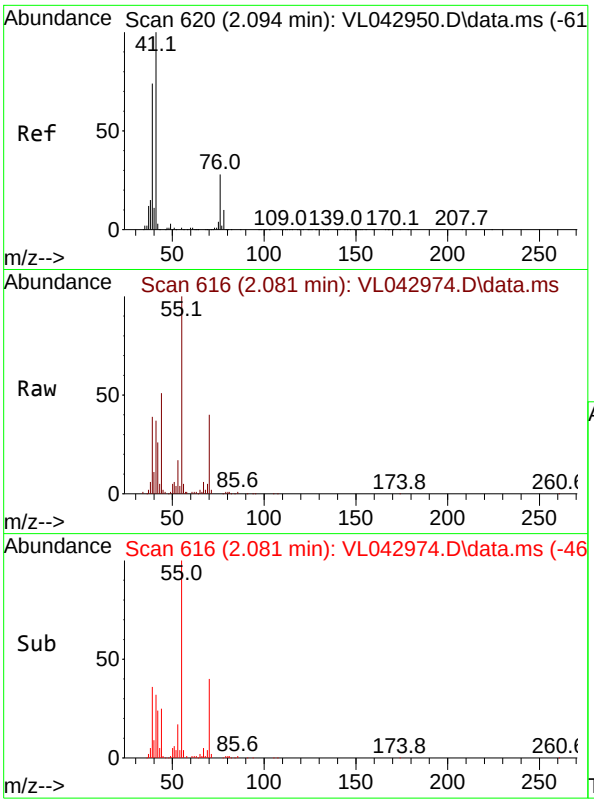


#20
Methylene Chloride
Concen: 1.997 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 84 Resp: 14219

Ion	Ratio	Lower	Upper
84	100		
49	163.8	124.1	186.1
51	46.0	39.8	59.8
86	65.6	50.9	76.3



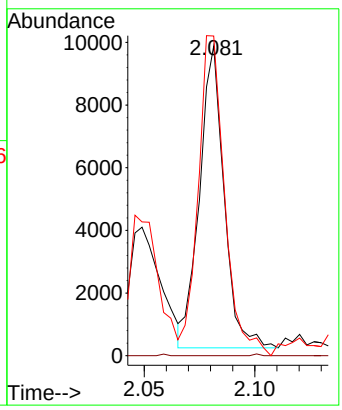


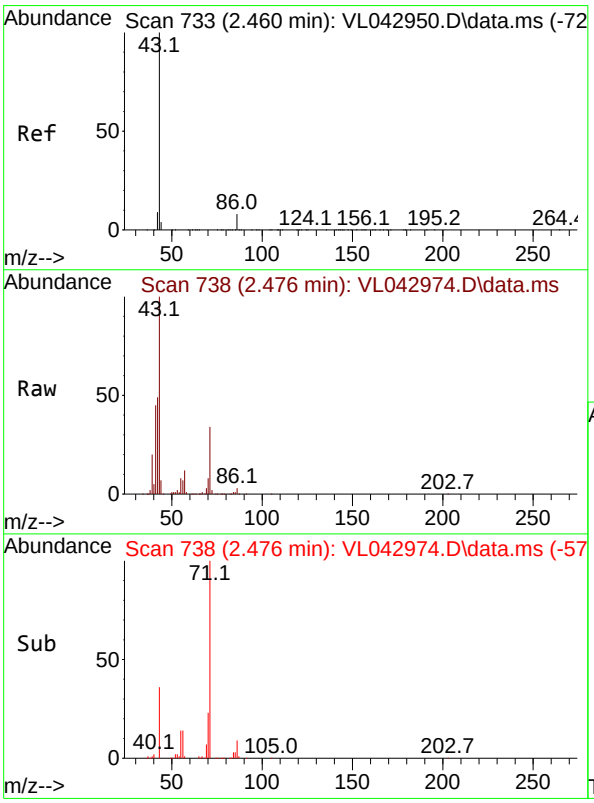
#21
Allyl Chloride
Concen: 0.568 ppbv
RT: 2.081 min Scan# 61
Delta R.T. -0.013 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 41 Resp: 7454

Ion	Ratio	Lower	Upper
41	100		
76	0.0	22.3	33.5#
39	104.2	61.3	91.9#

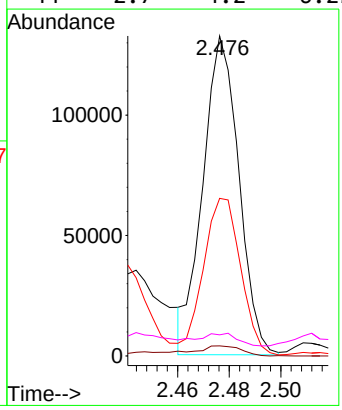


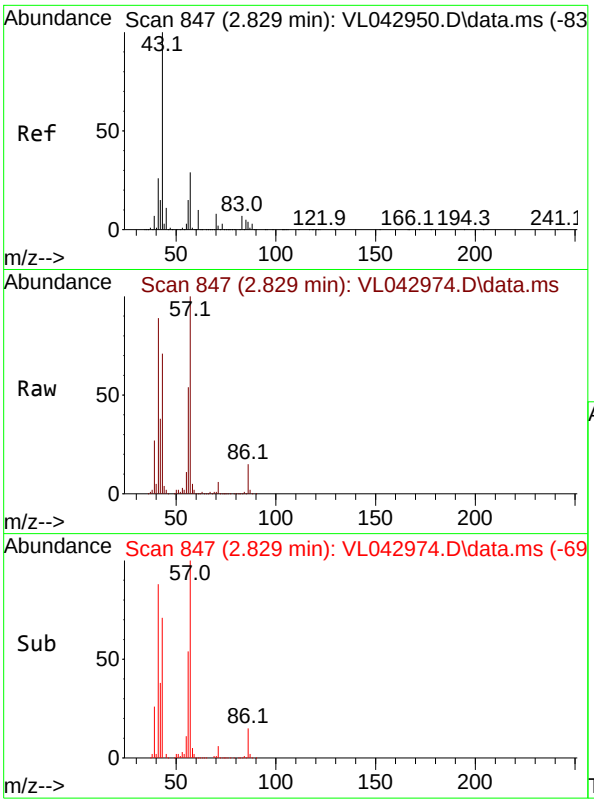


#23
Vinyl Acetate
Concen: 4.761 ppbv
RT: 2.476 min Scan# 738
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 128074

Ion	Ratio	Lower	Upper
43	100		
86	3.1	6.2	9.2#
42	49.4	7.4	11.0#
44	2.7	4.2	6.2#



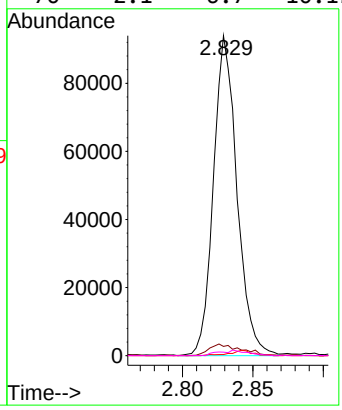


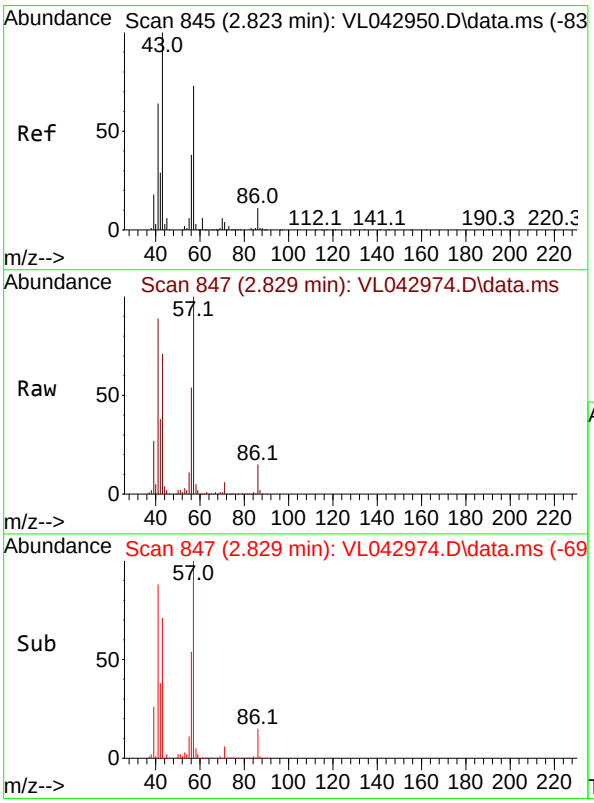
#25
Ethyl Acetate
Concen: 2.299 ppbv
RT: 2.829 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 43 Resp: 109430

Ion	Ratio	Lower	Upper
43	100		
45	5.3	7.7	11.5#
61	1.6	7.1	10.7#
70	2.1	6.7	10.1#

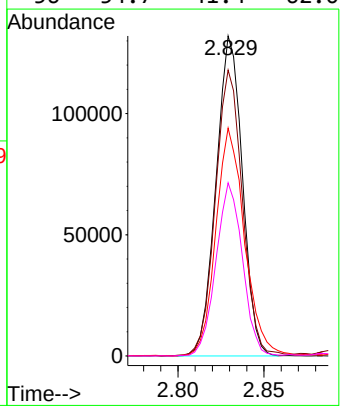


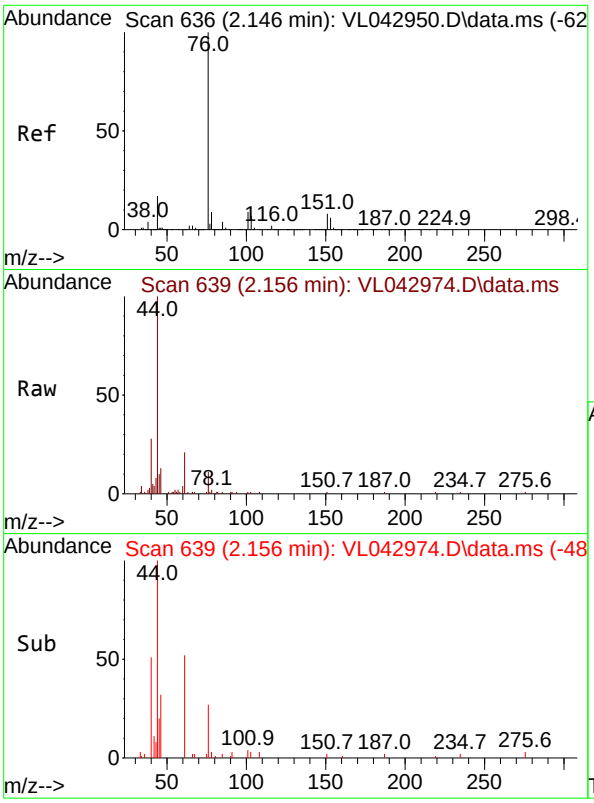


#26
Hexane
Concen: 6.486 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 57 Resp: 140710

Ion	Ratio	Lower	Upper
57	100		
41	91.9	71.7	107.5
43	77.9	180.8	271.2#
56	54.7	41.4	62.0



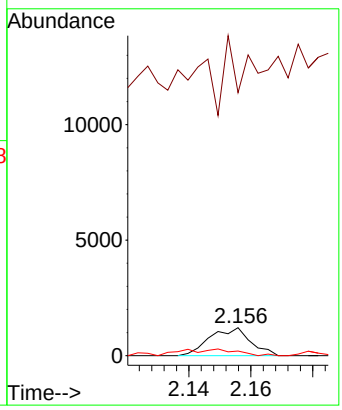


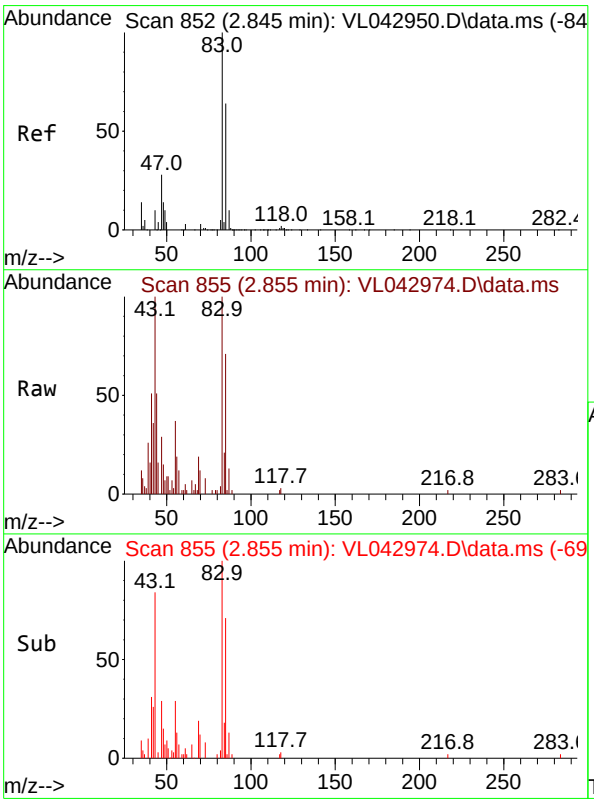
#27
Carbon Disulfide
Concen: 0.057 ppbv
RT: 2.156 min Scan# 6
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 76 Resp: 1103

Ion	Ratio	Lower	Upper
76	100		
44	1522.5	15.6	23.4#
78	51.0	8.9	13.3#

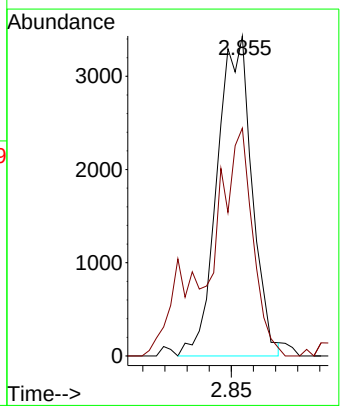


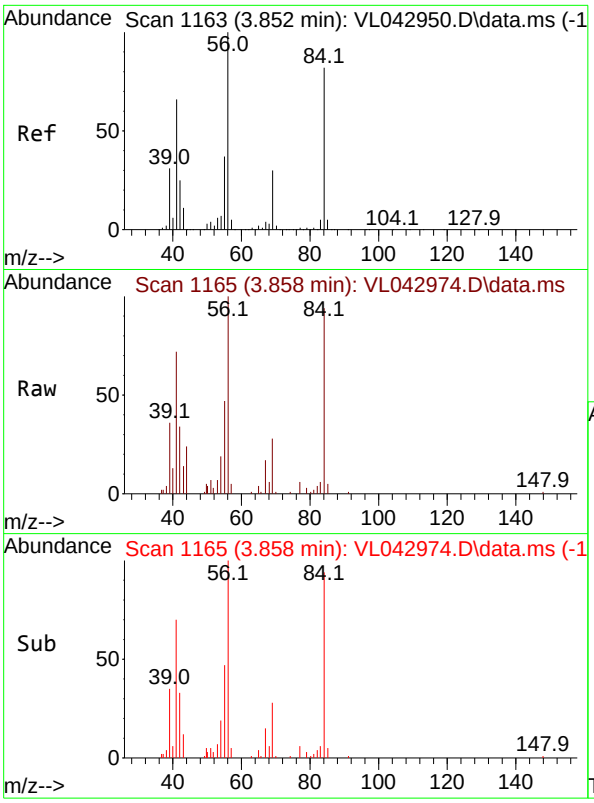


#29
Chloroform
Concen: 0.132 ppbv
RT: 2.855 min Scan# 855
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 83 Resp: 3737

Ion	Ratio	Lower	Upper
83	100		
85	68.6	51.2	76.8



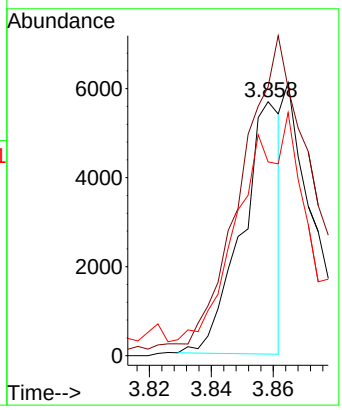


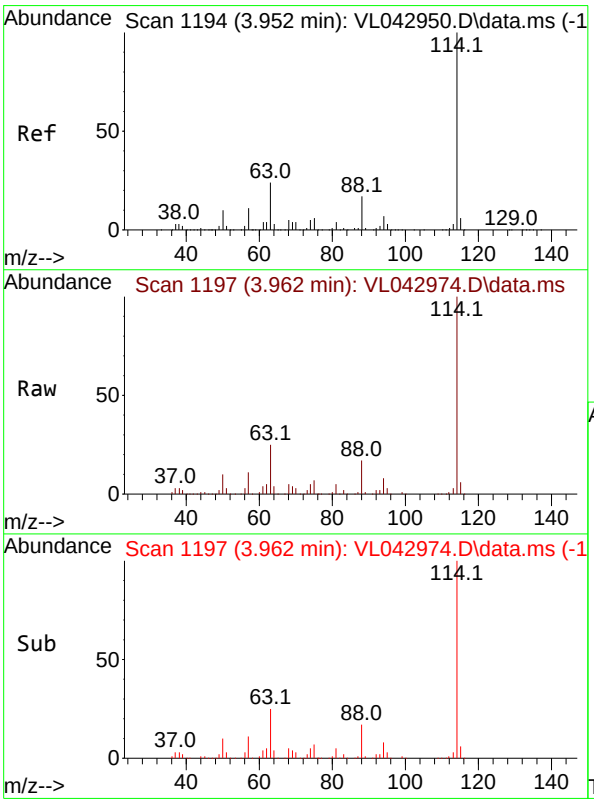
#30
Cyclohexane
Concen: 0.271 ppbv
RT: 3.858 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 84 Resp: 4917

Ion	Ratio	Lower	Upper
84	100		
56	0.0	102.2	153.4#
41	0.0	65.6	98.4#

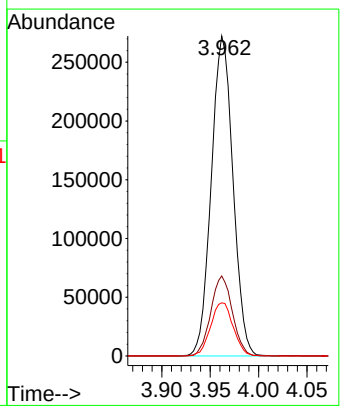


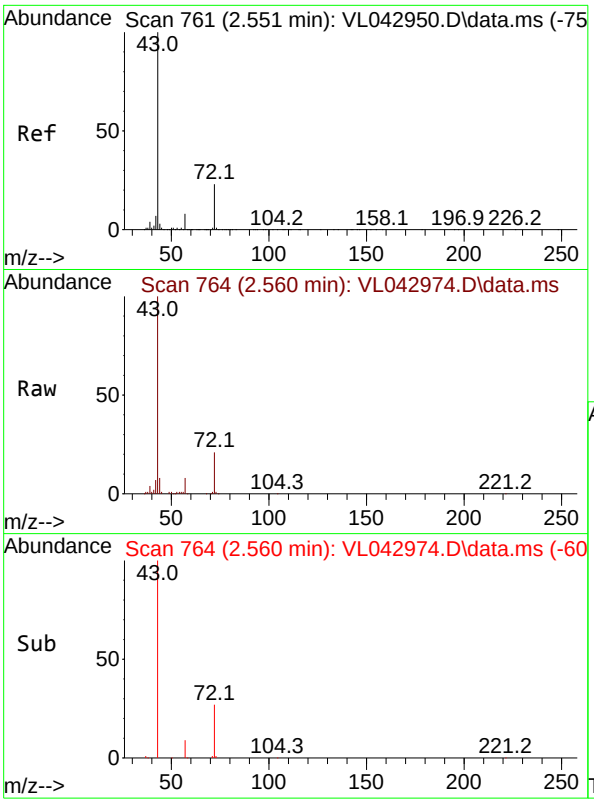


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:114 Resp: 424417

Ion	Ratio	Lower	Upper
114	100		
63	24.9	19.4	29.2
88	17.3	14.2	21.2



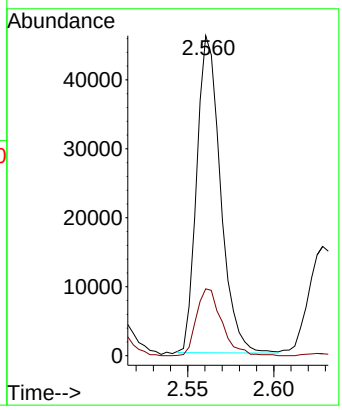


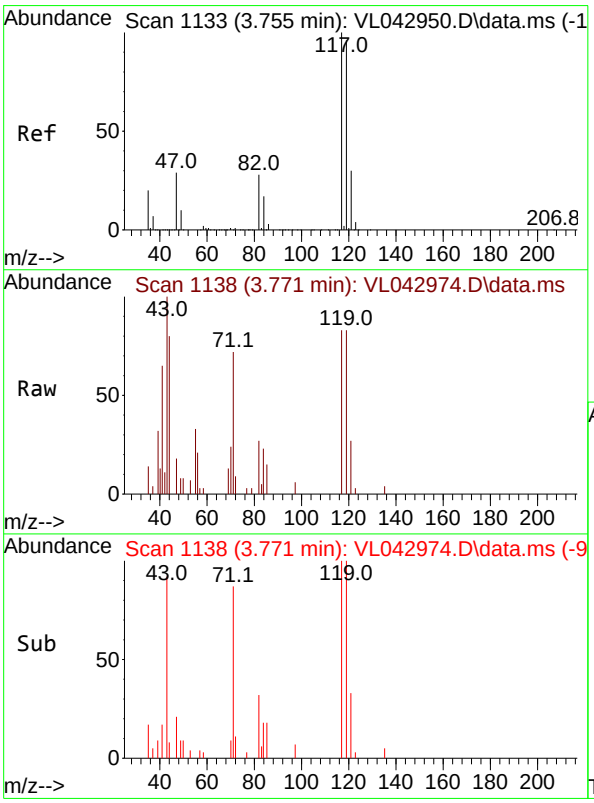
#34
2-Butanone
Concen: 1.487 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 43 Resp: 44238

Ion	Ratio	Lower	Upper
43	100		
72	22.4	17.7	26.5

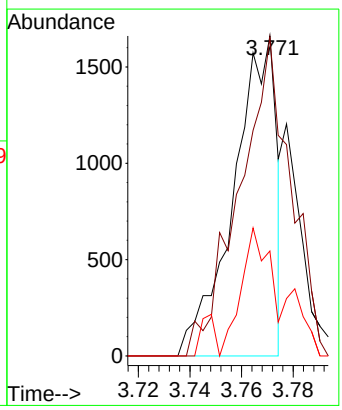


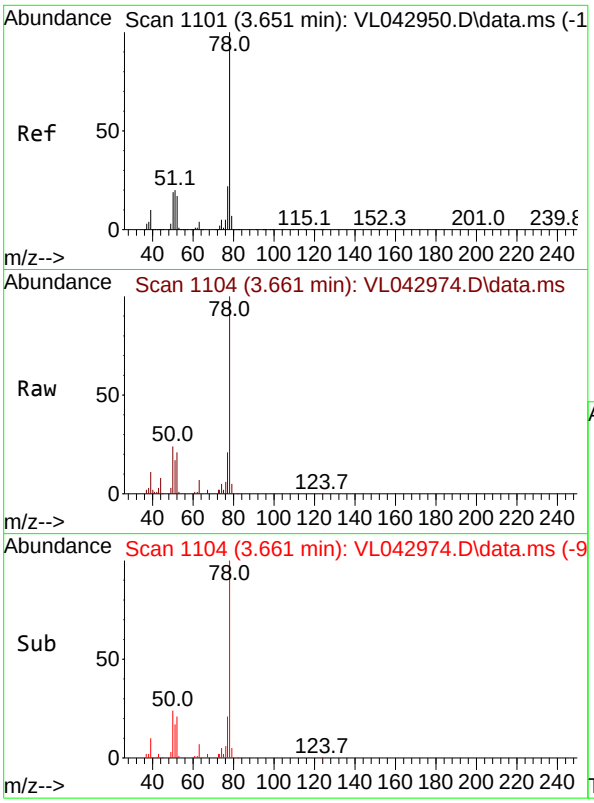


#35
Carbon Tetrachloride
Concen: 0.069 ppbv
RT: 3.771 min Scan# 1138
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:117 Resp: 1911

Ion	Ratio	Lower	Upper
117	100		
119	99.5	76.9	115.3
121	32.8	23.7	35.5



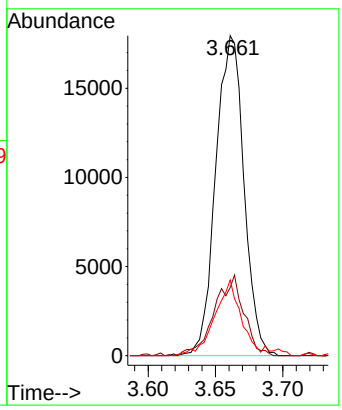


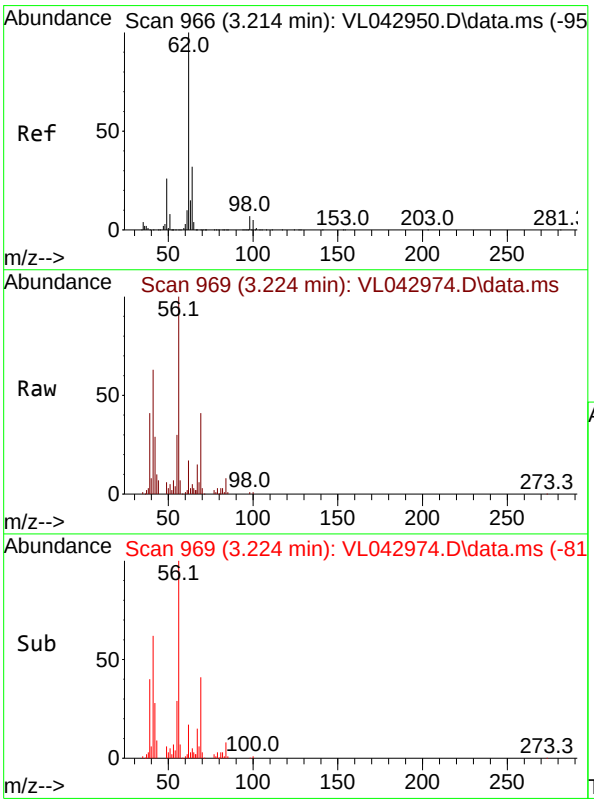
#36
Benzene
Concen: 0.656 ppbv
RT: 3.661 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 78 Resp: 26130

Ion	Ratio	Lower	Upper
78	100		
77	21.3	17.8	26.6
50	22.6	15.0	22.4#

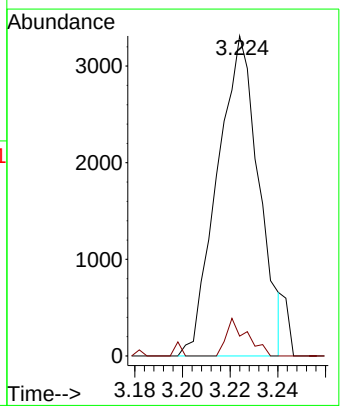


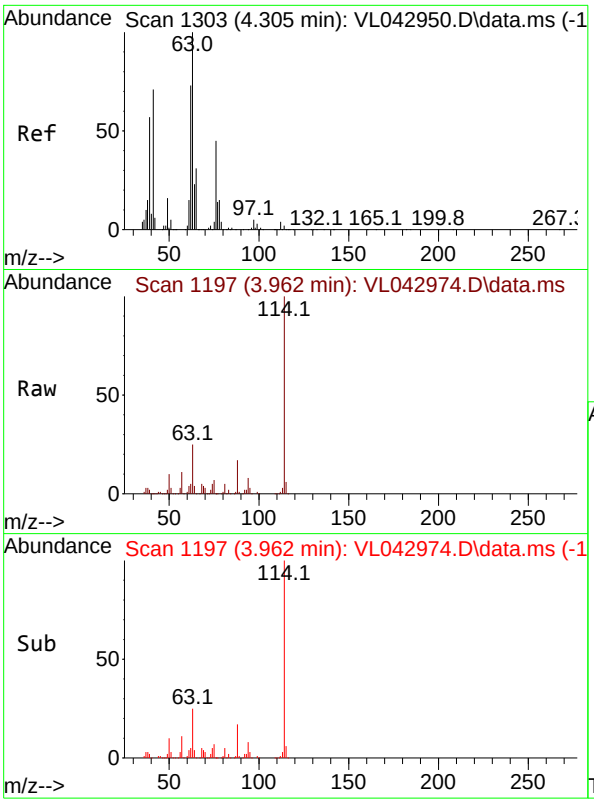


#37
1,2-Dichloroethane
Concen: 0.191 ppbv
RT: 3.224 min Scan# 969
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 62 Resp: 4005

Ion	Ratio	Lower	Upper
62	100		
98	6.9	5.9	8.9



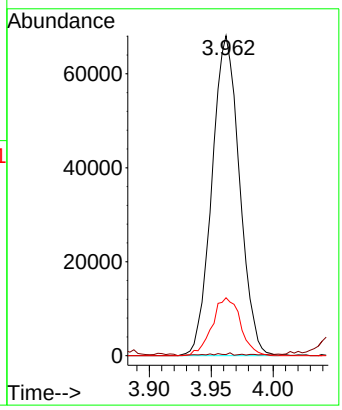


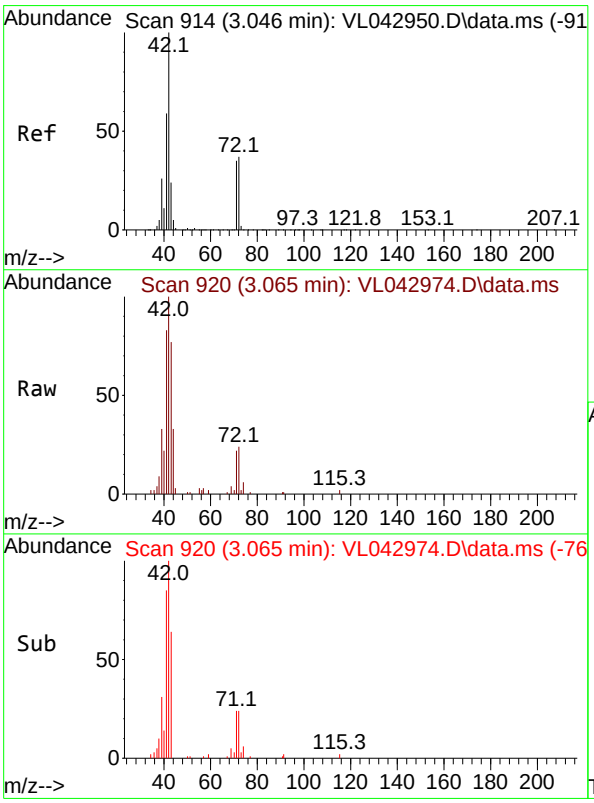
#39
1,2-Dichloropropane
Concen: 7.252 ppbv
RT: 3.962 min Scan# 11
Delta R.T. -0.343 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 63 Resp: 105522

Ion	Ratio	Lower	Upper
63	100		
41	0.5	57.5	86.3#
62	18.1	58.5	87.7#

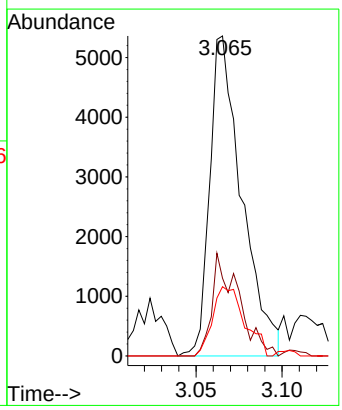


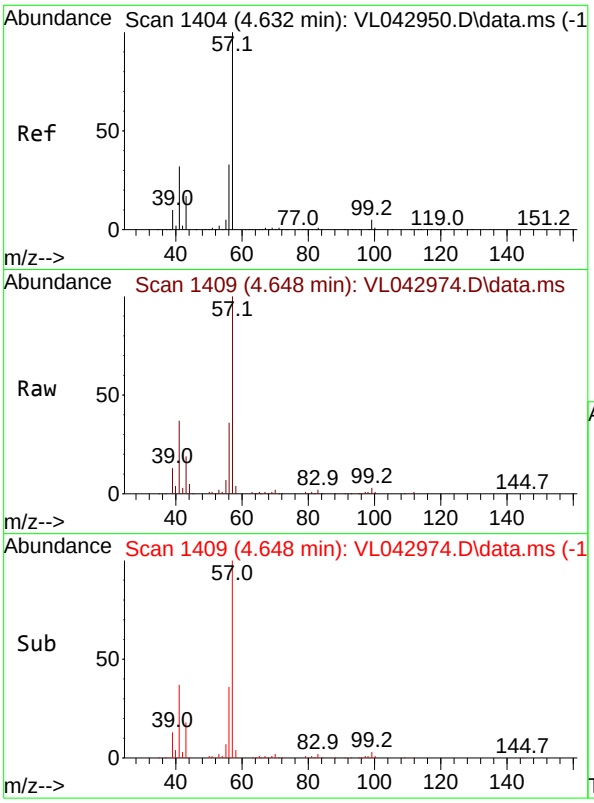


#41
Tetrahydrofuran
Concen: 0.407 ppbv
RT: 3.065 min Scan# 920
Delta R.T. 0.019 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 42 Resp: 6951

Ion	Ratio	Lower	Upper
42	100		
72	27.6	30.0	45.0#
71	22.4	28.8	43.2#



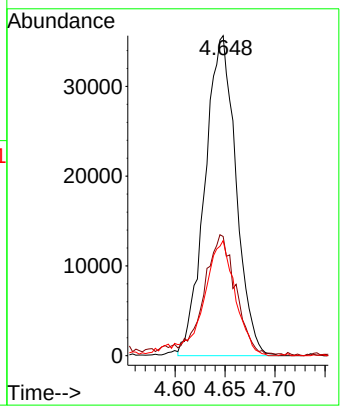


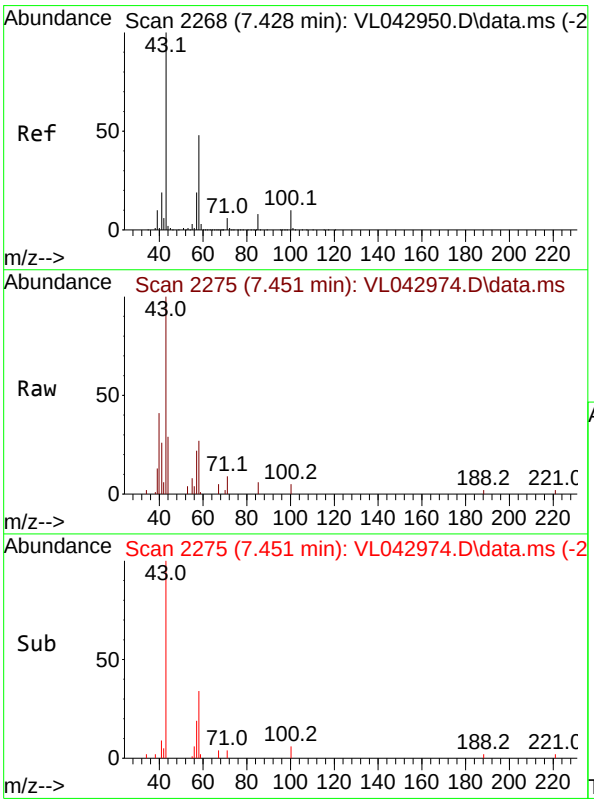
#44
2,2,4-Trimethylpentane
Concen: 1.119 ppbv
RT: 4.648 min Scan# 14
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 57 Resp: 77020

Ion	Ratio	Lower	Upper
57	100		
41	40.1	25.5	38.3#
56	37.9	25.8	38.8

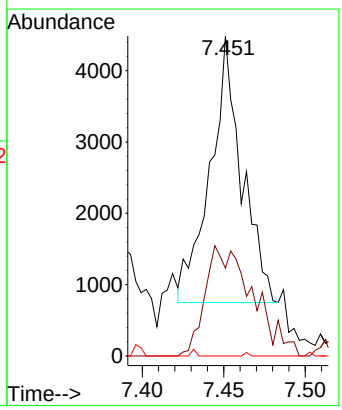


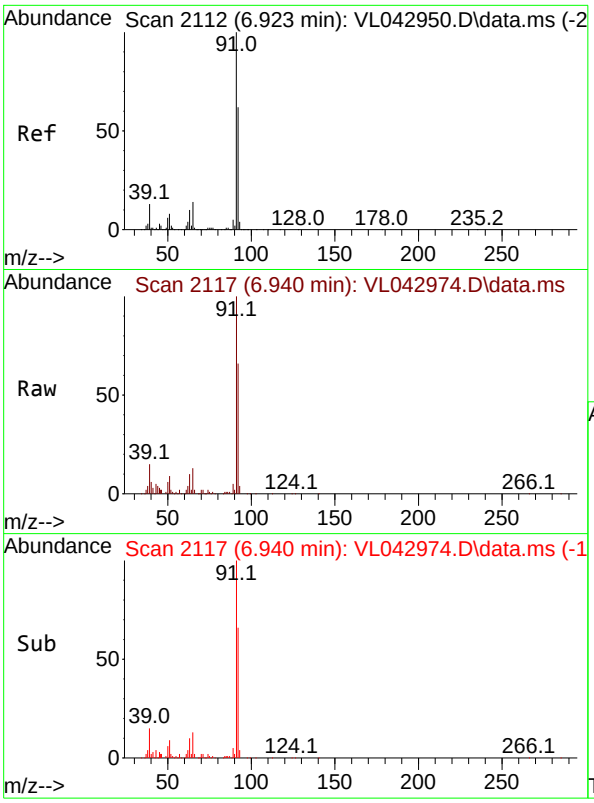


#51
2-Hexanone
Concen: 0.159 ppbv
RT: 7.451 min Scan# 2275
Delta R.T. 0.023 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 43 Resp: 5040

Ion	Ratio	Lower	Upper
43	100		
58	63.7	39.7	59.5#
98	0.4	0.1	0.1#



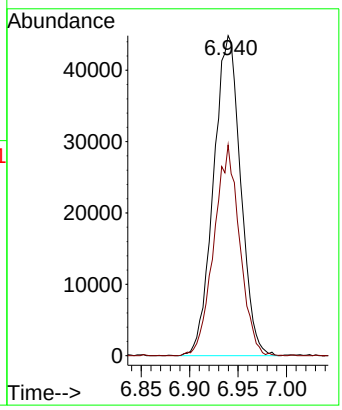


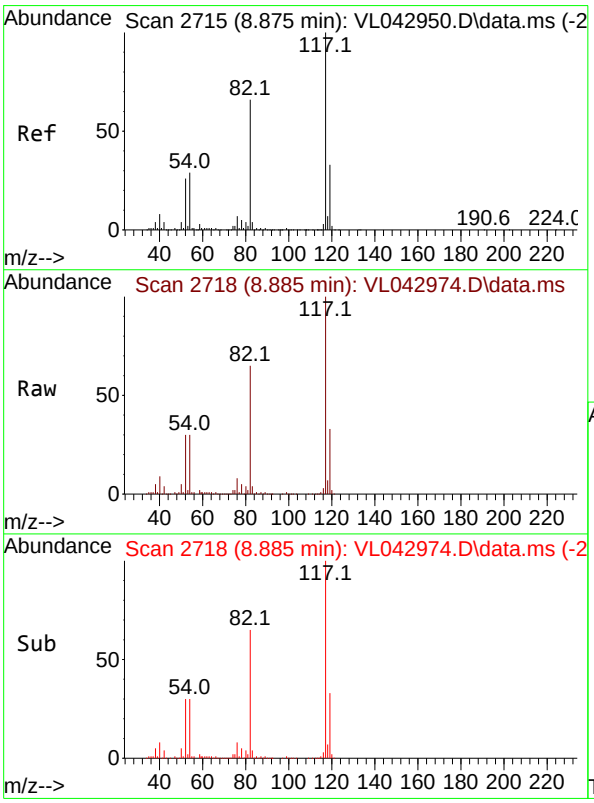
#53
Toluene
Concen: 1.850 ppbv
RT: 6.940 min Scan# 21
Delta R.T. 0.016 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 91 Resp: 87271

