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

Cover Page

Order ID : Q1669

Project ID : US EPA Riverside Industrial Park Superfund Site

Client : Woodard & Curran

Lab Sample Number	Client Sample Number
Q1669-01	IA-B9-3-3262025
Q1669-02	IA-B9-2-3262025
Q1669-03	IA-B9-1-3262025
Q1669-04	AA-1-3262025
Q1669-05	SSSG-B16-3-3262025
Q1669-06	SSSG-DUP-1-3262025
Q1669-07	SSSG-B16-1-3262025
Q1669-08	SSSG-B16-2-3262025
Q1669-09	AA-2-3262025

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: 4/7/2025

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. : Q1669

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	1 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hutton	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
City : **Rye Brook**	Fax Number : **914-448-0147**		
State : **NY**	Site Details:	Batch Certified	
Zip Code : **10573**	Analysis Turnaround Time		
Country :	Standard : **10 business days** **OR**	Data Package Type :	
	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		
TA-04-3-3/26/25	3/26/25 3/27/25	1158	0909	-30	-6	55	55	-30	-7.5	~~10311~~ ~~10637~~ ~~10508~~ 10311 10508	~~10508~~ 10588		6 L	100	~~VL041966.D~~	X				X			

	Temperature (Fahrenheit)			
	Ambient	Maximum	Minimum	
Start	45	54	38	
Stop	39			

GC/MS Analyst Signature (TO-15)

	Pressure (Inches of Hg)			
	Ambient	Maximum	Minimum	
Start	30.05			
Stop	30.26			

** 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: 0.0 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:		Date/Time: 03/24/25	Canisters Received by:	Date/Time: 3/27/25 11:25	
Samples Relinquished by:		Date/Time: 3/27/25 11:25	Received by:	Date/Time:	B2502051 - 30
Relinquished by:		Date/Time:	Received by:	Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : Q1669

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	2 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hatner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
IA-04-S-3/26/25	3/26/25 3/27/25	1136	0932	-28	-6	55	55	-30	-5.9	10785 ~~10567~~	10283 ~~10285~~	6 L	4.16	~~VL042078.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	45	54	38	
Stop	39	-		

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	30.05			
Stop	30.26			

** 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: 0.1 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:		Date/Time: 3/27/25 10:23	B2502051 - 16
Samples Relinquished by:	Date/Time: 3/27/25 11:25	Received by:		Date/Time:	
Relinquished by:	Date/Time:	Received by:		Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	3 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hetner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
IA-89-1-3/26/25	3/26/25 3/27/25	1104	0905	-29	-30	55	55	-30	-6.3	10771 ~~10635~~	10320	6 L	100	VL042143.D	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	45	54	38	
Stop	39			

GC/MS Analyst Signature (TO-15) Sara

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	30.05			
Stop	30.26			

** 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: 0.1 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sara	Date/Time: 03/24/25	Canisters Received by: CR	Date/Time: 3/27/25 11:25		
Samples Relinquished by:	Date/Time: 3/27/25 1125	Received by:	Date/Time:		B2502051 - 22
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	4 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
AA-1-3/26/25	3/26/25 3/27/25	1038	0857	-31	-6	—	—	-30	-6.3	10506 ~~10508~~	10285 ~~10280~~	6 L	4.16	~~VL042143.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	45°F	54°F	38°F	
Stop	40°F			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	30.05	30.25	29.90	
Stop	30.25			

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

X [redacted]

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.2 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 3/24/25	Canisters Received by: [redacted]	Date/Time: 3/27/25 1125		
Samples Relinquished by: [redacted]	Date/Time: 3/27/25 1125	Received by:	Date/Time:		B2502051 - 12
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	5 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) :	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
5556-BL-3-3/26/25	3/26/25	1452	1539	-30	-4.5	55	55	-30	-3.5	10633	10607	6 L	100	VL041974.D	X					X		

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	50	54	38	
Stop	50			

GC/MS Analyst Signature (TO-15): Scott

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.99			
Stop	29.99			

** 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: 0.0 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by: Sean	Date/Time: 03/24/25	Canisters Received by: CR	Date/Time: 3/27/25 1128	B2502051 - 40
Samples Relinquished by:	Date/Time: 3/27/25 1125	Received by:	Date/Time:	
Relinquished by:	Date/Time:	Received by:	Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	6 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
[redacted] SSSCa-BUP-1 - 3/26/25	3/26/25	1420	1500	-32	-5	55	55	-30	-1.8	10695	10606	6 L	100	VL042143.D	X					X		

Temperature (Fahrenheit)

	Ambient	Maximum	Minimum	
Start	50	54	38	
Stop	50			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)

	Ambient	Maximum	Minimum	
Start	29.99			
Stop	29.99			

** 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: 0.0 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by:	Date/Time: 03/26/25	Canisters Received by:	Date/Time: 3/27/25 1125
Samples Relinquished by:	Date/Time: 3/27/25 1125	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

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Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	7 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hetrick	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
5356-B16-1-3/24/25	3/26/25	1420	1520	-30	-6	55	55	-30	-8.0	10769	10445	6 L	100	VL042143.D	X					X		

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	50	54	38	
Stop	50			

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.99			
Stop	29.99			

GC/MS Analyst Signature (TO-15)

** 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: 0.1 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:		Date/Time: 3/24/25	Canisters Received by:	Date/Time: 3/27/25 1125	
Samples Relinquished by:		Date/Time: 3/27/25 1125	Received by:	Date/Time:	B2502051 - 28
Relinquished by:		Date/Time:	Received by:	Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	8 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clyde Metivier	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
SSSG-BIG-2-3/26/25	3/26/25	1415	1526	-30	-5	55	55	-30	-7.1	10773	10282	6 L	100	VL041966.D	X					X		

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	50	54	38	
Stop	50			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.99			
Stop	29.99			

** 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: 0.0 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:		Date/Time: 3/27/25 1125	B2502051 - 14
Samples Relinquished by:	Date/Time: 3/27/25 1125	Received by:		Date/Time:	
Relinquished by:	Date/Time:	Received by:		Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	9 of 13 COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hettler	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	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		
AA-1-3/25/25	3/25/25 3/26/25	1010	0954	-30	-5	—	—	-30	-4.7	10537 ~~10785~~	~~10602~~ 10054	6 L	4.16	~~VL04215.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	48	60	40	
Stop	44			

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.90	30.04	29.90	
Stop	30.04			

10267

GC/MS Analyst Signature (TO-15)

** 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: 0.1 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:		Date/Time: 03/24/25	Canisters Received by:	Date/Time: 3/27/25 1125	B2502051 - 2
Samples Relinquished by:		Date/Time: 3/27/25 1125	Received by:	Date/Time:	
Relinquished by:		Date/Time:	Received by:	Date/Time:	

From: Stephanie Rogacki <SRogacki@woodardcurran.com>
Sent: Thursday, March 27, 2025 3:11 PM
To: Yazmeen Gomez; Jill Tribley; Jordan Hedvat
Cc: Bryan Maurer; Clayton Hefner; Kiran Saleem
Subject: Re: Sample Updates Request

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Secured by Check Point

Hi Yazmeen,

I am answering on Jill's behalf. Thank you for checking with us.

Please analyze all samples listed in Q1669.

Additionally, please change AA-1-3/26/25 ID to AA-2-3/26/25; please also analyze this.

Best regards,
Steph

Stephanie Rogacki, MS, CSM
Environmental Scientist 3| she/her

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

800 Westchester Avenue, Suite N507, Rye Brook, NY 10573

****
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****

From: Yazmeen Gomez
Sent: Thursday, March 27, 2025 2:29 PM
To: Jill Tribley; Stephanie Rogacki; Jordan Hedvat
Cc: Bryan Maurer; Clayton Hefner; Kiran Saleem
Subject: RE: Sample Updates Request

Jill,

Please see attached – just confirming Q1668 are all on hold per COC and Q1669 are OK to analyze (no mention of hold on COC).

There is a few of Indoor and two Ambient air samples that don't mention a hold that I've logged into Q1669.
Let me know if any of those need to be on hold.

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Thursday, March 27, 2025 1:28 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Bryan Maurer <bmaurer@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Subject: RE: Sample Updates Request

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Secured by Check Point

Hi Yazmeen, this will be standard TAT.

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Thursday, March 27, 2025 1:14 PM
To: Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Bryan Maurer <bmaurer@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Subject: RE: Sample Updates Request

Jill,

Can you confirm the TAT? The lab wants to know if you need anything expediated for Tuesday or Wednesday results?

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Thursday, March 27, 2025 12:15 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Bryan Maurer <bmaurer@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Subject: RE: Sample Updates Request

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Hello Yazmeen and Kiran,
I have the info for the (14) 6L Summas we need on Monday:

(5) 6L Summa canisters with regulators for a 24-hour sampling period
(4) 6L Summa canisters with 100 ml/min regulators
(3) 6L Summa canisters with 200 ml/min regulators
(2) 6L Summa canisters with 70 ml/min regulators

One of our folks can pick these up at 11 am at the lab.
We will be submitting these samples mid-next week.

A batch of samples and the unused 1.4 L canisters will be dropped off at the lab this afternoon.
Please confirm you can still accommodate this.
Thank you!
-Jill

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Wednesday, March 26, 2025 1:21 PM
To: Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Bryan Maurer <bmaurer@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Subject: RE: Sample Updates Request

Jill,

I spoke with Mohammad he mentioned we can provide 14 Cans on Friday – if you wanted them all to be 200ml/min or to switch them up?

Also, for the sampling team – each Summa Can belongs to a specific Chain of Custody. Looks like the sampler was just crossing out things on our COC instead of keeping the coordinated Chain and Summa Can together which causes confusion in the lab. If you can just have the samplers keep the Chain and related Summa Can together, the same way they are packages when delivered.

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Wednesday, March 26, 2025 12:49 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Bryan Maurer <bmaurer@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Sample Updates Request

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Hi Yazmeen,
Can we get another pickup mid day tomorrow? Would you be able to bring the 24 hour IA and AA canisters at that time?

The canisters and associated regulators are for 1.4 liter canisters. We requested and require 6 liter canisters for this project. When can you get the correct canisters and regulators on site?

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Wednesday, March 26, 2025 12:01 PM
To: Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Jill Tribley <jtribley@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Subject: RE: Sample Updates Request

Hi Stephanie,

Please see below responses in RED.

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Stephanie Rogacki <SRogacki@woodardcurran.com>
Sent: Wednesday, March 26, 2025 11:54 AM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Jordan Hedvat <Jordan.Hedvat@alliancetg.com>
Cc: Jill Tribley <jtribley@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Subject: Sample Updates Request

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Hi Yazmeen/Jordan,

1. When is the next pickup / drop off scheduled for? We currently do not have another pick up / drop off scheduled after today. Last we spoke you mentioned you weren't sure if you'd need additional cans. And you'd reach out once you've coordinated with the field teams to schedule the pickups.
2. We will need 7 more 24 hour samples - 6 IA and 1 AA When do you need these by?
3. The name of this project is Riverside Superfund Site not "NYCHHC Environmental Services" Noted
4. The PM for this project is Bryan Maurer not me. He is copied here. Please update him for project notes. Noted
5. Please copy both Bryan and Jill (copied) on results and acknowledgments, and all other correspondence regarding this project. Noted

Best regards,
Steph

Stephanie Rogacki, MS, CSM
Environmental Scientist 3| she/her

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

800 Westchester Avenue, Suite N507, Rye Brook, NY 10573

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****

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Monday, April 07, 2025 1:04 PM
To: Yazmeen Gomez; Stephanie Rogacki; Bryan Maurer
Cc: Jordan Hedvat; Clayton Hefner
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

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Hi Yazmeen, 5-day TAT for just SSSG samples only will be fine with us. As of now, we won't want to do the IA samples as 5-day TAT if we need to analyze those.

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Monday, April 7, 2025 11:52 AM
To: Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

Hi Jill,

Yes, there would be a 5 DAY TAT surcharge –

EXPRESS...	ADDITIONAL CHARGES
Ten Working Days	0
Five Working Days	15
Three Working Days	50
Two Working Days	75
One Working Day	100
Same Day	200

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Monday, April 7, 2025 11:35 AM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

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Hi Yazmeen, are there cost implications? Will we be charged the expedited TAT fee?
Apologies for missing your call, I had a dr. appt this morning.
-Jill

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Monday, April 7, 2025 10:56 AM
To: Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

Good morning Jill,

I tried giving you a call a few minutes ago and couldn't reach you. I did call Stephanie as well, she mentioned she cannot make this call.

My lab manager is wondering if we can adjust the TAT to 5 days instead of 10? For at least the SSSG samples that aren't on hold? We have so many cans on hold that we aren't able to provide anything for anyone else. Possibly provide the first round of results today if we can adjust the TAT.

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Thursday, April 3, 2025 11:58 AM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

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Thanks Yazmeen
Clayton is driving now but he will be able to respond once he's back.

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Thursday, April 3, 2025 11:53 AM
To: Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

Good morning,

Please see attached.

One of these was missing the CAN ID on the COC and the other has nothing filled out on the tag.
The Air Lab attempted to match the COCs with a Summa Can – can you confirm these go with one another?

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147

Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Monday, March 31, 2025 3:02 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

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Thank you! Clayton was tied up in traffic but he thought he would be there in about 10 minutes.

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Monday, March 31, 2025 3:00 PM
To: Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

Jill,

We are going to leave the regulators in the shipping/ receiving room just incase the person picking up can't get here until later in the day.

The code to get into the room is 2,3,4,5. If they have any samples to drop off, they can also leave them in this room. Someone will grab them in the morning.

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Tuesday, March 25, 2025 10:30 AM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

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Hi Yazmeen, that should not be an issue on our end.
Thank you!
-Jill

Jill D. Tribley, P.G.
412-535-0833
Woodard & Curran

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Tuesday, March 25, 2025 10:28 AM
To: Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Jill Tribley <jtribley@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

Stephanie,

The Air Lab mentioned the closest they can get to 66ml/min is 70 ml/min.

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com AST AEM AAS

From: Stephanie Rogacki <SRogacki@woodardcurran.com>
Sent: Monday, March 24, 2025 2:25 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Cc: Jordan Hedvat <Jordan.Hedvat@alliancetg.com>; Jill Tribley <jtribley@woodardcurran.com>; Clayton Hefner

<CHefner@woodardcurran.com>
Subject: Fw: Canister Drop Off Confirmation / Pick Up Schedule Change

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Hi Yazmeen,

I think the request to have 3 of the SSGS canisters set at 66 ml/min was missed. I sent this on 3/18. Can we have this prepped for drop off on Wednesday?

Best regards,
Steph

Stephanie Rogacki, MS, CSM
Environmental Scientist 3| she/her

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

800 Westchester Avenue, Suite N507, Rye Brook, NY 10573

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****

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Monday, March 24, 2025 2:06 PM
To: Stephanie Rogacki <SRogacki@woodardcurran.com>

Cc: Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>; Jill Tribley <jtribley@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Canister Drop Off Confirmation / Pick Up Schedule Change

Hi Stephanie,

You will be receiving all requested 41 summa cans for SSGS ON 3/26.

Best Regards,

Yazmeen Gomez
Sr. Project Manager
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: Stephanie Rogacki <SRogacki@woodardcurran.com>
Sent: Monday, March 24, 2025 1:56 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Cc: Jordan Hedvat <Jordan.Hedvat@alliancetg.com>; Jill Tribley <jtribley@woodardcurran.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: Canister Drop Off Confirmation / Pick Up Schedule Change

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Hi Yazmeen,

Our field team received IA, AA canisters along with an additional 10 1-hr canisters set at 100 ml/min this morning.

We would like to schedule the drop off of SSGS canisters and pick up of IA/AA canisters at 9 AM Wednesday morning (March 26th, 2025).
Would you let us know how many canisters we should expect to receive next? Could you send over the order confirmation for this next round of canisters?

Thank you!

Best regards,
Steph

Stephanie Rogacki, MS, CSM
Environmental Scientist 3| she/her

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

800 Westchester Avenue, Suite N507, Rye Brook, NY 10573

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****

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

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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.: Q1669
Case No.: US EPA Riverside Industria

Location: 284 Sheffield Street, Mountainside, NJ 7092
Title: Sample Custodian
Date Broken: 3/27/2025
Military Time Seal Broken: 11:25:00
Analytical Parameter/Fraction: TO-15

Sample No.	Aliquot/Extract No.	Sample No.	Aliquot/Extract No.
Q1669-01	IA-B9-3-3262025		
Q1669-02	IA-B9-2-3262025		
Q1669-03	IA-B9-1-3262025		
Q1669-04	~~AA-2-3262025~~ AA-1-3262025		
Q1669-05	SSSG-B16-3-3262025		
Q1669-06	SSSG-DUP-1-3262025		
Q1669-07	SSSG-B16-1-3262025		
Q1669-08	SSSG-B16-2-3262025		
Q1669-09	~~AA-2-3262025~~ AA-2-3262025		

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
3/27	1440	Signature [signature]	Signature [signature]	
		Printed Name [illegible]	Printed Name [illegible]	
		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	

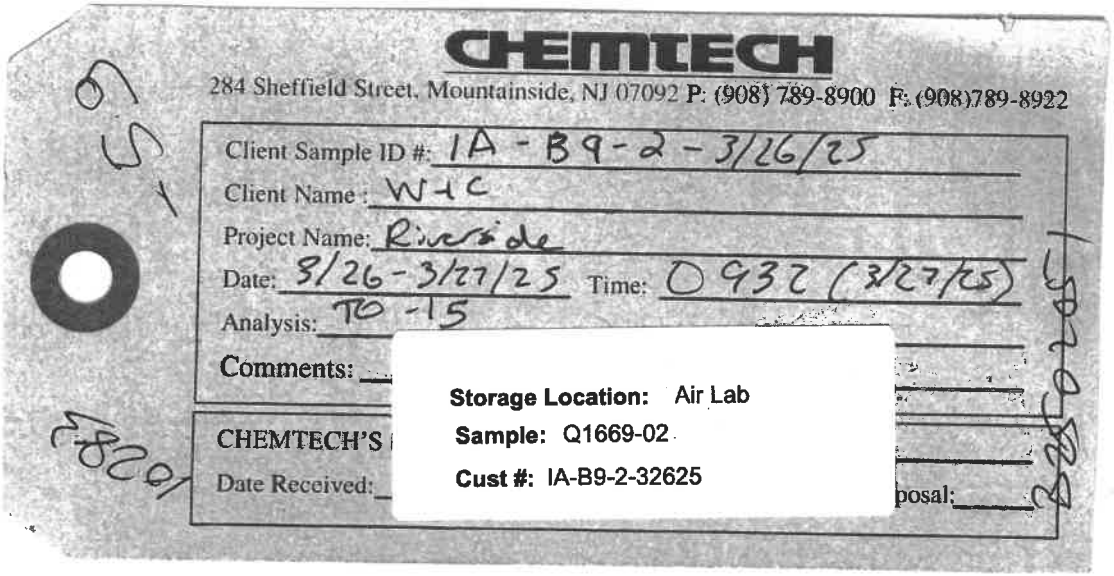
Distribution: White - Original (Sent With Report) *Yellow - Contractor Archive* *Pink - Sample Custodian - Interim Copy*

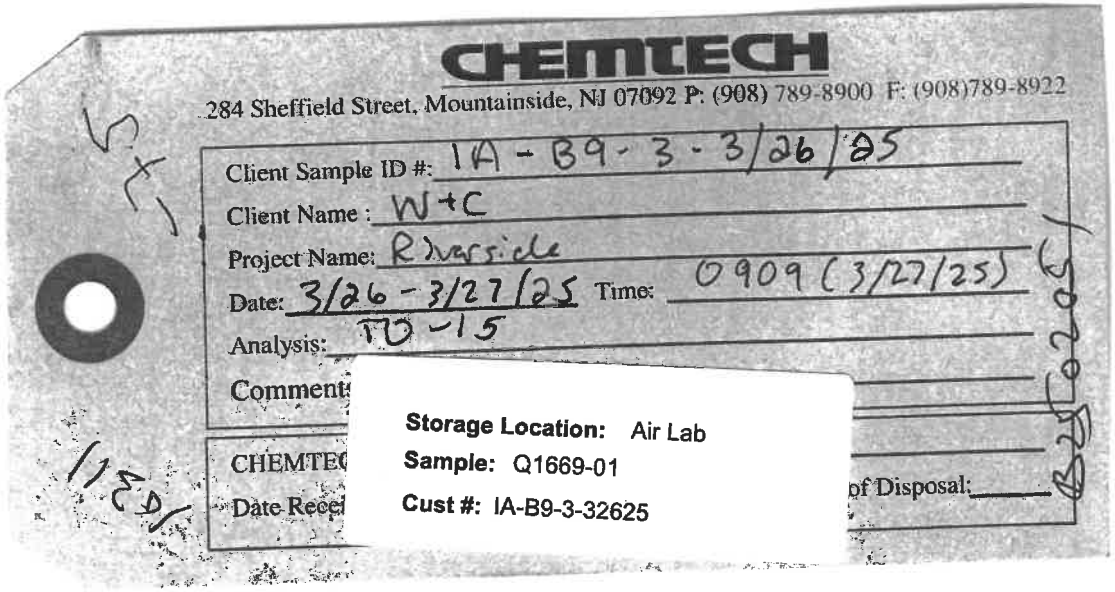
AIR SAMPLE PRESSURE & DILUTION LOGBOOK

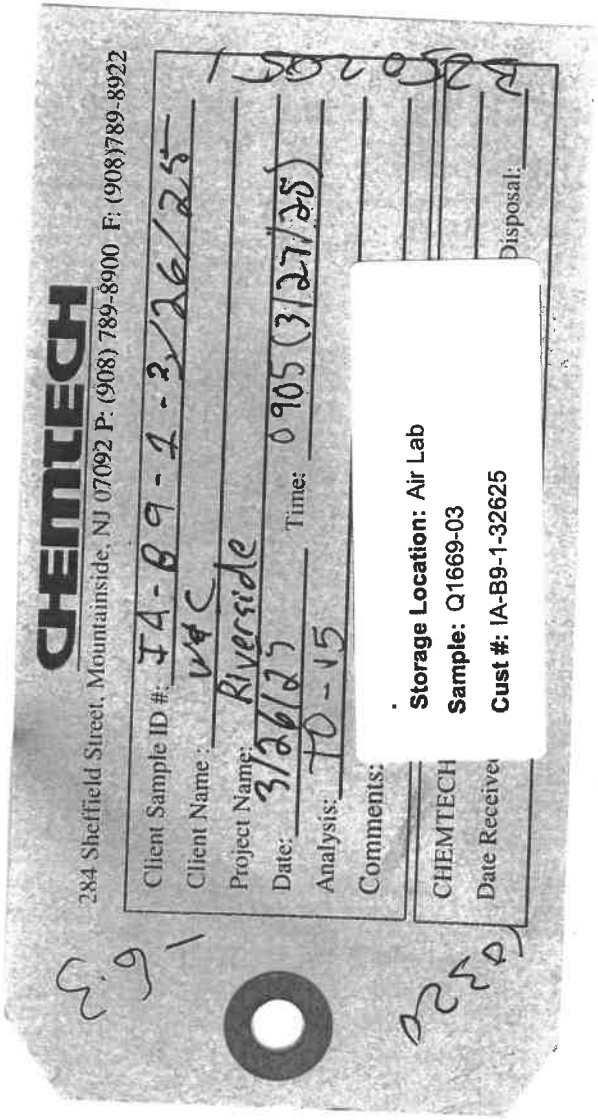
Analyst Signature: _____ Supervisor Signature: _____

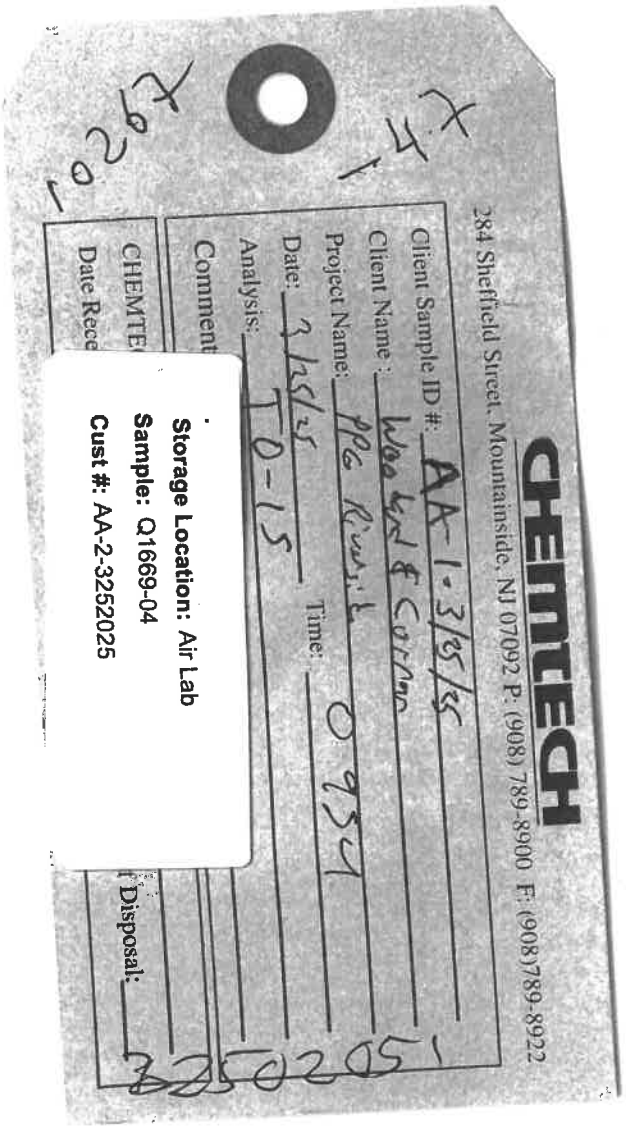
METHOD: TO-15 Pressure Gauge ID: AZ55971

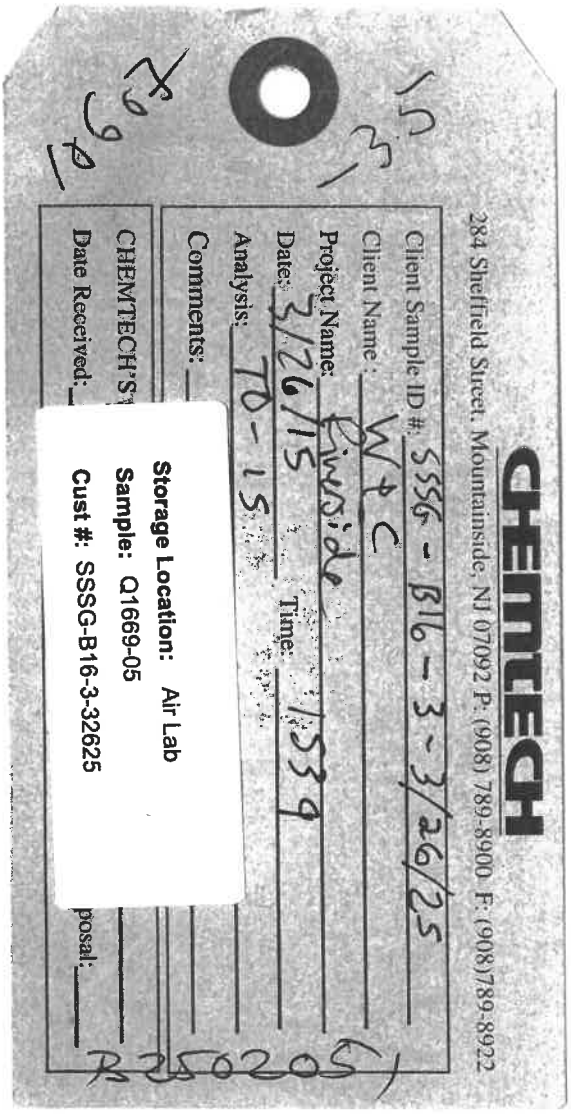
Date	Sample Number	Canister #	Initial Pressure psia	Initial Pressure Hg	Final Pressure psia	Final Pressure Hg	Dilution Factor	Comment
03/25/25	Q1665-22	10306	11.2	-7.1				SV
03/27/25	Q1668-01	10588	11.8	-5.9				
03/27/25	Q1668-02	10269	12.0	-5.5				
↓	Q1668-03	10060	12.0	-5.5				
	Q1668-04	10605	12.4	-4.7				
03/27/25	Q1669-01	10311	11.0	-7.5				
	Q1669-02	10283	11.8	-5.9				
	Q1669-03	10320	11.6	-6.3				
	Q1669-04	10267	12.4	-4.7				
	Q1669-05	10607	13.0	-3.5				
	Q1669-06	10606	13.8	-1.8				
	Q1669-07	10445	10.8	-8.0				
	Q1669-08	10282	11.2	-7.1				
	Q1669-09	10285	11.6	-6.3				

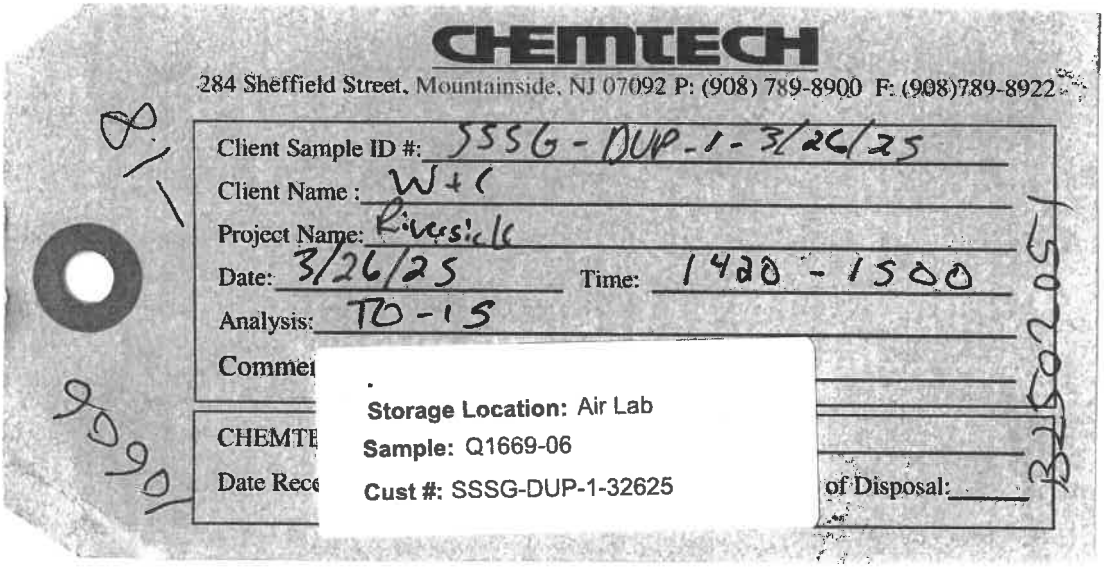

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B9-2-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26-3/27/25 Time: 0932 (3/27/25)
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received:
Storage Location: Air Lab
Sample: Q1669-02
Cust #: IA-B9-2-32625

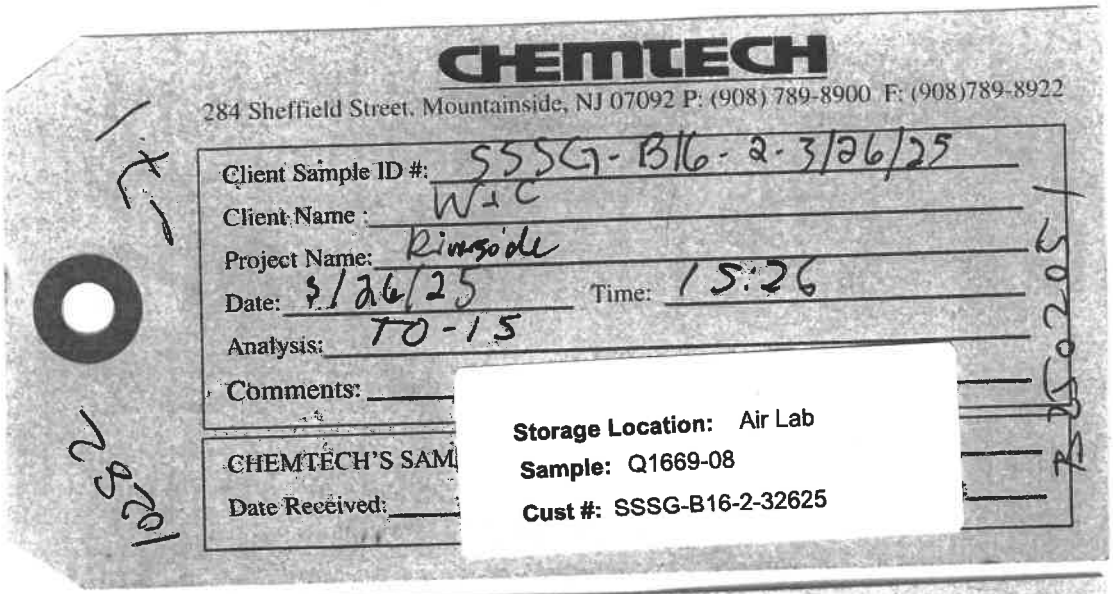

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B9-3-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26-3/27/25 Time: 0909 (3/27/25)
Analysis: TO-15
Comment
CHEMTEC
Date Rece
of Disposal:
Storage Location: Air Lab
Sample: Q1669-01
Cust #: IA-B9-3-32625

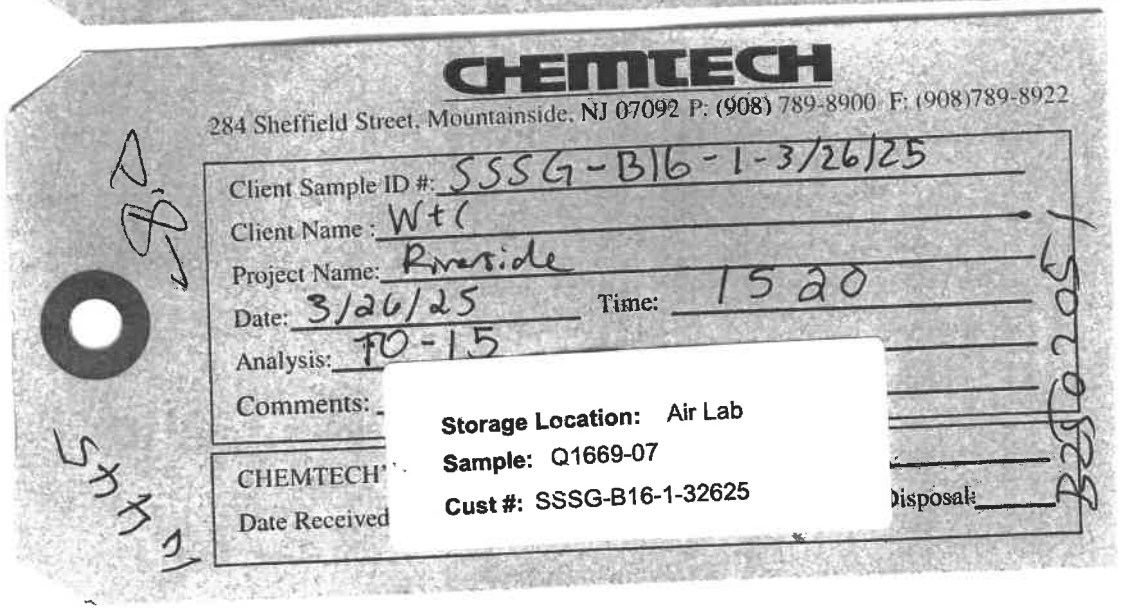

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B9-1-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26/25 Time: 0905 (3/27/25)
Analysis: TO-15
Comments:
CHEMTECH
Date Receive
Disposal:
Storage Location: Air Lab
Sample: Q1669-03
Cust #: IA-B9-1-32625

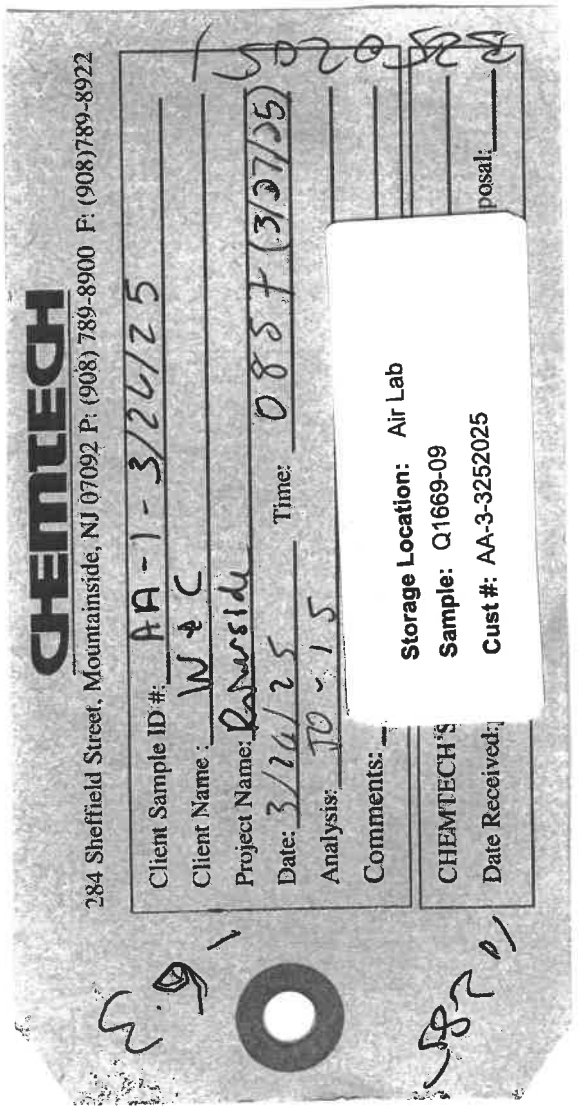

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: AA-1-3/25/25
Client Name: Woodard & Curran
Project Name: PPG Riverside
Date: 3/25/25 Time: 0754
Analysis: TO-15
Comments:
CHEMTECH's
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1669-04
Cust #: AA-2-3252025


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: SSSG-B16-3-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26/25 Time: 1539
Analysis: TO-15
Comments:
CHEMTECH's
Date Received:
posal:
Storage Location: Air Lab
Sample: Q1669-05
Cust #: SSSG-B16-3-32625


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: SSSG-DUP-1-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26/25 Time: 1420 - 1500
Analysis: TO-15
Comme
CHEMTE
Date Rece
of Disposal:
Storage Location: Air Lab
Sample: Q1669-06
Cust #: SSSG-DUP-1-32625


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: SSSG-B16-2-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26/25 Time: 15:26
Analysis: TO-15
Comments:
CHEMTECH'S SAM
Date Received:
Storage Location: Air Lab
Sample: Q1669-08
Cust #: SSSG-B16-2-32625


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: SSSG-B16-1-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26/25 Time: 1520
Analysis: TO-15
Comments:
CHEMTECH'
Date Received
Disposal:
Storage Location: Air Lab
Sample: Q1669-07
Cust #: SSSG-B16-1-32625


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: AA-1-3/26/25
Client Name: W+C
Project Name: Riverside
Date: 3/26/25 Time: 0857 (3/27/25)
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1669-09
Cust #: AA-3-3252025

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CASE NARRATIVE

Woodard & Curran
Project Name: US EPA Riverside Industrial Park Superfund Site
Project # N/A
Chemtech Project # Q1669
Test Name: TO-15

A. Number of Samples and Date of Receipt:
9 Air samples were received on 03/27/2025.

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 met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The RPD for {Q1669-09DUP} with File ID: VL042190.D met criteria except for 2-Butanone[24.4%], m/p-Xylene[200%] due to difference in results of original and DUP.

The RPD for {Q1669-01DUP} with File ID: VL042196.D met criteria except for 1,3,5-Trimethylbenzene[200%], Cyclohexane[200%] due to difference in results of original and DUP.

The RPD for {Q1669-06DUP} with File ID: VL042206.D met criteria except for Tetrachloroethene[200%] due to difference in results of original and DUP.

The Blank Spike met requirements for all samples .
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements .
The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

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Samples IA-B9-3-3262025, SSSG-DUP-1-3262025 and SSSG-B16-1-3262025 were diluted due to high concentrations.

E. Additional Comments:

This data Package has been revised to include DUP raw data.
This Data Package has been revised due to client ID corrected for sam#04 and 09. The Sample #IA-B9-3-3262025, IA-B9-3-3262025DL, AA-1-3262025, SSSG-DUP-1-3262025DL, SSSG-B16-1-3262025, SSSG-B16-1-3262025DL, SSSG-B16-2-3262025, AA-2-3262025 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

The Manual Integrations are performed for the followings :

Manual Integration Report			
Sequence	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042172.D	m/p-Xylene	SAM	3/31/2025 11:24:55 AM	MMDadoda	4/3/2025 8:05:09 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042173.D	1,4-Dioxane	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042173.D	Ethanol	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042173.D	m/p-Xylene	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	1,4-Dioxane	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software

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							incorrectly
VSTDICC001	VL042174.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	Ethanol	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	m/p-Xylene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	Methyl Methacrylate	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	Propene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	t-1,3-Dichloropropene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	trans-1,2-Dichloroethene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	Vinyl Acetate	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	1,1,2-Trichloroethane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly

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VSTDICC0.5	VL042175.D	1,4-Dioxane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	cis-1,3-Dichloropropene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Cyclohexane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	m/p-Xylene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Methyl Methacrylate	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Propene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Tetrahydrofuran	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Trichloroethene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042176.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042176.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025	MMDadoda	4/3/2025	Peak Integrate

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				11:25:04 AM		8:05:45 AM	d by Software incorrectly
VSTDICC0.1	VL042176.D	1,2-Dibromoethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042176.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042176.D	Trichloroethene	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	Tetrachloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	Trichloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	Vinyl Chloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software

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							incorrectly
VSTDICC015	VL042178.D	m/p-Xylene	SAM	3/31/2025 11:25:14 AM	MMDadoda	4/3/2025 8:06:09 AM	Peak Integrated by Software incorrectly
VSTDICV010	VL042179.D	m/p-Xylene	SAM	3/31/2025 11:28:50 AM	MMDadoda	4/3/2025 8:06:14 AM	Peak Integrated by Software incorrectly
VL0327ABS01	VL042181.D	m/p-Xylene	SAM	3/31/2025 11:25:09 AM	MMDadoda	4/3/2025 8:06:19 AM	Peak Integrated by Software incorrectly
Q1669-01	VL042185.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software incorrectly
Q1669-01	VL042185.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software incorrectly
Q1669-01	VL042185.D	Chlorodifluoromethane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software incorrectly
Q1669-01	VL042185.D	Cyclohexane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software incorrectly
Q1669-01	VL042185.D	Heptane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software incorrectly
Q1669-01	VL042185.D	m/p-Xylene	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software incorrectly

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Q1669-02	VL042186.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-02	VL042186.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-02	VL042186.D	Chlorodifluoromethane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-02	VL042186.D	Cyclohexane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-02	VL042186.D	Heptane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-02	VL042186.D	Propene	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-02	VL042186.D	Styrene	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-02	VL042186.D	Trichloroethene	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software incorrectly
Q1669-03	VL042187.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software incorrectly
Q1669-03	VL042187.D	4-Methyl-2-Pentanone	SAM	3/31/2025	MMDadoda	4/3/2025	Peak Integrate

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				11:25:41 AM		8:06:54 AM	d by Software incorrectly
Q1669-03	VL042187.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software incorrectly
Q1669-03	VL042187.D	Cyclohexane	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software incorrectly
Q1669-03	VL042187.D	Heptane	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software incorrectly
Q1669-03	VL042187.D	n-propylbenzene	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software incorrectly
Q1669-04	VL042188.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software incorrectly
Q1669-04	VL042188.D	Chlorodifluoromethane	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software incorrectly
Q1669-04	VL042188.D	m/p-Xylene	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software incorrectly
Q1669-04	VL042188.D	Propene	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software incorrectly
Q1669-09	VL042189.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:37 AM	MMDadoda	4/3/2025 8:07:08 AM	Peak Integrated by Software

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							incorrectly
Q1669-09	VL042189.D	m/p-Xylene	SAM	3/31/2025 11:25:37 AM	MMDadoda	4/3/2025 8:07:08 AM	Peak Integrated by Software incorrectly
Q1669-09	VL042189.D	Propene	SAM	3/31/2025 11:25:37 AM	MMDadoda	4/3/2025 8:07:08 AM	Peak Integrated by Software incorrectly
Q1669-09DUP	VL042190.D	Benzene	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software incorrectly
Q1669-09DUP	VL042190.D	Carbon Tetrachloride	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software incorrectly
Q1669-09DUP	VL042190.D	m/p-Xylene	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software incorrectly
Q1669-09DUP	VL042190.D	Toluene	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software incorrectly
Q1669-07DL	VL042192.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:27:27 AM	MMDadoda	4/3/2025 8:07:28 AM	Peak Integrated by Software incorrectly
Q1669-07DL	VL042192.D	m/p-Xylene	SAM	3/31/2025 11:27:27 AM	MMDadoda	4/3/2025 8:07:28 AM	Peak Integrated by Software incorrectly
Q1669-01DL	VL042195.D	m/p-Xylene	SAM	3/31/2025 11:27:14 AM	MMDadoda	4/3/2025 8:07:50 AM	Peak Integrated by Software incorrectly

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Q1669-01DL	VL042195.D	Propene	SAM	3/31/2025 11:27:14 AM	MMDadoda	4/3/2025 8:07:50 AM	Peak Integrated by Software incorrectly
Q1669-01DUP	VL042196.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software incorrectly
Q1669-01DUP	VL042196.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software incorrectly
Q1669-01DUP	VL042196.D	Cyclohexane	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software incorrectly
Q1669-01DUP	VL042196.D	Heptane	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software incorrectly
Q1669-05	VL042197.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software incorrectly
Q1669-05	VL042197.D	Chlorodifluoromethane	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software incorrectly
Q1669-05	VL042197.D	Cyclohexane	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software incorrectly
Q1669-05	VL042197.D	Propene	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software incorrectly
Q1669-05	VL042197.D	Tetrachloroethene	SAM	3/31/2025	MMDadoda	4/3/2025	Peak Integrate

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				11:26:03 AM		8:08:00 AM	d by Software incorrectly
Q1669-05	VL042197.D	Tetrahydrofuran	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software incorrectly
Q1669-07	VL042198.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software incorrectly
Q1669-07	VL042198.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software incorrectly
Q1669-07	VL042198.D	Cyclohexane	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software incorrectly
Q1669-07	VL042198.D	Heptane	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software incorrectly
Q1669-07	VL042198.D	n-propylbenzene	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software incorrectly
Q1669-07	VL042198.D	Trichloroethene	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software incorrectly
Q1669-08	VL042199.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software incorrectly
Q1669-08	VL042199.D	Chlorobenzene	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software

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							incorrectly
Q1669-08	VL042199.D	Chlorodifluoromethane	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software incorrectly
Q1669-08	VL042199.D	Heptane	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software incorrectly
Q1669-08	VL042199.D	m/p-Xylene	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software incorrectly
Q1669-08	VL042199.D	Propene	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software incorrectly

Manual Integration Report

Sequence	vl033125	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042201.D	1,1,2-Trichloroethane	SAM	4/1/2025 7:30:55 AM	MMDadoda	4/1/2025 1:19:08 PM	Peak Integrated by Software incorrectly
VSTDCCC010	VL042201.D	1,4-Dioxane	SAM	4/1/2025 7:30:55 AM	MMDadoda	4/1/2025 1:19:08 PM	Peak Integrated by Software incorrectly
VSTDCCC010	VL042201.D	m/p-Xylene	SAM	4/1/2025 7:30:55 AM	MMDadoda	4/1/2025 1:19:08 PM	Peak Integrated by Software incorrectly
VL0331ABS01	VL042203.D	m/p-Xylene	SAM	4/1/2025	MMDadoda	4/1/2025 1:19:10 PM	Peak Integrate

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				7:31:07 AM			d by Software incorrectly
Q1669-06	VL042204.D	4-Methyl-2-Pentanone	SAM	4/1/2025 7:47:12 AM	MMDadoda	4/1/2025 1:19:11 PM	Peak Integrated by Software incorrectly
Q1669-06	VL042204.D	Trichloroethene	SAM	4/1/2025 7:47:12 AM	MMDadoda	4/1/2025 1:19:11 PM	Peak Integrated by Software incorrectly
Q1669-06DL	VL042205.D	4-Methyl-2-Pentanone	SAM	4/1/2025 7:47:17 AM	MMDadoda	4/1/2025 1:19:13 PM	Peak Integrated by Software incorrectly
Q1669-06DL	VL042205.D	Heptane	SAM	4/1/2025 7:47:17 AM	MMDadoda	4/1/2025 1:19:13 PM	Peak Integrated by Software incorrectly
Q1669-06DL	VL042205.D	Tetrahydrofuran	SAM	4/1/2025 7:47:17 AM	MMDadoda	4/1/2025 1:19:13 PM	Peak Integrated by Software incorrectly
Q1669-06DUP	VL042206.D	4-Methyl-2-Pentanone	SAM	4/1/2025 7:31:12 AM	MMDadoda	4/1/2025 1:19:14 PM	Peak Integrated by Software incorrectly
Q1669-06DUP	VL042206.D	Naphthalene,2-methyl-	SAM	4/1/2025 7:31:12 AM	MMDadoda	4/1/2025 1:19:14 PM	Peak Integrated by Software incorrectly
Q1669-06DUP	VL042206.D	Tetrachloroethene	SAM	4/1/2025 7:31:12 AM	MMDadoda	4/1/2025 1:19:14 PM	Peak Integrated by Software incorrectly

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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 #: **Q1669**

	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:** **04/07/2025**

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LAB CHRONICLE

OrderID:	Q1669	**OrderDate:**	3/27/2025 2:02:00 PM
Client:	Woodard & Curran	**Project:**	US EPA Riverside Industrial Park Superfund Site
Contact:	Bryan Maurer	**Location:**	Air Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1669-01	**IA-B9-3-3262025**	**Air**			**03/27/25**			**03/27/25**
			TO-15	TO-15			03/27/25	
Q1669-01DL	**IA-B9-3-3262025DL**	**Air**			**03/27/25**			**03/27/25**
			TO-15	TO-15			03/28/25	
Q1669-02	**IA-B9-2-3262025**	**Air**			**03/27/25**			**03/27/25**
			TO-15	TO-15			03/27/25	
Q1669-03	**IA-B9-1-3262025**	**Air**			**03/27/25**			**03/27/25**
			TO-15	TO-15			03/27/25	
Q1669-04	**AA-1-3262025**	**Air**			**03/27/25**			**03/27/25**
			TO-15	TO-15			03/27/25	
Q1669-05	**SSSG-B16-3-3262025**	**Air**			**03/26/25**			**03/27/25**
			TO-15	TO-15			03/28/25	
Q1669-06	**SSSG-DUP-1-3262025**	**Air**			**03/26/25**			**03/27/25**
			TO-15	TO-15			03/31/25	
Q1669-06DL	**SSSG-DUP-1-3262025 DL**	**Air**			**03/26/25**			**03/27/25**
			TO-15	TO-15			03/31/25	
Q1669-07	**SSSG-B16-1-3262025**	**Air**			**03/26/25**			**03/27/25**
			TO-15	TO-15			03/28/25	
Q1669-07DL	**SSSG-B16-1-3262025 DL**	**Air**			**03/26/25**			**03/27/25**
			TO-15	TO-15			03/27/25	
Q1669-08	**SSSG-B16-2-3262025**	**Air**			**03/26/25**			**03/27/25**
			TO-15	TO-15			03/28/25	

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LAB CHRONICLE

Q1669-09	**AA-2-3262025**	**Air**		**03/26/25**		**03/27/25**
			TO-15	TO-15	03/27/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**IA-B9-3-3262025**								
Q1669-01	IA-B9-3-3262025	Air	Dichlorodifluoromethane		1.98	J	1.04	2.47	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Chloromethane		0.76	J	0.21	1.03	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1669-01	IA-B9-3-3262025	Air	tert-Butyl alcohol		1.52		0.58	1.52	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Heptane		1.56	J	0.45	2.05	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Acetone		82.4	E	0.57	1.19	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Methylene Chloride		1.25	J	0.66	1.74	ug/m3
Q1669-01	IA-B9-3-3262025	Air	2-Butanone		2.68		0.35	1.47	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Carbon Tetrachloride		0.38		0.060	0.19	ug/m3
Q1669-01	IA-B9-3-3262025	Air	2,2,4-Trimethylpentane		1.26	J	0.47	2.34	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Benzene		2.04		0.29	1.60	ug/m3
Q1669-01	IA-B9-3-3262025	Air	4-Methyl-2-Pentanone		1.48	J	0.37	2.05	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Toluene		8.67		0.41	1.88	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Ethyl Benzene		1.35	J	0.52	2.17	ug/m3
Q1669-01	IA-B9-3-3262025	Air	m/p-Xylene		4.78		0.91	4.34	ug/m3
Q1669-01	IA-B9-3-3262025	Air	o-Xylene		2.22		0.52	2.17	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Styrene		0.51	J	0.47	2.13	ug/m3
Q1669-01	IA-B9-3-3262025	Air	1,2,4-Trimethylbenzene		2.51		0.39	2.46	ug/m3
Q1669-01	IA-B9-3-3262025	Air	Hexane		6.70		0.39	1.76	ug/m3
			Total Voc :		125				
Q1669-01	IA-B9-3-3262025	Air	unknown1.774	*	1.40	J	0	0	ppbv
Q1669-01	IA-B9-3-3262025	Air	Pentane, 3-methyl-	*	1.60	J	0	0	ppbv
Q1669-01	IA-B9-3-3262025	Air	Pentane, 2-methyl-	*	2.50	J	0	0	ppbv
Q1669-01	IA-B9-3-3262025	Air	Pentane	*	1.80	J	0	0	ppbv
Q1669-01	IA-B9-3-3262025	Air	1-Propene, 2-methyl-	*	3.30	J	0	0	ppbv
Q1669-01	IA-B9-3-3262025	Air	Chlorodifluoromethane	*	0.27	J	0.090	0.50	ppbv
Q1669-01	IA-B9-3-3262025	Air	Propene	*	0.79	J	0.15	0.50	ppbv
Q1669-01	IA-B9-3-3262025	Air	n-propylbenzene	*	0.10	J	0.080	0.50	ppbv
			Total Tics :		11.8				
			Total Concentration:		137				
Client ID:	**IA-B9-3-3262025DL**								
Q1669-01DL	IA-B9-3-3262025D	Air	Acetone		88.1	D	2.85	5.94	ug/m3
Q1669-01DL	IA-B9-3-3262025D	Air	Methylene Chloride		3.82	JD	3.30	8.69	ug/m3
Q1669-01DL	IA-B9-3-3262025D	Air	2-Butanone		2.80	JD	1.77	7.37	ug/m3
Q1669-01DL	IA-B9-3-3262025D	Air	Benzene		1.82	JD	1.41	7.99	ug/m3
Q1669-01DL	IA-B9-3-3262025D	Air	Toluene		7.91	JD	2.07	9.42	ug/m3

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Hit Summary Sheet
SW-846

SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1669-01DL	IA-B9-3-3262025D	Air	Hexane		5.64	JD	1.94	8.81	ug/m3
			Total Voc :		110				
			Total Concentration:		110				
Client ID:	**IA-B9-2-3262025**								
Q1669-02	IA-B9-2-3262025	Air	Dichlorodifluoromethane		2.03	J	1.04	2.47	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Chloromethane		0.45	J	0.21	1.03	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Trichlorofluoromethane		1.12	J	0.90	2.81	ug/m3
Q1669-02	IA-B9-2-3262025	Air	tert-Butyl alcohol		1.15	J	0.58	1.52	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Heptane		2.01	J	0.45	2.05	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Acetone		5.70		0.57	1.19	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Methylene Chloride		1.22	J	0.66	1.74	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Cyclohexane		0.76	J	0.76	1.72	ug/m3
Q1669-02	IA-B9-2-3262025	Air	2-Butanone		1.24	J	0.35	1.47	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Chloroform		0.59	J	0.39	2.44	ug/m3
Q1669-02	IA-B9-2-3262025	Air	2,2,4-Trimethylpentane		1.73	J	0.47	2.34	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Benzene		2.14		0.29	1.60	ug/m3
Q1669-02	IA-B9-2-3262025	Air	4-Methyl-2-Pentanone		1.76	J	0.37	2.05	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Toluene		8.67		0.41	1.88	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Ethyl Benzene		1.69	J	0.52	2.17	ug/m3
Q1669-02	IA-B9-2-3262025	Air	m/p-Xylene		6.08		0.91	4.34	ug/m3
Q1669-02	IA-B9-2-3262025	Air	o-Xylene		2.82		0.52	2.17	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Styrene		0.55	J	0.47	2.13	ug/m3
Q1669-02	IA-B9-2-3262025	Air	1,3,5-Trimethylbenzene		0.88	J	0.54	2.46	ug/m3
Q1669-02	IA-B9-2-3262025	Air	1,2,4-Trimethylbenzene		2.65		0.39	2.46	ug/m3
Q1669-02	IA-B9-2-3262025	Air	4-Ethyltoluene		0.98	J	0.59	2.46	ug/m3
Q1669-02	IA-B9-2-3262025	Air	Hexane		8.11		0.39	1.76	ug/m3
			Total Voc :		54.8				
Q1669-02	IA-B9-2-3262025	Air	Pentane, 3-methyl-	*	1.60	J	0	0	ppbv
Q1669-02	IA-B9-2-3262025	Air	Cyclopentane, methyl-	*	1.00	J	0	0	ppbv
Q1669-02	IA-B9-2-3262025	Air	Butane	*	1.10	J	0	0	ppbv
Q1669-02	IA-B9-2-3262025	Air	Pentane, 2-methyl-	*	3.10	J	0	0	ppbv
Q1669-02	IA-B9-2-3262025	Air	Pentane	*	1.70	J	0	0	ppbv
Q1669-02	IA-B9-2-3262025	Air	Chlorodifluoromethane	*	0.24	J	0.090	0.50	ppbv
Q1669-02	IA-B9-2-3262025	Air	Propene	*	1.60	J	0.15	0.50	ppbv
			Total Tics :		10.3				
			Total Concentration:		65.1				

Alliance TECHNICAL GROUP
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Hit Summary Sheet
SW-846

SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**IA-B9-1-3262025**								
Q1669-03	IA-B9-1-3262025	Air	Dichlorodifluoromethane		1.88	J	1.04	2.47	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Chloromethane		0.52	J	0.21	1.03	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1669-03	IA-B9-1-3262025	Air	tert-Butyl alcohol		1.27	J	0.58	1.52	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Heptane		2.09		0.45	2.05	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Acetone		7.60		0.57	1.19	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Methylene Chloride		2.81		0.66	1.74	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Cyclohexane		0.96	J	0.76	1.72	ug/m3
Q1669-03	IA-B9-1-3262025	Air	2-Butanone		1.59		0.35	1.47	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1669-03	IA-B9-1-3262025	Air	2,2,4-Trimethylpentane		1.45	J	0.47	2.34	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Benzene		2.40		0.29	1.60	ug/m3
Q1669-03	IA-B9-1-3262025	Air	4-Methyl-2-Pentanone		3.52		0.37	2.05	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Toluene		9.80		0.41	1.88	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Ethyl Benzene		1.65	J	0.52	2.17	ug/m3
Q1669-03	IA-B9-1-3262025	Air	m/p-Xylene		6.08		0.91	4.34	ug/m3
Q1669-03	IA-B9-1-3262025	Air	o-Xylene		2.48		0.52	2.17	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Styrene		10.6		0.47	2.13	ug/m3
Q1669-03	IA-B9-1-3262025	Air	1,3,5-Trimethylbenzene		0.69	J	0.54	2.46	ug/m3
Q1669-03	IA-B9-1-3262025	Air	1,2,4-Trimethylbenzene		2.06	J	0.39	2.46	ug/m3
Q1669-03	IA-B9-1-3262025	Air	4-Ethyltoluene		0.64	J	0.59	2.46	ug/m3
Q1669-03	IA-B9-1-3262025	Air	Hexane		7.75		0.39	1.76	ug/m3
			Total Voc :		69.5				
Q1669-03	IA-B9-1-3262025	Air	Pentane, 3-methyl-	*	1.80	J	0	0	ppbv
Q1669-03	IA-B9-1-3262025	Air	Cyclopentane, methyl-	*	1.40	J	0	0	ppbv
Q1669-03	IA-B9-1-3262025	Air	Butane	*	1.10	J	0	0	ppbv
Q1669-03	IA-B9-1-3262025	Air	Pentane, 2-methyl-	*	3.10	J	0	0	ppbv
Q1669-03	IA-B9-1-3262025	Air	Pentane	*	2.20	J	0	0	ppbv
Q1669-03	IA-B9-1-3262025	Air	Chlorodifluoromethane	*	0.35	J	0.090	0.50	ppbv
Q1669-03	IA-B9-1-3262025	Air	Propene	*	0.62	J	0.15	0.50	ppbv
Q1669-03	IA-B9-1-3262025	Air	n-propylbenzene	*	0.11	J	0.080	0.50	ppbv
			Total Tics :		10.7				
			Total Concentration:		80.2				
Client ID:	**AA-1-3262025**								
Q1669-04	AA-1-3262025	Air	Dichlorodifluoromethane		1.98	J	1.04	2.47	ug/m3
Q1669-04	AA-1-3262025	Air	Chloromethane		0.97	J	0.21	1.03	ug/m3

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Hit Summary Sheet
SW-846

SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1669-04	AA-1-3262025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1669-04	AA-1-3262025	Air	Acetone		7.60		0.57	1.19	ug/m3
Q1669-04	AA-1-3262025	Air	Methylene Chloride		2.71		0.66	1.74	ug/m3
Q1669-04	AA-1-3262025	Air	2-Butanone		0.71	J	0.35	1.47	ug/m3
Q1669-04	AA-1-3262025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1669-04	AA-1-3262025	Air	Benzene		0.99	J	0.29	1.60	ug/m3
Q1669-04	AA-1-3262025	Air	Toluene		1.17	J	0.41	1.88	ug/m3
Q1669-04	AA-1-3262025	Air	Hexane		5.99		0.39	1.76	ug/m3
			Total Voc :		23.8				
Q1669-04	AA-1-3262025	Air	Pentane, 2-methyl-	*	1.20	J	0	0	ppbv
Q1669-04	AA-1-3262025	Air	Chlorodifluoromethane	*	0.26	J	0.090	0.50	ppbv
Q1669-04	AA-1-3262025	Air	Propene	*	0.42	J	0.15	0.50	ppbv
			Total Tics :		1.88				
			Total Concentration:		25.7				
Client ID:	**SSSG-B16-3-3262025**								
Q1669-05	SSSG-B16-3-32620	Air	Dichlorodifluoromethane		2.13	J	1.04	2.47	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Chloromethane		0.74	J	0.21	1.03	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Tetrahydrofuran		1.21	J	0.38	1.47	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Trichlorofluoromethane		1.29	J	0.90	2.81	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Heptane		1.64	J	0.45	2.05	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Acetone		14.7		0.57	1.19	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Methylene Chloride		2.57		0.66	1.74	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Cyclohexane		1.38	J	0.76	1.72	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	2-Butanone		8.55		0.35	1.47	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Chloroform		2.93		0.39	2.44	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	2,2,4-Trimethylpentane		1.82	J	0.47	2.34	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Benzene		1.76		0.29	1.60	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Toluene		7.91		0.41	1.88	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Tetrachloroethene		0.27		0.14	0.20	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Ethyl Benzene		1.17	J	0.52	2.17	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	m/p-Xylene		4.34		0.91	4.34	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	o-Xylene		1.56	J	0.52	2.17	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Styrene		1.53	J	0.47	2.13	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	1,2,4-Trimethylbenzene		1.28	J	0.39	2.46	ug/m3
Q1669-05	SSSG-B16-3-32620	Air	Hexane		6.70		0.39	1.76	ug/m3
			Total Voc :		66.0				

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Hit Summary Sheet
SW-846

SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1669-05	SSSG-B16-3-32620	Air	unknown2.441	*	1.20	J	0	0	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Pentane, 3-methyl-	*	2.00	J	0	0	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Cyclopentane, methyl-	*	1.60	J	0	0	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Butane	*	14.6	J	0	0	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Pentane, 2-methyl-	*	3.90	J	0	0	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Pentane	*	5.70	J	0	0	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Decane	*	1.10	J	0	0	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Chlorodifluoromethane	*	0.28	J	0.090	0.50	ppbv
Q1669-05	SSSG-B16-3-32620	Air	Propene	*	0.63	J	0.15	0.50	ppbv
			Total Tics :		31.0				
			Total Concentration:		97.0				
Client ID:	**SSSG-DUP-1-3262025**								
Q1669-06	SSSG-DUP-1-3262(	Air	Dichlorodifluoromethane		2.27	J	1.04	2.47	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Chloromethane		0.89	J	0.21	1.03	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Tetrahydrofuran		5.90		0.38	1.47	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Trichlorofluoromethane		1.12	J	0.90	2.81	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Heptane		6.56		0.45	2.05	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Acetone		57.0	E	0.57	1.19	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Methylene Chloride		1.77		0.66	1.74	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Cyclohexane		5.16		0.76	1.72	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	2-Butanone		18.3		0.35	1.47	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	2,2,4-Trimethylpentane		10.7		0.47	2.34	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Benzene		17.9		0.29	1.60	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	4-Methyl-2-Pentanone		1.64	J	0.37	2.05	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Toluene		36.5		0.41	1.88	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Ethyl Benzene		5.65		0.52	2.17	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	m/p-Xylene		22.1		0.91	4.34	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	o-Xylene		8.25		0.52	2.17	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Styrene		5.96		0.47	2.13	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	1,3,5-Trimethylbenzene		2.11	J	0.54	2.46	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	1,2,4-Trimethylbenzene		6.88		0.39	2.46	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Naphthalene		2.25		0.42	0.52	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	4-Ethyltoluene		2.16	J	0.59	2.46	ug/m3
Q1669-06	SSSG-DUP-1-3262(	Air	Hexane		15.5		0.39	1.76	ug/m3
			Total Voc :		237				
Q1669-06	SSSG-DUP-1-3262(	Air	Butane, 2,3-dimethyl-	*	3.30	J	0	0	ppbv

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Hit Summary Sheet
SW-846

SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1669-06	SSSG-DUP-1-3262(	Air	Pentane, 3-methyl-	*	4.90	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Cyclopentane, methyl-	*	4.30	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Butane	*	8.30	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Pentane, 2-methyl-	*	8.90	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Cyclohexane, methyl-	*	2.50	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Cyclohexanone	*	2.20	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Pentane	*	8.80	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	1-Propene, 2-methyl-	*	6.80	J	0	0	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Chlorodifluoromethane	*	0.31	J	0.090	0.50	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	Propene	*	17.2	J	0.15	0.50	ppbv
Q1669-06	SSSG-DUP-1-3262(	Air	n-propylbenzene	*	0.23	J	0.080	0.50	ppbv
			Total Tics :		67.7				
			Total Concentration:		305				
Client ID:	**SSSG-DUP-1-3262025DL**								
Q1669-06DL	SSSG-DUP-1-3262(	Air	Chloromethane		1.12	JD	0.81	4.13	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Tetrahydrofuran		6.19	D	1.53	5.90	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Heptane		6.97	JD	1.80	8.20	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Acetone		53.9	D	2.28	4.75	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Cyclohexane		5.16	JD	3.03	6.88	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	2-Butanone		18.9	D	1.42	5.90	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	2,2,4-Trimethylpentane		10.3	D	1.87	9.34	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Benzene		18.2	D	1.12	6.39	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Toluene		35.8	D	1.66	7.54	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Ethyl Benzene		5.65	JD	2.08	8.69	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	m/p-Xylene		20.9	D	3.65	17.4	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	o-Xylene		7.38	JD	2.08	8.69	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Styrene		5.11	JD	1.87	8.52	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	1,2,4-Trimethylbenzene		5.41	JD	1.52	9.83	ug/m3
Q1669-06DL	SSSG-DUP-1-3262(	Air	Hexane		15.5	D	1.55	7.05	ug/m3
			Total Voc :		216				
			Total Concentration:		216				
Client ID:	**SSSG-B16-1-3262025**								
Q1669-07	SSSG-B16-1-32620	Air	Dichlorodifluoromethane		2.57		1.04	2.47	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Chloromethane		0.29	J	0.21	1.03	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Tetrahydrofuran		1.39	J	0.38	1.47	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Trichlorofluoromethane		1.12	J	0.90	2.81	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	tert-Butyl alcohol		1.91		0.58	1.52	ug/m3

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Hit Summary Sheet
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SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1669-07	SSSG-B16-1-32620	Air	Heptane		1.31	J	0.45	2.05	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Acetone		84.1	E	0.57	1.19	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Methylene Chloride		5.21		0.66	1.74	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	2-Butanone		6.78		0.35	1.47	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Carbon Tetrachloride		0.25		0.060	0.19	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Chloroform		0.54	J	0.39	2.44	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	1,1,1-Trichloroethane		0.27		0.050	0.16	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	2,2,4-Trimethylpentane		1.12	J	0.47	2.34	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Benzene		1.44	J	0.29	1.60	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Trichloroethene		0.43		0.11	0.16	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	4-Methyl-2-Pentanone		6.56		0.37	2.05	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Toluene		23.0		0.41	1.88	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Tetrachloroethene		1.02		0.14	0.20	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Ethyl Benzene		2.35		0.52	2.17	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	m/p-Xylene		8.69		0.91	4.34	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	o-Xylene		3.74		0.52	2.17	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Styrene		3.32		0.47	2.13	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	1,3,5-Trimethylbenzene		0.98	J	0.54	2.46	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	1,2,4-Trimethylbenzene		2.41	J	0.39	2.46	ug/m3
Q1669-07	SSSG-B16-1-32620	Air	Hexane		3.88		0.39	1.76	ug/m3
			Total Voc :		165				
Q1669-07	SSSG-B16-1-32620	Air	Butane	*	1.20	J	0	0	ppbv
Q1669-07	SSSG-B16-1-32620	Air	Pentane, 2-methyl-	*	1.30	J	0	0	ppbv
Q1669-07	SSSG-B16-1-32620	Air	Pentane	*	1.00	J	0	0	ppbv
Q1669-07	SSSG-B16-1-32620	Air	1-Propene, 2-methyl-	*	2.30	J	0	0	ppbv
Q1669-07	SSSG-B16-1-32620	Air	Propene	*	0.88	J	0.15	0.50	ppbv
Q1669-07	SSSG-B16-1-32620	Air	n-propylbenzene	*	0.15	J	0.080	0.50	ppbv
			Total Tics :		6.83				
			Total Concentration:		171				
Client ID:	**SSSG-B16-1-3262025DL**								
Q1669-07DL	SSSG-B16-1-32620	Air	Acetone		91.0	D	5.70	11.9	ug/m3
Q1669-07DL	SSSG-B16-1-32620	Air	Methylene Chloride		8.34	JD	6.60	17.4	ug/m3
Q1669-07DL	SSSG-B16-1-32620	Air	2-Butanone		7.08	JD	3.54	14.8	ug/m3
Q1669-07DL	SSSG-B16-1-32620	Air	4-Methyl-2-Pentanone		6.97	JD	3.81	20.5	ug/m3
Q1669-07DL	SSSG-B16-1-32620	Air	Toluene		21.5	D	4.15	18.8	ug/m3
			Total Voc :		135				
			Total Concentration:		135				

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Hit Summary Sheet
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SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**SSSG-B16-2-3262025**								
Q1669-08	SSSG-B16-2-32620	Air	Dichlorodifluoromethane		2.08	J	1.04	2.47	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Trichlorofluoromethane		1.01	J	0.90	2.81	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Heptane		0.57	J	0.45	2.05	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Acetone		25.6		0.57	1.19	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Methylene Chloride		2.29		0.66	1.74	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	2-Butanone		1.86		0.35	1.47	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Carbon Tetrachloride		0.25		0.060	0.19	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Chloroform		6.35		0.39	2.44	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Benzene		0.77	J	0.29	1.60	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	4-Methyl-2-Pentanone		13.9		0.37	2.05	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Toluene		10.9		0.41	1.88	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Tetrachloroethene		1.29		0.14	0.20	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Chlorobenzene		0.46	J	0.37	2.30	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Ethyl Benzene		1.09	J	0.52	2.17	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	m/p-Xylene		5.21		0.91	4.34	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	o-Xylene		1.95	J	0.52	2.17	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Styrene		1.58	J	0.47	2.13	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	1,3,5-Trimethylbenzene		0.69	J	0.54	2.46	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	1,2,4-Trimethylbenzene		1.57	J	0.39	2.46	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	4-Ethyltoluene		0.64	J	0.59	2.46	ug/m3
Q1669-08	SSSG-B16-2-32620	Air	Hexane		1.97		0.39	1.76	ug/m3
			Total Voc :		82.1				
Q1669-08	SSSG-B16-2-32620	Air	unknown1.557	*	1.30	J	0	0	ppbv
Q1669-08	SSSG-B16-2-32620	Air	2-Hexanol	*	5.20	J	0	0	ppbv
Q1669-08	SSSG-B16-2-32620	Air	Undecane	*	1.30	J	0	0	ppbv
Q1669-08	SSSG-B16-2-32620	Air	1-Iodo-2-methylnonane	*	1.20	J	0	0	ppbv
Q1669-08	SSSG-B16-2-32620	Air	Chlorodifluoromethane	*	0.21	J	0.090	0.50	ppbv
Q1669-08	SSSG-B16-2-32620	Air	Propene	*	0.16	J	0.15	0.50	ppbv
			Total Tics :		9.37				
			Total Concentration:		91.5				
Client ID:	**AA-2-3262025**								
Q1669-09	AA-2-3262025	Air	Dichlorodifluoromethane		2.23	J	1.04	2.47	ug/m3
Q1669-09	AA-2-3262025	Air	Chloromethane		0.91	J	0.21	1.03	ug/m3
Q1669-09	AA-2-3262025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1669-09	AA-2-3262025	Air	Acetone		5.94		0.57	1.19	ug/m3
Q1669-09	AA-2-3262025	Air	Methylene Chloride		24.3		0.66	1.74	ug/m3

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Hit Summary Sheet
SW-846

SDG No.: Q1669

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1669-09	AA-2-3262025	Air	2-Butanone		0.53	J	0.35	1.47	ug/m3
Q1669-09	AA-2-3262025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1669-09	AA-2-3262025	Air	Benzene		0.42	J	0.29	1.60	ug/m3
Q1669-09	AA-2-3262025	Air	Toluene		1.28	J	0.41	1.88	ug/m3
Q1669-09	AA-2-3262025	Air	1,2,4-Trimethylbenzene		1.43	J	0.39	2.46	ug/m3
Q1669-09	AA-2-3262025	Air	Hexane		15.9		0.39	1.76	ug/m3
			Total Voc :		54.6				
Q1669-09	AA-2-3262025	Air	Pentane, 3-methyl-	*	1.20	J	0	0	ppbv
Q1669-09	AA-2-3262025	Air	Cyclopentane, methyl-	*	1.40	J	0	0	ppbv
Q1669-09	AA-2-3262025	Air	Chlorodifluoromethane	*	0.43	J	0.090	0.50	ppbv
Q1669-09	AA-2-3262025	Air	Propene	*	0.29	J	0.15	0.50	ppbv
			Total Tics :		3.32				
			Total Concentration:		57.9				

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/27/25

Field Id Number : IA-B9-3-3262025

Analysis Date : 03/27/25

Laboratory Id Number : Q1669-01

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	0.4	J	1.98		
Chloromethane	74-87-3	50.49	0.37	J	0.76		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.5		1.52		
Heptane	142-82-5	100.2	0.38	J	1.56		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	34.7	E	82.4		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.36	J	1.25		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.91		2.68		
Carbon Tetrachloride	56-23-5	153.8	0.06		0.38		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.27	J	1.26		
Benzene	71-43-2	78.11	0.64		2.04		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.36	J	1.48		
Toluene	108-88-3	92.14	2.3		8.67		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/27/25

Field Id Number : IA-B9-3-3262025 **Analysis Date :** 03/27/25

Laboratory Id Number : Q1669-01 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
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	0.31	J	1.35		
m/p-Xylene	179601-23-1	106.2	1.1		4.78		
o-Xylene	95-47-6	106.2	0.51		2.22		
Styrene	100-42-5	104.1	0.12	J	0.51		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.51		2.51		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.9		6.7		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/27/25

Field Id Number : IA-B9-3-3262025DL

Analysis Date : 03/28/25

Laboratory Id Number : Q1669-01DL

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	1.1	UD	5.44		
Chloromethane	74-87-3	50.49	0.49	UD	1.01		
Vinyl Chloride	75-01-4	62.5	0.07	UD	0.18		
Bromomethane	74-83-9	94.94	0.7	UD	2.72		
Chloroethane	75-00-3	64.52	0.85	UD	2.24		
Tetrahydrofuran	109-99-9	72.11	0.65	UD	1.92		
Trichlorofluoromethane	75-69-4	137.4	0.8	UD	4.5		
Dichlorotetrafluoroethane	76-14-2	170.9	0.44	UD	3.08		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.8	UD	6.13		
tert-Butyl alcohol	75-65-0	74.12	0.95	UD	2.88		
Heptane	142-82-5	100.2	0.55	UD	2.25		
1,1-Dichloroethene	75-35-4	96.94	0.7	UD	2.78		
Acetone	67-64-1	58.08	37.1	D	88.1		
Carbon Disulfide	75-15-0	76.14	0.8	UD	2.49		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.6	UD	2.16		
Methylene Chloride	75-09-2	84.94	1.1	JD	3.82		
trans-1,2-Dichloroethene	156-60-5	96.94	0.95	UD	3.77		
1,1-Dichloroethane	75-34-3	98.96	0.65	UD	2.63		
Cyclohexane	110-82-7	84.16	1.1	UD	3.79		
2-Butanone	78-93-3	72.11	0.95	JD	2.8		
Carbon Tetrachloride	56-23-5	153.8	0.06	UD	0.38		
cis-1,2-Dichloroethene	156-59-2	96.94	0.45	UD	1.78		
Chloroform	67-66-3	119.4	0.42	UD	2.05		
1,1,1-Trichloroethane	71-55-6	133.4	0.05	UD	0.27		
2,2,4-Trimethylpentane	540-84-1	114.2	0.5	UD	2.34		
Benzene	71-43-2	78.11	0.57	JD	1.82		
1,2-Dichloroethane	107-06-2	98.96	0.46	UD	1.86		
Trichloroethene	79-01-6	131.4	0.09	UD	0.48		
1,2-Dichloropropane	78-87-5	113	0.55	UD	2.54		
Bromodichloromethane	75-27-4	163.8	0.39	UD	2.61		
4-Methyl-2-Pentanone	108-10-1	100.2	0.47	UD	1.93		
Toluene	108-88-3	92.14	2.1	JD	7.91		
t-1,3-Dichloropropene	10061-02-6	111	0.3	UD	1.36		
cis-1,3-Dichloropropene	10061-01-5	111	0.32	UD	1.45		
1,1,2-Trichloroethane	79-00-5	133.4	0.36	UD	1.96		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/27/25

Field Id Number : IA-B9-3-3262025DL **Analysis Date :** 03/28/25

Laboratory Id Number : Q1669-01DL **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.33	UD	2.81		
1,2-Dibromoethane	106-93-4	187.9	0.36	UD	2.77		
Tetrachloroethene	127-18-4	165.8	0.08	UD	0.54		
Chlorobenzene	108-90-7	112.6	0.38	UD	1.75		
Ethyl Benzene	100-41-4	106.2	0.6	UD	2.61		
m/p-Xylene	179601-23-1	106.2	1.1	UD	4.78		
o-Xylene	95-47-6	106.2	0.6	UD	2.61		
Styrene	100-42-5	104.1	0.55	UD	2.34		
Bromoform	75-25-2	252.8	0.28	UD	2.9		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.06	UD	0.41		
2-Chlorotoluene	95-49-8	126.6	0.55	UD	2.85		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.55	UD	2.7		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.39	UD	1.92		
1,3-Dichlorobenzene	541-73-1	147	0.4	UD	2.4		
1,4-Dichlorobenzene	106-46-7	147	0.27	UD	1.62		
1,2-Dichlorobenzene	95-50-1	147	0.38	UD	2.28		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.43	UD	3.19		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.43	UD	4.59		
Naphthalene	91-20-3	128.17	0.38	UD	1.99		
1,3-Butadiene	106-99-0	54.09	0.65	UD	1.44		
4-Ethyltoluene	622-96-8	120.2	0.6	UD	2.95		
Hexane	110-54-3	86.17	1.6	JD	5.64		
Allyl Chloride	107-05-1	76.53	0.75	UD	2.35		
1,4-Dioxane	123-91-1	88.12	1.1	UD	3.96		
Methyl Methacrylate	80-62-6	100.117	0.43	UD	1.76		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/27/25

Field Id Number : IA-B9-2-3262025

Analysis Date : 03/27/25

Laboratory Id Number : Q1669-02

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	0.41	J	2.03		
Chloromethane	74-87-3	50.49	0.22	J	0.45		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.2	J	1.12		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.38	J	1.15		
Heptane	142-82-5	100.2	0.49	J	2.01		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	2.4		5.7		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.35	J	1.22		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	J	0.76		
2-Butanone	78-93-3	72.11	0.42	J	1.24		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.12	J	0.59		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.37	J	1.73		
Benzene	71-43-2	78.11	0.67		2.14		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.43	J	1.76		
Toluene	108-88-3	92.14	2.3		8.67		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/27/25

Field Id Number : IA-B9-2-3262025 **Analysis Date :** 03/27/25

Laboratory Id Number : Q1669-02 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
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	0.39	J	1.69		
m/p-Xylene	179601-23-1	106.2	1.4		6.08		
o-Xylene	95-47-6	106.2	0.65		2.82		
Styrene	100-42-5	104.1	0.13	J	0.55		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.18	J	0.88		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.54		2.65		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.2	J	0.98		
Hexane	110-54-3	86.17	2.3		8.11		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/27/25

Field Id Number : IA-B9-1-3262025

Analysis Date : 03/27/25

Laboratory Id Number : Q1669-03

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	0.38	J	1.88		
Chloromethane	74-87-3	50.49	0.25	J	0.52		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.42	J	1.27		
Heptane	142-82-5	100.2	0.51		2.09		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	3.2		7.6		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.81		2.81		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.28	J	0.96		
2-Butanone	78-93-3	72.11	0.54		1.59		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.31	J	1.45		
Benzene	71-43-2	78.11	0.75		2.4		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.86		3.52		
Toluene	108-88-3	92.14	2.6		9.8		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/27/25

Field Id Number : IA-B9-1-3262025 **Analysis Date :** 03/27/25

Laboratory Id Number : Q1669-03 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
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	0.38	J	1.65		
m/p-Xylene	179601-23-1	106.2	1.4		6.08		
o-Xylene	95-47-6	106.2	0.57		2.48		
Styrene	100-42-5	104.1	2.5		10.6		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.14	J	0.69		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.42	J	2.06		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.13	J	0.64		
Hexane	110-54-3	86.17	2.2		7.75		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/27/25

Field Id Number : AA-1-3262025

Analysis Date : 03/27/25

Laboratory Id Number : Q1669-04

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	0.4	J	1.98		
Chloromethane	74-87-3	50.49	0.47	J	0.97		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.11	U	0.45		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	3.2		7.6		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.78		2.71		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.24	J	0.71		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.31	J	0.99		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.31	J	1.17		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/27/25

Field Id Number : AA-1-3262025 **Analysis Date :** 03/27/25

Laboratory Id Number : Q1669-04 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
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	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.08	U	0.39		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.7		5.99		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/26/25

Field Id Number : SSSG-B16-3-3262025

Analysis Date : 03/28/25

Laboratory Id Number : Q1669-05

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	0.43	J	2.13		
Chloromethane	74-87-3	50.49	0.36	J	0.74		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.41	J	1.21		
Trichlorofluoromethane	75-69-4	137.4	0.23	J	1.29		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.4	J	1.64		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	6.2		14.7		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.74		2.57		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.4	J	1.38		
2-Butanone	78-93-3	72.11	2.9		8.55		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.6		2.93		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.39	J	1.82		
Benzene	71-43-2	78.11	0.55		1.76		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	2.1		7.91		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/26/25

Field Id Number : SSSG-B16-3-3262025 **Analysis Date :** 03/28/25

Laboratory Id Number : Q1669-05 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.04		0.27		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.27	J	1.17		
m/p-Xylene	179601-23-1	106.2	1		4.34		
o-Xylene	95-47-6	106.2	0.36	J	1.56		
Styrene	100-42-5	104.1	0.36	J	1.53		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.26	J	1.28		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.9		6.7		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/26/25

Field Id Number : SSSG-DUP-1-3262025

Analysis Date : 03/31/25

Laboratory Id Number : Q1669-06

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	0.46	J	2.27		
Chloromethane	74-87-3	50.49	0.43	J	0.89		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	2		5.9		
Trichlorofluoromethane	75-69-4	137.4	0.2	J	1.12		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	1.6		6.56		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	24	E	57.0		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.51		1.77		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	1.5		5.16		
2-Butanone	78-93-3	72.11	6.2		18.3		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	2.3		10.7		
Benzene	71-43-2	78.11	5.6		17.9		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.4	J	1.64		
Toluene	108-88-3	92.14	9.7		36.6		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/26/25

Field Id Number : SSSG-DUP-1-3262025 **Analysis Date :** 03/31/25

Laboratory Id Number : Q1669-06 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
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	1.3		5.65		
m/p-Xylene	179601-23-1	106.2	5.1		22.2		
o-Xylene	95-47-6	106.2	1.9		8.25		
Styrene	100-42-5	104.1	1.4		5.96		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.43	J	2.11		
1,2,4-Trimethylbenzene	95-63-6	120.2	1.4		6.88		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
Naphthalene	91-20-3	128.17	0.43		2.25		
4-Ethyltoluene	622-96-8	120.2	0.44	J	2.16		
Hexane	110-54-3	86.17	4.4		15.5		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/26/25

Field Id Number : SSSG-DUP-1-3262025DL

Analysis Date : 03/31/25

Laboratory Id Number : Q1669-06DL

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	0.84	UD	4.15		
Chloromethane	74-87-3	50.49	0.54	JD	1.12		
Vinyl Chloride	75-01-4	62.5	0.06	UD	0.15		
Bromomethane	74-83-9	94.94	0.56	UD	2.17		
Chloroethane	75-00-3	64.52	0.68	UD	1.79		
Tetrahydrofuran	109-99-9	72.11	2.1	D	6.19		
Trichlorofluoromethane	75-69-4	137.4	0.64	UD	3.6		
Dichlorotetrafluoroethane	76-14-2	170.9	0.35	UD	2.45		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.64	UD	4.91		
tert-Butyl alcohol	75-65-0	74.12	0.76	UD	2.3		
Heptane	142-82-5	100.2	1.7	JD	6.97		
1,1-Dichloroethene	75-35-4	96.94	0.56	UD	2.22		
Acetone	67-64-1	58.08	22.7	D	53.9		
Carbon Disulfide	75-15-0	76.14	0.64	UD	1.99		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.48	UD	1.73		
Methylene Chloride	75-09-2	84.94	0.76	UD	2.64		
trans-1,2-Dichloroethene	156-60-5	96.94	0.76	UD	3.01		
1,1-Dichloroethane	75-34-3	98.96	0.52	UD	2.1		
Cyclohexane	110-82-7	84.16	1.5	JD	5.16		
2-Butanone	78-93-3	72.11	6.4	D	18.9		
Carbon Tetrachloride	56-23-5	153.8	0.04	UD	0.25		
cis-1,2-Dichloroethene	156-59-2	96.94	0.36	UD	1.43		
Chloroform	67-66-3	119.4	0.33	UD	1.61		
1,1,1-Trichloroethane	71-55-6	133.4	0.04	UD	0.22		
2,2,4-Trimethylpentane	540-84-1	114.2	2.2	D	10.3		
Benzene	71-43-2	78.11	5.7	D	18.2		
1,2-Dichloroethane	107-06-2	98.96	0.36	UD	1.46		
Trichloroethene	79-01-6	131.4	0.07	UD	0.38		
1,2-Dichloropropane	78-87-5	113	0.44	UD	2.03		
Bromodichloromethane	75-27-4	163.8	0.31	UD	2.08		
4-Methyl-2-Pentanone	108-10-1	100.2	0.37	UD	1.52		
Toluene	108-88-3	92.14	9.5	D	35.8		
t-1,3-Dichloropropene	10061-02-6	111	0.24	UD	1.09		
cis-1,3-Dichloropropene	10061-01-5	111	0.26	UD	1.18		
1,1,2-Trichloroethane	79-00-5	133.4	0.28	UD	1.53		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/26/25

Field Id Number : SSSG-DUP-1-3262025D **Analysis Date :** 03/31/25

Laboratory Id Number : Q1669-06DL **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.26	UD	2.22		
1,2-Dibromoethane	106-93-4	187.9	0.29	UD	2.23		
Tetrachloroethene	127-18-4	165.8	0.06	UD	0.41		
Chlorobenzene	108-90-7	112.6	0.3	UD	1.38		
Ethyl Benzene	100-41-4	106.2	1.3	JD	5.65		
m/p-Xylene	179601-23-1	106.2	4.8	D	20.8		
o-Xylene	95-47-6	106.2	1.7	JD	7.38		
Styrene	100-42-5	104.1	1.2	JD	5.11		
Bromoform	75-25-2	252.8	0.23	UD	2.38		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.04	UD	0.27		
2-Chlorotoluene	95-49-8	126.6	0.44	UD	2.28		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.44	UD	2.16		
1,2,4-Trimethylbenzene	95-63-6	120.2	1.1	JD	5.41		
1,3-Dichlorobenzene	541-73-1	147	0.32	UD	1.92		
1,4-Dichlorobenzene	106-46-7	147	0.21	UD	1.26		
1,2-Dichlorobenzene	95-50-1	147	0.3	UD	1.8		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.34	UD	2.52		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.34	UD	3.63		
Naphthalene	91-20-3	128.17	0.3	UD	1.57		
1,3-Butadiene	106-99-0	54.09	0.52	UD	1.15		
4-Ethyltoluene	622-96-8	120.2	0.48	UD	2.36		
Hexane	110-54-3	86.17	4.4	D	15.5		
Allyl Chloride	107-05-1	76.53	0.6	UD	1.88		
1,4-Dioxane	123-91-1	88.12	0.84	UD	3.03		
Methyl Methacrylate	80-62-6	100.117	0.34	UD	1.39		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/26/25

Field Id Number : SSSG-B16-1-3262025

Analysis Date : 03/28/25

Laboratory Id Number : Q1669-07

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	0.52		2.57		
Chloromethane	74-87-3	50.49	0.14	J	0.29		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.47	J	1.39		
Trichlorofluoromethane	75-69-4	137.4	0.2	J	1.12		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.63		1.91		
Heptane	142-82-5	100.2	0.32	J	1.31		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	35.4	E	84.1		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.5		5.21		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	2.3		6.78		
Carbon Tetrachloride	56-23-5	153.8	0.04		0.25		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.11	J	0.54		
1,1,1-Trichloroethane	71-55-6	133.4	0.05		0.27		
2,2,4-Trimethylpentane	540-84-1	114.2	0.24	J	1.12		
Benzene	71-43-2	78.11	0.45	J	1.44		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.08		0.43		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	1.6		6.56		
Toluene	108-88-3	92.14	6.1		23.0		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/26/25

Field Id Number : SSSG-B16-1-3262025 **Analysis Date :** 03/28/25

Laboratory Id Number : Q1669-07 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.15		1.02		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.54		2.35		
m/p-Xylene	179601-23-1	106.2	2		8.69		
o-Xylene	95-47-6	106.2	0.86		3.74		
Styrene	100-42-5	104.1	0.78		3.32		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.2	J	0.98		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.49	J	2.41		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.1		3.88		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/26/25

Field Id Number : SSSG-B16-1-3262025DL

Analysis Date : 03/27/25

Laboratory Id Number : Q1669-07DL

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	2.1	UD	10.4		
Chloromethane	74-87-3	50.49	0.98	UD	2.02		
Vinyl Chloride	75-01-4	62.5	0.14	UD	0.36		
Bromomethane	74-83-9	94.94	1.4	UD	5.44		
Chloroethane	75-00-3	64.52	1.7	UD	4.49		
Tetrahydrofuran	109-99-9	72.11	1.3	UD	3.83		
Trichlorofluoromethane	75-69-4	137.4	1.6	UD	8.99		
Dichlorotetrafluoroethane	76-14-2	170.9	0.88	UD	6.15		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	1.6	UD	12.3		
tert-Butyl alcohol	75-65-0	74.12	1.9	UD	5.76		
Heptane	142-82-5	100.2	1.1	UD	4.51		
1,1-Dichloroethene	75-35-4	96.94	1.4	UD	5.55		
Acetone	67-64-1	58.08	38.3	D	91.0		
Carbon Disulfide	75-15-0	76.14	1.6	UD	4.98		
Methyl tert-Butyl Ether	1634-04-4	88.15	1.2	UD	4.33		
Methylene Chloride	75-09-2	84.94	2.4	JD	8.34		
trans-1,2-Dichloroethene	156-60-5	96.94	1.9	UD	7.53		
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	2.4	JD	7.08		
Carbon Tetrachloride	56-23-5	153.8	0.11	UD	0.69		
cis-1,2-Dichloroethene	156-59-2	96.94	0.89	UD	3.53		
Chloroform	67-66-3	119.4	0.83	UD	4.05		
1,1,1-Trichloroethane	71-55-6	133.4	0.1	UD	0.55		
2,2,4-Trimethylpentane	540-84-1	114.2	1	UD	4.67		
Benzene	71-43-2	78.11	0.87	UD	2.78		
1,2-Dichloroethane	107-06-2	98.96	0.91	UD	3.68		
Trichloroethene	79-01-6	131.4	0.17	UD	0.91		
1,2-Dichloropropane	78-87-5	113	1.1	UD	5.08		
Bromodichloromethane	75-27-4	163.8	0.77	UD	5.16		
4-Methyl-2-Pentanone	108-10-1	100.2	1.7	JD	6.97		
Toluene	108-88-3	92.14	5.7	D	21.5		
t-1,3-Dichloropropene	10061-02-6	111	0.6	UD	2.72		
cis-1,3-Dichloropropene	10061-01-5	111	0.64	UD	2.91		
1,1,2-Trichloroethane	79-00-5	133.4	0.71	UD	3.87		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/26/25

Field Id Number : SSSG-B16-1-3262025DL **Analysis Date :** 03/27/25

Laboratory Id Number : Q1669-07DL **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.66	UD	5.62		
1,2-Dibromoethane	106-93-4	187.9	0.72	UD	5.53		
Tetrachloroethene	127-18-4	165.8	0.15	UD	1.02		
Chlorobenzene	108-90-7	112.6	0.76	UD	3.5		
Ethyl Benzene	100-41-4	106.2	1.2	UD	5.21		
m/p-Xylene	179601-23-1	106.2	2.1	UD	9.12		
o-Xylene	95-47-6	106.2	1.2	UD	5.21		
Styrene	100-42-5	104.1	1.1	UD	4.68		
Bromoform	75-25-2	252.8	0.57	UD	5.89		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.11	UD	0.76		
2-Chlorotoluene	95-49-8	126.6	1.1	UD	5.7		
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	UD	5.41		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.78	UD	3.83		
1,3-Dichlorobenzene	541-73-1	147	0.8	UD	4.81		
1,4-Dichlorobenzene	106-46-7	147	0.53	UD	3.19		
1,2-Dichlorobenzene	95-50-1	147	0.75	UD	4.51		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.85	UD	6.31		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.85	UD	9.07		
Naphthalene	91-20-3	128.17	0.75	UD	3.93		
1,3-Butadiene	106-99-0	54.09	1.3	UD	2.88		
4-Ethyltoluene	622-96-8	120.2	1.2	UD	5.9		
Hexane	110-54-3	86.17	1.1	UD	3.88		
Allyl Chloride	107-05-1	76.53	1.5	UD	4.7		
1,4-Dioxane	123-91-1	88.12	2.1	UD	7.57		
Methyl Methacrylate	80-62-6	100.117	0.86	UD	3.52		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/26/25

Field Id Number : SSSG-B16-2-3262025

Analysis Date : 03/28/25

Laboratory Id Number : Q1669-08

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	0.42	J	2.08		
Chloromethane	74-87-3	50.49	0.1	U	0.21		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.18	J	1.01		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.14	J	0.57		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	10.8		25.6		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.66		2.29		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.63		1.86		
Carbon Tetrachloride	56-23-5	153.8	0.04		0.25		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	1.3		6.35		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.24	J	0.77		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	3.4		13.9		
Toluene	108-88-3	92.14	2.9		10.9		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/26/25

Field Id Number : SSSG-B16-2-3262025 **Analysis Date :** 03/28/25

Laboratory Id Number : Q1669-08 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.19		1.29		
Chlorobenzene	108-90-7	112.6	0.1	J	0.46		
Ethyl Benzene	100-41-4	106.2	0.25	J	1.09		
m/p-Xylene	179601-23-1	106.2	1.2		5.21		
o-Xylene	95-47-6	106.2	0.45	J	1.95		
Styrene	100-42-5	104.1	0.37	J	1.58		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.14	J	0.69		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.32	J	1.57		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.13	J	0.64		
Hexane	110-54-3	86.17	0.56		1.97		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Sampling Date : 03/26/25

Field Id Number : AA-2-3262025

Analysis Date : 03/27/25

Laboratory Id Number : Q1669-09

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	0.45	J	2.23		
Chloromethane	74-87-3	50.49	0.44	J	0.91		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.11	U	0.45		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	2.5		5.94		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	7		24.3		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.18	J	0.53		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.13	J	0.42		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.34	J	1.28		
t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/26/25

Field Id Number : AA-2-3262025 **Analysis Date :** 03/27/25

Laboratory Id Number : Q1669-09 **Target Analyts :** Air Results

Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
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	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.29	J	1.43		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	4.5		15.9		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Method	Matrix	Parameter	Spike_Amt_ Added	Calculated MDL	MB Data	MB Datafile	New MDL TO Be Used	MDL Unit
TO-15	Air	1,1,1,2-Tetrachloroethane	0.4	0.090683682	0		0.091	ppbv
TO-15	Air	1,1,1-Trichloroethane	0.03	0.00947589	0		0.0095	ppbv
TO-15	Air	1,1,2,2-Tetrachloroethane	0.03	0.010183321	0		0.011	ppbv
TO-15	Air	1,1,2-Trichloroethane	0.4	0.070112514	0		0.071	ppbv
TO-15	Air	1,1,2-Trichlorotrifluoroethane	0.4	0.155560652	0		0.16	ppbv
TO-15	Air	1,1-Dichloroethane	0.4	0.122378743	0		0.13	ppbv
TO-15	Air	1,1-Dichloroethene	0.4	0.139735617	0		0.14	ppbv
TO-15	Air	1,2,4-Trichlorobenzene	0.4	0.084677012	0		0.085	ppbv
TO-15	Air	1,2,4-Trimethylbenzene	0.4	0.077496367	0		0.078	ppbv
TO-15	Air	1,2-Dibromoethane	0.4	0.071318853	0		0.072	ppbv
TO-15	Air	1,2-Dichlorobenzene	0.4	0.074250332	0		0.075	ppbv
TO-15	Air	1,2-Dichloroethane	0.4	0.090890005	0		0.091	ppbv
TO-15	Air	1,2-Dichloropropane	0.4	0.073346868	0.109	VL038919.D	0.11	ppbv
TO-15	Air	1,3,5-Trimethylbenzene	0.4	0.101198372	0		0.11	ppbv
TO-15	Air	1,3-Butadiene	0.4	0.124009143	0		0.13	ppbv
TO-15	Air	1,3-Dichlorobenzene	0.4	0.079013305	0		0.08	ppbv
TO-15	Air	1,4-Dichlorobenzene	0.4	0.052746151	0		0.053	ppbv
TO-15	Air	1,4-Dioxane	0.4	0.202123585	0		0.21	ppbv
TO-15	Air	2,2,4-Trimethylpentane	0.4	0.09988427	0		0.10	ppbv
TO-15	Air	2-Butanone	0.4	0.118687999	0		0.12	ppbv
TO-15	Air	2-Chlorotoluene	0.4	0.104141644	0		0.11	ppbv
TO-15	Air	2-Hexanone	0.4	0.080656229	0		0.081	ppbv
TO-15	Air	4-Ethyltoluene	0.4	0.112037051	0		0.12	ppbv
TO-15	Air	4-Methyl-2-Pentanone	0.4	0.092836933	0		0.093	ppbv
TO-15	Air	Acetone	0.4	0.234416891	0		0.24	ppbv
TO-15	Air	Allyl Chloride	0.4	0.145618654	0		0.15	ppbv
TO-15	Air	Benzene	0.4	0.086407689	0		0.087	ppbv
TO-15	Air	Benzyl Chloride	0.4	0.173895169	0		0.18	ppbv
TO-15	Air	Bromodichloromethane	0.4	0.076780313	0		0.077	ppbv
TO-15	Air	Bromoethene	0.4	0.115560124	0		0.12	ppbv
TO-15	Air	Bromoform	0.4	0.056947551	0		0.057	ppbv
TO-15	Air	Bromomethane	0.4	0.137678239	0		0.14	ppbv
TO-15	Air	Carbon Disulfide	0.4	0.157343925	0		0.16	ppbv
TO-15	Air	Carbon Tetrachloride	0.03	0.010617308	0		0.011	ppbv
TO-15	Air	Chlorobenzene	0.4	0.075202602	0		0.076	ppbv
TO-15	Air	Chlorodifluoromethane	0.4	0.087466815	0		0.088	ppbv
TO-15	Air	Chloroethane	0.4	0.163530318	0		0.17	ppbv
TO-15	Air	Chloroform	0.4	0.082232394	0		0.083	ppbv
TO-15	Air	Chloromethane	0.4	0.097292998	0		0.098	ppbv
TO-15	Air	cis-1,2-Dichloroethene	0.4	0.088332535	0		0.089	ppbv
TO-15	Air	cis-1,3-Dichloropropene	0.4	0.063248763	0		0.064	ppbv
TO-15	Air	Cyclohexane	0.4	0.217999816	0		0.22	ppbv
TO-15	Air	Dibromochloromethane	0.4	0.065703935	0		0.066	ppbv
TO-15	Air	Dichlorodifluoromethane	0.4	0.20957733	0		0.21	ppbv
TO-15	Air	Dichlorotetrafluoroethane	0.4	0.087348046	0		0.088	ppbv
TO-15	Air	Ethyl Acetate	0.4	0.078161123	0		0.079	ppbv
TO-15	Air	Ethyl Benzene	0.4	0.115413562	0		0.12	ppbv
TO-15	Air	Heptane	0.4	0.100800637	0		0.11	ppbv
TO-15	Air	Hexachloro-1,3-Butadiene	0.4	0.084169773	0		0.085	ppbv
TO-15	Air	Hexane	0.4	0.106485082	0		0.11	ppbv
TO-15	Air	Isopropyl Alcohol	0.4	0.068329134	0		0.069	ppbv
TO-15	Air	Isopropylbenzene	0.4	0.086744608	0		0.087	ppbv
TO-15	Air	m/p-Xylene	0.4	0.205831125	0		0.21	ppbv
TO-15	Air	Methyl Methacrylate	0.4	0.085528753	0		0.086	ppbv
TO-15	Air	Methyl tert-Butyl Ether	0.4	0.119546728	0		0.12	ppbv
TO-15	Air	Methylene Chloride	0.4	0.18405265	0.11	VL039022.D	0.19	ppbv
TO-15	Air	Naphthalene	0.4	0.074961199	0		0.075	ppbv
TO-15	Air	Naphthalene,2-methyl-	0.4	0.148496389	0		0.15	ppbv
TO-15	Air	n-Butylbenzene	0.4	0.08201719	0		0.083	ppbv
TO-15	Air	n-propylbenzene	0.4	0.0778963	0		0.078	ppbv
TO-15	Air	o-Xylene	0.4	0.117630235	0		0.12	ppbv
TO-15	Air	p-Isopropyltoluene	0.4	0.085704866	0		0.086	ppbv
TO-15	Air	Propene	0.4	0.143790814	0.14	VL039337.D	0.15	ppbv
TO-15	Air	sec-Butylbenzene	0.4	0.093164076	0		0.094	ppbv
TO-15	Air	Styrene	0.4	0.109444442	0		0.11	ppbv
TO-15	Air	t-1,3-Dichloropropene	0.4	0.059734415	0		0.06	ppbv
TO-15	Air	tert-Butyl alcohol	0.4	0.187711954	0		0.19	ppbv
TO-15	Air	tert-Butylbenzene	0.4	0.092760327	0		0.093	ppbv
TO-15	Air	Tetrachloroethene	0.03	0.014462962	0		0.015	ppbv
TO-15	Air	Tetrahydrofuran	0.4	0.122655048	0		0.13	ppbv
TO-15	Air	Toluene	0.4	0.109284	0		0.11	ppbv
TO-15	Air	trans-1,2-Dichloroethene	0.4	0.185264638	0		0.19	ppbv
TO-15	Air	Trichloroethene	0.03	0.016558175	0		0.017	ppbv
TO-15	Air	Trichlorofluoromethane	0.4	0.157465794	0		0.16	ppbv
TO-15	Air	Vinyl Acetate	0.4	0.152371485	0		0.16	ppbv
TO-15	Air	Vinyl Chloride	0.03	0.013585954	0		0.014	ppbv
TO-15	Air	Ethanol	0.4	0.317031286	0		0.32	ug/L

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StdevVal	StudentsT Value	Instrument ID	Datafile1	Concentration1	Adate1	Datafile2	Concentration2
0.03485153	2.602	MSVOA_L	VL038602.D	0.51	03142022T18:52:00	VL038645.D	0.494
0.003641772	2.602	MSVOA_L	VL038599.D	0.03	03142022T17:01:00	VL038658.D	0.029
0.003913651	2.602	MSVOA_L	VL038599.D	0.03	03142022T17:01:00	VL038658.D	0.035
0.026945624	2.602	MSVOA_L	VL038602.D	0.44	03142022T18:52:00	VL038645.D	0.439
0.059785032	2.602	MSVOA_L	VL038602.D	0.47	03142022T18:52:00	VL038645.D	0.466
0.047032569	2.602	MSVOA_L	VL038602.D	0.45	03142022T18:52:00	VL038645.D	0.456
0.053703158	2.602	MSVOA_L	VL038602.D	0.43	03142022T18:52:00	VL038645.D	0.411
0.032543048	2.602	MSVOA_L	VL038602.D	0.3	03142022T18:52:00	VL038645.D	0.336
0.029783385	2.602	MSVOA_L	VL038602.D	0.38	03142022T18:52:00	VL038645.D	0.396
0.027409244	2.602	MSVOA_L	VL038602.D	0.38	03142022T18:52:00	VL038645.D	0.352
0.028535869	2.602	MSVOA_L	VL038602.D	0.45	03142022T18:52:00	VL038645.D	0.407
0.034930824	2.602	MSVOA_L	VL038602.D	0.41	03142022T18:52:00	VL038645.D	0.445
0.02818865	2.602	MSVOA_L	VL038602.D	0.43	03142022T18:52:00	VL038645.D	0.406
0.038892534	2.602	MSVOA_L	VL038602.D	0.33	03142022T18:52:00	VL038645.D	0.374
0.047659163	2.602	MSVOA_L	VL038602.D	0.42	03142022T18:52:00	VL038645.D	0.419
0.030366374	2.602	MSVOA_L	VL038602.D	0.42	03142022T18:52:00	VL038645.D	0.428
0.020271388	2.602	MSVOA_L	VL038602.D	0.42	03142022T18:52:00	VL038645.D	0.418
0.077680086	2.602	MSVOA_L	VL038602.D	0.46	03142022T18:52:00	VL038645.D	0.285
0.038387498	2.602	MSVOA_L	VL038602.D	0.39	03142022T18:52:00	VL038645.D	0.383
0.045614143	2.602	MSVOA_L	VL038602.D	0.4	03142022T18:52:00	VL038645.D	0.406
0.040023691	2.602	MSVOA_L	VL038602.D	0.37	03142022T18:52:00	VL038645.D	0.375
0.030997782	2.602	MSVOA_L	VL038602.D	0.3	03142022T18:52:00	VL038645.D	0.283
0.043058052	2.602	MSVOA_L	VL038602.D	0.34	03142022T18:52:00	VL038645.D	0.356
0.035679067	2.602	MSVOA_L	VL038602.D	0.3	03142022T18:52:00	VL038645.D	0.282
0.090091042	2.602	MSVOA_L	VL038602.D	0.43	03142022T18:52:00	VL038645.D	0.468
0.055964125	2.602	MSVOA_L	VL038602.D	0.4	03142022T18:52:00	VL038645.D	0.392
0.033208182	2.602	MSVOA_L	VL038602.D	0.38	03142022T18:52:00	VL038645.D	0.407
0.066831349	2.602	MSVOA_L	VL038602.D	0.44	03142022T18:52:00	VL038645.D	0.454
0.029508191	2.602	MSVOA_L	VL038602.D	0.43	03142022T18:52:00	VL038645.D	0.408
0.044412039	2.602	MSVOA_L	VL038602.D	0.42	03142022T18:52:00	VL038645.D	0.433
0.021886069	2.602	MSVOA_L	VL038602.D	0.38	03142022T18:52:00	VL038645.D	0.31
0.052912467	2.602	MSVOA_L	VL038602.D	0.43	03142022T18:52:00	VL038645.D	0.404
0.060470378	2.602	MSVOA_L	VL038602.D	0.37	03142022T18:52:00	VL038645.D	0.357
0.004080441	2.602	MSVOA_L	VL038599.D	0.03	03142022T17:01:00	VL038658.D	0.026
0.028901845	2.602	MSVOA_L	VL038602.D	0.48	03142022T18:52:00	VL038645.D	0.467
0.033615225	2.602	MSVOA_L	VL038602.D	0.45	03142022T18:52:00	VL038645.D	0.468
0.062847932	2.602	MSVOA_L	VL038602.D	0.44	03142022T18:52:00	VL038645.D	0.453
0.031603534	2.602	MSVOA_L	VL038602.D	0.45	03142022T18:52:00	VL038645.D	0.464
0.037391621	2.602	MSVOA_L	VL038602.D	0.47	03142022T18:52:00	VL038645.D	0.439
0.033947938	2.602	MSVOA_L	VL038602.D	0.36	03142022T18:52:00	VL038645.D	0.391
0.024307749	2.602	MSVOA_L	VL038602.D	0.3	03142022T18:52:00	VL038645.D	0.317
0.083781636	2.602	MSVOA_L	VL038602.D	0.42	03142022T18:52:00	VL038645.D	0.414
0.02525132	2.602	MSVOA_L	VL038602.D	0.39	03142022T18:52:00	VL038645.D	0.359
0.080544708	2.602	MSVOA_L	VL038602.D	0.49	03142022T18:52:00	VL038645.D	0.43
0.033569579	2.602	MSVOA_L	VL038602.D	0.5	03142022T18:52:00	VL038645.D	0.472
0.030038864	2.602	MSVOA_L	VL038602.D	0.39	03142022T18:52:00	VL038645.D	0.412
0.044355712	2.602	MSVOA_L	VL038602.D	0.33	03142022T18:52:00	VL038645.D	0.357
0.038739676	2.602	MSVOA_L	VL038602.D	0.35	03142022T18:52:00	VL038645.D	0.349
0.032348107	2.602	MSVOA_L	VL038602.D	0.48	03142022T18:52:00	VL038645.D	0.5
0.04092432	2.602	MSVOA_L	VL038602.D	0.37	03142022T18:52:00	VL038645.D	0.411
0.026260236	2.602	MSVOA_L	VL038602.D	0.47	03142022T18:52:00	VL038645.D	0.44
0.033337666	2.602	MSVOA_L	VL038602.D	0.4	03142022T18:52:00	VL038645.D	0.387
0.079104967	2.602	MSVOA_L	VL038602.D	0.76	03142022T18:52:00	VL038645.D	0.762
0.032870389	2.602	MSVOA_L	VL038602.D	0.31	03142022T18:52:00	VL038645.D	0.334
0.045944169	2.602	MSVOA_L	VL038602.D	0.41	03142022T18:52:00	VL038645.D	0.418
0.070735069	2.602	MSVOA_L	VL038602.D	0.49	03142022T18:52:00	VL038645.D	0.479
0.02880907	2.602	MSVOA_L	VL038602.D	0.25	03142022T18:52:00	VL038645.D	0.289
0.057070096	2.602	MSVOA_L	VL038602.D	0.14	03142022T18:52:00	VL038645.D	0.074
0.031520826	2.602	MSVOA_L	VL038602.D	0.35	03142022T18:52:00	VL038645.D	0.366
0.029937087	2.602	MSVOA_L	VL038602.D	0.37	03142022T18:52:00	VL038645.D	0.365
0.045207623	2.602	MSVOA_L	VL038602.D	0.36	03142022T18:52:00	VL038645.D	0.368
0.032938073	2.602	MSVOA_L	VL038602.D	0.35	03142022T18:52:00	VL038645.D	0.366
0.05526165	2.602	MSVOA_L	VL038602.D	0.44	03142022T18:52:00	VL038645.D	0.443
0.035804795	2.602	MSVOA_L	VL038602.D	0.38	03142022T18:52:00	VL038645.D	0.392
0.042061661	2.602	MSVOA_L	VL038602.D	0.26	03142022T18:52:00	VL038645.D	0.275
0.022957116	2.602	MSVOA_L	VL038602.D	0.27	03142022T18:52:00	VL038645.D	0.29
0.072141412	2.602	MSVOA_L	VL038602.D	0.44	03142022T18:52:00	VL038645.D	0.459
0.035649626	2.602	MSVOA_L	VL038602.D	0.37	03142022T18:52:00	VL038645.D	0.405
0.005558402	2.602	MSVOA_L	VL038599.D	0.03	03142022T17:01:00	VL038658.D	0.031
0.047138758	2.602	MSVOA_L	VL038602.D	0.3	03142022T18:52:00	VL038645.D	0.324
0.042	2.602	MSVOA_L	VL038602.D	0.31	03142022T18:52:00	VL038645.D	0.332
0.07120086	2.602	MSVOA_L	VL038602.D	0.4	03142022T18:52:00	VL038645.D	0.396
0.006363634	2.602	MSVOA_L	VL038599.D	0.03	03142022T17:01:00	VL038658.D	0.035
0.060517215	2.602	MSVOA_L	VL038602.D	0.46	03142022T18:52:00	VL038645.D	0.472
0.058559372	2.602	MSVOA_L	VL038602.D	0.4	03142022T18:52:00	VL038645.D	0.389
0.00522135	2.602	MSVOA_L	VL038599.D	0.03	03142022T17:01:00	VL038658.D	0.031
0.105747594	2.998	MSVOA_L	VL040210.D	0.438	02222023T00:52:00	VL040220.D	0.43

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Adate2	Datafile3	Concentration3	Adate3	Datafile4	Concentration4	Adate4	Datafile5
03182022T03:39:00	VL039242.D	0.45	06082022T19:44:00	VL039436.D	0.45	07062022T02:26:00	VL039568.D
03212022T20:11:00	VL039329.D	0.036	06222022T20:53:00	VL039439.D	0.033	07062022T09:13:00	VL039570.D
03212022T20:11:00	VL039329.D	0.029	06222022T20:53:00	VL039439.D	0.035	07062022T09:13:00	VL039570.D
03182022T03:39:00	VL039242.D	0.417	06082022T19:44:00	VL039436.D	0.445	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.615	06082022T19:44:00	VL039436.D	0.498	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.493	06082022T19:44:00	VL039436.D	0.545	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.594	06082022T19:44:00	VL039436.D	0.485	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.318	06082022T19:44:00	VL039436.D	0.328	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.389	06082022T19:44:00	VL039436.D	0.387	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.392	06082022T19:44:00	VL039436.D	0.391	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.409	06082022T19:44:00	VL039436.D	0.393	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.494	06082022T19:44:00	VL039436.D	0.435	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.404	06082022T19:44:00	VL039436.D	0.451	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.421	06082022T19:44:00	VL039436.D	0.397	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.583	06082022T19:44:00	VL039436.D	0.486	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.409	06082022T19:44:00	VL039436.D	0.465	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.392	06082022T19:44:00	VL039436.D	0.41	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.454	06082022T19:44:00	VL039436.D	0.535	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.37	06082022T19:44:00	VL039436.D	0.425	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.438	06082022T19:44:00	VL039436.D	0.482	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.415	06082022T19:44:00	VL039436.D	0.401	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.309	06082022T19:44:00	VL039436.D	0.31	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.391	06082022T19:44:00	VL039436.D	0.393	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.371	06082022T19:44:00	VL039436.D	0.372	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.649	06082022T19:44:00	VL039436.D	0.621	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.58	06082022T19:44:00	VL039436.D	0.45	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.391	06082022T19:44:00	VL039436.D	0.429	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.328	06082022T19:44:00	VL039436.D	0.438	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.398	06082022T19:44:00	VL039436.D	0.395	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.526	06082022T19:44:00	VL039436.D	0.475	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.335	06082022T19:44:00	VL039436.D	0.322	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.535	06082022T19:44:00	VL039436.D	0.503	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.494	06082022T19:44:00	VL039436.D	0.389	07062022T02:26:00	VL039568.D
03212022T20:11:00	VL039329.D	0.028	06222022T20:53:00	VL039439.D	0.03	07062022T09:13:00	VL039570.D
03182022T03:39:00	VL039242.D	0.418	06082022T19:44:00	VL039436.D	0.473	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.489	06082022T19:44:00	VL039436.D	0.483	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.595	06082022T19:44:00	VL039436.D	0.52	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.453	06082022T19:44:00	VL039436.D	0.469	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.5	06082022T19:44:00	VL039436.D	0.482	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.403	06082022T19:44:00	VL039436.D	0.434	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.315	06082022T19:44:00	VL039436.D	0.327	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.428	06082022T19:44:00	VL039436.D	0.512	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.359	06082022T19:44:00	VL039436.D	0.37	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.618	06082022T19:44:00	VL039436.D	0.675	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.551	06082022T19:44:00	VL039436.D	0.51	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.376	06082022T19:44:00	VL039436.D	0.441	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.374	06082022T19:44:00	VL039436.D	0.381	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.33	06082022T19:44:00	VL039436.D	0.41	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.444	06082022T19:44:00	VL039436.D	0.472	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.394	06082022T19:44:00	VL039436.D	0.47	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.504	06082022T19:44:00	VL039436.D	0.465	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.425	06082022T19:44:00	VL039436.D	0.416	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.815	06082022T19:44:00	VL039436.D	0.805	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.347	06082022T19:44:00	VL039436.D	0.361	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.492	06082022T19:44:00	VL039436.D	0.452	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.684	06082022T19:44:00	VL039436.D	0.578	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.282	06082022T19:44:00	VL039436.D	0.302	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.155	06082022T19:44:00	VL039436.D	0.143	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.39	06082022T19:44:00	VL039436.D	0.374	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.394	06082022T19:44:00	VL039436.D	0.397	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.421	06082022T19:44:00	VL039436.D	0.403	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.378	06082022T19:44:00	VL039436.D	0.388	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.435	06082022T19:44:00	VL039436.D	0.521	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.411	06082022T19:44:00	VL039436.D	0.406	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.345	06082022T19:44:00	VL039436.D	0.302	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.309	06082022T19:44:00	VL039436.D	0.279	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.655	06082022T19:44:00	VL039436.D	0.505	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.403	06082022T19:44:00	VL039436.D	0.388	07062022T02:26:00	VL039568.D
03212022T20:11:00	VL039329.D	0.036	06222022T20:53:00	VL039439.D	0.034	07062022T09:13:00	VL039570.D
03182022T03:39:00	VL039242.D	0.346	06082022T19:44:00	VL039436.D	0.38	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.341	06082022T19:44:00	VL039436.D	0.37	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.64	06082022T19:44:00	VL039436.D	0.494	07062022T02:26:00	VL039568.D
03212022T20:11:00	VL039329.D	0.038	06222022T20:53:00	VL039439.D	0.034	07062022T09:13:00	VL039570.D
03182022T03:39:00	VL039242.D	0.596	06082022T19:44:00	VL039436.D	0.492	07062022T02:26:00	VL039568.D
03182022T03:39:00	VL039242.D	0.418	06082022T19:44:00	VL039436.D	0.437	07062022T02:26:00	VL039568.D
03212022T20:11:00	VL039329.D	0.043	06222022T20:53:00	VL039439.D	0.036	07062022T09:13:00	VL039570.D
02232023T13:12:00	VL040329.D	0.51	04102023T17:39:00	VL040349.D	0.633	04122023T23:23:00	VL040559.D

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Concentration5	Adate5	Datafile6	Concentration6	Adate6	Datafile7	Concentration7	Adate7
0.433	08182022T21:04:00	VL039600.D	0.463	08262022T12:33:00	VL039709.D	0.402	10102022T23:30:00
0.03	08182022T22:24:00	VL039586.D	0.031	08252022T20:23:00	VL039711.D	0.03	10112022T00:45:00
0.03	08182022T22:24:00	VL039586.D	0.029	08252022T20:23:00	VL039711.D	0.03	10112022T00:45:00
0.404	08182022T21:04:00	VL039600.D	0.424	08262022T12:33:00	VL039709.D	0.412	10102022T23:30:00
0.448	08182022T21:04:00	VL039600.D	0.454	08262022T12:33:00	VL039709.D	0.438	10102022T23:30:00
0.426	08182022T21:04:00	VL039600.D	0.451	08262022T12:33:00	VL039709.D	0.445	10102022T23:30:00
0.394	08182022T21:04:00	VL039600.D	0.387	08262022T12:33:00	VL039709.D	0.427	10102022T23:30:00
0.314	08182022T21:04:00	VL039600.D	0.367	08262022T12:33:00	VL039709.D	0.373	10102022T23:30:00
0.342	08182022T21:04:00	VL039600.D	0.389	08262022T12:33:00	VL039709.D	0.389	10102022T23:30:00
0.361	08182022T21:04:00	VL039600.D	0.402	08262022T12:33:00	VL039709.D	0.375	10102022T23:30:00
0.408	08182022T21:04:00	VL039600.D	0.431	08262022T12:33:00	VL039709.D	0.448	10102022T23:30:00
0.411	08182022T21:04:00	VL039600.D	0.455	08262022T12:33:00	VL039709.D	0.418	10102022T23:30:00
0.444	08182022T21:04:00	VL039600.D	0.429	08262022T12:33:00	VL039709.D	0.373	10102022T23:30:00
0.331	08182022T21:04:00	VL039600.D	0.357	08262022T12:33:00	VL039709.D	0.342	10102022T23:30:00
0.405	08182022T21:04:00	VL039600.D	0.449	08262022T12:33:00	VL039709.D	0.422	10102022T23:30:00
0.368	08182022T21:04:00	VL039600.D	0.414	08262022T12:33:00	VL039709.D	0.399	10102022T23:30:00
0.404	08182022T21:04:00	VL039600.D	0.384	08262022T12:33:00	VL039709.D	0.439	10102022T23:30:00
0.373	08182022T21:04:00	VL039600.D	0.341	08262022T12:33:00	VL039709.D	0.418	10102022T23:30:00
0.348	08182022T21:04:00	VL039600.D	0.379	08262022T12:33:00	VL039709.D	0.392	10102022T23:30:00
0.314	08182022T21:04:00	VL039600.D	0.451	08262022T12:33:00	VL039709.D	0.354	10102022T23:30:00
0.312	08182022T21:04:00	VL039600.D	0.359	08262022T12:33:00	VL039709.D	0.348	10102022T23:30:00
0.27	08182022T21:04:00	VL039600.D	0.294	08262022T12:33:00	VL039709.D	0.326	10102022T23:30:00
0.284	08182022T21:04:00	VL039600.D	0.348	08262022T12:33:00	VL039709.D	0.355	10102022T23:30:00
0.322	08182022T21:04:00	VL039600.D	0.335	08262022T12:33:00	VL039709.D	0.32	10102022T23:30:00
0.363	08182022T21:04:00	VL039600.D	0.484	08262022T12:33:00	VL039709.D	0.5	10102022T23:30:00
0.418	08182022T21:04:00	VL039600.D	0.459	08262022T12:33:00	VL039709.D	0.379	10102022T23:30:00
0.345	08182022T21:04:00	VL039600.D	0.376	08262022T12:33:00	VL039709.D	0.398	10102022T23:30:00
0.394	08182022T21:04:00	VL039600.D	0.336	08262022T12:33:00	VL039709.D	0.356	10102022T23:30:00
0.382	08182022T21:04:00	VL039600.D	0.367	08262022T12:33:00	VL039709.D	0.377	10102022T23:30:00
0.408	08182022T21:04:00	VL039600.D	0.441	08262022T12:33:00	VL039709.D	0.388	10102022T23:30:00
0.305	08182022T21:04:00	VL039600.D	0.303	08262022T12:33:00	VL039709.D	0.293	10102022T23:30:00
0.364	08182022T21:04:00	VL039600.D	0.494	08262022T12:33:00	VL039709.D	0.464	10102022T23:30:00
0.399	08182022T21:04:00	VL039600.D	0.268	08262022T12:33:00	VL039709.D	0.332	10102022T23:30:00
0.03	08182022T22:24:00	VL039586.D	0.027	08252022T20:23:00	VL039711.D	0.03	10112022T00:45:00
0.431	08182022T21:04:00	VL039600.D	0.466	08262022T12:33:00	VL039709.D	0.46	10102022T23:30:00
0.456	08182022T21:04:00	VL039600.D	0.504	08262022T12:33:00	VL039709.D	0.446	10102022T23:30:00
0.462	08182022T21:04:00	VL039600.D	0.504	08262022T12:33:00	VL039709.D	0.531	10102022T23:30:00
0.423	08182022T21:04:00	VL039600.D	0.46	08262022T12:33:00	VL039709.D	0.411	10102022T23:30:00
0.392	08182022T21:04:00	VL039600.D	0.472	08262022T12:33:00	VL039709.D	0.485	10102022T23:30:00
0.36	08182022T21:04:00	VL039600.D	0.407	08262022T12:33:00	VL039709.D	0.438	10102022T23:30:00
0.277	08182022T21:04:00	VL039600.D	0.291	08262022T12:33:00	VL039709.D	0.284	10102022T23:30:00
0.376	08182022T21:04:00	VL039600.D	0.395	08262022T12:33:00	VL039709.D	0.383	10102022T23:30:00
0.339	08182022T21:04:00	VL039600.D	0.335	08262022T12:33:00	VL039709.D	0.301	10102022T23:30:00
0.62	08182022T21:04:00	VL039600.D	0.643	08262022T12:33:00	VL039709.D	0.694	10102022T23:30:00
0.454	08182022T21:04:00	VL039600.D	0.508	08262022T12:33:00	VL039709.D	0.473	10102022T23:30:00
0.341	08182022T21:04:00	VL039600.D	0.432	08262022T12:33:00	VL039709.D	0.395	10102022T23:30:00
0.297	08182022T21:04:00	VL039600.D	0.338	08262022T12:33:00	VL039709.D	0.334	10102022T23:30:00
0.347	08182022T21:04:00	VL039600.D	0.382	08262022T12:33:00	VL039709.D	0.407	10102022T23:30:00
0.447	08182022T21:04:00	VL039600.D	0.502	08262022T12:33:00	VL039709.D	0.468	10102022T23:30:00
0.385	08182022T21:04:00	VL039600.D	0.405	08262022T12:33:00	VL039709.D	0.435	10102022T23:30:00
0.458	08182022T21:04:00	VL039600.D	0.434	08262022T12:33:00	VL039709.D	0.481	10102022T23:30:00
0.361	08182022T21:04:00	VL039600.D	0.388	08262022T12:33:00	VL039709.D	0.405	10102022T23:30:00
0.673	08182022T21:04:00	VL039600.D	0.719	08262022T12:33:00	VL039709.D	0.688	10102022T23:30:00
0.3	08182022T21:04:00	VL039600.D	0.323	08262022T12:33:00	VL039709.D	0.346	10102022T23:30:00
0.337	08182022T21:04:00	VL039600.D	0.355	08262022T12:33:00	VL039709.D	0.396	10102022T23:30:00
0.536	08182022T21:04:00	VL039600.D	0.634	08262022T12:33:00	VL039709.D	0.499	10102022T23:30:00
0.28	08182022T21:04:00	VL039600.D	0.302	08262022T12:33:00	VL039709.D	0.291	10102022T23:30:00
0.158	08182022T21:04:00	VL039600.D	0.094	08262022T12:33:00	VL039709.D	0.149	10102022T23:30:00
0.321	08182022T21:04:00	VL039600.D	0.354	08262022T12:33:00	VL039709.D	0.358	10102022T23:30:00
0.332	08182022T21:04:00	VL039600.D	0.338	08262022T12:33:00	VL039709.D	0.347	10102022T23:30:00
0.315	08182022T21:04:00	VL039600.D	0.347	08262022T12:33:00	VL039709.D	0.354	10102022T23:30:00
0.316	08182022T21:04:00	VL039600.D	0.362	08262022T12:33:00	VL039709.D	0.358	10102022T23:30:00
0.499	08182022T21:04:00	VL039600.D	0.578	08262022T12:33:00	VL039709.D	0.533	10102022T23:30:00
0.359	08182022T21:04:00	VL039600.D	0.382	08262022T12:33:00	VL039709.D	0.371	10102022T23:30:00
0.23	08182022T21:04:00	VL039600.D	0.257	08262022T12:33:00	VL039709.D	0.278	10102022T23:30:00
0.252	08182022T21:04:00	VL039600.D	0.252	08262022T12:33:00	VL039709.D	0.273	10102022T23:30:00
0.384	08182022T21:04:00	VL039600.D	0.382	08262022T12:33:00	VL039709.D	0.454	10102022T23:30:00
0.345	08182022T21:04:00	VL039600.D	0.399	08262022T12:33:00	VL039709.D	0.371	10102022T23:30:00
0.03	08182022T22:24:00	VL039586.D	0.038	08252022T20:23:00	VL039711.D	0.03	10112022T00:45:00
0.299	08182022T21:04:00	VL039600.D	0.344	08262022T12:33:00	VL039709.D	0.389	10102022T23:30:00
0.288	08182022T21:04:00	VL039600.D	0.296	08262022T12:33:00	VL039709.D	0.33	10102022T23:30:00
0.375	08182022T21:04:00	VL039600.D	0.466	08262022T12:33:00	VL039709.D	0.437	10102022T23:30:00
0.03	08182022T22:24:00	VL039586.D	0.031	08252022T20:23:00	VL039711.D	0.04	10112022T00:45:00
0.436	08182022T21:04:00	VL039600.D	0.47	08262022T12:33:00	VL039709.D	0.385	10102022T23:30:00
0.42	08182022T21:04:00	VL039600.D	0.483	08262022T12:33:00	VL039709.D	0.363	10102022T23:30:00
0.03	08182022T22:24:00	VL039586.D	0.029	08252022T20:23:00	VL039711.D	0.03	10112022T00:45:00
0.636	07272023T03:27:00	VL040579.D	0.42	07312023T19:20:00	VL040747.D	0.607	10042023T19:33:00

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Datafile8	Concentration8	Adate8	Datafile9	Concentration9	Adate9	Datafile10	Concentration10
VL040134.D	0.42	01302023T15:54:00	VL040210.D	0.383	02222023T00:52:00	VL040220.D	0.42
VL040136.D	0.03	01302023T17:08:00	VL040222.D	0.038	02232023T14:26:00	VL040223.D	0.033
VL040136.D	0.03	01302023T17:08:00	VL040222.D	0.032	02232023T14:26:00	VL040223.D	0.027
VL040134.D	0.41	01302023T15:54:00	VL040210.D	0.395	02222023T00:52:00	VL040220.D	0.43
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.476	02222023T00:52:00	VL040220.D	0.47
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.436	02222023T00:52:00	VL040220.D	0.45
VL040134.D	0.4	01302023T15:54:00	VL040210.D	0.452	02222023T00:52:00	VL040220.D	0.45
VL040134.D	0.32	01302023T15:54:00	VL040210.D	0.299	02222023T00:52:00	VL040220.D	0.32
VL040134.D	0.37	01302023T15:54:00	VL040210.D	0.375	02222023T00:52:00	VL040220.D	0.37
VL040134.D	0.39	01302023T15:54:00	VL040210.D	0.38	02222023T00:52:00	VL040220.D	0.38
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.378	02222023T00:52:00	VL040220.D	0.43
VL040134.D	0.4	01302023T15:54:00	VL040210.D	0.434	02222023T00:52:00	VL040220.D	0.44
VL040134.D	0.41	01302023T15:54:00	VL040210.D	0.432	02222023T00:52:00	VL040220.D	0.43
VL040134.D	0.35	01302023T15:54:00	VL040210.D	0.344	02222023T00:52:00	VL040220.D	0.34
VL040134.D	0.43	01302023T15:54:00	VL040210.D	0.396	02222023T00:52:00	VL040220.D	0.41
VL040134.D	0.37	01302023T15:54:00	VL040210.D	0.395	02222023T00:52:00	VL040220.D	0.42
VL040134.D	0.4	01302023T15:54:00	VL040210.D	0.402	02222023T00:52:00	VL040220.D	0.4
VL040134.D	0.41	01302023T15:54:00	VL040210.D	0.387	02222023T00:52:00	VL040220.D	0.43
VL040134.D	0.39	01302023T15:54:00	VL040210.D	0.352	02222023T00:52:00	VL040220.D	0.38
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.416	02222023T00:52:00	VL040220.D	0.44
VL040134.D	0.36	01302023T15:54:00	VL040210.D	0.34	02222023T00:52:00	VL040220.D	0.36
VL040134.D	0.32	01302023T15:54:00	VL040210.D	0.318	02222023T00:52:00	VL040220.D	0.34
VL040134.D	0.35	01302023T15:54:00	VL040210.D	0.321	02222023T00:52:00	VL040220.D	0.36
VL040134.D	0.36	01302023T15:54:00	VL040210.D	0.337	02222023T00:52:00	VL040220.D	0.37
VL040134.D	0.45	01302023T15:54:00	VL040210.D	0.482	02222023T00:52:00	VL040220.D	0.5
VL040134.D	0.36	01302023T15:54:00	VL040210.D	0.411	02222023T00:52:00	VL040220.D	0.45
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.359	02222023T00:52:00	VL040220.D	0.39
VL040134.D	0.29	01302023T15:54:00	VL040210.D	0.311	02222023T00:52:00	VL040220.D	0.38
VL040134.D	0.37	01302023T15:54:00	VL040210.D	0.378	02222023T00:52:00	VL040220.D	0.38
VL040134.D	0.37	01302023T15:54:00	VL040210.D	0.413	02222023T00:52:00	VL040220.D	0.42
VL040134.D	0.32	01302023T15:54:00	VL040210.D	0.32	02222023T00:52:00	VL040220.D	0.33
VL040134.D	0.4	01302023T15:54:00	VL040210.D	0.408	02222023T00:52:00	VL040220.D	0.49
VL040134.D	0.31	01302023T15:54:00	VL040210.D	0.391	02222023T00:52:00	VL040220.D	0.37
VL040136.D	0.03	01302023T17:08:00	VL040222.D	0.033	02232023T14:26:00	VL040223.D	0.037
VL040134.D	0.44	01302023T15:54:00	VL040210.D	0.414	02222023T00:52:00	VL040220.D	0.45
VL040134.D	0.43	01302023T15:54:00	VL040210.D	0.474	02222023T00:52:00	VL040220.D	0.46
VL040134.D	0.37	01302023T15:54:00	VL040210.D	0.416	02222023T00:52:00	VL040220.D	0.44
VL040134.D	0.47	01302023T15:54:00	VL040210.D	0.445	02222023T00:52:00	VL040220.D	0.42
VL040134.D	0.46	01302023T15:54:00	VL040210.D	0.443	02222023T00:52:00	VL040220.D	0.47
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.435	02222023T00:52:00	VL040220.D	0.38
VL040134.D	0.33	01302023T15:54:00	VL040210.D	0.284	02222023T00:52:00	VL040220.D	0.34
VL040134.D	0.49	01302023T15:54:00	VL040210.D	0.521	02222023T00:52:00	VL040220.D	0.34
VL040134.D	0.35	01302023T15:54:00	VL040210.D	0.343	02222023T00:52:00	VL040220.D	0.34
VL040134.D	0.48	01302023T15:54:00	VL040210.D	0.497	02222023T00:52:00	VL040220.D	0.49
VL040134.D	0.43	01302023T15:54:00	VL040210.D	0.431	02222023T00:52:00	VL040220.D	0.46
VL040134.D	0.39	01302023T15:54:00	VL040210.D	0.398	02222023T00:52:00	VL040220.D	0.42
VL040134.D	0.36	01302023T15:54:00	VL040210.D	0.309	02222023T00:52:00	VL040220.D	0.33
VL040134.D	0.34	01302023T15:54:00	VL040210.D	0.336	02222023T00:52:00	VL040220.D	0.37
VL040134.D	0.43	01302023T15:54:00	VL040210.D	0.421	02222023T00:52:00	VL040220.D	0.44
VL040134.D	0.41	01302023T15:54:00	VL040210.D	0.4	02222023T00:52:00	VL040220.D	0.41
VL040134.D	0.4	01302023T15:54:00	VL040210.D	0.479	02222023T00:52:00	VL040220.D	0.48
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.361	02222023T00:52:00	VL040220.D	0.4
VL040134.D	0.71	01302023T15:54:00	VL040210.D	0.699	02222023T00:52:00	VL040220.D	0.75
VL040134.D	0.35	01302023T15:54:00	VL040210.D	0.314	02222023T00:52:00	VL040220.D	0.35
VL040134.D	0.38	01302023T15:54:00	VL040210.D	0.421	02222023T00:52:00	VL040220.D	0.41
VL040134.D	0.44	01302023T15:54:00	VL040210.D	0.558	02222023T00:52:00	VL040220.D	0.57
VL040134.D	0.27	01302023T15:54:00	VL040210.D	0.246	02222023T00:52:00	VL040220.D	0.27
VL040134.D	0.19	01302023T15:54:00	VL040210.D	0.116	02222023T00:52:00	VL040220.D	0.21
VL040134.D	0.34	01302023T15:54:00	VL040210.D	0.349	02222023T00:52:00	VL040220.D	0.35
VL040134.D	0.34	01302023T15:54:00	VL040210.D	0.354	02222023T00:52:00	VL040220.D	0.36
VL040134.D	0.34	01302023T15:54:00	VL040210.D	0.331	02222023T00:52:00	VL040220.D	0.36
VL040134.D	0.33	01302023T15:54:00	VL040210.D	0.329	02222023T00:52:00	VL040220.D	0.34
VL040134.D	0.42	01302023T15:54:00	VL040210.D	0.432	02222023T00:52:00	VL040220.D	0.43
VL040134.D	0.36	01302023T15:54:00	VL040210.D	0.352	02222023T00:52:00	VL040220.D	0.37
VL040134.D	0.29	01302023T15:54:00	VL040210.D	0.262	02222023T00:52:00	VL040220.D	0.27
VL040134.D	0.3	01302023T15:54:00	VL040210.D	0.292	02222023T00:52:00	VL040220.D	0.3
VL040134.D	0.4	01302023T15:54:00	VL040210.D	0.395	02222023T00:52:00	VL040220.D	0.44
VL040134.D	0.35	01302023T15:54:00	VL040210.D	0.349	02222023T00:52:00	VL040220.D	0.36
VL040136.D	0.03	01302023T17:08:00	VL040222.D	0.029	02232023T14:26:00	VL040223.D	0.031
VL040134.D	0.42	01302023T15:54:00	VL040210.D	0.368	02222023T00:52:00	VL040220.D	0.42
VL040134.D	0.34	01302023T15:54:00	VL040210.D	0.297	02222023T00:52:00	VL040220.D	0.33
VL040134.D	0.35	01302023T15:54:00	VL040210.D	0.397	02222023T00:52:00	VL040220.D	0.42
VL040136.D	0.03	01302023T17:08:00	VL040222.D	0.027	02232023T14:26:00	VL040223.D	0.028
VL040134.D	0.4	01302023T15:54:00	VL040210.D	0.451	02222023T00:52:00	VL040220.D	0.45
VL040134.D	0.39	01302023T15:54:00	VL040210.D	0.438	02222023T00:52:00	VL040220.D	0.4
VL040136.D	0.03	01302023T17:08:00	VL040222.D	0.033	02232023T14:26:00	VL040223.D	0.038
VL040805.D	0.675	10252023T18:12:00					

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Adate10	Datafile11	Concentration11	Adate11	Datafile12	Concentration12	Adate12	Datafile13
02232023T13:12:00	VL040329.D	0.45	04102023T17:39:00	VL040349.D	0.434	04122023T23:23:00	VL040559.D
02232023T15:04:00	VL040332.D	0.028	04102023T19:33:00	VL040346.D	0.027	04122023T19:50:00	VL040576.D
02232023T15:04:00	VL040332.D	0.023	04102023T19:33:00	VL040346.D	0.03	04122023T19:50:00	VL040576.D
02232023T13:12:00	VL040329.D	0.41	04102023T17:39:00	VL040349.D	0.403	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.42	04102023T17:39:00	VL040349.D	0.429	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.43	04102023T17:39:00	VL040349.D	0.4	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.44	04102023T17:39:00	VL040349.D	0.419	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.3	04102023T17:39:00	VL040349.D	0.302	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.34	04102023T17:39:00	VL040349.D	0.362	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.37	04102023T17:39:00	VL040349.D	0.398	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.38	04102023T17:39:00	VL040349.D	0.402	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.45	04102023T17:39:00	VL040349.D	0.427	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.41	04102023T17:39:00	VL040349.D	0.385	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.33	04102023T17:39:00	VL040349.D	0.311	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.38	04102023T17:39:00	VL040349.D	0.448	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.38	04102023T17:39:00	VL040349.D	0.392	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.39	04102023T17:39:00	VL040349.D	0.402	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.33	04102023T17:39:00	VL040349.D	0.33	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.35	04102023T17:39:00	VL040349.D	0.356	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.45	04102023T17:39:00	VL040349.D	0.451	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.32	04102023T17:39:00	VL040349.D	0.31	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.28	04102023T17:39:00	VL040349.D	0.29	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.32	04102023T17:39:00	VL040349.D	0.303	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.33	04102023T17:39:00	VL040349.D	0.339	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.58	04102023T17:39:00	VL040349.D	0.582	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.39	04102023T17:39:00	VL040349.D	0.402	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.37	04102023T17:39:00	VL040349.D	0.365	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.37	04102023T17:39:00	VL040349.D	0.421	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.38	04102023T17:39:00	VL040349.D	0.397	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.41	04102023T17:39:00	VL040349.D	0.415	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.31	04102023T17:39:00	VL040349.D	0.337	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.44	04102023T17:39:00	VL040349.D	0.51	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.34	04102023T17:39:00	VL040349.D	0.342	04122023T23:23:00	VL040559.D
02232023T15:04:00	VL040332.D	0.028	04102023T19:33:00	VL040346.D	0.025	04122023T19:50:00	VL040576.D
02232023T13:12:00	VL040329.D	0.45	04102023T17:39:00	VL040349.D	0.433	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.45	04102023T17:39:00	VL040349.D	0.453	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.4	04102023T17:39:00	VL040349.D	0.487	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.43	04102023T17:39:00	VL040349.D	0.456	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.47	04102023T17:39:00	VL040349.D	0.455	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.38	04102023T17:39:00	VL040349.D	0.376	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.29	04102023T17:39:00	VL040349.D	0.287	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.29	04102023T17:39:00	VL040349.D	0.35	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.35	04102023T17:39:00	VL040349.D	0.339	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.51	04102023T17:39:00	VL040349.D	0.483	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.46	04102023T17:39:00	VL040349.D	0.467	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.39	04102023T17:39:00	VL040349.D	0.394	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.32	04102023T17:39:00	VL040349.D	0.31	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.33	04102023T17:39:00	VL040349.D	0.336	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.45	04102023T17:39:00	VL040349.D	0.441	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.37	04102023T17:39:00	VL040349.D	0.365	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.47	04102023T17:39:00	VL040349.D	0.442	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.38	04102023T17:39:00	VL040349.D	0.363	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.66	04102023T17:39:00	VL040349.D	0.659	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.31	04102023T17:39:00	VL040349.D	0.305	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.41	04102023T17:39:00	VL040349.D	0.362	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.47	04102023T17:39:00	VL040349.D	0.533	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.26	04102023T17:39:00	VL040349.D	0.261	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.21	04102023T17:39:00	VL040349.D	0.19	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.33	04102023T17:39:00	VL040349.D	0.334	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.35	04102023T17:39:00	VL040349.D	0.345	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.31	04102023T17:39:00	VL040349.D	0.327	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.32	04102023T17:39:00	VL040349.D	0.314	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.42	04102023T17:39:00	VL040349.D	0.465	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.35	04102023T17:39:00	VL040349.D	0.335	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.26	04102023T17:39:00	VL040349.D	0.257	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.27	04102023T17:39:00	VL040349.D	0.256	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.46	04102023T17:39:00	VL040349.D	0.427	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.34	04102023T17:39:00	VL040349.D	0.327	04122023T23:23:00	VL040559.D
02232023T15:04:00	VL040332.D	0.022	04102023T19:33:00	VL040346.D	0.029	04122023T19:50:00	VL040576.D
02232023T13:12:00	VL040329.D	0.3	04102023T17:39:00	VL040349.D	0.347	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.29	04102023T17:39:00	VL040349.D	0.291	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.37	04102023T17:39:00	VL040349.D	0.391	04122023T23:23:00	VL040559.D
02232023T15:04:00	VL040332.D	0.029	04102023T19:33:00	VL040346.D	0.028	04122023T19:50:00	VL040576.D
02232023T13:12:00	VL040329.D	0.45	04102023T17:39:00	VL040349.D	0.47	04122023T23:23:00	VL040559.D
02232023T13:12:00	VL040329.D	0.37	04102023T17:39:00	VL040349.D	0.58	04122023T23:23:00	VL040559.D
02232023T15:04:00	VL040332.D	0.024	04102023T19:33:00	VL040346.D	0.029	04122023T19:50:00	VL040576.D

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Concentration13	Adate13	Datafile14	Concentration14	Adate14	Datafile15	Concentration15	Adate15
0.48	07272023T03:27:00	VL040579.D	0.42	07312023T19:20:00	VL040747.D	0.488	10042023T19:33:00
0.03	07312023T17:18:00	VL040581.D	0.031	07312023T20:41:00	VL040772.D	0.035	10122023T01:48:00
0.031	07312023T17:18:00	VL040581.D	0.026	07312023T20:41:00	VL040772.D	0.029	10122023T01:48:00
0.459	07272023T03:27:00	VL040579.D	0.36	07312023T19:20:00	VL040747.D	0.405	10042023T19:33:00
0.573	07272023T03:27:00	VL040579.D	0.5	07312023T19:20:00	VL040747.D	0.557	10042023T19:33:00
0.535	07272023T03:27:00	VL040579.D	0.43	07312023T19:20:00	VL040747.D	0.527	10042023T19:33:00
0.527	07272023T03:27:00	VL040579.D	0.42	07312023T19:20:00	VL040747.D	0.481	10042023T19:33:00
0.33	07272023T03:27:00	VL040579.D	0.23	07312023T19:20:00	VL040747.D	0.305	10042023T19:33:00
0.389	07272023T03:27:00	VL040579.D	0.3	07312023T19:20:00	VL040747.D	0.361	10042023T19:33:00
0.425	07272023T03:27:00	VL040579.D	0.32	07312023T19:20:00	VL040747.D	0.359	10042023T19:33:00
0.442	07272023T03:27:00	VL040579.D	0.36	07312023T19:20:00	VL040747.D	0.45	10042023T19:33:00
0.519	07272023T03:27:00	VL040579.D	0.41	07312023T19:20:00	VL040747.D	0.426	10042023T19:33:00
0.452	07272023T03:27:00	VL040579.D	0.36	07312023T19:20:00	VL040747.D	0.42	10042023T19:33:00
0.33	07272023T03:27:00	VL040579.D	0.26	07312023T19:20:00	VL040747.D	0.321	10042023T19:33:00
0.412	07272023T03:27:00	VL040579.D	0.41	07312023T19:20:00	VL040747.D	0.466	10042023T19:33:00
0.388	07272023T03:27:00	VL040579.D	0.33	07312023T19:20:00	VL040747.D	0.412	10042023T19:33:00
0.438	07272023T03:27:00	VL040579.D	0.36	07312023T19:20:00	VL040747.D	0.382	10042023T19:33:00
0.373	07272023T03:27:00	VL040579.D	0.29	07312023T19:20:00	VL040747.D	0.257	10042023T19:33:00
0.398	07272023T03:27:00	VL040579.D	0.27	07312023T19:20:00	VL040747.D	0.335	10042023T19:33:00
0.448	07272023T03:27:00	VL040579.D	0.37	07312023T19:20:00	VL040747.D	0.443	10042023T19:33:00
0.35	07272023T03:27:00	VL040579.D	0.27	07312023T19:20:00	VL040747.D	0.325	10042023T19:33:00
0.303	07272023T03:27:00	VL040579.D	0.22	07312023T19:20:00	VL040747.D	0.283	10042023T19:33:00
0.32	07272023T03:27:00	VL040579.D	0.23	07312023T19:20:00	VL040747.D	0.317	10042023T19:33:00
0.348	07272023T03:27:00	VL040579.D	0.27	07312023T19:20:00	VL040747.D	0.302	10042023T19:33:00
0.674	07272023T03:27:00	VL040579.D	0.48	07312023T19:20:00	VL040747.D	0.65	10042023T19:33:00
0.436	07272023T03:27:00	VL040579.D	0.37	07312023T19:20:00	VL040747.D	0.511	10042023T19:33:00
0.397	07272023T03:27:00	VL040579.D	0.3	07312023T19:20:00	VL040747.D	0.386	10042023T19:33:00
0.425	07272023T03:27:00	VL040579.D	0.34	07312023T19:20:00	VL040747.D	0.307	10042023T19:33:00
0.467	07272023T03:27:00	VL040579.D	0.4	07312023T19:20:00	VL040747.D	0.409	10042023T19:33:00
0.508	07272023T03:27:00	VL040579.D	0.42	07312023T19:20:00	VL040747.D	0.506	10042023T19:33:00
0.352	07272023T03:27:00	VL040579.D	0.33	07312023T19:20:00	VL040747.D	0.349	10042023T19:33:00
0.543	07272023T03:27:00	VL040579.D	0.46	07312023T19:20:00	VL040747.D	0.496	10042023T19:33:00
0.46	07272023T03:27:00	VL040579.D	0.42	07312023T19:20:00	VL040747.D	0.477	10042023T19:33:00
0.036	07312023T17:18:00	VL040581.D	0.033	07312023T20:41:00	VL040772.D	0.031	10122023T01:48:00
0.481	07272023T03:27:00	VL040579.D	0.38	07312023T19:20:00	VL040747.D	0.489	10042023T19:33:00
0.526	07272023T03:27:00	VL040579.D	0.45	07312023T19:20:00	VL040747.D	0.55	10042023T19:33:00
0.516	07272023T03:27:00	VL040579.D	0.43	07312023T19:20:00	VL040747.D	0.576	10042023T19:33:00
0.521	07272023T03:27:00	VL040579.D	0.41	07312023T19:20:00	VL040747.D	0.501	10042023T19:33:00
0.486	07272023T03:27:00	VL040579.D	0.39	07312023T19:20:00	VL040747.D	0.544	10042023T19:33:00
0.405	07272023T03:27:00	VL040579.D	0.32	07312023T19:20:00	VL040747.D	0.431	10042023T19:33:00
0.295	07272023T03:27:00	VL040579.D	0.25	07312023T19:20:00	VL040747.D	0.298	10042023T19:33:00
0.301	07272023T03:27:00	VL040579.D	0.21	07312023T19:20:00	VL040747.D	0.317	10042023T19:33:00
0.403	07272023T03:27:00	VL040579.D	0.35	07312023T19:20:00	VL040747.D	0.381	10042023T19:33:00
0.54	07272023T03:27:00	VL040579.D	0.47	07312023T19:20:00	VL040747.D	0.562	10042023T19:33:00
0.516	07272023T03:27:00	VL040579.D	0.46	07312023T19:20:00	VL040747.D	0.509	10042023T19:33:00
0.424	07272023T03:27:00	VL040579.D	0.34	07312023T19:20:00	VL040747.D	0.441	10042023T19:33:00
0.32	07272023T03:27:00	VL040579.D	0.21	07312023T19:20:00	VL040747.D	0.299	10042023T19:33:00
0.341	07272023T03:27:00	VL040579.D	0.25	07312023T19:20:00	VL040747.D	0.355	10042023T19:33:00
0.466	07272023T03:27:00	VL040579.D	0.37	07312023T19:20:00	VL040747.D	0.479	10042023T19:33:00
0.38	07272023T03:27:00	VL040579.D	0.31	07312023T19:20:00	VL040747.D	0.465	10042023T19:33:00
0.451	07272023T03:27:00	VL040579.D	0.43	07312023T19:20:00	VL040747.D	0.426	10042023T19:33:00
0.379	07272023T03:27:00	VL040579.D	0.29	07312023T19:20:00	VL040747.D	0.386	10042023T19:33:00
0.735	07272023T03:27:00	VL040579.D	0.54	07312023T19:20:00	VL040747.D	0.682	10042023T19:33:00
0.283	07272023T03:27:00	VL040579.D	0.23	07312023T19:20:00	VL040747.D	0.324	10042023T19:33:00
0.468	07272023T03:27:00	VL040579.D	0.38	07312023T19:20:00	VL040747.D	0.472	10042023T19:33:00
0.619	07272023T03:27:00	VL040579.D	0.62	07312023T19:20:00	VL040747.D	0.625	10042023T19:33:00
0.274	07272023T03:27:00	VL040579.D	0.19	07312023T19:20:00	VL040747.D	0.258	10042023T19:33:00
0.107	07272023T03:27:00	VL040579.D	0.06	07312023T19:20:00	VL040747.D	0.133	10042023T19:33:00
0.361	07272023T03:27:00	VL040579.D	0.27	07312023T19:20:00	VL040747.D	0.343	10042023T19:33:00
0.355	07272023T03:27:00	VL040579.D	0.27	07312023T19:20:00	VL040747.D	0.369	10042023T19:33:00
0.355	07272023T03:27:00	VL040579.D	0.26	07312023T19:20:00	VL040747.D	0.301	10042023T19:33:00
0.357	07272023T03:27:00	VL040579.D	0.26	07312023T19:20:00	VL040747.D	0.313	10042023T19:33:00
0.436	07272023T03:27:00	VL040579.D	0.34	07312023T19:20:00	VL040747.D	0.471	10042023T19:33:00
0.393	07272023T03:27:00	VL040579.D	0.29	07312023T19:20:00	VL040747.D	0.354	10042023T19:33:00
0.242	07272023T03:27:00	VL040579.D	0.17	07312023T19:20:00	VL040747.D	0.266	10042023T19:33:00
0.283	07272023T03:27:00	VL040579.D	0.23	07312023T19:20:00	VL040747.D	0.312	10042023T19:33:00
0.539	07272023T03:27:00	VL040579.D	0.43	07312023T19:20:00	VL040747.D	0.394	10042023T19:33:00
0.366	07272023T03:27:00	VL040579.D	0.28	07312023T19:20:00	VL040747.D	0.381	10042023T19:33:00
0.025	07312023T17:18:00	VL040581.D	0.028	07312023T20:41:00	VL040772.D	0.044	10122023T01:48:00
0.353	07272023T03:27:00	VL040579.D	0.26	07312023T19:20:00	VL040747.D	0.351	10042023T19:33:00
0.285	07272023T03:27:00	VL040579.D	0.2	07312023T19:20:00	VL040747.D	0.288	10042023T19:33:00
0.477	07272023T03:27:00	VL040579.D	0.4	07312023T19:20:00	VL040747.D	0.507	10042023T19:33:00
0.027	07312023T17:18:00	VL040581.D	0.027	07312023T20:41:00	VL040772.D	0.039	10122023T01:48:00
0.589	07272023T03:27:00	VL040579.D	0.52	07312023T19:20:00	VL040747.D	0.561	10042023T19:33:00
0.487	07272023T03:27:00	VL040579.D	0.46	07312023T19:20:00	VL040747.D	0.456	10042023T19:33:00
0.03	07312023T17:18:00	VL040581.D	0.033	07312023T20:41:00	VL040772.D	0.041	10122023T01:48:00

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Datafile16	Concentration16	Adate16	Department	AVG Concentration	Recovery
VL040805.D	0.428	10252023T18:12:00	VOC	0.45	110
VL040787.D	0.04	10232023T20:32:00	VOC	0.032	110
VL040787.D	0.04	10232023T20:32:00	VOC	0.03	100
VL040805.D	0.471	10252023T18:12:00	VOC	0.42	110
VL040805.D	0.476	10252023T18:12:00	VOC	0.48	120
VL040805.D	0.427	10252023T18:12:00	VOC	0.46	110
VL040805.D	0.47	10252023T18:12:00	VOC	0.45	110
VL040805.D	0.288	10252023T18:12:00	VOC	0.31	79
VL040805.D	0.435	10252023T18:12:00	VOC	0.37	93
VL040805.D	0.433	10252023T18:12:00	VOC	0.38	95
VL040805.D	0.405	10252023T18:12:00	VOC	0.41	100
VL040805.D	0.501	10252023T18:12:00	VOC	0.44	110
VL040805.D	0.456	10252023T18:12:00	VOC	0.42	100
VL040805.D	0.403	10252023T18:12:00	VOC	0.35	87
VL040805.D	0.455	10252023T18:12:00	VOC	0.44	110
VL040805.D	0.412	10252023T18:12:00	VOC	0.4	100
VL040805.D	0.414	10252023T18:12:00	VOC	0.4	100
VL040805.D	0.486	10252023T18:12:00	VOC	0.38	96
VL040805.D	0.434	10252023T18:12:00	VOC	0.37	93
VL040805.D	0.467	10252023T18:12:00	VOC	0.42	100
VL040805.D	0.42	10252023T18:12:00	VOC	0.35	88
VL040805.D	0.353	10252023T18:12:00	VOC	0.3	75
VL040805.D	0.397	10252023T18:12:00	VOC	0.34	84
VL040805.D	0.403	10252023T18:12:00	VOC	0.34	84
VL040805.D	0.576	10252023T18:12:00	VOC	0.53	130
VL040805.D	0.422	10252023T18:12:00	VOC	0.43	110
VL040805.D	0.445	10252023T18:12:00	VOC	0.38	96
VL040805.D	0.205	10252023T18:12:00	VOC	0.36	91
VL040805.D	0.458	10252023T18:12:00	VOC	0.4	100
VL040805.D	0.436	10252023T18:12:00	VOC	0.44	110
VL040805.D	0.34	10252023T18:12:00	VOC	0.33	82
VL040805.D	0.508	10252023T18:12:00	VOC	0.47	120
VL040805.D	0.361	10252023T18:12:00	VOC	0.38	95
VL040787.D	0.04	10232023T20:32:00	VOC	0.031	100
VL040805.D	0.454	10252023T18:12:00	VOC	0.45	110
VL040805.D	0.517	10252023T18:12:00	VOC	0.48	120
VL040805.D	0.435	10252023T18:12:00	VOC	0.47	120
VL040805.D	0.487	10252023T18:12:00	VOC	0.45	110
VL040805.D	0.458	10252023T18:12:00	VOC	0.46	120
VL040805.D	0.435	10252023T18:12:00	VOC	0.4	99
VL040805.D	0.335	10252023T18:12:00	VOC	0.3	75
VL040805.D	0.416	10252023T18:12:00	VOC	0.39	96
VL040805.D	0.384	10252023T18:12:00	VOC	0.36	89
VL040805.D	0.516	10252023T18:12:00	VOC	0.54	140
VL040805.D	0.505	10252023T18:12:00	VOC	0.48	120
VL040805.D	0.404	10252023T18:12:00	VOC	0.4	100
VL040805.D	0.406	10252023T18:12:00	VOC	0.33	82
VL040805.D	0.404	10252023T18:12:00	VOC	0.35	88
VL040805.D	0.446	10252023T18:12:00	VOC	0.45	110
VL040805.D	0.452	10252023T18:12:00	VOC	0.4	100
VL040805.D	0.442	10252023T18:12:00	VOC	0.45	110
VL040805.D	0.435	10252023T18:12:00	VOC	0.38	96
VL040805.D	0.888	10252023T18:12:00	VOC	0.72	180
VL040805.D	0.348	10252023T18:12:00	VOC	0.32	80
VL040805.D	0.353	10252023T18:12:00	VOC	0.41	100
VL040805.D	0.619	10252023T18:12:00	VOC	0.56	140
VL040805.D	0.226	10252023T18:12:00	VOC	0.27	66
VL040805.D	0	10252023T18:12:00	VOC	0.14	35
VL040805.D	0.415	10252023T18:12:00	VOC	0.35	88
VL040805.D	0.389	10252023T18:12:00	VOC	0.35	89
VL040805.D	0.439	10252023T18:12:00	VOC	0.35	87
VL040805.D	0.381	10252023T18:12:00	VOC	0.34	85
VL040805.D	0.467	10252023T18:12:00	VOC	0.46	110
VL040805.D	0.449	10252023T18:12:00	VOC	0.37	93
VL040805.D	0.35	10252023T18:12:00	VOC	0.27	67
VL040805.D	0.291	10252023T18:12:00	VOC	0.28	70
VL040805.D	0.37	10252023T18:12:00	VOC	0.45	110
VL040805.D	0.427	10252023T18:12:00	VOC	0.37	92
VL040787.D	0.04	10232023T20:32:00	VOC	0.032	110
VL040805.D	0.416	10252023T18:12:00	VOC	0.35	88
VL040805.D	0.38	10252023T18:12:00	VOC	0.31	78
VL040805.D	0.435	10252023T18:12:00	VOC	0.43	110
VL040787.D	0.05	10232023T20:32:00	VOC	0.033	110
VL040805.D	0.506	10252023T18:12:00	VOC	0.48	120
VL040805.D	0.341	10252023T18:12:00	VOC	0.43	110
VL040787.D	0.04	10232023T20:32:00	VOC	0.033	110
			VOC	0.544	136

QC
SUMMARY

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

SDG No.: Q1669

Client: Woodard & Curran

Analytical Method: SWTO-15

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
Q1669-01	IA-B9-3-3262025	1-Bromo-4-Fluorobenzene	10	9.95	99	70 (65)	130 (135)
Q1669-01DL	IA-B9-3-3262025DL	1-Bromo-4-Fluorobenzene	10	9.90	99	70 (65)	130 (135)
Q1669-01DUP	IA-B9-3-3262025DUP	1-Bromo-4-Fluorobenzene	10	10.1	101	70 (65)	130 (135)
Q1669-02	IA-B9-2-3262025	1-Bromo-4-Fluorobenzene	10	9.91	99	70 (65)	130 (135)
Q1669-03	IA-B9-1-3262025	1-Bromo-4-Fluorobenzene	10	9.80	98	70 (65)	130 (135)
Q1669-04	AA-1-3262025	1-Bromo-4-Fluorobenzene	10	9.93	99	70 (65)	130 (135)
Q1669-05	SSSG-B16-3-3262025	1-Bromo-4-Fluorobenzene	10	10.1	101	70 (65)	130 (135)
Q1669-06	SSSG-DUP-1-3262025	1-Bromo-4-Fluorobenzene	10	10.1	101	70 (65)	130 (135)
Q1669-06DL	SSSG-DUP-1-3262025DL	1-Bromo-4-Fluorobenzene	10	9.84	98	70 (65)	130 (135)
Q1669-06DUP	SSSG-DUP-1-3262025DUP	1-Bromo-4-Fluorobenzene	10	9.85	99	70 (65)	130 (135)
Q1669-07	SSSG-B16-1-3262025	1-Bromo-4-Fluorobenzene	10	10.0	100	70 (65)	130 (135)
Q1669-07DL	SSSG-B16-1-3262025DL	1-Bromo-4-Fluorobenzene	10	9.90	99	70 (65)	130 (135)
Q1669-08	SSSG-B16-2-3262025	1-Bromo-4-Fluorobenzene	10	10.1	101	70 (65)	130 (135)
Q1669-09	AA-2-3262025	1-Bromo-4-Fluorobenzene	10	9.88	99	70 (65)	130 (135)
Q1669-09DUP	AA-2-3262025DUP	1-Bromo-4-Fluorobenzene	10	9.96	100	70 (65)	130 (135)
VL0327ABL01	VL0327ABL01	1-Bromo-4-Fluorobenzene	10	9.93	99	70 (65)	130 (135)
VL0327ABS01	VL0327ABS01	1-Bromo-4-Fluorobenzene	10	9.93	99	70 (65)	130 (135)
VL0331ABL01	VL0331ABL01	1-Bromo-4-Fluorobenzene	10	9.95	99	70 (65)	130 (135)
VL0331ABS01	VL0331ABS01	1-Bromo-4-Fluorobenzene	10	10.3	103	70 (65)	130 (135)

( ) = LABORATORY INHOUSE LIMIT

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1669

Client: Woodard & Curran

Analytical Method: SWTO-15 **Datafile :** VL042181.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0327ABS01	Dichlorodifluoromethane	10	9.90	ppbv	99			40 (70)	160 (130)	
	Chloromethane	10	9.60	ppbv	96			40 (70)	160 (130)	
	Vinyl Chloride	10	8.60	ppbv	86			70 (70)	130 (130)	
	Bromomethane	10	8.90	ppbv	89			40 (70)	160 (130)	
	Chloroethane	10	9.30	ppbv	93			40 (70)	160 (130)	
	Tetrahydrofuran	10	9.40	ppbv	94			70 (70)	130 (130)	
	Trichlorofluoromethane	10	9.70	ppbv	97			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	9.10	ppbv	91			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	10.0	ppbv	100			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	9.20	ppbv	92			70 (70)	130 (130)	
	Heptane	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,1-Dichloroethene	10	9.10	ppbv	91			70 (70)	130 (130)	
	Acetone	10	8.40	ppbv	84			40 (70)	160 (130)	
	Carbon disulfide	10	9.20	ppbv	92			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	10.3	ppbv	103			70 (70)	130 (130)	
	Methylene Chloride	10	8.10	ppbv	81			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	9.10	ppbv	91			70 (70)	130 (130)	
	1,1-Dichloroethane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Cyclohexane	10	9.60	ppbv	96			70 (70)	130 (130)	
	2-Butanone	10	9.20	ppbv	92			40 (70)	160 (130)	
	Carbon Tetrachloride	10	9.60	ppbv	96			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	9.80	ppbv	98			70 (70)	130 (130)	
	Chloroform	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	9.20	ppbv	92			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	9.50	ppbv	95			70 (70)	130 (130)	
	Benzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,2-Dichloroethane	10	10.1	ppbv	101			70 (70)	130 (130)	
	Trichloroethene	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,2-Dichloropropane	10	9.40	ppbv	94			70 (70)	130 (130)	
	Bromodichloromethane	10	10.0	ppbv	100			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	8.70	ppbv	87			40 (70)	160 (130)	
	Toluene	10	9.50	ppbv	95			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	9.40	ppbv	94			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	9.50	ppbv	95			70 (70)	130 (130)	
	Dibromochloromethane	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,2-Dibromoethane	10	9.60	ppbv	96			70 (70)	130 (130)	
	Tetrachloroethene	10	8.80	ppbv	88			70 (70)	130 (130)	
	Chlorobenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	Ethyl Benzene	10	9.60	ppbv	96			70 (70)	130 (130)	
	m/p-Xylene	20	19.0	ppbv	95			70 (70)	130 (130)	
	o-Xylene	10	9.50	ppbv	95			70 (70)	130 (130)	
	Styrene	10	9.60	ppbv	96			70 (70)	130 (130)	
	Bromoform	10	10.0	ppbv	100			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	9.50	ppbv	95			70 (70)	130 (130)	
	2-Chlorotoluene	10	9.60	ppbv	96			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	8.90	ppbv	89			70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1669

Client: Woodard & Curran

Analytical Method: SWTO-15 **Datafile :** VL042181.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0327ABS01	1,3-Dichlorobenzene	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	8.80	ppbv	88			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	7.90	ppbv	79			70 (70)	130 (130)	
	Naphthalene	10	8.70	ppbv	87			40 (70)	160 (130)	
	1,3-Butadiene	10	8.70	ppbv	87			70 (70)	130 (130)	
	4-Ethyltoluene	10	9.60	ppbv	96			70 (70)	130 (130)	
	Hexane	10	9.60	ppbv	96			70 (70)	130 (130)	
	Allyl Chloride	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,4-Dioxane	10	8.90	ppbv	89			40 (70)	160 (130)	
	Methyl methacrylate	10	9.40	ppbv	94			70 (70)	130 (130)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1669

Client: Woodard & Curran

Analytical Method: SWTO-15 **Datafile :** VL042203.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0331ABS01	Dichlorodifluoromethane	10	10.4	ppbv	104			40 (70)	160 (130)	
	Chloromethane	10	9.70	ppbv	97			40 (70)	160 (130)	
	Vinyl Chloride	10	8.70	ppbv	87			70 (70)	130 (130)	
	Bromomethane	10	9.10	ppbv	91			40 (70)	160 (130)	
	Chloroethane	10	9.30	ppbv	93			40 (70)	160 (130)	
	Tetrahydrofuran	10	9.30	ppbv	93			70 (70)	130 (130)	
	Trichlorofluoromethane	10	10.3	ppbv	103			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	10.3	ppbv	103			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	9.00	ppbv	90			70 (70)	130 (130)	
	Heptane	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,1-Dichloroethene	10	9.20	ppbv	92			70 (70)	130 (130)	
	Acetone	10	8.90	ppbv	89			40 (70)	160 (130)	
	Carbon disulfide	10	9.30	ppbv	93			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	11.0	ppbv	110			70 (70)	130 (130)	
	Methylene Chloride	10	8.40	ppbv	84			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,1-Dichloroethane	10	10.0	ppbv	100			70 (70)	130 (130)	
	Cyclohexane	10	9.40	ppbv	94			70 (70)	130 (130)	
	2-Butanone	10	9.50	ppbv	95			40 (70)	160 (130)	
	Carbon Tetrachloride	10	10.6	ppbv	106			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	10.0	ppbv	100			70 (70)	130 (130)	
	Chloroform	10	10.6	ppbv	106			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	9.80	ppbv	98			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	9.50	ppbv	95			70 (70)	130 (130)	
	Benzene	10	9.80	ppbv	98			70 (70)	130 (130)	
	1,2-Dichloroethane	10	11.0	ppbv	110			70 (70)	130 (130)	
	Trichloroethene	10	9.70	ppbv	97			70 (70)	130 (130)	
	1,2-Dichloropropane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Bromodichloromethane	10	10.8	ppbv	108			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	8.60	ppbv	86			40 (70)	160 (130)	
	Toluene	10	9.60	ppbv	96			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	9.10	ppbv	91			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	10.2	ppbv	102			70 (70)	130 (130)	
	Dibromochloromethane	10	10.6	ppbv	106			70 (70)	130 (130)	
	1,2-Dibromoethane	10	10.3	ppbv	103			70 (70)	130 (130)	
	Tetrachloroethene	10	9.00	ppbv	90			70 (70)	130 (130)	
	Chlorobenzene	10	10.4	ppbv	104			70 (70)	130 (130)	
	Ethyl Benzene	10	10.1	ppbv	101			70 (70)	130 (130)	
	m/p-Xylene	20	20.6	ppbv	103			70 (70)	130 (130)	
	o-Xylene	10	10.4	ppbv	104			70 (70)	130 (130)	
	Styrene	10	10.1	ppbv	101			70 (70)	130 (130)	
	Bromoform	10	10.3	ppbv	103			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	10.4	ppbv	104			70 (70)	130 (130)	
	2-Chlorotoluene	10	10.3	ppbv	103			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	10.4	ppbv	104			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	9.80	ppbv	98			70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1669

Client: Woodard & Curran

Analytical Method: SWTO-15 **Datafile :** VL042203.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0331ABS01	1,3-Dichlorobenzene	10	10.5	ppbv	105			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	10.5	ppbv	105			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	10.6	ppbv	106			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	8.40	ppbv	84			70 (70)	130 (130)	
	Naphthalene	10	9.50	ppbv	95			40 (70)	160 (130)	
	1,3-Butadiene	10	8.70	ppbv	87			70 (70)	130 (130)	
	4-Ethyltoluene	10	10.5	ppbv	105			70 (70)	130 (130)	
	Hexane	10	9.50	ppbv	95			70 (70)	130 (130)	
	Allyl Chloride	10	8.90	ppbv	89			70 (70)	130 (130)	
	1,4-Dioxane	10	8.90	ppbv	89			40 (70)	160 (130)	
	Methyl methacrylate	10	9.20	ppbv	92			70 (70)	130 (130)	

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Duplicate Sample Summary

Lab Sample Id :	Q1669-01DUP	Q1669-01
Client Id :	IA-B9-3-3262025DUP	IA-B9-3-3262025
DF :	1	1
Datafile :	VL042196.D	VL042185.D
Anal Date & Time :	03/28/2025 00:44	03/27/2025 18:22

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	0.49	0.51	4
1,2-Dibromoethane	0	0	0
1,2-Dichlorobenzene	0	0	0
1,2-Dichloroethane	0	0	0
1,2-Dichloropropane	0	0	0
1,3,5-Trimethylbenzene	0.16	0	200 *
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	0.26	0.27	3.8
2-Butanone	0.93	0.91	2.2
2-Chlorotoluene	0	0	0
4-Ethyltoluene	0	0	0
4-Methyl-2-Pentanone	0.35	0.36	2.8
Acetone	36.2	34.7	4.2
Allyl Chloride	0	0	0
Benzene	0.62	0.64	3.2
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 :	Q1669-01DUP		Q1669-01	
Client Id :	IA-B9-3-3262025DUP		IA-B9-3-3262025	
DF :	1		1	
Datafile :	VL042196.D		VL042185.D	
Anal Date & Time :	03/28/2025	00:44	03/27/2025	18:22

Parameter	Result	Result	RPD
Chlorobenzene	0	0	0
Chloroethane	0	0	0
Chloroform	0	0	0
Chloromethane	0.37	0.37	0
cis-1,2-Dichloroethene	0	0	0
cis-1,3-Dichloropropene	0	0	0
Cyclohexane	0.18	0	200 *
Dibromochloromethane	0	0	0
Dichlorodifluoromethane	0.42	0.4	4.9
Dichlorotetrafluoroethane	0	0	0
Ethyl Benzene	0.28	0.31	10.2
Heptane	0.36	0.38	5.4
Hexachloro-1,3-Butadiene	0	0	0
Hexane	1.8	1.9	5.4
m/p-Xylene	1.1	1.1	0
Methyl Methacrylate	0	0	0
Methyl tert-Butyl Ether	0	0	0
Methylene Chloride	0.36	0.36	0
Naphthalene	0	0	0
o-Xylene	0.49	0.51	4
Styrene	0.11	0.12	8.7
t-1,3-Dichloropropene	0	0	0
tert-Butyl alcohol	0.52	0.5	3.9
Tetrachloroethene	0	0	0
Tetrahydrofuran	0	0	0
Toluene	2.3	2.3	0
trans-1,2-Dichloroethene	0	0	0
Trichloroethene	0	0	0
Trichlorofluoromethane	0.22	0.22	0
Vinyl Chloride	0	0	0

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Duplicate Sample Summary

Lab Sample Id :	Q1669-06DUP		Q1669-06	
Client Id :	SSSG-DUP-1-3262025DUI		SSSG-DUP-1-3262025	
DF :	1		1	
Datafile :	VL042206.D		VL042204.D	
Anal Date & Time :	03/31/2025	12:26	03/31/2025	11:06

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	1.3	1.4	7.4
1,2-Dibromoethane	0	0	0
1,2-Dichlorobenzene	0	0	0
1,2-Dichloroethane	0	0	0
1,2-Dichloropropane	0	0	0
1,3,5-Trimethylbenzene	0.43	0.43	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	2.3	2.3	0
2-Butanone	6.4	6.2	3.2
2-Chlorotoluene	0	0	0
4-Ethyltoluene	0.43	0.44	2.3
4-Methyl-2-Pentanone	0.41	0.4	2.5
Acetone	22.2	24	7.8
Allyl Chloride	0	0	0
Benzene	5.8	5.6	3.5
Bromodichloromethane	0	0	0
Bromoform	0	0	0
Bromomethane	0	0	0
Carbon Disulfide	0	0	0
Carbon Tetrachloride	0.07	0.07	0

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Duplicate Sample Summary

Lab Sample Id :	Q1669-06DUP		Q1669-06	
Client Id :	SSSG-DUP-1-3262025DUI		SSSG-DUP-1-3262025	
DF :	1		1	
Datafile :	VL042206.D		VL042204.D	
Anal Date & Time :	03/31/2025	12:26	03/31/2025	11:06

Parameter	Result	Result	RPD
Chlorobenzene	0	0	0
Chloroethane	0	0	0
Chloroform	0	0	0
Chloromethane	0.42	0.43	2.4
cis-1,2-Dichloroethene	0	0	0
cis-1,3-Dichloropropene	0	0	0
Cyclohexane	1.5	1.5	0
Dibromochloromethane	0	0	0
Dichlorodifluoromethane	0.45	0.46	2.2
Dichlorotetrafluoroethane	0	0	0
Ethyl Benzene	1.4	1.3	7.4
Heptane	1.7	1.6	6.1
Hexachloro-1,3-Butadiene	0	0	0
Hexane	4.6	4.4	4.4
m/p-Xylene	5.1	5.1	0
Methyl Methacrylate	0	0	0
Methyl tert-Butyl Ether	0	0	0
Methylene Chloride	0.53	0.51	3.8
Naphthalene	0.37	0.43	15
o-Xylene	1.9	1.9	0
Styrene	1.4	1.4	0
t-1,3-Dichloropropene	0	0	0
tert-Butyl alcohol	0	0	0
Tetrachloroethene	0.04	0	200 *
Tetrahydrofuran	1.9	2	5.1
Toluene	10	9.7	3
trans-1,2-Dichloroethene	0	0	0
Trichloroethene	0	0	0
Trichlorofluoromethane	0.19	0.2	5.1
Vinyl Chloride	0	0	0

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Duplicate Sample Summary

Lab Sample Id :	Q1669-09DUP		Q1669-09	
Client Id :	AA-2-3262025DUP		AA-2-3262025	
DF :	1		1	
Datafile :	VL042190.D		VL042189.D	
Anal Date & Time :	03/27/2025	21:24	03/27/2025	20:48

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	0.29	0.29	0
1,2-Dibromoethane	0	0	0
1,2-Dichlorobenzene	0	0	0
1,2-Dichloroethane	0	0	0
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	0.23	0.18	24.4 *
2-Chlorotoluene	0	0	0
4-Ethyltoluene	0	0	0
4-Methyl-2-Pentanone	0	0	0
Acetone	2.3	2.5	8.3
Allyl Chloride	0	0	0
Benzene	0.15	0.13	14.3
Bromodichloromethane	0	0	0
Bromoform	0	0	0
Bromomethane	0	0	0
Carbon Disulfide	0	0	0
Carbon Tetrachloride	0.07	0.07	0

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Duplicate Sample Summary

Lab Sample Id :	Q1669-09DUP		Q1669-09	
Client Id :	AA-2-3262025DUP		AA-2-3262025	
DF :	1		1	
Datafile :	VL042190.D		VL042189.D	
Anal Date & Time :	03/27/2025	21:24	03/27/2025	20:48

Parameter	Result	Result	RPD
Chlorobenzene	0	0	0
Chloroethane	0	0	0
Chloroform	0	0	0
Chloromethane	0.45	0.44	2.2
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	0.45	4.5
Dichlorotetrafluoroethane	0	0	0
Ethyl Benzene	0	0	0
Heptane	0	0	0
Hexachloro-1,3-Butadiene	0	0	0
Hexane	3.9	4.5	14.3
m/p-Xylene	0.13	0	200 *
Methyl Methacrylate	0	0	0
Methyl tert-Butyl Ether	0	0	0
Methylene Chloride	6.4	7	9
Naphthalene	0	0	0
o-Xylene	0	0	0
Styrene	0	0	0
t-1,3-Dichloropropene	0	0	0
tert-Butyl alcohol	0	0	0
Tetrachloroethene	0	0	0
Tetrahydrofuran	0	0	0
Toluene	0.33	0.34	3
trans-1,2-Dichloroethene	0	0	0
Trichloroethene	0	0	0
Trichlorofluoromethane	0.2	0.22	9.5
Vinyl Chloride	0	0	0

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0327ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG NO.: Q1669

Lab File ID: VL042180.D Lab Sample ID: VL0327ABL01

Date Analyzed: 03/27/2025 Time Analyzed: 13:50

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
VL0327ABS01	VL0327ABS01	VL042181.D	03/27/2025
IA-B9-3-3262025	Q1669-01	VL042185.D	03/27/2025
IA-B9-2-3262025	Q1669-02	VL042186.D	03/27/2025
IA-B9-1-3262025	Q1669-03	VL042187.D	03/27/2025
AA-1-3262025	Q1669-04	VL042188.D	03/27/2025
AA-2-3262025	Q1669-09	VL042189.D	03/27/2025
AA-2-3262025DUP	Q1669-09DUP	VL042190.D	03/27/2025
SSSG-B16-1-3262025DL	Q1669-07DL	VL042192.D	03/27/2025
IA-B9-3-3262025DL	Q1669-01DL	VL042195.D	03/28/2025
IA-B9-3-3262025DUP	Q1669-01DUP	VL042196.D	03/28/2025
SSSG-B16-3-3262025	Q1669-05	VL042197.D	03/28/2025
SSSG-B16-1-3262025	Q1669-07	VL042198.D	03/28/2025
SSSG-B16-2-3262025	Q1669-08	VL042199.D	03/28/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0331ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG NO.: Q1669

Lab File ID: VL042202.D Lab Sample ID: VL0331ABL01

Date Analyzed: 03/31/2025 Time Analyzed: 09:34

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
VL0331ABS01	VL0331ABS01	VL042203.D	03/31/2025
SSSG-DUP-1-3262025	Q1669-06	VL042204.D	03/31/2025
SSSG-DUP-1-3262025DL	Q1669-06DL	VL042205.D	03/31/2025
SSSG-DUP-1-3262025DUP	Q1669-06DUP	VL042206.D	03/31/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG NO.: Q1669

Lab File ID: VL042171.D BFB Injection Date: 03/27/2025

Instrument ID: MSVOA_L BFB Injection Time: 07:44

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	23
75	30.0 - 66.0% of mass 95	56.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	63.8
175	4.0 - 9.0% of mass 174	5.1 (8) 1
176	93.0 - 101.0% of mass 174	61.1 (95.7) 1
177	5.0 - 9.0% of mass 176	4.2 (6.8) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICCC010	VSTDICCC010	VL042172.D	03/27/2025	08:26
VSTDICC002	VSTDICC002	VL042173.D	03/27/2025	08:59
VSTDICC001	VSTDICC001	VL042174.D	03/27/2025	09:30
VSTDICC0.5	VSTDICC0.5	VL042175.D	03/27/2025	10:01
VSTDICC0.1	VSTDICC0.1	VL042176.D	03/27/2025	10:32
VSTDICC0.03	VSTDICC0.03	VL042177.D	03/27/2025	11:03
VSTDICC015	VSTDICC015	VL042178.D	03/27/2025	11:36
VL0327ABL01	VL0327ABL01	VL042180.D	03/27/2025	13:50
VL0327ABS01	VL0327ABS01	VL042181.D	03/27/2025	14:39
IA-B9-3-3262025	Q1669-01	VL042185.D	03/27/2025	18:22
IA-B9-2-3262025	Q1669-02	VL042186.D	03/27/2025	18:59
IA-B9-1-3262025	Q1669-03	VL042187.D	03/27/2025	19:36
AA-1-3262025	Q1669-04	VL042188.D	03/27/2025	20:12
AA-2-3262025	Q1669-09	VL042189.D	03/27/2025	20:48
AA-2-3262025DUP	Q1669-09DUP	VL042190.D	03/27/2025	21:24
SSSG-B16-1-3262025DL	Q1669-07DL	VL042192.D	03/27/2025	22:29
IA-B9-3-3262025DL	Q1669-01DL	VL042195.D	03/28/2025	00:06
IA-B9-3-3262025DUP	Q1669-01DUP	VL042196.D	03/28/2025	00:44

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG NO.: Q1669

Lab File ID: VL042171.D BFB Injection Date: 03/27/2025

Instrument ID: MSVOA_L BFB Injection Time: 07:44

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	23
75	30.0 - 66.0% of mass 95	56.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	63.8
175	4.0 - 9.0% of mass 174	5.1 (8) 1
176	93.0 - 101.0% of mass 174	61.1 (95.7) 1
177	5.0 - 9.0% of mass 176	4.2 (6.8) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSSG-B16-3-3262025	Q1669-05	VL042197.D	03/28/2025	01:20
SSSG-B16-1-3262025	Q1669-07	VL042198.D	03/28/2025	01:57
SSSG-B16-2-3262025	Q1669-08	VL042199.D	03/28/2025	02:33

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG NO.: Q1669

Lab File ID: VL042200.D BFB Injection Date: 03/31/2025

Instrument ID: MSVOA_L BFB Injection Time: 08:09

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	25.4
75	30.0 - 66.0% of mass 95	61.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.3 (0.5) 1
174	50.0 - 120.0% of mass 95	59.4
175	4.0 - 9.0% of mass 174	4.5 (7.6) 1
176	93.0 - 101.0% of mass 174	57.9 (97.6) 1
177	5.0 - 9.0% of mass 176	3.8 (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:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042201.D	03/31/2025	08:51
VL0331ABL01	VL0331ABL01	VL042202.D	03/31/2025	09:34
VL0331ABS01	VL0331ABS01	VL042203.D	03/31/2025	10:17
SSSG-DUP-1-3262025	Q1669-06	VL042204.D	03/31/2025	11:06
SSSG-DUP-1-3262025DL	Q1669-06DL	VL042205.D	03/31/2025	11:52
SSSG-DUP-1-3262025DUP	Q1669-06DUP	VL042206.D	03/31/2025	12:26

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG NO.: Q1669

Lab File ID: VL042172.D Date Analyzed: 03/27/2025

Instrument ID: MSVOA_L Time Analyzed: 08:26

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	187002	2.78	545068	3.95	519536	8.88
UPPER LIMIT	261803	3.11	763095	4.28	727350	9.21
LOWER LIMIT	112201	2.45	327041	3.62	311722	8.55
EPA SAMPLE NO.						
IA-B9-3-3262025	182164	2.79	537249	3.96	488802	8.89
IA-B9-3-3262025DL	175494	2.78	495493	3.96	449375	8.88
IA-B9-3-3262025DUP	169076	2.78	480272	3.96	439128	8.88
IA-B9-2-3262025	187729	2.78	538422	3.96	491411	8.88
IA-B9-1-3262025	185410	2.78	523694	3.96	484321	8.88
AA-1-3262025	185847	2.79	529516	3.96	474604	8.88
SSSG-B16-3-3262025	172645	2.79	493948	3.97	445312	8.89
SSSG-B16-1-3262025	175214	2.79	504192	3.96	456695	8.88
SSSG-B16-1-3262025DL	182834	2.79	517445	3.96	472334	8.88
SSSG-B16-2-3262025	181183	2.79	509062	3.96	458107	8.88
AA-2-3262025	185013	2.79	523099	3.96	477151	8.88
AA-2-3262025DUP	184637	2.79	532429	3.96	472897	8.88
VL0327ABL01	170921	2.79	483563	3.96	446480	8.88
VL0327ABS01	166105	2.79	483209	3.96	452250	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.

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG NO.: Q1669

Lab File ID: VL042201.D Date Analyzed: 03/31/2025

Instrument ID: MSVOA_L Time Analyzed: 08:51

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	161478	2.80	460403	3.98	424671	8.90
UPPER LIMIT	226069	3.13	644564	4.31	594539	9.23
LOWER LIMIT	96886.8	2.47	276242	3.65	254803	8.57
EPA SAMPLE NO.						
SSSG-DUP-1-3262025	184538	2.81	528809	3.98	477707	8.91
SSSG-DUP-1-3262025DL	188934	2.80	537109	3.99	480959	8.91
SSSG-DUP-1-3262025DUP	184777	2.81	533717	3.99	486289	8.91
VL0331ABL01	181807	2.80	517775	3.98	464953	8.90
VL0331ABS01	175685	2.80	498986	3.98	456400	8.90

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.

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SAMPLE DATA

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-3-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-01	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
VL042185.D	1		03/27/25 18:22	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.40	1.98	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.37	0.76	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.50	1.52		0.58	1.52	ug/m3
142-82-5	Heptane	0.38	1.56	J	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	34.7	82.4	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.36	1.25	J	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.91	2.68		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.060	0.38		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.27	1.26	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.64	2.04		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.36	1.48	J	0.37	2.05	ug/m3
108-88-3	Toluene	2.30	8.67		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-3-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-01	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
VL042185.D	1		03/27/25 18:22	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.31	1.35	J	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.10	4.78		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.51	2.22		0.52	2.17	ug/m3
100-42-5	Styrene	0.12	0.51	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.51	2.51		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.90	6.70		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	182000		2.791			
540-36-3	1,4-Difluorobenzene	537000		3.962			
3114-55-4	Chlorobenzene-d5	489000		8.885			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.27		J		1.48	ppbv
115-07-1	Propene	0.79		J		1.48	ppbv
000115-11-7	1-Propene, 2-methyl-	3.30		J		1.60	ppbv

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-3-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-01	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
VL042185.D	1		03/27/25 18:22	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
	unknown1.774	1.40		J		1.77	ppbv
000109-66-0	Pentane	1.80		J		1.97	ppbv
000107-83-5	Pentane, 2-methyl-	2.50		J		2.47	ppbv
000096-14-0	Pentane, 3-methyl-	1.60		J		2.63	ppbv
103-65-1	n-propylbenzene	0.10		J		11.0	ppbv

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\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:14:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.791	49	182164	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	537249	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	488802	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	399253	9.946	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10784	0.401	ppbv		94
3) Chlorodifluoromethane	1.476	51	7336m	0.267	ppbv		
4) Chloromethane	1.532	50	4102	0.373	ppbv		97
9) Propene	1.483	41	9886	0.785	ppbv		90
10) Heptane	4.982	43	12733m	0.380	ppbv		
11) Trichlorofluoromethane	1.881	101	5615	0.215	ppbv		98
13) Ethanol	1.722	45	66284	55.675	ppbv		87
15) Acetone	1.836	43	884107	34.703	ppbv		98
17) tert-Butyl alcohol	2.043	59	15704	0.495	ppbv	#	88
20) Methylene Chloride	2.062	84	3433	0.362	ppbv	#	83
26) Hexane	2.829	57	49383	1.934	ppbv	#	35
30) Cyclohexane	3.855	84	4259m	0.192	ppbv		
34) 2-Butanone	2.561	43	35584	0.913	ppbv		98
35) Carbon Tetrachloride	3.765	117	2627	0.063	ppbv		91
36) Benzene	3.661	78	34017	0.639	ppbv	#	92
44) 2,2,4-Trimethylpentane	4.648	57	23919m	0.266	ppbv		
50) 4-Methyl-2-Pentanone	5.781	43	22175m	0.359	ppbv		
53) Toluene	6.937	91	146384	2.319	ppbv		99
58) Ethyl Benzene	9.358	91	27191	0.313	ppbv		95
59) m/p-Xylene	9.533	91	73715m	1.063	ppbv		
60) o-Xylene	9.966	91	35115	0.505	ppbv		99
61) Styrene	9.872	104	4273	0.124	ppbv		91
64) n-propylbenzene	10.992	120	2677	0.100	ppbv		96
74) 1,2,4-Trimethylbenzene	11.539	105	44446	0.510	ppbv	#	64

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:14:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations APPROVED

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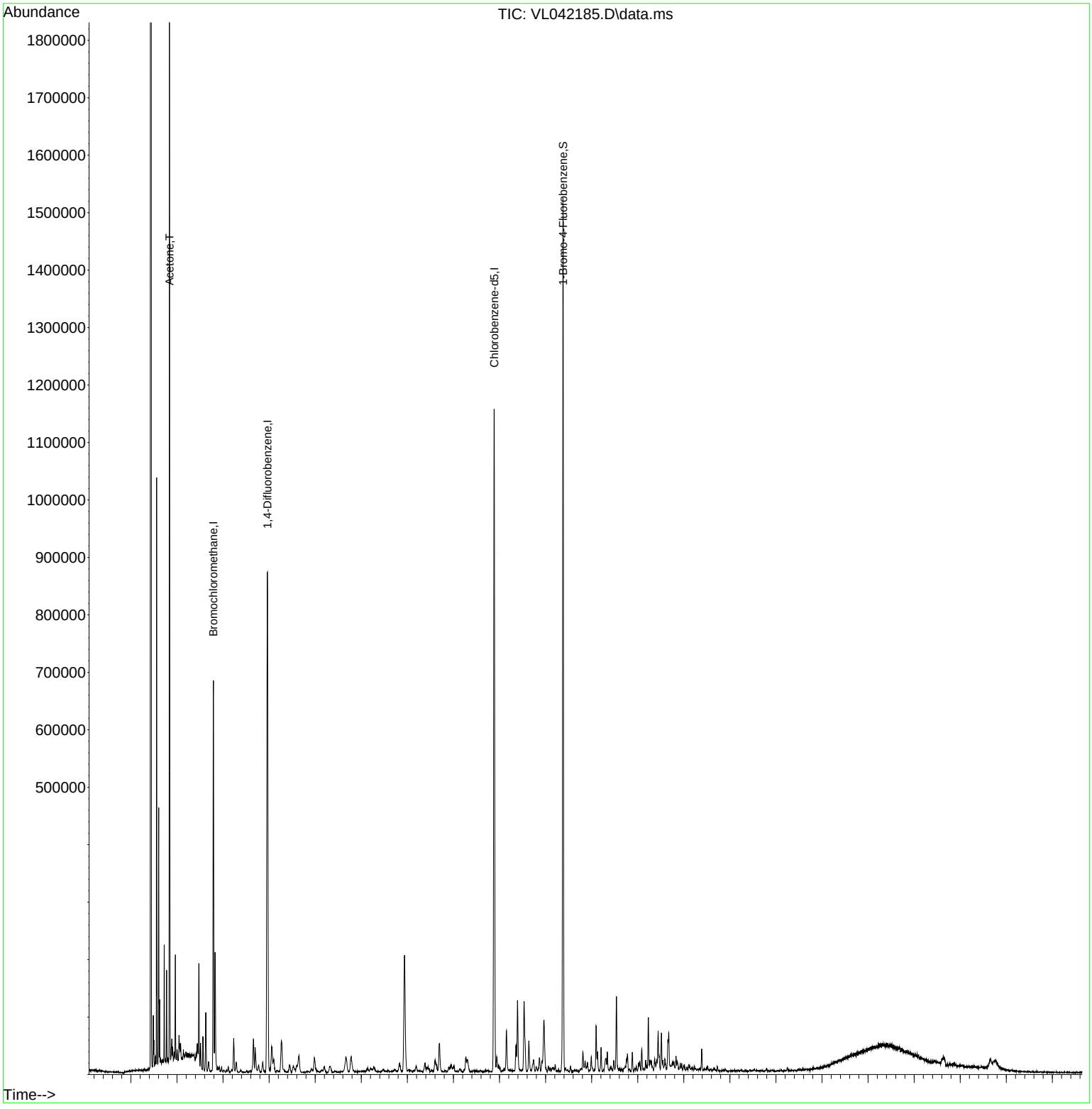
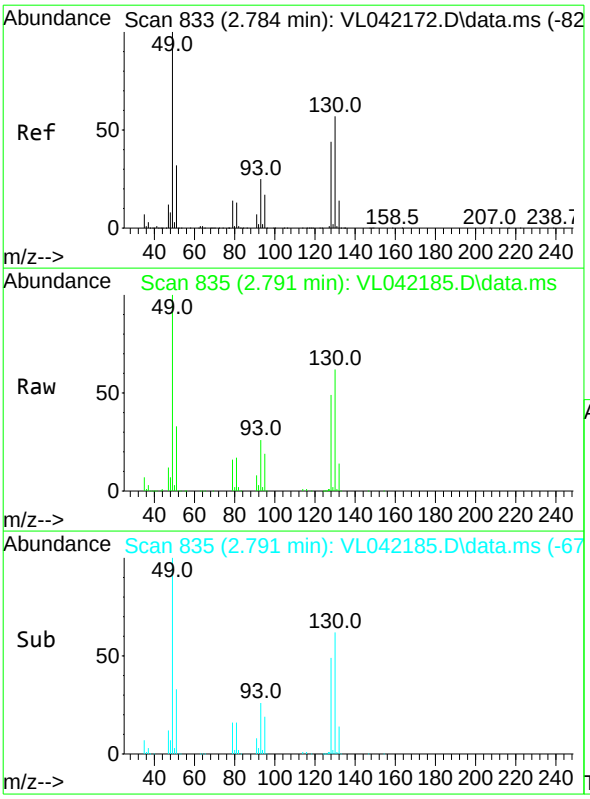
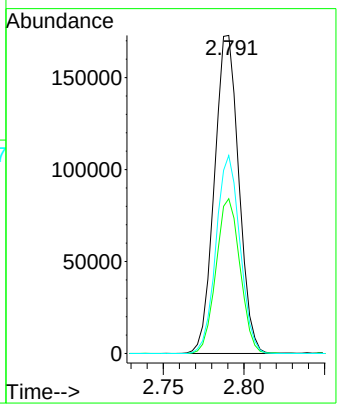




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 83
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 49 Resp: 182164

Ion	Ratio	Lower	Upper
49	100		
128	47.9	22.9	68.5
130	61.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

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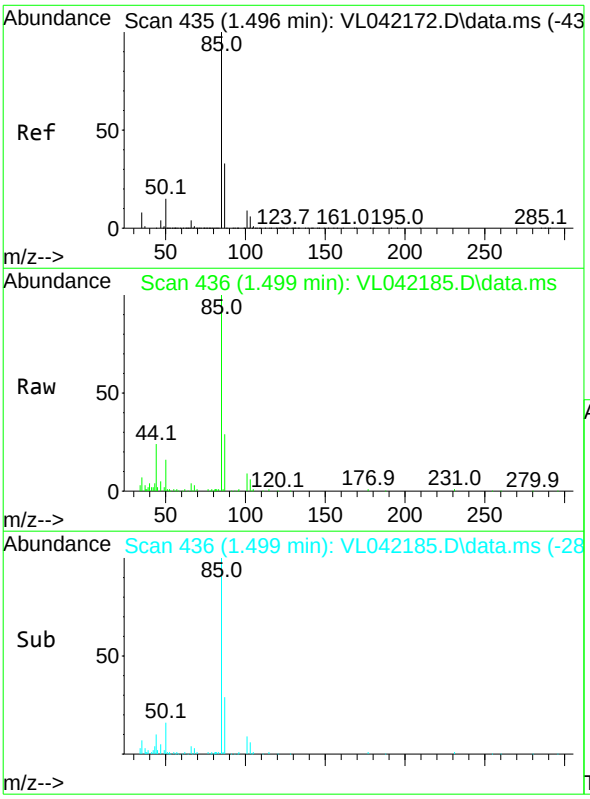
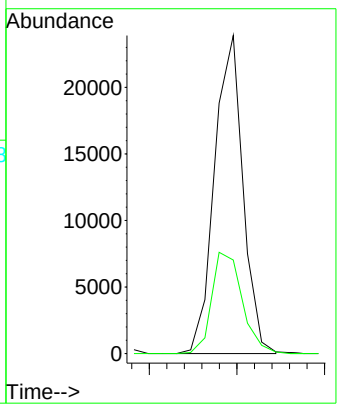
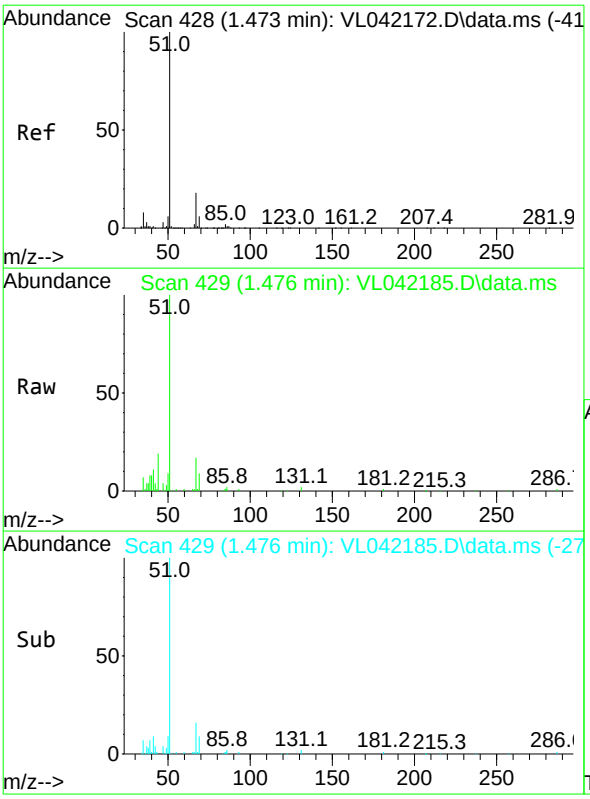


#2
Dichlorodifluoromethane
Concen: 0.401 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 85 Resp: 10784

Ion	Ratio	Lower	Upper
85	100		
87	29.4	26.1	39.1

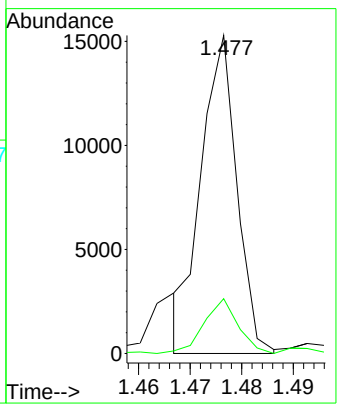




#3
Chlorodifluoromethane
Concen: 0.267 ppbv m
RT: 1.476 min Scan# 42
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 51 Resp: 7336

Ion	Ratio	Lower	Upper
51	100		
67	18.9	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
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Manual Integrations
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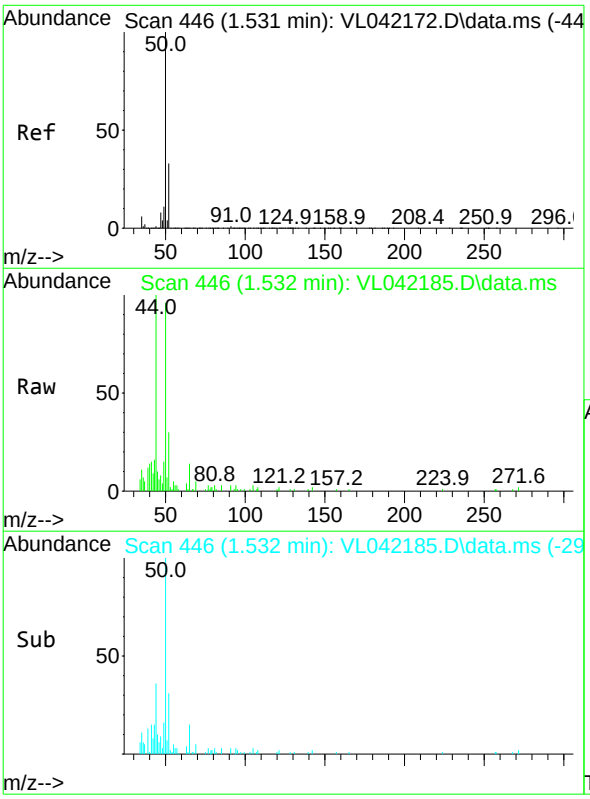
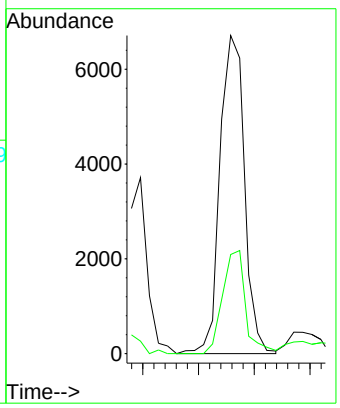
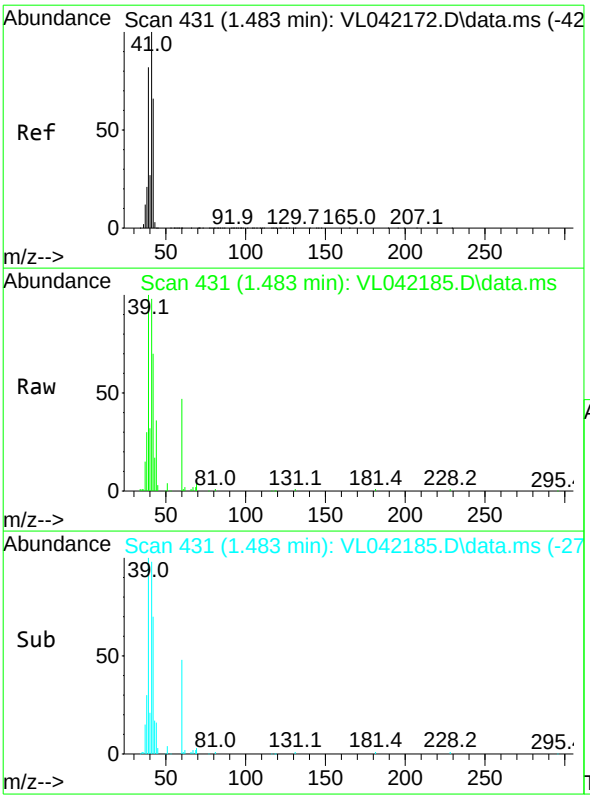


#4
Chloromethane
Concen: 0.373 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 50 Resp: 4102

Ion	Ratio	Lower	Upper
50	100		
52	31.2	26.1	39.1

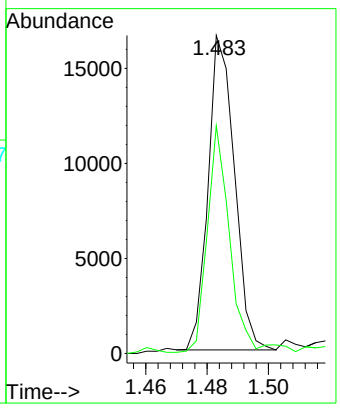




#9
Propene
Concen: 0.785 ppbv
RT: 1.483 min Scan# 43
Delta R.T. 0.000 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 41 Resp: 9886

Ion	Ratio	Lower	Upper
41	100		
42	61.2	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 03/31/2025
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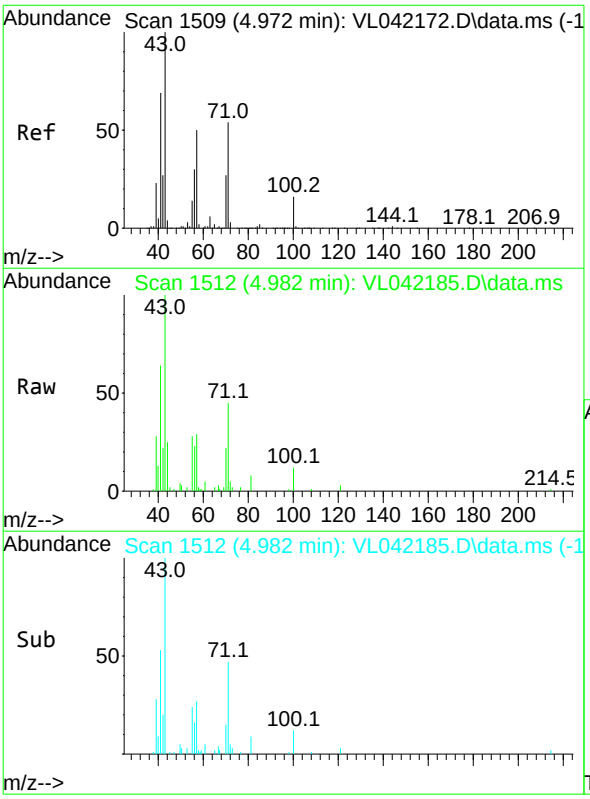
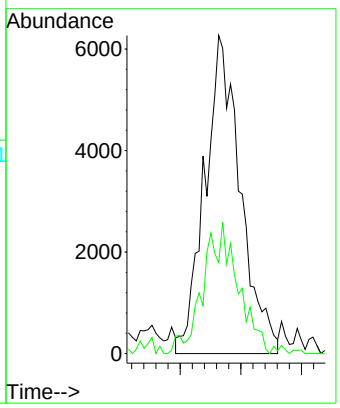
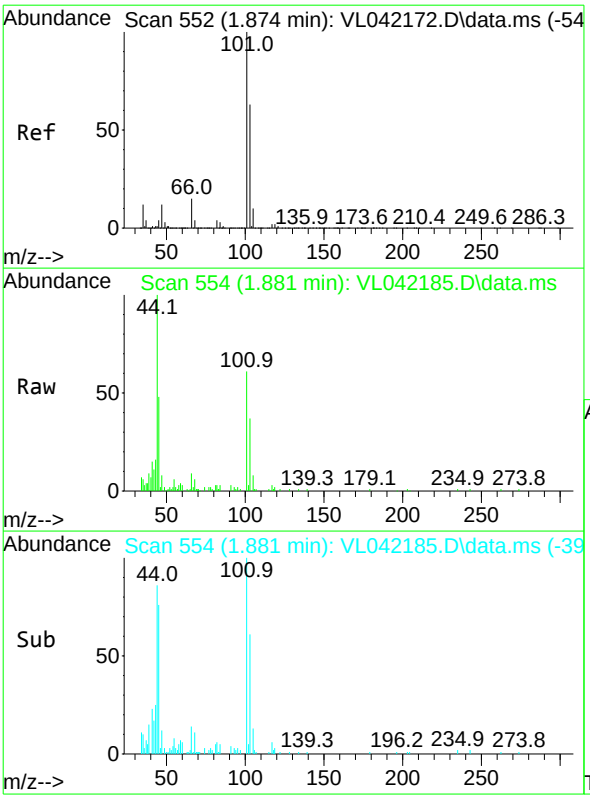


#10
Heptane
Concen: 0.380 ppbv m
RT: 4.982 min Scan# 1512
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 43 Resp: 12733

Ion	Ratio	Lower	Upper
43	100		
57	42.8	39.4	59.2

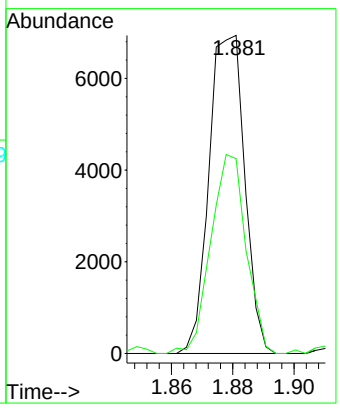




#11
Trichlorofluoromethane
Concen: 0.215 ppbv
RT: 1.881 min Scan# 55
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:101 Resp: 5615

Ion	Ratio	Lower	Upper
101	100		
103	61.3	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
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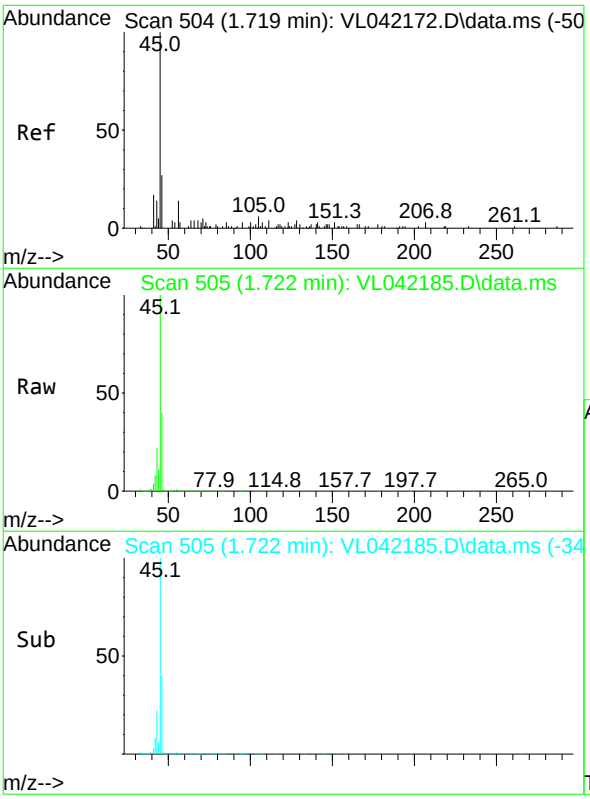
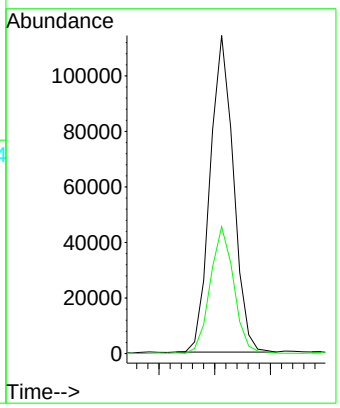
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

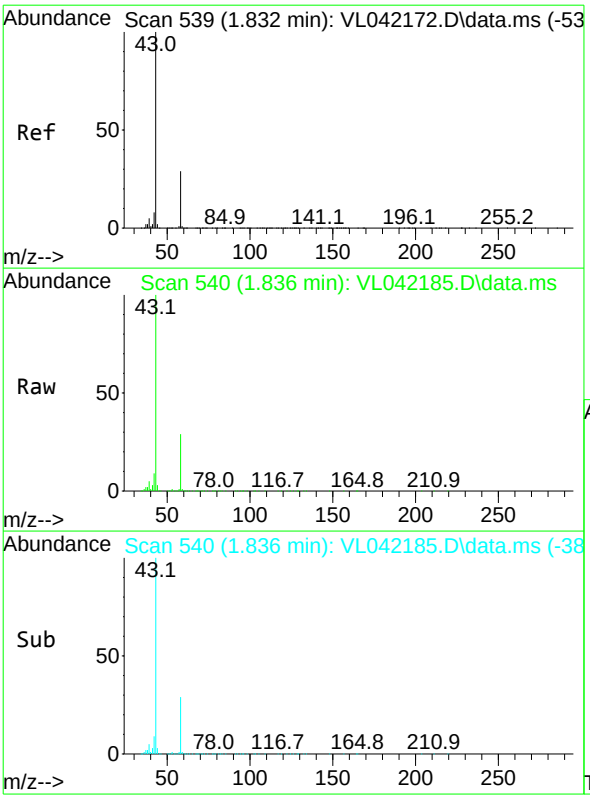


#13
Ethanol
Concen: 55.675 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 45 Resp: 66284

Ion	Ratio	Lower	Upper
45	100		
46	41.8	20.2	80.8

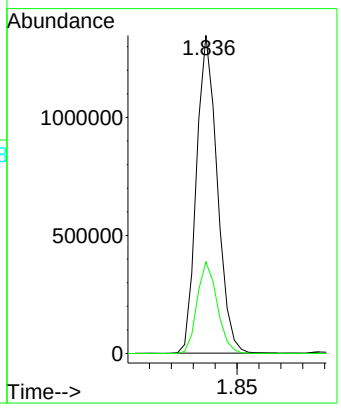




#15
Acetone
Concen: 34.703 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 43 Resp: 884107

Ion	Ratio	Lower	Upper
43	100		
58	28.0	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
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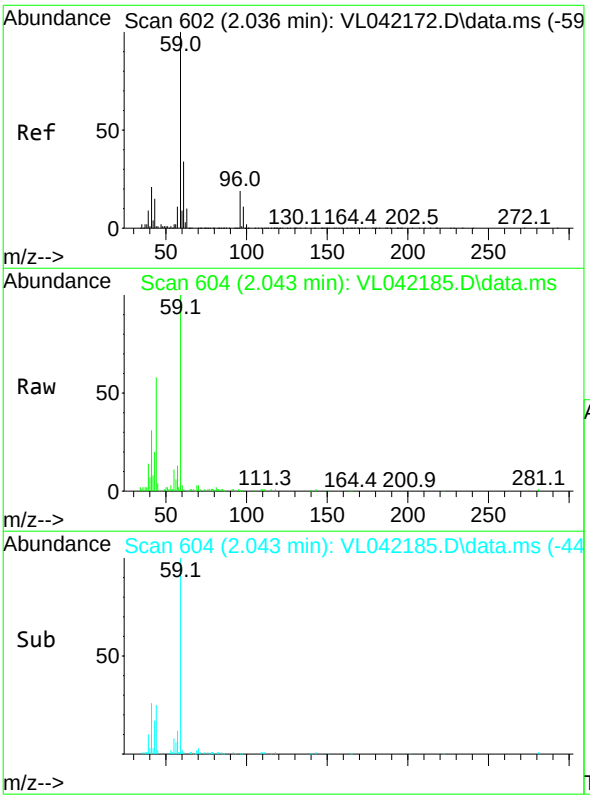
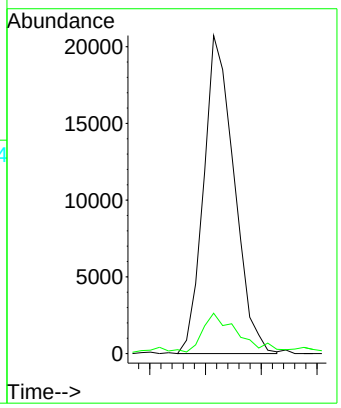
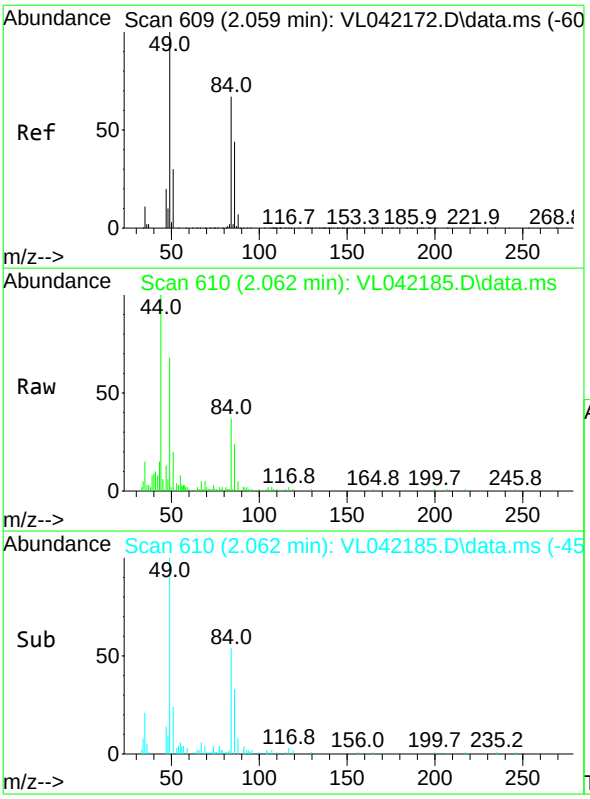


#17
tert-Butyl alcohol
Concen: 0.495 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 59 Resp: 15704

Ion	Ratio	Lower	Upper
59	100		
57	15.8	8.9	13.3#

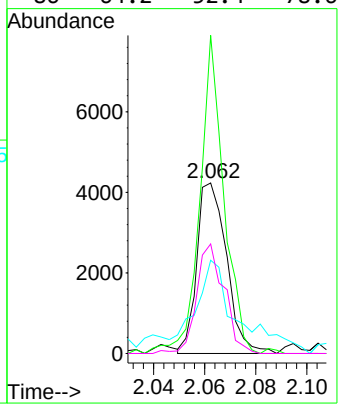




#20
Methylene Chloride
Concen: 0.362 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 84 Resp: 3433

Ion	Ratio	Lower	Upper
84	100		
49	184.6	120.2	180.4#
51	43.8	37.4	56.0
86	64.2	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
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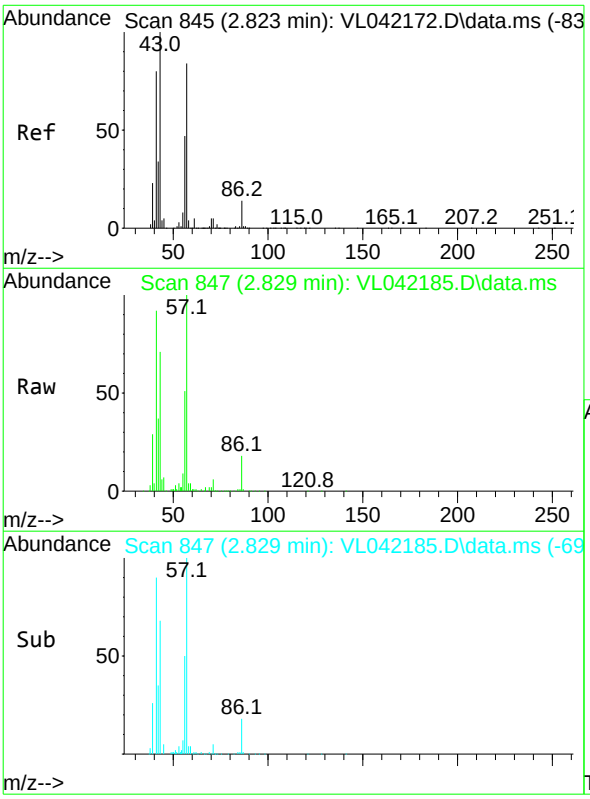
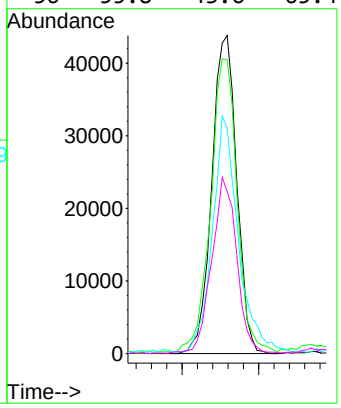
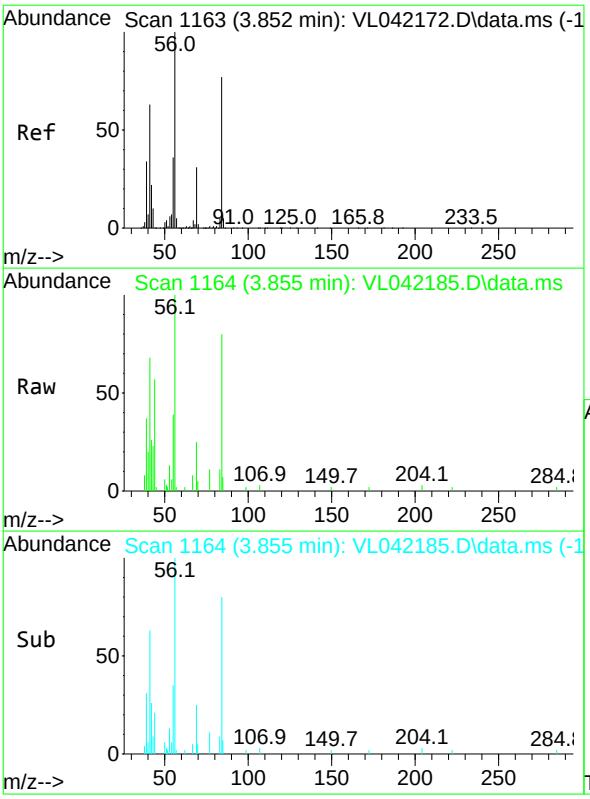


#26
Hexane
Concen: 1.934 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 57 Resp: 49383

Ion	Ratio	Lower	Upper
57	100		
41	97.4	76.6	114.8
43	78.3	207.8	311.8#
56	55.8	43.6	65.4





#30
Cyclohexane
Concen: 0.192 ppbv m
RT: 3.855 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 84 Resp: 4259

Ion	Ratio	Lower	Upper
84	100		
56	154.4	102.8	154.2#
41	0.0	66.5	99.7#

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

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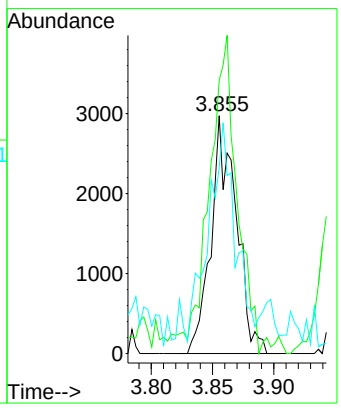
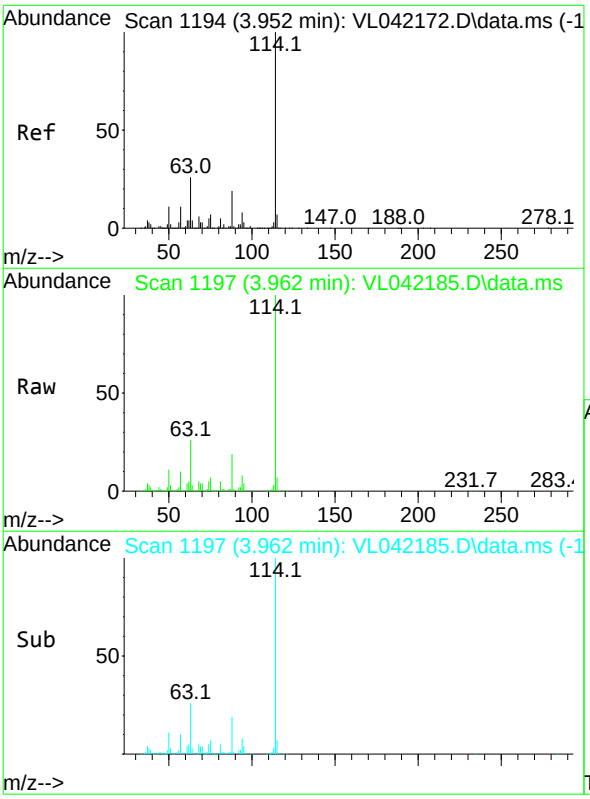
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

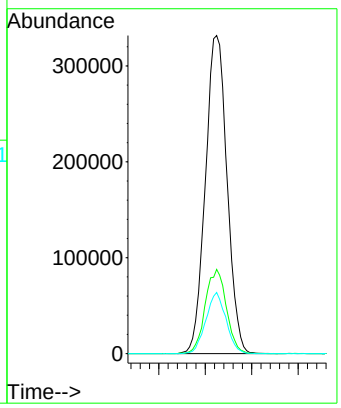


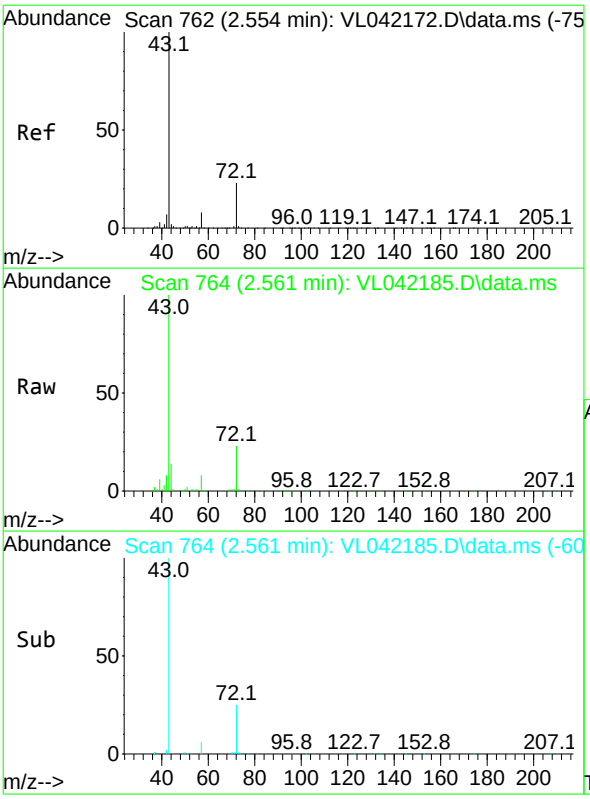


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:114 Resp: 537249

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	17.9	15.0	22.4

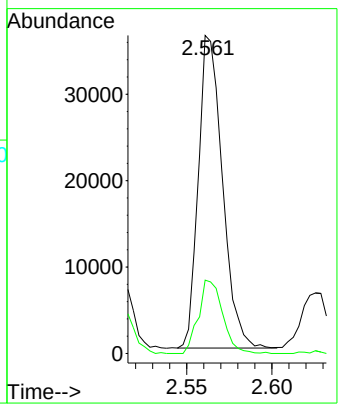




#34
2-Butanone
Concen: 0.913 ppbv
RT: 2.561 min Scan# 76
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 43 Resp: 35584

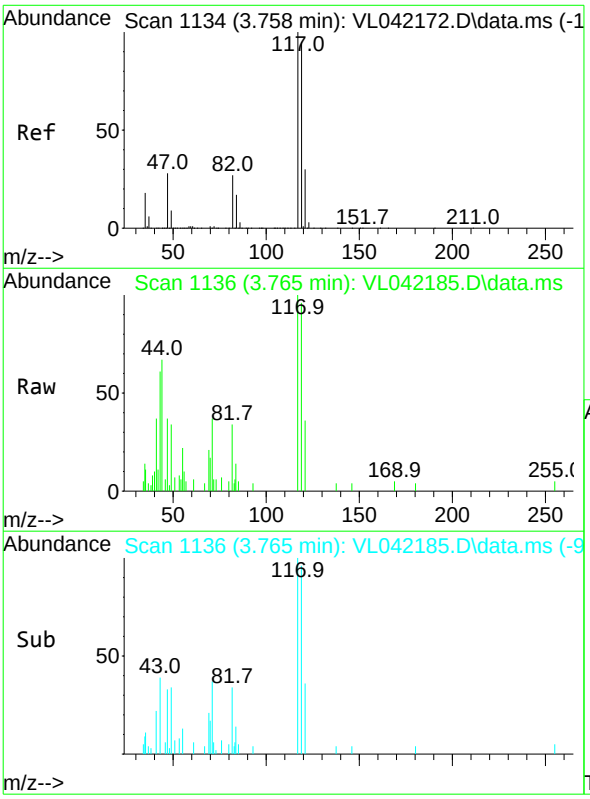
Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
APPROVED

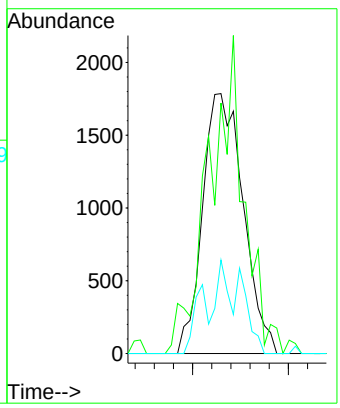
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

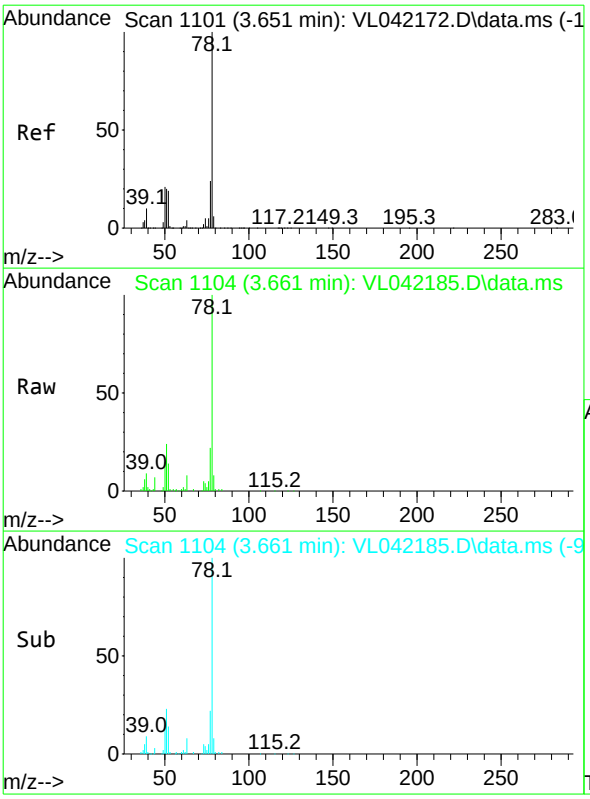


#35
Carbon Tetrachloride
Concen: 0.063 ppbv
RT: 3.765 min Scan# 1136
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:117 Resp: 2627

Ion	Ratio	Lower	Upper
117	100		
119	86.6	76.2	114.2
121	35.9	24.2	36.4

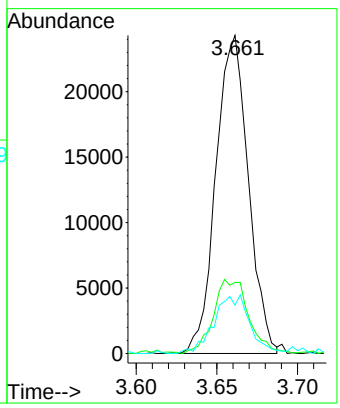




#36
Benzene
Concen: 0.639 ppbv
RT: 3.661 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 78 Resp: 34017

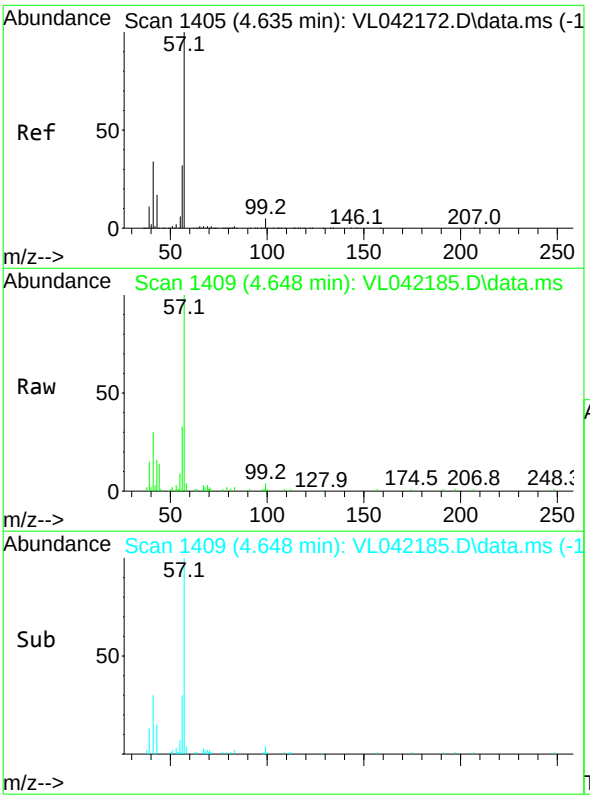
Ion	Ratio	Lower	Upper
78	100		
77	22.0	19.1	28.7
50	14.3	16.6	24.8#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
APPROVED

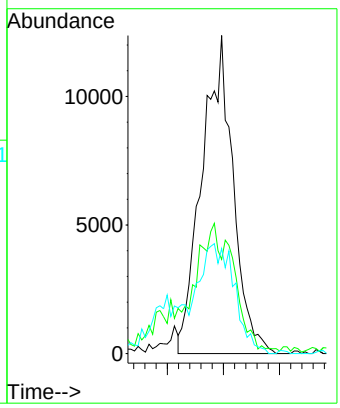
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

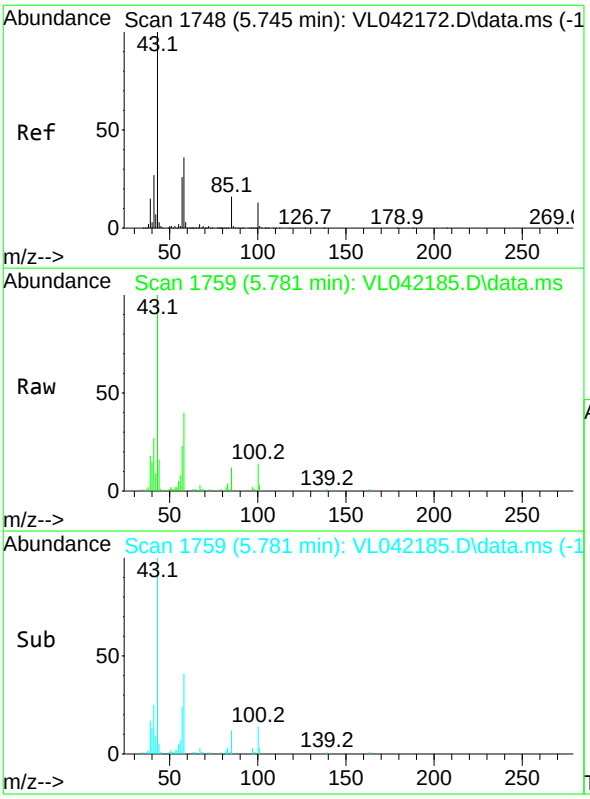


#44
2,2,4-Trimethylpentane
Concen: 0.266 ppbv m
RT: 4.648 min Scan# 1409
Delta R.T. 0.013 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 57 Resp: 23919

Ion	Ratio	Lower	Upper
57	100		
41	62.1	26.8	40.2#
56	58.0	25.6	38.4#

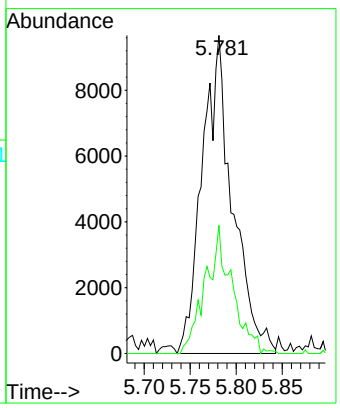




#50
4-Methyl-2-Pentanone
Concen: 0.359 ppbv m
RT: 5.781 min Scan# 17
Delta R.T. 0.036 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 43 Resp: 22175

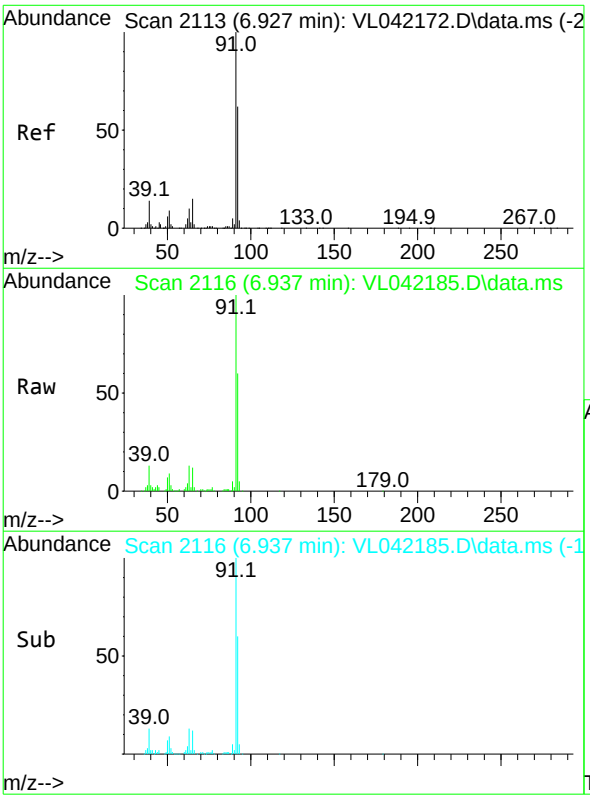
Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
APPROVED

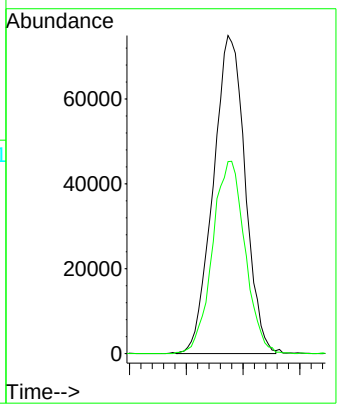
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

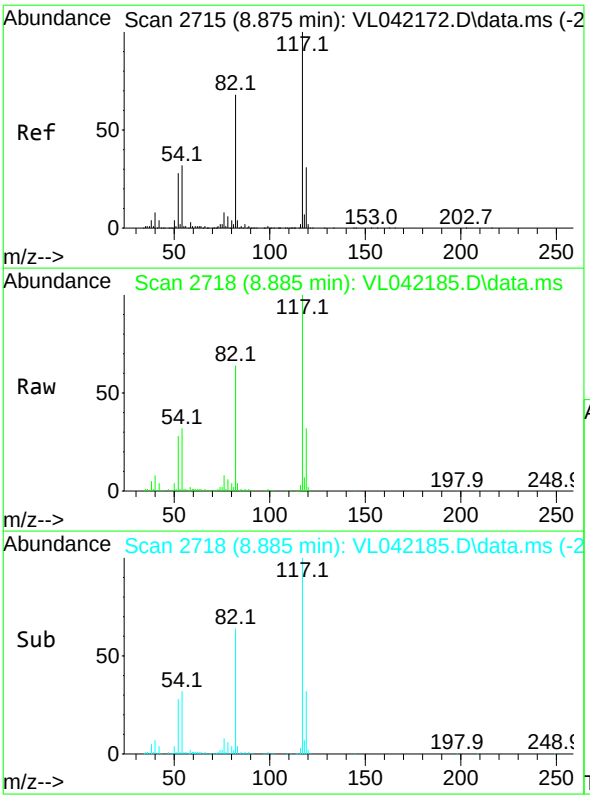


#53
Toluene
Concen: 2.319 ppbv
RT: 6.937 min Scan# 2116
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 146384

Ion	Ratio	Lower	Upper
91	100		
92	61.6	48.4	72.6





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 27
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:117 Resp: 488802

Ion	Ratio	Lower	Upper
117	100		
82	65.5	55.8	83.6
119	32.1	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
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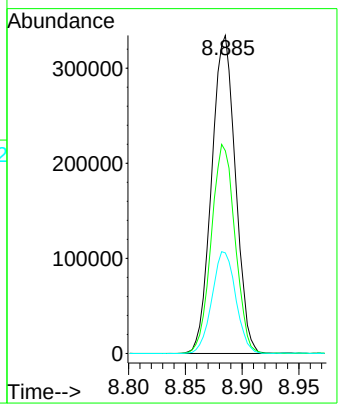
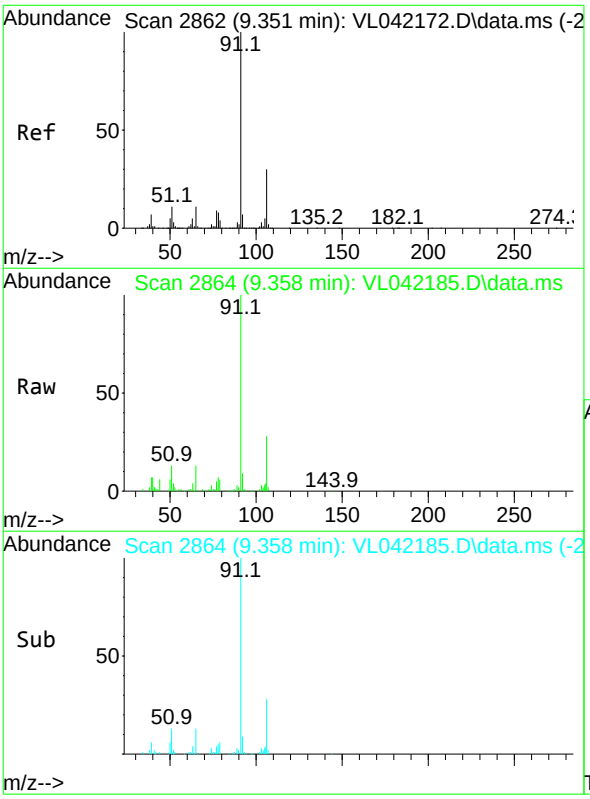
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

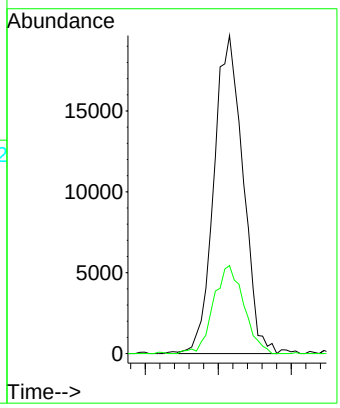


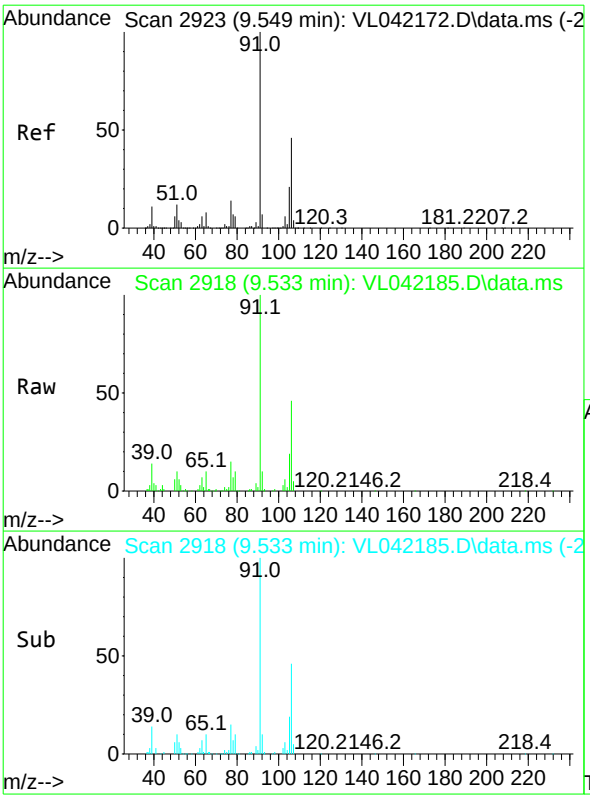


#58
Ethyl Benzene
Concen: 0.313 ppbv
RT: 9.358 min Scan# 2864
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 27191

Ion	Ratio	Lower	Upper
91	100		
106	27.7	24.2	36.2

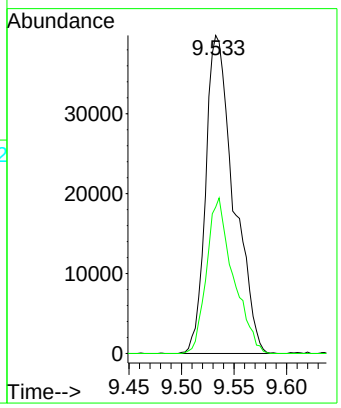




#59
m/p-Xylene
Concen: 1.063 ppbv m
RT: 9.533 min Scan# 29
Delta R.T. -0.016 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 73715

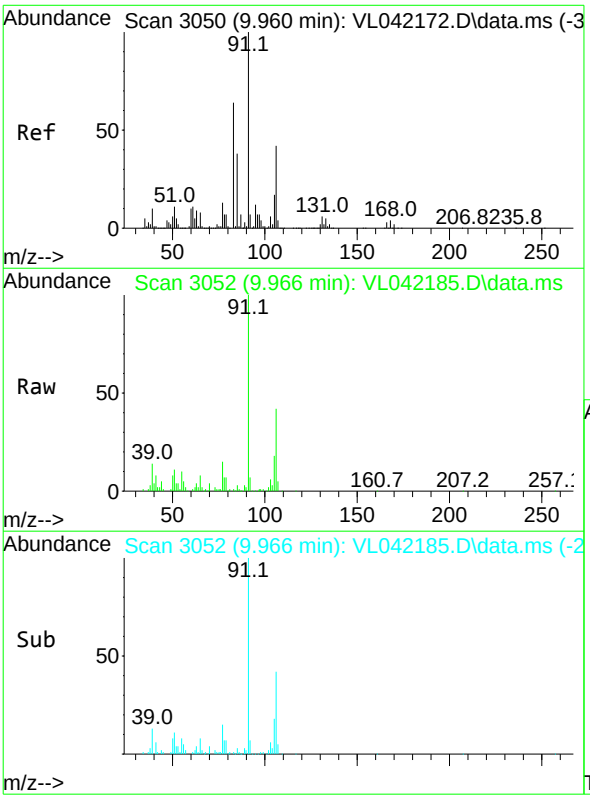
Ion	Ratio	Lower	Upper
91	100		
106	46.5	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
APPROVED

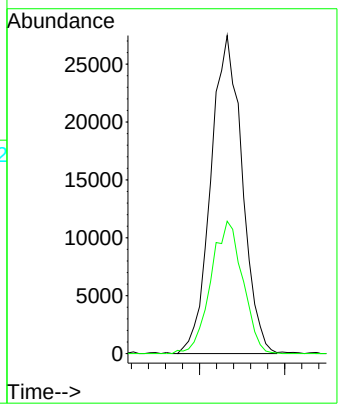
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

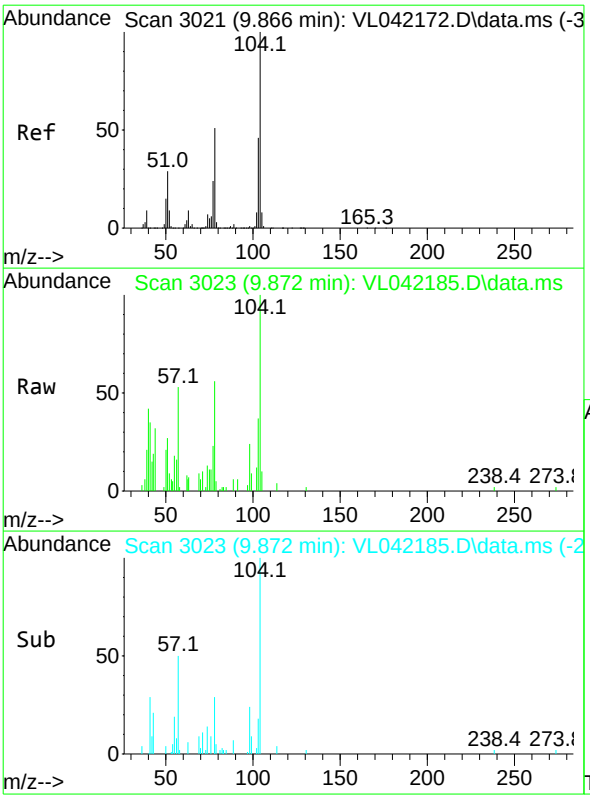


#60
o-Xylene
Concen: 0.505 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 35115

Ion	Ratio	Lower	Upper
91	100		
106	42.3	20.8	62.5

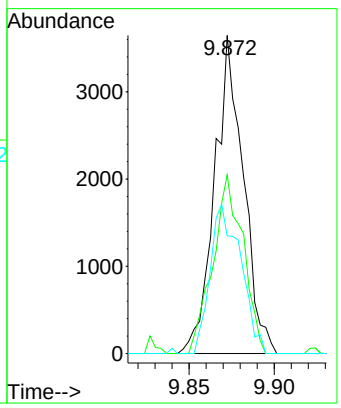




#61
Styrene
Concen: 0.124 ppbv
RT: 9.872 min Scan# 30
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:104 Resp: 4273

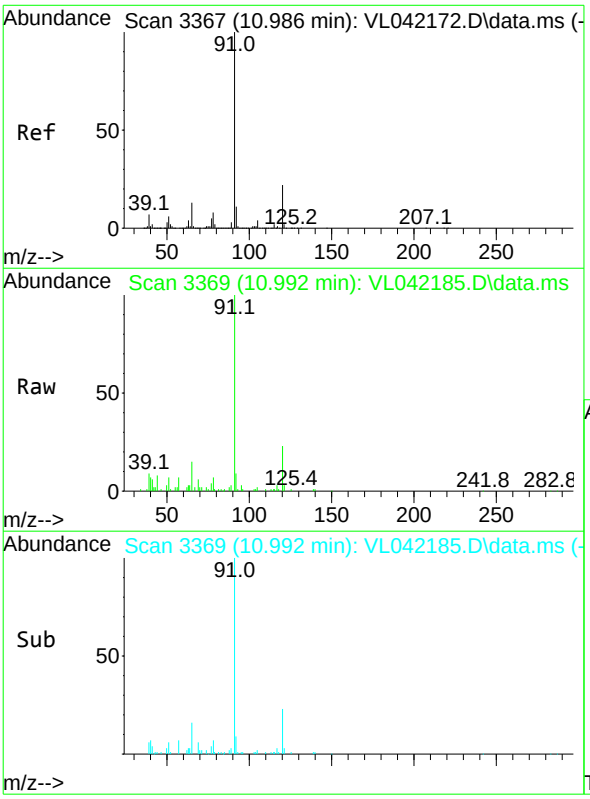
Ion	Ratio	Lower	Upper
104	100		
78	60.5	41.8	62.6
103	49.9	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Manual Integrations
APPROVED

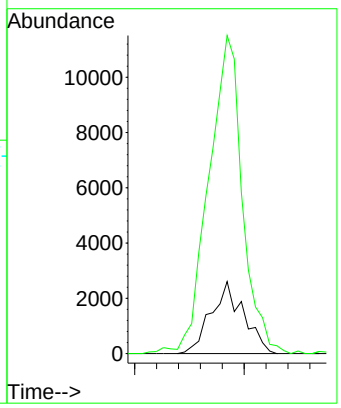
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

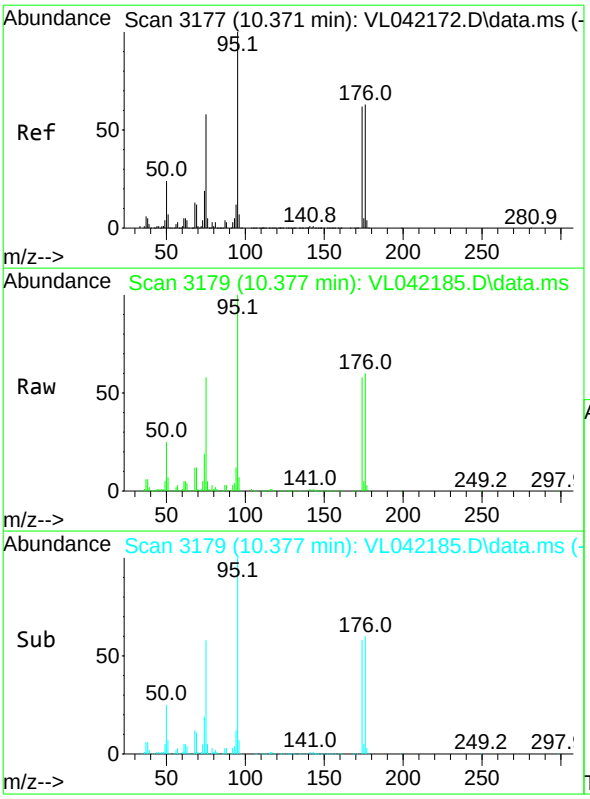


#64
n-propylbenzene
Concen: 0.100 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:120 Resp: 2677

Ion	Ratio	Lower	Upper
120	100		
91	461.2	376.9	565.3





#68
1-Bromo-4-Fluorobenzene
Concen: 9.946 ppbv
RT: 10.377 min Scan# 31
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 95 Resp: 399253

Ion	Ratio	Lower	Upper
95	100		
174	60.5	50.6	76.0
175	4.8	3.8	5.6

Manual Integrations
APPROVED

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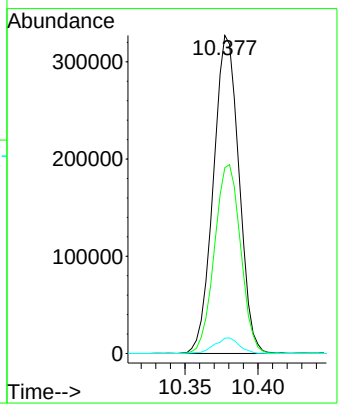
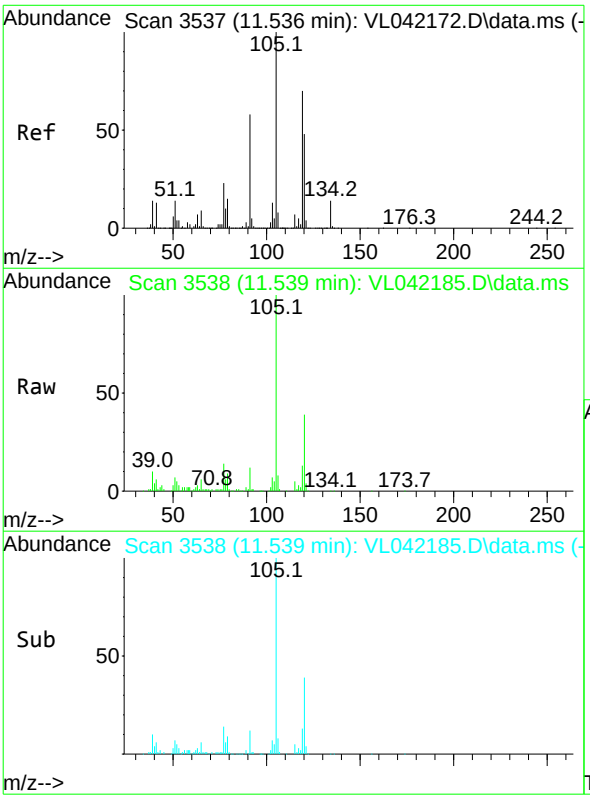
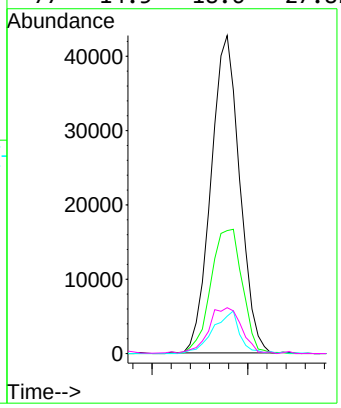




#74
1,2,4-Trimethylbenzene
Concen: 0.510 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:105 Resp: 44446

Ion	Ratio	Lower	Upper
105	100		
120	38.5	38.6	58.0#
91	11.8	46.2	69.2#
77	14.5	18.6	27.8#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042185.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4270422	4724824	100.00%	29.010%
2	1.486	427	432	434	rBV3	88651	57888	1.23%	0.355%
3	1.557	450	454	459	rBV	1021168	533159	11.28%	3.274%
4	1.603	464	468	471	rVV	444755	235739	4.99%	1.447%
5	1.622	471	474	478	rVB	109657	57942	1.23%	0.356%
6	1.722	501	505	509	rBV	202737	116091	2.46%	0.713%
7	1.774	517	521	527	rBV	160163	99384	2.10%	0.610%
8	1.836	536	540	548	rVB	2126258	1457667	30.85%	8.950%
9	1.965	575	580	584	rVB	181736	127912	2.71%	0.785%
10	2.473	732	737	744	rVB	178763	182151	3.86%	1.118%
11	2.512	744	749	760	rVB3	46404	50123	1.06%	0.308%
12	2.561	760	764	776	rVB	60138	60608	1.28%	0.372%
13	2.626	776	784	793	rVB2	102261	111036	2.35%	0.682%
14	2.791	825	835	841	rBV	679699	716741	15.17%	4.401%
15	2.826	841	846	860	rVB2	205535	242043	5.12%	1.486%
16	3.231	961	971	979	rBV2	57075	70818	1.50%	0.435%
17	3.658	1087	1103	1111	rBV4	57299	93710	1.98%	0.575%
18	3.697	1111	1115	1126	rVB3	39300	52352	1.11%	0.321%
19	3.962	1184	1197	1210	rBV	870291	1418704	30.03%	8.711%
20	4.053	1215	1225	1234	rBV4	41325	79790	1.69%	0.490%
21	4.266	1280	1291	1306	rBV4	54250	118768	2.51%	0.729%
22	6.940	2101	2117	2136	rBV3	202661	426925	9.04%	2.621%
23	7.697	2341	2351	2366	rVB5	49910	95365	2.02%	0.586%
24	8.882	2704	2717	2730	rBV	1153082	1733843	36.70%	10.646%
25	9.151	2790	2800	2811	rBV3	69273	104429	2.21%	0.641%
26	9.358	2855	2864	2868	rBV	45260	63916	1.35%	0.392%
27	9.390	2868	2874	2891	rVB	122964	171912	3.64%	1.056%
28	9.533	2909	2918	2935	rVB2	122401	230148	4.87%	1.413%
29	9.636	2941	2950	2962	rBV2	52388	75069	1.59%	0.461%
30	9.966	3042	3052	3063	rVB3	84218	162317	3.44%	0.997%
31	10.377	3165	3179	3190	rBV	1520250	1891906	40.04%	11.616%
32	11.096	3392	3401	3407	rBV	77638	96706	2.05%	0.594%
33	11.206	3422	3435	3443	rVB2	42544	52004	1.10%	0.319%
34	11.309	3455	3467	3472	rBV10	21542	47390	1.00%	0.291%
35	11.539	3526	3538	3548	rBV2	127254	162178	3.43%	0.996%
36	12.232	3744	3752	3758	rBV3	88963	103051	2.18%	0.633%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	12.442	3811	3817	3823	rBV	54403	56613	1.20%	0.348%
38	12.513	3832	3839	3846	rBV3	63614	81157	1.72%	0.498%
39	12.653	3874	3882	3885	rBV4	52361	59932	1.27%	0.368%
40	12.672	3885	3888	3897	rVB2	59379	64290	1.36%	0.395%

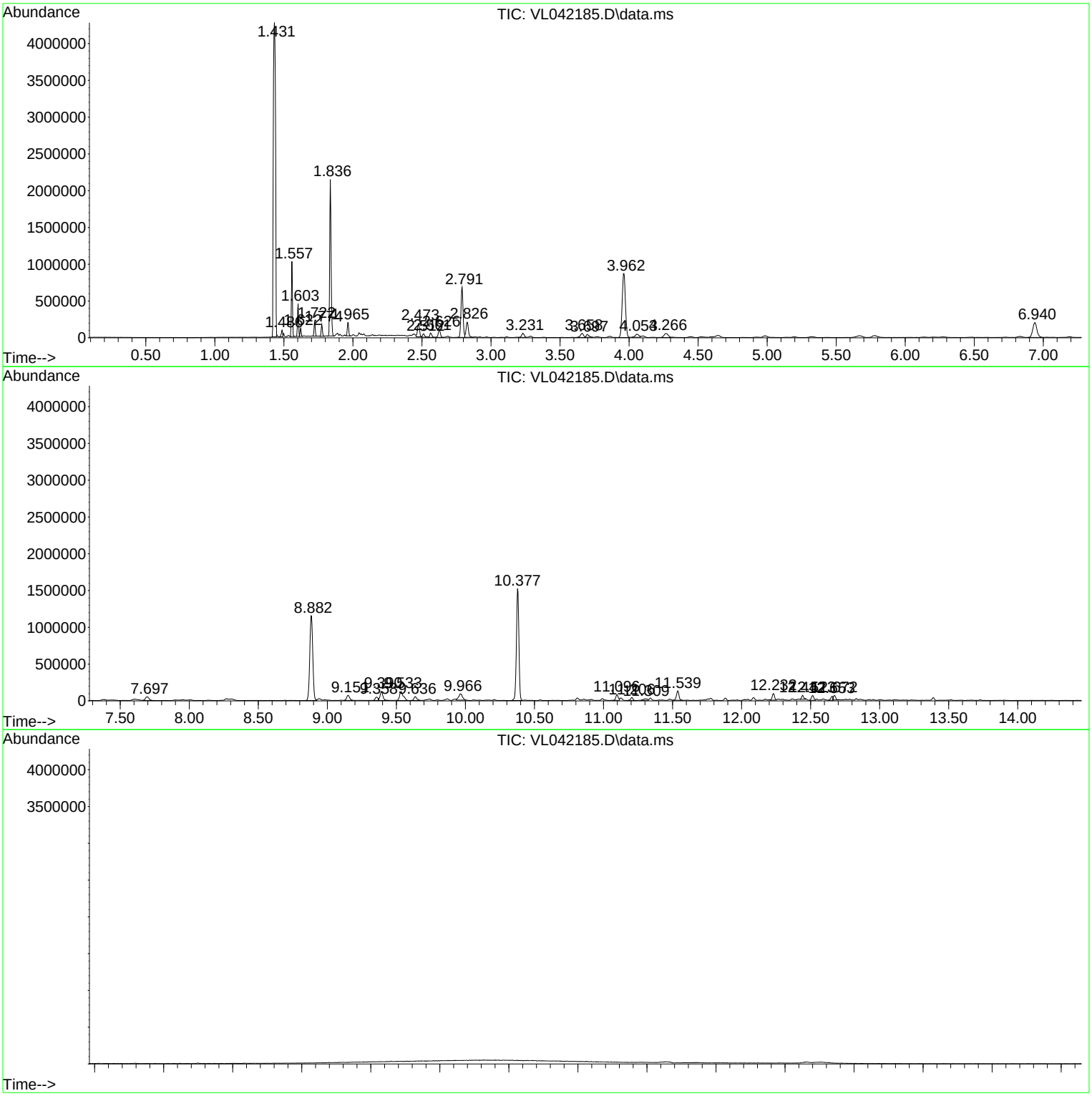
Sum of corrected areas: 16286601

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

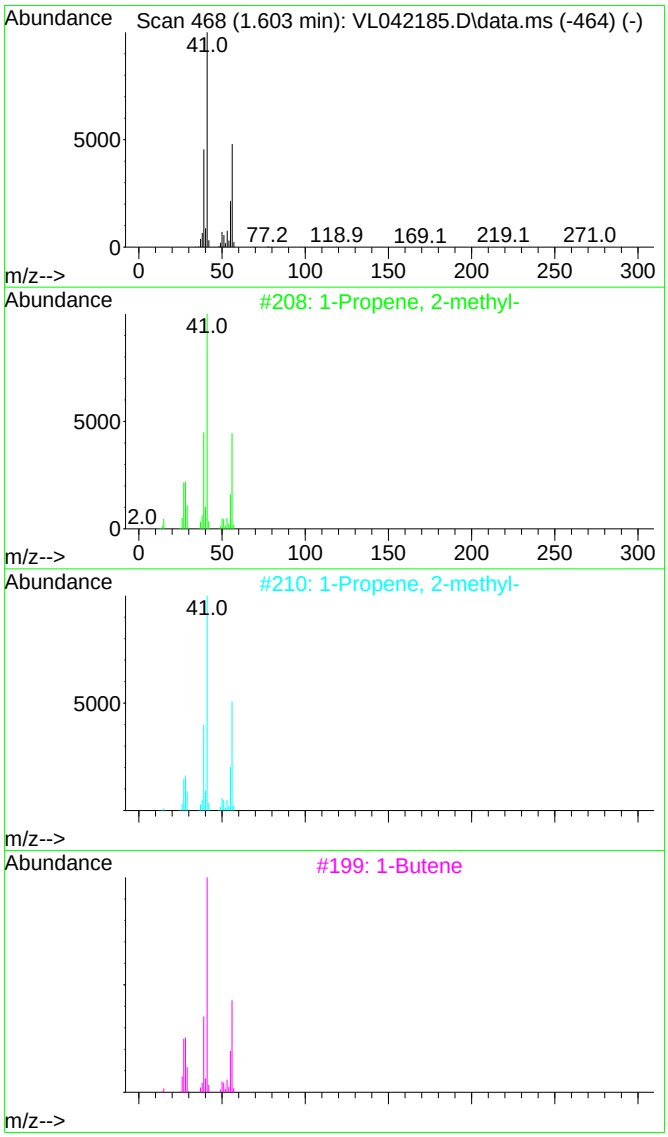
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

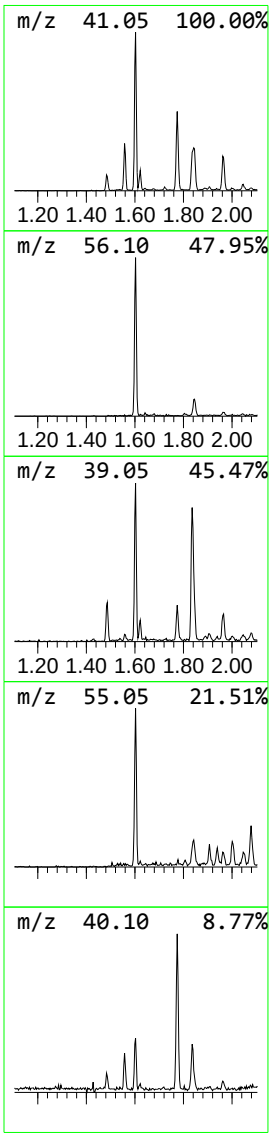
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 1-Propene, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.603	3.29 ppbv	235739	Bromochloromethane	2.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene, 2-methyl-	56	C4H8	000115-11-7	90
2	1-Propene, 2-methyl-	56	C4H8	000115-11-7	90
3	1-Butene	56	C4H8	000106-98-9	87
4	1-Butene	56	C4H8	000106-98-9	87
5	1-Butene	56	C4H8	000106-98-9	87





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

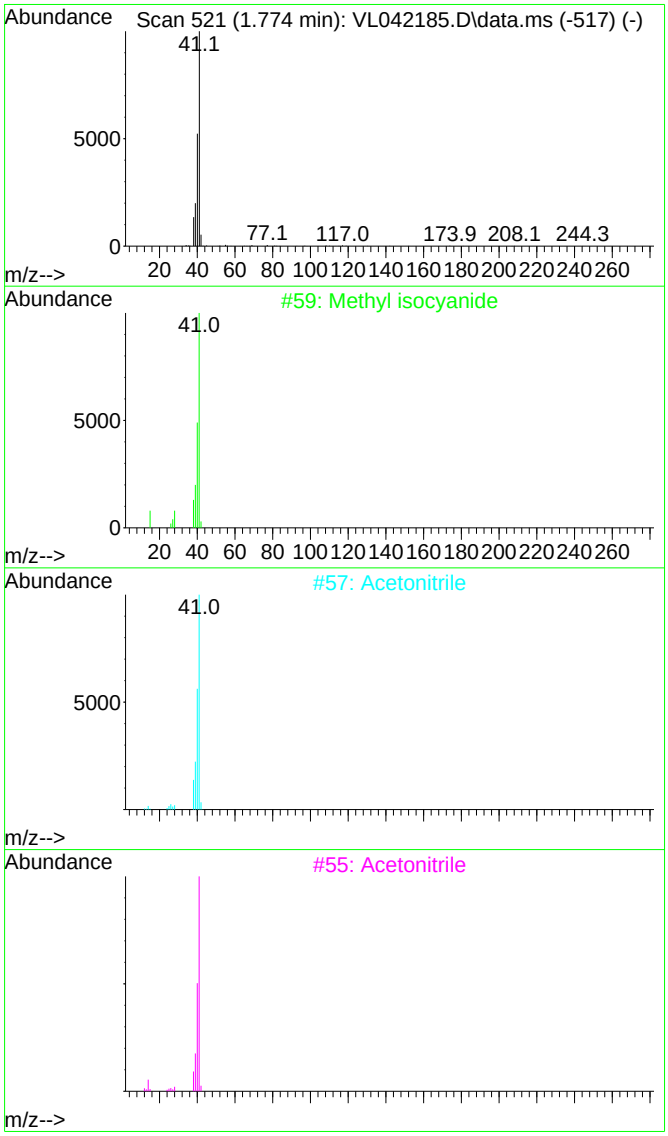
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

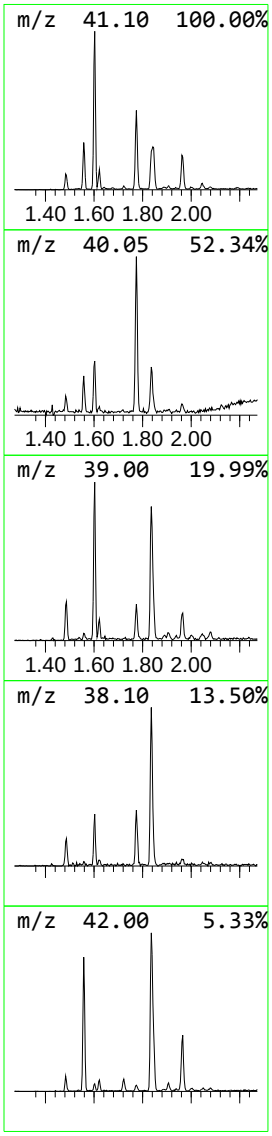
****

Peak Number 2 unknown1.774 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.774	1.39 ppbv	99384	Bromochloromethane	2.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methyl isocyanide	41	C2H3N	000593-75-9	42
2	Acetonitrile	41	C2H3N	000075-05-8	42
3	Acetonitrile	41	C2H3N	000075-05-8	42
4	Acetonitrile	41	C2H3N	000075-05-8	9
5	Acetic acid, cyano-	85	C3H3NO2	000372-09-8	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

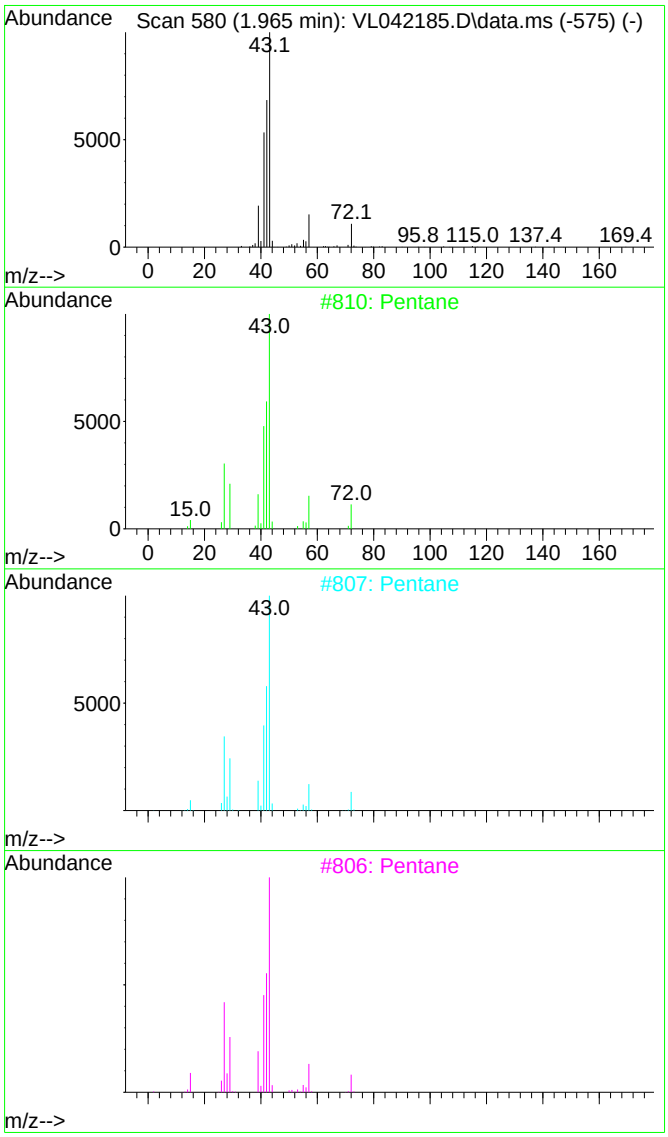
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

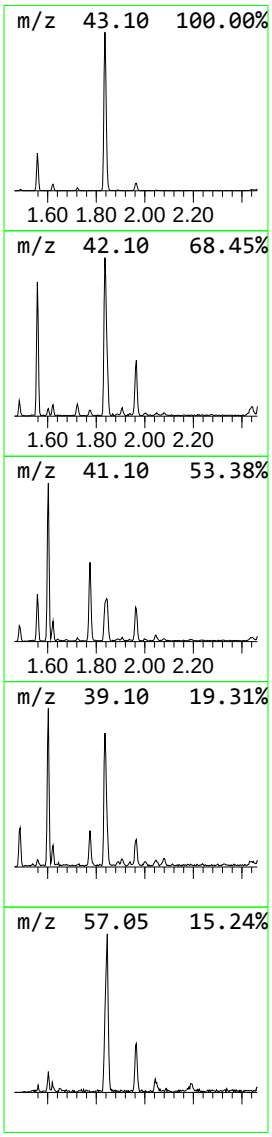
****

Peak Number 3 Pentane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.965	1.78 ppbv	127912	Bromochloromethane	2.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	80
2	Pentane	72	C5H12	000109-66-0	80
3	Pentane	72	C5H12	000109-66-0	80
4	Pentane	72	C5H12	000109-66-0	72
5	Pentane	72	C5H12	000109-66-0	59





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

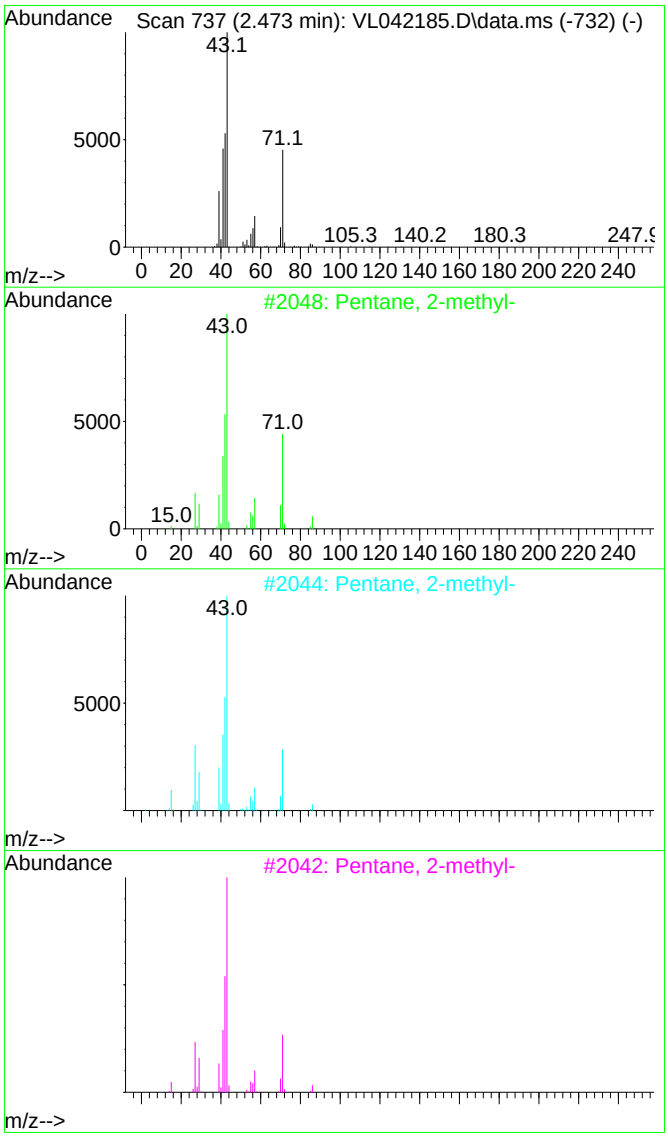
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

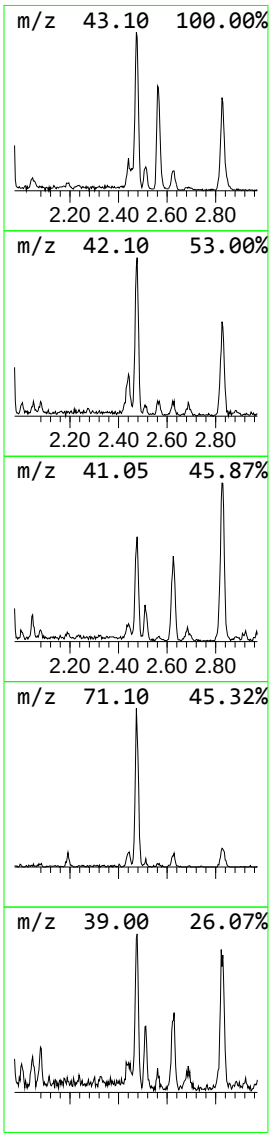
****

Peak Number 4 Pentane, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.473	2.54 ppbv	182151	Bromochloromethane	2.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	78
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	74
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	64
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	50





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

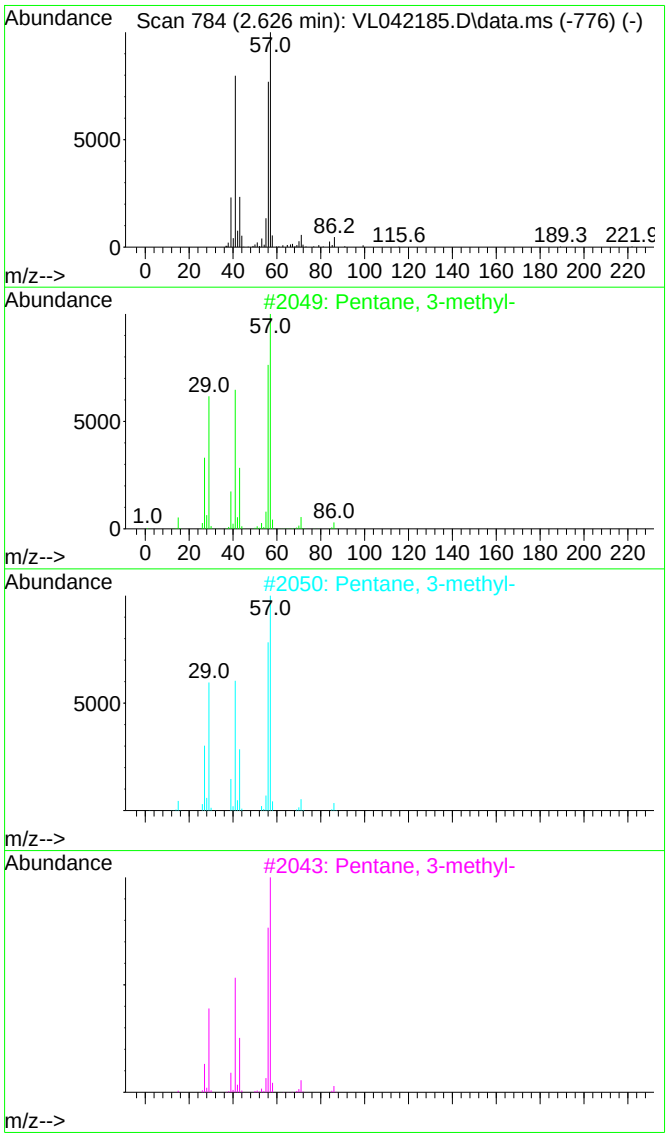
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

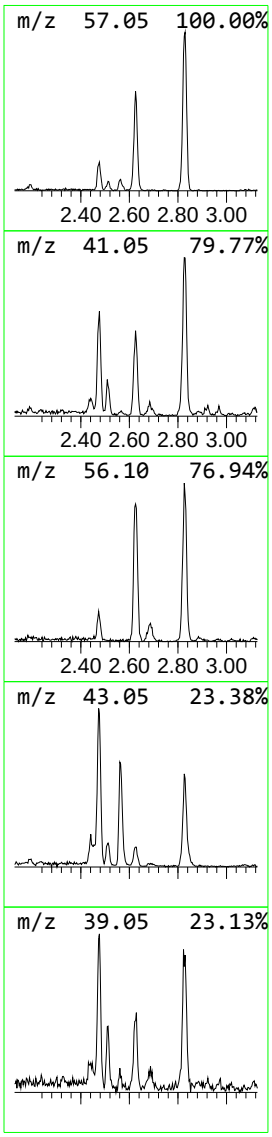
****

Peak Number 5 Pentane, 3-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.626	1.55 ppbv	111036	Bromochloromethane	2.791

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	87
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	80
4	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	78
5	Butyl isocyanatoacetate	157	C7H11NO3	017046-22-9	64





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1-Propene, 2-me...	1.603	3.3	ppbv	235739	1	2.791	716741	10.0
unknown1.774	1.774	1.4	ppbv	99384	1	2.791	716741	10.0
Pentane	1.965	1.8	ppbv	127912	1	2.791	716741	10.0
Pentane, 2-methyl-	2.473	2.5	ppbv	182151	1	2.791	716741	10.0
Pentane, 3-methyl-	2.626	1.6	ppbv	111036	1	2.791	716741	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-3-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-01DL	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
VL042195.D	5		03/28/25 00:06	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	1.10	5.44	UD	5.44	12.4	ug/m3
74-87-3	Chloromethane	0.49	1.01	UD	1.01	5.16	ug/m3
75-01-4	Vinyl Chloride	0.070	0.18	UD	0.18	0.38	ug/m3
74-83-9	Bromomethane	0.70	2.72	UD	2.72	9.71	ug/m3
75-00-3	Chloroethane	0.85	2.24	UD	2.24	6.60	ug/m3
109-99-9	Tetrahydrofuran	0.65	1.92	UD	1.92	7.37	ug/m3
75-69-4	Trichlorofluoromethane	0.80	4.50	UD	4.50	14.1	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.80	6.13	UD	6.13	19.2	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.44	3.08	UD	3.08	17.5	ug/m3
75-65-0	tert-Butyl alcohol	0.95	2.88	UD	2.88	7.58	ug/m3
142-82-5	Heptane	0.55	2.25	UD	2.25	10.3	ug/m3
75-35-4	1,1-Dichloroethene	0.70	2.78	UD	2.78	9.91	ug/m3
67-64-1	Acetone	37.1	88.1	D	2.85	5.94	ug/m3
75-15-0	Carbon Disulfide	0.80	2.49	UD	2.49	7.79	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.60	2.16	UD	2.16	9.01	ug/m3
75-09-2	Methylene Chloride	1.10	3.82	JD	3.30	8.69	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.95	3.77	UD	3.77	9.91	ug/m3
75-34-3	1,1-Dichloroethane	0.65	2.63	UD	2.63	10.1	ug/m3
110-82-7	Cyclohexane	1.10	3.79	UD	3.79	8.61	ug/m3
78-93-3	2-Butanone	0.95	2.80	JD	1.77	7.37	ug/m3
56-23-5	Carbon Tetrachloride	0.060	0.38	UD	0.38	0.94	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.45	1.78	UD	1.78	9.91	ug/m3
67-66-3	Chloroform	0.42	2.05	UD	2.05	12.2	ug/m3
71-55-6	1,1,1-Trichloroethane	0.050	0.27	UD	0.27	0.82	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.50	2.34	UD	2.34	11.7	ug/m3
71-43-2	Benzene	0.57	1.82	JD	1.41	7.99	ug/m3
107-06-2	1,2-Dichloroethane	0.46	1.86	UD	1.86	10.1	ug/m3
79-01-6	Trichloroethene	0.090	0.48	UD	0.48	0.81	ug/m3
78-87-5	1,2-Dichloropropane	0.55	2.54	UD	2.54	11.6	ug/m3
75-27-4	Bromodichloromethane	0.39	2.61	UD	2.61	16.8	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.47	1.93	UD	1.93	10.3	ug/m3
108-88-3	Toluene	2.10	7.91	JD	2.07	9.42	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.30	1.36	UD	1.36	11.3	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.32	1.45	UD	1.45	11.3	ug/m3
79-00-5	1,1,2-Trichloroethane	0.36	1.96	UD	1.96	13.6	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-3-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-01DL	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
VL042195.D	5		03/28/25 00:06	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.33	2.81	UD	2.81	21.3	ug/m3
106-93-4	1,2-Dibromoethane	0.36	2.77	UD	2.77	3.84	ug/m3
127-18-4	Tetrachloroethene	0.080	0.54	UD	0.54	1.02	ug/m3
108-90-7	Chlorobenzene	0.38	1.75	UD	1.75	11.5	ug/m3
100-41-4	Ethyl Benzene	0.60	2.61	UD	2.61	10.9	ug/m3
179601-23-1	m/p-Xylene	1.10	4.78	UD	4.78	21.7	ug/m3
95-47-6	o-Xylene	0.60	2.61	UD	2.61	10.9	ug/m3
100-42-5	Styrene	0.55	2.34	UD	2.34	10.6	ug/m3
75-25-2	Bromoform	0.28	2.90	UD	2.90	25.9	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.060	0.41	UD	0.41	1.03	ug/m3
95-49-8	2-Chlorotoluene	0.55	2.85	UD	2.85	12.9	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.55	2.70	UD	2.70	12.3	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.39	1.92	UD	1.92	12.3	ug/m3
541-73-1	1,3-Dichlorobenzene	0.40	2.40	UD	2.40	15.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.27	1.62	UD	1.62	15.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.38	2.28	UD	2.28	15.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.43	3.19	UD	3.19	18.6	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.43	4.59	UD	4.59	26.7	ug/m3
106-99-0	1,3-Butadiene	0.65	1.44	UD	1.44	5.53	ug/m3
91-20-3	Naphthalene	0.38	1.99	UD	1.99	2.62	ug/m3
622-96-8	4-Ethyltoluene	0.60	2.95	UD	2.95	12.3	ug/m3
110-54-3	Hexane	1.60	5.64	JD	1.94	8.81	ug/m3
107-05-1	Allyl Chloride	0.75	2.35	UD	2.35	7.83	ug/m3
123-91-1	1,4-Dioxane	1.10	3.96	UD	3.96	9.01	ug/m3
80-62-6	Methyl Methacrylate	0.43	1.76	UD	1.76	10.2	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	175000		2.784			
540-36-3	1,4-Difluorobenzene	495000		3.956			
3114-55-4	Chlorobenzene-d5	449000		8.879			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-3-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-01DL	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
VL042195.D	5		03/28/25 00:06	VL032725

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

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\VL032725\
Data File : VL042195.D
Acq On : 28 Mar 2025 00:06
Operator : SY/MD
Sample : Q1669-01DL 5X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:19:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	175494	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	495493	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.879	117	449375	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	365476	9.904	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
9) Propene	1.483	41	2514m	0.207	ppbv	
13) Ethanol	1.719	45	13574	11.835	ppbv	85
15) Acetone	1.832	43	182020	7.416	ppbv	96
20) Methylene Chloride	2.059	84	2019	0.221	ppbv #	68
26) Hexane	2.823	57	8040	0.327	ppbv #	32
34) 2-Butanone	2.557	43	6791	0.189	ppbv	100
36) Benzene	3.655	78	5647	0.115	ppbv	92
53) Toluene	6.927	91	24689	0.424	ppbv	97
59) m/p-Xylene	9.526	91	11405m	0.179	ppbv	

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042195.D
Acq On : 28 Mar 2025 00:06
Operator : SY/MD
Sample : Q1669-01DL 5X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:19:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations APPROVED

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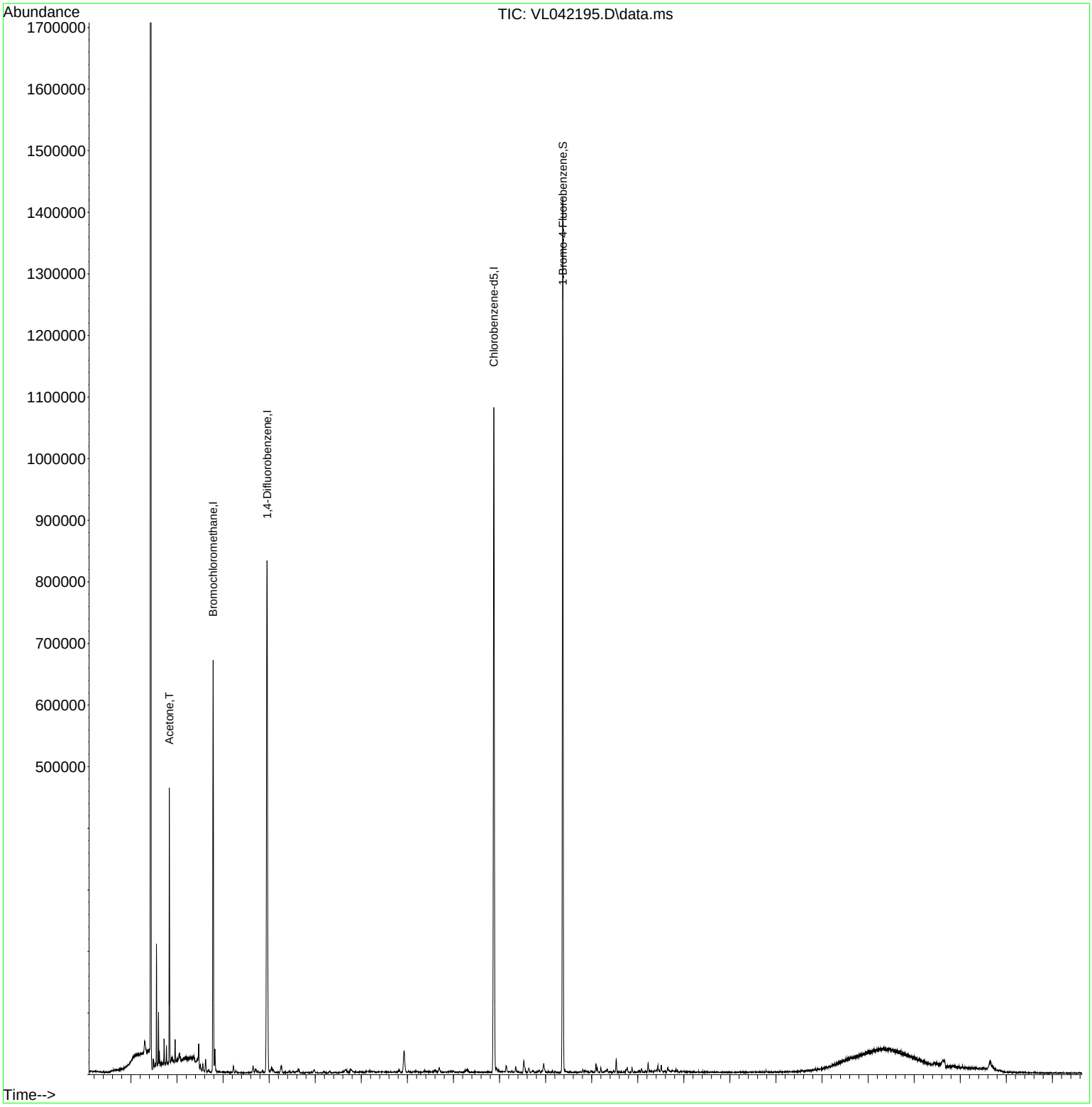
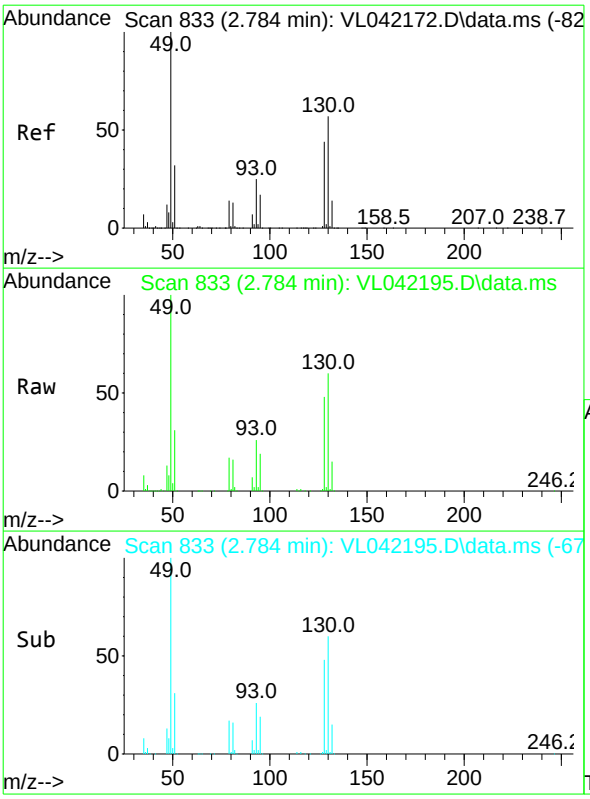
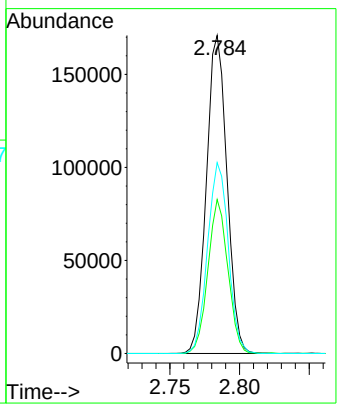




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 49 Resp: 175494

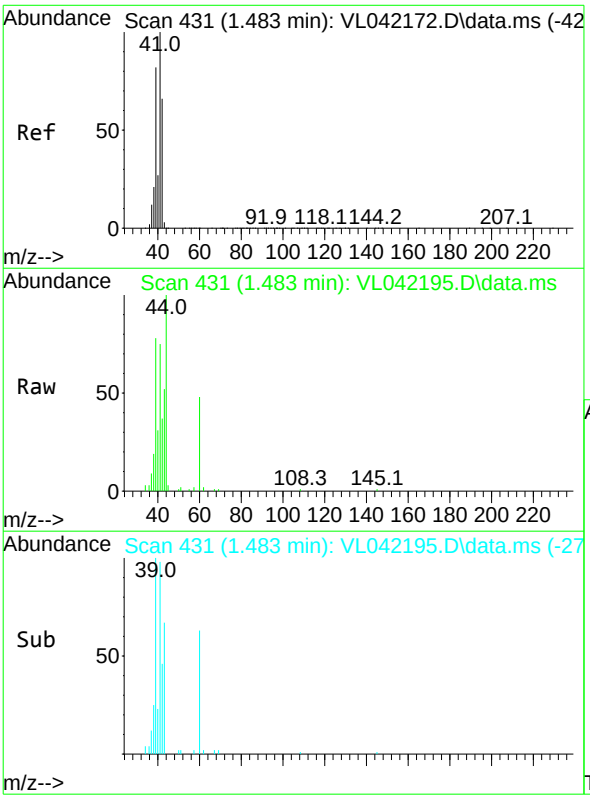
Ion	Ratio	Lower	Upper
49	100		
128	47.0	22.9	68.5
130	60.4	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations
APPROVED

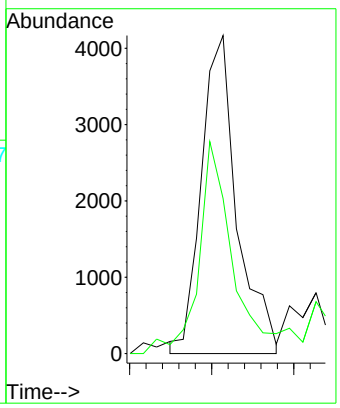
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

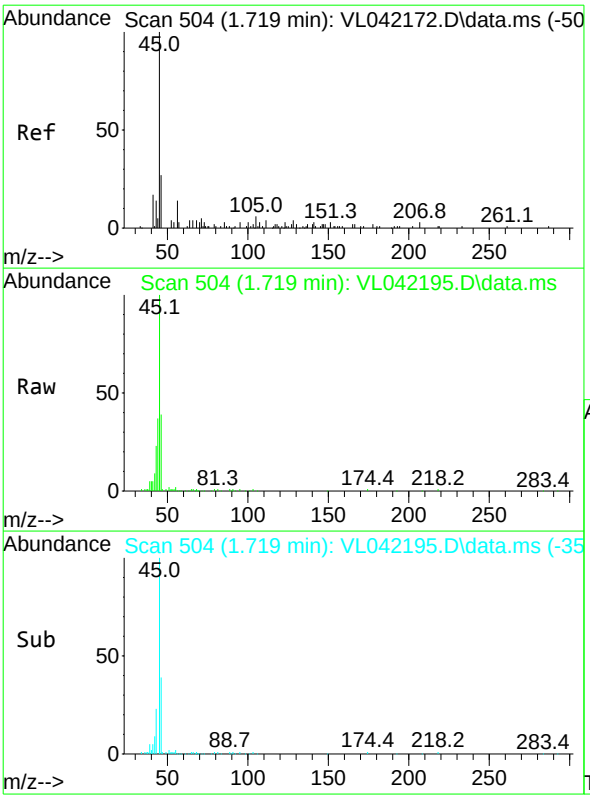


#9
Propene
Concen: 0.207 ppbv m
RT: 1.483 min Scan# 431
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 41 Resp: 2514

Ion	Ratio	Lower	Upper
41	100		
42	48.5	55.4	83.2#

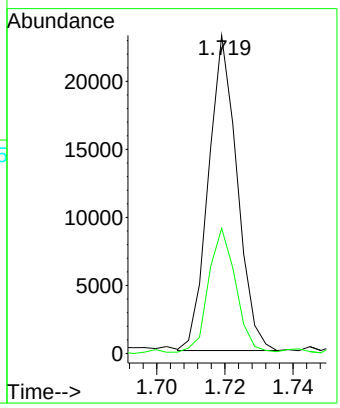




#13
Ethanol
Concen: 11.835 ppbv
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 45 Resp: 13574

Ion	Ratio	Lower	Upper
45	100		
46	40.2	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations
APPROVED

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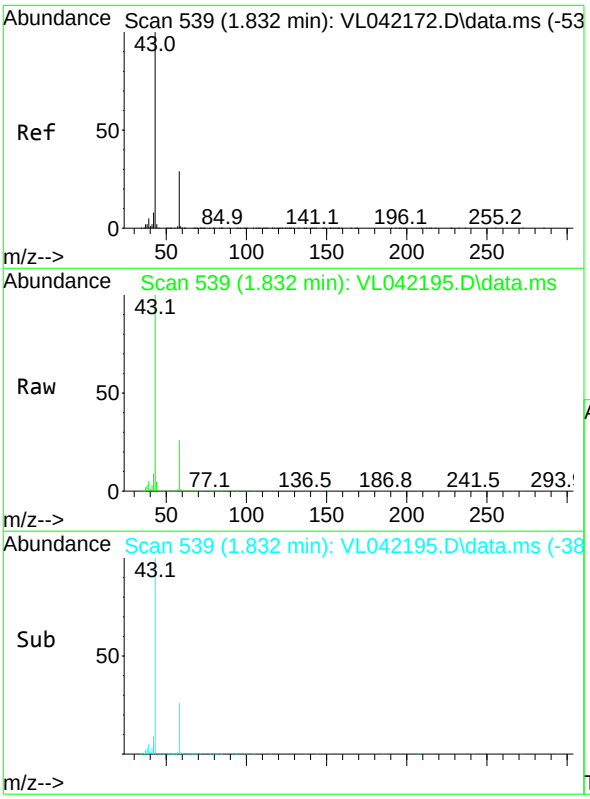
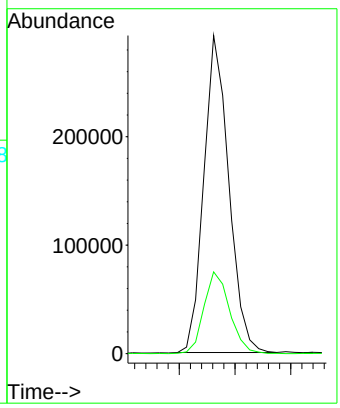
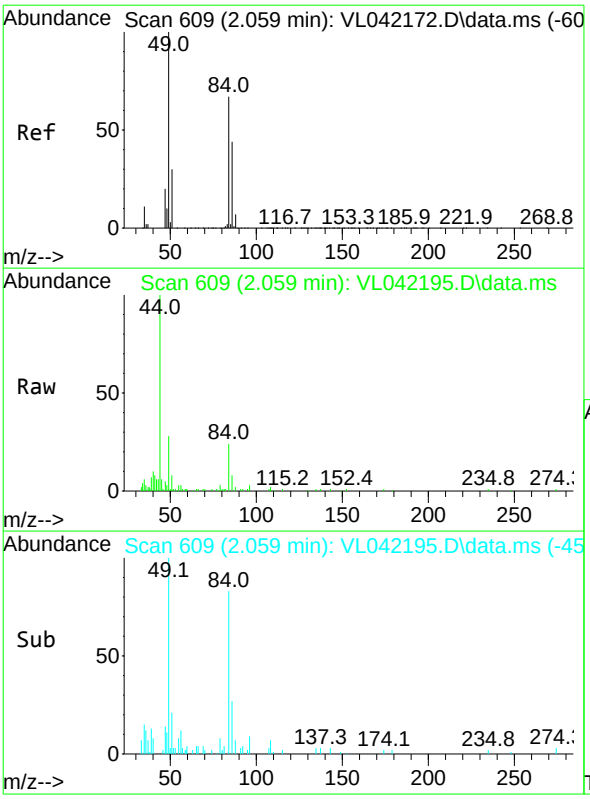


#15
Acetone
Concen: 7.416 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 43 Resp: 182020

Ion	Ratio	Lower	Upper
43	100		
58	26.8	23.2	34.8

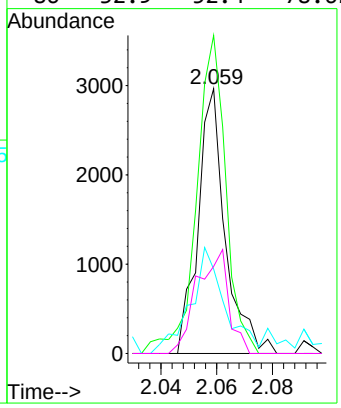




#20
Methylene Chloride
Concen: 0.221 ppbv
RT: 2.059 min Scan# 60
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 84 Resp: 2019

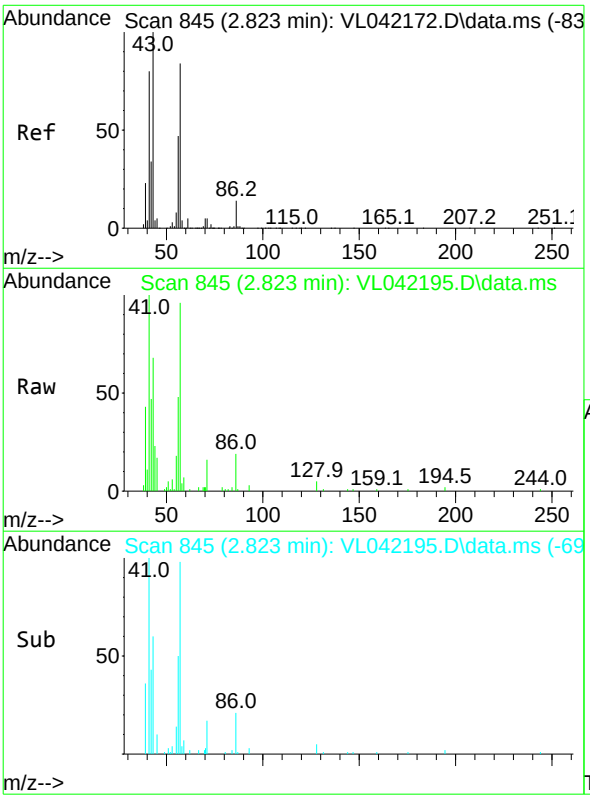
Ion	Ratio	Lower	Upper
84	100		
49	111.6	120.2	180.4#
51	31.6	37.4	56.0#
86	32.9	52.4	78.6#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations
APPROVED

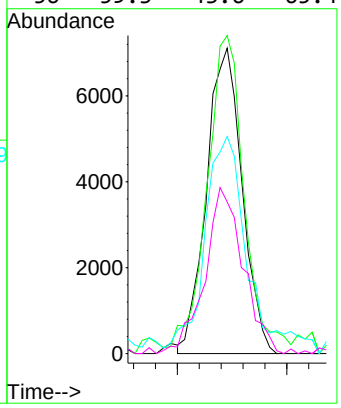
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

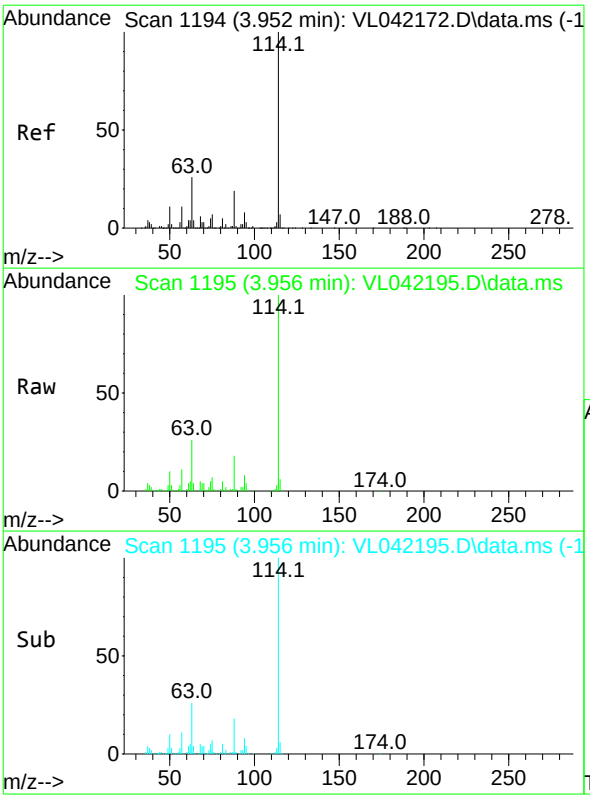


#26
Hexane
Concen: 0.327 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 57 Resp: 8040

Ion	Ratio	Lower	Upper
57	100		
41	117.4	76.6	114.8#
43	86.5	207.8	311.8#
56	59.3	43.6	65.4

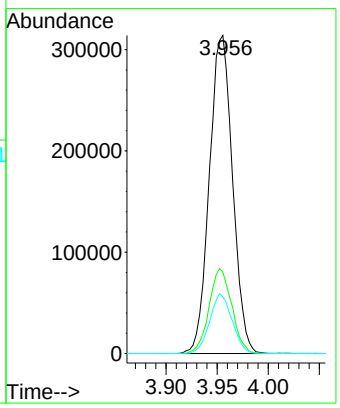




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion:114 Resp: 495493

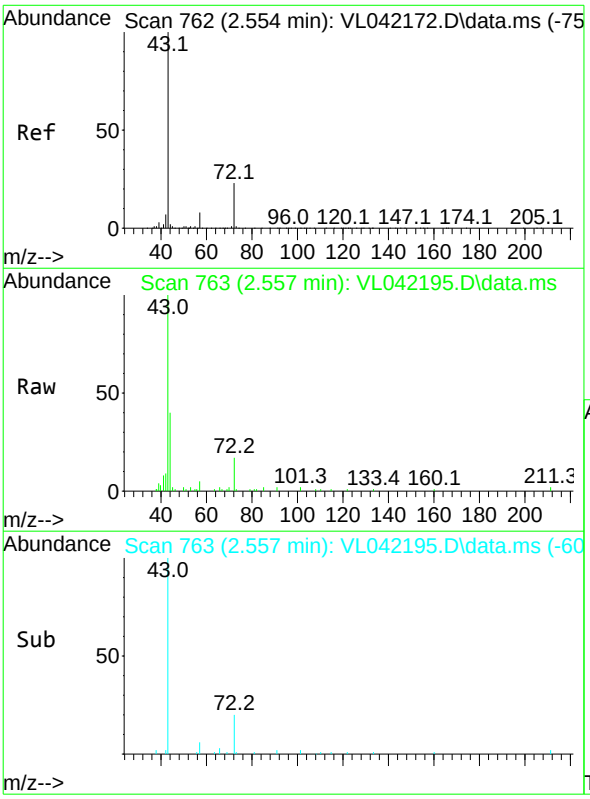
Ion	Ratio	Lower	Upper
114	100		
63	26.2	20.7	31.1
88	18.1	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations
APPROVED

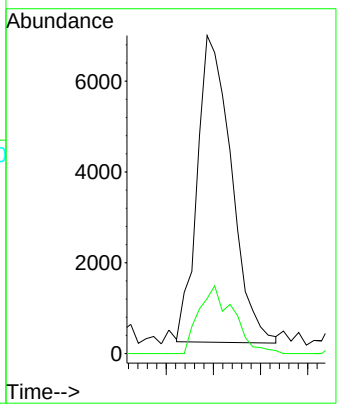
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

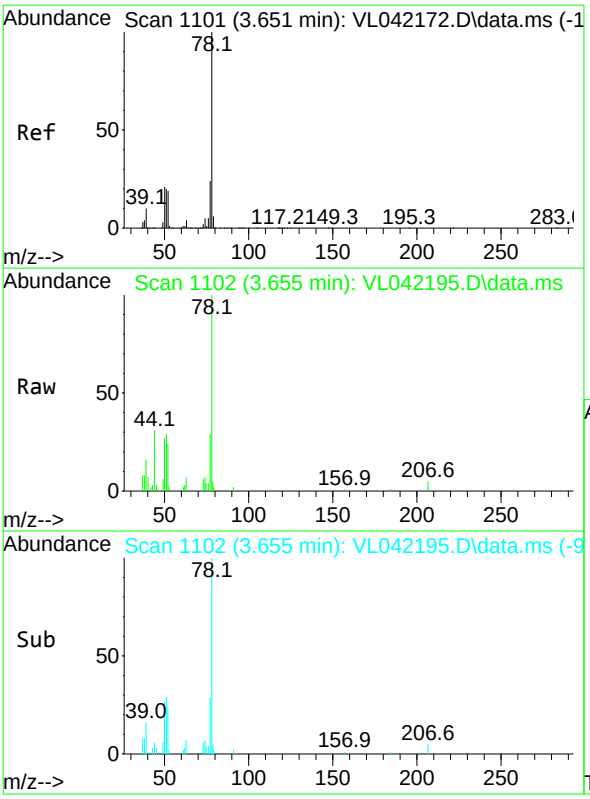


#34
2-Butanone
Concen: 0.189 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 43 Resp: 6791

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2

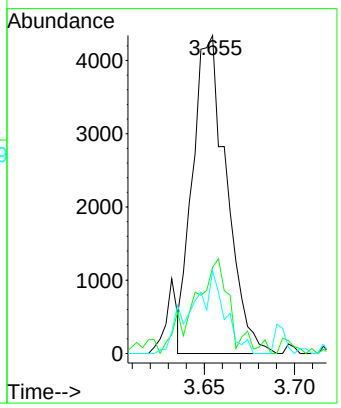




#36
Benzene
Concen: 0.115 ppbv
RT: 3.655 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 78 Resp: 5647

Ion	Ratio	Lower	Upper
78	100		
77	27.1	19.1	28.7
50	16.7	16.6	24.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations
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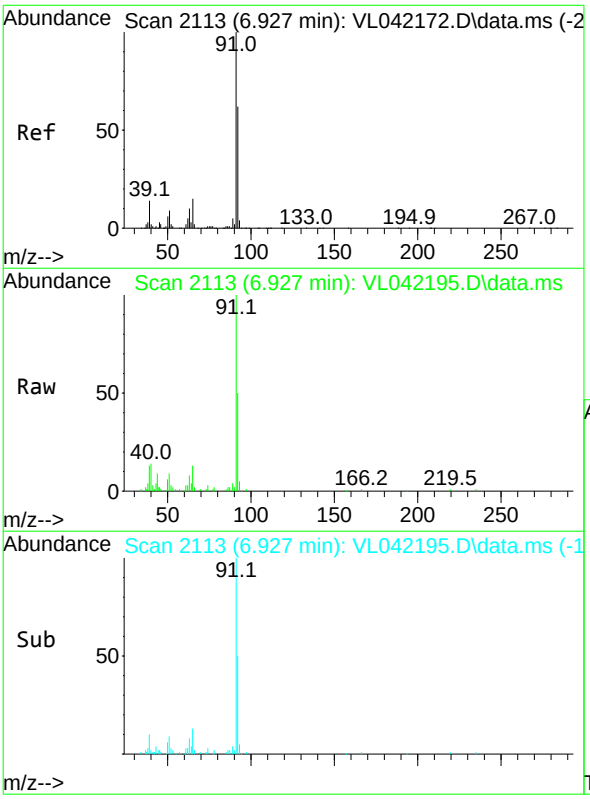
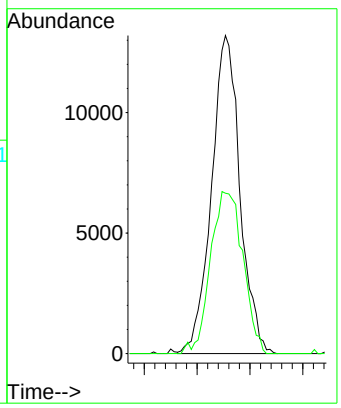
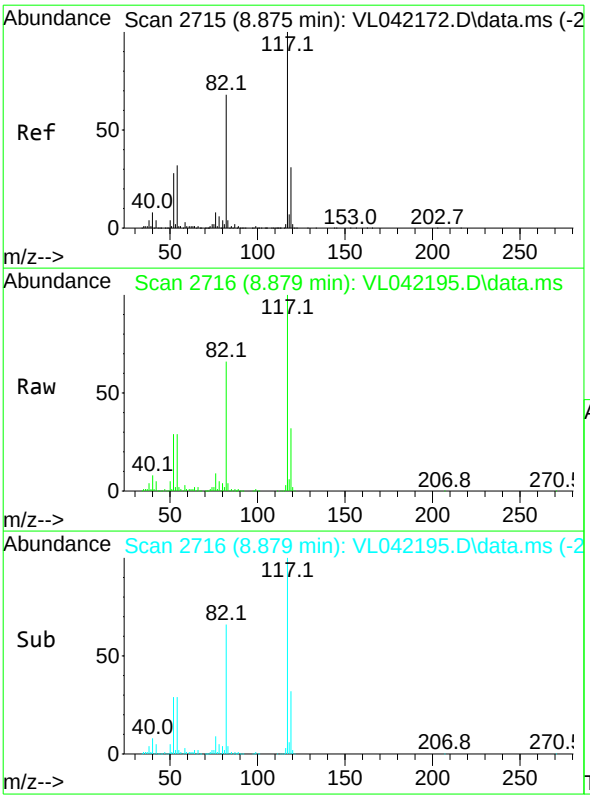


#53
Toluene
Concen: 0.424 ppbv
RT: 6.927 min Scan# 2113
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 91 Resp: 24689

Ion	Ratio	Lower	Upper
91	100		
92	58.1	48.4	72.6

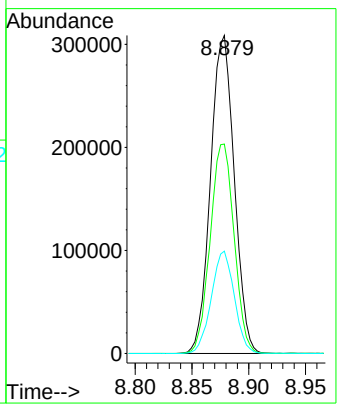




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion:117 Resp: 449375

Ion	Ratio	Lower	Upper
117	100		
82	66.4	55.8	83.6
119	31.3	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
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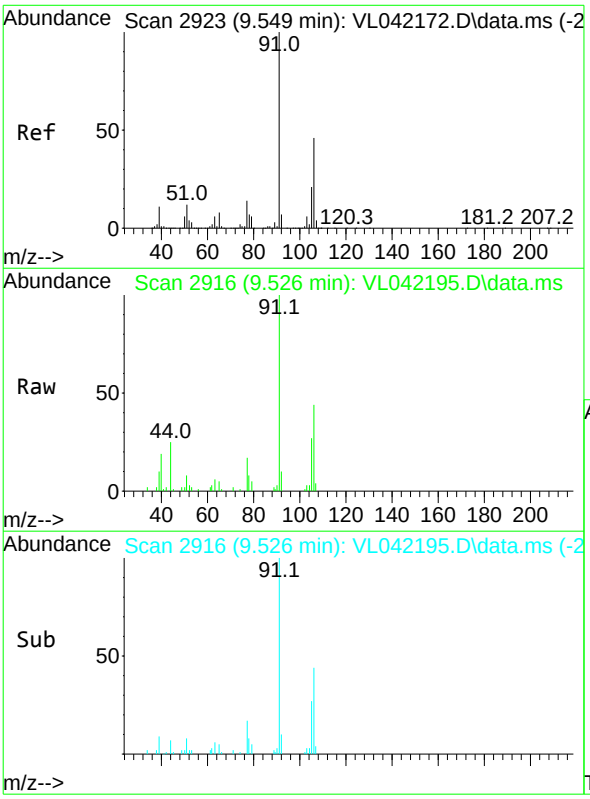
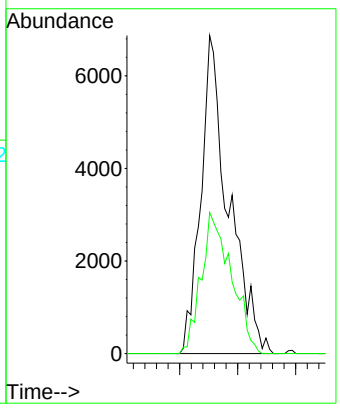
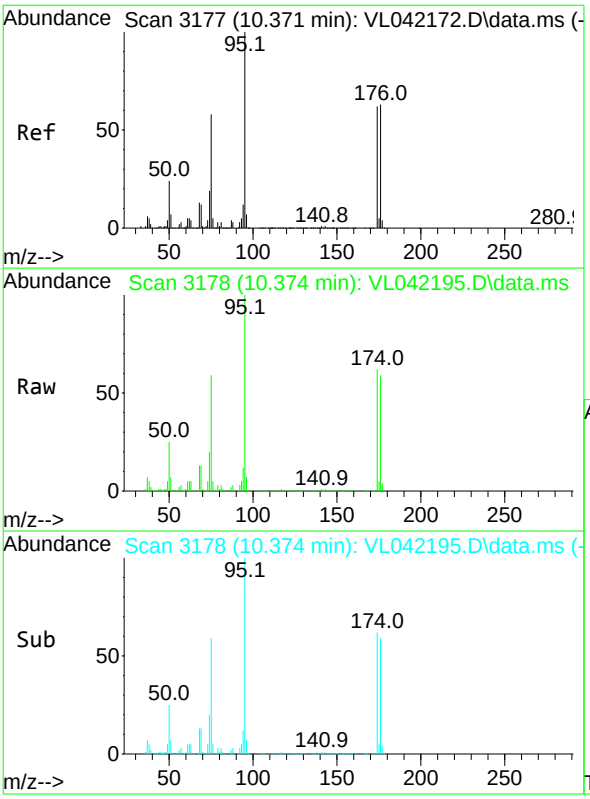


#59
m/p-Xylene
Concen: 0.179 ppbv m
RT: 9.526 min Scan# 2916
Delta R.T. -0.023 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 91 Resp: 11405

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

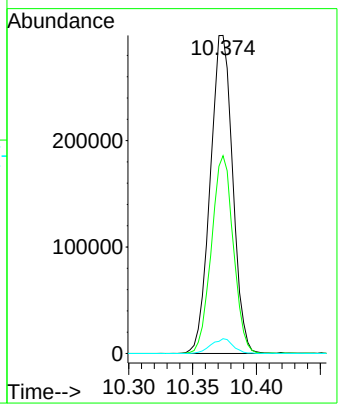




#68
1-Bromo-4-Fluorobenzene
Concen: 9.904 ppbv
RT: 10.374 min Scan# 31
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 95 Resp: 365476

Ion	Ratio	Lower	Upper
95	100		
174	60.7	50.6	76.0
175	4.6	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-02	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
VL042186.D	1		03/27/25 18:59	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.41	2.03	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.22	0.45	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.20	1.12	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.38	1.15	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.49	2.01	J	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	2.40	5.70		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.35	1.22	J	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	J	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.42	1.24	J	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.12	0.59	J	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.37	1.73	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.67	2.14		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.43	1.76	J	0.37	2.05	ug/m3
108-88-3	Toluene	2.30	8.67		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-02	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
VL042186.D	1		03/27/25 18:59	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.39	1.69	J	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.40	6.08		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.65	2.82		0.52	2.17	ug/m3
100-42-5	Styrene	0.13	0.55	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.54	2.65		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.20	0.98	J	0.59	2.46	ug/m3
110-54-3	Hexane	2.30	8.11		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	188000		2.784			
540-36-3	1,4-Difluorobenzene	538000		3.955			
3114-55-4	Chlorobenzene-d5	491000		8.878			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.24		J		1.47	ppbv
115-07-1	Propene	1.60		J		1.49	ppbv
000106-97-8	Butane	1.10		J		1.62	ppbv

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-02	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
VL042186.D	1		03/27/25 18:59	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000109-66-0	Pentane	1.70		J		1.96	ppbv
000107-83-5	Pentane, 2-methyl-	3.10		J		2.47	ppbv
000096-14-0	Pentane, 3-methyl-	1.60		J		2.62	ppbv
000096-37-7	Cyclopentane, methyl-	1.00		J		3.23	ppbv

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 (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:15:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	187729	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	538422	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	491411	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	400118	9.915	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	11483	0.414	ppbv		94
3) Chlorodifluoromethane	1.473	51	6817m	0.241	ppbv		
4) Chloromethane	1.531	50	2440	0.215	ppbv		96
9) Propene	1.486	41	20814m	1.604	ppbv		
10) Heptane	4.978	43	16872m	0.489	ppbv		
11) Trichlorofluoromethane	1.877	101	5432	0.201	ppbv		87
13) Ethanol	1.719	45	57647	46.985	ppbv		83
15) Acetone	1.835	43	64251	2.447	ppbv	#	82
17) tert-Butyl alcohol	2.043	59	12249	0.375	ppbv	#	83
20) Methylene Chloride	2.059	84	3376	0.345	ppbv	#	91
26) Hexane	2.826	57	60389	2.294	ppbv	#	34
29) Chloroform	2.845	83	4455	0.116	ppbv		92
30) Cyclohexane	3.849	84	5046m	0.221	ppbv		
34) 2-Butanone	2.564	43	16547	0.424	ppbv		96
35) Carbon Tetrachloride	3.758	117	2811m	0.067	ppbv		
36) Benzene	3.654	78	35891	0.672	ppbv	#	90
44) 2,2,4-Trimethylpentane	4.638	57	33449m	0.371	ppbv		
50) 4-Methyl-2-Pentanone	5.765	43	26447	0.427	ppbv		99
53) Toluene	6.933	91	146301	2.312	ppbv		99
58) Ethyl Benzene	9.351	91	33902	0.388	ppbv	#	89
59) m/p-Xylene	9.532	91	96658	1.387	ppbv		97
60) o-Xylene	9.959	91	45203	0.647	ppbv		99
61) Styrene	9.872	104	4574m	0.132	ppbv		
72) 4-Ethyltoluene	11.125	105	17501	0.201	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.199	105	13983	0.184	ppbv		97
74) 1,2,4-Trimethylbenzene	11.536	105	47154	0.539	ppbv	#	63

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

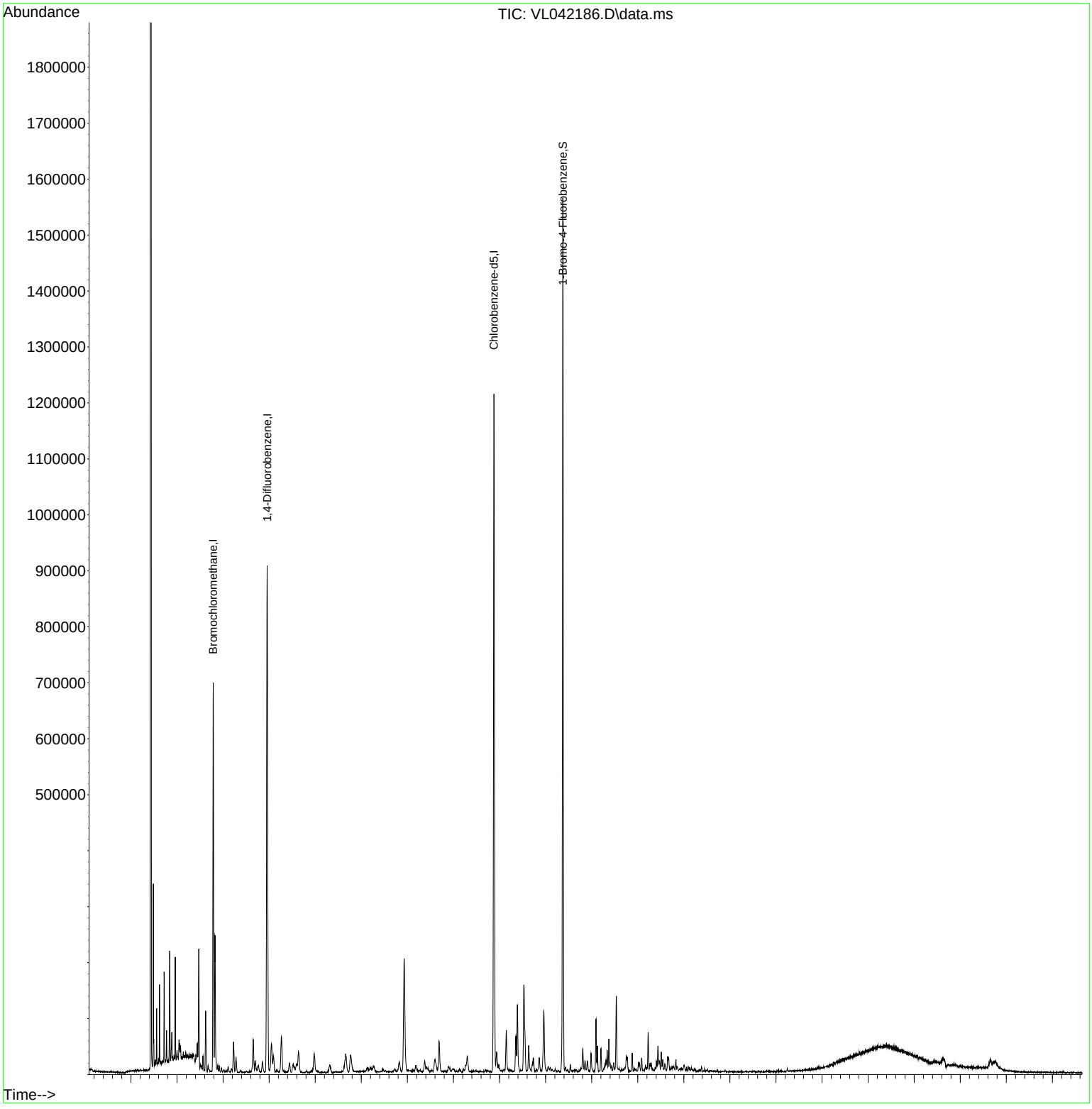
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

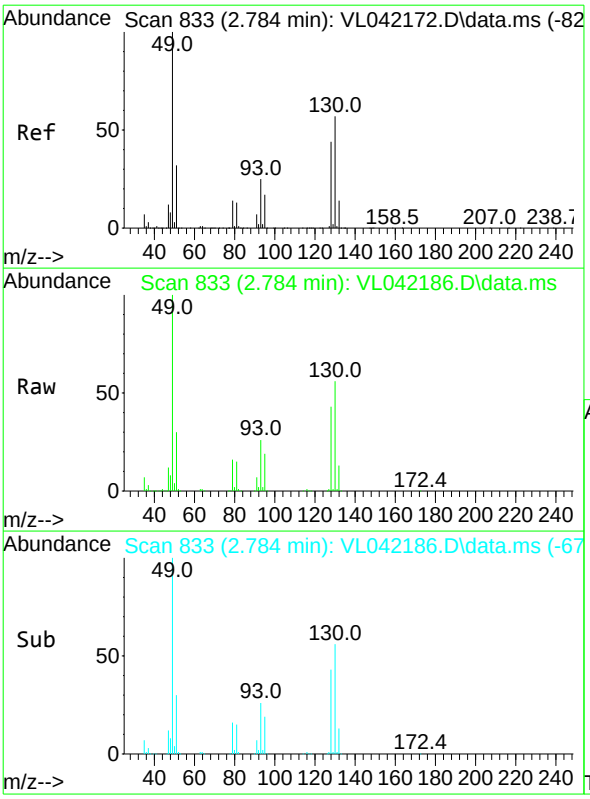
Quant Time: Mar 28 02:15:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

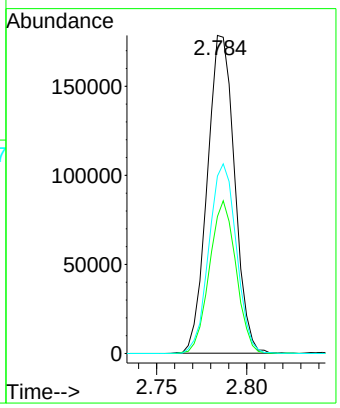




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 49 Resp: 187729

Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	60.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations
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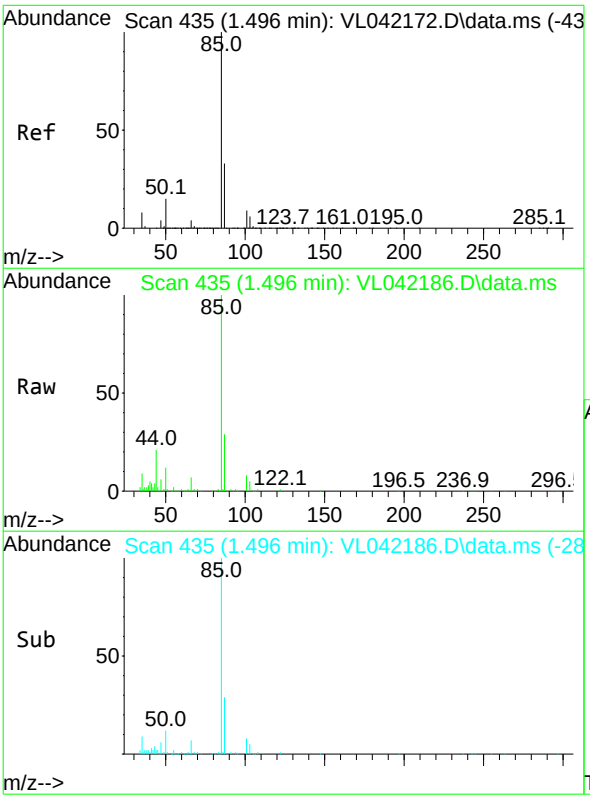
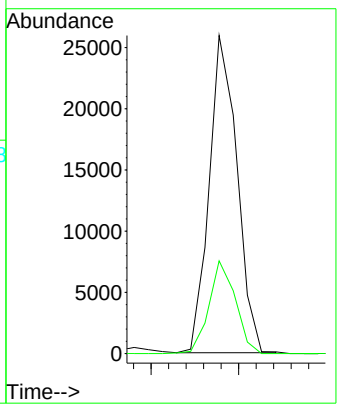
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

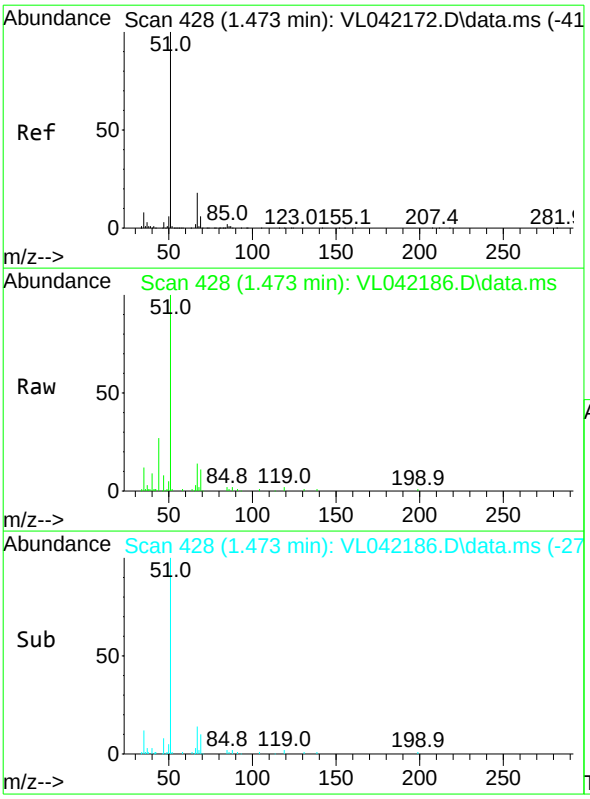


#2
Dichlorodifluoromethane
Concen: 0.414 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 85 Resp: 11483

Ion	Ratio	Lower	Upper
85	100		
87	29.2	26.1	39.1

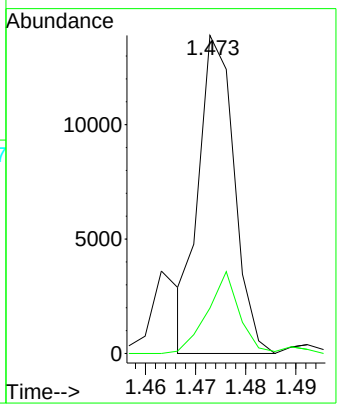




#3
Chlorodifluoromethane
Concen: 0.241 ppbv m
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 51 Resp: 6817

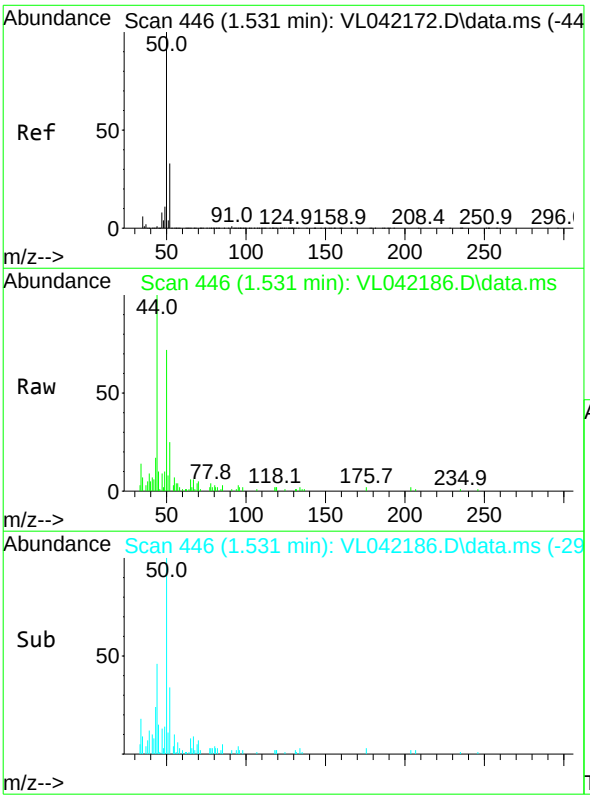
Ion	Ratio	Lower	Upper
51	100		
67	26.8	15.0	22.6#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations
APPROVED

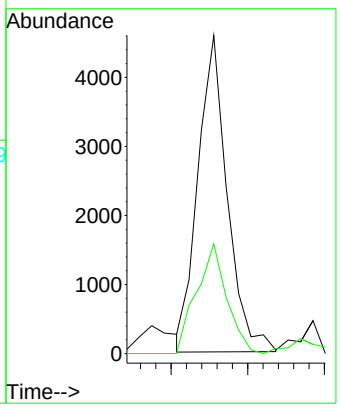
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

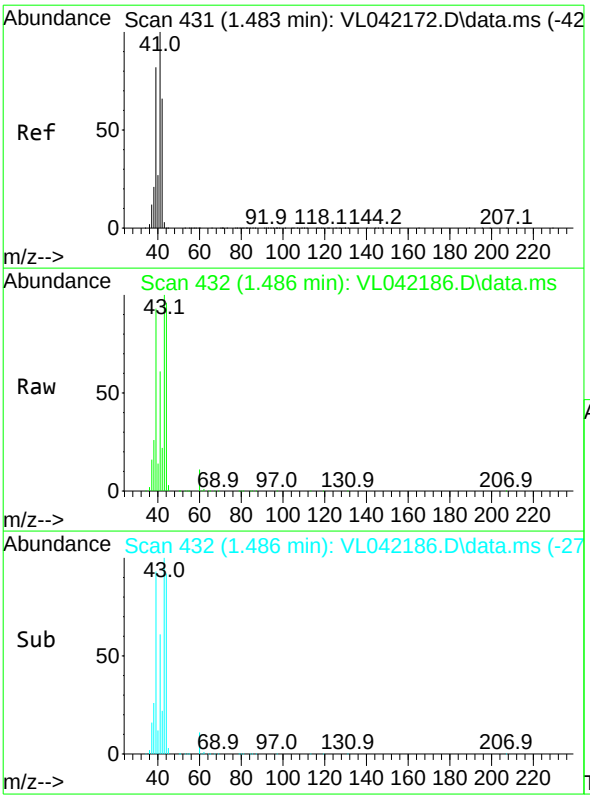


#4
Chloromethane
Concen: 0.215 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 50 Resp: 2440

Ion	Ratio	Lower	Upper
50	100		
52	34.9	26.1	39.1

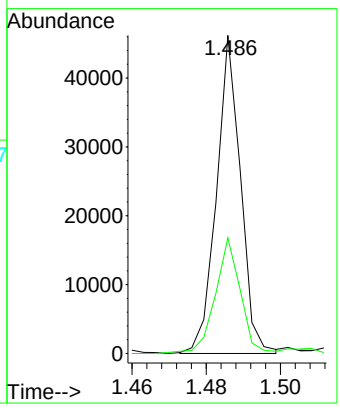




#9
Propene
Concen: 1.604 ppbv m
RT: 1.486 min Scan# 43
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 41 Resp: 20814

Ion	Ratio	Lower	Upper
41	100		
42	32.6	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 03/31/2025
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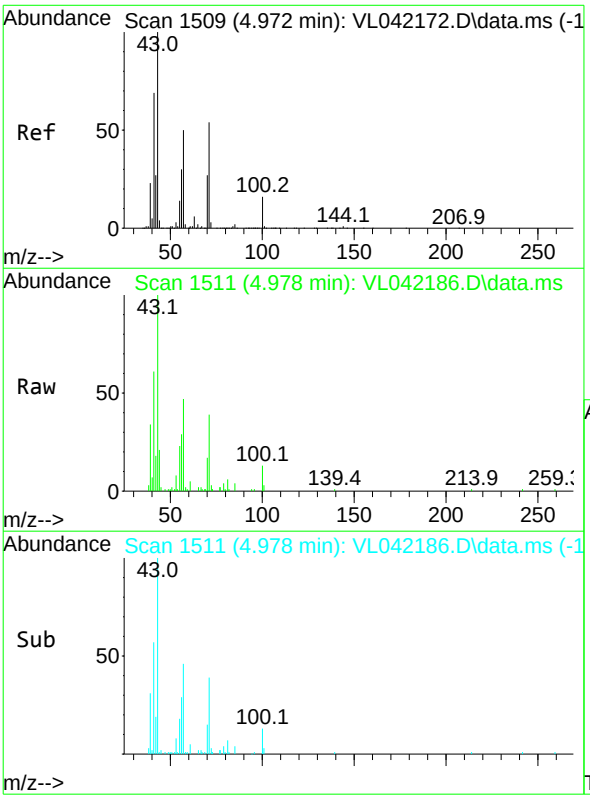
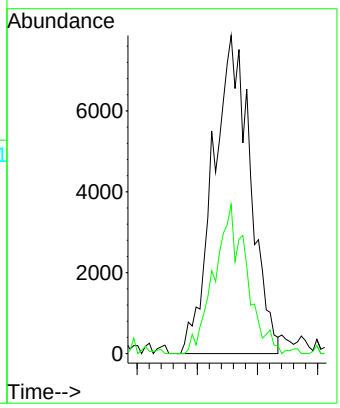
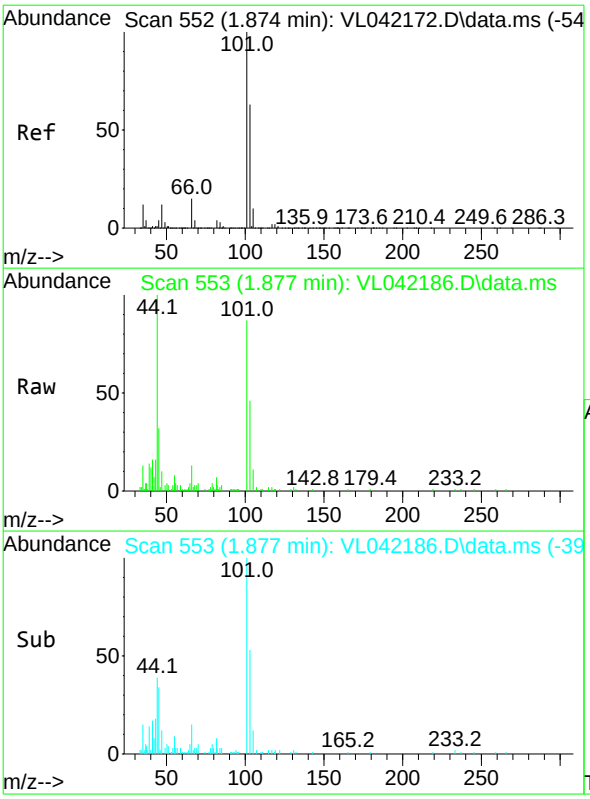


#10
Heptane
Concen: 0.489 ppbv m
RT: 4.978 min Scan# 1511
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 43 Resp: 16872

Ion	Ratio	Lower	Upper
43	100		
57	41.3	39.4	59.2

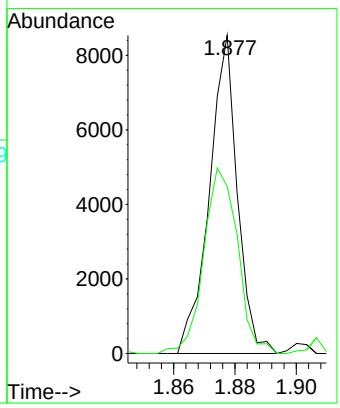




#11
Trichlorofluoromethane
Concen: 0.201 ppbv
RT: 1.877 min Scan# 55
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:101 Resp: 5432

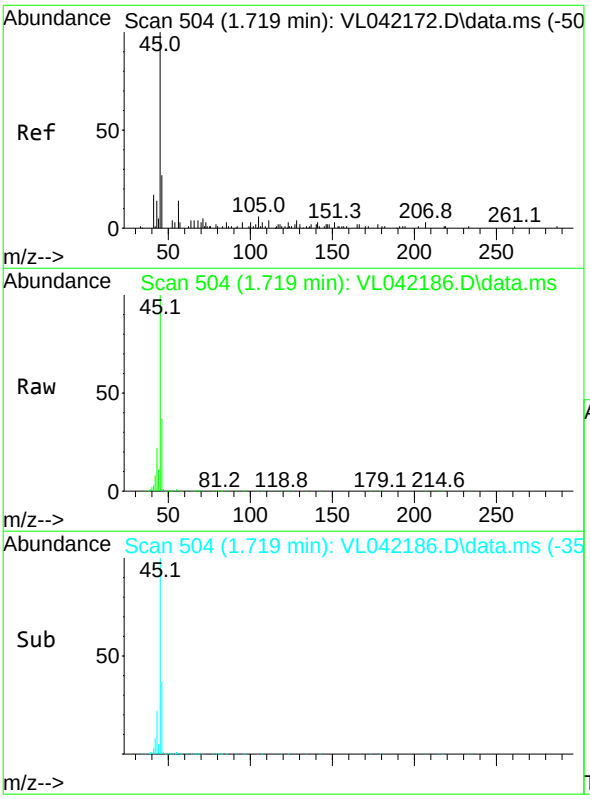
Ion	Ratio	Lower	Upper
101	100		
103	52.5	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations
APPROVED

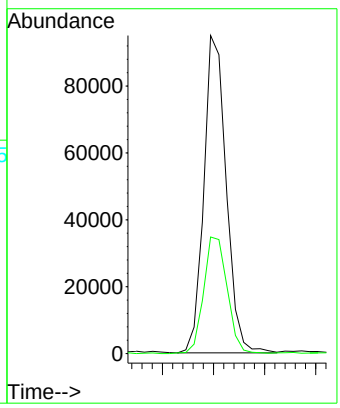
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

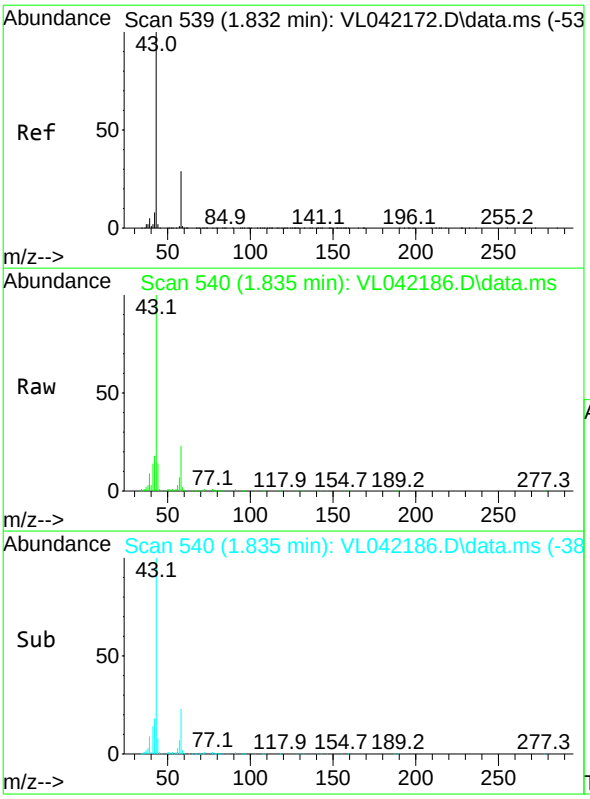


#13
Ethanol
Concen: 46.985 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 45 Resp: 57647

Ion	Ratio	Lower	Upper
45	100		
46	39.0	20.2	80.8

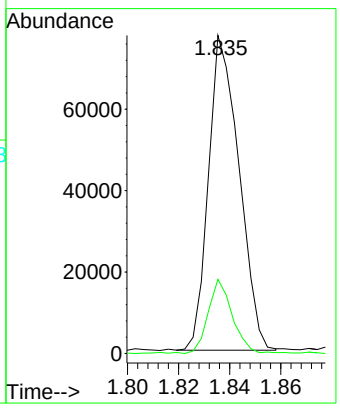




#15
Acetone
Concen: 2.447 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 43 Resp: 64251

Ion	Ratio	Lower	Upper
43	100		
58	19.2	23.2	34.8#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations
APPROVED

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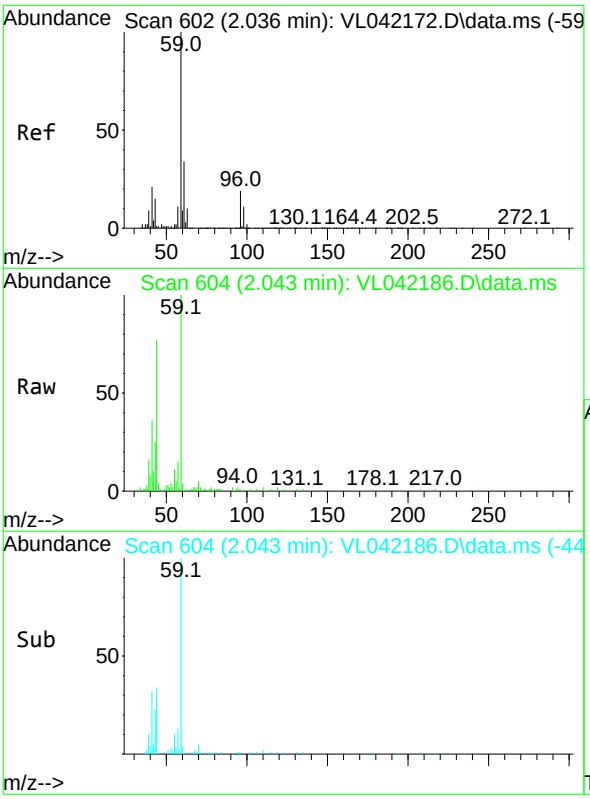
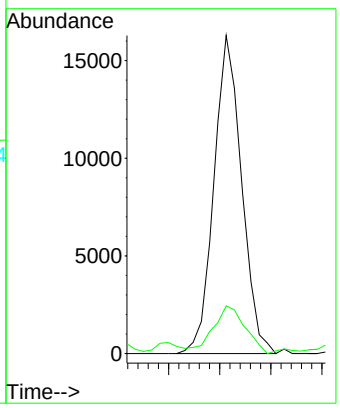
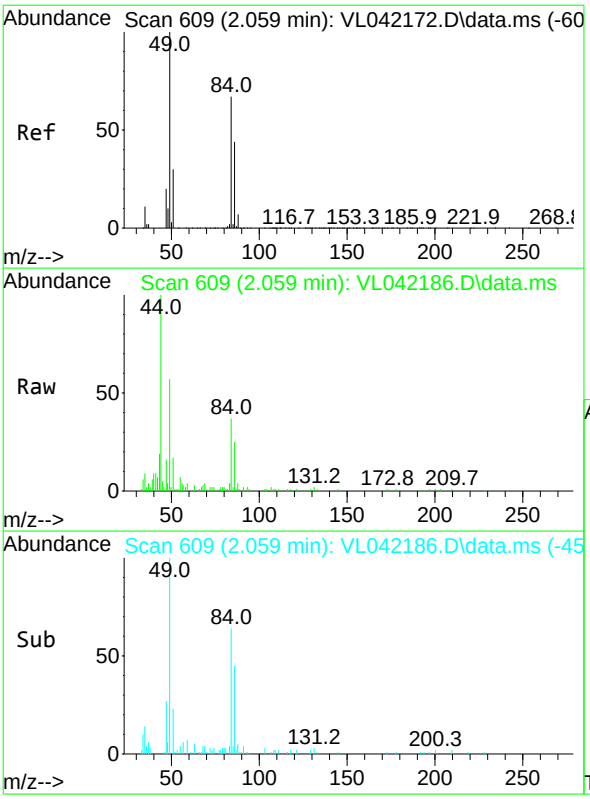


#17
tert-Butyl alcohol
Concen: 0.375 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 59 Resp: 12249

Ion	Ratio	Lower	Upper
59	100		
57	17.6	8.9	13.3#

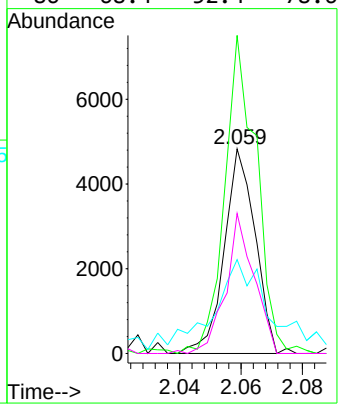




#20
Methylene Chloride
Concen: 0.345 ppbv
RT: 2.059 min Scan# 60
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 84 Resp: 3376

Ion	Ratio	Lower	Upper
84	100		
49	161.5	120.2	180.4
51	34.0	37.4	56.0#
86	68.4	52.4	78.6



Instrument :
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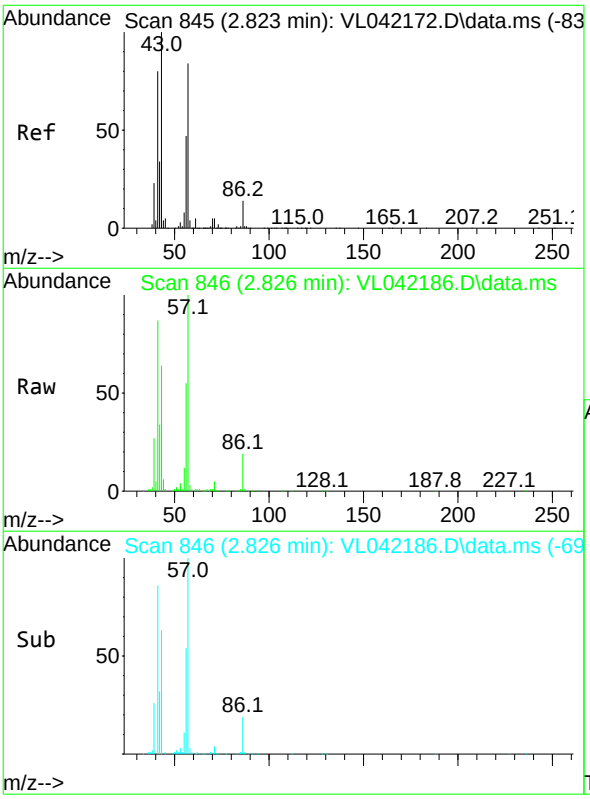
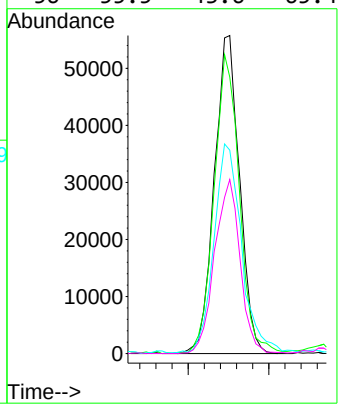
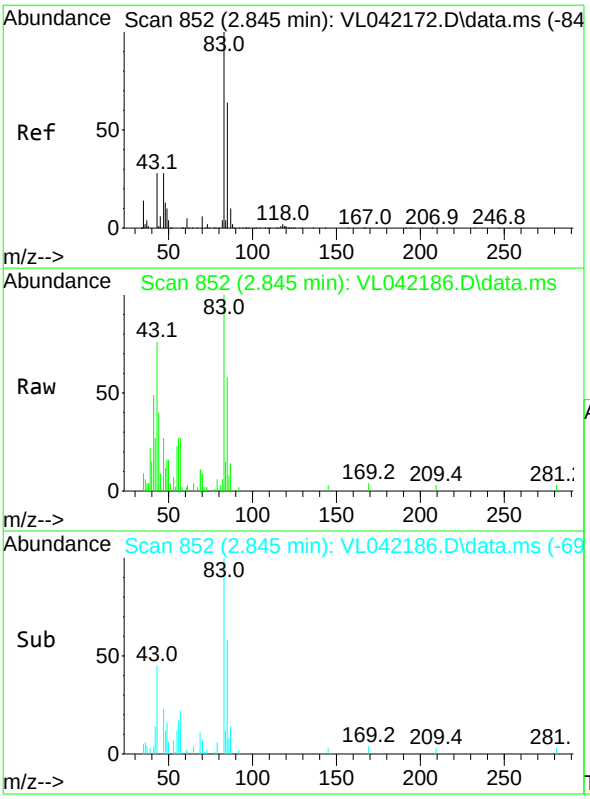


#26
Hexane
Concen: 2.294 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 57 Resp: 60389

Ion	Ratio	Lower	Upper
57	100		
41	94.6	76.6	114.8
43	73.8	207.8	311.8#
56	55.5	43.6	65.4





#29
Chloroform
Concen: 0.116 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 83 Resp: 4455

Ion	Ratio	Lower	Upper
83	100		
85	58.3	51.4	77.2

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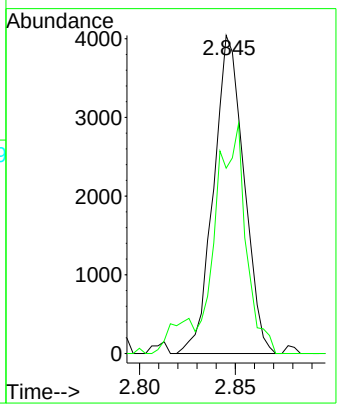
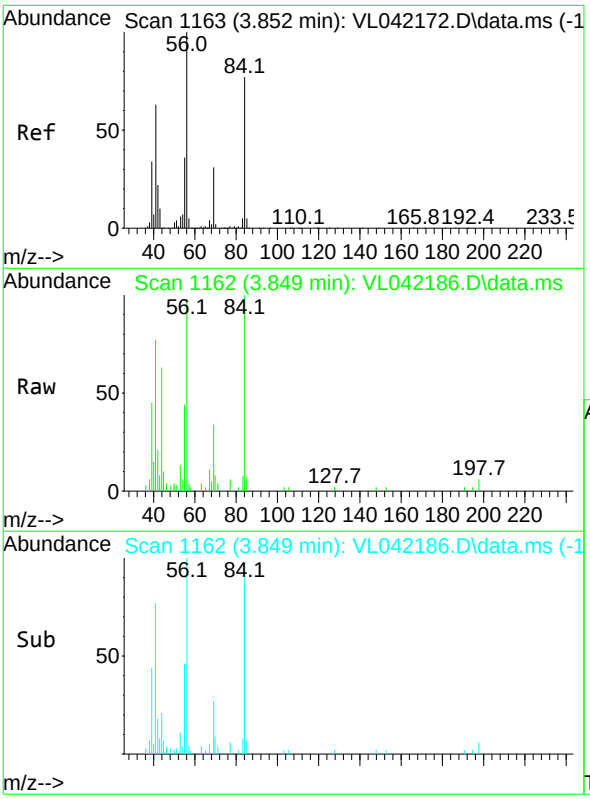
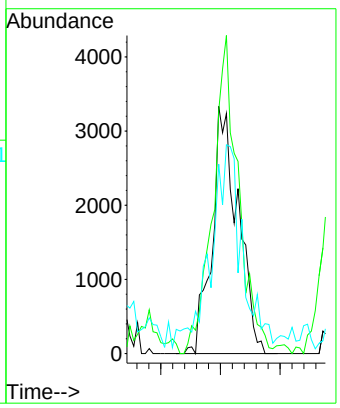


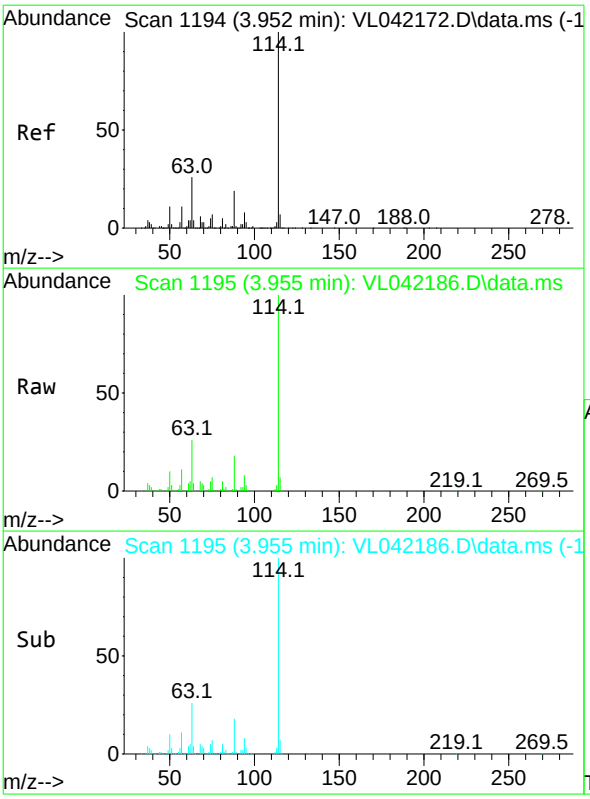


#30
Cyclohexane
Concen: 0.221 ppbv m
RT: 3.849 min Scan# 1162
Delta R.T. -0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 84 Resp: 5046

Ion	Ratio	Lower	Upper
84	100		
56	127.6	102.8	154.2
41	90.5	66.5	99.7

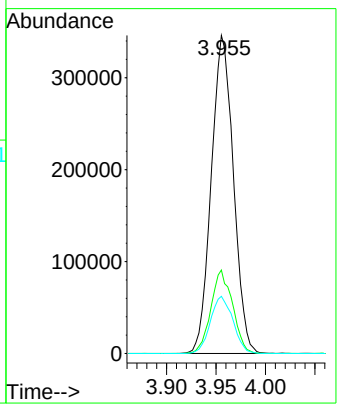




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:114 Resp: 538422

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.3	15.0	22.4



Instrument :
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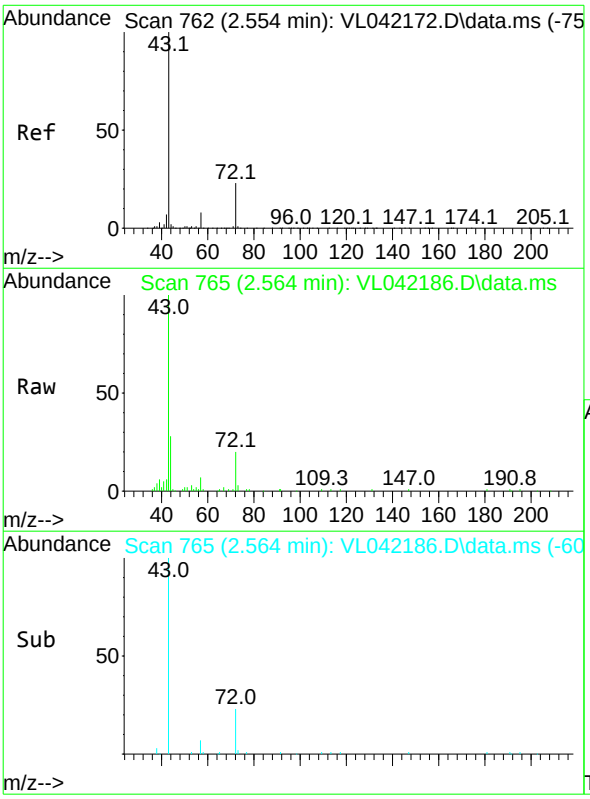
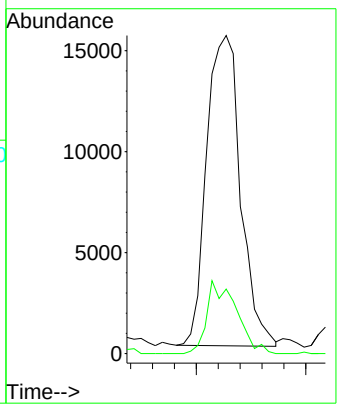
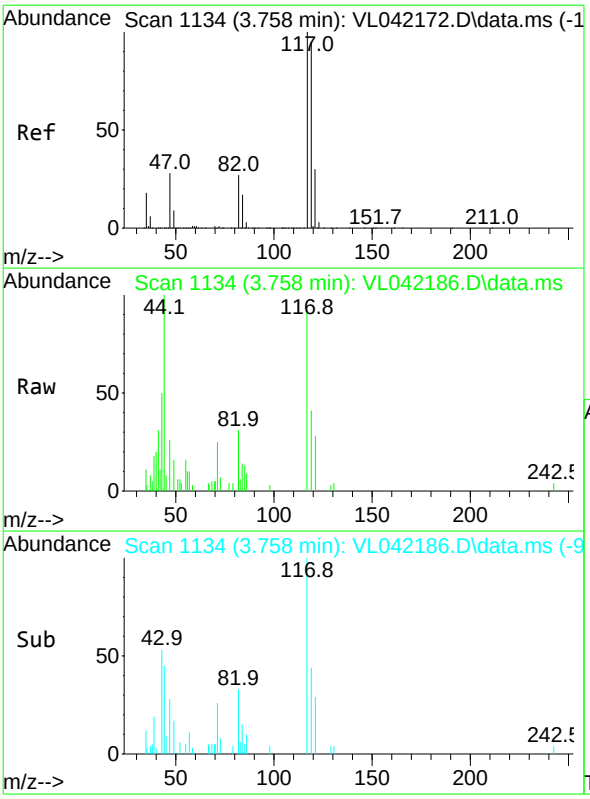


#34
2-Butanone
Concen: 0.424 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.009 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 43 Resp: 16547

Ion	Ratio	Lower	Upper
43	100		
72	20.6	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.067 ppbv m
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:117 Resp: 2811

Ion	Ratio	Lower	Upper
117	100		
119	43.5	76.2	114.2#
121	29.3	24.2	36.4

Instrument :
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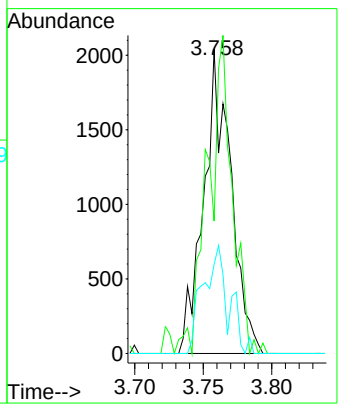
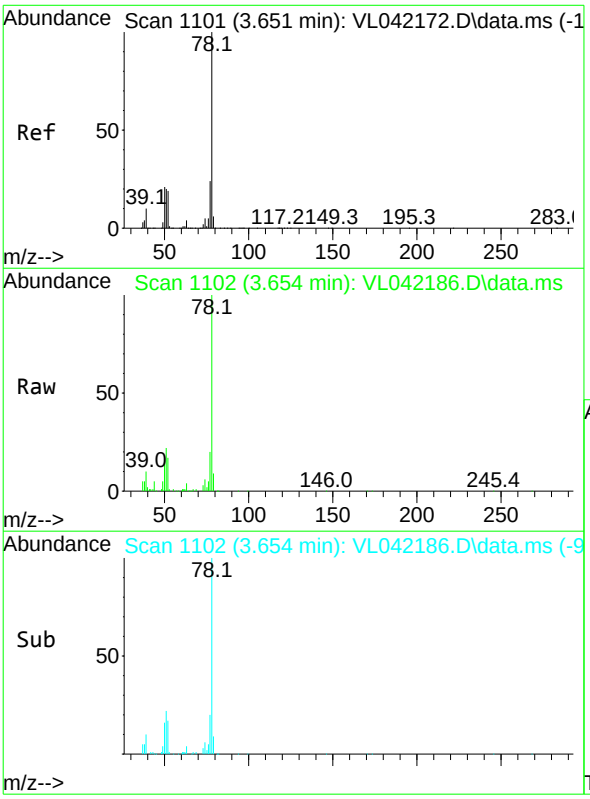
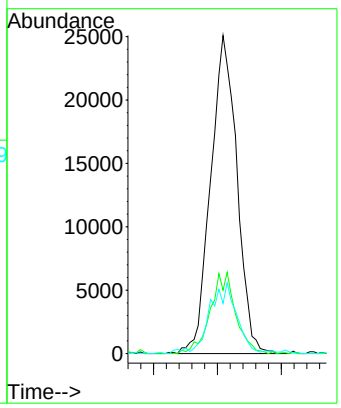


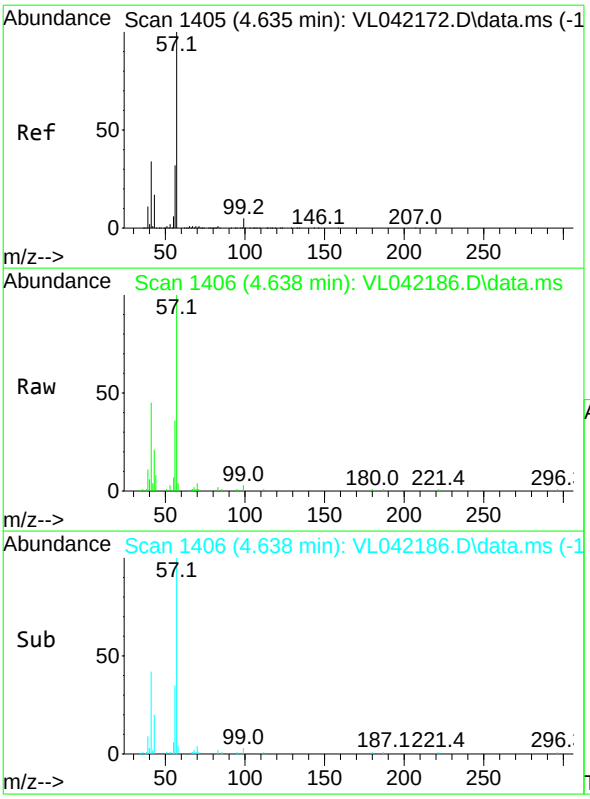


#36
Benzene
Concen: 0.672 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 78 Resp: 35891

Ion	Ratio	Lower	Upper
78	100		
77	19.9	19.1	28.7
50	15.3	16.6	24.8#

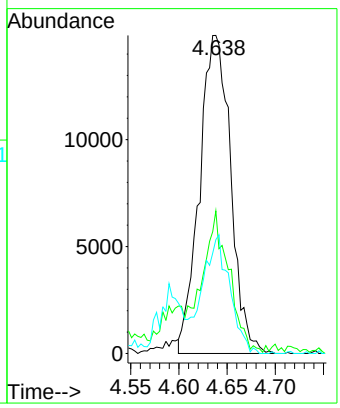




#44
2,2,4-Trimethylpentane
Concen: 0.371 ppbv m
RT: 4.638 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 57 Resp: 33449

Ion	Ratio	Lower	Upper
57	100		
41	49.4	26.8	40.2#
56	33.6	25.6	38.4



Instrument :
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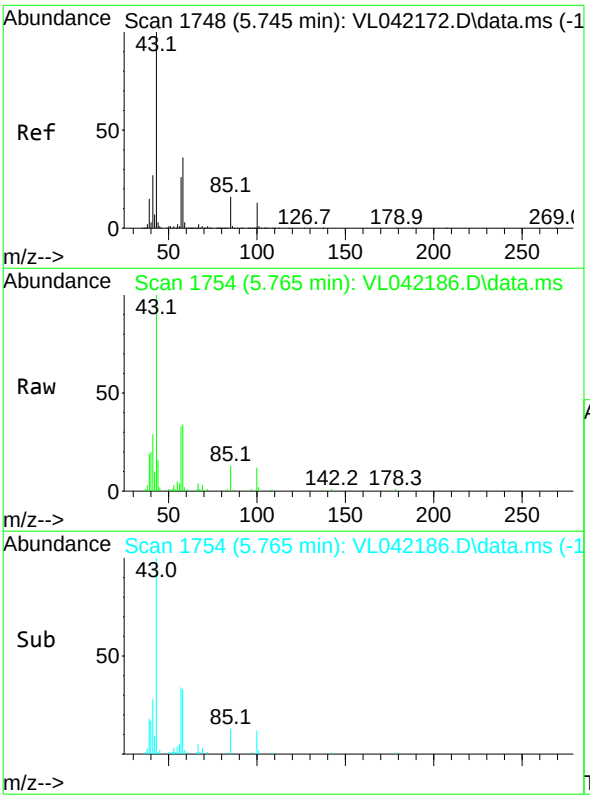
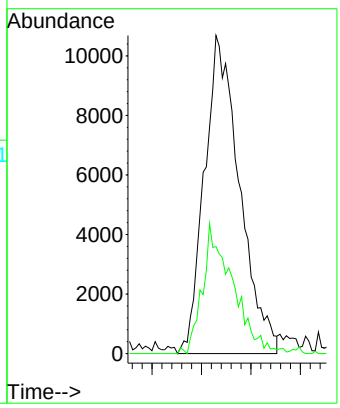
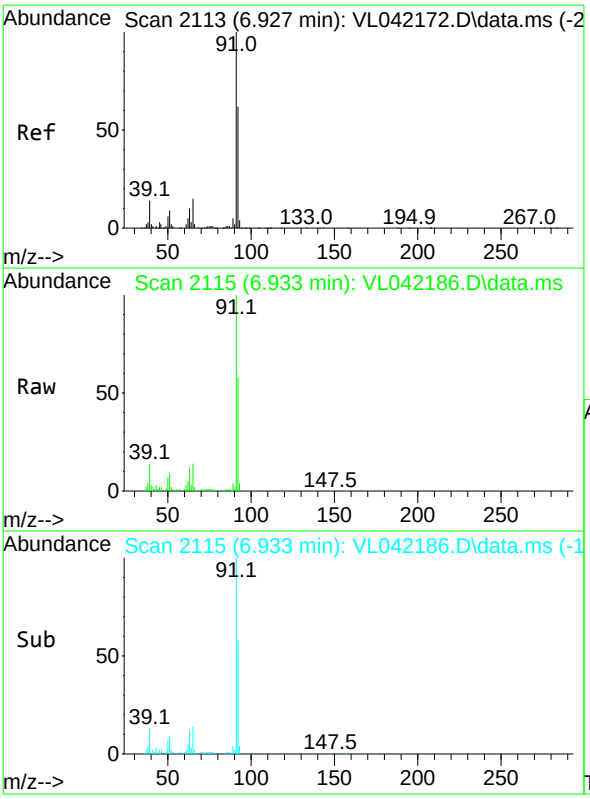


#50
4-Methyl-2-Pentanone
Concen: 0.427 ppbv
RT: 5.765 min Scan# 1754
Delta R.T. 0.019 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 43 Resp: 26447

Ion	Ratio	Lower	Upper
43	100		
58	35.4	29.0	43.6





#53
Toluene
Concen: 2.312 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 91 Resp: 146301

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.4	72.6

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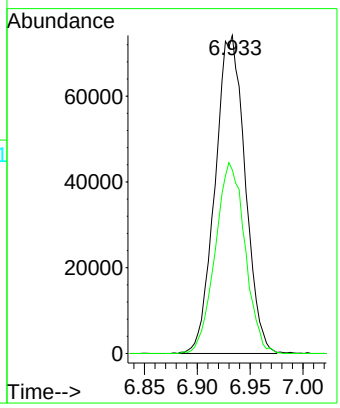
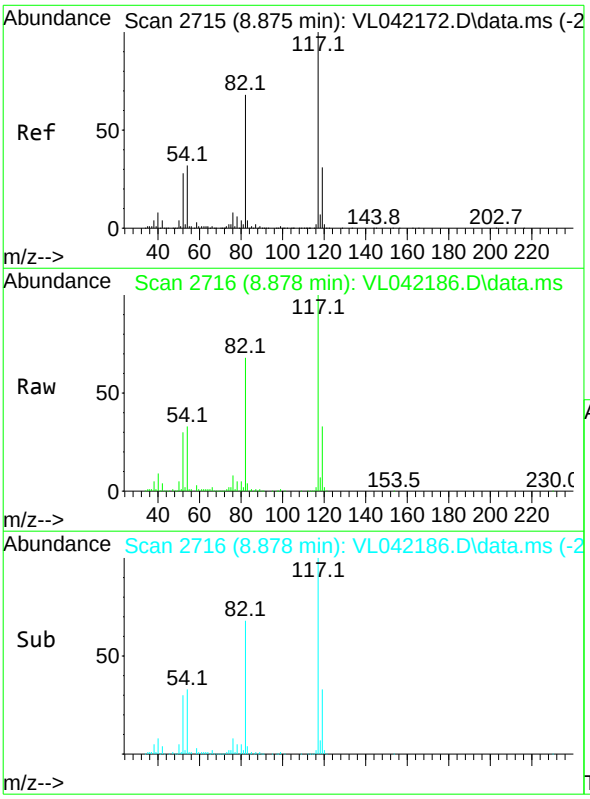
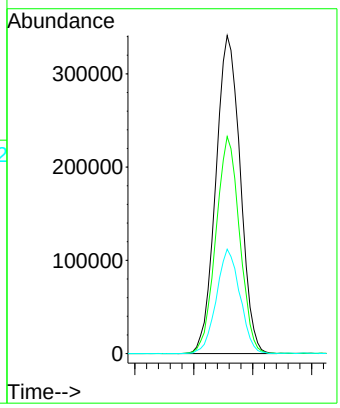


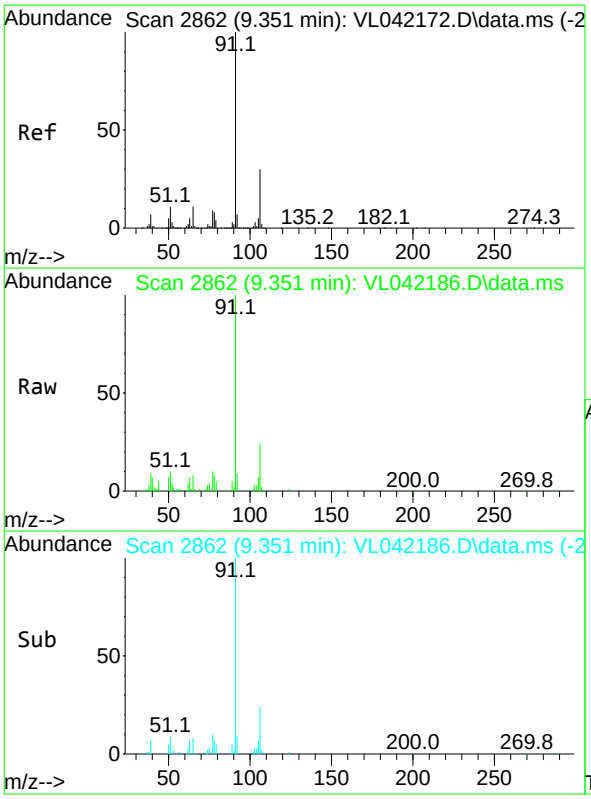


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:117 Resp: 491411

Ion	Ratio	Lower	Upper
117	100		
82	66.3	55.8	83.6
119	31.8	25.5	38.3





#58
Ethyl Benzene
Concen: 0.388 ppbv
RT: 9.351 min Scan# 28
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 91 Resp: 33902

Ion	Ratio	Lower	Upper
91	100		
106	24.0	24.2	36.2#

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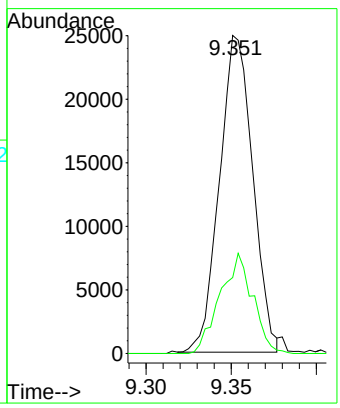
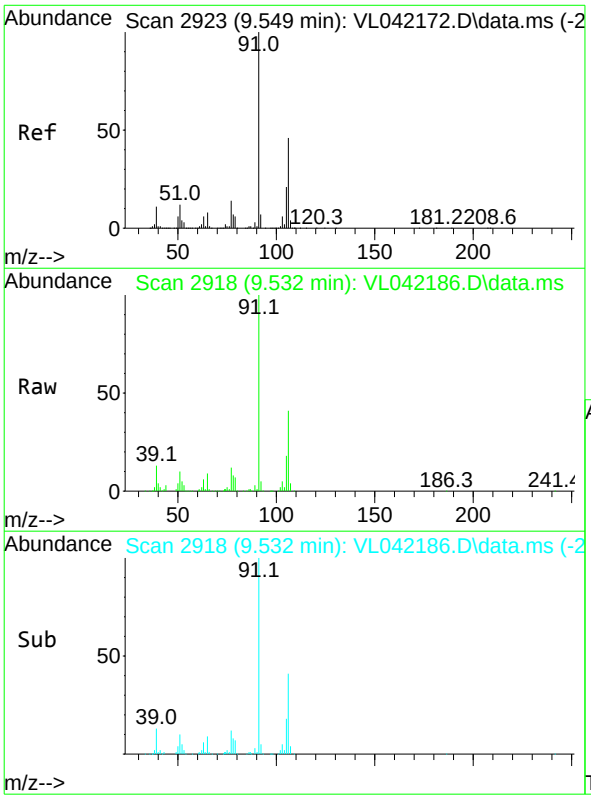
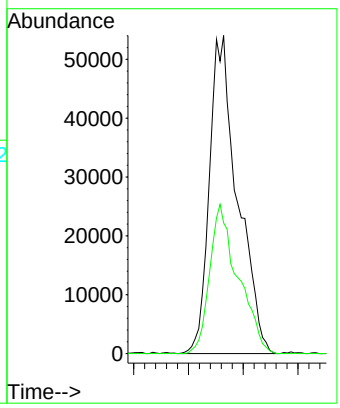