Ion	Ratio	Lower	Upper
91	100		
92	62.5	48.2	72.2

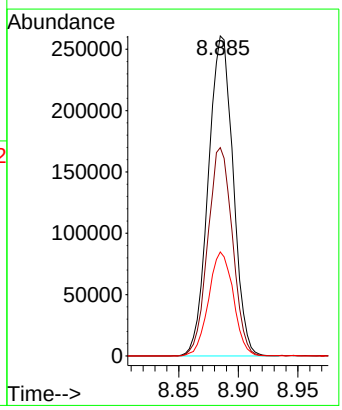


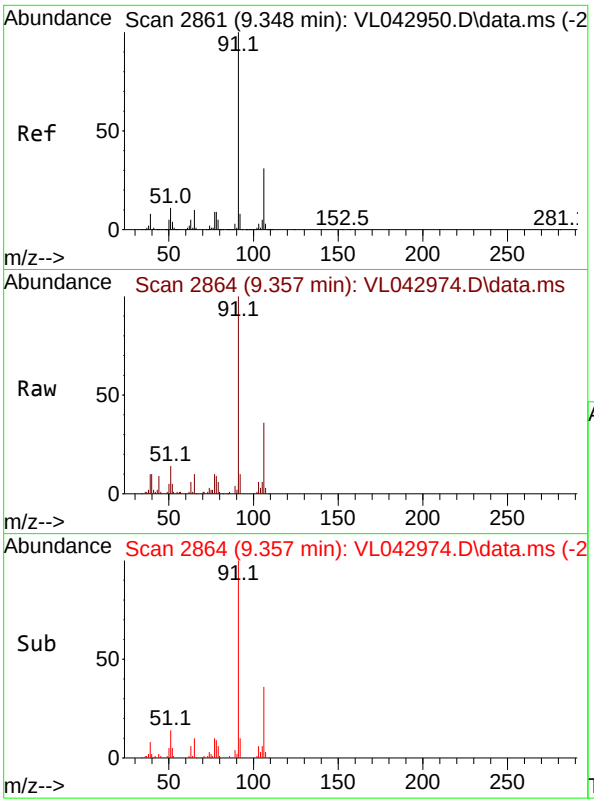


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:117 Resp: 377395

Ion	Ratio	Lower	Upper
117	100		
82	64.9	52.8	79.2
119	32.6	26.5	39.7



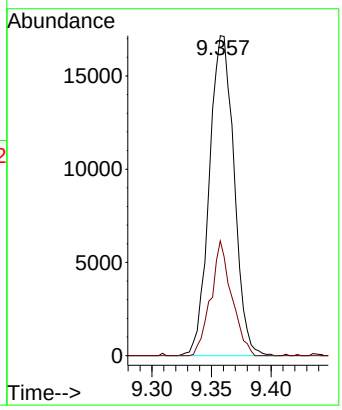


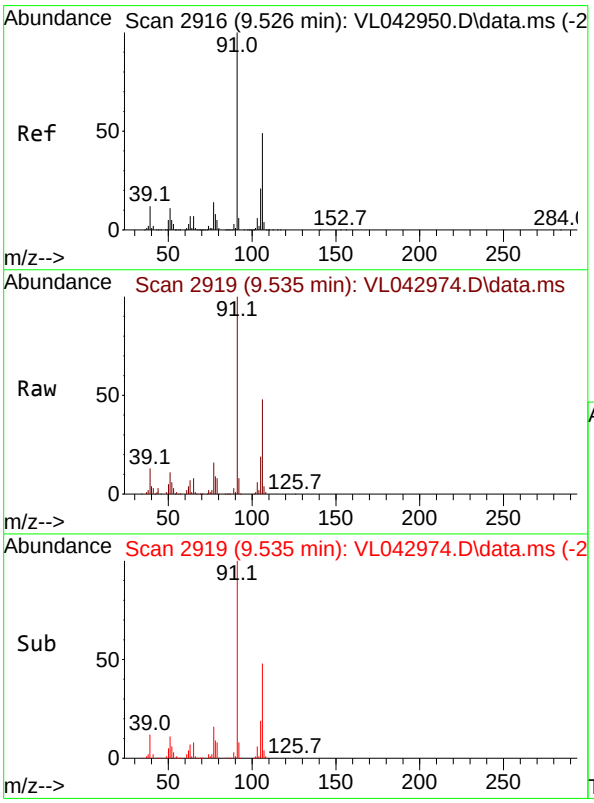
#58
Ethyl Benzene
Concen: 0.400 ppbv
RT: 9.357 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 91 Resp: 24797

Ion	Ratio	Lower	Upper
91	100		
106	35.9	24.6	37.0

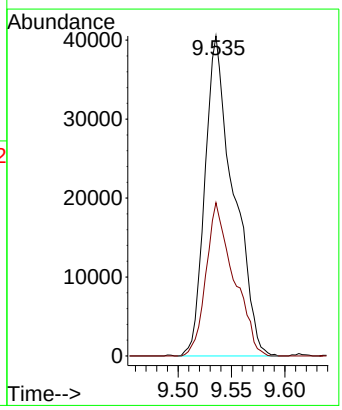


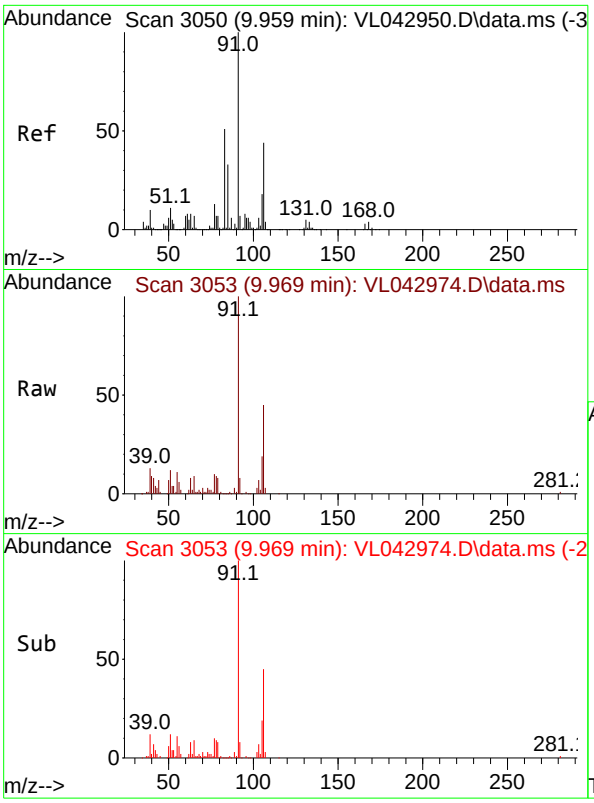


#59
m/p-Xylene
Concen: 1.537 ppbv
RT: 9.535 min Scan# 2919
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 91 Resp: 75106

Ion	Ratio	Lower	Upper
91	100		
106	46.6	0.0	0.0#



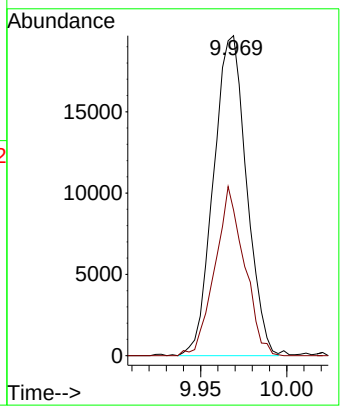


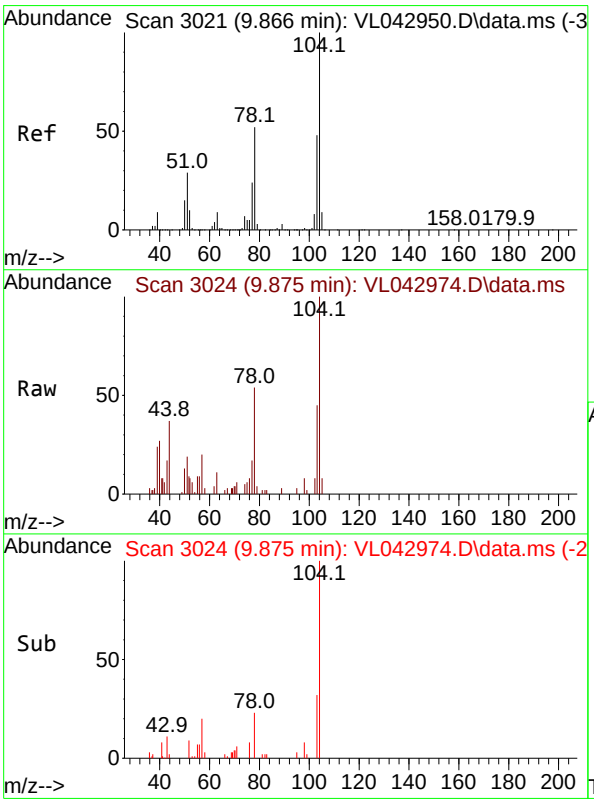
#60
o-Xylene
Concen: 0.538 ppbv
RT: 9.969 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion: 91 Resp: 26261

Ion	Ratio	Lower	Upper
91	100		
106	47.2	22.4	67.0

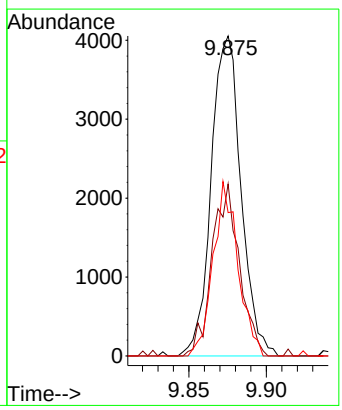


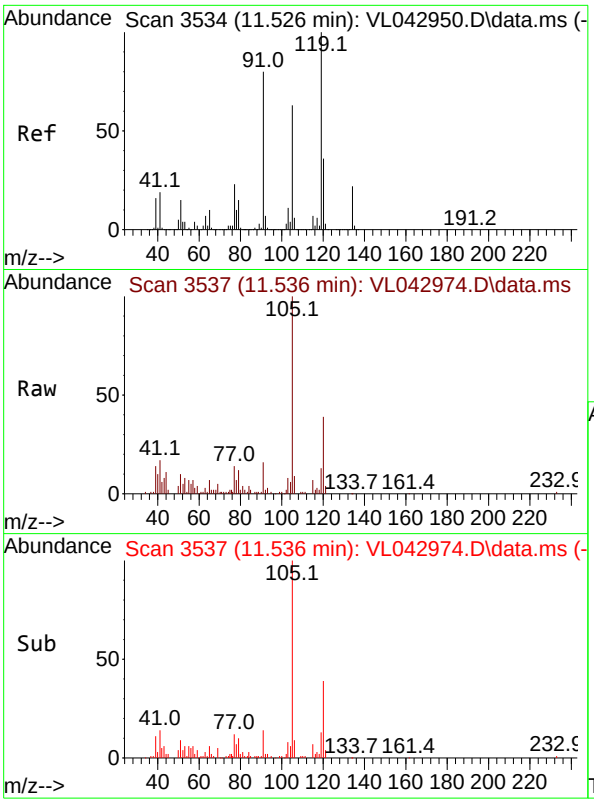


#61
Styrene
Concen: 0.235 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:104 Resp: 5433

Ion	Ratio	Lower	Upper
104	100		
78	49.3	39.9	59.9
103	45.3	36.9	55.3



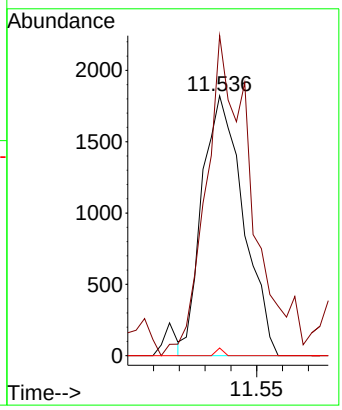


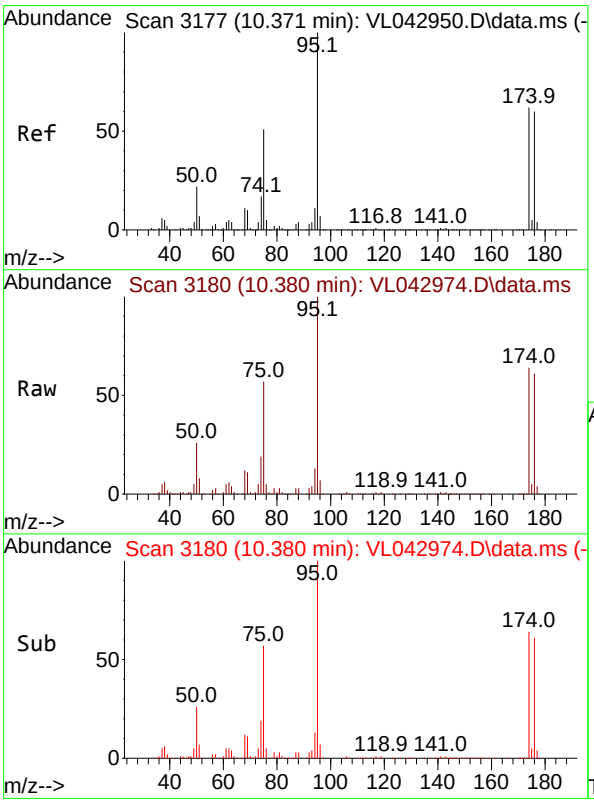
#65
tert-Butylbenzene
Concen: 0.031 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion:119 Resp: 2027

Ion	Ratio	Lower	Upper
119	100		
91	151.7	63.1	94.7#
134	0.0	17.0	25.6#

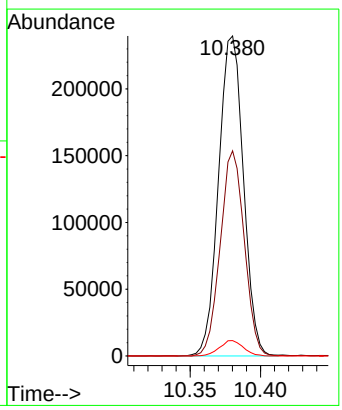


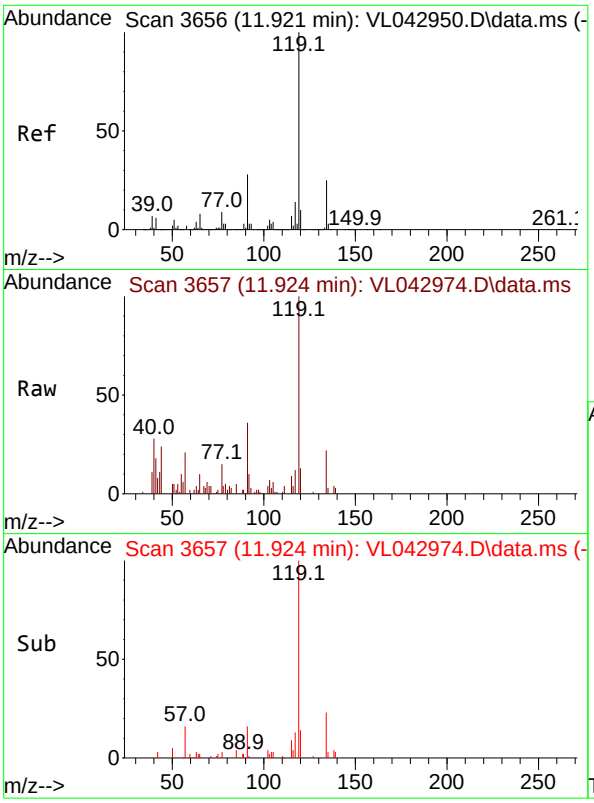


#68
1-Bromo-4-Fluorobenzene
Concen: 10.458 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion: 95 Resp: 294613

Ion	Ratio	Lower	Upper
95	100		
174	62.1	51.4	77.2
175	4.6	4.0	6.0



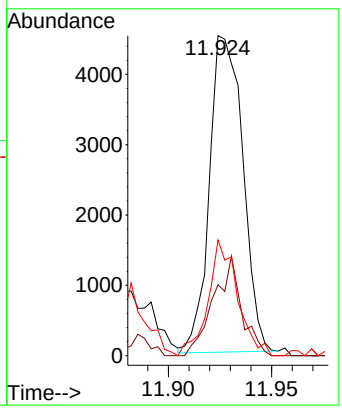


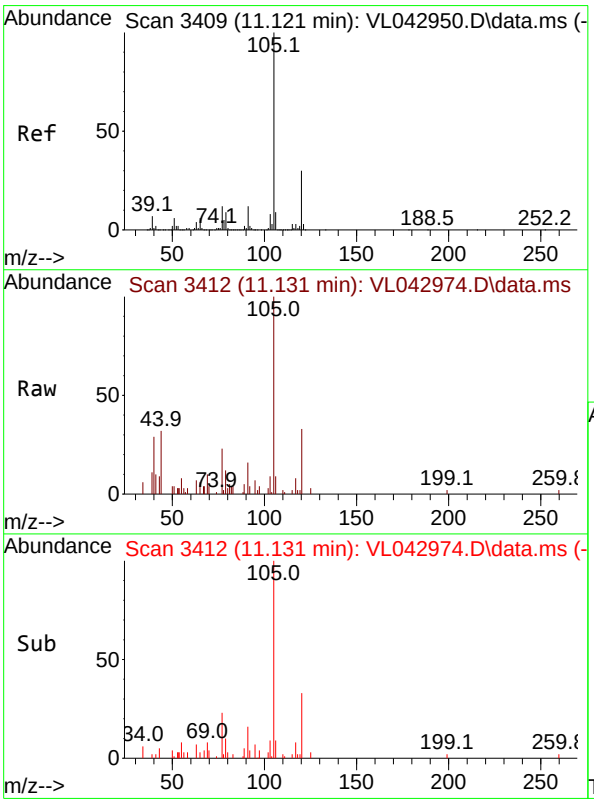
#69
p-Isopropyltoluene
Concen: 0.066 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion:119 Resp: 5064

Ion	Ratio	Lower	Upper
119	100		
134	26.4	21.0	31.4
91	33.0	22.3	33.5

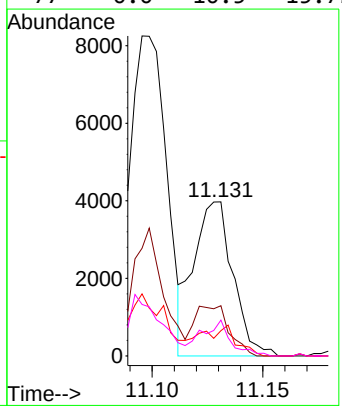


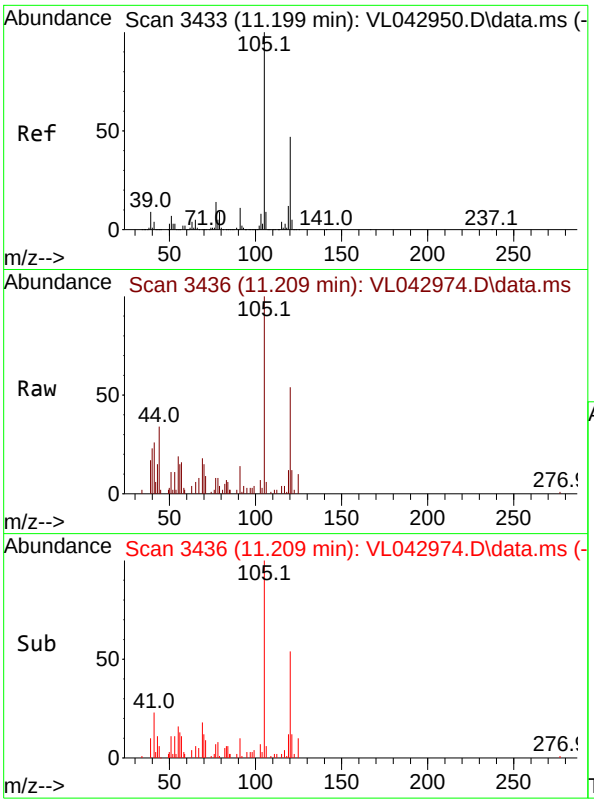


#72
4-Ethyltoluene
Concen: 0.081 ppbv
RT: 11.131 min Scan# 3412
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:105 Resp: 4926

Ion	Ratio	Lower	Upper
105	100		
120	0.0	24.2	36.2#
91	0.0	10.0	15.0#
77	0.0	10.5	15.7#



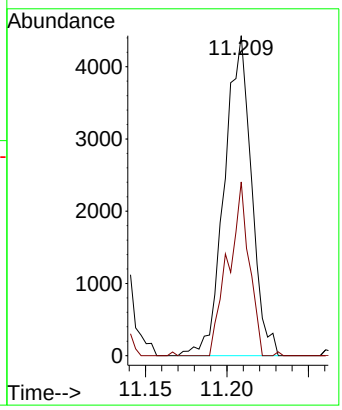


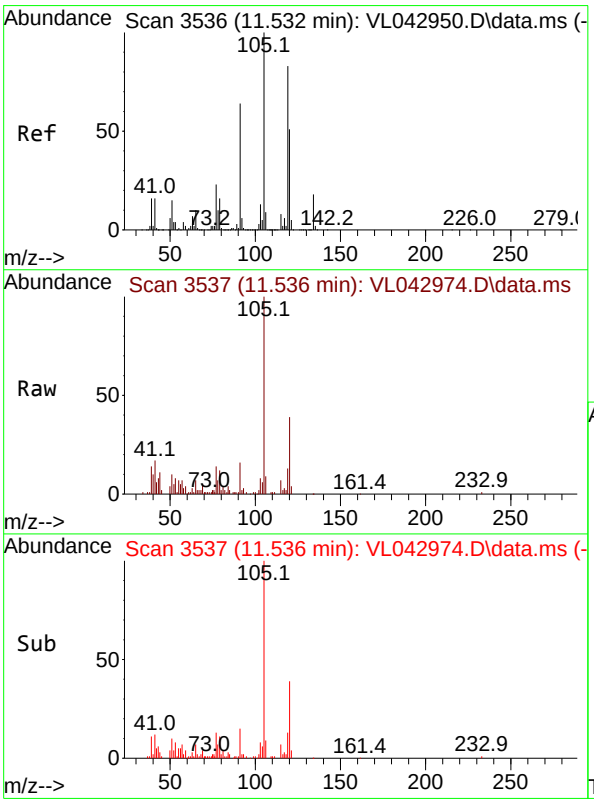
#73
1,3,5-Trimethylbenzene
Concen: 0.103 ppbv
RT: 11.209 min Scan# 34
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion:105 Resp: 5102

Ion	Ratio	Lower	Upper
105	100		
120	54.3	38.0	57.0

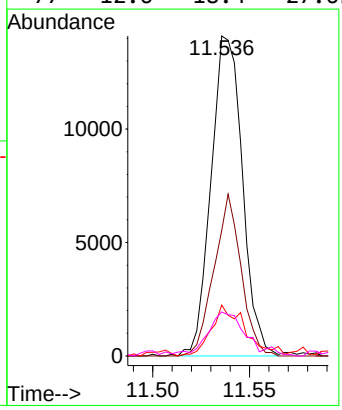


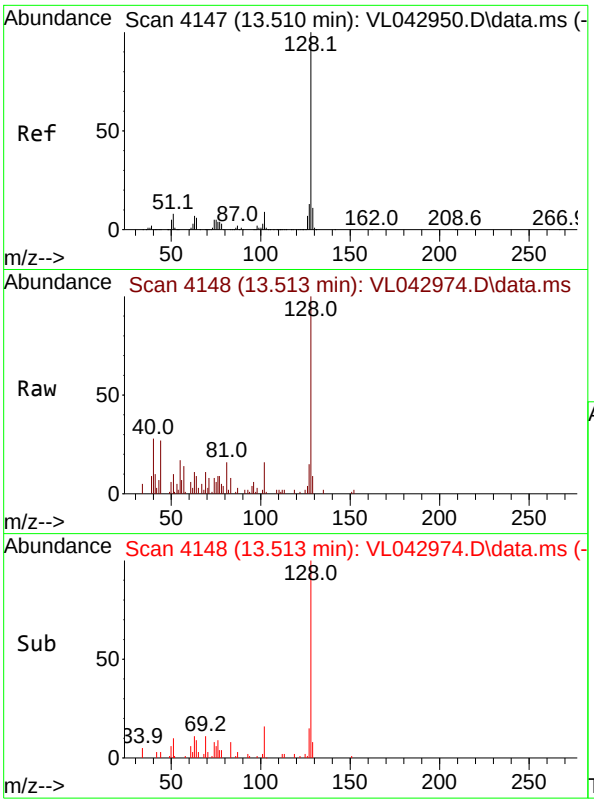


#74
1,2,4-Trimethylbenzene
Concen: 0.290 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:105 Resp: 15880

Ion	Ratio	Lower	Upper
105	100		
120	39.2	40.9	61.3#
91	15.9	51.2	76.8#
77	12.6	18.4	27.6#



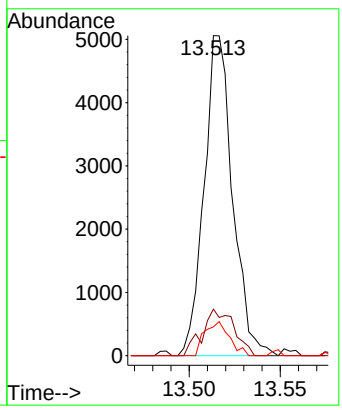


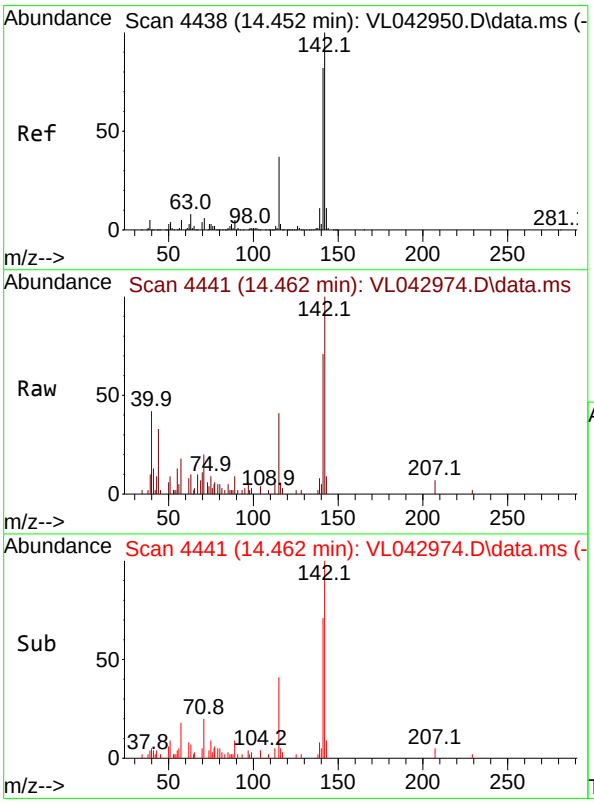
#79
Naphthalene
Concen: 0.114 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1

Tgt Ion:128 Resp: 5520

Ion	Ratio	Lower	Upper
128	100		
127	14.5	10.6	15.8
129	9.0	9.0	13.6#

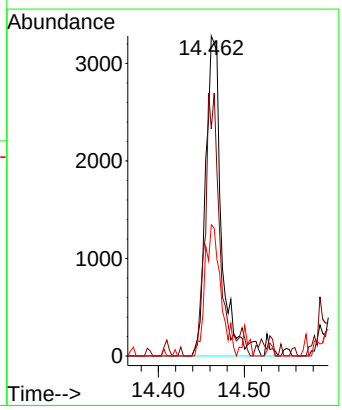




#80
Naphthalene,2-methyl-
Concen: 0.283 ppbv
RT: 14.462 min Scan# 4441
Delta R.T. 0.010 min
Lab File: VL042974.D
Acq: 23 Sep 2025 01:11

Tgt Ion:142 Resp: 4230

Ion	Ratio	Lower	Upper
142	100		
141	76.1	65.1	97.7
115	40.1	28.9	43.3



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042975.D
Acq On : 23 Sep 2025 01:46
Operator : SY/MD
Sample : Q3131-01DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument : MSVOA_L
ClientSampleId : 141-1A-1DL

Quant Time: Sep 24 01:13:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

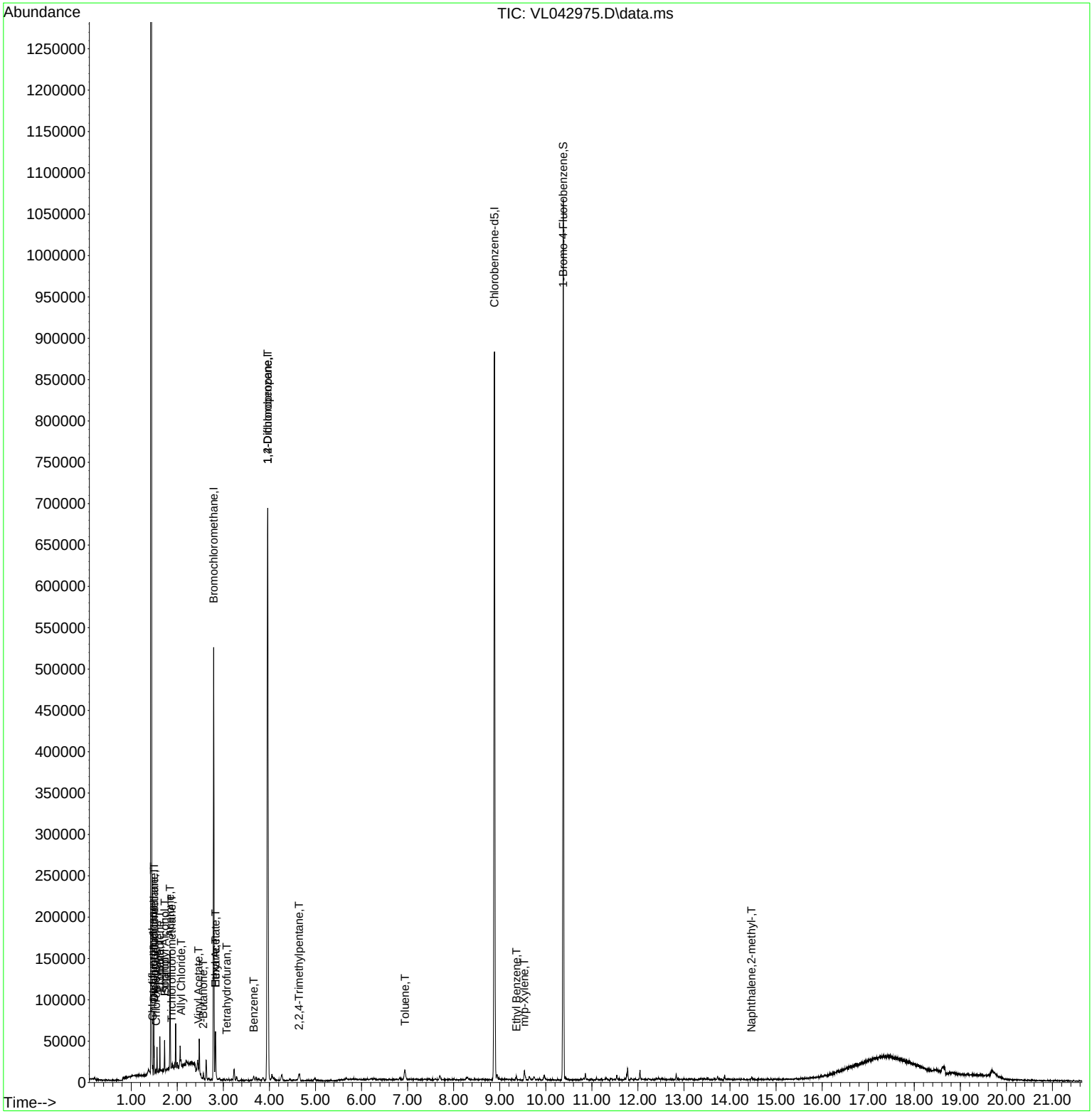
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	142766	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	419987	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	364182	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	273620	10.065	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	7296	0.380	ppbv		98
3) Chlorodifluoromethane	1.467	51	3611	0.151	ppbv	#	71
4) Chloromethane	1.535	50	442	0.051	ppbv	#	44
8) Dichlorotetrafluoroethane	1.499	85	7296	0.445	ppbv	#	19
9) Propene	1.622	41	3696	0.355	ppbv		87
11) Trichlorofluoromethane	1.881	101	756	0.041	ppbv		98
13) Ethanol	1.726	45	13214	13.083	ppbv		100
15) Acetone	1.839	43	51308	2.759	ppbv	#	81
16) 1,3-Butadiene	1.622	39	2155	0.246	ppbv	#	19
19) Isopropyl Alcohol	1.726	45	13214	1.182	ppbv	#	51
20) Methylene Chloride	2.062	84	3387	Below Cal			97
21) Allyl Chloride	2.082	41	1000	0.077	ppbv	#	53
23) Vinyl Acetate	2.457	43	953	0.036	ppbv	#	78
25) Ethyl Acetate	2.829	43	10733	0.228	ppbv	#	87
26) Hexane	2.829	57	12846	0.600	ppbv	#	45
34) 2-Butanone	2.564	43	4708	0.160	ppbv		97
36) Benzene	3.661	78	2611	0.066	ppbv	#	93
39) 1,2-Dichloropropane	3.962	63	103352	7.178	ppbv	#	25
41) Tetrahydrofuran	3.072	42	663	0.039	ppbv	#	85
44) 2,2,4-Trimethylpentane	4.645	57	7639	0.112	ppbv	#	77
53) Toluene	6.943	91	3546	0.076	ppbv	#	5
58) Ethyl Benzene	9.361	91	2132	0.036	ppbv		91
59) m/p-Xylene	9.532	91	4541	0.096	ppbv	#	100
80) Naphthalene,2-methyl-	14.468	142	1323	0.092	ppbv		98

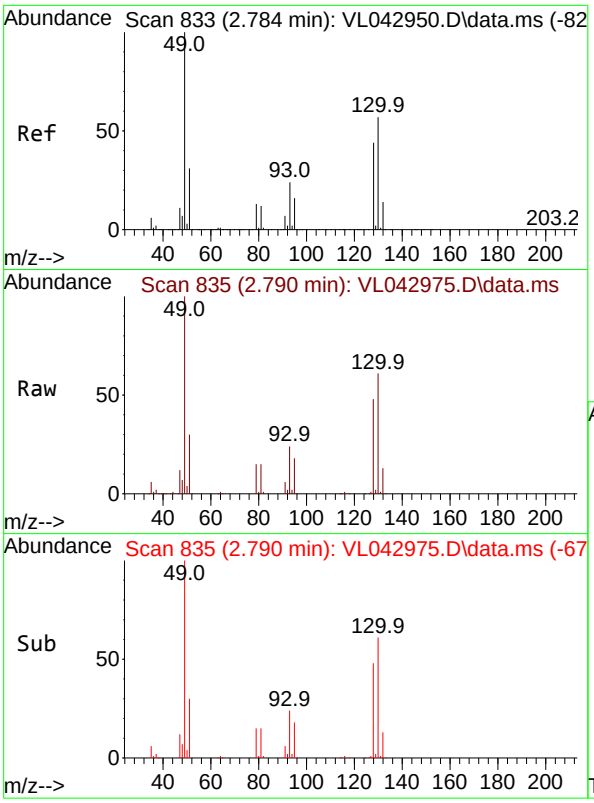
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042975.D
Acq On : 23 Sep 2025 01:46
Operator : SY/MD
Sample : Q3131-01DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Quant Time: Sep 24 01:13:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



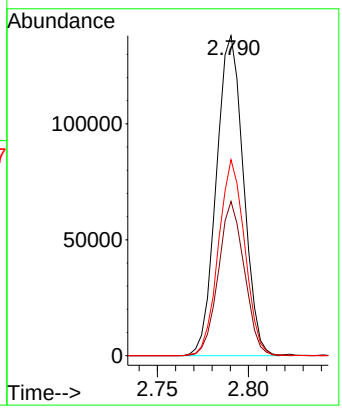


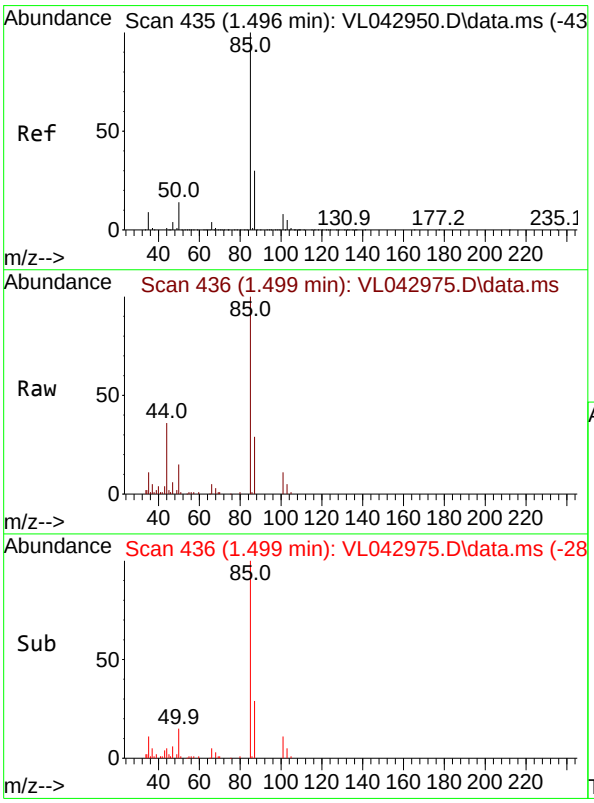
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 49 Resp: 142766

Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.9	68.8
130	59.5	29.1	87.3

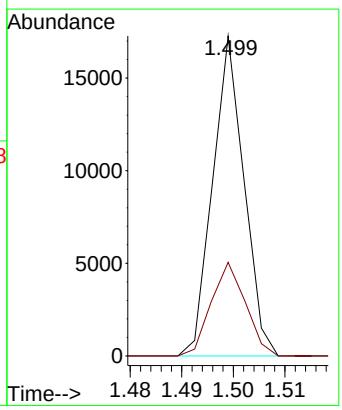


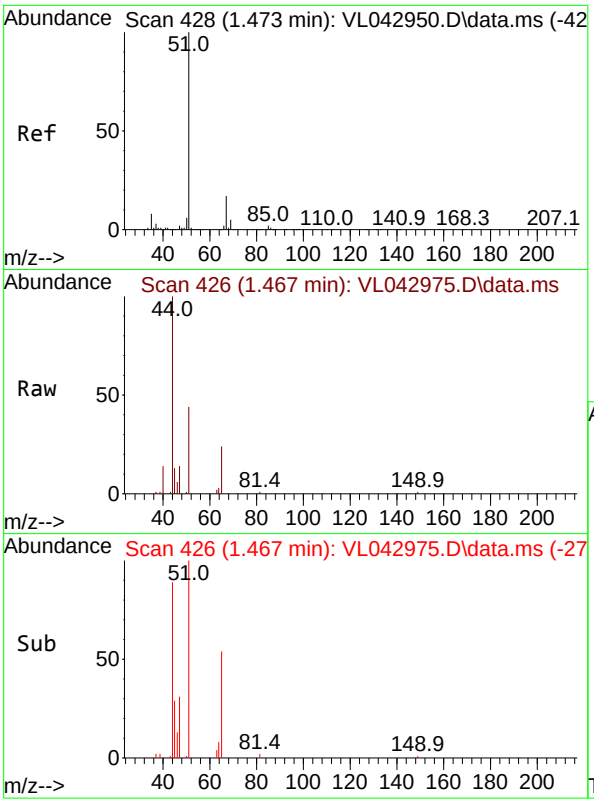


#2
Dichlorodifluoromethane
Concen: 0.380 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 85 Resp: 7296

Ion	Ratio	Lower	Upper
85	100		
87	29.2	24.3	36.5



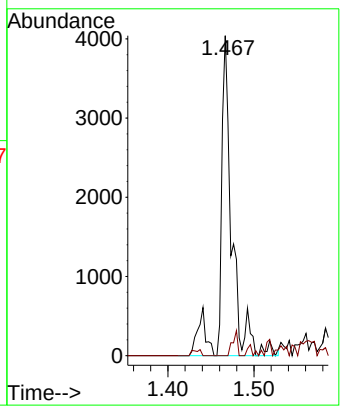


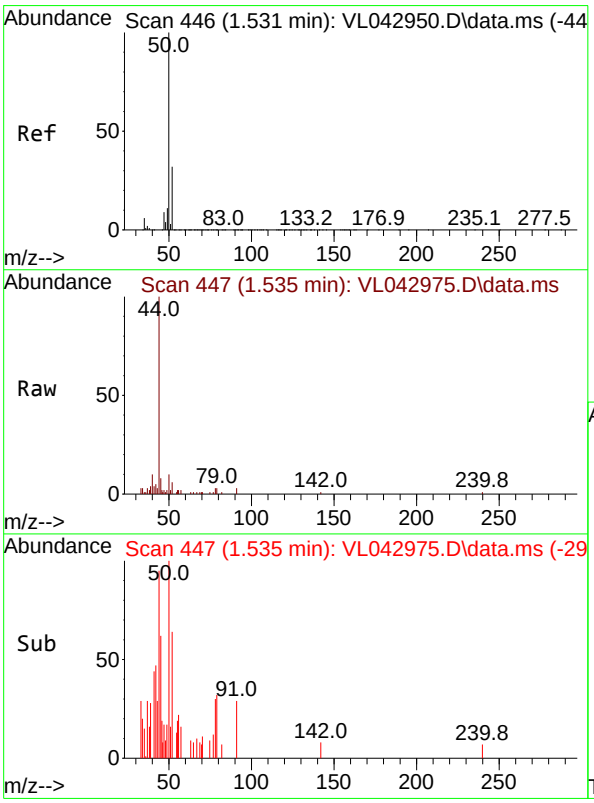
#3
Chlorodifluoromethane
Concen: 0.151 ppbv
RT: 1.467 min Scan# 4
Delta R.T. -0.006 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 51 Resp: 3611

Ion	Ratio	Lower	Upper
51	100		
67	4.7	13.8	20.8#

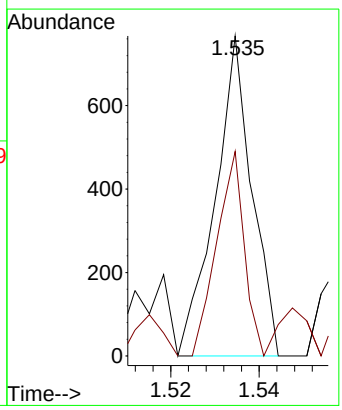


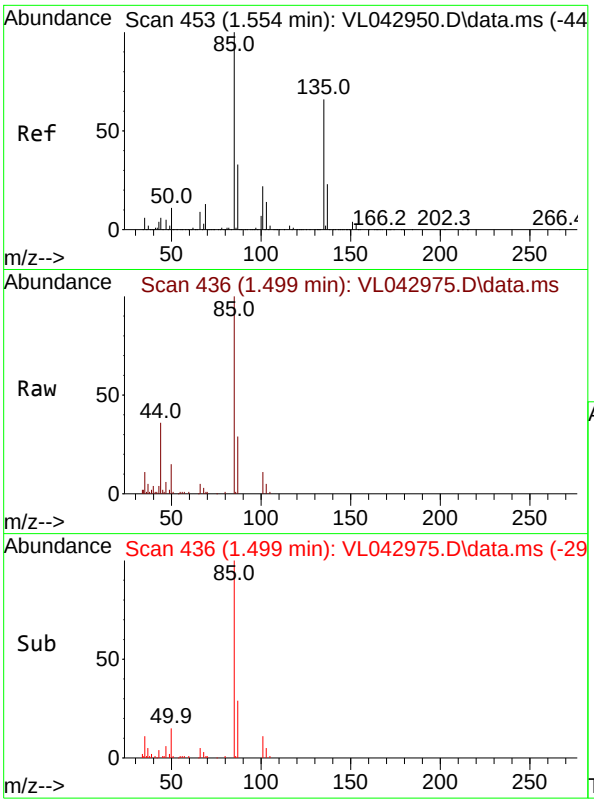


#4
Chloromethane
Concen: 0.051 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 50 Resp: 442

Ion	Ratio	Lower	Upper
50	100		
52	63.9	25.9	38.9#



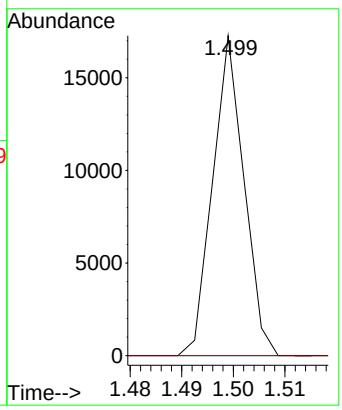


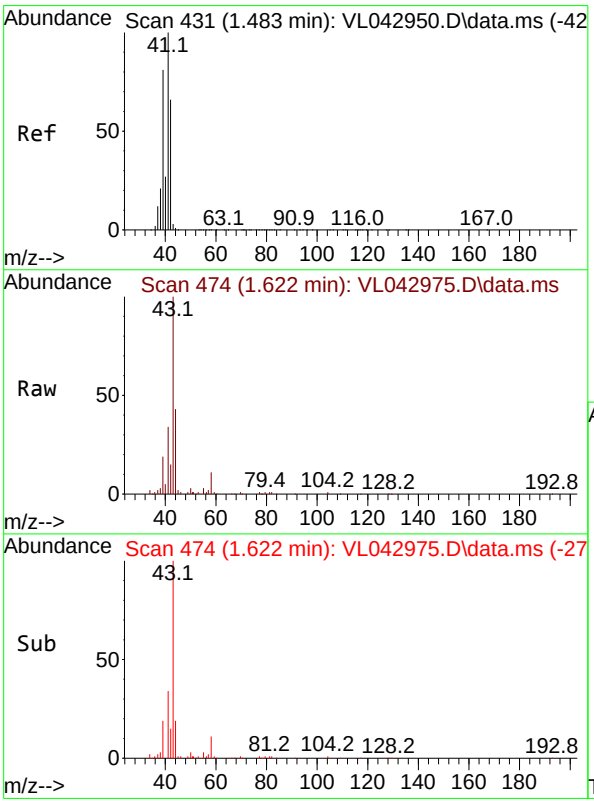
#8
Dichlorotetrafluoroethane
Concen: 0.445 ppbv
RT: 1.499 min Scan# 4
Delta R.T. -0.055 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 85 Resp: 7296

Ion	Ratio	Lower	Upper
85	100		
135	0.0	49.7	74.5#

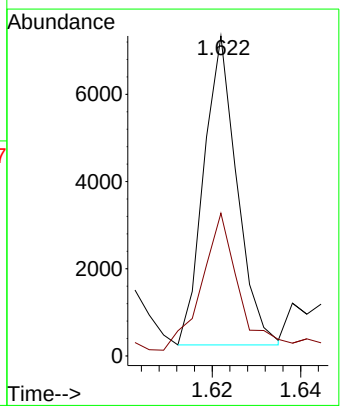


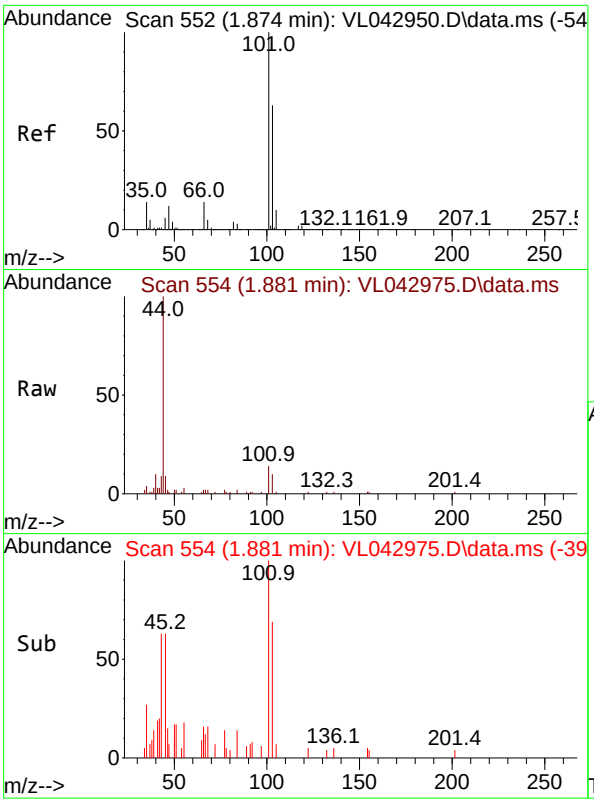


#9
Propene
Concen: 0.355 ppbv
RT: 1.622 min Scan# 474
Delta R.T. 0.139 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 41 Resp: 3696

Ion	Ratio	Lower	Upper
41	100		
42	60.7	57.4	86.2



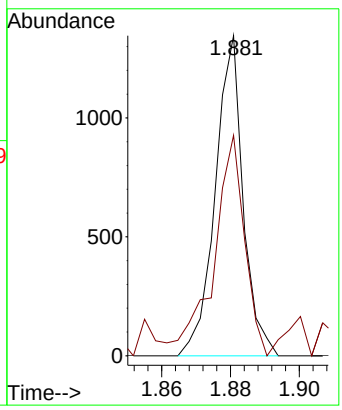


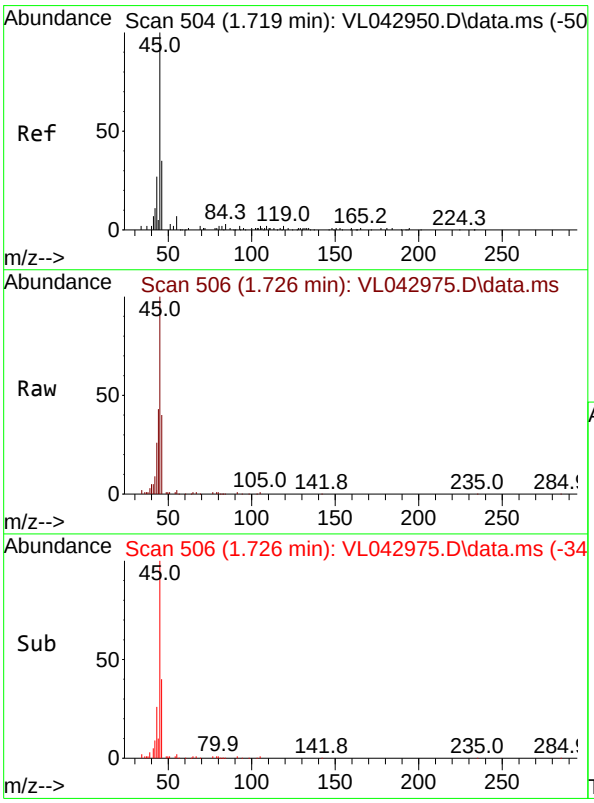
#11
Trichlorofluoromethane
Concen: 0.041 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion:101 Resp: 756

Ion	Ratio	Lower	Upper
101	100		
103	64.0	50.1	75.1

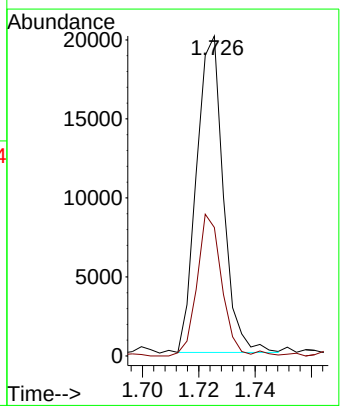


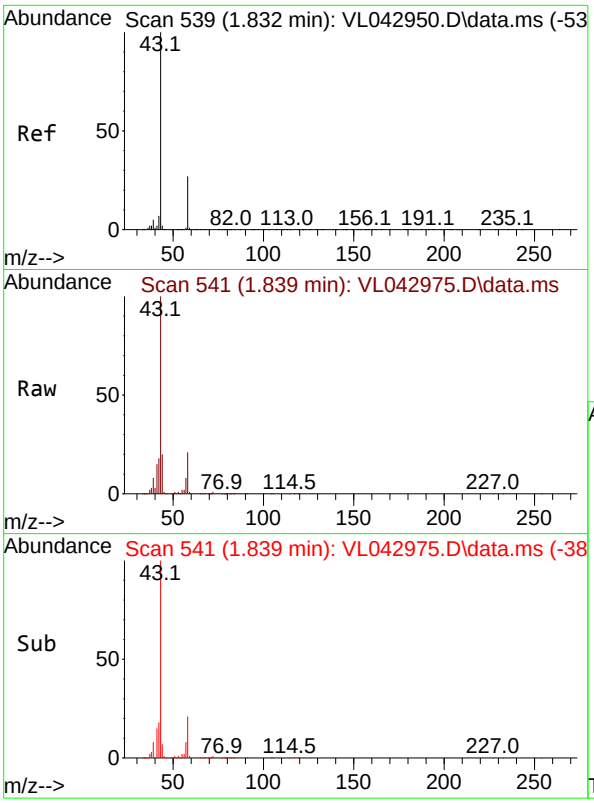


#13
Ethanol
Concen: 13.083 ppbv
RT: 1.726 min Scan# 506
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 45 Resp: 13214

Ion	Ratio	Lower	Upper
45	100		
46	40.6	16.2	64.6



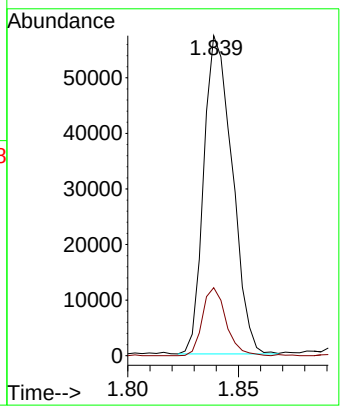


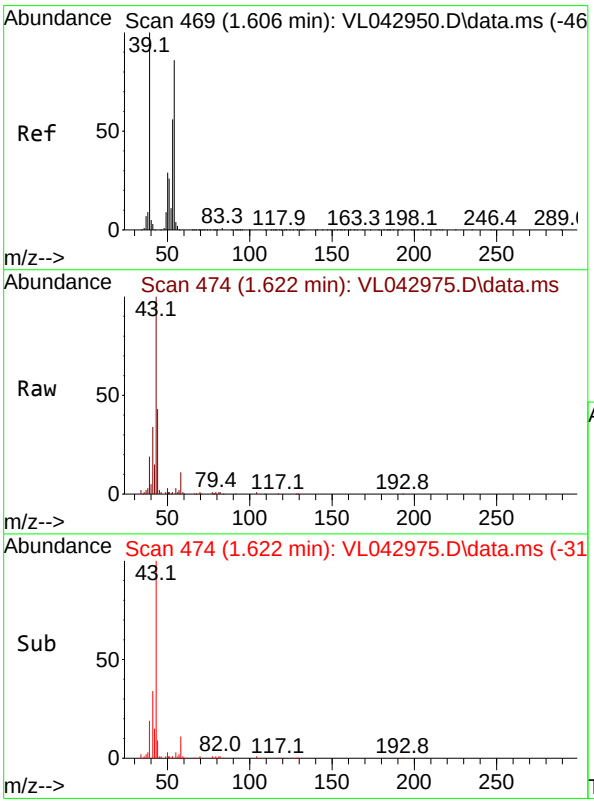
#15
Acetone
Concen: 2.759 ppbv
RT: 1.839 min Scan# 54
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 43 Resp: 51308

Ion	Ratio	Lower	Upper
43	100		
58	17.8	22.3	33.5#

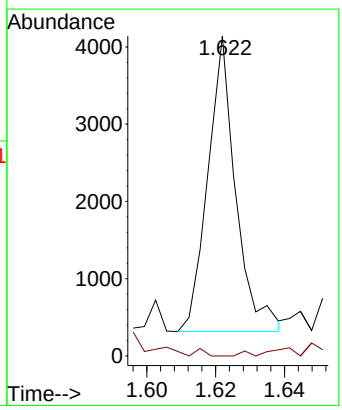


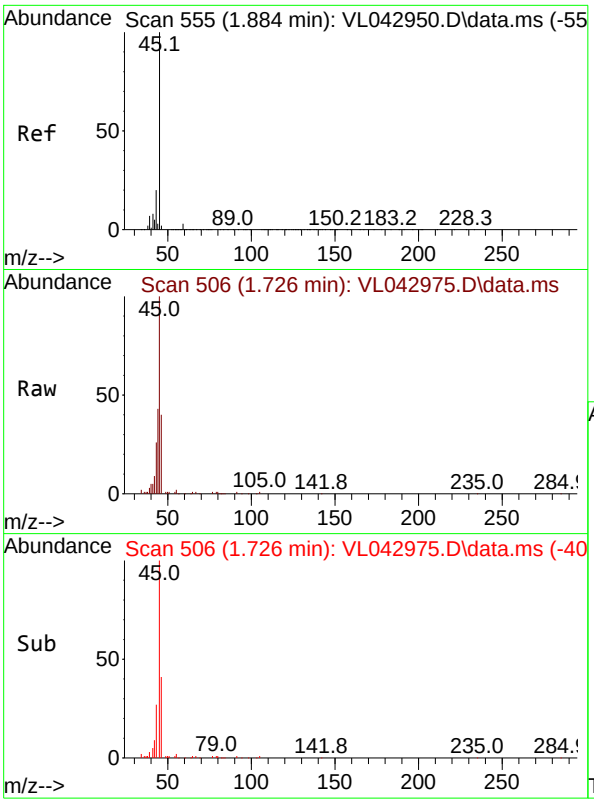


#16
1,3-Butadiene
Concen: 0.246 ppbv
RT: 1.622 min Scan# 474
Delta R.T. 0.016 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 39 Resp: 2155

Ion	Ratio	Lower	Upper
39	100		
54	6.5	60.8	91.2#



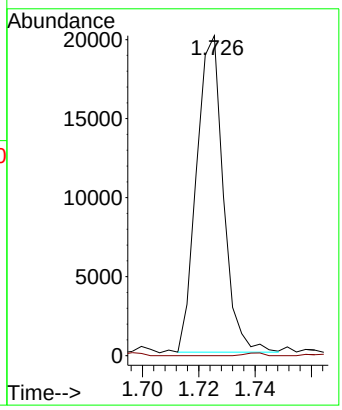


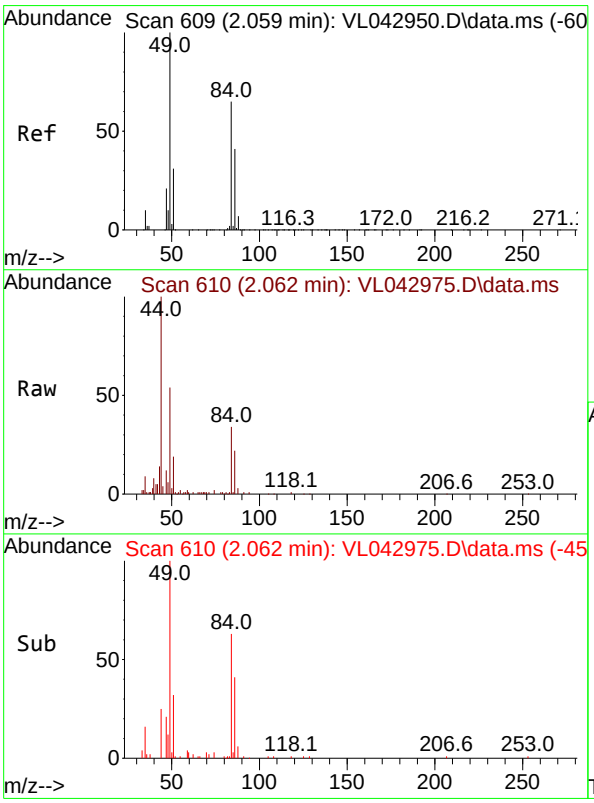
#19
Isopropyl Alcohol
Concen: 1.182 ppbv
RT: 1.726 min Scan# 5(
Delta R.T. -0.159 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 45 Resp: 13214

Ion	Ratio	Lower	Upper
45	100		
58	9.3	31.0	46.6#

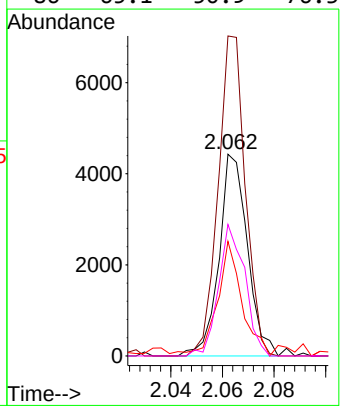


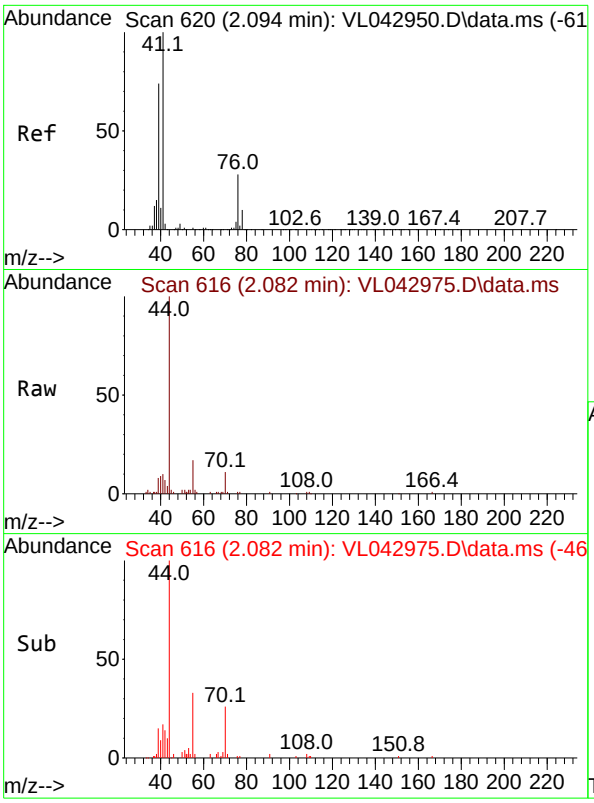


#20
Methylene Chloride
Concen: Below Cal
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 84 Resp: 3387

Ion	Ratio	Lower	Upper
84	100		
49	158.6	124.1	186.1
51	54.7	39.8	59.8
86	65.1	50.9	76.3



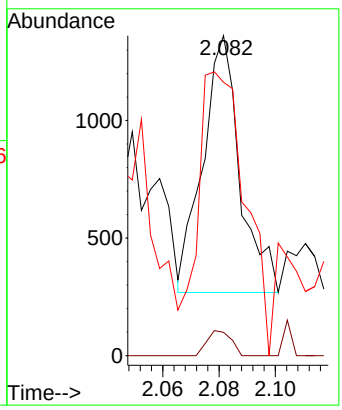


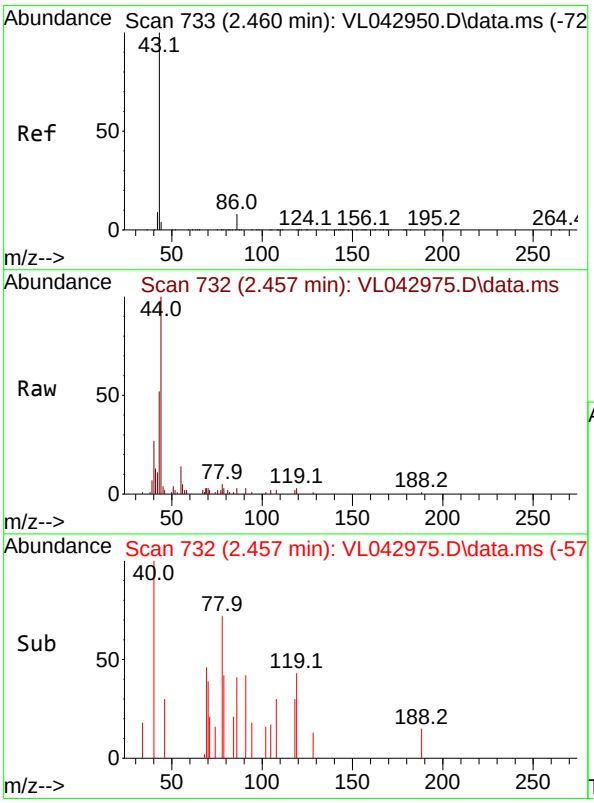
#21
Allyl Chloride
Concen: 0.077 ppbv
RT: 2.082 min Scan# 61
Delta R.T. -0.013 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 41 Resp: 1000

Ion	Ratio	Lower	Upper
41	100		
76	6.3	22.3	33.5#
39	118.5	61.3	91.9#

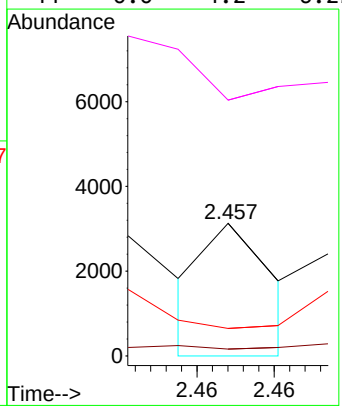


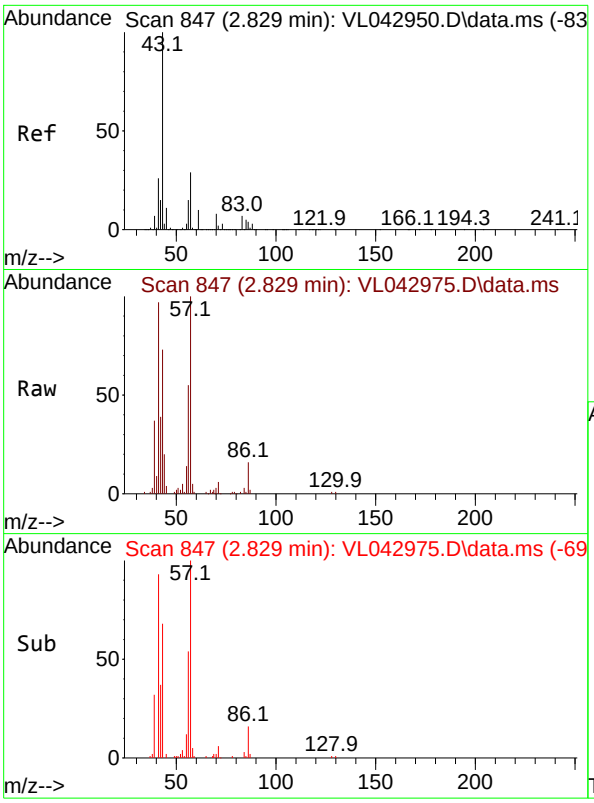


#23
Vinyl Acetate
Concen: 0.036 ppbv
RT: 2.457 min Scan# 732
Delta R.T. -0.003 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 43 Resp: 953

Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.2	9.2#
42	0.0	7.4	11.0#
44	0.0	4.2	6.2#



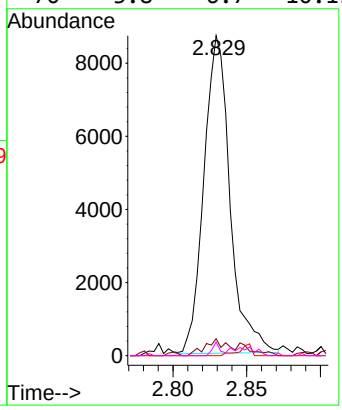


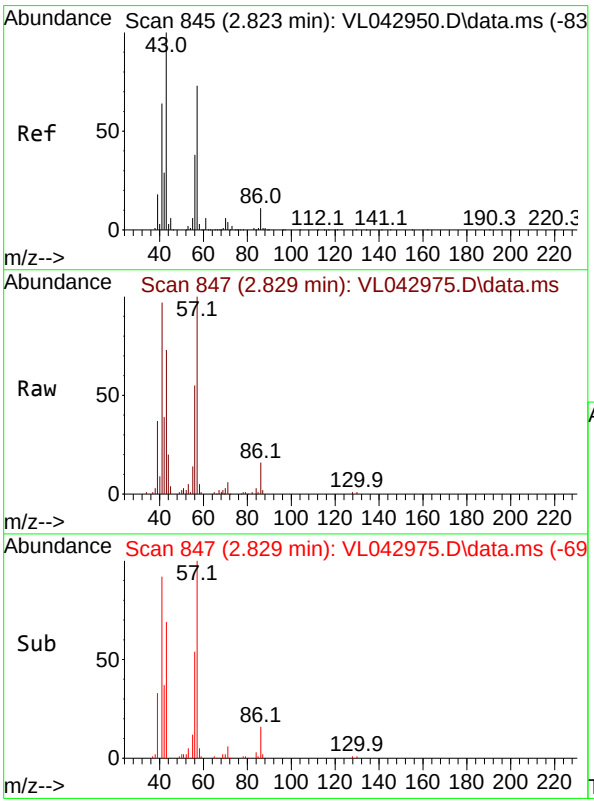
#25
Ethyl Acetate
Concen: 0.228 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 43 Resp: 10733

Ion	Ratio	Lower	Upper
43	100		
45	7.1	7.7	11.5#
61	1.6	7.1	10.7#
70	3.8	6.7	10.1#

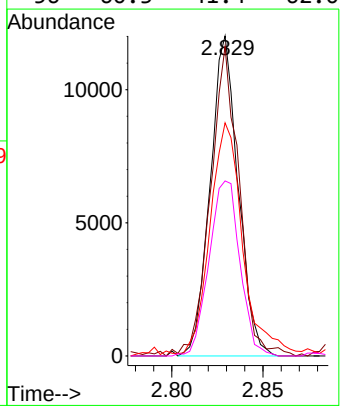


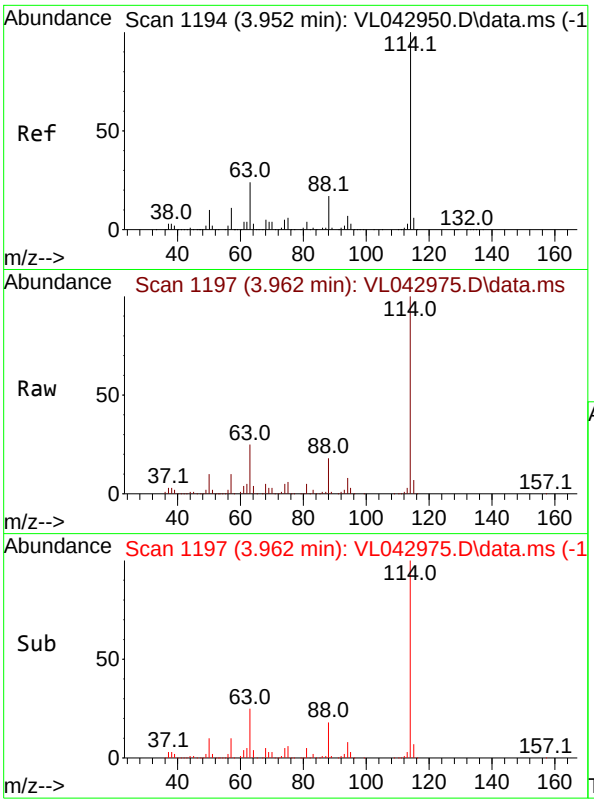


#26
Hexane
Concen: 0.600 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 57 Resp: 12846

Ion	Ratio	Lower	Upper
57	100		
41	97.8	71.7	107.5
43	88.9	180.8	271.2#
56	60.3	41.4	62.0



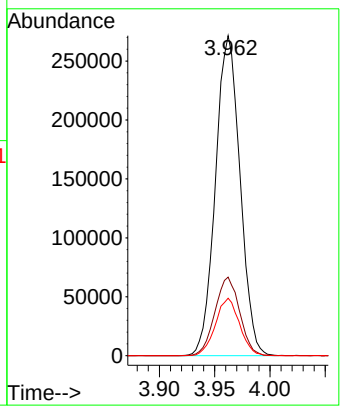


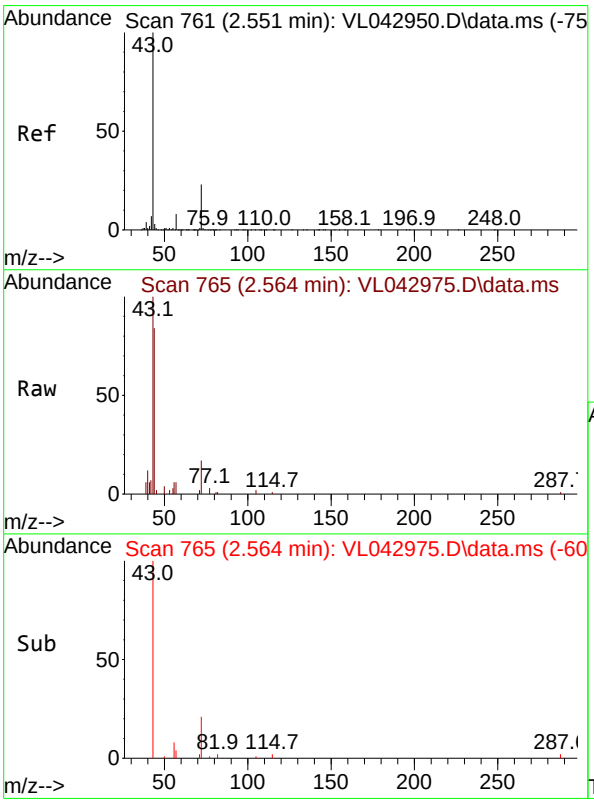
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion:114 Resp: 419987

Ion	Ratio	Lower	Upper
114	100		
63	24.7	19.4	29.2
88	17.7	14.2	21.2

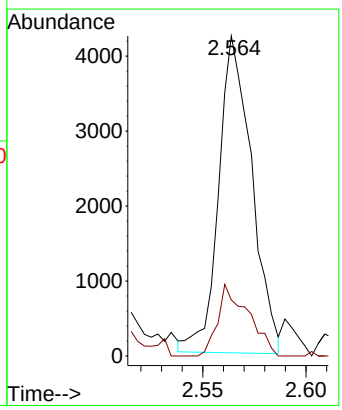


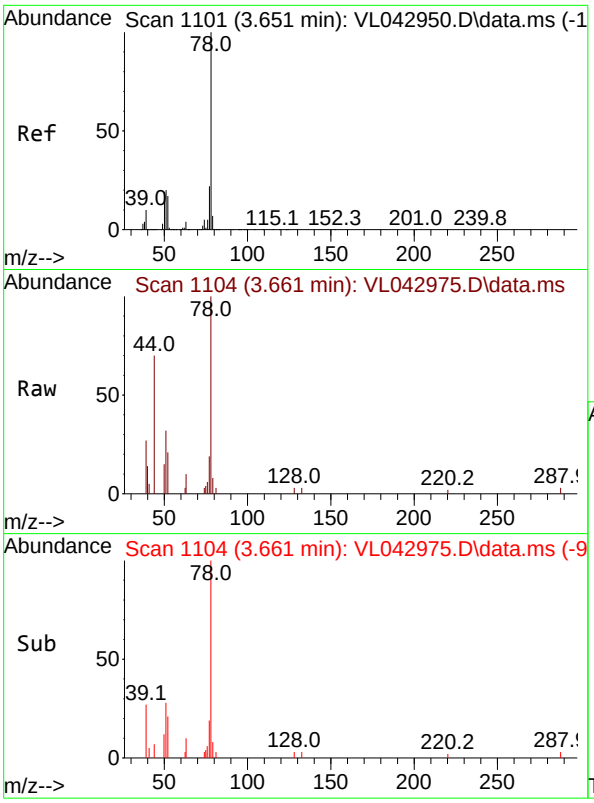


#34
2-Butanone
Concen: 0.160 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.013 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 43 Resp: 4708

Ion	Ratio	Lower	Upper
43	100		
72	20.8	17.7	26.5



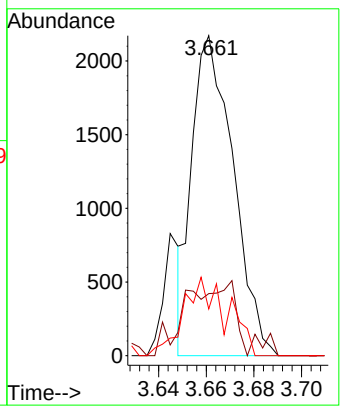


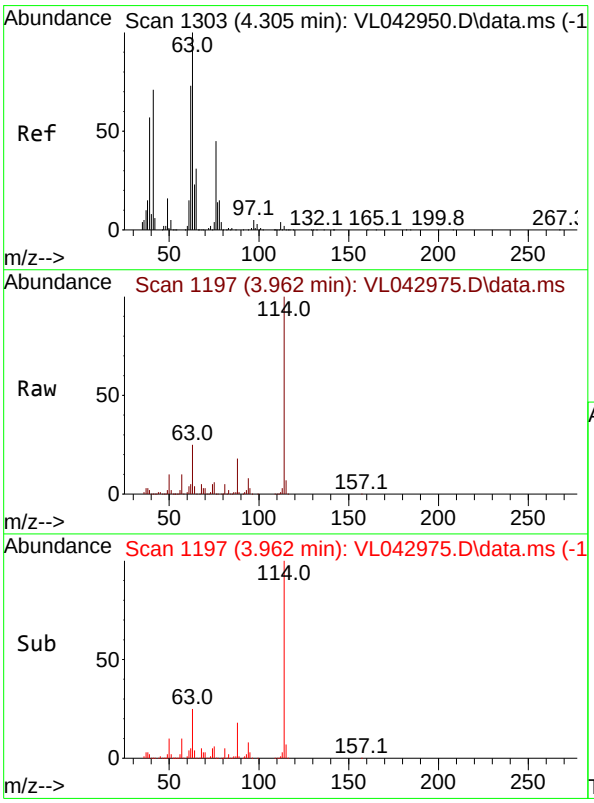
#36
Benzene
Concen: 0.066 ppbv
RT: 3.661 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 78 Resp: 2611