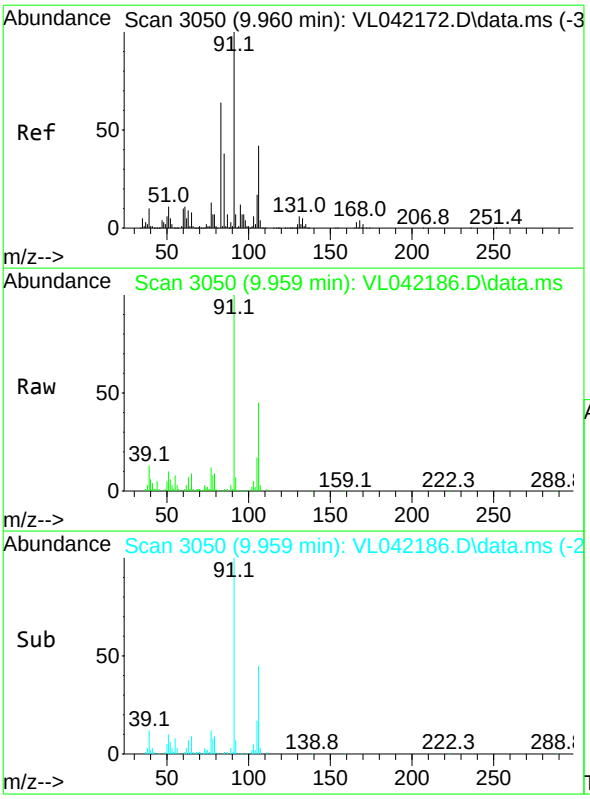


#59
m/p-Xylene
Concen: 1.387 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 91 Resp: 96658

Ion	Ratio	Lower	Upper
91	100		
106	47.3	36.4	54.6

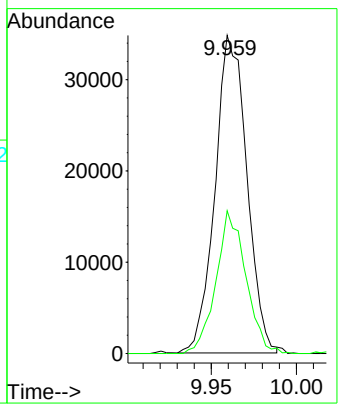




#60
o-Xylene
Concen: 0.647 ppbv
RT: 9.959 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 91 Resp: 45203

Ion	Ratio	Lower	Upper
91	100		
106	42.1	20.8	62.5



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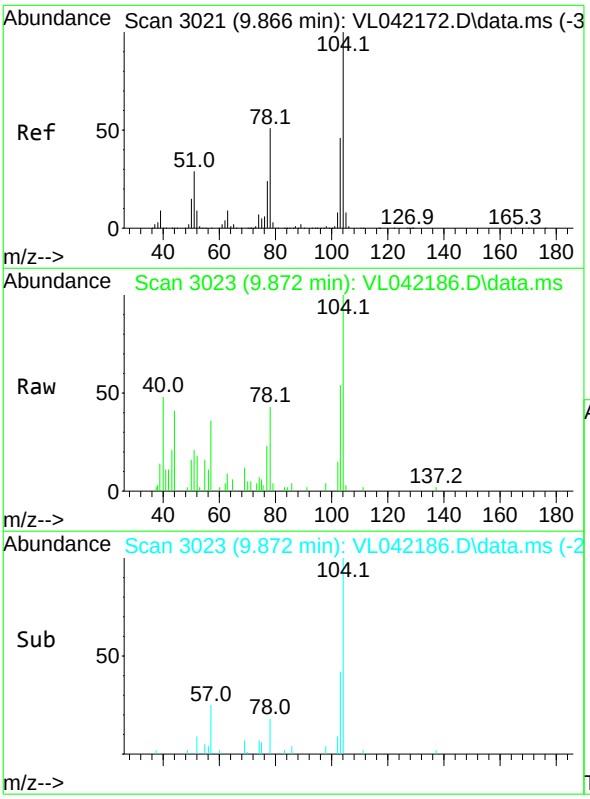
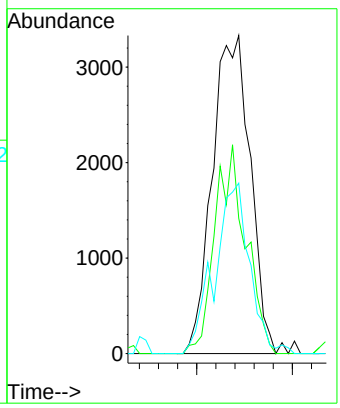
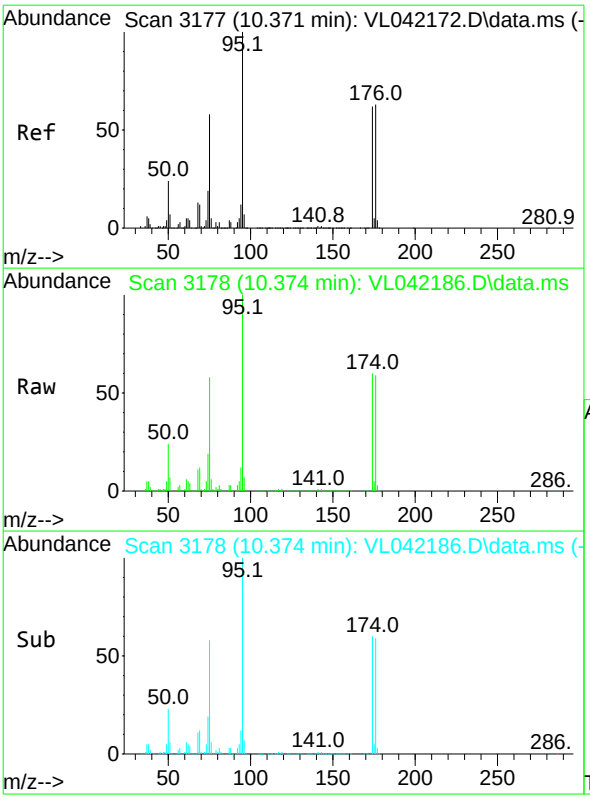


#61
Styrene
Concen: 0.132 ppbv m
RT: 9.872 min Scan# 3023
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:104 Resp: 4574

Ion	Ratio	Lower	Upper
104	100		
78	53.8	41.8	62.6
103	49.7	37.0	55.4

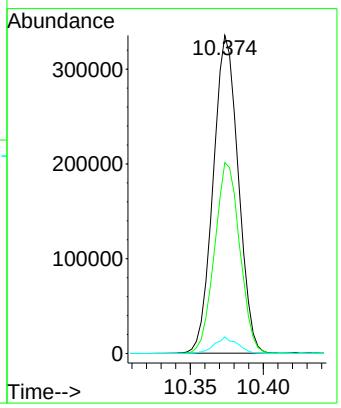




#68
1-Bromo-4-Fluorobenzene
Concen: 9.915 ppbv
RT: 10.374 min Scan# 31
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 95 Resp: 400118

Ion	Ratio	Lower	Upper
95	100		
174	60.8	50.6	76.0
175	4.7	3.8	5.6



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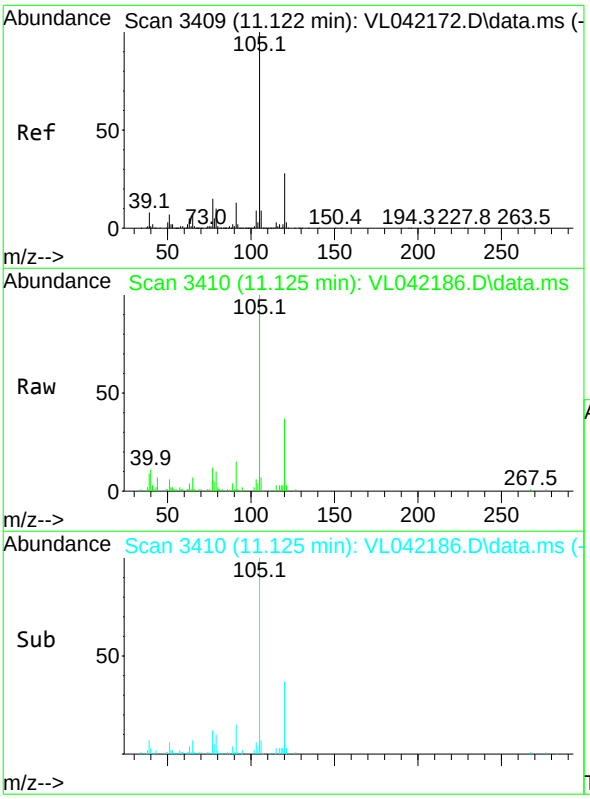
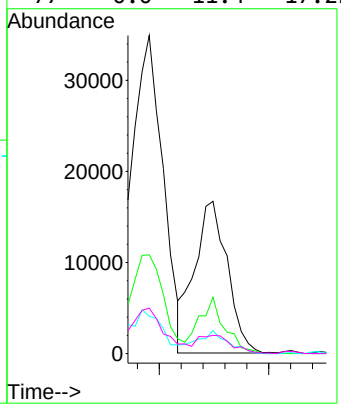
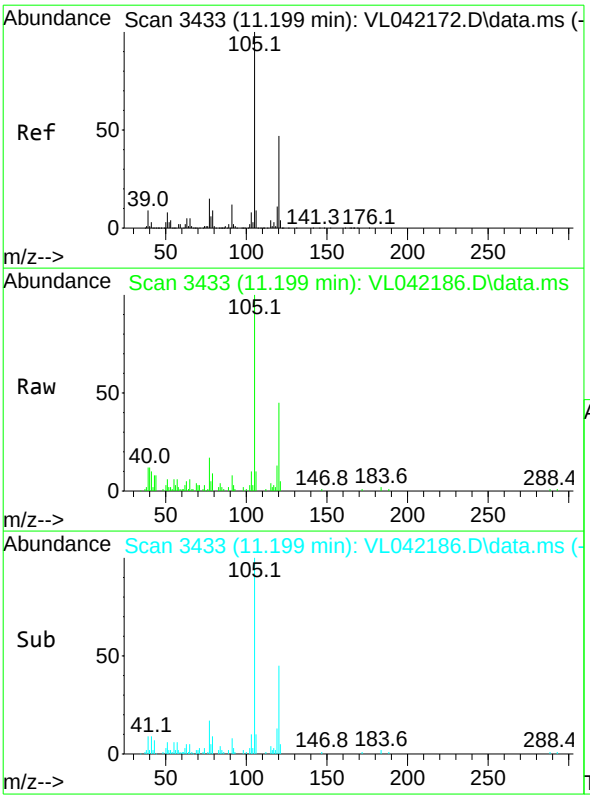


#72
4-Ethyltoluene
Concen: 0.201 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:105 Resp: 17501

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#





#73
1,3,5-Trimethylbenzene
Concen: 0.184 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

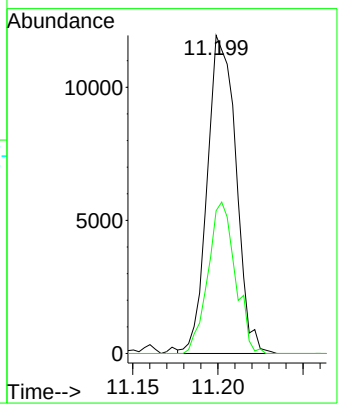
Tgt Ion:105 Resp: 13983

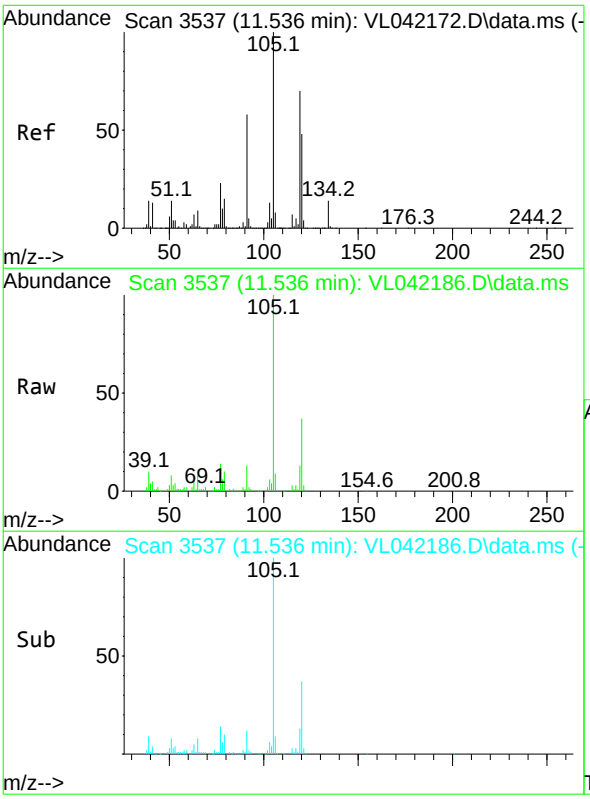
Ion	Ratio	Lower	Upper
105	100		
120	44.9	37.4	56.0

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

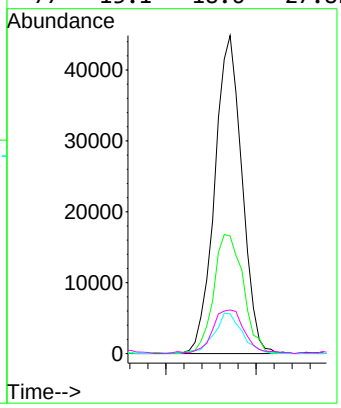




#74
1,2,4-Trimethylbenzene
Concen: 0.539 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:105 Resp: 47154

Ion	Ratio	Lower	Upper
105	100		
120	36.7	38.6	58.0#
91	12.5	46.2	69.2#
77	13.1	18.6	27.8#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042186.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4303548	4795170	100.00%	32.841%
2	1.486	429	432	434	rBV2	307202	123557	2.58%	0.846%
3	1.557	449	454	458	rBV	100250	52111	1.09%	0.357%
4	1.619	469	473	478	rVB	142346	76014	1.59%	0.521%
5	1.719	500	504	511	rBV	161929	101287	2.11%	0.694%
6	1.842	536	542	547	rBV2	197334	173957	3.63%	1.191%
7	1.962	574	579	584	rVB	183111	122346	2.55%	0.838%
8	2.473	730	737	744	rVB	214024	224166	4.67%	1.535%
9	2.622	777	783	792	rVB3	108383	115880	2.42%	0.794%
10	2.787	825	834	840	rBV	694264	726146	15.14%	4.973%
11	2.823	840	845	857	rVB	240227	281126	5.86%	1.925%
12	3.227	962	970	978	rBV2	53402	73831	1.54%	0.506%
13	3.654	1088	1102	1110	rBV3	58471	97116	2.03%	0.665%
14	3.955	1182	1195	1208	rBV	904630	1423209	29.68%	9.747%
15	4.049	1213	1224	1233	rVV2	50557	102997	2.15%	0.705%
16	4.266	1278	1291	1303	rBV6	63418	121901	2.54%	0.835%
17	4.635	1398	1405	1422	rVB4	37530	79988	1.67%	0.548%
18	4.978	1499	1511	1524	rBV6	32059	65972	1.38%	0.452%
19	5.661	1704	1722	1725	rBV7	31939	63305	1.32%	0.434%
20	5.765	1743	1754	1766	rBV6	30726	80946	1.69%	0.554%
21	6.930	2098	2114	2131	rBV2	201761	429024	8.95%	2.938%
22	7.600	2308	2321	2335	rBV2	22312	65864	1.37%	0.451%
23	7.687	2339	2348	2360	rVB5	52904	94806	1.98%	0.649%
24	8.302	2530	2538	2551	rVB8	27131	56654	1.18%	0.388%
25	8.878	2700	2716	2727	rBV	1212253	1755500	36.61%	12.023%
26	9.147	2791	2799	2812	rVB	72154	100197	2.09%	0.686%
27	9.354	2851	2863	2868	rBV2	63796	94942	1.98%	0.650%
28	9.390	2868	2874	2889	rVB	119934	174086	3.63%	1.192%
29	9.529	2907	2917	2934	rVB3	155116	302259	6.30%	2.070%
30	9.632	2939	2949	2965	rVB3	45857	71160	1.48%	0.487%
31	9.959	3036	3050	3064	rBV3	107163	193494	4.04%	1.325%
32	10.374	3162	3178	3188	rBV	1562482	1931984	40.29%	13.232%
33	11.095	3393	3401	3406	rBV	92871	106168	2.21%	0.727%
34	11.202	3427	3434	3443	rVB3	41074	48833	1.02%	0.334%
35	11.374	3480	3487	3493	rBV2	50694	49876	1.04%	0.342%
36	11.536	3528	3537	3549	rVB	131084	157166	3.28%	1.076%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	12.225	3745	3750	3757	rVB2	65690	68220	1.42%	0.467%

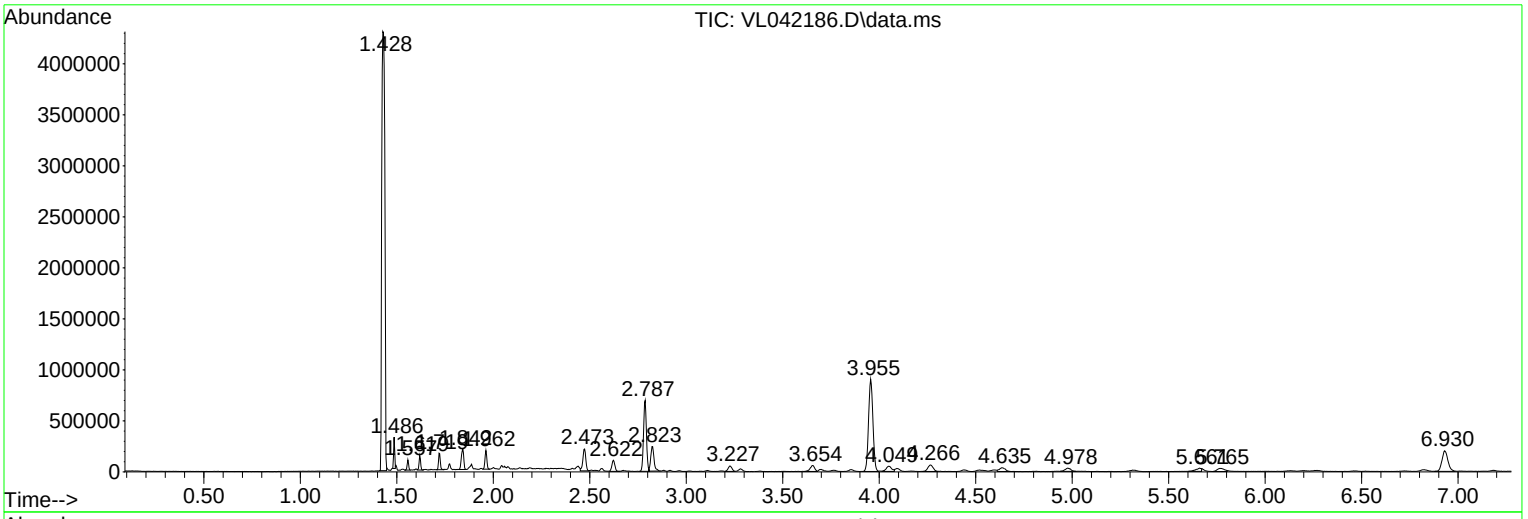
Sum of corrected areas: 14601258

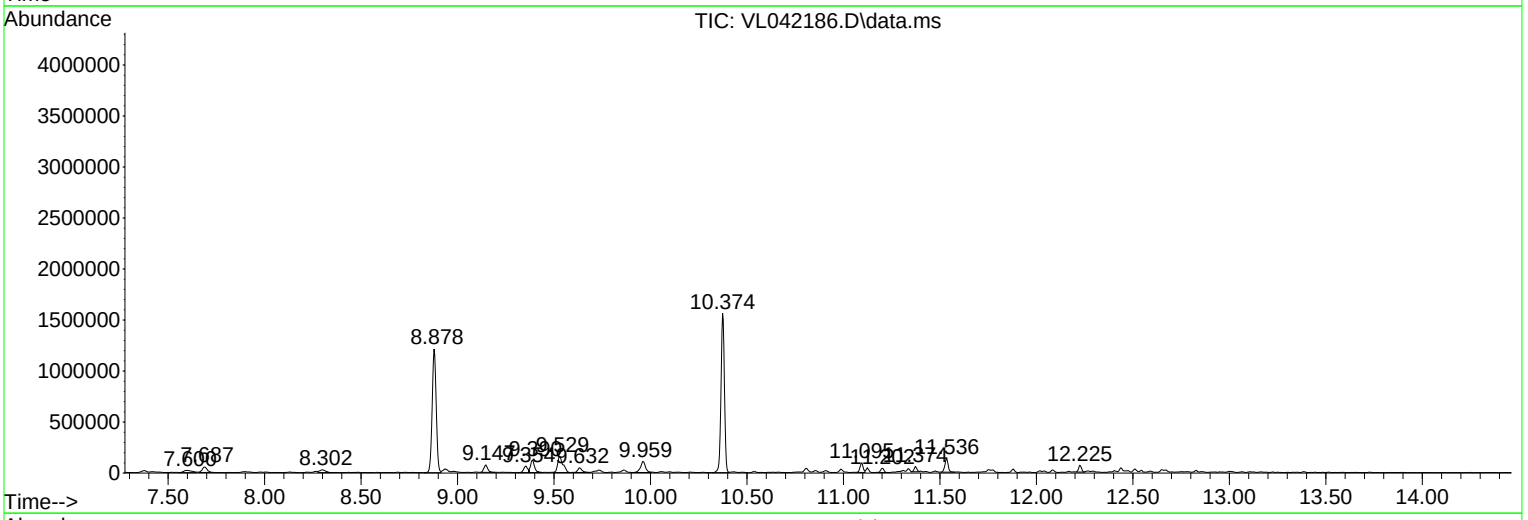
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

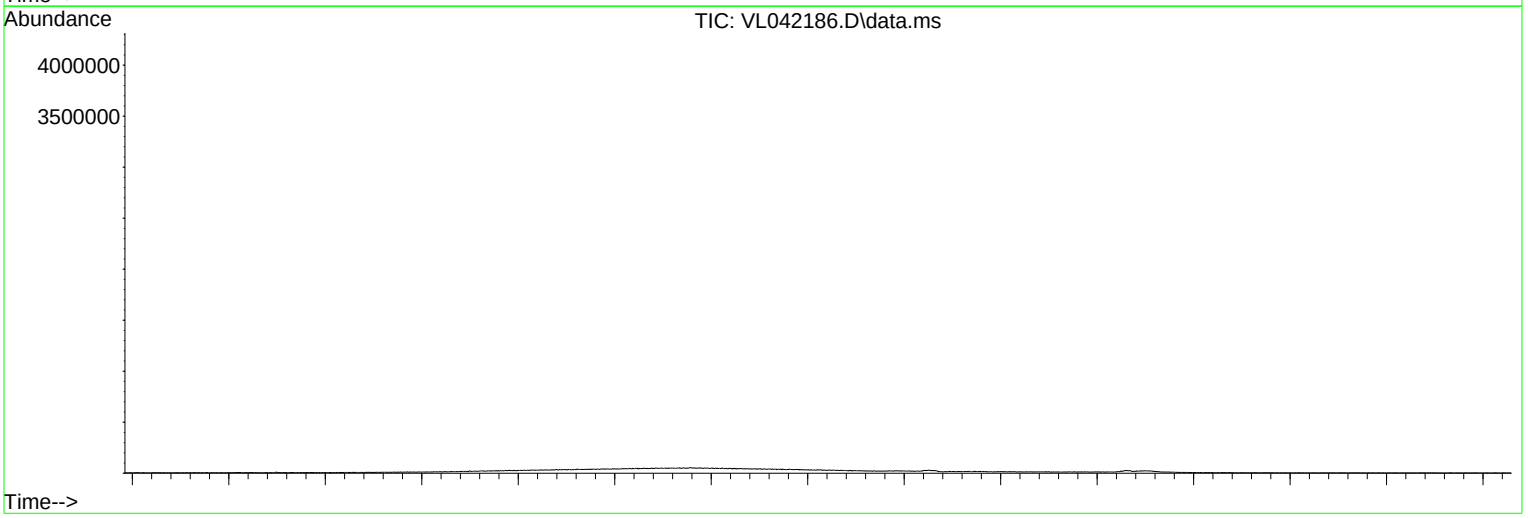
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

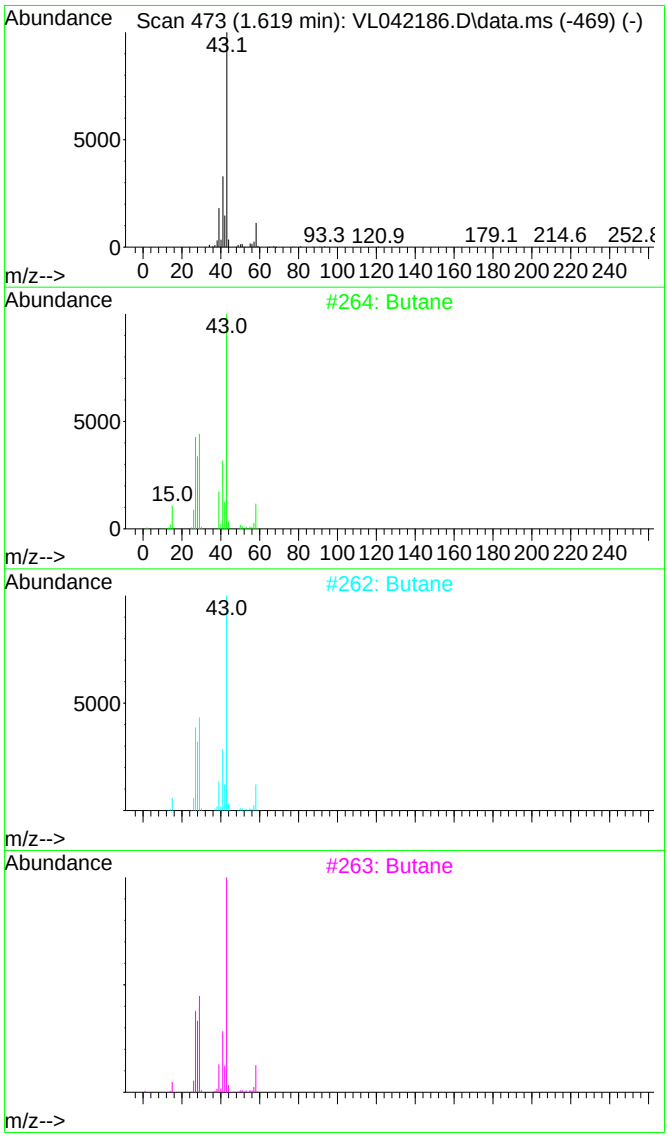
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

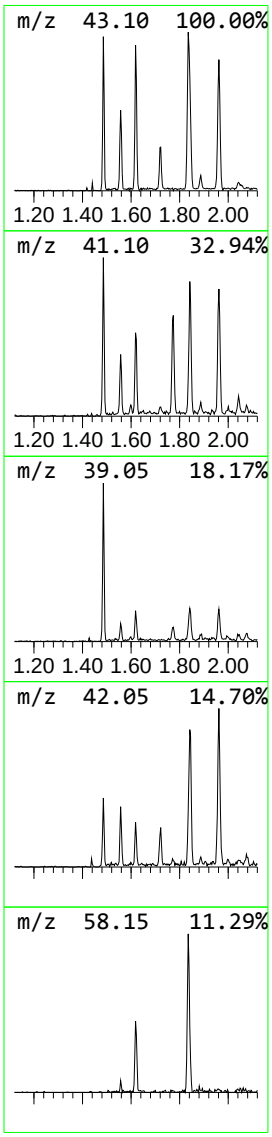
****

Peak Number 1 Butane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	1.05 ppbv	76014	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	9
5	Formic acid, chloro-, (3,4,4-tri...	194	C7H11ClO4	107323-92-2	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

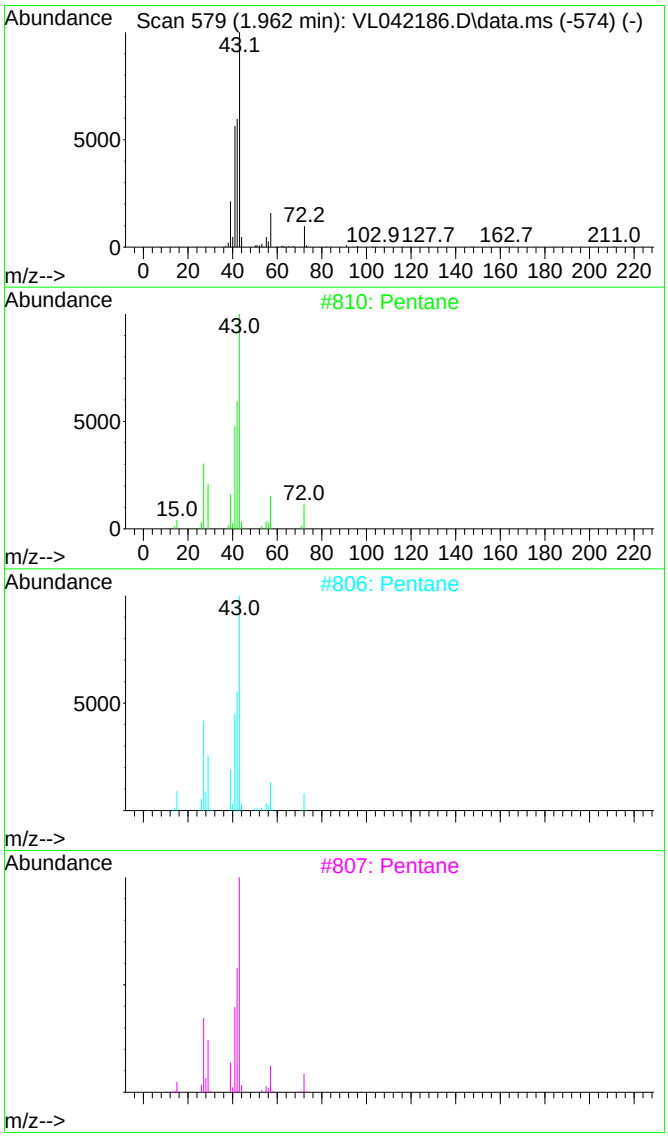
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

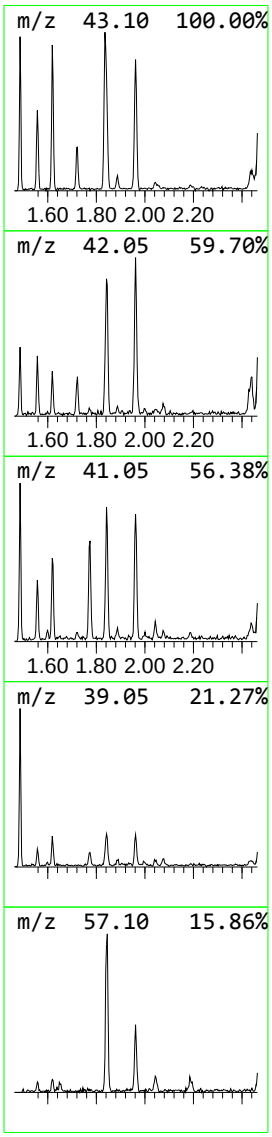
****

Peak Number 2 Pentane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.962	1.68 ppbv	122346	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	86
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	80
4	Pentane	72	C5H12	000109-66-0	72
5	Pentane	72	C5H12	000109-66-0	72





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

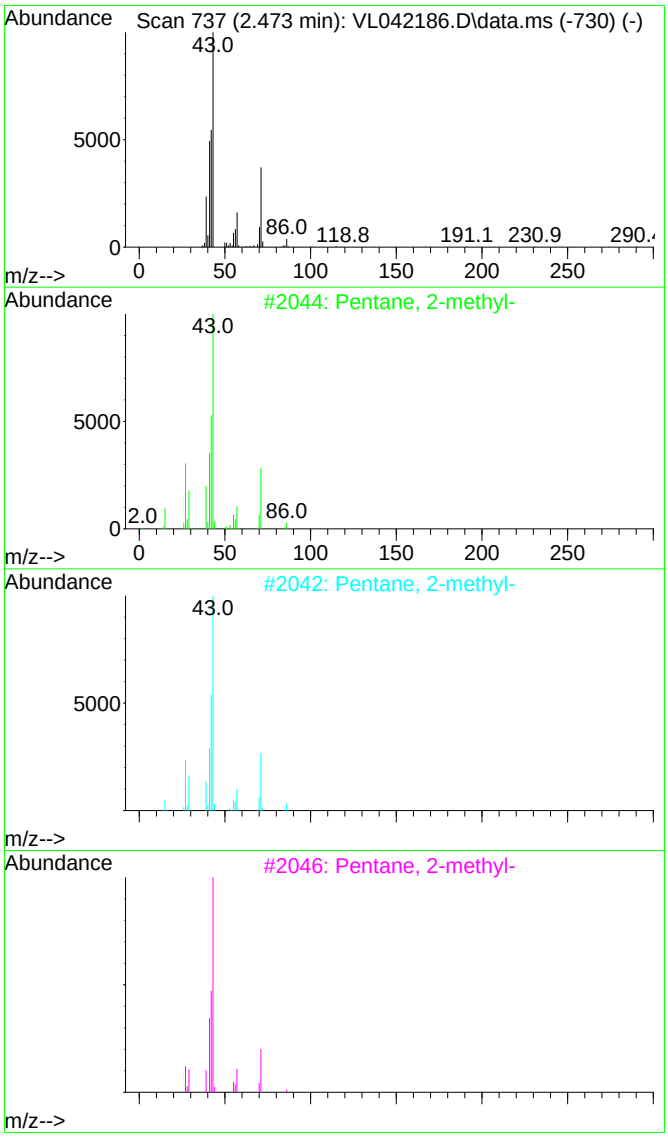
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

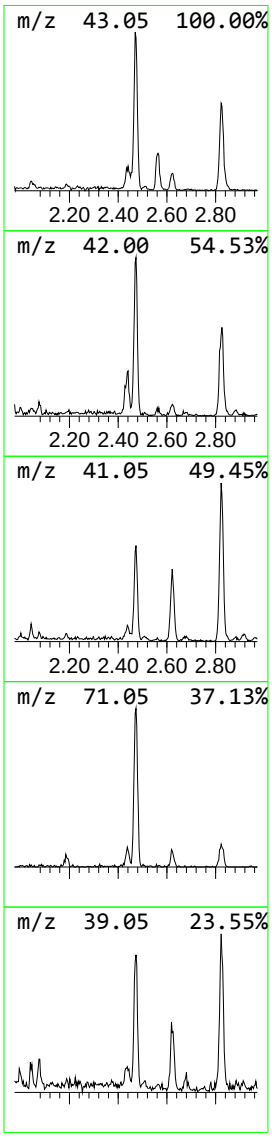
****

Peak Number 3 Pentane, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.473	3.09 ppbv	224166	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	83
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	83
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	78





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

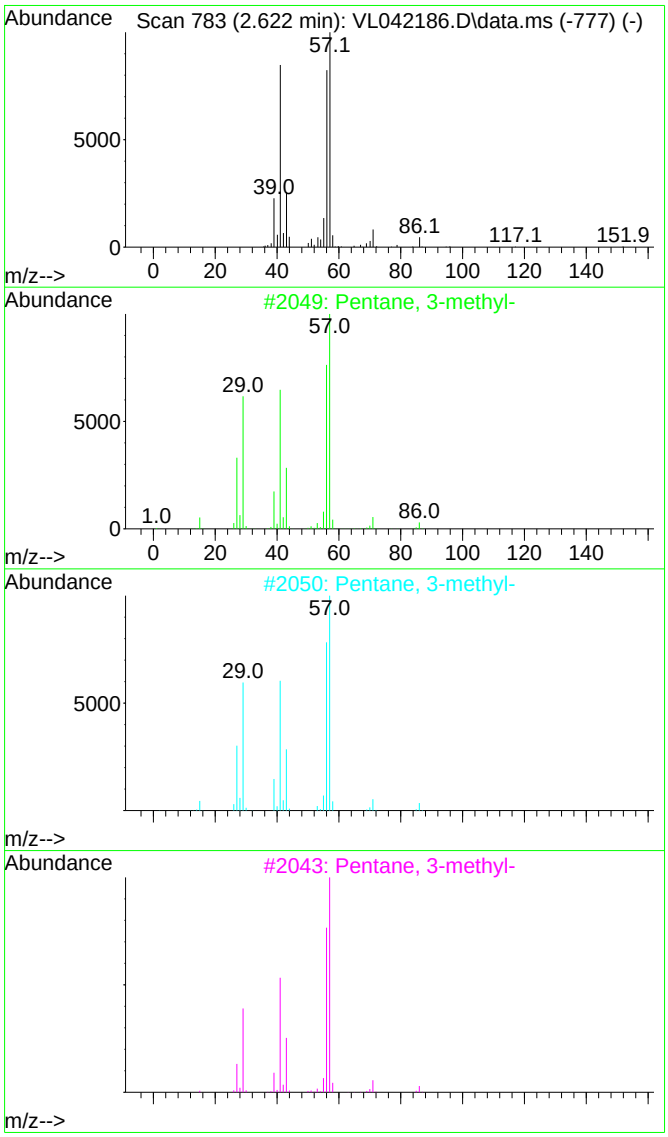
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

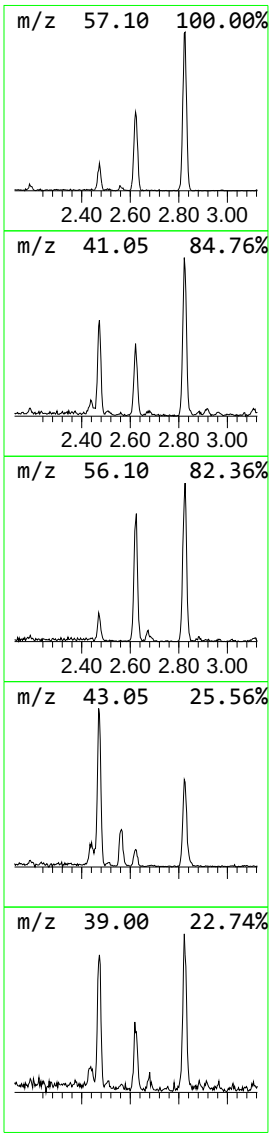
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Pentane, 3-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.622	1.60 ppbv	115880	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	72
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	72
4	Heptane, 2,2-dimethyl-	128	C9H20	001071-26-7	56
5	Decane, 2,2,3-trimethyl-	184	C13H28	062338-09-4	53





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

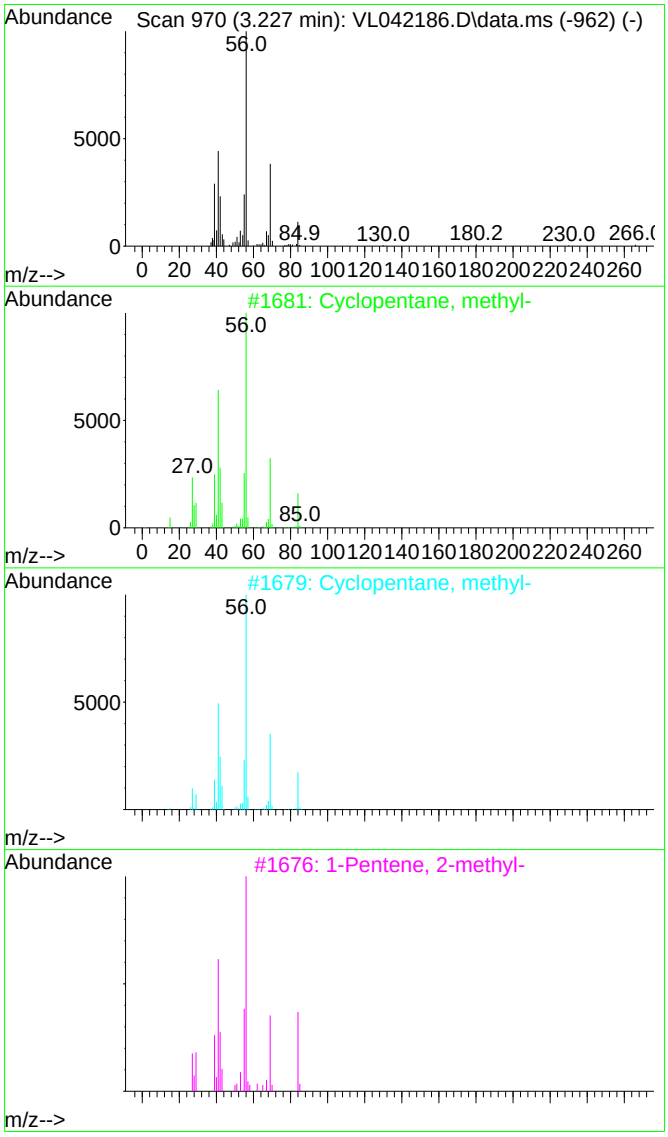
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

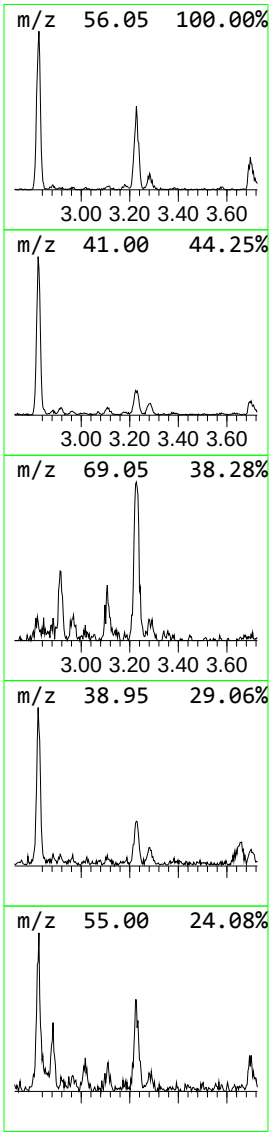
****

Peak Number 5 Cyclopentane, methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.227	1.02 ppbv	73831	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	86
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	78
3	1-Pentene, 2-methyl-	84	C6H12	000763-29-1	72
4	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	64
5	Cyclohexane	84	C6H12	000110-82-7	56





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	1.1	ppbv	76014	1	2.784	726146	10.0
Pentane	1.962	1.7	ppbv	122346	1	2.784	726146	10.0
Pentane, 2-methyl-	2.473	3.1	ppbv	224166	1	2.784	726146	10.0
Pentane, 3-methyl-	2.622	1.6	ppbv	115880	1	2.784	726146	10.0
Cyclopentane, m...	3.227	1.0	ppbv	73831	1	2.784	726146	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-03	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
VL042187.D	1		03/27/25 19:36	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.38	1.88	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.25	0.52	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.42	1.27	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.51	2.09		0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	3.20	7.60		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.81	2.81		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.28	0.96	J	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.54	1.59		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.31	1.45	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.75	2.40		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.86	3.52		0.37	2.05	ug/m3
108-88-3	Toluene	2.60	9.80		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-03	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
VL042187.D	1		03/27/25 19:36	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.38	1.65	J	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.40	6.08		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.57	2.48		0.52	2.17	ug/m3
100-42-5	Styrene	2.50	10.6		0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.14	0.69	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.42	2.06	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.13	0.64	J	0.59	2.46	ug/m3
110-54-3	Hexane	2.20	7.75		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.80			70 (65) - 130 (135)	98%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	185000		2.784			
540-36-3	1,4-Difluorobenzene	524000		3.955			
3114-55-4	Chlorobenzene-d5	484000		8.878			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.35		J		1.47	ppbv
115-07-1	Propene	0.62		J		1.49	ppbv
000106-97-8	Butane	1.10		J		1.62	ppbv

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	IA-B9-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-03	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
VL042187.D	1		03/27/25 19:36	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000109-66-0	Pentane	2.20		J		1.96	ppbv
000107-83-5	Pentane, 2-methyl-	3.10		J		2.47	ppbv
000096-14-0	Pentane, 3-methyl-	1.80		J		2.62	ppbv
000096-37-7	Cyclopentane, methyl-	1.40		J		3.22	ppbv
103-65-1	n-propylbenzene	0.11		J		11.0	ppbv

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\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:16:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	185410	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	523694	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	484321	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	389805	9.801	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	10428	0.381	ppbv		96
3) Chlorodifluoromethane	1.473	51	9747	0.349	ppbv		97
4) Chloromethane	1.528	50	2809	0.251	ppbv	#	86
9) Propene	1.486	41	7879	0.615	ppbv		84
10) Heptane	4.981	43	17273m	0.507	ppbv		
11) Trichlorofluoromethane	1.877	101	5528	0.208	ppbv		96
13) Ethanol	1.719	45	58391	48.187	ppbv		80
15) Acetone	1.835	43	82901	3.197	ppbv	#	82
17) tert-Butyl alcohol	2.042	59	13650	0.423	ppbv		95
20) Methylene Chloride	2.059	84	7860	0.814	ppbv	#	86
26) Hexane	2.822	57	57580	2.215	ppbv	#	34
30) Cyclohexane	3.849	84	6351m	0.281	ppbv		
34) 2-Butanone	2.560	43	20631	0.543	ppbv		95
35) Carbon Tetrachloride	3.758	117	2812m	0.069	ppbv		
36) Benzene	3.651	78	38888	0.749	ppbv		99
44) 2,2,4-Trimethylpentane	4.641	57	27186m	0.310	ppbv		
50) 4-Methyl-2-Pentanone	5.761	43	52014m	0.864	ppbv		
53) Toluene	6.930	91	159613	2.593	ppbv		99
58) Ethyl Benzene	9.351	91	32819	0.381	ppbv		93
59) m/p-Xylene	9.529	91	96052	1.398	ppbv		100
60) o-Xylene	9.959	91	38965	0.566	ppbv		97
61) Styrene	9.869	104	86112	2.528	ppbv		99
64) n-propylbenzene	10.992	120	2810m	0.106	ppbv		
72) 4-Ethyltoluene	11.124	105	10792	0.126	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.199	105	10875	0.145	ppbv		92
74) 1,2,4-Trimethylbenzene	11.536	105	35817	0.415	ppbv	#	66

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

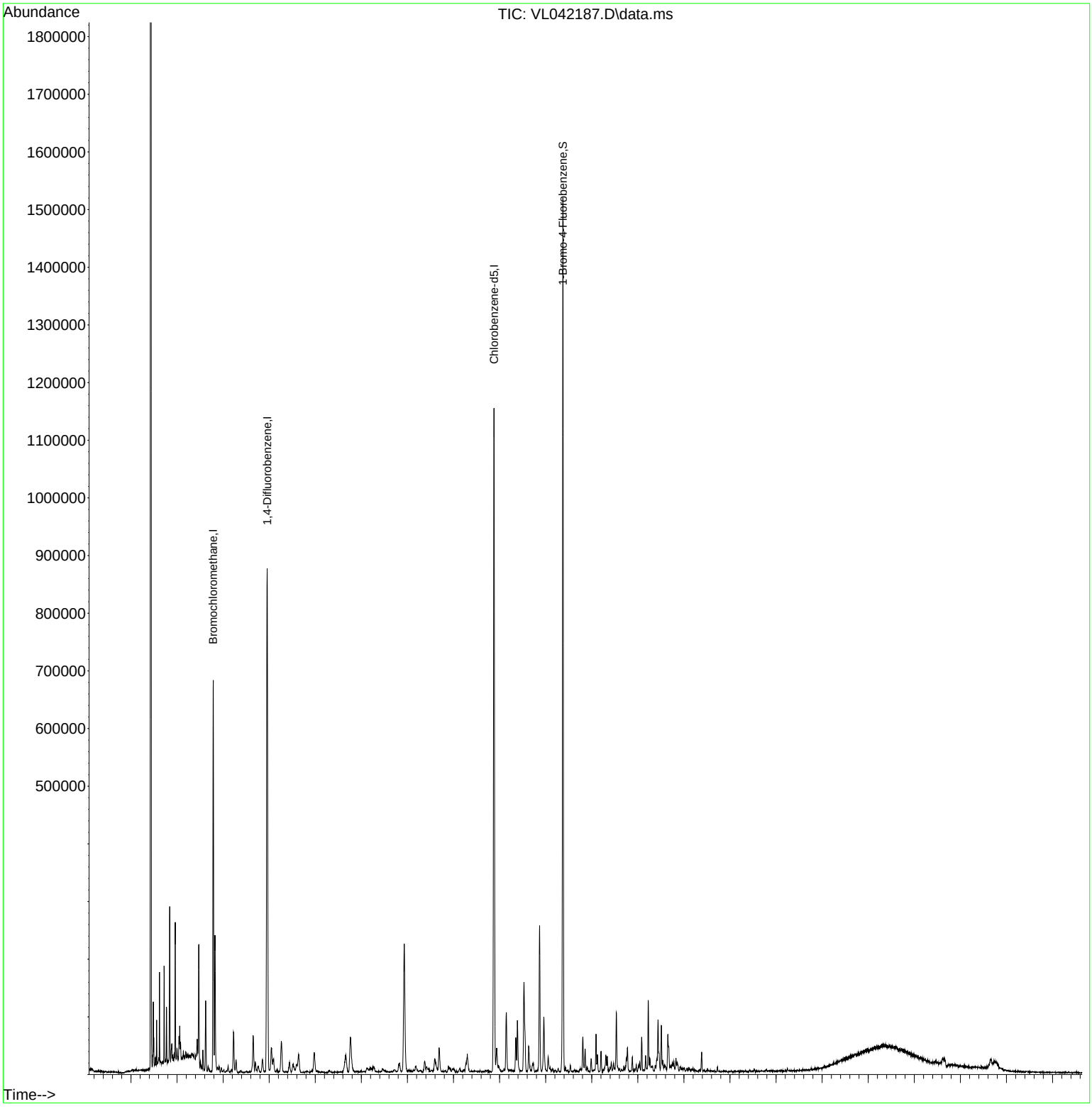
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

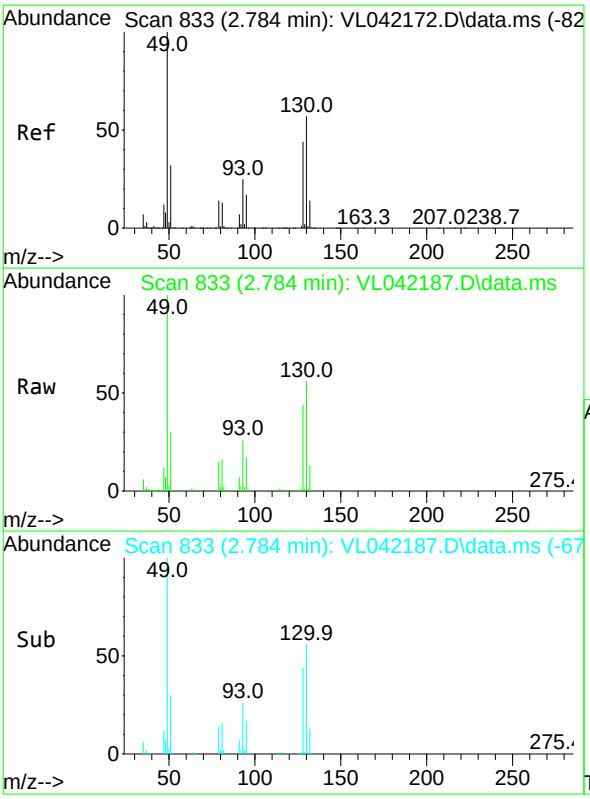
Quant Time: Mar 28 02:16:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

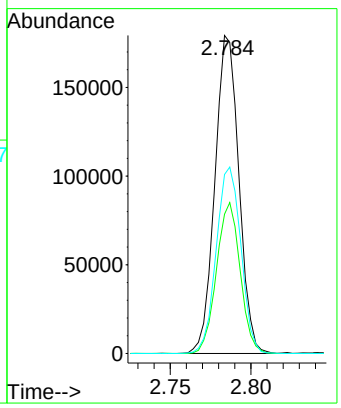




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 49 Resp: 185410

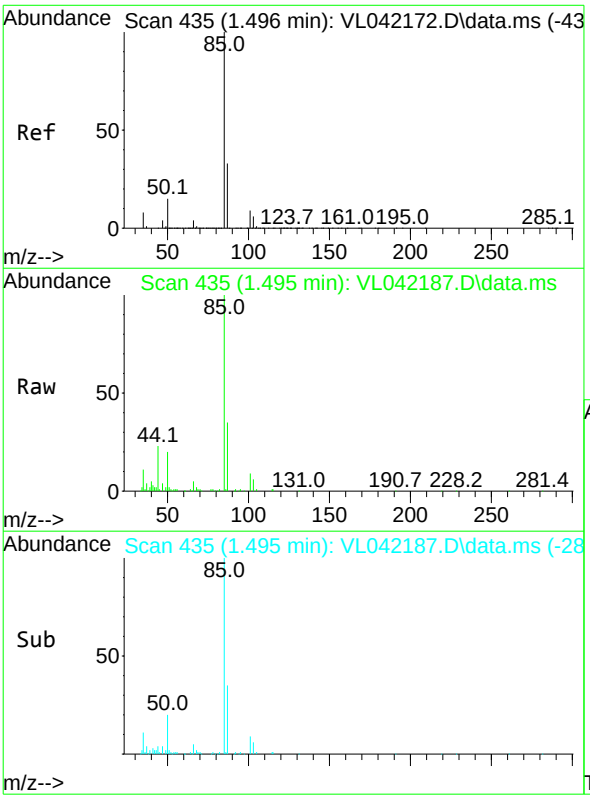
Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	60.2	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations
APPROVED

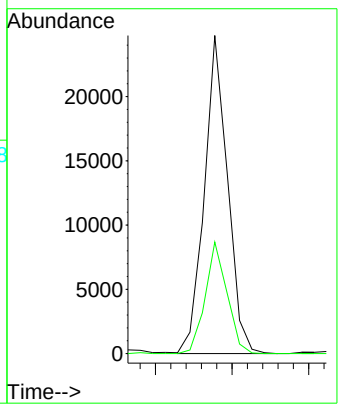
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

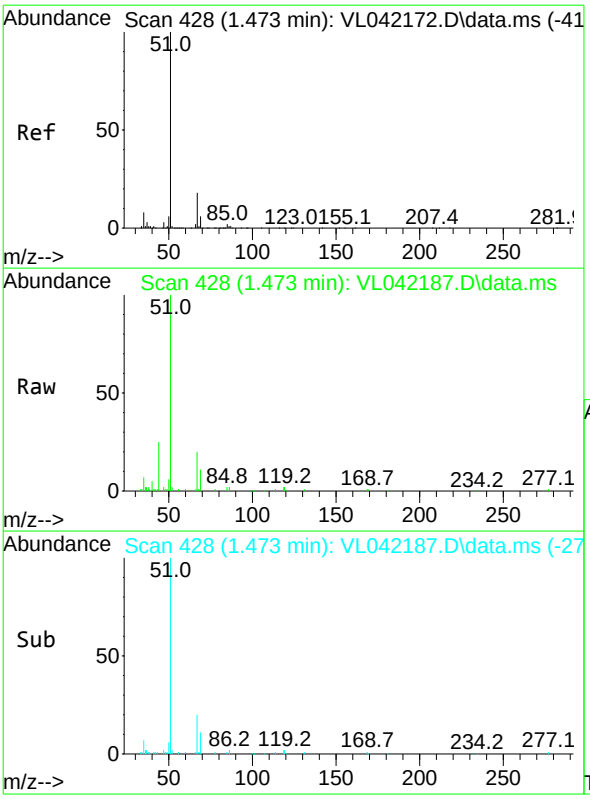


#2
Dichlorodifluoromethane
Concen: 0.381 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 85 Resp: 10428

Ion	Ratio	Lower	Upper
85	100		
87	35.1	26.1	39.1

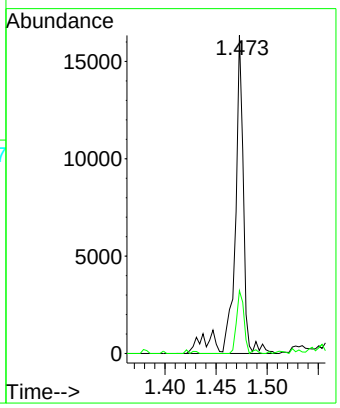




#3
Chlorodifluoromethane
Concen: 0.349 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 51 Resp: 9747

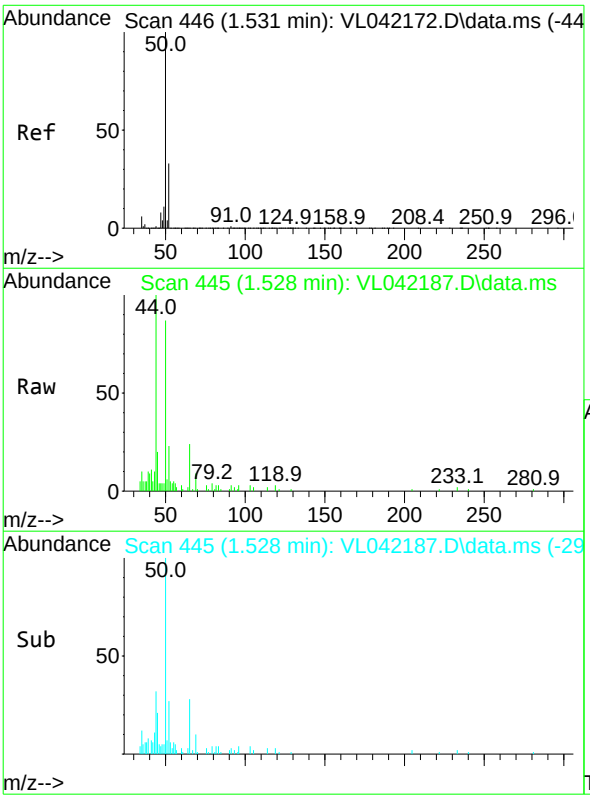
Ion	Ratio	Lower	Upper
51	100		
67	17.4	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations
APPROVED

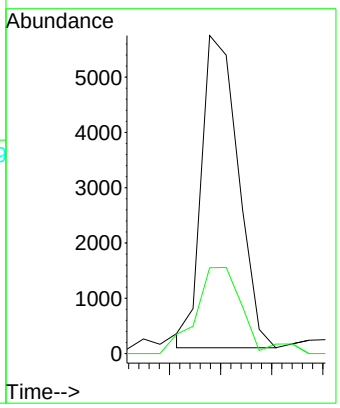
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

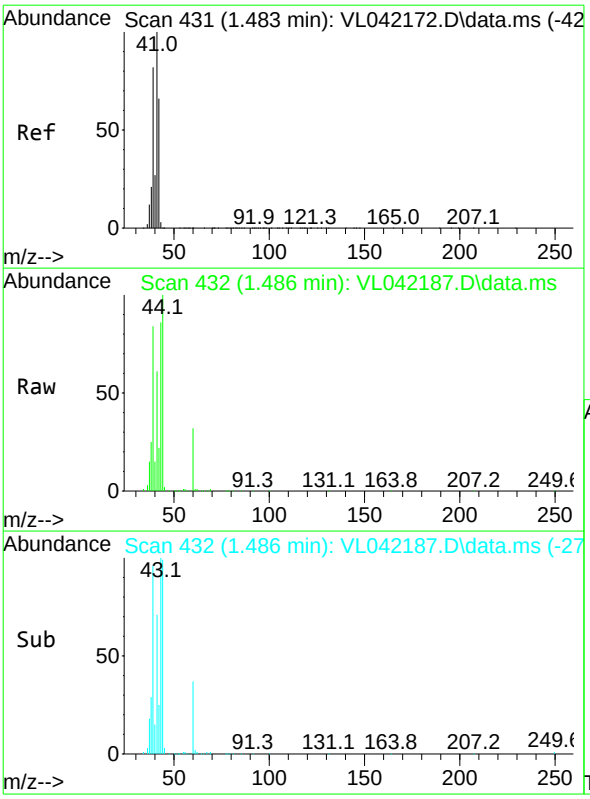


#4
Chloromethane
Concen: 0.251 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.004 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 50 Resp: 2809

Ion	Ratio	Lower	Upper
50	100		
52	24.5	26.1	39.1#

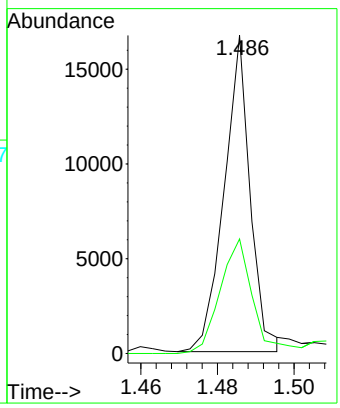




#9
Propene
Concen: 0.615 ppbv
RT: 1.486 min Scan# 43
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 41 Resp: 7879

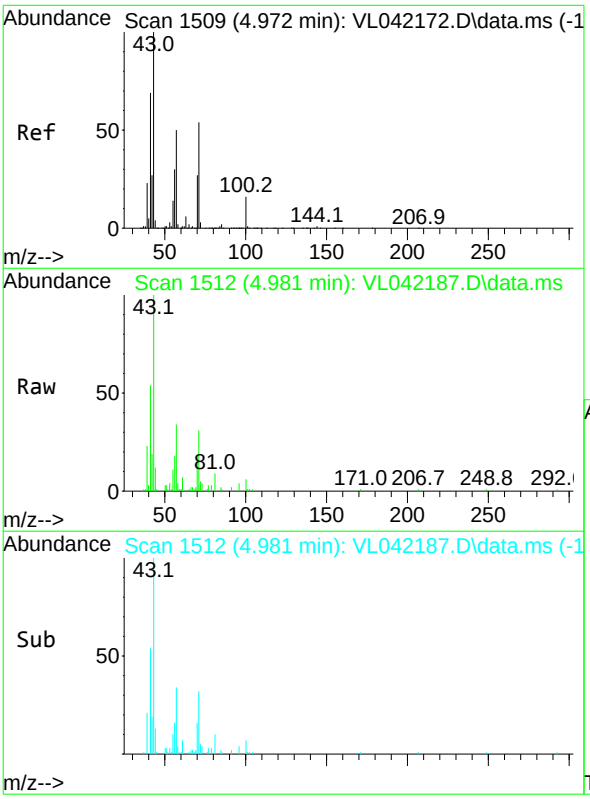
Ion	Ratio	Lower	Upper
41	100		
42	56.3	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations
APPROVED

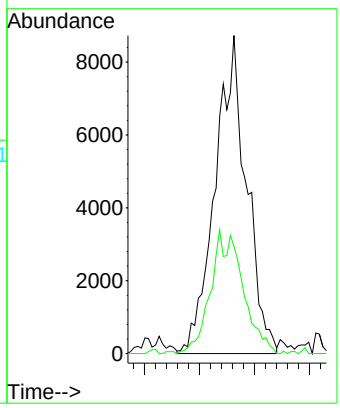
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

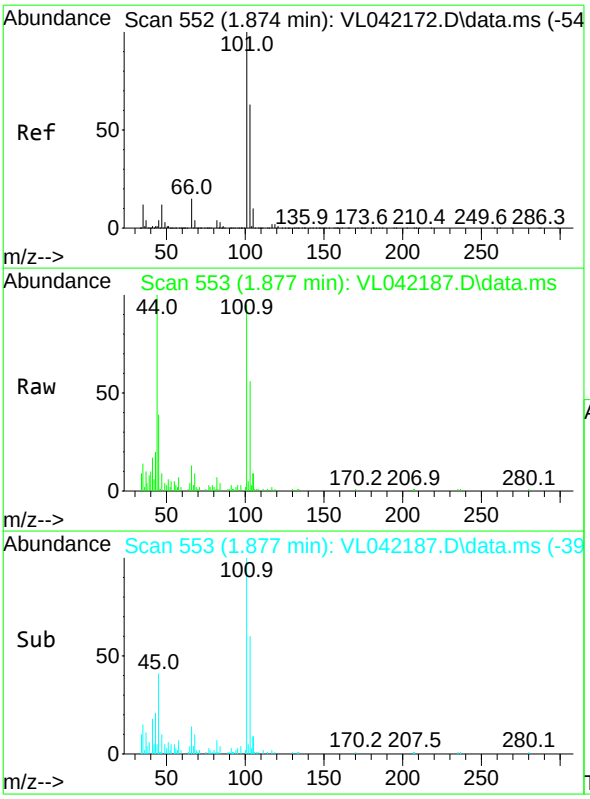


#10
Heptane
Concen: 0.507 ppbv m
RT: 4.981 min Scan# 1512
Delta R.T. 0.009 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 17273

Ion	Ratio	Lower	Upper
43	100		
57	40.4	39.4	59.2

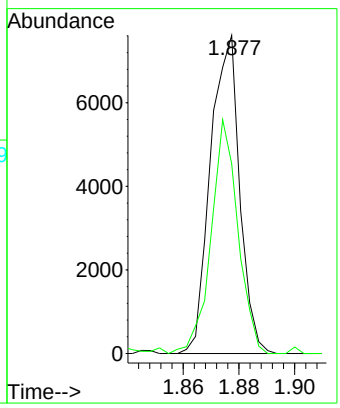




#11
Trichlorofluoromethane
Concen: 0.208 ppbv
RT: 1.877 min Scan# 55
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:101 Resp: 5528

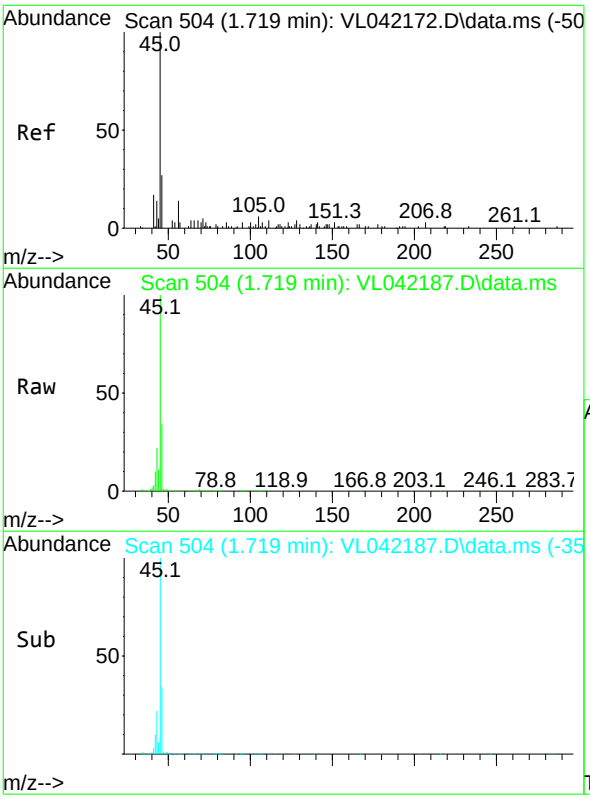
Ion	Ratio	Lower	Upper
101	100		
103	59.6	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations
APPROVED

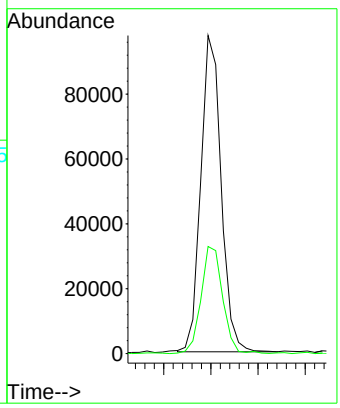
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

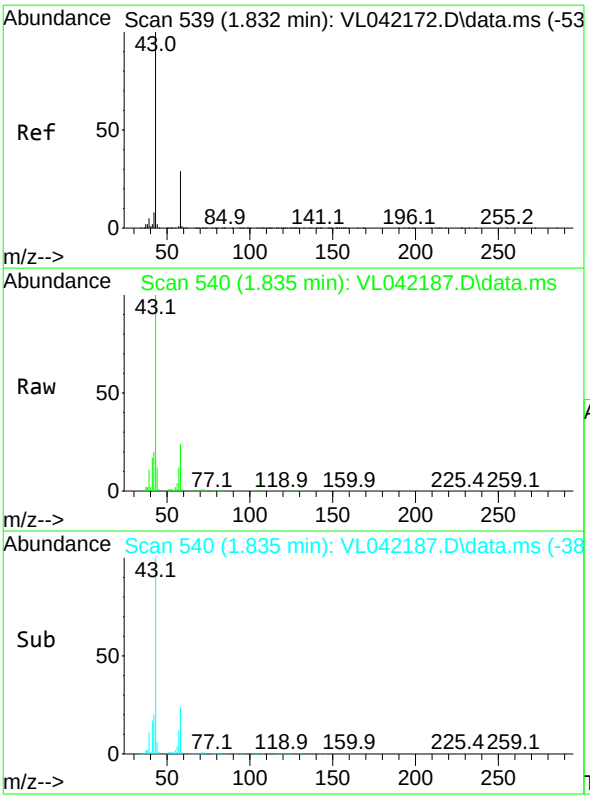


#13
Ethanol
Concen: 48.187 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 45 Resp: 58391

Ion	Ratio	Lower	Upper
45	100		
46	36.4	20.2	80.8

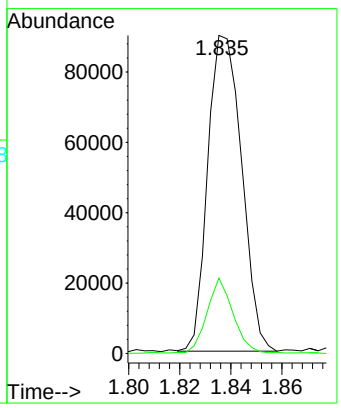




#15
Acetone
Concen: 3.197 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 82901

Ion	Ratio	Lower	Upper
43	100		
58	19.3	23.2	34.8#



Instrument :
MSVOA_L
ClientSampleId :
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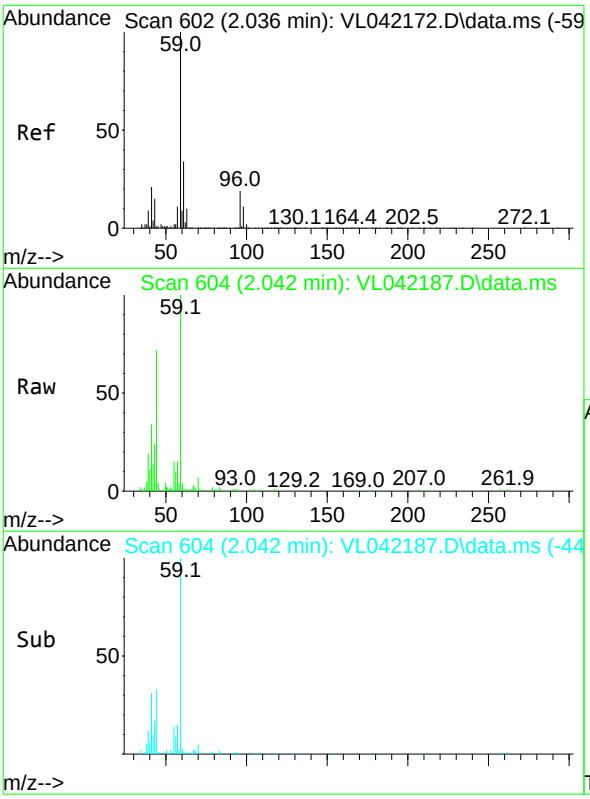
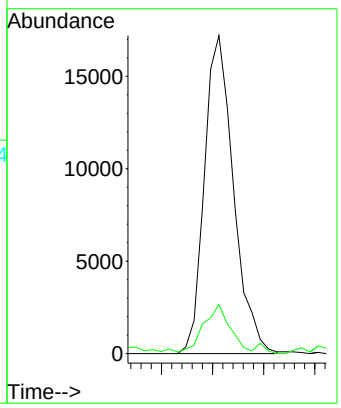
Supervised By :Mahesh Dadoda 04/03/2025

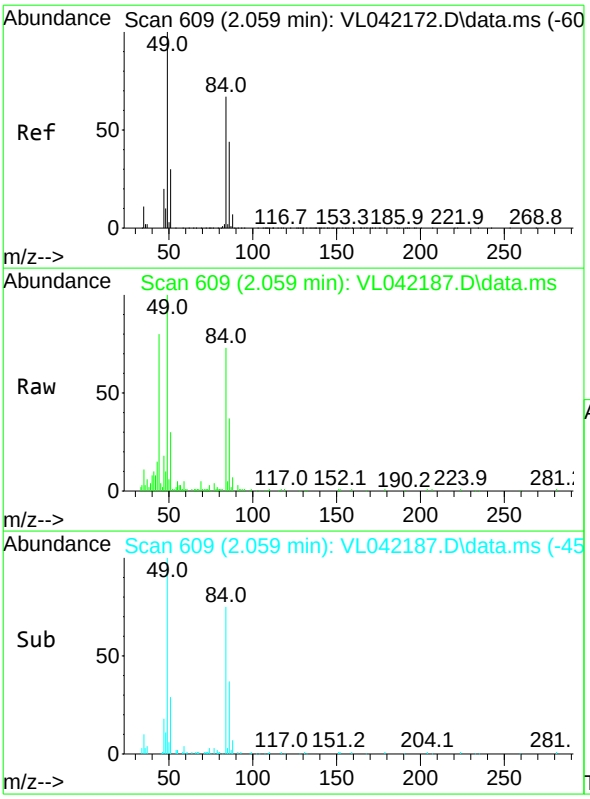


#17
tert-Butyl alcohol
Concen: 0.423 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 59 Resp: 13650

Ion	Ratio	Lower	Upper
59	100		
57	13.1	8.9	13.3

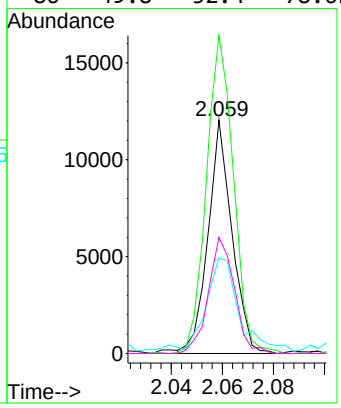




#20
Methylene Chloride
Concen: 0.814 ppbv
RT: 2.059 min Scan# 60
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 84 Resp: 7860

Ion	Ratio	Lower	Upper
84	100		
49	135.0	120.2	180.4
51	38.4	37.4	56.0
86	49.8	52.4	78.6#



Instrument :
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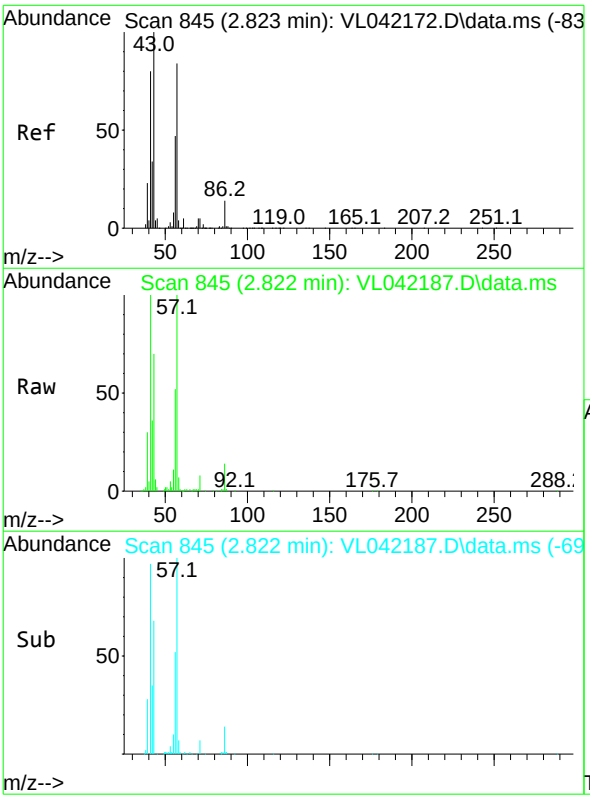
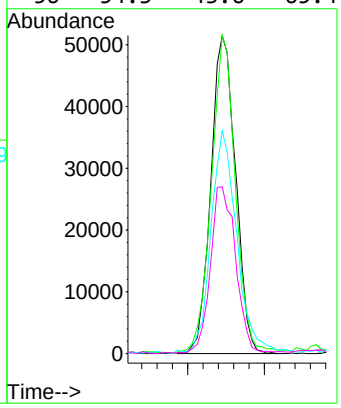
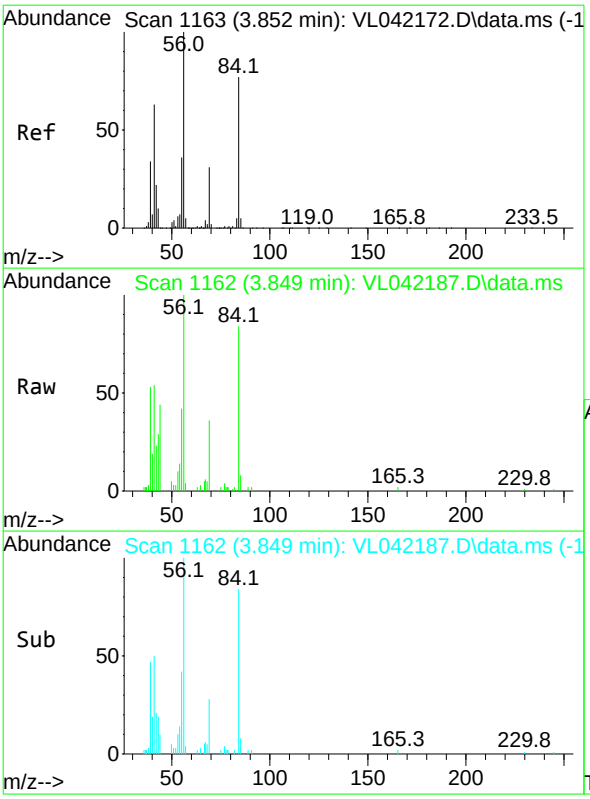


#26
Hexane
Concen: 2.215 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 57 Resp: 57580

Ion	Ratio	Lower	Upper
57	100		
41	98.0	76.6	114.8
43	74.4	207.8	311.8#
56	54.3	43.6	65.4





#30
Cyclohexane
Concen: 0.281 ppbv m
RT: 3.849 min Scan# 11
Delta R.T. -0.004 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 84 Resp: 6351

Ion	Ratio	Lower	Upper
84	100		
56	128.6	102.8	154.2
41	106.7	66.5	99.7#

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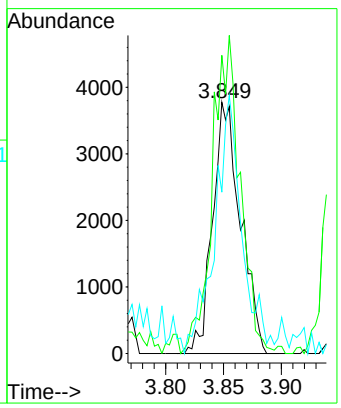
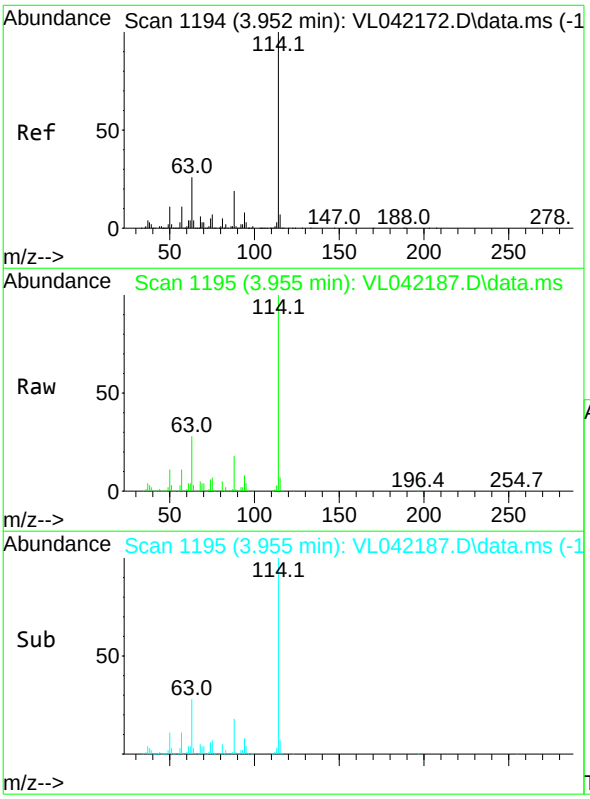
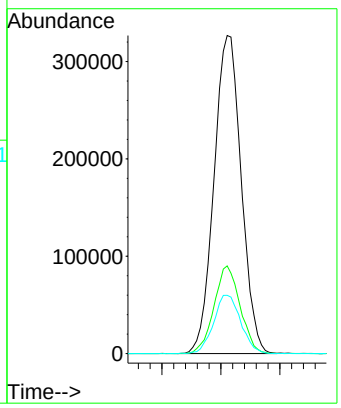


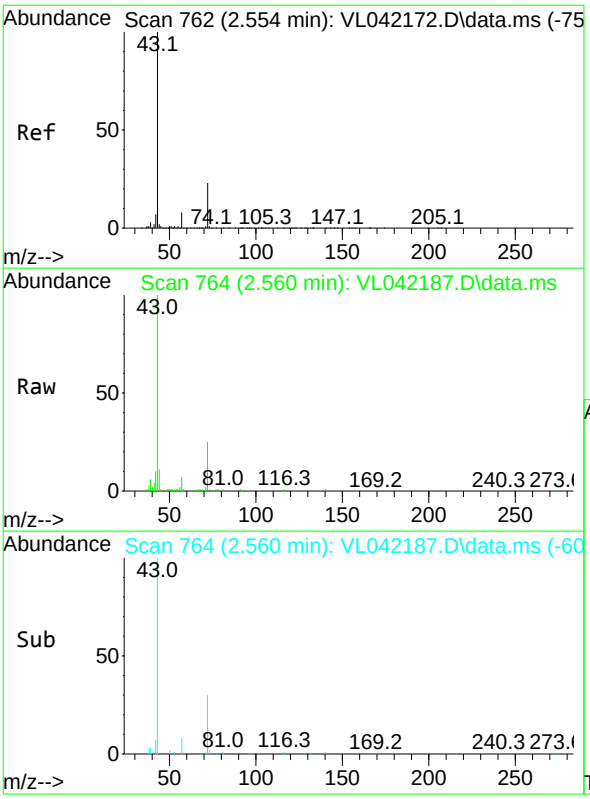


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:114 Resp: 523694

Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.7	31.1
88	18.3	15.0	22.4





#34
2-Butanone
Concen: 0.543 ppbv
RT: 2.560 min Scan# 76
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 20631

Ion	Ratio	Lower	Upper
43	100		
72	24.9	18.2	27.2

Instrument :
MSVOA_L
ClientSampleId :
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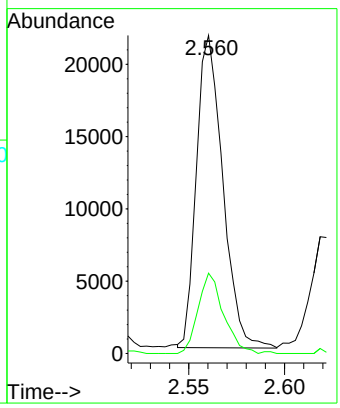
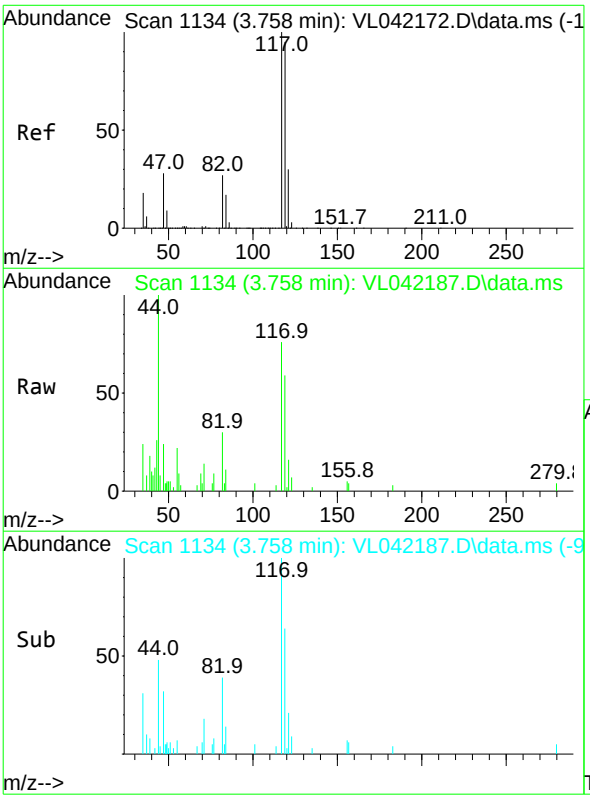
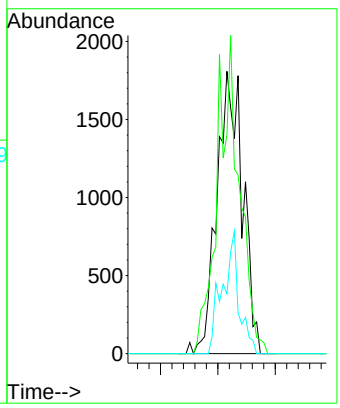


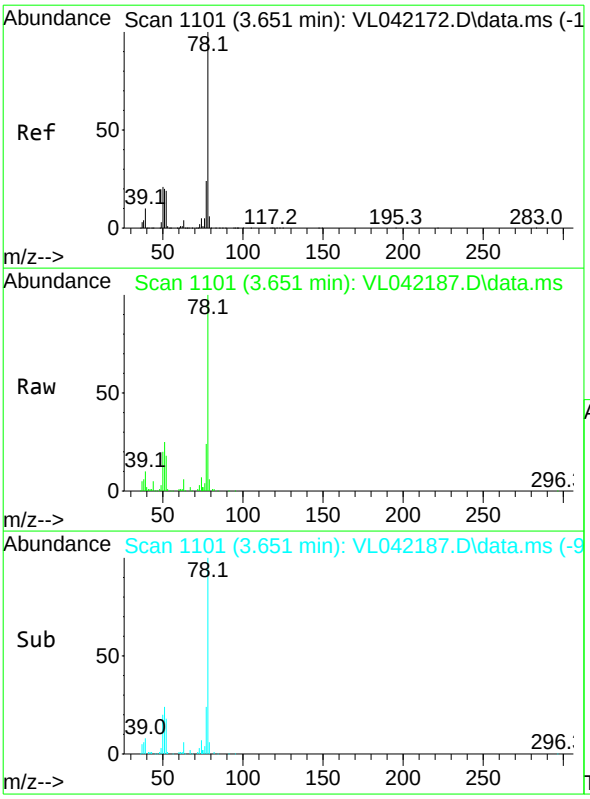


#35
Carbon Tetrachloride
Concen: 0.069 ppbv m
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:117 Resp: 2812

Ion	Ratio	Lower	Upper
117	100		
119	77.4	76.2	114.2
121	21.2	24.2	36.4#

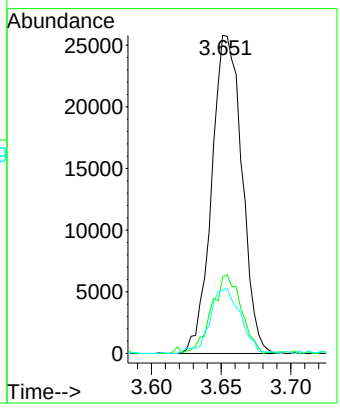




#36
Benzene
Concen: 0.749 ppbv
RT: 3.651 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 78 Resp: 38888

Ion	Ratio	Lower	Upper
78	100		
77	23.6	19.1	28.7
50	19.9	16.6	24.8



Instrument :
MSVOA_L
ClientSampleId :
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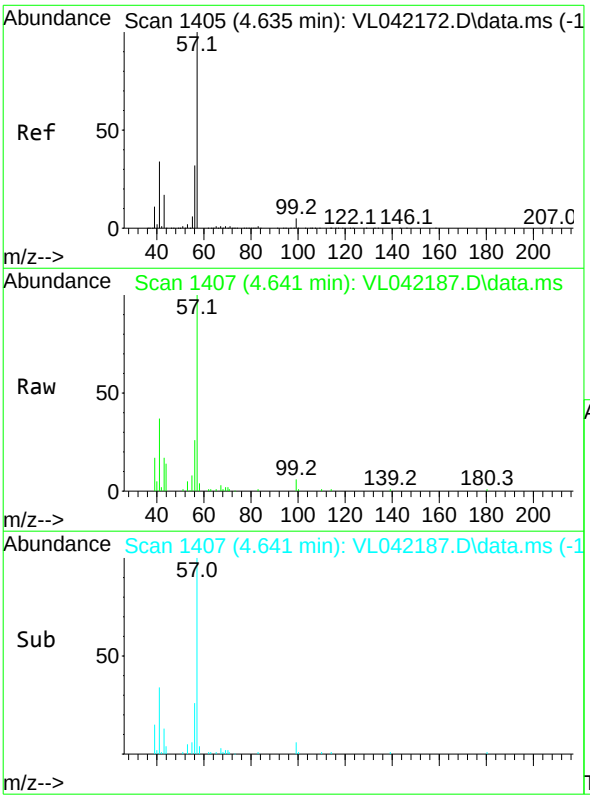
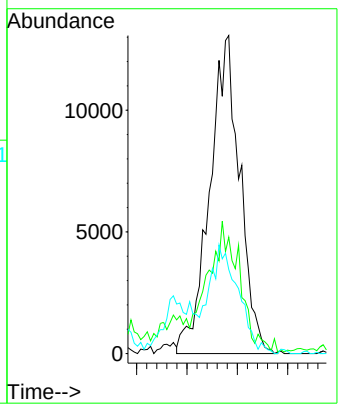
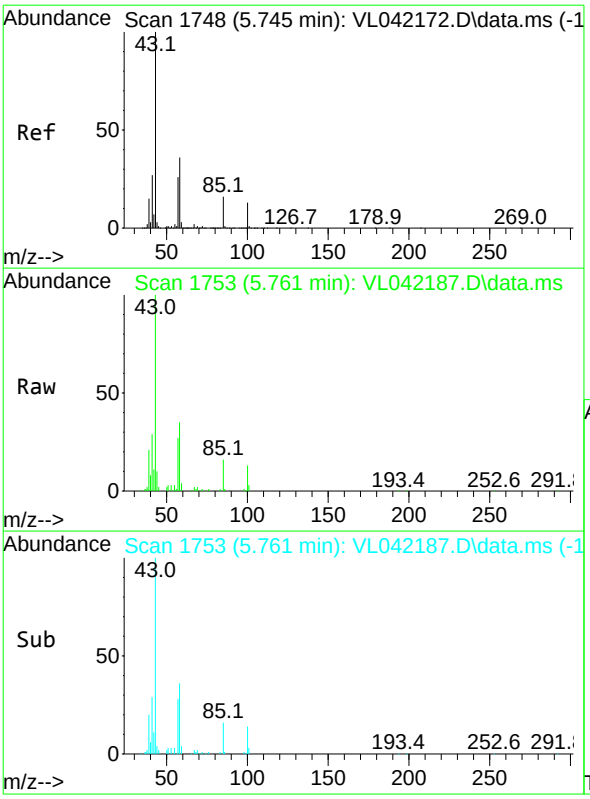


#44
2,2,4-Trimethylpentane
Concen: 0.310 ppbv m
RT: 4.641 min Scan# 1407
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 57 Resp: 27186

Ion	Ratio	Lower	Upper
57	100		
41	52.8	26.8	40.2#
56	35.2	25.6	38.4

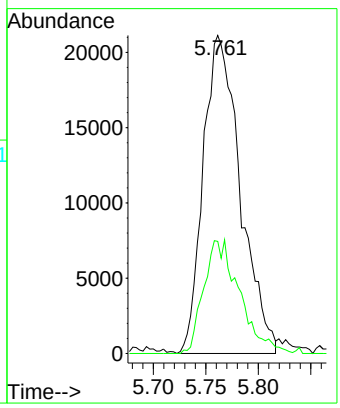




#50
4-Methyl-2-Pentanone
Concen: 0.864 ppbv m
RT: 5.761 min Scan# 17
Delta R.T. 0.016 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 52014

Ion	Ratio	Lower	Upper
43	100		
58	34.7	29.0	43.6



Instrument :
MSVOA_L
ClientSampleId :
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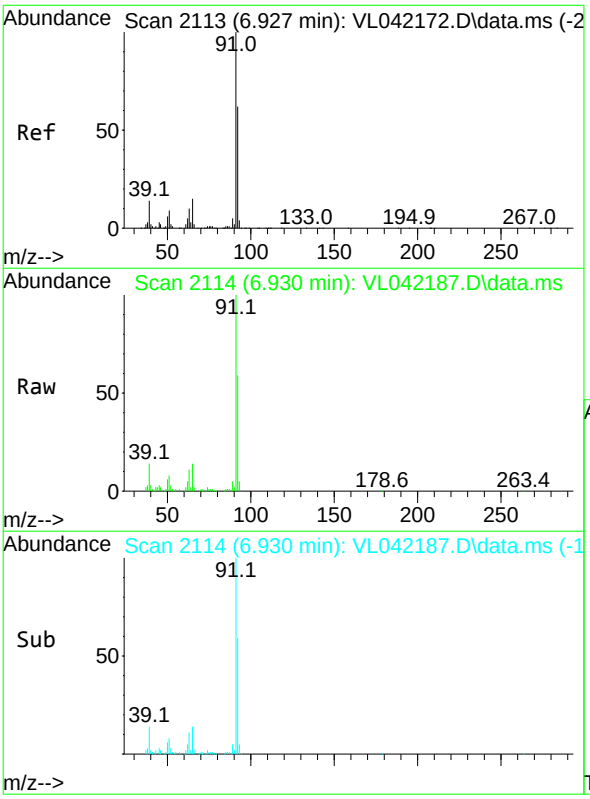
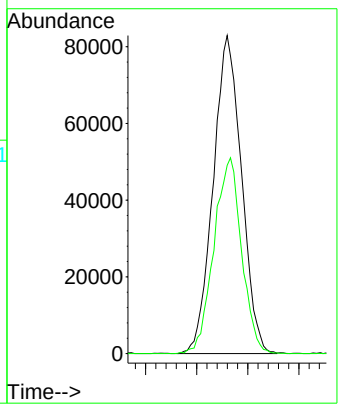
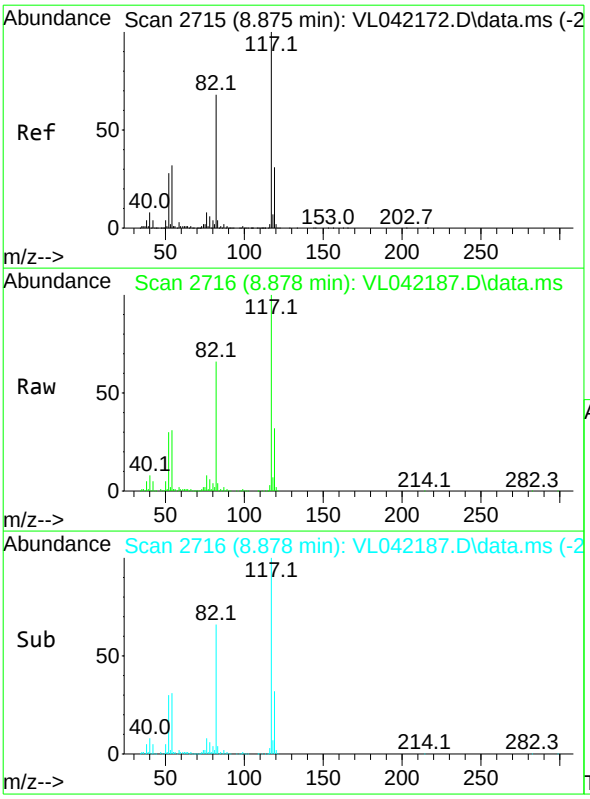


#53
Toluene
Concen: 2.593 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 159613

Ion	Ratio	Lower	Upper
91	100		
92	60.1	48.4	72.6





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:117 Resp: 484321

Ion	Ratio	Lower	Upper
117	100		
82	64.6	55.8	83.6
119	31.9	25.5	38.3

Instrument :
MSVOA_L
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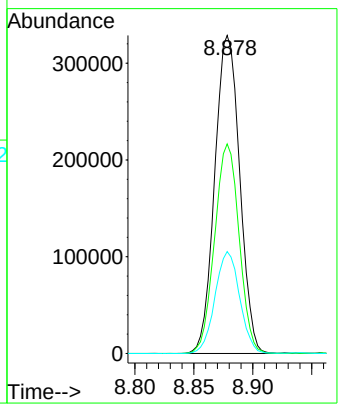
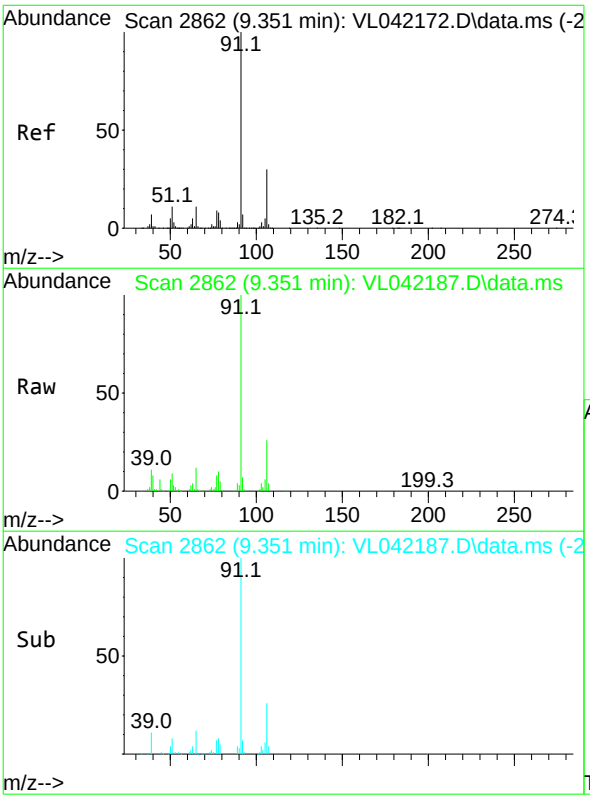
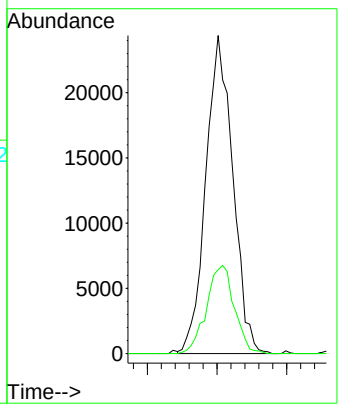


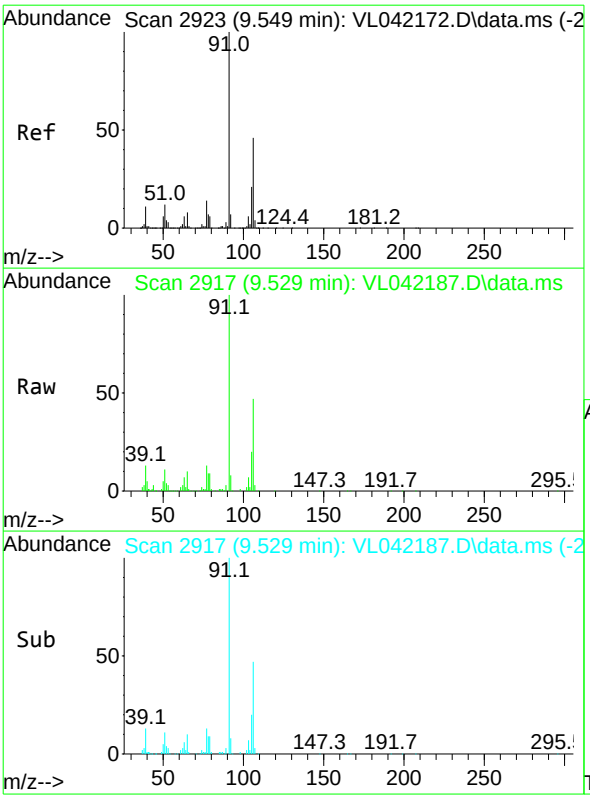


#58
Ethyl Benzene
Concen: 0.381 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 32819

Ion	Ratio	Lower	Upper
91	100		
106	26.4	24.2	36.2

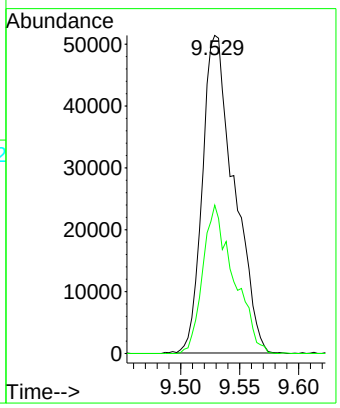




#59
m/p-Xylene
Concen: 1.398 ppbv
RT: 9.529 min Scan# 29
Delta R.T. -0.020 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 96052

Ion	Ratio	Lower	Upper
91	100		
106	45.6	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
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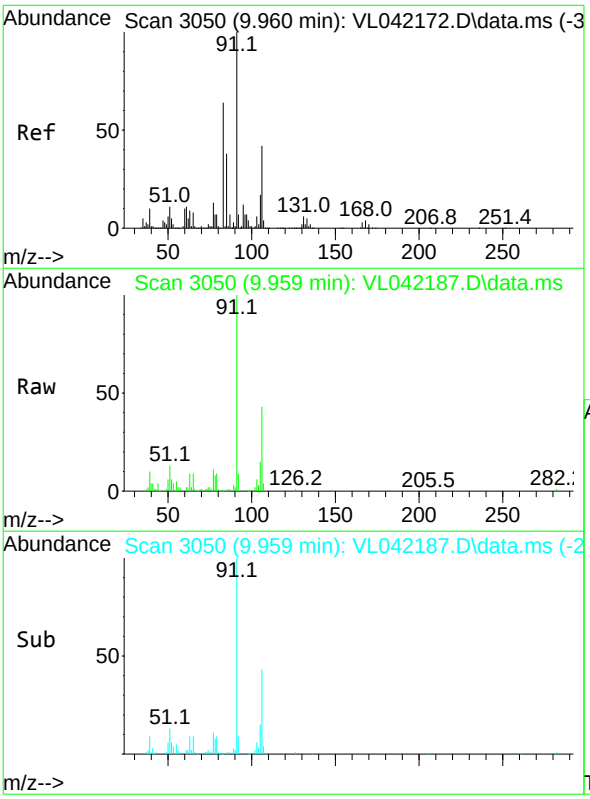
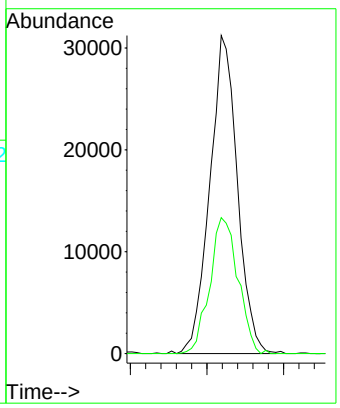
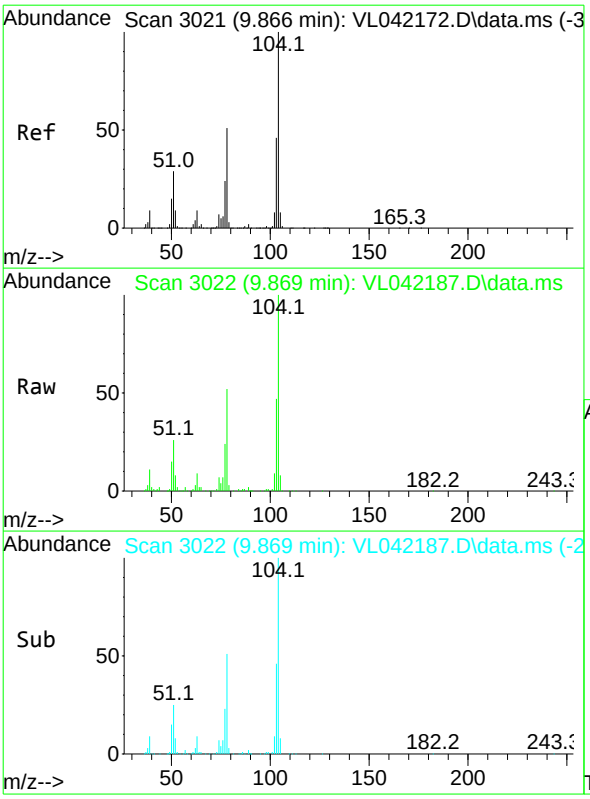


#60
o-Xylene
Concen: 0.566 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 38965

Ion	Ratio	Lower	Upper
91	100		
106	43.9	20.8	62.5





#61
Styrene
Concen: 2.528 ppbv
RT: 9.869 min Scan# 30
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:104 Resp: 86112

Ion	Ratio	Lower	Upper
104	100		
78	51.9	41.8	62.6
103	46.9	37.0	55.4

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations
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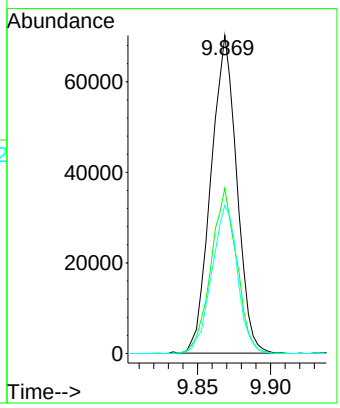
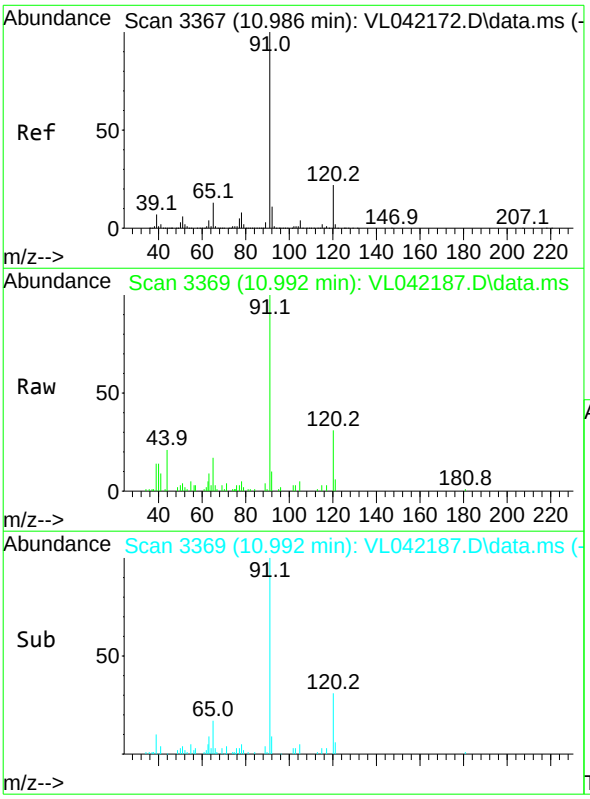
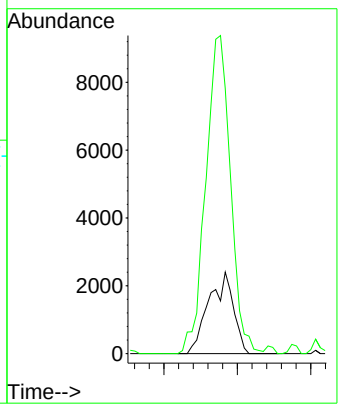


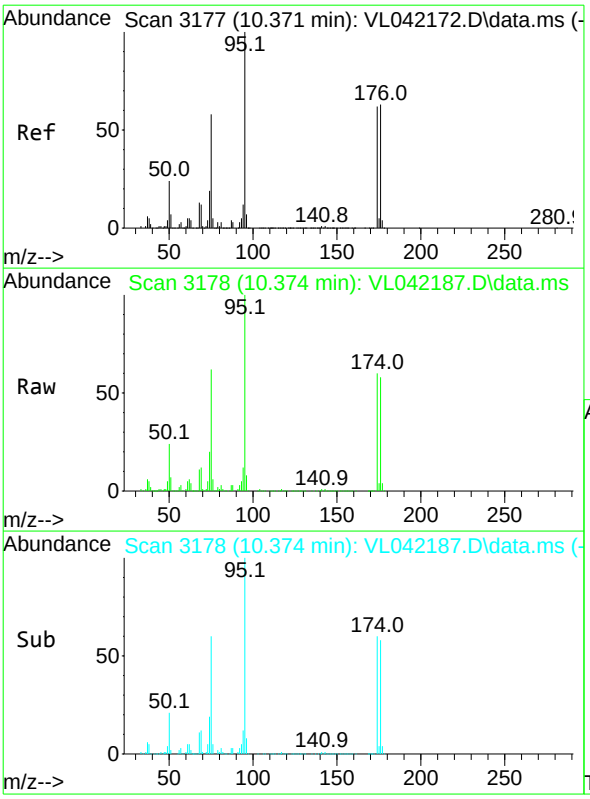


#64
n-propylbenzene
Concen: 0.106 ppbv m
RT: 10.992 min Scan# 3369
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:120 Resp: 2810

Ion	Ratio	Lower	Upper
120	100		
91	396.5	376.9	565.3

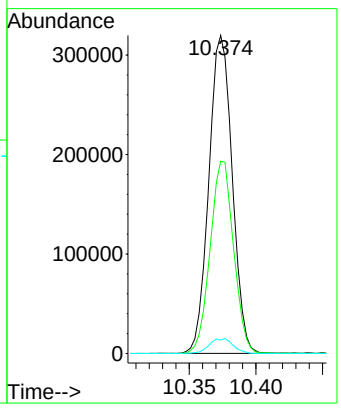




#68
1-Bromo-4-Fluorobenzene
Concen: 9.801 ppbv
RT: 10.374 min Scan# 31
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 95 Resp: 389805

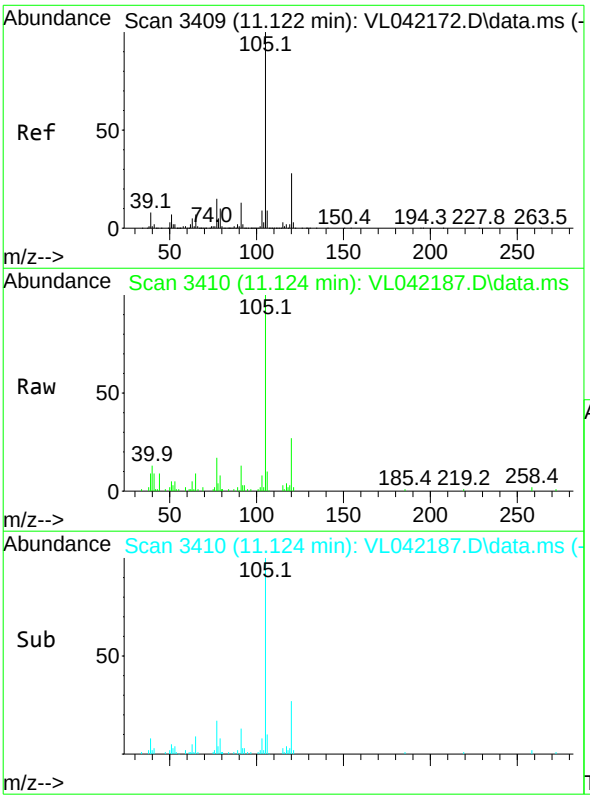
Ion	Ratio	Lower	Upper
95	100		
174	60.8	50.6	76.0
175	4.8	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations
APPROVED

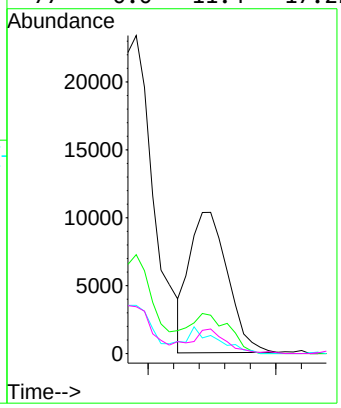
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

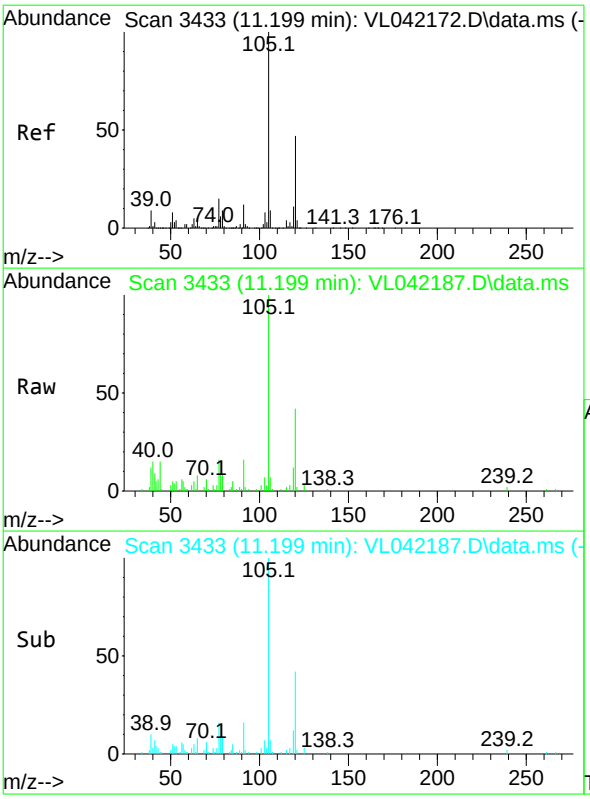


#72
4-Ethyltoluene
Concen: 0.126 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:105 Resp: 10792

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#

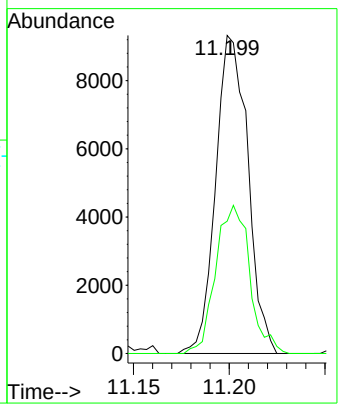




#73
1,3,5-Trimethylbenzene
Concen: 0.145 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:105 Resp: 10875

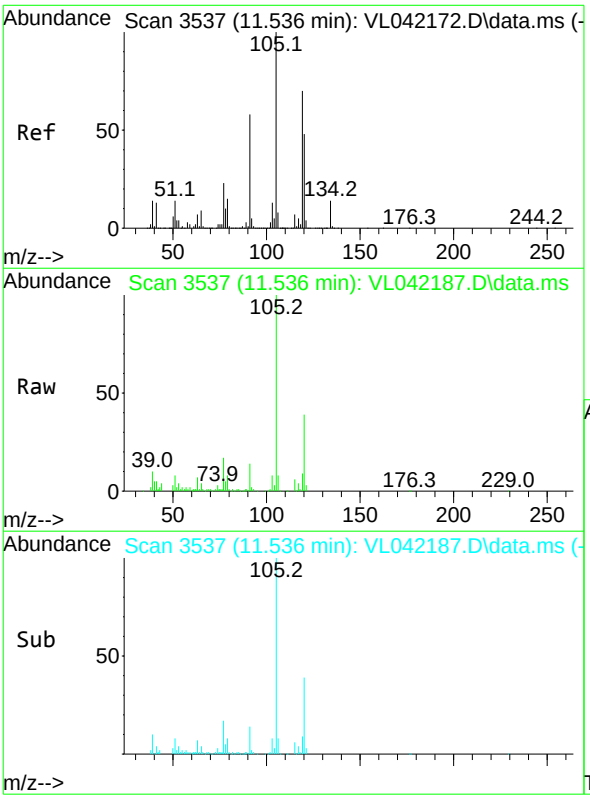
Ion	Ratio	Lower	Upper
105	100		
120	41.6	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Manual Integrations
APPROVED

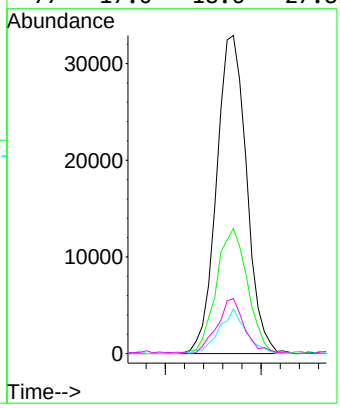
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.415 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:105 Resp: 35817

Ion	Ratio	Lower	Upper
105	100		
120	39.3	38.6	58.0
91	14.1	46.2	69.2#
77	17.0	18.6	27.8#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042187.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4301374	4710651	100.00%	31.571%
2	1.618	470	473	477	rVB	156815	78959	1.68%	0.529%
3	1.719	498	504	509	rBV	168321	103085	2.19%	0.691%
4	1.771	516	520	525	rVB	97059	63145	1.34%	0.423%
5	1.842	533	542	548	rBV2	269624	232004	4.93%	1.555%
6	1.962	574	579	584	rVB	237364	159501	3.39%	1.069%
7	2.473	730	737	745	rVB	211971	219624	4.66%	1.472%
8	2.622	774	783	791	rVB2	122100	128445	2.73%	0.861%
9	2.787	824	834	840	rBV	679173	719172	15.27%	4.820%
10	2.823	840	845	857	rVB2	234183	271041	5.75%	1.817%
11	3.224	960	969	979	rBV2	69154	101212	2.15%	0.678%
12	3.651	1087	1101	1110	rBV2	63116	103844	2.20%	0.696%
13	3.955	1182	1195	1208	rBV2	872909	1389529	29.50%	9.313%
14	4.046	1214	1223	1232	rBV2	38945	67415	1.43%	0.452%
15	4.263	1276	1290	1303	rBV6	52862	102619	2.18%	0.688%
16	4.638	1397	1406	1419	rVB3	31547	68470	1.45%	0.459%
17	4.978	1497	1511	1524	rBV6	33760	68274	1.45%	0.458%
18	5.658	1704	1721	1722	rBV6	29028	47729	1.01%	0.320%
19	5.761	1742	1753	1770	rBV5	60778	151794	3.22%	1.017%
20	6.930	2100	2114	2132	rVB2	221303	456409	9.69%	3.059%
21	7.687	2338	2348	2361	rVB5	40124	70097	1.49%	0.470%
22	8.299	2530	2537	2547	rVB7	27944	47603	1.01%	0.319%
23	8.878	2704	2716	2727	rBV	1150031	1706112	36.22%	11.434%
24	8.933	2727	2733	2743	rVB3	34395	55575	1.18%	0.372%
25	9.147	2788	2799	2813	rVB2	101510	152584	3.24%	1.023%
26	9.351	2854	2862	2868	rBV3	59128	85553	1.82%	0.573%
27	9.386	2868	2873	2890	rVB2	89014	125835	2.67%	0.843%
28	9.529	2906	2917	2933	rVB3	155383	297317	6.31%	1.993%
29	9.629	2939	2948	2961	rBV3	44543	71120	1.51%	0.477%
30	9.869	3011	3022	3033	rVB2	252203	334740	7.11%	2.243%
31	9.959	3037	3050	3061	rBV2	94028	151319	3.21%	1.014%
32	10.374	3162	3178	3190	rBV	1515532	1874231	39.79%	12.561%
33	10.807	3304	3312	3320	rBV2	57952	75128	1.59%	0.504%
34	11.092	3391	3400	3405	rBV	62844	70819	1.50%	0.475%
35	11.532	3528	3536	3544	rBV	97866	120361	2.56%	0.807%
36	12.083	3699	3706	3714	rVB2	58599	67164	1.43%	0.450%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	12.225	3743	3750	3757	rBV2	119626	129519	2.75%	0.868%
38	12.439	3810	3816	3820	rBV	71021	70597	1.50%	0.473%
39	12.510	3830	3838	3844	rBV	77564	89280	1.90%	0.598%
40	12.652	3873	3882	3886	rBV2	62565	83162	1.77%	0.557%

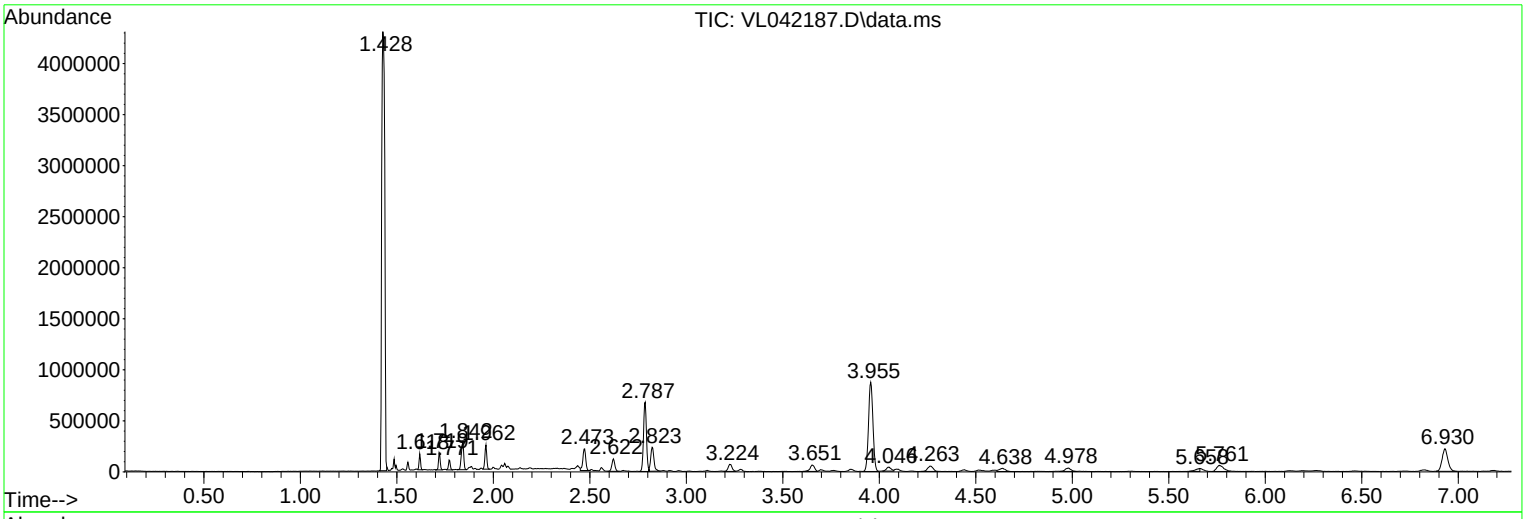
Sum of corrected areas: 14921038

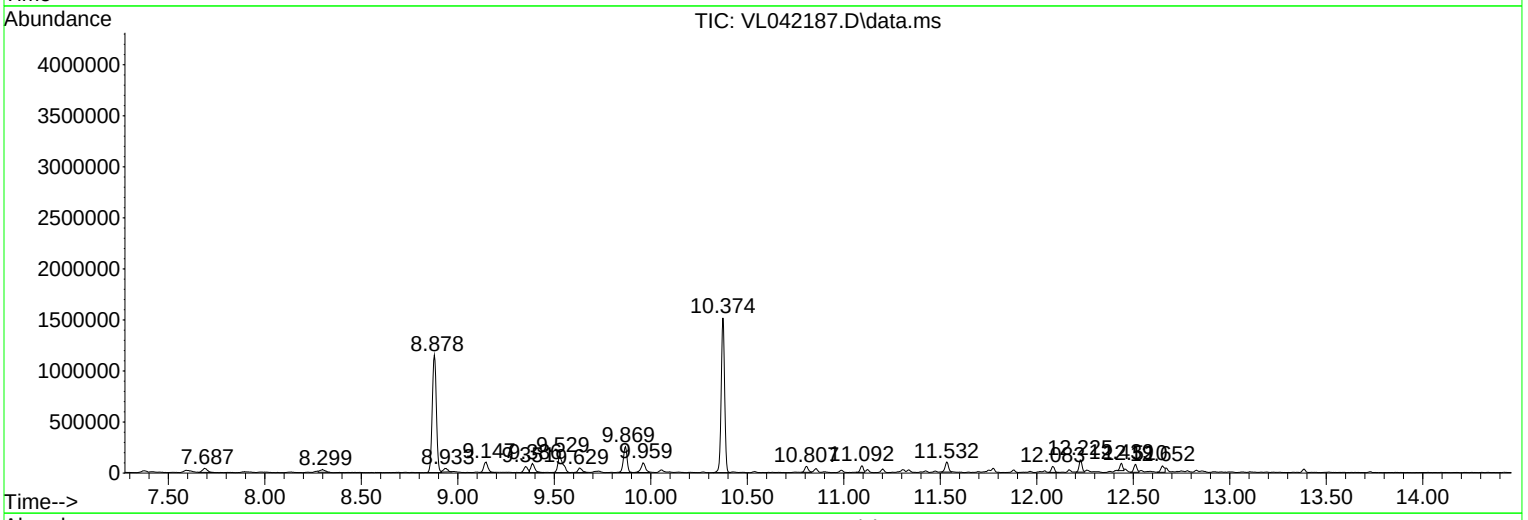
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

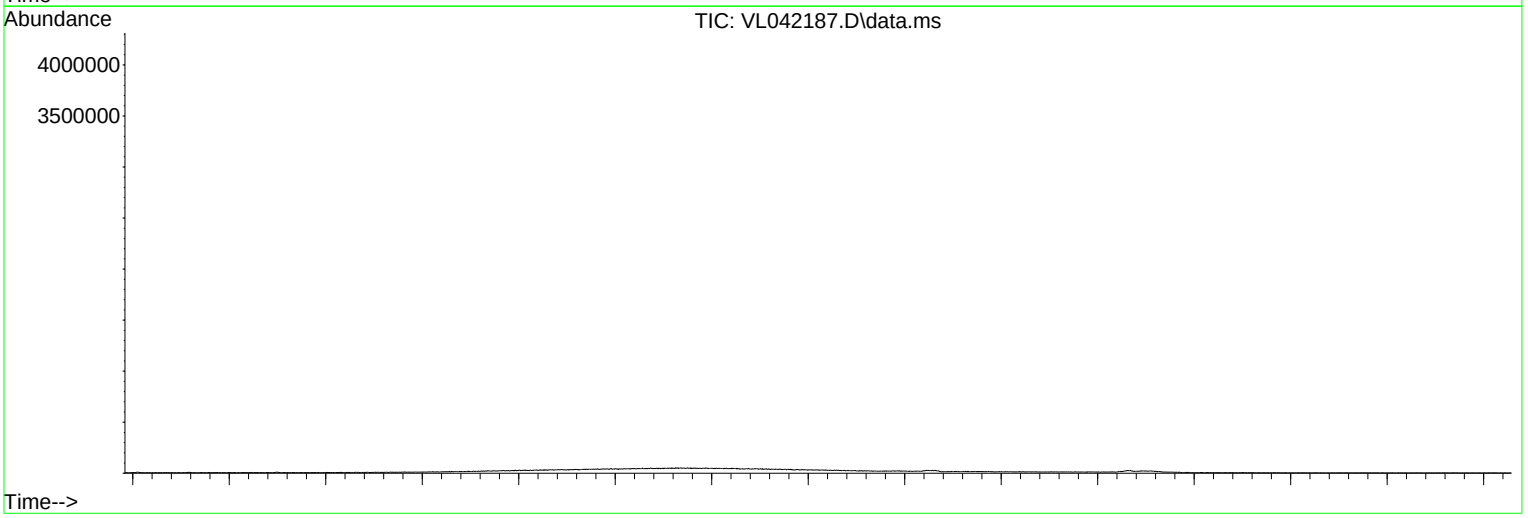
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

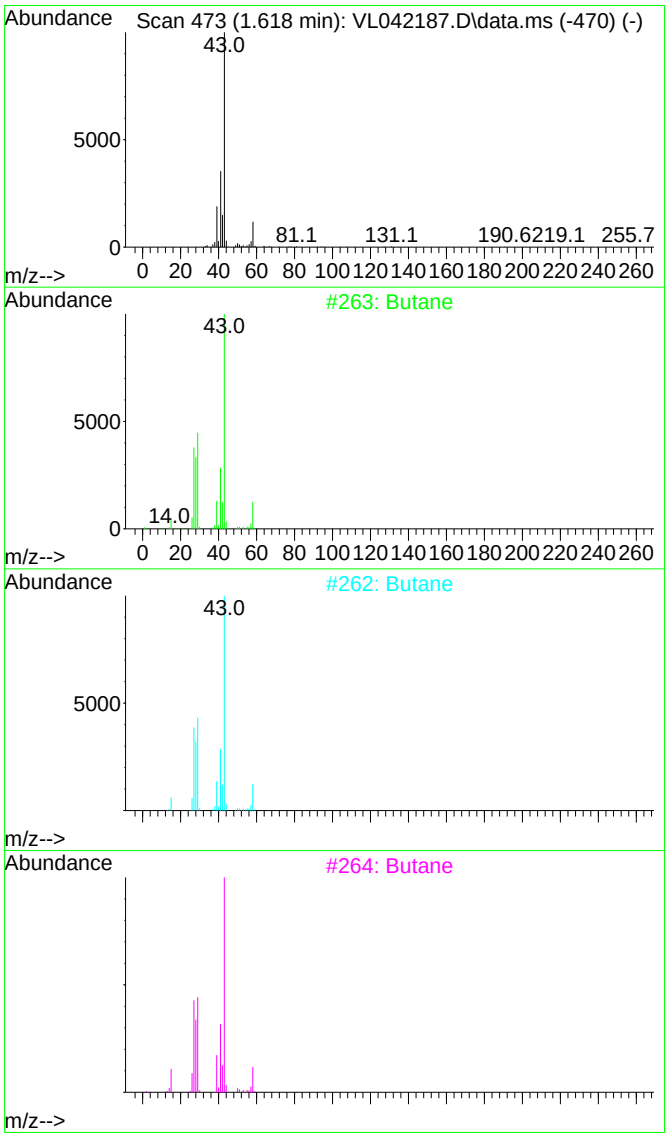
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

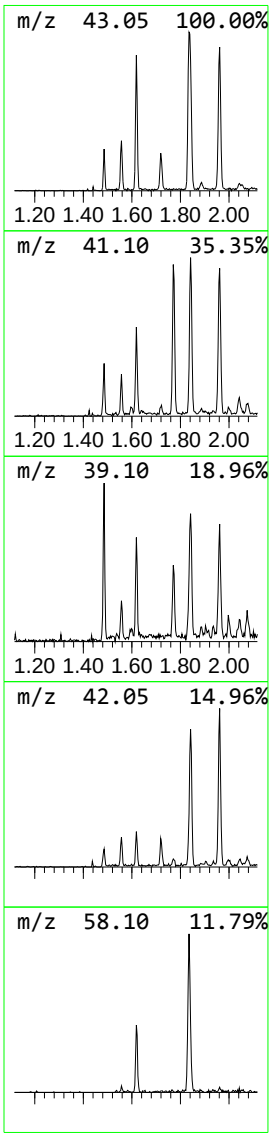
****

Peak Number 1 Butane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.618	1.10 ppbv	78959	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	53
2	Butane	58	C4H10	000106-97-8	53
3	Butane	58	C4H10	000106-97-8	53
4	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	42
5	Butane	58	C4H10	000106-97-8	42





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

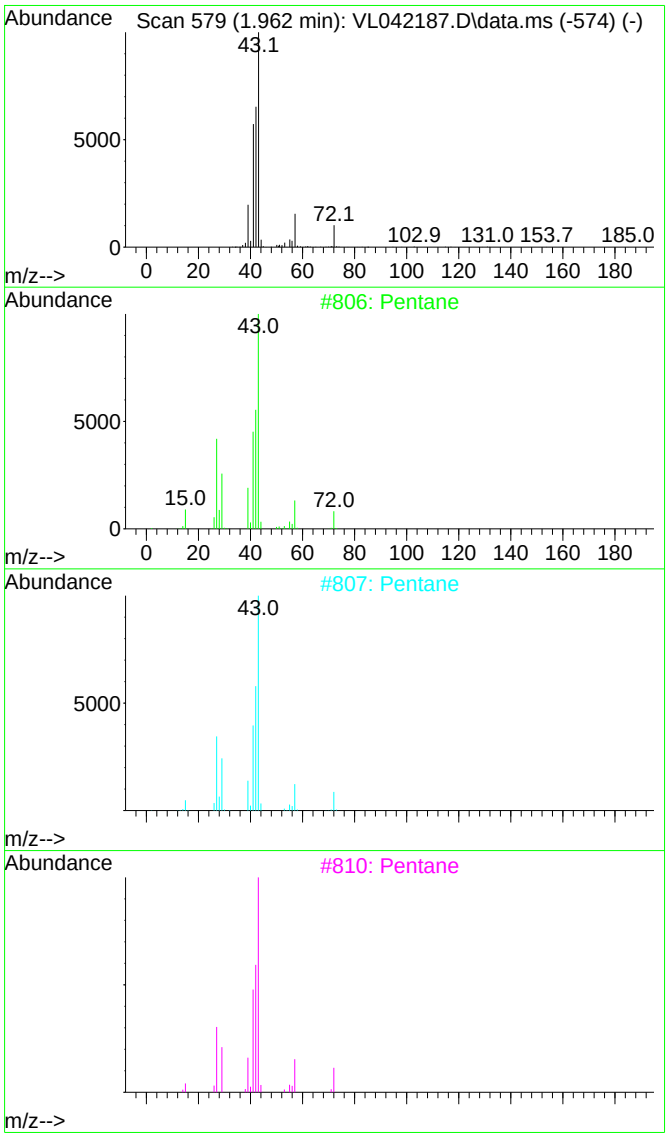
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

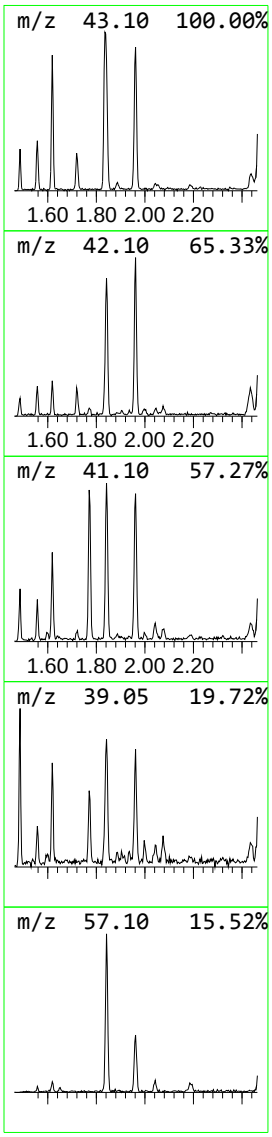
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Pentane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.962	2.22 ppbv	159501	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	86
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	86
4	Pentane	72	C5H12	000109-66-0	78
5	Butane, 2-methyl-	72	C5H12	000078-78-4	50





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

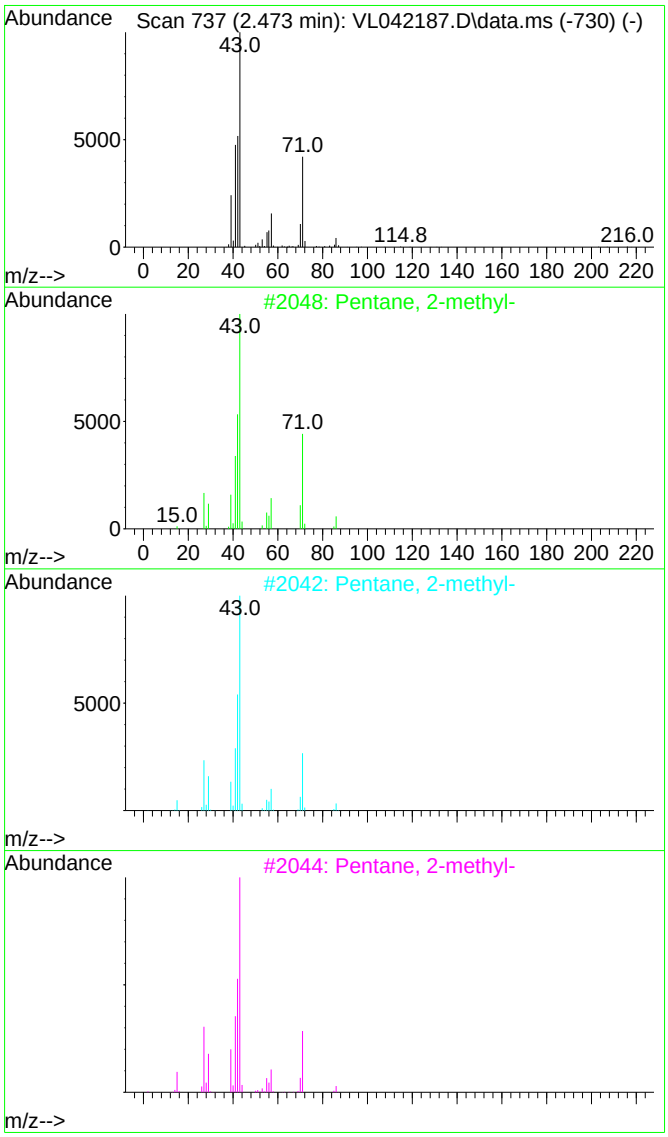
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

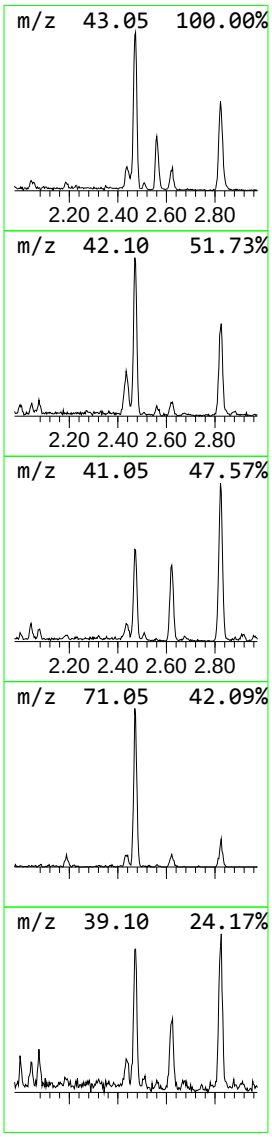
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 Pentane, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.473	3.05 ppbv	219624	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	87
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	83
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	80





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

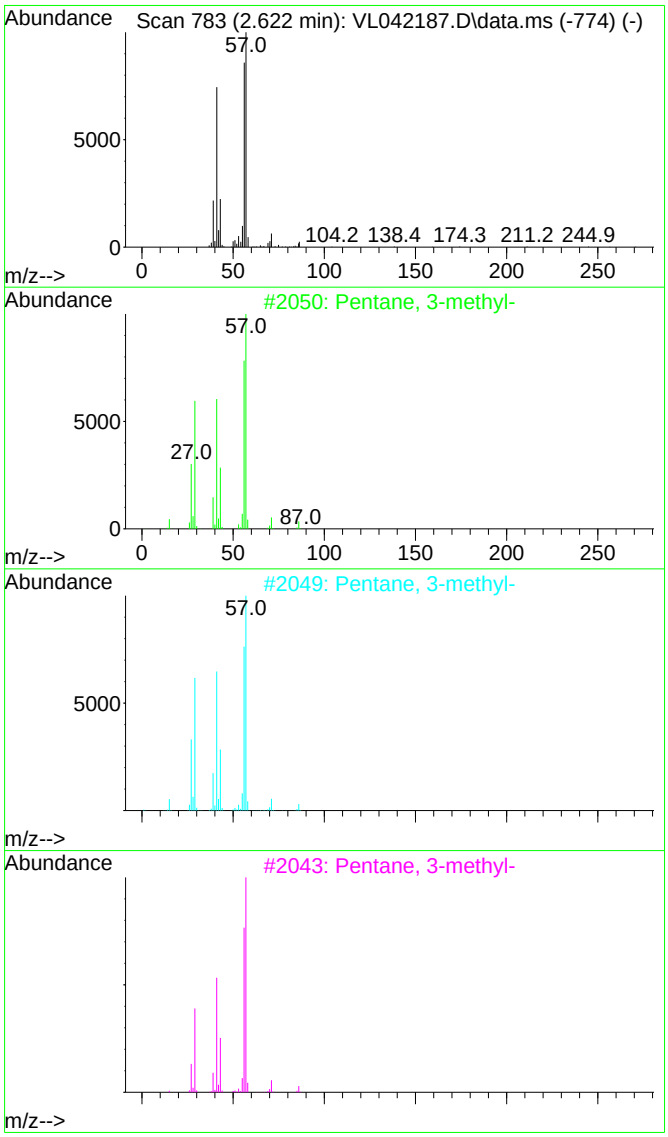
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

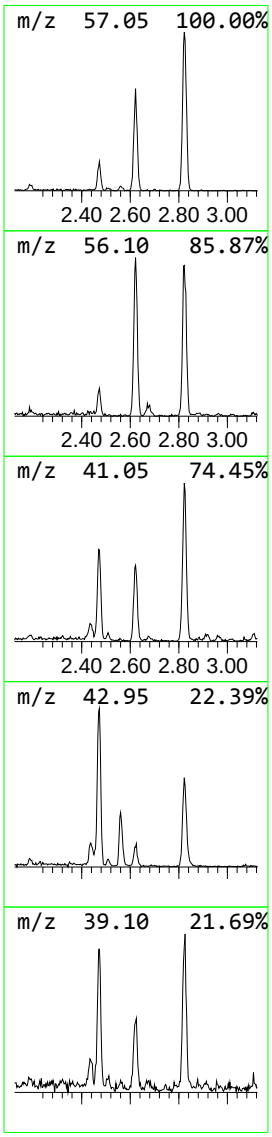
****

Peak Number 4 Pentane, 3-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.622	1.79 ppbv	128445	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	80
4	1-Hexene, 4-methyl-	98	C7H14	003769-23-1	64
5	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

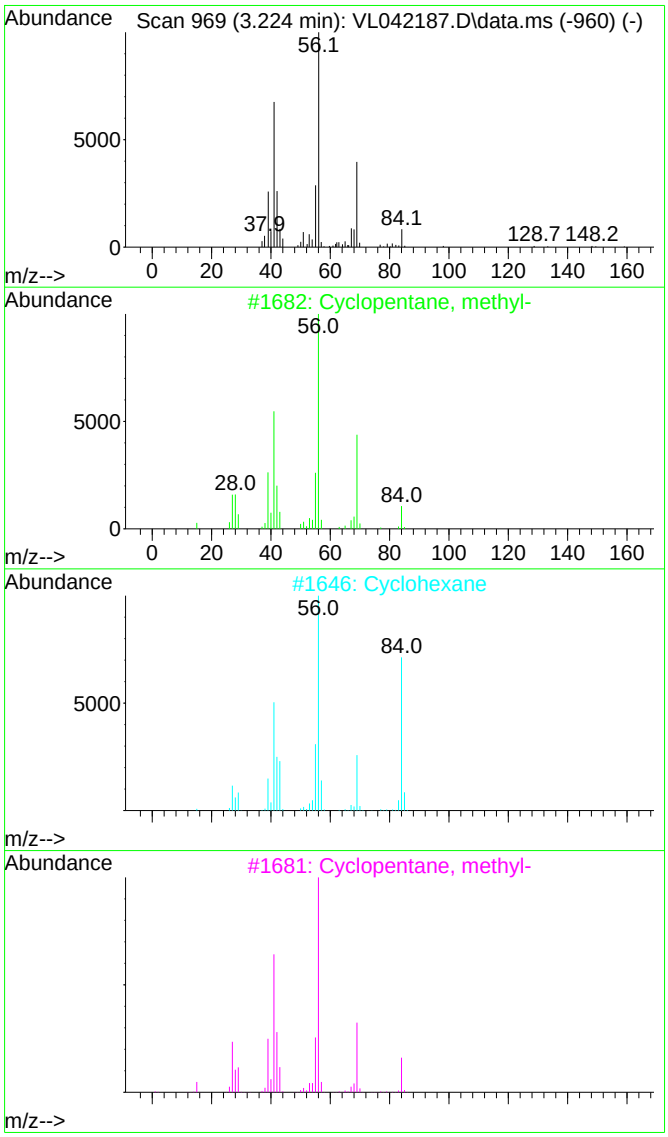
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

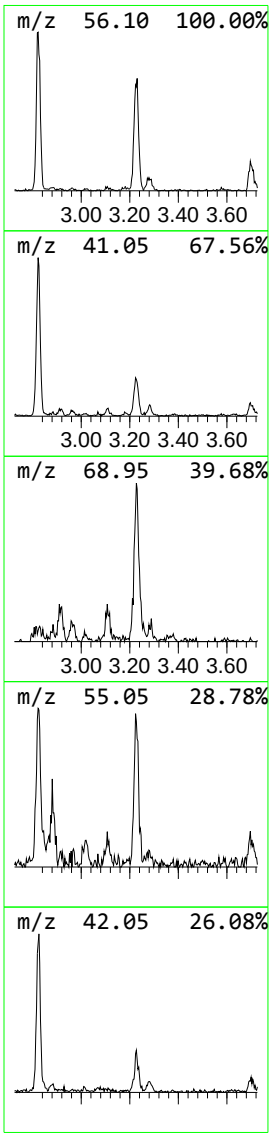
****

Peak Number 5 Cyclopentane, methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.224	1.41 ppbv	101212	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	78
2	Cyclohexane	84	C6H12	000110-82-7	78
3	Cyclopentane, methyl-	84	C6H12	000096-37-7	78
4	Cyclopropane, propyl-	84	C6H12	002415-72-7	64
5	Cyclohexane	84	C6H12	000110-82-7	64





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.618	1.1	ppbv	78959	1	2.784	719172	10.0
Pentane	1.962	2.2	ppbv	159501	1	2.784	719172	10.0
Pentane, 2-methyl-	2.473	3.0	ppbv	219624	1	2.784	719172	10.0
Pentane, 3-methyl-	2.622	1.8	ppbv	128445	1	2.784	719172	10.0
Cyclopentane, m...	3.224	1.4	ppbv	101212	1	2.784	719172	10.0

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

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	AA-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-04	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
VL042188.D	1		03/27/25 20:12	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.40	1.98	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.47	0.97	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	3.20	7.60		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.78	2.71		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.24	0.71	J	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.31	0.99	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.31	1.17	J	0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	AA-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-04	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
VL042188.D	1		03/27/25 20:12	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.70	5.99		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	186000		2.787			
540-36-3	1,4-Difluorobenzene	530000		3.955			
3114-55-4	Chlorobenzene-d5	475000		8.878			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.26		J		1.47	ppbv
115-07-1	Propene	0.42		J		1.49	ppbv

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/27/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	AA-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-04	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
VL042188.D	1		03/27/25 20:12	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000107-83-5	Pentane, 2-methyl-	1.20		J		2.47	ppbv

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\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:16:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	185847	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	529516	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	474604	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	386837	9.925	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	10856	0.396	ppbv	94
3) Chlorodifluoromethane	1.473	51	7173m	0.256	ppbv	
4) Chloromethane	1.531	50	5306	0.473	ppbv	100
9) Propene	1.486	41	5401m	0.420	ppbv	
11) Trichlorofluoromethane	1.878	101	5846	0.219	ppbv	95
13) Ethanol	1.719	45	15071	12.408	ppbv	93
15) Acetone	1.836	43	83691	3.220	ppbv	92
20) Methylene Chloride	2.059	84	7575	0.783	ppbv	85
26) Hexane	2.823	57	44184	1.696	ppbv #	33
34) 2-Butanone	2.564	43	9069	0.236	ppbv	98
35) Carbon Tetrachloride	3.758	117	2713m	0.066	ppbv	
36) Benzene	3.651	78	16130	0.307	ppbv #	93
53) Toluene	6.930	91	19259	0.309	ppbv	97
59) m/p-Xylene	9.529	91	8368m	0.124	ppbv	

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:16:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations APPROVED

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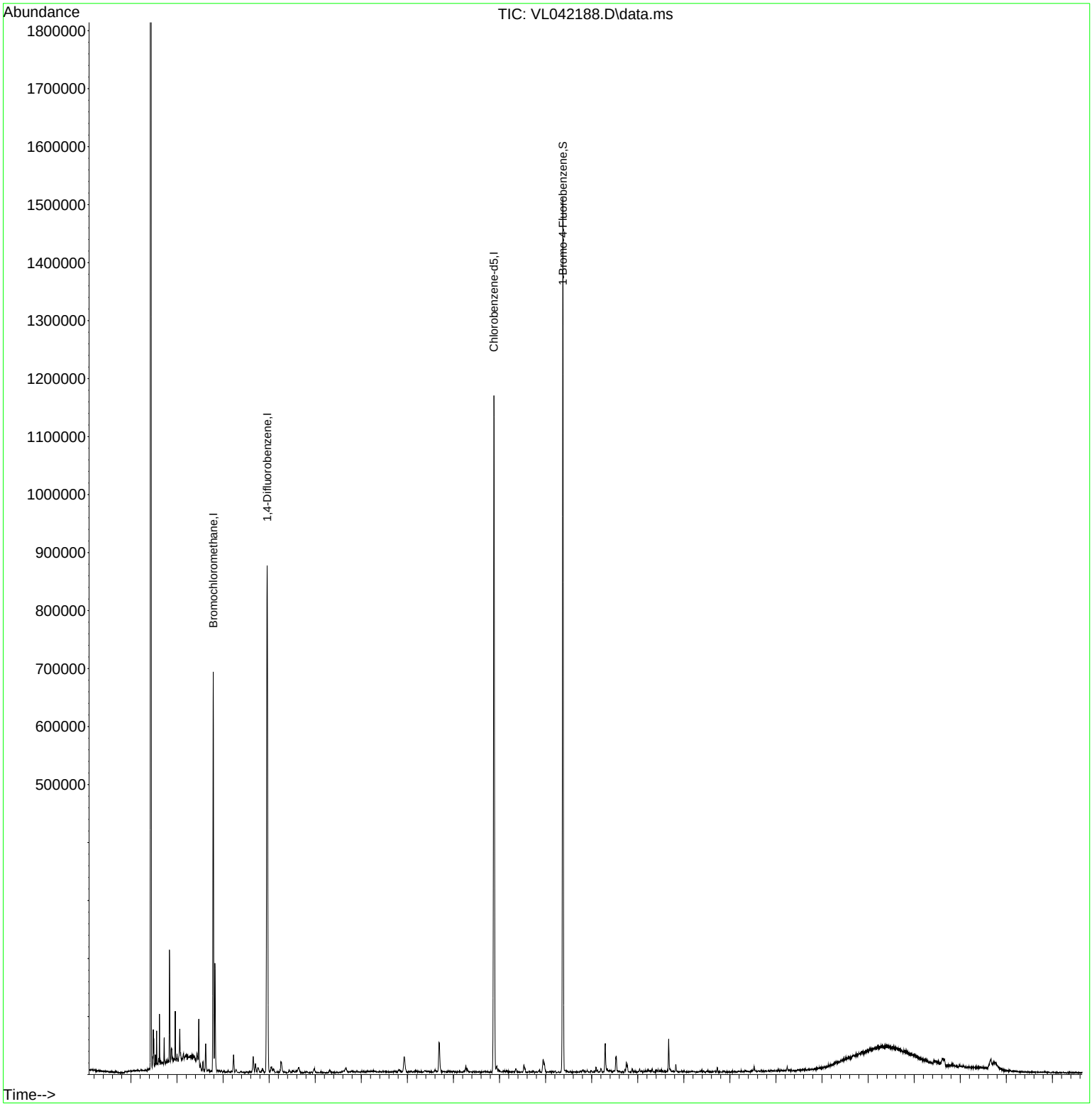
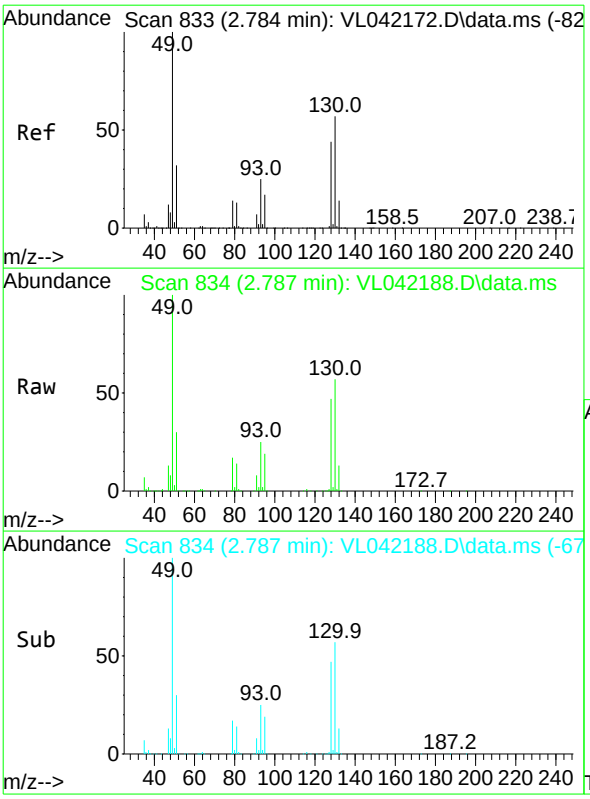
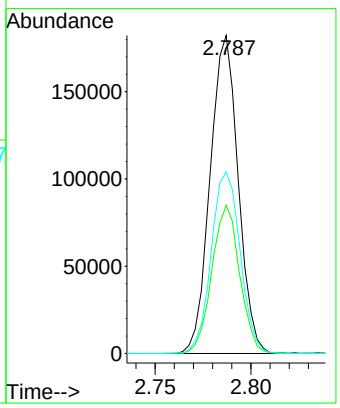




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 49 Resp: 185847

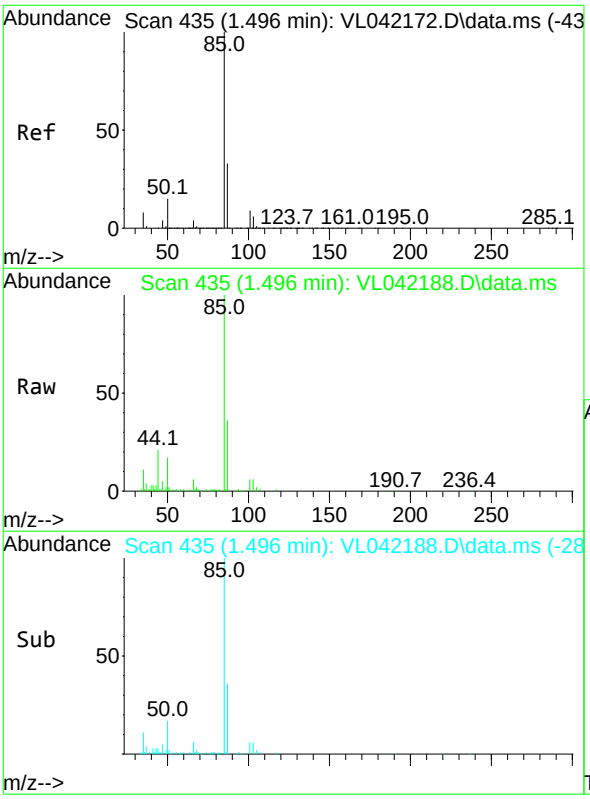
Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	59.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

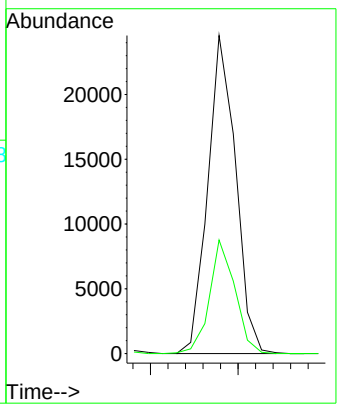
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

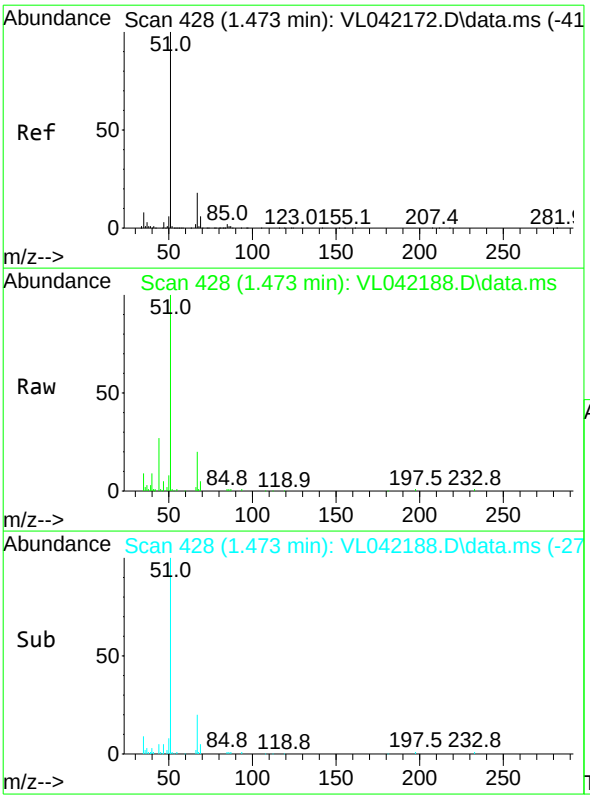


#2
Dichlorodifluoromethane
Concen: 0.396 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 85 Resp: 10856

Ion	Ratio	Lower	Upper
85	100		
87	35.7	26.1	39.1

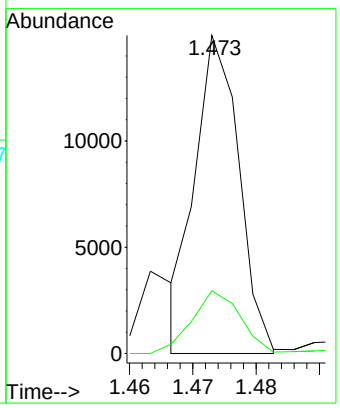




#3
Chlorodifluoromethane
Concen: 0.256 ppbv m
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 51 Resp: 7173

Ion	Ratio	Lower	Upper
51	100		
67	27.4	15.0	22.6#



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

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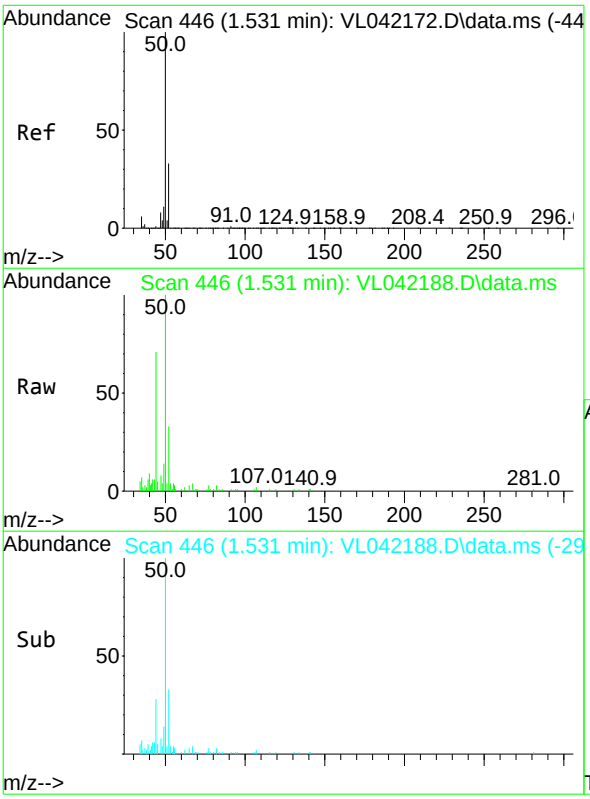
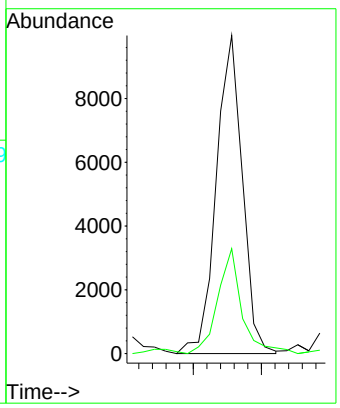
Supervised By :Mahesh Dadoda 04/03/2025

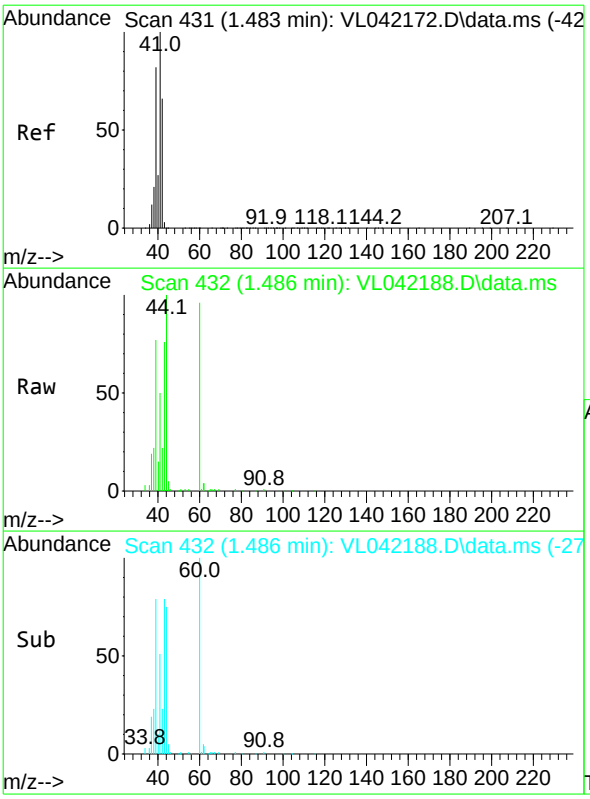


#4
Chloromethane
Concen: 0.473 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 50 Resp: 5306

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.1	39.1

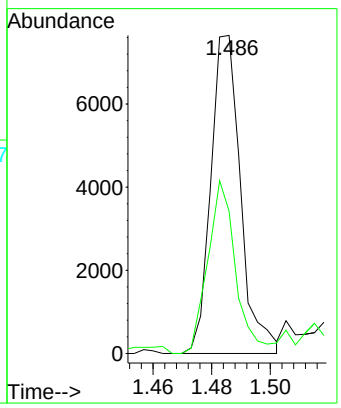




#9
Propene
Concen: 0.420 ppbv m
RT: 1.486 min Scan# 43
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 41 Resp: 5401

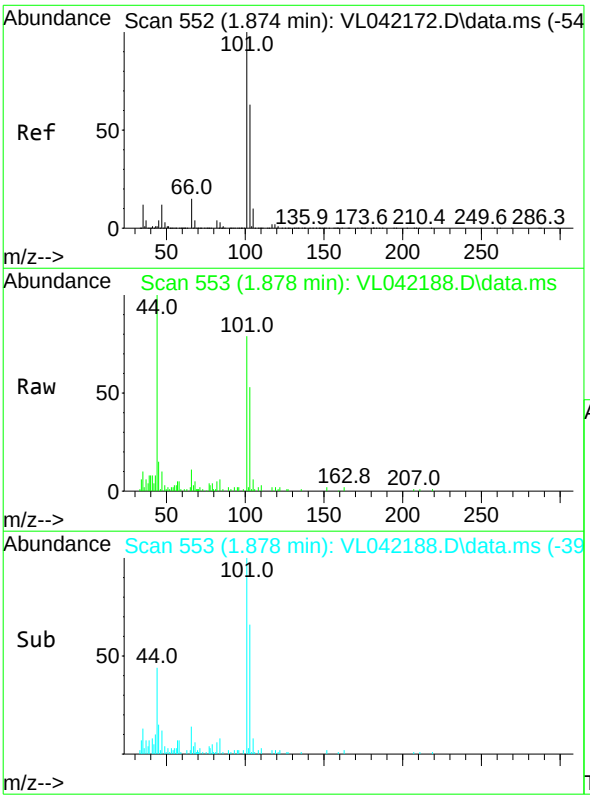
Ion	Ratio	Lower	Upper
41	100		
42	26.7	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

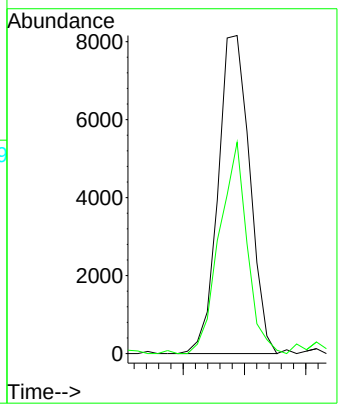
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

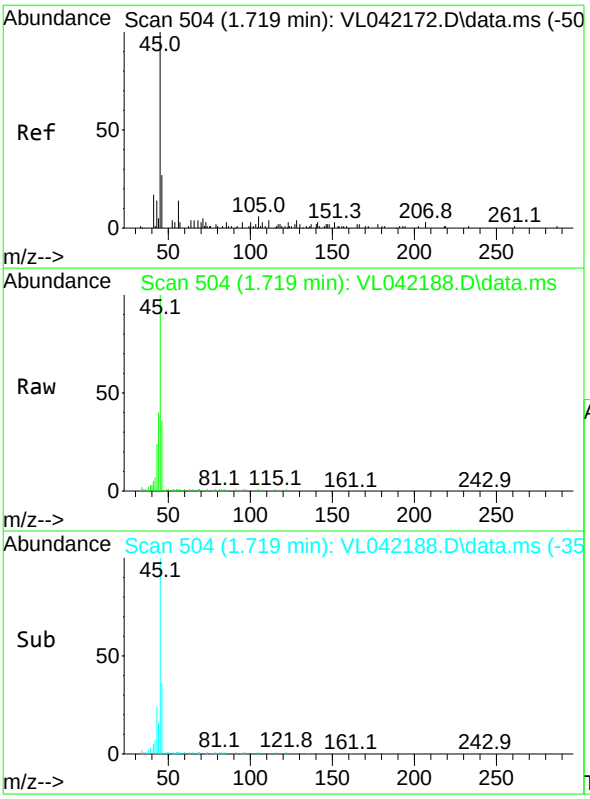


#11
Trichlorofluoromethane
Concen: 0.219 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion:101 Resp: 5846

Ion	Ratio	Lower	Upper
101	100		
103	66.4	50.2	75.2

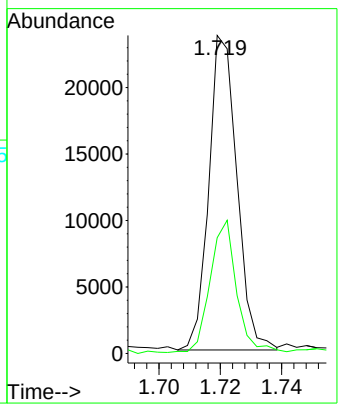




#13
Ethanol
Concen: 12.408 ppbv
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 45 Resp: 15071

Ion	Ratio	Lower	Upper
45	100		
46	45.5	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

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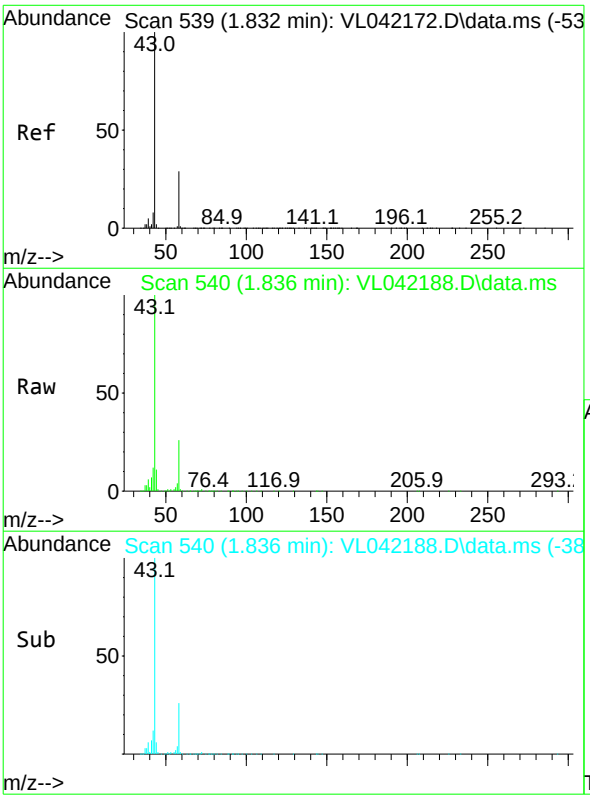
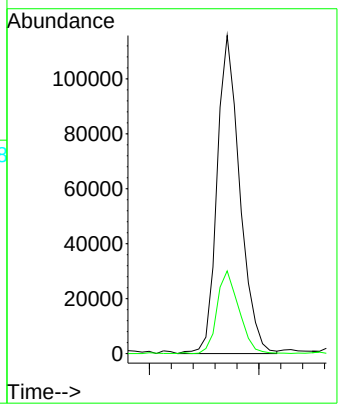
Supervised By :Mahesh Dadoda 04/03/2025

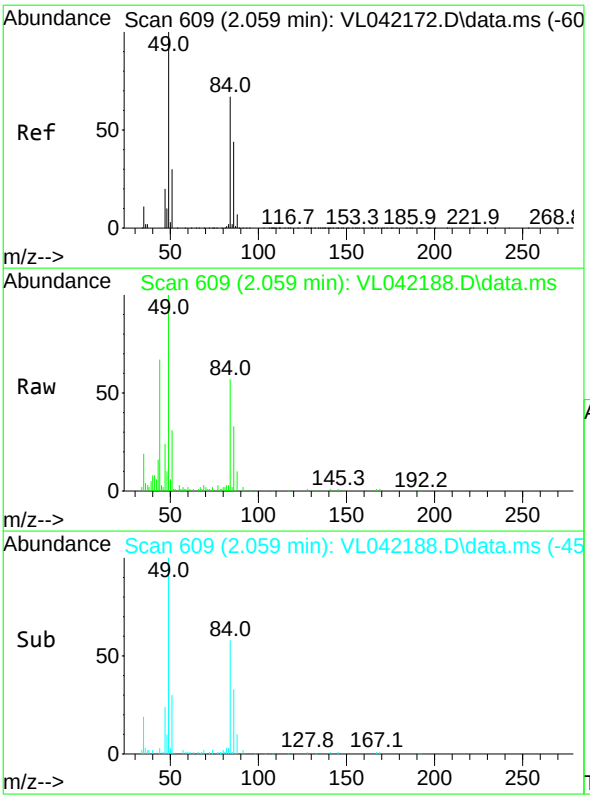


#15
Acetone
Concen: 3.220 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 43 Resp: 83691

Ion	Ratio	Lower	Upper
43	100		
58	24.7	23.2	34.8

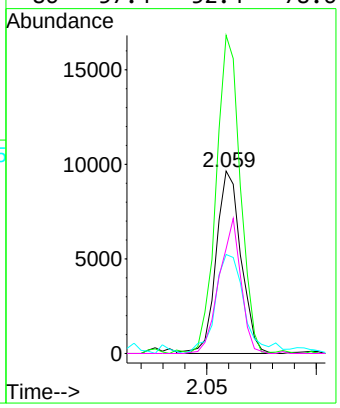




#20
Methylene Chloride
Concen: 0.783 ppbv
RT: 2.059 min Scan# 60
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 84 Resp: 7575

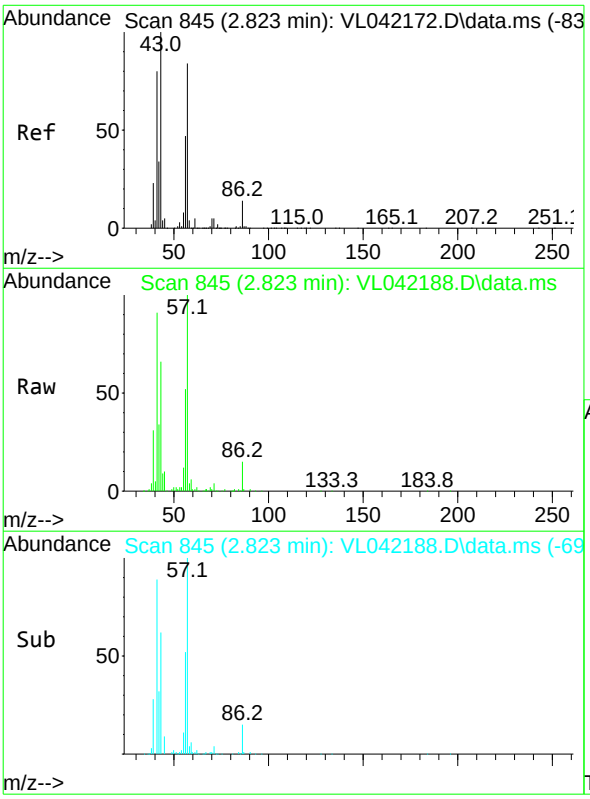
Ion	Ratio	Lower	Upper
84	100		
49	173.6	120.2	180.4
51	53.1	37.4	56.0
86	57.4	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

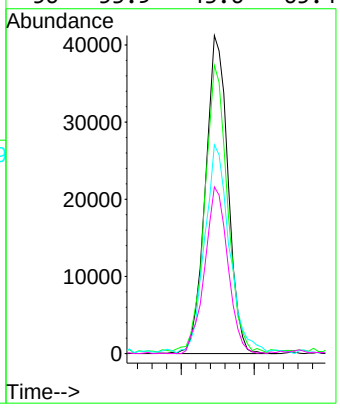
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

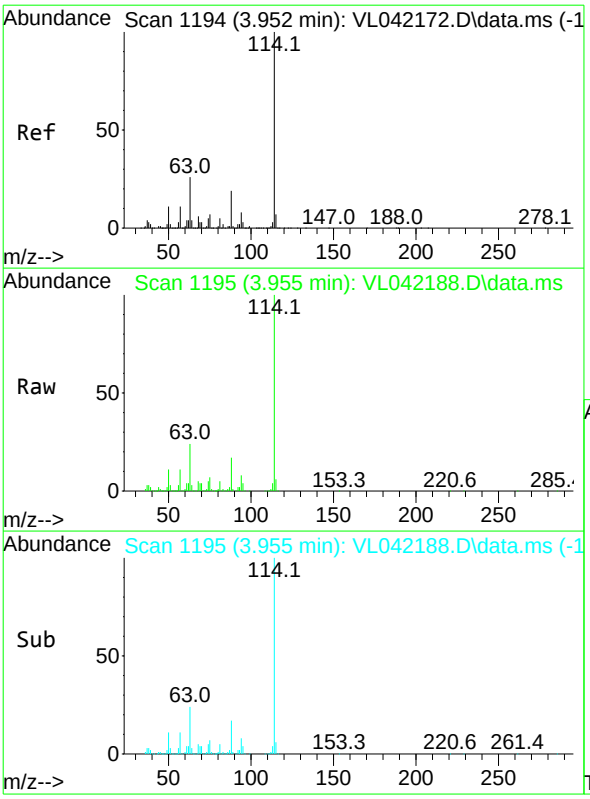


#26
Hexane
Concen: 1.696 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 57 Resp: 44184

Ion	Ratio	Lower	Upper
57	100		
41	91.3	76.6	114.8
43	74.7	207.8	311.8#
56	53.9	43.6	65.4

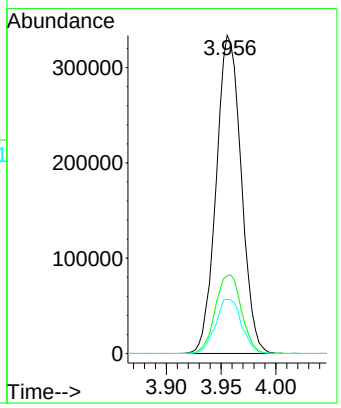




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion:114 Resp: 529516

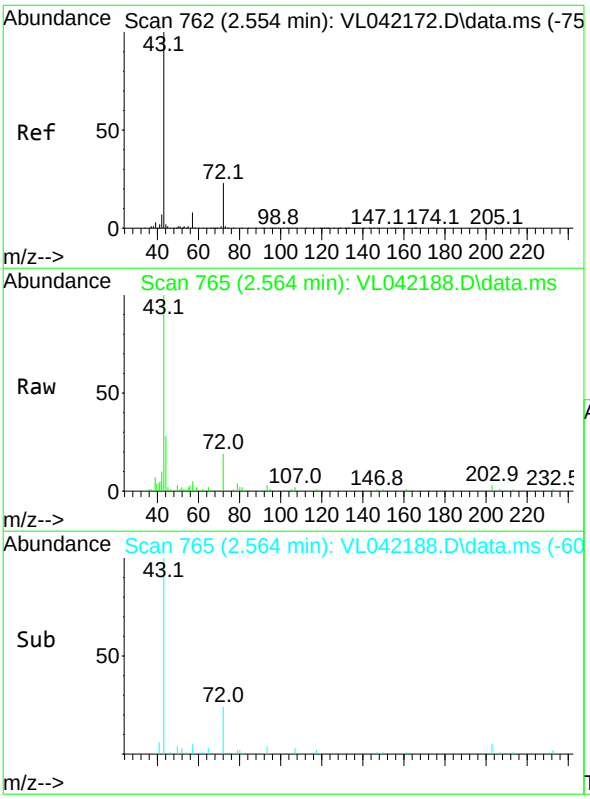
Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	17.8	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

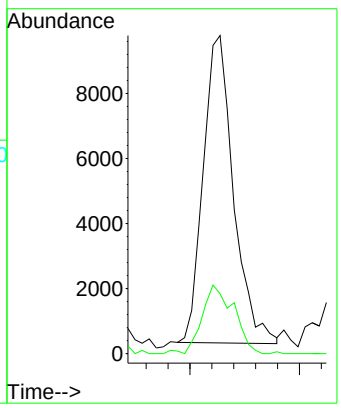
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

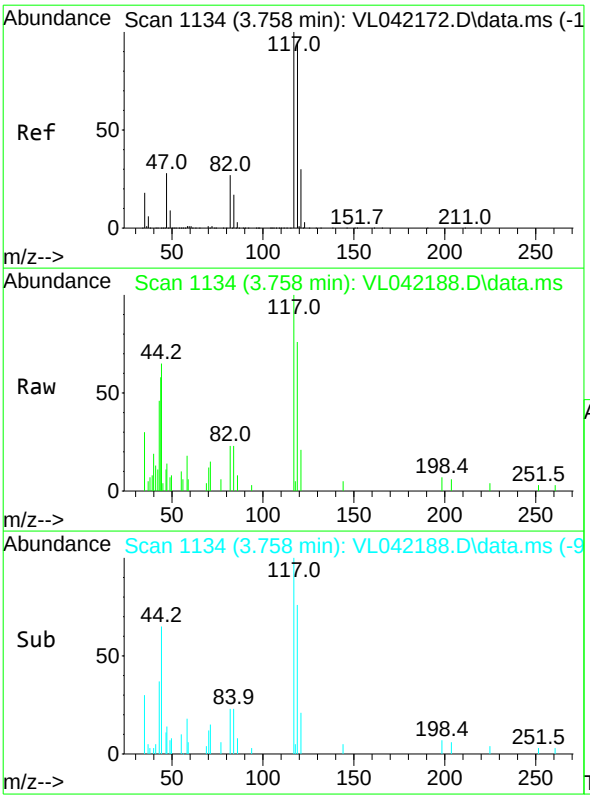


#34
2-Butanone
Concen: 0.236 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 43 Resp: 9069

Ion	Ratio	Lower	Upper
43	100		
72	23.6	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.066 ppbv m
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

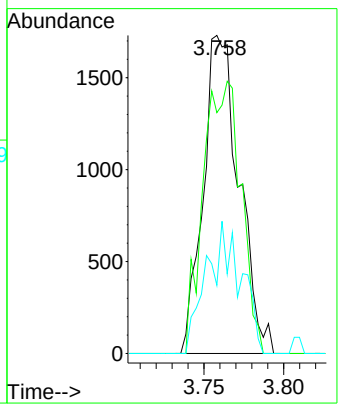
Tgt Ion:117 Resp: 2713

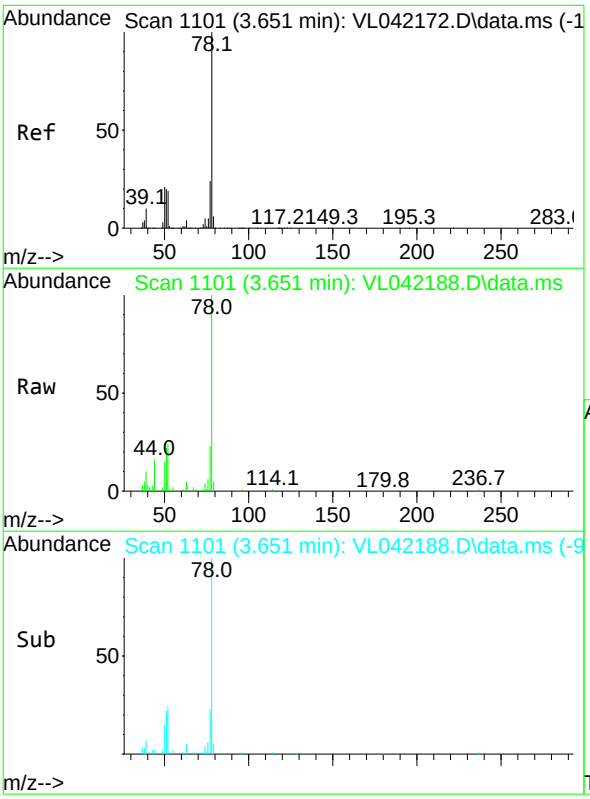
Ion	Ratio	Lower	Upper
117	100		
119	75.7	76.2	114.2#
121	21.4	24.2	36.4#

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

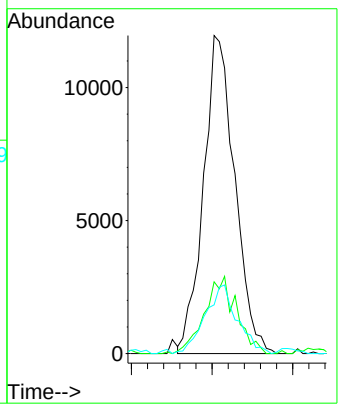


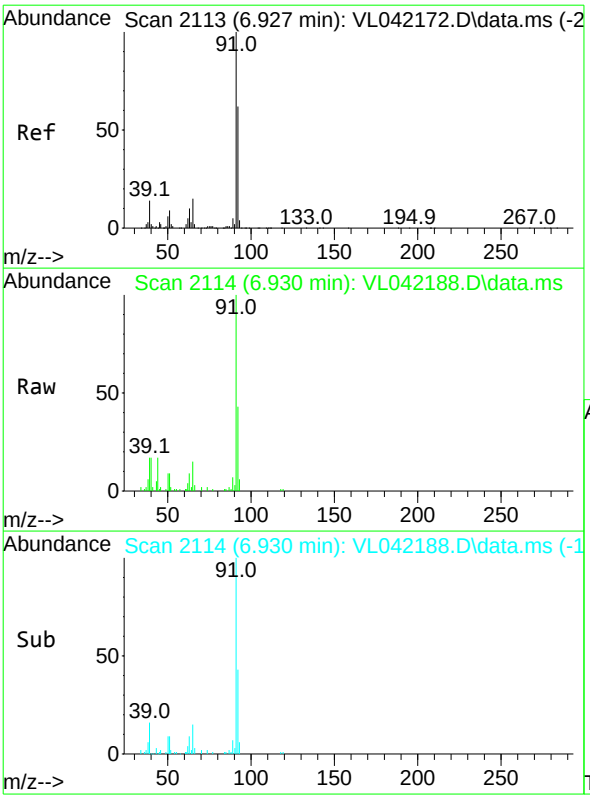


#36
Benzene
Concen: 0.307 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 78 Resp: 16130

Ion	Ratio	Lower	Upper
78	100		
77	22.6	19.1	28.7
50	14.8	16.6	24.8#

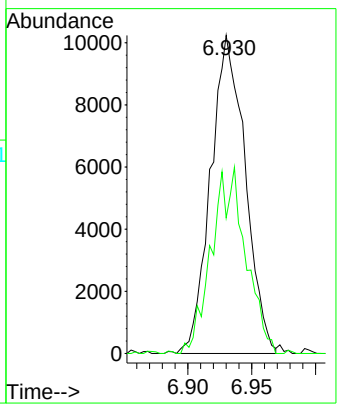




#53
Toluene
Concen: 0.309 ppbv
RT: 6.930 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 91 Resp: 19259

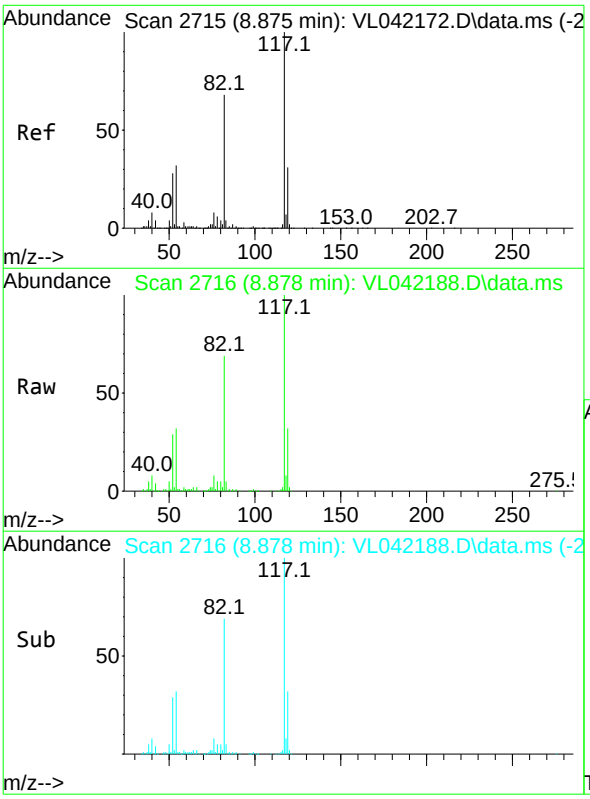
Ion	Ratio	Lower	Upper
91	100		
92	58.4	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

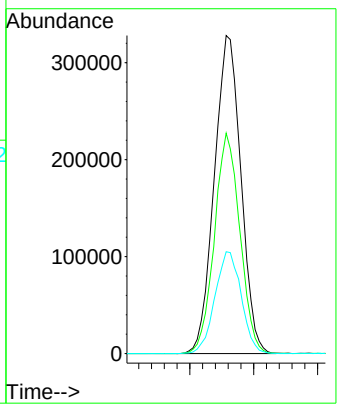
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

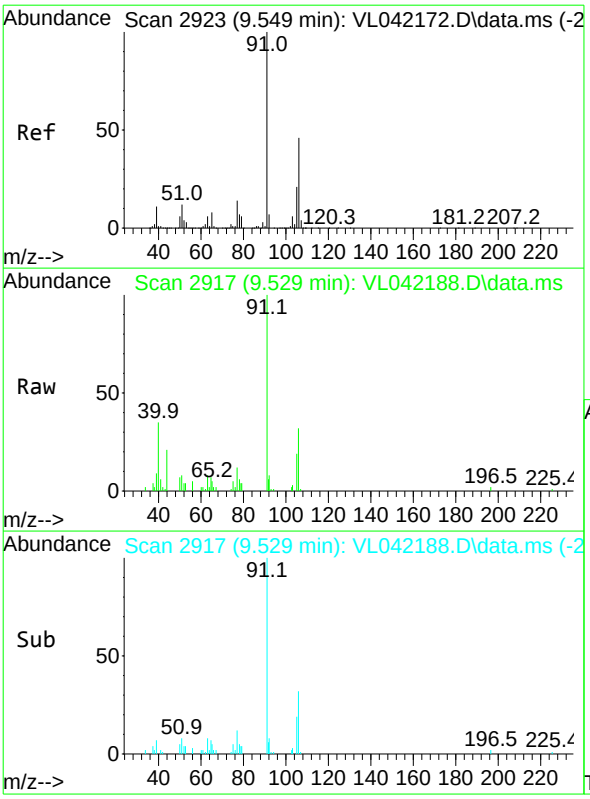


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion:117 Resp: 474604

Ion	Ratio	Lower	Upper
117	100		
82	66.3	55.8	83.6
119	31.6	25.5	38.3

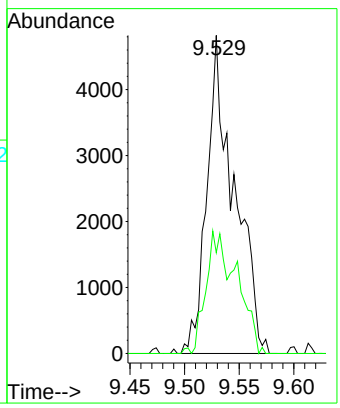




#59
m/p-Xylene
Concen: 0.124 ppbv m
RT: 9.529 min Scan# 29
Delta R.T. -0.020 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 91 Resp: 8368

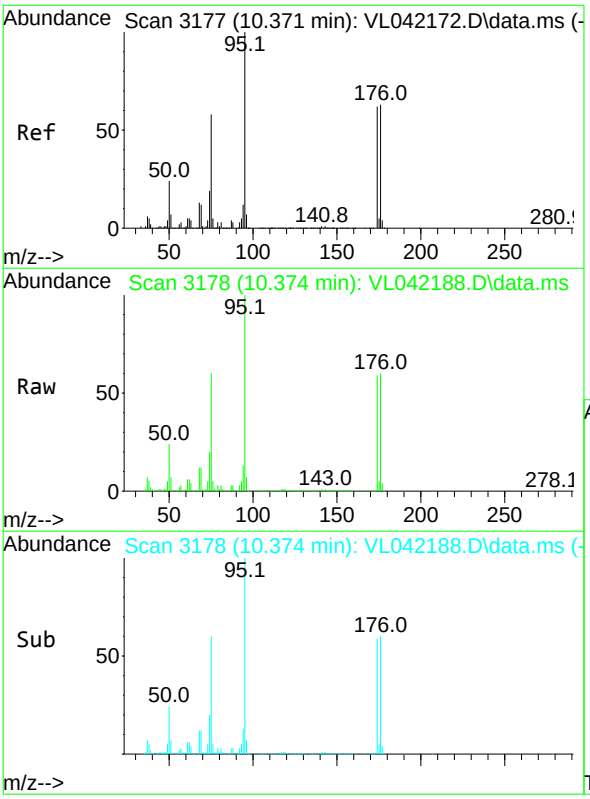
Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Manual Integrations
APPROVED

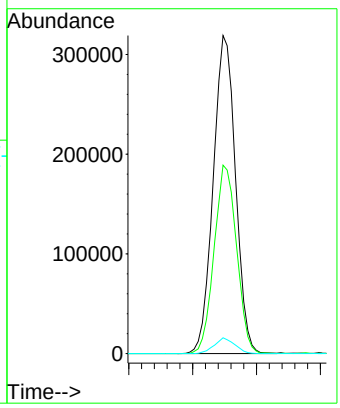
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 9.925 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 95 Resp: 386837

Ion	Ratio	Lower	Upper
95	100		
174	59.7	50.6	76.0
175	4.6	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042188.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4220977	4629360	100.00%	41.257%
2	1.619	470	473	477	rVB	87489	46885	1.01%	0.418%
3	1.836	536	540	547	rBV2	194106	170597	3.69%	1.520%
4	1.962	574	579	585	rVB2	86548	62886	1.36%	0.560%
5	2.059	598	609	614	rBV3	56209	63420	1.37%	0.565%
6	2.473	731	737	743	rVB2	83011	82786	1.79%	0.738%
7	2.622	776	783	792	rVB3	48010	54745	1.18%	0.488%
8	2.787	826	834	840	rBV	689292	711374	15.37%	6.340%
9	2.823	840	845	858	rVB	187064	209703	4.53%	1.869%
10	3.956	1181	1195	1209	rBV	873697	1392046	30.07%	12.406%
11	6.933	2101	2115	2128	rBV3	26317	59254	1.28%	0.528%
12	7.687	2337	2348	2362	rBV4	51100	93076	2.01%	0.829%
13	8.878	2704	2716	2727	rBV	1167127	1689423	36.49%	15.056%
14	10.374	3164	3178	3191	rBV	1507802	1829446	39.52%	16.304%
15	11.296	3454	3463	3472	rBV3	49151	67119	1.45%	0.598%
16	12.672	3881	3888	3895	rBV	55551	58627	1.27%	0.522%

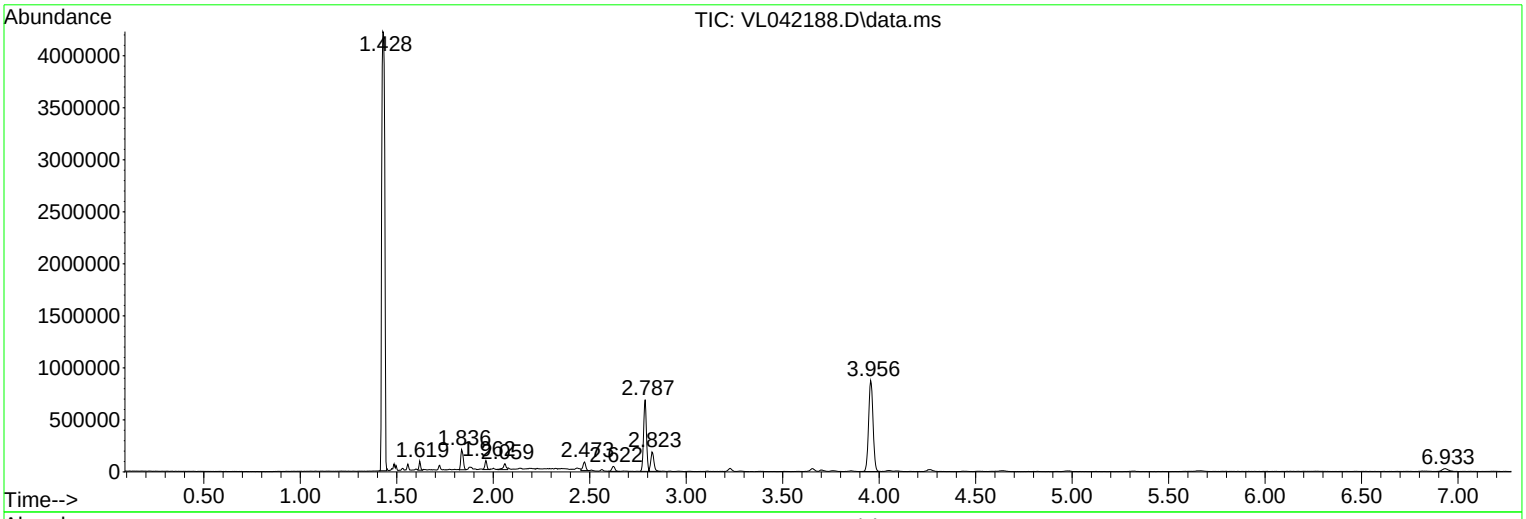
Sum of corrected areas: 11220747

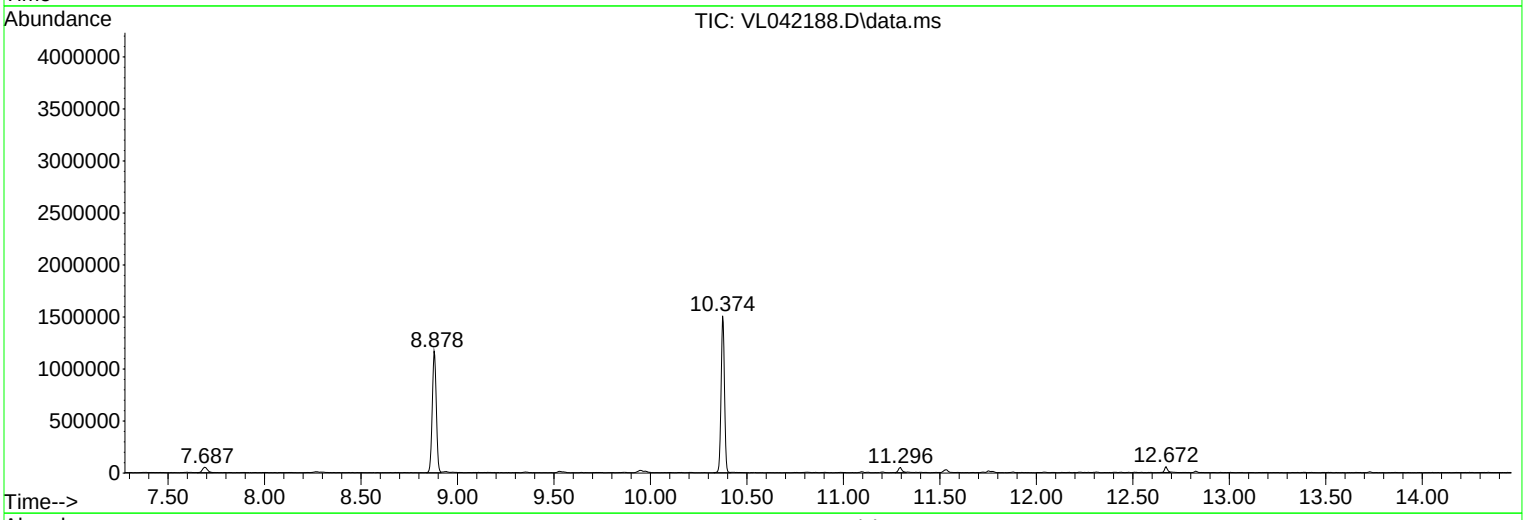
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

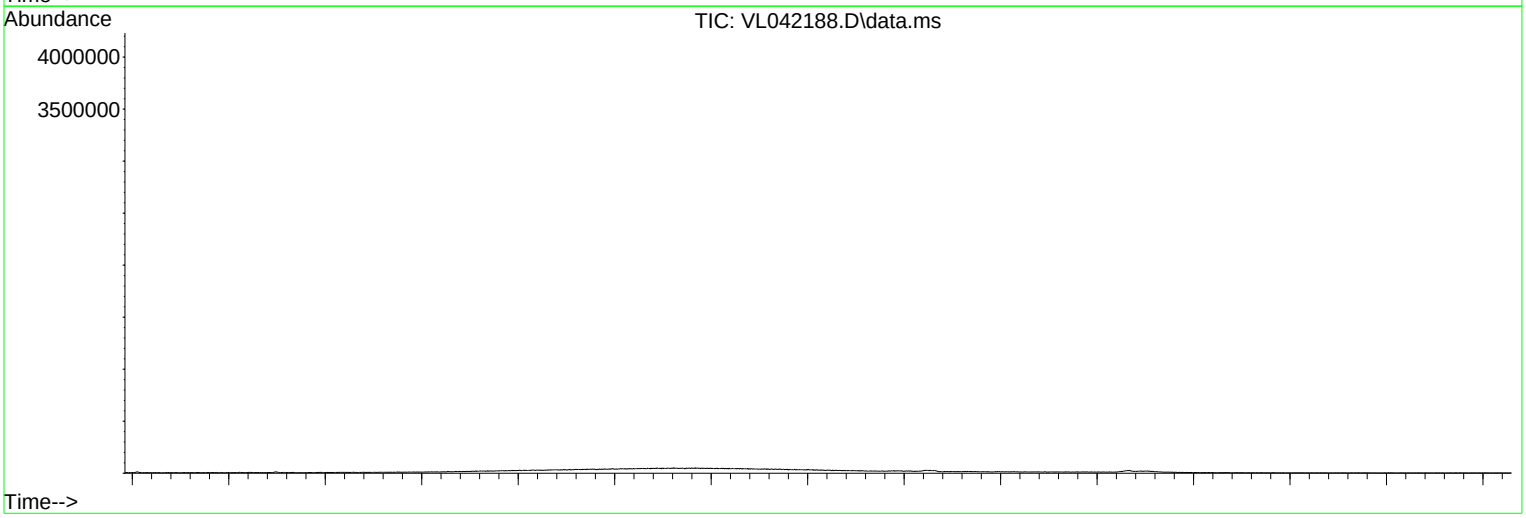
Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

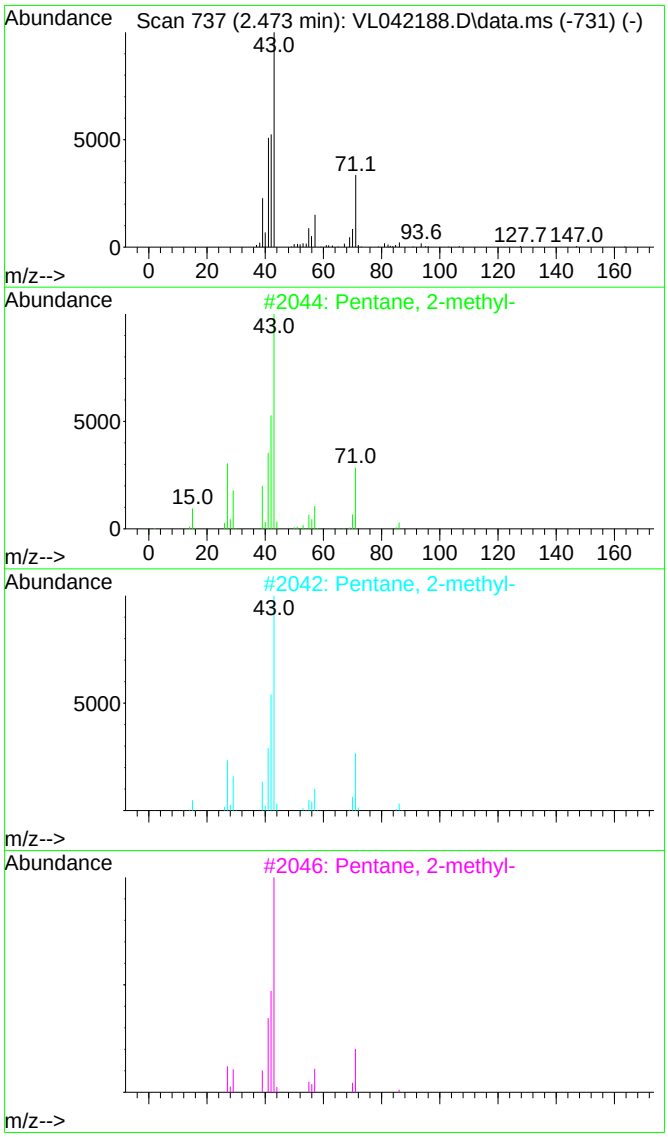
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

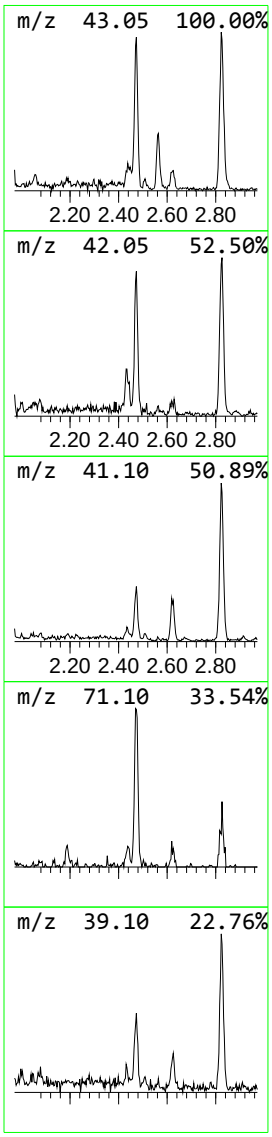
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 1 Pentane, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.473	1.16 ppbv	82786	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	64
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	64





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Pentane, 2-methyl-	2.473	1.2	ppbv	82786	1	2.787	711374	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-3-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-05	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
VL042197.D	1		03/28/25 01:20	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.43	2.13	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.36	0.74	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.41	1.21	J	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.23	1.29	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.40	1.64	J	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	6.20	14.7		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.74	2.57		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.40	1.38	J	0.76	1.72	ug/m3
78-93-3	2-Butanone	2.90	8.55		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.60	2.93		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.39	1.82	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.55	1.76		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	2.10	7.91		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-3-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-05	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
VL042197.D	1		03/28/25 01:20	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.040	0.27		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.27	1.17	J	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.00	4.34		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.36	1.56	J	0.52	2.17	ug/m3
100-42-5	Styrene	0.36	1.53	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.26	1.28	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.90	6.70		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.1			70 (65) - 130 (135)	101%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	173000		2.79			
540-36-3	1,4-Difluorobenzene	494000		3.965			
3114-55-4	Chlorobenzene-d5	445000		8.885			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.28		J		1.48	ppbv
115-07-1	Propene	0.63		J		1.49	ppbv
000106-97-8	Butane	14.6		J		1.62	ppbv

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-3-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-05	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
VL042197.D	1		03/28/25 01:20	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000109-66-0	Pentane	5.70		J		1.97	ppbv
	unknown2.441	1.20		J		2.44	ppbv
000107-83-5	Pentane, 2-methyl-	3.90		J		2.48	ppbv
000096-14-0	Pentane, 3-methyl-	2.00		J		2.63	ppbv
000096-37-7	Cyclopentane, methyl-	1.60		J		3.23	ppbv
000124-18-5	Decane	1.10		J		11.8	ppbv

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\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 23:03:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	172645	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	493948	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.885	117	445312	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	368899	10.088	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	10972	0.430	ppbv	92
3) Chlorodifluoromethane	1.476	51	7213m	0.277	ppbv	
4) Chloromethane	1.531	50	3716	0.357	ppbv	99
9) Propene	1.486	41	7546m	0.632	ppbv	
10) Heptane	4.985	43	12702	0.400	ppbv	91
11) Trichlorofluoromethane	1.881	101	5673	0.229	ppbv	99
13) Ethanol	1.722	45	56814	50.352	ppbv	81
15) Acetone	1.842	43	149738m	6.202	ppbv	
20) Methylene Chloride	2.065	84	6666	0.741	ppbv	95
26) Hexane	2.829	57	45421	1.876	ppbv #	34
29) Chloroform	2.852	83	21281	0.601	ppbv	99
30) Cyclohexane	3.858	84	8428m	0.401	ppbv	
34) 2-Butanone	2.564	43	104671	2.922	ppbv	96
35) Carbon Tetrachloride	3.761	117	2542m	0.066	ppbv	
36) Benzene	3.658	78	26954	0.550	ppbv	97
41) Tetrahydrofuran	3.065	42	8525m	0.413	ppbv	
44) 2,2,4-Trimethylpentane	4.648	57	32093	0.388	ppbv #	76
52) Tetrachloroethene	8.225	164	690m	0.036	ppbv	
53) Toluene	6.940	91	124001	2.136	ppbv	98
58) Ethyl Benzene	9.361	91	20976	0.265	ppbv	95
59) m/p-Xylene	9.532	91	64820	1.026	ppbv	99
60) o-Xylene	9.969	91	22977	0.363	ppbv	94
61) Styrene	9.875	104	11230	0.359	ppbv	96
74) 1,2,4-Trimethylbenzene	11.539	105	20838	0.263	ppbv #	72

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 23:03:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Manual Integrations APPROVED

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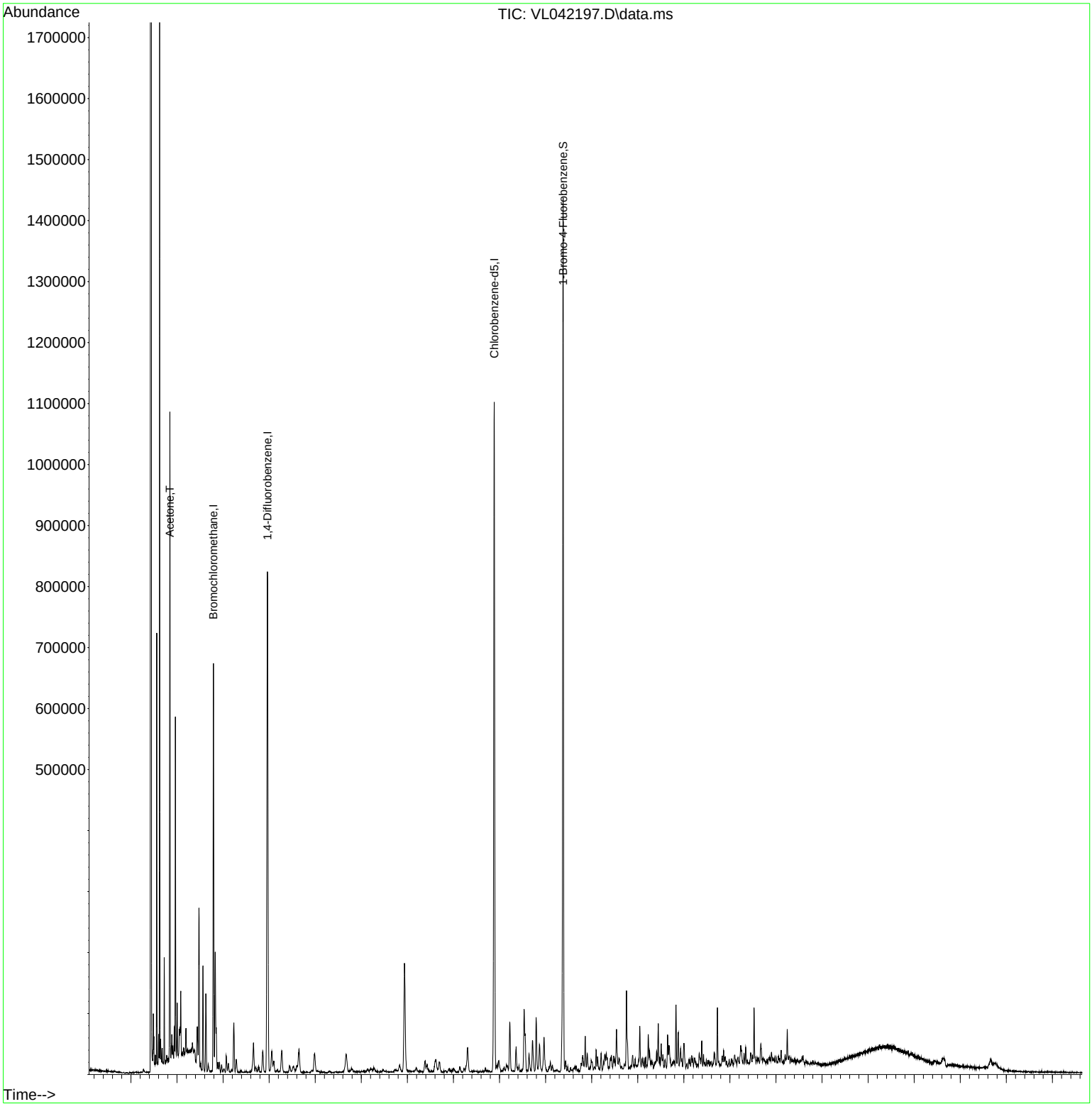

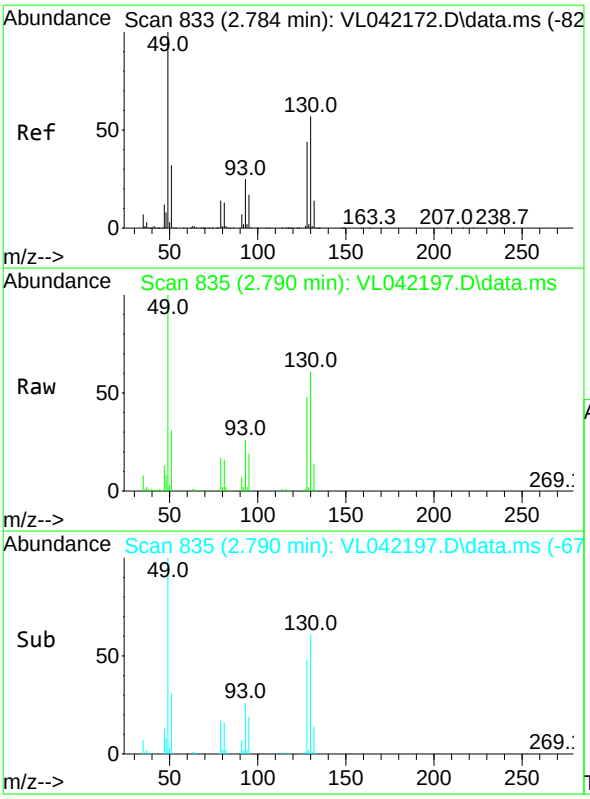

#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 83
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 49 Resp: 172645

Ion	Ratio	Lower	Upper
49	100		
128	48.0	22.9	68.5
130	61.2	28.8	86.4

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Manual Integrations
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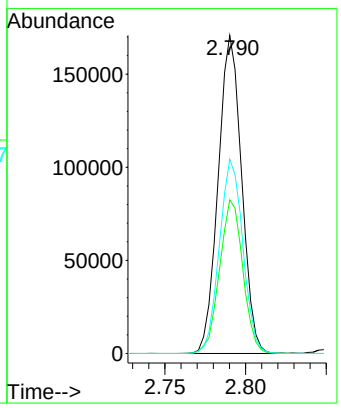
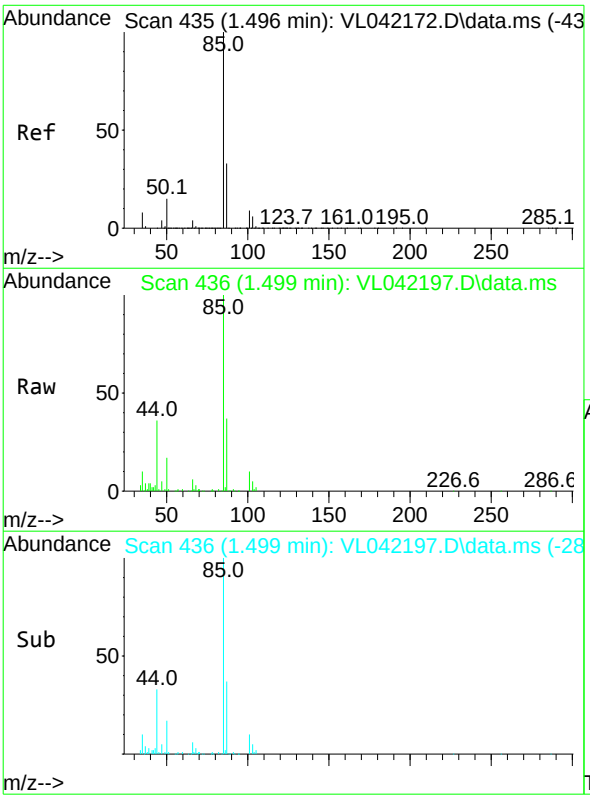
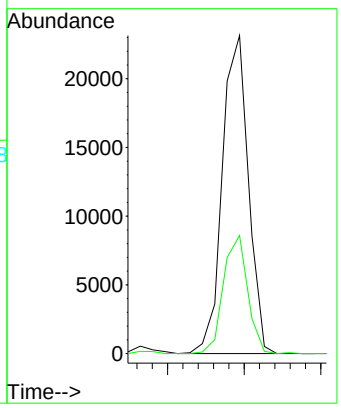


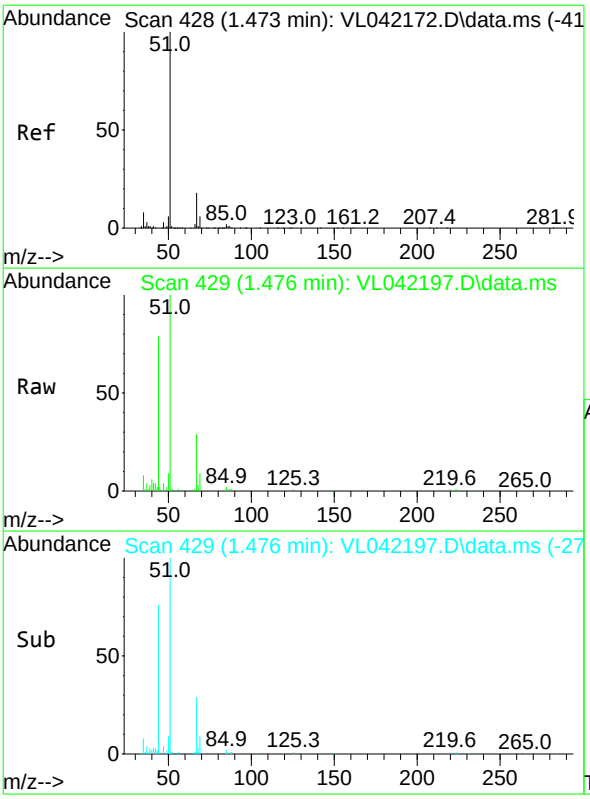


#2
Dichlorodifluoromethane
Concen: 0.430 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 85 Resp: 10972

Ion	Ratio	Lower	Upper
85	100		
87	37.1	26.1	39.1

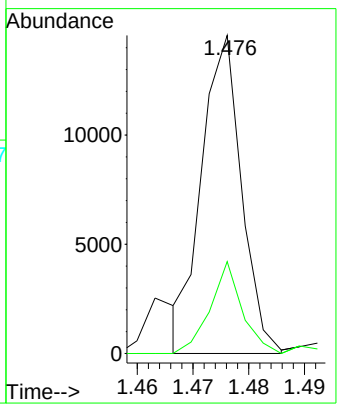




#3
Chlorodifluoromethane
Concen: 0.277 ppbv m
RT: 1.476 min Scan# 42
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 51 Resp: 7213

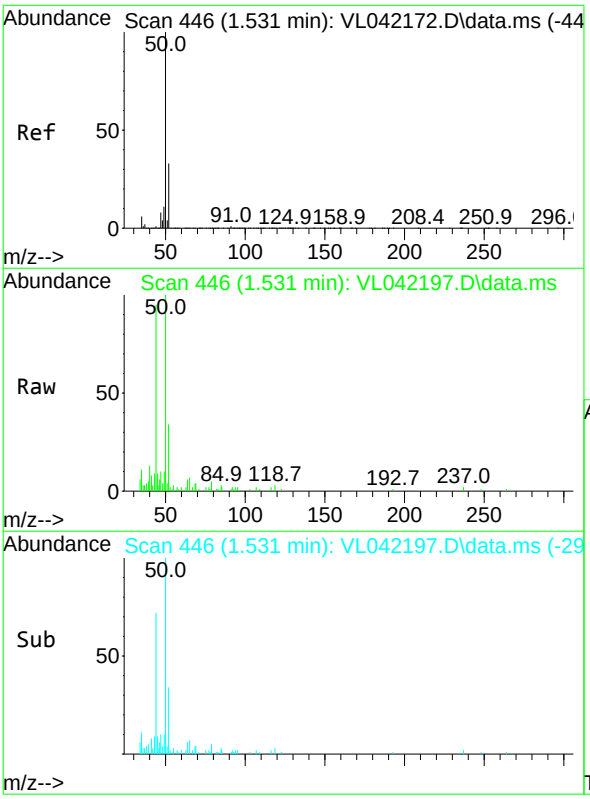
Ion	Ratio	Lower	Upper
51	100		
67	28.1	15.0	22.6#



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Manual Integrations
APPROVED

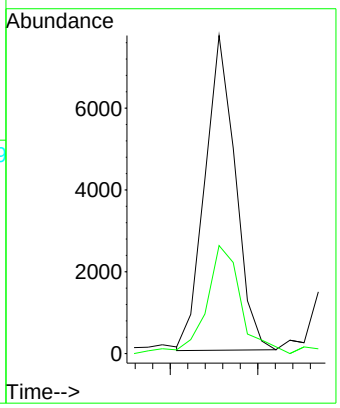
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

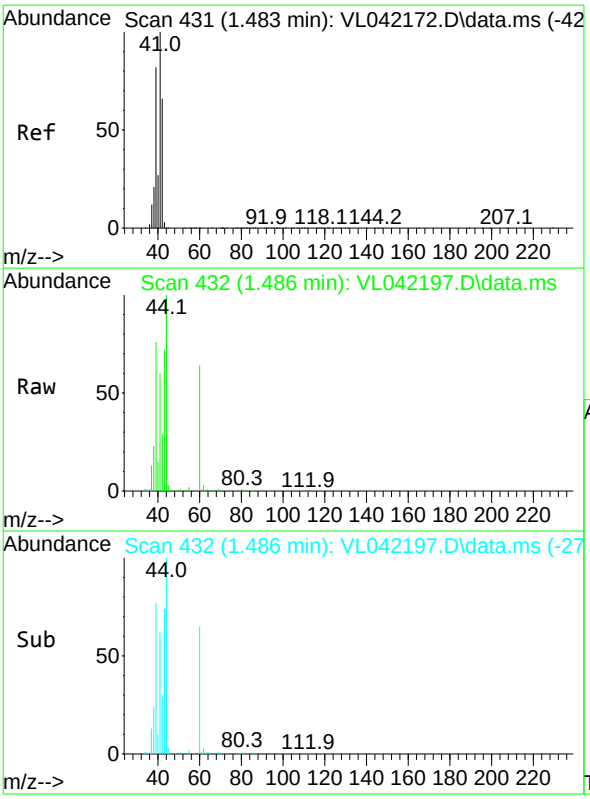


#4
Chloromethane
Concen: 0.357 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 50 Resp: 3716

Ion	Ratio	Lower	Upper
50	100		
52	33.2	26.1	39.1

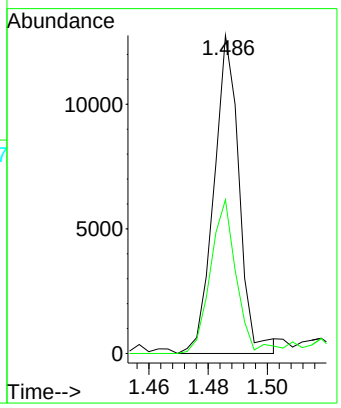




#9
Propene
Concen: 0.632 ppbv m
RT: 1.486 min Scan# 43
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 41 Resp: 7546

Ion	Ratio	Lower	Upper
41	100		
42	665.9	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
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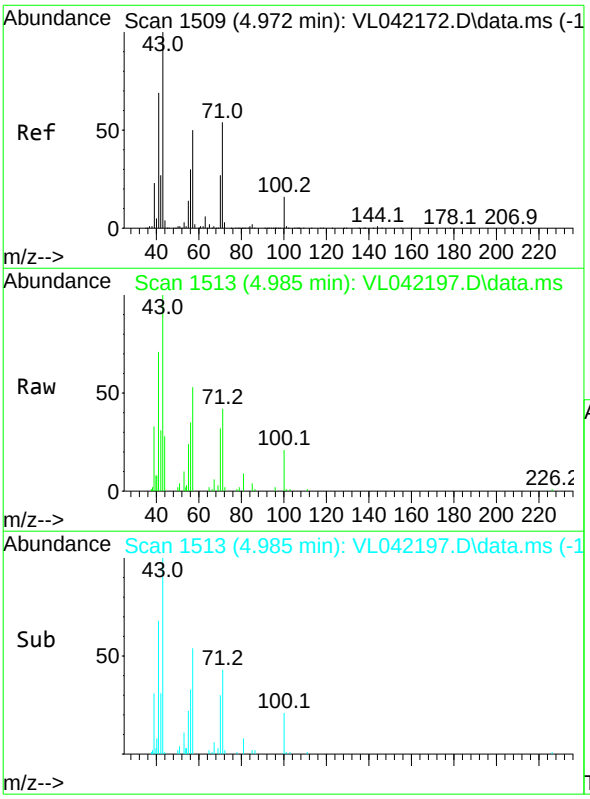
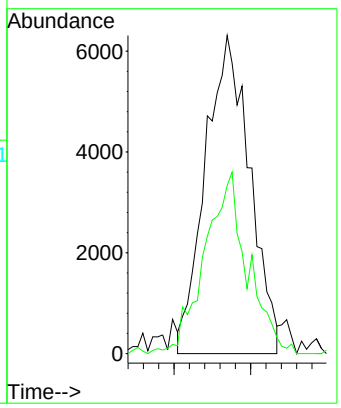
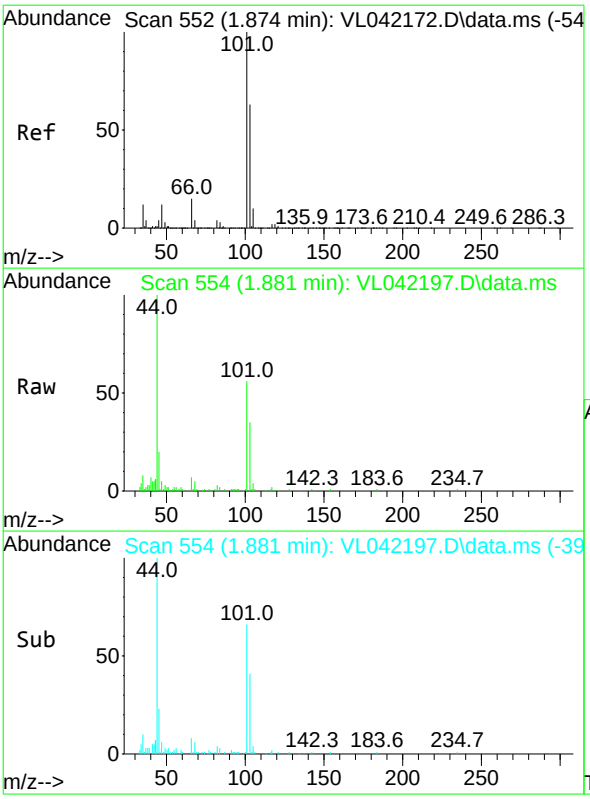


#10
Heptane
Concen: 0.400 ppbv
RT: 4.985 min Scan# 1513
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 43 Resp: 12702

Ion	Ratio	Lower	Upper
43	100		
57	55.1	39.4	59.2

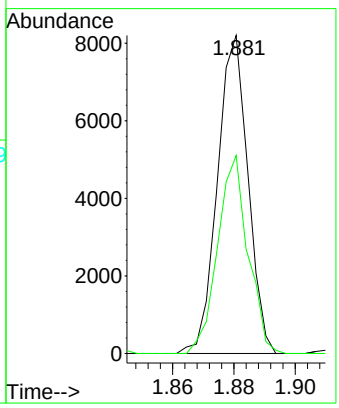




#11
Trichlorofluoromethane
Concen: 0.229 ppbv
RT: 1.881 min Scan# 55
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:101 Resp: 5673

Ion	Ratio	Lower	Upper
101	100		
103	62.2	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
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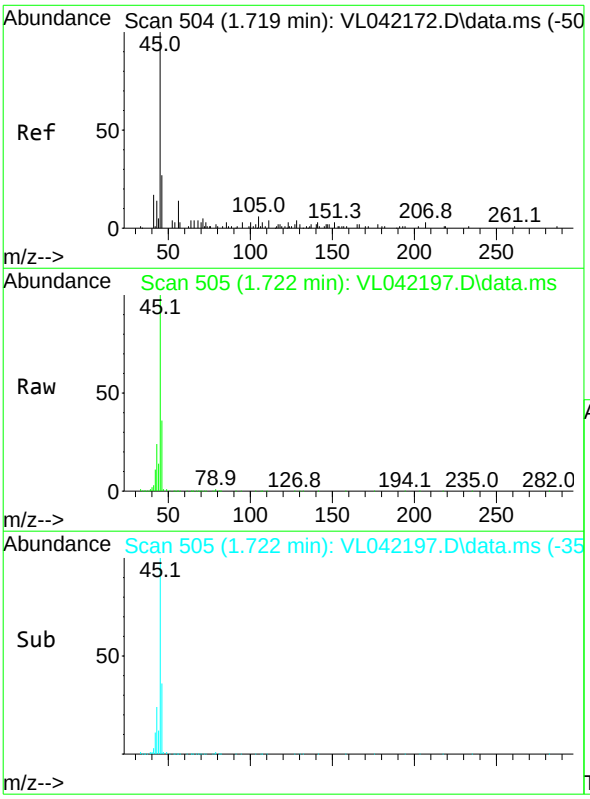
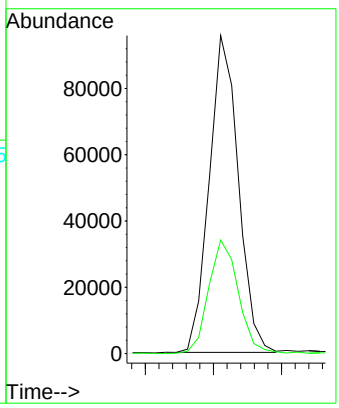
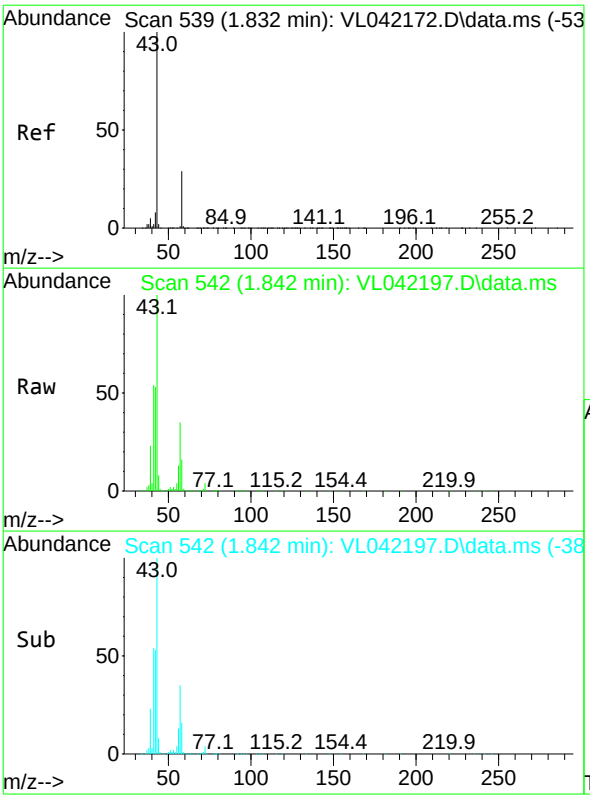


#13
Ethanol
Concen: 50.352 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 45 Resp: 56814

Ion	Ratio	Lower	Upper
45	100		
46	37.5	20.2	80.8

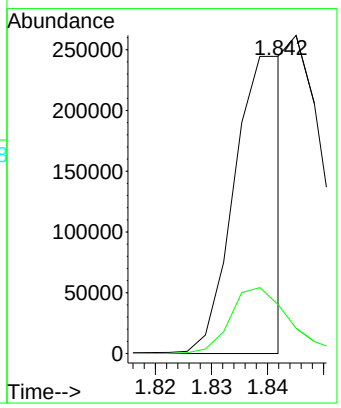




#15
Acetone
Concen: 6.202 ppbv m
RT: 1.842 min Scan# 54
Delta R.T. 0.010 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 43 Resp: 149738

Ion	Ratio	Lower	Upper
43	100		
58	26.9	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Manual Integrations
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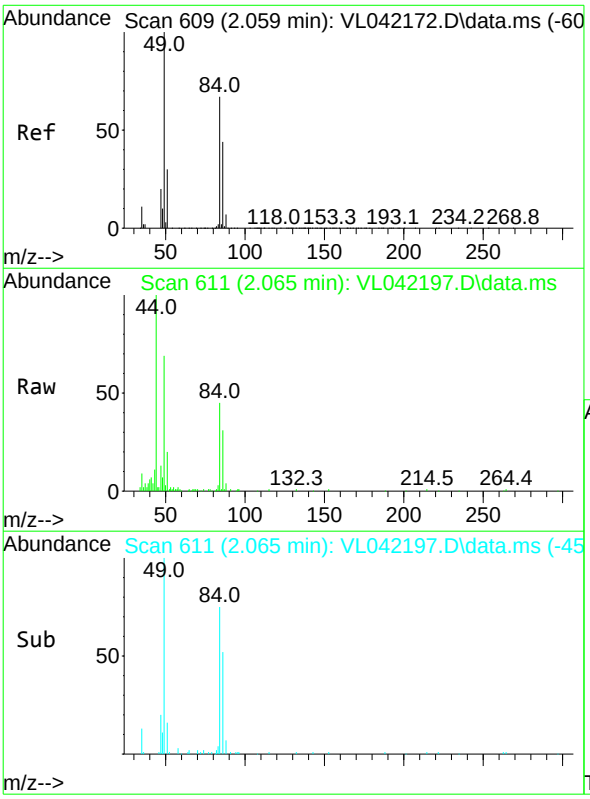
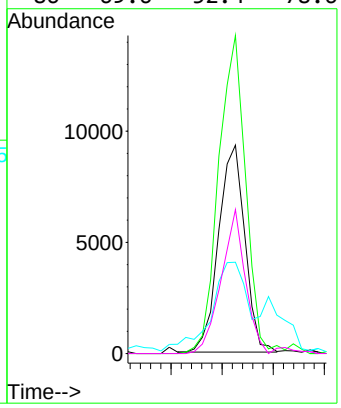
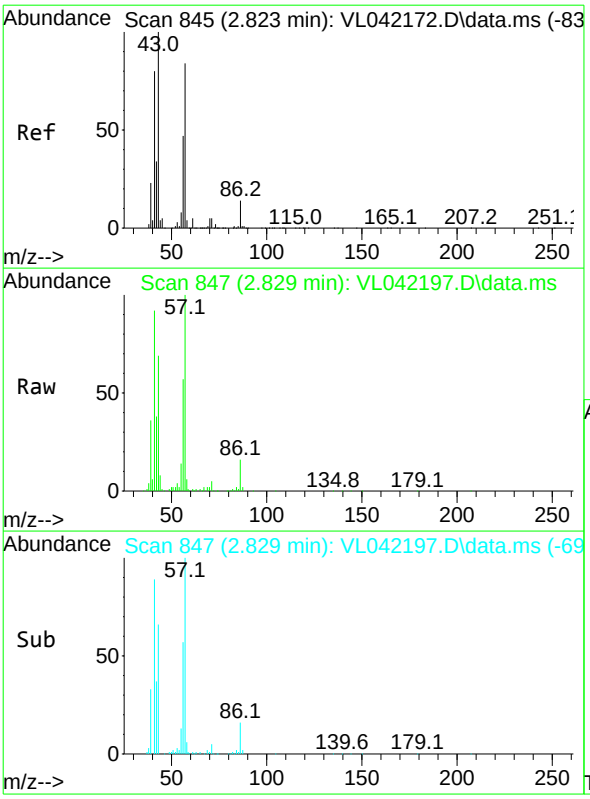


#20
Methylene Chloride
Concen: 0.741 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 84 Resp: 6666

Ion	Ratio	Lower	Upper
84	100		
49	153.7	120.2	180.4
51	37.5	37.4	56.0
86	69.6	52.4	78.6

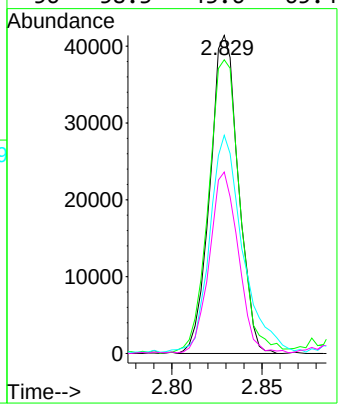




#26
Hexane
Concen: 1.876 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 57 Resp: 45421

Ion	Ratio	Lower	Upper
57	100		
41	102.0	76.6	114.8
43	79.1	207.8	311.8#
56	58.3	43.6	65.4



Instrument :
MSVOA_L
ClientSampleId :
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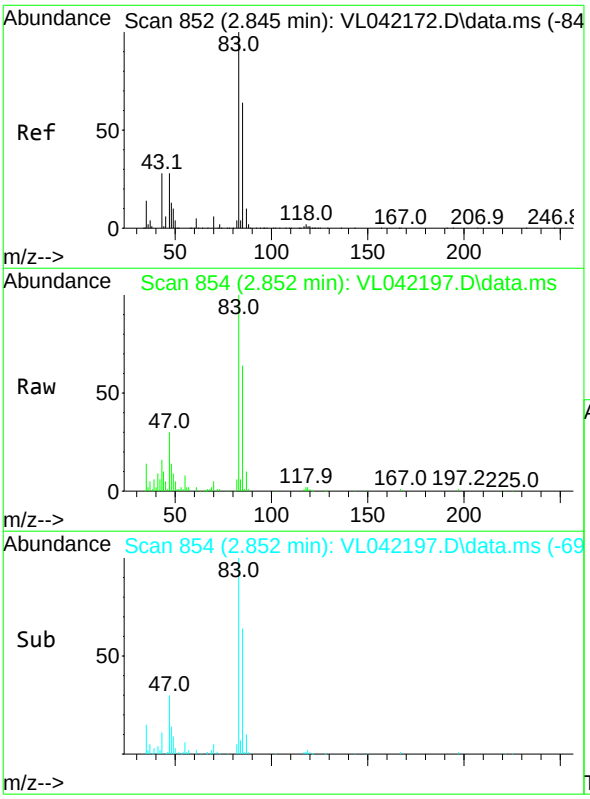
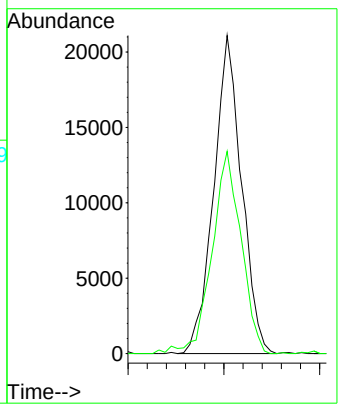
Supervised By :Mahesh Dadoda 04/03/2025

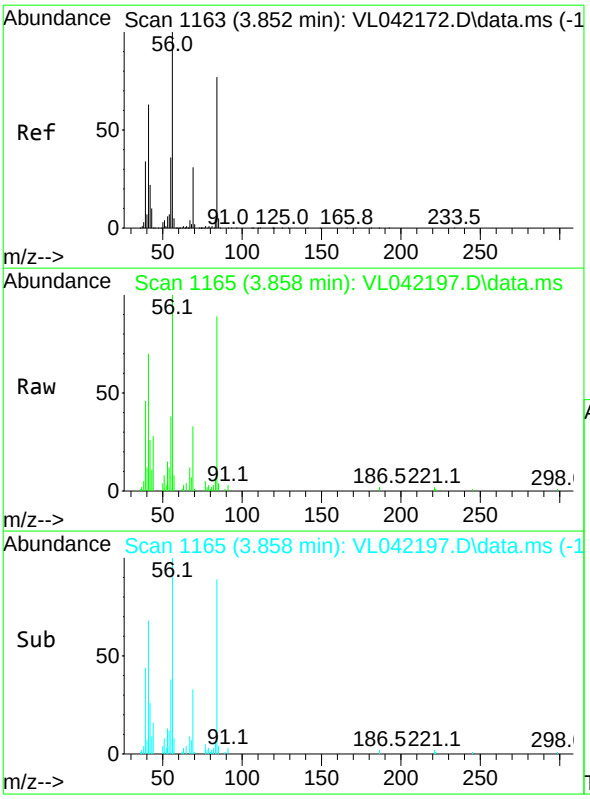


#29
Chloroform
Concen: 0.601 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 83 Resp: 21281

Ion	Ratio	Lower	Upper
83	100		
85	63.6	51.4	77.2

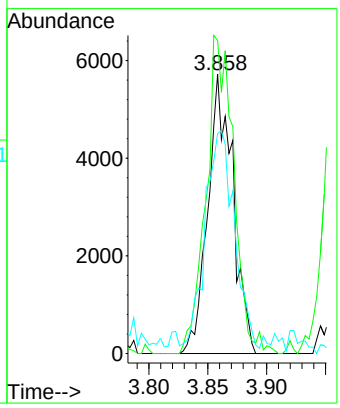




#30
Cyclohexane
Concen: 0.401 ppbv m
RT: 3.858 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 84 Resp: 8428

Ion	Ratio	Lower	Upper
84	100		
56	126.8	102.8	154.2
41	92.0	66.5	99.7



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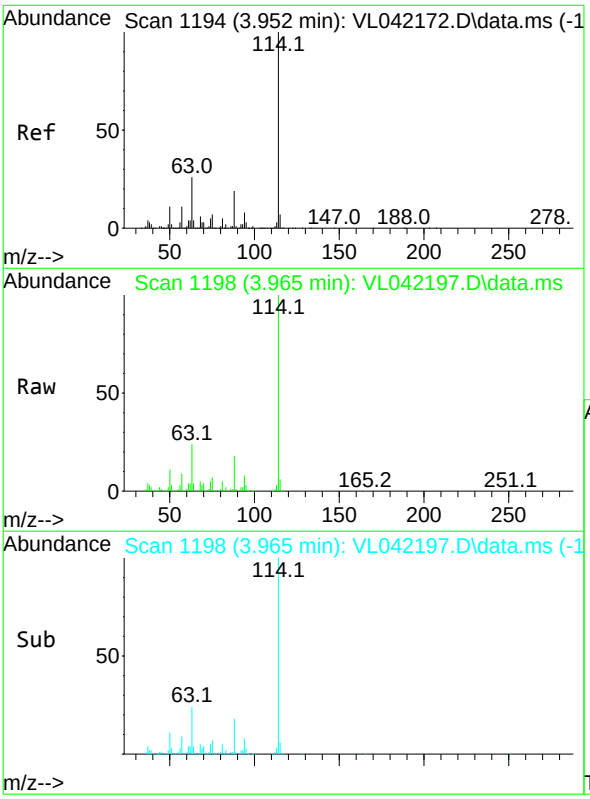
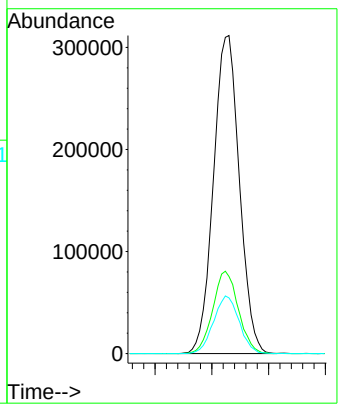
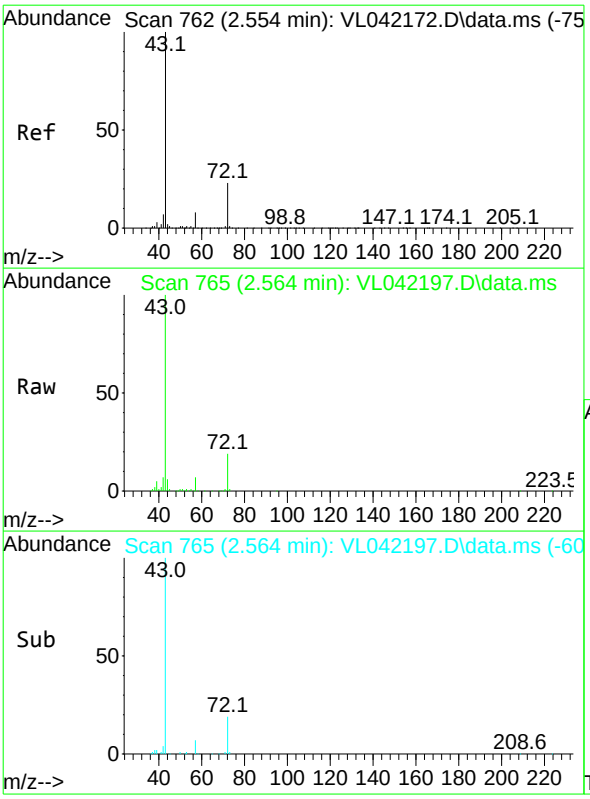


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:114 Resp: 493948

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.9	15.0	22.4

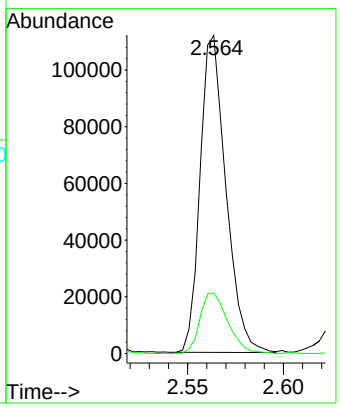




#34
2-Butanone
Concen: 2.922 ppbv
RT: 2.564 min Scan# 76
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 43 Resp: 104671

Ion	Ratio	Lower	Upper
43	100		
72	20.7	18.2	27.2



Instrument :
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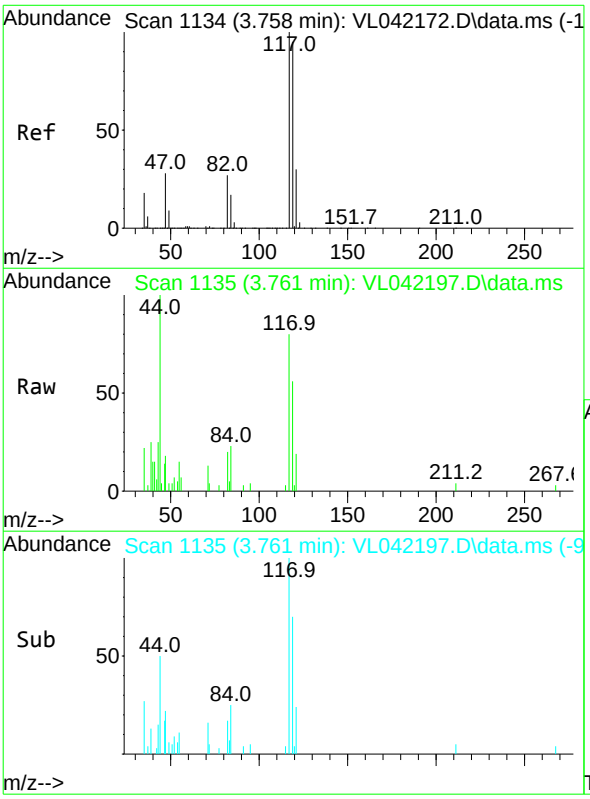
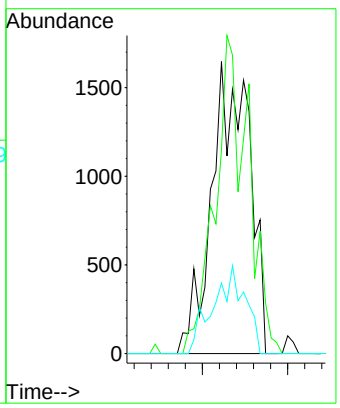
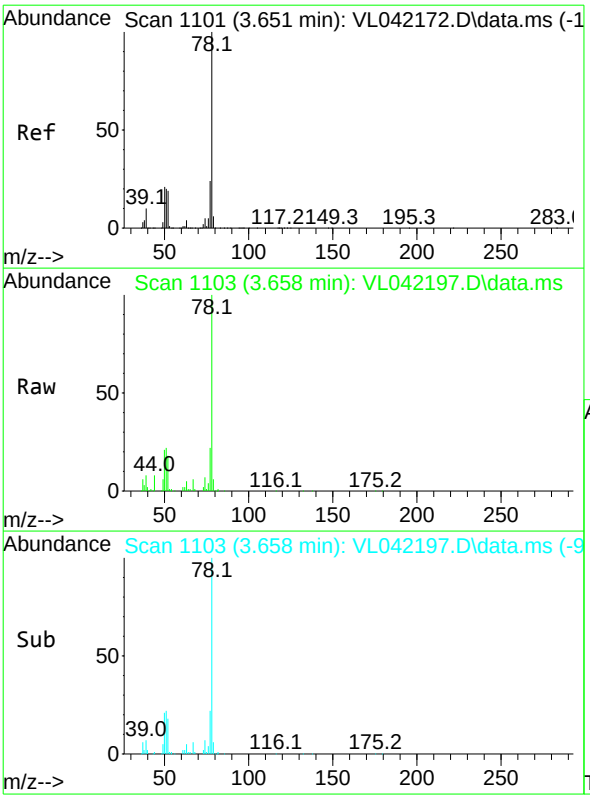


#35
Carbon Tetrachloride
Concen: 0.066 ppbv m
RT: 3.761 min Scan# 1135
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:117 Resp: 2542

Ion	Ratio	Lower	Upper
117	100		
119	69.8	76.2	114.2#
121	24.2	24.2	36.4#

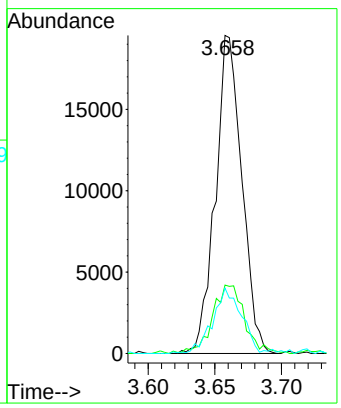




#36
Benzene
Concen: 0.550 ppbv
RT: 3.658 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 78 Resp: 26954

Ion	Ratio	Lower	Upper
78	100		
77	21.2	19.1	28.7
50	20.3	16.6	24.8



Instrument :
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ClientSampleId :
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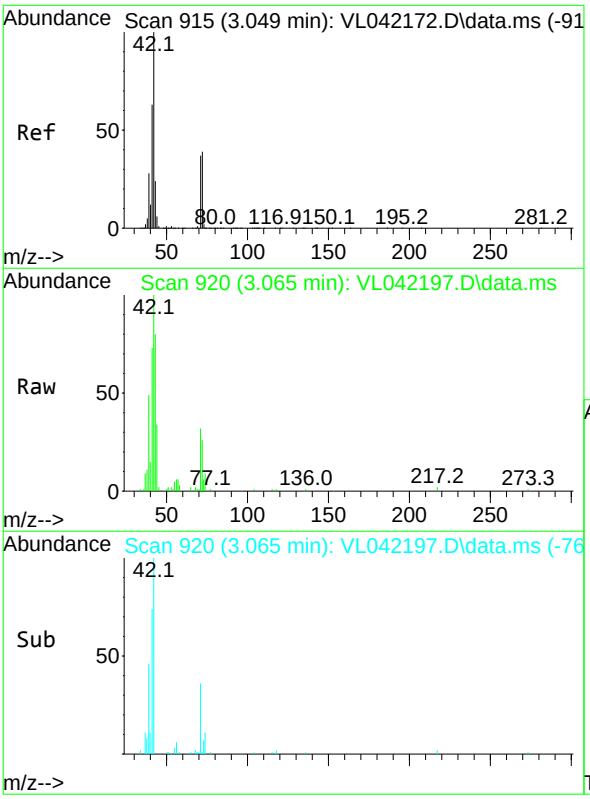
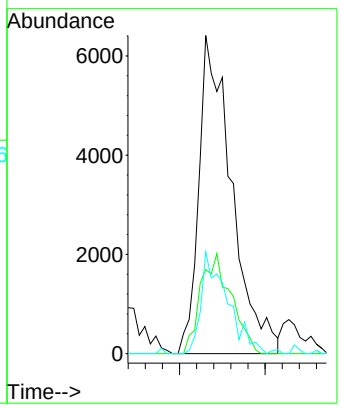
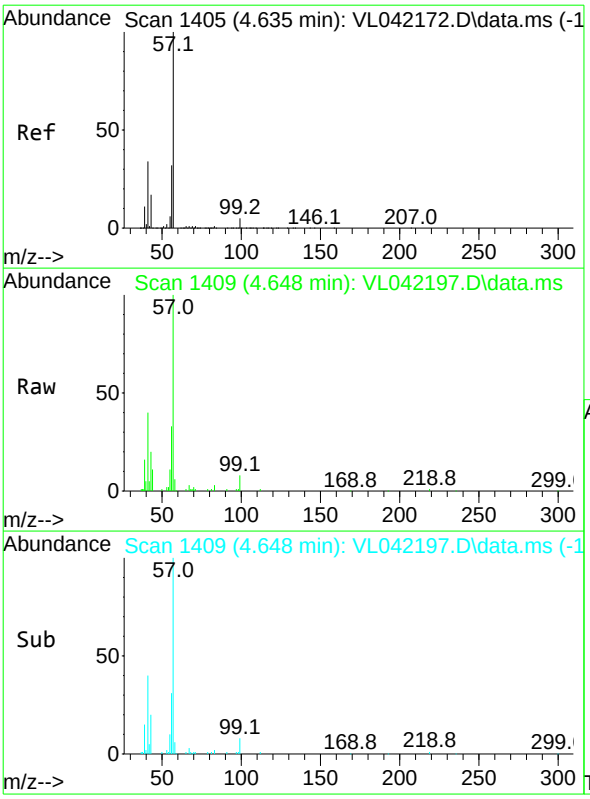


#41
Tetrahydrofuran
Concen: 0.413 ppbv m
RT: 3.065 min Scan# 920
Delta R.T. 0.016 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 42 Resp: 8525

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	26.0	30.2	45.4#

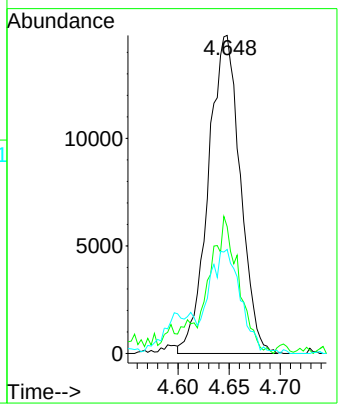




#44
2,2,4-Trimethylpentane
Concen: 0.388 ppbv
RT: 4.648 min Scan# 14
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 57 Resp: 32093

Ion	Ratio	Lower	Upper
57	100		
41	47.6	26.8	40.2#
56	44.7	25.6	38.4#



Instrument :
MSVOA_L
ClientSampleId :
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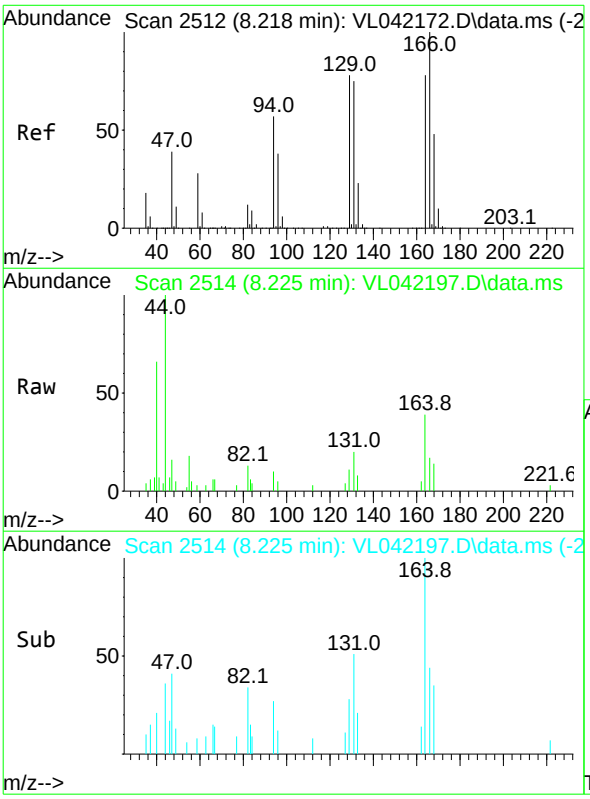
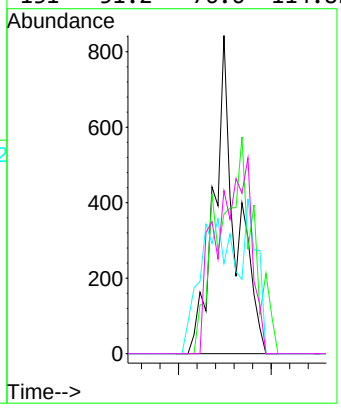
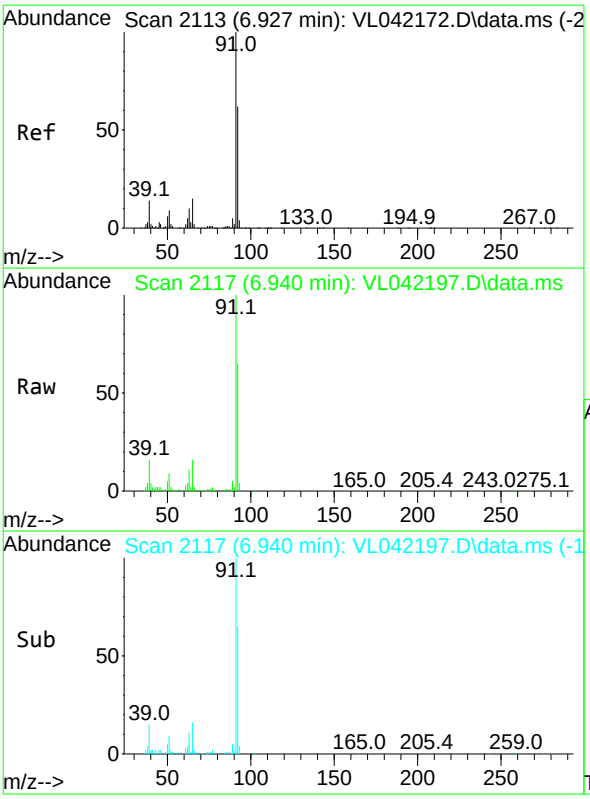


#52
Tetrachloroethene
Concen: 0.036 ppbv m
RT: 8.225 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:164 Resp: 690

Ion	Ratio	Lower	Upper
164	100		
166	43.9	102.5	153.7#
129	28.4	79.8	119.8#
131	51.2	76.6	114.8#

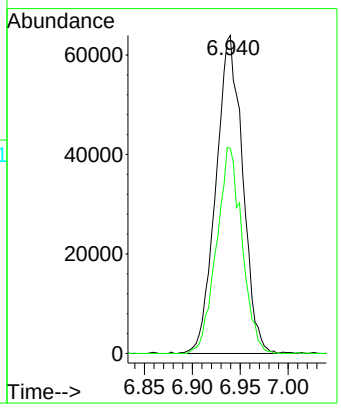




#53
Toluene
Concen: 2.136 ppbv
RT: 6.940 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 91 Resp: 124001

Ion	Ratio	Lower	Upper
91	100		
92	61.8	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
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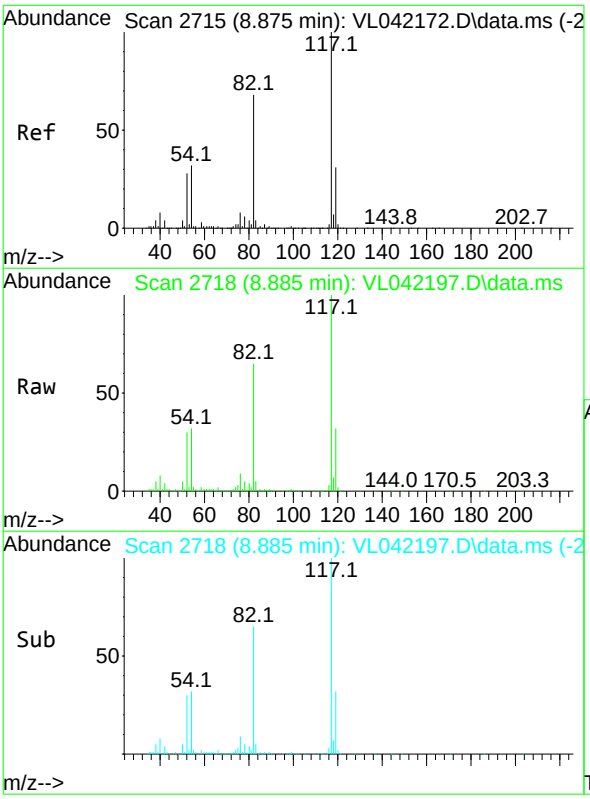
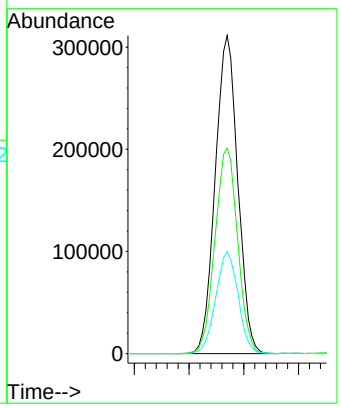
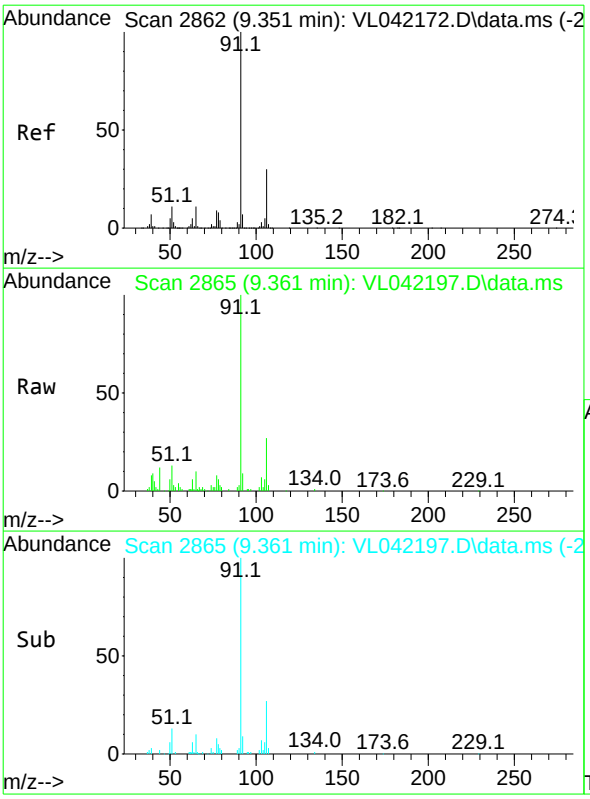


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:117 Resp: 445312

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	32.0	25.5	38.3





#58
Ethyl Benzene
Concen: 0.265 ppbv
RT: 9.361 min Scan# 28
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 91 Resp: 20976

Ion	Ratio	Lower	Upper
91	100		
106	27.3	24.2	36.2

Instrument :
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ClientSampleId :
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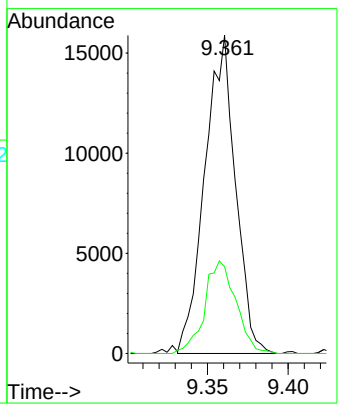
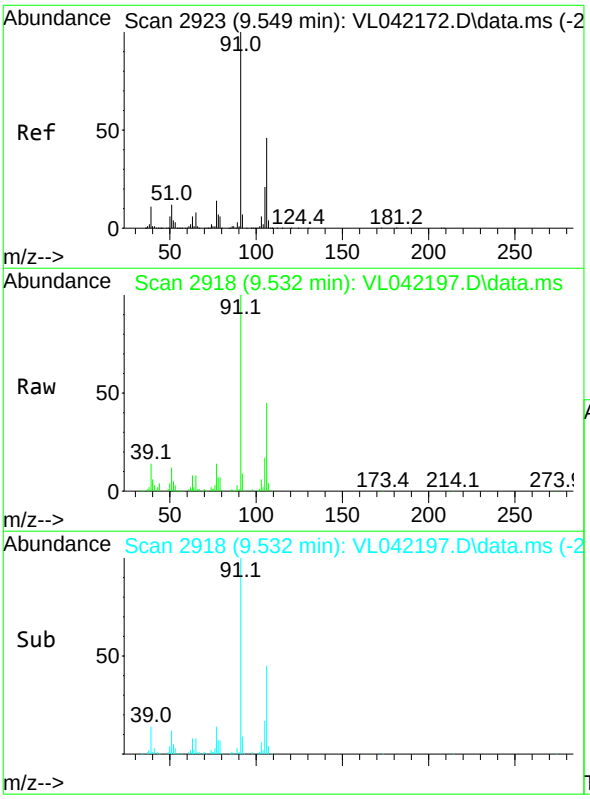
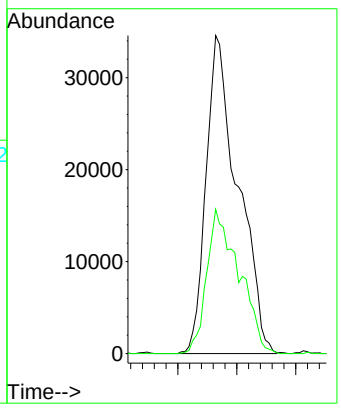


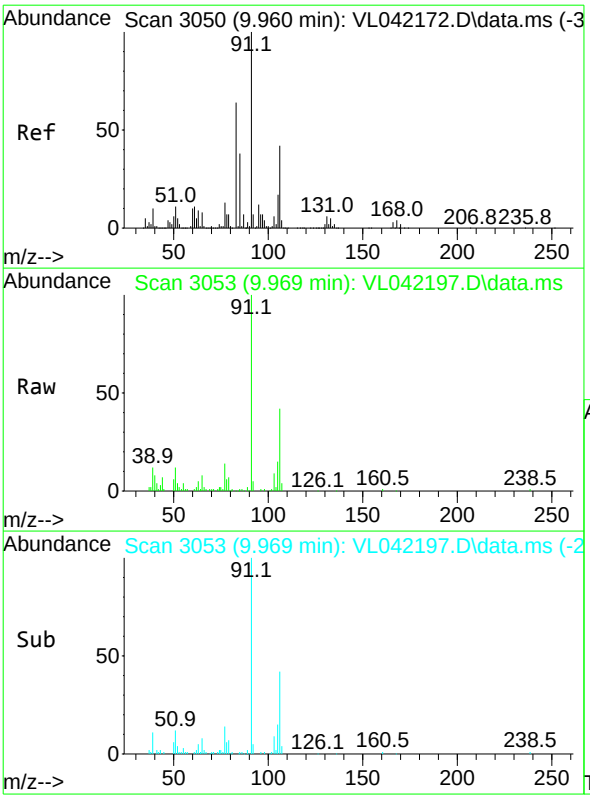


#59
m/p-Xylene
Concen: 1.026 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 91 Resp: 64820

Ion	Ratio	Lower	Upper
91	100		
106	46.1	36.4	54.6

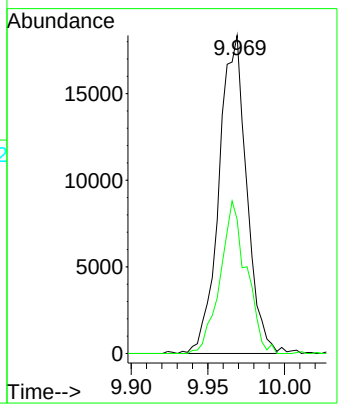




#60
o-Xylene
Concen: 0.363 ppbv
RT: 9.969 min Scan# 30
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 91 Resp: 22977

Ion	Ratio	Lower	Upper
91	100		
106	45.7	20.8	62.5



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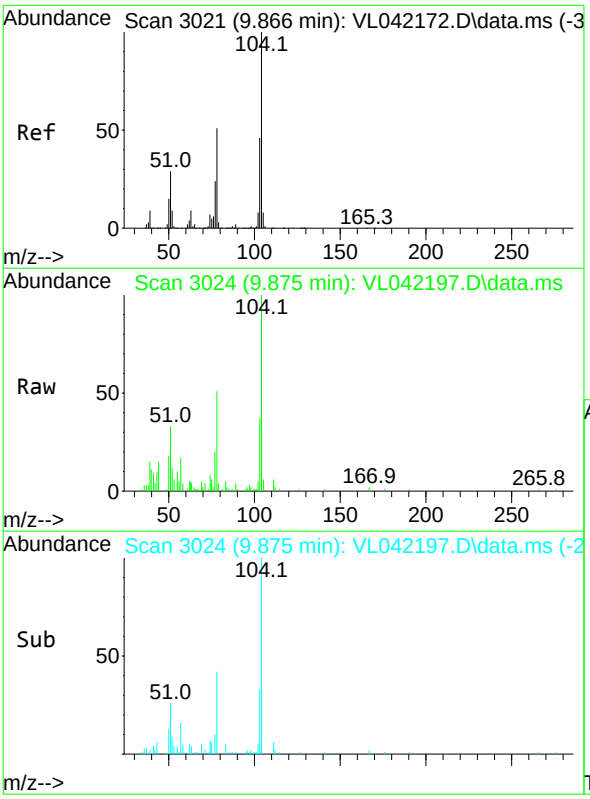
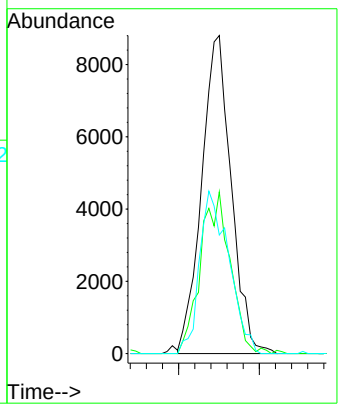
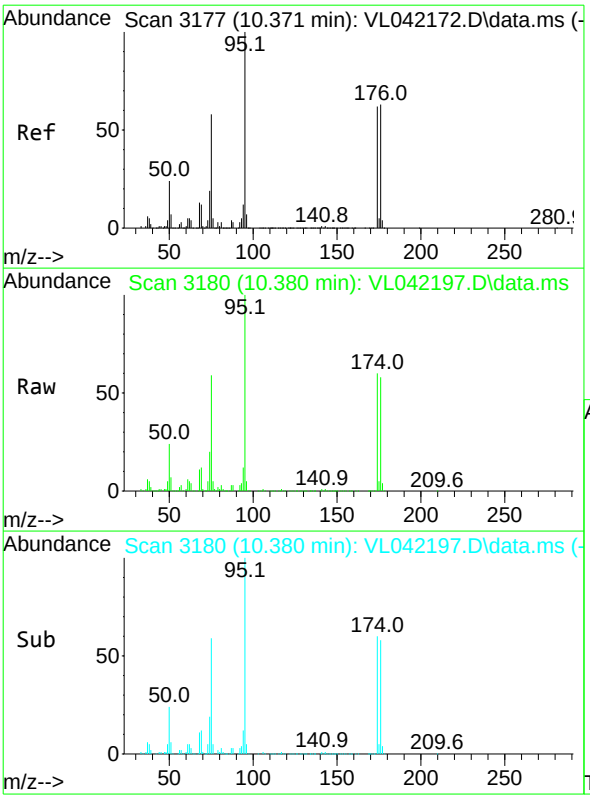


#61
Styrene
Concen: 0.359 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:104 Resp: 11230

Ion	Ratio	Lower	Upper
104	100		
78	51.4	41.8	62.6
103	50.7	37.0	55.4

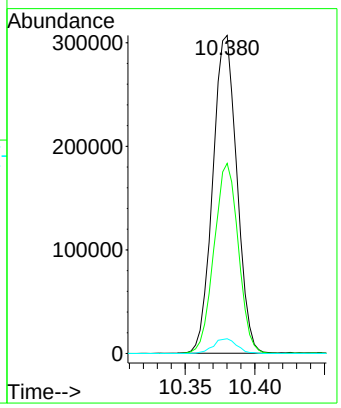




#68
1-Bromo-4-Fluorobenzene
Concen: 10.088 ppbv
RT: 10.380 min Scan# 31
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 95 Resp: 368899

Ion	Ratio	Lower	Upper
95	100		
174	60.5	50.6	76.0
175	4.5	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
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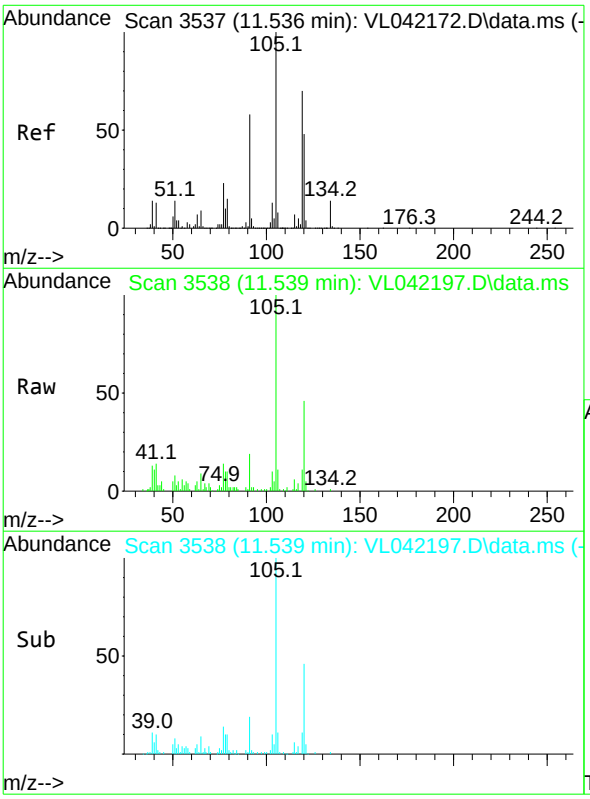
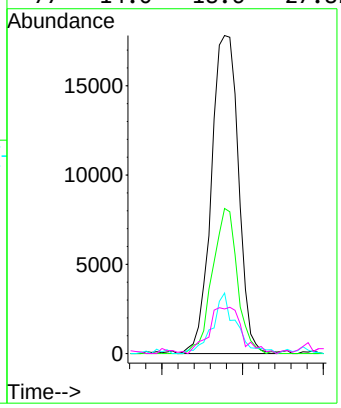


#74
1,2,4-Trimethylbenzene
Concen: 0.263 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:105 Resp: 20838

Ion	Ratio	Lower	Upper
105	100		
120	45.6	38.6	58.0
91	19.0	46.2	69.2#
77	14.0	18.6	27.8#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042197.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.424	410	413	416	rBV	4126215	3571958	100.00%	19.910%
2	1.437	416	417	421	rVB3	4081971	1852491	51.86%	10.326%
3	1.560	451	455	459	rBV	705090	356544	9.98%	1.987%
4	1.622	470	474	478	rVB	1853660	999323	27.98%	5.570%
5	1.722	500	505	512	rBV	174343	104991	2.94%	0.585%
6	1.845	535	543	549	rBV2	1065746	853931	23.91%	4.760%
7	1.939	568	572	576	rBV2	51809	42185	1.18%	0.235%
8	1.965	576	580	586	rVV	558770	385999	10.81%	2.152%
9	2.004	586	592	599	rVB	87319	65743	1.84%	0.366%
10	2.081	613	616	621	rVB	104292	75997	2.13%	0.424%
11	2.441	720	727	732	rBV3	57721	80338	2.25%	0.448%
12	2.476	732	738	746	rVB2	260904	264158	7.40%	1.472%
13	2.564	760	765	774	rVB	172370	164873	4.62%	0.919%
14	2.625	777	784	792	rBV	127554	137149	3.84%	0.764%
15	2.790	827	835	842	rBV	668713	683759	19.14%	3.811%
16	2.829	842	847	852	rVV2	192521	224796	6.29%	1.253%
17	2.852	852	854	860	rVB	67335	51663	1.45%	0.288%
18	3.234	964	972	980	rVB2	80049	108047	3.02%	0.602%
19	3.661	1089	1104	1113	rBV2	47736	81834	2.29%	0.456%
20	3.858	1155	1165	1177	rBV4	33535	59306	1.66%	0.331%
21	3.962	1184	1197	1211	rBV	820130	1305181	36.54%	7.275%
22	4.056	1216	1226	1234	rBV4	30886	54979	1.54%	0.306%
23	4.273	1282	1293	1305	rVB5	35135	69766	1.95%	0.389%
24	4.648	1399	1409	1421	rVB2	38068	80294	2.25%	0.448%
25	4.988	1499	1514	1527	rVB6	30119	63406	1.78%	0.353%
26	5.671	1708	1725	1744	rVB8	29338	79252	2.22%	0.442%
27	6.936	2101	2116	2132	rBV2	178285	361314	10.12%	2.014%
28	7.616	2306	2326	2327	rBV9	20724	40401	1.13%	0.225%
29	8.309	2523	2540	2552	rBV8	39042	86212	2.41%	0.481%
30	8.885	2702	2718	2729	rBV	1098535	1630047	45.63%	9.086%
31	9.221	2813	2822	2836	rVB5	79481	118157	3.31%	0.659%
32	9.361	2853	2865	2870	rBV2	41187	58209	1.63%	0.324%
33	9.532	2909	2918	2924	rBV3	99737	155464	4.35%	0.867%
34	9.555	2924	2925	2937	rVB7	62343	57437	1.61%	0.320%
35	9.639	2943	2951	2960	rBV4	28843	45033	1.26%	0.251%
36	9.717	2967	2975	2988	rVB5	50252	89237	2.50%	0.497%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	9.794	2988	2999	3008	rBV	88339	121594	3.40%	0.678%
38	9.866	3011	3021	3036	rVB6	42822	76357	2.14%	0.426%
39	9.966	3038	3052	3064	rBV3	55055	103301	2.89%	0.576%
40	10.380	3162	3180	3190	rBV	1431699	1822329	51.02%	10.158%
41	10.862	3321	3329	3335	rVV2	50620	61027	1.71%	0.340%
42	10.904	3335	3342	3355	rVB5	26786	41930	1.17%	0.234%
43	11.539	3530	3538	3549	rBV4	59652	85725	2.40%	0.478%
44	11.756	3599	3605	3618	rVB3	127757	183893	5.15%	1.025%
45	12.044	3689	3694	3703	rVB5	66694	75904	2.12%	0.423%
46	12.228	3743	3751	3756	rBV3	52567	62141	1.74%	0.346%
47	12.445	3812	3818	3825	rVB3	65407	66883	1.87%	0.373%
48	12.510	3832	3838	3844	rBV7	35823	42266	1.18%	0.236%
49	12.646	3873	3880	3885	rBV3	54410	64853	1.82%	0.361%
50	12.830	3930	3937	3943	rBV2	99308	104990	2.94%	0.585%
51	12.882	3943	3953	3958	rVB2	54959	71117	1.99%	0.396%
52	12.931	3958	3968	3973	rBV7	28761	41597	1.16%	0.232%
53	13.002	3980	3990	4002	rVB8	41478	76653	2.15%	0.427%
54	13.390	4103	4110	4117	rVB2	41352	44523	1.25%	0.248%
55	13.730	4208	4215	4221	rBV2	93428	90483	2.53%	0.504%
56	14.235	4362	4371	4375	rBV9	30289	45567	1.28%	0.254%
57	14.523	4454	4460	4473	rVB2	91379	100380	2.81%	0.560%
58	14.672	4497	4506	4513	rBV2	32424	54156	1.52%	0.302%
59	15.245	4678	4683	4689	rVB2	48375	43076	1.21%	0.240%

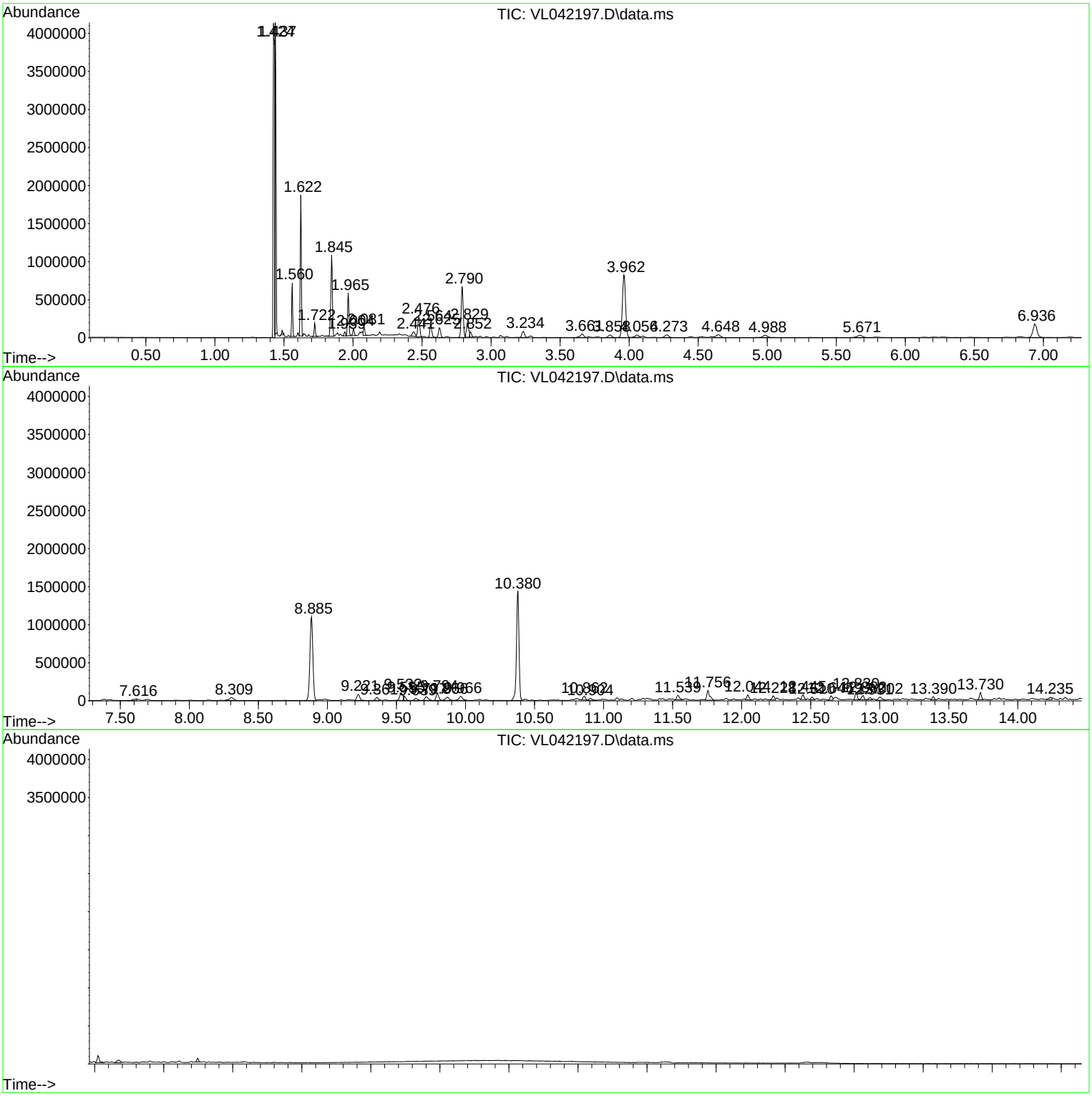
Sum of corrected areas: 17940219

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

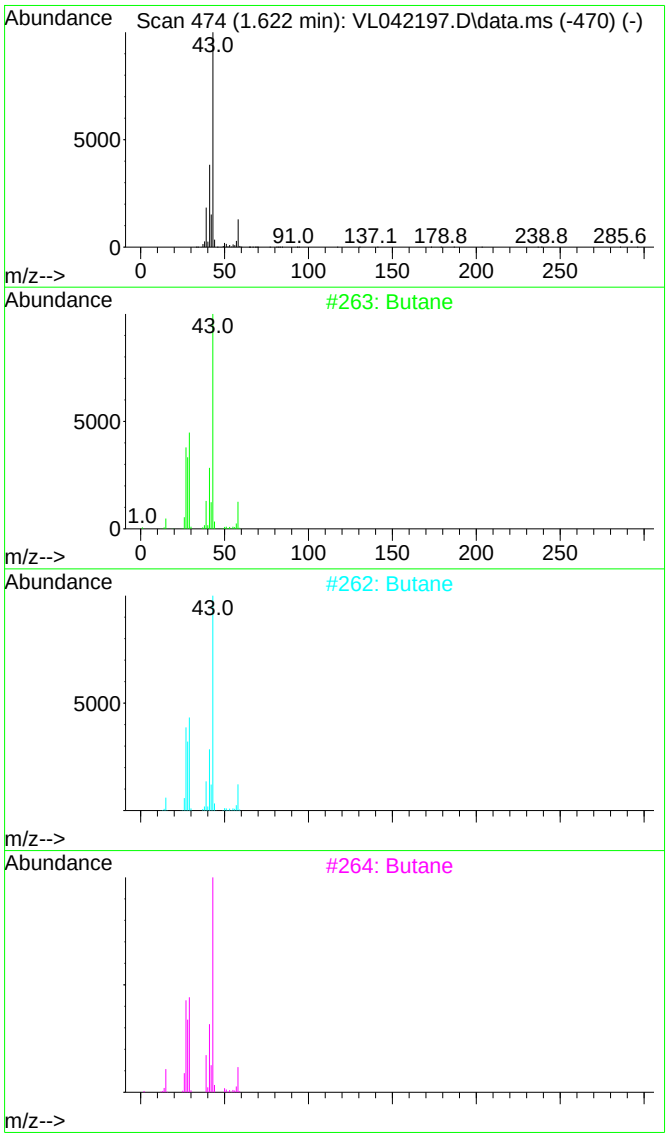
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

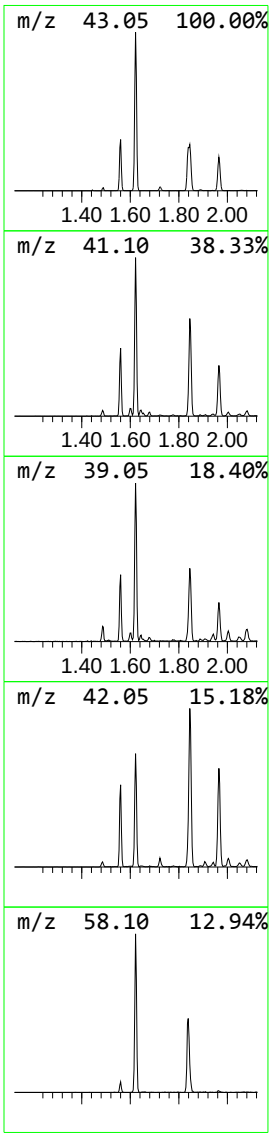
****

Peak Number 2 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	14.62 ppbv	999323	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	86
2	Butane	58	C4H10	000106-97-8	86
3	Butane	58	C4H10	000106-97-8	78
4	Butane	58	C4H10	000106-97-8	72
5	Isobutane	58	C4H10	000075-28-5	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

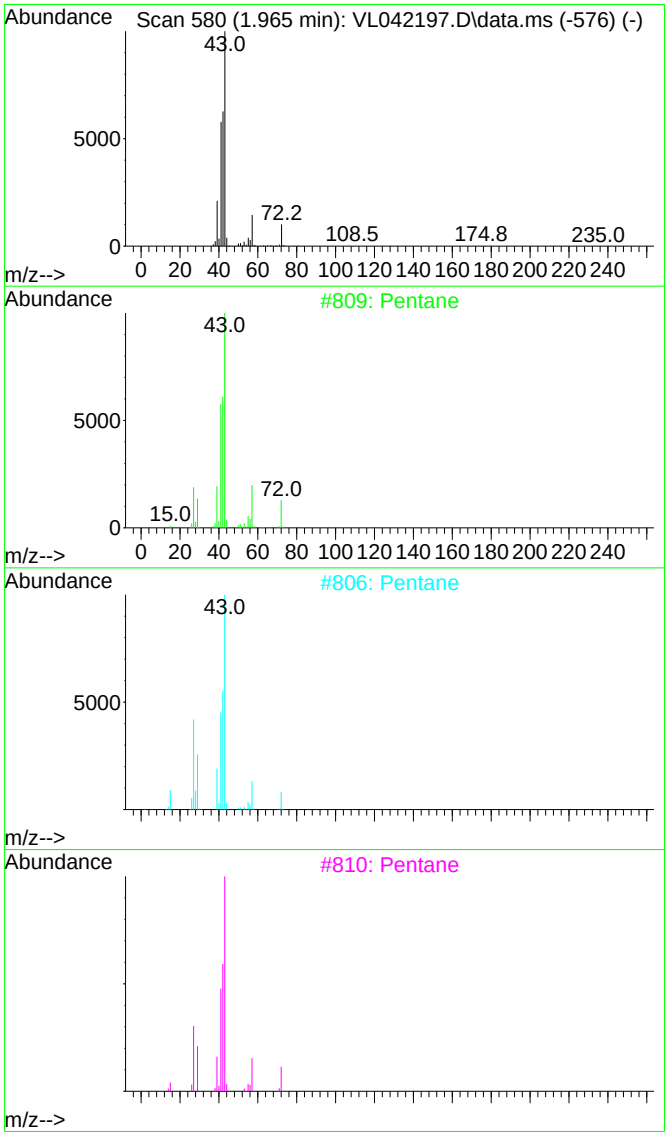
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

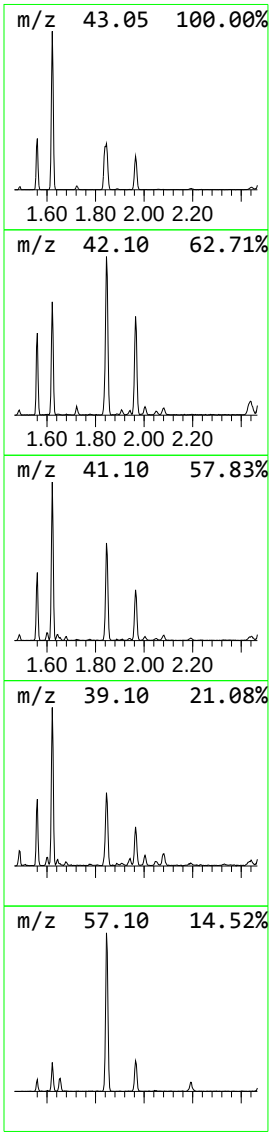
****

Peak Number 3 Pentane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.965	5.65 ppbv	385999	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	91
2	Pentane	72	C5H12	000109-66-0	90
3	Pentane	72	C5H12	000109-66-0	90
4	Pentane	72	C5H12	000109-66-0	86
5	Pentane	72	C5H12	000109-66-0	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

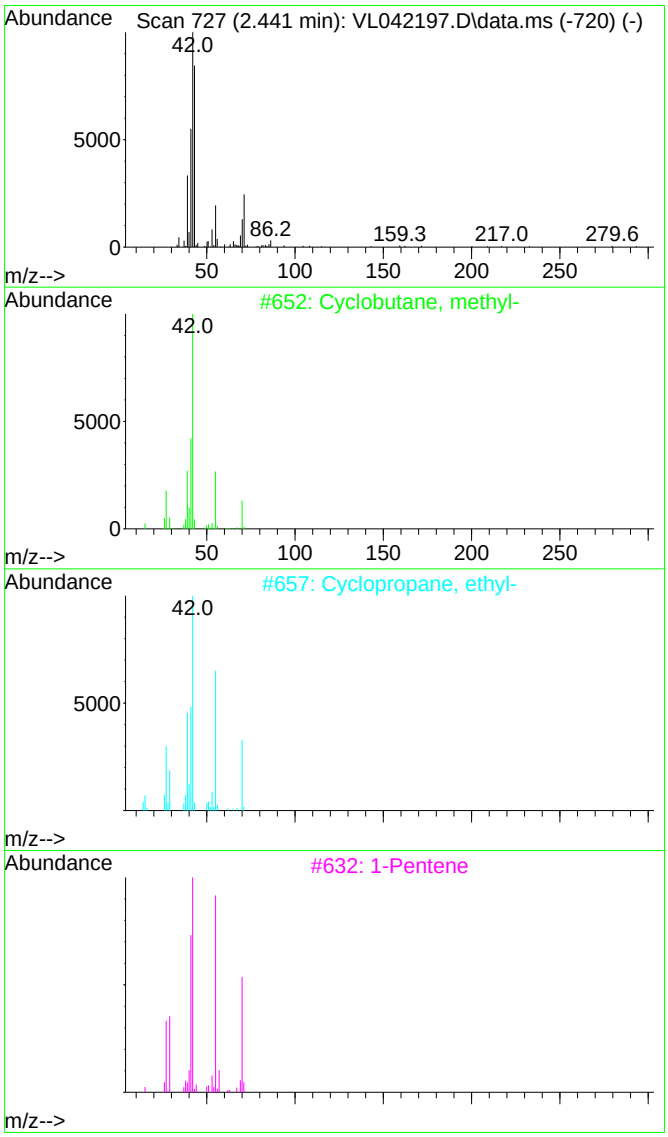
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

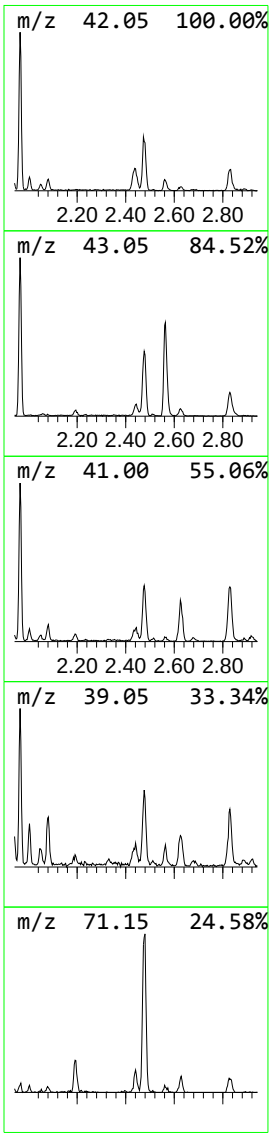
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 unknown2.441 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.441	1.17 ppbv	80338	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclobutane, methyl-	70	C5H10	000598-61-8	47
2	Cyclopropane, ethyl-	70	C5H10	001191-96-4	25
3	1-Pentene	70	C5H10	000109-67-1	25
4	Pentane, 2-bromo-	150	C5H11Br	000107-81-3	25
5	Cyclopropanecarboxaldehyde	70	C4H6O	001489-69-6	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

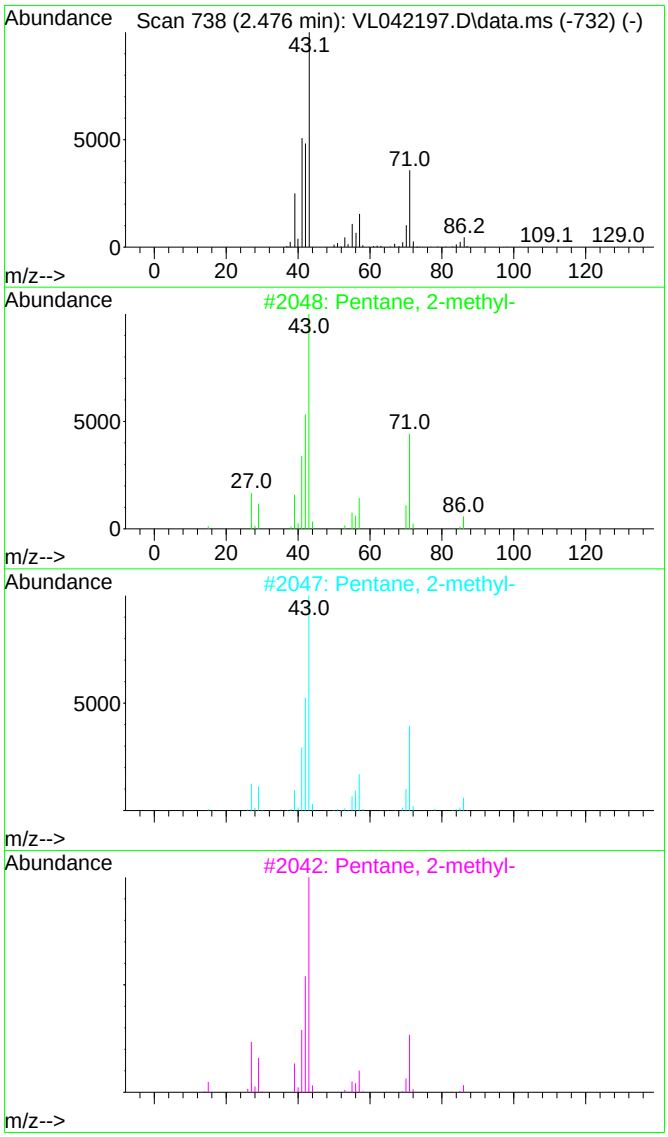
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

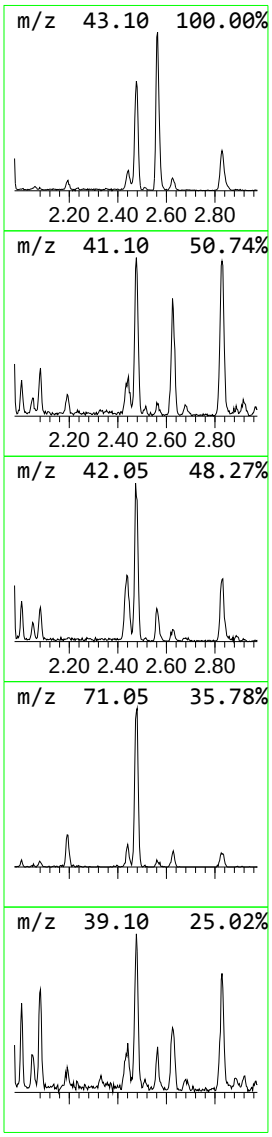
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Pentane, 2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.476	3.86 ppbv	264158	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	86





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

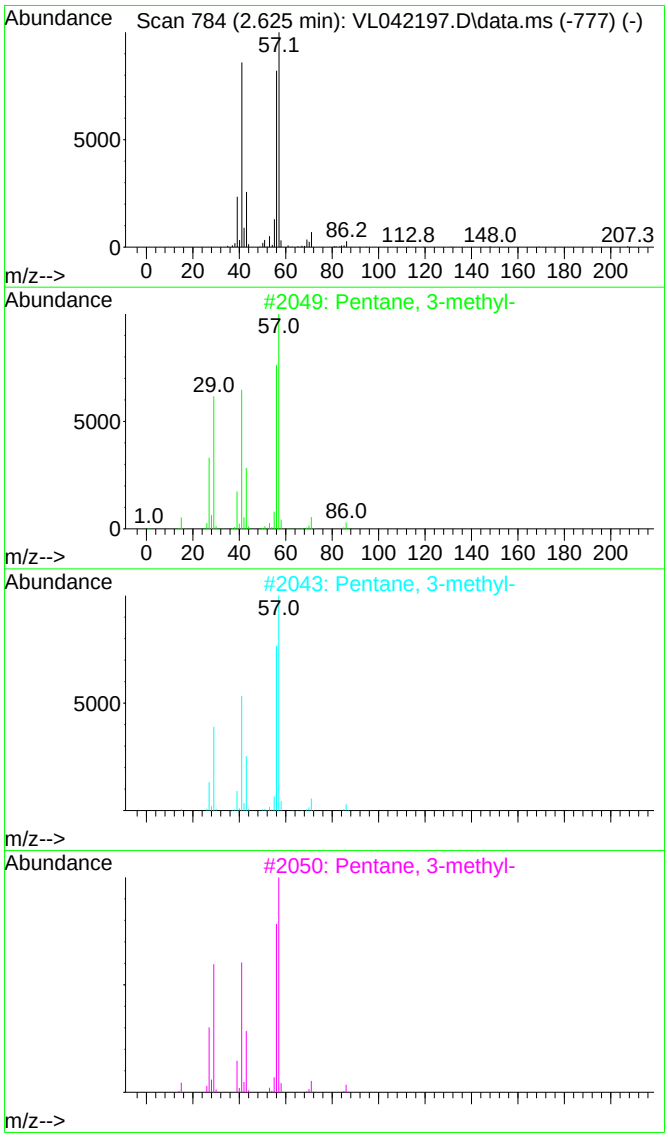
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

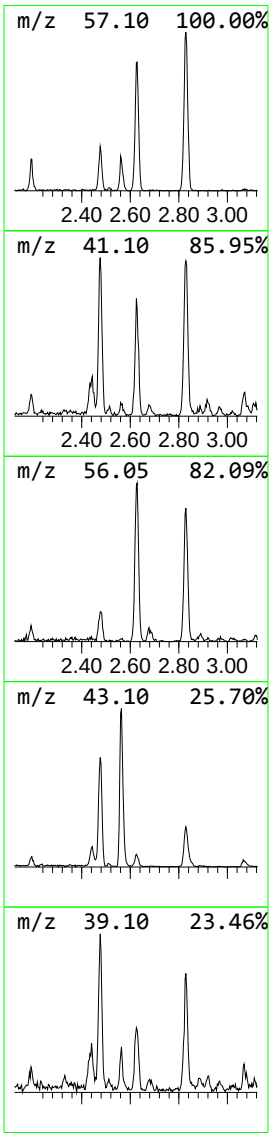
****

Peak Number 6 Pentane, 3-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.625	2.01 ppbv	137149	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	72
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	64
4	3,4-Dimethyldihydrofuran-2,5-dione	128	C6H8O3	007475-92-5	53
5	1-Hexene, 4-methyl-	98	C7H14	003769-23-1	40





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

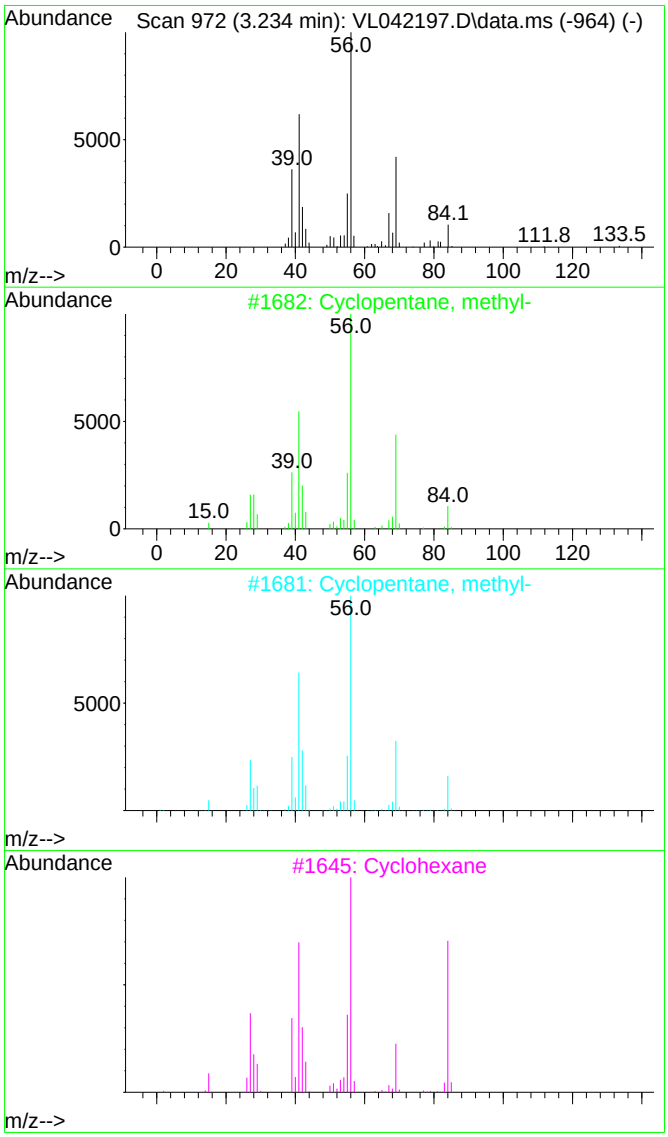
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

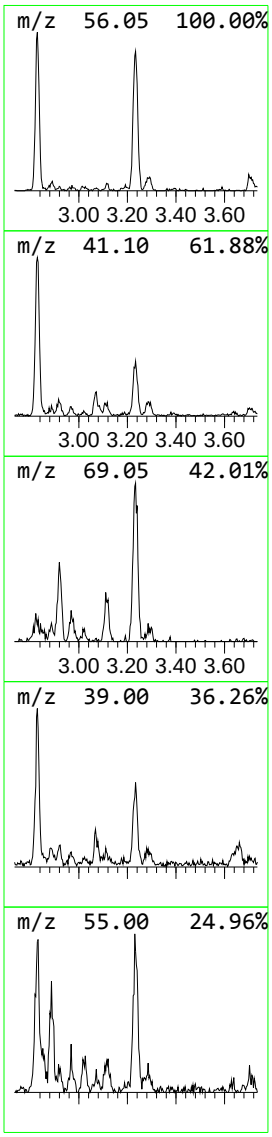
****

Peak Number 7 Cyclopentane, methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.234	1.58 ppbv	108047	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	90
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	80
3	Cyclohexane	84	C6H12	000110-82-7	72
4	Cyclopentanone, 2,2-dimethyl-	112	C7H12O	004541-32-6	72
5	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

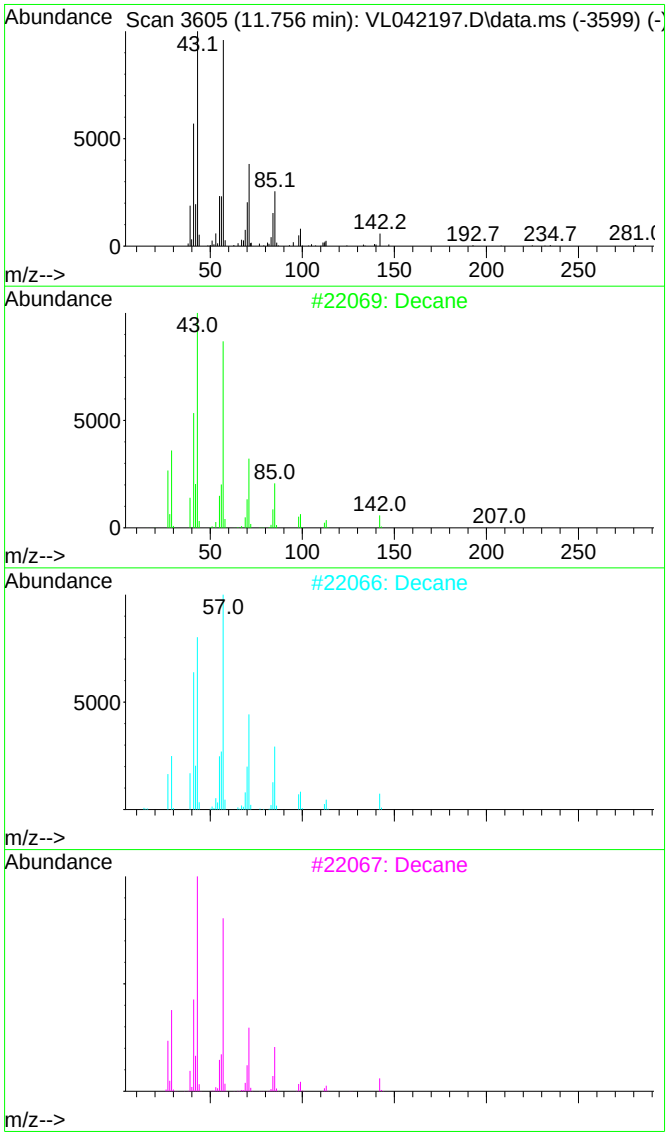
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

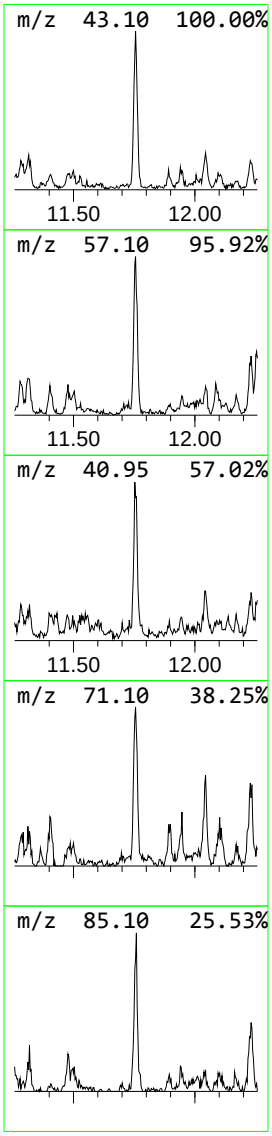
****

Peak Number 8 Decane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.756	1.13 ppbv	183893	Chlorobenzene-d5	8.885

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane	142	C10H22	000124-18-5	93
2	Decane	142	C10H22	000124-18-5	91
3	Decane	142	C10H22	000124-18-5	90
4	Decane	142	C10H22	000124-18-5	83
5	Undecane	156	C11H24	001120-21-4	72





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	14.6	ppbv	999323	1	2.790	683759	10.0
Pentane	1.965	5.7	ppbv	385999	1	2.790	683759	10.0
unknown2.441	2.441	1.2	ppbv	80338	1	2.790	683759	10.0
Pentane, 2-methyl-	2.476	3.9	ppbv	264158	1	2.790	683759	10.0
Pentane, 3-methyl-	2.625	2.0	ppbv	137149	1	2.790	683759	10.0
Cyclopentane, m...	3.234	1.6	ppbv	108047	1	2.790	683759	10.0
Decane	11.756	1.1	ppbv	183893	3	8.885	1630050	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-DUP-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-06	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
VL042204.D	1		03/31/25 11:06	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.46	2.27	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.43	0.89	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	2.00	5.90		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.20	1.12	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	1.60	6.56		0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	24.0	57.0	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.51	1.77		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	1.50	5.16		0.76	1.72	ug/m3
78-93-3	2-Butanone	6.20	18.3		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	2.30	10.7		0.47	2.34	ug/m3
71-43-2	Benzene	5.60	17.9		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.40	1.64	J	0.37	2.05	ug/m3
108-88-3	Toluene	9.70	36.5		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-DUP-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-06	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
VL042204.D	1		03/31/25 11:06	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	1.30	5.65		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	5.10	22.1		0.91	4.34	ug/m3
95-47-6	o-Xylene	1.90	8.25		0.52	2.17	ug/m3
100-42-5	Styrene	1.40	5.96		0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.43	2.11	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	1.40	6.88		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.43	2.25		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.44	2.16	J	0.59	2.46	ug/m3
110-54-3	Hexane	4.40	15.5		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.1			70 (65) - 130 (135)	101%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	185000		2.806			
540-36-3	1,4-Difluorobenzene	529000		3.984			
3114-55-4	Chlorobenzene-d5	478000		8.907			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.31		J		1.48	ppbv
115-07-1	Propene	17.2		J		1.49	ppbv
000115-11-7	1-Propene, 2-methyl-	6.80		J		1.61	ppbv

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-DUP-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-06	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
VL042204.D	1		03/31/25 11:06	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000106-97-8	Butane	8.30		J		1.63	ppbv
000109-66-0	Pentane	8.80		J		1.98	ppbv
000079-29-8	Butane, 2,3-dimethyl-	3.30		J		2.45	ppbv
000107-83-5	Pentane, 2-methyl-	8.90		J		2.49	ppbv
000096-14-0	Pentane, 3-methyl-	4.90		J		2.64	ppbv
000096-37-7	Cyclopentane, methyl-	4.30		J		3.25	ppbv
000108-87-2	Cyclohexane, methyl-	2.50		J		5.71	ppbv
000108-94-1	Cyclohexanone	2.20		J		9.65	ppbv
103-65-1	n-propylbenzene	0.23		J		11.0	ppbv

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 (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 03:33:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.806	49	184538	10.000	ppbv		0.02
33) 1,4-Difluorobenzene	3.984	114	528809	10.000	ppbv		0.03
55) Chlorobenzene-d5	8.907	117	477707	10.000	ppbv		0.03
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.399	95	395364	10.078	ppbv		0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.505	85	12624	0.463	ppbv		99
3) Chlorodifluoromethane	1.483	51	8664	0.311	ppbv		99
4) Chloromethane	1.538	50	4783	0.430	ppbv	#	87
9) Propene	1.489	41	219989	17.243	ppbv		96
10) Heptane	5.017	43	54482	1.605	ppbv		97
11) Trichlorofluoromethane	1.890	101	5277	0.199	ppbv		85
13) Ethanol	1.732	45	129111	107.052	ppbv		83
15) Acetone	1.845	43	618335m	23.958	ppbv		
20) Methylene Chloride	2.075	84	4857	0.505	ppbv	#	91
26) Hexane	2.845	57	114579	4.428	ppbv	#	34
30) Cyclohexane	3.887	84	33602	1.496	ppbv		93
34) 2-Butanone	2.577	43	238611	6.223	ppbv		98
35) Carbon Tetrachloride	3.793	117	2894	0.070	ppbv	#	45
36) Benzene	3.683	78	295232	5.632	ppbv		98
41) Tetrahydrofuran	3.081	42	44873	2.032	ppbv		99
44) 2,2,4-Trimethylpentane	4.677	57	203749	2.300	ppbv	#	86
50) 4-Methyl-2-Pentanone	5.816	43	24529m	0.404	ppbv		
53) Toluene	6.969	91	601582	9.680	ppbv		99
58) Ethyl Benzene	9.380	91	112145	1.322	ppbv		97
59) m/p-Xylene	9.555	91	343493	5.070	ppbv		99
60) o-Xylene	9.988	91	127965	1.884	ppbv		100
61) Styrene	9.895	104	46841	1.394	ppbv		98
64) n-propylbenzene	11.011	120	6017	0.230	ppbv		89
72) 4-Ethyltoluene	11.144	105	37267	0.441	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.222	105	31497	0.426	ppbv		93
74) 1,2,4-Trimethylbenzene	11.555	105	117257	1.378	ppbv	#	63
79) Naphthalene	13.529	128	40082	0.431	ppbv		96

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

Quantitation Report (LSC Reviewed)

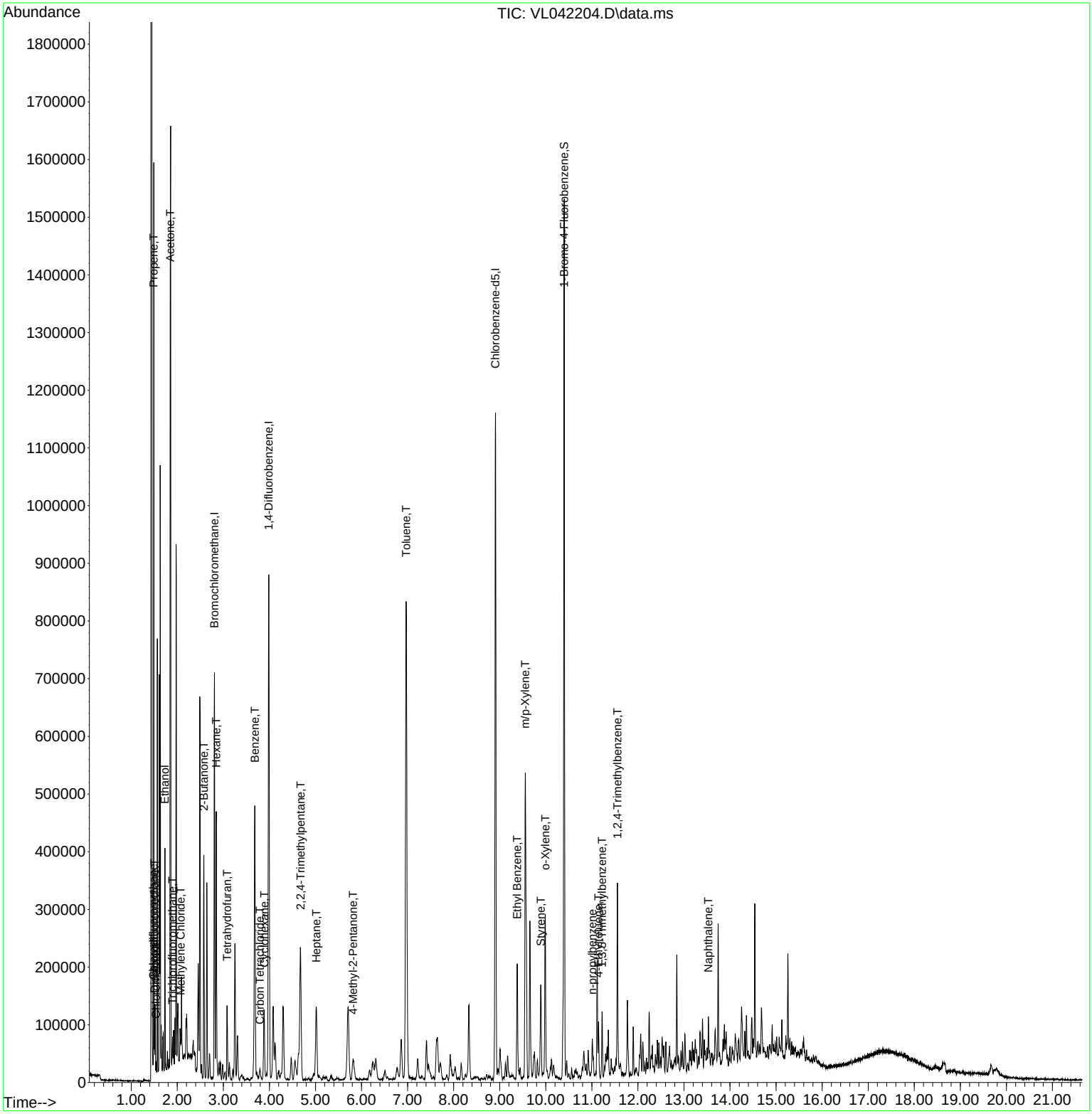
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

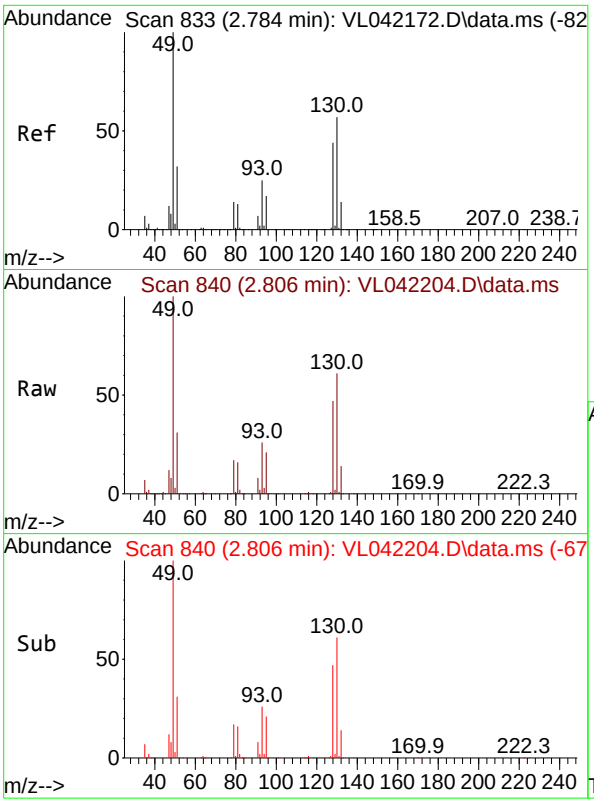
Quant Time: Apr 01 03:33:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

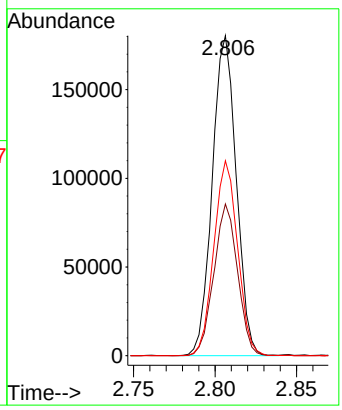




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.806 min Scan# 84
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 49 Resp: 18453

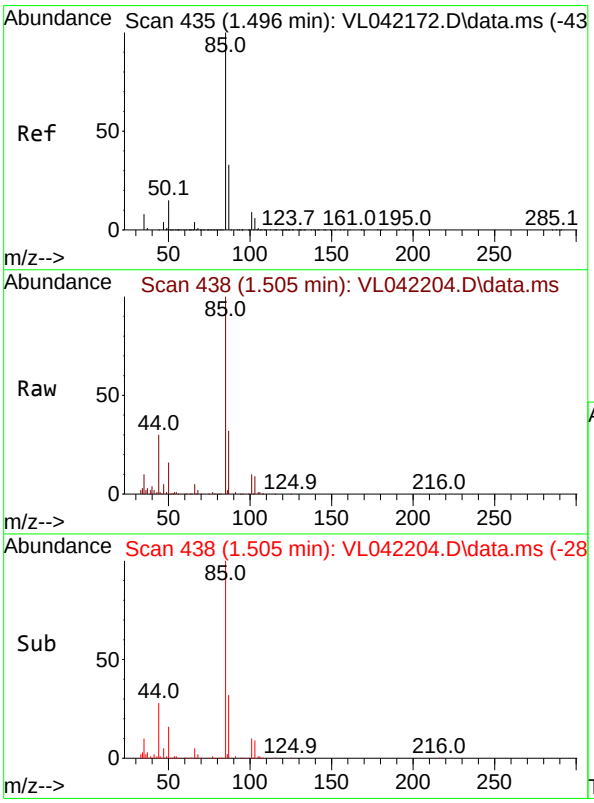
Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	60.3	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations
APPROVED

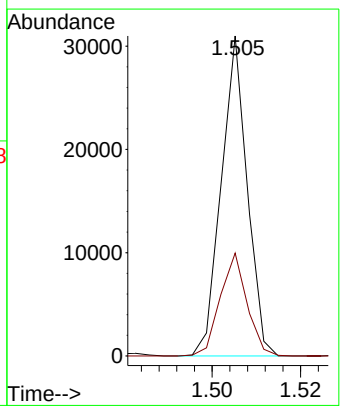
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

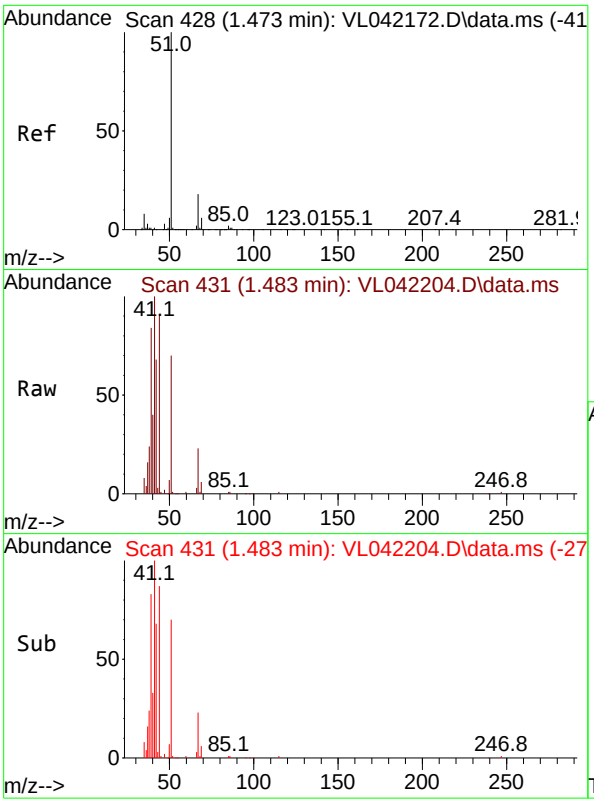


#2
Dichlorodifluoromethane
Concen: 0.463 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.009 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 85 Resp: 12624

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1





#3
Chlorodifluoromethane
Concen: 0.311 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

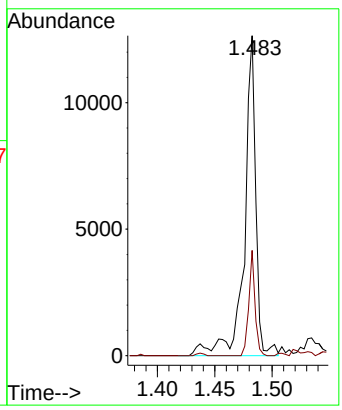
Tgt Ion: 51 Resp: 866

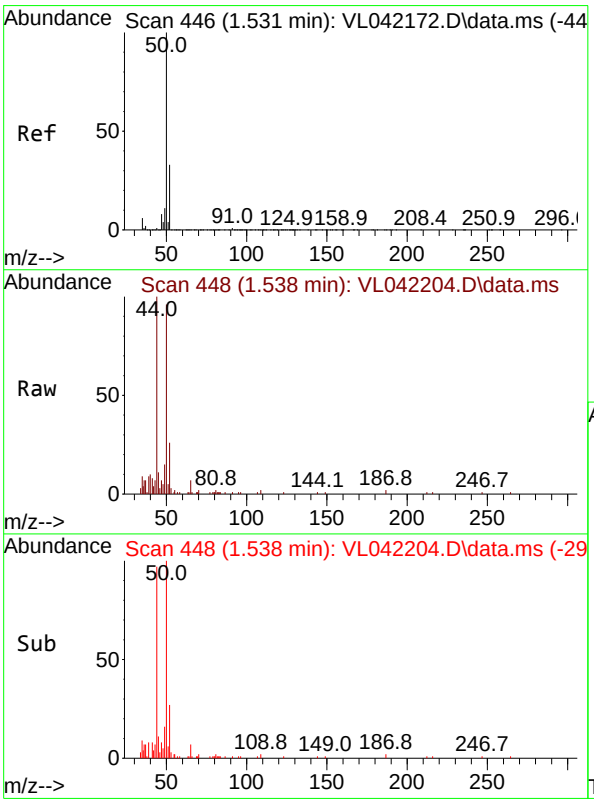
Ion	Ratio	Lower	Upper
51	100		
67	18.5	15.0	22.6

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

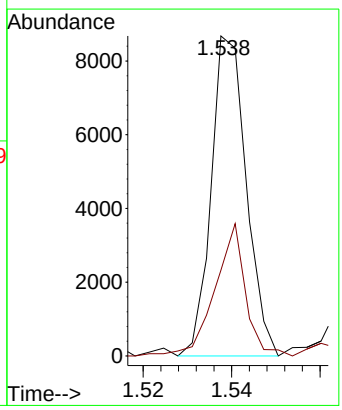


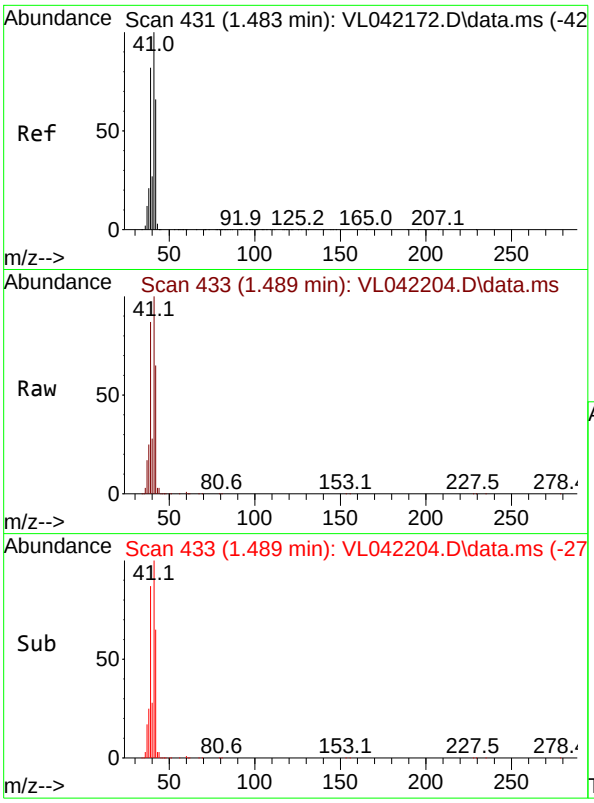


#4
Chloromethane
Concen: 0.430 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 50 Resp: 4783

Ion	Ratio	Lower	Upper
50	100		
52	25.3	26.1	39.1#

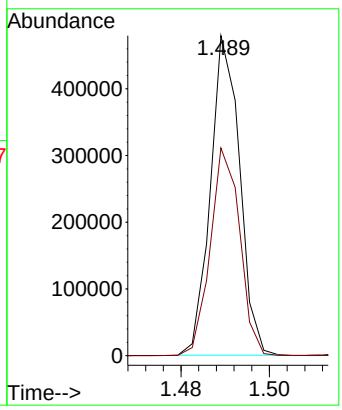




#9
Propene
Concen: 17.243 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 41 Resp: 21998

Ion	Ratio	Lower	Upper
41	100		
42	66.0	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
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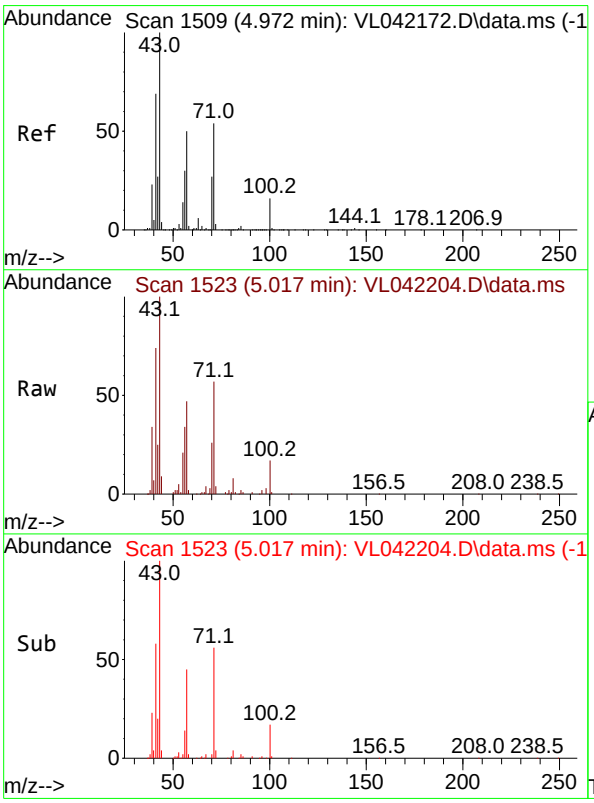
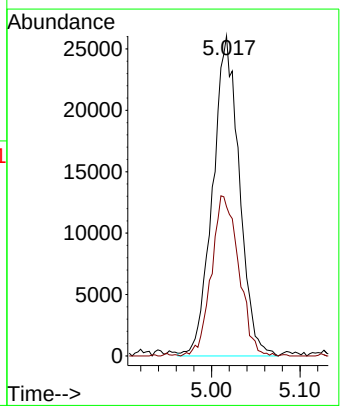
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

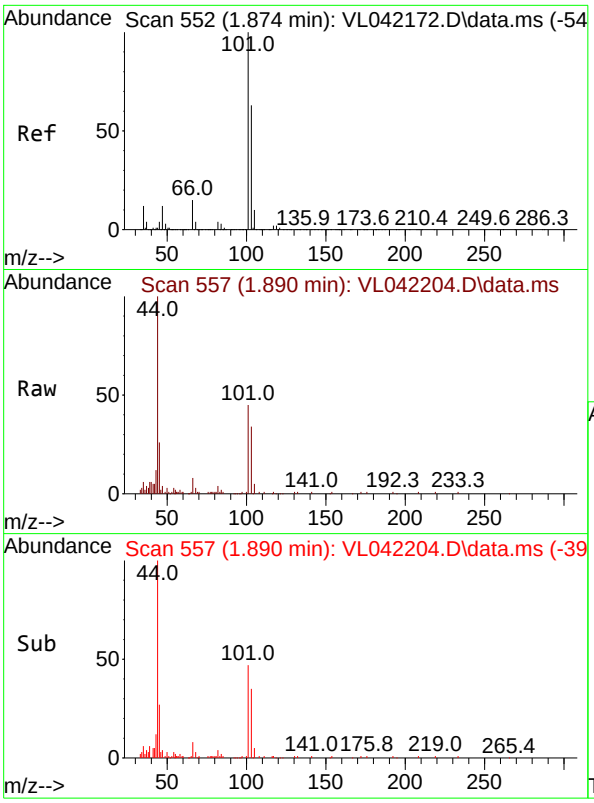


#10
Heptane
Concen: 1.605 ppbv
RT: 5.017 min Scan# 1523
Delta R.T. 0.045 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 54482

Ion	Ratio	Lower	Upper
43	100		
57	51.4	39.4	59.2

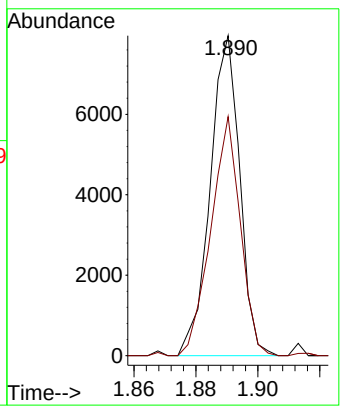




#11
Trichlorofluoromethane
Concen: 0.199 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:101 Resp: 527

Ion	Ratio	Lower	Upper
101	100		
103	74.7	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
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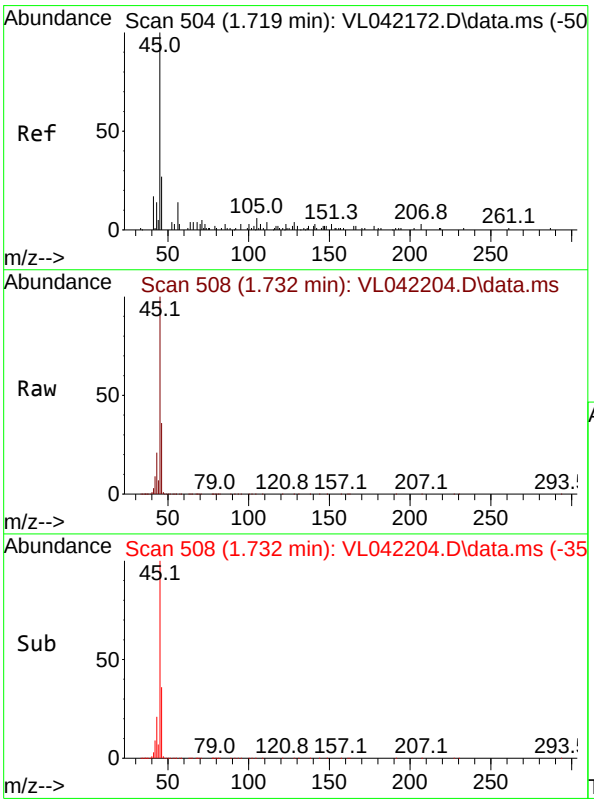
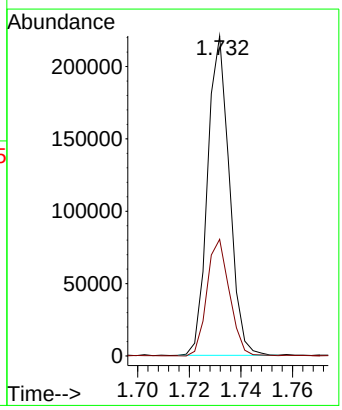
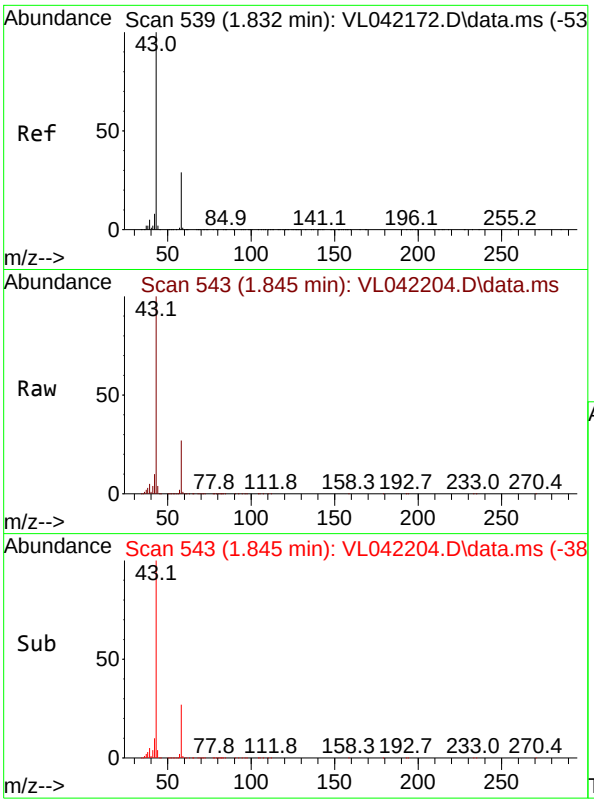


#13
Ethanol
Concen: 107.052 ppbv
RT: 1.732 min Scan# 508
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 45 Resp: 129111

Ion	Ratio	Lower	Upper
45	100		
46	38.6	20.2	80.8

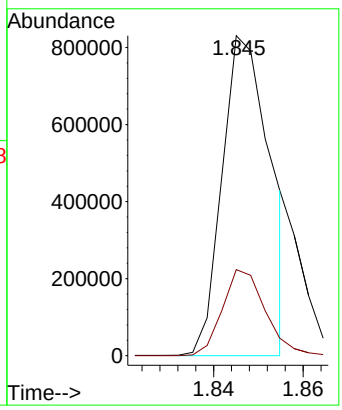




#15
Acetone
Concen: 23.958 ppbv m
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 61833

Ion	Ratio	Lower	Upper
43	100		
58	24.2	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
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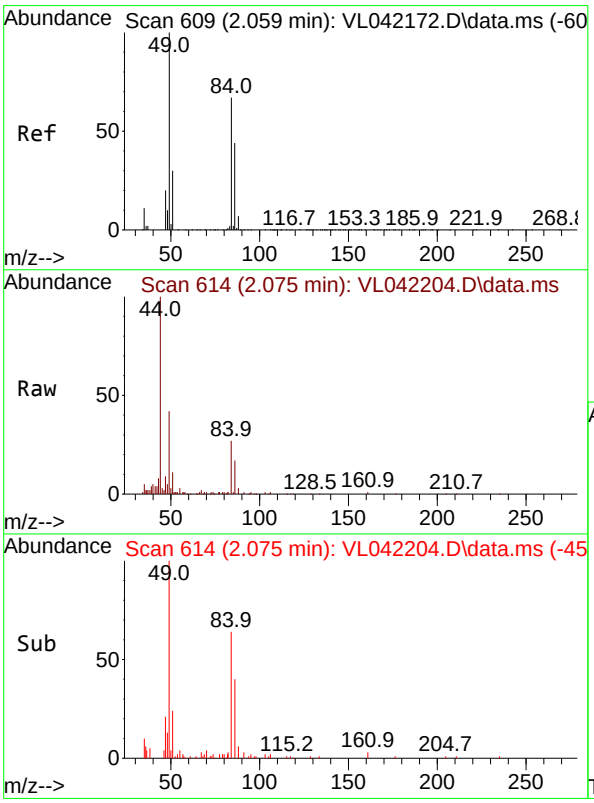
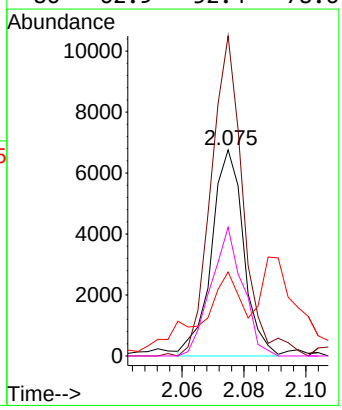
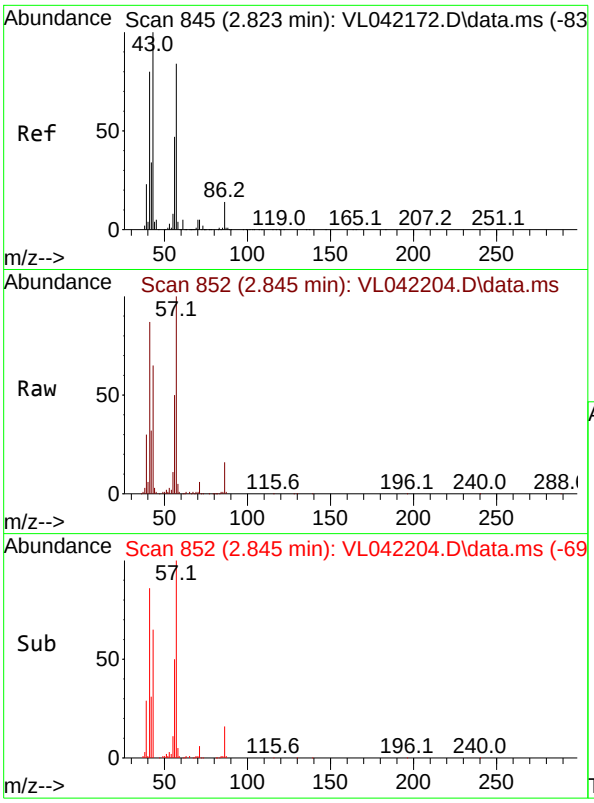


#20
Methylene Chloride
Concen: 0.505 ppbv
RT: 2.075 min Scan# 614
Delta R.T. 0.016 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 84 Resp: 4857

Ion	Ratio	Lower	Upper
84	100		
49	156.5	120.2	180.4
51	27.1	37.4	56.0#
86	62.9	52.4	78.6

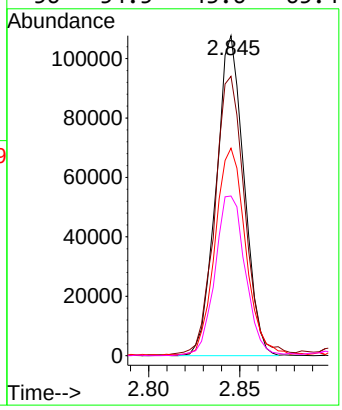




#26
Hexane
Concen: 4.428 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 57 Resp: 11457

Ion	Ratio	Lower	Upper
57	100		
41	95.4	76.6	114.8
43	73.9	207.8	311.8
56	54.5	43.6	65.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

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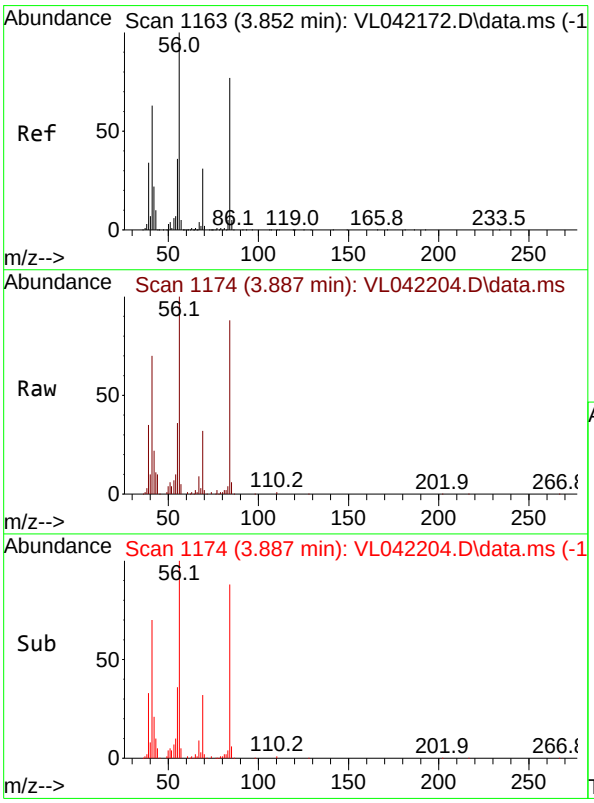
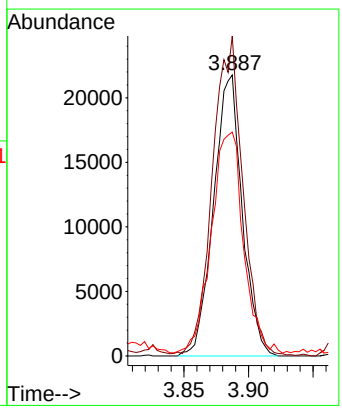
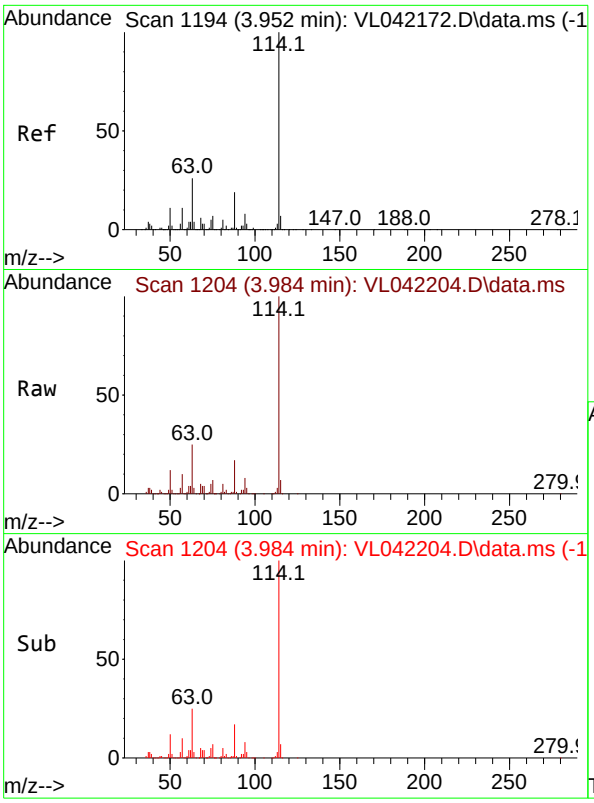


#30
Cyclohexane
Concen: 1.496 ppbv
RT: 3.887 min Scan# 1174
Delta R.T. 0.035 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 84 Resp: 33602

Ion	Ratio	Lower	Upper
84	100		
56	118.8	102.8	154.2
41	87.3	66.5	99.7





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.984 min Scan# 1
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:114 Resp: 52880

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	17.9	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
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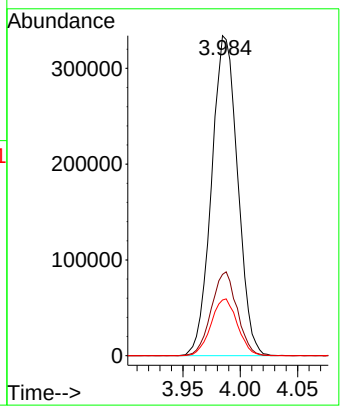
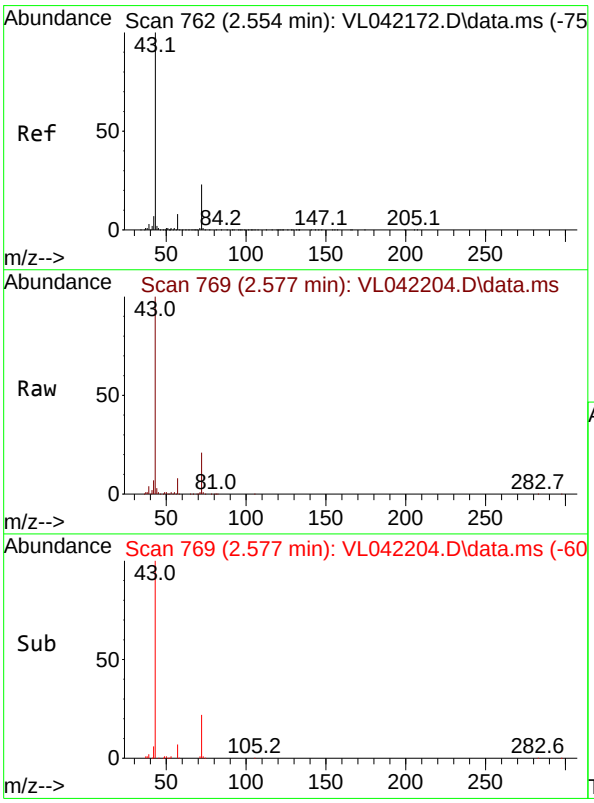
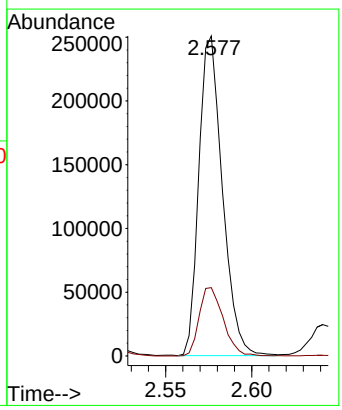


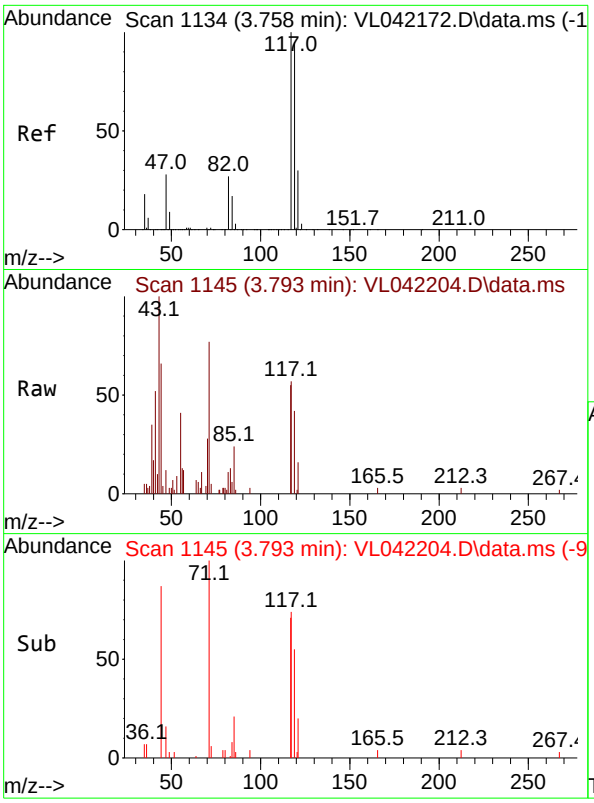


#34
2-Butanone
Concen: 6.223 ppbv
RT: 2.577 min Scan# 769
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 238611

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.070 ppbv
RT: 3.793 min Scan# 1
Delta R.T. 0.035 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:117 Resp: 289

Ion	Ratio	Lower	Upper
117	100		
119	33.5	76.2	114.2#
121	14.0	24.2	36.4#

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

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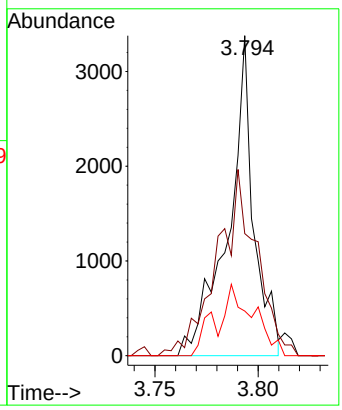
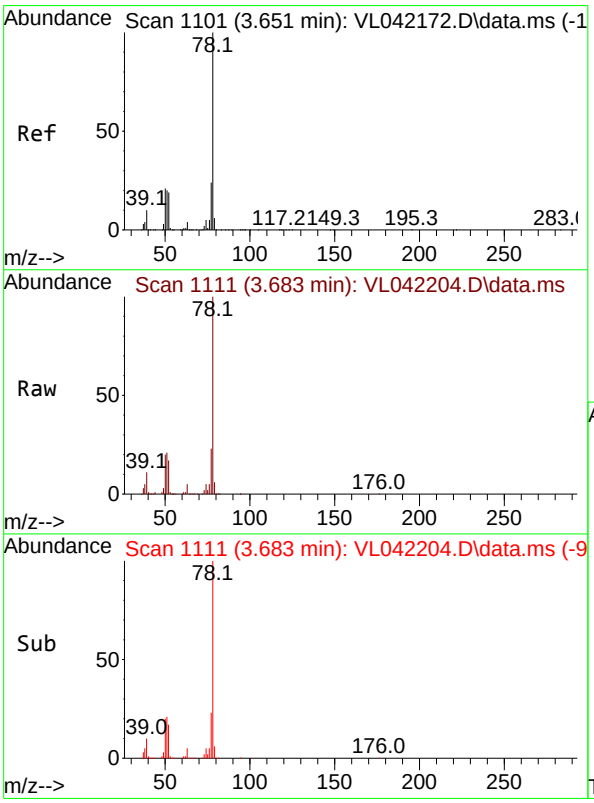
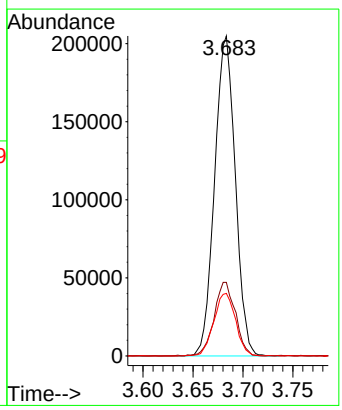


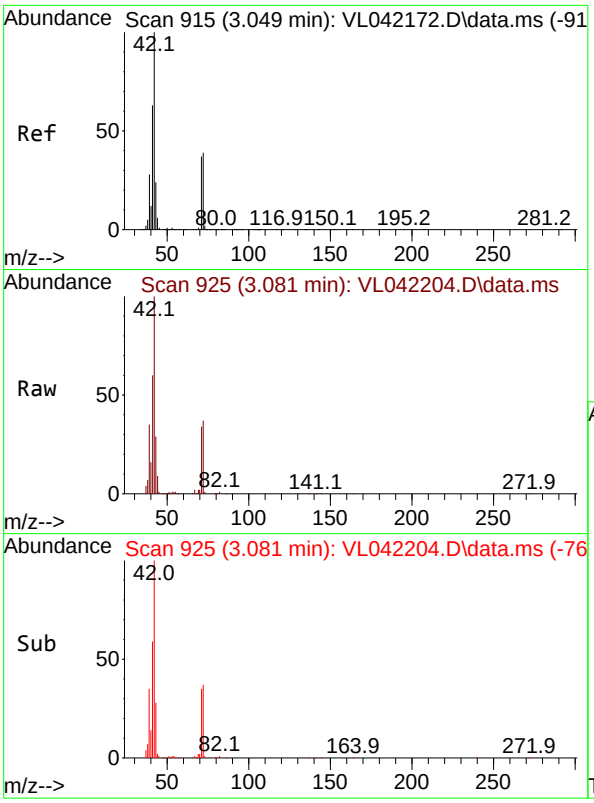


#36
Benzene
Concen: 5.632 ppbv
RT: 3.683 min Scan# 1111
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 78 Resp: 295232

Ion	Ratio	Lower	Upper
78	100		
77	22.8	19.1	28.7
50	19.5	16.6	24.8

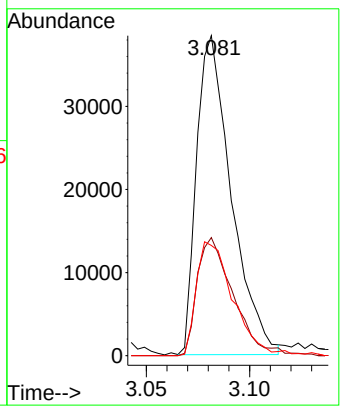




#41
Tetrahydrofuran
Concen: 2.032 ppbv
RT: 3.081 min Scan# 9
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 42 Resp: 4487

Ion	Ratio	Lower	Upper
42	100		
72	38.6	31.4	47.0
71	37.9	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
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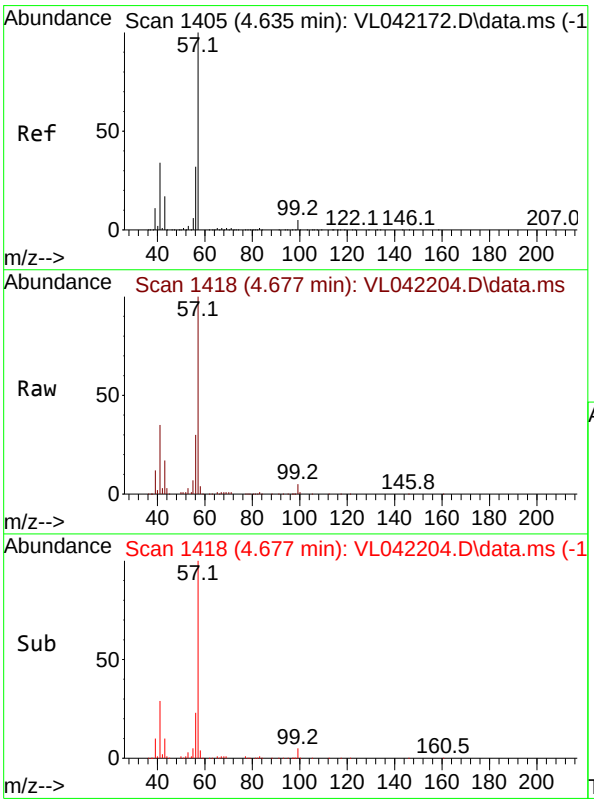
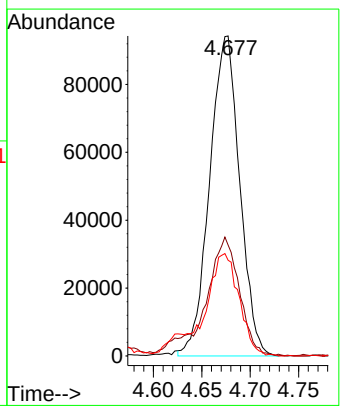
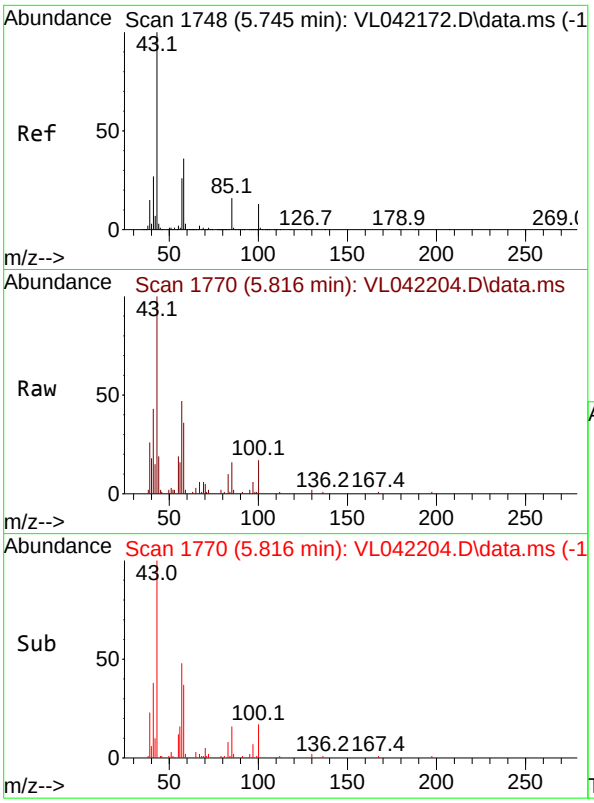


#44
2,2,4-Trimethylpentane
Concen: 2.300 ppbv
RT: 4.677 min Scan# 1418
Delta R.T. 0.042 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 57 Resp: 203749

Ion	Ratio	Lower	Upper
57	100		
41	42.2	26.8	40.2#
56	38.6	25.6	38.4#





#50
4-Methyl-2-Pentanone
Concen: 0.404 ppbv m
RT: 5.816 min Scan# 1
Delta R.T. 0.071 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 2452

Ion	Ratio	Lower	Upper
43	100		
58	37.2	29.0	43.6

Instrument :
MSVOA_L
ClientSampleId :
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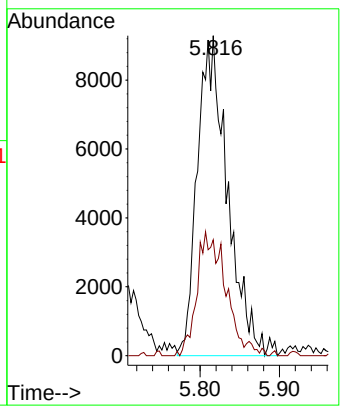
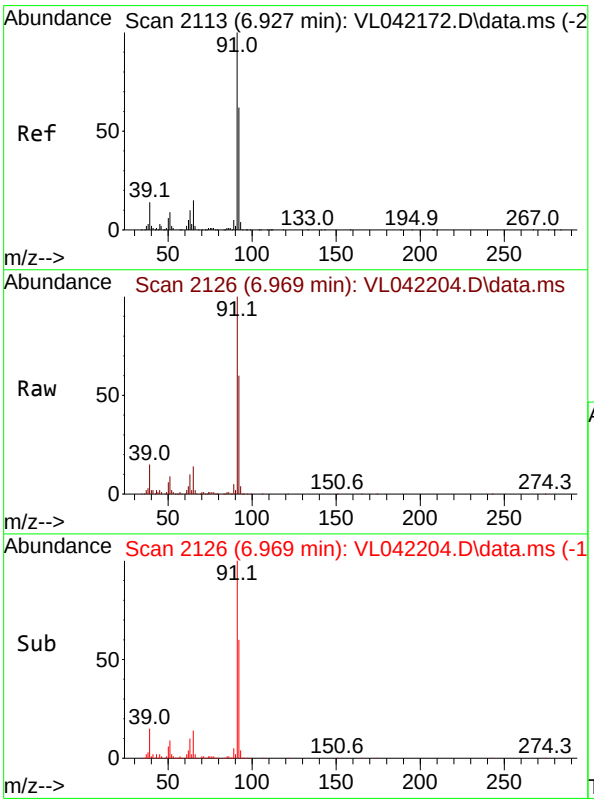
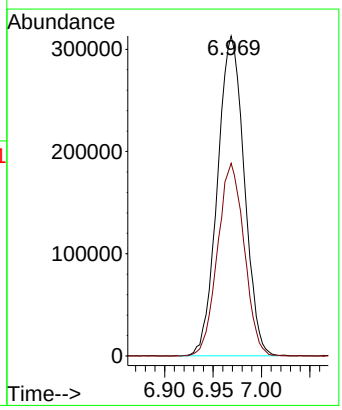


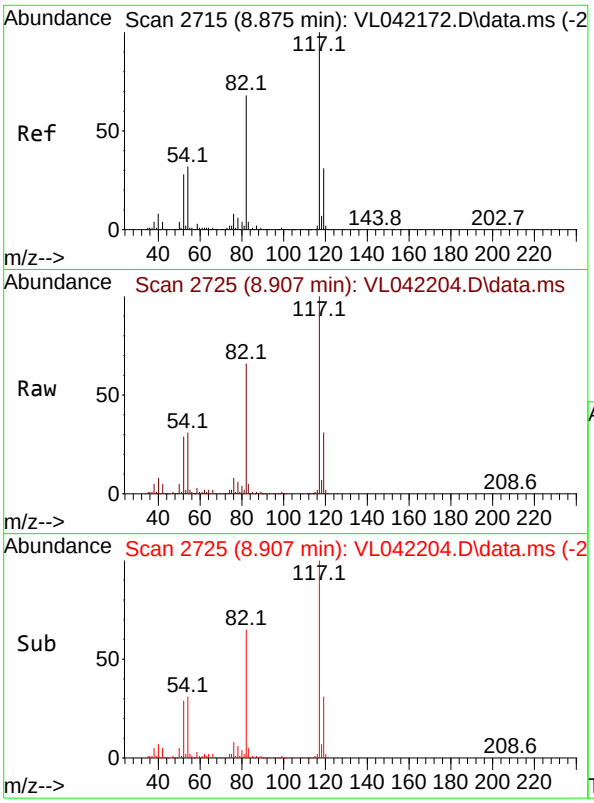


#53
Toluene
Concen: 9.680 ppbv
RT: 6.969 min Scan# 2126
Delta R.T. 0.042 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 601582

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.4	72.6





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.907 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:117 Resp: 47770

Ion	Ratio	Lower	Upper
117	100		
82	65.6	55.8	83.6
119	31.7	25.5	38.3

Instrument :
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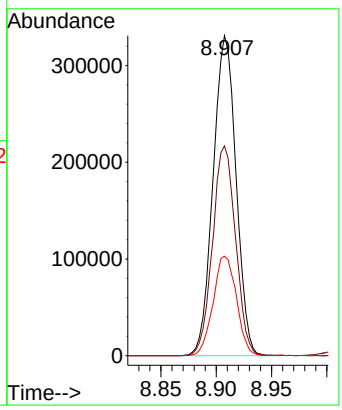
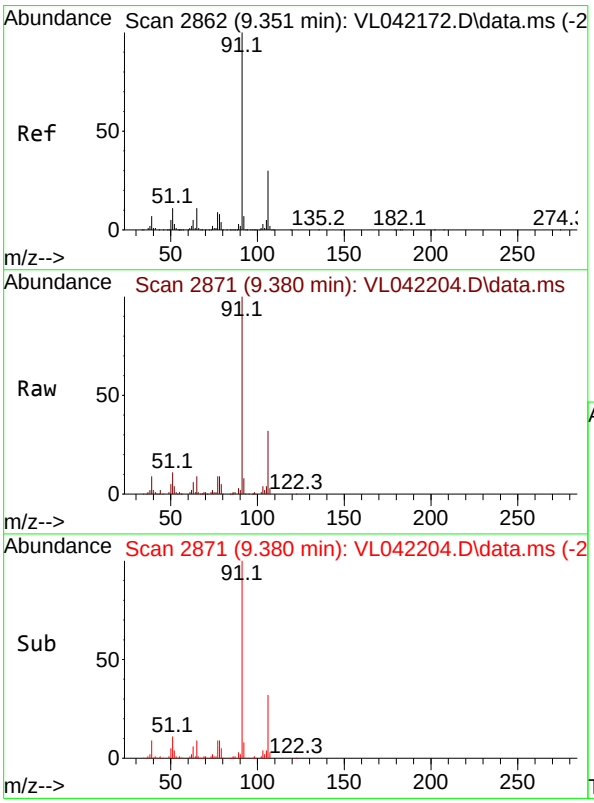
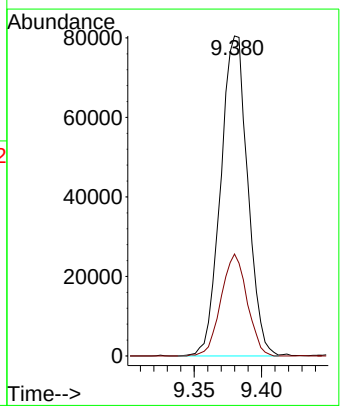


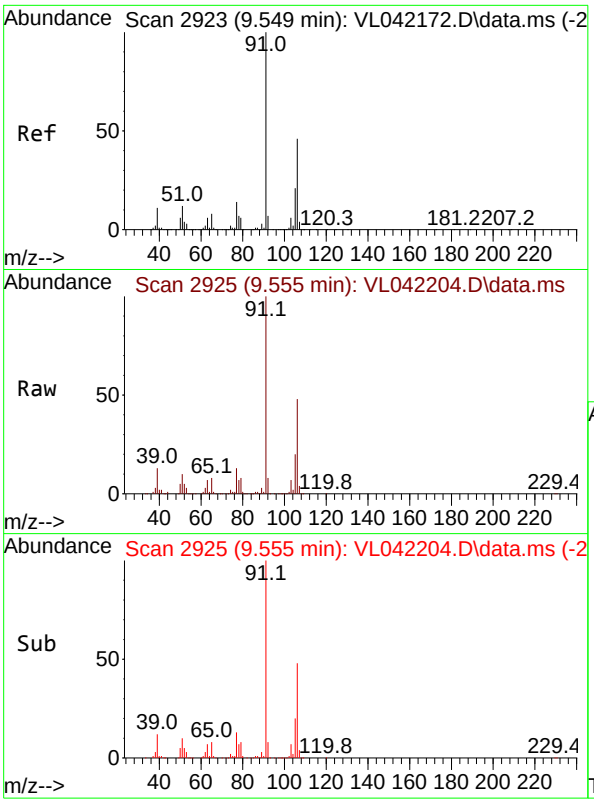


#58
Ethyl Benzene
Concen: 1.322 ppbv
RT: 9.380 min Scan# 2871
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 112145

Ion	Ratio	Lower	Upper
91	100		
106	31.9	24.2	36.2





#59
m/p-Xylene
Concen: 5.070 ppbv
RT: 9.555 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 34349

Ion	Ratio	Lower	Upper
91	100		
106	46.1	36.4	54.6

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

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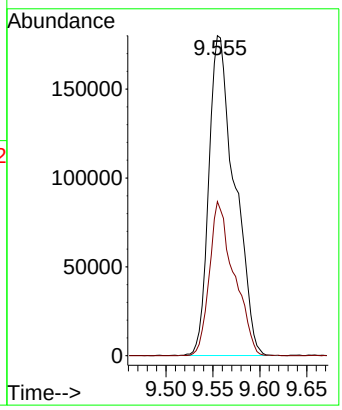
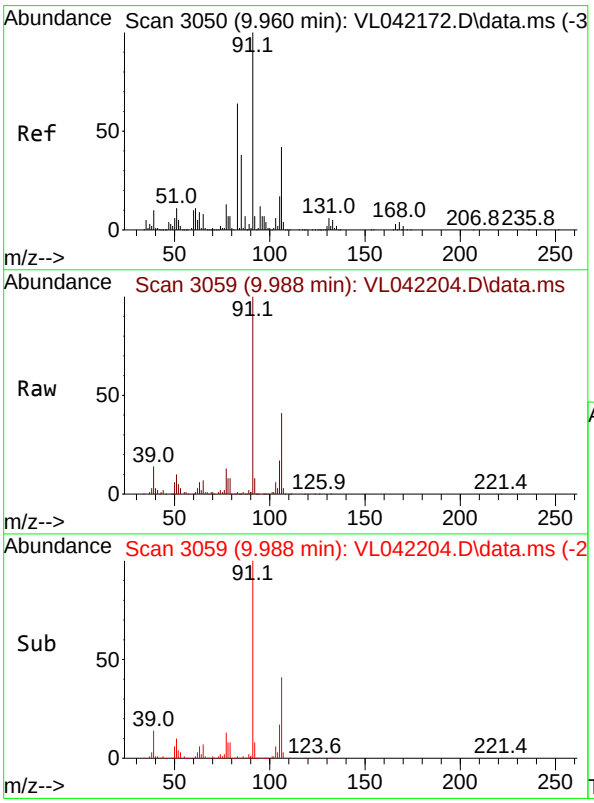
Supervised By :Mahesh Dadoda 04/01/2025

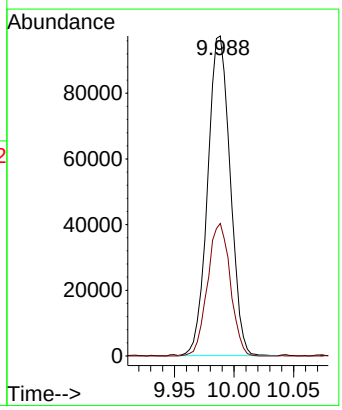


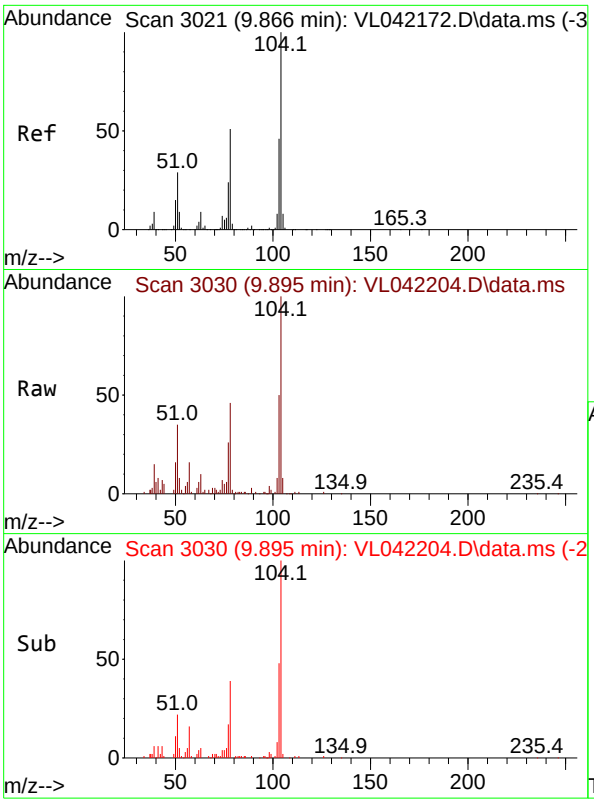


#60
o-Xylene
Concen: 1.884 ppbv
RT: 9.988 min Scan# 3059
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 127965

Ion	Ratio	Lower	Upper
91	100		
106	41.9	20.8	62.5





#61
Styrene
Concen: 1.394 ppbv
RT: 9.895 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

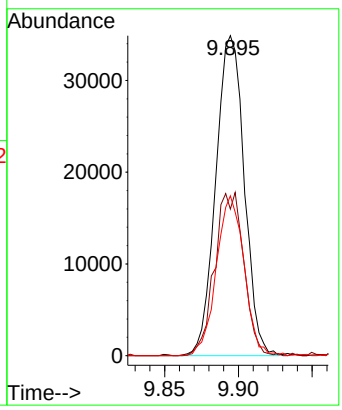
Tgt Ion:104 Resp: 4684

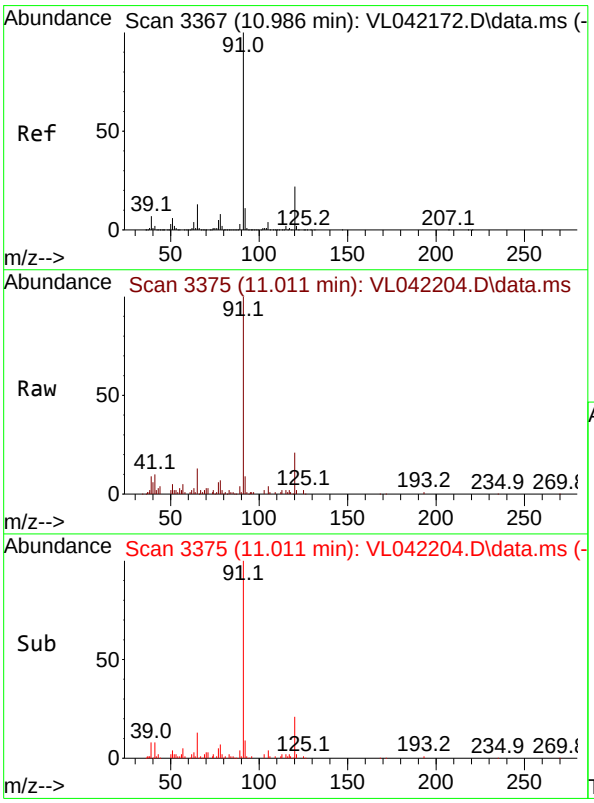
Ion	Ratio	Lower	Upper
104	100		
78	52.3	41.8	62.6
103	48.8	37.0	55.4

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

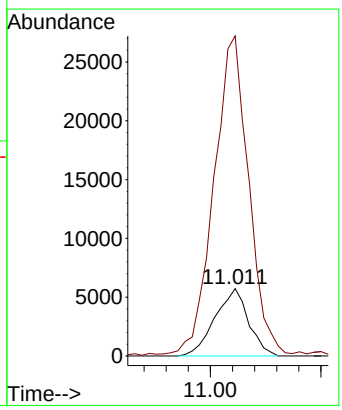


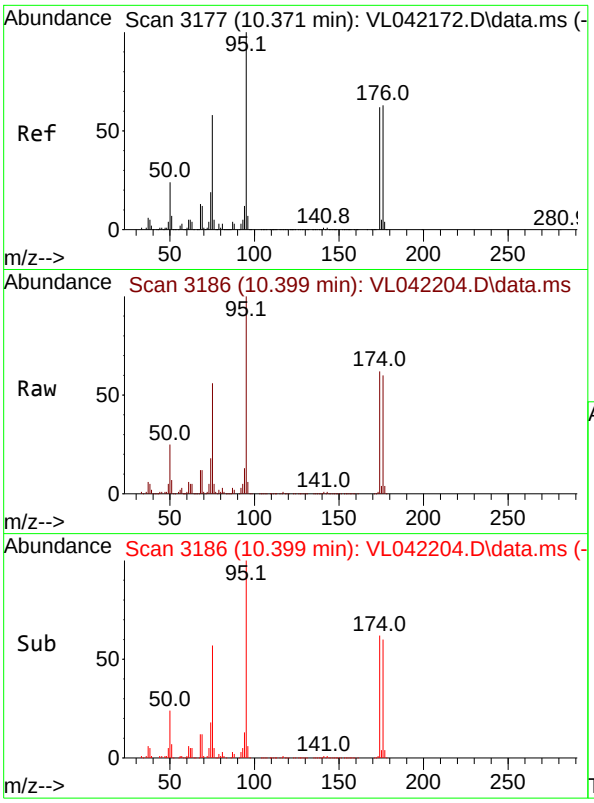


#64
n-propylbenzene
Concen: 0.230 ppbv
RT: 11.011 min Scan# 3375
Delta R.T. 0.026 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:120 Resp: 6017

Ion	Ratio	Lower	Upper
120	100		
91	499.2	376.9	565.3

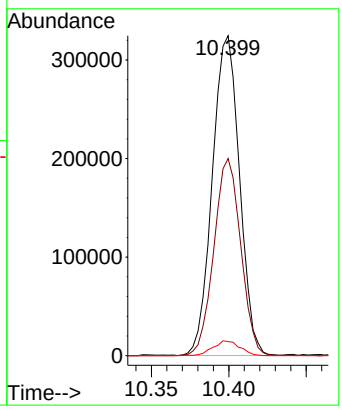




#68
1-Bromo-4-Fluorobenzene
Concen: 10.078 ppbv
RT: 10.399 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 95 Resp: 39536

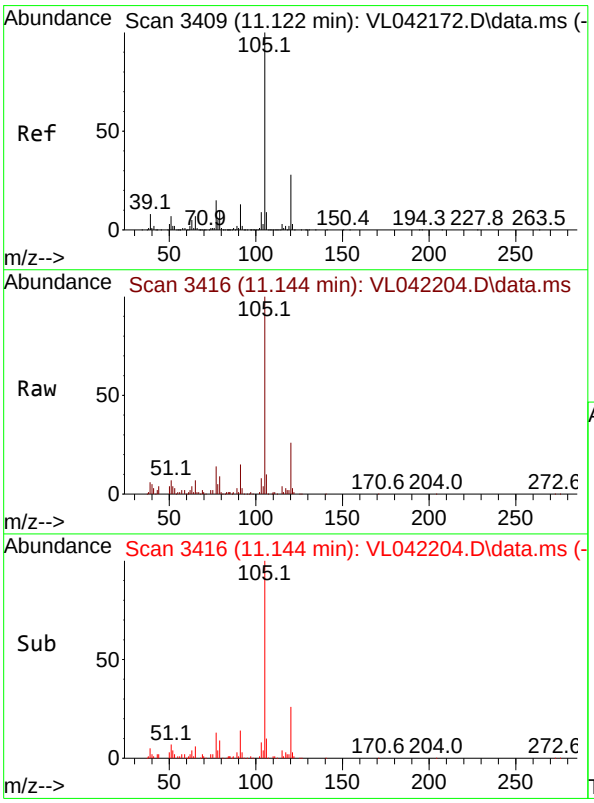
Ion	Ratio	Lower	Upper
95	100		
174	61.0	50.6	76.0
175	4.6	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations
APPROVED

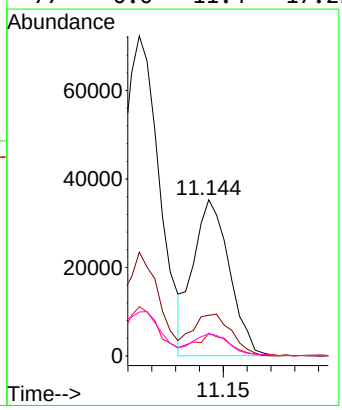
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

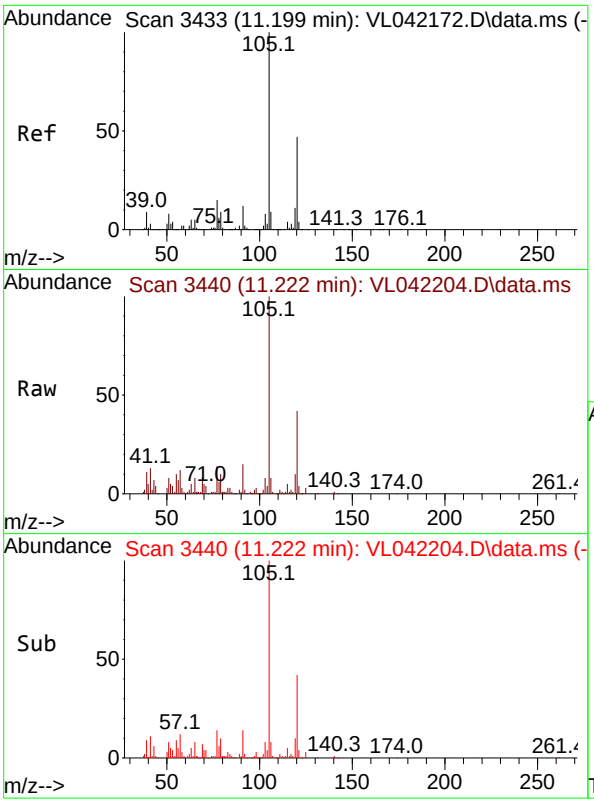


#72
4-Ethyltoluene
Concen: 0.441 ppbv
RT: 11.144 min Scan# 3416
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 37267

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#

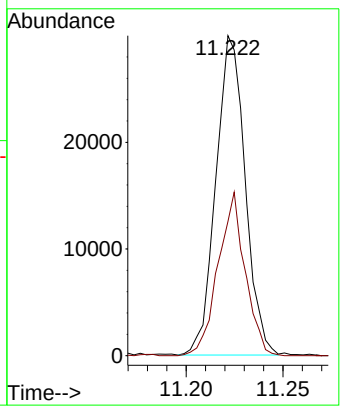




#73
1,3,5-Trimethylbenzene
Concen: 0.426 ppbv
RT: 11.222 min Scan# 34
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 3149

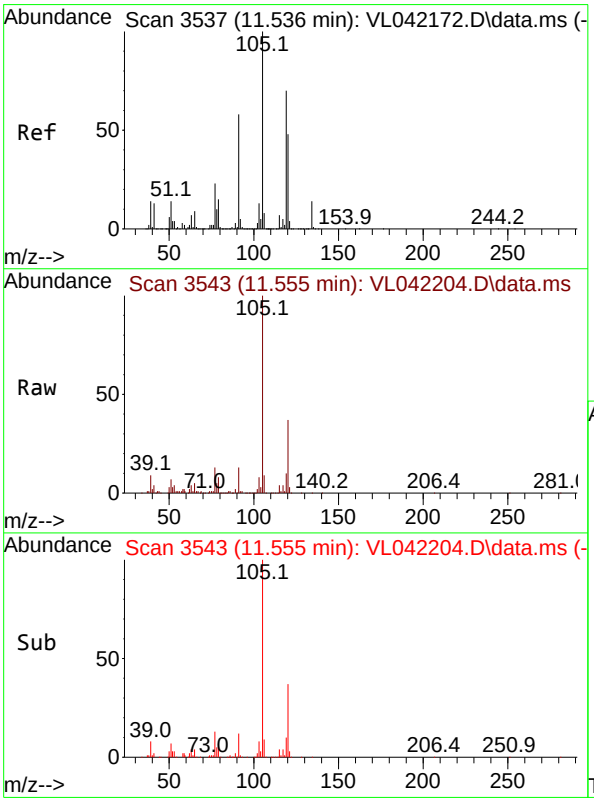
Ion	Ratio	Lower	Upper
105	100		
120	42.0	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations
APPROVED

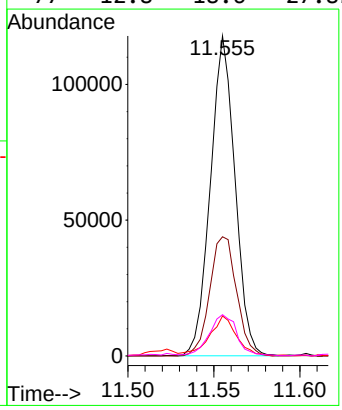
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