Ion	Ratio	Lower	Upper
78	100		
77	19.4	17.8	26.6
50	14.6	15.0	22.4#

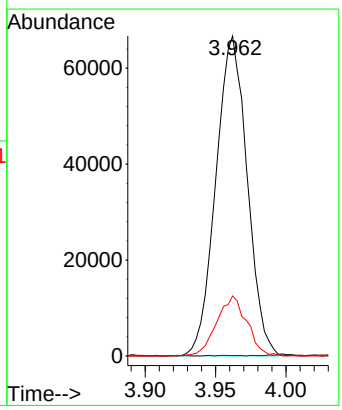


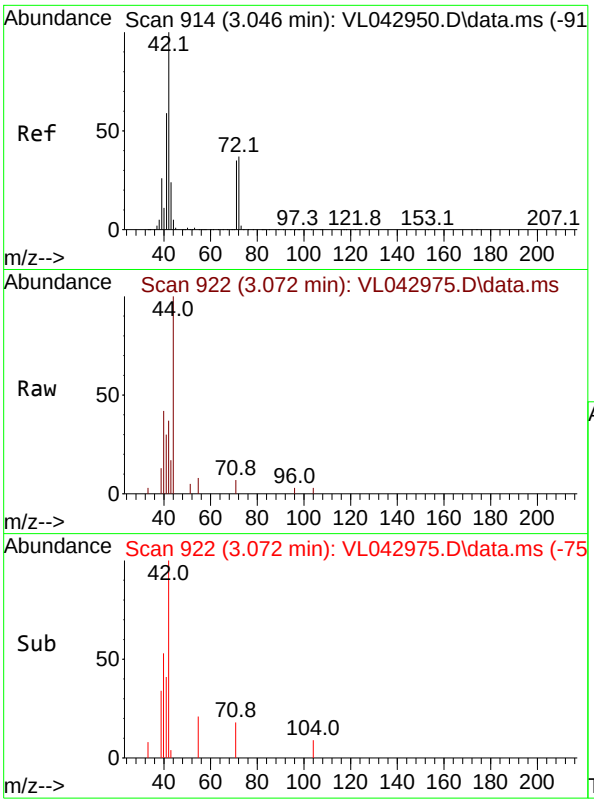


#39
1,2-Dichloropropane
Concen: 7.178 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.343 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 63 Resp: 103352

Ion	Ratio	Lower	Upper
63	100		
41	0.1	57.5	86.3#
62	18.6	58.5	87.7#



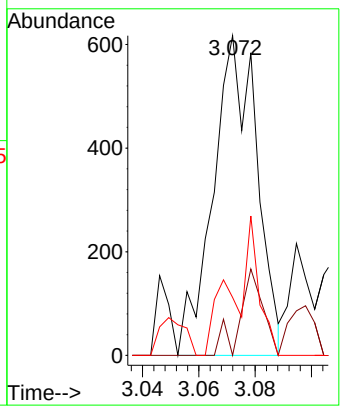


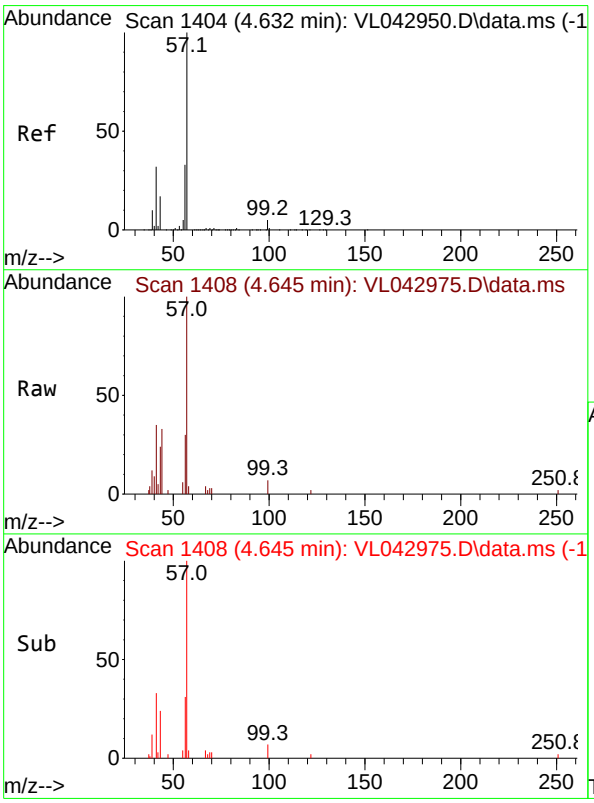
#41
Tetrahydrofuran
Concen: 0.039 ppbv
RT: 3.072 min Scan# 9
Delta R.T. 0.026 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 42 Resp: 663

Ion	Ratio	Lower	Upper
42	100		
72	23.4	30.0	45.0#
71	32.6	28.8	43.2

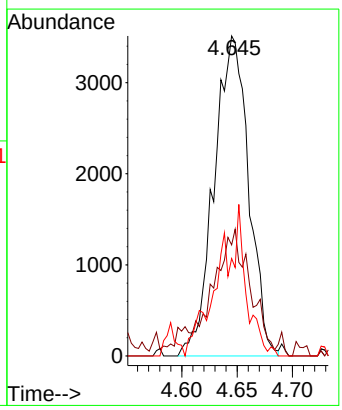


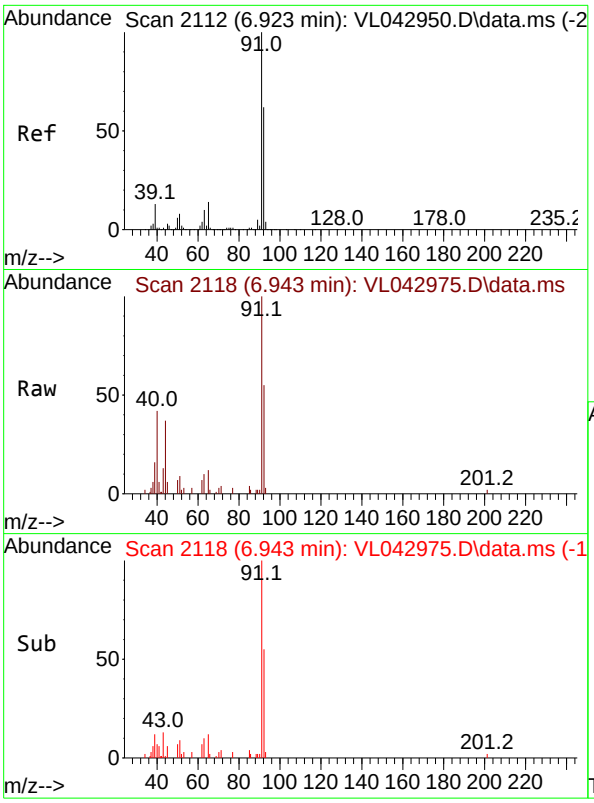


#44
2,2,4-Trimethylpentane
Concen: 0.112 ppbv
RT: 4.645 min Scan# 1408
Delta R.T. 0.013 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 57 Resp: 7639

Ion	Ratio	Lower	Upper
57	100		
41	49.9	25.5	38.3#
56	40.5	25.8	38.8#



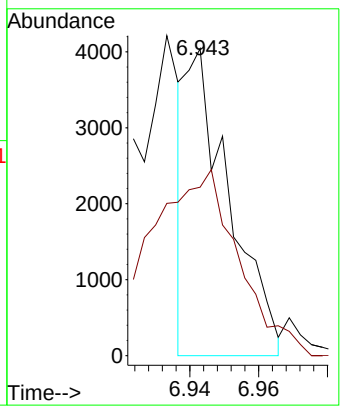


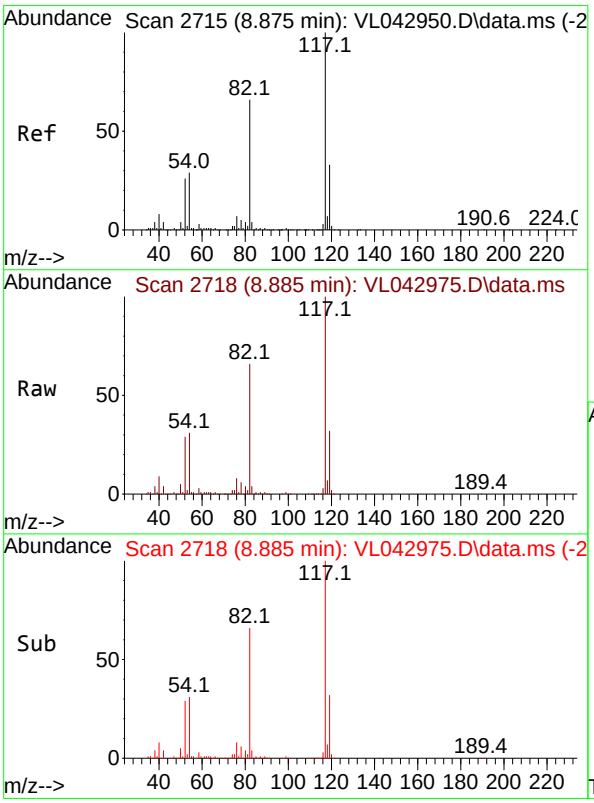
#53
Toluene
Concen: 0.076 ppbv
RT: 6.943 min Scan# 21
Delta R.T. 0.019 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 91 Resp: 3546

Ion	Ratio	Lower	Upper
91	100		
92	132.5	48.2	72.2#

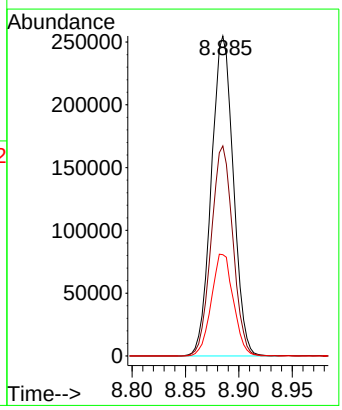


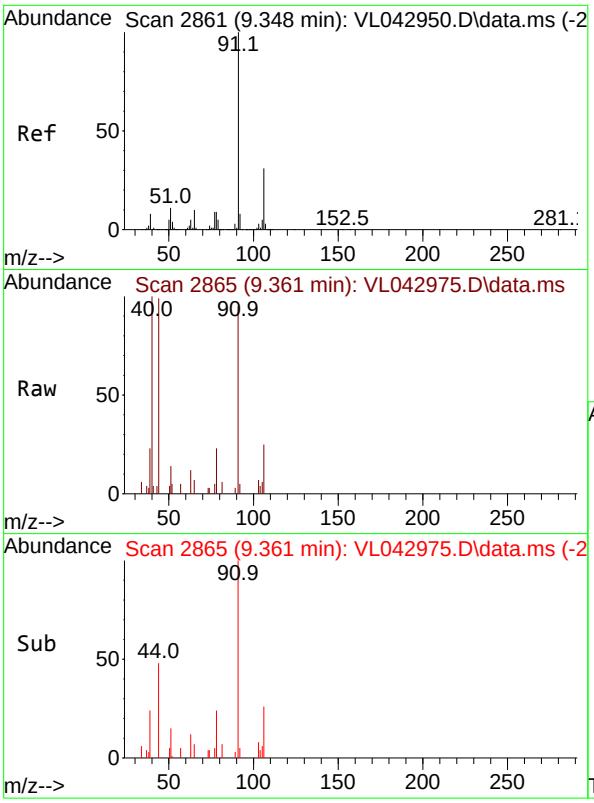


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion:117 Resp: 364182

Ion	Ratio	Lower	Upper
117	100		
82	65.0	52.8	79.2
119	32.0	26.5	39.7



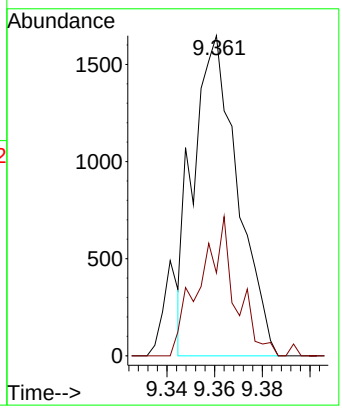


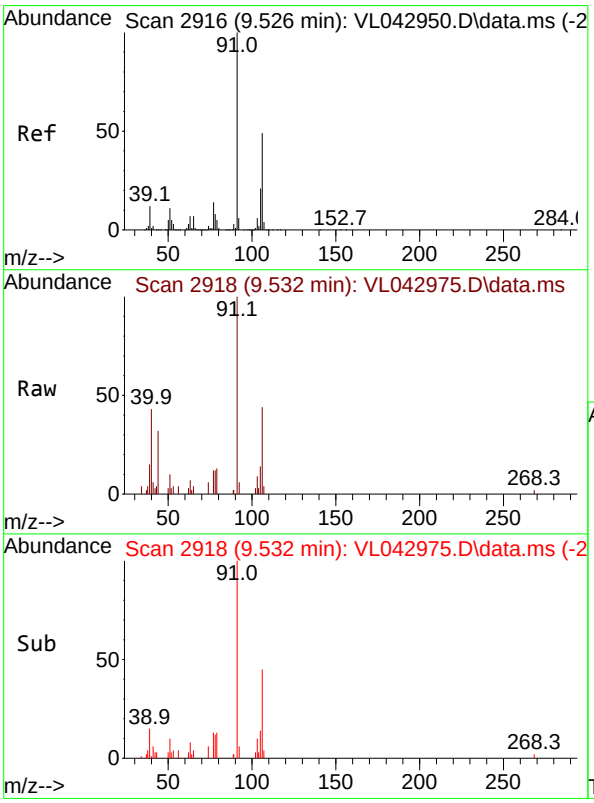
#58
Ethyl Benzene
Concen: 0.036 ppbv
RT: 9.361 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 91 Resp: 2132

Ion	Ratio	Lower	Upper
91	100		
106	25.8	24.6	37.0

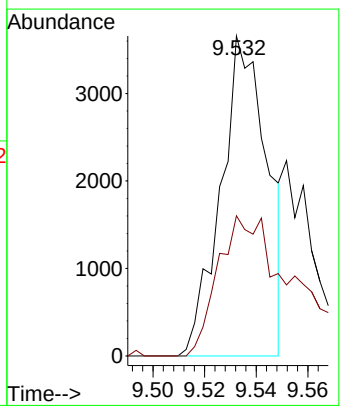


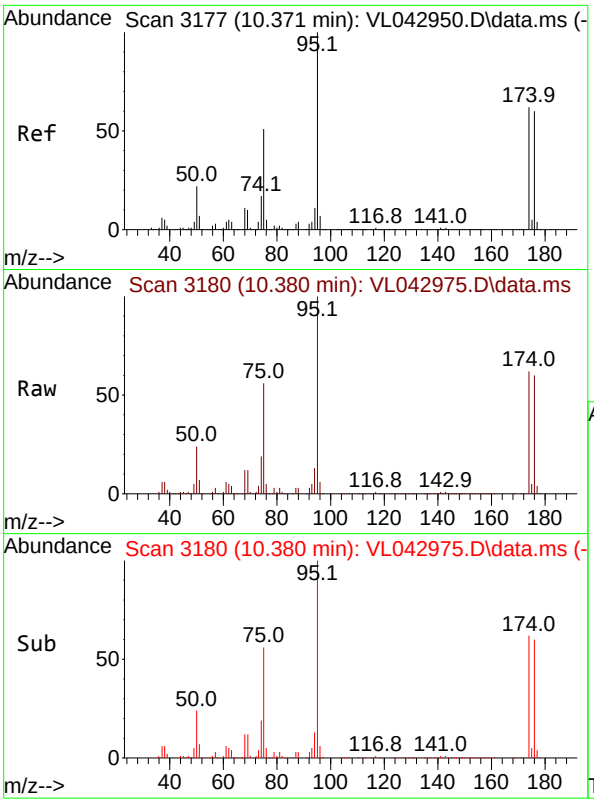


#59
m/p-Xylene
Concen: 0.096 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. 0.007 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion: 91 Resp: 4541

Ion	Ratio	Lower	Upper
91	100		
106	68.9	0.0	0.0#



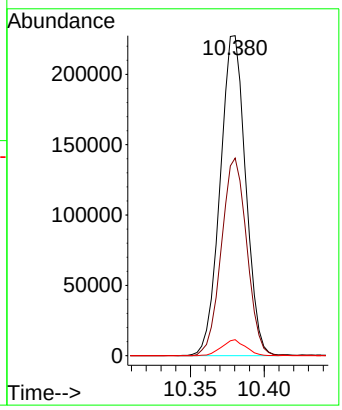


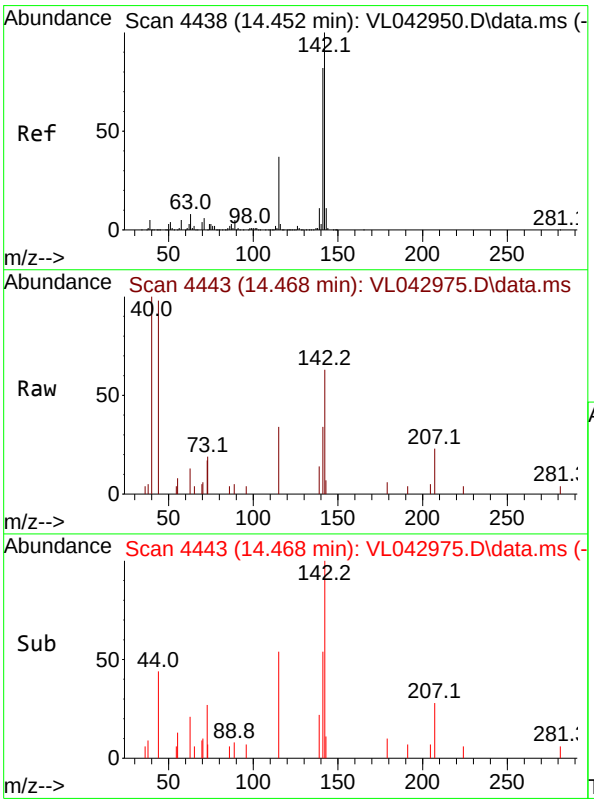
#68
1-Bromo-4-Fluorobenzene
Concen: 10.065 ppbv
RT: 10.380 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Instrument :
MSVOA_L
ClientSampleId :
141-1A-1DL

Tgt Ion: 95 Resp: 273620

Ion	Ratio	Lower	Upper
95	100		
174	61.6	51.4	77.2
175	4.7	4.0	6.0

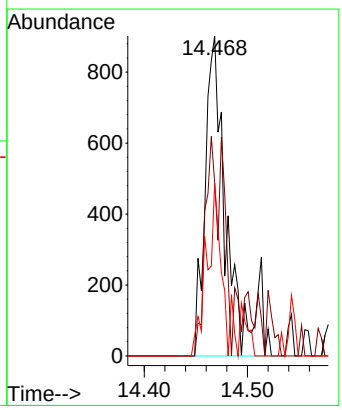




#80
Naphthalene,2-methyl-
Concen: 0.092 ppbv
RT: 14.468 min Scan# 4443
Delta R.T. 0.016 min
Lab File: VL042975.D
Acq: 23 Sep 2025 01:46

Tgt Ion:142 Resp: 1323

Ion	Ratio	Lower	Upper
142	100		
141	79.4	65.1	97.7
115	37.8	28.9	43.3



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042976.D
Acq On : 23 Sep 2025 02:22
Operator : SY/MD
Sample : Q3131-02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Quant Time: Sep 24 01:13:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	142688	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	412064	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	367269	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	280234	10.222	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	72159	3.760	ppbv		94
3) Chlorodifluoromethane	1.845	51	6111	0.255	ppbv		100
4) Chloromethane	1.531	50	3494	0.402	ppbv		94
8) Dichlorotetrafluoroethane	1.499	85	72159	4.404	ppbv	#	20
9) Propene	1.560	41	24089	2.315	ppbv		91
10) Heptane	4.985	43	8170	0.294	ppbv	#	67
11) Trichlorofluoromethane	1.877	101	7922	0.428	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.140	101	959	0.064	ppbv	#	82
13) Ethanol	1.722	45	128905	127.697	ppbv		96
15) Acetone	1.835	43	521311	28.051	ppbv	#	80
16) 1,3-Butadiene	1.599	39	1554	0.177	ppbv	#	11
17) tert-Butyl alcohol	2.046	59	5375	0.264	ppbv	#	72
19) Isopropyl Alcohol	1.887	45	23113	2.069	ppbv	#	1
20) Methylene Chloride	2.062	84	7540	0.741	ppbv	#	92
21) Allyl Chloride	2.078	41	7453	0.576	ppbv	#	1
23) Vinyl Acetate	2.473	43	137153	5.166	ppbv	#	45
25) Ethyl Acetate	2.826	43	108543	2.311	ppbv	#	84
26) Hexane	2.826	57	143051	6.681	ppbv	#	42
27) Carbon Disulfide	2.153	76	893	0.047	ppbv	#	1
29) Chloroform	2.852	83	1772	0.063	ppbv		99
30) Cyclohexane	3.858	84	9777	0.546	ppbv		88
34) 2-Butanone	2.557	43	41609	1.441	ppbv		98
35) Carbon Tetrachloride	3.761	117	1325	0.049	ppbv	#	75
36) Benzene	3.658	78	27676	0.715	ppbv	#	91
37) 1,2-Dichloroethane	3.221	62	4116	0.202	ppbv		99
39) 1,2-Dichloropropane	3.959	63	104475	7.396	ppbv	#	24
41) Tetrahydrofuran	3.059	42	2175	0.131	ppbv	#	11
44) 2,2,4-Trimethylpentane	4.641	57	84058	1.258	ppbv	#	89
53) Toluene	6.936	91	92307	2.015	ppbv		100
58) Ethyl Benzene	9.357	91	26614	0.441	ppbv		95
59) m/p-Xylene	9.532	91	80258	1.688	ppbv	#	100
60) o-Xylene	9.966	91	28894	0.608	ppbv		99
61) Styrene	9.869	104	5085	0.226	ppbv		95
65) tert-Butylbenzene	11.539	119	1987	0.032	ppbv	#	33
69) p-Isopropyltoluene	11.924	119	3458	0.047	ppbv	#	87
71) 2-Chlorotoluene	10.856	91	10436	0.195	ppbv	#	44
72) 4-Ethyltoluene	11.121	105	4364	0.073	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.202	105	4817	0.100	ppbv		90
74) 1,2,4-Trimethylbenzene	11.536	105	15499	0.291	ppbv	#	66
79) Naphthalene	13.513	128	4568	0.097	ppbv	#	94
80) Naphthalene,2-methyl-	14.458	142	4342	0.298	ppbv		94
81) 1,2,4-Trichlorobenzene	13.445	180	796	0.032	ppbv	#	88

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042976.D
Acq On : 23 Sep 2025 02:22
Operator : SY/MD
Sample : Q3131-02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Quant Time: Sep 24 01:13:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

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

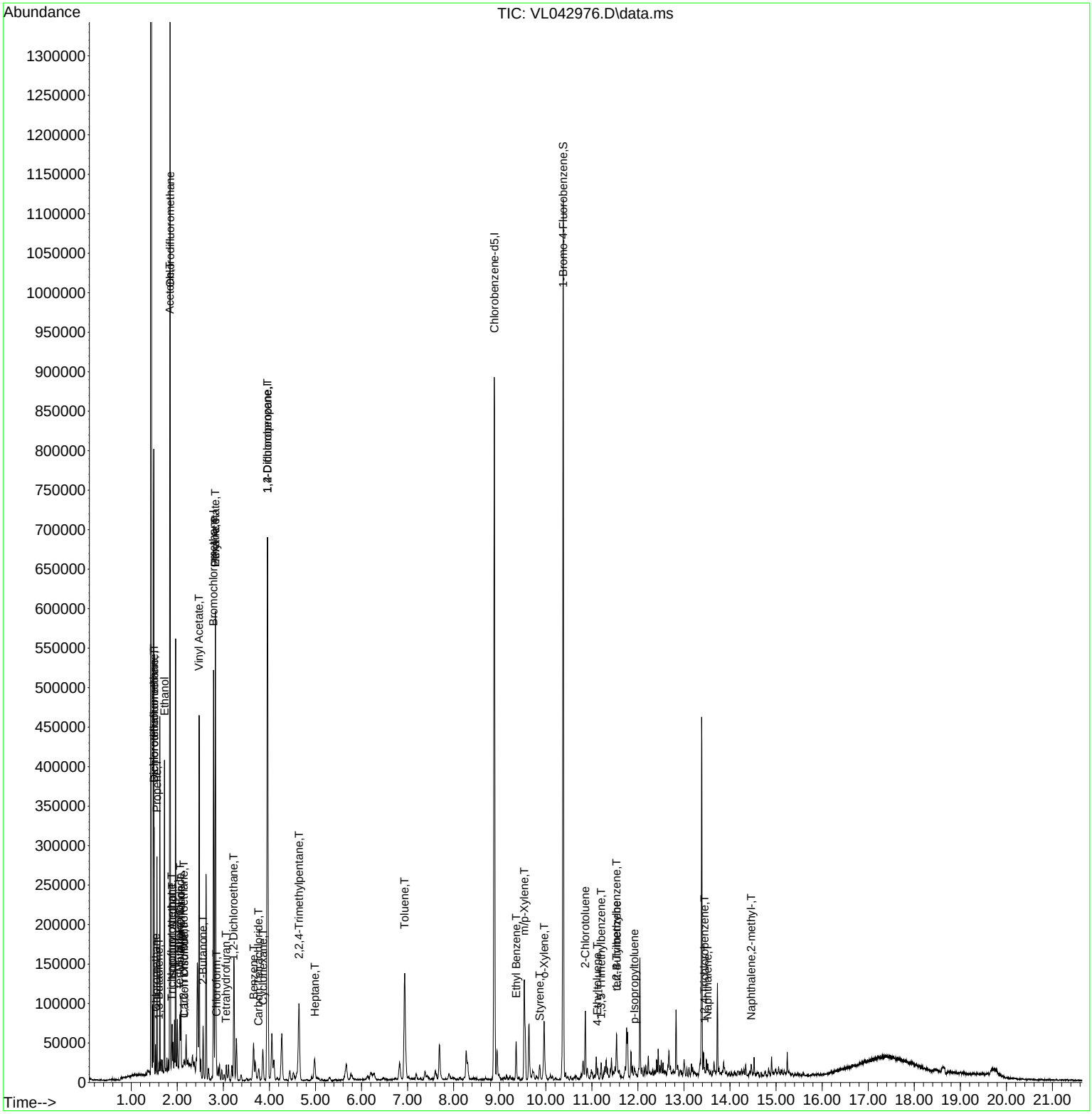
(#) = qualifier out of range (m) = manual integration (+) = signals summed

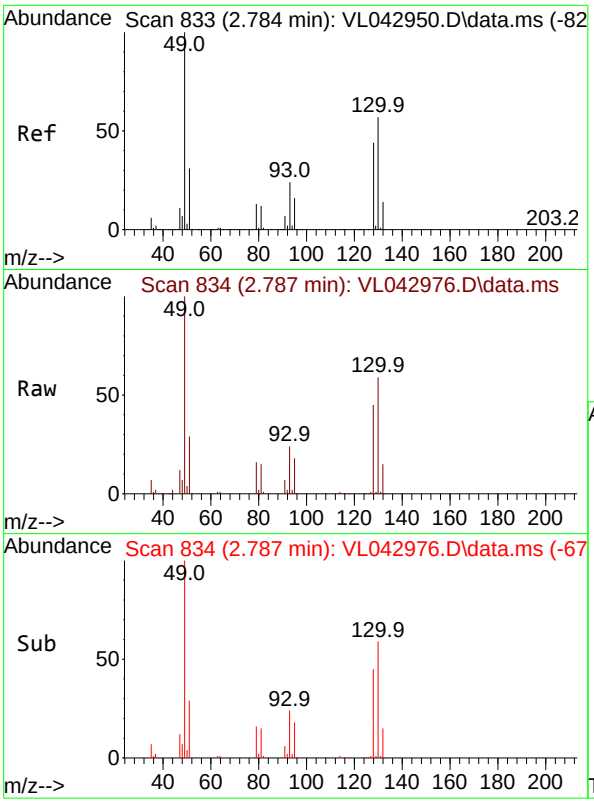
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042976.D
Acq On : 23 Sep 2025 02:22
Operator : SY/MD
Sample : Q3131-02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Quant Time: Sep 24 01:13:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



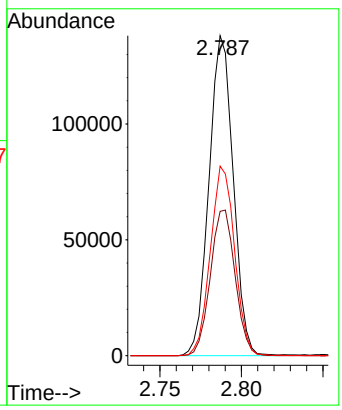


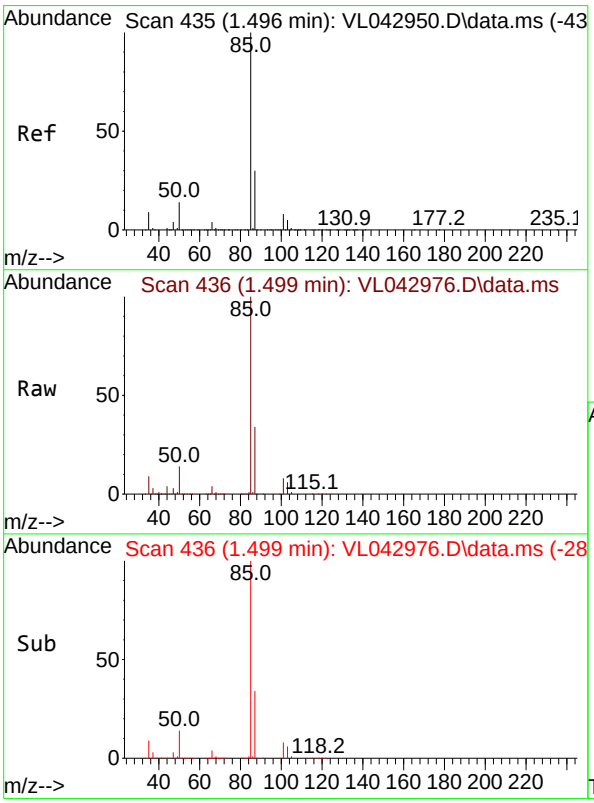
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 49 Resp: 142688

Ion	Ratio	Lower	Upper
49	100		
128	46.5	22.9	68.8
130	59.3	29.1	87.3

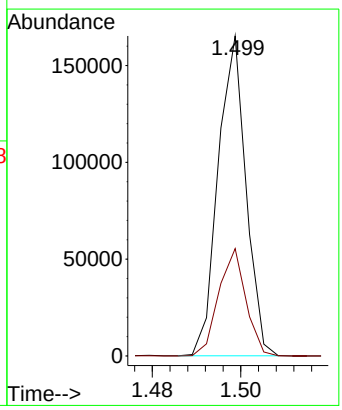


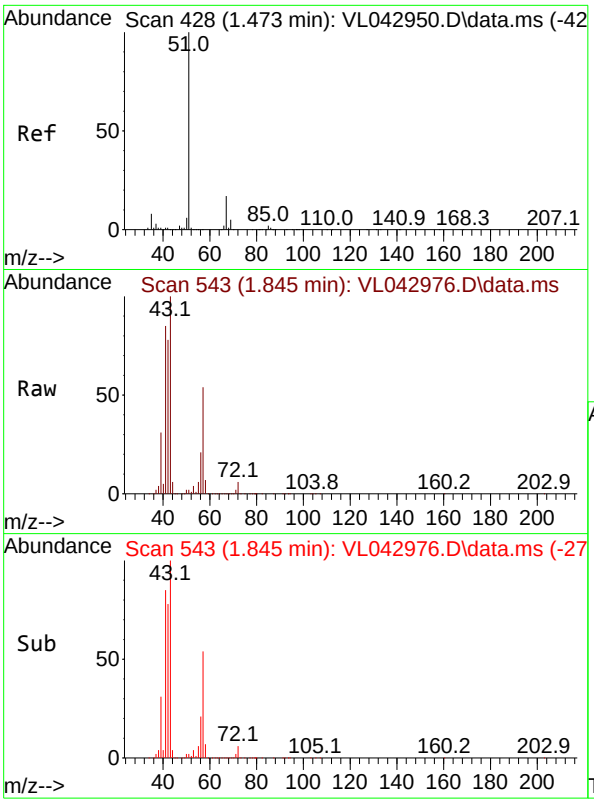


#2
Dichlorodifluoromethane
Concen: 3.760 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 85 Resp: 72159

Ion	Ratio	Lower	Upper
85	100		
87	33.6	24.3	36.5



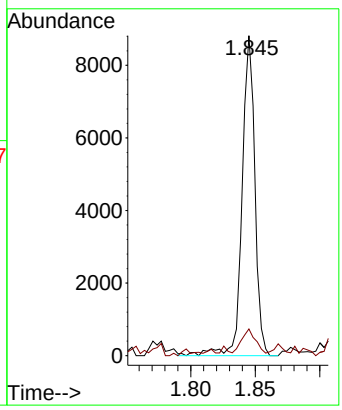


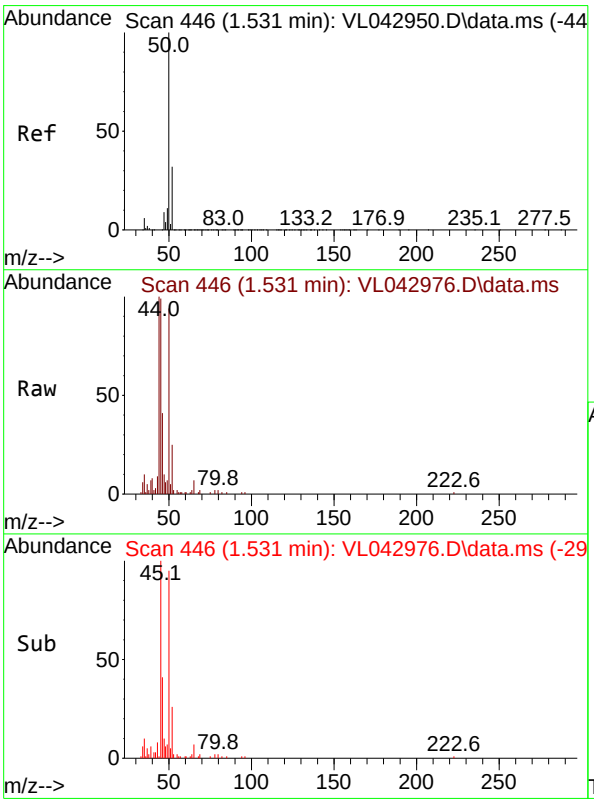
#3
Chlorodifluoromethane
Concen: 0.255 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.372 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 51 Resp: 6111

Ion	Ratio	Lower	Upper
51	100		
67	17.5	13.8	20.8

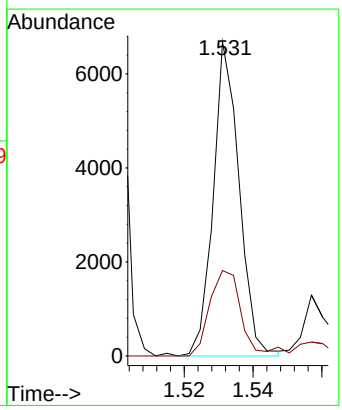


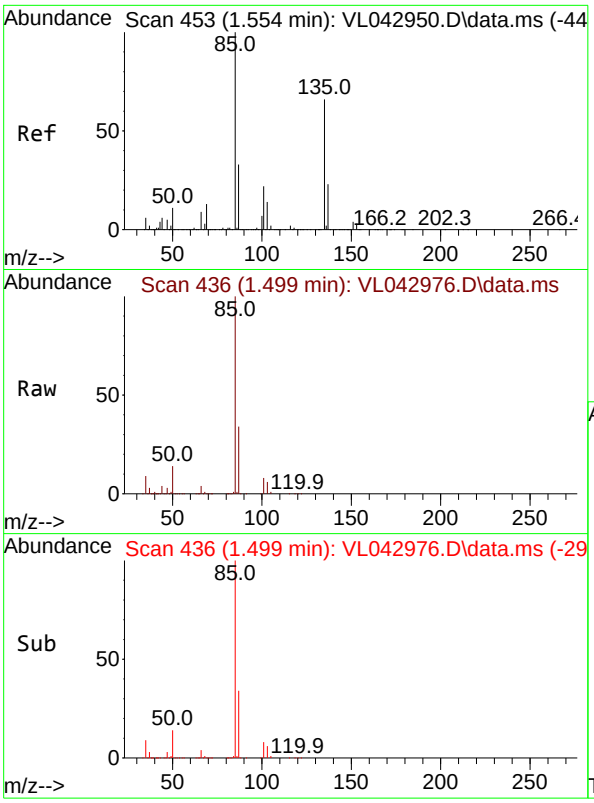


#4
Chloromethane
Concen: 0.402 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 50 Resp: 3494

Ion	Ratio	Lower	Upper
50	100		
52	29.2	25.9	38.9



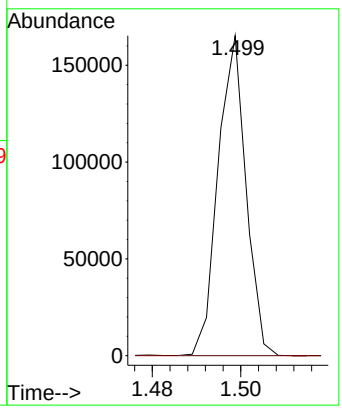


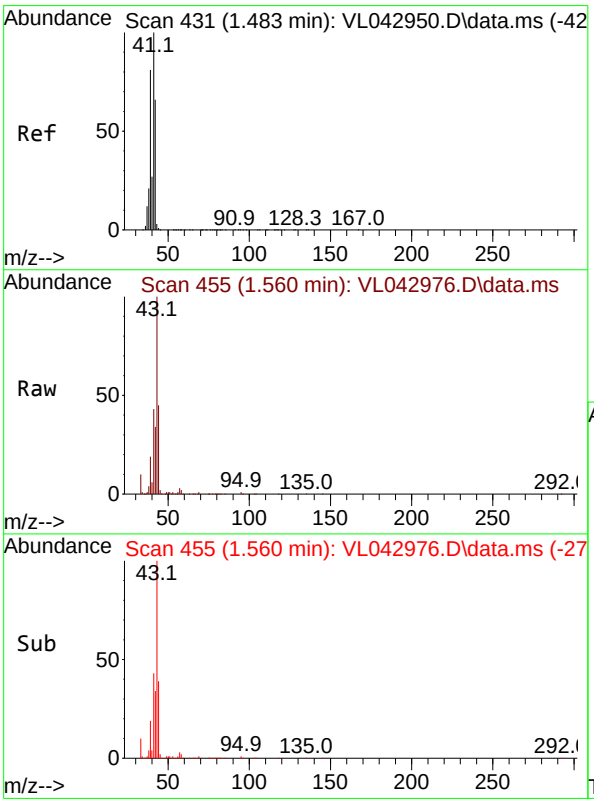
#8
Dichlorotetrafluoroethane
Concen: 4.404 ppbv
RT: 1.499 min Scan# 4
Delta R.T. -0.055 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 85 Resp: 72159

Ion	Ratio	Lower	Upper
85	100		
135	0.4	49.7	74.5#

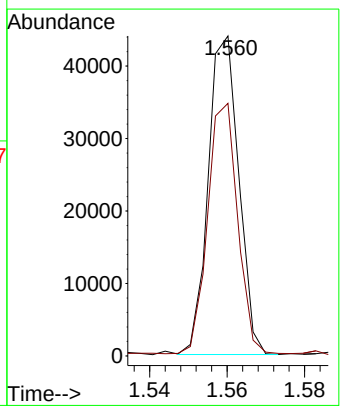


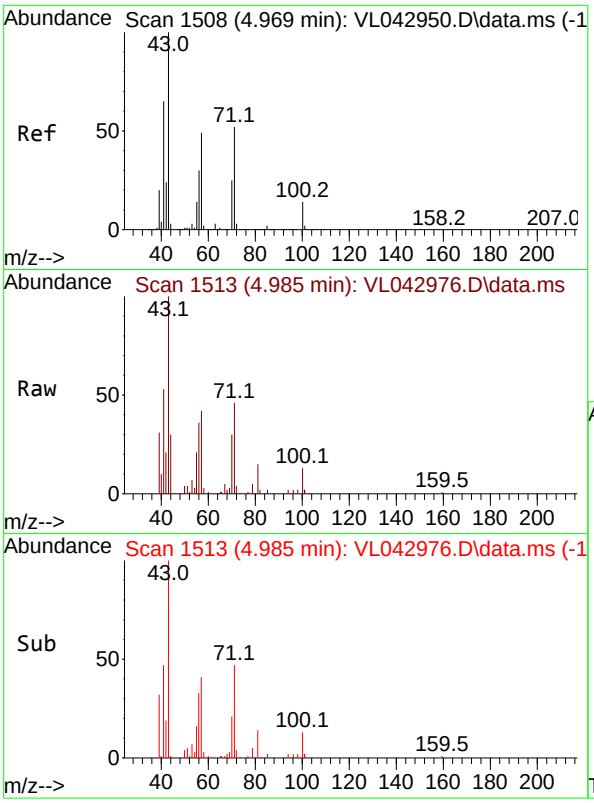


#9
Propene
Concen: 2.315 ppbv
RT: 1.560 min Scan# 455
Delta R.T. 0.077 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 41 Resp: 24089

Ion	Ratio	Lower	Upper
41	100		
42	79.1	57.4	86.2



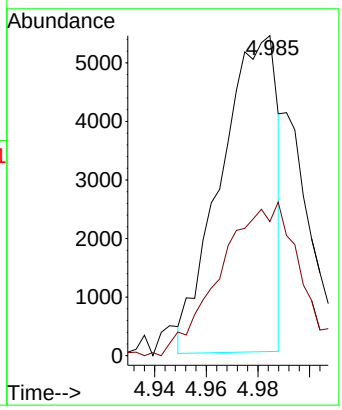


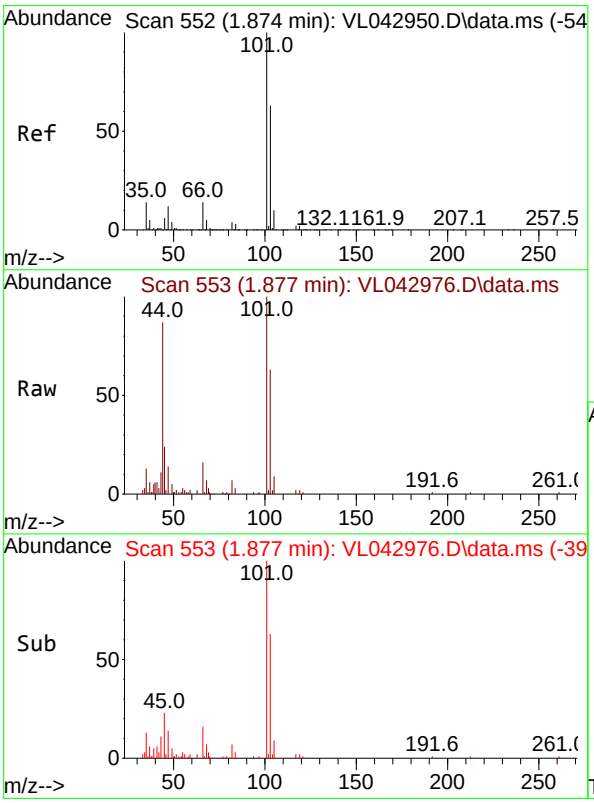
#10
Heptane
Concen: 0.294 ppbv
RT: 4.985 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 43 Resp: 8170

Ion	Ratio	Lower	Upper
43	100		
57	70.6	38.6	57.8#

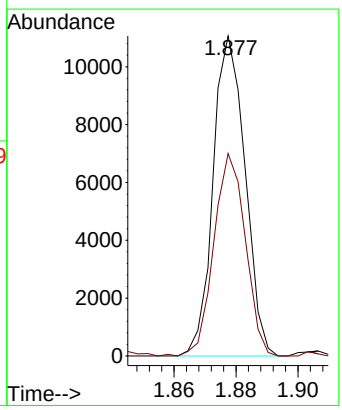


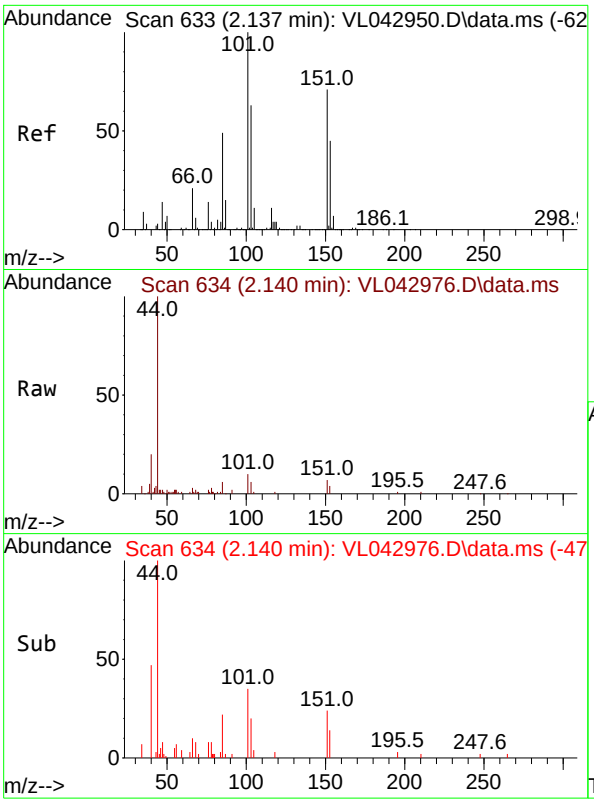


#11
Trichlorofluoromethane
Concen: 0.428 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:101 Resp: 7922

Ion	Ratio	Lower	Upper
101	100		
103	63.3	50.1	75.1



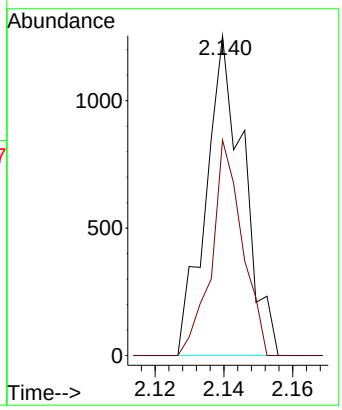


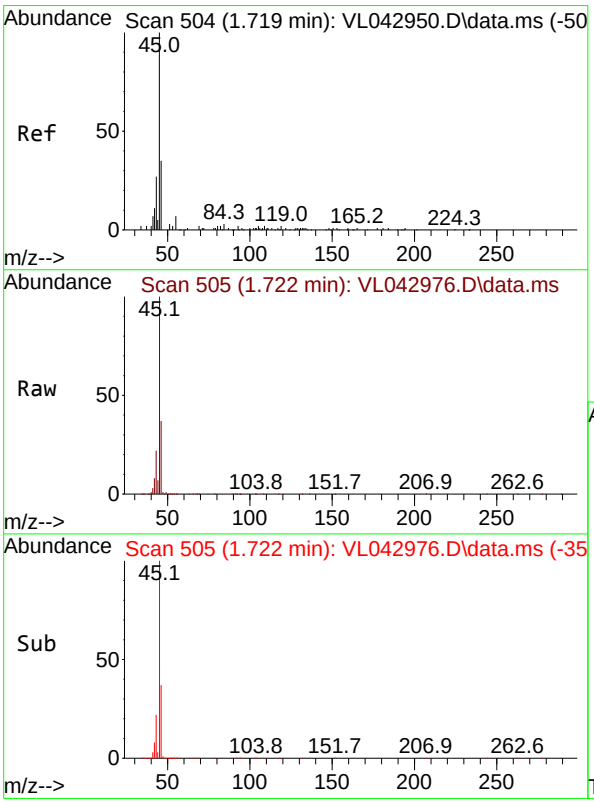
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.064 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:101 Resp: 959

Ion	Ratio	Lower	Upper
101	100		
151	54.6	55.7	83.5#

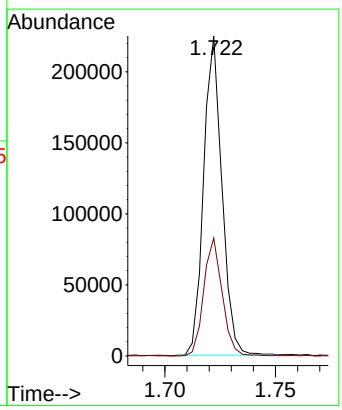


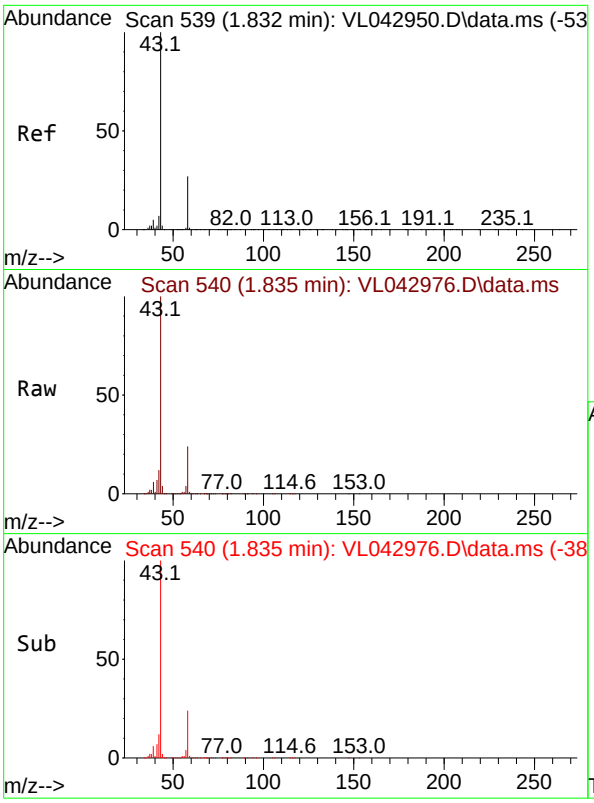


#13
Ethanol
Concen: 127.697 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 45 Resp: 128905

Ion	Ratio	Lower	Upper
45	100		
46	37.7	16.2	64.6



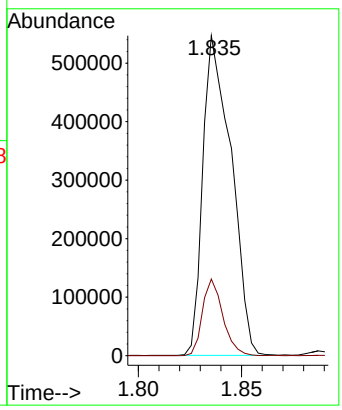


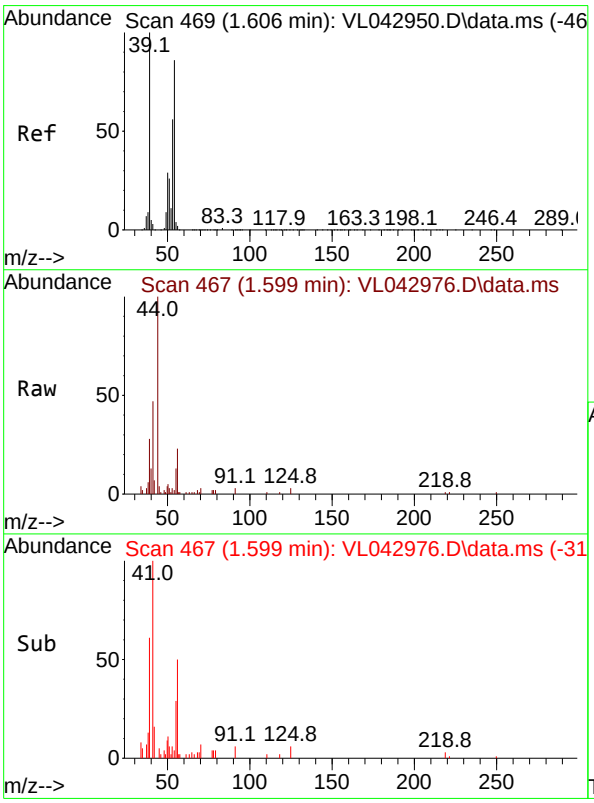
#15
Acetone
Concen: 28.051 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 43 Resp: 521311

Ion	Ratio	Lower	Upper
43	100		
58	17.3	22.3	33.5#

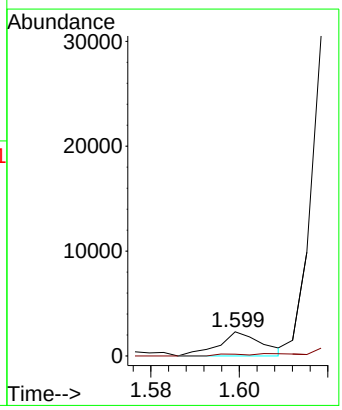


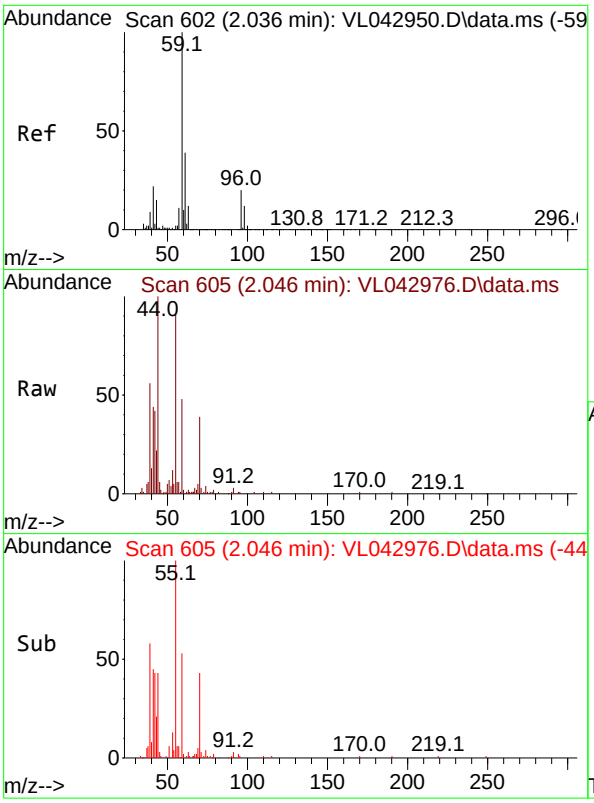


#16
1,3-Butadiene
Concen: 0.177 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 39 Resp: 1554

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.8	91.2#



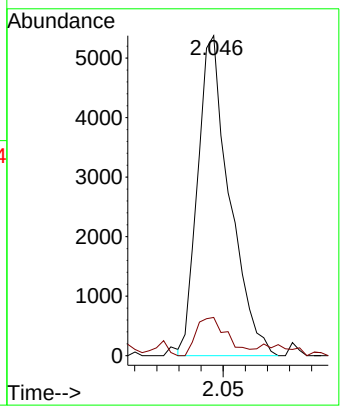


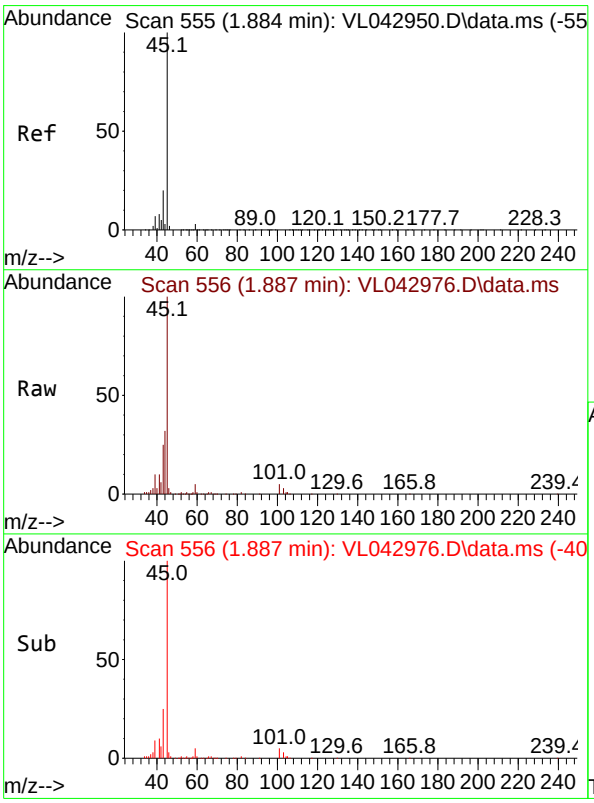
#17
tert-Butyl alcohol
Concen: 0.264 ppbv
RT: 2.046 min Scan# 6
Delta R.T. 0.010 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 59 Resp: 5375

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.6	12.8#

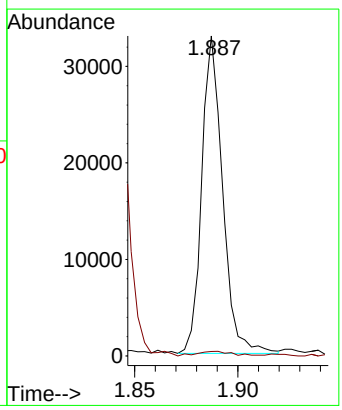


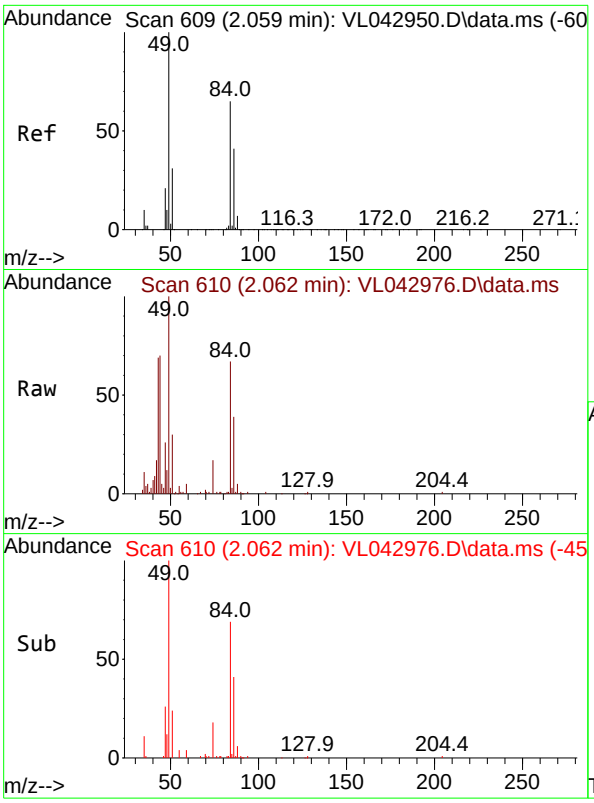


#19
Isopropyl Alcohol
Concen: 2.069 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 45 Resp: 23113

Ion	Ratio	Lower	Upper
45	100		
58	390.5	31.0	46.6#



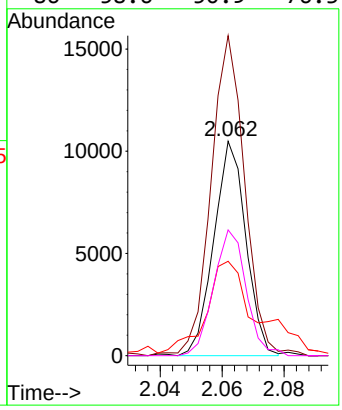


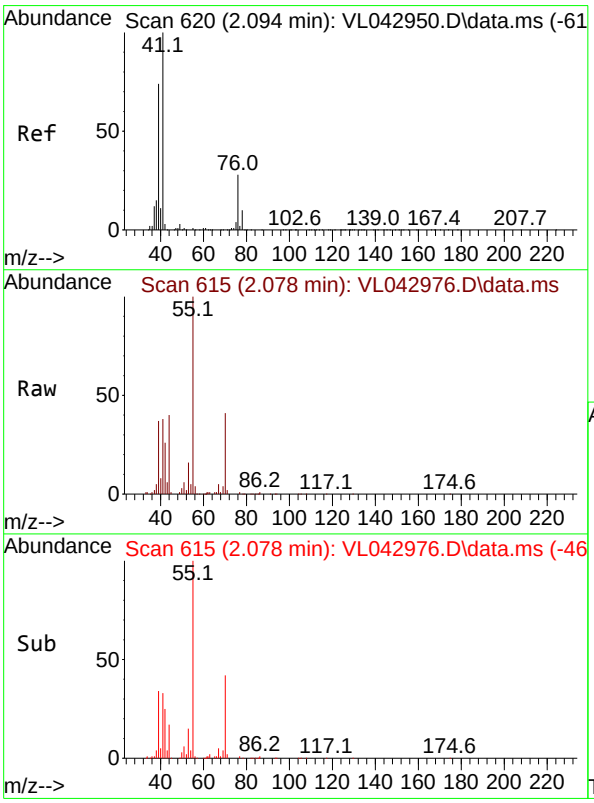
#20
Methylene Chloride
Concen: 0.741 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 84 Resp: 7540

Ion	Ratio	Lower	Upper
84	100		
49	148.0	124.1	186.1
51	37.0	39.8	59.8#
86	58.6	50.9	76.3

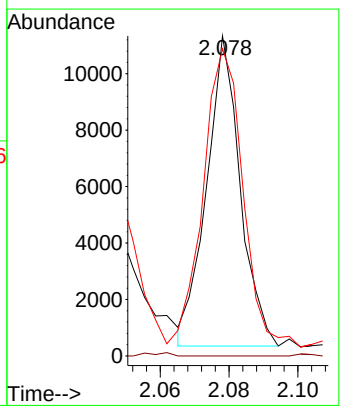


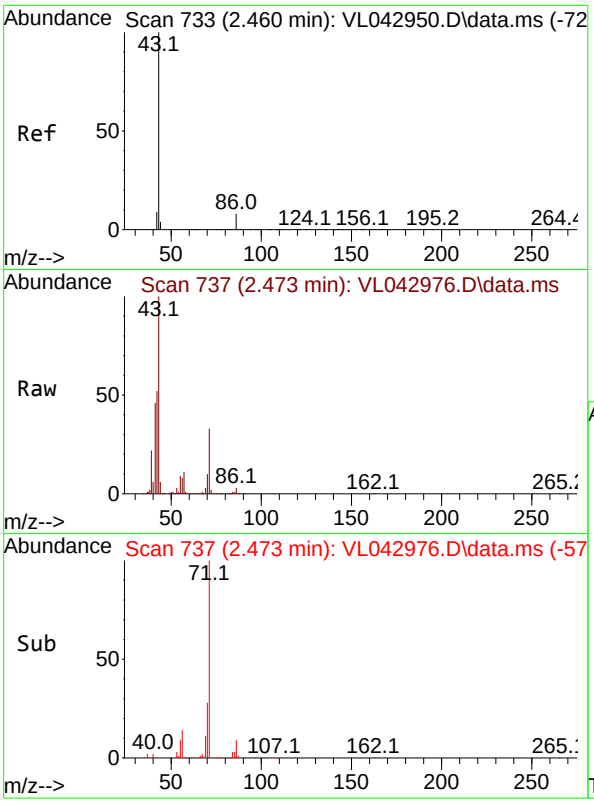


#21
Allyl Chloride
Concen: 0.576 ppbv
RT: 2.078 min Scan# 615
Delta R.T. -0.016 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 41 Resp: 7453

Ion	Ratio	Lower	Upper
41	100		
76	0.9	22.3	33.5#
39	185.1	61.3	91.9#



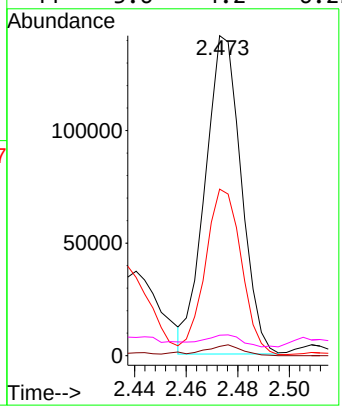


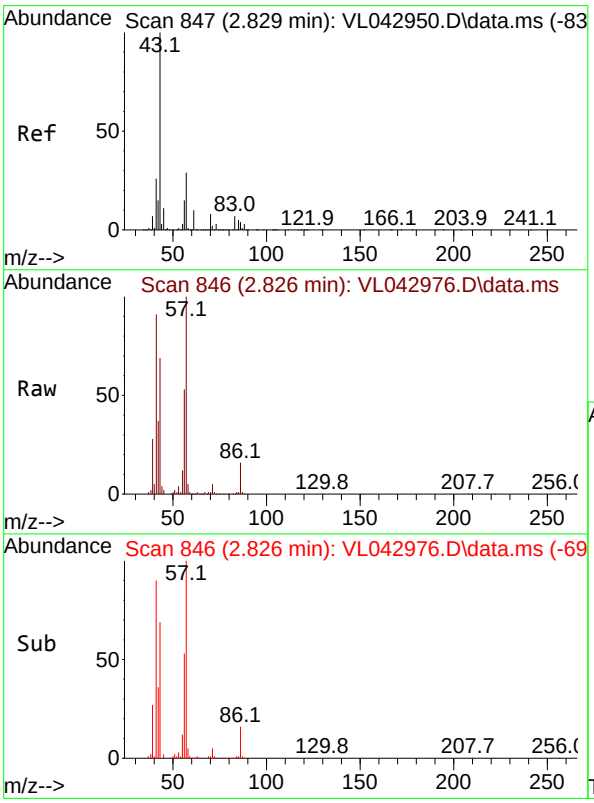
#23
Vinyl Acetate
Concen: 5.166 ppbv
RT: 2.473 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 43 Resp: 137153

Ion	Ratio	Lower	Upper
43	100		
86	2.9	6.2	9.2#
42	52.2	7.4	11.0#
44	3.6	4.2	6.2#

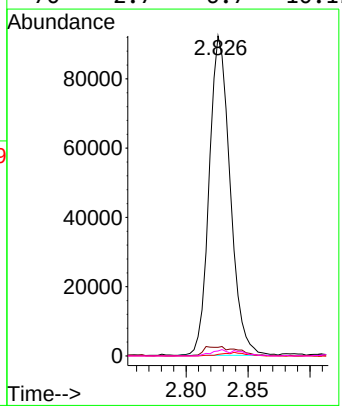


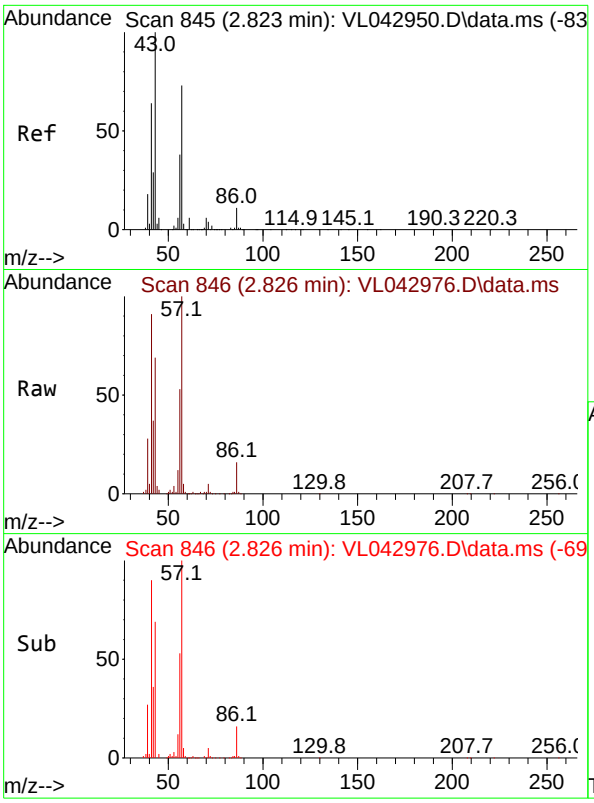


#25
Ethyl Acetate
Concen: 2.311 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 43 Resp: 108543

Ion	Ratio	Lower	Upper
43	100		
45	5.0	7.7	11.5#
61	1.3	7.1	10.7#
70	2.7	6.7	10.1#



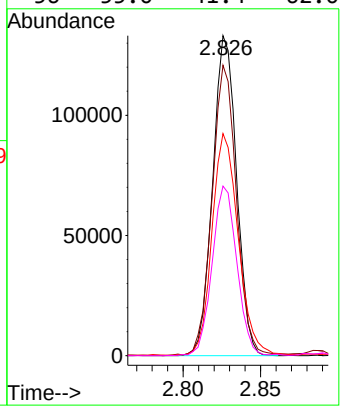


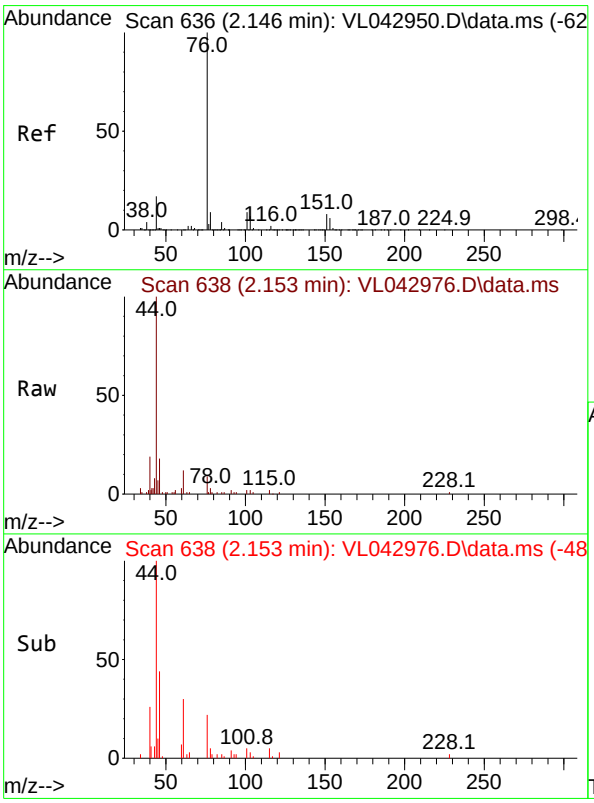
#26
Hexane
Concen: 6.681 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 57 Resp: 143051

Ion	Ratio	Lower	Upper
57	100		
41	92.8	71.7	107.5
43	77.0	180.8	271.2#
56	55.0	41.4	62.0

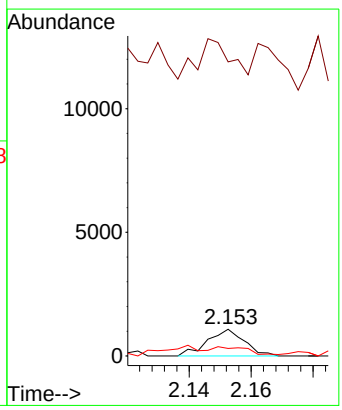


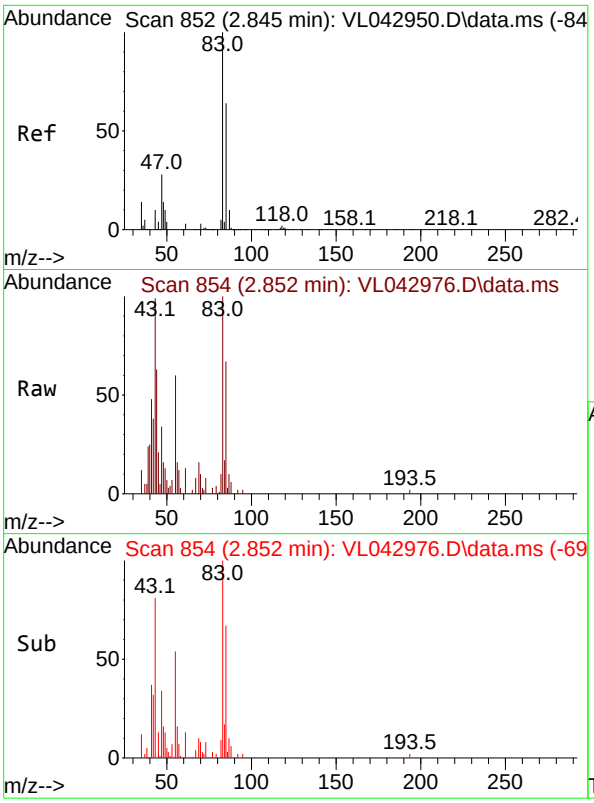


#27
Carbon Disulfide
Concen: 0.047 ppbv
RT: 2.153 min Scan# 638
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 76 Resp: 893

Ion	Ratio	Lower	Upper
76	100		
44	0.0	15.6	23.4#
78	97.5	8.9	13.3#



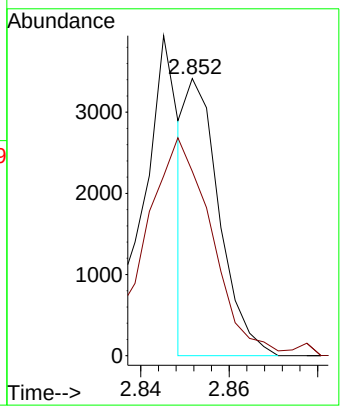


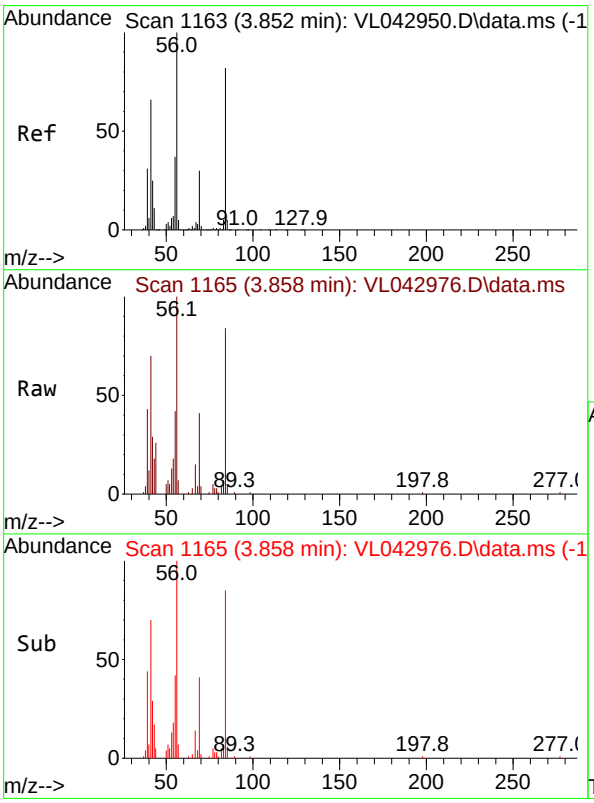
#29
Chloroform
Concen: 0.063 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 83 Resp: 1772

Ion	Ratio	Lower	Upper
83	100		
85	64.8	51.2	76.8

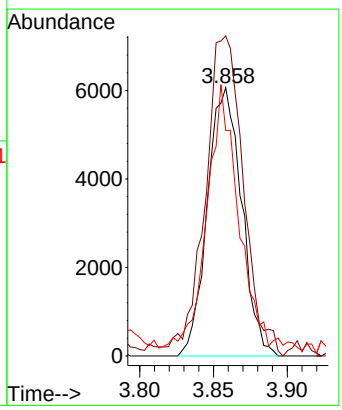


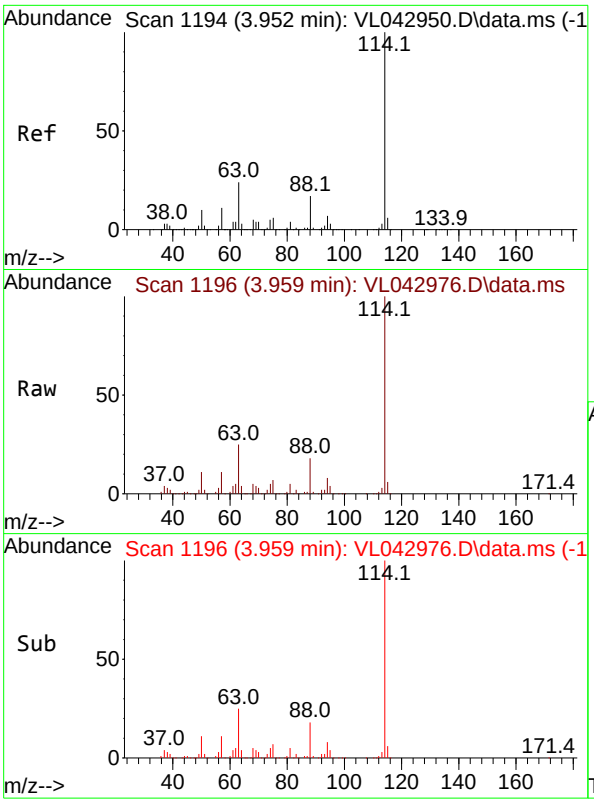


#30
Cyclohexane
Concen: 0.546 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 84 Resp: 9777