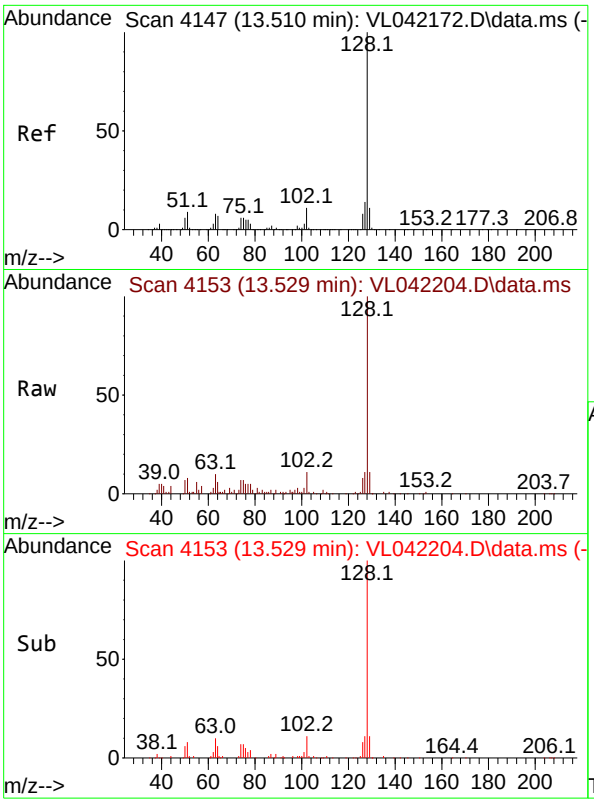


#74
1,2,4-Trimethylbenzene
Concen: 1.378 ppbv
RT: 11.555 min Scan# 3543
Delta R.T. 0.019 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 117257

Ion	Ratio	Lower	Upper
105	100		
120	37.3	38.6	58.0#
91	12.2	46.2	69.2#
77	12.8	18.6	27.8#

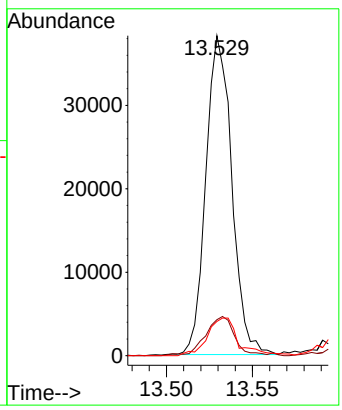




#79
Naphthalene
Concen: 0.431 ppbv
RT: 13.529 min Scan# 4
Delta R.T. 0.019 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:128 Resp: 4008

Ion	Ratio	Lower	Upper
128	100		
127	11.0	10.8	16.2
129	10.8	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042204.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	412	415	418	rBV	4336445	3639684	100.00%	11.027%
2	1.444	418	419	424	rVB	4288251	2184320	60.01%	6.618%
3	1.489	429	433	437	rVV	1580304	769958	21.15%	2.333%
4	1.515	439	441	446	rVB	116067	80166	2.20%	0.243%
5	1.567	453	457	462	rVB	750973	374455	10.29%	1.134%
6	1.609	466	470	474	rVV2	687729	491921	13.52%	1.490%
7	1.628	474	476	481	rVV	1049956	601157	16.52%	1.821%
8	1.651	481	483	490	rVB2	79196	48212	1.32%	0.146%
9	1.693	490	496	503	rVB2	65834	66131	1.82%	0.200%
10	1.732	503	508	517	rBV	386007	234378	6.44%	0.710%
11	1.855	539	546	552	rBV2	1630918	1759533	48.34%	5.331%
12	1.900	553	560	563	rBV2	47968	47357	1.30%	0.143%
13	1.952	571	576	579	rBV	80820	60018	1.65%	0.182%
14	1.975	579	583	588	rVV	900137	635595	17.46%	1.926%
15	2.004	588	592	593	rVV	82563	59553	1.64%	0.180%
16	2.013	593	595	600	rVV2	101776	68299	1.88%	0.207%
17	2.059	603	609	612	rVV2	56630	47881	1.32%	0.145%
18	2.091	615	619	629	rVB	142872	125549	3.45%	0.380%
19	2.188	645	649	651	rBV2	68461	51766	1.42%	0.157%
20	2.204	651	654	660	rVB2	78783	72827	2.00%	0.221%
21	2.454	723	731	737	rBV4	183897	239634	6.58%	0.726%
22	2.489	737	742	750	rVB	653028	641542	17.63%	1.944%
23	2.577	763	769	780	rVB	386902	374331	10.28%	1.134%
24	2.641	780	789	797	rVB	339626	356245	9.79%	1.079%
25	2.700	797	807	816	rBV3	42969	59903	1.65%	0.181%
26	2.806	831	840	846	rBV2	703503	721653	19.83%	2.186%
27	2.845	846	852	865	rVB	458176	519676	14.28%	1.574%
28	3.081	920	925	934	rBV	126446	148678	4.08%	0.450%
29	3.253	968	978	986	rBV	231803	313025	8.60%	0.948%
30	3.308	986	995	1004	rVB4	74840	112417	3.09%	0.341%
31	3.680	1095	1110	1120	rBV2	471261	727679	19.99%	2.205%
32	3.884	1160	1173	1184	rBV2	121557	205804	5.65%	0.624%
33	3.984	1192	1204	1218	rVB	872727	1388990	38.16%	4.208%
34	4.082	1222	1234	1242	rVV2	125516	235542	6.47%	0.714%
35	4.120	1242	1246	1259	rVB5	62706	107636	2.96%	0.326%
36	4.295	1289	1300	1318	rVB3	126428	256363	7.04%	0.777%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	4.476	1344	1356	1367	rBV7	36571	71191	1.96%	0.216%
38	4.557	1367	1381	1393	rVV10	33610	92469	2.54%	0.280%
39	4.632	1393	1404	1405	rVV4	45697	68636	1.89%	0.208%
40	4.674	1405	1417	1435	rVB2	230571	524553	14.41%	1.589%
41	5.017	1510	1523	1535	rVB5	120337	248881	6.84%	0.754%
42	5.710	1714	1737	1753	rVB5	125968	346825	9.53%	1.051%
43	5.816	1757	1770	1791	rBV7	36446	103626	2.85%	0.314%
44	6.308	1913	1922	1937	rVB7	35118	87575	2.41%	0.265%
45	6.859	2080	2092	2105	rVB5	65390	141818	3.90%	0.430%
46	6.969	2110	2126	2146	rVB2	826253	1712101	47.04%	5.187%
47	7.218	2191	2203	2215	rBV5	35097	71524	1.97%	0.217%
48	7.409	2251	2262	2271	rBV3	66629	131735	3.62%	0.399%
49	7.632	2317	2331	2332	rBV4	70048	104908	2.88%	0.318%
50	7.648	2332	2336	2345	rVB4	61749	94351	2.59%	0.286%
51	7.710	2353	2355	2368	rVB10	27294	45869	1.26%	0.139%
52	7.923	2410	2421	2430	rBV3	44619	88627	2.44%	0.269%
53	8.030	2445	2454	2468	rVB6	22165	51729	1.42%	0.157%
54	8.163	2484	2495	2506	rBV5	28257	53108	1.46%	0.161%
55	8.331	2530	2547	2561	rVB5	128310	252433	6.94%	0.765%
56	8.907	2710	2725	2737	rBV	1157230	1743820	47.91%	5.283%
57	9.173	2799	2807	2822	rVB4	36935	60586	1.66%	0.184%
58	9.380	2861	2871	2885	rBV	200131	306473	8.42%	0.929%
59	9.555	2915	2925	2942	rVB	529393	1033055	28.38%	3.130%
60	9.655	2948	2956	2970	rBV	270169	387770	10.65%	1.175%
61	9.755	2985	2987	2999	rVB2	46284	41966	1.15%	0.127%
62	9.820	2999	3007	3015	rBV3	32190	47297	1.30%	0.143%
63	9.891	3015	3029	3038	rVV5	157460	244733	6.72%	0.741%
64	9.988	3046	3059	3079	rVB	284725	431921	11.87%	1.309%
65	10.399	3164	3186	3196	rBV	1526910	2033820	55.88%	6.162%
66	10.827	3311	3318	3327	rVB7	33711	48423	1.33%	0.147%
67	10.921	3341	3347	3359	rVB5	44939	57545	1.58%	0.174%
68	11.011	3364	3375	3388	rVB3	64073	113900	3.13%	0.345%
69	11.115	3400	3407	3412	rBV	197524	222593	6.12%	0.674%
70	11.144	3412	3416	3427	rVB	97415	117913	3.24%	0.357%
71	11.222	3432	3440	3448	rVB2	112529	132149	3.63%	0.400%
72	11.358	3477	3482	3494	rVB3	78566	91310	2.51%	0.277%
73	11.555	3536	3543	3555	rVB	322630	367152	10.09%	1.112%
74	11.772	3598	3610	3622	rVB4	131916	193325	5.31%	0.586%
75	11.898	3642	3649	3656	rBV3	83625	89220	2.45%	0.270%
76	12.037	3684	3692	3695	rBV4	37695	49138	1.35%	0.149%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

77	12.060	3695	3699	3706	rVV5	69835	80502	2.21%	0.244%
78	12.108	3706	3714	3721	rVB6	51384	71295	1.96%	0.216%
79	12.244	3749	3756	3763	rVB4	97934	108482	2.98%	0.329%
80	12.422	3806	3811	3817	rVB6	49643	50964	1.40%	0.154%
81	12.455	3817	3821	3828	rBV3	45084	44196	1.21%	0.134%
82	12.526	3837	3843	3851	rBV6	51713	83298	2.29%	0.252%
83	12.562	3851	3854	3862	rVB5	45782	41482	1.14%	0.126%
84	12.607	3862	3868	3878	rBV3	52421	69110	1.90%	0.209%
85	12.688	3878	3893	3900	rBV8	45345	87842	2.41%	0.266%
86	12.843	3935	3941	3948	rBV	191230	175063	4.81%	0.530%
87	12.934	3961	3969	3975	rBV3	33822	42673	1.17%	0.129%
88	12.969	3975	3980	3986	rVV3	51286	53935	1.48%	0.163%
89	13.018	3988	3995	4007	rVB4	65205	93140	2.56%	0.282%
90	13.244	4060	4065	4070	rBV3	36810	44309	1.22%	0.134%
91	13.348	4091	4097	4107	rBV7	56771	95163	2.61%	0.288%
92	13.403	4107	4114	4120	rVB4	84431	98971	2.72%	0.300%
93	13.442	4120	4126	4130	rBV4	48116	54371	1.49%	0.165%
94	13.529	4148	4153	4158	rBV	73294	71214	1.96%	0.216%
95	13.678	4192	4199	4208	rBV8	52378	83773	2.30%	0.254%
96	13.743	4210	4219	4225	rBV	238195	230807	6.34%	0.699%
97	13.847	4243	4251	4255	rBV6	40056	49597	1.36%	0.150%
98	13.914	4269	4272	4278	rVB7	47163	43830	1.20%	0.133%
99	13.999	4287	4298	4306	rBV7	34589	55192	1.52%	0.167%
100	14.112	4326	4333	4338	rBV9	46776	64226	1.76%	0.195%
101	14.190	4348	4357	4366	rBV9	39847	67515	1.85%	0.205%
102	14.251	4366	4376	4389	rVV8	92537	196084	5.39%	0.594%
103	14.319	4392	4397	4403	rVB7	47209	46980	1.29%	0.142%
104	14.355	4403	4408	4415	rBV4	74176	83593	2.30%	0.253%
105	14.471	4433	4444	4450	rBV5	72451	111487	3.06%	0.338%
106	14.536	4459	4464	4475	rVB	265829	274811	7.55%	0.833%
107	14.682	4501	4509	4519	rBV8	79977	127360	3.50%	0.386%
108	14.915	4574	4581	4586	rBV5	49663	51543	1.42%	0.156%
109	15.125	4641	4646	4653	rVB3	64139	66374	1.82%	0.201%
110	15.258	4682	4687	4696	rVB	166979	153187	4.21%	0.464%

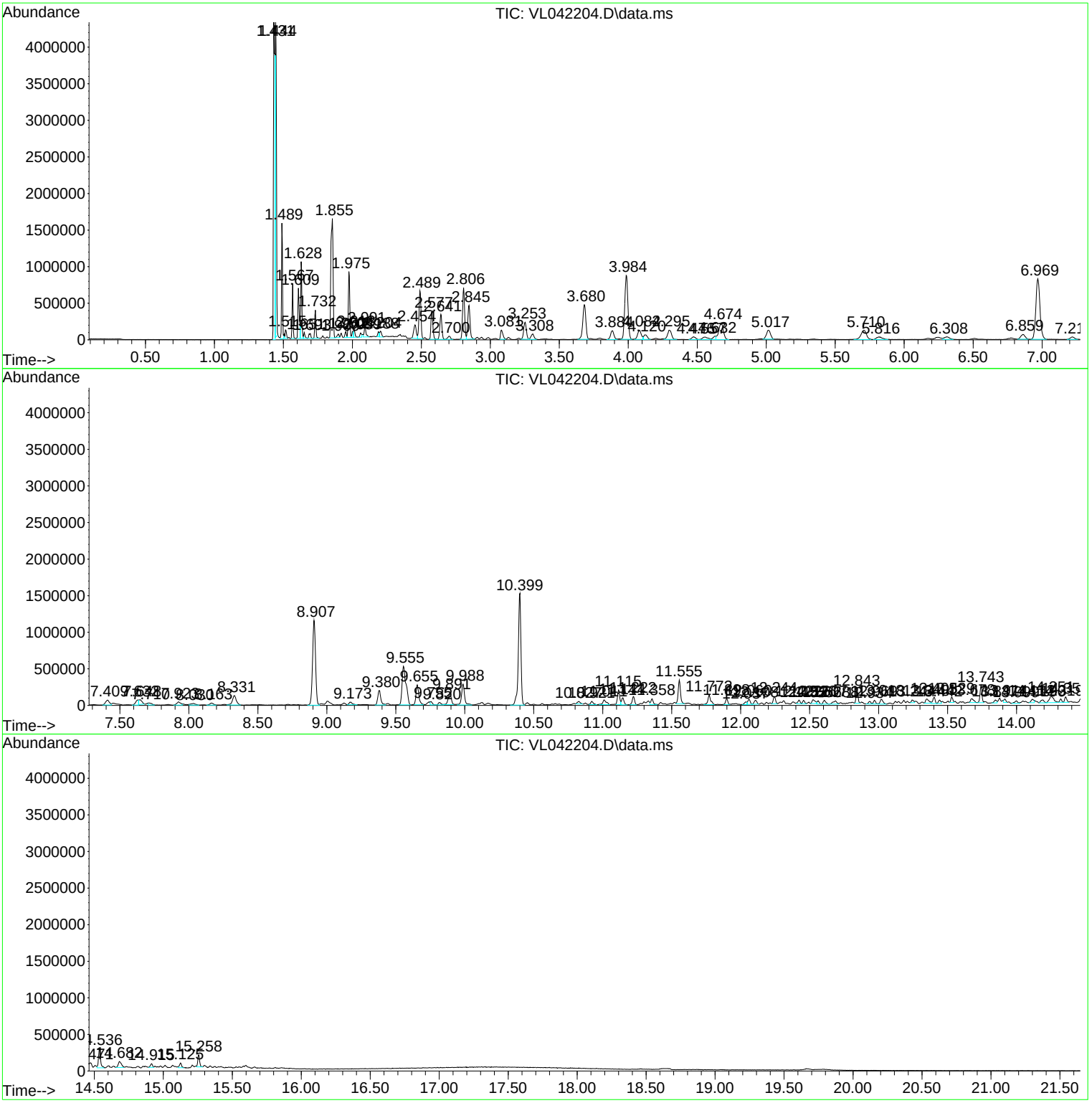
Sum of corrected areas: 33006315

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

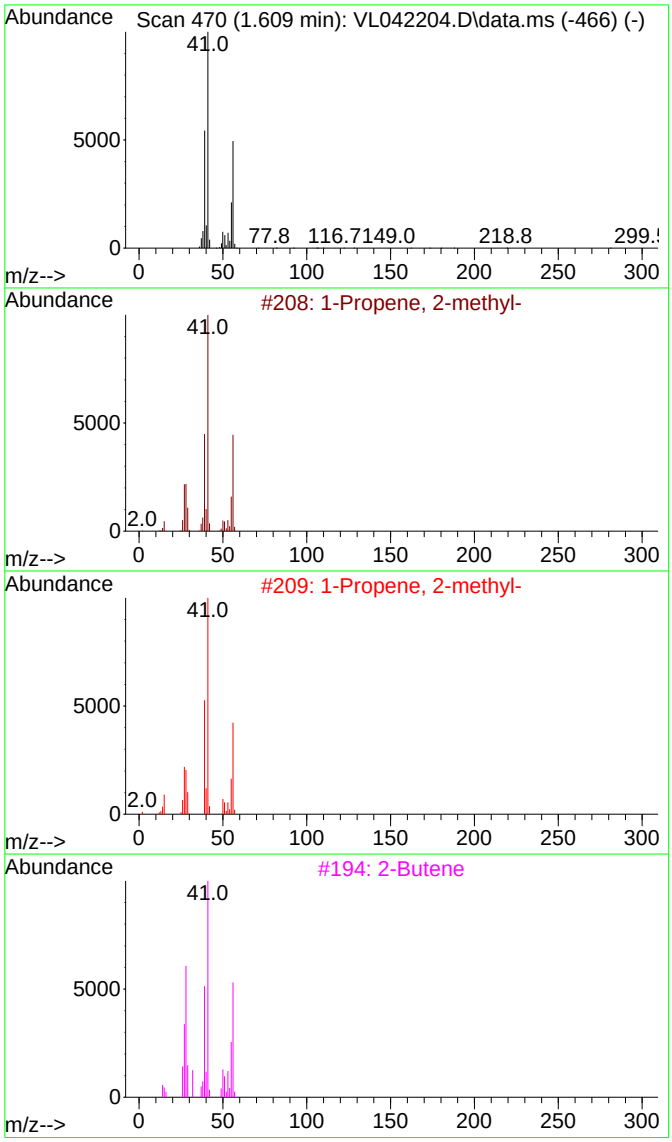
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

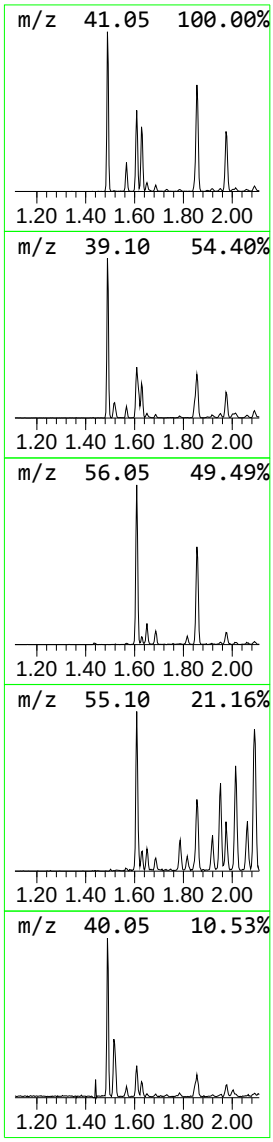
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 1-Propene, 2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.609	6.82 ppbv	491921	Bromochloromethane	2.806

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene, 2-methyl-	56	C4H8	000115-11-7	90
2	1-Propene, 2-methyl-	56	C4H8	000115-11-7	80
3	2-Butene	56	C4H8	000107-01-7	80
4	2-Butene	56	C4H8	000107-01-7	64
5	1-Propene, 2-methyl-	56	C4H8	000115-11-7	53





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Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

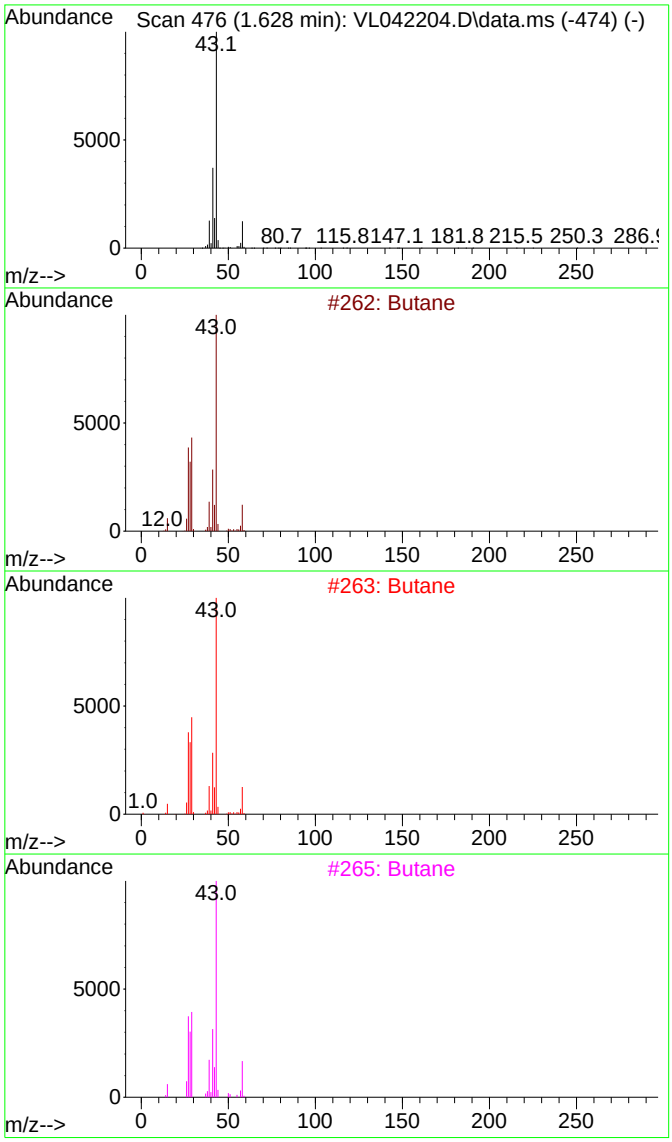
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

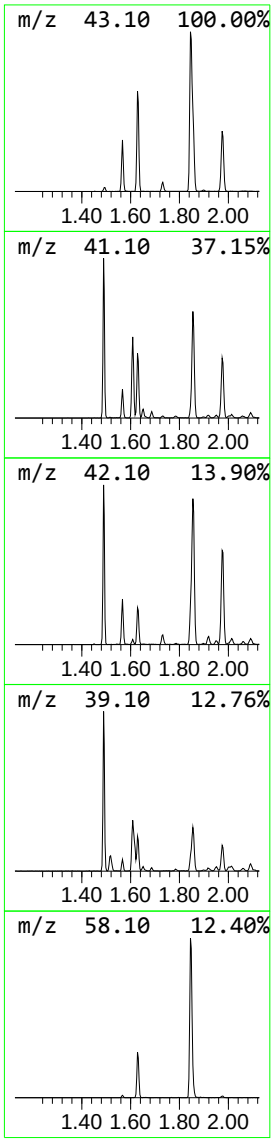
****

Peak Number 3 Butane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.628	8.33 ppbv	601157	Bromochloromethane	2.806

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	86
2	Butane	58	C4H10	000106-97-8	86
3	Butane	58	C4H10	000106-97-8	72
4	Butane	58	C4H10	000106-97-8	52
5	Isobutane	58	C4H10	000075-28-5	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

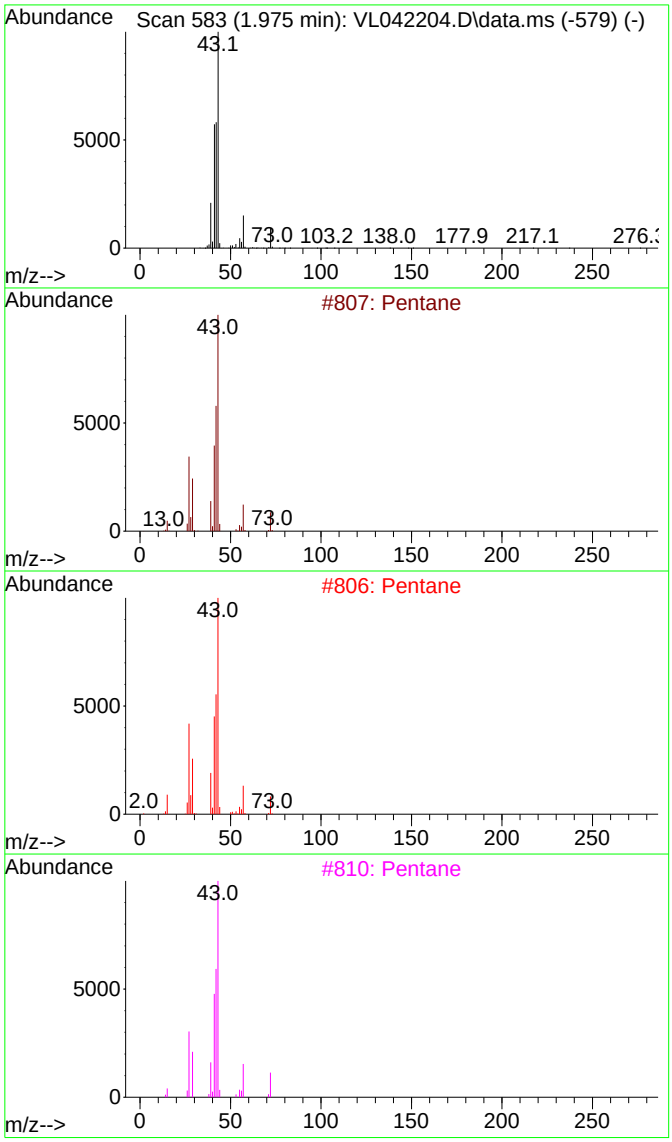
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

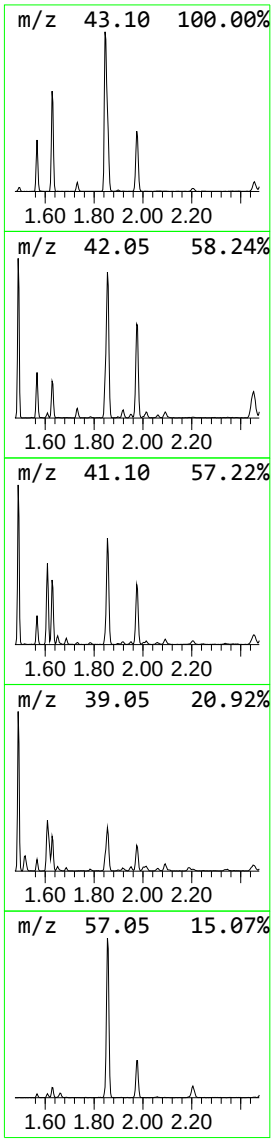
****

Peak Number 4 Pentane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.975	8.81 ppbv	635595	Bromochloromethane	2.806

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	86
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	80
4	Pentane	72	C5H12	000109-66-0	64
5	Butane, 2-methyl-	72	C5H12	000078-78-4	53





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Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

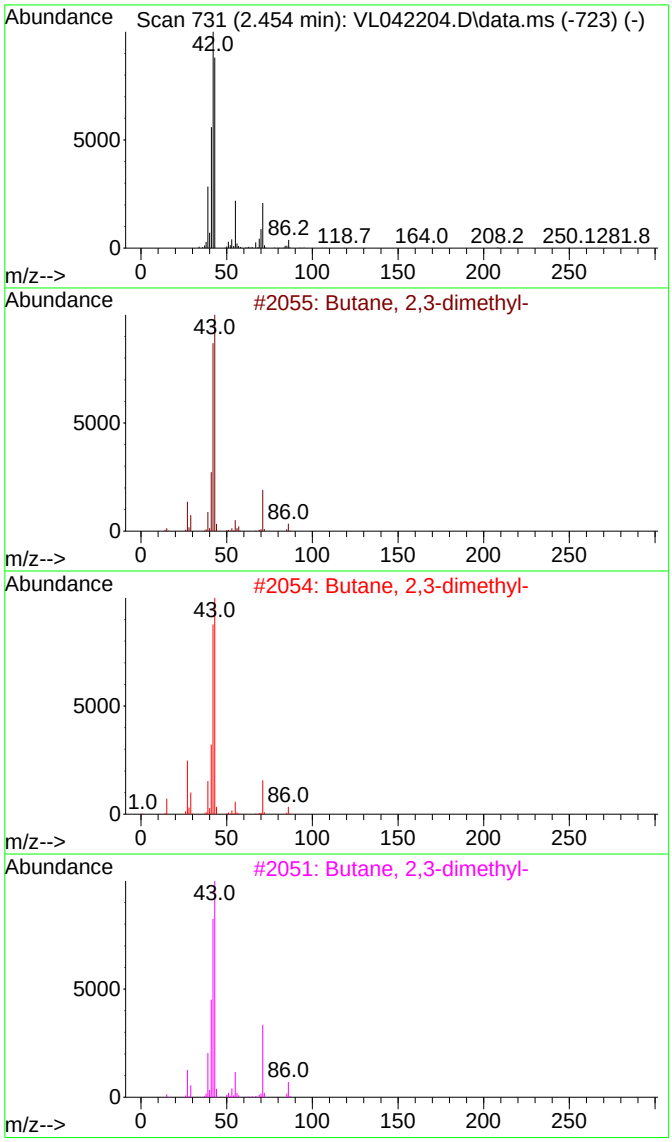
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

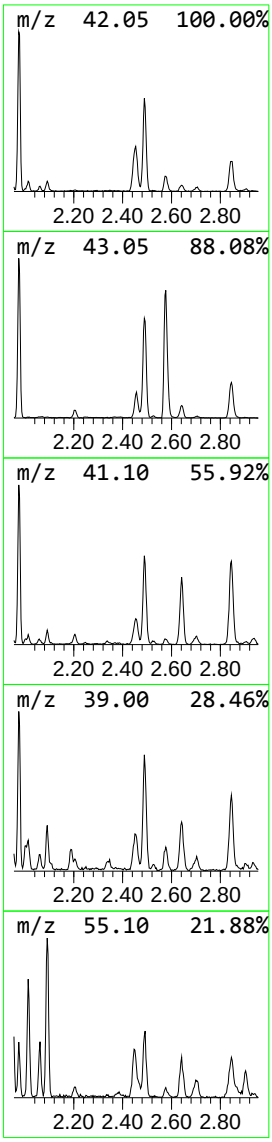
****

Peak Number 5 Butane, 2,3-dimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.454	3.32 ppbv	239634	Bromochloromethane	2.806

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	56
4	Cyclobutane, methyl-	70	C5H10	000598-61-8	47
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	40





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

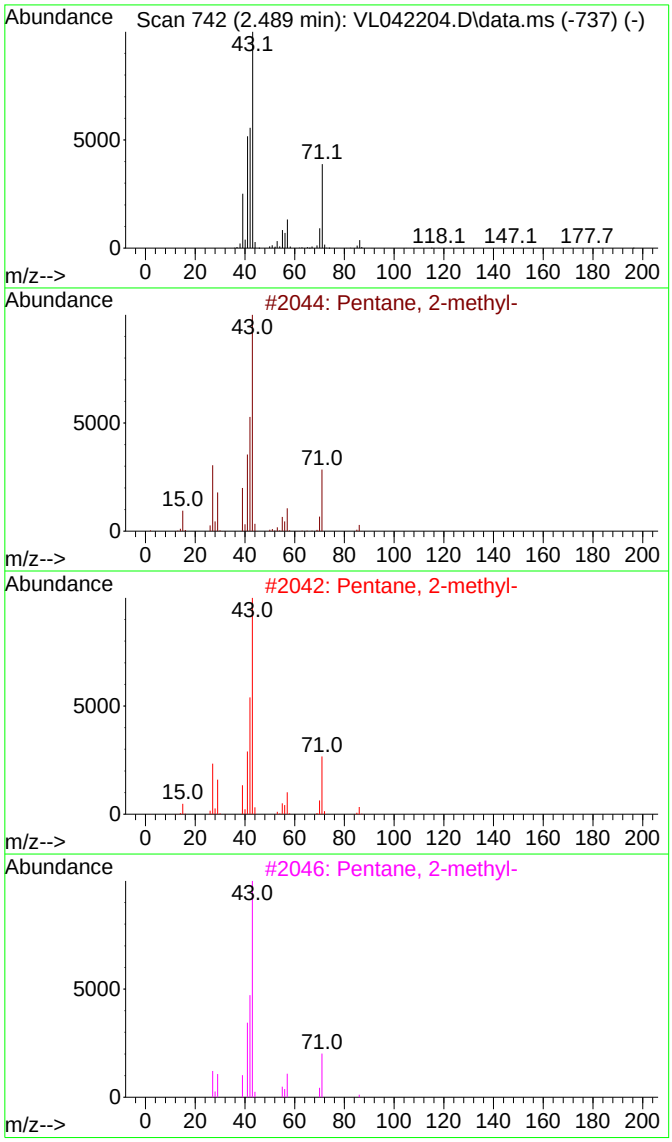
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

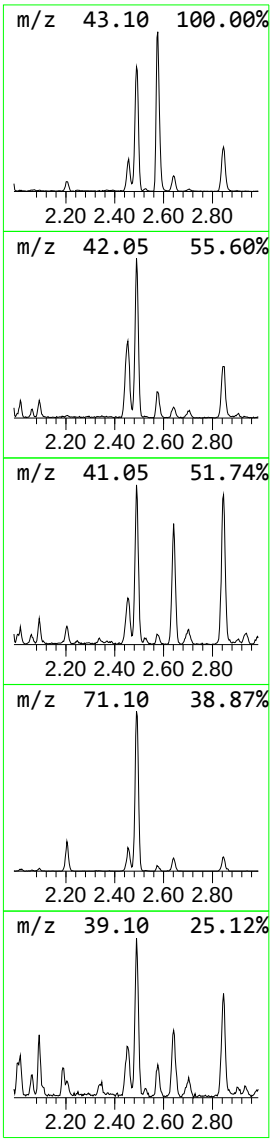
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 6 Pentane, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.489	8.89 ppbv	641542	Bromochloromethane	2.806

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	90
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	83
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	64
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	52





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

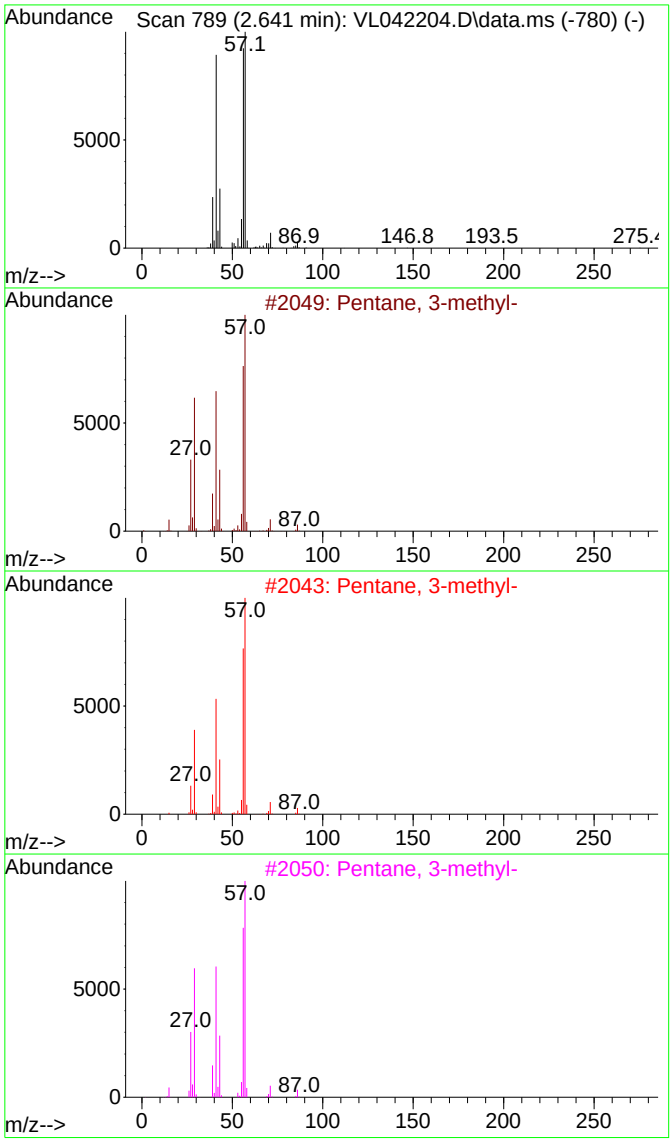
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

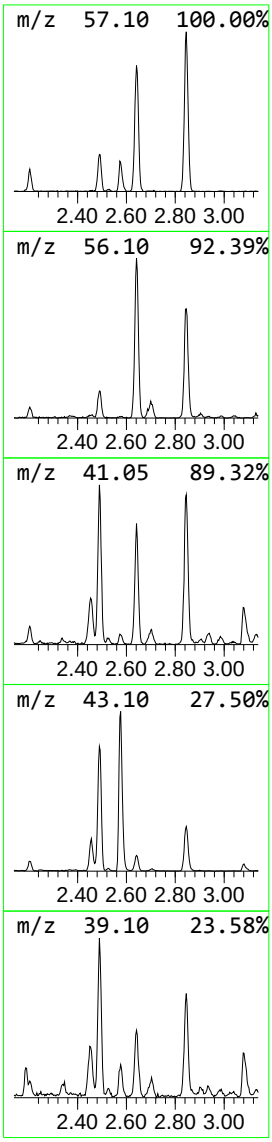
****

Peak Number 7 Pentane, 3-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.641	4.94 ppbv	356245	Bromochloromethane	2.806

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	80
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	80
4	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	50
5	Butane, 2,2,3-trimethyl-	100	C7H16	000464-06-2	40





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Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

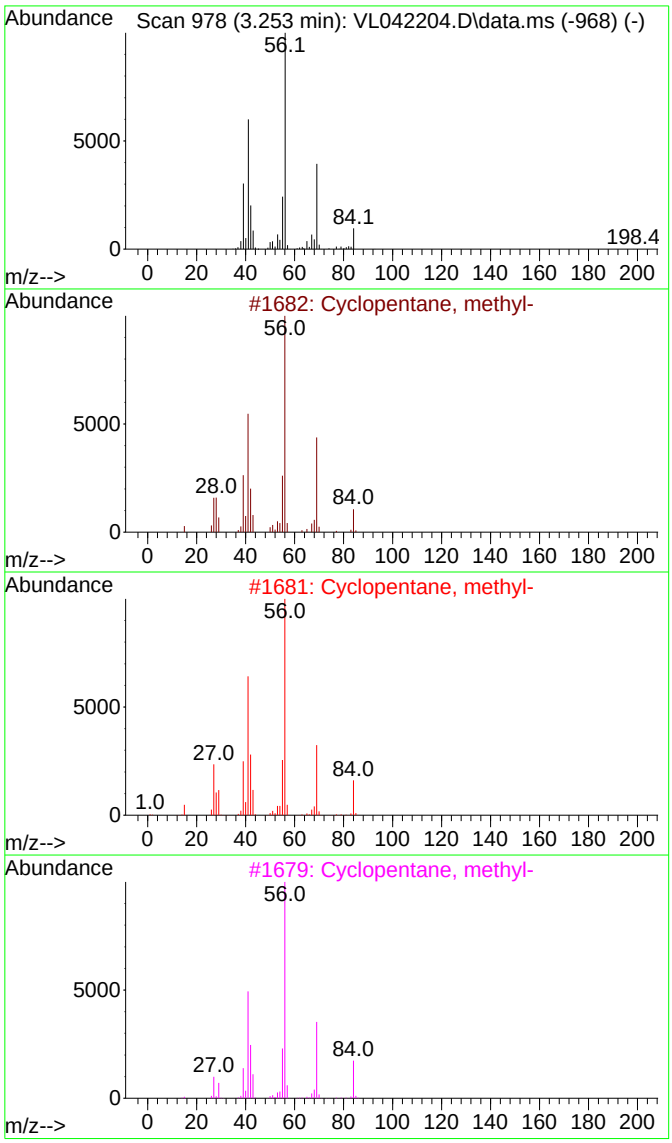
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

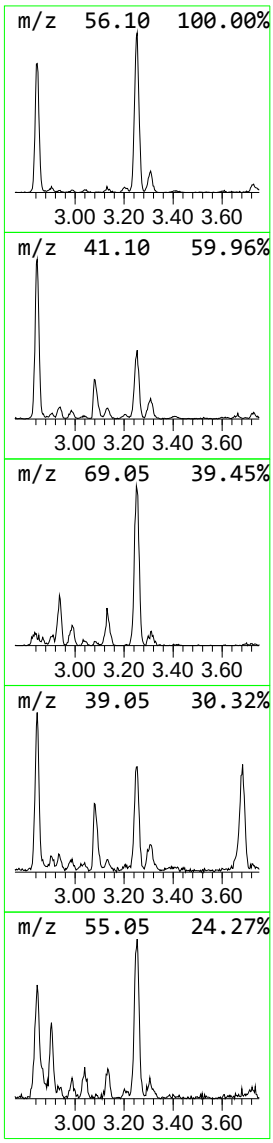
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 Cyclopentane, methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.253	4.34 ppbv	313025	Bromochloromethane	2.806

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	87
3	Cyclopentane, methyl-	84	C6H12	000096-37-7	78
4	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	64
5	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64





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Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 9 Cyclohexane, methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.710	2.50 ppbv	346825	1,4-Difluorobenzene	3.984

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
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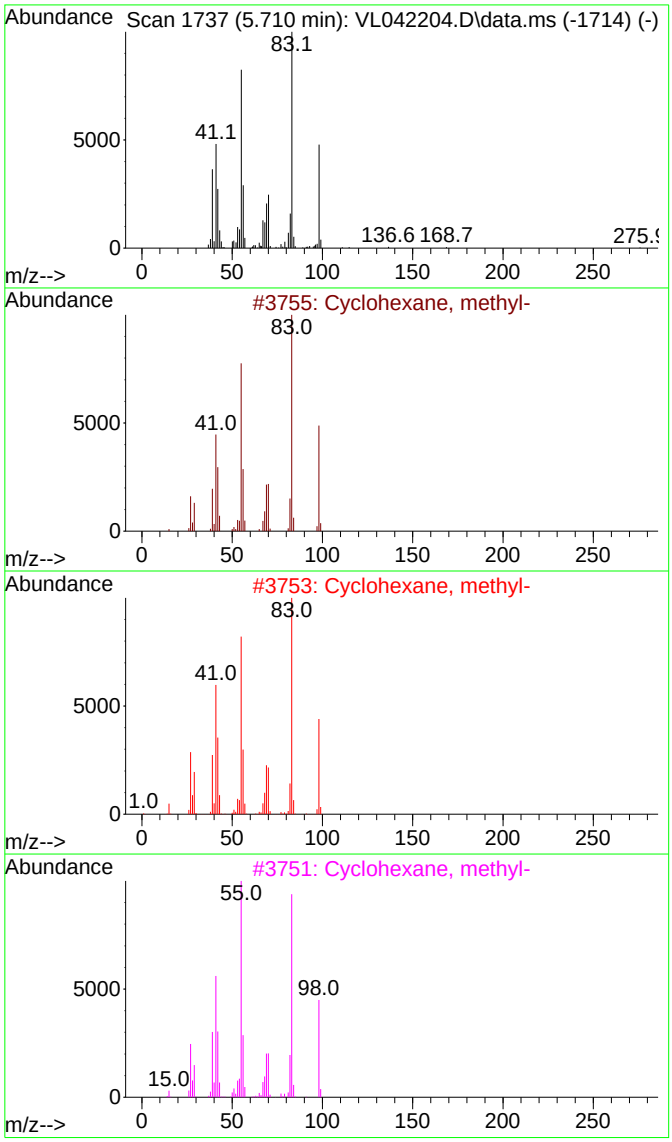
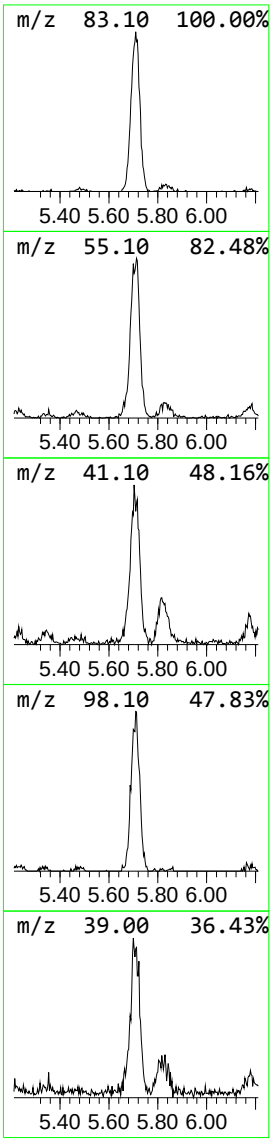
5	Cyclohexane, methyl-	98	C7H14	000108-87-2	91





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Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

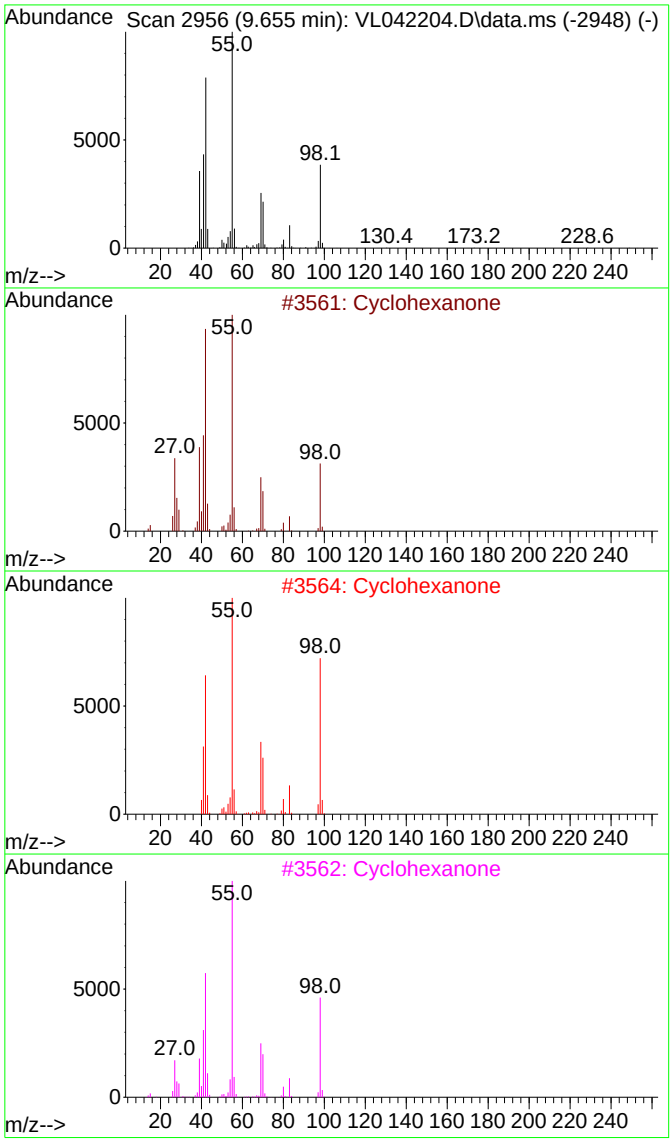
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

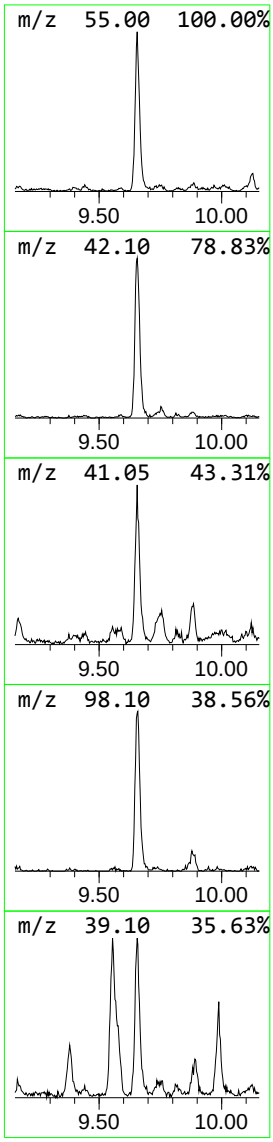
****

Peak Number 10 Cyclohexanone Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.655	2.22 ppbv	387770	Chlorobenzene-d5	8.907

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanone	98	C6H10O	000108-94-1	95
2	Cyclohexanone	98	C6H10O	000108-94-1	94
3	Cyclohexanone	98	C6H10O	000108-94-1	91
4	Cyclohexanone	98	C6H10O	000108-94-1	91
5	Cyclohexanone	98	C6H10O	000108-94-1	91





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1-Propene, 2-me...	1.609	6.8	ppbv	491921	1	2.806	721653	10.0
Butane	1.628	8.3	ppbv	601157	1	2.806	721653	10.0
Pentane	1.975	8.8	ppbv	635595	1	2.806	721653	10.0
Butane, 2,3-dim...	2.454	3.3	ppbv	239634	1	2.806	721653	10.0
Pentane, 2-methyl-	2.489	8.9	ppbv	641542	1	2.806	721653	10.0
Pentane, 3-methyl-	2.641	4.9	ppbv	356245	1	2.806	721653	10.0
Cyclopentane, m...	3.253	4.3	ppbv	313025	1	2.806	721653	10.0
Cyclohexane, me...	5.710	2.5	ppbv	346825	2	3.984	1388990	10.0
Cyclohexanone	9.655	2.2	ppbv	387770	3	8.907	1743820	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-DUP-1-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-06DL	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
VL042205.D	4		03/31/25 11:52	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.84	4.15	UD	4.15	9.89	ug/m3
74-87-3	Chloromethane	0.54	1.12	JD	0.81	4.13	ug/m3
75-01-4	Vinyl Chloride	0.060	0.15	UD	0.15	0.31	ug/m3
74-83-9	Bromomethane	0.56	2.17	UD	2.17	7.77	ug/m3
75-00-3	Chloroethane	0.68	1.79	UD	1.79	5.28	ug/m3
109-99-9	Tetrahydrofuran	2.10	6.19	D	1.53	5.90	ug/m3
75-69-4	Trichlorofluoromethane	0.64	3.60	UD	3.60	11.2	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.64	4.91	UD	4.91	15.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.35	2.45	UD	2.45	14.0	ug/m3
75-65-0	tert-Butyl alcohol	0.76	2.30	UD	2.30	6.06	ug/m3
142-82-5	Heptane	1.70	6.97	JD	1.80	8.20	ug/m3
75-35-4	1,1-Dichloroethene	0.56	2.22	UD	2.22	7.93	ug/m3
67-64-1	Acetone	22.7	53.9	D	2.28	4.75	ug/m3
75-15-0	Carbon Disulfide	0.64	1.99	UD	1.99	6.23	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.48	1.73	UD	1.73	7.21	ug/m3
75-09-2	Methylene Chloride	0.76	2.64	UD	2.64	6.95	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.76	3.01	UD	3.01	7.93	ug/m3
75-34-3	1,1-Dichloroethane	0.52	2.10	UD	2.10	8.09	ug/m3
110-82-7	Cyclohexane	1.50	5.16	JD	3.03	6.88	ug/m3
78-93-3	2-Butanone	6.40	18.9	D	1.42	5.90	ug/m3
56-23-5	Carbon Tetrachloride	0.040	0.25	UD	0.25	0.75	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.36	1.43	UD	1.43	7.93	ug/m3
67-66-3	Chloroform	0.33	1.61	UD	1.61	9.77	ug/m3
71-55-6	1,1,1-Trichloroethane	0.040	0.22	UD	0.22	0.65	ug/m3
540-84-1	2,2,4-Trimethylpentane	2.20	10.3	D	1.87	9.34	ug/m3
71-43-2	Benzene	5.70	18.2	D	1.12	6.39	ug/m3
107-06-2	1,2-Dichloroethane	0.36	1.46	UD	1.46	8.09	ug/m3
79-01-6	Trichloroethene	0.070	0.38	UD	0.38	0.64	ug/m3
78-87-5	1,2-Dichloropropane	0.44	2.03	UD	2.03	9.24	ug/m3
75-27-4	Bromodichloromethane	0.31	2.08	UD	2.08	13.4	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.37	1.52	UD	1.52	8.20	ug/m3
108-88-3	Toluene	9.50	35.8	D	1.66	7.54	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.24	1.09	UD	1.09	9.08	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.26	1.18	UD	1.18	9.08	ug/m3
79-00-5	1,1,2-Trichloroethane	0.28	1.53	UD	1.53	10.9	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-DUP-1-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-06DL	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
VL042205.D	4		03/31/25 11:52	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.26	2.22	UD	2.22	17.0	ug/m3
106-93-4	1,2-Dibromoethane	0.29	2.23	UD	2.23	3.07	ug/m3
127-18-4	Tetrachloroethene	0.060	0.41	UD	0.41	0.81	ug/m3
108-90-7	Chlorobenzene	0.30	1.38	UD	1.38	9.21	ug/m3
100-41-4	Ethyl Benzene	1.30	5.65	JD	2.08	8.69	ug/m3
179601-23-1	m/p-Xylene	4.80	20.9	D	3.65	17.4	ug/m3
95-47-6	o-Xylene	1.70	7.38	JD	2.08	8.69	ug/m3
100-42-5	Styrene	1.20	5.11	JD	1.87	8.52	ug/m3
75-25-2	Bromoform	0.23	2.38	UD	2.38	20.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.040	0.27	UD	0.27	0.82	ug/m3
95-49-8	2-Chlorotoluene	0.44	2.28	UD	2.28	10.4	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.44	2.16	UD	2.16	9.83	ug/m3
95-63-6	1,2,4-Trimethylbenzene	1.10	5.41	JD	1.52	9.83	ug/m3
541-73-1	1,3-Dichlorobenzene	0.32	1.92	UD	1.92	12.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.21	1.26	UD	1.26	12.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.30	1.80	UD	1.80	12.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.34	2.52	UD	2.52	14.8	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.34	3.63	UD	3.63	21.3	ug/m3
106-99-0	1,3-Butadiene	0.52	1.15	UD	1.15	4.42	ug/m3
91-20-3	Naphthalene	0.30	1.57	UD	1.57	2.10	ug/m3
622-96-8	4-Ethyltoluene	0.48	2.36	UD	2.36	9.83	ug/m3
110-54-3	Hexane	4.40	15.5	D	1.55	7.05	ug/m3
107-05-1	Allyl Chloride	0.60	1.88	UD	1.88	6.26	ug/m3
123-91-1	1,4-Dioxane	0.84	3.03	UD	3.03	7.21	ug/m3
80-62-6	Methyl Methacrylate	0.34	1.39	UD	1.39	8.19	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.80			70 (65) - 130 (135)	98%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	189000		2.803			
540-36-3	1,4-Difluorobenzene	537000		3.985			
3114-55-4	Chlorobenzene-d5	481000		8.908			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-DUP-1-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-06DL	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
VL042205.D	4		03/31/25 11:52	VL033125

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

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 (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042205.D
Acq On : 31 Mar 2025 11:52
Operator : SY/MD
Sample : Q1669-06DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

Quant Time: Apr 01 04:03:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.803	49	188934	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.985	114	537109	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.908	117	480959	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.397	95	388692	9.841	ppbv	0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	3598	0.129	ppbv #	84
4) Chloromethane	1.538	50	1536	0.135	ppbv #	82
9) Propene	1.489	41	58893	4.509	ppbv	95
10) Heptane	5.014	43	14950m	0.430	ppbv	
13) Ethanol	1.732	45	32574	26.380	ppbv	84
15) Acetone	1.845	43	150267m	5.687	ppbv	
26) Hexane	2.842	57	29019	1.095	ppbv #	33
30) Cyclohexane	3.884	84	8868	0.386	ppbv	96
34) 2-Butanone	2.577	43	62430	1.603	ppbv	99
36) Benzene	3.681	78	76263	1.432	ppbv	98
41) Tetrahydrofuran	3.082	42	11571m	0.516	ppbv	
44) 2,2,4-Trimethylpentane	4.671	57	50242	0.558	ppbv #	79
53) Toluene	6.966	91	150266	2.381	ppbv	98
58) Ethyl Benzene	9.377	91	27471	0.322	ppbv	95
59) m/p-Xylene	9.555	91	81487	1.195	ppbv	99
60) o-Xylene	9.986	91	28632	0.419	ppbv	92
61) Styrene	9.895	104	9837	0.291	ppbv	92
74) 1,2,4-Trimethylbenzene	11.555	105	24393	0.285	ppbv #	70

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

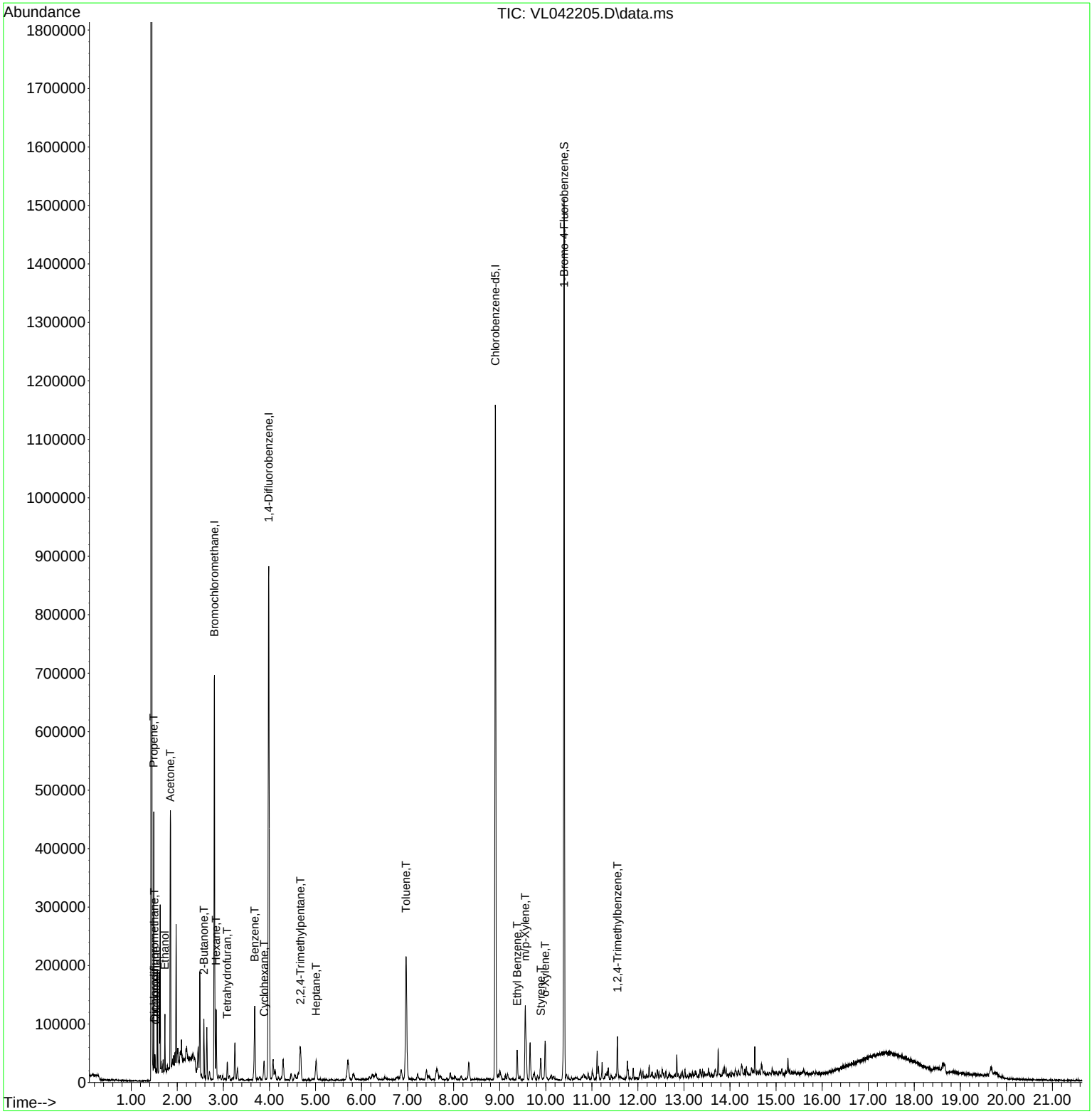
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042205.D
Acq On : 31 Mar 2025 11:52
Operator : SY/MD
Sample : Q1669-06DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

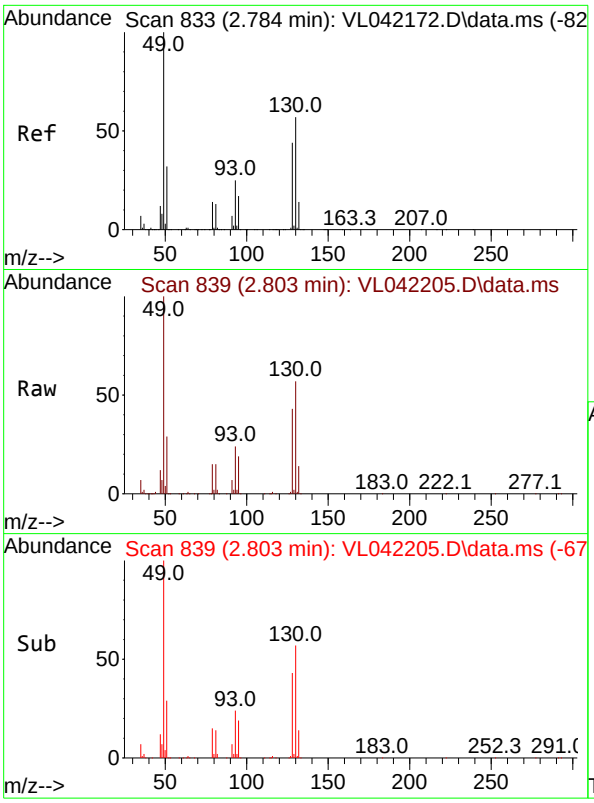
Quant Time: Apr 01 04:03:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

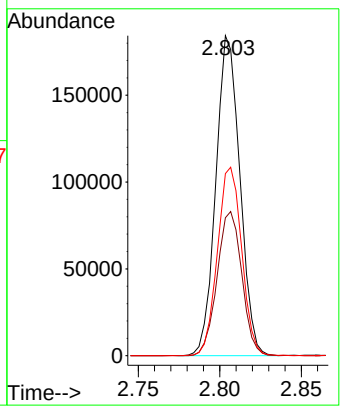




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.803 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 49 Resp: 18893

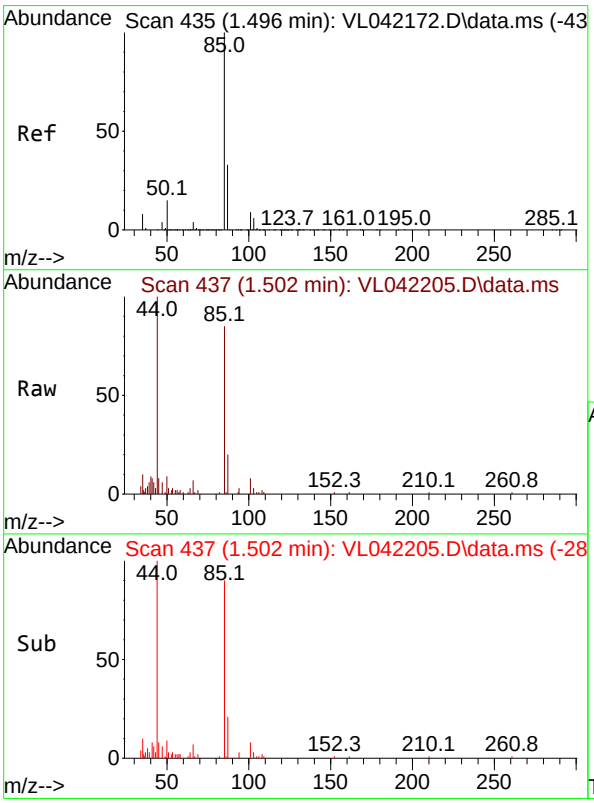
Ion	Ratio	Lower	Upper
49	100		
128	46.3	22.9	68.5
130	59.5	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

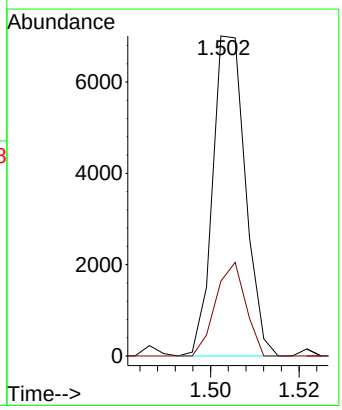
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

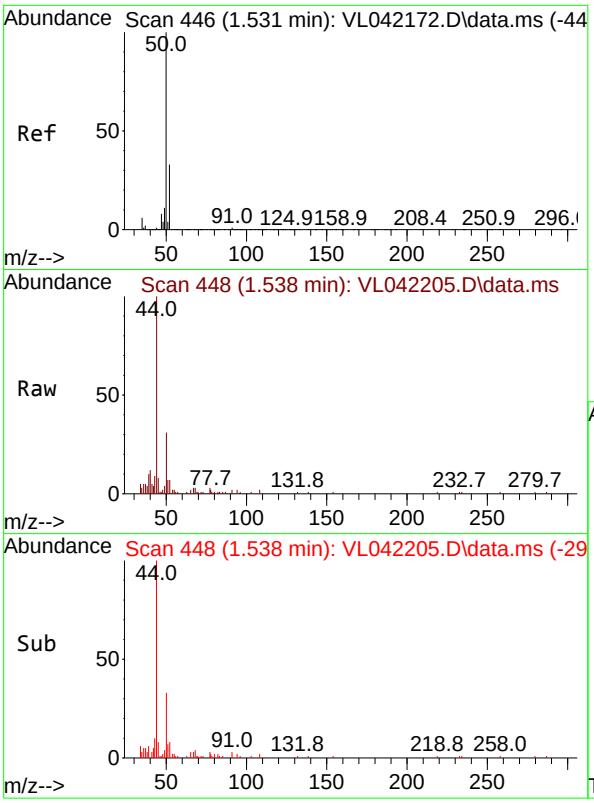


#2
Dichlorodifluoromethane
Concen: 0.129 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 85 Resp: 3598

Ion	Ratio	Lower	Upper
85	100		
87	23.4	26.1	39.1#





#4
Chloromethane
Concen: 0.135 ppbv
RT: 1.538 min Scan# 44
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

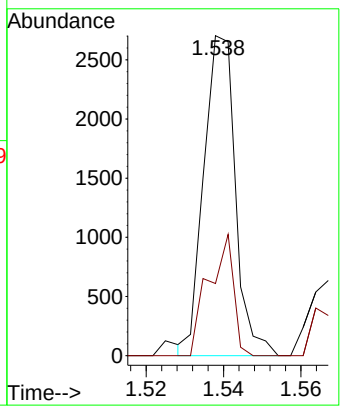
Tgt Ion: 50 Resp: 153

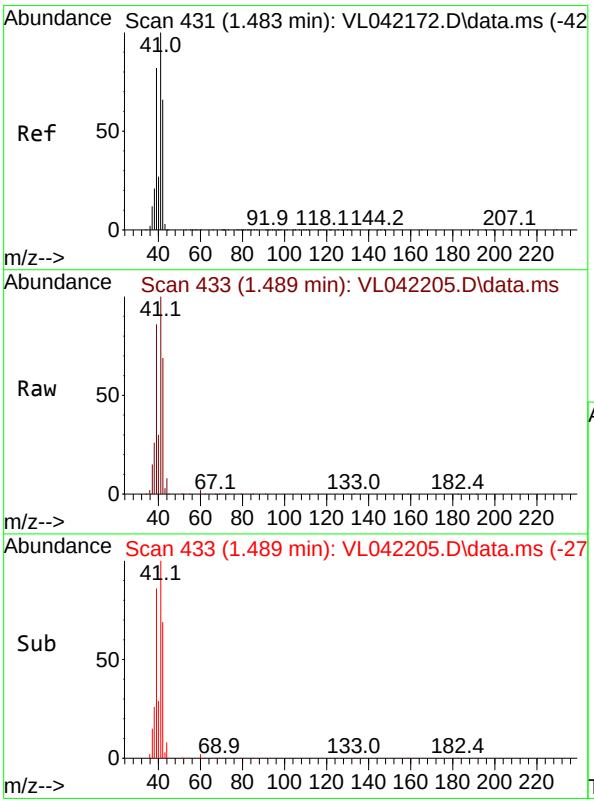
Ion	Ratio	Lower	Upper
50	100		
52	22.6	26.1	39.1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

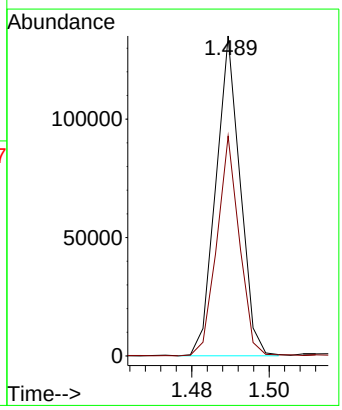


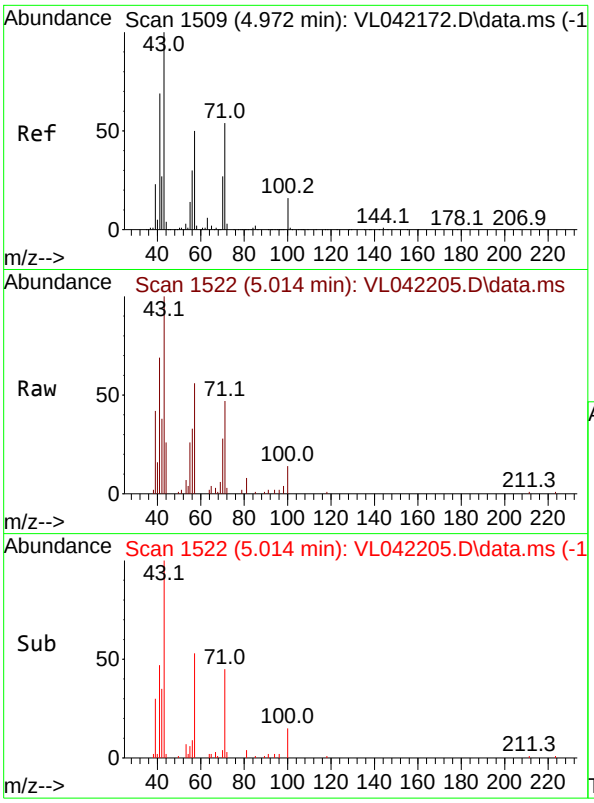


#9
Propene
Concen: 4.509 ppbv
RT: 1.489 min Scan# 433
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 41 Resp: 58893

Ion	Ratio	Lower	Upper
41	100		
42	65.3	55.4	83.2





#10
Heptane
Concen: 0.430 ppbv m
RT: 5.014 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

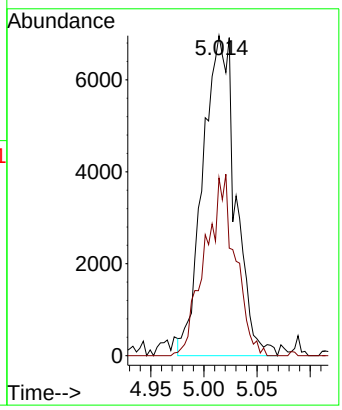
Tgt Ion: 43 Resp: 1495

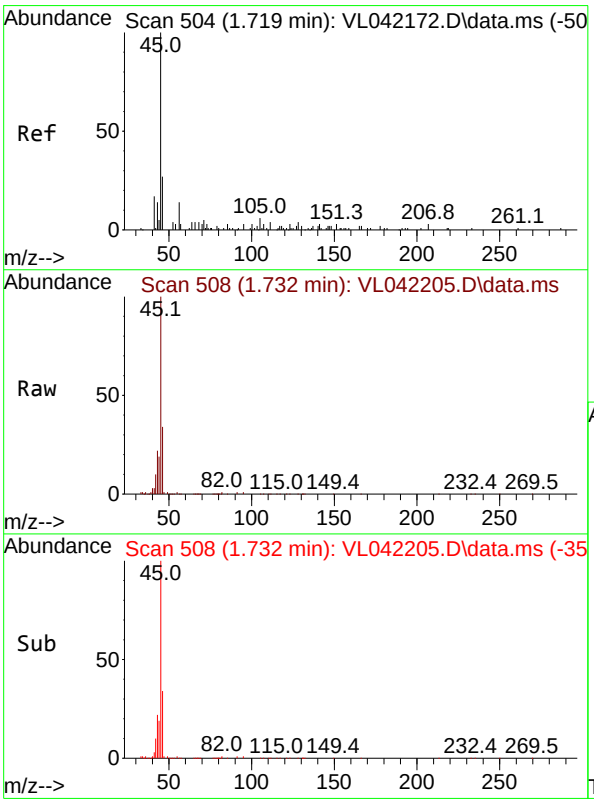
Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

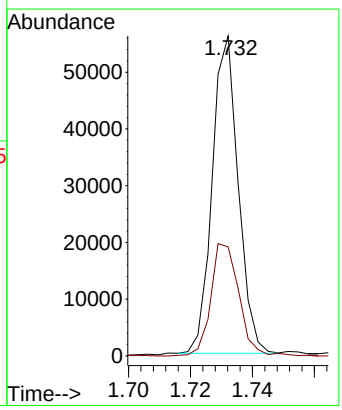


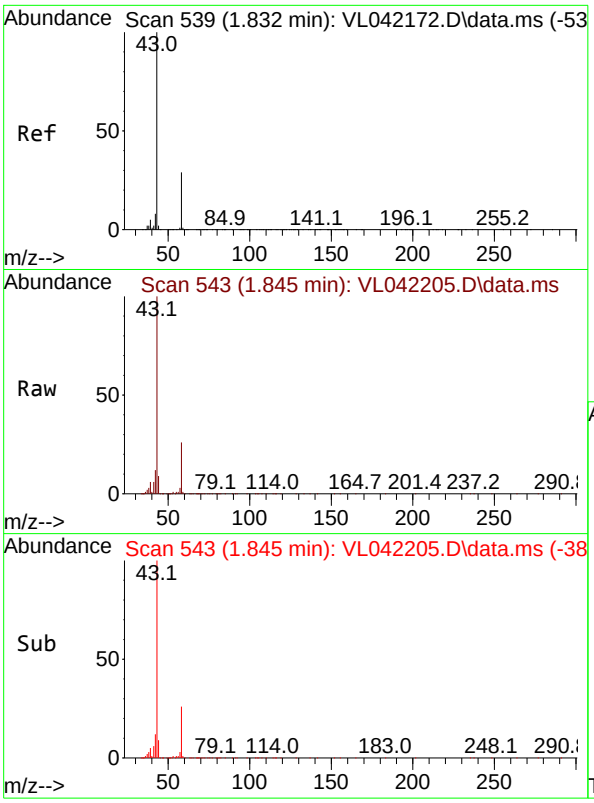


#13
Ethanol
Concen: 26.380 ppbv
RT: 1.732 min Scan# 508
Delta R.T. 0.013 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 45 Resp: 32574

Ion	Ratio	Lower	Upper
45	100		
46	39.1	20.2	80.8

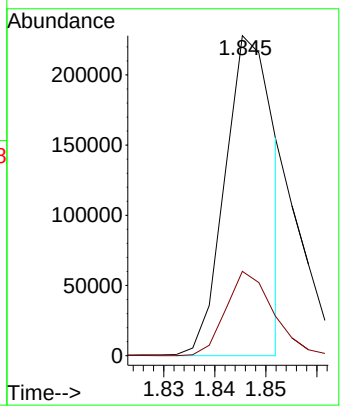




#15
Acetone
Concen: 5.687 ppbv m
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 43 Resp: 15026

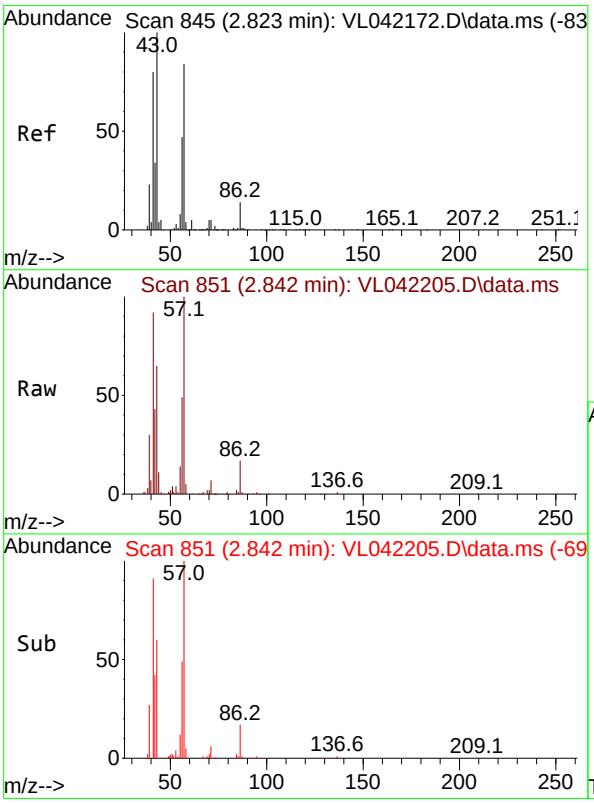
Ion	Ratio	Lower	Upper
43	100		
58	26.3	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

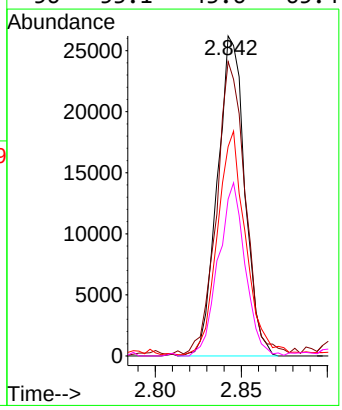
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

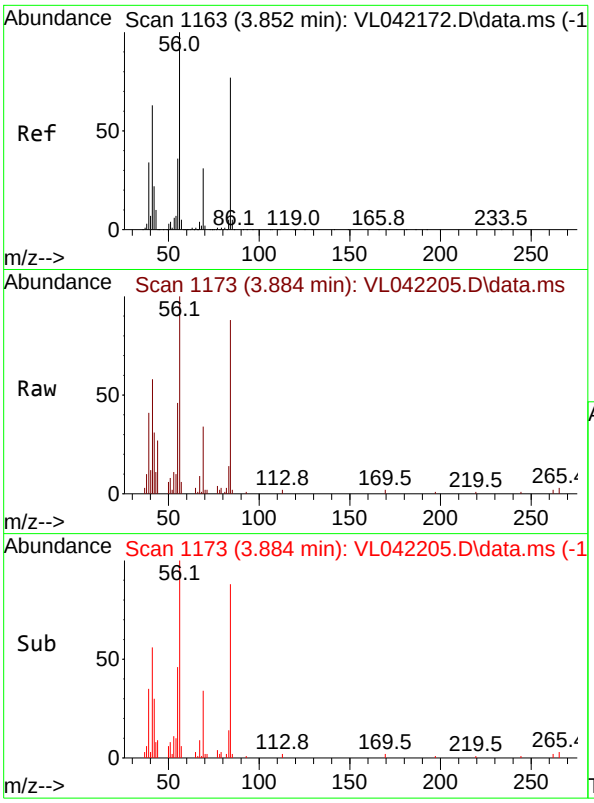


#26
Hexane
Concen: 1.095 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.020 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 57 Resp: 29019

Ion	Ratio	Lower	Upper
57	100		
41	96.6	76.6	114.8
43	72.3	207.8	311.8#
56	53.1	43.6	65.4





#30
Cyclohexane
Concen: 0.386 ppbv
RT: 3.884 min Scan# 1
Delta R.T. 0.032 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

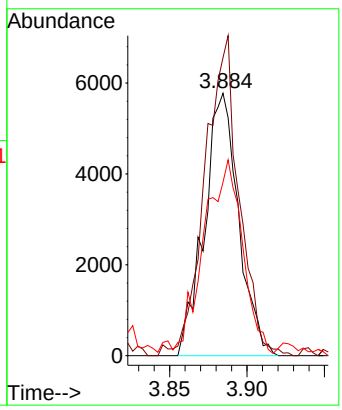
Tgt Ion: 84 Resp: 886

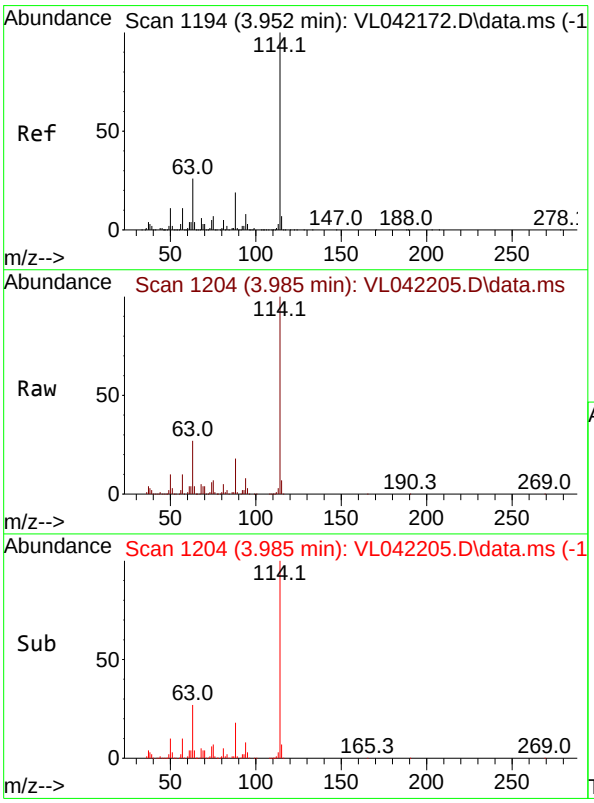
Ion	Ratio	Lower	Upper
84	100		
56	121.7	102.8	154.2
41	84.5	66.5	99.7

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

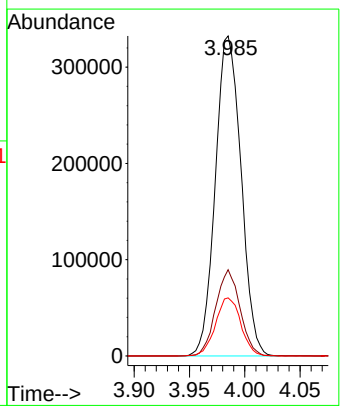


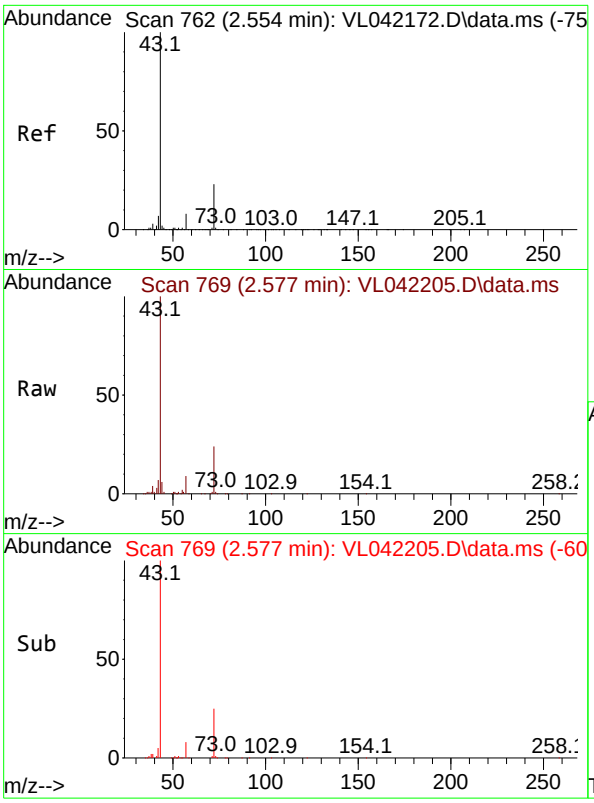


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.985 min Scan# 1204
Delta R.T. 0.032 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:114 Resp: 537109

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	17.9	15.0	22.4





#34
2-Butanone
Concen: 1.603 ppbv
RT: 2.577 min Scan# 7
Delta R.T. 0.023 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

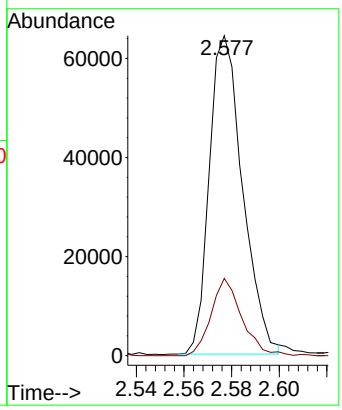
Tgt Ion: 43 Resp: 6243

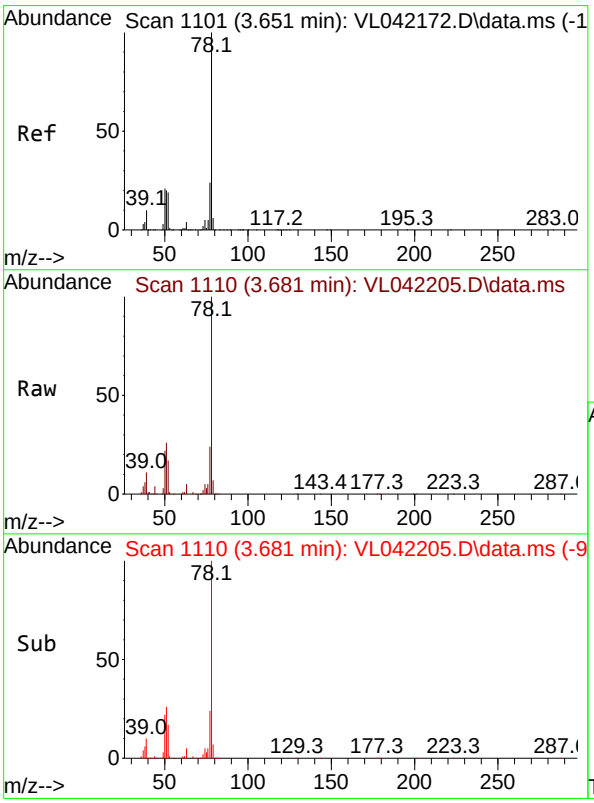
Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

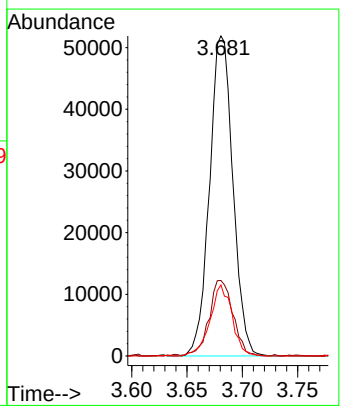


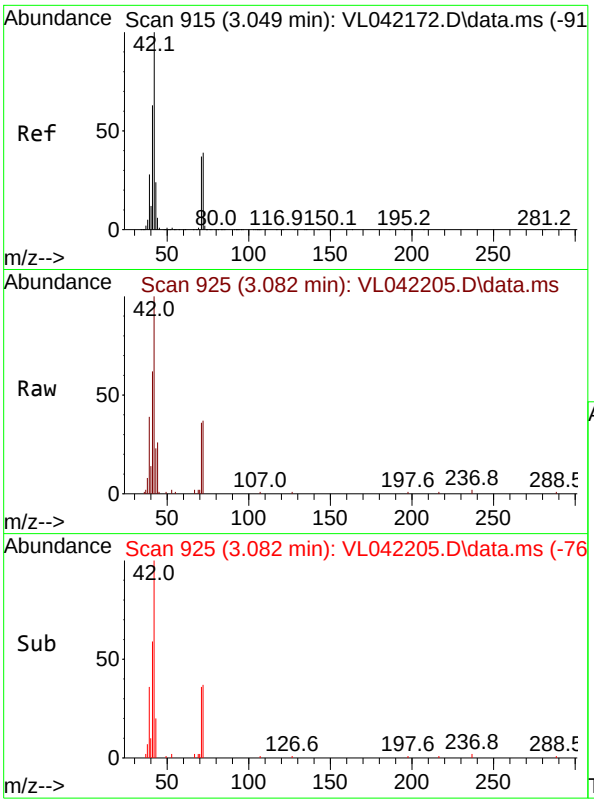


#36
Benzene
Concen: 1.432 ppbv
RT: 3.681 min Scan# 1110
Delta R.T. 0.029 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 78 Resp: 76263

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	22.2	16.6	24.8





#41
Tetrahydrofuran
Concen: 0.516 ppbv m
RT: 3.082 min Scan# 9
Delta R.T. 0.032 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

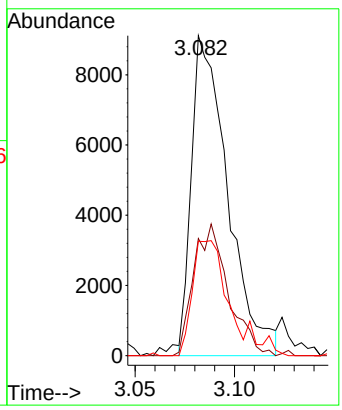
Tgt Ion: 42 Resp: 1157

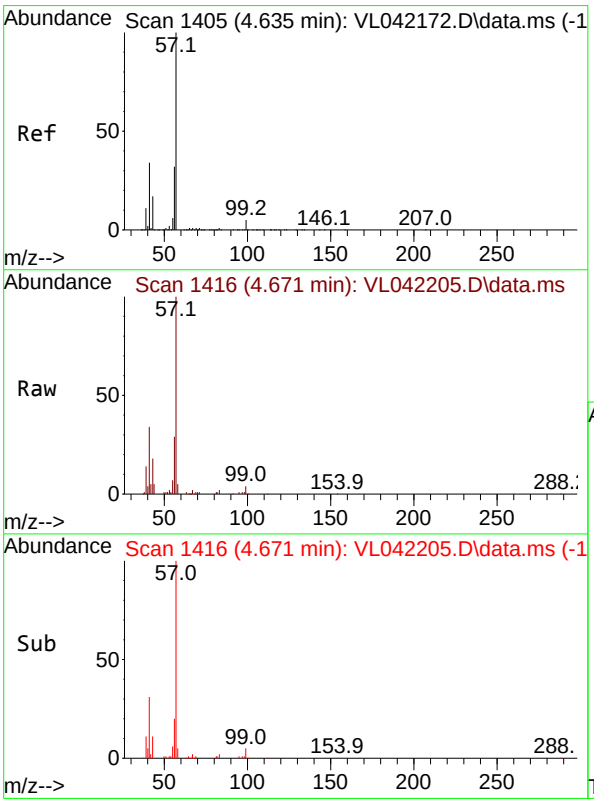
Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	0.0	30.2	45.4#

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

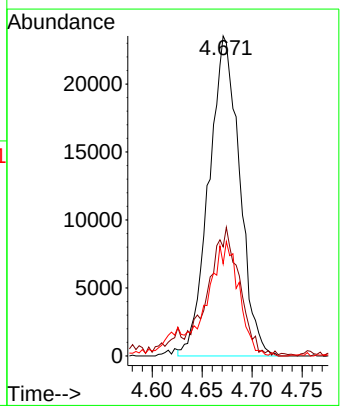


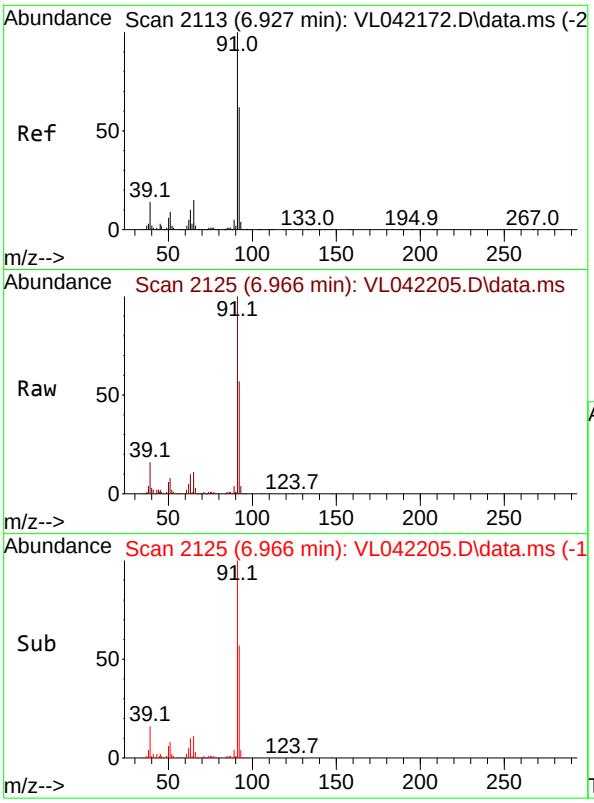


#44
2,2,4-Trimethylpentane
Concen: 0.558 ppbv
RT: 4.671 min Scan# 1416
Delta R.T. 0.036 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 57 Resp: 50242

Ion	Ratio	Lower	Upper
57	100		
41	47.6	26.8	40.2#
56	41.9	25.6	38.4#

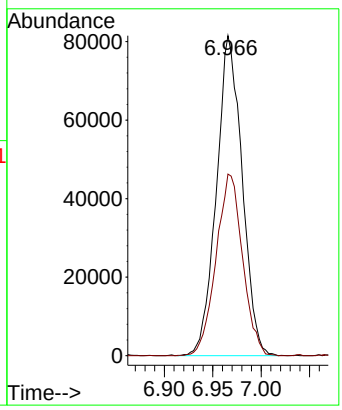




#53
Toluene
Concen: 2.381 ppbv
RT: 6.966 min Scan# 2
Delta R.T. 0.039 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 91 Resp: 15026

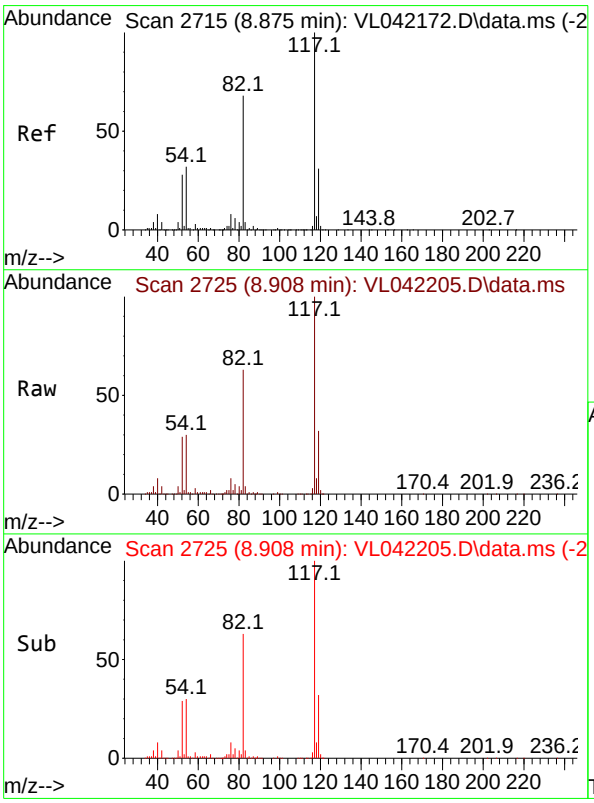
Ion	Ratio	Lower	Upper
91	100		
92	58.7	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

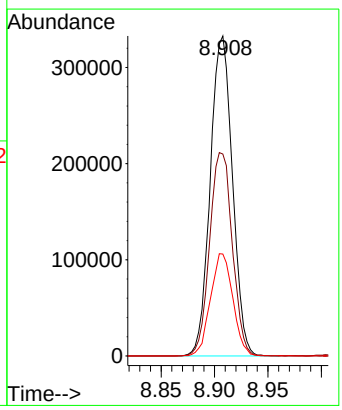
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

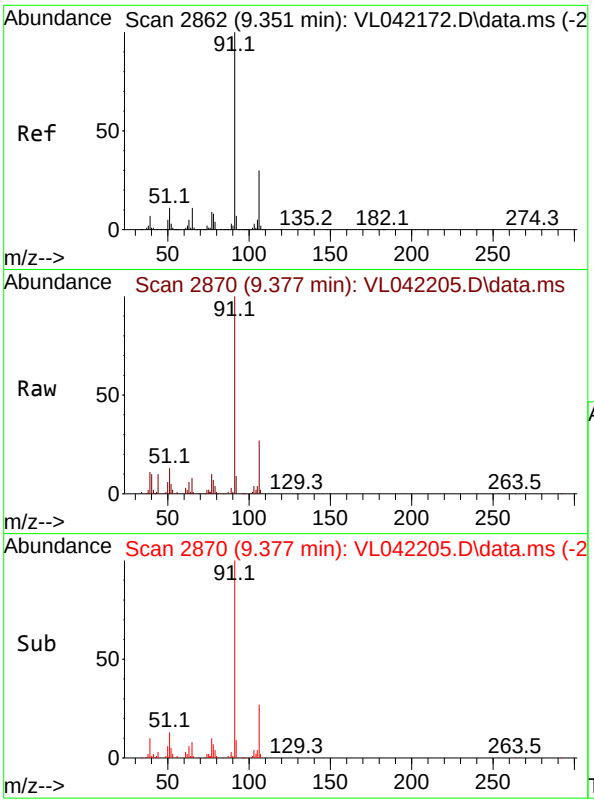


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.908 min Scan# 2725
Delta R.T. 0.032 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:117 Resp: 480959

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	32.3	25.5	38.3

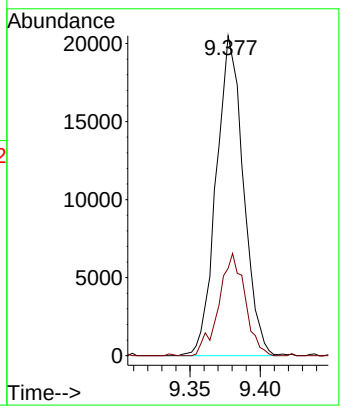




#58
Ethyl Benzene
Concen: 0.322 ppbv
RT: 9.377 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 91 Resp: 2747

Ion	Ratio	Lower	Upper
91	100		
106	27.3	24.2	36.2



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
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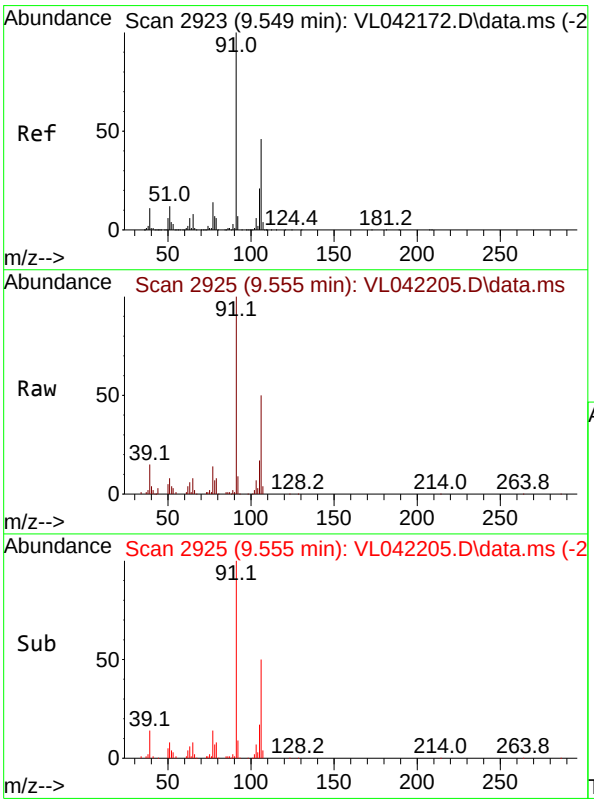
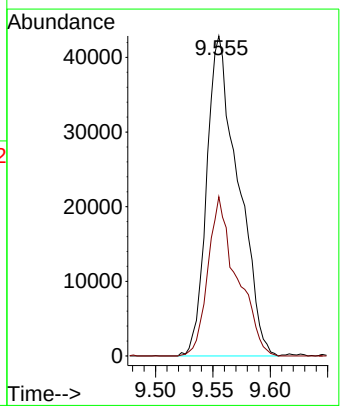
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

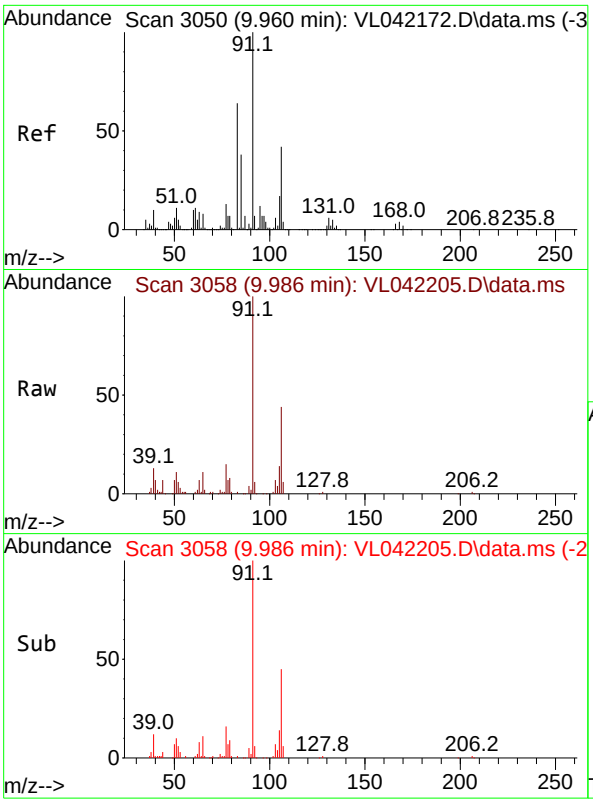


#59
m/p-Xylene
Concen: 1.195 ppbv
RT: 9.555 min Scan# 2925
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 91 Resp: 81487

Ion	Ratio	Lower	Upper
91	100		
106	46.0	36.4	54.6

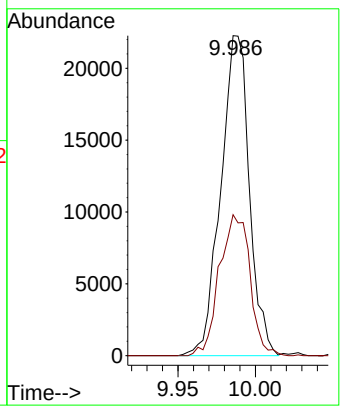




#60
o-Xylene
Concen: 0.419 ppbv
RT: 9.986 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 91 Resp: 2863

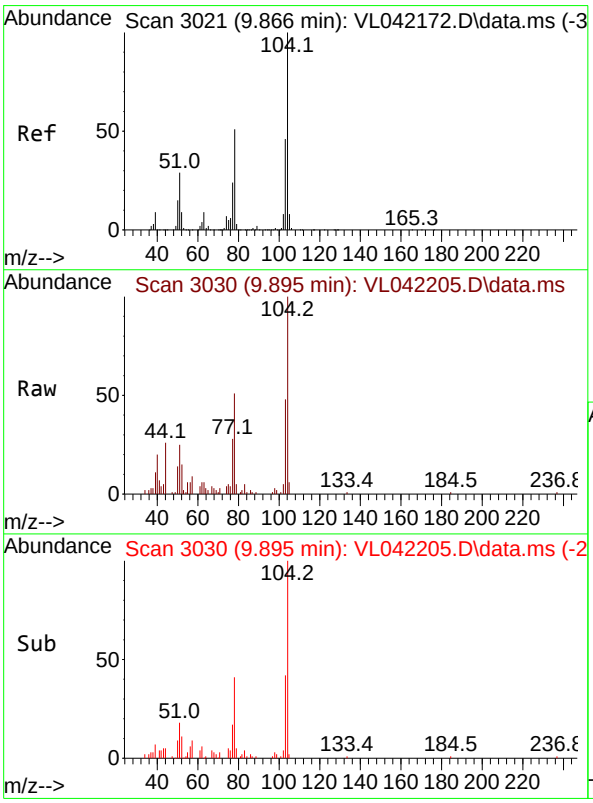
Ion	Ratio	Lower	Upper
91	100		
106	47.0	20.8	62.5



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

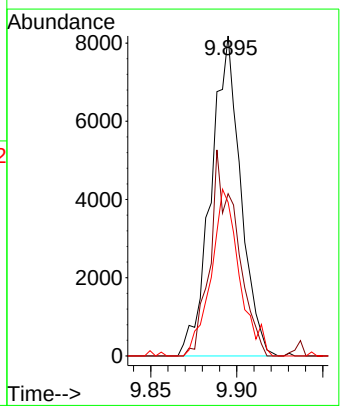
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

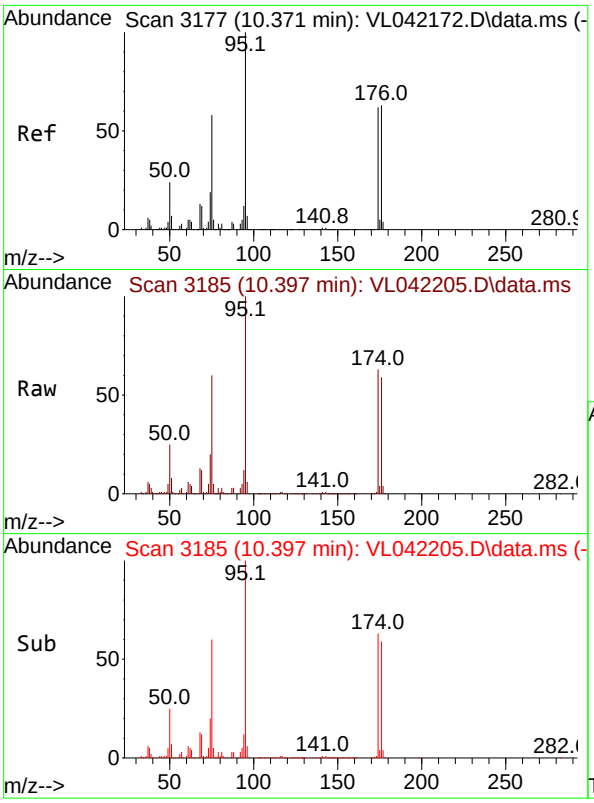


#61
Styrene
Concen: 0.291 ppbv
RT: 9.895 min Scan# 3030
Delta R.T. 0.029 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:104 Resp: 9837

Ion	Ratio	Lower	Upper
104	100		
78	59.0	41.8	62.6
103	50.2	37.0	55.4

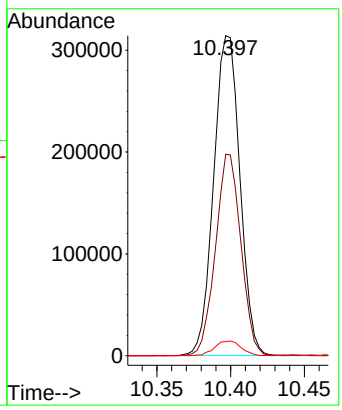




#68
1-Bromo-4-Fluorobenzene
Concen: 9.841 ppbv
RT: 10.397 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 95 Resp: 38869

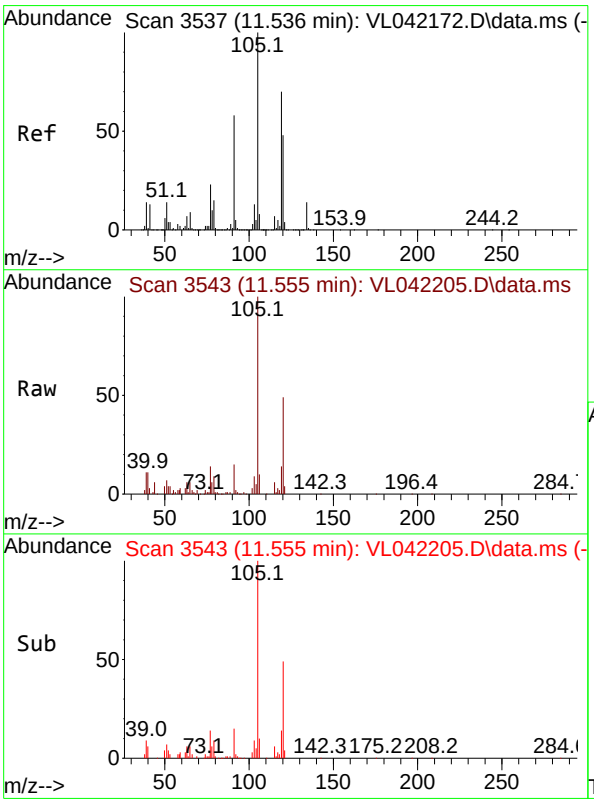
Ion	Ratio	Lower	Upper
95	100		
174	61.0	50.6	76.0
175	4.7	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Manual Integrations
APPROVED

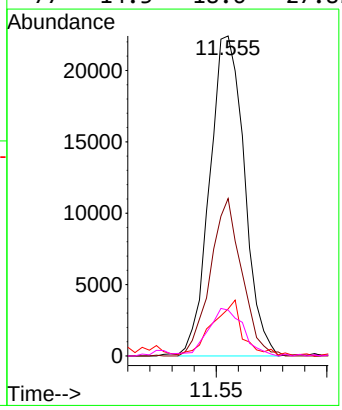
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.285 ppbv
RT: 11.555 min Scan# 3543
Delta R.T. 0.019 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:105 Resp: 24393

Ion	Ratio	Lower	Upper
105	100		
120	49.2	38.6	58.0
91	14.3	46.2	69.2#
77	14.3	18.6	27.8#



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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-07	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
VL042198.D	1		03/28/25 01:57	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.52	2.57		1.04	2.47	ug/m3
74-87-3	Chloromethane	0.14	0.29	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.47	1.39	J	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.20	1.12	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.63	1.91		0.58	1.52	ug/m3
142-82-5	Heptane	0.32	1.31	J	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	35.4	84.1	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.50	5.21		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	2.30	6.78		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.040	0.25		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.11	0.54	J	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.050	0.27		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.24	1.12	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.45	1.44	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.080	0.43		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	1.60	6.56		0.37	2.05	ug/m3
108-88-3	Toluene	6.10	23.0		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-07	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
VL042198.D	1		03/28/25 01:57	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.15	1.02		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.54	2.35		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	2.00	8.69		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.86	3.74		0.52	2.17	ug/m3
100-42-5	Styrene	0.78	3.32		0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.20	0.98	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.49	2.41	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.10	3.88		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.0			70 (65) - 130 (135)	100%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	175000		2.79			
540-36-3	1,4-Difluorobenzene	504000		3.962			
3114-55-4	Chlorobenzene-d5	457000		8.881			
TENTITIVE IDENTIFIED COMPOUNDS							
115-07-1	Propene	0.88		J		1.48	ppbv
000115-11-7	1-Propene, 2-methyl-	2.30		J		1.60	ppbv
000106-97-8	Butane	1.20		J		1.62	ppbv

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-1-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-07	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
VL042198.D	1		03/28/25 01:57	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000109-66-0	Pentane	1.00		J		1.97	ppbv
000107-83-5	Pentane, 2-methyl-	1.30		J		2.48	ppbv
103-65-1	n-propylbenzene	0.15		J		11.0	ppbv

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\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 23:03:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	175214	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	504192	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.881	117	456695	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	374920	9.997	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	13401	0.518	ppbv		96
4) Chloromethane	1.528	50	1536	0.145	ppbv	#	64
9) Propene	1.479	41	10650	0.879	ppbv		96
10) Heptane	4.978	43	10394m	0.323	ppbv		
11) Trichlorofluoromethane	1.877	101	5125	0.204	ppbv		91
13) Ethanol	1.722	45	170673	149.043	ppbv		82
15) Acetone	1.835	43	866562	35.363	ppbv		98
17) tert-Butyl alcohol	2.042	59	19215	0.630	ppbv	#	89
20) Methylene Chloride	2.065	84	14093	1.544	ppbv		94
26) Hexane	2.829	57	26539	1.080	ppbv	#	33
29) Chloroform	2.852	83	3953	0.110	ppbv		93
30) Cyclohexane	3.858	84	4530m	0.212	ppbv		
32) 1,1,1-Trichloroethane	3.376	97	2054	0.050	ppbv		89
34) 2-Butanone	2.564	43	85672	2.343	ppbv		99
35) Carbon Tetrachloride	3.764	117	1493m	0.038	ppbv		
36) Benzene	3.661	78	22692	0.454	ppbv	#	92
38) Trichloroethene	4.548	130	1734m	0.083	ppbv		
41) Tetrahydrofuran	3.065	42	9870	0.469	ppbv		95
44) 2,2,4-Trimethylpentane	4.641	57	20106m	0.238	ppbv		
50) 4-Methyl-2-Pentanone	5.768	43	90838	1.568	ppbv		99
52) Tetrachloroethene	8.224	164	2909	0.147	ppbv	#	78
53) Toluene	6.936	91	360213	6.079	ppbv		100
58) Ethyl Benzene	9.354	91	43413	0.535	ppbv	#	87
59) m/p-Xylene	9.532	91	127535	1.969	ppbv		99
60) o-Xylene	9.966	91	56023	0.863	ppbv		98
61) Styrene	9.869	104	25026	0.779	ppbv		98
64) n-propylbenzene	10.989	120	3769m	0.151	ppbv		
73) 1,3,5-Trimethylbenzene	11.205	105	14315	0.203	ppbv		98
74) 1,2,4-Trimethylbenzene	11.536	105	39507	0.486	ppbv	#	70

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

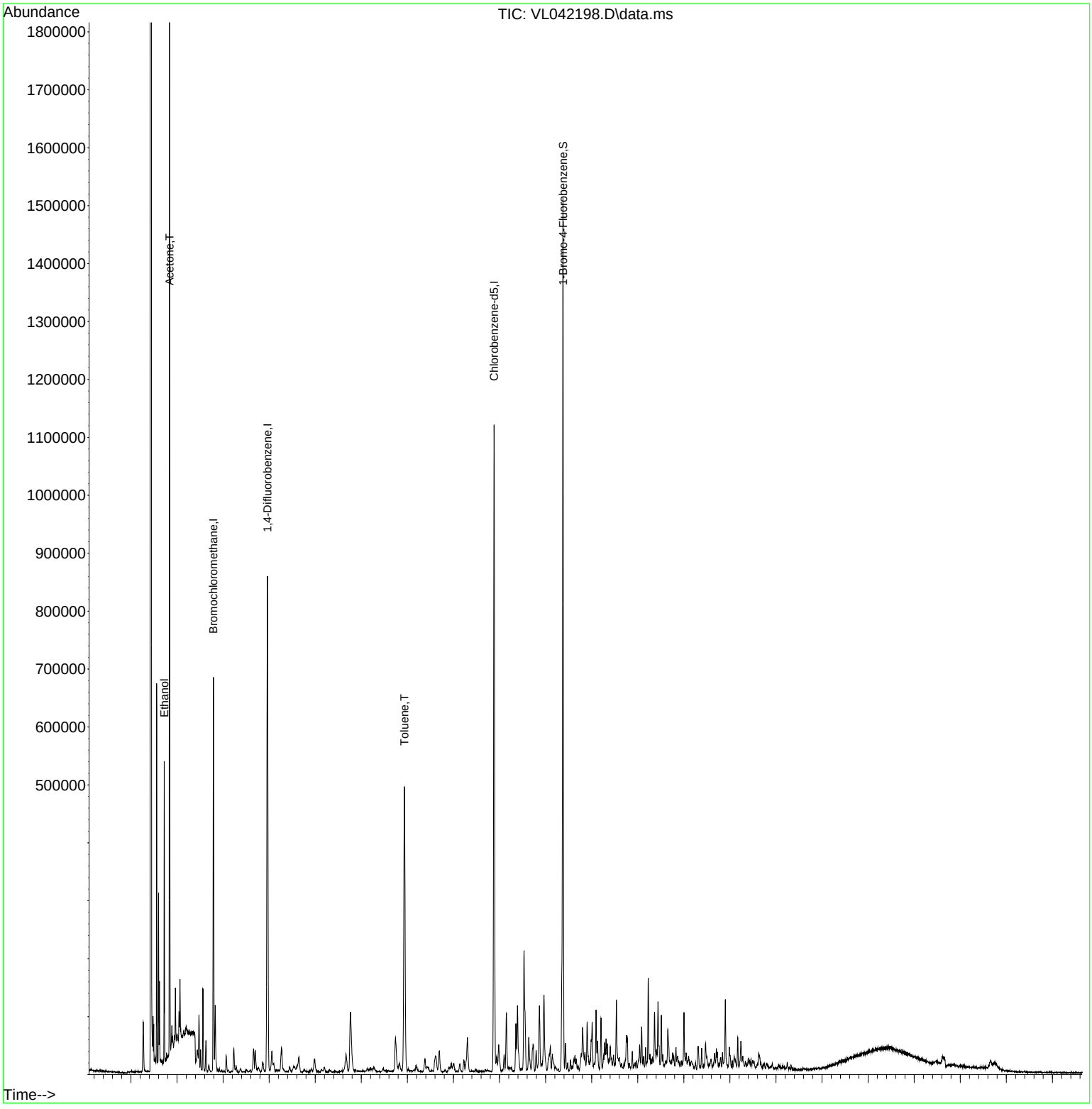
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

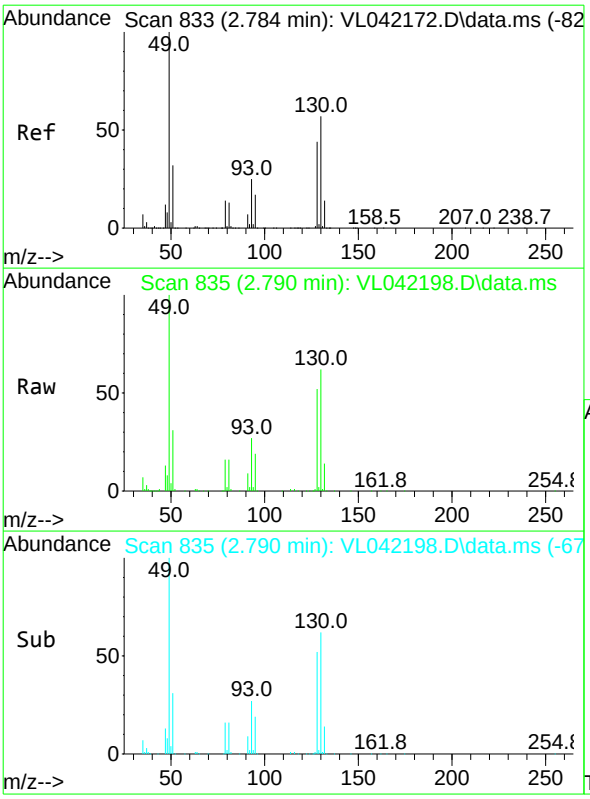
Quant Time: Mar 28 23:03:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

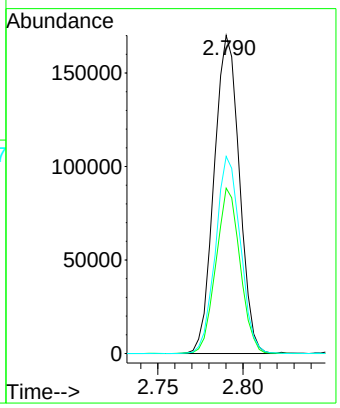




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 83
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 49 Resp: 175214

Ion	Ratio	Lower	Upper
49	100		
128	49.8	22.9	68.5
130	61.1	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

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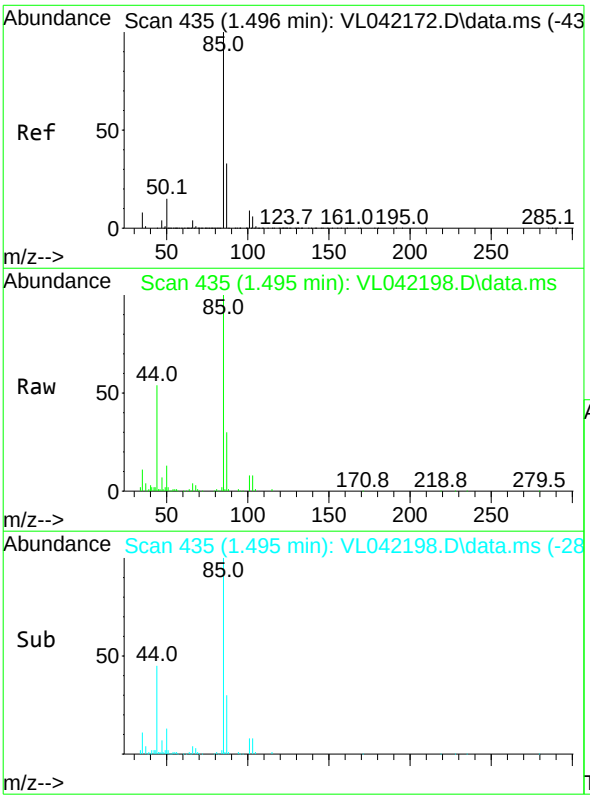
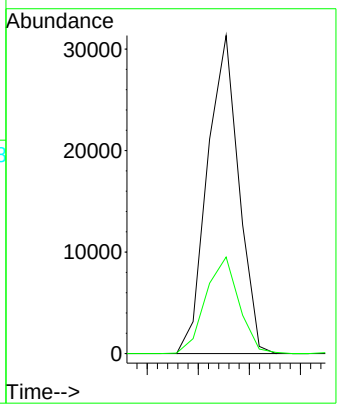
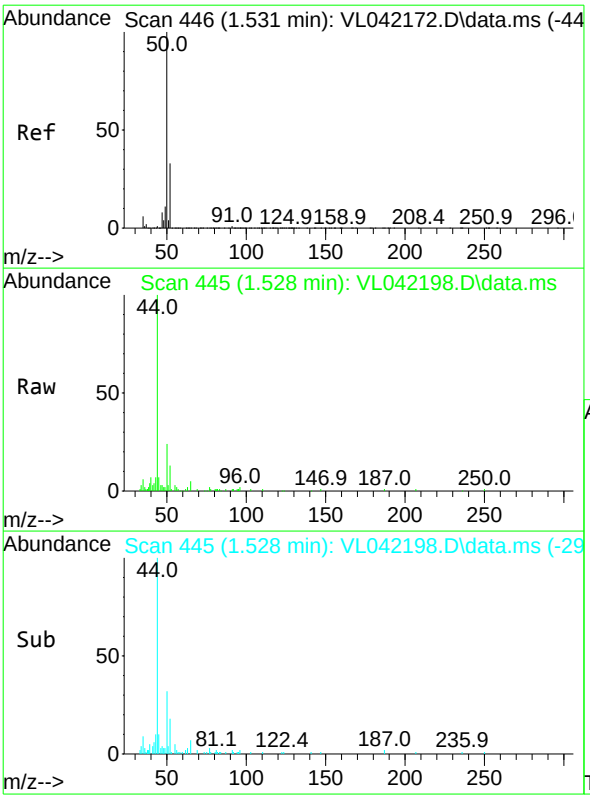


#2
Dichlorodifluoromethane
Concen: 0.518 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 85 Resp: 13401

Ion	Ratio	Lower	Upper
85	100		
87	30.2	26.1	39.1

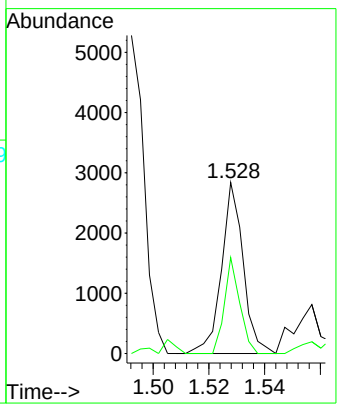




#4
Chloromethane
Concen: 0.145 ppbv
RT: 1.528 min Scan# 44
Delta R.T. -0.004 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 50 Resp: 1536

Ion	Ratio	Lower	Upper
50	100		
52	52.7	26.1	39.1#



Instrument :
MSVOA_L
ClientSampleId :
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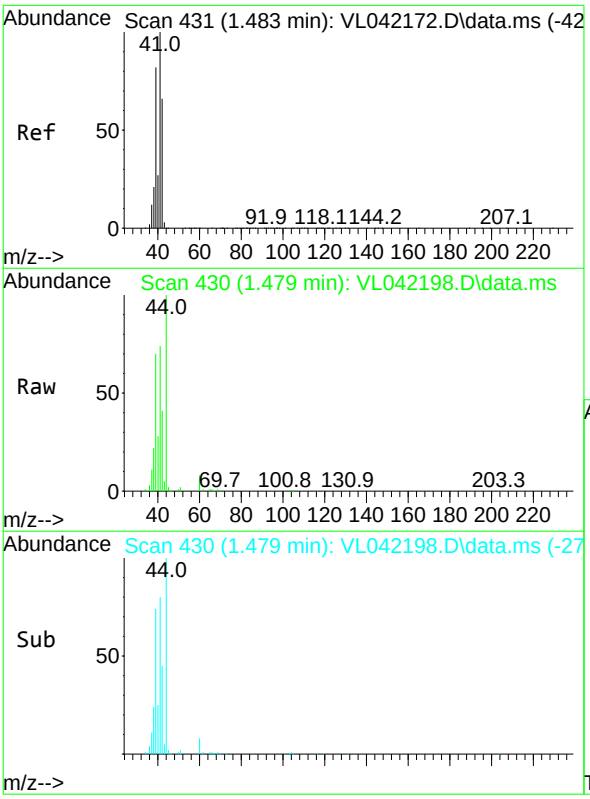
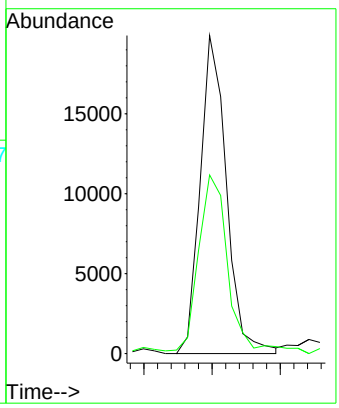
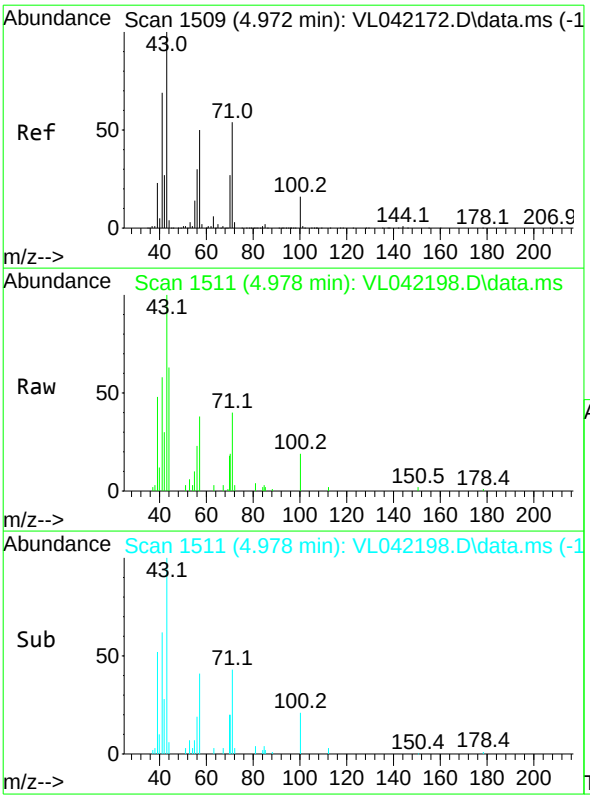


#9
Propene
Concen: 0.879 ppbv
RT: 1.479 min Scan# 430
Delta R.T. -0.004 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 41 Resp: 10650

Ion	Ratio	Lower	Upper
41	100		
42	66.4	55.4	83.2

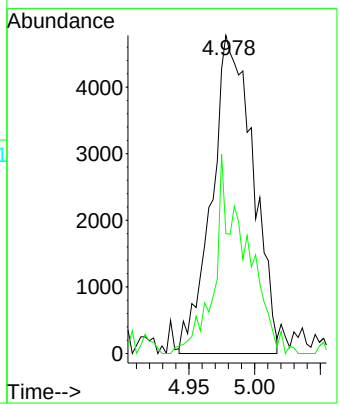




#10
Heptane
Concen: 0.323 ppbv m
RT: 4.978 min Scan# 15
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 10394

Ion	Ratio	Lower	Upper
43	100		
57	47.0	39.4	59.2



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 03/31/2025
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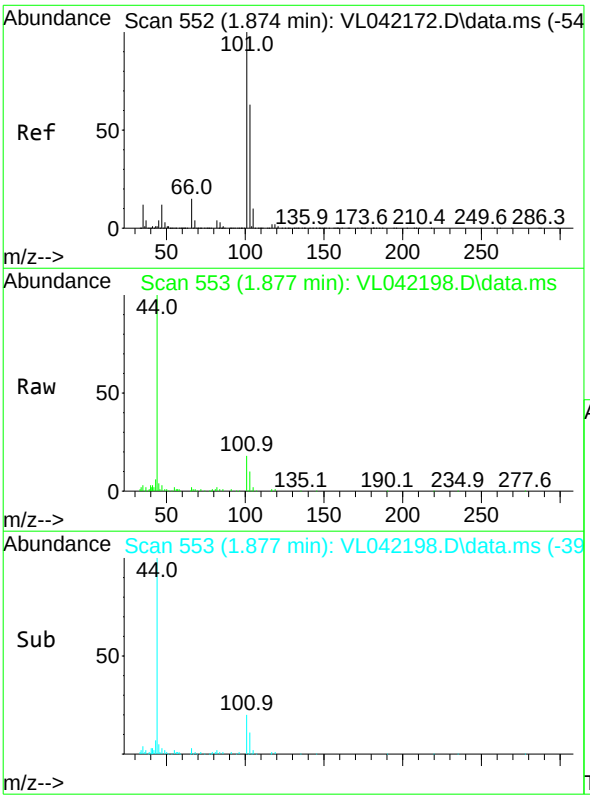
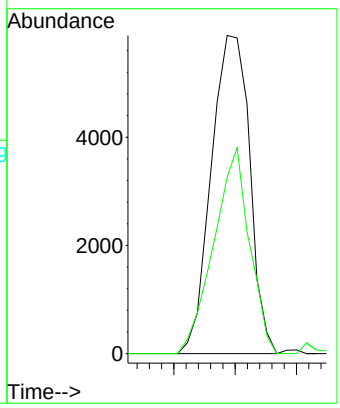
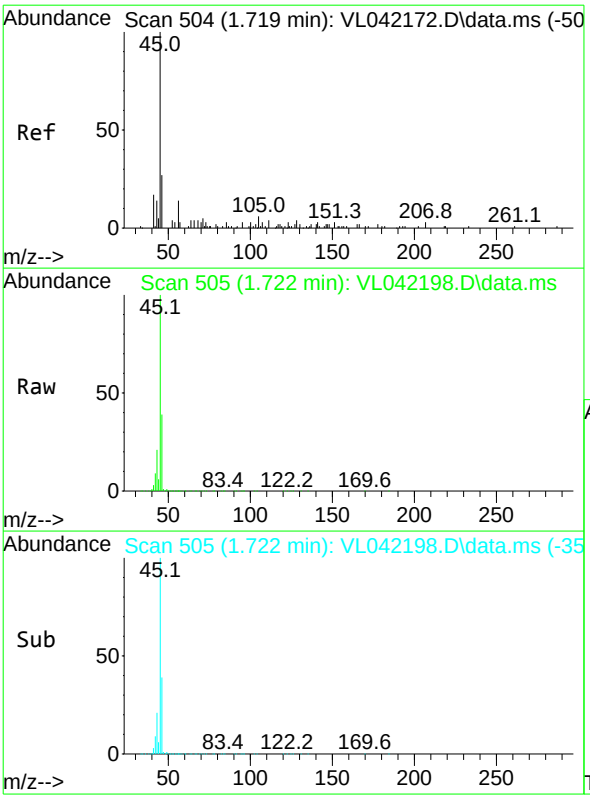


#11
Trichlorofluoromethane
Concen: 0.204 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:101 Resp: 5125

Ion	Ratio	Lower	Upper
101	100		
103	55.4	50.2	75.2

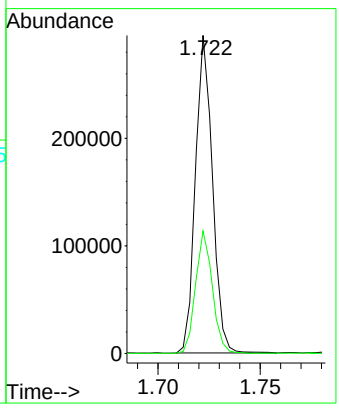




#13
Ethanol
Concen: 149.043 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 45 Resp: 170673

Ion	Ratio	Lower	Upper
45	100		
46	38.0	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations
APPROVED

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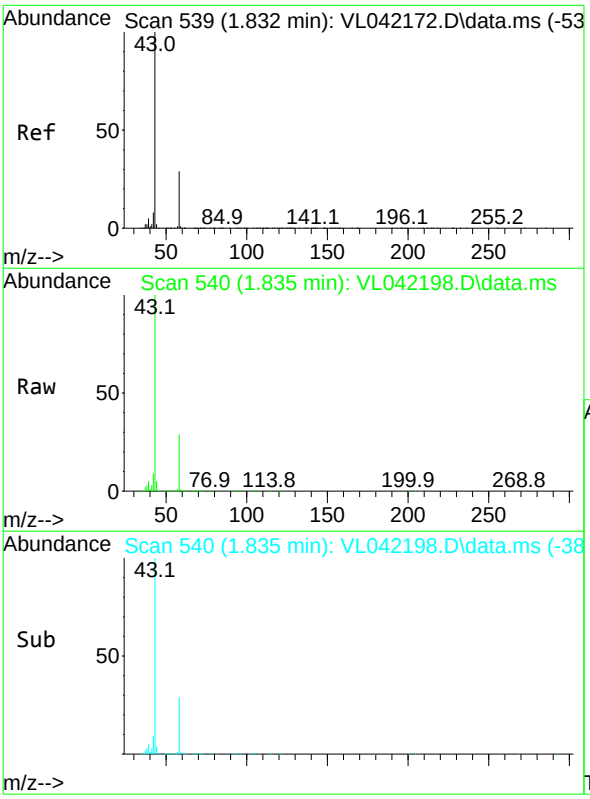
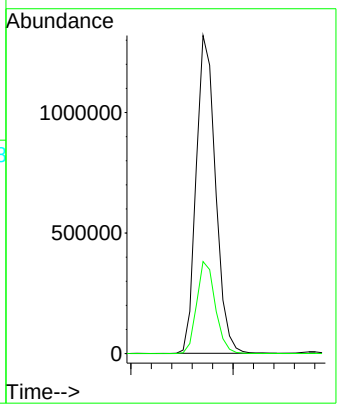
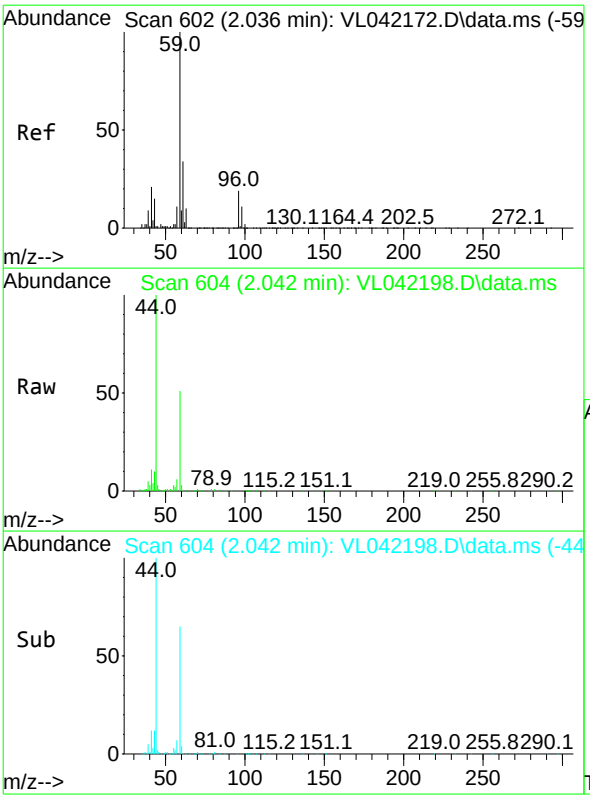


#15
Acetone
Concen: 35.363 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 866562

Ion	Ratio	Lower	Upper
43	100		
58	28.0	23.2	34.8

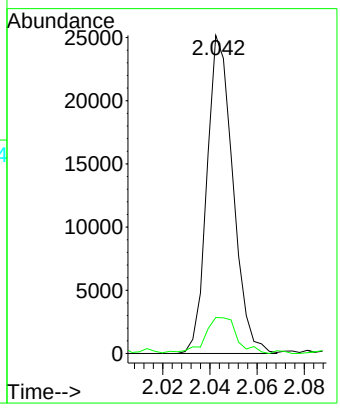




#17
tert-Butyl alcohol
Concen: 0.630 ppbv
RT: 2.042 min Scan# 60
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 59 Resp: 19215

Ion	Ratio	Lower	Upper
59	100		
57	15.1	8.9	13.3#



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations
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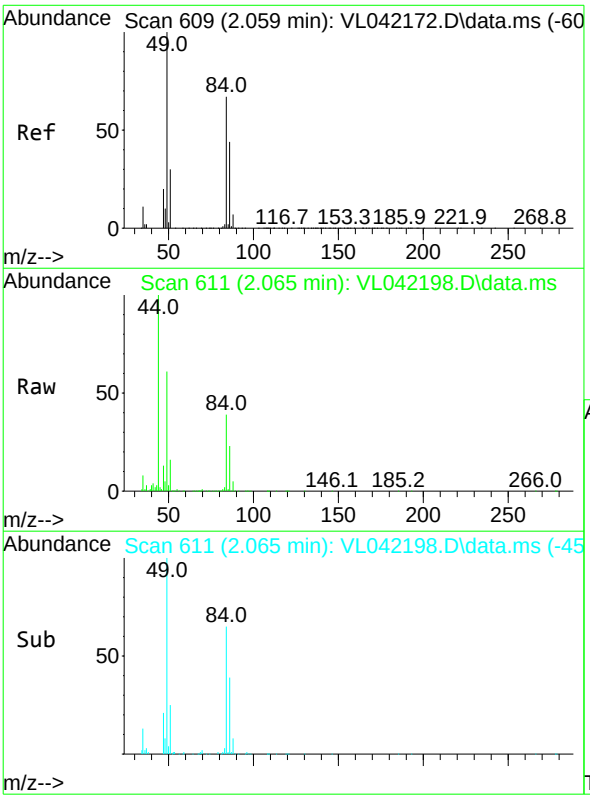
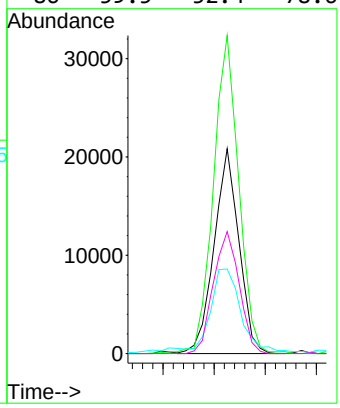
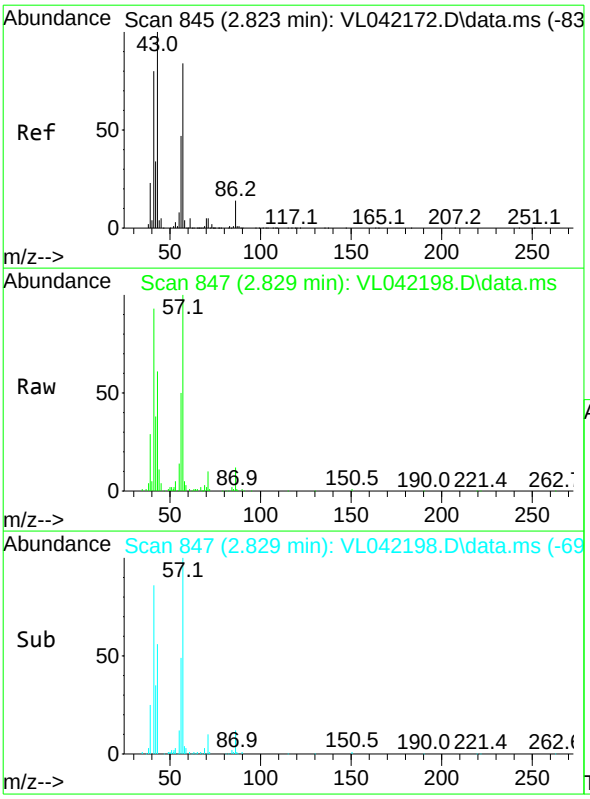


#20
Methylene Chloride
Concen: 1.544 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 84 Resp: 14093

Ion	Ratio	Lower	Upper
84	100		
49	154.4	120.2	180.4
51	39.8	37.4	56.0
86	59.5	52.4	78.6

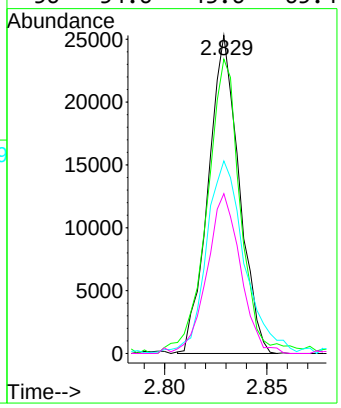




#26
Hexane
Concen: 1.080 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 57 Resp: 26539

Ion	Ratio	Lower	Upper
57	100		
41	104.4	76.6	114.8
43	75.7	207.8	311.8#
56	54.6	43.6	65.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

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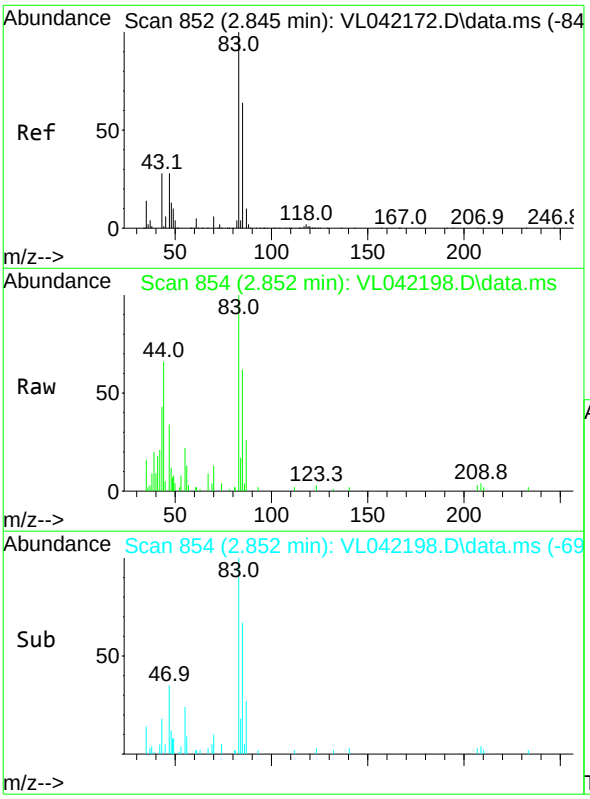
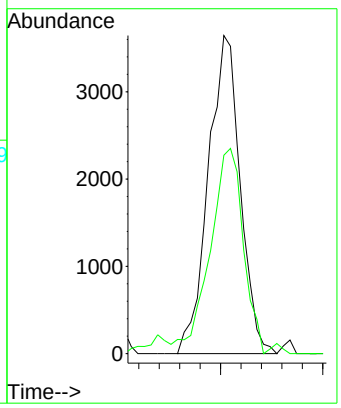
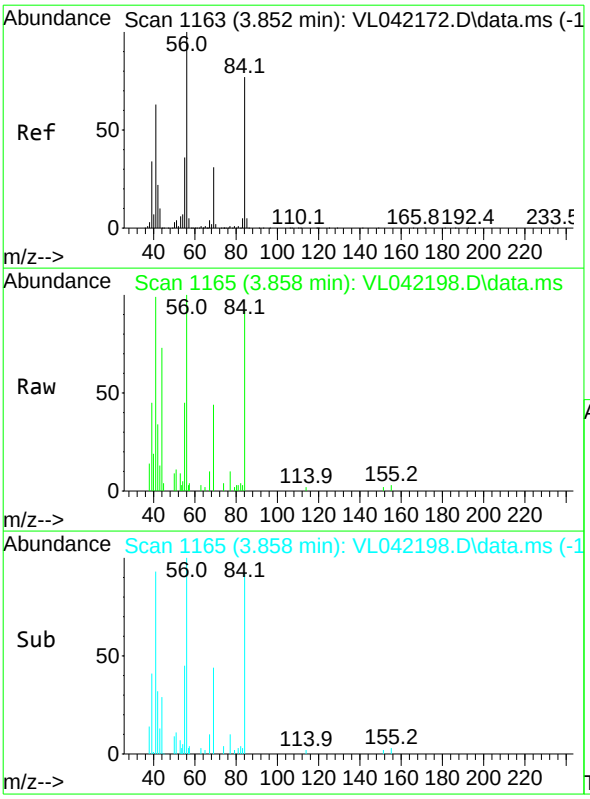


#29
Chloroform
Concen: 0.110 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 83 Resp: 3953

Ion	Ratio	Lower	Upper
83	100		
85	59.2	51.4	77.2





#30
Cyclohexane
Concen: 0.212 ppbv m
RT: 3.858 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 84 Resp: 4530

Ion	Ratio	Lower	Upper
84	100		
56	131.8	102.8	154.2
41	131.0	66.5	99.7#

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

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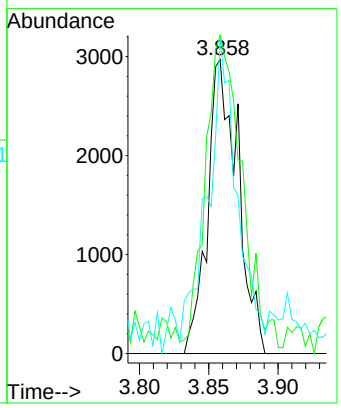
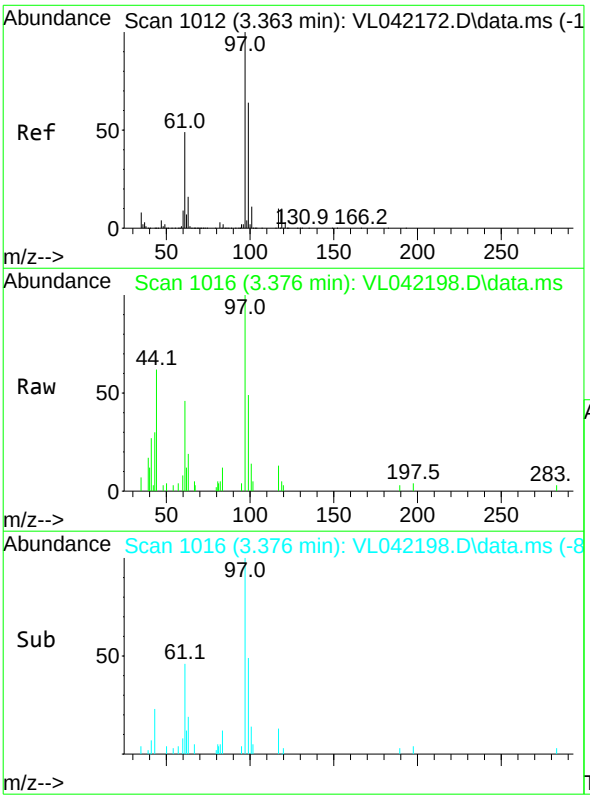
Supervised By :Mahesh Dadoda 04/03/2025

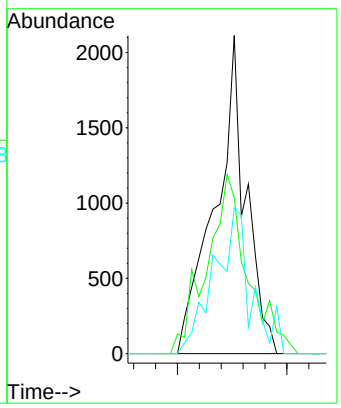


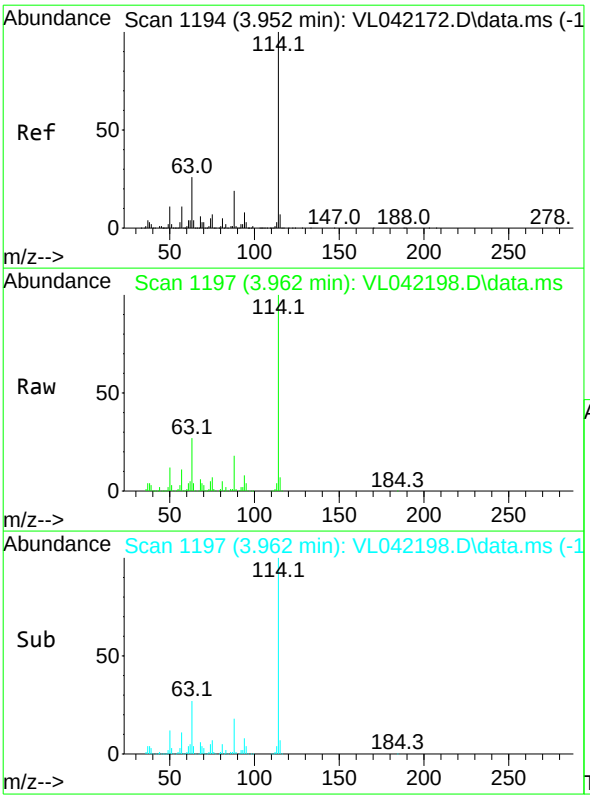


#32
1,1,1-Trichloroethane
Concen: 0.050 ppbv
RT: 3.376 min Scan# 1016
Delta R.T. 0.013 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 97 Resp: 2054

Ion	Ratio	Lower	Upper
97	100		
99	74.8	51.5	77.3
61	54.2	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:114 Resp: 504192

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.2	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
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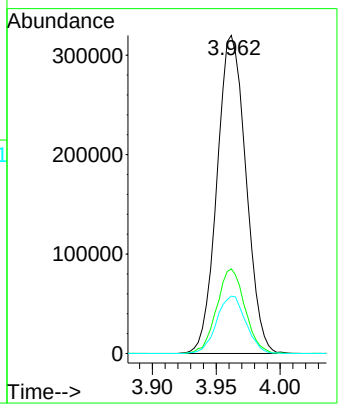
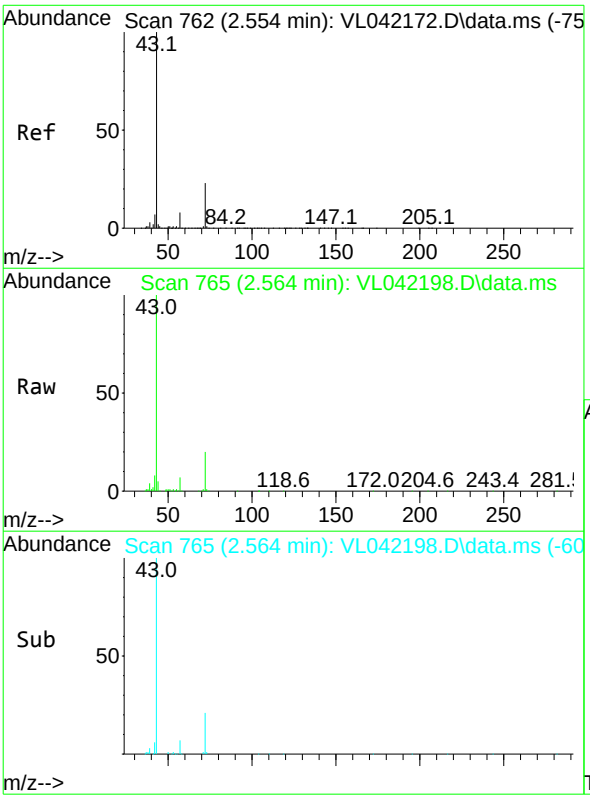
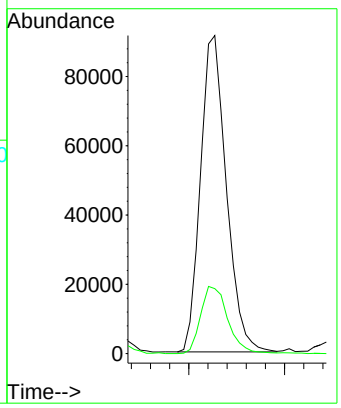


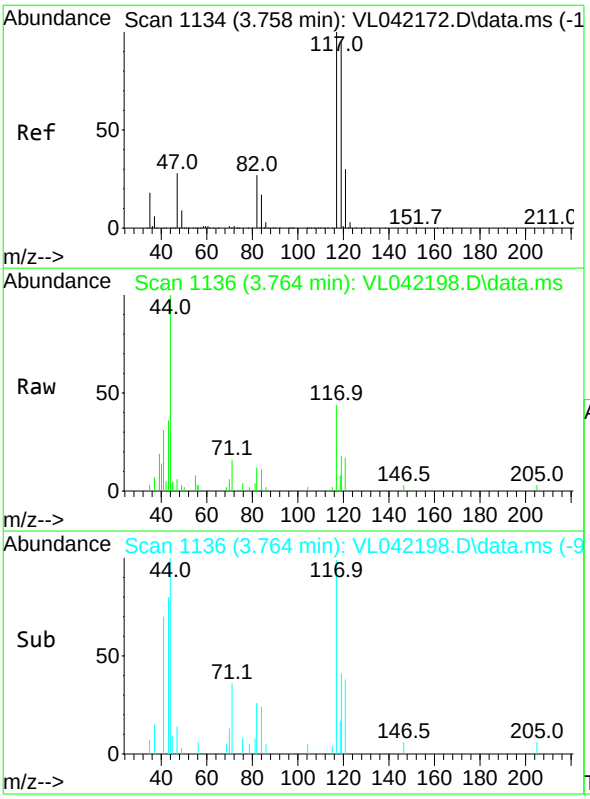


#34
2-Butanone
Concen: 2.343 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 85672

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.038 ppbv m
RT: 3.764 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:117 Resp: 1493

Ion	Ratio	Lower	Upper
117	100		
119	40.9	76.2	114.2#
121	38.5	24.2	36.4#

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

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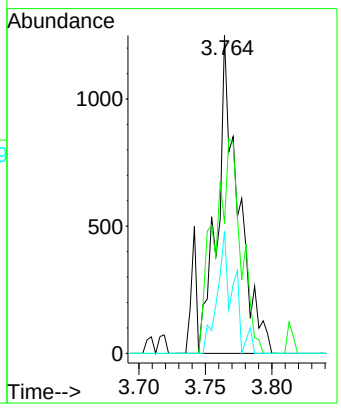
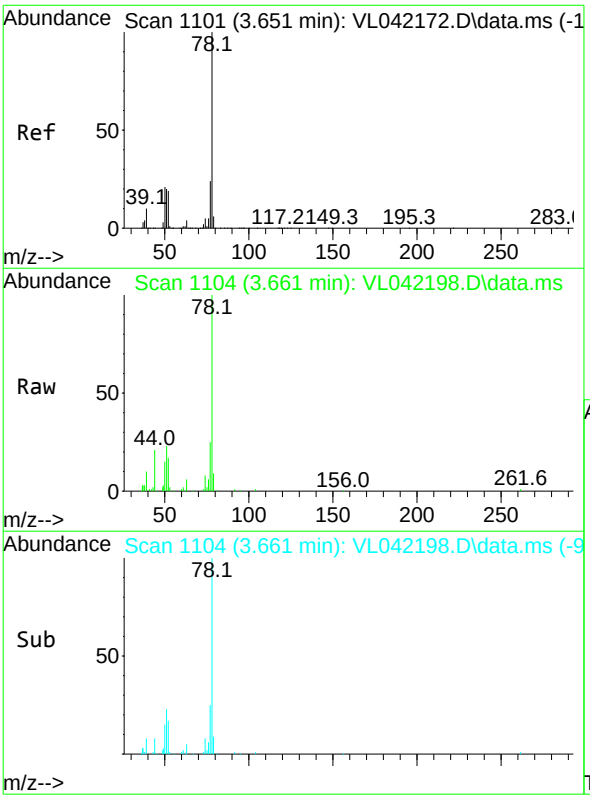
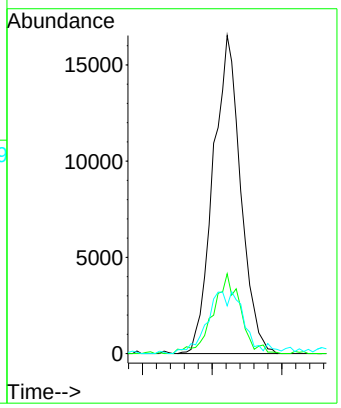


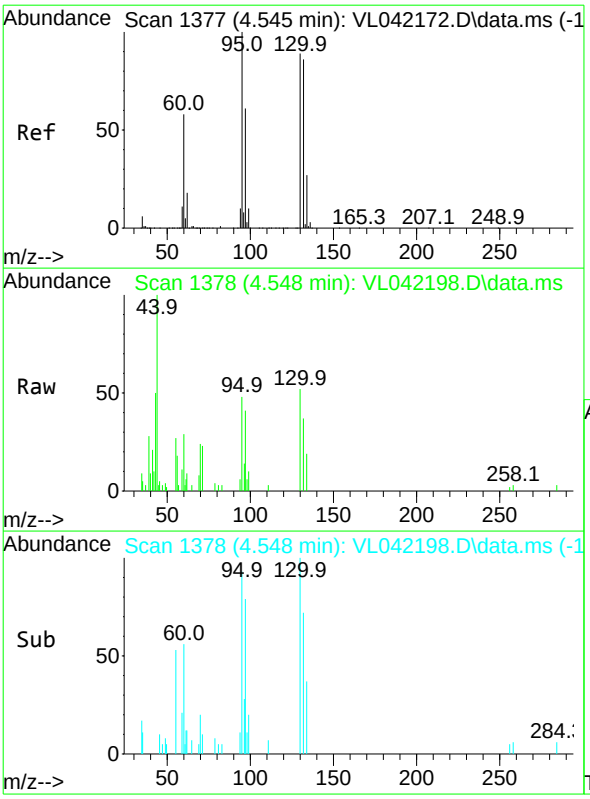


#36
Benzene
Concen: 0.454 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 78 Resp: 22692

Ion	Ratio	Lower	Upper
78	100		
77	24.7	19.1	28.7
50	13.8	16.6	24.8#

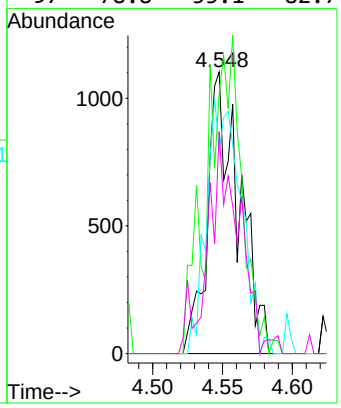




#38
Trichloroethene
Concen: 0.083 ppbv m
RT: 4.548 min Scan# 13
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:130 Resp: 1734

Ion	Ratio	Lower	Upper
130	100		
95	92.7	89.8	134.8
132	72.3	77.4	116.2#
97	78.8	55.1	82.7



Instrument :
MSVOA_L
ClientSampleId :
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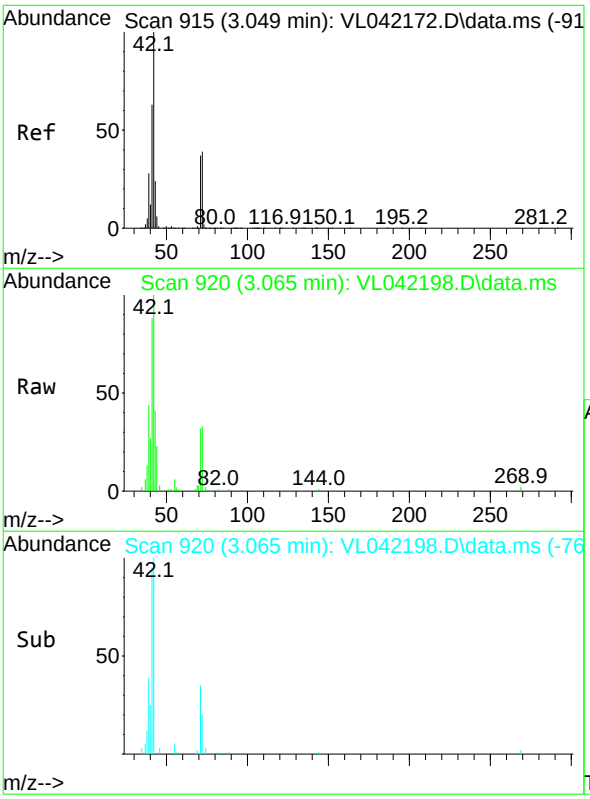
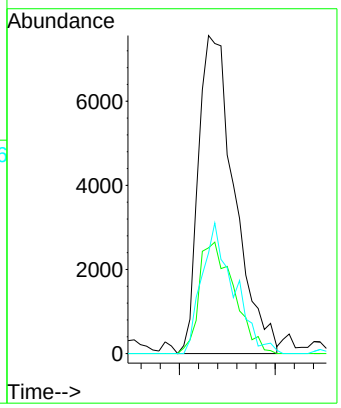
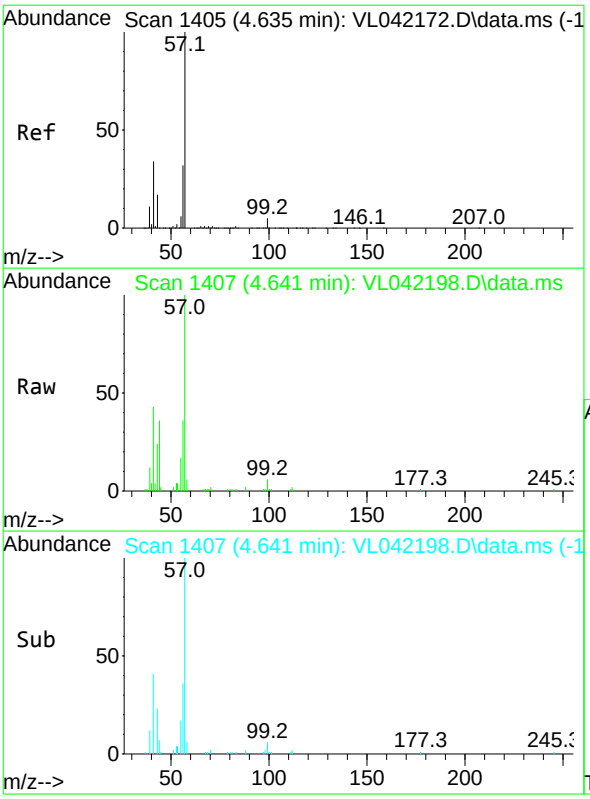


#41
Tetrahydrofuran
Concen: 0.469 ppbv
RT: 3.065 min Scan# 920
Delta R.T. 0.016 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 42 Resp: 9870

Ion	Ratio	Lower	Upper
42	100		
72	34.1	31.4	47.0
71	36.7	30.2	45.4

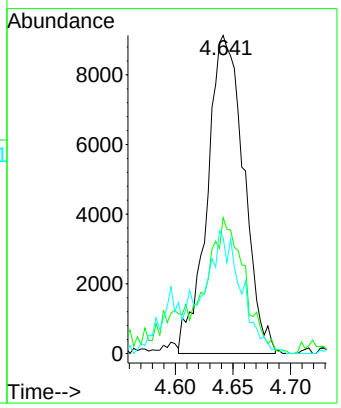




#44
2,2,4-Trimethylpentane
Concen: 0.238 ppbv m
RT: 4.641 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 57 Resp: 20106

Ion	Ratio	Lower	Upper
57	100		
41	56.1	26.8	40.2#
56	51.3	25.6	38.4#



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

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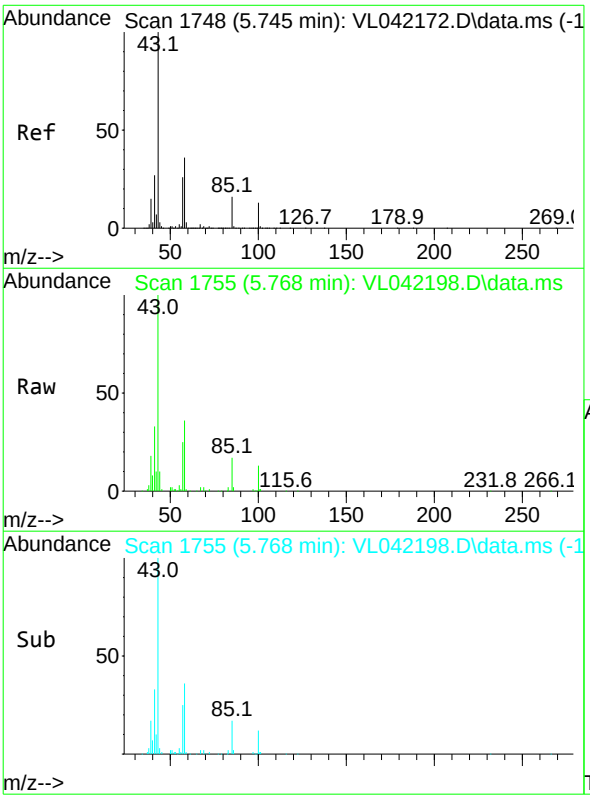
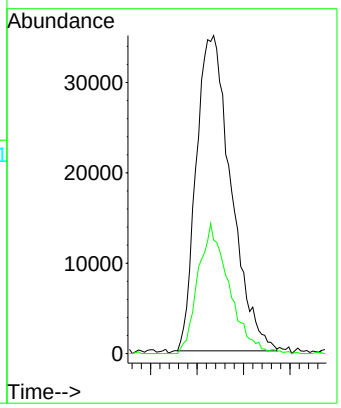
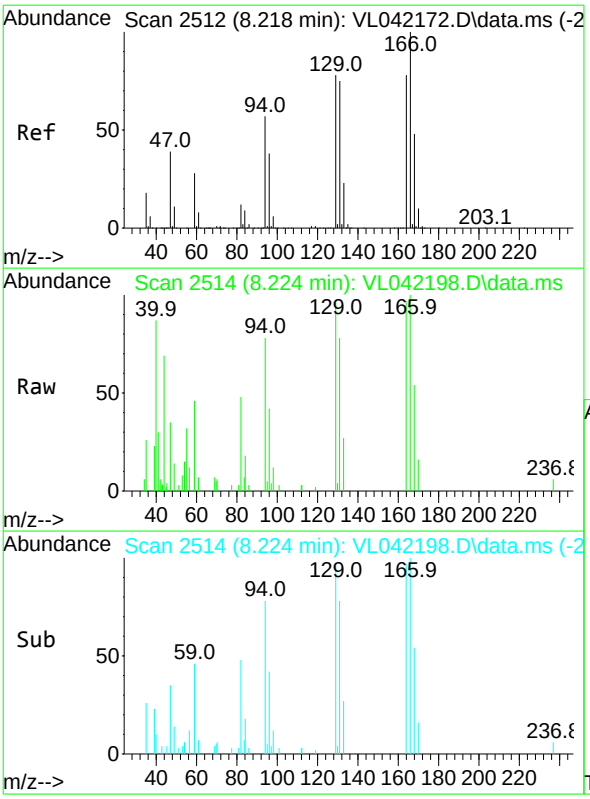


#50
4-Methyl-2-Pentanone
Concen: 1.568 ppbv
RT: 5.768 min Scan# 1755
Delta R.T. 0.022 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 90838

Ion	Ratio	Lower	Upper
43	100		
58	36.8	29.0	43.6

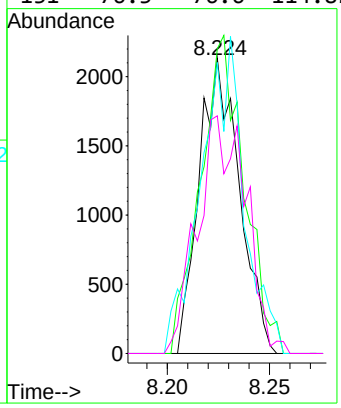




#52
Tetrachloroethene
Concen: 0.147 ppbv
RT: 8.224 min Scan# 25
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:164 Resp: 2909

Ion	Ratio	Lower	Upper
164	100		
166	92.3	102.5	153.7#
129	88.4	79.8	119.8
131	76.3	76.6	114.8#



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations
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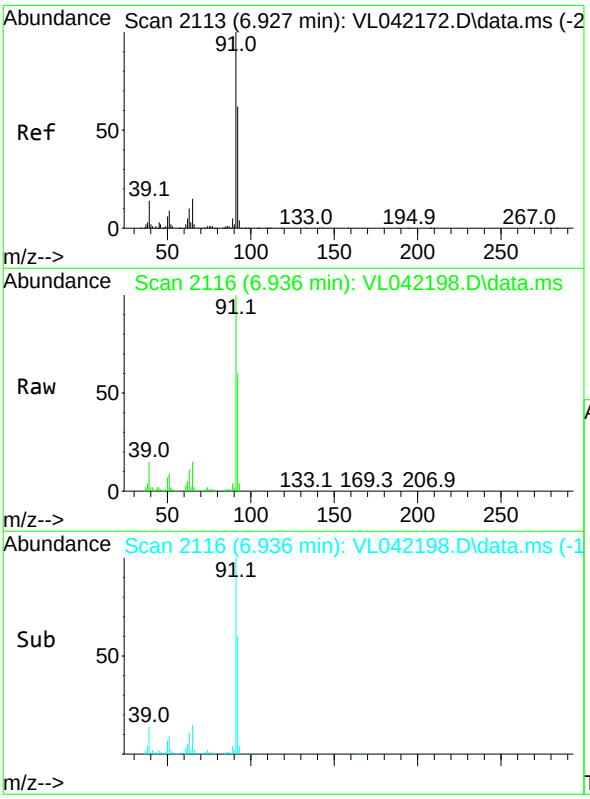
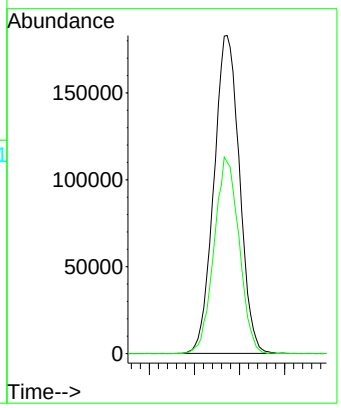
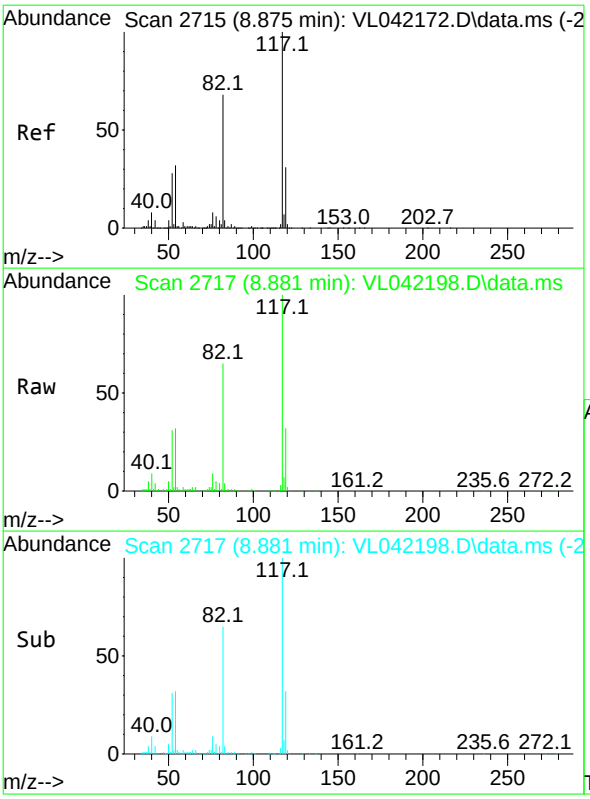


#53
Toluene
Concen: 6.079 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 91 Resp: 360213

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.4	72.6

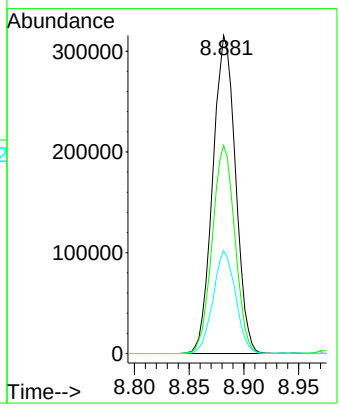




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 27
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:117 Resp: 456695

Ion	Ratio	Lower	Upper
117	100		
82	65.0	55.8	83.6
119	31.9	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
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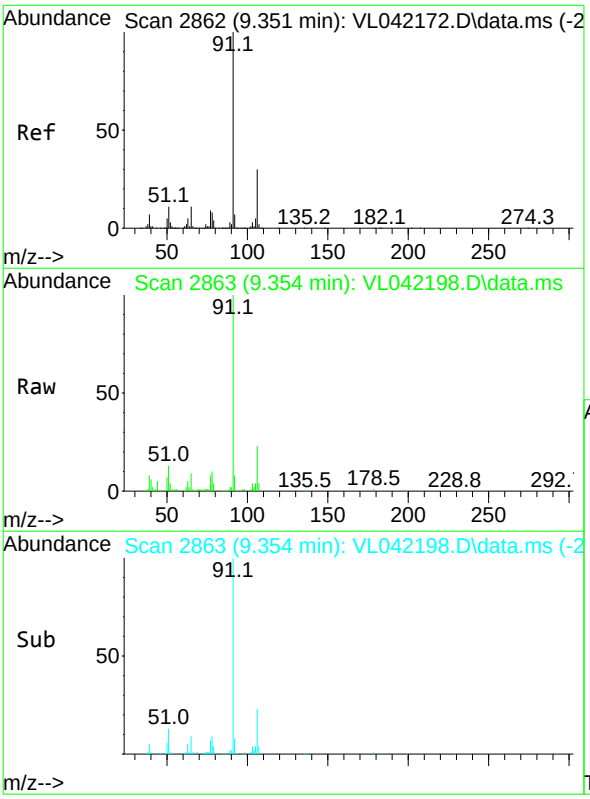
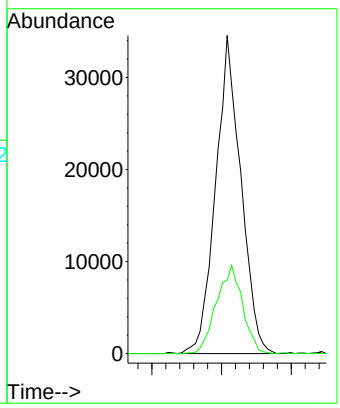
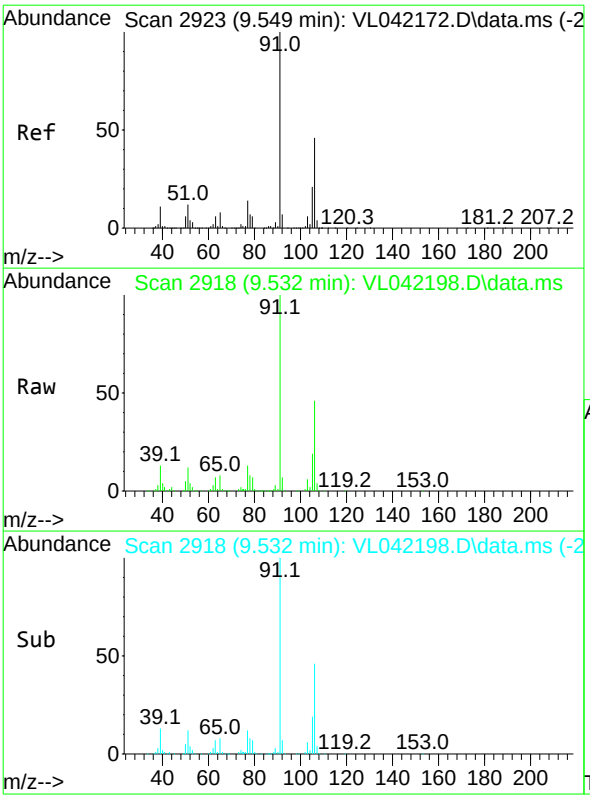


#58
Ethyl Benzene
Concen: 0.535 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 91 Resp: 43413

Ion	Ratio	Lower	Upper
91	100		
106	23.0	24.2	36.2#

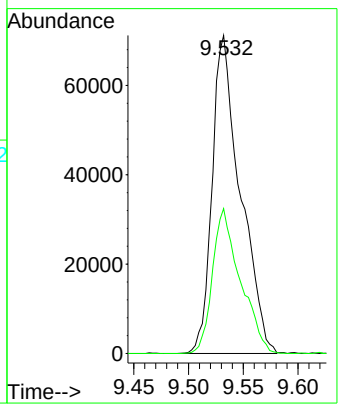




#59
m/p-Xylene
Concen: 1.969 ppbv
RT: 9.532 min Scan# 29
Delta R.T. -0.016 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 91 Resp: 127535

Ion	Ratio	Lower	Upper
91	100		
106	44.9	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
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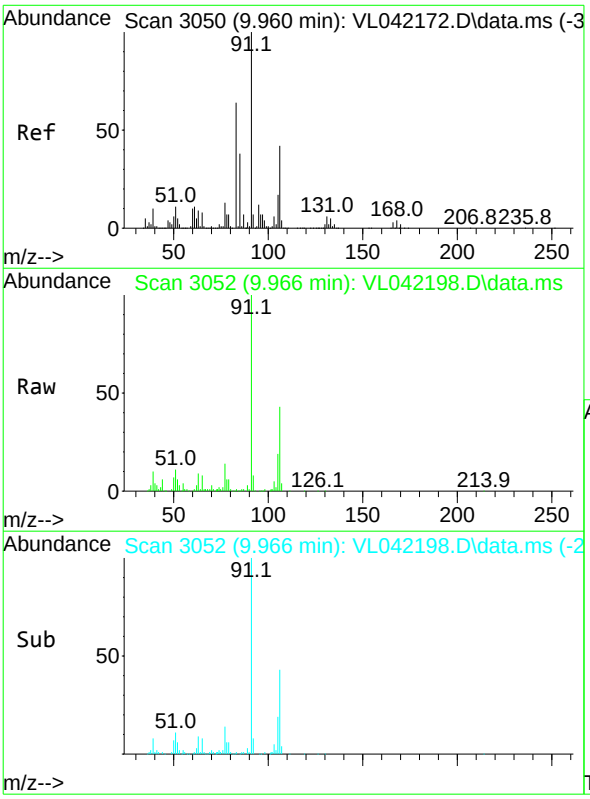
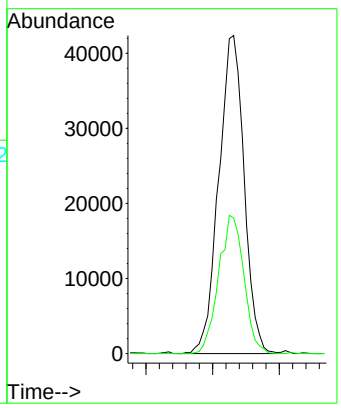
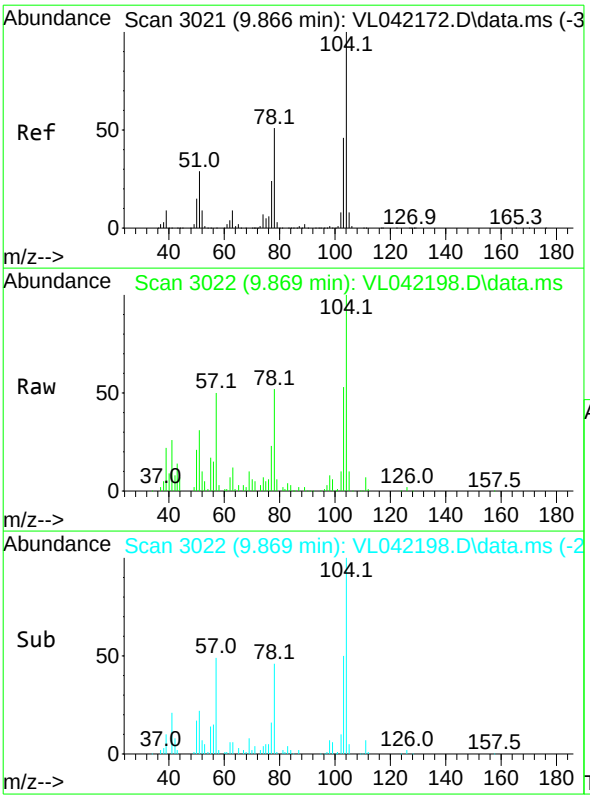


#60
o-Xylene
Concen: 0.863 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 91 Resp: 56023

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5

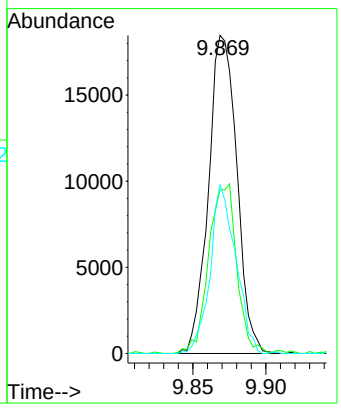




#61
Styrene
Concen: 0.779 ppbv
RT: 9.869 min Scan# 30
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:104 Resp: 25026

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	48.0	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
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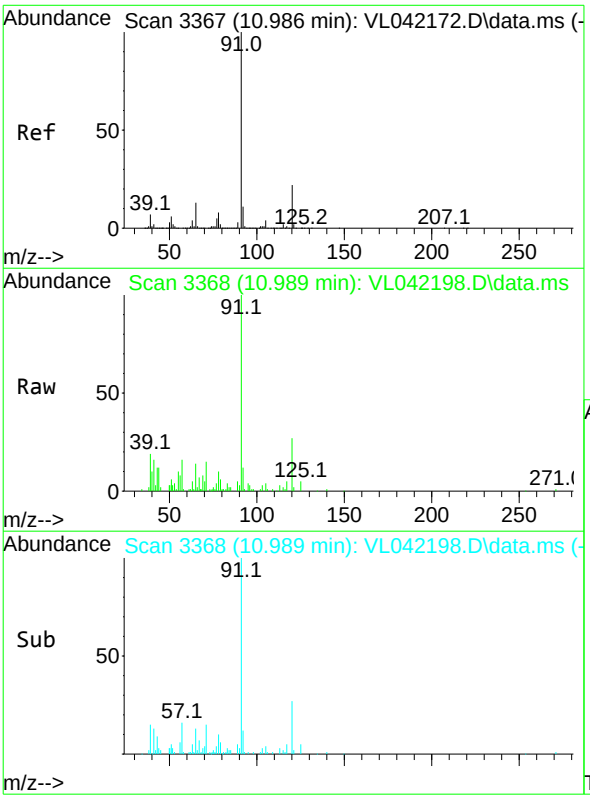
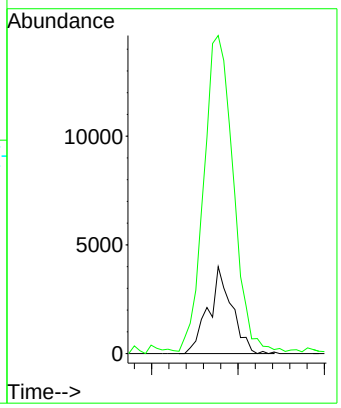
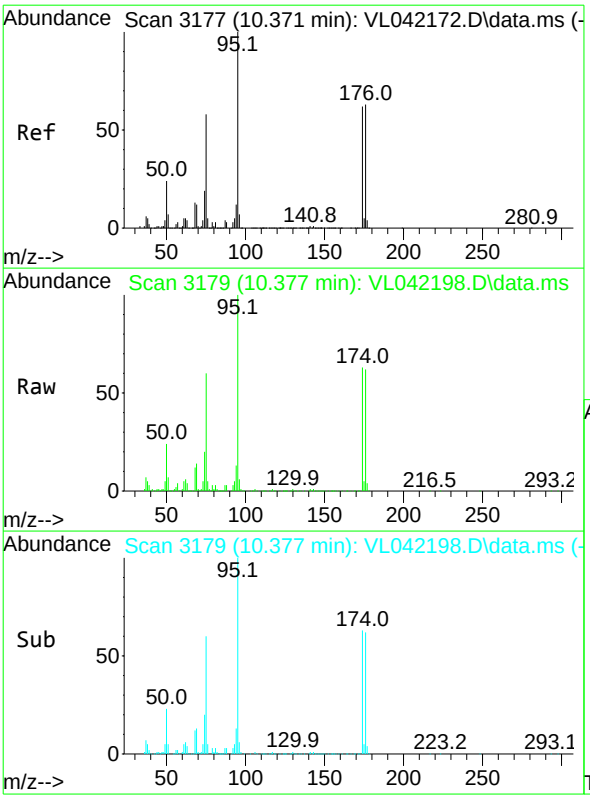


#64
n-propylbenzene
Concen: 0.151 ppbv m
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:120 Resp: 3769

Ion	Ratio	Lower	Upper
120	100		
91	477.6	376.9	565.3





#68
1-Bromo-4-Fluorobenzene
Concen: 9.997 ppbv
RT: 10.377 min Scan# 31
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

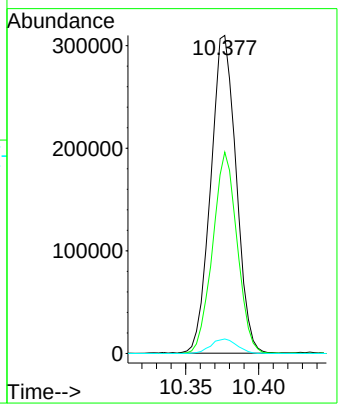
Tgt Ion: 95 Resp: 374920

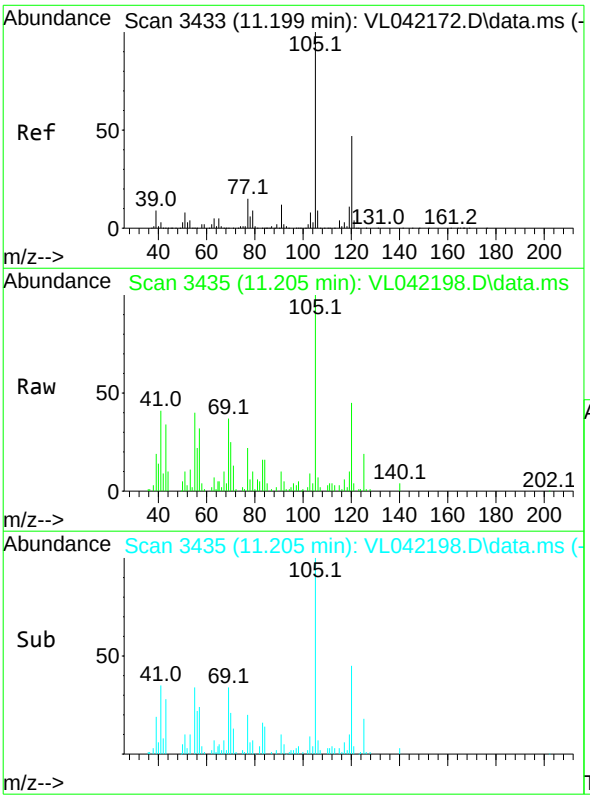
Ion	Ratio	Lower	Upper
95	100		
174	61.3	50.6	76.0
175	4.7	3.8	5.6

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

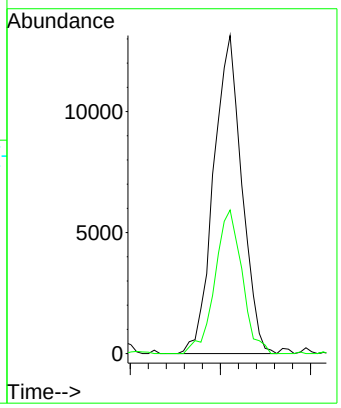


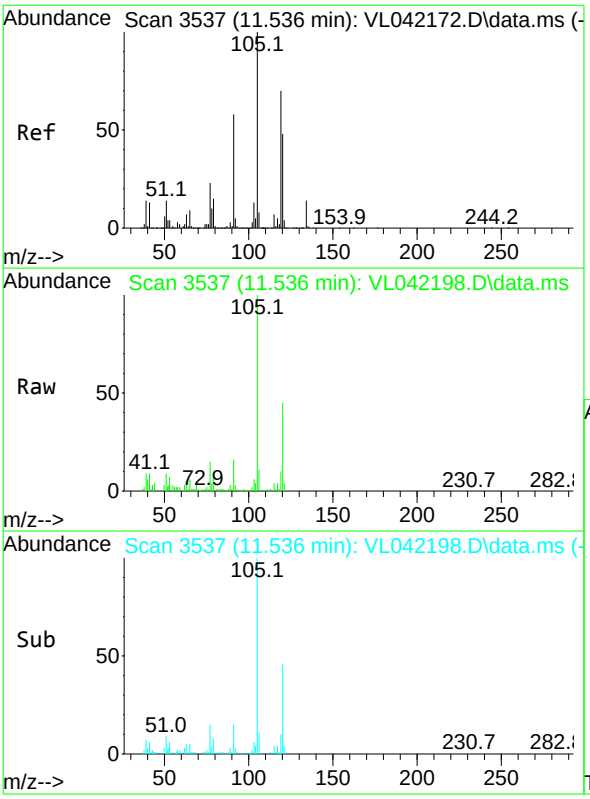


#73
1,3,5-Trimethylbenzene
Concen: 0.203 ppbv
RT: 11.205 min Scan# 3435
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:105 Resp: 14315

Ion	Ratio	Lower	Upper
105	100		
120	45.1	37.4	56.0

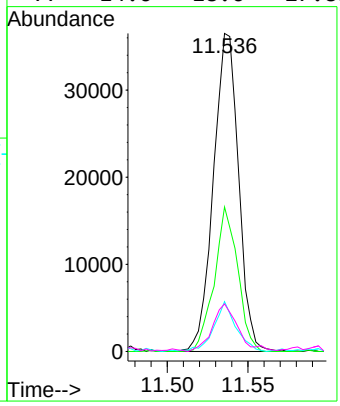




#74
1,2,4-Trimethylbenzene
Concen: 0.486 ppbv
RT: 11.536 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:105 Resp: 39507

Ion	Ratio	Lower	Upper
105	100		
120	45.4	38.6	58.0
91	15.4	46.2	69.2#
77	14.6	18.6	27.8#



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042198.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.266	353	364	377	rBV	86737	118205	5.83%	0.689%
2	1.431	413	415	417	rBV	491523	691781	34.10%	4.034%
3	1.440	417	418	422	rVB	3829715	1415554	69.78%	8.254%
4	1.557	449	454	460	rBV	655064	377050	18.59%	2.199%
5	1.599	463	467	470	rBV	291337	157978	7.79%	0.921%
6	1.618	470	473	478	rVB	136817	82740	4.08%	0.482%
7	1.722	499	505	510	rBV	521266	304401	15.01%	1.775%
8	1.835	536	540	549	rBV	2094350	1433034	70.64%	8.356%
9	1.887	549	556	559	rBV2	41298	40930	2.02%	0.239%
10	1.965	575	580	585	rVB	91142	69665	3.43%	0.406%
11	2.042	599	604	607	rBV2	49441	43259	2.13%	0.252%
12	2.065	607	611	614	rVB2	88968	60799	3.00%	0.355%
13	2.382	708	709	715	rVB	50749	41272	2.03%	0.241%
14	2.476	733	738	745	rVB3	90689	89977	4.44%	0.525%
15	2.560	759	764	777	rVV	142208	139338	6.87%	0.812%
16	2.628	777	785	793	rVB4	53941	63008	3.11%	0.367%
17	2.790	827	835	842	rBV	679161	696443	34.33%	4.061%
18	2.829	842	847	860	rVB3	114249	139785	6.89%	0.815%
19	3.065	913	920	930	rBV3	29608	38284	1.89%	0.223%
20	3.234	962	972	980	rBV3	40437	59306	2.92%	0.346%
21	3.661	1091	1104	1110	rBV3	39950	64369	3.17%	0.375%
22	3.696	1110	1115	1127	rVB2	33824	53384	2.63%	0.311%
23	3.962	1185	1197	1212	rBV	854224	1340536	66.08%	7.817%
24	4.059	1214	1227	1236	rBV5	33869	65261	3.22%	0.381%
25	4.266	1279	1291	1303	rBV5	40644	83504	4.12%	0.487%
26	4.641	1400	1407	1421	rVB4	25428	55814	2.75%	0.325%
27	4.985	1501	1513	1525	rBV7	22558	46681	2.30%	0.272%
28	5.667	1706	1724	1736	rBV6	29841	75477	3.72%	0.440%
29	5.765	1740	1754	1775	rBV4	102342	264083	13.02%	1.540%
30	6.742	2042	2056	2071	rBV5	57384	133446	6.58%	0.778%
31	6.933	2100	2115	2135	rVB	491647	988773	48.74%	5.766%
32	7.376	2242	2252	2259	rBV5	21626	39401	1.94%	0.230%
33	7.609	2319	2324	2339	rVB5	23708	53551	2.64%	0.312%
34	7.694	2339	2350	2360	rVB7	34079	64929	3.20%	0.379%
35	8.302	2523	2538	2555	rVB9	59814	137443	6.78%	0.801%
36	8.881	2704	2717	2728	rBV	1115388	1657967	81.73%	9.668%

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	8.982	2740	2748	2762	rVB10	44997	90947	4.48%	0.530%
38	9.098	2776	2784	2791	rBV5	27538	40374	1.99%	0.235%
39	9.147	2791	2799	2811	rVB2	96817	144695	7.13%	0.844%
40	9.354	2852	2863	2868	rBV2	82714	115145	5.68%	0.671%
41	9.390	2868	2874	2892	rVB	112383	198198	9.77%	1.156%
42	9.532	2908	2918	2935	rVB	206951	400972	19.77%	2.338%
43	9.636	2941	2950	2964	rBV3	55516	94403	4.65%	0.550%
44	9.726	2966	2978	2989	rVB6	45795	109182	5.38%	0.637%
45	9.794	2992	2999	3008	rBV3	34575	48148	2.37%	0.281%
46	9.865	3008	3021	3032	rBV6	107174	170168	8.39%	0.992%
47	9.966	3040	3052	3071	rVB	130142	244162	12.04%	1.424%
48	10.079	3071	3087	3088	rBV5	28183	49397	2.44%	0.288%
49	10.102	3088	3094	3101	rVV5	39369	57736	2.85%	0.337%
50	10.147	3101	3108	3122	rVV5	25390	47484	2.34%	0.277%
51	10.377	3156	3179	3189	rBV	1508793	2028557	100.00%	11.829%
52	10.429	3189	3195	3204	rVB4	44857	57333	2.83%	0.334%
53	10.775	3290	3302	3304	rBV7	28447	45375	2.24%	0.265%
54	10.804	3304	3311	3321	rVB4	57640	97149	4.79%	0.566%
55	10.901	3333	3341	3354	rBV4	75095	107887	5.32%	0.629%
56	11.011	3369	3375	3383	rVB2	77684	105860	5.22%	0.617%
57	11.095	3393	3401	3407	rBV2	94687	112168	5.53%	0.654%
58	11.124	3407	3410	3423	rVB2	50097	64444	3.18%	0.376%
59	11.202	3423	3434	3442	rBV5	89156	122125	6.02%	0.712%
60	11.536	3527	3537	3552	rBV2	112405	156140	7.70%	0.910%
61	11.756	3599	3605	3608	rBV3	45956	56215	2.77%	0.328%
62	11.775	3608	3611	3618	rVB2	51331	49026	2.42%	0.286%
63	12.083	3700	3706	3715	rVB3	64812	76436	3.77%	0.446%
64	12.228	3743	3751	3758	rBV2	146131	164495	8.11%	0.959%
65	12.364	3785	3793	3798	rBV3	87152	101578	5.01%	0.592%
66	12.439	3811	3816	3821	rBV	91782	88162	4.35%	0.514%
67	12.513	3829	3839	3844	rBV	85804	95131	4.69%	0.555%
68	12.652	3875	3882	3894	rBV4	57771	102223	5.04%	0.596%
69	13.002	3985	3990	4002	rBV2	84240	89290	4.40%	0.521%
70	13.306	4076	4084	4085	rBV4	39013	41299	2.04%	0.241%
71	13.387	4103	4109	4117	rBV	35039	38078	1.88%	0.222%
72	13.474	4126	4136	4140	rBV6	41198	57506	2.83%	0.335%
73	13.901	4258	4268	4274	rBV3	109551	127117	6.27%	0.741%
74	13.989	4286	4295	4299	rBV4	34570	42778	2.11%	0.249%
75	14.170	4344	4351	4358	rVB3	51316	56528	2.79%	0.330%
76	14.238	4360	4372	4378	rBV10	44142	68023	3.35%	0.397%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

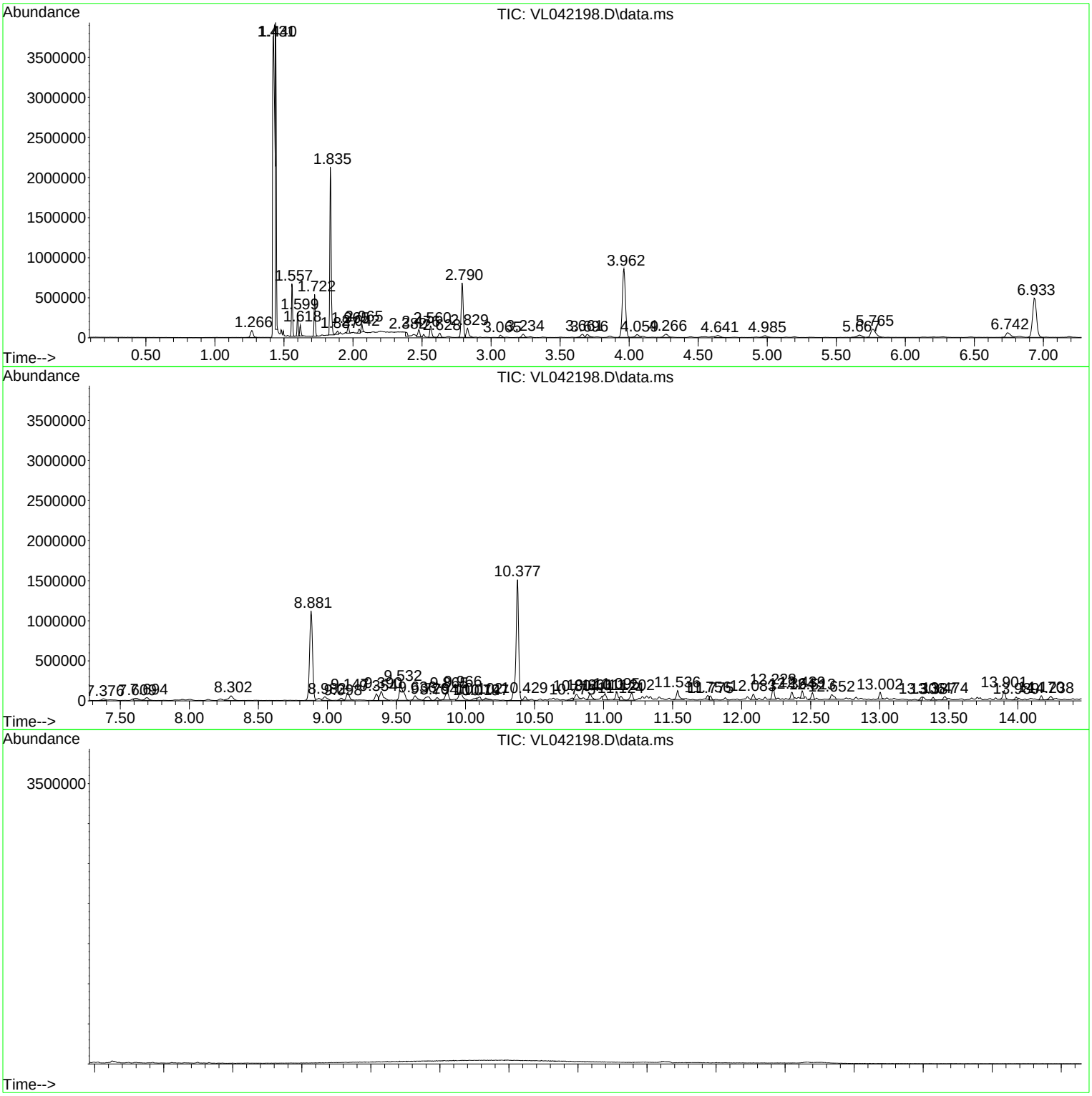
Sum of corrected areas: 17149362

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

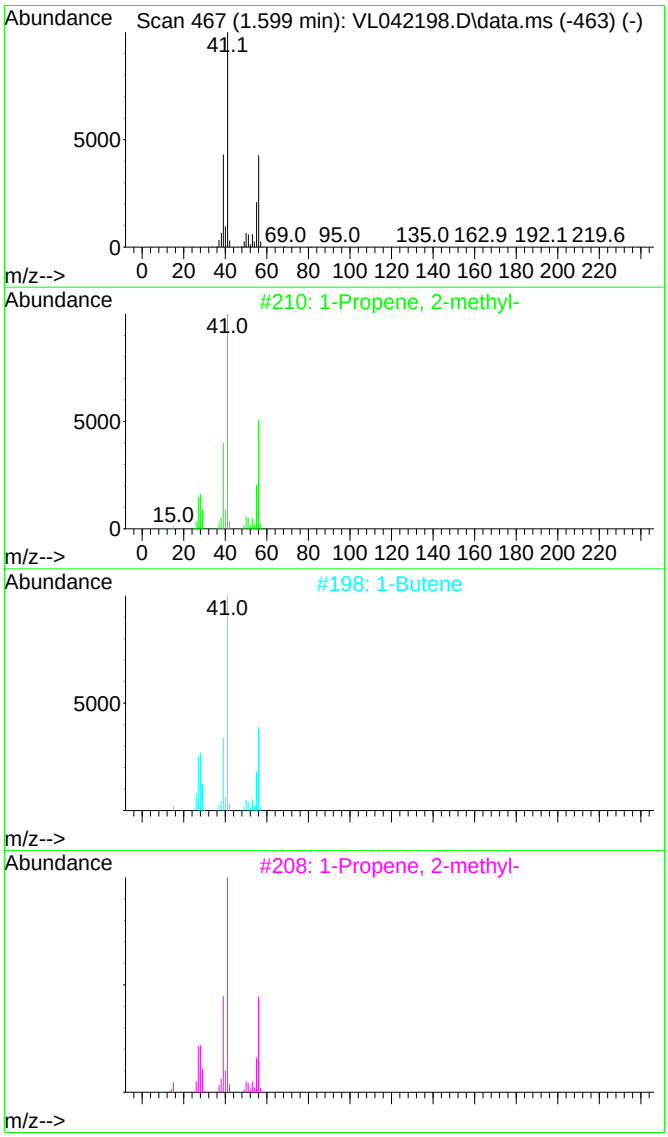
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

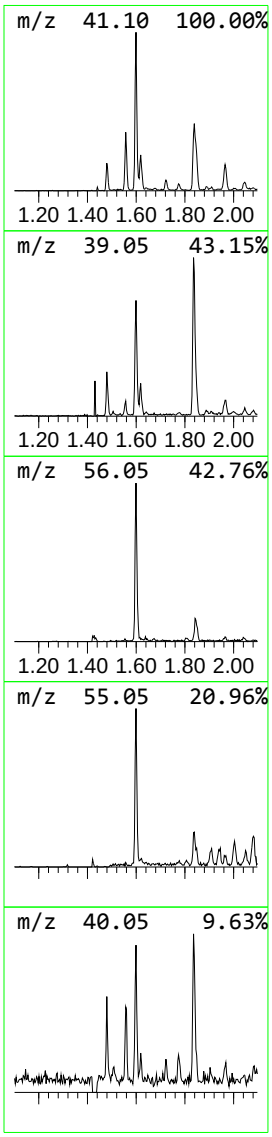
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 1-Propene, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.599	2.27 ppbv	157978	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene, 2-methyl-	56	C4H8	000115-11-7	87
2	1-Butene	56	C4H8	000106-98-9	83
3	1-Propene, 2-methyl-	56	C4H8	000115-11-7	80
4	2-Butene, (Z)-	56	C4H8	000590-18-1	80
5	2-Butene, (E)-	56	C4H8	000624-64-6	80





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

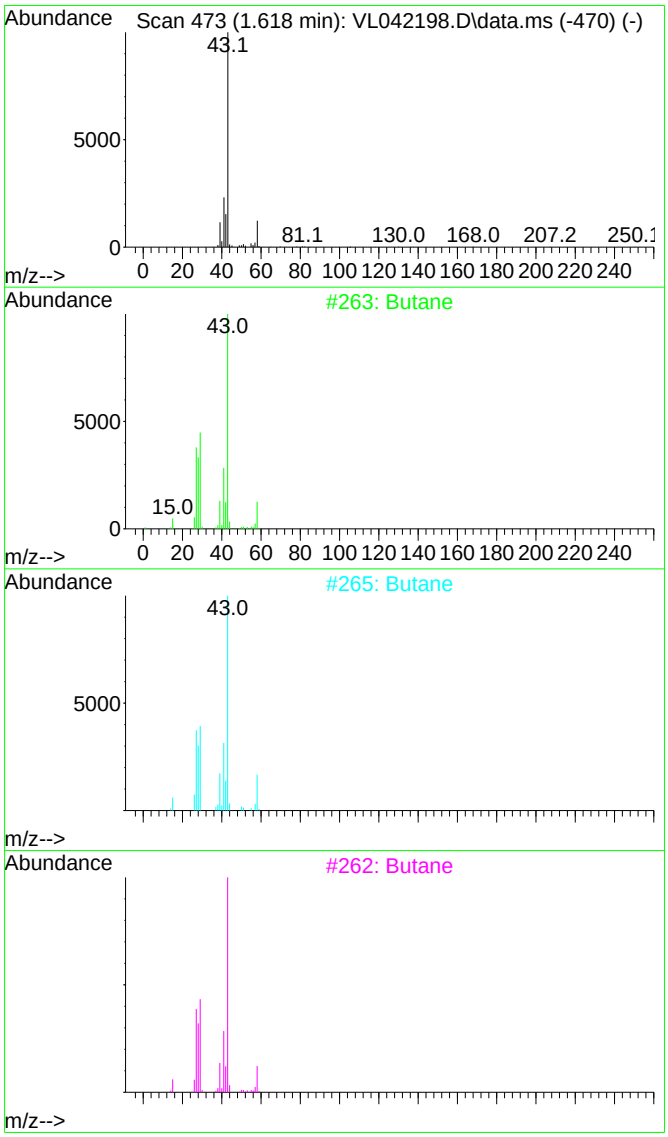
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

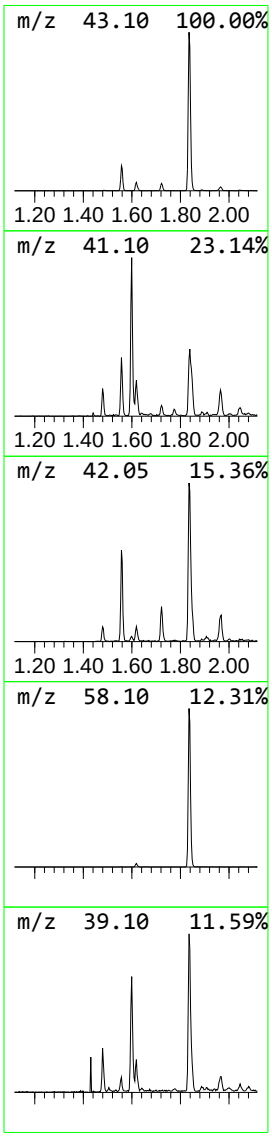
****

Peak Number 3 Butane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.618	1.19 ppbv	82740	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	50
3	Butane	58	C4H10	000106-97-8	50
4	Butane	58	C4H10	000106-97-8	45
5	Diazene, dimethyl-	58	C2H6N2	000503-28-6	5





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

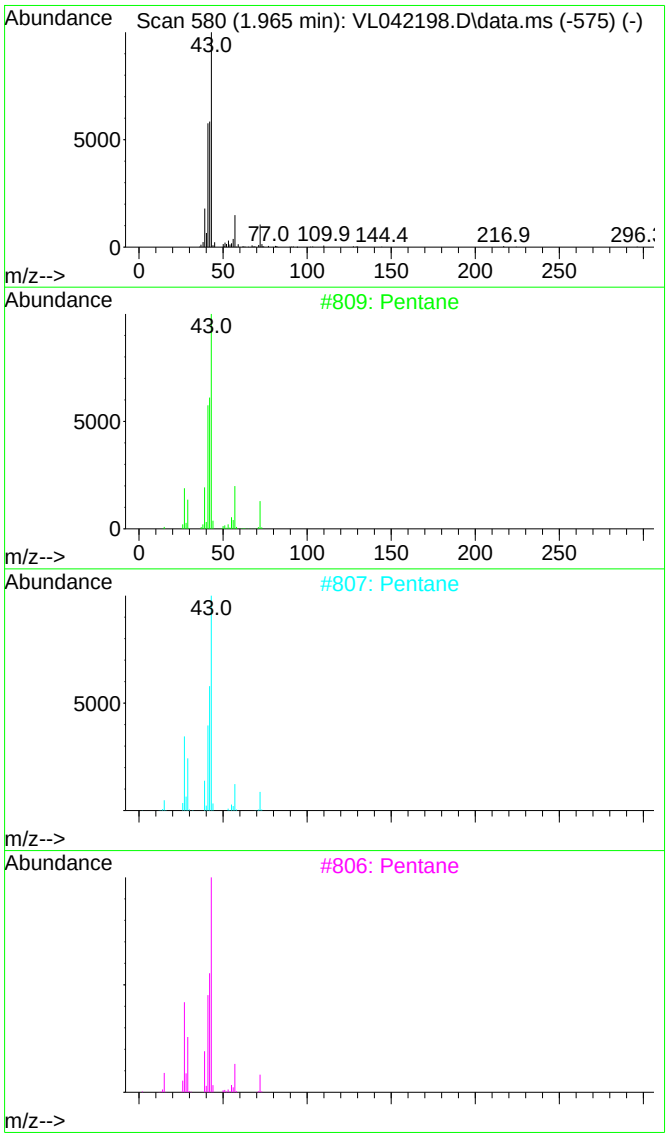
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

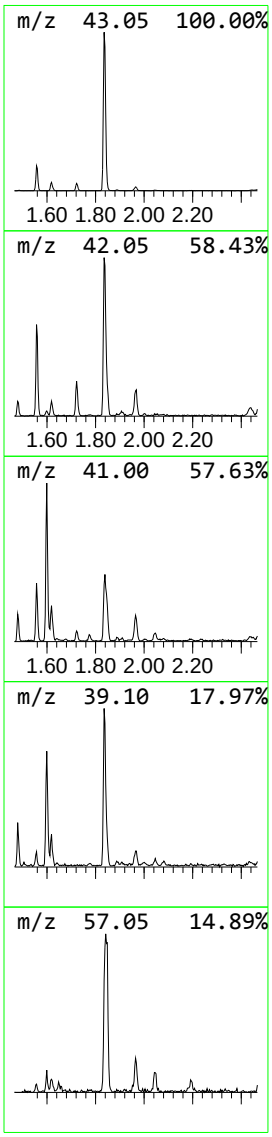
****

Peak Number 4 Pentane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.965	1.00 ppbv	69665	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	86
2	Pentane	72	C5H12	000109-66-0	72
3	Pentane	72	C5H12	000109-66-0	72
4	Pentane	72	C5H12	000109-66-0	72
5	Isobutylene epoxide	72	C4H8O	000558-30-5	53





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

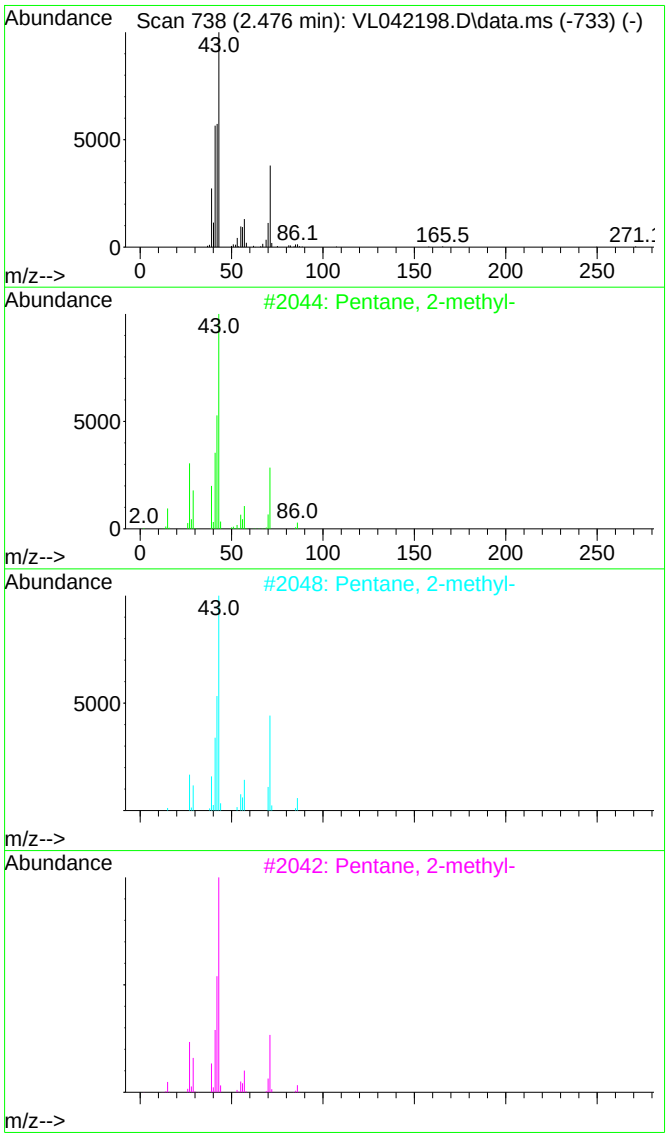
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

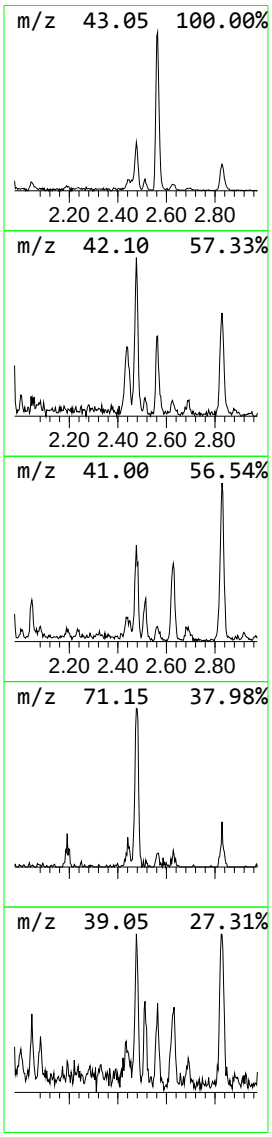
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Pentane, 2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.476	1.29 ppbv	89977	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	78
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	78
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	72
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	56
5	Pentane, 2-bromo-	150	C5H11Br	000107-81-3	53





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1-Propene, 2-me...	1.599	2.3	ppbv	157978	1	2.790	696443	10.0
Butane	1.618	1.2	ppbv	82740	1	2.790	696443	10.0
Pentane	1.965	1.0	ppbv	69665	1	2.790	696443	10.0
Pentane, 2-methyl-	2.476	1.3	ppbv	89977	1	2.790	696443	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-1-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-07DL	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
VL042192.D	10		03/27/25 22:29	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	2.10	10.4	UD	10.4	24.7	ug/m3
74-87-3	Chloromethane	0.98	2.02	UD	2.02	10.3	ug/m3
75-01-4	Vinyl Chloride	0.14	0.36	UD	0.36	0.77	ug/m3
74-83-9	Bromomethane	1.40	5.44	UD	5.44	19.4	ug/m3
75-00-3	Chloroethane	1.70	4.49	UD	4.49	13.2	ug/m3
109-99-9	Tetrahydrofuran	1.30	3.83	UD	3.83	14.8	ug/m3
75-69-4	Trichlorofluoromethane	1.60	8.99	UD	8.99	28.1	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	1.60	12.3	UD	12.3	38.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.88	6.15	UD	6.15	35.0	ug/m3
75-65-0	tert-Butyl alcohol	1.90	5.76	UD	5.76	15.2	ug/m3
142-82-5	Heptane	1.10	4.51	UD	4.51	20.5	ug/m3
75-35-4	1,1-Dichloroethene	1.40	5.55	UD	5.55	19.8	ug/m3
67-64-1	Acetone	38.3	91.0	D	5.70	11.9	ug/m3
75-15-0	Carbon Disulfide	1.60	4.98	UD	4.98	15.6	ug/m3
1634-04-4	Methyl tert-Butyl Ether	1.20	4.33	UD	4.33	18.0	ug/m3
75-09-2	Methylene Chloride	2.40	8.34	JD	6.60	17.4	ug/m3
156-60-5	trans-1,2-Dichloroethene	1.90	7.53	UD	7.53	19.8	ug/m3
75-34-3	1,1-Dichloroethane	1.30	5.26	UD	5.26	20.2	ug/m3
110-82-7	Cyclohexane	2.20	7.57	UD	7.57	17.2	ug/m3
78-93-3	2-Butanone	2.40	7.08	JD	3.54	14.8	ug/m3
56-23-5	Carbon Tetrachloride	0.11	0.69	UD	0.69	1.89	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.89	3.53	UD	3.53	19.8	ug/m3
67-66-3	Chloroform	0.83	4.05	UD	4.05	24.4	ug/m3
71-55-6	1,1,1-Trichloroethane	0.10	0.55	UD	0.55	1.64	ug/m3
540-84-1	2,2,4-Trimethylpentane	1.00	4.67	UD	4.67	23.4	ug/m3
71-43-2	Benzene	0.87	2.78	UD	2.78	16.0	ug/m3
107-06-2	1,2-Dichloroethane	0.91	3.68	UD	3.68	20.2	ug/m3
79-01-6	Trichloroethene	0.17	0.91	UD	0.91	1.61	ug/m3
78-87-5	1,2-Dichloropropane	1.10	5.08	UD	5.08	23.1	ug/m3
75-27-4	Bromodichloromethane	0.77	5.16	UD	5.16	33.5	ug/m3
108-10-1	4-Methyl-2-Pentanone	1.70	6.97	JD	3.81	20.5	ug/m3
108-88-3	Toluene	5.70	21.5	D	4.15	18.8	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.60	2.72	UD	2.72	22.7	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.64	2.91	UD	2.91	22.7	ug/m3
79-00-5	1,1,2-Trichloroethane	0.71	3.87	UD	3.87	27.3	ug/m3

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-1-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-07DL	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
VL042192.D	10		03/27/25 22:29	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.66	5.62	UD	5.62	42.6	ug/m3
106-93-4	1,2-Dibromoethane	0.72	5.53	UD	5.53	7.69	ug/m3
127-18-4	Tetrachloroethene	0.15	1.02	UD	1.02	2.03	ug/m3
108-90-7	Chlorobenzene	0.76	3.50	UD	3.50	23.0	ug/m3
100-41-4	Ethyl Benzene	1.20	5.21	UD	5.21	21.7	ug/m3
179601-23-1	m/p-Xylene	2.10	9.12	UD	9.12	43.4	ug/m3
95-47-6	o-Xylene	1.20	5.21	UD	5.21	21.7	ug/m3
100-42-5	Styrene	1.10	4.68	UD	4.68	21.3	ug/m3
75-25-2	Bromoform	0.57	5.89	UD	5.89	51.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.11	0.76	UD	0.76	2.06	ug/m3
95-49-8	2-Chlorotoluene	1.10	5.70	UD	5.70	25.9	ug/m3
108-67-8	1,3,5-Trimethylbenzene	1.10	5.41	UD	5.41	24.6	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.78	3.83	UD	3.83	24.6	ug/m3
541-73-1	1,3-Dichlorobenzene	0.80	4.81	UD	4.81	30.1	ug/m3
106-46-7	1,4-Dichlorobenzene	0.53	3.19	UD	3.19	30.1	ug/m3
95-50-1	1,2-Dichlorobenzene	0.75	4.51	UD	4.51	30.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.85	6.31	UD	6.31	37.1	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.85	9.07	UD	9.07	53.3	ug/m3
106-99-0	1,3-Butadiene	1.30	2.88	UD	2.88	11.1	ug/m3
91-20-3	Naphthalene	0.75	3.93	UD	3.93	5.24	ug/m3
622-96-8	4-Ethyltoluene	1.20	5.90	UD	5.90	24.6	ug/m3
110-54-3	Hexane	1.10	3.88	UD	3.88	17.6	ug/m3
107-05-1	Allyl Chloride	1.50	4.70	UD	4.70	15.7	ug/m3
123-91-1	1,4-Dioxane	2.10	7.57	UD	7.57	18.0	ug/m3
80-62-6	Methyl Methacrylate	0.86	3.52	UD	3.52	20.5	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	183000		2.787			
540-36-3	1,4-Difluorobenzene	517000		3.959			
3114-55-4	Chlorobenzene-d5	472000		8.882			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-1-3262025DL	SDG No.:	Q1669
Lab Sample ID:	Q1669-07DL	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
VL042192.D	10		03/27/25 22:29	VL032725

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

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 (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042192.D
Acq On : 27 Mar 2025 22:29
Operator : SY/MD
Sample : Q1669-07DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:18:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	182834	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	517445	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	472334	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	383930	9.898	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
13) Ethanol	1.722	45	18353	15.359	ppbv #	27
15) Acetone	1.835	43	97895	3.828	ppbv	95
20) Methylene Chloride	2.062	84	2299	0.241	ppbv #	79
34) 2-Butanone	2.564	43	9065	0.242	ppbv	97
50) 4-Methyl-2-Pentanone	5.774	43	10001m	0.168	ppbv	
53) Toluene	6.933	91	34361	0.565	ppbv	100
59) m/p-Xylene	9.532	91	11656m	0.174	ppbv	

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

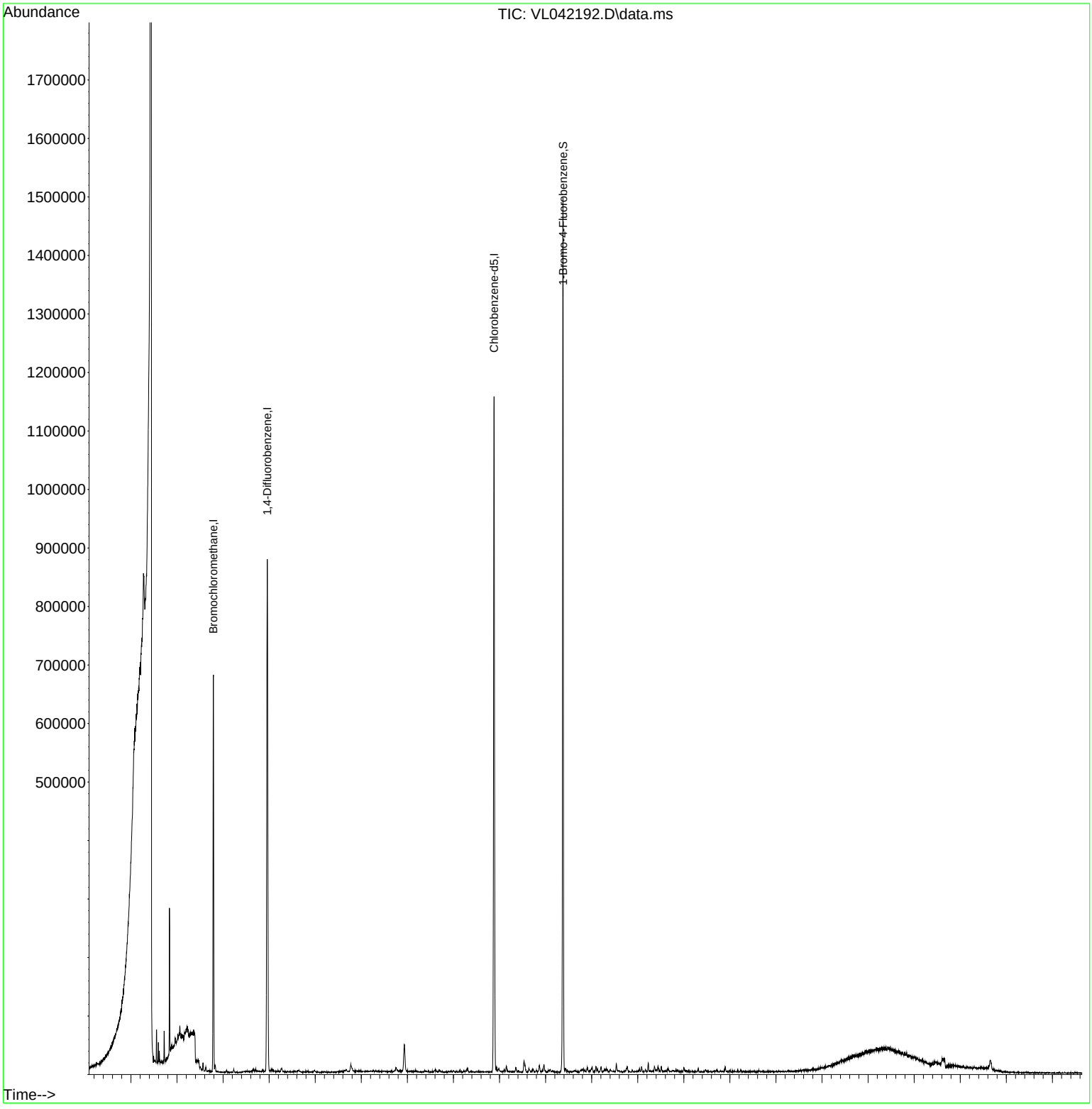
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042192.D
Acq On : 27 Mar 2025 22:29
Operator : SY/MD
Sample : Q1669-07DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

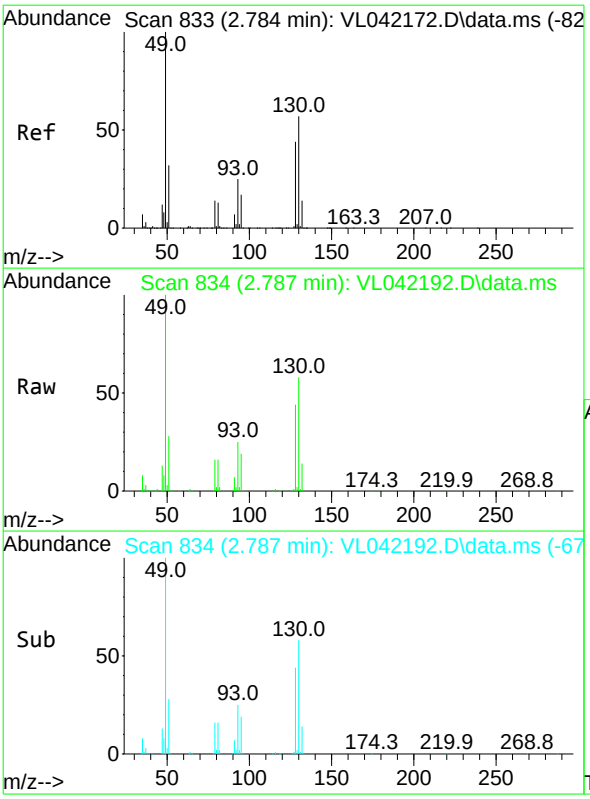
Quant Time: Mar 28 02:18:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

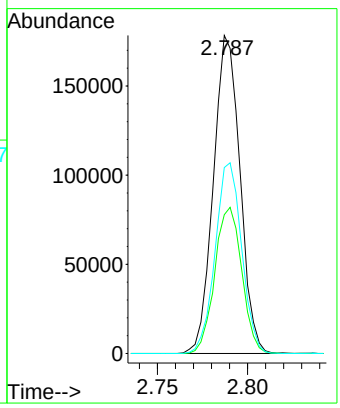




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 49 Resp: 182834

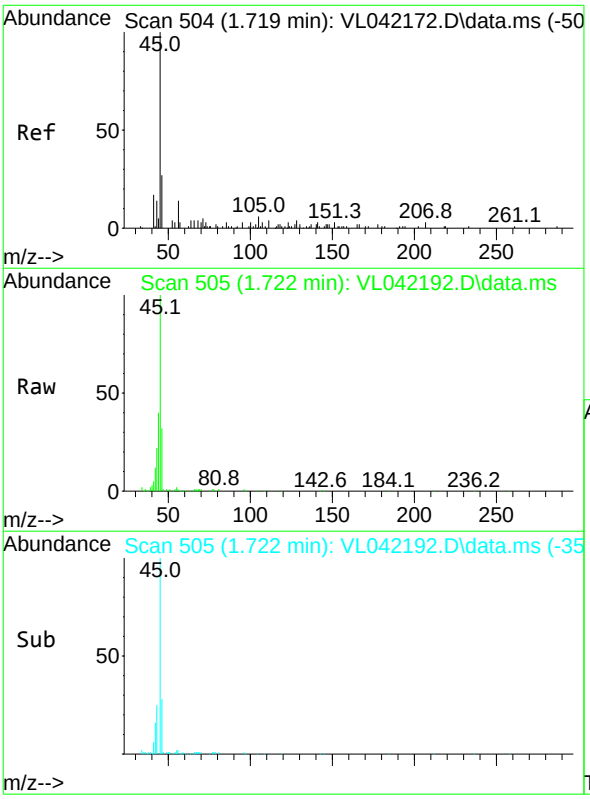
Ion	Ratio	Lower	Upper
49	100		
128	46.7	22.9	68.5
130	59.8	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Manual Integrations
APPROVED

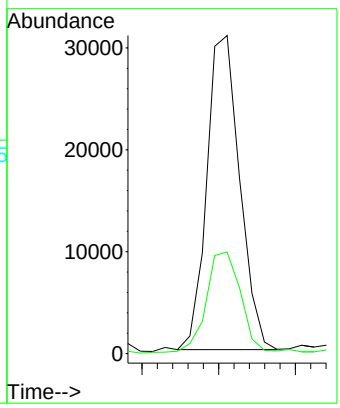
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

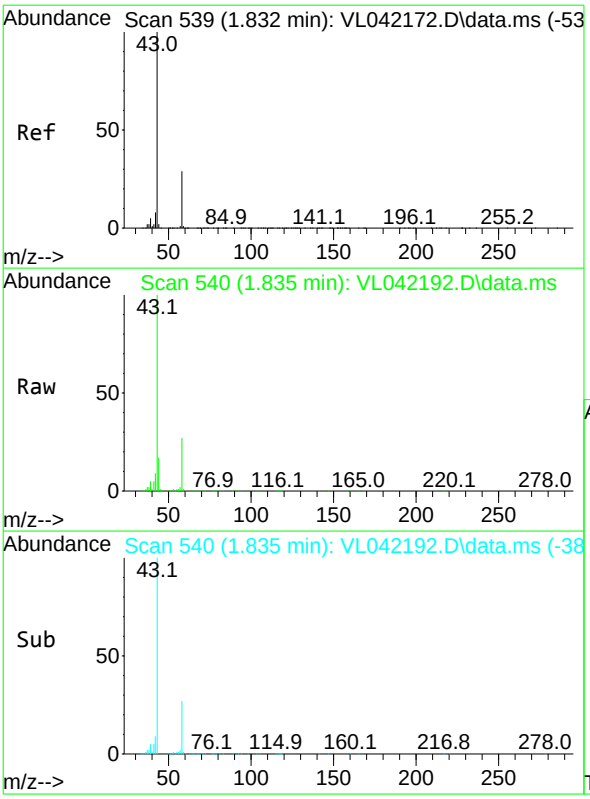


#13
Ethanol
Concen: 15.359 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 45 Resp: 18353

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#

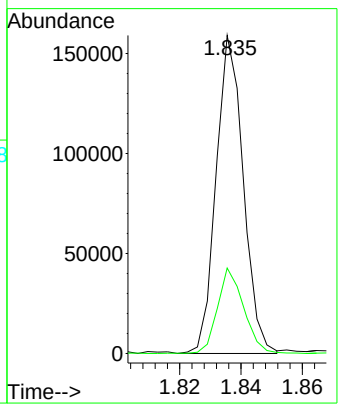




#15
Acetone
Concen: 3.828 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 43 Resp: 97895

Ion	Ratio	Lower	Upper
43	100		
58	26.4	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Manual Integrations
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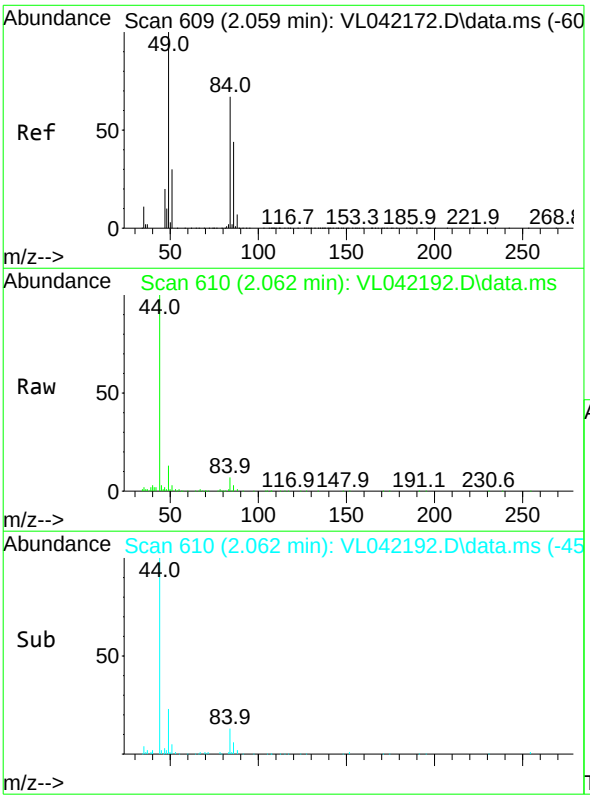
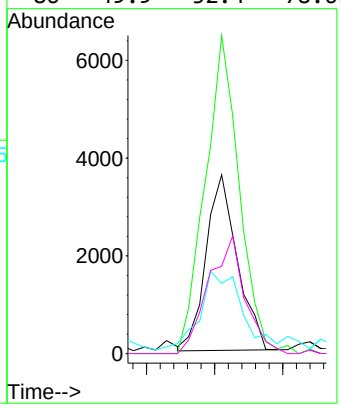
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

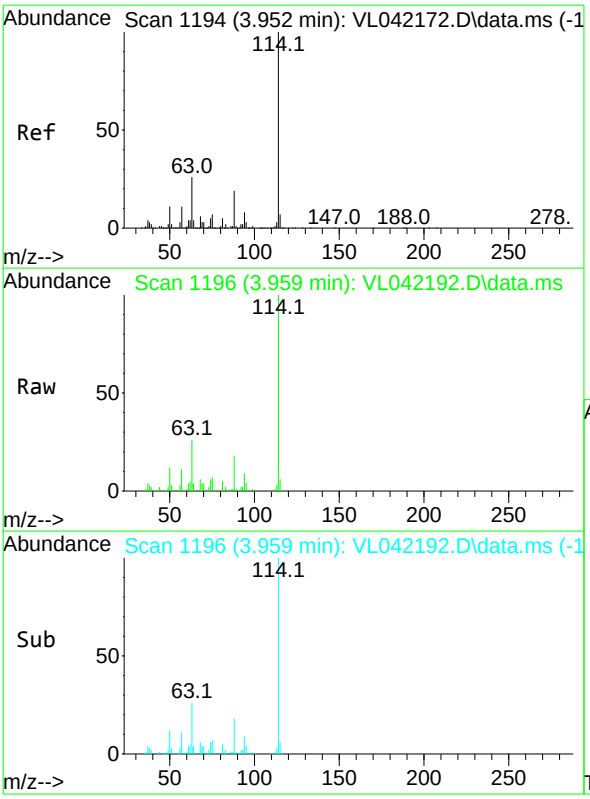


#20
Methylene Chloride
Concen: 0.241 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 84 Resp: 2299

Ion	Ratio	Lower	Upper
84	100		
49	179.1	120.2	180.4
51	34.5	37.4	56.0#
86	49.9	52.4	78.6#





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

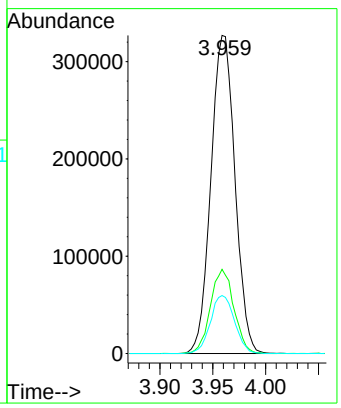
Tgt Ion:114 Resp: 517445

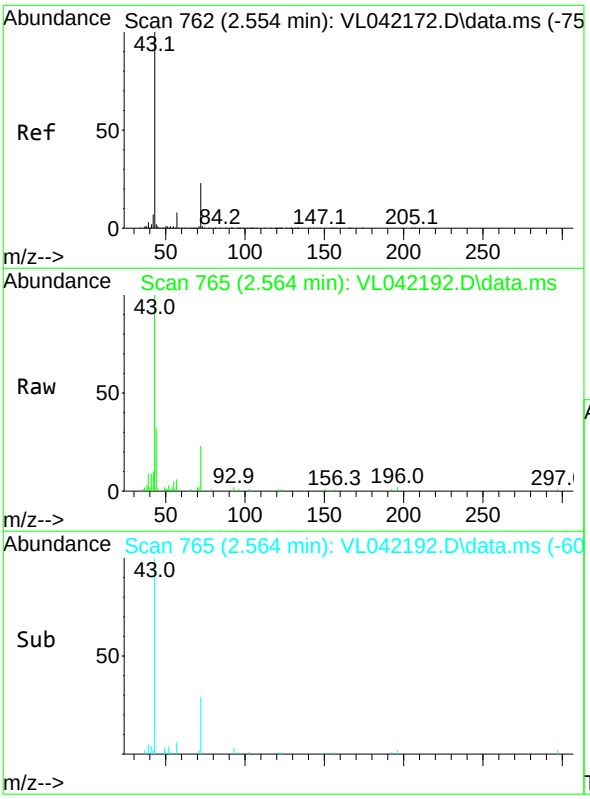
Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.3	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

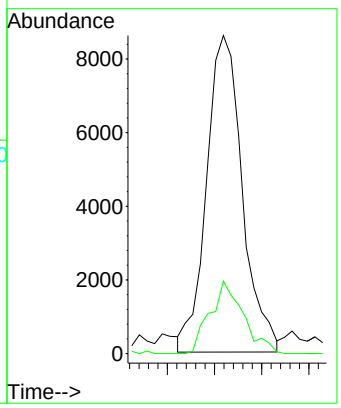


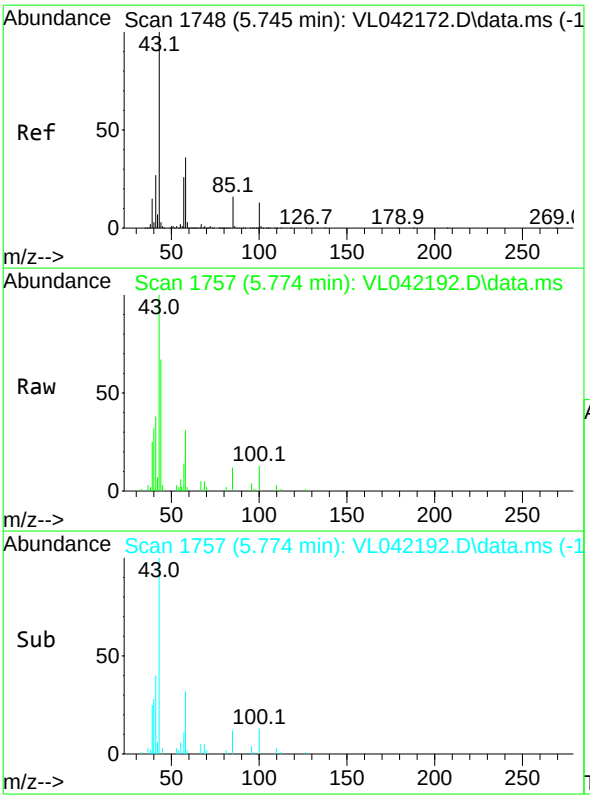


#34
2-Butanone
Concen: 0.242 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 43 Resp: 9065

Ion	Ratio	Lower	Upper
43	100		
72	21.4	18.2	27.2

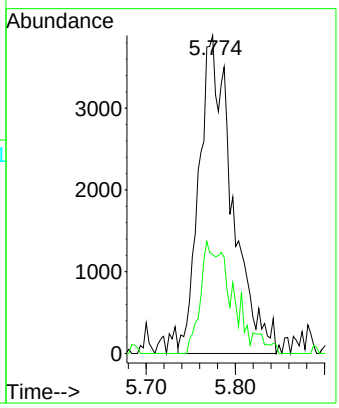




#50
4-Methyl-2-Pentanone
Concen: 0.168 ppbv m
RT: 5.774 min Scan# 17
Delta R.T. 0.029 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 43 Resp: 10001

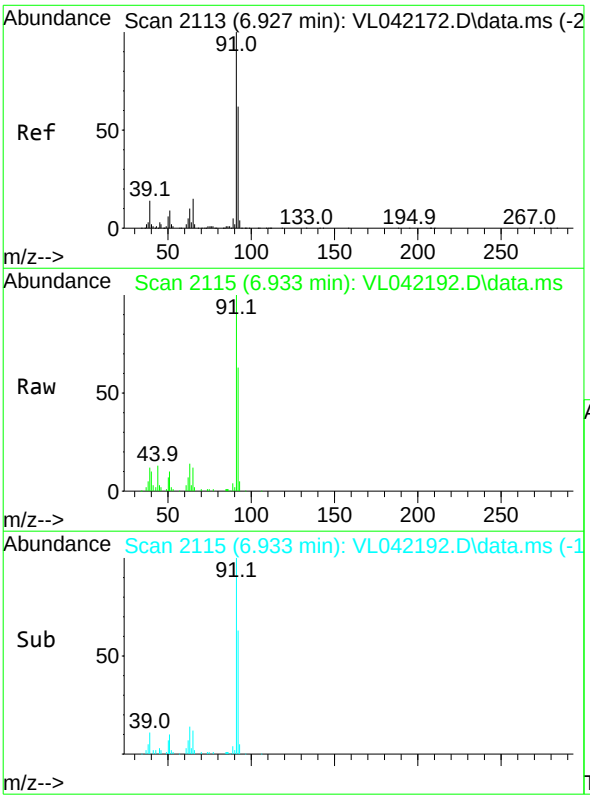
Ion	Ratio	Lower	Upper
43	100		
58	34.6	29.0	43.6



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Manual Integrations
APPROVED

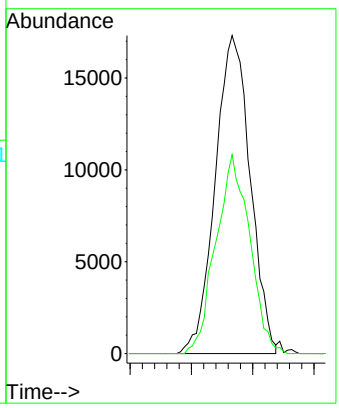
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

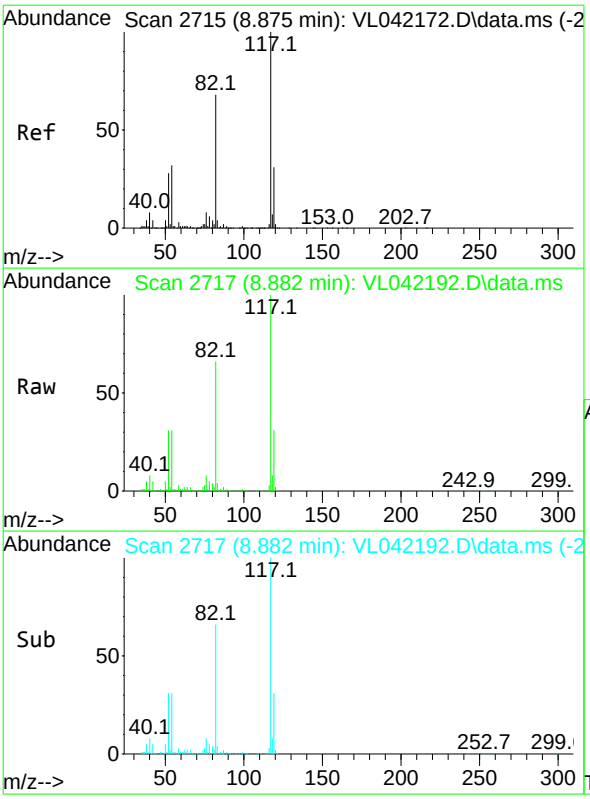


#53
Toluene
Concen: 0.565 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 91 Resp: 34361

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.4	72.6

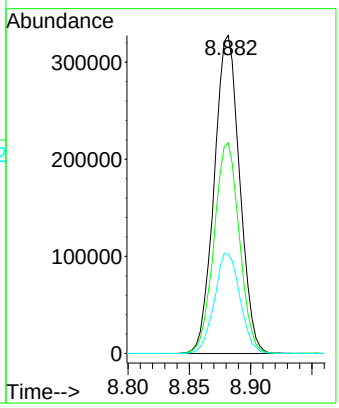




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 27
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion:117 Resp: 472334

Ion	Ratio	Lower	Upper
117	100		
82	65.9	55.8	83.6
119	31.7	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

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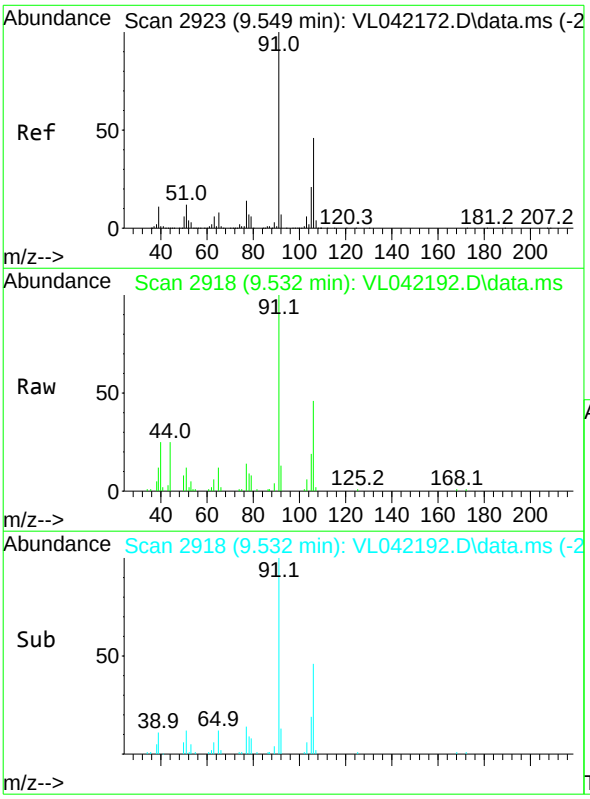
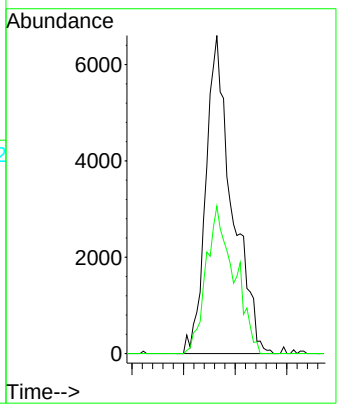
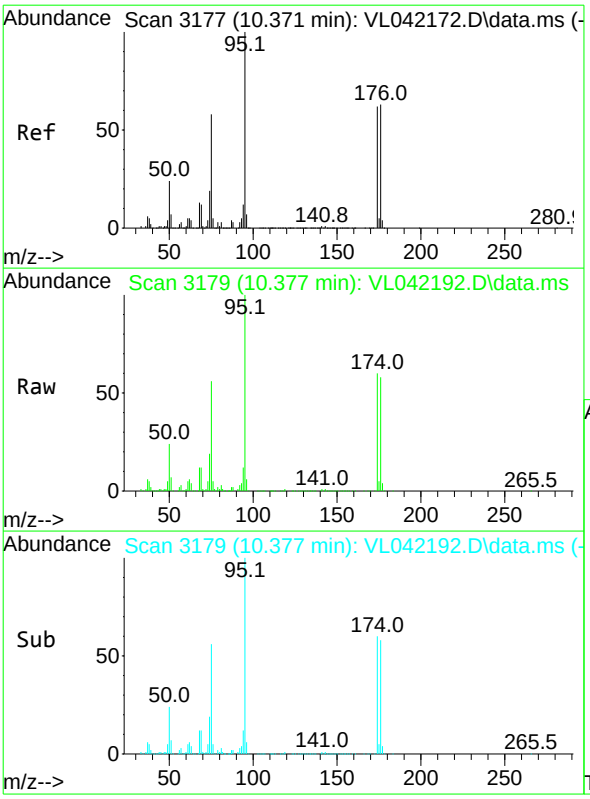


#59
m/p-Xylene
Concen: 0.174 ppbv m
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 91 Resp: 11656

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

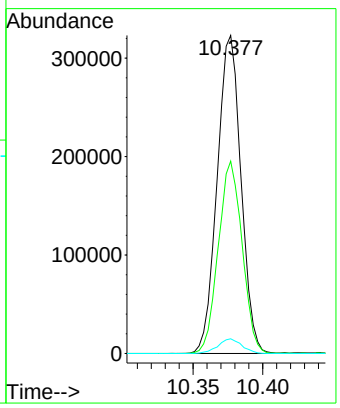




#68
1-Bromo-4-Fluorobenzene
Concen: 9.898 ppbv
RT: 10.377 min Scan# 31
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 95 Resp: 383930

Ion	Ratio	Lower	Upper
95	100		
174	60.5	50.6	76.0
175	4.6	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

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Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-08	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
VL042199.D	1		03/28/25 02:33	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.42	2.08	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.18	1.01	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.14	0.57	J	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	10.8	25.6		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.66	2.29		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.63	1.86		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.040	0.25		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	1.30	6.35		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.24	0.77	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	3.40	13.9		0.37	2.05	ug/m3
108-88-3	Toluene	2.90	10.9		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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Report of Analysis

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Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-08	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
VL042199.D	1		03/28/25 02:33	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.19	1.29		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.10	0.46	J	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.25	1.09	J	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.20	5.21		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.45	1.95	J	0.52	2.17	ug/m3
100-42-5	Styrene	0.37	1.58	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.14	0.69	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.32	1.57	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.13	0.64	J	0.59	2.46	ug/m3
110-54-3	Hexane	0.56	1.97		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.1			70 (65) - 130 (135)	101%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	181000		2.787			
540-36-3	1,4-Difluorobenzene	509000		3.959			
3114-55-4	Chlorobenzene-d5	458000		8.882			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.21		J		1.47	ppbv
115-07-1	Propene	0.16		J		1.48	ppbv
	unknown1.557	1.30		J		1.56	ppbv

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Report of Analysis

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Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	SSSG-B16-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-08	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
VL042199.D	1		03/28/25 02:33	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000626-93-7	2-Hexanol	5.20		J		6.74	ppbv
1000101-47-9	1-Iodo-2-methylnonane	1.20		J		12.2	ppbv
001120-21-4	Undecane	1.30		J		12.4	ppbv

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 (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 23:04:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

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Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	181183	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	509062	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	458107	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	379865	10.097	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	11194	0.418	ppbv	99
3) Chlorodifluoromethane	1.473	51	5843m	0.214	ppbv	
9) Propene	1.483	41	1960m	0.156	ppbv	
10) Heptane	4.982	43	4590m	0.138	ppbv	
11) Trichlorofluoromethane	1.878	101	4706	0.181	ppbv	94
13) Ethanol	1.722	45	8952	7.560	ppbv #	27
15) Acetone	1.836	43	272395	10.750	ppbv	94
17) tert-Butyl alcohol	2.046	59	5649	0.179	ppbv #	71
20) Methylene Chloride	2.062	84	6239	0.661	ppbv	92
26) Hexane	2.826	57	14117	0.556	ppbv #	40
29) Chloroform	2.849	83	47910	1.289	ppbv	97
30) Cyclohexane	3.858	84	2653m	0.120	ppbv	
34) 2-Butanone	2.564	43	23343	0.632	ppbv	95
35) Carbon Tetrachloride	3.771	117	1682m	0.042	ppbv	
36) Benzene	3.658	78	11929	0.236	ppbv	98
50) 4-Methyl-2-Pentanone	5.762	43	196564	3.360	ppbv	97
52) Tetrachloroethene	8.225	164	3844	0.192	ppbv	85
53) Toluene	6.933	91	171948	2.874	ppbv	100
57) Chlorobenzene	8.917	112	4154m	0.096	ppbv	
58) Ethyl Benzene	9.354	91	20640	0.254	ppbv	90
59) m/p-Xylene	9.532	91	79433m	1.222	ppbv	
60) o-Xylene	9.966	91	29151	0.448	ppbv	100
61) Styrene	9.875	104	11979	0.372	ppbv	96
72) 4-Ethyltoluene	11.125	105	10586	0.131	ppbv #	89
73) 1,3,5-Trimethylbenzene	11.206	105	9797	0.138	ppbv	95
74) 1,2,4-Trimethylbenzene	11.536	105	25878	0.317	ppbv #	69

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 23:04:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

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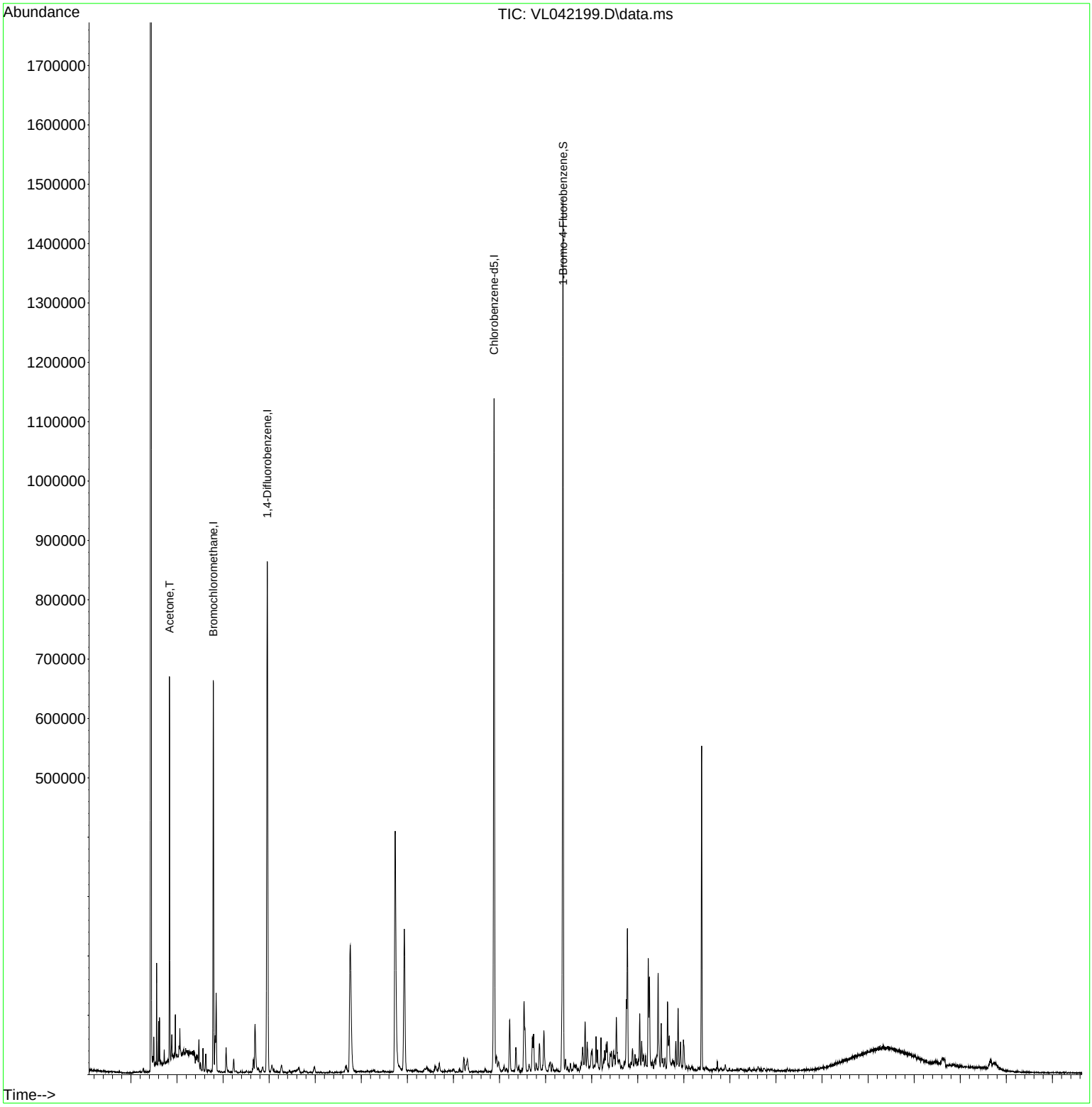
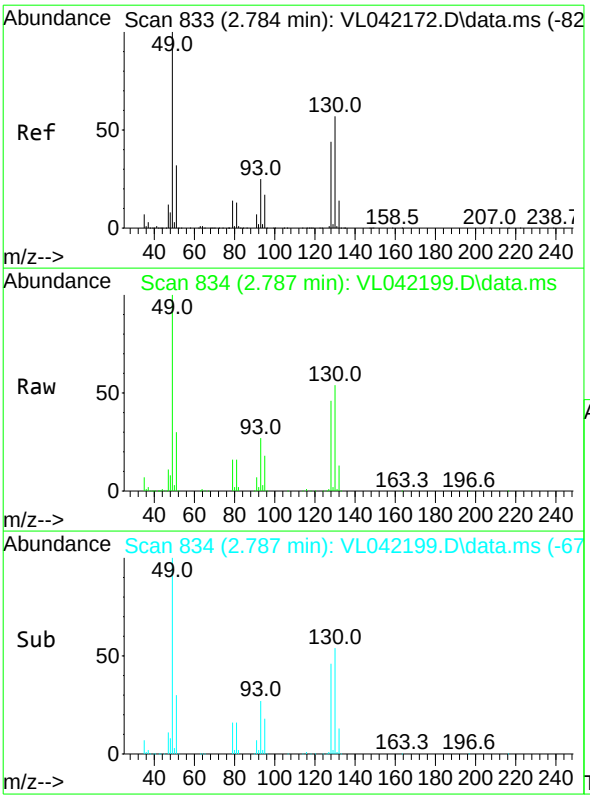
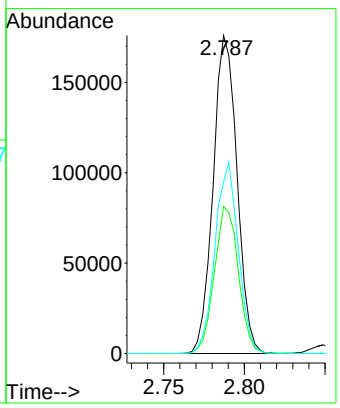




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 49 Resp: 181183

Ion	Ratio	Lower	Upper
49	100		
128	46.5	22.9	68.5
130	58.6	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

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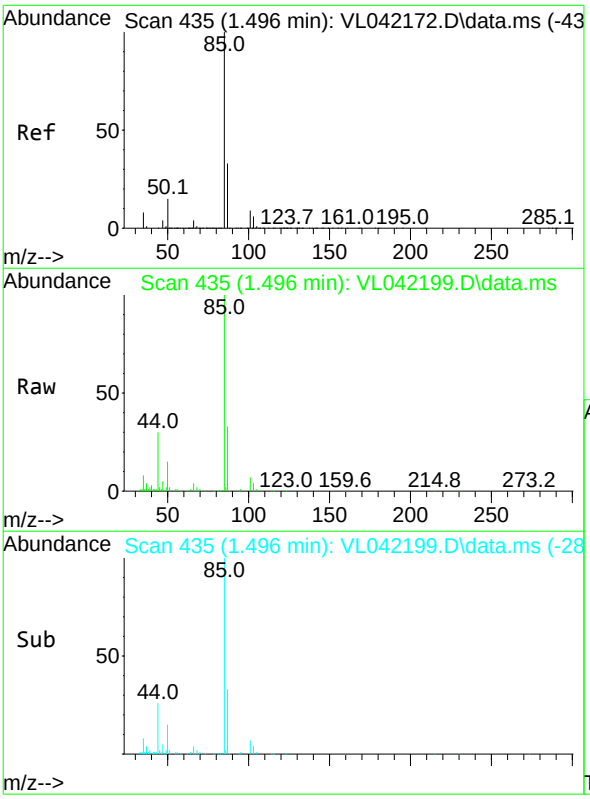
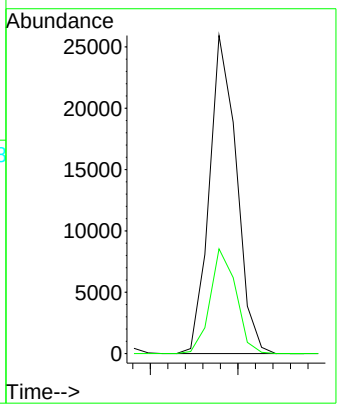
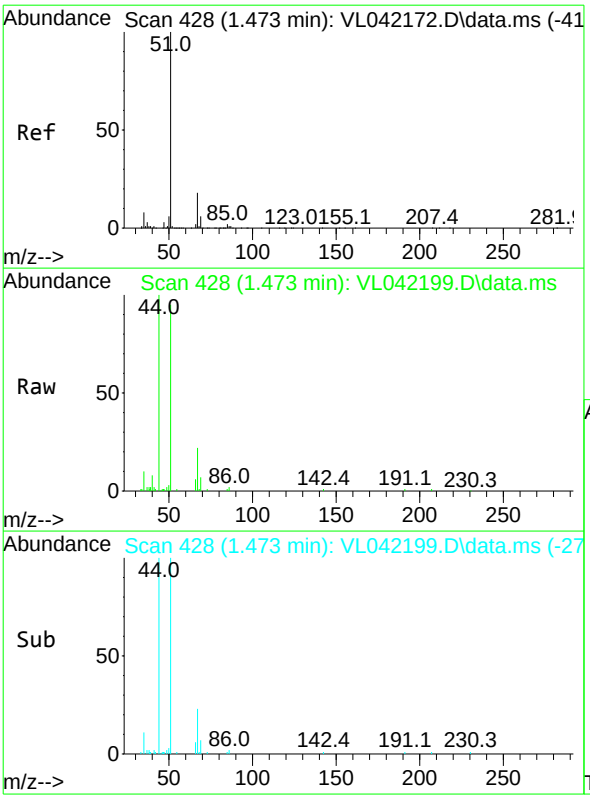


#2
Dichlorodifluoromethane
Concen: 0.418 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 85 Resp: 11194

Ion	Ratio	Lower	Upper
85	100		
87	32.9	26.1	39.1





#3
Chlorodifluoromethane
Concen: 0.214 ppbv m
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 51 Resp: 5843

Ion	Ratio	Lower	Upper
51	100		
67	28.7	15.0	22.6#

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

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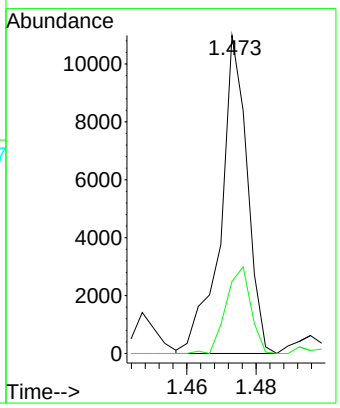
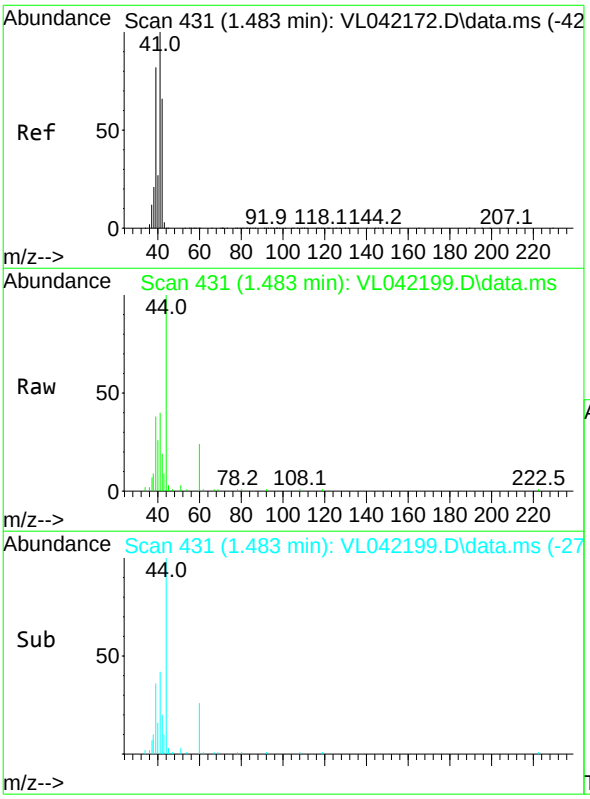
Supervised By :Mahesh Dadoda 04/03/2025

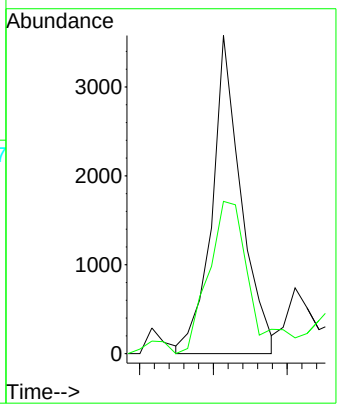


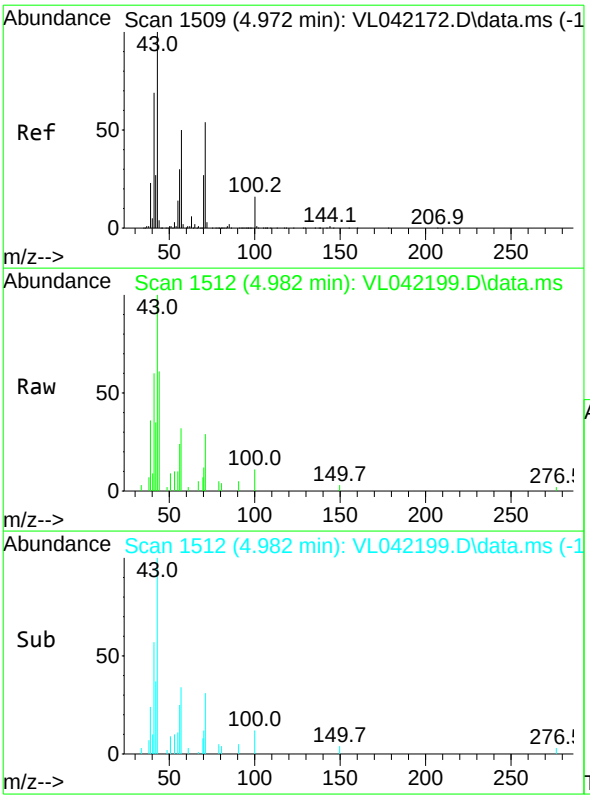


#9
Propene
Concen: 0.156 ppbv m
RT: 1.483 min Scan# 431
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 41 Resp: 1960

Ion	Ratio	Lower	Upper
41	100		
42	253.7	55.4	83.2#

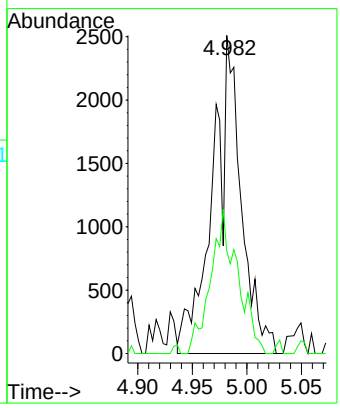




#10
Heptane
Concen: 0.138 ppbv m
RT: 4.982 min Scan# 15
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 43 Resp: 4590

Ion	Ratio	Lower	Upper
43	100		
57	43.5	39.4	59.2



Instrument :
MSVOA_L
ClientSampleId :
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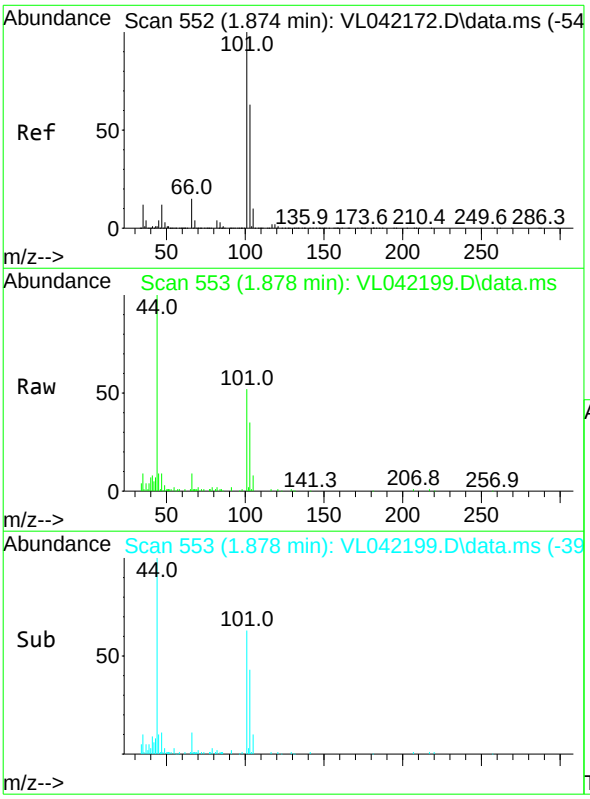
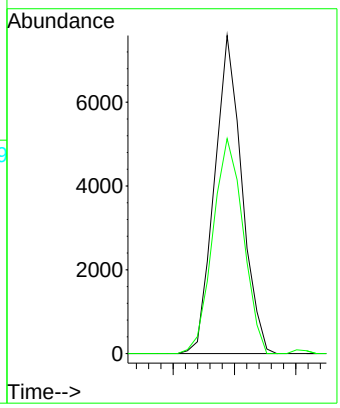
Supervised By :Mahesh Dadoda 04/03/2025

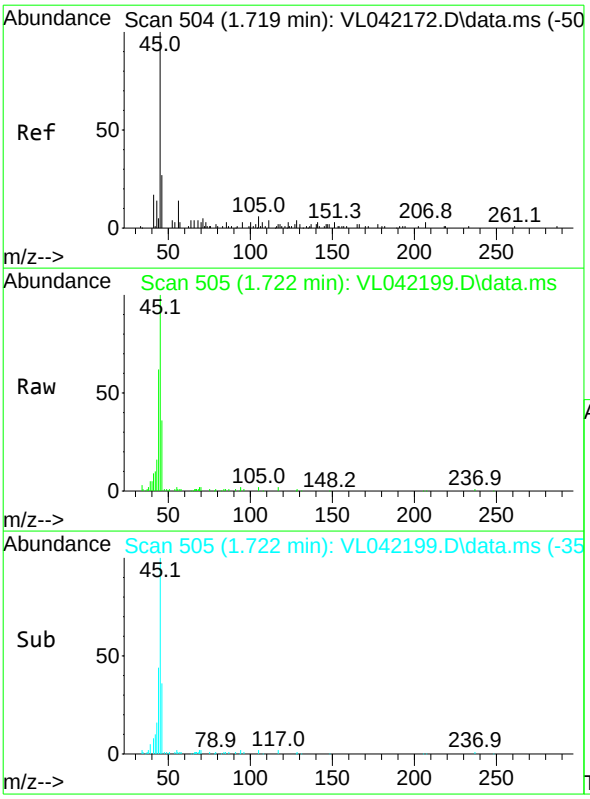


#11
Trichlorofluoromethane
Concen: 0.181 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:101 Resp: 4706

Ion	Ratio	Lower	Upper
101	100		
103	67.6	50.2	75.2

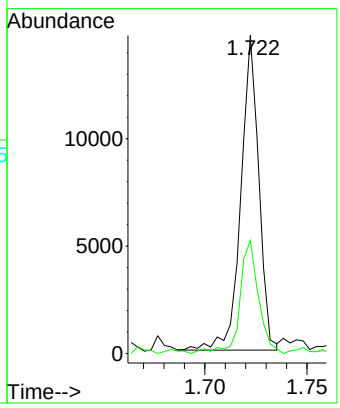




#13
Ethanol
Concen: 7.560 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 45 Resp: 8952

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#



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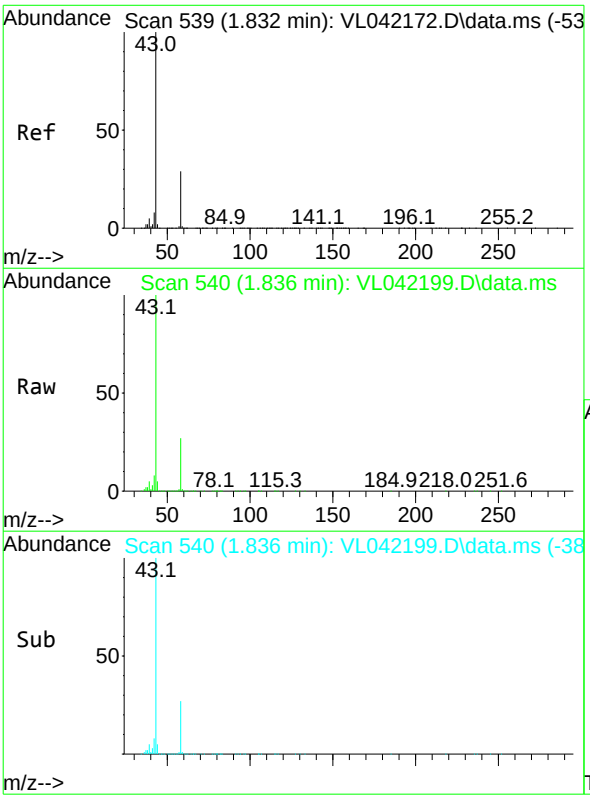
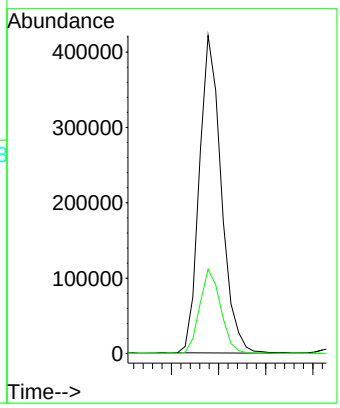
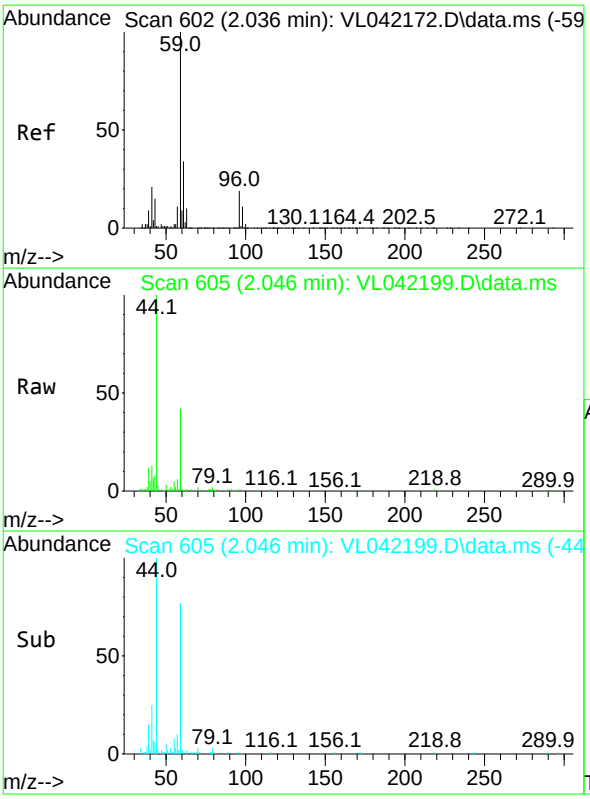


#15
Acetone
Concen: 10.750 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 43 Resp: 272395

Ion	Ratio	Lower	Upper
43	100		
58	25.7	23.2	34.8

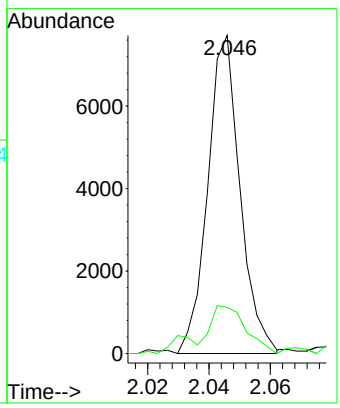




#17
tert-Butyl alcohol
Concen: 0.179 ppbv
RT: 2.046 min Scan# 60
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 59 Resp: 5649

Ion	Ratio	Lower	Upper
59	100		
57	22.0	8.9	13.3#



Instrument :
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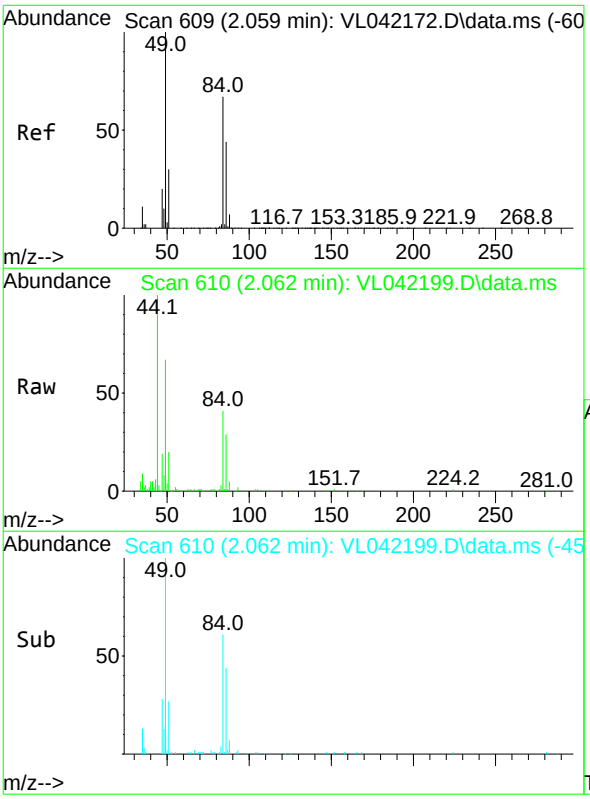
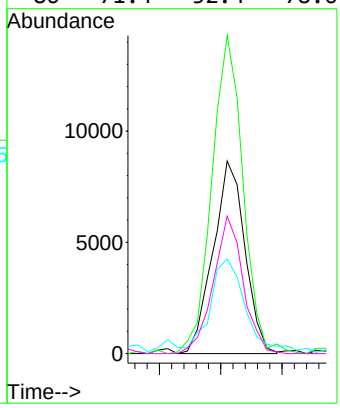
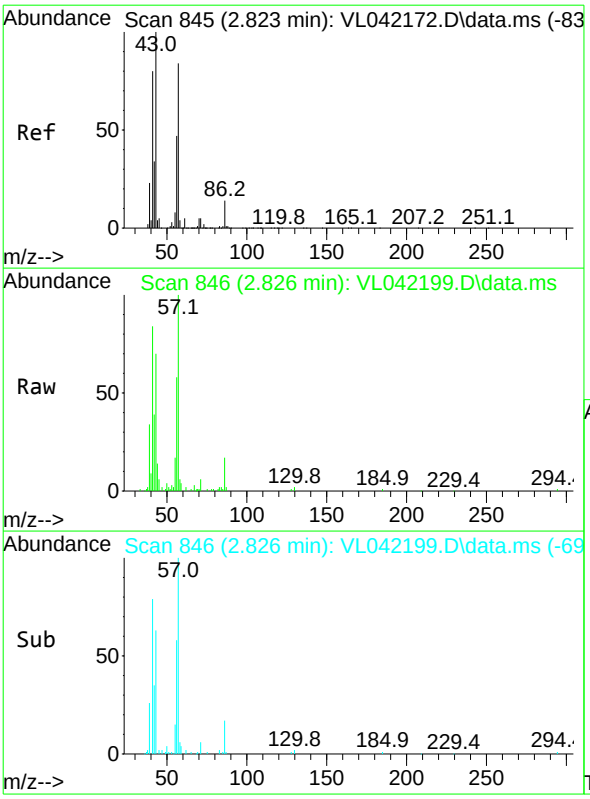


#20
Methylene Chloride
Concen: 0.661 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 84 Resp: 6239

Ion	Ratio	Lower	Upper
84	100		
49	164.3	120.2	180.4
51	46.0	37.4	56.0
86	71.4	52.4	78.6

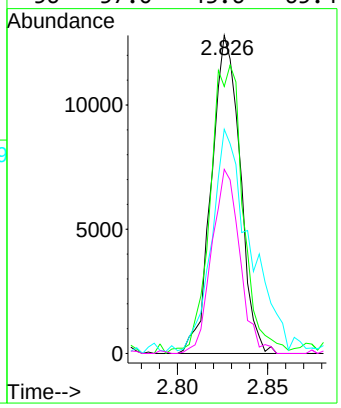




#26
Hexane
Concen: 0.556 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 57 Resp: 14117

Ion	Ratio	Lower	Upper
57	100		
41	107.0	76.6	114.8
43	100.8	207.8	311.8#
56	57.0	43.6	65.4



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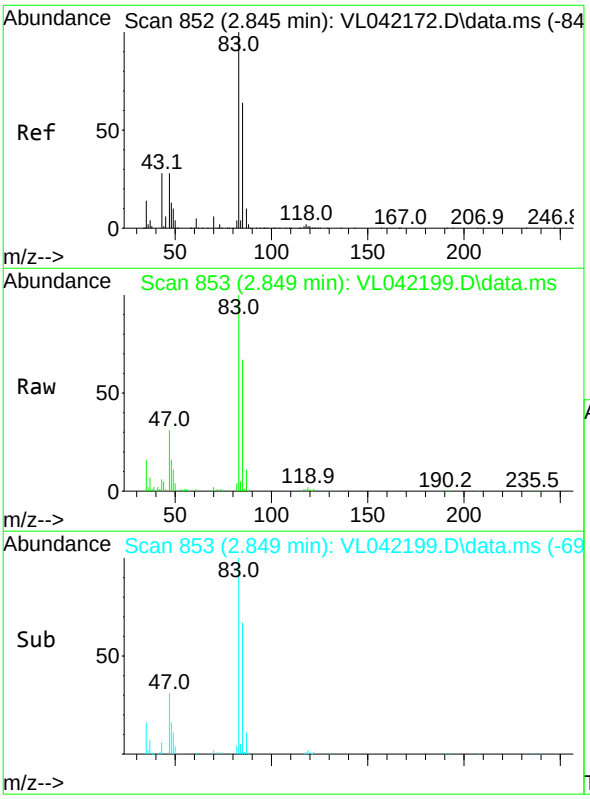
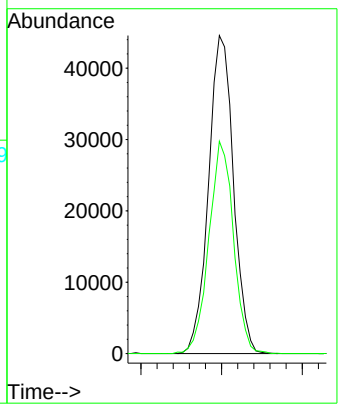
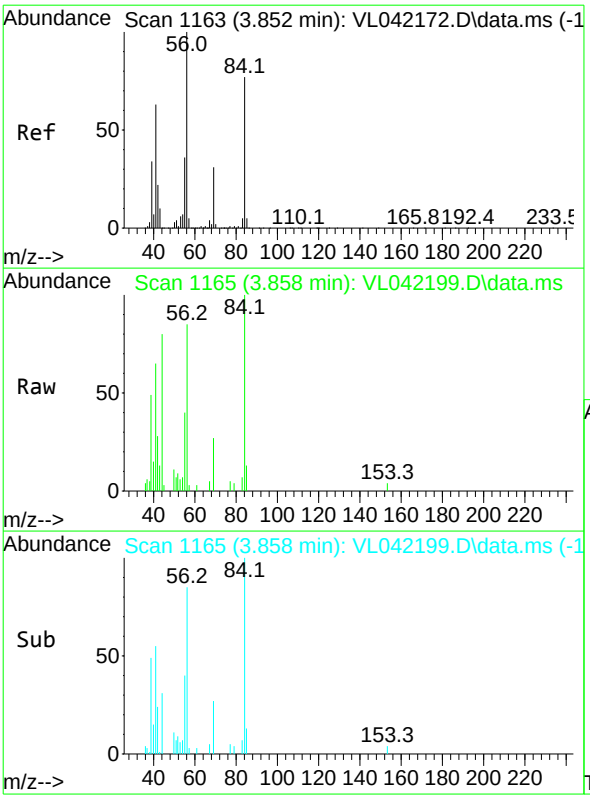


#29
Chloroform
Concen: 1.289 ppbv
RT: 2.849 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 83 Resp: 47910

Ion	Ratio	Lower	Upper
83	100		
85	66.6	51.4	77.2





#30
Cyclohexane
Concen: 0.120 ppbv m
RT: 3.858 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 84 Resp: 2653

Ion	Ratio	Lower	Upper
84	100		
56	0.0	102.8	154.2#
41	0.0	66.5	99.7#

Instrument :
MSVOA_L
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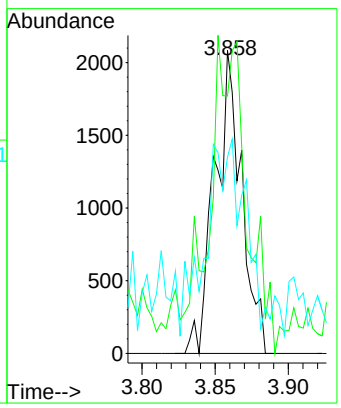
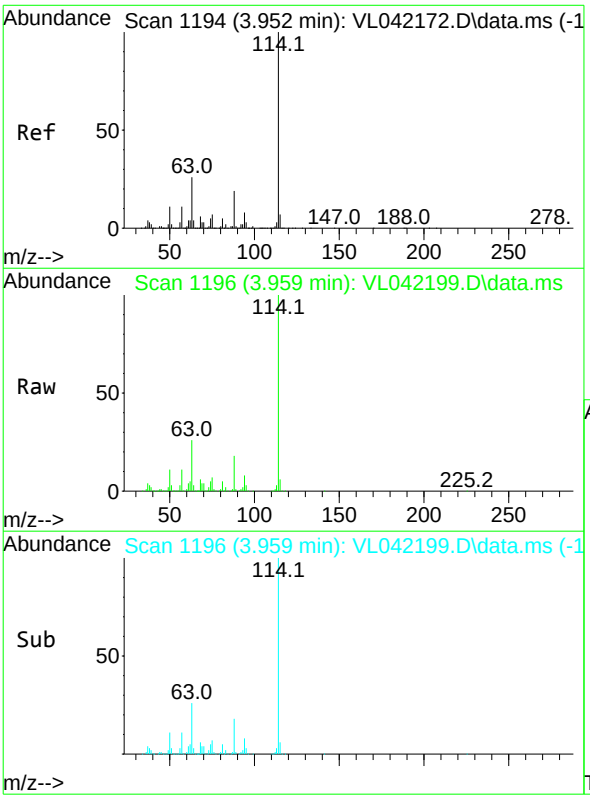
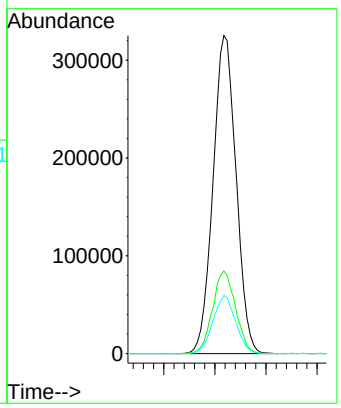


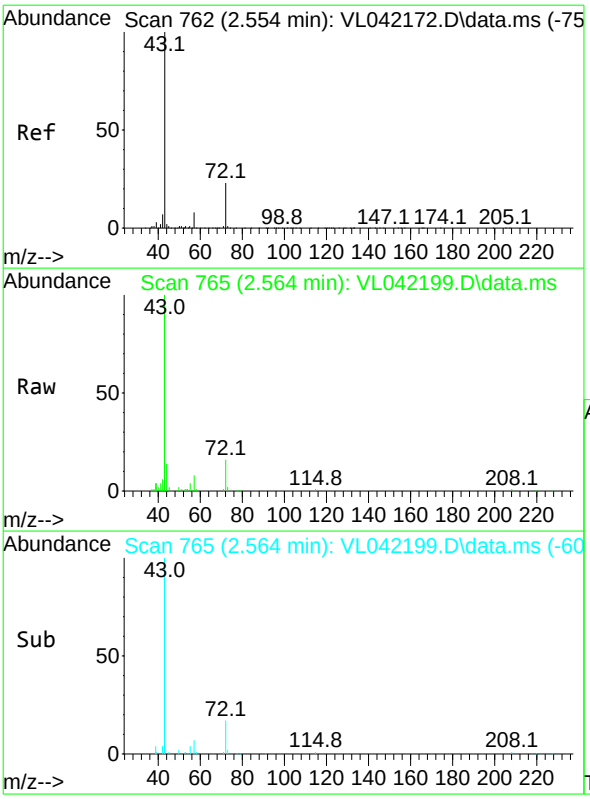


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:114 Resp: 509062

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.0	15.0	22.4





#34
2-Butanone
Concen: 0.632 ppbv
RT: 2.564 min Scan# 76
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 43 Resp: 23343

Ion	Ratio	Lower	Upper
43	100		
72	20.2	18.2	27.2

Instrument :
MSVOA_L
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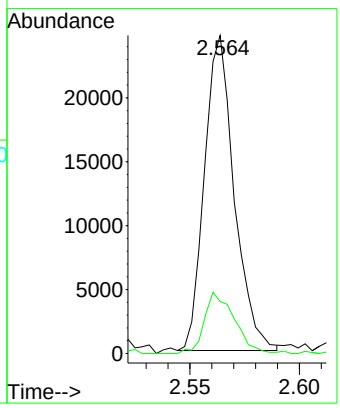
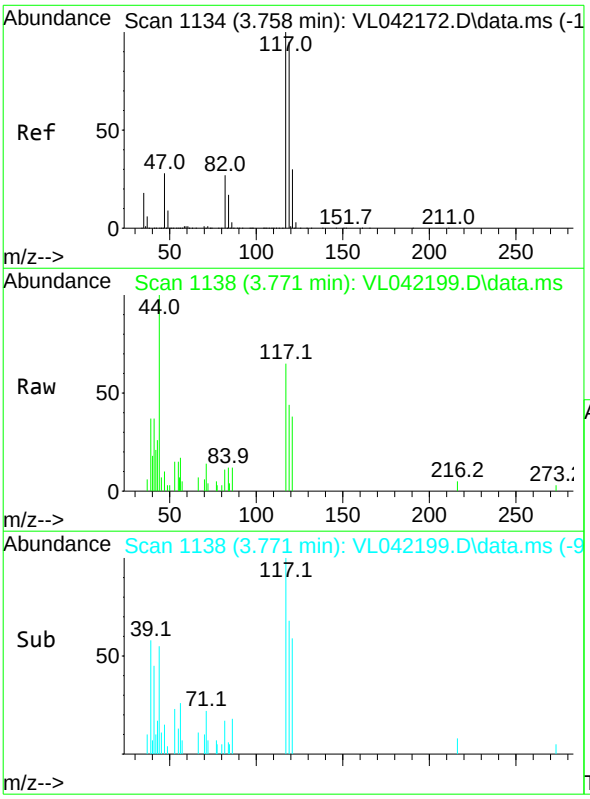
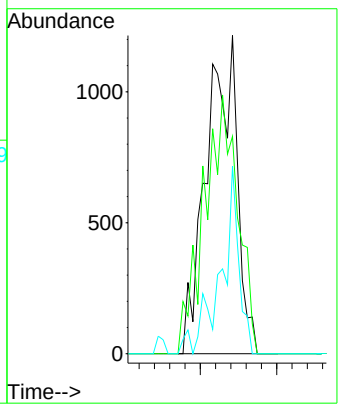


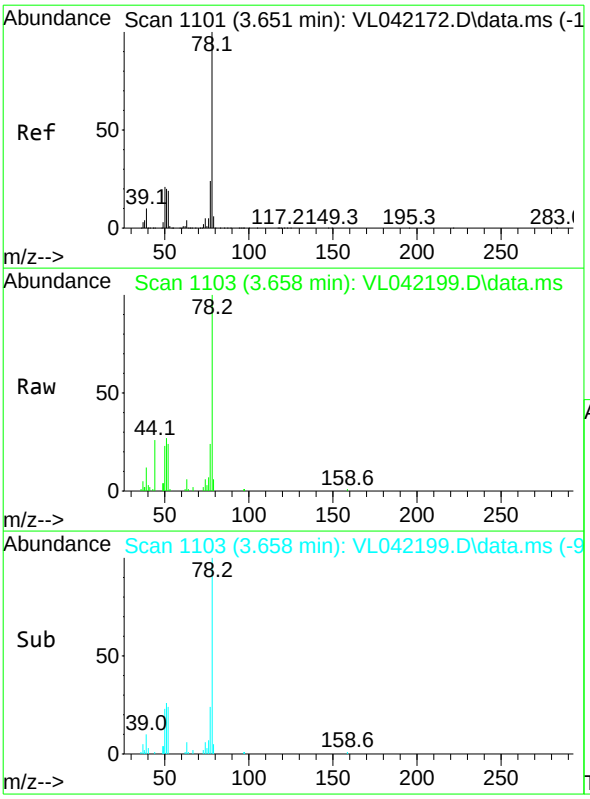


#35
Carbon Tetrachloride
Concen: 0.042 ppbv m
RT: 3.771 min Scan# 1138
Delta R.T. 0.013 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:117 Resp: 1682

Ion	Ratio	Lower	Upper
117	100		
119	68.3	76.2	114.2#
121	58.9	24.2	36.4#

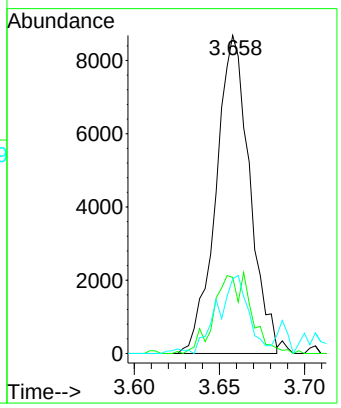




#36
Benzene
Concen: 0.236 ppbv
RT: 3.658 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 78 Resp: 11929

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.1	28.7
50	22.0	16.6	24.8



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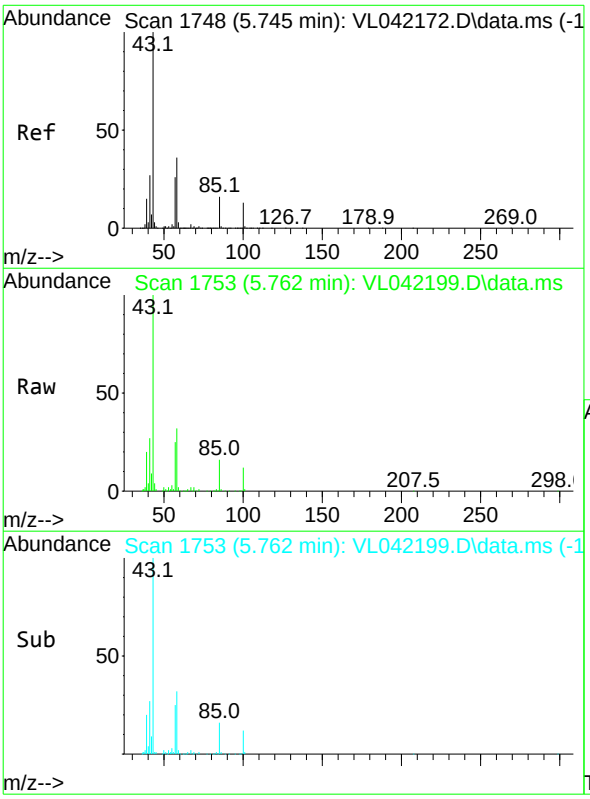
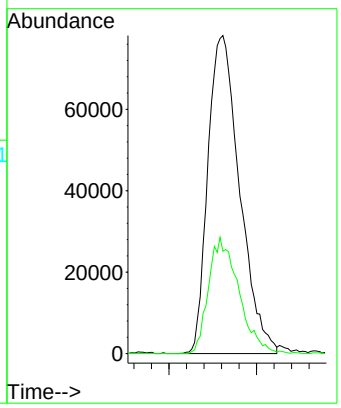
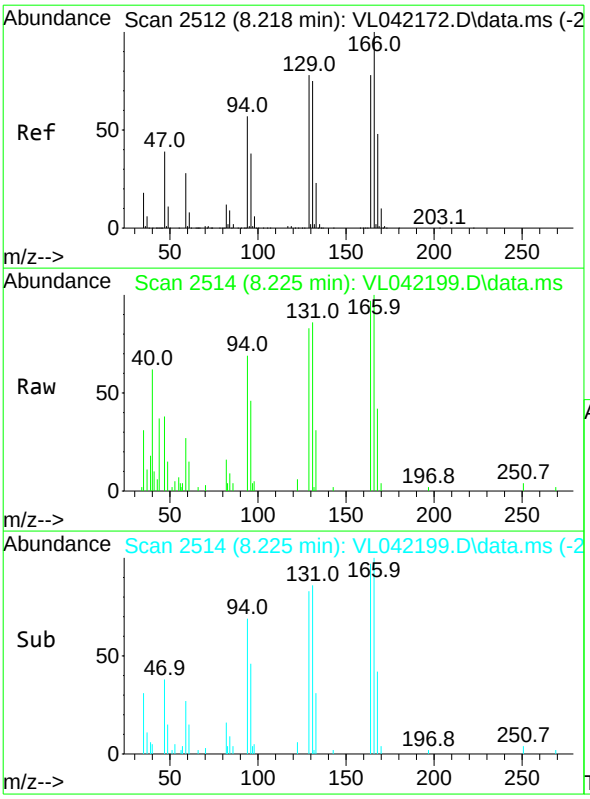


#50
4-Methyl-2-Pentanone
Concen: 3.360 ppbv
RT: 5.762 min Scan# 1753
Delta R.T. 0.016 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 43 Resp: 196564

Ion	Ratio	Lower	Upper
43	100		
58	34.8	29.0	43.6

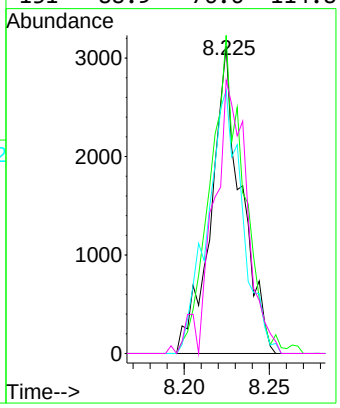




#52
Tetrachloroethene
Concen: 0.192 ppbv
RT: 8.225 min Scan# 25
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:164 Resp: 3844

Ion	Ratio	Lower	Upper
164	100		
166	103.6	102.5	153.7
129	85.8	79.8	119.8
131	88.9	76.6	114.8



Instrument :
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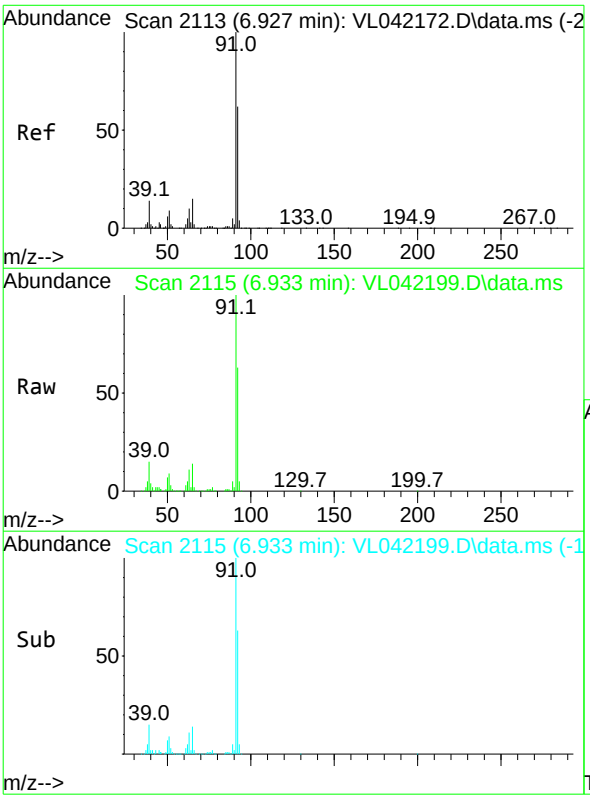
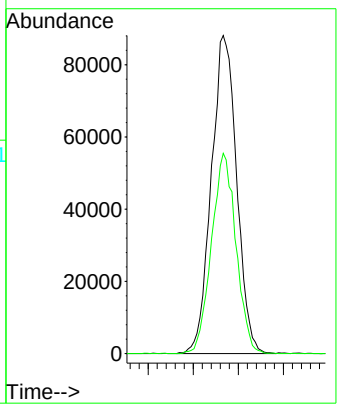
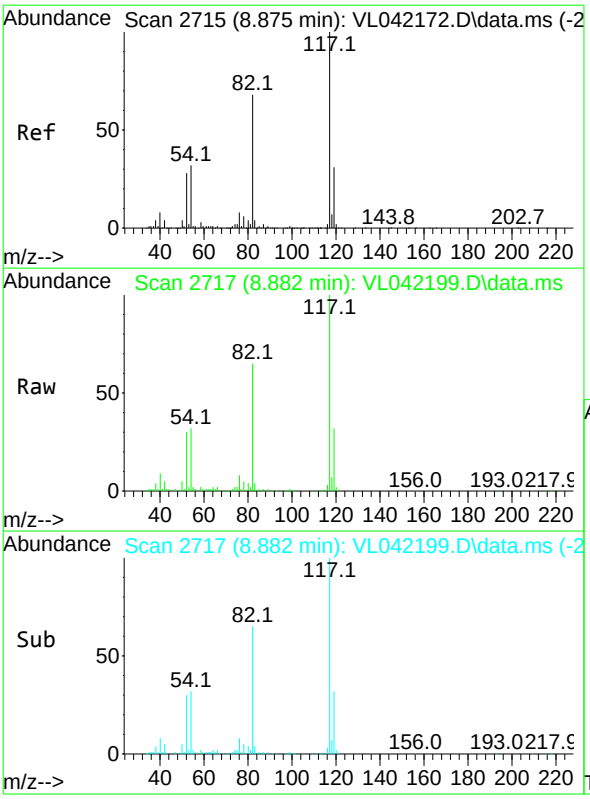


#53
Toluene
Concen: 2.874 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 91 Resp: 171948

Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.4	72.6

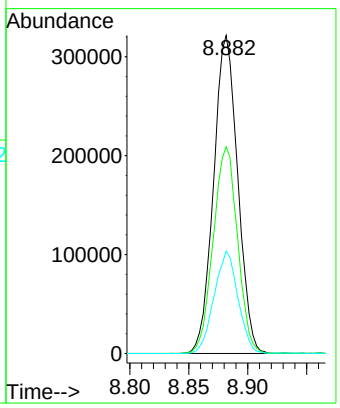




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 27
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:117 Resp: 458107

Ion	Ratio	Lower	Upper
117	100		
82	65.5	55.8	83.6
119	32.0	25.5	38.3



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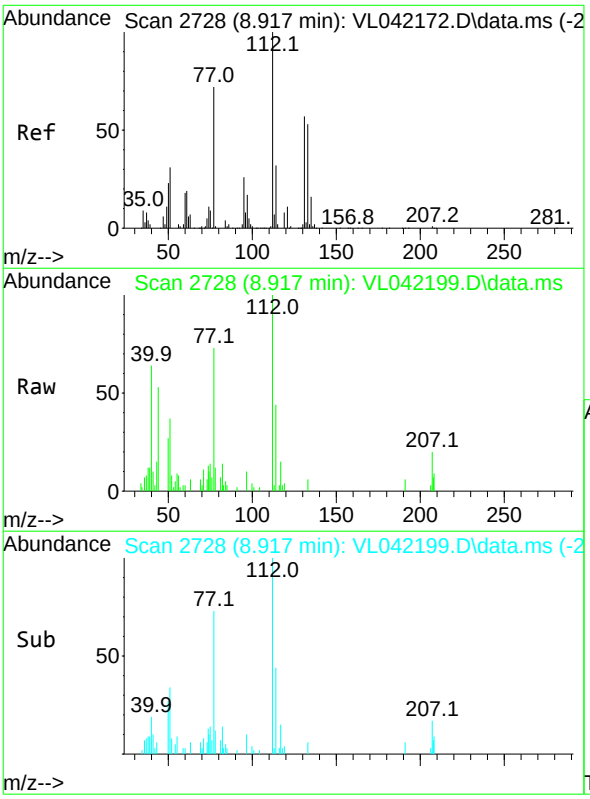
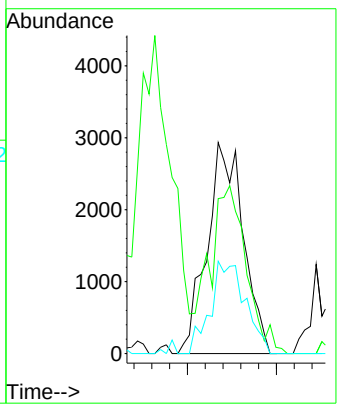
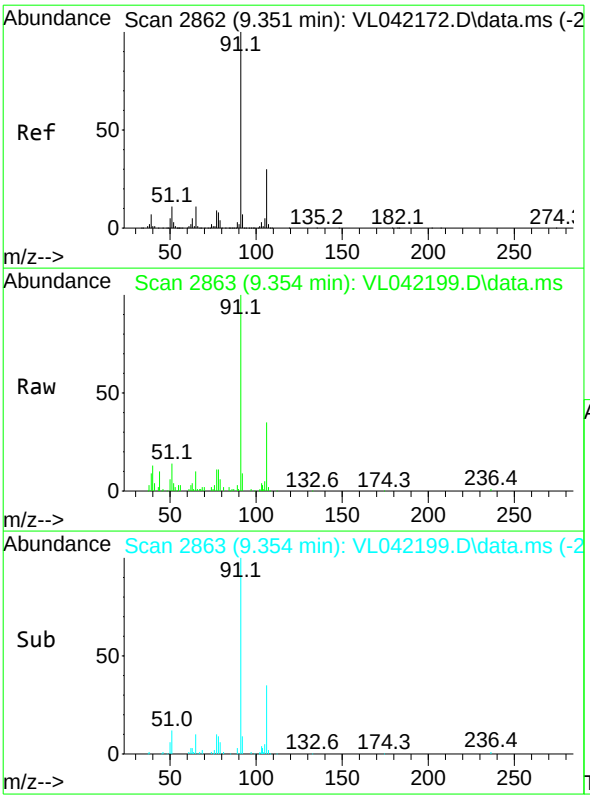


#57
Chlorobenzene
Concen: 0.096 ppbv m
RT: 8.917 min Scan# 2728
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:112 Resp: 4154

Ion	Ratio	Lower	Upper
112	100		
77	73.4	58.2	87.2
114	43.8	29.1	35.5#

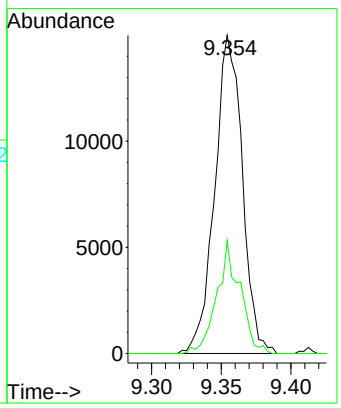




#58
Ethyl Benzene
Concen: 0.254 ppbv
RT: 9.354 min Scan# 28
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 91 Resp: 20640

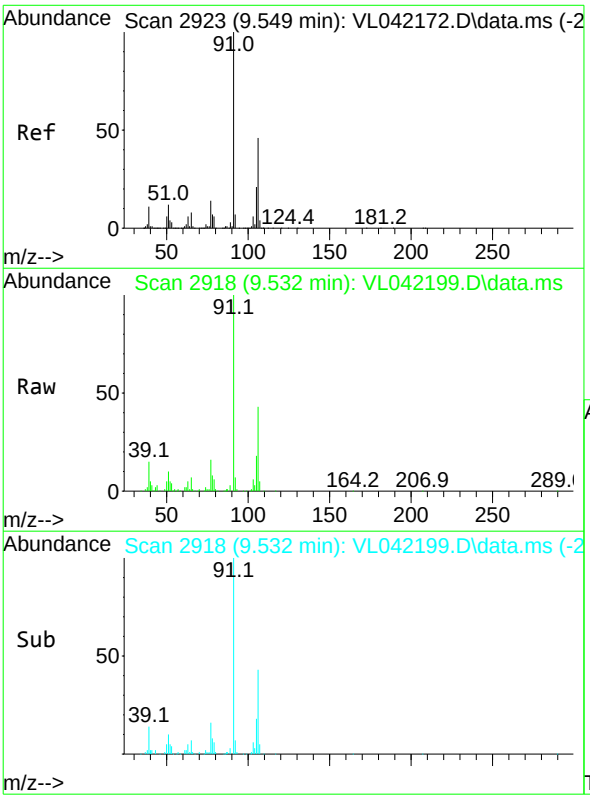
Ion	Ratio	Lower	Upper
91	100		
106	35.4	24.2	36.2



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Manual Integrations
APPROVED

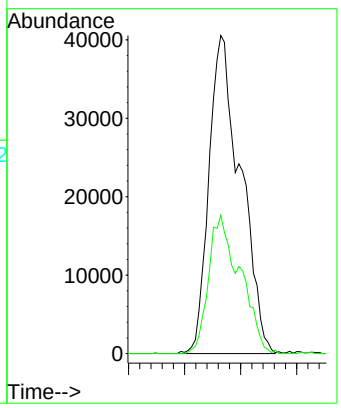
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

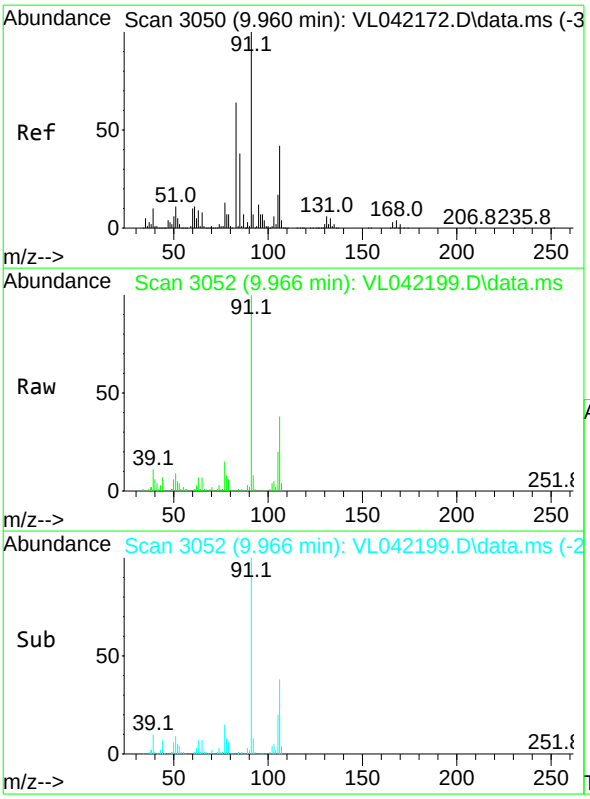


#59
m/p-Xylene
Concen: 1.222 ppbv m
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 91 Resp: 79433

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

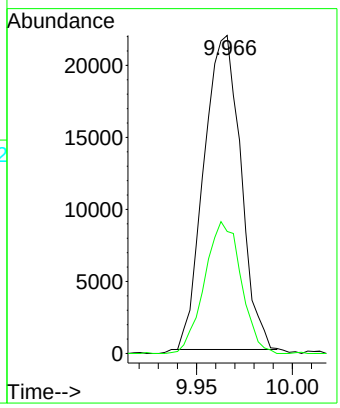




#60
o-Xylene
Concen: 0.448 ppbv
RT: 9.966 min Scan# 30
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 91 Resp: 29151

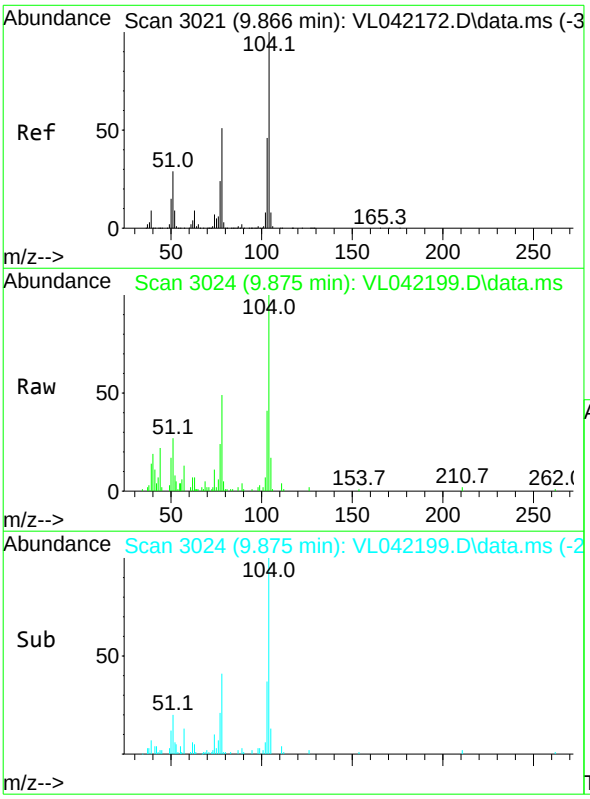
Ion	Ratio	Lower	Upper
91	100		
106	41.7	20.8	62.5



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Manual Integrations
APPROVED

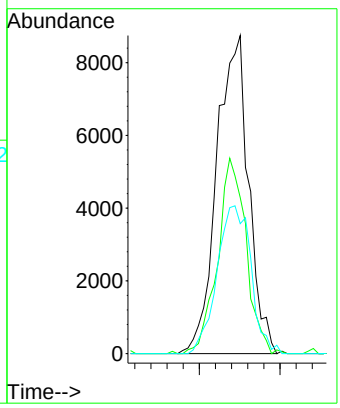
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

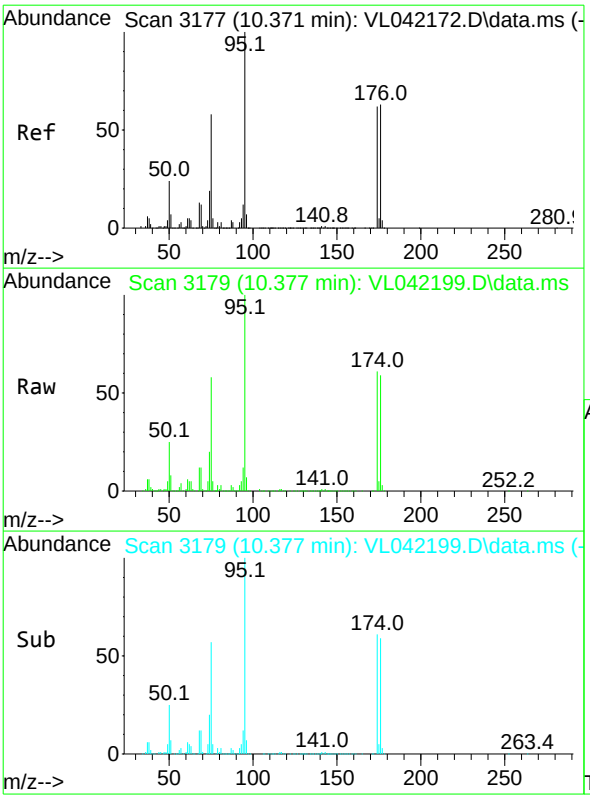


#61
Styrene
Concen: 0.372 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:104 Resp: 11979

Ion	Ratio	Lower	Upper
104	100		
78	55.0	41.8	62.6
103	49.5	37.0	55.4

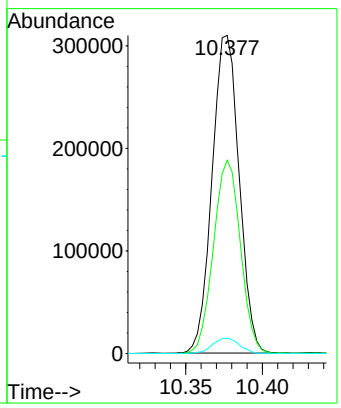




#68
1-Bromo-4-Fluorobenzene
Concen: 10.097 ppbv
RT: 10.377 min Scan# 31
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 95 Resp: 379865

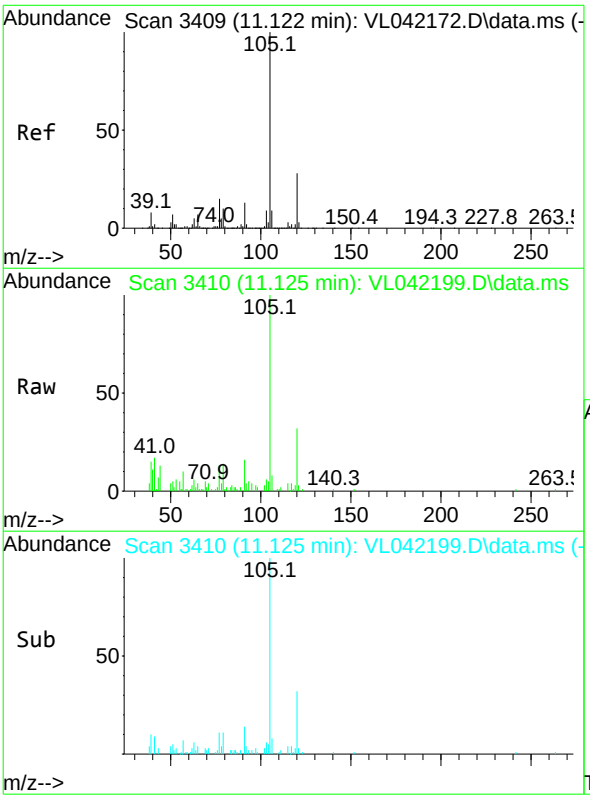
Ion	Ratio	Lower	Upper
95	100		
174	60.7	50.6	76.0
175	4.8	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Manual Integrations
APPROVED

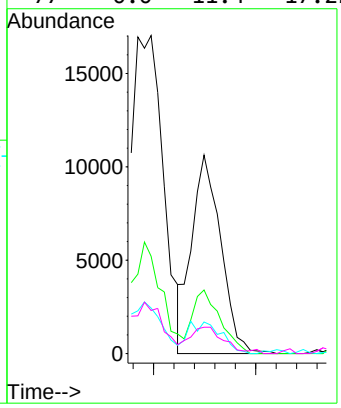
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

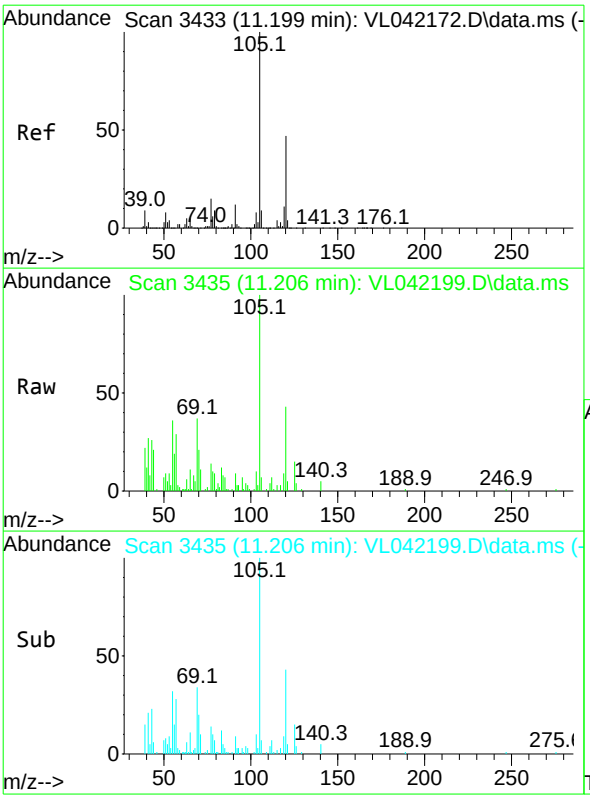


#72
4-Ethyltoluene
Concen: 0.131 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:105 Resp: 10586

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.4	35.0
91	14.4	10.3	15.5
77	0.0	11.4	17.2#

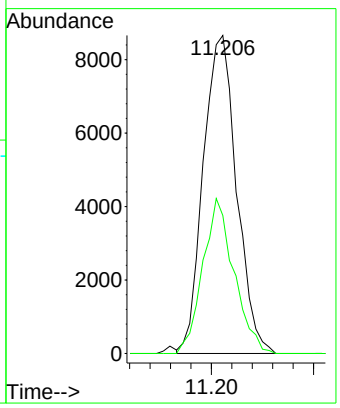




#73
1,3,5-Trimethylbenzene
Concen: 0.138 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:105 Resp: 9797

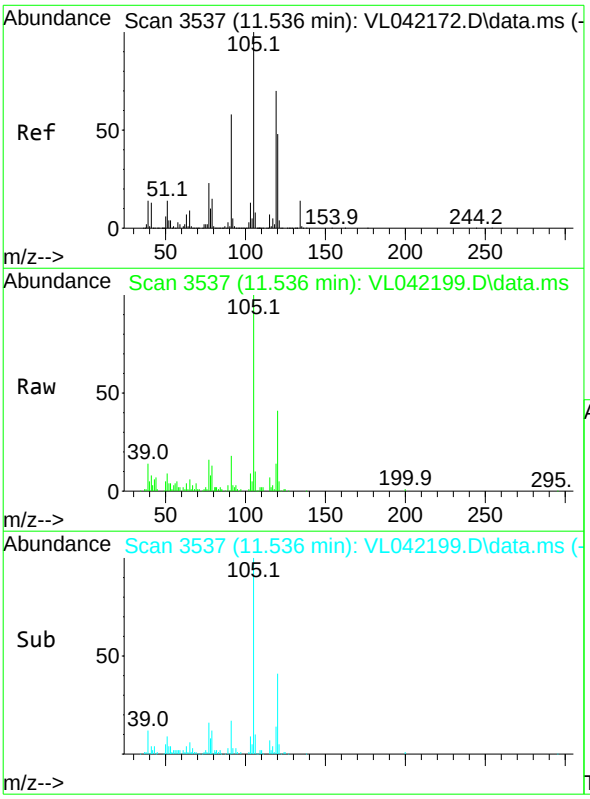
Ion	Ratio	Lower	Upper
105	100		
120	43.4	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Manual Integrations
APPROVED

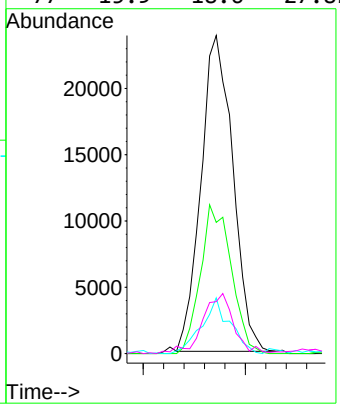
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.317 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:105 Resp: 25878

Ion	Ratio	Lower	Upper
105	100		
120	41.5	38.6	58.0
91	16.8	46.2	69.2#
77	15.9	18.6	27.8#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042199.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.424	409	413	416	rBV	4440328	3788673	100.00%	21.598%
2	1.437	416	417	421	rVB2	3931811	1566143	41.34%	8.928%
3	1.557	450	454	460	rVB	171783	91164	2.41%	0.520%
4	1.619	470	473	478	rVB	79256	46485	1.23%	0.265%
5	1.836	535	540	548	rBV	649686	469304	12.39%	2.675%
6	1.965	575	580	586	rVB2	71313	51576	1.36%	0.294%
7	2.476	733	738	745	rVB2	49344	49414	1.30%	0.282%
8	2.787	827	834	842	rBV	658875	696628	18.39%	3.971%
9	2.829	842	847	849	rVV	60614	64728	1.71%	0.369%
10	2.849	849	853	861	rVB	131961	135737	3.58%	0.774%
11	3.065	914	920	931	rBV3	41780	51260	1.35%	0.292%
12	3.693	1108	1114	1130	rVB3	77181	122895	3.24%	0.701%
13	3.959	1182	1196	1212	rBV	859693	1350010	35.63%	7.696%
14	5.762	1741	1753	1773	rBV5	212395	539150	14.23%	3.074%
15	6.736	2041	2054	2078	rBV3	405615	877662	23.17%	5.003%
16	6.933	2101	2115	2133	rVB2	239517	476198	12.57%	2.715%
17	8.302	2532	2538	2553	rVB9	22475	45598	1.20%	0.260%
18	8.882	2700	2717	2727	rBV	1135350	1684917	44.47%	9.605%
19	9.222	2811	2822	2833	rBV3	87460	131673	3.48%	0.751%
20	9.354	2853	2863	2871	rBV2	41619	63241	1.67%	0.361%
21	9.532	2909	2918	2922	rBV2	116429	168365	4.44%	0.960%
22	9.548	2922	2923	2937	rVB5	74363	83063	2.19%	0.474%
23	9.717	2965	2975	2978	rBV3	55719	82036	2.17%	0.468%
24	9.743	2978	2983	2992	rVB2	61722	81763	2.16%	0.466%
25	9.866	3011	3021	3033	rVB4	44650	74434	1.96%	0.424%
26	9.963	3040	3051	3068	rVB	67793	118361	3.12%	0.675%
27	10.377	3160	3179	3189	rBV	1471912	1918225	50.63%	10.935%
28	10.856	3321	3327	3335	rVV3	73952	90190	2.38%	0.514%
29	10.905	3335	3342	3354	rVB6	43874	66871	1.77%	0.381%
30	11.011	3370	3375	3382	rVB4	32949	42513	1.12%	0.242%
31	11.096	3395	3401	3407	rBV2	50006	55030	1.45%	0.314%
32	11.202	3424	3434	3441	rVB5	53807	67775	1.79%	0.386%
33	11.536	3529	3537	3548	rBV2	79126	108800	2.87%	0.620%
34	11.756	3597	3605	3606	rBV2	107145	97688	2.58%	0.557%
35	11.775	3606	3611	3619	rVB2	233068	278456	7.35%	1.587%
36	12.044	3687	3694	3701	rVB4	86485	92519	2.44%	0.527%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	12.086	3701	3707	3712	rBV2	40533	43859	1.16%	0.250%
38	12.228	3744	3751	3755	rBV2	181885	207903	5.49%	1.185%
39	12.254	3755	3759	3770	rVB2	149433	166998	4.41%	0.952%
40	12.442	3810	3817	3831	rVB2	157523	215256	5.68%	1.227%
41	12.510	3831	3838	3844	rBV2	72950	84717	2.24%	0.483%
42	12.646	3873	3880	3886	rBV4	111772	141877	3.74%	0.809%
43	12.685	3886	3892	3902	rVB8	49219	79174	2.09%	0.451%
44	12.827	3929	3936	3941	rBV5	43284	49523	1.31%	0.282%
45	12.876	3944	3951	3958	rVV3	99108	113760	3.00%	0.649%
46	12.931	3958	3968	3975	rVB3	42946	55290	1.46%	0.315%
47	12.992	3980	3987	4001	rVB5	50031	87190	2.30%	0.497%
48	13.387	4100	4109	4117	rBV	545624	567577	14.98%	3.236%

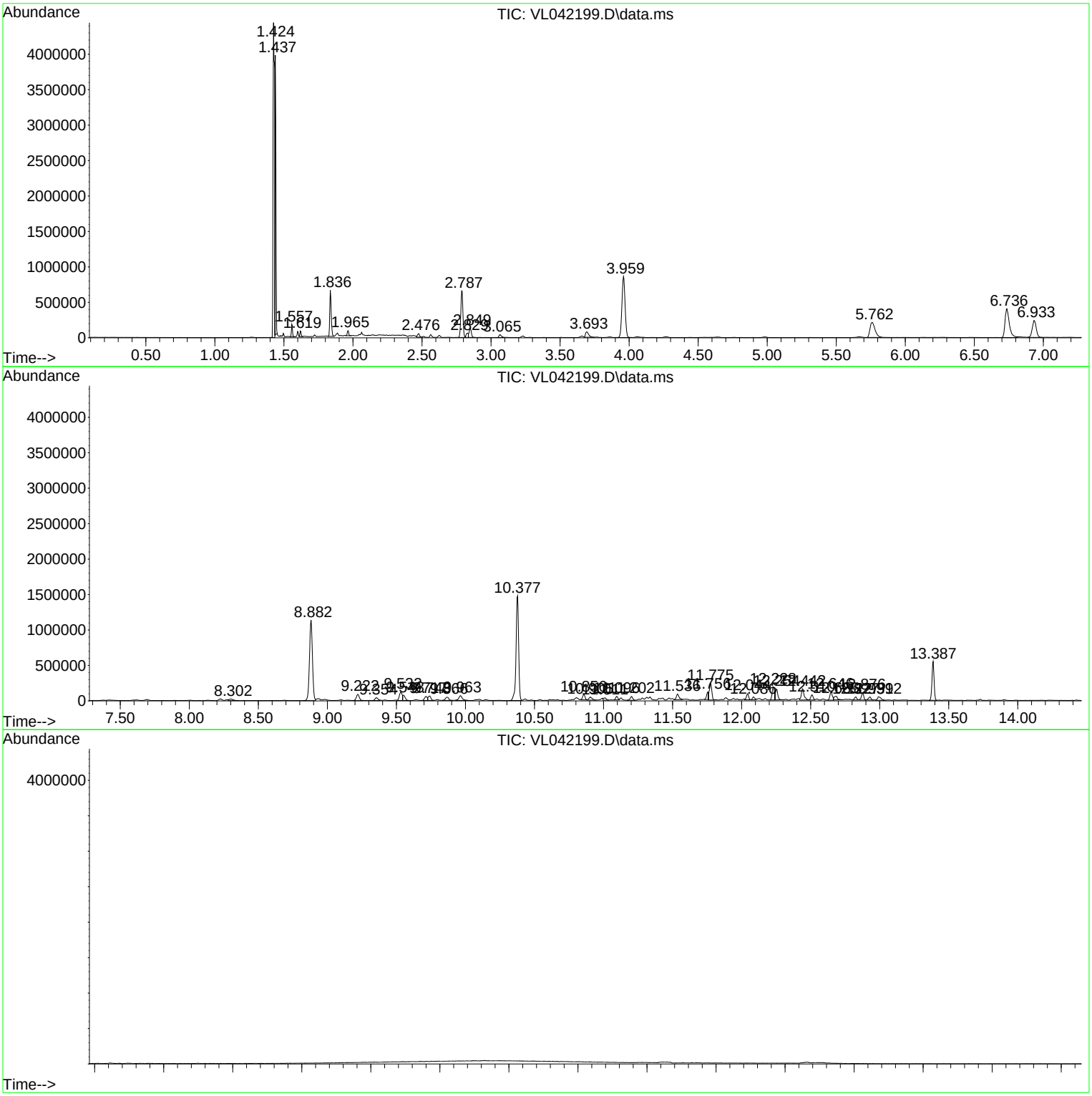
Sum of corrected areas: 17541669

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

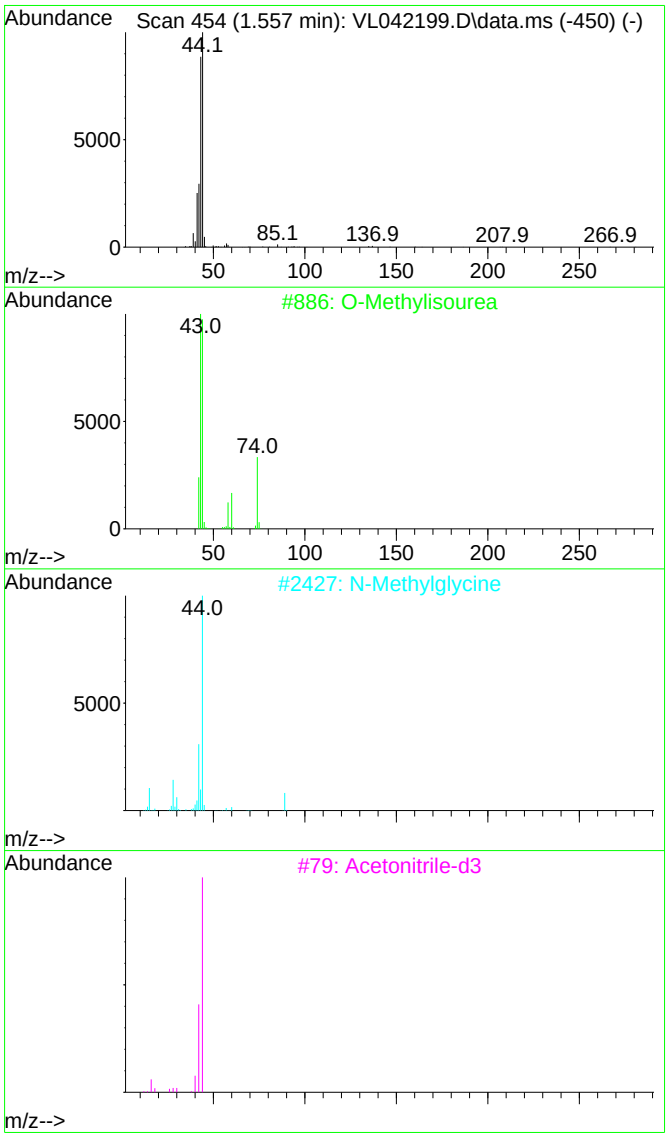
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

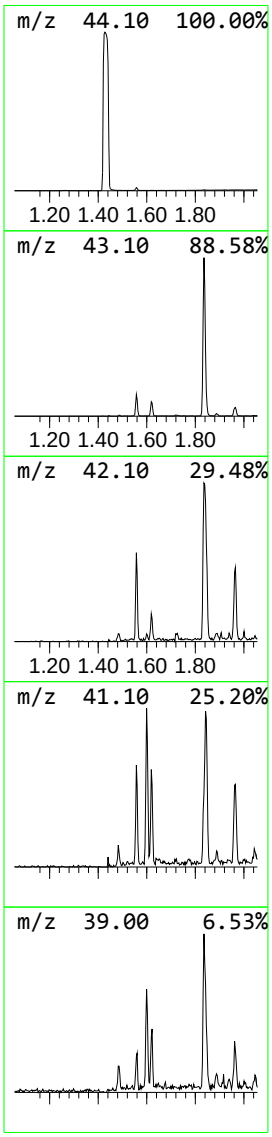
****

Peak Number 1 unknown1.557 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.557	1.31 ppbv	91164	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	O-Methylisourea	74	C2H6N2O	002440-60-0	43
2	N-Methylglycine	89	C3H7NO2	000107-97-1	9
3	Acetonitrile-d3	44	C2D3N	002206-26-0	5
4	Ethylene oxide	44	C2H4O	000075-21-8	5
5	Ethylene oxide	44	C2H4O	000075-21-8	5





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

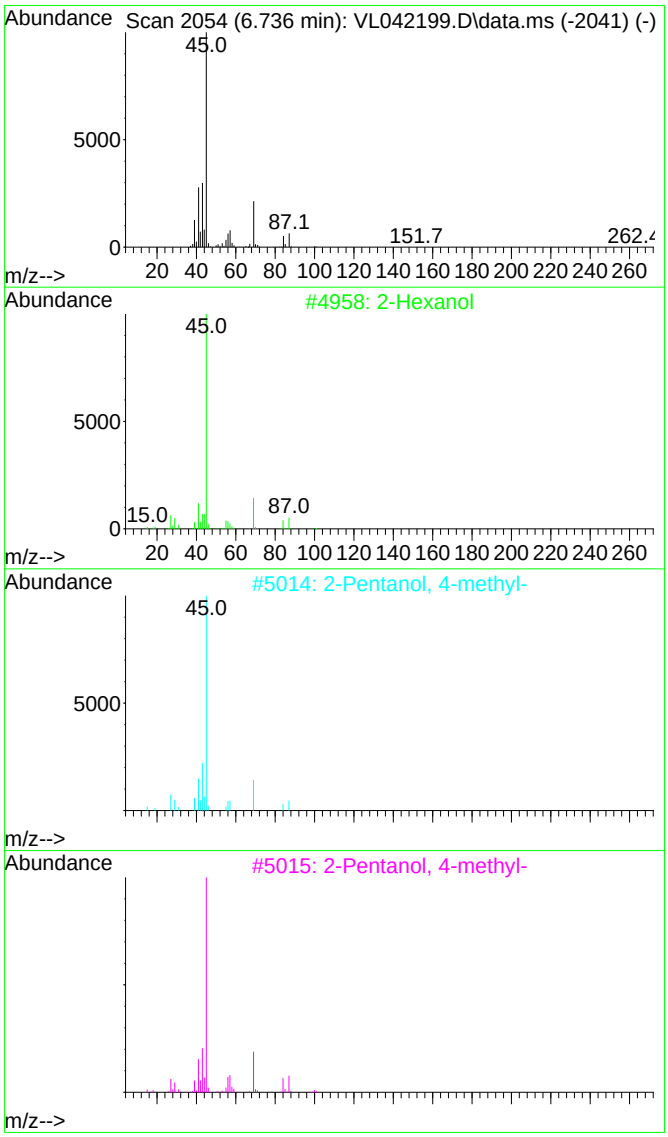
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

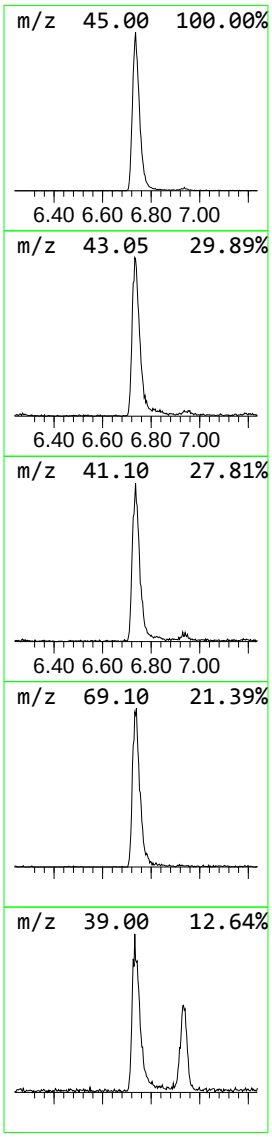
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 2-Hexanol Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.736	5.21 ppbv	877662	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Hexanol	102	C6H14O	000626-93-7	83
2	2-Pentanol, 4-methyl-	102	C6H14O	000108-11-2	83
3	2-Pentanol, 4-methyl-	102	C6H14O	000108-11-2	83
4	2-Octanol, (R)-	130	C8H18O	005978-70-1	78
5	2-Octanol, (S)-	130	C8H18O	006169-06-8	78





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

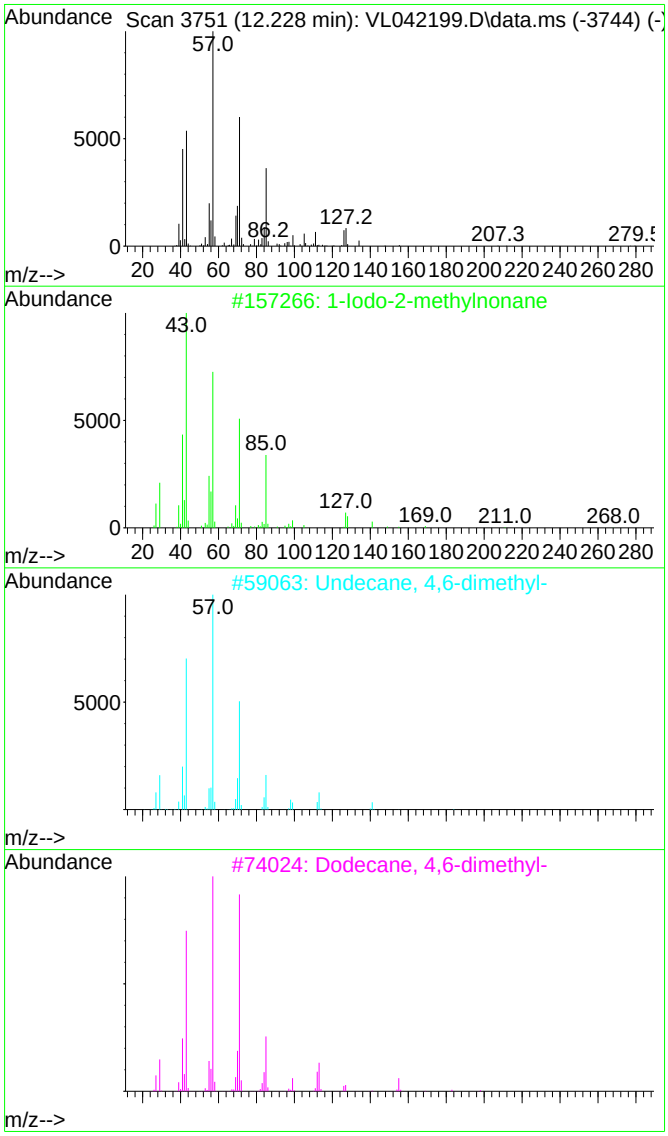
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

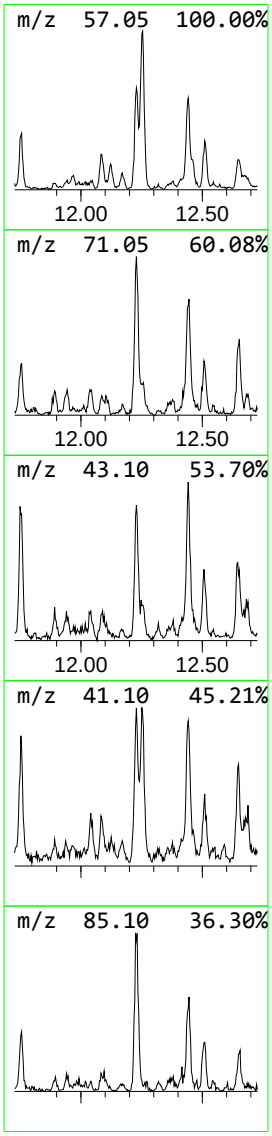
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 1-Iodo-2-methylnonane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.228	1.23 ppbv	207903	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Iodo-2-methylnonane	268	C10H21I	1000101-47-9	72
2	Undecane, 4,6-dimethyl-	184	C13H28	017312-82-2	72
3	Dodecane, 4,6-dimethyl-	198	C14H30	061141-72-8	64
4	Undecane, 3,8-dimethyl-	184	C13H28	017301-30-3	64
5	Hexadecane	226	C16H34	000544-76-3	59





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

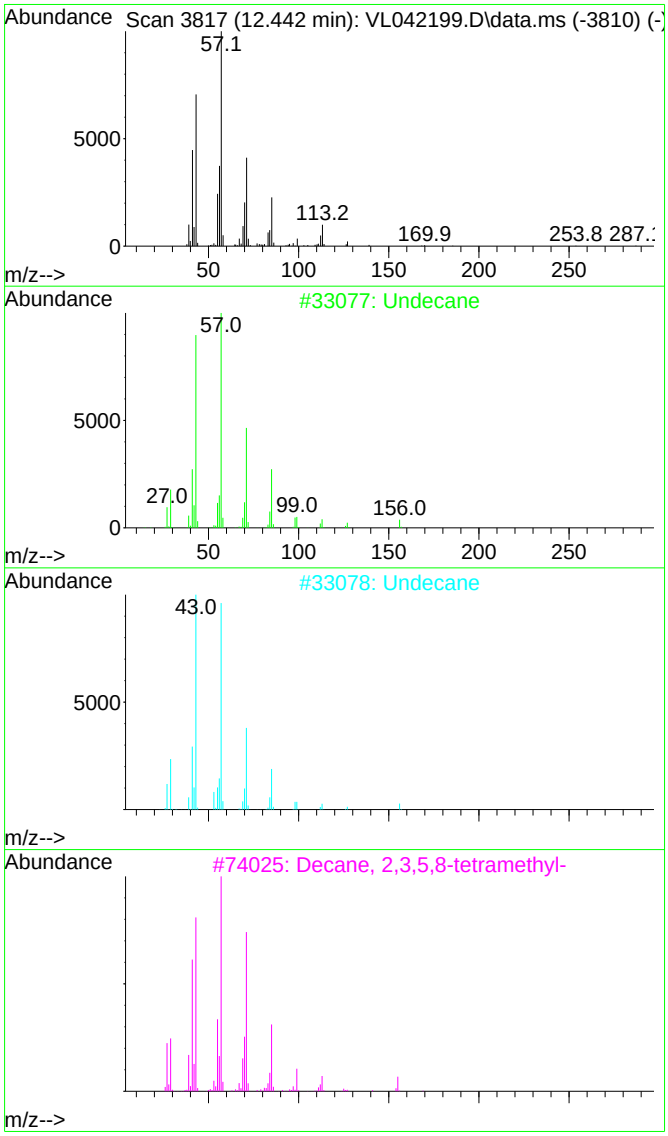
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

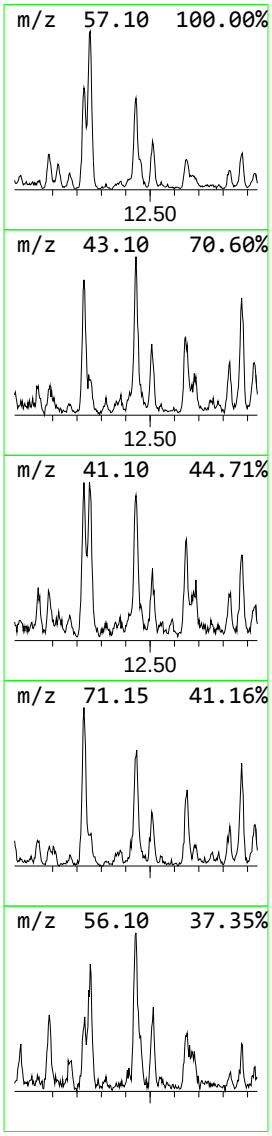
****

Peak Number 5 Undecane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.442	1.28 ppbv	215256	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	59
2	Undecane	156	C11H24	001120-21-4	59
3	Decane, 2,3,5,8-tetramethyl-	198	C14H30	192823-15-7	53
4	Tridecane	184	C13H28	000629-50-5	53
5	Decane, 6-ethyl-2-methyl-	184	C13H28	062108-21-8	53





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown1.557	1.557	1.3	ppbv	91164	1	2.787	696628	10.0
2-Hexanol	6.736	5.2	ppbv	877662	3	8.882	1684920	10.0
1-Iodo-2-methyl...	12.228	1.2	ppbv	207903	3	8.882	1684920	10.0
Undecane	12.442	1.3	ppbv	215256	3	8.882	1684920	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	AA-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-09	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
VL042189.D	1		03/27/25 20:48	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.45	2.23	J	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.44	0.91	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	2.50	5.94		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	7.00	24.3		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.18	0.53	J	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.13	0.42	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.34	1.28	J	0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	AA-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-09	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
VL042189.D	1		03/27/25 20:48	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.29	1.43	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	4.50	15.9		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	185000		2.787			
540-36-3	1,4-Difluorobenzene	523000		3.962			
3114-55-4	Chlorobenzene-d5	477000		8.882			
TENTITIVE IDENTIFIED COMPOUNDS							
75-45-6	Chlorodifluoromethane	0.43		J		1.48	ppbv
115-07-1	Propene	0.29		J		1.49	ppbv

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/26/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/27/25
Client Sample ID:	AA-2-3262025	SDG No.:	Q1669
Lab Sample ID:	Q1669-09	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
VL042189.D	1		03/27/25 20:48	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
000096-14-0	Pentane, 3-methyl-	1.20		J		2.63	ppbv
000096-37-7	Cyclopentane, methyl-	1.40		J		3.23	ppbv

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\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	185013	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	523099	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	477151	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	387301	9.884	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	12204	0.447	ppbv		100
3) Chlorodifluoromethane	1.476	51	11994	0.430	ppbv	#	85
4) Chloromethane	1.531	50	4911	0.440	ppbv		91
9) Propene	1.486	41	3674m	0.287	ppbv		
11) Trichlorofluoromethane	1.878	101	5874	0.221	ppbv		88
13) Ethanol	1.722	45	10166	8.407	ppbv	#	27
15) Acetone	1.835	43	63981	2.473	ppbv		97
20) Methylene Chloride	2.062	84	67627	7.018	ppbv		95
26) Hexane	2.826	57	116880	4.506	ppbv	#	31
34) 2-Butanone	2.567	43	6879	0.181	ppbv		96
35) Carbon Tetrachloride	3.764	117	2968m	0.073	ppbv		
36) Benzene	3.654	78	6925	0.134	ppbv	#	90
53) Toluene	6.933	91	20704	0.337	ppbv		99
59) m/p-Xylene	9.532	91	7256m	0.107	ppbv		
74) 1,2,4-Trimethylbenzene	11.539	105	24773	0.291	ppbv	#	65

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

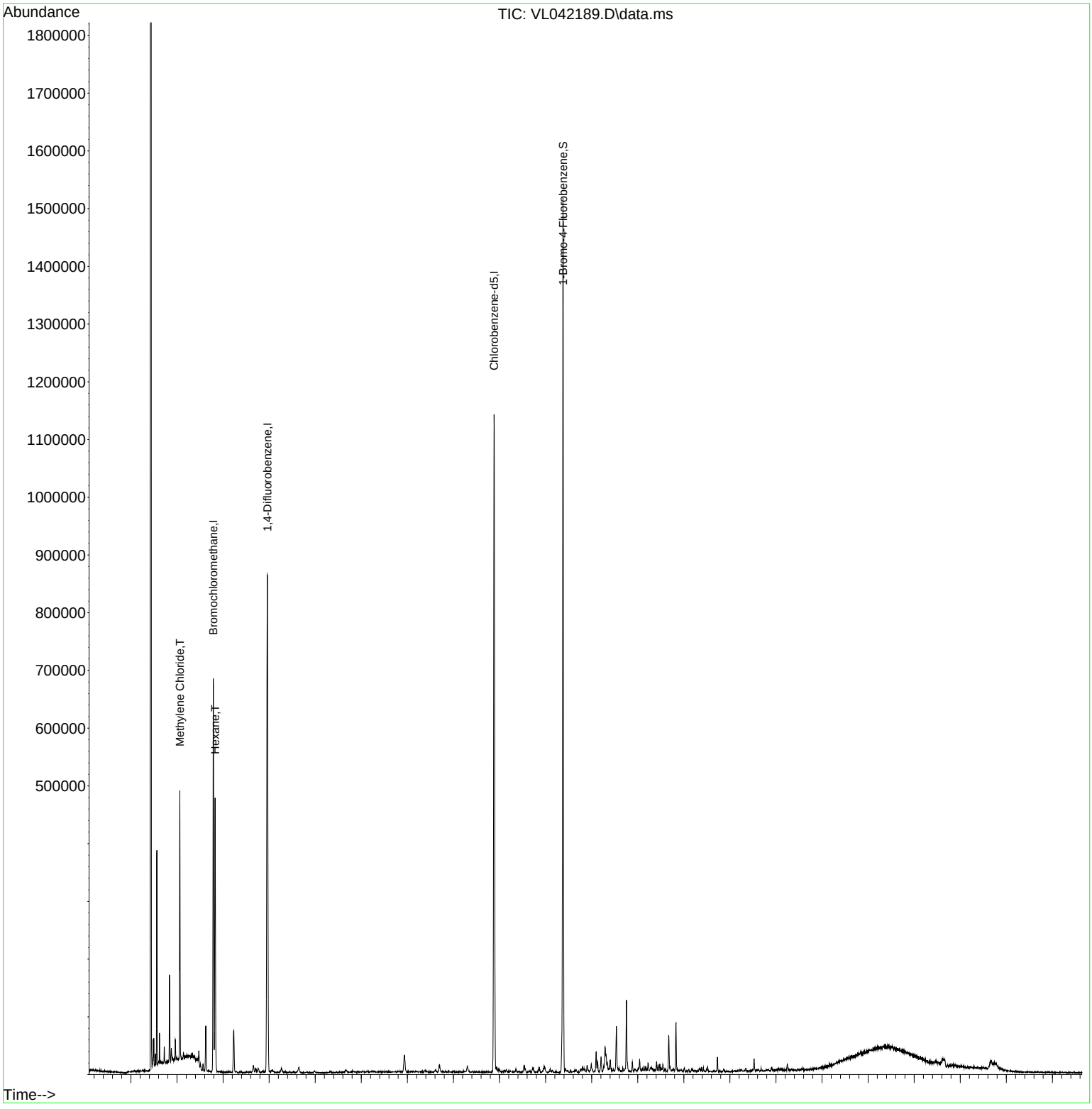
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

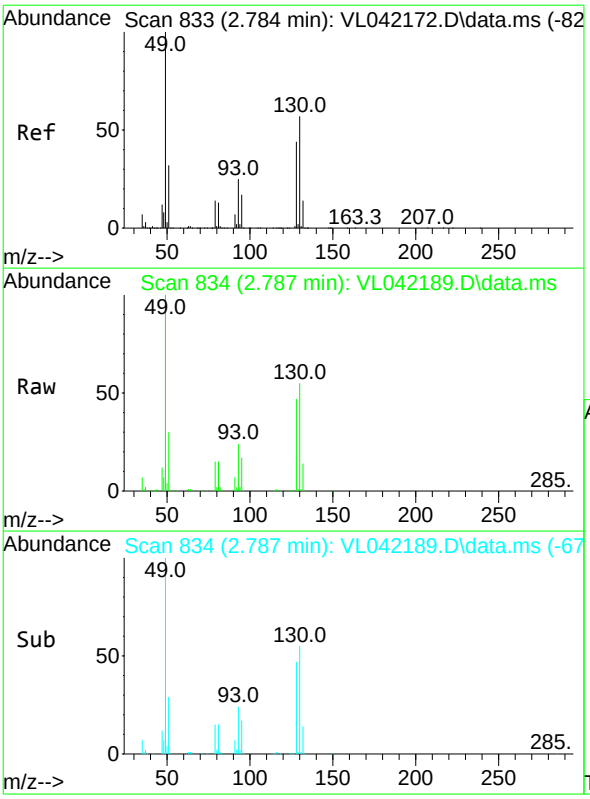
Quant Time: Mar 28 02:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

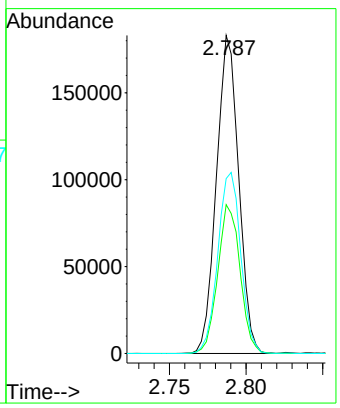




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 49 Resp: 185013

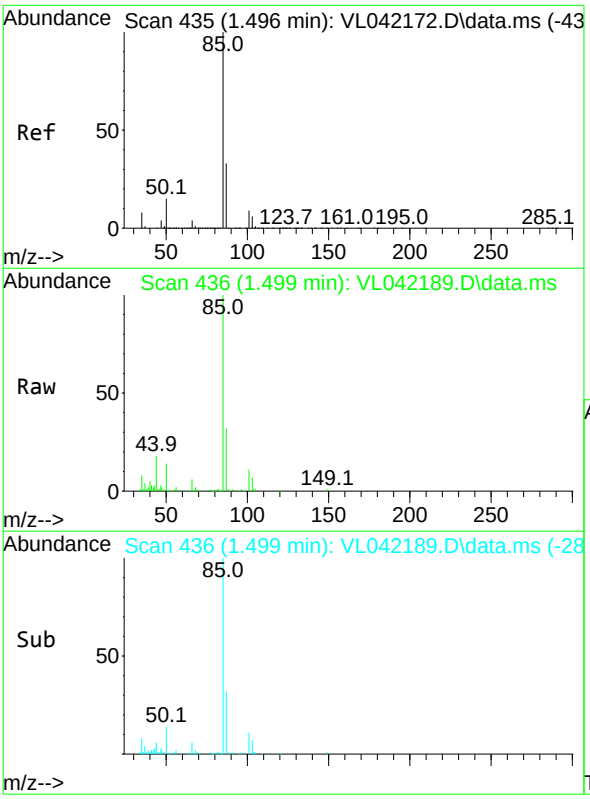
Ion	Ratio	Lower	Upper
49	100		
128	47.0	22.9	68.5
130	58.7	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
APPROVED

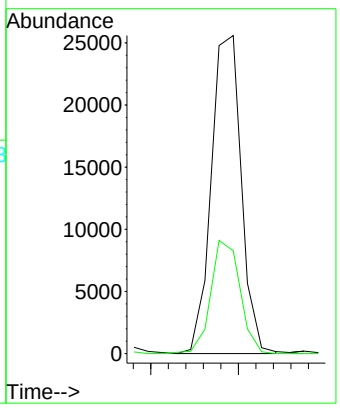
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

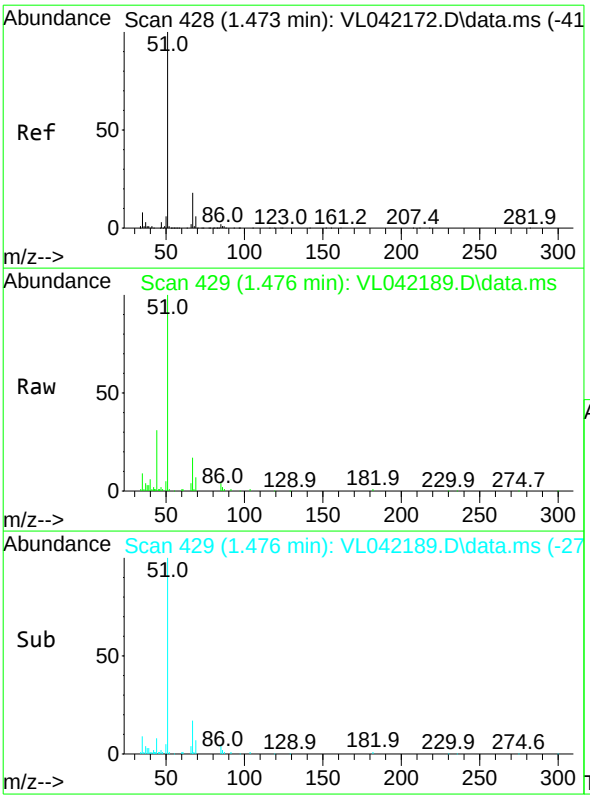


#2
Dichlorodifluoromethane
Concen: 0.447 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 85 Resp: 12204

Ion	Ratio	Lower	Upper
85	100		
87	32.3	26.1	39.1

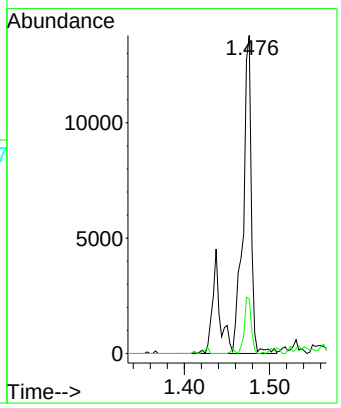




#3
Chlorodifluoromethane
Concen: 0.430 ppbv
RT: 1.476 min Scan# 42
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 51 Resp: 11994

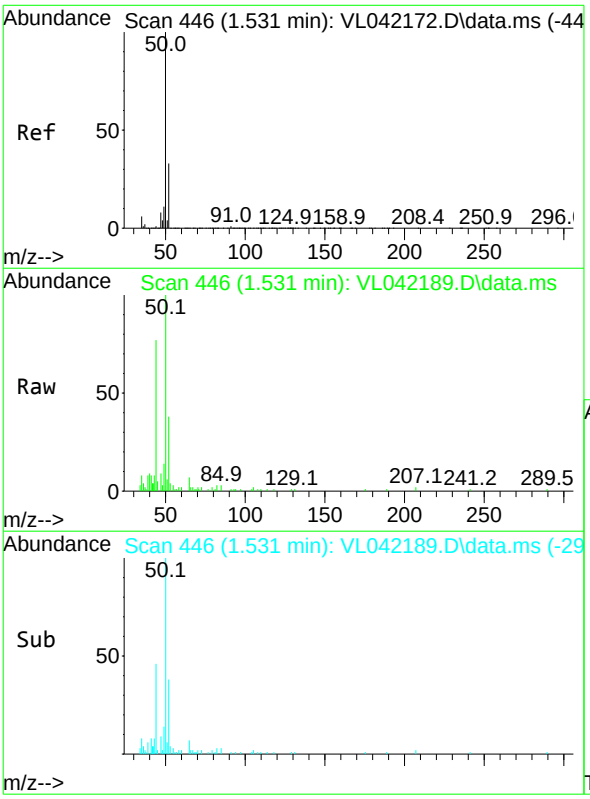
Ion	Ratio	Lower	Upper
51	100		
67	12.0	15.0	22.6#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
APPROVED

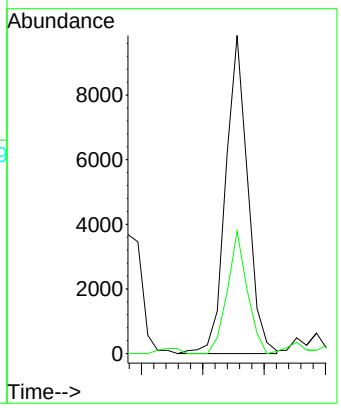
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

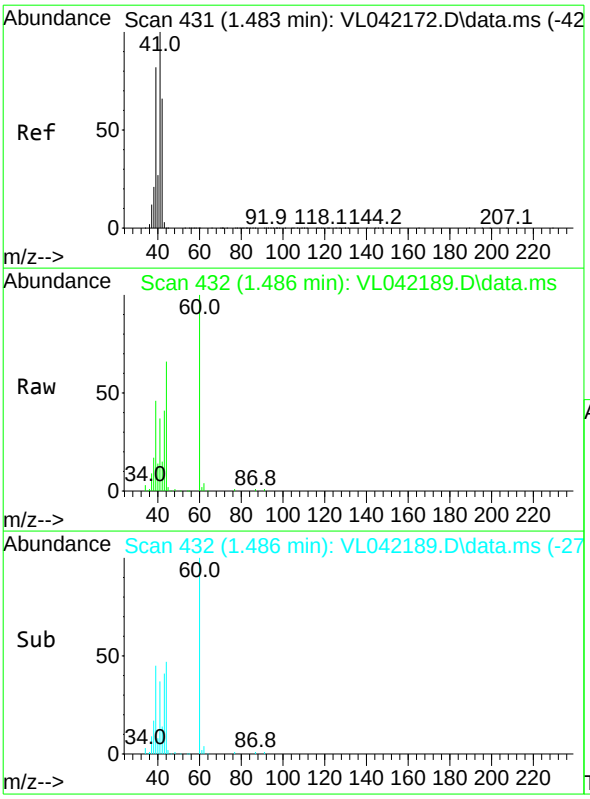


#4
Chloromethane
Concen: 0.440 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 50 Resp: 4911

Ion	Ratio	Lower	Upper
50	100		
52	37.7	26.1	39.1

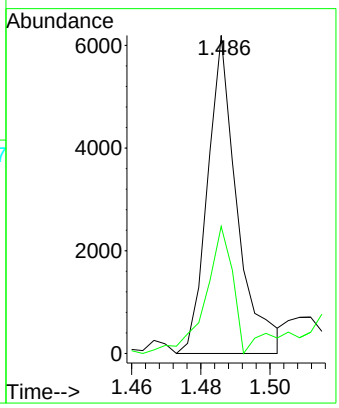




#9
Propene
Concen: 0.287 ppbv m
RT: 1.486 min Scan# 43
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 41 Resp: 3674

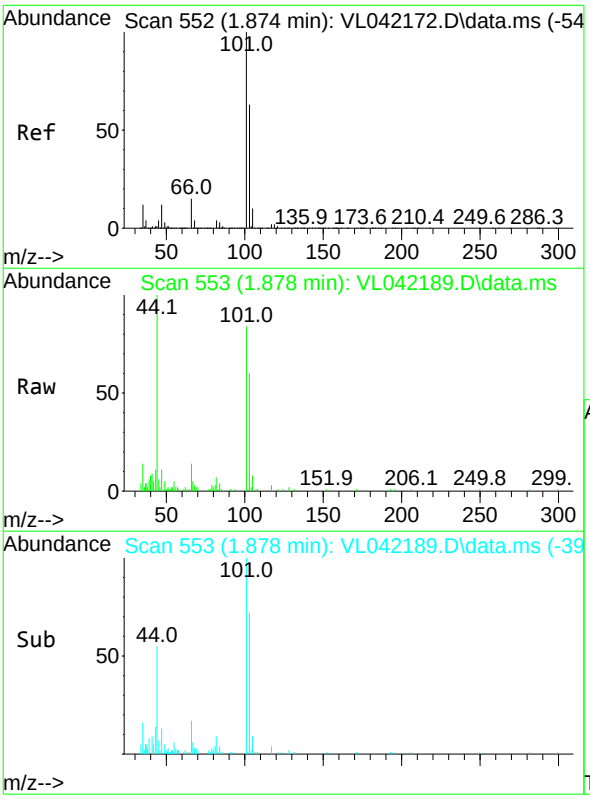
Ion	Ratio	Lower	Upper
41	100		
42	96.0	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
APPROVED

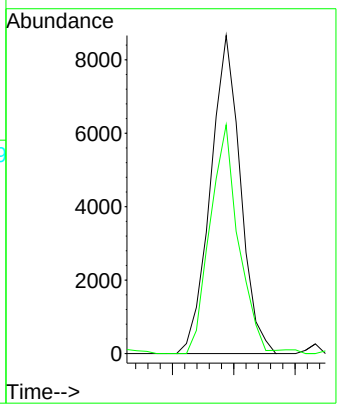
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

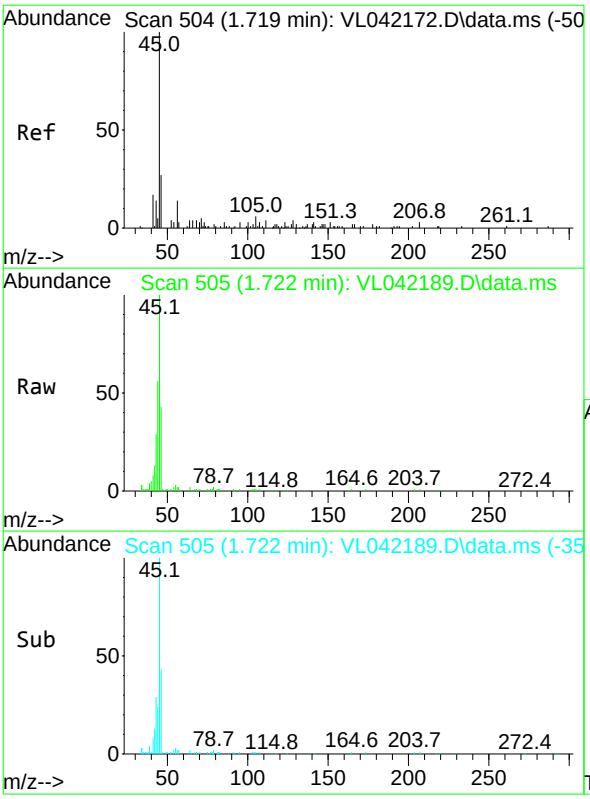


#11
Trichlorofluoromethane
Concen: 0.221 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:101 Resp: 5874

Ion	Ratio	Lower	Upper
101	100		
103	71.9	50.2	75.2

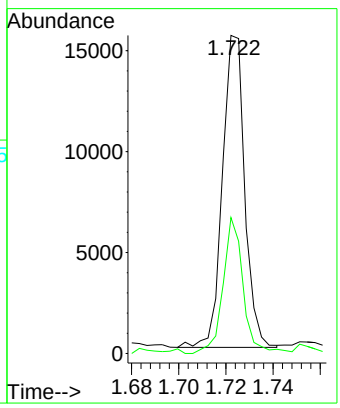




#13
Ethanol
Concen: 8.407 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 45 Resp: 10166

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 03/31/2025
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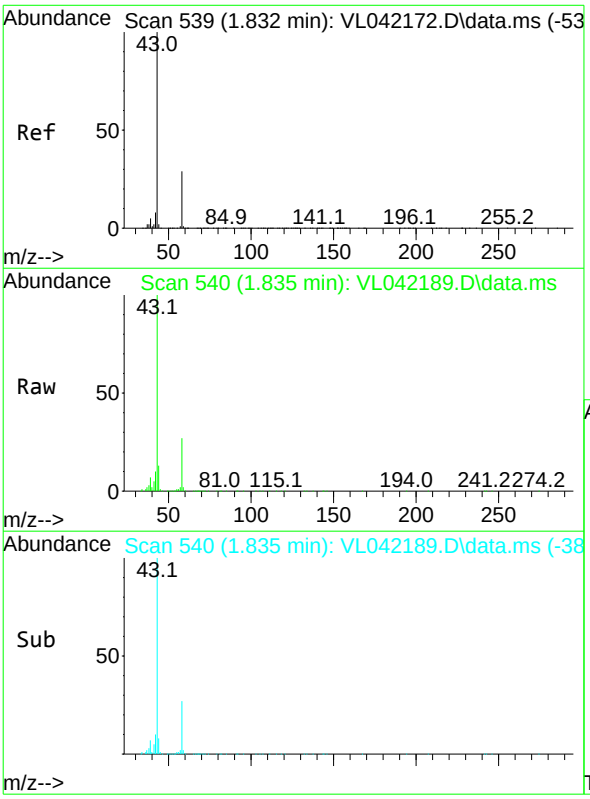
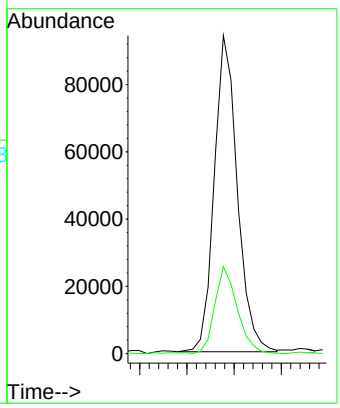
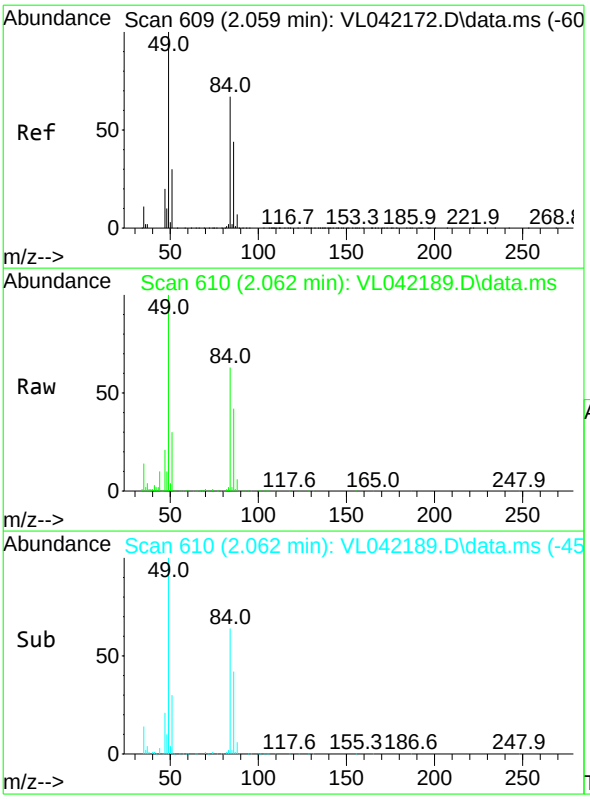


#15
Acetone
Concen: 2.473 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 43 Resp: 63981

Ion	Ratio	Lower	Upper
43	100		
58	27.4	23.2	34.8

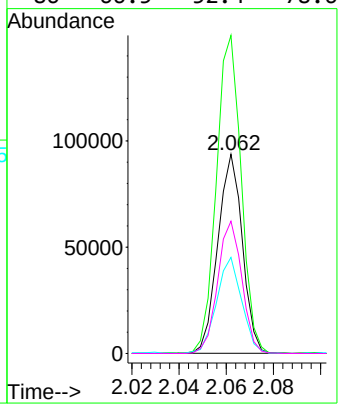




#20
Methylene Chloride
Concen: 7.018 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 84 Resp: 67627

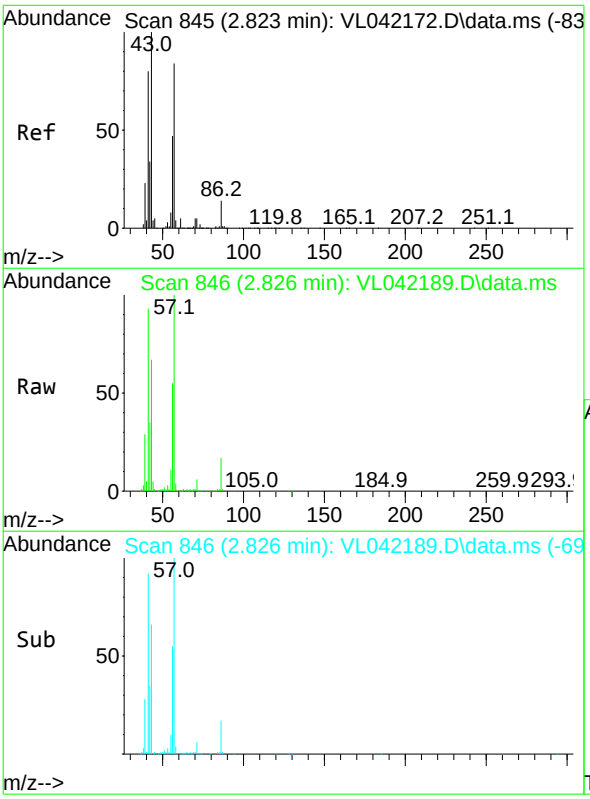
Ion	Ratio	Lower	Upper
84	100		
49	159.6	120.2	180.4
51	48.2	37.4	56.0
86	66.5	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
APPROVED

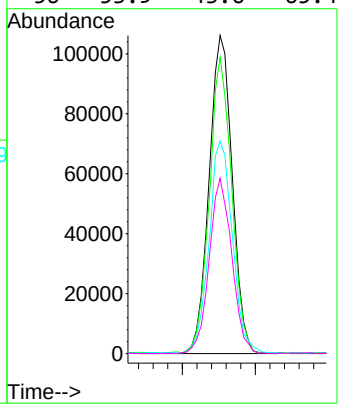
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

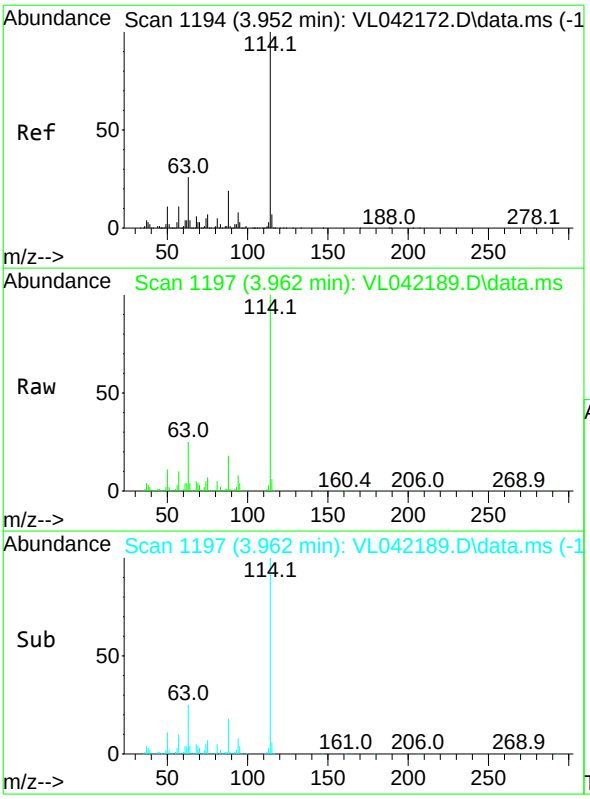


#26
Hexane
Concen: 4.506 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 57 Resp: 116880

Ion	Ratio	Lower	Upper
57	100		
41	90.1	76.6	114.8
43	68.0	207.8	311.8#
56	53.9	43.6	65.4





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:114 Resp: 523099

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.1	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
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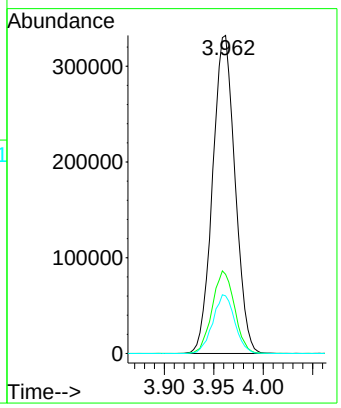
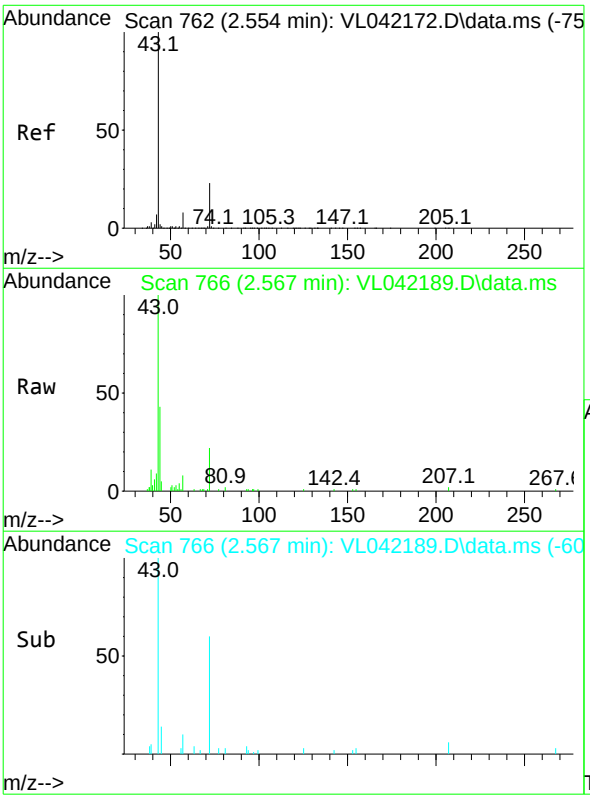
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

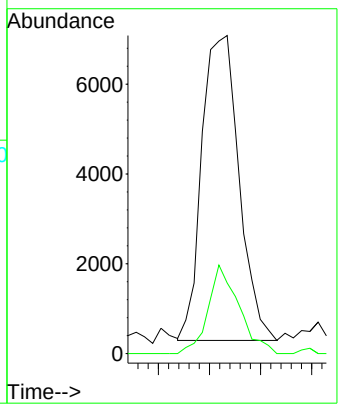


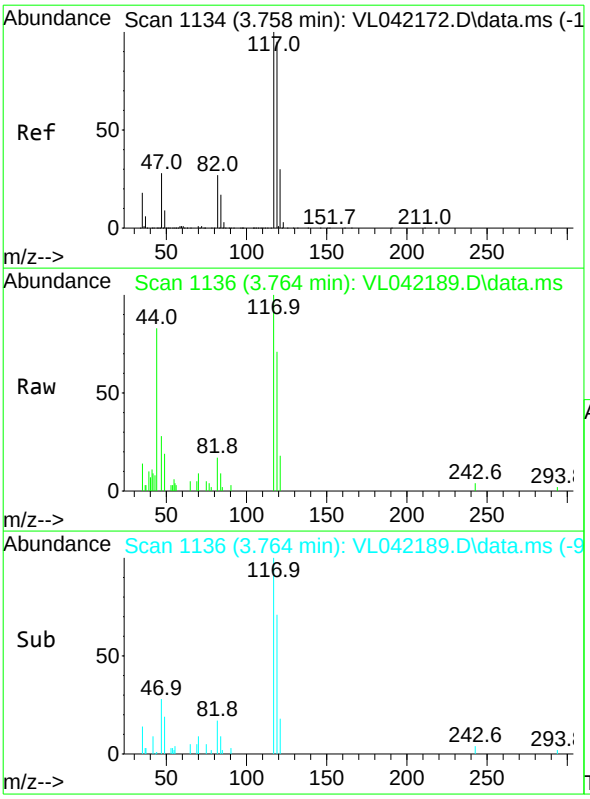


#34
2-Butanone
Concen: 0.181 ppbv
RT: 2.567 min Scan# 766
Delta R.T. 0.013 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 43 Resp: 6879

Ion	Ratio	Lower	Upper
43	100		
72	24.6	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.073 ppbv m
RT: 3.764 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:117 Resp: 2968

Ion	Ratio	Lower	Upper
117	100		
119	70.7	76.2	114.2#
121	18.0	24.2	36.4#

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
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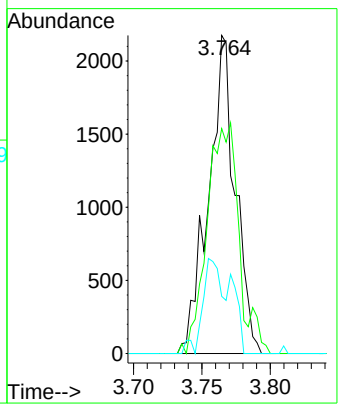
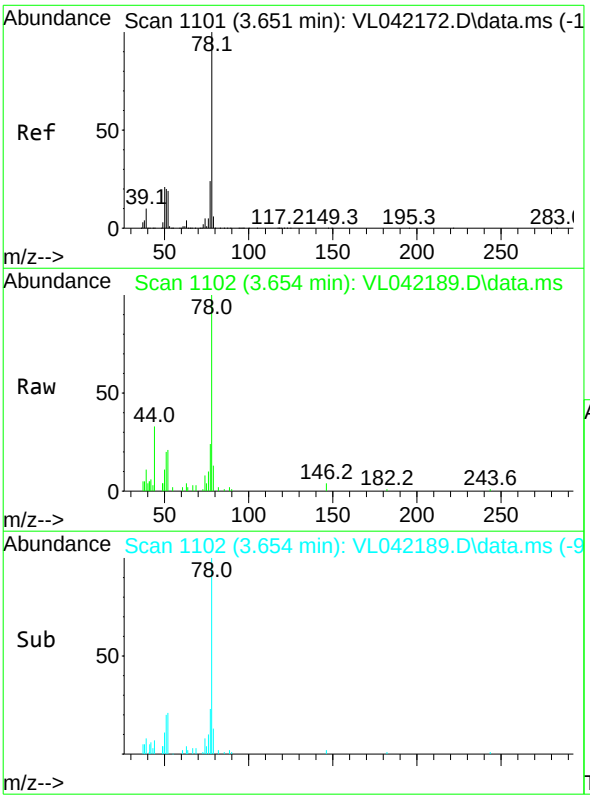
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