Ion	Ratio	Lower	Upper
84	100		
56	136.2	102.2	153.4
41	98.1	65.6	98.4



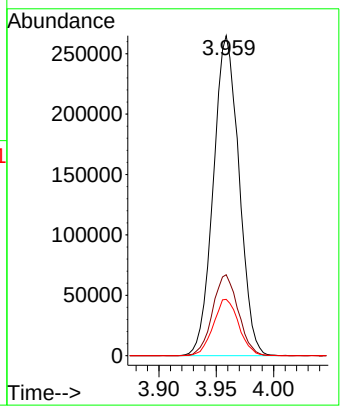


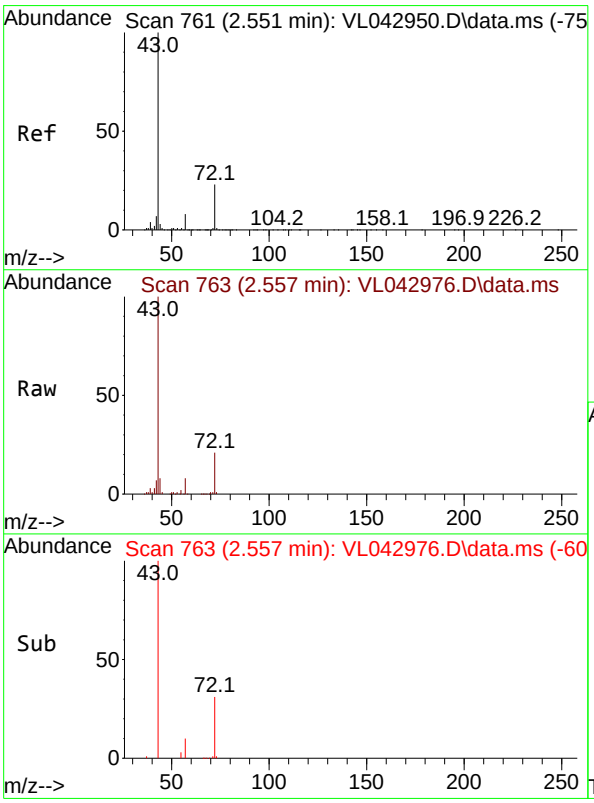
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:114 Resp: 412064

Ion	Ratio	Lower	Upper
114	100		
63	25.4	19.4	29.2
88	17.5	14.2	21.2

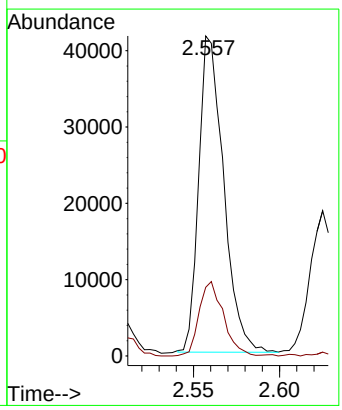


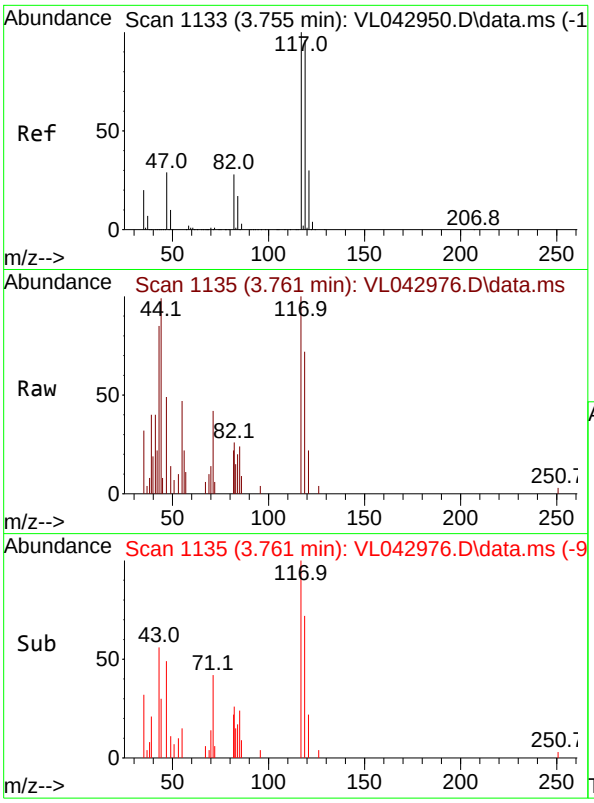


#34
2-Butanone
Concen: 1.441 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 43 Resp: 41609

Ion	Ratio	Lower	Upper
43	100		
72	23.2	17.7	26.5



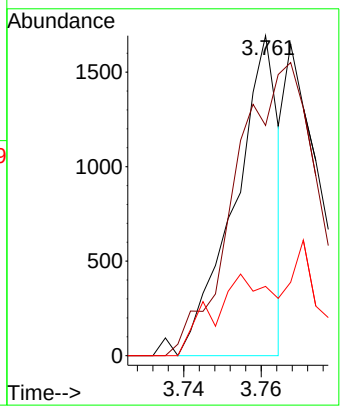


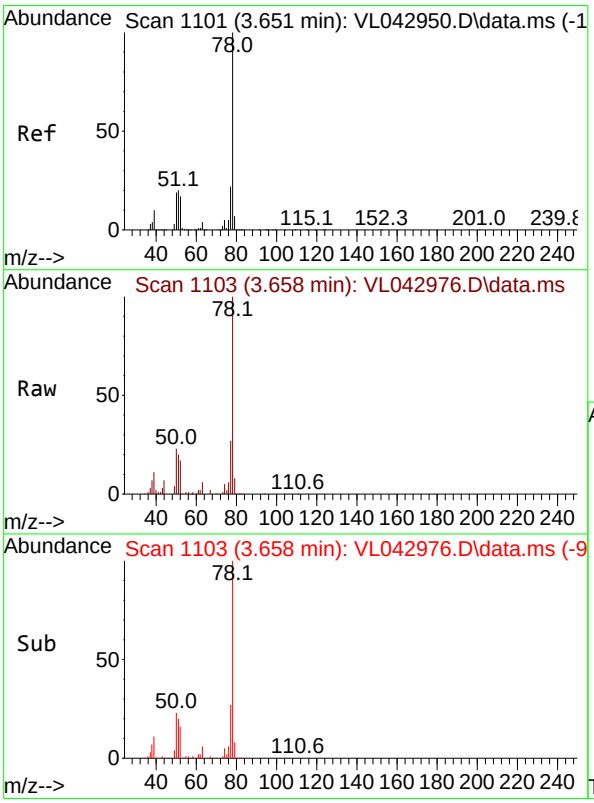
#35
Carbon Tetrachloride
Concen: 0.049 ppbv
RT: 3.761 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:117 Resp: 1325

Ion	Ratio	Lower	Upper
117	100		
119	68.3	76.9	115.3#
121	21.6	23.7	35.5#

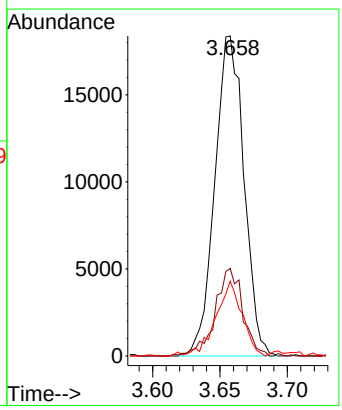


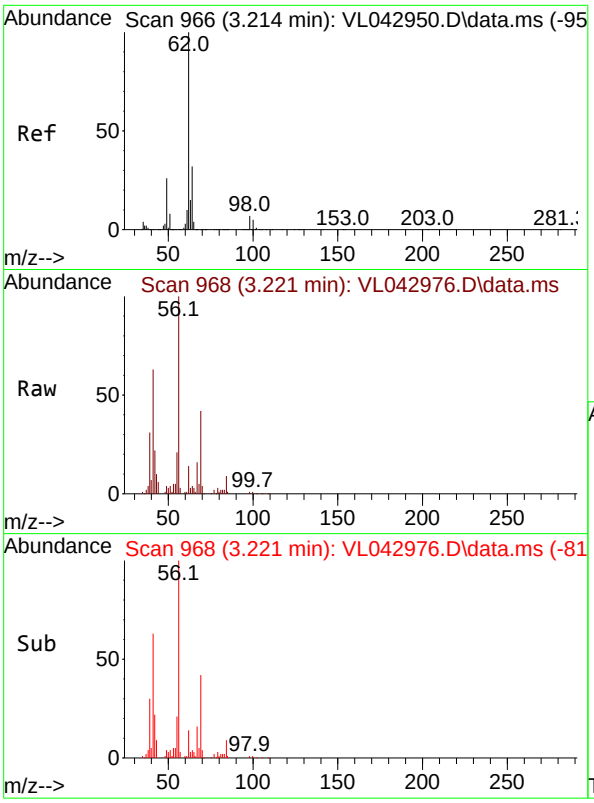


#36
Benzene
Concen: 0.715 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 78 Resp: 27676

Ion	Ratio	Lower	Upper
78	100		
77	27.0	17.8	26.6#
50	22.1	15.0	22.4



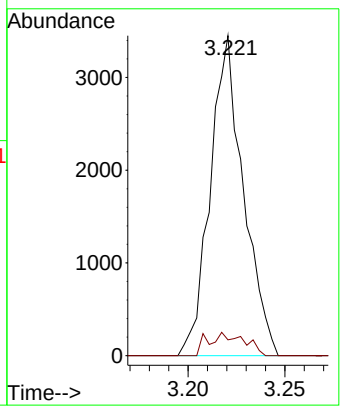


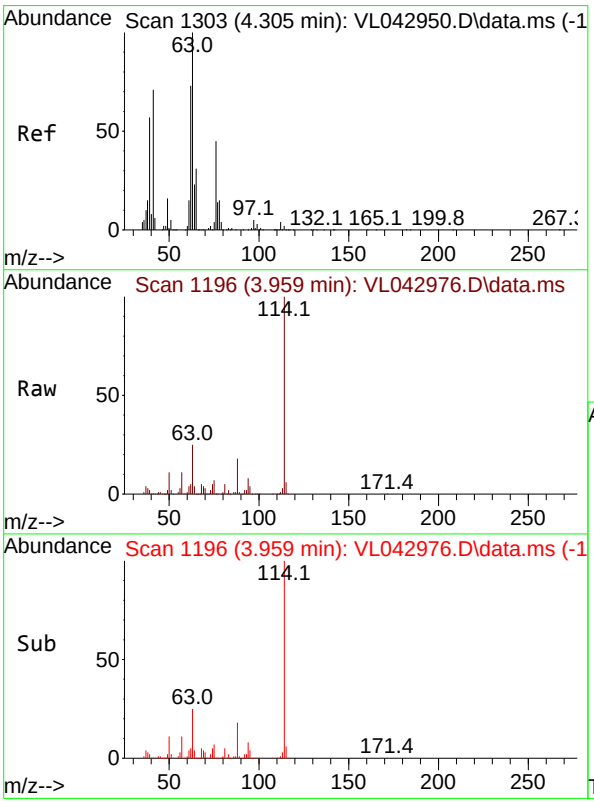
#37
1,2-Dichloroethane
Concen: 0.202 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 62 Resp: 4116

Ion	Ratio	Lower	Upper
62	100		
98	7.8	5.9	8.9

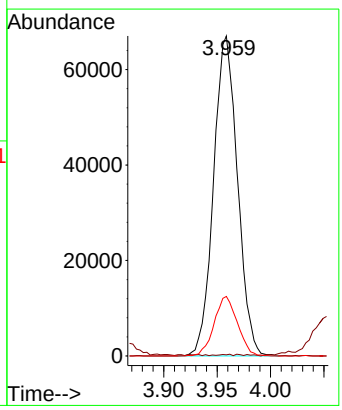


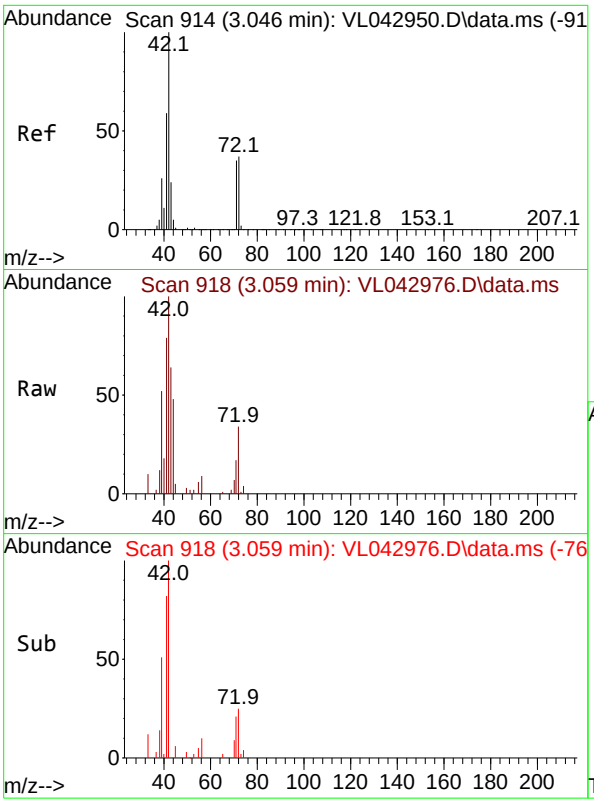


#39
1,2-Dichloropropane
Concen: 7.396 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.347 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 63 Resp: 104475

Ion	Ratio	Lower	Upper
63	100		
41	0.0	57.5	86.3#
62	18.6	58.5	87.7#



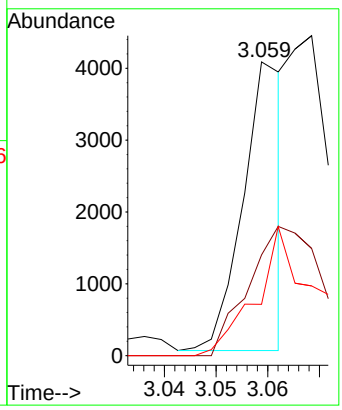


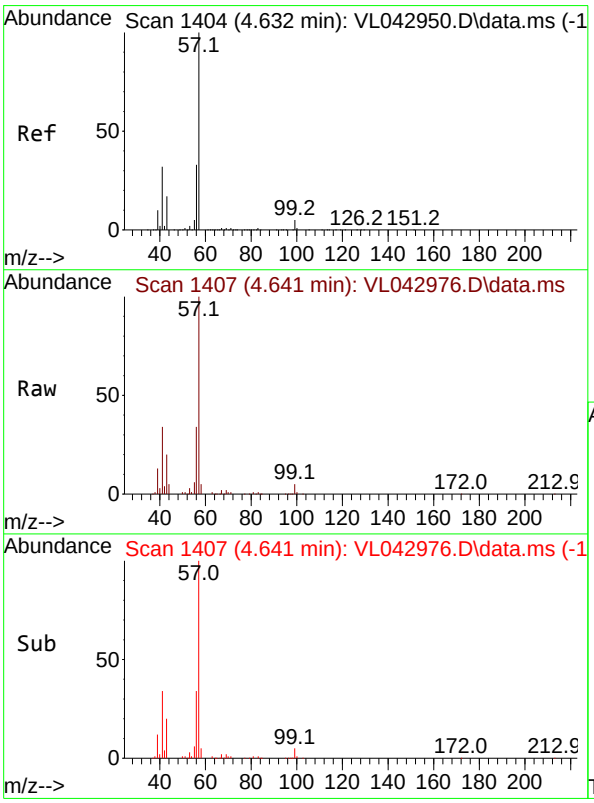
#41
Tetrahydrofuran
Concen: 0.131 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.013 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 42 Resp: 2175

Ion	Ratio	Lower	Upper
42	100		
72	105.7	30.0	45.0#
71	73.3	28.8	43.2#

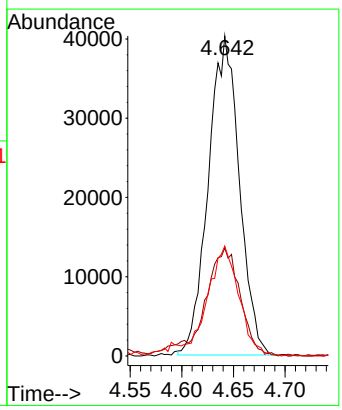


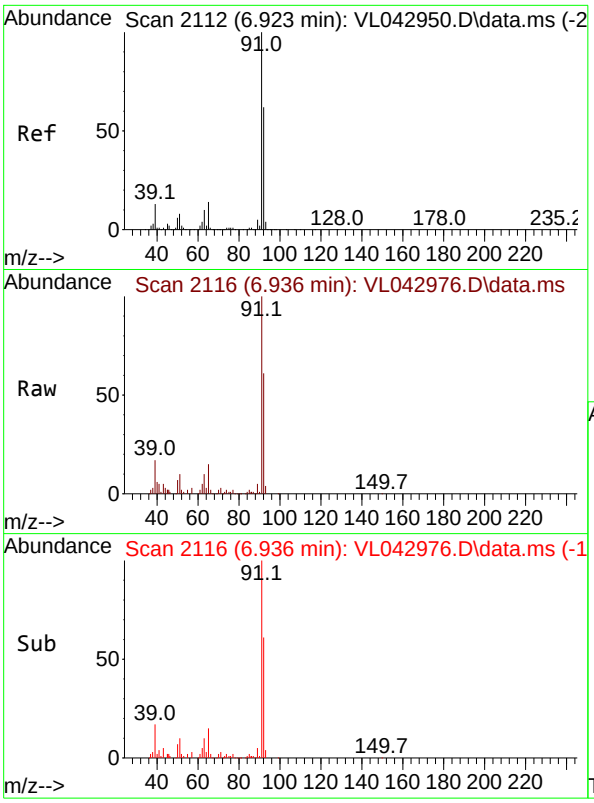


#44
2,2,4-Trimethylpentane
Concen: 1.258 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. 0.010 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 57 Resp: 84058

Ion	Ratio	Lower	Upper
57	100		
41	39.0	25.5	38.3#
56	37.2	25.8	38.8



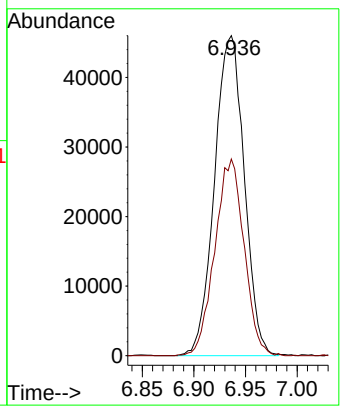


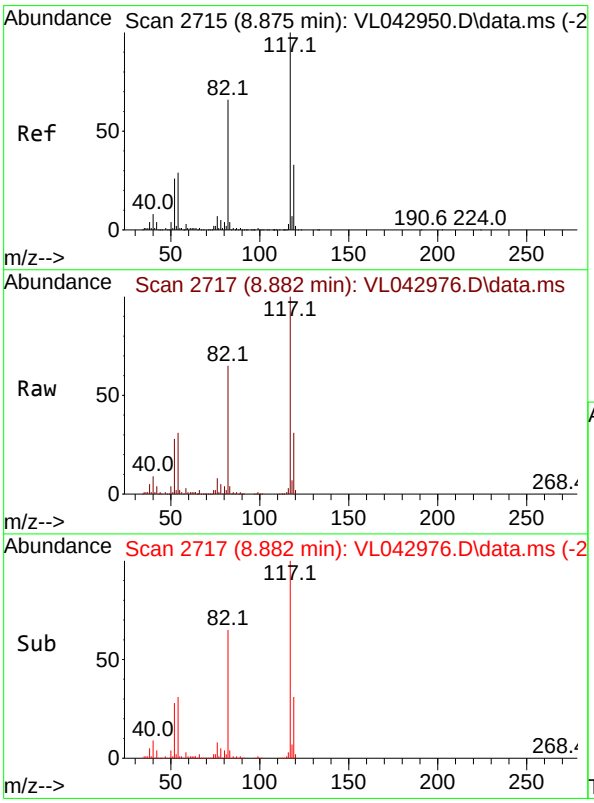
#53
Toluene
Concen: 2.015 ppbv
RT: 6.936 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 91 Resp: 92307

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.2	72.2

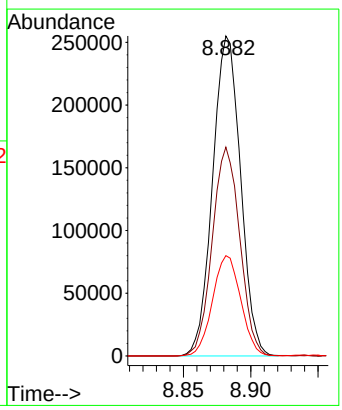


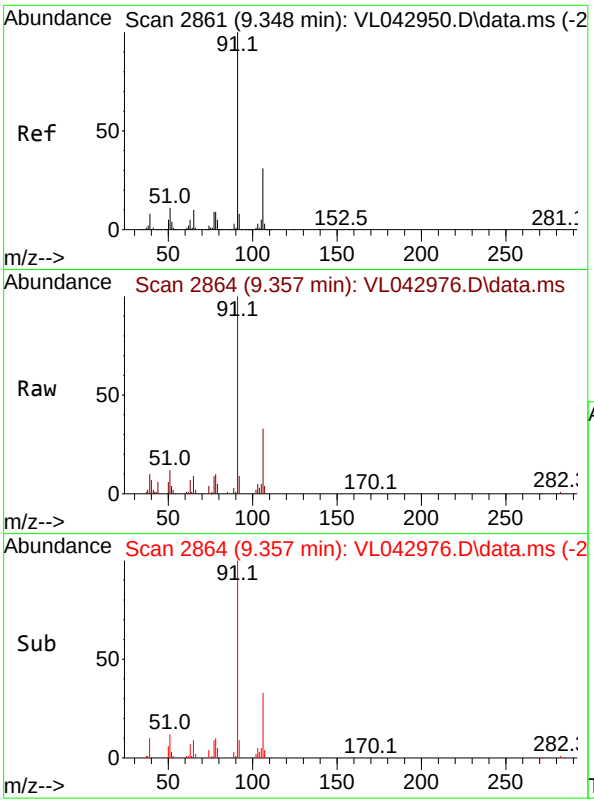


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:117 Resp: 367269

Ion	Ratio	Lower	Upper
117	100		
82	64.5	52.8	79.2
119	31.7	26.5	39.7



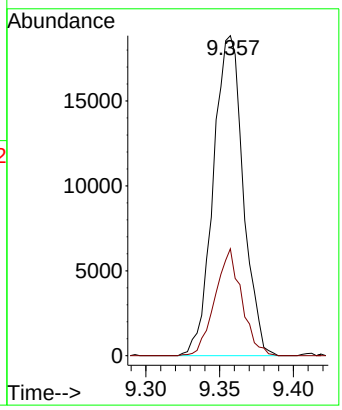


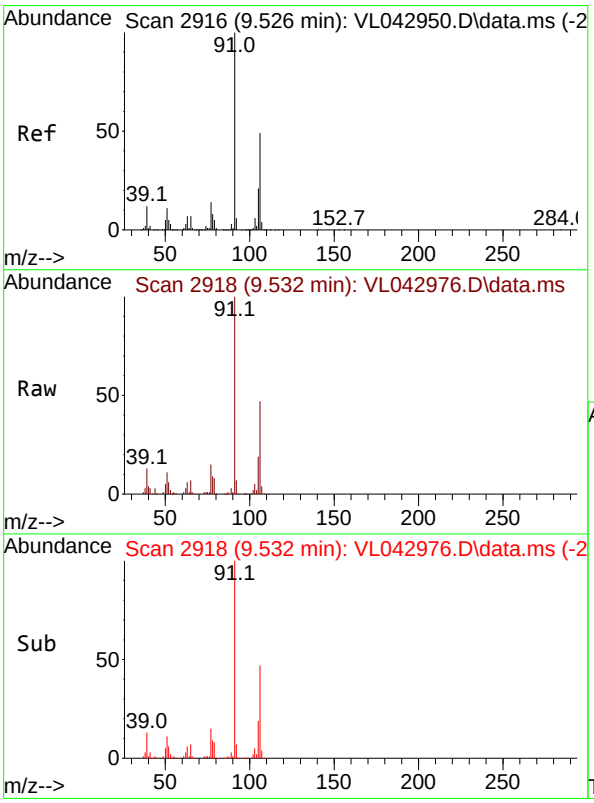
#58
Ethyl Benzene
Concen: 0.441 ppbv
RT: 9.357 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 91 Resp: 26614

Ion	Ratio	Lower	Upper
91	100		
106	33.4	24.6	37.0

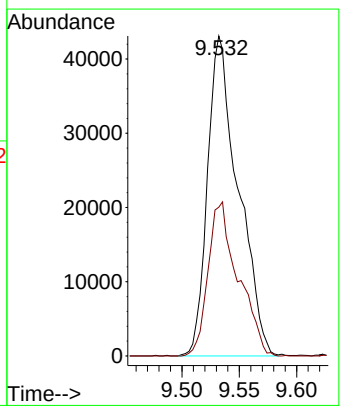


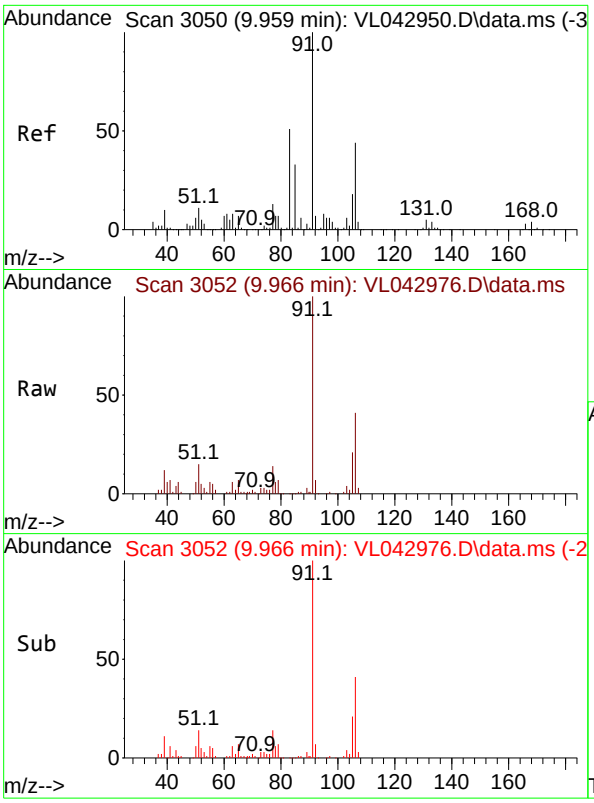


#59
m/p-Xylene
Concen: 1.688 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 91 Resp: 80258

Ion	Ratio	Lower	Upper
91	100		
106	47.3	0.0	0.0#



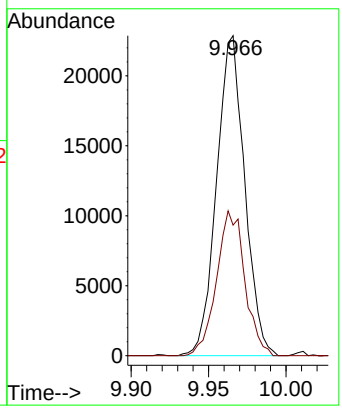


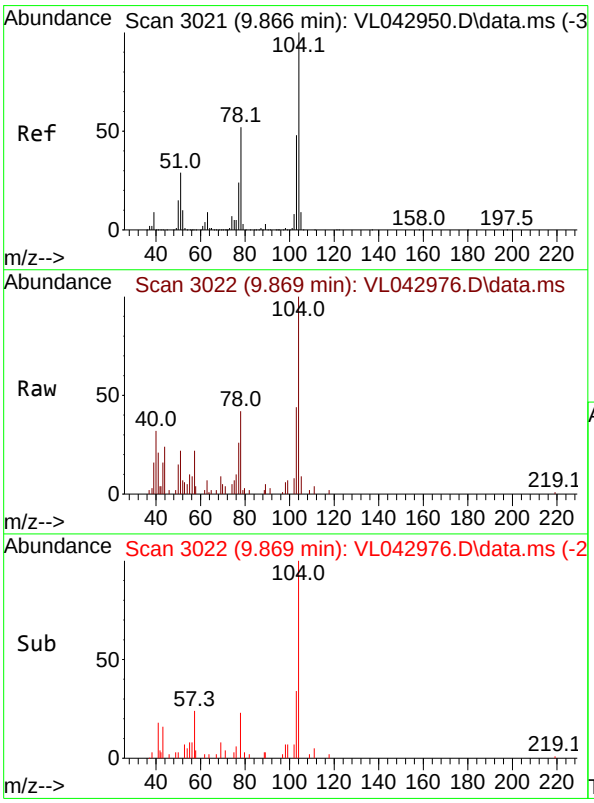
#60
o-Xylene
Concen: 0.608 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion: 91 Resp: 28894

Ion	Ratio	Lower	Upper
91	100		
106	45.5	22.4	67.0

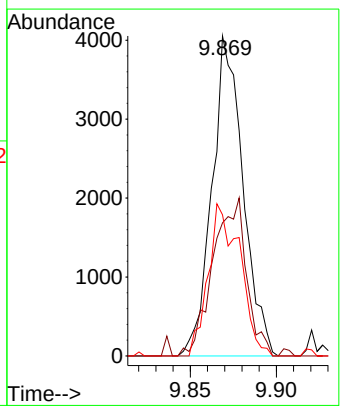


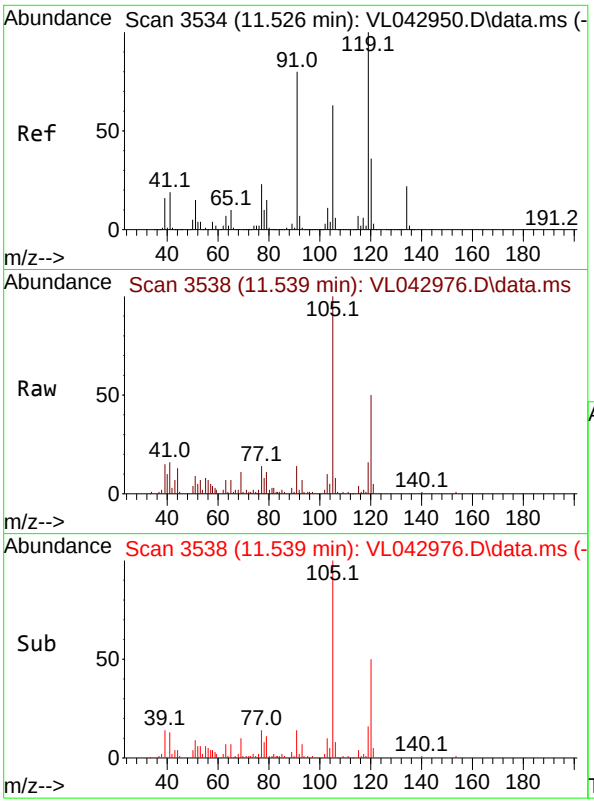


#61
Styrene
Concen: 0.226 ppbv
RT: 9.869 min Scan# 3022
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:104 Resp: 5085

Ion	Ratio	Lower	Upper
104	100		
78	54.8	39.9	59.9
103	48.6	36.9	55.3



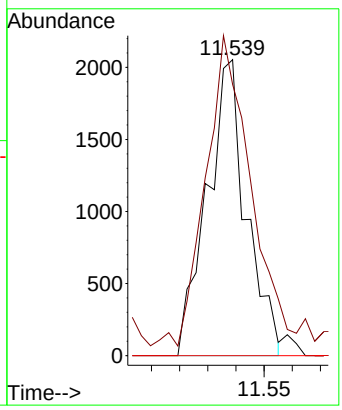


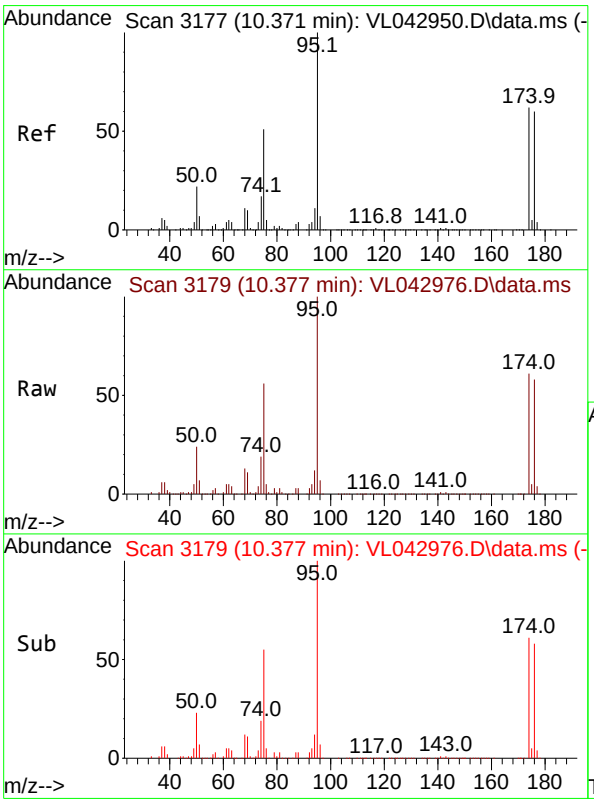
#65
tert-Butylbenzene
Concen: 0.032 ppbv
RT: 11.539 min Scan# 3
Delta R.T. 0.013 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:119 Resp: 1987

Ion	Ratio	Lower	Upper
119	100		
91	142.4	63.1	94.7#
134	0.0	17.0	25.6#

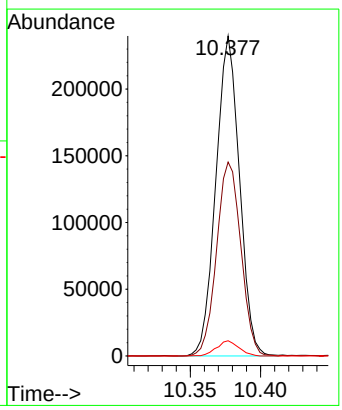


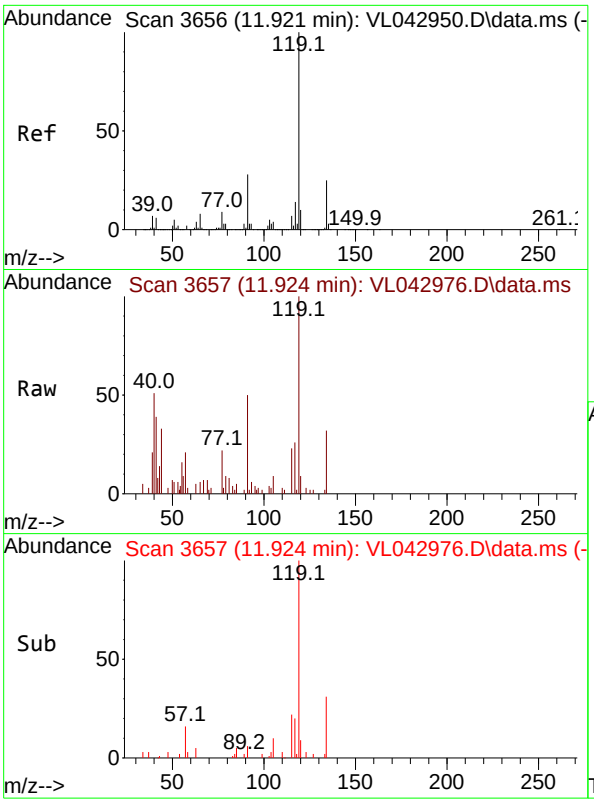


#68
1-Bromo-4-Fluorobenzene
Concen: 10.222 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 95 Resp: 280234

Ion	Ratio	Lower	Upper
95	100		
174	62.4	51.4	77.2
175	4.5	4.0	6.0



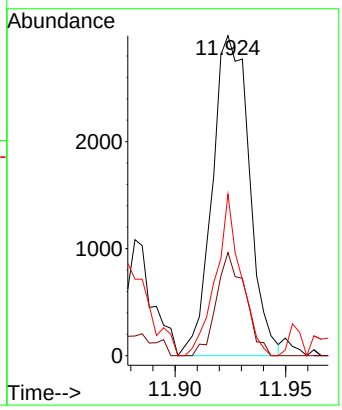


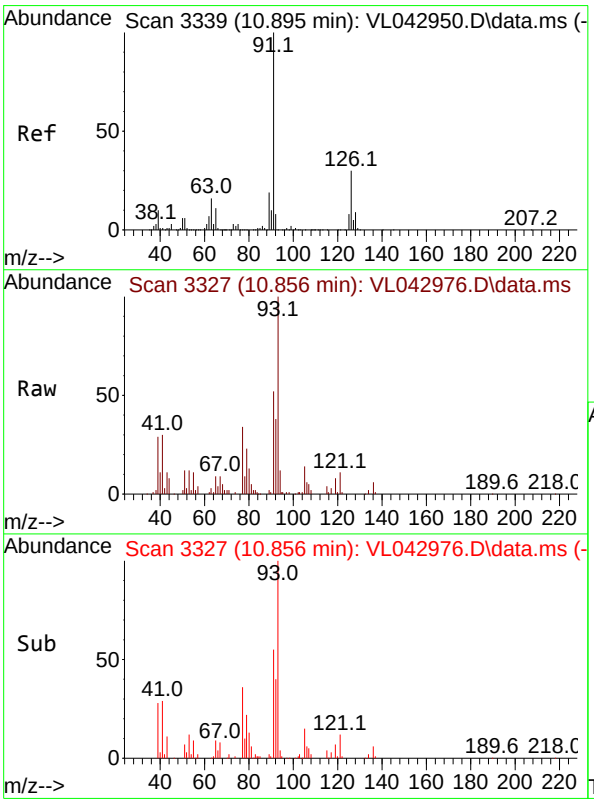
#69
p-Isopropyltoluene
Concen: 0.047 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:119 Resp: 3458

Ion	Ratio	Lower	Upper
119	100		
134	25.1	21.0	31.4
91	40.3	22.3	33.5#

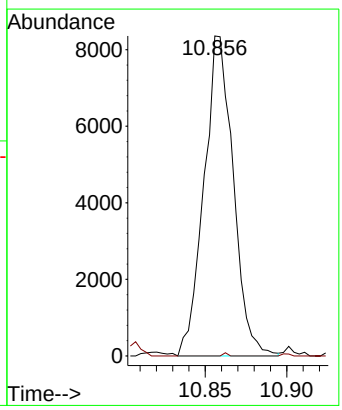


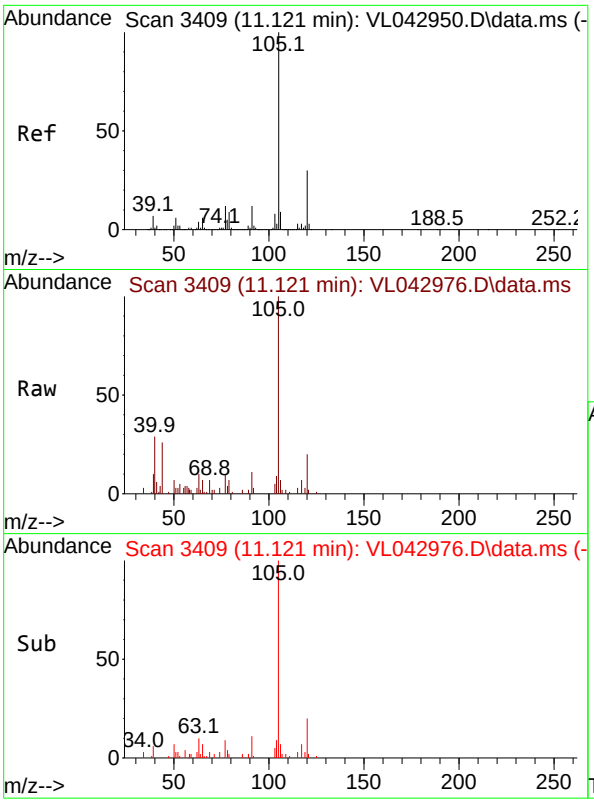


#71
2-Chlorotoluene
Concen: 0.195 ppbv
RT: 10.856 min Scan# 3327
Delta R.T. -0.039 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion: 91 Resp: 10436