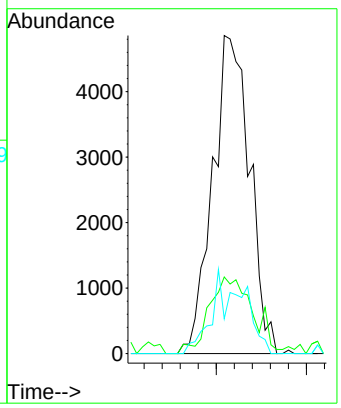


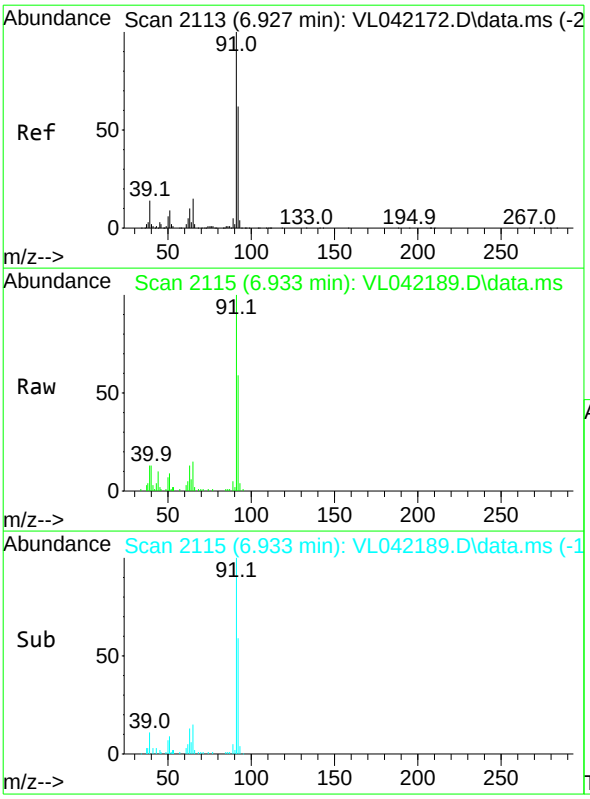


#36
Benzene
Concen: 0.134 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 78 Resp: 6925

Ion	Ratio	Lower	Upper
78	100		
77	24.1	19.1	28.7
50	10.9	16.6	24.8#

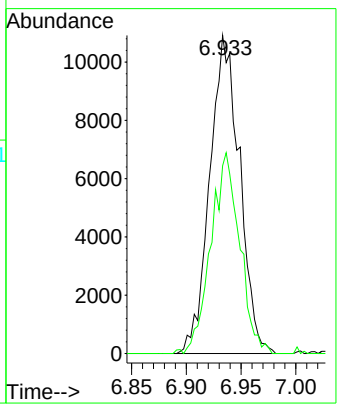




#53
Toluene
Concen: 0.337 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 91 Resp: 20704

Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
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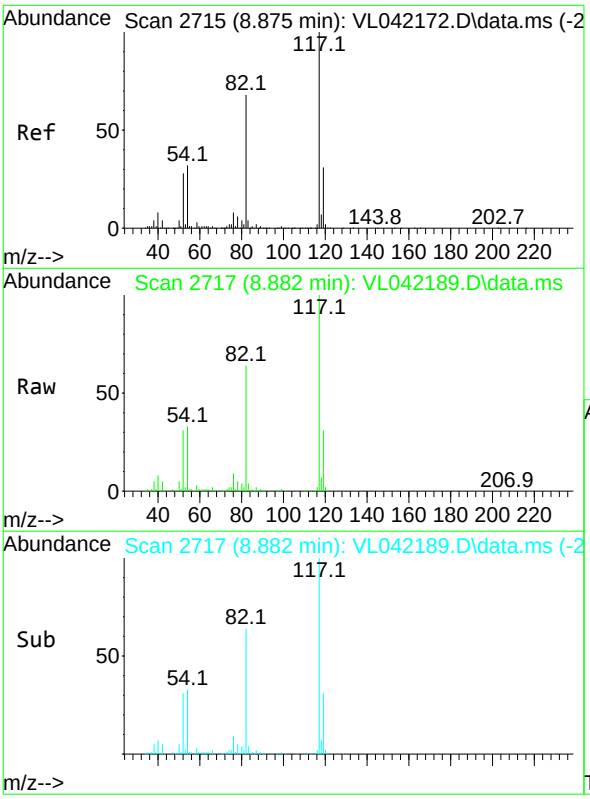
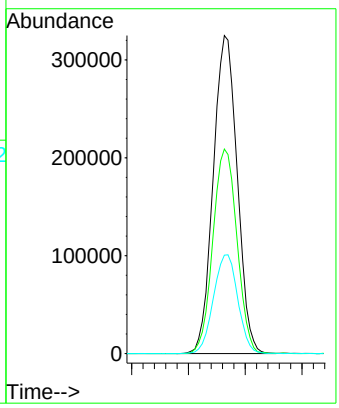
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

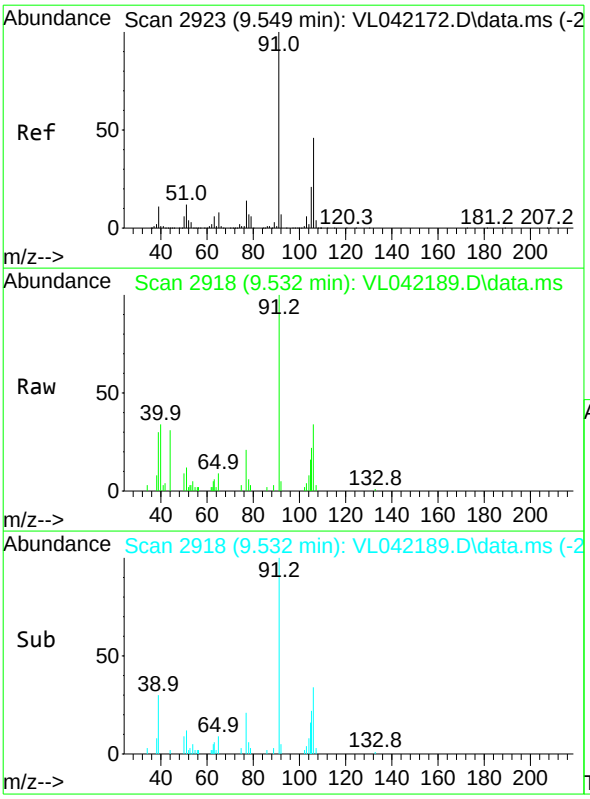


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:117 Resp: 477151

Ion	Ratio	Lower	Upper
117	100		
82	64.6	55.8	83.6
119	31.6	25.5	38.3

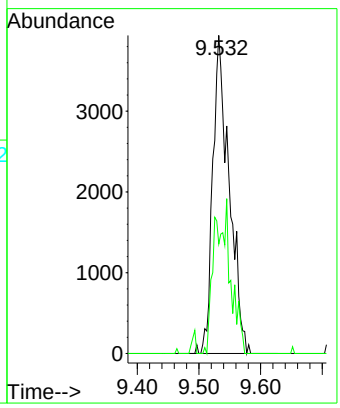




#59
m/p-Xylene
Concen: 0.107 ppbv m
RT: 9.532 min Scan# 29
Delta R.T. -0.016 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 91 Resp: 7256

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

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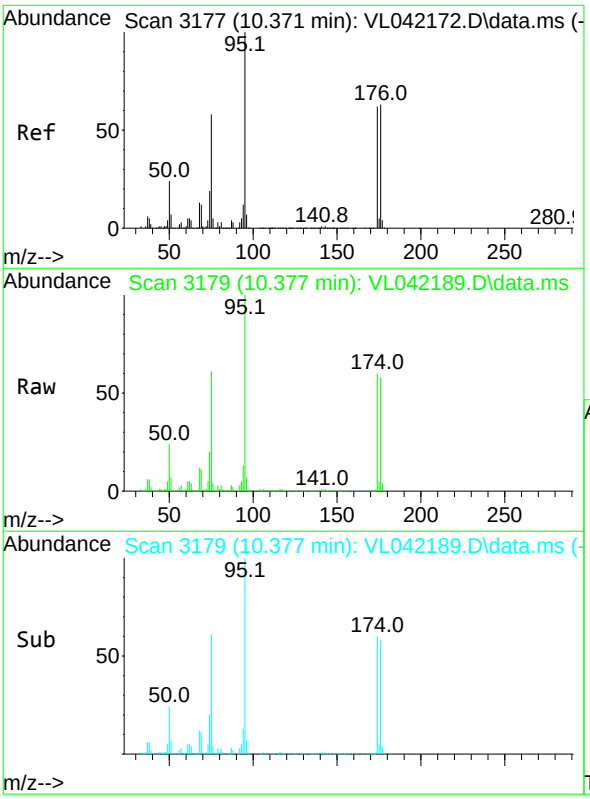
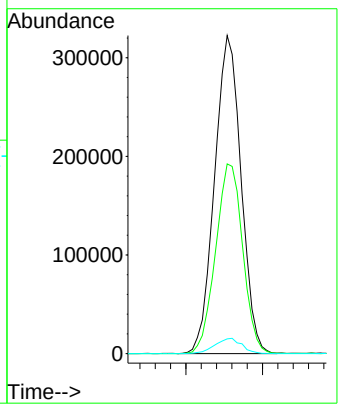
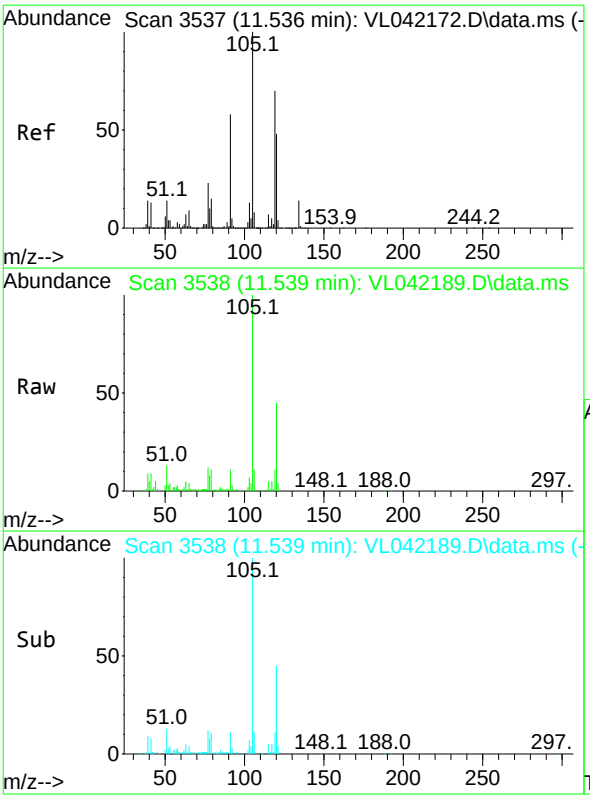


#68
1-Bromo-4-Fluorobenzene
Concen: 9.884 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 95 Resp: 387301

Ion	Ratio	Lower	Upper
95	100		
174	61.0	50.6	76.0
175	4.9	3.8	5.6

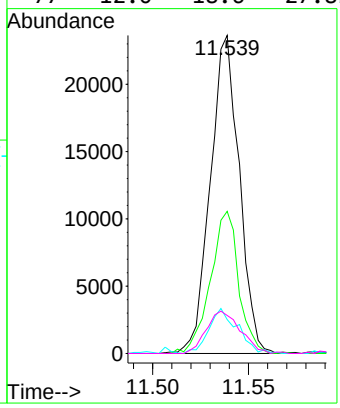




#74
1,2,4-Trimethylbenzene
Concen: 0.291 ppbv
RT: 11.539 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:105 Resp: 24773

Ion	Ratio	Lower	Upper
105	100		
120	44.7	38.6	58.0
91	10.5	46.2	69.2#
77	12.0	18.6	27.8#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042189.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4372856	4902725	100.00%	39.197%
2	1.564	449	456	462	rBV	371951	232376	4.74%	1.858%
3	1.835	533	540	547	rBV	151777	120543	2.46%	0.964%
4	2.062	604	610	619	rVB	465144	344813	7.03%	2.757%
5	2.625	776	784	791	rBV	78366	84853	1.73%	0.678%
6	2.787	822	834	840	rBV	681877	717029	14.63%	5.733%
7	2.826	840	846	858	rVB	474511	524144	10.69%	4.190%
8	3.230	963	971	982	rVB3	72922	103610	2.11%	0.828%
9	3.959	1183	1196	1208	rBV	861488	1376388	28.07%	11.004%
10	6.936	2104	2116	2130	rVB3	29772	60982	1.24%	0.488%
11	8.882	2704	2717	2729	rBV	1139477	1686276	34.39%	13.482%
12	10.377	3162	3179	3191	rBV	1515292	1904749	38.85%	15.228%
13	11.290	3454	3461	3466	rBV6	36425	50368	1.03%	0.403%
14	11.536	3525	3537	3546	rBV2	78287	106931	2.18%	0.855%
15	11.756	3597	3605	3611	rBV2	119348	126418	2.58%	1.011%
16	12.672	3876	3888	3897	rBV3	63094	78936	1.61%	0.631%
17	12.830	3928	3937	3943	rBV	83941	86911	1.77%	0.695%

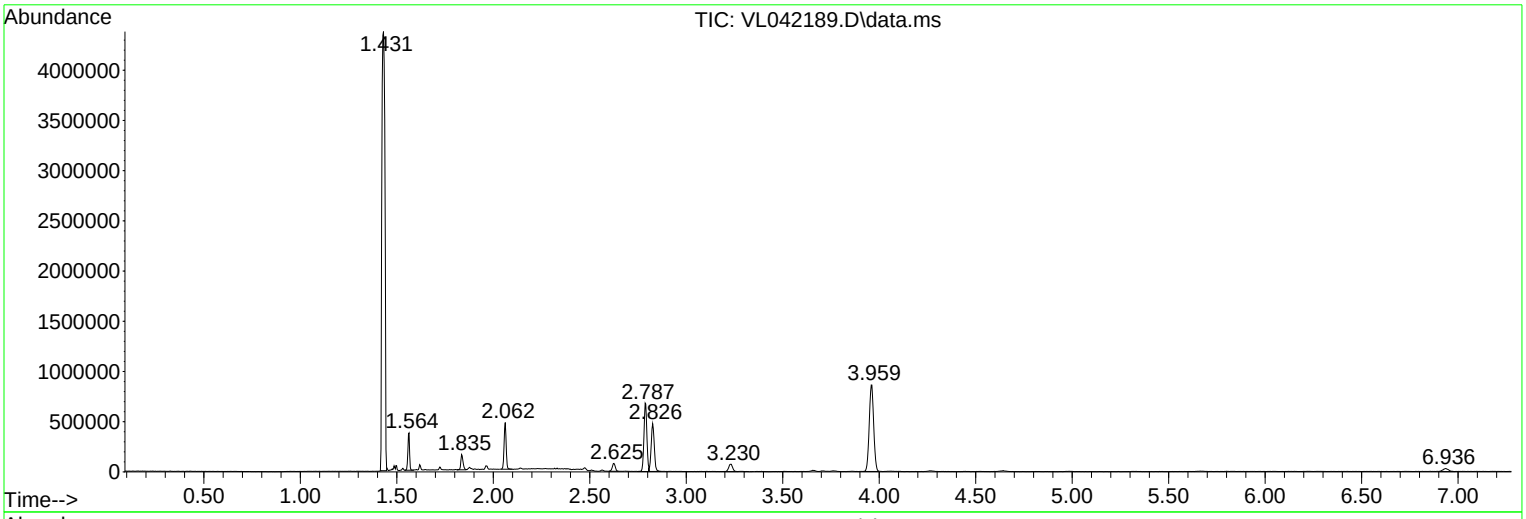
Sum of corrected areas: 12508052

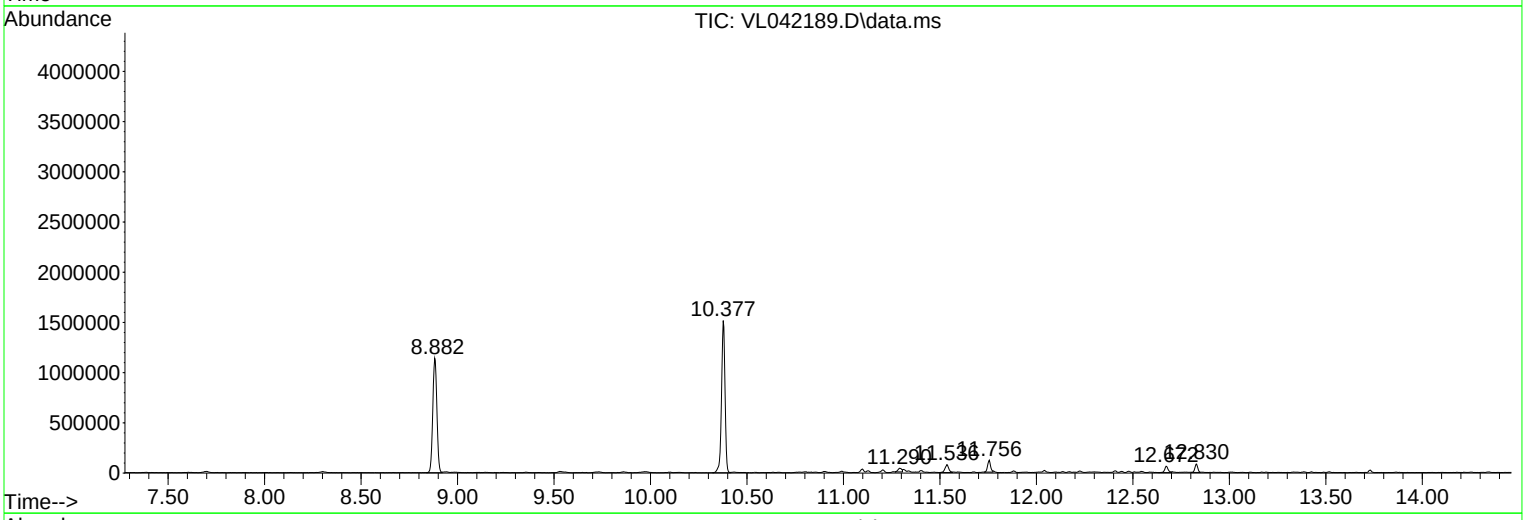
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

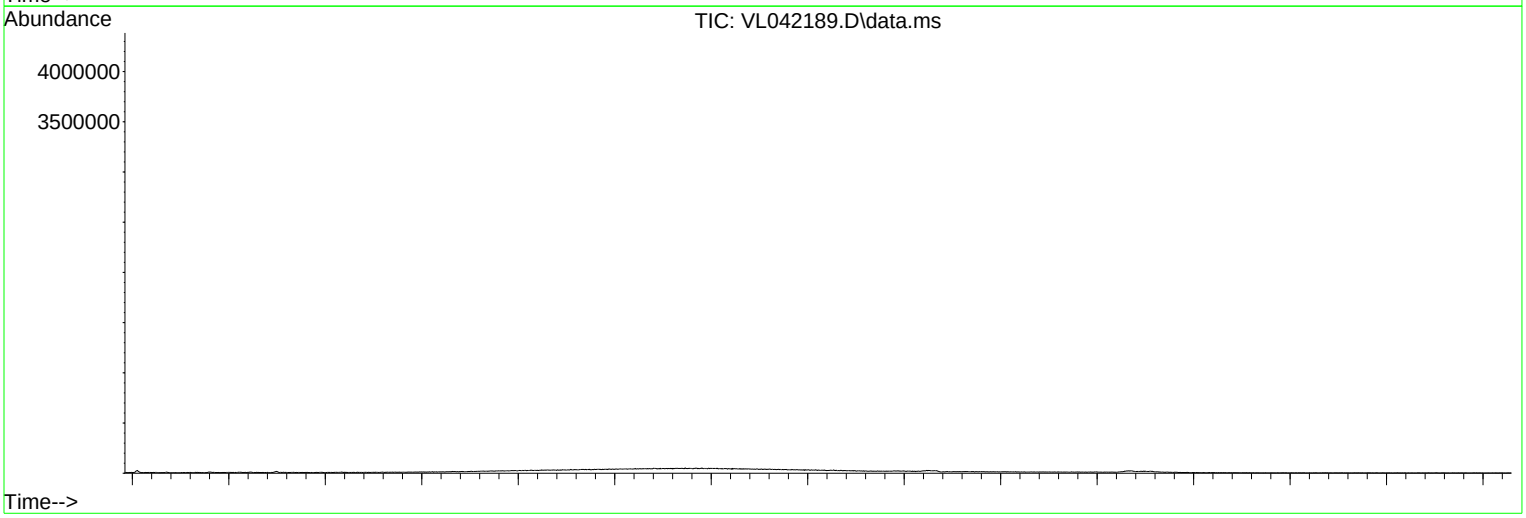
Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

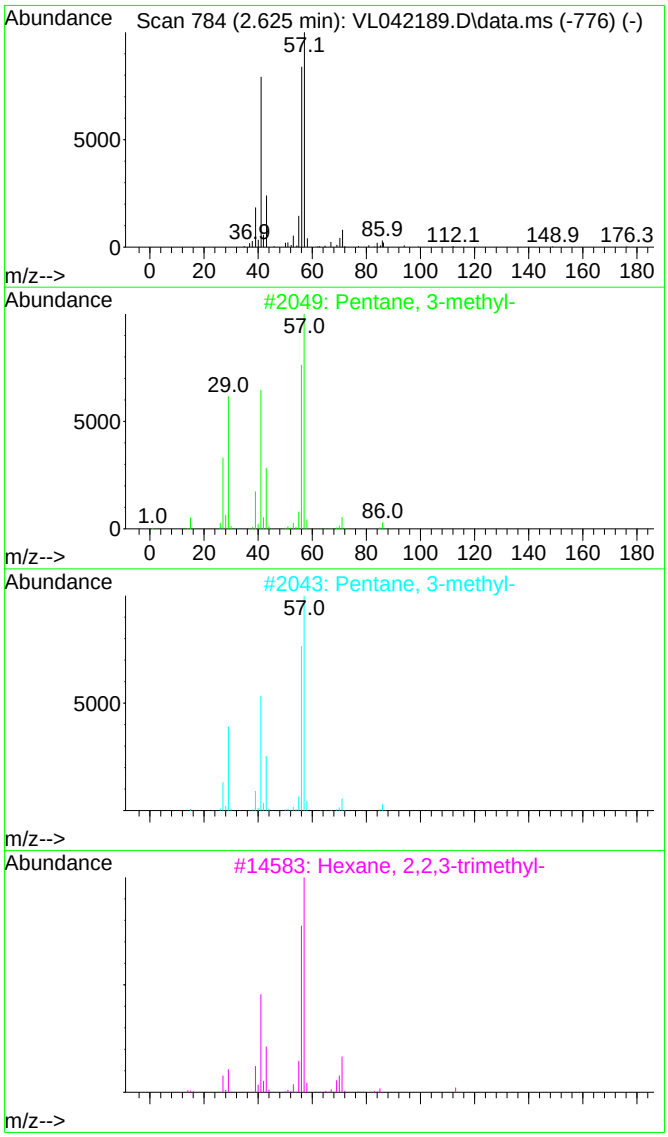
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

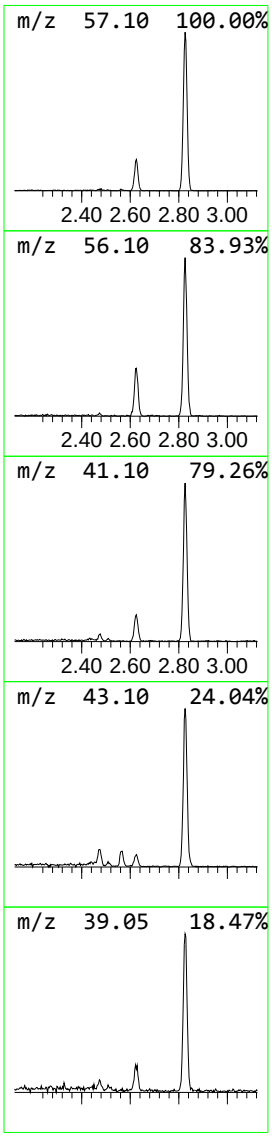
****

Peak Number 1 Pentane, 3-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.625	1.18 ppbv	84853	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	80
3	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	78
4	Pentane, 3-methyl-	86	C6H14	000096-14-0	72
5	5,5-Dimethyl-1,3-dioxan-2-one	130	C6H10O3	003592-12-9	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

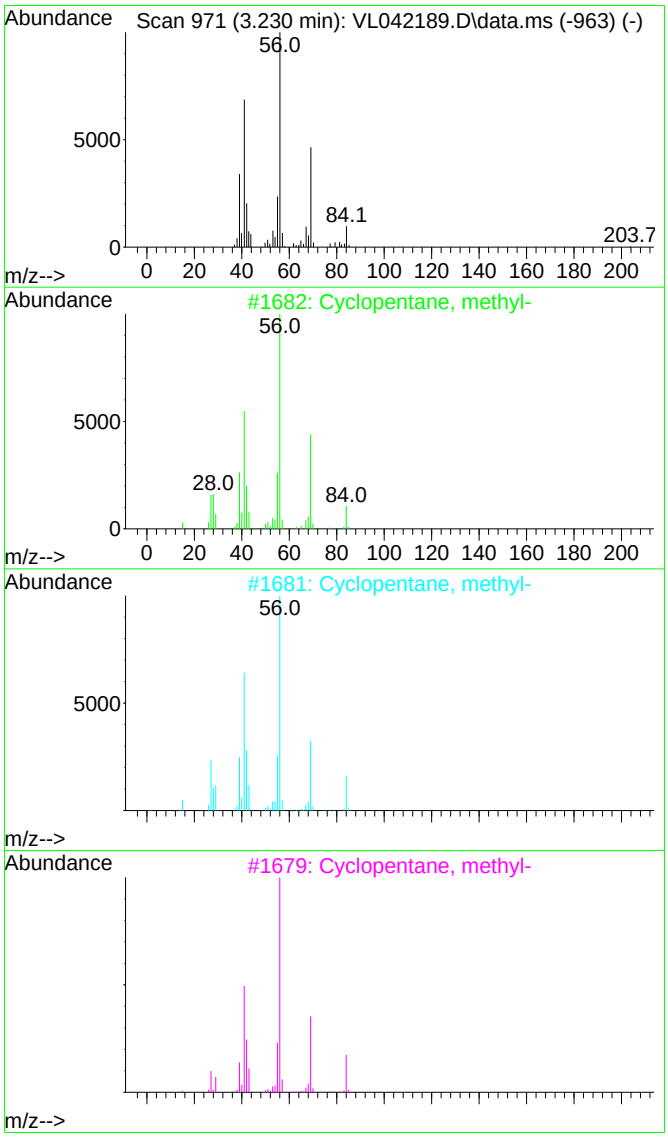
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

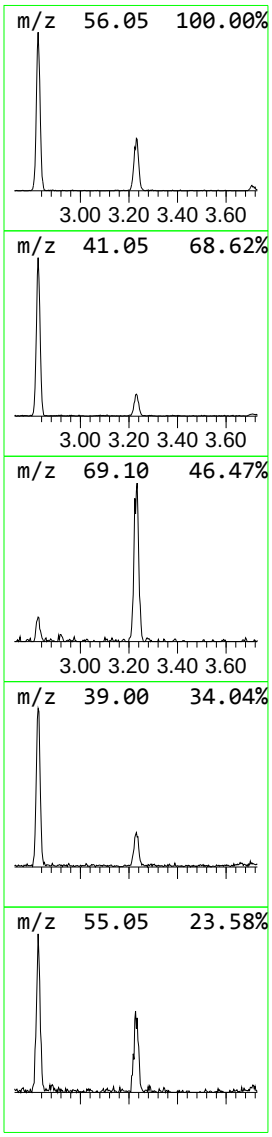
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Cyclopentane, methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.230	1.44 ppbv	103610	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	90
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	80
3	Cyclopentane, methyl-	84	C6H12	000096-37-7	72
4	Tetramethylene diisocyanate	140	C6H8N2O2	004538-37-8	72
5	Propane, 2-cyclopropyl-	84	C6H12	003638-35-5	64





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Pentane, 3-methyl-	2.625	1.2	ppbv	84853	1	2.787	717029	10.0
Cyclopentane, m...	3.230	1.4	ppbv	103610	1	2.787	717029	10.0

CALIBRATION SUMMARY

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL042177.D 0.1 =VL042176.D 0.5 =VL042175.D 1 =VL042174.D 2 =VL042173.D 10 =VL042172.D 15 =VL042178.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.602	1.514	1.482	1.404	1.380	1.476	6.03
3)		Chlorodifluoro...			1.622	1.541	1.514	1.457	1.408	1.508	5.41
4)		Chloromethane			0.660	0.597	0.618	0.573	0.570	0.603	6.17
5)	T	Vinyl Chloride	0.882	0.705	0.635	0.576	0.584	0.549	0.546	0.639	18.84
6)	T	Bromomethane			0.327	0.268	0.266	0.256	0.250	0.273	11.20
7)		Chloroethane			0.286	0.248	0.223	0.227	0.226	0.242	10.92
8)	T	Dichlorotetraf...			1.306	1.283	1.274	1.214	1.211	1.257	3.40
9)	T	Propene			0.734	0.736	0.698	0.660	0.630	0.691	6.69
10)	T	Heptane			1.847	1.940	1.897	1.792	1.719	1.839	4.73
11)	T	Trichlorofluor...			1.562	1.457	1.480	1.339	1.346	1.437	6.59
12)	T	1,1,2-Trichlor...			1.247	1.215	1.188	1.120	1.135	1.181	4.52
13)		Ethanol			0.110	0.086	0.073	0.029	0.028	0.065	55.48
14)	T	Bromoethene			0.529	0.447	0.460	0.417	0.409	0.452	10.47
15)	T	Acetone			1.699	1.573	1.469	1.113	1.139	1.399	18.73
16)	T	1,3-Butadiene			0.952	0.705	0.608	0.573	0.577	0.683	23.38
17)		tert-Butyl alc...			1.935	1.799	1.756	1.618	1.601	1.742	7.91
18)	T	1,1-Dichloroet...			0.624	0.565	0.560	0.504	0.507	0.552	8.99
19)	T	Isopropyl Alcohol			1.016	0.800	0.738	0.702	0.689	0.789	16.99
20)	T	Methylene Chlo...			0.624	0.563	0.545	0.438	0.435	0.521	15.85
21)	T	Allyl Chloride			1.067	1.022	1.020	0.902	0.921	0.986	7.25
22)	T	trans-1,2-Dich...			0.704	0.701	0.621	0.590	0.575	0.638	9.56
23)	T	Vinyl Acetate			0.754	0.692	0.550	0.498	0.532	0.605	18.40
24)	T	1,1-Dichloroet...			1.247	1.208	1.187	1.122	1.149	1.183	4.17
25)	T	Ethyl Acetate			4.017	3.619	3.703	3.457	3.353	3.630	7.06
26)	T	Hexane			1.507	1.462	1.383	1.333	1.325	1.402	5.71
27)	T	Carbon Disulfide			1.608	1.512	1.538	1.436	1.423	1.503	5.07
28)	T	Methyl tert-Bu...			0.921	0.886	0.894	0.831	0.832	0.873	4.56
29)	T	Chloroform			2.233	2.068	2.071	1.932	1.956	2.052	5.81
30)	T	Cyclohexane			1.337	1.238	1.211	1.162	1.140	1.217	6.33
31)	T	cis-1,2-Dichlo...			1.507	1.460	1.426	1.371	1.353	1.423	4.44
32)	T	1,1,1-Trichlor...	3.151	2.495	2.279	2.201	2.152	2.062	2.105	2.349	16.23
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.754	0.771	0.770	0.667	0.664	0.725	7.58
35)	T	Carbon Tetrach...	1.069	0.782	0.709	0.732	0.748	0.703	0.725	0.781	16.60
36)	T	Benzene			1.049	1.027	1.013	0.934	0.934	0.991	5.47
37)	T	1,2-Dichloroet...			0.613	0.569	0.563	0.537	0.556	0.568	4.95
38)	T	Trichloroethene	0.463	0.437	0.438	0.408	0.398	0.374	0.378	0.414	8.00
39)	T	1,2-Dichloropr...			0.386	0.373	0.365	0.337	0.344	0.361	5.68

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL032725AIR.M

40)	T	1,4-Dioxane			0.234	0.197	0.191	0.169	0.167	0.192	14.08
41)	T	Tetrahydrofuran			0.439	0.425	0.432	0.398	0.393	0.418	4.98
42)	T	Bromodichlorom...			0.778	0.779	0.802	0.769	0.785	0.782	1.58
43)		Methyl Methacr...			0.442	0.451	0.408	0.403	0.394	0.420	6.03
44)	T	2,2,4-Trimethy...			1.781	1.689	1.723	1.608	1.576	1.675	5.00
45)	T	t-1,3-Dichloro...			0.474	0.447	0.453	0.439	0.440	0.450	3.15
46)	T	cis-1,3-Dichlo...			0.549	0.560	0.566	0.550	0.535	0.552	2.12
47)	T	1,1,2-Trichlor...			0.419	0.382	0.379	0.364	0.365	0.382	5.88
48)	T	Dibromochlorom...			0.651	0.641	0.663	0.636	0.644	0.647	1.62
49)	T	Bromoform			0.566	0.588	0.597	0.582	0.570	0.581	2.18
50)	T	4-Methyl-2-Pen...			1.286	1.214	1.211	1.027	1.008	1.149	10.79
51)	T	2-Hexanone			0.999	1.018	1.031	0.844	0.827	0.944	10.56
52)	T	Tetrachloroethene	0.572	0.359	0.401	0.361	0.371	0.343	0.345	0.393	20.64
53)	T	Toluene			1.239	1.203	1.202	1.125	1.108	1.175	4.76
54)	T	1,2-Dibromoethane		0.574	0.543	0.538	0.520	0.508	0.510	0.532	4.74
55)	I	Chlorobenzene-d5	----------ISTD----------								
56)		1,1,1,2-Tetrac...			0.576	0.575	0.576	0.510	0.515	0.550	6.30
57)	T	Chlorobenzene			1.024	0.979	0.994	0.875	0.871	0.949	7.46
58)	T	Ethyl Benzene			1.850	1.822	1.894	1.671	1.645	1.776	6.28
59)	T	m/p-Xylene			1.505	1.472	1.484	1.321	1.309	1.418	6.71
60)	T	o-Xylene			1.521	1.475	1.499	1.328	1.287	1.422	7.50
61)	T	Styrene			0.709	0.722	0.735	0.683	0.668	0.703	3.92
62)		Isopropylbenzene			2.290	2.199	2.261	1.962	1.920	2.126	8.14
63)	T	1,1,2,2-Tetrac...	0.986	0.800	0.907	0.889	0.893	0.796	0.777	0.864	8.78
64)		n-propylbenzene			0.578	0.581	0.576	0.499	0.502	0.547	7.81
65)		tert-Butylbenzene			2.190	2.071	2.144	1.736	1.691	1.966	11.96
66)	T	Benzyl Chloride			0.217	0.213	0.221	0.203	0.189	0.209	6.06
67)		sec-Butylbenzene			3.005	2.994	2.947	2.404	2.316	2.733	12.54
68)	S	1-Bromo-4-Fluo...	0.820	0.827	0.832	0.810	0.828	0.813	0.820	0.821	0.98
69)		p-Isopropyltol...			2.554	2.551	2.560	2.078	2.025	2.354	11.74
70)		n-Butylbenzene			2.536	2.598	2.682	2.137	2.082	2.407	11.51
71)		2-Chlorotoluene			1.717	1.728	1.759	1.538	1.510	1.650	7.07
72)	T	4-Ethyltoluene			1.834	1.859	1.929	1.629	1.601	1.770	8.26
73)	T	1,3,5-Trimethy...			1.616	1.671	1.677	1.387	1.381	1.546	9.71
74)	T	1,2,4-Trimethy...			1.994	1.958	1.966	1.510	1.478	1.781	14.74
75)	T	1,3-Dichlorobe...			1.036	1.022	1.063	0.882	0.882	0.977	8.99
76)	T	1,4-Dichlorobe...			1.030	1.017	1.040	0.888	0.886	0.972	8.05
77)	T	1,2-Dichlorobe...			1.012	1.031	1.014	0.850	0.850	0.951	9.78
78)	T	Hexachloro-1,3...			1.057	1.113	1.086	0.802	0.784	0.968	16.65
79)	T	Naphthalene		1.637	1.979	2.181	2.314	1.806	1.773	1.948	13.31
80)	T	Naphthalene,2-...			0.721	0.891	1.163	0.990	1.013	0.955	17.09
81)	T	1,2,4-Trichlor...			0.821	0.941	1.028	0.859	0.843	0.899	9.51

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	187002	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	545068	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	519536	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	422410	9.901	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	262496	9.507	ppbv	100
3) Chlorodifluoromethane	1.473	51	272522	9.662	ppbv	100
4) Chloromethane	1.531	50	107099	9.491	ppbv	100
5) Vinyl Chloride	1.577	62	102699	8.925	ppbv	100
6) Bromomethane	1.664	94	47950	9.377	ppbv	100
7) Chloroethane	1.703	64	42516	9.387	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	227041	9.656	ppbv	100
9) Propene	1.483	41	123386	9.709	ppbv	100
10) Heptane	4.972	43	335086	9.744	ppbv	100
11) Trichlorofluoromethane	1.874	101	250349	9.318	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	209365	9.481	ppbv	100
13) Ethanol	1.719	45	5338	5.364	ppbv	100
14) Bromoethene	1.777	108	77999	9.220	ppbv	100
15) Acetone	1.832	43	208061	7.955	ppbv	100
16) 1,3-Butadiene	1.606	39	107104	9.105	ppbv	100
17) tert-Butyl alcohol	2.036	59	302616	9.290	ppbv	100
18) 1,1-Dichloroethene	2.030	96	94236	9.128	ppbv	100
19) Isopropyl Alcohol	1.884	45	131359	8.902	ppbv	100
20) Methylene Chloride	2.059	84	81828	8.401	ppbv	100
21) Allyl Chloride	2.091	41	168602	9.141	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	110371	9.149	ppbv	100
23) Vinyl Acetate	2.460	43	93080	8.563	ppbv	100
24) 1,1-Dichloroethane	2.405	63	209753	9.484	ppbv	100
25) Ethyl Acetate	2.833	43	646501	9.524	ppbv	100
26) Hexane	2.823	57	249331	9.510	ppbv	100
27) Carbon Disulfide	2.146	76	268507	9.550	ppbv	100
28) Methyl tert-Butyl Ether	2.438	73	155398	9.520	ppbv	100
29) Chloroform	2.845	83	361264	9.415	ppbv	100
30) Cyclohexane	3.852	84	217215	9.537	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	256425	9.634	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	385628	8.784	ppbv	100
34) 2-Butanone	2.554	43	363735	9.203	ppbv	100
35) Carbon Tetrachloride	3.758	117	382925	9.129	ppbv	100
36) Benzene	3.651	78	508860	9.417	ppbv	100
37) 1,2-Dichloroethane	3.214	62	292937	9.469	ppbv	100
38) Trichloroethene	4.545	130	204027	9.045	ppbv	100
39) 1,2-Dichloropropane	4.312	63	183439	9.321	ppbv	100
40) 1,4-Dioxane	4.577	88	92327	9.042	ppbv #	100
41) Tetrahydrofuran	3.049	42	216851	9.643	ppbv	100
42) Bromodichloromethane	4.483	83	418887	9.822	ppbv	100
43) Methyl Methacrylate	4.872	69	219399	9.618	ppbv	100
44) 2,2,4-Trimethylpentane	4.635	57	876649	9.600	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	239180	9.746	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
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Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	300021	9.973	ppbv		100
47) 1,1,2-Trichloroethane	6.574	97	198176	9.526	ppbv		100
48) Dibromochloromethane	7.380	129	346499	9.828	ppbv		100
49) Bromoform	9.477	173	317189	10.021	ppbv		100
50) 4-Methyl-2-Pentanone	5.745	43	559800	8.934	ppbv		100
51) 2-Hexanone	7.432	43	460013	8.848	ppbv	#	100
52) Tetrachloroethene	8.218	164	186912	8.722	ppbv		100
53) Toluene	6.927	91	613378	9.576	ppbv		100
54) 1,2-Dibromoethane	7.649	107	276797	9.536	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.917	131	265037	9.268	ppbv		100
57) Chlorobenzene	8.917	112	454511	9.223	ppbv		100
58) Ethyl Benzene	9.351	91	868003	9.406	ppbv		100
59) m/p-Xylene	9.549	91	1372806m	18.607	ppbv		
60) o-Xylene	9.960	91	689933	9.340	ppbv		100
61) Styrene	9.866	104	354697	9.706	ppbv		100
62) Isopropylbenzene	10.536	105	1019255	9.227	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.960	83	413392	9.210	ppbv		100
64) n-propylbenzene	10.986	120	259405	9.122	ppbv		100
65) tert-Butylbenzene	11.529	119	901951	8.828	ppbv		100
66) Benzyl Chloride	11.610	91	105411	9.724	ppbv		100
67) sec-Butylbenzene	11.766	105	1249106	8.796	ppbv		100
69) p-Isopropyltoluene	11.924	119	1079675	8.830	ppbv		100
70) n-Butylbenzene	12.277	91	1110351	8.879	ppbv		100
71) 2-Chlorotoluene	10.898	91	799102	9.320	ppbv		100
72) 4-Ethyltoluene	11.122	105	846232	9.200	ppbv		100
73) 1,3,5-Trimethylbenzene	11.199	105	720566	8.970	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	784745	8.480	ppbv		100
75) 1,3-Dichlorobenzene	11.604	146	458226	9.028	ppbv		100
76) 1,4-Dichlorobenzene	11.669	146	461371	9.134	ppbv		100
77) 1,2-Dichlorobenzene	11.944	146	441473	8.933	ppbv		100
78) Hexachloro-1,3-Butadiene	13.879	225	416735	8.284	ppbv		100
79) Naphthalene	13.510	128	938470	9.271	ppbv		100
80) Naphthalene,2-methyl-	14.455	142	514394	10.436	ppbv		100
81) 1,2,4-Trichlorobenzene	13.439	180	446420	9.561	ppbv		100

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

Quantitation Report (QT Reviewed)

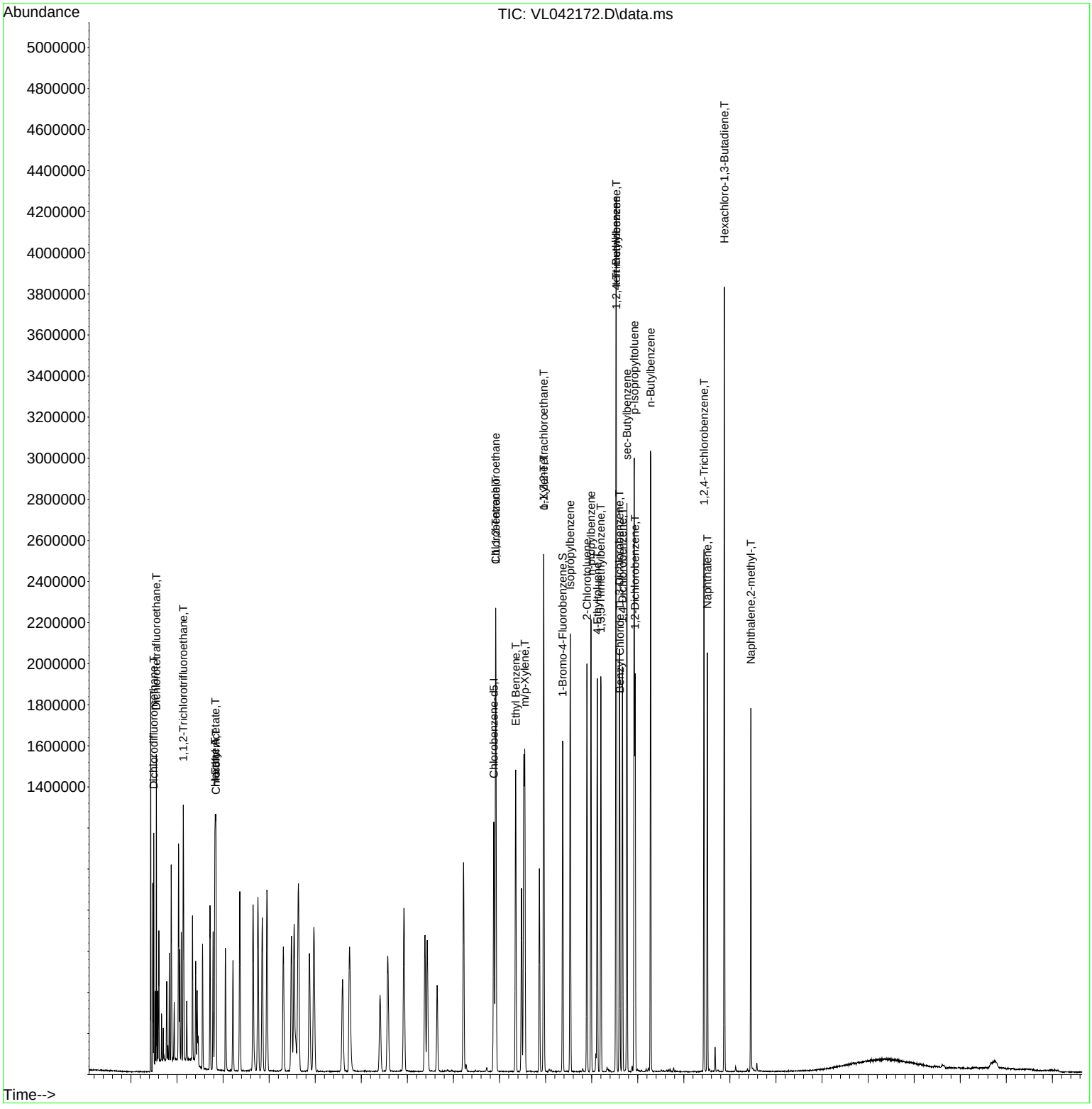
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

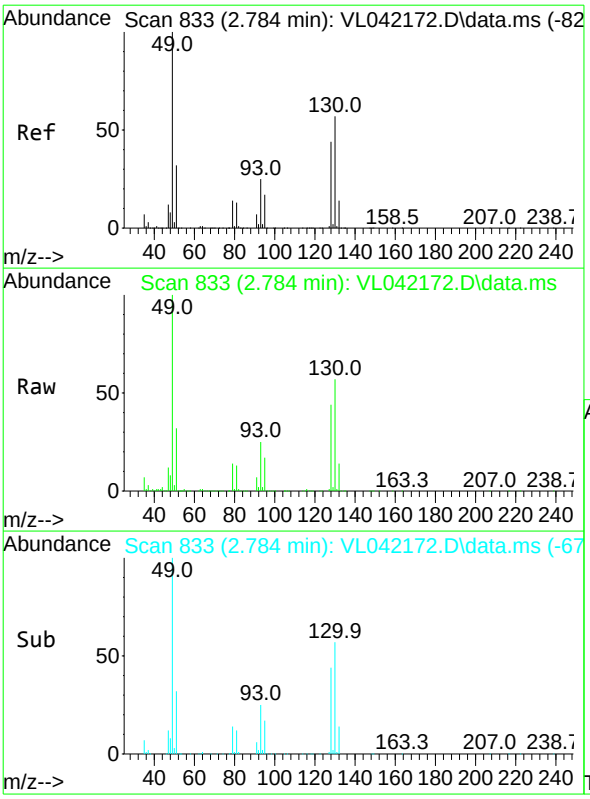
Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

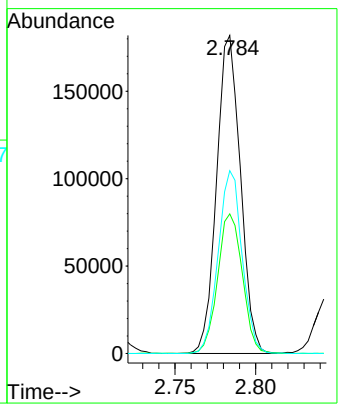




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 49 Resp: 187002

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.6	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
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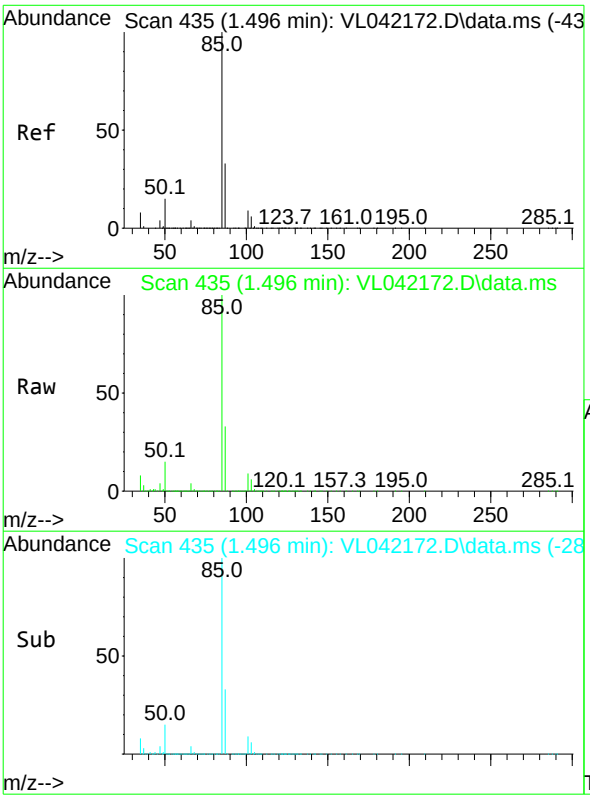
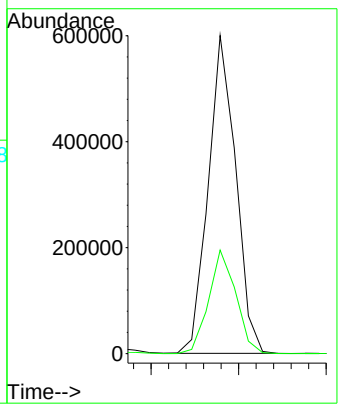
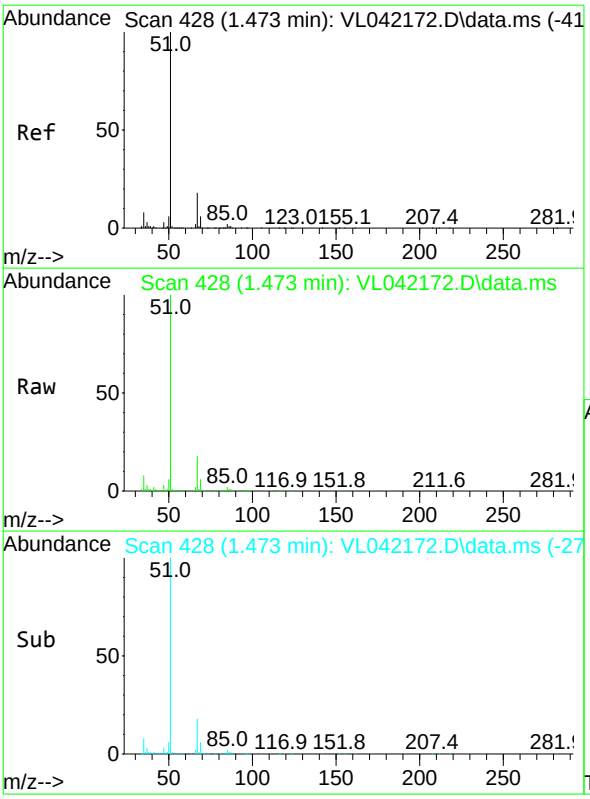


#2
Dichlorodifluoromethane
Concen: 9.507 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 262496

Ion	Ratio	Lower	Upper
85	100		
87	32.6	26.1	39.1

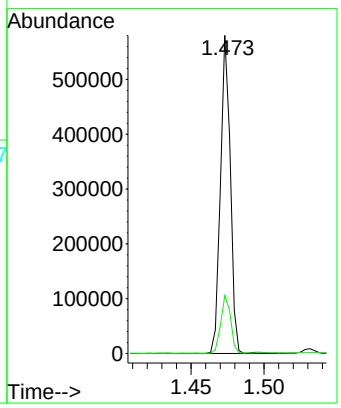




#3
Chlorodifluoromethane
Concen: 9.662 ppbv
RT: 1.473 min Scan# 42
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 51 Resp: 272522

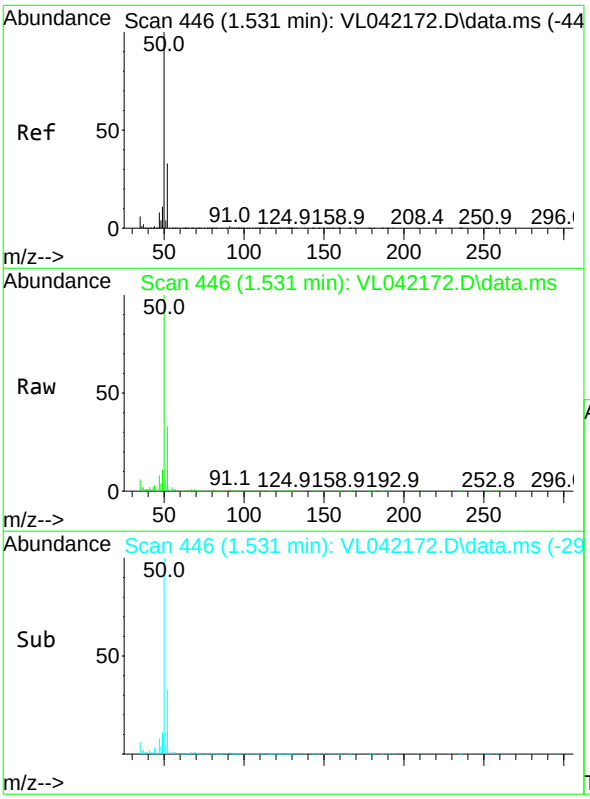
Ion	Ratio	Lower	Upper
51	100		
67	18.8	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

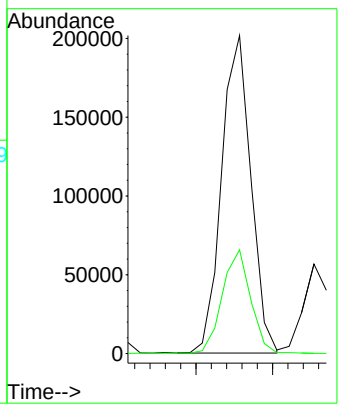
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

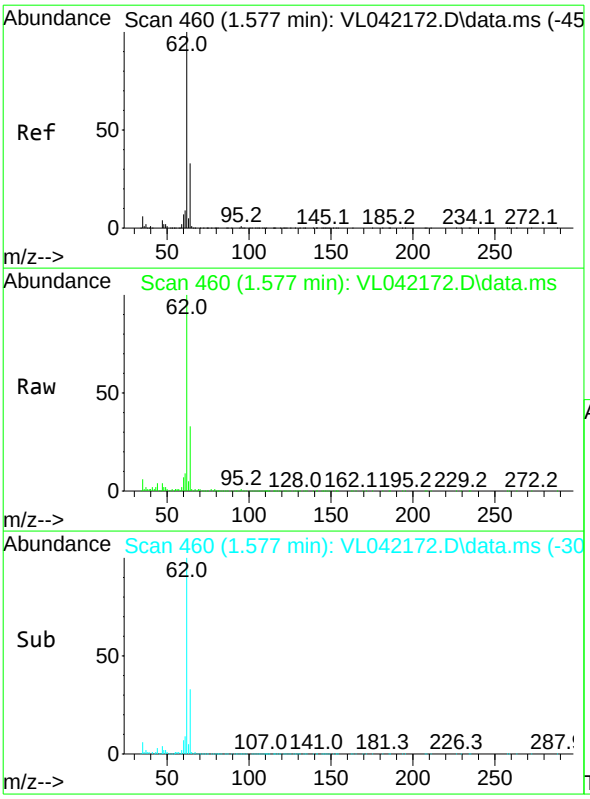


#4
Chloromethane
Concen: 9.491 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 50 Resp: 107099

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.1	39.1





#5
Vinyl Chloride
Concen: 8.925 ppbv
RT: 1.577 min Scan# 46
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

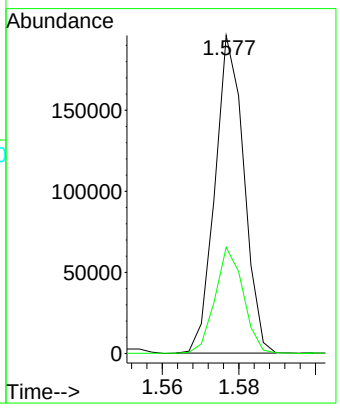
Tgt Ion: 62 Resp: 102699

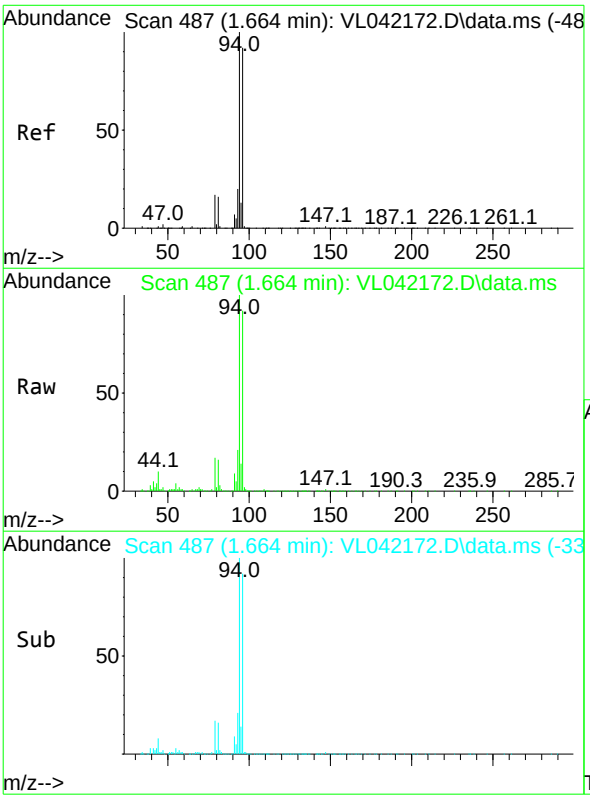
Ion	Ratio	Lower	Upper
62	100		
64	33.3	26.6	40.0

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

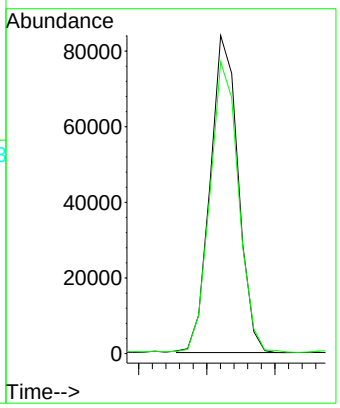


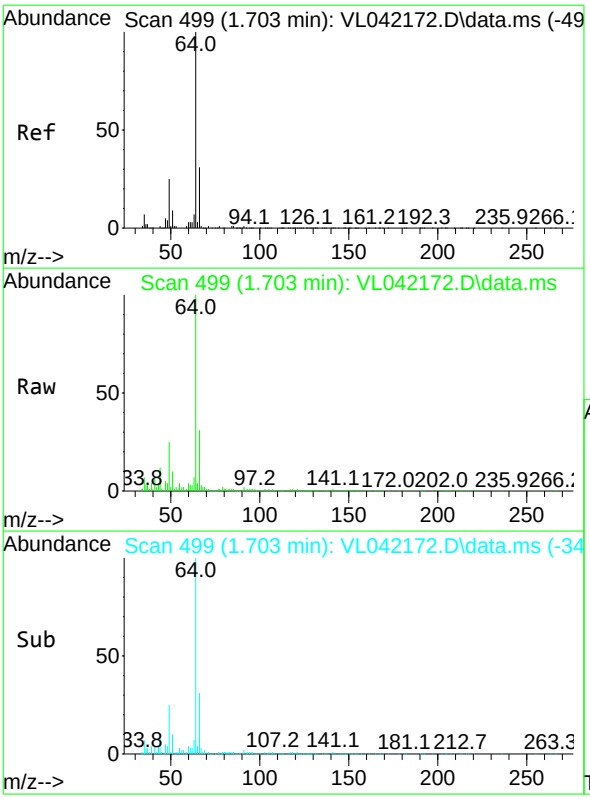


#6
Bromomethane
Concen: 9.377 ppbv
RT: 1.664 min Scan# 487
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 94 Resp: 47950

Ion	Ratio	Lower	Upper
94	100		
96	91.4	73.1	109.7

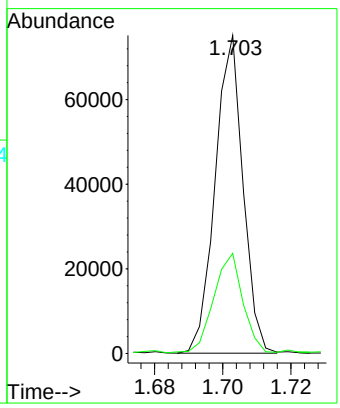




#7
Chloroethane
Concen: 9.387 ppbv
RT: 1.703 min Scan# 49
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 64 Resp: 42516

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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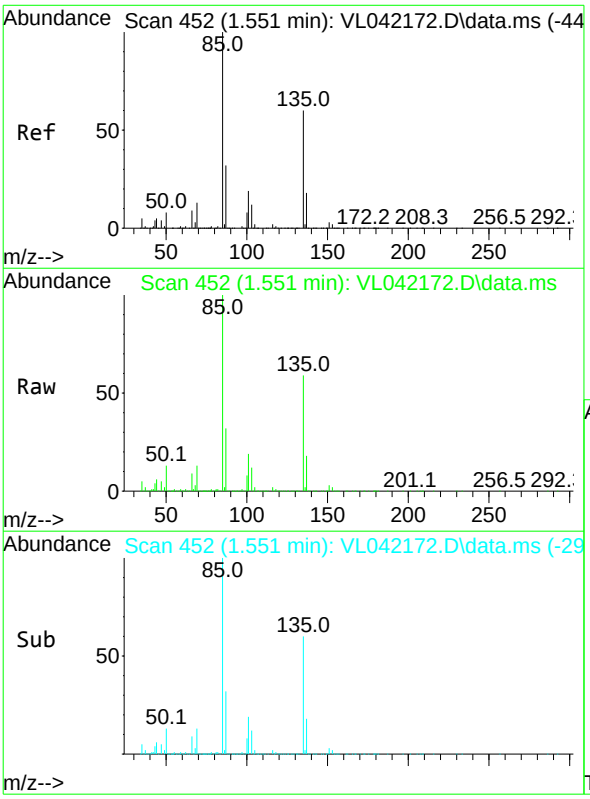
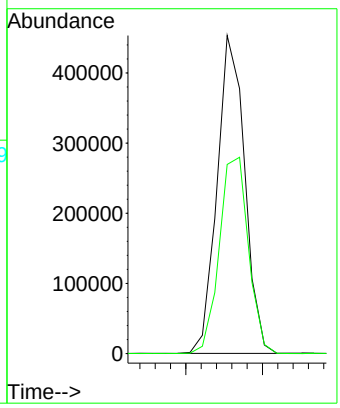
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

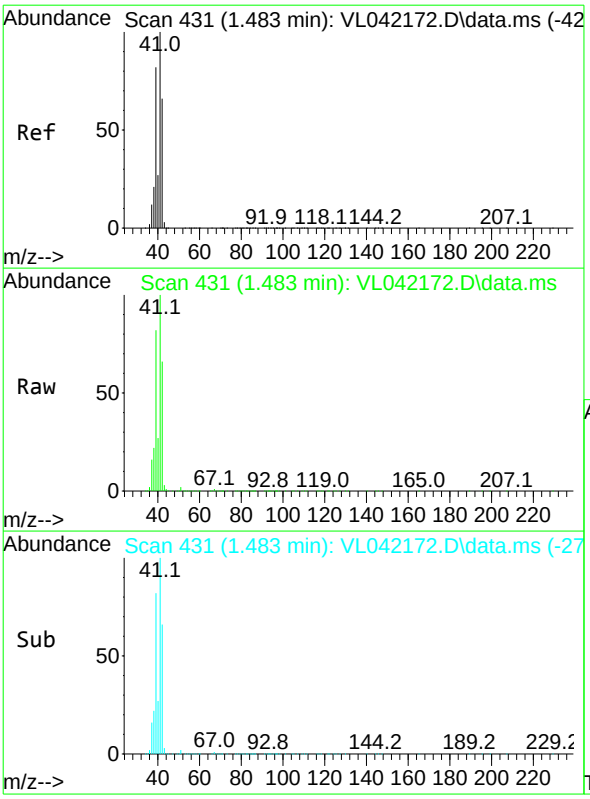


#8
Dichlorotetrafluoroethane
Concen: 9.656 ppbv
RT: 1.551 min Scan# 452
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 227041

Ion	Ratio	Lower	Upper
85	100		
135	65.5	52.4	78.6

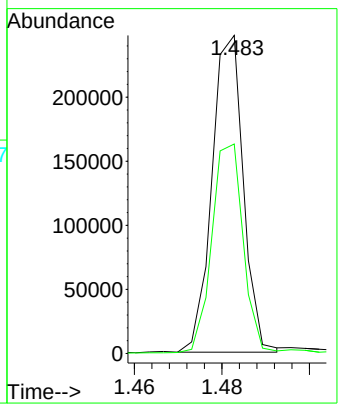




#9
Propene
Concen: 9.709 ppbv
RT: 1.483 min Scan# 43
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 41 Resp: 123386

Ion	Ratio	Lower	Upper
41	100		
42	69.3	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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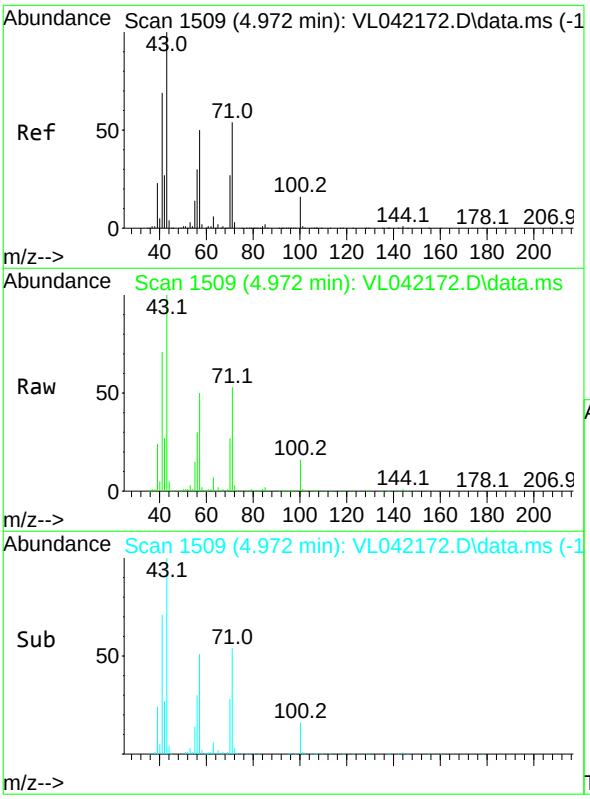
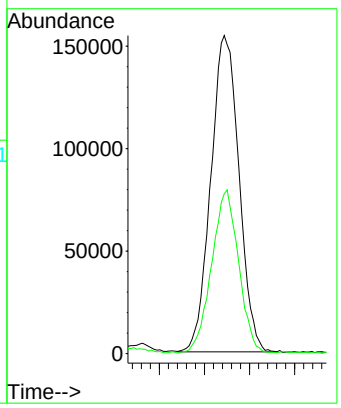
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

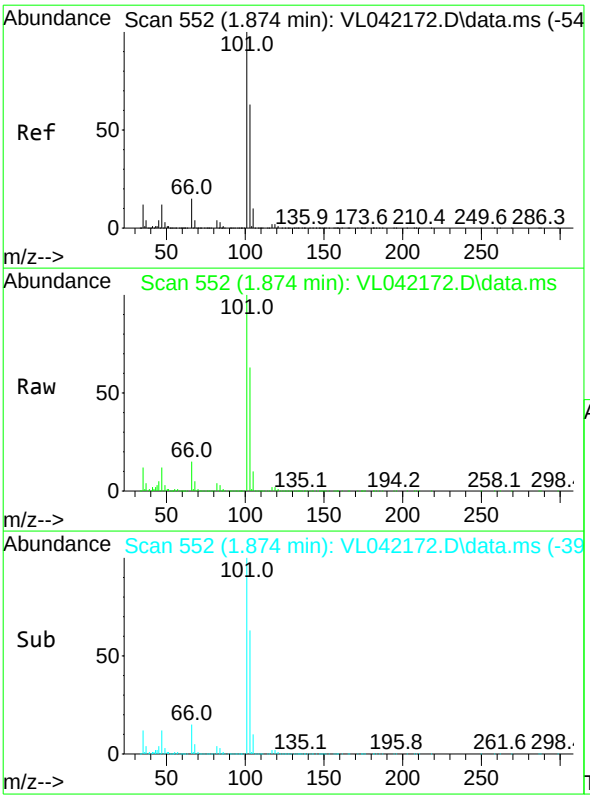


#10
Heptane
Concen: 9.744 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 335086

Ion	Ratio	Lower	Upper
43	100		
57	49.3	39.4	59.2





#11
Trichlorofluoromethane
Concen: 9.318 ppbv
RT: 1.874 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:101 Resp: 250349

Ion	Ratio	Lower	Upper
101	100		
103	62.7	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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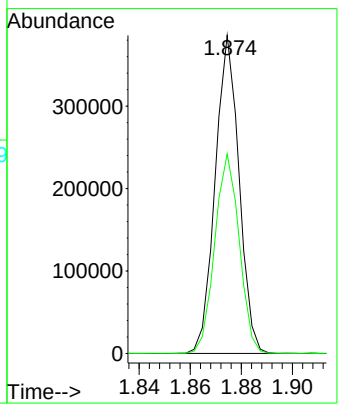
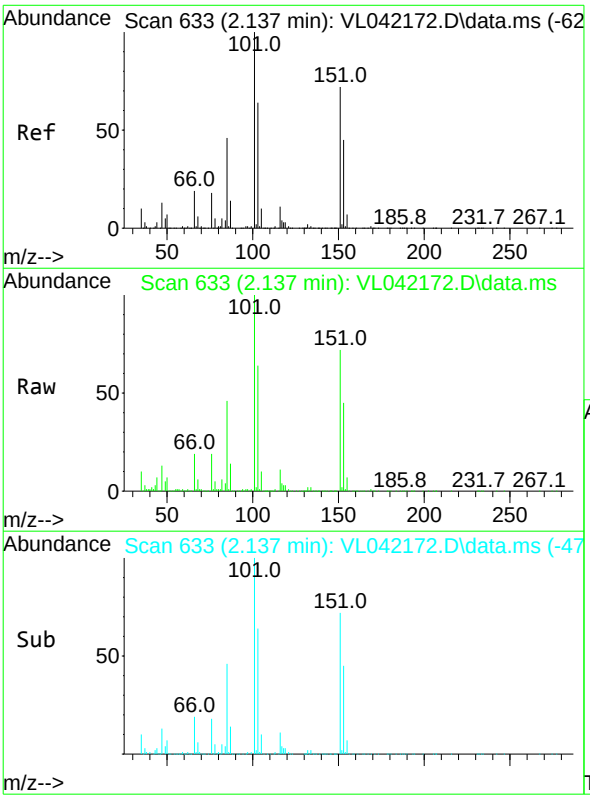
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

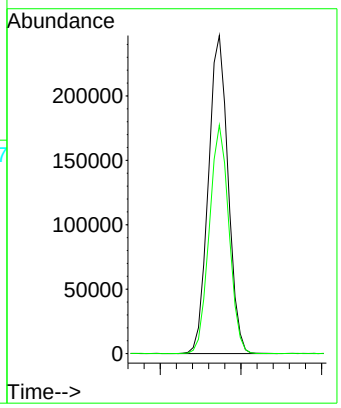


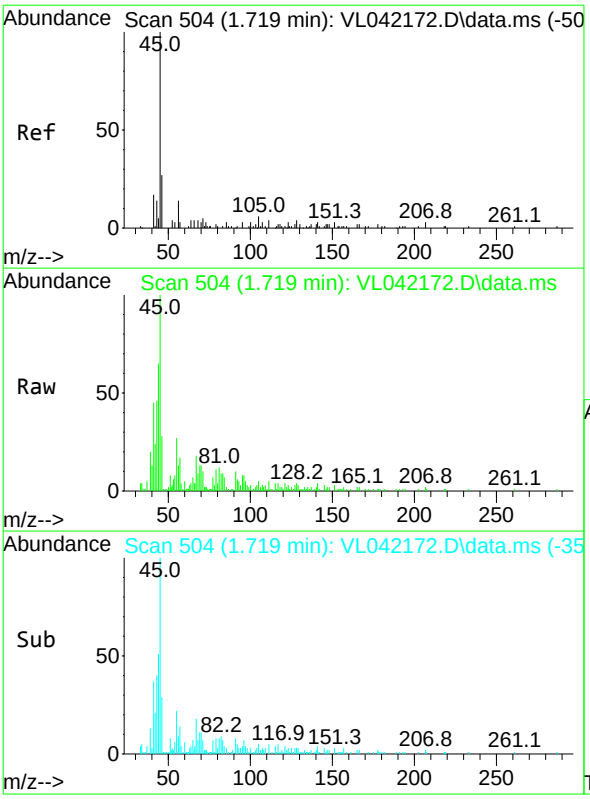


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.481 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:101 Resp: 209365

Ion	Ratio	Lower	Upper
101	100		
151	71.4	57.1	85.7

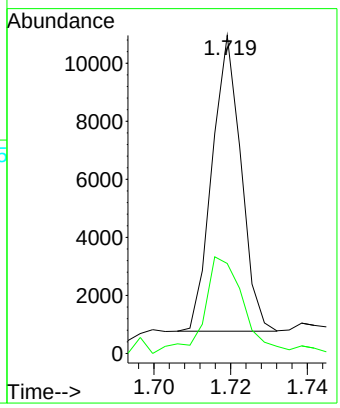




#13
Ethanol
Concen: 5.364 ppbv
RT: 1.719 min Scan# 50
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 45 Resp: 5338

Ion	Ratio	Lower	Upper
45	100		
46	50.5	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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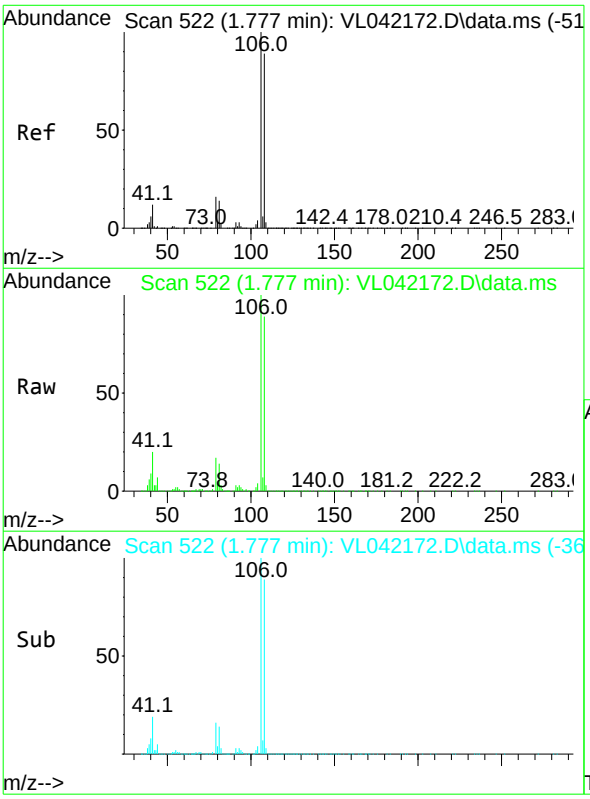
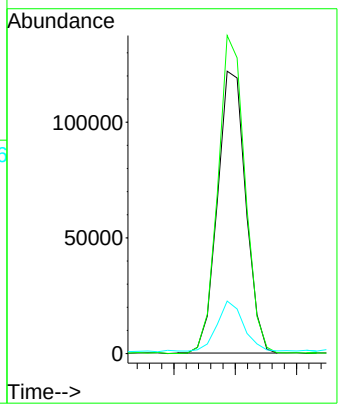
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

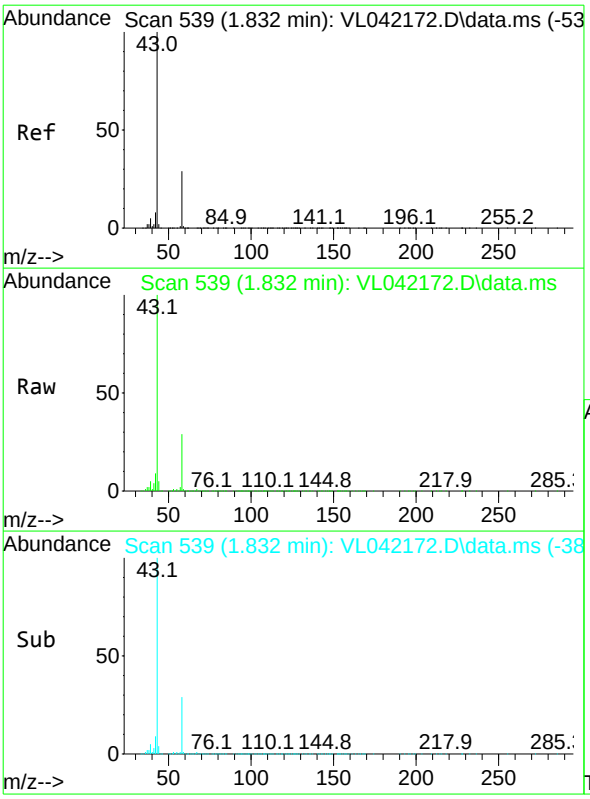


#14
Bromoethene
Concen: 9.220 ppbv
RT: 1.777 min Scan# 522
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:108 Resp: 77999

Ion	Ratio	Lower	Upper
108	100		
106	108.5	86.8	130.2
79	18.8	15.0	22.6

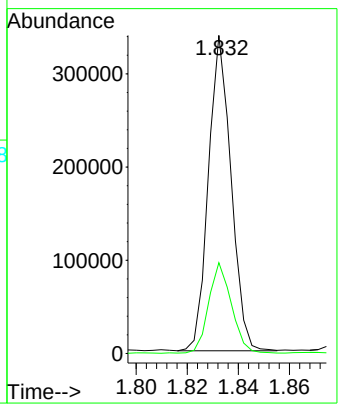




#15
Acetone
Concen: 7.955 ppbv
RT: 1.832 min Scan# 53
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 208061

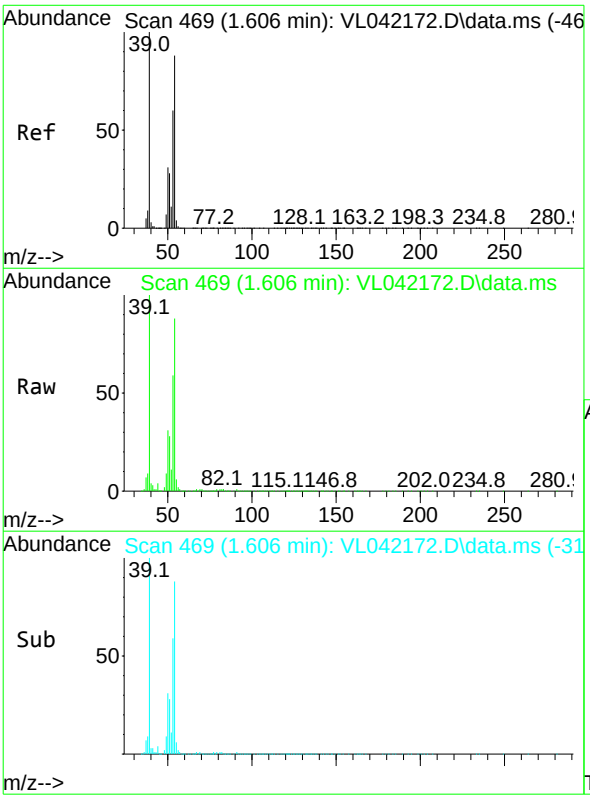
Ion	Ratio	Lower	Upper
43	100		
58	29.0	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

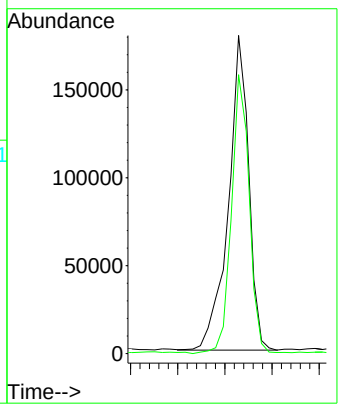
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

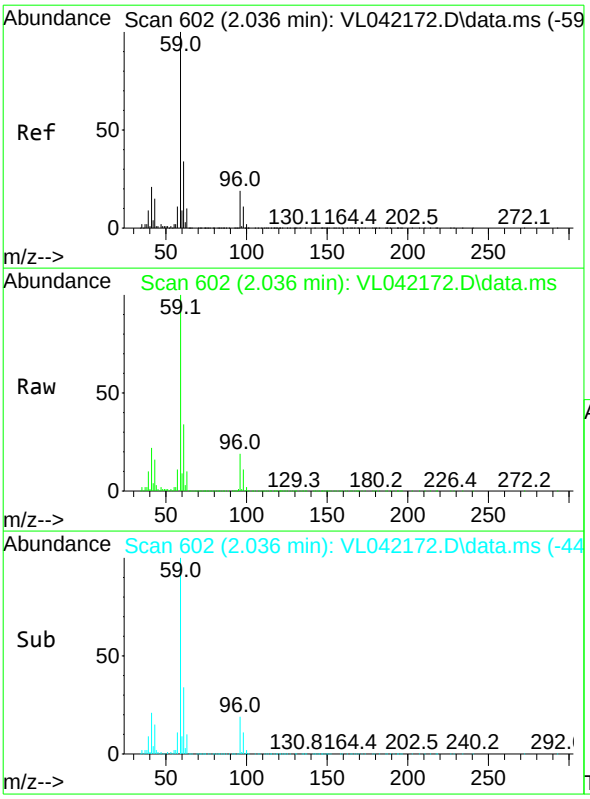


#16
1,3-Butadiene
Concen: 9.105 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 39 Resp: 107104

Ion	Ratio	Lower	Upper
39	100		
54	75.9	60.7	91.1

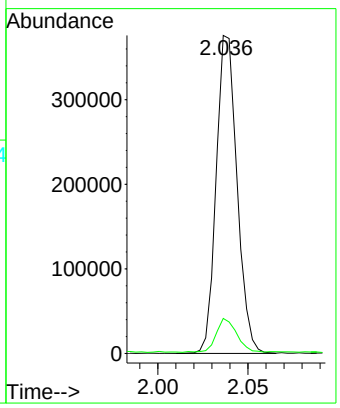




#17
tert-Butyl alcohol
Concen: 9.290 ppbv
RT: 2.036 min Scan# 60
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 59 Resp: 302616

Ion	Ratio	Lower	Upper
59	100		
57	11.1	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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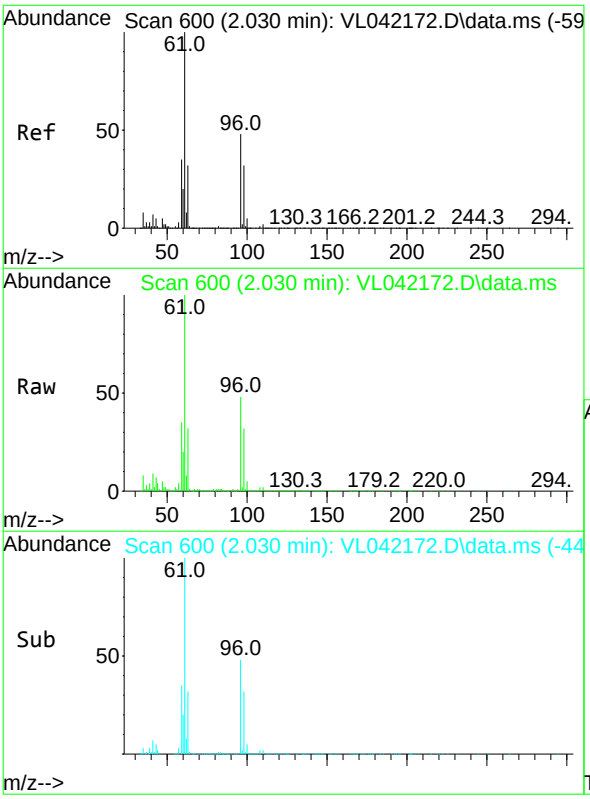
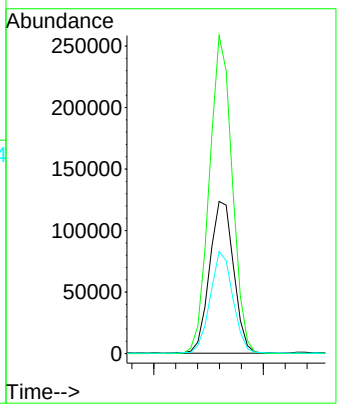
Supervised By :Mahesh Dadoda 04/03/2025

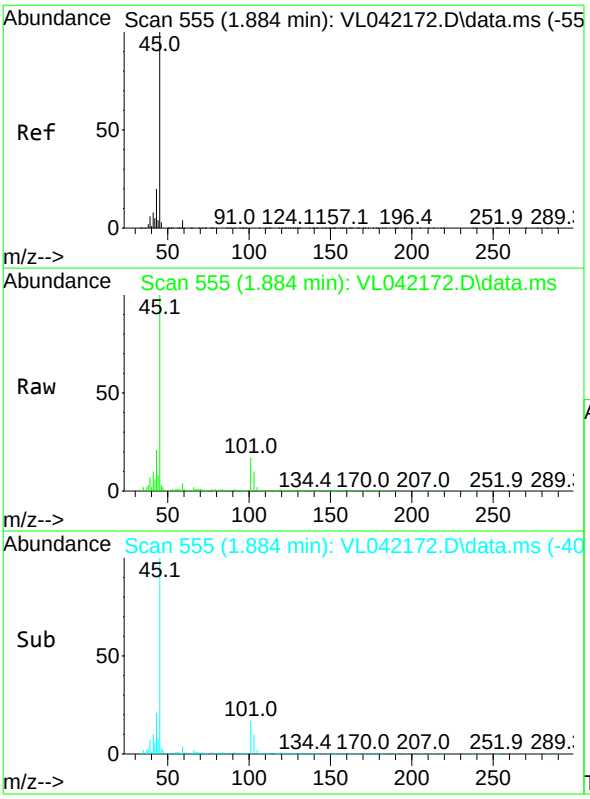


#18
1,1-Dichloroethene
Concen: 9.128 ppbv
RT: 2.030 min Scan# 600
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 94236

Ion	Ratio	Lower	Upper
96	100		
61	209.5	167.6	251.4
98	66.9	53.5	80.3

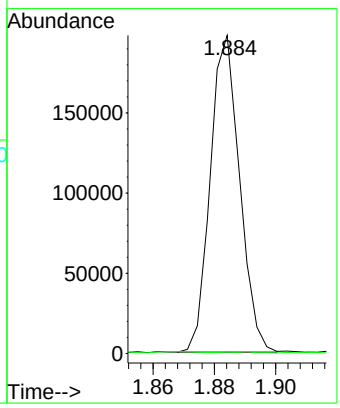




#19
Isopropyl Alcohol
Concen: 8.902 ppbv
RT: 1.884 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 45 Resp: 131359

Ion	Ratio	Lower	Upper
45	100		
58	46.1	36.9	55.3



Instrument :
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ClientSampleId :
VSTDICCC010

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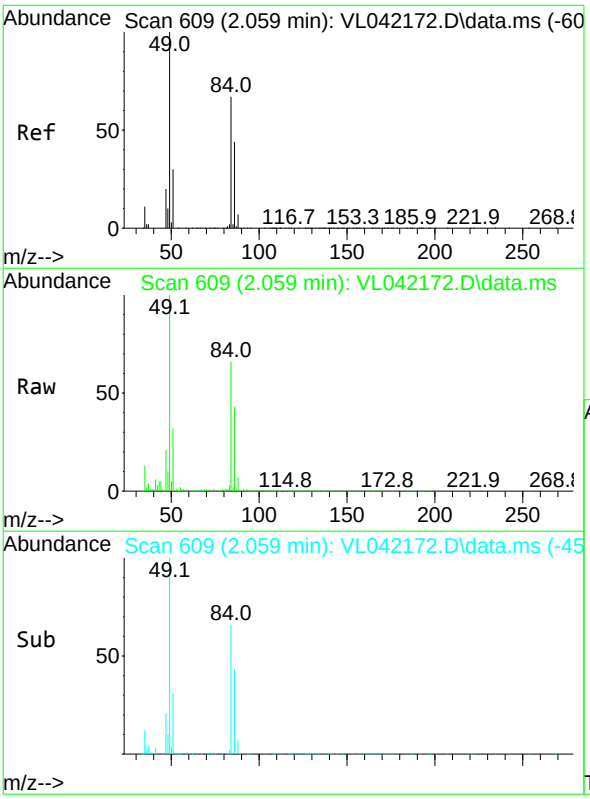
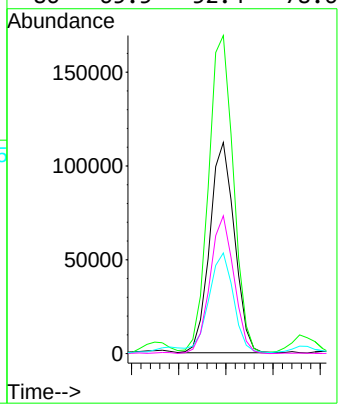
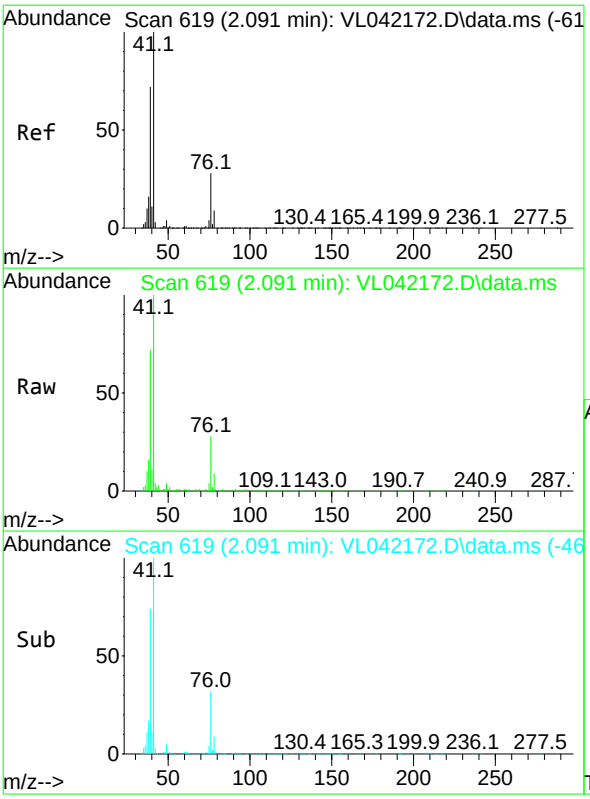


#20
Methylene Chloride
Concen: 8.401 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 81828

Ion	Ratio	Lower	Upper
84	100		
49	150.3	120.2	180.4
51	46.7	37.4	56.0
86	65.5	52.4	78.6

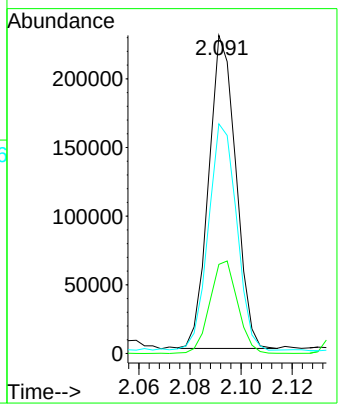




#21
Allyl Chloride
Concen: 9.141 ppbv
RT: 2.091 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 41 Resp: 168602

Ion	Ratio	Lower	Upper
41	100		
76	30.1	24.1	36.1
39	76.4	61.1	91.7



Instrument :
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ClientSampleId :
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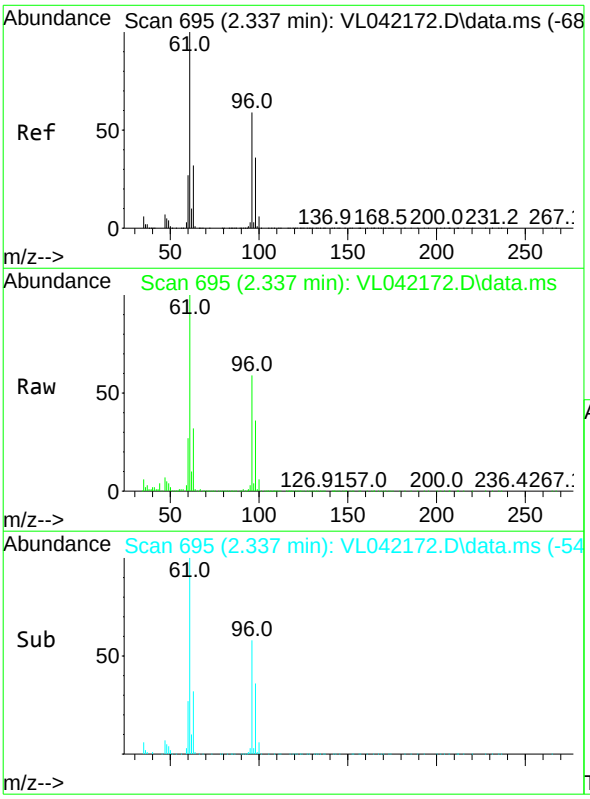
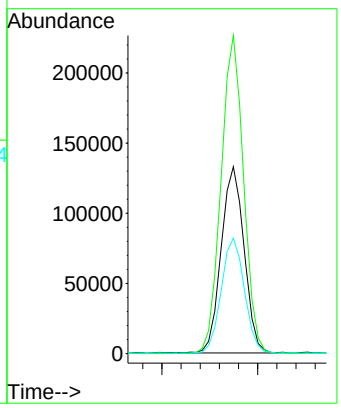
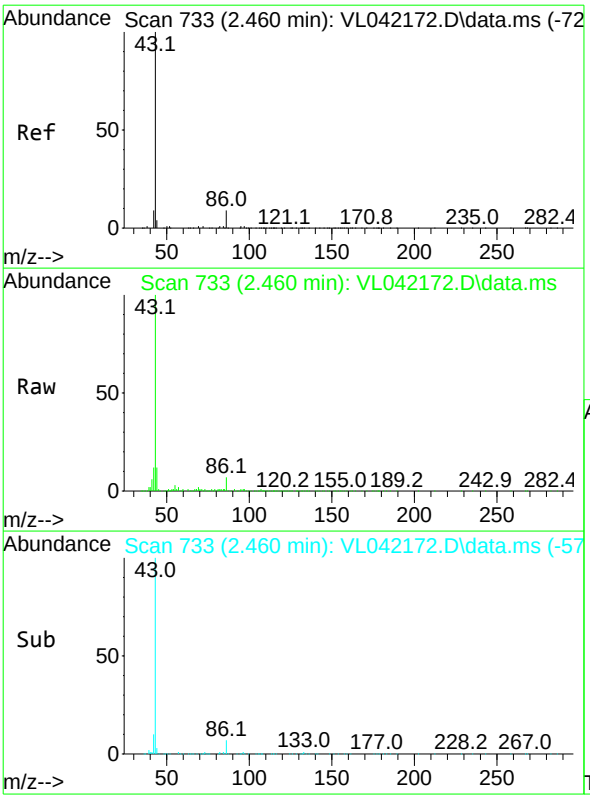


#22
trans-1,2-Dichloroethene
Concen: 9.149 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 110371

Ion	Ratio	Lower	Upper
96	100		
61	170.7	136.6	204.8
98	61.8	49.4	74.2

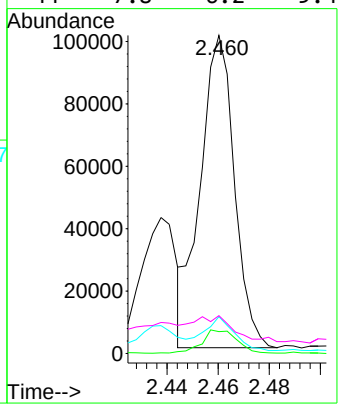




#23
Vinyl Acetate
Concen: 8.563 ppbv
RT: 2.460 min Scan# 73
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 93080

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	10.8	8.6	13.0
44	7.8	6.2	9.4



Instrument :
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ClientSampleId :
VSTDICCC010

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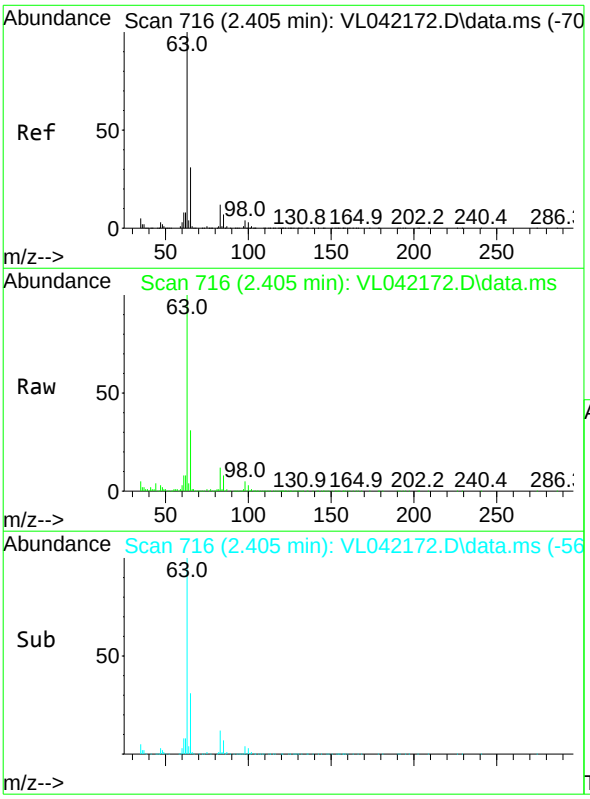
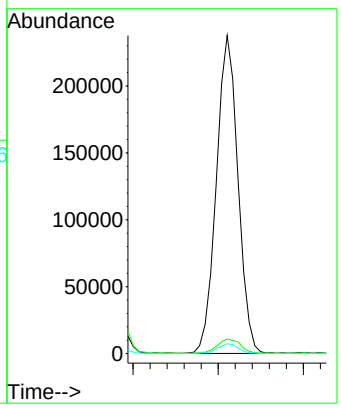
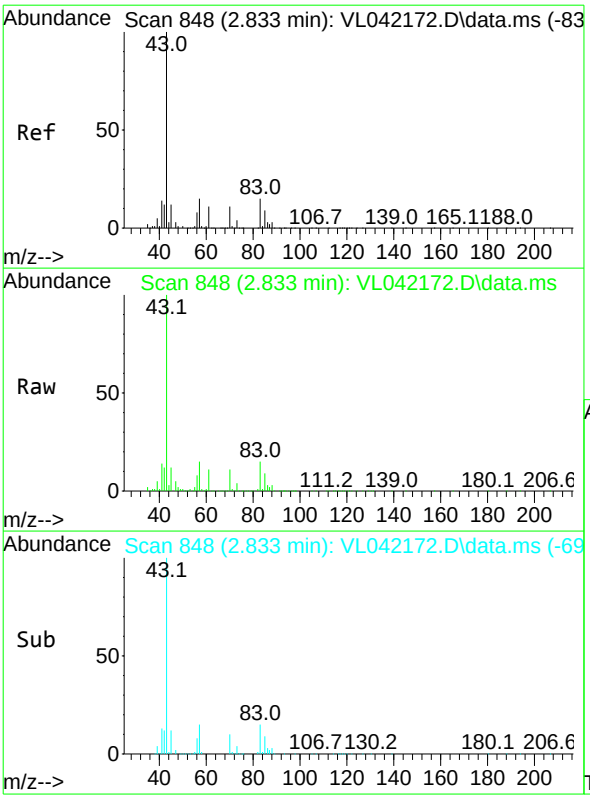


#24
1,1-Dichloroethane
Concen: 9.484 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 63 Resp: 209753

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.1	1.6	4.7

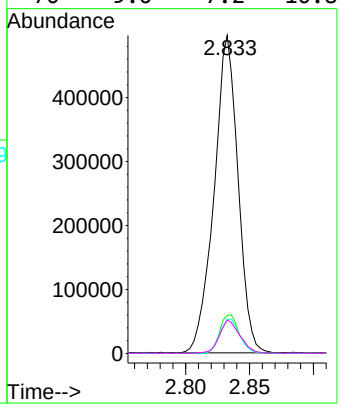




#25
Ethyl Acetate
Concen: 9.524 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 646501

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.1	7.3	10.9
70	9.0	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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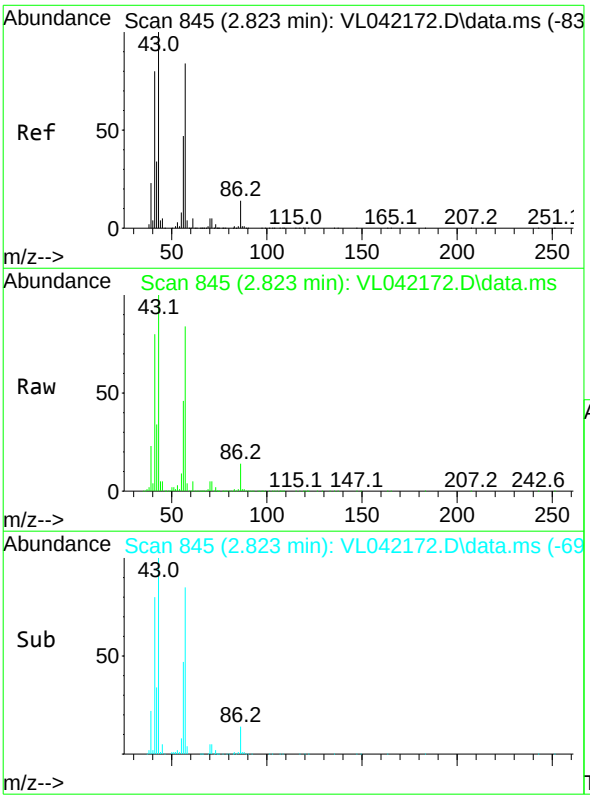
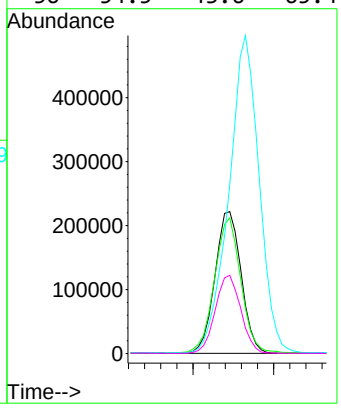
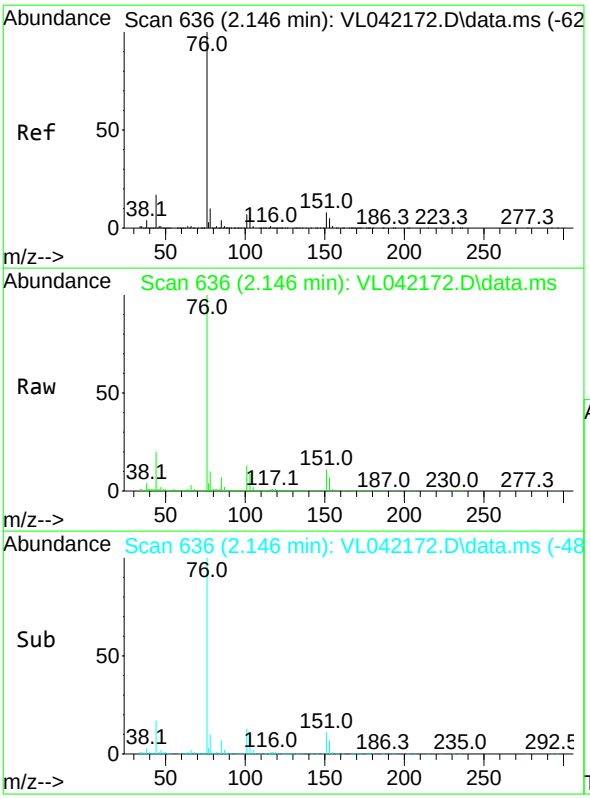


#26
Hexane
Concen: 9.510 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 249331

Ion	Ratio	Lower	Upper
57	100		
41	95.7	76.6	114.8
43	259.8	207.8	311.8
56	54.5	43.6	65.4

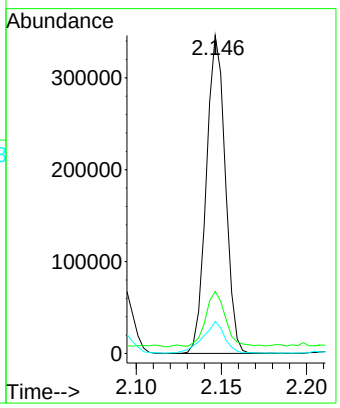




#27
Carbon Disulfide
Concen: 9.550 ppbv
RT: 2.146 min Scan# 63
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 76 Resp: 268507

Ion	Ratio	Lower	Upper
76	100		
44	18.4	14.7	22.1
78	11.6	9.3	13.9



Instrument :
MSVOA_L
ClientSampleId :
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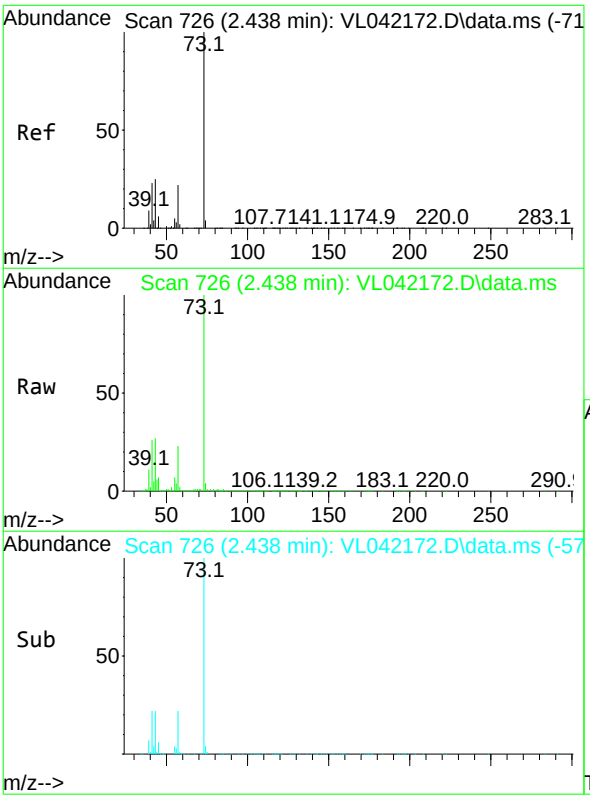
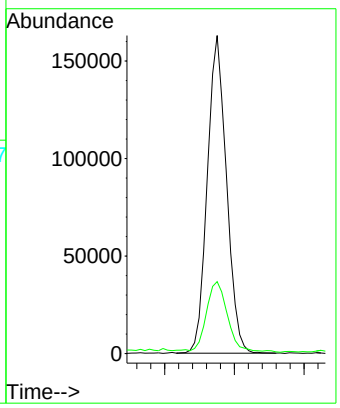
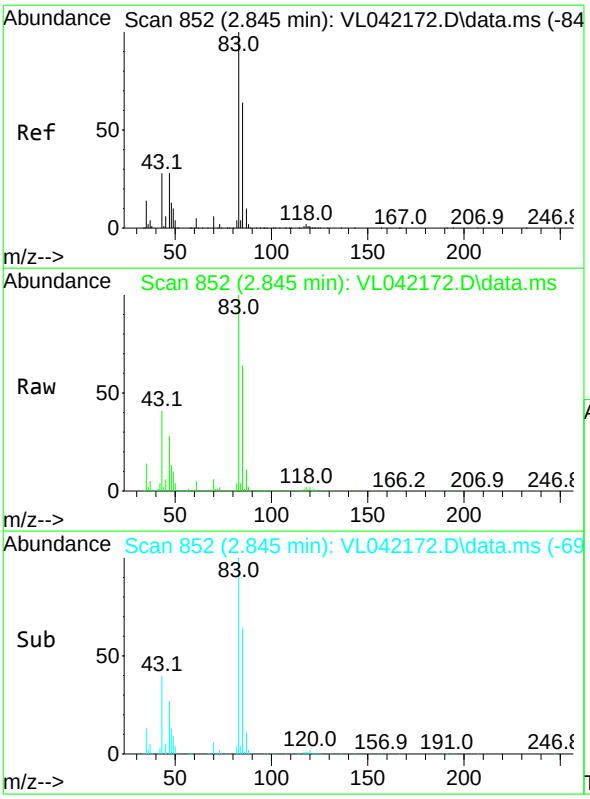


#28
Methyl tert-Butyl Ether
Concen: 9.520 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 73 Resp: 155398

Ion	Ratio	Lower	Upper
73	100		
57	25.6	20.5	30.7





#29
Chloroform
Concen: 9.415 ppbv
RT: 2.845 min Scan# 85
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 361264

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.4	77.2

Instrument :
MSVOA_L
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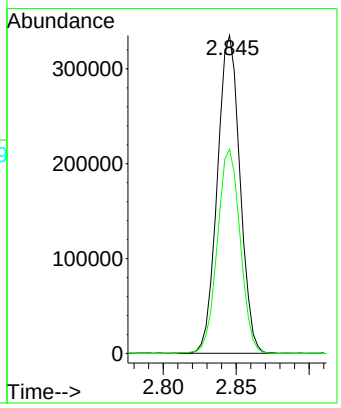
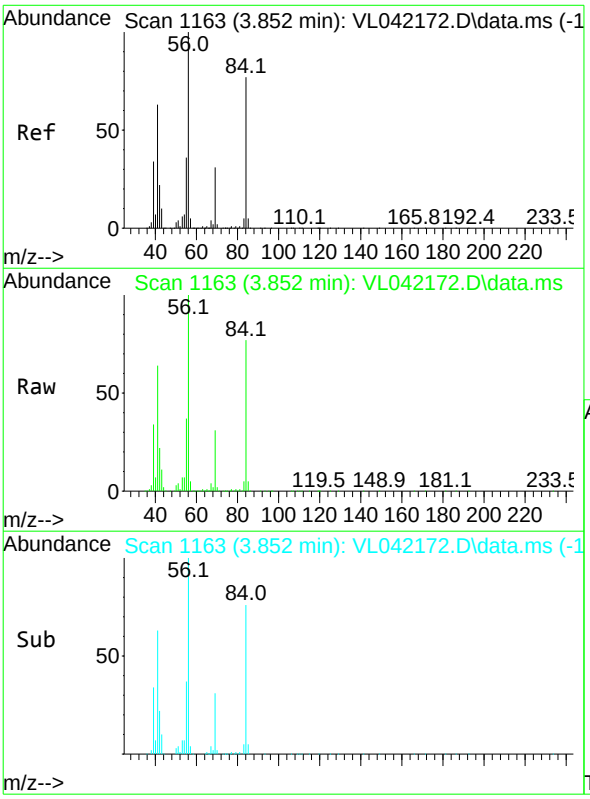
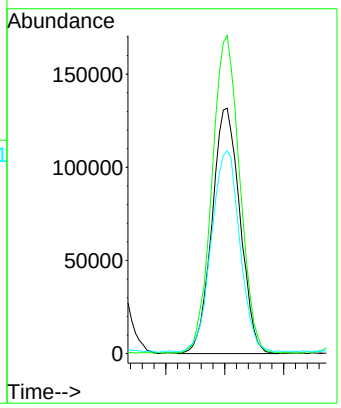


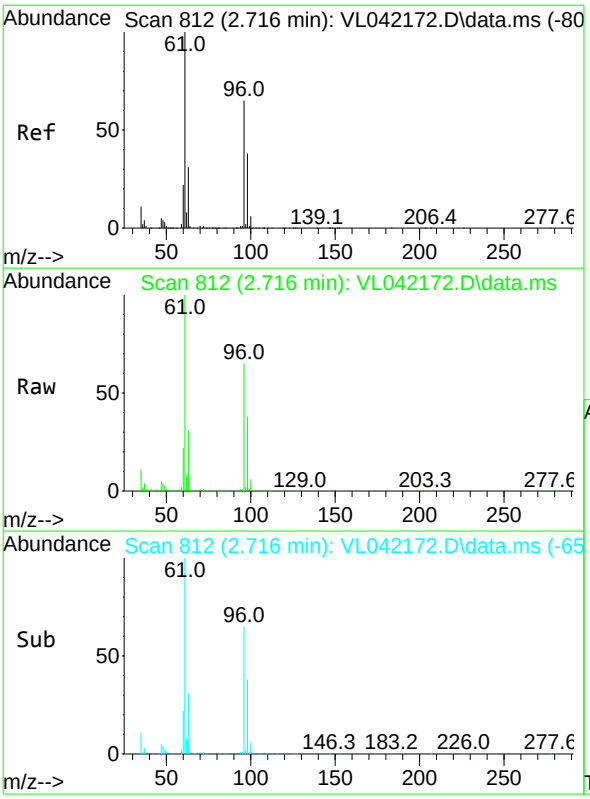


#30
Cyclohexane
Concen: 9.537 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 217215

Ion	Ratio	Lower	Upper
84	100		
56	128.5	102.8	154.2
41	83.1	66.5	99.7

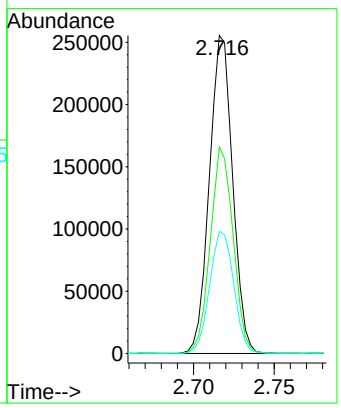




#31
cis-1,2-Dichloroethene
Concen: 9.634 ppbv
RT: 2.716 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 61 Resp: 256425

Ion	Ratio	Lower	Upper
61	100		
96	64.8	51.8	77.8
98	38.3	30.6	46.0



Instrument :
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ClientSampleId :
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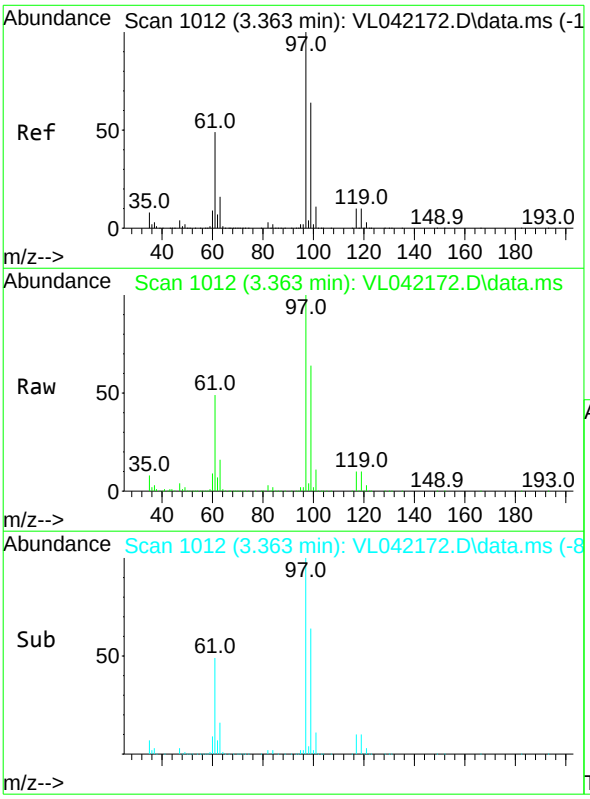
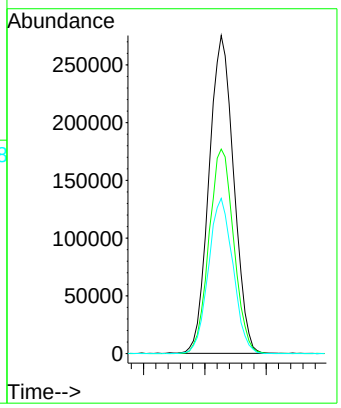
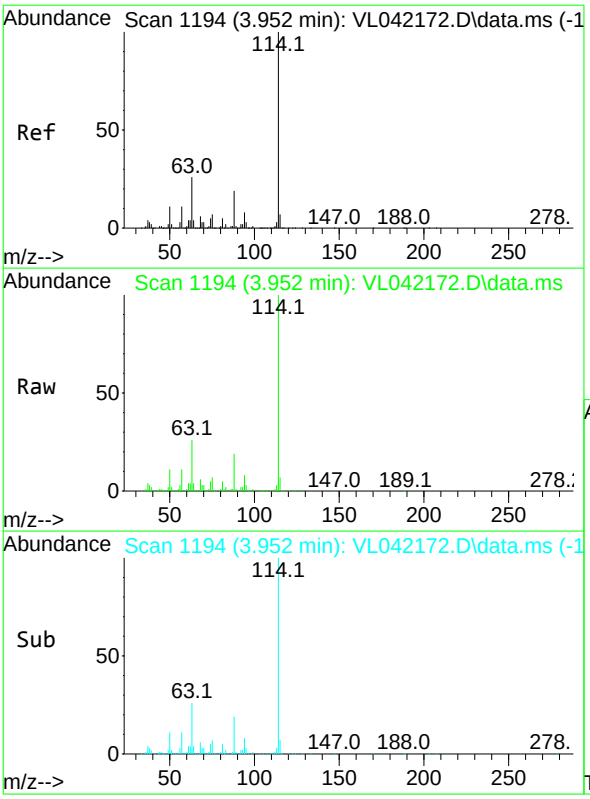


#32
1,1,1-Trichloroethane
Concen: 8.784 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 97 Resp: 385628

Ion	Ratio	Lower	Upper
97	100		
99	64.4	51.5	77.3
61	48.4	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:114 Resp: 545068

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.7	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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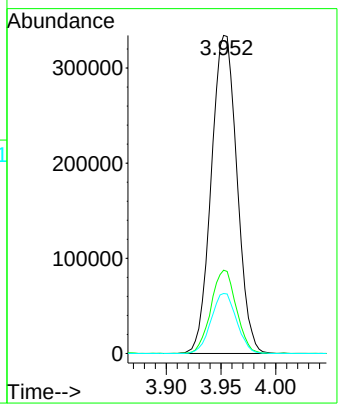
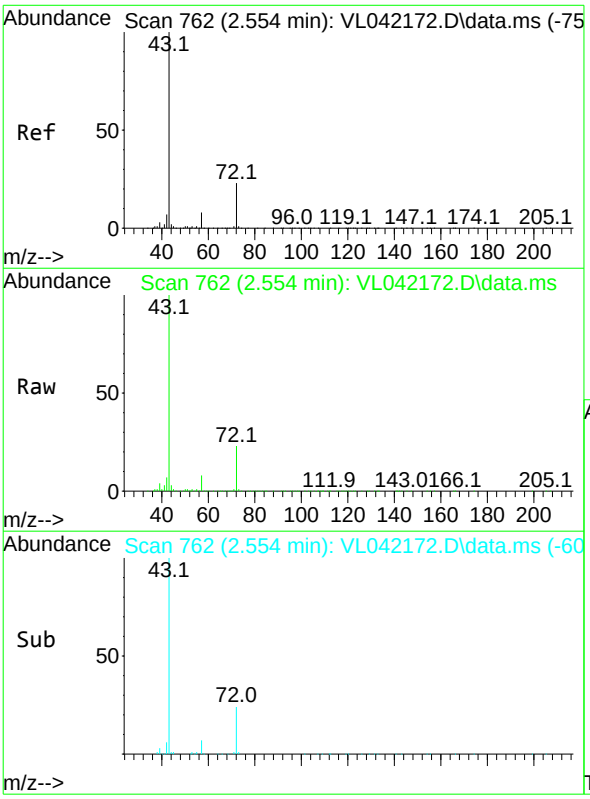
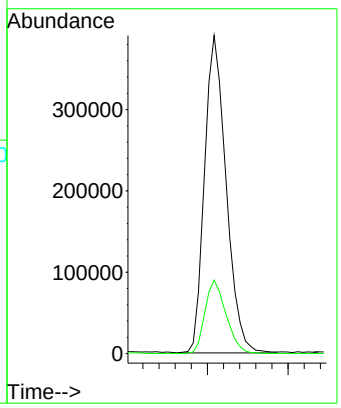


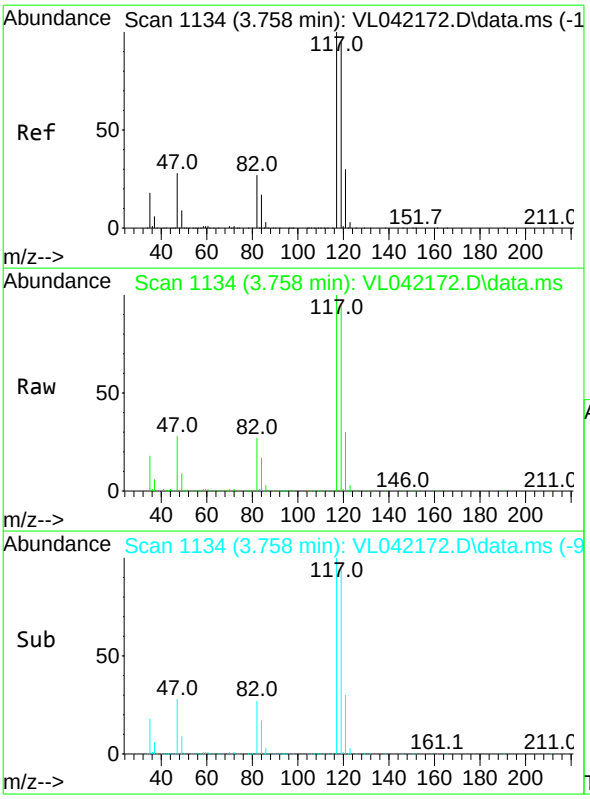


#34
2-Butanone
Concen: 9.203 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 363735

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2

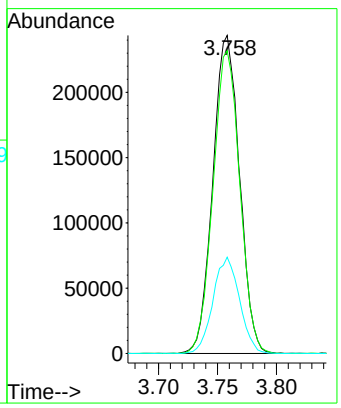




#35
Carbon Tetrachloride
Concen: 9.129 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:117 Resp: 382925

Ion	Ratio	Lower	Upper
117	100		
119	95.2	76.2	114.2
121	30.3	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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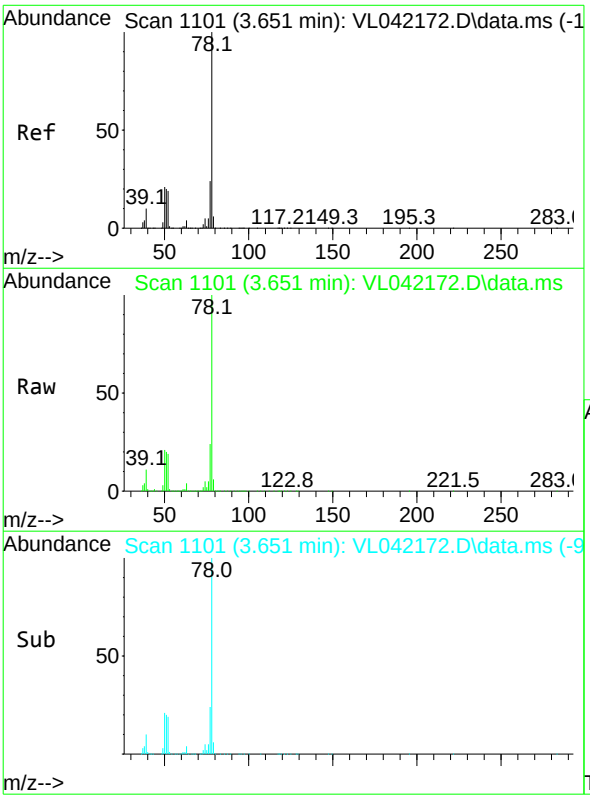
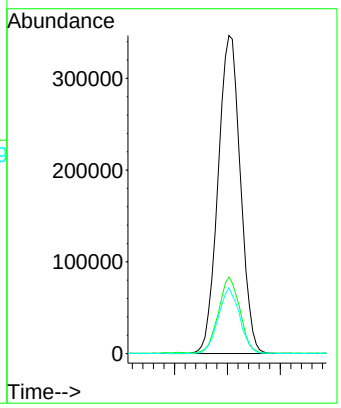
Supervised By :Mahesh Dadoda 04/03/2025

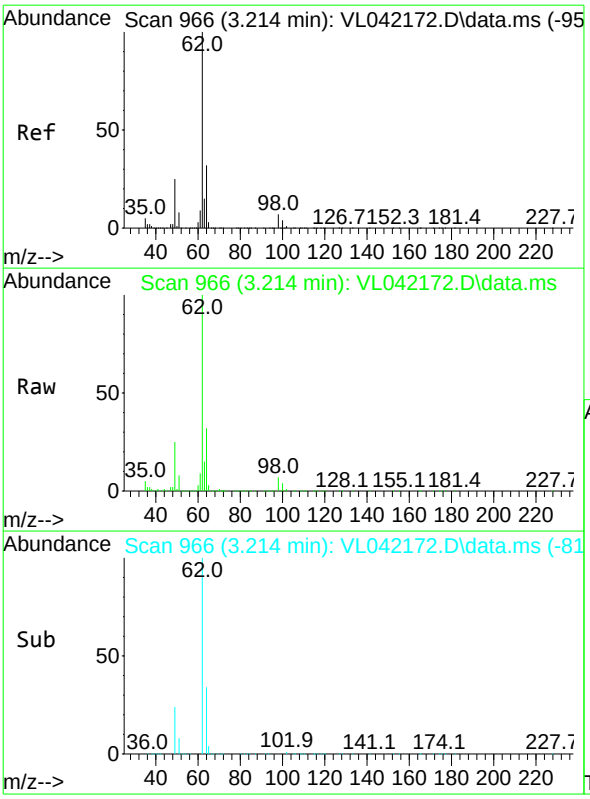


#36
Benzene
Concen: 9.417 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 78 Resp: 508860

Ion	Ratio	Lower	Upper
78	100		
77	23.9	19.1	28.7
50	20.7	16.6	24.8

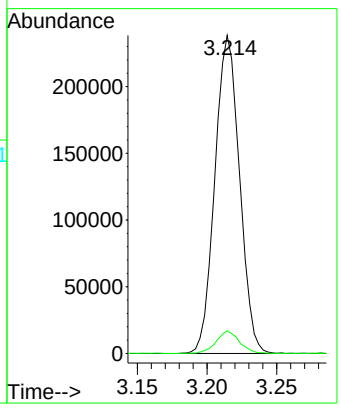




#37
1,2-Dichloroethane
Concen: 9.469 ppbv
RT: 3.214 min Scan# 96
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 62 Resp: 292937

Ion	Ratio	Lower	Upper
62	100		
98	6.8	5.4	8.2



Instrument :
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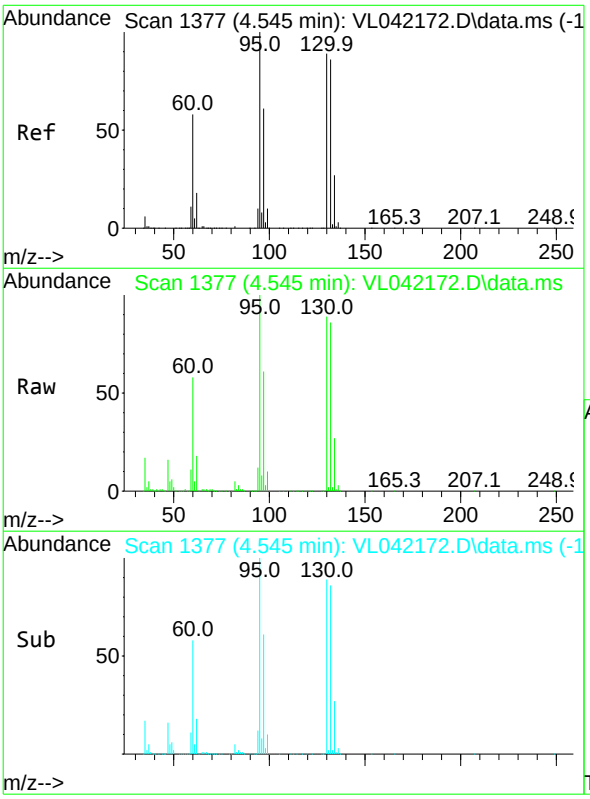
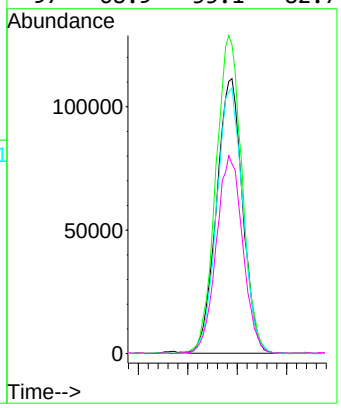
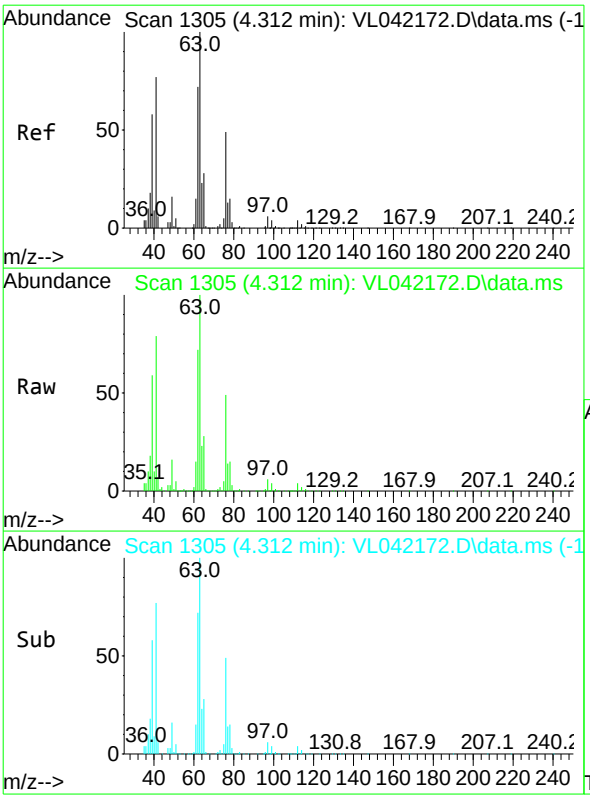


#38
Trichloroethene
Concen: 9.045 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:130 Resp: 204027

Ion	Ratio	Lower	Upper
130	100		
95	112.3	89.8	134.8
132	96.8	77.4	116.2
97	68.9	55.1	82.7

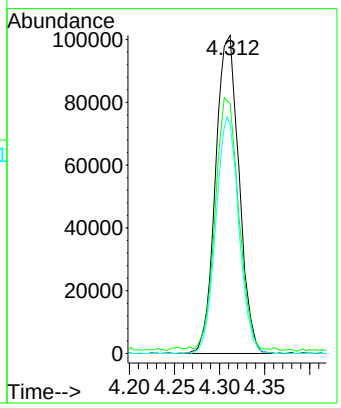




#39
1,2-Dichloropropane
Concen: 9.321 ppbv
RT: 4.312 min Scan# 13
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 63 Resp: 183439

Ion	Ratio	Lower	Upper
63	100		
41	77.1	61.7	92.5
62	72.0	57.6	86.4



Instrument :
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ClientSampleId :
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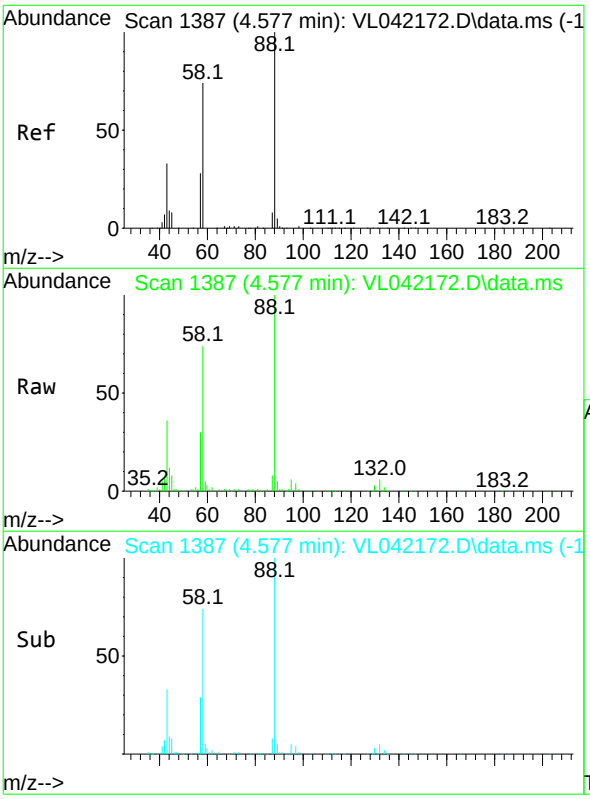
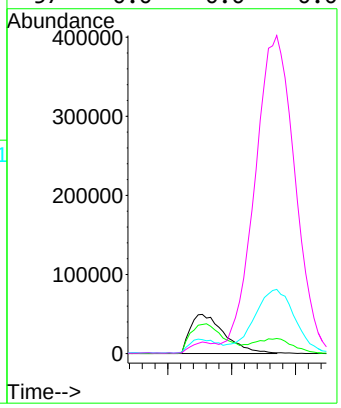
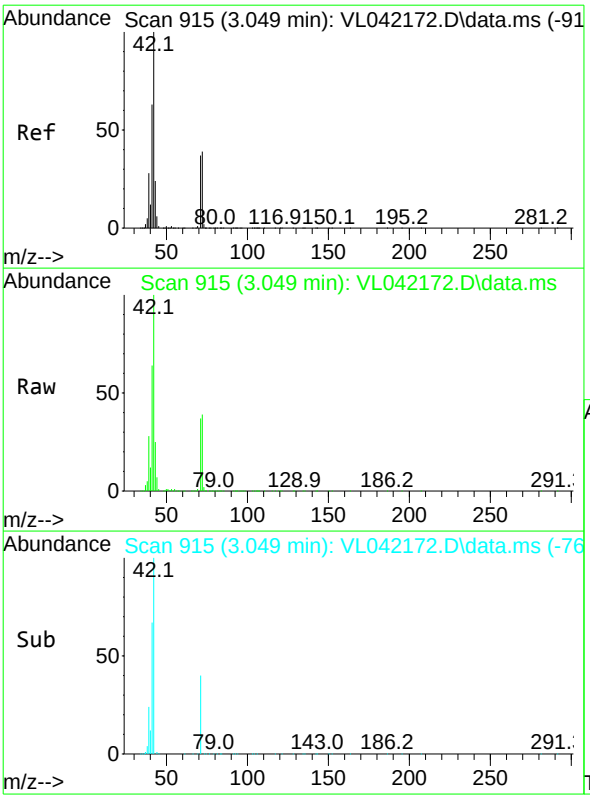


#40
1,4-Dioxane
Concen: 9.042 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 88 Resp: 92327

Ion	Ratio	Lower	Upper
88	100		
58	78.4	62.7	94.1
43	28.7	23.0	34.4
57	0.0	0.0	0.0

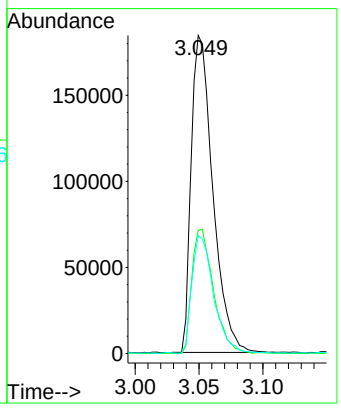




#41
Tetrahydrofuran
Concen: 9.643 ppbv
RT: 3.049 min Scan# 91
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 42 Resp: 216851

Ion	Ratio	Lower	Upper
42	100		
72	39.2	31.4	47.0
71	37.8	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
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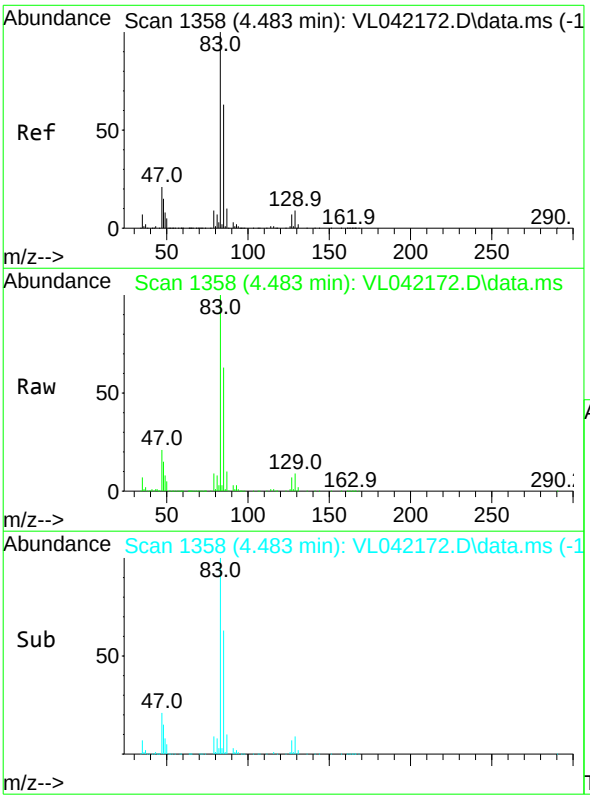
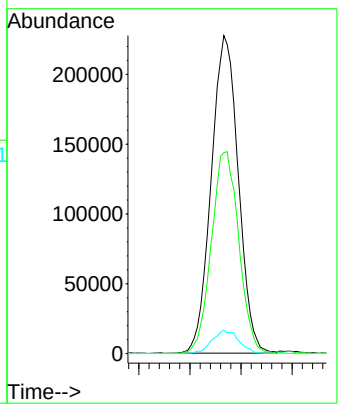
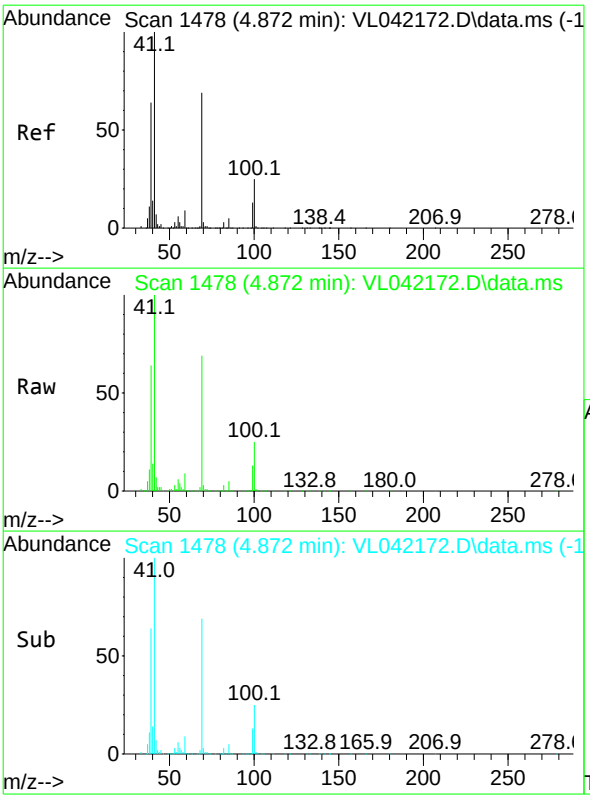


#42
Bromodichloromethane
Concen: 9.822 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 418887

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.4	5.9	8.9

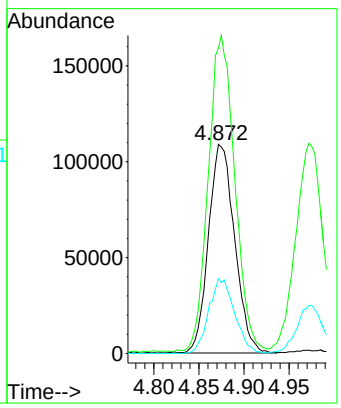




#43
Methyl Methacrylate
Concen: 9.618 ppbv
RT: 4.872 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 69 Resp: 219399

Ion	Ratio	Lower	Upper
69	100		
41	154.7	123.8	185.6
100	35.5	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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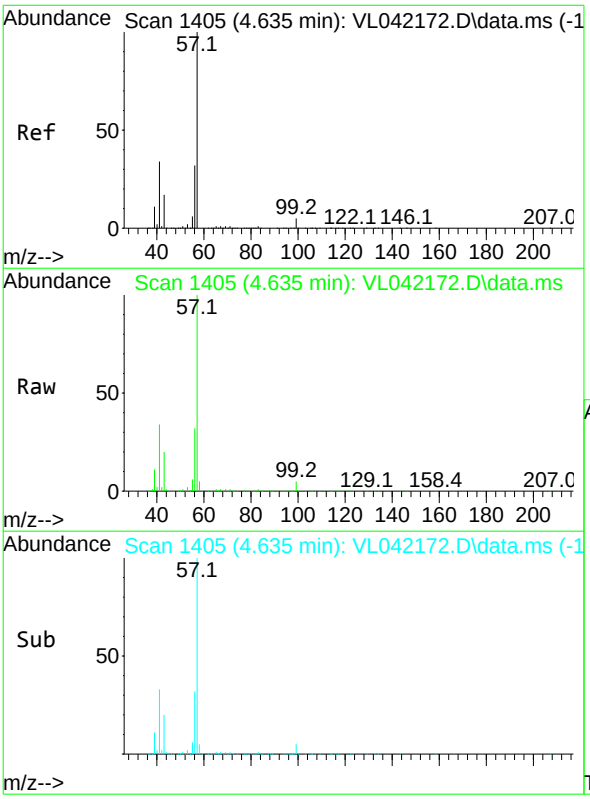
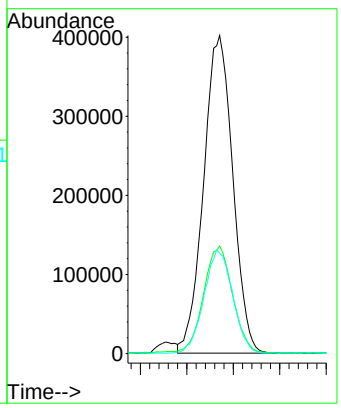
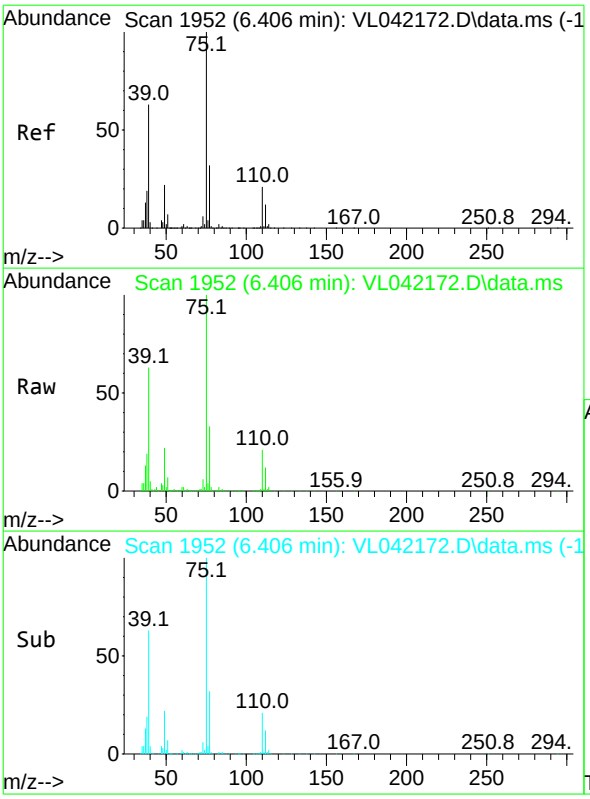


#44
2,2,4-Trimethylpentane
Concen: 9.600 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 876649

Ion	Ratio	Lower	Upper
57	100		
41	33.5	26.8	40.2
56	32.0	25.6	38.4

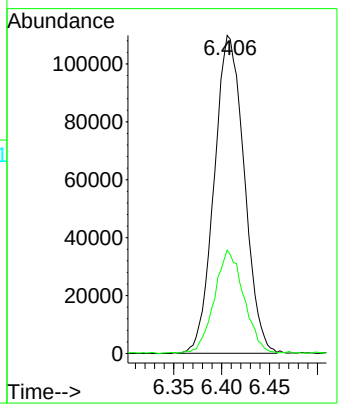




#45
t-1,3-Dichloropropene
Concen: 9.746 ppbv
RT: 6.406 min Scan# 19
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 75 Resp: 239180

Ion	Ratio	Lower	Upper
75	100		
77	32.5	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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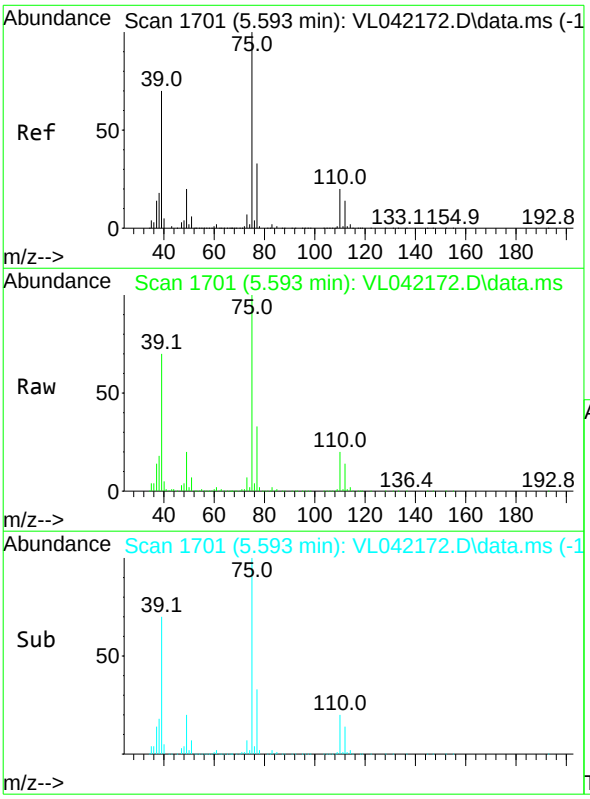
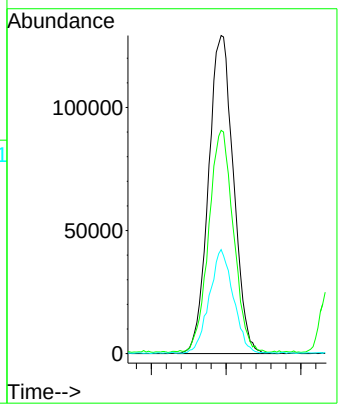
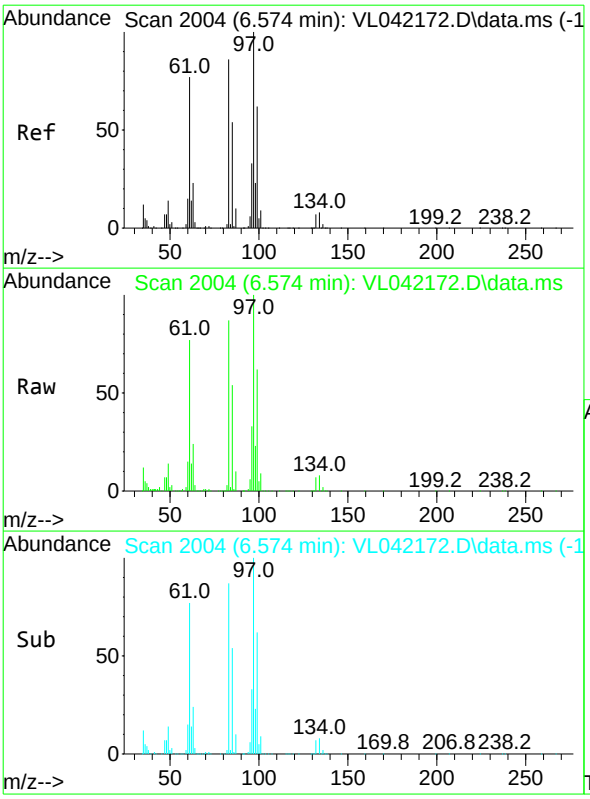


#46
cis-1,3-Dichloropropene
Concen: 9.973 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 75 Resp: 300021

Ion	Ratio	Lower	Upper
75	100		
39	69.7	55.8	83.6
77	32.5	26.0	39.0

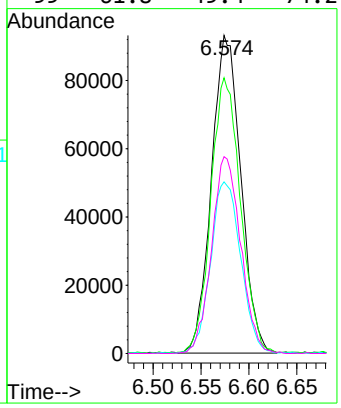




#47
1,1,2-Trichloroethane
Concen: 9.526 ppbv
RT: 6.574 min Scan# 20
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 97 Resp: 198176

Ion	Ratio	Lower	Upper
97	100		
83	86.5	69.2	103.8
85	53.9	43.1	64.7
99	61.8	49.4	74.2



Instrument :
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ClientSampleId :
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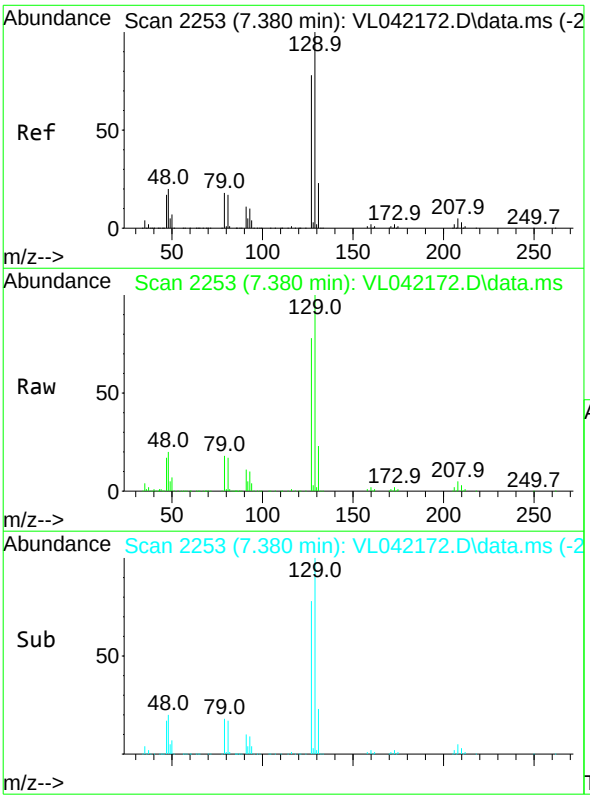
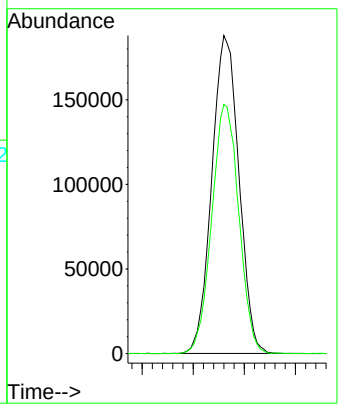
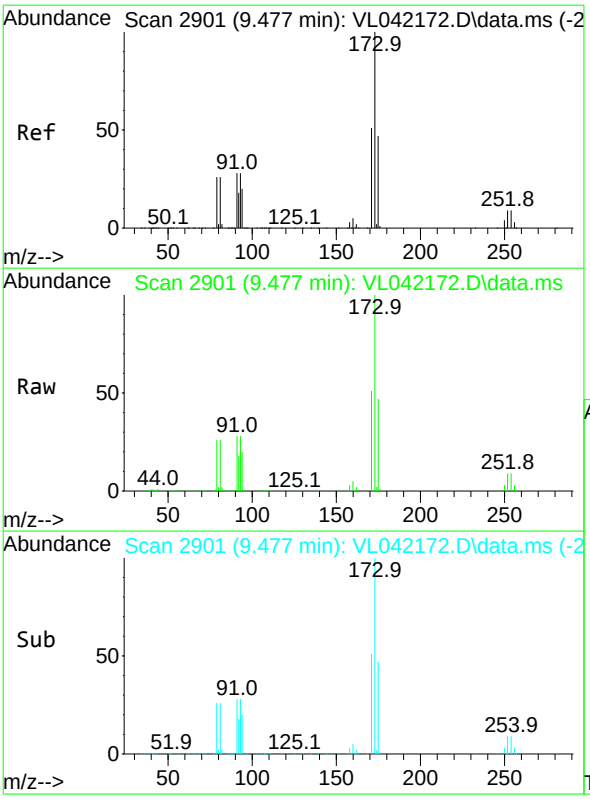


#48
Dibromochloromethane
Concen: 9.828 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:129 Resp: 346499

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2

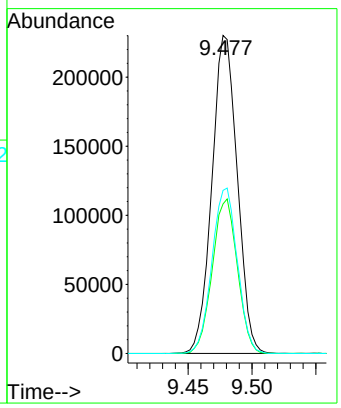




#49
Bromoform
Concen: 10.021 ppbv
RT: 9.477 min Scan# 29
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:173 Resp: 317189

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.6	57.8
171	52.2	41.8	62.6



Instrument :
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ClientSampleId :
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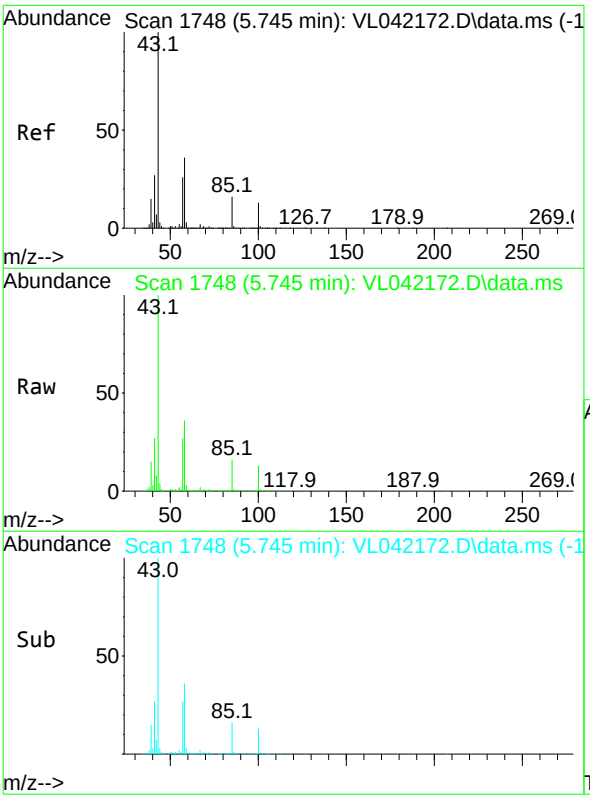
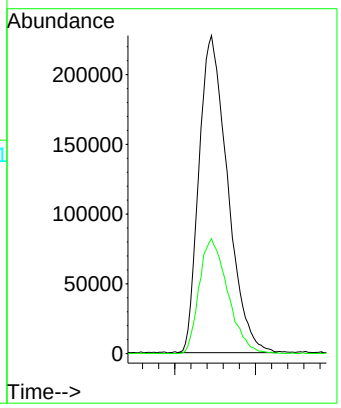
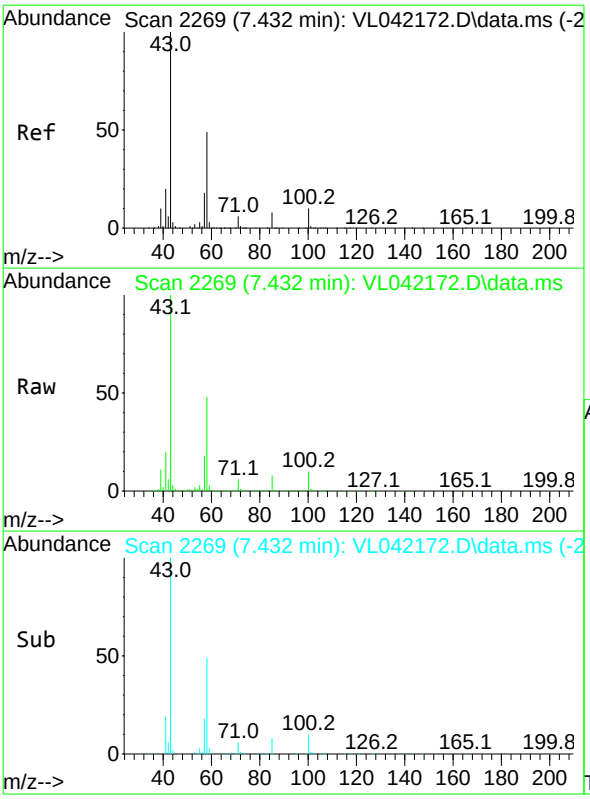


#50
4-Methyl-2-Pentanone
Concen: 8.934 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 559800

Ion	Ratio	Lower	Upper
43	100		
58	36.3	29.0	43.6

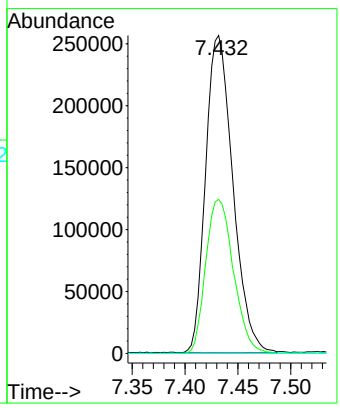




#51
2-Hexanone
Concen: 8.848 ppbv
RT: 7.432 min Scan# 22
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 460013

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



Instrument :
MSVOA_L
ClientSampleId :
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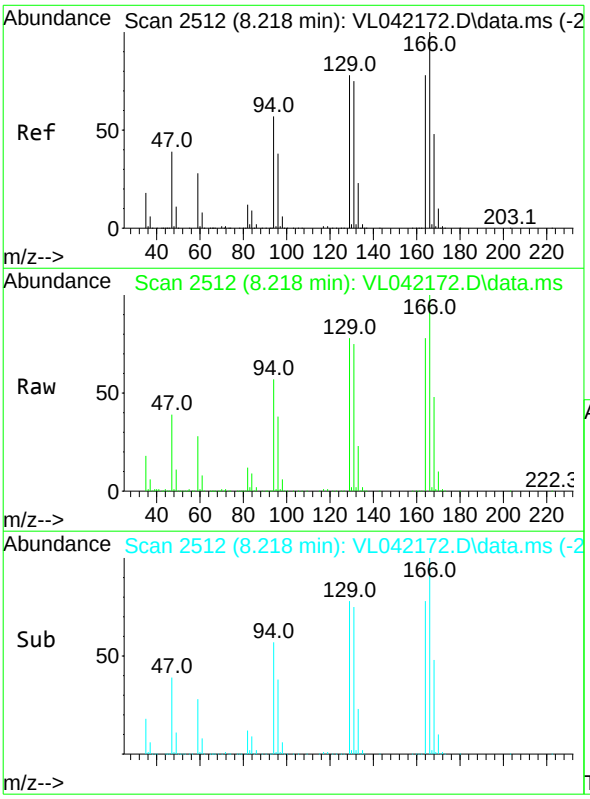
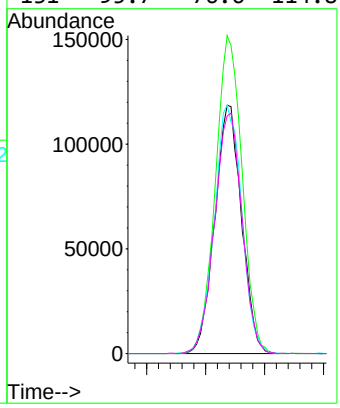
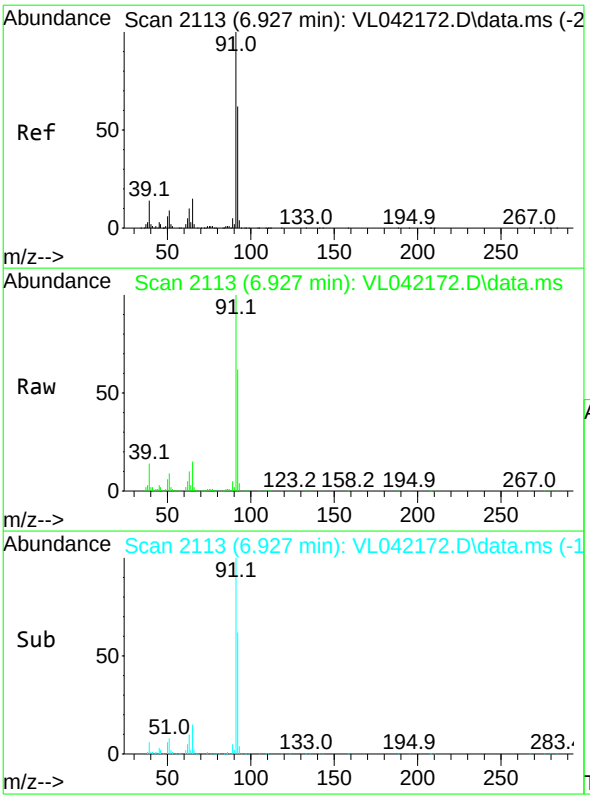


#52
Tetrachloroethene
Concen: 8.722 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:164 Resp: 186912

Ion	Ratio	Lower	Upper
164	100		
166	128.1	102.5	153.7
129	99.8	79.8	119.8
131	95.7	76.6	114.8

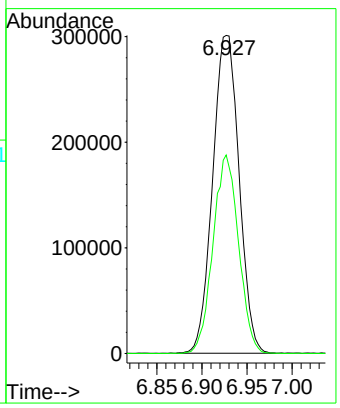




#53
Toluene
Concen: 9.576 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 613378

Ion	Ratio	Lower	Upper
91	100		
92	60.5	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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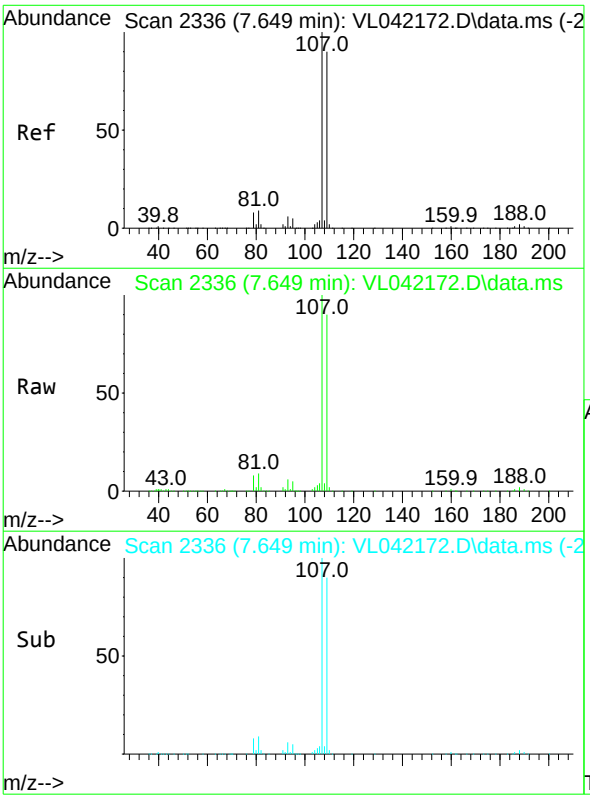
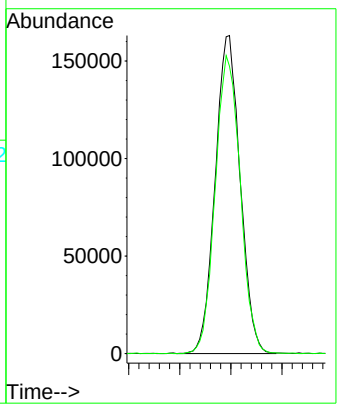
Supervised By :Mahesh Dadoda 04/03/2025

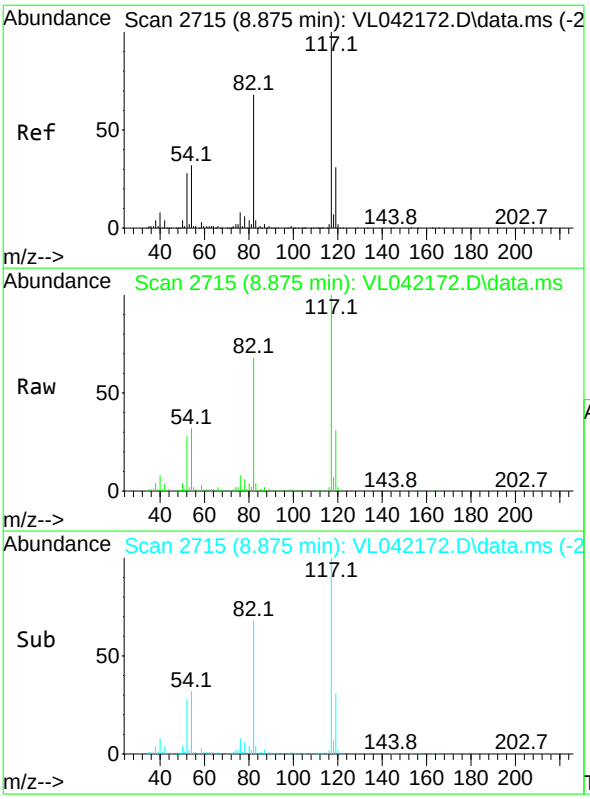


#54
1,2-Dibromoethane
Concen: 9.536 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:107 Resp: 276797

Ion	Ratio	Lower	Upper
107	100		
109	90.3	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 27
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:117 Resp: 519536

Ion	Ratio	Lower	Upper
117	100		
82	69.7	55.8	83.6
119	31.9	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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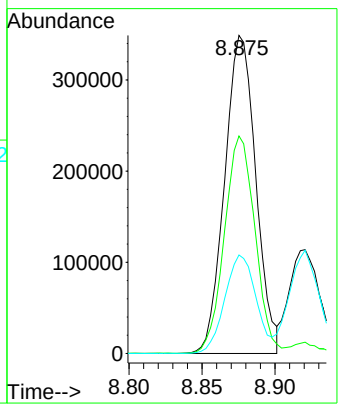
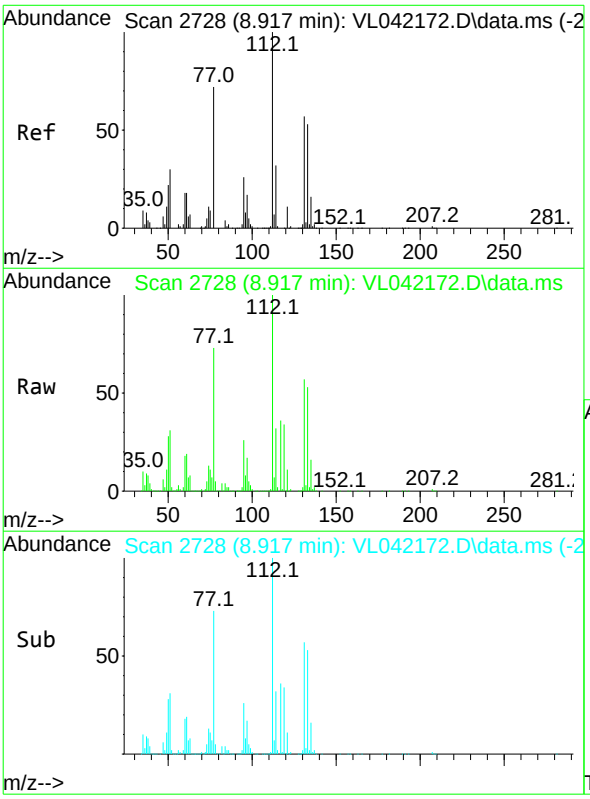
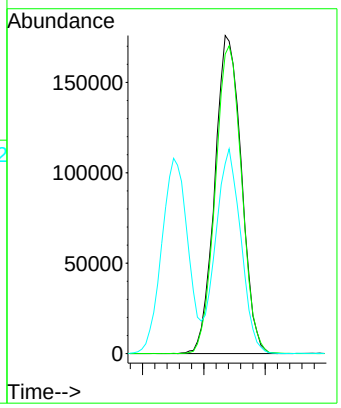


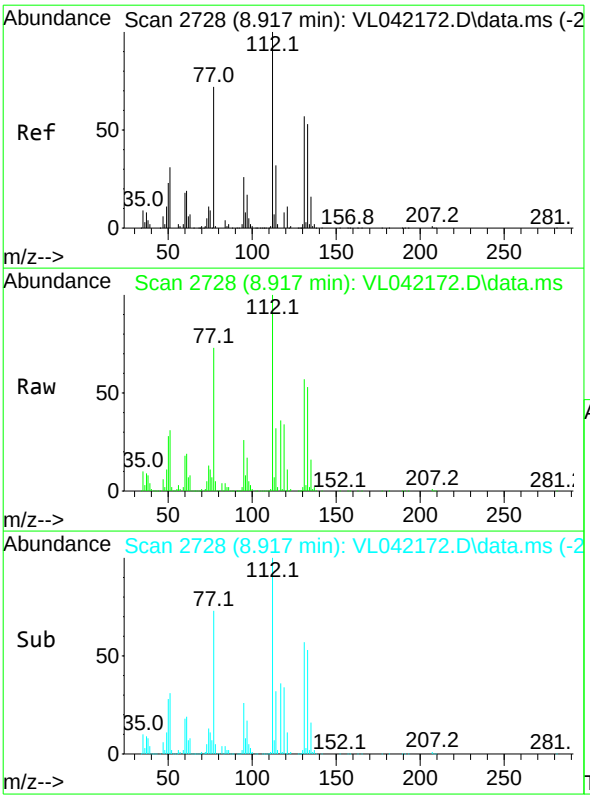


#56
1,1,1,2-Tetrachloroethane
Concen: 9.268 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:131 Resp: 265037

Ion	Ratio	Lower	Upper
131	100		
133	95.7	76.6	114.8
119	62.2	49.8	74.6

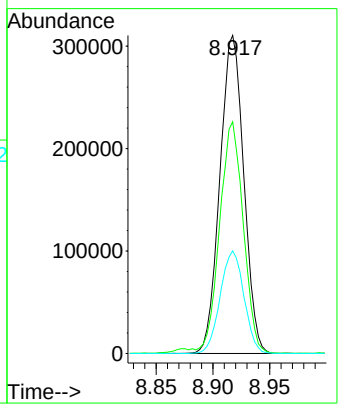




#57
Chlorobenzene
Concen: 9.223 ppbv
RT: 8.917 min Scan# 27
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:112 Resp: 454511

Ion	Ratio	Lower	Upper
112	100		
77	72.7	58.2	87.2
114	32.3	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
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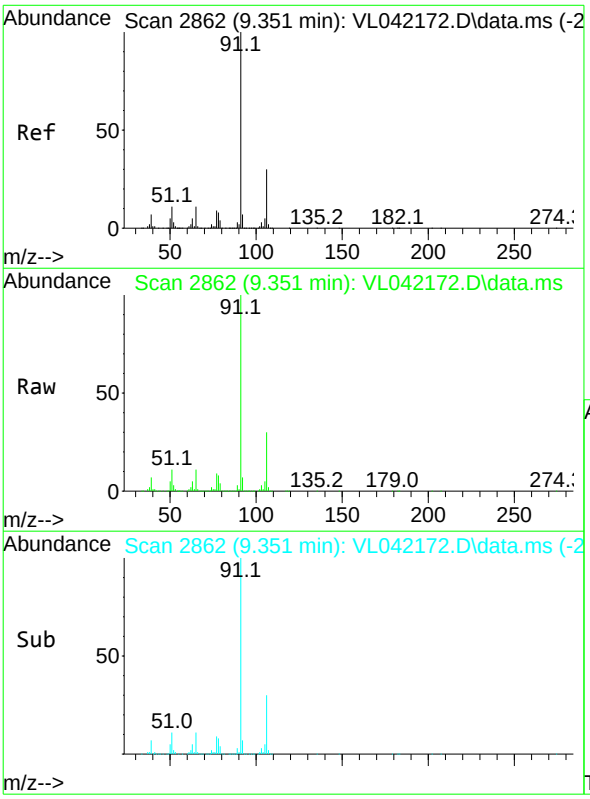
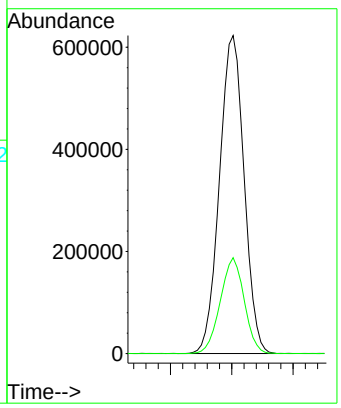
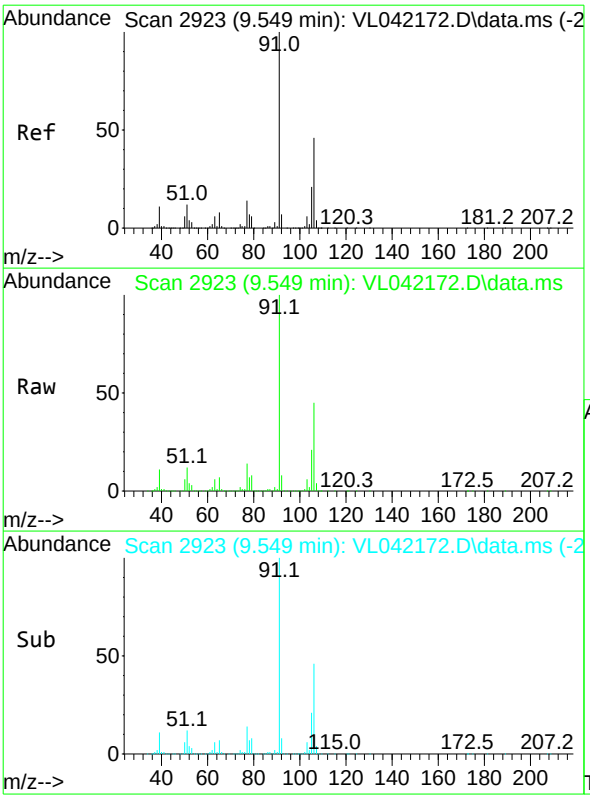


#58
Ethyl Benzene
Concen: 9.406 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 868003

Ion	Ratio	Lower	Upper
91	100		
106	30.2	24.2	36.2

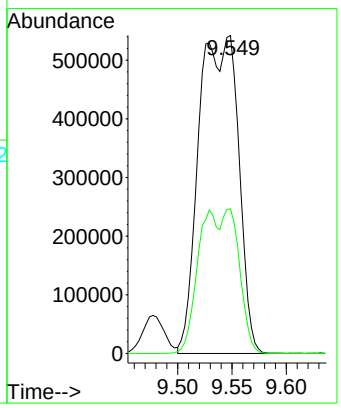




#59
m/p-Xylene
Concen: 18.607 ppbv m
RT: 9.549 min Scan# 29
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 1372806

Ion	Ratio	Lower	Upper
91	100		
106	45.5	36.4	54.6



Instrument :
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ClientSampleId :
VSTDICCC010

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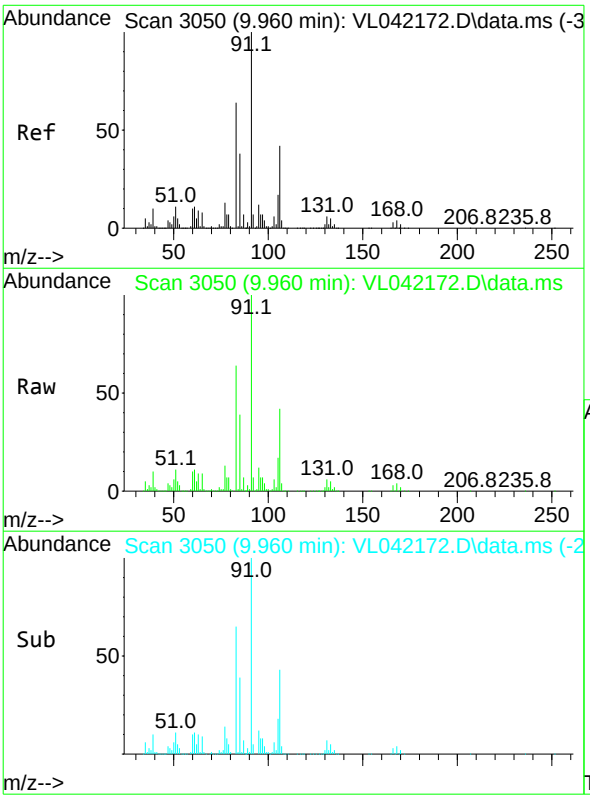
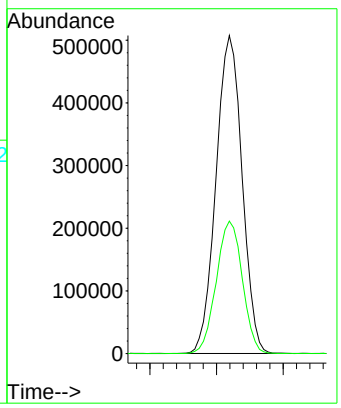
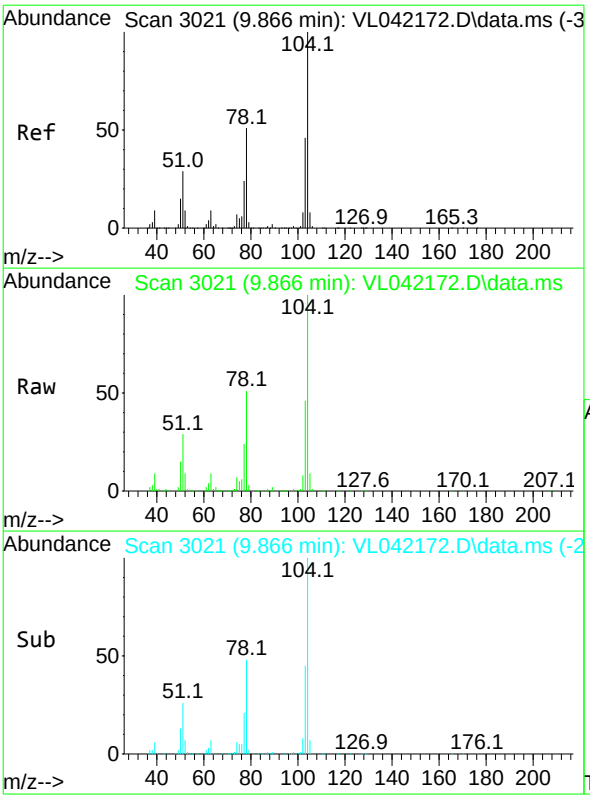


#60
o-Xylene
Concen: 9.340 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 689933

Ion	Ratio	Lower	Upper
91	100		
106	41.7	20.8	62.5

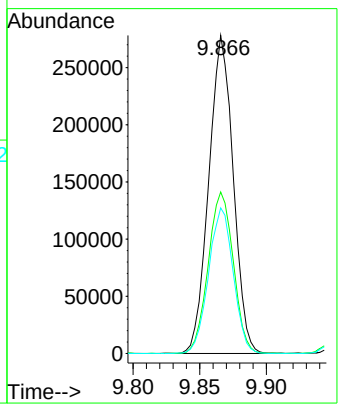




#61
Styrene
Concen: 9.706 ppbv
RT: 9.866 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:104 Resp: 354697

Ion	Ratio	Lower	Upper
104	100		
78	52.2	41.8	62.6
103	46.2	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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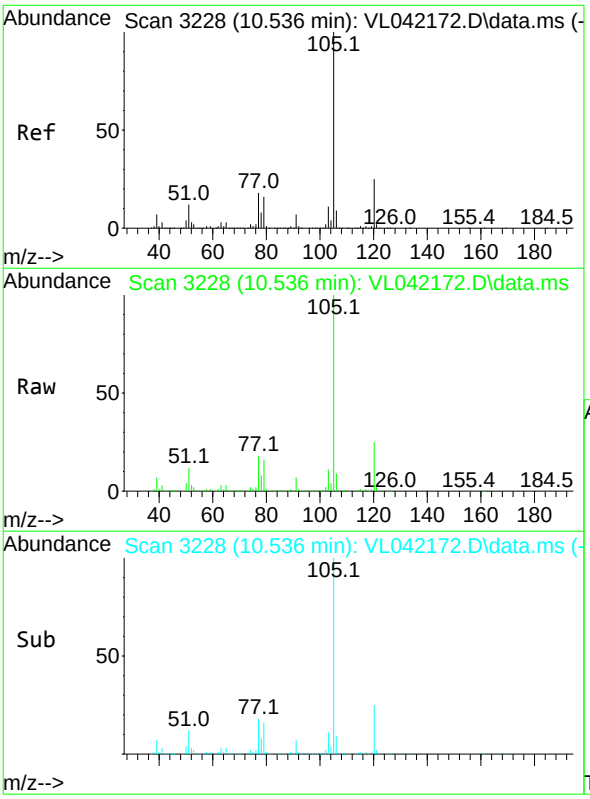
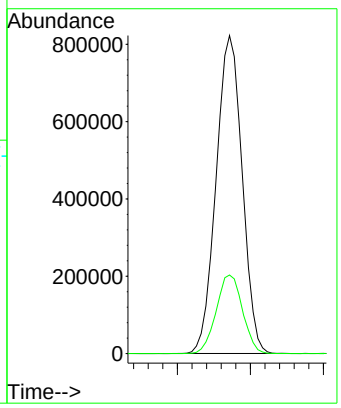
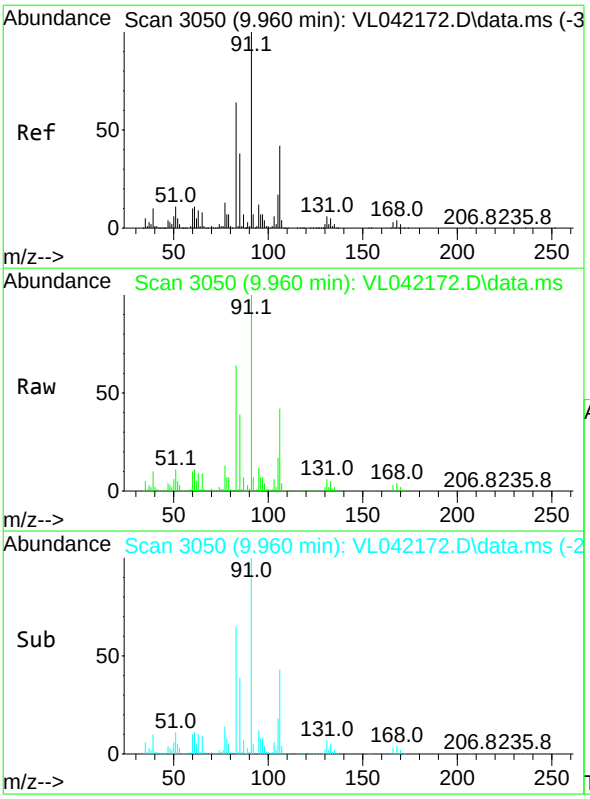


#62
Isopropylbenzene
Concen: 9.227 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 1019255

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 9.210 ppbv
RT: 9.960 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 413392

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	65.0	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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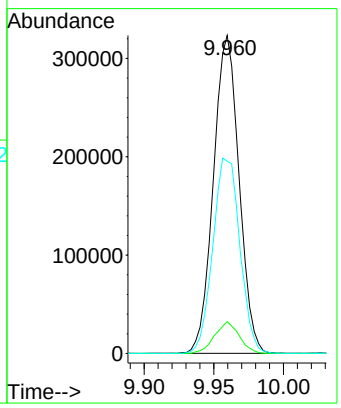
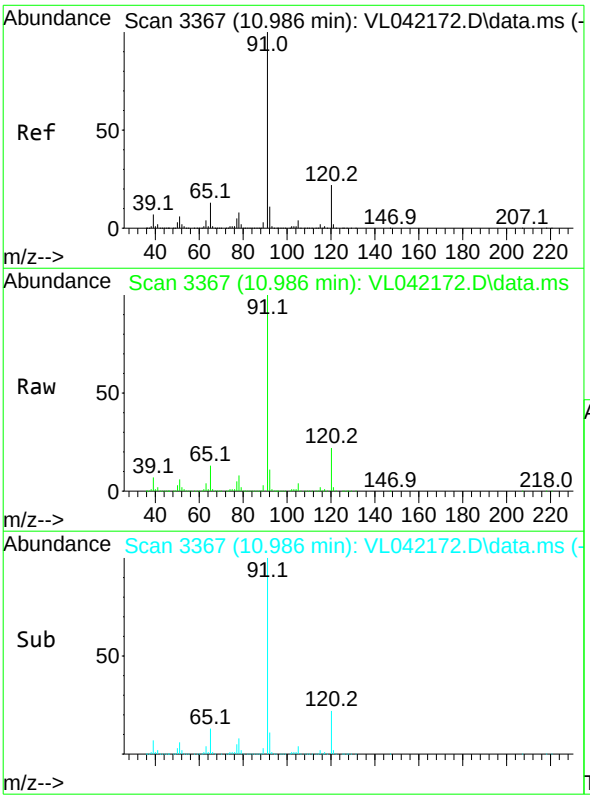
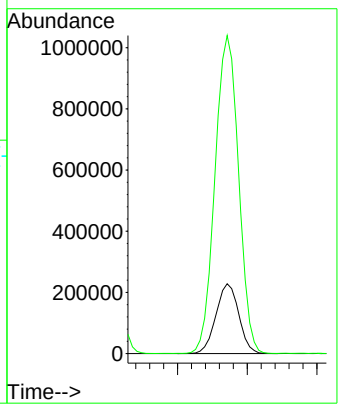


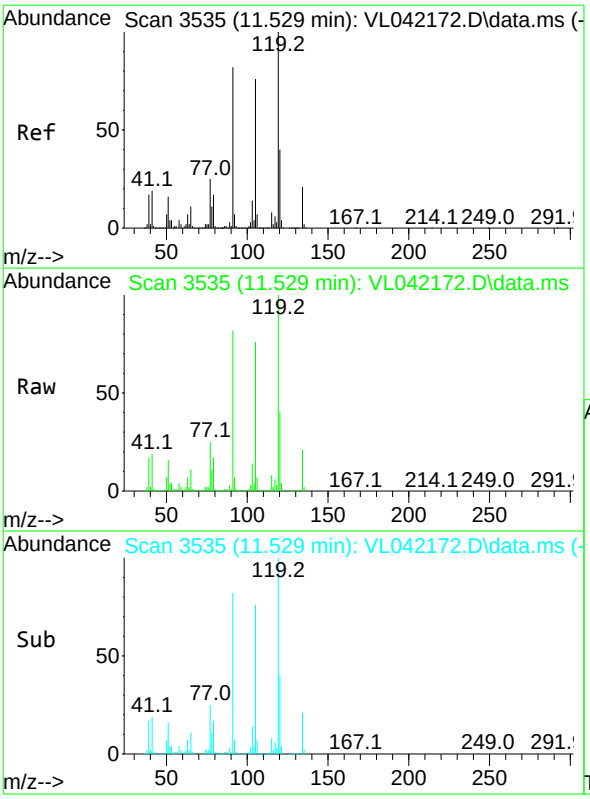


#64
n-propylbenzene
Concen: 9.122 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:120 Resp: 259405

Ion	Ratio	Lower	Upper
120	100		
91	471.1	376.9	565.3





#65
tert-Butylbenzene
Concen: 8.828 ppbv
RT: 11.529 min Scan# 35
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:119 Resp: 901951

Ion	Ratio	Lower	Upper
119	100		
91	82.5	66.0	99.0
134	20.9	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
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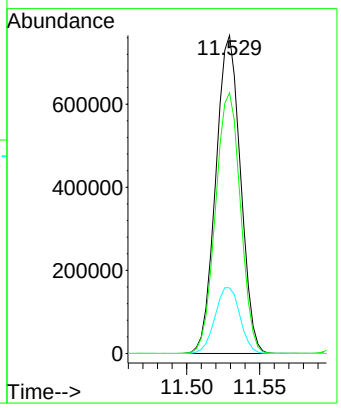
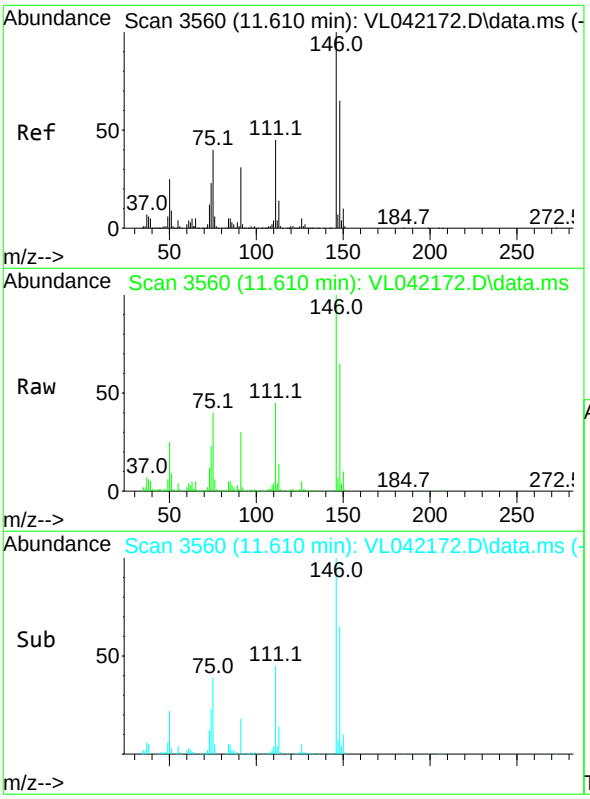
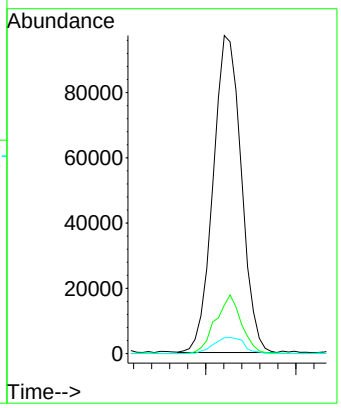


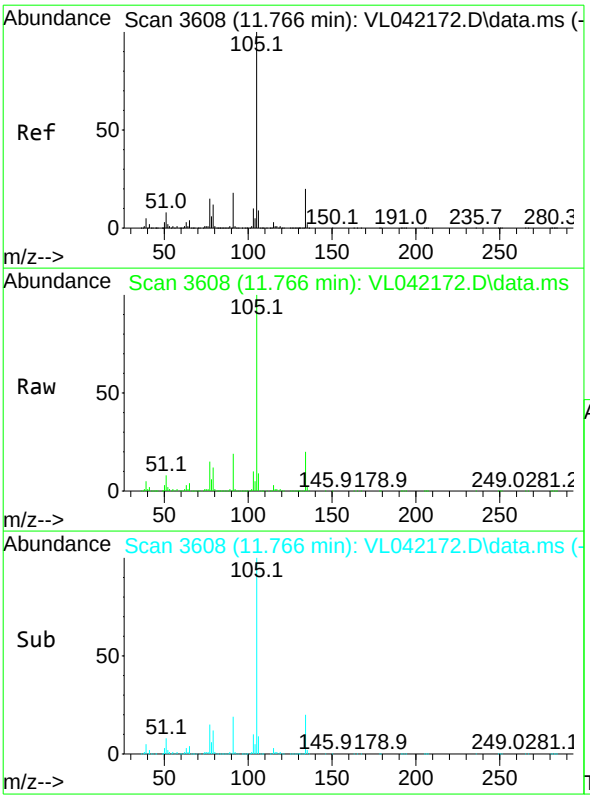


#66
Benzyl Chloride
Concen: 9.724 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 105411

Ion	Ratio	Lower	Upper
91	100		
126	17.2	13.8	20.6
128	5.6	4.5	6.7

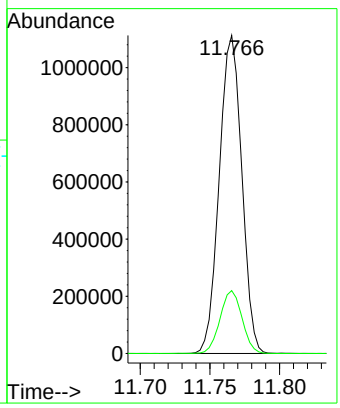




#67
sec-Butylbenzene
Concen: 8.796 ppbv
RT: 11.766 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 1249106

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
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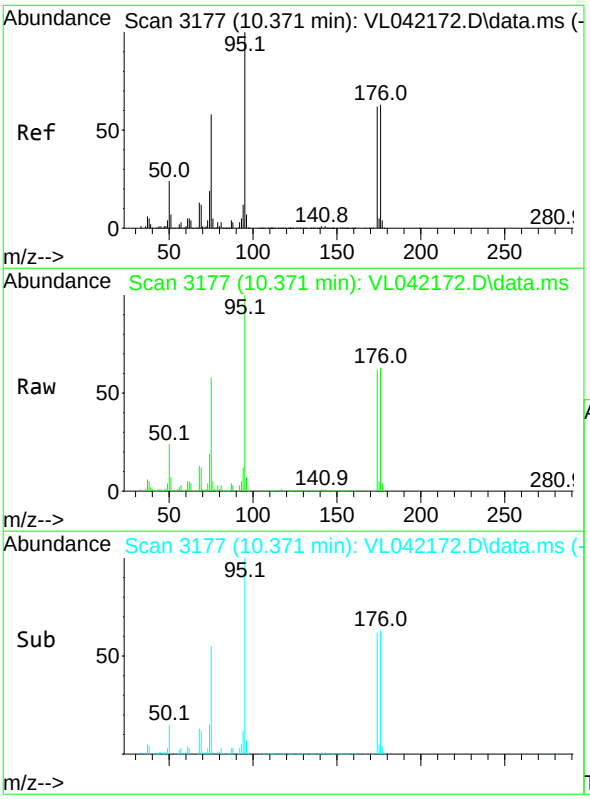
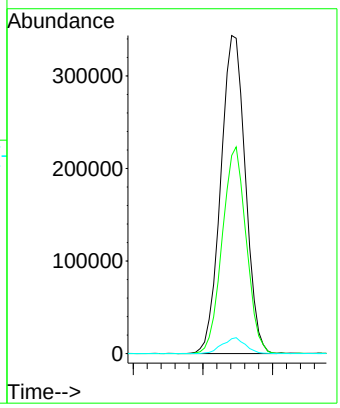
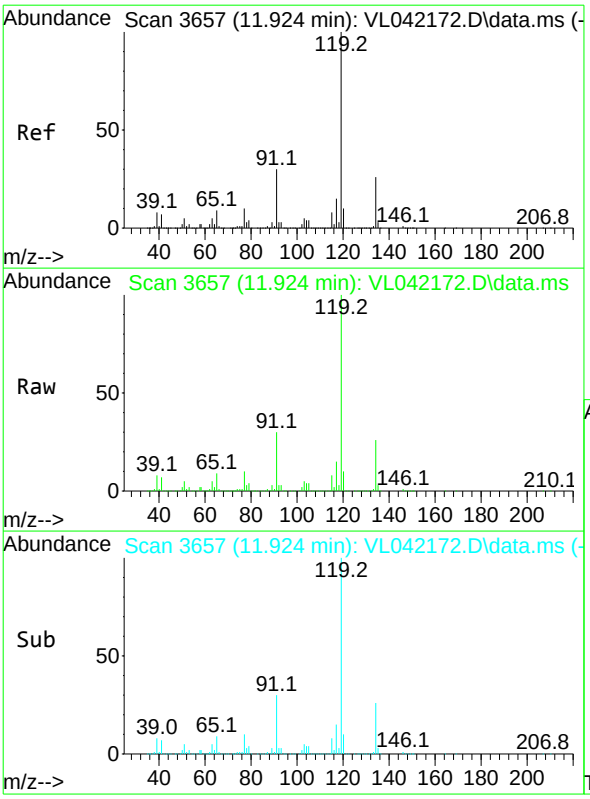


#68
1-Bromo-4-Fluorobenzene
Concen: 9.901 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 95 Resp: 422410

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.7	3.8	5.6

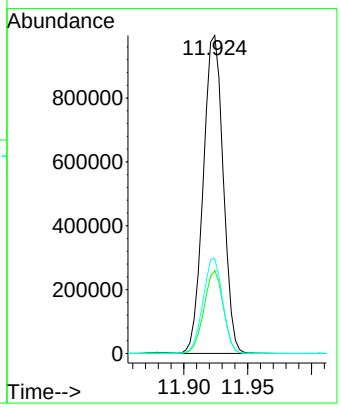




#69
p-Isopropyltoluene
Concen: 8.830 ppbv
RT: 11.924 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:119 Resp: 1079675

Ion	Ratio	Lower	Upper
119	100		
134	25.5	20.4	30.6
91	29.6	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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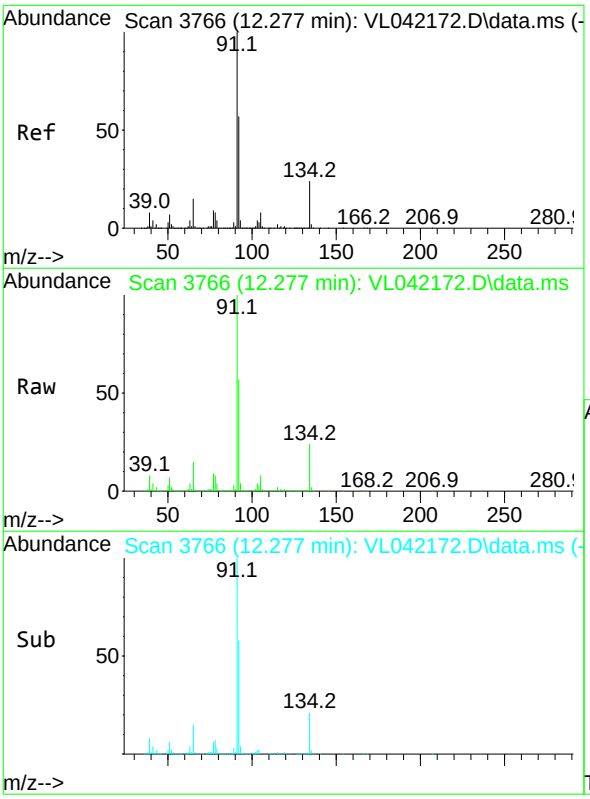
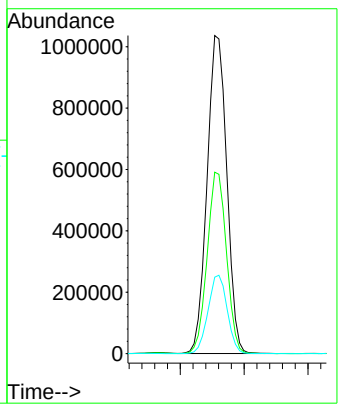
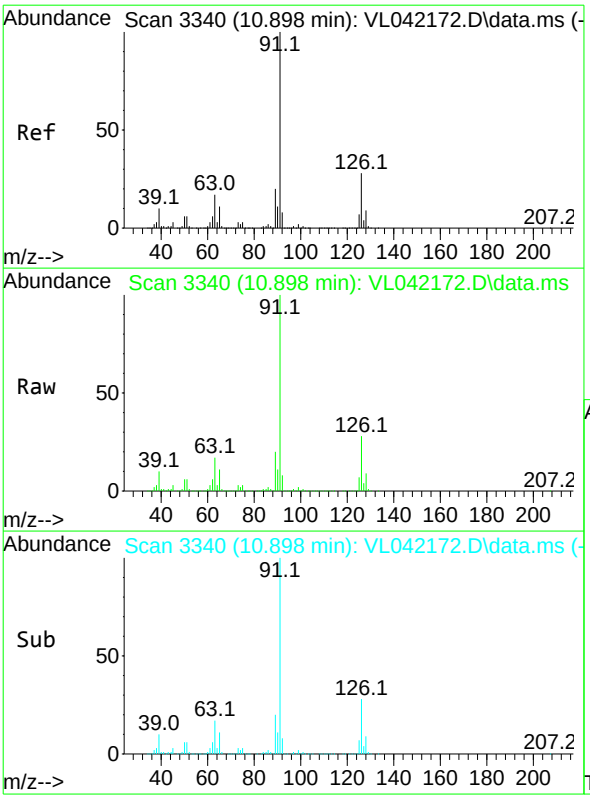


#70
n-Butylbenzene
Concen: 8.879 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 1110351

Ion	Ratio	Lower	Upper
91	100		
92	56.1	44.9	67.3
134	24.0	19.2	28.8

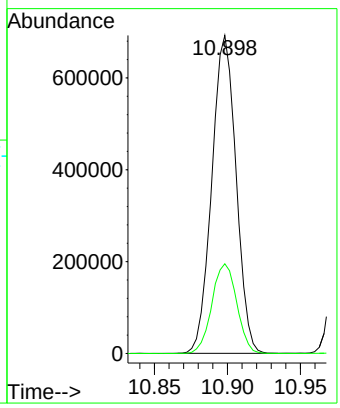




#71
2-Chlorotoluene
Concen: 9.320 ppbv
RT: 10.898 min Scan# 33
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 799102

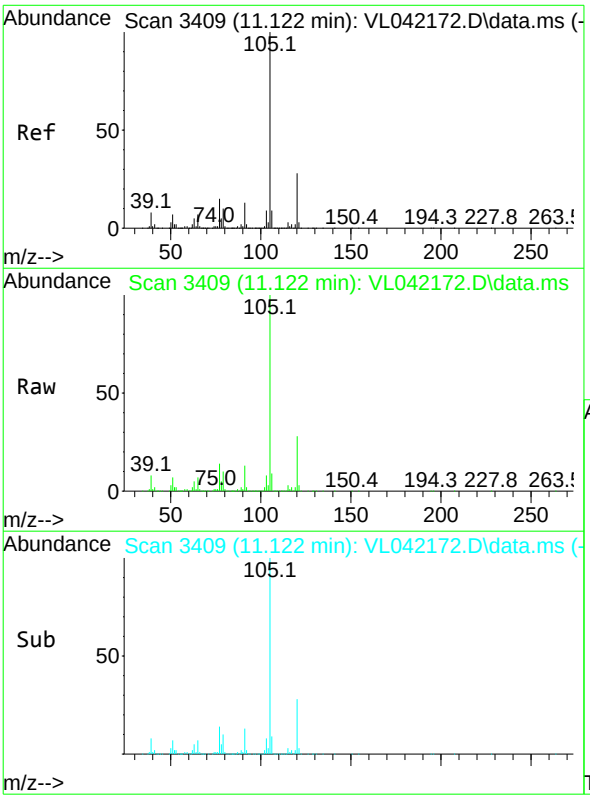
Ion	Ratio	Lower	Upper
91	100		
126	29.0	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

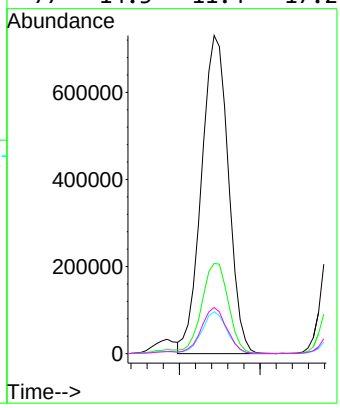
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

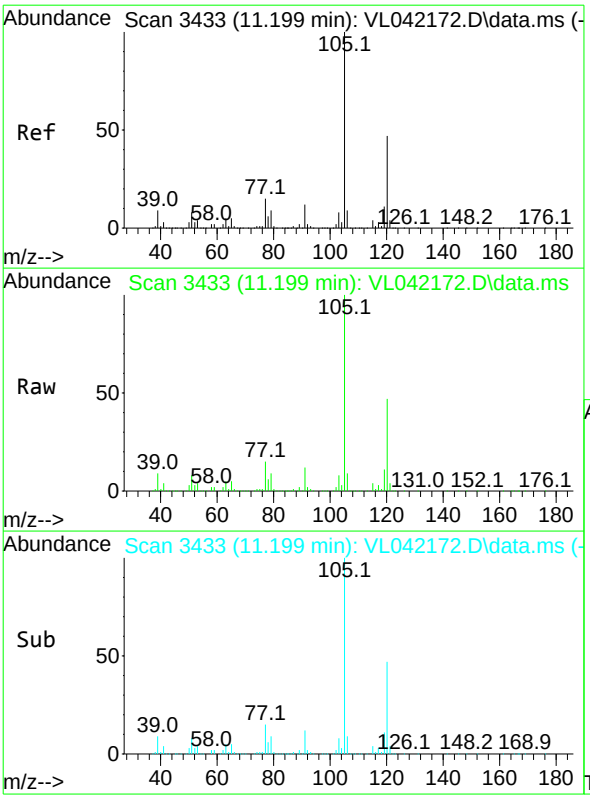


#72
4-Ethyltoluene
Concen: 9.200 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 846232

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	12.9	10.3	15.5
77	14.3	11.4	17.2

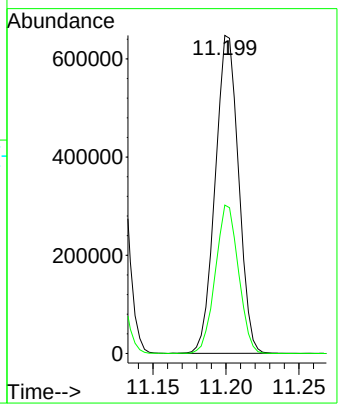




#73
1,3,5-Trimethylbenzene
Concen: 8.970 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 720566

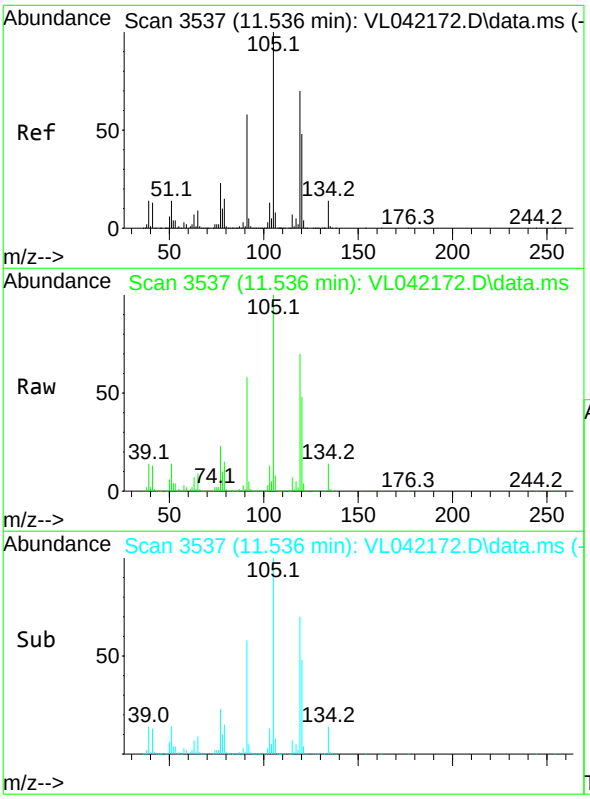
Ion	Ratio	Lower	Upper
105	100		
120	46.7	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

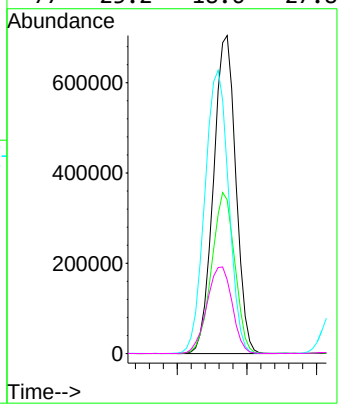
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

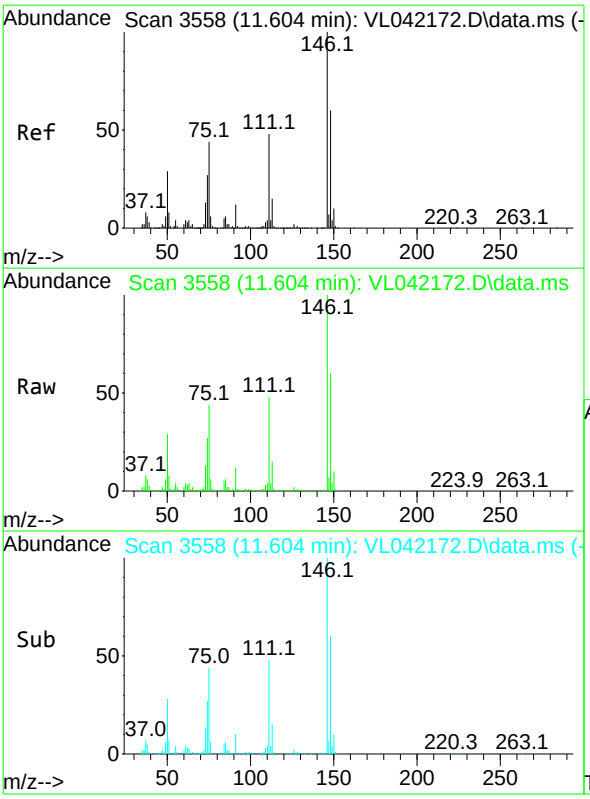


#74
1,2,4-Trimethylbenzene
Concen: 8.480 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 784745

Ion	Ratio	Lower	Upper
105	100		
120	48.3	38.6	58.0
91	57.7	46.2	69.2
77	23.2	18.6	27.8

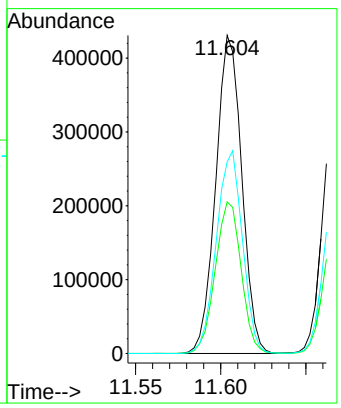




#75
1,3-Dichlorobenzene
Concen: 9.028 ppbv
RT: 11.604 min Scan# 35
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 458226

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.9	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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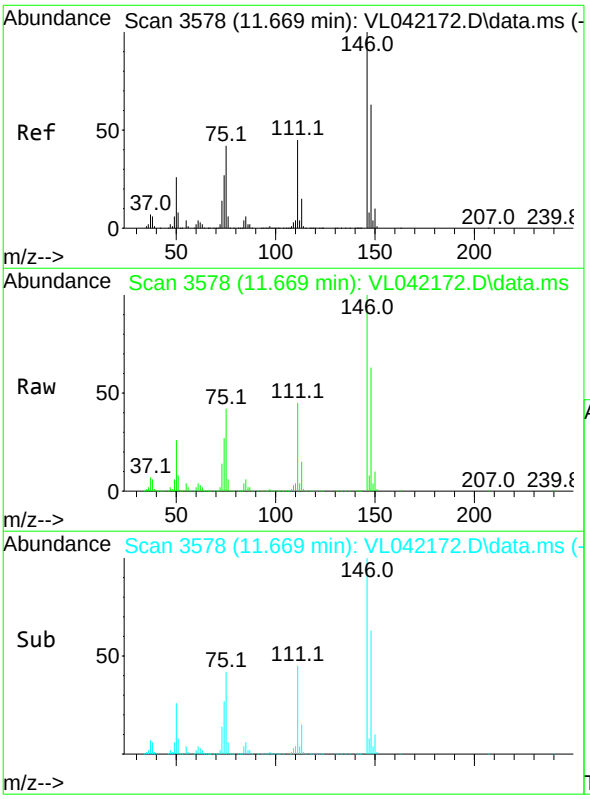
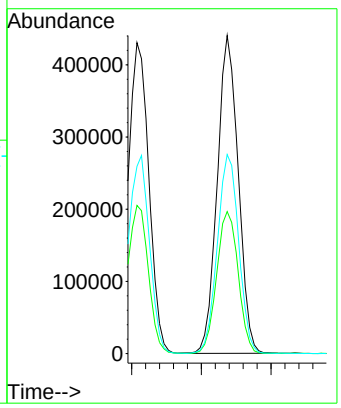
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

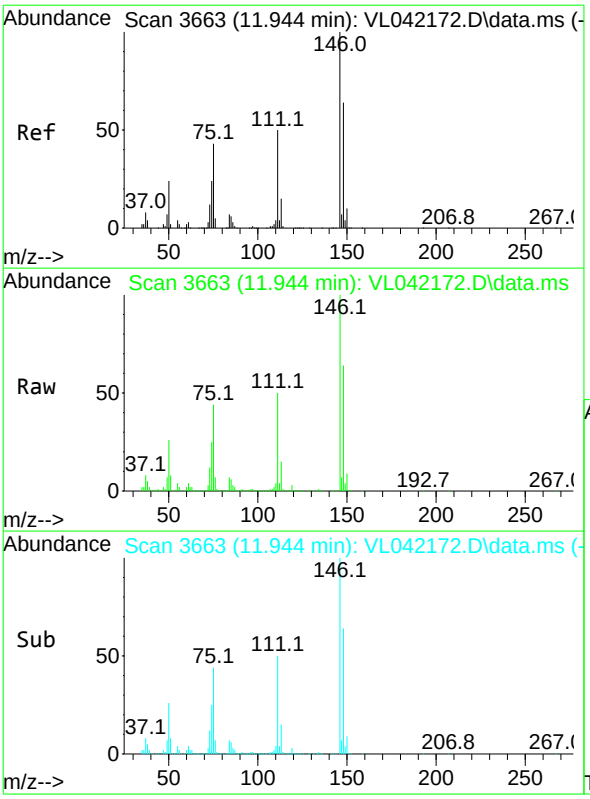


#76
1,4-Dichlorobenzene
Concen: 9.134 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 461371

Ion	Ratio	Lower	Upper
146	100		
111	46.0	23.0	69.0
148	63.8	31.9	95.7

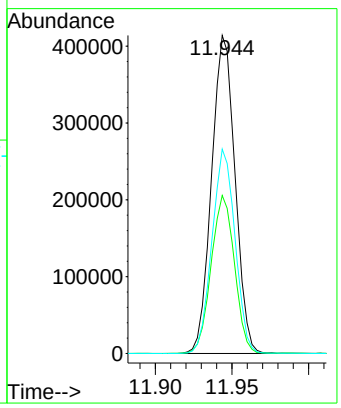




#77
1,2-Dichlorobenzene
Concen: 8.933 ppbv
RT: 11.944 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 441473

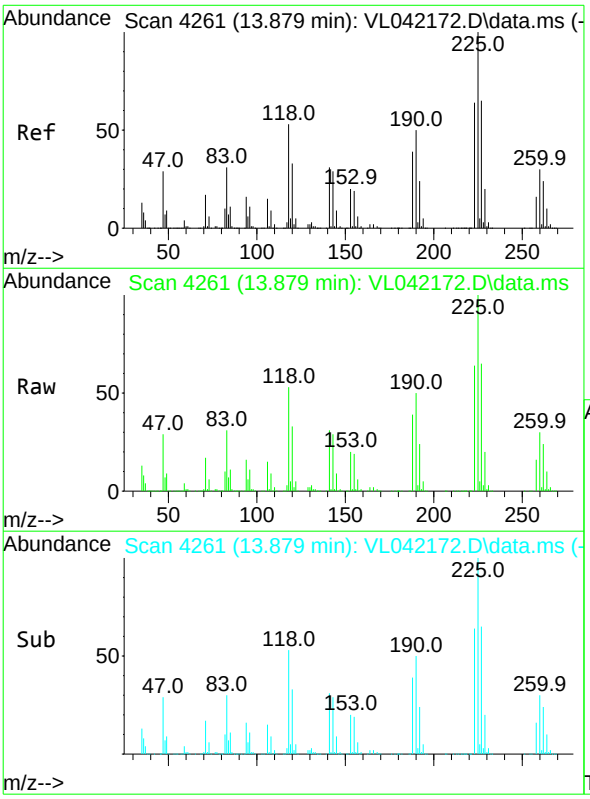
Ion	Ratio	Lower	Upper
146	100		
111	49.5	24.8	74.3
148	63.2	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

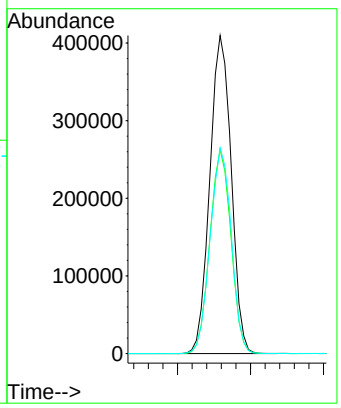
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

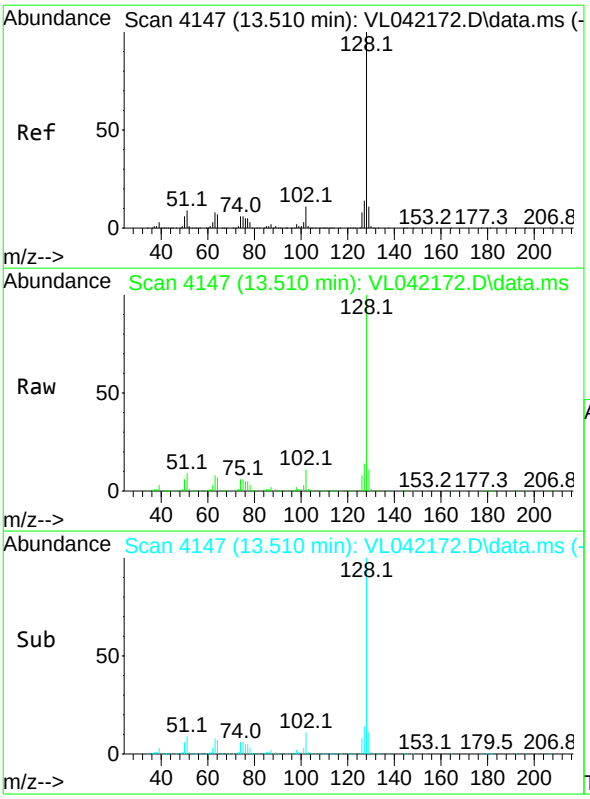


#78
Hexachloro-1,3-Butadiene
Concen: 8.284 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:225 Resp: 416735

Ion	Ratio	Lower	Upper
225	100		
223	63.3	50.6	76.0
227	64.0	51.2	76.8

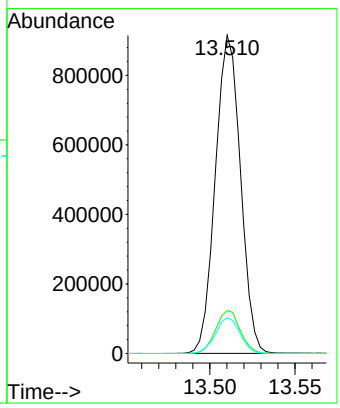




#79
Naphthalene
Concen: 9.271 ppbv
RT: 13.510 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:128 Resp: 938470

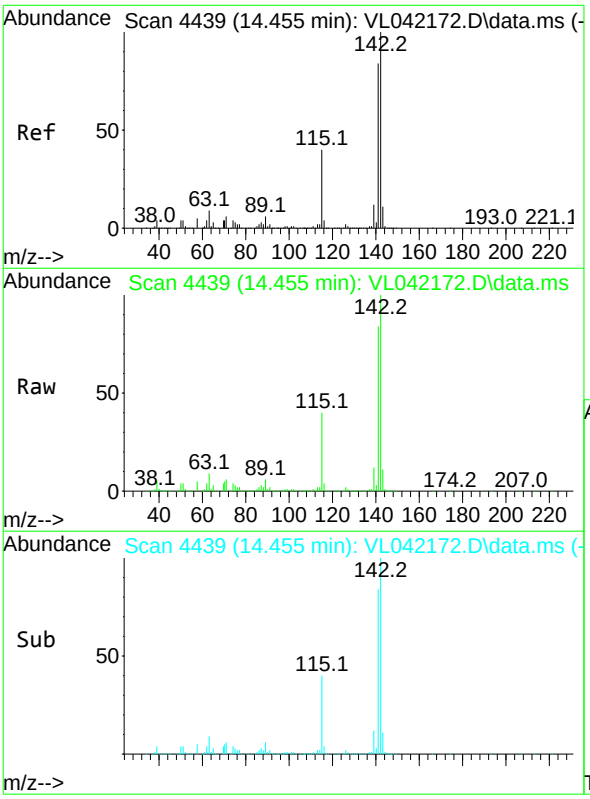
Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.8	16.2
129	11.2	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

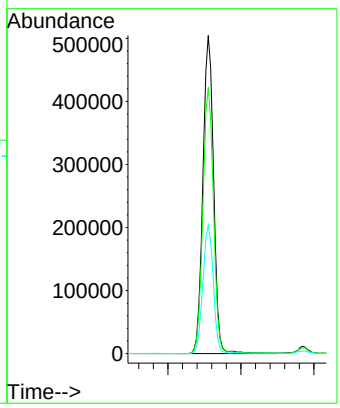
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

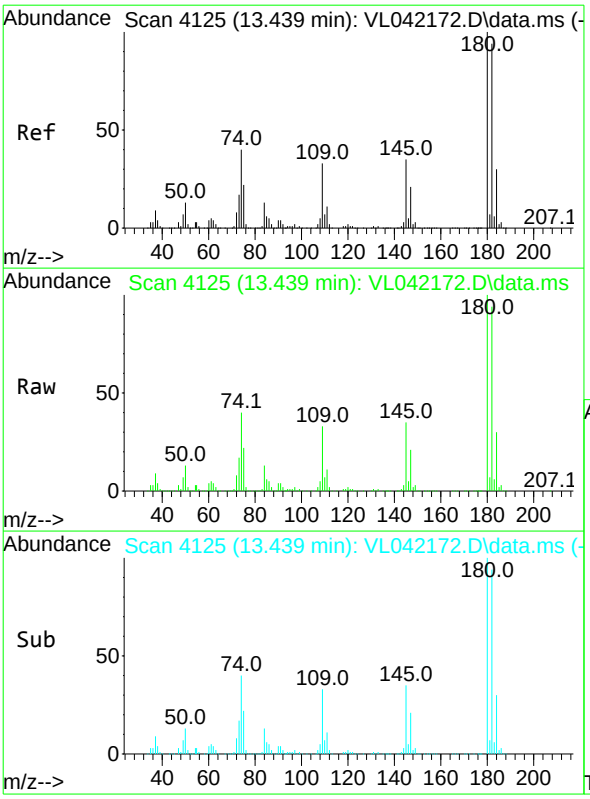


#80
Naphthalene,2-methyl-
Concen: 10.436 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:142 Resp: 514394

Ion	Ratio	Lower	Upper
142	100		
141	82.9	66.3	99.5
115	39.5	31.6	47.4

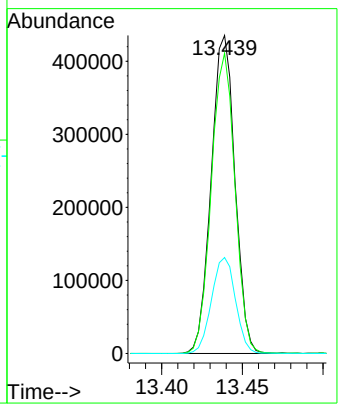




#81
1,2,4-Trichlorobenzene
Concen: 9.561 ppbv
RT: 13.439 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:180 Resp: 446420

Ion	Ratio	Lower	Upper
180	100		
182	93.9	75.1	112.7
184	30.5	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	188395	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	546394	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	504538	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	417532	10.077	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	55859	2.008	ppbv		99
3) Chlorodifluoromethane	1.473	51	57045	2.007	ppbv		99
4) Chloromethane	1.531	50	23293	2.049	ppbv		94
5) Vinyl Chloride	1.576	62	21989	1.897	ppbv		99
6) Bromomethane	1.664	94	10027	1.946	ppbv		98
7) Chloroethane	1.703	64	8413	1.844	ppbv		92
8) Dichlorotetrafluoroethane	1.551	85	48008	2.027	ppbv		98
9) Propene	1.483	41	26295	2.054	ppbv		94
10) Heptane	4.972	43	71466	2.063	ppbv		99
11) Trichlorofluoromethane	1.874	101	55754	2.060	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.136	101	44761	2.012	ppbv		98
13) Ethanol	1.719	45	2748m	2.741	ppbv		
14) Bromoethene	1.780	108	17323	2.033	ppbv	#	89
15) Acetone	1.832	43	55365	2.101	ppbv		95
16) 1,3-Butadiene	1.606	39	22894	1.932	ppbv		95
17) tert-Butyl alcohol	2.039	59	66174	2.016	ppbv		100
18) 1,1-Dichloroethene	2.030	96	21103	2.029	ppbv		95
19) Isopropyl Alcohol	1.884	45	27804	1.870	ppbv	#	35
20) Methylene Chloride	2.059	84	20518	2.091	ppbv		96
21) Allyl Chloride	2.094	41	38425	2.068	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	23384	1.924	ppbv		92
23) Vinyl Acetate	2.460	43	20736	1.894	ppbv	#	97
24) 1,1-Dichloroethane	2.405	63	44740	2.008	ppbv		99
25) Ethyl Acetate	2.832	43	139516	2.040	ppbv		99
26) Hexane	2.823	57	52095	1.972	ppbv		92
27) Carbon Disulfide	2.146	76	57969	2.047	ppbv	#	76
28) Methyl tert-Butyl Ether	2.437	73	33703	2.049	ppbv		99
29) Chloroform	2.845	83	78043	2.019	ppbv		95
30) Cyclohexane	3.852	84	45641	1.989	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	53713	2.003	ppbv		96
32) 1,1,1-Trichloroethane	3.363	97	81070	1.833	ppbv		99
34) 2-Butanone	2.554	43	84157	2.124	ppbv		99
35) Carbon Tetrachloride	3.758	117	81735	1.944	ppbv		96
36) Benzene	3.651	78	110727	2.044	ppbv		97
37) 1,2-Dichloroethane	3.214	62	61476	1.982	ppbv		97
38) Trichloroethene	4.541	130	43501	1.924	ppbv		97
39) 1,2-Dichloropropane	4.308	63	39912	2.023	ppbv		93
40) 1,4-Dioxane	4.587	88	20884m	2.040	ppbv		
41) Tetrahydrofuran	3.056	42	47262	2.097	ppbv		99
42) Bromodichloromethane	4.483	83	87640	2.050	ppbv		99
43) Methyl Methacrylate	4.878	69	44624	1.952	ppbv		97
44) 2,2,4-Trimethylpentane	4.632	57	188282	2.057	ppbv		100
45) t-1,3-Dichloropropene	6.406	75	49461	2.011	ppbv		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	61829	2.050	ppbv	#	91
47) 1,1,2-Trichloroethane	6.577	97	41387	1.985	ppbv		95
48) Dibromochloromethane	7.383	129	72441	2.050	ppbv		100
49) Bromoform	9.477	173	65221	2.056	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	132328	2.107	ppbv		99
51) 2-Hexanone	7.435	43	112681	2.162	ppbv	#	99
52) Tetrachloroethene	8.221	164	40558	1.888	ppbv		98
53) Toluene	6.923	91	131314	2.045	ppbv		99
54) 1,2-Dibromoethane	7.648	107	56799	1.952	ppbv		90
56) 1,1,1,2-Tetrachloroethane	8.920	131	58141	2.093	ppbv		97
57) Chlorobenzene	8.914	112	100308	2.096	ppbv	#	94
58) Ethyl Benzene	9.351	91	191114	2.132	ppbv		96
59) m/p-Xylene	9.548	91	299531m	4.181	ppbv		
60) o-Xylene	9.959	91	151292	2.109	ppbv		98
61) Styrene	9.865	104	74134	2.089	ppbv		98
62) Isopropylbenzene	10.535	105	228191	2.127	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.956	83	90114	2.067	ppbv		99
64) n-propylbenzene	10.985	120	58105	2.104	ppbv		92
65) tert-Butylbenzene	11.529	119	216336	2.180	ppbv		99
66) Benzyl Chloride	11.610	91	22272	2.116	ppbv		95
67) sec-Butylbenzene	11.762	105	297381	2.156	ppbv		99
69) p-Isopropyltoluene	11.921	119	258357	2.176	ppbv		100
70) n-Butylbenzene	12.277	91	270616	2.228	ppbv		99
71) 2-Chlorotoluene	10.898	91	177487	2.132	ppbv		100
72) 4-Ethyltoluene	11.121	105	194660	2.179	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	169221	2.169	ppbv		96
74) 1,2,4-Trimethylbenzene	11.532	105	198351	2.207	ppbv		96
75) 1,3-Dichlorobenzene	11.604	146	107217	2.175	ppbv		97
76) 1,4-Dichlorobenzene	11.668	146	104925	2.139	ppbv		99
77) 1,2-Dichlorobenzene	11.943	146	102310	2.132	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	109539	2.242	ppbv		99
79) Naphthalene	13.510	128	233451	2.375	ppbv		97
80) Naphthalene,2-methyl-	14.455	142	117313	2.451	ppbv		99
81) 1,2,4-Trichlorobenzene	13.435	180	103765	2.288	ppbv		97

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

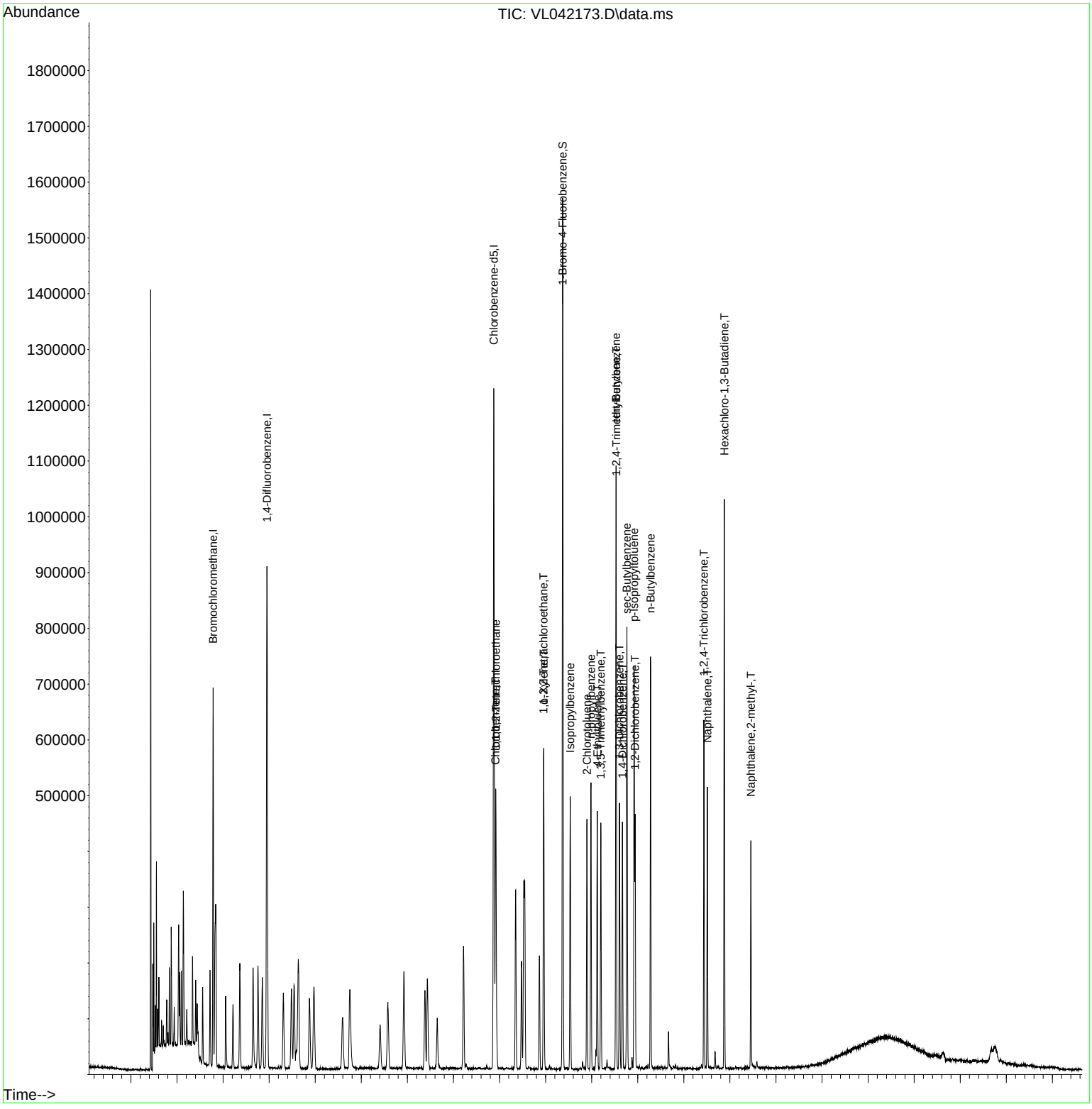
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

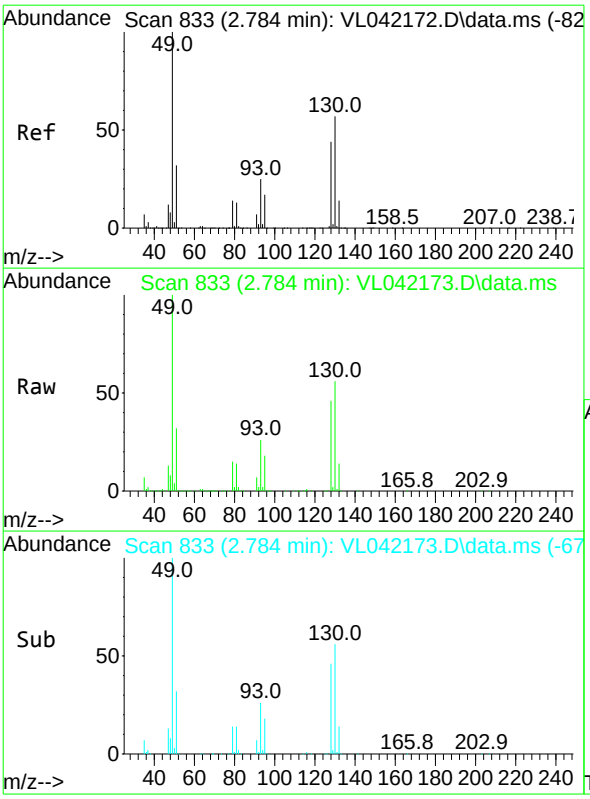
Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

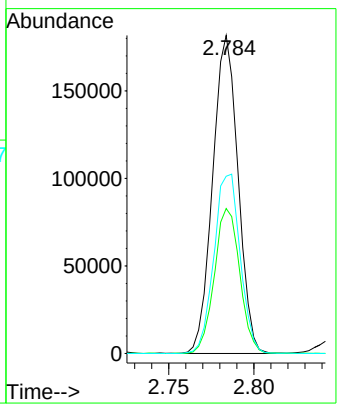




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 49 Resp: 188395

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.5	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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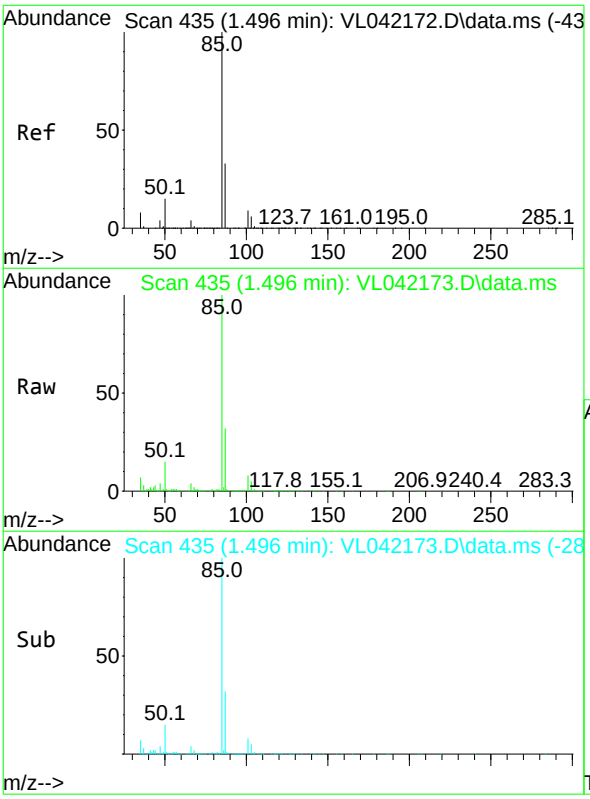
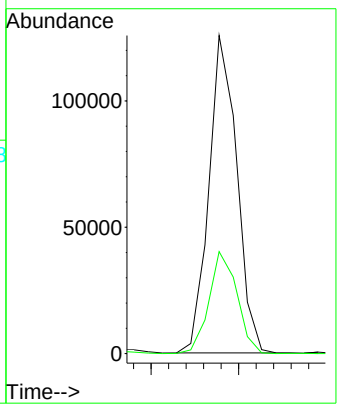
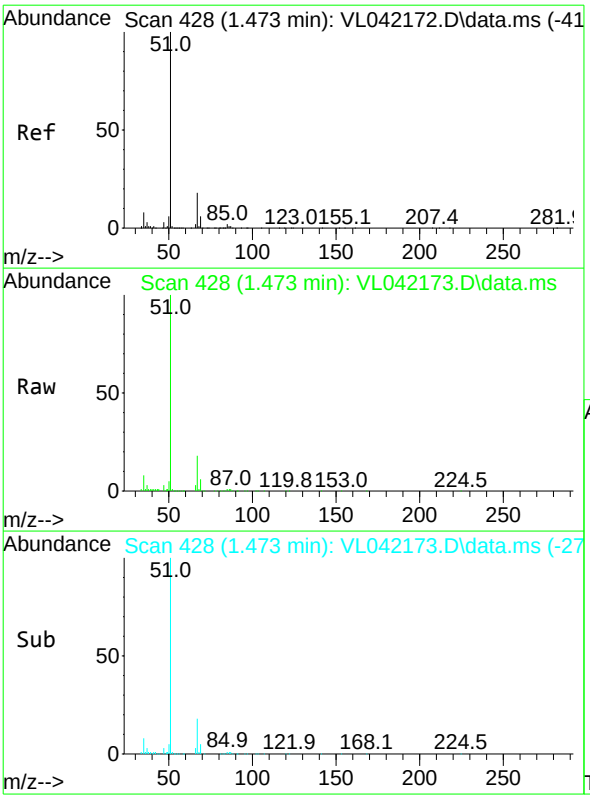


#2
Dichlorodifluoromethane
Concen: 2.008 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 55859

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1

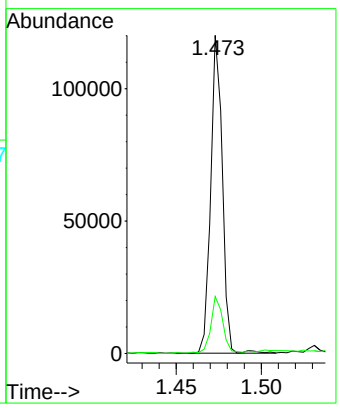




#3
Chlorodifluoromethane
Concen: 2.007 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 51 Resp: 57045

Ion	Ratio	Lower	Upper
51	100		
67	19.4	15.0	22.6



Instrument :
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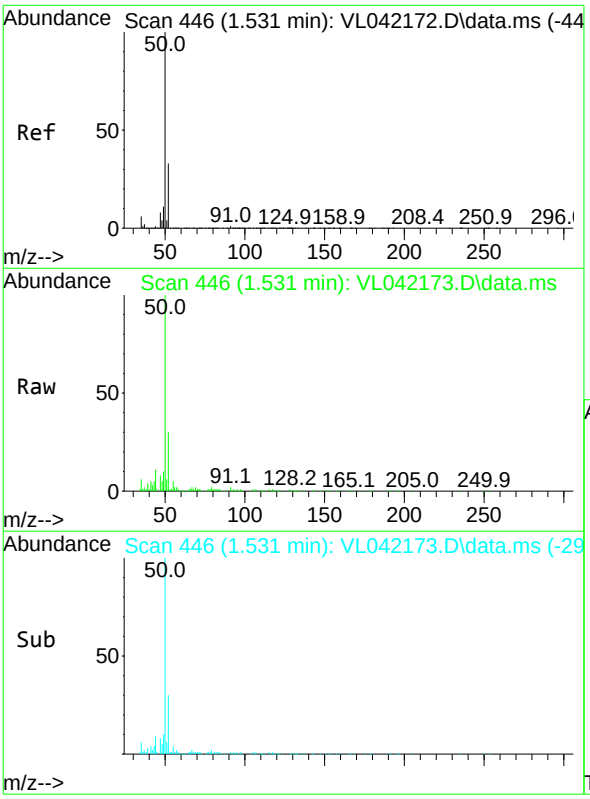
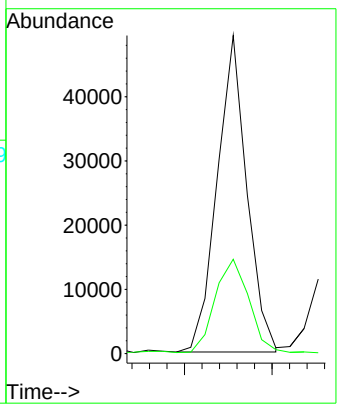
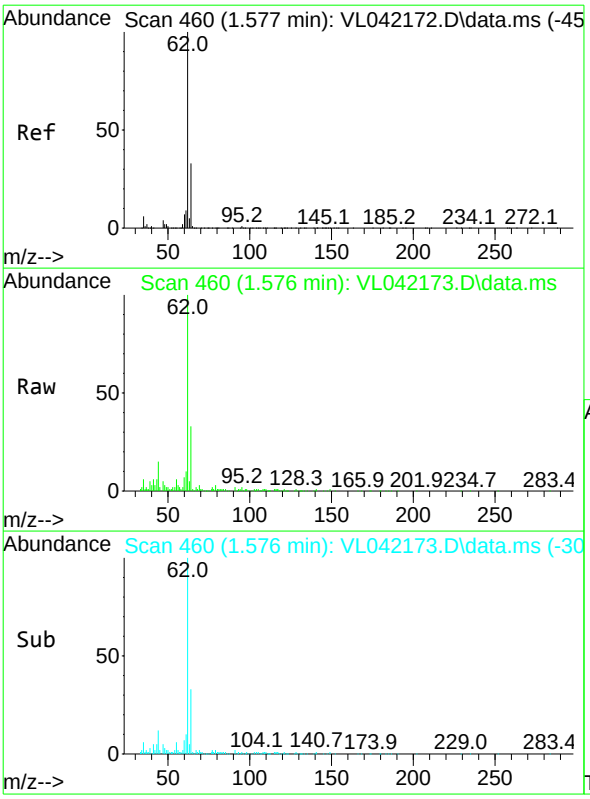


#4
Chloromethane
Concen: 2.049 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 50 Resp: 23293

Ion	Ratio	Lower	Upper
50	100		
52	29.5	26.1	39.1





#5
Vinyl Chloride
Concen: 1.897 ppbv
RT: 1.576 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 62 Resp: 21989

Ion	Ratio	Lower	Upper
62	100		
64	32.5	26.6	40.0

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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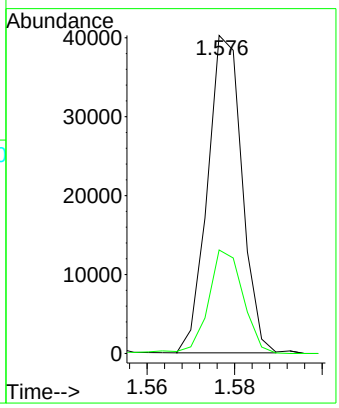
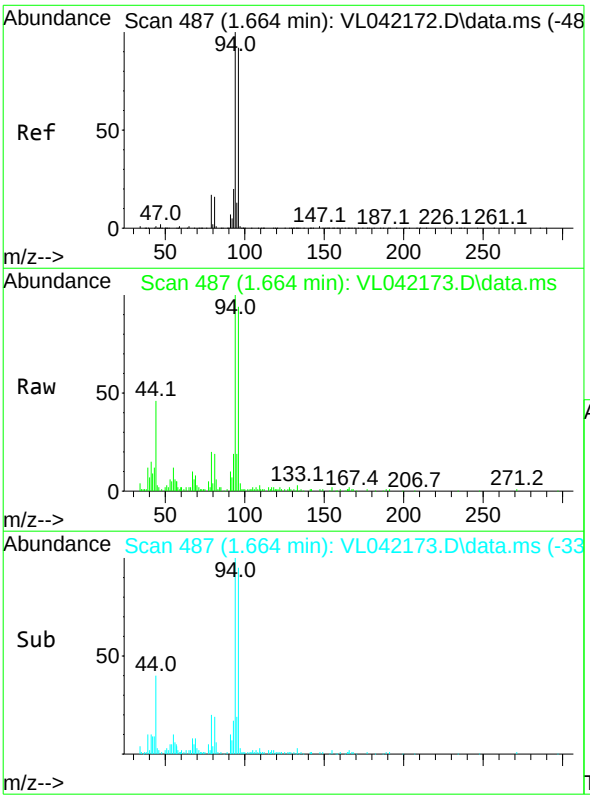
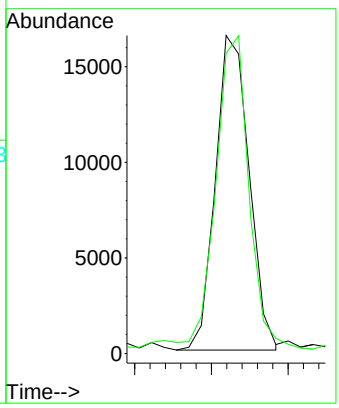


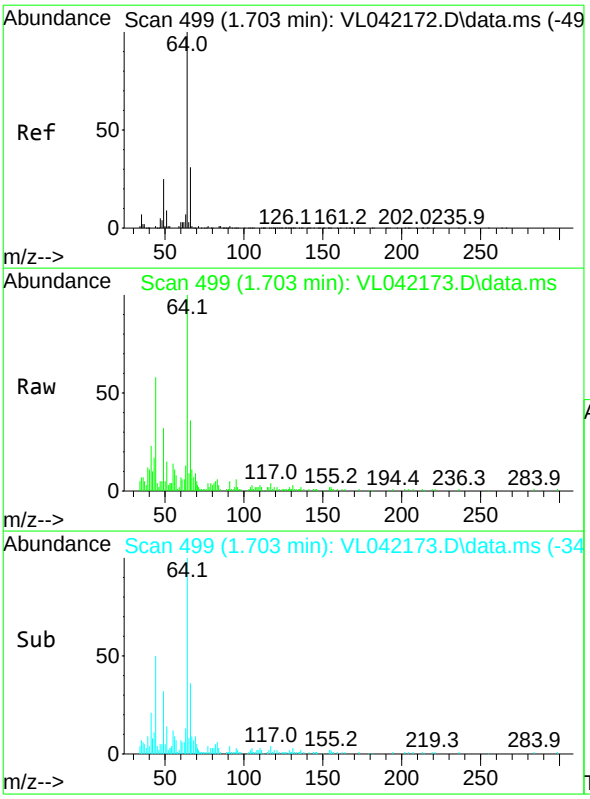


#6
Bromomethane
Concen: 1.946 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 94 Resp: 10027

Ion	Ratio	Lower	Upper
94	100		
96	93.6	73.1	109.7

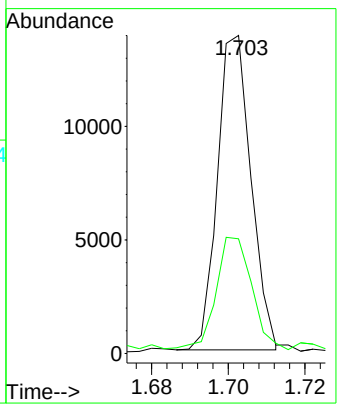




#7
Chloroethane
Concen: 1.844 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 64 Resp: 8413

Ion	Ratio	Lower	Upper
64	100		
66	36.1	25.2	37.8



Instrument :
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ClientSampleId :
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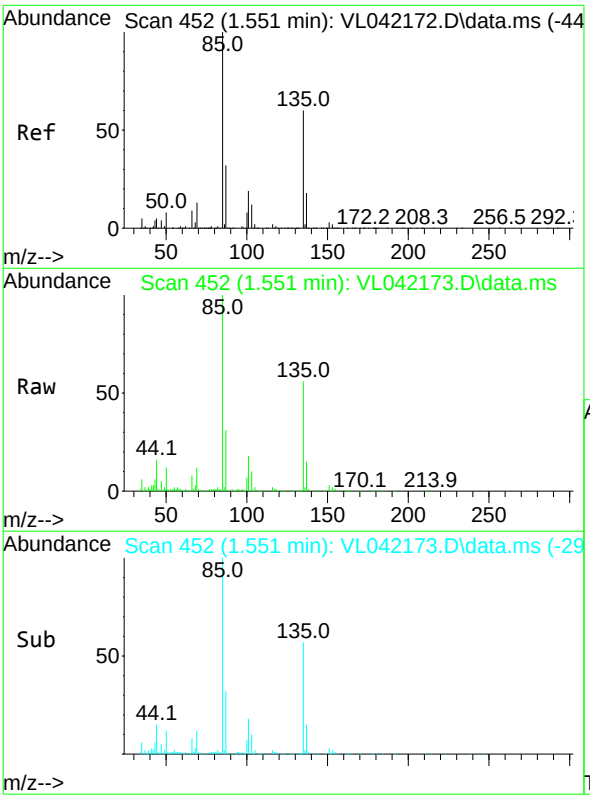
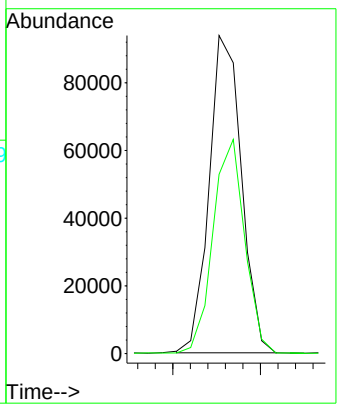
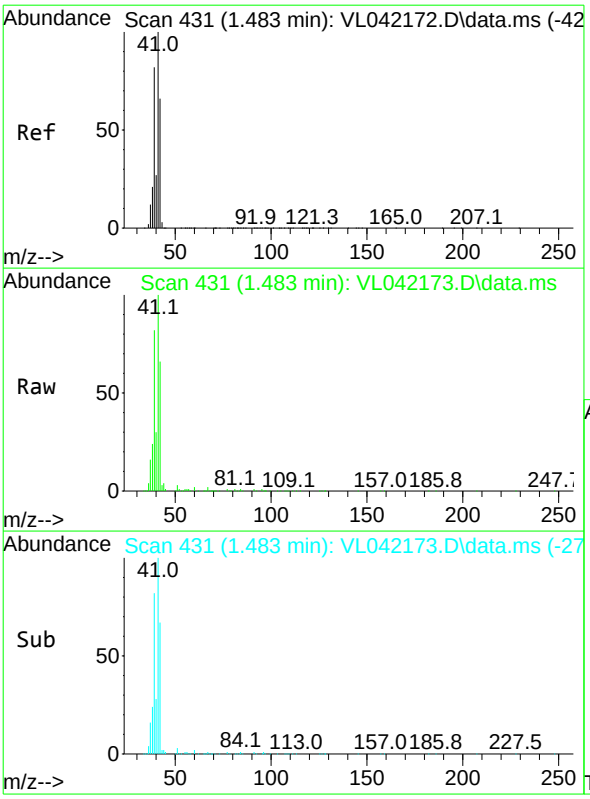


#8
Dichlorotetrafluoroethane
Concen: 2.027 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 48008

Ion	Ratio	Lower	Upper
85	100		
135	66.8	52.4	78.6

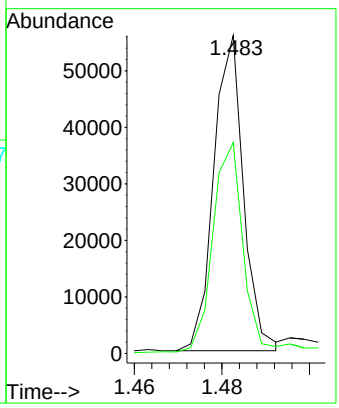




#9
Propene
Concen: 2.054 ppbv
RT: 1.483 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 41 Resp: 26295

Ion	Ratio	Lower	Upper
41	100		
42	73.9	55.4	83.2



Instrument :
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ClientSampleId :
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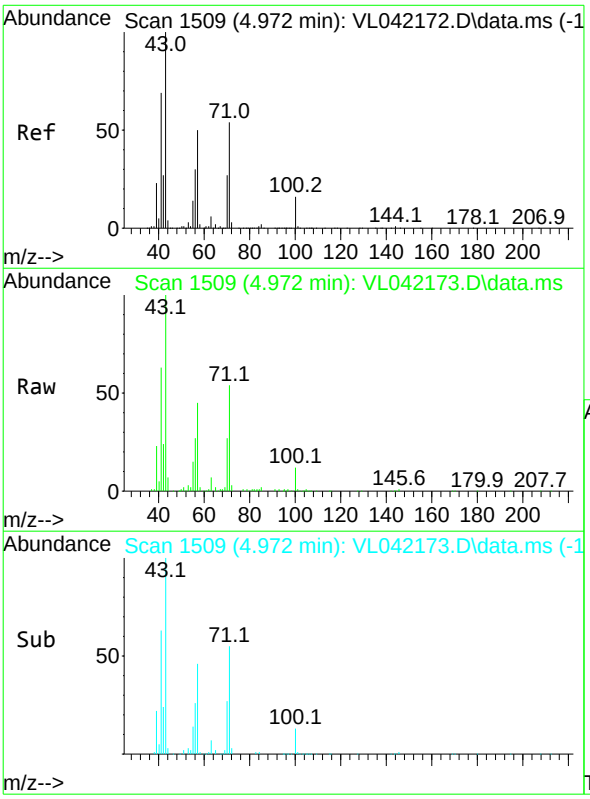
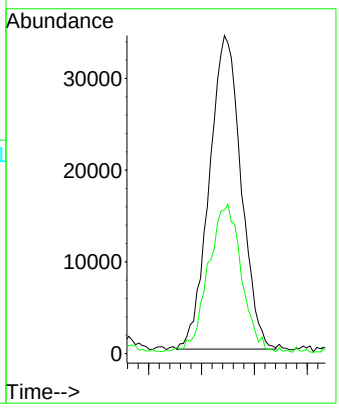
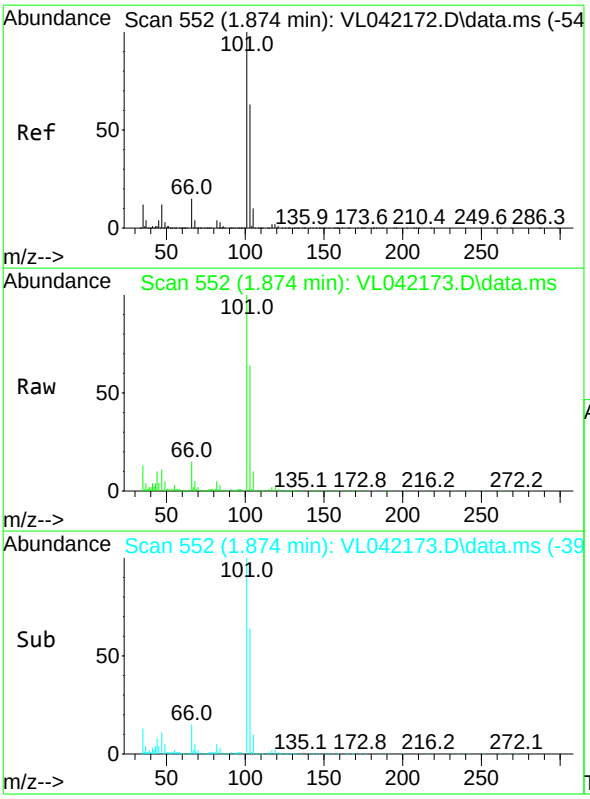


#10
Heptane
Concen: 2.063 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 71466

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2





#11
Trichlorofluoromethane
Concen: 2.060 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:101 Resp: 55754

Ion	Ratio	Lower	Upper
101	100		
103	63.5	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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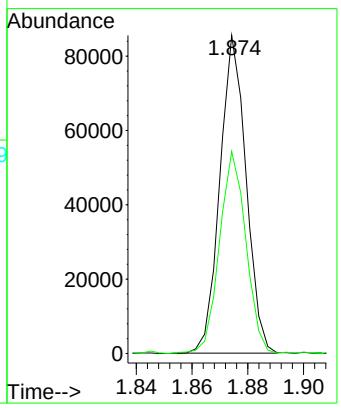
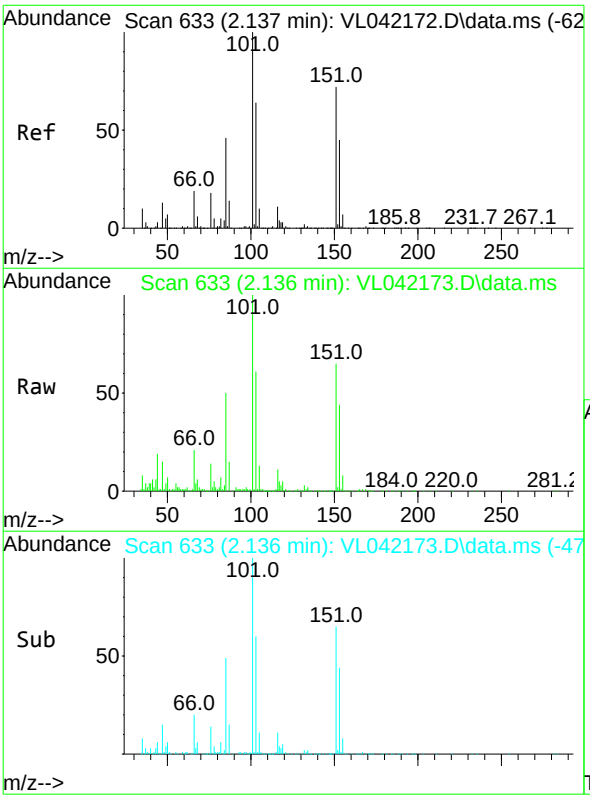
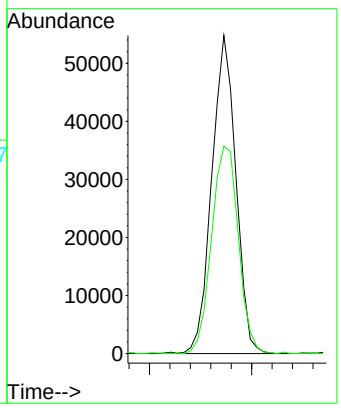


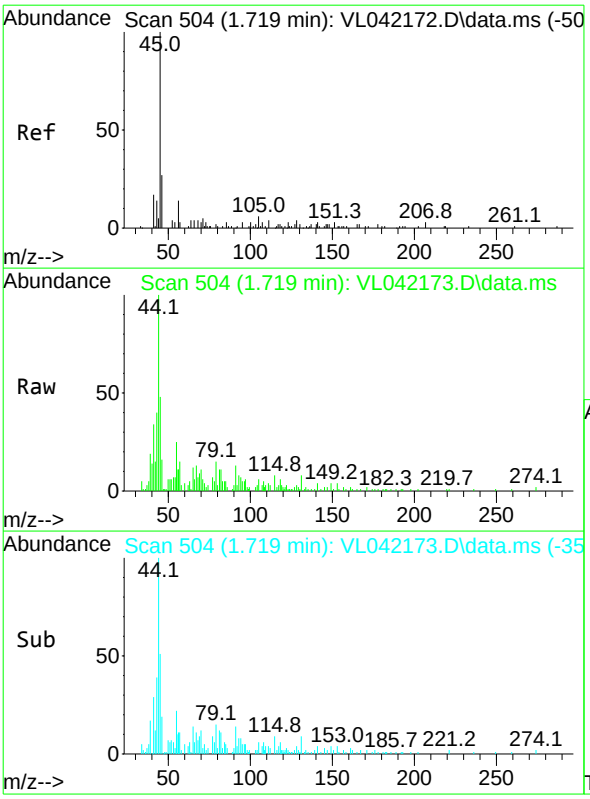


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.012 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:101 Resp: 44761

Ion	Ratio	Lower	Upper
101	100		
151	73.0	57.1	85.7

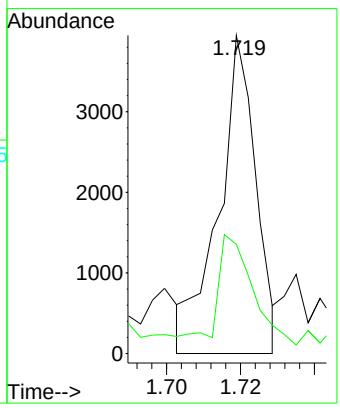




#13
Ethanol
Concen: 2.741 ppbv m
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 45 Resp: 2748

Ion	Ratio	Lower	Upper
45	100		
46	56.9	20.2	80.8



Instrument :
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ClientSampleId :
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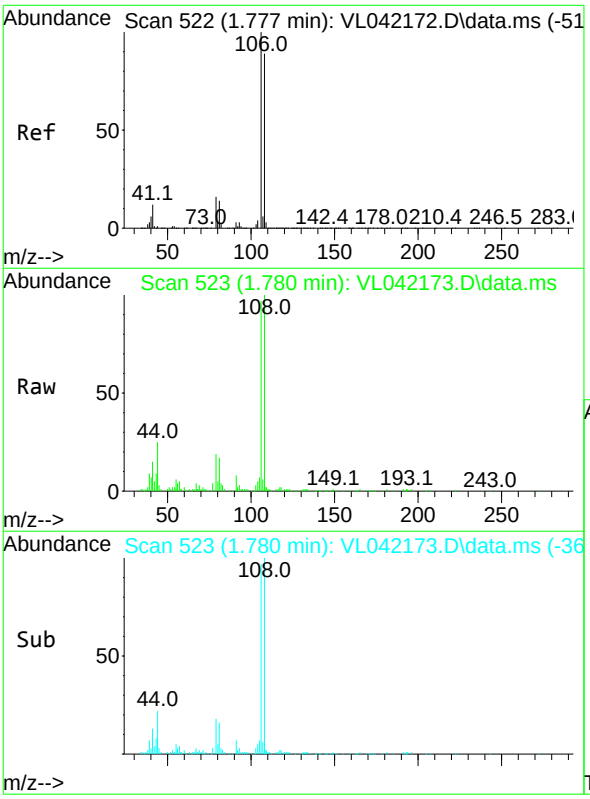
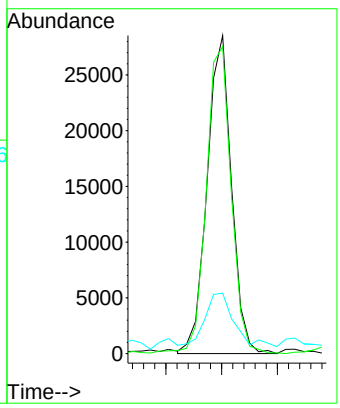
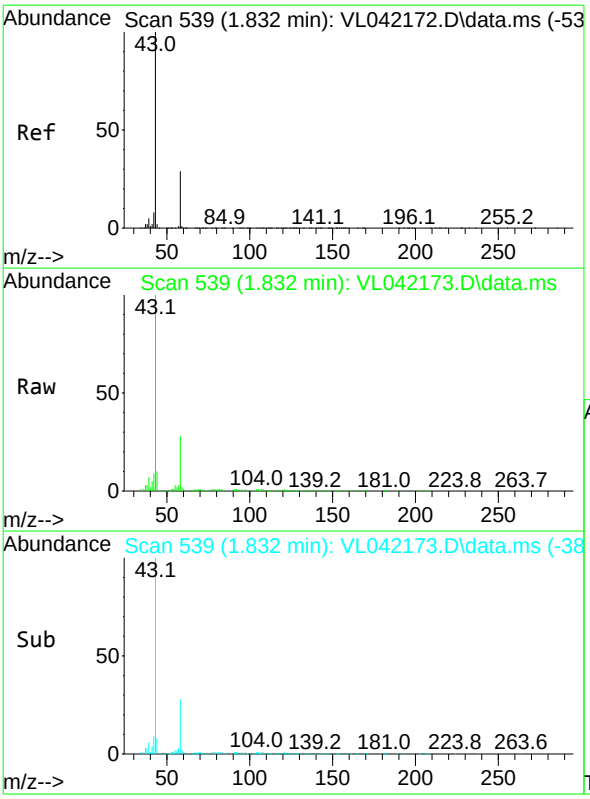


#14
Bromoethene
Concen: 2.033 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:108 Resp: 17323

Ion	Ratio	Lower	Upper
108	100		
106	100.6	86.8	130.2
79	32.0	15.0	22.6#

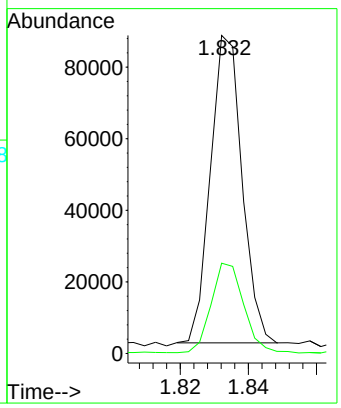




#15
Acetone
Concen: 2.101 ppbv
RT: 1.832 min Scan# 53
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 55365

Ion	Ratio	Lower	Upper
43	100		
58	31.8	23.2	34.8



Instrument :
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ClientSampleId :
VSTDICC002

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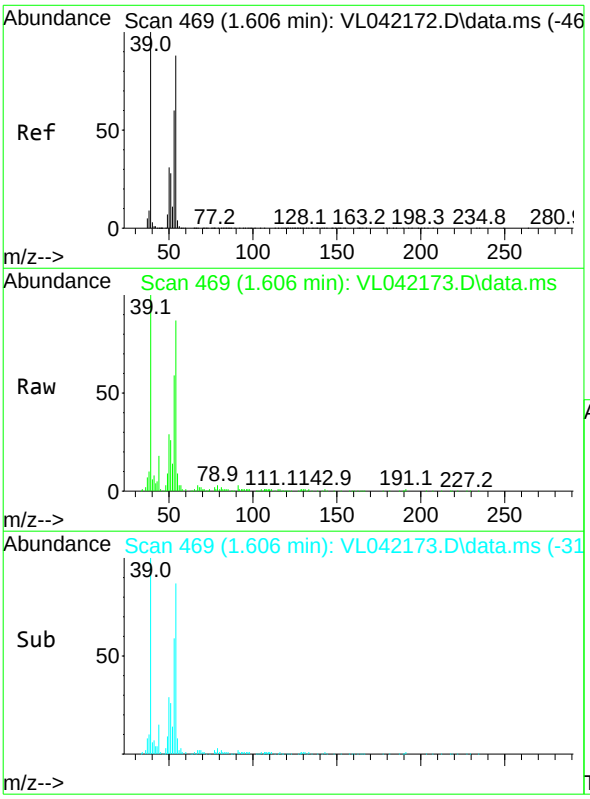
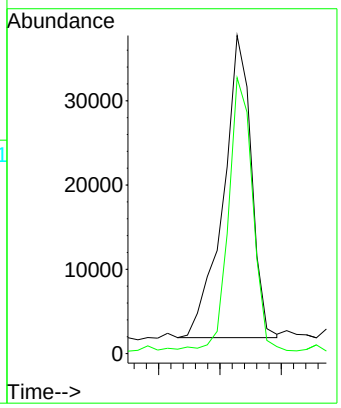
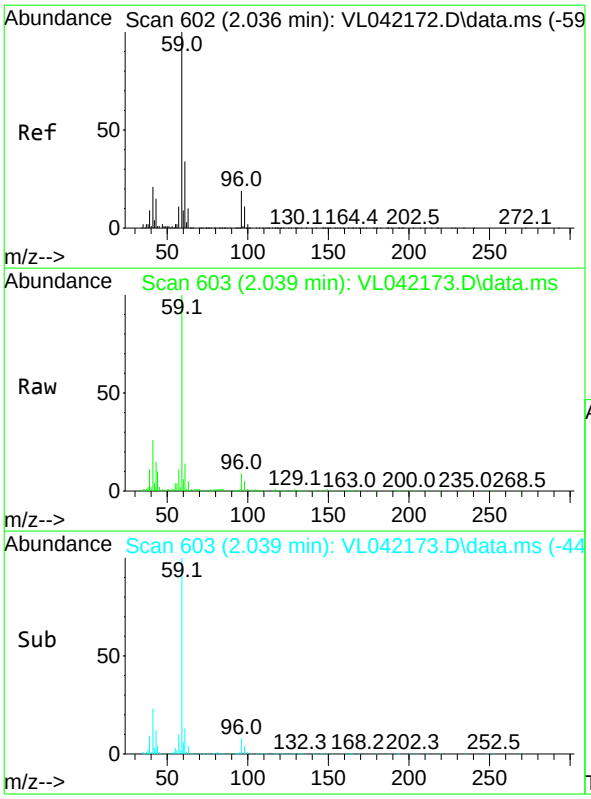


#16
1,3-Butadiene
Concen: 1.932 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 39 Resp: 22894

Ion	Ratio	Lower	Upper
39	100		
54	79.9	60.7	91.1

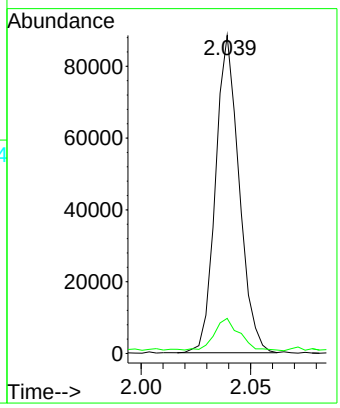




#17
tert-Butyl alcohol
Concen: 2.016 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 59 Resp: 66174

Ion	Ratio	Lower	Upper
59	100		
57	11.2	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
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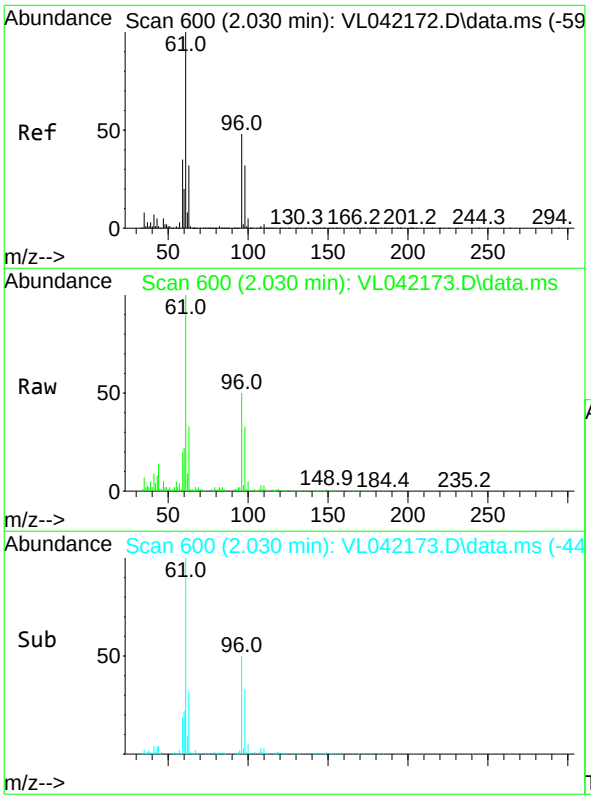
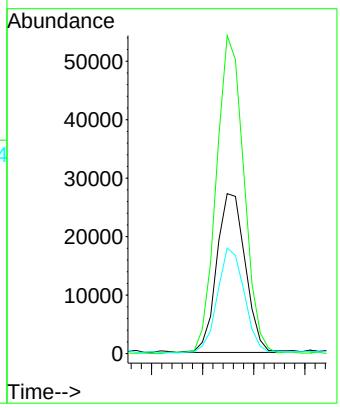
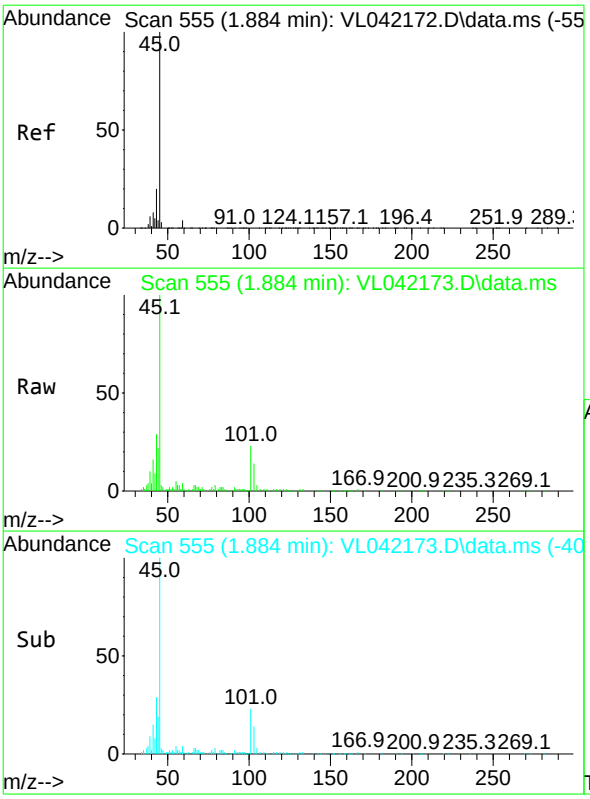


#18
1,1-Dichloroethene
Concen: 2.029 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 21103

Ion	Ratio	Lower	Upper
96	100		
61	199.8	167.6	251.4
98	66.0	53.5	80.3





#19
Isopropyl Alcohol
Concen: 1.870 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 45 Resp: 27804

Ion	Ratio	Lower	Upper
45	100		
58	3.3	36.9	55.3#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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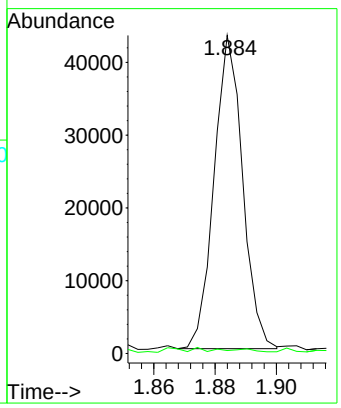
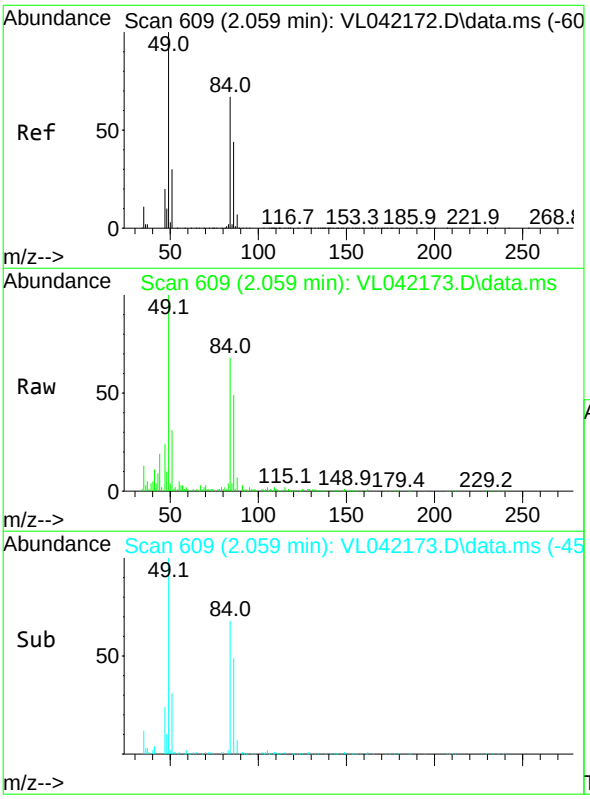
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

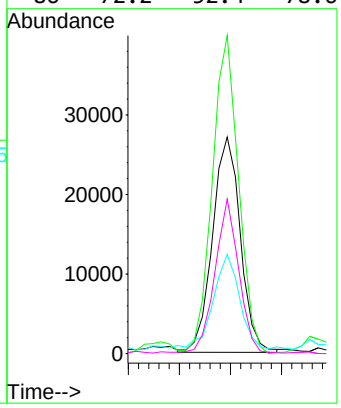


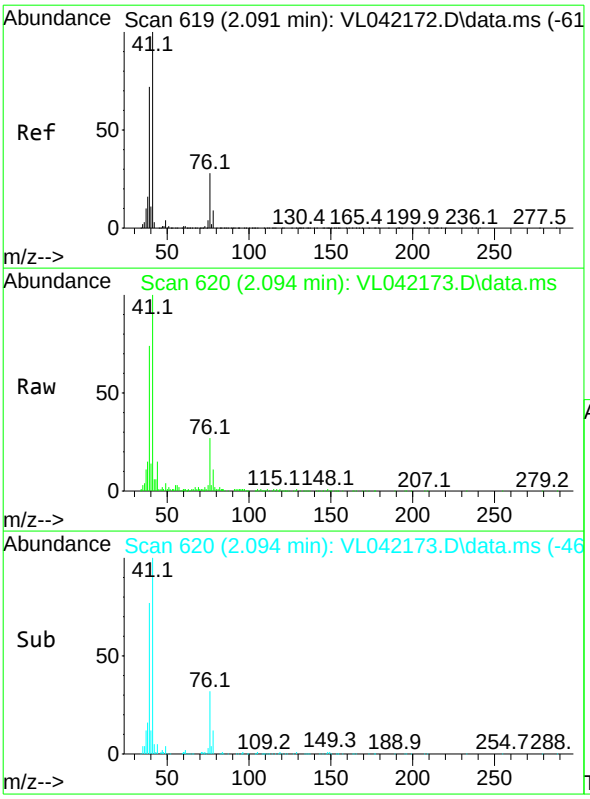


#20
Methylene Chloride
Concen: 2.091 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 20518

Ion	Ratio	Lower	Upper
84	100		
49	148.8	120.2	180.4
51	43.5	37.4	56.0
86	72.2	52.4	78.6

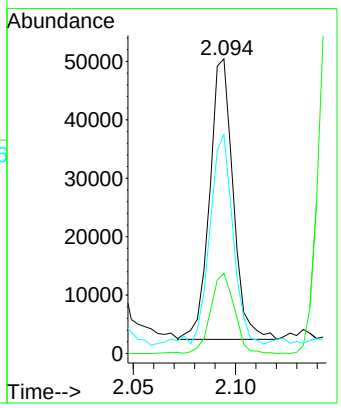




#21
Allyl Chloride
Concen: 2.068 ppbv
RT: 2.094 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 41 Resp: 38425

Ion	Ratio	Lower	Upper
41	100		
76	29.0	24.1	36.1
39	77.5	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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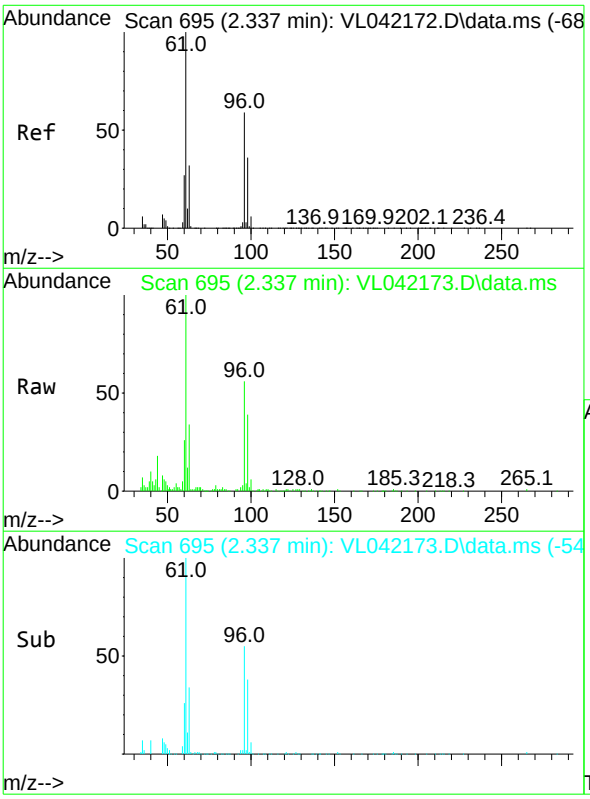
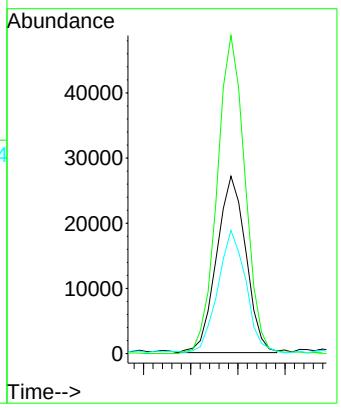
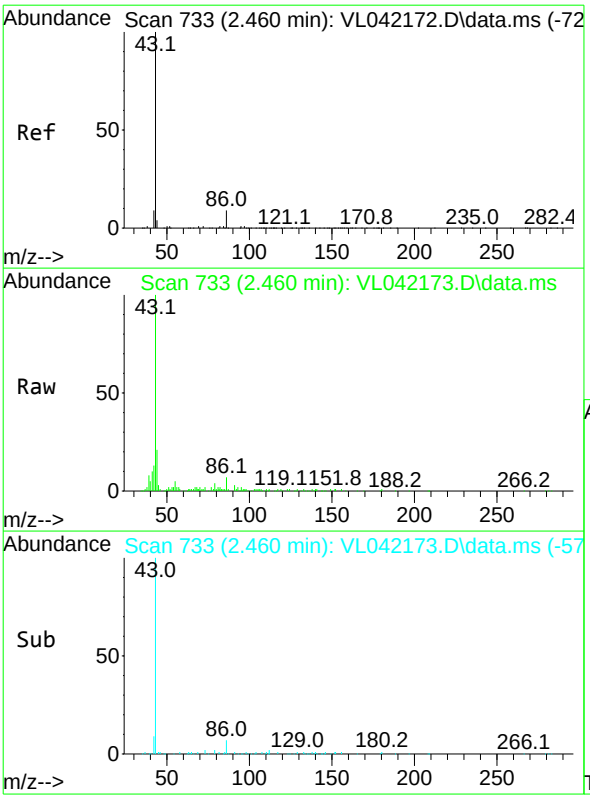


#22
trans-1,2-Dichloroethene
Concen: 1.924 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 23384

Ion	Ratio	Lower	Upper
96	100		
61	180.3	136.6	204.8
98	68.6	49.4	74.2

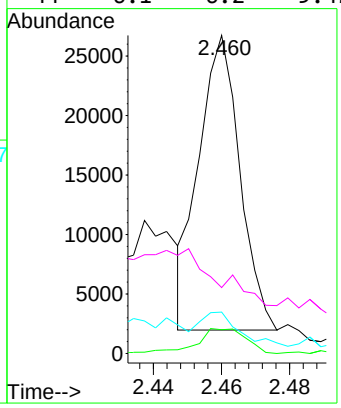




#23
Vinyl Acetate
Concen: 1.894 ppbv
RT: 2.460 min Scan# 73
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 20736

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.4	8.6	13.0
44	6.1	6.2	9.4#



Instrument :
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ClientSampleId :
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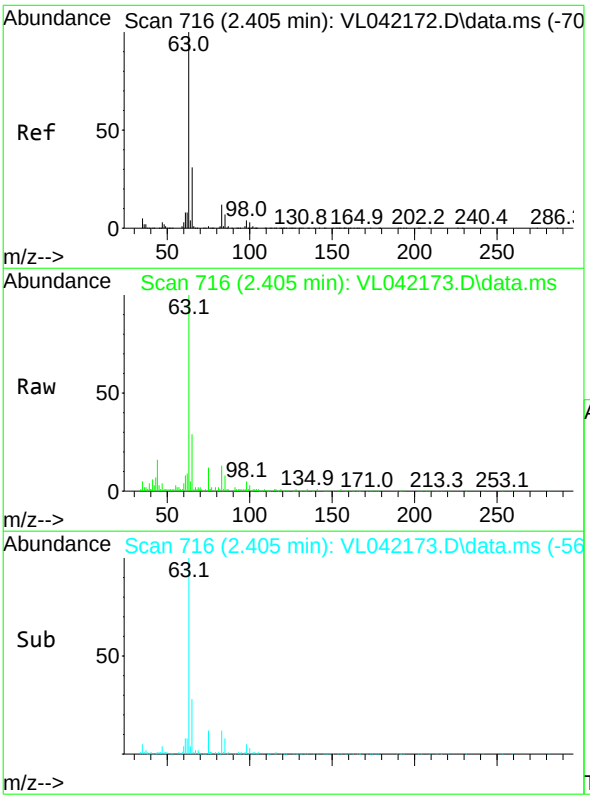
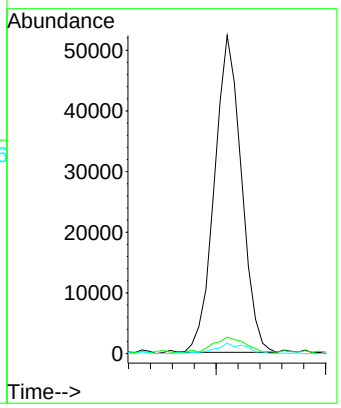
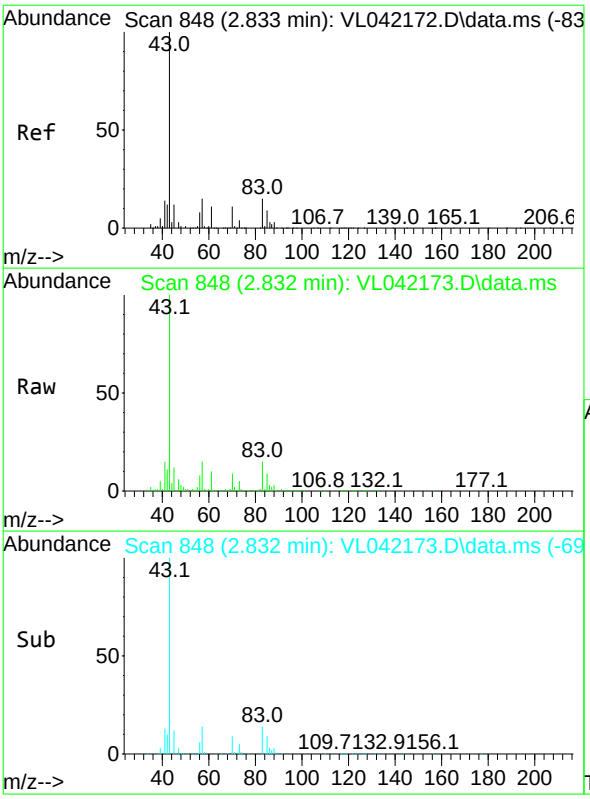


#24
1,1-Dichloroethane
Concen: 2.008 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 63 Resp: 44740

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	3.3	1.6	4.7

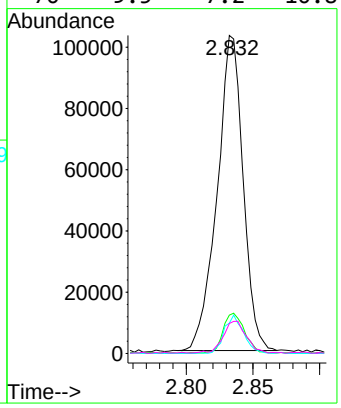




#25
Ethyl Acetate
Concen: 2.040 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 139516

Ion	Ratio	Lower	Upper
43	100		
45	10.9	8.2	12.2
61	9.1	7.3	10.9
70	9.5	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
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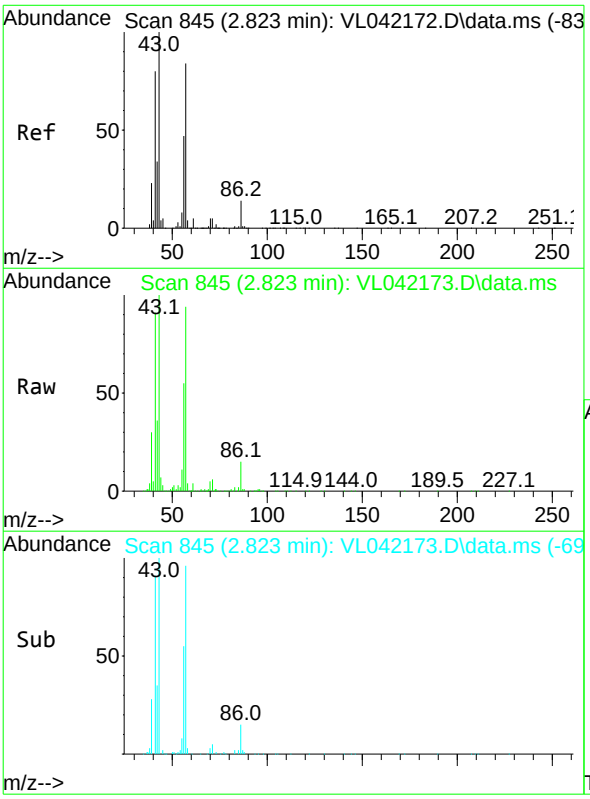
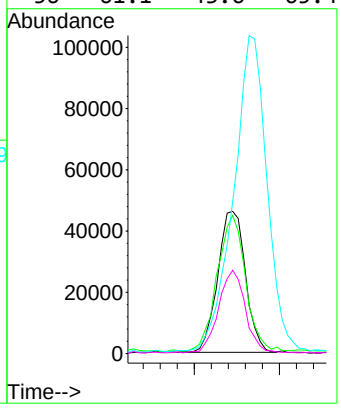
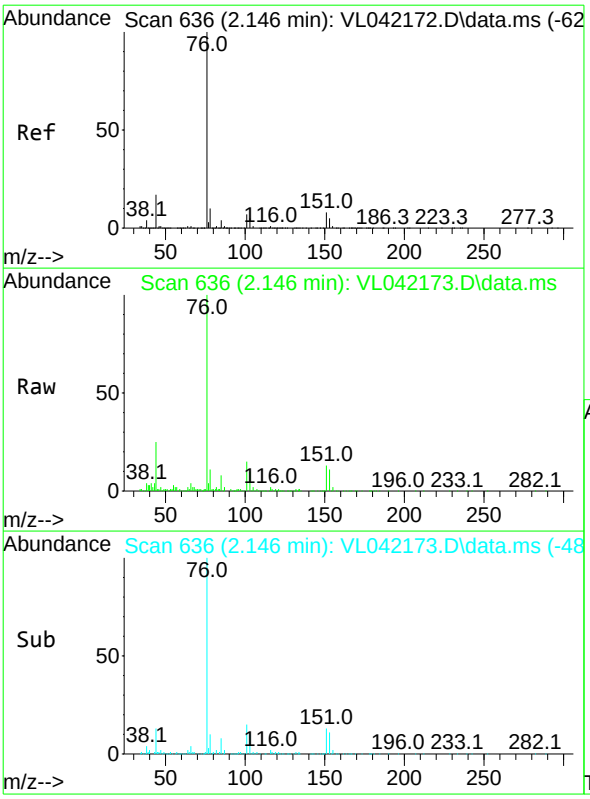


#26
Hexane
Concen: 1.972 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 52095

Ion	Ratio	Lower	Upper
57	100		
41	100.9	76.6	114.8
43	274.8	207.8	311.8
56	61.1	43.6	65.4

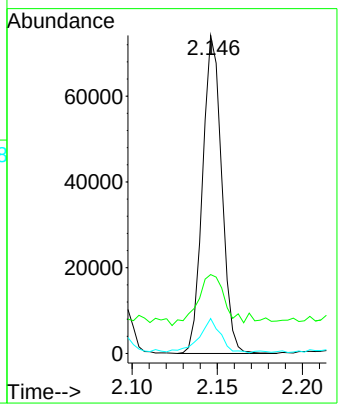




#27
Carbon Disulfide
Concen: 2.047 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 76 Resp: 57969

Ion	Ratio	Lower	Upper
76	100		
44	35.2	14.7	22.1#
78	12.0	9.3	13.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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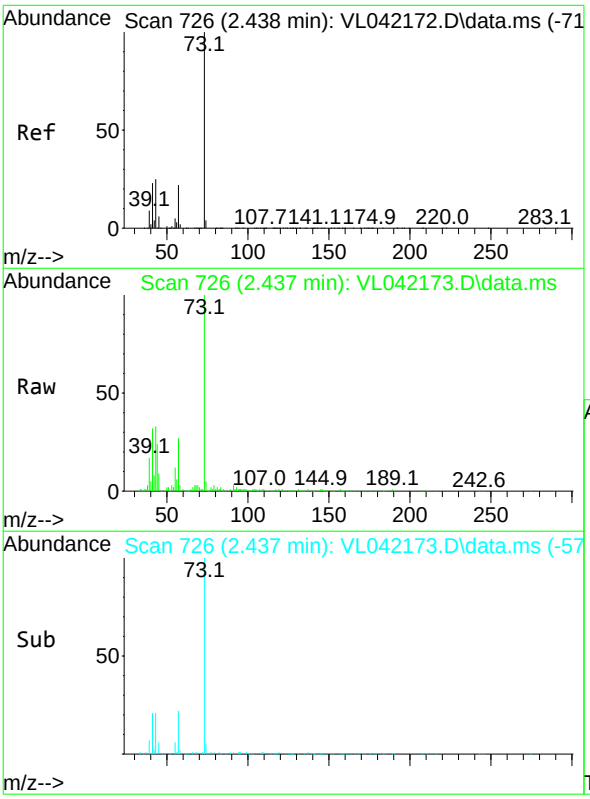
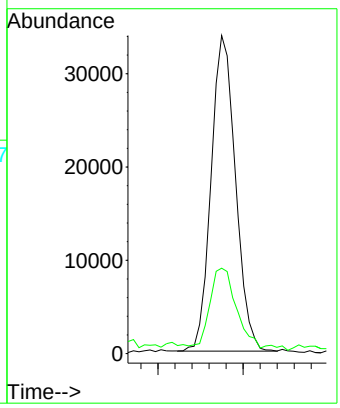
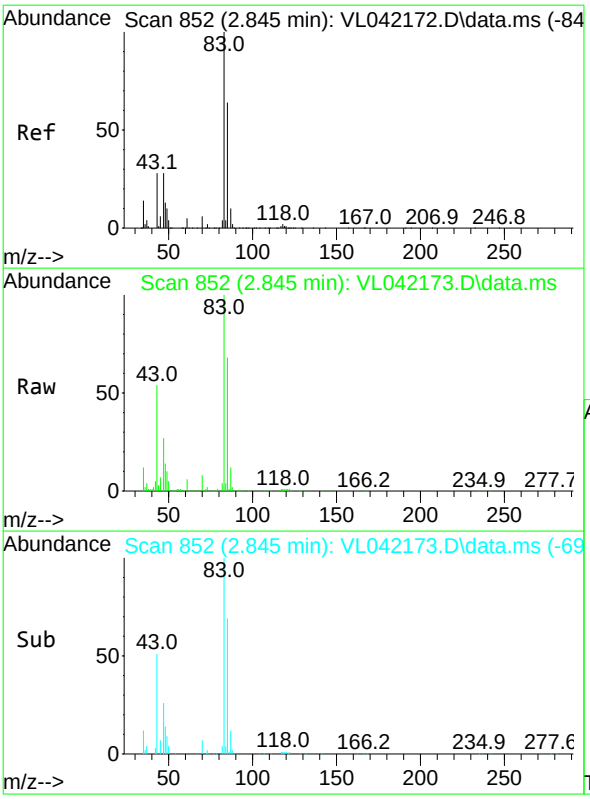


#28
Methyl tert-Butyl Ether
Concen: 2.049 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 73 Resp: 33703

Ion	Ratio	Lower	Upper
73	100		
57	25.2	20.5	30.7

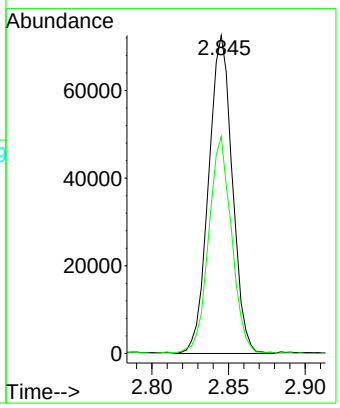




#29
Chloroform
Concen: 2.019 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 78043

Ion	Ratio	Lower	Upper
83	100		
85	68.2	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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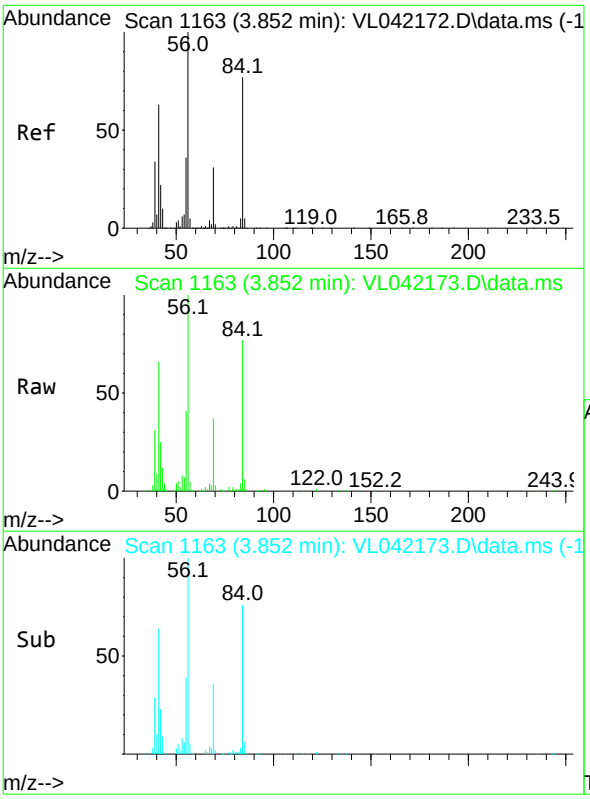
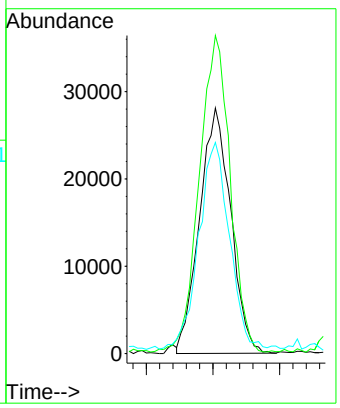
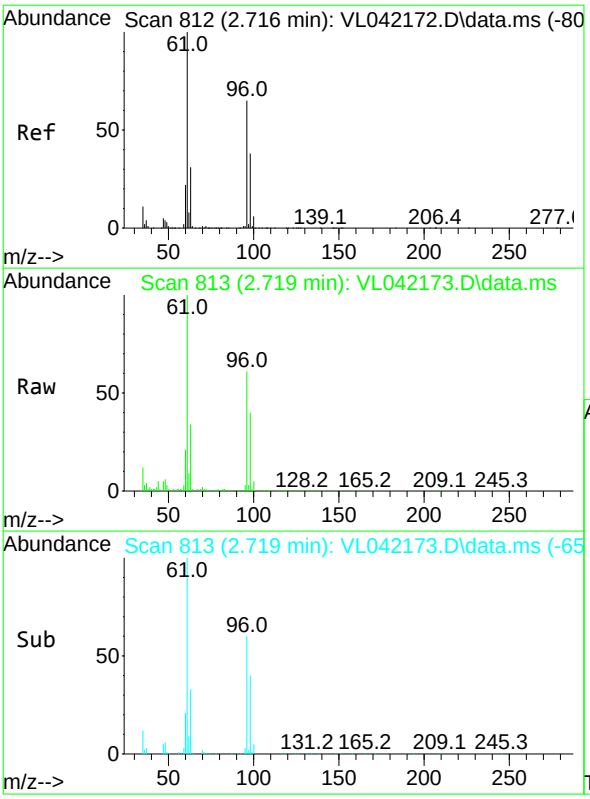


#30
Cyclohexane
Concen: 1.989 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 45641

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.8	154.2
41	84.6	66.5	99.7

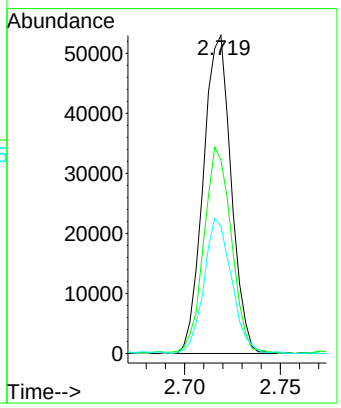




#31
cis-1,2-Dichloroethene
Concen: 2.003 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 61 Resp: 53713

Ion	Ratio	Lower	Upper
61	100		
96	60.6	51.8	77.8
98	39.6	30.6	46.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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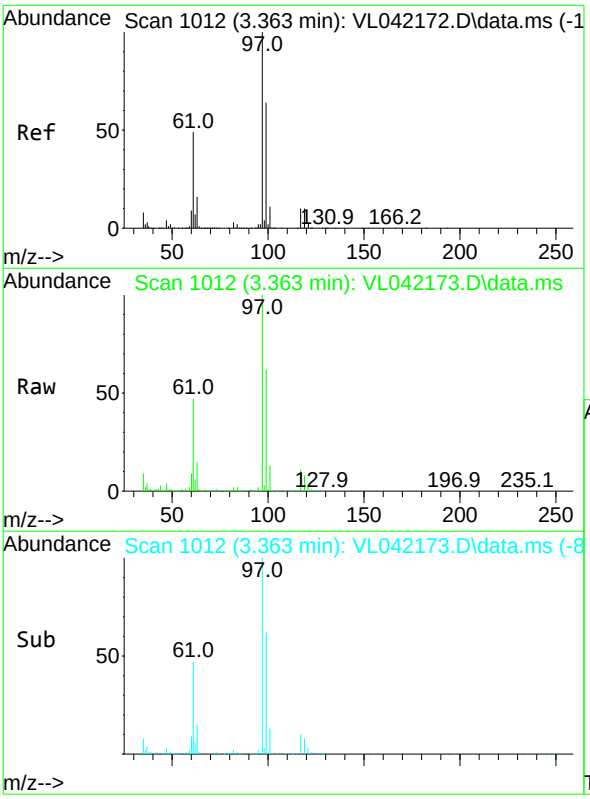
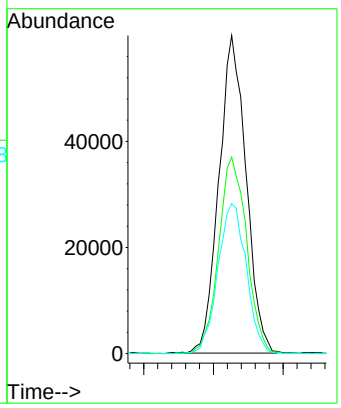
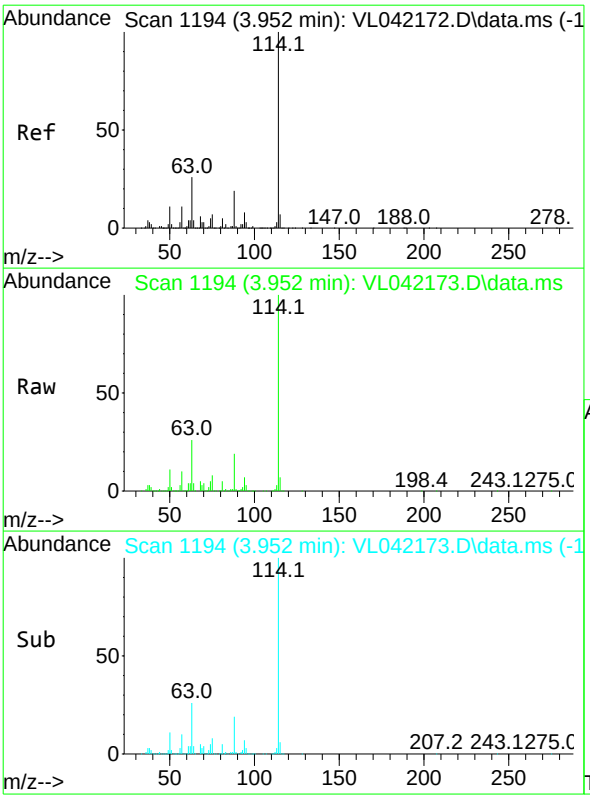


#32
1,1,1-Trichloroethane
Concen: 1.833 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 97 Resp: 81070

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.5	77.3
61	49.3	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:114 Resp: 546394

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.9	15.0	22.4

Instrument :
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ClientSampleId :
VSTDICC002

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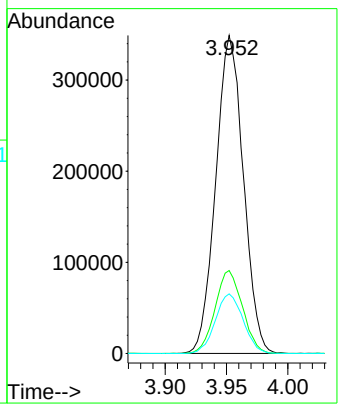
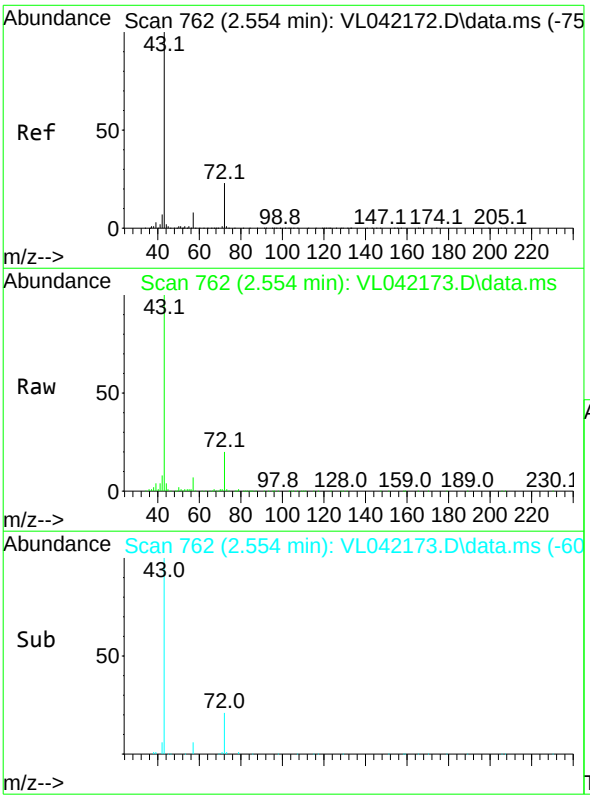
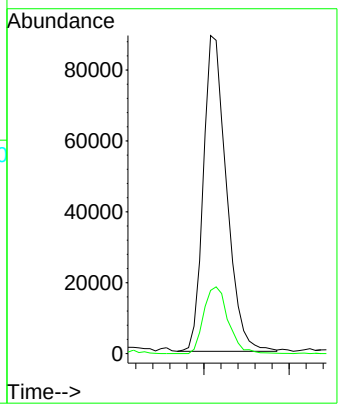


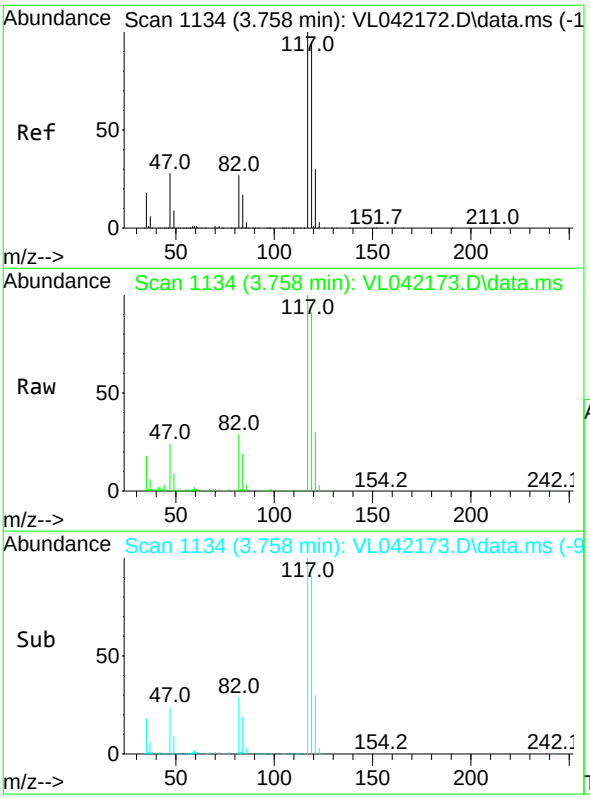


#34
2-Butanone
Concen: 2.124 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 84157

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2





#35
Carbon Tetrachloride
Concen: 1.944 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:117 Resp: 81735

Ion	Ratio	Lower	Upper
117	100		
119	90.8	76.2	114.2
121	30.0	24.2	36.4

Instrument :
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VSTDICC002

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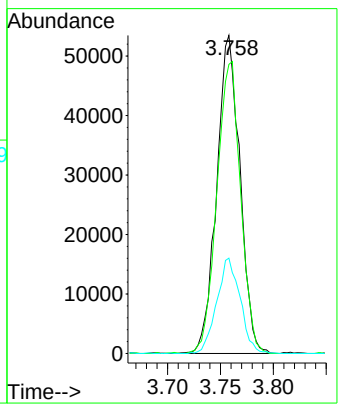
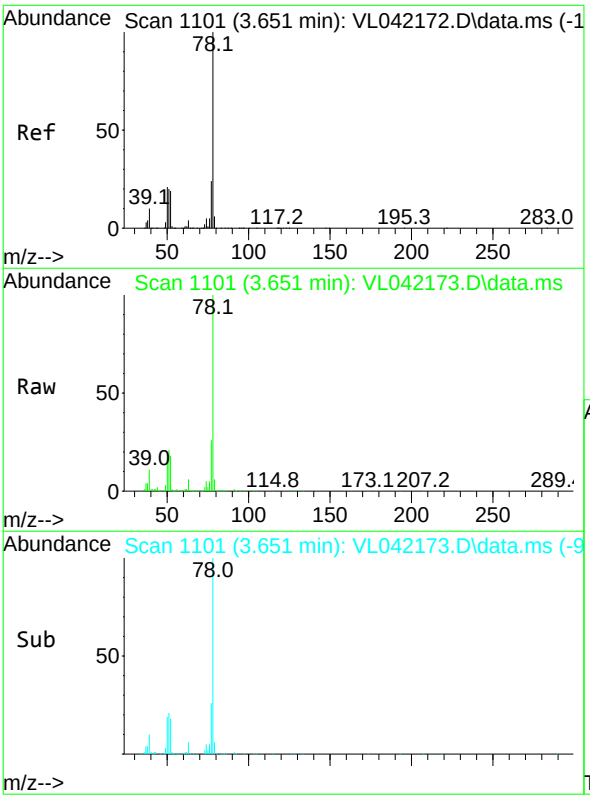
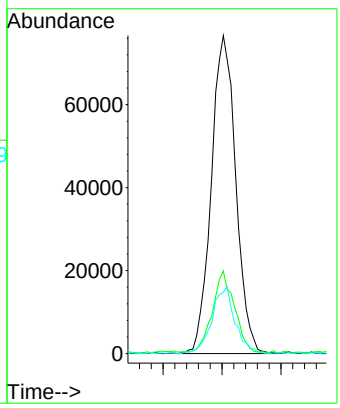


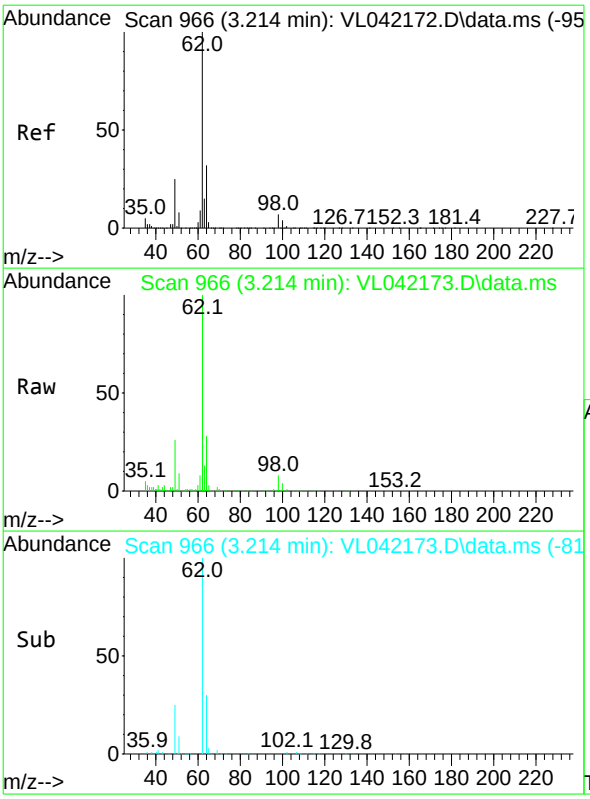


#36
Benzene
Concen: 2.044 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 78 Resp: 110727

Ion	Ratio	Lower	Upper
78	100		
77	25.7	19.1	28.7
50	19.3	16.6	24.8





#37
1,2-Dichloroethane
Concen: 1.982 ppbv
RT: 3.214 min Scan# 96
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 62 Resp: 61476

Ion	Ratio	Lower	Upper
62	100		
98	7.7	5.4	8.2

Instrument :
MSVOA_L
ClientSampleId :
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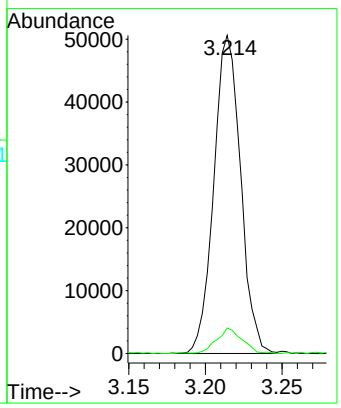
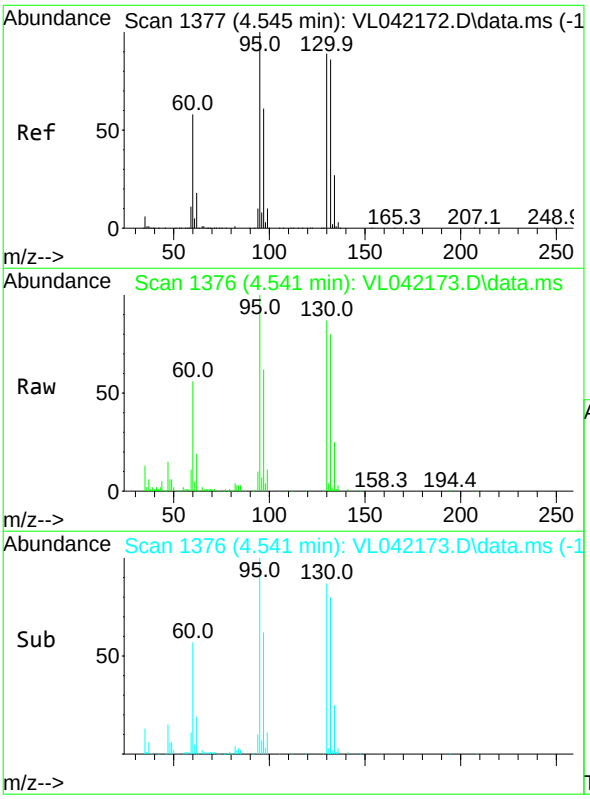
Supervised By :Mahesh Dadoda 04/03/2025

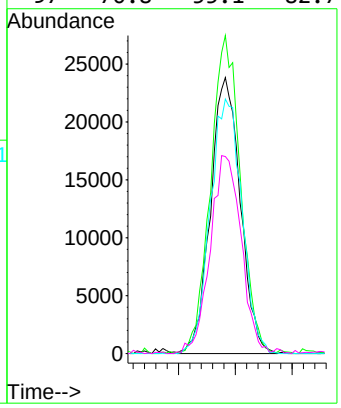


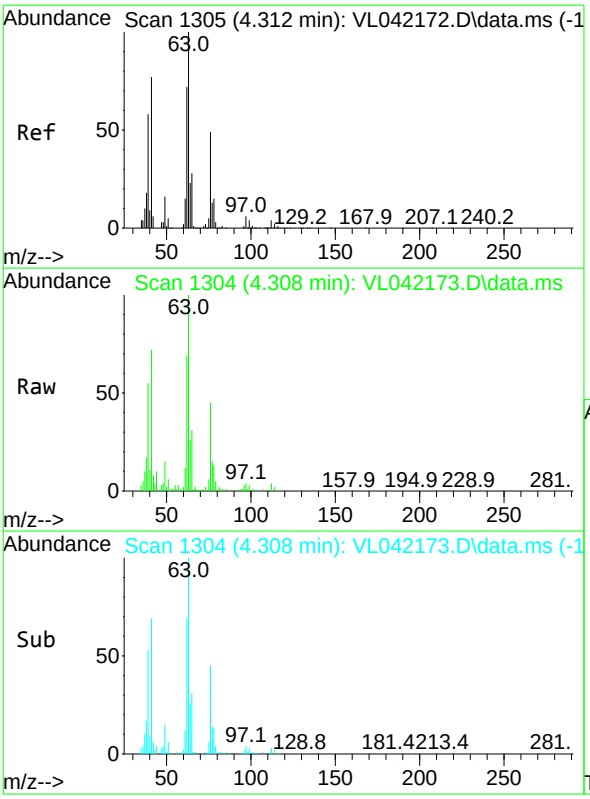


#38
Trichloroethene
Concen: 1.924 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:130 Resp: 43501

Ion	Ratio	Lower	Upper
130	100		
95	114.8	89.8	134.8
132	92.2	77.4	116.2
97	70.8	55.1	82.7





#39
1,2-Dichloropropane
Concen: 2.023 ppbv
RT: 4.308 min Scan# 13
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 63 Resp: 39912

Ion	Ratio	Lower	Upper
63	100		
41	68.6	61.7	92.5
62	69.2	57.6	86.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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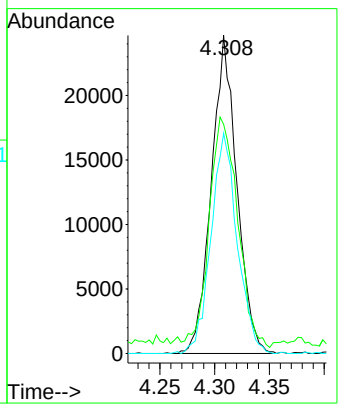
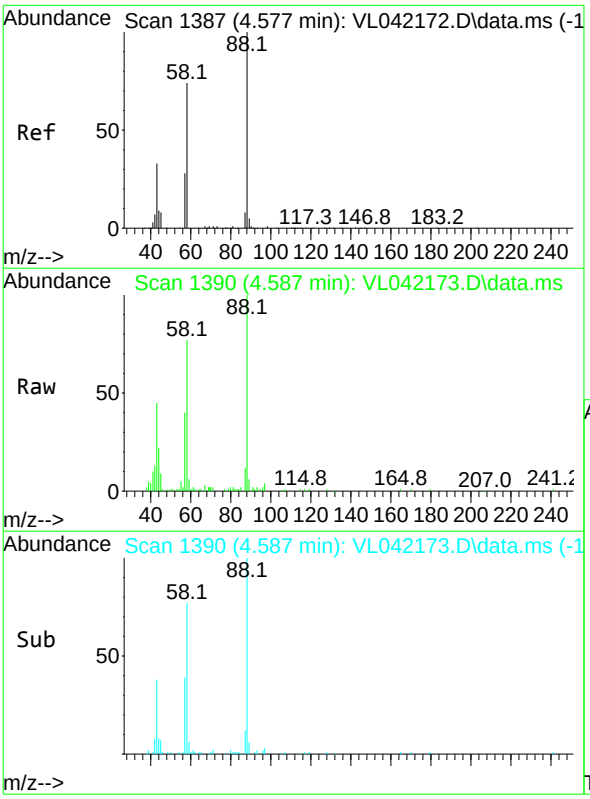
Supervised By :Mahesh Dadoda 04/03/2025

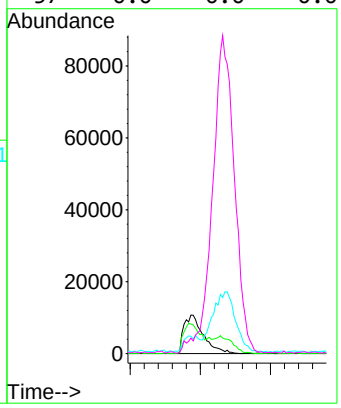


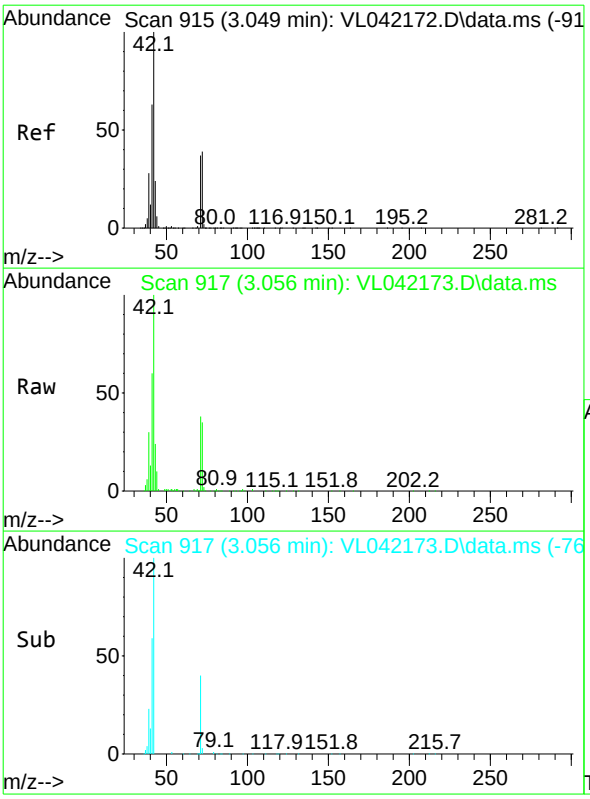


#40
1,4-Dioxane
Concen: 2.040 ppbv m
RT: 4.587 min Scan# 1390
Delta R.T. 0.009 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 88 Resp: 20884

Ion	Ratio	Lower	Upper
88	100		
58	119.5	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0

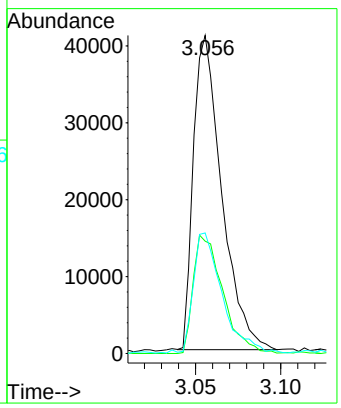




#41
Tetrahydrofuran
Concen: 2.097 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 42 Resp: 47262

Ion	Ratio	Lower	Upper
42	100		
72	39.6	31.4	47.0
71	39.0	30.2	45.4



Instrument :
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ClientSampleId :
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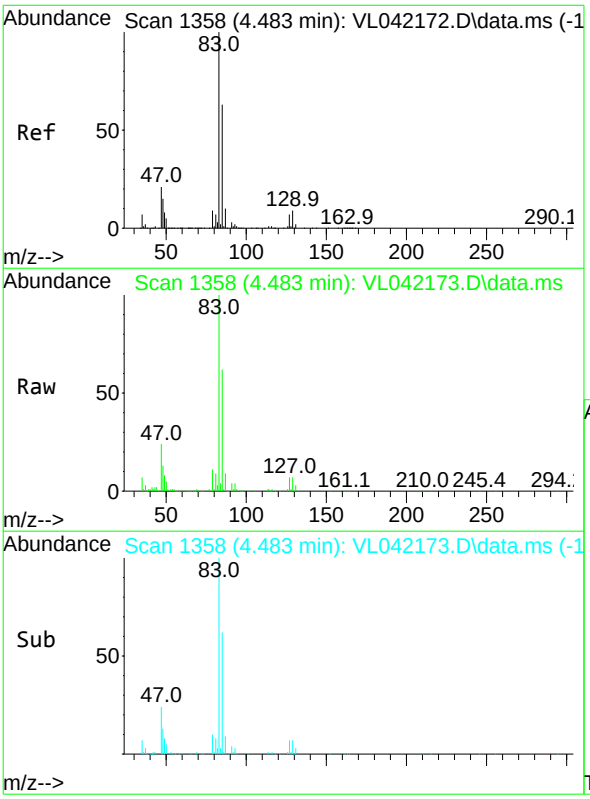
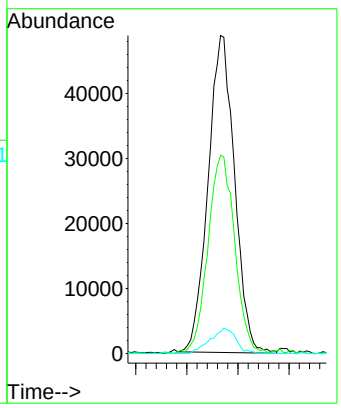
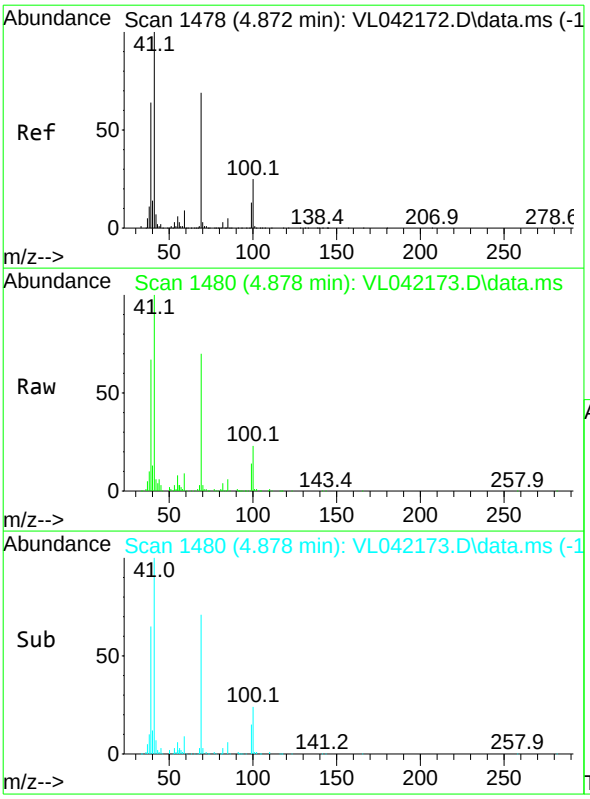


#42
Bromodichloromethane
Concen: 2.050 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 87640

Ion	Ratio	Lower	Upper
83	100		
85	62.2	50.5	75.7
127	6.9	5.9	8.9

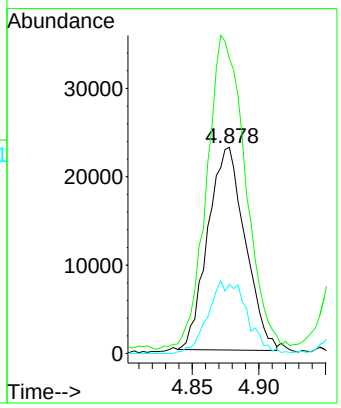




#43
Methyl Methacrylate
Concen: 1.952 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 69 Resp: 44624

Ion	Ratio	Lower	Upper
69	100		
41	158.7	123.8	185.6
100	37.5	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
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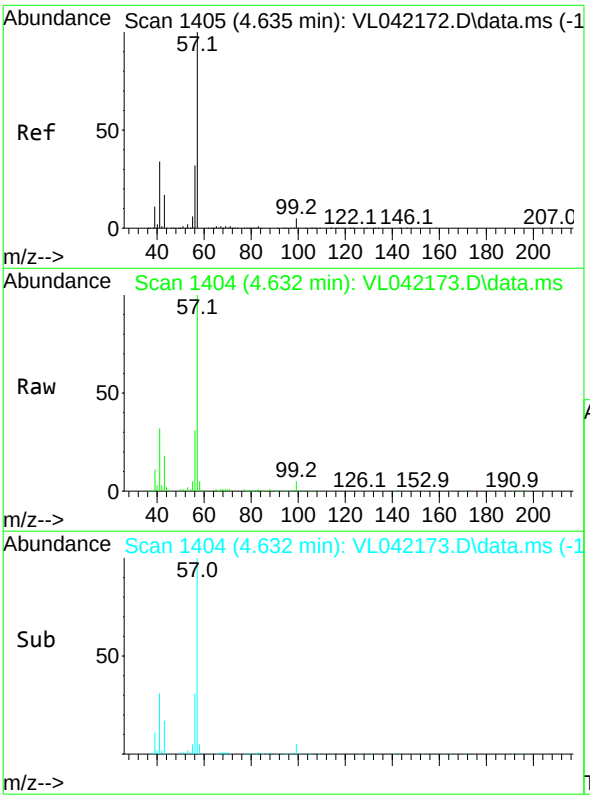
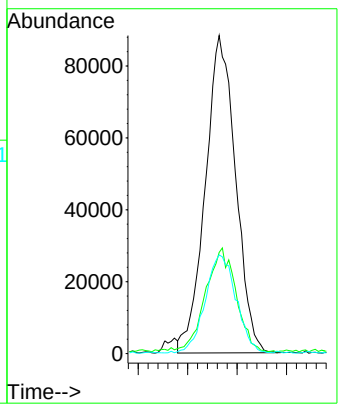
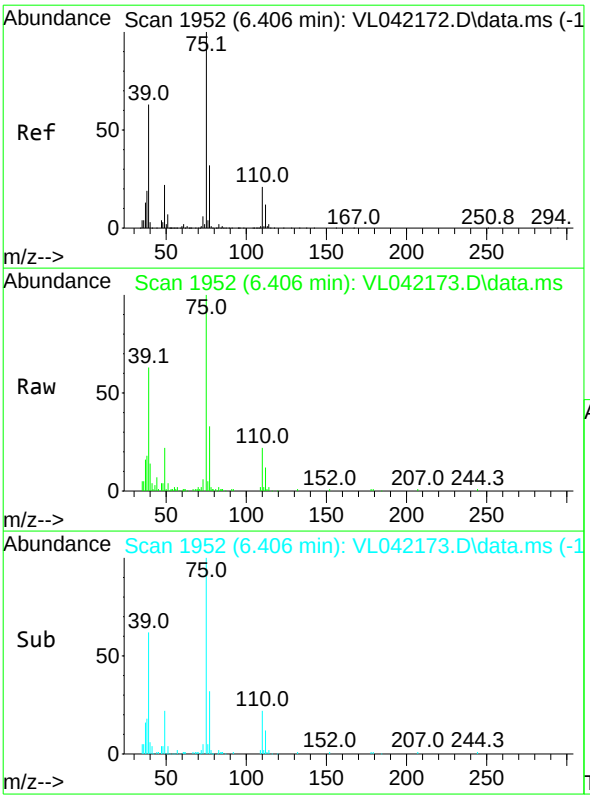


#44
2,2,4-Trimethylpentane
Concen: 2.057 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 188282

Ion	Ratio	Lower	Upper
57	100		
41	33.8	26.8	40.2
56	31.8	25.6	38.4

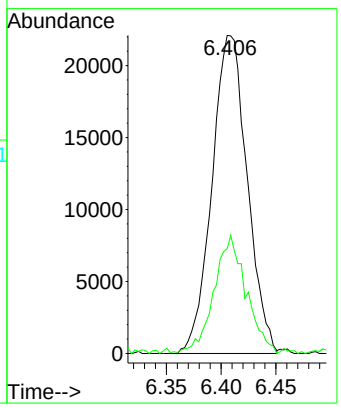




#45
t-1,3-Dichloropropene
Concen: 2.011 ppbv
RT: 6.406 min Scan# 19
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 75 Resp: 49461

Ion	Ratio	Lower	Upper
75	100		
77	32.9	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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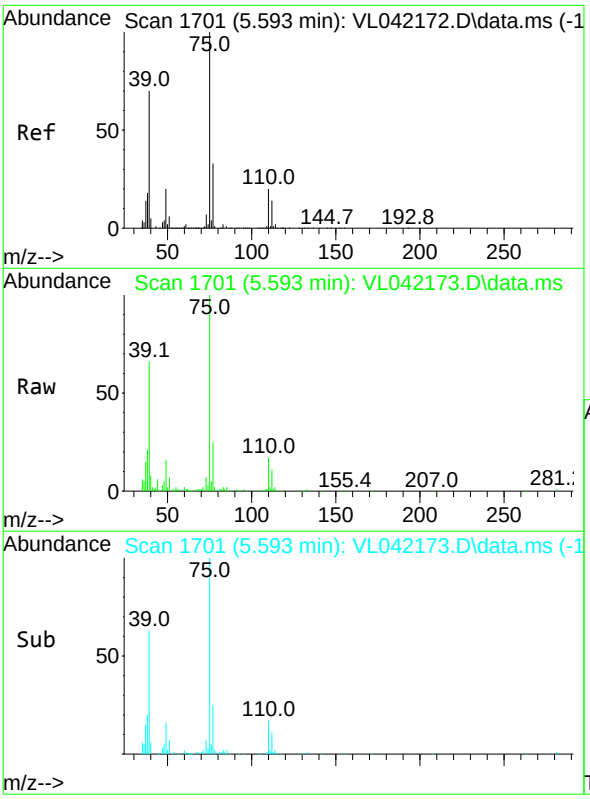
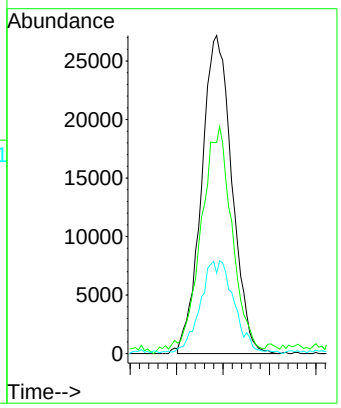
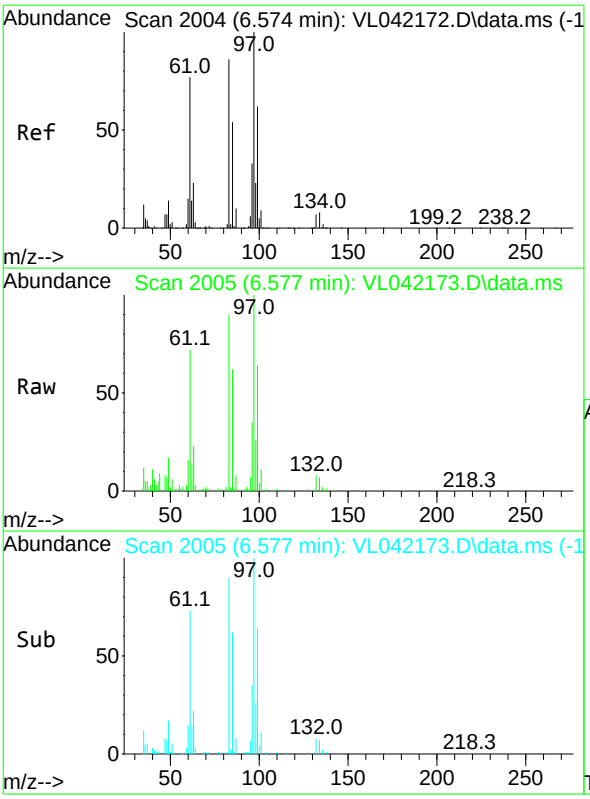


#46
cis-1,3-Dichloropropene
Concen: 2.050 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 75 Resp: 61829

Ion	Ratio	Lower	Upper
75	100		
39	64.4	55.8	83.6
77	24.5	26.0	39.0#

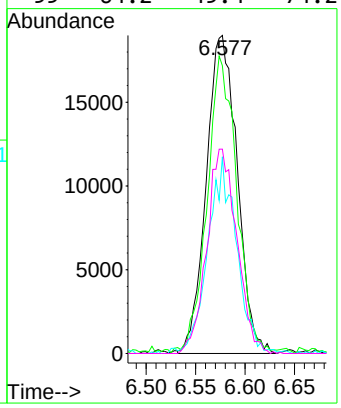




#47
1,1,2-Trichloroethane
Concen: 1.985 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 97 Resp: 41387

Ion	Ratio	Lower	Upper
97	100		
83	89.4	69.2	103.8
85	61.3	43.1	64.7
99	64.2	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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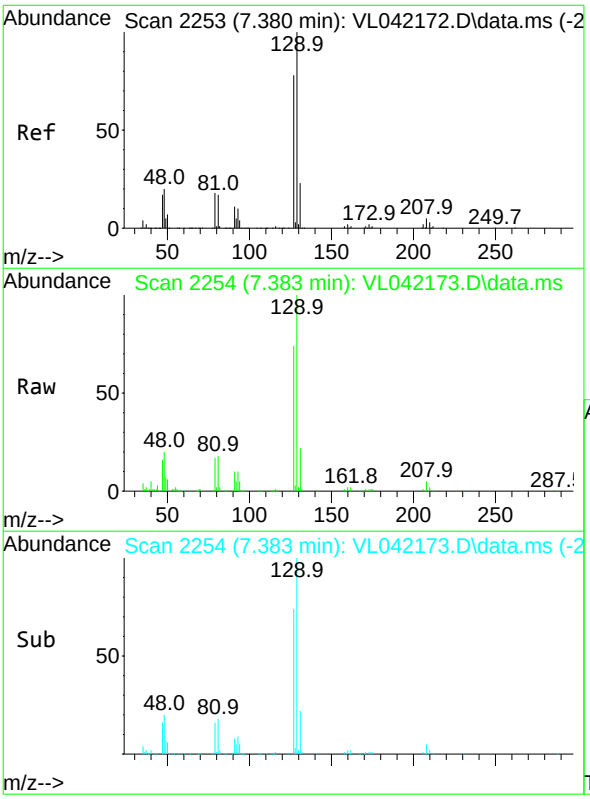
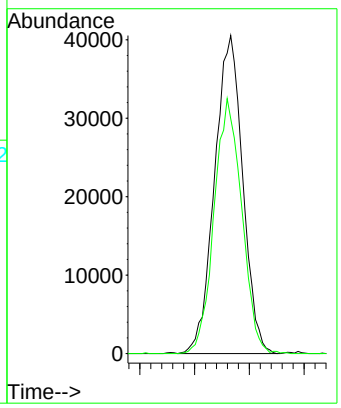
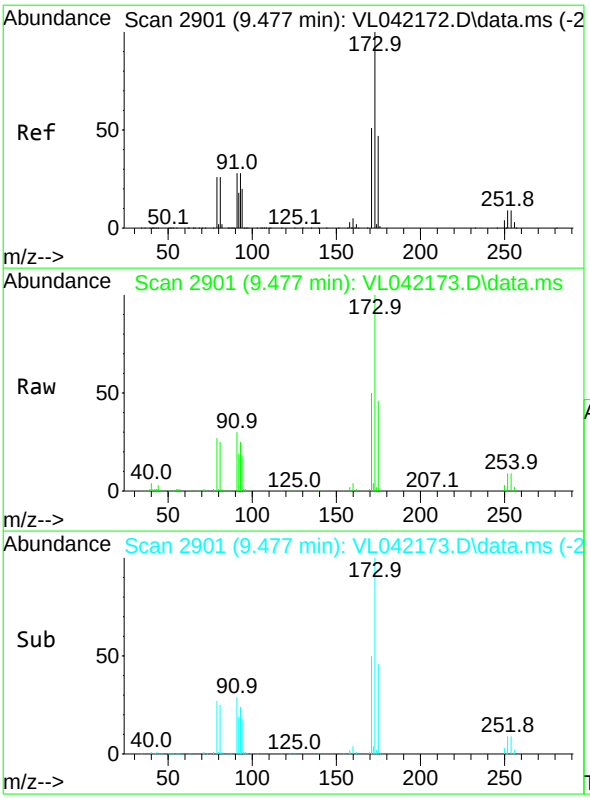


#48
Dibromochloromethane
Concen: 2.050 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:129 Resp: 72441

Ion	Ratio	Lower	Upper
129	100		
127	78.5	39.1	117.2





#49
Bromoform
Concen: 2.056 ppbv
RT: 9.477 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:173 Resp: 65221

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.0	41.8	62.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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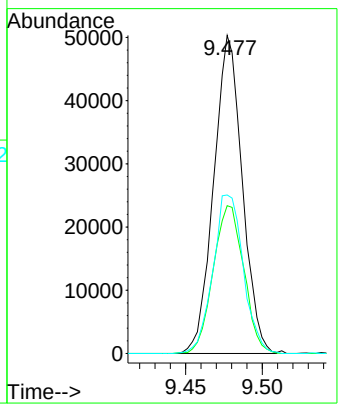
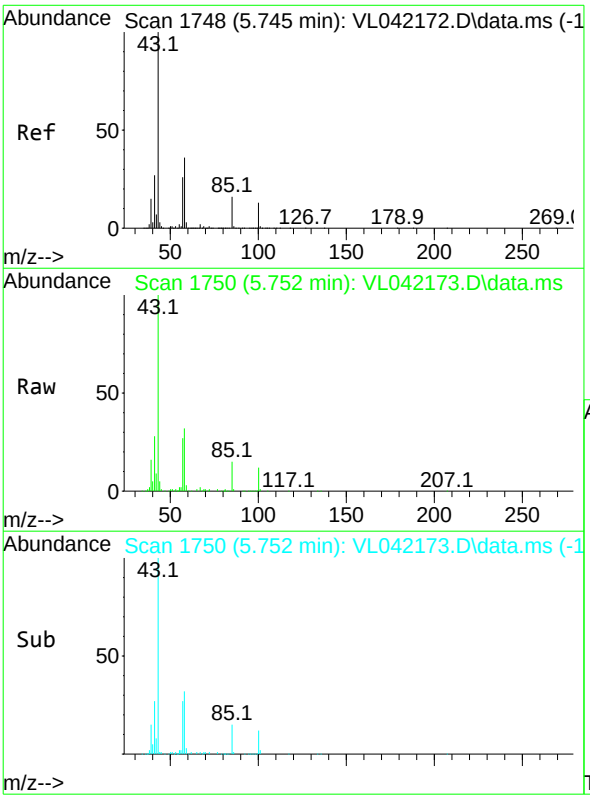
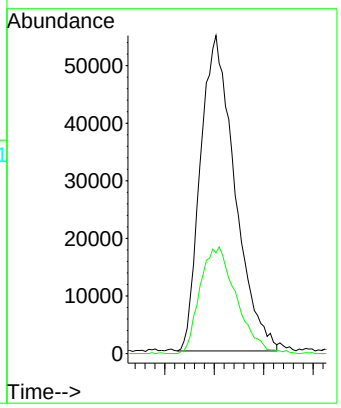


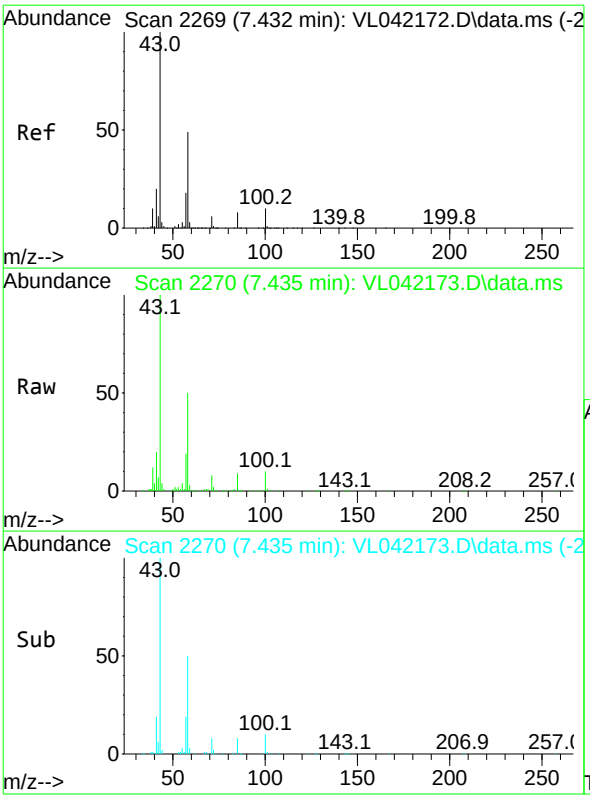


#50
4-Methyl-2-Pentanone
Concen: 2.107 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 132328

Ion	Ratio	Lower	Upper
43	100		
58	35.9	29.0	43.6

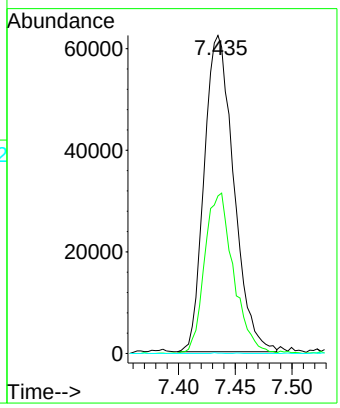




#51
2-Hexanone
Concen: 2.162 ppbv
RT: 7.435 min Scan# 22
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 112681

Ion	Ratio	Lower	Upper
43	100		
58	50.0	39.7	59.5
98	0.0	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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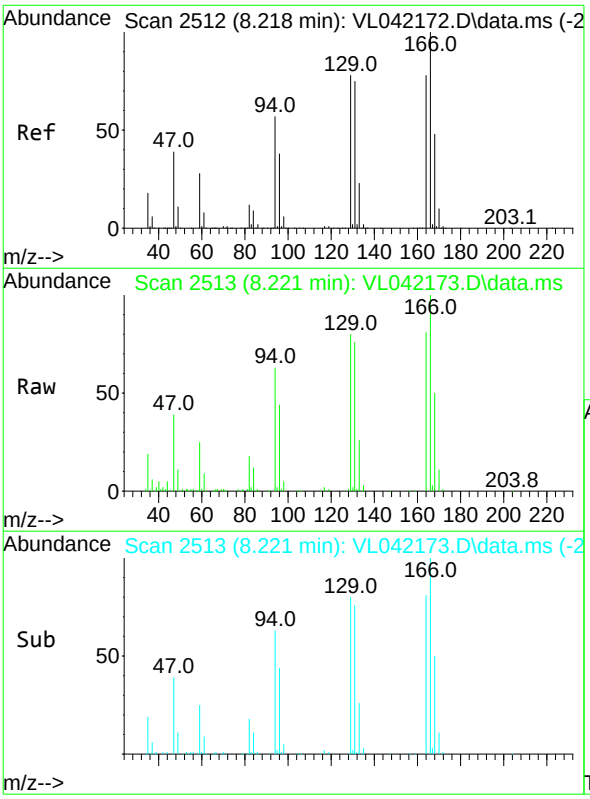
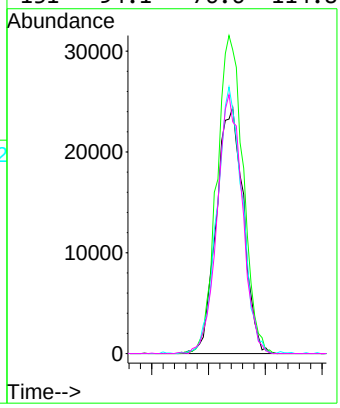
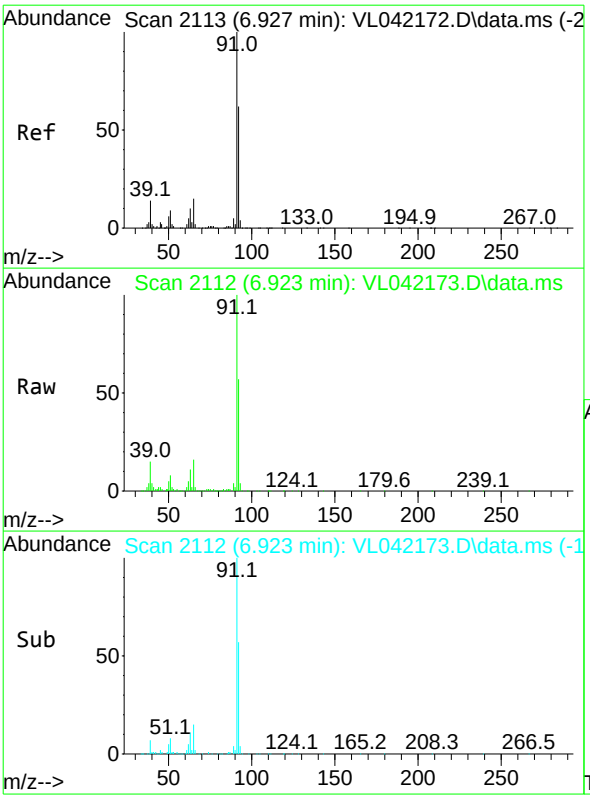


#52
Tetrachloroethene
Concen: 1.888 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:164 Resp: 40558

Ion	Ratio	Lower	Upper
164	100		
166	123.4	102.5	153.7
129	99.2	79.8	119.8
131	94.1	76.6	114.8

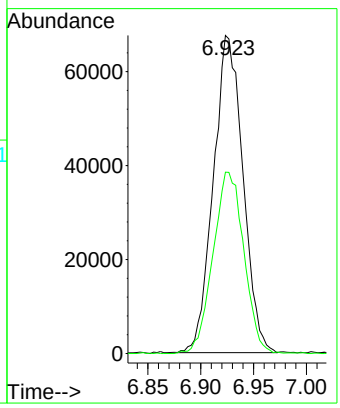




#53
Toluene
Concen: 2.045 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 131314

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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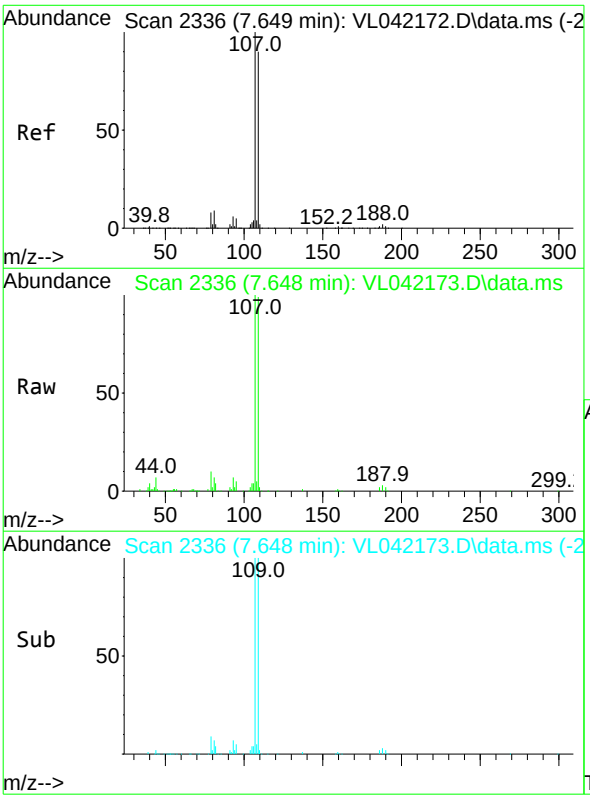
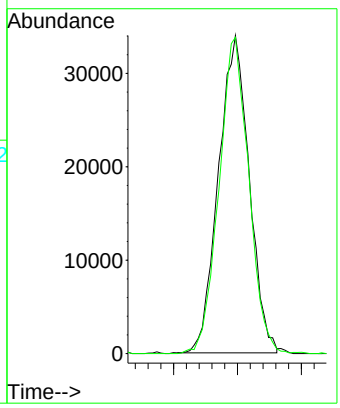
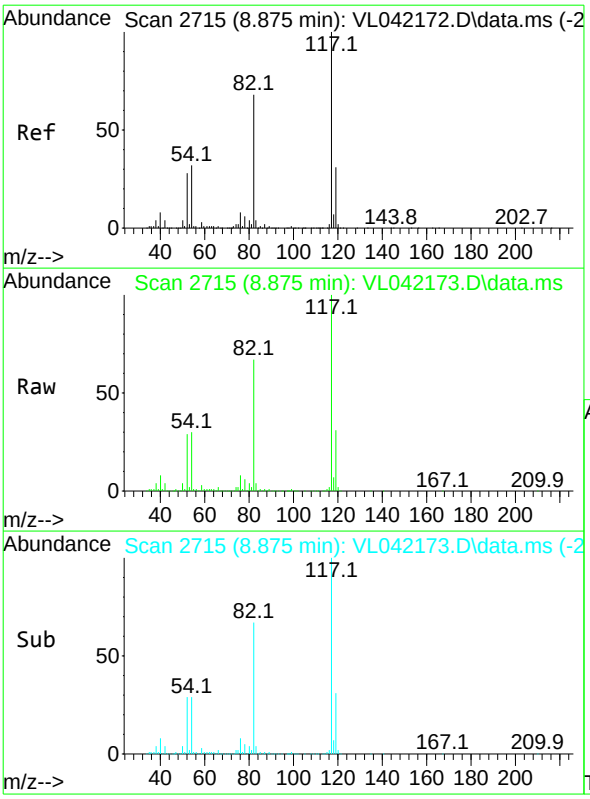


#54
1,2-Dibromoethane
Concen: 1.952 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:107 Resp: 56799

Ion	Ratio	Lower	Upper
107	100		
109	99.7	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:117 Resp: 504538

Ion	Ratio	Lower	Upper
117	100		
82	68.2	55.8	83.6
119	33.0	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
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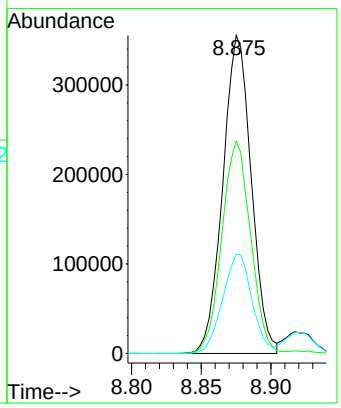
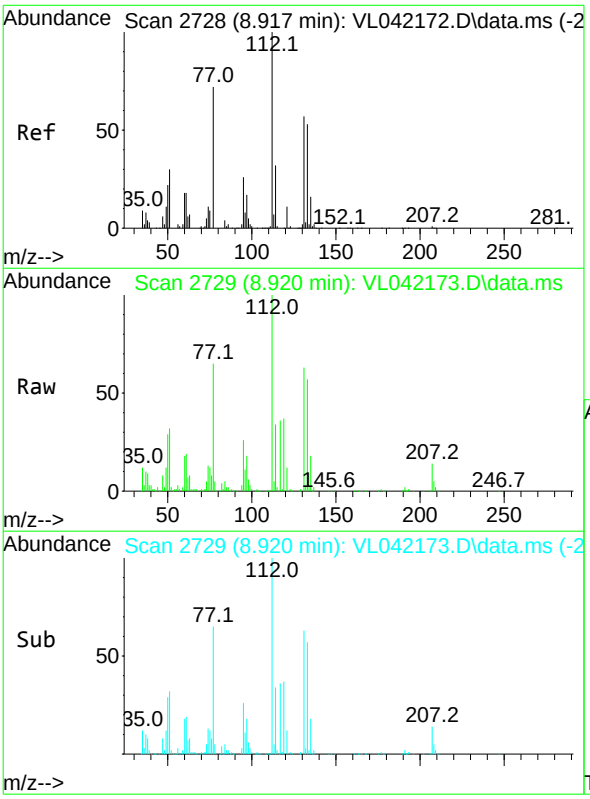
Supervised By :Mahesh Dadoda 04/03/2025

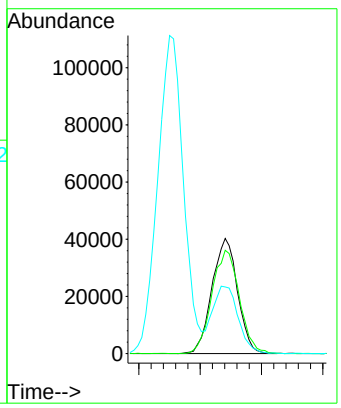


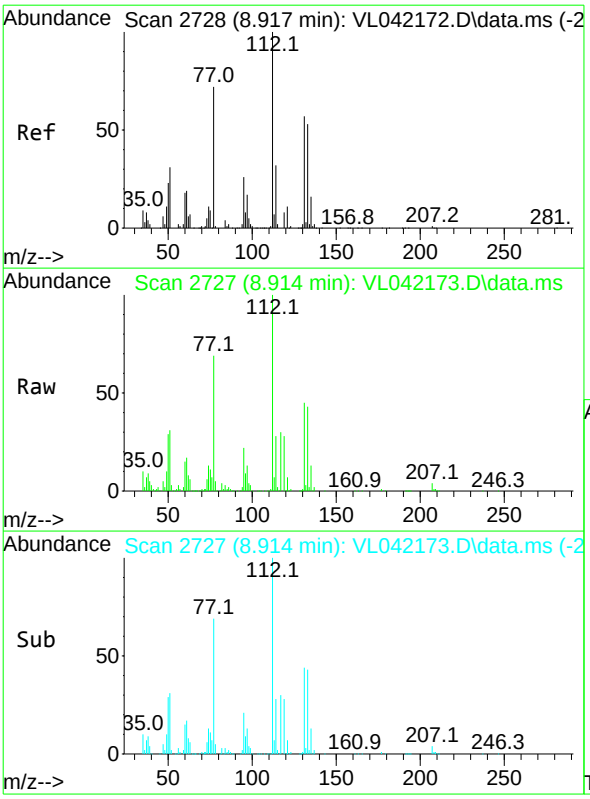


#56
1,1,1,2-Tetrachloroethane
Concen: 2.093 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:131 Resp: 58141

Ion	Ratio	Lower	Upper
131	100		
133	96.6	76.6	114.8
119	58.3	49.8	74.6





#57
Chlorobenzene
Concen: 2.096 ppbv
RT: 8.914 min Scan# 27
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:112 Resp: 100308

Ion	Ratio	Lower	Upper
112	100		
77	68.8	58.2	87.2
114	27.8	29.1	35.5#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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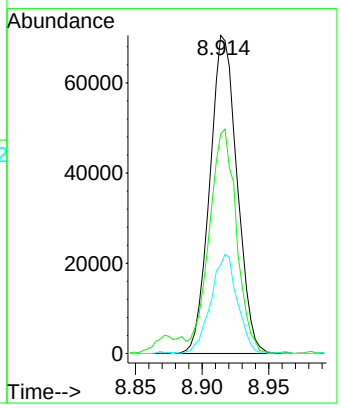
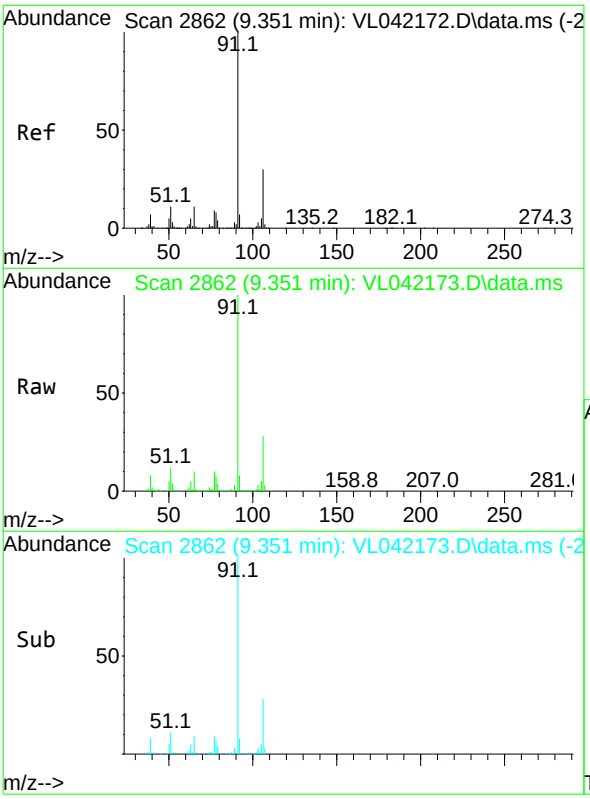
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

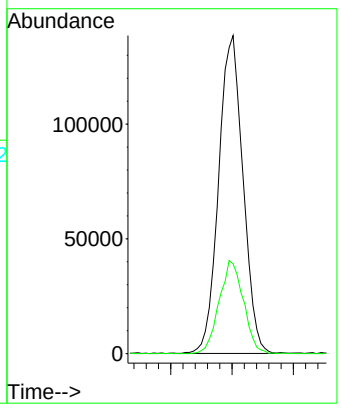


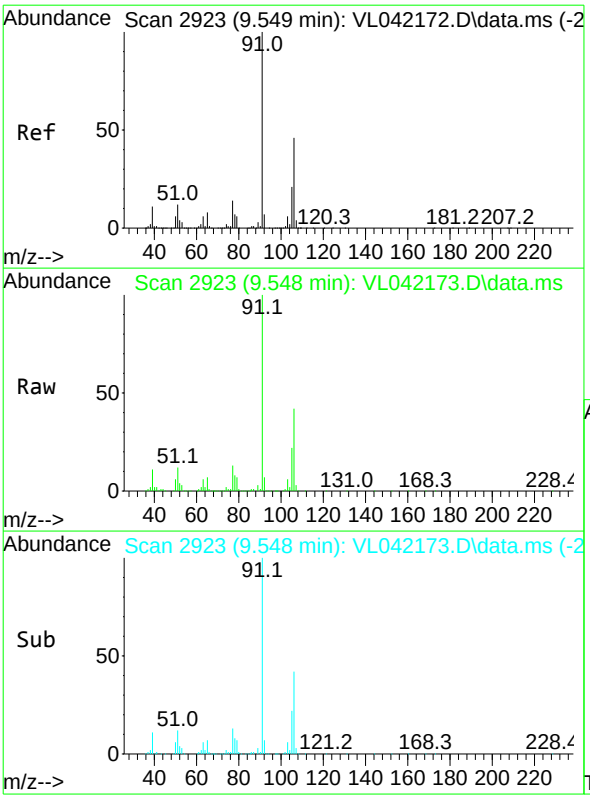


#58
Ethyl Benzene
Concen: 2.132 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 191114

Ion	Ratio	Lower	Upper
91	100		
106	28.3	24.2	36.2





#59
m/p-Xylene
Concen: 4.181 ppbv m
RT: 9.548 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 299531

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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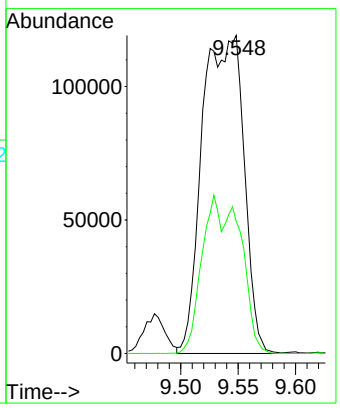
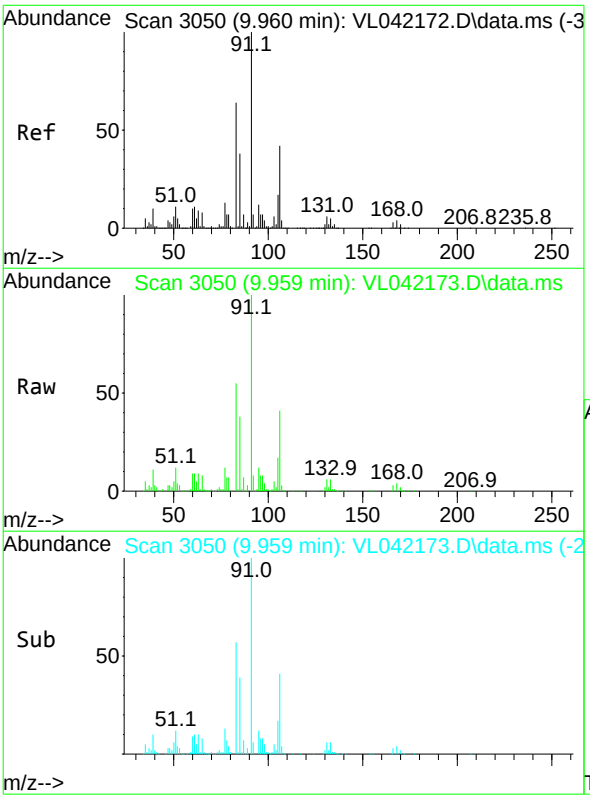
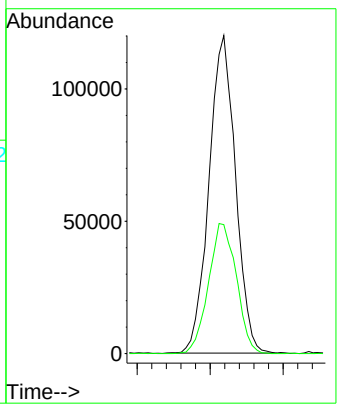


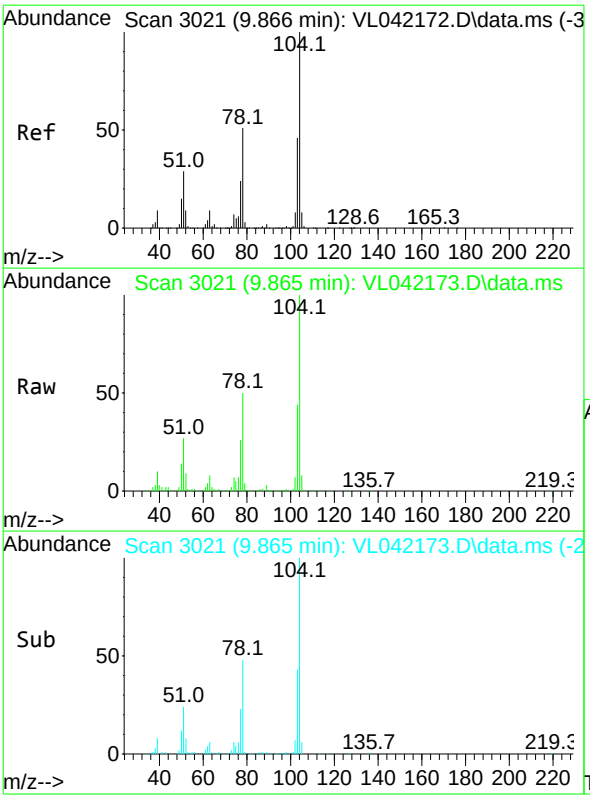


#60
o-Xylene
Concen: 2.109 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 151292

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5

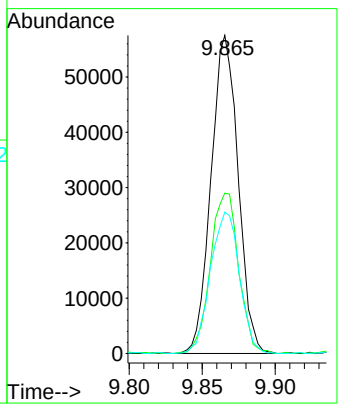




#61
Styrene
Concen: 2.089 ppbv
RT: 9.865 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:104 Resp: 74134

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	47.8	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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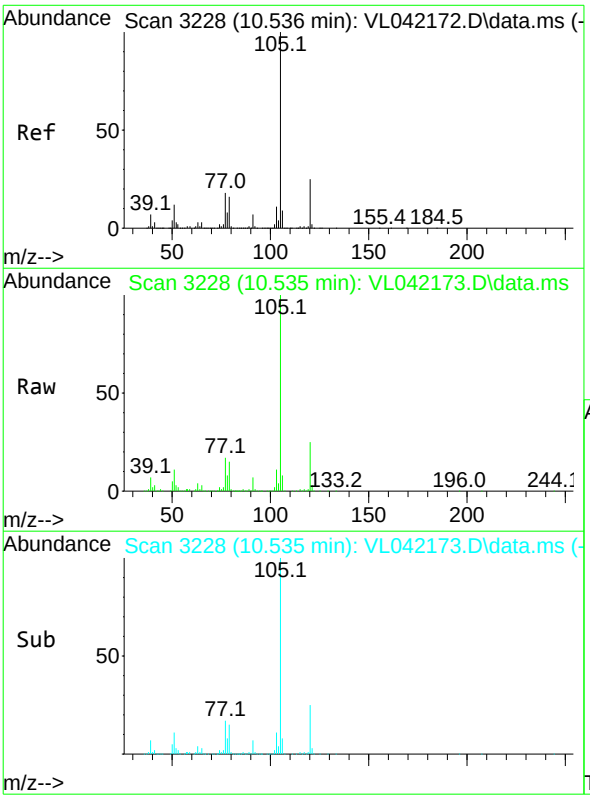
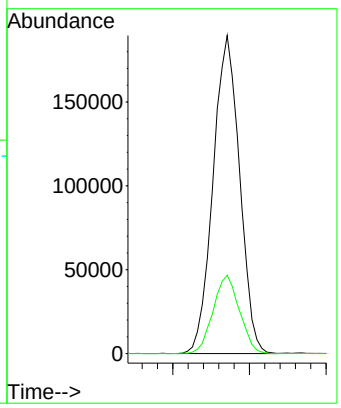
Supervised By :Mahesh Dadoda 04/03/2025

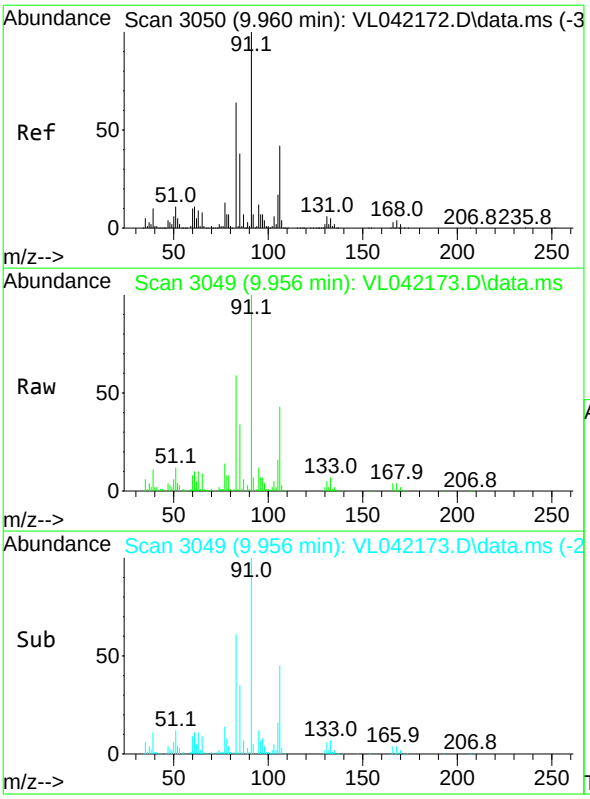


#62
Isopropylbenzene
Concen: 2.127 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 228191

Ion	Ratio	Lower	Upper
105	100		
120	24.4	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 2.067 ppbv
RT: 9.956 min Scan# 30
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 90114

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.4	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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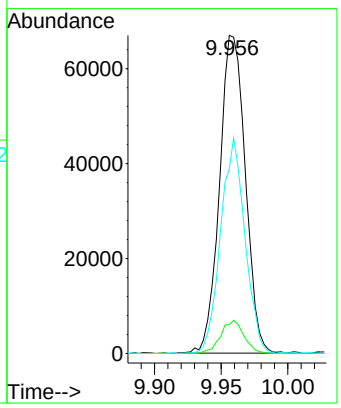
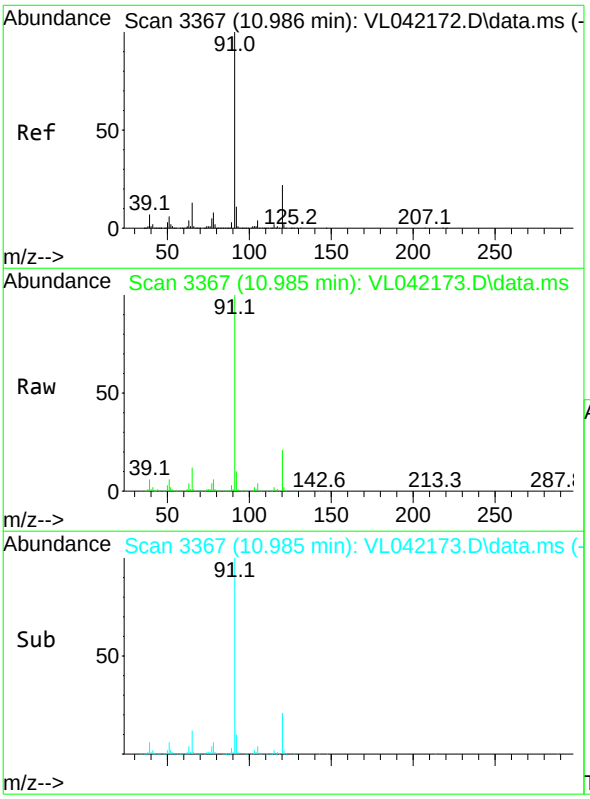
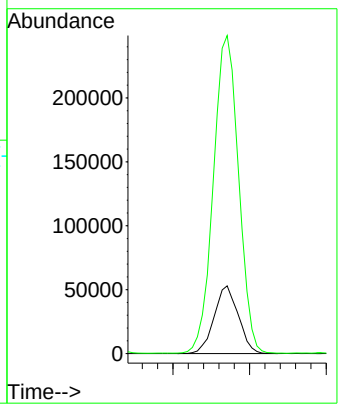


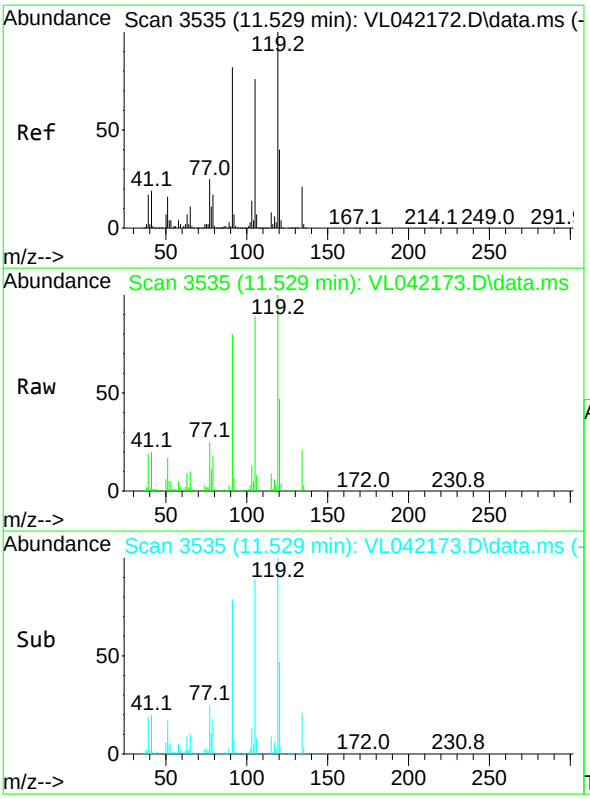


#64
n-propylbenzene
Concen: 2.104 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:120 Resp: 58105

Ion	Ratio	Lower	Upper
120	100		
91	491.1	376.9	565.3





#65
tert-Butylbenzene
Concen: 2.180 ppbv
RT: 11.529 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:119 Resp: 216336

Ion	Ratio	Lower	Upper
119	100		
91	81.5	66.0	99.0
134	20.2	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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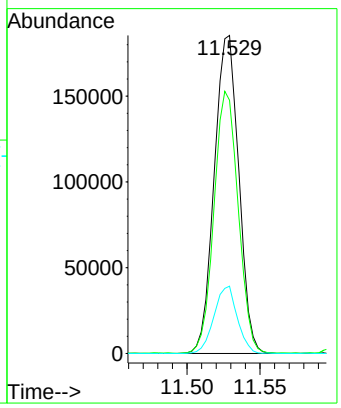
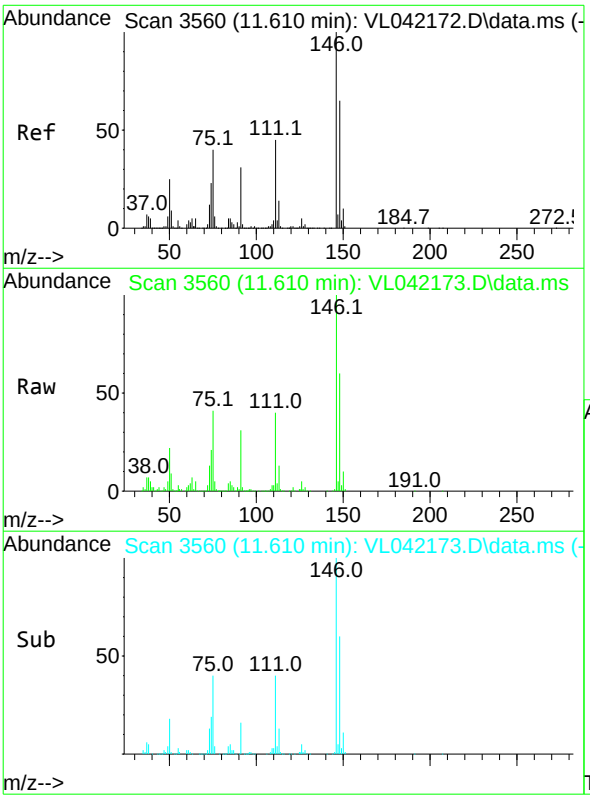
Supervised By :Mahesh Dadoda 04/03/2025

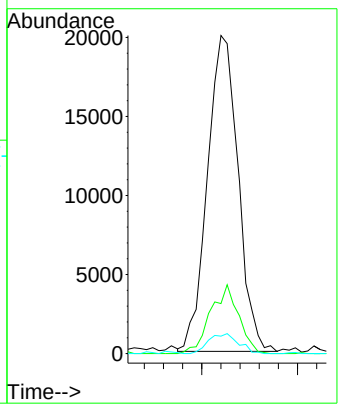


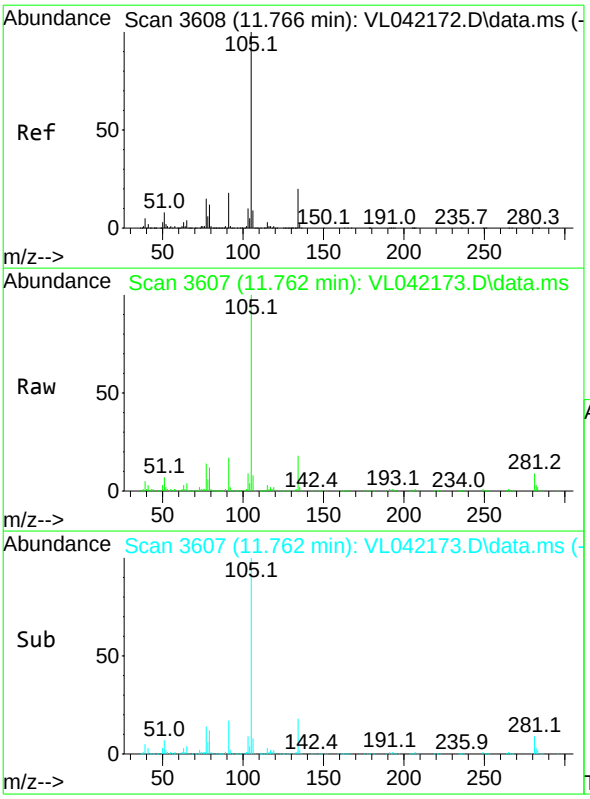


#66
Benzyl Chloride
Concen: 2.116 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 22272

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	6.5	4.5	6.7





#67
sec-Butylbenzene
Concen: 2.156 ppbv
RT: 11.762 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 297381

Ion	Ratio	Lower	Upper
105	100		
134	18.8	15.5	23.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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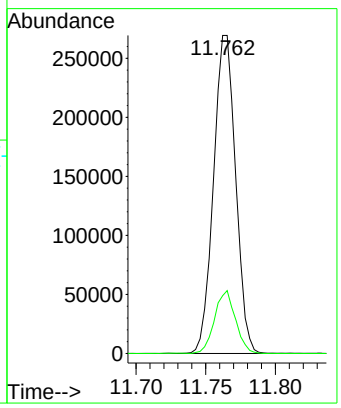
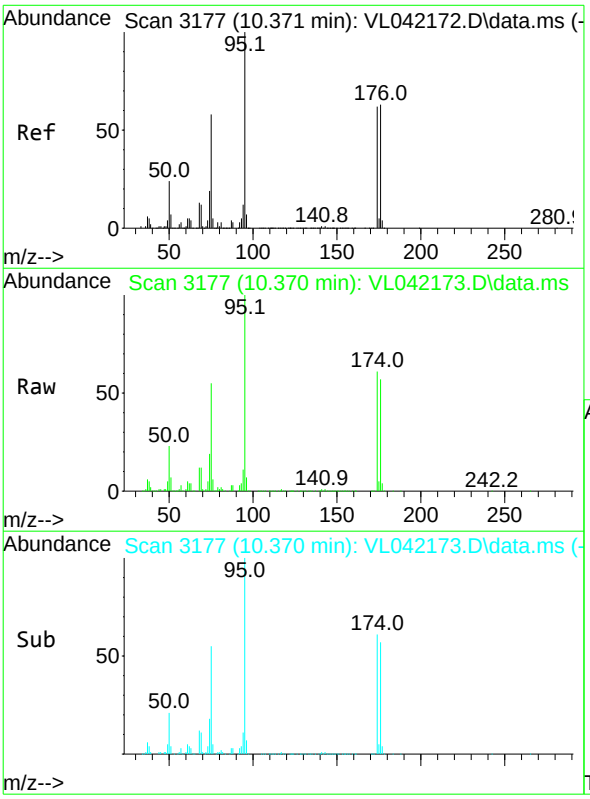
Supervised By :Mahesh Dadoda 04/03/2025