Ion	Ratio	Lower	Upper
91	100		
126	0.2	12.3	49.3#



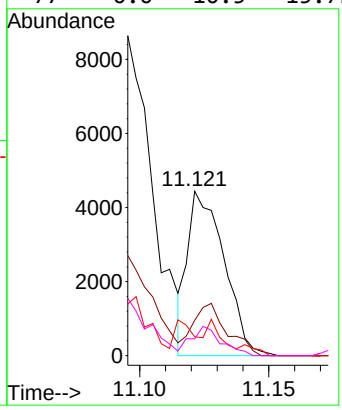


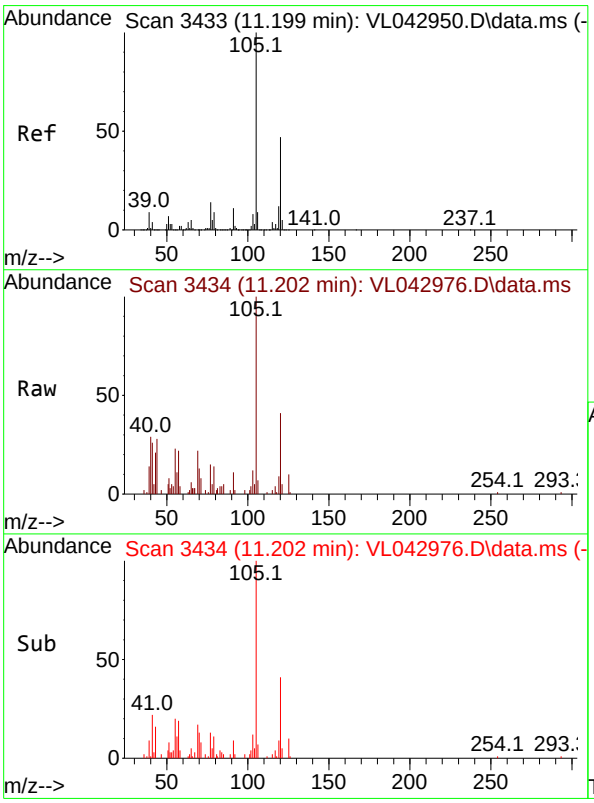
#72
4-Ethyltoluene
Concen: 0.073 ppbv
RT: 11.121 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:105 Resp: 4364

Ion	Ratio	Lower	Upper
105	100		
120	0.0	24.2	36.2#
91	0.0	10.0	15.0#
77	0.0	10.5	15.7#

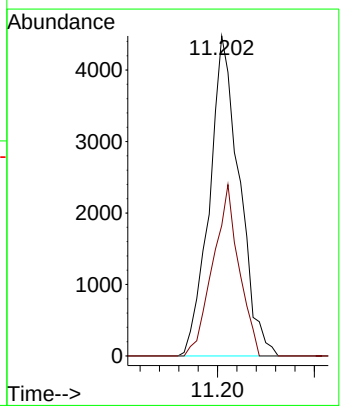


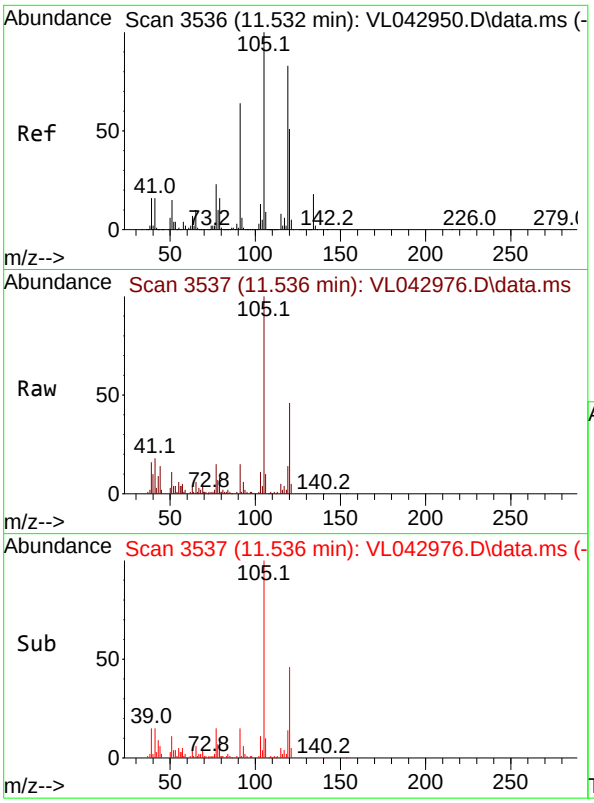


#73
1,3,5-Trimethylbenzene
Concen: 0.100 ppbv
RT: 11.202 min Scan# 3434
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:105 Resp: 4817

Ion	Ratio	Lower	Upper
105	100		
120	40.8	38.0	57.0



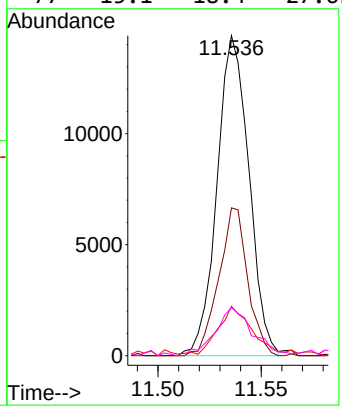


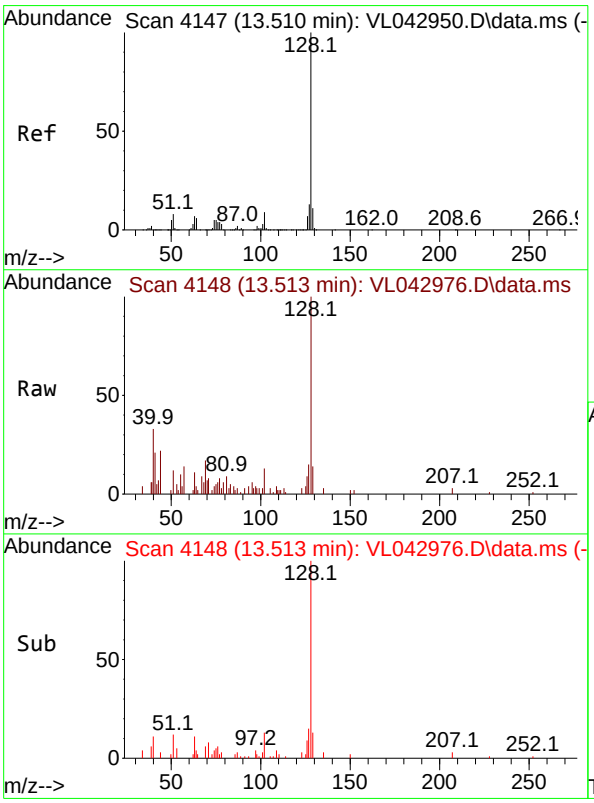
#74
1,2,4-Trimethylbenzene
Concen: 0.291 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:105 Resp: 15499

Ion	Ratio	Lower	Upper
105	100		
120	46.2	40.9	61.3
91	14.9	51.2	76.8#
77	15.1	18.4	27.6#

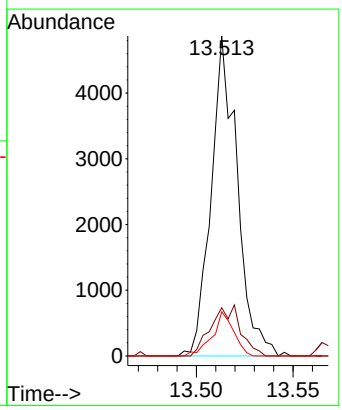


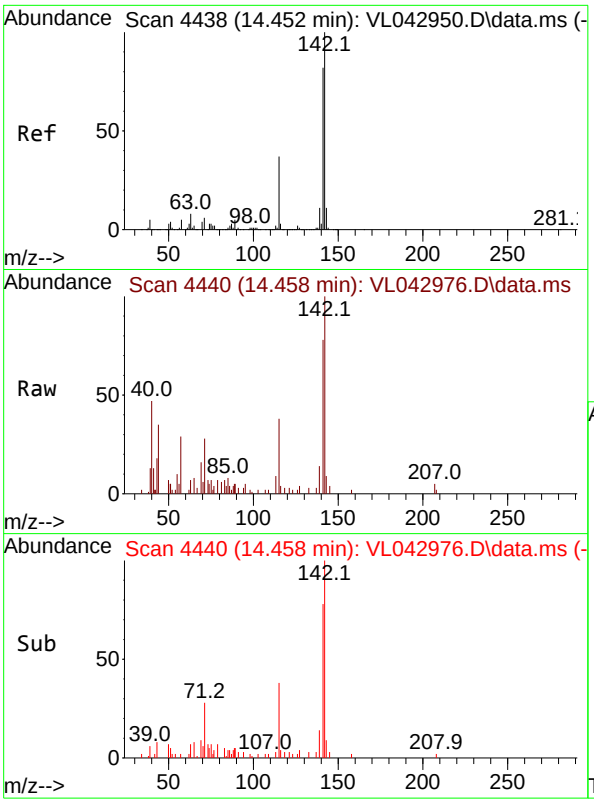


#79
Naphthalene
Concen: 0.097 ppbv
RT: 13.513 min Scan# 4148
Delta R.T. 0.003 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:128 Resp: 4568

Ion	Ratio	Lower	Upper
128	100		
127	15.1	10.6	15.8
129	13.8	9.0	13.6#



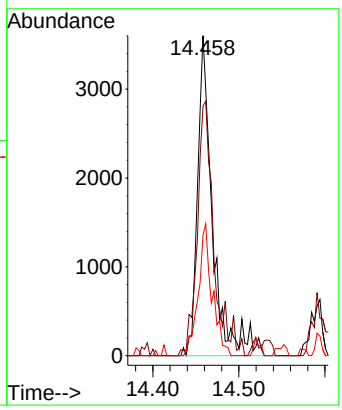


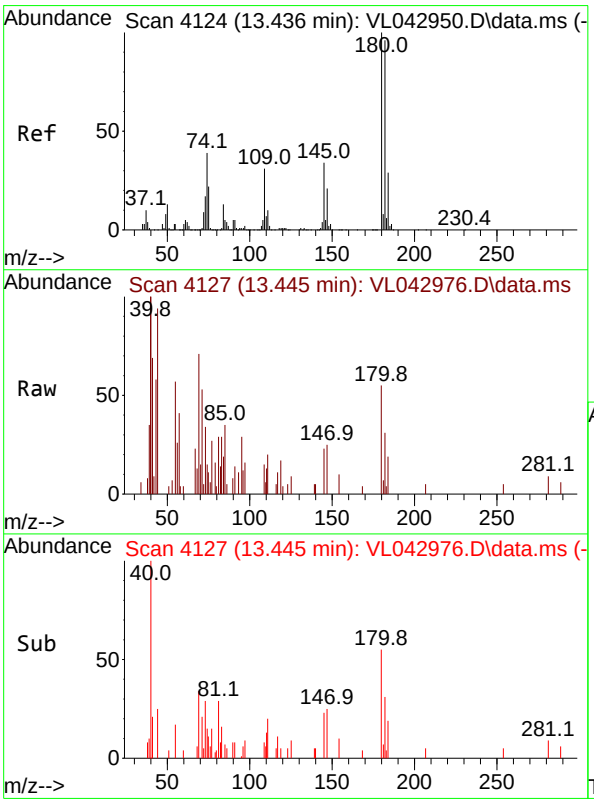
#80
Naphthalene,2-methyl-
Concen: 0.298 ppbv
RT: 14.458 min Scan# 44
Delta R.T. 0.006 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2

Tgt Ion:142 Resp: 4342

Ion	Ratio	Lower	Upper
142	100		
141	87.5	65.1	97.7
115	38.2	28.9	43.3

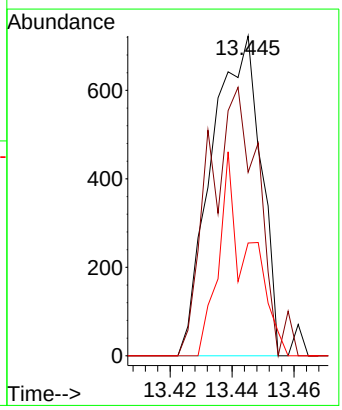




#81
1,2,4-Trichlorobenzene
Concen: 0.032 ppbv
RT: 13.445 min Scan# 4127
Delta R.T. 0.010 min
Lab File: VL042976.D
Acq: 23 Sep 2025 02:22

Tgt Ion:180 Resp: 796

Ion	Ratio	Lower	Upper
180	100		
182	84.8	75.7	113.5
184	39.1	23.9	35.9#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042977.D
Acq On : 23 Sep 2025 02:57
Operator : SY/MD
Sample : Q3131-02DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Quant Time: Sep 24 01:14:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

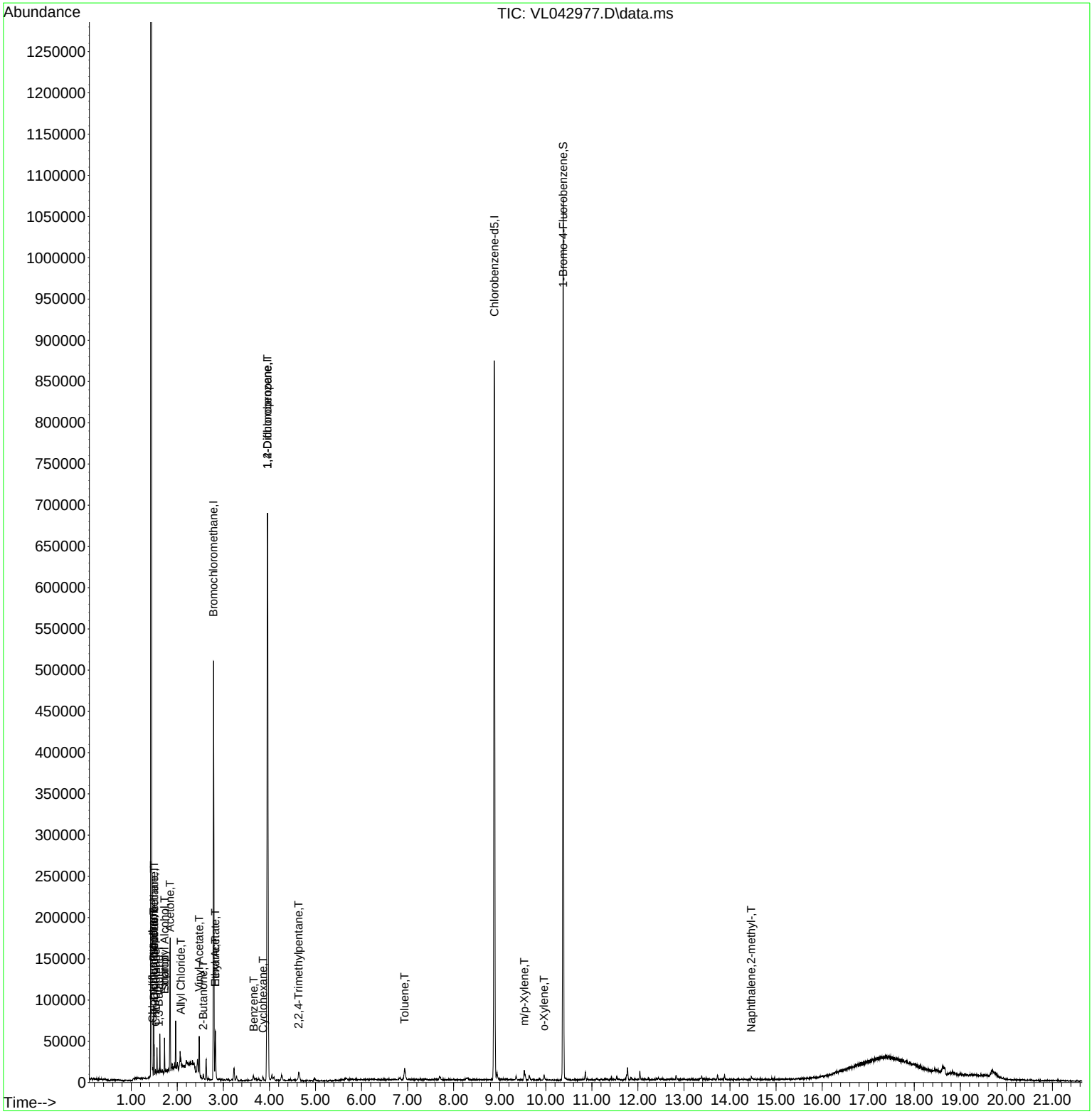
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	144383	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	412784	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	358472	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	272808	10.195	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	8070	0.416	ppbv	100
3) Chlorodifluoromethane	1.466	51	3306	0.137	ppbv #	89
4) Chloromethane	1.531	50	413	0.047	ppbv	94
8) Dichlorotetrafluoroethane	1.499	85	8070	0.487	ppbv #	19
9) Propene	1.489	41	5758	0.547	ppbv #	69
13) Ethanol	1.722	45	13003	12.730	ppbv	96
15) Acetone	1.839	43	55527	2.953	ppbv #	83
16) 1,3-Butadiene	1.599	39	380	0.043	ppbv #	11
19) Isopropyl Alcohol	1.722	45	13003	1.150	ppbv #	56
20) Methylene Chloride	2.065	84	2459	Below Cal	#	91
21) Allyl Chloride	2.078	41	803	0.061	ppbv #	46
23) Vinyl Acetate	2.476	43	13119	0.488	ppbv #	30
25) Ethyl Acetate	2.826	43	10821	0.228	ppbv #	84
26) Hexane	2.826	57	13368	0.617	ppbv #	42
30) Cyclohexane	3.861	84	895	0.049	ppbv #	40
34) 2-Butanone	2.560	43	4380	0.151	ppbv	97
36) Benzene	3.658	78	2873	0.074	ppbv #	73
39) 1,2-Dichloropropane	3.959	63	103626	7.323	ppbv #	24
44) 2,2,4-Trimethylpentane	4.632	57	2757	0.041	ppbv #	43
53) Toluene	6.936	91	6333	0.138	ppbv #	73
59) m/p-Xylene	9.532	91	3656	0.079	ppbv #	100
60) o-Xylene	9.963	91	2489	0.054	ppbv	99
80) Naphthalene,2-methyl-	14.461	142	1430	0.101	ppbv	98

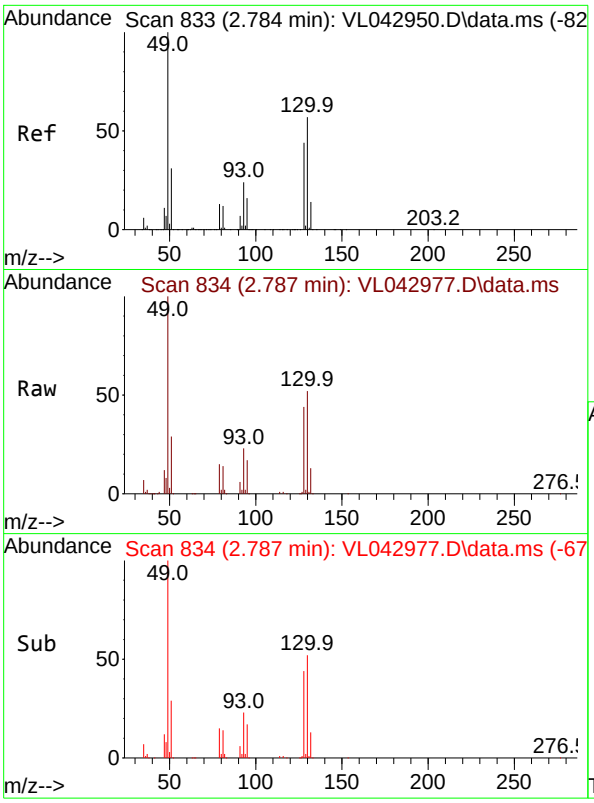
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042977.D
Acq On : 23 Sep 2025 02:57
Operator : SY/MD
Sample : Q3131-02DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Quant Time: Sep 24 01:14:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration



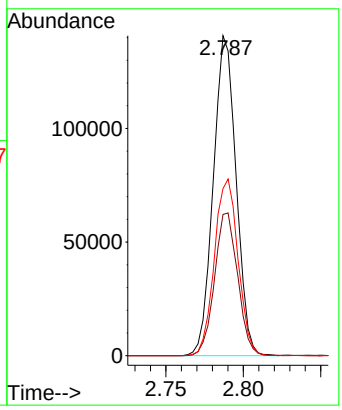


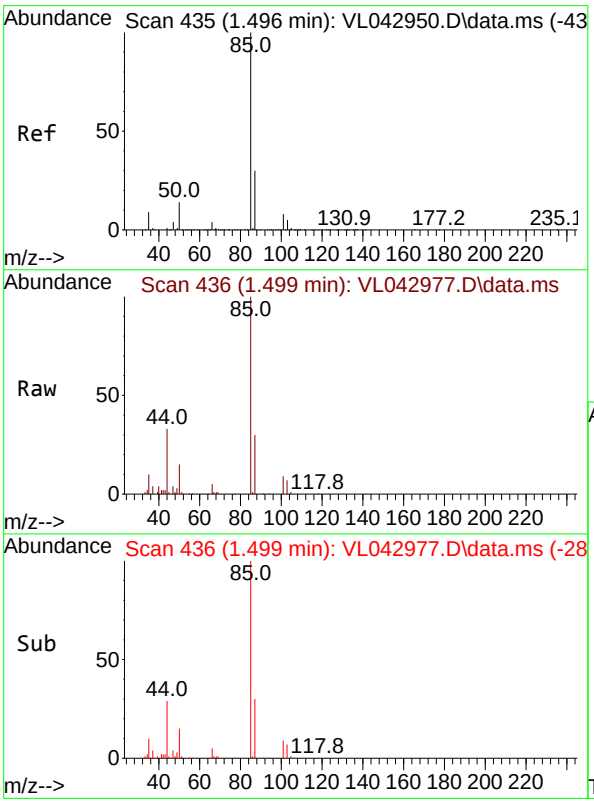
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 49 Resp: 144383

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.9	68.8
130	57.3	29.1	87.3

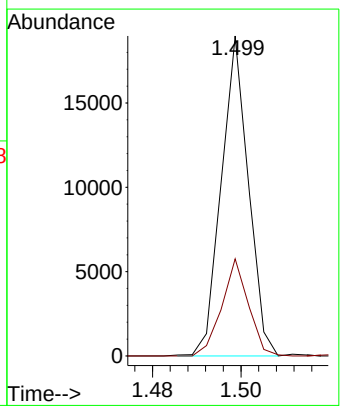


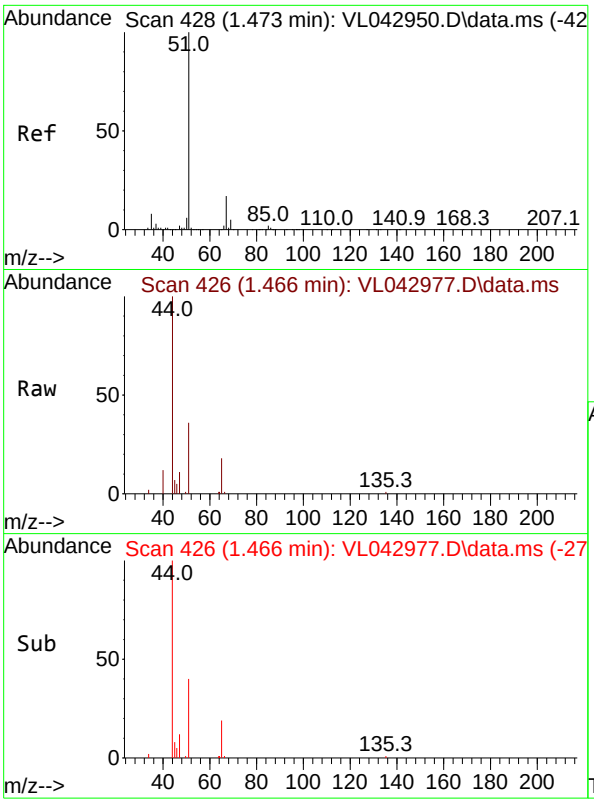


#2
Dichlorodifluoromethane
Concen: 0.416 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 85 Resp: 8070

Ion	Ratio	Lower	Upper
85	100		
87	30.3	24.3	36.5



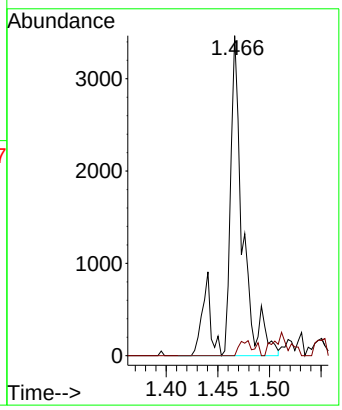


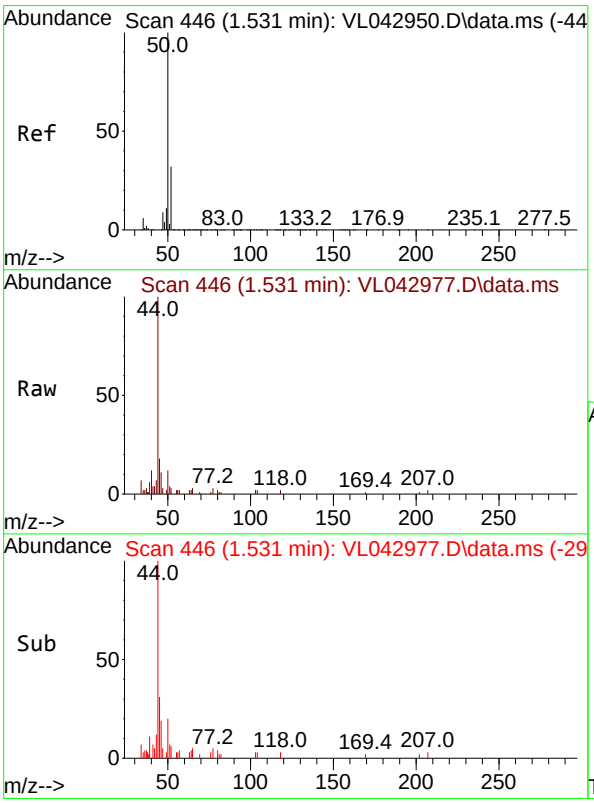
#3
Chlorodifluoromethane
Concen: 0.137 ppbv
RT: 1.466 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 51 Resp: 3306

Ion	Ratio	Lower	Upper
51	100		
67	12.5	13.8	20.8#

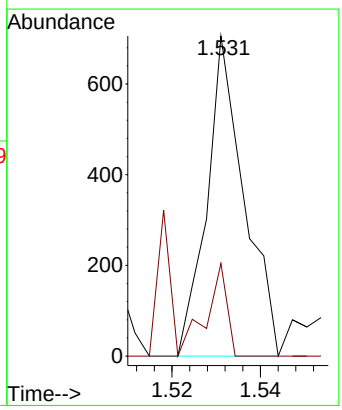


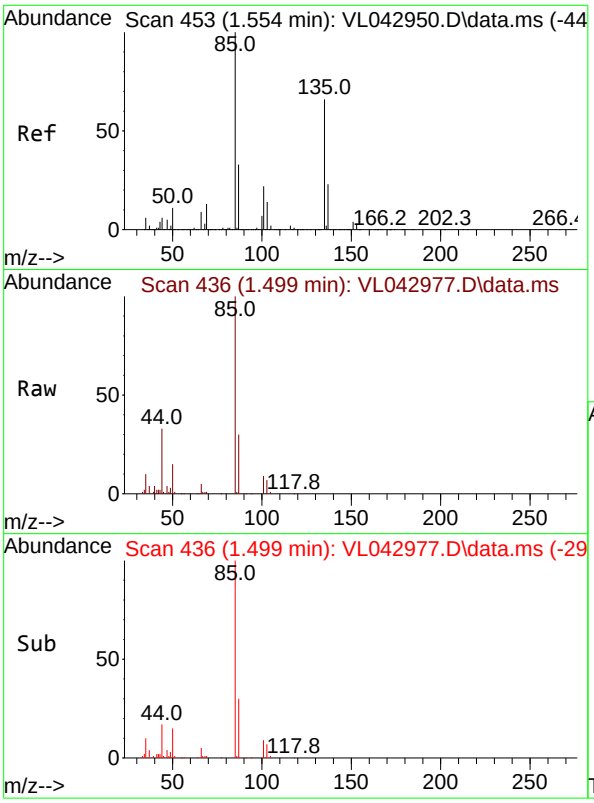


#4
Chloromethane
Concen: 0.047 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 50 Resp: 413

Ion	Ratio	Lower	Upper
50	100		
52	28.9	25.9	38.9



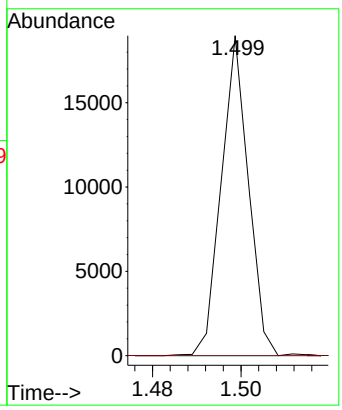


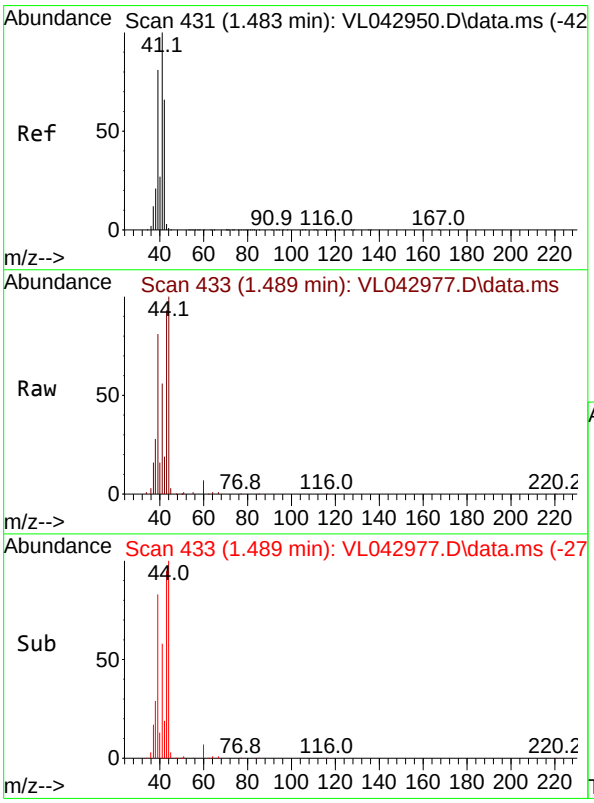
#8
Dichlorotetrafluoroethane
Concen: 0.487 ppbv
RT: 1.499 min Scan# 4
Delta R.T. -0.055 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 85 Resp: 8070

Ion	Ratio	Lower	Upper
85	100		
135	0.0	49.7	74.5#

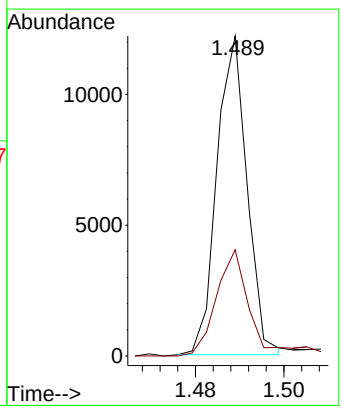


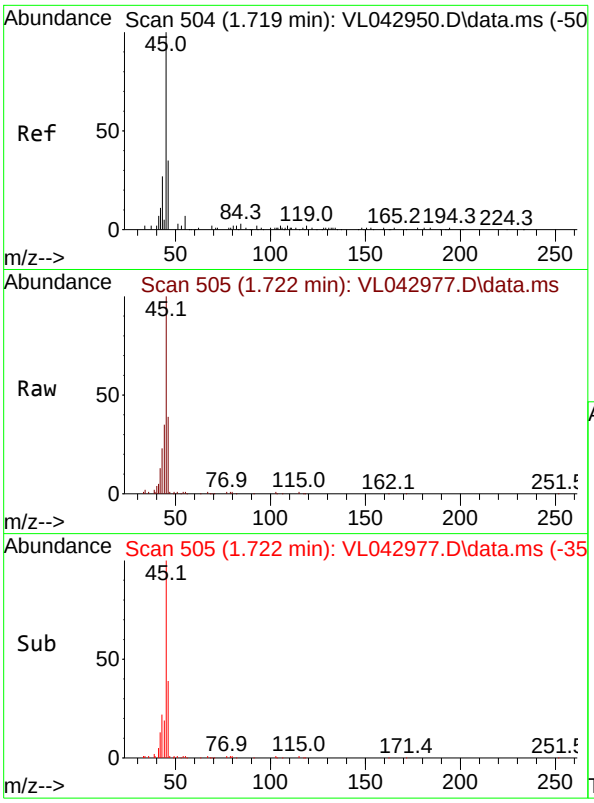


#9
Propene
Concen: 0.547 ppbv
RT: 1.489 min Scan# 433
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 41 Resp: 5758

Ion	Ratio	Lower	Upper
41	100		
42	45.7	57.4	86.2#



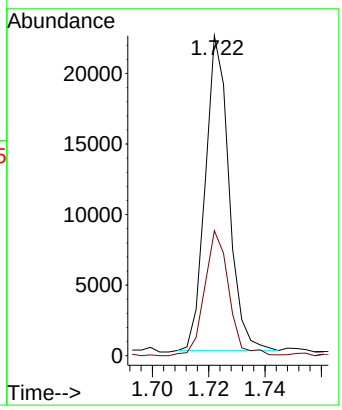


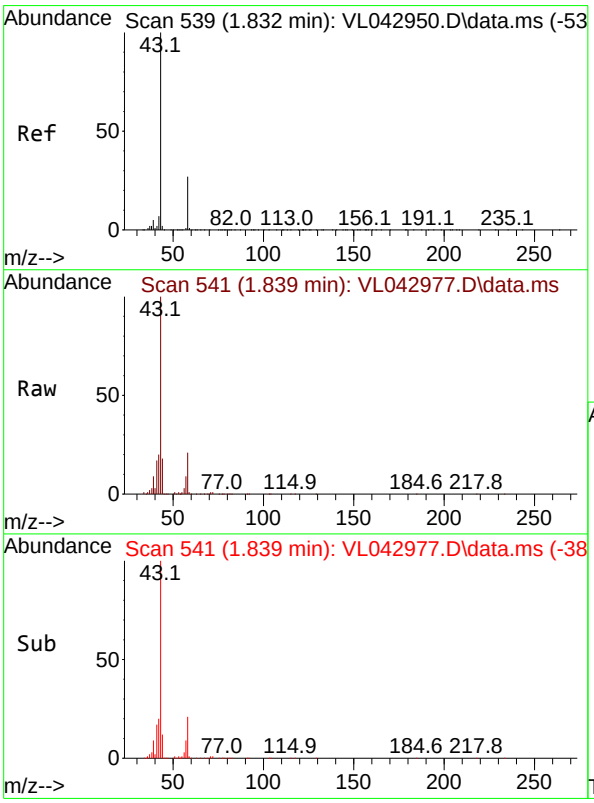
#13
Ethanol
Concen: 12.730 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 45 Resp: 13003

Ion	Ratio	Lower	Upper
45	100		
46	43.2	16.2	64.6

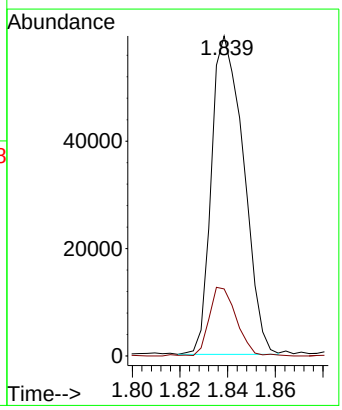


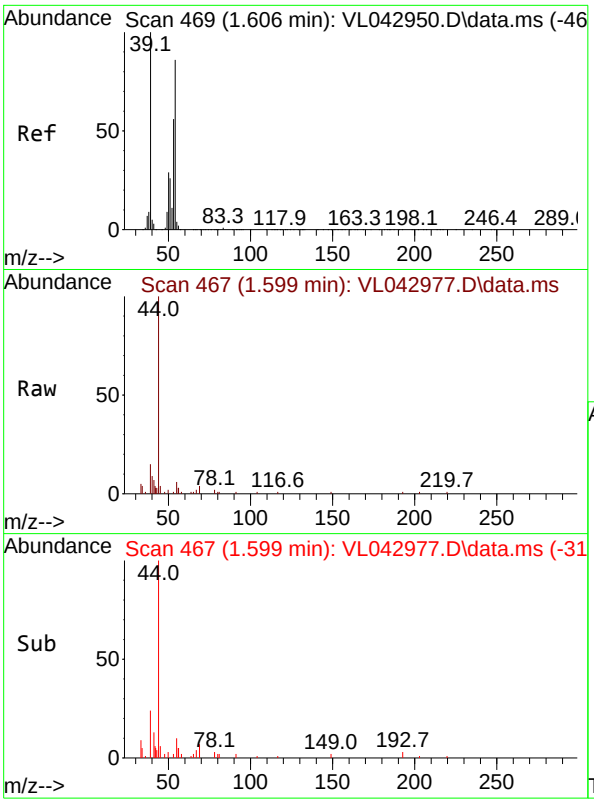


#15
Acetone
Concen: 2.953 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 43 Resp: 55527

Ion	Ratio	Lower	Upper
43	100		
58	18.8	22.3	33.5#



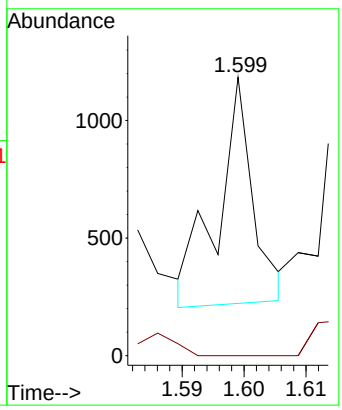


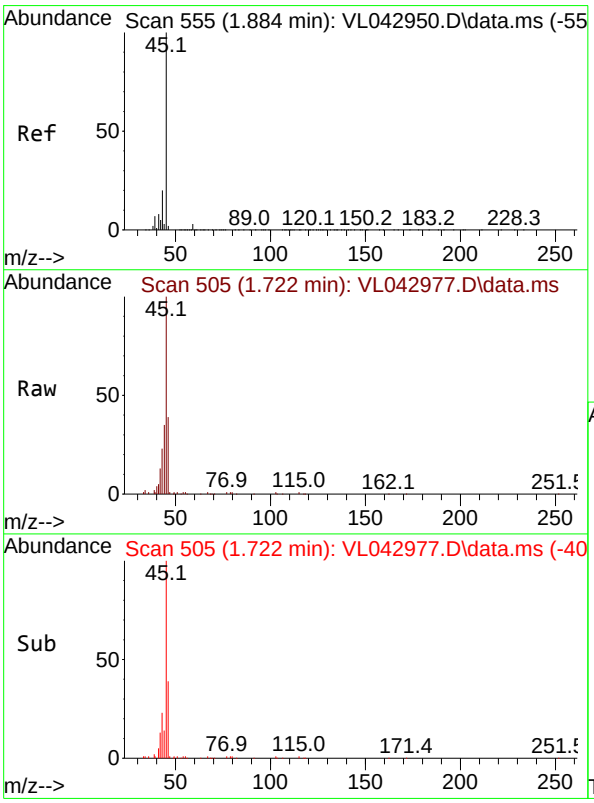
#16
1,3-Butadiene
Concen: 0.043 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 39 Resp: 380