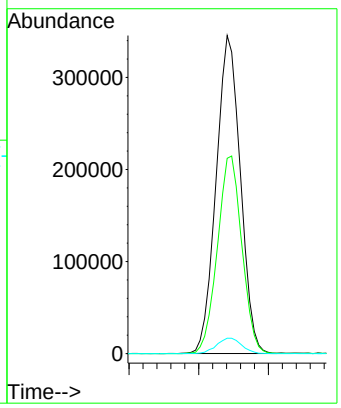


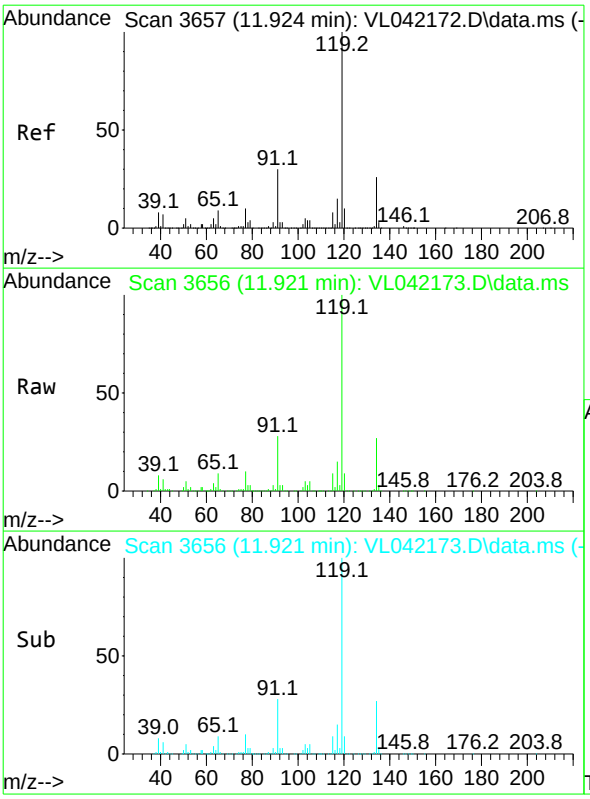


#68
1-Bromo-4-Fluorobenzene
Concen: 10.077 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 95 Resp: 417532

Ion	Ratio	Lower	Upper
95	100		
174	62.6	50.6	76.0
175	5.0	3.8	5.6





#69
p-Isopropyltoluene
Concen: 2.176 ppbv
RT: 11.921 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:119 Resp: 258357

Ion	Ratio	Lower	Upper
119	100		
134	25.2	20.4	30.6
91	29.5	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
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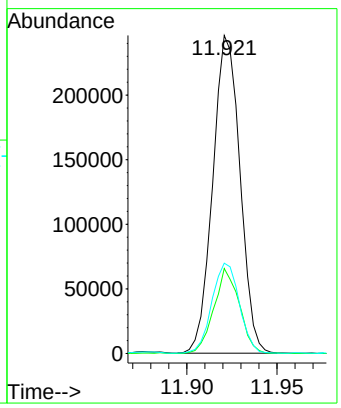
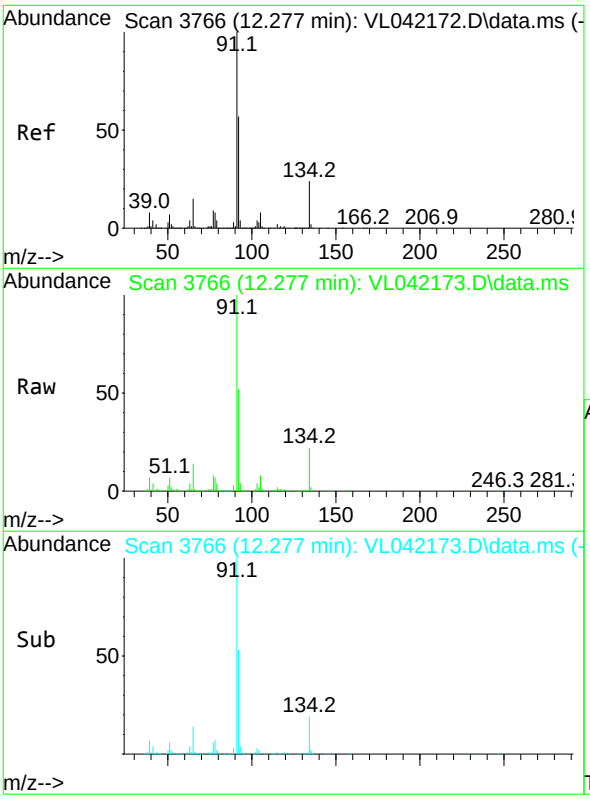
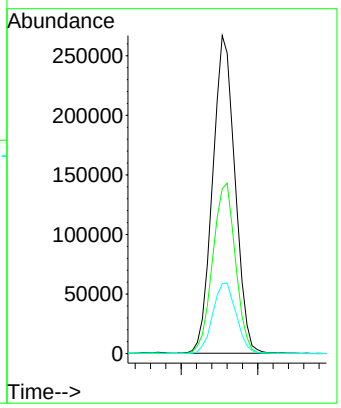


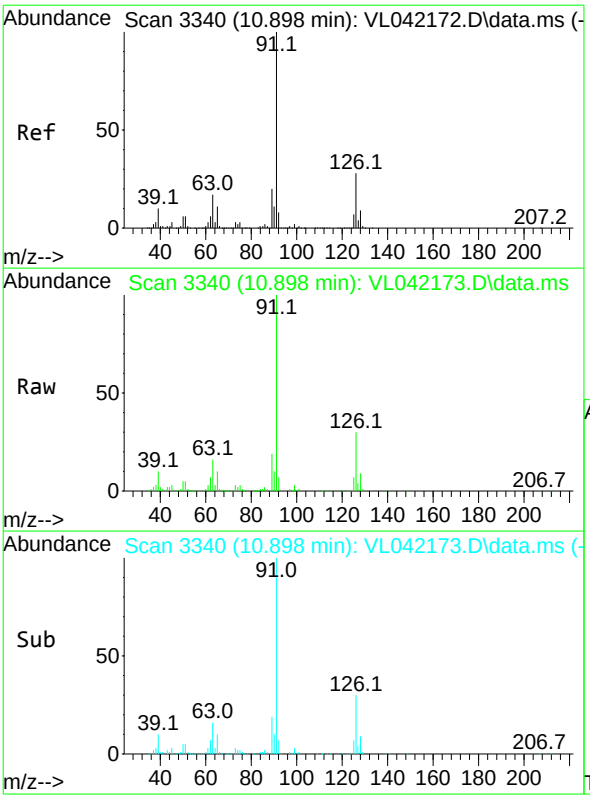


#70
n-Butylbenzene
Concen: 2.228 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 270616

Ion	Ratio	Lower	Upper
91	100		
92	55.1	44.9	67.3
134	23.3	19.2	28.8

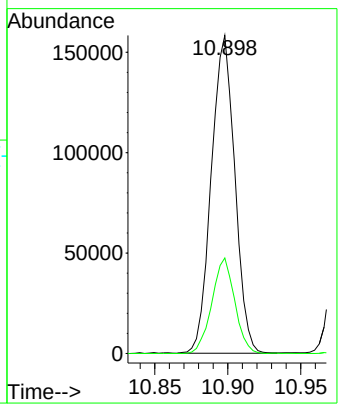




#71
2-Chlorotoluene
Concen: 2.132 ppbv
RT: 10.898 min Scan# 33
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 177487

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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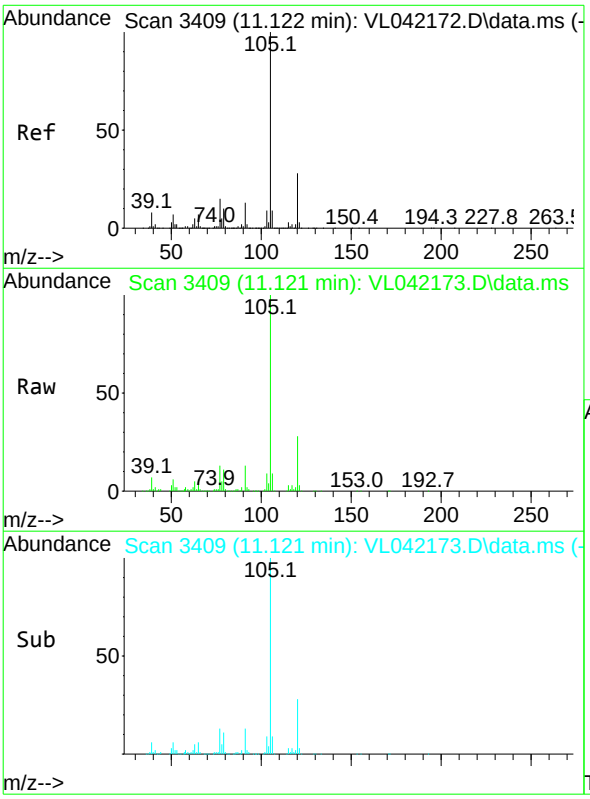
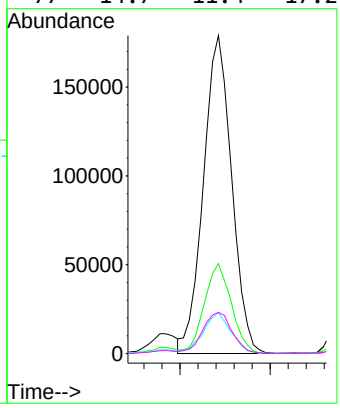
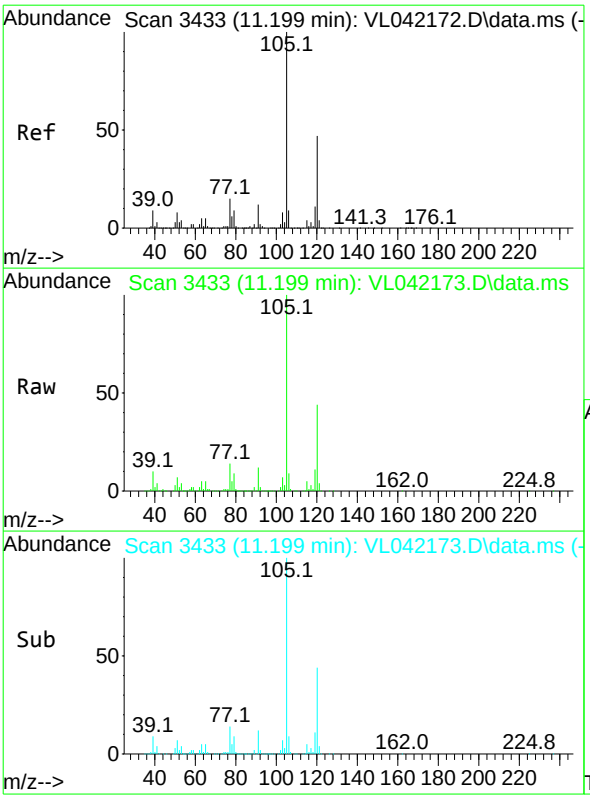


#72
4-Ethyltoluene
Concen: 2.179 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 194660

Ion	Ratio	Lower	Upper
105	100		
120	29.1	23.4	35.0
91	13.7	10.3	15.5
77	14.7	11.4	17.2

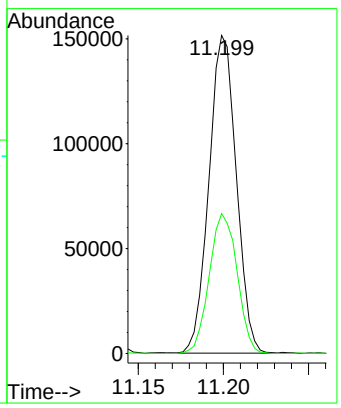




#73
1,3,5-Trimethylbenzene
Concen: 2.169 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 169221

Ion	Ratio	Lower	Upper
105	100		
120	44.0	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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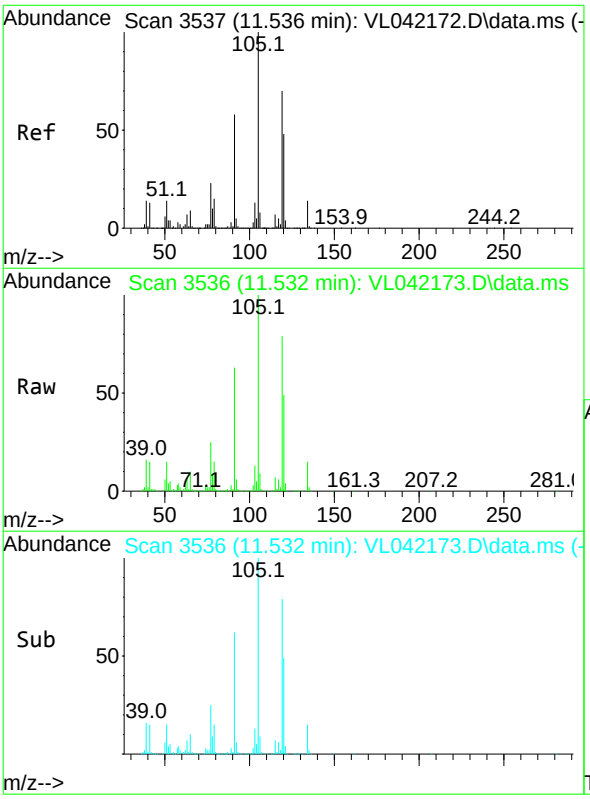
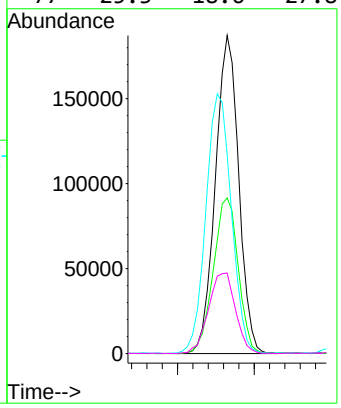
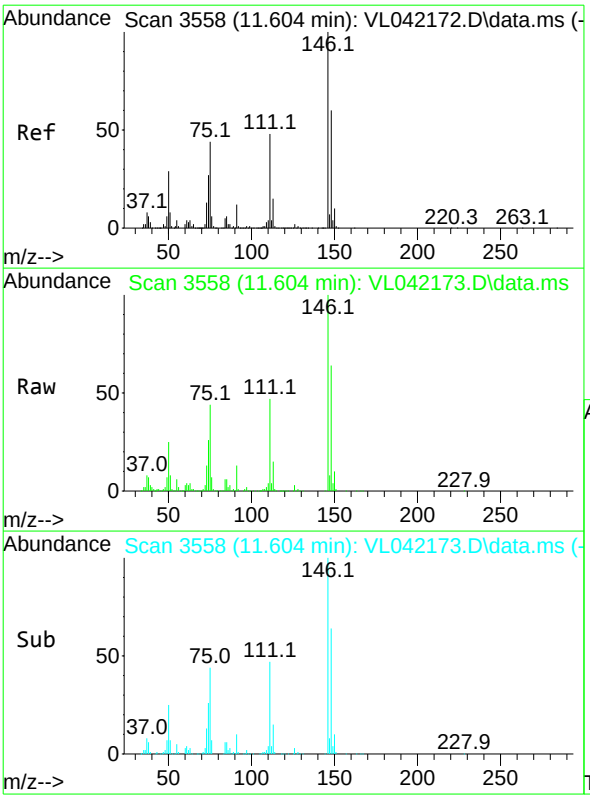


#74
1,2,4-Trimethylbenzene
Concen: 2.207 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 198351

Ion	Ratio	Lower	Upper
105	100		
120	49.0	38.6	58.0
91	62.4	46.2	69.2
77	25.3	18.6	27.8

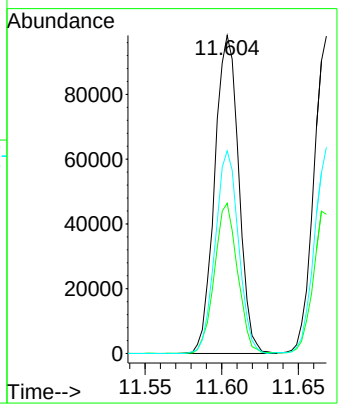




#75
1,3-Dichlorobenzene
Concen: 2.175 ppbv
RT: 11.604 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 107217

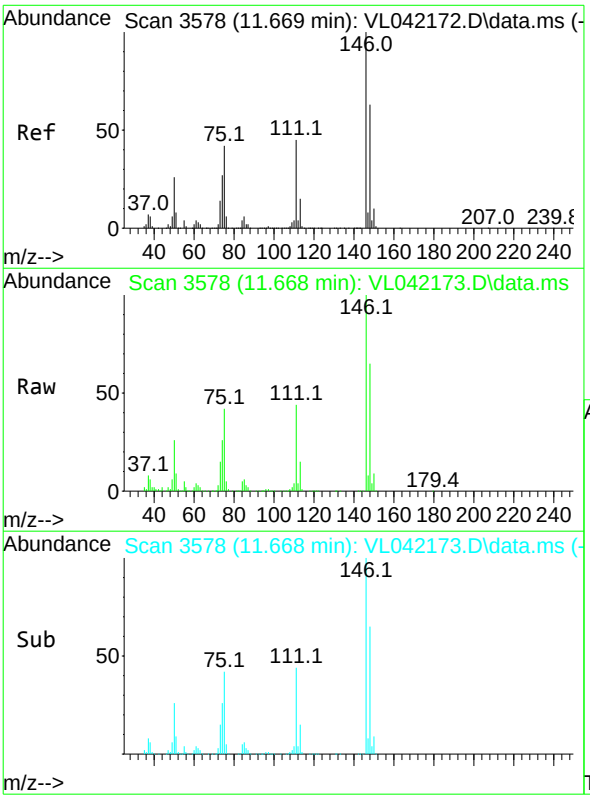
Ion	Ratio	Lower	Upper
146	100		
111	45.5	23.8	71.2
148	61.6	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

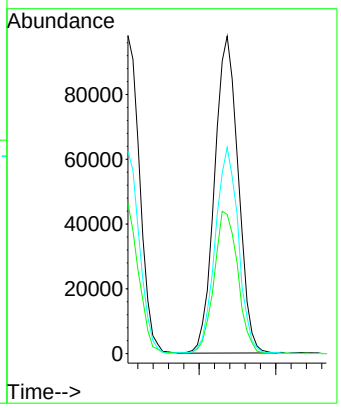
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

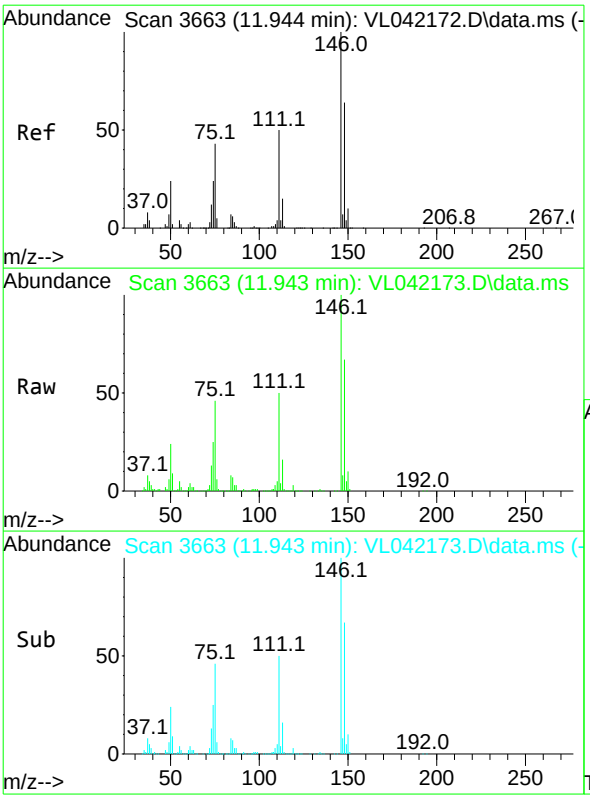


#76
1,4-Dichlorobenzene
Concen: 2.139 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 104925

Ion	Ratio	Lower	Upper
146	100		
111	45.3	23.0	69.0
148	64.0	31.9	95.7

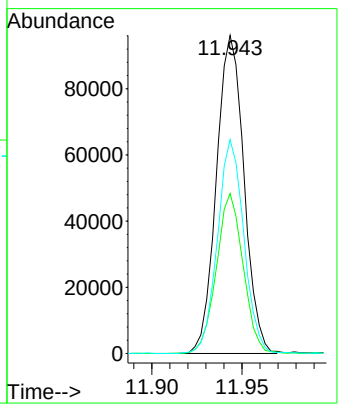




#77
1,2-Dichlorobenzene
Concen: 2.132 ppbv
RT: 11.943 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 102310

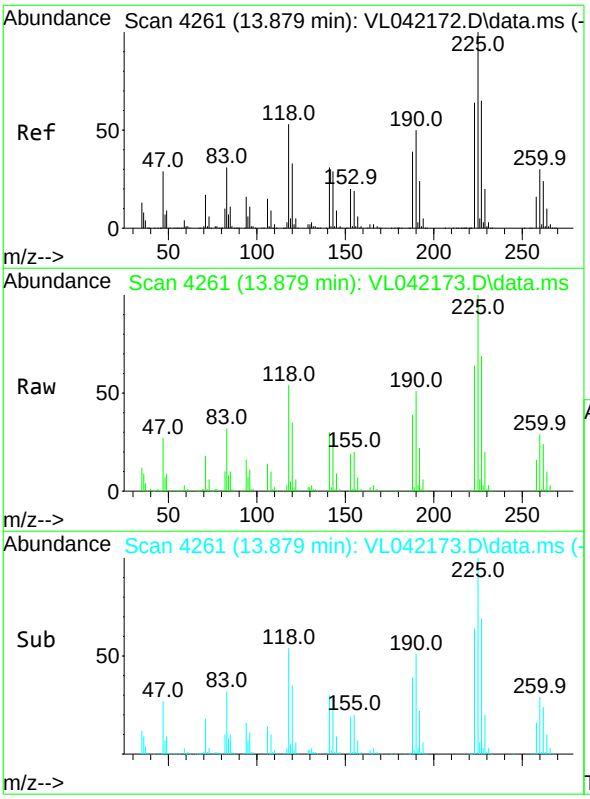
Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	64.6	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

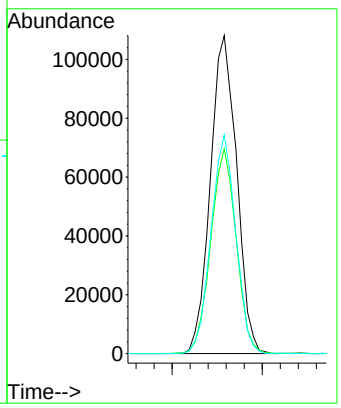
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

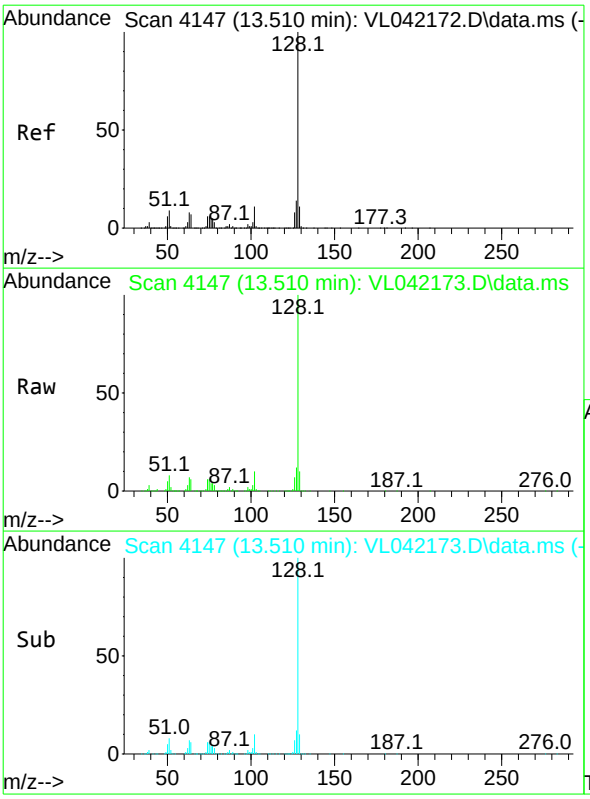


#78
Hexachloro-1,3-Butadiene
Concen: 2.242 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:225 Resp: 109539

Ion	Ratio	Lower	Upper
225	100		
223	62.2	50.6	76.0
227	64.9	51.2	76.8

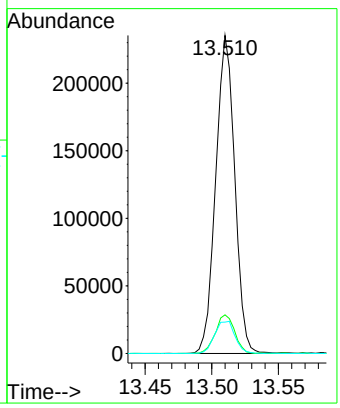




#79
Naphthalene
Concen: 2.375 ppbv
RT: 13.510 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:128 Resp: 233451

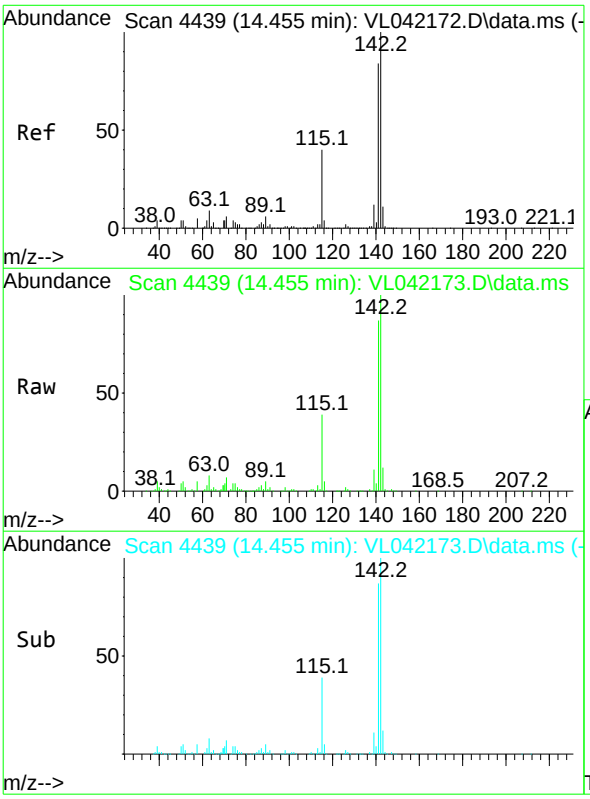
Ion	Ratio	Lower	Upper
128	100		
127	12.1	10.8	16.2
129	9.9	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

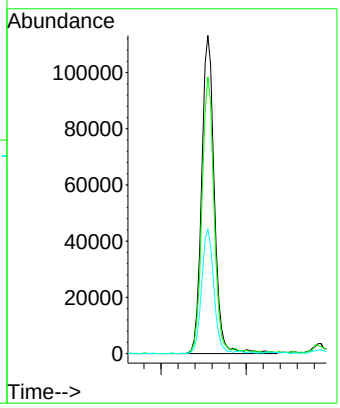
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

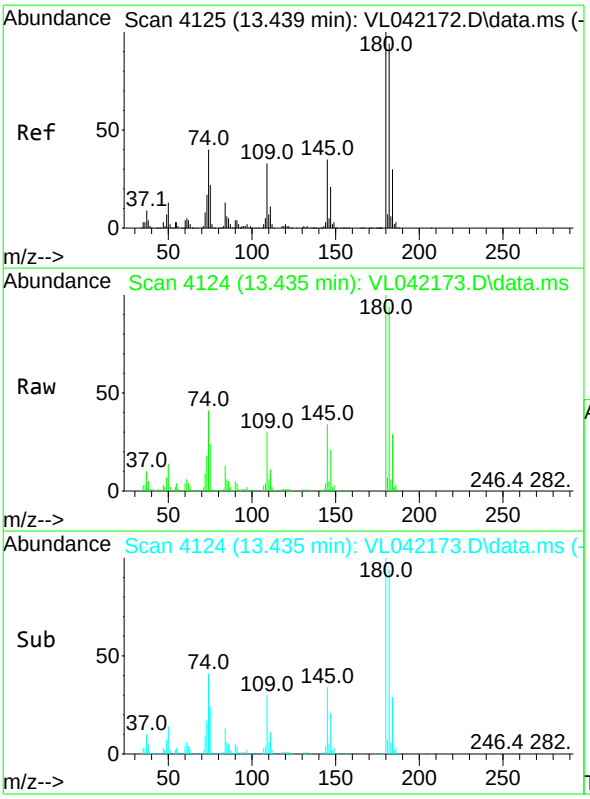


#80
Naphthalene,2-methyl-
Concen: 2.451 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:142 Resp: 117313

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	38.5	31.6	47.4

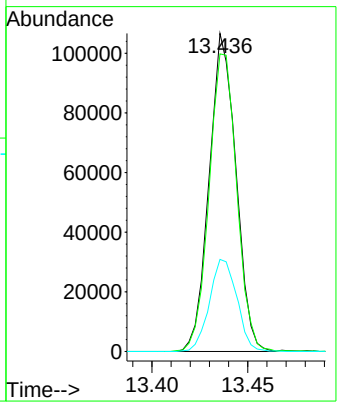




#81
1,2,4-Trichlorobenzene
Concen: 2.288 ppbv
RT: 13.435 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:180 Resp: 103765

Ion	Ratio	Lower	Upper
180	100		
182	97.0	75.1	112.7
184	29.6	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	186244	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	537244	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	499830	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	404753	9.861	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	28203	1.026	ppbv		99
3) Chlorodifluoromethane	1.473	51	28693	1.021	ppbv		94
4) Chloromethane	1.531	50	11111	0.989	ppbv		99
5) Vinyl Chloride	1.577	62	10723	0.936	ppbv		98
6) Bromomethane	1.667	94	4984	0.979	ppbv		97
7) Chloroethane	1.703	64	4622	1.025	ppbv		100
8) Dichlorotetrafluoroethane	1.554	85	23886	1.020	ppbv		98
9) Propene	1.483	41	13699m	1.082	ppbv		
10) Heptane	4.975	43	36132	1.055	ppbv		100
11) Trichlorofluoromethane	1.875	101	27136	1.014	ppbv		96
12) 1,1,2-Trichlorotrifluo...	2.137	101	22629	1.029	ppbv		99
13) Ethanol	1.719	45	1610m	1.624	ppbv		
14) Bromoethene	1.781	108	8330	0.989	ppbv	#	82
15) Acetone	1.836	43	29294	1.125	ppbv		95
16) 1,3-Butadiene	1.606	39	13133	1.121	ppbv		97
17) tert-Butyl alcohol	2.040	59	33500	1.033	ppbv		97
18) 1,1-Dichloroethene	2.033	96	10532	1.024	ppbv		89
19) Isopropyl Alcohol	1.884	45	14903	1.014	ppbv	#	38
20) Methylene Chloride	2.059	84	10481	1.080	ppbv		93
21) Allyl Chloride	2.095	41	19039	1.036	ppbv		99
22) trans-1,2-Dichloroethene	2.341	96	13051m	1.086	ppbv		
23) Vinyl Acetate	2.464	43	12883m	1.190	ppbv		
24) 1,1-Dichloroethane	2.409	63	22505	1.022	ppbv		99
25) Ethyl Acetate	2.836	43	67402	0.997	ppbv	#	96
26) Hexane	2.823	57	27223	1.043	ppbv		98
27) Carbon Disulfide	2.146	76	28167	1.006	ppbv	#	47
28) Methyl tert-Butyl Ether	2.441	73	16501	1.015	ppbv		95
29) Chloroform	2.845	83	38516	1.008	ppbv		96
30) Cyclohexane	3.852	84	23052	1.016	ppbv		97
31) cis-1,2-Dichloroethene	2.716	61	27187	1.026	ppbv		89
32) 1,1,1-Trichloroethane	3.363	97	40993	0.938	ppbv		99
34) 2-Butanone	2.557	43	41423	1.063	ppbv		98
35) Carbon Tetrachloride	3.758	117	39345	0.952	ppbv		93
36) Benzene	3.651	78	55156	1.036	ppbv		94
37) 1,2-Dichloroethane	3.218	62	30543	1.002	ppbv		98
38) Trichloroethene	4.545	130	21906	0.985	ppbv		93
39) 1,2-Dichloropropane	4.312	63	20020	1.032	ppbv		99
40) 1,4-Dioxane	4.593	88	10592m	1.052	ppbv		
41) Tetrahydrofuran	3.056	42	22818	1.029	ppbv		97
42) Bromodichloromethane	4.483	83	41864	0.996	ppbv		90
43) Methyl Methacrylate	4.875	69	24233m	1.078	ppbv		
44) 2,2,4-Trimethylpentane	4.632	57	90727	1.008	ppbv		96
45) t-1,3-Dichloropropene	6.403	75	23993m	0.992	ppbv		

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	30063	1.014	ppbv		93
47) 1,1,2-Trichloroethane	6.577	97	20546	1.002	ppbv		96
48) Dibromochloromethane	7.383	129	34425	0.991	ppbv		100
49) Bromoform	9.481	173	31610	1.013	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	65226m	1.056	ppbv		
51) 2-Hexanone	7.438	43	54680	1.067	ppbv	#	100
52) Tetrachloroethene	8.222	164	19415	0.919	ppbv		95
53) Toluene	6.927	91	64612	1.023	ppbv		99
54) 1,2-Dibromoethane	7.652	107	28879	1.009	ppbv		95
56) 1,1,1,2-Tetrachloroethane	8.924	131	28764	1.045	ppbv	#	87
57) Chlorobenzene	8.917	112	48930	1.032	ppbv		93
58) Ethyl Benzene	9.348	91	91086	1.026	ppbv		97
59) m/p-Xylene	9.529	91	147162m	2.073	ppbv		
60) o-Xylene	9.960	91	73702	1.037	ppbv		96
61) Styrene	9.866	104	36110	1.027	ppbv		97
62) Isopropylbenzene	10.536	105	109897	1.034	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.960	83	44431	1.029	ppbv		99
64) n-propylbenzene	10.986	120	29054	1.062	ppbv		98
65) tert-Butylbenzene	11.526	119	103520	1.053	ppbv		96
66) Benzyl Chloride	11.614	91	10660	1.022	ppbv	#	93
67) sec-Butylbenzene	11.762	105	149660	1.095	ppbv		97
69) p-Isopropyltoluene	11.921	119	127509	1.084	ppbv		99
70) n-Butylbenzene	12.280	91	129860	1.079	ppbv		99
71) 2-Chlorotoluene	10.898	91	86356	1.047	ppbv		100
72) 4-Ethyltoluene	11.122	105	92912	1.050	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	83497	1.080	ppbv		92
74) 1,2,4-Trimethylbenzene	11.533	105	97858	1.099	ppbv		94
75) 1,3-Dichlorobenzene	11.604	146	51096	1.046	ppbv		99
76) 1,4-Dichlorobenzene	11.669	146	50841	1.046	ppbv		99
77) 1,2-Dichlorobenzene	11.944	146	51523	1.084	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	55611	1.149	ppbv		97
79) Naphthalene	13.510	128	109031	1.120	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	44518	0.939	ppbv		99
81) 1,2,4-Trichlorobenzene	13.436	180	47040	1.047	ppbv		98

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

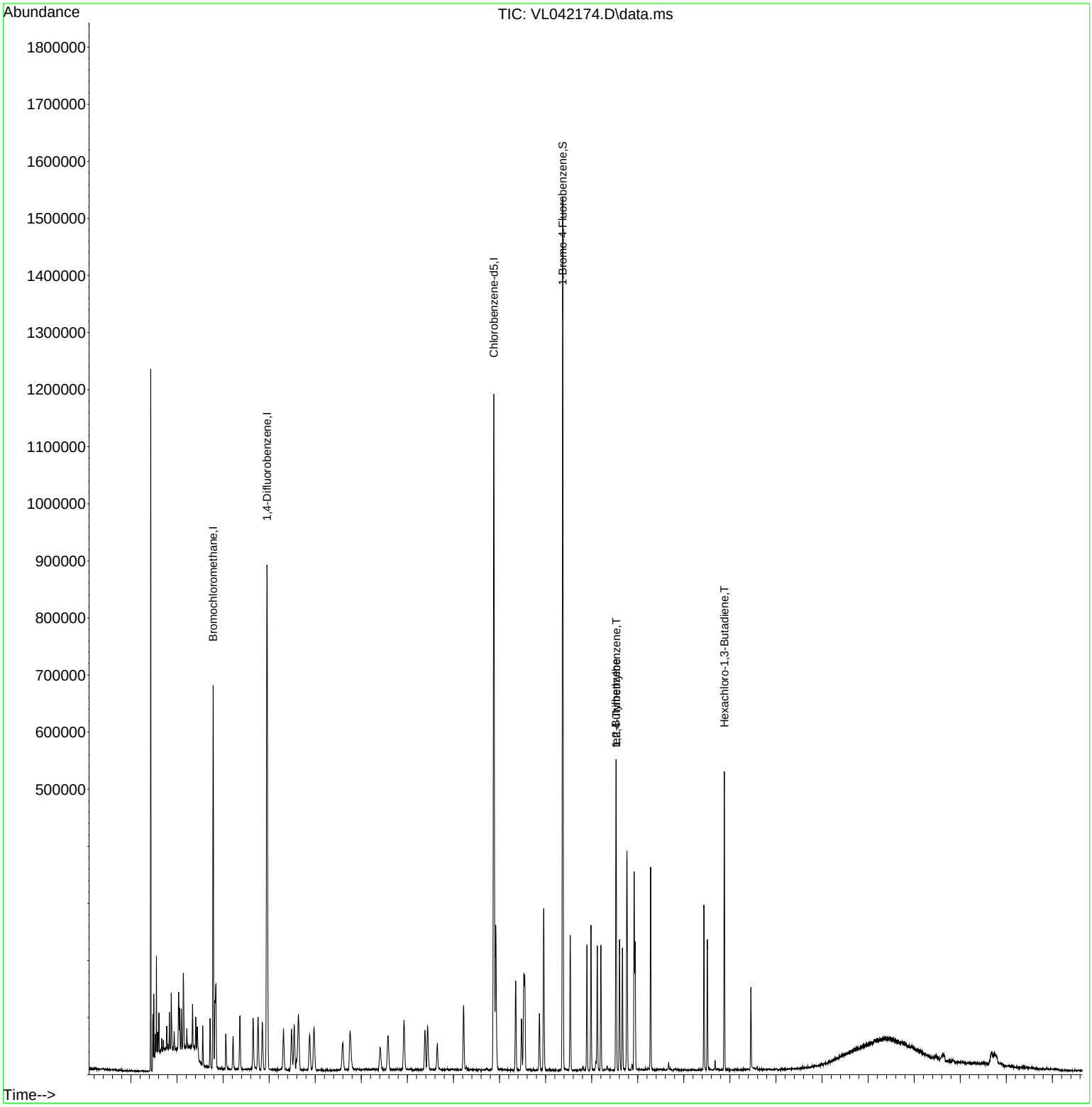
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

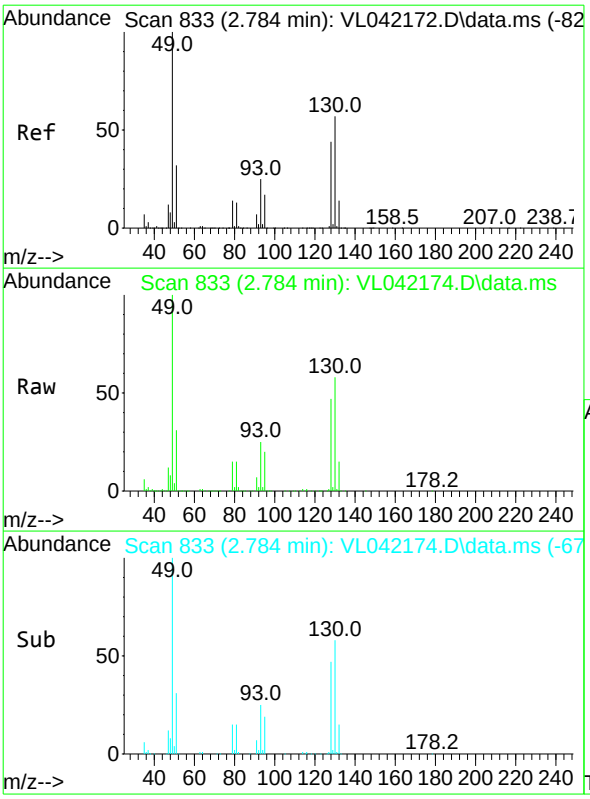
Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

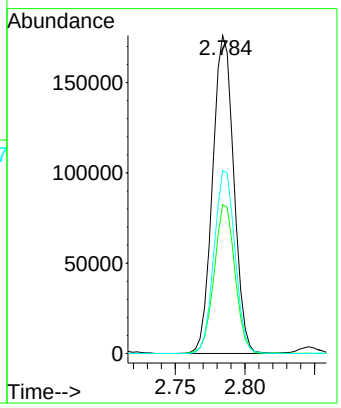




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 49 Resp: 186244

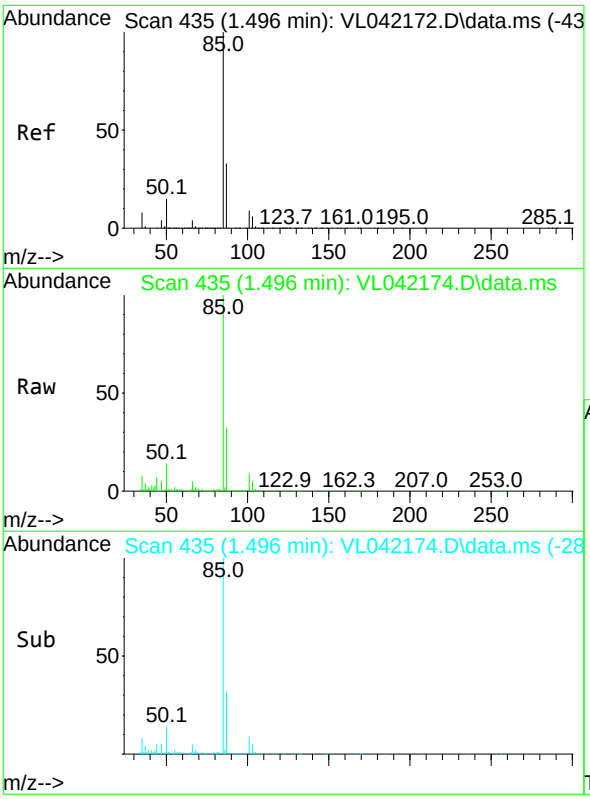
Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.9	68.5
130	57.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

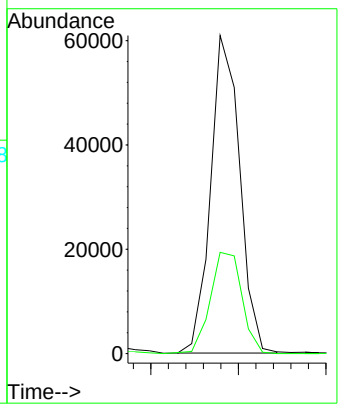
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

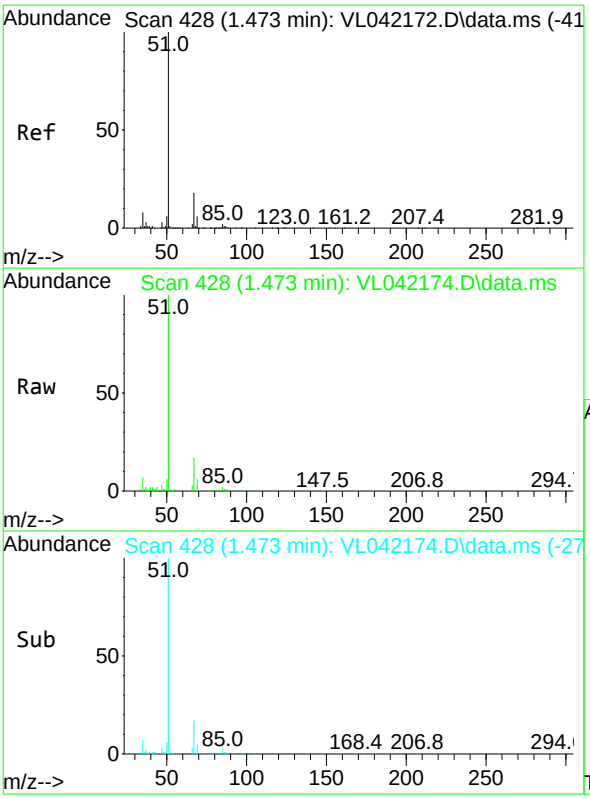


#2
Dichlorodifluoromethane
Concen: 1.026 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 28203

Ion	Ratio	Lower	Upper
85	100		
87	31.9	26.1	39.1

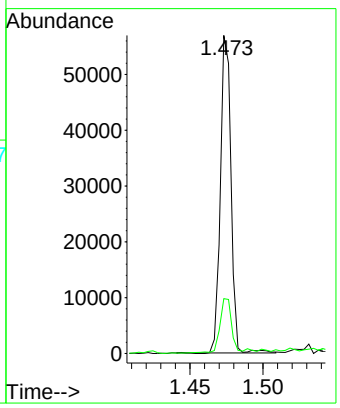




#3
Chlorodifluoromethane
Concen: 1.021 ppbv
RT: 1.473 min Scan# 42
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 51 Resp: 28693

Ion	Ratio	Lower	Upper
51	100		
67	21.5	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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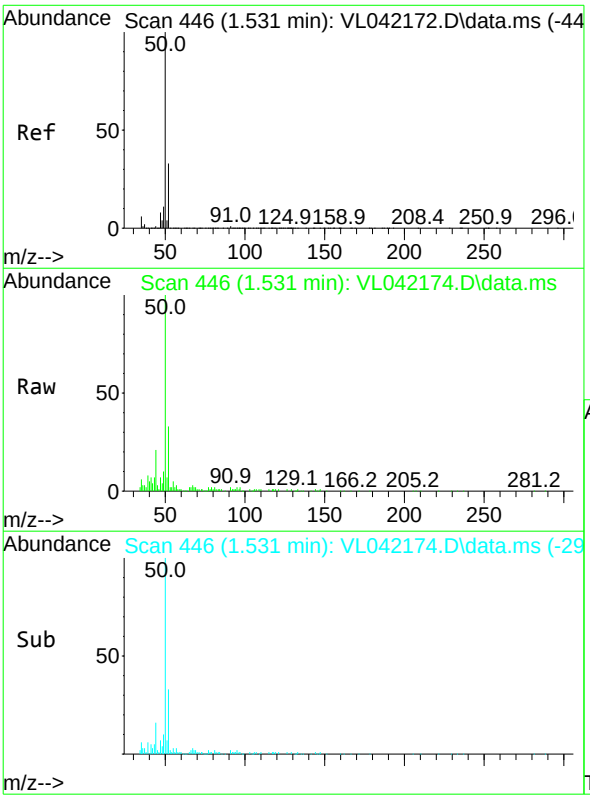
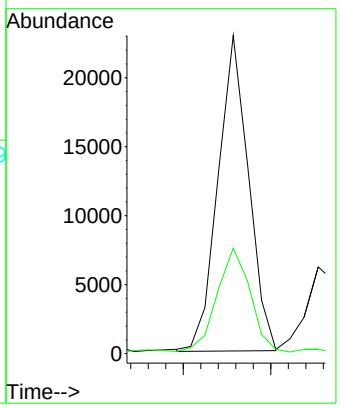
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

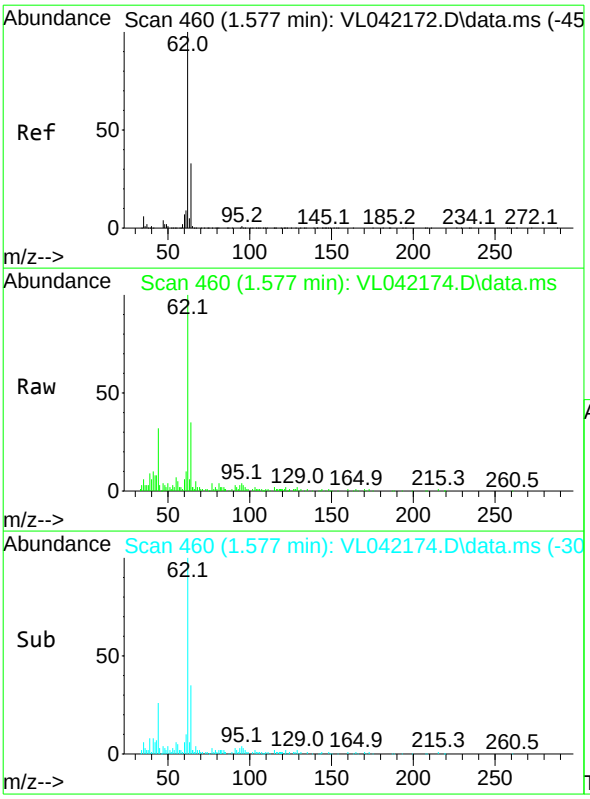


#4
Chloromethane
Concen: 0.989 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 50 Resp: 11111

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1

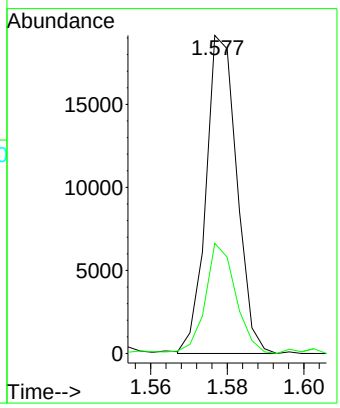




#5
Vinyl Chloride
Concen: 0.936 ppbv
RT: 1.577 min Scan# 46
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 62 Resp: 10723

Ion	Ratio	Lower	Upper
62	100		
64	34.6	26.6	40.0



Instrument :
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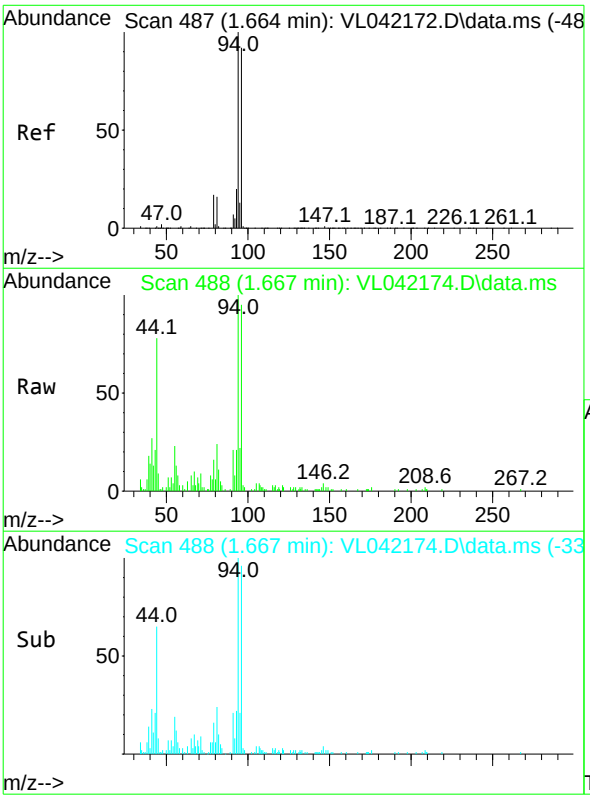
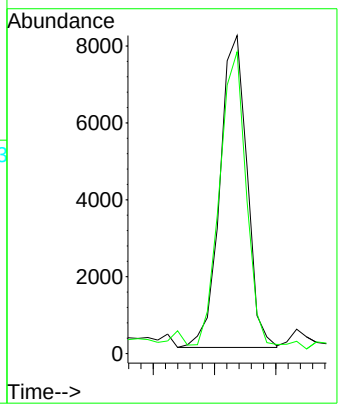
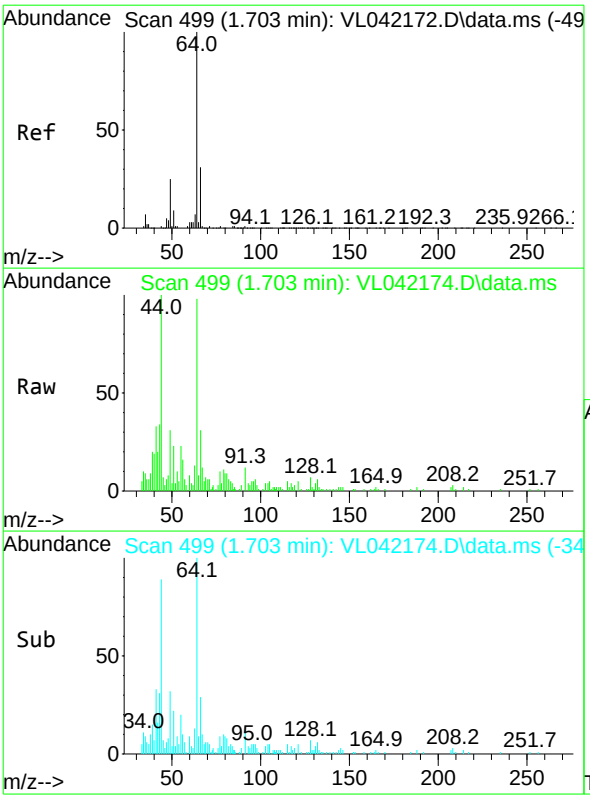


#6
Bromomethane
Concen: 0.979 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 94 Resp: 4984

Ion	Ratio	Lower	Upper
94	100		
96	93.8	73.1	109.7

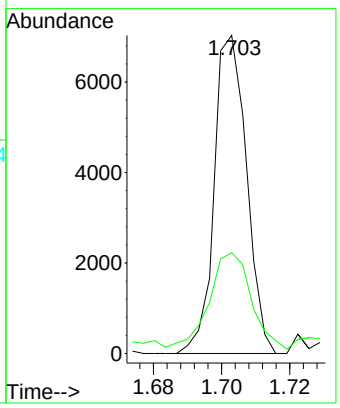




#7
Chloroethane
Concen: 1.025 ppbv
RT: 1.703 min Scan# 49
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 64 Resp: 4622

Ion	Ratio	Lower	Upper
64	100		
66	31.7	25.2	37.8



Instrument :
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ClientSampleId :
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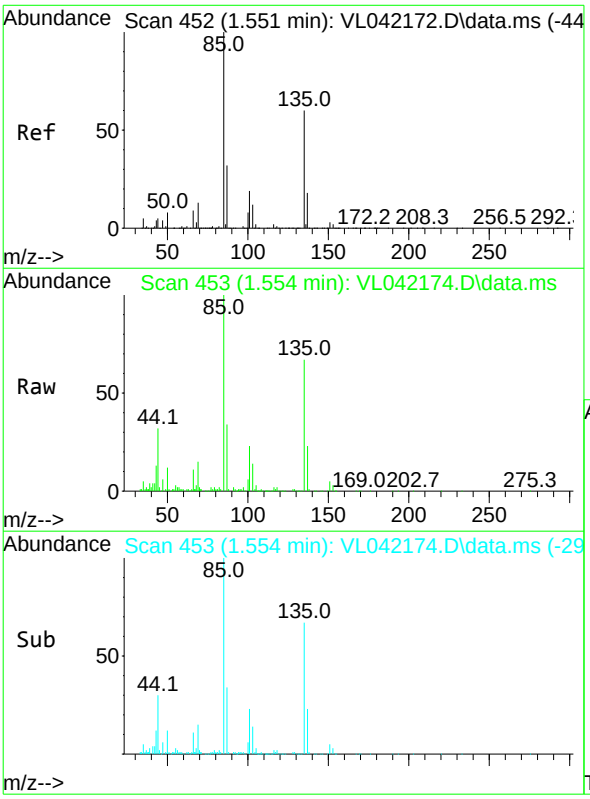
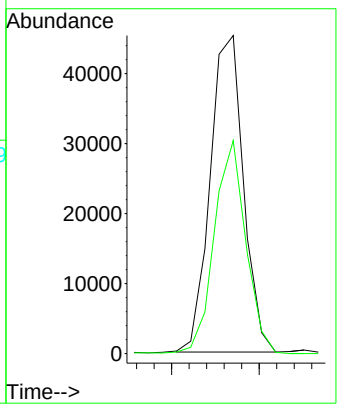
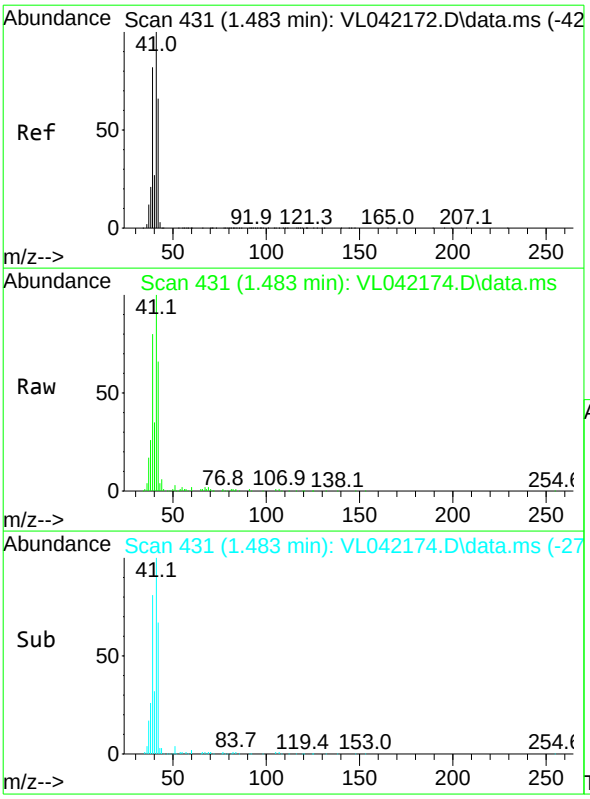


#8
Dichlorotetrafluoroethane
Concen: 1.020 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 23886

Ion	Ratio	Lower	Upper
85	100		
135	64.2	52.4	78.6

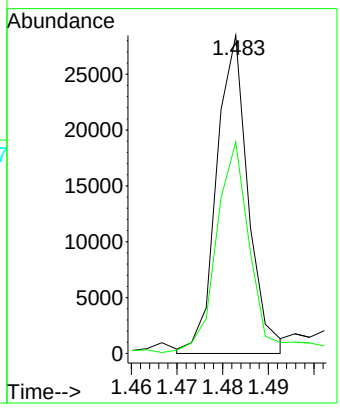




#9
Propene
Concen: 1.082 ppbv m
RT: 1.483 min Scan# 43
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 41 Resp: 13699

Ion	Ratio	Lower	Upper
41	100		
42	7.5	55.4	83.2#



Instrument :
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ClientSampleId :
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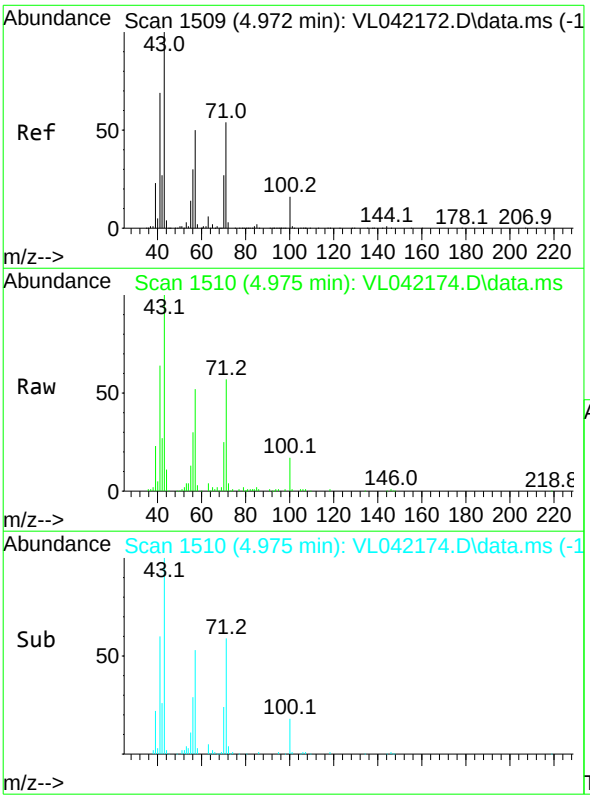
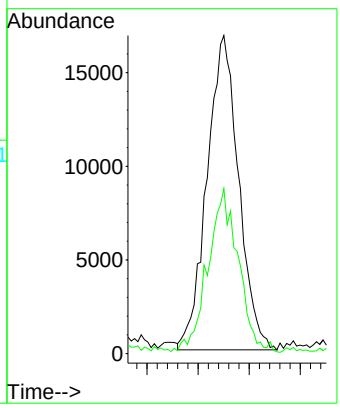
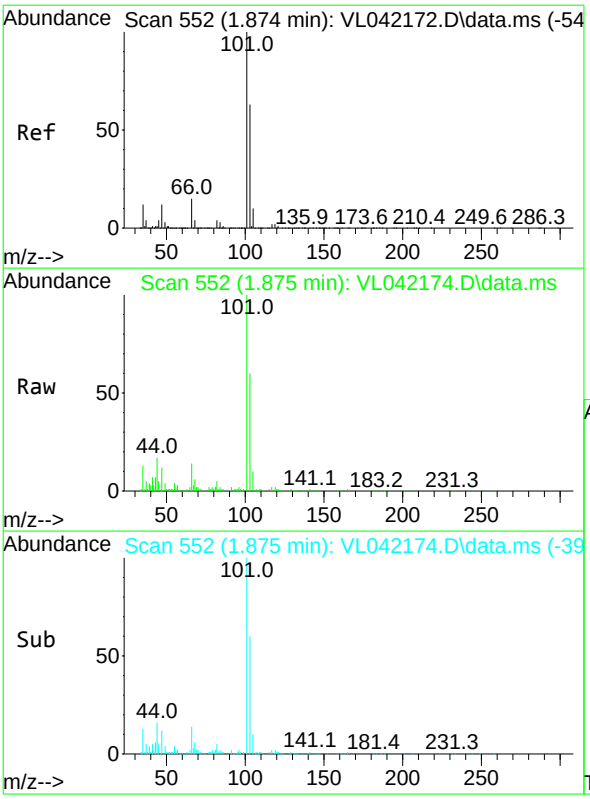


#10
Heptane
Concen: 1.055 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 36132

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2





#11
Trichlorofluoromethane
Concen: 1.014 ppbv
RT: 1.875 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:101 Resp: 27136

Ion	Ratio	Lower	Upper
101	100		
103	59.9	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
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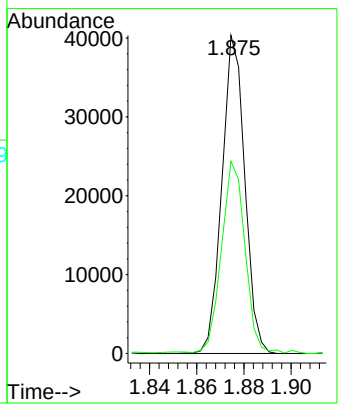
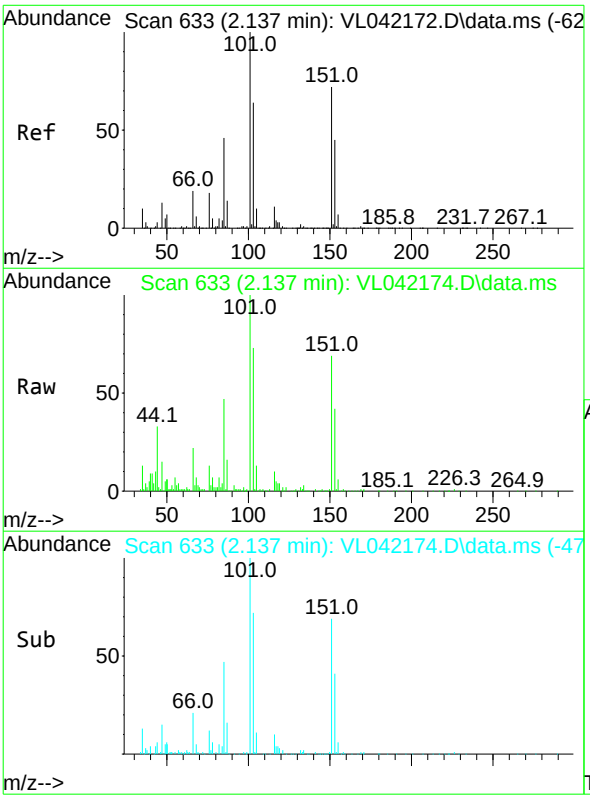
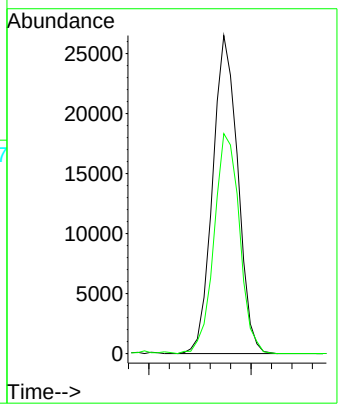


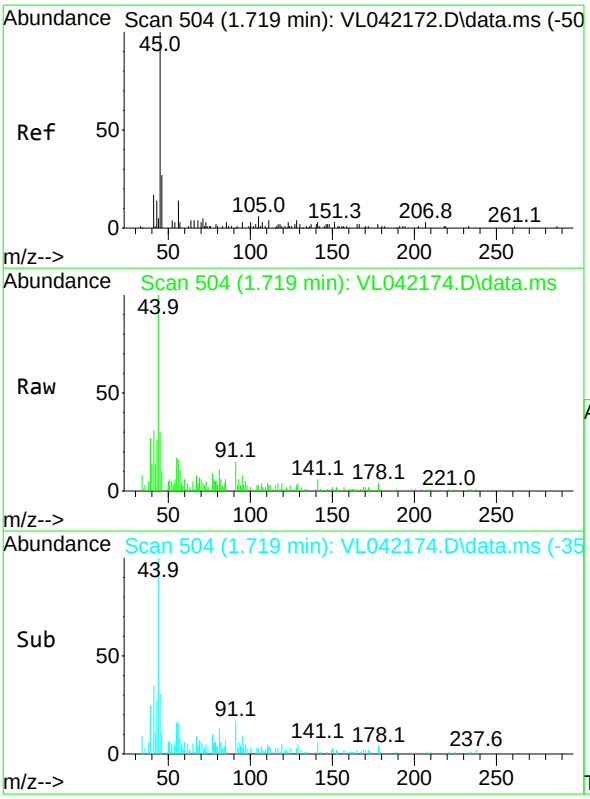


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.029 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:101 Resp: 22629

Ion	Ratio	Lower	Upper
101	100		
151	70.3	57.1	85.7

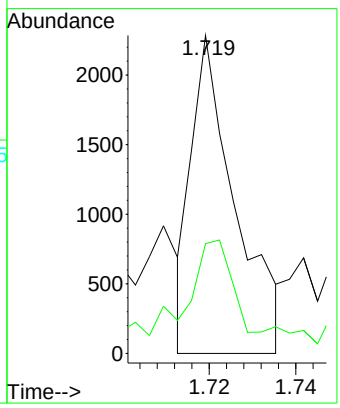




#13
Ethanol
Concen: 1.624 ppbv m
RT: 1.719 min Scan# 50
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 45 Resp: 1610

Ion	Ratio	Lower	Upper
45	100		
46	73.4	20.2	80.8



Instrument :
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ClientSampleId :
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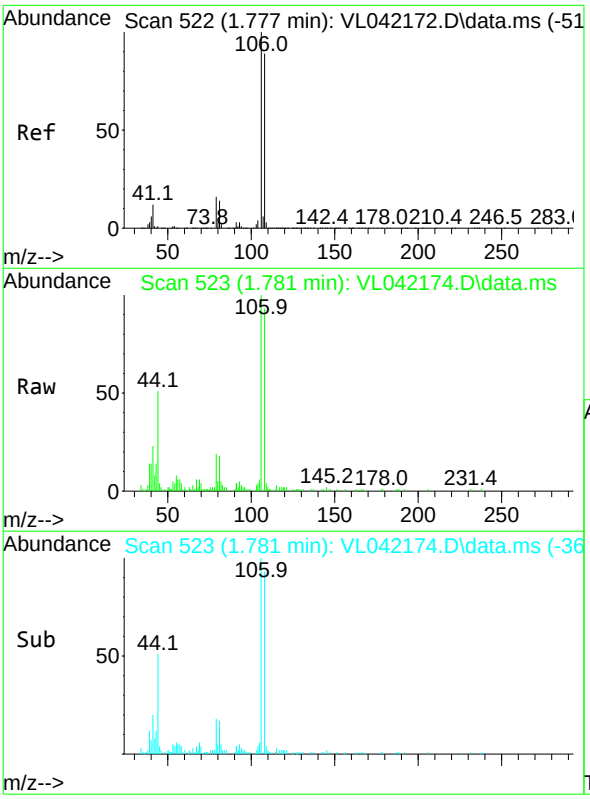
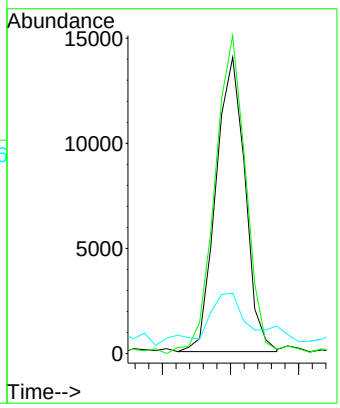
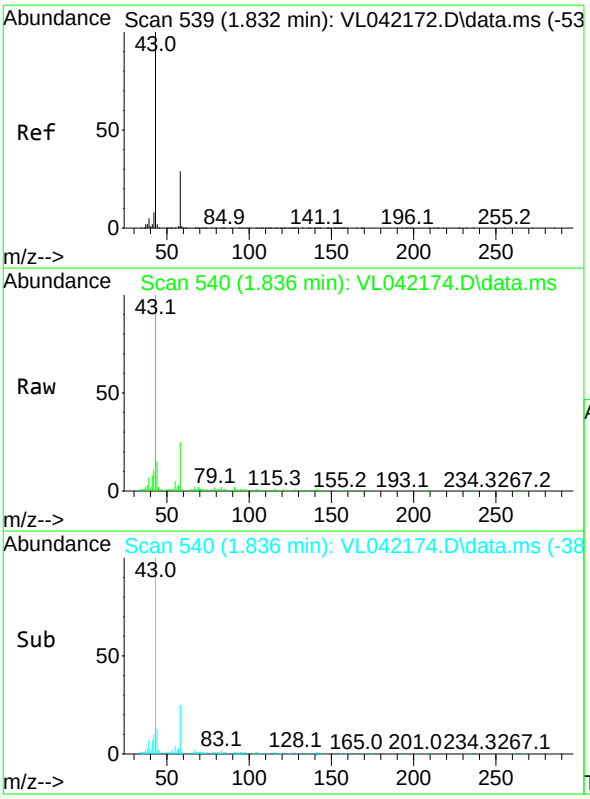


#14
Bromoethene
Concen: 0.989 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:108 Resp: 8330

Ion	Ratio	Lower	Upper
108	100		
106	115.2	86.8	130.2
79	57.0	15.0	22.6#

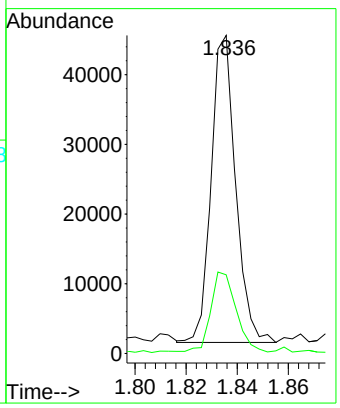




#15
Acetone
Concen: 1.125 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 29294

Ion	Ratio	Lower	Upper
43	100		
58	31.6	23.2	34.8



Instrument :
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ClientSampleId :
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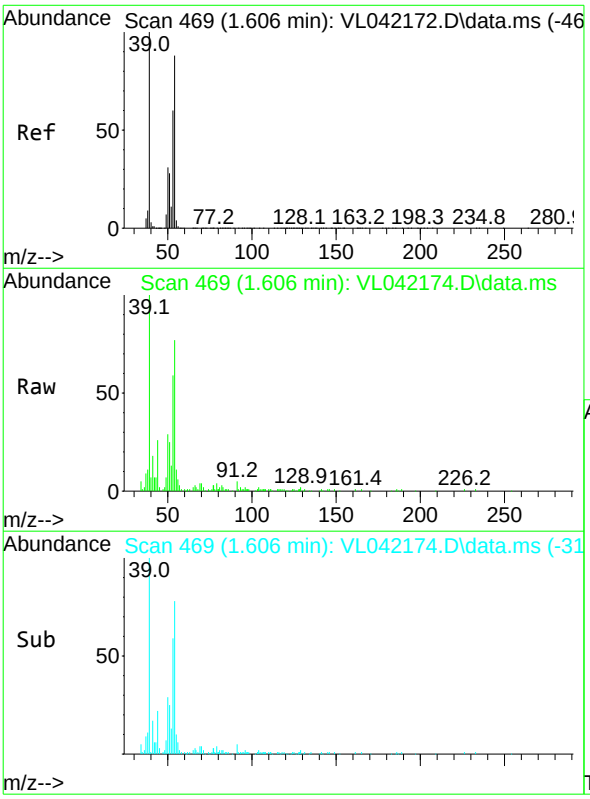
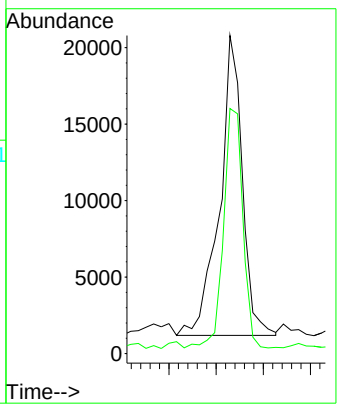
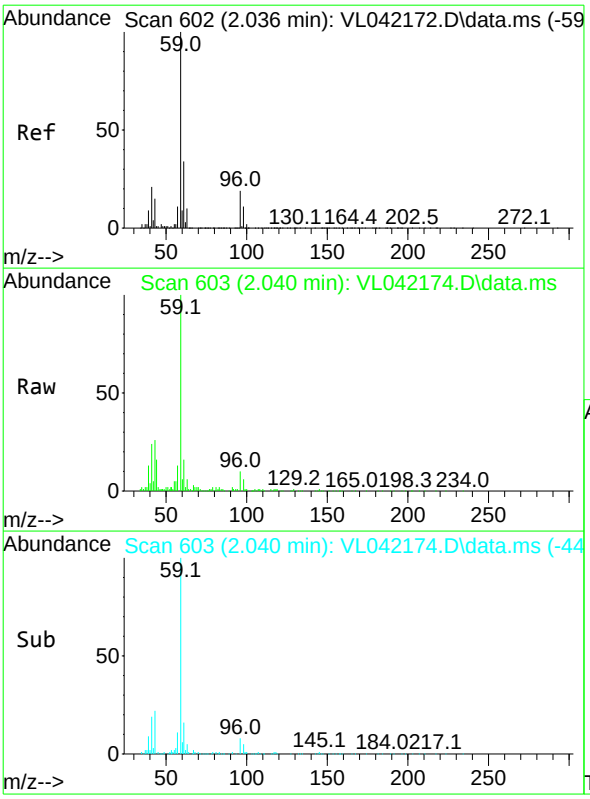


#16
1,3-Butadiene
Concen: 1.121 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 39 Resp: 13133

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1

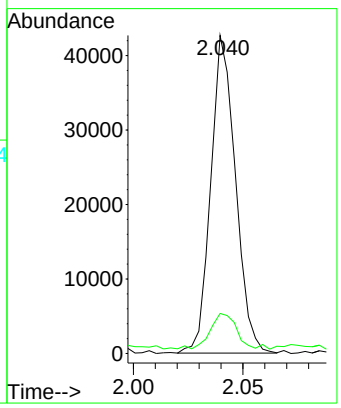




#17
tert-Butyl alcohol
Concen: 1.033 ppbv
RT: 2.040 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 59 Resp: 33500

Ion	Ratio	Lower	Upper
59	100		
57	12.3	8.9	13.3



Instrument :
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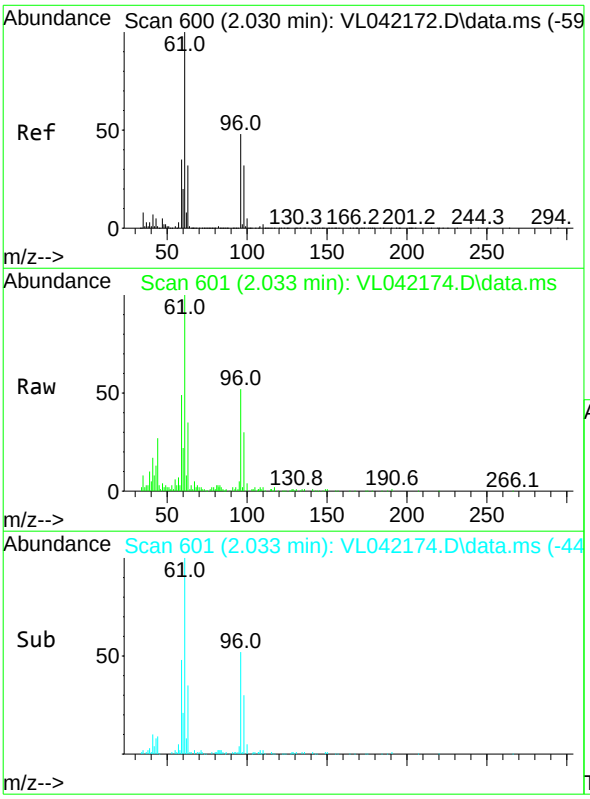
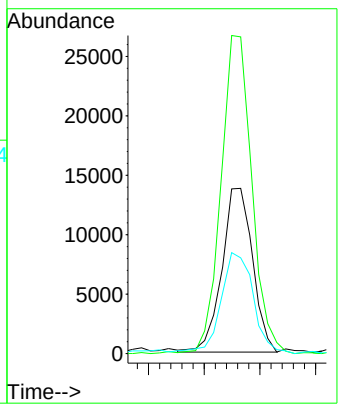
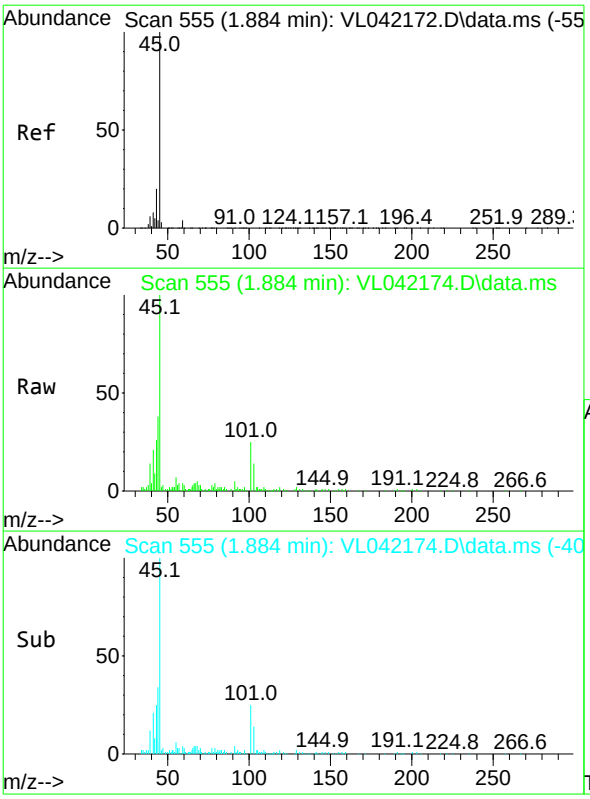


#18
1,1-Dichloroethene
Concen: 1.024 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 10532

Ion	Ratio	Lower	Upper
96	100		
61	192.9	167.6	251.4
98	56.7	53.5	80.3

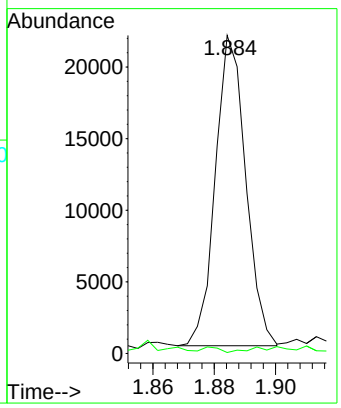




#19
Isopropyl Alcohol
Concen: 1.014 ppbv
RT: 1.884 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 45 Resp: 14903

Ion	Ratio	Lower	Upper
45	100		
58	4.9	36.9	55.3#



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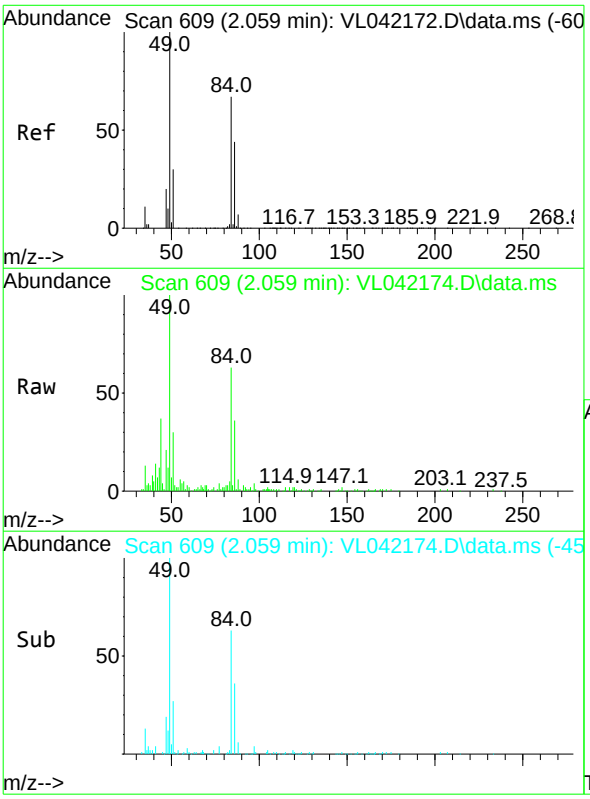
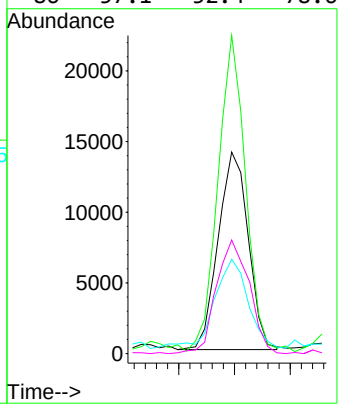
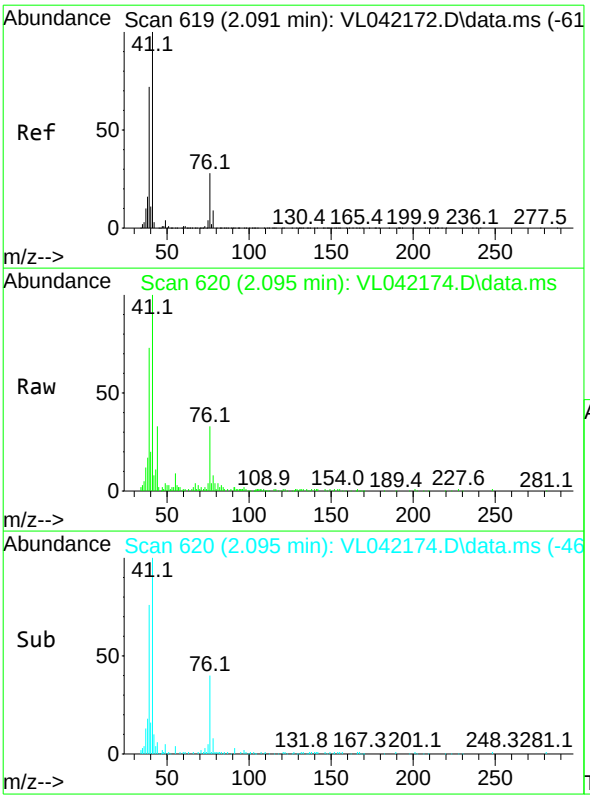


#20
Methylene Chloride
Concen: 1.080 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 10481

Ion	Ratio	Lower	Upper
84	100		
49	158.3	120.2	180.4
51	44.3	37.4	56.0
86	57.1	52.4	78.6





#21
Allyl Chloride
Concen: 1.036 ppbv
RT: 2.095 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 41 Resp: 19039

Ion	Ratio	Lower	Upper
41	100		
76	30.5	24.1	36.1
39	77.8	61.1	91.7

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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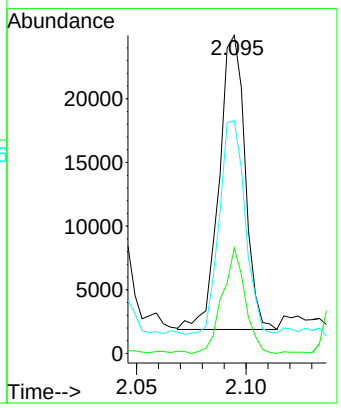
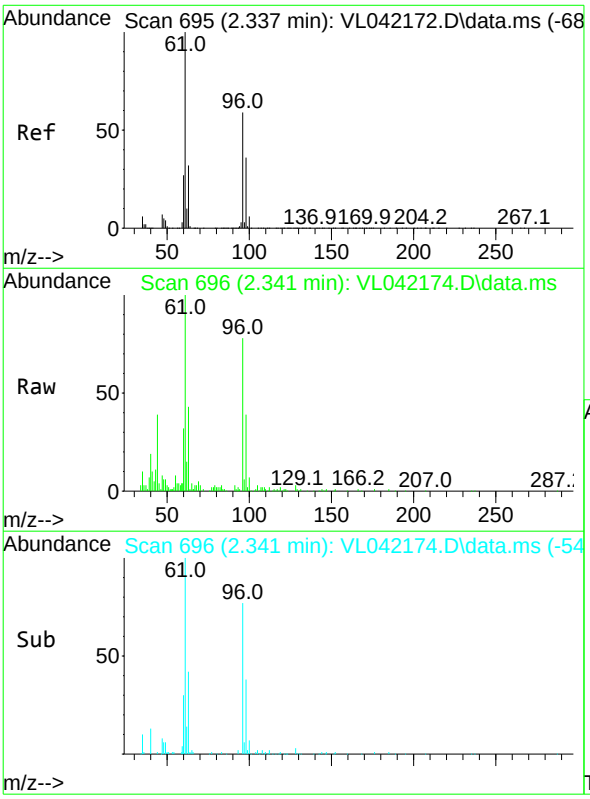
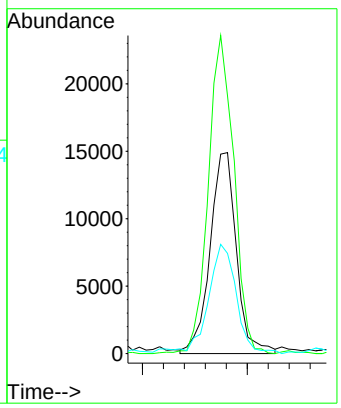


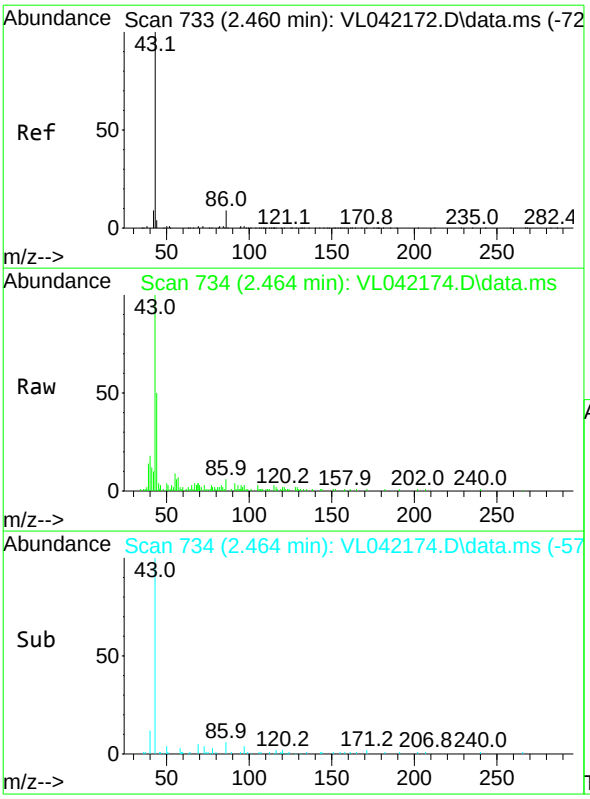


#22
trans-1,2-Dichloroethene
Concen: 1.086 ppbv m
RT: 2.341 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 13051

Ion	Ratio	Lower	Upper
96	100		
61	128.3	136.6	204.8#
98	49.9	49.4	74.2

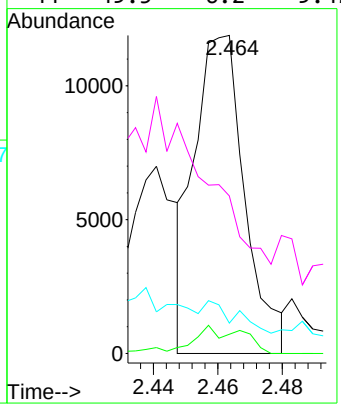




#23
Vinyl Acetate
Concen: 1.190 ppbv m
RT: 2.464 min Scan# 73
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 12883

Ion	Ratio	Lower	Upper
43	100		
86	6.0	5.5	8.3
42	9.5	8.6	13.0
44	49.5	6.2	9.4#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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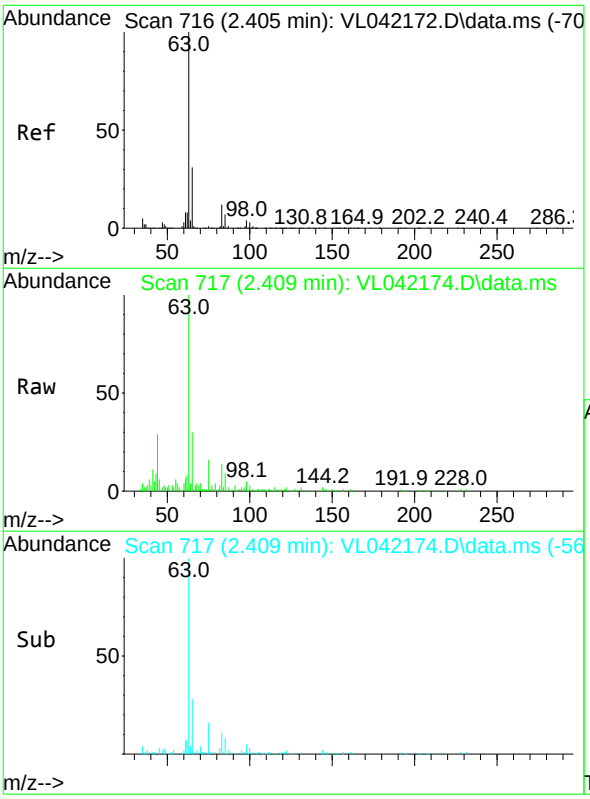
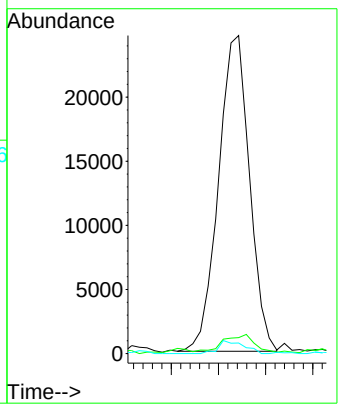
Supervised By :Mahesh Dadoda 04/03/2025

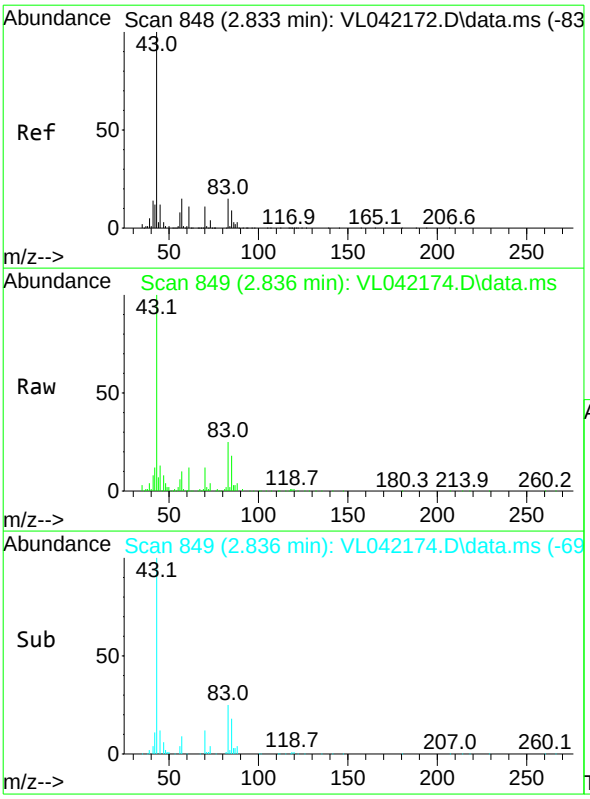


#24
1,1-Dichloroethane
Concen: 1.022 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 63 Resp: 22505

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.3	6.8
100	3.4	1.6	4.7

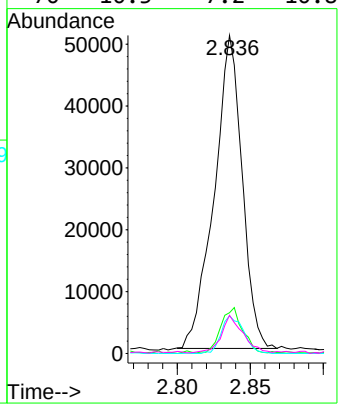




#25
Ethyl Acetate
Concen: 0.997 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 67402

Ion	Ratio	Lower	Upper
43	100		
45	12.3	8.2	12.2#
61	9.6	7.3	10.9
70	10.3	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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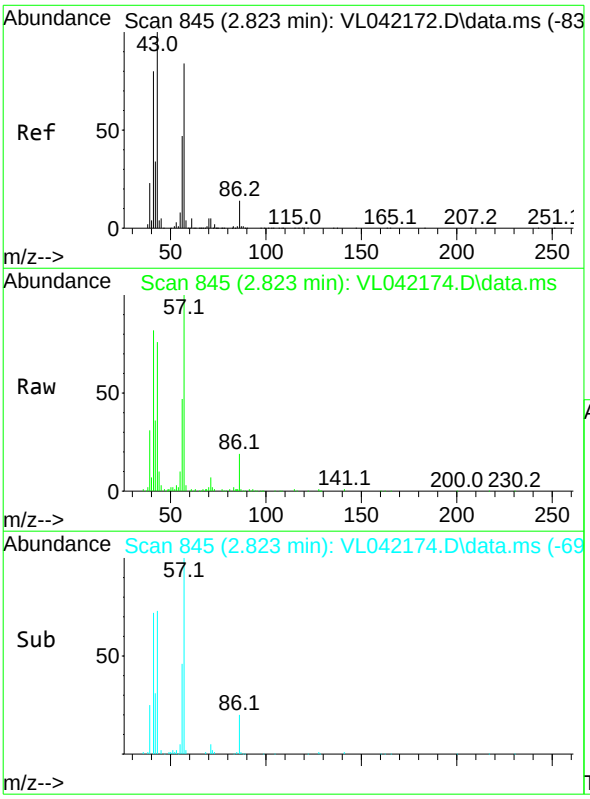
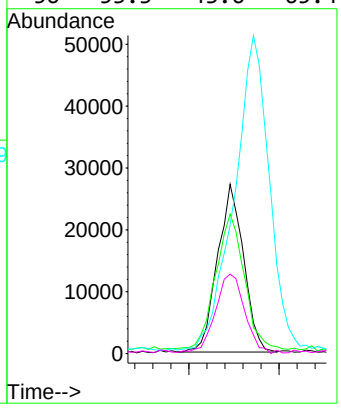
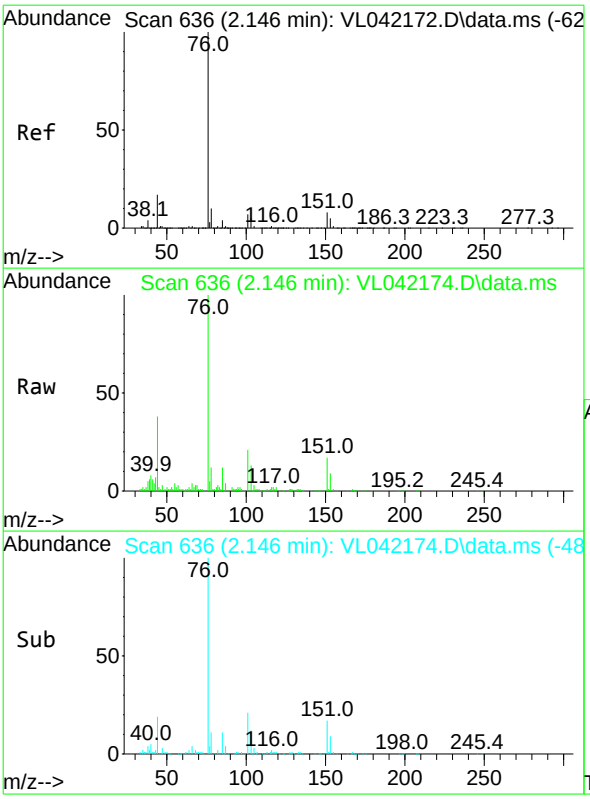


#26
Hexane
Concen: 1.043 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 27223

Ion	Ratio	Lower	Upper
57	100		
41	93.5	76.6	114.8
43	256.9	207.8	311.8
56	53.3	43.6	65.4

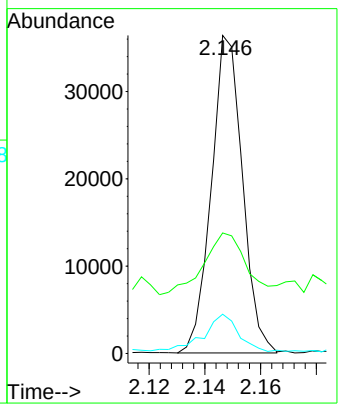




#27
Carbon Disulfide
Concen: 1.006 ppbv
RT: 2.146 min Scan# 63
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 76 Resp: 28167

Ion	Ratio	Lower	Upper
76	100		
44	54.6	14.7	22.1#
78	15.0	9.3	13.9#



Instrument :
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ClientSampleId :
VSTDICC001

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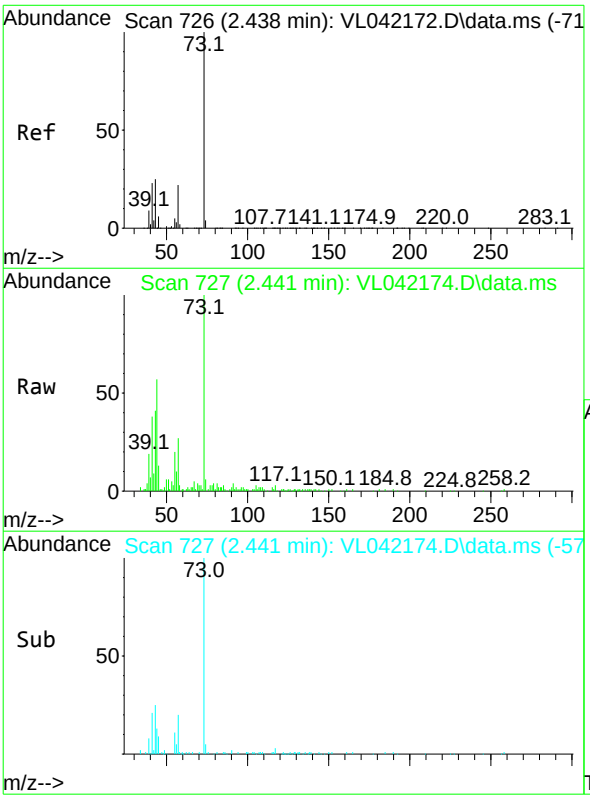
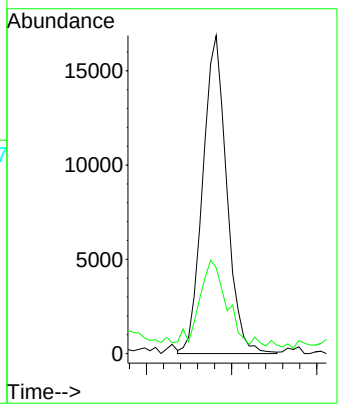
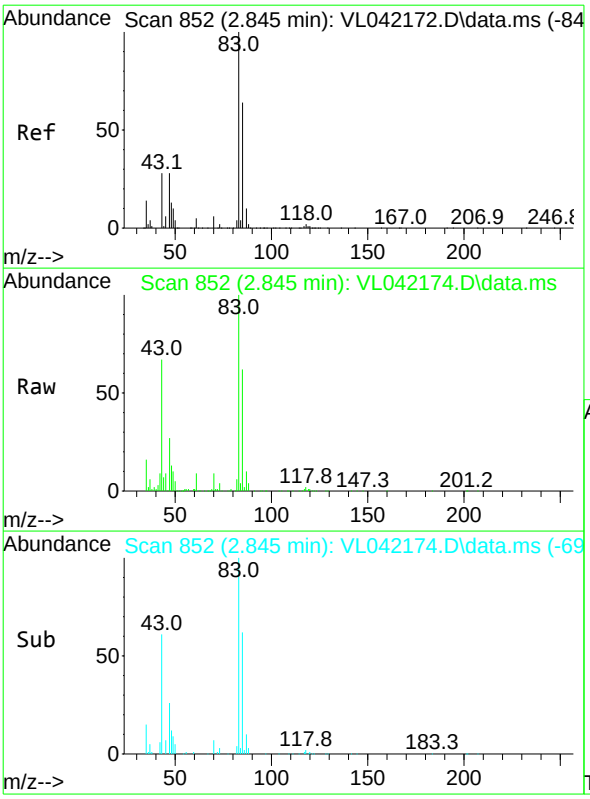


#28
Methyl tert-Butyl Ether
Concen: 1.015 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 73 Resp: 16501

Ion	Ratio	Lower	Upper
73	100		
57	28.0	20.5	30.7





#29
Chloroform
Concen: 1.008 ppbv
RT: 2.845 min Scan# 85
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 38516

Ion	Ratio	Lower	Upper
83	100		
85	61.6	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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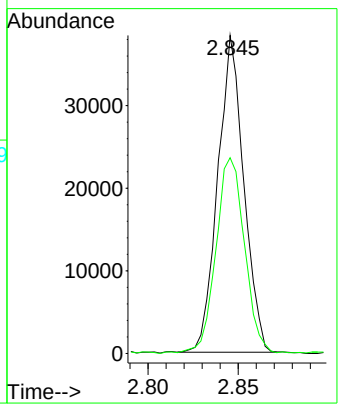
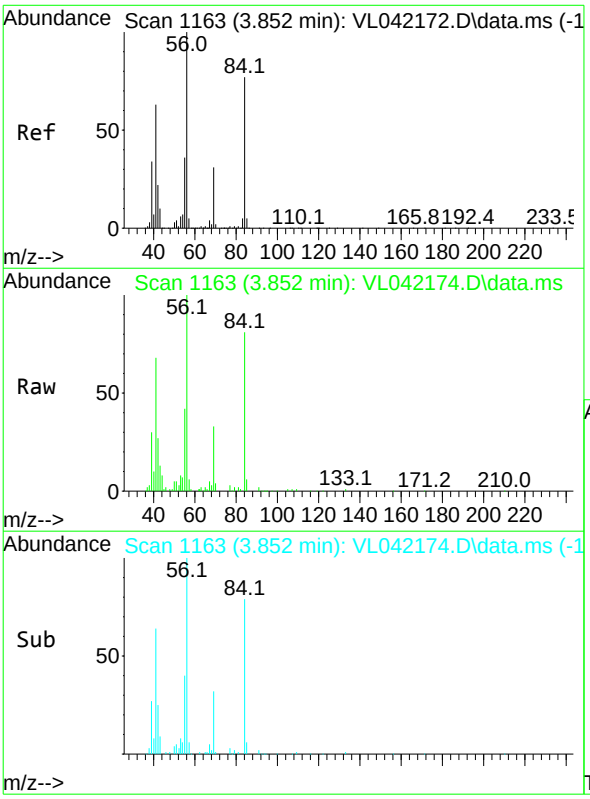
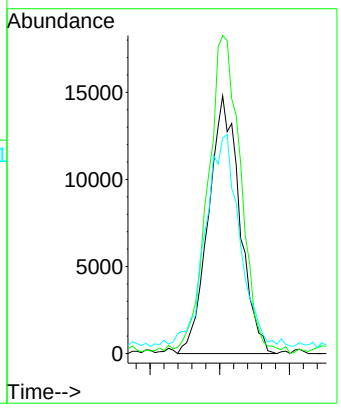


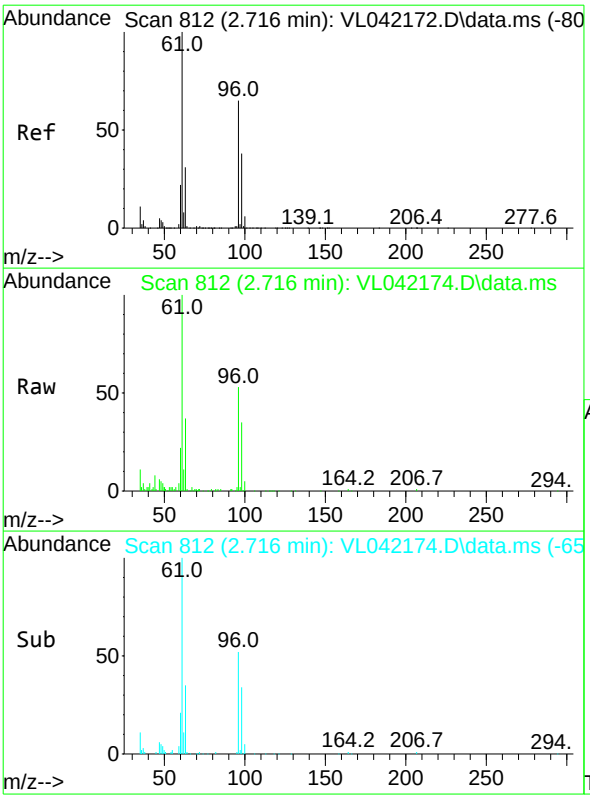


#30
Cyclohexane
Concen: 1.016 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 23052

Ion	Ratio	Lower	Upper
84	100		
56	128.9	102.8	154.2
41	89.3	66.5	99.7





#31
cis-1,2-Dichloroethene
Concen: 1.026 ppbv
RT: 2.716 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 61 Resp: 27187

Ion	Ratio	Lower	Upper
61	100		
96	53.3	51.8	77.8
98	34.8	30.6	46.0

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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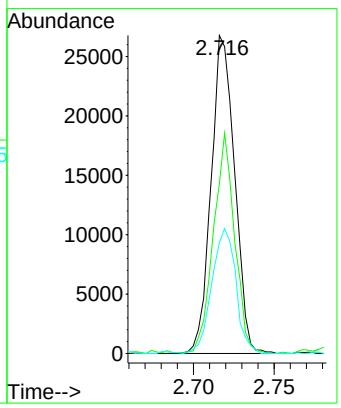
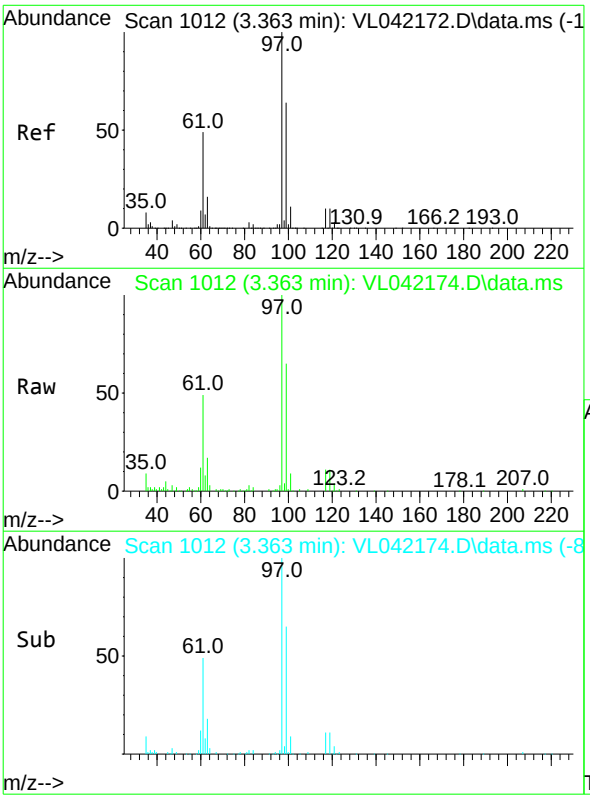
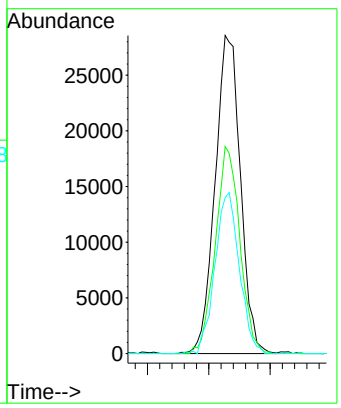


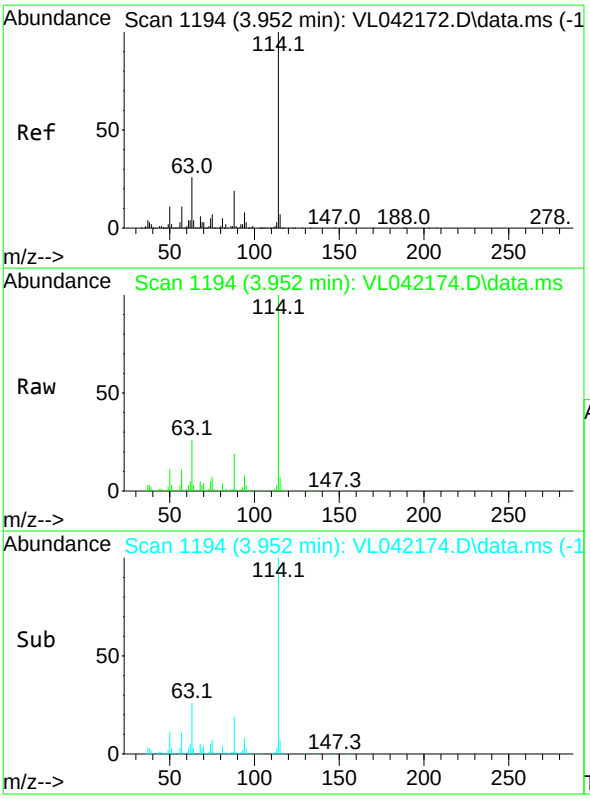


#32
1,1,1-Trichloroethane
Concen: 0.938 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 97 Resp: 40993

Ion	Ratio	Lower	Upper
97	100		
99	63.0	51.5	77.3
61	48.8	38.7	58.1

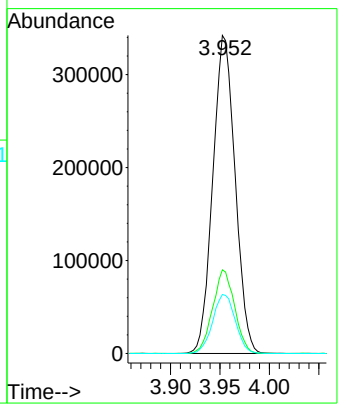




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:114 Resp: 537244

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.8	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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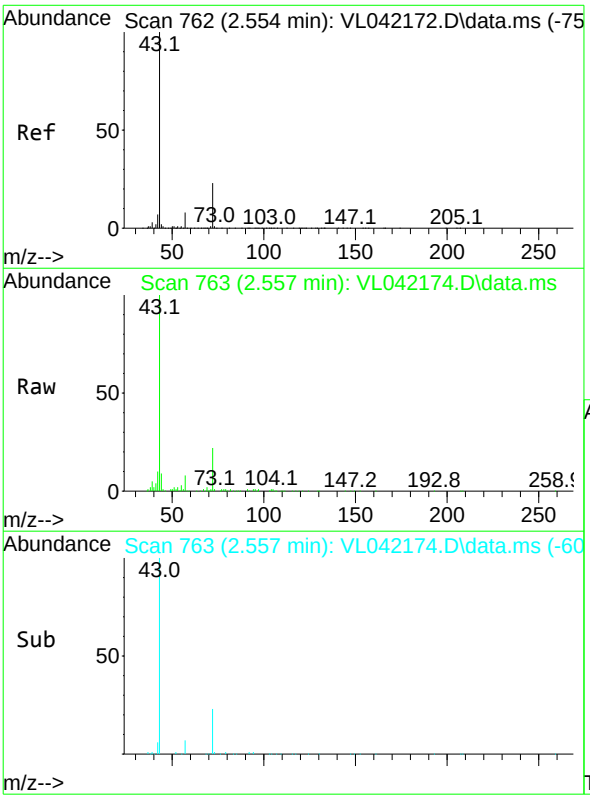
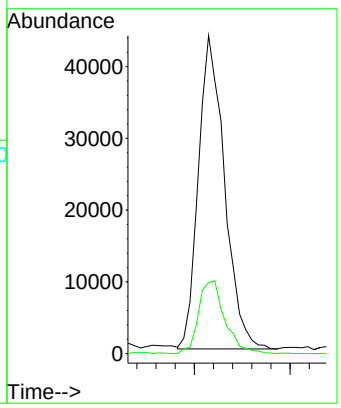
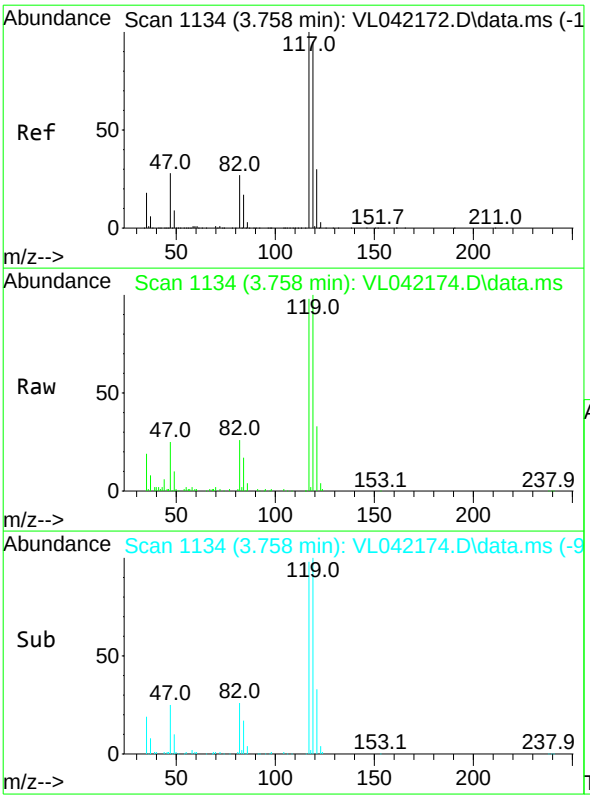


#34
2-Butanone
Concen: 1.063 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 41423

Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2

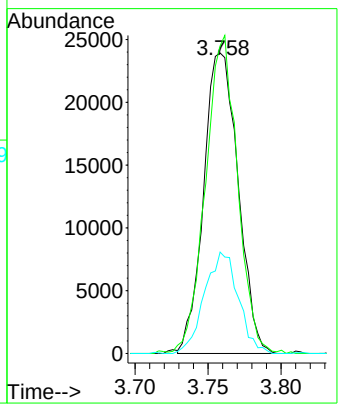




#35
Carbon Tetrachloride
Concen: 0.952 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:117 Resp: 39345

Ion	Ratio	Lower	Upper
117	100		
119	101.8	76.2	114.2
121	33.7	24.2	36.4



Instrument :
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ClientSampleId :
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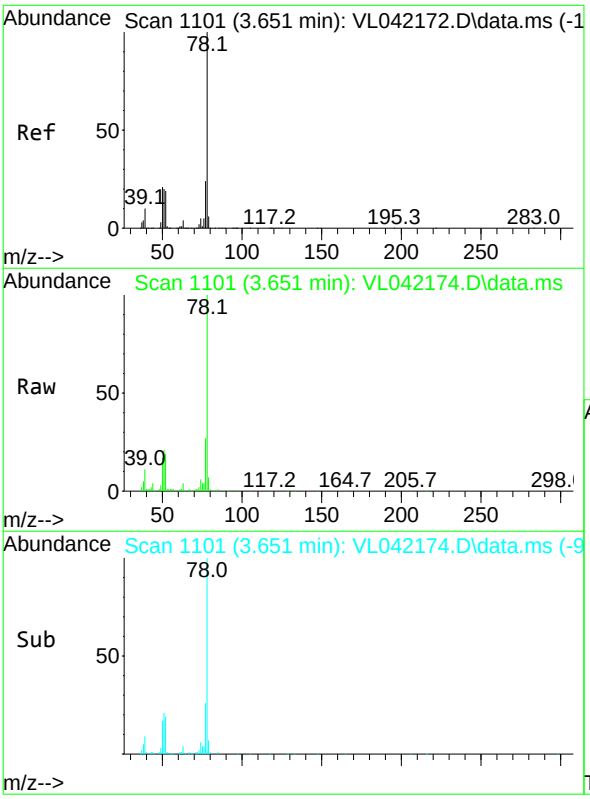
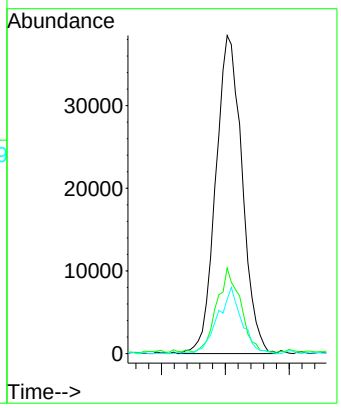
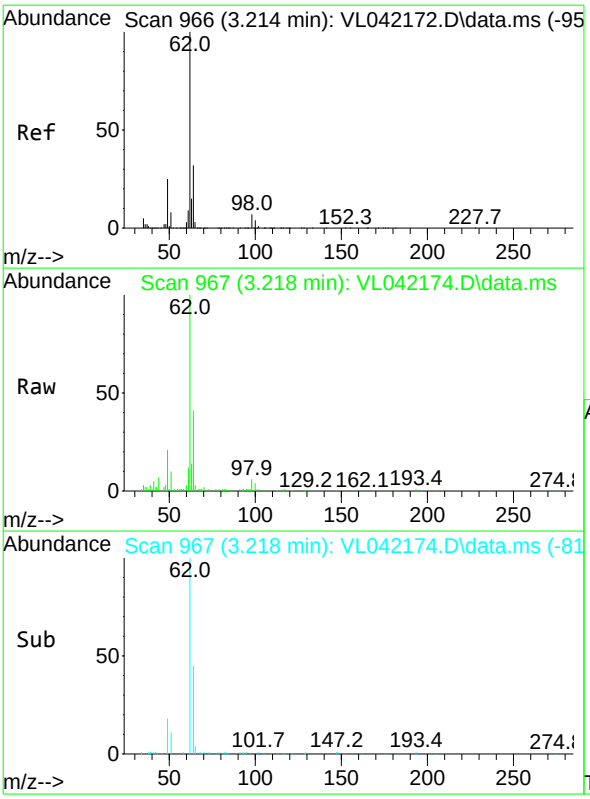


#36
Benzene
Concen: 1.036 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 78 Resp: 55156

Ion	Ratio	Lower	Upper
78	100		
77	26.5	19.1	28.7
50	17.1	16.6	24.8





#37
1,2-Dichloroethane
Concen: 1.002 ppbv
RT: 3.218 min Scan# 96
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 62 Resp: 30543

Ion	Ratio	Lower	Upper
62	100		
98	7.6	5.4	8.2

Instrument :
MSVOA_L
ClientSampleId :
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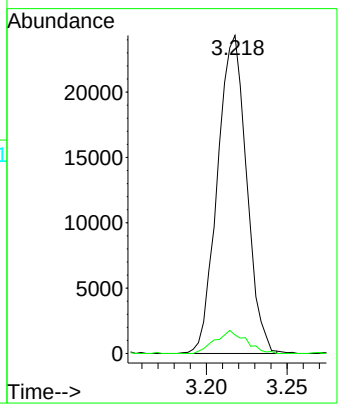
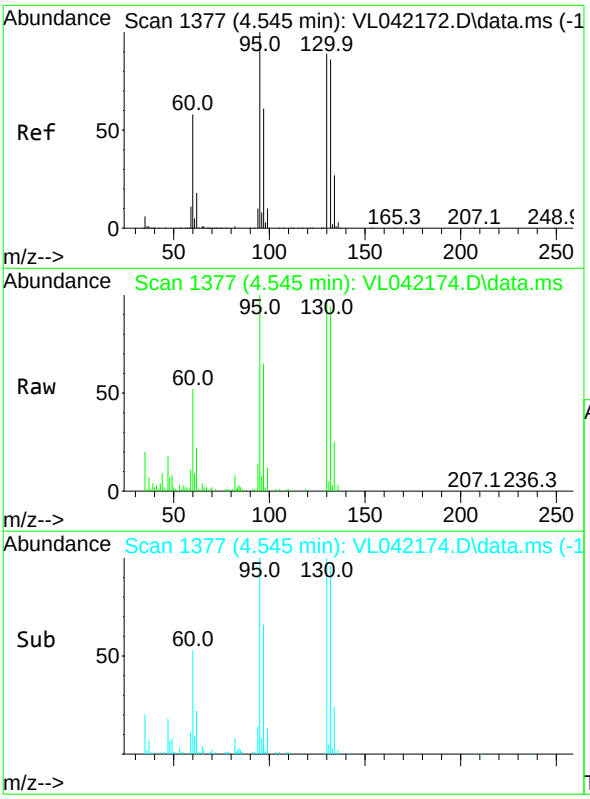
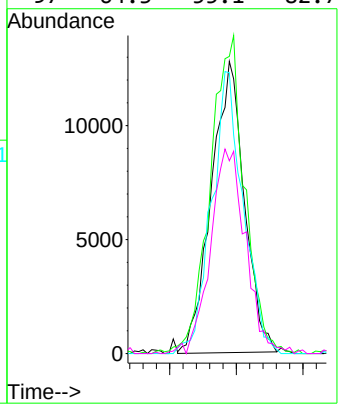


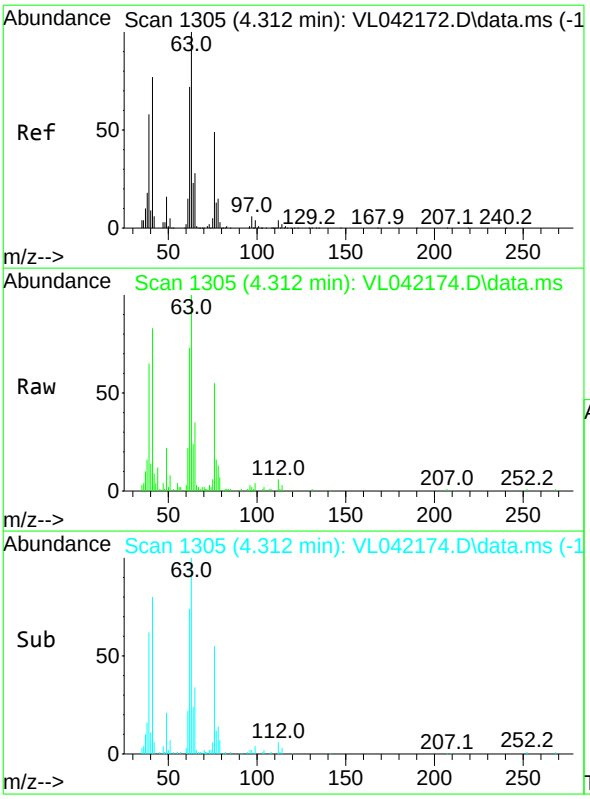


#38
Trichloroethene
Concen: 0.985 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:130 Resp: 21906

Ion	Ratio	Lower	Upper
130	100		
95	100.2	89.8	134.8
132	95.3	77.4	116.2
97	64.3	55.1	82.7

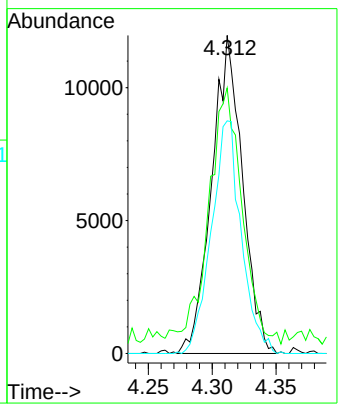




#39
1,2-Dichloropropane
Concen: 1.032 ppbv
RT: 4.312 min Scan# 13
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 63 Resp: 20020

Ion	Ratio	Lower	Upper
63	100		
41	76.8	61.7	92.5
62	73.1	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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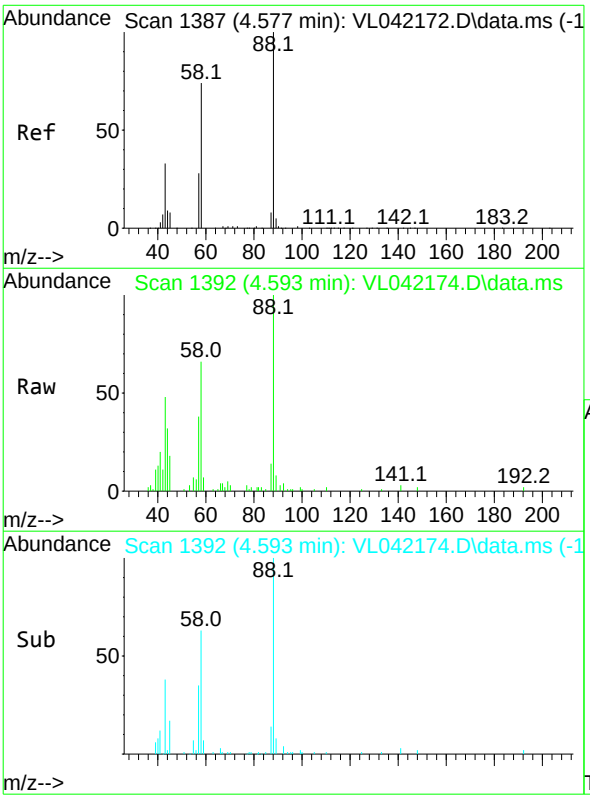
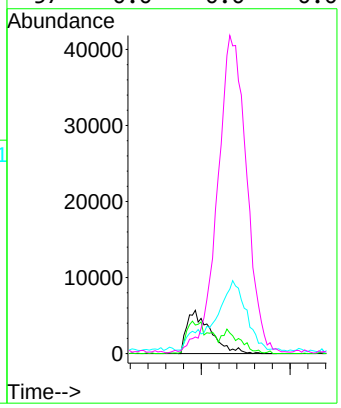
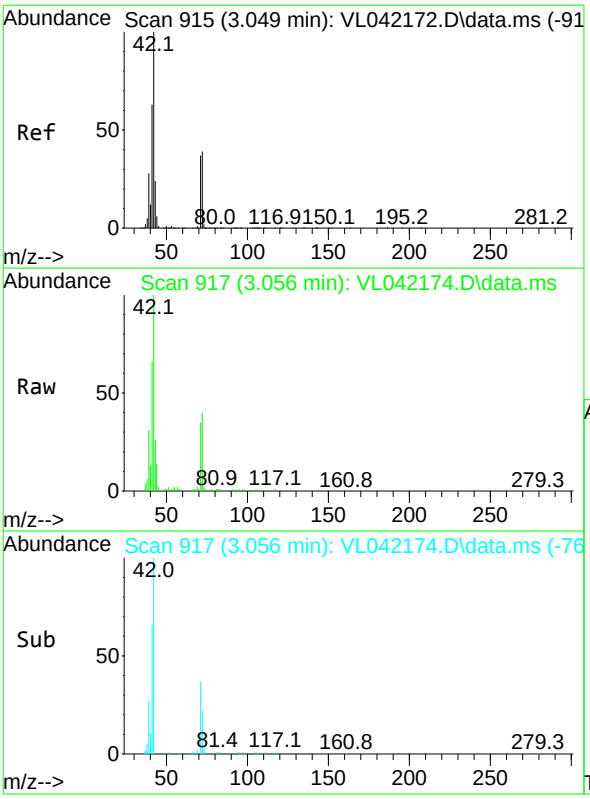


#40
1,4-Dioxane
Concen: 1.052 ppbv m
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 88 Resp: 10592

Ion	Ratio	Lower	Upper
88	100		
58	115.3	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0

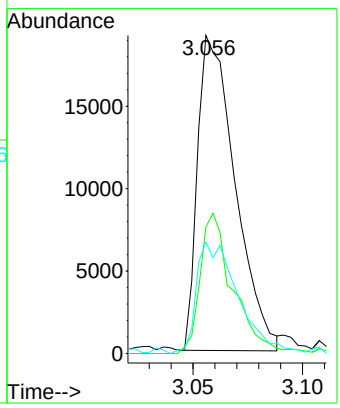




#41
Tetrahydrofuran
Concen: 1.029 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 42 Resp: 22818

Ion	Ratio	Lower	Upper
42	100		
72	39.4	31.4	47.0
71	40.8	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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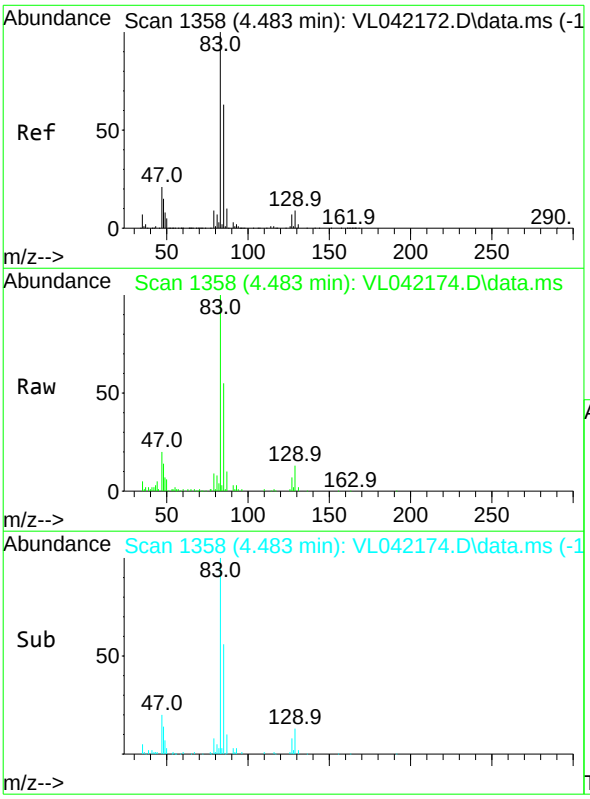
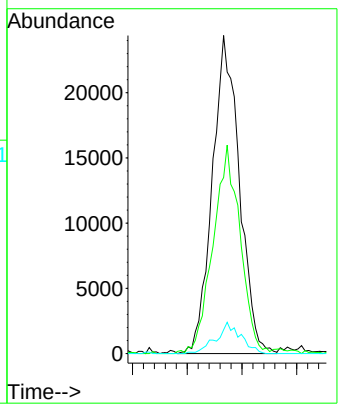
Supervised By :Mahesh Dadoda 04/03/2025

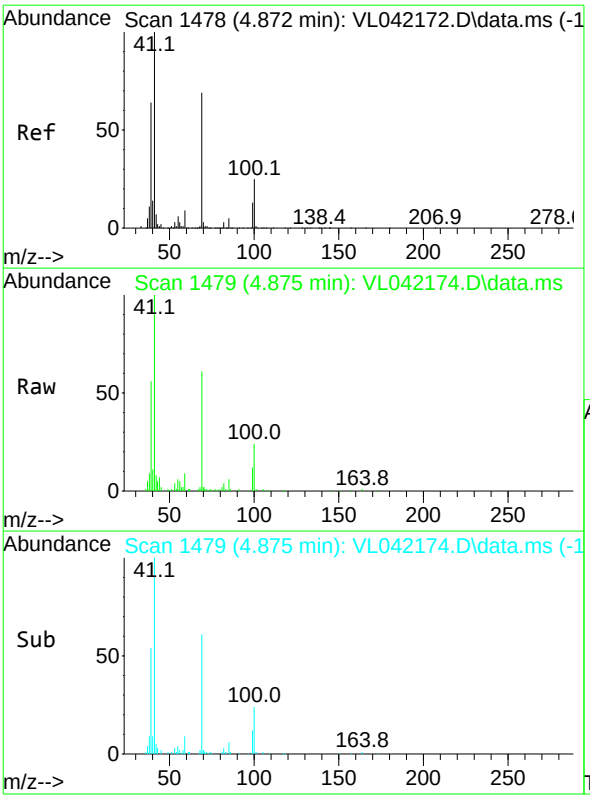


#42
Bromodichloromethane
Concen: 0.996 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 41864

Ion	Ratio	Lower	Upper
83	100		
85	54.7	50.5	75.7
127	7.5	5.9	8.9





#43
Methyl Methacrylate
Concen: 1.078 ppbv m
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 69 Resp: 24233

Ion	Ratio	Lower	Upper
69	100		
41	146.1	123.8	185.6
100	0.0	28.4	42.6#

Instrument :
MSVOA_L
ClientSampleId :
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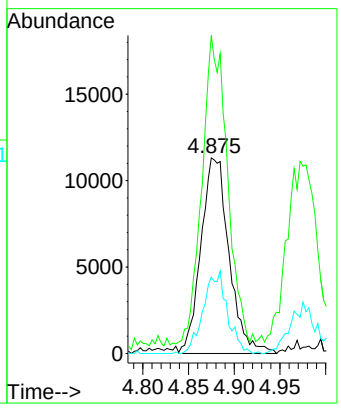
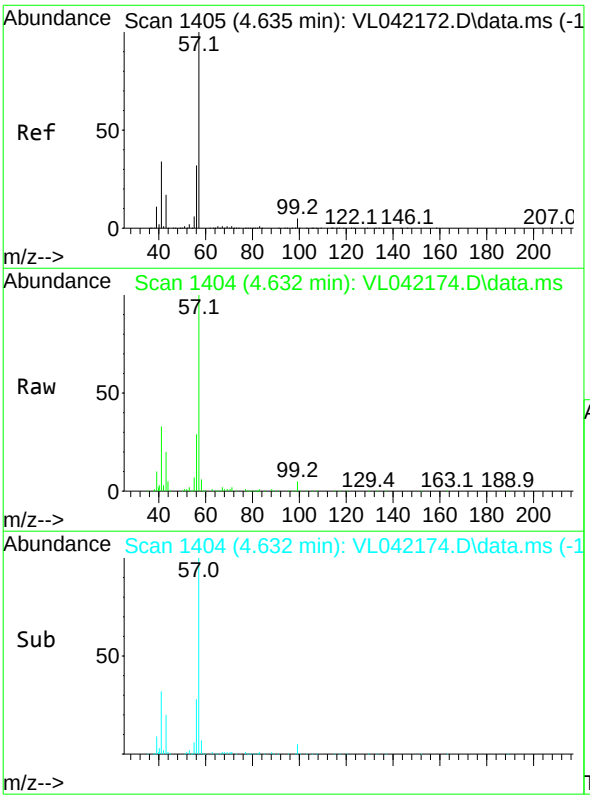
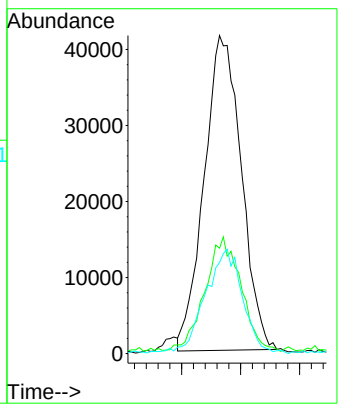


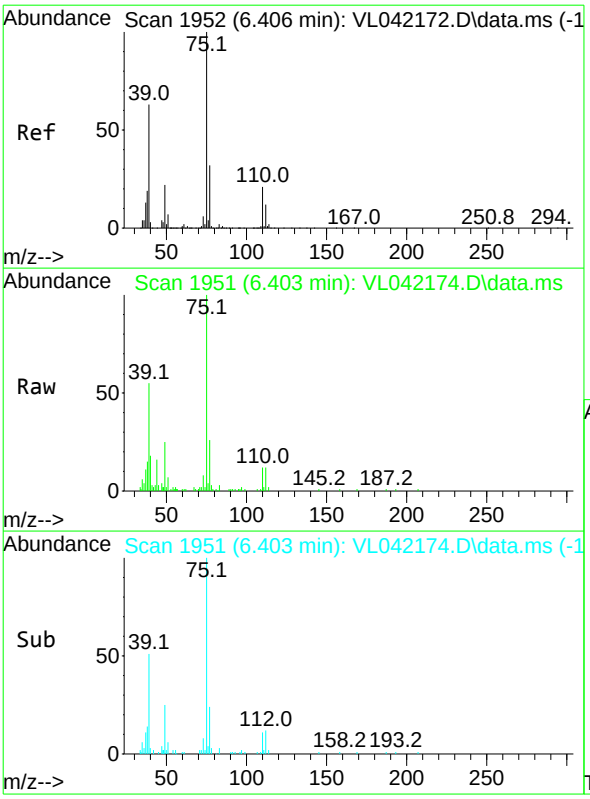


#44
2,2,4-Trimethylpentane
Concen: 1.008 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 90727

Ion	Ratio	Lower	Upper
57	100		
41	35.9	26.8	40.2
56	33.7	25.6	38.4

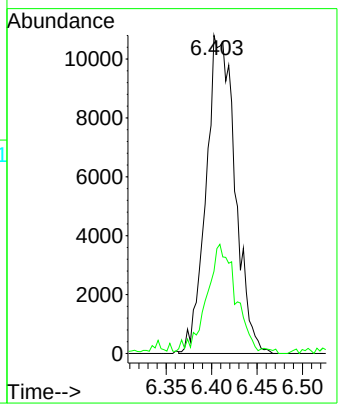




#45
t-1,3-Dichloropropene
Concen: 0.992 ppbv m
RT: 6.403 min Scan# 19
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 75 Resp: 23993

Ion	Ratio	Lower	Upper
75	100		
77	25.9	26.0	39.0#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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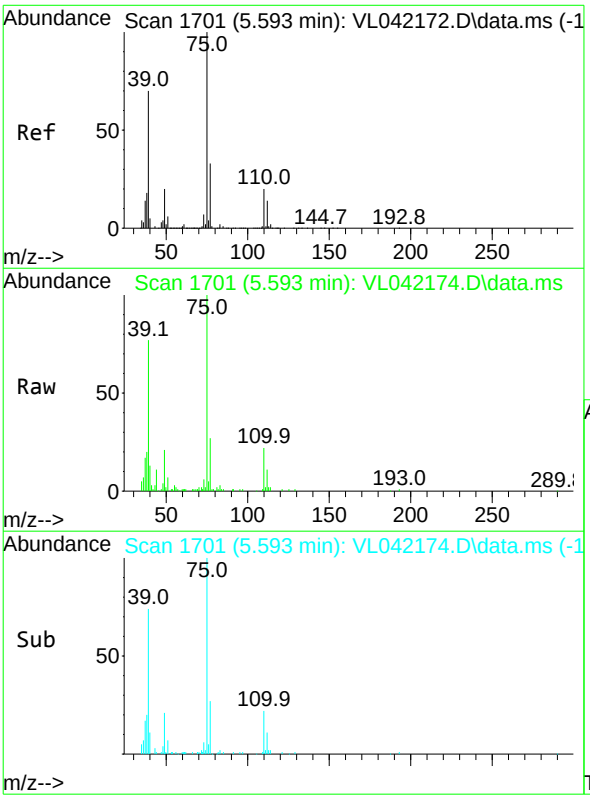
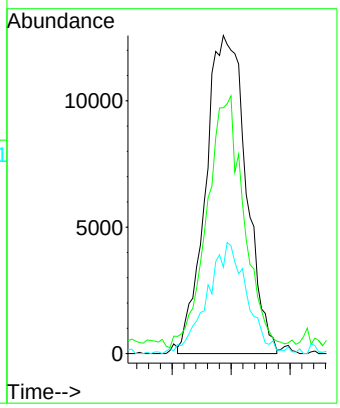
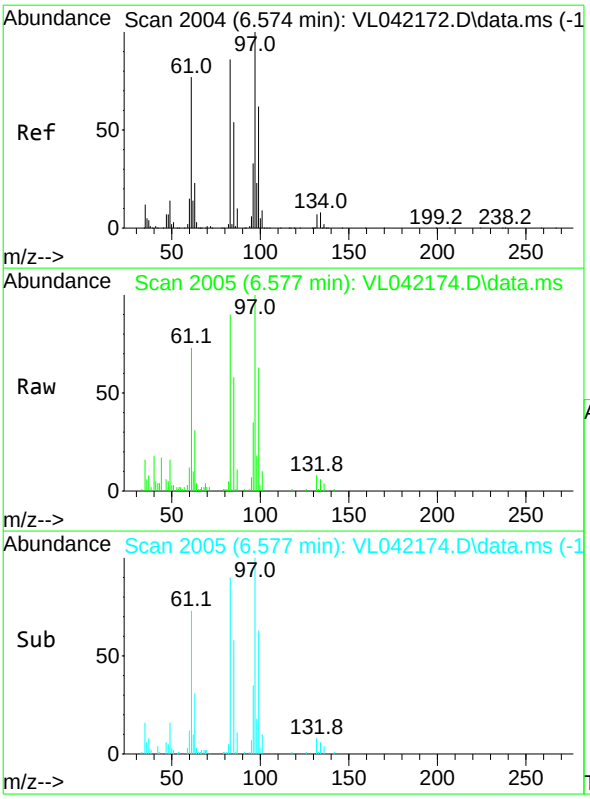


#46
cis-1,3-Dichloropropene
Concen: 1.014 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 75 Resp: 30063

Ion	Ratio	Lower	Upper
75	100		
39	74.2	55.8	83.6
77	26.4	26.0	39.0

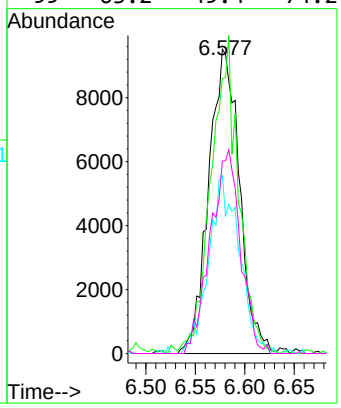




#47
1,1,2-Trichloroethane
Concen: 1.002 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 97 Resp: 20546

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	58.4	43.1	64.7
99	63.2	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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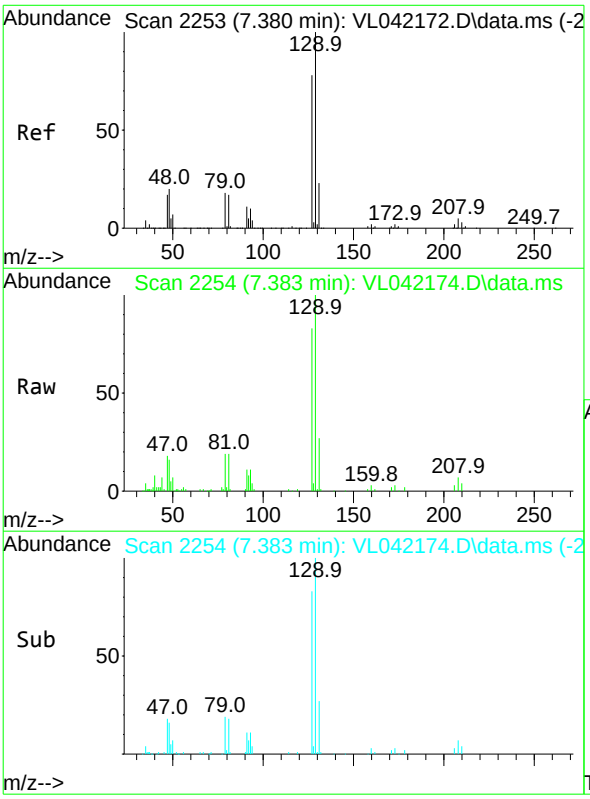
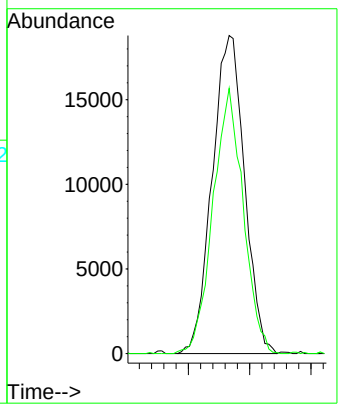
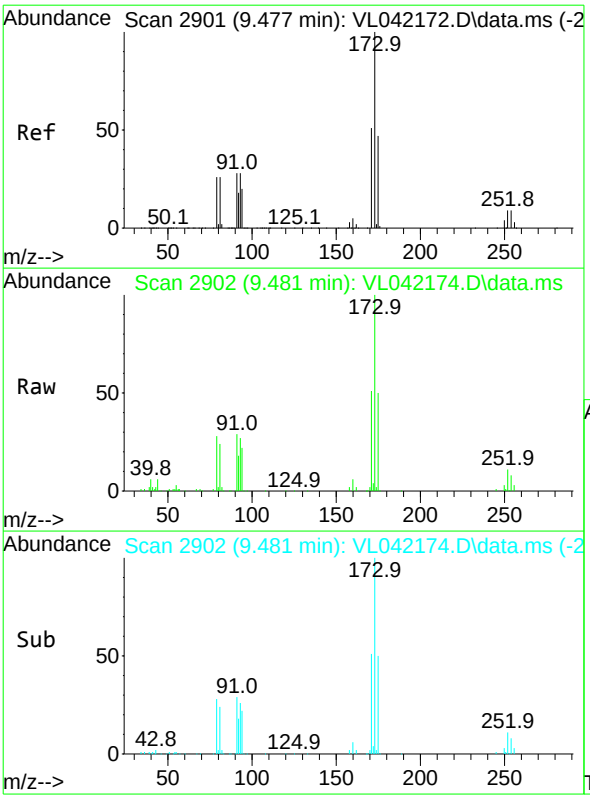


#48
Dibromochloromethane
Concen: 0.991 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:129 Resp: 34425

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2

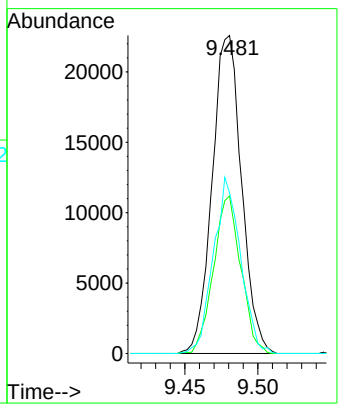




#49
Bromoform
Concen: 1.013 ppbv
RT: 9.481 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:173 Resp: 31610

Ion	Ratio	Lower	Upper
173	100		
175	46.1	38.6	57.8
171	51.3	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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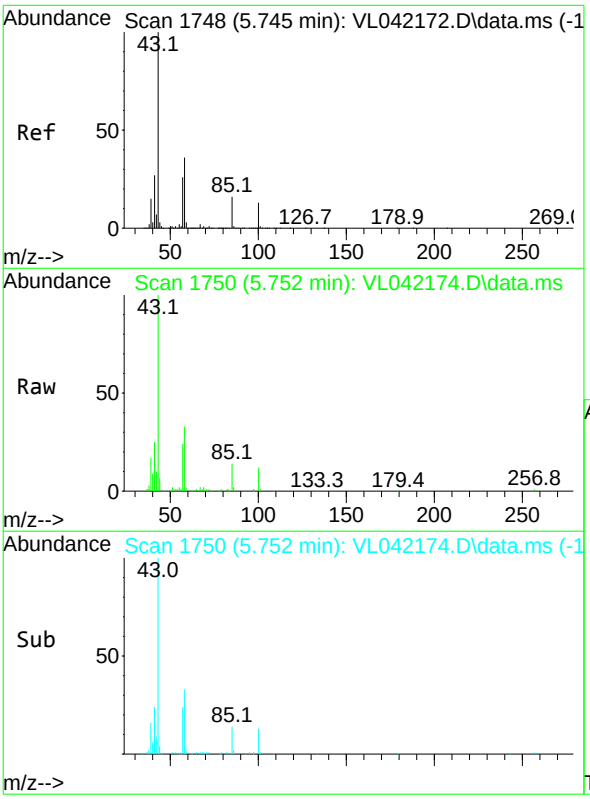
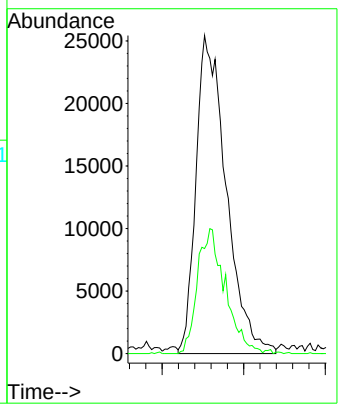
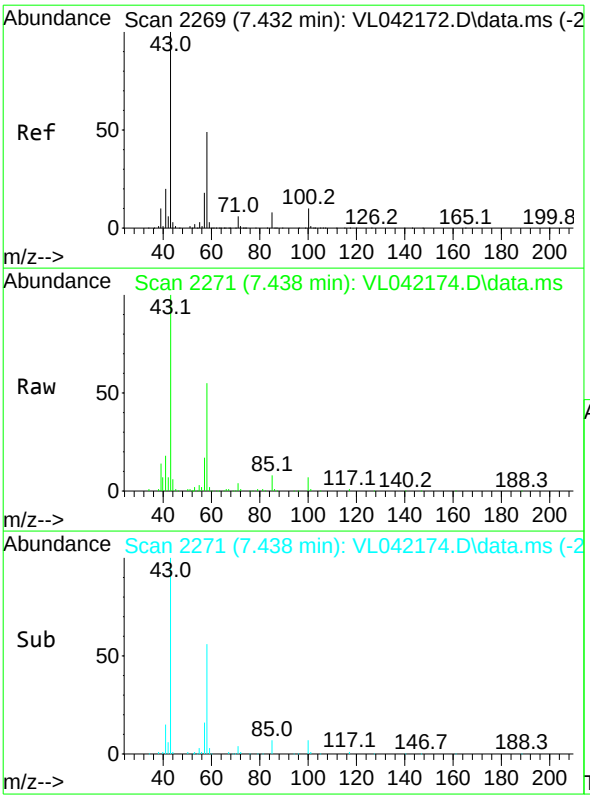


#50
4-Methyl-2-Pentanone
Concen: 1.056 ppbv m
RT: 5.752 min Scan# 1750
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 65226

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#

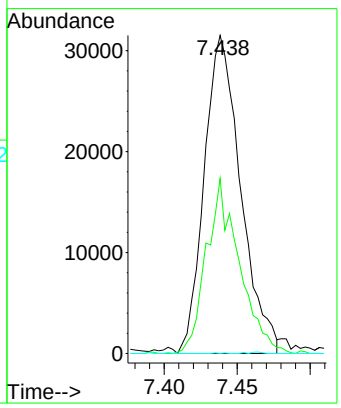




#51
2-Hexanone
Concen: 1.067 ppbv
RT: 7.438 min Scan# 22
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 54680

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.2	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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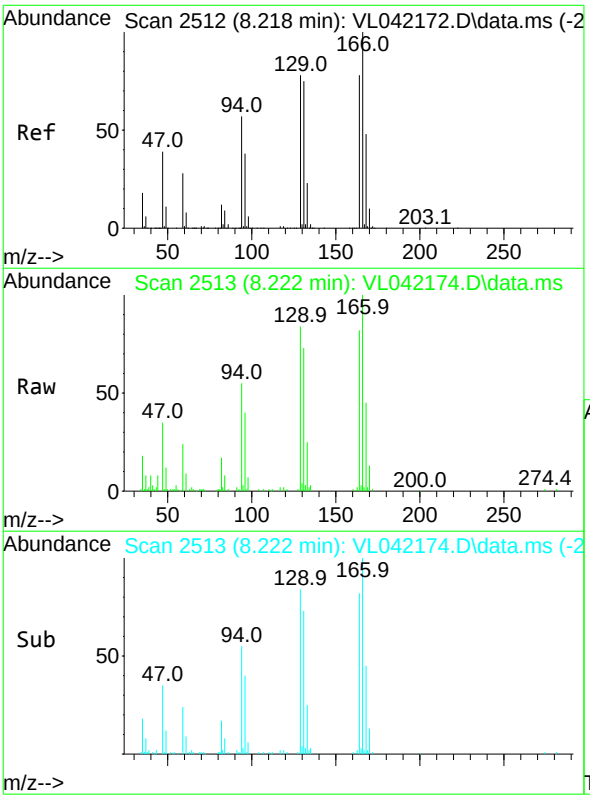
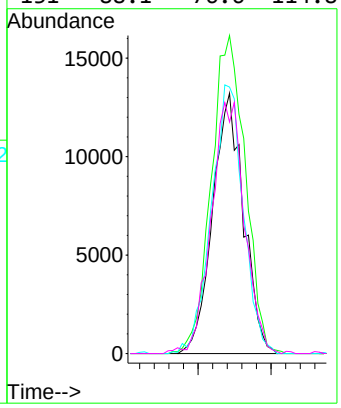
Supervised By :Mahesh Dadoda 04/03/2025

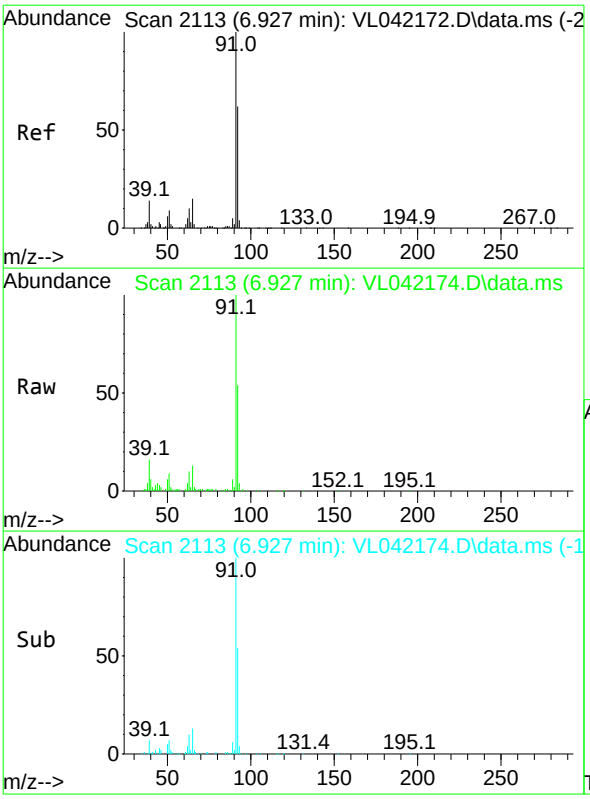


#52
Tetrachloroethene
Concen: 0.919 ppbv
RT: 8.222 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:164 Resp: 19415

Ion	Ratio	Lower	Upper
164	100		
166	121.4	102.5	153.7
129	102.4	79.8	119.8
131	88.1	76.6	114.8

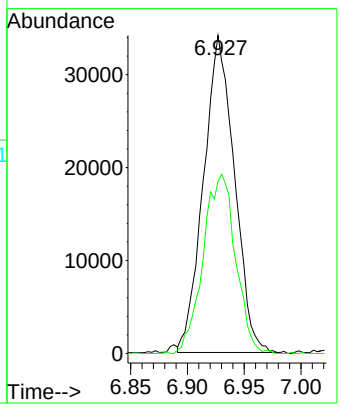




#53
Toluene
Concen: 1.023 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 64612

Ion	Ratio	Lower	Upper
91	100		
92	59.4	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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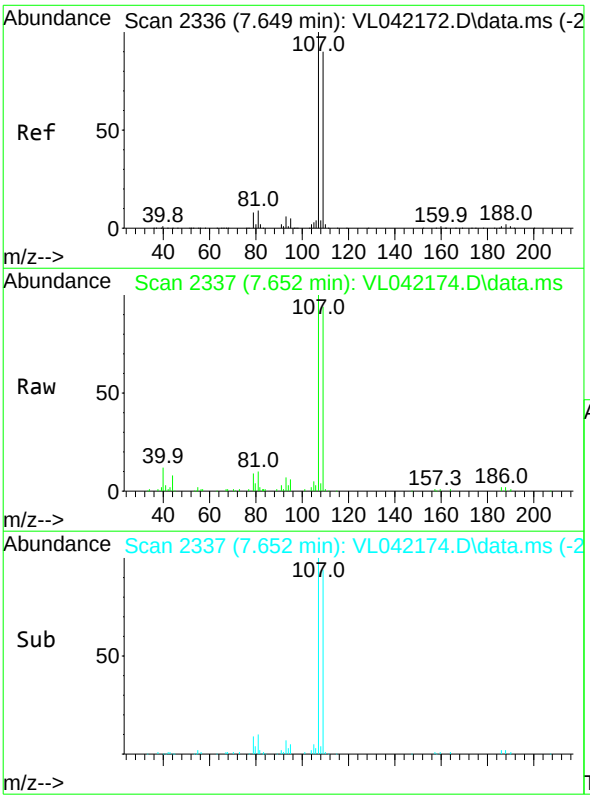
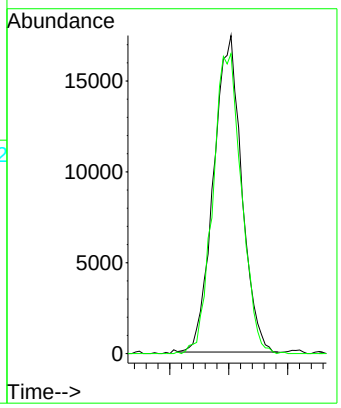
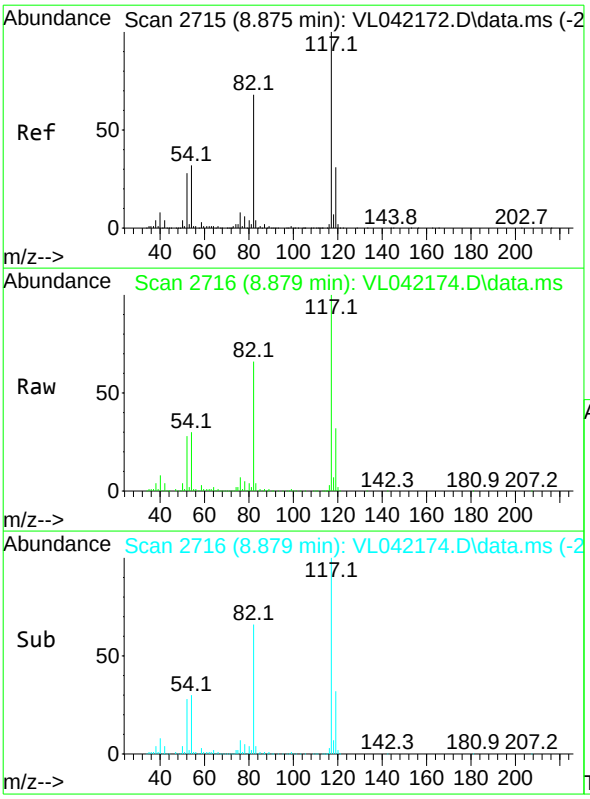


#54
1,2-Dibromoethane
Concen: 1.009 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:107 Resp: 28879

Ion	Ratio	Lower	Upper
107	100		
109	94.8	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:117 Resp: 499830

Ion	Ratio	Lower	Upper
117	100		
82	67.6	55.8	83.6
119	32.2	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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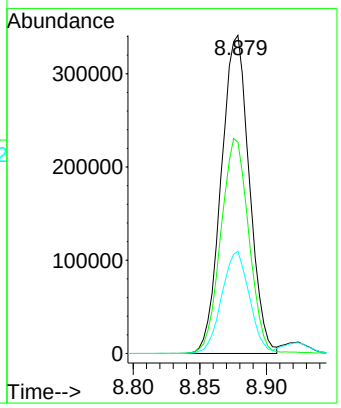
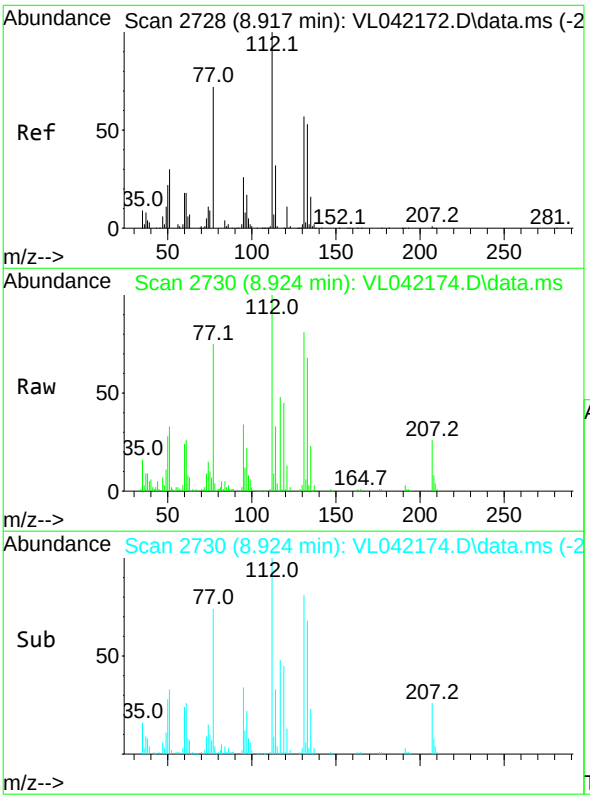
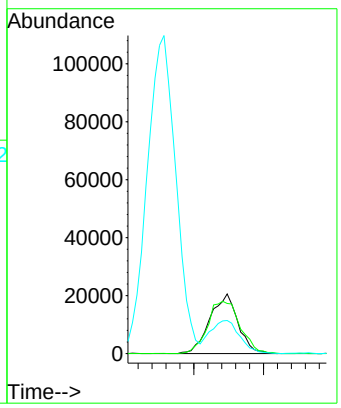


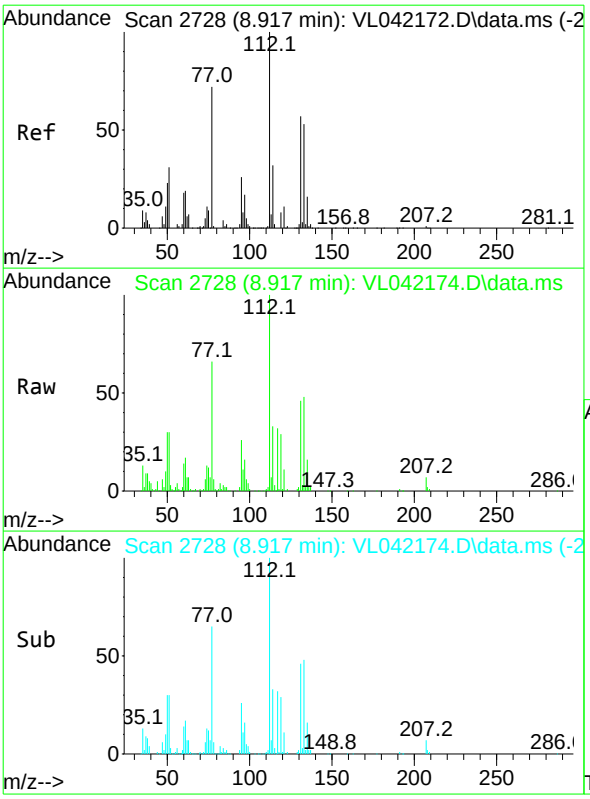


#56
1,1,1,2-Tetrachloroethane
Concen: 1.045 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:131 Resp: 28764

Ion	Ratio	Lower	Upper
131	100		
133	101.7	76.6	114.8
119	44.1	49.8	74.6#





#57
Chlorobenzene
Concen: 1.032 ppbv
RT: 8.917 min Scan# 27
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:112 Resp: 48930

Ion	Ratio	Lower	Upper
112	100		
77	65.0	58.2	87.2
114	32.9	29.1	35.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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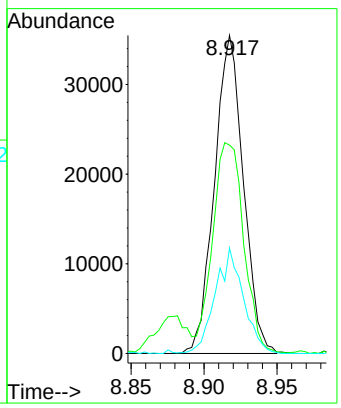
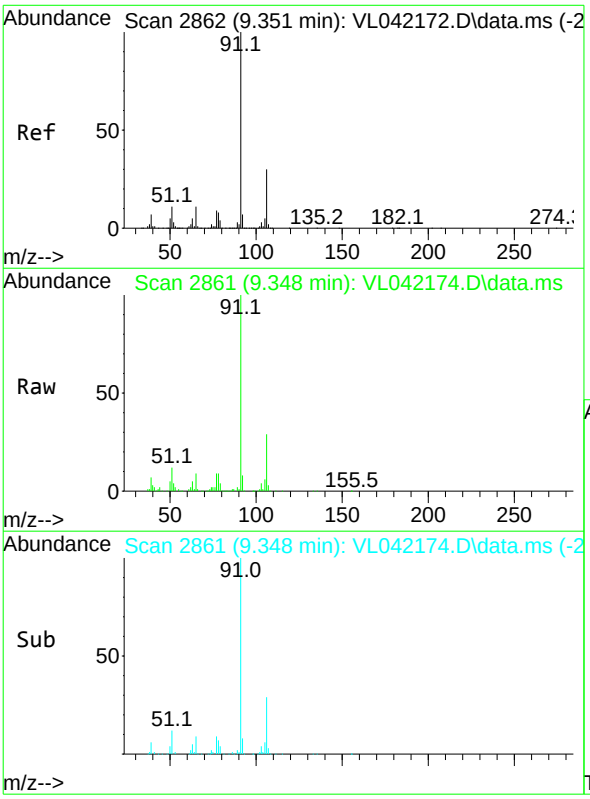
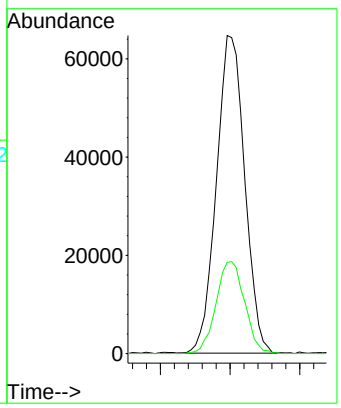


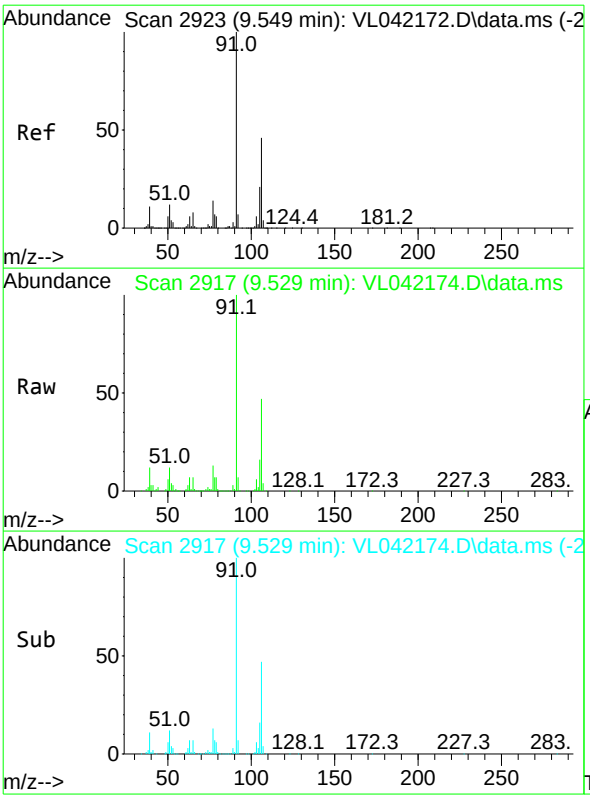


#58
Ethyl Benzene
Concen: 1.026 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 91086

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2





#59
m/p-Xylene
Concen: 2.073 ppbv m
RT: 9.529 min Scan# 29
Delta R.T. -0.019 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 147162

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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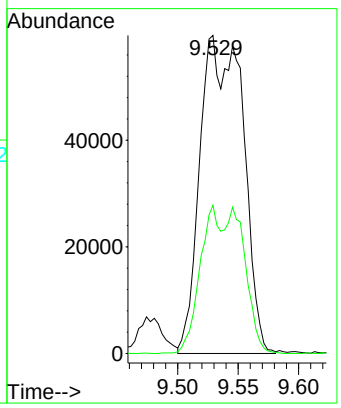
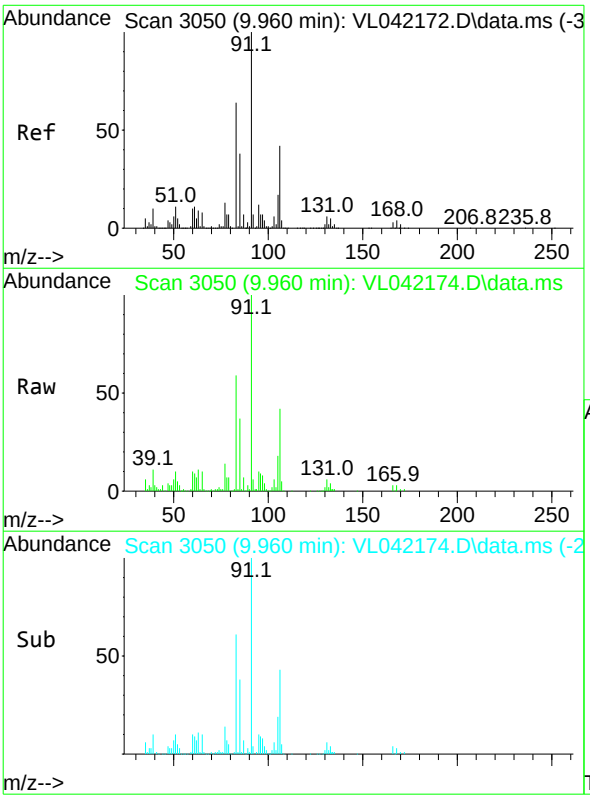
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

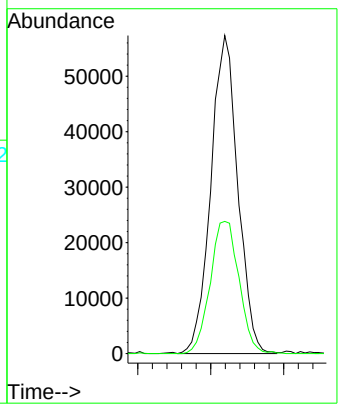


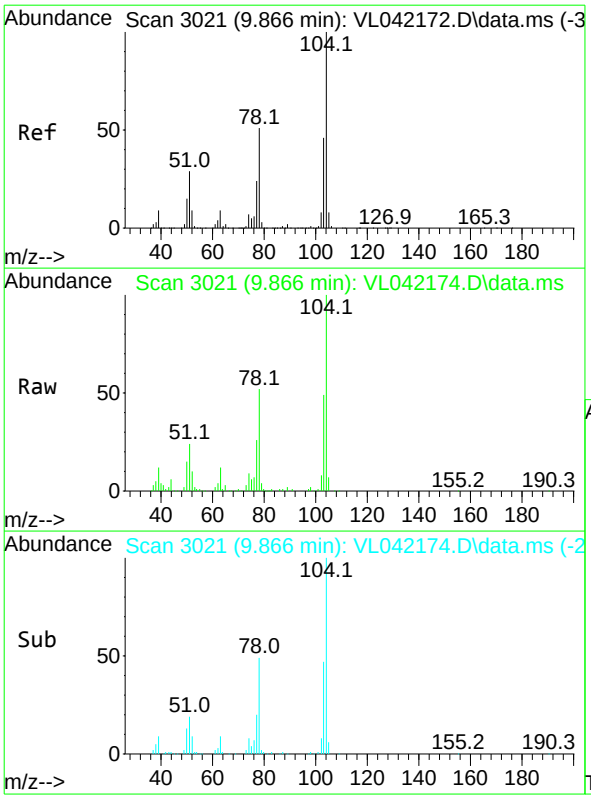


#60
o-Xylene
Concen: 1.037 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 73702

Ion	Ratio	Lower	Upper
91	100		
106	44.3	20.8	62.5

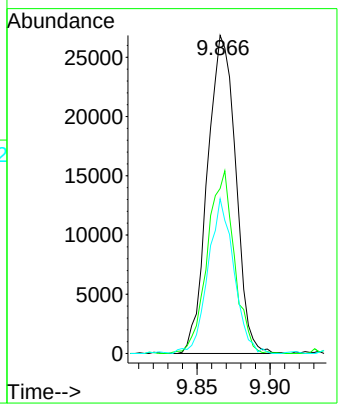




#61
Styrene
Concen: 1.027 ppbv
RT: 9.866 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:104 Resp: 36110

Ion	Ratio	Lower	Upper
104	100		
78	54.9	41.8	62.6
103	45.1	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
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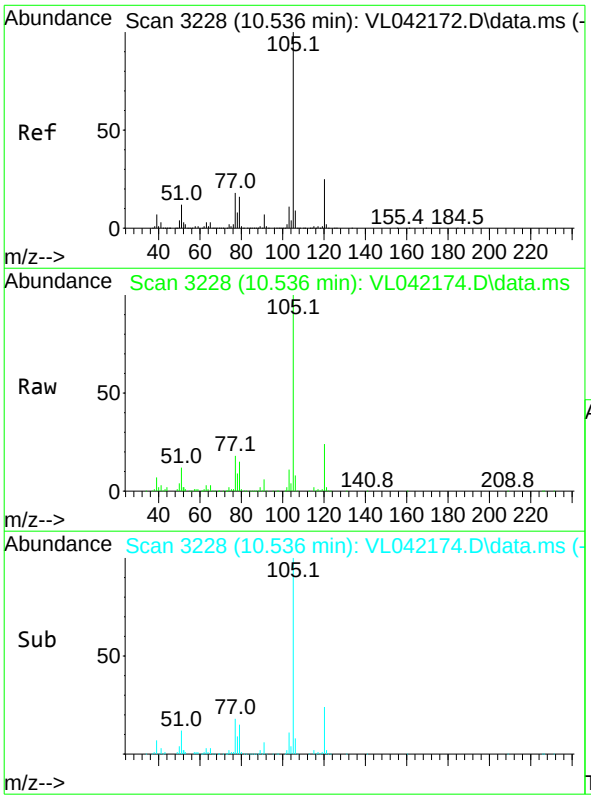
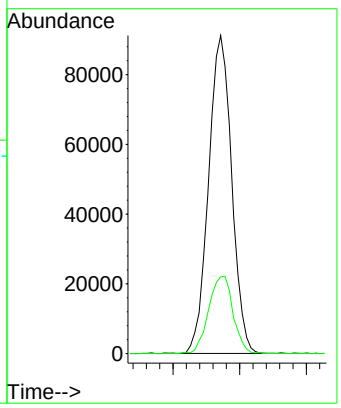
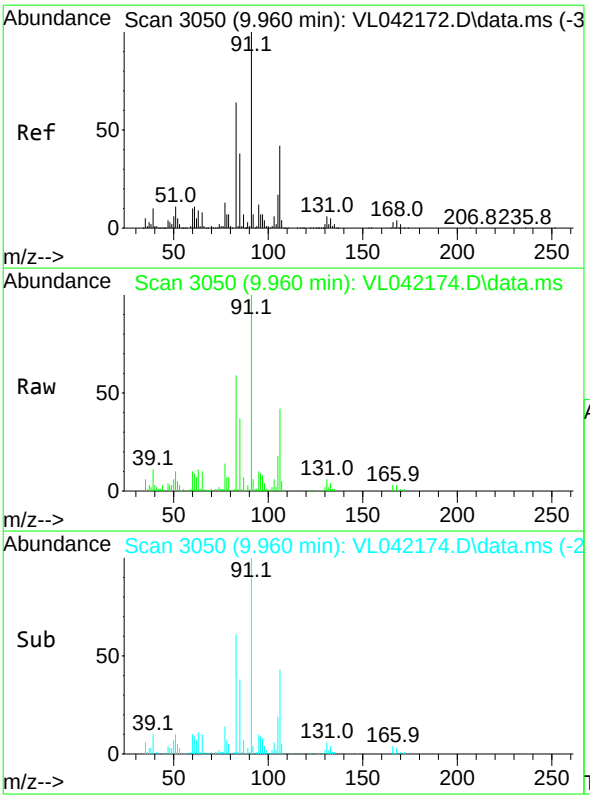


#62
Isopropylbenzene
Concen: 1.034 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 109897

Ion	Ratio	Lower	Upper
105	100		
120	25.7	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 1.029 ppbv
RT: 9.960 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 44431

Ion	Ratio	Lower	Upper
83	100		
131	10.6	4.8	14.4
85	64.0	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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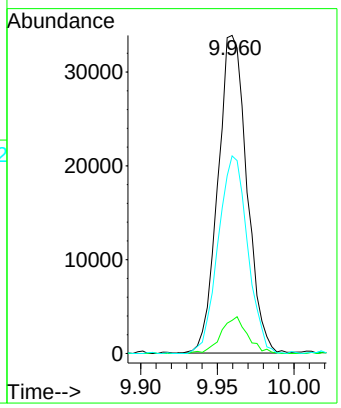
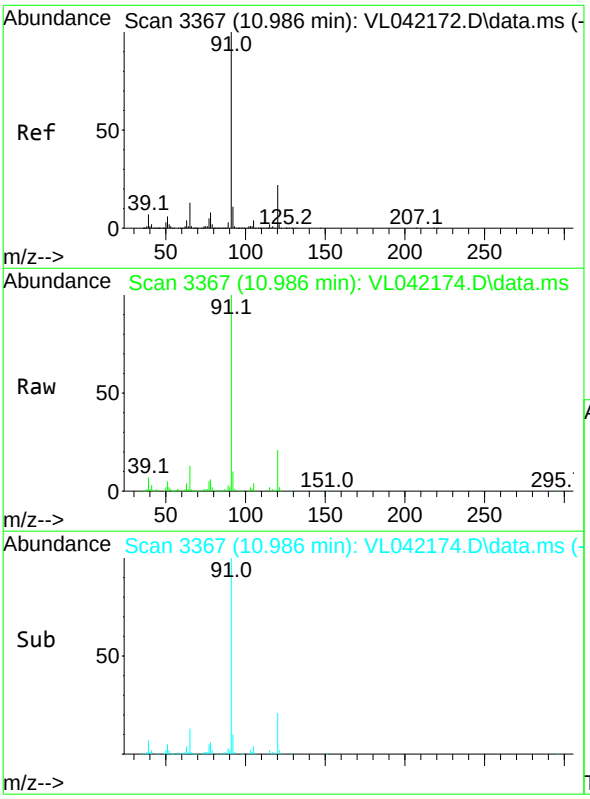
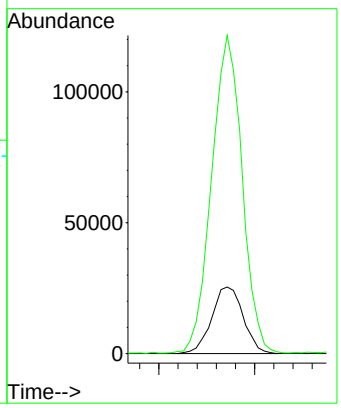


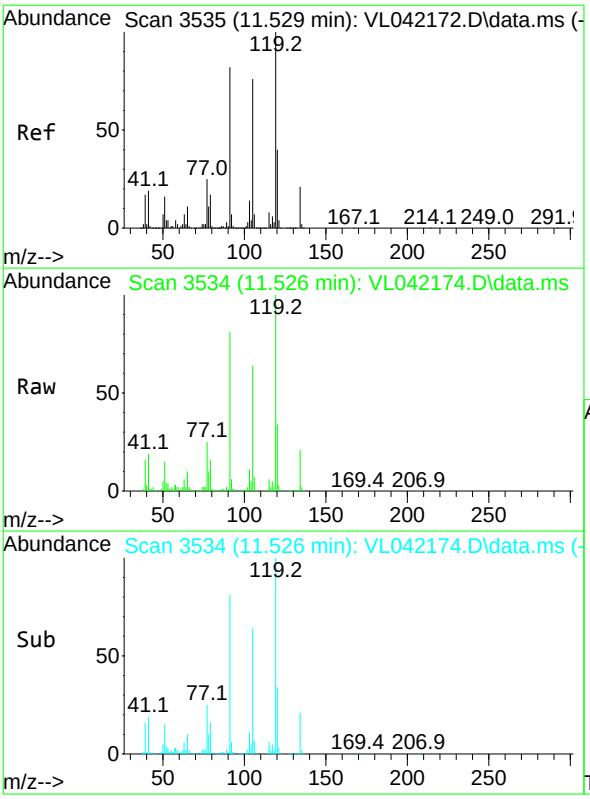


#64
n-propylbenzene
Concen: 1.062 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:120 Resp: 29054

Ion	Ratio	Lower	Upper
120	100		
91	466.9	376.9	565.3





#65
tert-Butylbenzene
Concen: 1.053 ppbv
RT: 11.526 min Scan# 35
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:119 Resp: 103520

Ion	Ratio	Lower	Upper
119	100		
91	85.9	66.0	99.0
134	22.1	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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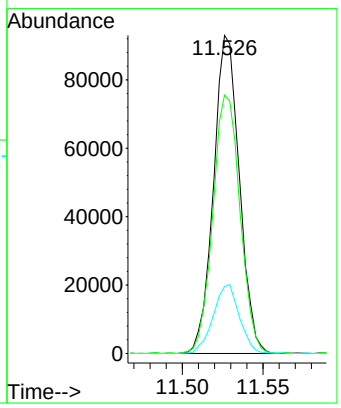
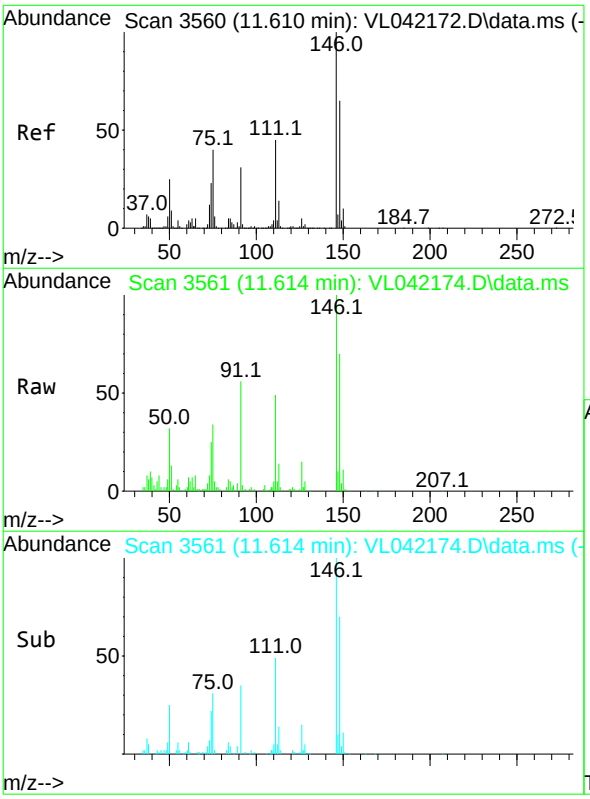
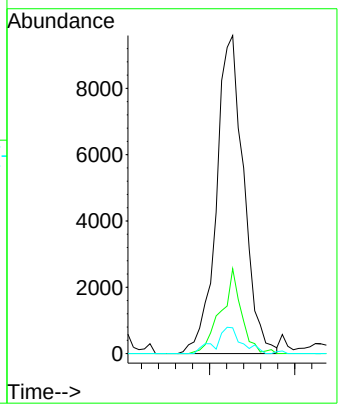


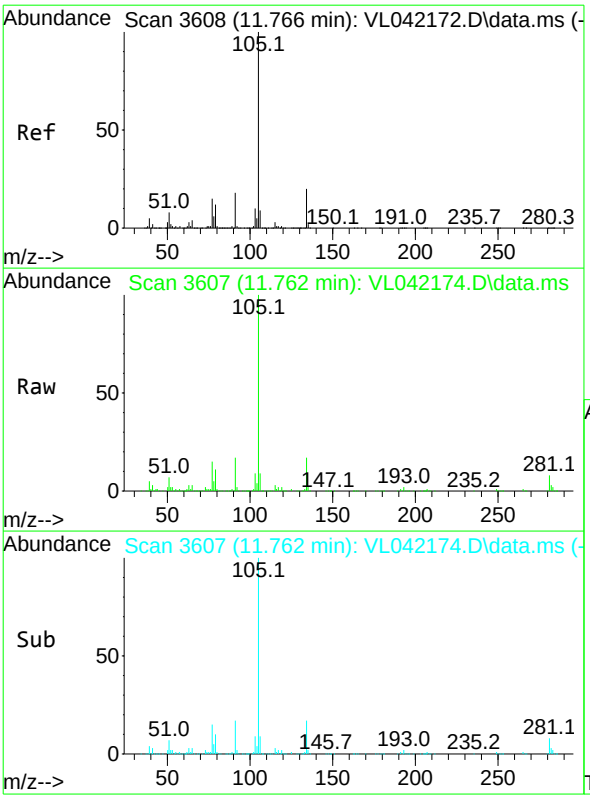


#66
Benzyl Chloride
Concen: 1.022 ppbv
RT: 11.614 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 10660

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	8.0	4.5	6.7#





#67
sec-Butylbenzene
Concen: 1.095 ppbv
RT: 11.762 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 149660

Ion	Ratio	Lower	Upper
105	100		
134	18.1	15.5	23.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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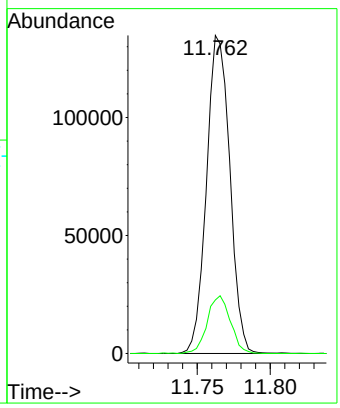
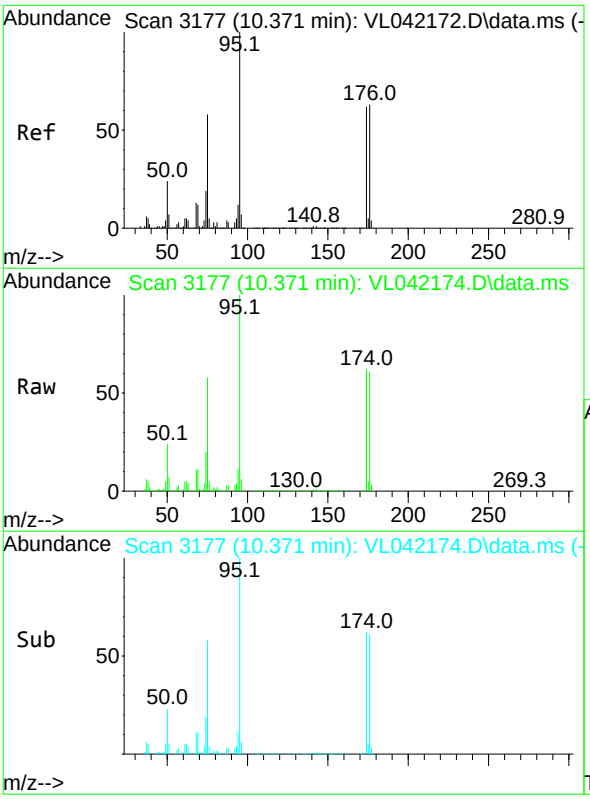
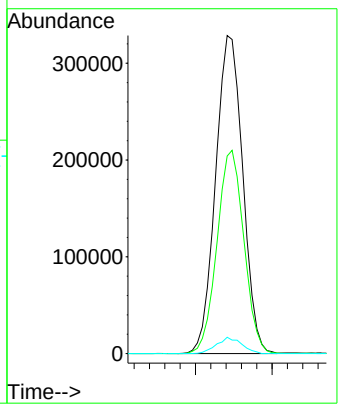


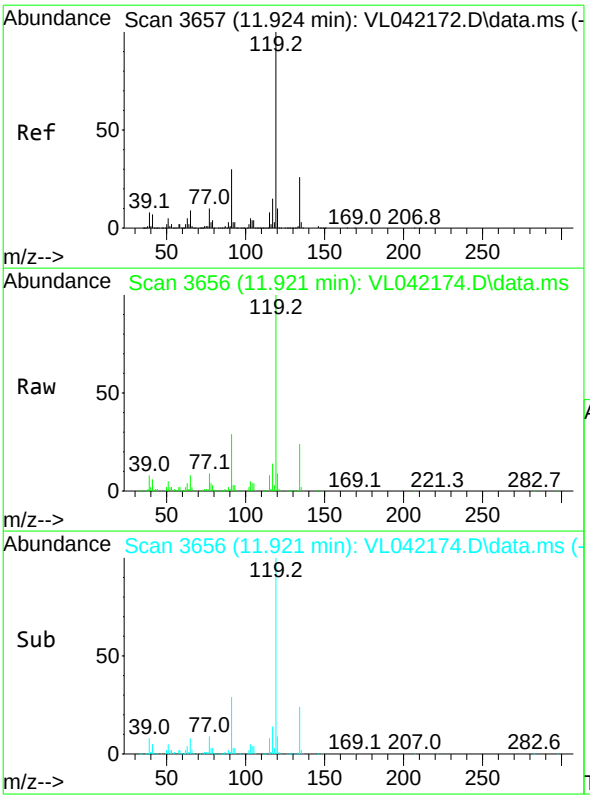


#68
1-Bromo-4-Fluorobenzene
Concen: 9.861 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 95 Resp: 404753

Ion	Ratio	Lower	Upper
95	100		
174	63.4	50.6	76.0
175	4.7	3.8	5.6





#69
p-Isopropyltoluene
Concen: 1.084 ppbv
RT: 11.921 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:119 Resp: 127509

Ion	Ratio	Lower	Upper
119	100		
134	24.6	20.4	30.6
91	30.0	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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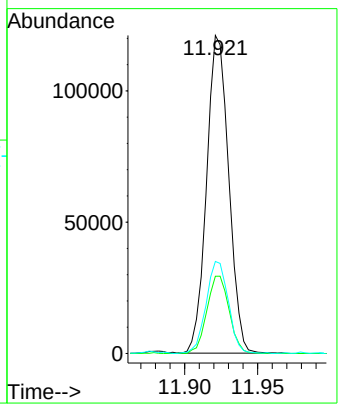
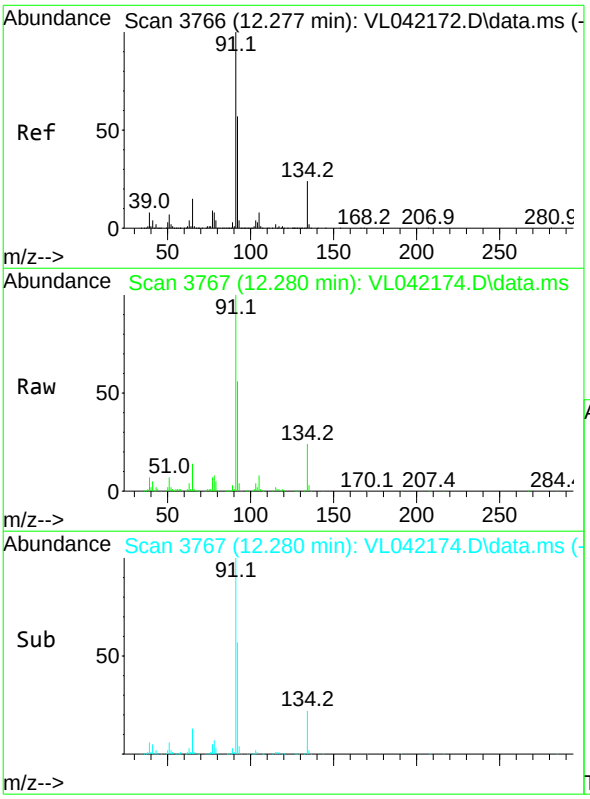
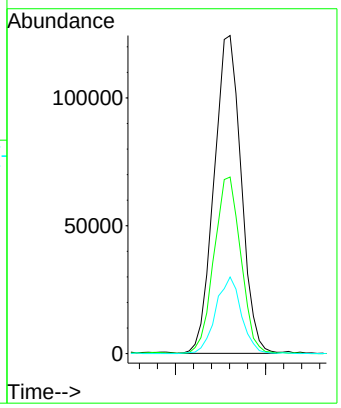


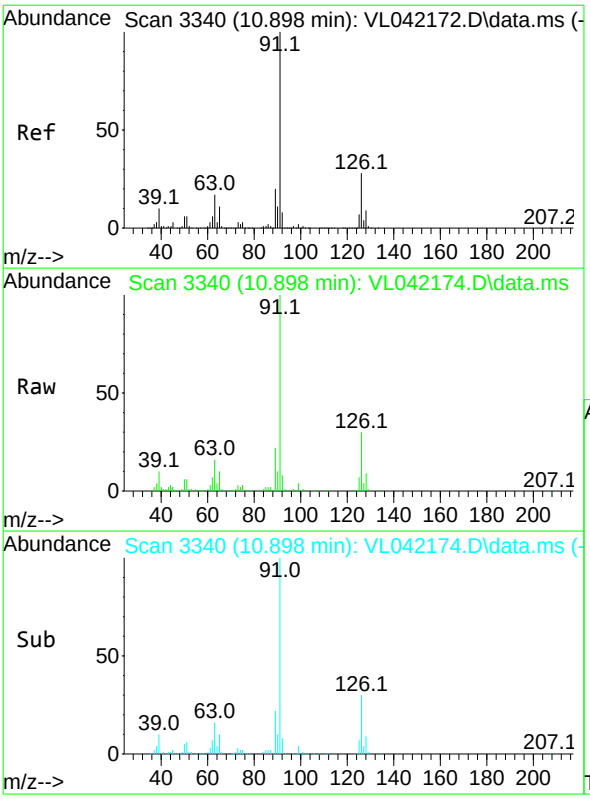


#70
n-Butylbenzene
Concen: 1.079 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 129860

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.9	67.3
134	22.8	19.2	28.8

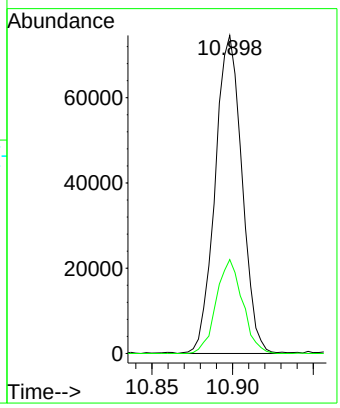




#71
2-Chlorotoluene
Concen: 1.047 ppbv
RT: 10.898 min Scan# 33
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 86356

Ion	Ratio	Lower	Upper
91	100		
126	28.8	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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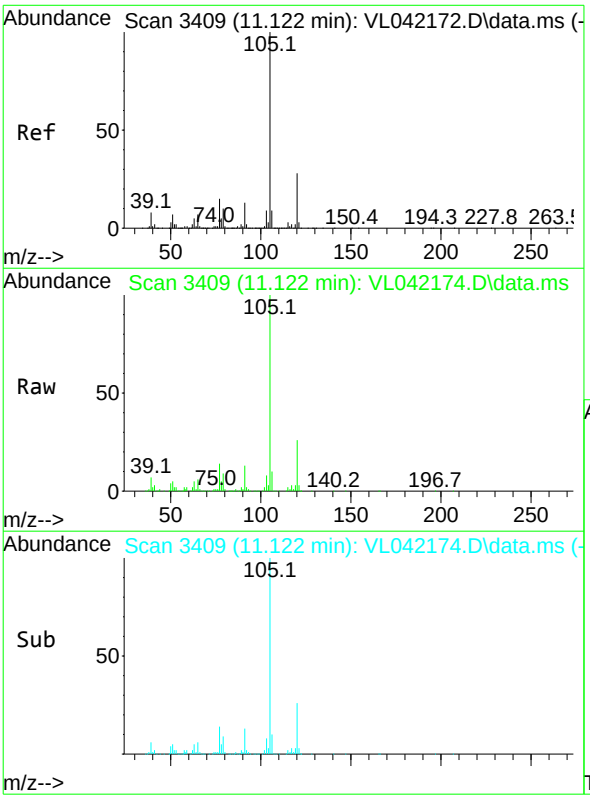
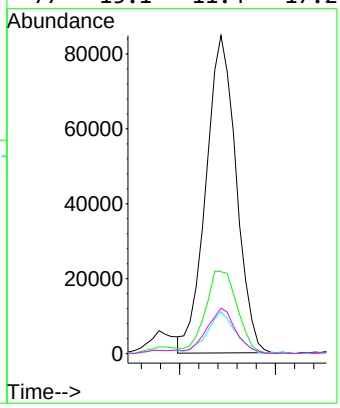
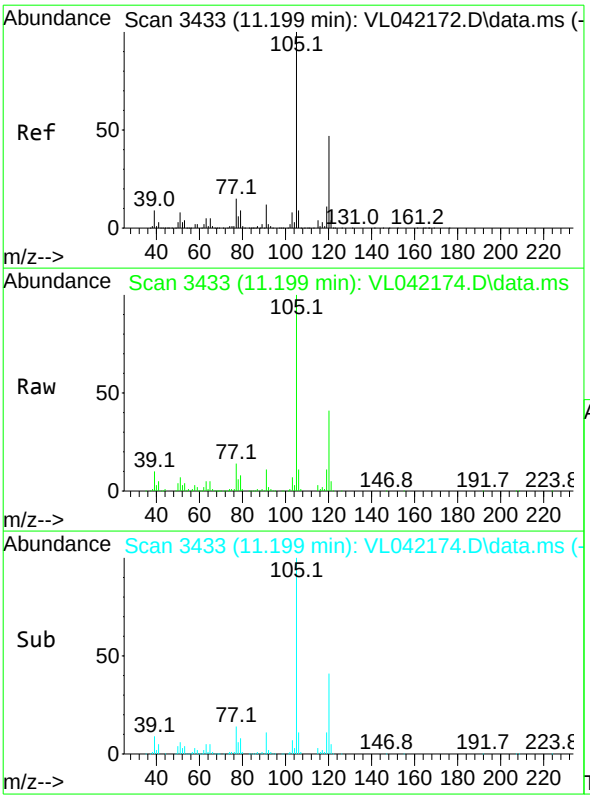


#72
4-Ethyltoluene
Concen: 1.050 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 92912

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.5	10.3	15.5
77	15.1	11.4	17.2

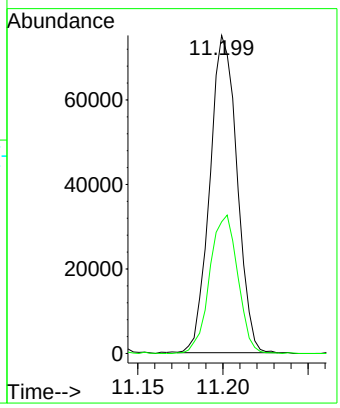




#73
1,3,5-Trimethylbenzene
Concen: 1.080 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 83497

Ion	Ratio	Lower	Upper
105	100		
120	41.3	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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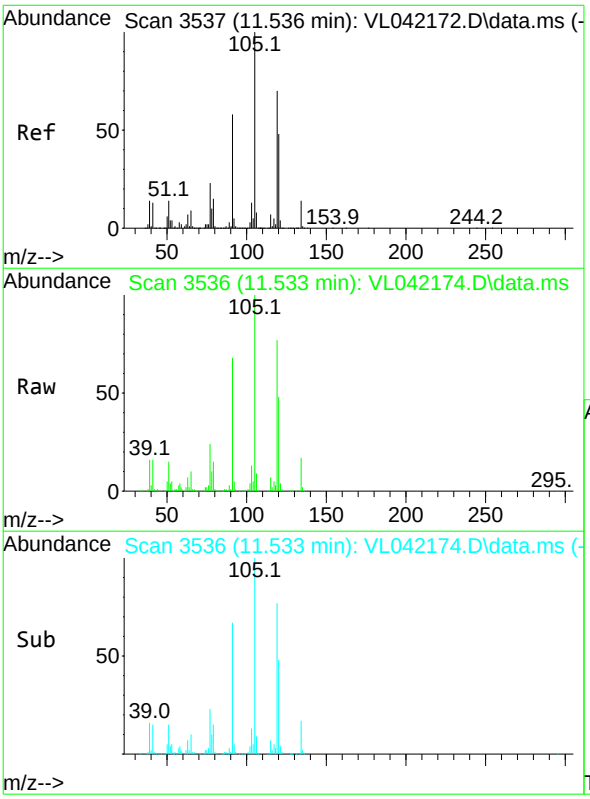
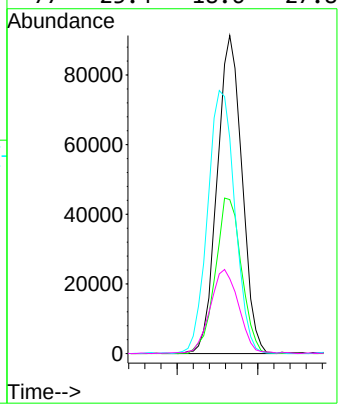
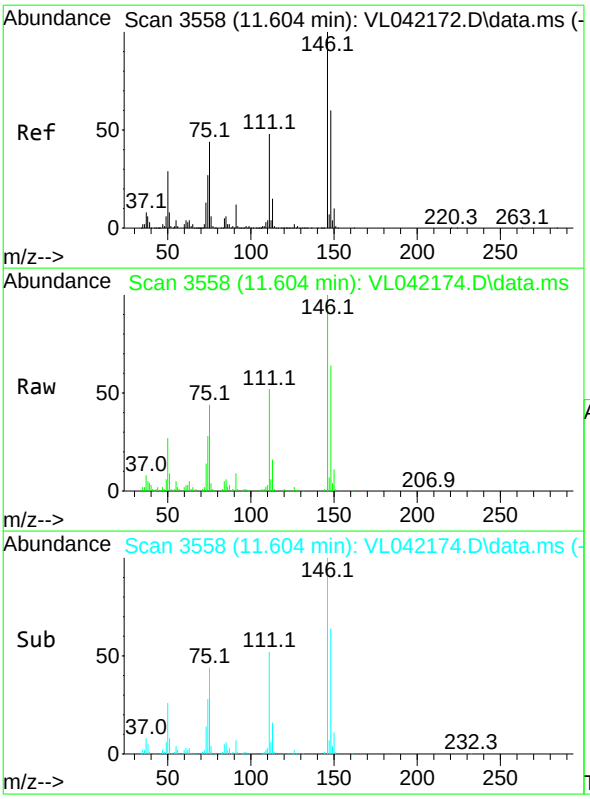


#74
1,2,4-Trimethylbenzene
Concen: 1.099 ppbv
RT: 11.533 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 97858

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	67.6	46.2	69.2
77	23.4	18.6	27.8

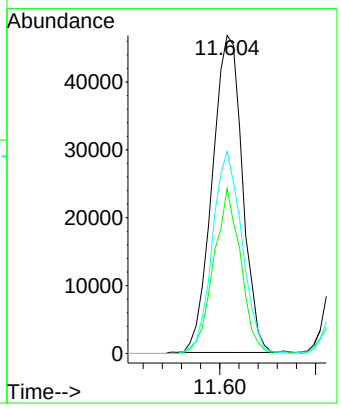




#75
1,3-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.604 min Scan# 35
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 51096

Ion	Ratio	Lower	Upper
146	100		
111	46.8	23.8	71.2
148	62.6	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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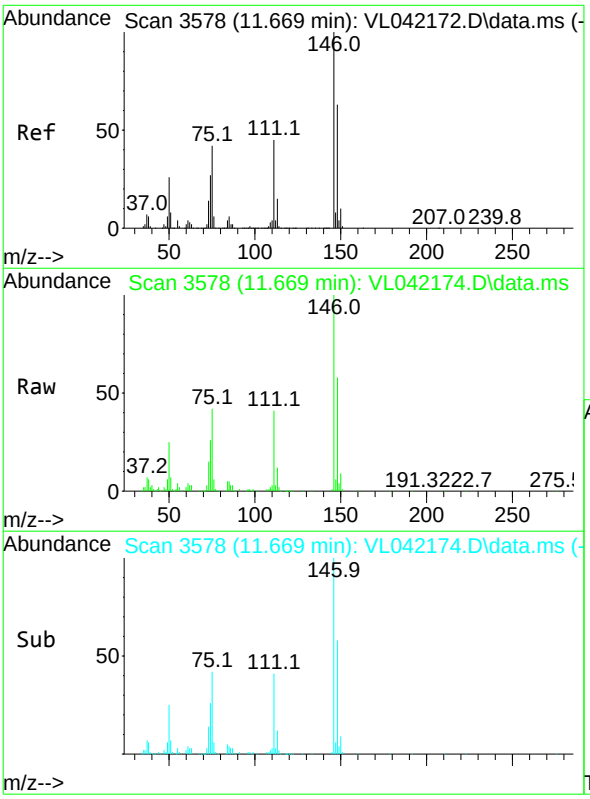
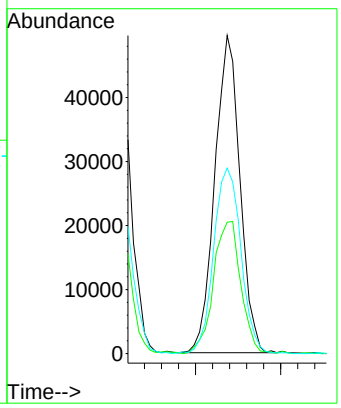
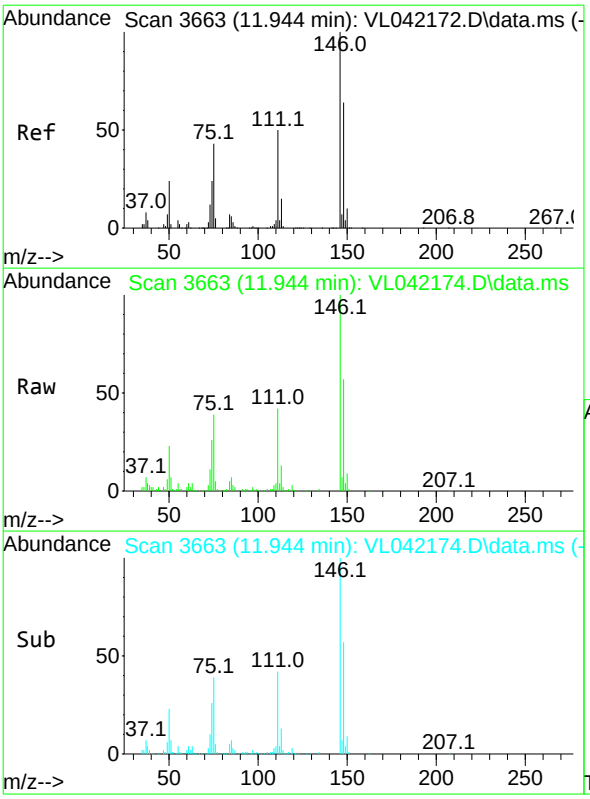


#76
1,4-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 50841

Ion	Ratio	Lower	Upper
146	100		
111	45.4	23.0	69.0
148	63.6	31.9	95.7

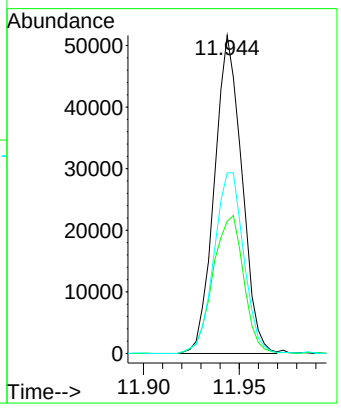




#77
1,2-Dichlorobenzene
Concen: 1.084 ppbv
RT: 11.944 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 51523

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.8	74.3
148	61.9	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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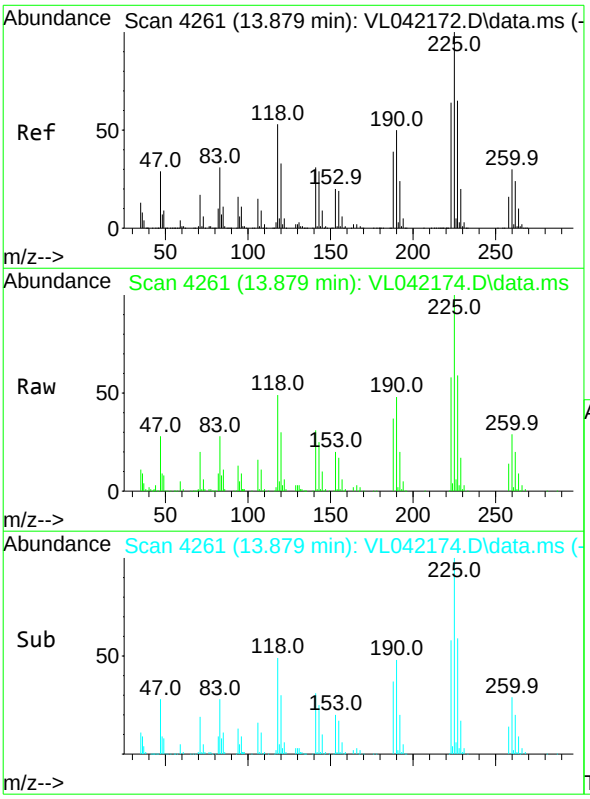
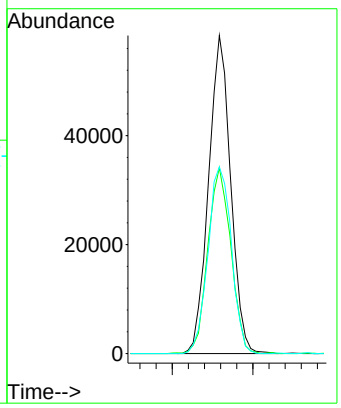
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

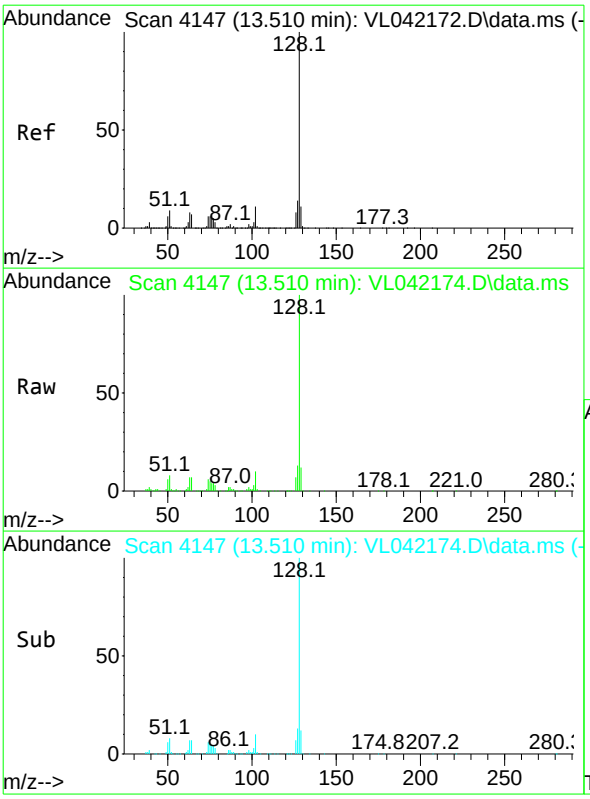


#78
Hexachloro-1,3-Butadiene
Concen: 1.149 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:225 Resp: 55611

Ion	Ratio	Lower	Upper
225	100		
223	60.8	50.6	76.0
227	62.3	51.2	76.8

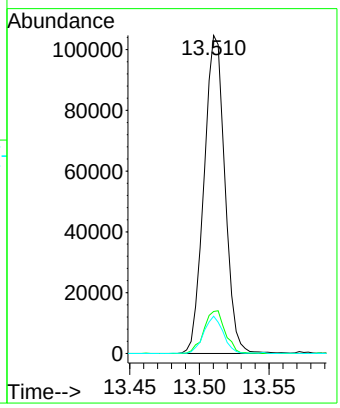




#79
Naphthalene
Concen: 1.120 ppbv
RT: 13.510 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:128 Resp: 109031

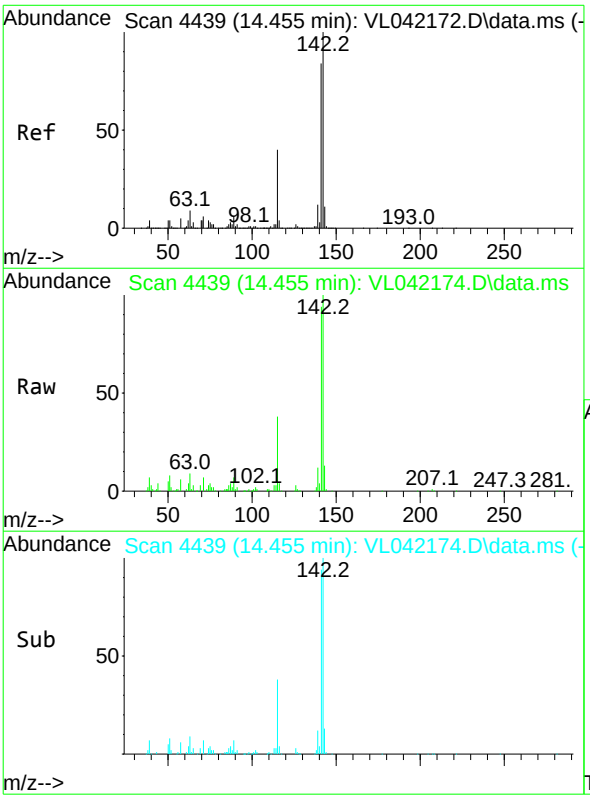
Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.8	16.2
129	11.7	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

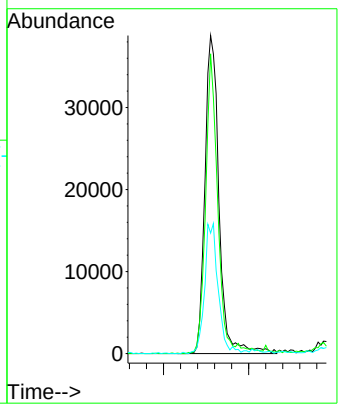
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

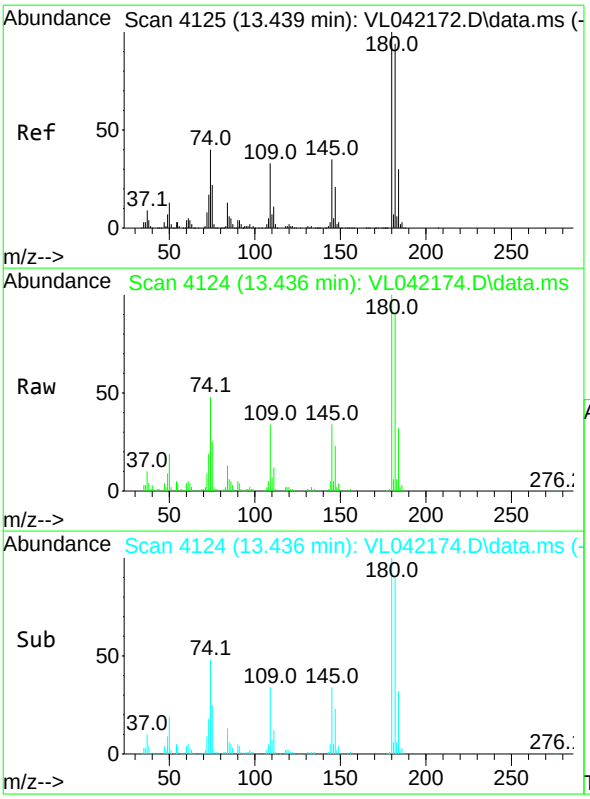


#80
Naphthalene,2-methyl-
Concen: 0.939 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:142 Resp: 44518

Ion	Ratio	Lower	Upper
142	100		
141	83.4	66.3	99.5
115	41.5	31.6	47.4

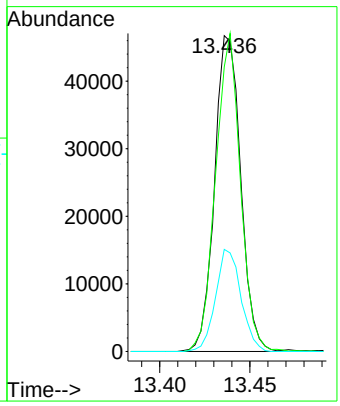




#81
1,2,4-Trichlorobenzene
Concen: 1.047 ppbv
RT: 13.436 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:180 Resp: 47040

Ion	Ratio	Lower	Upper
180	100		
182	95.7	75.1	112.7
184	31.4	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	180502	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	523832	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	485078	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	403513	10.130	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	14455	0.542	ppbv		95
3) Chlorodifluoromethane	1.473	51	14637	0.538	ppbv	#	89
4) Chloromethane	1.531	50	5956	0.547	ppbv		94
5) Vinyl Chloride	1.577	62	5732	0.516	ppbv		92
6) Bromomethane	1.664	94	2949	0.597	ppbv		95
7) Chloroethane	1.703	64	2582	0.591	ppbv	#	87
8) Dichlorotetrafluoroethane	1.551	85	11783	0.519	ppbv		98
9) Propene	1.483	41	6622m	0.540	ppbv		
10) Heptane	4.972	43	16673	0.502	ppbv		89
11) Trichlorofluoromethane	1.874	101	14099	0.544	ppbv		92
12) 1,1,2-Trichlorotrifluo...	2.136	101	11252	0.528	ppbv		99
13) Ethanol	1.722	45	997	1.038	ppbv	#	36
14) Bromoethene	1.780	108	4770	0.584	ppbv	#	86
15) Acetone	1.835	43	15331	0.607	ppbv	#	85
16) 1,3-Butadiene	1.606	39	8594	0.757	ppbv		82
17) tert-Butyl alcohol	2.039	59	17467	0.556	ppbv		97
18) 1,1-Dichloroethene	2.030	96	5634	0.565	ppbv	#	92
19) Isopropyl Alcohol	1.884	45	9171	0.644	ppbv	#	39
20) Methylene Chloride	2.059	84	5634	0.599	ppbv	#	93
21) Allyl Chloride	2.091	41	9632	0.541	ppbv		89
22) trans-1,2-Dichloroethene	2.334	96	6353	0.546	ppbv		83
23) Vinyl Acetate	2.457	43	6809	0.649	ppbv	#	91
24) 1,1-Dichloroethane	2.405	63	11258	0.527	ppbv		97
25) Ethyl Acetate	2.836	43	36258	0.553	ppbv		98
26) Hexane	2.823	57	13605	0.538	ppbv		92
27) Carbon Disulfide	2.146	76	14510	0.535	ppbv	#	1
28) Methyl tert-Butyl Ether	2.437	73	8310	0.527	ppbv	#	89
29) Chloroform	2.845	83	20149	0.544	ppbv		98
30) Cyclohexane	3.852	84	12063m	0.549	ppbv		
31) cis-1,2-Dichloroethene	2.719	61	13601	0.529	ppbv		92
32) 1,1,1-Trichloroethane	3.360	97	20567	0.485	ppbv		100
34) 2-Butanone	2.557	43	19739	0.520	ppbv		96
35) Carbon Tetrachloride	3.755	117	18558	0.460	ppbv		93
36) Benzene	3.651	78	27488	0.529	ppbv	#	87
37) 1,2-Dichloroethane	3.214	62	16062	0.540	ppbv		100
38) Trichloroethene	4.538	130	11460m	0.529	ppbv		
39) 1,2-Dichloropropane	4.308	63	10123	0.535	ppbv		92
40) 1,4-Dioxane	4.593	88	6121m	0.624	ppbv		
41) Tetrahydrofuran	3.059	42	11509m	0.533	ppbv		
42) Bromodichloromethane	4.483	83	20374	0.497	ppbv	#	98
43) Methyl Methacrylate	4.875	69	11583m	0.528	ppbv		
44) 2,2,4-Trimethylpentane	4.632	57	46646	0.532	ppbv		95
45) t-1,3-Dichloropropene	6.406	75	12404	0.526	ppbv	#	79

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	14374m	0.497	ppbv		
47) 1,1,2-Trichloroethane	6.574	97	10972m	0.549	ppbv		
48) Dibromochloromethane	7.380	129	17042	0.503	ppbv		99
49) Bromoform	9.480	173	14828	0.487	ppbv		98
50) 4-Methyl-2-Pentanone	5.758	43	33674	0.559	ppbv		97
51) 2-Hexanone	7.438	43	26154	0.523	ppbv	#	100
52) Tetrachloroethene	8.218	164	10502	0.510	ppbv		94
53) Toluene	6.923	91	32444	0.527	ppbv		98
54) 1,2-Dibromoethane	7.648	107	14220	0.510	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.920	131	13959	0.523	ppbv	#	1
57) Chlorobenzene	8.914	112	24826	0.540	ppbv	#	91
58) Ethyl Benzene	9.348	91	44862	0.521	ppbv		96
59) m/p-Xylene	9.542	91	73028m	1.060	ppbv		
60) o-Xylene	9.959	91	36879	0.535	ppbv		98
61) Styrene	9.866	104	17198	0.504	ppbv		96
62) Isopropylbenzene	10.536	105	55531	0.538	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	21989	0.525	ppbv		96
64) n-propylbenzene	10.985	120	14030	0.528	ppbv		95
65) tert-Butylbenzene	11.526	119	53115	0.557	ppbv		100
66) Benzyl Chloride	11.613	91	5263	0.520	ppbv		97
67) sec-Butylbenzene	11.762	105	72879	0.550	ppbv		98
69) p-Isopropyltoluene	11.921	119	61933	0.542	ppbv		100
70) n-Butylbenzene	12.277	91	61507	0.527	ppbv		99
71) 2-Chlorotoluene	10.895	91	41637	0.520	ppbv		95
72) 4-Ethyltoluene	11.121	105	44473	0.518	ppbv	#	94
73) 1,3,5-Trimethylbenzene	11.199	105	39190	0.523	ppbv		97
74) 1,2,4-Trimethylbenzene	11.532	105	48370	0.560	ppbv		97
75) 1,3-Dichlorobenzene	11.600	146	25122	0.530	ppbv		100
76) 1,4-Dichlorobenzene	11.668	146	24991	0.530	ppbv		97
77) 1,2-Dichlorobenzene	11.943	146	24548	0.532	ppbv		96
78) Hexachloro-1,3-Butadiene	13.879	225	25636	0.546	ppbv		99
79) Naphthalene	13.510	128	47990	0.508	ppbv		95
80) Naphthalene,2-methyl-	14.458	142	17486	0.380	ppbv		98
81) 1,2,4-Trichlorobenzene	13.436	180	19924	0.457	ppbv		97

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

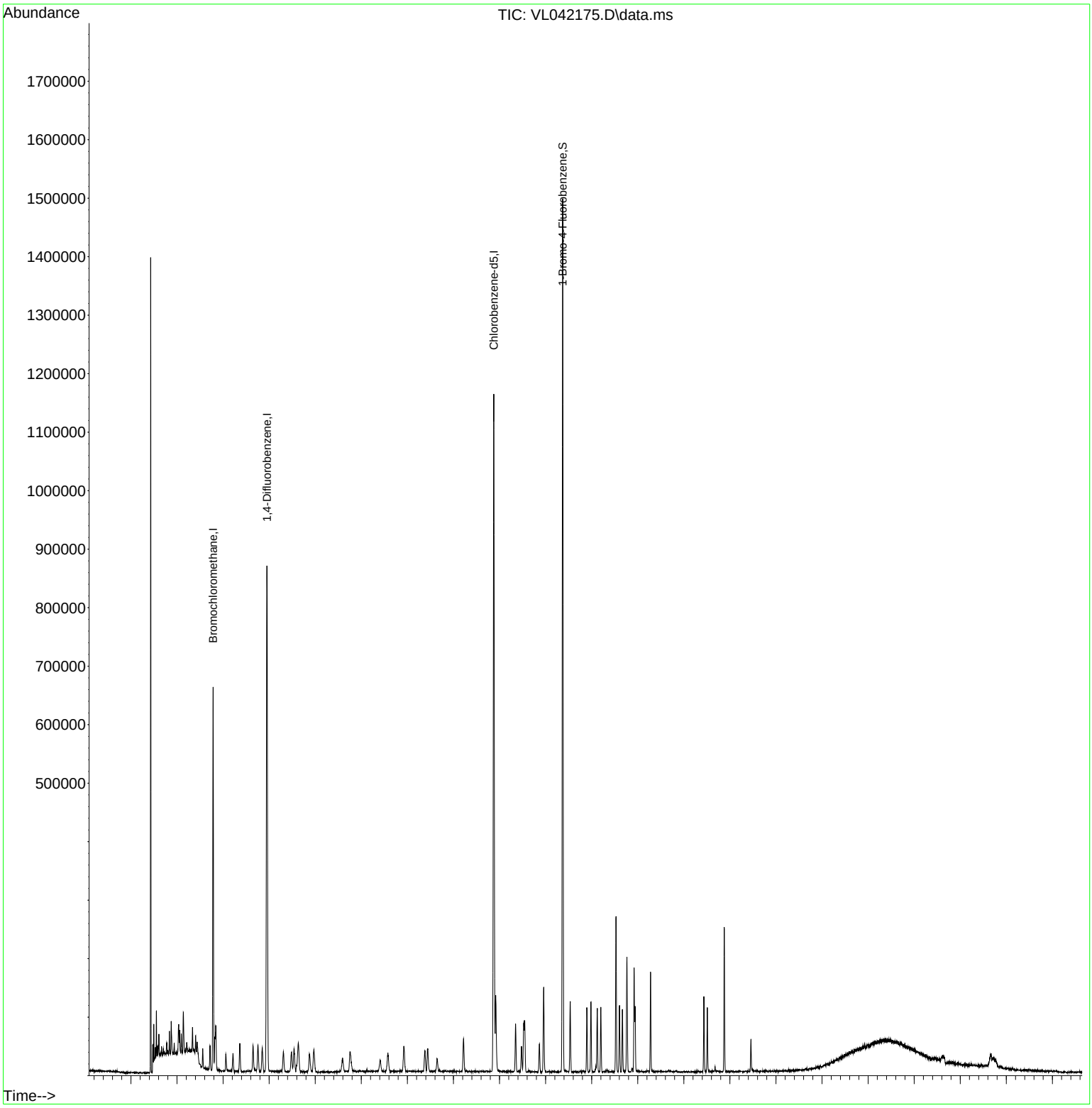
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

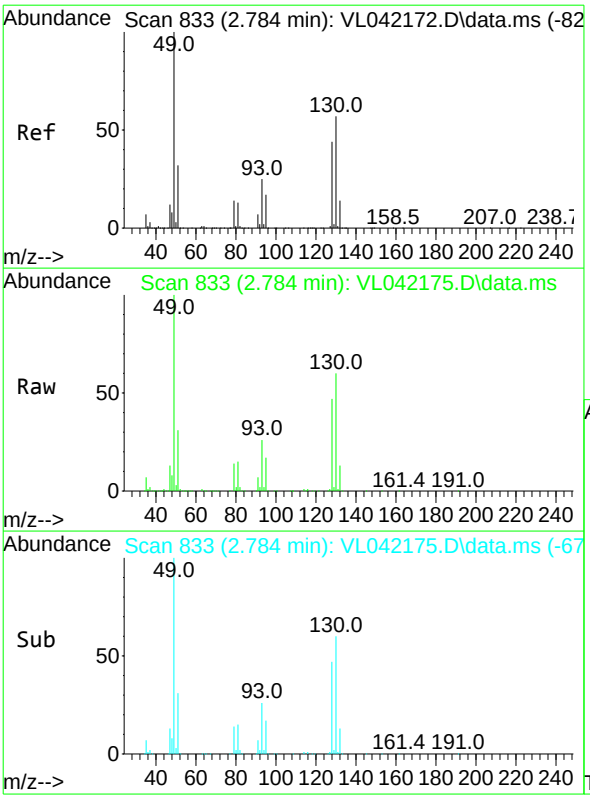
Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

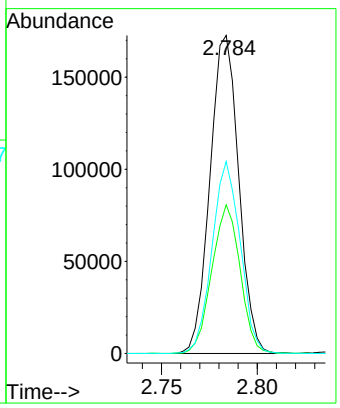




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 49 Resp: 180502

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	59.2	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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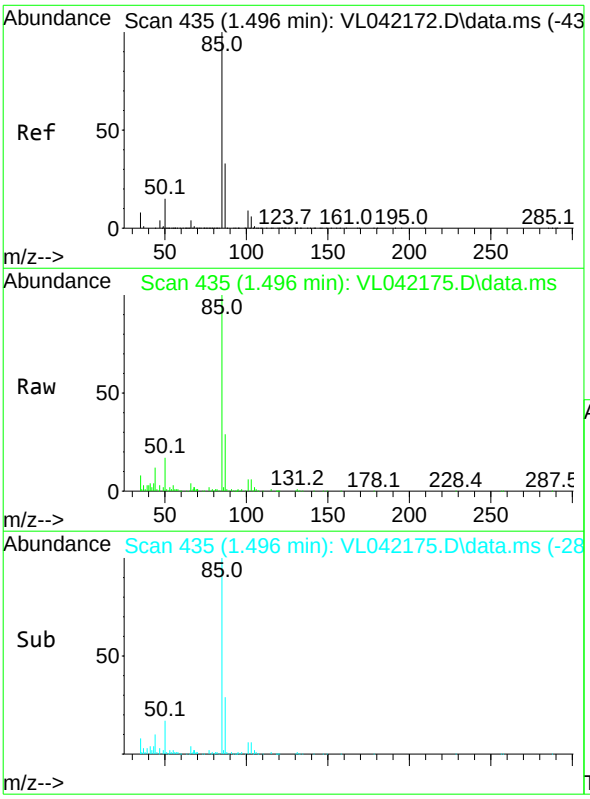
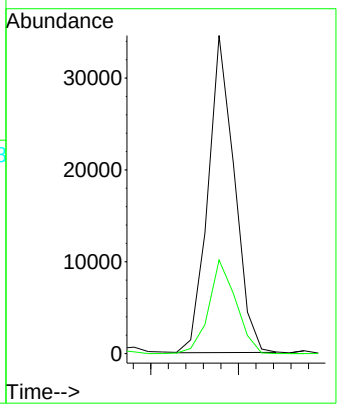
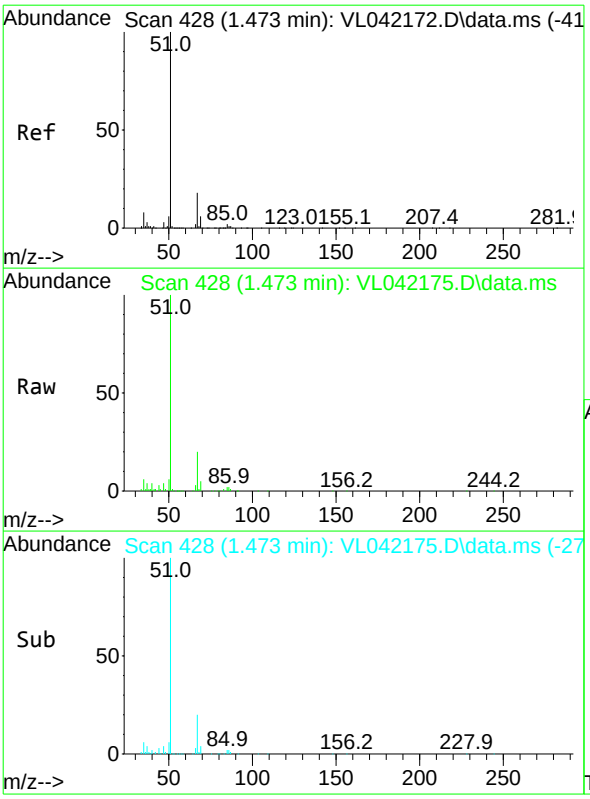


#2
Dichlorodifluoromethane
Concen: 0.542 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 14455

Ion	Ratio	Lower	Upper
85	100		
87	29.5	26.1	39.1

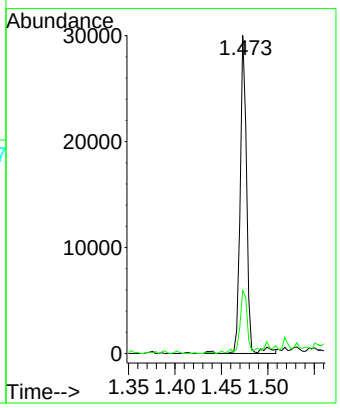




#3
Chlorodifluoromethane
Concen: 0.538 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 51 Resp: 14637

Ion	Ratio	Lower	Upper
51	100		
67	23.6	15.0	22.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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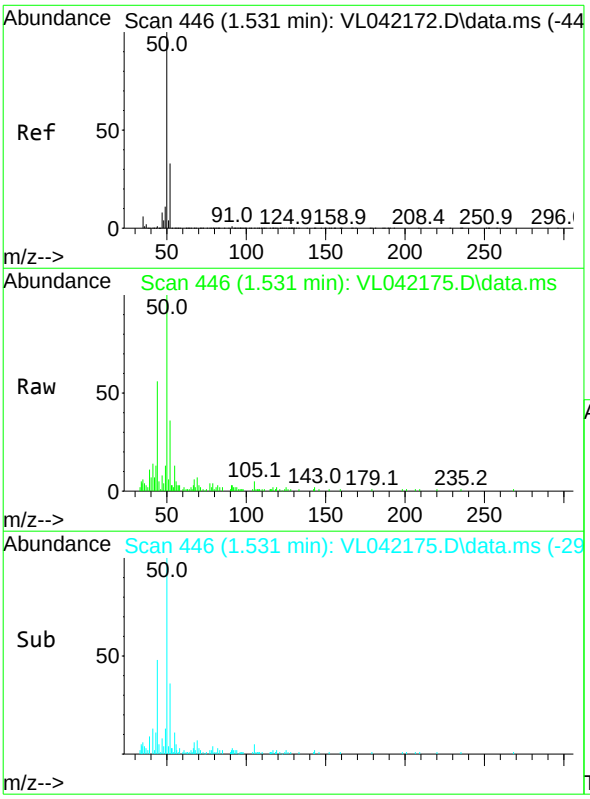
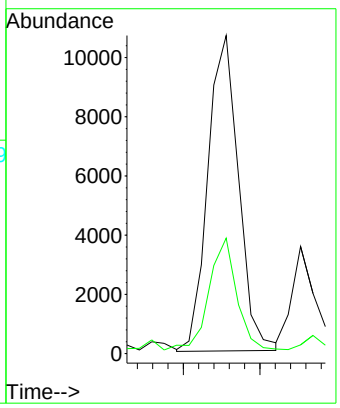
Supervised By :Mahesh Dadoda 04/03/2025

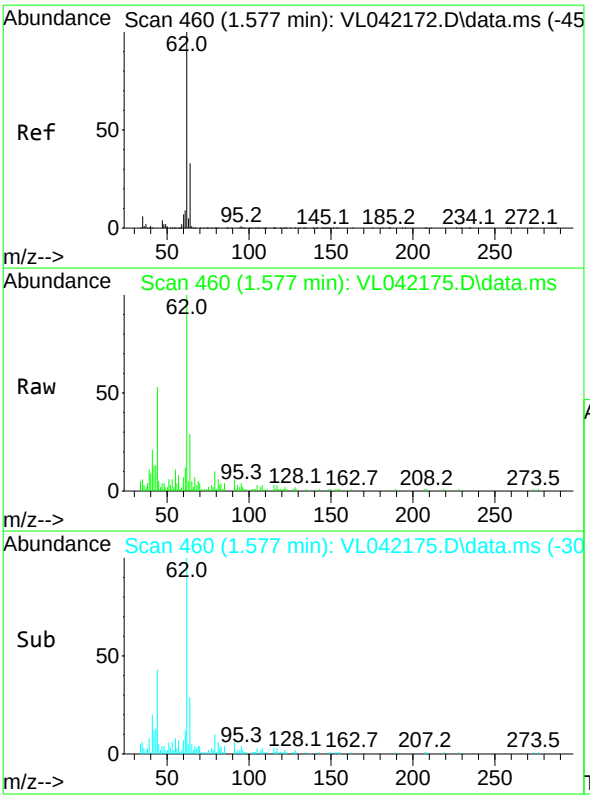


#4
Chloromethane
Concen: 0.547 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 50 Resp: 5956

Ion	Ratio	Lower	Upper
50	100		
52	36.1	26.1	39.1

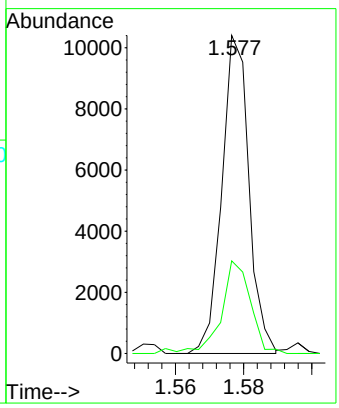




#5
Vinyl Chloride
Concen: 0.516 ppbv
RT: 1.577 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 62 Resp: 5732

Ion	Ratio	Lower	Upper
62	100		
64	28.5	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

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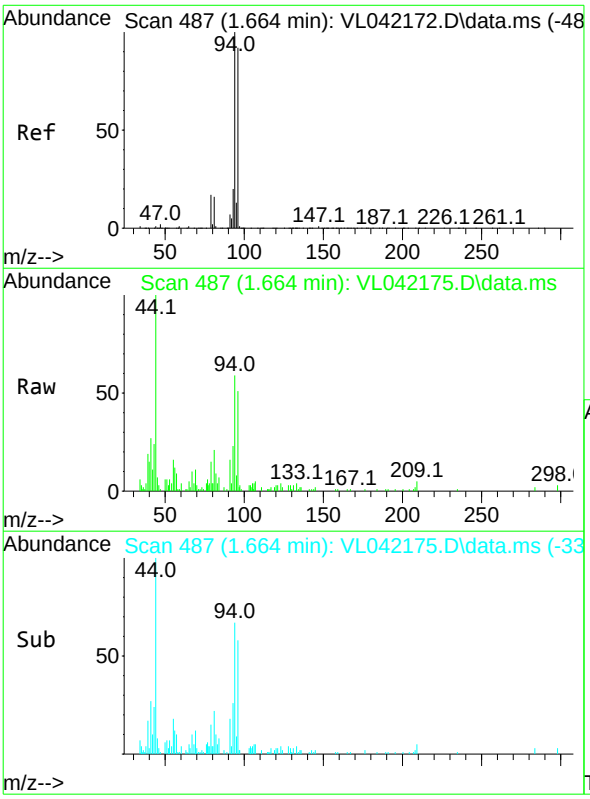
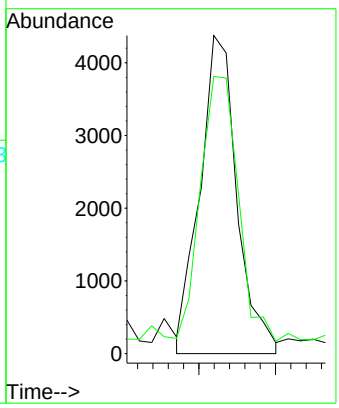
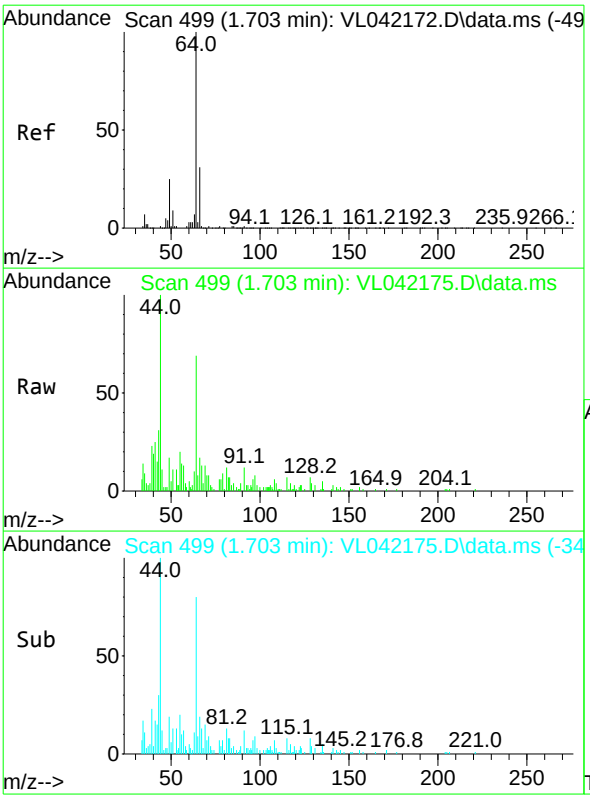


#6
Bromomethane
Concen: 0.597 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 94 Resp: 2949

Ion	Ratio	Lower	Upper
94	100		
96	86.2	73.1	109.7





#7
Chloroethane
Concen: 0.591 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

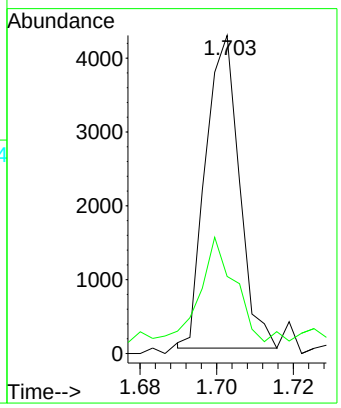
Tgt Ion: 64 Resp: 2582

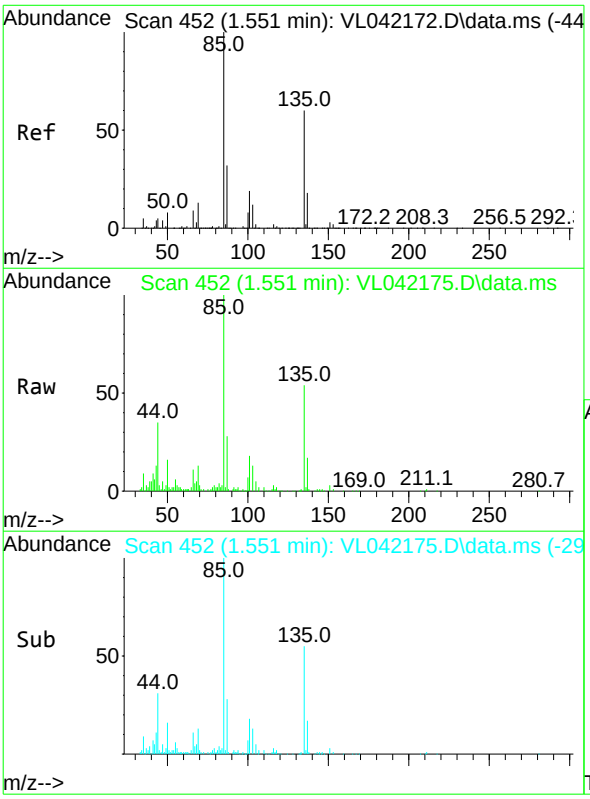
Ion	Ratio	Lower	Upper
64	100		
66	24.2	25.2	37.8#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

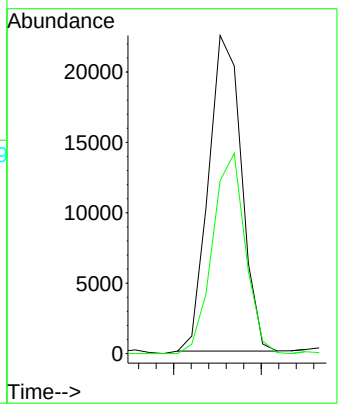


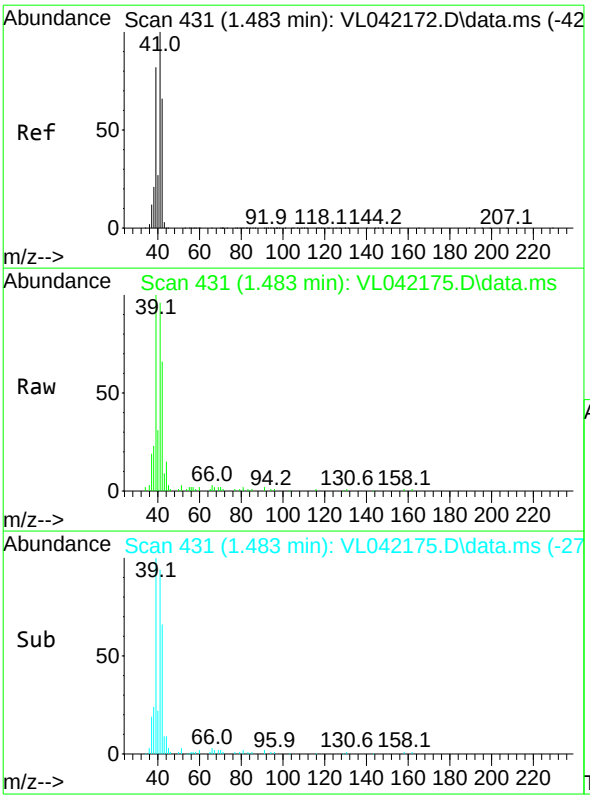


#8
Dichlorotetrafluoroethane
Concen: 0.519 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 11783

Ion	Ratio	Lower	Upper
85	100		
135	63.7	52.4	78.6





#9
Propene
Concen: 0.540 ppbv m
RT: 1.483 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 41 Resp: 6622

Ion	Ratio	Lower	Upper
41	100		
42	19.5	55.4	83.2#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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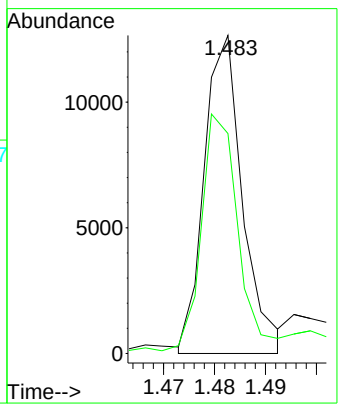
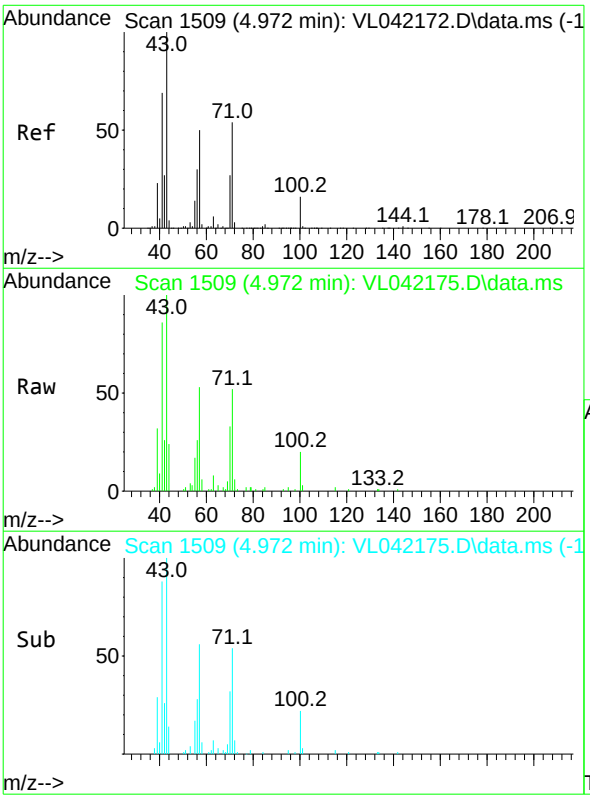
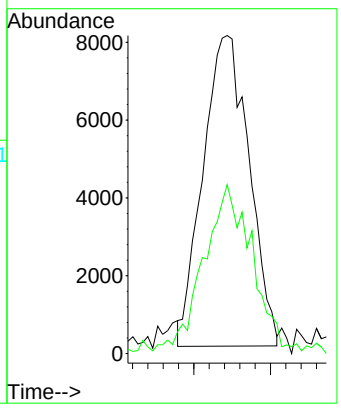


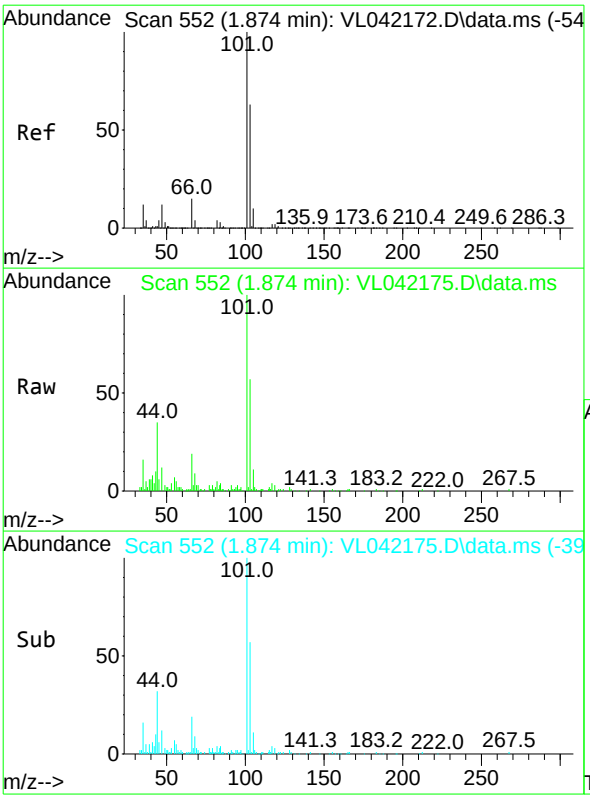


#10
Heptane
Concen: 0.502 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 16673

Ion	Ratio	Lower	Upper
43	100		
57	57.0	39.4	59.2





#11
Trichlorofluoromethane
Concen: 0.544 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:101 Resp: 14099

Ion	Ratio	Lower	Upper
101	100		
103	56.3	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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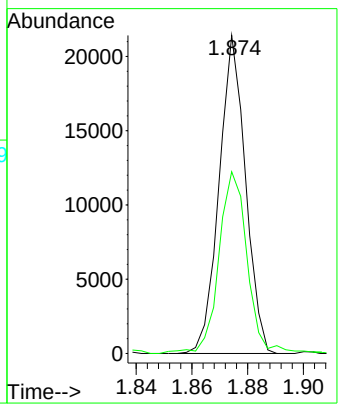
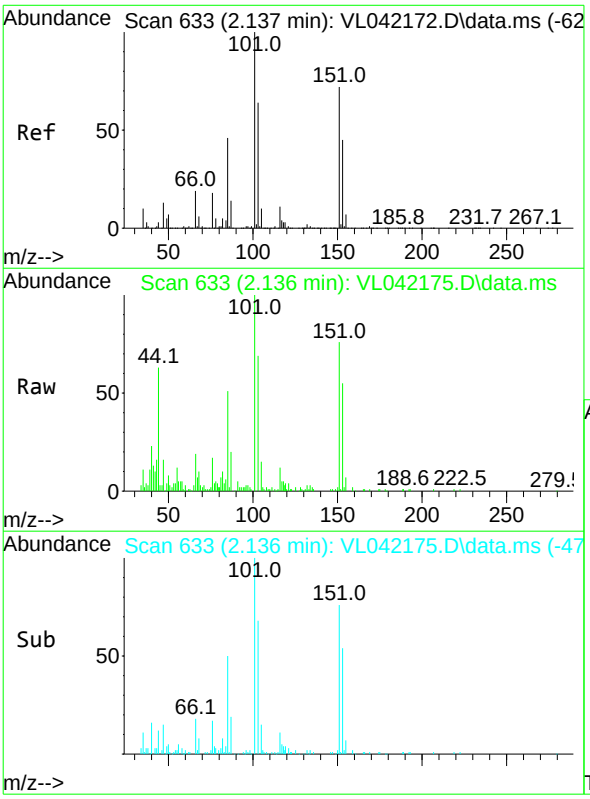
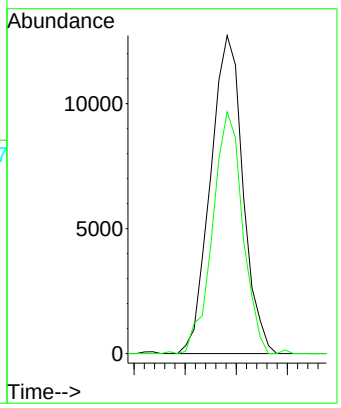


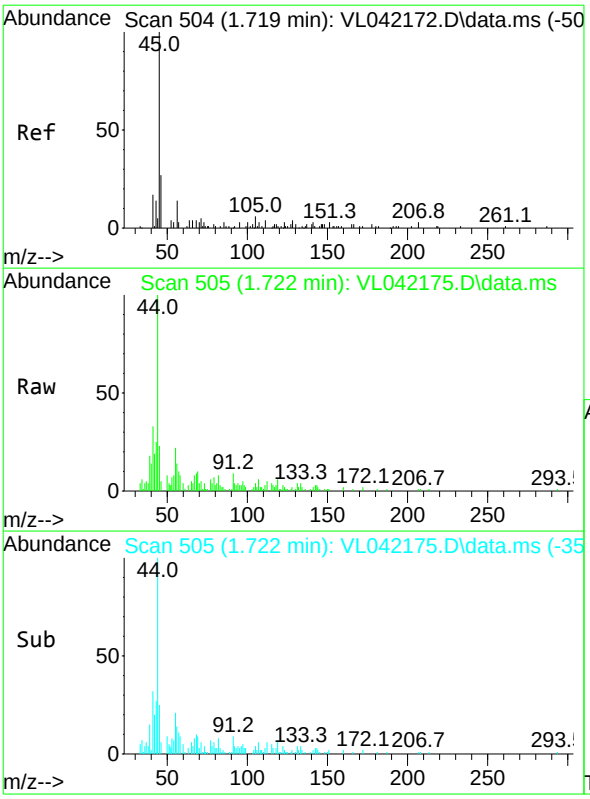


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.528 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:101 Resp: 11252

Ion	Ratio	Lower	Upper
101	100		
151	70.6	57.1	85.7





#13
Ethanol
Concen: 1.038 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 45 Resp: 997

Ion	Ratio	Lower	Upper
45	100		
46	94.5	20.2	80.8#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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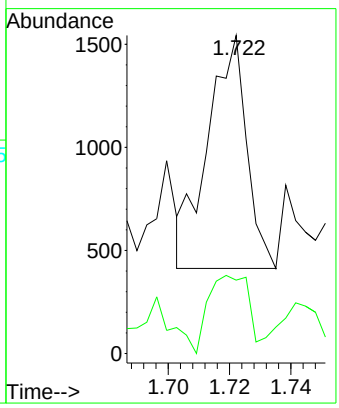
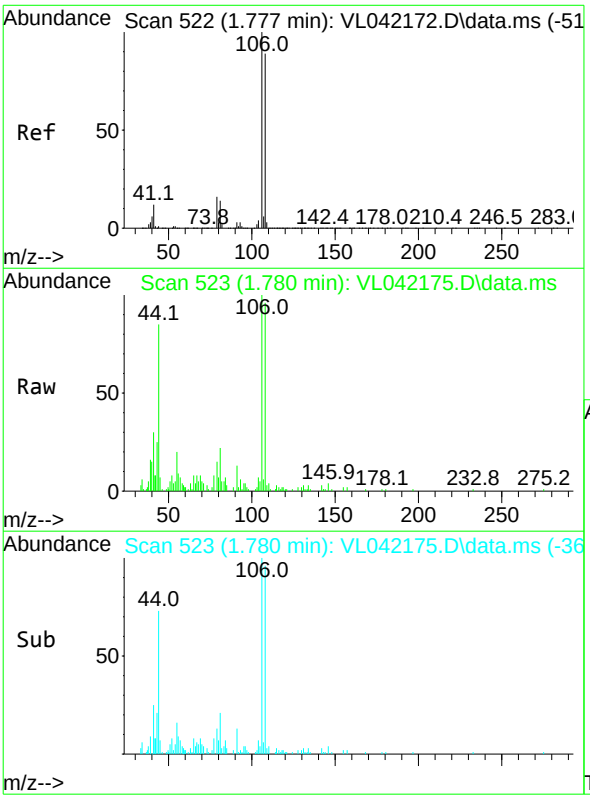
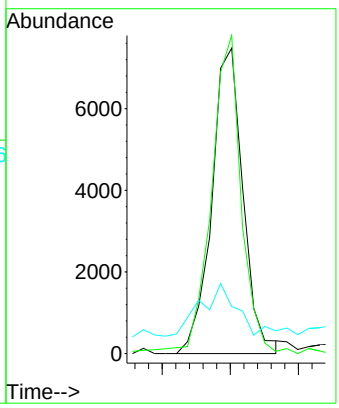


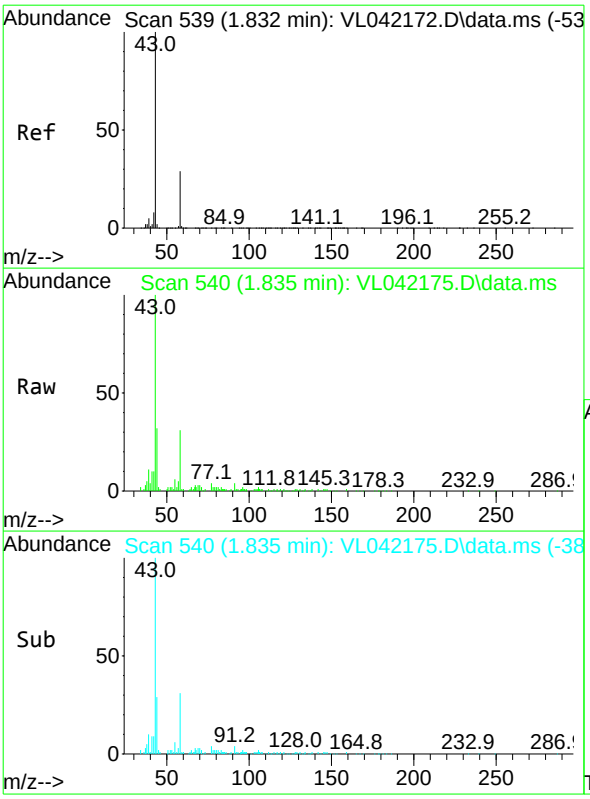


#14
Bromoethene
Concen: 0.584 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:108 Resp: 4770

Ion	Ratio	Lower	Upper
108	100		
106	101.3	86.8	130.2
79	42.6	15.0	22.6#

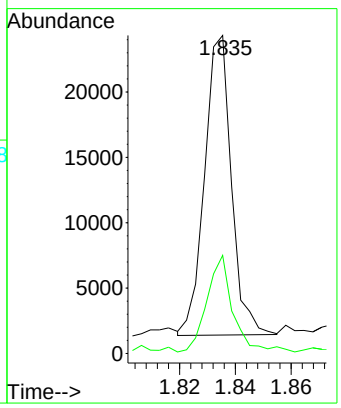




#15
Acetone
Concen: 0.607 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 15331

Ion	Ratio	Lower	Upper
43	100		
58	37.1	23.2	34.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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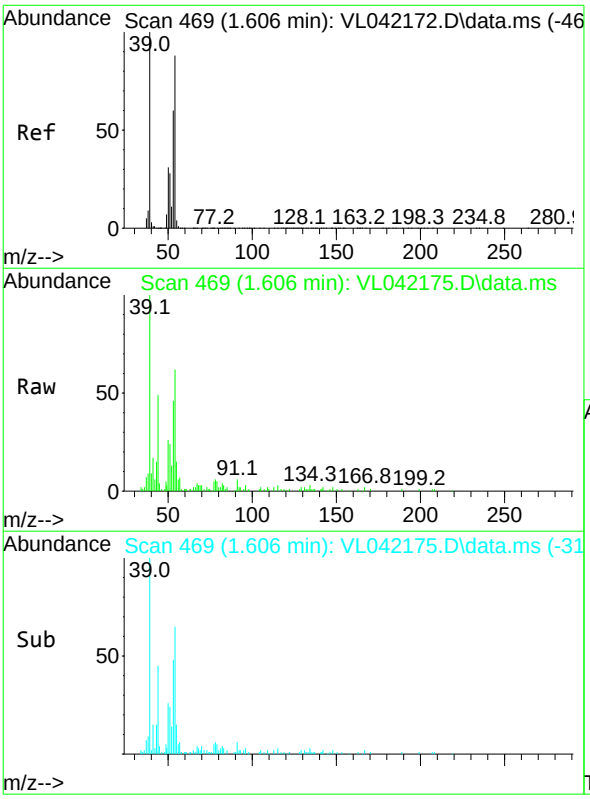
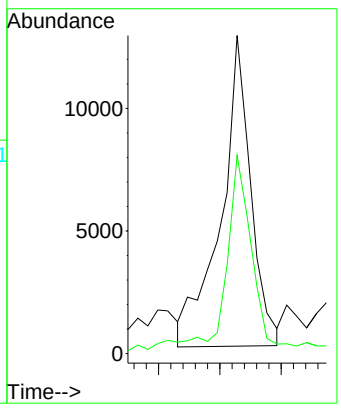
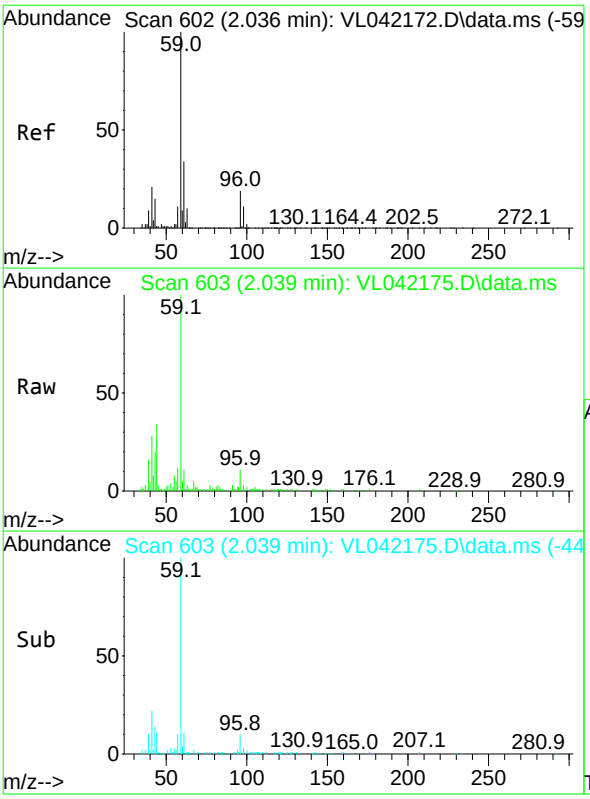


#16
1,3-Butadiene
Concen: 0.757 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 39 Resp: 8594

Ion	Ratio	Lower	Upper
39	100		
54	60.7	60.7	91.1

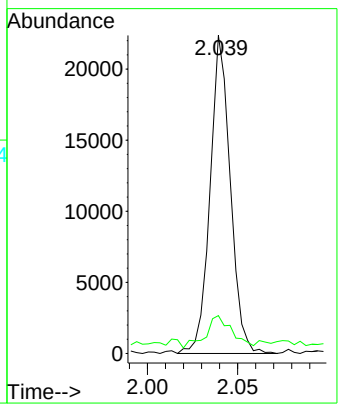




#17
tert-Butyl alcohol
Concen: 0.556 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 59 Resp: 17467

Ion	Ratio	Lower	Upper
59	100		
57	12.1	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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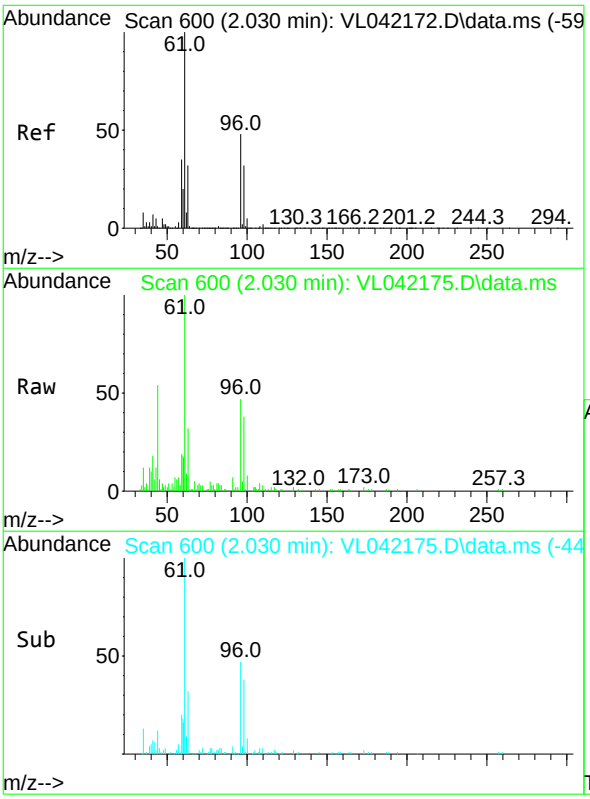
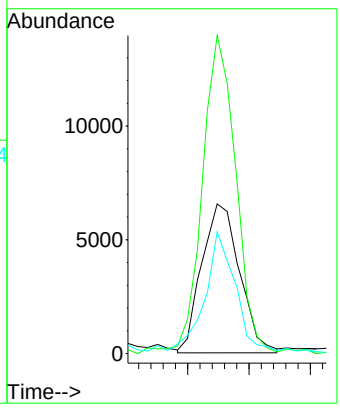
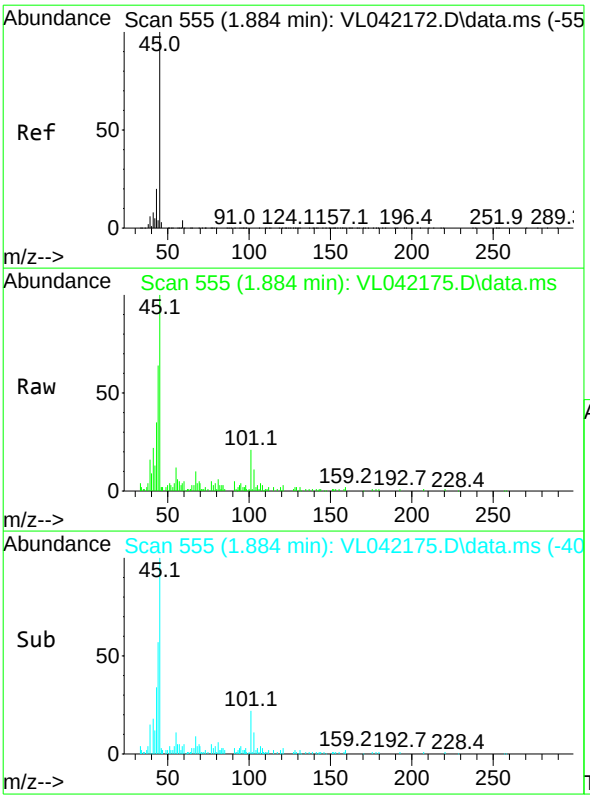


#18
1,1-Dichloroethene
Concen: 0.565 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 5634

Ion	Ratio	Lower	Upper
96	100		
61	216.6	167.6	251.4
98	81.2	53.5	80.3#

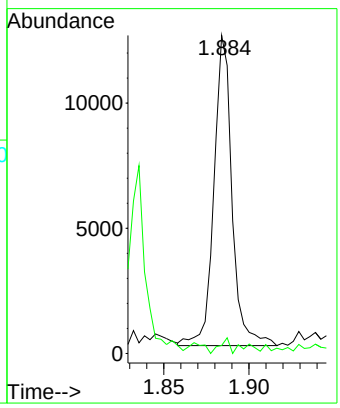




#19
Isopropyl Alcohol
Concen: 0.644 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 45 Resp: 9171

Ion	Ratio	Lower	Upper
45	100		
58	5.5	36.9	55.3#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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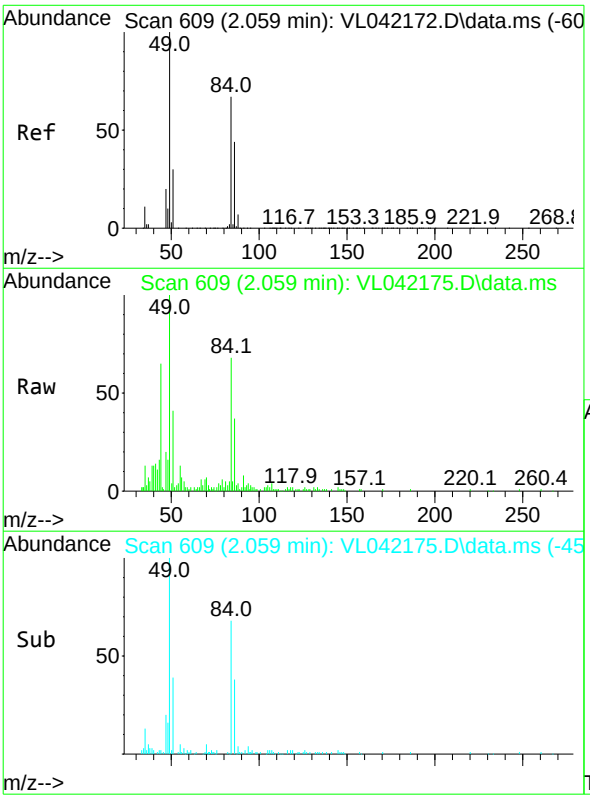
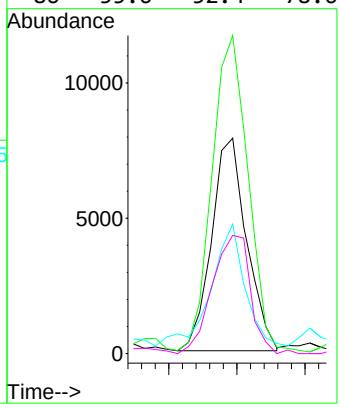
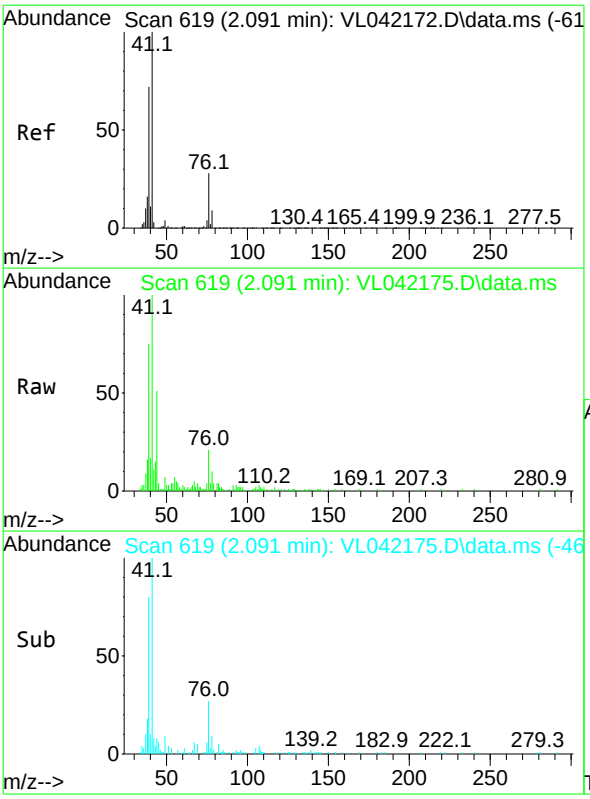


#20
Methylene Chloride
Concen: 0.599 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 5634

Ion	Ratio	Lower	Upper
84	100		
49	148.1	120.2	180.4
51	56.1	37.4	56.0#
86	55.6	52.4	78.6





#21
Allyl Chloride
Concen: 0.541 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 41 Resp: 9632

Ion	Ratio	Lower	Upper
41	100		
76	30.9	24.1	36.1
39	88.9	61.1	91.7

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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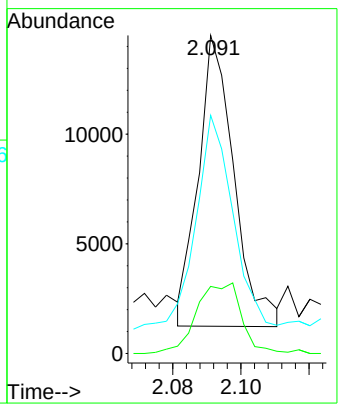
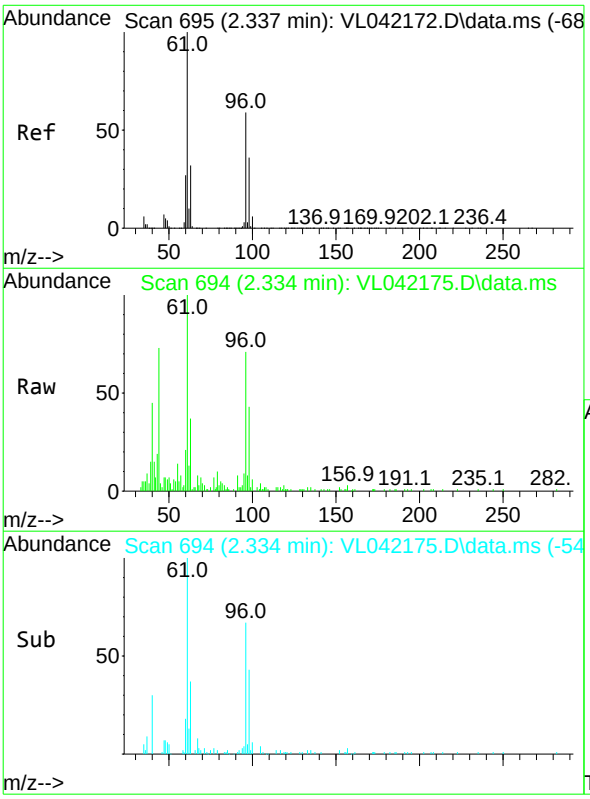
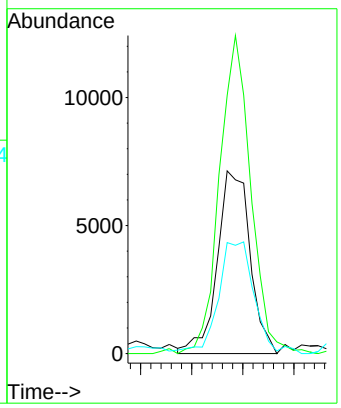


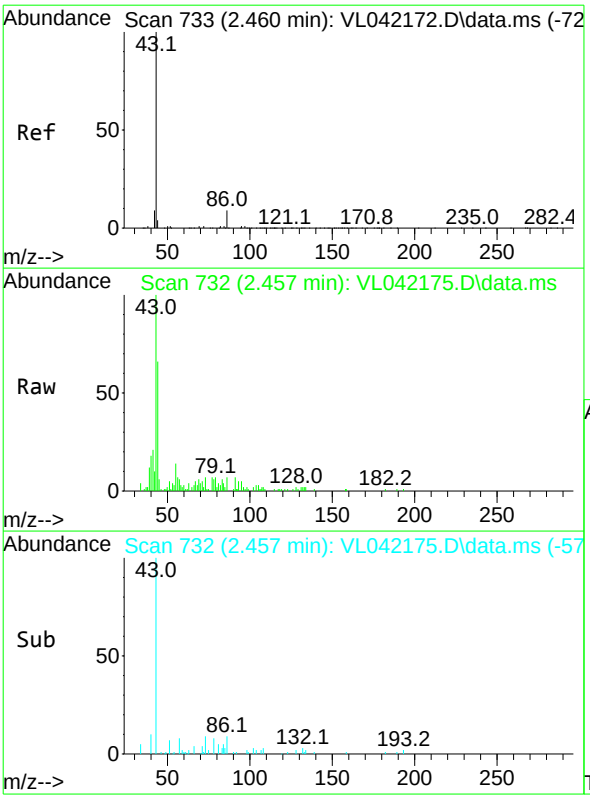


#22
trans-1,2-Dichloroethene
Concen: 0.546 ppbv
RT: 2.334 min Scan# 694
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 6353

Ion	Ratio	Lower	Upper
96	100		
61	141.3	136.6	204.8
98	59.4	49.4	74.2

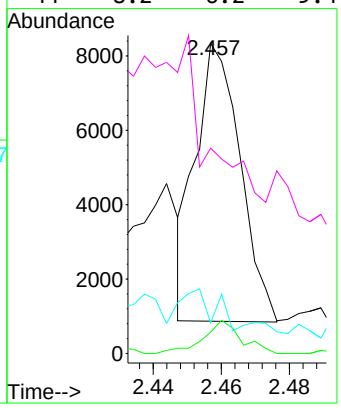




#23
Vinyl Acetate
Concen: 0.649 ppbv
RT: 2.457 min Scan# 73
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 6809

Ion	Ratio	Lower	Upper
43	100		
86	7.7	5.5	8.3
42	3.2	8.6	13.0#
44	8.2	6.2	9.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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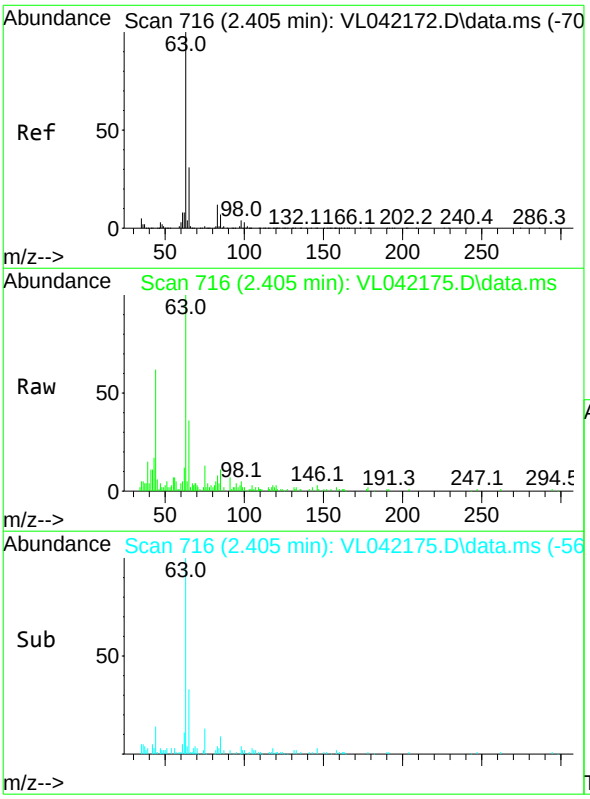
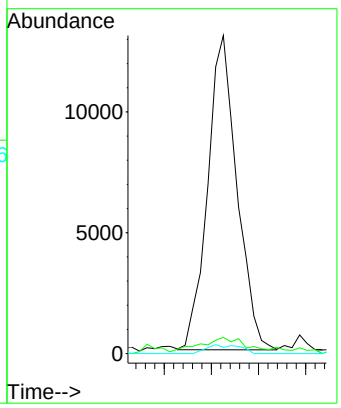
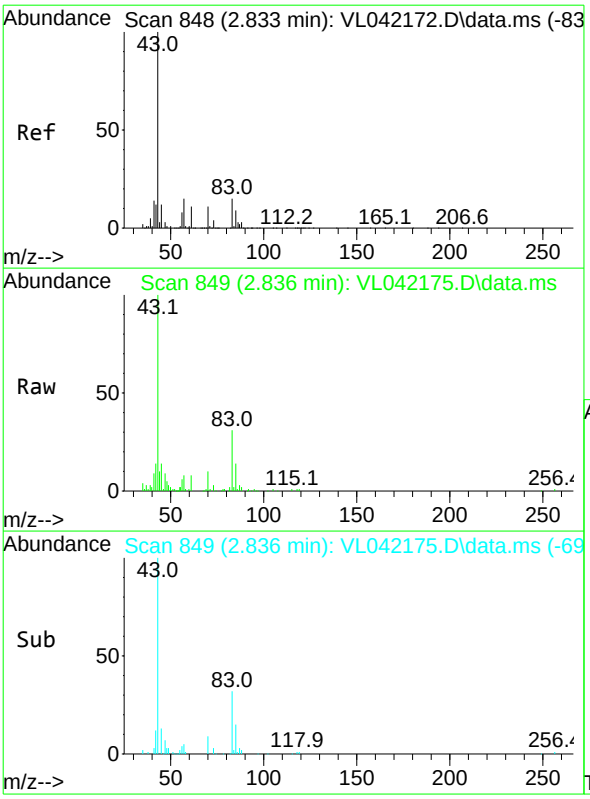


#24
1,1-Dichloroethane
Concen: 0.527 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 63 Resp: 11258

Ion	Ratio	Lower	Upper
63	100		
98	3.7	2.3	6.8
100	2.0	1.6	4.7

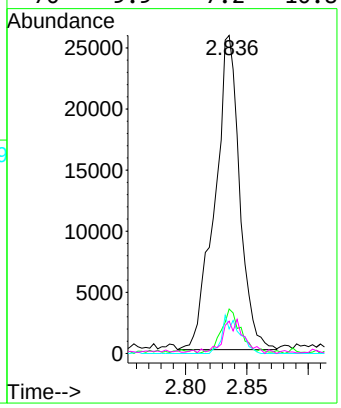




#25
Ethyl Acetate
Concen: 0.553 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 36258

Ion	Ratio	Lower	Upper
43	100		
45	11.2	8.2	12.2
61	8.3	7.3	10.9
70	9.9	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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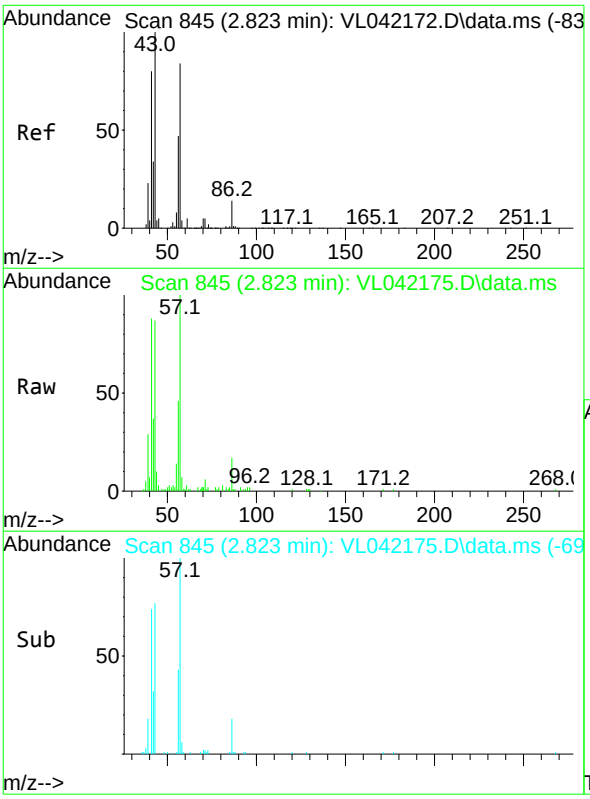
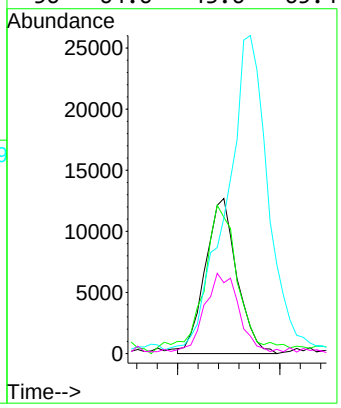
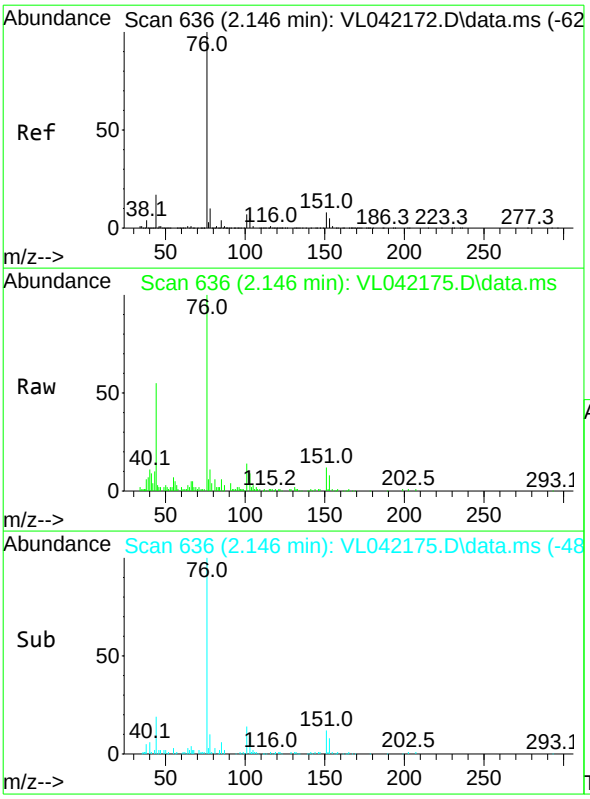


#26
Hexane
Concen: 0.538 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 13605

Ion	Ratio	Lower	Upper
57	100		
41	92.1	76.6	114.8
43	273.4	207.8	311.8
56	64.6	43.6	65.4

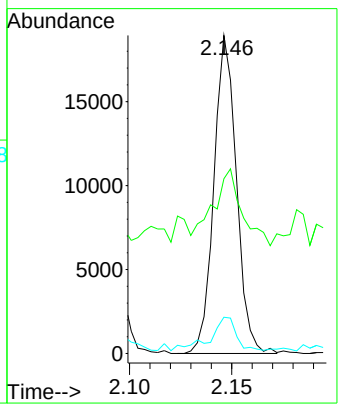




#27
Carbon Disulfide
Concen: 0.535 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 76 Resp: 14510

Ion	Ratio	Lower	Upper
76	100		
44	115.5	14.7	22.1#
78	14.9	9.3	13.9#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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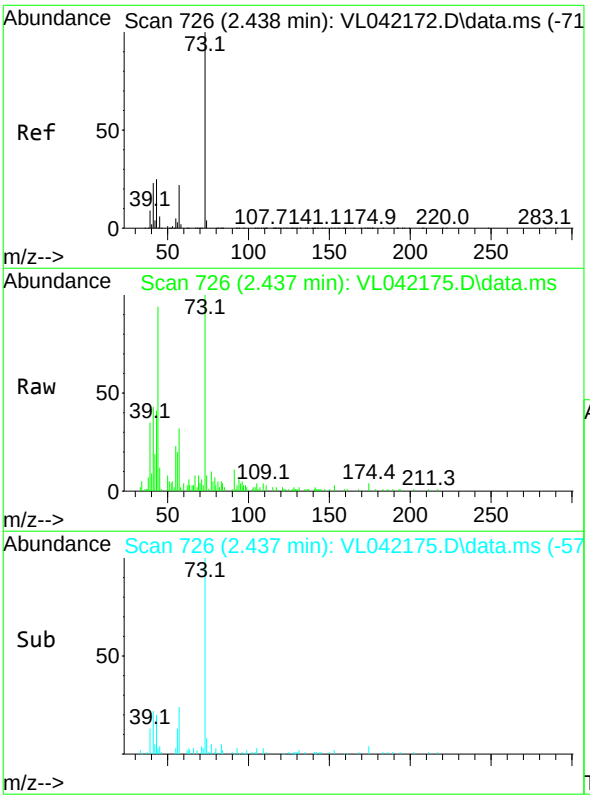
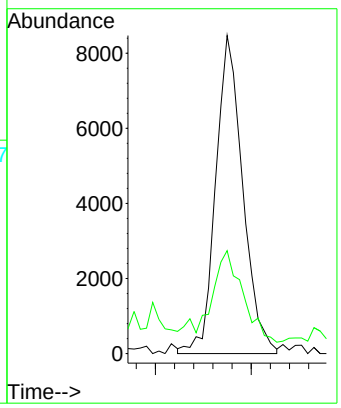
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

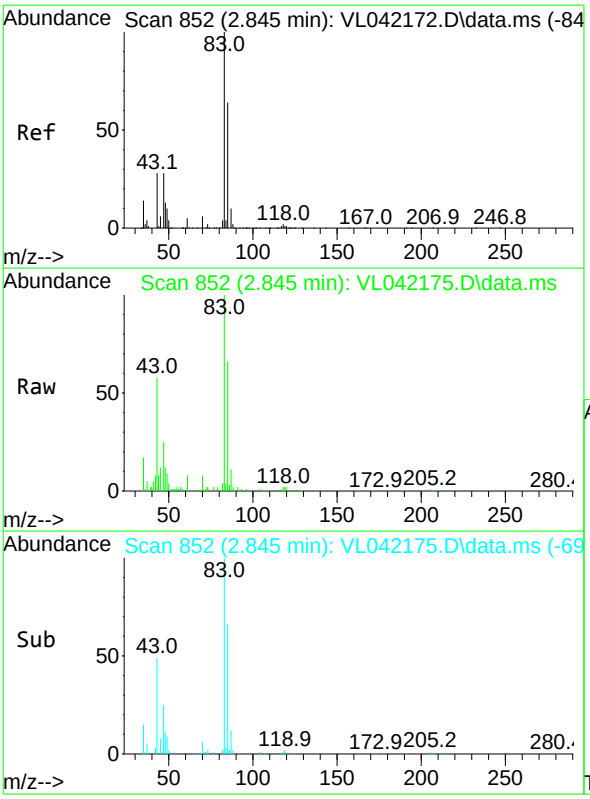


#28
Methyl tert-Butyl Ether
Concen: 0.527 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 73 Resp: 8310

Ion	Ratio	Lower	Upper
73	100		
57	31.1	20.5	30.7#

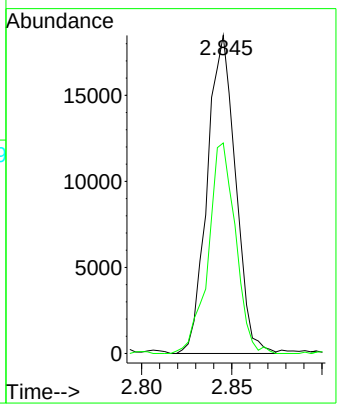




#29
Chloroform
Concen: 0.544 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 20149

Ion	Ratio	Lower	Upper
83	100		
85	66.2	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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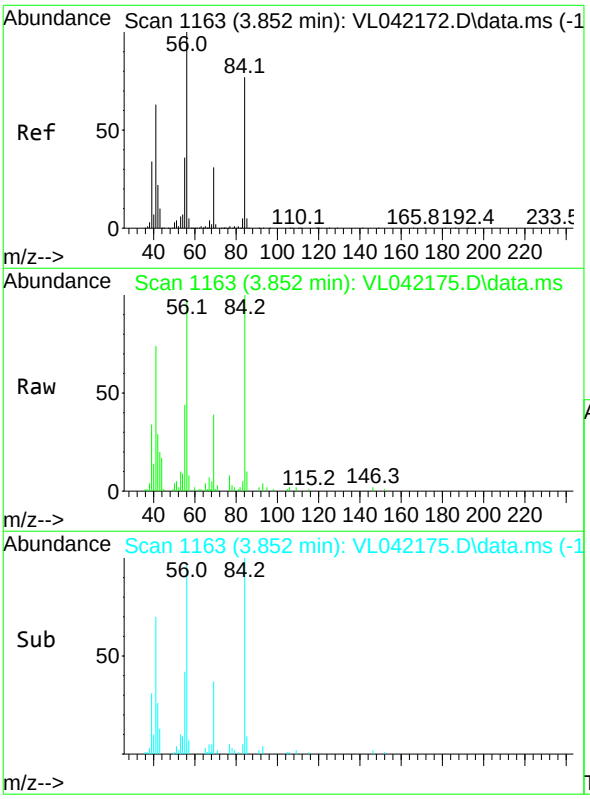
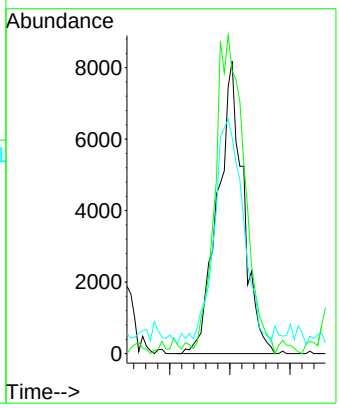
Supervised By :Mahesh Dadoda 04/03/2025

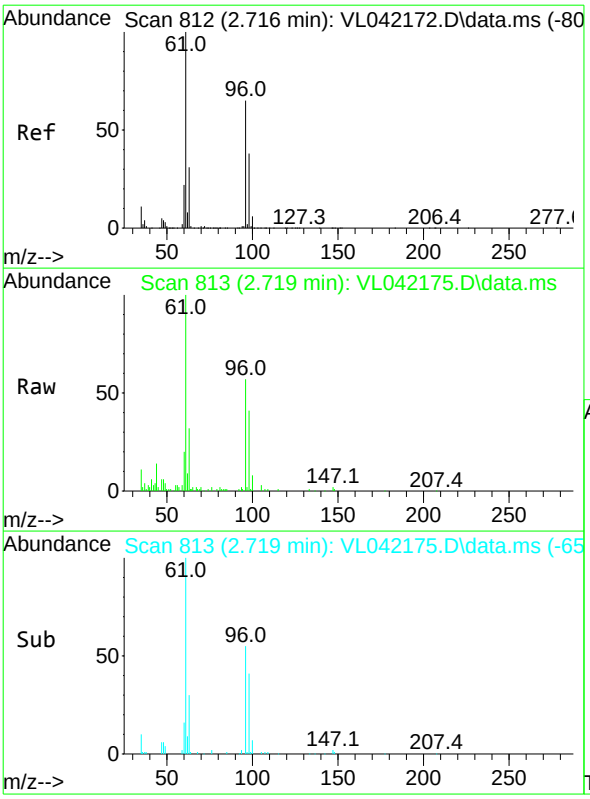


#30
Cyclohexane
Concen: 0.549 ppbv m
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 12063

Ion	Ratio	Lower	Upper
84	100		
56	126.3	102.8	154.2
41	93.5	66.5	99.7

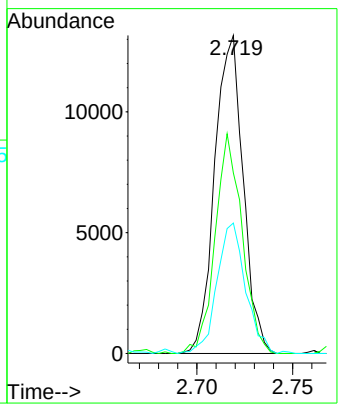




#31
cis-1,2-Dichloroethene
Concen: 0.529 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 61 Resp: 13601

Ion	Ratio	Lower	Upper
61	100		
96	56.8	51.8	77.8
98	41.0	30.6	46.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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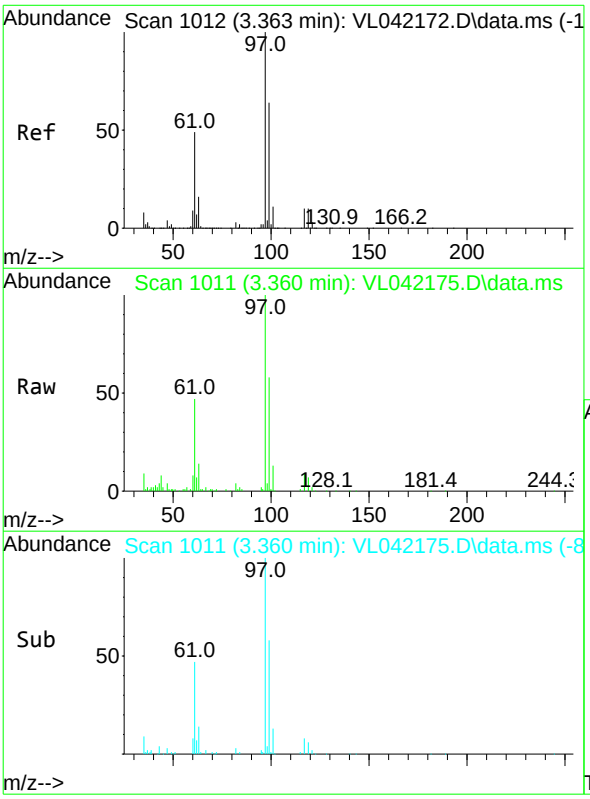
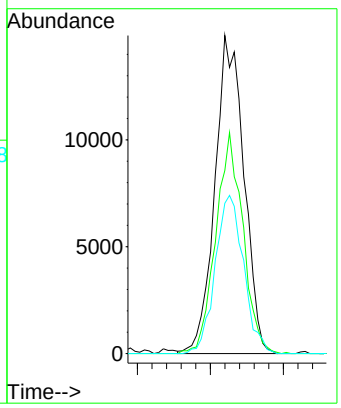
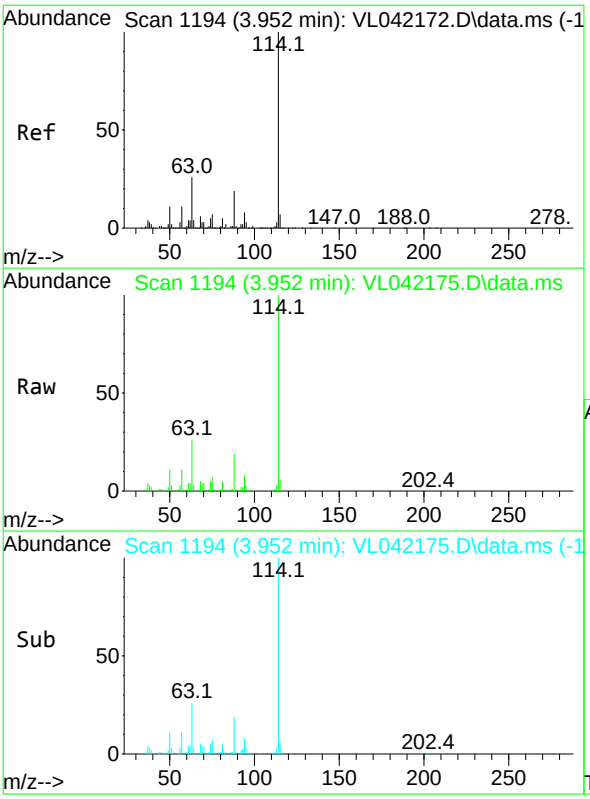


#32
1,1,1-Trichloroethane
Concen: 0.485 ppbv
RT: 3.360 min Scan# 1011
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 97 Resp: 20567

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.5	77.3
61	48.6	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:114 Resp: 523832

Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.7	31.1
88	19.1	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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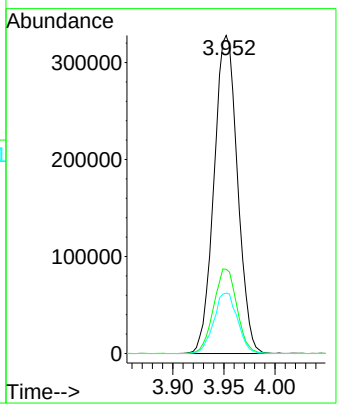
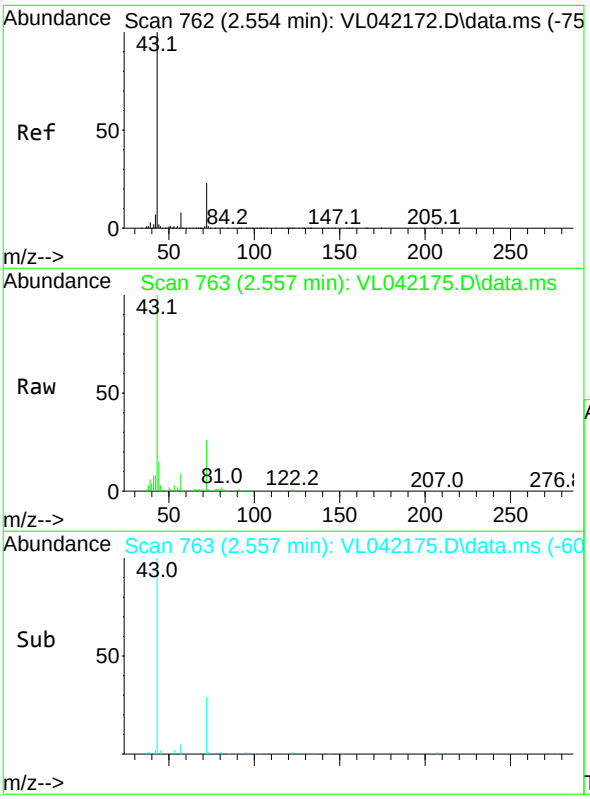
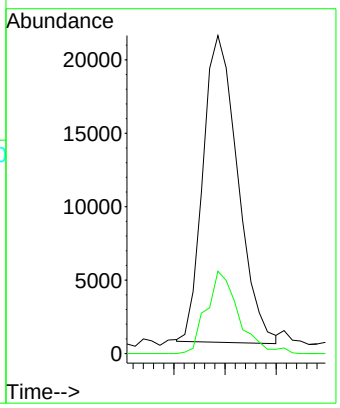


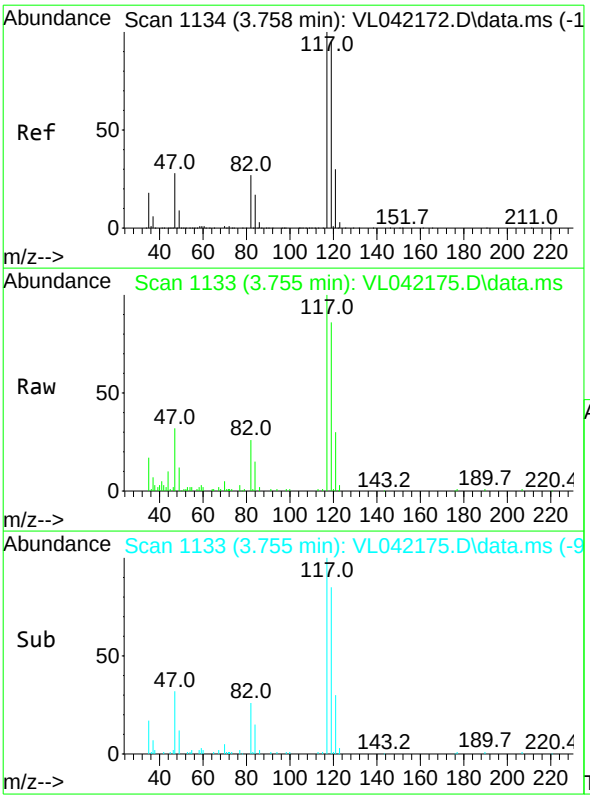


#34
2-Butanone
Concen: 0.520 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 19739

Ion	Ratio	Lower	Upper
43	100		
72	24.8	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.460 ppbv
RT: 3.755 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:117 Resp: 18558

Ion	Ratio	Lower	Upper
117	100		
119	86.4	76.2	114.2
121	30.1	24.2	36.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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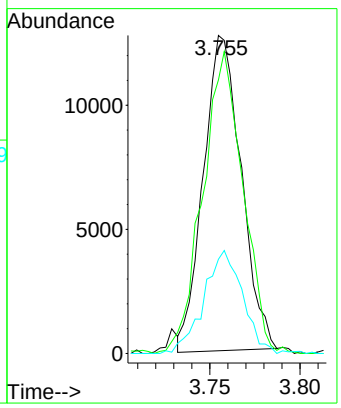
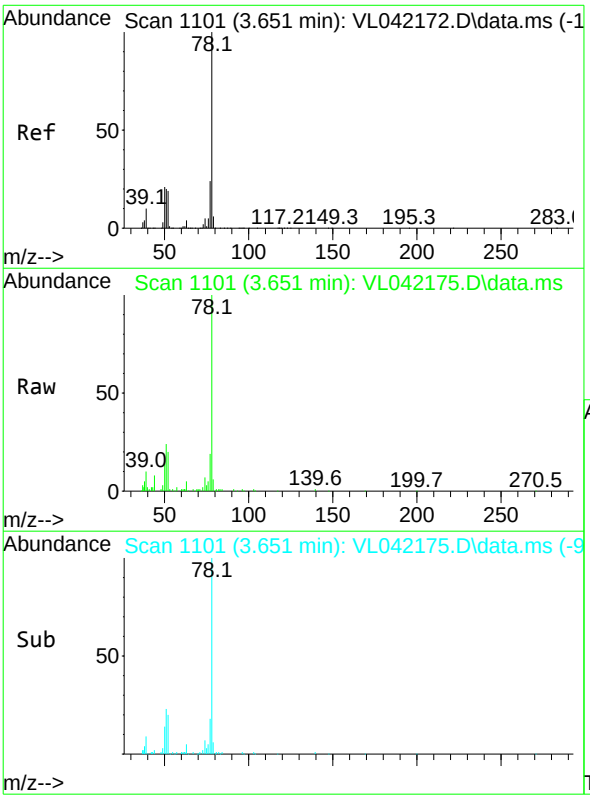
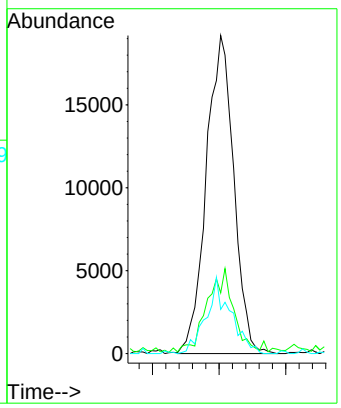


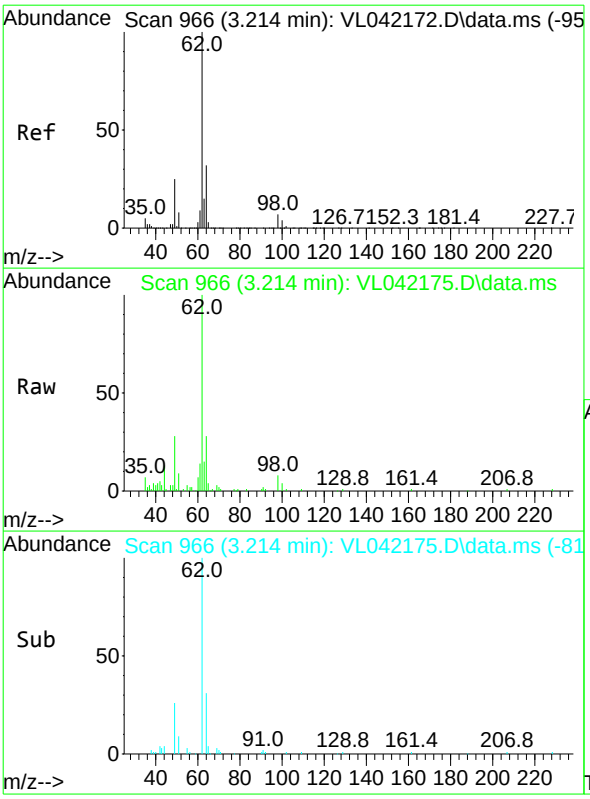


#36
Benzene
Concen: 0.529 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 78 Resp: 27488

Ion	Ratio	Lower	Upper
78	100		
77	18.5	19.1	28.7#
50	13.9	16.6	24.8#

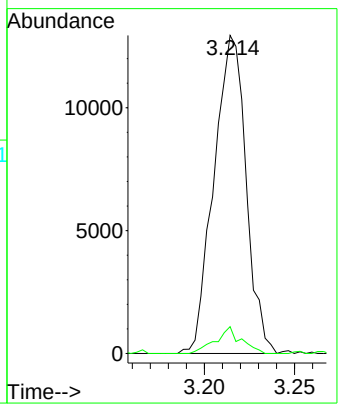




#37
1,2-Dichloroethane
Concen: 0.540 ppbv
RT: 3.214 min Scan# 96
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 62 Resp: 16062

Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.4	8.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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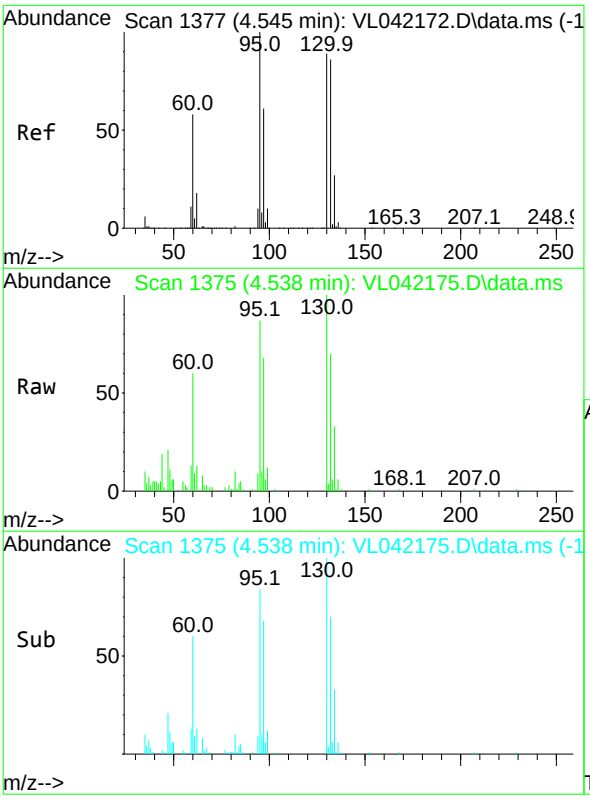
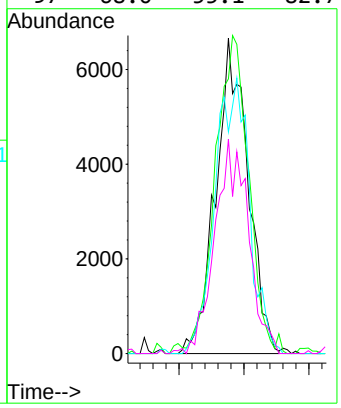
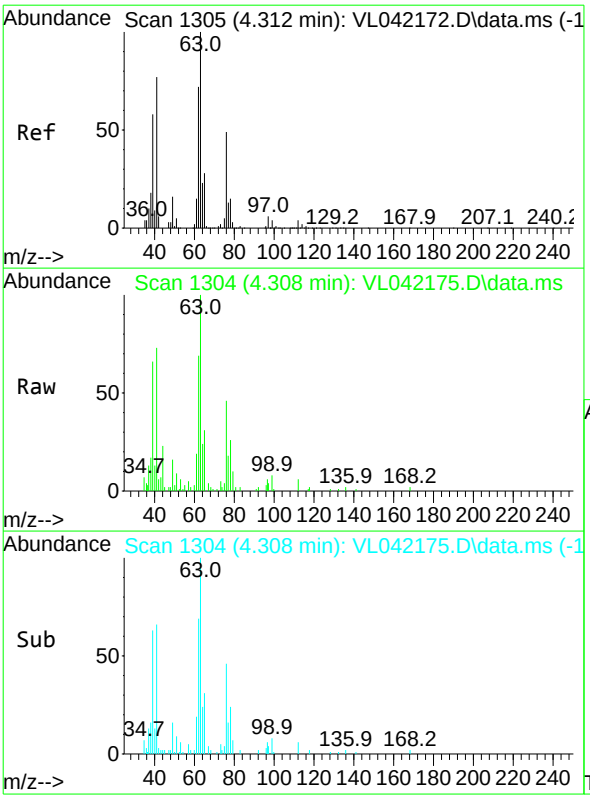


#38
Trichloroethene
Concen: 0.529 ppbv m
RT: 4.538 min Scan# 1375
Delta R.T. -0.007 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:130 Resp: 11460

Ion	Ratio	Lower	Upper
130	100		
95	87.1	89.8	134.8#
132	70.3	77.4	116.2#
97	68.0	55.1	82.7





#39
1,2-Dichloropropane
Concen: 0.535 ppbv
RT: 4.308 min Scan# 13
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 63 Resp: 10123

Ion	Ratio	Lower	Upper
63	100		
41	66.4	61.7	92.5
62	69.3	57.6	86.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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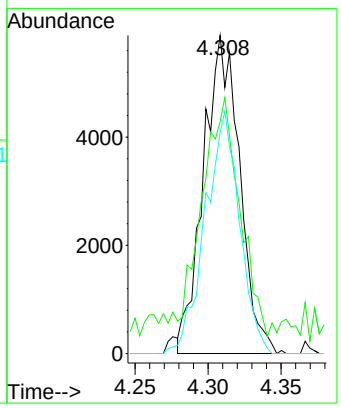
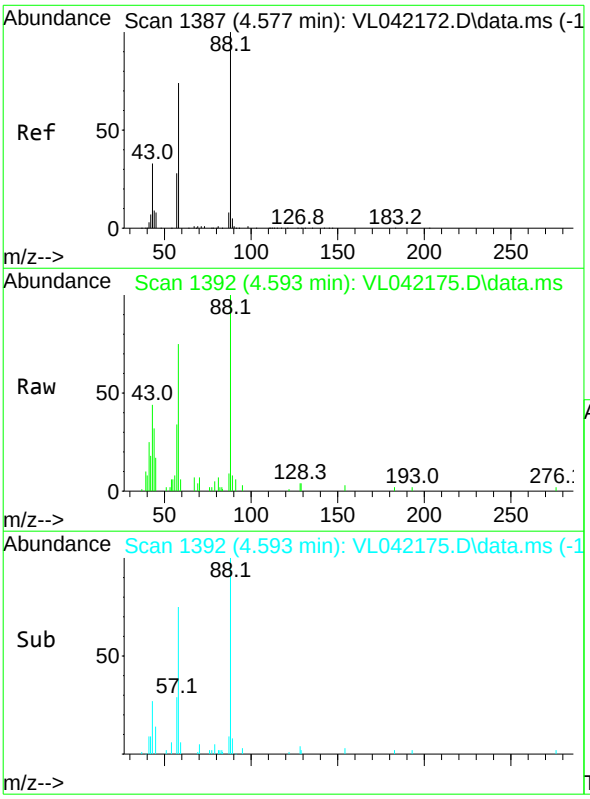
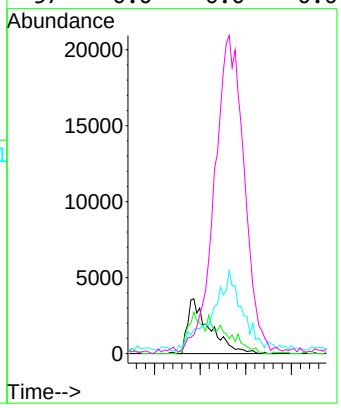


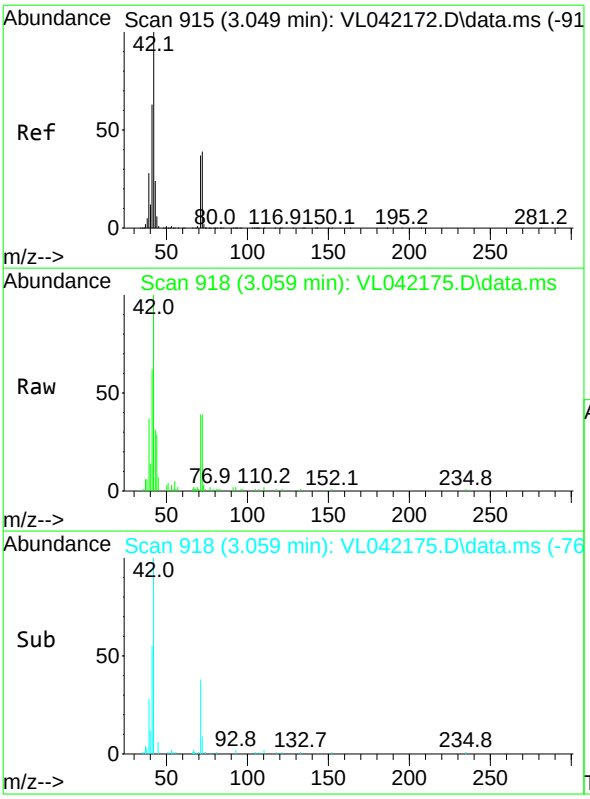


#40
1,4-Dioxane
Concen: 0.624 ppbv m
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 88 Resp: 6121

Ion	Ratio	Lower	Upper
88	100		
58	111.2	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0

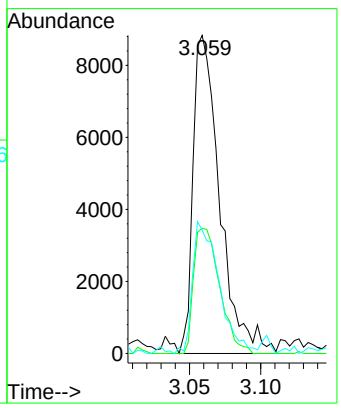




#41
Tetrahydrofuran
Concen: 0.533 ppbv m
RT: 3.059 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 42 Resp: 11509

Ion	Ratio	Lower	Upper
42	100		
72	38.4	31.4	47.0
71	40.7	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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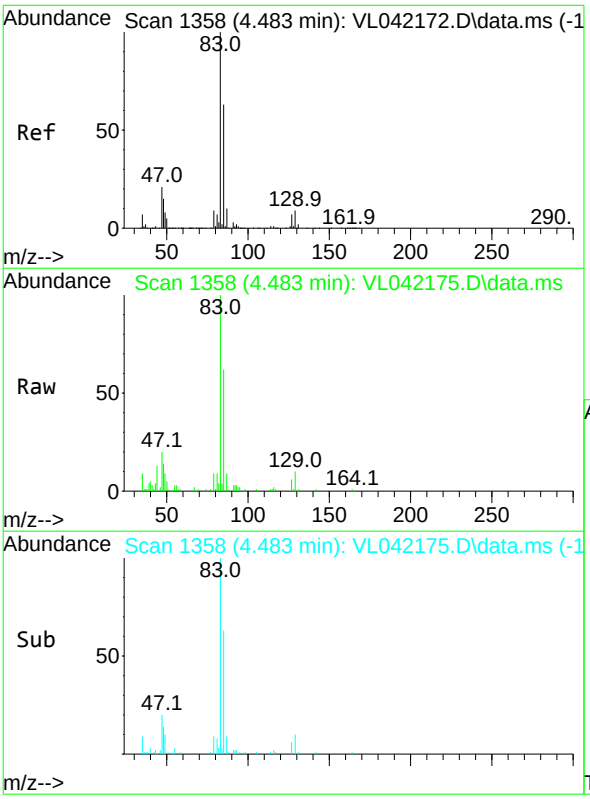
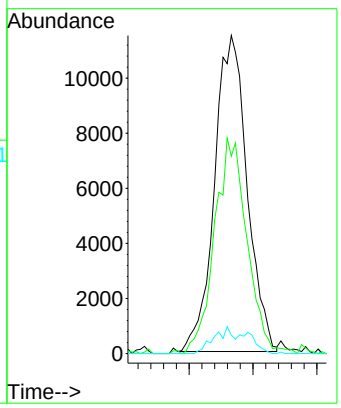
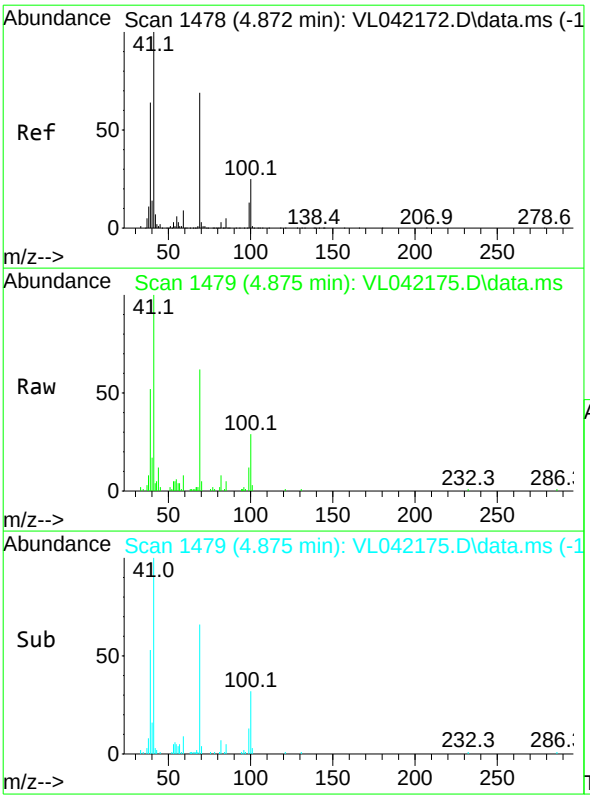


#42
Bromodichloromethane
Concen: 0.497 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 20374

Ion	Ratio	Lower	Upper
83	100		
85	61.6	50.5	75.7
127	5.9	5.9	8.9#

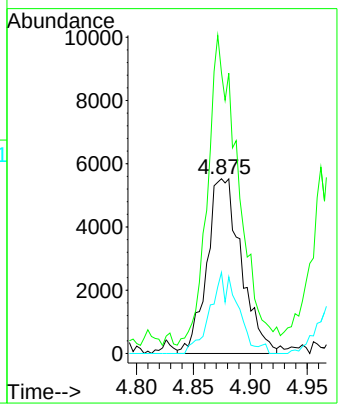




#43
Methyl Methacrylate
Concen: 0.528 ppbv m
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 69 Resp: 11583

Ion	Ratio	Lower	Upper
69	100		
41	150.3	123.8	185.6
100	37.9	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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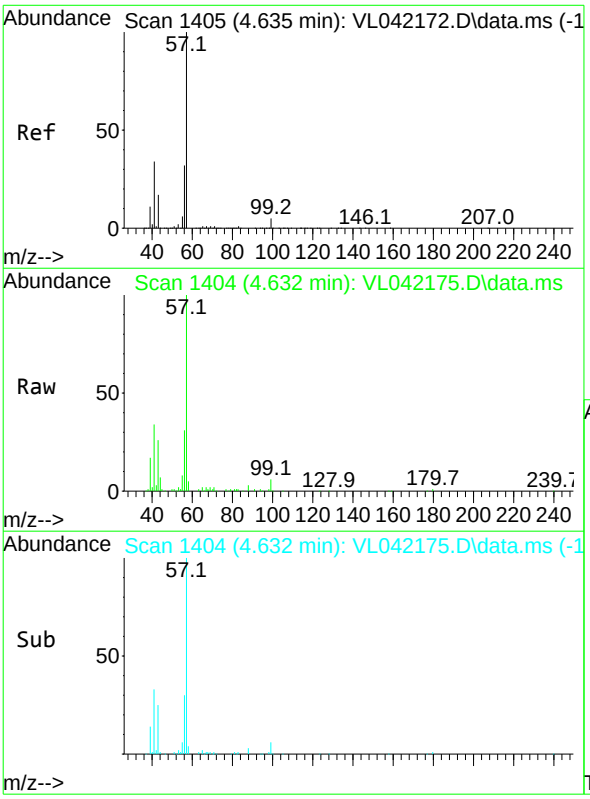
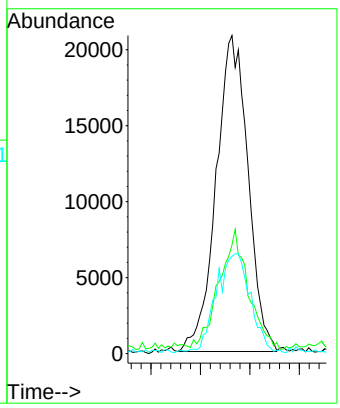
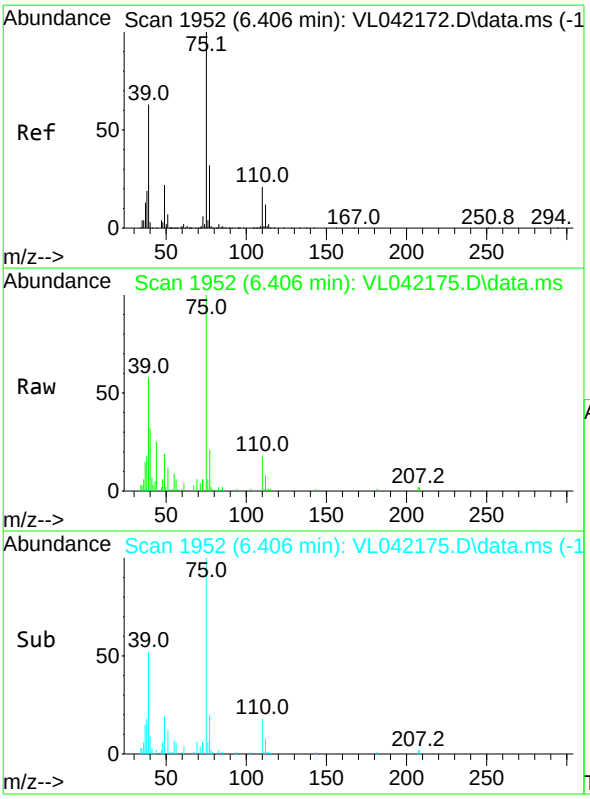


#44
2,2,4-Trimethylpentane
Concen: 0.532 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 46646

Ion	Ratio	Lower	Upper
57	100		
41	36.7	26.8	40.2
56	34.3	25.6	38.4

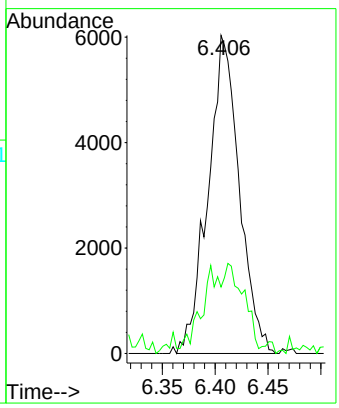




#45
t-1,3-Dichloropropene
Concen: 0.526 ppbv
RT: 6.406 min Scan# 19
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 75 Resp: 12404

Ion	Ratio	Lower	Upper
75	100		
77	20.9	26.0	39.0#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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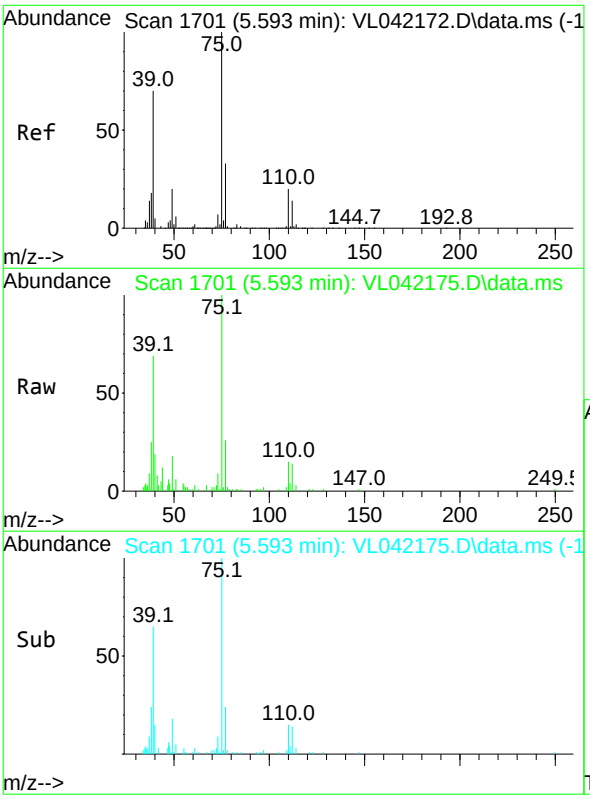
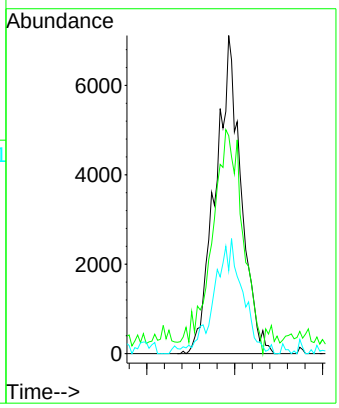
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

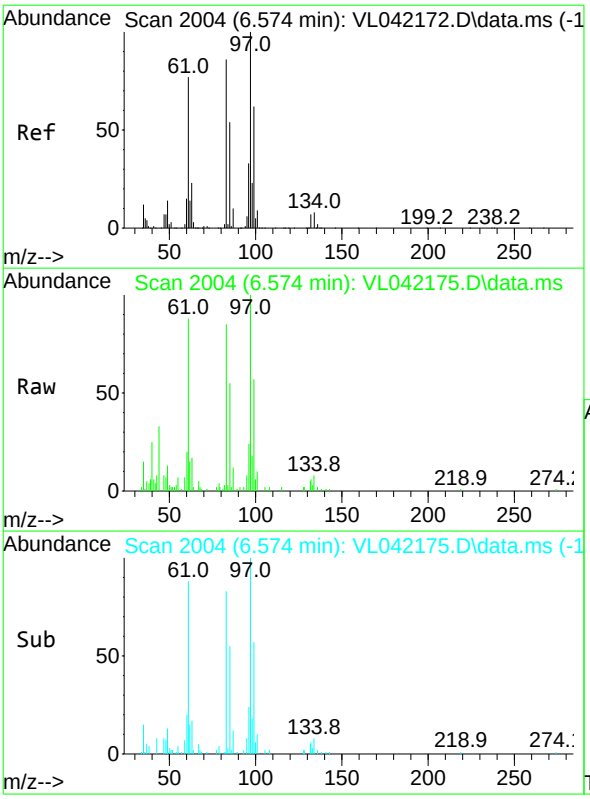


#46
cis-1,3-Dichloropropene
Concen: 0.497 ppbv m
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 75 Resp: 14374

Ion	Ratio	Lower	Upper
75	100		
39	68.5	55.8	83.6
77	26.1	26.0	39.0

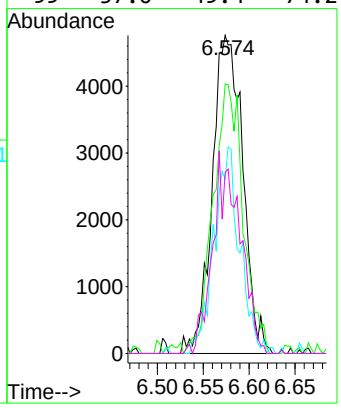




#47
1,1,2-Trichloroethane
Concen: 0.549 ppbv m
RT: 6.574 min Scan# 20
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 97 Resp: 10972

Ion	Ratio	Lower	Upper
97	100		
83	84.8	69.2	103.8
85	54.9	43.1	64.7
99	57.0	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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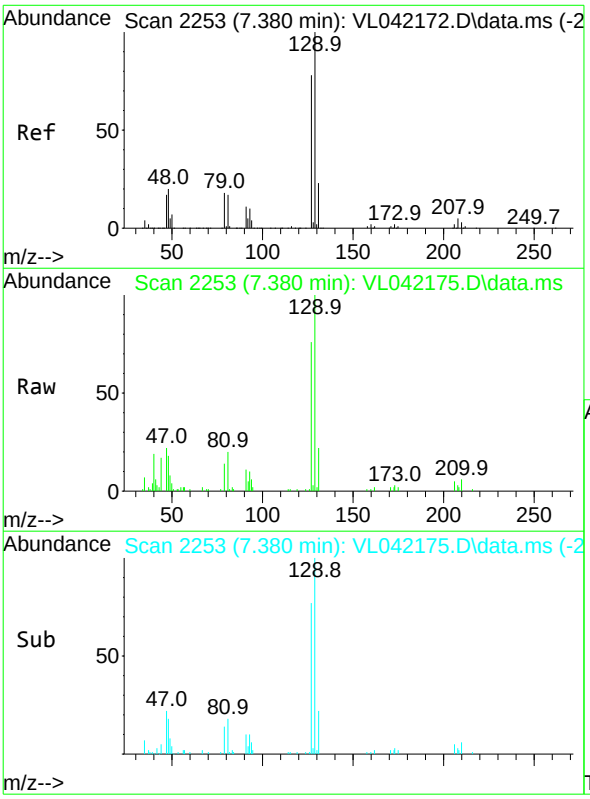
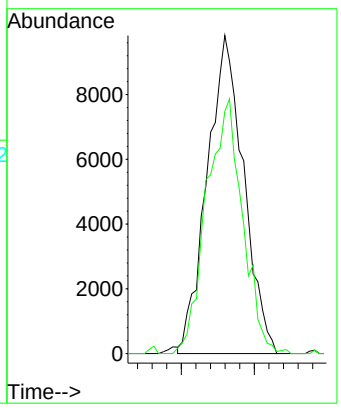
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

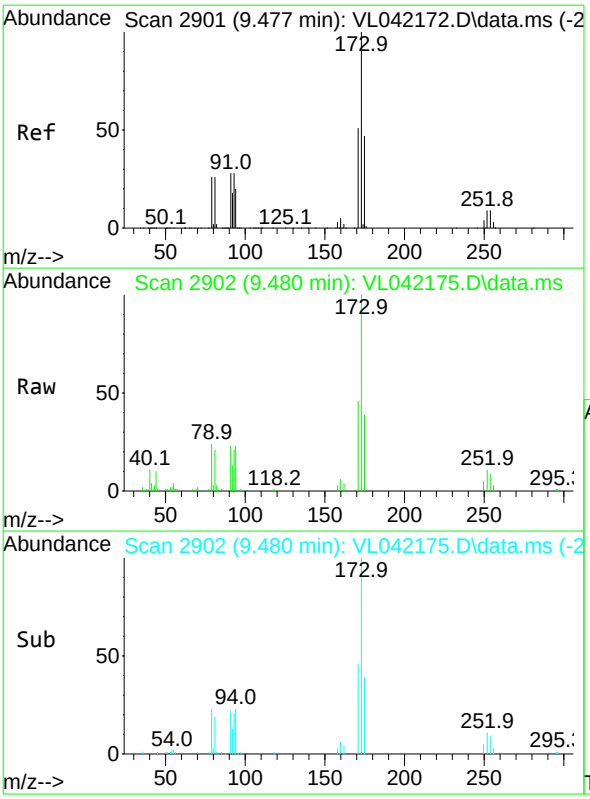


#48
Dibromochloromethane
Concen: 0.503 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:129 Resp: 17042

Ion	Ratio	Lower	Upper
129	100		
127	79.4	39.1	117.2

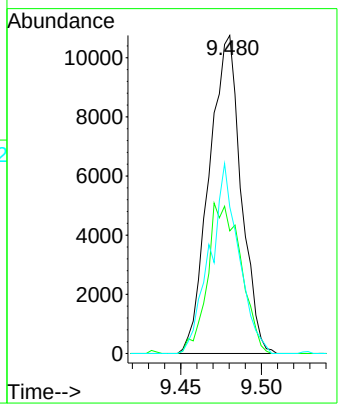




#49
Bromoform
Concen: 0.487 ppbv
RT: 9.480 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:173 Resp: 14828

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.8	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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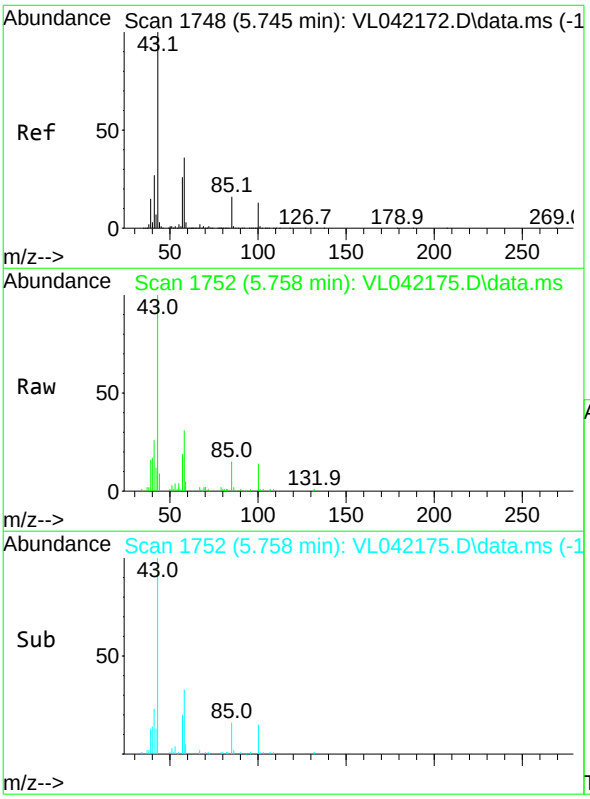
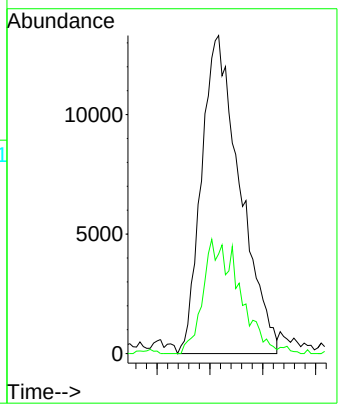
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

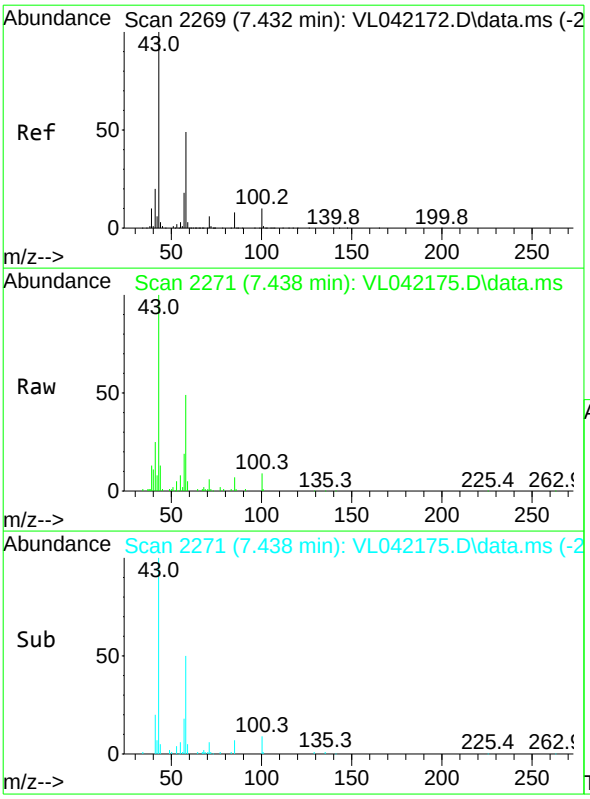


#50
4-Methyl-2-Pentanone
Concen: 0.559 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.013 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 33674

Ion	Ratio	Lower	Upper
43	100		
58	34.4	29.0	43.6





#51
2-Hexanone
Concen: 0.523 ppbv
RT: 7.438 min Scan# 22
Delta R.T. 0.006 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 26154

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.0	0.1	0.1#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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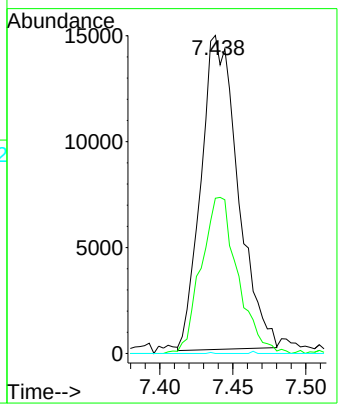
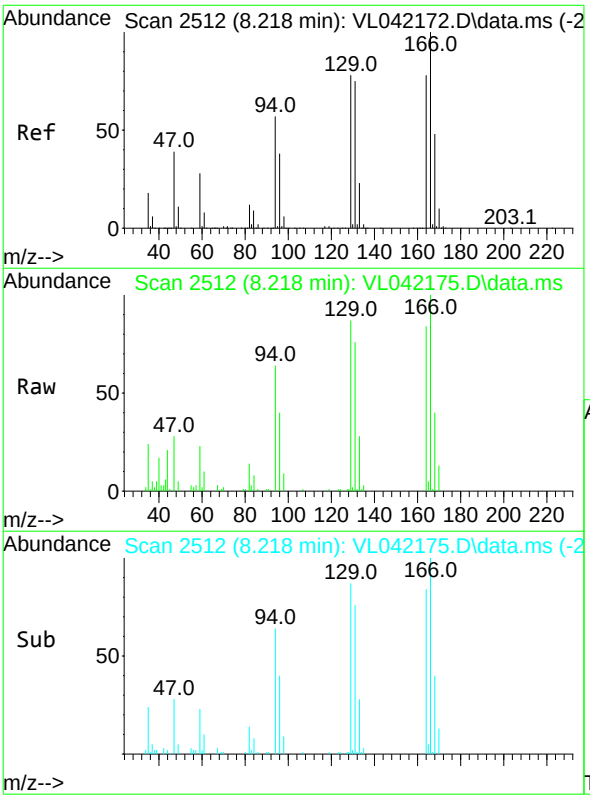
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

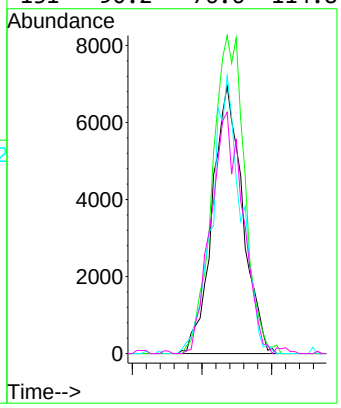


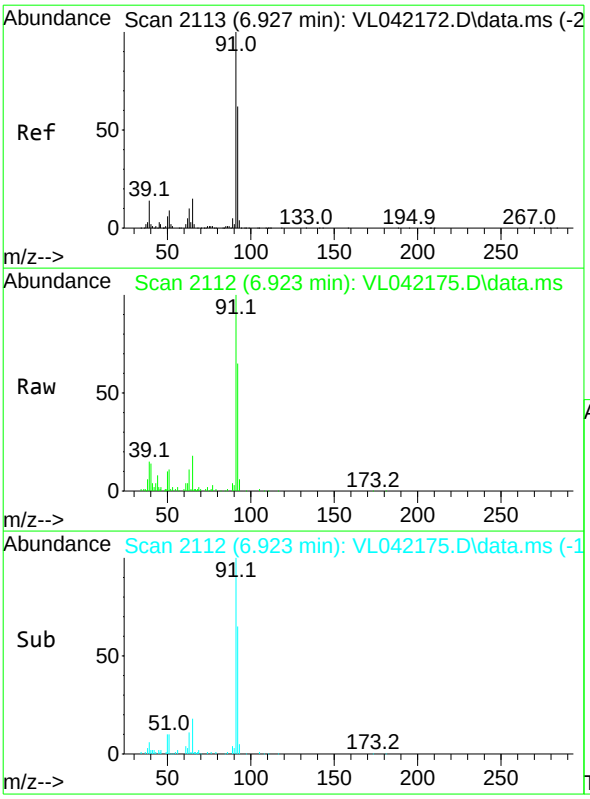


#52
Tetrachloroethene
Concen: 0.510 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:164 Resp: 10502

Ion	Ratio	Lower	Upper
164	100		
166	118.9	102.5	153.7
129	103.8	79.8	119.8
131	90.2	76.6	114.8





#53
Toluene
Concen: 0.527 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 32444

Ion	Ratio	Lower	Upper
91	100		
92	58.9	48.4	72.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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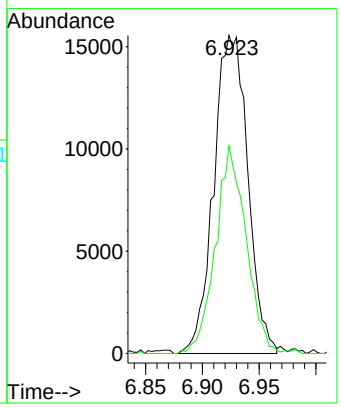
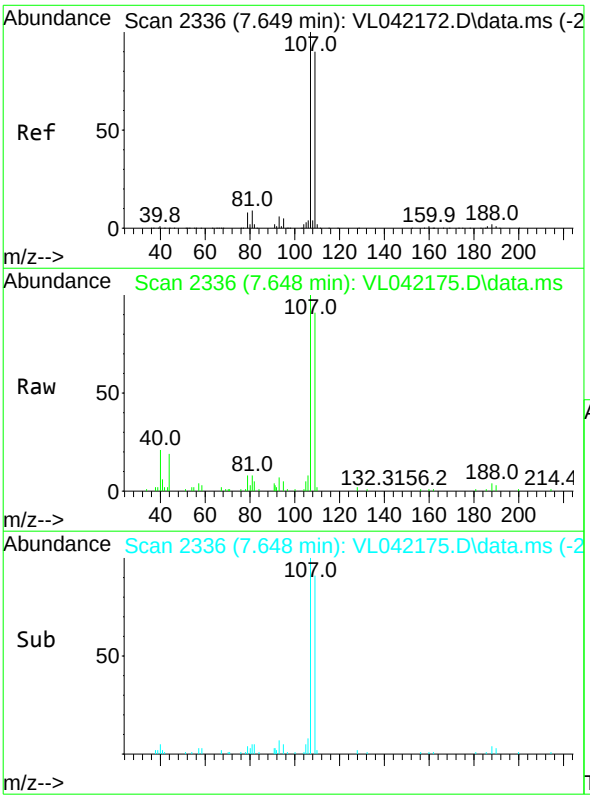
Supervised By :Mahesh Dadoda 04/03/2025

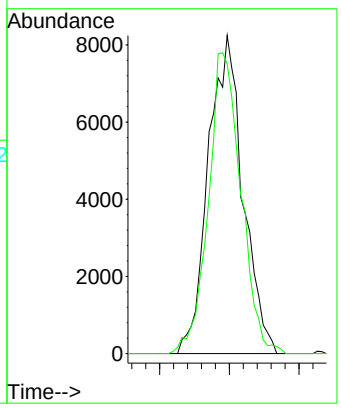


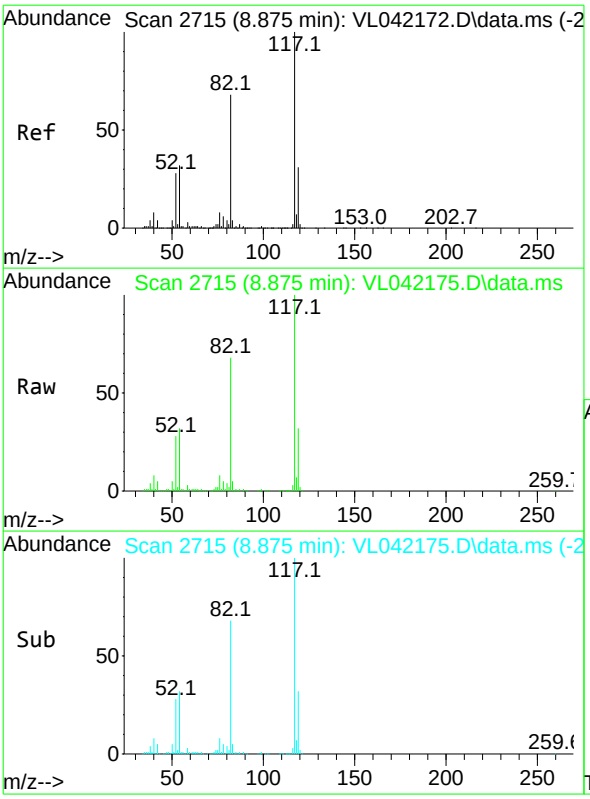


#54
1,2-Dibromoethane
Concen: 0.510 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:107 Resp: 14220

Ion	Ratio	Lower	Upper
107	100		
109	89.1	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:117 Resp: 485078

Ion	Ratio	Lower	Upper
117	100		
82	67.0	55.8	83.6
119	33.7	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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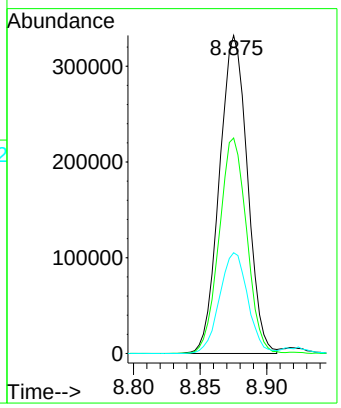
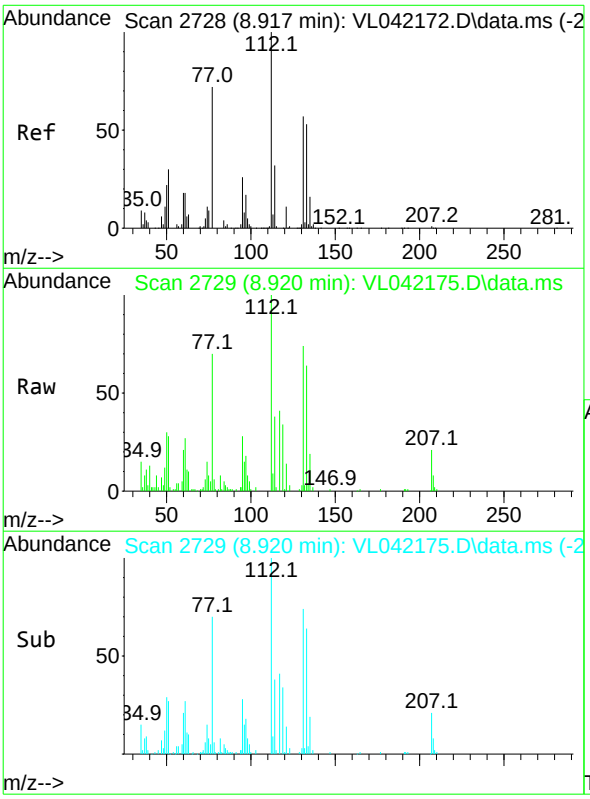
Supervised By :Mahesh Dadoda 04/03/2025

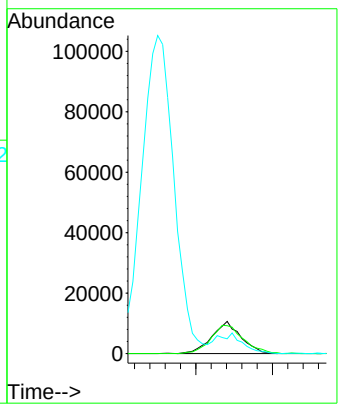


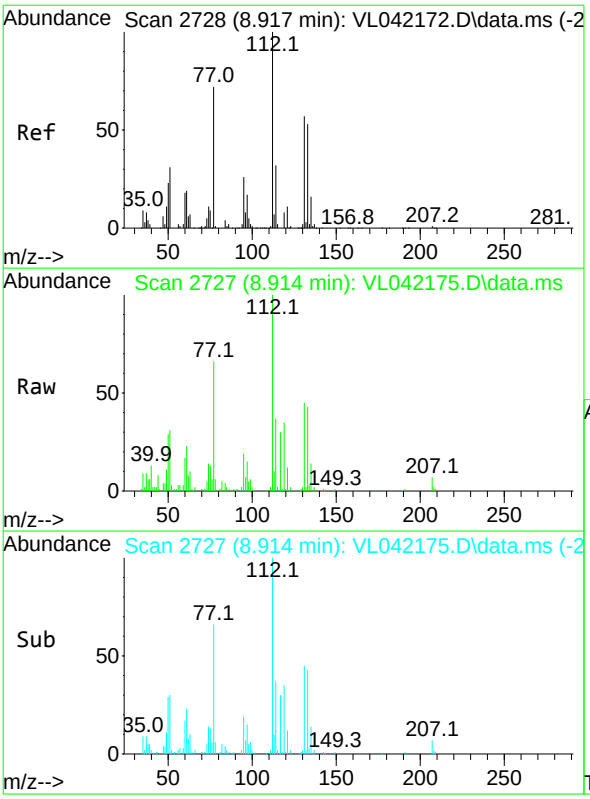


#56
1,1,1,2-Tetrachloroethane
Concen: 0.523 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:131 Resp: 13959

Ion	Ratio	Lower	Upper
131	100		
133	99.6	76.6	114.8
119	1170.3	49.8	74.6#





#57
Chlorobenzene
Concen: 0.540 ppbv
RT: 8.914 min Scan# 27
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:112 Resp: 24826

Ion	Ratio	Lower	Upper
112	100		
77	65.1	58.2	87.2
114	36.8	29.1	35.5#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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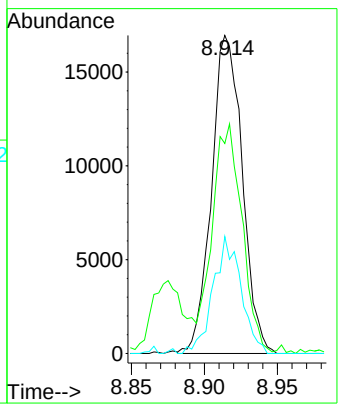
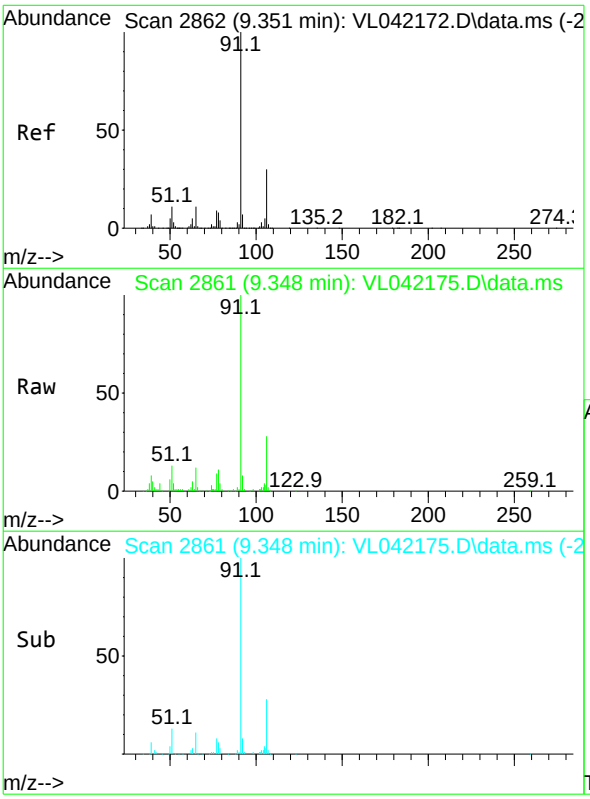
Supervised By :Mahesh Dadoda 04/03/2025

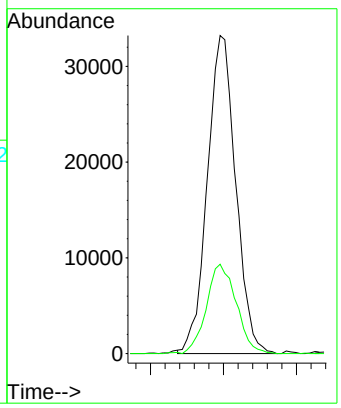


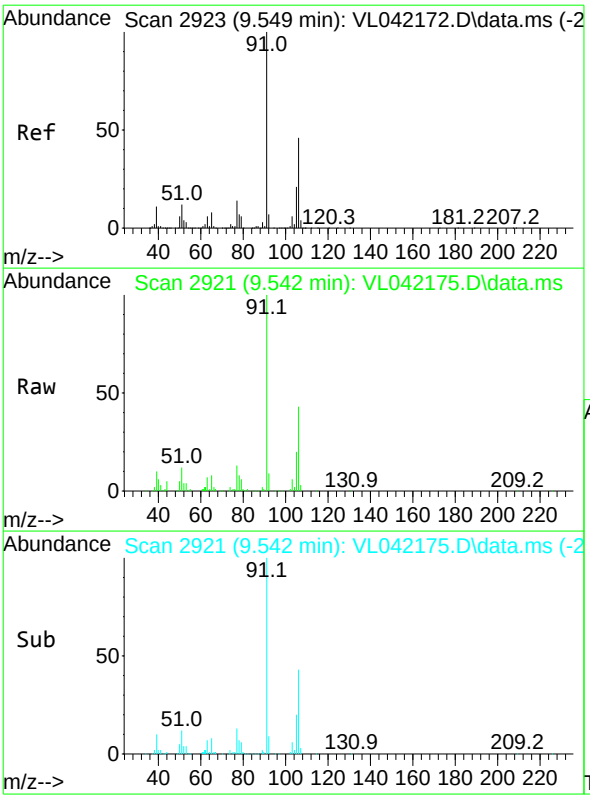


#58
Ethyl Benzene
Concen: 0.521 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 44862

Ion	Ratio	Lower	Upper
91	100		
106	28.1	24.2	36.2

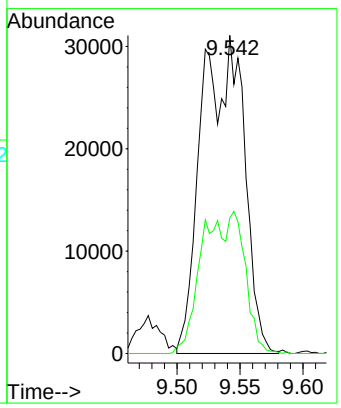




#59
m/p-Xylene
Concen: 1.060 ppbv m
RT: 9.542 min Scan# 29
Delta R.T. -0.007 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 73028

Ion	Ratio	Lower	Upper
91	100		
106	45.2	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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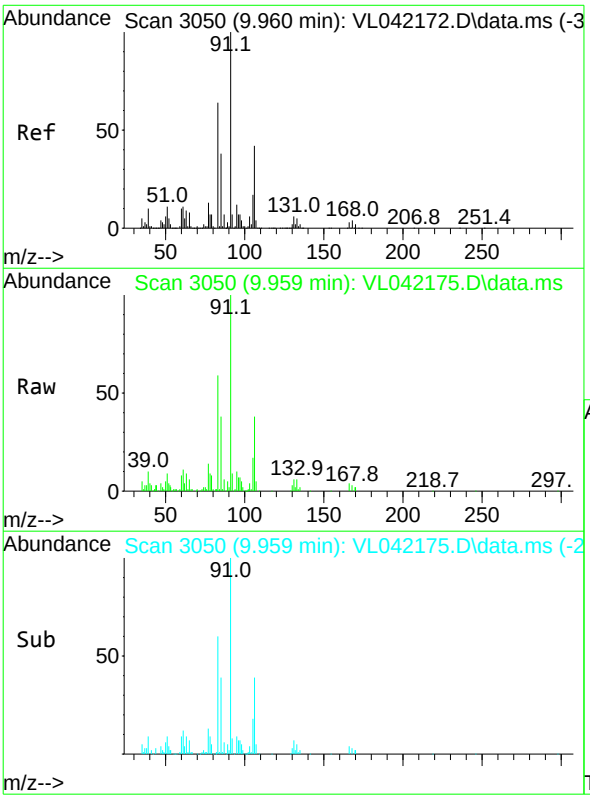
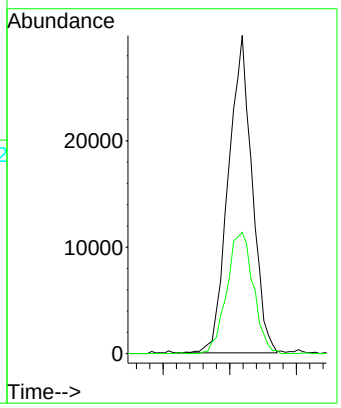
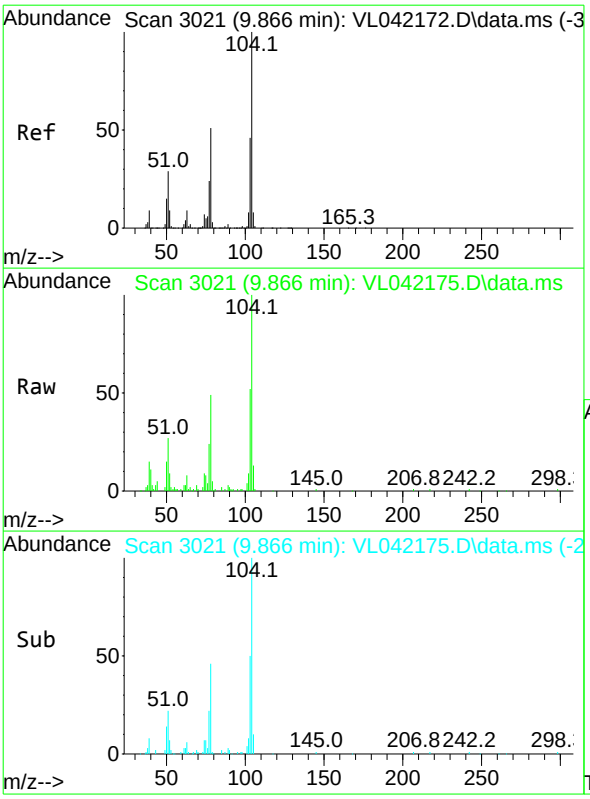


#60
o-Xylene
Concen: 0.535 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 36879

Ion	Ratio	Lower	Upper
91	100		
106	42.7	20.8	62.5

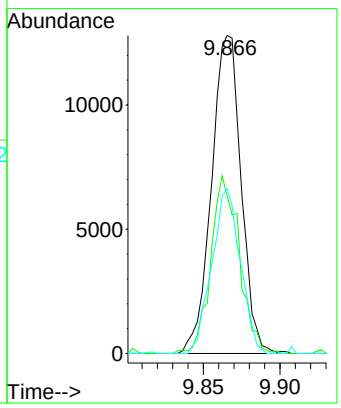




#61
Styrene
Concen: 0.504 ppbv
RT: 9.866 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:104 Resp: 17198

Ion	Ratio	Lower	Upper
104	100		
78	53.7	41.8	62.6
103	50.2	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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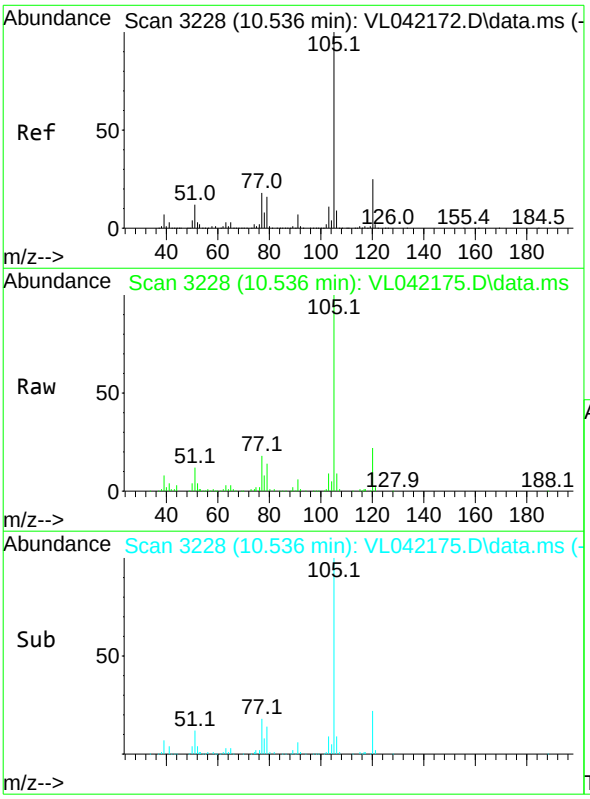
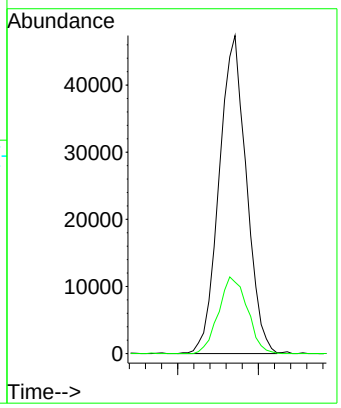
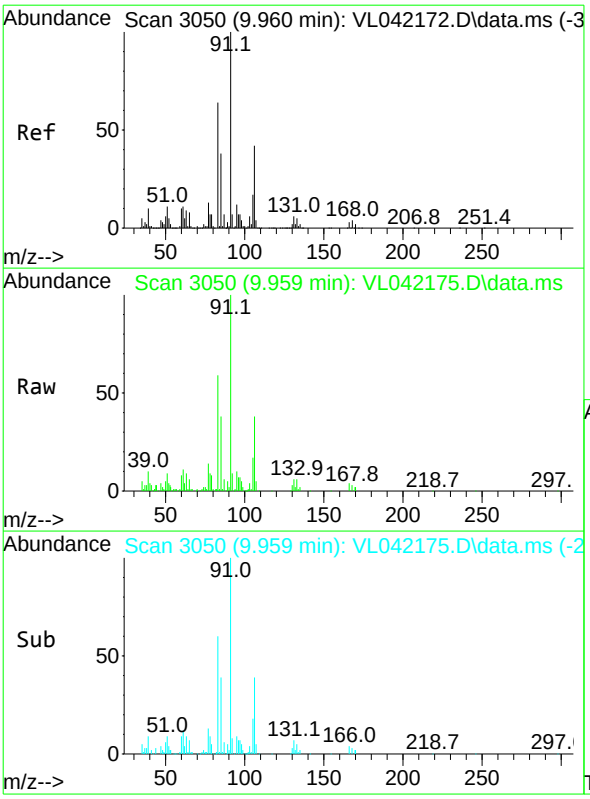


#62
Isopropylbenzene
Concen: 0.538 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 55531

Ion	Ratio	Lower	Upper
105	100		
120	25.5	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 0.525 ppbv
RT: 9.959 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 21989

Ion	Ratio	Lower	Upper
83	100		
131	10.4	4.8	14.4
85	68.1	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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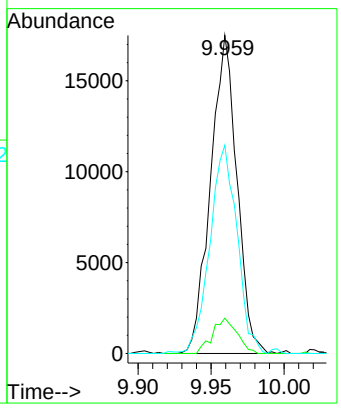
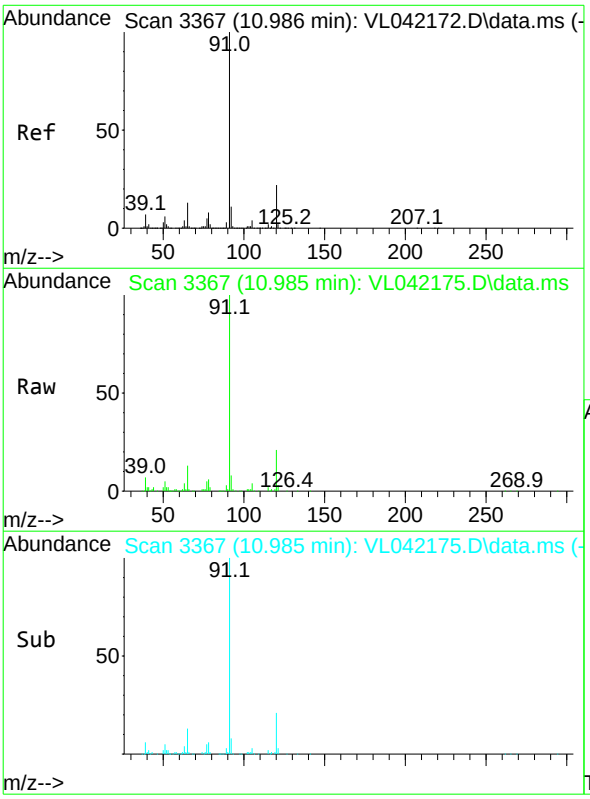
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

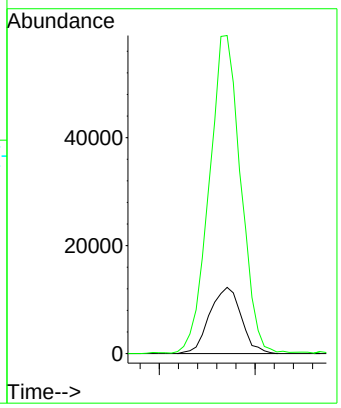


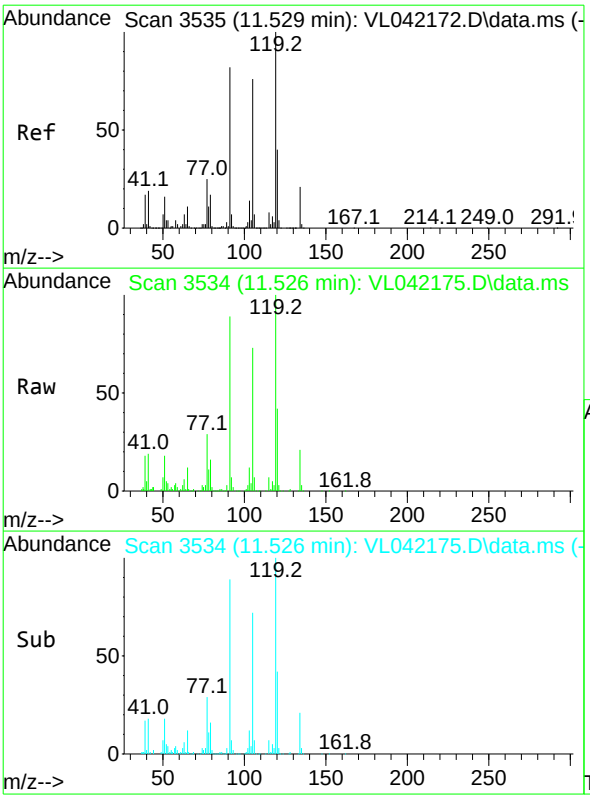


#64
n-propylbenzene
Concen: 0.528 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:120 Resp: 14030

Ion	Ratio	Lower	Upper
120	100		
91	483.1	376.9	565.3

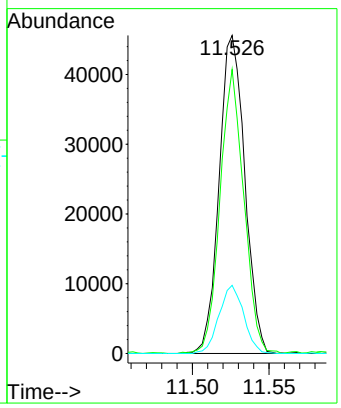




#65
tert-Butylbenzene
Concen: 0.557 ppbv
RT: 11.526 min Scan# 35
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:119 Resp: 53115

Ion	Ratio	Lower	Upper
119	100		
91	82.9	66.0	99.0
134	20.6	16.7	25.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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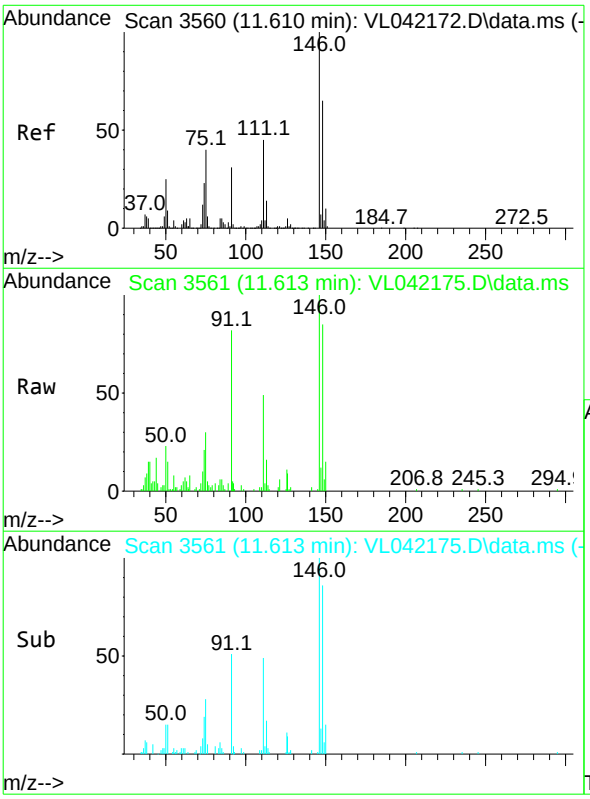
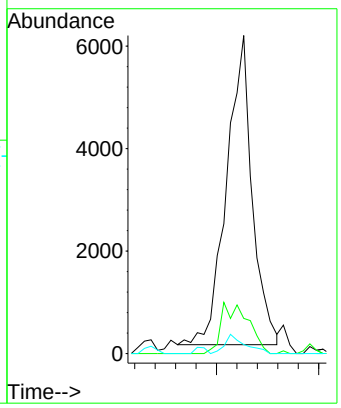
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

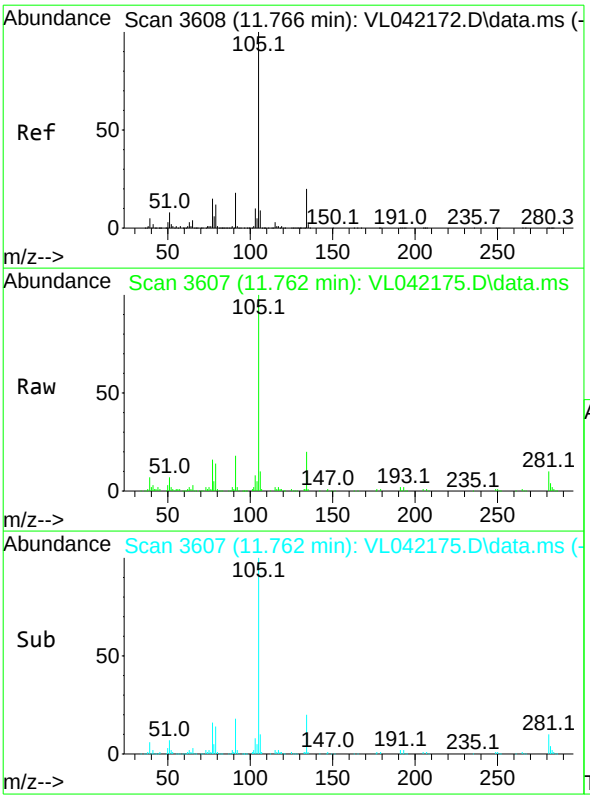


#66
Benzyl Chloride
Concen: 0.520 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 5263

Ion	Ratio	Lower	Upper
91	100		
126	18.7	13.8	20.6
128	5.8	4.5	6.7





#67
sec-Butylbenzene
Concen: 0.550 ppbv
RT: 11.762 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 72879

Ion	Ratio	Lower	Upper
105	100		
134	18.6	15.5	23.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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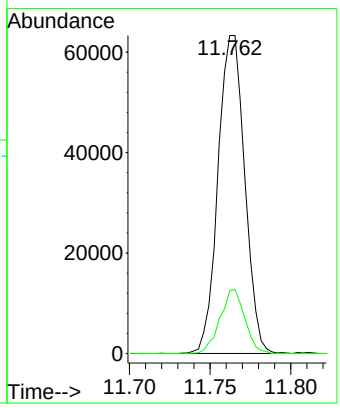
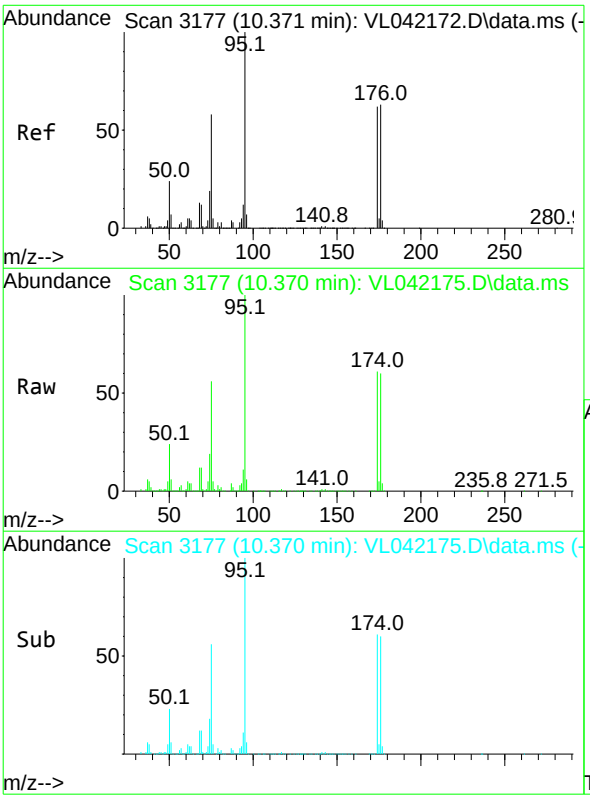
Supervised By :Mahesh Dadoda 04/03/2025

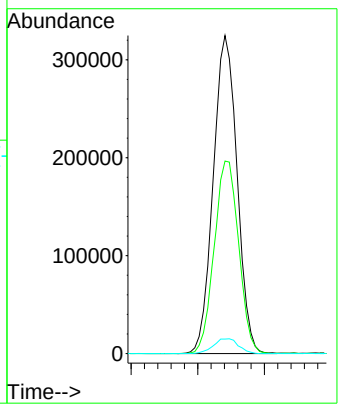


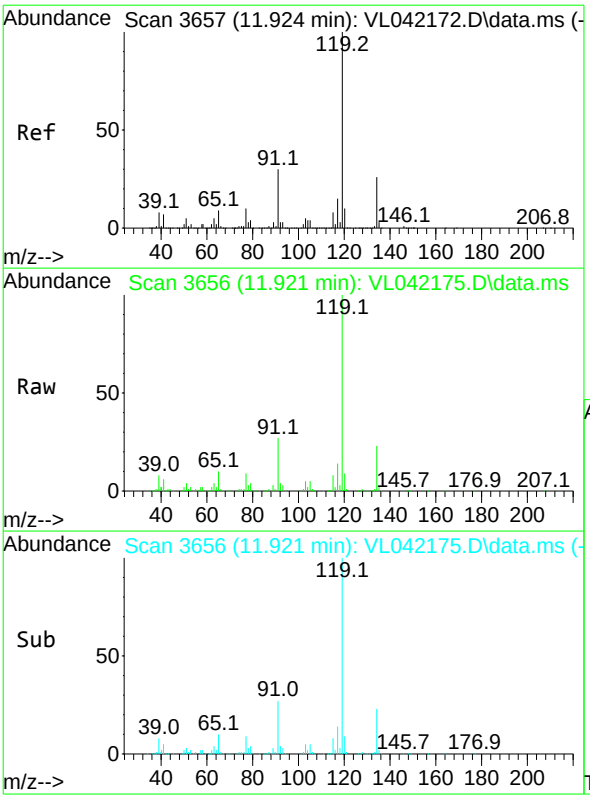


#68
1-Bromo-4-Fluorobenzene
Concen: 10.130 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 95 Resp: 403513

Ion	Ratio	Lower	Upper
95	100		
174	62.3	50.6	76.0
175	4.9	3.8	5.6

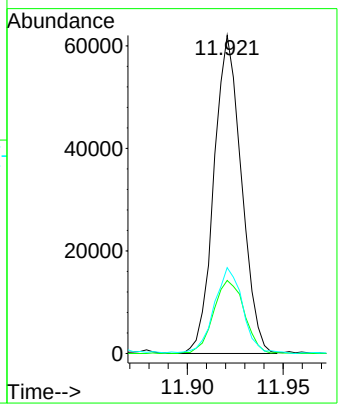




#69
p-Isopropyltoluene
Concen: 0.542 ppbv
RT: 11.921 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:119 Resp: 61933

Ion	Ratio	Lower	Upper
119	100		
134	25.8	20.4	30.6
91	29.4	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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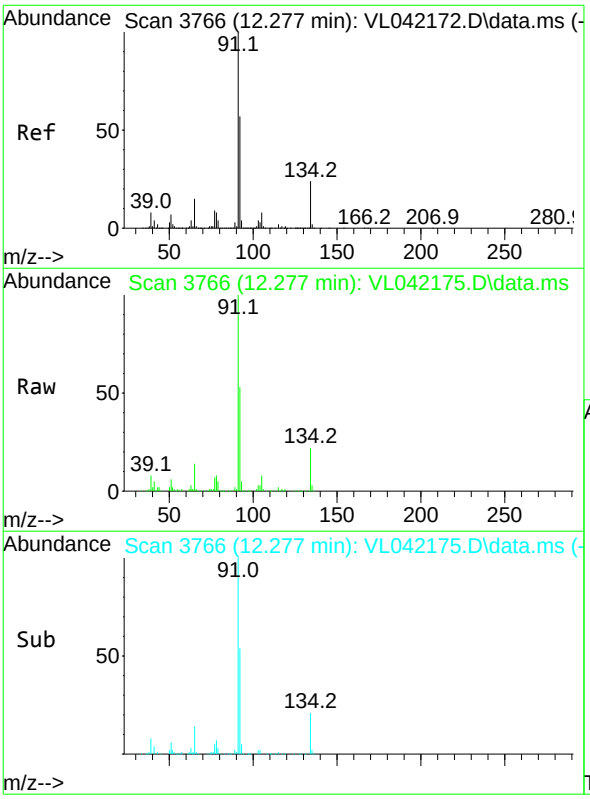
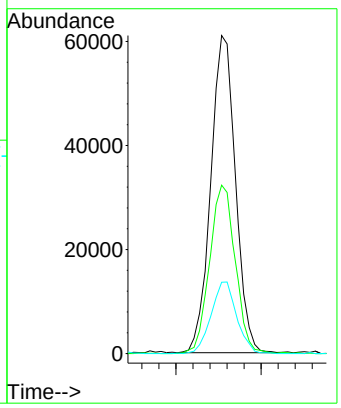
Supervised By :Mahesh Dadoda 04/03/2025

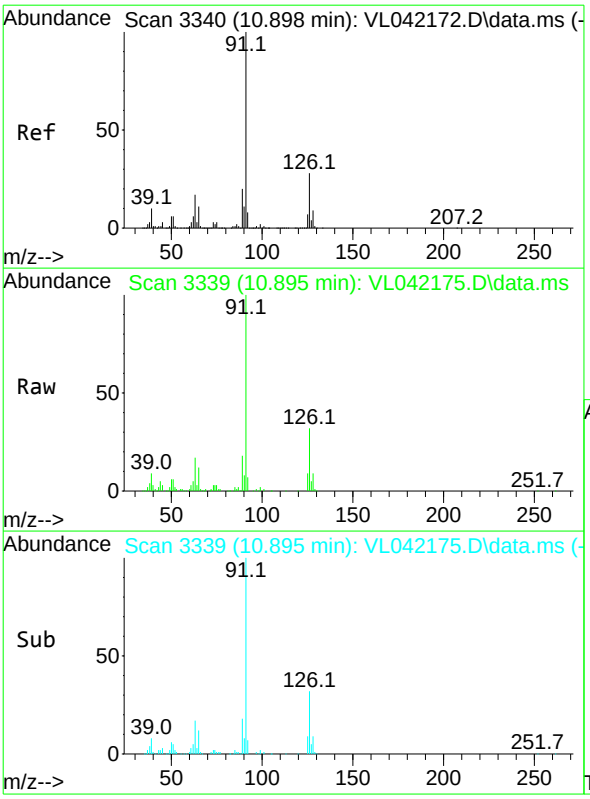


#70
n-Butylbenzene
Concen: 0.527 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 61507

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.4	19.2	28.8





#71
2-Chlorotoluene
Concen: 0.520 ppbv
RT: 10.895 min Scan# 33
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 41637

Ion	Ratio	Lower	Upper
91	100		
126	31.7	11.6	46.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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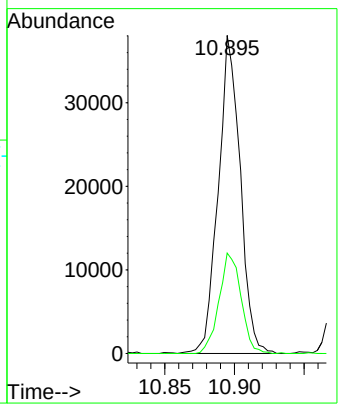
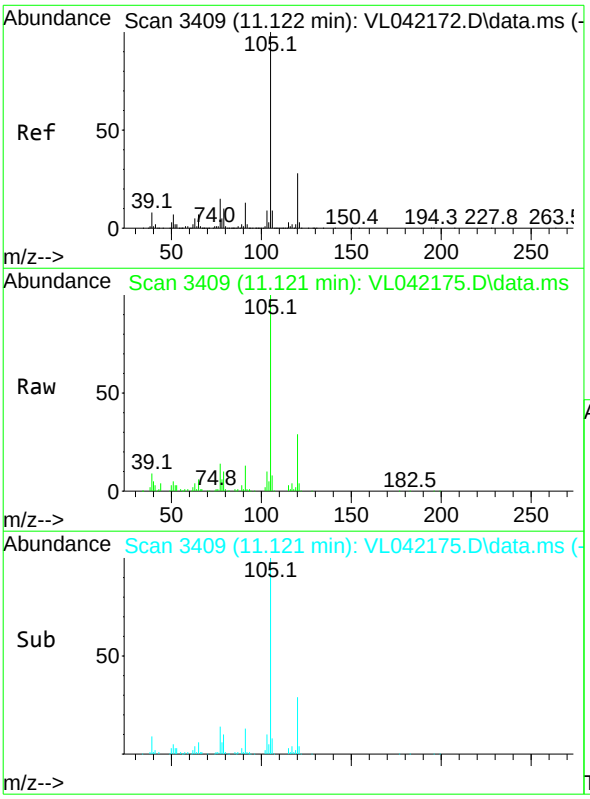
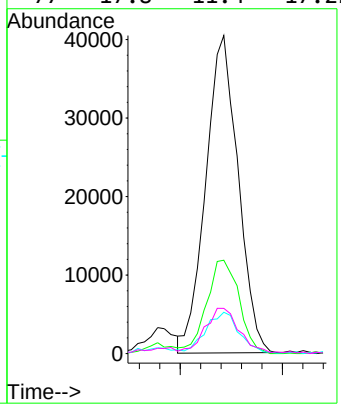


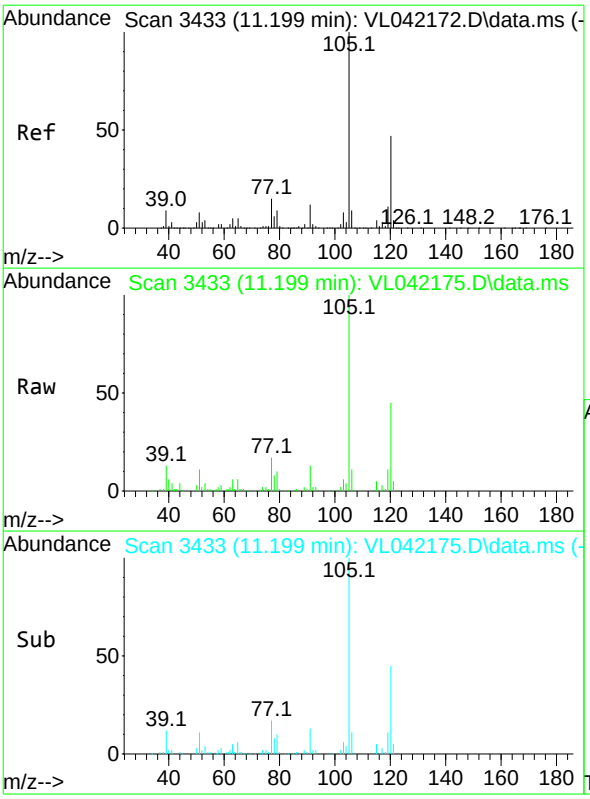


#72
4-Ethyltoluene
Concen: 0.518 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 44473

Ion	Ratio	Lower	Upper
105	100		
120	32.3	23.4	35.0
91	14.9	10.3	15.5
77	17.8	11.4	17.2#

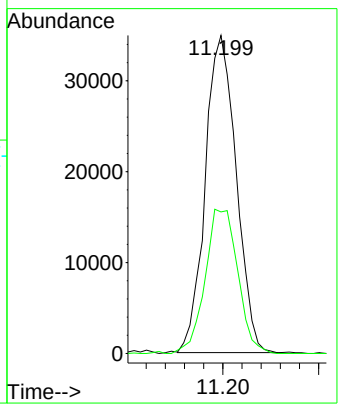




#73
1,3,5-Trimethylbenzene
Concen: 0.523 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 39190

Ion	Ratio	Lower	Upper
105	100		
120	44.6	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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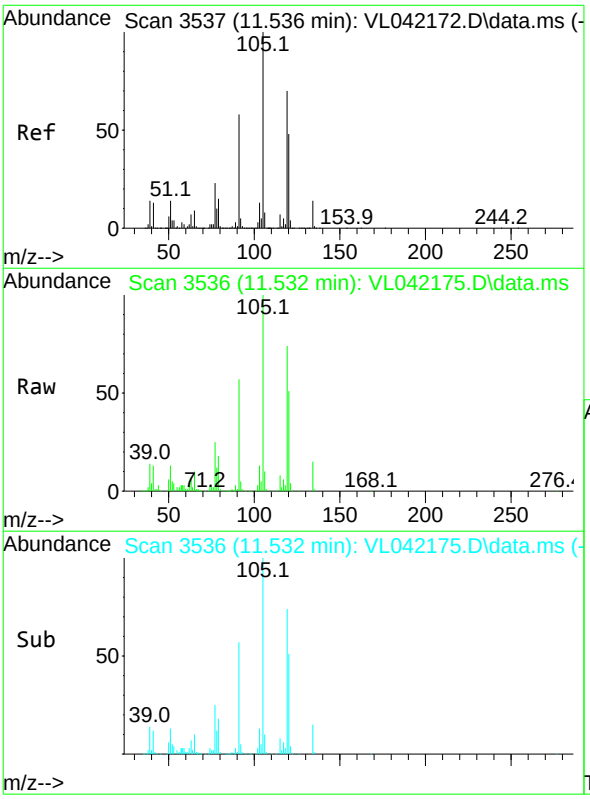
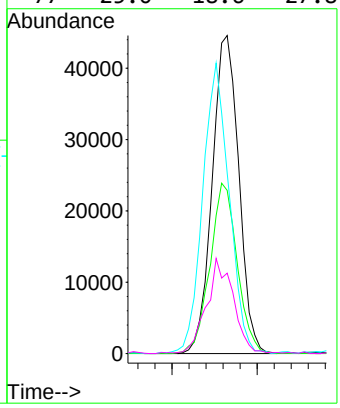
Supervised By :Mahesh Dadoda 04/03/2025

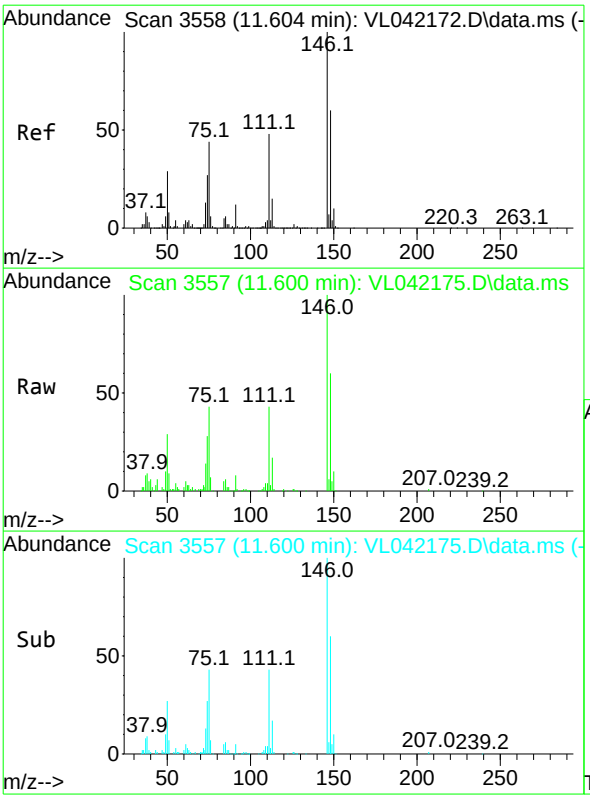


#74
1,2,4-Trimethylbenzene
Concen: 0.560 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 48370

Ion	Ratio	Lower	Upper
105	100		
120	51.3	38.6	58.0
91	56.5	46.2	69.2
77	25.0	18.6	27.8

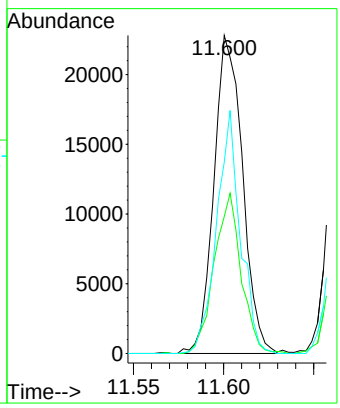




#75
1,3-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.600 min Scan# 35
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 25122

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.7	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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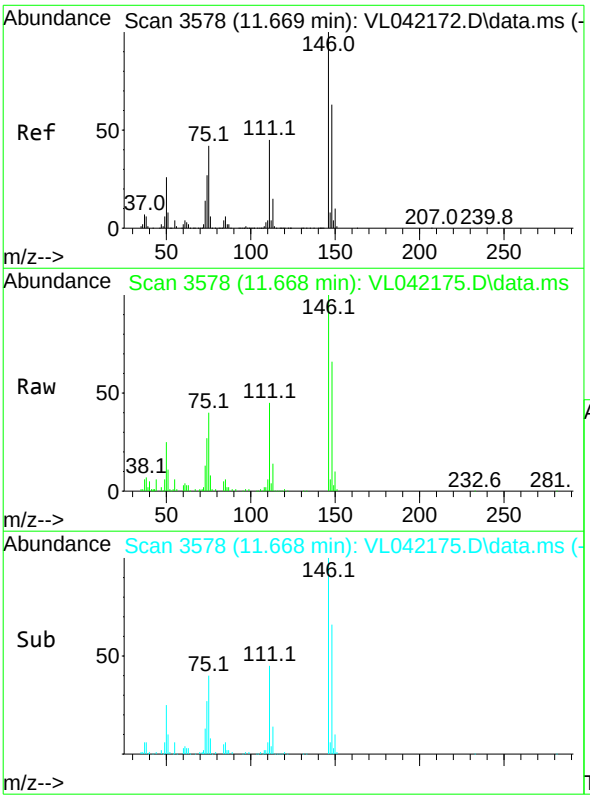
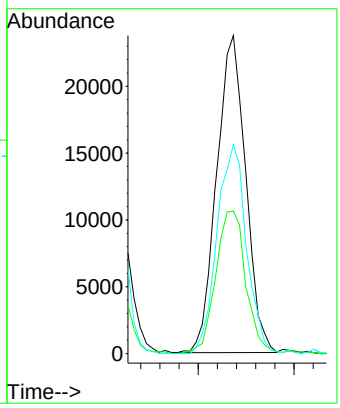
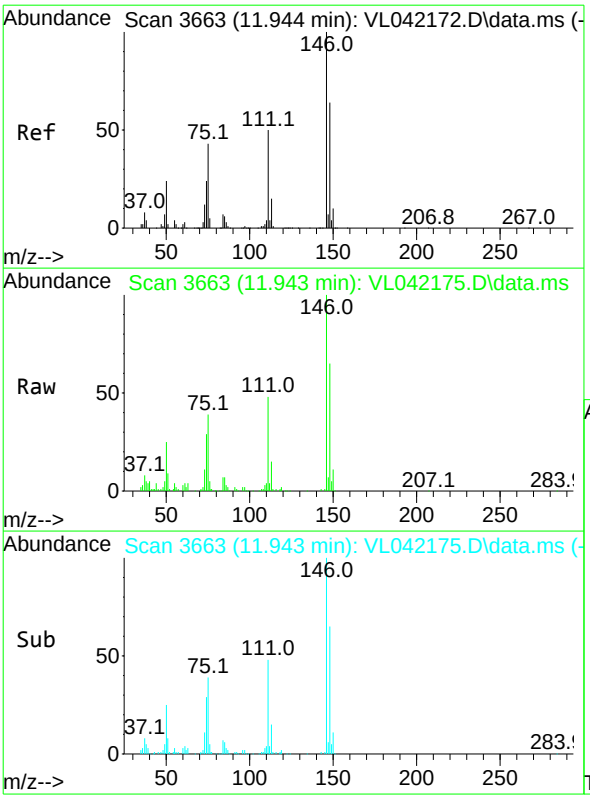


#76
1,4-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 24991

Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.0	69.0
148	67.5	31.9	95.7

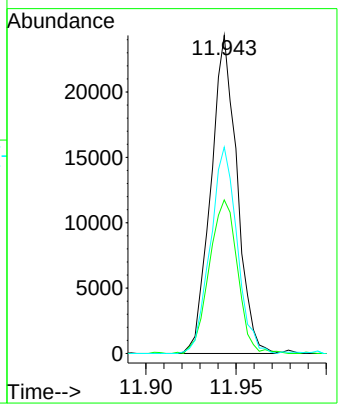




#77
1,2-Dichlorobenzene
Concen: 0.532 ppbv
RT: 11.943 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 24548

Ion	Ratio	Lower	Upper
146	100		
111	52.2	24.8	74.3
148	66.6	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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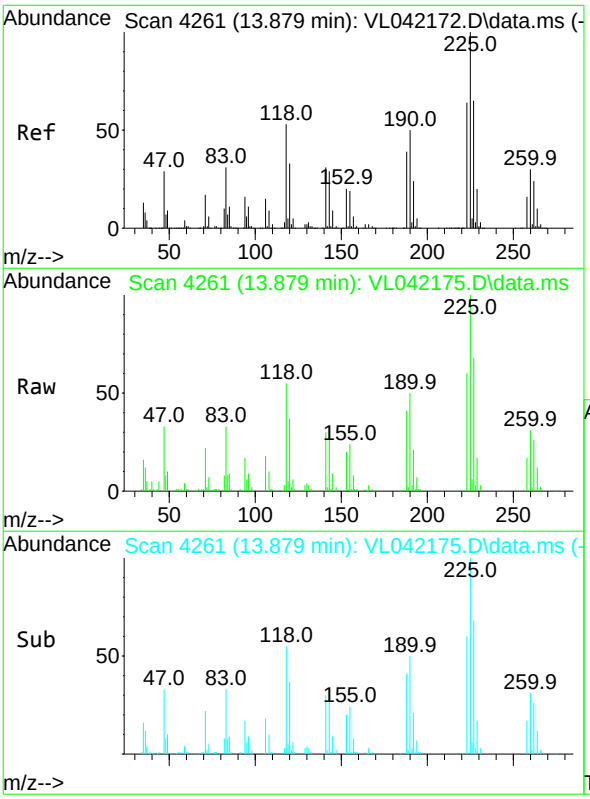
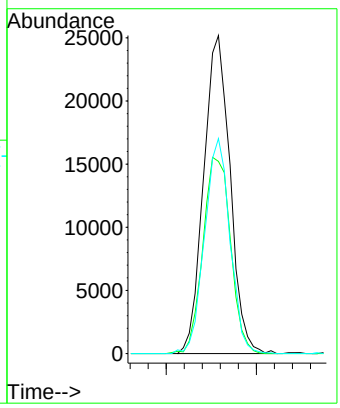
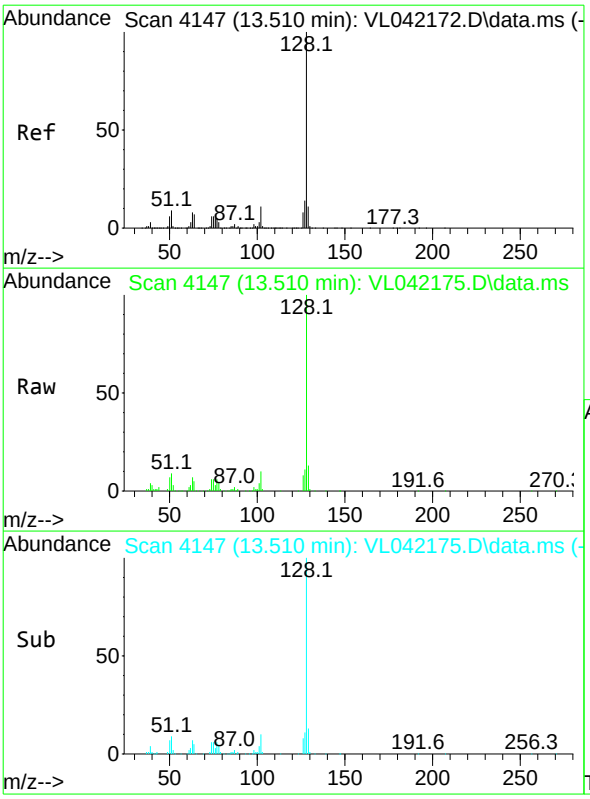


#78
Hexachloro-1,3-Butadiene
Concen: 0.546 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:225 Resp: 25636

Ion	Ratio	Lower	Upper
225	100		
223	64.5	50.6	76.0
227	64.8	51.2	76.8

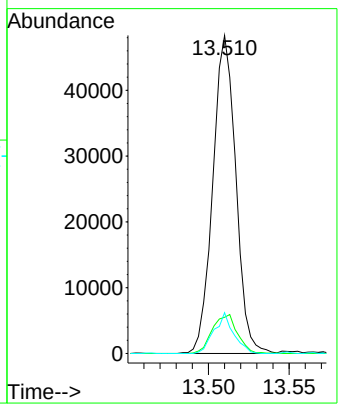




#79
Naphthalene
Concen: 0.508 ppbv
RT: 13.510 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:128 Resp: 47990

Ion	Ratio	Lower	Upper
128	100		
127	11.4	10.8	16.2
129	12.8	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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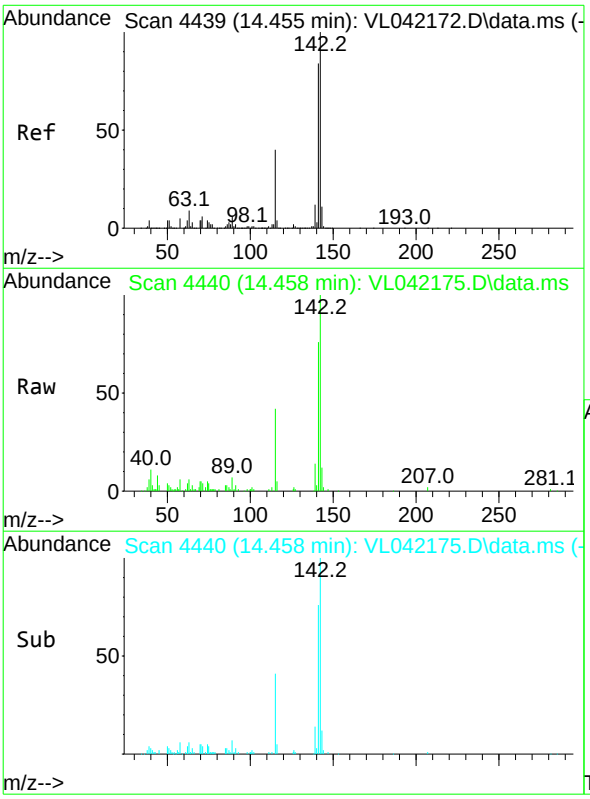
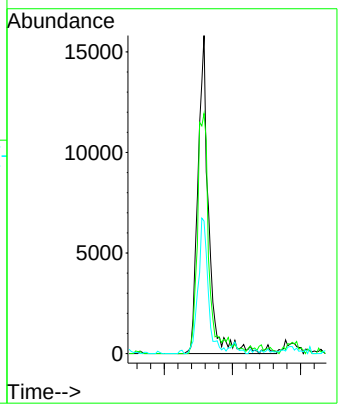
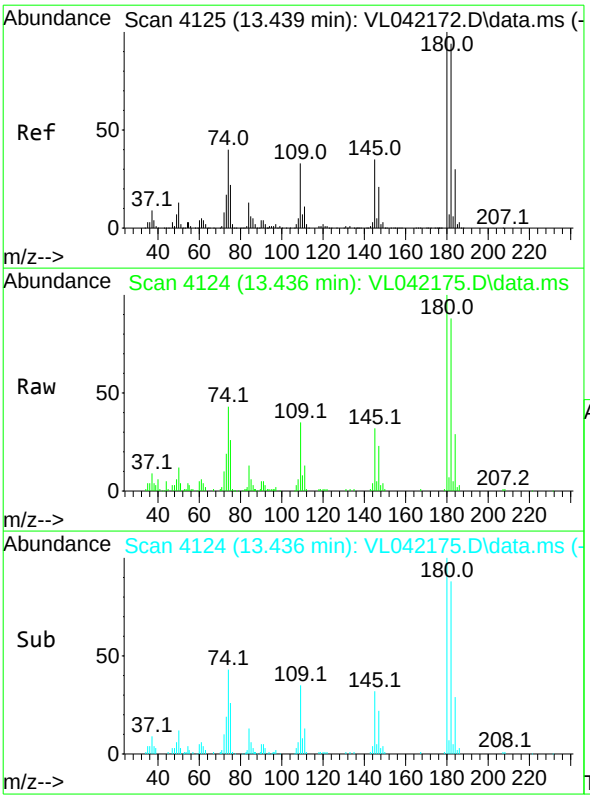


#80
Naphthalene,2-methyl-
Concen: 0.380 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:142 Resp: 17486

Ion	Ratio	Lower	Upper
142	100		
141	83.3	66.3	99.5
115	43.5	31.6	47.4

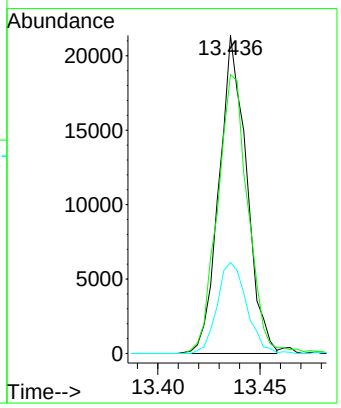




#81
1,2,4-Trichlorobenzene
Concen: 0.457 ppbv
RT: 13.436 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:180 Resp: 19924

Ion	Ratio	Lower	Upper
180	100		
182	97.9	75.1	112.7
184	31.1	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	180740	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	528028	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	481506	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	398069	10.067	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.700%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.580	62	1274	0.115	ppbv	# 42
32) 1,1,1-Trichloroethane	3.366	97	4509m	0.106	ppbv	
35) Carbon Tetrachloride	3.768	117	4131m	0.102	ppbv	
38) Trichloroethene	4.551	130	2306m	0.106	ppbv	
52) Tetrachloroethene	8.225	164	1895m	0.091	ppbv	
54) 1,2-Dibromoethane	7.652	107	3033m	0.108	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.966	83	3852m	0.093	ppbv	
79) Naphthalene	13.513	128	7882	0.084	ppbv	# 92

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

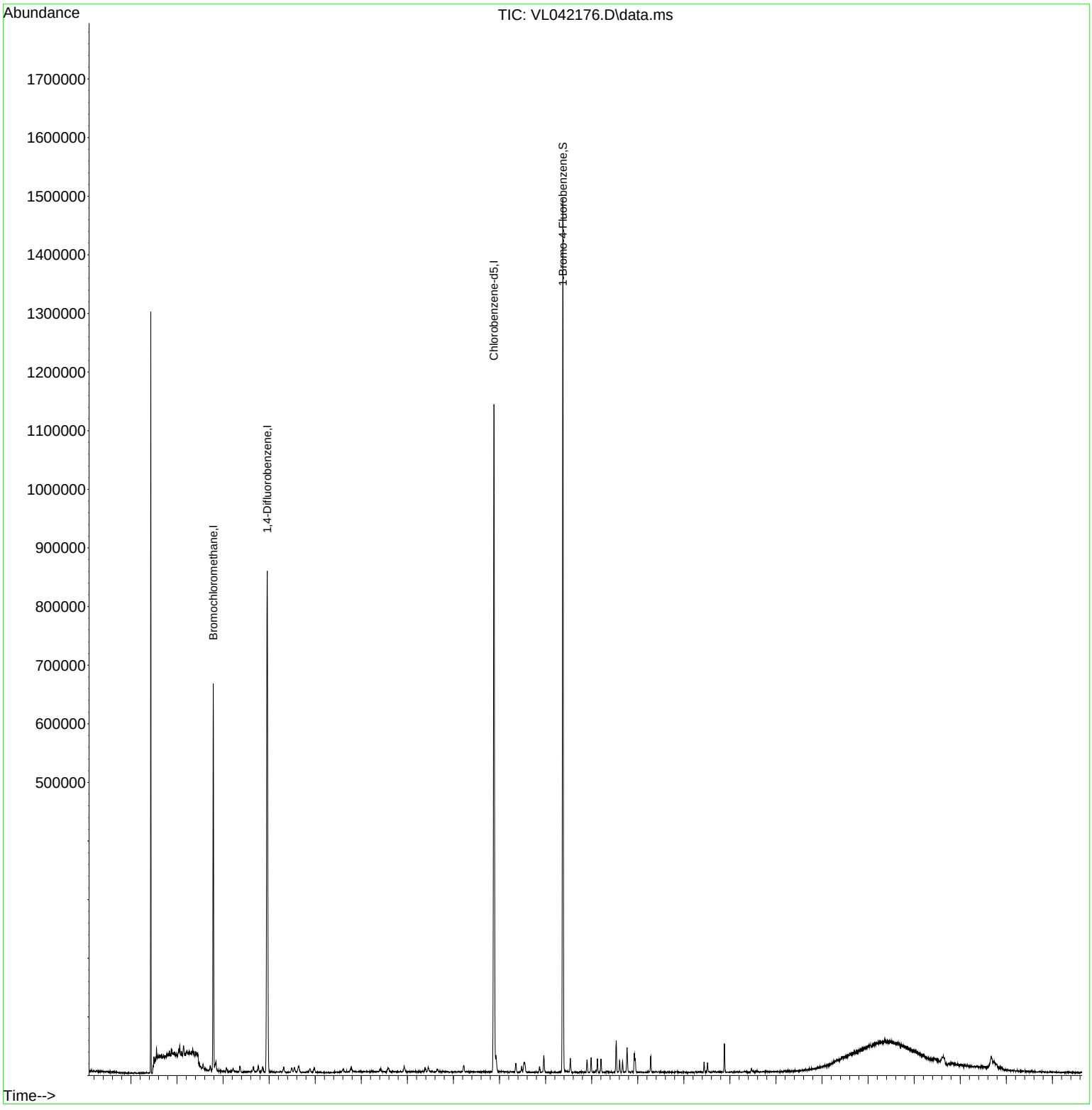
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

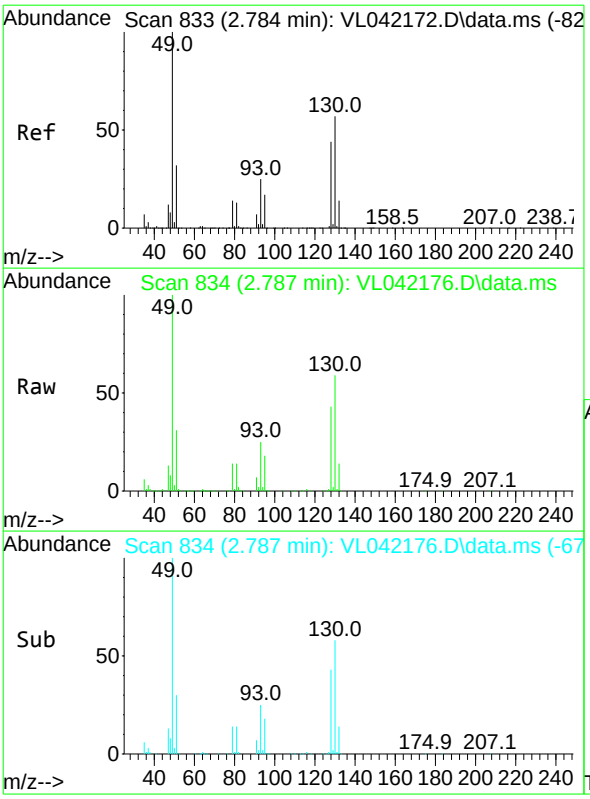
Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

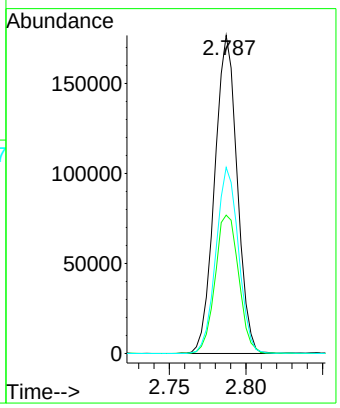




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 49 Resp: 180740

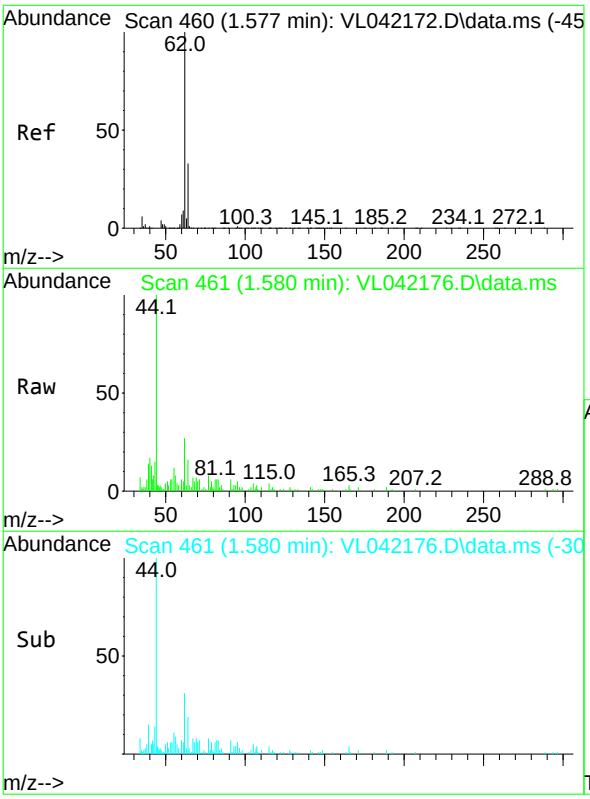
Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.9	68.5
130	58.5	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

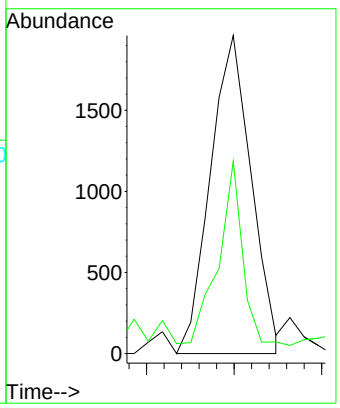
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

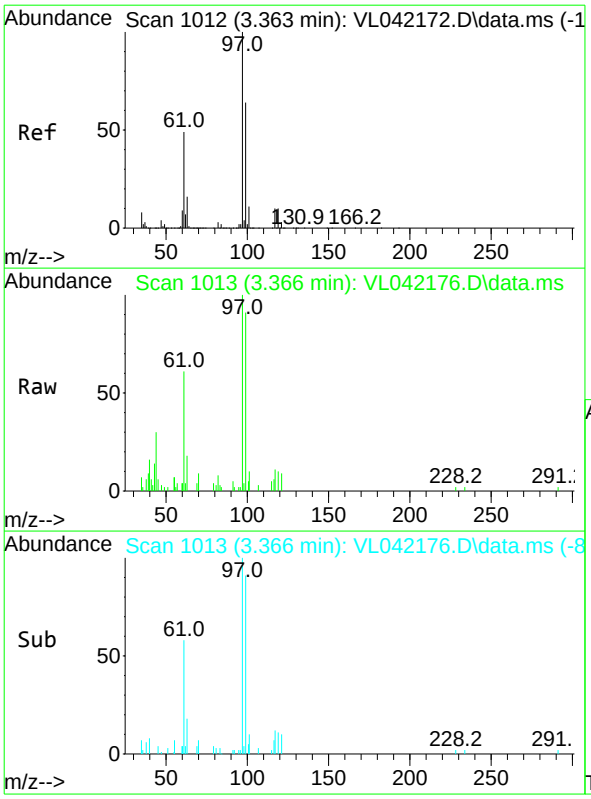


#5
Vinyl Chloride
Concen: 0.115 ppbv
RT: 1.580 min Scan# 461
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 62 Resp: 1274

Ion	Ratio	Lower	Upper
62	100		
64	66.4	26.6	40.0#





#32
1,1,1-Trichloroethane
Concen: 0.106 ppbv m
RT: 3.366 min Scan# 10
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

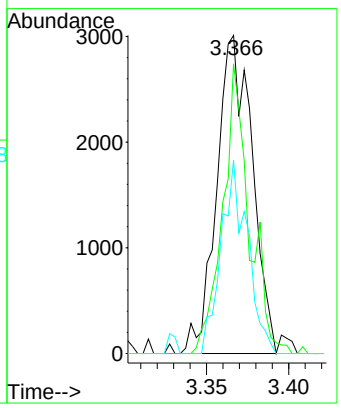
Tgt Ion: 97 Resp: 4509

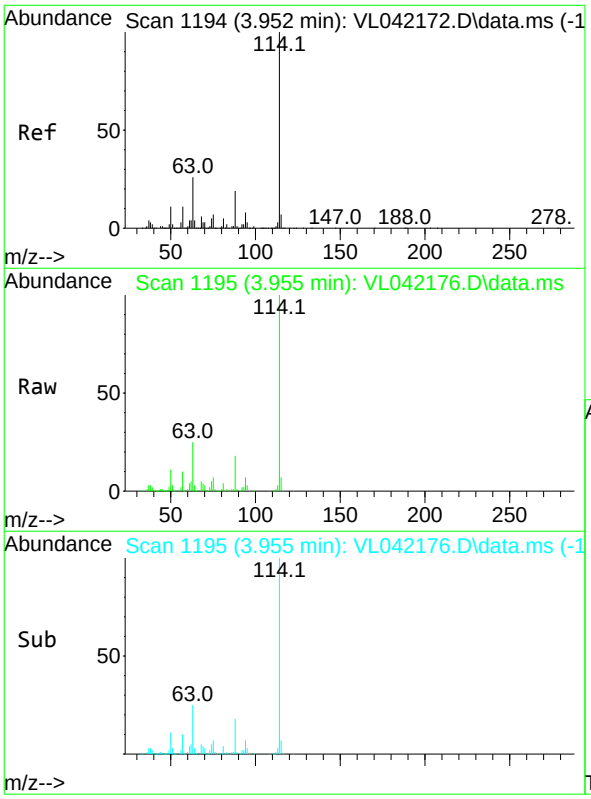
Ion	Ratio	Lower	Upper
97	100		
99	68.6	51.5	77.3
61	45.4	38.7	58.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

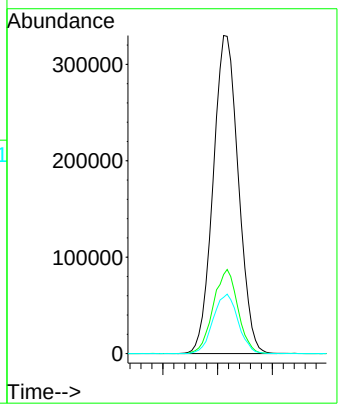


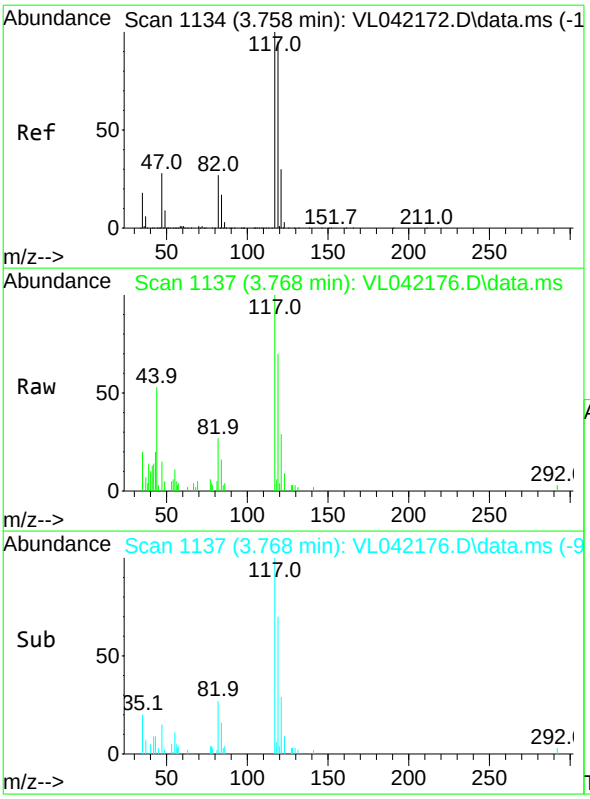


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:114 Resp: 528028

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.5	15.0	22.4

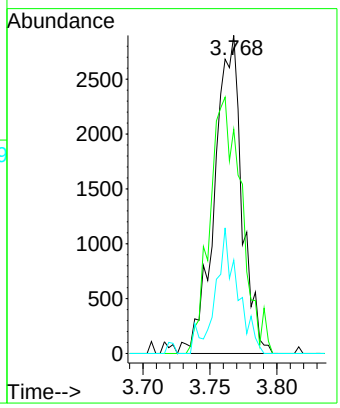




#35
Carbon Tetrachloride
Concen: 0.102 ppbv m
RT: 3.768 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:117 Resp: 4131

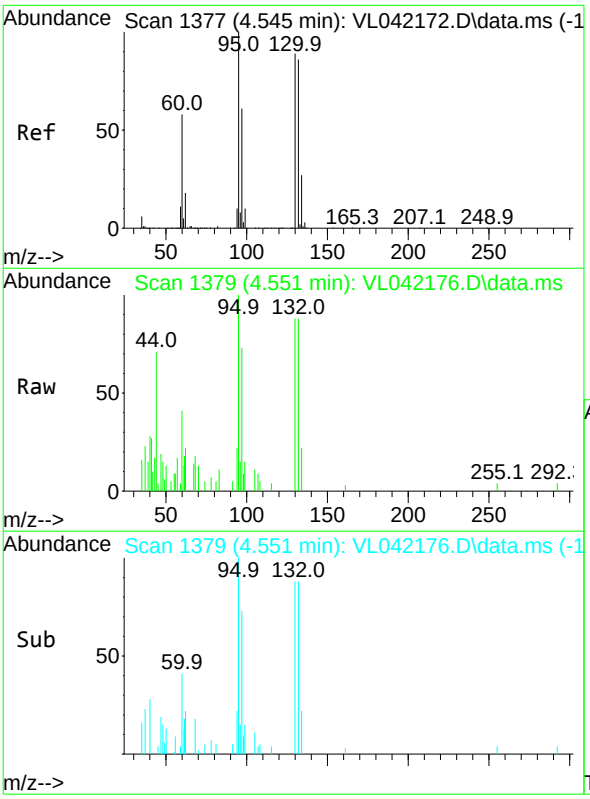
Ion	Ratio	Lower	Upper
117	100		
119	70.5	76.2	114.2#
121	29.4	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

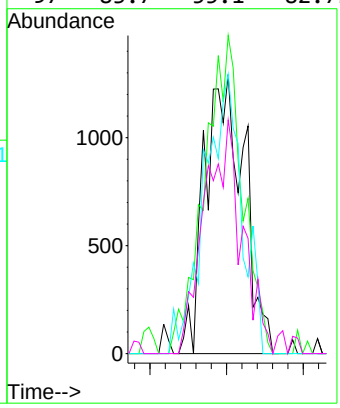
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

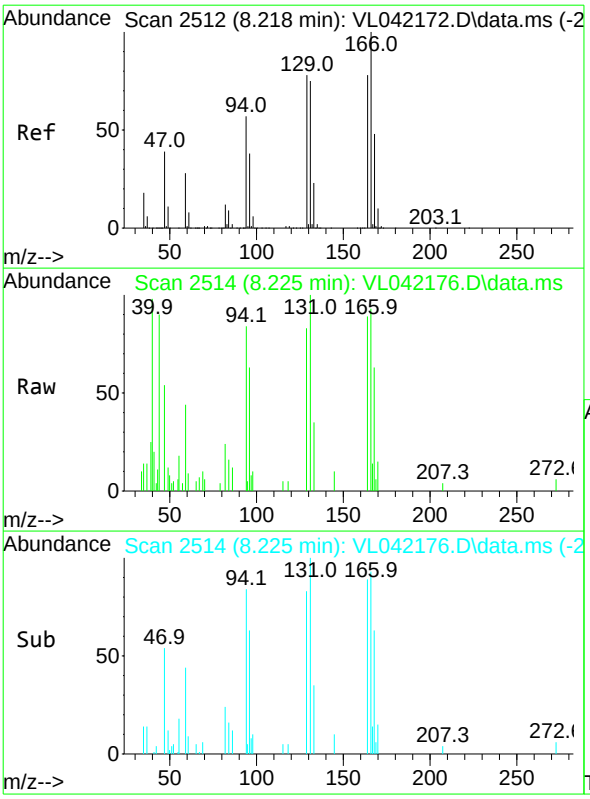


#38
Trichloroethene
Concen: 0.106 ppbv m
RT: 4.551 min Scan# 1379
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:130 Resp: 2306

Ion	Ratio	Lower	Upper
130	100		
95	114.0	89.8	134.8
132	100.2	77.4	116.2
97	83.7	55.1	82.7#

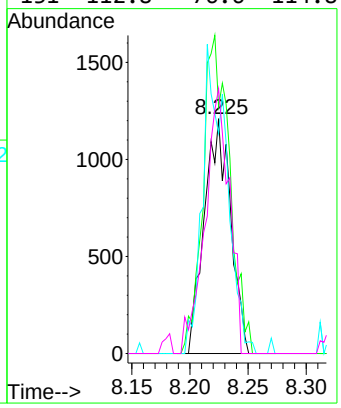




#52
Tetrachloroethene
Concen: 0.091 ppbv m
RT: 8.225 min Scan# 25
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:164 Resp: 1895

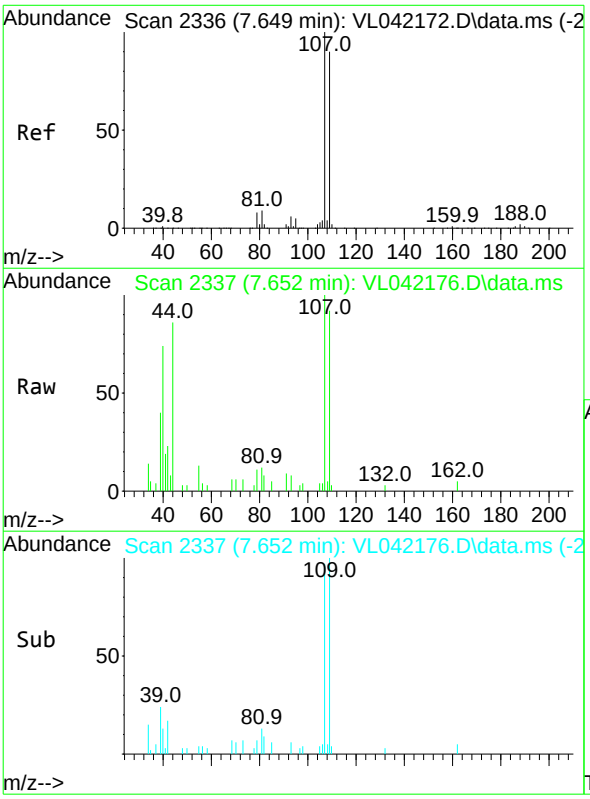
Ion	Ratio	Lower	Upper
164	100		
166	105.1	102.5	153.7
129	93.7	79.8	119.8
131	112.8	76.6	114.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

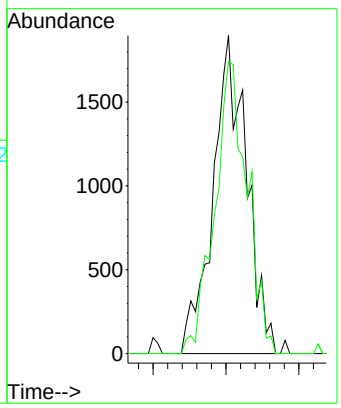
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

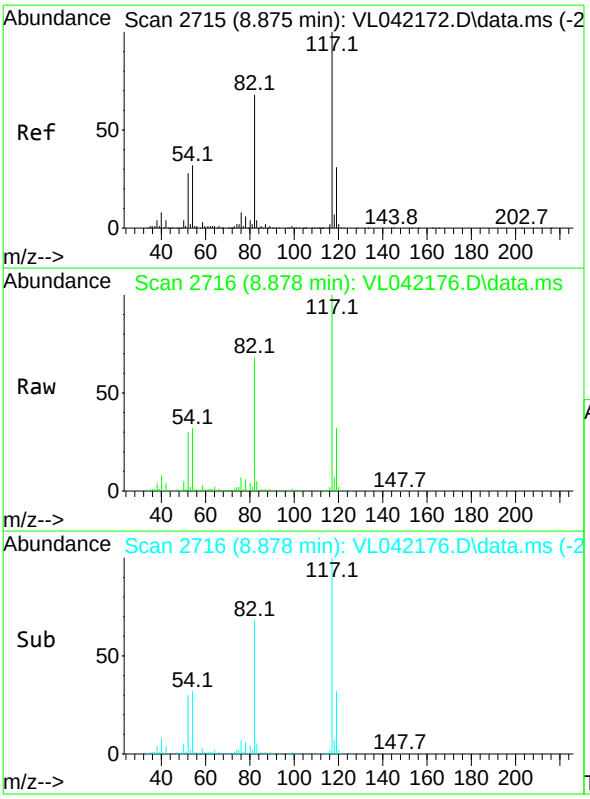


#54
1,2-Dibromoethane
Concen: 0.108 ppbv m
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:107 Resp: 3033

Ion	Ratio	Lower	Upper
107	100		
109	91.8	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

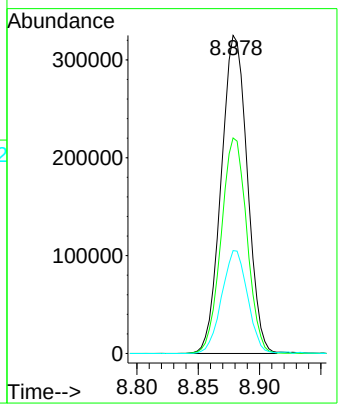
Tgt Ion:117 Resp: 481506

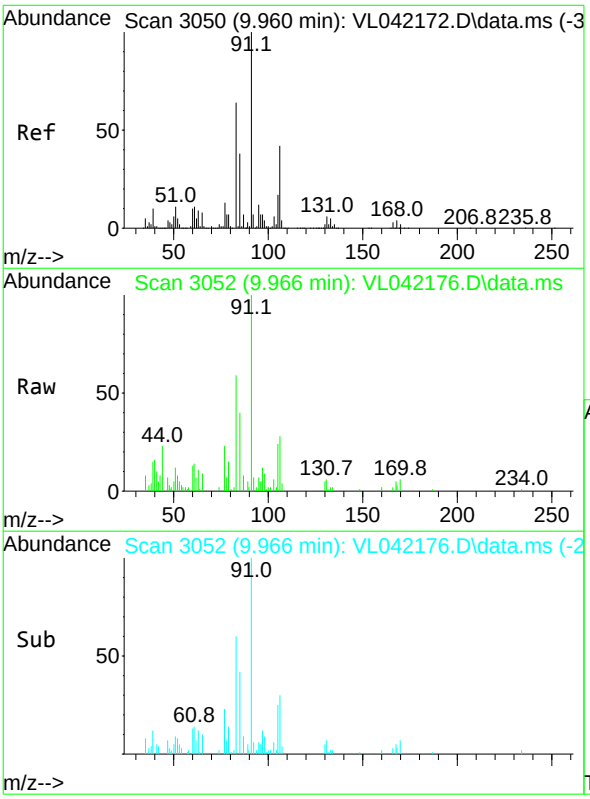
Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	32.3	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

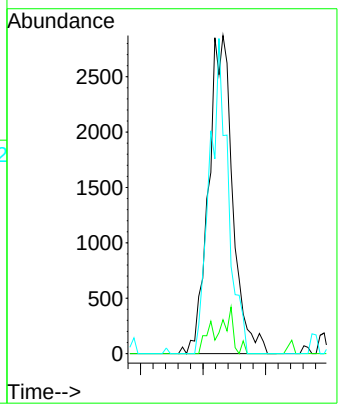


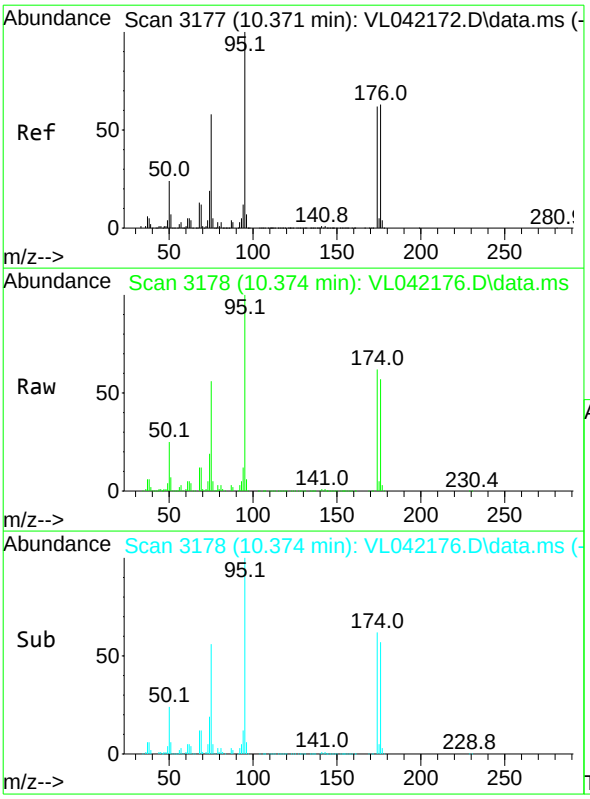


#63
1,1,2,2-Tetrachloroethane
Concen: 0.093 ppbv m
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 83 Resp: 3852

Ion	Ratio	Lower	Upper
83	100		
131	0.0	4.8	14.4#
85	0.0	32.5	97.5#

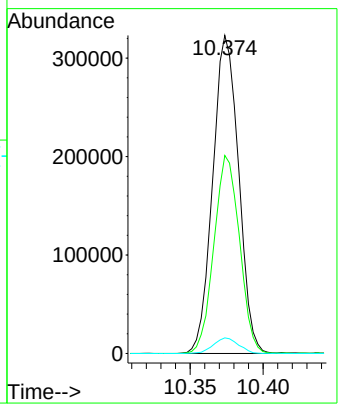




#68
1-Bromo-4-Fluorobenzene
Concen: 10.067 ppbv
RT: 10.374 min Scan# 31
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 95 Resp: 398069

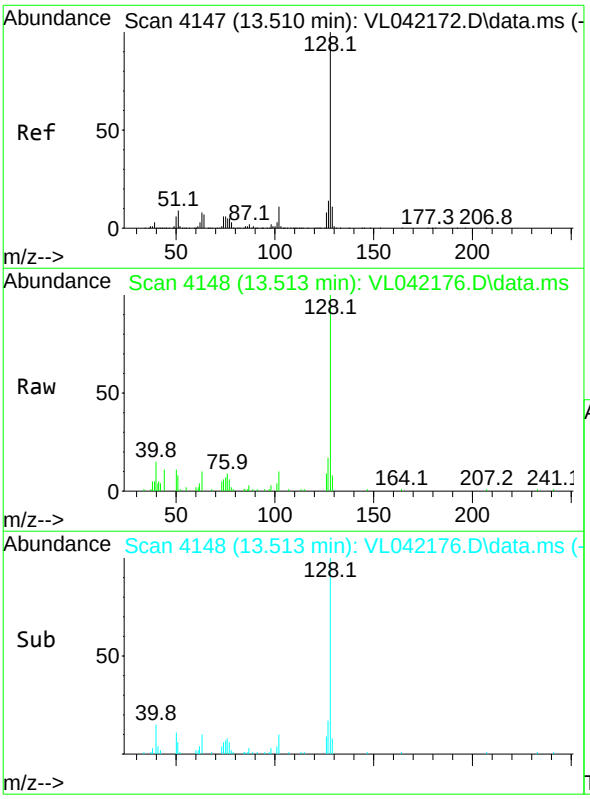
Ion	Ratio	Lower	Upper
95	100		
174	61.5	50.6	76.0
175	4.8	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

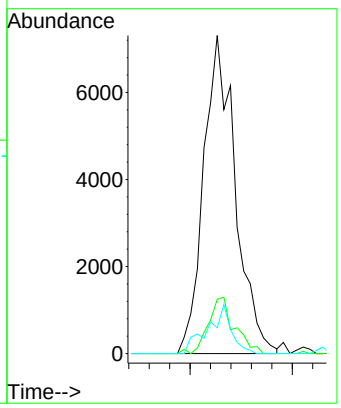
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#79
Naphthalene
Concen: 0.084 ppbv
RT: 13.513 min Scan# 4148
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:128 Resp: 7882

Ion	Ratio	Lower	Upper
128	100		
127	17.1	10.8	16.2#
129	8.1	9.0	13.4#



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	178058	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	512915	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	475617	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	389935	9.983	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.580	62	471m	0.043	ppbv	
32) 1,1,1-Trichloroethane	3.366	97	1683m	0.040	ppbv	
35) Carbon Tetrachloride	3.758	117	1645m	0.042	ppbv	
38) Trichloroethene	4.541	130	712m	0.034	ppbv	
52) Tetrachloroethene	8.208	164	880m	0.044	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.963	83	1407m	0.034	ppbv	

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

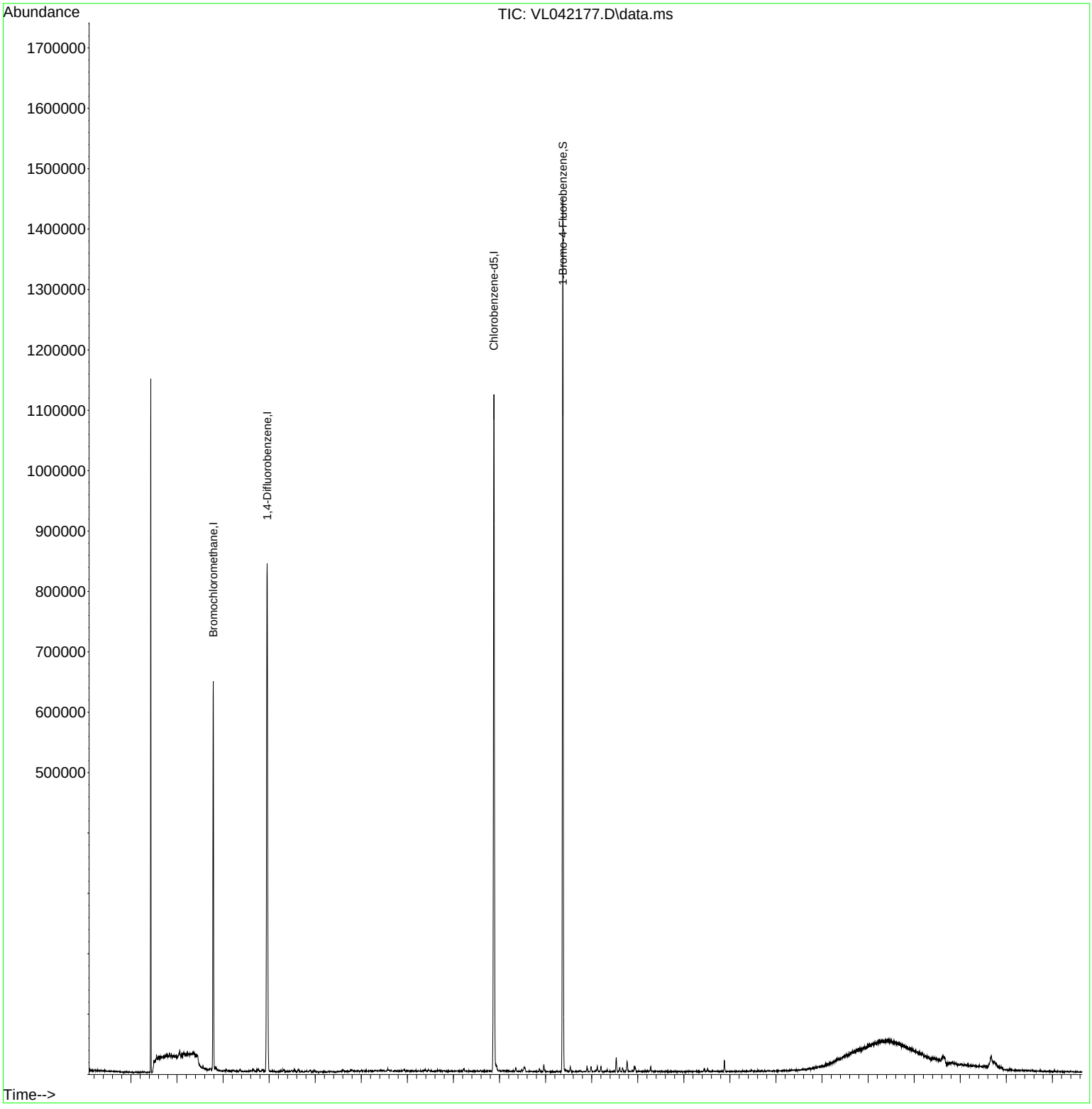
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

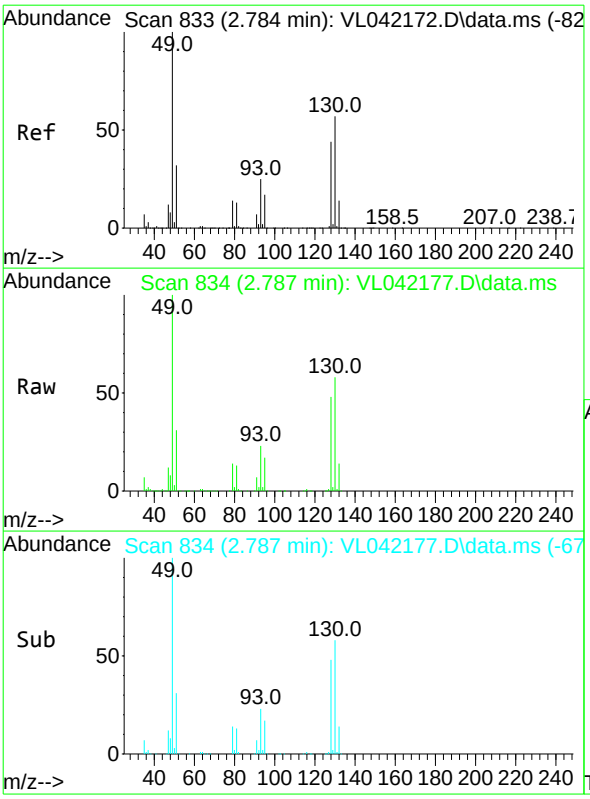
Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

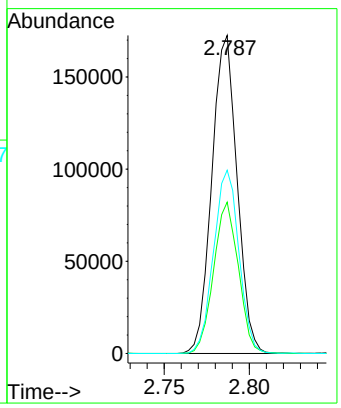




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 49 Resp: 178058

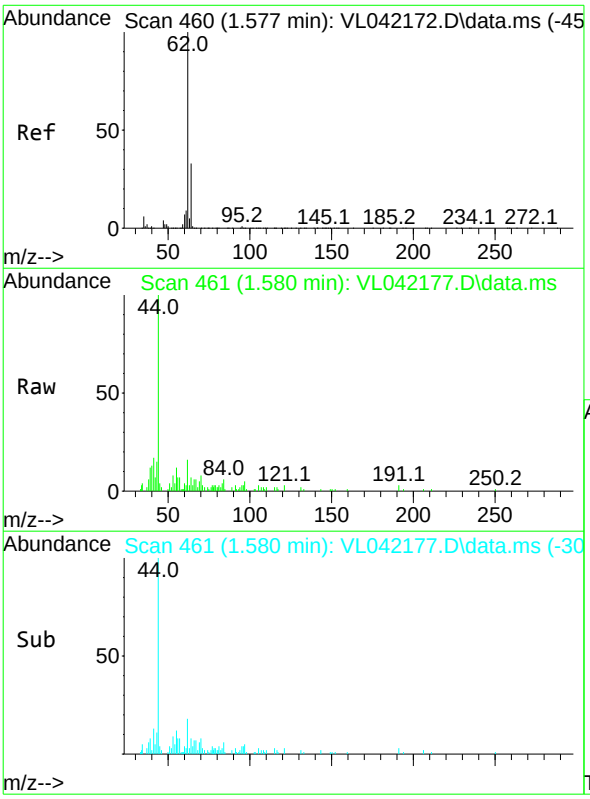
Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	57.9	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

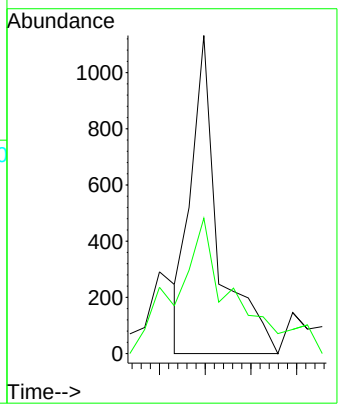
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

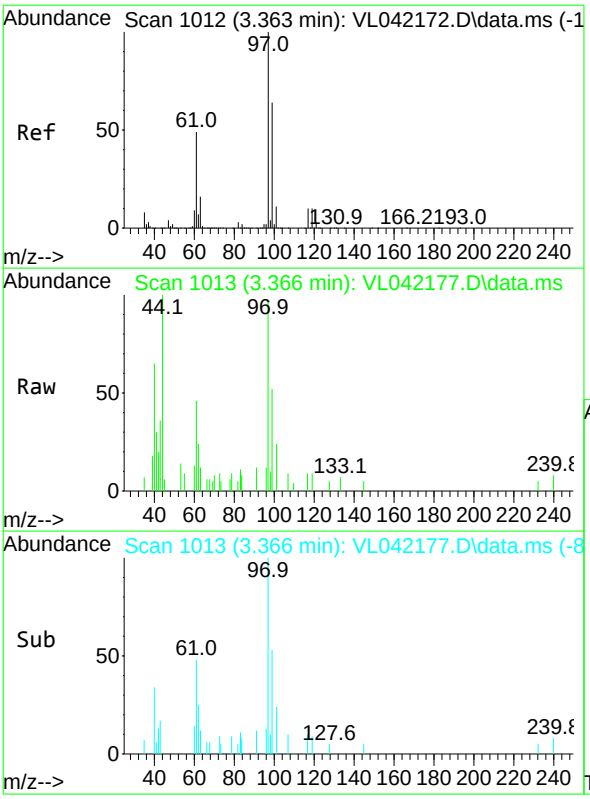


#5
Vinyl Chloride
Concen: 0.043 ppbv m
RT: 1.580 min Scan# 461
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 62 Resp: 471

Ion	Ratio	Lower	Upper
62	100		
64	42.6	26.6	40.0#

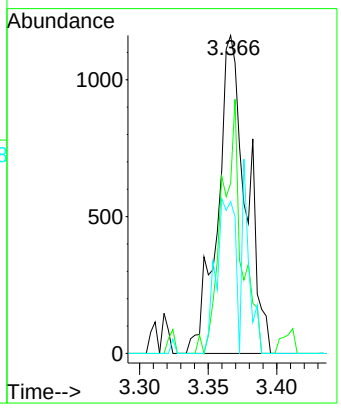




#32
1,1,1-Trichloroethane
Concen: 0.040 ppbv m
RT: 3.366 min Scan# 10
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 97 Resp: 1683

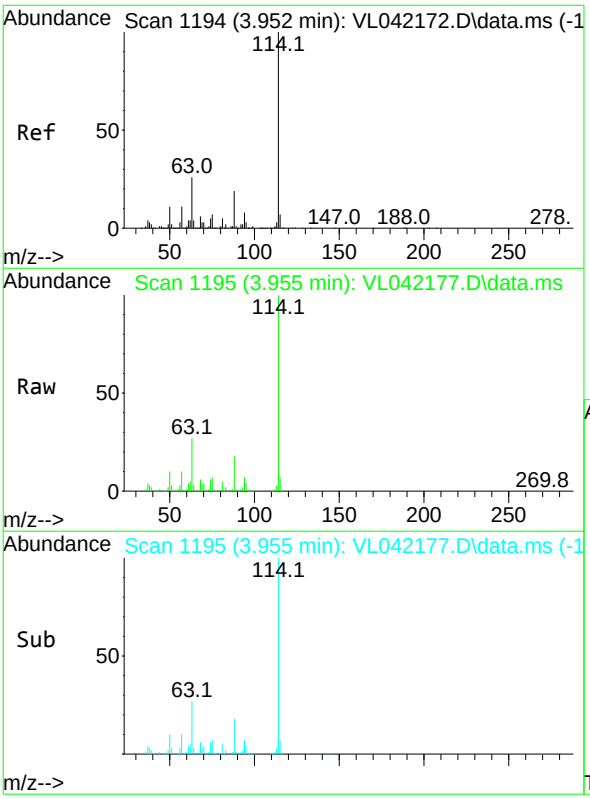
Ion	Ratio	Lower	Upper
97	100		
99	3.8	51.5	77.3#
61	2.1	38.7	58.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

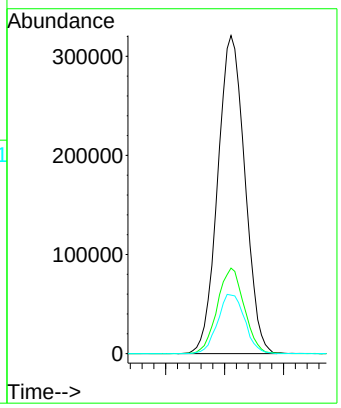
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

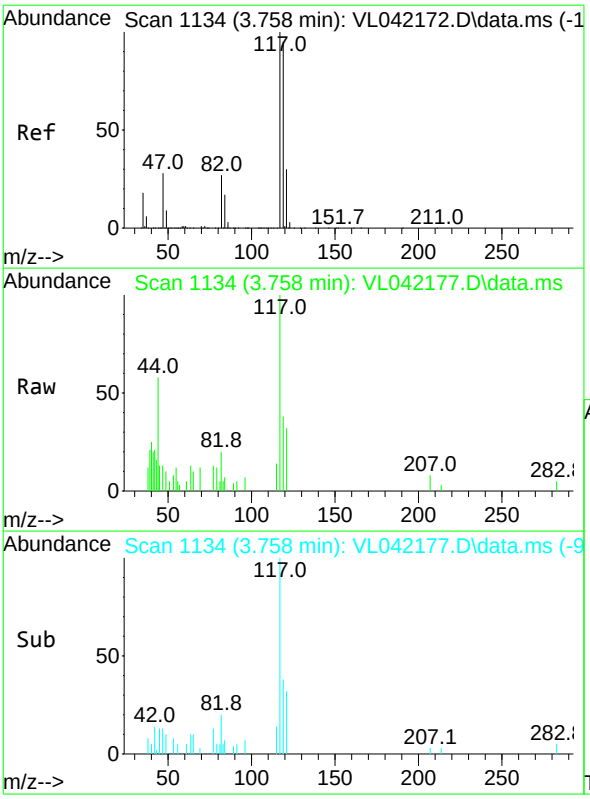


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:114 Resp: 512915

Ion	Ratio	Lower	Upper
114	100		
63	26.6	20.7	31.1
88	18.6	15.0	22.4

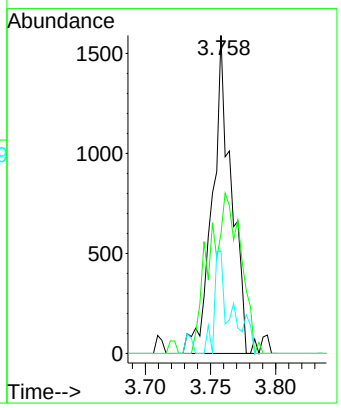




#35
Carbon Tetrachloride
Concen: 0.042 ppbv m
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:117 Resp: 1645

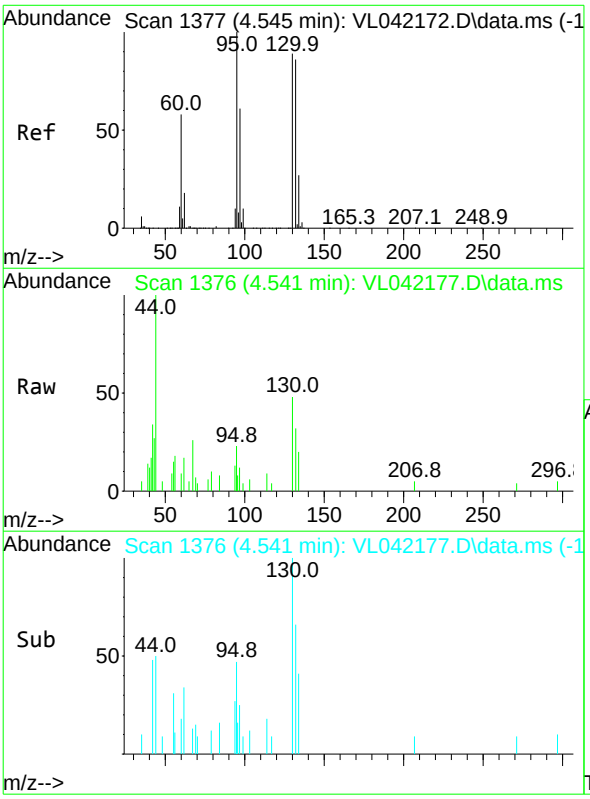
Ion	Ratio	Lower	Upper
117	100		
119	37.7	76.2	114.2#
121	32.3	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

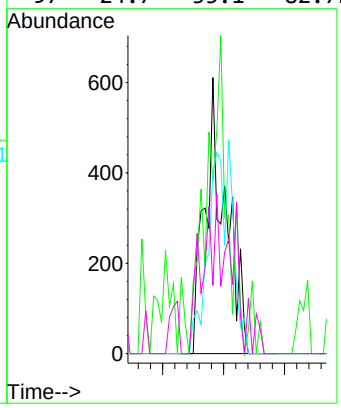
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

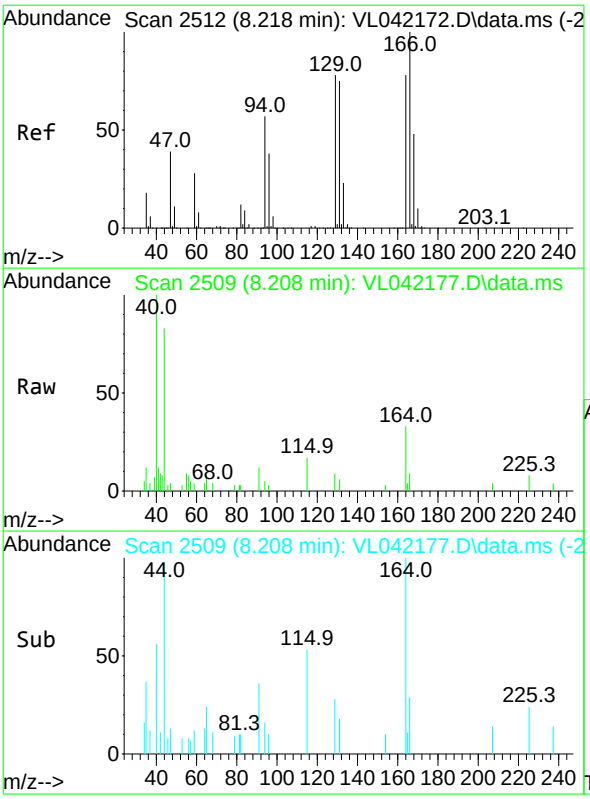


#38
Trichloroethene
Concen: 0.034 ppbv m
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:130 Resp: 712

Ion	Ratio	Lower	Upper
130	100		
95	47.0	89.8	134.8#
132	65.6	77.4	116.2#
97	24.7	55.1	82.7#





#52
Tetrachloroethene
Concen: 0.044 ppbv m
RT: 8.208 min Scan# 25
Delta R.T. -0.010 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

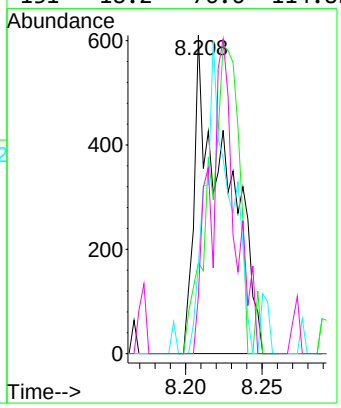
Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

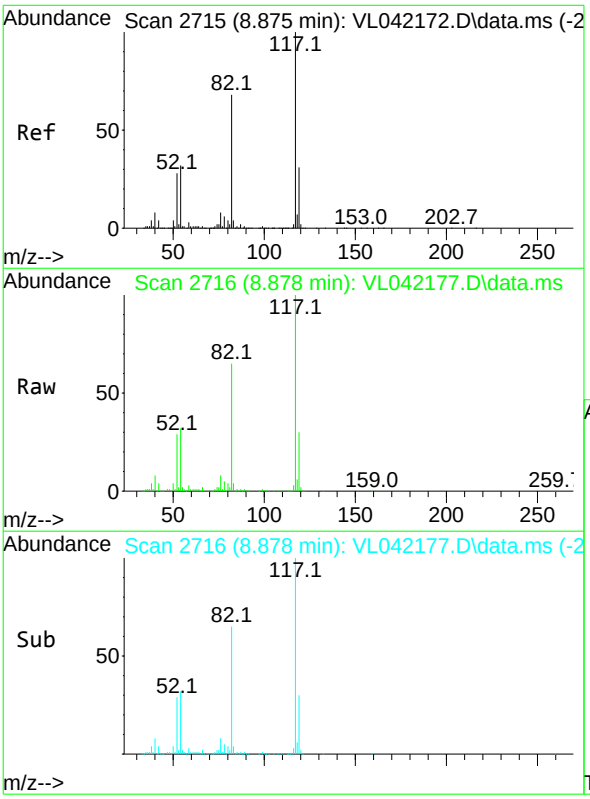
Tgt Ion:164 Resp: 880

Ion	Ratio	Lower	Upper
164	100		
166	28.5	102.5	153.7#
129	27.7	79.8	119.8#
131	18.2	76.6	114.8#

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

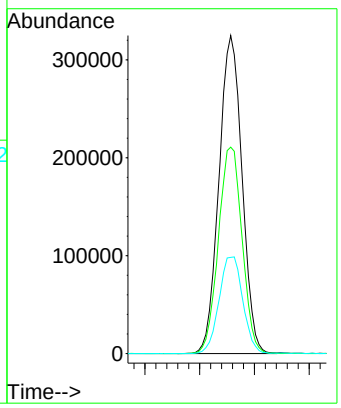


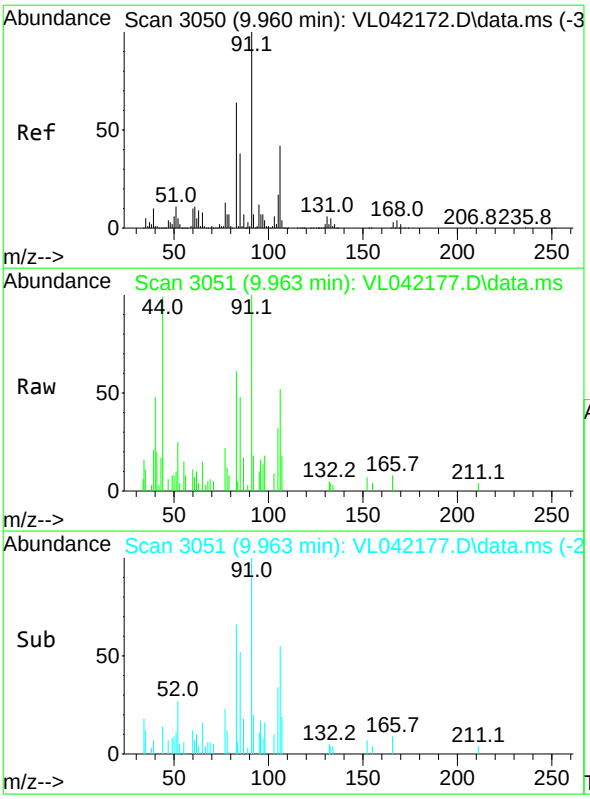


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:117 Resp: 475617

Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	31.5	25.5	38.3





#63
1,1,2,2-Tetrachloroethane
Concen: 0.034 ppbv m
RT: 9.963 min Scan# 30
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

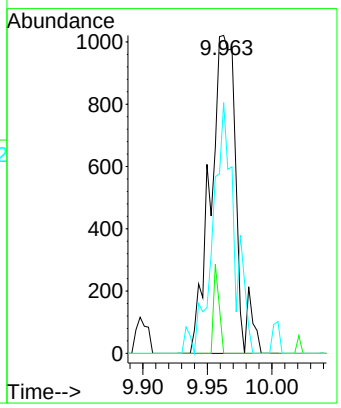
Tgt Ion: 83 Resp: 1407

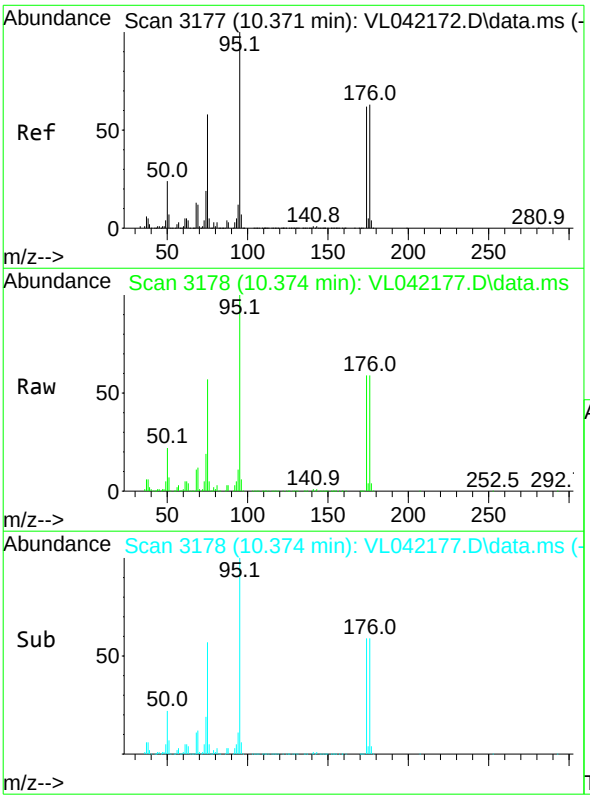
Ion	Ratio	Lower	Upper
83	100		
131	6.0	4.8	14.4
85	67.2	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

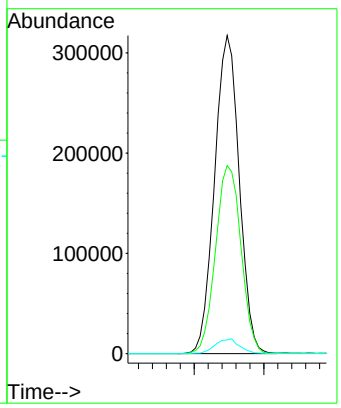




#68
1-Bromo-4-Fluorobenzene
Concen: 9.983 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 95 Resp: 389935

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.6	3.8	5.6



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	173372	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	499360	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	473077	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	387777	9.981	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	358962	14.023	ppbv		99
3) Chlorodifluoromethane	1.473	51	366164	14.002	ppbv		98
4) Chloromethane	1.531	50	148133	14.160	ppbv		98
5) Vinyl Chloride	1.576	62	141938	13.304	ppbv		97
6) Bromomethane	1.667	94	65113	13.734	ppbv		99
7) Chloroethane	1.703	64	58820	14.007	ppbv		99
8) Dichlorotetrafluoroethane	1.550	85	314834	14.442	ppbv		98
9) Propene	1.482	41	163799	13.902	ppbv		95
10) Heptane	4.972	43	446949	14.019	ppbv		99
11) Trichlorofluoromethane	1.874	101	349967	14.050	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.136	101	295217	14.419	ppbv		99
13) Ethanol	1.719	45	7382	8.001	ppbv		92
14) Bromoethene	1.780	108	106436	13.571	ppbv		98
15) Acetone	1.832	43	296254	12.218	ppbv		98
16) 1,3-Butadiene	1.605	39	150122	13.766	ppbv		100
17) tert-Butyl alcohol	2.039	59	416362	13.787	ppbv		99
18) 1,1-Dichloroethene	2.029	96	131720	13.762	ppbv		99
19) Isopropyl Alcohol	1.884	45	179117	13.093	ppbv		100
20) Methylene Chloride	2.059	84	113183	12.533	ppbv		95
21) Allyl Chloride	2.094	41	239440	14.002	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	149455	13.362	ppbv		98
23) Vinyl Acetate	2.460	43	138419	13.736	ppbv	#	96
24) 1,1-Dichloroethane	2.405	63	298760	14.570	ppbv		99
25) Ethyl Acetate	2.832	43	871882	13.855	ppbv		100
26) Hexane	2.822	57	344636	14.178	ppbv		98
27) Carbon Disulfide	2.146	76	370022	14.196	ppbv		97
28) Methyl tert-Butyl Ether	2.437	73	216463	14.303	ppbv		95
29) Chloroform	2.845	83	508614	14.297	ppbv		100
30) Cyclohexane	3.852	84	296458	14.040	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	351945	14.262	ppbv		97
32) 1,1,1-Trichloroethane	3.363	97	547329	13.448	ppbv		99
34) 2-Butanone	2.554	43	497020	13.726	ppbv		99
35) Carbon Tetrachloride	3.758	117	543385	14.140	ppbv		100
36) Benzene	3.651	78	699549	14.131	ppbv		98
37) 1,2-Dichloroethane	3.214	62	416544	14.697	ppbv		99
38) Trichloroethene	4.541	130	283430	13.715	ppbv		98
39) 1,2-Dichloropropane	4.308	63	257891	14.304	ppbv		99
40) 1,4-Dioxane	4.577	88	124925	13.354	ppbv	#	91
41) Tetrahydrofuran	3.049	42	294634	14.301	ppbv		100
42) Bromodichloromethane	4.483	83	587772	15.043	ppbv		99
43) Methyl Methacrylate	4.874	69	295300	14.130	ppbv		99
44) 2,2,4-Trimethylpentane	4.635	57	1180275	14.108	ppbv		99
45) t-1,3-Dichloropropene	6.405	75	329360	14.649	ppbv		96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	400813	14.542	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	273137	14.331	ppbv		98
48) Dibromochloromethane	7.383	129	482431	14.936	ppbv		100
49) Bromoform	9.480	173	427143	14.730	ppbv		99
50) 4-Methyl-2-Pentanone	5.745	43	755146	13.155	ppbv		99
51) 2-Hexanone	7.431	43	619419	13.005	ppbv	#	99
52) Tetrachloroethene	8.221	164	258356	13.159	ppbv		95
53) Toluene	6.926	91	829648	14.137	ppbv		100
54) 1,2-Dibromoethane	7.645	107	381823	14.359	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.920	131	365410	14.032	ppbv		99
57) Chlorobenzene	8.917	112	618201	13.777	ppbv		100
58) Ethyl Benzene	9.351	91	1167096	13.889	ppbv		97
59) m/p-Xylene	9.548	91	1857561m	27.651	ppbv		
60) o-Xylene	9.962	91	913234	13.577	ppbv		99
61) Styrene	9.865	104	474195	14.250	ppbv		99
62) Isopropylbenzene	10.535	105	1362416	13.544	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	551386	13.491	ppbv		99
64) n-propylbenzene	10.985	120	356118	13.753	ppbv		94
65) tert-Butylbenzene	11.529	119	1200149	12.901	ppbv		98
66) Benzyl Chloride	11.613	91	134397	13.615	ppbv		100
67) sec-Butylbenzene	11.765	105	1643629	12.711	ppbv		99
69) p-Isopropyltoluene	11.924	119	1437016	12.906	ppbv		98
70) n-Butylbenzene	12.280	91	1477443	12.975	ppbv		99
71) 2-Chlorotoluene	10.898	91	1071432	13.724	ppbv		99
72) 4-Ethyltoluene	11.121	105	1136415	13.569	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	979783	13.395	ppbv		99
74) 1,2,4-Trimethylbenzene	11.535	105	1048874	12.447	ppbv		92
75) 1,3-Dichlorobenzene	11.607	146	626015	13.545	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	628694	13.668	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	602844	13.396	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	556392	12.147	ppbv		99
79) Naphthalene	13.513	128	1258479	13.653	ppbv		98
80) Naphthalene,2-methyl-	14.455	142	718900	16.018	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	598416	14.075	ppbv		99

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

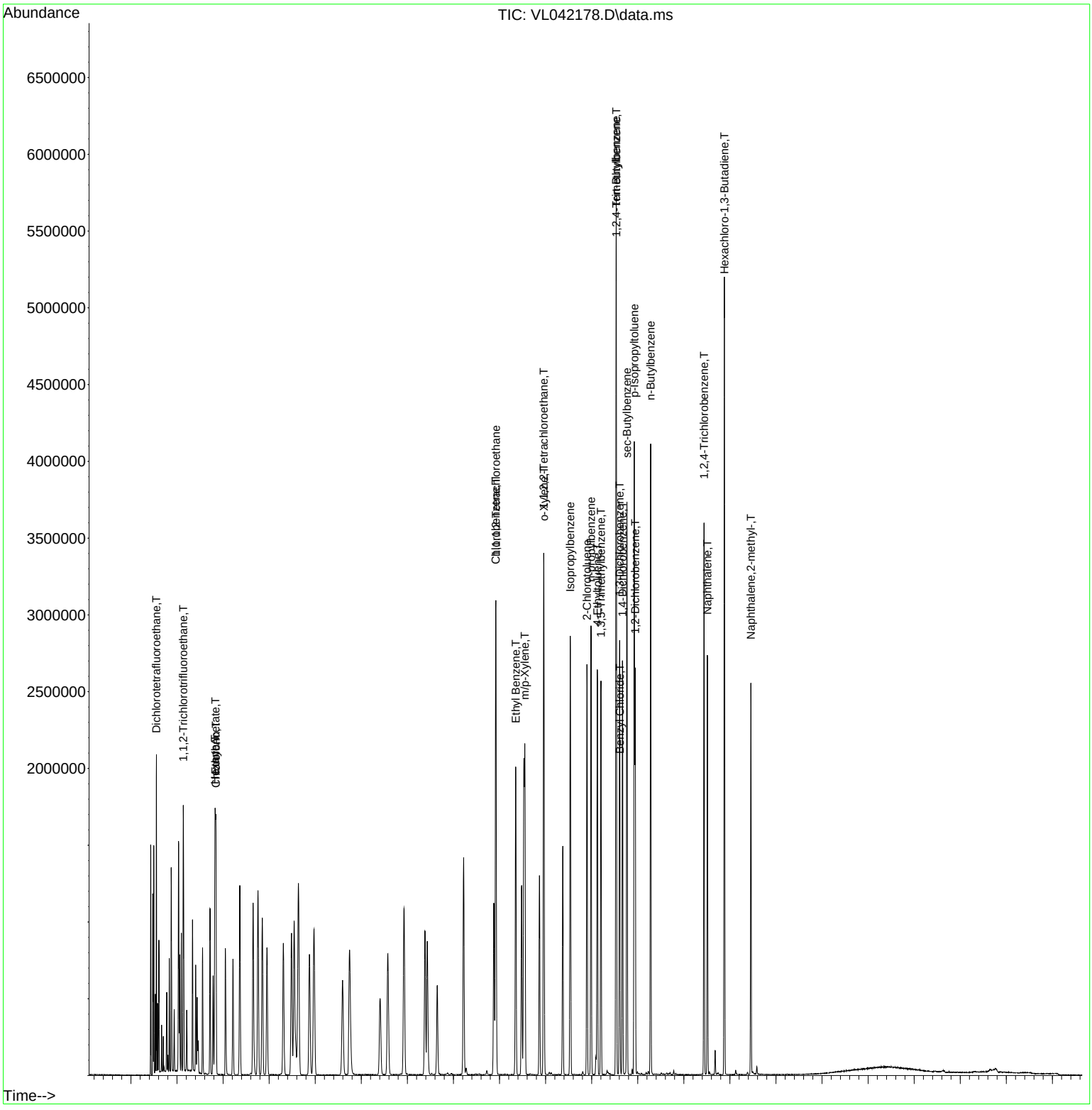
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

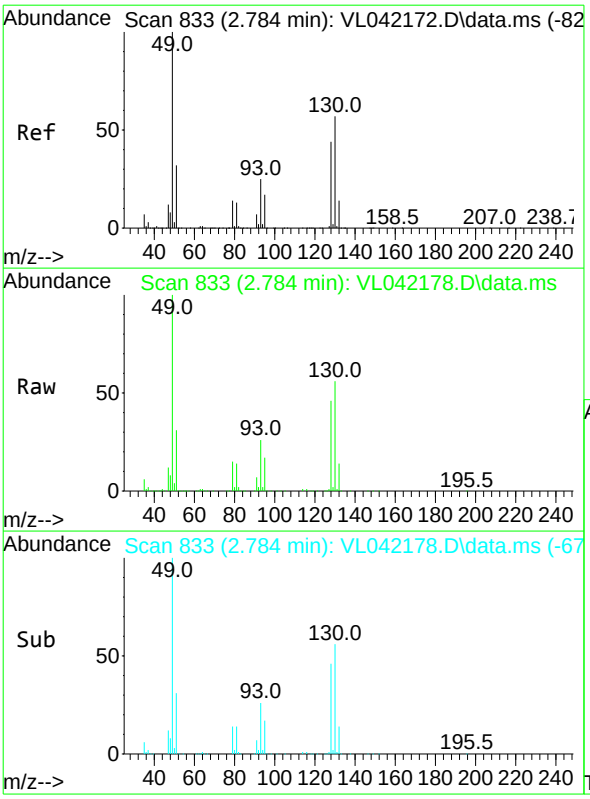
Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

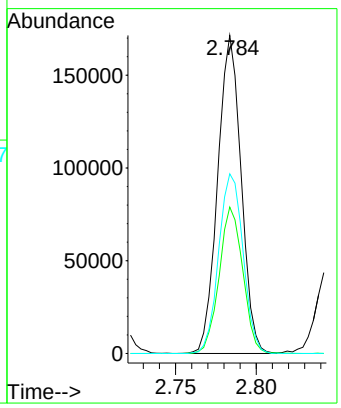




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 49 Resp: 173372

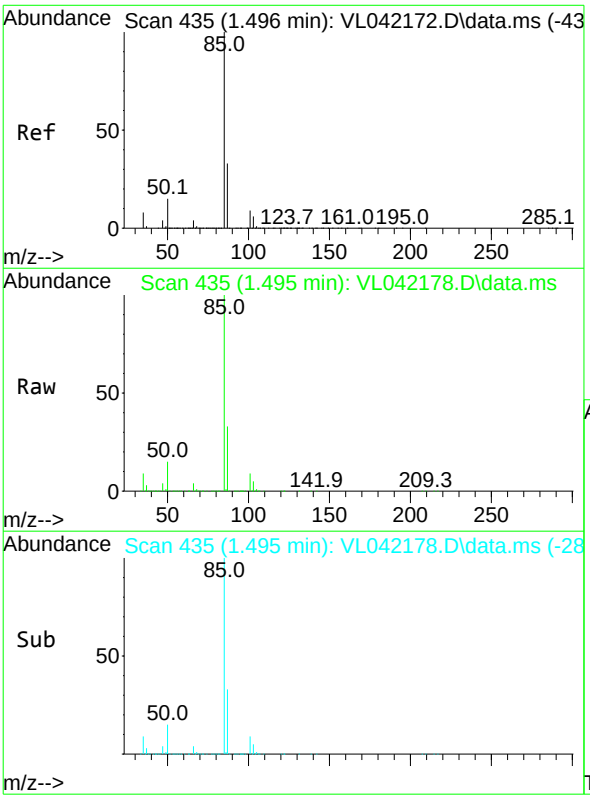
Ion	Ratio	Lower	Upper
49	100		
128	46.4	22.9	68.5
130	58.7	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

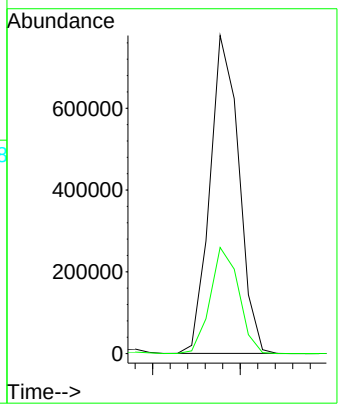
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

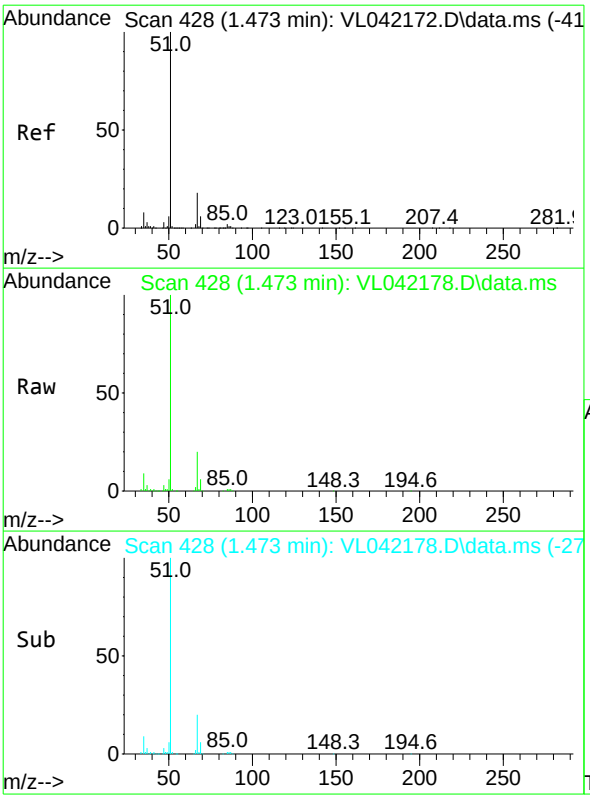


#2
Dichlorodifluoromethane
Concen: 14.023 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 358962

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.1	39.1

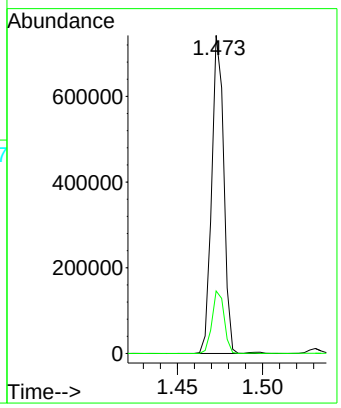




#3
Chlorodifluoromethane
Concen: 14.002 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 51 Resp: 366164

Ion	Ratio	Lower	Upper
51	100		
67	19.8	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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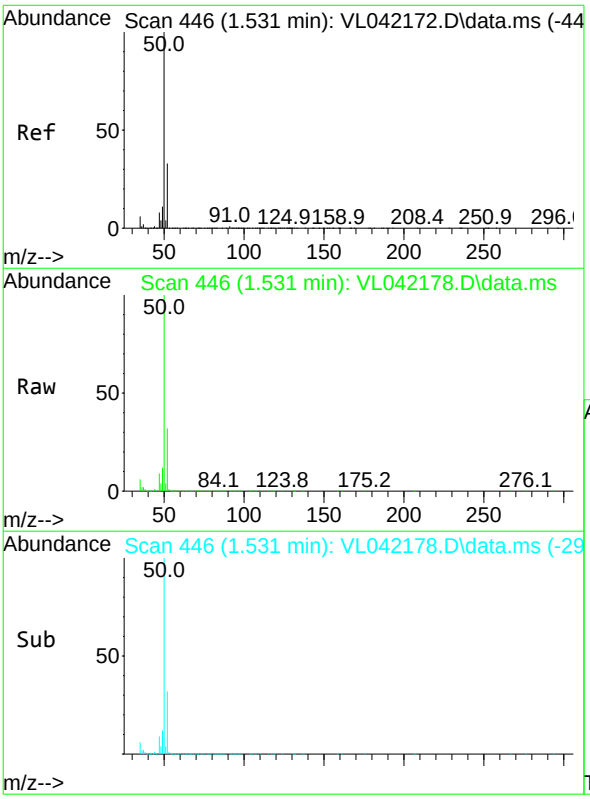
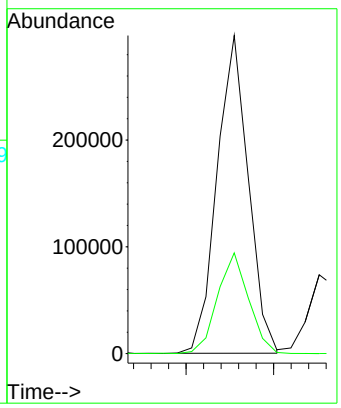
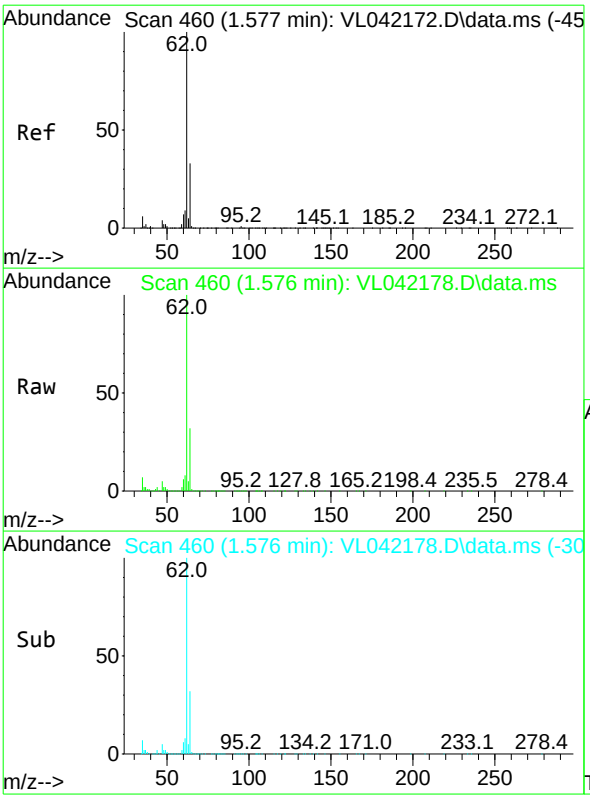


#4
Chloromethane
Concen: 14.160 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 50 Resp: 148133

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1

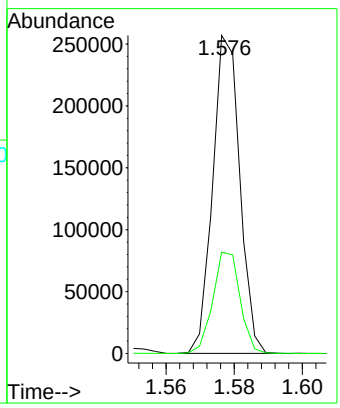




#5
Vinyl Chloride
Concen: 13.304 ppbv
RT: 1.576 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 62 Resp: 141938

Ion	Ratio	Lower	Upper
62	100		
64	31.9	26.6	40.0



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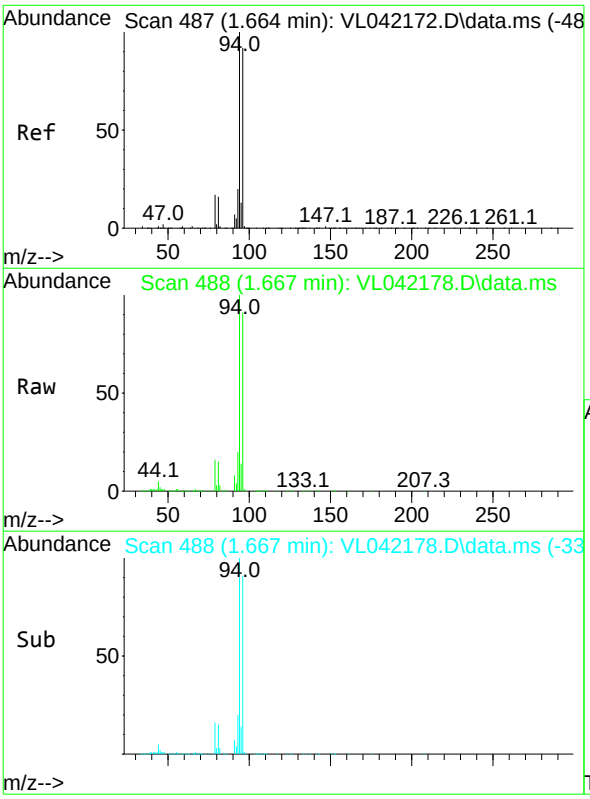
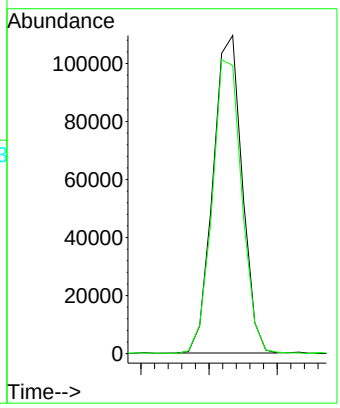
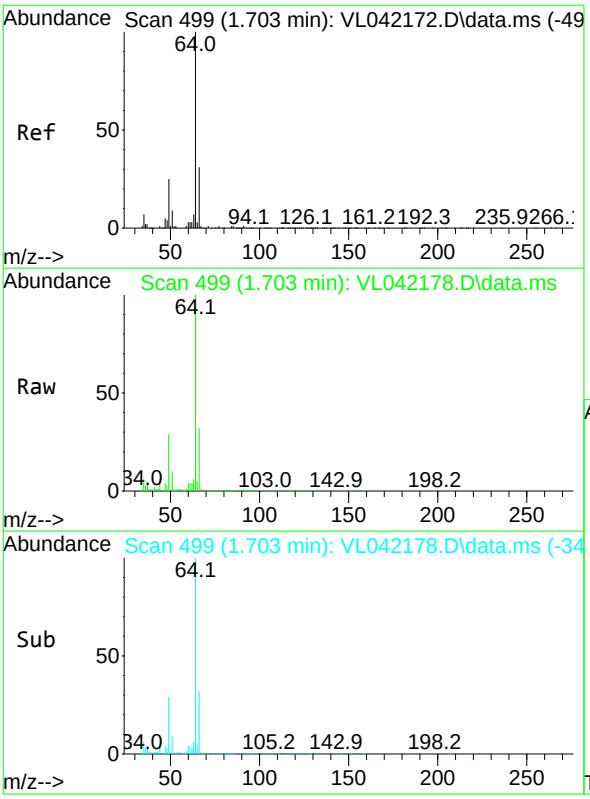


#6
Bromomethane
Concen: 13.734 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 94 Resp: 65113

Ion	Ratio	Lower	Upper
94	100		
96	90.7	73.1	109.7

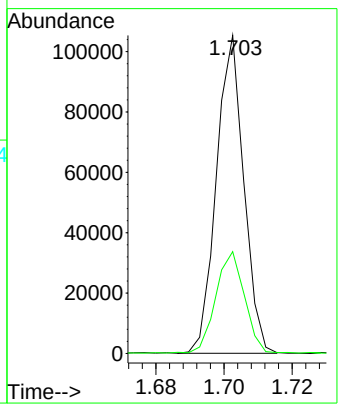




#7
Chloroethane
Concen: 14.007 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 64 Resp: 58820

Ion	Ratio	Lower	Upper
64	100		
66	32.0	25.2	37.8



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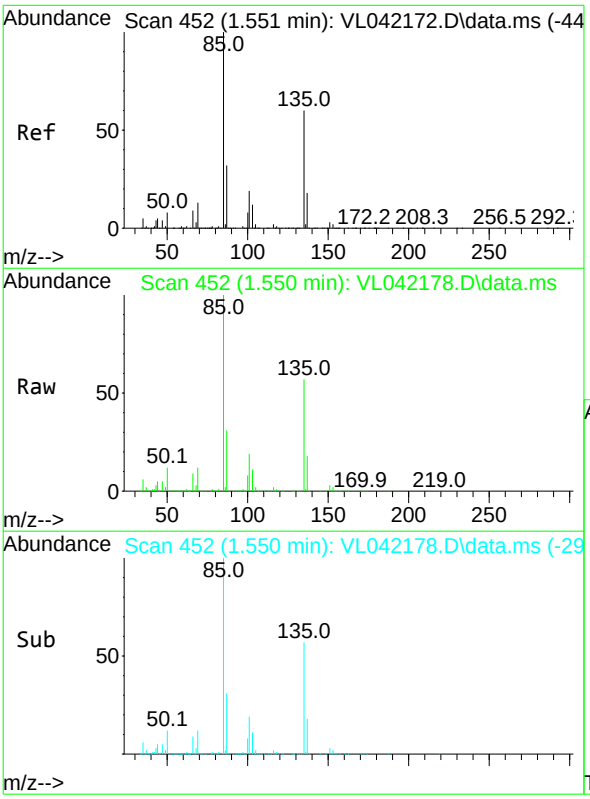
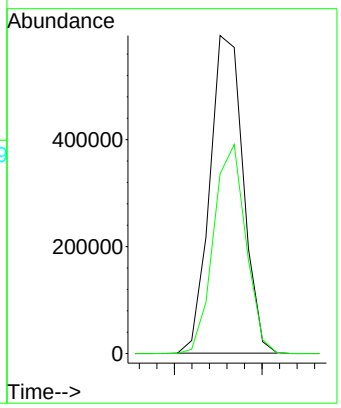
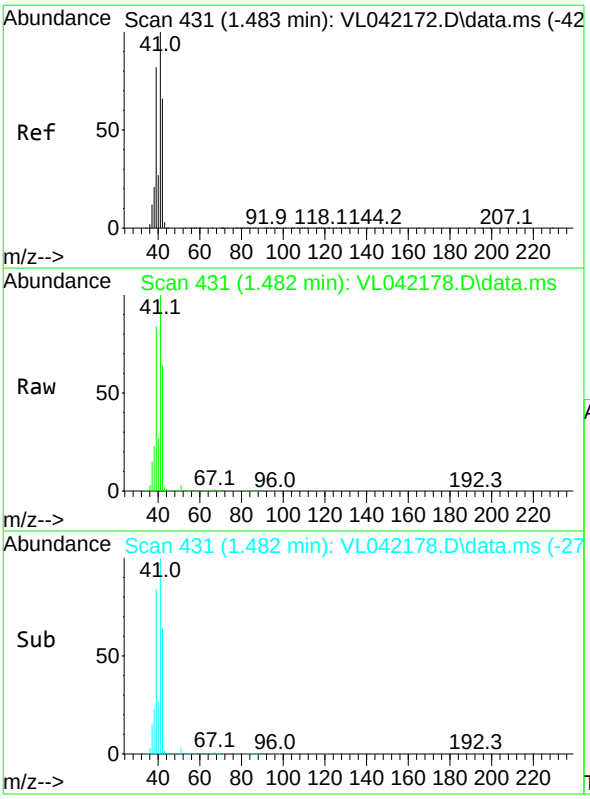


#8
Dichlorotetrafluoroethane
Concen: 14.442 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 314834

Ion	Ratio	Lower	Upper
85	100		
135	63.8	52.4	78.6

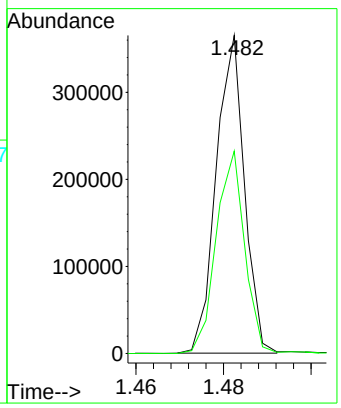




#9
Propene
Concen: 13.902 ppbv
RT: 1.482 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 41 Resp: 163799

Ion	Ratio	Lower	Upper
41	100		
42	65.3	55.4	83.2



Instrument :
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ClientSampleId :
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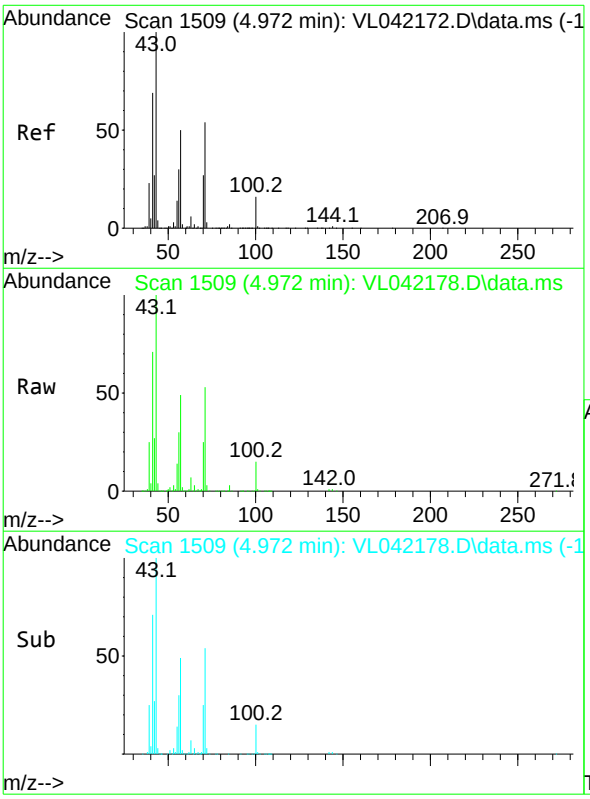
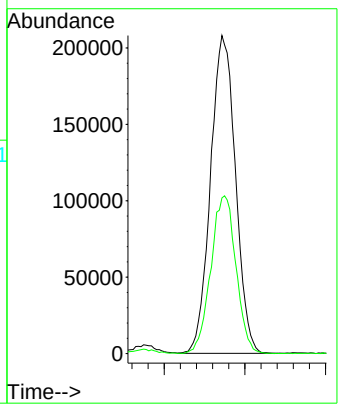
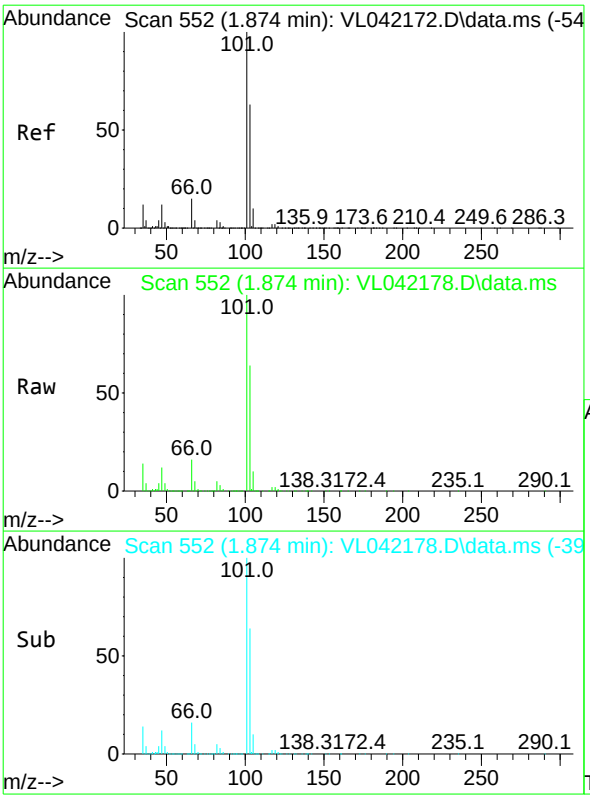


#10
Heptane
Concen: 14.019 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 446949

Ion	Ratio	Lower	Upper
43	100		
57	49.9	39.4	59.2





#11
Trichlorofluoromethane
Concen: 14.050 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:101 Resp: 349967

Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
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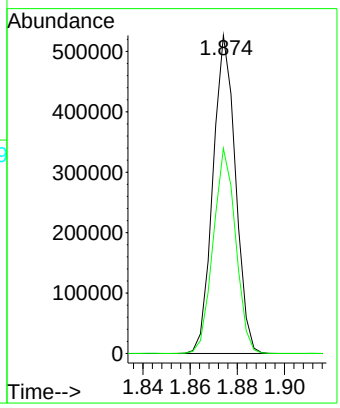
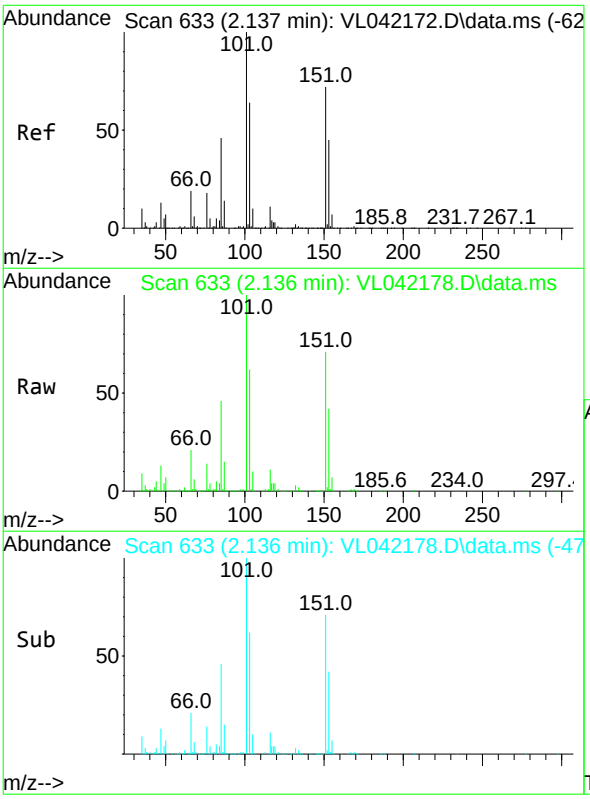
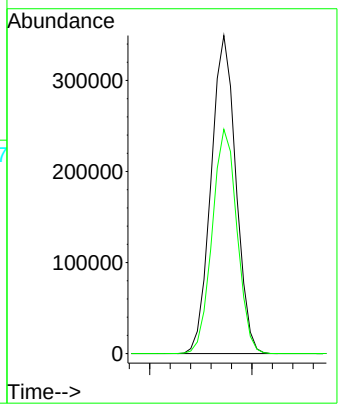


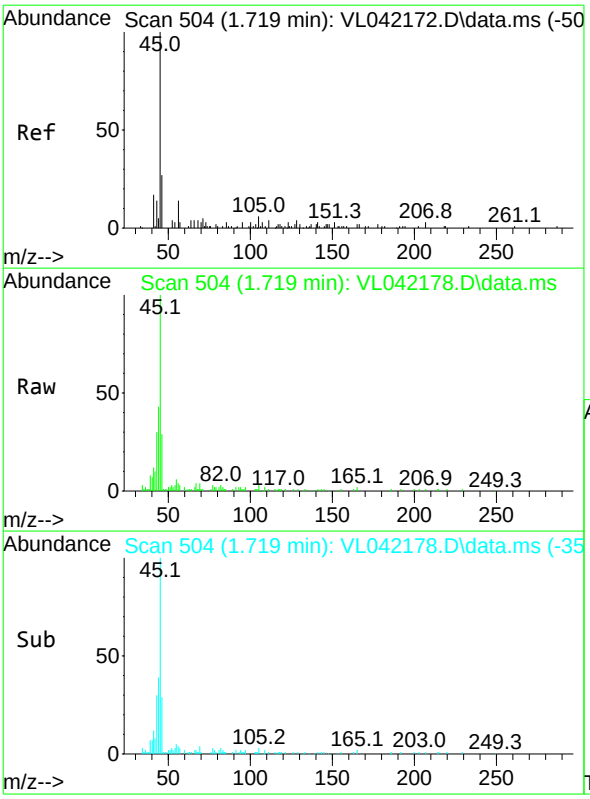


#12
1,1,2-Trichlorotrifluoroethane
Concen: 14.419 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:101 Resp: 295217

Ion	Ratio	Lower	Upper
101	100		
151	70.4	57.1	85.7

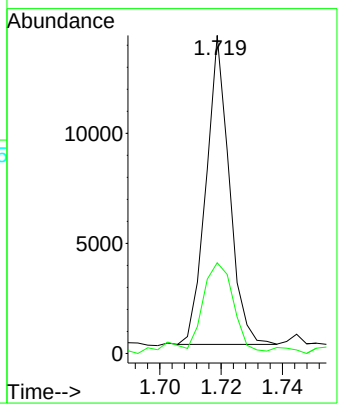




#13
Ethanol
Concen: 8.001 ppbv
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 45 Resp: 7382

Ion	Ratio	Lower	Upper
45	100		
46	44.6	20.2	80.8



Instrument :
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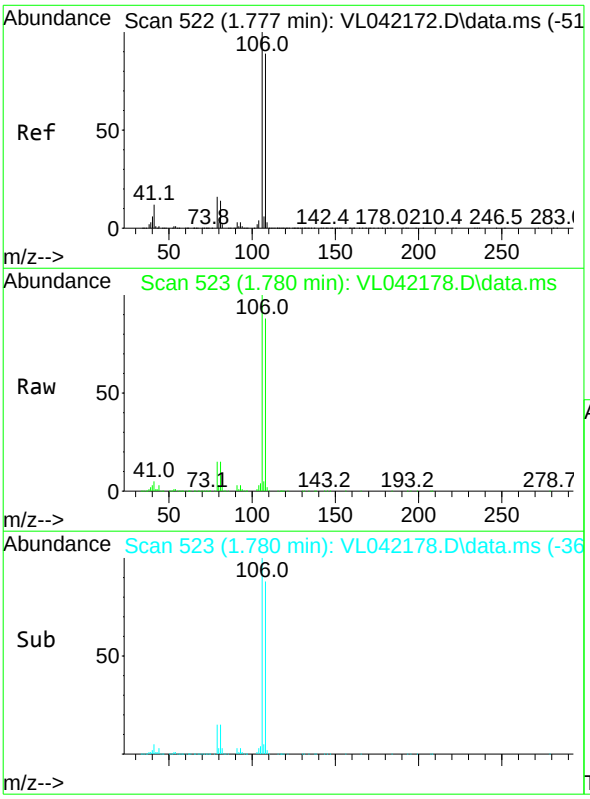
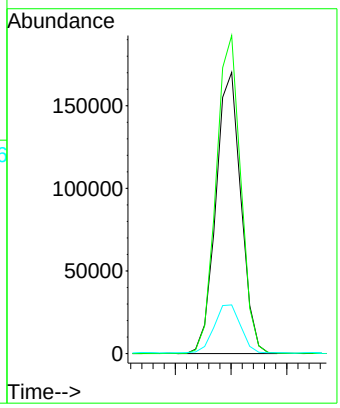
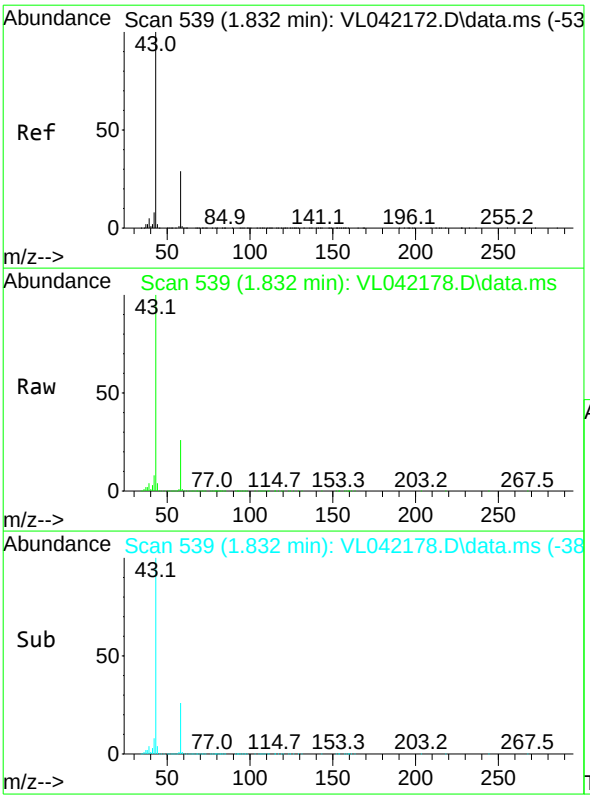


#14
Bromoethene
Concen: 13.571 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:108 Resp: 106436

Ion	Ratio	Lower	Upper
108	100		
106	110.9	86.8	130.2
79	18.8	15.0	22.6

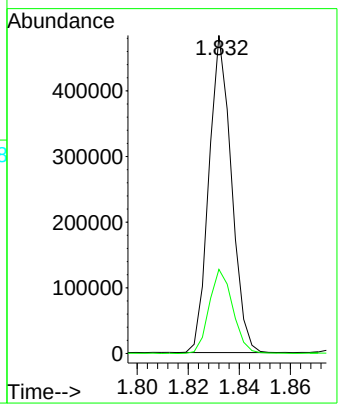




#15
Acetone
Concen: 12.218 ppbv
RT: 1.832 min Scan# 53
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 296254

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8



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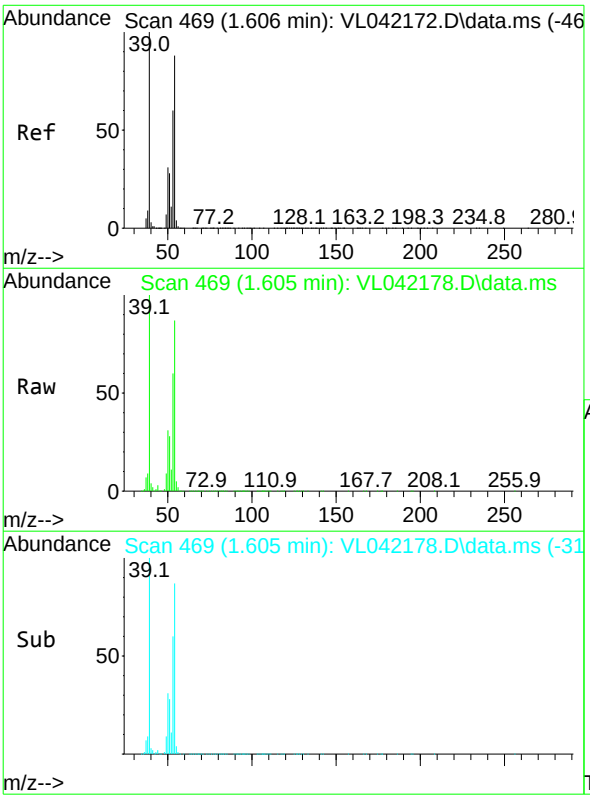
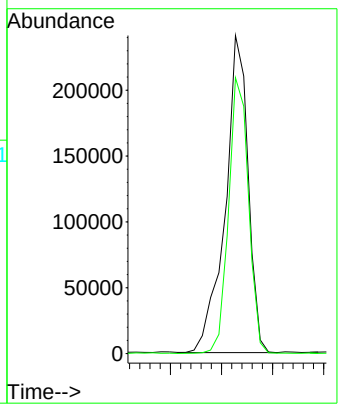
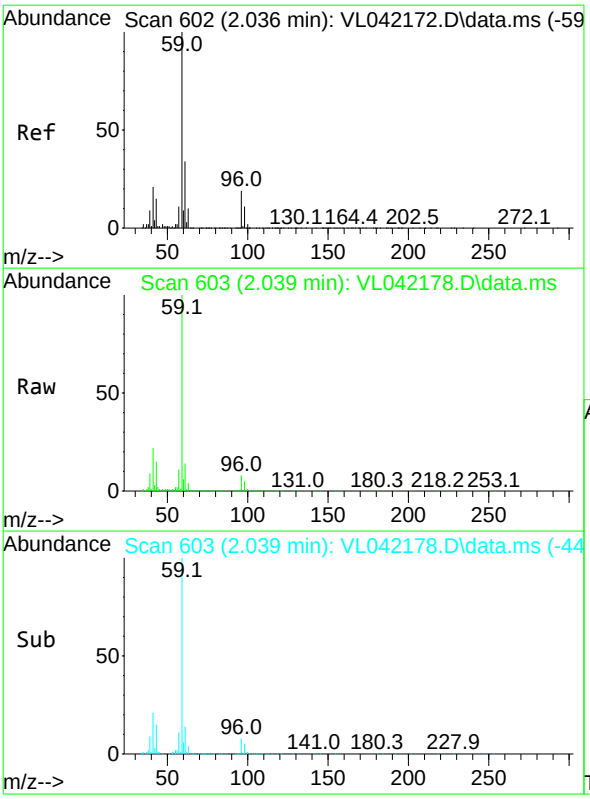


#16
1,3-Butadiene
Concen: 13.766 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 39 Resp: 150122

Ion	Ratio	Lower	Upper
39	100		
54	76.3	60.7	91.1

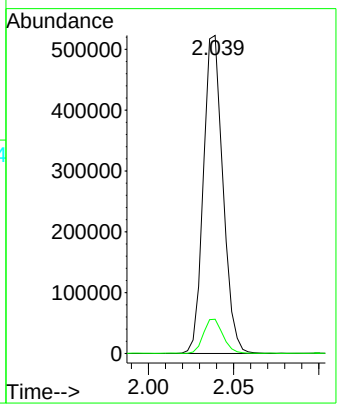




#17
tert-Butyl alcohol
Concen: 13.787 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 59 Resp: 416362

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3



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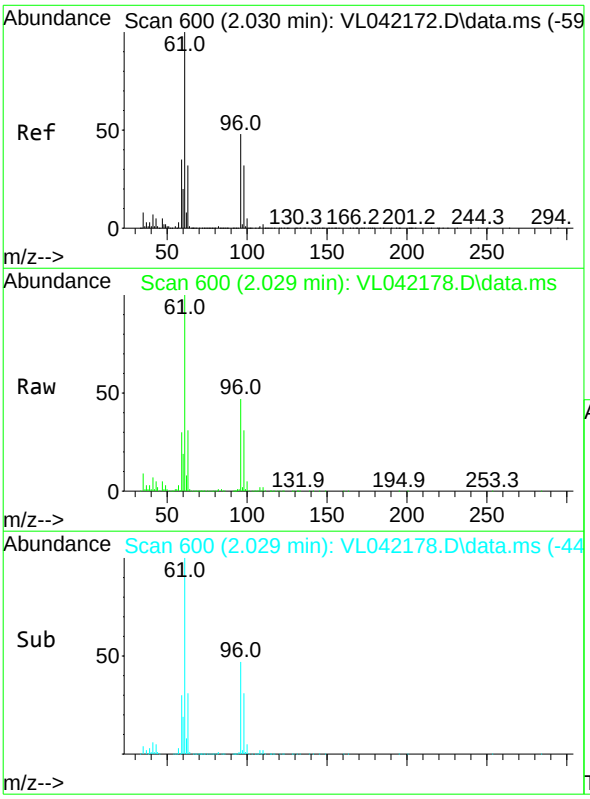
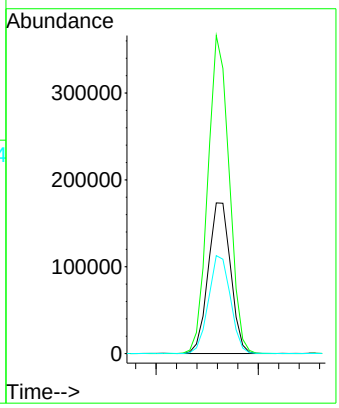
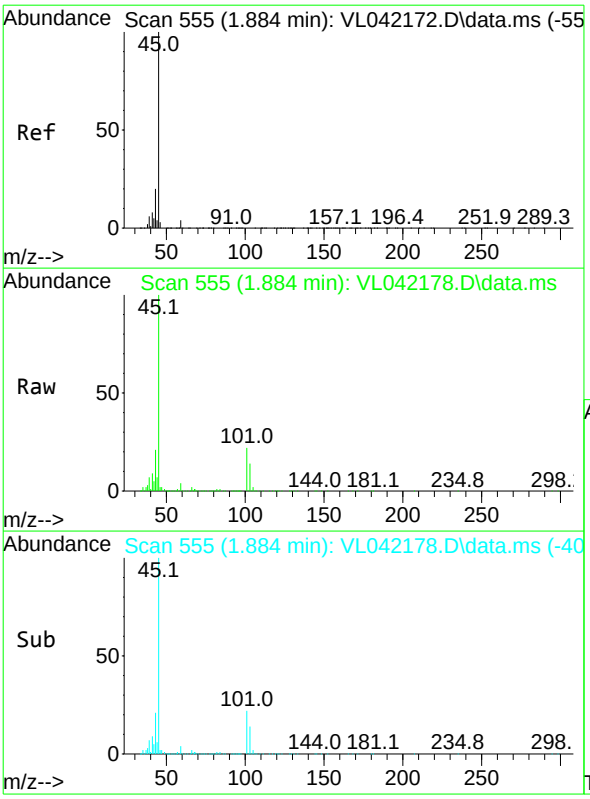


#18
1,1-Dichloroethene
Concen: 13.762 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 131720

Ion	Ratio	Lower	Upper
96	100		
61	211.1	167.6	251.4
98	64.9	53.5	80.3

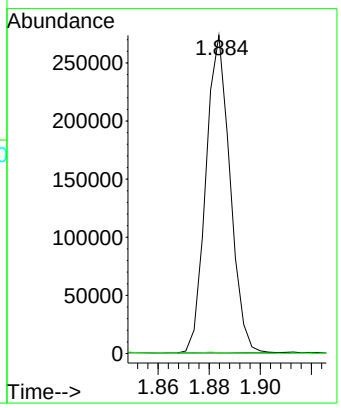




#19
Isopropyl Alcohol
Concen: 13.093 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 45 Resp: 179117

Ion	Ratio	Lower	Upper
45	100		
58	46.4	36.9	55.3



Instrument :
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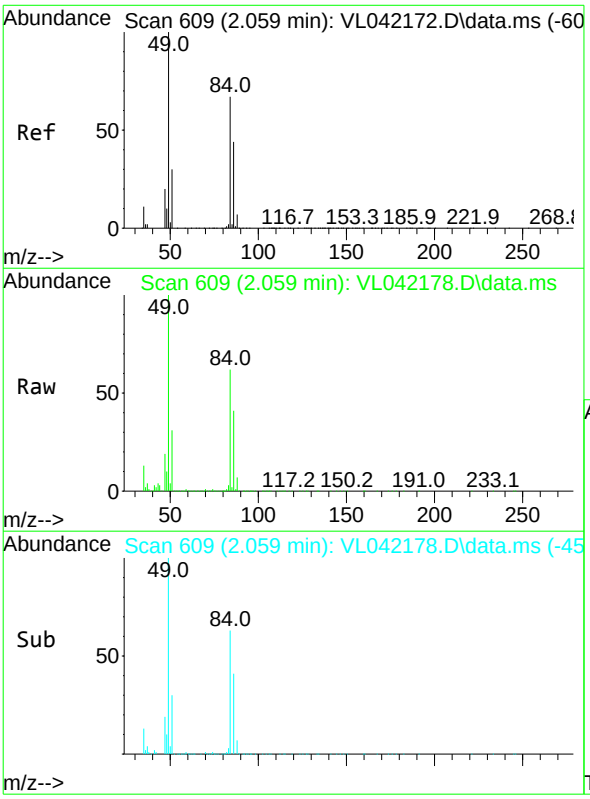
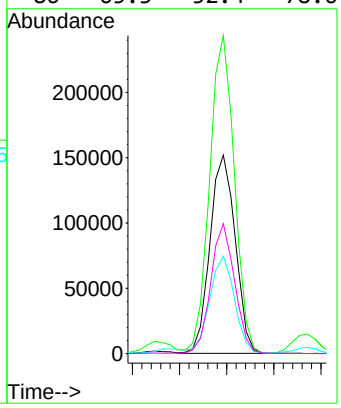
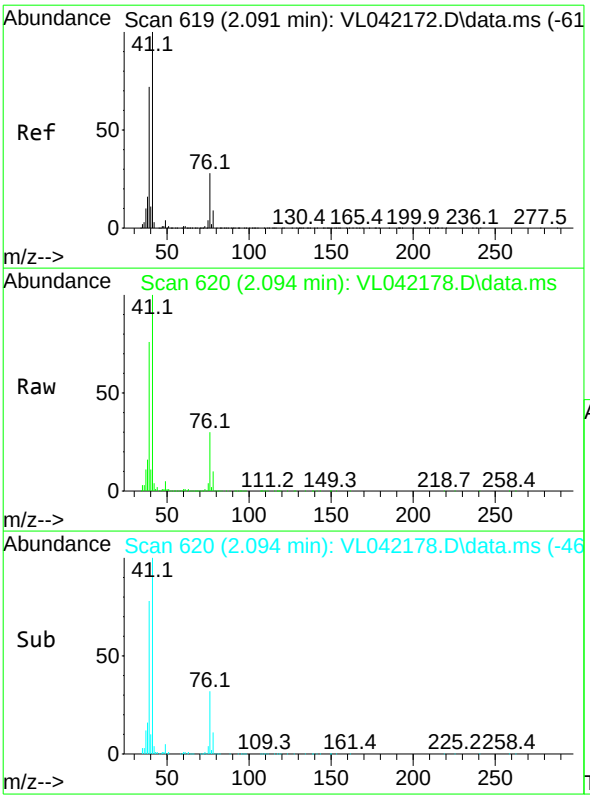


#20
Methylene Chloride
Concen: 12.533 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 113183

Ion	Ratio	Lower	Upper
84	100		
49	159.7	120.2	180.4
51	48.7	37.4	56.0
86	65.3	52.4	78.6

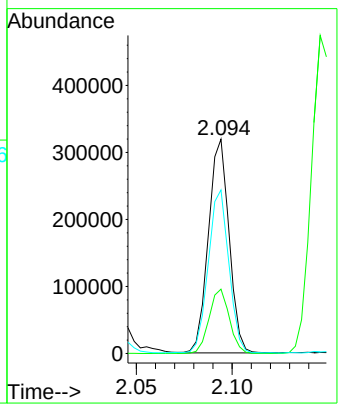




#21
Allyl Chloride
Concen: 14.002 ppbv
RT: 2.094 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 41 Resp: 239440

Ion	Ratio	Lower	Upper
41	100		
76	29.5	24.1	36.1
39	76.1	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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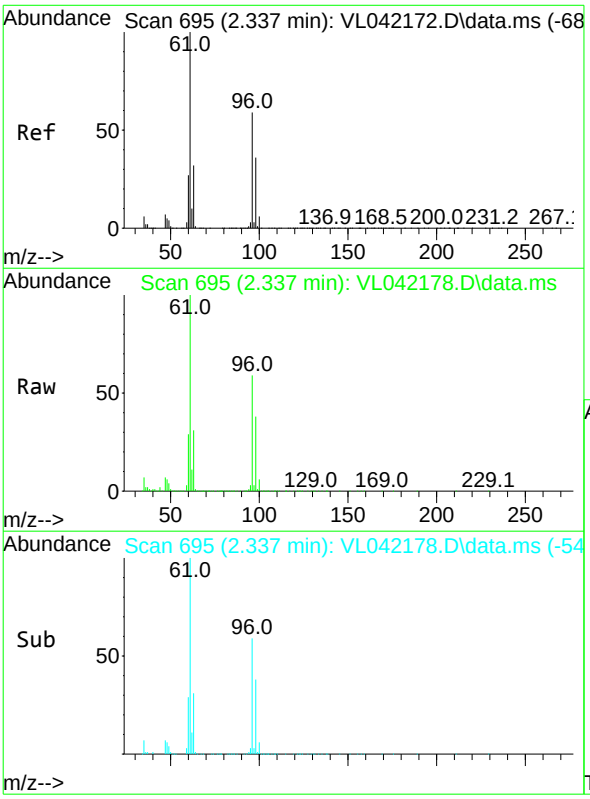
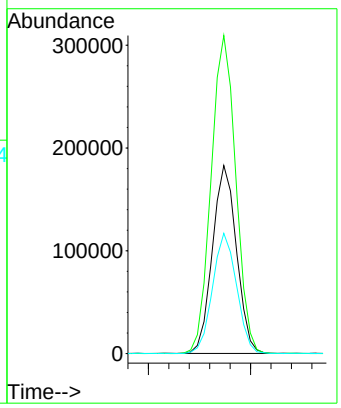
Supervised By :Mahesh Dadoda 04/03/2025

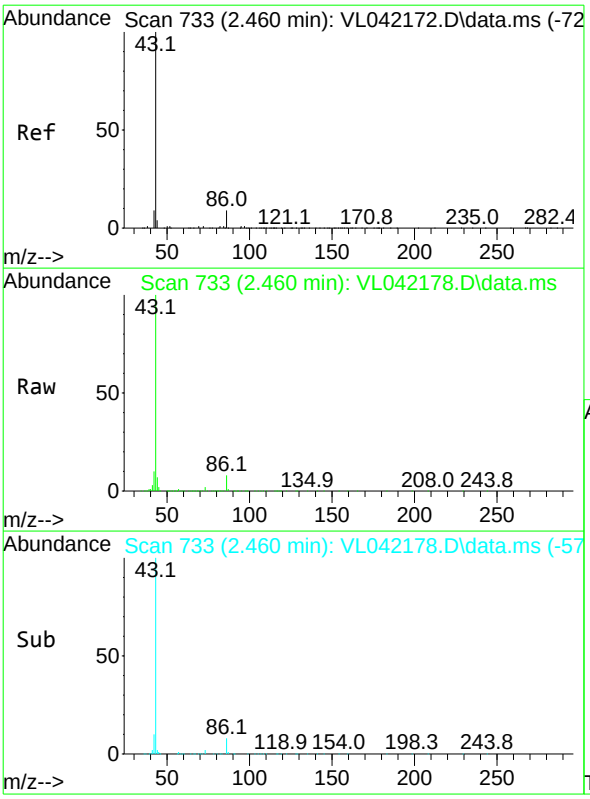


#22
trans-1,2-Dichloroethene
Concen: 13.362 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 149455

Ion	Ratio	Lower	Upper
96	100		
61	169.2	136.6	204.8
98	63.9	49.4	74.2

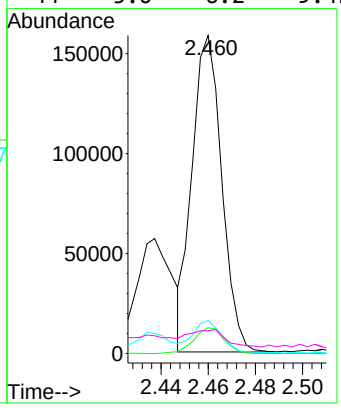




#23
Vinyl Acetate
Concen: 13.736 ppbv
RT: 2.460 min Scan# 73
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 138419

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.1	8.6	13.0
44	5.0	6.2	9.4#



Instrument :
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ClientSampleId :
VSTDICC015

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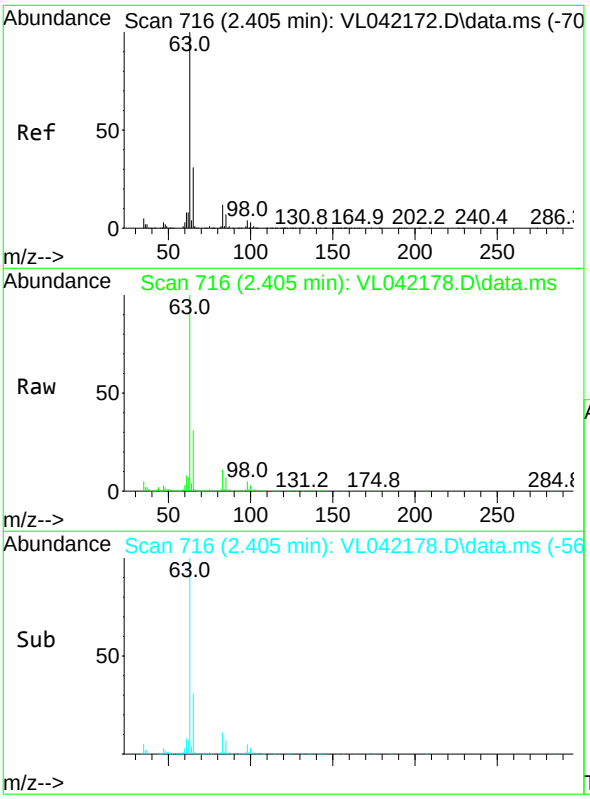
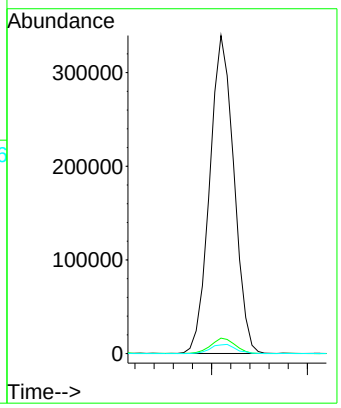
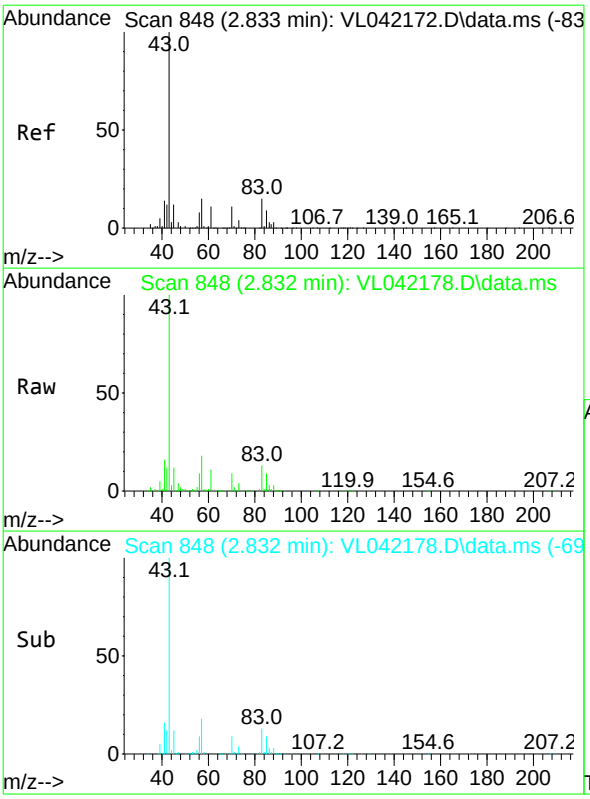


#24
1,1-Dichloroethane
Concen: 14.570 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 63 Resp: 298760

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	2.7	1.6	4.7

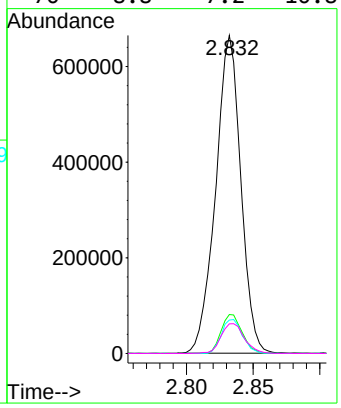




#25
Ethyl Acetate
Concen: 13.855 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 871882

Ion	Ratio	Lower	Upper
43	100		
45	10.3	8.2	12.2
61	9.0	7.3	10.9
70	8.8	7.2	10.8



Instrument :
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ClientSampleId :
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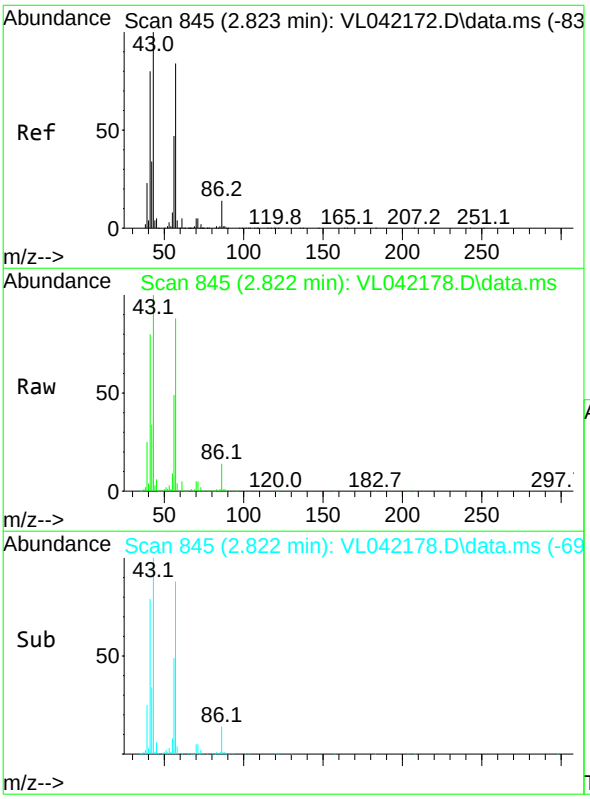
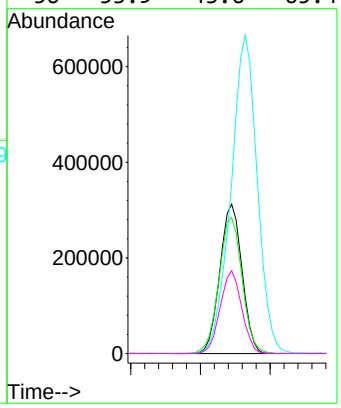
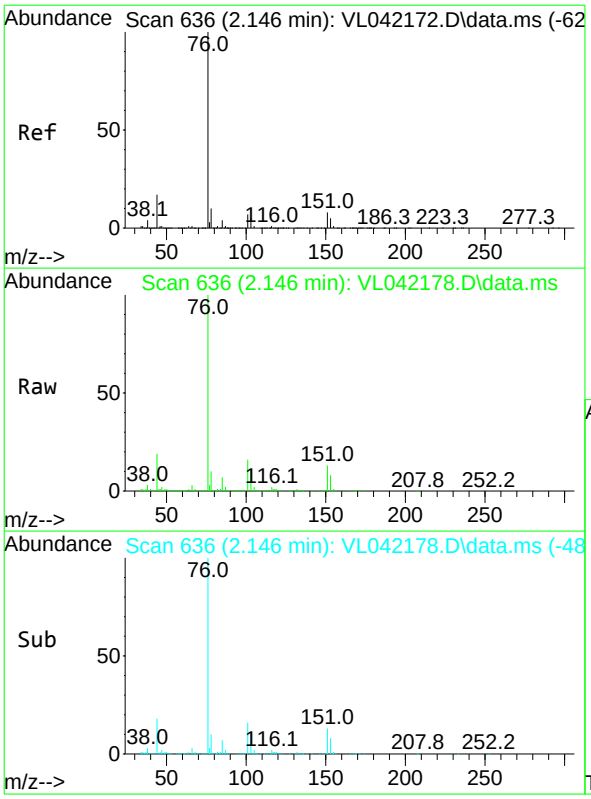


#26
Hexane
Concen: 14.178 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 344636

Ion	Ratio	Lower	Upper
57	100		
41	96.1	76.6	114.8
43	254.0	207.8	311.8
56	53.9	43.6	65.4

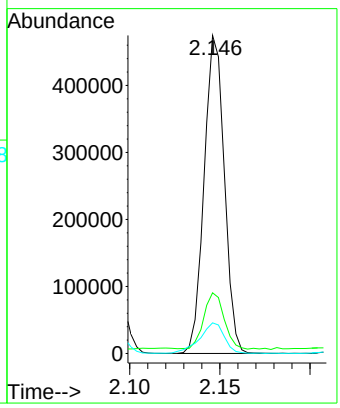




#27
Carbon Disulfide
Concen: 14.196 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 76 Resp: 370022

Ion	Ratio	Lower	Upper
76	100		
44	20.3	14.7	22.1
78	11.7	9.3	13.9



Instrument :
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ClientSampleId :
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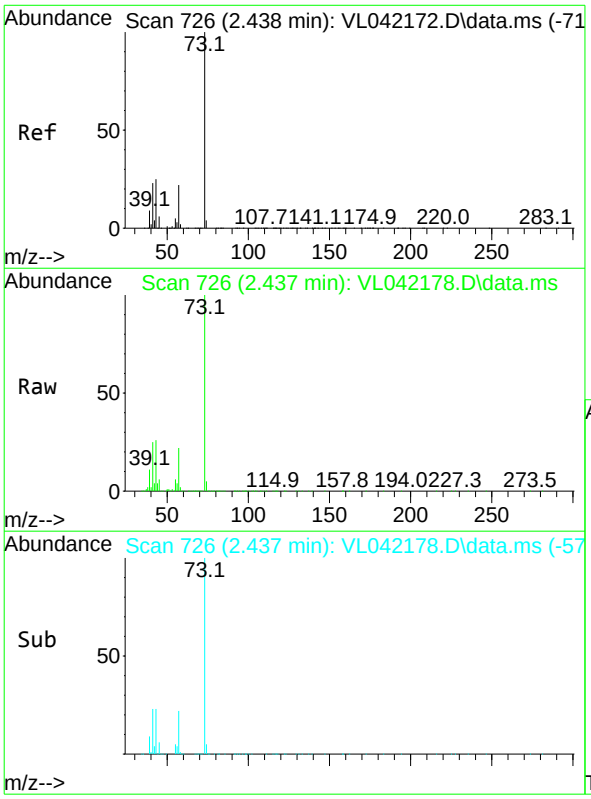
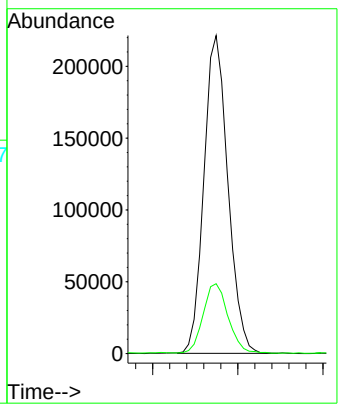
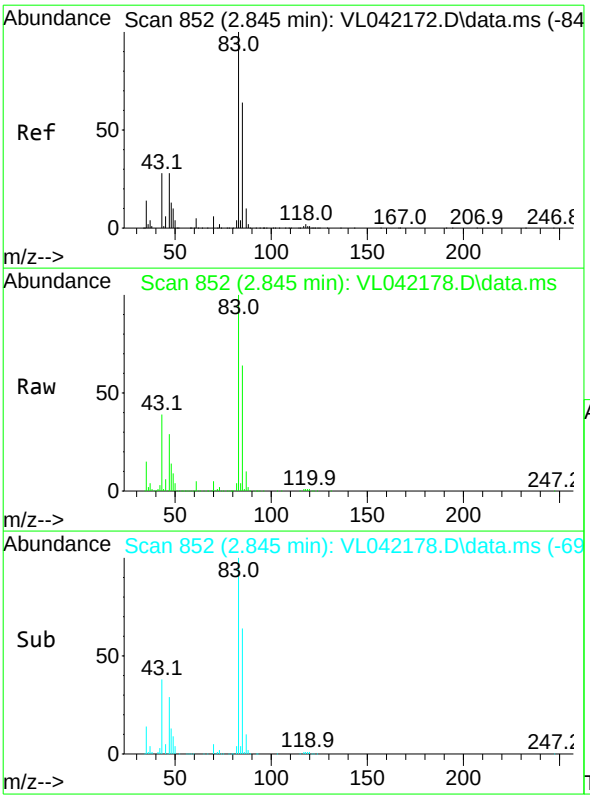


#28
Methyl tert-Butyl Ether
Concen: 14.303 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 73 Resp: 216463

Ion	Ratio	Lower	Upper
73	100		
57	23.2	20.5	30.7





#29
Chloroform
Concen: 14.297 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 508614

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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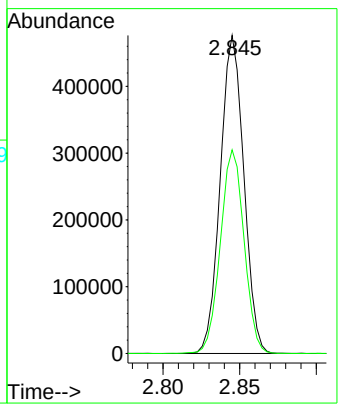
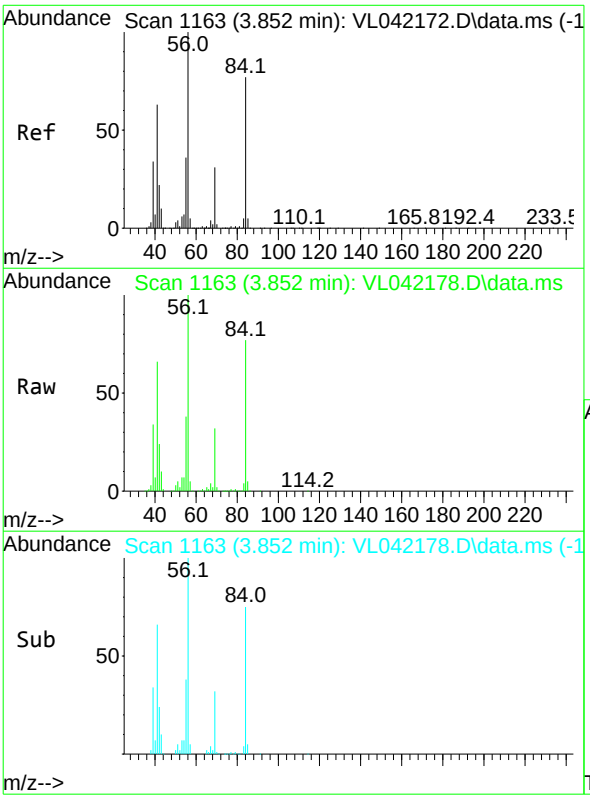
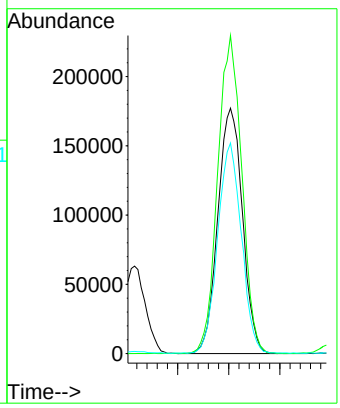


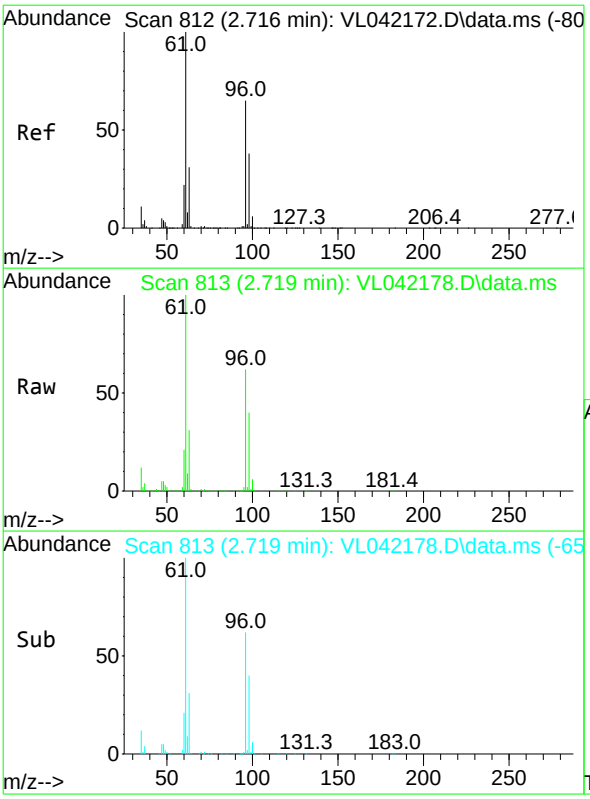


#30
Cyclohexane
Concen: 14.040 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 296458

Ion	Ratio	Lower	Upper
84	100		
56	126.7	102.8	154.2
41	82.6	66.5	99.7

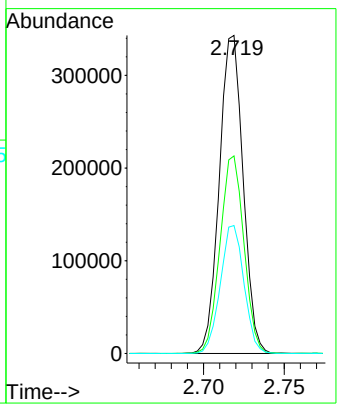




#31
cis-1,2-Dichloroethene
Concen: 14.262 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 61 Resp: 351945

Ion	Ratio	Lower	Upper
61	100		
96	62.1	51.8	77.8
98	40.2	30.6	46.0



Instrument :
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ClientSampleId :
VSTDICC015

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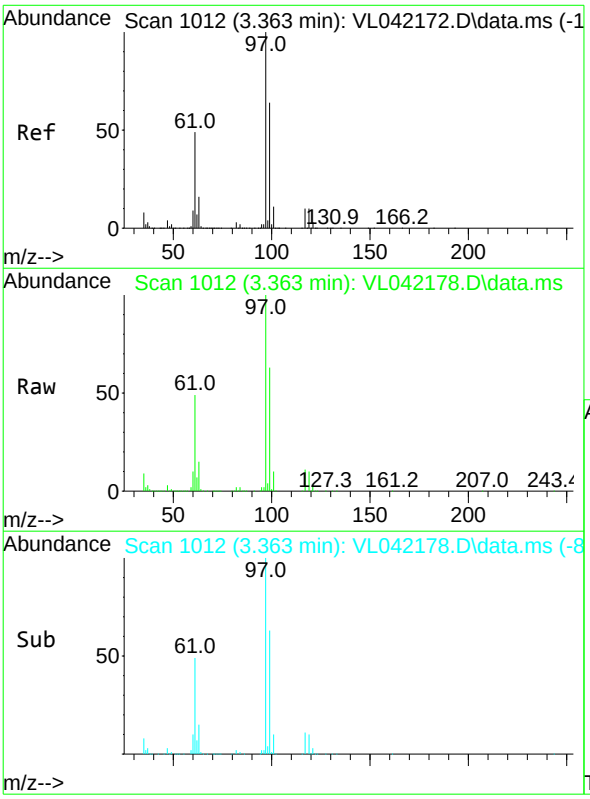
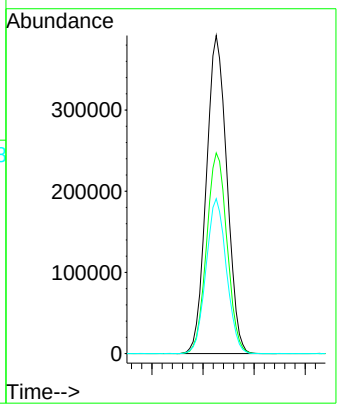
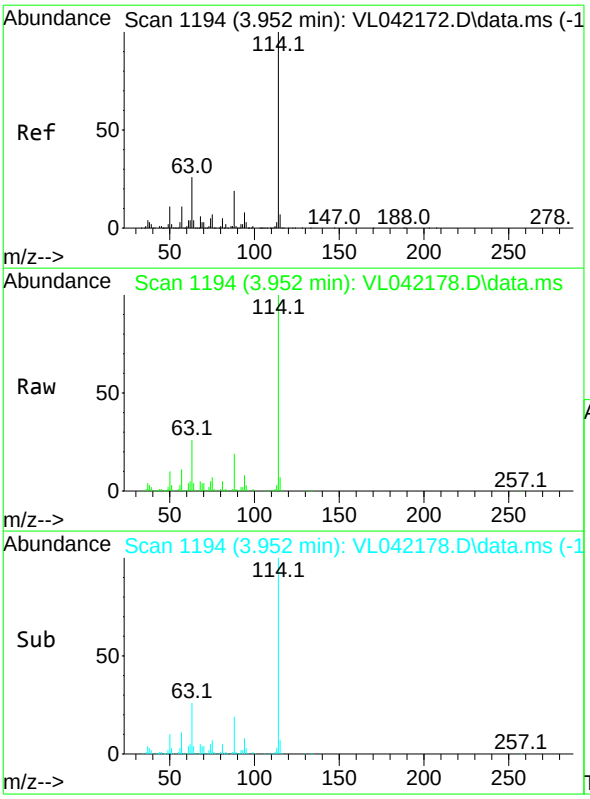


#32
1,1,1-Trichloroethane
Concen: 13.448 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 97 Resp: 547329

Ion	Ratio	Lower	Upper
97	100		
99	62.8	51.5	77.3
61	48.4	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:114 Resp: 499360

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.4	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
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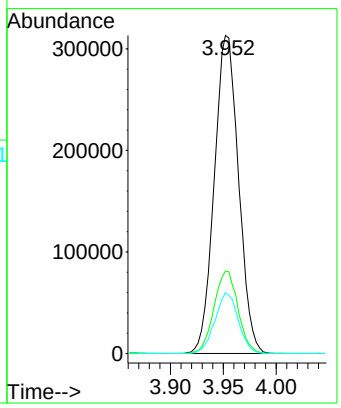
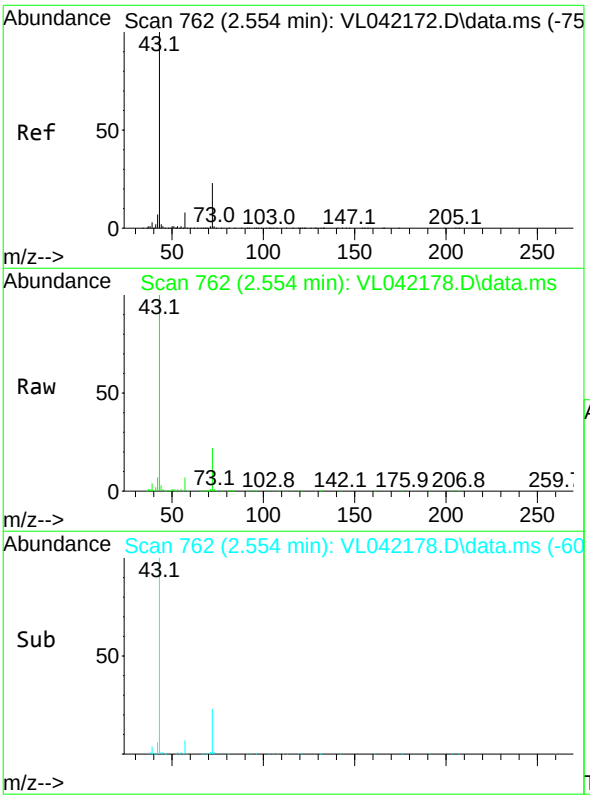
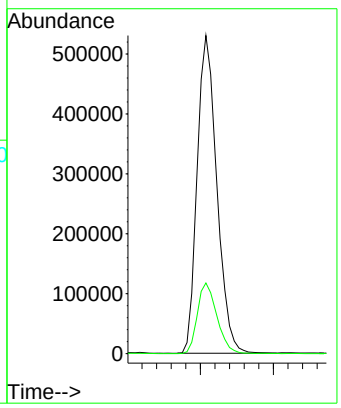


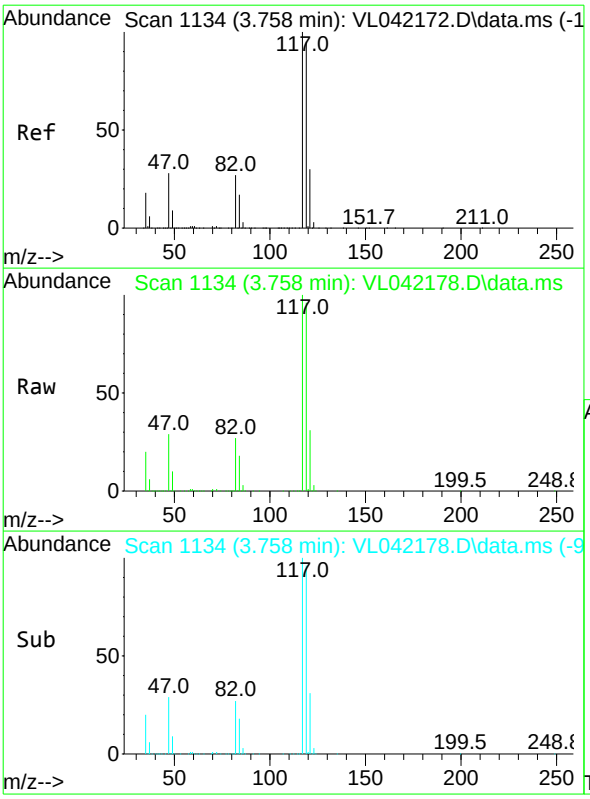


#34
2-Butanone
Concen: 13.726 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 497020

Ion	Ratio	Lower	Upper
43	100		
72	22.0	18.2	27.2

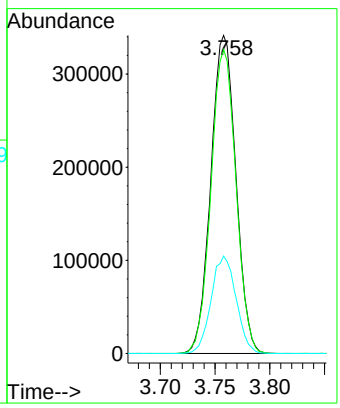




#35
Carbon Tetrachloride
Concen: 14.140 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:117 Resp: 543385

Ion	Ratio	Lower	Upper
117	100		
119	95.5	76.2	114.2
121	30.6	24.2	36.4



Instrument :
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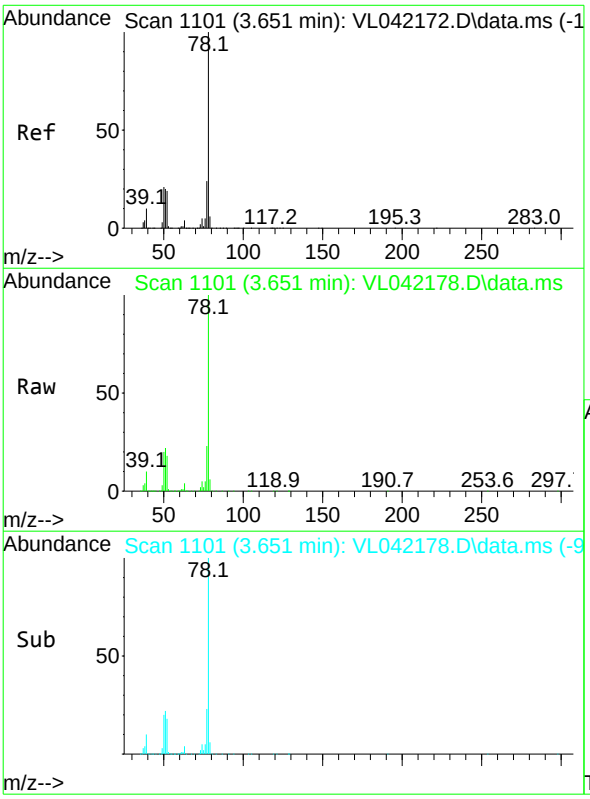
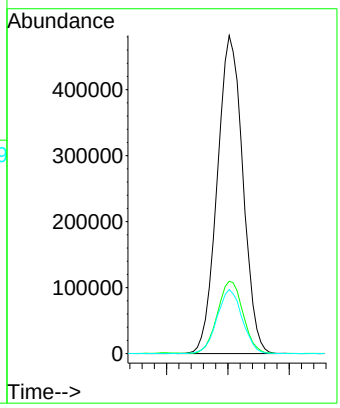
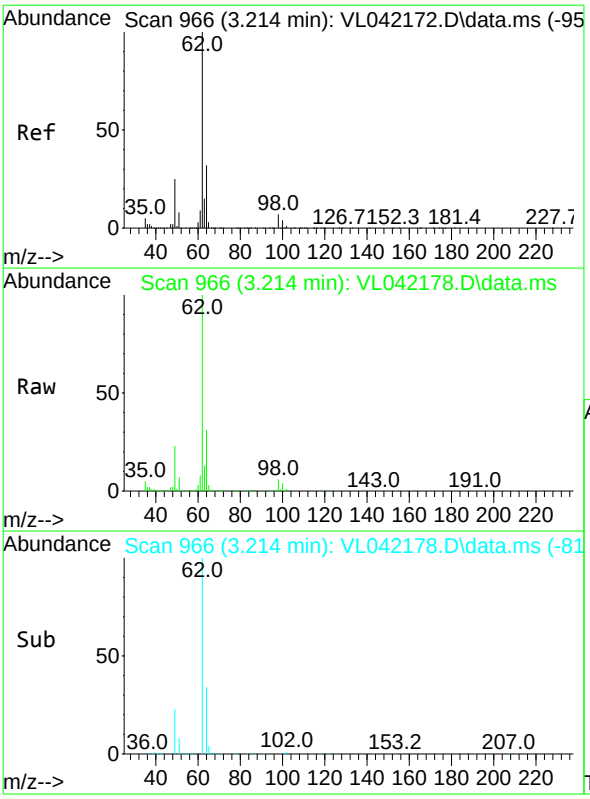


#36
Benzene
Concen: 14.131 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 78 Resp: 699549

Ion	Ratio	Lower	Upper
78	100		
77	22.7	19.1	28.7
50	20.1	16.6	24.8





#37
1,2-Dichloroethane
Concen: 14.697 ppbv
RT: 3.214 min Scan# 96
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 62 Resp: 416544

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.4	8.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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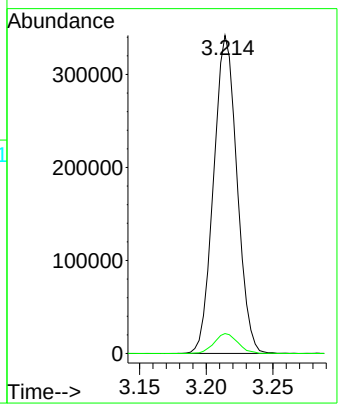
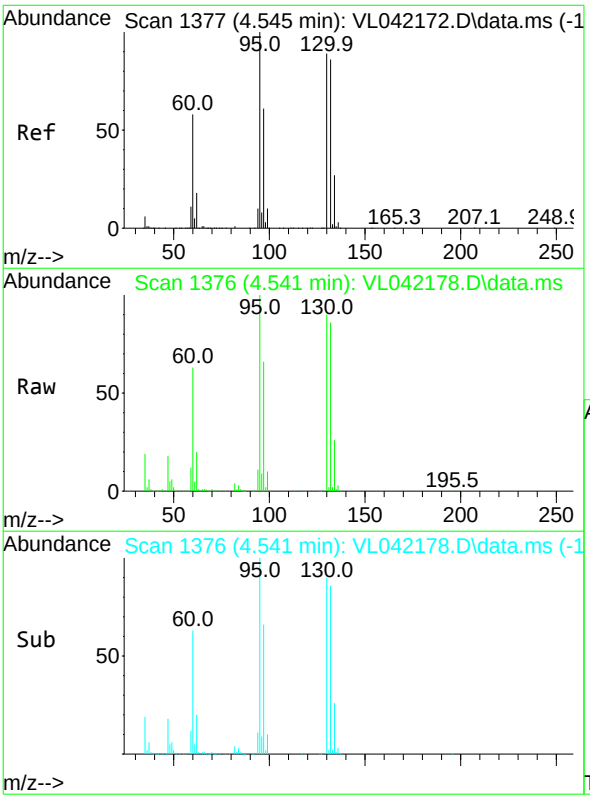
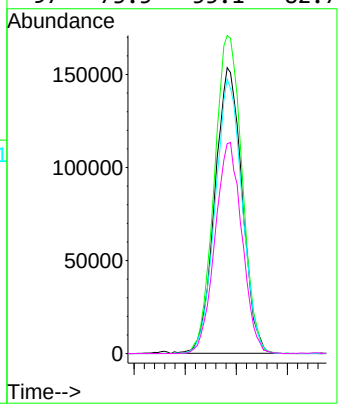


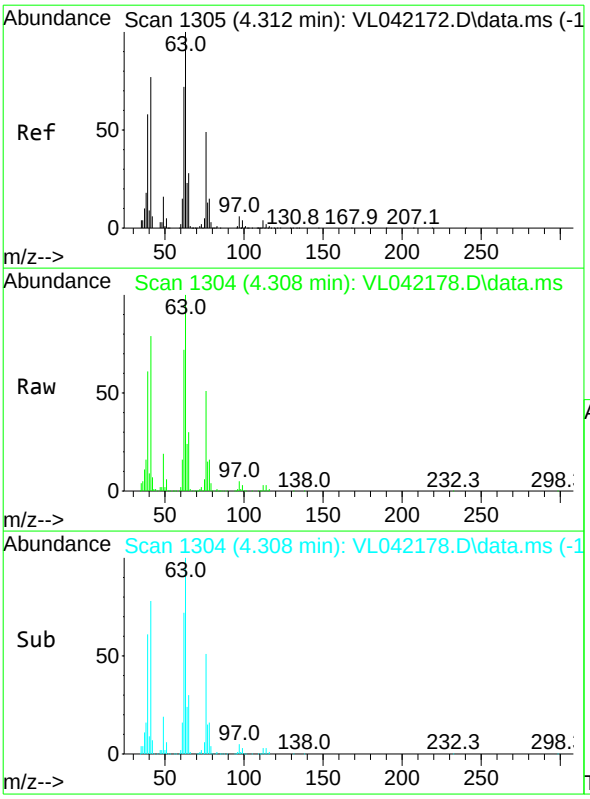


#38
Trichloroethene
Concen: 13.715 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:130 Resp: 283430

Ion	Ratio	Lower	Upper
130	100		
95	111.3	89.8	134.8
132	96.0	77.4	116.2
97	73.5	55.1	82.7

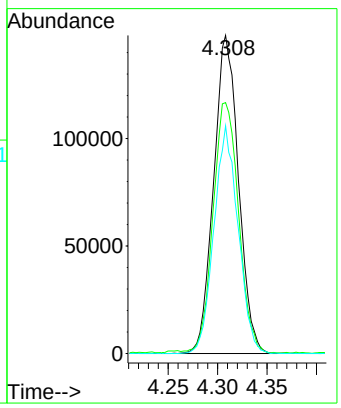




#39
1,2-Dichloropropane
Concen: 14.304 ppbv
RT: 4.308 min Scan# 13
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 63 Resp: 257891

Ion	Ratio	Lower	Upper
63	100		
41	78.7	61.7	92.5
62	71.6	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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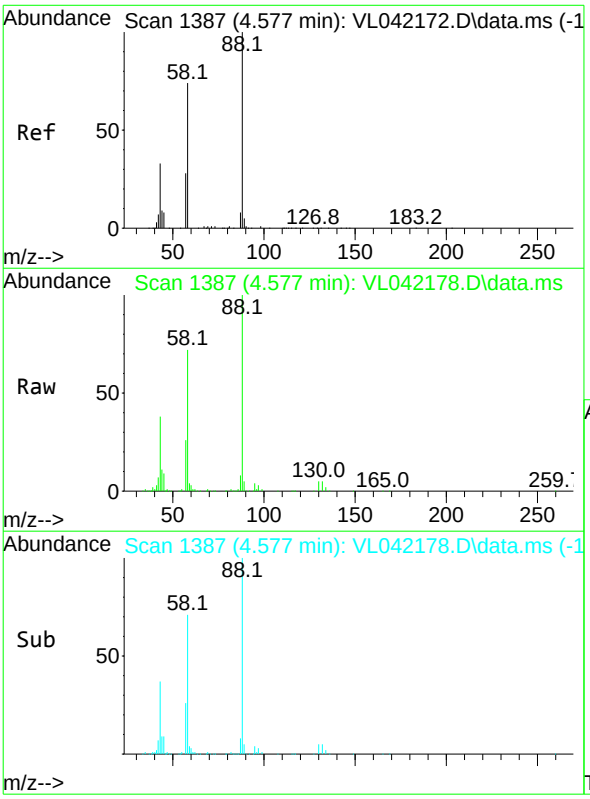
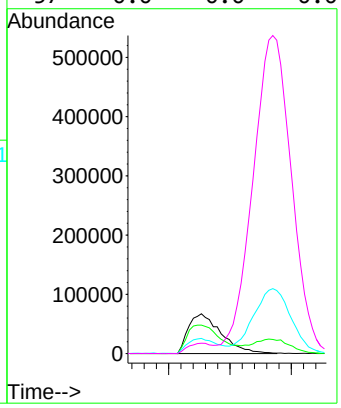
Supervised By :Mahesh Dadoda 04/03/2025

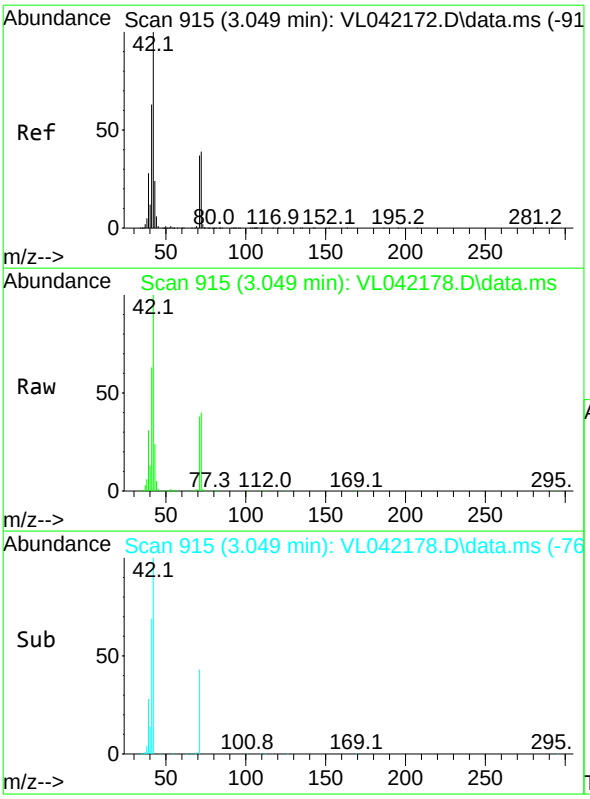


#40
1,4-Dioxane
Concen: 13.354 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 88 Resp: 124925

Ion	Ratio	Lower	Upper
88	100		
58	69.6	62.7	94.1
43	31.6	23.0	34.4
57	0.0	0.0	0.0

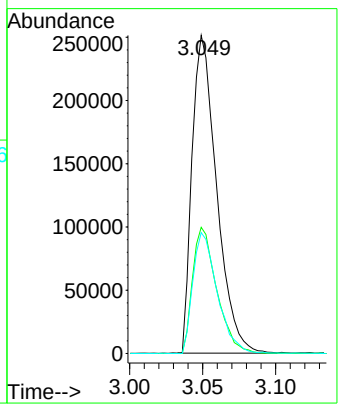




#41
Tetrahydrofuran
Concen: 14.301 ppbv
RT: 3.049 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 42 Resp: 294634

Ion	Ratio	Lower	Upper
42	100		
72	39.0	31.4	47.0
71	37.9	30.2	45.4



Instrument :
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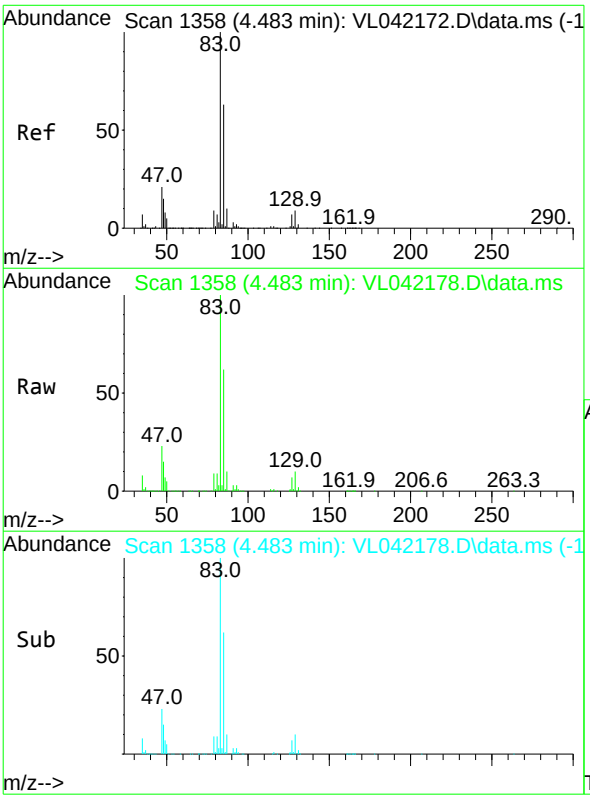
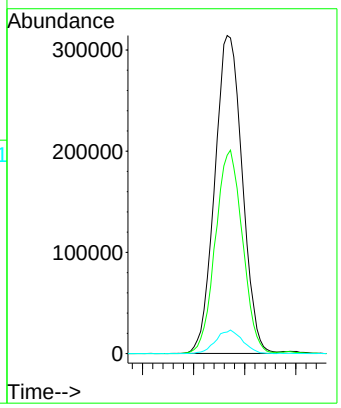
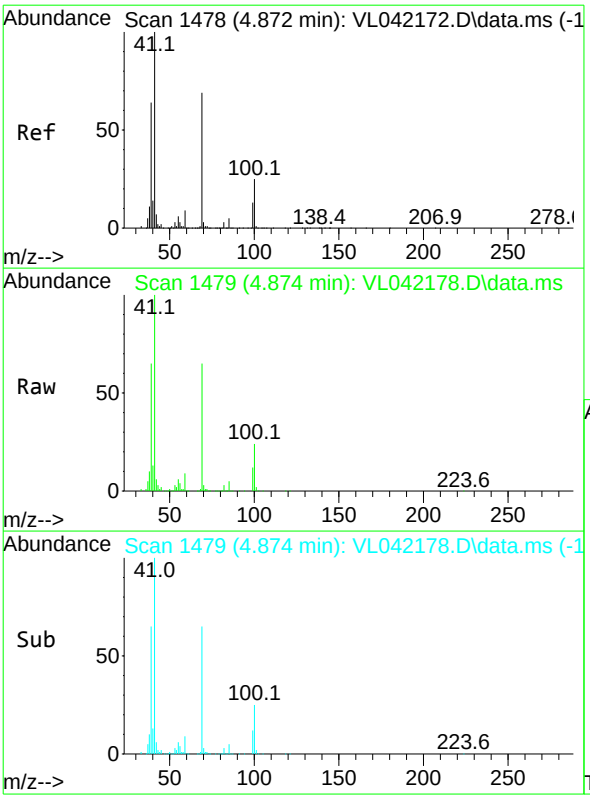


#42
Bromodichloromethane
Concen: 15.043 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 587772

Ion	Ratio	Lower	Upper
83	100		
85	62.4	50.5	75.7
127	6.8	5.9	8.9

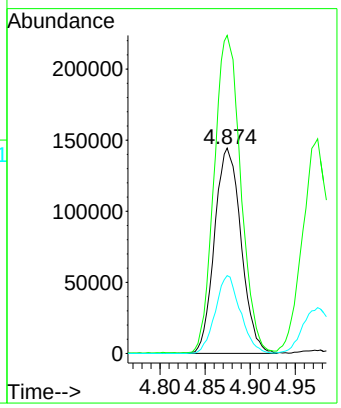




#43
Methyl Methacrylate
Concen: 14.130 ppbv
RT: 4.874 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 69 Resp: 295300

Ion	Ratio	Lower	Upper
69	100		
41	155.4	123.8	185.6
100	36.0	28.4	42.6



Instrument :
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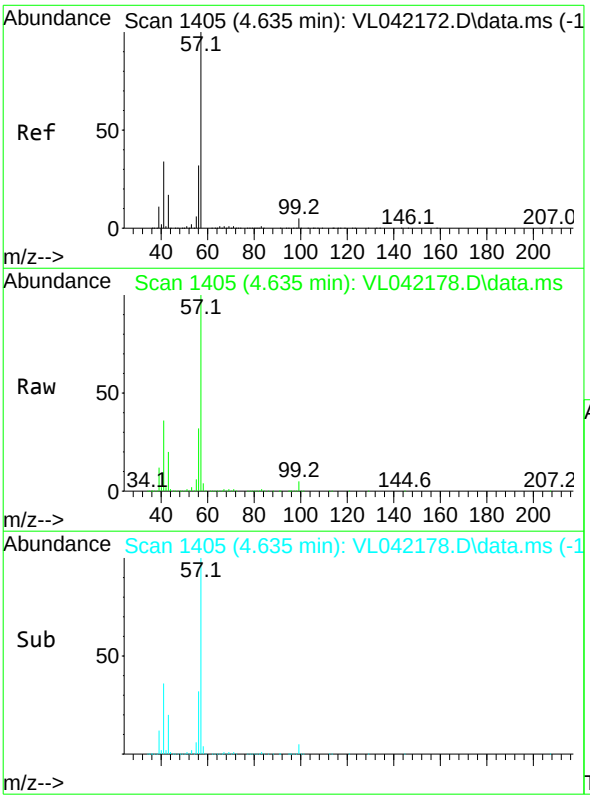
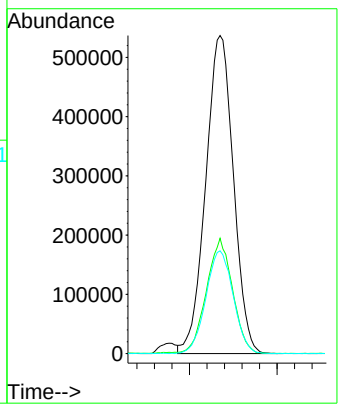
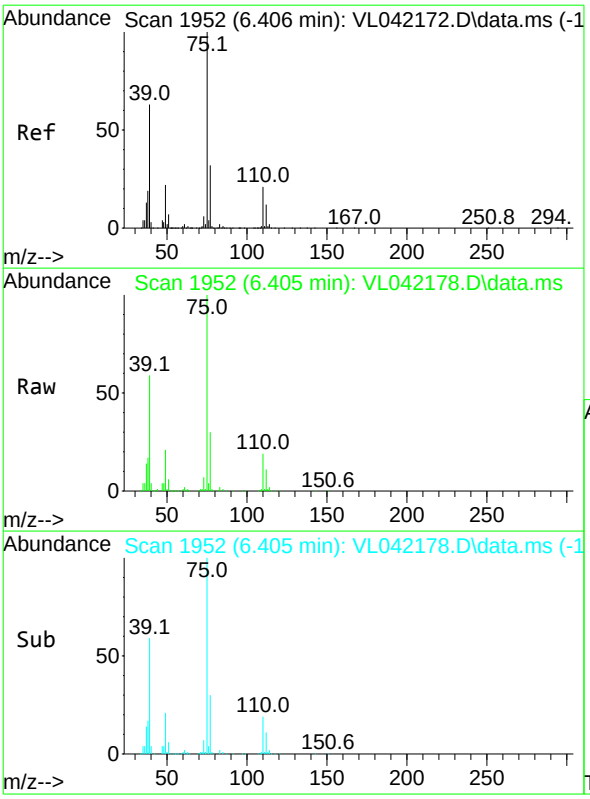


#44
2,2,4-Trimethylpentane
Concen: 14.108 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 1180275

Ion	Ratio	Lower	Upper
57	100		
41	34.2	26.8	40.2
56	31.9	25.6	38.4

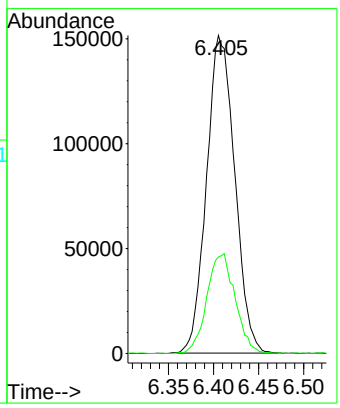




#45
t-1,3-Dichloropropene
Concen: 14.649 ppbv
RT: 6.405 min Scan# 19
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 75 Resp: 329360

Ion	Ratio	Lower	Upper
75	100		
77	30.4	26.0	39.0



Instrument :
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ClientSampleId :
VSTDICC015

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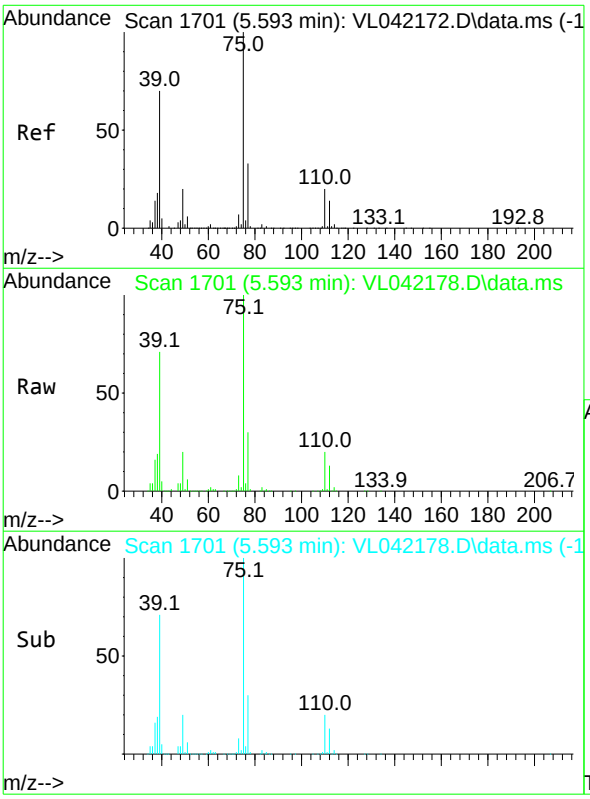
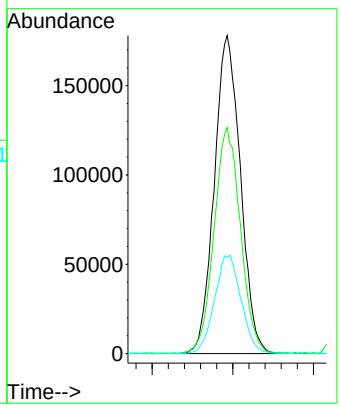
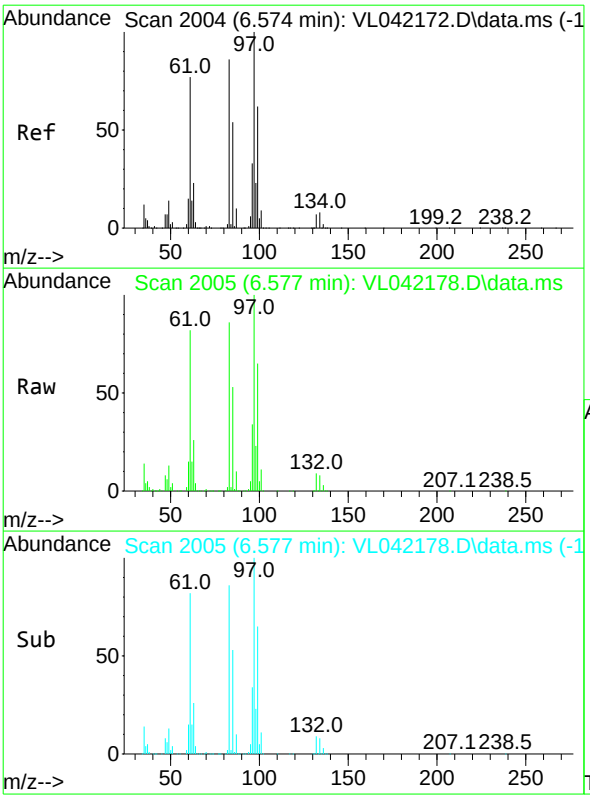


#46
cis-1,3-Dichloropropene
Concen: 14.542 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 75 Resp: 400813

Ion	Ratio	Lower	Upper
75	100		
39	70.9	55.8	83.6
77	30.2	26.0	39.0

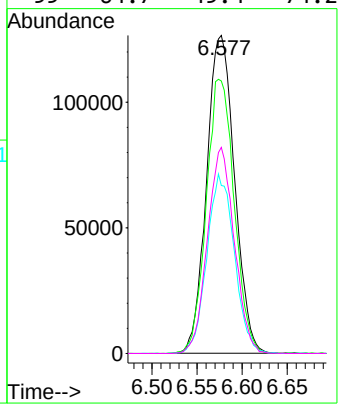




#47
1,1,2-Trichloroethane
Concen: 14.331 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 97 Resp: 273137

Ion	Ratio	Lower	Upper
97	100		
83	85.7	69.2	103.8
85	52.7	43.1	64.7
99	64.7	49.4	74.2



Instrument :
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ClientSampleId :
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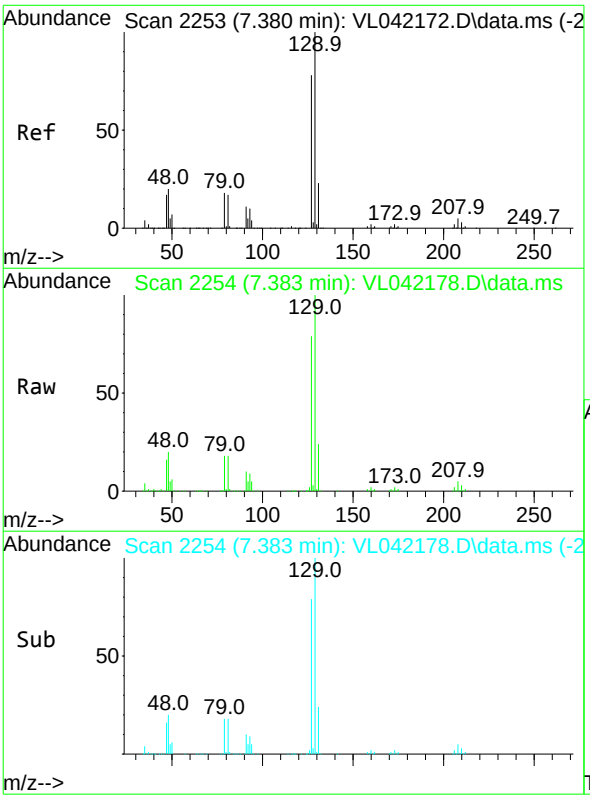
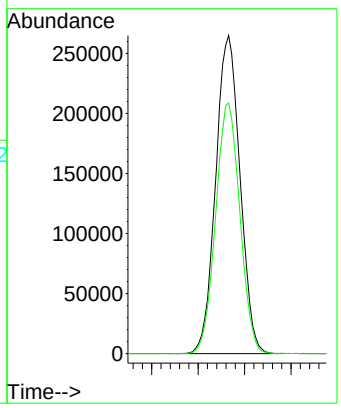
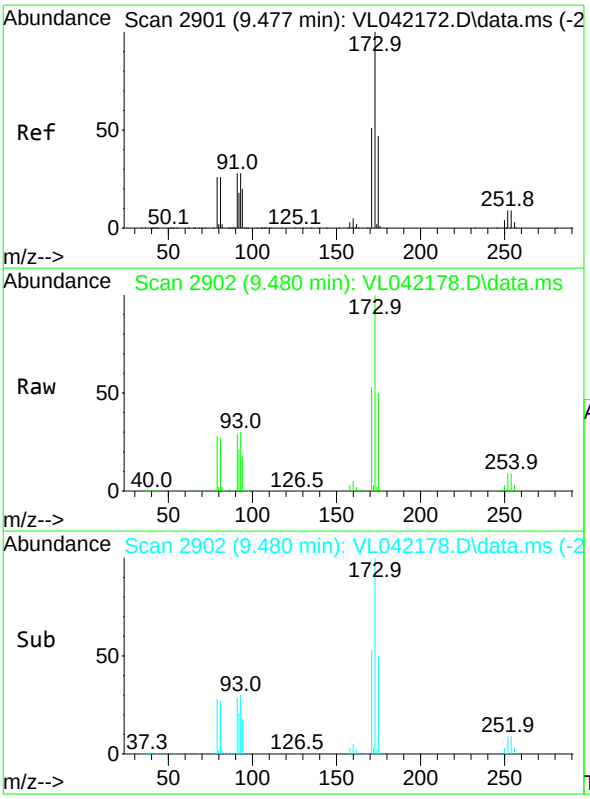


#48
Dibromochloromethane
Concen: 14.936 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:129 Resp: 482431

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.2





#49
Bromoform
Concen: 14.730 ppbv
RT: 9.480 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:173 Resp: 427143

Ion	Ratio	Lower	Upper
173	100		
175	48.9	38.6	57.8
171	51.5	41.8	62.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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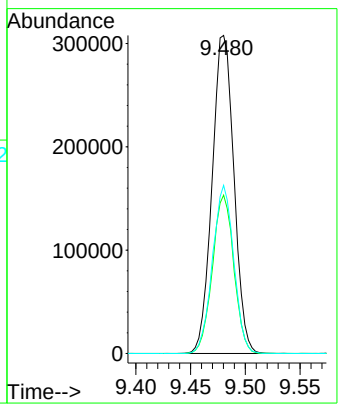
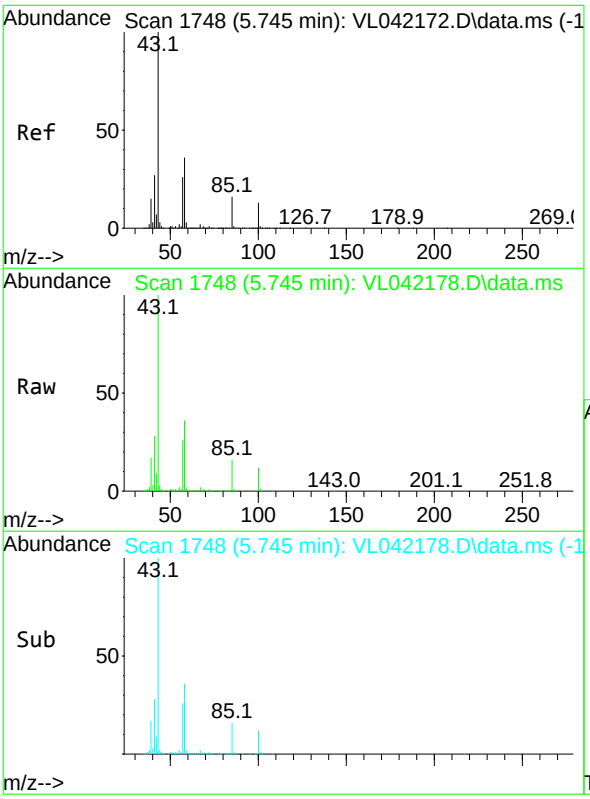
Supervised By :Mahesh Dadoda 04/03/2025

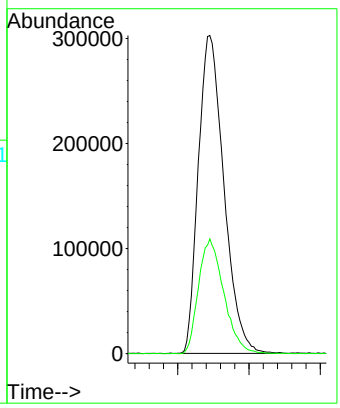


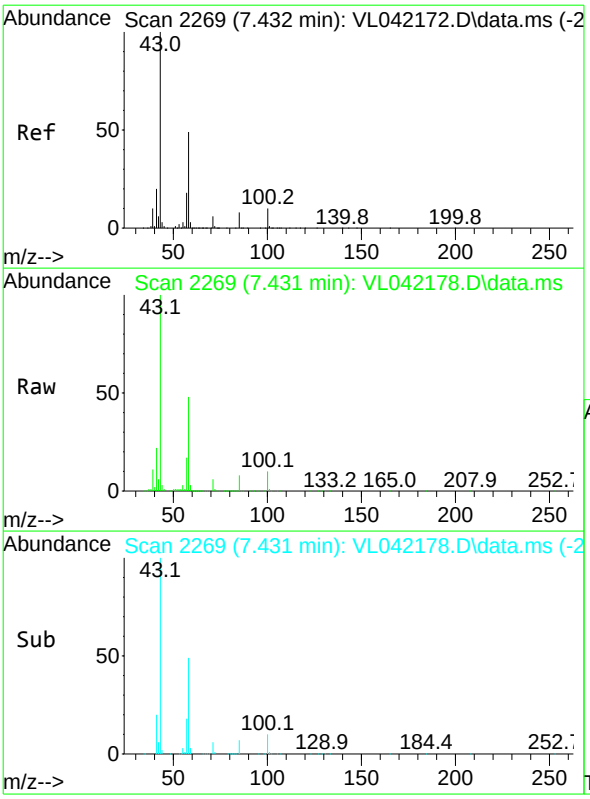


#50
4-Methyl-2-Pentanone
Concen: 13.155 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 755146

Ion	Ratio	Lower	Upper
43	100		
58	35.5	29.0	43.6

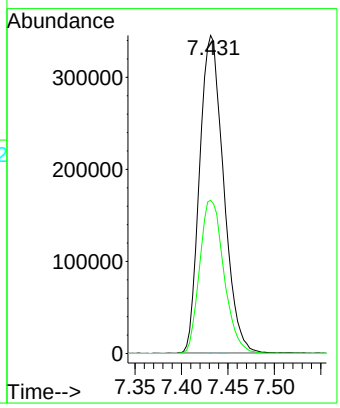




#51
2-Hexanone
Concen: 13.005 ppbv
RT: 7.431 min Scan# 22
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 619419

Ion	Ratio	Lower	Upper
43	100		
58	49.0	39.7	59.5
98	0.0	0.1	0.1#



Instrument :
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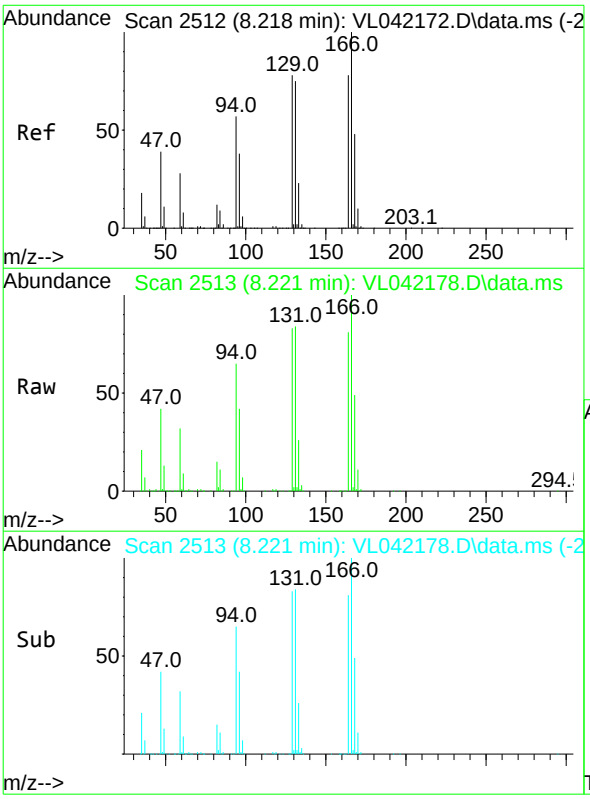
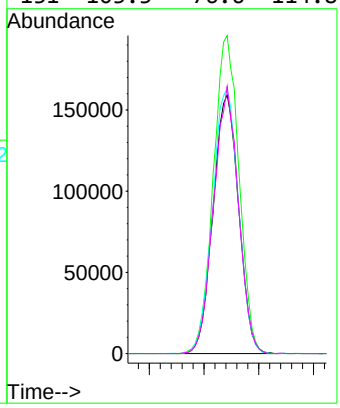
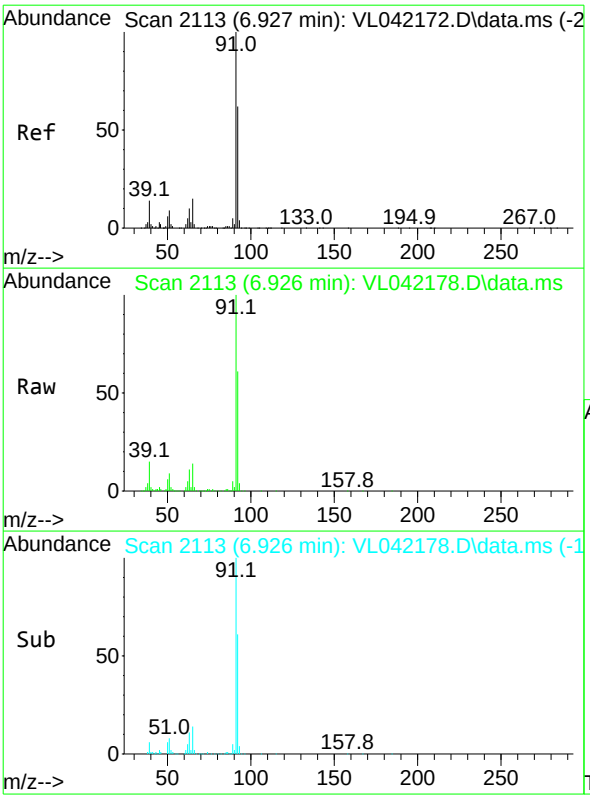


#52
Tetrachloroethene
Concen: 13.159 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:164 Resp: 258356

Ion	Ratio	Lower	Upper
164	100		
166	123.0	102.5	153.7
129	102.5	79.8	119.8
131	103.3	76.6	114.8

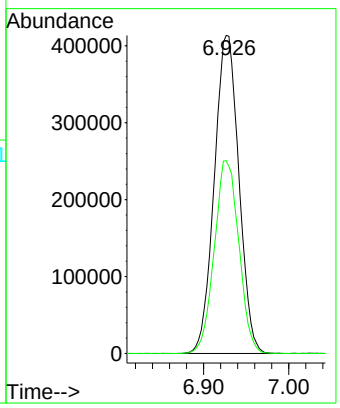




#53
Toluene
Concen: 14.137 ppbv
RT: 6.926 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 829648

Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.4	72.6



Instrument :
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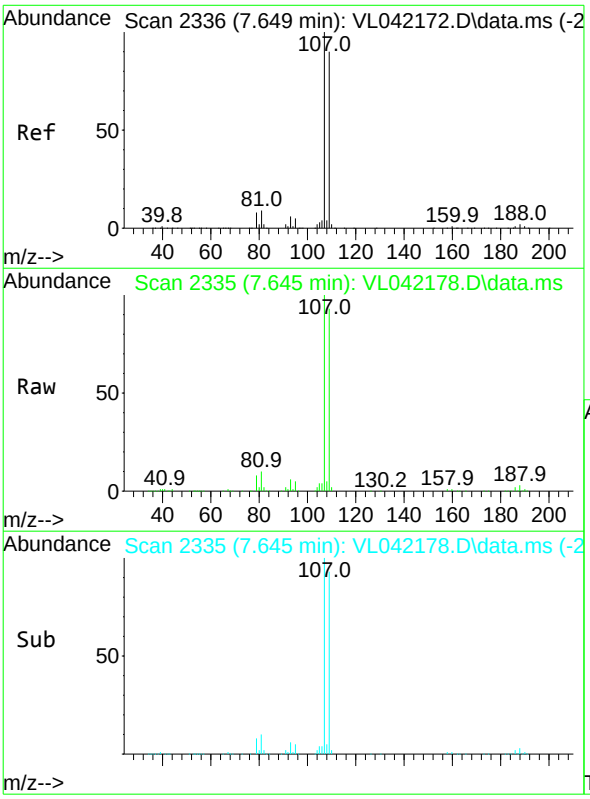
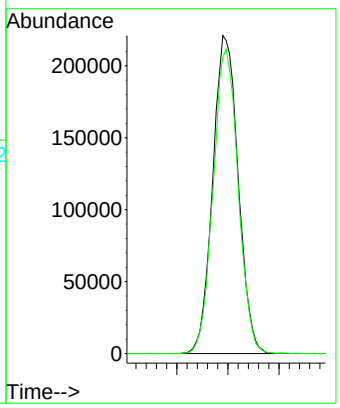
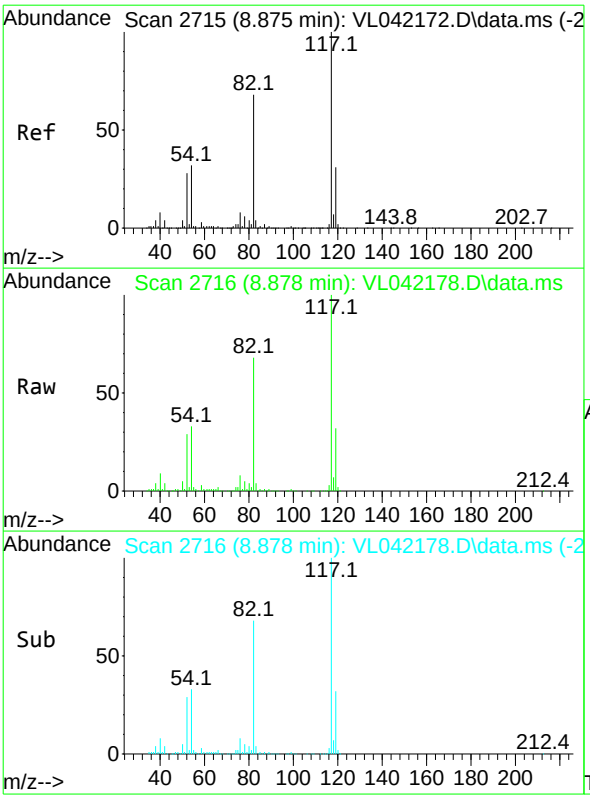


#54
1,2-Dibromoethane
Concen: 14.359 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:107 Resp: 381823

Ion	Ratio	Lower	Upper
107	100		
109	93.2	72.2	108.4

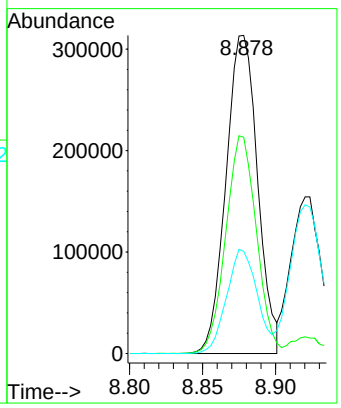




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:117 Resp: 473077

Ion	Ratio	Lower	Upper
117	100		
82	71.4	55.8	83.6
119	31.7	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
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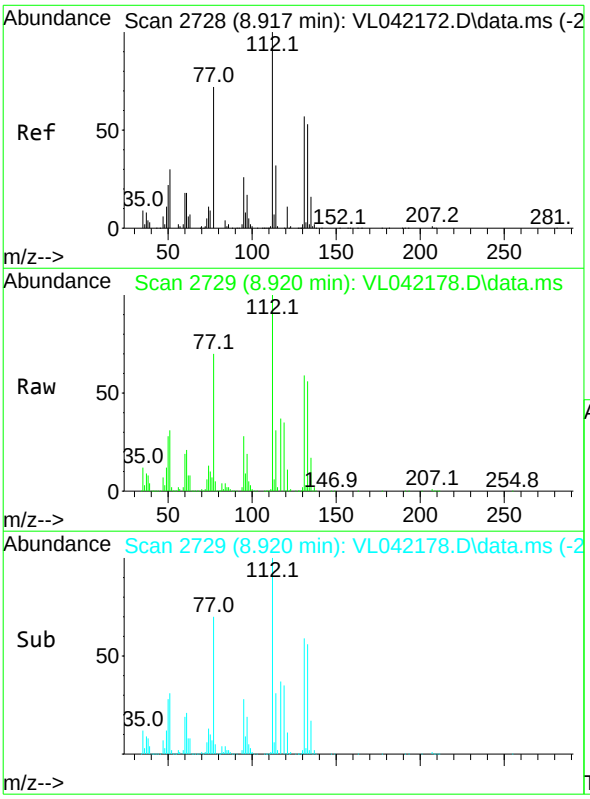
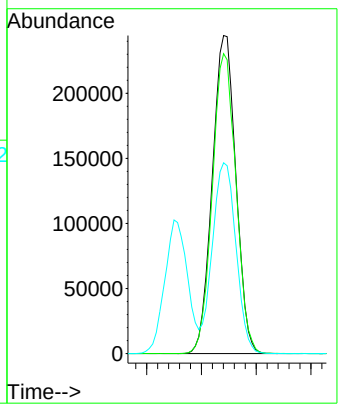
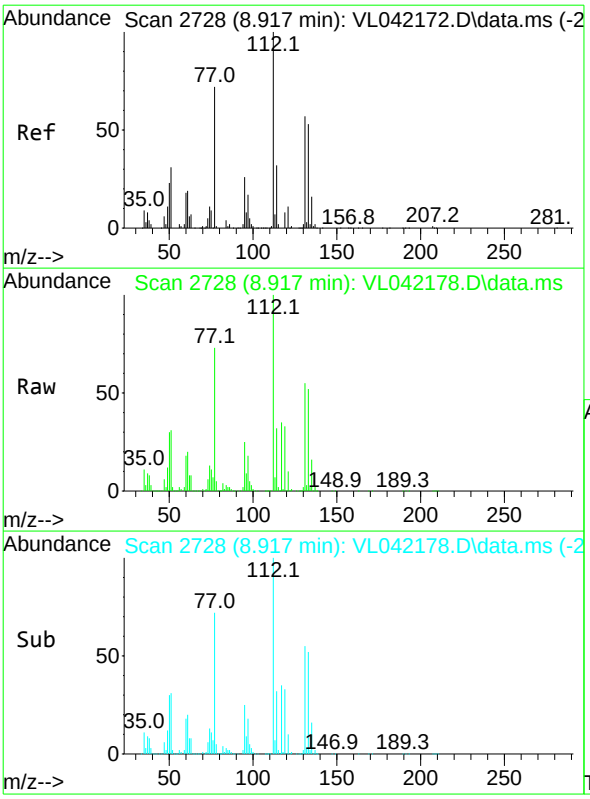


#56
1,1,1,2-Tetrachloroethane
Concen: 14.032 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:131 Resp: 365410

Ion	Ratio	Lower	Upper
131	100		
133	94.5	76.6	114.8
119	61.2	49.8	74.6

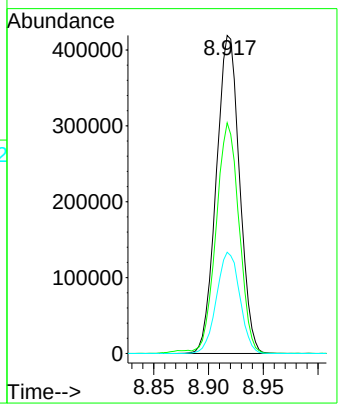




#57
Chlorobenzene
Concen: 13.777 ppbv
RT: 8.917 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:112 Resp: 618201

Ion	Ratio	Lower	Upper
112	100		
77	72.5	58.2	87.2
114	31.8	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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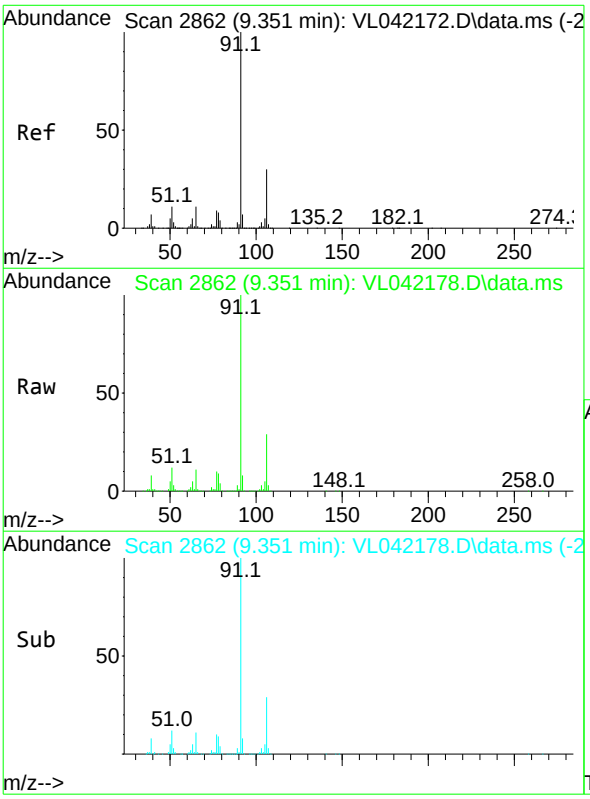
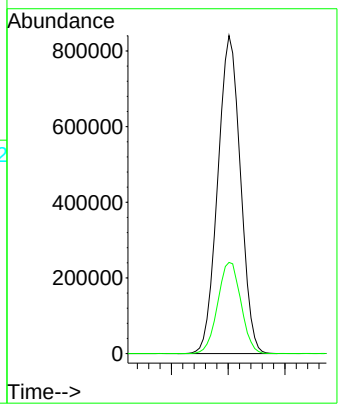
Supervised By :Mahesh Dadoda 04/03/2025

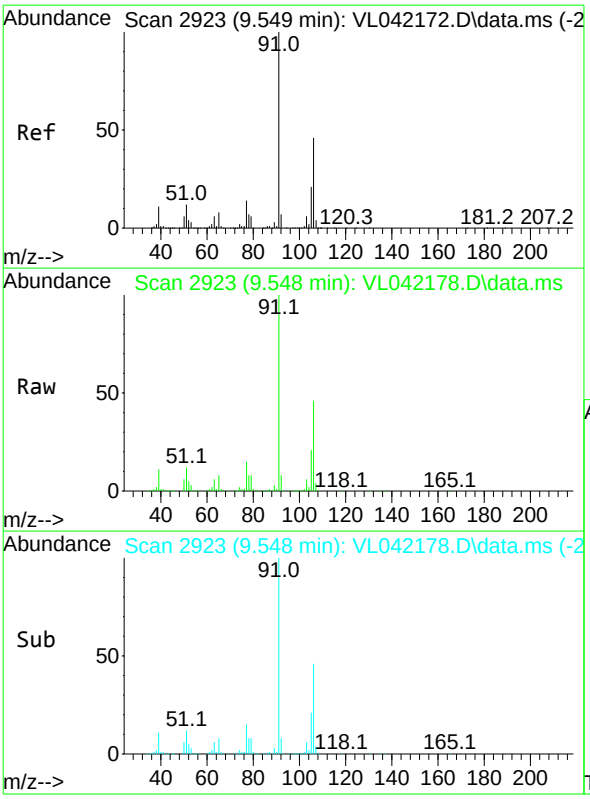


#58
Ethyl Benzene
Concen: 13.889 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1167096

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2

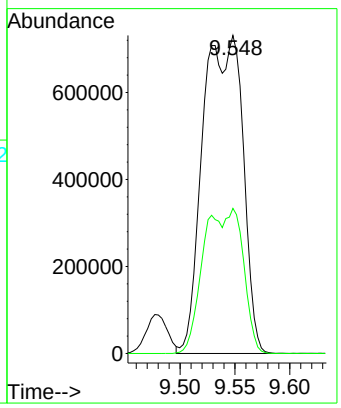




#59
m/p-Xylene
Concen: 27.651 ppbv m
RT: 9.548 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1857561

Ion	Ratio	Lower	Upper
91	100		
106	45.2	36.4	54.6



Instrument :
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VSTDICC015

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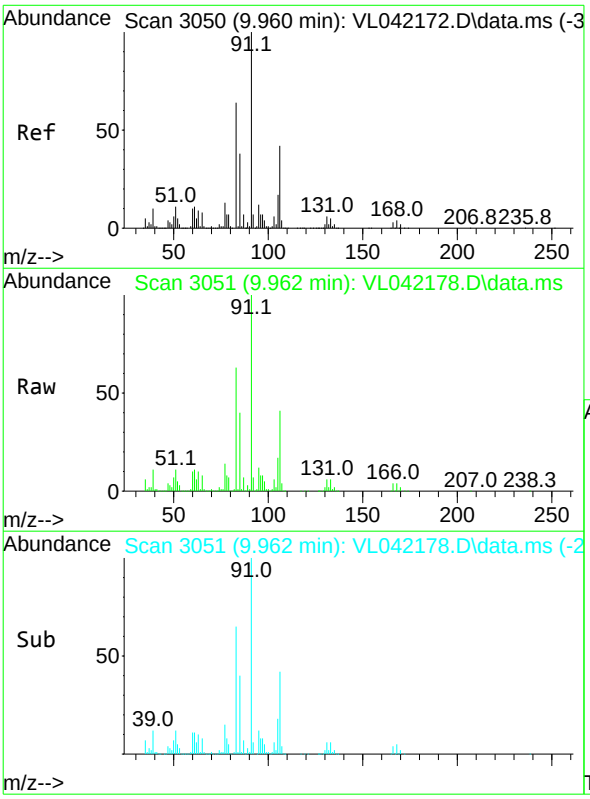
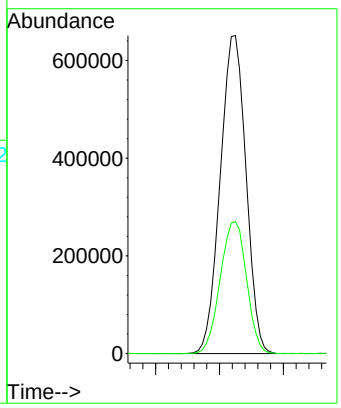
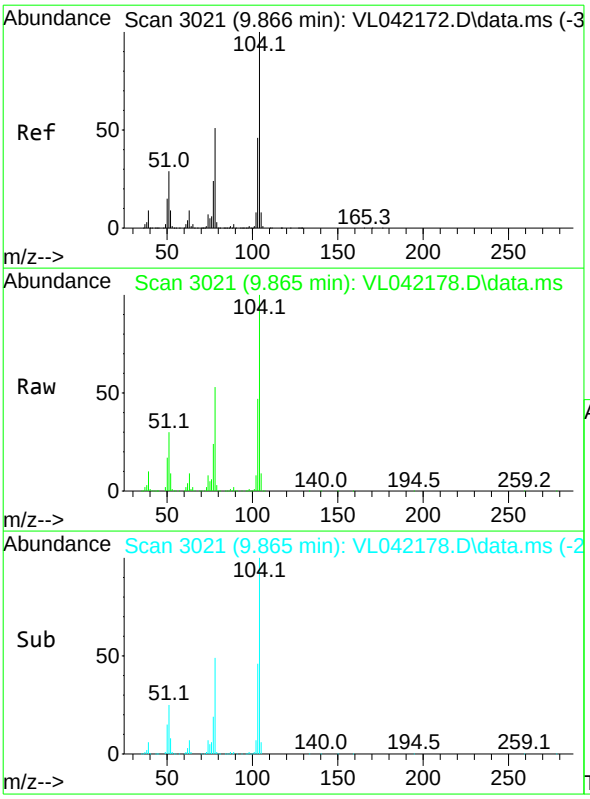


#60
o-Xylene
Concen: 13.577 ppbv
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 913234

Ion	Ratio	Lower	Upper
91	100		
106	42.4	20.8	62.5

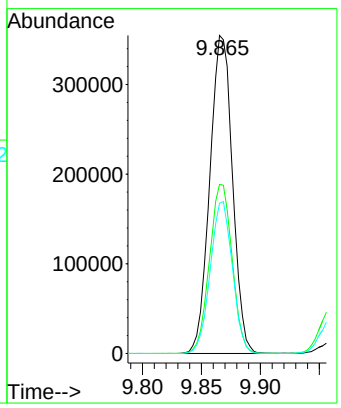




#61
Styrene
Concen: 14.250 ppbv
RT: 9.865 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:104 Resp: 474195

Ion	Ratio	Lower	Upper
104	100		
78	53.0	41.8	62.6
103	46.7	37.0	55.4



Instrument :
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ClientSampleId :
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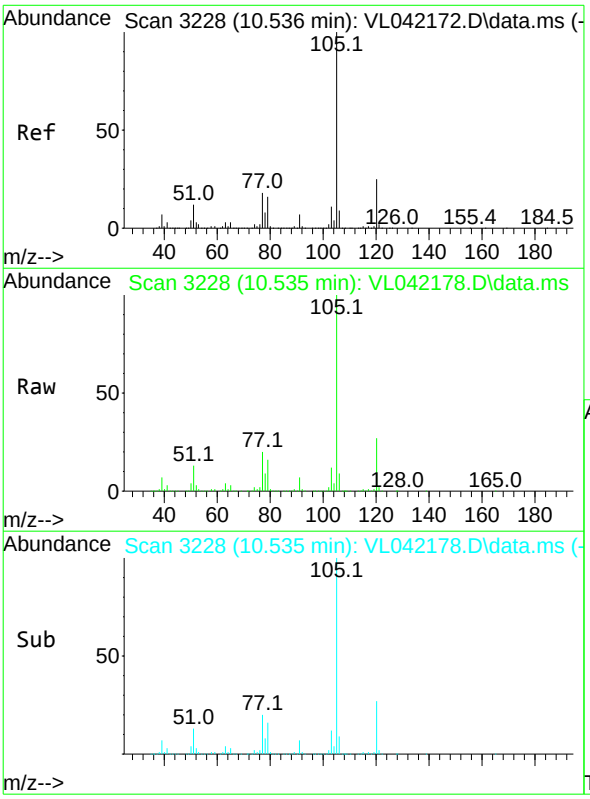
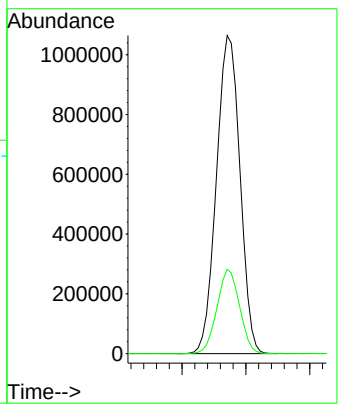
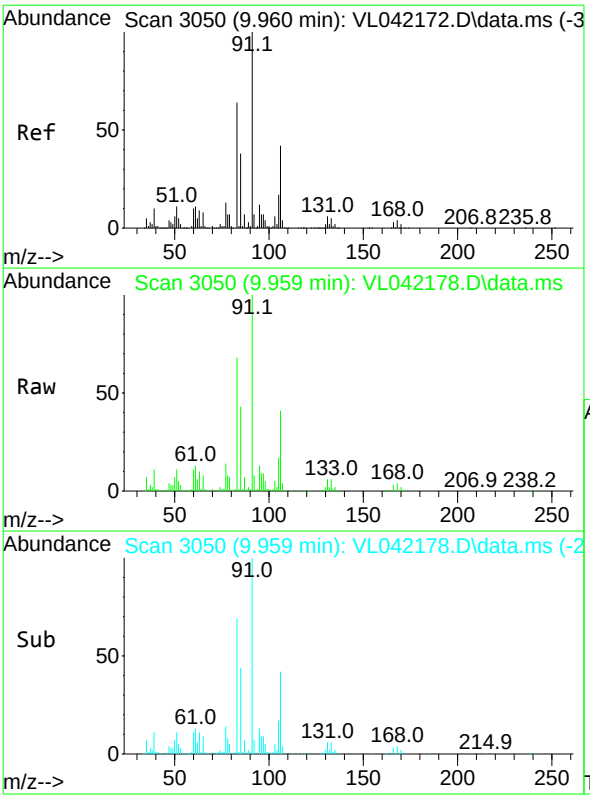


#62
Isopropylbenzene
Concen: 13.544 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1362416

Ion	Ratio	Lower	Upper
105	100		
120	25.3	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 13.491 ppbv
RT: 9.959 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 551386

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.2	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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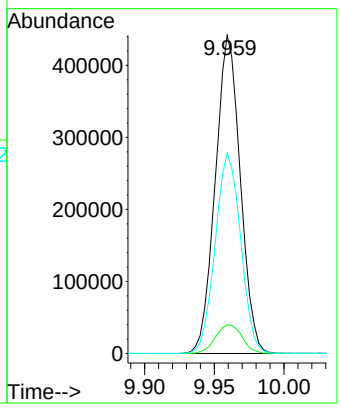
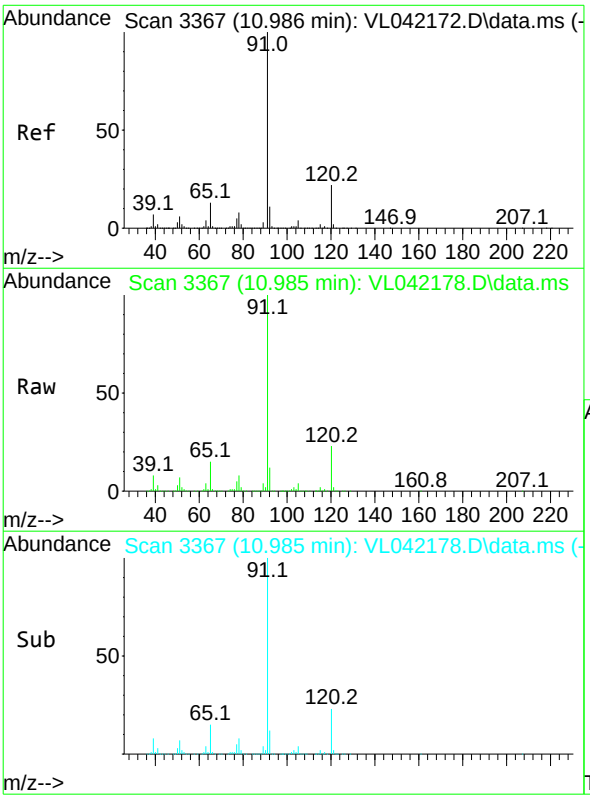
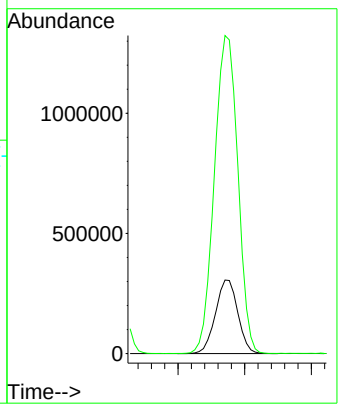


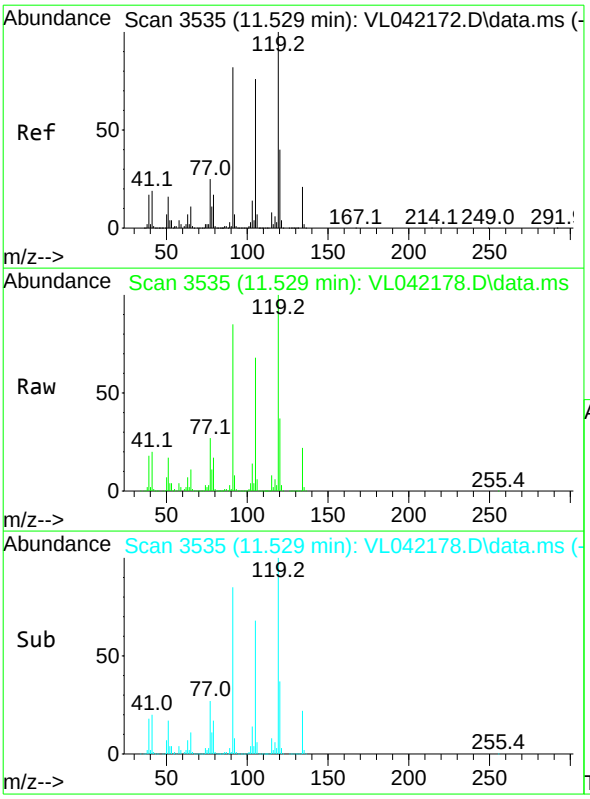


#64
n-propylbenzene
Concen: 13.753 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:120 Resp: 356118

Ion	Ratio	Lower	Upper
120	100		
91	455.4	376.9	565.3





#65
tert-Butylbenzene
Concen: 12.901 ppbv
RT: 11.529 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:119 Resp: 1200149

Ion	Ratio	Lower	Upper
119	100		
91	84.6	66.0	99.0
134	21.2	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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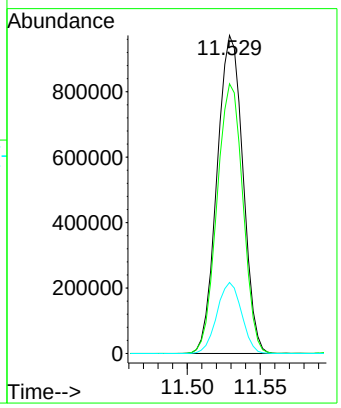
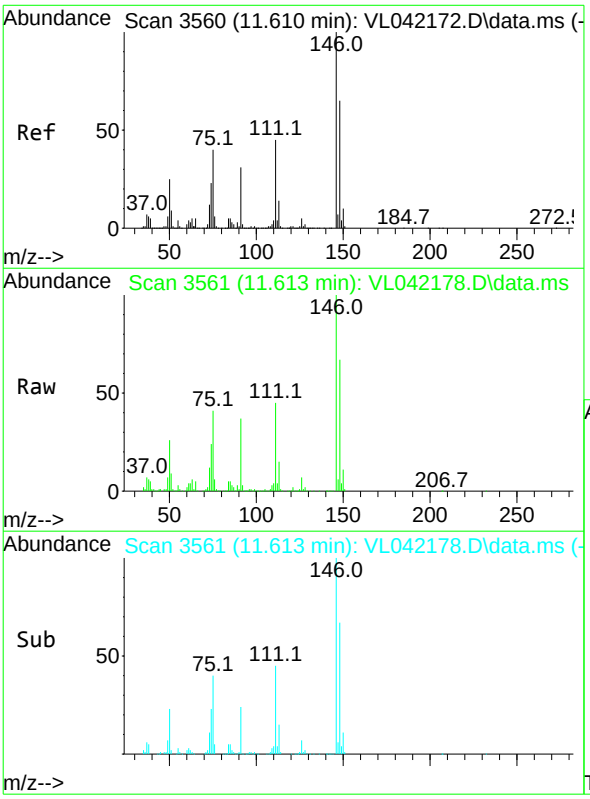
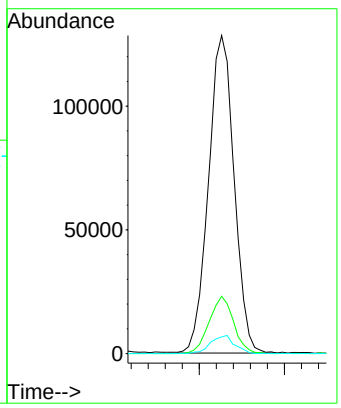


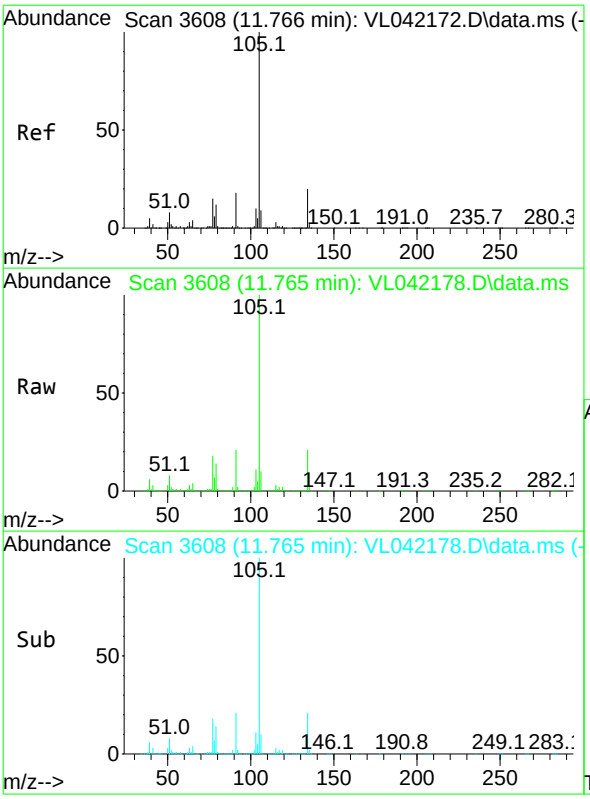


#66
Benzyl Chloride
Concen: 13.615 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 134397

Ion	Ratio	Lower	Upper
91	100		
126	17.3	13.8	20.6
128	5.4	4.5	6.7





#67
sec-Butylbenzene
Concen: 12.711 ppbv
RT: 11.765 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1643629

Ion	Ratio	Lower	Upper
105	100		
134	20.0	15.5	23.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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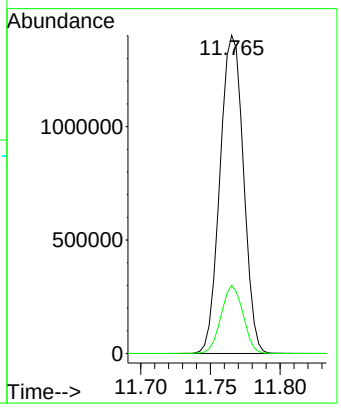
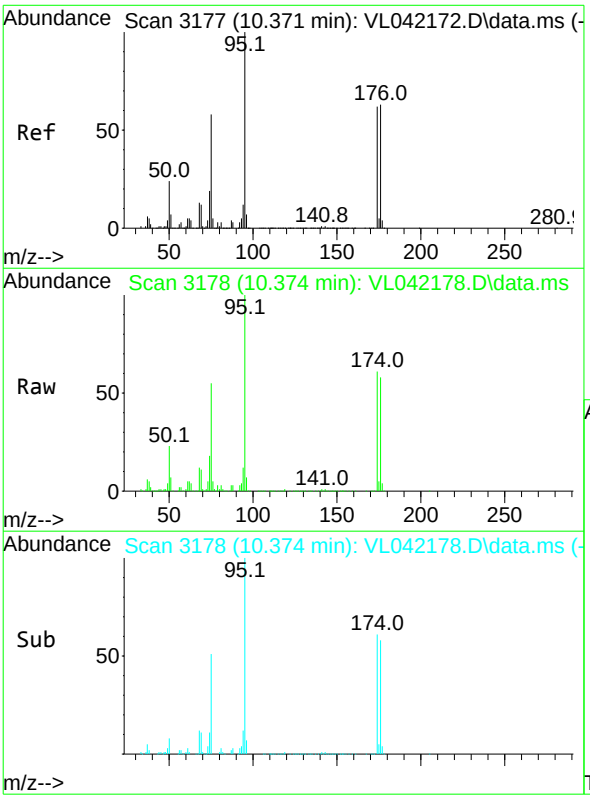
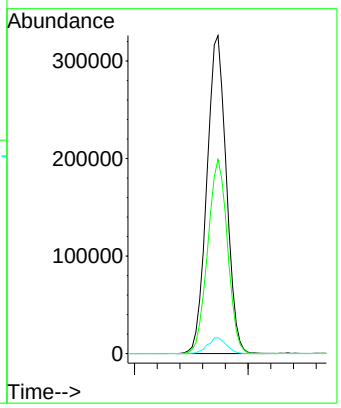


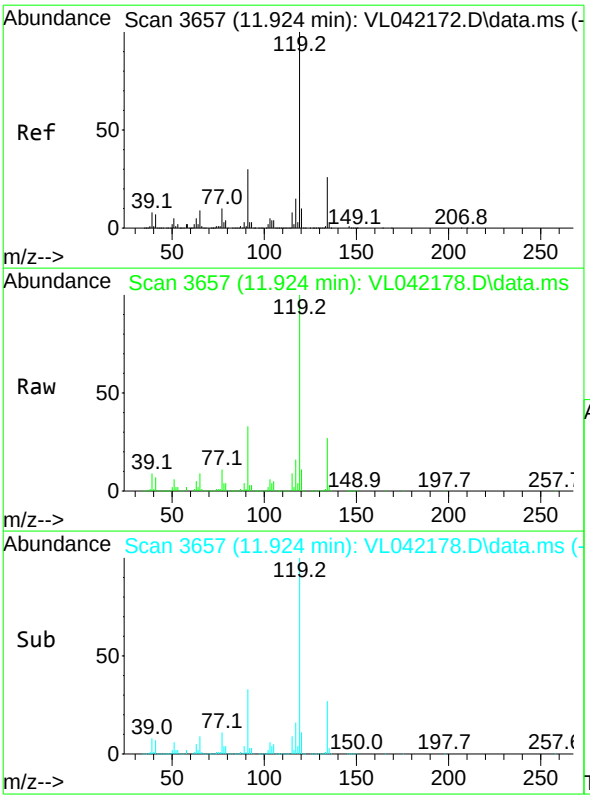


#68
1-Bromo-4-Fluorobenzene
Concen: 9.981 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 95 Resp: 387777

Ion	Ratio	Lower	Upper
95	100		
174	62.1	50.6	76.0
175	4.8	3.8	5.6





#69
p-Isopropyltoluene
Concen: 12.906 ppbv
RT: 11.924 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:119 Resp: 1437016

Ion	Ratio	Lower	Upper
119	100		
134	26.2	20.4	30.6
91	31.2	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
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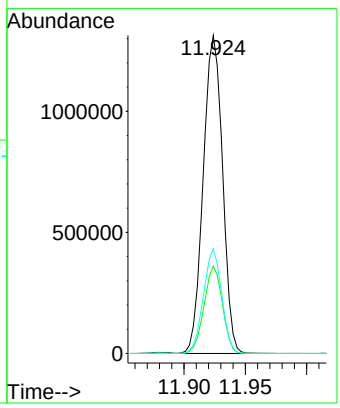
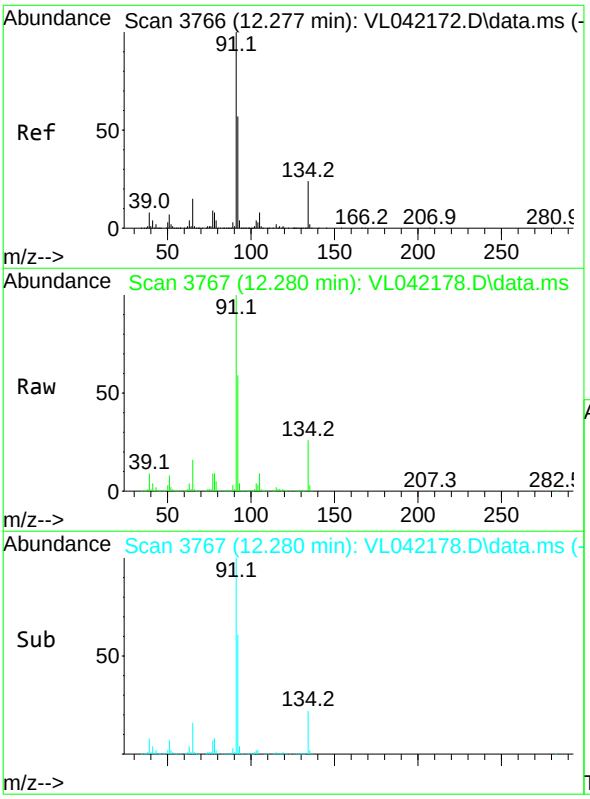
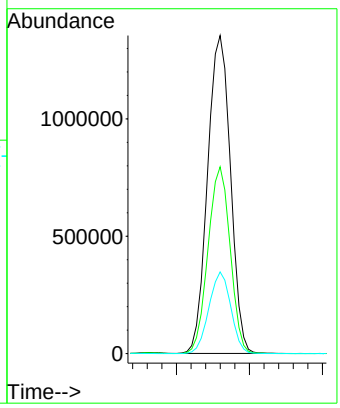


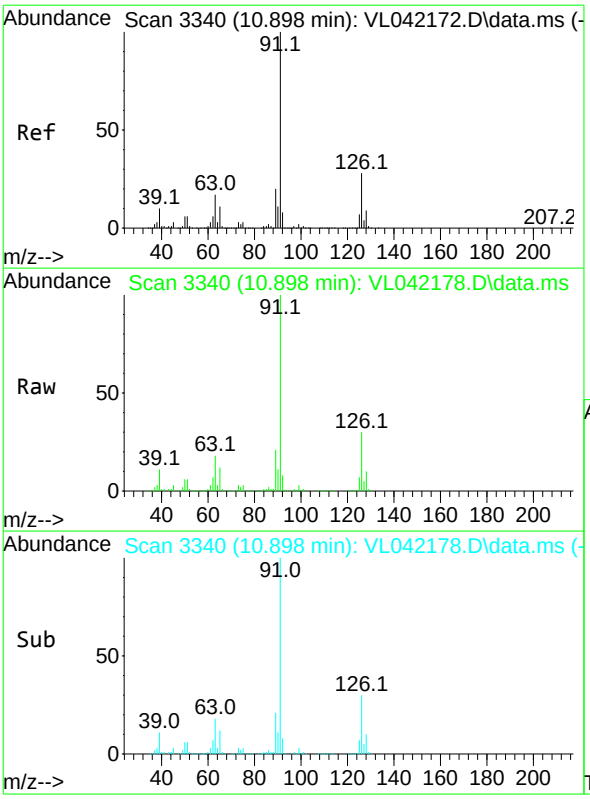


#70
n-Butylbenzene
Concen: 12.975 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1477443

Ion	Ratio	Lower	Upper
91	100		
92	57.0	44.9	67.3
134	24.6	19.2	28.8

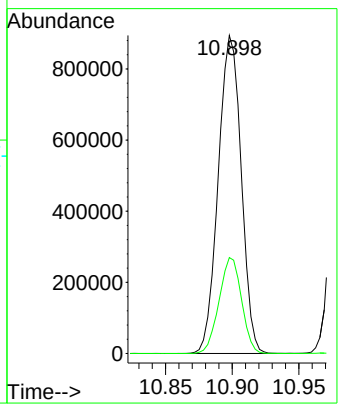




#71
2-Chlorotoluene
Concen: 13.724 ppbv
RT: 10.898 min Scan# 33
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1071432

Ion	Ratio	Lower	Upper
91	100		
126	29.5	11.6	46.4



Instrument :
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ClientSampleId :
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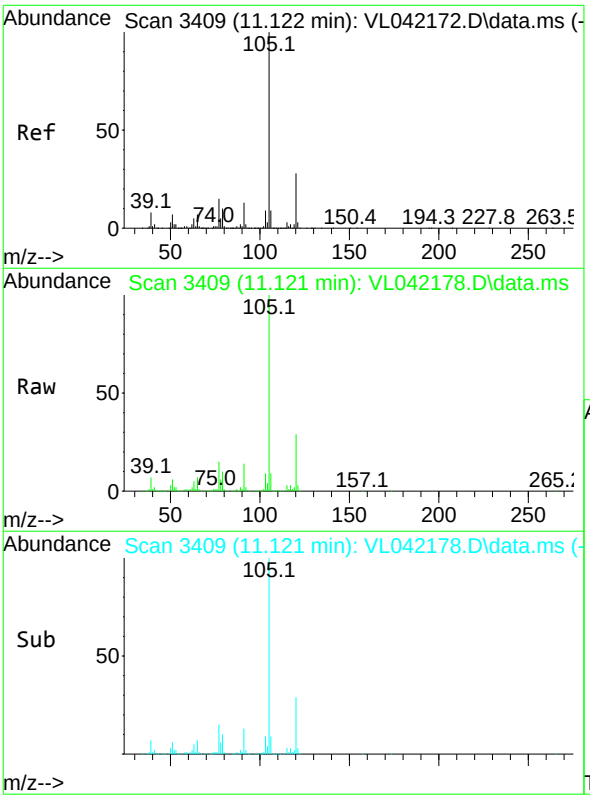
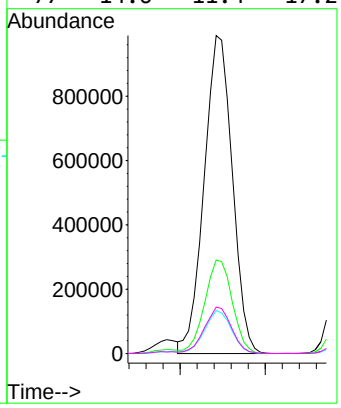
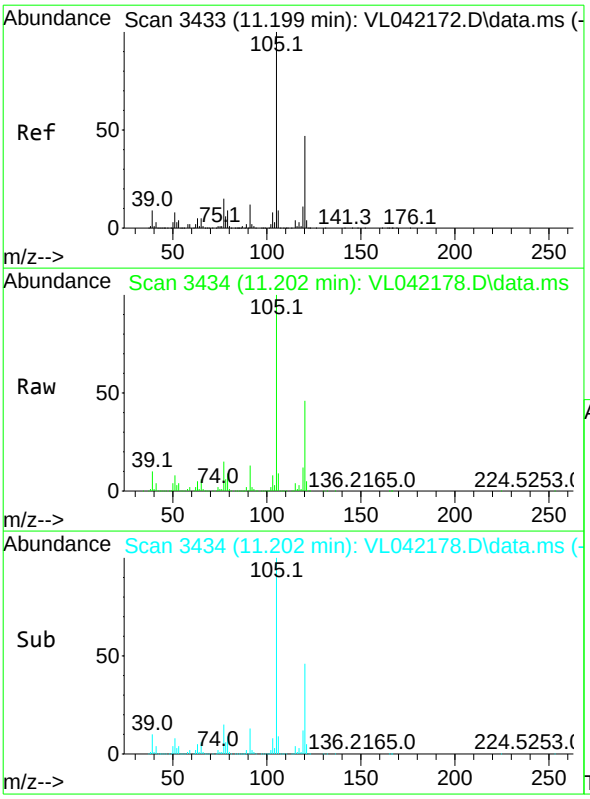


#72
4-Ethyltoluene
Concen: 13.569 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1136415

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.4	35.0
91	13.5	10.3	15.5
77	14.6	11.4	17.2

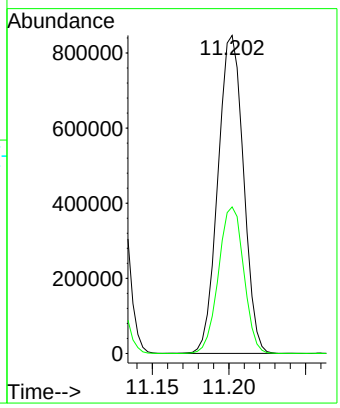




#73
1,3,5-Trimethylbenzene
Concen: 13.395 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 979783

Ion	Ratio	Lower	Upper
105	100		
120	46.1	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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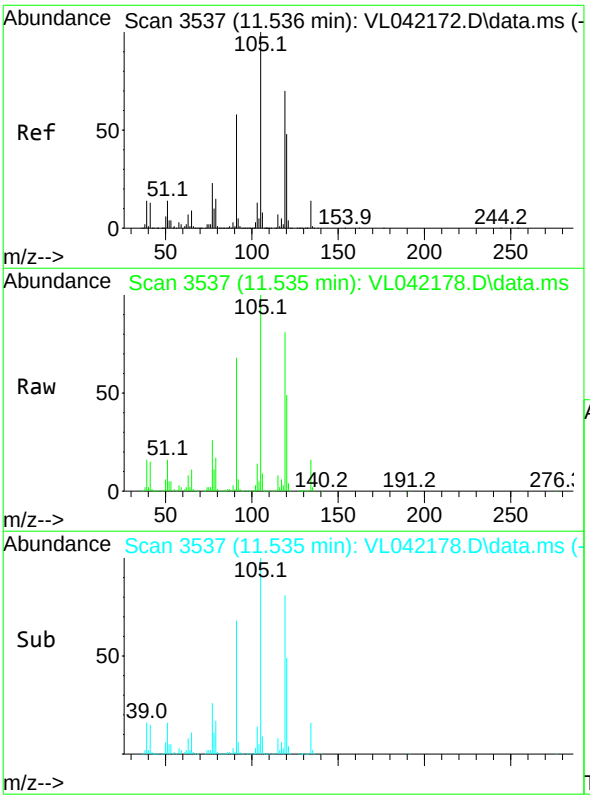
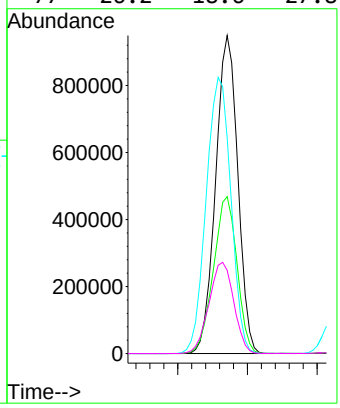
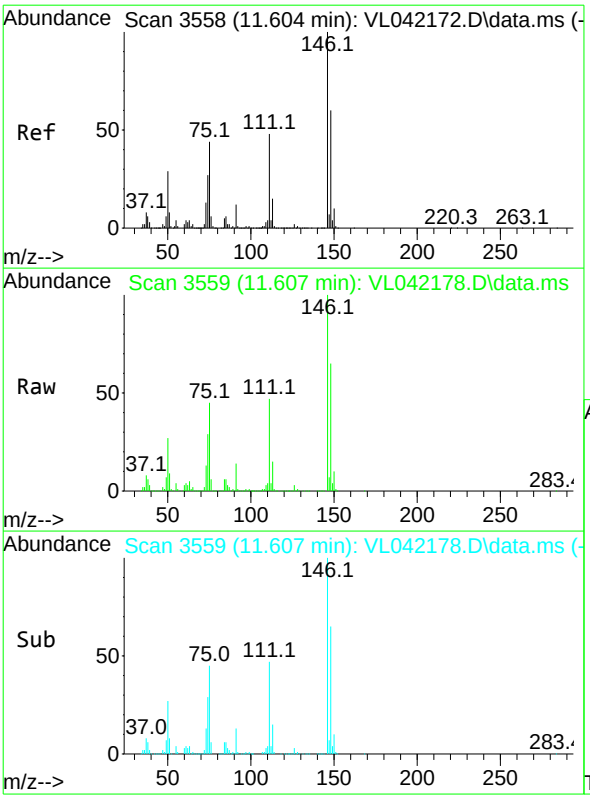


#74
1,2,4-Trimethylbenzene
Concen: 12.447 ppbv
RT: 11.535 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1048874

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.6	58.0
91	67.8	46.2	69.2
77	26.2	18.6	27.8

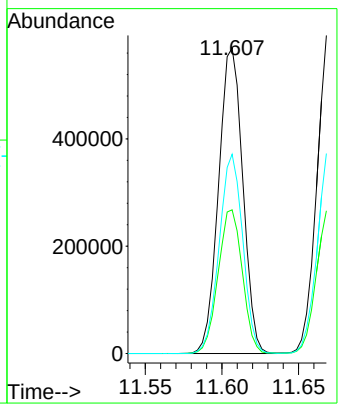




#75
1,3-Dichlorobenzene
Concen: 13.545 ppbv
RT: 11.607 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 626015

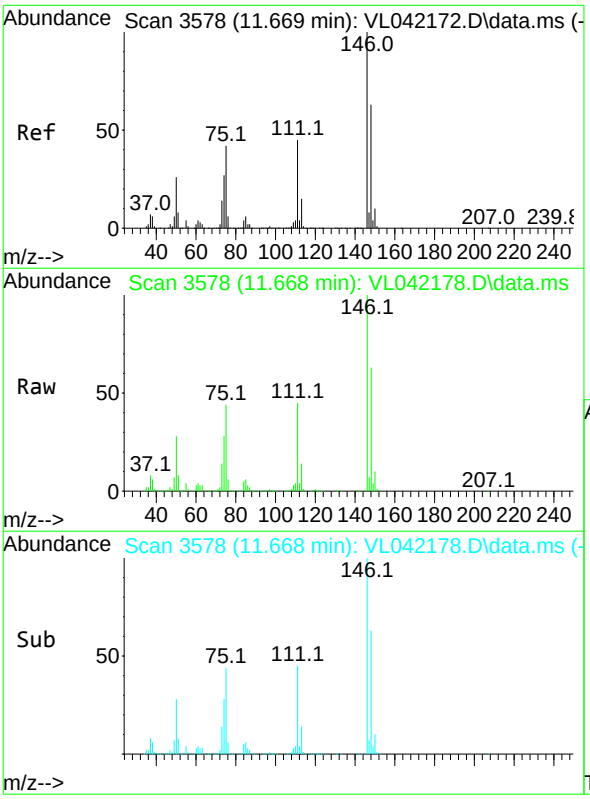
Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.8	71.2
148	63.5	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

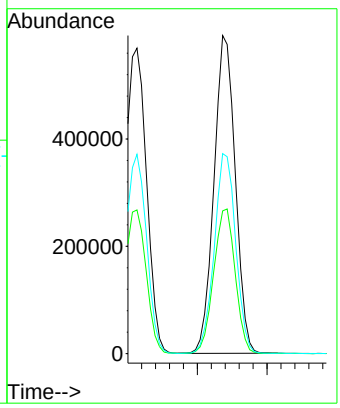
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

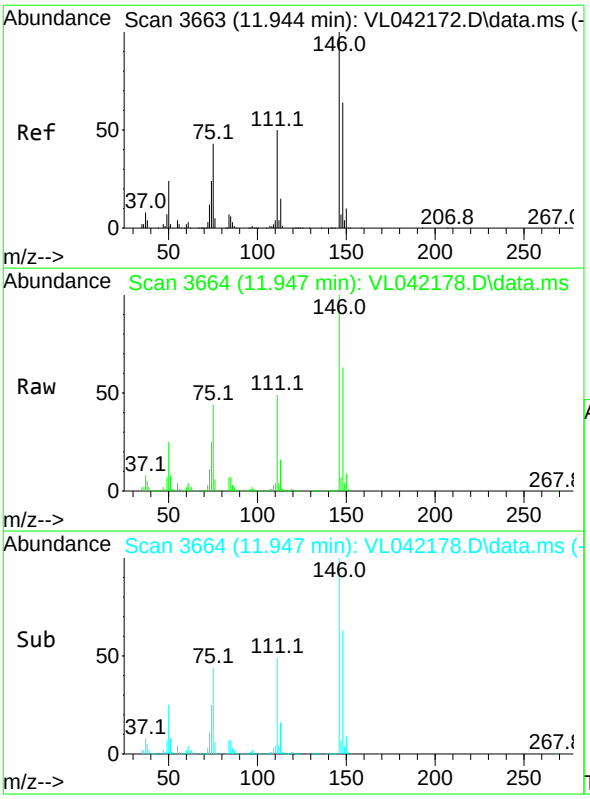


#76
1,4-Dichlorobenzene
Concen: 13.668 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 628694

Ion	Ratio	Lower	Upper
146	100		
111	46.1	23.0	69.0
148	63.6	31.9	95.7

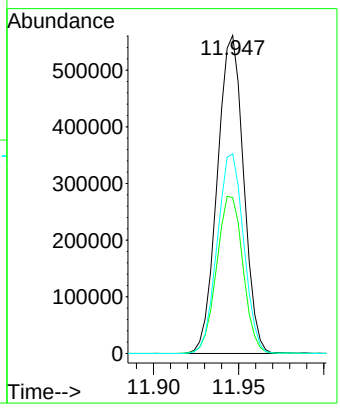




#77
1,2-Dichlorobenzene
Concen: 13.396 ppbv
RT: 11.947 min Scan# 36
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 602844

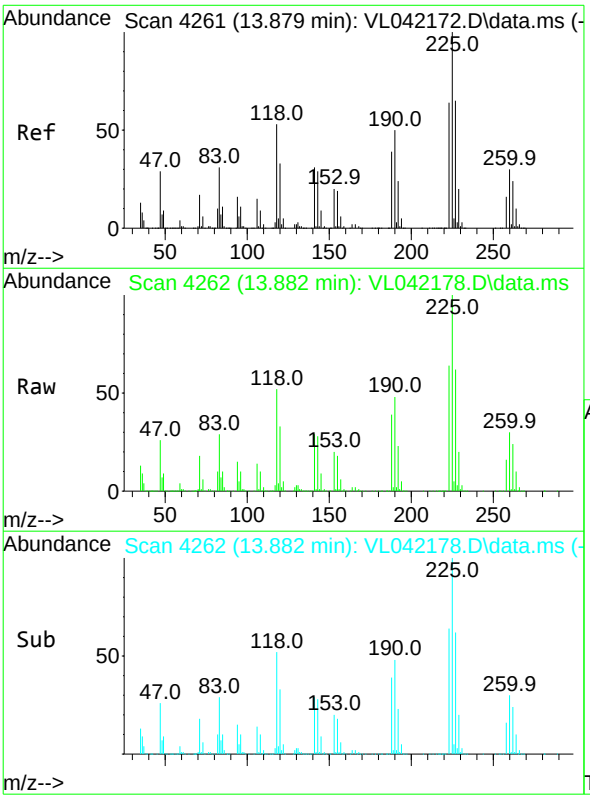
Ion	Ratio	Lower	Upper
146	100		
111	49.7	24.8	74.3
148	63.3	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

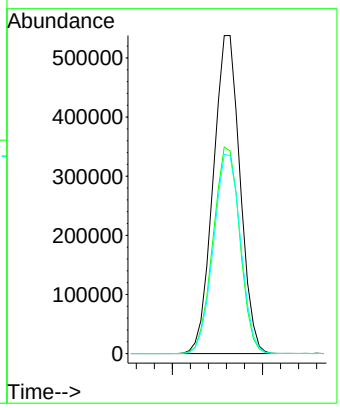
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

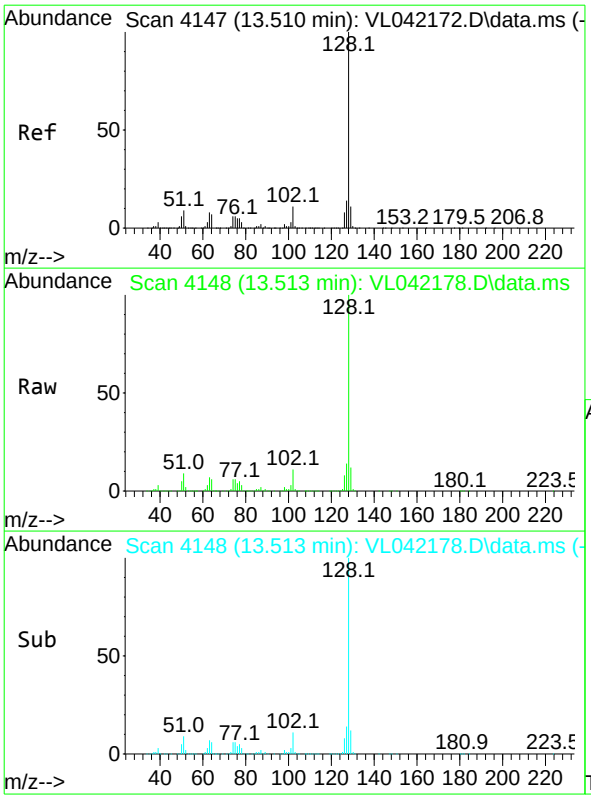


#78
Hexachloro-1,3-Butadiene
Concen: 12.147 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:225 Resp: 556392

Ion	Ratio	Lower	Upper
225	100		
223	64.7	50.6	76.0
227	63.3	51.2	76.8

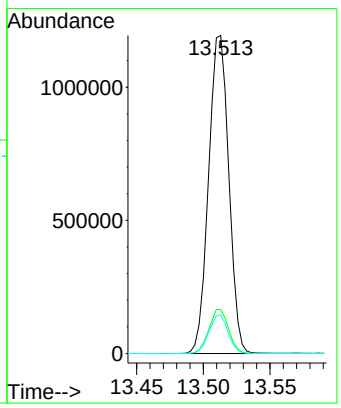




#79
Naphthalene
Concen: 13.653 ppbv
RT: 13.513 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:128 Resp: 1258479

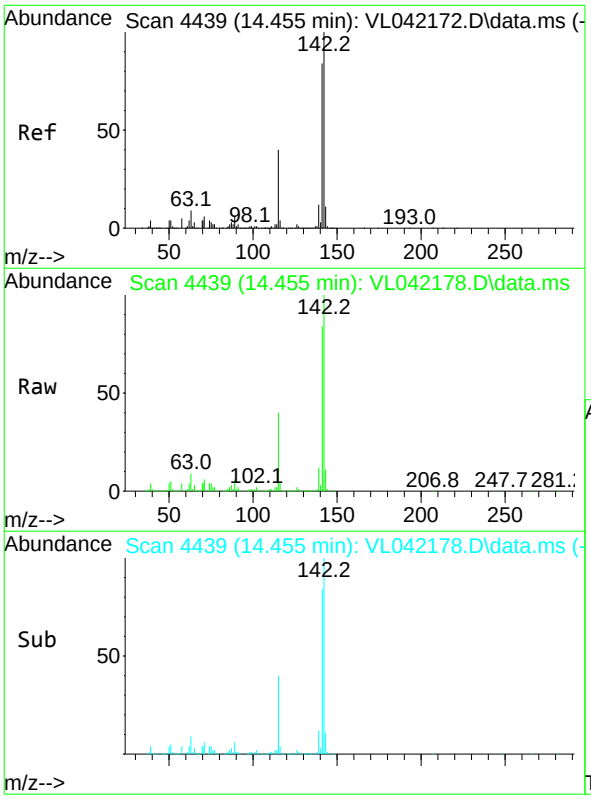
Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.8	16.2
129	12.2	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

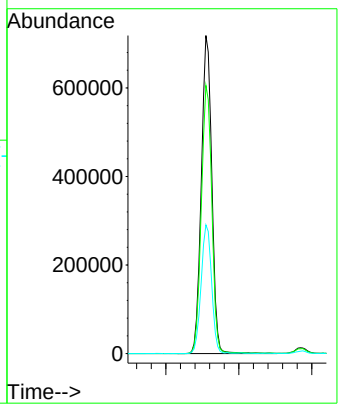
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

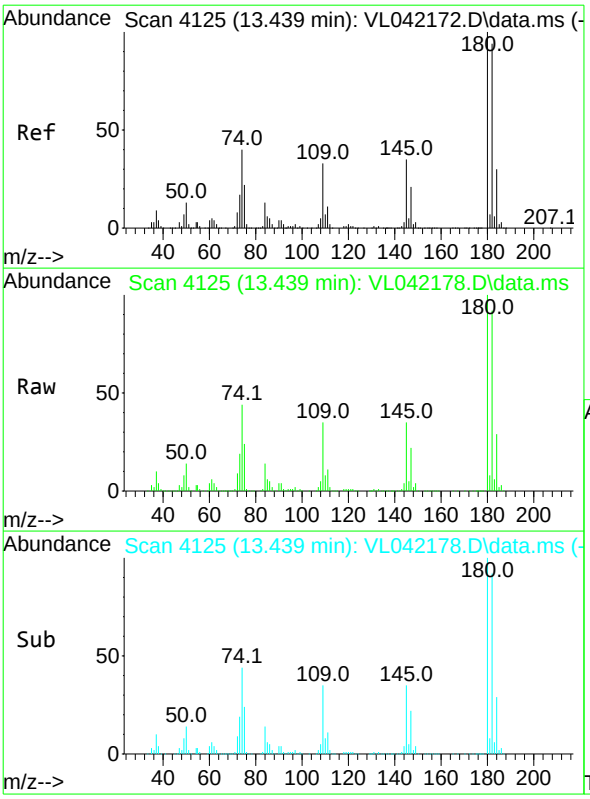


#80
Naphthalene,2-methyl-
Concen: 16.018 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:142 Resp: 718900

Ion	Ratio	Lower	Upper
142	100		
141	84.3	66.3	99.5
115	40.6	31.6	47.4

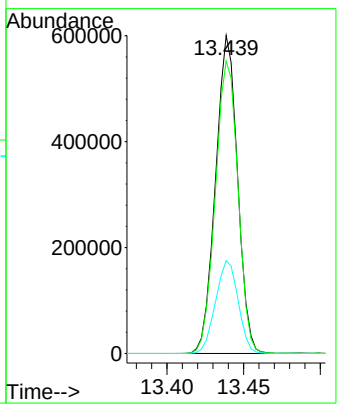




#81
1,2,4-Trichlorobenzene
Concen: 14.075 ppbv
RT: 13.439 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:180 Resp: 598416

Ion	Ratio	Lower	Upper
180	100		
182	94.7	75.1	112.7
184	30.1	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	174350	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	498105	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	473357	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	379929	9.774	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	245714	9.545	ppbv		100
3) Chlorodifluoromethane	1.473	51	247046	9.394	ppbv		97
4) Chloromethane	1.531	50	98527	9.365	ppbv		98
5) Vinyl Chloride	1.577	62	95578	8.573	ppbv		97
6) Bromomethane	1.667	94	41950	8.799	ppbv		97
7) Chloroethane	1.703	64	37400	8.856	ppbv		94
8) Dichlorotetrafluoroethane	1.551	85	213819	9.753	ppbv		95
9) Propene	1.483	41	105338	8.739	ppbv		99
10) Heptane	4.972	43	298768	9.318	ppbv		100
11) Trichlorofluoromethane	1.874	101	236793	9.453	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.136	101	193965	9.421	ppbv		98
13) Ethanol	1.719	45	5773	5.066	ppbv		97
14) Bromoethene	1.780	108	73572	9.328	ppbv		97
15) Acetone	1.832	43	198300	8.132	ppbv		98
16) 1,3-Butadiene	1.606	39	97840	8.216	ppbv		99
17) tert-Butyl alcohol	2.039	59	276195	9.094	ppbv		99
18) 1,1-Dichloroethene	2.033	96	87137	9.053	ppbv		89
19) Isopropyl Alcohol	1.884	45	122768	8.923	ppbv		98
20) Methylene Chloride	2.059	84	72813	8.018	ppbv		97
21) Allyl Chloride	2.094	41	157418	9.154	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	101141	9.092	ppbv		93
23) Vinyl Acetate	2.460	43	90260	8.553	ppbv	#	97
24) 1,1-Dichloroethane	2.405	63	197968	9.600	ppbv		99
25) Ethyl Acetate	2.832	43	592585	9.364	ppbv		99
26) Hexane	2.823	57	231125	9.455	ppbv		99
27) Carbon Disulfide	2.146	76	248834	9.493	ppbv		97
28) Methyl tert-Butyl Ether	2.437	73	146470	9.624	ppbv		95
29) Chloroform	2.845	83	344106	9.619	ppbv		100
30) Cyclohexane	3.852	84	197897	9.323	ppbv		98
31) cis-1,2-Dichloroethene	2.719	61	234487	9.449	ppbv		96
32) 1,1,1-Trichloroethane	3.363	97	365364	8.921	ppbv		99
34) 2-Butanone	2.554	43	331236	9.171	ppbv		99
35) Carbon Tetrachloride	3.758	117	363392	9.339	ppbv		98
36) Benzene	3.651	78	461261	9.341	ppbv		99
37) 1,2-Dichloroethane	3.217	62	273559	9.676	ppbv		99
38) Trichloroethene	4.541	130	191746	9.306	ppbv		97
39) 1,2-Dichloropropane	4.311	63	170839	9.500	ppbv		95
40) 1,4-Dioxane	4.577	88	80592	8.443	ppbv	#	97
41) Tetrahydrofuran	3.052	42	196163	9.431	ppbv		99
42) Bromodichloromethane	4.486	83	384006	9.853	ppbv		100
43) Methyl Methacrylate	4.878	69	195339	9.344	ppbv		99
44) 2,2,4-Trimethylpentane	4.635	57	787400	9.436	ppbv		99
45) t-1,3-Dichloropropene	6.409	75	212335	9.467	ppbv		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	265101	9.643	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	183228	9.638	ppbv		98
48) Dibromochloromethane	7.383	129	322766	10.018	ppbv		100
49) Bromoform	9.480	173	285149	9.858	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	500791	8.749	ppbv		99
51) 2-Hexanone	7.432	43	410889	8.741	ppbv	#	99
52) Tetrachloroethene	8.221	164	173420	8.855	ppbv		93
53) Toluene	6.927	91	556897	9.514	ppbv		99
54) 1,2-Dibromoethane	7.645	107	256930	9.695	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.920	131	249270	9.567	ppbv		99
57) Chlorobenzene	8.917	112	422531	9.411	ppbv		98
58) Ethyl Benzene	9.351	91	791360	9.412	ppbv		98
59) m/p-Xylene	9.548	91	1260340m	18.772	ppbv		
60) o-Xylene	9.959	91	632918	9.404	ppbv		99
61) Styrene	9.866	104	315910	9.488	ppbv		99
62) Isopropylbenzene	10.539	105	944938	9.388	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	382635	9.357	ppbv		99
64) n-propylbenzene	10.985	120	244547	9.439	ppbv		98
65) tert-Butylbenzene	11.529	119	843828	9.065	ppbv		98
66) Benzyl Chloride	11.613	91	86804	8.789	ppbv		97
67) sec-Butylbenzene	11.765	105	1172636	9.063	ppbv		100
69) p-Isopropyltoluene	11.924	119	1019694	9.153	ppbv		100
70) n-Butylbenzene	12.280	91	1038548	9.115	ppbv		100
71) 2-Chlorotoluene	10.898	91	732874	9.382	ppbv		100
72) 4-Ethyltoluene	11.125	105	785185	9.370	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	673541	9.203	ppbv		98
74) 1,2,4-Trimethylbenzene	11.536	105	729155	8.648	ppbv		94
75) 1,3-Dichlorobenzene	11.607	146	426573	9.224	ppbv		99
76) 1,4-Dichlorobenzene	11.672	146	426318	9.263	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	412180	9.154	ppbv		99
78) Hexachloro-1,3-Butadiene	13.882	225	356386	7.776	ppbv		100
79) Naphthalene	13.513	128	773311	8.385	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	323443	7.151	ppbv		99
81) 1,2,4-Trichlorobenzene	13.439	180	363863	8.553	ppbv		98

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

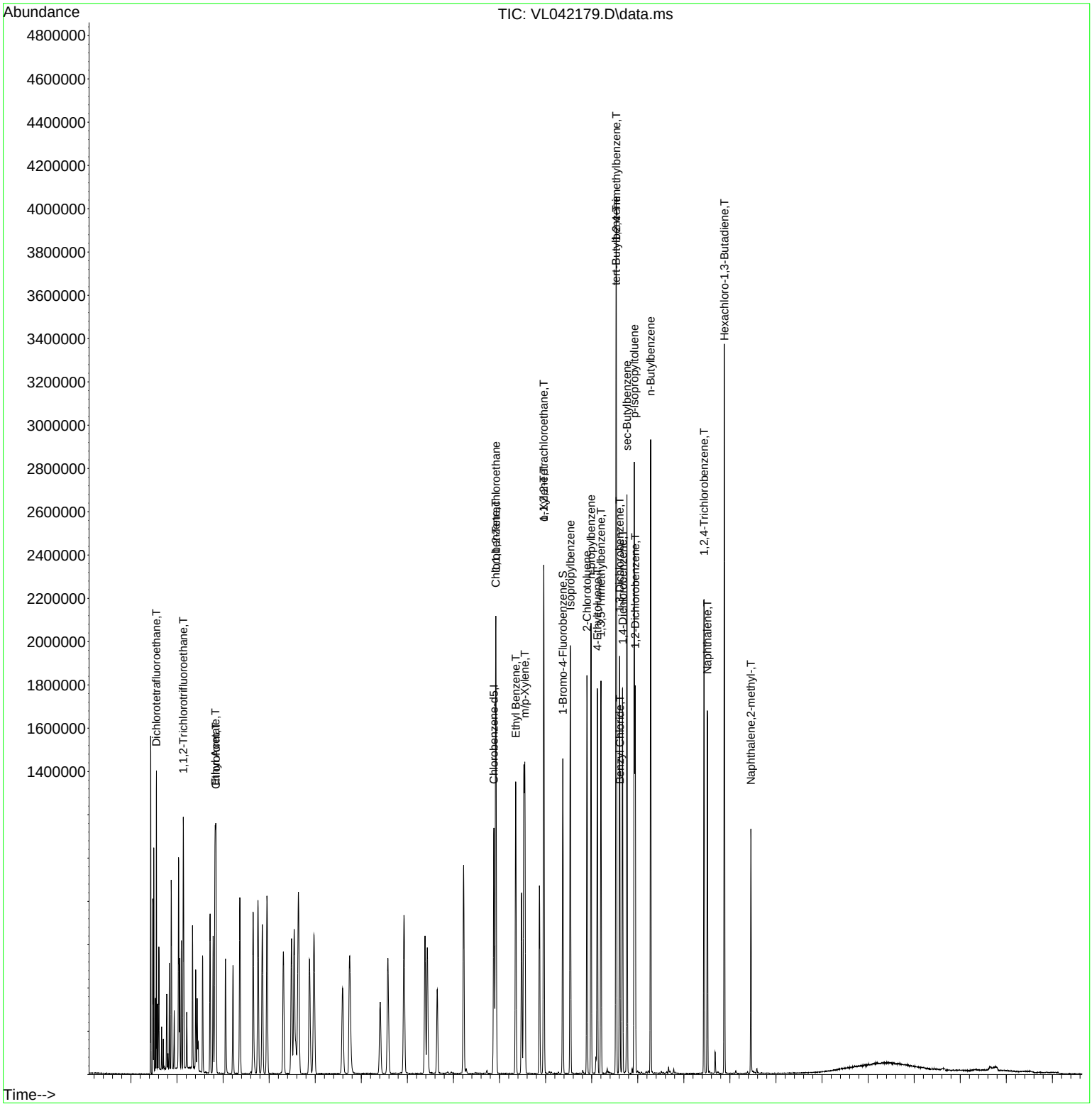
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

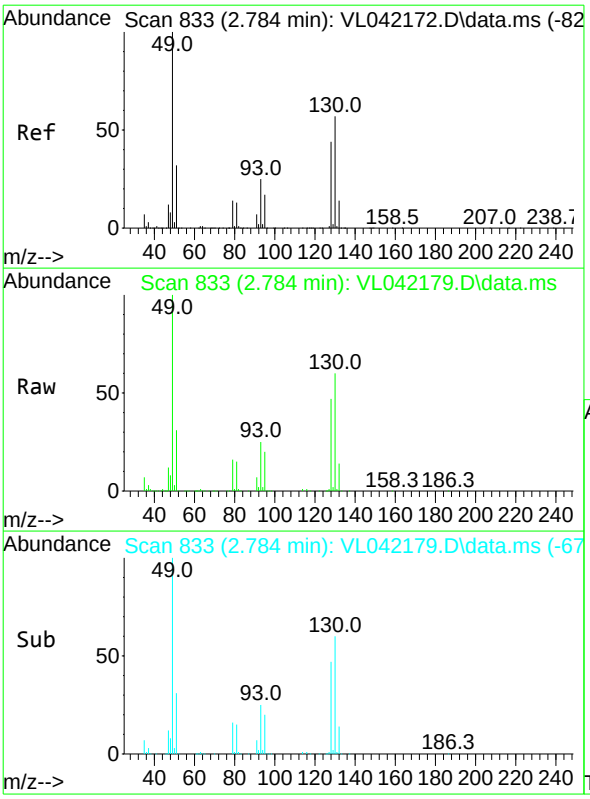
Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

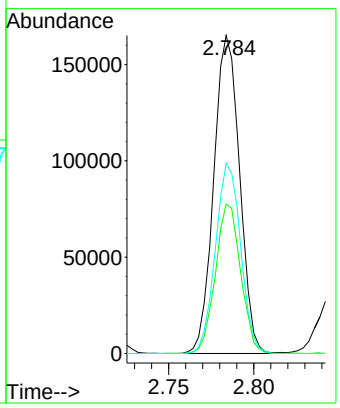




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 49 Resp: 174350

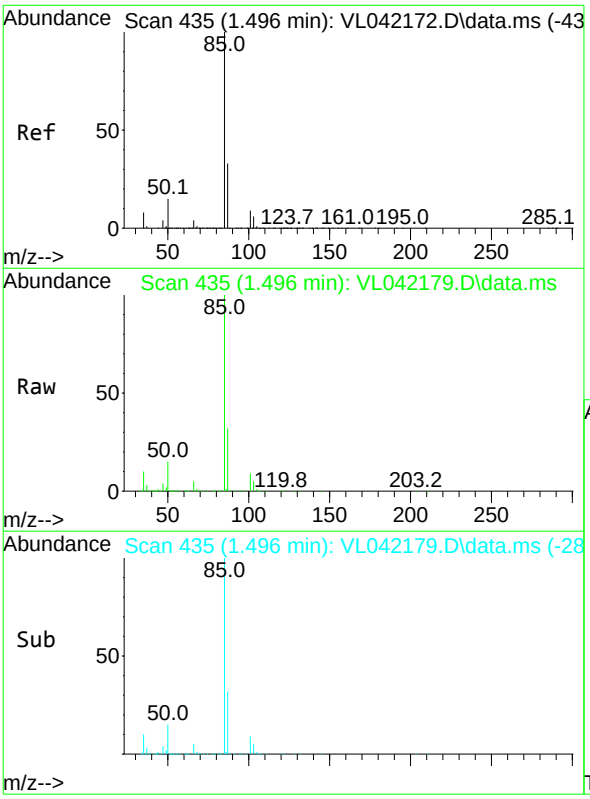
Ion	Ratio	Lower	Upper
49	100		
128	45.8	22.9	68.5
130	58.4	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
APPROVED

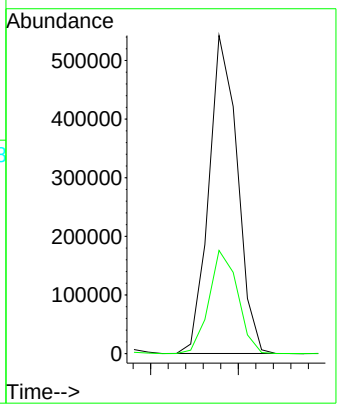
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

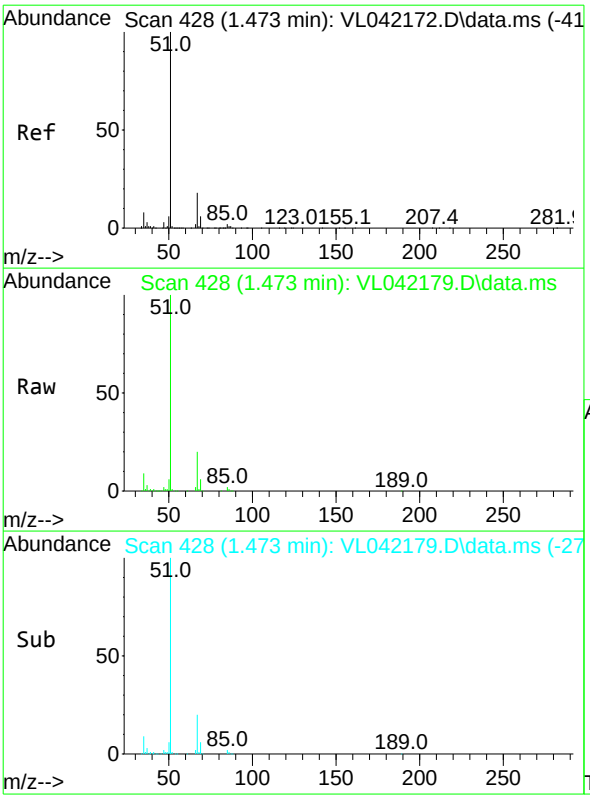


#2
Dichlorodifluoromethane
Concen: 9.545 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 245714

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1

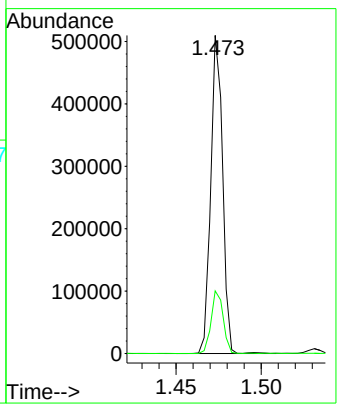




#3
Chlorodifluoromethane
Concen: 9.394 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 51 Resp: 247046

Ion	Ratio	Lower	Upper
51	100		
67	20.1	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
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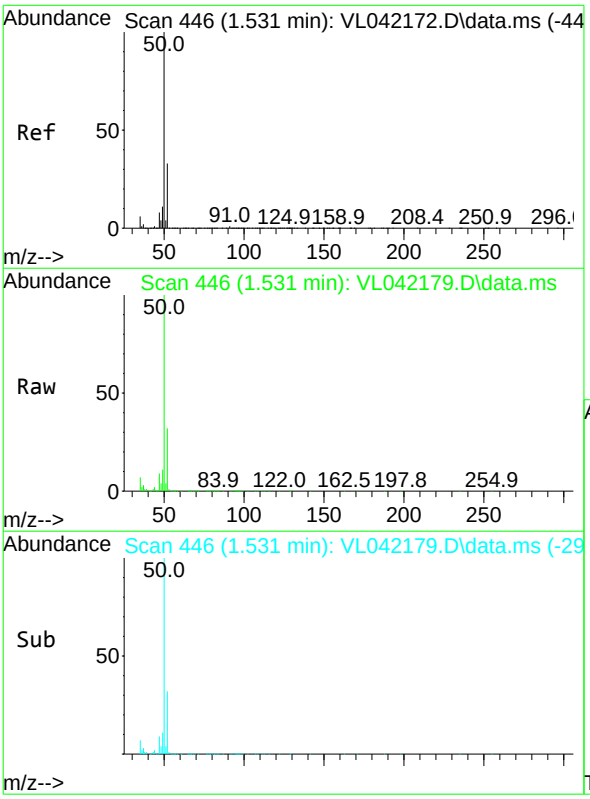
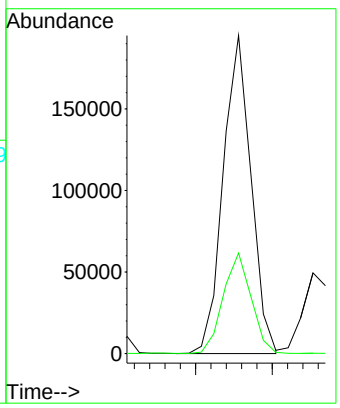
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

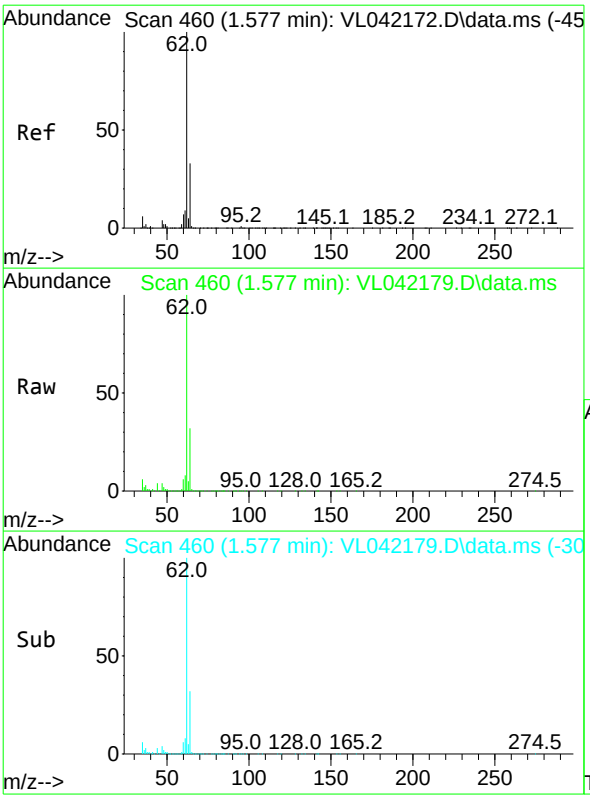


#4
Chloromethane
Concen: 9.365 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 50 Resp: 98527

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1

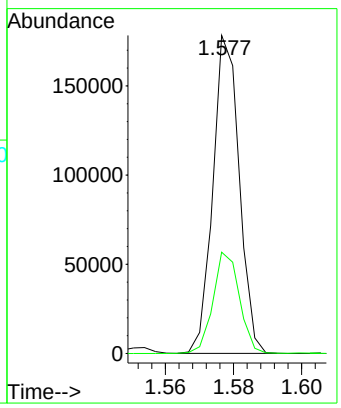




#5
Vinyl Chloride
Concen: 8.573 ppbv
RT: 1.577 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 62 Resp: 95578

Ion	Ratio	Lower	Upper
62	100		
64	31.8	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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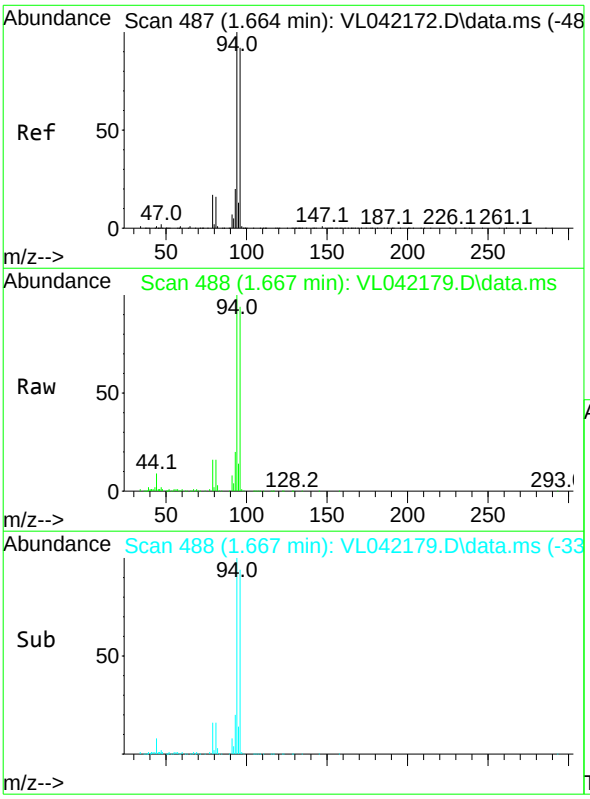
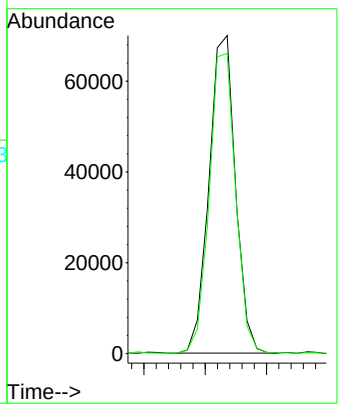
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

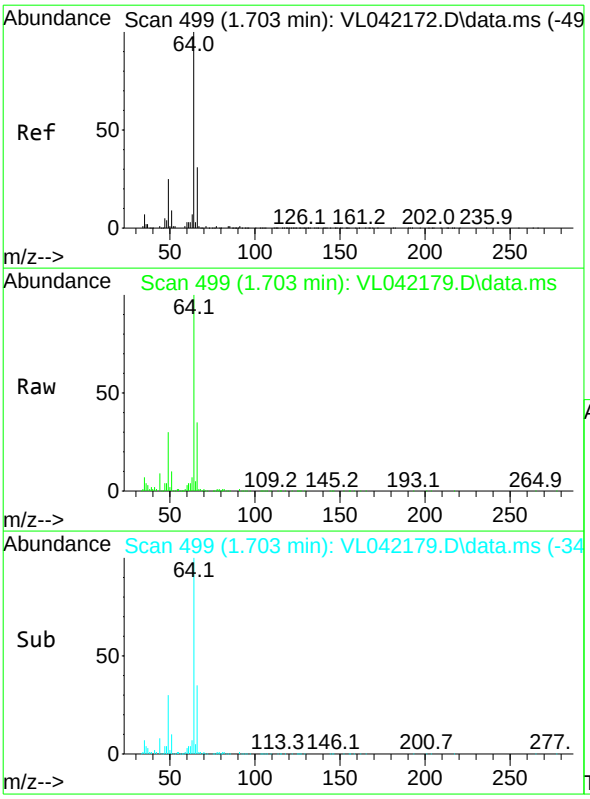


#6
Bromomethane
Concen: 8.799 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 94 Resp: 41950

Ion	Ratio	Lower	Upper
94	100		
96	94.4	73.1	109.7





#7
Chloroethane
Concen: 8.856 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 64 Resp: 37400

Ion	Ratio	Lower	Upper
64	100		
66	34.5	25.2	37.8

Instrument :
MSVOA_L
ClientSampleId :
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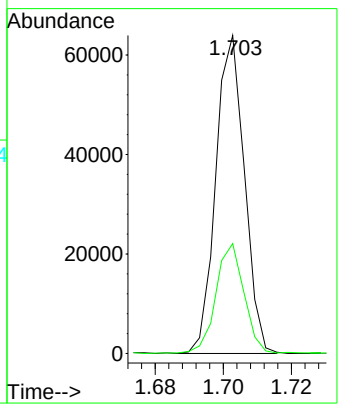
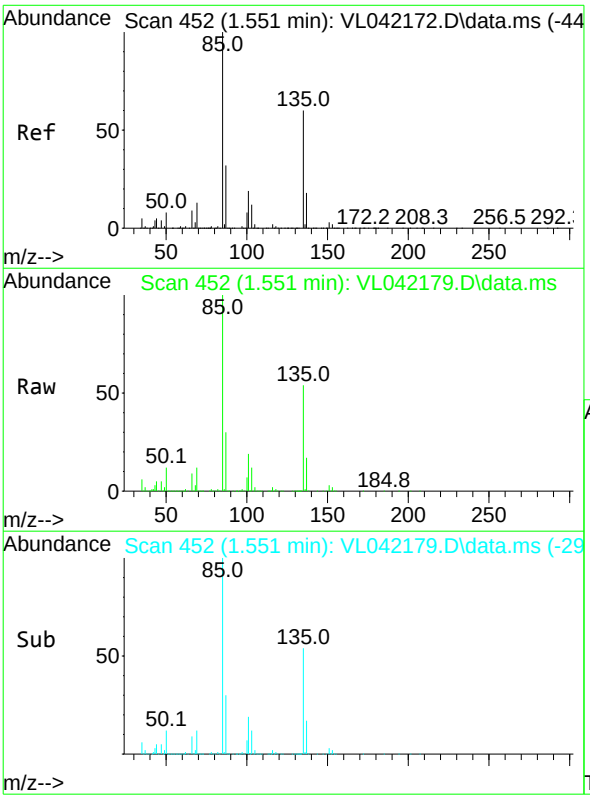
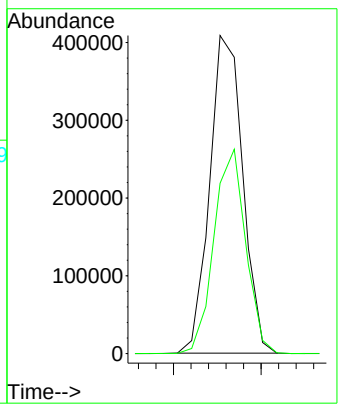


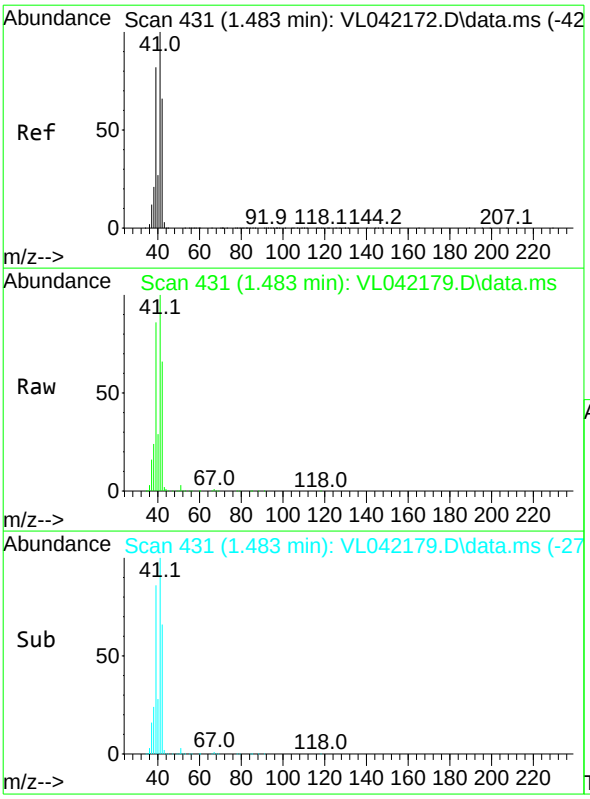


#8
Dichlorotetrafluoroethane
Concen: 9.753 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 213819

Ion	Ratio	Lower	Upper
85	100		
135	61.9	52.4	78.6

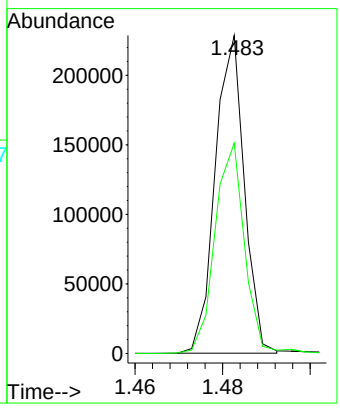




#9
Propene
Concen: 8.739 ppbv
RT: 1.483 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 41 Resp: 105338

Ion	Ratio	Lower	Upper
41	100		
42	68.1	55.4	83.2



Instrument :
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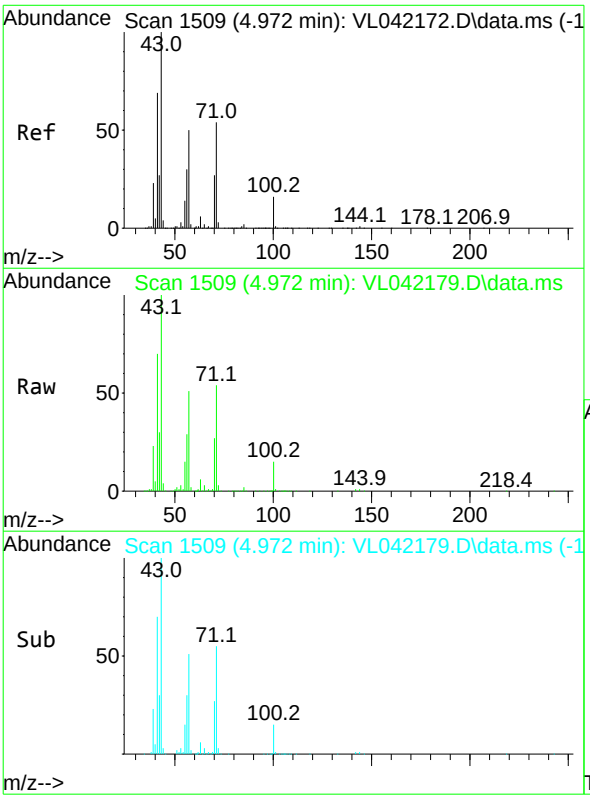
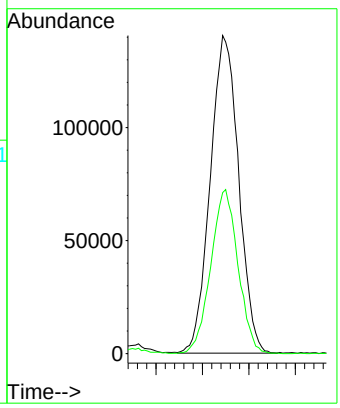
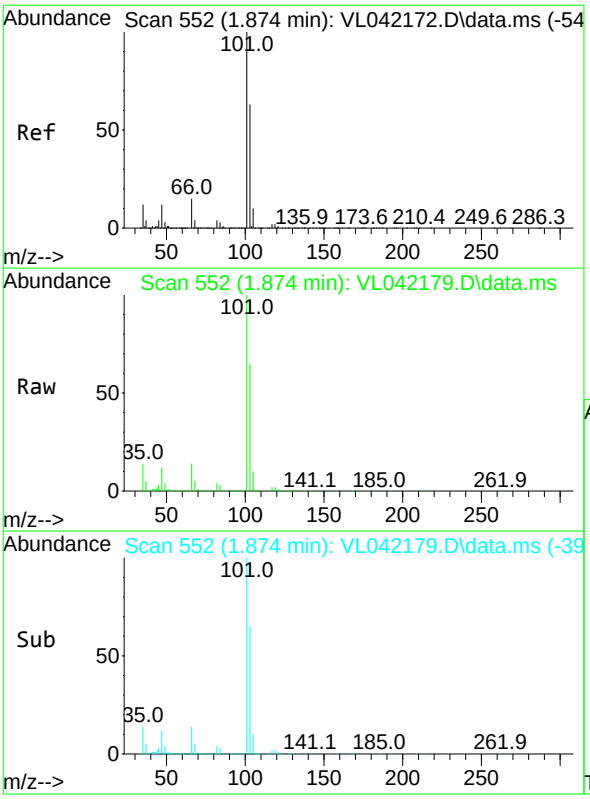


#10
Heptane
Concen: 9.318 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 298768

Ion	Ratio	Lower	Upper
43	100		
57	49.5	39.4	59.2





#11
Trichlorofluoromethane
Concen: 9.453 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:101 Resp: 236793

Ion	Ratio	Lower	Upper
101	100		
103	64.7	50.2	75.2

Instrument :
MSVOA_L
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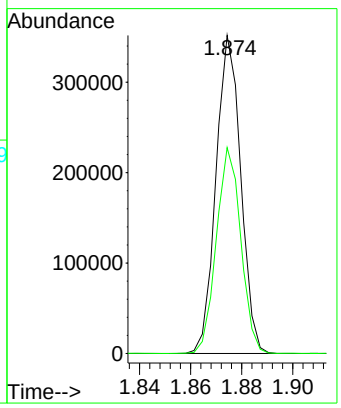
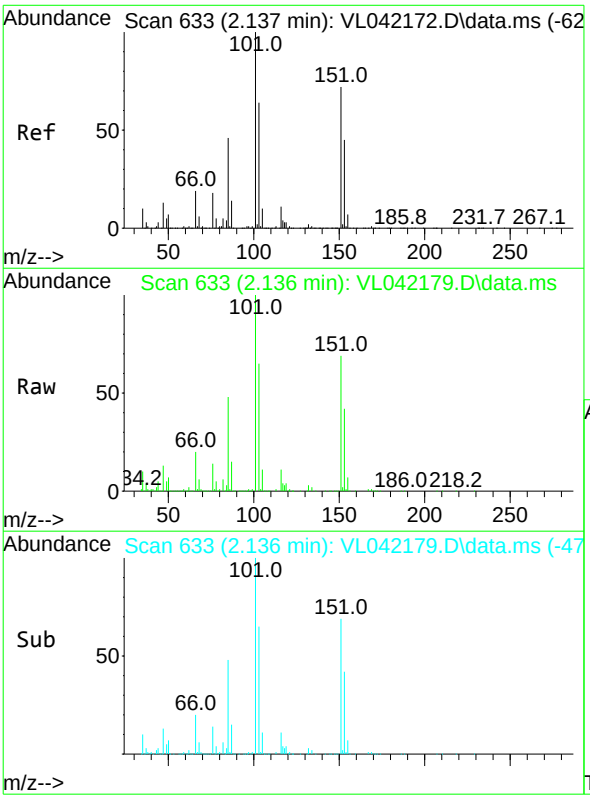
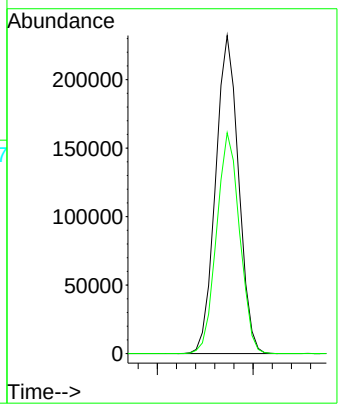


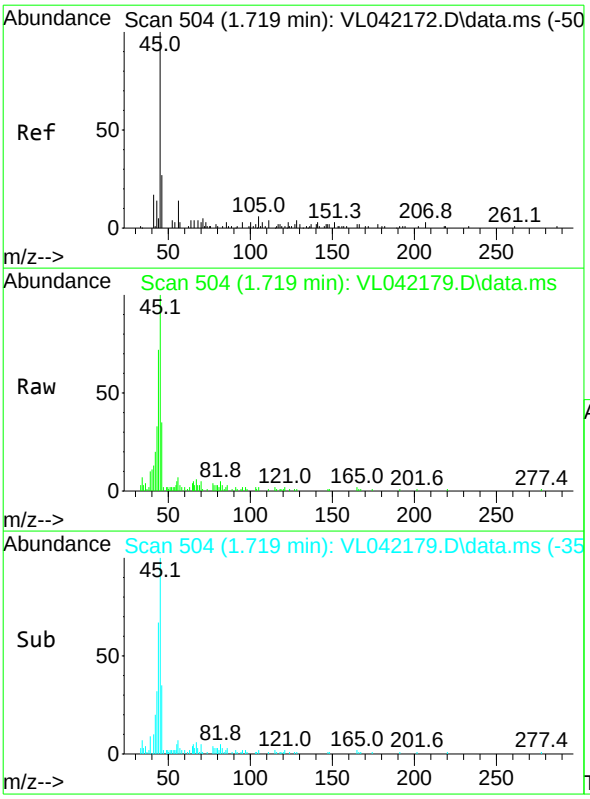


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.421 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:101 Resp: 193965

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.1	85.7

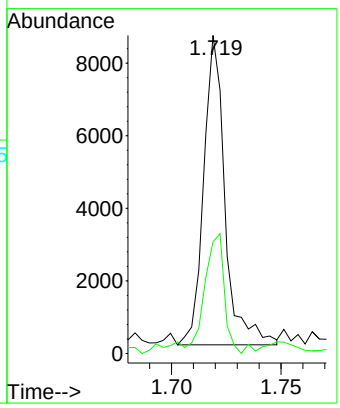




#13
Ethanol
Concen: 5.066 ppbv
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 45 Resp: 5773

Ion	Ratio	Lower	Upper
45	100		
46	48.5	20.2	80.8



Instrument :
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ClientSampleId :
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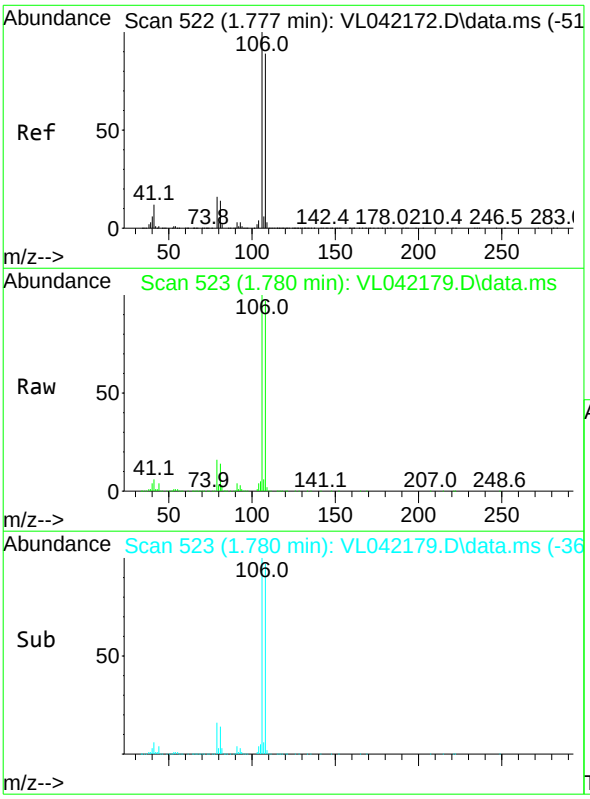
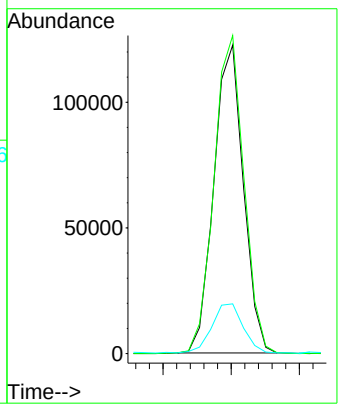
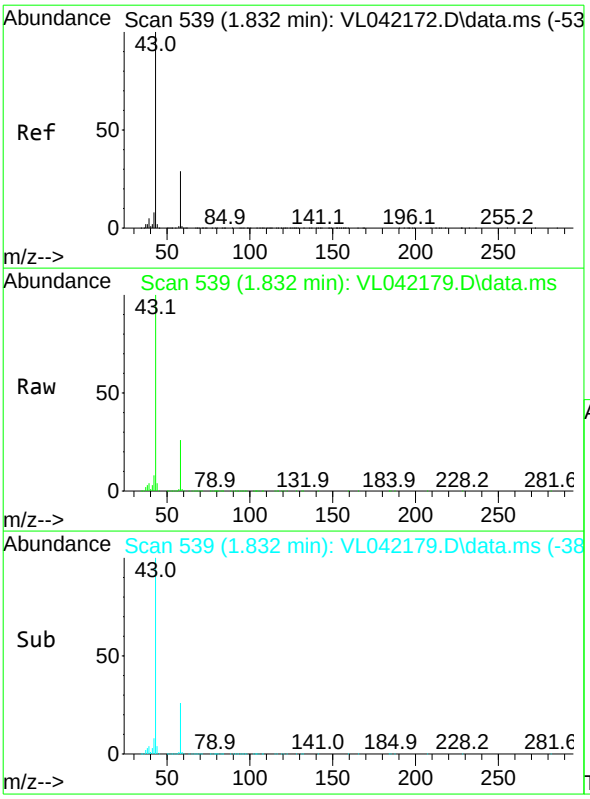


#14
Bromoethene
Concen: 9.328 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:108 Resp: 73572

Ion	Ratio	Lower	Upper
108	100		
106	105.0	86.8	130.2
79	18.8	15.0	22.6

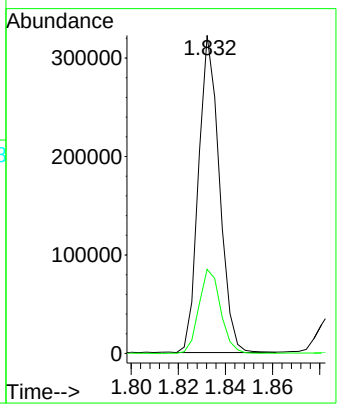




#15
Acetone
Concen: 8.132 ppbv
RT: 1.832 min Scan# 53
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 198300

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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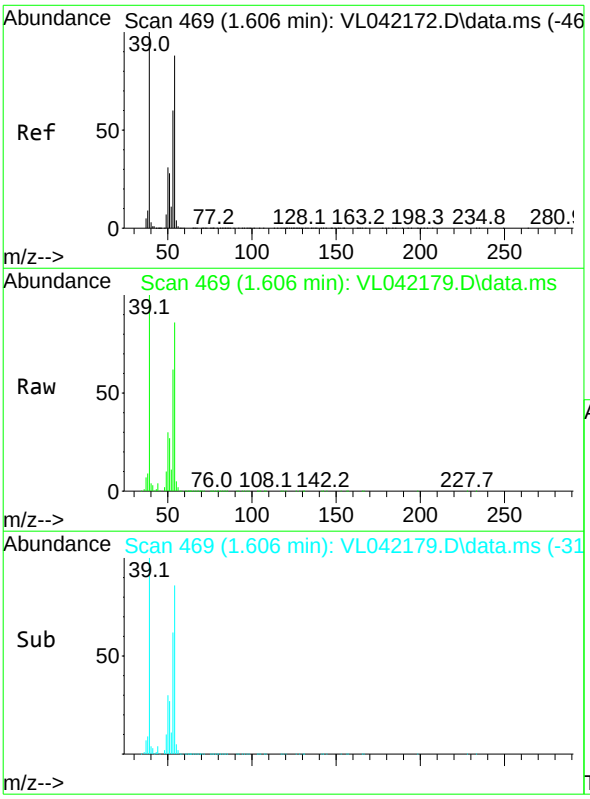
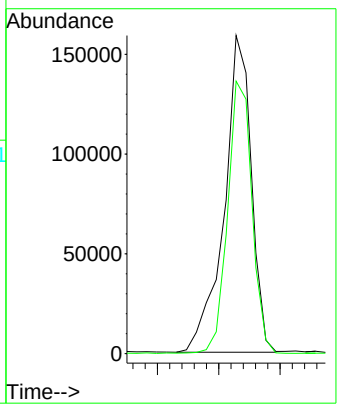
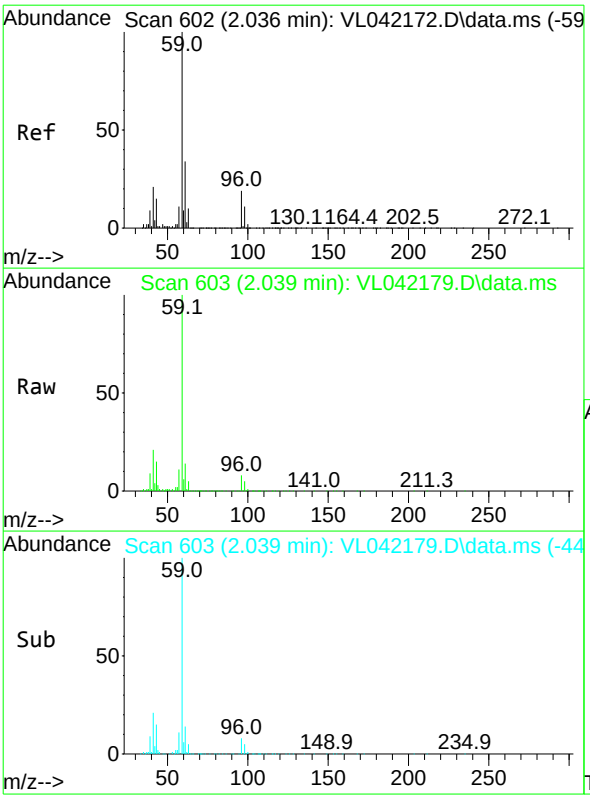


#16
1,3-Butadiene
Concen: 8.216 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 39 Resp: 97840

Ion	Ratio	Lower	Upper
39	100		
54	76.9	60.7	91.1

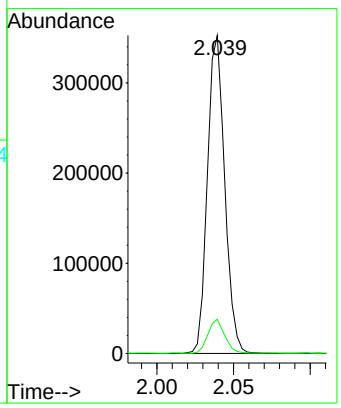




#17
tert-Butyl alcohol
Concen: 9.094 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 59 Resp: 276195

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
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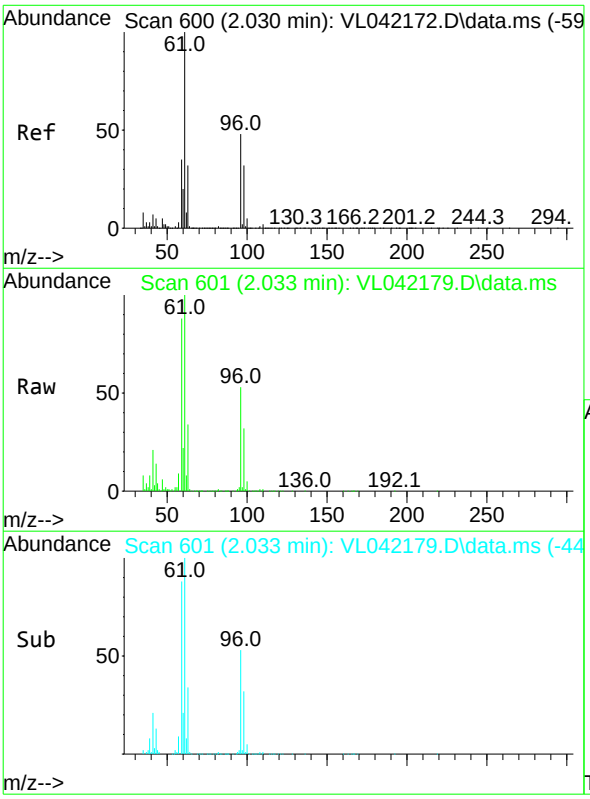
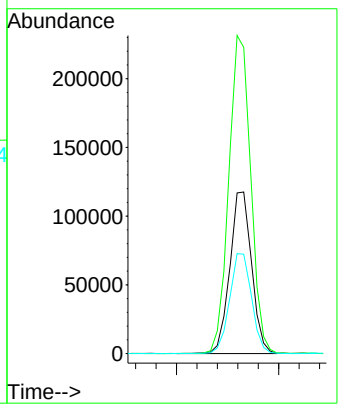
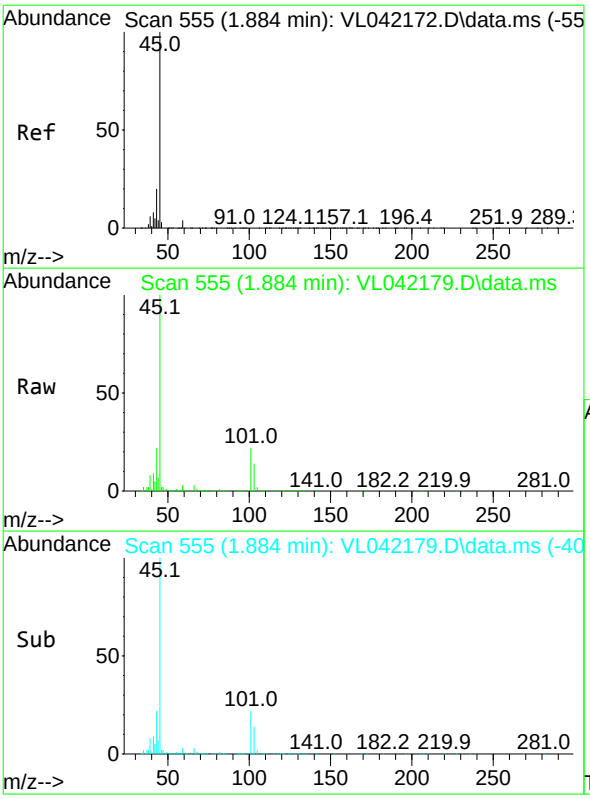


#18
1,1-Dichloroethene
Concen: 9.053 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 87137

Ion	Ratio	Lower	Upper
96	100		
61	189.6	167.6	251.4
98	61.5	53.5	80.3

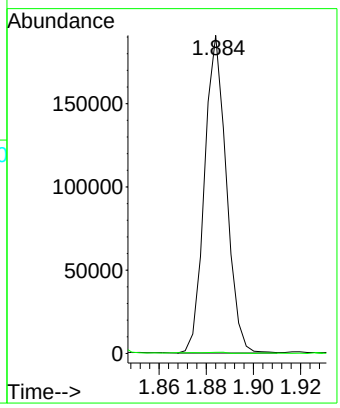




#19
Isopropyl Alcohol
Concen: 8.923 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 45 Resp: 122768

Ion	Ratio	Lower	Upper
45	100		
58	44.9	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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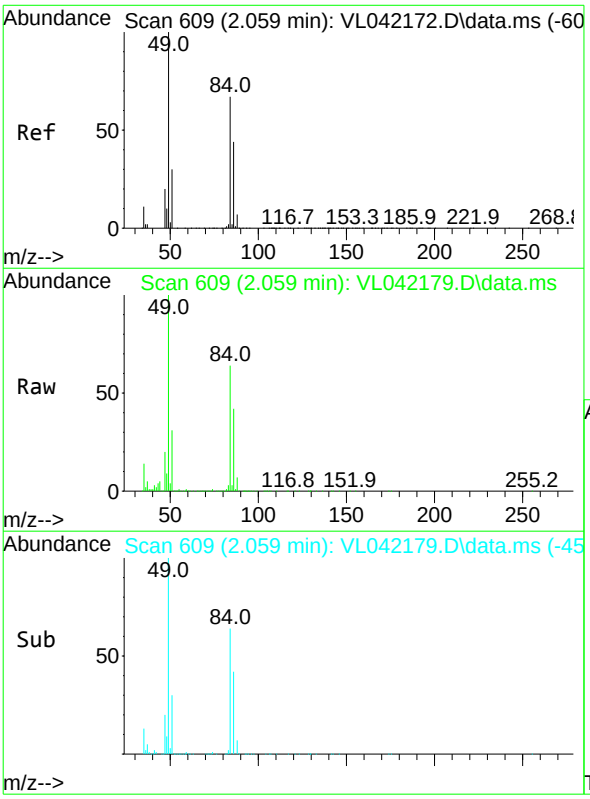
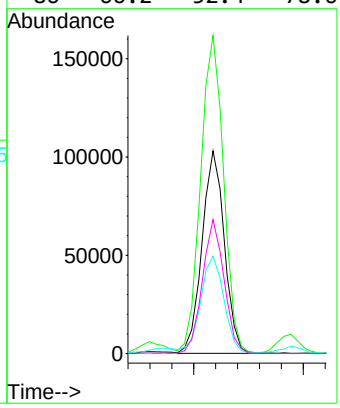
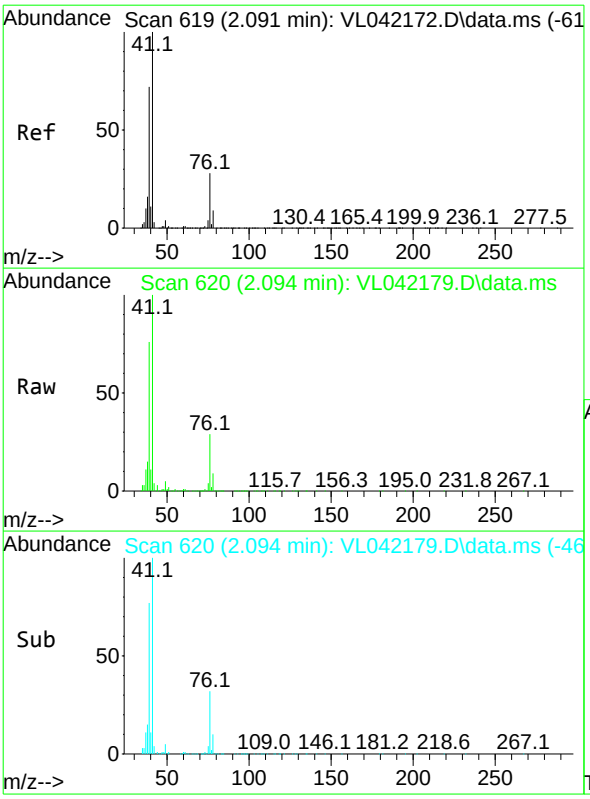


#20
Methylene Chloride
Concen: 8.018 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 72813

Ion	Ratio	Lower	Upper
84	100		
49	155.8	120.2	180.4
51	46.4	37.4	56.0
86	66.2	52.4	78.6

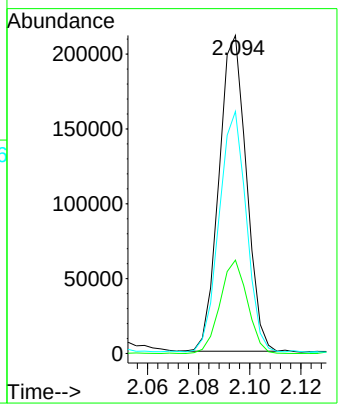




#21
Allyl Chloride
Concen: 9.154 ppbv
RT: 2.094 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 41 Resp: 157418

Ion	Ratio	Lower	Upper
41	100		
76	29.6	24.1	36.1
39	75.5	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
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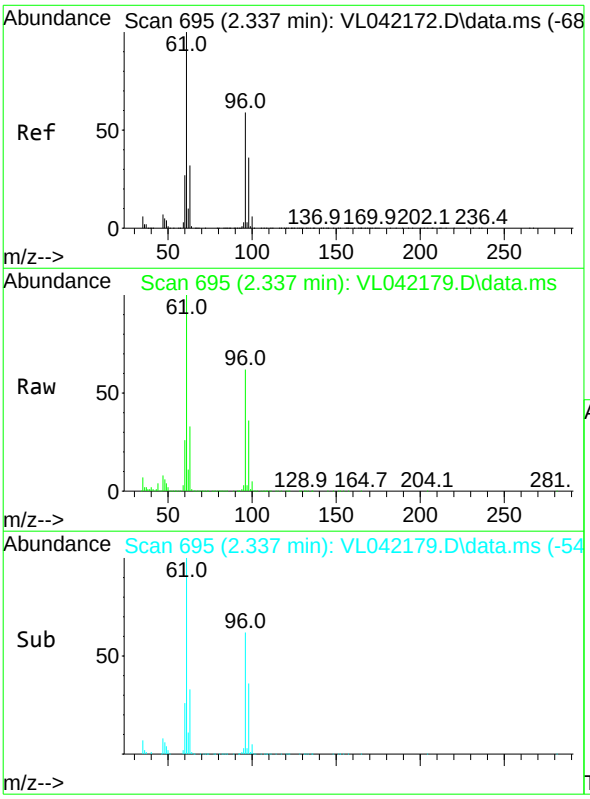
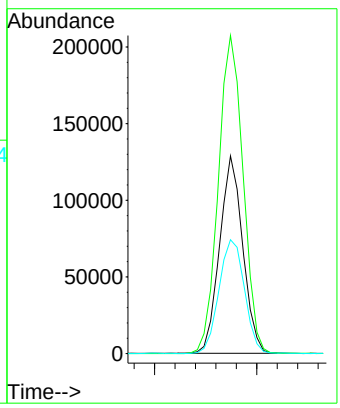
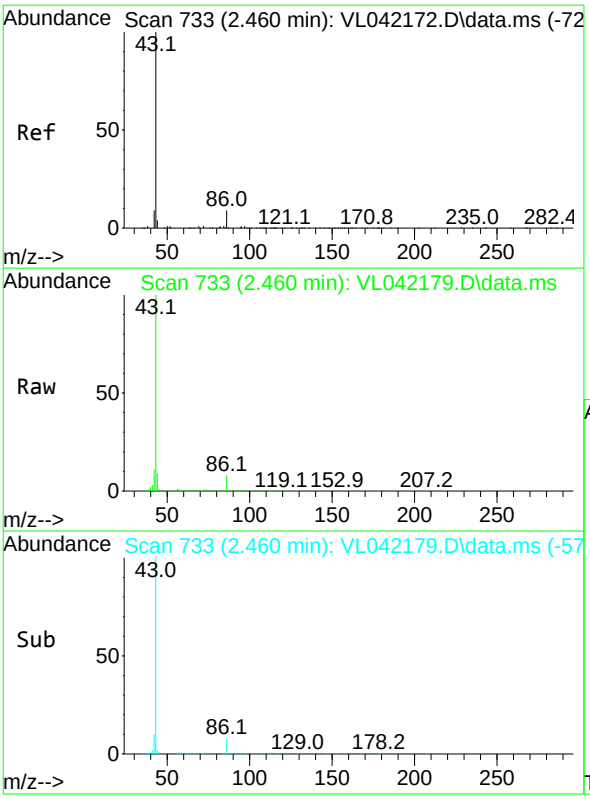


#22
trans-1,2-Dichloroethene
Concen: 9.092 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 101141

Ion	Ratio	Lower	Upper
96	100		
61	161.2	136.6	204.8
98	57.7	49.4	74.2

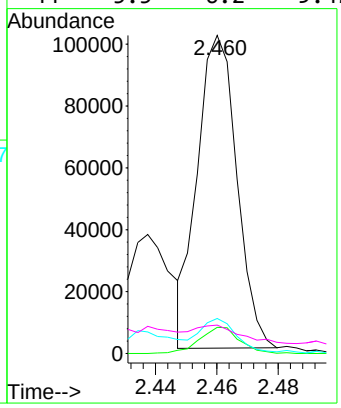




#23
Vinyl Acetate
Concen: 8.553 ppbv
RT: 2.460 min Scan# 73
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 90260

Ion	Ratio	Lower	Upper
43	100		
86	8.3	5.5	8.3#
42	10.7	8.6	13.0
44	5.5	6.2	9.4#



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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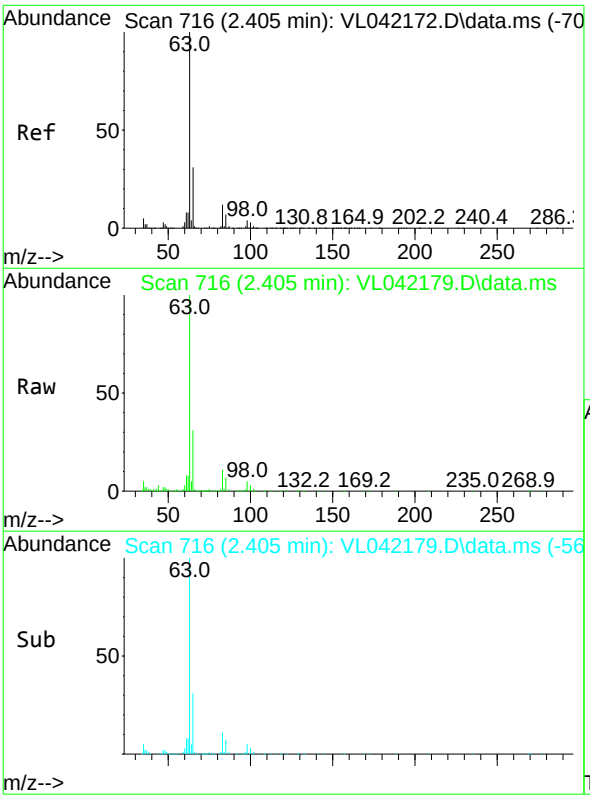
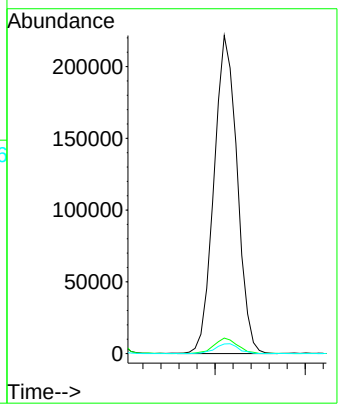
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

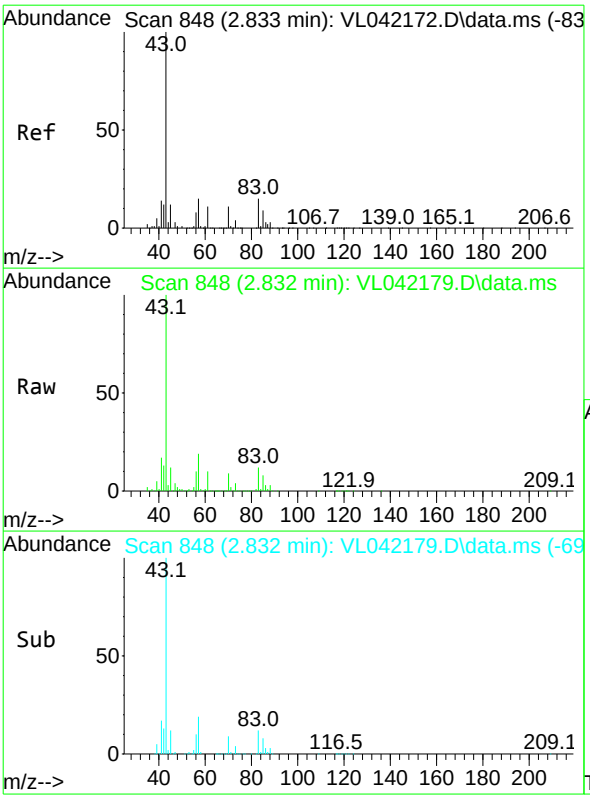


#24
1,1-Dichloroethane
Concen: 9.600 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 63 Resp: 197968

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.3	6.8
100	3.0	1.6	4.7

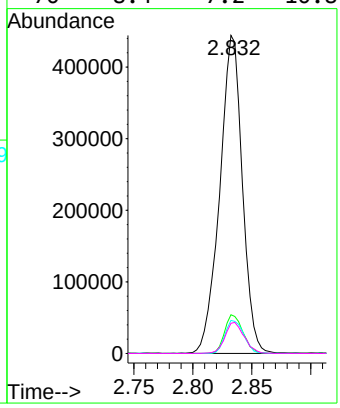




#25
Ethyl Acetate
Concen: 9.364 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 592585

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.2	12.2
61	8.7	7.3	10.9
70	8.4	7.2	10.8



Instrument :
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ClientSampleId :
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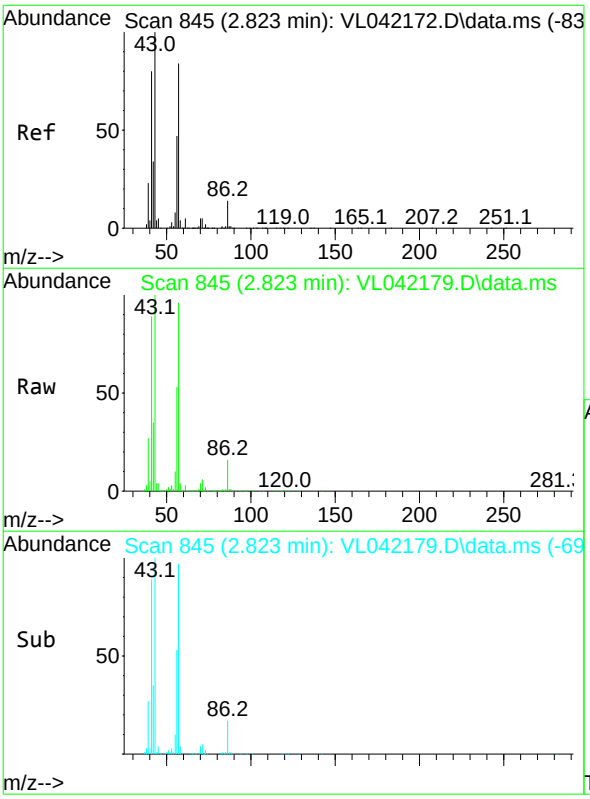
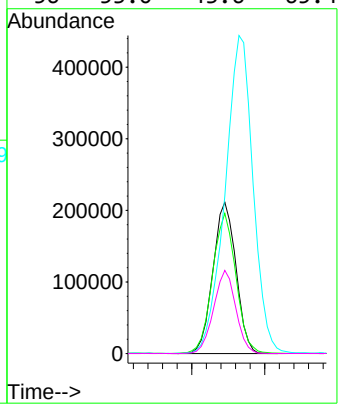
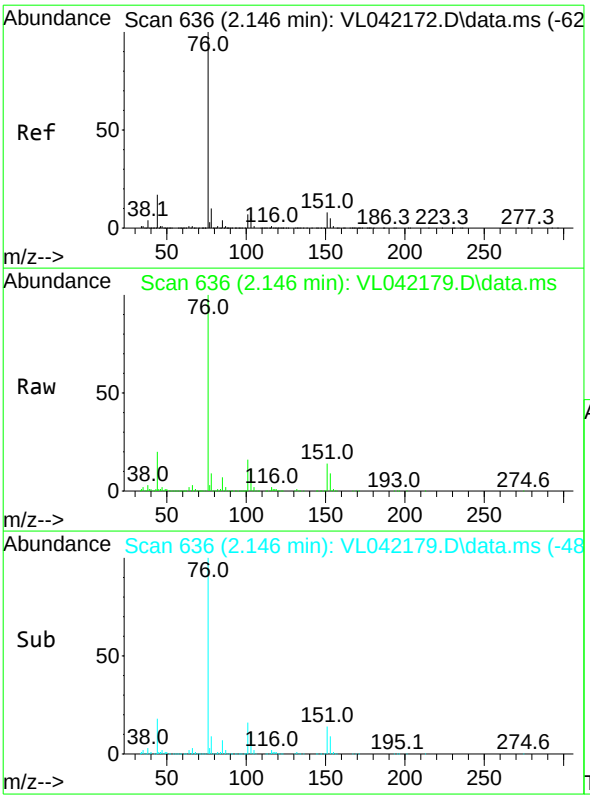


#26
Hexane
Concen: 9.455 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 231125

Ion	Ratio	Lower	Upper
57	100		
41	95.2	76.6	114.8
43	256.8	207.8	311.8
56	53.0	43.6	65.4

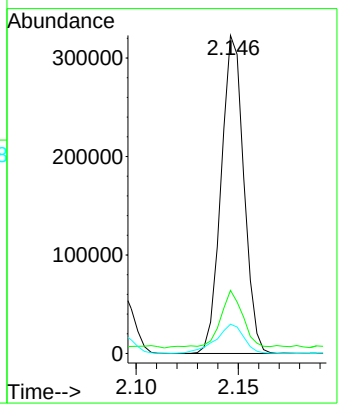




#27
Carbon Disulfide
Concen: 9.493 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 76 Resp: 248834

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.3	9.3	13.9



Instrument :
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ClientSampleId :
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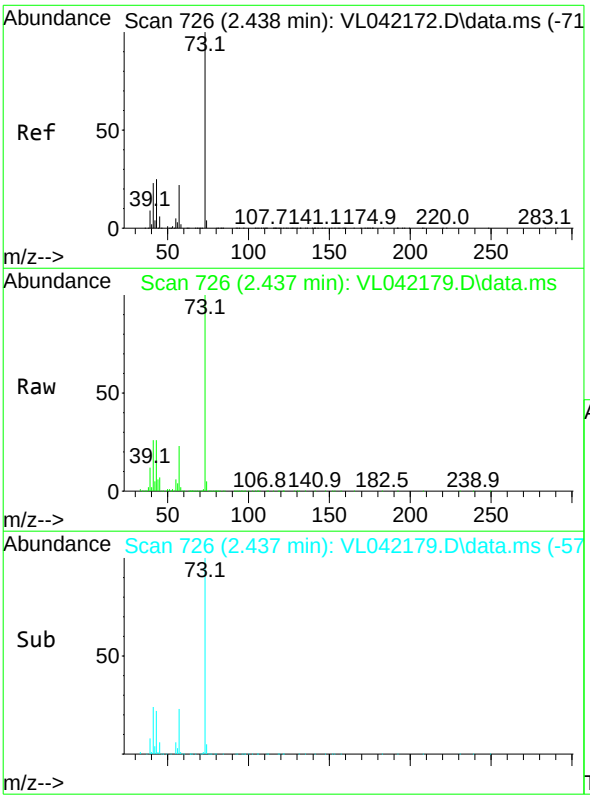
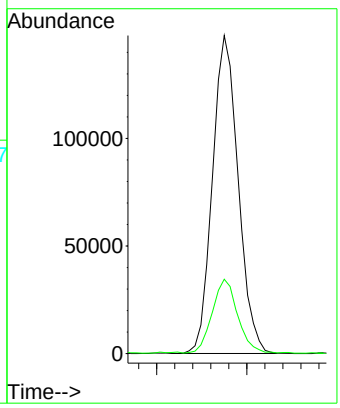
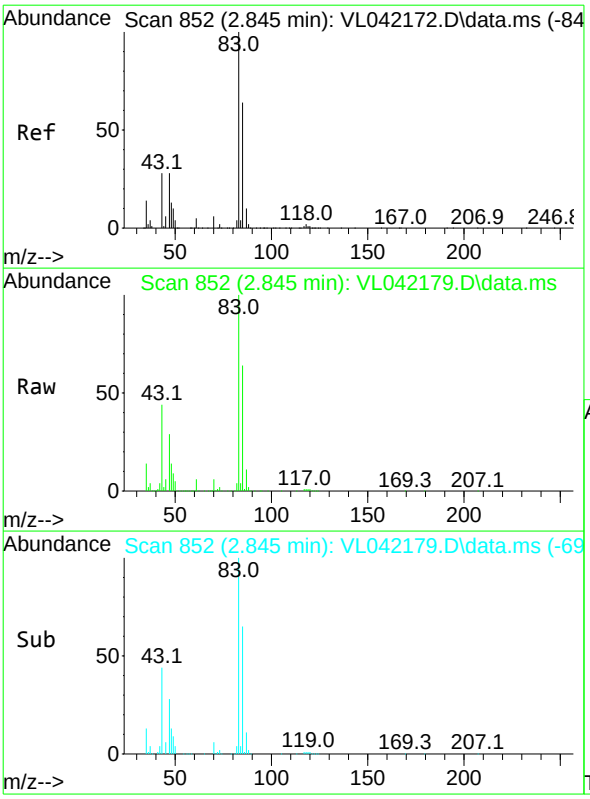


#28
Methyl tert-Butyl Ether
Concen: 9.624 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 73 Resp: 146470

Ion	Ratio	Lower	Upper
73	100		
57	23.3	20.5	30.7

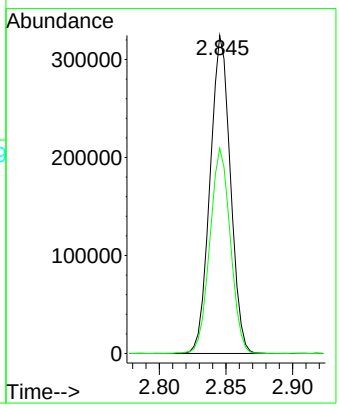




#29
Chloroform
Concen: 9.619 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 344106

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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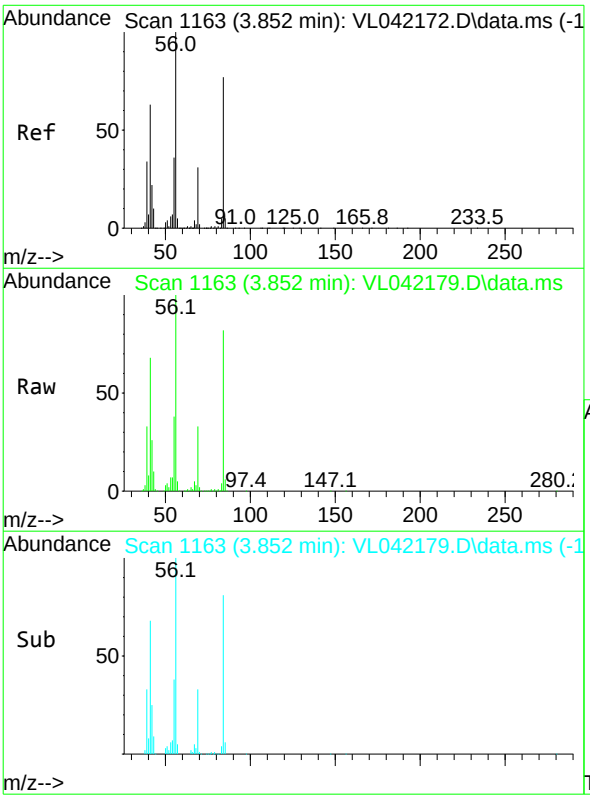
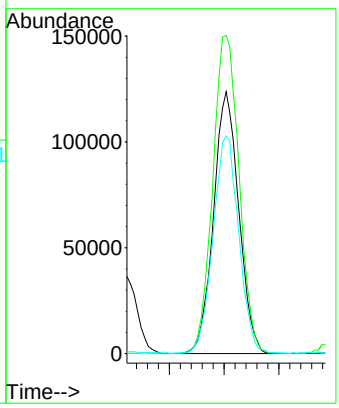
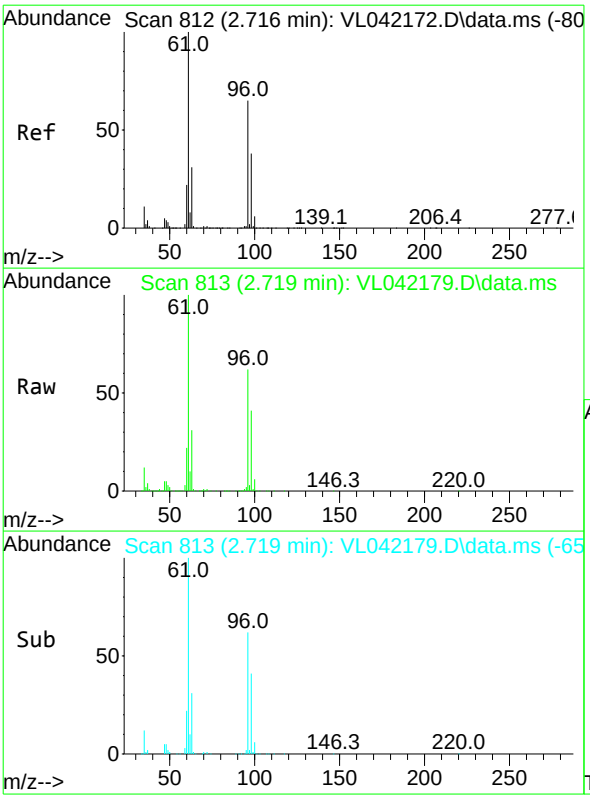


#30
Cyclohexane
Concen: 9.323 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 197897

Ion	Ratio	Lower	Upper
84	100		
56	126.8	102.8	154.2
41	84.6	66.5	99.7

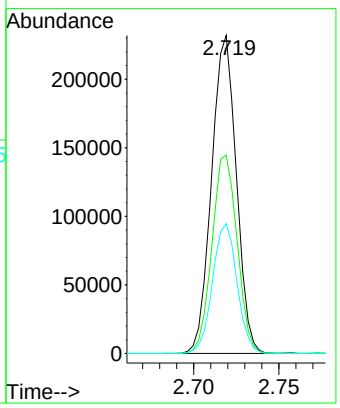




#31
cis-1,2-Dichloroethene
Concen: 9.449 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 61 Resp: 234487

Ion	Ratio	Lower	Upper
61	100		
96	62.3	51.8	77.8
98	40.9	30.6	46.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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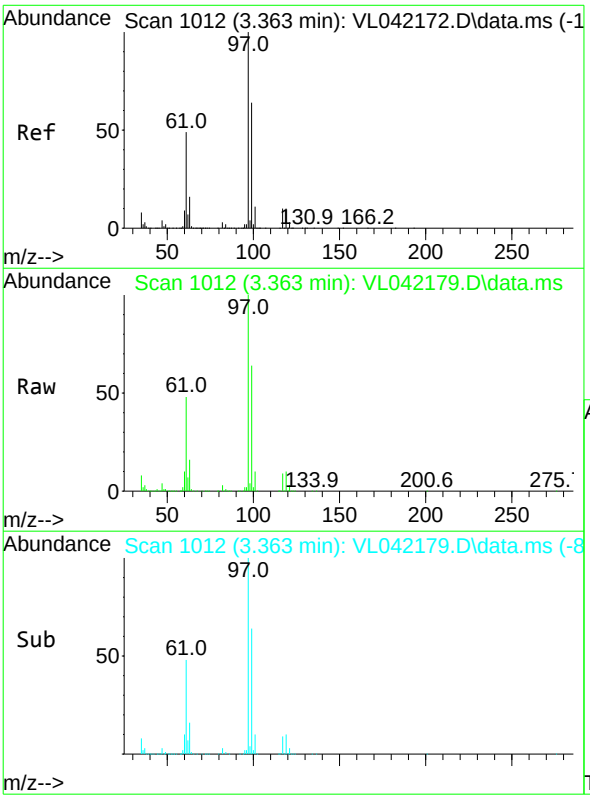
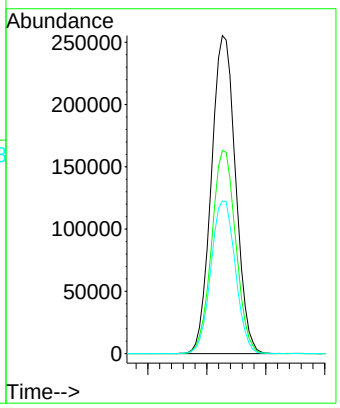
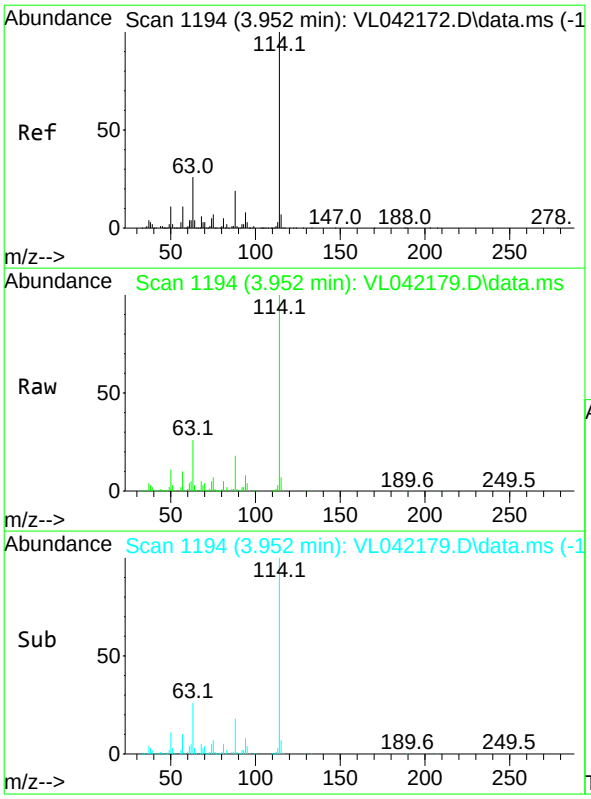


#32
1,1,1-Trichloroethane
Concen: 8.921 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 97 Resp: 365364

Ion	Ratio	Lower	Upper
97	100		
99	63.4	51.5	77.3
61	48.4	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:114 Resp: 498105

Ion	Ratio	Lower	Upper
114	100		
63	26.1	20.7	31.1
88	18.7	15.0	22.4

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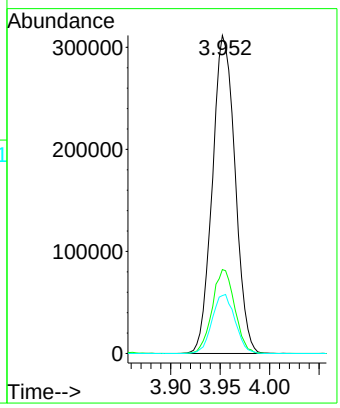
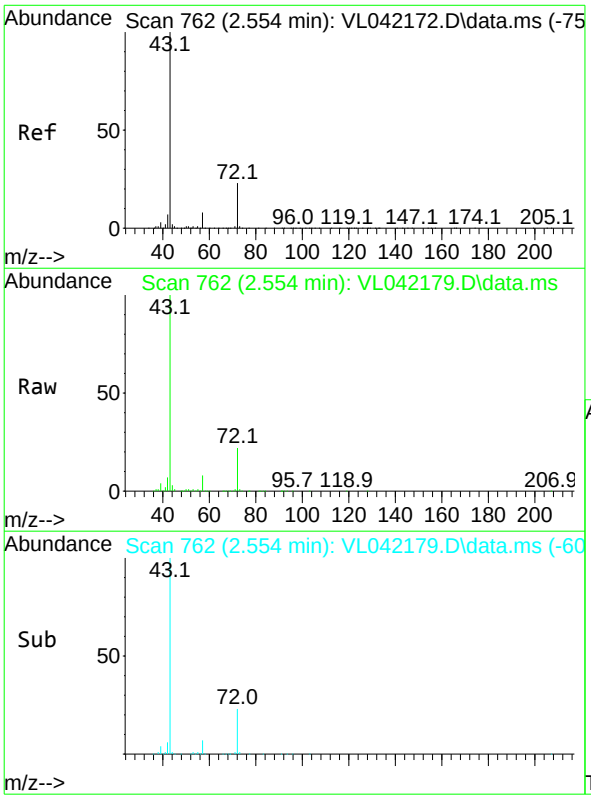
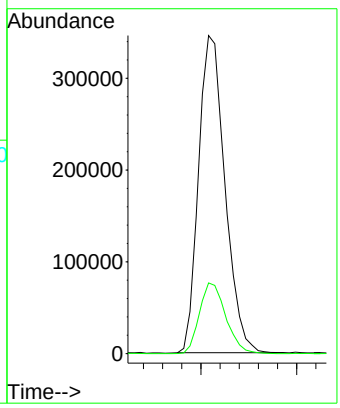


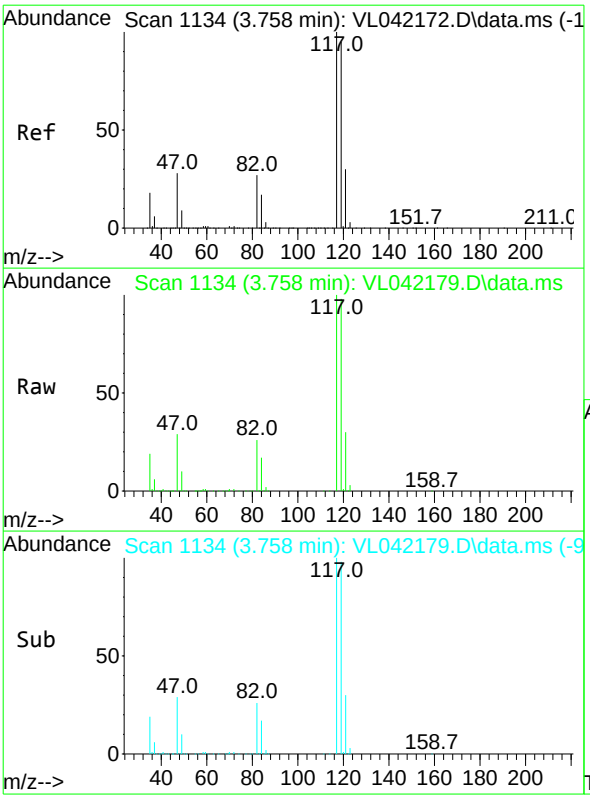


#34
2-Butanone
Concen: 9.171 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 331236

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2





#35
Carbon Tetrachloride
Concen: 9.339 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:117 Resp: 363392

Ion	Ratio	Lower	Upper
117	100		
119	97.7	76.2	114.2
121	29.9	24.2	36.4

Instrument :
MSVOA_L
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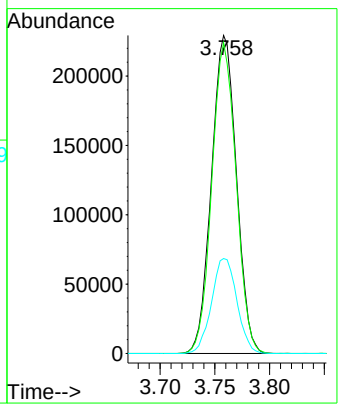
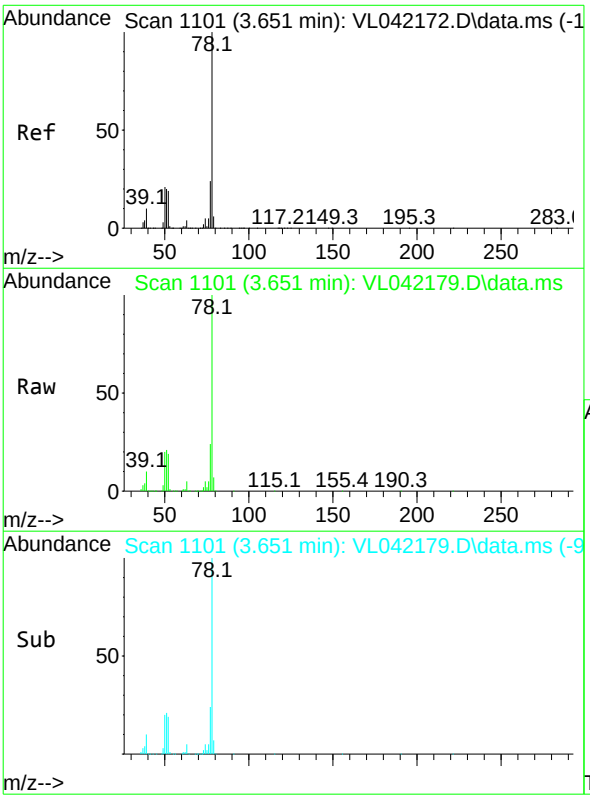
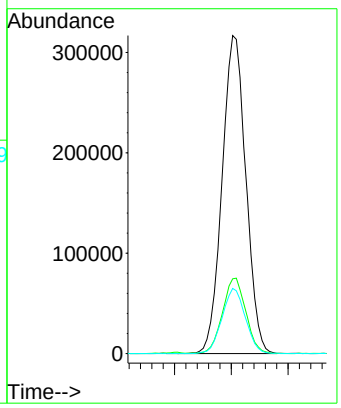


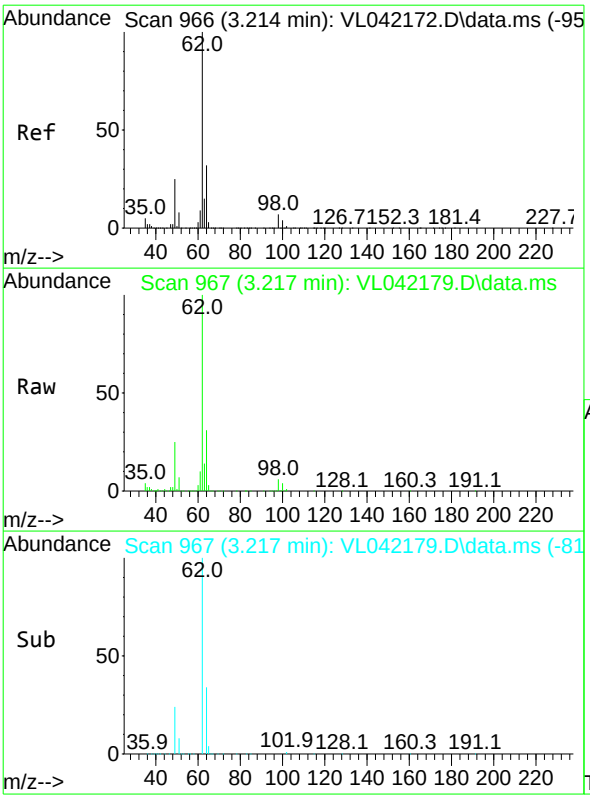


#36
Benzene
Concen: 9.341 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 78 Resp: 461261

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	20.4	16.6	24.8

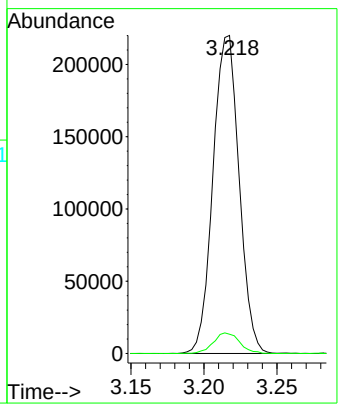




#37
1,2-Dichloroethane
Concen: 9.676 ppbv
RT: 3.217 min Scan# 96
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 62 Resp: 273559

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2



Instrument :
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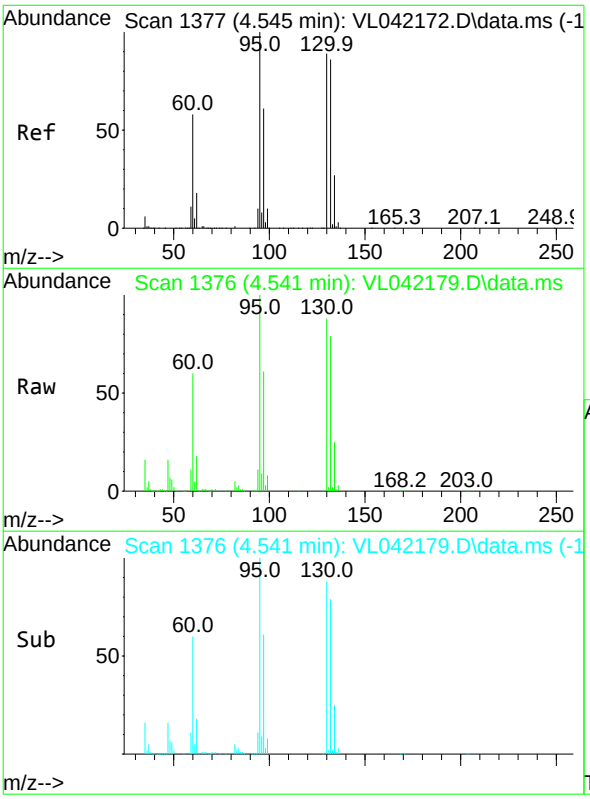
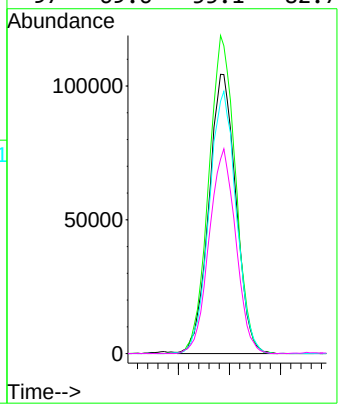
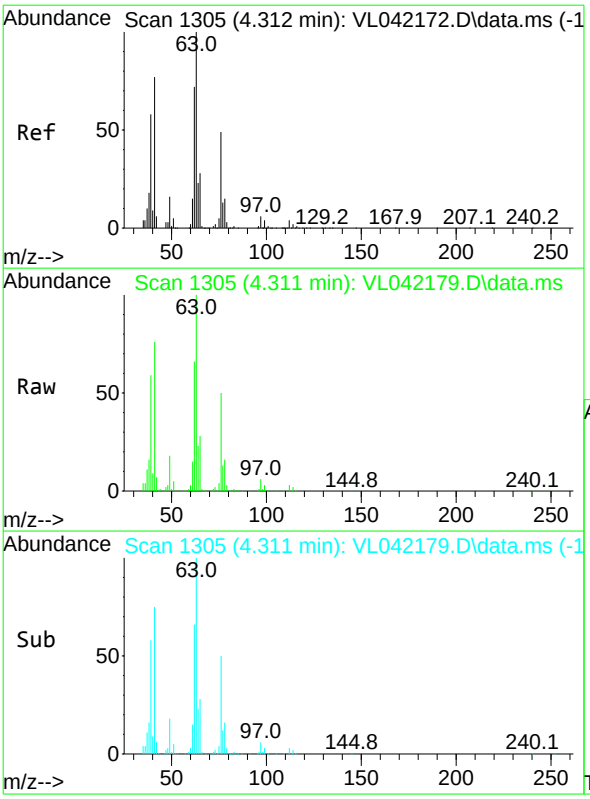


#38
Trichloroethene
Concen: 9.306 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:130 Resp: 191746

Ion	Ratio	Lower	Upper
130	100		
95	113.9	89.8	134.8
132	90.3	77.4	116.2
97	69.6	55.1	82.7

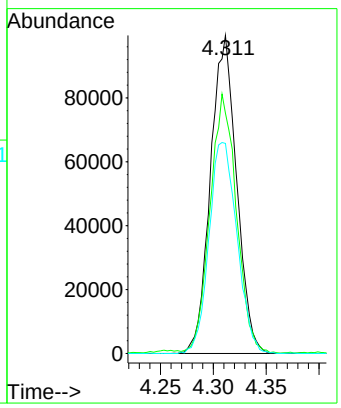




#39
1,2-Dichloropropane
Concen: 9.500 ppbv
RT: 4.311 min Scan# 13
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 63 Resp: 170839

Ion	Ratio	Lower	Upper
63	100		
41	75.3	61.7	92.5
62	66.0	57.6	86.4



Instrument :
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ClientSampleId :
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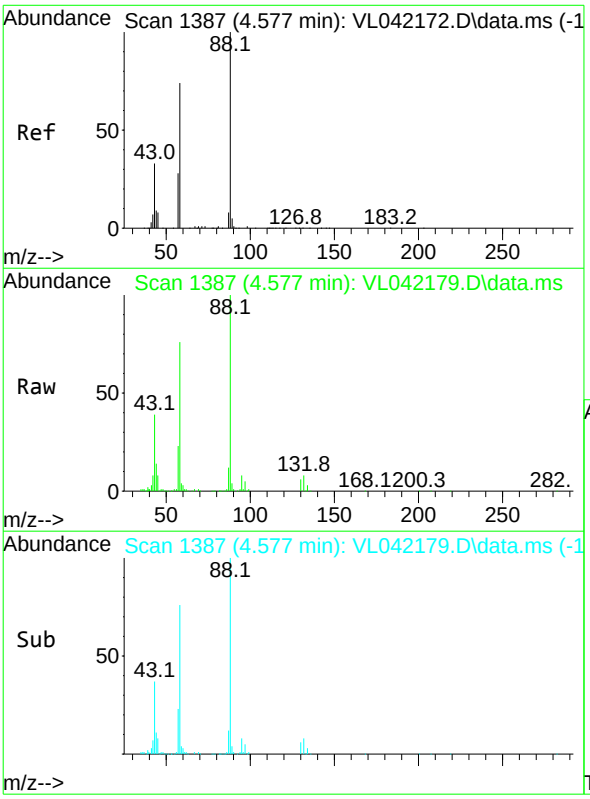
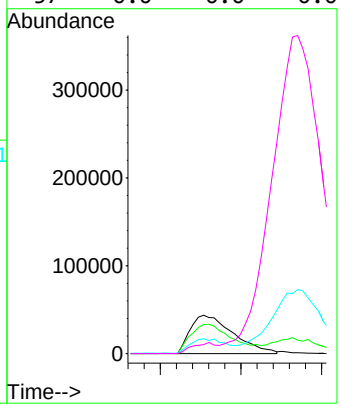
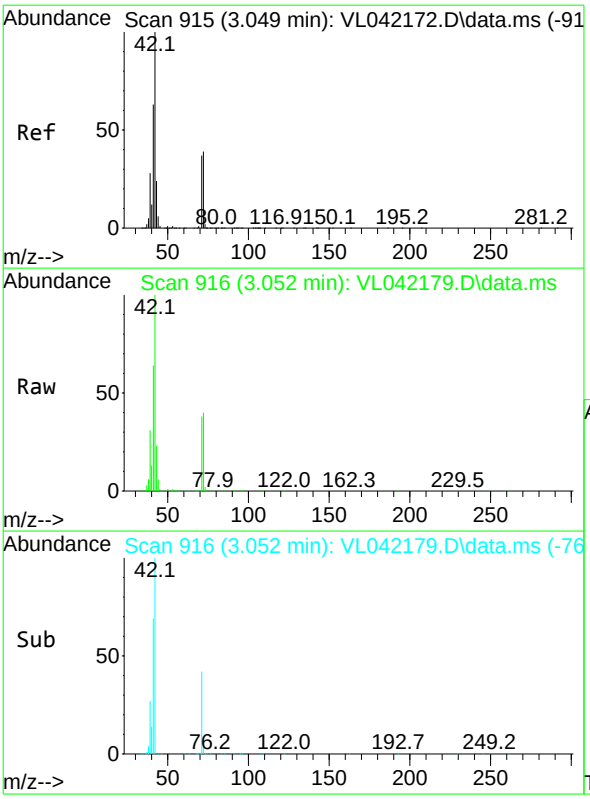


#40
1,4-Dioxane
Concen: 8.443 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 88 Resp: 80592

Ion	Ratio	Lower	Upper
88	100		
58	76.2	62.7	94.1
43	31.4	23.0	34.4
57	0.0	0.0	0.0

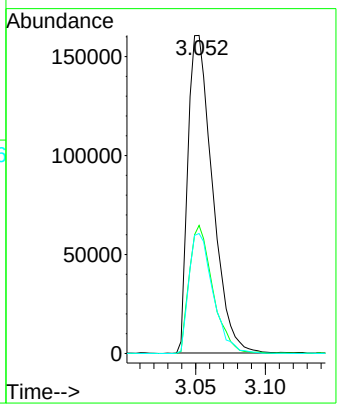




#41
Tetrahydrofuran
Concen: 9.431 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 42 Resp: 196163

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	37.2	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
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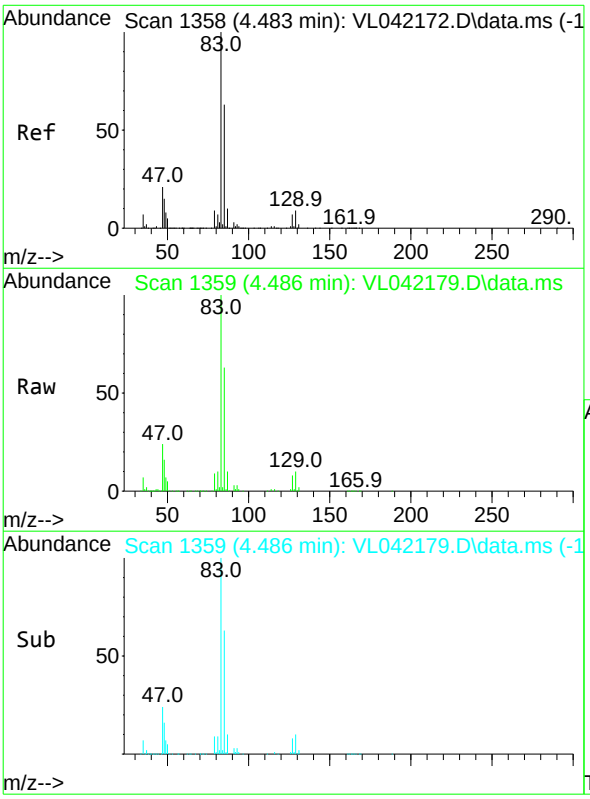
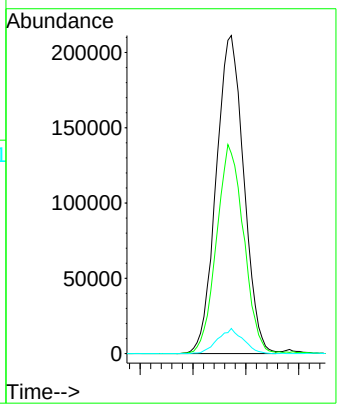
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

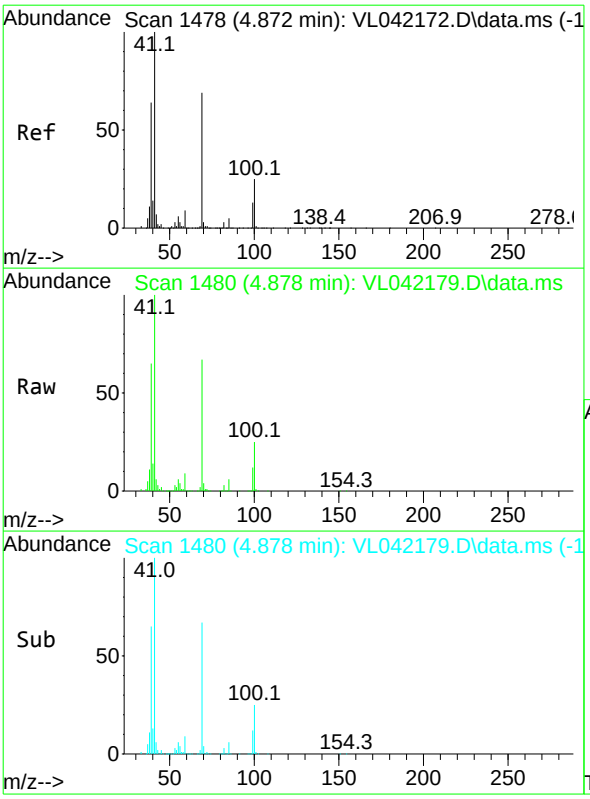


#42
Bromodichloromethane
Concen: 9.853 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 384006

Ion	Ratio	Lower	Upper
83	100		
85	63.0	50.5	75.7
127	7.9	5.9	8.9

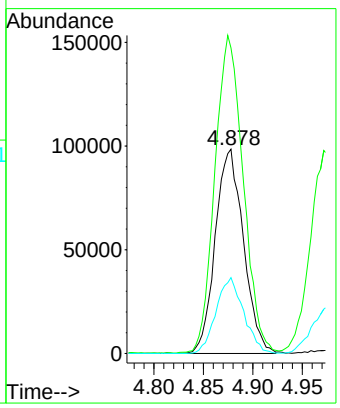




#43
Methyl Methacrylate
Concen: 9.344 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 69 Resp: 195339

Ion	Ratio	Lower	Upper
69	100		
41	156.4	123.8	185.6
100	36.4	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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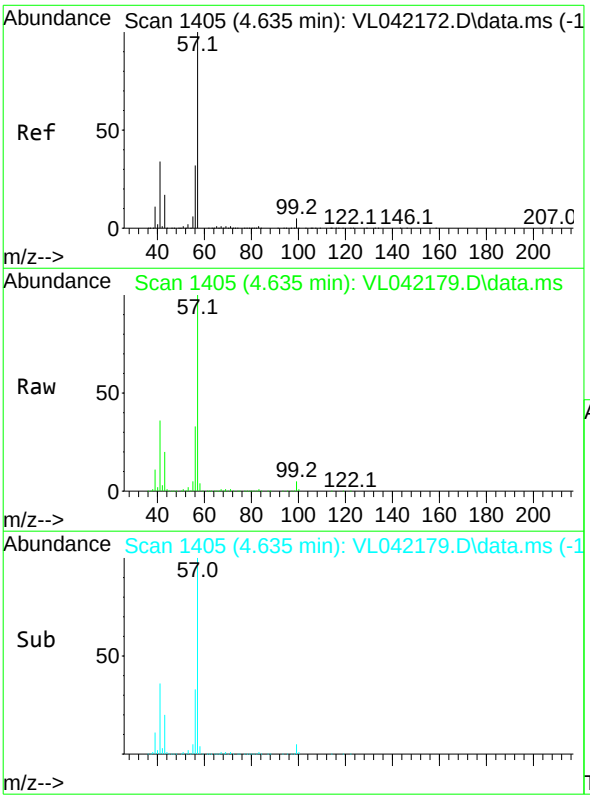
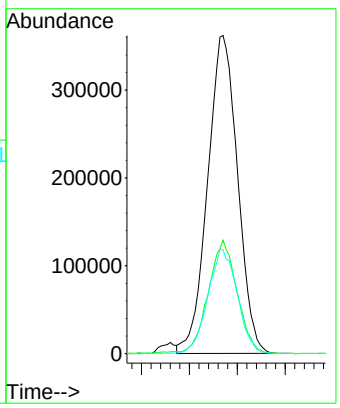
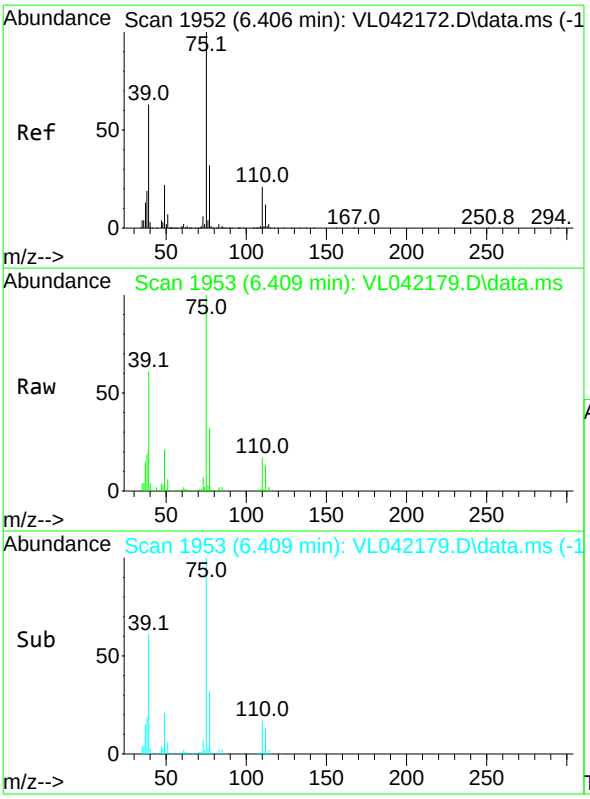


#44
2,2,4-Trimethylpentane
Concen: 9.436 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 787400

Ion	Ratio	Lower	Upper
57	100		
41	34.3	26.8	40.2
56	32.5	25.6	38.4

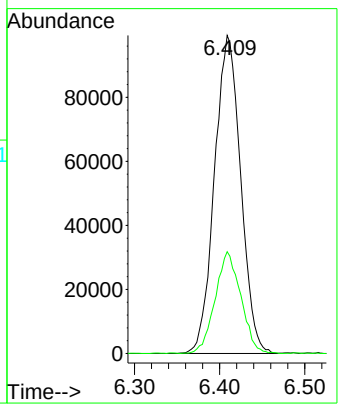




#45
t-1,3-Dichloropropene
Concen: 9.467 ppbv
RT: 6.409 min Scan# 19
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 75 Resp: 212335

Ion	Ratio	Lower	Upper
75	100		
77	32.0	26.0	39.0



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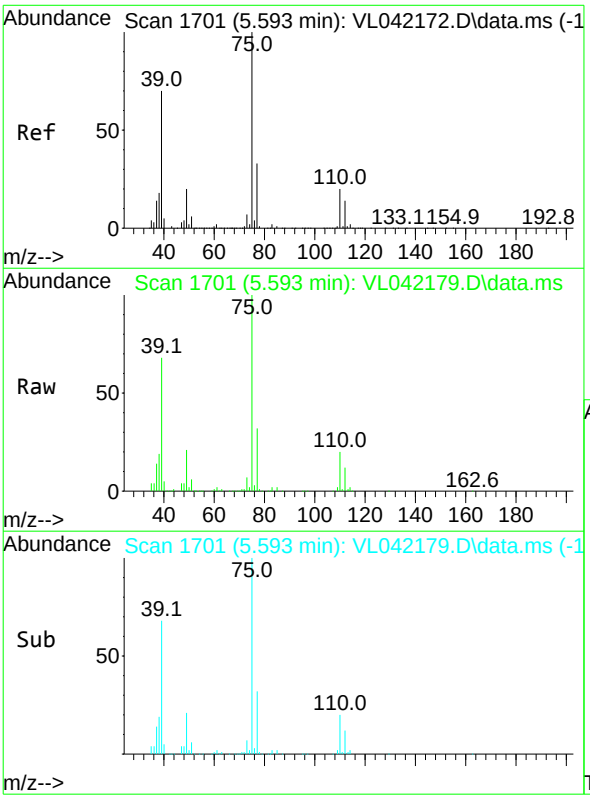
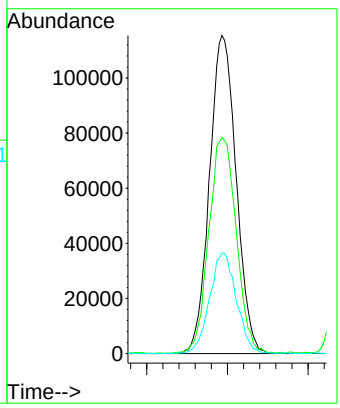
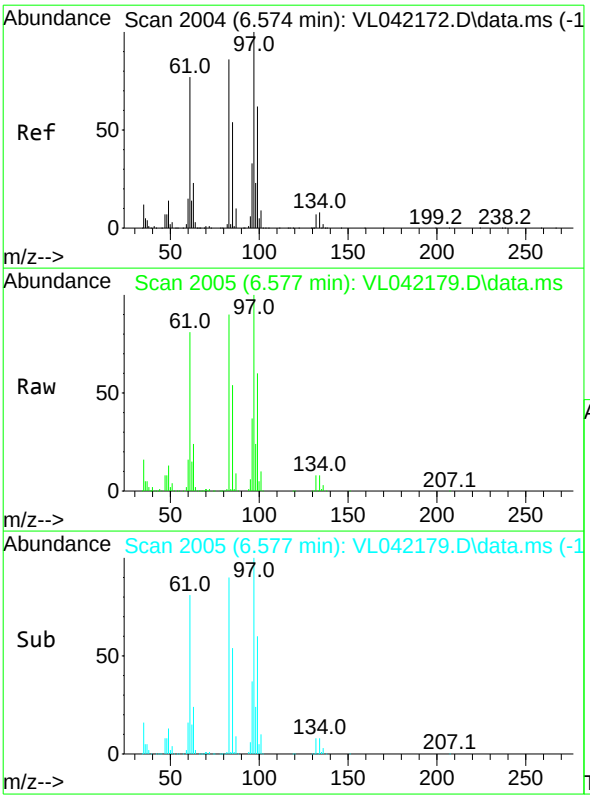


#46
cis-1,3-Dichloropropene
Concen: 9.643 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 75 Resp: 265101

Ion	Ratio	Lower	Upper
75	100		
39	67.8	55.8	83.6
77	31.6	26.0	39.0

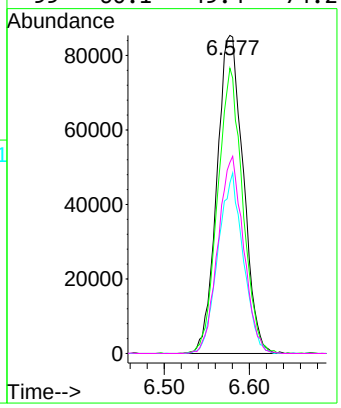




#47
1,1,2-Trichloroethane
Concen: 9.638 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 97 Resp: 183228

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	53.6	43.1	64.7
99	60.1	49.4	74.2