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.8	91.2#

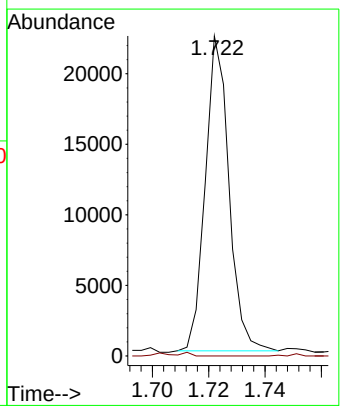


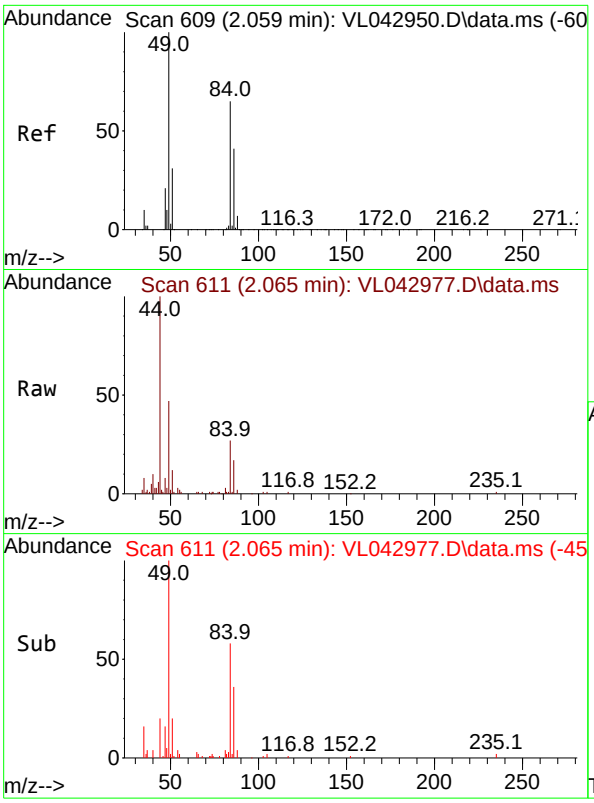


#19
Isopropyl Alcohol
Concen: 1.150 ppbv
RT: 1.722 min Scan# 505
Delta R.T. -0.162 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 45 Resp: 13003

Ion	Ratio	Lower	Upper
45	100		
58	12.0	31.0	46.6#



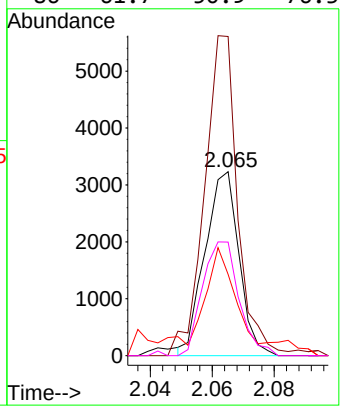


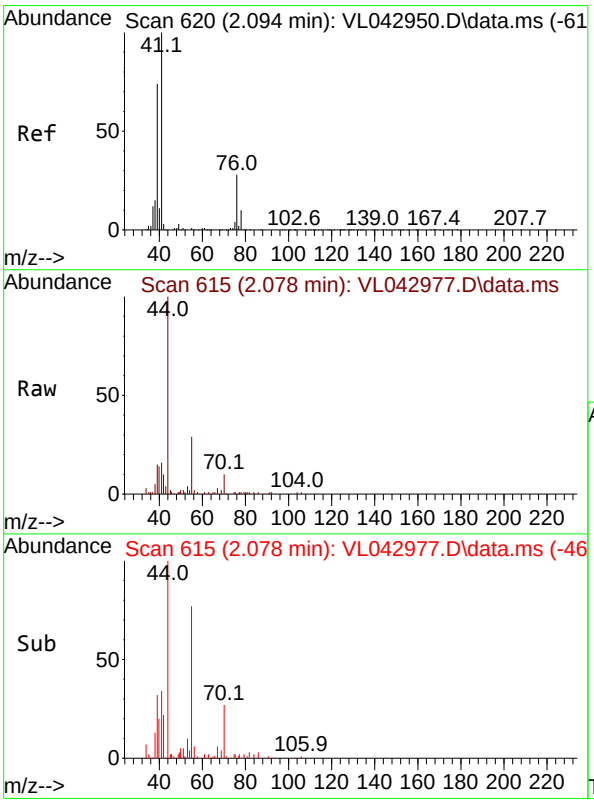
#20
Methylene Chloride
Concen: Below Cal
RT: 2.065 min Scan# 61
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 84 Resp: 2459

Ion	Ratio	Lower	Upper
84	100		
49	165.3	124.1	186.1
51	36.9	39.8	59.8#
86	61.7	50.9	76.3

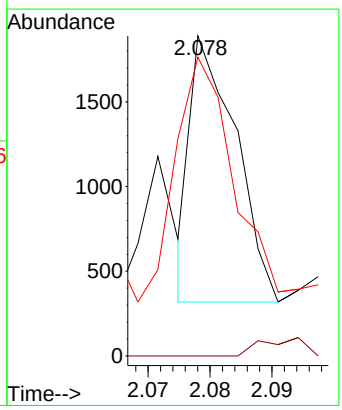


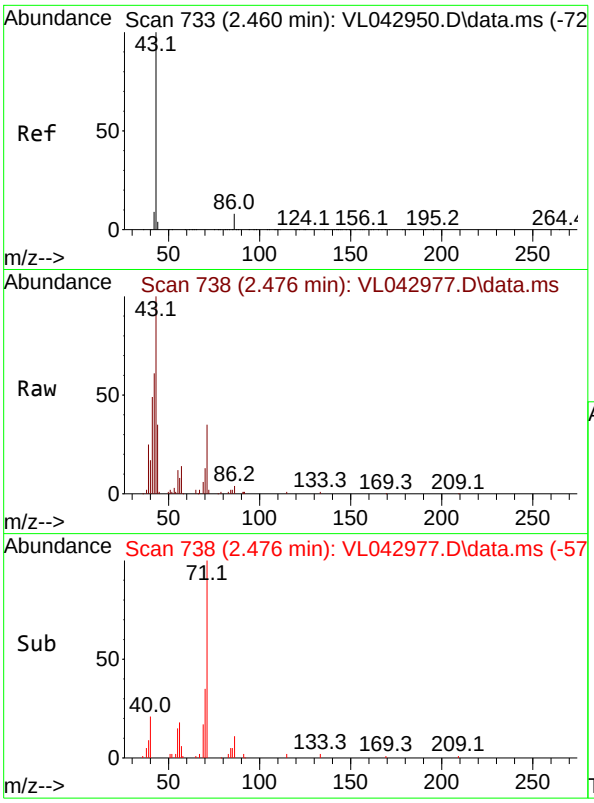


#21
Allyl Chloride
Concen: 0.061 ppbv
RT: 2.078 min Scan# 615
Delta R.T. -0.016 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 41 Resp: 803

Ion	Ratio	Lower	Upper
41	100		
76	6.4	22.3	33.5#
39	127.5	61.3	91.9#



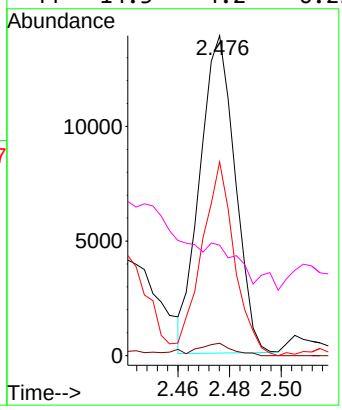


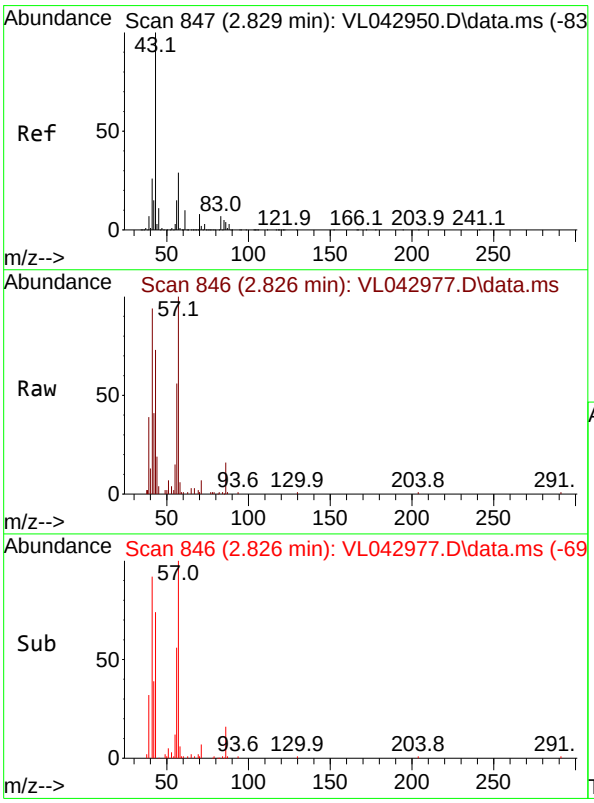
#23
Vinyl Acetate
Concen: 0.488 ppbv
RT: 2.476 min Scan# 7
Delta R.T. 0.016 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 43 Resp: 13119

Ion	Ratio	Lower	Upper
43	100		
86	3.9	6.2	9.2#
42	61.3	7.4	11.0#
44	14.3	4.2	6.2#

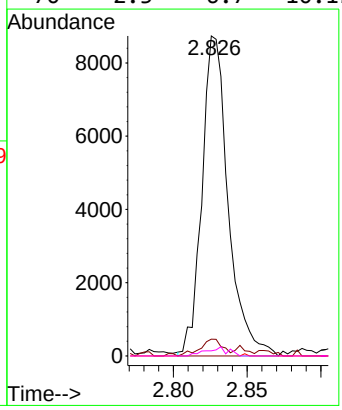


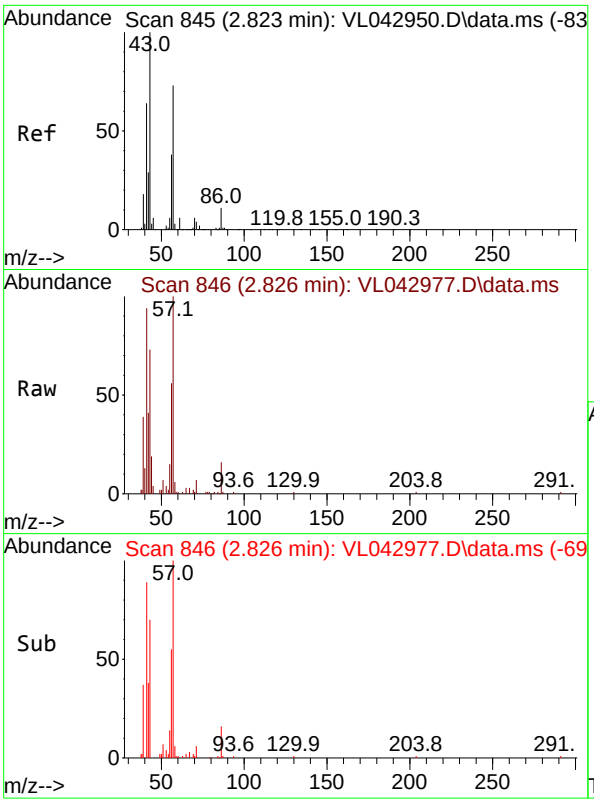


#25
Ethyl Acetate
Concen: 0.228 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 43 Resp: 10821

Ion	Ratio	Lower	Upper
43	100		
45	7.2	7.7	11.5#
61	0.0	7.1	10.7#
70	2.3	6.7	10.1#



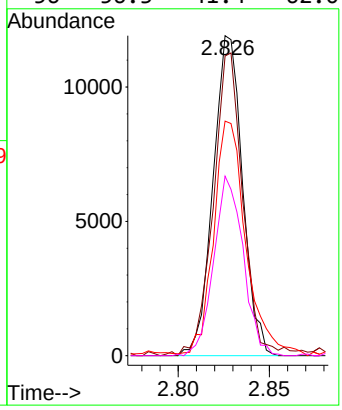


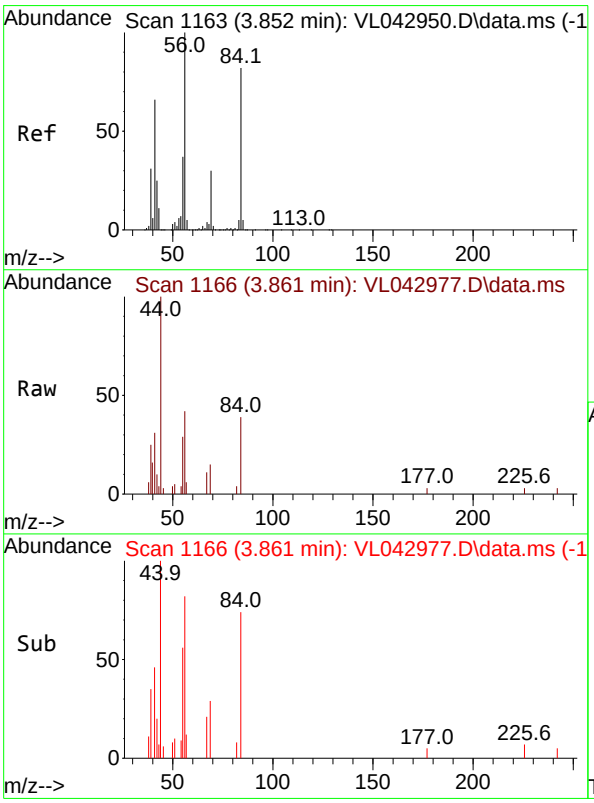
#26
Hexane
Concen: 0.617 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 57 Resp: 13368

Ion	Ratio	Lower	Upper
57	100		
41	98.2	71.7	107.5
43	79.9	180.8	271.2#
56	56.3	41.4	62.0

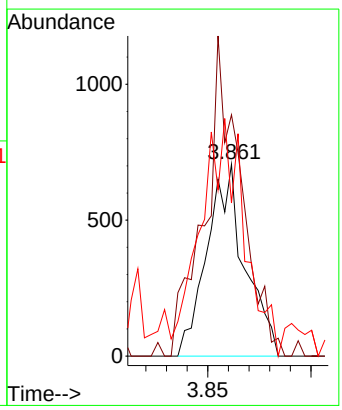


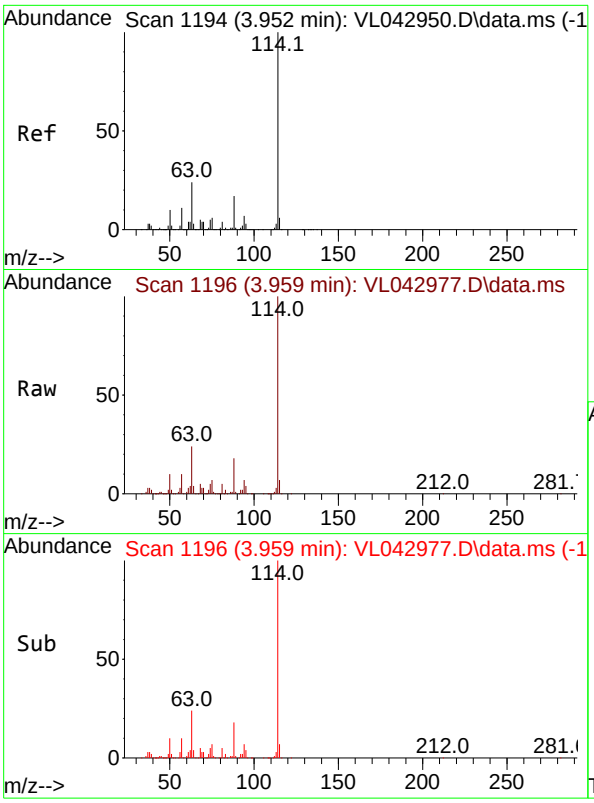


#30
Cyclohexane
Concen: 0.049 ppbv
RT: 3.861 min Scan# 1166
Delta R.T. 0.010 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 84 Resp: 895

Ion	Ratio	Lower	Upper
84	100		
56	161.2	102.2	153.4#
41	178.3	65.6	98.4#



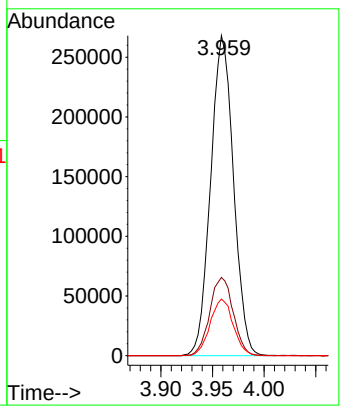


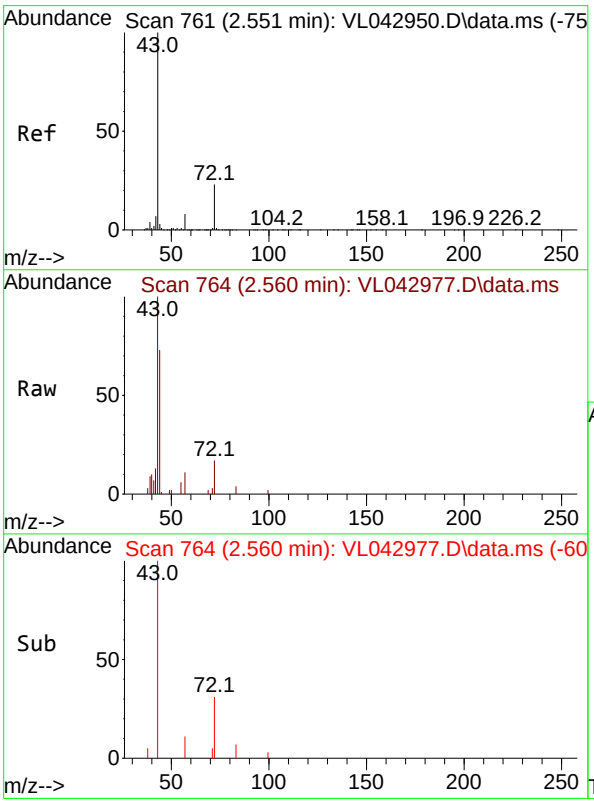
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion:114 Resp: 412784

Ion	Ratio	Lower	Upper
114	100		
63	25.1	19.4	29.2
88	17.9	14.2	21.2

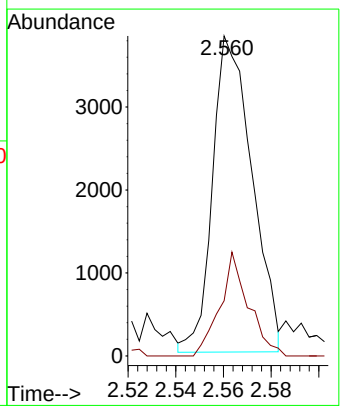


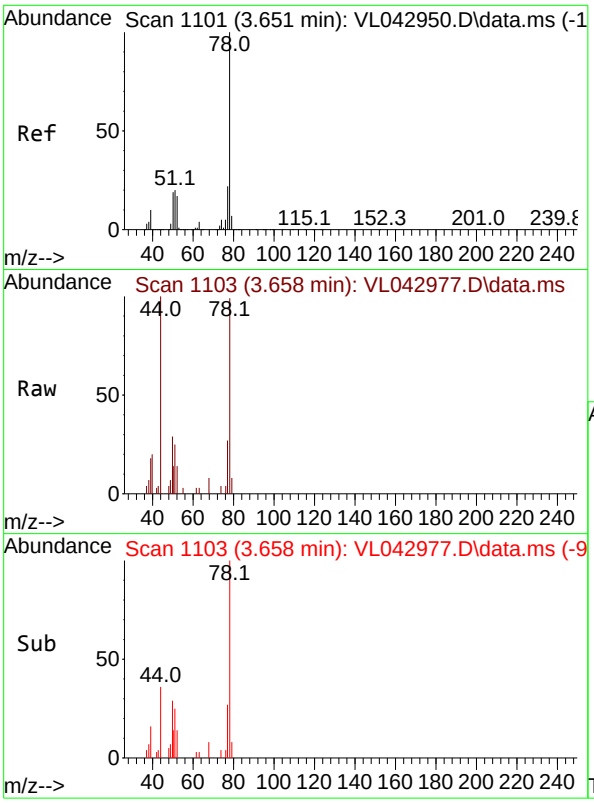


#34
2-Butanone
Concen: 0.151 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.009 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 43 Resp: 4380

Ion	Ratio	Lower	Upper
43	100		
72	23.7	17.7	26.5



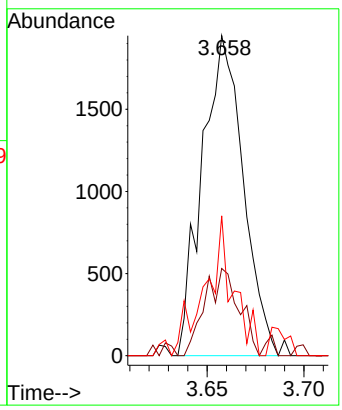


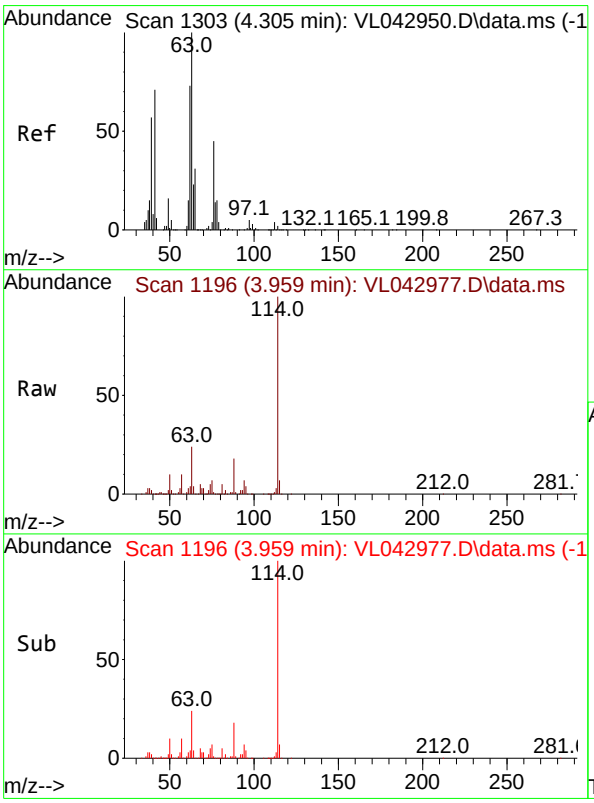
#36
Benzene
Concen: 0.074 ppbv
RT: 3.658 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 78 Resp: 2873

Ion	Ratio	Lower	Upper
78	100		
77	27.3	17.8	26.6#
50	39.6	15.0	22.4#

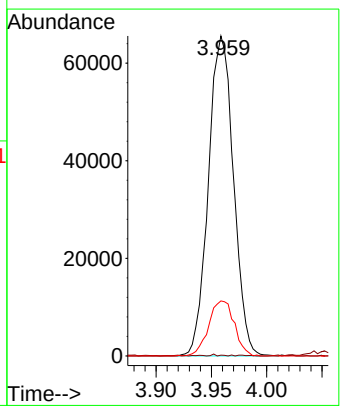


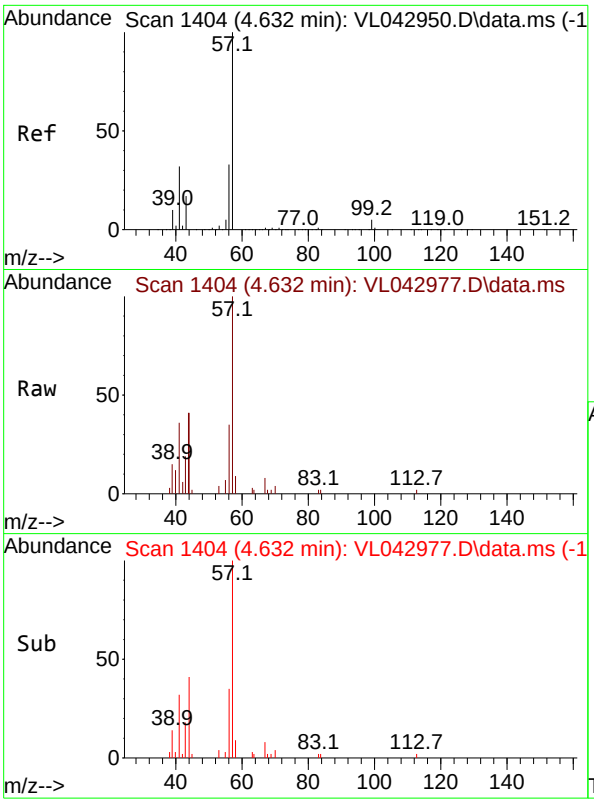


#39
1,2-Dichloropropane
Concen: 7.323 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.347 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 63 Resp: 103626

Ion	Ratio	Lower	Upper
63	100		
41	0.0	57.5	86.3#
62	17.2	58.5	87.7#



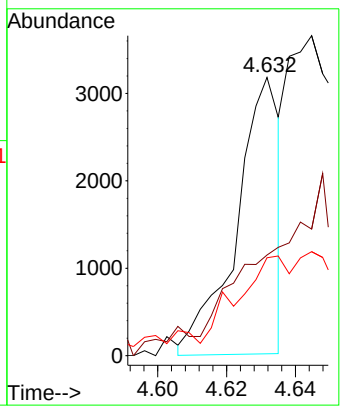


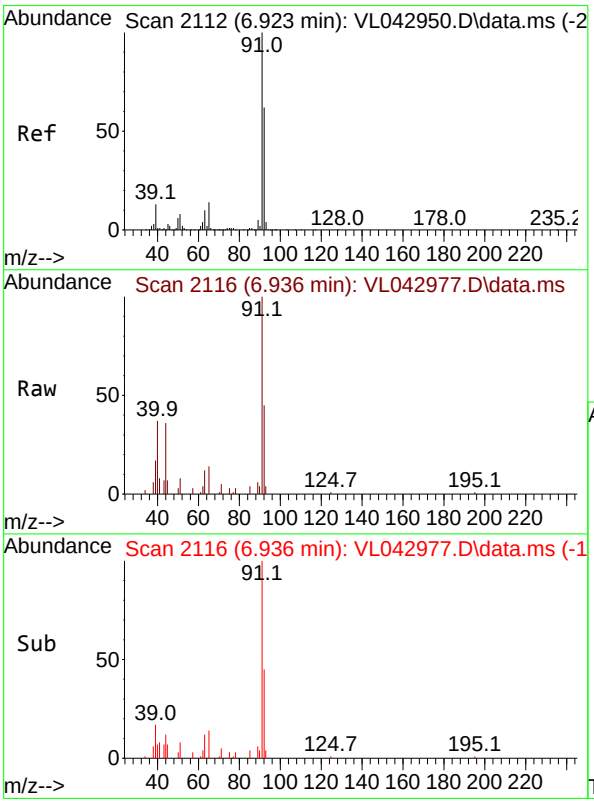
#44
2,2,4-Trimethylpentane
Concen: 0.041 ppbv
RT: 4.632 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 57 Resp: 2757

Ion	Ratio	Lower	Upper
57	100		
41	0.0	25.5	38.3#
56	0.0	25.8	38.8#

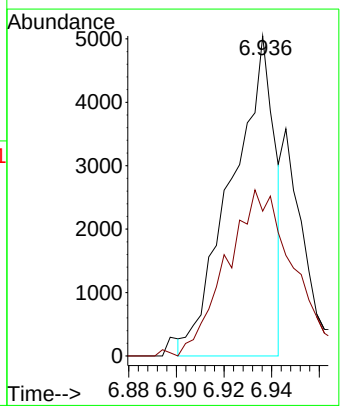


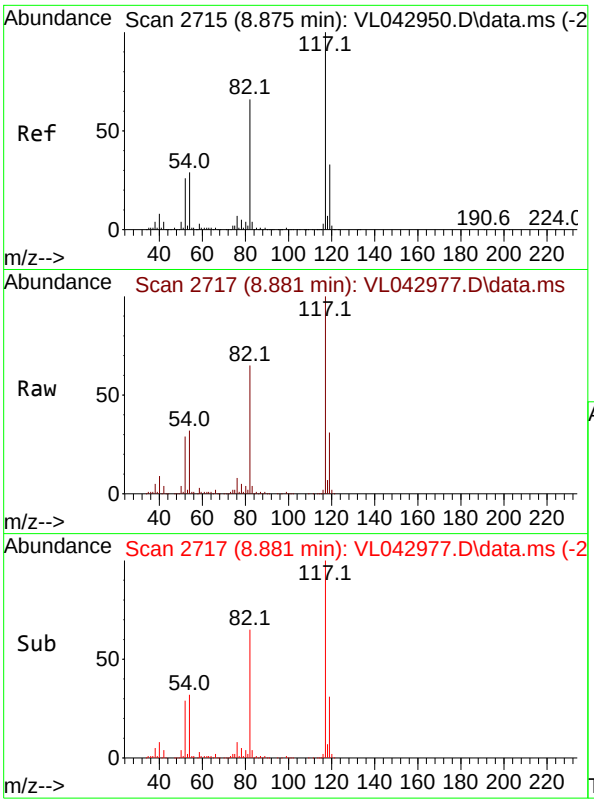


#53
Toluene
Concen: 0.138 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.013 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 91 Resp: 6333

Ion	Ratio	Lower	Upper
91	100		
92	80.4	48.2	72.2#



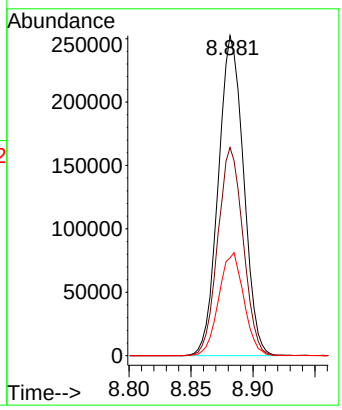


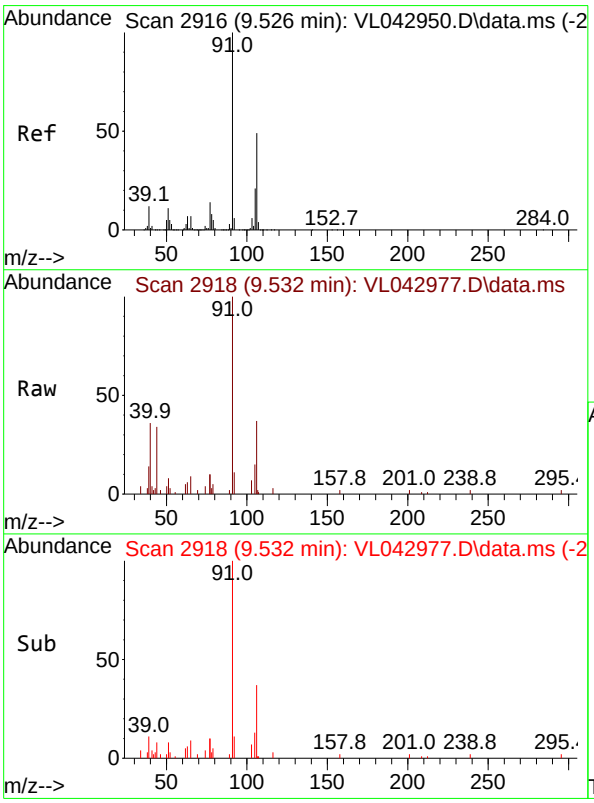
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion:117 Resp: 358472

Ion	Ratio	Lower	Upper
117	100		
82	65.2	52.8	79.2
119	32.0	26.5	39.7

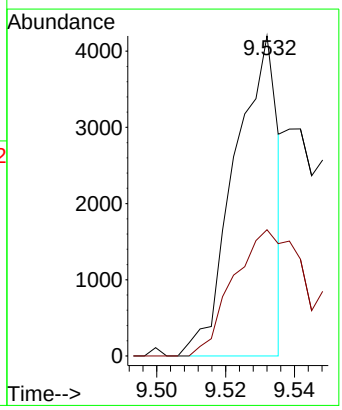


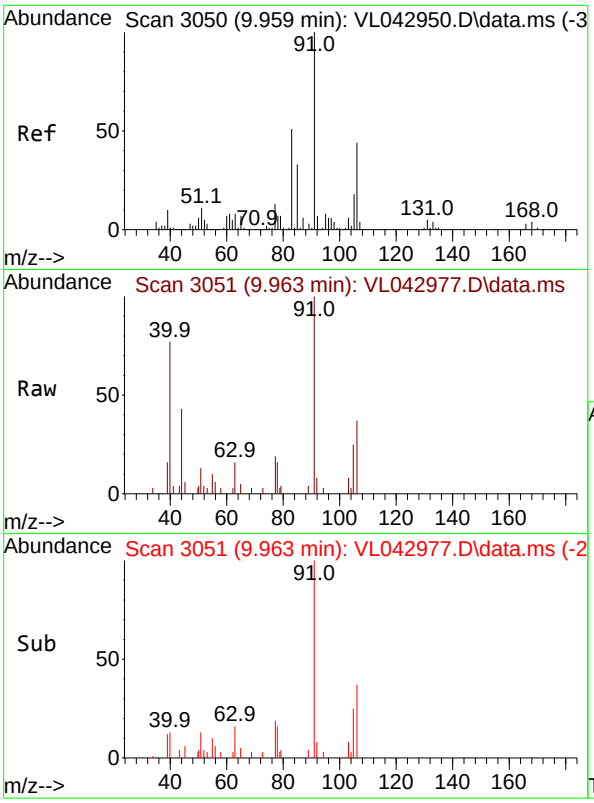


#59
m/p-Xylene
Concen: 0.079 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 91 Resp: 3656

Ion	Ratio	Lower	Upper
91	100		
106	86.2	0.0	0.0#



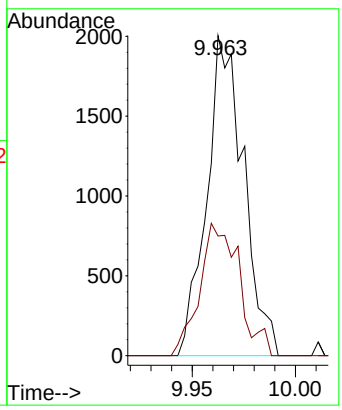


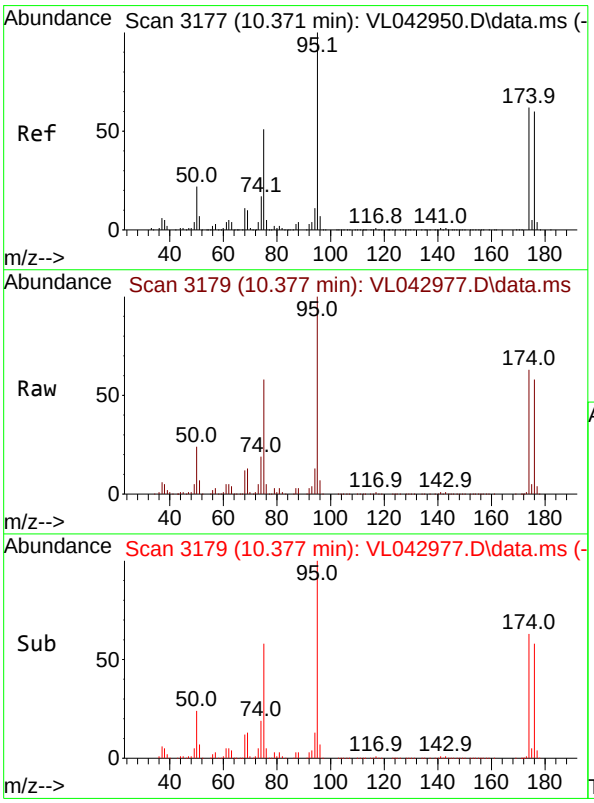
#60
o-Xylene
Concen: 0.054 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion: 91 Resp: 2489

Ion	Ratio	Lower	Upper
91	100		
106	44.3	22.4	67.0

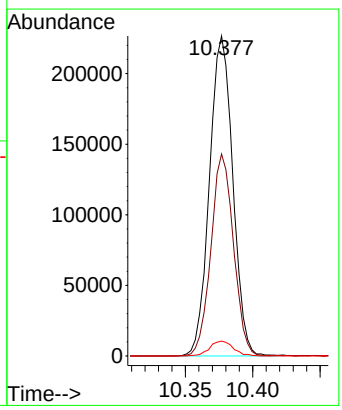


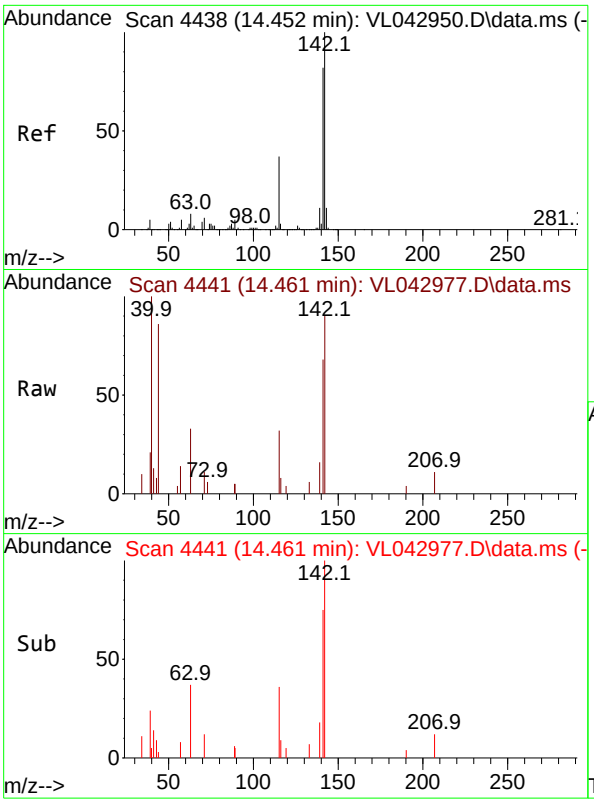


#68
1-Bromo-4-Fluorobenzene
Concen: 10.195 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 95 Resp: 272808

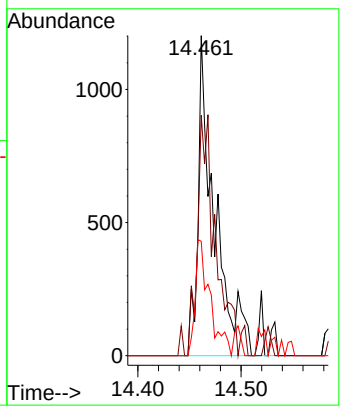
Ion	Ratio	Lower	Upper
95	100		
174	61.4	51.4	77.2
175	4.7	4.0	6.0





#80
Naphthalene,2-methyl-
Concen: 0.101 ppbv
RT: 14.461 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

Tgt Ion:142 Resp: 1430

Ion	Ratio	Lower	Upper
142	100		
141	80.5	65.1	97.7
115	39.0	28.9	43.3