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ClientSampleId :
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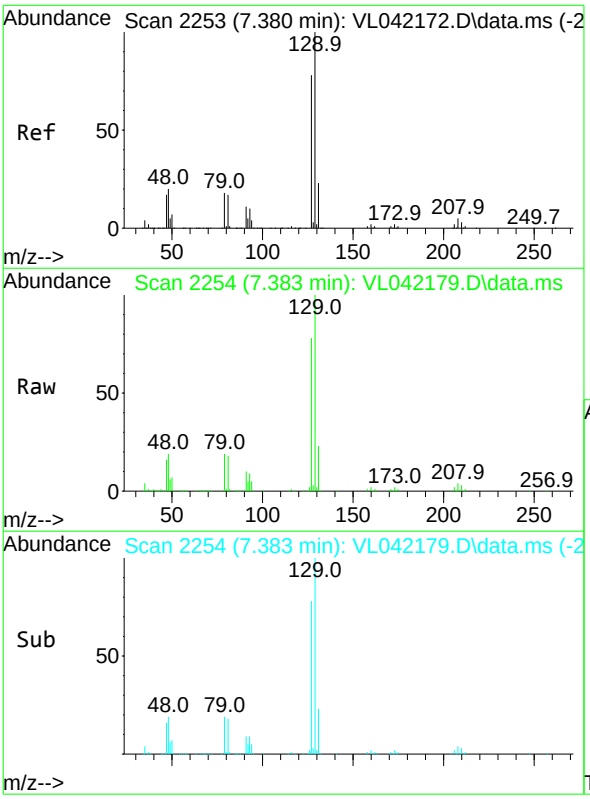
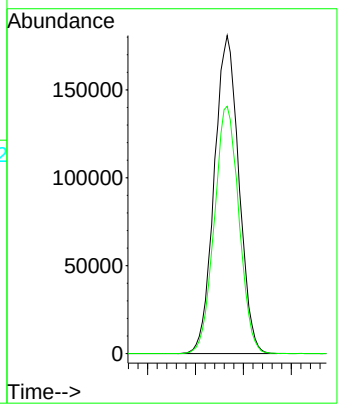
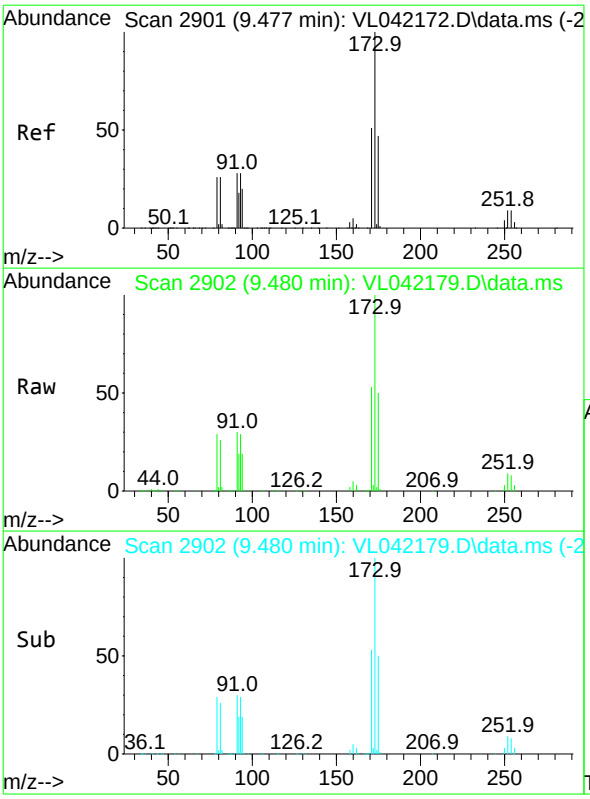


#48
Dibromochloromethane
Concen: 10.018 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:129 Resp: 322766

Ion	Ratio	Lower	Upper
129	100		
127	77.7	39.1	117.2

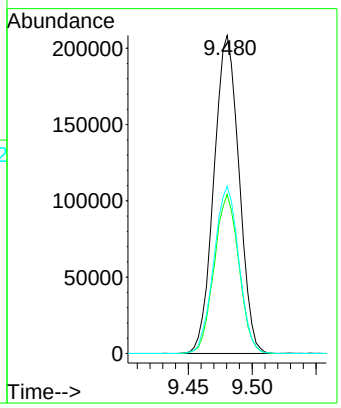




#49
Bromoform
Concen: 9.858 ppbv
RT: 9.480 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:173 Resp: 285149

Ion	Ratio	Lower	Upper
173	100		
175	49.2	38.6	57.8
171	52.4	41.8	62.6



Instrument :
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ClientSampleId :
ICVVL032725

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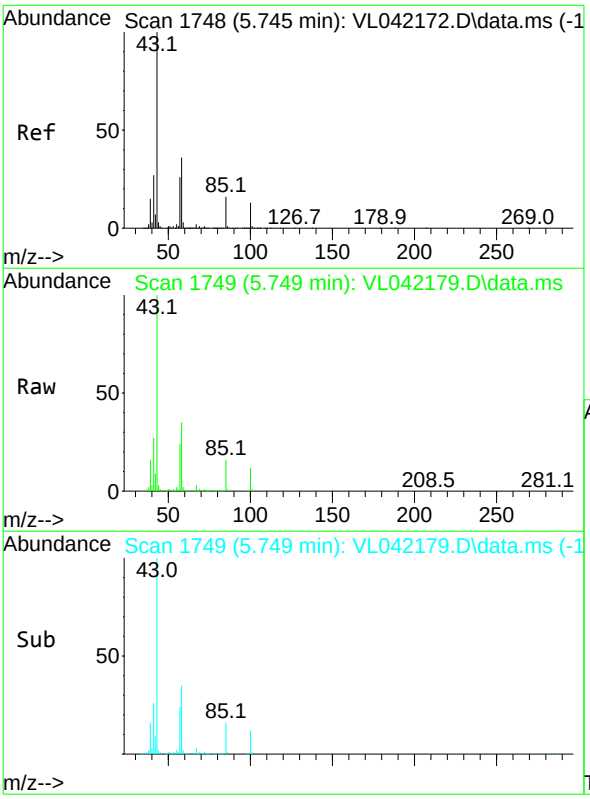
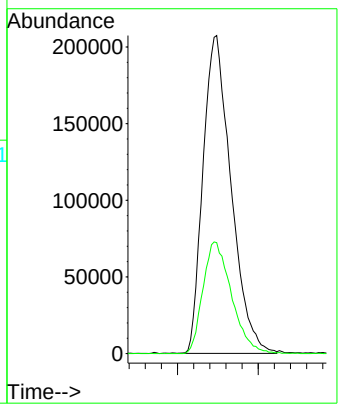
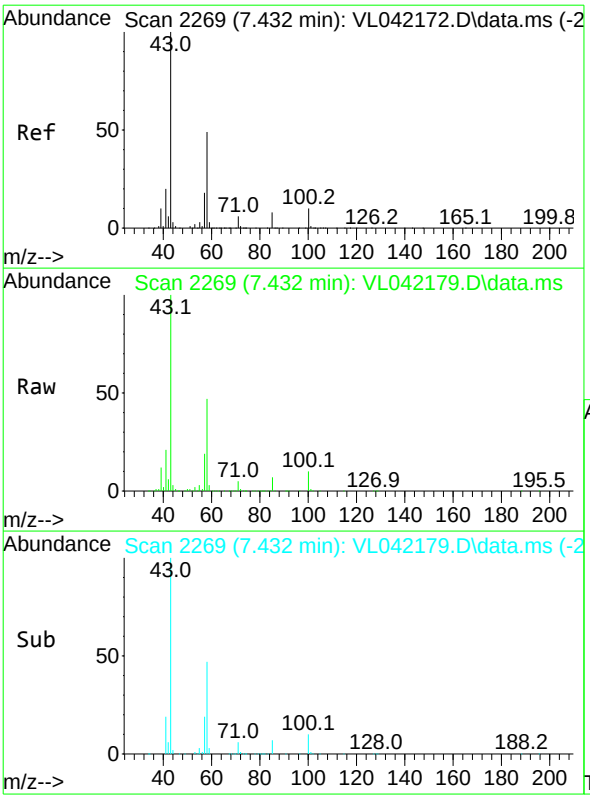


#50
4-Methyl-2-Pentanone
Concen: 8.749 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 500791

Ion	Ratio	Lower	Upper
43	100		
58	35.8	29.0	43.6

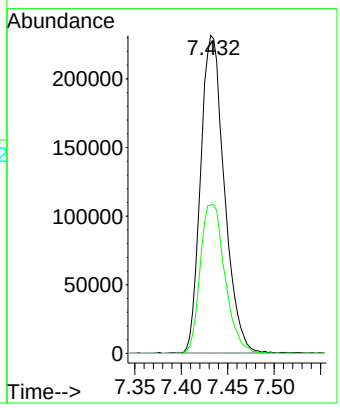




#51
2-Hexanone
Concen: 8.741 ppbv
RT: 7.432 min Scan# 22
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 410889

Ion	Ratio	Lower	Upper
43	100		
58	48.9	39.7	59.5
98	0.0	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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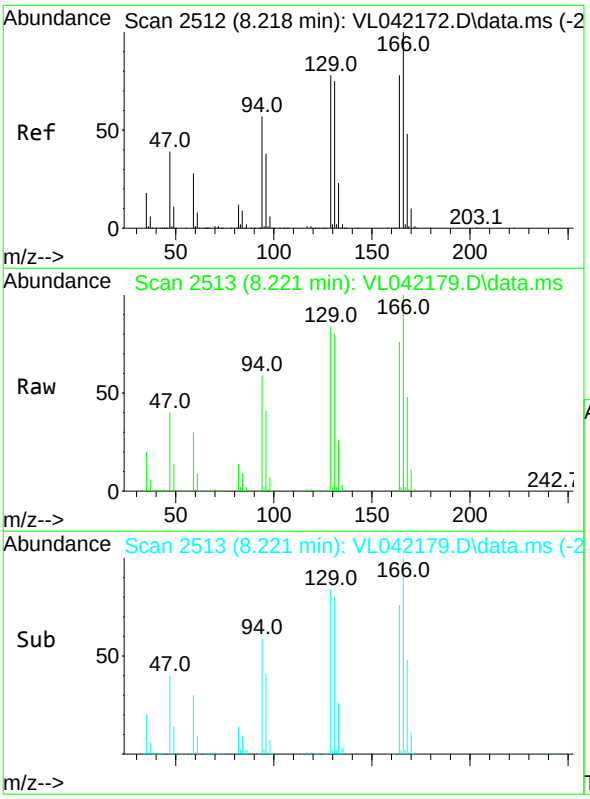
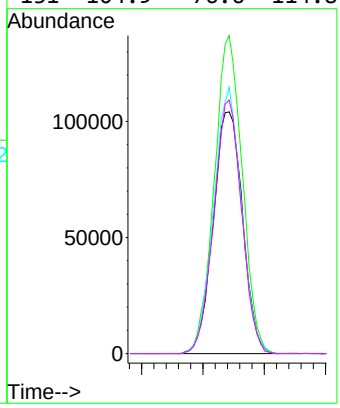
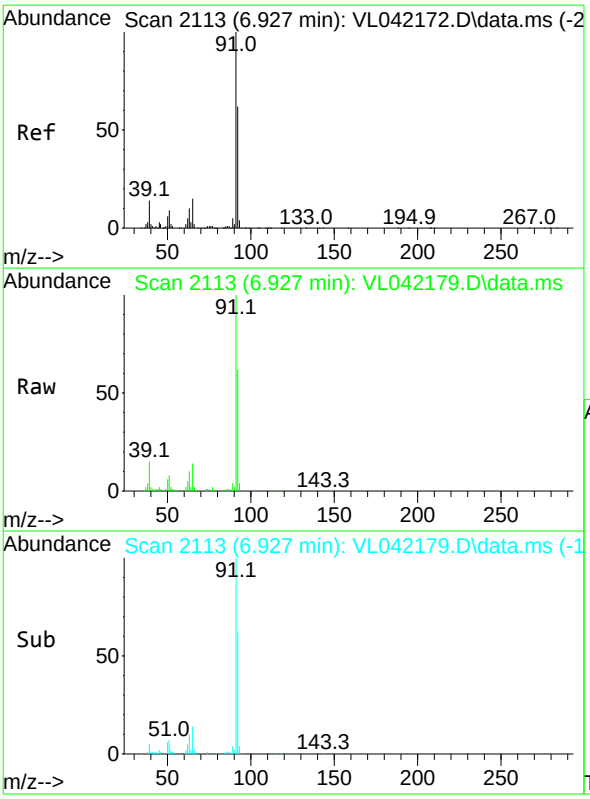


#52
Tetrachloroethene
Concen: 8.855 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:164 Resp: 173420

Ion	Ratio	Lower	Upper
164	100		
166	131.6	102.5	153.7
129	110.1	79.8	119.8
131	104.9	76.6	114.8

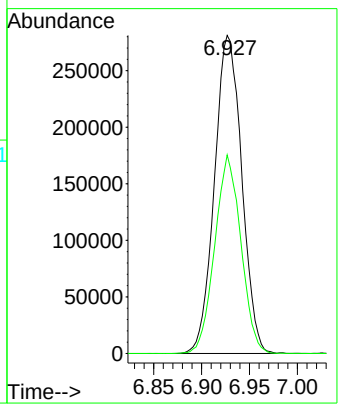




#53
Toluene
Concen: 9.514 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 556897

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.4	72.6



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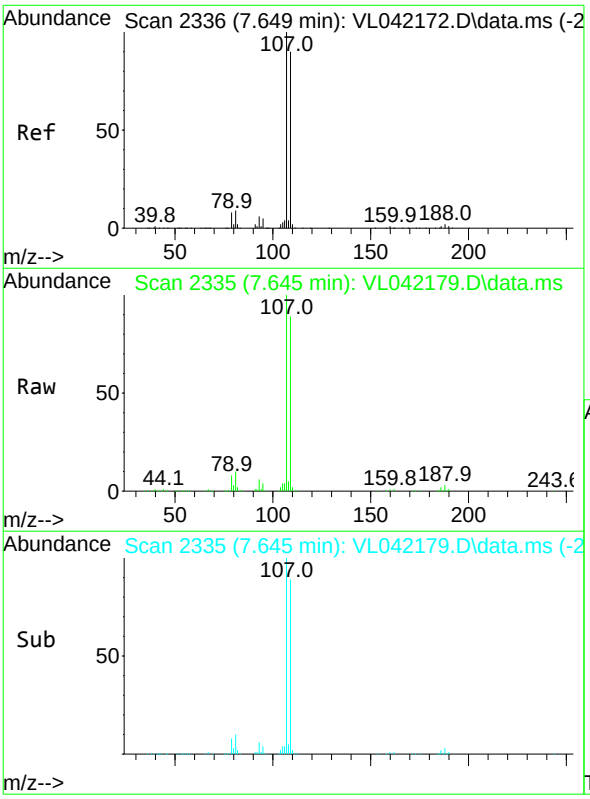
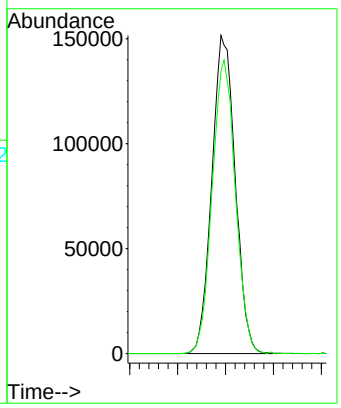
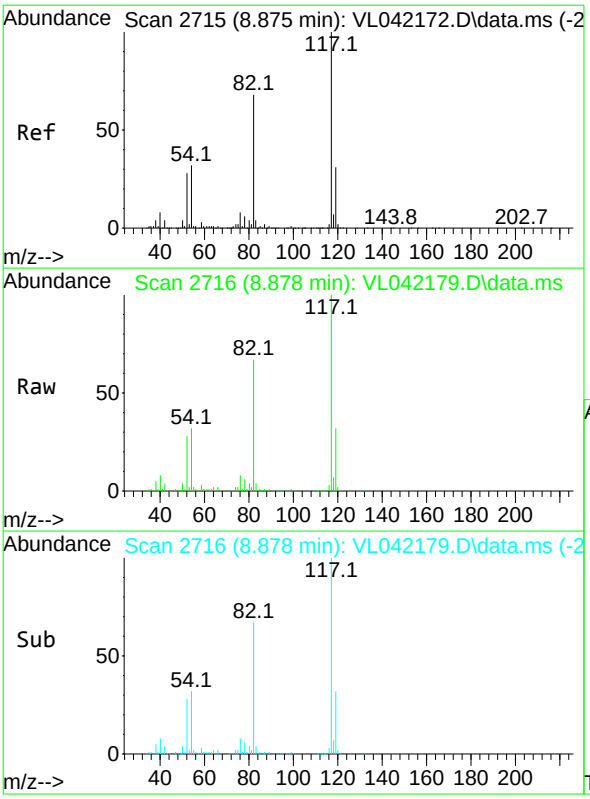


#54
1,2-Dibromoethane
Concen: 9.695 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:107 Resp: 256930

Ion	Ratio	Lower	Upper
107	100		
109	88.9	72.2	108.4

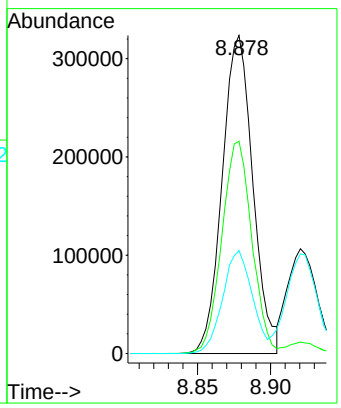




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:117 Resp: 473357

Ion	Ratio	Lower	Upper
117	100		
82	68.7	55.8	83.6
119	31.2	25.5	38.3



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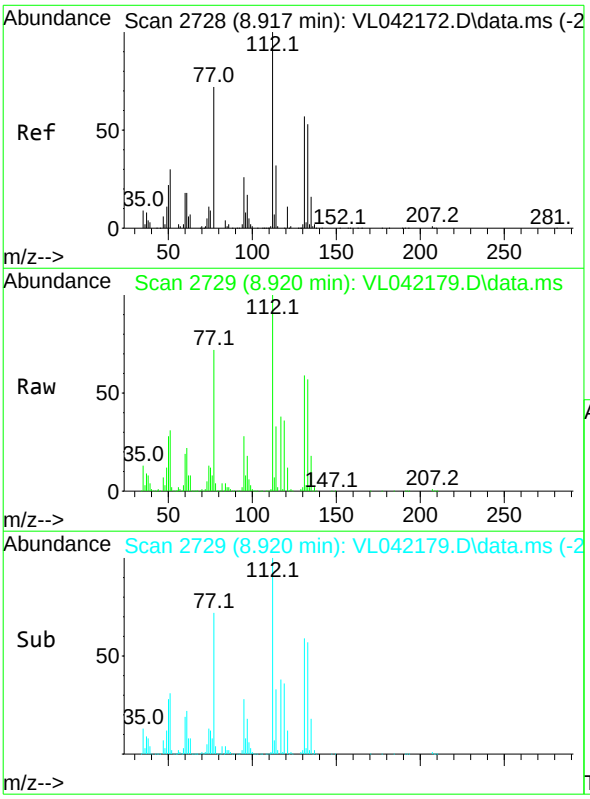
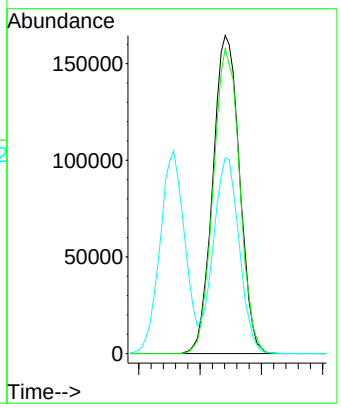
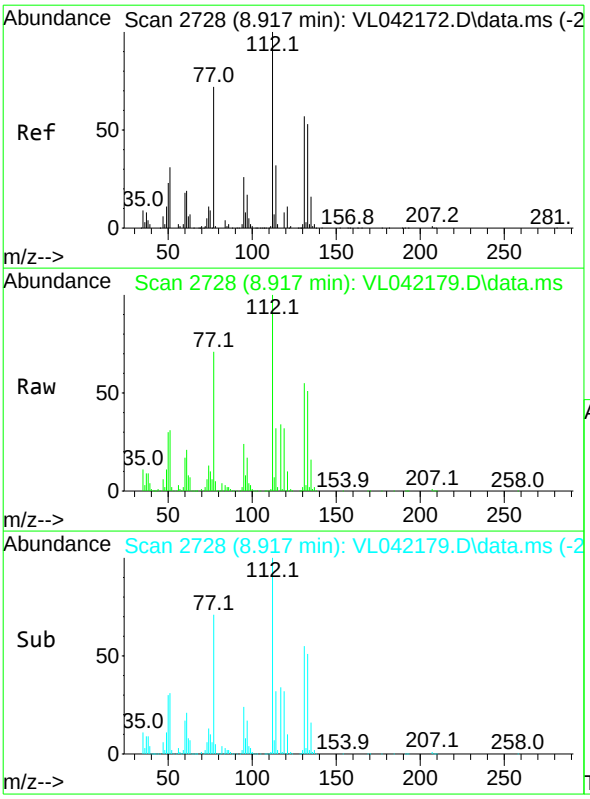


#56
1,1,1,2-Tetrachloroethane
Concen: 9.567 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:131 Resp: 249270

Ion	Ratio	Lower	Upper
131	100		
133	95.0	76.6	114.8
119	61.3	49.8	74.6

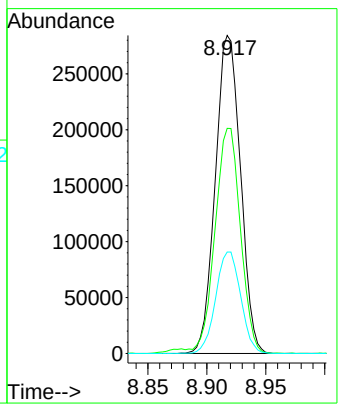




#57
Chlorobenzene
Concen: 9.411 ppbv
RT: 8.917 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:112 Resp: 422531

Ion	Ratio	Lower	Upper
112	100		
77	70.6	58.2	87.2
114	31.9	29.1	35.5



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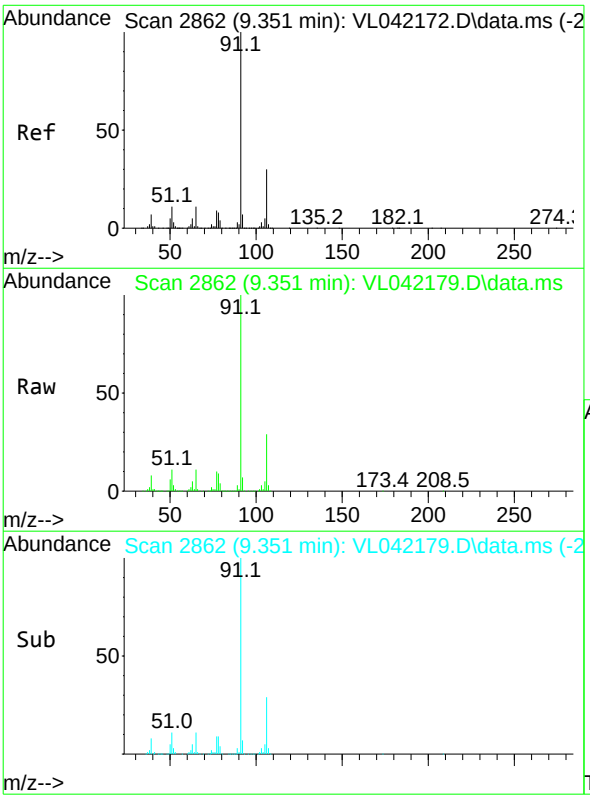
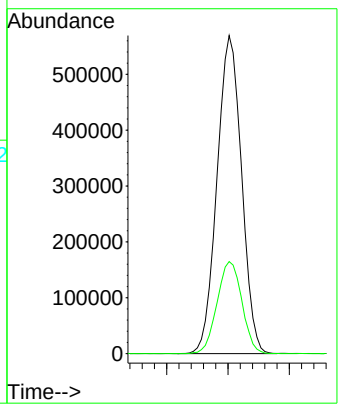
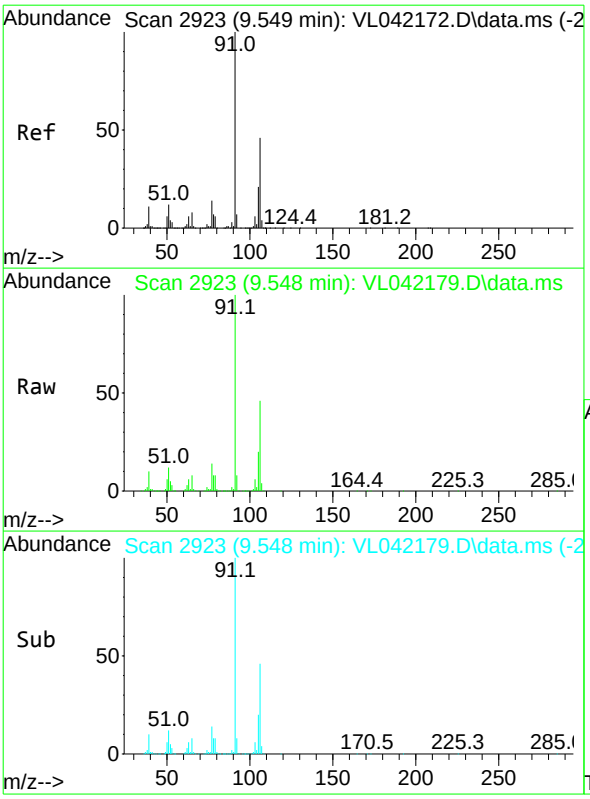


#58
Ethyl Benzene
Concen: 9.412 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 791360

Ion	Ratio	Lower	Upper
91	100		
106	28.9	24.2	36.2

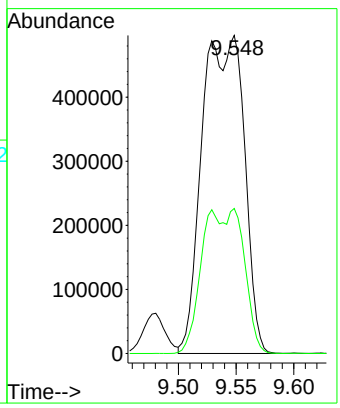




#59
m/p-Xylene
Concen: 18.772 ppbv m
RT: 9.548 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 1260340

Ion	Ratio	Lower	Upper
91	100		
106	45.3	36.4	54.6



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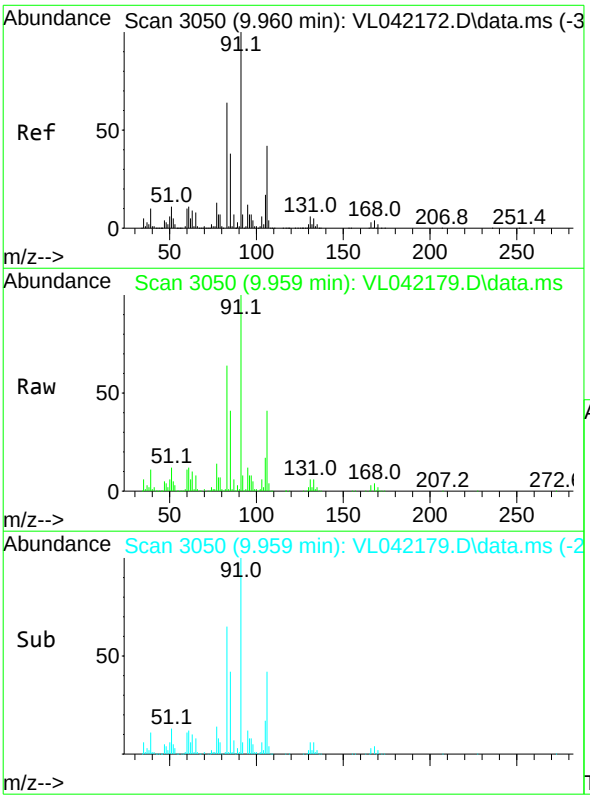
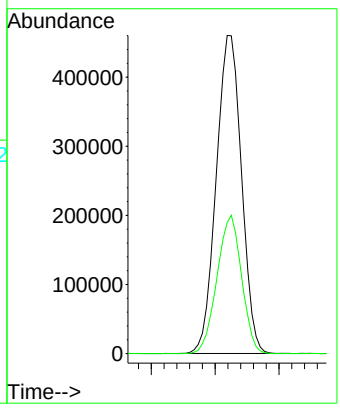
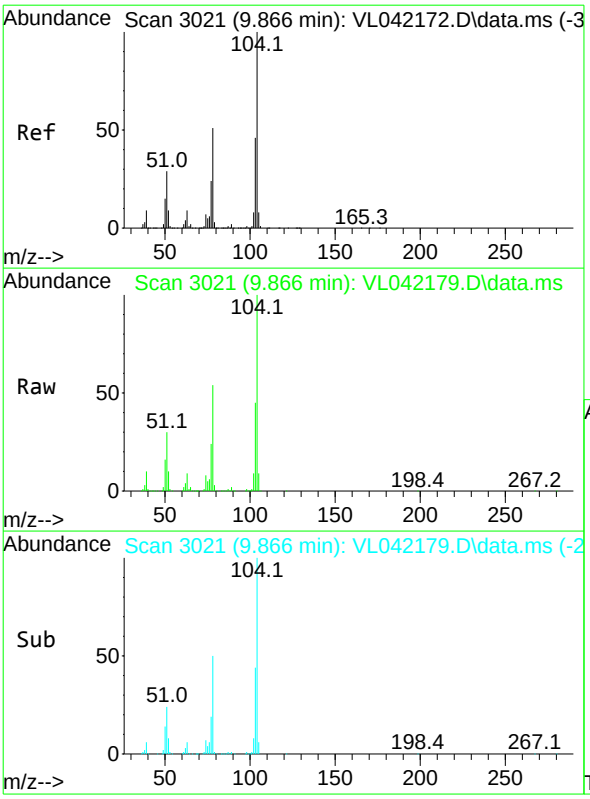


#60
o-Xylene
Concen: 9.404 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 632918

Ion	Ratio	Lower	Upper
91	100		
106	42.2	20.8	62.5





#61
Styrene
Concen: 9.488 ppbv
RT: 9.866 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:104 Resp: 315910

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	46.3	37.0	55.4

Instrument :
MSVOA_L
ClientSampleId :
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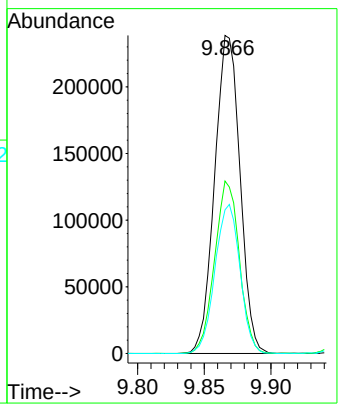
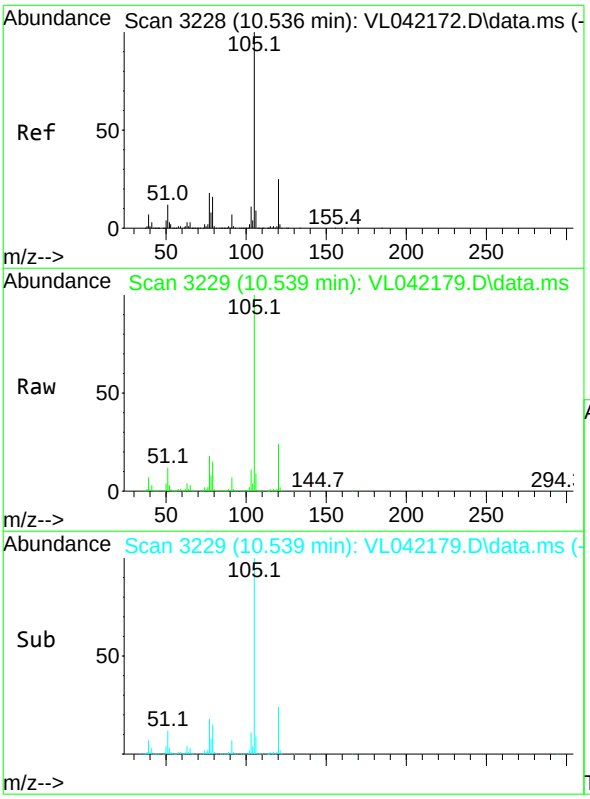
Supervised By :Mahesh Dadoda 04/03/2025

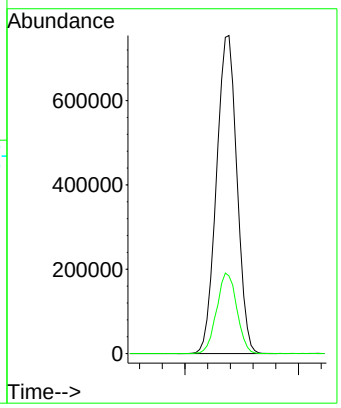


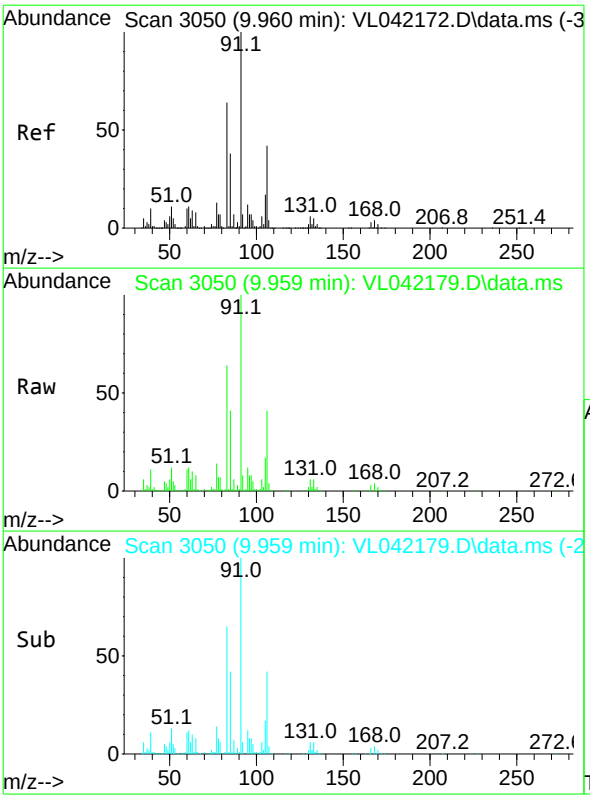


#62
Isopropylbenzene
Concen: 9.388 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 944938

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 9.357 ppbv
RT: 9.959 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 382635

Ion	Ratio	Lower	Upper
83	100		
131	9.7	4.8	14.4
85	63.9	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
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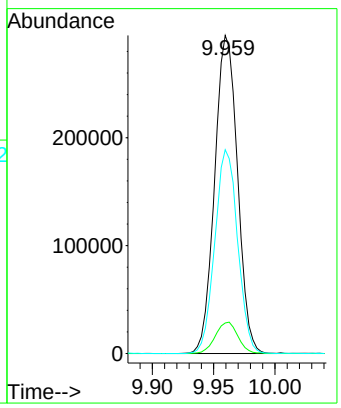
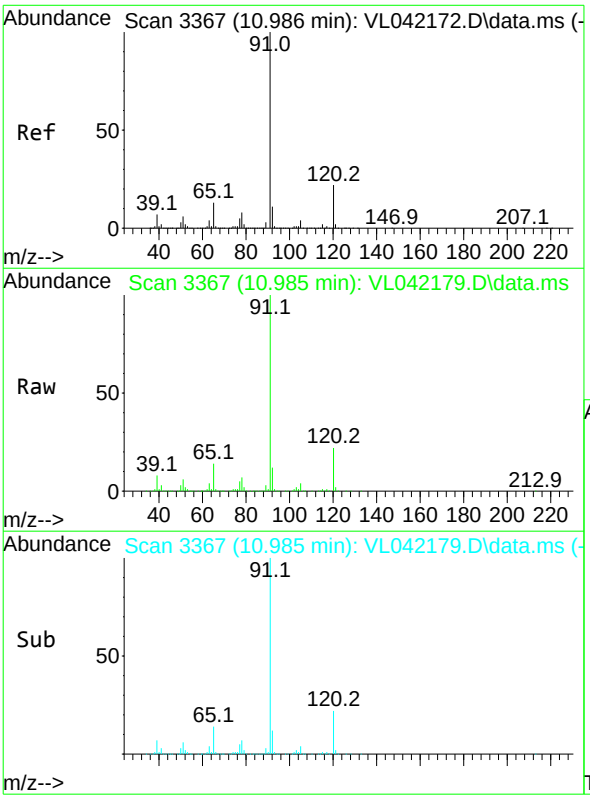
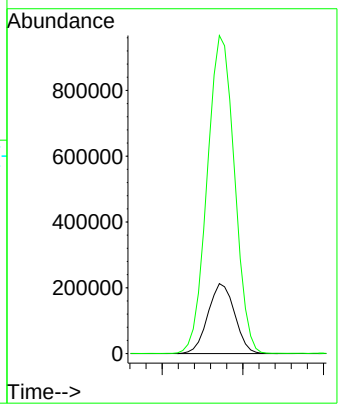


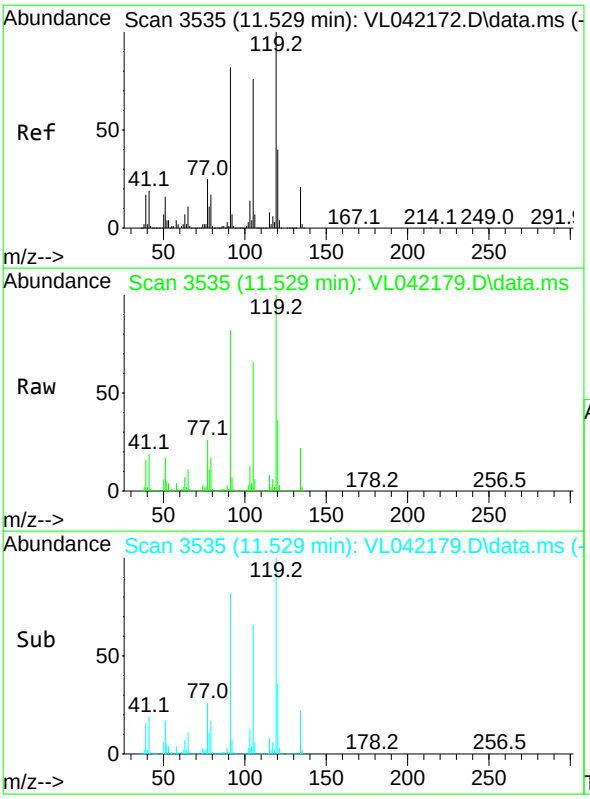


#64
n-propylbenzene
Concen: 9.439 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:120 Resp: 244547

Ion	Ratio	Lower	Upper
120	100		
91	465.9	376.9	565.3





#65
tert-Butylbenzene
Concen: 9.065 ppbv
RT: 11.529 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:119 Resp: 843828

Ion	Ratio	Lower	Upper
119	100		
91	84.3	66.0	99.0
134	21.2	16.7	25.1

Instrument :
MSVOA_L
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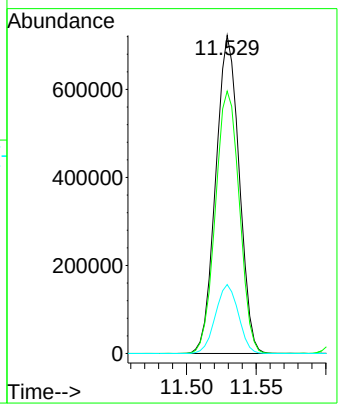
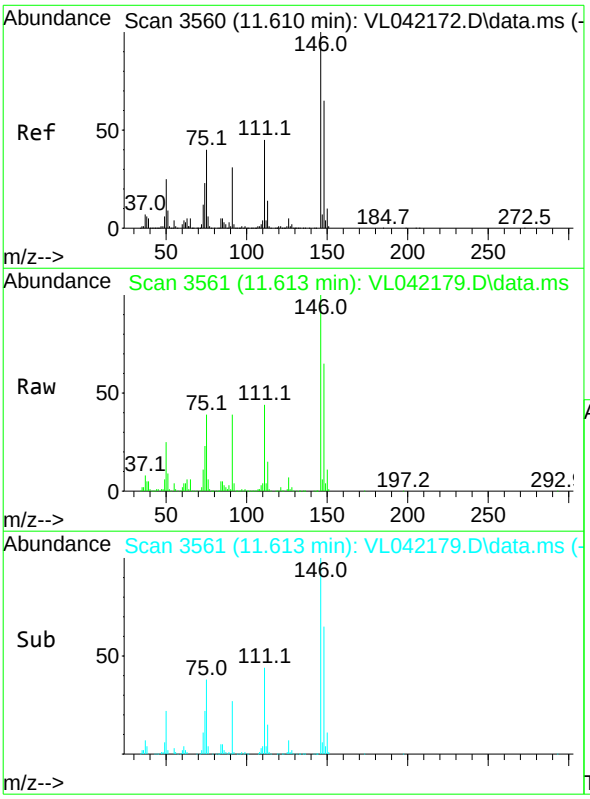
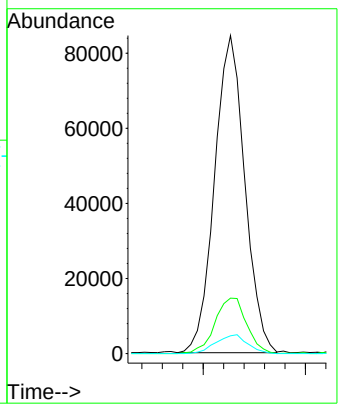


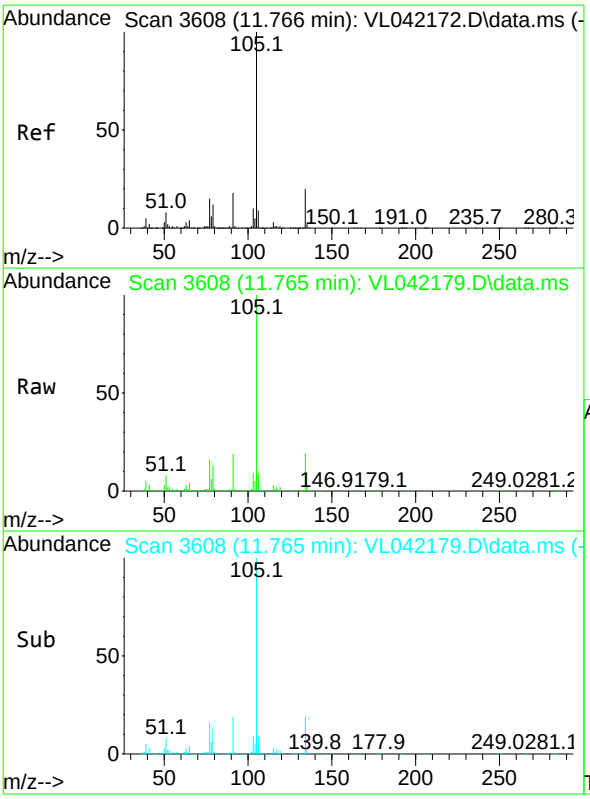


#66
Benzyl Chloride
Concen: 8.789 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 86804

Ion	Ratio	Lower	Upper
91	100		
126	18.5	13.8	20.6
128	6.2	4.5	6.7

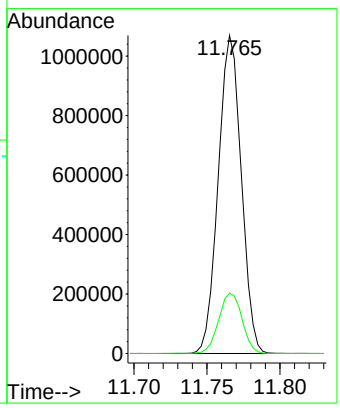




#67
sec-Butylbenzene
Concen: 9.063 ppbv
RT: 11.765 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 1172636

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
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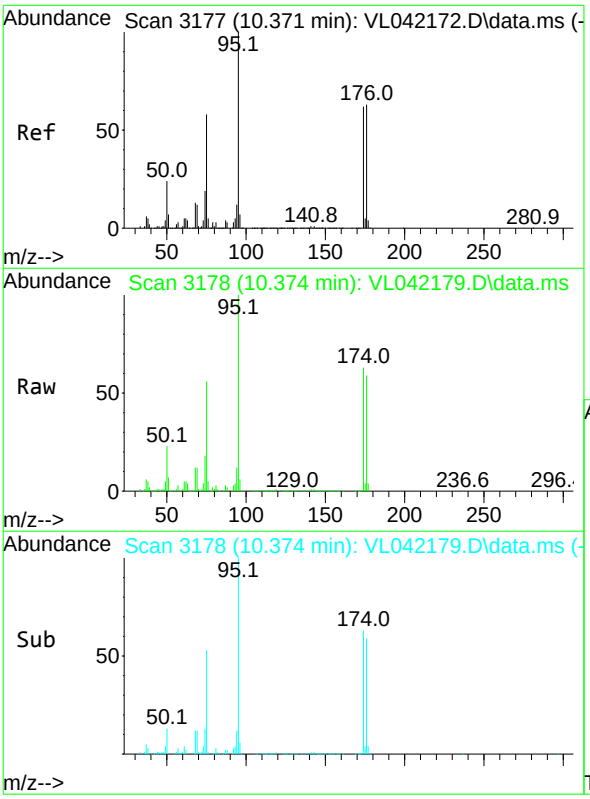
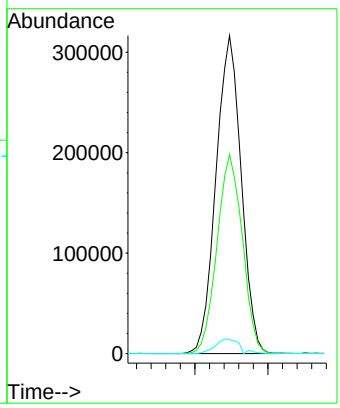
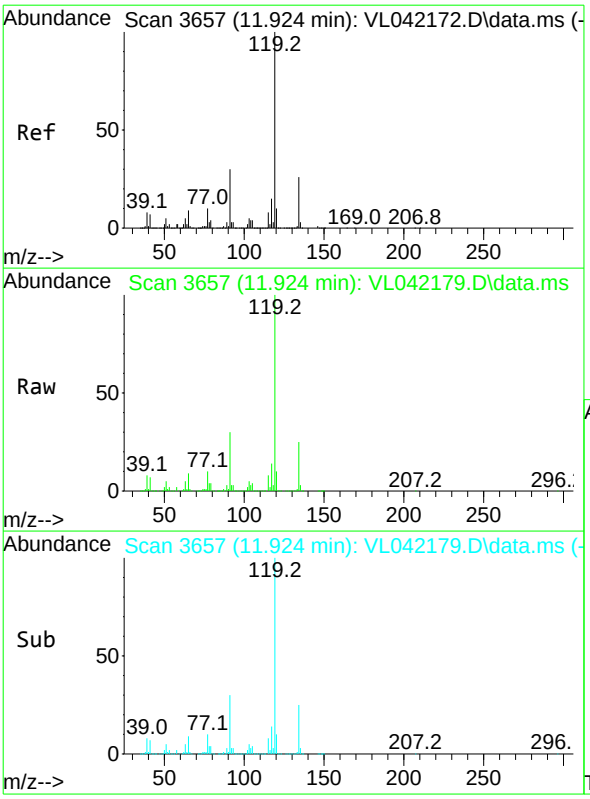


#68
1-Bromo-4-Fluorobenzene
Concen: 9.774 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 95 Resp: 379929

Ion	Ratio	Lower	Upper
95	100		
174	63.0	50.6	76.0
175	4.4	3.8	5.6





#69
p-Isopropyltoluene
Concen: 9.153 ppbv
RT: 11.924 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:119 Resp: 1019694

Ion	Ratio	Lower	Upper
119	100		
134	25.3	20.4	30.6
91	29.9	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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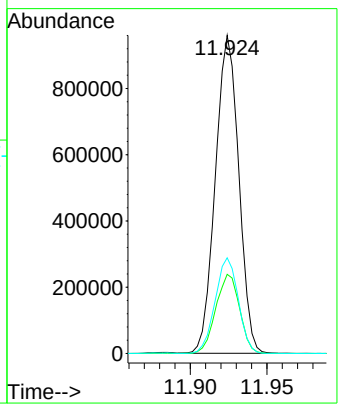
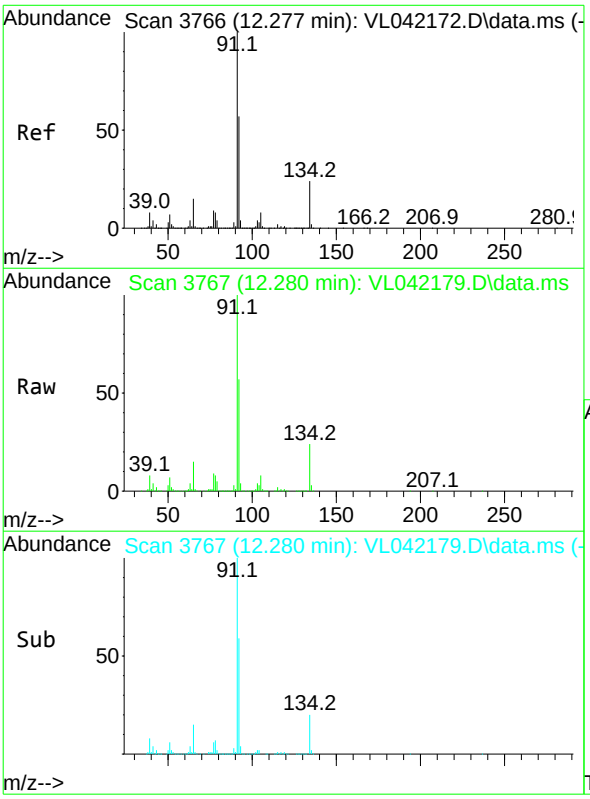
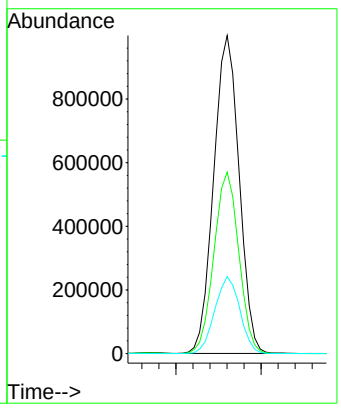


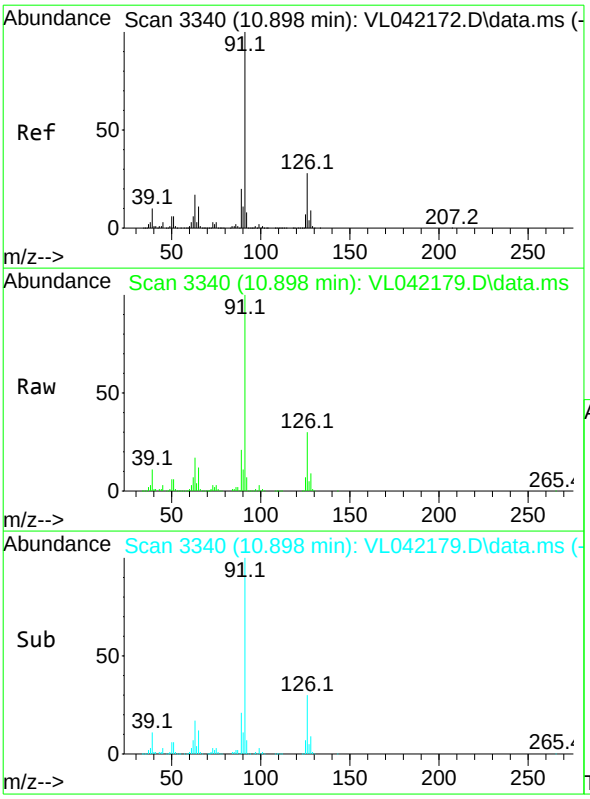


#70
n-Butylbenzene
Concen: 9.115 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 1038548

Ion	Ratio	Lower	Upper
91	100		
92	56.0	44.9	67.3
134	23.8	19.2	28.8

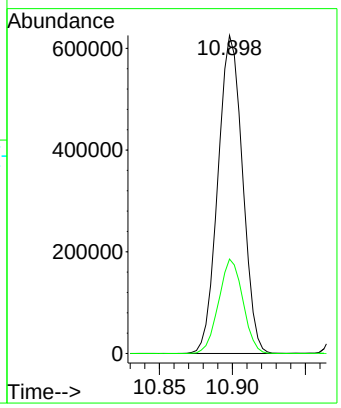




#71
2-Chlorotoluene
Concen: 9.382 ppbv
RT: 10.898 min Scan# 33
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 732874

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
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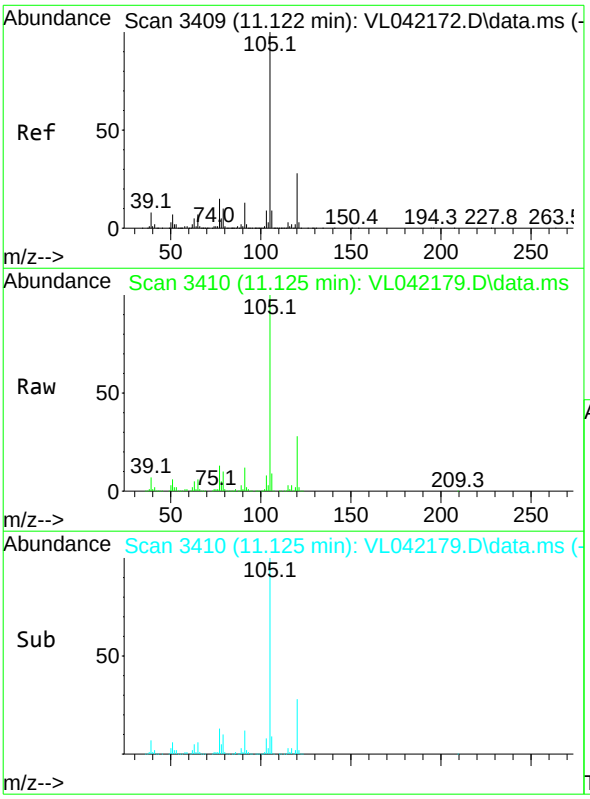
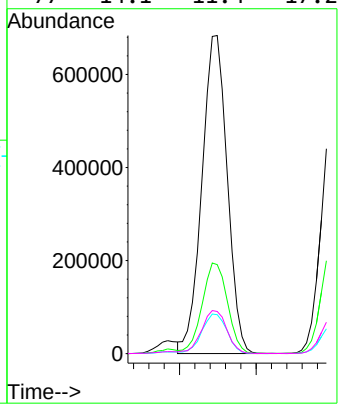
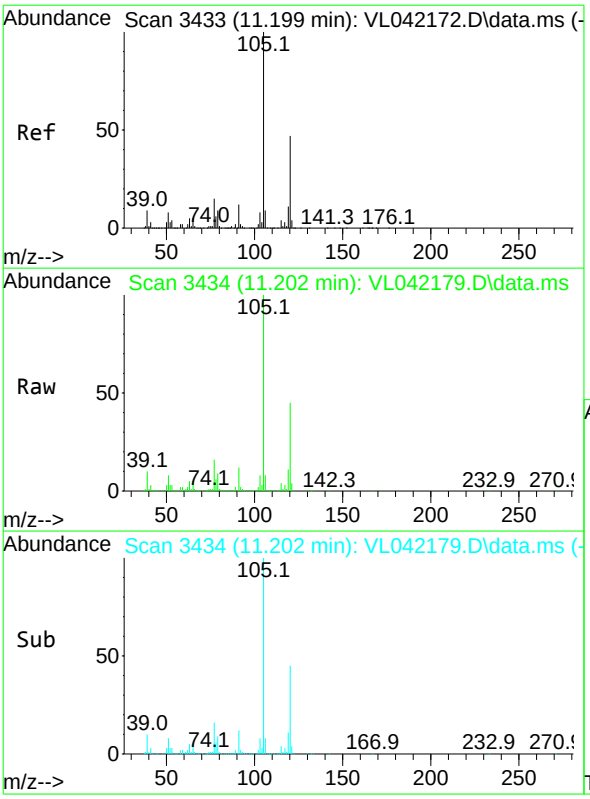


#72
4-Ethyltoluene
Concen: 9.370 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 785185

Ion	Ratio	Lower	Upper
105	100		
120	29.6	23.4	35.0
91	12.9	10.3	15.5
77	14.1	11.4	17.2

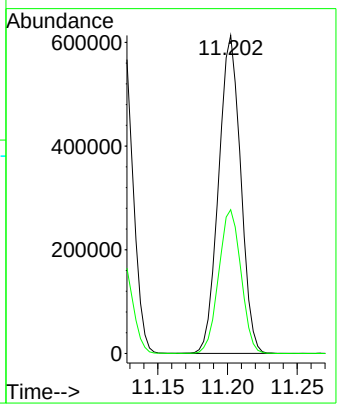




#73
1,3,5-Trimethylbenzene
Concen: 9.203 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 673541

Ion	Ratio	Lower	Upper
105	100		
120	45.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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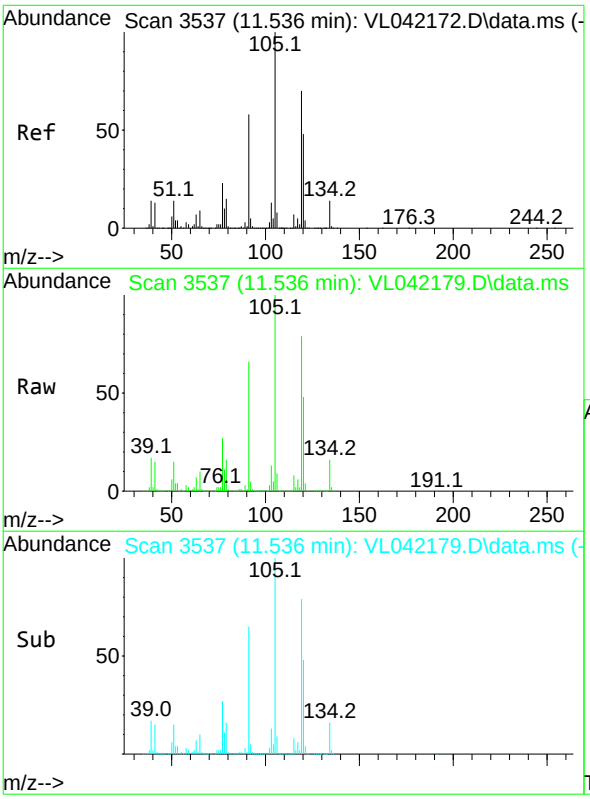
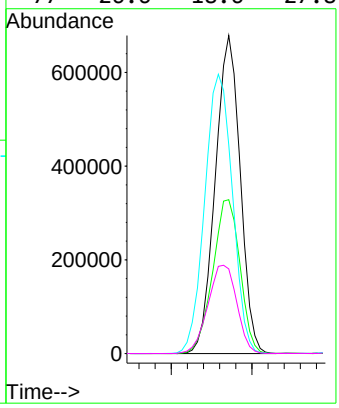
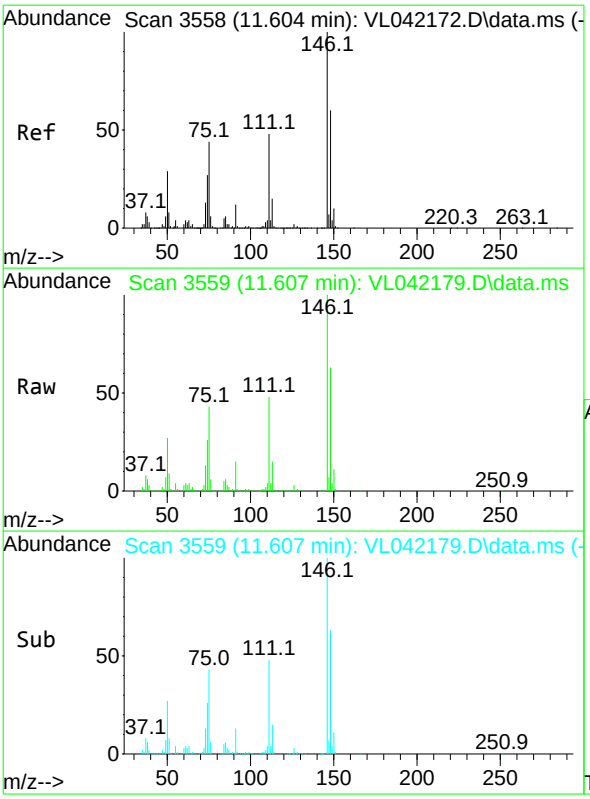


#74
1,2,4-Trimethylbenzene
Concen: 8.648 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 729155

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	65.6	46.2	69.2
77	26.6	18.6	27.8

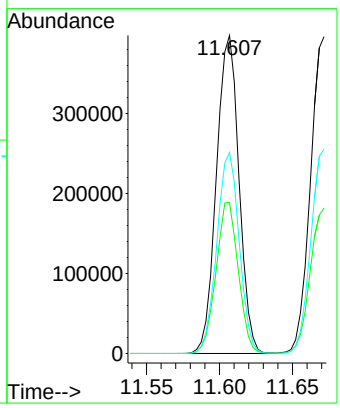




#75
1,3-Dichlorobenzene
Concen: 9.224 ppbv
RT: 11.607 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 426573

Ion	Ratio	Lower	Upper
146	100		
111	47.2	23.8	71.2
148	62.9	31.9	95.9



Instrument :
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ClientSampleId :
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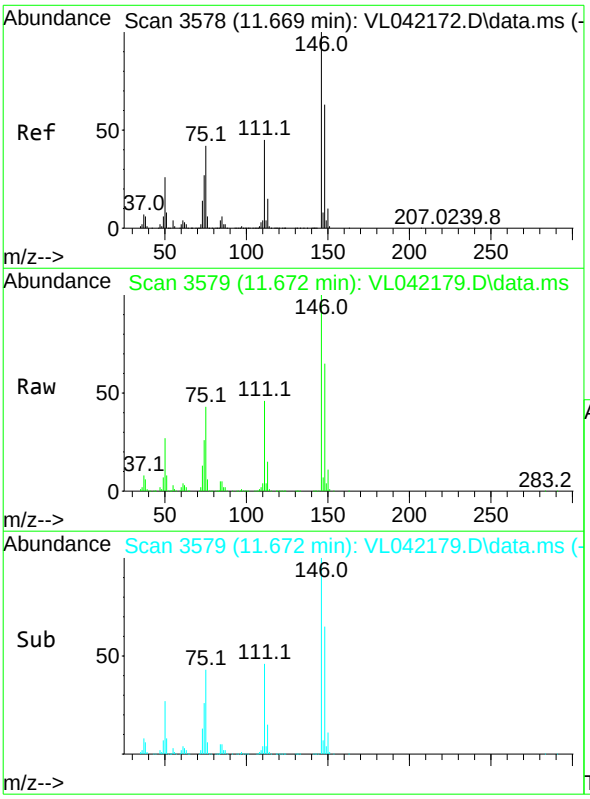
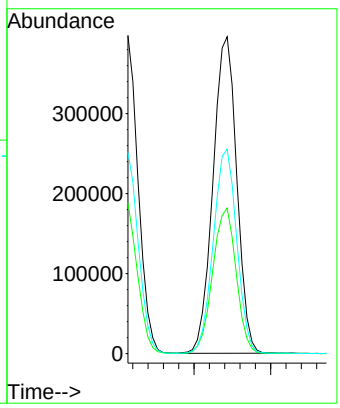
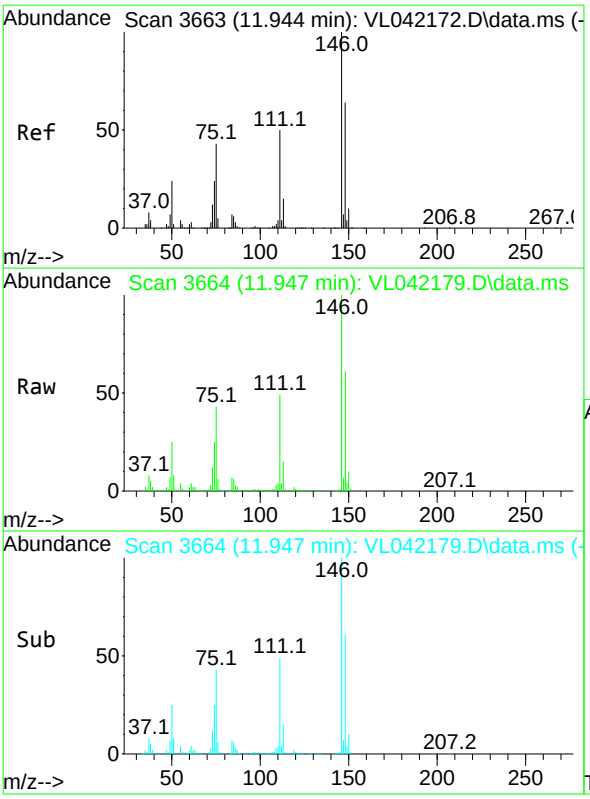


#76
1,4-Dichlorobenzene
Concen: 9.263 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 426318

Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.0	69.0
148	64.1	31.9	95.7

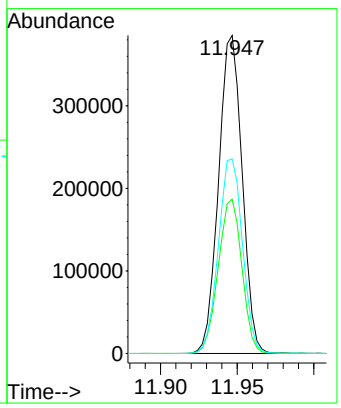




#77
1,2-Dichlorobenzene
Concen: 9.154 ppbv
RT: 11.947 min Scan# 36
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 412180

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	62.8	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
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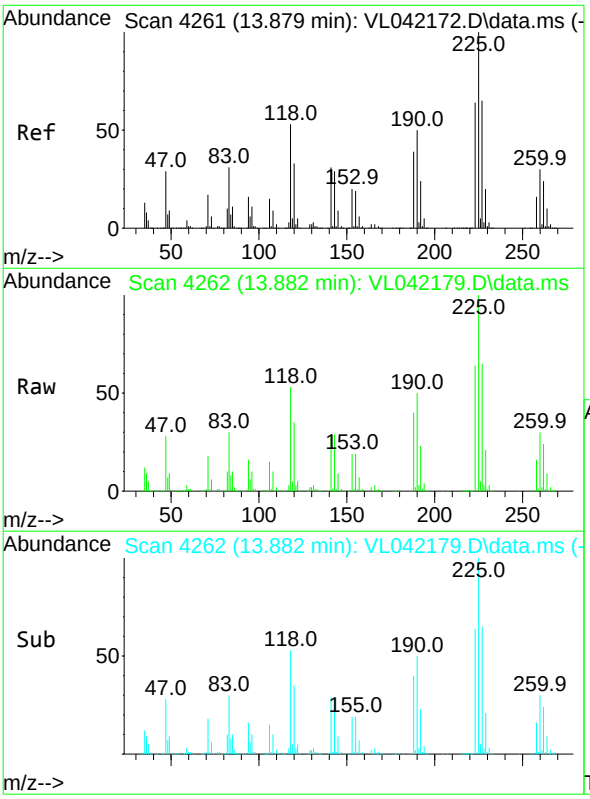
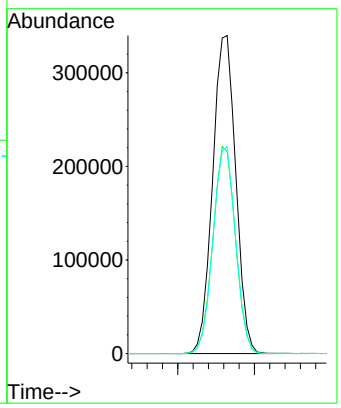
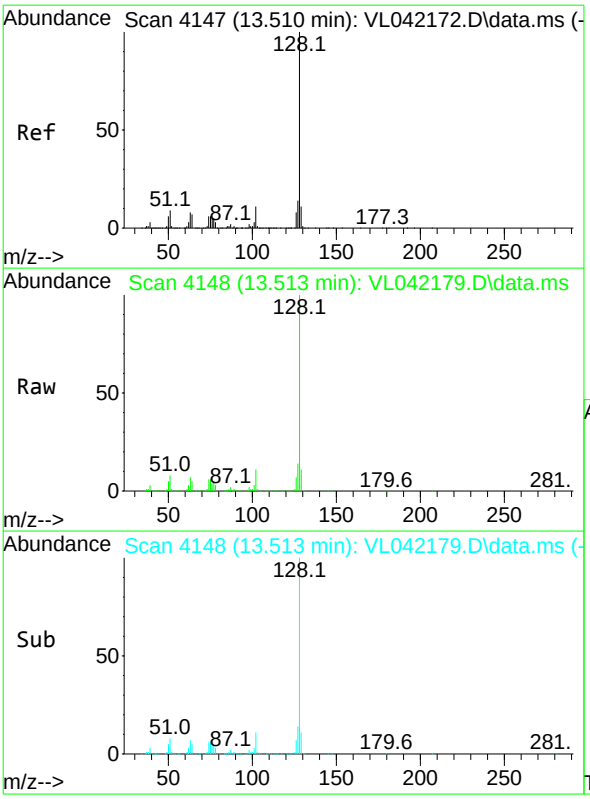


#78
Hexachloro-1,3-Butadiene
Concen: 7.776 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:225 Resp: 356386

Ion	Ratio	Lower	Upper
225	100		
223	63.4	50.6	76.0
227	63.4	51.2	76.8

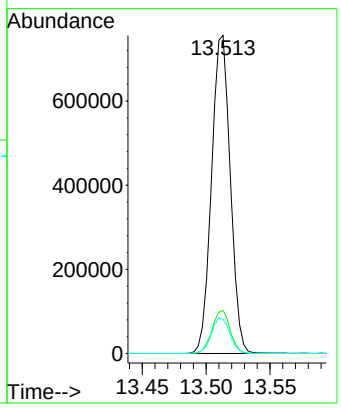




#79
Naphthalene
Concen: 8.385 ppbv
RT: 13.513 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:128 Resp: 773311

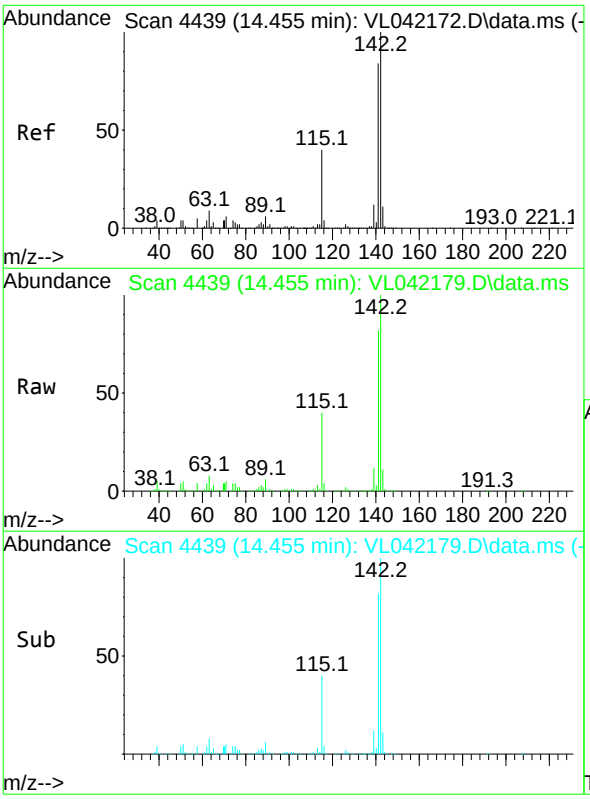
Ion	Ratio	Lower	Upper
128	100		
127	13.6	10.8	16.2
129	10.7	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
APPROVED

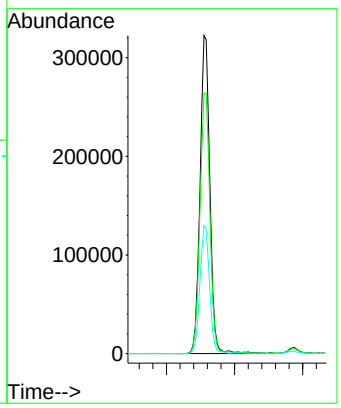
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

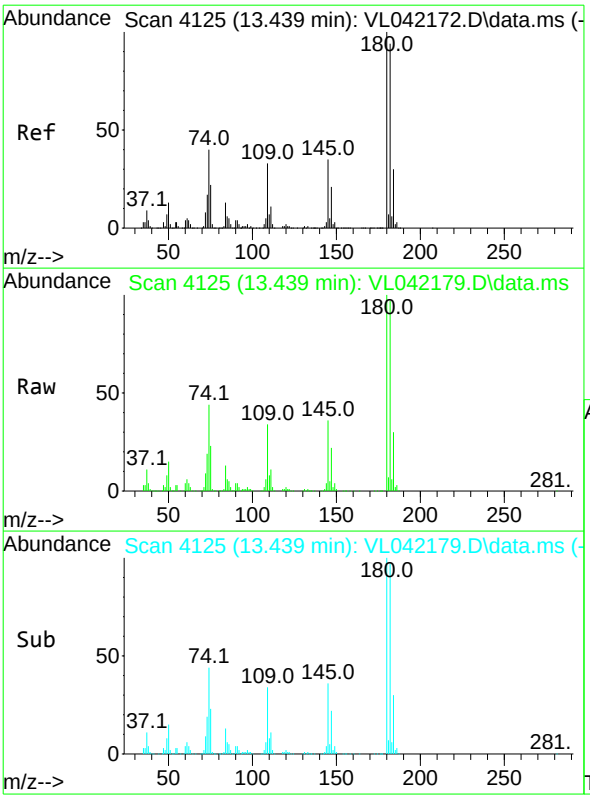


#80
Naphthalene,2-methyl-
Concen: 7.151 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:142 Resp: 323443

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	39.8	31.6	47.4

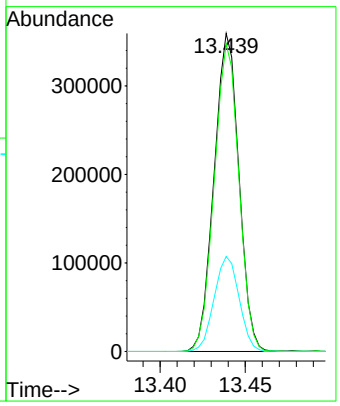




#81
1,2,4-Trichlorobenzene
Concen: 8.553 ppbv
RT: 13.439 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:180 Resp: 363863

Ion	Ratio	Lower	Upper
180	100		
182	96.2	75.1	112.7
184	30.1	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 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	93	0.00
2	T	Dichlorodifluoromethane	1.476	1.409	4.5	94	0.00
3		Chlorodifluoromethane	1.508	1.417	6.0	91	0.00
4		Chloromethane	0.603	0.565	6.3	92	0.00
5	T	Vinyl Chloride	0.639	0.548	14.2	93	0.00
6	T	Bromomethane	0.273	0.241	11.7	87	0.00
7		Chloroethane	0.242	0.215	11.2	88	0.00
8	T	Dichlorotetrafluoroethane	1.257	1.226	2.5	94	0.00
9	T	Propene	0.691	0.604	12.6	85	0.00
10	T	Heptane	1.839	1.714	6.8	89	0.00
11	T	Trichlorofluoromethane	1.437	1.358	5.5	95	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.181	1.113	5.8	93	0.00
13		Ethanol	0.065	0.033#	49.2#	108	0.00
14	T	Bromoethene	0.452	0.422	6.6	94	0.00
15	T	Acetone	1.399	1.137	18.7	95	0.00
16	T	1,3-Butadiene	0.683	0.561	17.9	91	0.00
17		tert-Butyl alcohol	1.742	1.584	9.1	91	0.00
18	T	1,1-Dichloroethene	0.552	0.500	9.4	92	0.00
19	T	Isopropyl Alcohol	0.789	0.704	10.8	93	0.00
20	T	Methylene Chloride	0.521	0.418	19.8	89	0.00
21	T	Allyl Chloride	0.986	0.903	8.4	93	0.00
22	T	trans-1,2-Dichloroethene	0.638	0.580	9.1	92	0.00
23	T	Vinyl Acetate	0.605	0.518	14.4	97	0.00
24	T	1,1-Dichloroethane	1.183	1.135	4.1	94	0.00
25	T	Ethyl Acetate	3.630	3.399	6.4	92	0.00
26	T	Hexane	1.402	1.326	5.4	93	0.00
27	T	Carbon Disulfide	1.503	1.427	5.1	93	0.00
28	T	Methyl tert-Butyl Ether	0.873	0.840	3.8	94	0.00
29	T	Chloroform	2.052	1.974	3.8	95	0.00
30	T	Cyclohexane	1.217	1.135	6.7	91	0.00
31	T	cis-1,2-Dichloroethene	1.423	1.345	5.5	91	0.00
32	T	1,1,1-Trichloroethane	2.349	2.096	10.8	95	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	91	0.00
34	T	2-Butanone	0.725	0.665	8.3	91	0.00
35	T	Carbon Tetrachloride	0.781	0.730	6.5	95	0.00
36	T	Benzene	0.991	0.926	6.6	91	0.00
37	T	1,2-Dichloroethane	0.568	0.549	3.3	93	0.00
38	T	Trichloroethene	0.414	0.385	7.0	94	0.00
39	T	1,2-Dichloropropane	0.361	0.343	5.0	93	0.00
40	T	1,4-Dioxane	0.192	0.162	15.6	87	0.00
41	T	Tetrahydrofuran	0.418	0.394	5.7	90	0.00
42	T	Bromodichloromethane	0.782	0.771	1.4	92	0.00
43		Methyl Methacrylate	0.420	0.392	6.7	89	0.00
44	T	2,2,4-Trimethylpentane	1.675	1.581	5.6	90	0.00
45	T	t-1,3-Dichloropropene	0.450	0.426	5.3	89	0.00
46	T	cis-1,3-Dichloropropene	0.552	0.532	3.6	88	0.00
47	T	1,1,2-Trichloroethane	0.382	0.368	3.7	92	0.00
48	T	Dibromochloromethane	0.647	0.648	-0.2	93	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 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	0.581	0.572	1.5	90	0.00
50	T	4-Methyl-2-Pentanone	1.149	1.005	12.5	89	0.00
51	T	2-Hexanone	0.944	0.825	12.6	89	0.00
52	T	Tetrachloroethene	0.393	0.348	11.5	93	0.00
53	T	Toluene	1.175	1.118	4.9	91	0.00
54	T	1,2-Dibromoethane	0.532	0.516	3.0	93	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00
56		1,1,1,2-Tetrachloroethane	0.550	0.527	4.2	94	0.00
57	T	Chlorobenzene	0.949	0.893	5.9	93	0.00
58	T	Ethyl Benzene	1.776	1.672	5.9	91	0.00
59	T	m/p-Xylene	1.418	1.331	6.1	92	0.00
60	T	o-Xylene	1.422	1.337	6.0	92	0.00
61	T	Styrene	0.703	0.667	5.1	89	0.00
62		Isopropylbenzene	2.126	1.996	6.1	93	0.00
63	T	1,1,2,2-Tetrachloroethane	0.864	0.808	6.5	93	0.00
64		n-propylbenzene	0.547	0.517	5.5	94	0.00
65		tert-Butylbenzene	1.966	1.783	9.3	94	0.00
66	T	Benzyl Chloride	0.209	0.183	12.4	82	0.00
67		sec-Butylbenzene	2.733	2.477	9.4	94	0.00
68	S	1-Bromo-4-Fluorobenzene	0.821	0.803	2.2	90	0.00
69		p-Isopropyltoluene	2.354	2.154	8.5	94	0.00
70		n-Butylbenzene	2.407	2.194	8.8	94	0.00
71		2-Chlorotoluene	1.650	1.548	6.2	92	0.00
72	T	4-Ethyltoluene	1.770	1.659	6.3	93	0.00
73	T	1,3,5-Trimethylbenzene	1.546	1.423	8.0	93	0.00
74	T	1,2,4-Trimethylbenzene	1.781	1.540	13.5	93	0.00
75	T	1,3-Dichlorobenzene	0.977	0.901	7.8	93	0.00
76	T	1,4-Dichlorobenzene	0.972	0.901	7.3	92	0.00
77	T	1,2-Dichlorobenzene	0.951	0.871	8.4	93	0.00
78	T	Hexachloro-1,3-Butadiene	0.968	0.753	22.2	86	0.00
79	T	Naphthalene	1.948	1.634	16.1	82	0.00
80	T	Naphthalene,2-methyl-	0.955	0.683	28.5	63	0.00
81	T	1,2,4-Trichlorobenzene	0.899	0.769	14.5	82	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG No.: Q1669

Instrument ID: MSVOA_L Calibration Date/Time: 03/31/2025 08:51

Lab File ID: VL042201.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.476	1.509		2.24	30
Chloromethane	0.603	0.570		-5.47	30
Vinyl Chloride	0.639	0.550		-13.93	30
Bromomethane	0.273	0.252		-7.69	30
Chloroethane	0.242	0.221		-8.68	30
Tetrahydrofuran	0.418	0.371		-11.24	30
Trichlorofluoromethane	1.437	1.435		-0.14	30
1,1,2-Trichlorotrifluoroethane	1.181	1.132		-4.15	30
Dichlorotetrafluoroethane	1.257	1.261		0.32	30
tert-Butyl alcohol	1.742	1.563		-10.28	30
Heptane	1.839	1.622		-11.8	30
1,1-Dichloroethene	0.552	0.513		-7.07	30
Acetone	1.399	1.200		-14.22	30
Carbon Disulfide	1.503	1.425		-5.19	30
Methyl tert-Butyl Ether	0.873	1.103		26.35	30
Methylene Chloride	0.521	0.420		-19.39	30
trans-1,2-Dichloroethene	0.638	0.569		-10.81	30
1,1-Dichloroethane	1.183	1.151		-2.7	30
Cyclohexane	1.217	1.115		-8.38	30
2-Butanone	0.725	0.655		-9.65	30
Carbon Tetrachloride	0.781	0.807		3.33	30
cis-1,2-Dichloroethene	1.423	1.359		-4.5	30
Chloroform	2.052	2.093		2	30
1,1,1-Trichloroethane	2.349	2.228		-5.15	30
2,2,4-Trimethylpentane	1.675	1.532		-8.54	30
Benzene	0.991	0.927		-6.46	30
1,2-Dichloroethane	0.568	0.593		4.4	30
Trichloroethene	0.414	0.391		-5.56	30
1,2-Dichloropropane	0.361	0.333		-7.76	30
Bromodichloromethane	0.782	0.811		3.71	30
4-Methyl-2-Pentanone	1.149	0.949		-17.41	30
Toluene	1.175	1.070		-8.94	30
t-1,3-Dichloropropene	0.450	0.413		-8.22	30
cis-1,3-Dichloropropene	0.552	0.505		-8.51	30
1,1,2-Trichloroethane	0.382	0.366		-4.19	30
Dibromochloromethane	0.647	0.659		1.86	30
1,2-Dibromoethane	0.532	0.520		-2.26	30
Tetrachloroethene	0.393	0.337		-14.25	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1669 SAS No.: Q1669 SDG No.: Q1669

Instrument ID: MSVOA_L Calibration Date/Time: 03/31/2025 08:51

Lab File ID: VL042201.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Chlorobenzene	0.949	0.917		-3.37	30
Ethyl Benzene	1.776	1.678		-5.52	30
m/p-Xylene	1.418	1.371		-3.32	30
o-Xylene	1.422	1.355		-4.71	30
Styrene	0.703	0.663		-5.69	30
Bromoform	0.581	0.568		-2.24	30
1,1,2,2-Tetrachloroethane	0.864	0.822		-4.86	30
2-Chlorotoluene	1.650	1.593		-3.45	30
1,3,5-Trimethylbenzene	1.546	1.501		-2.91	30
1,2,4-Trimethylbenzene	1.781	1.639		-7.97	30
1,3-Dichlorobenzene	0.977	0.967		-1.02	30
1,4-Dichlorobenzene	0.972	0.974		0.21	30
1,2-Dichlorobenzene	0.951	0.940		-1.16	30
1,2,4-Trichlorobenzene	0.899	0.879		-2.22	30
Hexachloro-1,3-Butadiene	0.968	0.813		-16.01	30
1,3-Butadiene	0.683	0.595		-12.88	30
Naphthalene	1.948	1.962		0.72	30
4-Ethyltoluene	1.770	1.731		-2.2	30
1-Bromo-4-Fluorobenzene	0.821	0.837		1.95	30
Hexane	1.402	1.295		-7.63	30
Allyl Chloride	0.986	0.895		-9.23	30
1,4-Dioxane	191.626	167.508		-12.59	30
Methyl Methacrylate	0.420	0.370		-11.9	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 01:49:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	161478	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.982	114	460403	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.904	117	424671	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	355372	10.190	ppbv	0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.506	85	243672	10.220	ppbv	98
3) Chlorodifluoromethane	1.483	51	233931	9.604	ppbv	96
4) Chloromethane	1.538	50	91967	9.439	ppbv	99
5) Vinyl Chloride	1.586	62	88747	8.595	ppbv	96
6) Bromomethane	1.674	94	40765	9.232	ppbv	98
7) Chloroethane	1.713	64	35638	9.112	ppbv	98
8) Dichlorotetrafluoroethane	1.561	85	203570	10.026	ppbv	96
9) Propene	1.489	41	95128	8.521	ppbv	97
10) Heptane	5.011	43	261936	8.821	ppbv	99
11) Trichlorofluoromethane	1.887	101	231721	9.988	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.150	101	182824	9.588	ppbv	98
13) Ethanol	1.729	45	4473	4.238	ppbv	87
14) Bromoethene	1.790	108	66903	9.159	ppbv	99
15) Acetone	1.842	43	193773	8.580	ppbv	96
16) 1,3-Butadiene	1.616	39	96046	8.709	ppbv	97
17) tert-Butyl alcohol	2.049	59	252420	8.974	ppbv	99
18) 1,1-Dichloroethene	2.043	96	82868	9.296	ppbv	100
19) Isopropyl Alcohol	1.894	45	115180	9.039	ppbv	98
20) Methylene Chloride	2.072	84	67877	8.070	ppbv	94
21) Allyl Chloride	2.108	41	144599	9.079	ppbv	98
22) trans-1,2-Dichloroethene	2.353	96	91942	8.924	ppbv	96
23) Vinyl Acetate	2.473	43	82938	8.485	ppbv #	96
24) 1,1-Dichloroethane	2.421	63	185830	9.730	ppbv	99
25) Ethyl Acetate	2.852	43	536366	9.151	ppbv	99
26) Hexane	2.842	57	209103	9.236	ppbv	98
27) Carbon Disulfide	2.159	76	230171	9.481	ppbv	98
28) Methyl tert-Butyl Ether	2.454	73	178093	12.635	ppbv	92
29) Chloroform	2.865	83	337970	10.200	ppbv	99
30) Cyclohexane	3.878	84	180110	9.162	ppbv	95
31) cis-1,2-Dichloroethene	2.735	61	219389	9.545	ppbv	98
32) 1,1,1-Trichloroethane	3.386	97	359718	9.483	ppbv	98
34) 2-Butanone	2.570	43	301334	9.026	ppbv	99
35) Carbon Tetrachloride	3.784	117	371691	10.335	ppbv	98
36) Benzene	3.677	78	426758	9.350	ppbv	98
37) 1,2-Dichloroethane	3.234	62	273137	10.453	ppbv	99
38) Trichloroethene	4.574	130	179999	9.452	ppbv	96
39) 1,2-Dichloropropane	4.338	63	153124	9.212	ppbv	94
40) 1,4-Dioxane	4.613	88	77121m	8.741	ppbv	
41) Tetrahydrofuran	3.069	42	170829	8.886	ppbv	100
42) Bromodichloromethane	4.516	83	373399	10.365	ppbv	99
43) Methyl Methacrylate	4.907	69	170312	8.814	ppbv	98
44) 2,2,4-Trimethylpentane	4.664	57	705253	9.143	ppbv	98
45) t-1,3-Dichloropropene	6.445	75	190040	9.167	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 01:49:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.632	75	232713	9.158	ppbv		96
47)	1,1,2-Trichloroethane	6.616	97	168373m	9.582	ppbv		
48)	Dibromochloromethane	7.416	129	303330	10.186	ppbv		100
49)	Bromoform	9.503	173	261484	9.780	ppbv		99
50)	4-Methyl-2-Pentanone	5.791	43	437050	8.261	ppbv		97
51)	2-Hexanone	7.464	43	351622	8.093	ppbv	#	96
52)	Tetrachloroethene	8.247	164	155203	8.574	ppbv		96
53)	Toluene	6.962	91	492717	9.106	ppbv		100
54)	1,2-Dibromoethane	7.675	107	239347	9.771	ppbv		100
56)	1,1,1,2-Tetrachloroethane	8.947	131	236930	10.136	ppbv		98
57)	Chlorobenzene	8.943	112	389475	9.669	ppbv		97
58)	Ethyl Benzene	9.374	91	712533	9.446	ppbv		98
59)	m/p-Xylene	9.571	91	1164678m	19.336	ppbv		
60)	o-Xylene	9.986	91	575224	9.526	ppbv		97
61)	Styrene	9.892	104	281518	9.424	ppbv		100
62)	Isopropylbenzene	10.558	105	874894	9.689	ppbv		99
63)	1,1,2,2-Tetrachloroethane	9.982	83	349199	9.518	ppbv		100
64)	n-propylbenzene	11.008	120	228400	9.826	ppbv		97
65)	tert-Butylbenzene	11.549	119	795482	9.526	ppbv		98
66)	Benzyl Chloride	11.633	91	72526	8.185	ppbv		99
67)	sec-Butylbenzene	11.785	105	1123267	9.677	ppbv		99
69)	p-Isopropyltoluene	11.940	119	967912	9.684	ppbv		99
70)	n-Butylbenzene	12.296	91	1006907	9.850	ppbv		98
71)	2-Chlorotoluene	10.918	91	676396	9.652	ppbv		98
72)	4-Ethyltoluene	11.141	105	734909	9.775	ppbv		100
73)	1,3,5-Trimethylbenzene	11.222	105	637499	9.709	ppbv		97
74)	1,2,4-Trimethylbenzene	11.555	105	696079	9.202	ppbv		99
75)	1,3-Dichlorobenzene	11.623	146	410546	9.895	ppbv		99
76)	1,4-Dichlorobenzene	11.688	146	413478	10.014	ppbv		100
77)	1,2-Dichlorobenzene	11.963	146	399386	9.887	ppbv		99
78)	Hexachloro-1,3-Butadiene	13.895	225	345217	8.395	ppbv		99
79)	Naphthalene	13.530	128	833346	10.072	ppbv		99
80)	Naphthalene,2-methyl-	14.471	142	427563	10.537	ppbv		98
81)	1,2,4-Trichlorobenzene	13.455	180	373226	9.779	ppbv		99

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

Quantitation Report (QT Reviewed)

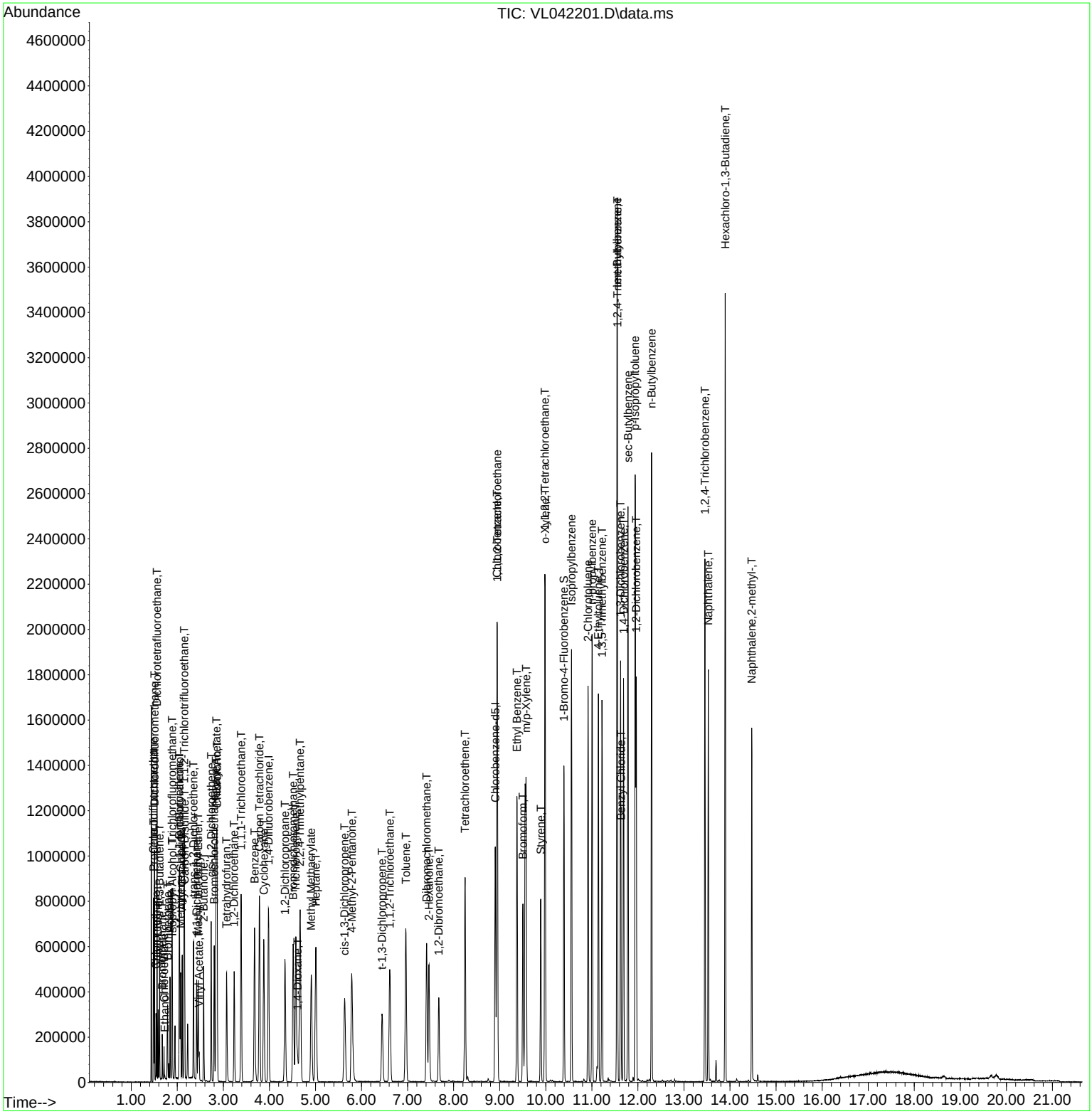
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

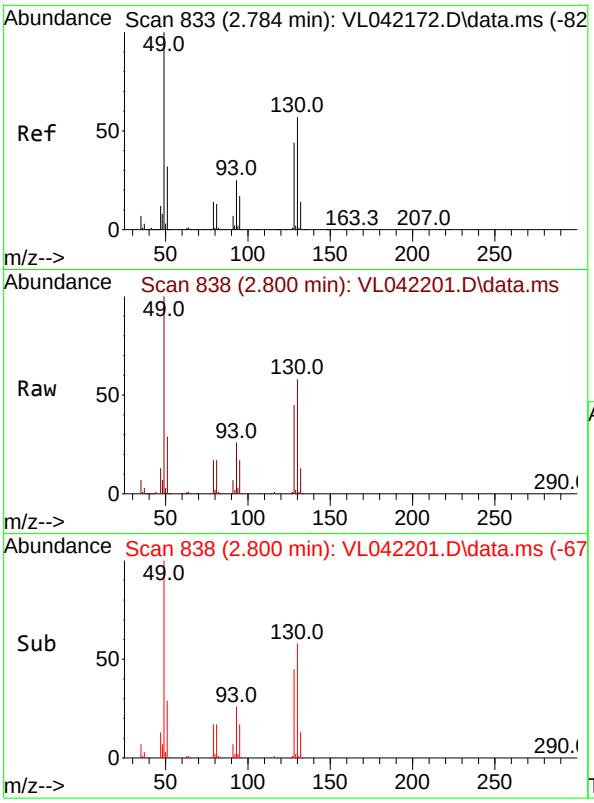
Quant Time: Apr 01 01:49:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.800 min Scan# 8
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 49 Resp: 16147

Ion	Ratio	Lower	Upper
49	100		
128	47.1	22.9	68.5
130	60.6	28.8	86.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

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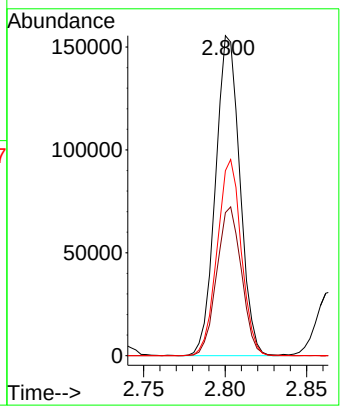
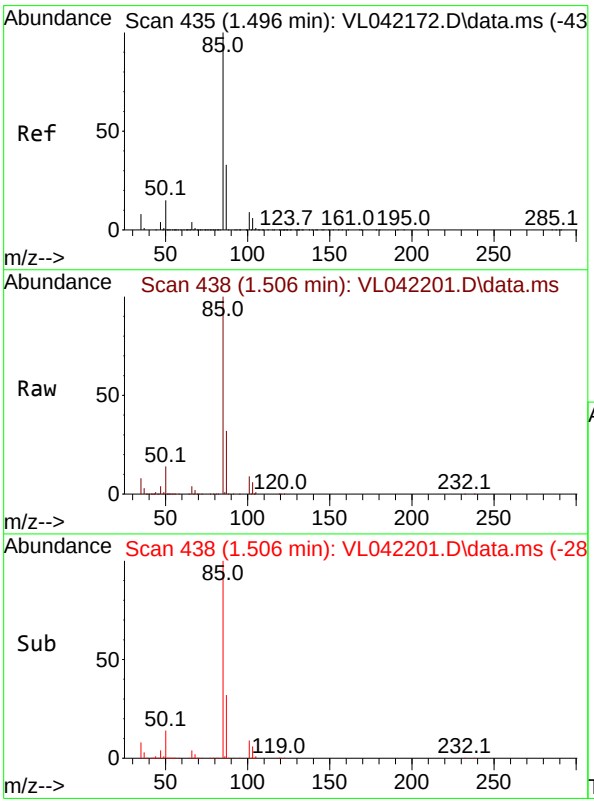
Supervised By :Mahesh Dadoda 04/01/2025

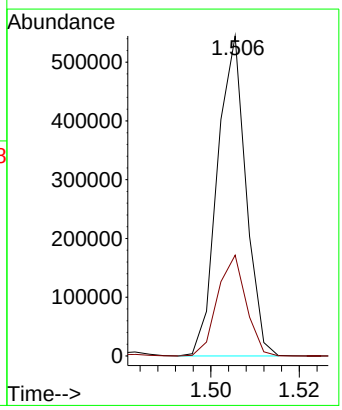


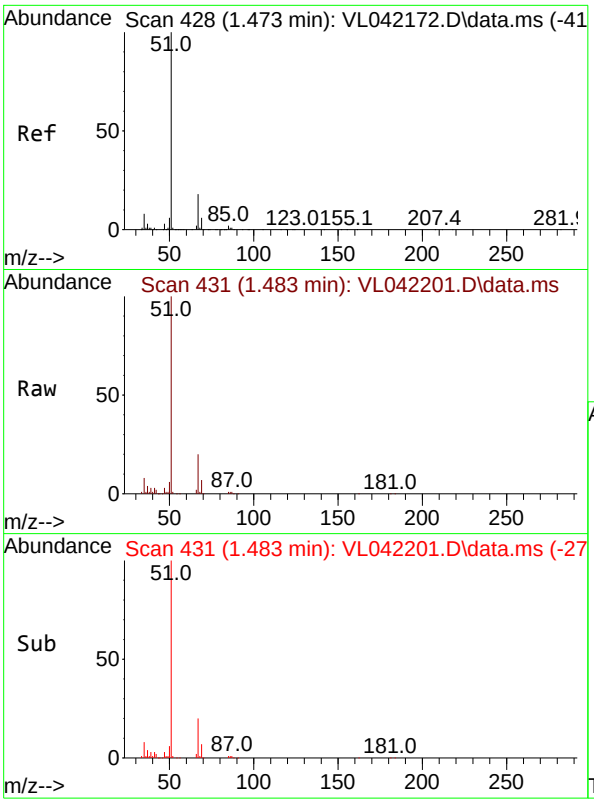


#2
Dichlorodifluoromethane
Concen: 10.220 ppbv
RT: 1.506 min Scan# 438
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 85 Resp: 243672

Ion	Ratio	Lower	Upper
85	100		
87	31.5	26.1	39.1

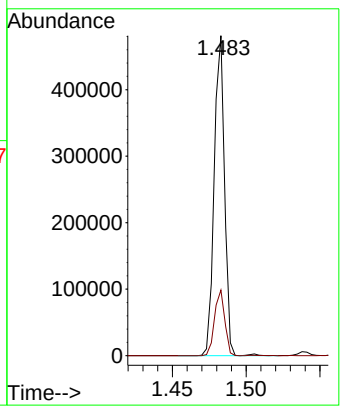




#3
Chlorodifluoromethane
Concen: 9.604 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 51 Resp: 23393

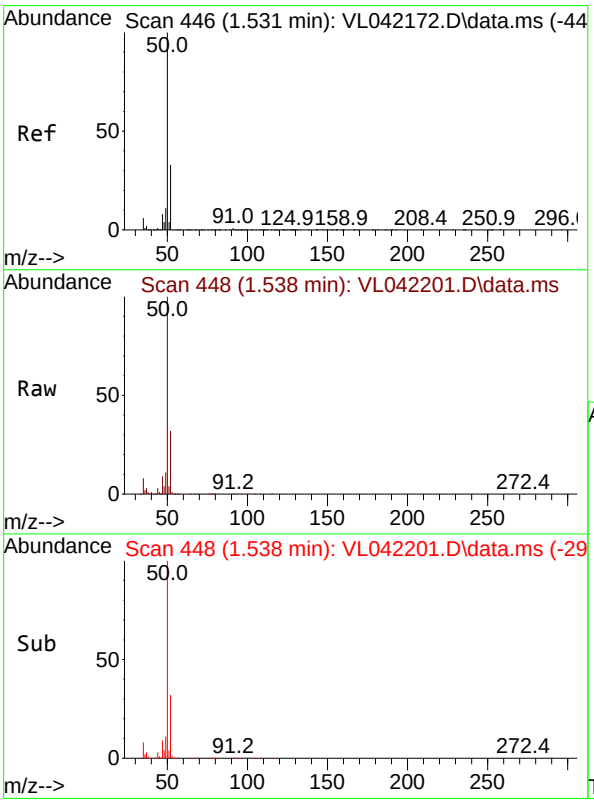
Ion	Ratio	Lower	Upper
51	100		
67	20.4	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

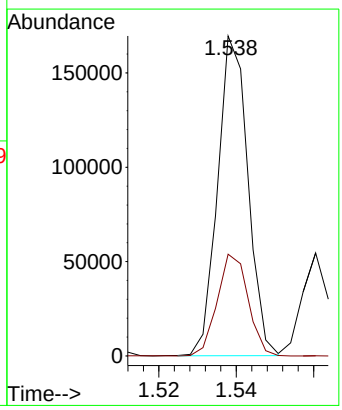
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

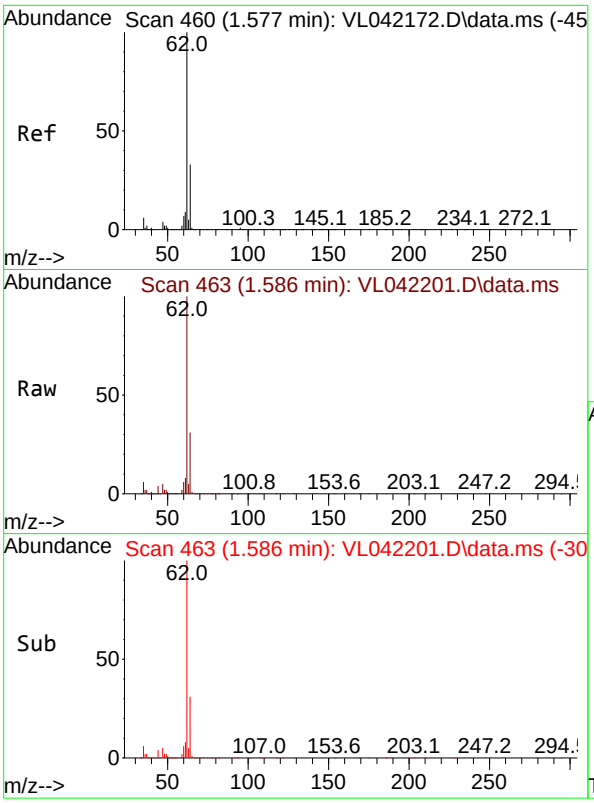


#4
Chloromethane
Concen: 9.439 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 50 Resp: 91967

Ion	Ratio	Lower	Upper
50	100		
52	31.8	26.1	39.1

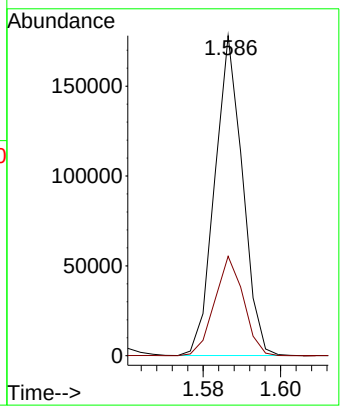




#5
Vinyl Chloride
Concen: 8.595 ppbv
RT: 1.586 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 62 Resp: 8874

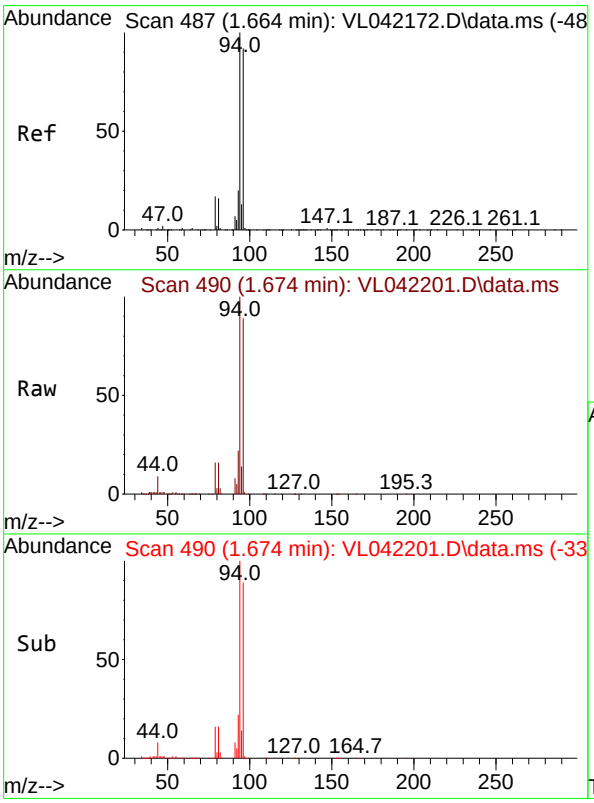
Ion	Ratio	Lower	Upper
62	100		
64	31.1	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

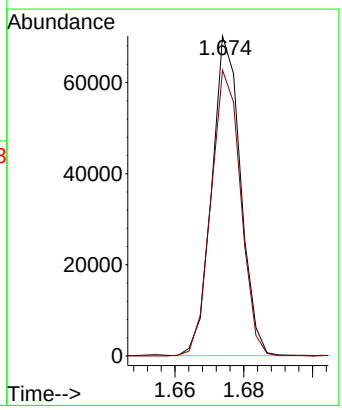
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

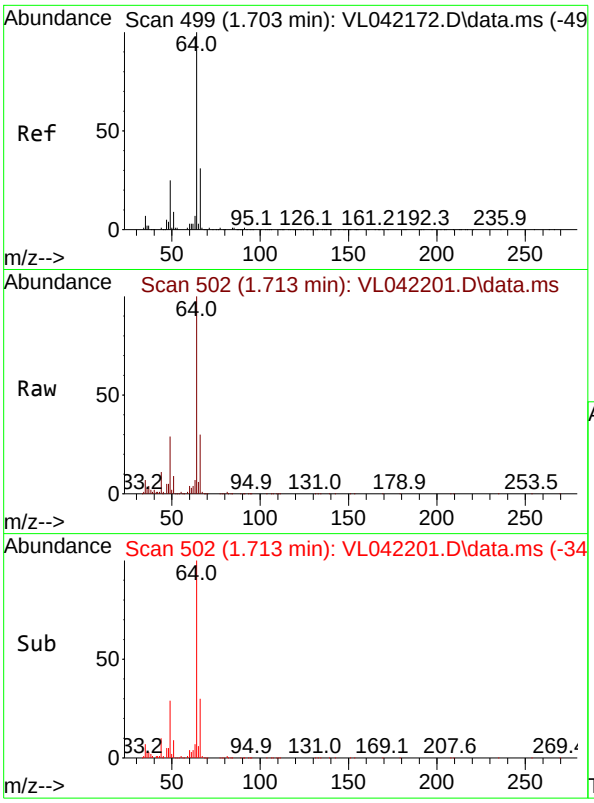


#6
Bromomethane
Concen: 9.232 ppbv
RT: 1.674 min Scan# 490
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 94 Resp: 40765

Ion	Ratio	Lower	Upper
94	100		
96	89.3	73.1	109.7

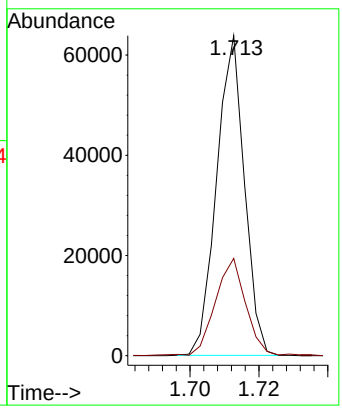




#7
Chloroethane
Concen: 9.112 ppbv
RT: 1.713 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 64 Resp: 3563

Ion	Ratio	Lower	Upper
64	100		
66	30.4	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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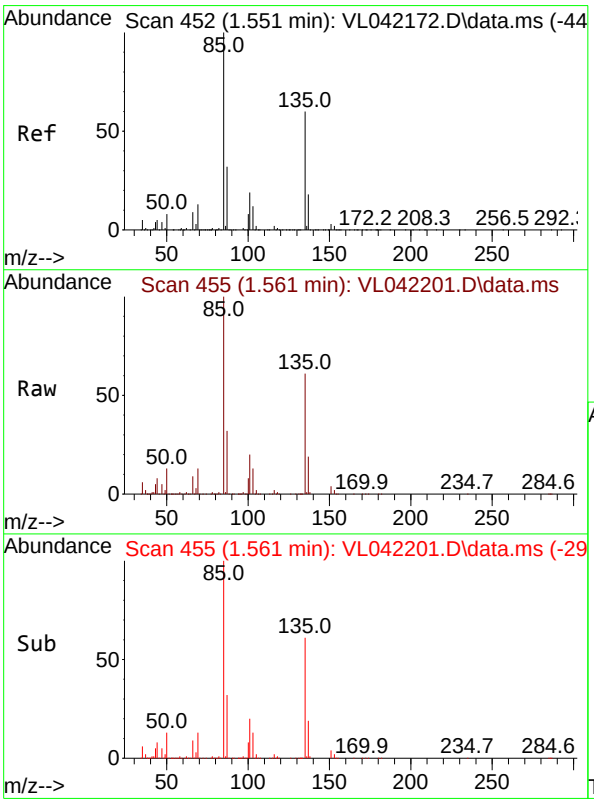
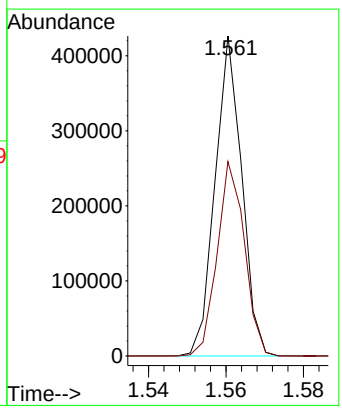
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

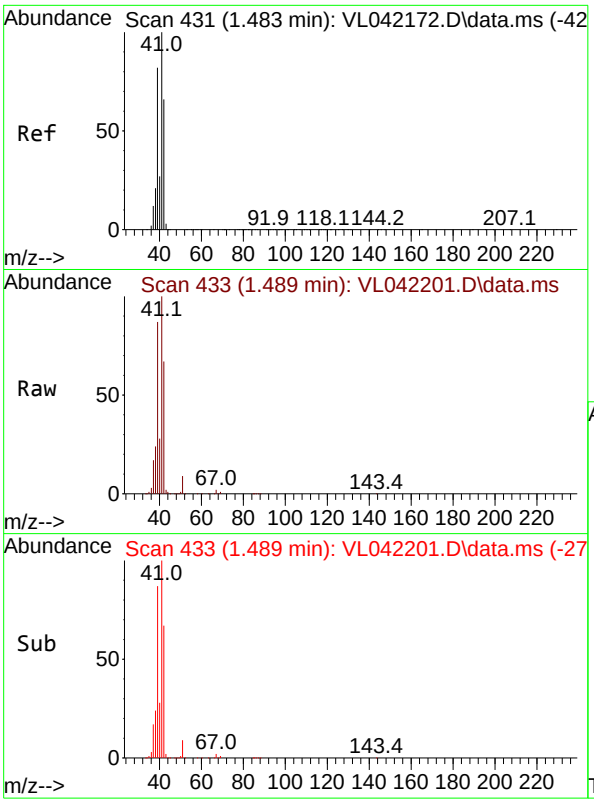


#8
Dichlorotetrafluoroethane
Concen: 10.026 ppbv
RT: 1.561 min Scan# 455
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 85 Resp: 203570

Ion	Ratio	Lower	Upper
85	100		
135	62.2	52.4	78.6

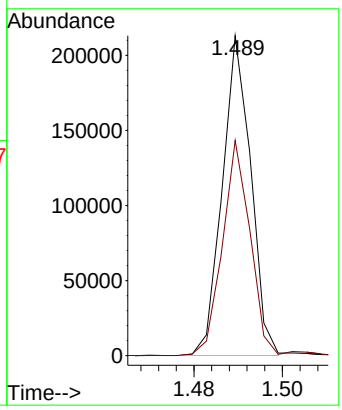




#9
Propene
Concen: 8.521 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 41 Resp: 9512

Ion	Ratio	Lower	Upper
41	100		
42	67.2	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
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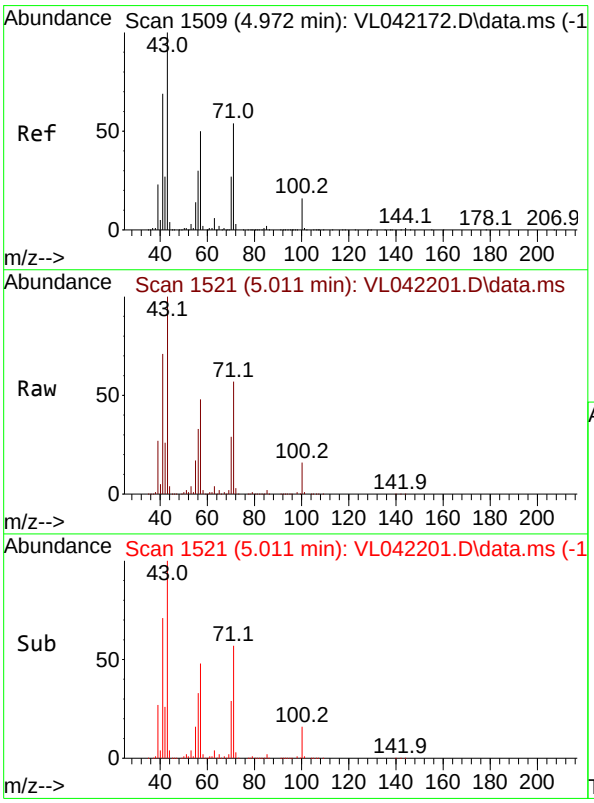
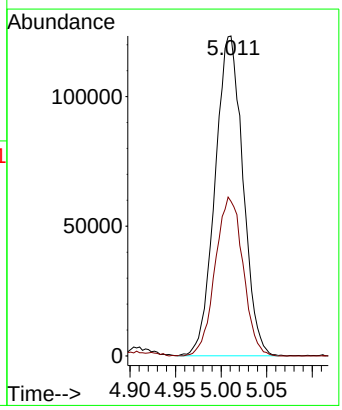
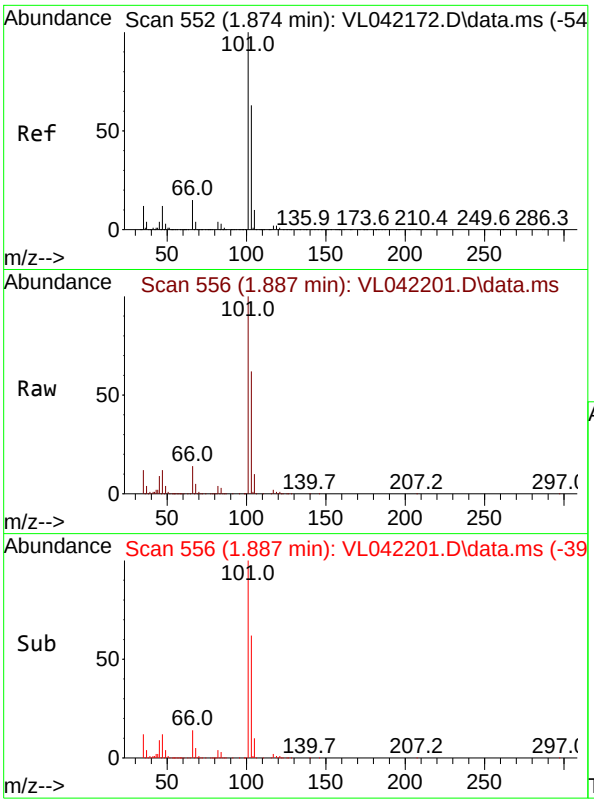


#10
Heptane
Concen: 8.821 ppbv
RT: 5.011 min Scan# 1521
Delta R.T. 0.039 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 261936

Ion	Ratio	Lower	Upper
43	100		
57	49.7	39.4	59.2

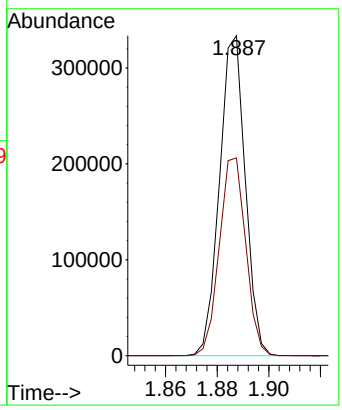




#11
Trichlorofluoromethane
Concen: 9.988 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:101 Resp: 23172

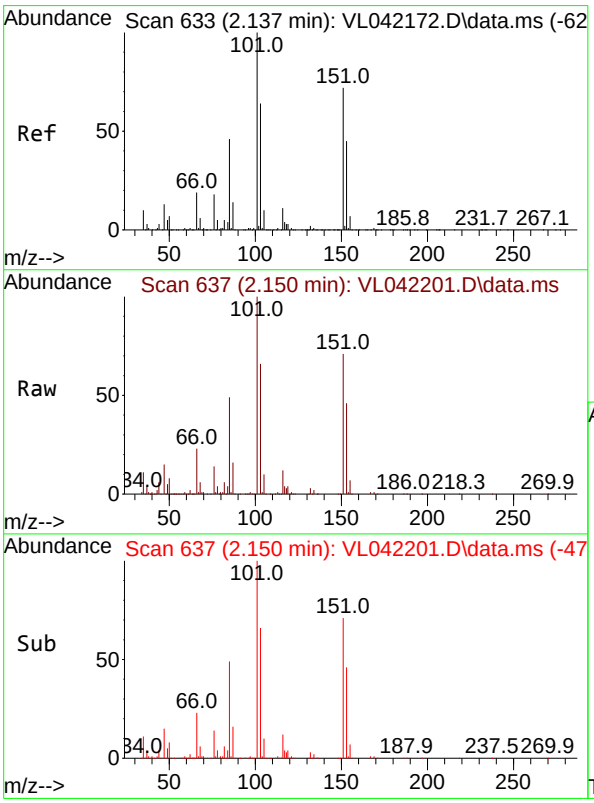
Ion	Ratio	Lower	Upper
101	100		
103	61.8	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

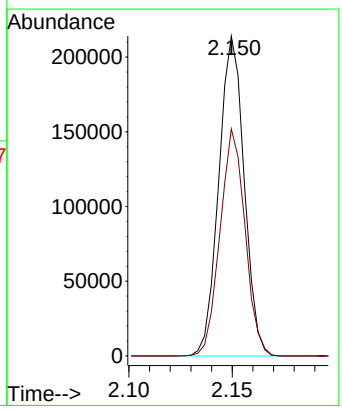
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

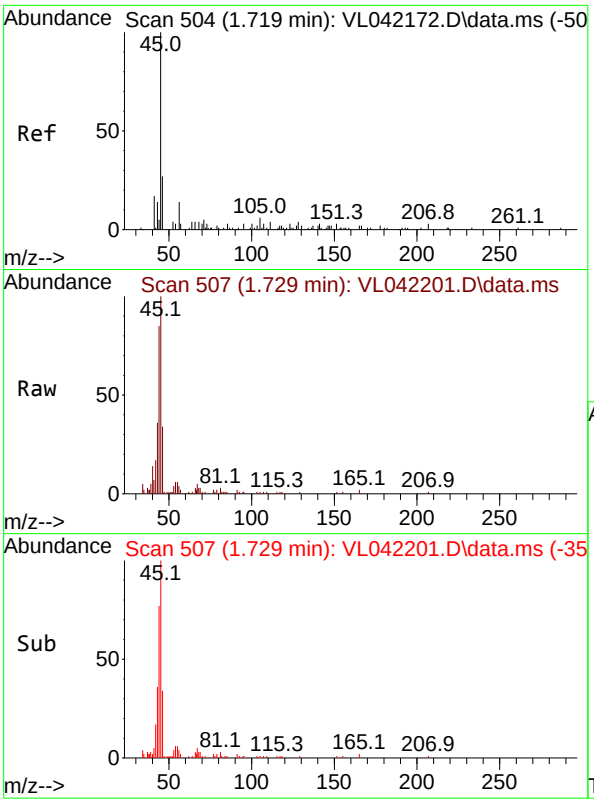


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.588 ppbv
RT: 2.150 min Scan# 637
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:101 Resp: 182824

Ion	Ratio	Lower	Upper
101	100		
151	69.9	57.1	85.7

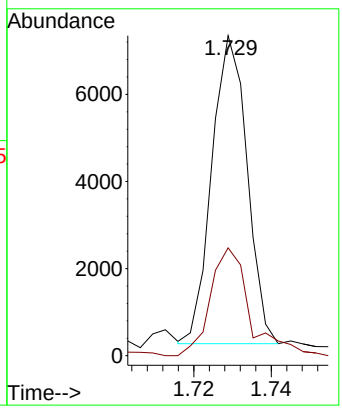




#13
Ethanol
Concen: 4.238 ppbv
RT: 1.729 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 45 Resp: 447

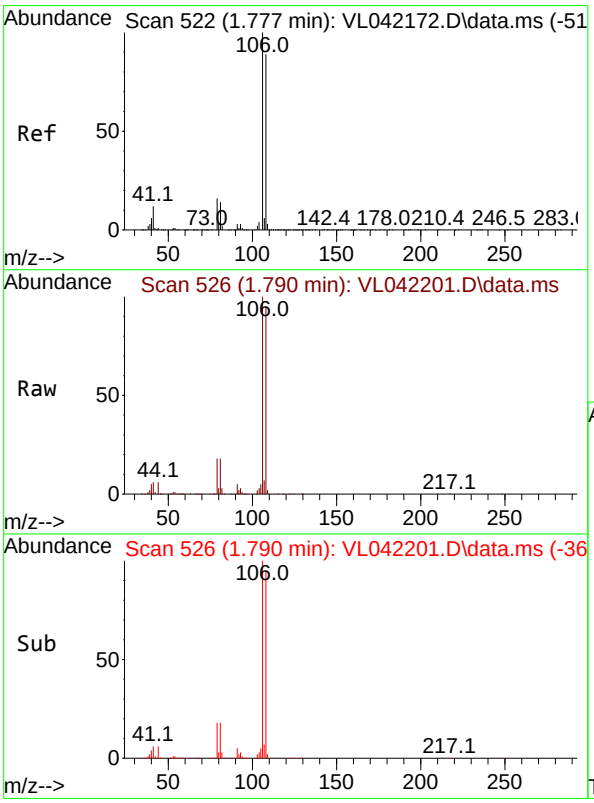
Ion	Ratio	Lower	Upper
45	100		
46	41.3	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

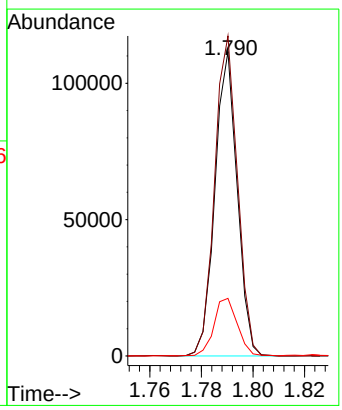
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

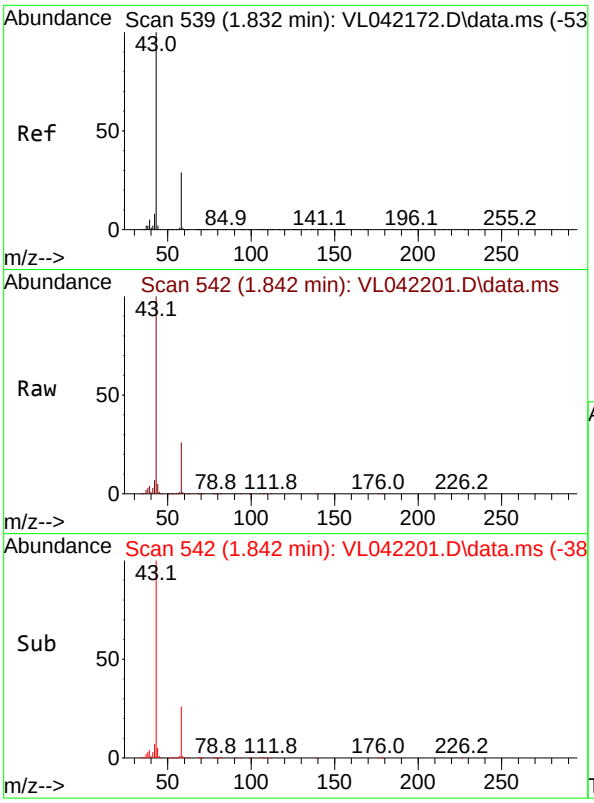


#14
Bromoethene
Concen: 9.159 ppbv
RT: 1.790 min Scan# 526
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:108 Resp: 66903

Ion	Ratio	Lower	Upper
108	100		
106	107.5	86.8	130.2
79	20.9	15.0	22.6





#15
Acetone
Concen: 8.580 ppbv
RT: 1.842 min Scan# 54
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 19377

Ion	Ratio	Lower	Upper
43	100		
58	26.7	23.2	34.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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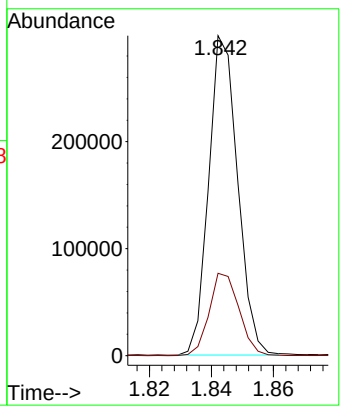
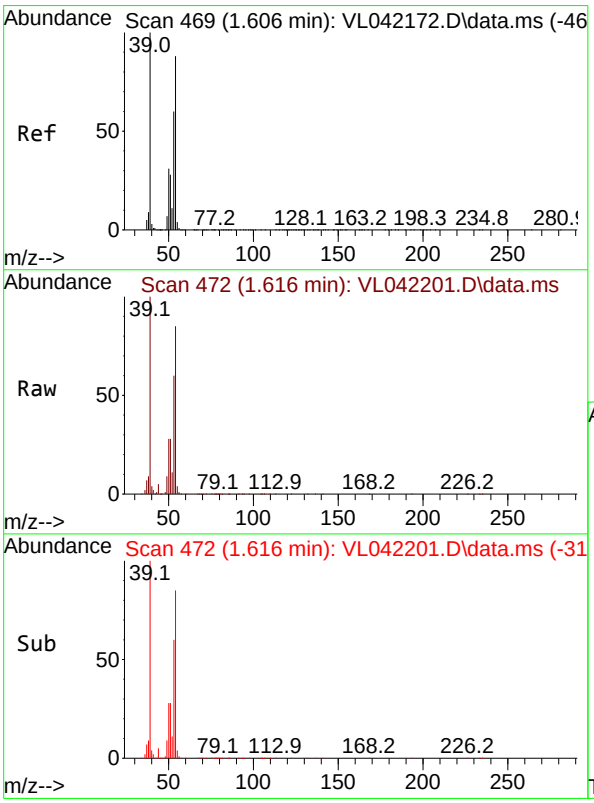
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

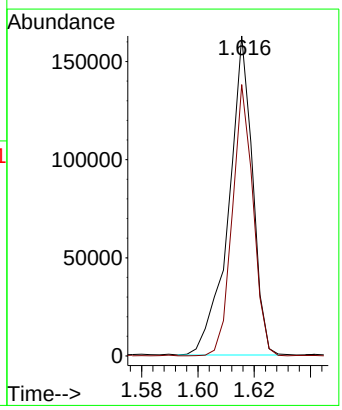


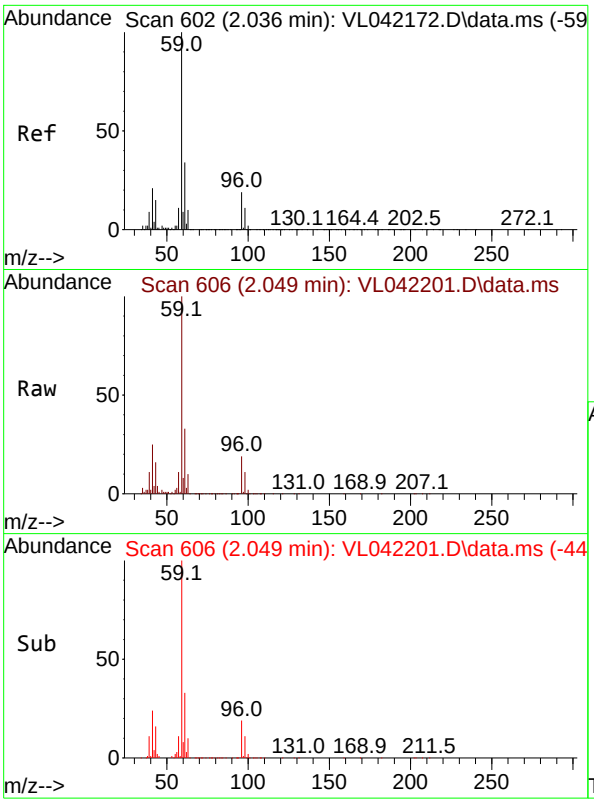


#16
1,3-Butadiene
Concen: 8.709 ppbv
RT: 1.616 min Scan# 472
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 39 Resp: 96046

Ion	Ratio	Lower	Upper
39	100		
54	73.7	60.7	91.1





#17
tert-Butyl alcohol
Concen: 8.974 ppbv
RT: 2.049 min Scan# 6
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 59 Resp: 25242

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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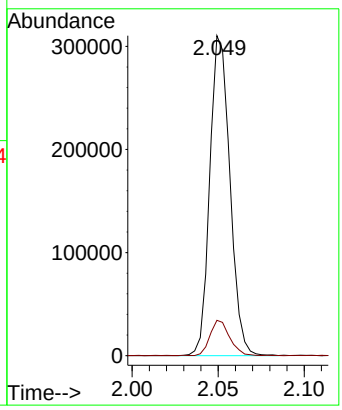
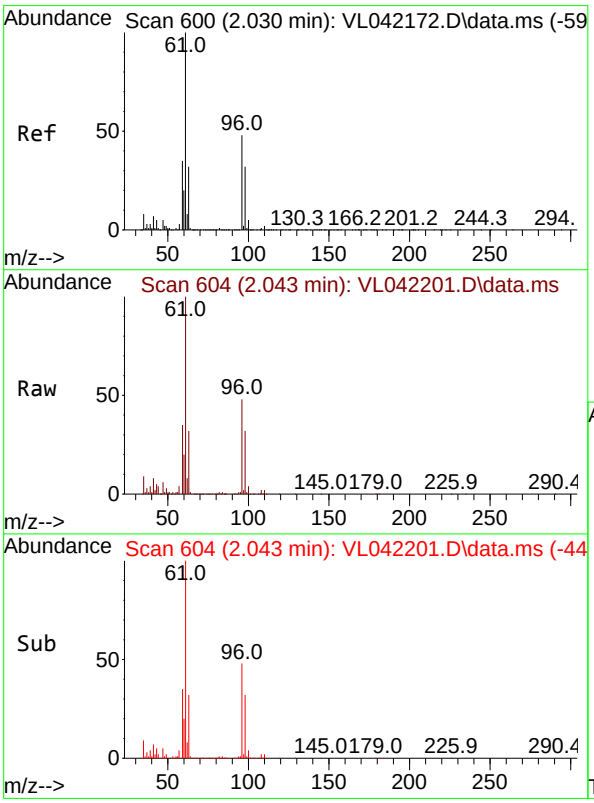
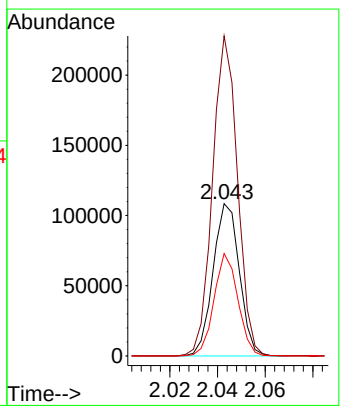


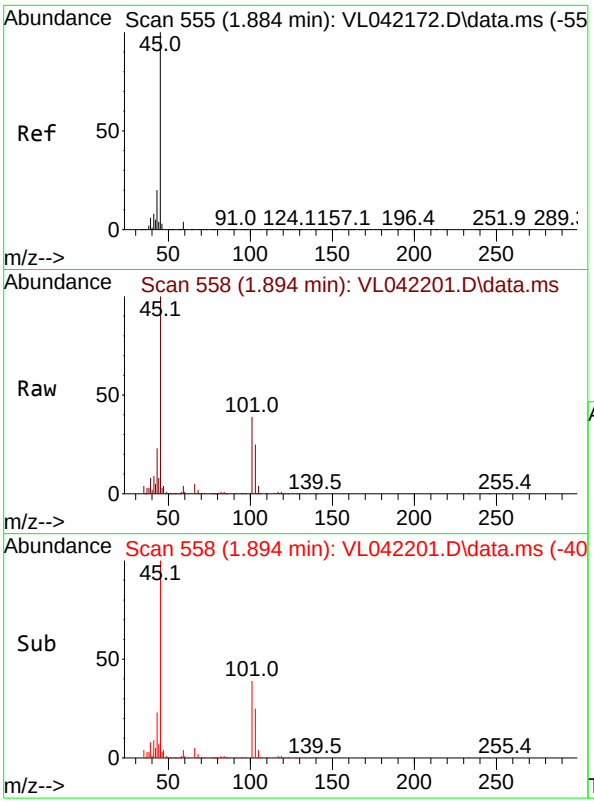


#18
1,1-Dichloroethene
Concen: 9.296 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 96 Resp: 82868

Ion	Ratio	Lower	Upper
96	100		
61	209.9	167.6	251.4
98	67.2	53.5	80.3





#19
Isopropyl Alcohol
Concen: 9.039 ppbv
RT: 1.894 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 45 Resp: 11518

Ion	Ratio	Lower	Upper
45	100		
58	45.0	36.9	55.3

Instrument :
MSVOA_L
ClientSampleId :
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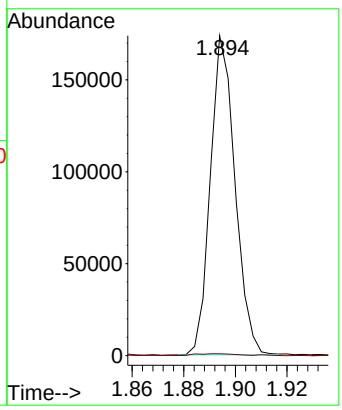
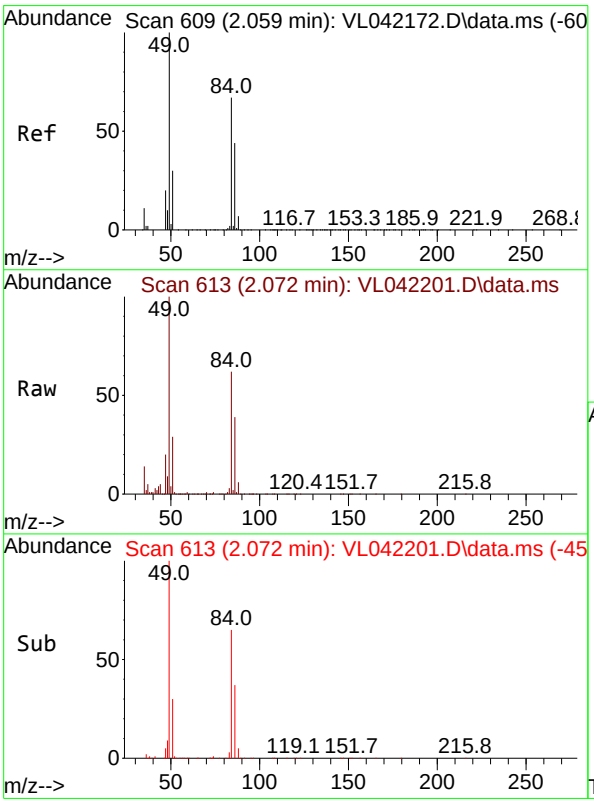
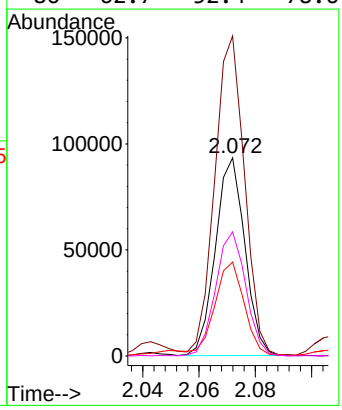


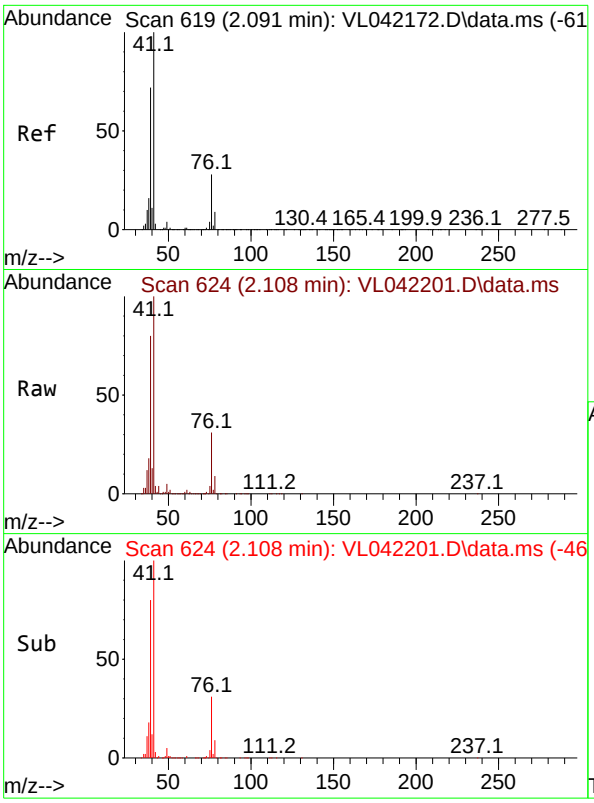


#20
Methylene Chloride
Concen: 8.070 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 84 Resp: 67877

Ion	Ratio	Lower	Upper
84	100		
49	161.2	120.2	180.4
51	47.1	37.4	56.0
86	62.7	52.4	78.6





#21
Allyl Chloride
Concen: 9.079 ppbv
RT: 2.108 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 41 Resp: 14459

Ion	Ratio	Lower	Upper
41	100		
76	30.0	24.1	36.1
39	79.1	61.1	91.7

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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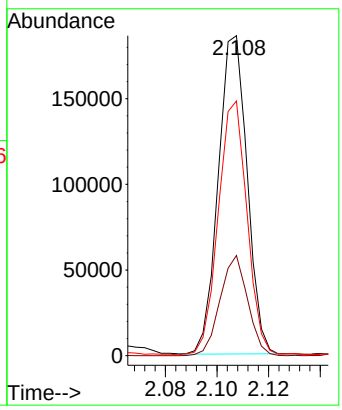
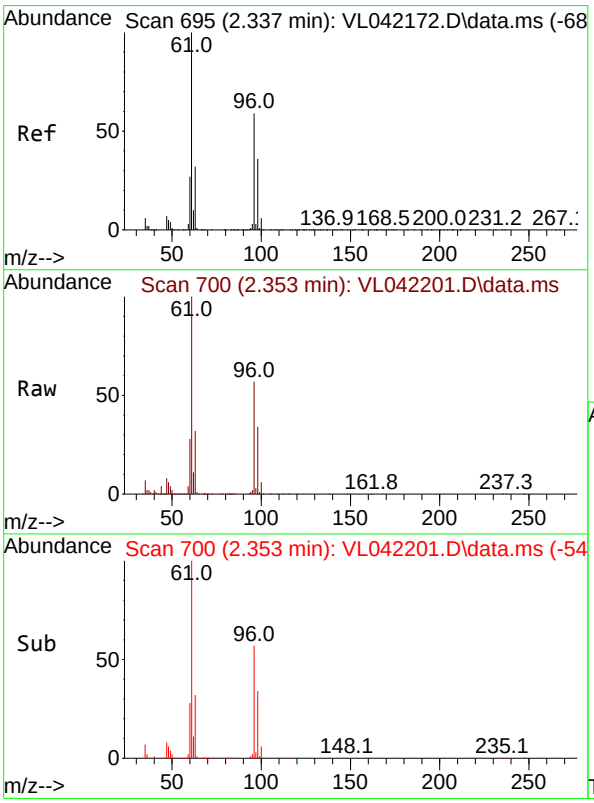
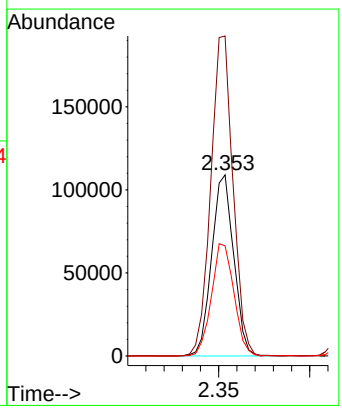


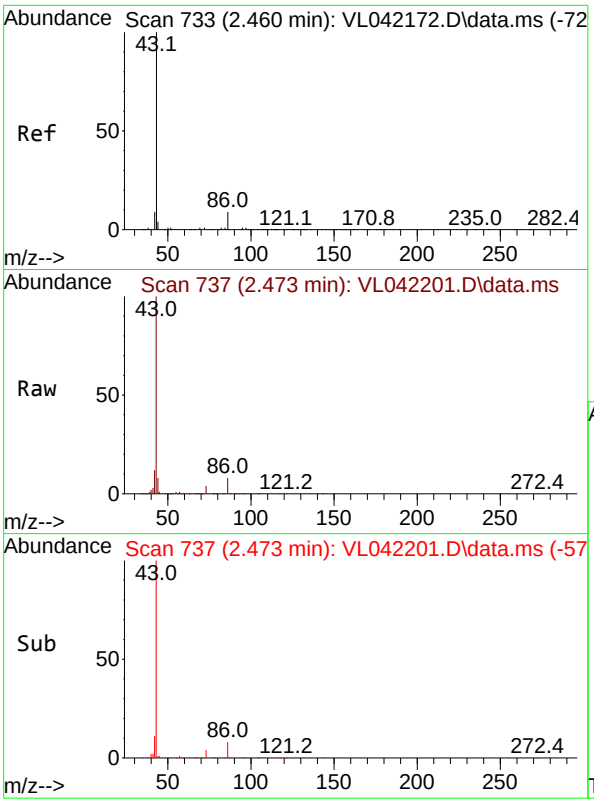


#22
trans-1,2-Dichloroethene
Concen: 8.924 ppbv
RT: 2.353 min Scan# 700
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 96 Resp: 91942

Ion	Ratio	Lower	Upper
96	100		
61	176.6	136.6	204.8
98	60.8	49.4	74.2

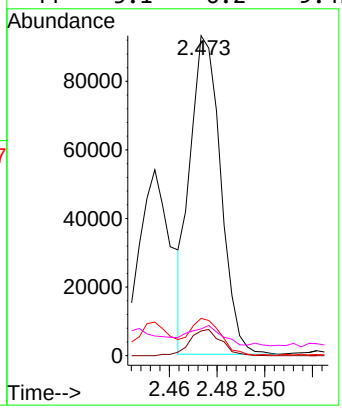




#23
Vinyl Acetate
Concen: 8.485 ppbv
RT: 2.473 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 8293

Ion	Ratio	Lower	Upper
43	100		
86	7.8	5.5	8.3
42	11.5	8.6	13.0
44	5.1	6.2	9.4#



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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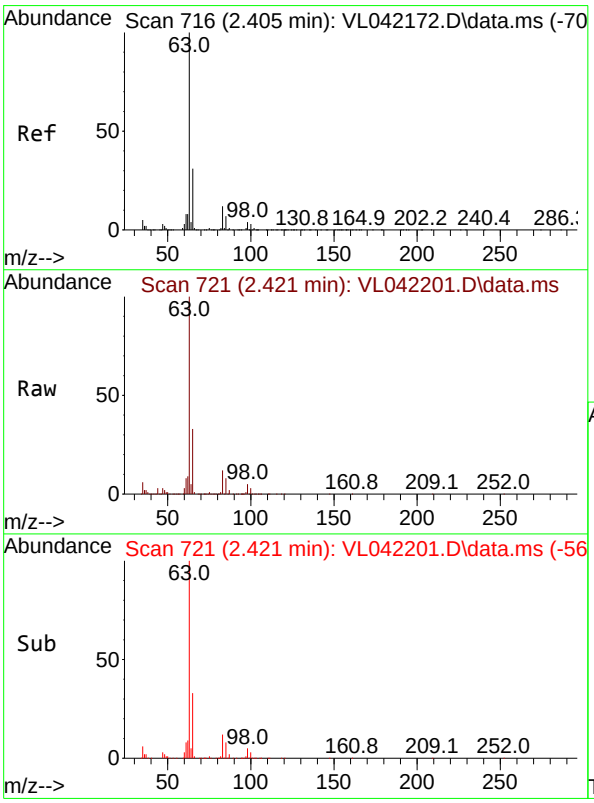
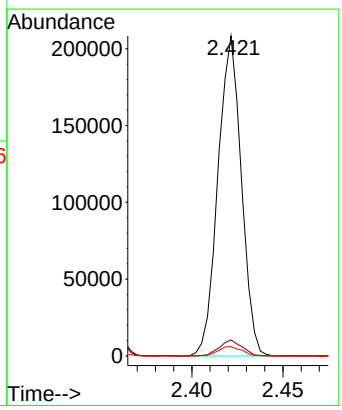
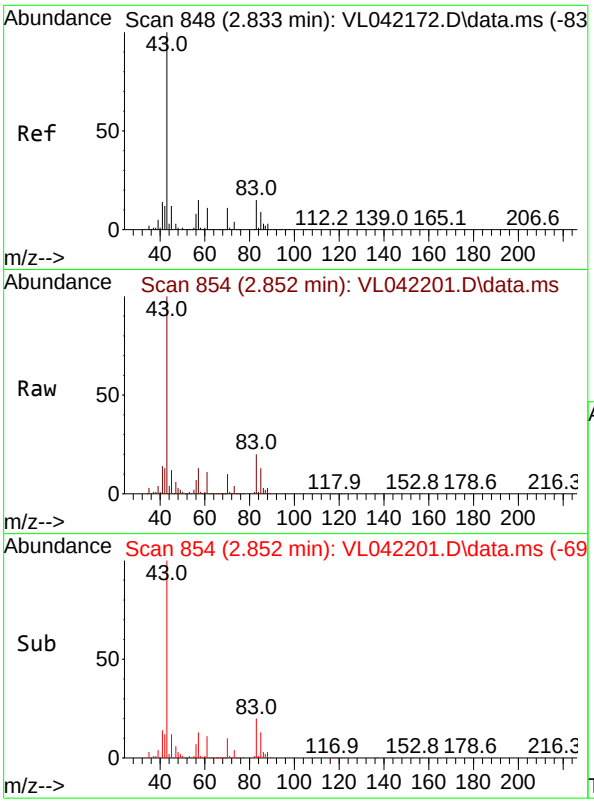


#24
1,1-Dichloroethane
Concen: 9.730 ppbv
RT: 2.421 min Scan# 721
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 63 Resp: 185830

Ion	Ratio	Lower	Upper
63	100		
98	5.0	2.3	6.8
100	2.9	1.6	4.7

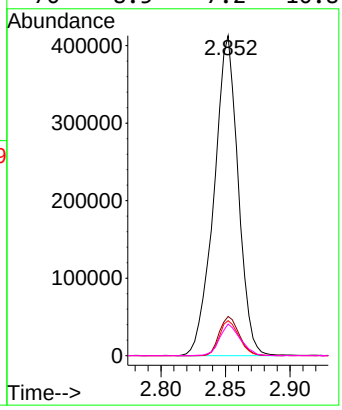




#25
Ethyl Acetate
Concen: 9.151 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 53636

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.0	7.3	10.9
70	8.5	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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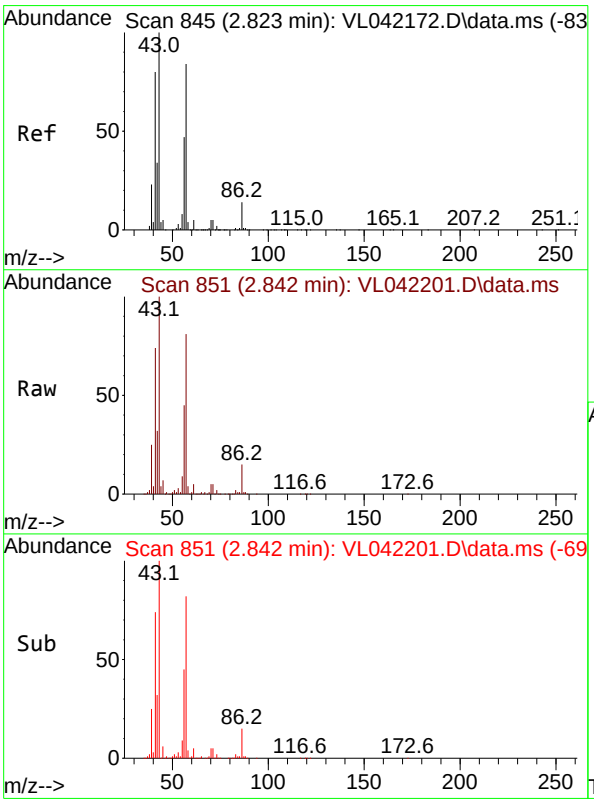
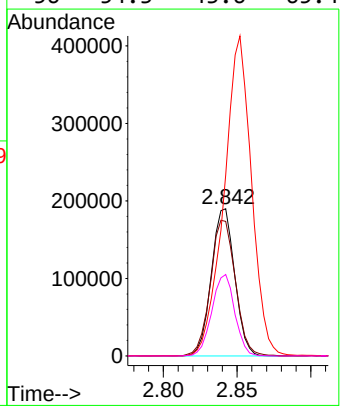
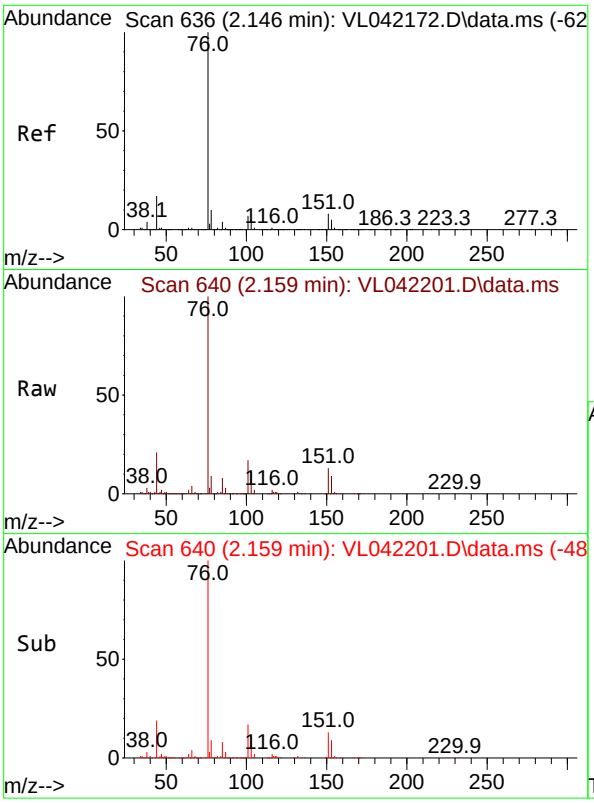


#26
Hexane
Concen: 9.236 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 57 Resp: 209103

Ion	Ratio	Lower	Upper
57	100		
41	98.8	76.6	114.8
43	257.3	207.8	311.8
56	54.3	43.6	65.4

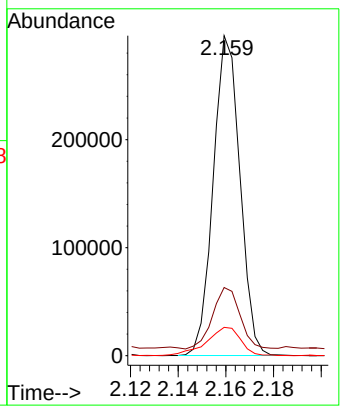




#27
Carbon Disulfide
Concen: 9.481 ppbv
RT: 2.159 min Scan# 64
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 76 Resp: 23017

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.4	9.3	13.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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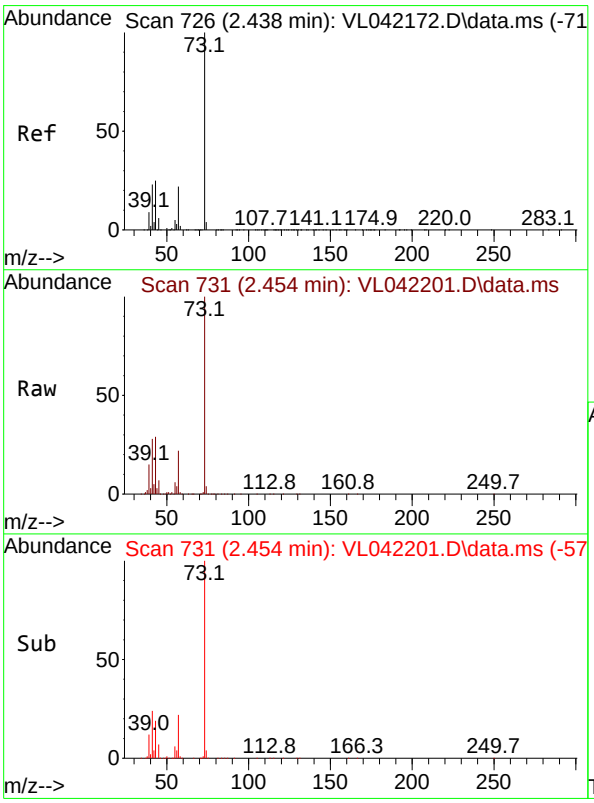
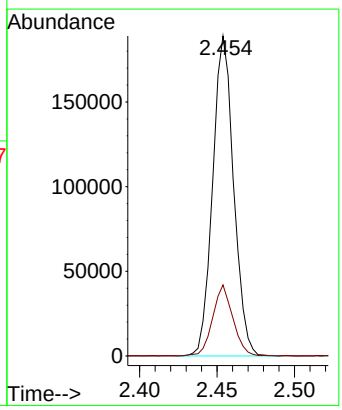
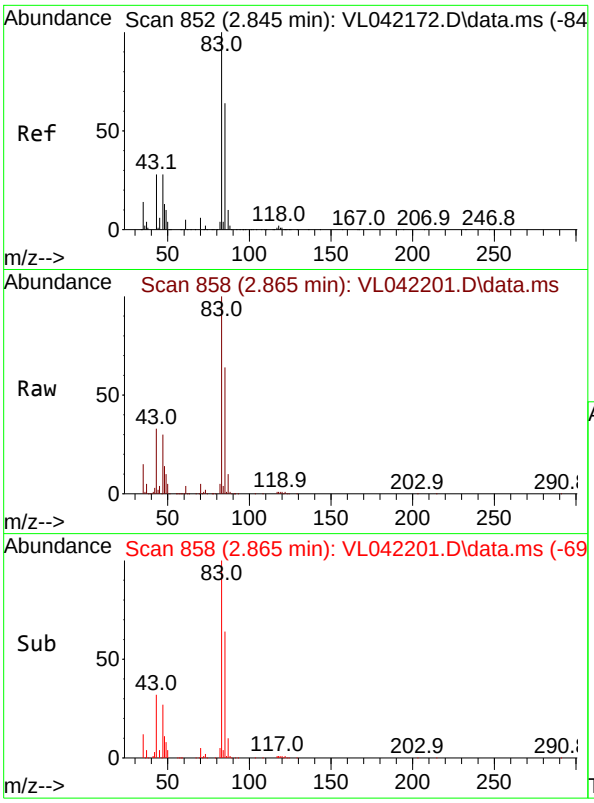


#28
Methyl tert-Butyl Ether
Concen: 12.635 ppbv
RT: 2.454 min Scan# 731
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 73 Resp: 178093

Ion	Ratio	Lower	Upper
73	100		
57	21.4	20.5	30.7





#29
Chloroform
Concen: 10.200 ppbv
RT: 2.865 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 83 Resp: 33797

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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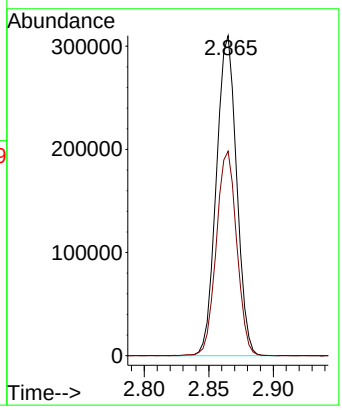
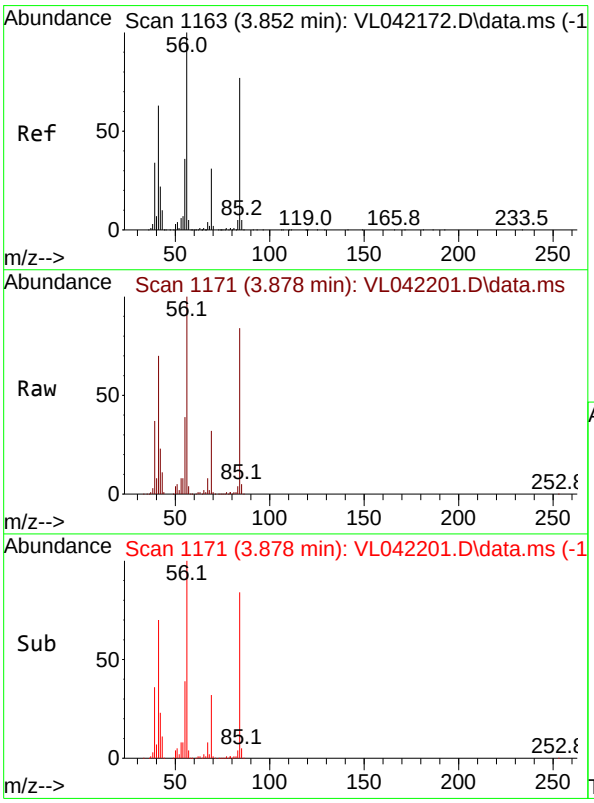
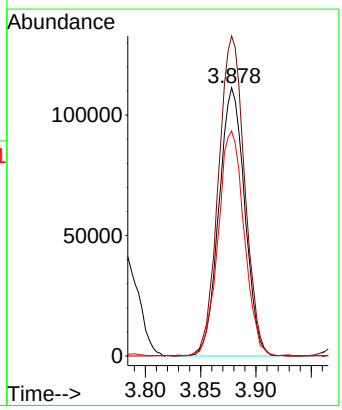


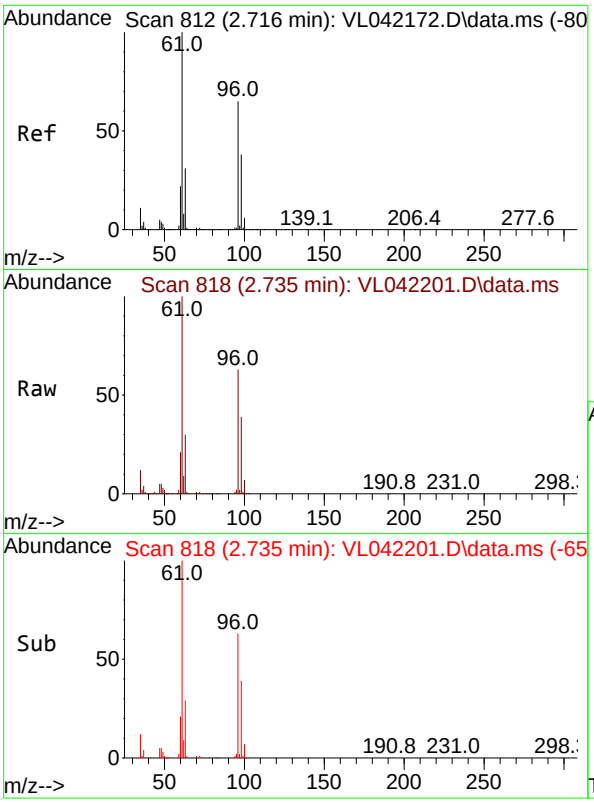


#30
Cyclohexane
Concen: 9.162 ppbv
RT: 3.878 min Scan# 1171
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 84 Resp: 180110

Ion	Ratio	Lower	Upper
84	100		
56	121.1	102.8	154.2
41	84.6	66.5	99.7

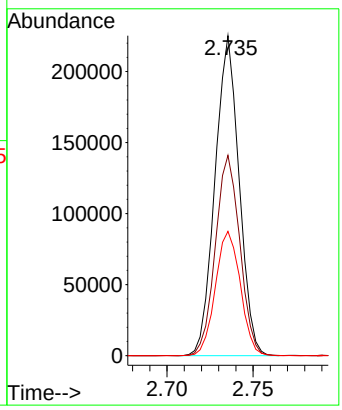




#31
cis-1,2-Dichloroethene
Concen: 9.545 ppbv
RT: 2.735 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 61 Resp: 21938

Ion	Ratio	Lower	Upper
61	100		
96	62.6	51.8	77.8
98	38.9	30.6	46.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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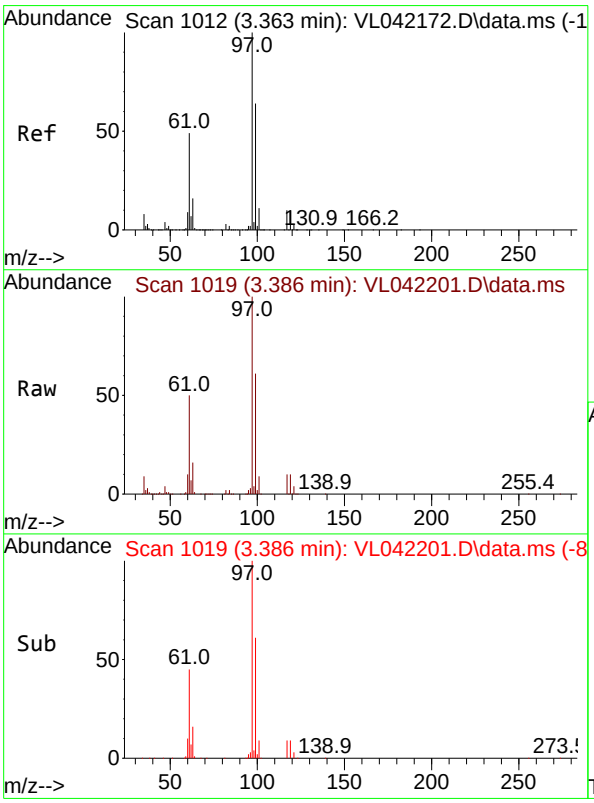
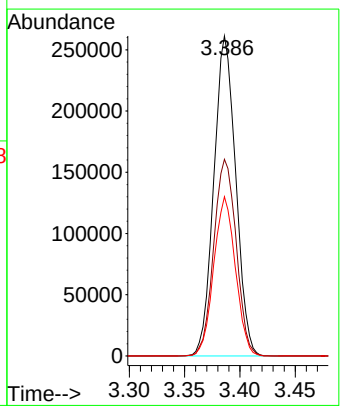
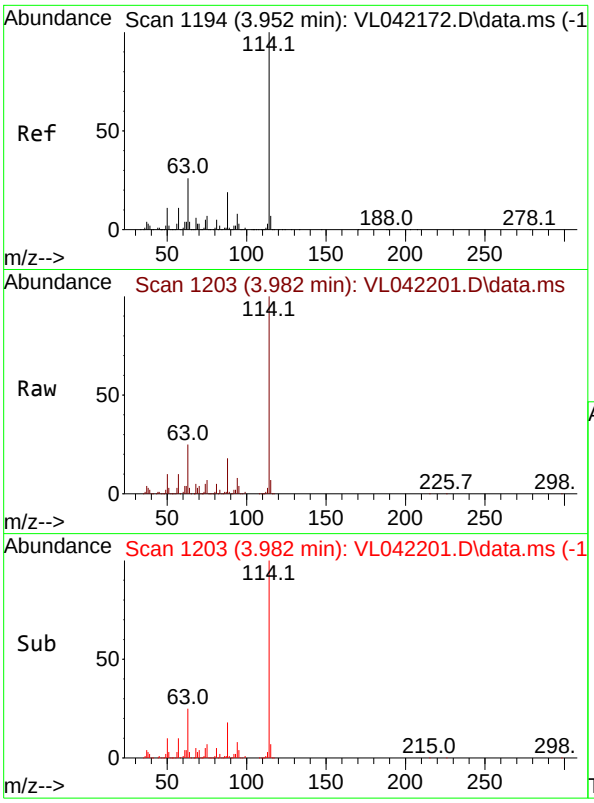


#32
1,1,1-Trichloroethane
Concen: 9.483 ppbv
RT: 3.386 min Scan# 1019
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 97 Resp: 359718

Ion	Ratio	Lower	Upper
97	100		
99	63.0	51.5	77.3
61	49.3	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.982 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:114 Resp: 46040

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.0	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
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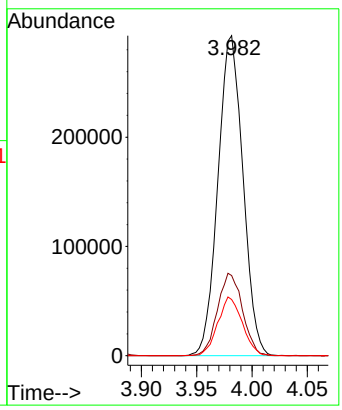
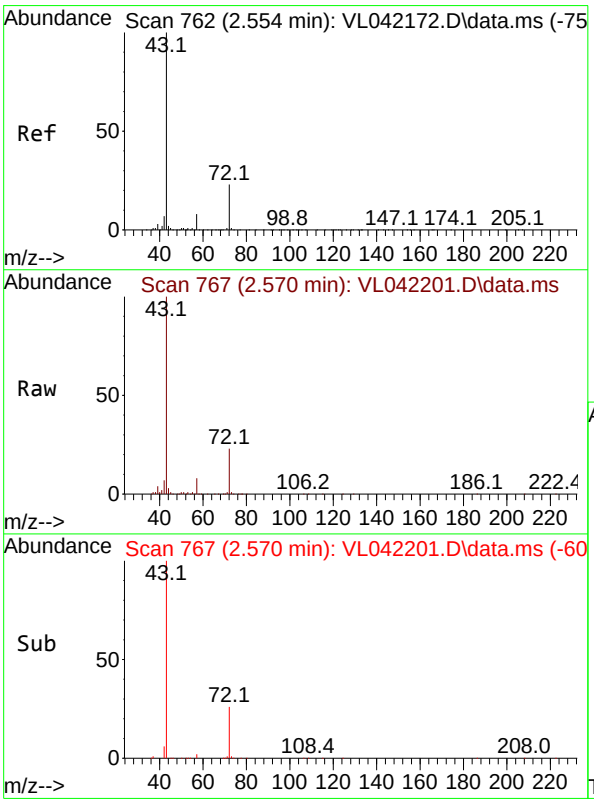
Supervised By :Mahesh Dadoda 04/01/2025

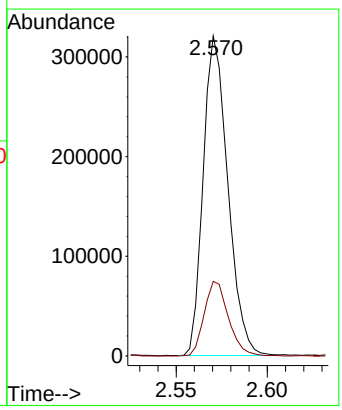


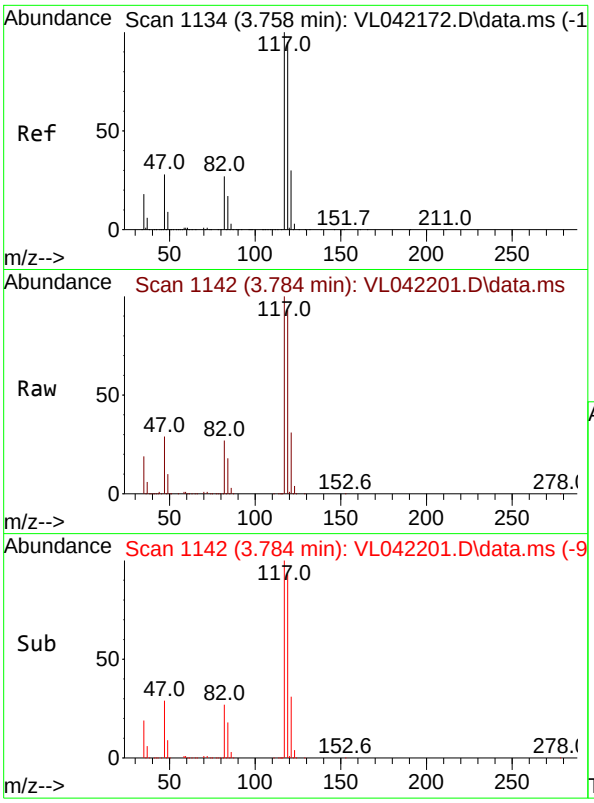


#34
2-Butanone
Concen: 9.026 ppbv
RT: 2.570 min Scan# 767
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 301334

Ion	Ratio	Lower	Upper
43	100		
72	23.0	18.2	27.2

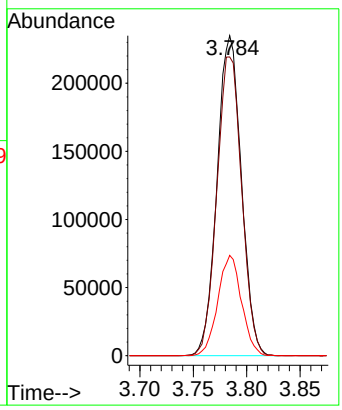




#35
Carbon Tetrachloride
Concen: 10.335 ppbv
RT: 3.784 min Scan# 1
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:117 Resp: 37169

Ion	Ratio	Lower	Upper
117	100		
119	93.4	76.2	114.2
121	31.3	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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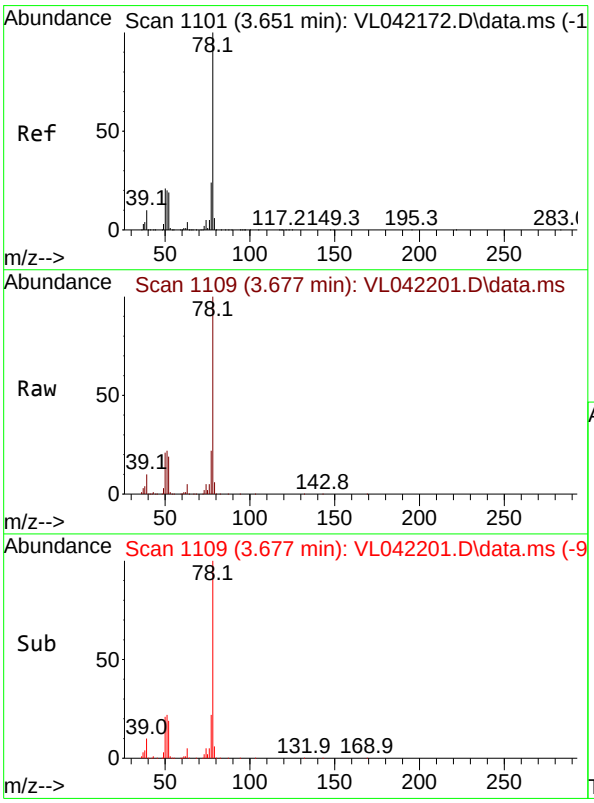
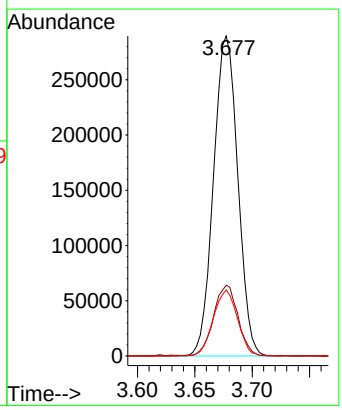
Supervised By :Mahesh Dadoda 04/01/2025

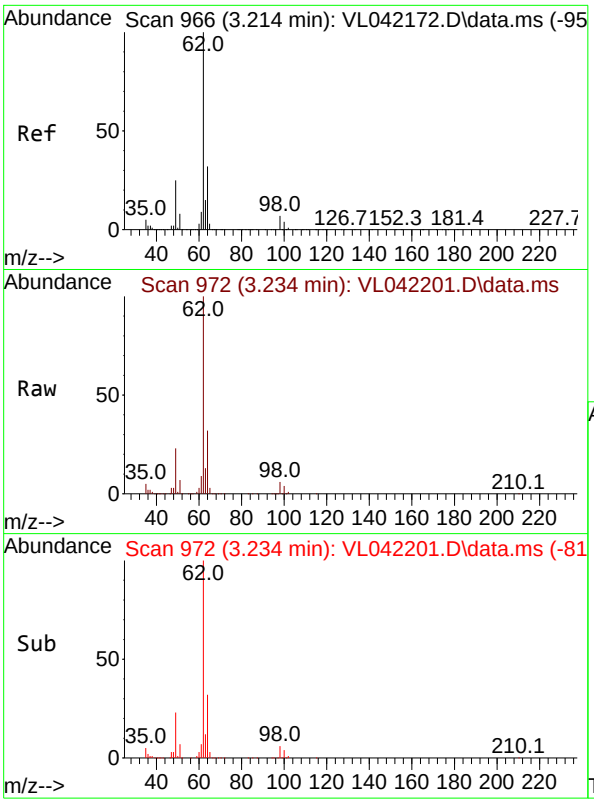


#36
Benzene
Concen: 9.350 ppbv
RT: 3.677 min Scan# 1109
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 78 Resp: 426758

Ion	Ratio	Lower	Upper
78	100		
77	22.1	19.1	28.7
50	20.6	16.6	24.8





#37
1,2-Dichloroethane
Concen: 10.453 ppbv
RT: 3.234 min Scan# 9
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 62 Resp: 27313

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.4	8.2

Instrument :
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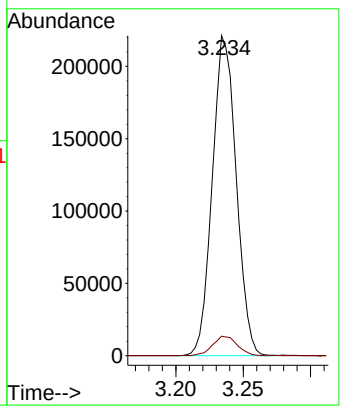
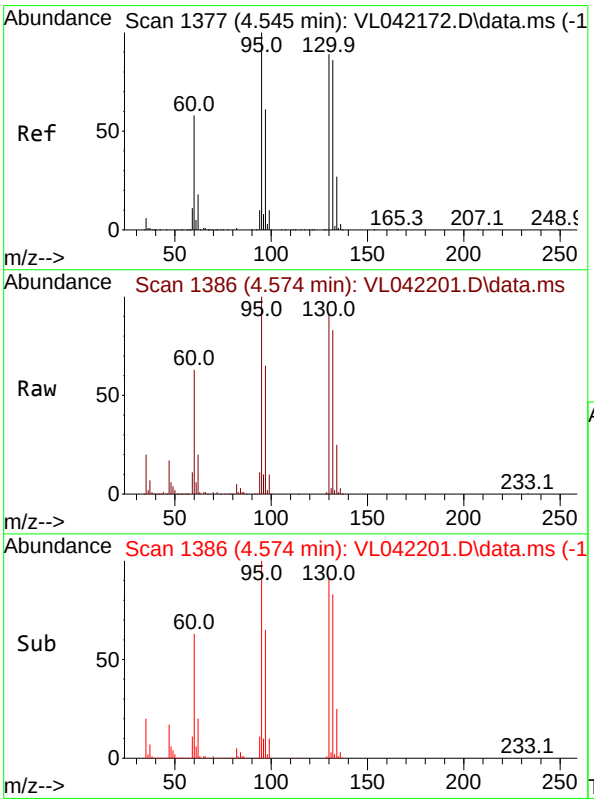
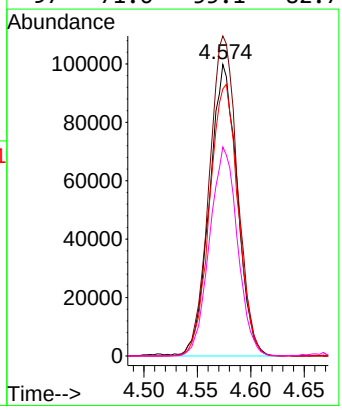


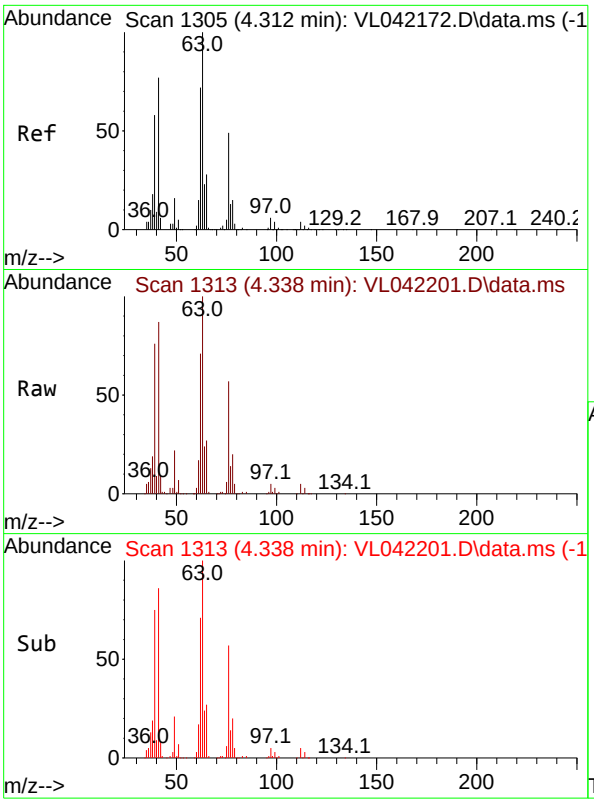


#38
Trichloroethene
Concen: 9.452 ppbv
RT: 4.574 min Scan# 1386
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:130 Resp: 179999

Ion	Ratio	Lower	Upper
130	100		
95	109.7	89.8	134.8
132	91.5	77.4	116.2
97	71.6	55.1	82.7

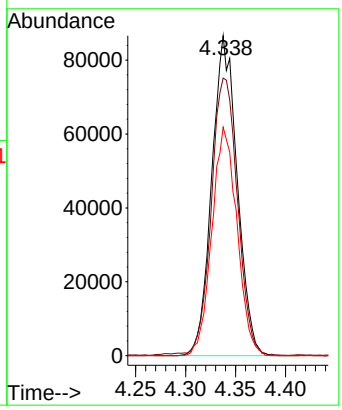




#39
1,2-Dichloropropane
Concen: 9.212 ppbv
RT: 4.338 min Scan# 1
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 63 Resp: 15312

Ion	Ratio	Lower	Upper
63	100		
41	86.5	61.7	92.5
62	71.4	57.6	86.4



Instrument :
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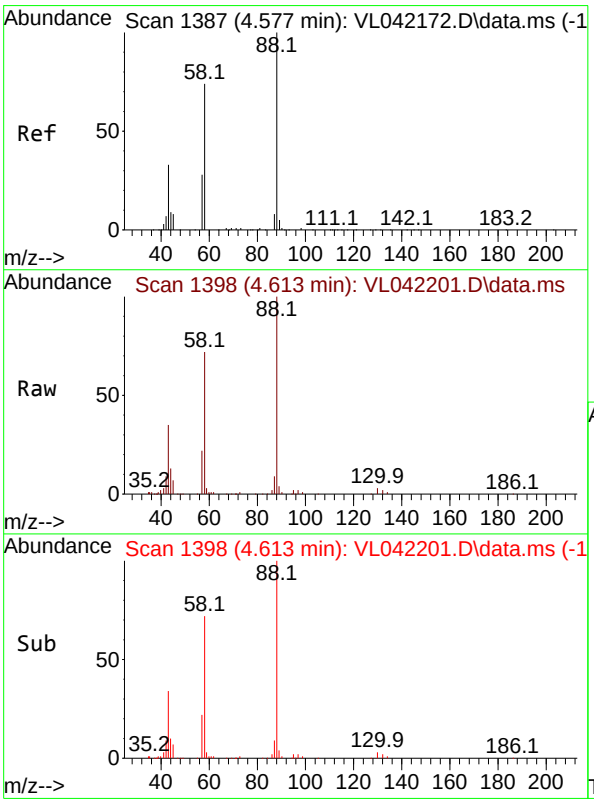
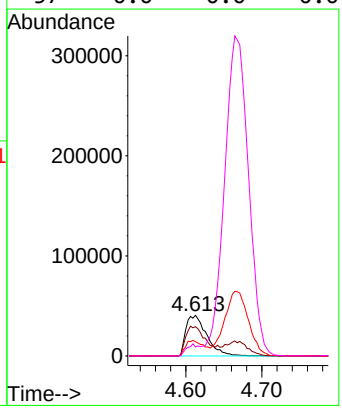
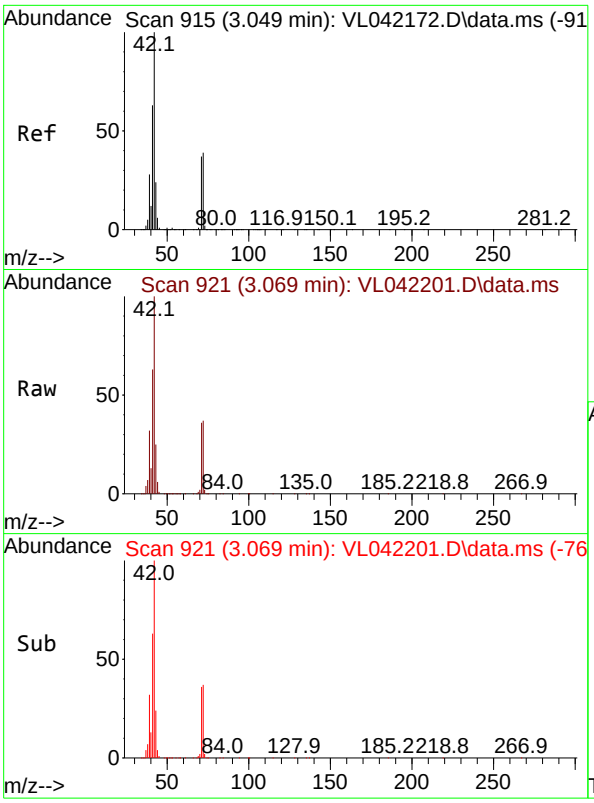


#40
1,4-Dioxane
Concen: 8.741 ppbv m
RT: 4.613 min Scan# 1398
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 88 Resp: 77121

Ion	Ratio	Lower	Upper
88	100		
58	0.0	62.7	94.1#
43	34.1	23.0	34.4
57	0.0	0.0	0.0

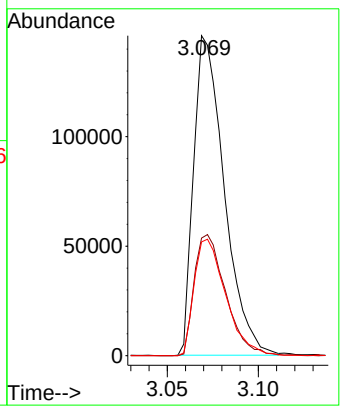




#41
Tetrahydrofuran
Concen: 8.886 ppbv
RT: 3.069 min Scan# 9
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 42 Resp: 17082

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	37.7	30.2	45.4



Instrument :
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ClientSampleId :
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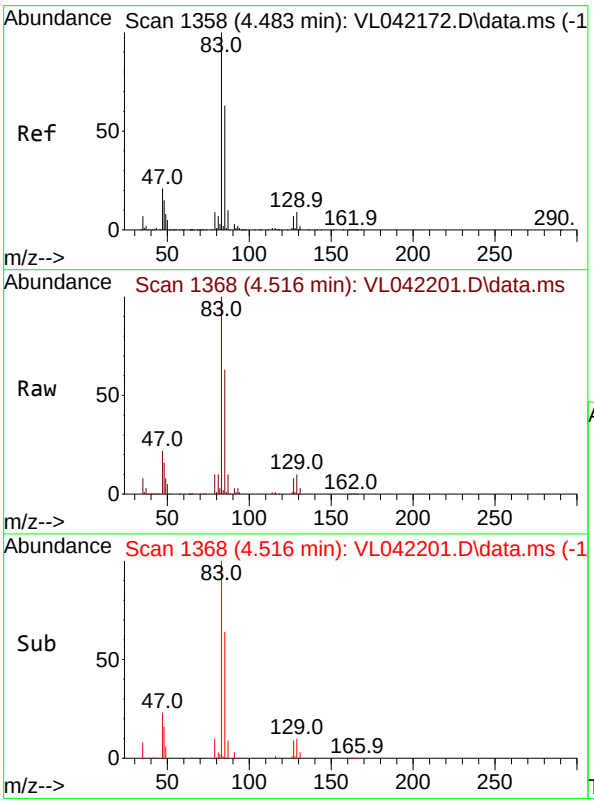
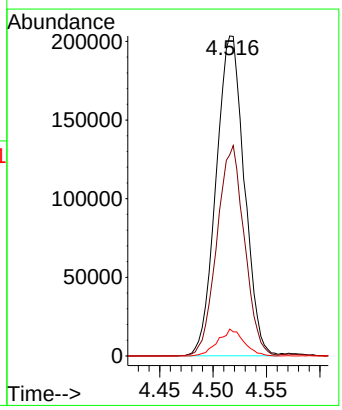
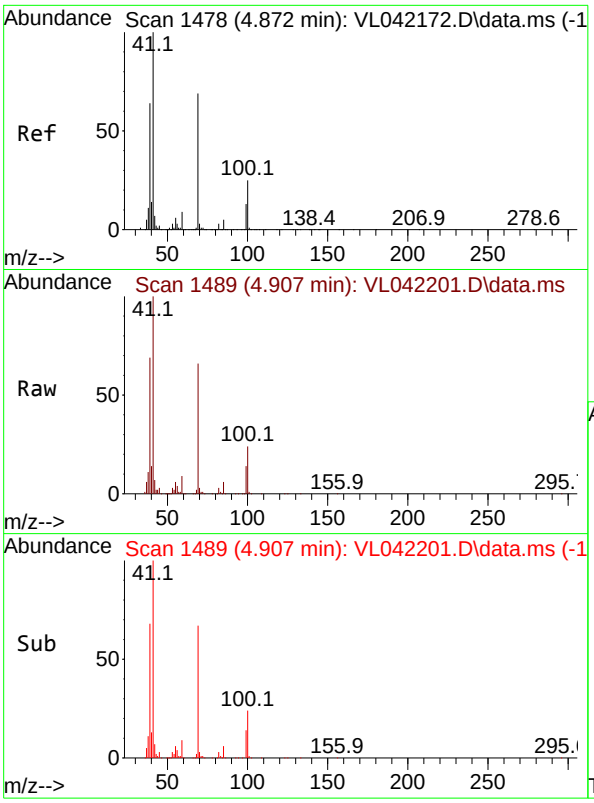


#42
Bromodichloromethane
Concen: 10.365 ppbv
RT: 4.516 min Scan# 1368
Delta R.T. 0.032 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 83 Resp: 373399

Ion	Ratio	Lower	Upper
83	100		
85	62.9	50.5	75.7
127	8.4	5.9	8.9

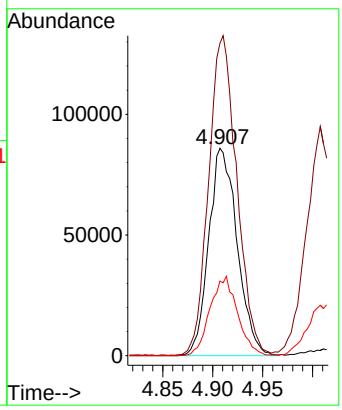




#43
Methyl Methacrylate
Concen: 8.814 ppbv
RT: 4.907 min Scan# 14
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 69 Resp: 17031

Ion	Ratio	Lower	Upper
69	100		
41	152.5	123.8	185.6
100	37.0	28.4	42.6



Instrument :
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ClientSampleId :
VSTDCCC010

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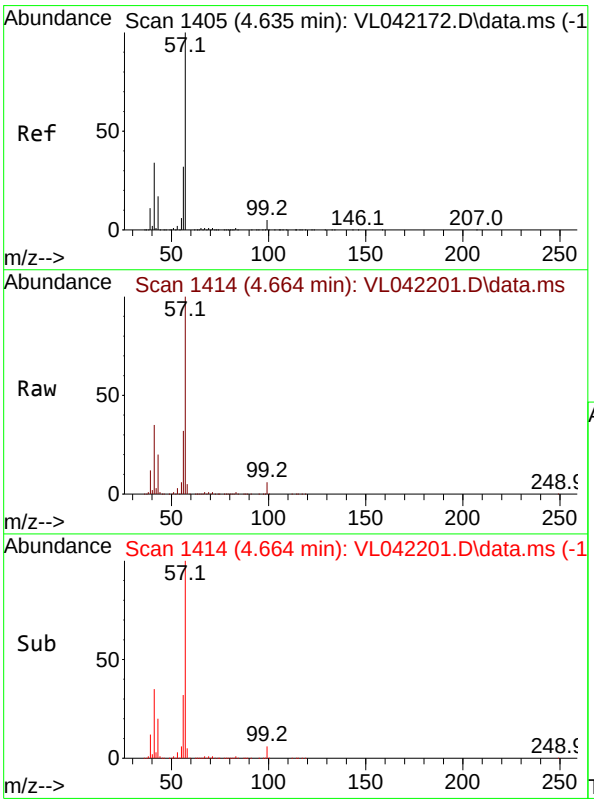
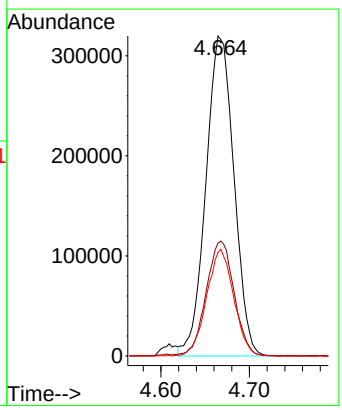
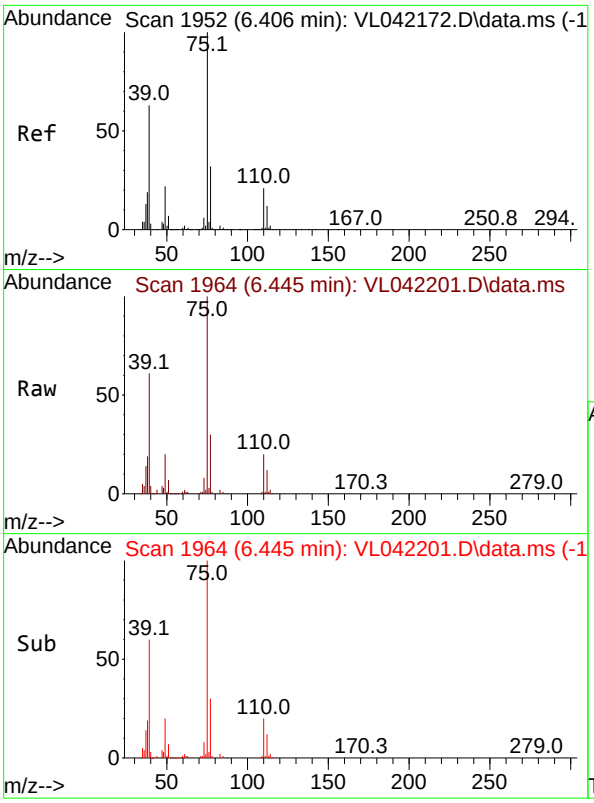


#44
2,2,4-Trimethylpentane
Concen: 9.143 ppbv
RT: 4.664 min Scan# 1414
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 57 Resp: 705253

Ion	Ratio	Lower	Upper
57	100		
41	36.1	26.8	40.2
56	32.2	25.6	38.4

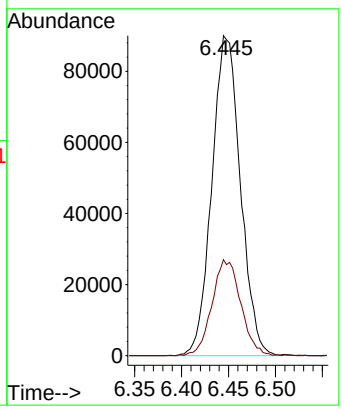




#45
t-1,3-Dichloropropene
Concen: 9.167 ppbv
RT: 6.445 min Scan# 1
Delta R.T. 0.039 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 75 Resp: 19004

Ion	Ratio	Lower	Upper
75	100		
77	30.0	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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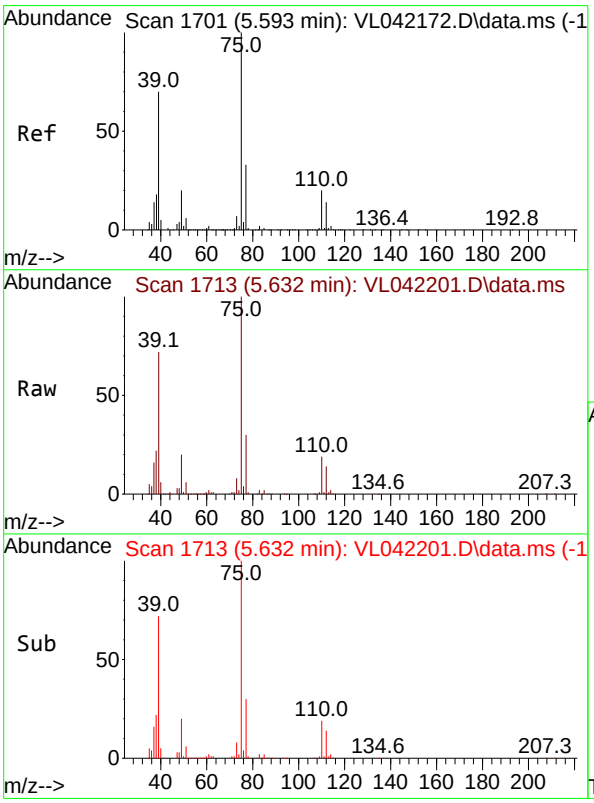
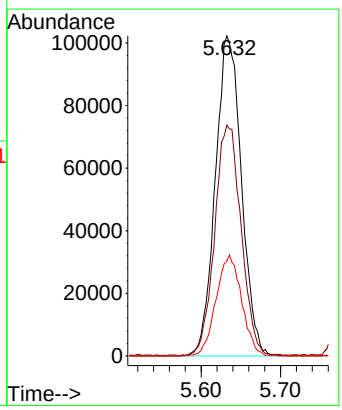
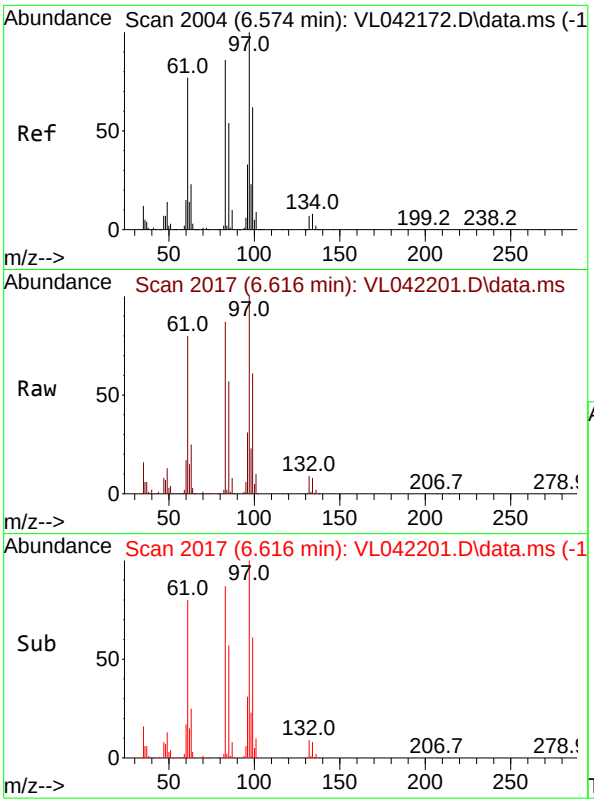


#46
cis-1,3-Dichloropropene
Concen: 9.158 ppbv
RT: 5.632 min Scan# 1713
Delta R.T. 0.039 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 75 Resp: 232713

Ion	Ratio	Lower	Upper
75	100		
39	72.0	55.8	83.6
77	29.7	26.0	39.0

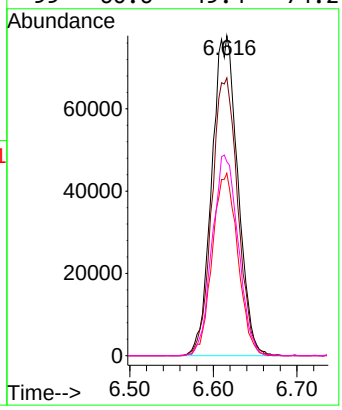




#47
1,1,2-Trichloroethane
Concen: 9.582 ppbv m
RT: 6.616 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 97 Resp: 16837

Ion	Ratio	Lower	Upper
97	100		
83	86.8	69.2	103.8
85	57.0	43.1	64.7
99	60.6	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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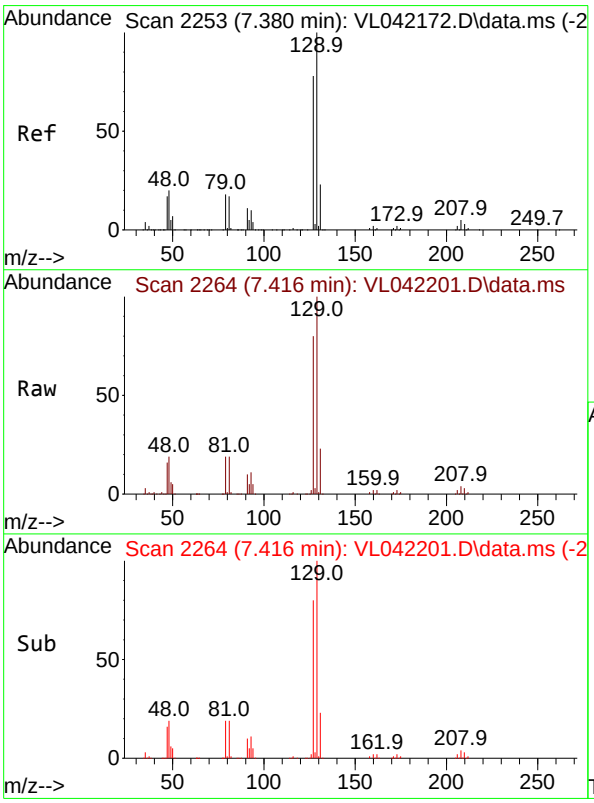
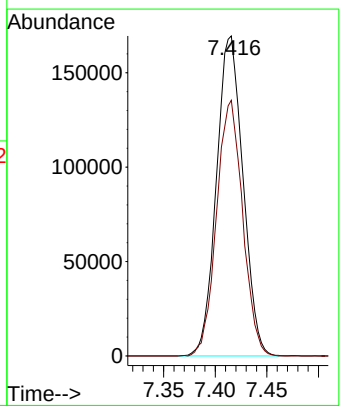
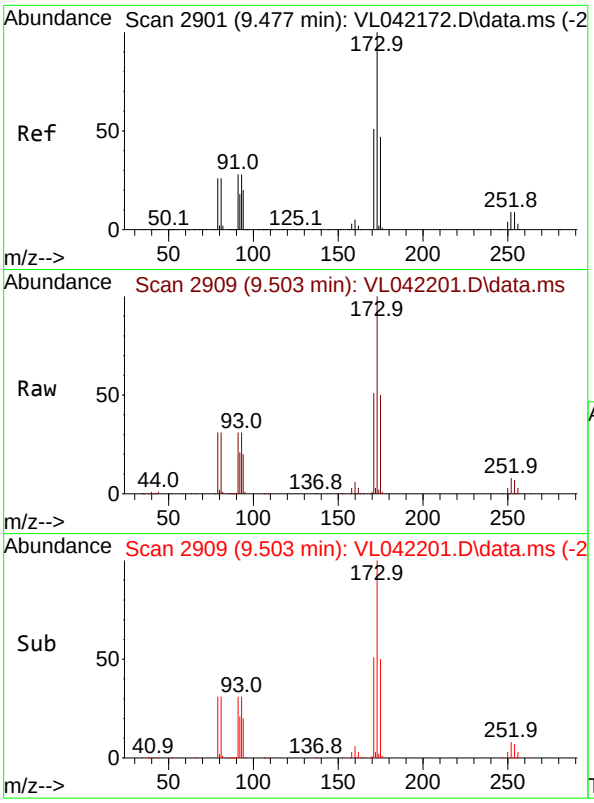


#48
Dibromochloromethane
Concen: 10.186 ppbv
RT: 7.416 min Scan# 2264
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:129 Resp: 303330

Ion	Ratio	Lower	Upper
129	100		
127	78.5	39.1	117.2





#49
Bromoform
Concen: 9.780 ppbv
RT: 9.503 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:173 Resp: 26148

Ion	Ratio	Lower	Upper
173	100		
175	47.9	38.6	57.8
171	51.3	41.8	62.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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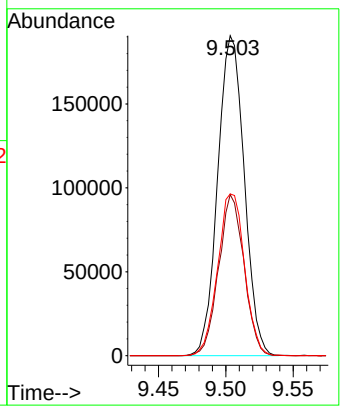
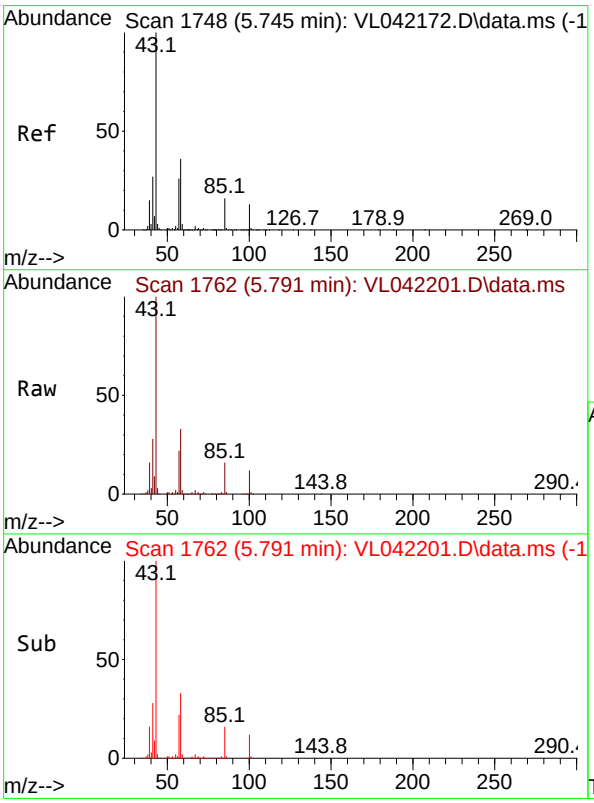
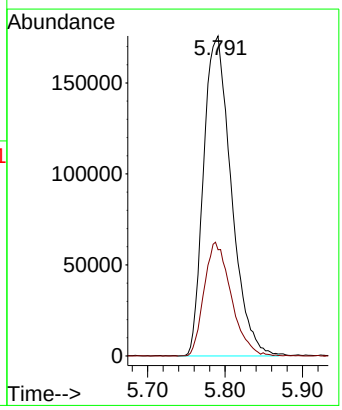


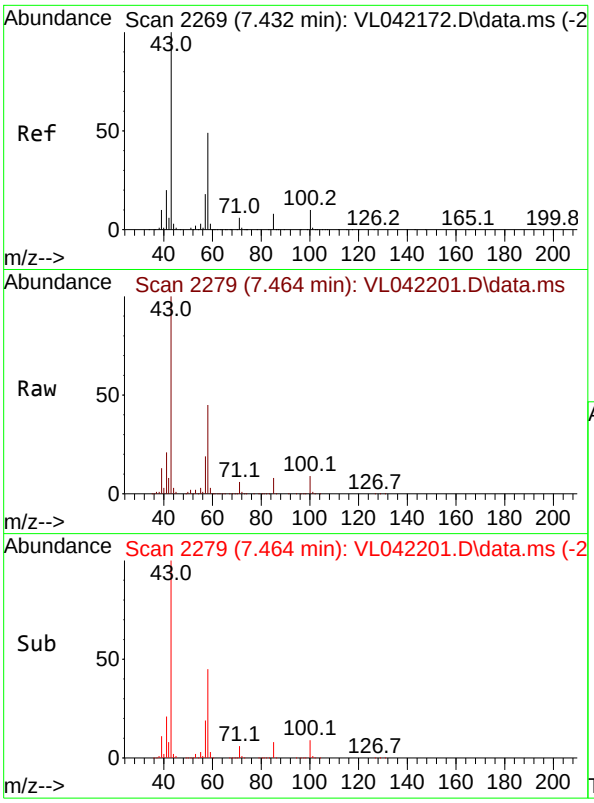


#50
4-Methyl-2-Pentanone
Concen: 8.261 ppbv
RT: 5.791 min Scan# 1762
Delta R.T. 0.045 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 437050

Ion	Ratio	Lower	Upper
43	100		
58	34.8	29.0	43.6





#51
2-Hexanone
Concen: 8.093 ppbv
RT: 7.464 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 35162

Ion	Ratio	Lower	Upper
43	100		
58	47.0	39.7	59.5
98	0.3	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
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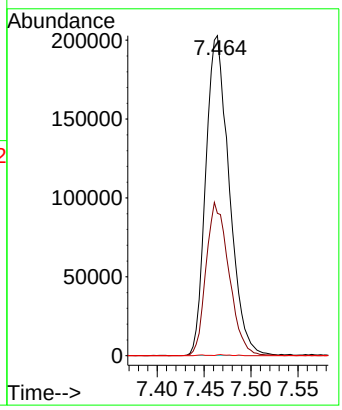
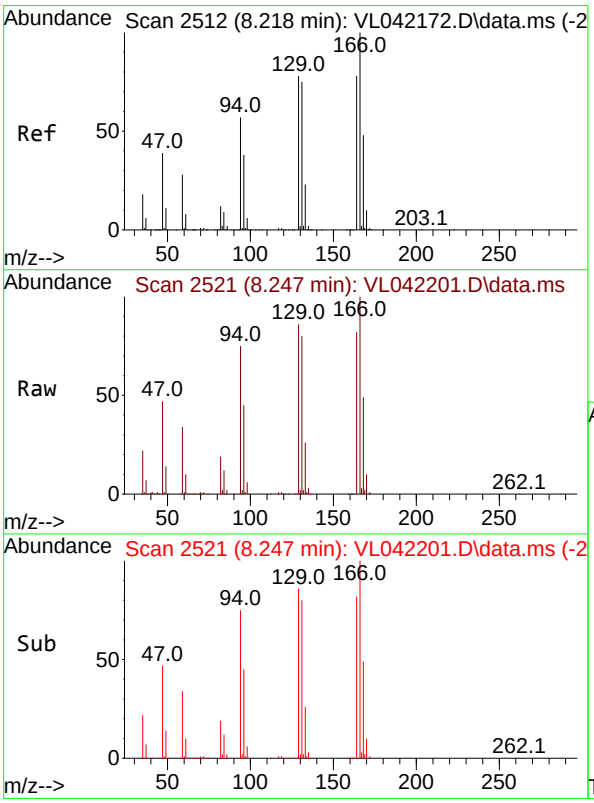
Supervised By :Mahesh Dadoda 04/01/2025

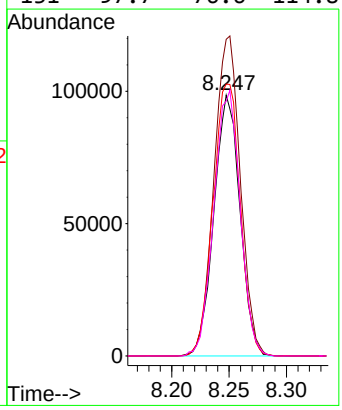


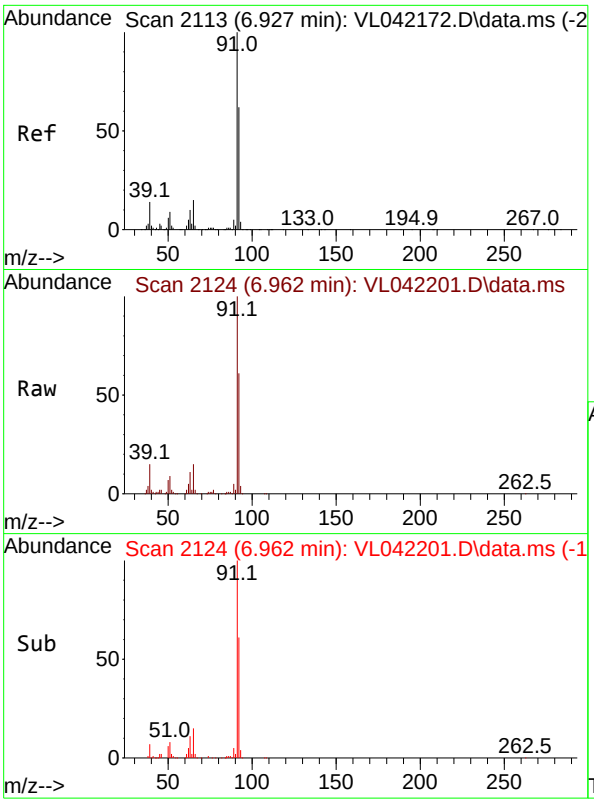


#52
Tetrachloroethene
Concen: 8.574 ppbv
RT: 8.247 min Scan# 2521
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:164 Resp: 155203

Ion	Ratio	Lower	Upper
164	100		
166	121.4	102.5	153.7
129	104.3	79.8	119.8
131	97.7	76.6	114.8

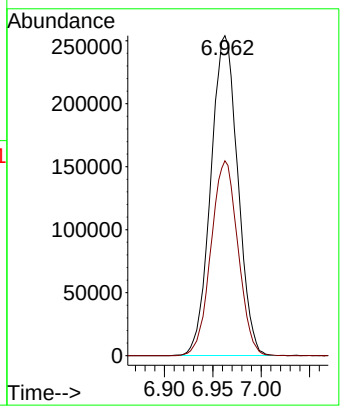




#53
Toluene
Concen: 9.106 ppbv
RT: 6.962 min Scan# 21
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 49271

Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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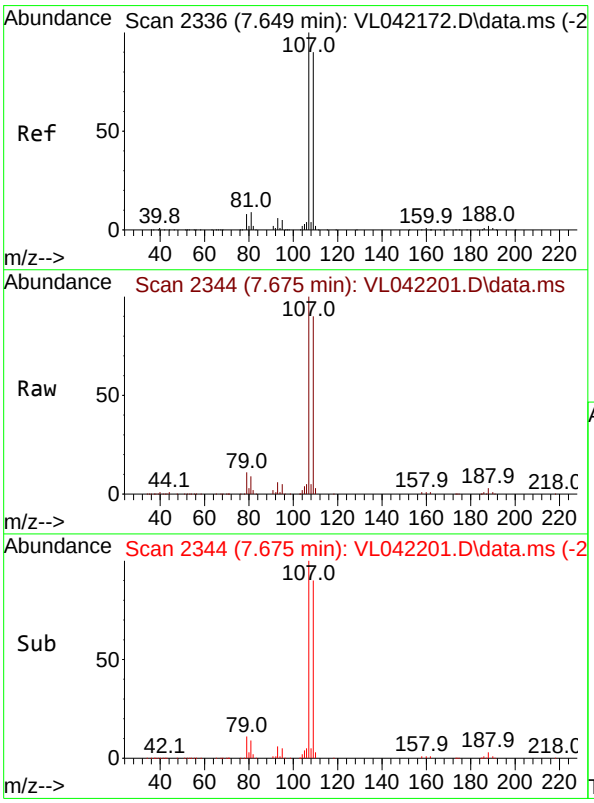
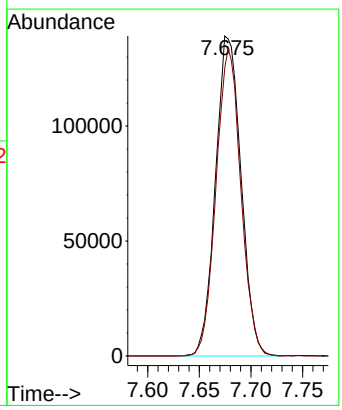
Supervised By :Mahesh Dadoda 04/01/2025

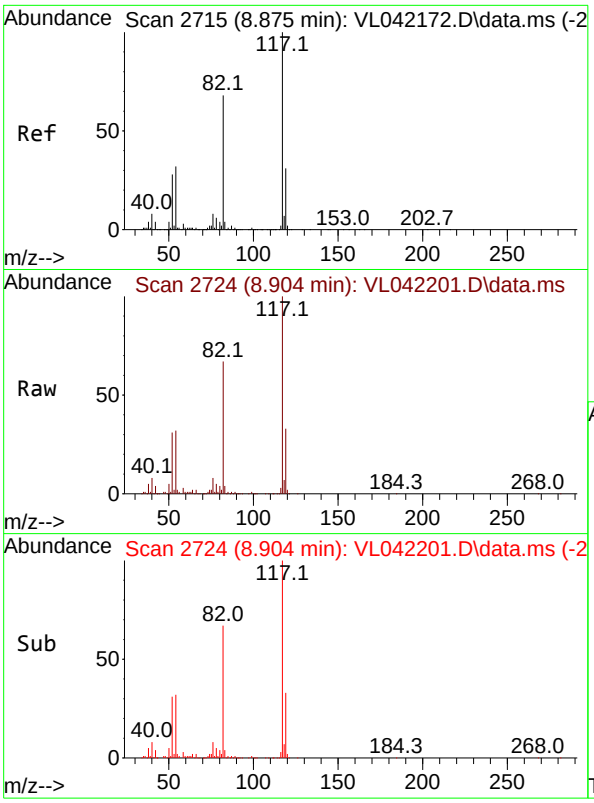


#54
1,2-Dibromoethane
Concen: 9.771 ppbv
RT: 7.675 min Scan# 2344
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:107 Resp: 239347

Ion	Ratio	Lower	Upper
107	100		
109	90.0	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.904 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:117 Resp: 42467

Ion	Ratio	Lower	Upper
117	100		
82	69.3	55.8	83.6
119	31.7	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
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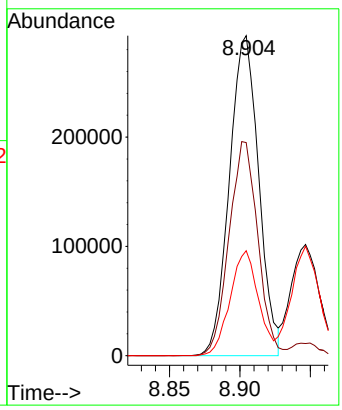
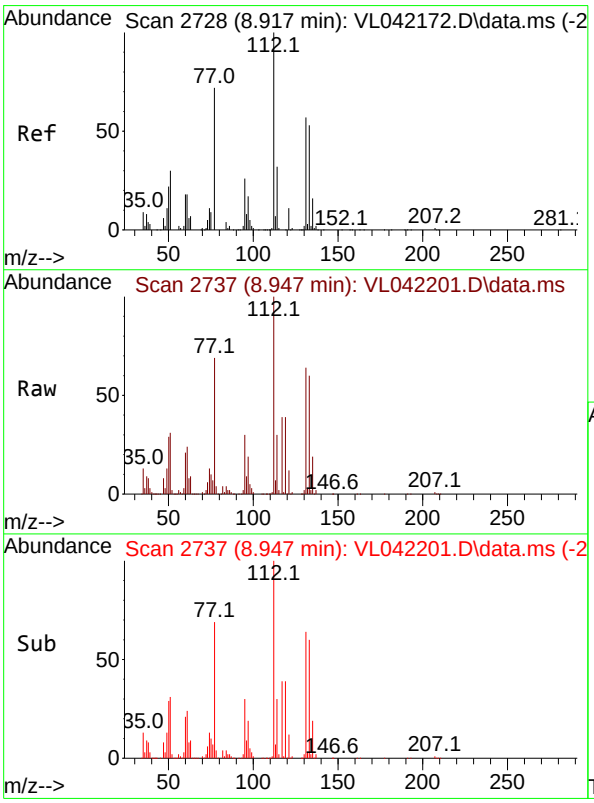
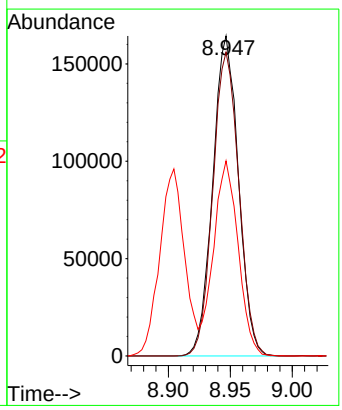


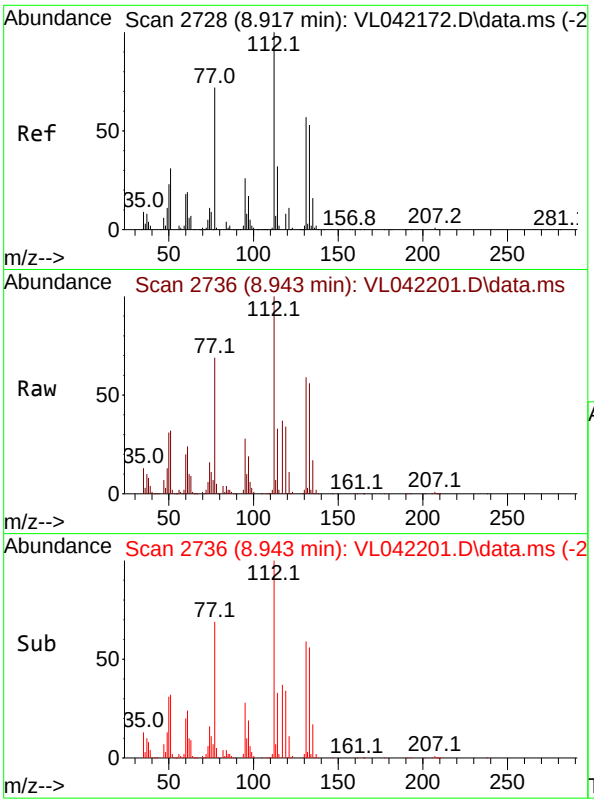


#56
1,1,1,2-Tetrachloroethane
Concen: 10.136 ppbv
RT: 8.947 min Scan# 2737
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:131 Resp: 236930

Ion	Ratio	Lower	Upper
131	100		
133	96.5	76.6	114.8
119	60.1	49.8	74.6

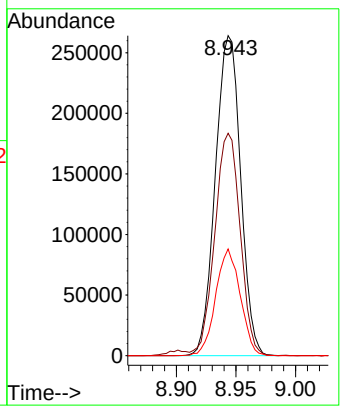




#57
Chlorobenzene
Concen: 9.669 ppbv
RT: 8.943 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:112 Resp: 38947

Ion	Ratio	Lower	Upper
112	100		
77	69.5	58.2	87.2
114	33.4	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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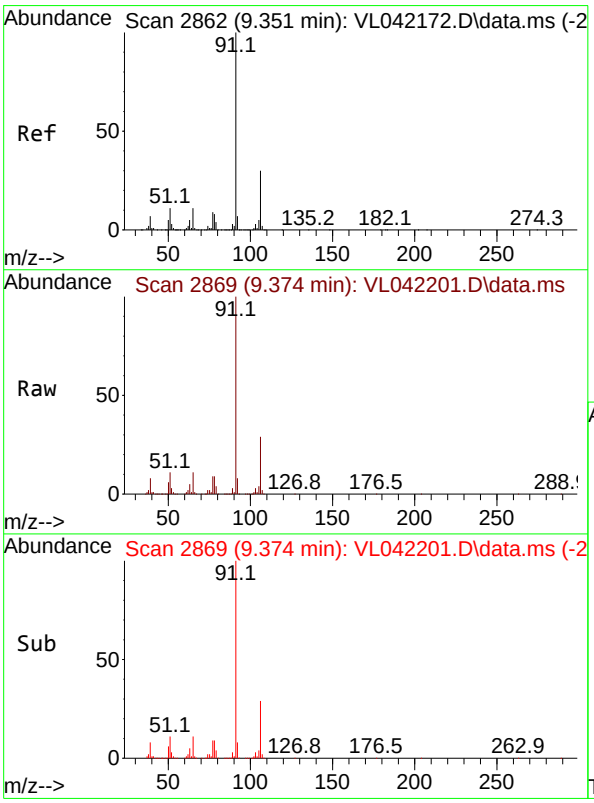
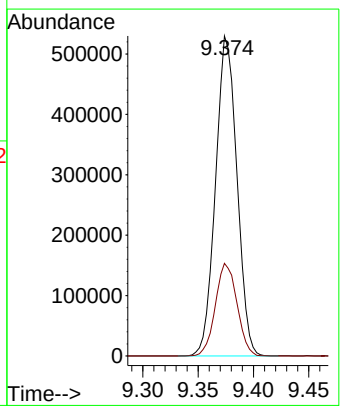
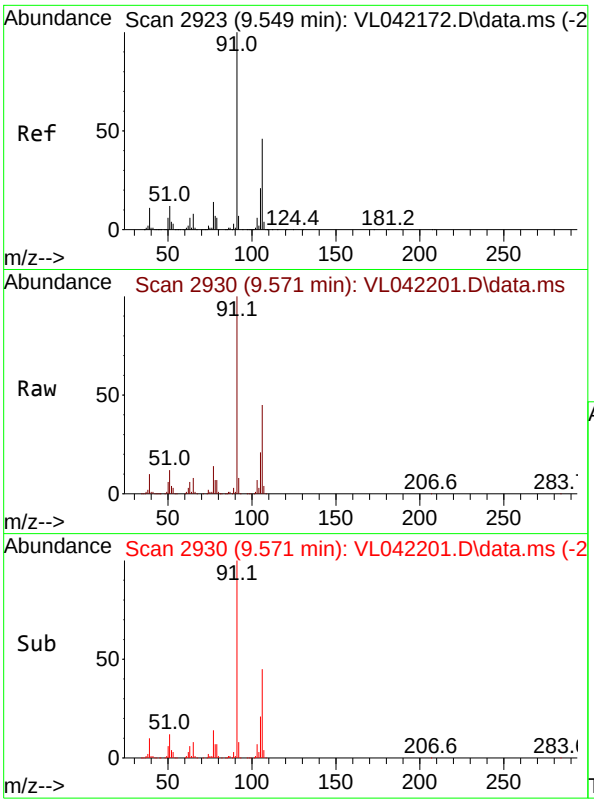


#58
Ethyl Benzene
Concen: 9.446 ppbv
RT: 9.374 min Scan# 2869
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 712533

Ion	Ratio	Lower	Upper
91	100		
106	29.0	24.2	36.2

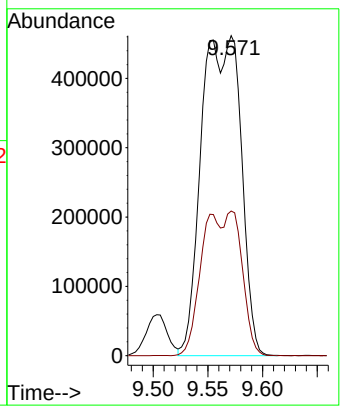




#59
m/p-Xylene
Concen: 19.336 ppbv m
RT: 9.571 min Scan# 2
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 116467

Ion	Ratio	Lower	Upper
91	100		
106	45.2	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
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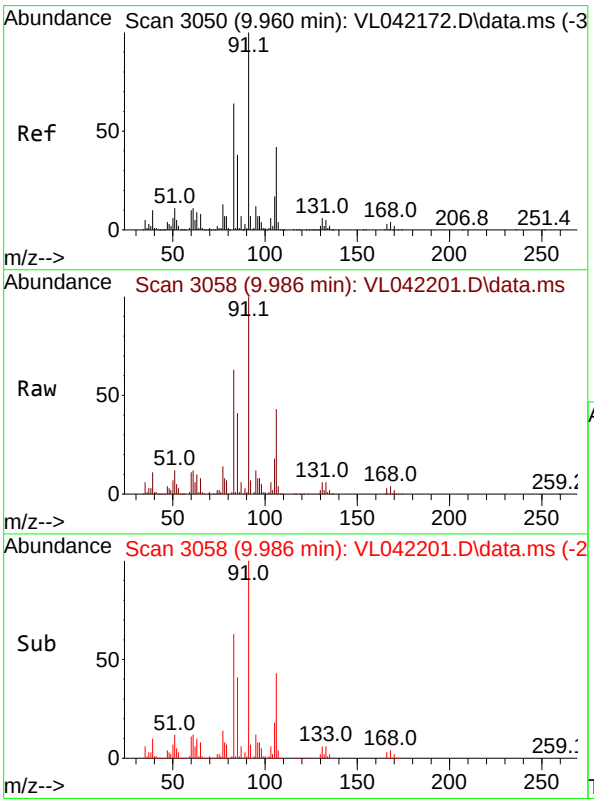
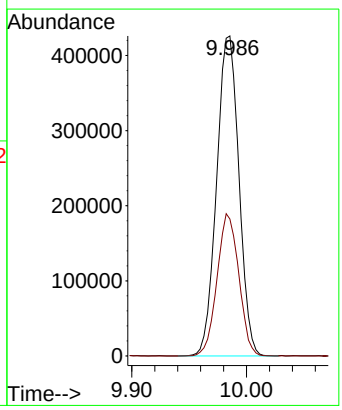
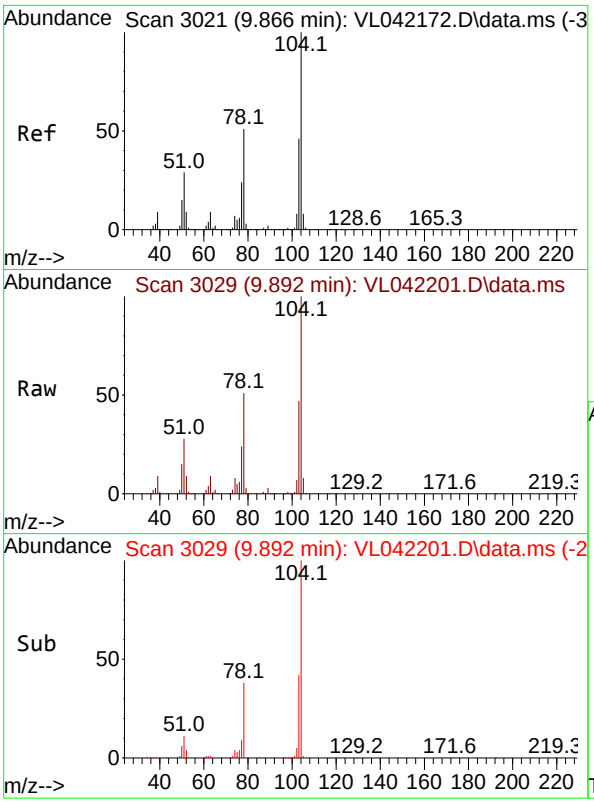


#60
o-Xylene
Concen: 9.526 ppbv
RT: 9.986 min Scan# 3058
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 575224

Ion	Ratio	Lower	Upper
91	100		
106	43.3	20.8	62.5





#61
Styrene
Concen: 9.424 ppbv
RT: 9.892 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:104 Resp: 28151

Ion	Ratio	Lower	Upper
104	100		
78	52.6	41.8	62.6
103	46.2	37.0	55.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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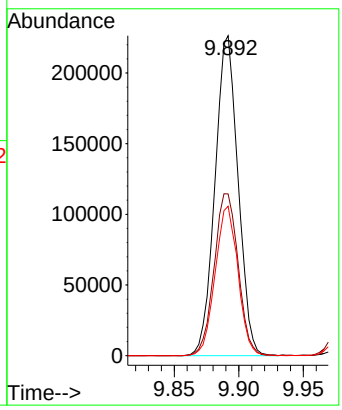
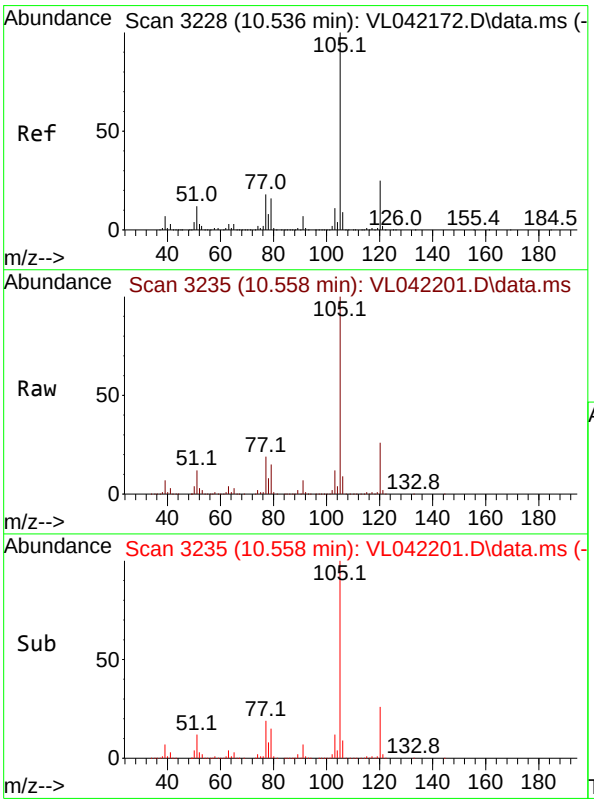
Supervised By :Mahesh Dadoda 04/01/2025

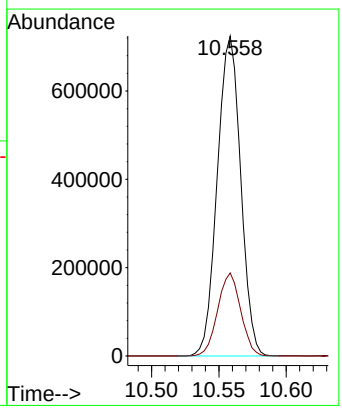


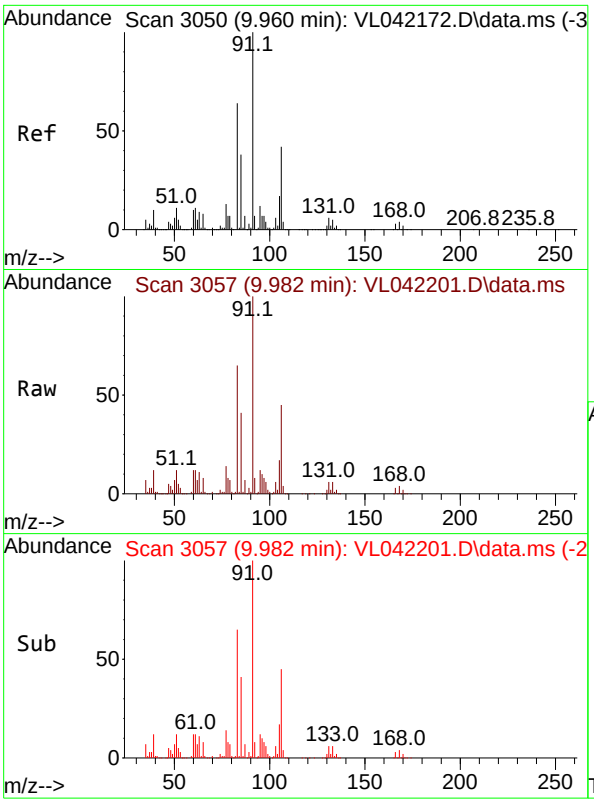


#62
Isopropylbenzene
Concen: 9.689 ppbv
RT: 10.558 min Scan# 3235
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 874894

Ion	Ratio	Lower	Upper
105	100		
120	25.4	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 9.518 ppbv
RT: 9.982 min Scan# 3
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 83 Resp: 34919

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.8	14.4
85	64.9	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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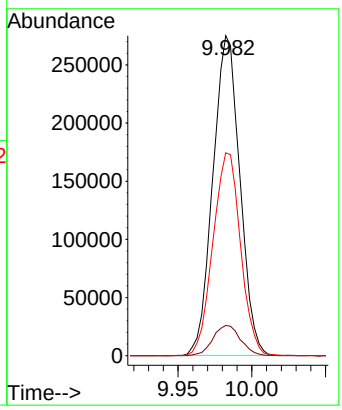
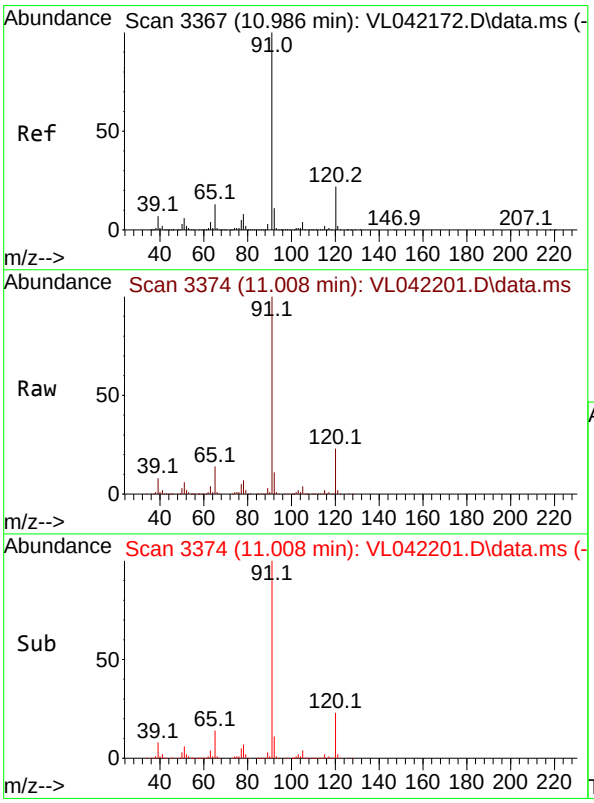
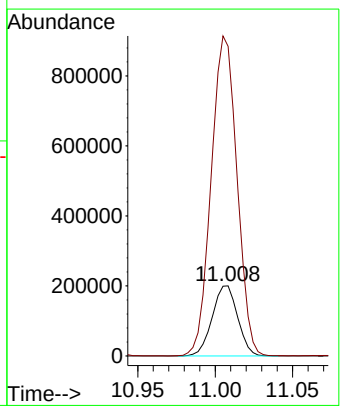


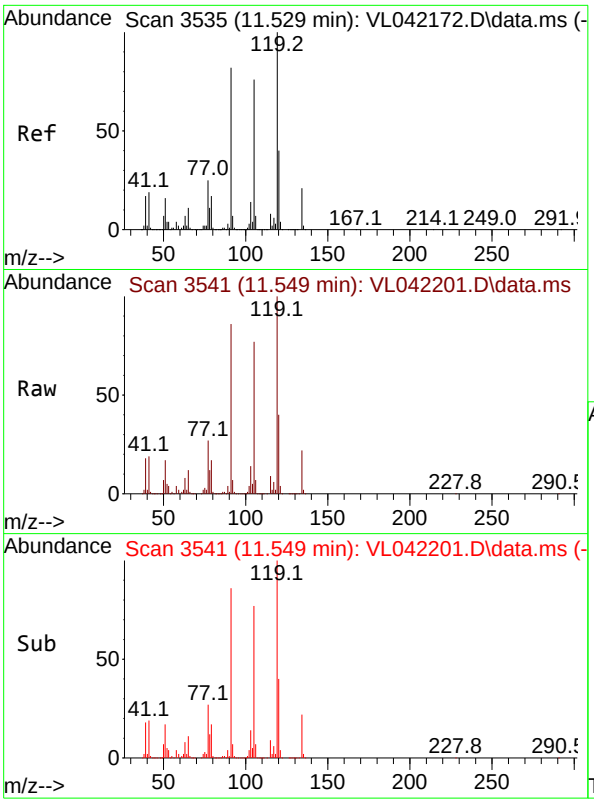


#64
n-propylbenzene
Concen: 9.826 ppbv
RT: 11.008 min Scan# 3374
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:120 Resp: 228400

Ion	Ratio	Lower	Upper
120	100		
91	463.7	376.9	565.3





#65
tert-Butylbenzene
Concen: 9.526 ppbv
RT: 11.549 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:119 Resp: 79548

Ion	Ratio	Lower	Upper
119	100		
91	84.5	66.0	99.0
134	21.1	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
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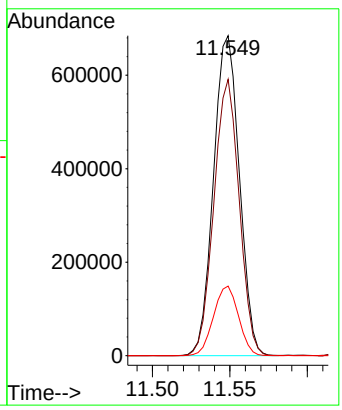
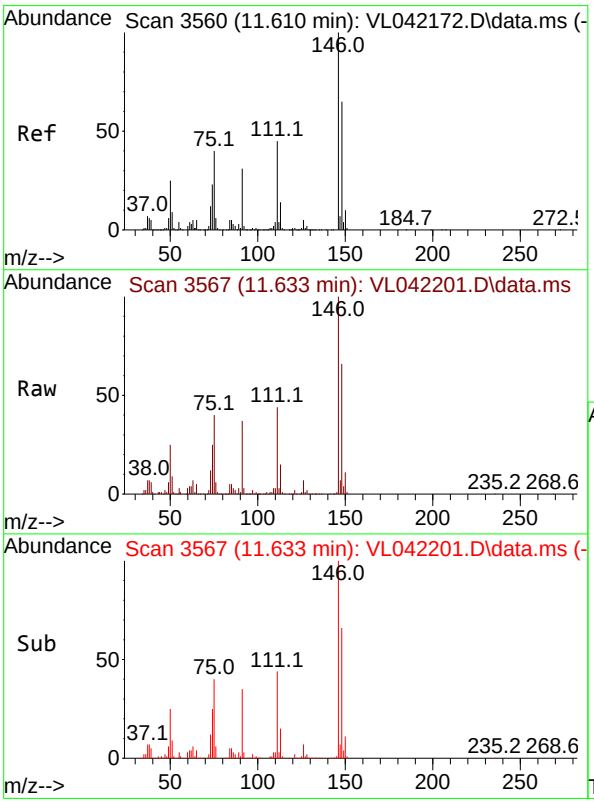
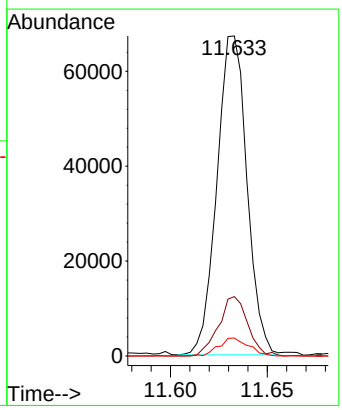


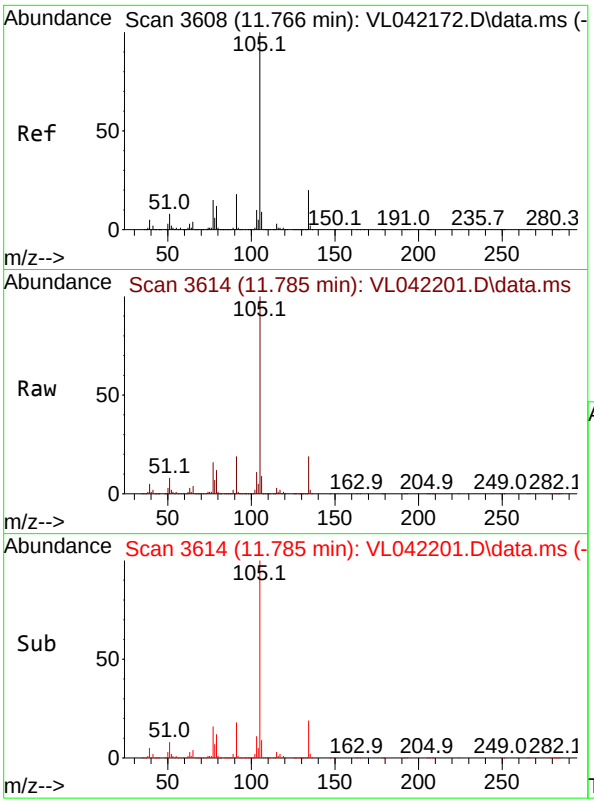


#66
Benzyl Chloride
Concen: 8.185 ppbv
RT: 11.633 min Scan# 3567
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 72526

Ion	Ratio	Lower	Upper
91	100		
126	18.0	13.8	20.6
128	5.6	4.5	6.7

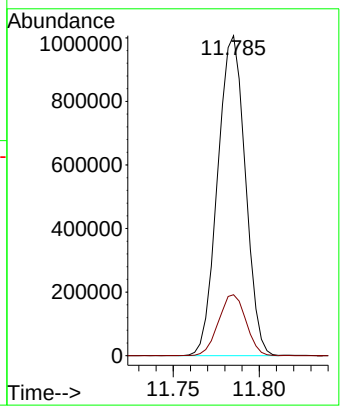




#67
sec-Butylbenzene
Concen: 9.677 ppbv
RT: 11.785 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 112326

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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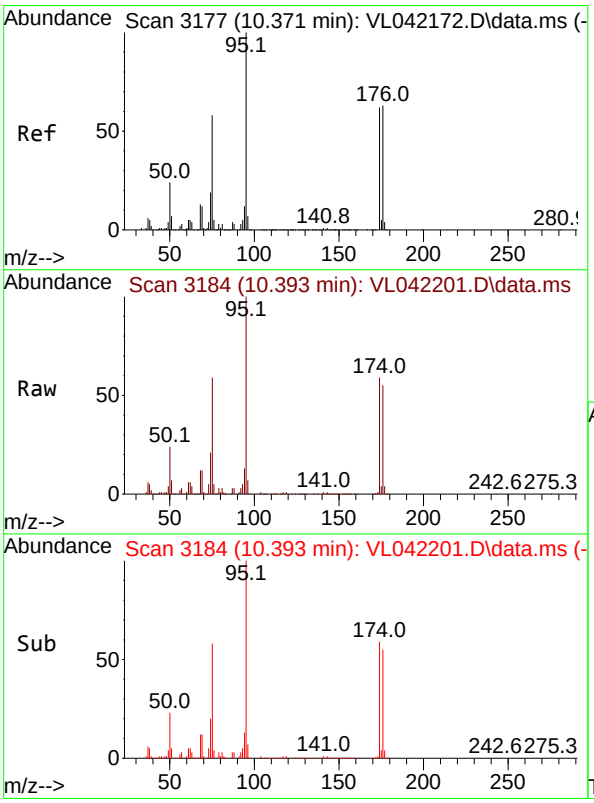
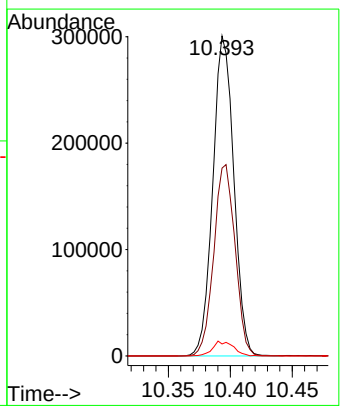
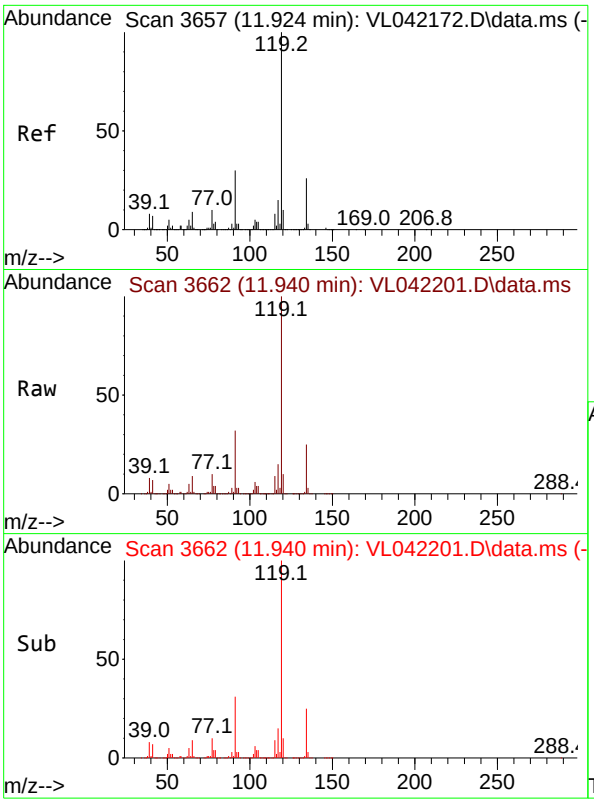


#68
1-Bromo-4-Fluorobenzene
Concen: 10.190 ppbv
RT: 10.393 min Scan# 3184
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 95 Resp: 355372

Ion	Ratio	Lower	Upper
95	100		
174	60.6	50.6	76.0
175	4.6	3.8	5.6





#69
p-Isopropyltoluene
Concen: 9.684 ppbv
RT: 11.940 min Scan# 3
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:119 Resp: 96791

Ion	Ratio	Lower	Upper
119	100		
134	25.1	20.4	30.6
91	30.0	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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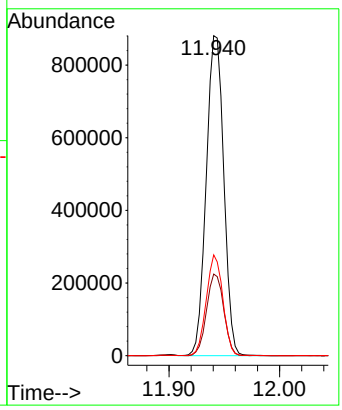
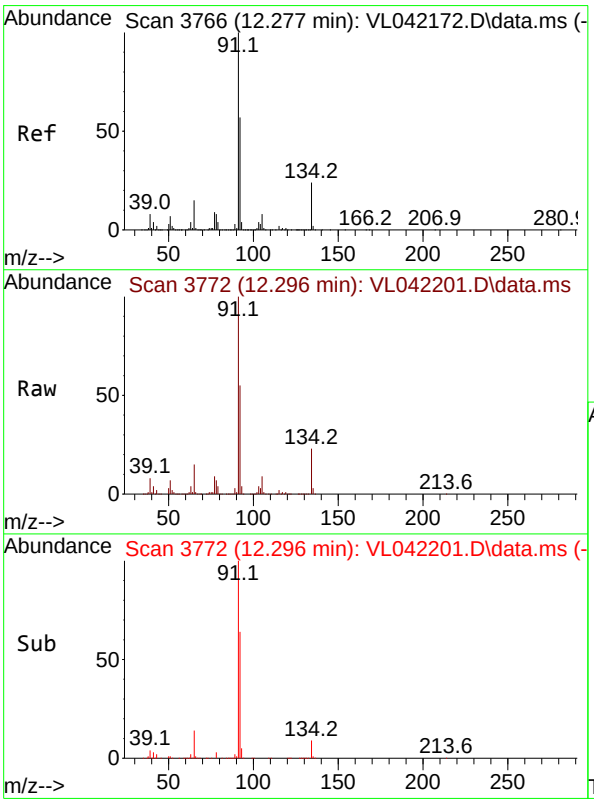
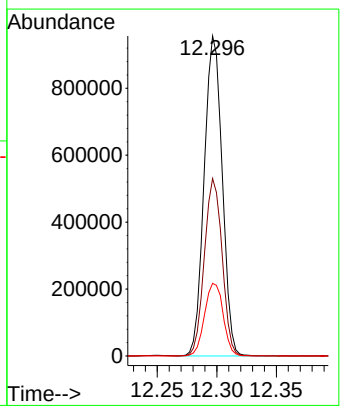


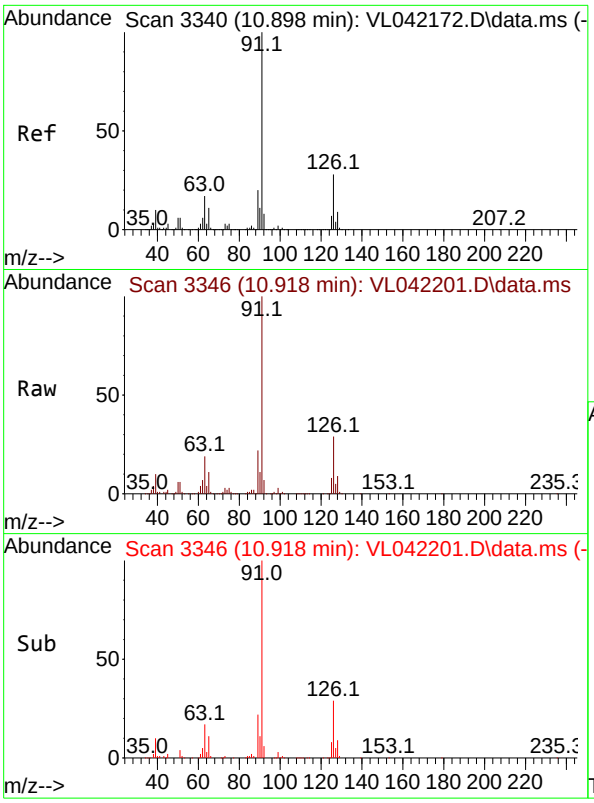


#70
n-Butylbenzene
Concen: 9.850 ppbv
RT: 12.296 min Scan# 3772
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 1006907

Ion	Ratio	Lower	Upper
91	100		
92	54.8	44.9	67.3
134	23.4	19.2	28.8

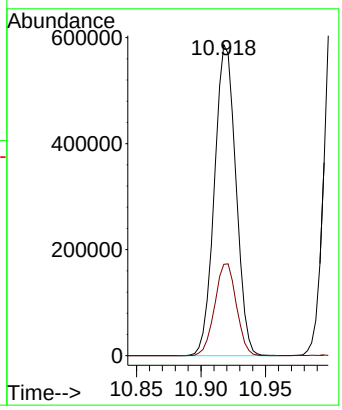




#71
2-Chlorotoluene
Concen: 9.652 ppbv
RT: 10.918 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 67639

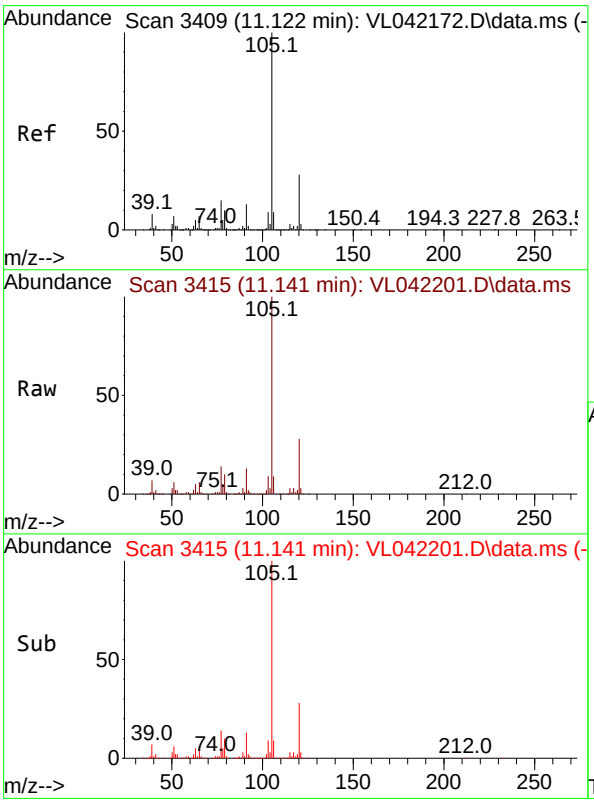
Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

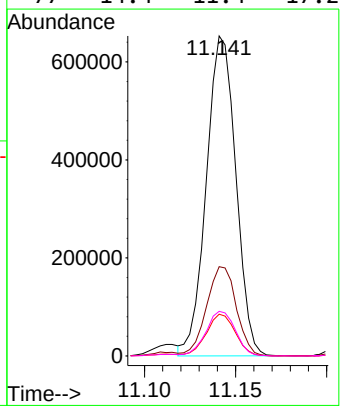
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

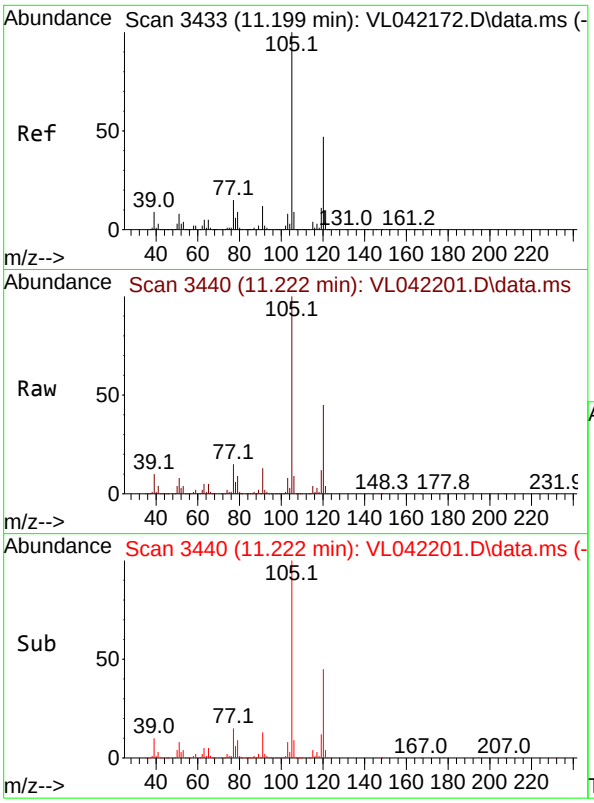


#72
4-Ethyltoluene
Concen: 9.775 ppbv
RT: 11.141 min Scan# 3415
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 734909

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	13.3	10.3	15.5
77	14.4	11.4	17.2

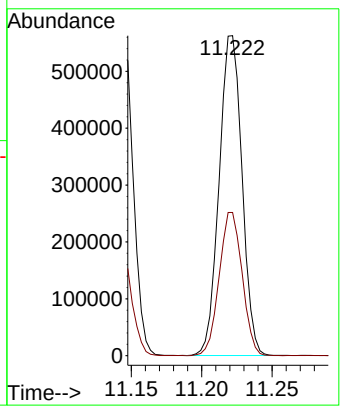




#73
1,3,5-Trimethylbenzene
Concen: 9.709 ppbv
RT: 11.222 min Scan# 34
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 637499

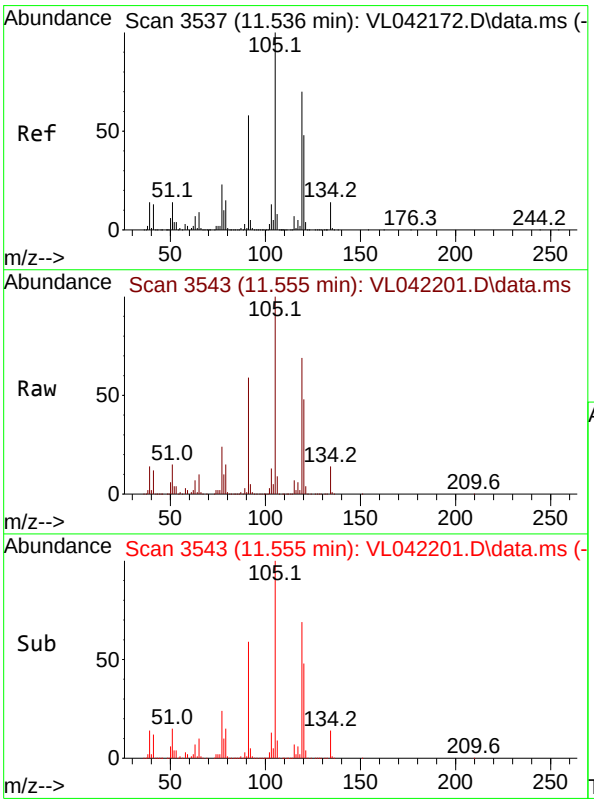
Ion	Ratio	Lower	Upper
105	100		
120	44.7	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

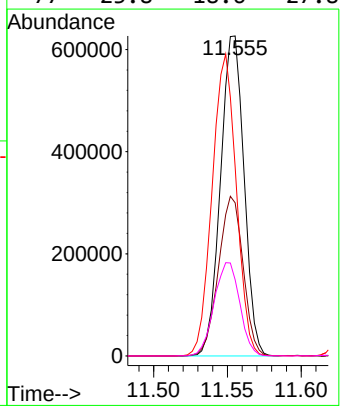
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

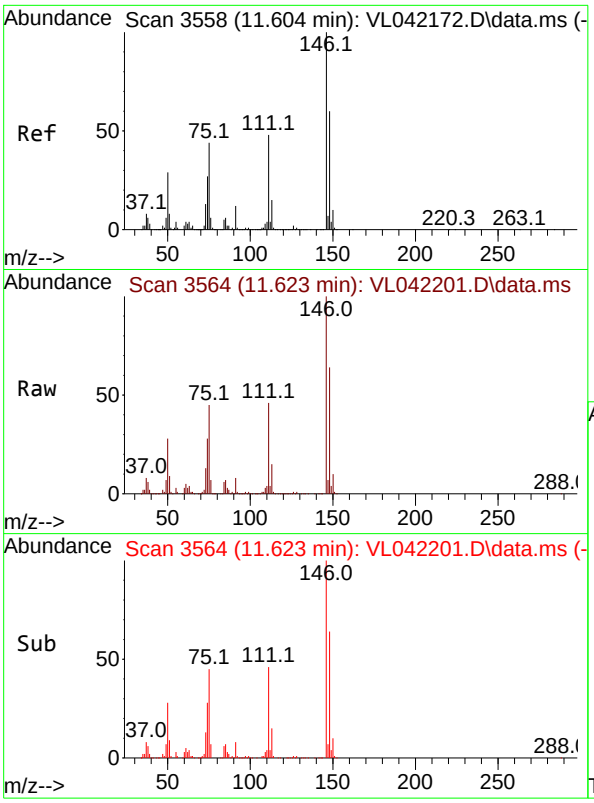


#74
1,2,4-Trimethylbenzene
Concen: 9.202 ppbv
RT: 11.555 min Scan# 3543
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 696079

Ion	Ratio	Lower	Upper
105	100		
120	47.8	38.6	58.0
91	59.0	46.2	69.2
77	23.8	18.6	27.8





#75
1,3-Dichlorobenzene
Concen: 9.895 ppbv
RT: 11.623 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

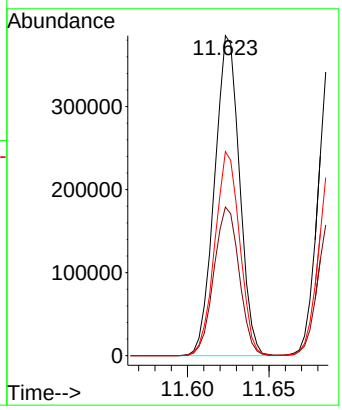
Tgt Ion:146 Resp: 41054

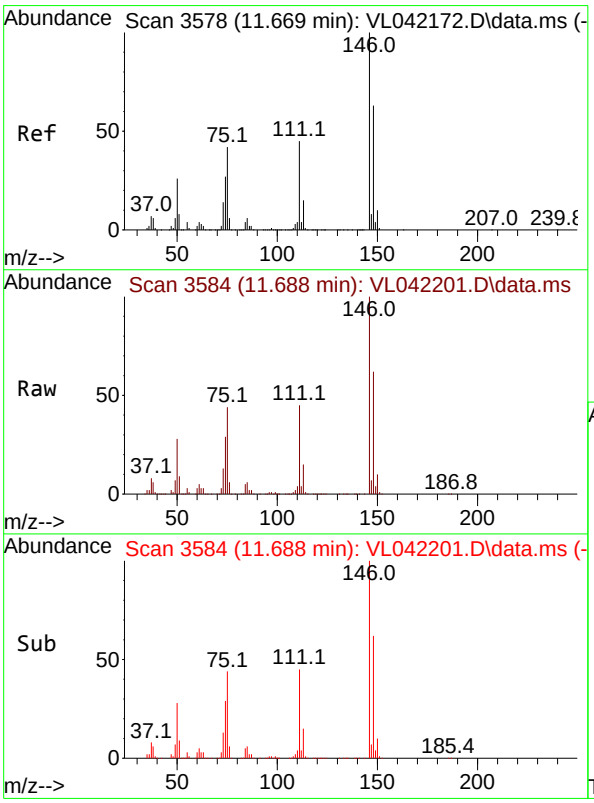
Ion	Ratio	Lower	Upper
146	100		
111	47.1	23.8	71.2
148	63.5	31.9	95.9

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

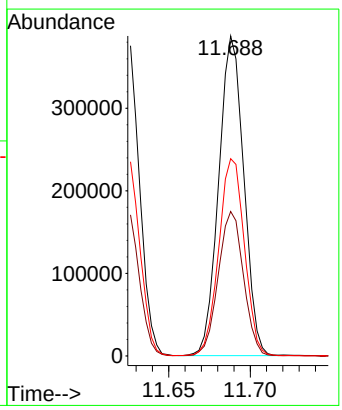


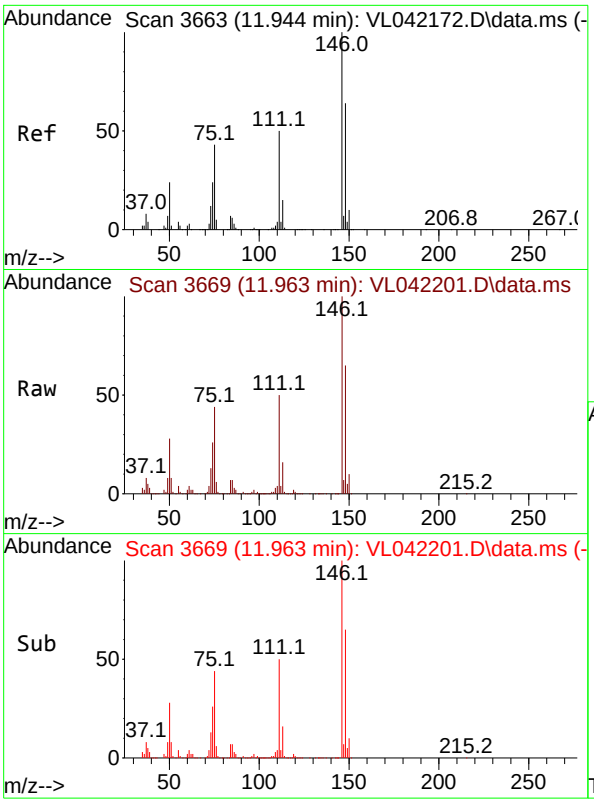


#76
1,4-Dichlorobenzene
Concen: 10.014 ppbv
RT: 11.688 min Scan# 3584
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:146 Resp: 413478

Ion	Ratio	Lower	Upper
146	100		
111	45.8	23.0	69.0
148	63.5	31.9	95.7





#77
1,2-Dichlorobenzene
Concen: 9.887 ppbv
RT: 11.963 min Scan# 3(
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

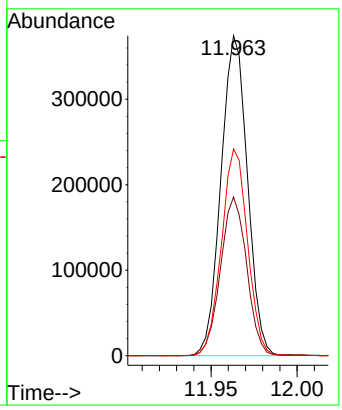
Tgt Ion:146 Resp: 39938(

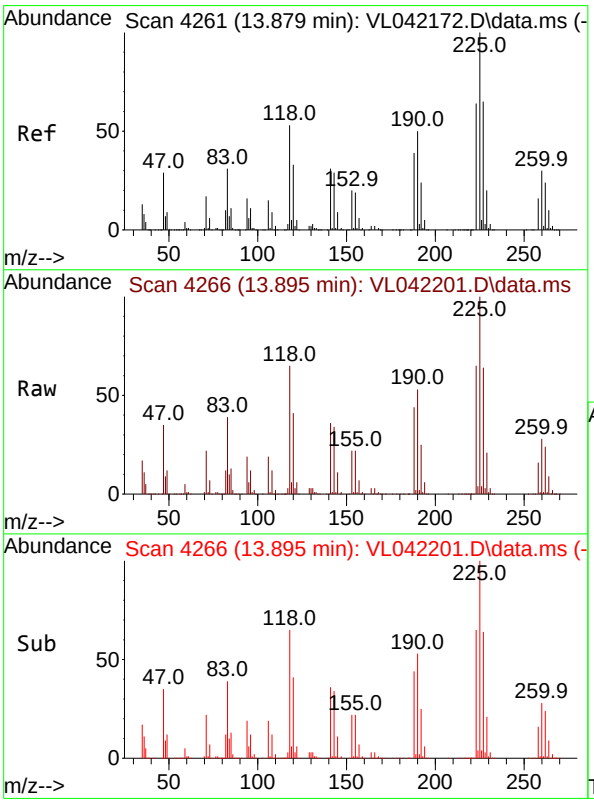
Ion	Ratio	Lower	Upper
146	100		
111	49.4	24.8	74.3
148	64.0	31.6	94.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

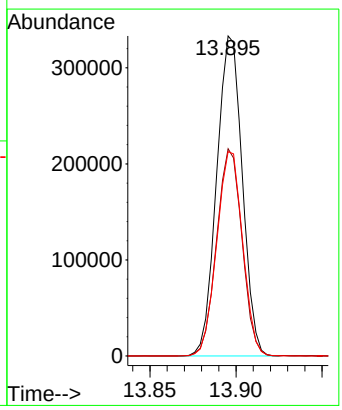


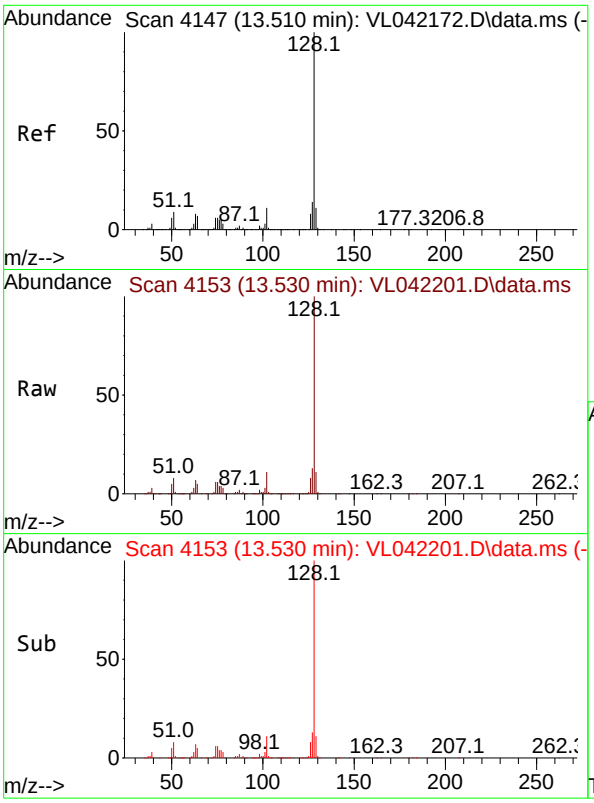


#78
Hexachloro-1,3-Butadiene
Concen: 8.395 ppbv
RT: 13.895 min Scan# 4266
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:225 Resp: 345217

Ion	Ratio	Lower	Upper
225	100		
223	64.1	50.6	76.0
227	64.4	51.2	76.8

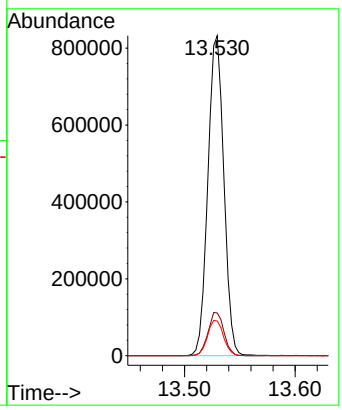




#79
Naphthalene
Concen: 10.072 ppbv
RT: 13.530 min Scan# 4
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:128 Resp: 83334

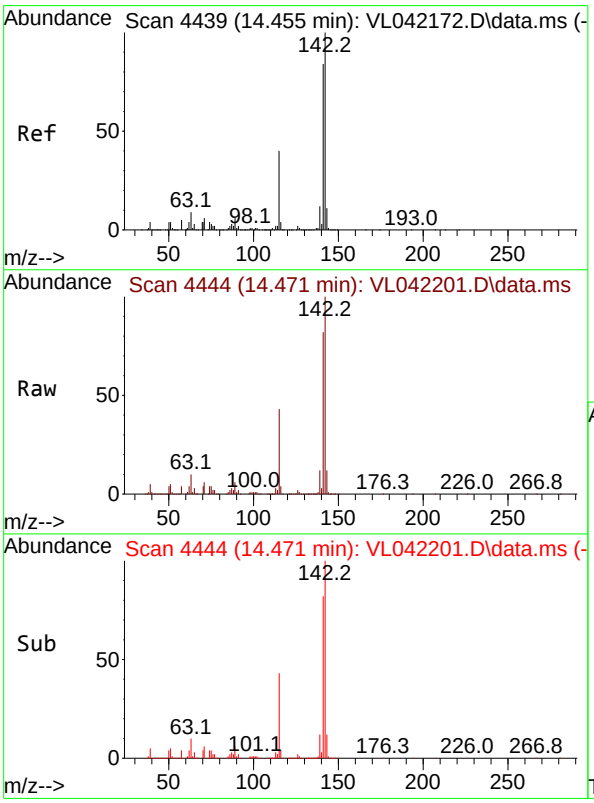
Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	10.9	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

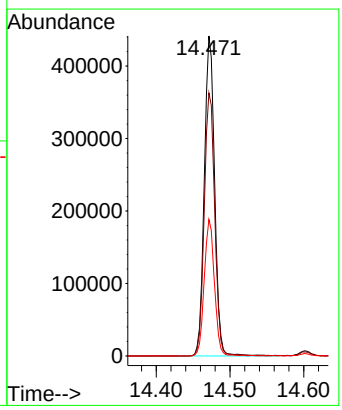
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

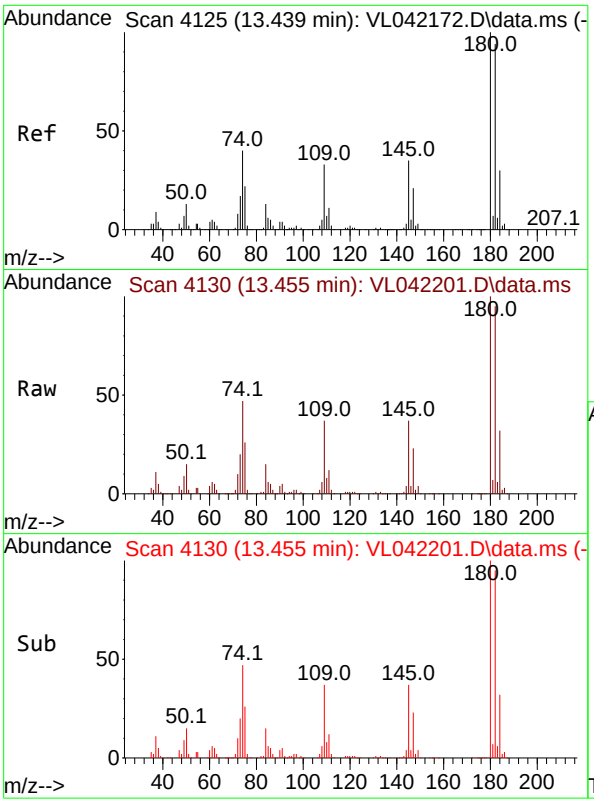


#80
Naphthalene,2-methyl-
Concen: 10.537 ppbv
RT: 14.471 min Scan# 4444
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:142 Resp: 427563

Ion	Ratio	Lower	Upper
142	100		
141	84.2	66.3	99.5
115	42.4	31.6	47.4

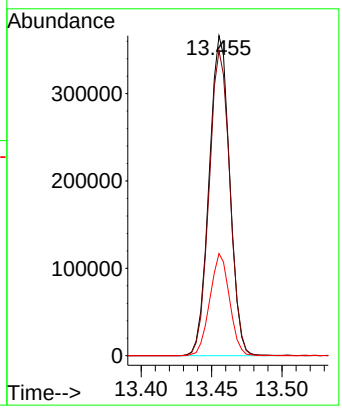




#81
1,2,4-Trichlorobenzene
Concen: 9.779 ppbv
RT: 13.455 min Scan# 4
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:180 Resp: 37322

Ion	Ratio	Lower	Upper
180	100		
182	95.8	75.1	112.7
184	30.5	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 01 01:49:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 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	86	0.02
2	T	Dichlorodifluoromethane	1.476	1.509	-2.2	93	0.00
3		Chlorodifluoromethane	1.508	1.449	3.9	86	0.00
4		Chloromethane	0.603	0.570	5.5	86	0.00
5	T	Vinyl Chloride	0.639	0.550	13.9	86	0.00
6	T	Bromomethane	0.273	0.252	7.7	85	0.00
7		Chloroethane	0.242	0.221	8.7	84	0.00
8	T	Dichlorotetrafluoroethane	1.257	1.261	-0.3	90	0.00
9	T	Propene	0.691	0.589	14.8	77	0.00
10	T	Heptane	1.839	1.622	11.8	78	0.04
11	T	Trichlorofluoromethane	1.437	1.435	0.1	93	0.01
12	T	1,1,2-Trichlorotrifluoroeth	1.181	1.132	4.1	87	0.01
13		Ethanol	0.065	0.028#	56.9#	84	0.00
14	T	Bromoethene	0.452	0.414	8.4	86	0.01
15	T	Acetone	1.399	1.200	14.2	93	0.00
16	T	1,3-Butadiene	0.683	0.595	12.9	90	0.00
17		tert-Butyl alcohol	1.742	1.563	10.3	83	0.01
18	T	1,1-Dichloroethene	0.552	0.513	7.1	88	0.01
19	T	Isopropyl Alcohol	0.789	0.713	9.6	88	0.00
20	T	Methylene Chloride	0.521	0.420	19.4	83	0.01
21	T	Allyl Chloride	0.986	0.895	9.2	86	0.02
22	T	trans-1,2-Dichloroethene	0.638	0.569	10.8	83	0.02
23	T	Vinyl Acetate	0.605	0.514	15.0	89	0.01
24	T	1,1-Dichloroethane	1.183	1.151	2.7	89	0.02
25	T	Ethyl Acetate	3.630	3.322	8.5	83	0.02
26	T	Hexane	1.402	1.295	7.6	84	0.02
27	T	Carbon Disulfide	1.503	1.425	5.2	86	0.01
28	T	Methyl tert-Butyl Ether	0.873	1.103	-26.3	115	0.02
29	T	Chloroform	2.052	2.093	-2.0	94	0.02
30	T	Cyclohexane	1.217	1.115	8.4	83	0.03
31	T	cis-1,2-Dichloroethene	1.423	1.359	4.5	86	0.02
32	T	1,1,1-Trichloroethane	2.349	2.228	5.2	93	0.02
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.03
34	T	2-Butanone	0.725	0.655	9.7	83	0.02
35	T	Carbon Tetrachloride	0.781	0.807	-3.3	97	0.03
36	T	Benzene	0.991	0.927	6.5	84	0.03
37	T	1,2-Dichloroethane	0.568	0.593	-4.4	93	0.02
38	T	Trichloroethene	0.414	0.391	5.6	88	0.03
39	T	1,2-Dichloropropane	0.361	0.333	7.8	83	0.03
40	T	1,4-Dioxane	0.192	0.168	12.5	84	0.04
41	T	Tetrahydrofuran	0.418	0.371	11.2	79	0.02
42	T	Bromodichloromethane	0.782	0.811	-3.7	89	0.03
43		Methyl Methacrylate	0.420	0.370	11.9	78	0.04
44	T	2,2,4-Trimethylpentane	1.675	1.532	8.5	80	0.03
45	T	t-1,3-Dichloropropene	0.450	0.413	8.2	79	0.04
46	T	cis-1,3-Dichloropropene	0.552	0.505	8.5	78	0.04
47	T	1,1,2-Trichloroethane	0.382	0.366	4.2	85	0.04
48	T	Dibromochloromethane	0.647	0.659	-1.9	88	0.04

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 01 01:49:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 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	0.581	0.568	2.2	82	0.03
50	T	4-Methyl-2-Pentanone	1.149	0.949	17.4	78	0.05
51	T	2-Hexanone	0.944	0.764	19.1	76	0.03
52	T	Tetrachloroethene	0.393	0.337	14.2	83	0.03
53	T	Toluene	1.175	1.070	8.9	80	0.04
54	T	1,2-Dibromoethane	0.532	0.520	2.3	86	0.03
55	I	Chlorobenzene-d5	1.000	1.000	0.0	82	0.03
56		1,1,1,2-Tetrachloroethane	0.550	0.558	-1.5	89	0.03
57	T	Chlorobenzene	0.949	0.917	3.4	86	0.03
58	T	Ethyl Benzene	1.776	1.678	5.5	82	0.02
59	T	m/p-Xylene	1.418	1.371	3.3	85	0.02
60	T	o-Xylene	1.422	1.355	4.7	83	0.03
61	T	Styrene	0.703	0.663	5.7	79	0.03
62		Isopropylbenzene	2.126	2.060	3.1	86	0.02
63	T	1,1,2,2-Tetrachloroethane	0.864	0.822	4.9	84	0.02
64		n-propylbenzene	0.547	0.538	1.6	88	0.02
65		tert-Butylbenzene	1.966	1.873	4.7	88	0.02
66	T	Benzyl Chloride	0.209	0.171	18.2	69	0.02
67		sec-Butylbenzene	2.733	2.645	3.2	90	0.02
68	S	1-Bromo-4-Fluorobenzene	0.821	0.837	-1.9	84	0.02
69		p-Isopropyltoluene	2.354	2.279	3.2	90	0.02
70		n-Butylbenzene	2.407	2.371	1.5	91	0.02
71		2-Chlorotoluene	1.650	1.593	3.5	85	0.02
72	T	4-Ethyltoluene	1.770	1.731	2.2	87	0.02
73	T	1,3,5-Trimethylbenzene	1.546	1.501	2.9	88	0.02
74	T	1,2,4-Trimethylbenzene	1.781	1.639	8.0	89	0.02
75	T	1,3-Dichlorobenzene	0.977	0.967	1.0	90	0.02
76	T	1,4-Dichlorobenzene	0.972	0.974	-0.2	90	0.02
77	T	1,2-Dichlorobenzene	0.951	0.940	1.2	90	0.02
78	T	Hexachloro-1,3-Butadiene	0.968	0.813	16.0	83	0.02
79	T	Naphthalene	1.948	1.962	-0.7	89	0.02
80	T	Naphthalene,2-methyl-	0.955	1.007	-5.4	83	0.02
81	T	1,2,4-Trichlorobenzene	0.899	0.879	2.2	84	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QC SAMPLE DATA

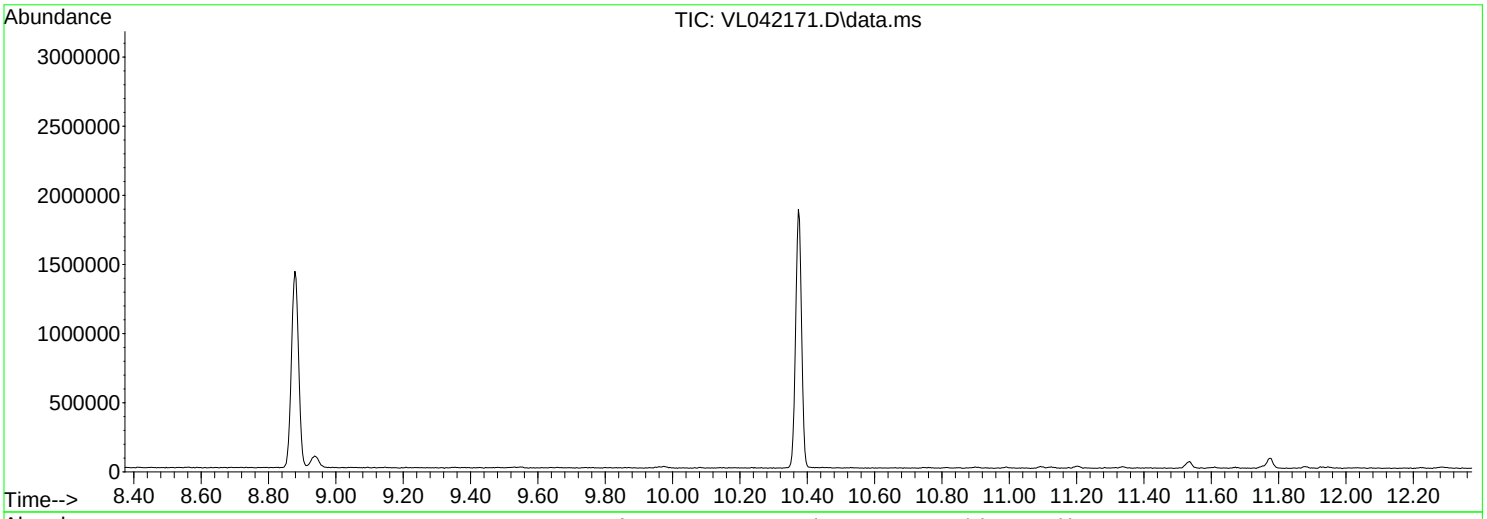
BFB

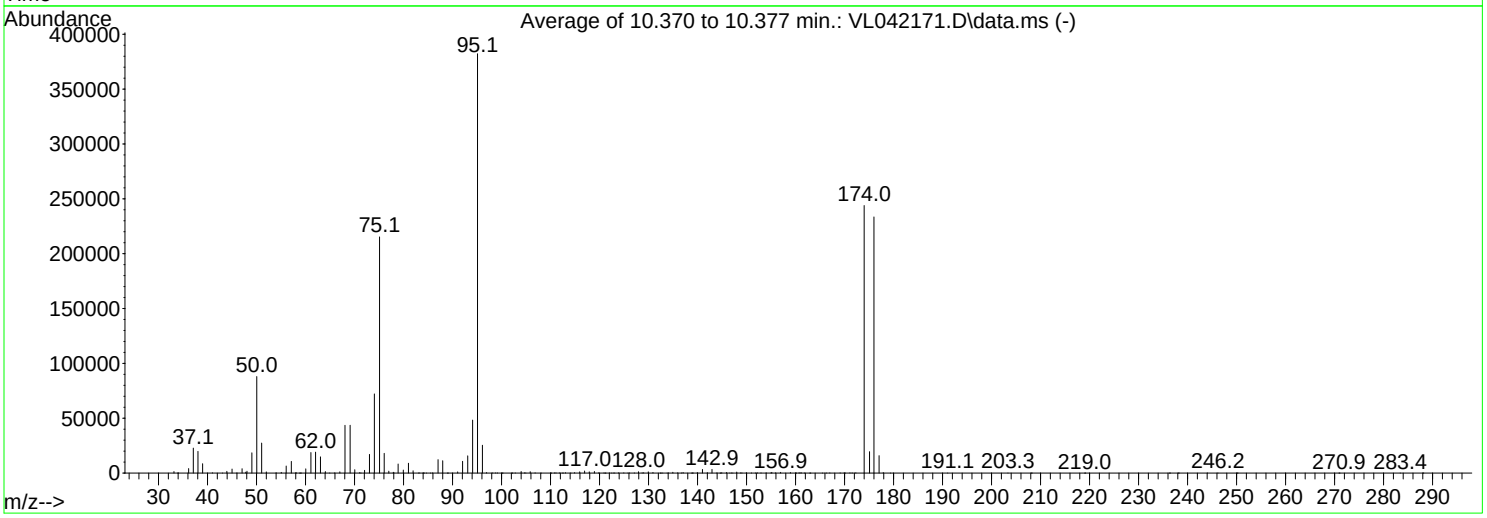
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042171.D
Acq On : 27 Mar 2025 07:44
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025





AutoFind: Scans 3177, 3178, 3179; Background Corrected with Scan 3150

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.0	87995	PASS
75	95	30	66	56.3	215296	PASS
95	95	100	100	100.0	382268	PASS
96	95	5	9	6.6	25383	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	63.8	243904	PASS
175	174	4	9	8.0	19539	PASS
176	174	93	101	95.7	233493	PASS
177	176	5	9	6.8	15877	PASS

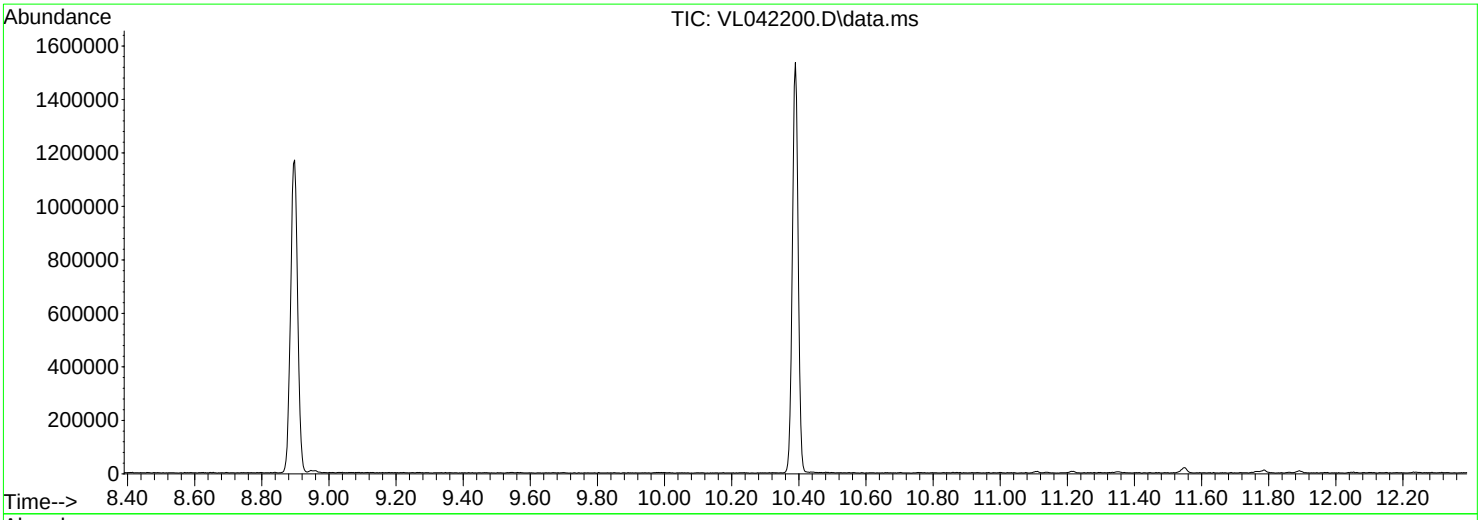
BFB

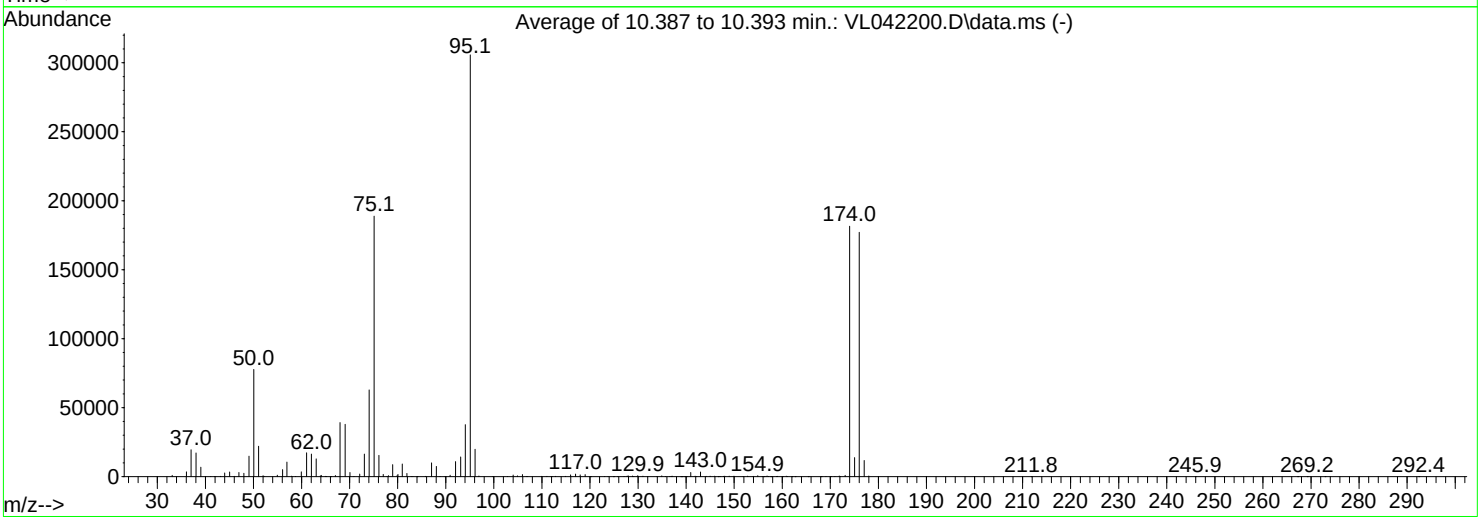
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042200.D
Acq On : 31 Mar 2025 08:09
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025





AutoFind: Scans 3182, 3183, 3184; Background Corrected with Scan 3168

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	25.4	77685	PASS
75	95	30	66	61.8	188843	PASS
95	95	100	100	100.0	305749	PASS
96	95	5	9	6.5	19795	PASS
173	174	0.00	2	0.5	913	PASS
174	95	50	120	59.4	181483	PASS
175	174	4	9	7.6	13787	PASS
176	174	93	101	97.6	177067	PASS
177	176	5	9	6.6	11740	PASS

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0327ABL01	SDG No.:	Q1669
Lab Sample ID:	VL0327ABL01	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
VL042180.D	1		03/27/25 13:50	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0327ABL01	SDG No.:	Q1669
Lab Sample ID:	VL0327ABL01	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
VL042180.D	1		03/27/25 13:50	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	171000		2.787			
540-36-3	1,4-Difluorobenzene	484000		3.959			
3114-55-4	Chlorobenzene-d5	446000		8.881			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0327ABL01	SDG No.:	Q1669
Lab Sample ID:	VL0327ABL01	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
VL042180.D	1		03/27/25 13:50	VL032725

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

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\VL032725\
Data File : VL042180.D
Acq On : 27 Mar 2025 13:50
Operator : SY/MD
Sample : VL0327ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Quant Time: Mar 28 02:12:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

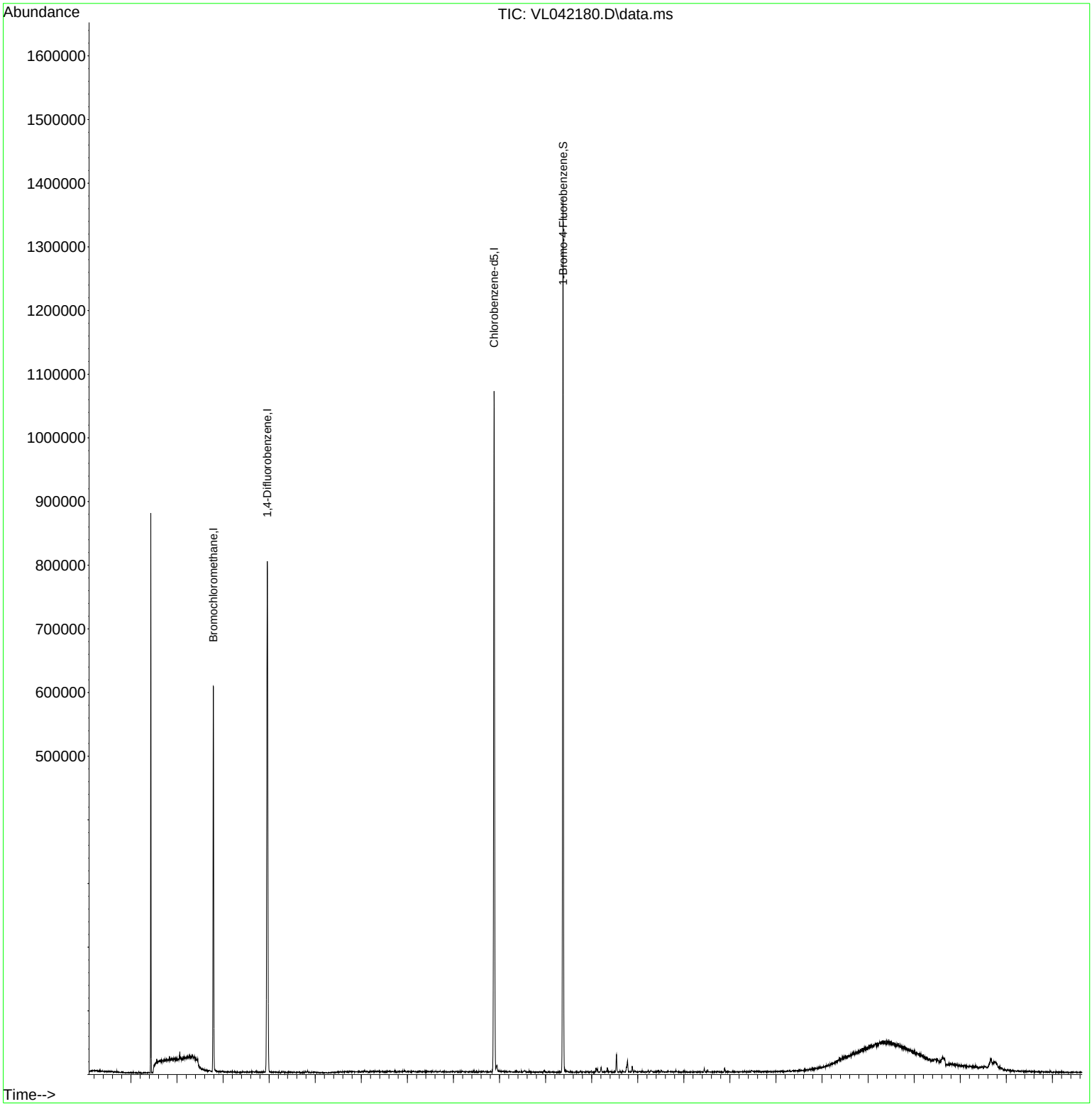
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	170921	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	483563	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	446480	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	364194	9.933	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue

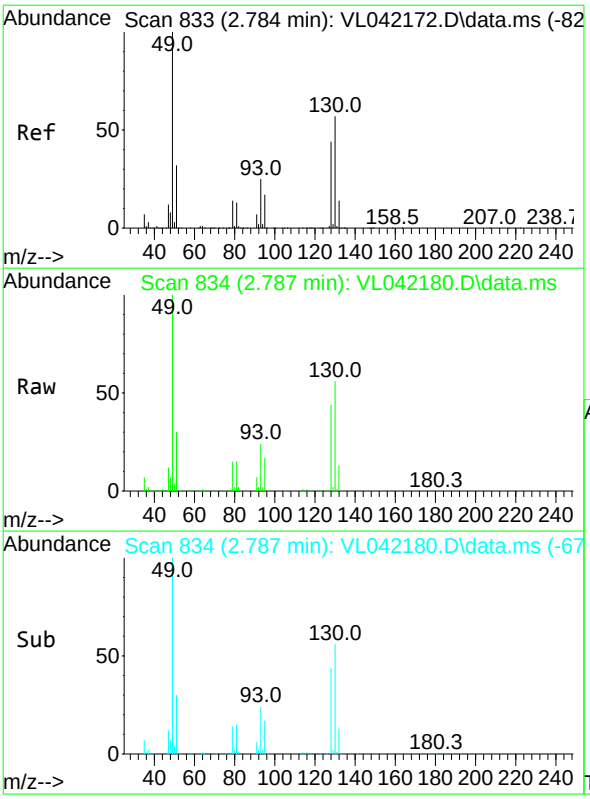
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042180.D
Acq On : 27 Mar 2025 13:50
Operator : SY/MD
Sample : VL0327ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Quant Time: Mar 28 02:12:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



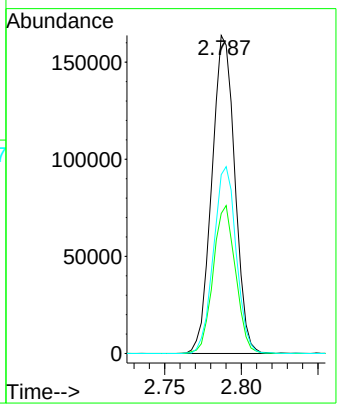


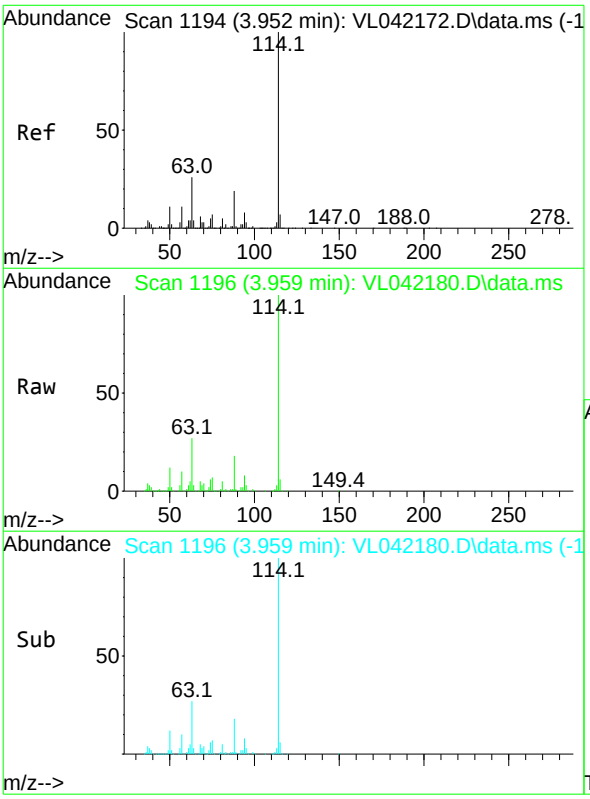
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042180.D
Acq: 27 Mar 2025 13:50

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Tgt Ion: 49 Resp: 170921

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.9	68.5
130	58.1	28.8	86.4

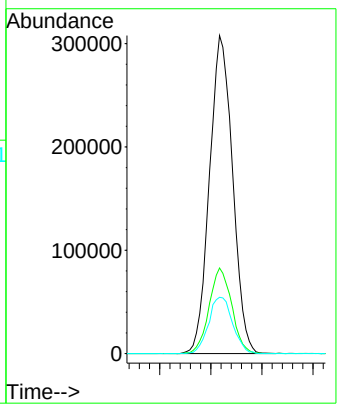


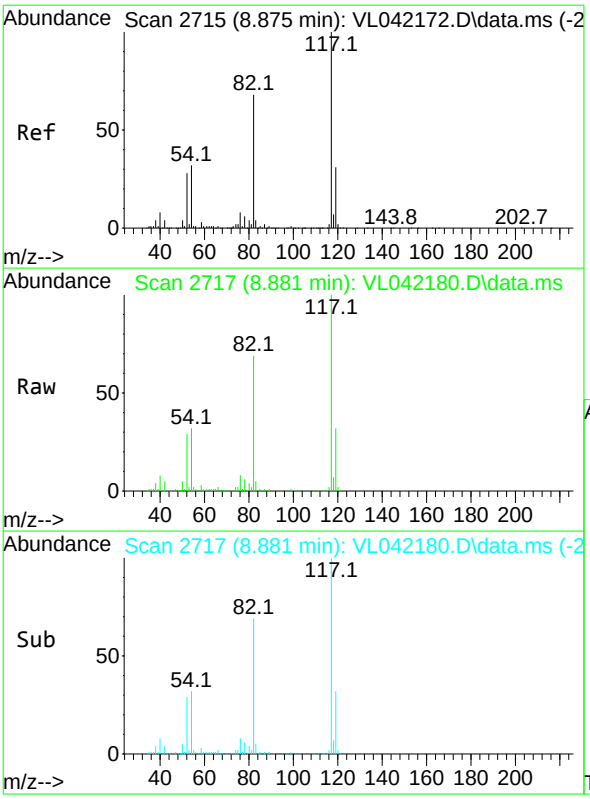


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042180.D
Acq: 27 Mar 2025 13:50

Tgt Ion:114 Resp: 483563

Ion	Ratio	Lower	Upper
114	100		
63	26.3	20.7	31.1
88	18.4	15.0	22.4



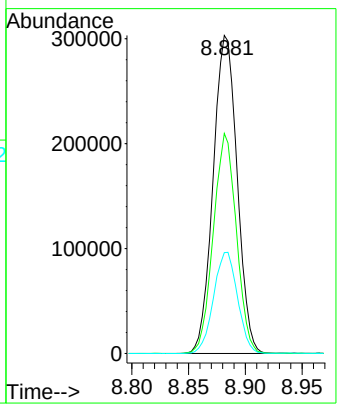


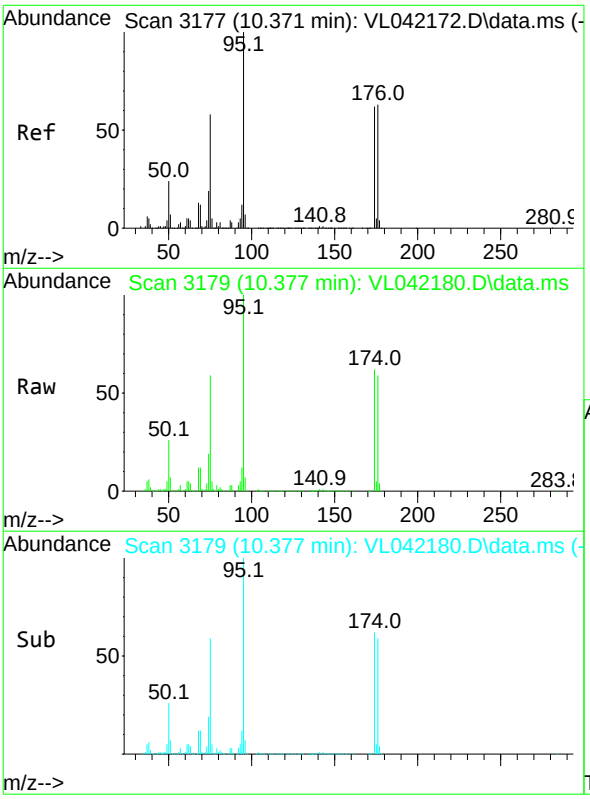
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 27
Delta R.T. 0.006 min
Lab File: VL042180.D
Acq: 27 Mar 2025 13:50

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Tgt Ion:117 Resp: 446480

Ion	Ratio	Lower	Upper
117	100		
82	66.3	55.8	83.6
119	31.9	25.5	38.3

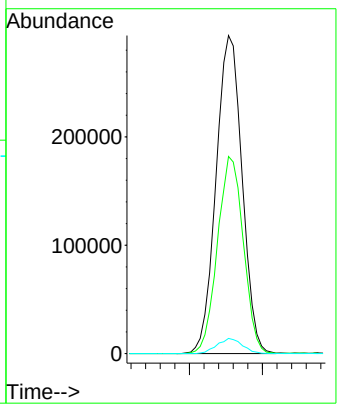




#68
1-Bromo-4-Fluorobenzene
Concen: 9.933 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042180.D
Acq: 27 Mar 2025 13:50

Tgt Ion: 95 Resp: 364194

Ion	Ratio	Lower	Upper
95	100		
174	61.6	50.6	76.0
175	4.6	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042180.D
Acq On : 27 Mar 2025 13:50
Operator : SY/MD
Sample : VL0327ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042180.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	411	415	419	rBV	878588	470375	27.65%	8.217%
2	2.787	826	834	844	rBV	605351	642115	37.75%	11.217%
3	3.959	1183	1196	1210	rBV	802770	1281175	75.32%	22.381%
4	8.881	2705	2717	2728	rBV	1069430	1574344	92.55%	27.503%
5	10.377	3167	3179	3190	rBV	1373870	1701049	100.00%	29.716%
6	11.539	3529	3538	3548	rBV3	28031	32980	1.94%	0.576%
7	11.778	3607	3612	3620	rVB4	19044	22274	1.31%	0.389%

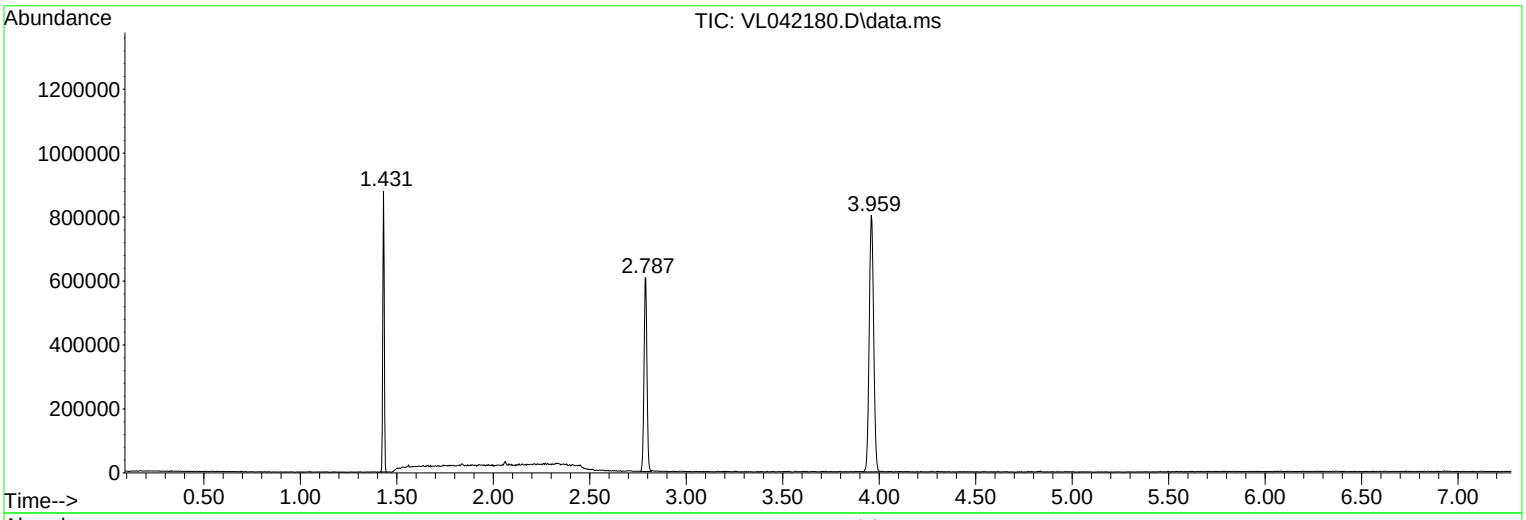
Sum of corrected areas: 5724312

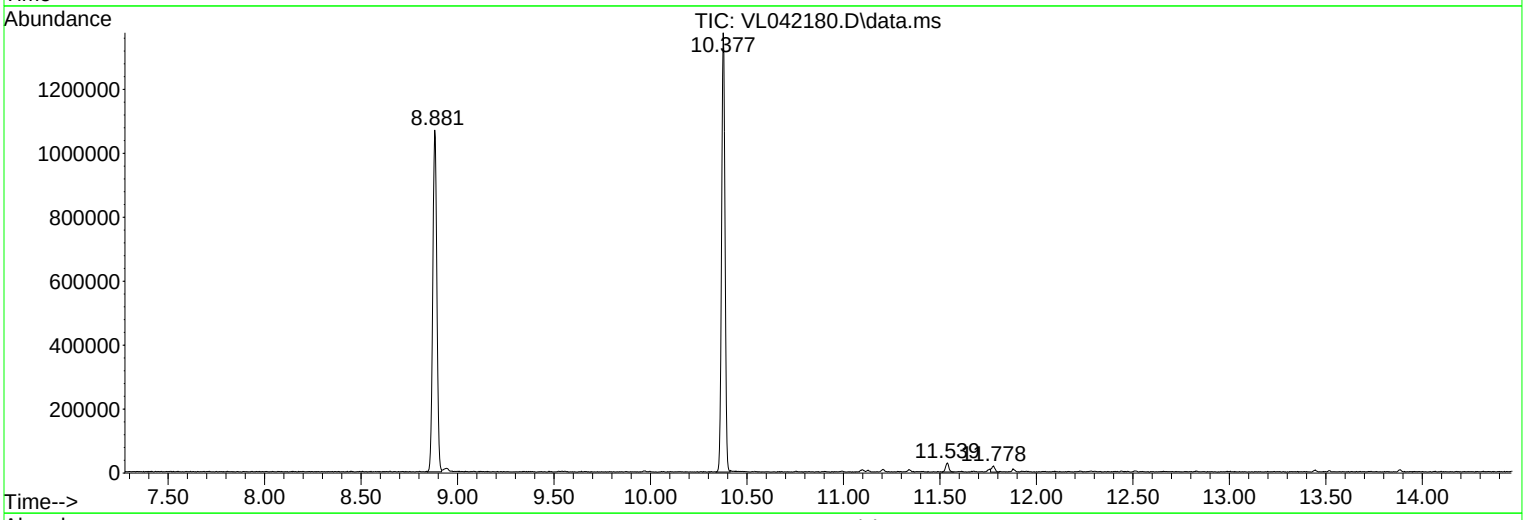
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042180.D
Acq On : 27 Mar 2025 13:50
Operator : SY/MD
Sample : VL0327ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

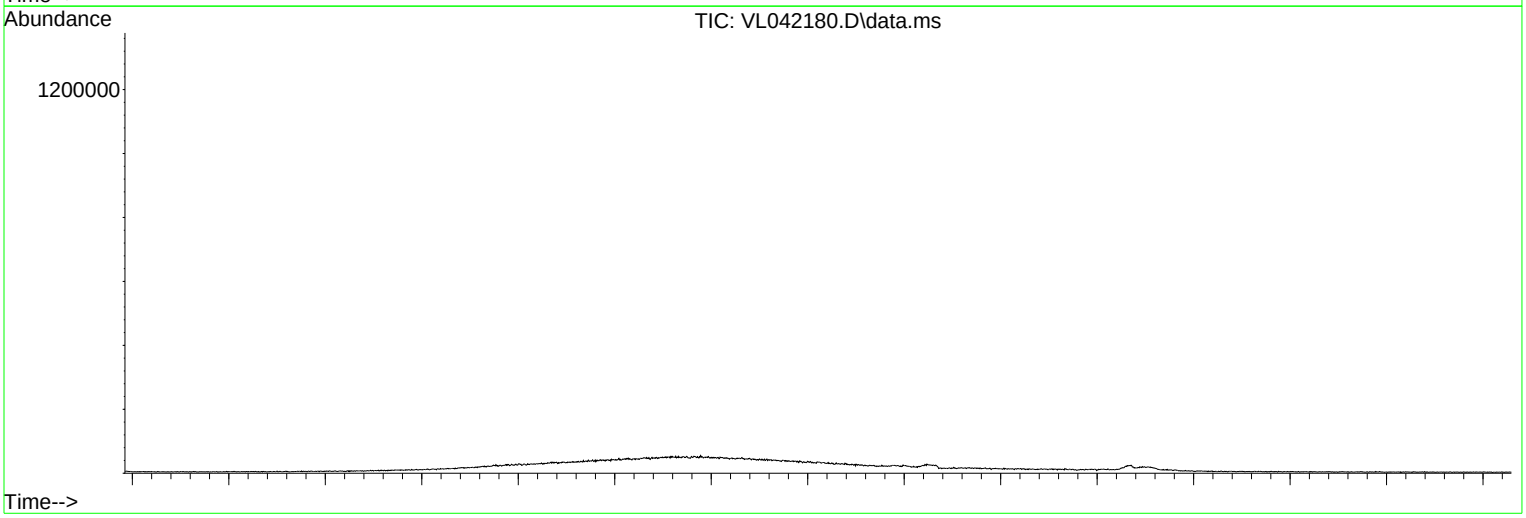
Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042180.D
Acq On : 27 Mar 2025 13:50
Operator : SY/MD
Sample : VL0327ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042180.D
Acq On : 27 Mar 2025 13:50
Operator : SY/MD
Sample : VL0327ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0331ABL01	SDG No.:	Q1669
Lab Sample ID:	VL0331ABL01	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
VL042202.D	1		03/31/25 09:34	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0331ABL01	SDG No.:	Q1669
Lab Sample ID:	VL0331ABL01	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
VL042202.D	1		03/31/25 09:34	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	182000		2.8			
540-36-3	1,4-Difluorobenzene	518000		3.981			
3114-55-4	Chlorobenzene-d5	465000		8.901			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0331ABL01	SDG No.:	Q1669
Lab Sample ID:	VL0331ABL01	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
VL042202.D	1		03/31/25 09:34	VL033125

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

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 (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042202.D
Acq On : 31 Mar 2025 09:34
Operator : SY/MD
Sample : VL0331ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Quant Time: Apr 01 01:35:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

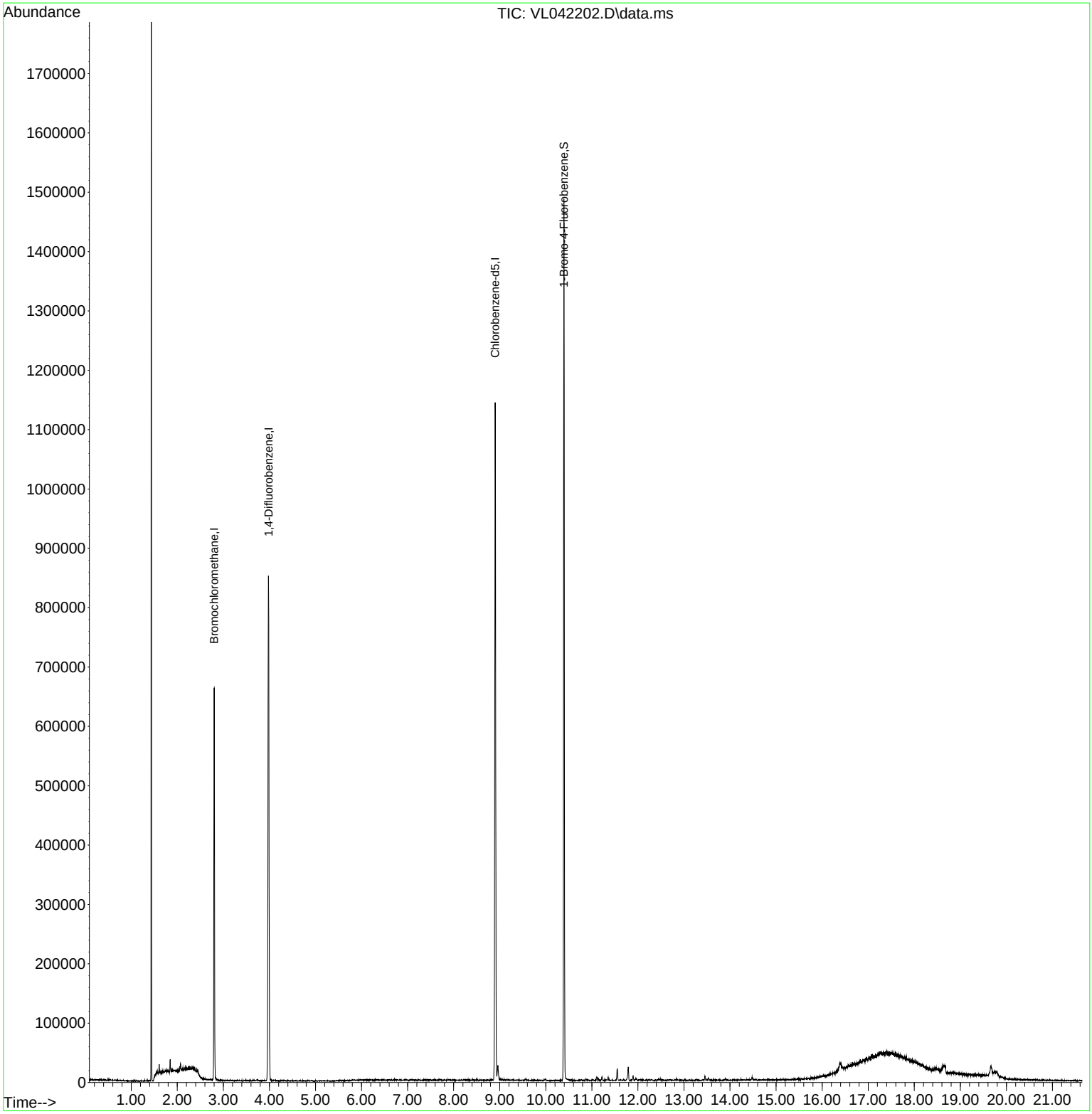
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	181807	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.981	114	517775	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.901	117	464953	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	379890	9.949	ppbv	0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%			
Target Compounds						Qvalue

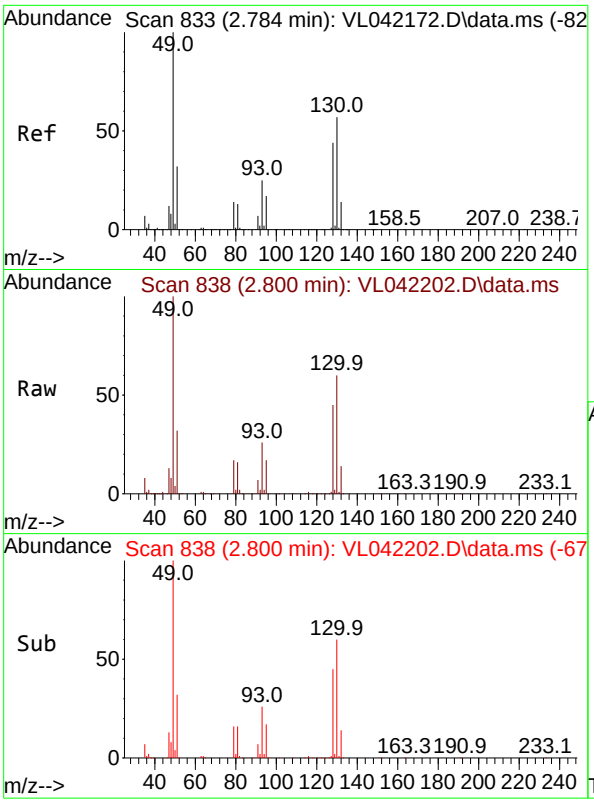
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042202.D
Acq On : 31 Mar 2025 09:34
Operator : SY/MD
Sample : VL0331ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Quant Time: Apr 01 01:35:30 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



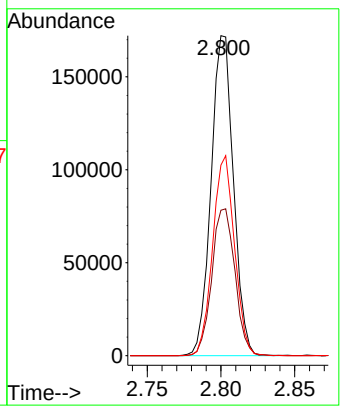


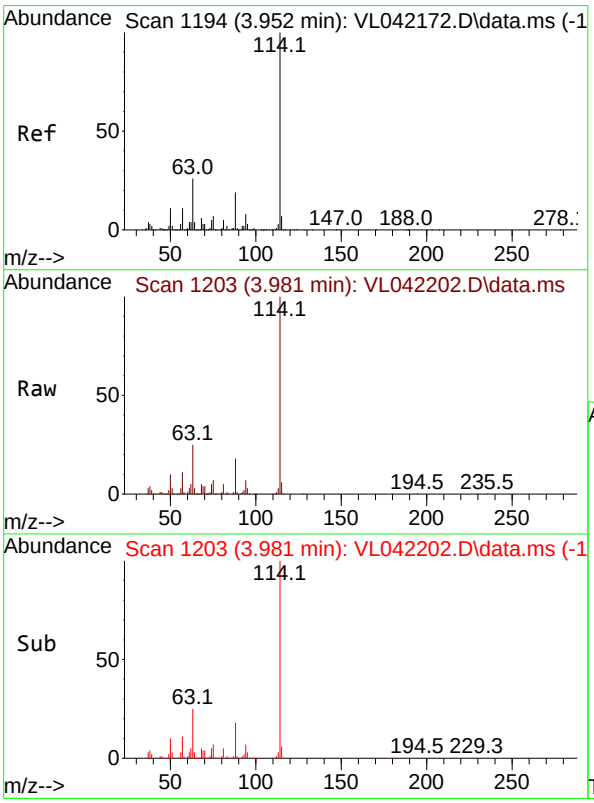
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.800 min Scan# 8
Delta R.T. 0.016 min
Lab File: VL042202.D
Acq: 31 Mar 2025 09:34

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Tgt Ion: 49 Resp: 181807

Ion	Ratio	Lower	Upper
49	100		
128	47.5	22.9	68.5
130	61.0	28.8	86.4

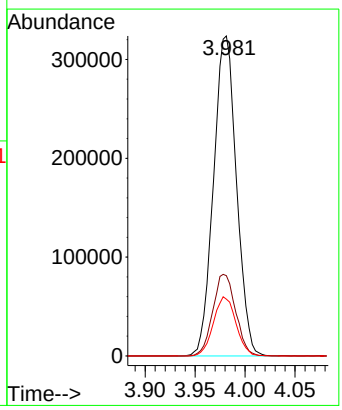


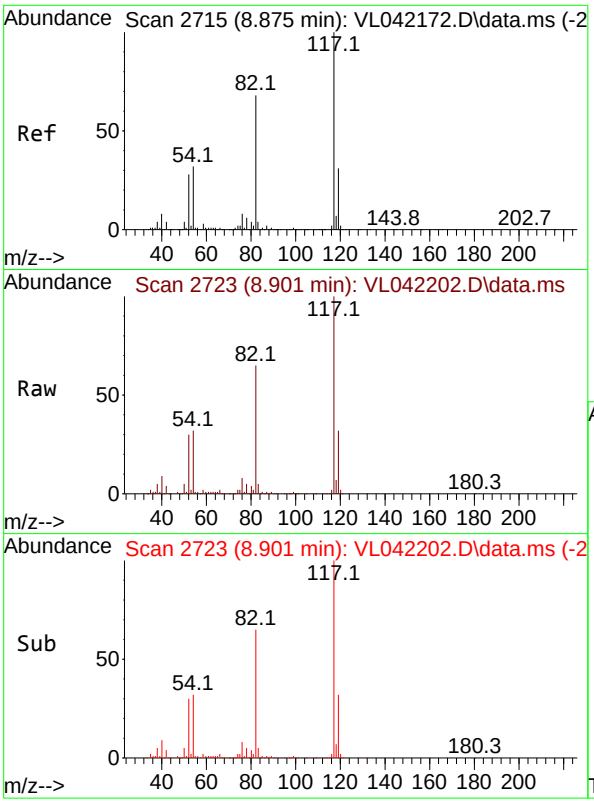


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.981 min Scan# 1203
Delta R.T. 0.029 min
Lab File: VL042202.D
Acq: 31 Mar 2025 09:34

Tgt Ion:114 Resp: 517775

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	18.2	15.0	22.4



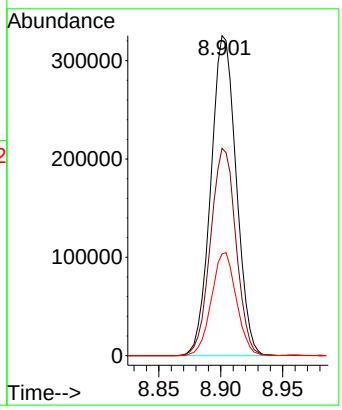


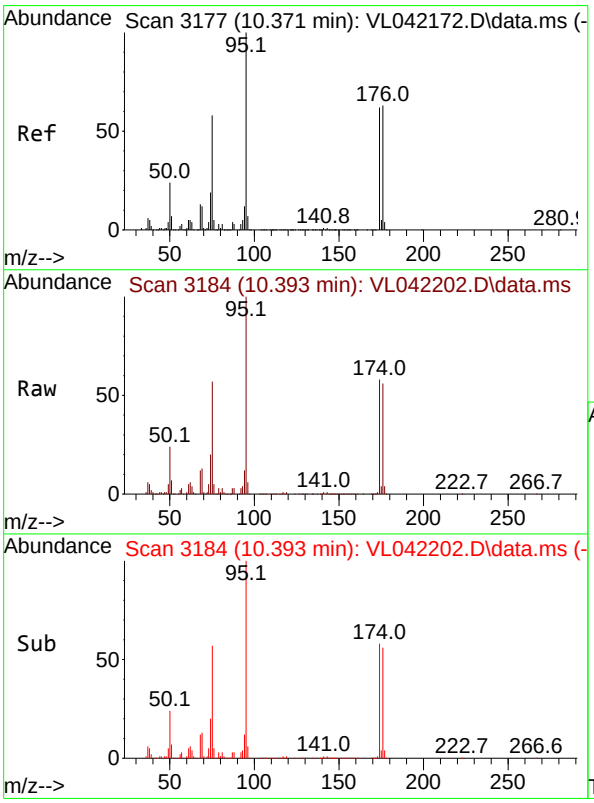
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.901 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042202.D
Acq: 31 Mar 2025 09:34

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Tgt Ion:117 Resp: 464953

Ion	Ratio	Lower	Upper
117	100		
82	65.0	55.8	83.6
119	31.7	25.5	38.3

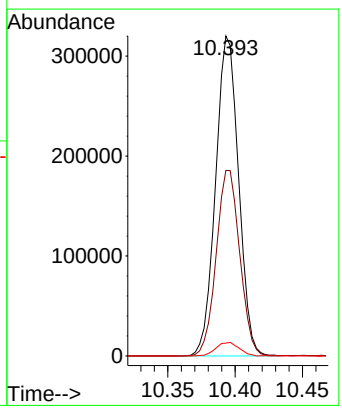




#68
1-Bromo-4-Fluorobenzene
Concen: 9.949 ppbv
RT: 10.393 min Scan# 3184
Delta R.T. 0.022 min
Lab File: VL042202.D
Acq: 31 Mar 2025 09:34

Tgt Ion: 95 Resp: 379890

Ion	Ratio	Lower	Upper
95	100		
174	59.4	50.6	76.0
175	4.3	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042202.D
Acq On : 31 Mar 2025 09:34
Operator : SY/MD
Sample : VL0331ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 3 Min Area: 3 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 0

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042202.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.437	412	417	421	rBV	1922242	1209679	67.81%	17.755%
2	2.803	828	839	846	rBV	660798	707520	39.66%	10.384%
3	3.978	1189	1202	1215	rBV	850859	1370354	76.82%	20.113%
4	8.901	2709	2723	2734	rBV	1142391	1647912	92.38%	24.186%
5	8.959	2734	2741	2753	rVB4	24619	39323	2.20%	0.577%
6	10.393	3173	3184	3201	rBV	1485970	1783824	100.00%	26.181%
7	11.552	3535	3542	3551	rVB4	19390	23362	1.31%	0.343%
8	11.788	3604	3615	3622	rVB3	22327	31391	1.76%	0.461%

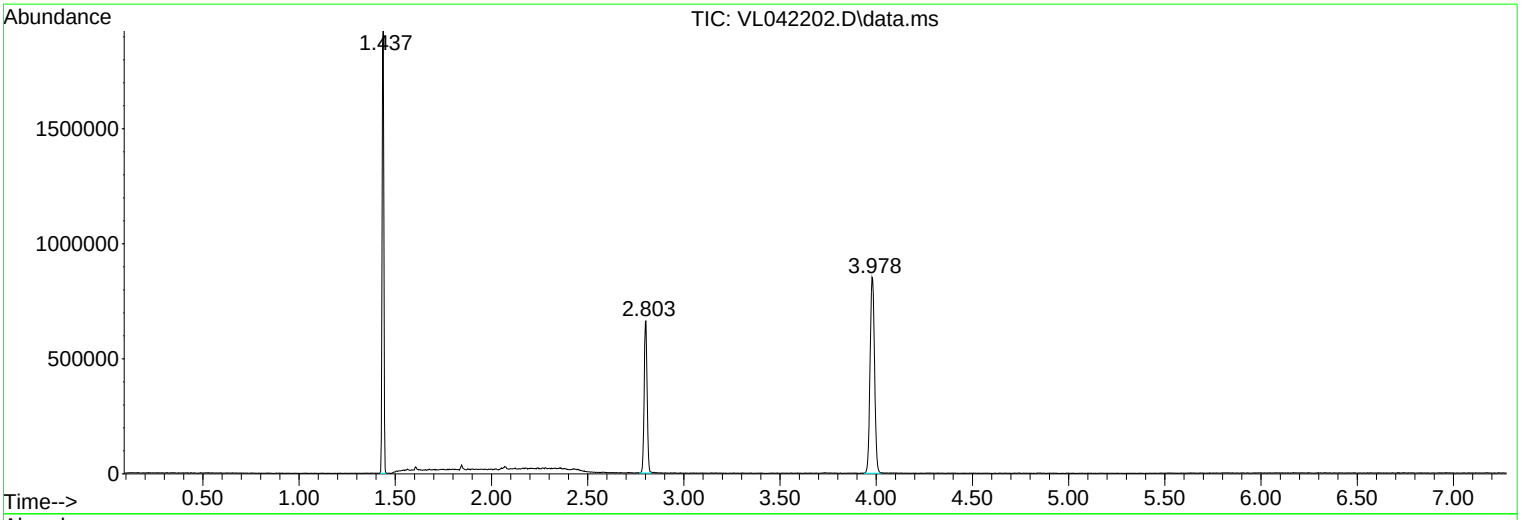
Sum of corrected areas: 6813365

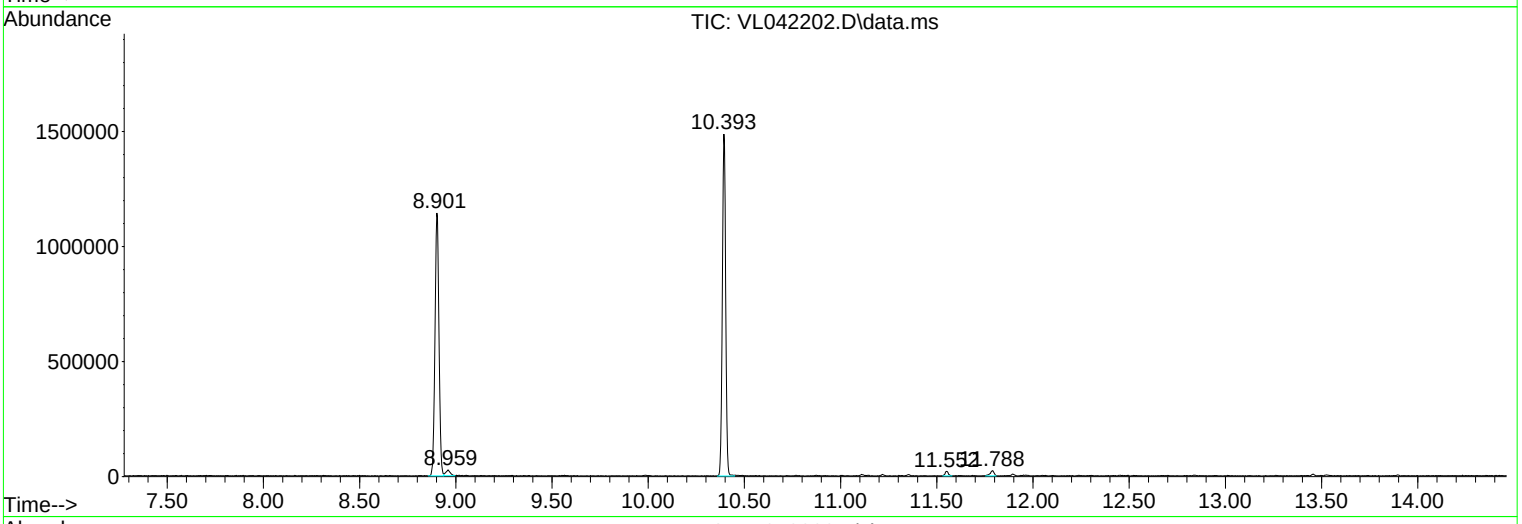
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042202.D
Acq On : 31 Mar 2025 09:34
Operator : SY/MD
Sample : VL0331ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

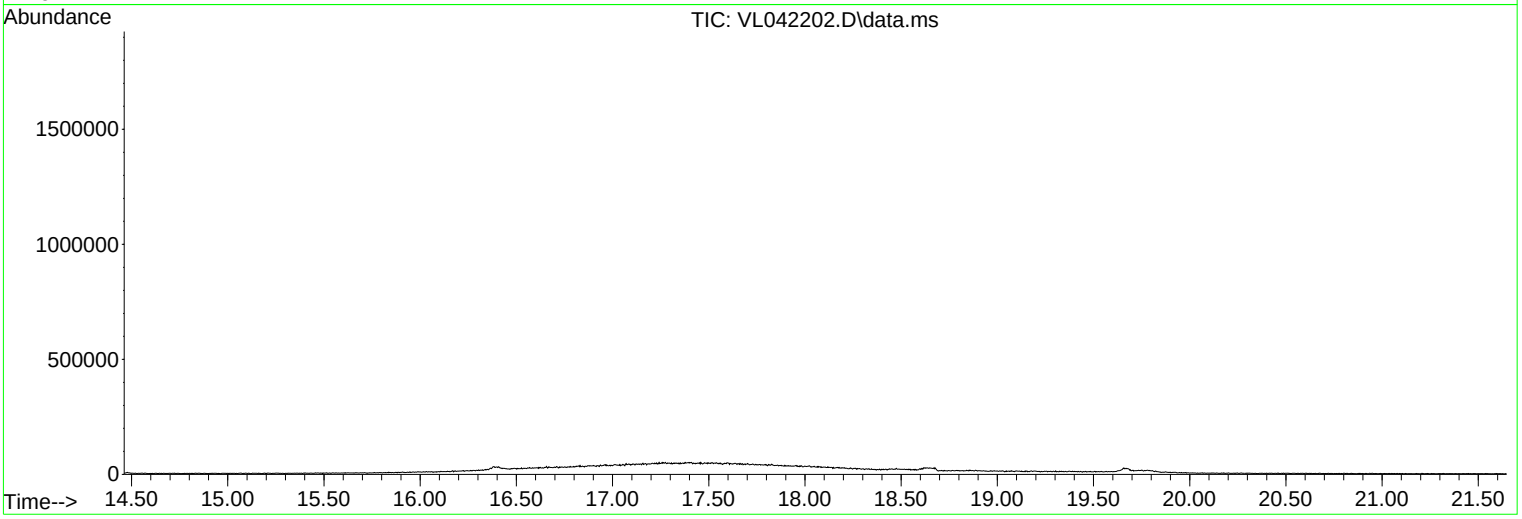
Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042202.D
Acq On : 31 Mar 2025 09:34
Operator : SY/MD
Sample : VL0331ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042202.D
Acq On : 31 Mar 2025 09:34
Operator : SY/MD
Sample : VL0331ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0327ABS01	SDG No.:	Q1669
Lab Sample ID:	VL0327ABS01	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
VL042181.D	1		03/27/25 14:39	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	9.90	49.0		1.04	2.47	ug/m3
74-87-3	Chloromethane	9.60	19.8		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	8.60	22.0		0.030	0.080	ug/m3
74-83-9	Bromomethane	8.90	34.6		0.54	1.94	ug/m3
75-00-3	Chloroethane	9.30	24.5		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	9.40	27.7		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	9.70	54.5		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	9.10	69.8		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	10.0	69.9		0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	9.20	27.9		0.58	1.52	ug/m3
142-82-5	Heptane	9.50	38.9		0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	9.10	36.1		0.56	1.98	ug/m3
67-64-1	Acetone	8.40	19.9		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	9.20	28.6		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	10.3	37.1		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	8.10	28.1		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	9.10	36.1		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	9.70	39.3		0.53	2.02	ug/m3
110-82-7	Cyclohexane	9.60	33.0		0.76	1.72	ug/m3
78-93-3	2-Butanone	9.20	27.1		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	9.60	60.4		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	9.80	38.9		0.36	1.98	ug/m3
67-66-3	Chloroform	9.90	48.4		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	9.20	50.2		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	9.50	44.4		0.47	2.34	ug/m3
71-43-2	Benzene	9.50	30.4		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	10.1	40.9		0.36	2.02	ug/m3
79-01-6	Trichloroethene	9.40	50.5		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	9.40	43.4		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	10.0	67.0		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	8.70	35.6		0.37	2.05	ug/m3
108-88-3	Toluene	9.50	35.8		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	9.40	42.7		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	9.40	42.7		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	9.50	51.8		0.38	2.73	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0327ABS01	SDG No.:	Q1669
Lab Sample ID:	VL0327ABS01	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
VL042181.D	1		03/27/25 14:39	VL032725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	9.90	84.3		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	9.60	73.8		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	8.80	59.7		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	9.50	43.8		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	9.60	41.7		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	19.0	82.5		0.91	4.34	ug/m3
95-47-6	o-Xylene	9.50	41.3		0.52	2.17	ug/m3
100-42-5	Styrene	9.60	40.9		0.47	2.13	ug/m3
75-25-2	Bromoform	10.0	103		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	9.50	65.2		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	9.60	49.7		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	9.50	46.7		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	8.90	43.8		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	9.40	56.5		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	9.50	57.1		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	9.30	55.9		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	8.80	65.3		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	7.90	84.3		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	8.70	19.3		0.29	1.11	ug/m3
91-20-3	Naphthalene	8.70	45.6		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	9.60	47.2		0.59	2.46	ug/m3
110-54-3	Hexane	9.60	33.8		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	9.00	28.2		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	8.90	32.1		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	9.40	38.5		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	166000	2.787				
540-36-3	1,4-Difluorobenzene	483000	3.955				
3114-55-4	Chlorobenzene-d5	452000	8.881				

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0327ABS01	SDG No.:	Q1669
Lab Sample ID:	VL0327ABS01	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
VL042181.D	1		03/27/25 14:39	VL032725

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

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\VL032725\
Data File : VL042181.D
Acq On : 27 Mar 2025 14:39
Operator : SY/MD
Sample : VL0327ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	166105	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	483209	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	452250	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	368941	9.934	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	243063	9.911	ppbv	100
3) Chlorodifluoromethane	1.476	51	241481	9.638	ppbv	99
4) Chloromethane	1.531	50	96241	9.602	ppbv	99
5) Vinyl Chloride	1.580	62	91865	8.649	ppbv	94
6) Bromomethane	1.667	94	40361	8.886	ppbv	92
7) Chloroethane	1.703	64	37307	9.273	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	208981	10.006	ppbv	94
9) Propene	1.482	41	102862	8.957	ppbv	99
10) Heptane	4.978	43	290621	9.514	ppbv	100
11) Trichlorofluoromethane	1.877	101	232086	9.725	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.140	101	178792	9.115	ppbv	99
13) Ethanol	1.719	45	5124	4.720	ppbv	93
14) Bromoethene	1.780	108	69775	9.286	ppbv	98
15) Acetone	1.835	43	195717	8.425	ppbv	96
16) 1,3-Butadiene	1.609	39	98877	8.716	ppbv	100
17) tert-Butyl alcohol	2.039	59	266424	9.208	ppbv	98
18) 1,1-Dichloroethene	2.033	96	83339	9.088	ppbv	95
19) Isopropyl Alcohol	1.884	45	120986	9.230	ppbv	97
20) Methylene Chloride	2.062	84	69930	8.083	ppbv	96
21) Allyl Chloride	2.094	41	147810	9.022	ppbv	99
22) trans-1,2-Dichloroethene	2.340	96	96616	9.116	ppbv	99
23) Vinyl Acetate	2.463	43	94696	9.418	ppbv	96
24) 1,1-Dichloroethane	2.408	63	189793	9.661	ppbv	99
25) Ethyl Acetate	2.835	43	574442	9.528	ppbv	99
26) Hexane	2.826	57	224704	9.649	ppbv	98
27) Carbon Disulfide	2.149	76	230410	9.226	ppbv #	94
28) Methyl tert-Butyl Ether	2.441	73	149961	10.342	ppbv	95
29) Chloroform	2.848	83	336404	9.870	ppbv	96
30) Cyclohexane	3.855	84	194220	9.604	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	231151	9.777	ppbv	97
32) 1,1,1-Trichloroethane	3.366	97	359860	9.223	ppbv	99
34) 2-Butanone	2.557	43	320843	9.157	ppbv	100
35) Carbon Tetrachloride	3.761	117	361037	9.565	ppbv	99
36) Benzene	3.658	78	452718	9.450	ppbv	98
37) 1,2-Dichloroethane	3.217	62	277247	10.109	ppbv	98
38) Trichloroethene	4.548	130	187209	9.366	ppbv	98
39) 1,2-Dichloropropane	4.315	63	164374	9.422	ppbv	95
40) 1,4-Dioxane	4.583	88	82012	8.857	ppbv #	92
41) Tetrahydrofuran	3.052	42	188907	9.362	ppbv	99
42) Bromodichloromethane	4.489	83	377092	9.974	ppbv	98
43) Methyl Methacrylate	4.881	69	190156	9.377	ppbv	100
44) 2,2,4-Trimethylpentane	4.638	57	769803	9.509	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	204004	9.376	ppbv	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042181.D
Acq On : 27 Mar 2025 14:39
Operator : SY/MD
Sample : VL0327ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.599	75	251694	9.437	ppbv	97
47) 1,1,2-Trichloroethane	6.583	97	175509	9.517	ppbv	99
48) Dibromochloromethane	7.386	129	310158	9.923	ppbv	99
49) Bromoform	9.483	173	279382	9.957	ppbv	99
50) 4-Methyl-2-Pentanone	5.748	43	481919	8.679	ppbv	98
51) 2-Hexanone	7.435	43	395520	8.674	ppbv	99
52) Tetrachloroethene	8.224	164	167015	8.791	ppbv	95
53) Toluene	6.930	91	540612	9.520	ppbv	99
54) 1,2-Dibromoethane	7.655	107	246519	9.589	ppbv	99
56) 1,1,1,2-Tetrachloroethane	8.924	131	240905	9.677	ppbv	96
57) Chlorobenzene	8.920	112	407816	9.507	ppbv	98
58) Ethyl Benzene	9.354	91	769818	9.583	ppbv	97
59) m/p-Xylene	9.551	91	1220553m	19.028	ppbv	
60) o-Xylene	9.962	91	612011	9.518	ppbv	98
61) Styrene	9.869	104	306658	9.639	ppbv	99
62) Isopropylbenzene	10.539	105	923163	9.600	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.962	83	370486	9.483	ppbv	99
64) n-propylbenzene	10.989	120	239652	9.682	ppbv	98
65) tert-Butylbenzene	11.532	119	828438	9.315	ppbv	98
66) Benzyl Chloride	11.616	91	81404	8.627	ppbv	98
67) sec-Butylbenzene	11.769	105	1155378	9.347	ppbv	99
69) p-Isopropyltoluene	11.927	119	1011573	9.503	ppbv	99
70) n-Butylbenzene	12.283	91	1022935	9.397	ppbv	99
71) 2-Chlorotoluene	10.901	91	713648	9.562	ppbv	98
72) 4-Ethyltoluene	11.128	105	766720	9.576	ppbv	100
73) 1,3,5-Trimethylbenzene	11.205	105	660905	9.451	ppbv	99
74) 1,2,4-Trimethylbenzene	11.539	105	718683	8.921	ppbv	97
75) 1,3-Dichlorobenzene	11.610	146	415378	9.401	ppbv	100
76) 1,4-Dichlorobenzene	11.671	146	418670	9.521	ppbv	99
77) 1,2-Dichlorobenzene	11.947	146	401634	9.336	ppbv	99
78) Hexachloro-1,3-Butadiene	13.882	225	346566	7.914	ppbv	100
79) Naphthalene	13.513	128	762976	8.659	ppbv	99
80) Naphthalene,2-methyl-	14.458	142	308264	7.134	ppbv	98
81) 1,2,4-Trichlorobenzene	13.442	180	356193	8.764	ppbv	99

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

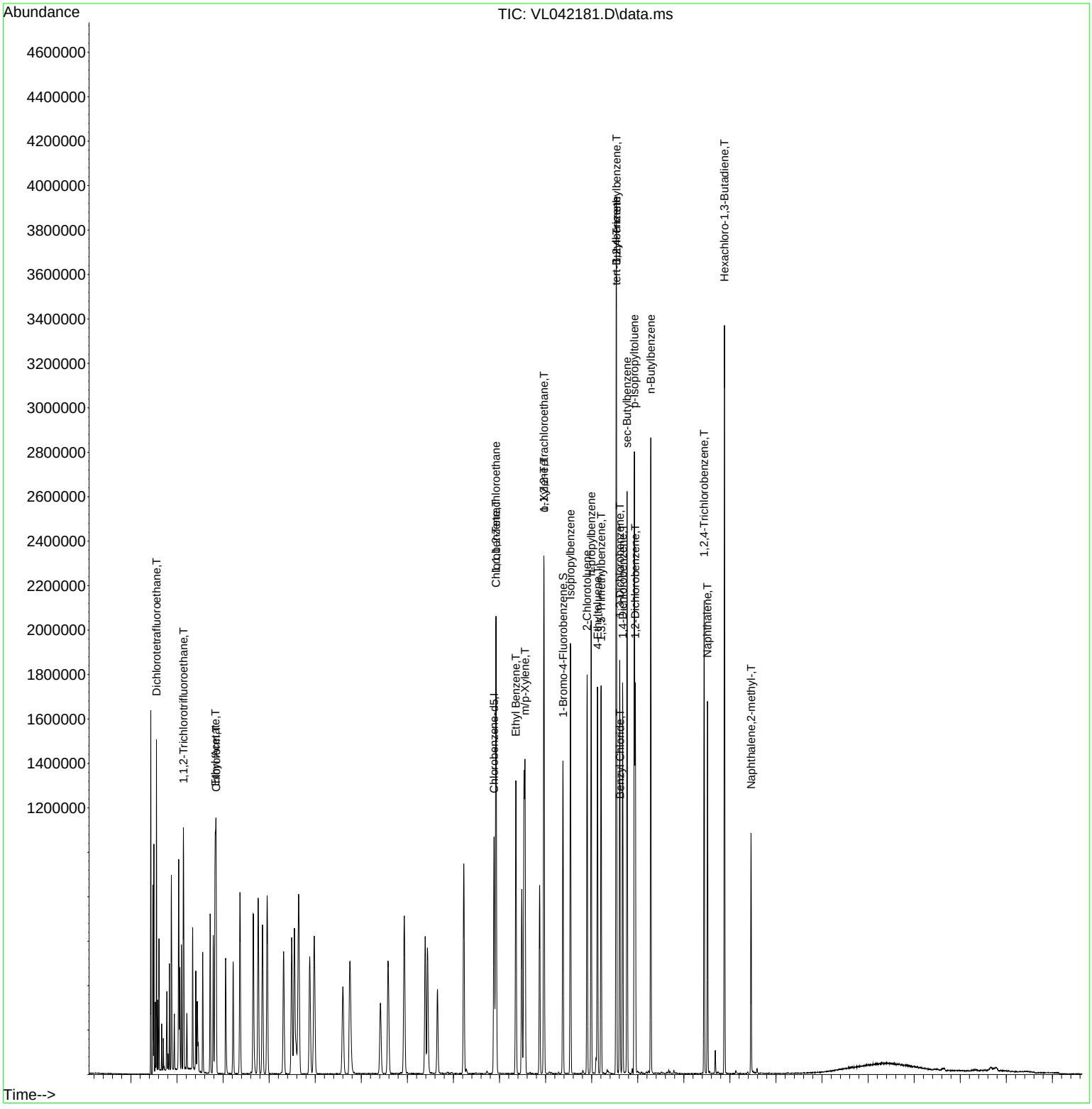
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042181.D
Acq On : 27 Mar 2025 14:39
Operator : SY/MD
Sample : VL0327ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

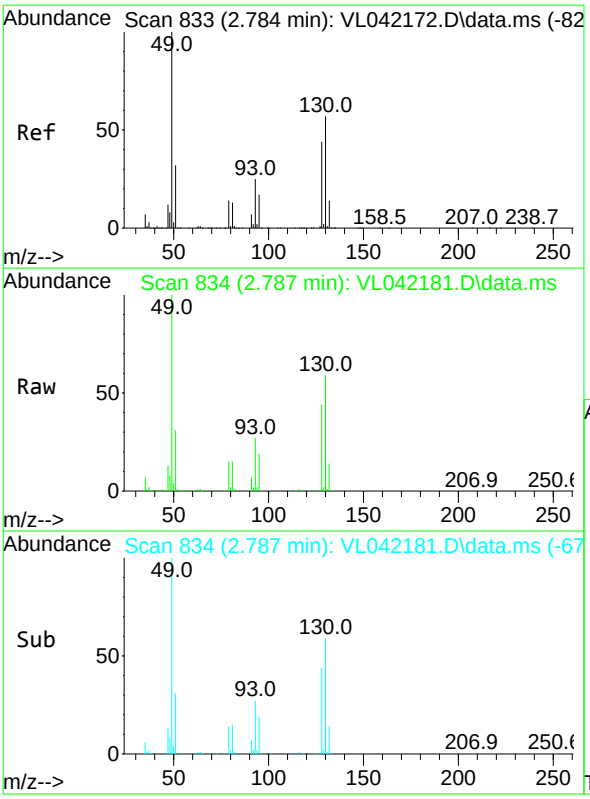
Quant Time: Mar 28 02:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

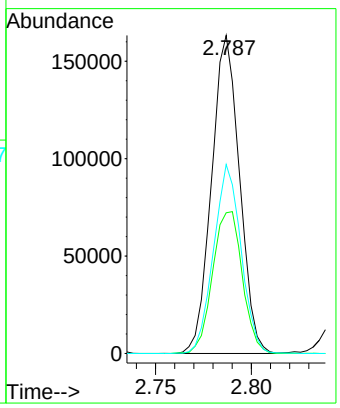




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 49 Resp: 166105

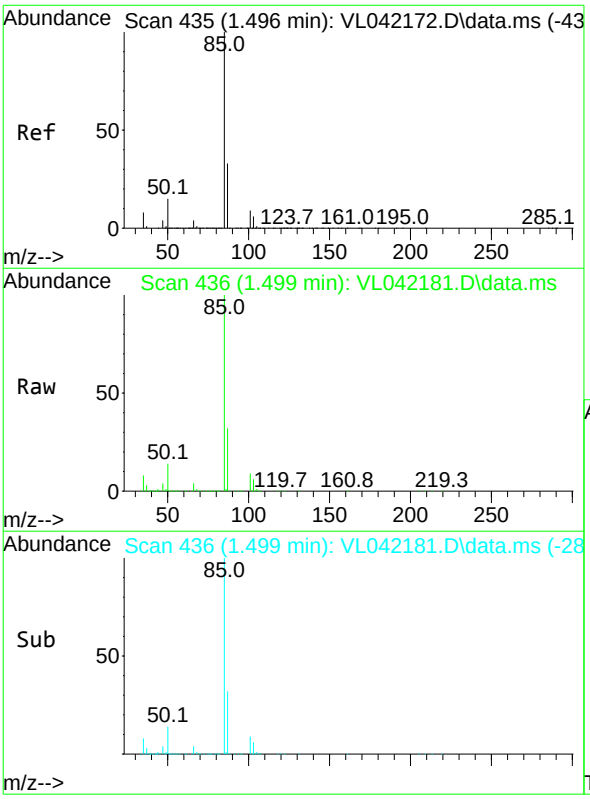
Ion	Ratio	Lower	Upper
49	100		
128	47.4	22.9	68.5
130	58.3	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations
APPROVED

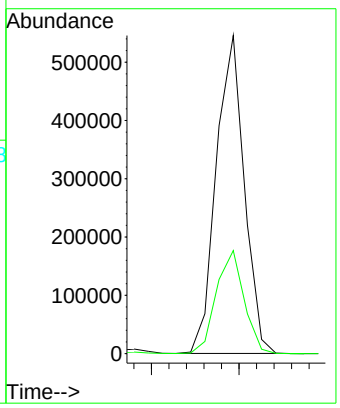
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

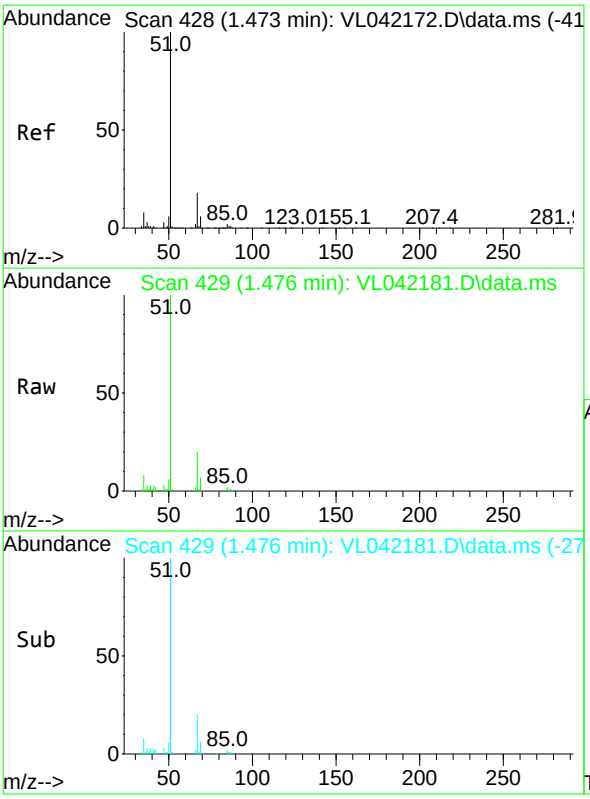


#2
Dichlorodifluoromethane
Concen: 9.911 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 85 Resp: 243063

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1

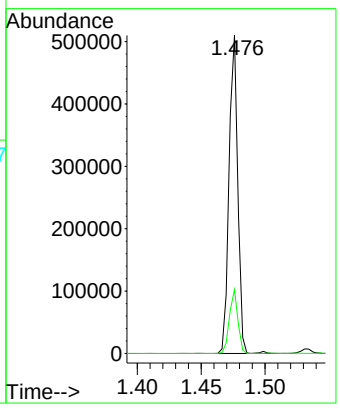




#3
Chlorodifluoromethane
Concen: 9.638 ppbv
RT: 1.476 min Scan# 42
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 51 Resp: 241481

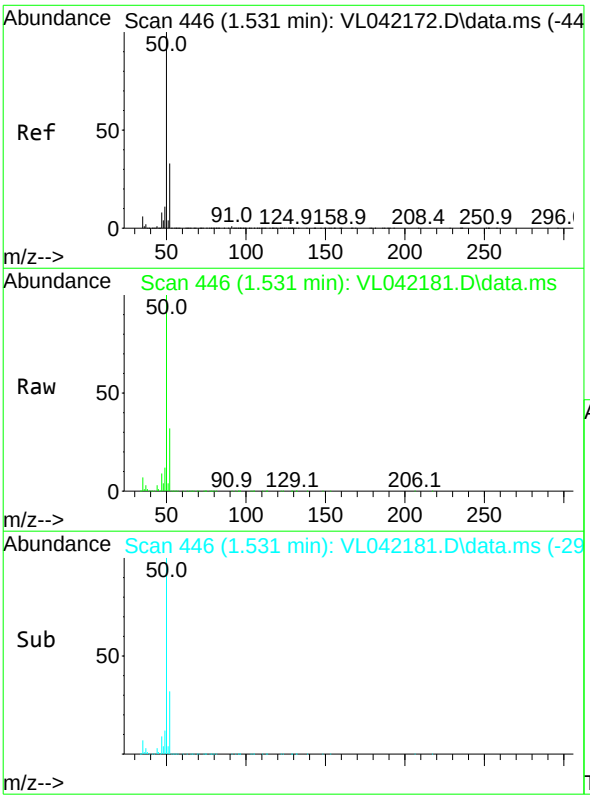
Ion	Ratio	Lower	Upper
51	100		
67	19.4	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations
APPROVED

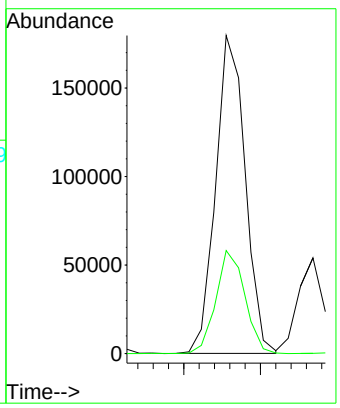
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

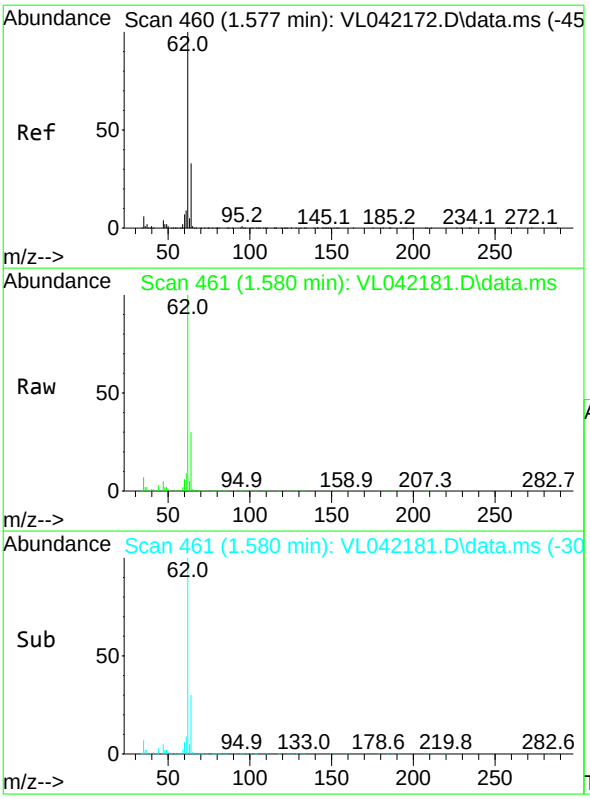


#4
Chloromethane
Concen: 9.602 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 50 Resp: 96241

Ion	Ratio	Lower	Upper
50	100		
52	32.2	26.1	39.1

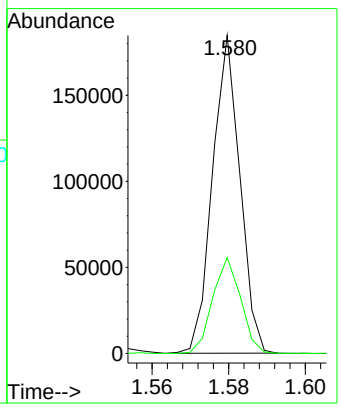




#5
Vinyl Chloride
Concen: 8.649 ppbv
RT: 1.580 min Scan# 46
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 62 Resp: 91865

Ion	Ratio	Lower	Upper
62	100		
64	30.2	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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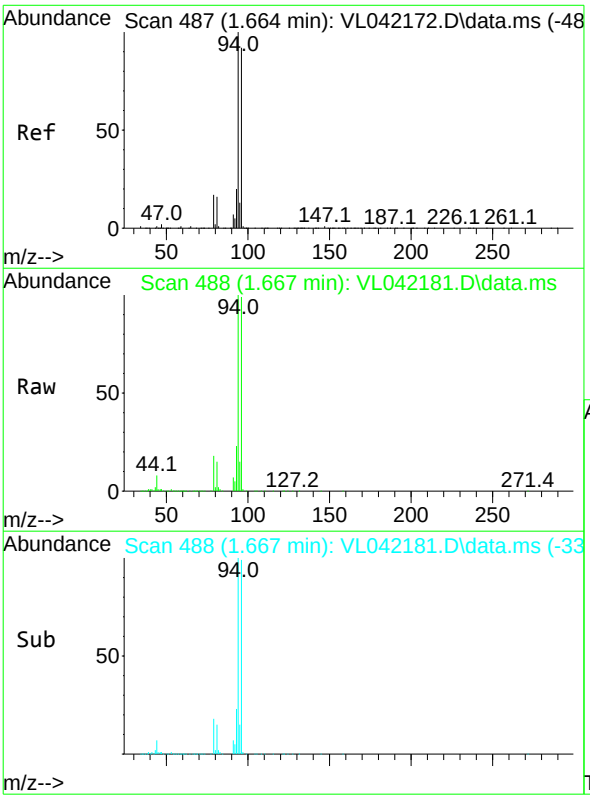
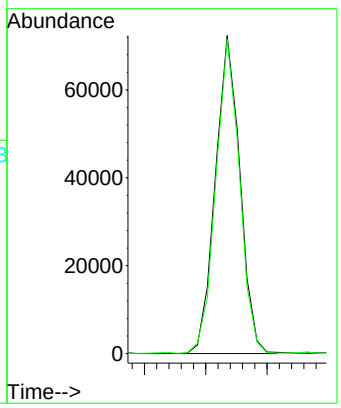
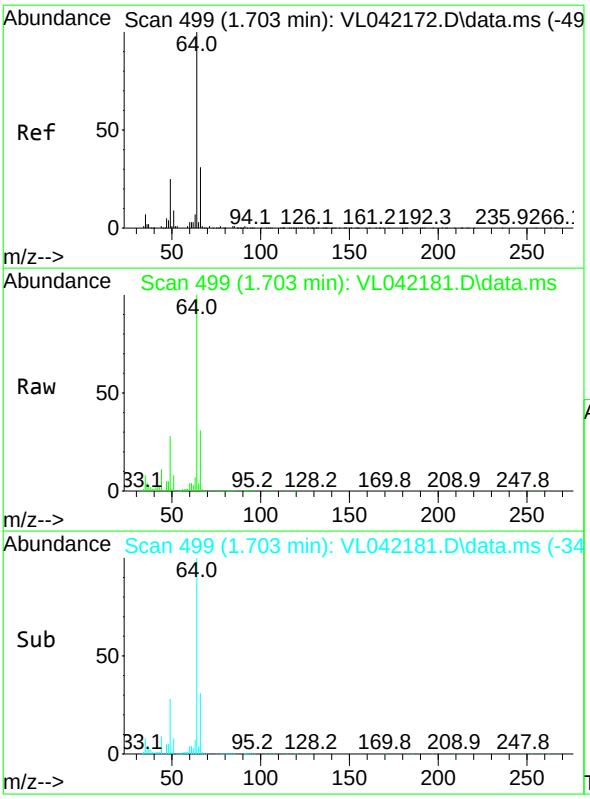


#6
Bromomethane
Concen: 8.886 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 94 Resp: 40361

Ion	Ratio	Lower	Upper
94	100		
96	98.7	73.1	109.7

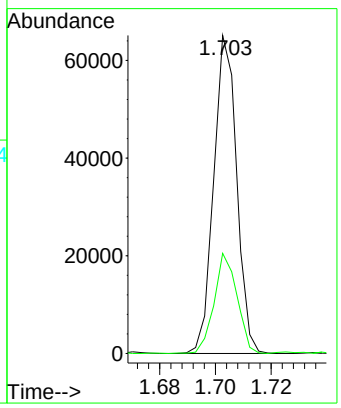




#7
Chloroethane
Concen: 9.273 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 64 Resp: 37307

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8



Instrument :
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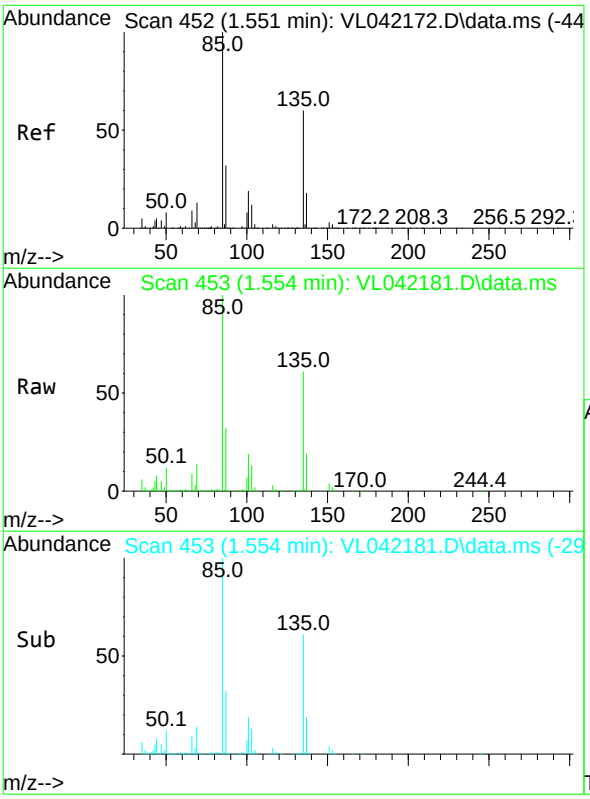
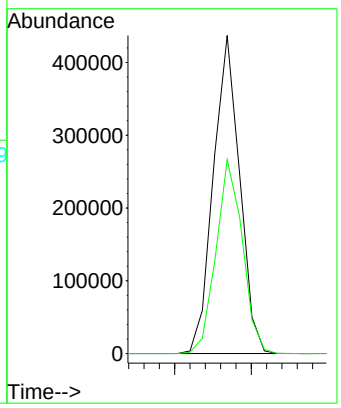
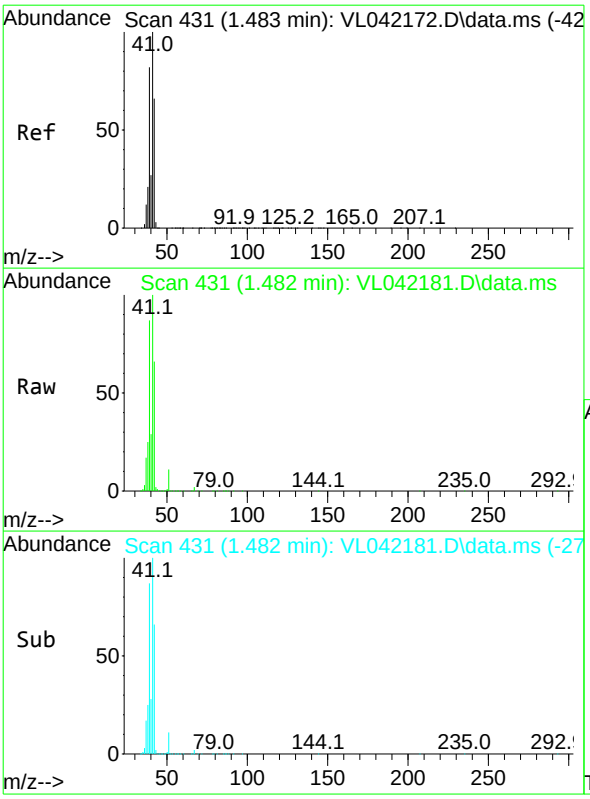


#8
Dichlorotetrafluoroethane
Concen: 10.006 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 85 Resp: 208981

Ion	Ratio	Lower	Upper
85	100		
135	61.1	52.4	78.6

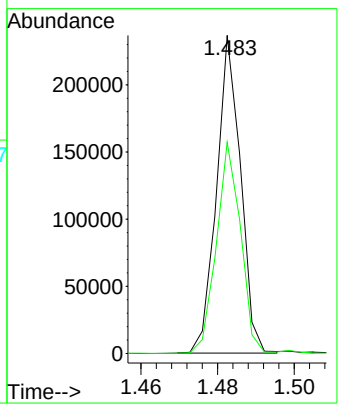




#9
Propene
Concen: 8.957 ppbv
RT: 1.482 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 41 Resp: 102862

Ion	Ratio	Lower	Upper
41	100		
42	68.5	55.4	83.2



Instrument :
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ClientSampleId :
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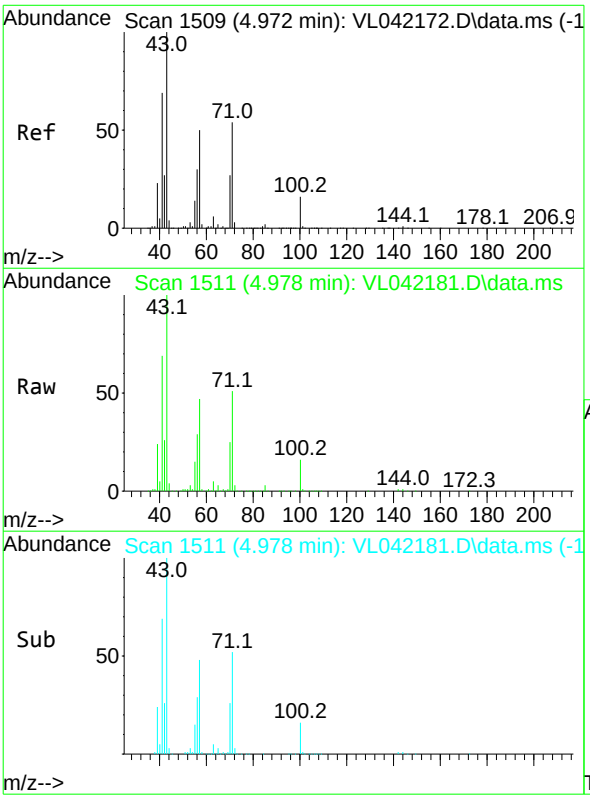
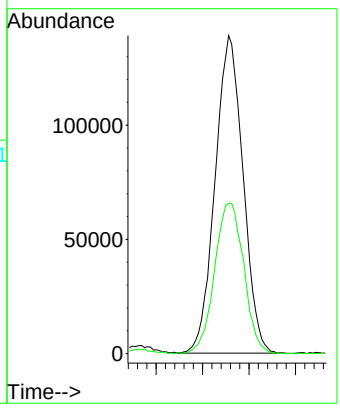
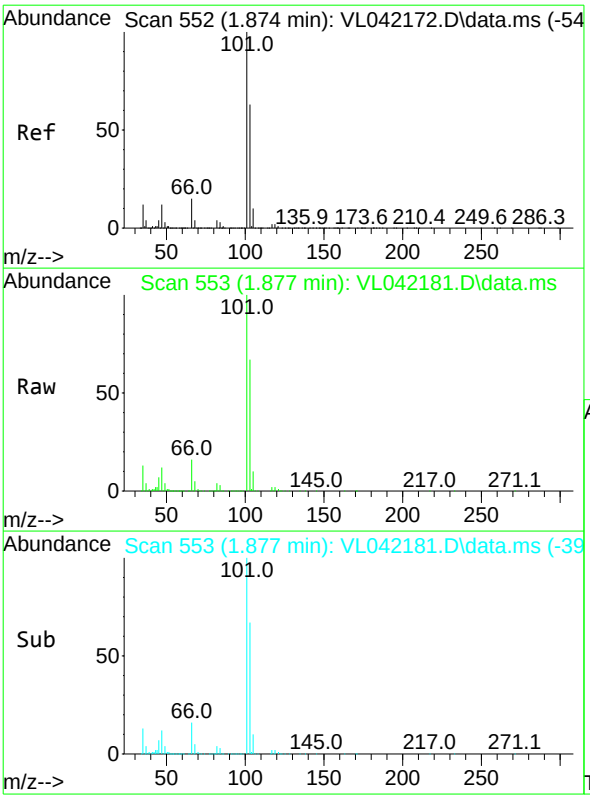


#10
Heptane
Concen: 9.514 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 290621

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2

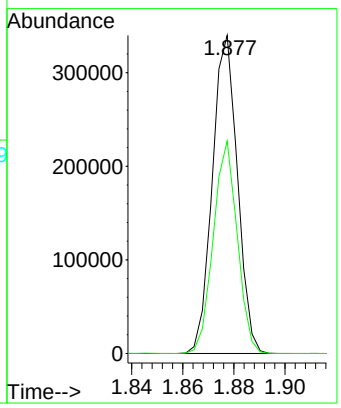




#11
Trichlorofluoromethane
Concen: 9.725 ppbv
RT: 1.877 min Scan# 55
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:101 Resp: 232086

Ion	Ratio	Lower	Upper
101	100		
103	66.8	50.2	75.2



Instrument :
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ClientSampleId :
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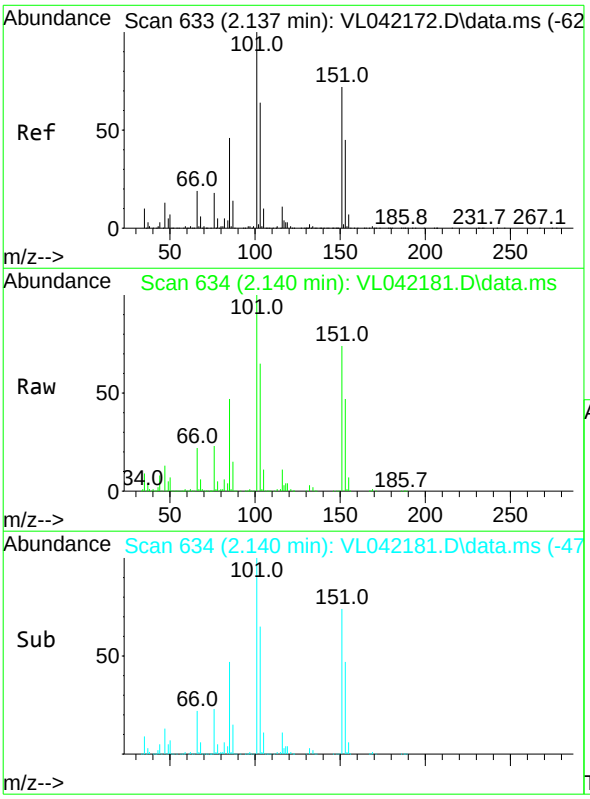
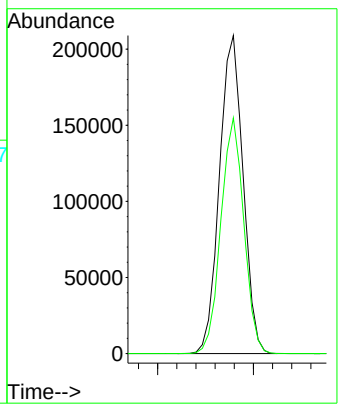
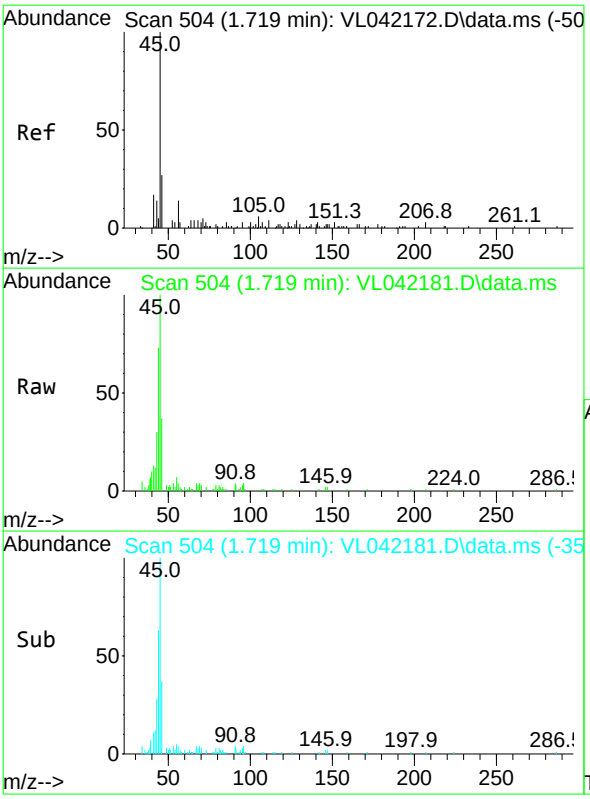


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.115 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:101 Resp: 178792

Ion	Ratio	Lower	Upper
101	100		
151	71.9	57.1	85.7

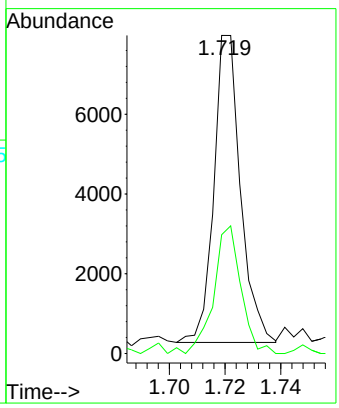




#13
Ethanol
Concen: 4.720 ppbv
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 45 Resp: 5124

Ion	Ratio	Lower	Upper
45	100		
46	45.5	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
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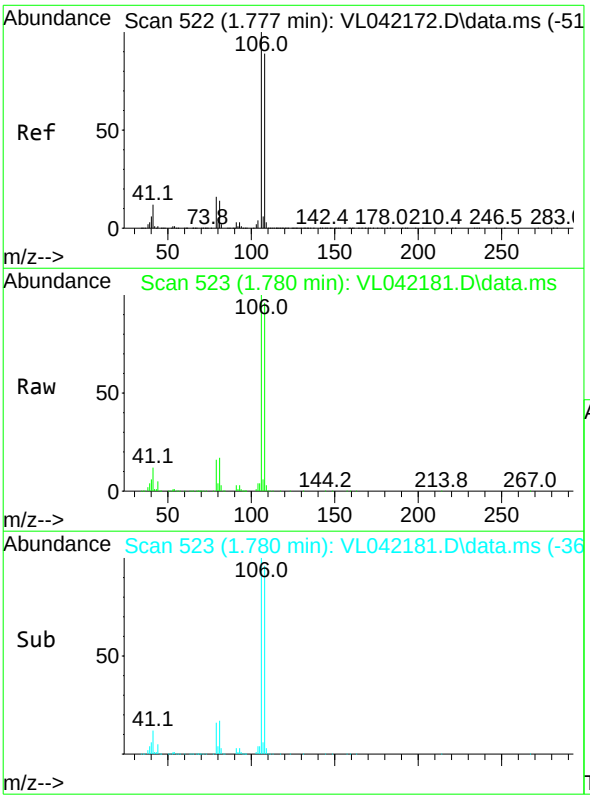
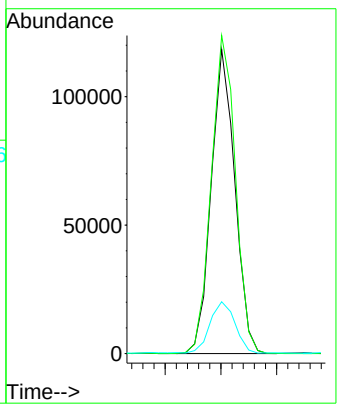
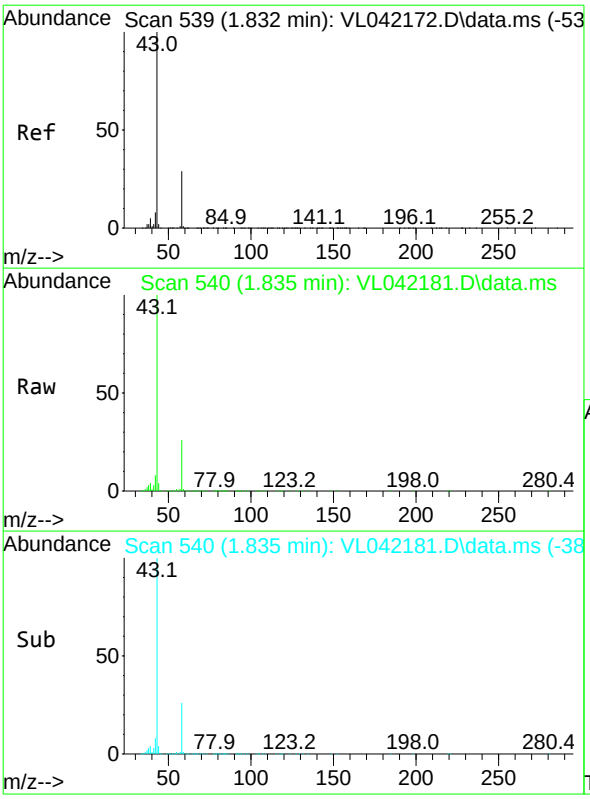


#14
Bromoethene
Concen: 9.286 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:108 Resp: 69775

Ion	Ratio	Lower	Upper
108	100		
106	106.9	86.8	130.2
79	18.1	15.0	22.6

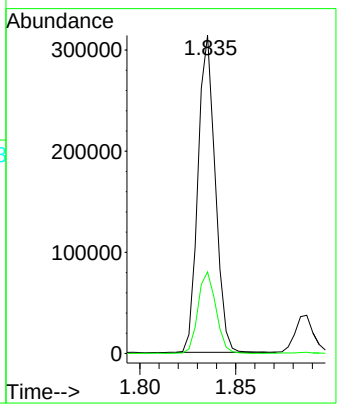




#15
Acetone
Concen: 8.425 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 195717

Ion	Ratio	Lower	Upper
43	100		
58	27.1	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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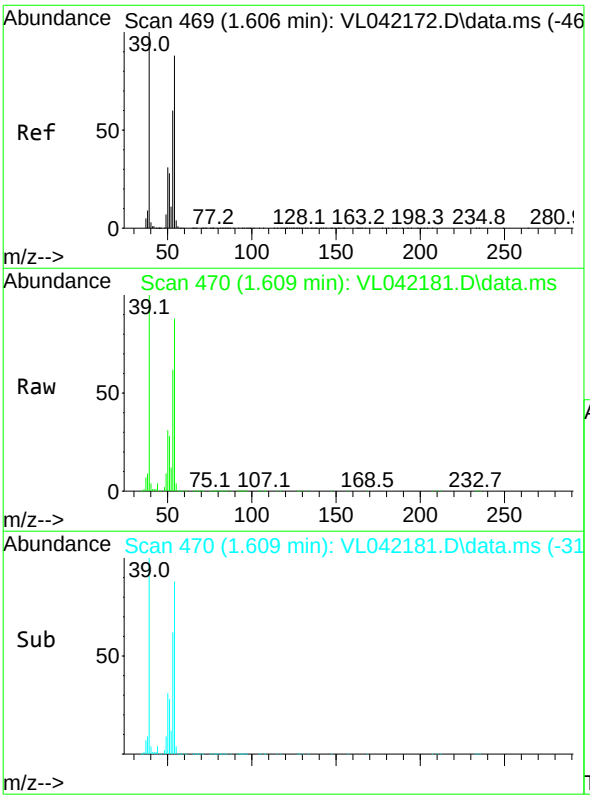
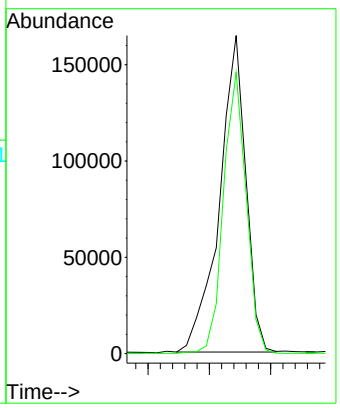
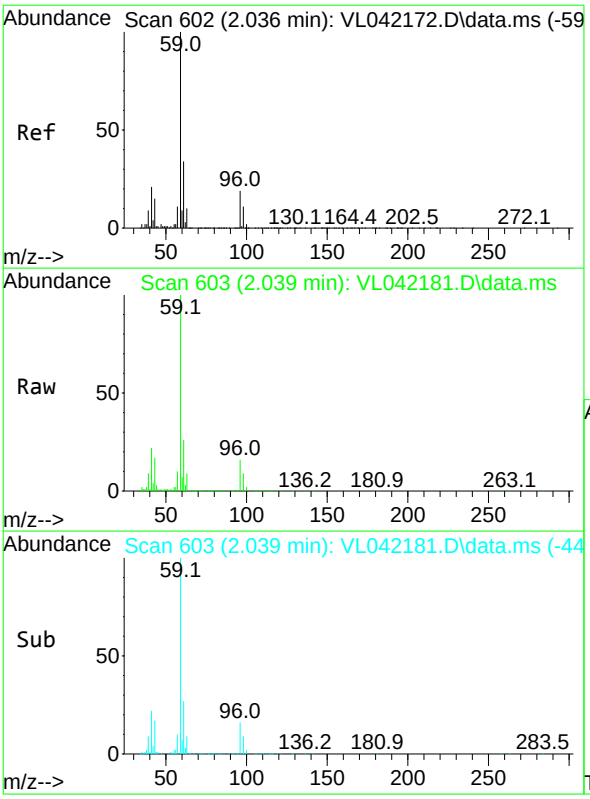


#16
1,3-Butadiene
Concen: 8.716 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 39 Resp: 98877

Ion	Ratio	Lower	Upper
39	100		
54	76.1	60.7	91.1

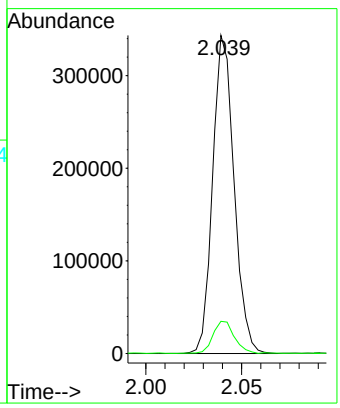




#17
tert-Butyl alcohol
Concen: 9.208 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 59 Resp: 266424

Ion	Ratio	Lower	Upper
59	100		
57	10.3	8.9	13.3



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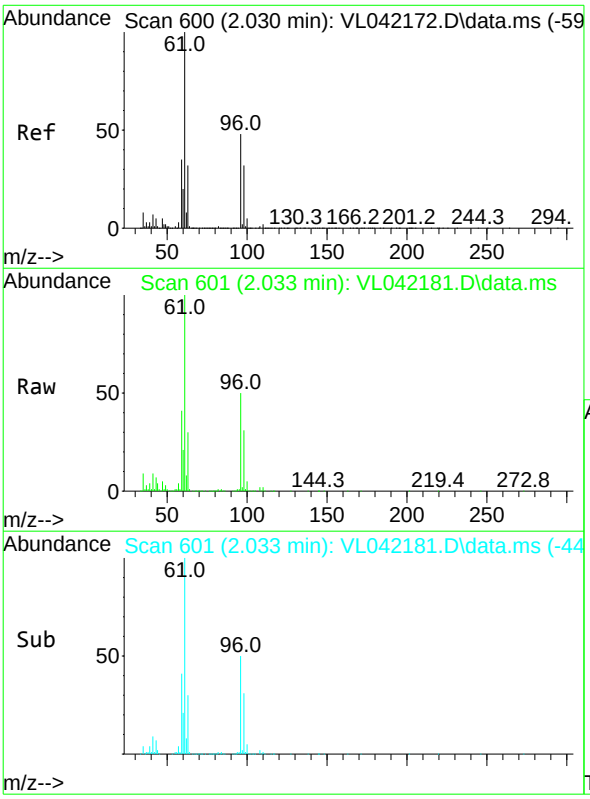
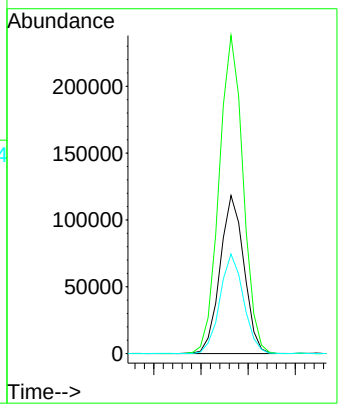
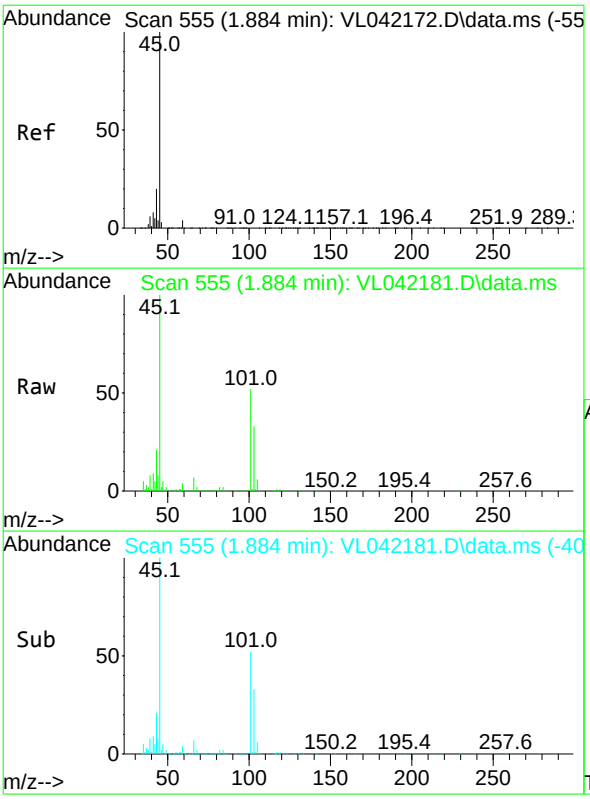


#18
1,1-Dichloroethene
Concen: 9.088 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 96 Resp: 83339

Ion	Ratio	Lower	Upper
96	100		
61	201.2	167.6	251.4
98	62.9	53.5	80.3

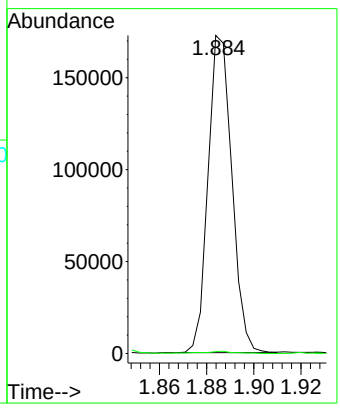




#19
Isopropyl Alcohol
Concen: 9.230 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 45 Resp: 120986

Ion	Ratio	Lower	Upper
45	100		
58	43.8	36.9	55.3



Instrument :
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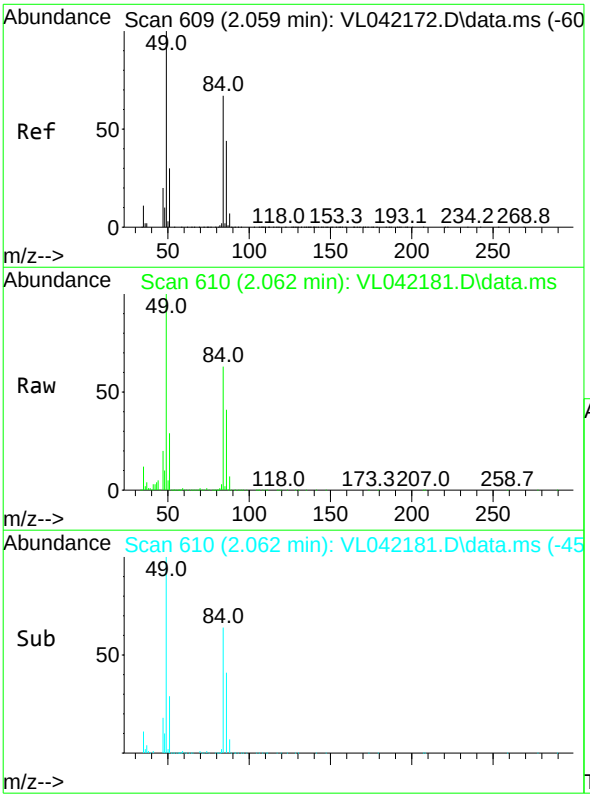
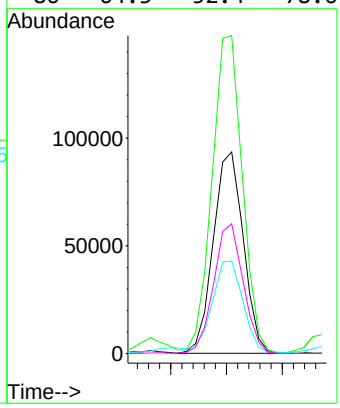
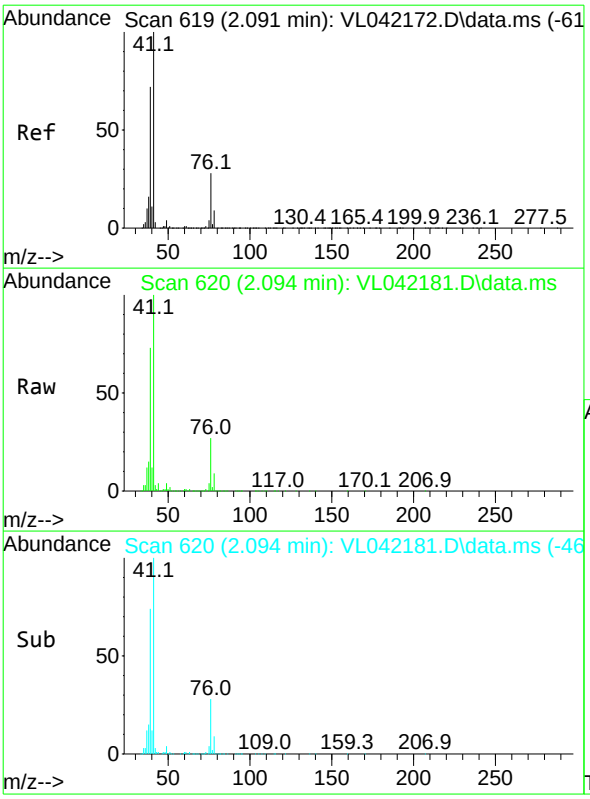


#20
Methylene Chloride
Concen: 8.083 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 84 Resp: 69930

Ion	Ratio	Lower	Upper
84	100		
49	157.4	120.2	180.4
51	45.2	37.4	56.0
86	64.3	52.4	78.6

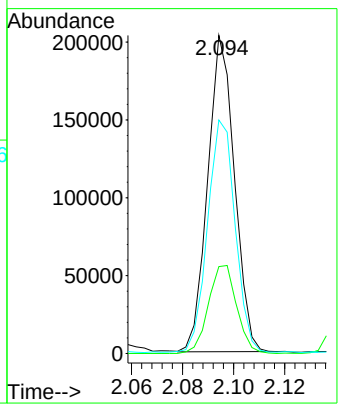




#21
Allyl Chloride
Concen: 9.022 ppbv
RT: 2.094 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 41 Resp: 147810

Ion	Ratio	Lower	Upper
41	100		
76	29.4	24.1	36.1
39	76.2	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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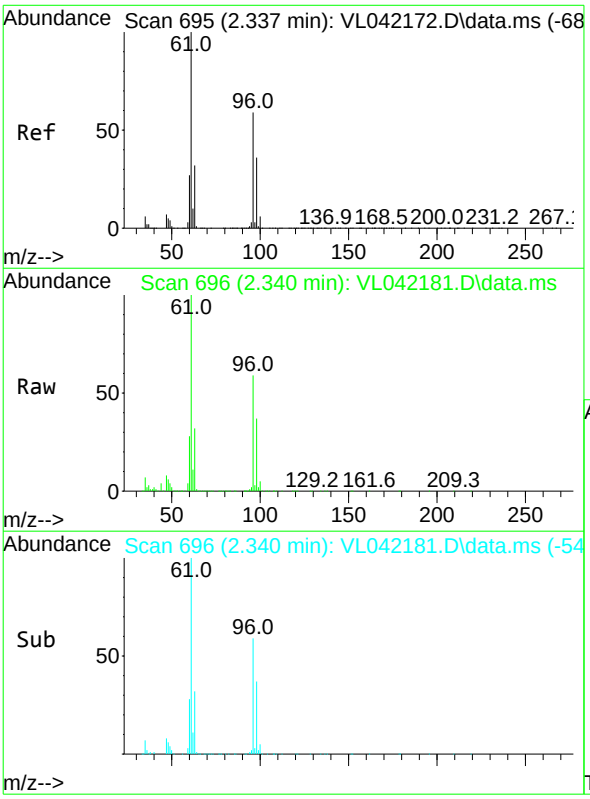
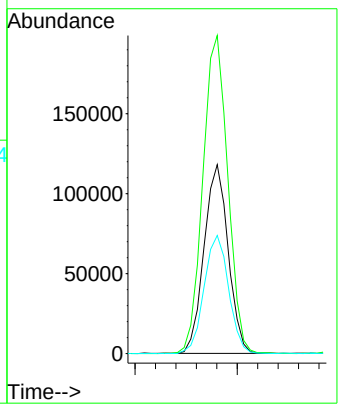
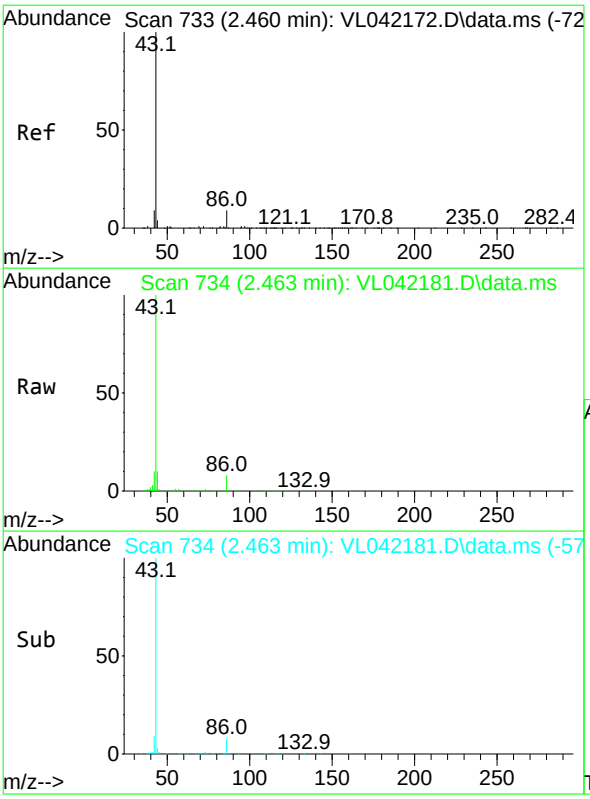


#22
trans-1,2-Dichloroethene
Concen: 9.116 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 96 Resp: 96616

Ion	Ratio	Lower	Upper
96	100		
61	168.4	136.6	204.8
98	62.5	49.4	74.2

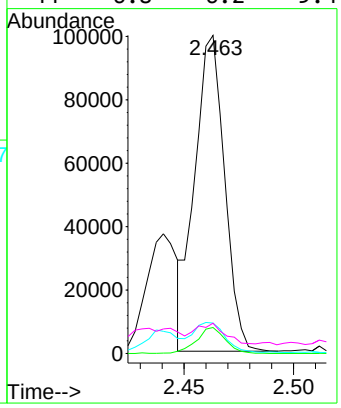




#23
Vinyl Acetate
Concen: 9.418 ppbv
RT: 2.463 min Scan# 73
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 94696

Ion	Ratio	Lower	Upper
43	100		
86	8.2	5.5	8.3
42	9.2	8.6	13.0
44	6.8	6.2	9.4



Instrument :
MSVOA_L
ClientSampleId :
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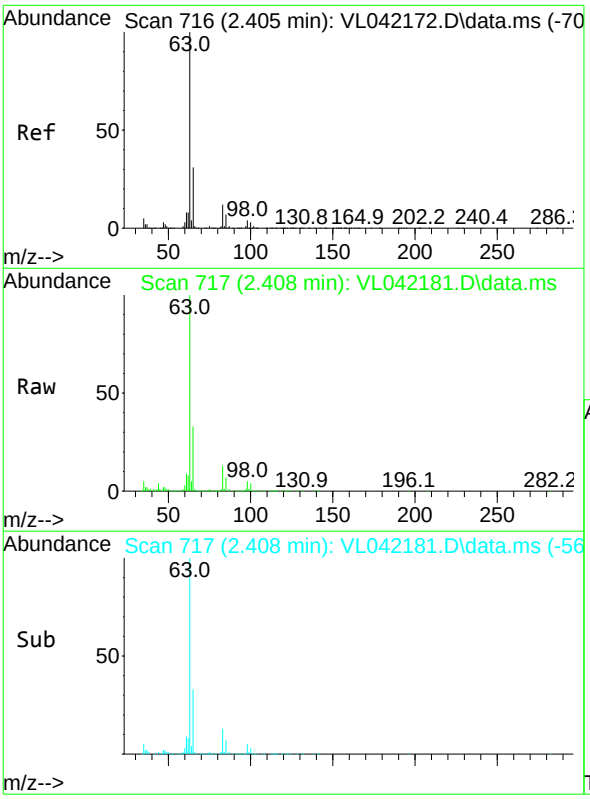
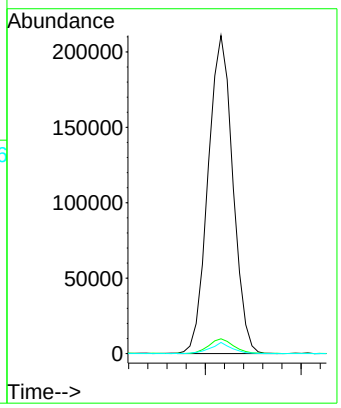
Supervised By :Mahesh Dadoda 04/03/2025

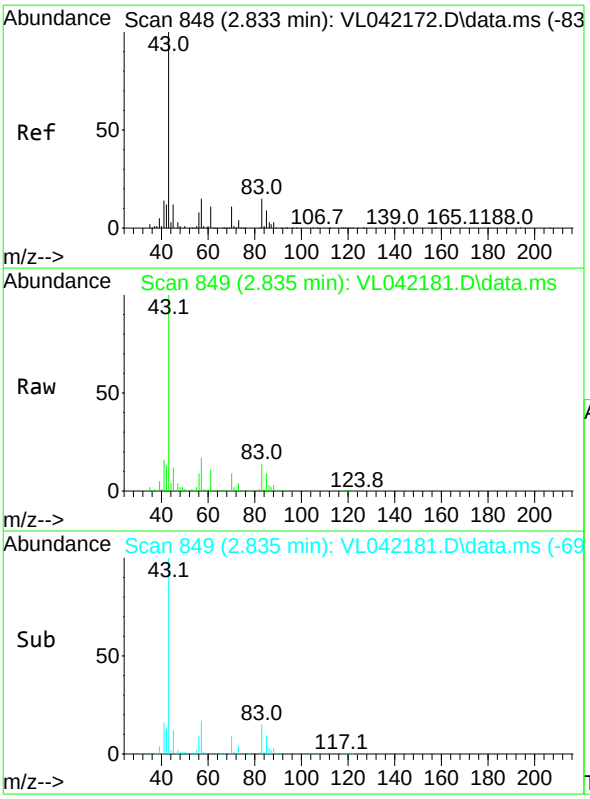


#24
1,1-Dichloroethane
Concen: 9.661 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 63 Resp: 189793

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.5	1.6	4.7

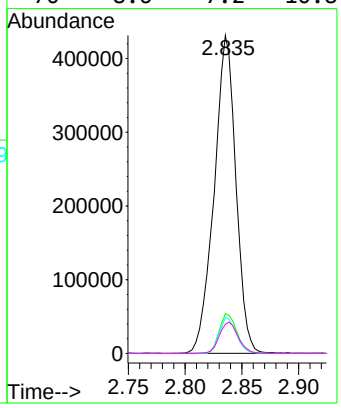




#25
Ethyl Acetate
Concen: 9.528 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 574442

Ion	Ratio	Lower	Upper
43	100		
45	10.1	8.2	12.2
61	9.0	7.3	10.9
70	8.6	7.2	10.8



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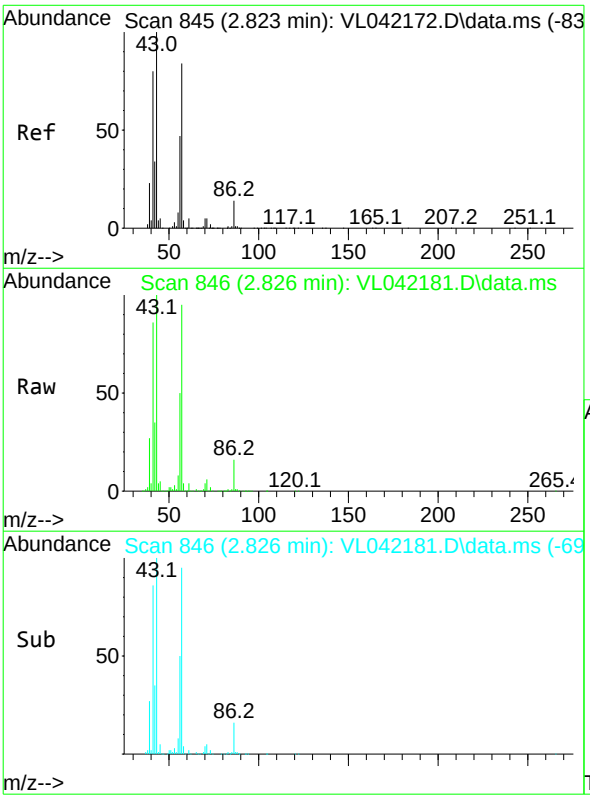
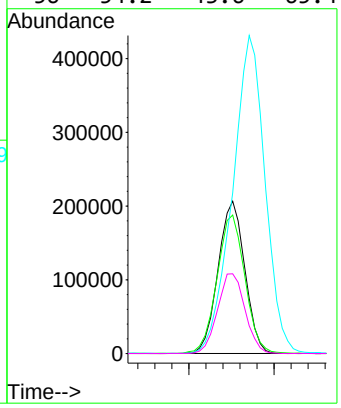
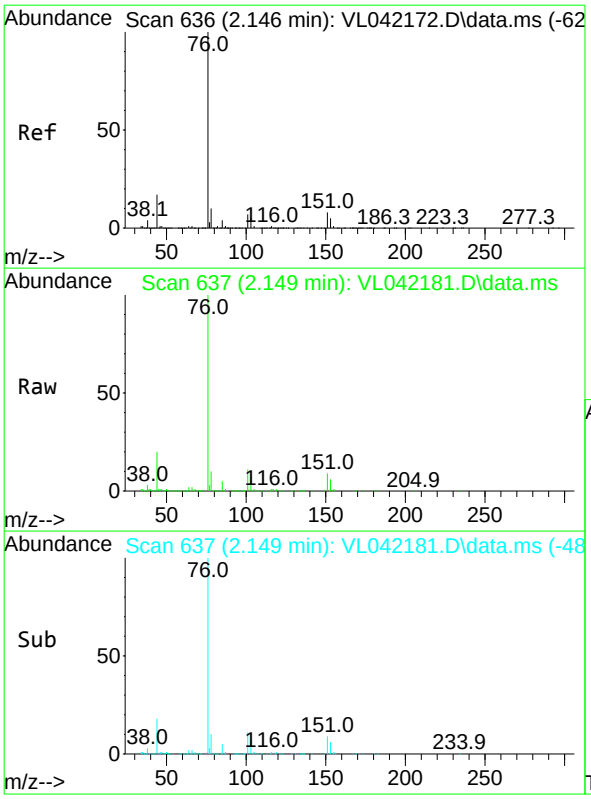


#26
Hexane
Concen: 9.649 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 57 Resp: 224704

Ion	Ratio	Lower	Upper
57	100		
41	95.3	76.6	114.8
43	255.9	207.8	311.8
56	54.2	43.6	65.4

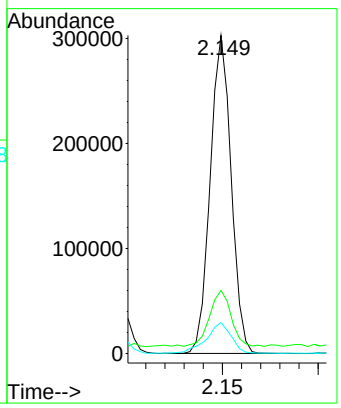




#27
Carbon Disulfide
Concen: 9.226 ppbv
RT: 2.149 min Scan# 63
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 76 Resp: 230410

Ion	Ratio	Lower	Upper
76	100		
44	22.5	14.7	22.1#
78	11.5	9.3	13.9



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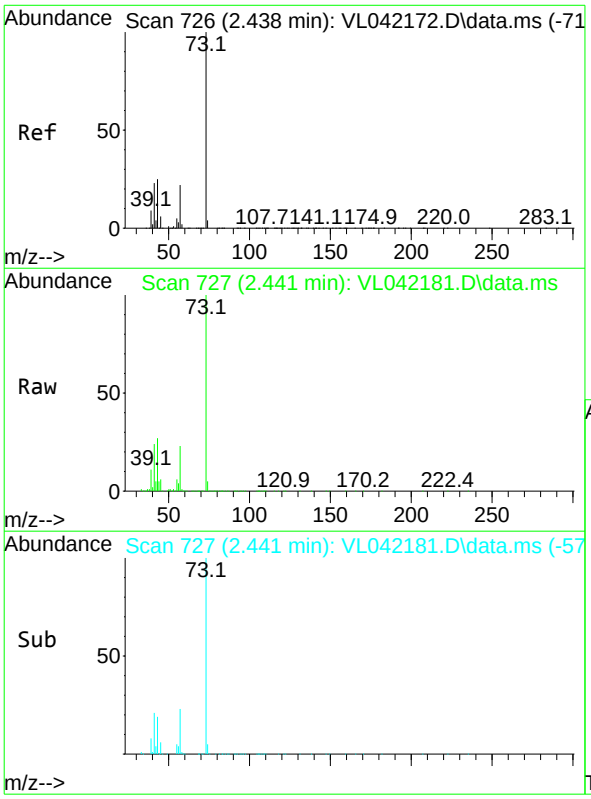
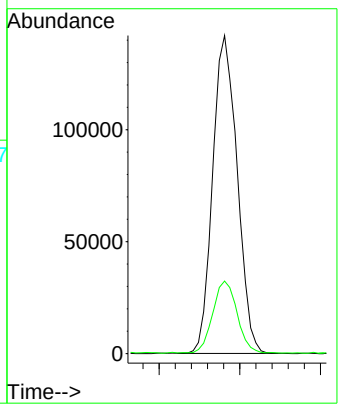
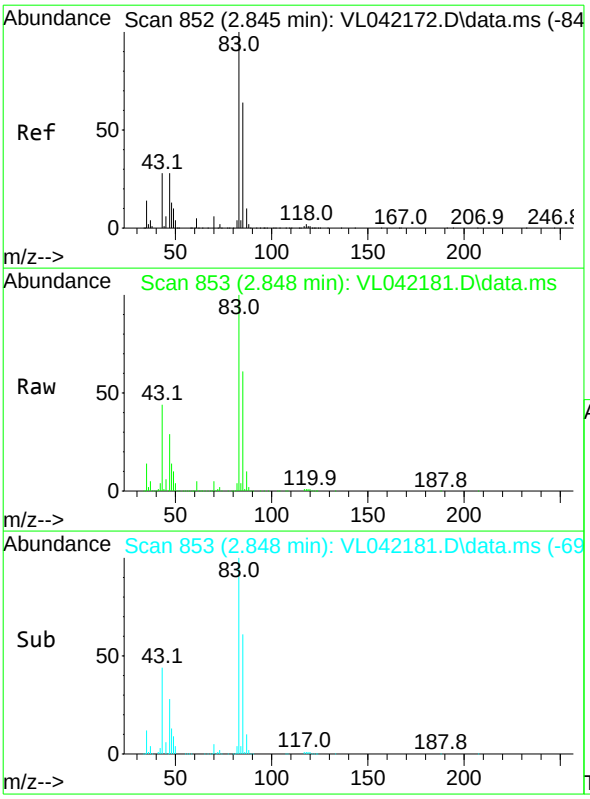


#28
Methyl tert-Butyl Ether
Concen: 10.342 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 73 Resp: 149961

Ion	Ratio	Lower	Upper
73	100		
57	23.0	20.5	30.7

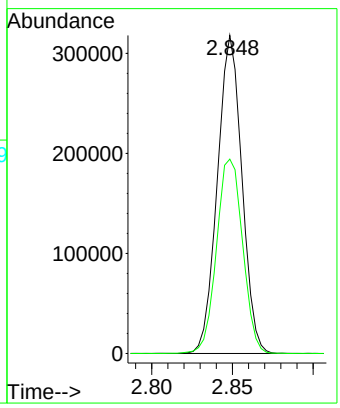




#29
Chloroform
Concen: 9.870 ppbv
RT: 2.848 min Scan# 85
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 83 Resp: 336404

Ion	Ratio	Lower	Upper
83	100		
85	61.0	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
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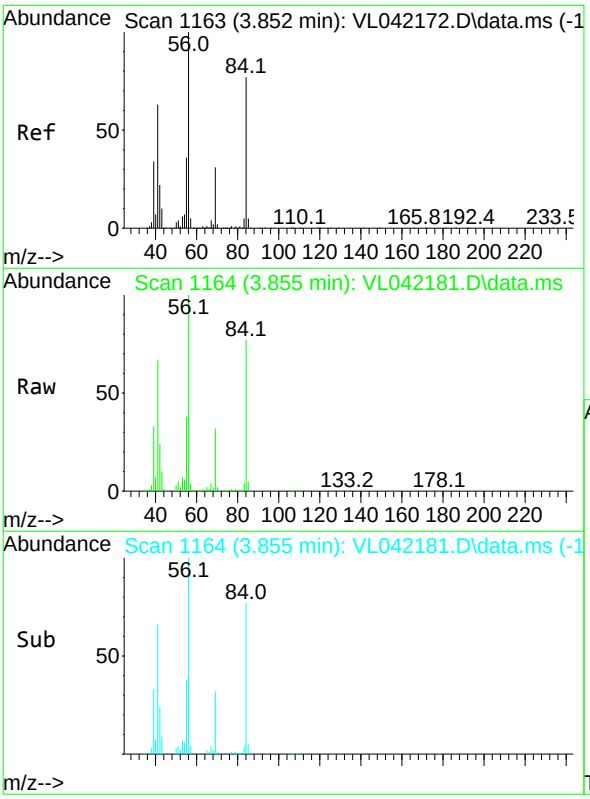
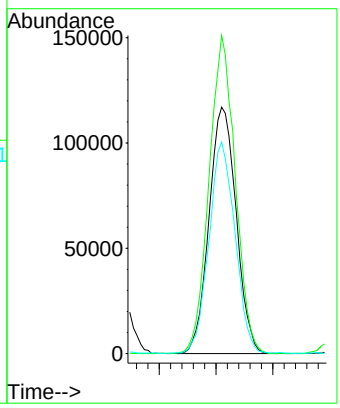
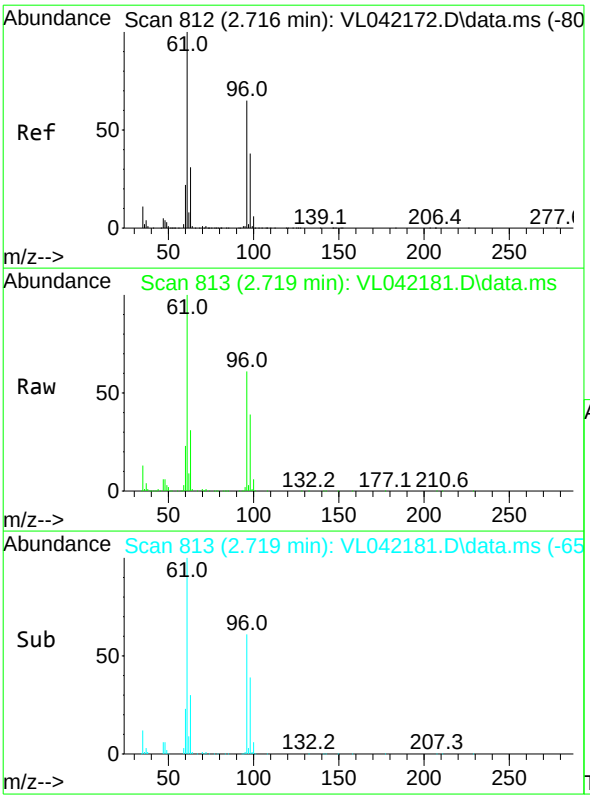


#30
Cyclohexane
Concen: 9.604 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 84 Resp: 194220

Ion	Ratio	Lower	Upper
84	100		
56	124.4	102.8	154.2
41	82.7	66.5	99.7





#31
cis-1,2-Dichloroethene
Concen: 9.777 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 61 Resp: 231151

Ion	Ratio	Lower	Upper
61	100		
96	60.8	51.8	77.8
98	38.8	30.6	46.0

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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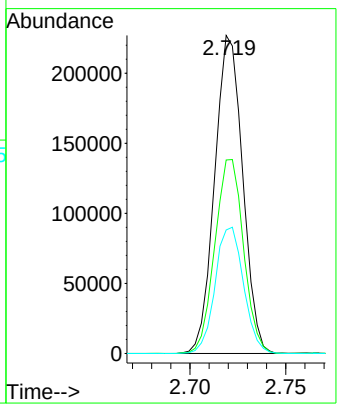
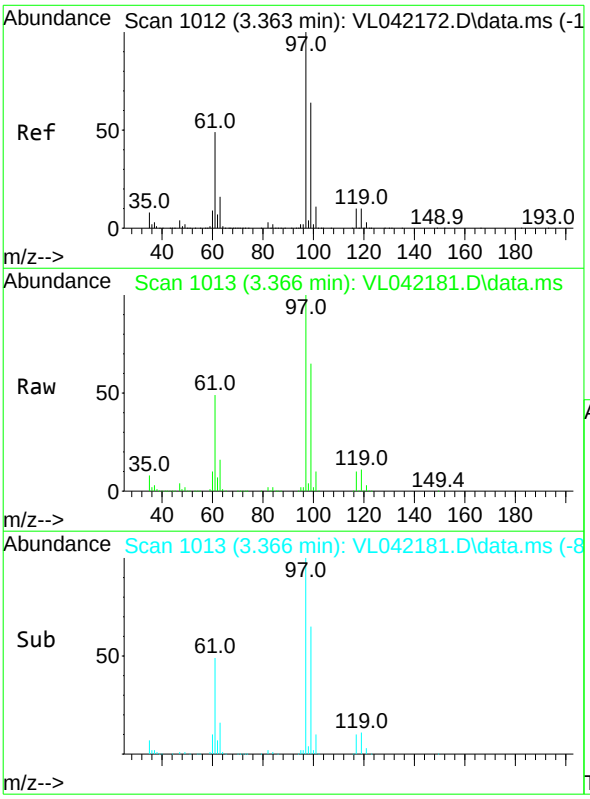
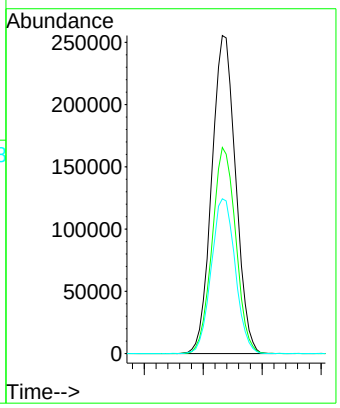


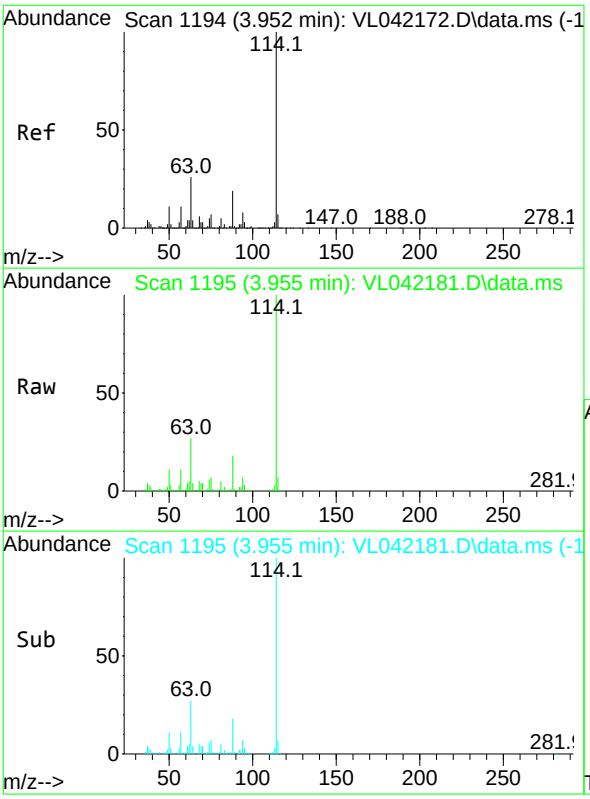


#32
1,1,1-Trichloroethane
Concen: 9.223 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 97 Resp: 359860

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.5	77.3
61	48.9	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:114 Resp: 483209

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.1	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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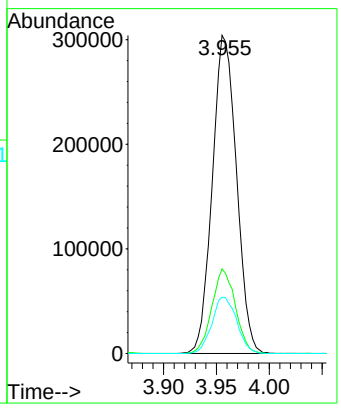
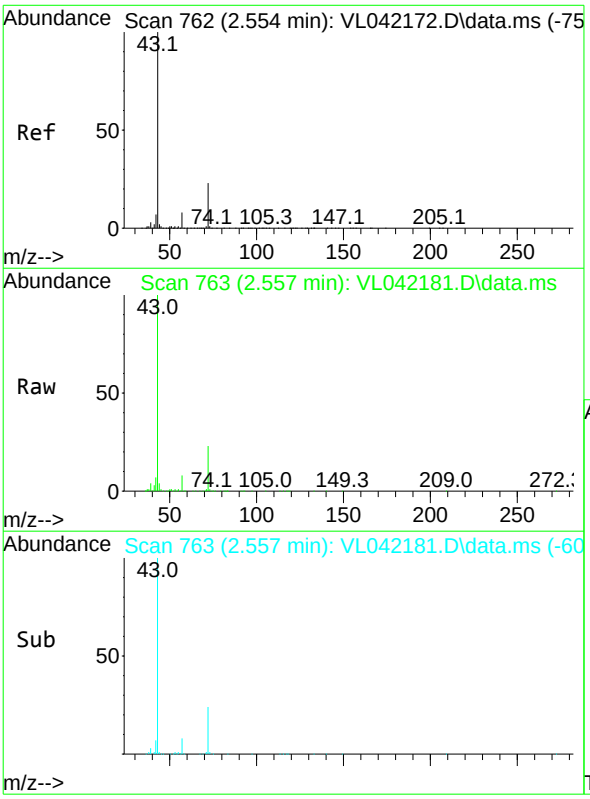
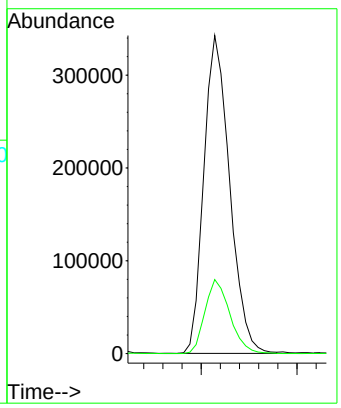


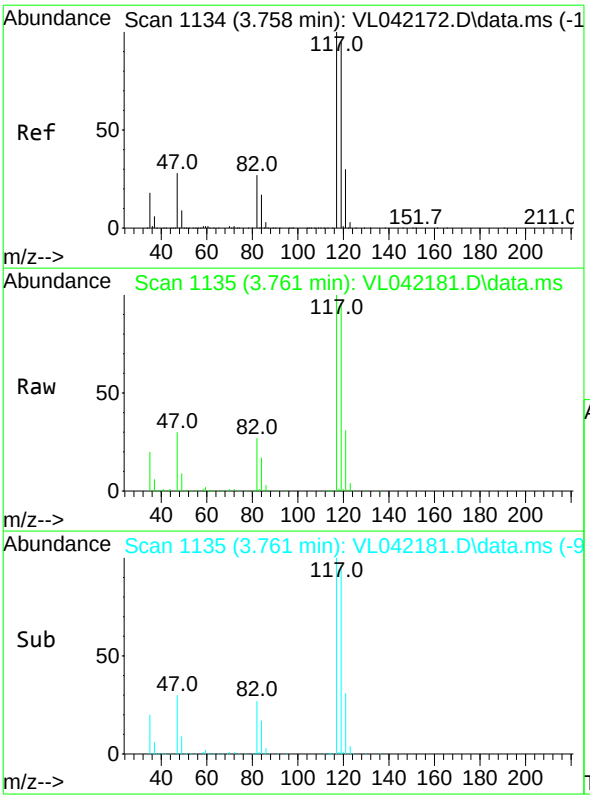


#34
2-Butanone
Concen: 9.157 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 320843

Ion	Ratio	Lower	Upper
43	100		
72	22.6	18.2	27.2

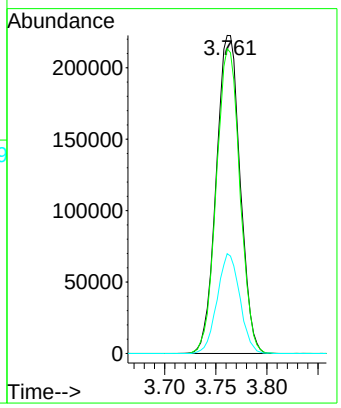




#35
Carbon Tetrachloride
Concen: 9.565 ppbv
RT: 3.761 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:117 Resp: 361037

Ion	Ratio	Lower	Upper
117	100		
119	95.8	76.2	114.2
121	31.4	24.2	36.4



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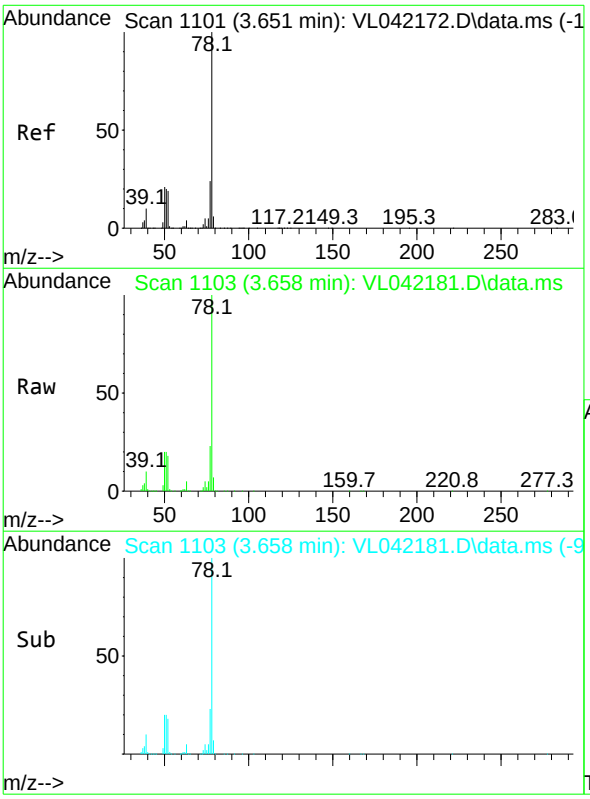
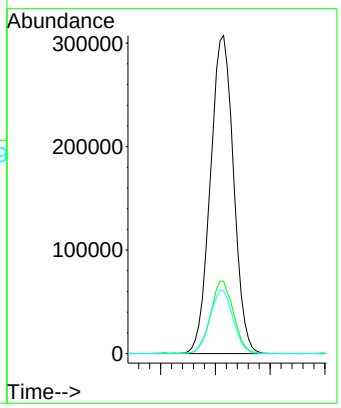
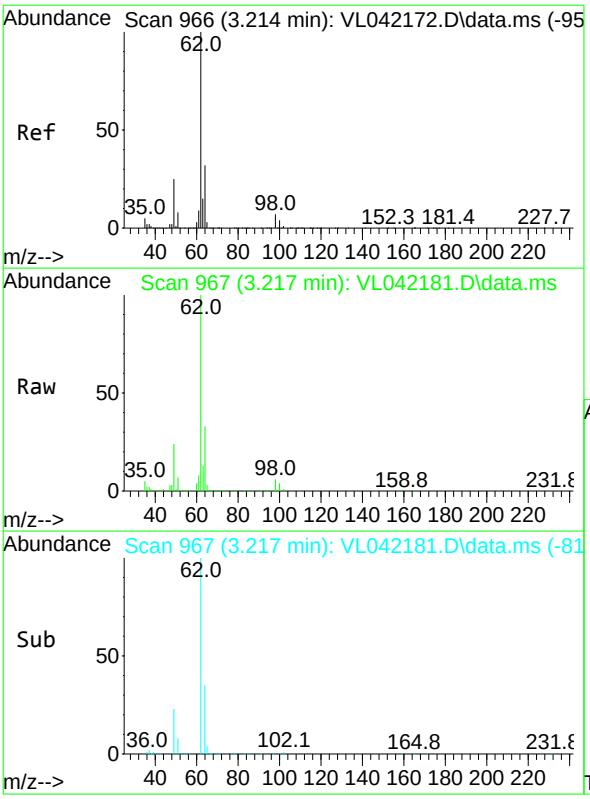


#36
Benzene
Concen: 9.450 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 78 Resp: 452718

Ion	Ratio	Lower	Upper
78	100		
77	22.7	19.1	28.7
50	19.7	16.6	24.8

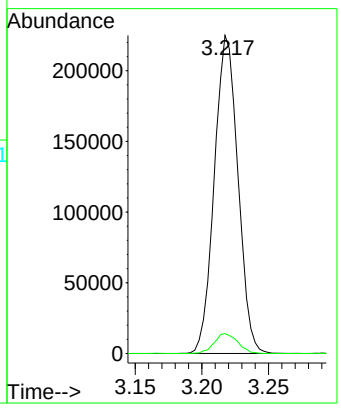




#37
1,2-Dichloroethane
Concen: 10.109 ppbv
RT: 3.217 min Scan# 96
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 62 Resp: 277247

Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.4	8.2



Instrument :
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ClientSampleId :
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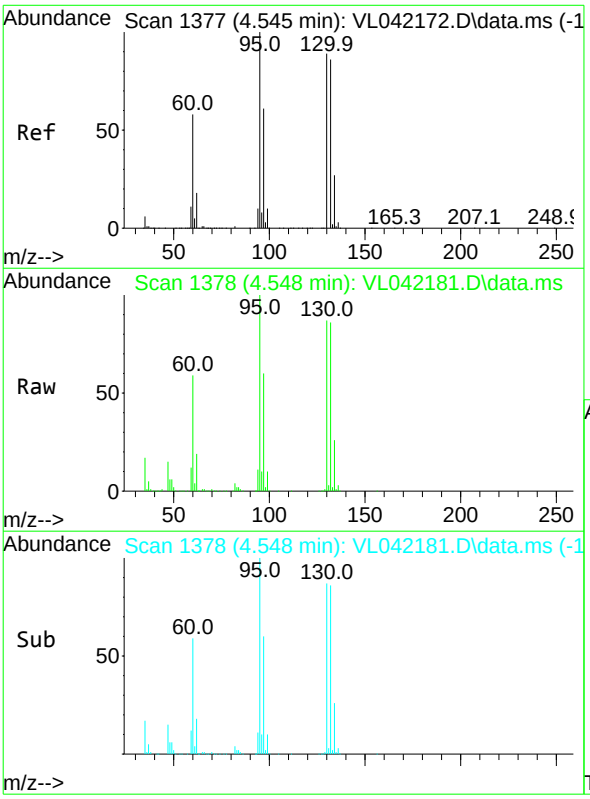
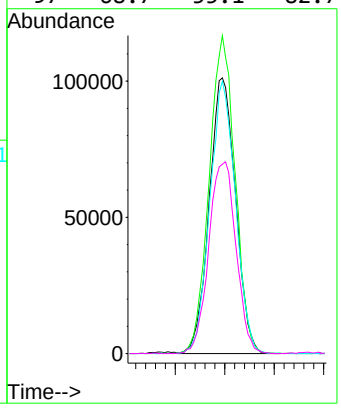
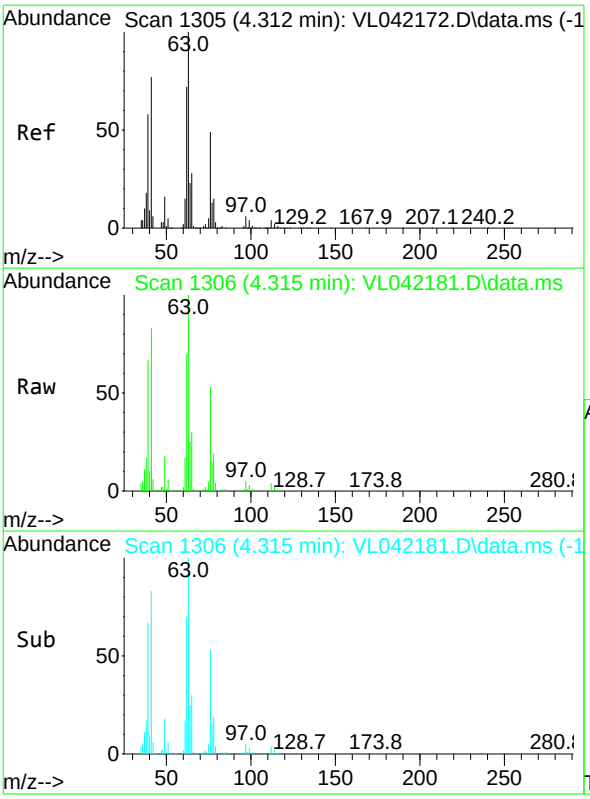


#38
Trichloroethene
Concen: 9.366 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:130 Resp: 187209

Ion	Ratio	Lower	Upper
130	100		
95	115.3	89.8	134.8
132	98.7	77.4	116.2
97	68.7	55.1	82.7

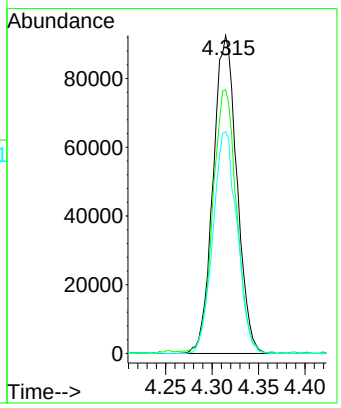




#39
1,2-Dichloropropane
Concen: 9.422 ppbv
RT: 4.315 min Scan# 13
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 63 Resp: 164374

Ion	Ratio	Lower	Upper
63	100		
41	82.9	61.7	92.5
62	69.7	57.6	86.4



Instrument :
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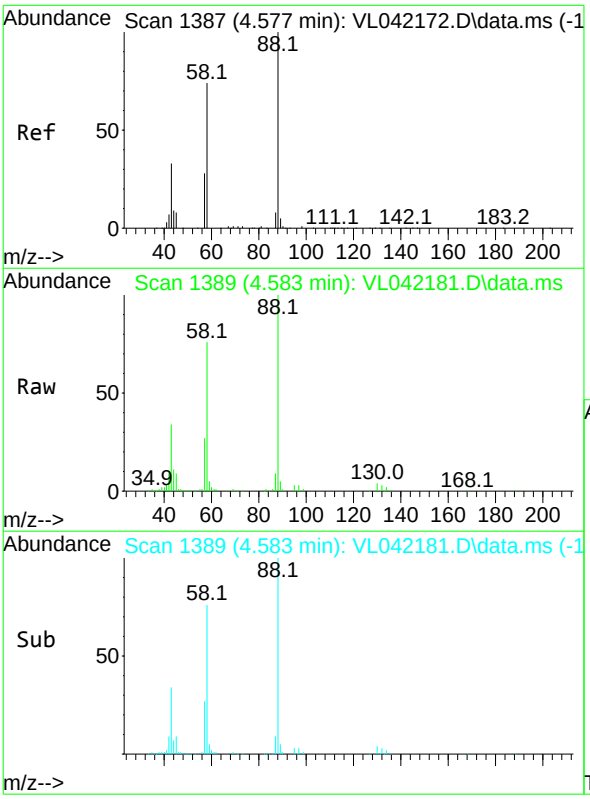
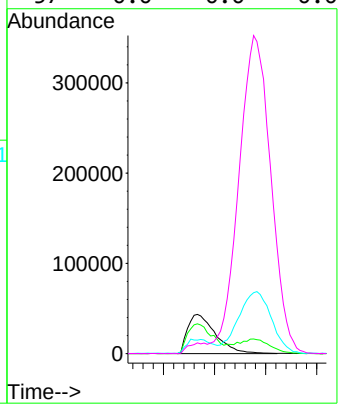
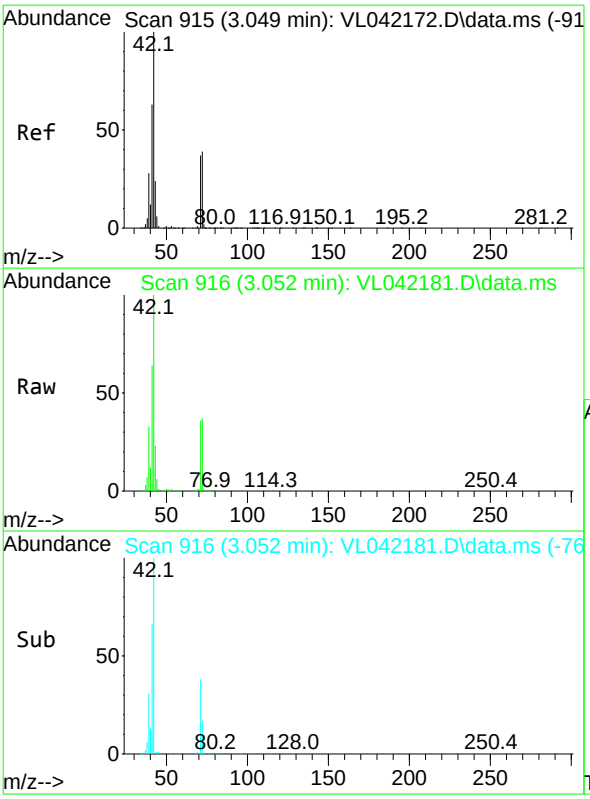


#40
1,4-Dioxane
Concen: 8.857 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 88 Resp: 82012

Ion	Ratio	Lower	Upper
88	100		
58	73.5	62.7	94.1
43	35.8	23.0	34.4#
57	0.0	0.0	0.0

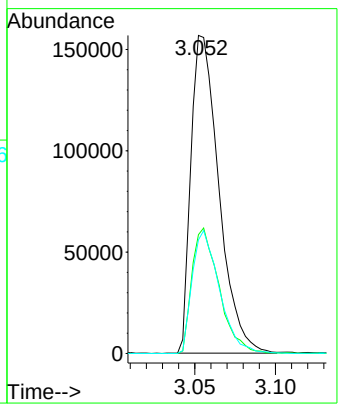




#41
Tetrahydrofuran
Concen: 9.362 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 42 Resp: 188907

Ion	Ratio	Lower	Upper
42	100		
72	38.5	31.4	47.0
71	37.8	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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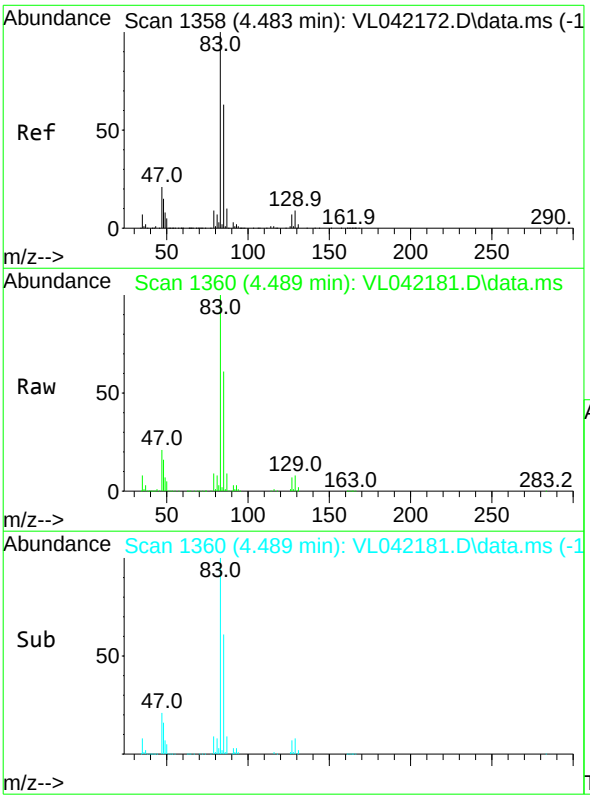
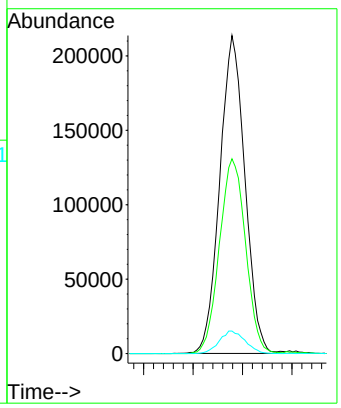
Supervised By :Mahesh Dadoda 04/03/2025

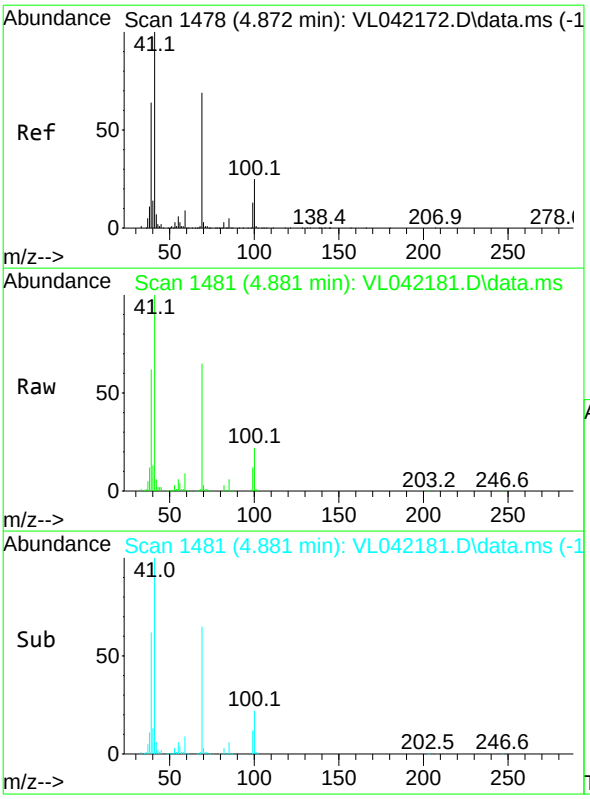


#42
Bromodichloromethane
Concen: 9.974 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 83 Resp: 377092

Ion	Ratio	Lower	Upper
83	100		
85	61.3	50.5	75.7
127	7.1	5.9	8.9

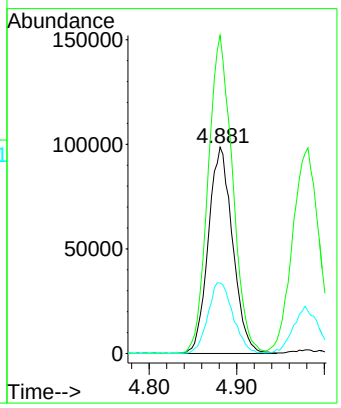




#43
Methyl Methacrylate
Concen: 9.377 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.009 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 69 Resp: 190156

Ion	Ratio	Lower	Upper
69	100		
41	154.1	123.8	185.6
100	35.7	28.4	42.6



Instrument :
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ClientSampleId :
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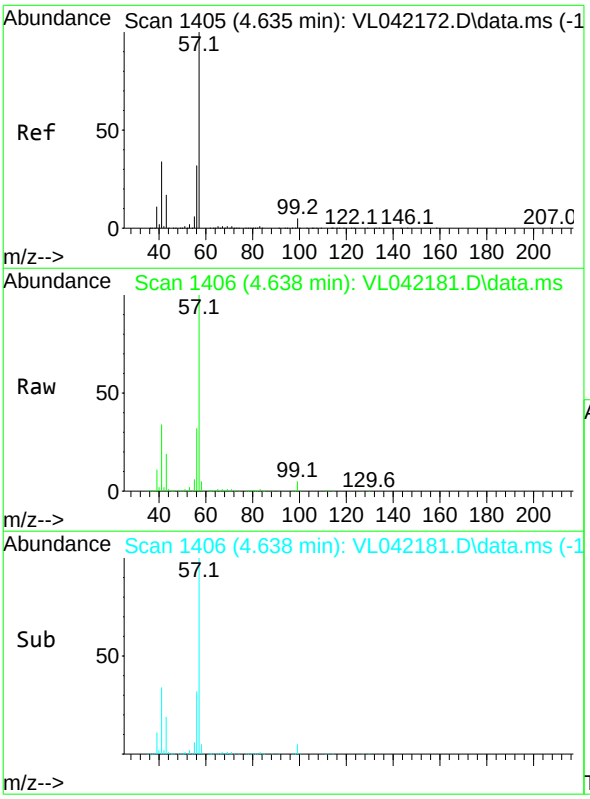
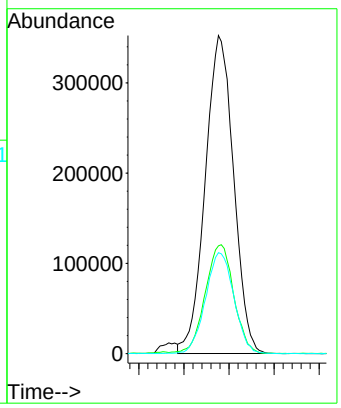
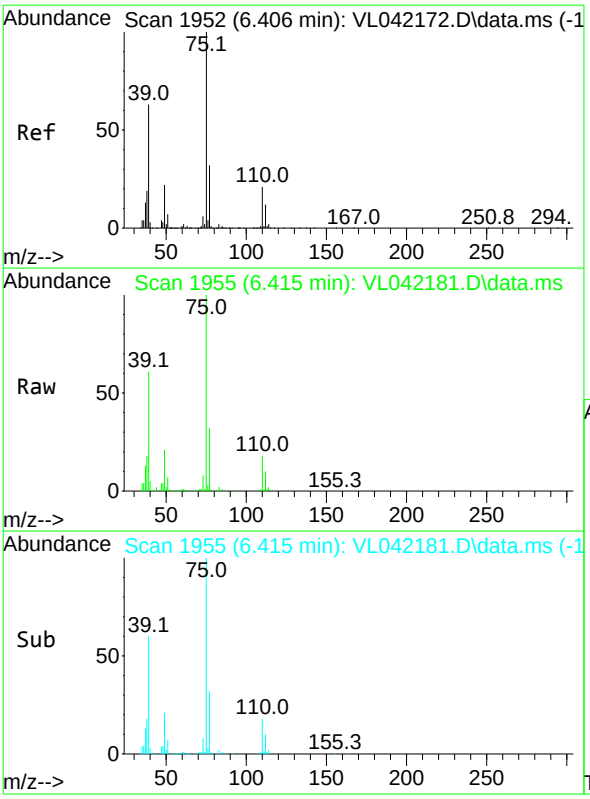


#44
2,2,4-Trimethylpentane
Concen: 9.509 ppbv
RT: 4.638 min Scan# 1406
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 57 Resp: 769803

Ion	Ratio	Lower	Upper
57	100		
41	34.8	26.8	40.2
56	31.8	25.6	38.4

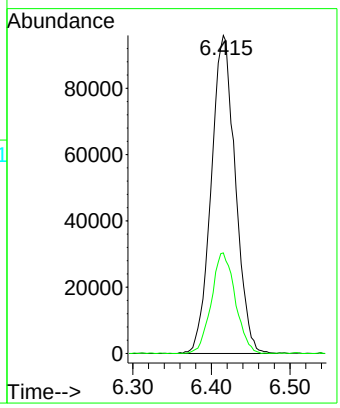




#45
t-1,3-Dichloropropene
Concen: 9.376 ppbv
RT: 6.415 min Scan# 19
Delta R.T. 0.009 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 75 Resp: 204004

Ion	Ratio	Lower	Upper
75	100		
77	31.6	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
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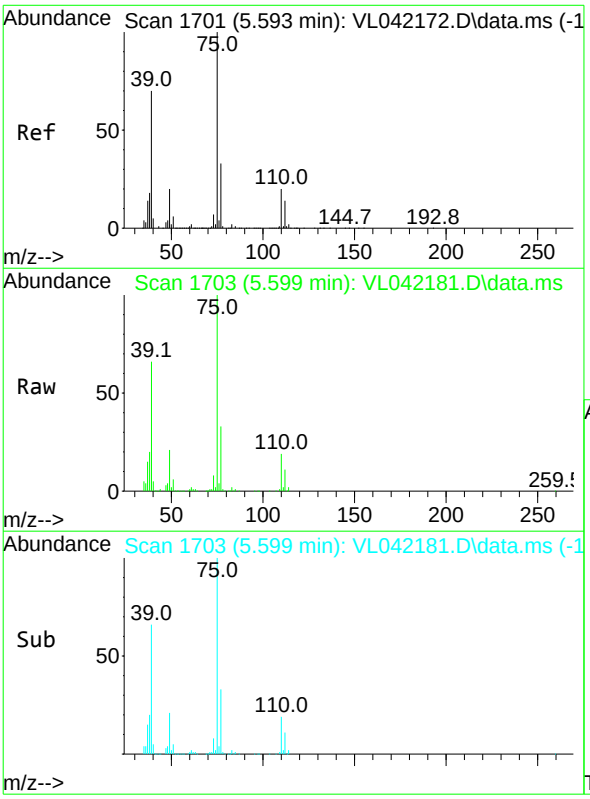
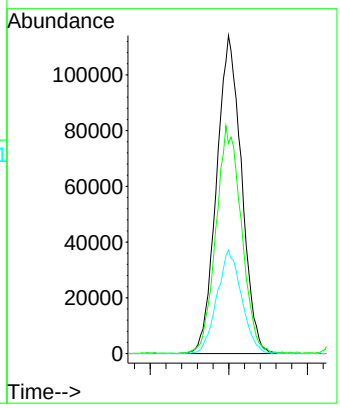
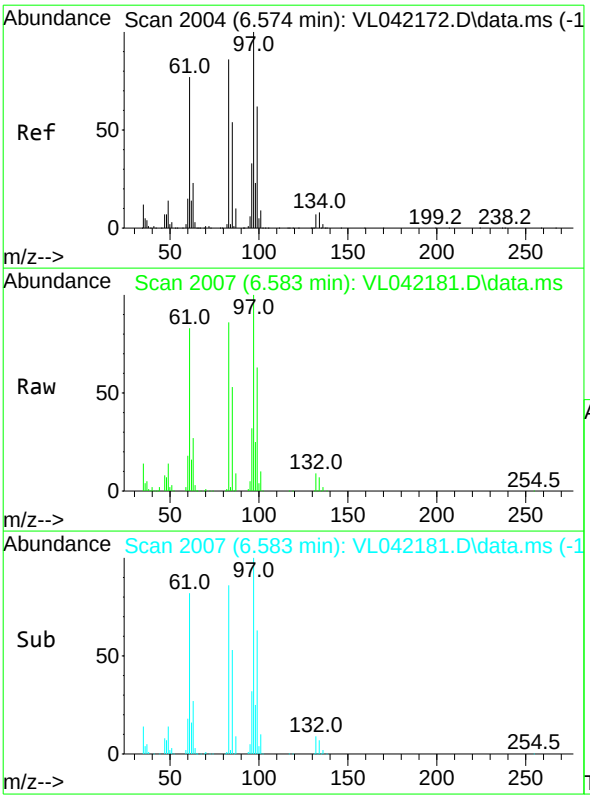


#46
cis-1,3-Dichloropropene
Concen: 9.437 ppbv
RT: 5.599 min Scan# 1703
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 75 Resp: 251694

Ion	Ratio	Lower	Upper
75	100		
39	66.0	55.8	83.6
77	32.6	26.0	39.0

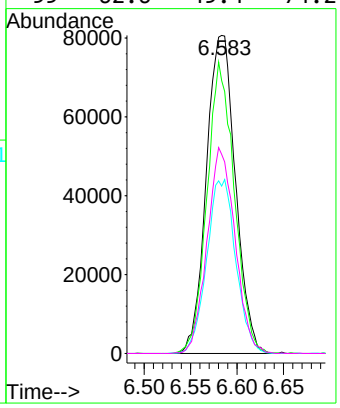




#47
1,1,2-Trichloroethane
Concen: 9.517 ppbv
RT: 6.583 min Scan# 20
Delta R.T. 0.009 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 97 Resp: 175509

Ion	Ratio	Lower	Upper
97	100		
83	85.6	69.2	103.8
85	52.6	43.1	64.7
99	62.6	49.4	74.2



Instrument :
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ClientSampleId :
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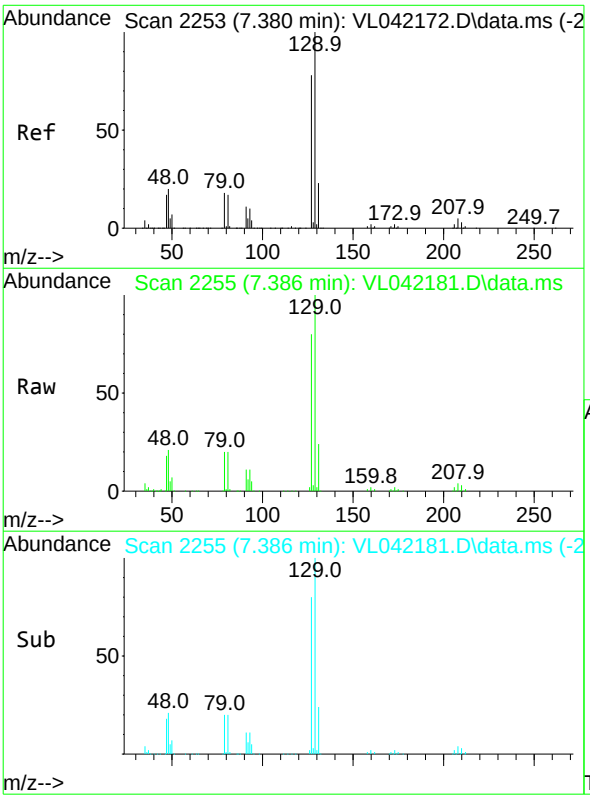
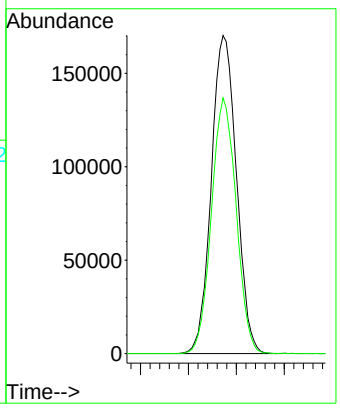
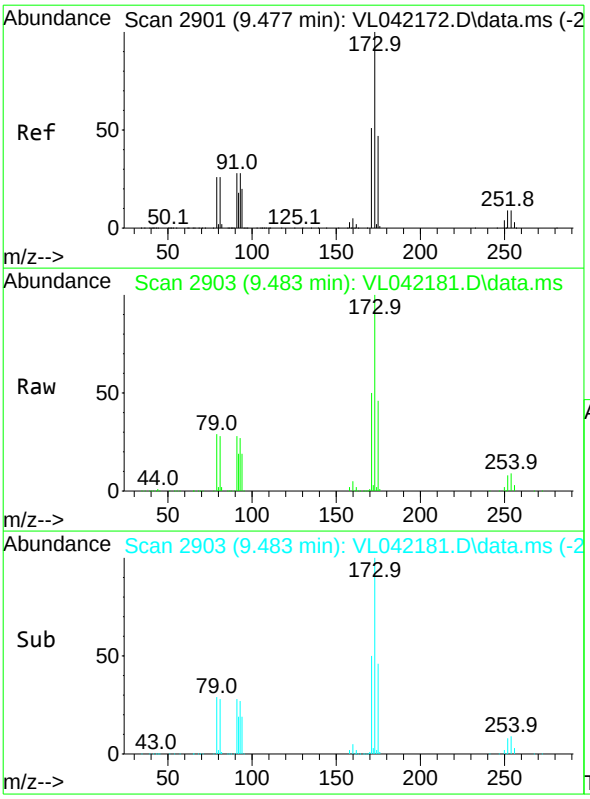


#48
Dibromochloromethane
Concen: 9.923 ppbv
RT: 7.386 min Scan# 2255
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:129 Resp: 310158

Ion	Ratio	Lower	Upper
129	100		
127	79.1	39.1	117.2

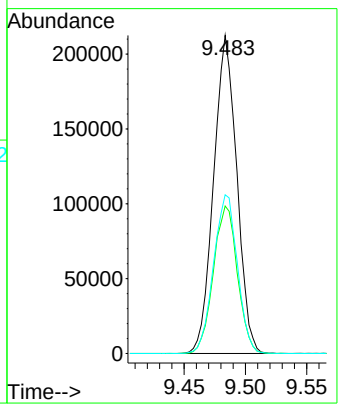




#49
Bromoform
Concen: 9.957 ppbv
RT: 9.483 min Scan# 29
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:173 Resp: 279382

Ion	Ratio	Lower	Upper
173	100		
175	48.0	38.6	57.8
171	51.4	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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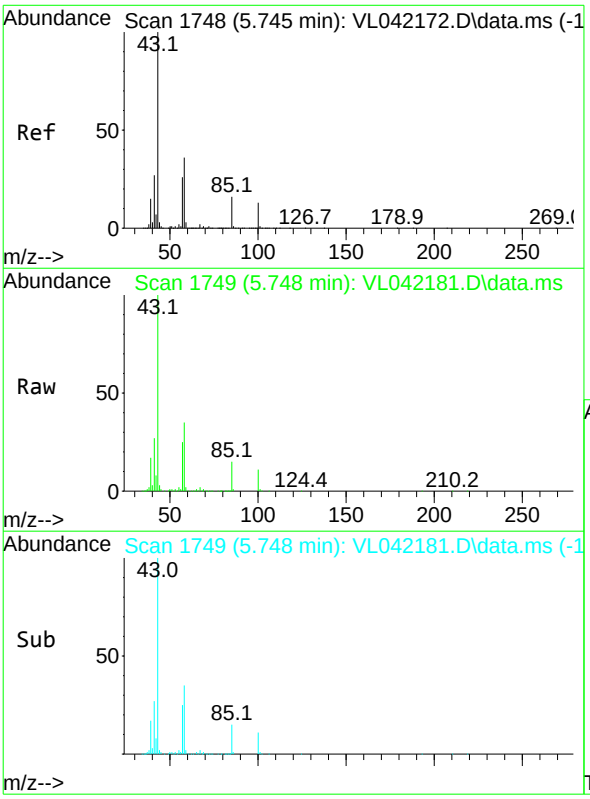
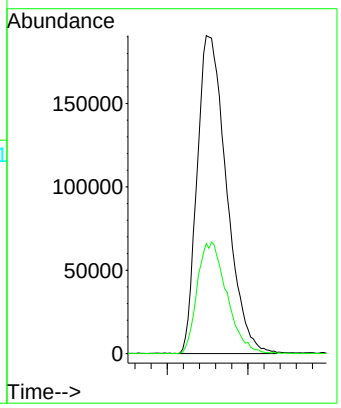
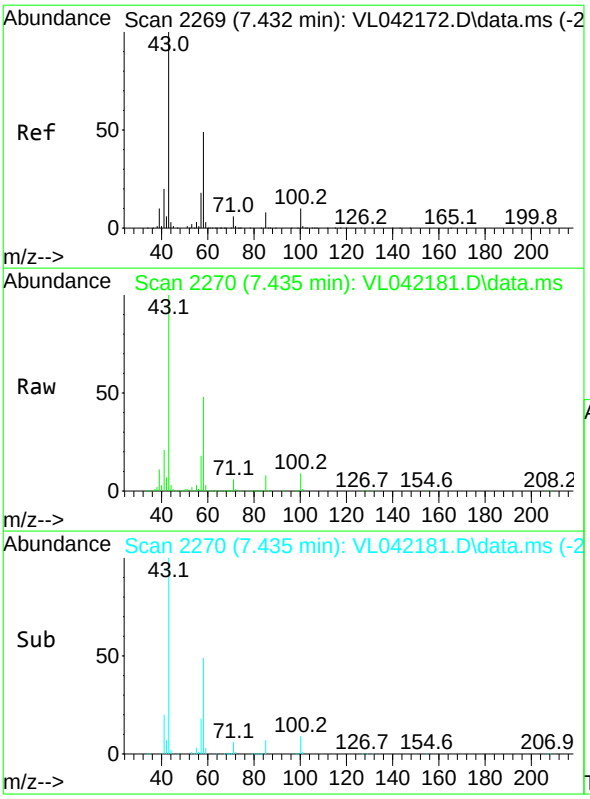


#50
4-Methyl-2-Pentanone
Concen: 8.679 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 481919

Ion	Ratio	Lower	Upper
43	100		
58	35.3	29.0	43.6

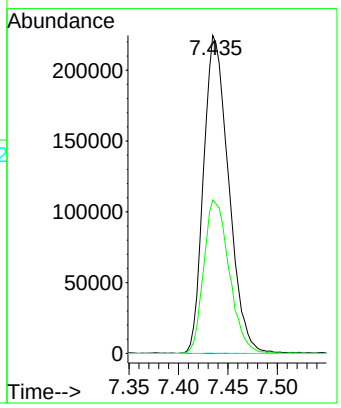




#51
2-Hexanone
Concen: 8.674 ppbv
RT: 7.435 min Scan# 22
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 395520

Ion	Ratio	Lower	Upper
43	100		
58	49.0	39.7	59.5
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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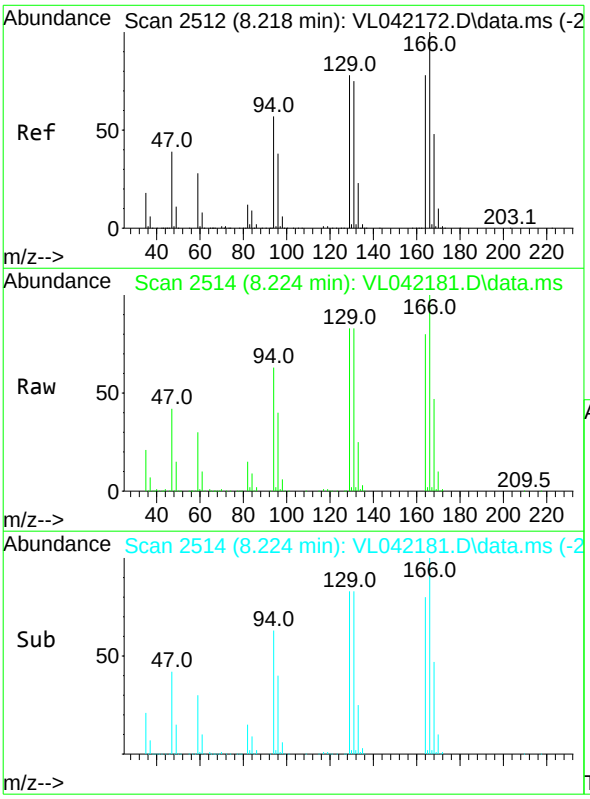
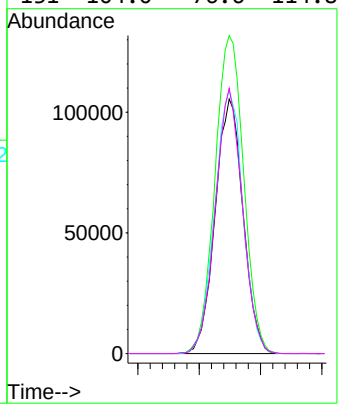
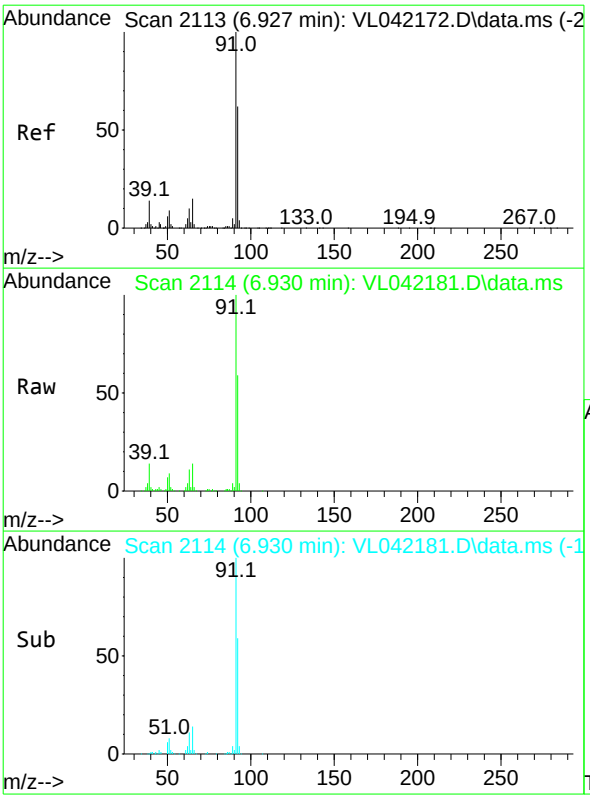


#52
Tetrachloroethene
Concen: 8.791 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:164 Resp: 167015

Ion	Ratio	Lower	Upper
164	100		
166	124.8	102.5	153.7
129	103.6	79.8	119.8
131	104.0	76.6	114.8

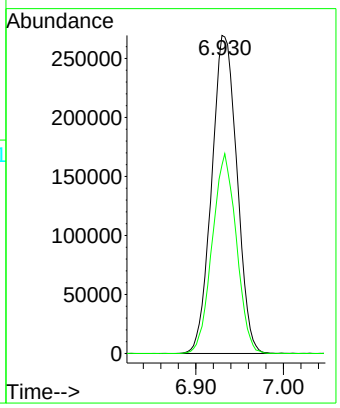




#53
Toluene
Concen: 9.520 ppbv
RT: 6.930 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 540612

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.4	72.6



Instrument :
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ClientSampleId :
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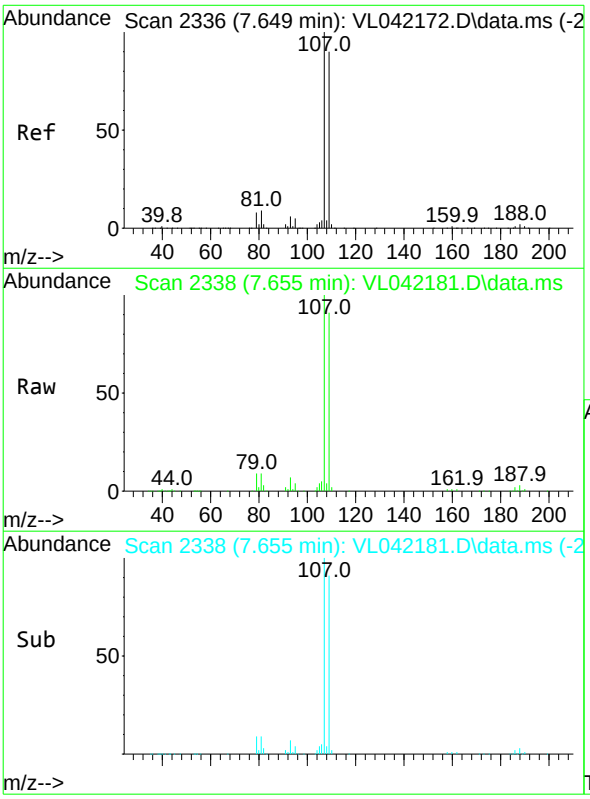
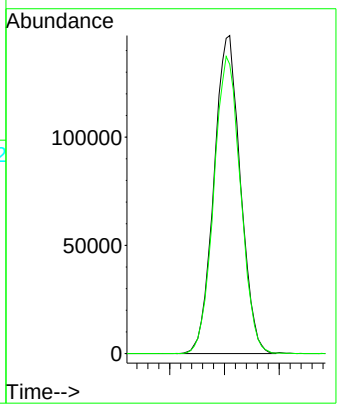
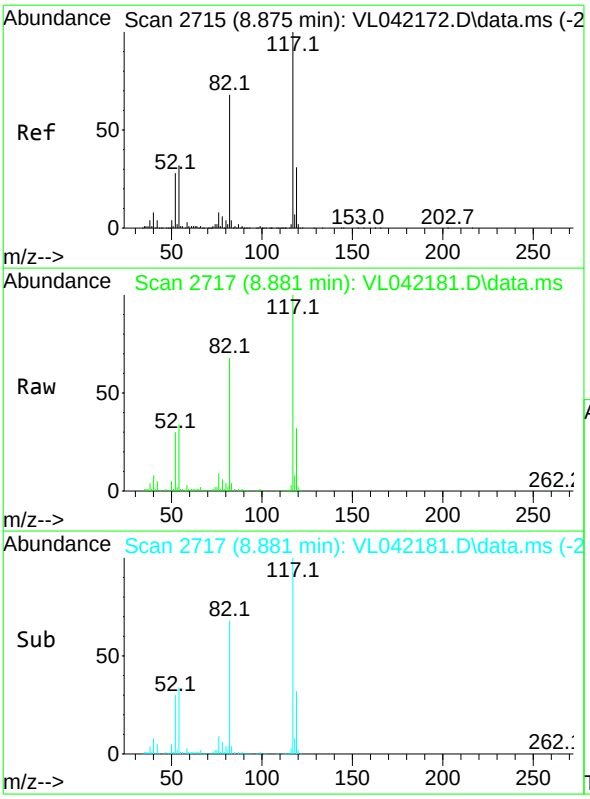


#54
1,2-Dibromoethane
Concen: 9.589 ppbv
RT: 7.655 min Scan# 2338
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:107 Resp: 246519

Ion	Ratio	Lower	Upper
107	100		
109	90.9	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 27
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:117 Resp: 452250

Ion	Ratio	Lower	Upper
117	100		
82	68.9	55.8	83.6
119	32.8	25.5	38.3

Instrument :
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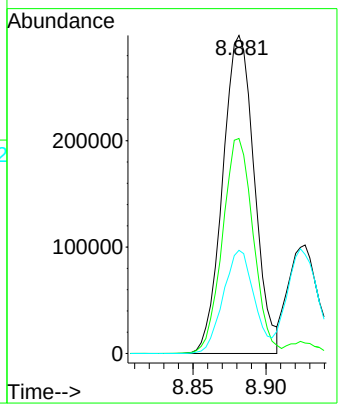
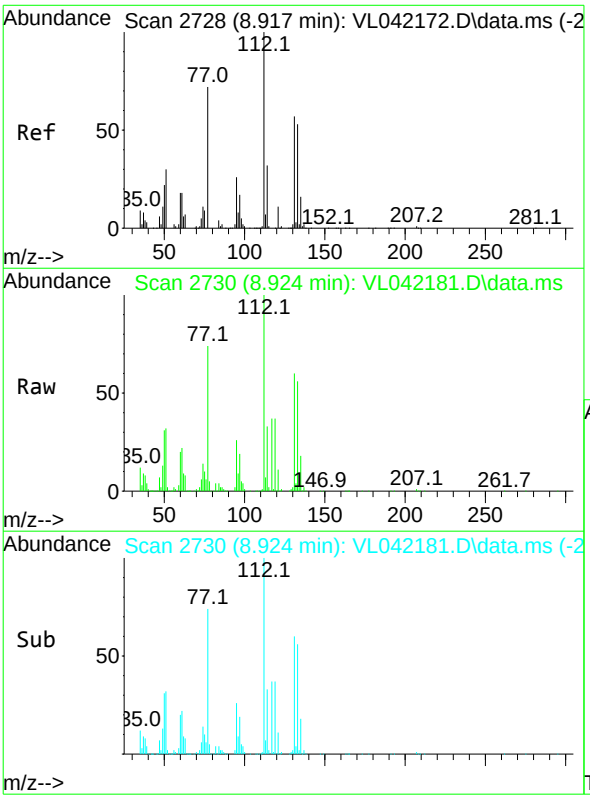
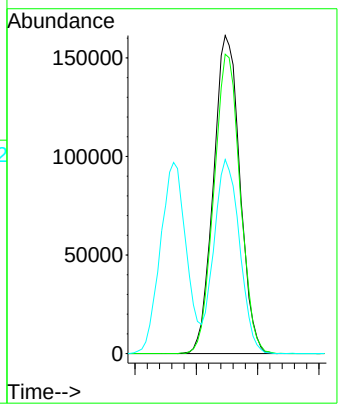


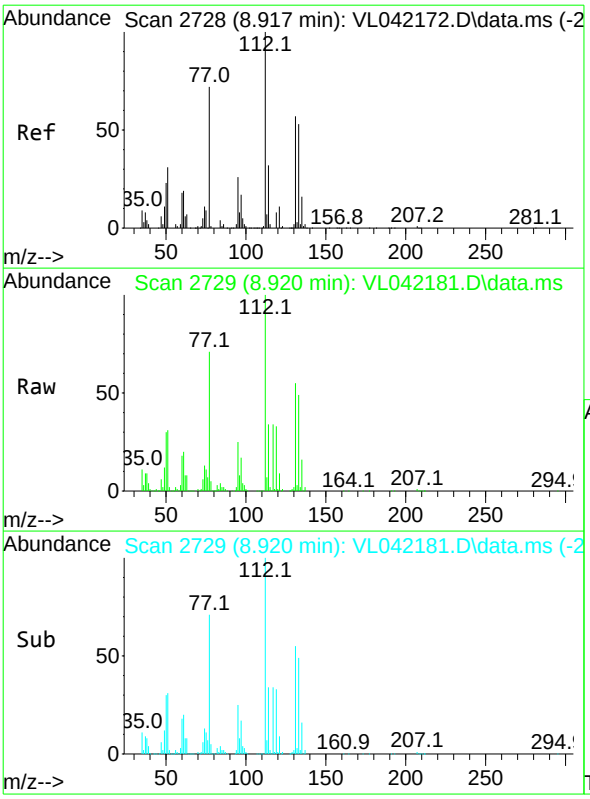


#56
1,1,1,2-Tetrachloroethane
Concen: 9.677 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:131 Resp: 240905

Ion	Ratio	Lower	Upper
131	100		
133	93.5	76.6	114.8
119	57.6	49.8	74.6

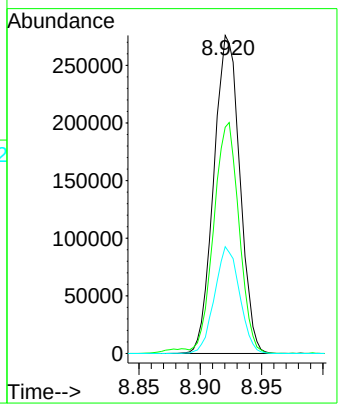




#57
Chlorobenzene
Concen: 9.507 ppbv
RT: 8.920 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:112 Resp: 407816

Ion	Ratio	Lower	Upper
112	100		
77	71.1	58.2	87.2
114	33.6	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
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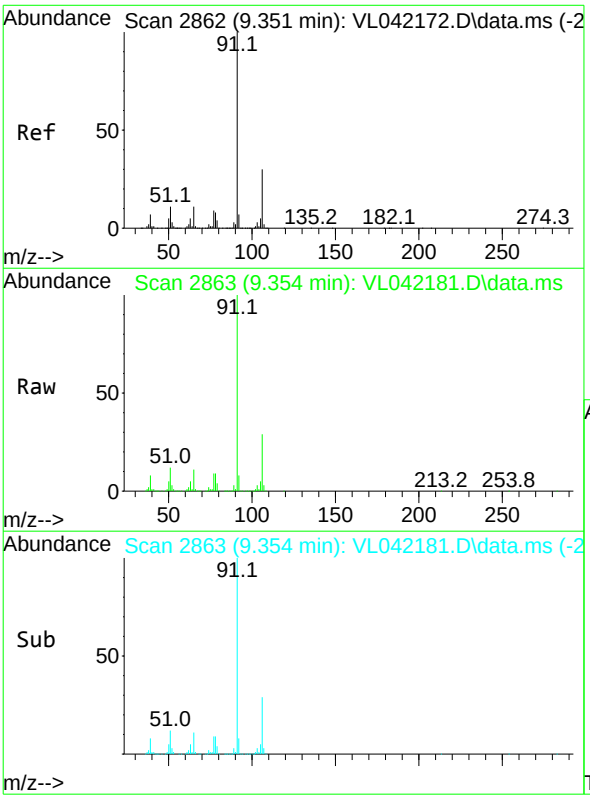
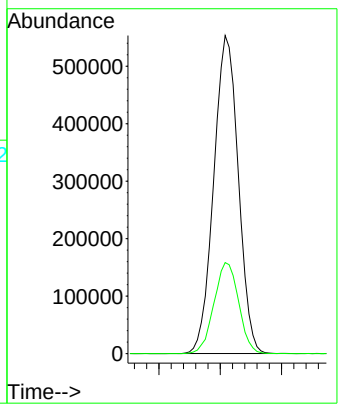
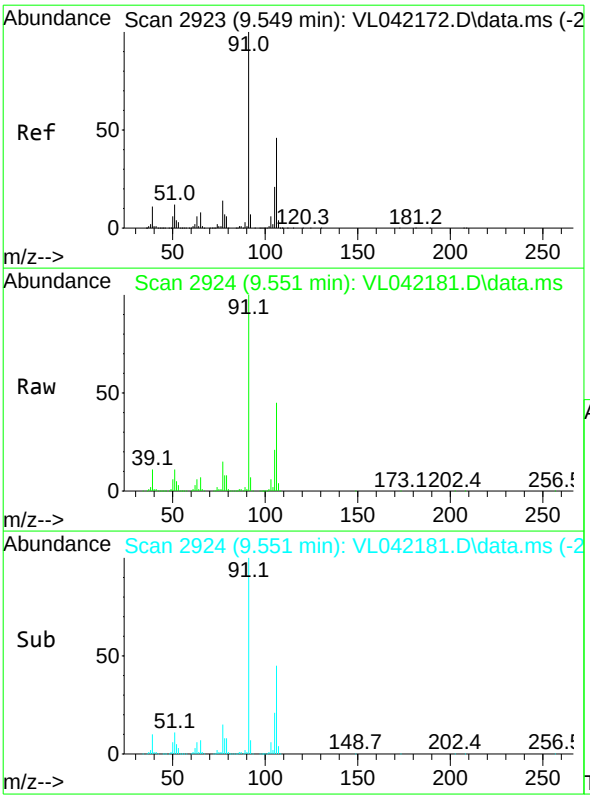


#58
Ethyl Benzene
Concen: 9.583 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 769818

Ion	Ratio	Lower	Upper
91	100		
106	28.6	24.2	36.2

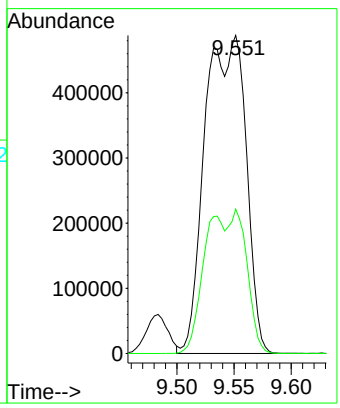




#59
m/p-Xylene
Concen: 19.028 ppbv m
RT: 9.551 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 1220553

Ion	Ratio	Lower	Upper
91	100		
106	45.2	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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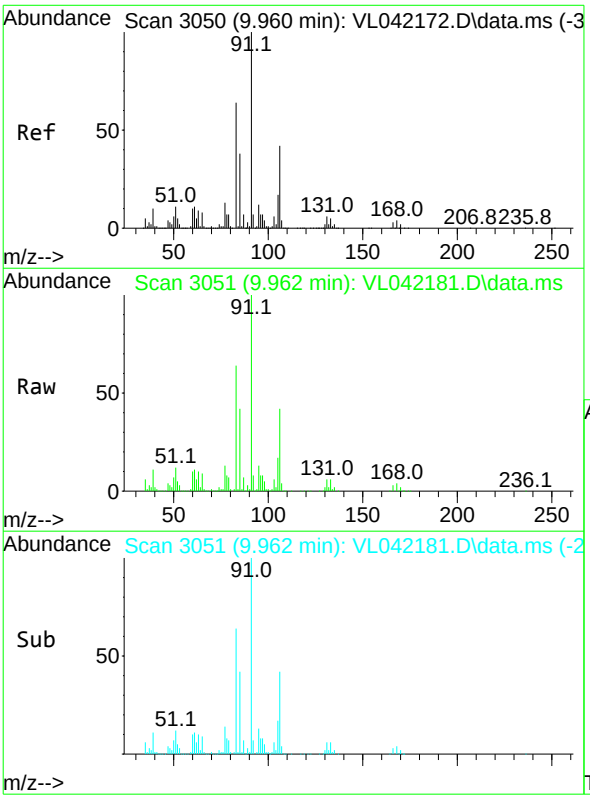
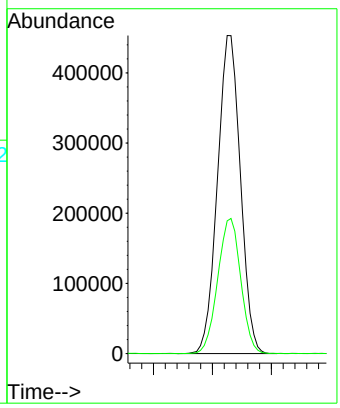
Supervised By :Mahesh Dadoda 04/03/2025

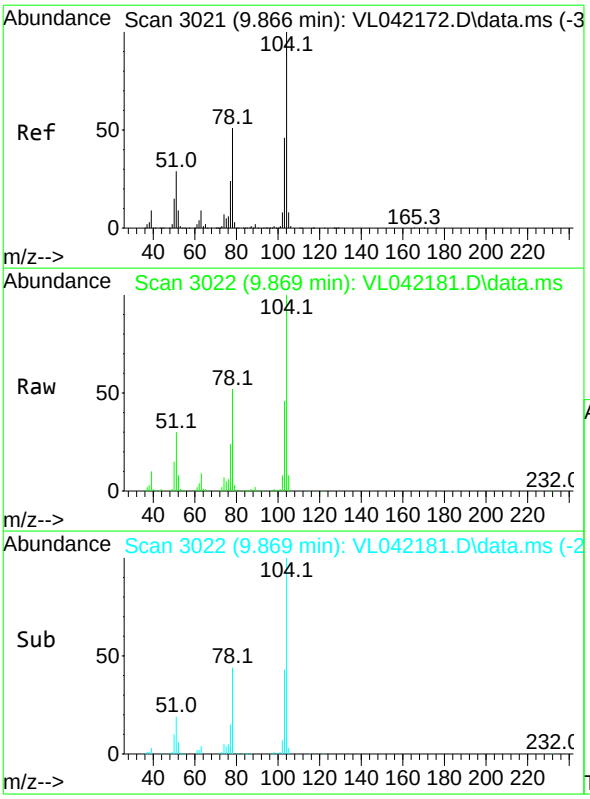


#60
o-Xylene
Concen: 9.518 ppbv
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 612011

Ion	Ratio	Lower	Upper
91	100		
106	42.7	20.8	62.5

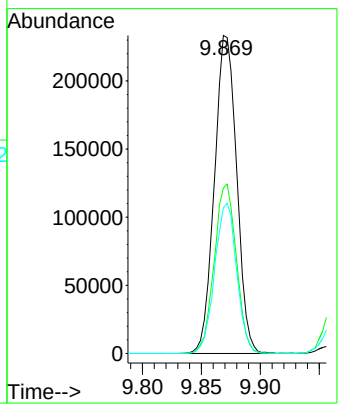




#61
Styrene
Concen: 9.639 ppbv
RT: 9.869 min Scan# 30
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:104 Resp: 306658

Ion	Ratio	Lower	Upper
104	100		
78	52.9	41.8	62.6
103	46.8	37.0	55.4



Instrument :
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ClientSampleId :
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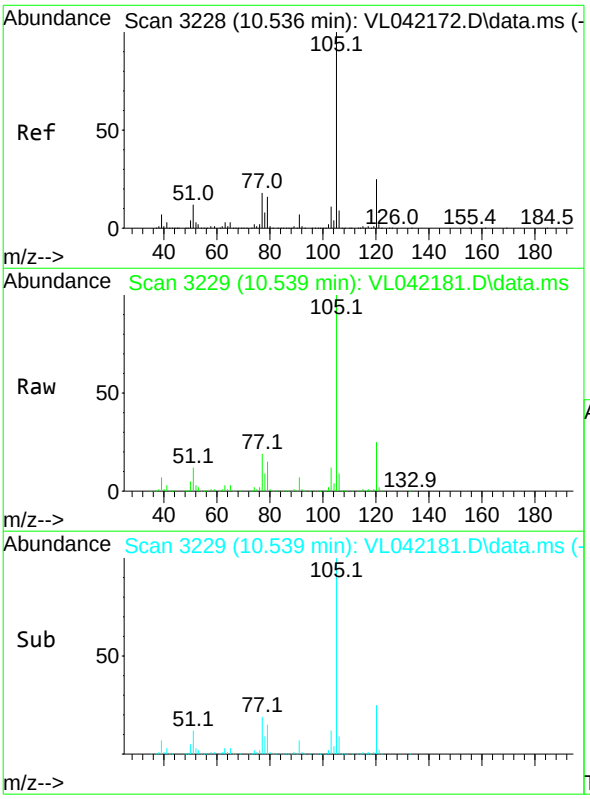
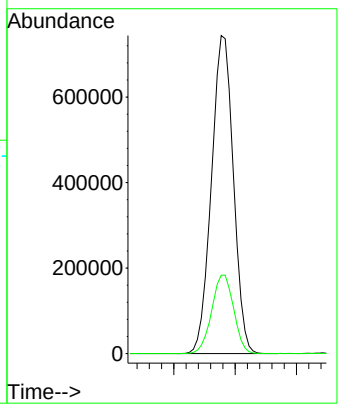
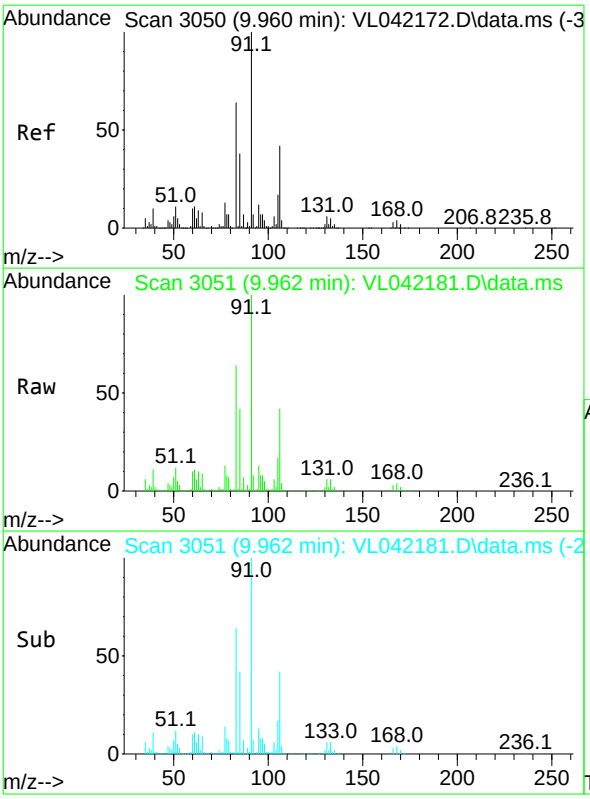


#62
Isopropylbenzene
Concen: 9.600 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 923163

Ion	Ratio	Lower	Upper
105	100		
120	24.8	19.9	29.9

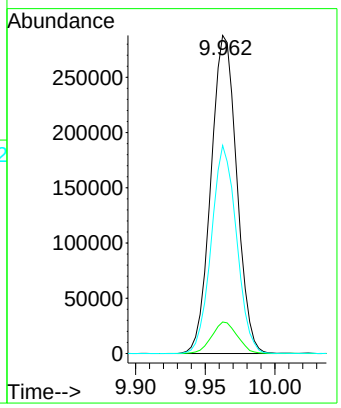




#63
1,1,2,2-Tetrachloroethane
Concen: 9.483 ppbv
RT: 9.962 min Scan# 30
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 83 Resp: 370486

Ion	Ratio	Lower	Upper
83	100		
131	9.9	4.8	14.4
85	63.9	32.5	97.5



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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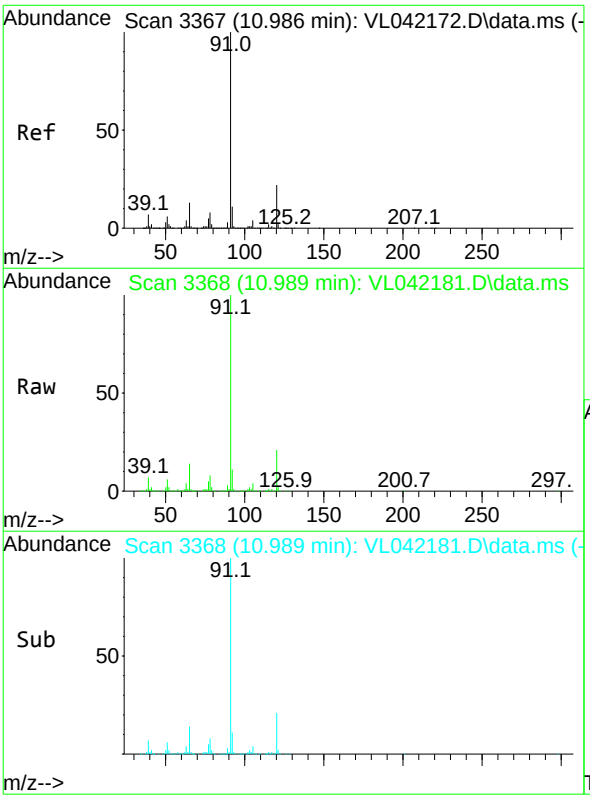
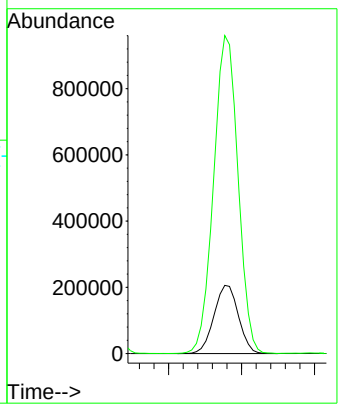
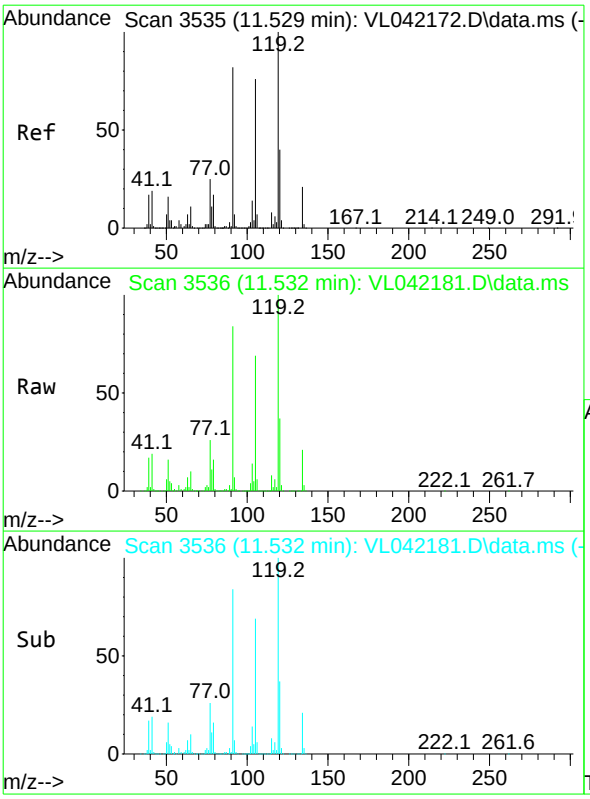


#64
n-propylbenzene
Concen: 9.682 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:120 Resp: 239652

Ion	Ratio	Lower	Upper
120	100		
91	465.1	376.9	565.3





#65
tert-Butylbenzene
Concen: 9.315 ppbv
RT: 11.532 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:119 Resp: 828438

Ion	Ratio	Lower	Upper
119	100		
91	84.2	66.0	99.0
134	20.8	16.7	25.1

Instrument :
MSVOA_L
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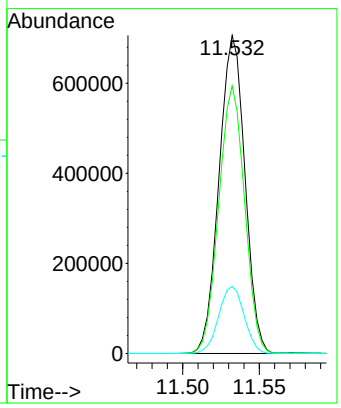
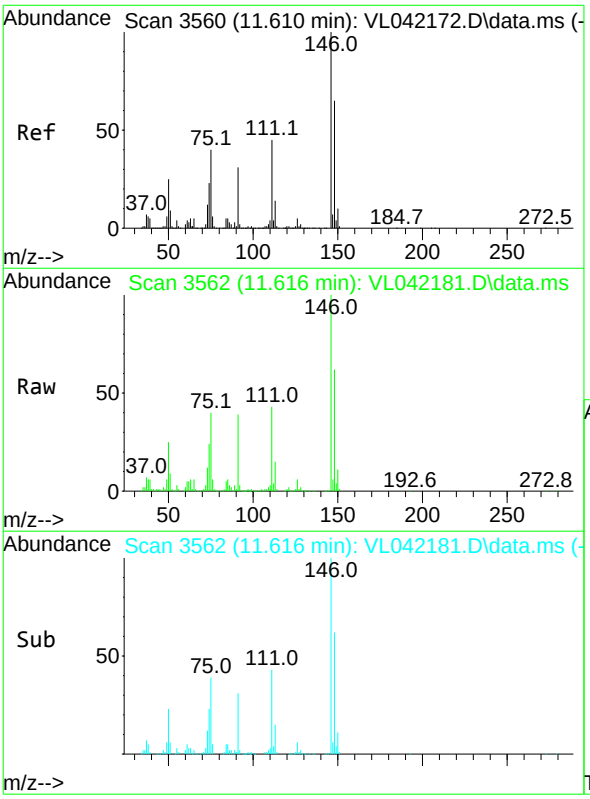
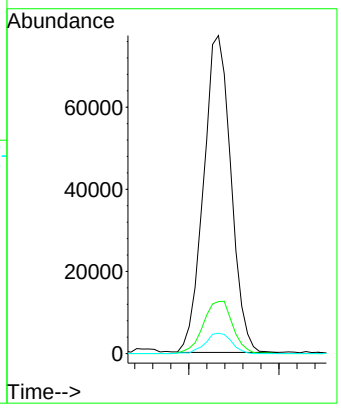


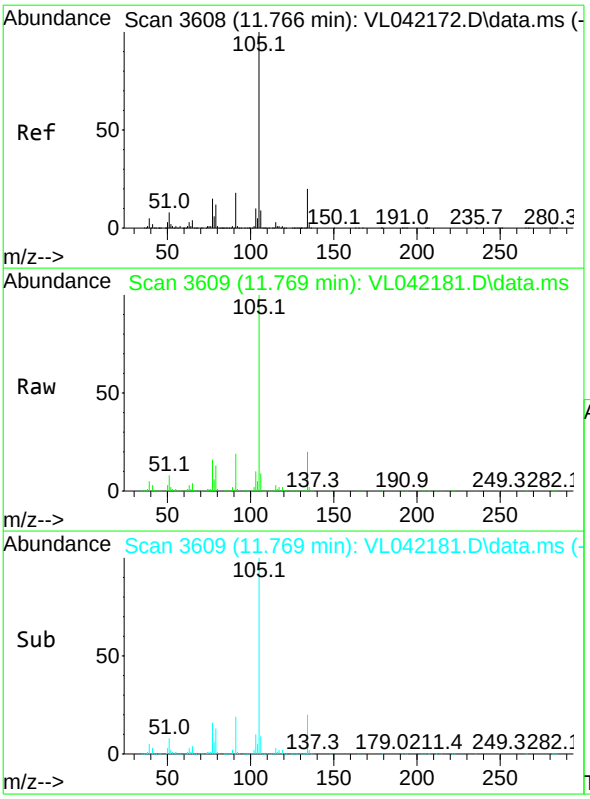


#66
Benzyl Chloride
Concen: 8.627 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 81404

Ion	Ratio	Lower	Upper
91	100		
126	17.8	13.8	20.6
128	6.2	4.5	6.7





#67
sec-Butylbenzene
Concen: 9.347 ppbv
RT: 11.769 min Scan# 36
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 1155378

Ion	Ratio	Lower	Upper
105	100		
134	19.1	15.5	23.3

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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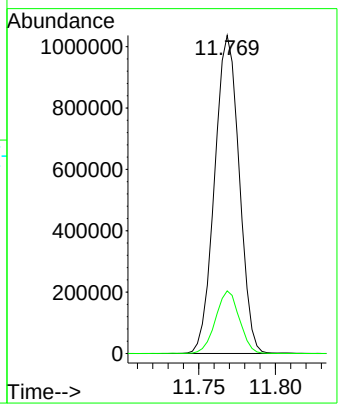
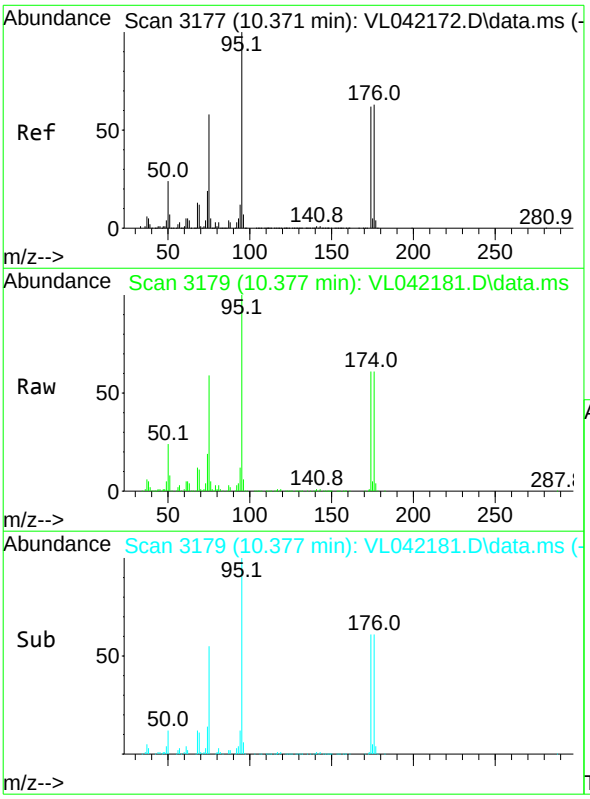
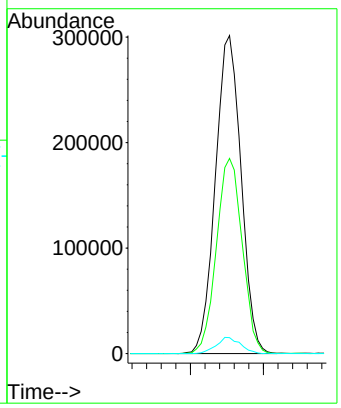


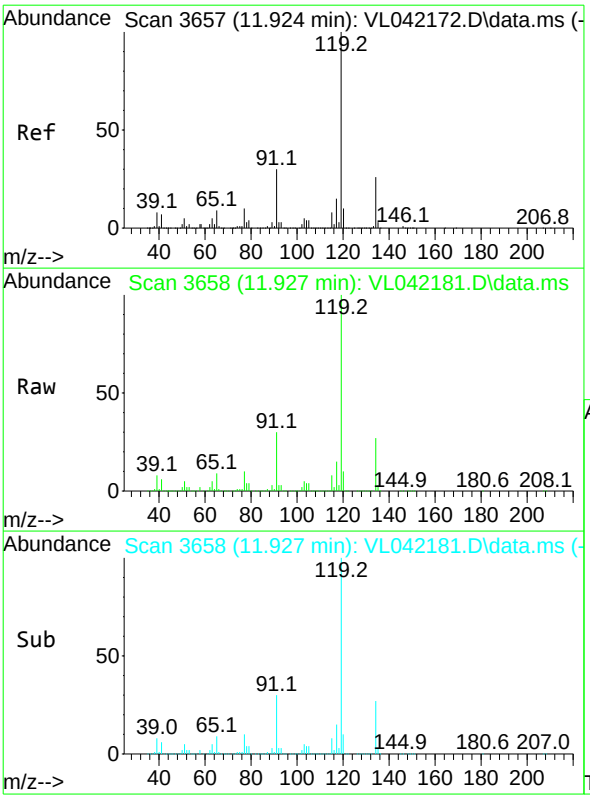


#68
1-Bromo-4-Fluorobenzene
Concen: 9.934 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 95 Resp: 368941

Ion	Ratio	Lower	Upper
95	100		
174	61.7	50.6	76.0
175	4.8	3.8	5.6

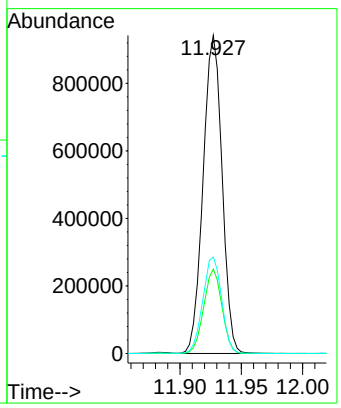




#69
p-Isopropyltoluene
Concen: 9.503 ppbv
RT: 11.927 min Scan# 36
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:119 Resp: 1011573

Ion	Ratio	Lower	Upper
119	100		
134	25.5	20.4	30.6
91	30.3	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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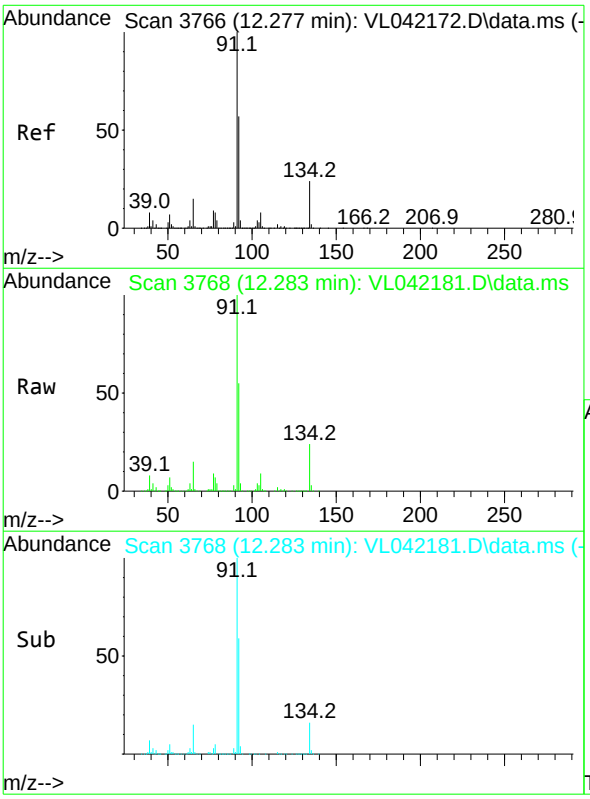
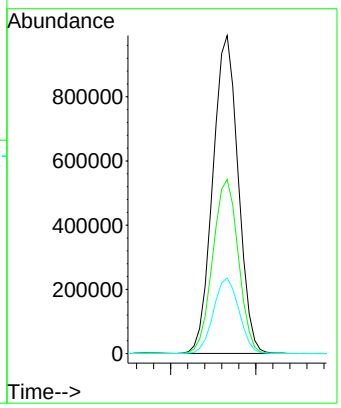
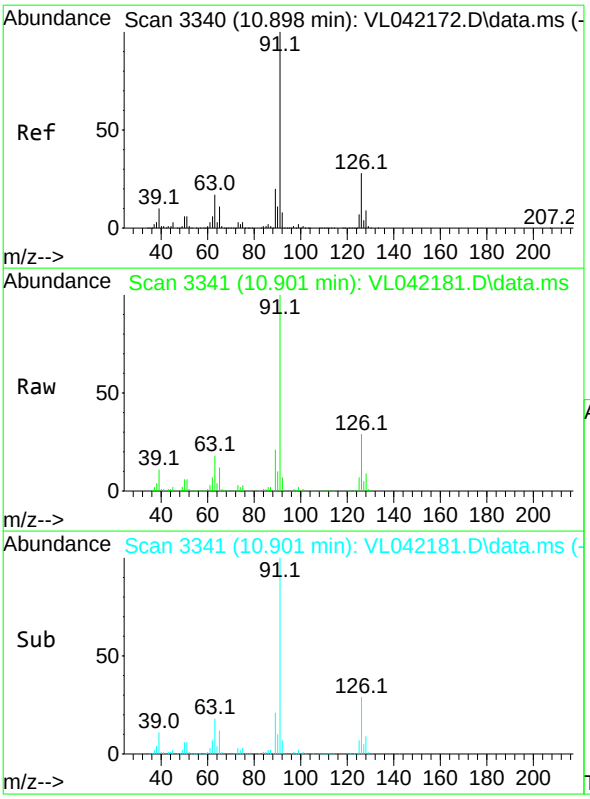


#70
n-Butylbenzene
Concen: 9.397 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 1022935

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.9	67.3
134	24.0	19.2	28.8

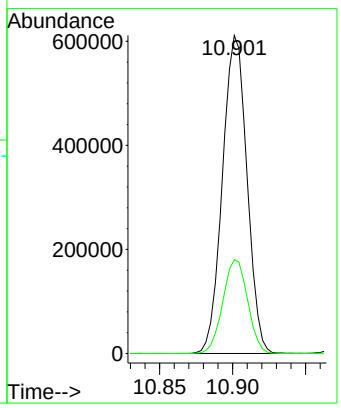




#71
2-Chlorotoluene
Concen: 9.562 ppbv
RT: 10.901 min Scan# 33
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 713648

Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4



Instrument :
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ClientSampleId :
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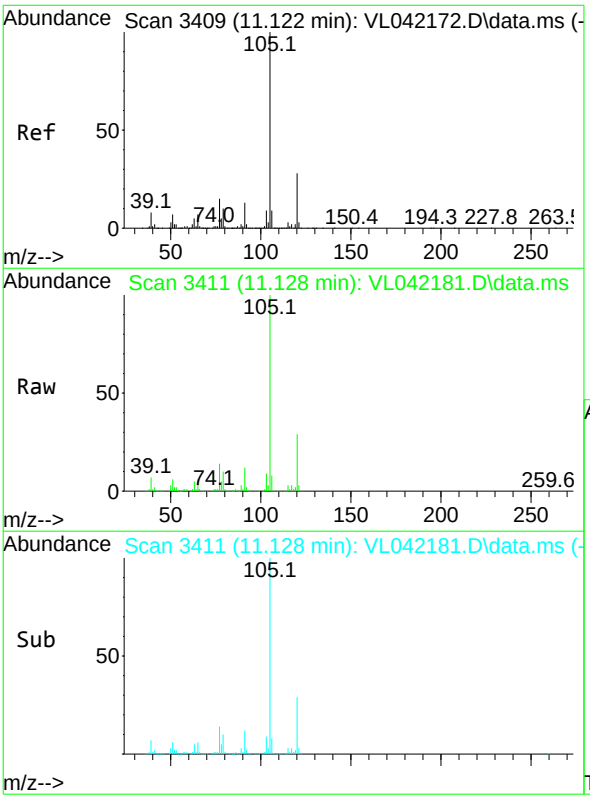
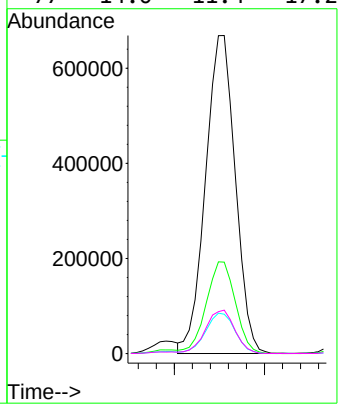
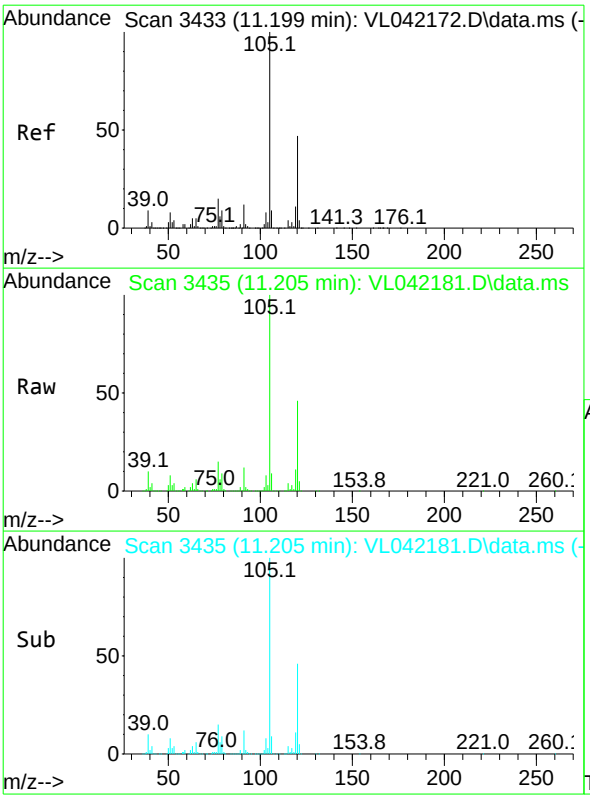


#72
4-Ethyltoluene
Concen: 9.576 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 766720

Ion	Ratio	Lower	Upper
105	100		
120	29.4	23.4	35.0
91	13.1	10.3	15.5
77	14.0	11.4	17.2

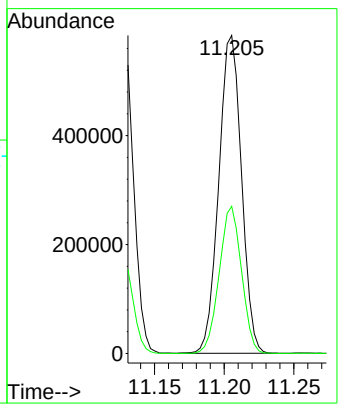




#73
1,3,5-Trimethylbenzene
Concen: 9.451 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 660905

Ion	Ratio	Lower	Upper
105	100		
120	46.3	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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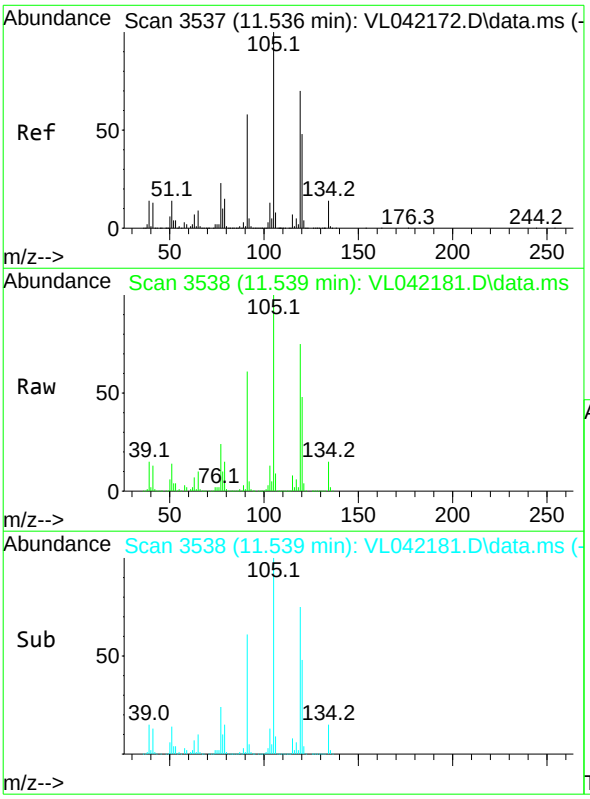
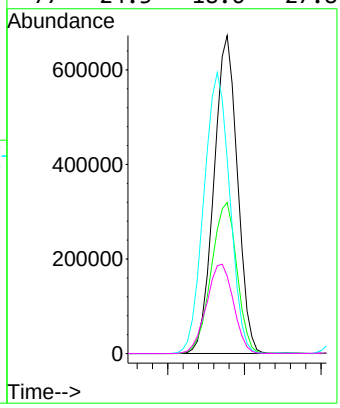
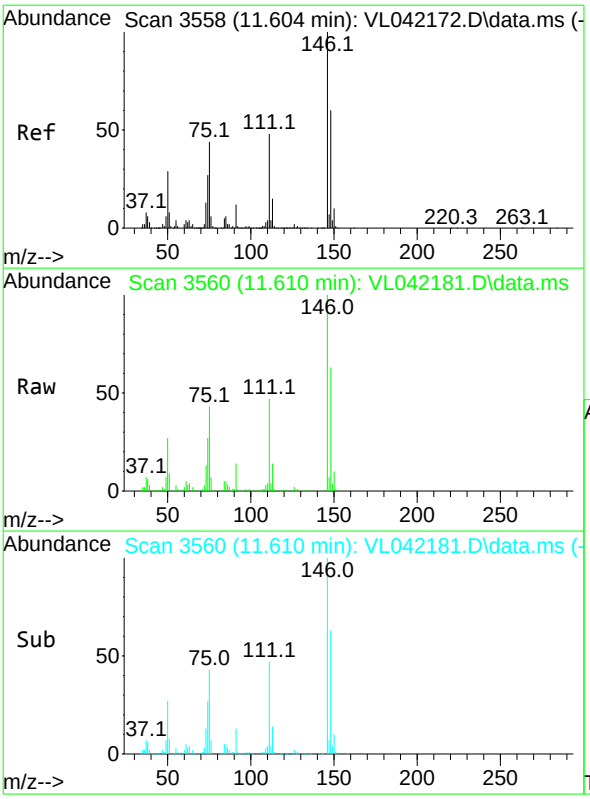


#74
1,2,4-Trimethylbenzene
Concen: 8.921 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 718683

Ion	Ratio	Lower	Upper
105	100		
120	47.5	38.6	58.0
91	61.0	46.2	69.2
77	24.3	18.6	27.8

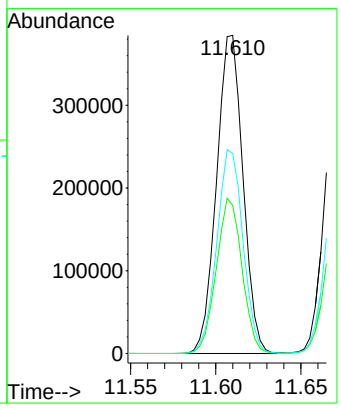




#75
1,3-Dichlorobenzene
Concen: 9.401 ppbv
RT: 11.610 min Scan# 35
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:146 Resp: 415378

Ion	Ratio	Lower	Upper
146	100		
111	47.4	23.8	71.2
148	63.6	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

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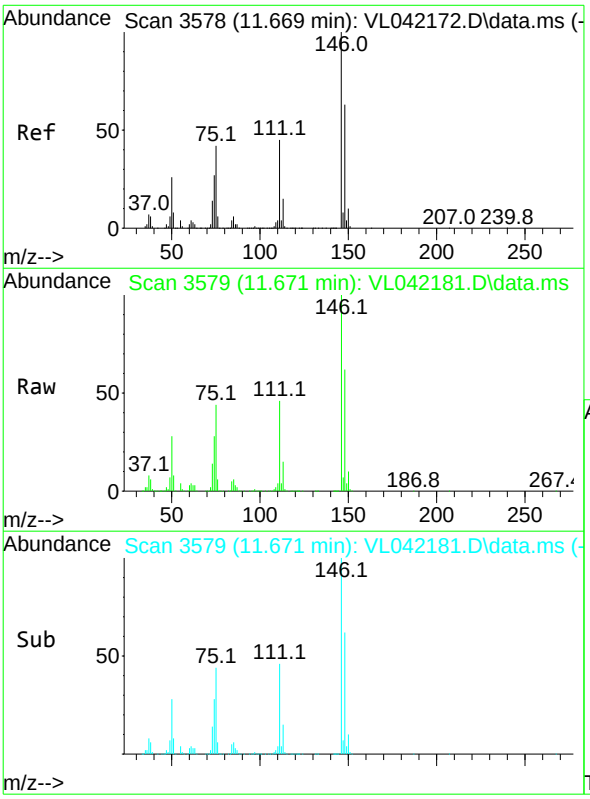
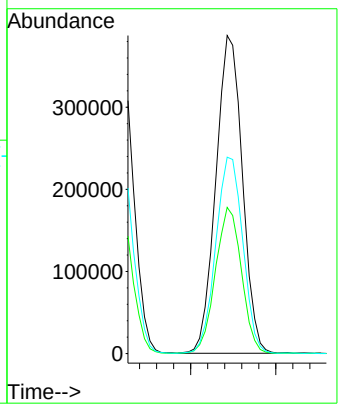
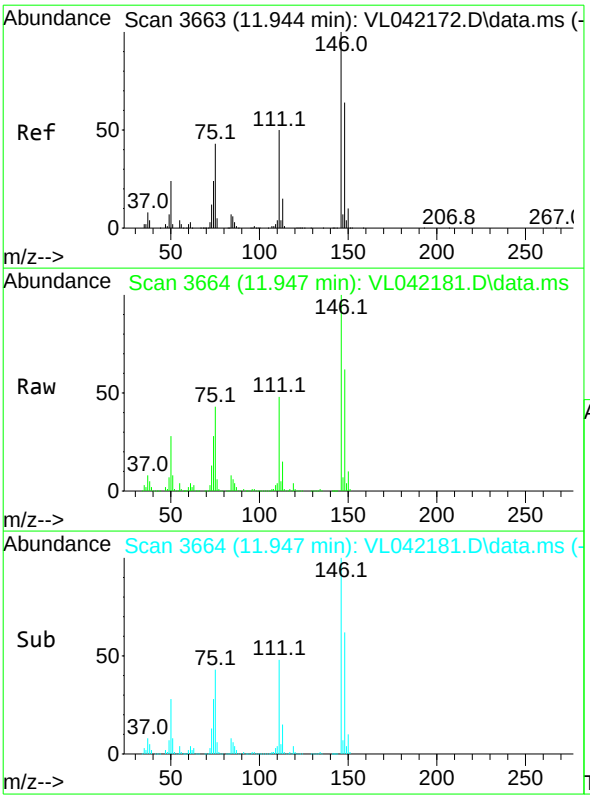


#76
1,4-Dichlorobenzene
Concen: 9.521 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:146 Resp: 418670

Ion	Ratio	Lower	Upper
146	100		
111	45.4	23.0	69.0
148	63.4	31.9	95.7

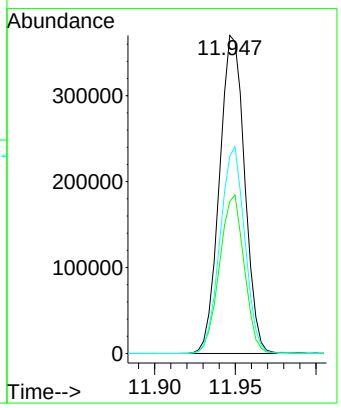




#77
1,2-Dichlorobenzene
Concen: 9.336 ppbv
RT: 11.947 min Scan# 36
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:146 Resp: 401634

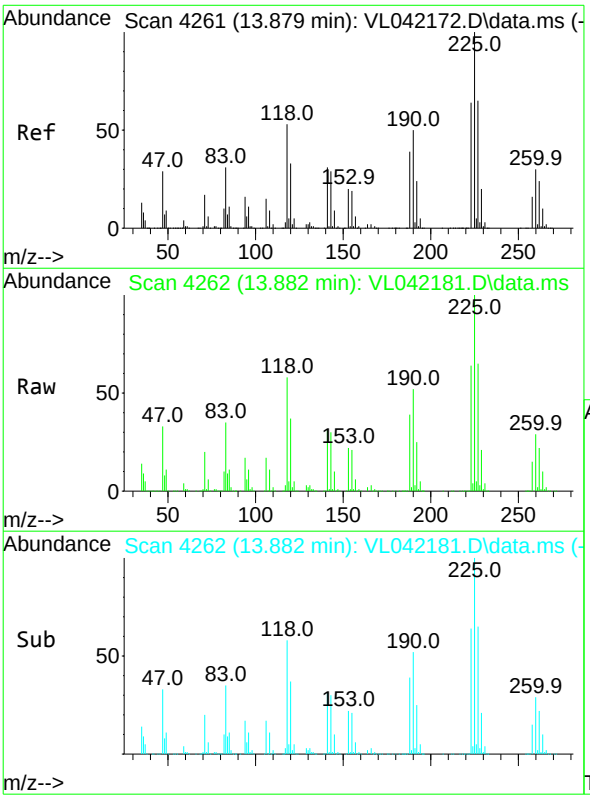
Ion	Ratio	Lower	Upper
146	100		
111	49.0	24.8	74.3
148	64.0	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations
APPROVED

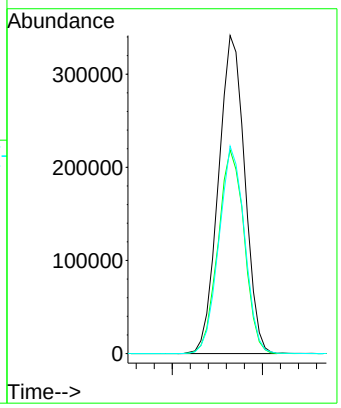
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

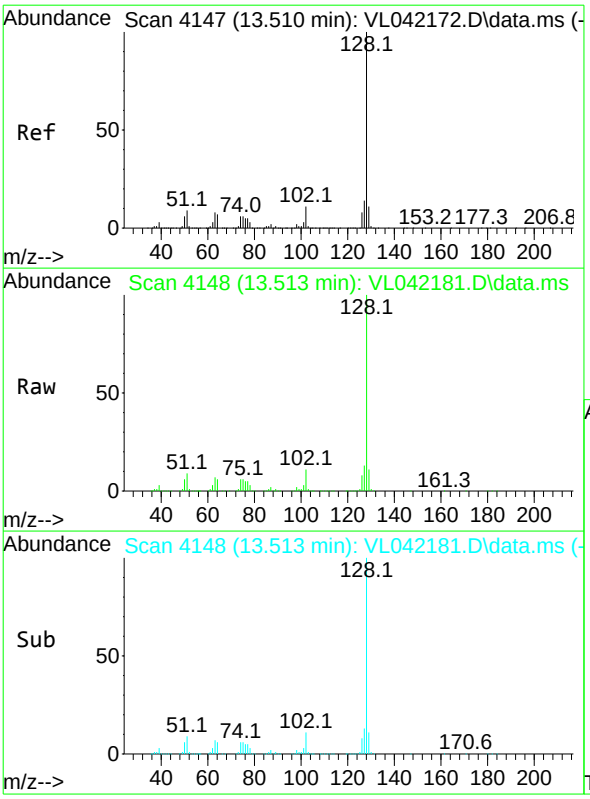


#78
Hexachloro-1,3-Butadiene
Concen: 7.914 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:225 Resp: 346566

Ion	Ratio	Lower	Upper
225	100		
223	63.5	50.6	76.0
227	63.5	51.2	76.8

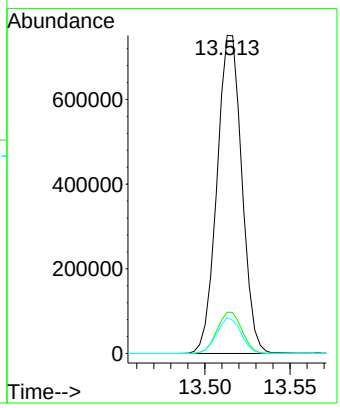




#79
Naphthalene
Concen: 8.659 ppbv
RT: 13.513 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:128 Resp: 762976

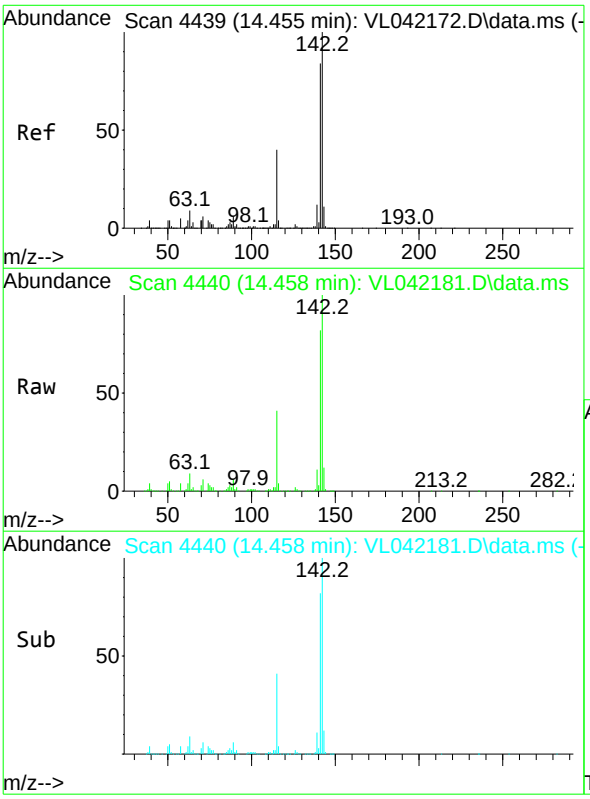
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.8	16.2
129	11.2	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations
APPROVED

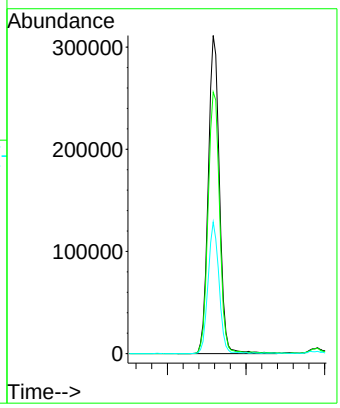
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

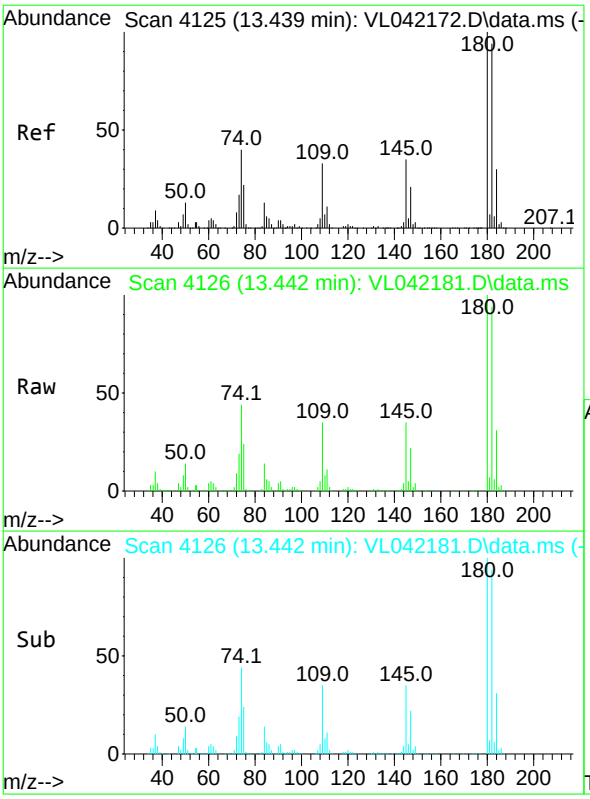


#80
Naphthalene,2-methyl-
Concen: 7.134 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:142 Resp: 308264

Ion	Ratio	Lower	Upper
142	100		
141	84.9	66.3	99.5
115	40.7	31.6	47.4

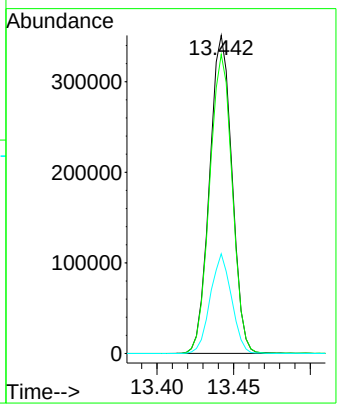




#81
1,2,4-Trichlorobenzene
Concen: 8.764 ppbv
RT: 13.442 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:180 Resp: 356193

Ion	Ratio	Lower	Upper
180	100		
182	95.1	75.1	112.7
184	29.8	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0331ABS01	SDG No.:	Q1669
Lab Sample ID:	VL0331ABS01	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
VL042203.D	1		03/31/25 10:17	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	10.4	51.4		1.04	2.47	ug/m3
74-87-3	Chloromethane	9.70	20.0		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	8.70	22.2		0.030	0.080	ug/m3
74-83-9	Bromomethane	9.10	35.3		0.54	1.94	ug/m3
75-00-3	Chloroethane	9.30	24.5		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	9.30	27.4		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	10.3	57.9		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	9.70	74.3		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	10.3	72.0		0.63	3.49	ug/m3
75-65-0	tert-Butyl alcohol	9.00	27.3		0.58	1.52	ug/m3
142-82-5	Heptane	9.20	37.7		0.45	2.05	ug/m3
75-35-4	1,1-Dichloroethene	9.20	36.5		0.56	1.98	ug/m3
67-64-1	Acetone	8.90	21.1		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	9.30	29.0		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	11.0	39.7		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	8.40	29.2		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	9.20	36.5		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	10.0	40.5		0.53	2.02	ug/m3
110-82-7	Cyclohexane	9.40	32.4		0.76	1.72	ug/m3
78-93-3	2-Butanone	9.50	28.0		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	10.6	66.7		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	10.0	39.6		0.36	1.98	ug/m3
67-66-3	Chloroform	10.6	51.8		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	9.80	53.5		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	9.50	44.4		0.47	2.34	ug/m3
71-43-2	Benzene	9.80	31.3		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	11.0	44.5		0.36	2.02	ug/m3
79-01-6	Trichloroethene	9.70	52.1		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	9.70	44.8		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	10.8	72.3		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	8.60	35.2		0.37	2.05	ug/m3
108-88-3	Toluene	9.60	36.2		0.41	1.88	ug/m3
10061-02-6	t-1,3-Dichloropropene	9.10	41.3		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	9.40	42.7		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	10.2	55.6		0.38	2.73	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0331ABS01	SDG No.:	Q1669
Lab Sample ID:	VL0331ABS01	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
VL042203.D	1		03/31/25 10:17	VL033125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
124-48-1	Dibromochloromethane	10.6	90.3		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	10.3	79.2		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	9.00	61.0		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	10.4	47.9		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	10.1	43.9		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	20.6	89.5		0.91	4.34	ug/m3
95-47-6	o-Xylene	10.4	45.2		0.52	2.17	ug/m3
100-42-5	Styrene	10.1	43.0		0.47	2.13	ug/m3
75-25-2	Bromoform	10.3	107		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	10.4	71.4		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	10.3	53.3		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	10.4	51.1		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	9.80	48.2		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	10.5	63.1		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	10.5	63.1		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	10.6	63.7		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	9.30	69.0		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	8.40	89.6		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	8.70	19.3		0.29	1.11	ug/m3
91-20-3	Naphthalene	9.50	49.8		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	10.5	51.6		0.59	2.46	ug/m3
110-54-3	Hexane	9.50	33.5		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	8.90	27.9		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	8.90	32.1		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	9.20	37.7		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.3			70 (65) - 130 (135)	103%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	176000		2.803			
540-36-3	1,4-Difluorobenzene	499000		3.981			
3114-55-4	Chlorobenzene-d5	456000		8.904			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0331ABS01	SDG No.:	Q1669
Lab Sample ID:	VL0331ABS01	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
VL042203.D	1		03/31/25 10:17	VL033125

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

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\VL033125\
Data File : VL042203.D
Acq On : 31 Mar 2025 10:17
Operator : SY/MD
Sample : VL0331ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 01:35:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.803	49	175685	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.981	114	498986	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.904	117	456400	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.396	95	385330	10.281	ppbv	0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	270376	10.423	ppbv	99
3) Chlorodifluoromethane	1.482	51	262345	9.900	ppbv	95
4) Chloromethane	1.538	50	102731	9.691	ppbv	100
5) Vinyl Chloride	1.586	62	97910	8.716	ppbv	95
6) Bromomethane	1.673	94	43862	9.130	ppbv	98
7) Chloroethane	1.712	64	39774	9.347	ppbv	100
8) Dichlorotetrafluoroethane	1.560	85	228198	10.330	ppbv	94
9) Propene	1.489	41	104679	8.618	ppbv	98
10) Heptane	5.007	43	298492	9.239	ppbv	99
11) Trichlorofluoromethane	1.887	101	258953	10.260	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.149	101	200210	9.650	ppbv	96
13) Ethanol	1.732	45	5239	4.563	ppbv	91
14) Bromoethene	1.790	108	74401	9.361	ppbv	98
15) Acetone	1.845	43	218378	8.888	ppbv	95
16) 1,3-Butadiene	1.615	39	104247	8.688	ppbv	99
17) tert-Butyl alcohol	2.049	59	276592	9.038	ppbv	99
18) 1,1-Dichloroethene	2.042	96	89252	9.202	ppbv	99
19) Isopropyl Alcohol	1.894	45	127449	9.193	ppbv	99
20) Methylene Chloride	2.072	84	76788	8.391	ppbv	97
21) Allyl Chloride	2.107	41	154876	8.938	ppbv	98
22) trans-1,2-Dichloroethene	2.353	96	102643	9.157	ppbv	96
23) Vinyl Acetate	2.476	43	89760	8.441	ppbv #	95
24) 1,1-Dichloroethane	2.421	63	208334	10.026	ppbv	99
25) Ethyl Acetate	2.852	43	609975	9.565	ppbv	99
26) Hexane	2.842	57	234267	9.511	ppbv	99
27) Carbon Disulfide	2.159	76	245905	9.310	ppbv	99
28) Methyl tert-Butyl Ether	2.454	73	169404	11.046	ppbv	94
29) Chloroform	2.865	83	382690	10.616	ppbv	100
30) Cyclohexane	3.881	84	200894	9.393	ppbv	97
31) cis-1,2-Dichloroethene	2.735	61	249599	9.981	ppbv	97
32) 1,1,1-Trichloroethane	3.386	97	402506	9.753	ppbv	99
34) 2-Butanone	2.570	43	343896	9.504	ppbv	100
35) Carbon Tetrachloride	3.784	117	412312	10.578	ppbv	99
36) Benzene	3.677	78	482499	9.754	ppbv	97
37) 1,2-Dichloroethane	3.237	62	310502	10.964	ppbv	98
38) Trichloroethene	4.577	130	201215	9.749	ppbv	95
39) 1,2-Dichloropropane	4.340	63	174119	9.665	ppbv	92
40) 1,4-Dioxane	4.616	88	84833	8.872	ppbv #	91
41) Tetrahydrofuran	3.072	42	194140	9.318	ppbv	99
42) Bromodichloromethane	4.515	83	422881	10.831	ppbv	97
43) Methyl Methacrylate	4.913	69	191894	9.163	ppbv	100
44) 2,2,4-Trimethylpentane	4.667	57	792762	9.483	ppbv	98
45) t-1,3-Dichloropropene	6.447	75	203792	9.071	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042203.D
Acq On : 31 Mar 2025 10:17
Operator : SY/MD
Sample : VL0331ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 01:35:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.632	75	258084	9.371	ppbv		98
47)	1,1,2-Trichloroethane	6.616	97	194204	10.197	ppbv		98
48)	Dibromochloromethane	7.415	129	342254	10.604	ppbv		99
49)	Bromoform	9.506	173	298349	10.296	ppbv		100
50)	4-Methyl-2-Pentanone	5.787	43	493320	8.603	ppbv		98
51)	2-Hexanone	7.464	43	405558	8.613	ppbv		97
52)	Tetrachloroethene	8.250	164	176804	9.012	ppbv		95
53)	Toluene	6.965	91	560307	9.555	ppbv		100
54)	1,2-Dibromoethane	7.681	107	273381	10.298	ppbv		97
56)	1,1,1,2-Tetrachloroethane	8.946	131	266468	10.607	ppbv		98
57)	Chlorobenzene	8.946	112	448854	10.368	ppbv	#	95
58)	Ethyl Benzene	9.377	91	815513	10.059	ppbv		99
59)	m/p-Xylene	9.574	91	1331237m	20.565	ppbv		
60)	o-Xylene	9.985	91	673552	10.379	ppbv		99
61)	Styrene	9.891	104	322981	10.060	ppbv		99
62)	Isopropylbenzene	10.558	105	1021273	10.524	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.985	83	411620	10.440	ppbv		100
64)	n-propylbenzene	11.008	120	264706	10.596	ppbv		97
65)	tert-Butylbenzene	11.548	119	913025	10.173	ppbv		97
66)	Benzyl Chloride	11.633	91	78394	8.232	ppbv		99
67)	sec-Butylbenzene	11.785	105	1292454	10.360	ppbv		100
69)	p-Isopropyltoluene	11.943	119	1113087	10.362	ppbv		99
70)	n-Butylbenzene	12.296	91	1144962	10.422	ppbv		99
71)	2-Chlorotoluene	10.921	91	775424	10.295	ppbv		99
72)	4-Ethyltoluene	11.144	105	848380	10.500	ppbv		100
73)	1,3,5-Trimethylbenzene	11.222	105	736772	10.441	ppbv		97
74)	1,2,4-Trimethylbenzene	11.555	105	800063	9.841	ppbv		97
75)	1,3-Dichlorobenzene	11.626	146	470306	10.548	ppbv		99
76)	1,4-Dichlorobenzene	11.688	146	467631	10.538	ppbv		99
77)	1,2-Dichlorobenzene	11.963	146	460911	10.617	ppbv		99
78)	Hexachloro-1,3-Butadiene	13.898	225	371995	8.418	ppbv		100
79)	Naphthalene	13.529	128	840768	9.455	ppbv		99
80)	Naphthalene,2-methyl-	14.471	142	328839	7.541	ppbv		99
81)	1,2,4-Trichlorobenzene	13.455	180	381981	9.313	ppbv		99

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

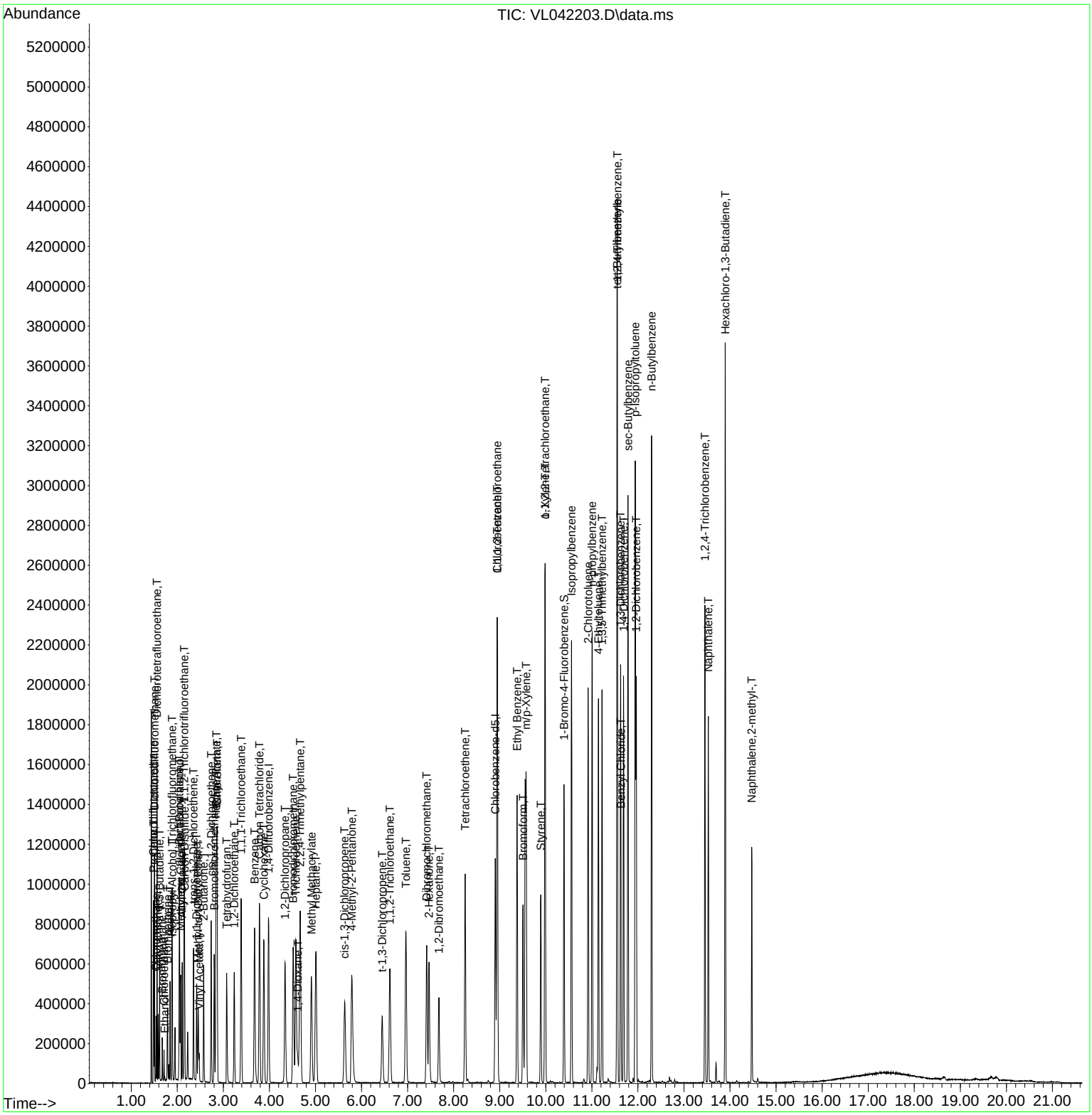
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042203.D
Acq On : 31 Mar 2025 10:17
Operator : SY/MD
Sample : VL0331ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

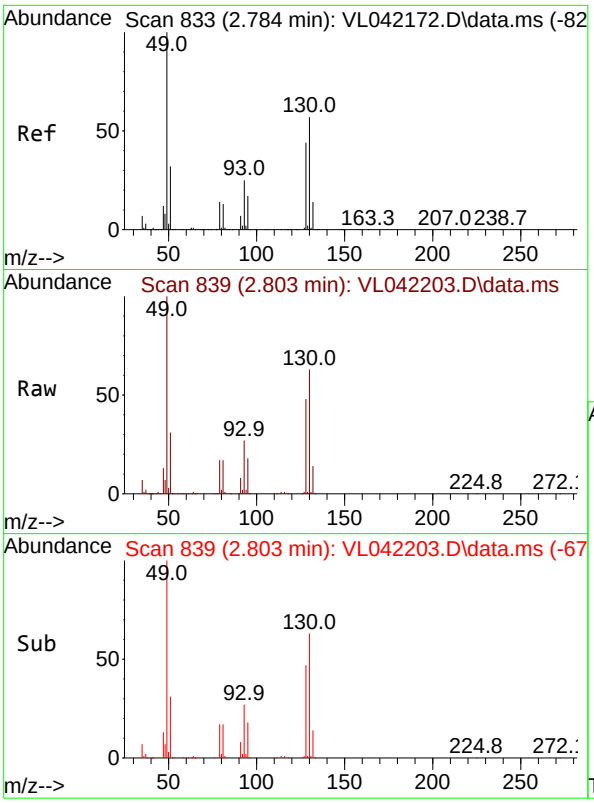
Quant Time: Apr 01 01:35:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

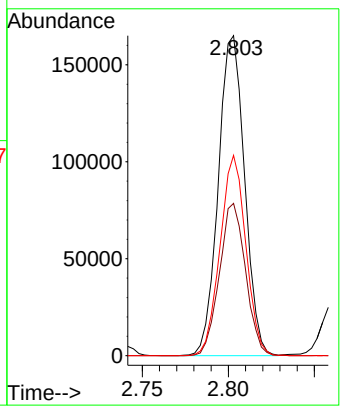




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.803 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 49 Resp: 17568

Ion	Ratio	Lower	Upper
49	100		
128	47.2	22.9	68.5
130	61.2	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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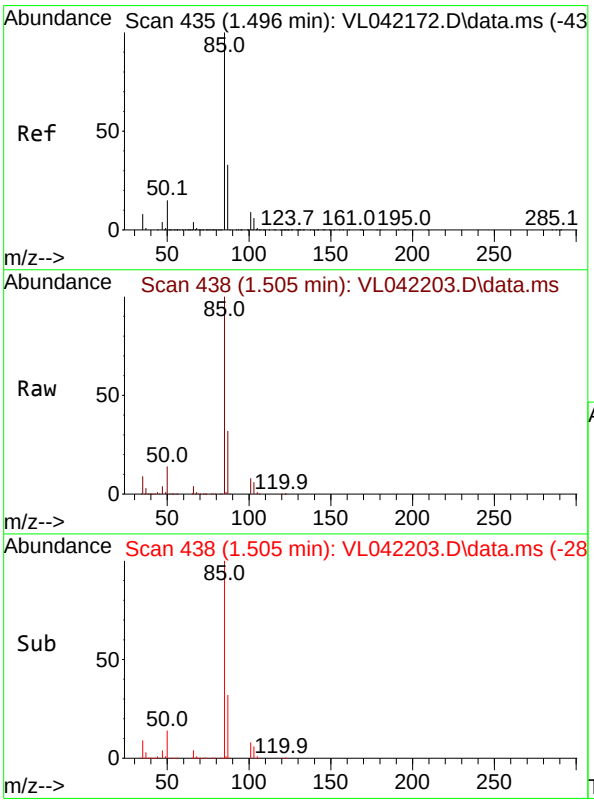
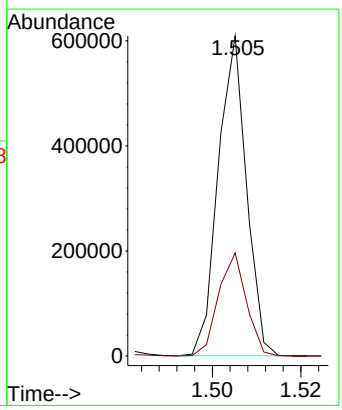
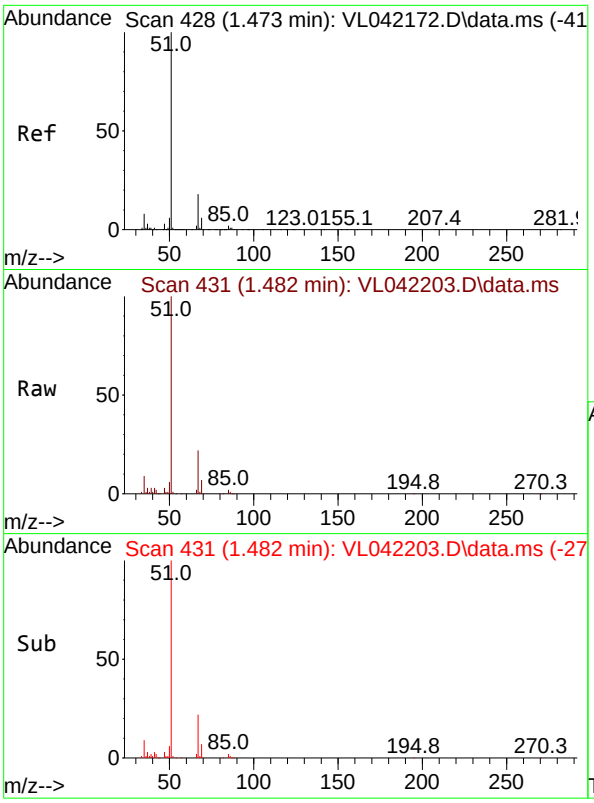


#2
Dichlorodifluoromethane
Concen: 10.423 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 85 Resp: 270376

Ion	Ratio	Lower	Upper
85	100		
87	32.2	26.1	39.1





#3
Chlorodifluoromethane
Concen: 9.900 ppbv
RT: 1.482 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 51 Resp: 26234

Ion	Ratio	Lower	Upper
51	100		
67	21.0	15.0	22.6

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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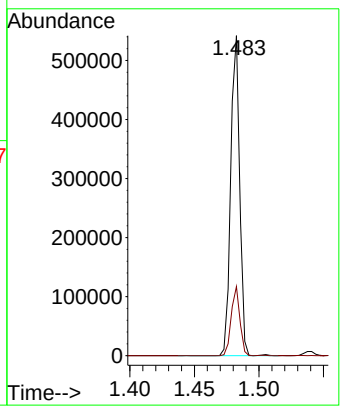
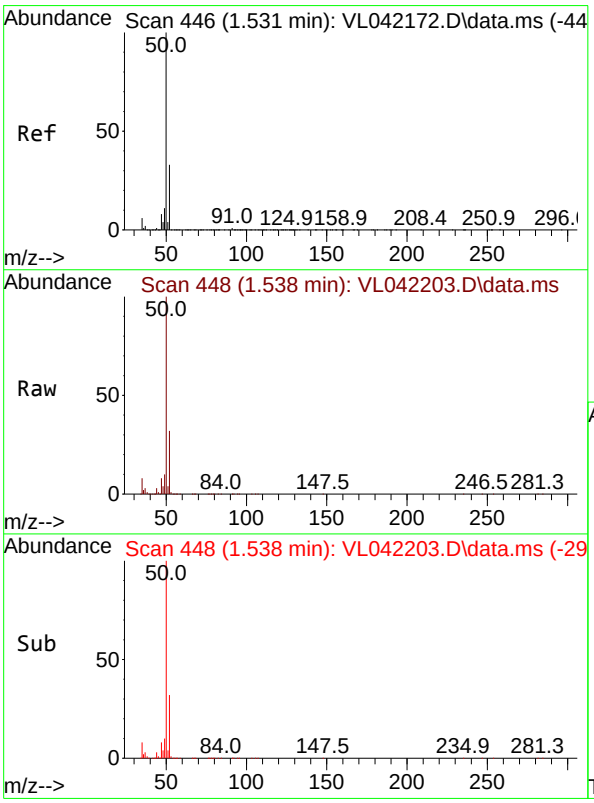
Supervised By :Mahesh Dadoda 04/01/2025

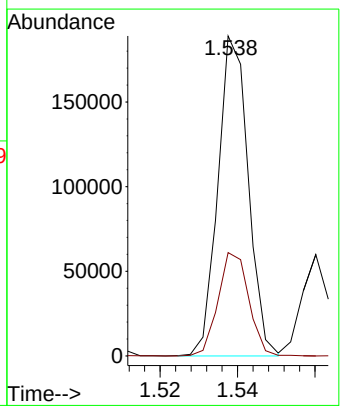


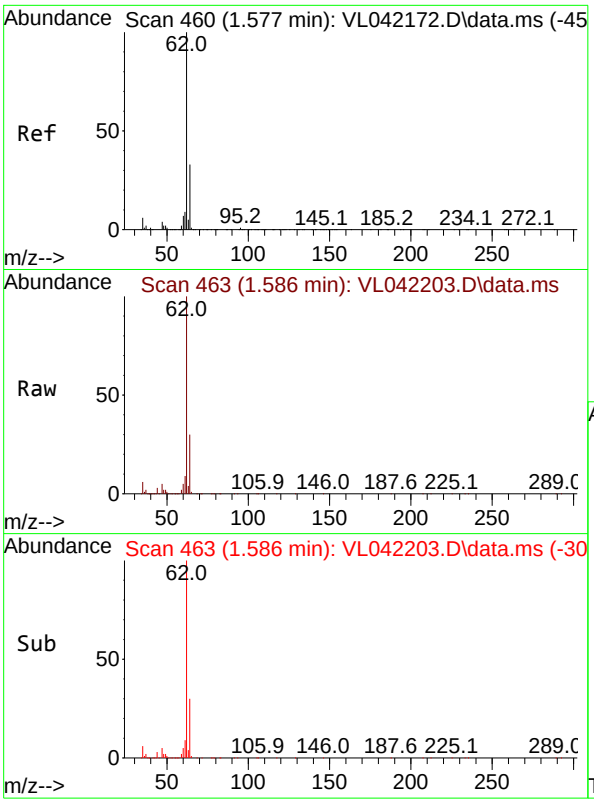


#4
Chloromethane
Concen: 9.691 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 50 Resp: 102731

Ion	Ratio	Lower	Upper
50	100		
52	32.3	26.1	39.1

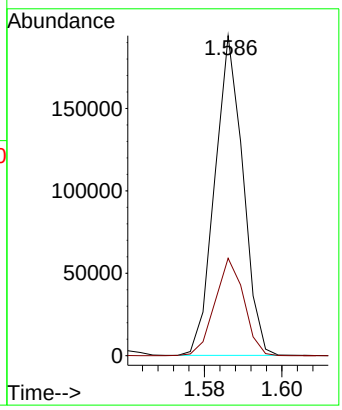




#5
Vinyl Chloride
Concen: 8.716 ppbv
RT: 1.586 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 62 Resp: 9791

Ion	Ratio	Lower	Upper
62	100		
64	30.5	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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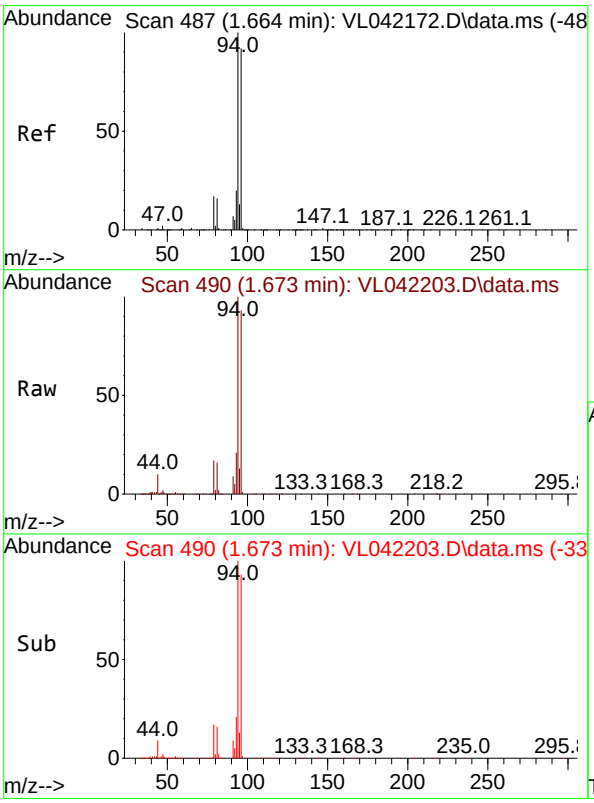
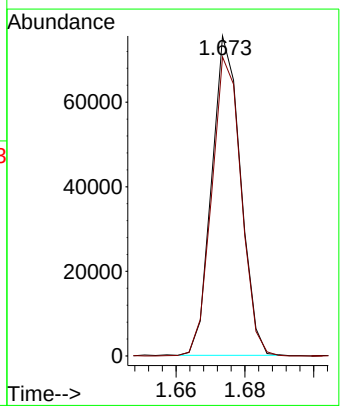
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

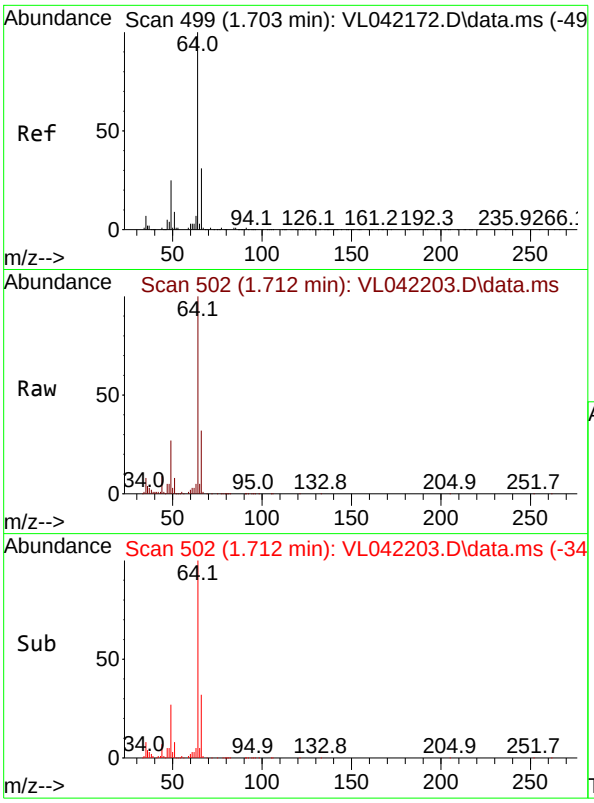


#6
Bromomethane
Concen: 9.130 ppbv
RT: 1.673 min Scan# 490
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 94 Resp: 43862

Ion	Ratio	Lower	Upper
94	100		
96	93.5	73.1	109.7

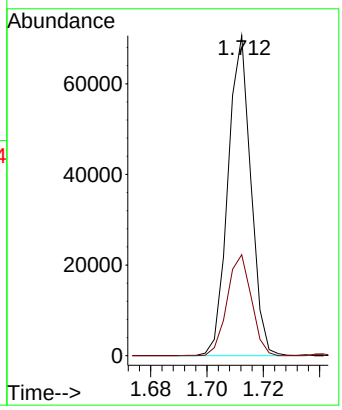




#7
Chloroethane
Concen: 9.347 ppbv
RT: 1.712 min Scan# 5
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 64 Resp: 3977

Ion	Ratio	Lower	Upper
64	100		
66	31.6	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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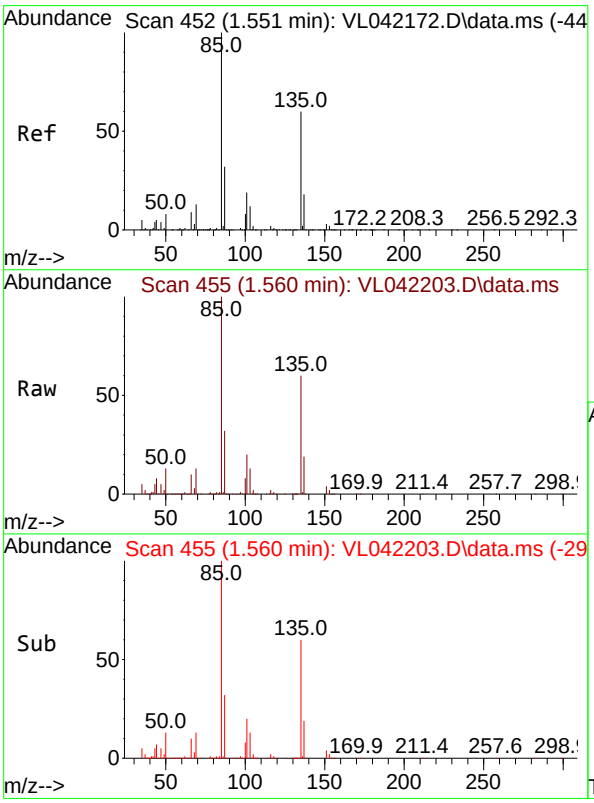
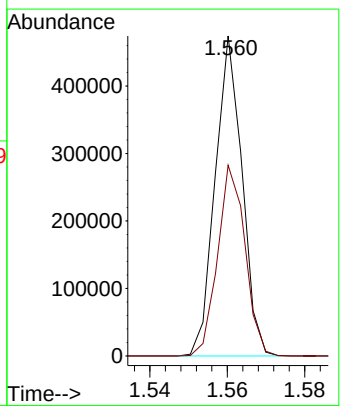
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

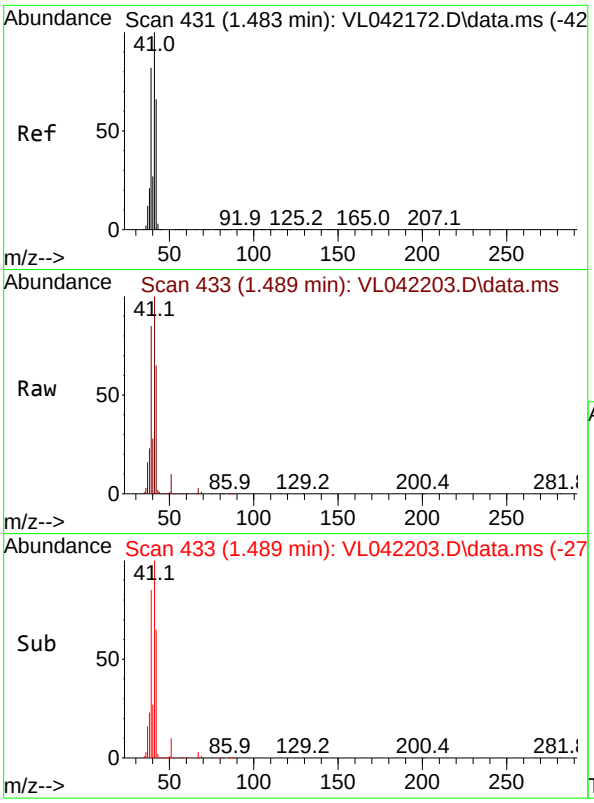


#8
Dichlorotetrafluoroethane
Concen: 10.330 ppbv
RT: 1.560 min Scan# 455
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 85 Resp: 228198

Ion	Ratio	Lower	Upper
85	100		
135	60.9	52.4	78.6

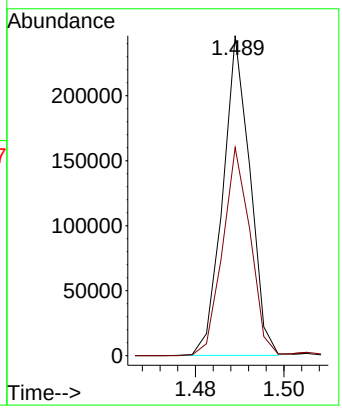




#9
Propene
Concen: 8.618 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 41 Resp: 10467

Ion	Ratio	Lower	Upper
41	100		
42	67.9	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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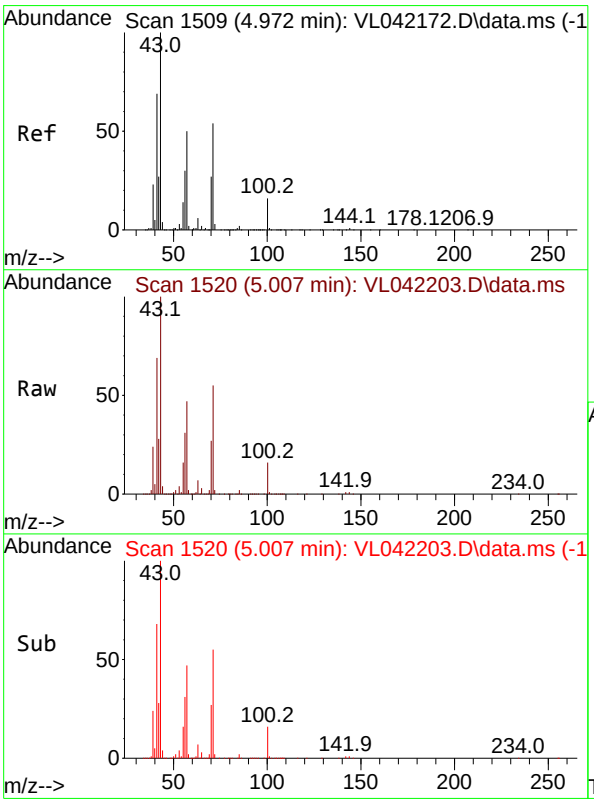
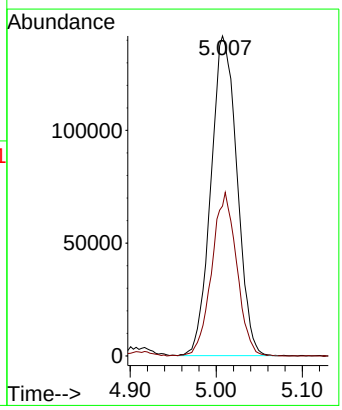
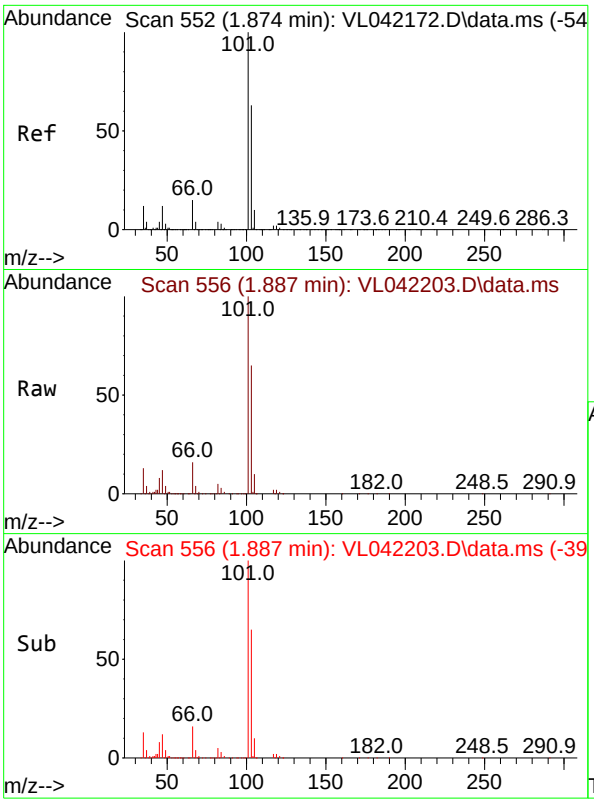


#10
Heptane
Concen: 9.239 ppbv
RT: 5.007 min Scan# 1520
Delta R.T. 0.035 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 298492

Ion	Ratio	Lower	Upper
43	100		
57	48.9	39.4	59.2





#11
Trichlorofluoromethane
Concen: 10.260 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:101 Resp: 25895

Ion	Ratio	Lower	Upper
101	100		
103	65.5	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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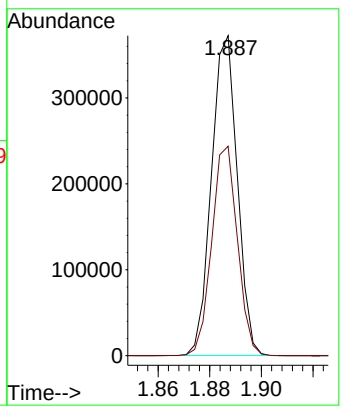
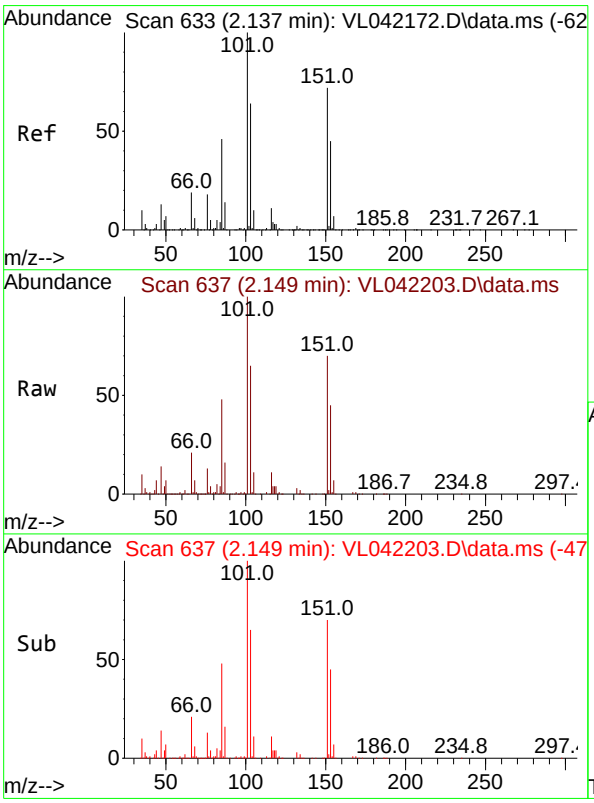
Supervised By :Mahesh Dadoda 04/01/2025

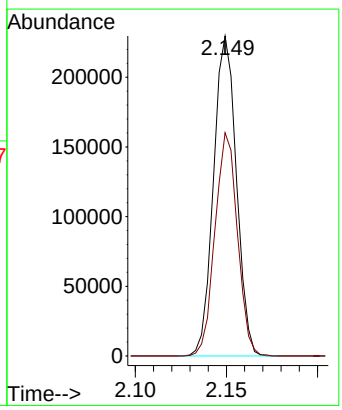


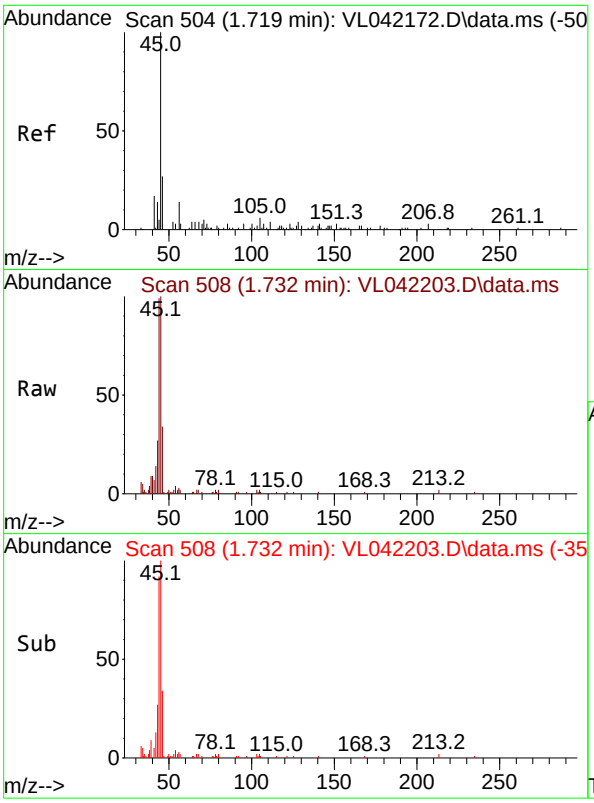


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.650 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:101 Resp: 200210

Ion	Ratio	Lower	Upper
101	100		
151	68.5	57.1	85.7

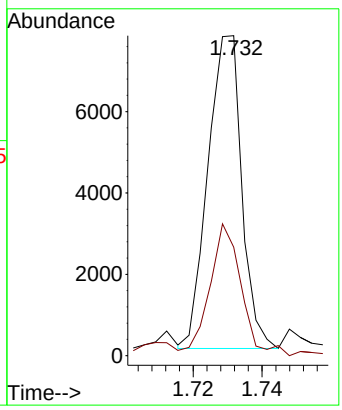




#13
Ethanol
Concen: 4.563 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 45 Resp: 523

Ion	Ratio	Lower	Upper
45	100		
46	44.4	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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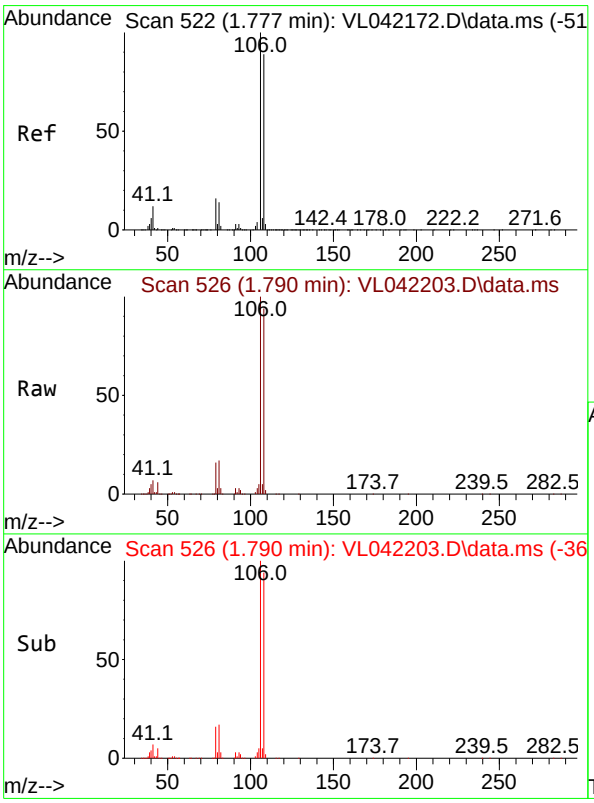
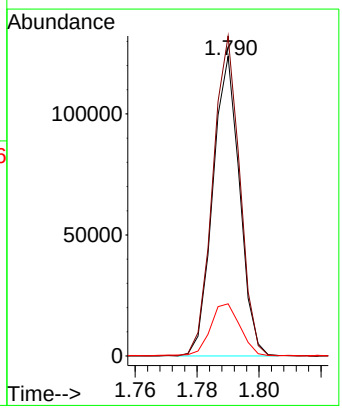
Supervised By :Mahesh Dadoda 04/01/2025

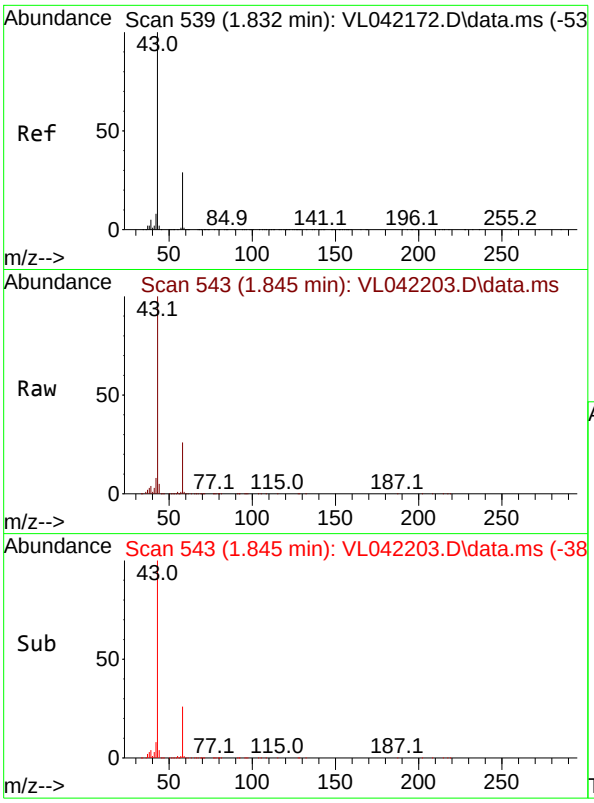


#14
Bromoethene
Concen: 9.361 ppbv
RT: 1.790 min Scan# 526
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:108 Resp: 74401

Ion	Ratio	Lower	Upper
108	100		
106	107.1	86.8	130.2
79	20.2	15.0	22.6

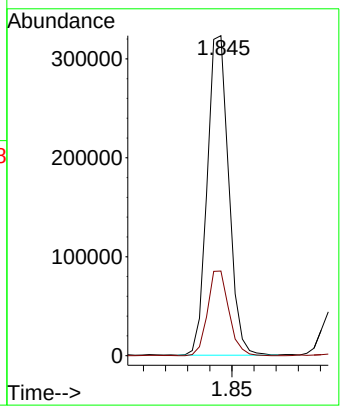




#15
Acetone
Concen: 8.888 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 21837

Ion	Ratio	Lower	Upper
43	100		
58	26.4	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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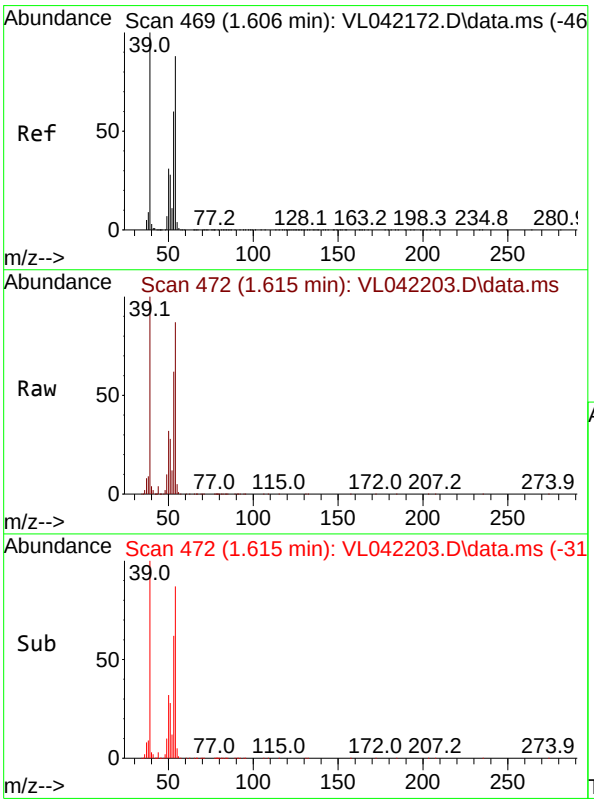
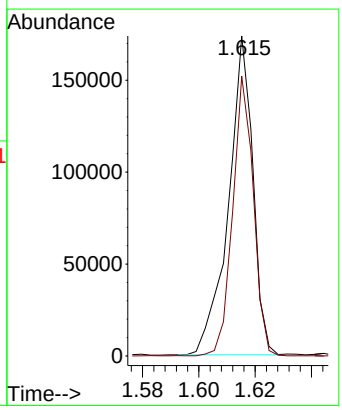
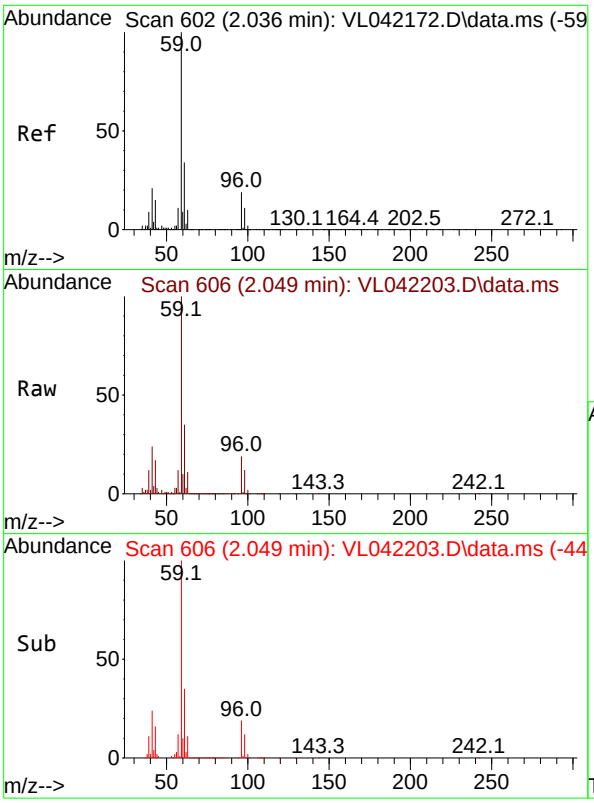


#16
1,3-Butadiene
Concen: 8.688 ppbv
RT: 1.615 min Scan# 472
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 39 Resp: 104247

Ion	Ratio	Lower	Upper
39	100		
54	74.6	60.7	91.1





#17
tert-Butyl alcohol
Concen: 9.038 ppbv
RT: 2.049 min Scan# 6
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 59 Resp: 27659

Ion	Ratio	Lower	Upper
59	100		
57	11.4	8.9	13.3

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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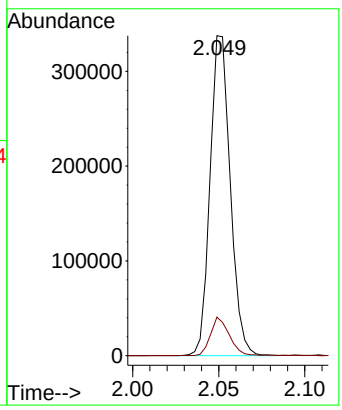
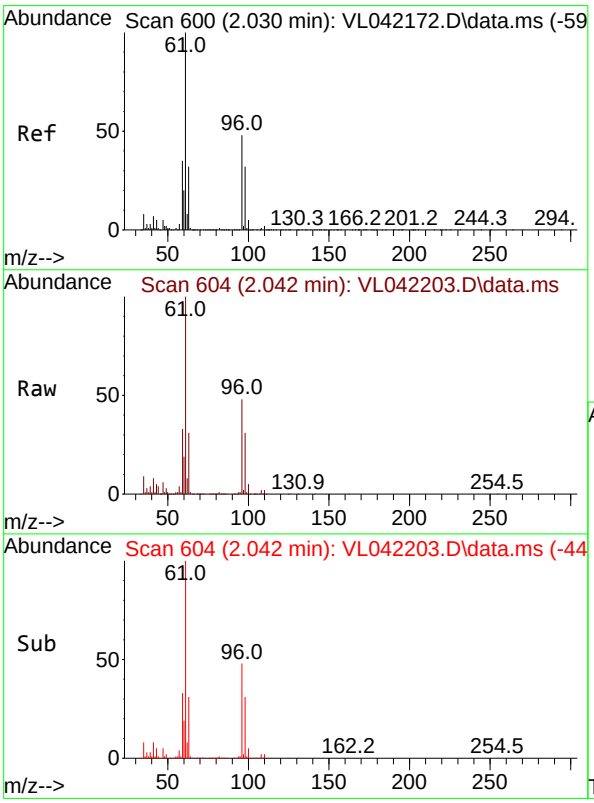
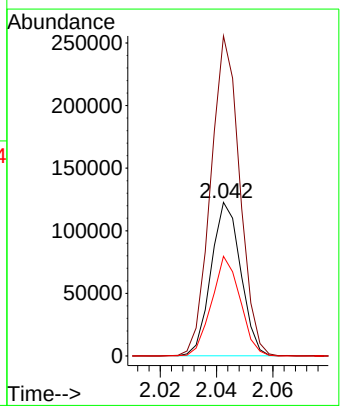


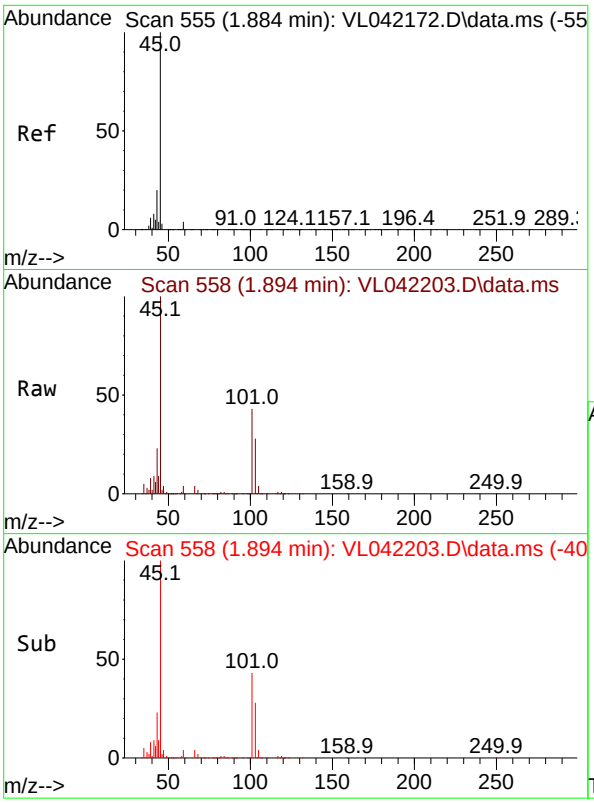


#18
1,1-Dichloroethene
Concen: 9.202 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 96 Resp: 89252

Ion	Ratio	Lower	Upper
96	100		
61	208.4	167.6	251.4
98	65.0	53.5	80.3

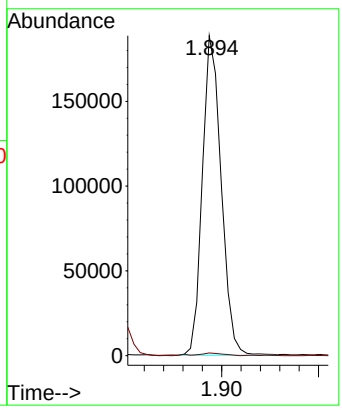




#19
Isopropyl Alcohol
Concen: 9.193 ppbv
RT: 1.894 min Scan# 5
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 45 Resp: 12744

Ion	Ratio	Lower	Upper
45	100		
58	45.3	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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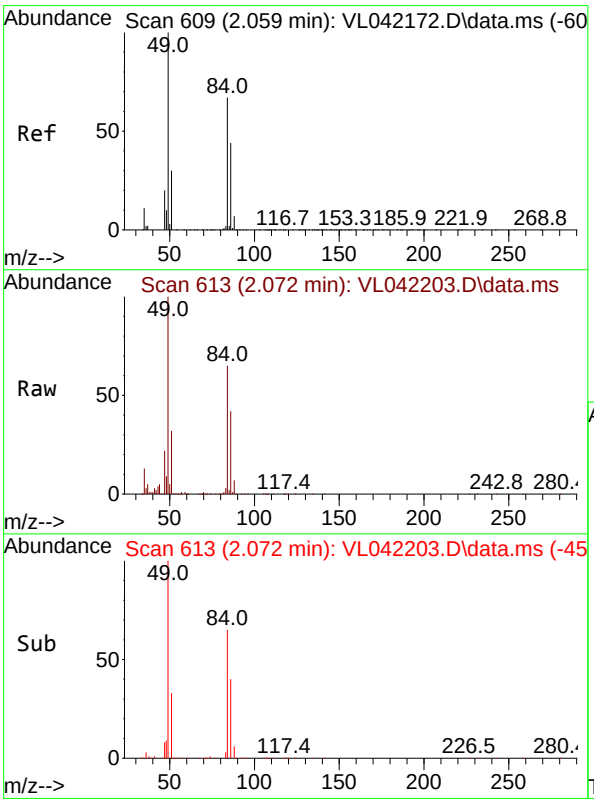
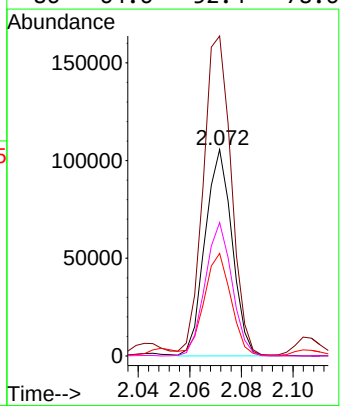
Supervised By :Mahesh Dadoda 04/01/2025

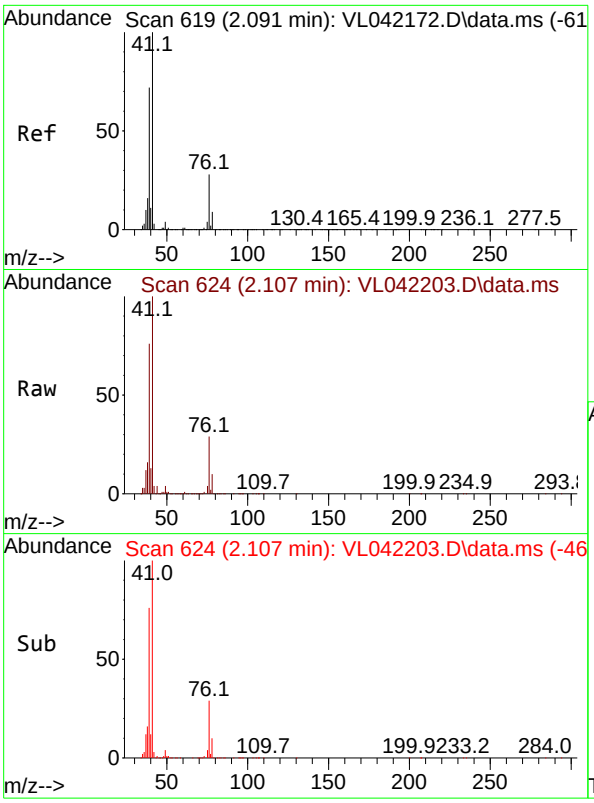


#20
Methylene Chloride
Concen: 8.391 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 84 Resp: 76788

Ion	Ratio	Lower	Upper
84	100		
49	154.6	120.2	180.4
51	49.3	37.4	56.0
86	64.6	52.4	78.6

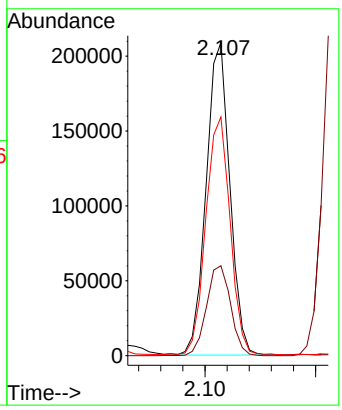




#21
Allyl Chloride
Concen: 8.938 ppbv
RT: 2.107 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 41 Resp: 15487

Ion	Ratio	Lower	Upper
41	100		
76	29.3	24.1	36.1
39	78.1	61.1	91.7



Instrument :
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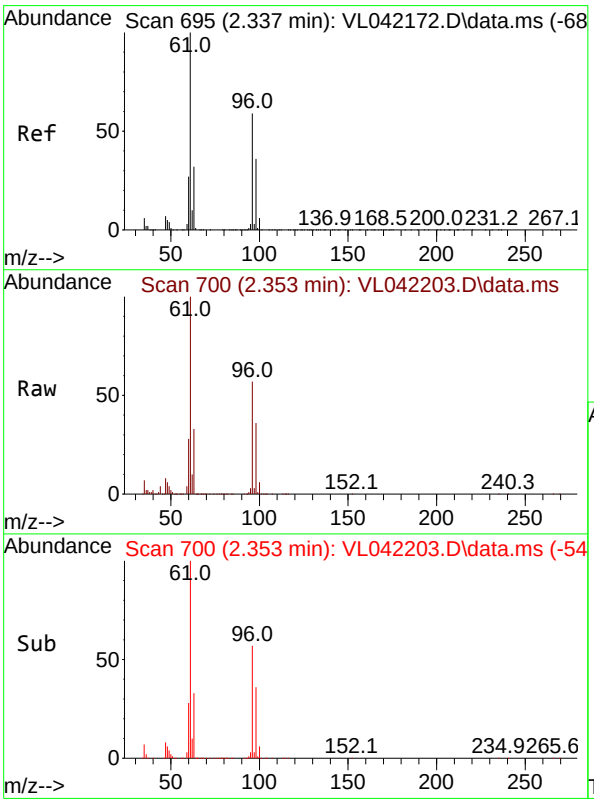
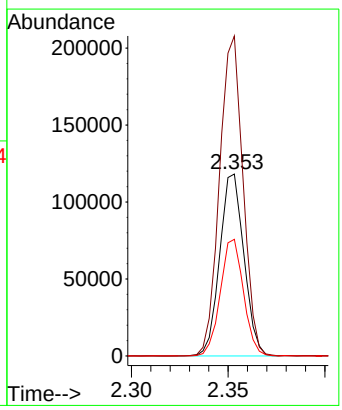
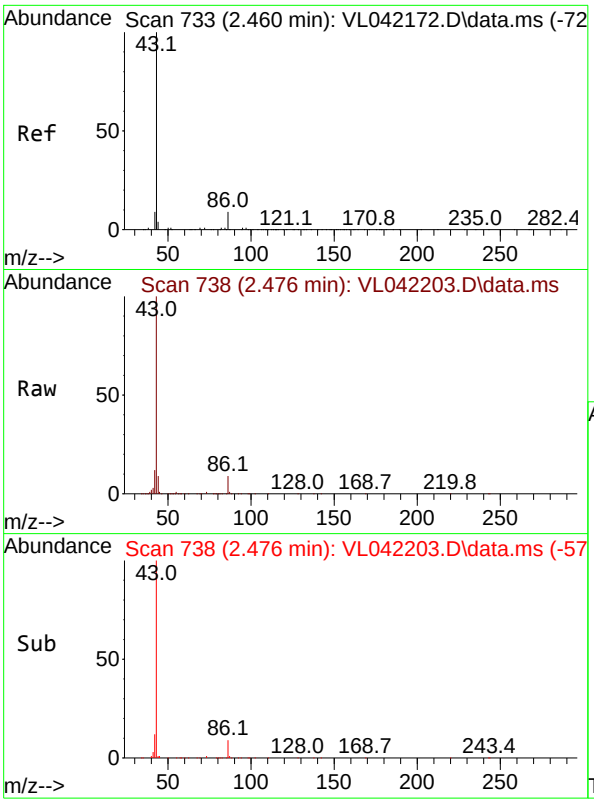


#22
trans-1,2-Dichloroethene
Concen: 9.157 ppbv
RT: 2.353 min Scan# 700
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 96 Resp: 102643

Ion	Ratio	Lower	Upper
96	100		
61	175.8	136.6	204.8
98	64.1	49.4	74.2

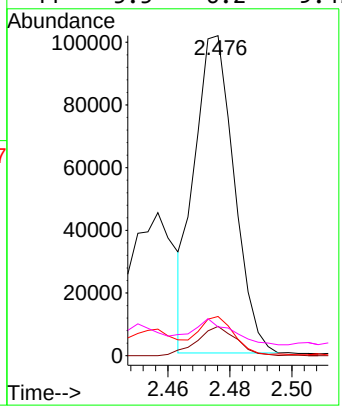




#23
Vinyl Acetate
Concen: 8.441 ppbv
RT: 2.476 min Scan# 7
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 8976

Ion	Ratio	Lower	Upper
43	100		
86	9.2	5.5	8.3#
42	11.8	8.6	13.0
44	5.5	6.2	9.4#



Instrument :
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ClientSampleId :
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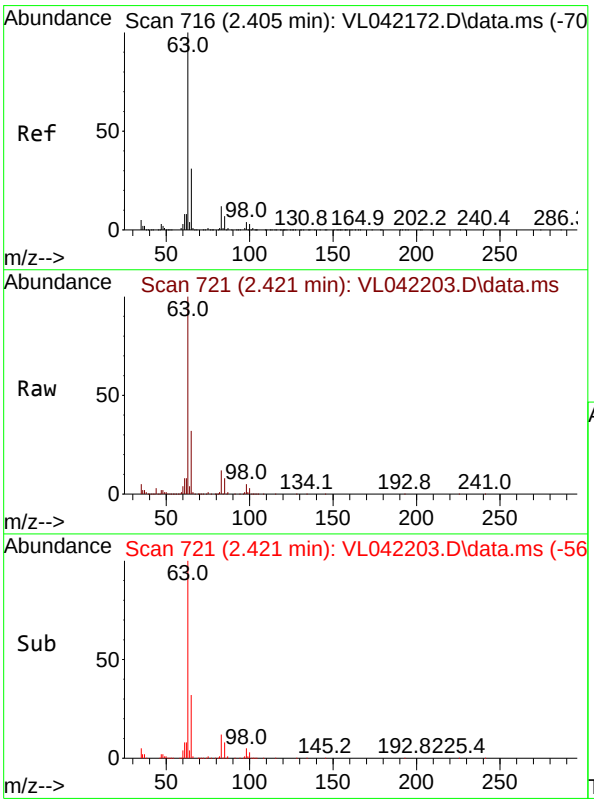
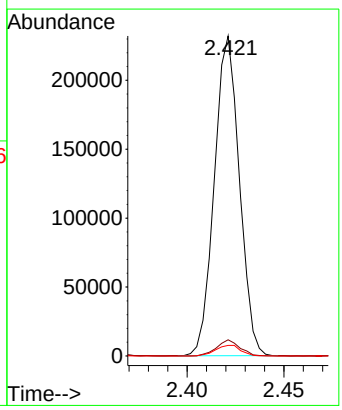
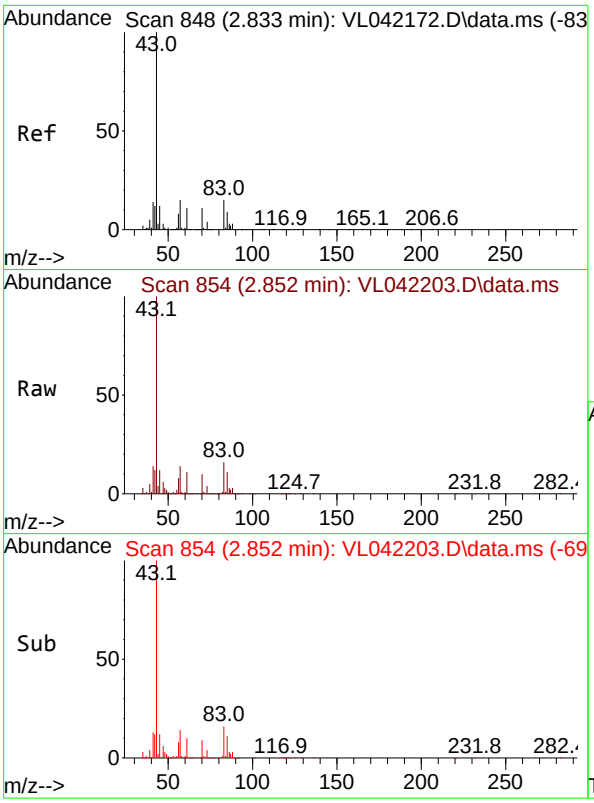


#24
1,1-Dichloroethane
Concen: 10.026 ppbv
RT: 2.421 min Scan# 721
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 63 Resp: 208334

Ion	Ratio	Lower	Upper
63	100		
98	5.0	2.3	6.8
100	3.3	1.6	4.7

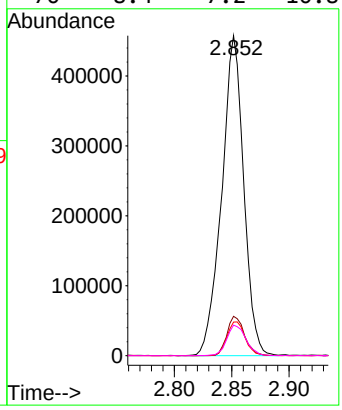




#25
Ethyl Acetate
Concen: 9.565 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 60997

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.2	12.2
61	8.8	7.3	10.9
70	8.4	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
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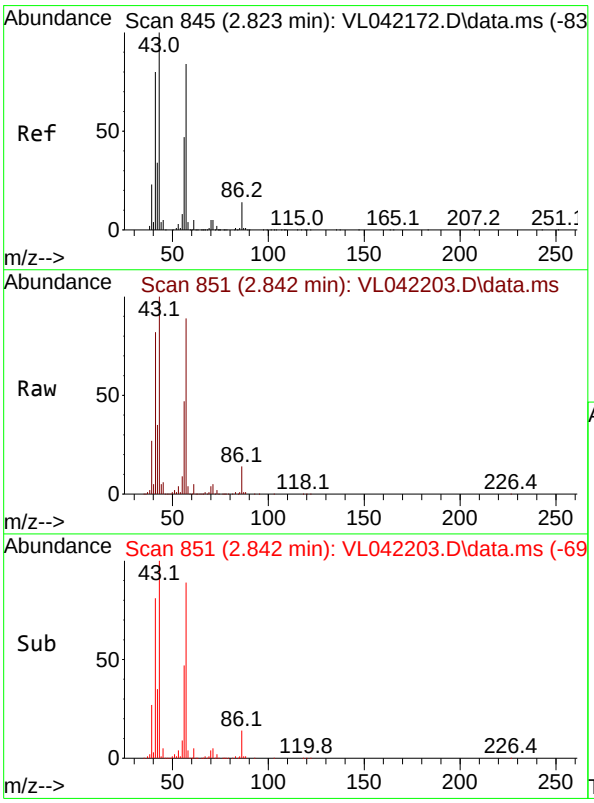
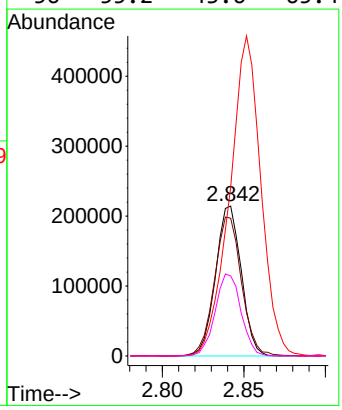
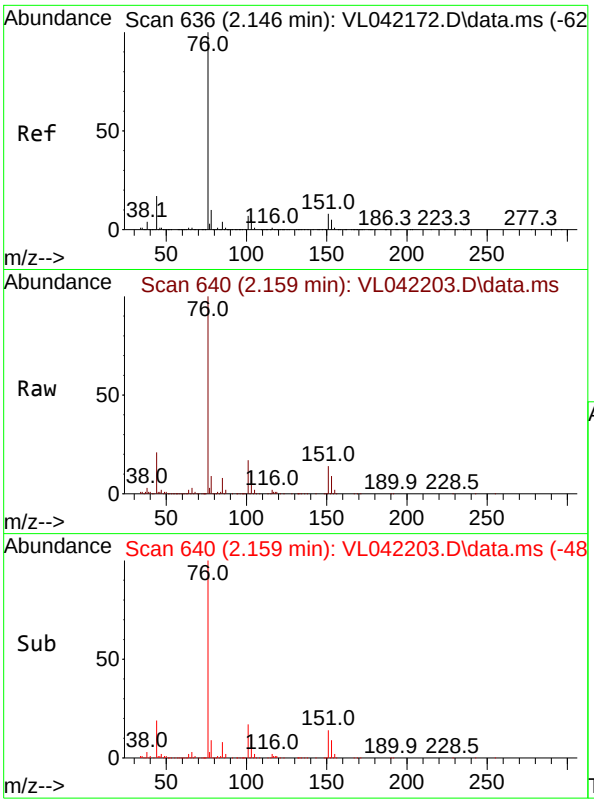


#26
Hexane
Concen: 9.511 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 57 Resp: 234267

Ion	Ratio	Lower	Upper
57	100		
41	97.6	76.6	114.8
43	261.1	207.8	311.8
56	55.2	43.6	65.4

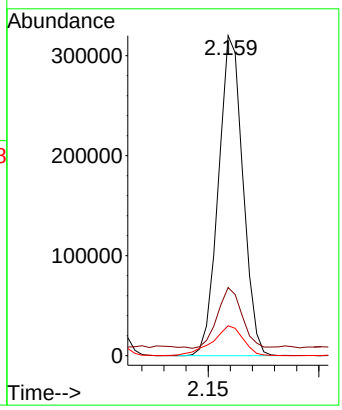




#27
Carbon Disulfide
Concen: 9.310 ppbv
RT: 2.159 min Scan# 64
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 76 Resp: 24590

Ion	Ratio	Lower	Upper
76	100		
44	19.4	14.7	22.1
78	11.7	9.3	13.9



Instrument :
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ClientSampleId :
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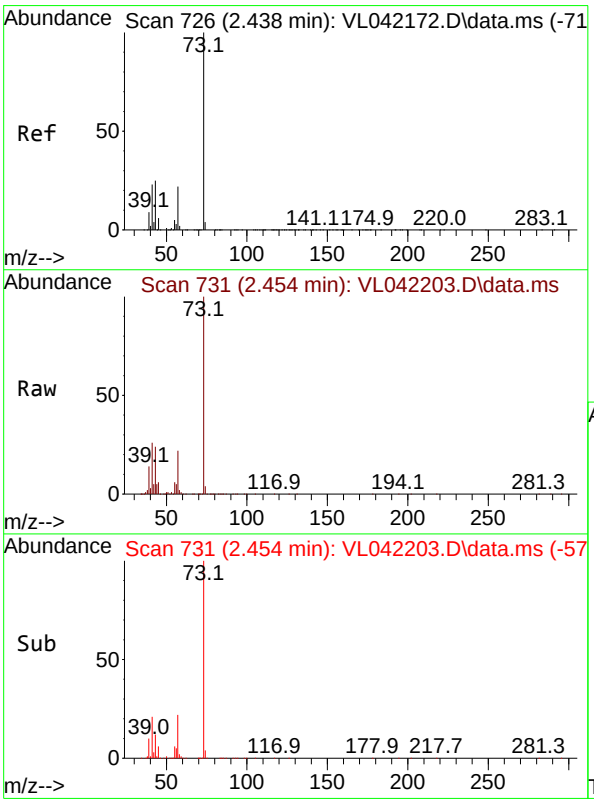
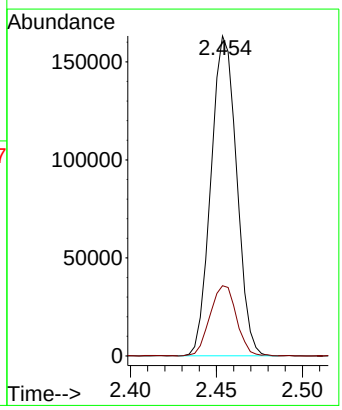
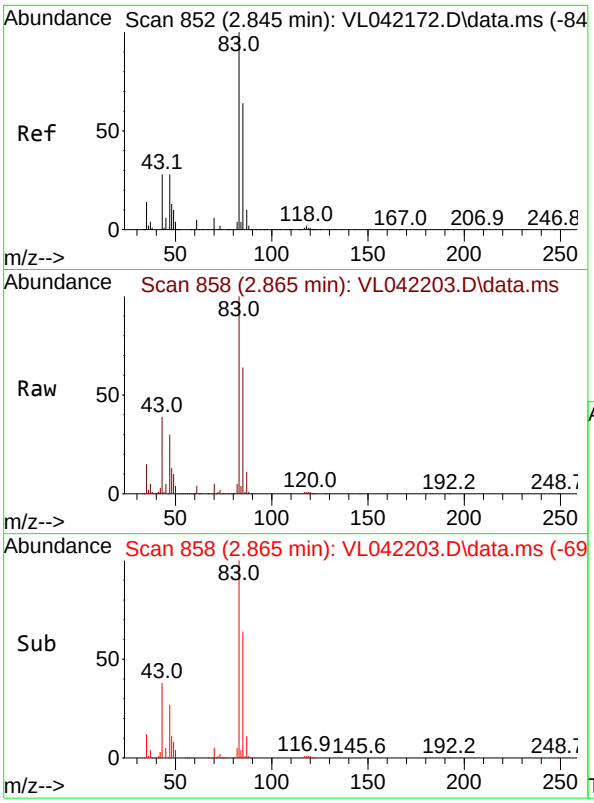


#28
Methyl tert-Butyl Ether
Concen: 11.046 ppbv
RT: 2.454 min Scan# 731
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 73 Resp: 169404

Ion	Ratio	Lower	Upper
73	100		
57	22.8	20.5	30.7





#29
Chloroform
Concen: 10.616 ppbv
RT: 2.865 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 83 Resp: 38269

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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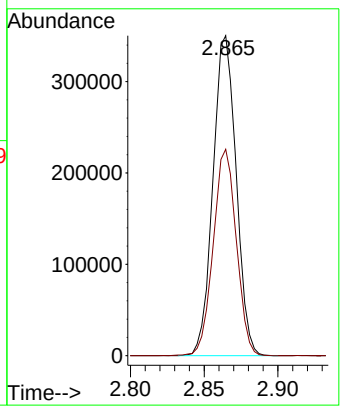
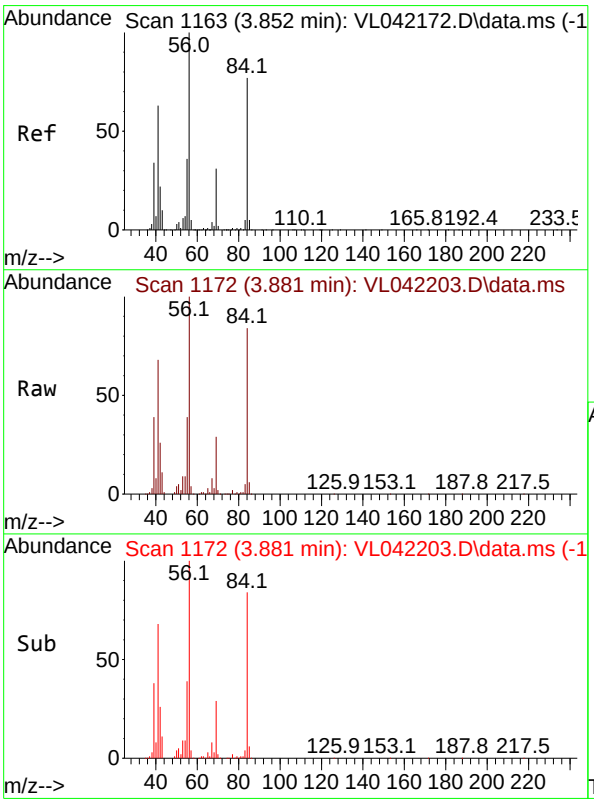
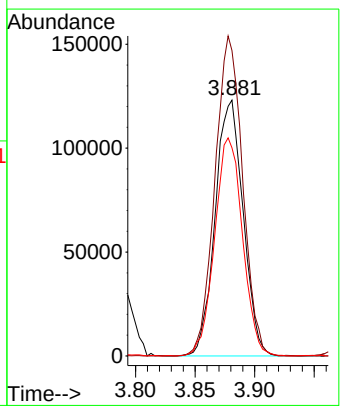


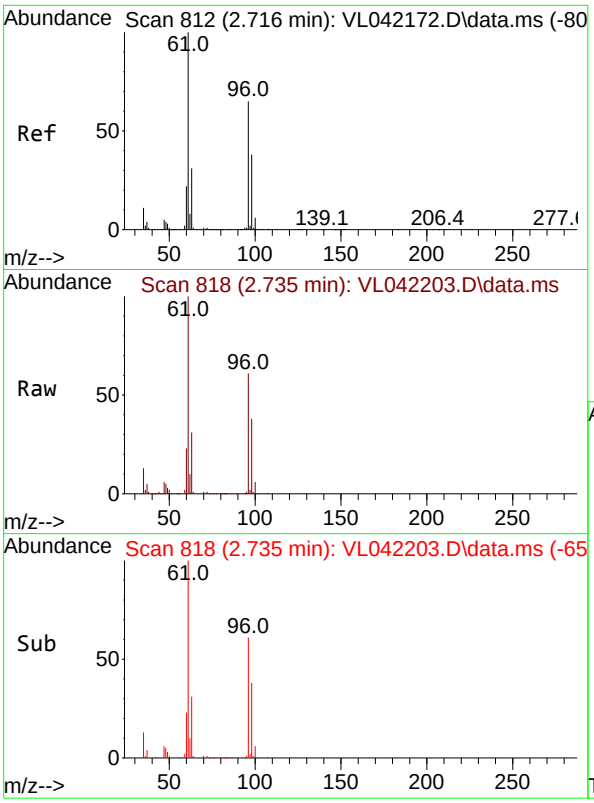


#30
Cyclohexane
Concen: 9.393 ppbv
RT: 3.881 min Scan# 1172
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 84 Resp: 200894

Ion	Ratio	Lower	Upper
84	100		
56	123.7	102.8	154.2
41	85.2	66.5	99.7

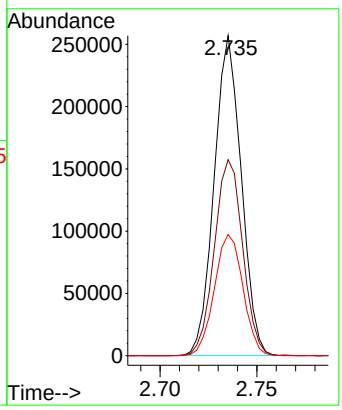




#31
cis-1,2-Dichloroethene
Concen: 9.981 ppbv
RT: 2.735 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 61 Resp: 24959

Ion	Ratio	Lower	Upper
61	100		
96	61.3	51.8	77.8
98	38.0	30.6	46.0



Instrument :
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ClientSampleId :
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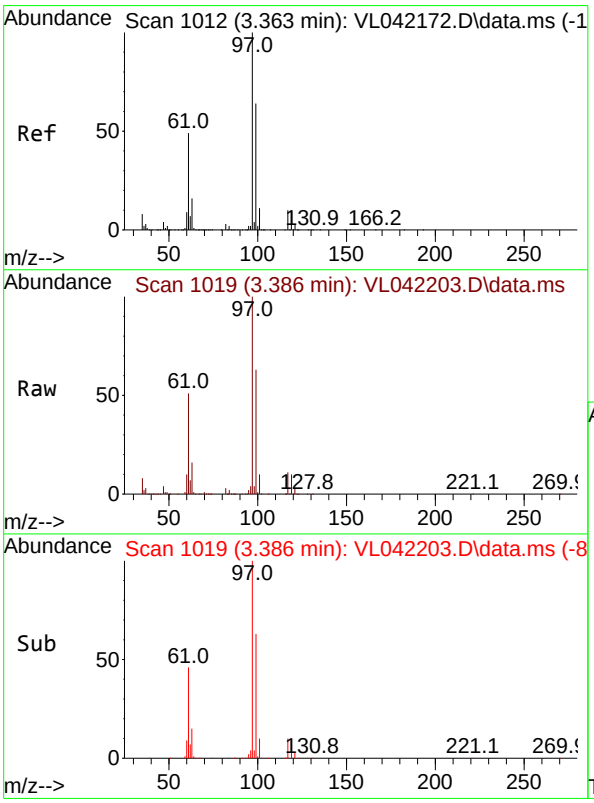
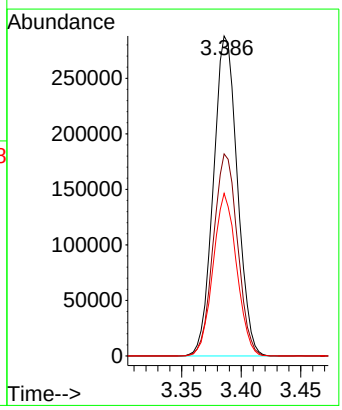
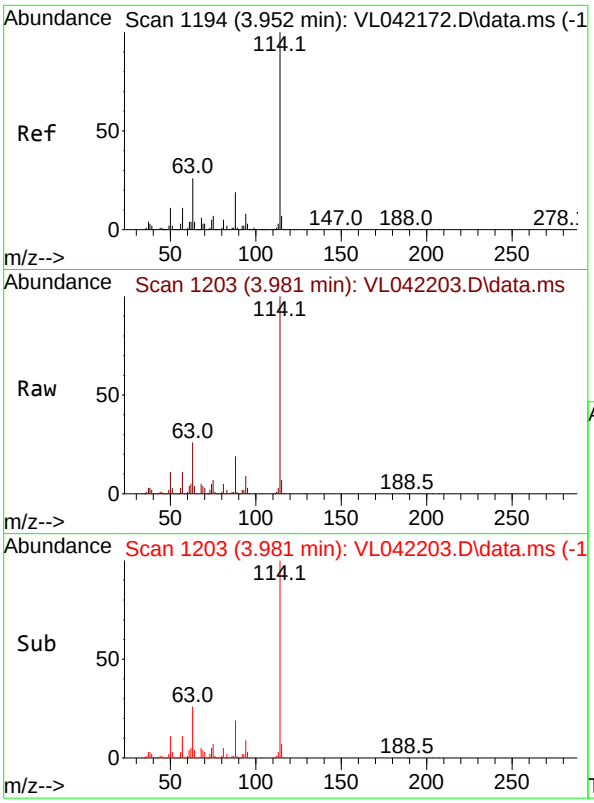


#32
1,1,1-Trichloroethane
Concen: 9.753 ppbv
RT: 3.386 min Scan# 1019
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 97 Resp: 402506

Ion	Ratio	Lower	Upper
97	100		
99	63.8	51.5	77.3
61	50.0	38.7	58.1

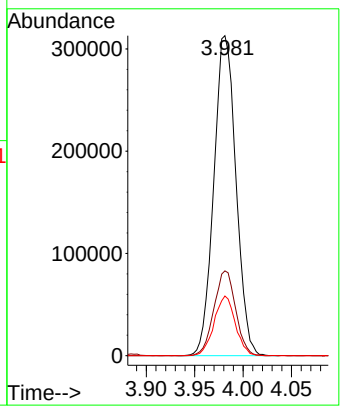




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.981 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:114 Resp: 49898

Ion	Ratio	Lower	Upper
114	100		
63	26.0	20.7	31.1
88	17.9	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
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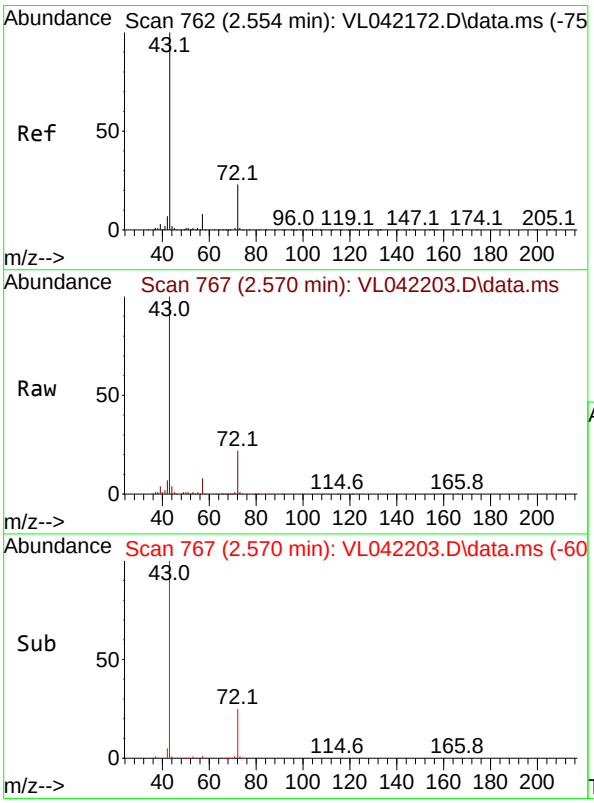
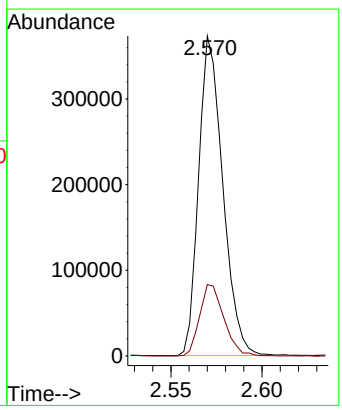
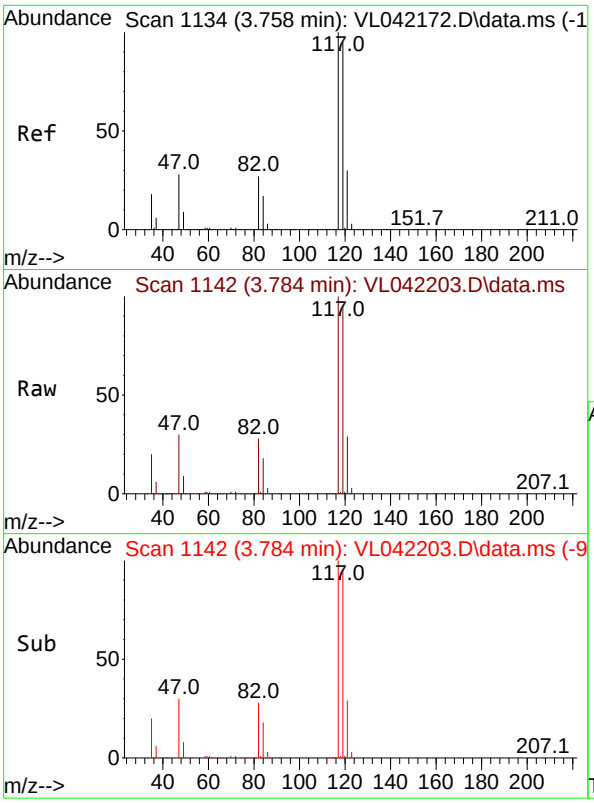


#34
2-Butanone
Concen: 9.504 ppbv
RT: 2.570 min Scan# 767
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 343896

Ion	Ratio	Lower	Upper
43	100		
72	22.6	18.2	27.2





#35
Carbon Tetrachloride
Concen: 10.578 ppbv
RT: 3.784 min Scan# 1
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:117 Resp: 41231

Ion	Ratio	Lower	Upper
117	100		
119	94.9	76.2	114.2
121	29.1	24.2	36.4

Instrument :
MSVOA_L
ClientSampleId :
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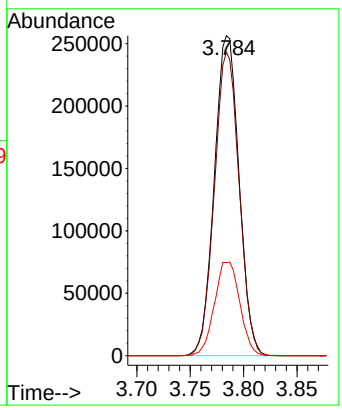
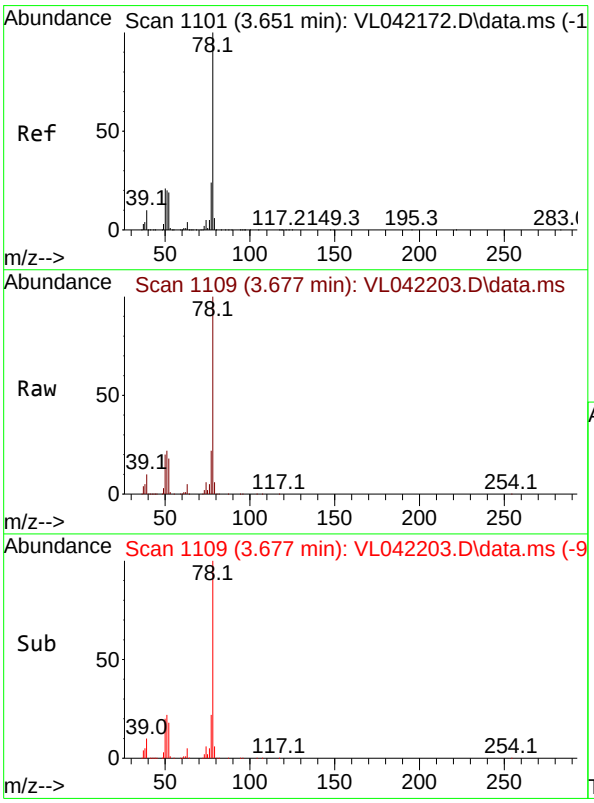
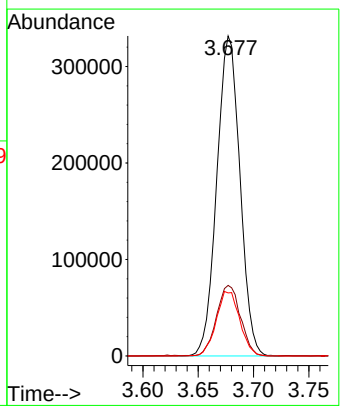


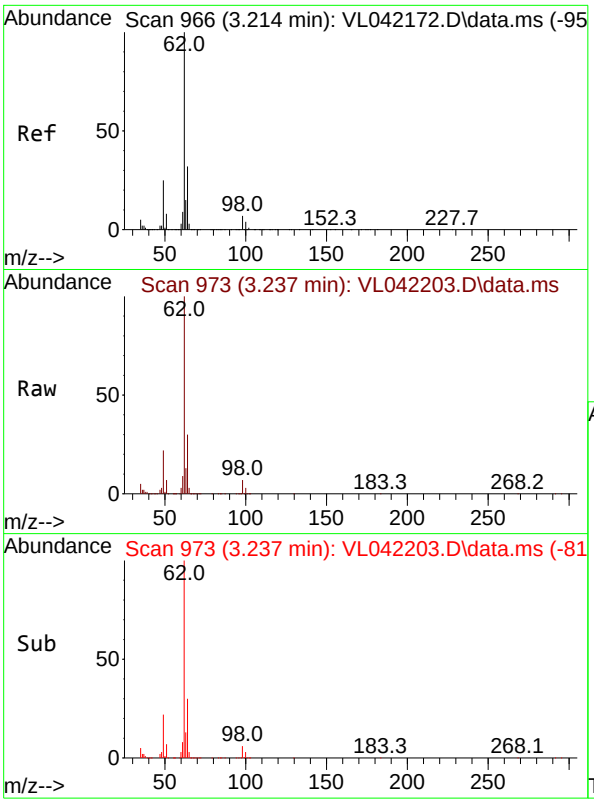


#36
Benzene
Concen: 9.754 ppbv
RT: 3.677 min Scan# 1109
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 78 Resp: 482499

Ion	Ratio	Lower	Upper
78	100		
77	22.0	19.1	28.7
50	19.7	16.6	24.8





#37
1,2-Dichloroethane
Concen: 10.964 ppbv
RT: 3.237 min Scan# 9
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 62 Resp: 31050

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.4	8.2

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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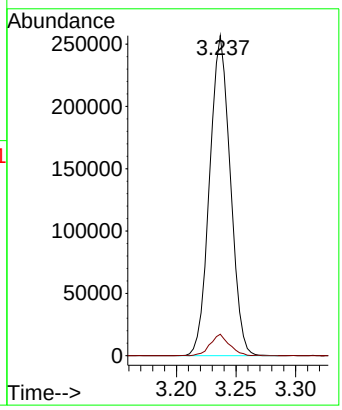
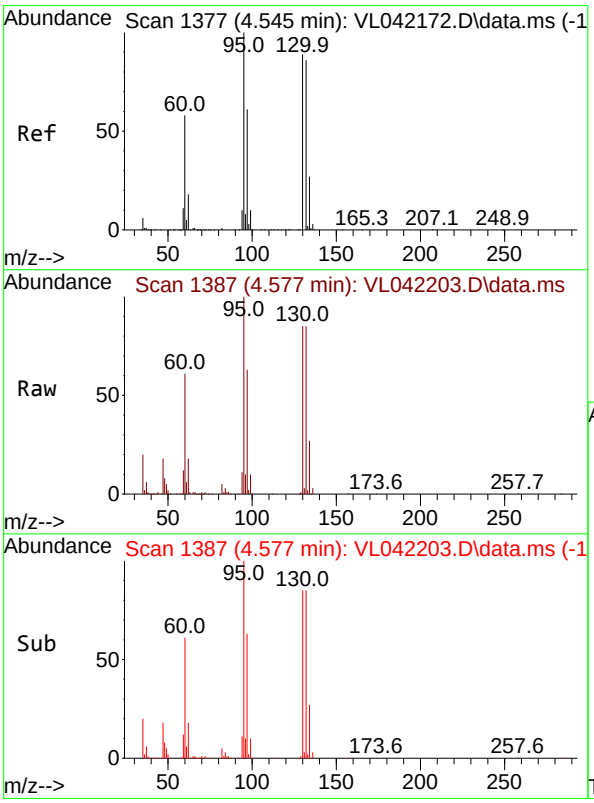
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

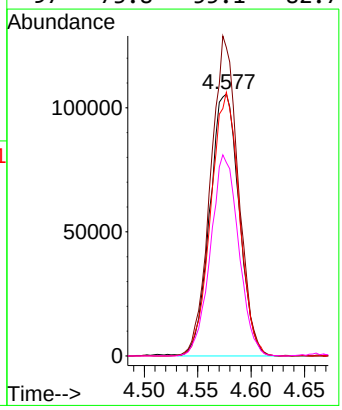


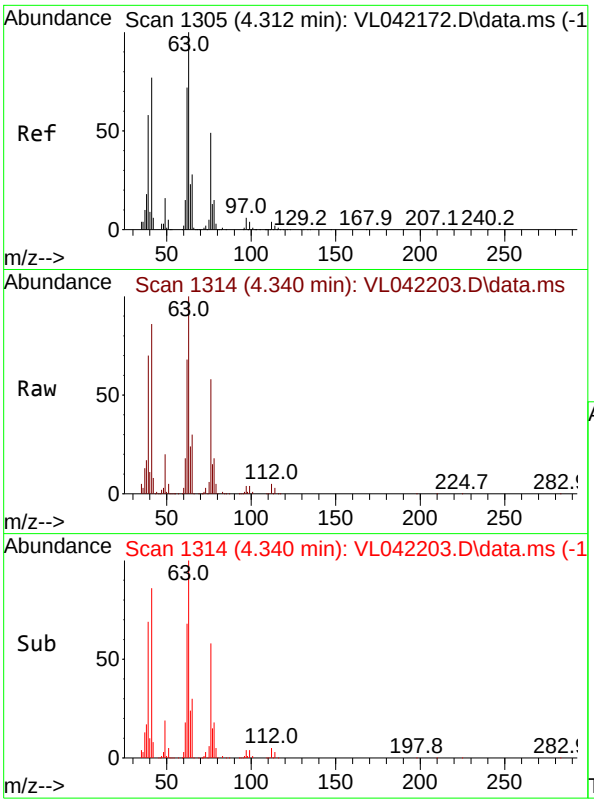


#38
Trichloroethene
Concen: 9.749 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:130 Resp: 201215

Ion	Ratio	Lower	Upper
130	100		
95	117.8	89.8	134.8
132	100.6	77.4	116.2
97	73.8	55.1	82.7





#39
1,2-Dichloropropane
Concen: 9.665 ppbv
RT: 4.340 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 63 Resp: 17411

Ion	Ratio	Lower	Upper
63	100		
41	85.8	61.7	92.5
62	67.7	57.6	86.4

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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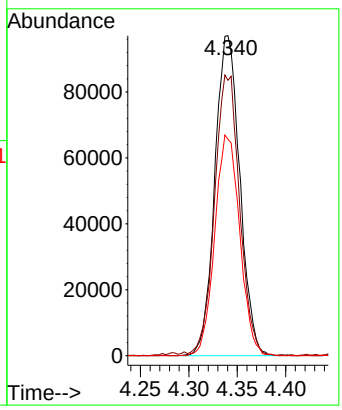
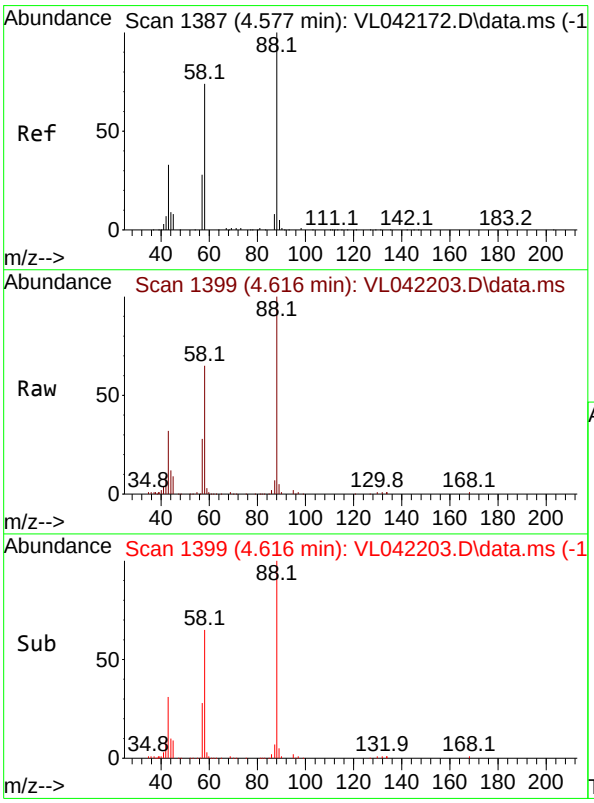
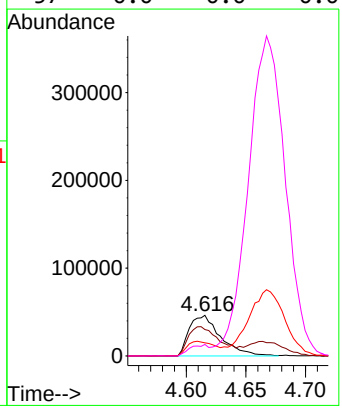


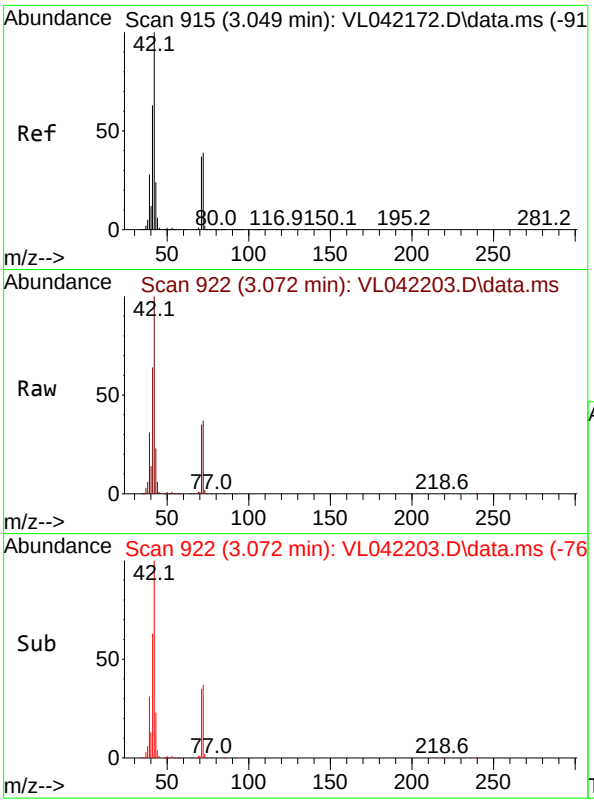


#40
1,4-Dioxane
Concen: 8.872 ppbv
RT: 4.616 min Scan# 1399
Delta R.T. 0.039 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 88 Resp: 84833

Ion	Ratio	Lower	Upper
88	100		
58	71.2	62.7	94.1
43	34.3	23.0	34.4
57	0.0	0.0	0.0





#41
Tetrahydrofuran
Concen: 9.318 ppbv
RT: 3.072 min Scan# 9
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 42 Resp: 19414

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	36.9	30.2	45.4

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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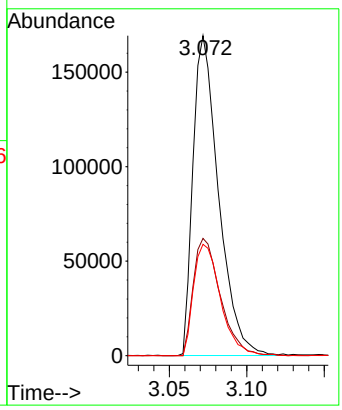
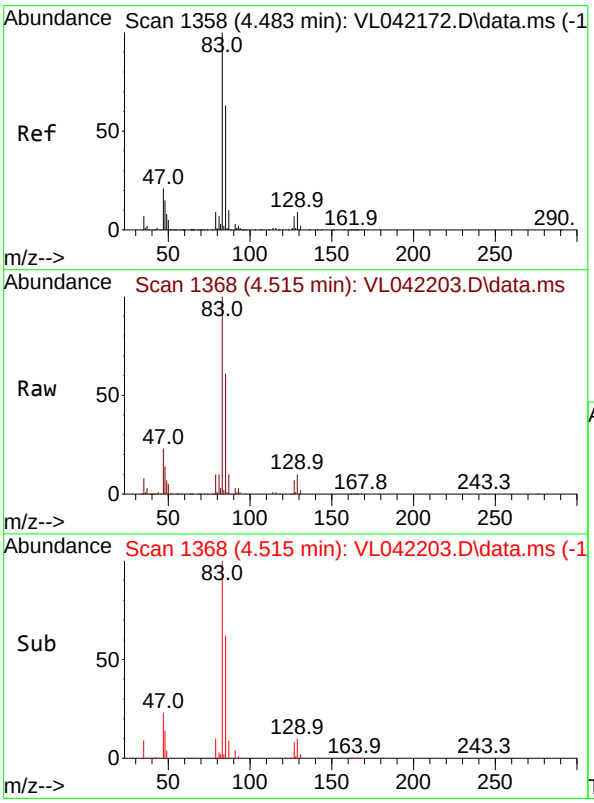
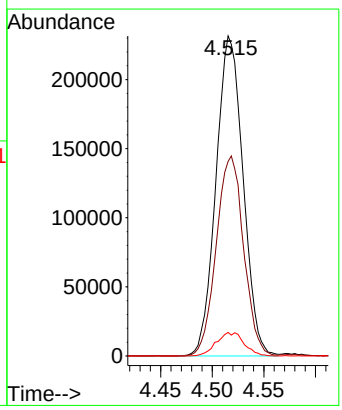


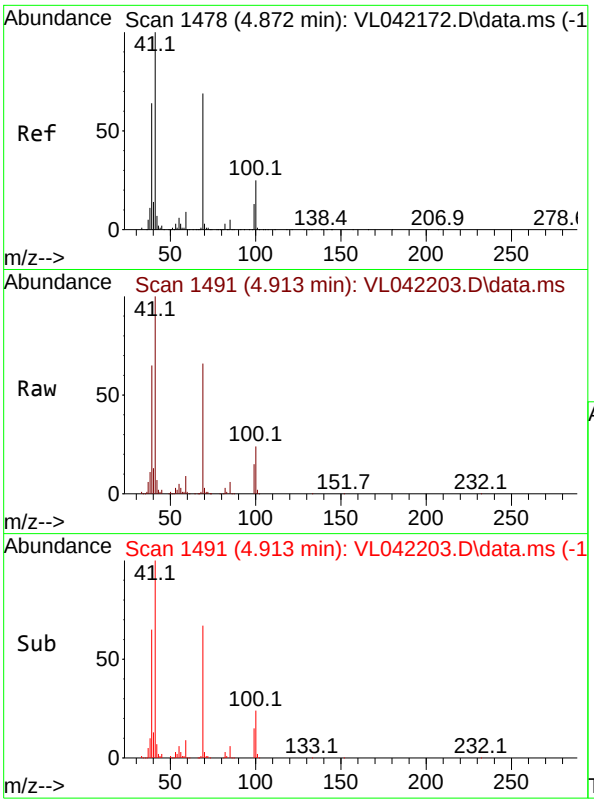


#42
Bromodichloromethane
Concen: 10.831 ppbv
RT: 4.515 min Scan# 1368
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 83 Resp: 422881

Ion	Ratio	Lower	Upper
83	100		
85	60.8	50.5	75.7
127	7.4	5.9	8.9

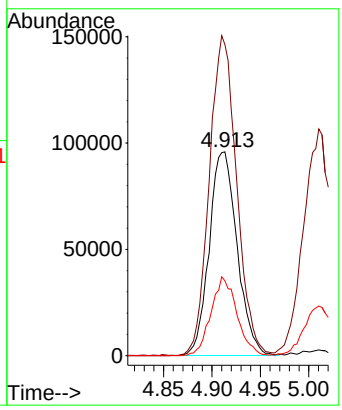




#43
Methyl Methacrylate
Concen: 9.163 ppbv
RT: 4.913 min Scan# 14
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 69 Resp: 19189

Ion	Ratio	Lower	Upper
69	100		
41	154.2	123.8	185.6
100	36.0	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
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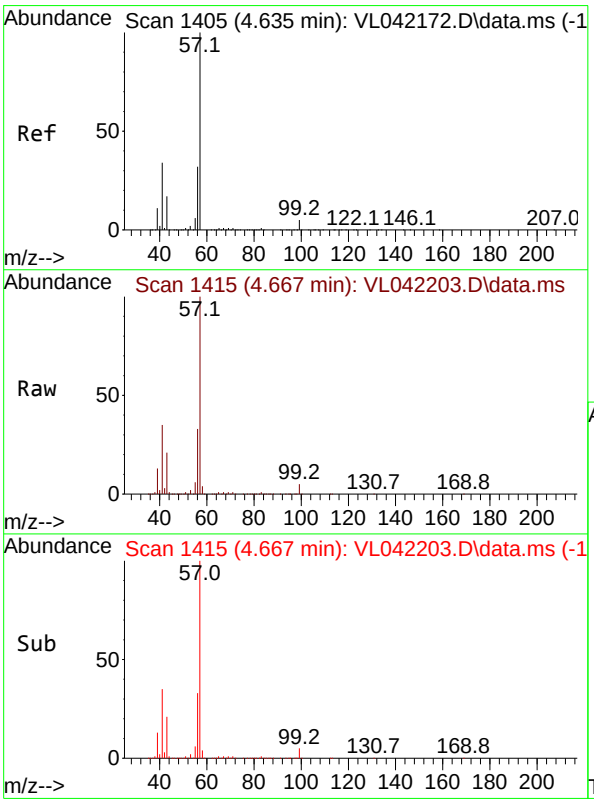
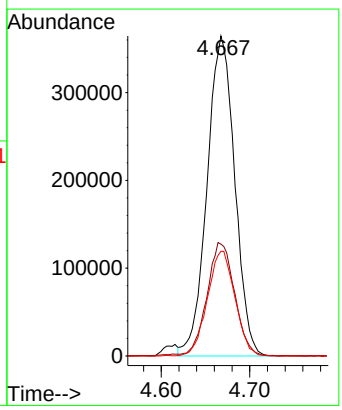
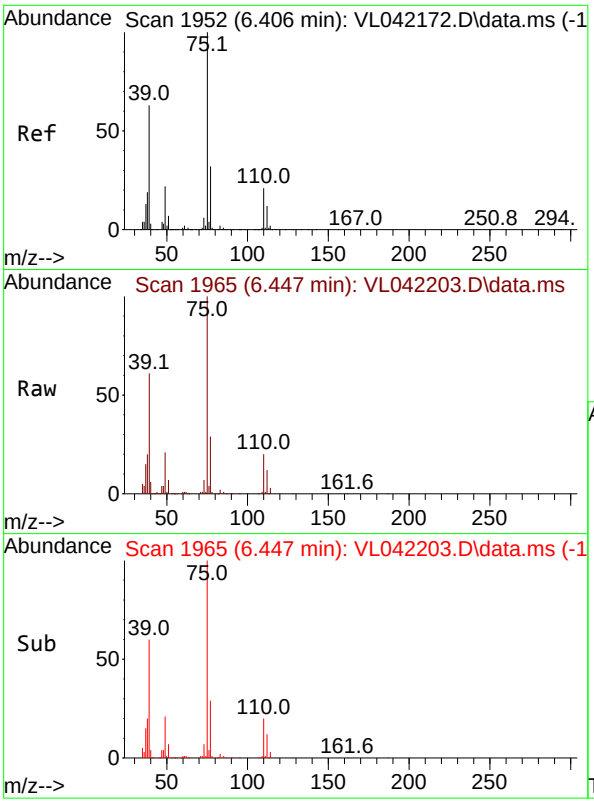


#44
2,2,4-Trimethylpentane
Concen: 9.483 ppbv
RT: 4.667 min Scan# 1415
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 57 Resp: 792762

Ion	Ratio	Lower	Upper
57	100		
41	35.5	26.8	40.2
56	32.6	25.6	38.4

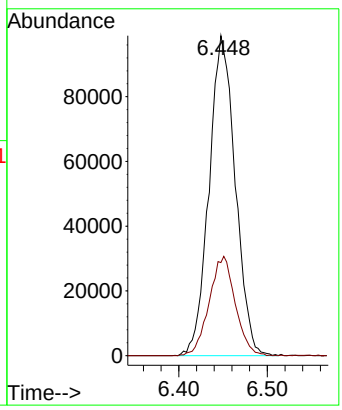




#45
t-1,3-Dichloropropene
Concen: 9.071 ppbv
RT: 6.447 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 75 Resp: 20379

Ion	Ratio	Lower	Upper
75	100		
77	29.1	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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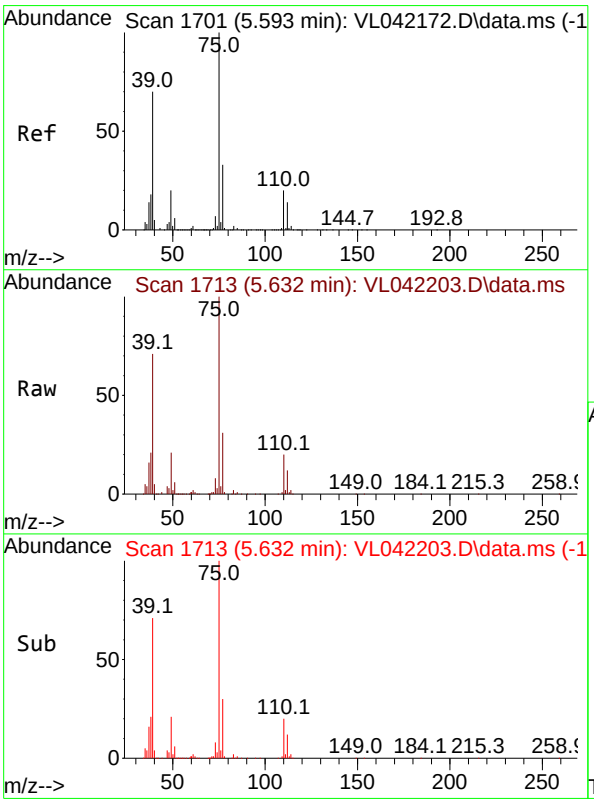
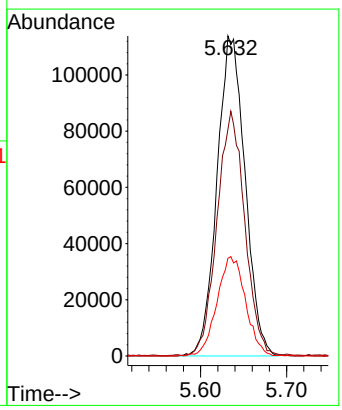
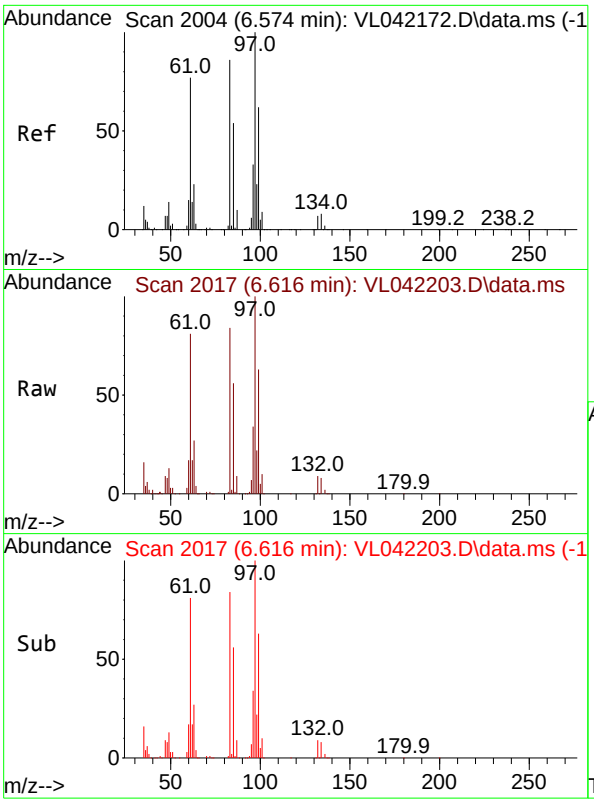


#46
cis-1,3-Dichloropropene
Concen: 9.371 ppbv
RT: 5.632 min Scan# 1713
Delta R.T. 0.039 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 75 Resp: 258084

Ion	Ratio	Lower	Upper
75	100		
39	70.4	55.8	83.6
77	30.5	26.0	39.0

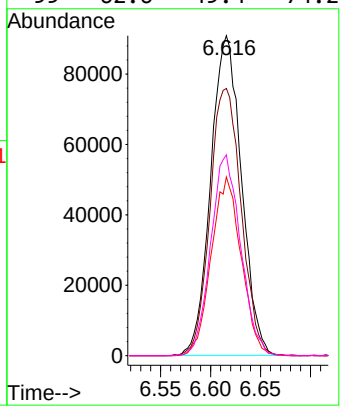




#47
1,1,2-Trichloroethane
Concen: 10.197 ppbv
RT: 6.616 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 97 Resp: 19420

Ion	Ratio	Lower	Upper
97	100		
83	83.4	69.2	103.8
85	55.8	43.1	64.7
99	62.6	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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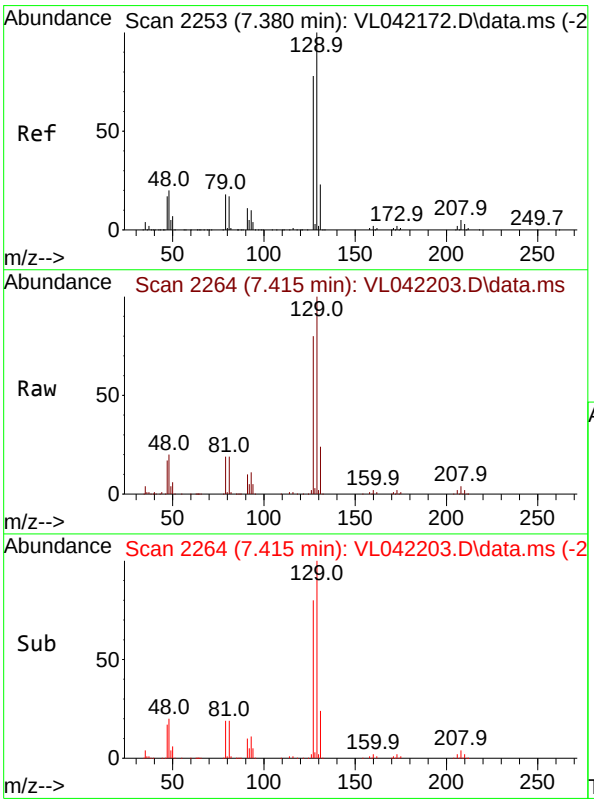
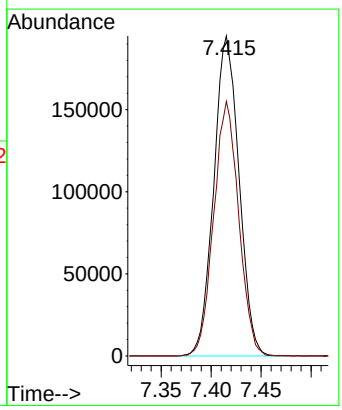
Supervised By :Mahesh Dadoda 04/01/2025

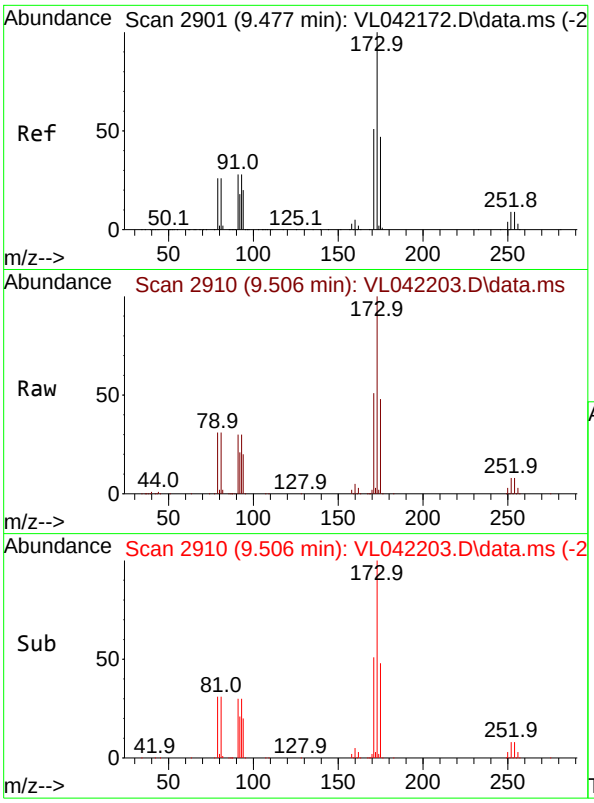


#48
Dibromochloromethane
Concen: 10.604 ppbv
RT: 7.415 min Scan# 2264
Delta R.T. 0.035 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:129 Resp: 342254

Ion	Ratio	Lower	Upper
129	100		
127	78.7	39.1	117.2

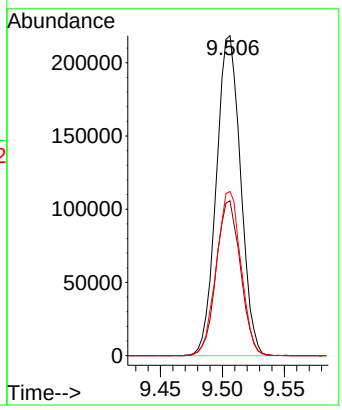




#49
Bromoform
Concen: 10.296 ppbv
RT: 9.506 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:173 Resp: 29834

Ion	Ratio	Lower	Upper
173	100		
175	48.6	38.6	57.8
171	52.0	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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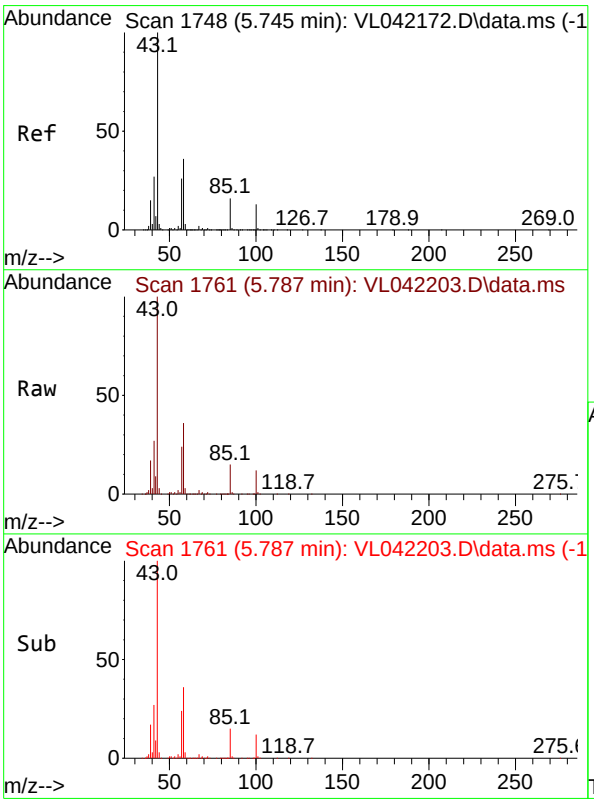
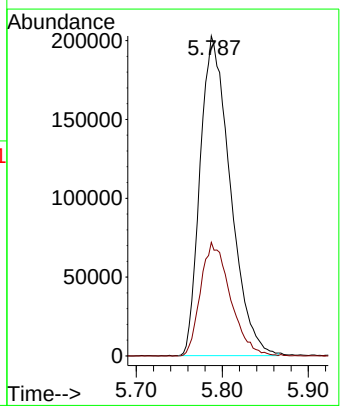
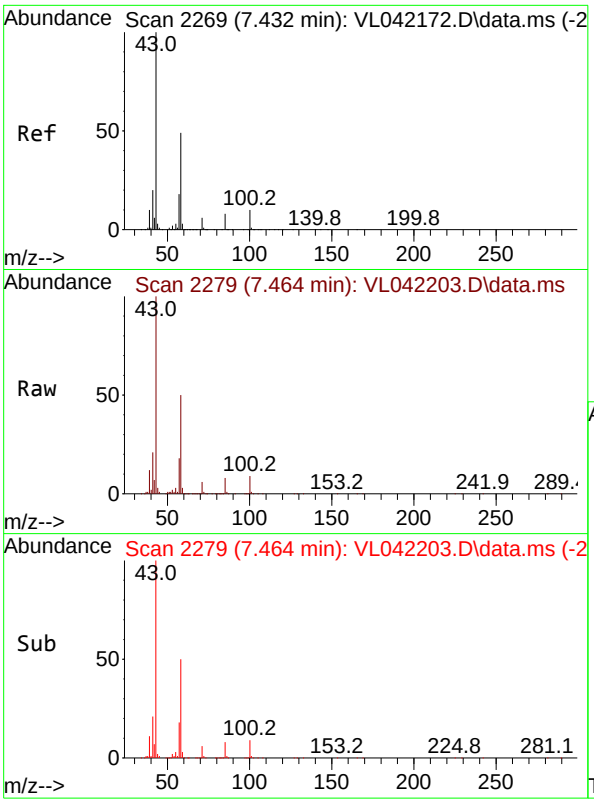


#50
4-Methyl-2-Pentanone
Concen: 8.603 ppbv
RT: 5.787 min Scan# 1761
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 493320

Ion	Ratio	Lower	Upper
43	100		
58	35.2	29.0	43.6





#51
2-Hexanone
Concen: 8.613 ppbv
RT: 7.464 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 40555

Ion	Ratio	Lower	Upper
43	100		
58	47.4	39.7	59.5
98	0.1	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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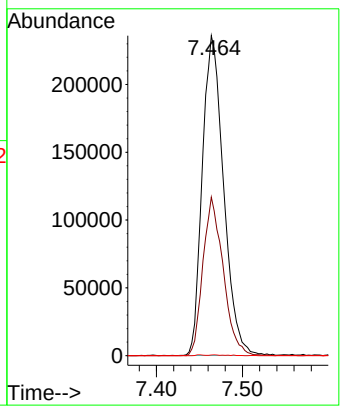
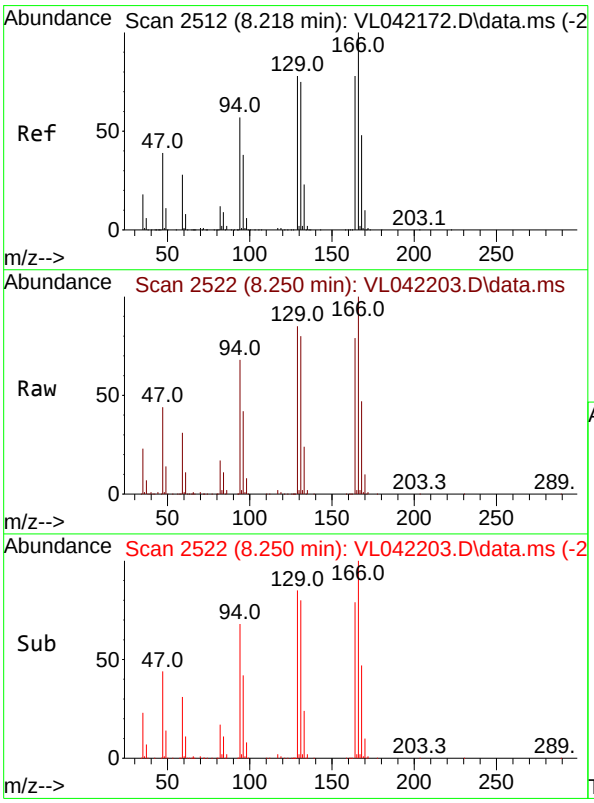
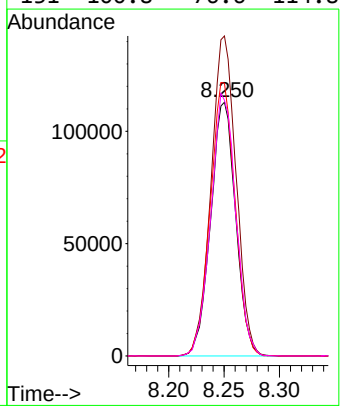


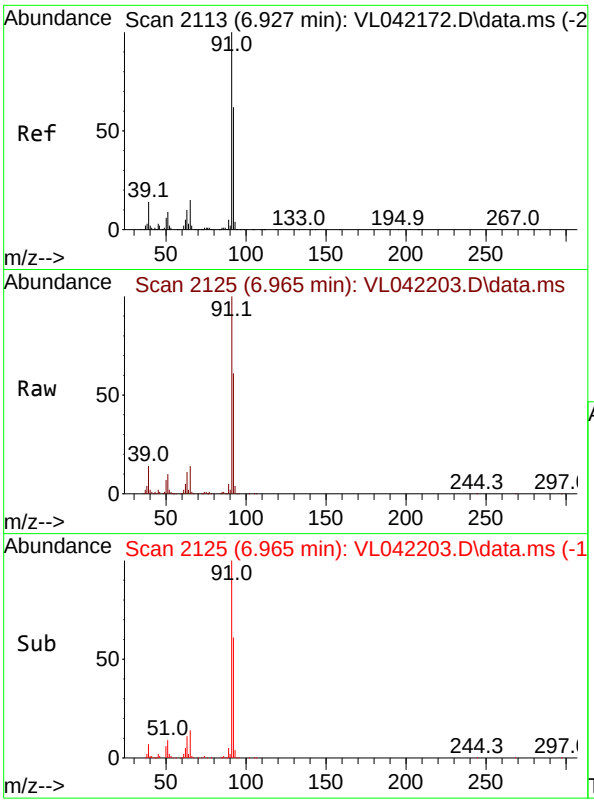


#52
Tetrachloroethene
Concen: 9.012 ppbv
RT: 8.250 min Scan# 2522
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:164 Resp: 176804

Ion	Ratio	Lower	Upper
164	100		
166	126.1	102.5	153.7
129	107.5	79.8	119.8
131	100.8	76.6	114.8

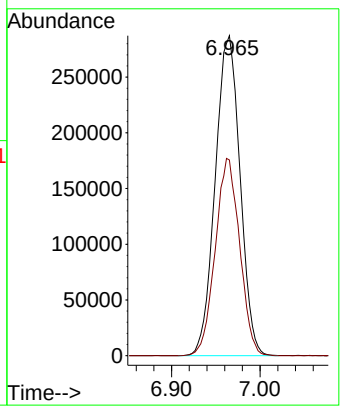




#53
Toluene
Concen: 9.555 ppbv
RT: 6.965 min Scan# 21
Delta R.T. 0.039 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 56030

Ion	Ratio	Lower	Upper
91	100		
92	60.5	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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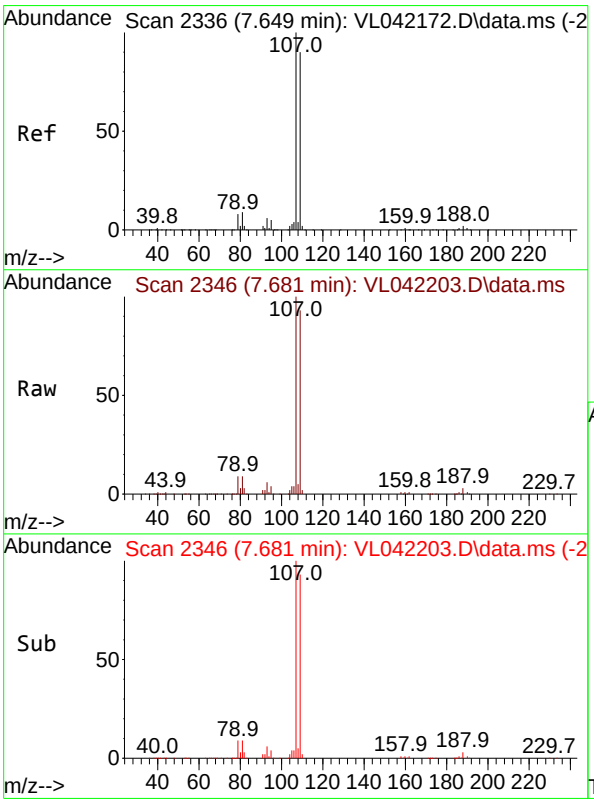
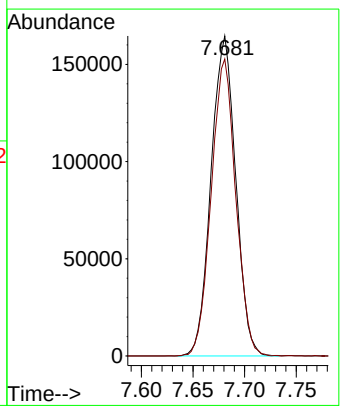
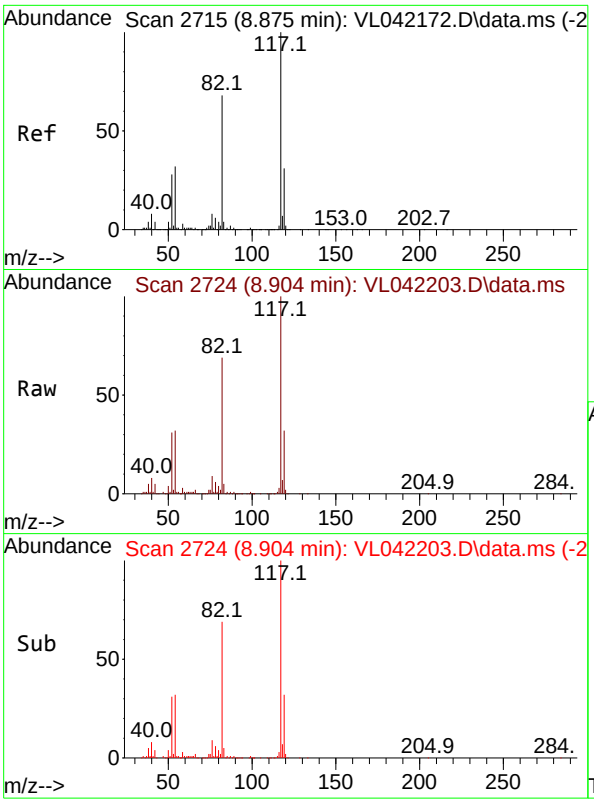


#54
1,2-Dibromoethane
Concen: 10.298 ppbv
RT: 7.681 min Scan# 2346
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:107 Resp: 273381

Ion	Ratio	Lower	Upper
107	100		
109	92.7	72.2	108.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.904 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:117 Resp: 45640

Ion	Ratio	Lower	Upper
117	100		
82	70.9	55.8	83.6
119	34.4	25.5	38.3

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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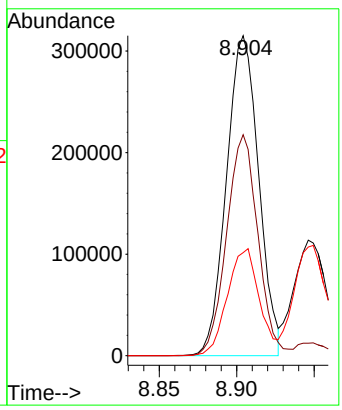
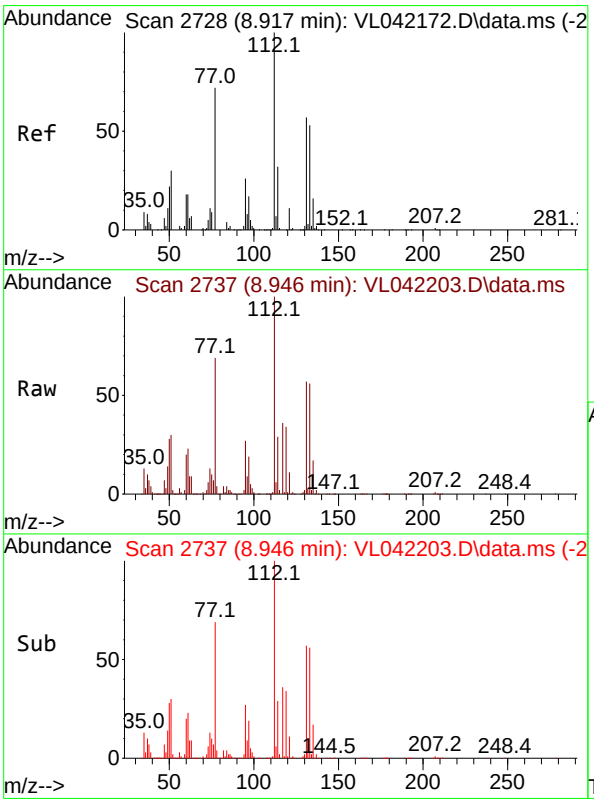
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

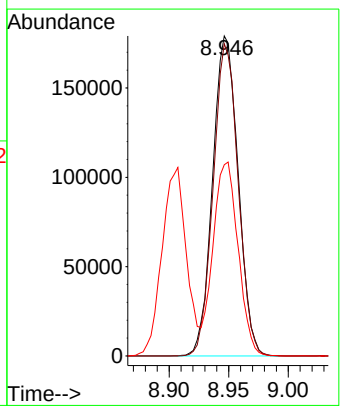


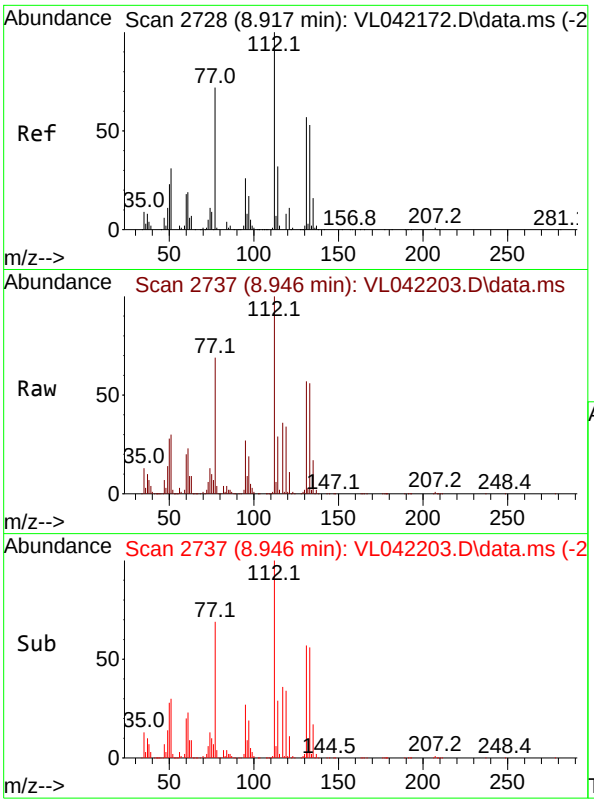


#56
1,1,1,2-Tetrachloroethane
Concen: 10.607 ppbv
RT: 8.946 min Scan# 2737
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:131 Resp: 266468

Ion	Ratio	Lower	Upper
131	100		
133	95.6	76.6	114.8
119	57.5	49.8	74.6





#57
Chlorobenzene
Concen: 10.368 ppbv
RT: 8.946 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:112 Resp: 44885

Ion	Ratio	Lower	Upper
112	100		
77	68.7	58.2	87.2
114	29.0	29.1	35.5

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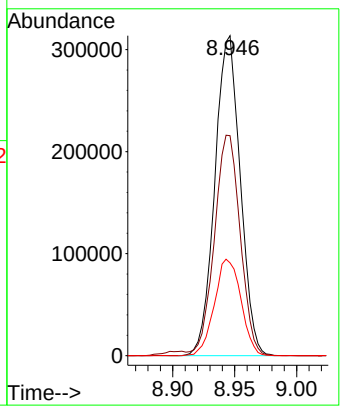
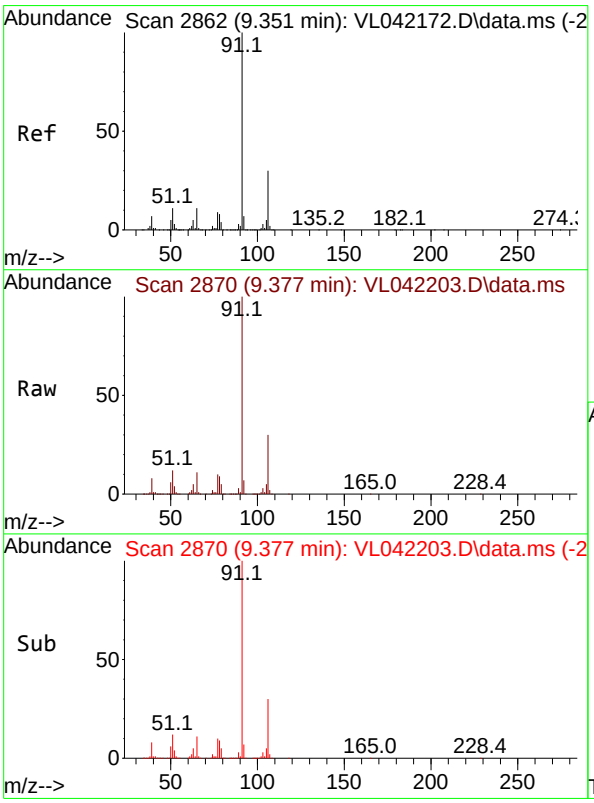
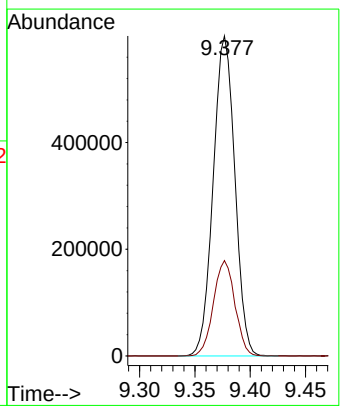


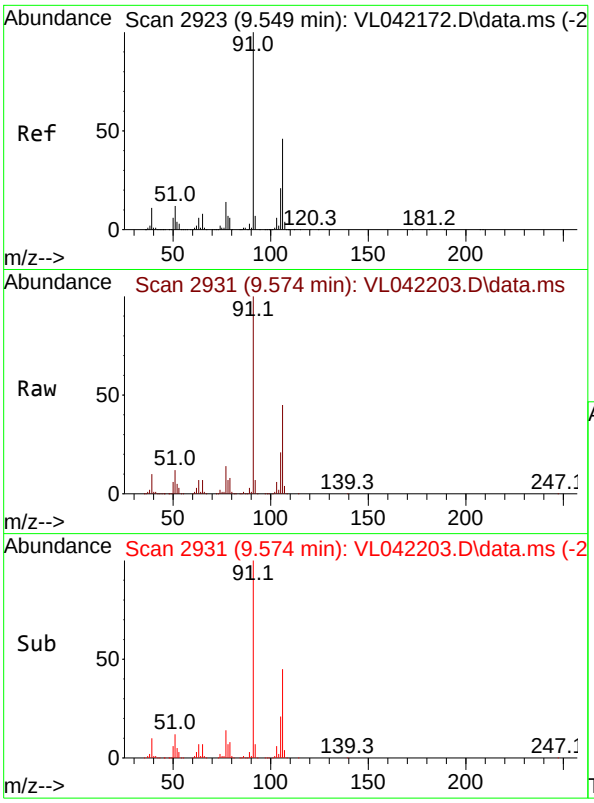


#58
Ethyl Benzene
Concen: 10.059 ppbv
RT: 9.377 min Scan# 2870
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 815513

Ion	Ratio	Lower	Upper
91	100		
106	29.8	24.2	36.2

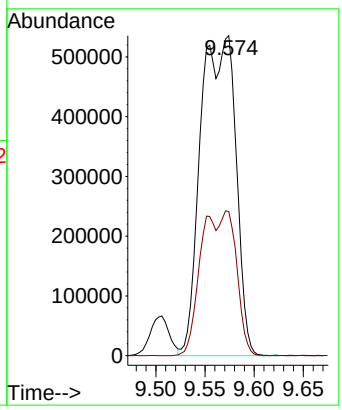




#59
m/p-Xylene
Concen: 20.565 ppbv m
RT: 9.574 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 133123

Ion	Ratio	Lower	Upper
91	100		
106	45.5	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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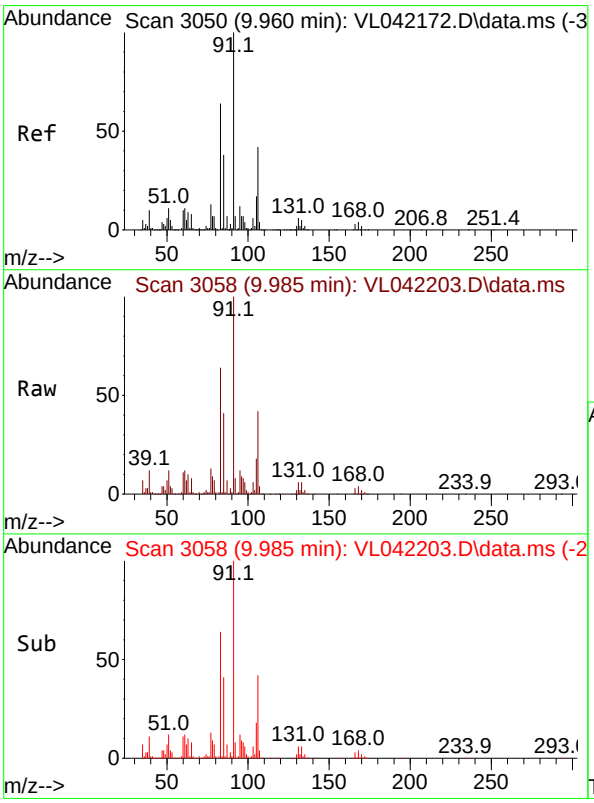
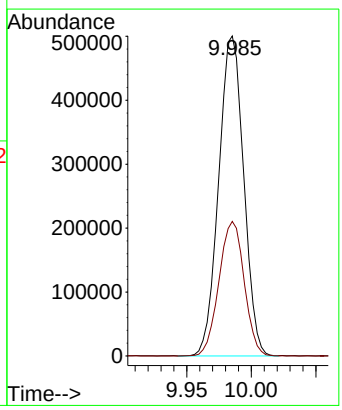
Supervised By :Mahesh Dadoda 04/01/2025

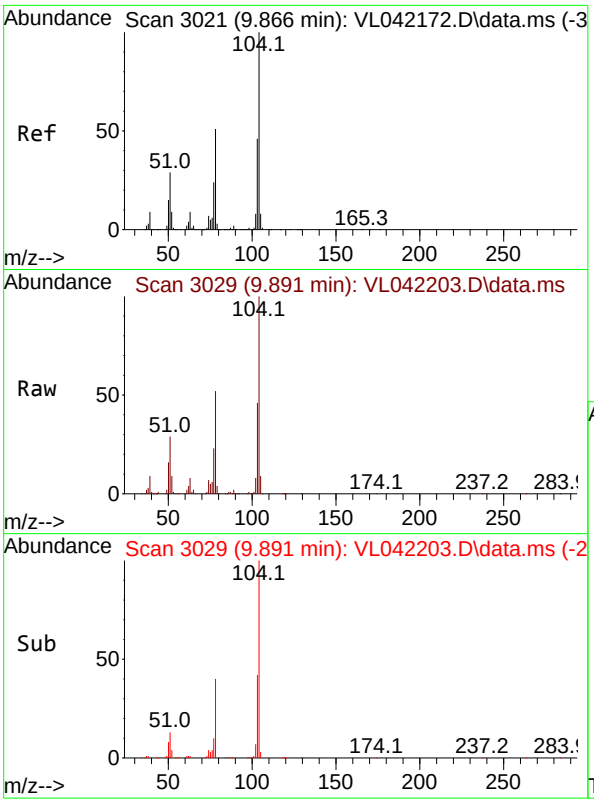


#60
o-Xylene
Concen: 10.379 ppbv
RT: 9.985 min Scan# 3058
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 673552

Ion	Ratio	Lower	Upper
91	100		
106	42.4	20.8	62.5

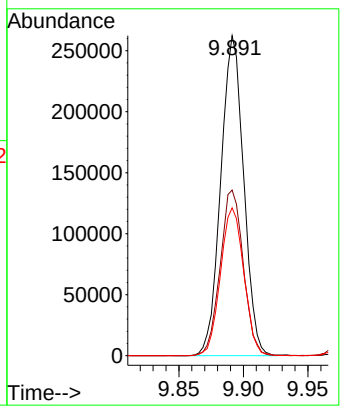




#61
Styrene
Concen: 10.060 ppbv
RT: 9.891 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:104 Resp: 32298

Ion	Ratio	Lower	Upper
104	100		
78	52.3	41.8	62.6
103	47.2	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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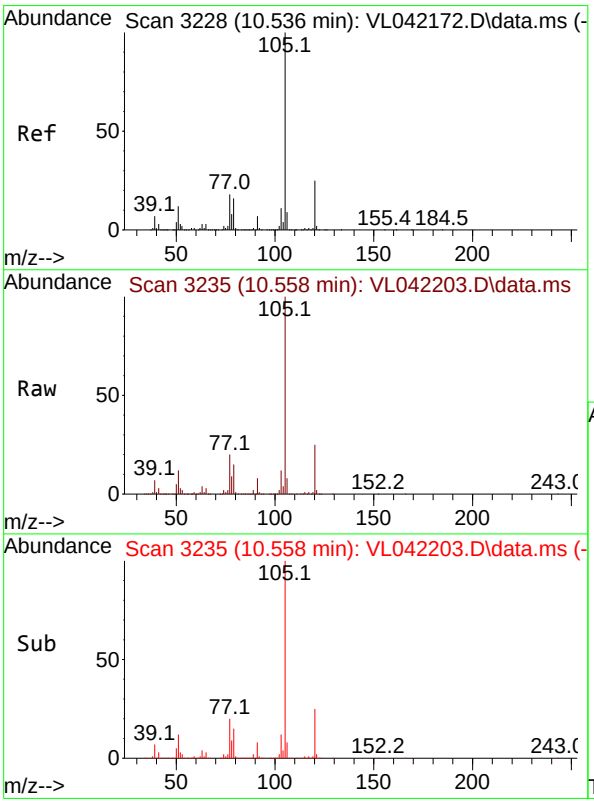
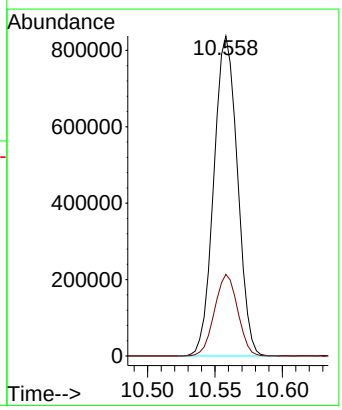
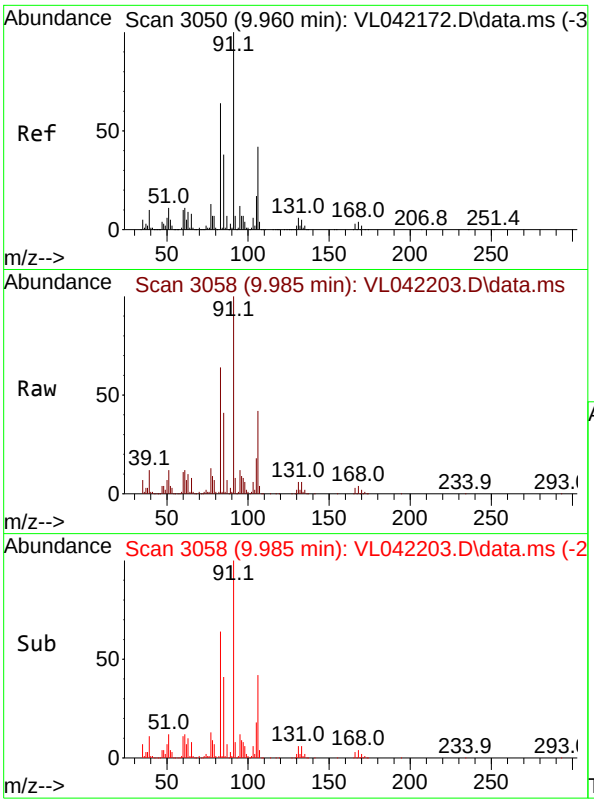


#62
Isopropylbenzene
Concen: 10.524 ppbv
RT: 10.558 min Scan# 3235
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 1021273

Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 10.440 ppbv
RT: 9.985 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 83 Resp: 41162

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.9	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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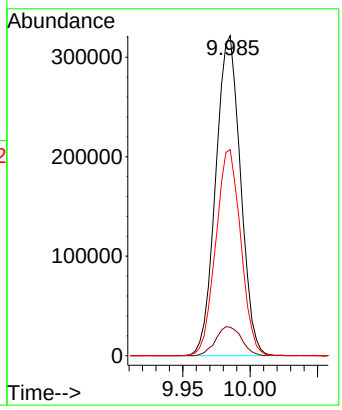
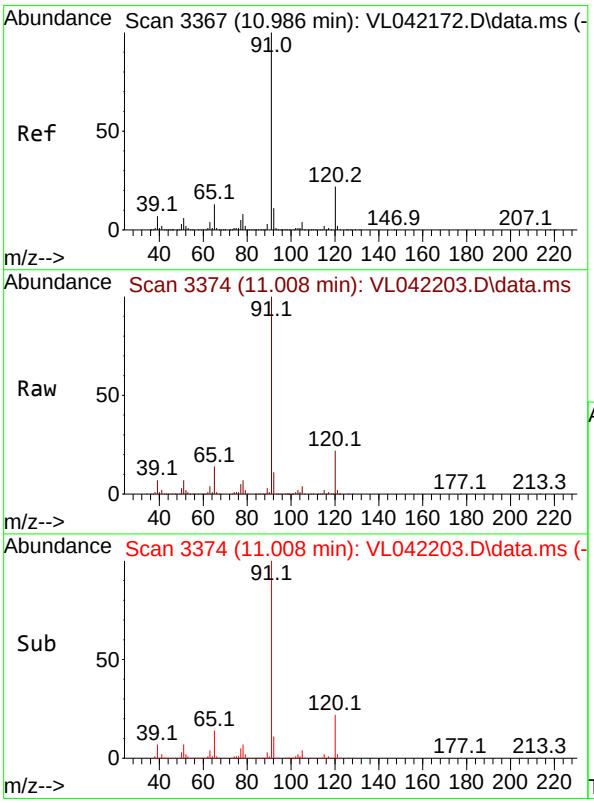
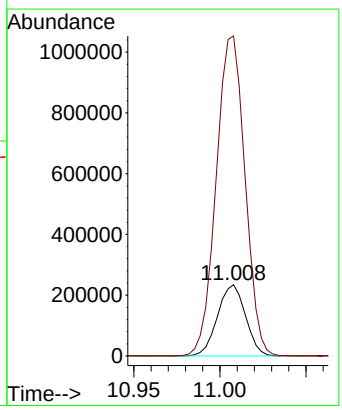


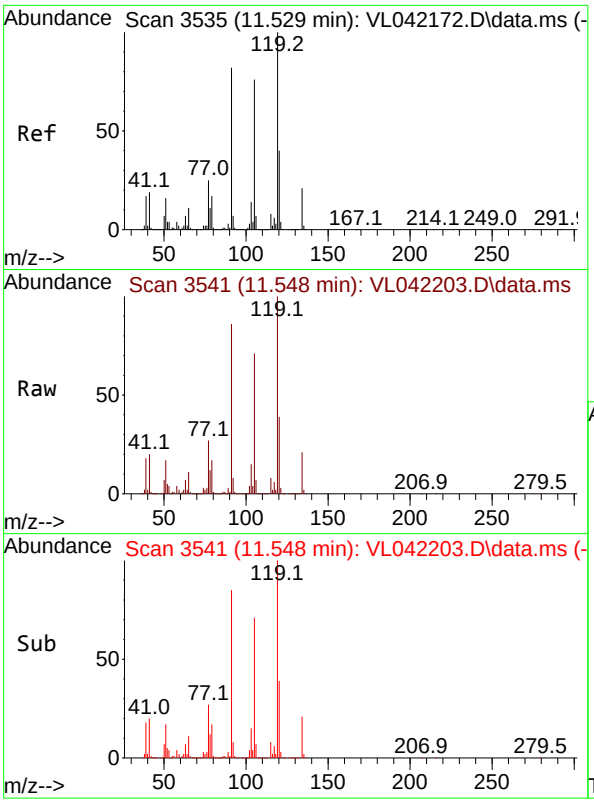


#64
n-propylbenzene
Concen: 10.596 ppbv
RT: 11.008 min Scan# 3374
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:120 Resp: 264706

Ion	Ratio	Lower	Upper
120	100		
91	463.0	376.9	565.3





#65
tert-Butylbenzene
Concen: 10.173 ppbv
RT: 11.548 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:119 Resp: 91302

Ion	Ratio	Lower	Upper
119	100		
91	85.8	66.0	99.0
134	21.2	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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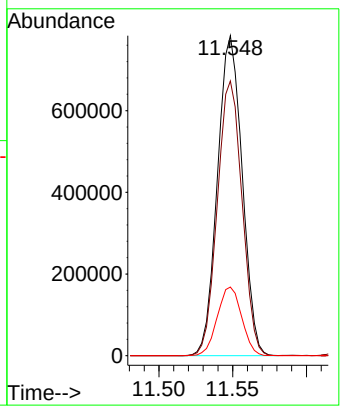
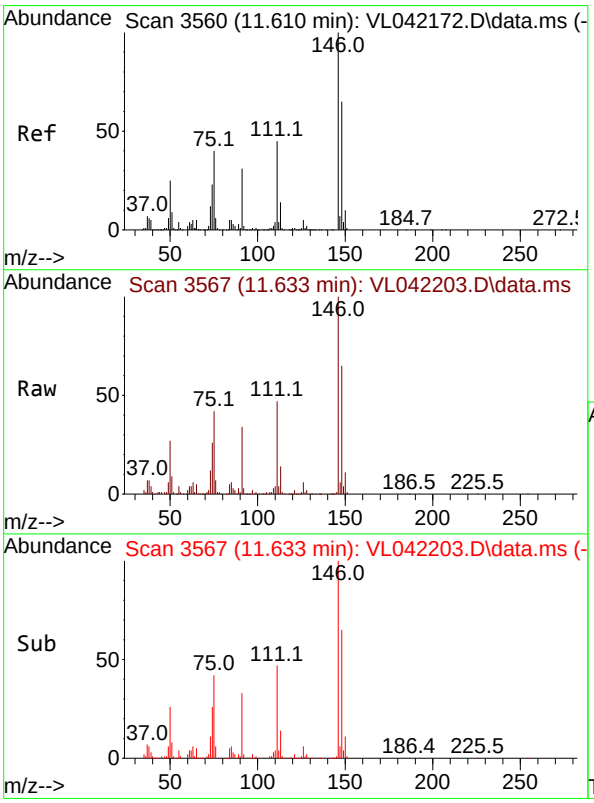
Supervised By :Mahesh Dadoda 04/01/2025

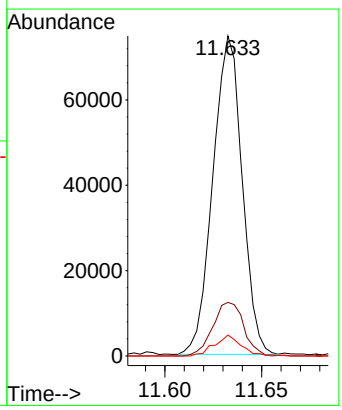


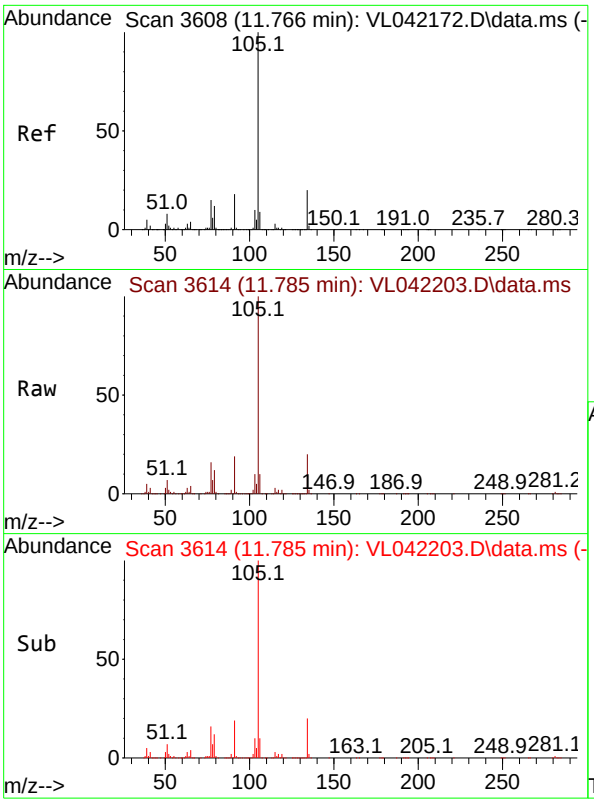


#66
Benzyl Chloride
Concen: 8.232 ppbv
RT: 11.633 min Scan# 3567
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 78394

Ion	Ratio	Lower	Upper
91	100		
126	17.8	13.8	20.6
128	6.0	4.5	6.7

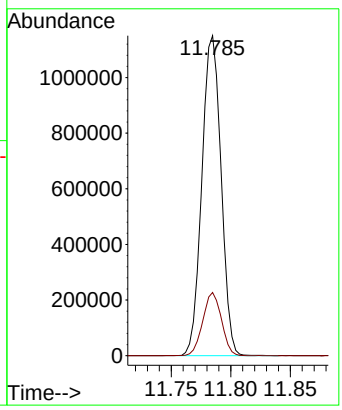




#67
sec-Butylbenzene
Concen: 10.360 ppbv
RT: 11.785 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 129245

Ion	Ratio	Lower	Upper
105	100		
134	19.3	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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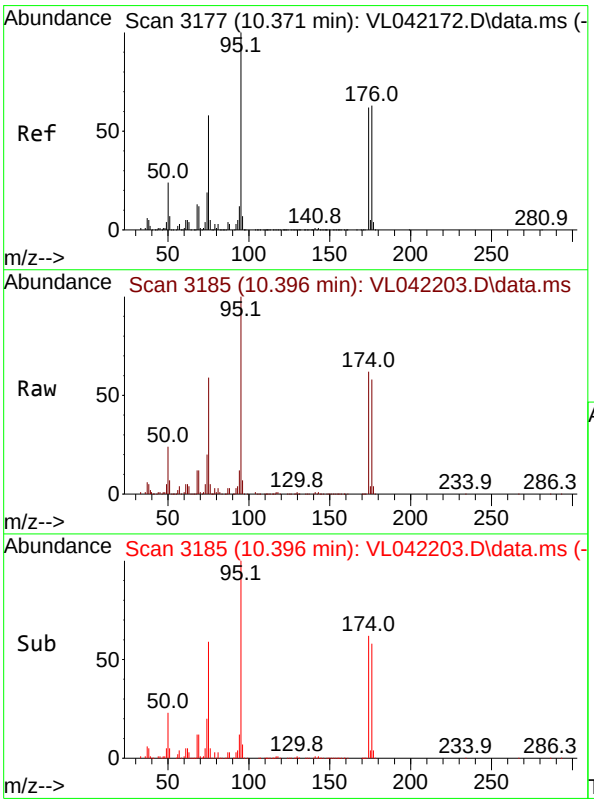
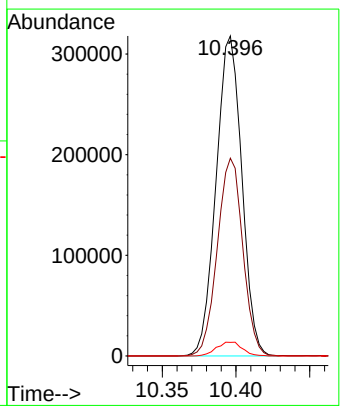
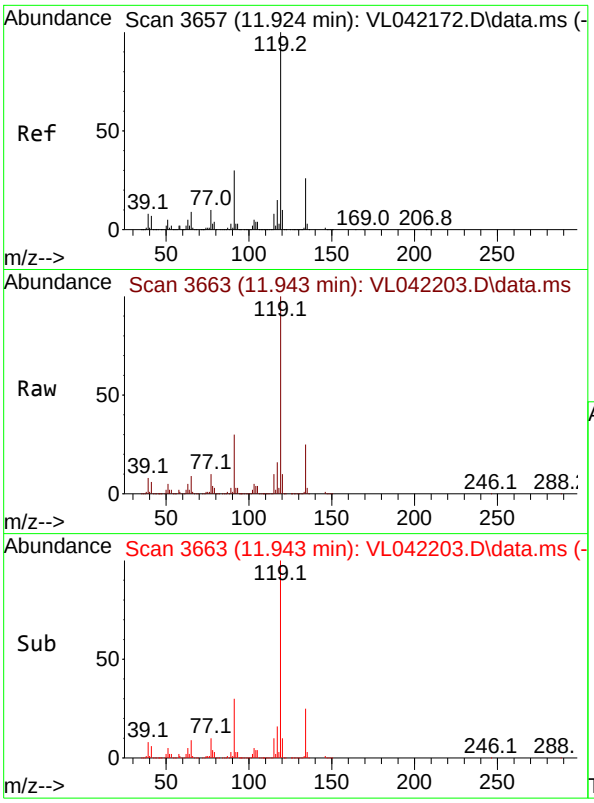


#68
1-Bromo-4-Fluorobenzene
Concen: 10.281 ppbv
RT: 10.396 min Scan# 3185
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 95 Resp: 385330

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.4	3.8	5.6





#69
p-Isopropyltoluene
Concen: 10.362 ppbv
RT: 11.943 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:119 Resp: 111308

Ion	Ratio	Lower	Upper
119	100		
134	25.6	20.4	30.6
91	30.4	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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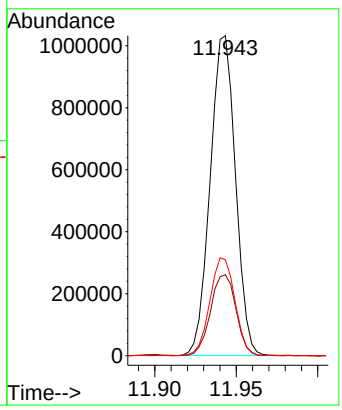
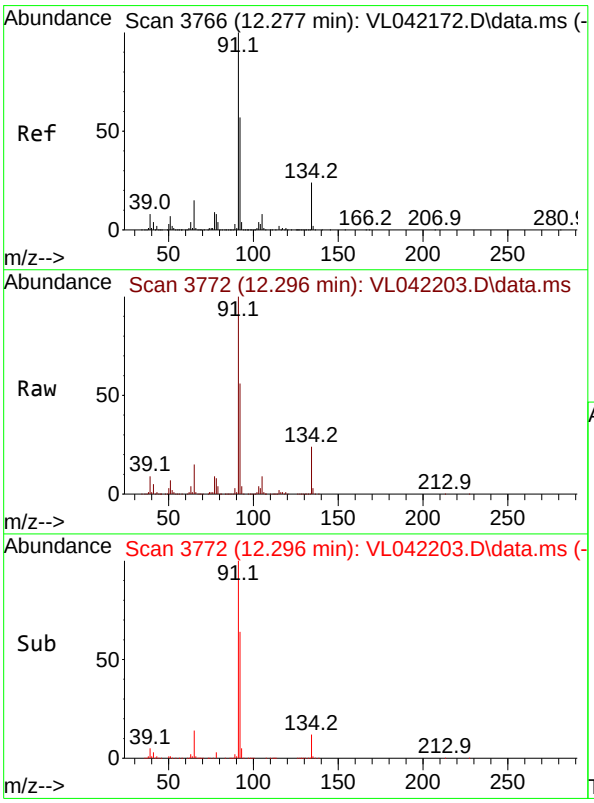
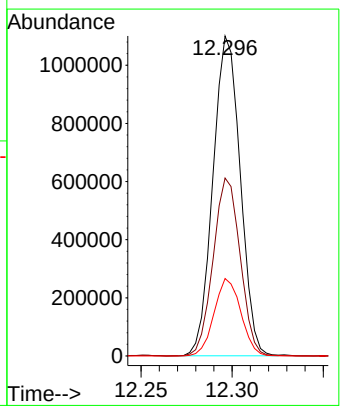


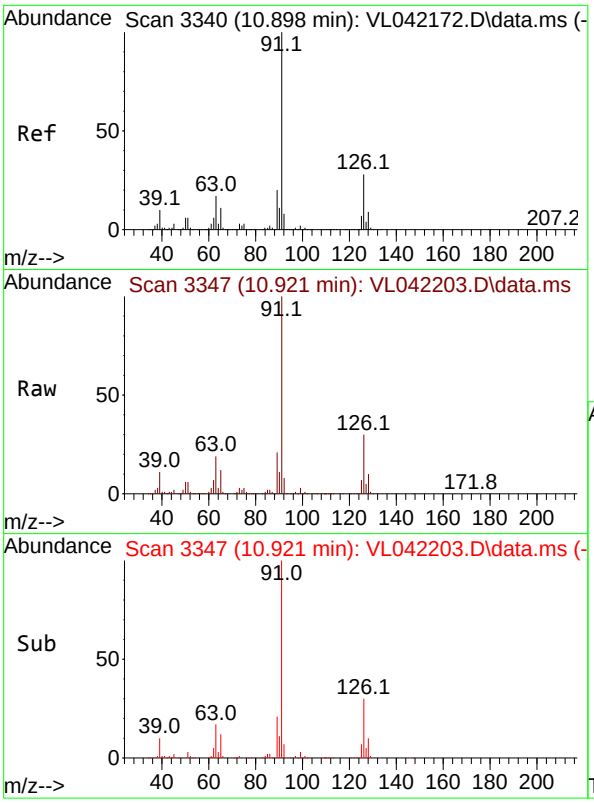


#70
n-Butylbenzene
Concen: 10.422 ppbv
RT: 12.296 min Scan# 3772
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 1144962

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.7	19.2	28.8

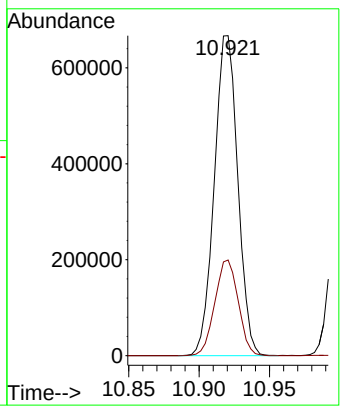




#71
2-Chlorotoluene
Concen: 10.295 ppbv
RT: 10.921 min Scan# 3
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 77542

Ion	Ratio	Lower	Upper
91	100		
126	29.7	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

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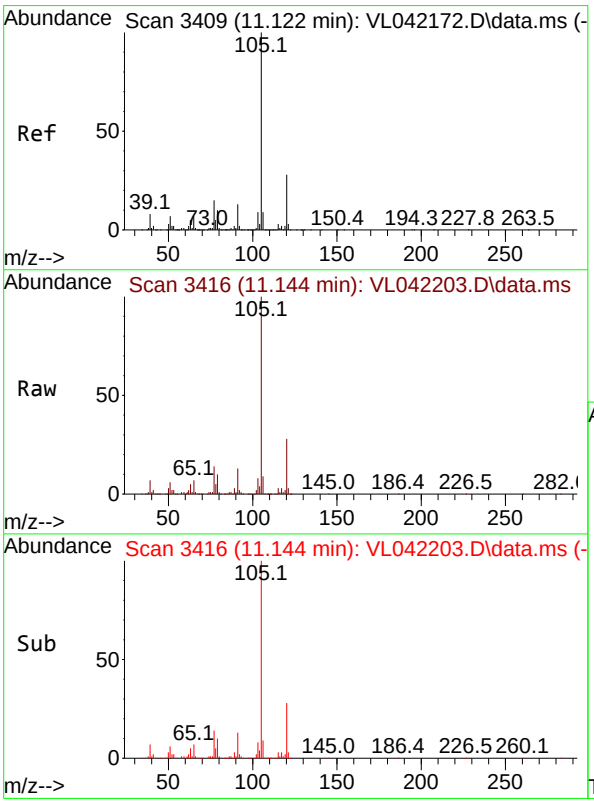
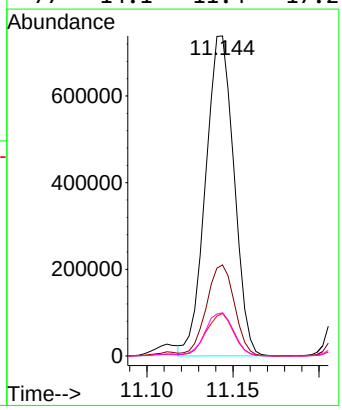
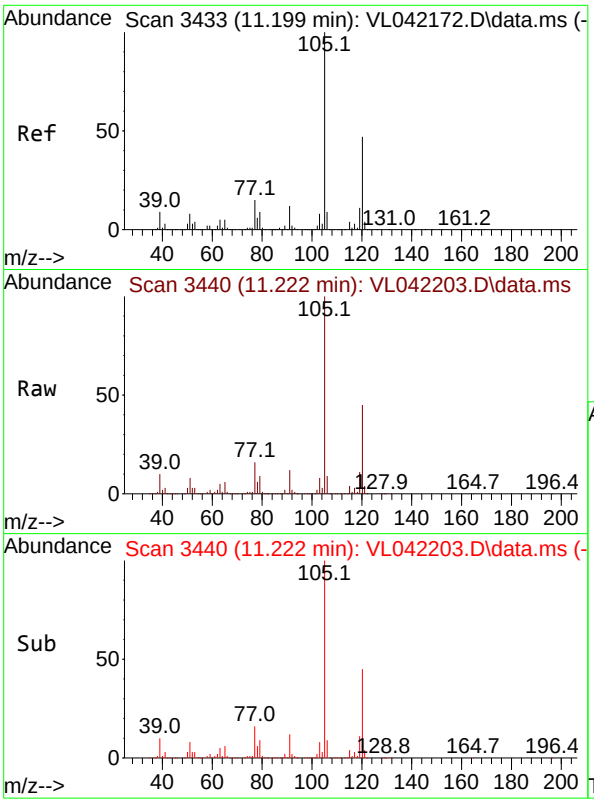


#72
4-Ethyltoluene
Concen: 10.500 ppbv
RT: 11.144 min Scan# 3416
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 848380

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	13.4	10.3	15.5
77	14.1	11.4	17.2

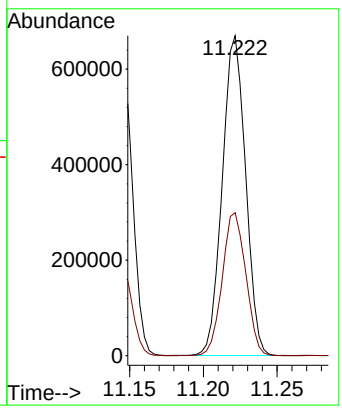




#73
1,3,5-Trimethylbenzene
Concen: 10.441 ppbv
RT: 11.222 min Scan# 34
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 73677

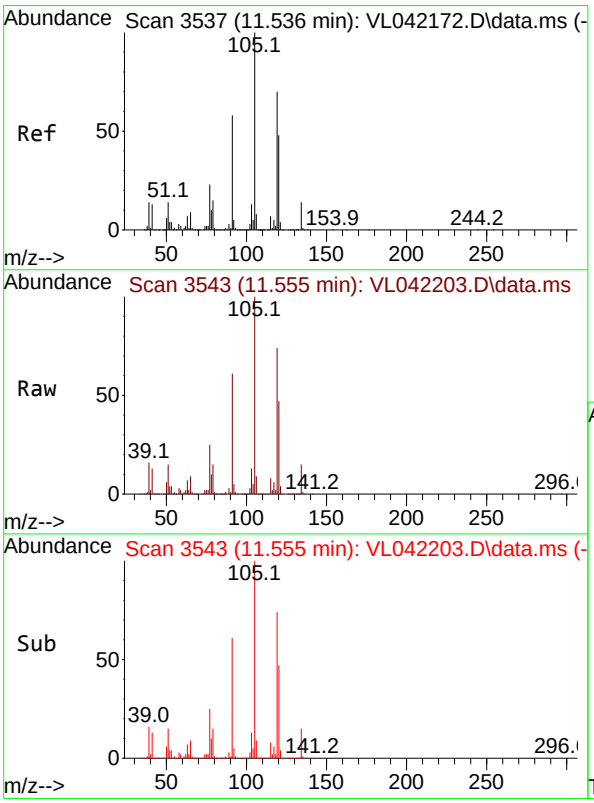
Ion	Ratio	Lower	Upper
105	100		
120	44.7	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
APPROVED

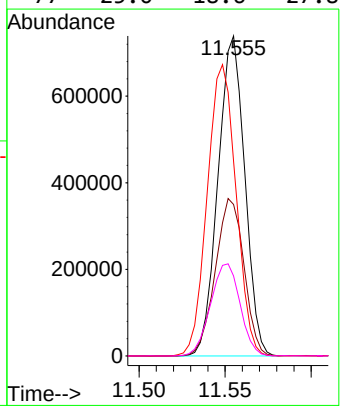
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

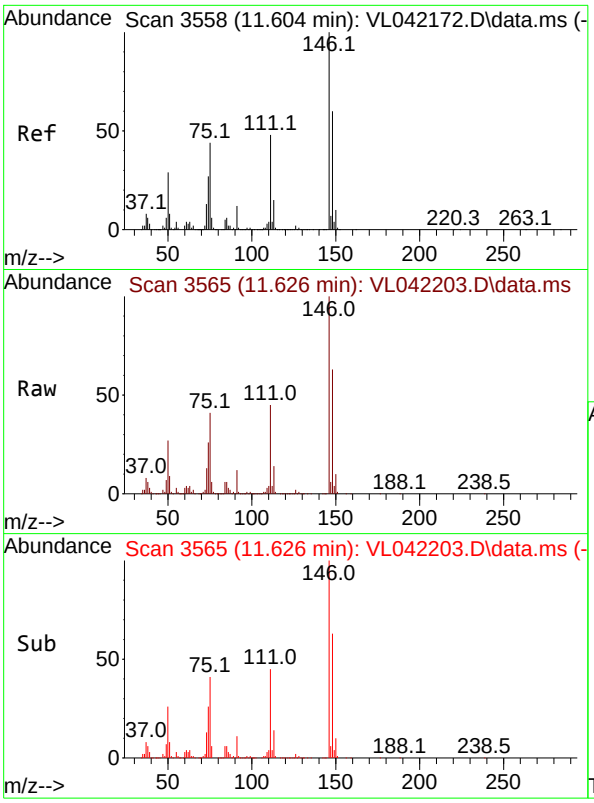


#74
1,2,4-Trimethylbenzene
Concen: 9.841 ppbv
RT: 11.555 min Scan# 3543
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 800063

Ion	Ratio	Lower	Upper
105	100		
120	47.3	38.6	58.0
91	60.8	46.2	69.2
77	25.0	18.6	27.8

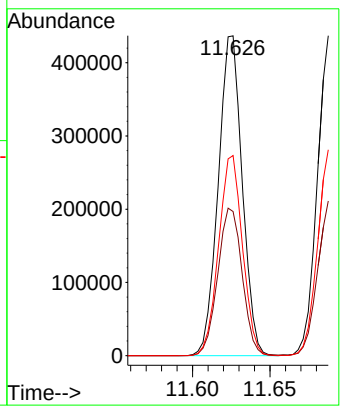




#75
1,3-Dichlorobenzene
Concen: 10.548 ppbv
RT: 11.626 min Scan# 3
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:146 Resp: 47030

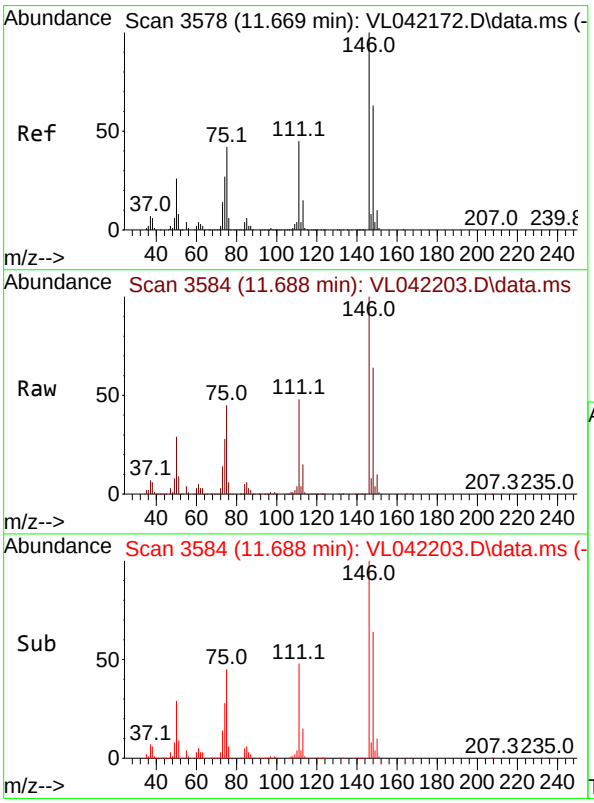
Ion	Ratio	Lower	Upper
146	100		
111	46.9	23.8	71.2
148	62.4	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
APPROVED

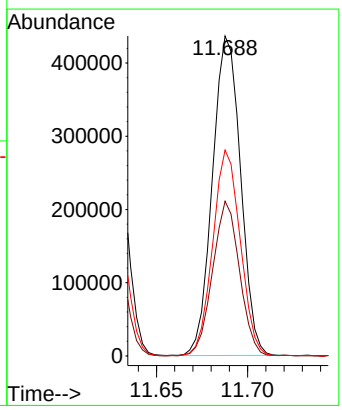
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

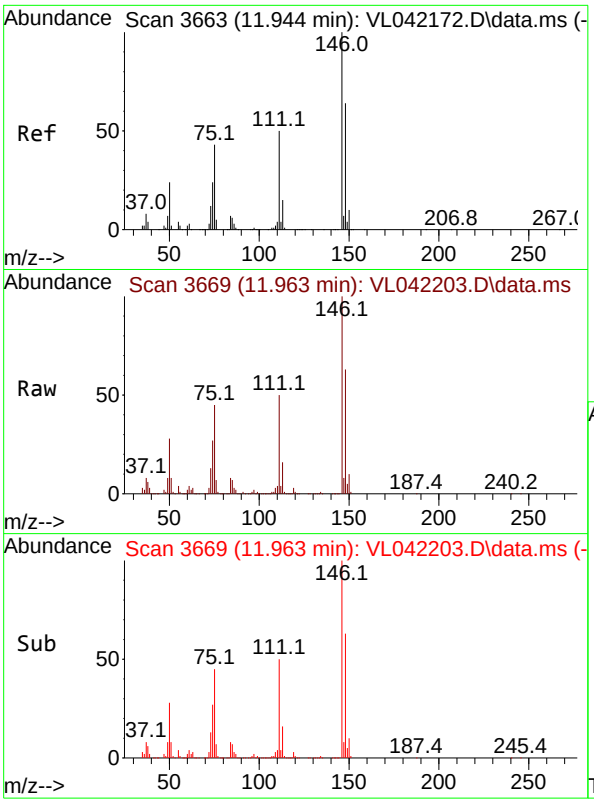


#76
1,4-Dichlorobenzene
Concen: 10.538 ppbv
RT: 11.688 min Scan# 3584
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:146 Resp: 467631

Ion	Ratio	Lower	Upper
146	100		
111	46.6	23.0	69.0
148	63.4	31.9	95.7

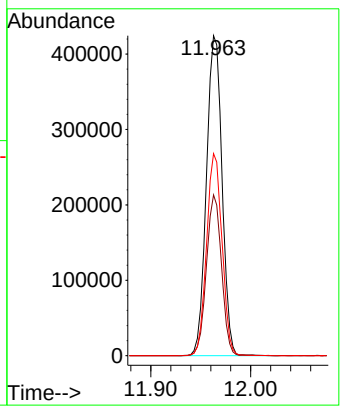




#77
1,2-Dichlorobenzene
Concen: 10.617 ppbv
RT: 11.963 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:146 Resp: 46091

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.8	74.3
148	62.4	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
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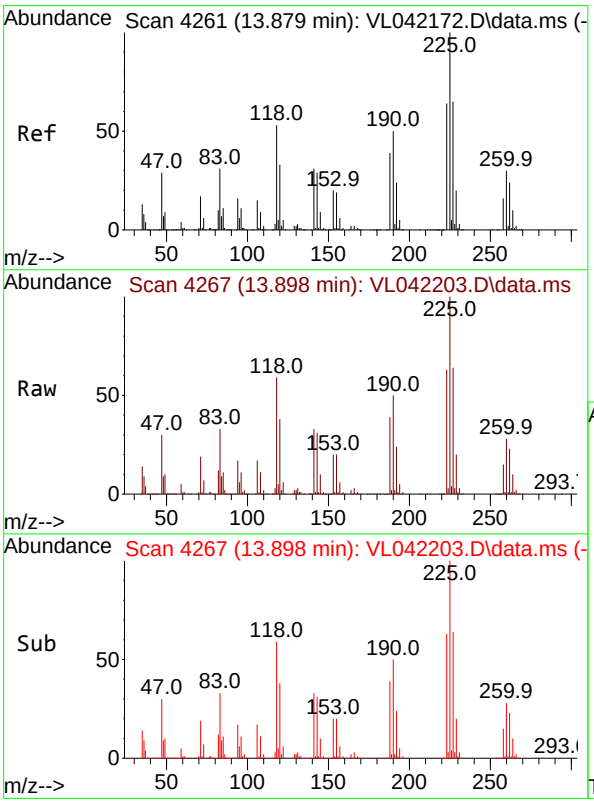
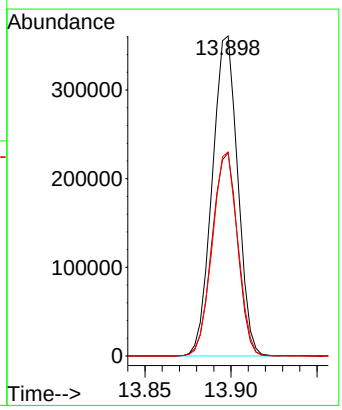
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

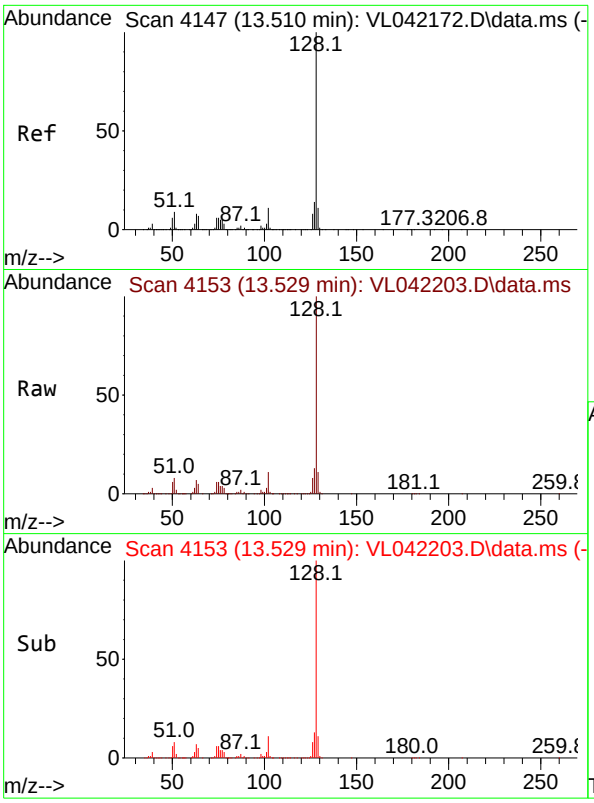


#78
Hexachloro-1,3-Butadiene
Concen: 8.418 ppbv
RT: 13.898 min Scan# 4267
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:225 Resp: 371995

Ion	Ratio	Lower	Upper
225	100		
223	63.6	50.6	76.0
227	63.7	51.2	76.8

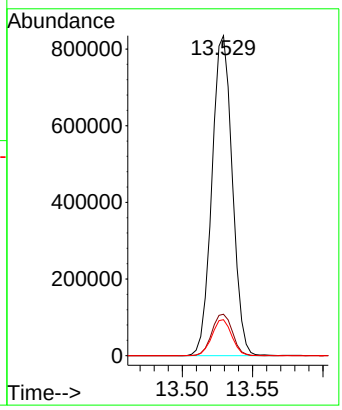




#79
Naphthalene
Concen: 9.455 ppbv
RT: 13.529 min Scan# 4
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:128 Resp: 84076

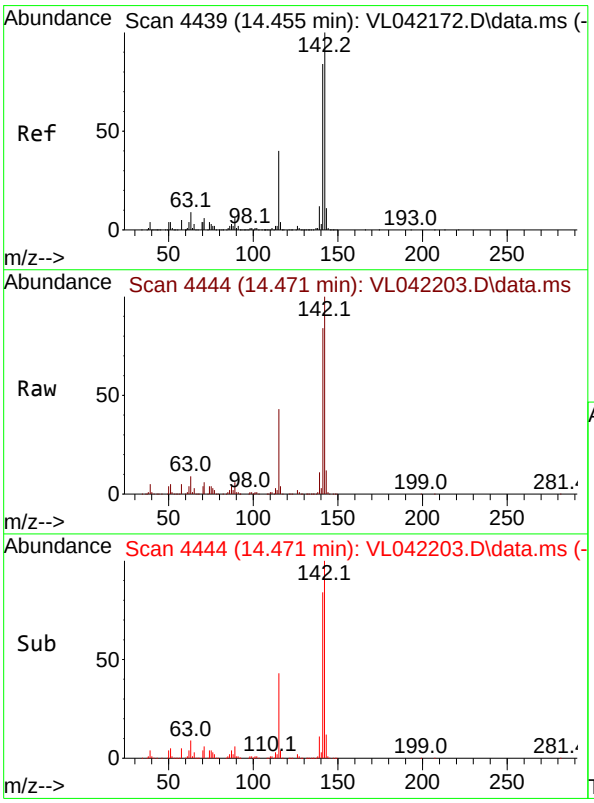
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.8	16.2
129	11.2	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
APPROVED

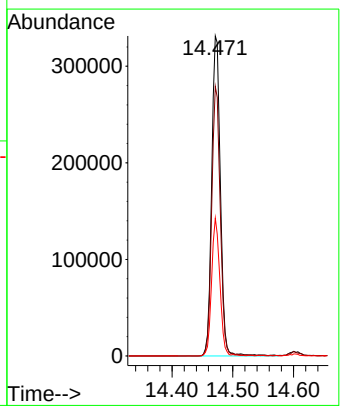
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

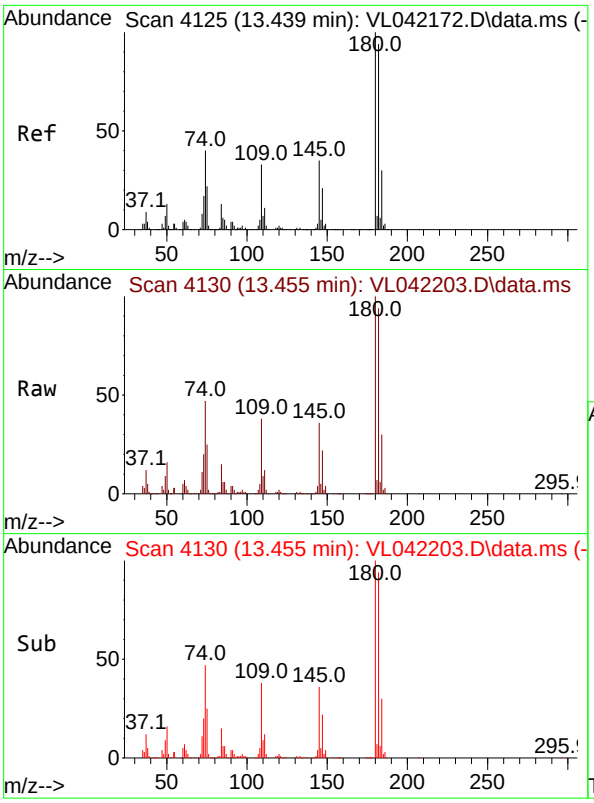


#80
Naphthalene,2-methyl-
Concen: 7.541 ppbv
RT: 14.471 min Scan# 4444
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:142 Resp: 328839

Ion	Ratio	Lower	Upper
142	100		
141	83.3	66.3	99.5
115	41.4	31.6	47.4

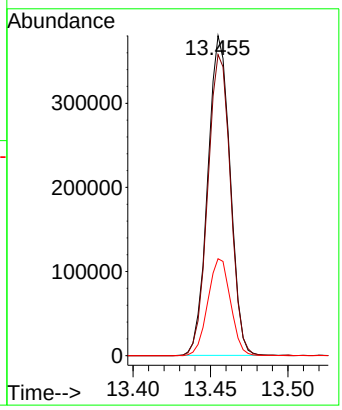




#81
1,2,4-Trichlorobenzene
Concen: 9.313 ppbv
RT: 13.455 min Scan# 4
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:180 Resp: 38198

Ion	Ratio	Lower	Upper
180	100		
182	95.6	75.1	112.7
184	30.8	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042196.D
Acq On : 28 Mar 2025 00:44
Operator : SY/MD
Sample : Q1669-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:20:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	169076	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.956	114	480272	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	439128	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	364412	10.105	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	10520	0.421	ppbv		95
3) Chlorodifluoromethane	1.473	51	8616	0.338	ppbv		93
4) Chloromethane	1.532	50	3735	0.366	ppbv		90
9) Propene	1.483	41	9977	0.854	ppbv		88
10) Heptane	4.982	43	11183m	0.360	ppbv		
11) Trichlorofluoromethane	1.875	101	5375	0.221	ppbv		99
13) Ethanol	1.719	45	64469	58.343	ppbv		85
15) Acetone	1.833	43	856935	36.240	ppbv		98
17) tert-Butyl alcohol	2.043	59	15220	0.517	ppbv	#	91
20) Methylene Chloride	2.059	84	3137	0.356	ppbv		94
26) Hexane	2.826	57	41919	1.768	ppbv	#	34
30) Cyclohexane	3.852	84	3688m	0.179	ppbv		
34) 2-Butanone	2.561	43	32222	0.925	ppbv		99
35) Carbon Tetrachloride	3.758	117	2485	0.066	ppbv		88
36) Benzene	3.652	78	29626	0.622	ppbv	#	88
44) 2,2,4-Trimethylpentane	4.639	57	21092m	0.262	ppbv		
50) 4-Methyl-2-Pentanone	5.772	43	19370m	0.351	ppbv		
53) Toluene	6.933	91	128886	2.284	ppbv		99
58) Ethyl Benzene	9.351	91	21749	0.279	ppbv		97
59) m/p-Xylene	9.526	91	65488	1.051	ppbv		98
60) o-Xylene	9.963	91	30665	0.491	ppbv		93
61) Styrene	9.866	104	3531	0.114	ppbv		97
73) 1,3,5-Trimethylbenzene	11.199	105	10625	0.156	ppbv		87
74) 1,2,4-Trimethylbenzene	11.536	105	38101	0.487	ppbv	#	69

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

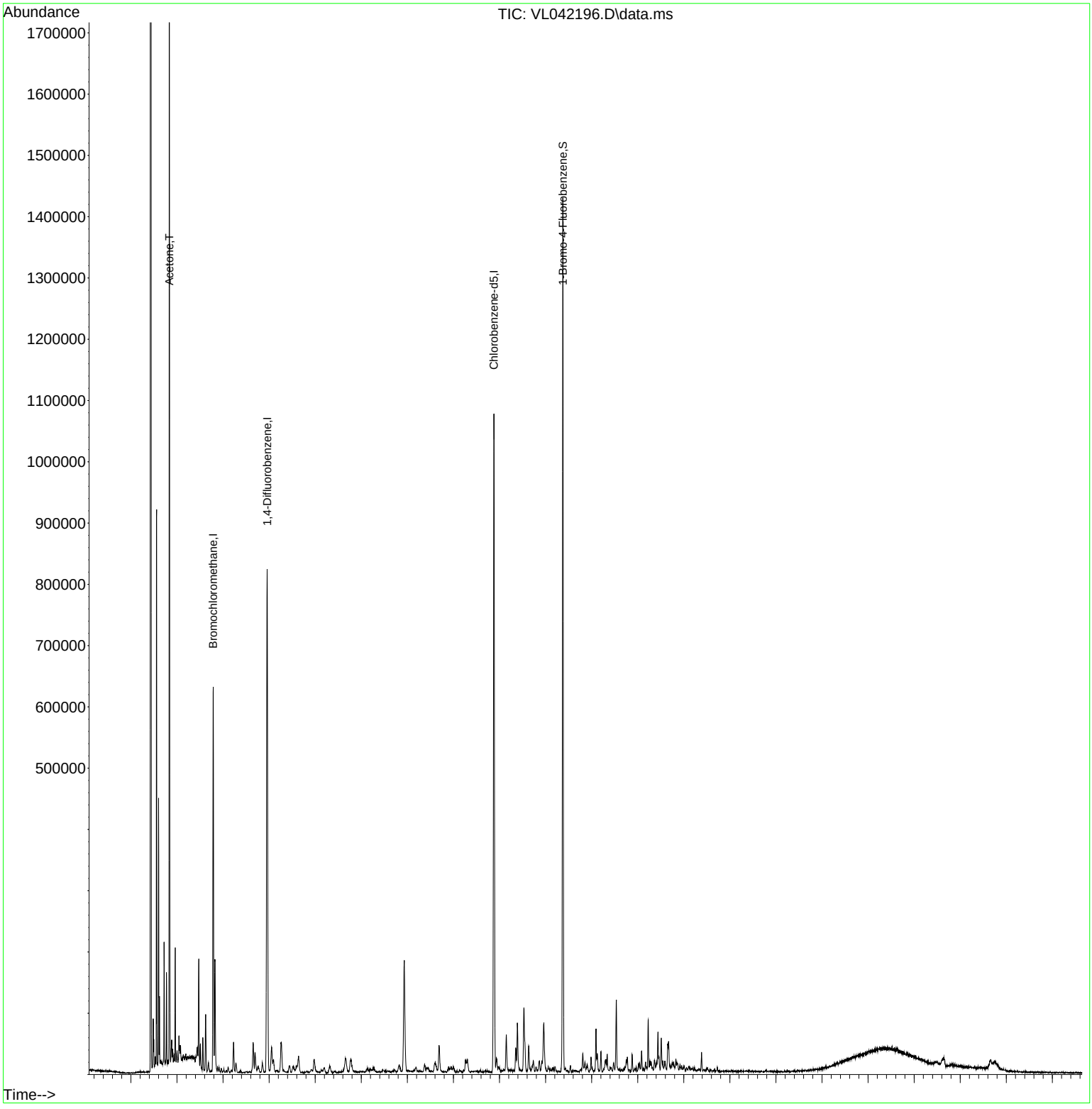
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042196.D
Acq On : 28 Mar 2025 00:44
Operator : SY/MD
Sample : Q1669-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

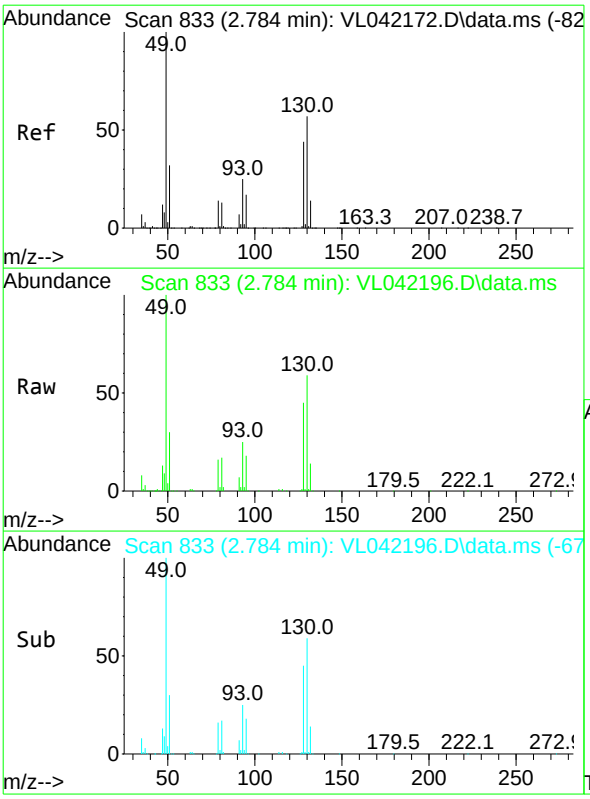
Quant Time: Mar 28 02:20:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

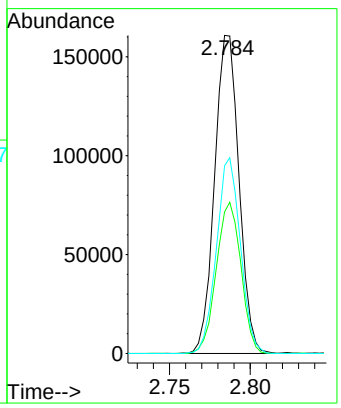




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 49 Resp: 169076

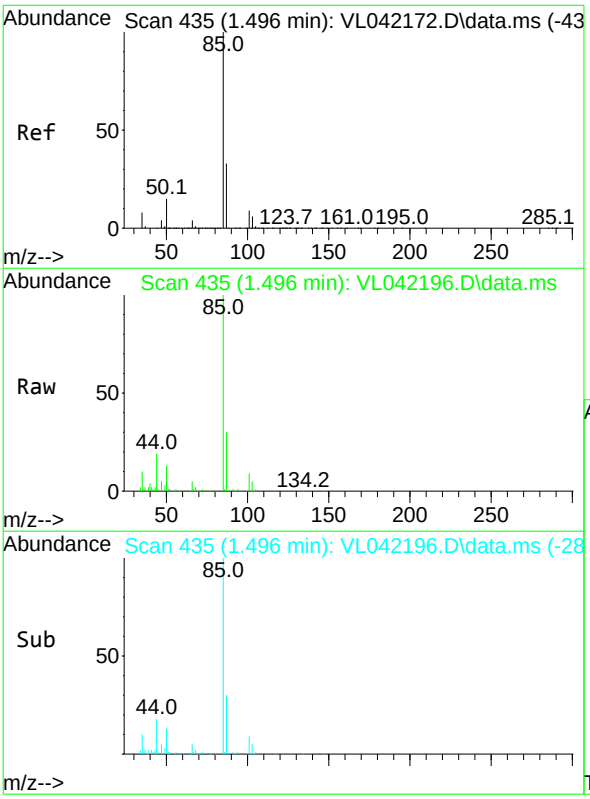
Ion	Ratio	Lower	Upper
49	100		
128	48.0	22.9	68.5
130	60.4	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Manual Integrations
APPROVED

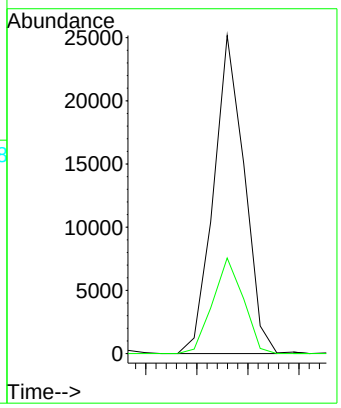
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

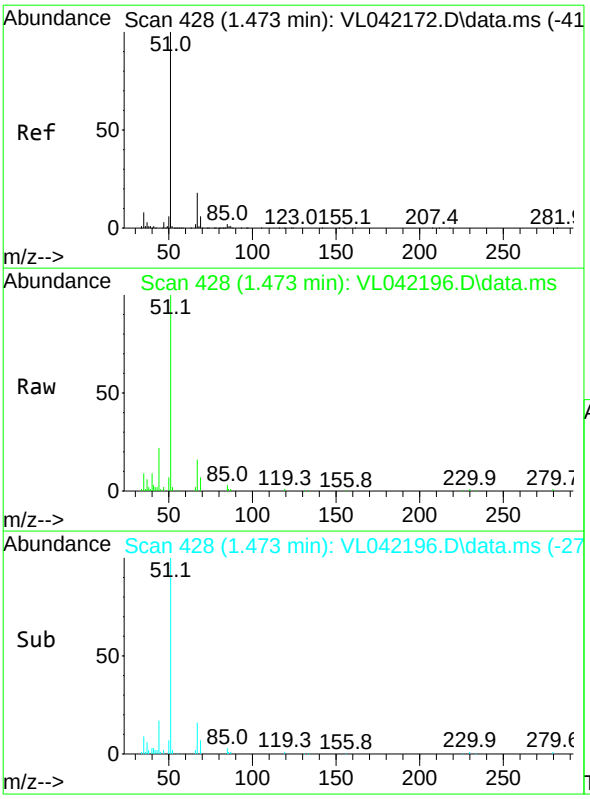


#2
Dichlorodifluoromethane
Concen: 0.421 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 85 Resp: 10520

Ion	Ratio	Lower	Upper
85	100		
87	30.1	26.1	39.1

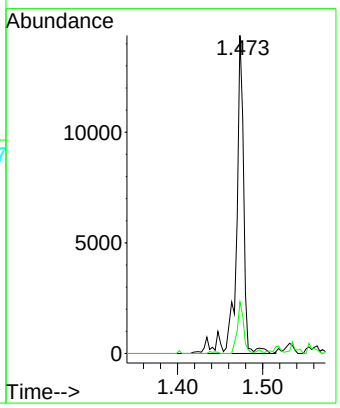




#3
Chlorodifluoromethane
Concen: 0.338 ppbv
RT: 1.473 min Scan# 42
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 51 Resp: 8616

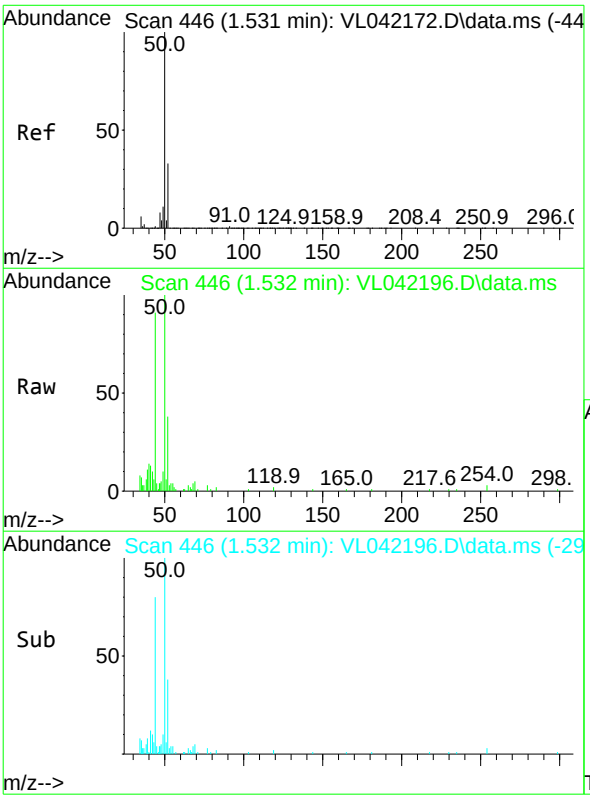
Ion	Ratio	Lower	Upper
51	100		
67	15.8	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Manual Integrations
APPROVED

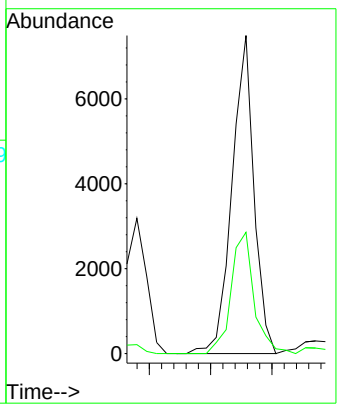
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

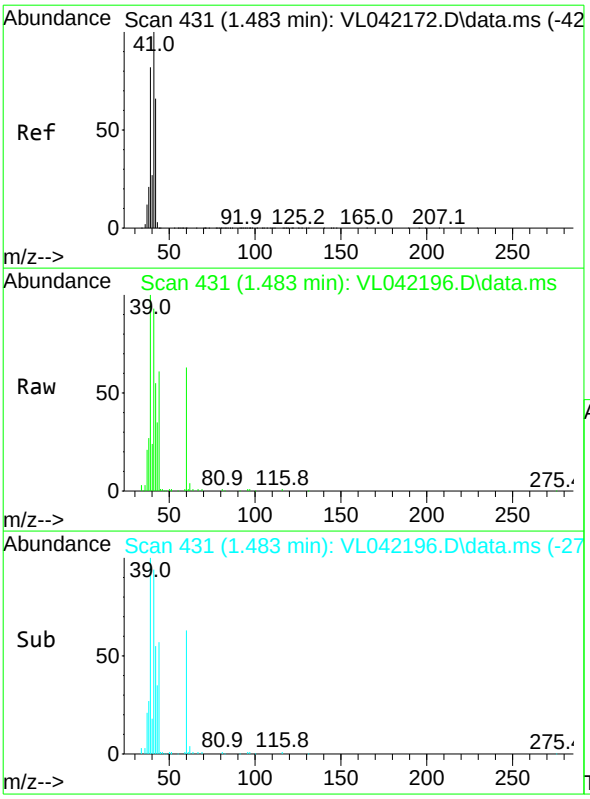


#4
Chloromethane
Concen: 0.366 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 50 Resp: 3735

Ion	Ratio	Lower	Upper
50	100		
52	38.1	26.1	39.1

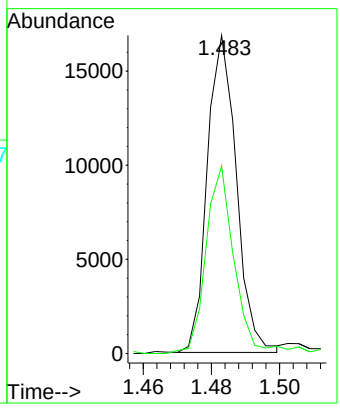




#9
Propene
Concen: 0.854 ppbv
RT: 1.483 min Scan# 43
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 41 Resp: 9977

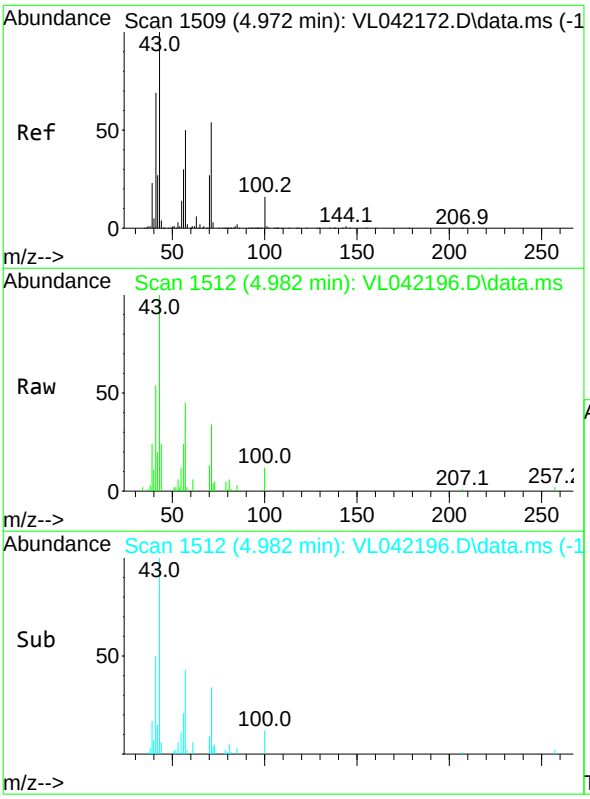
Ion	Ratio	Lower	Upper
41	100		
42	59.7	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Manual Integrations
APPROVED

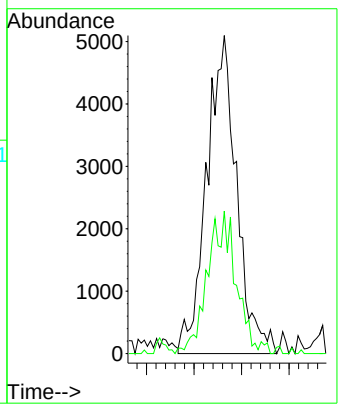
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

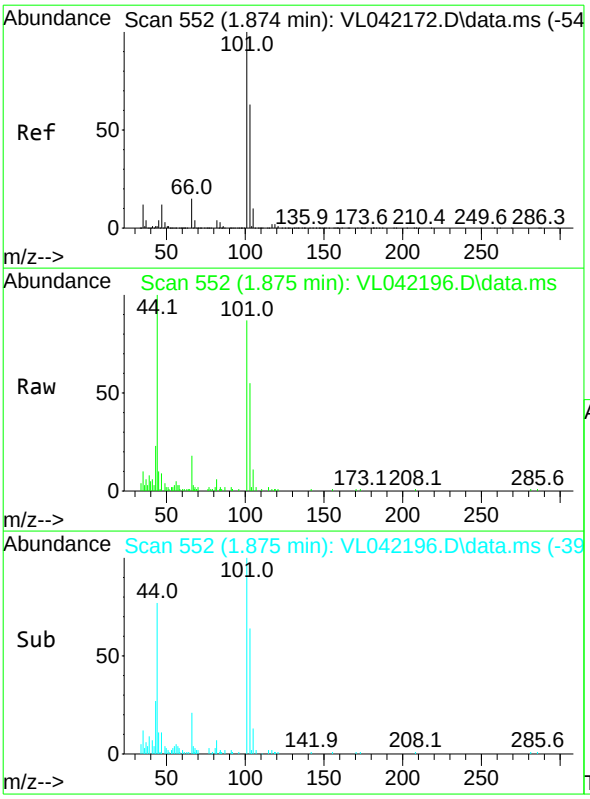


#10
Heptane
Concen: 0.360 ppbv m
RT: 4.982 min Scan# 1512
Delta R.T. 0.010 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 11183

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

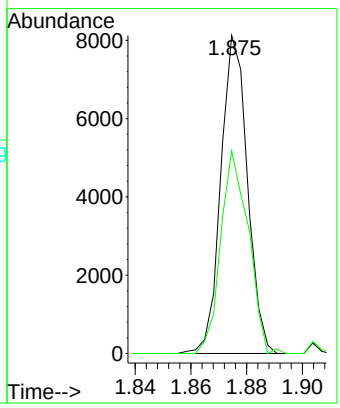




#11
Trichlorofluoromethane
Concen: 0.221 ppbv
RT: 1.875 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:101 Resp: 5375

Ion	Ratio	Lower	Upper
101	100		
103	63.7	50.2	75.2



Instrument :
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ClientSampleId :
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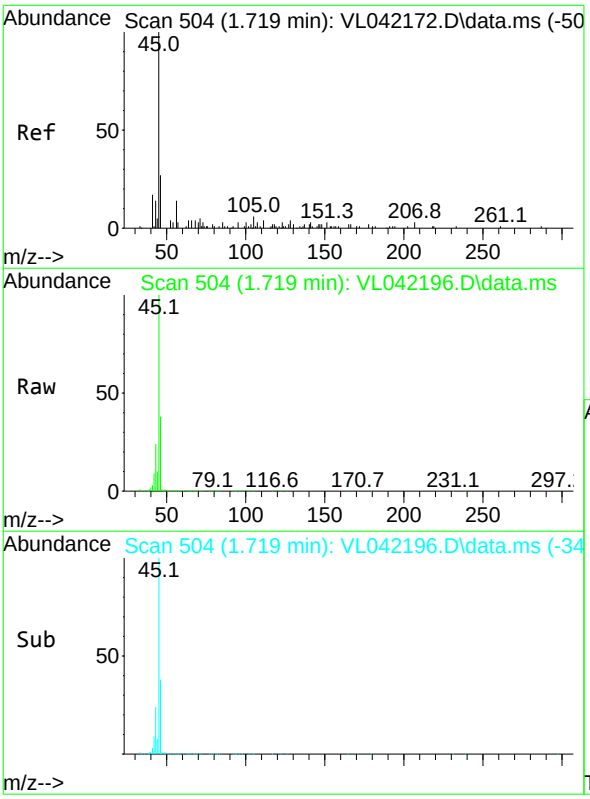
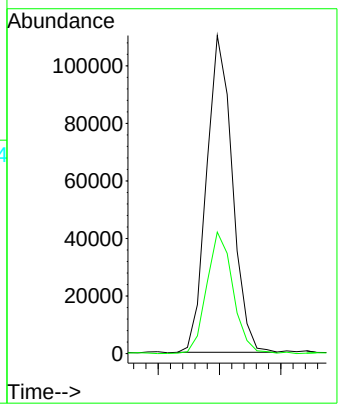
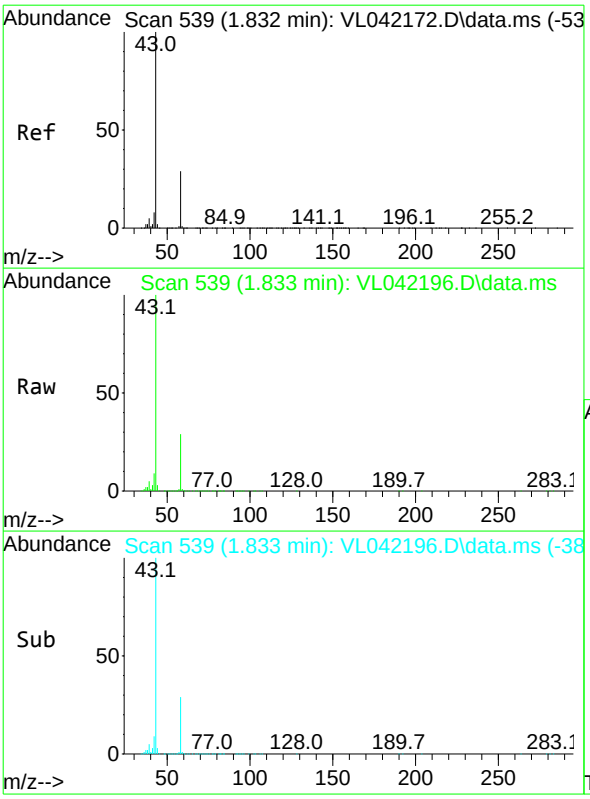


#13
Ethanol
Concen: 58.343 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 45 Resp: 64469

Ion	Ratio	Lower	Upper
45	100		
46	40.2	20.2	80.8

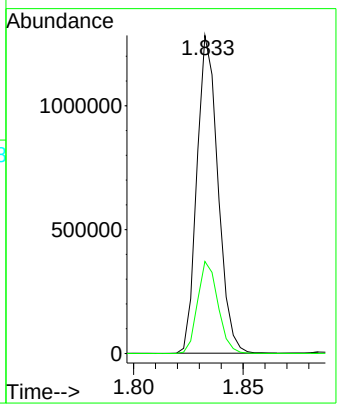




#15
Acetone
Concen: 36.240 ppbv
RT: 1.833 min Scan# 53
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 856935

Ion	Ratio	Lower	Upper
43	100		
58	28.2	23.2	34.8



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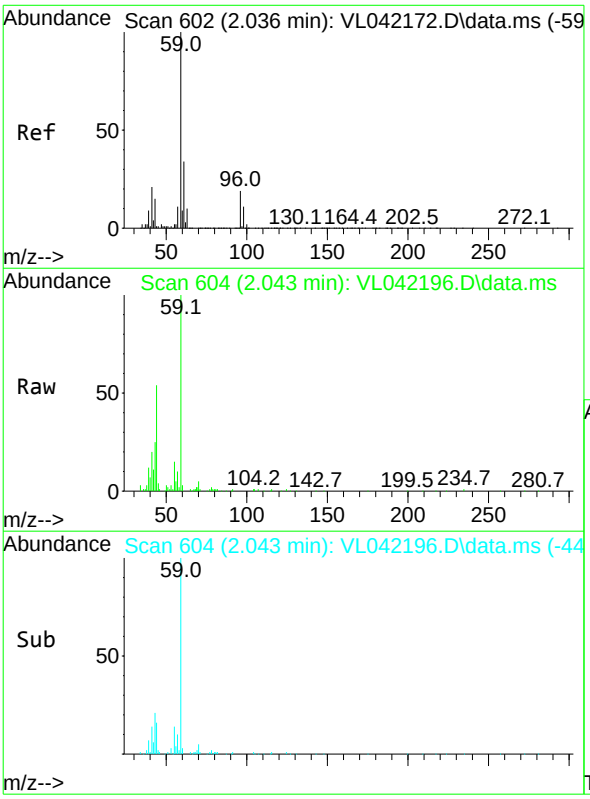
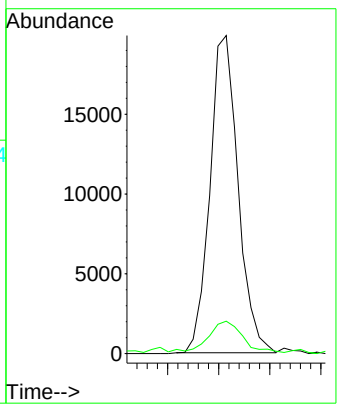
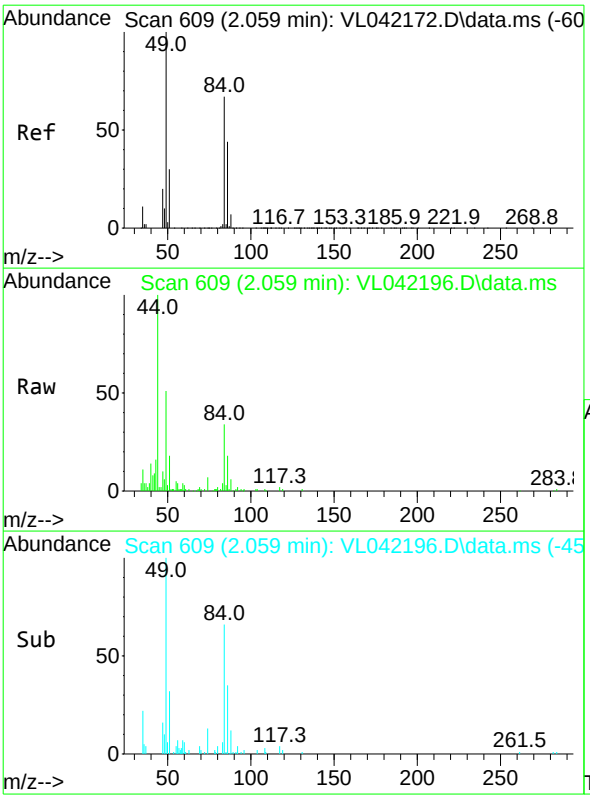


#17
tert-Butyl alcohol
Concen: 0.517 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 59 Resp: 15220

Ion	Ratio	Lower	Upper
59	100		
57	14.7	8.9	13.3#

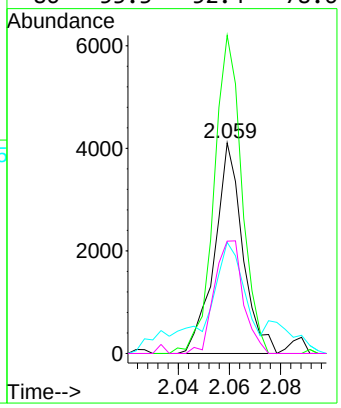




#20
Methylene Chloride
Concen: 0.356 ppbv
RT: 2.059 min Scan# 60
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 84 Resp: 3137

Ion	Ratio	Lower	Upper
84	100		
49	151.0	120.2	180.4
51	39.1	37.4	56.0
86	53.3	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
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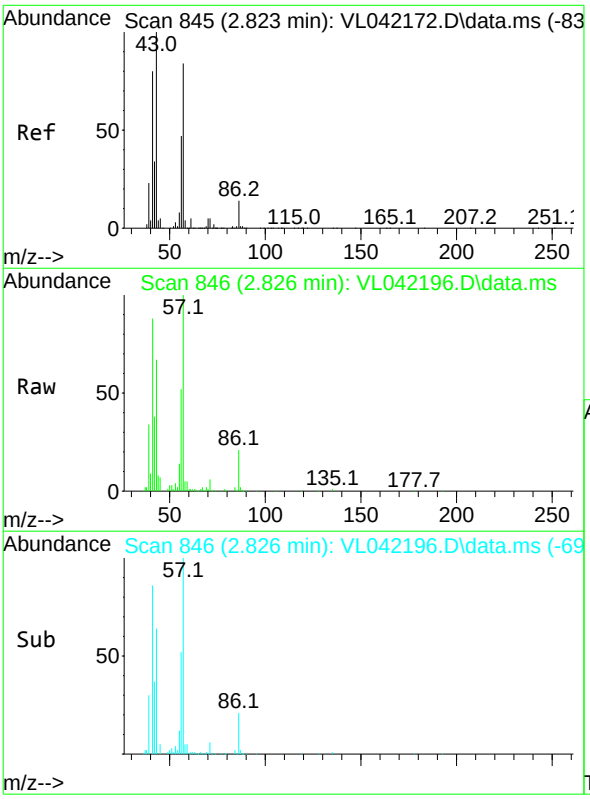
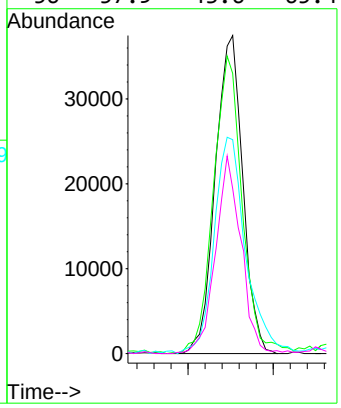
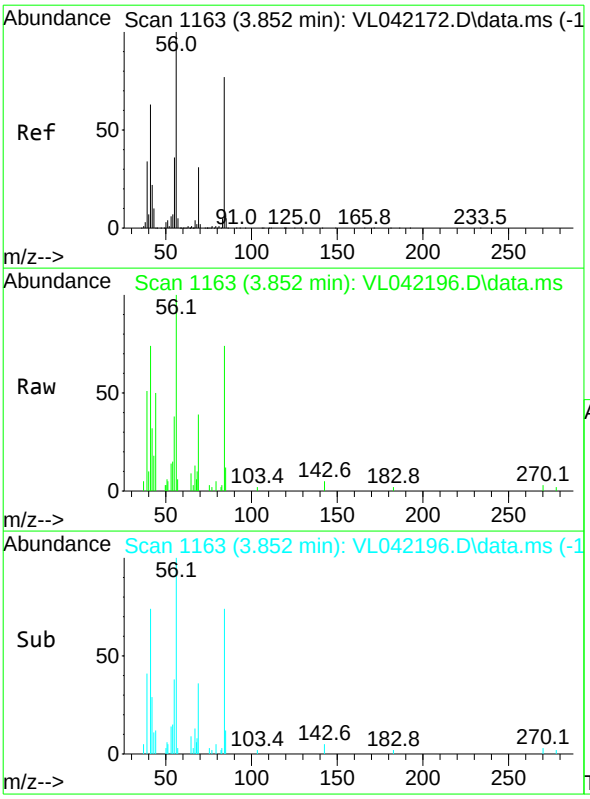


#26
Hexane
Concen: 1.768 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 57 Resp: 41919

Ion	Ratio	Lower	Upper
57	100		
41	99.1	76.6	114.8
43	78.9	207.8	311.8#
56	57.9	43.6	65.4





#30
Cyclohexane
Concen: 0.179 ppbv m
RT: 3.852 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 84 Resp: 3688

Ion	Ratio	Lower	Upper
84	100		
56	141.8	102.8	154.2
41	140.3	66.5	99.7#

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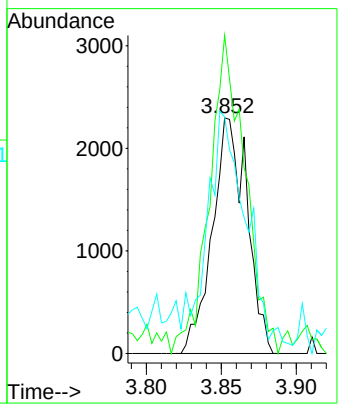
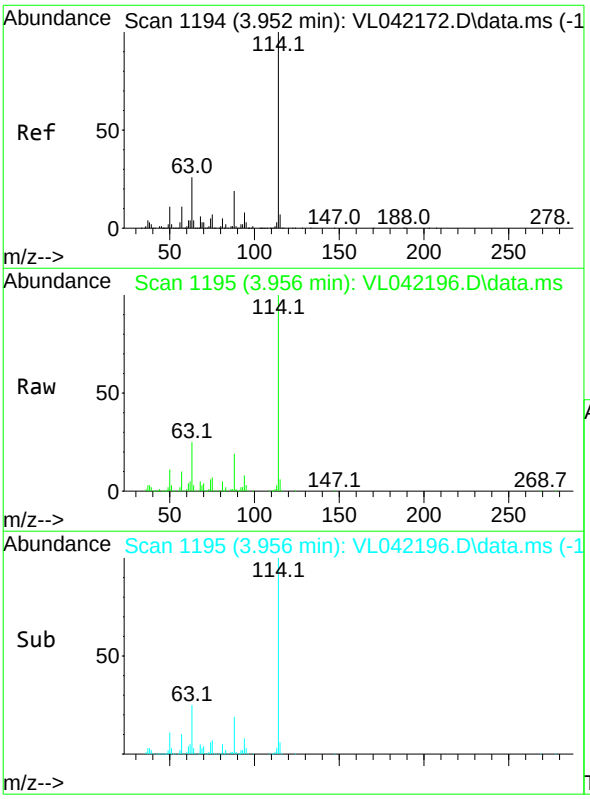
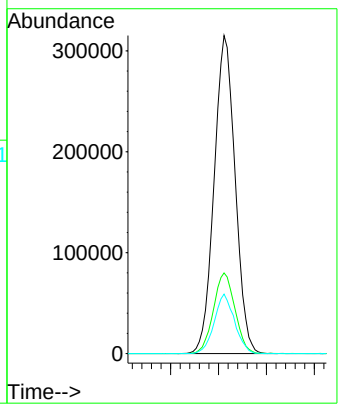


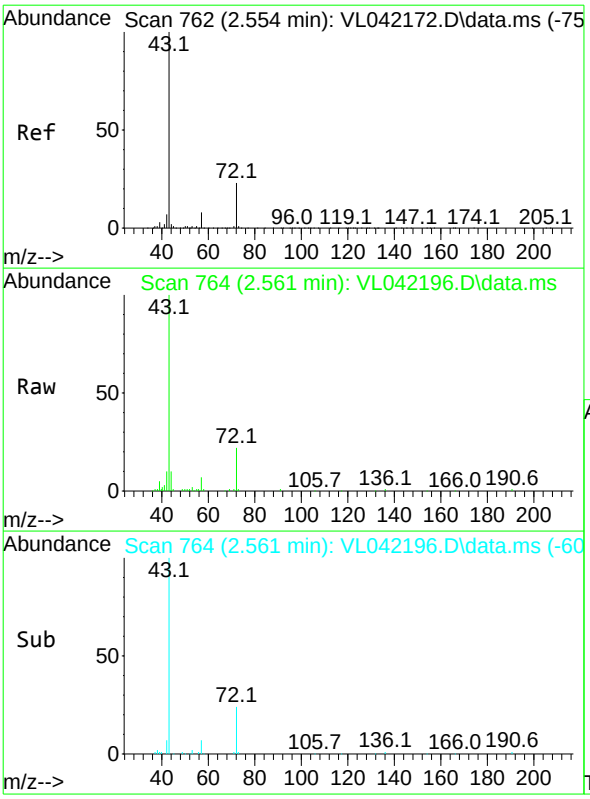


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:114 Resp: 480272

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.0	15.0	22.4

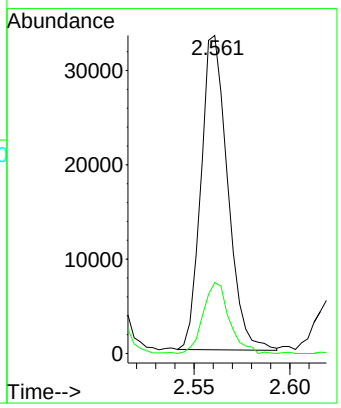




#34
2-Butanone
Concen: 0.925 ppbv
RT: 2.561 min Scan# 76
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 32222

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2



Instrument :
MSVOA_L
ClientSampleId :
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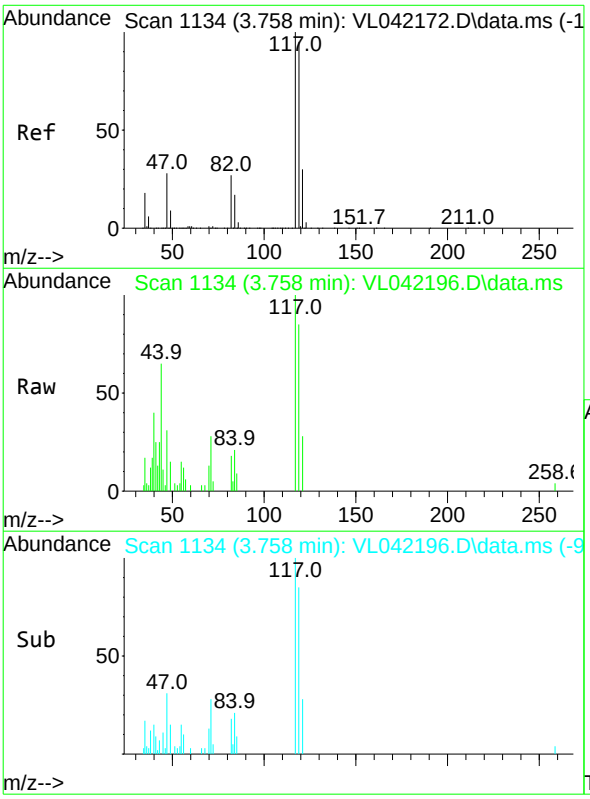
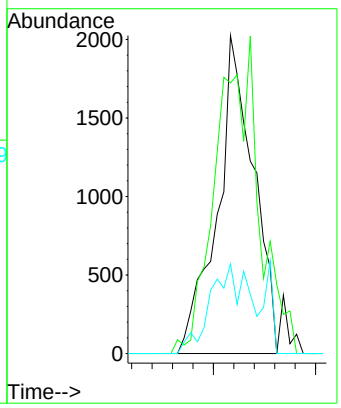
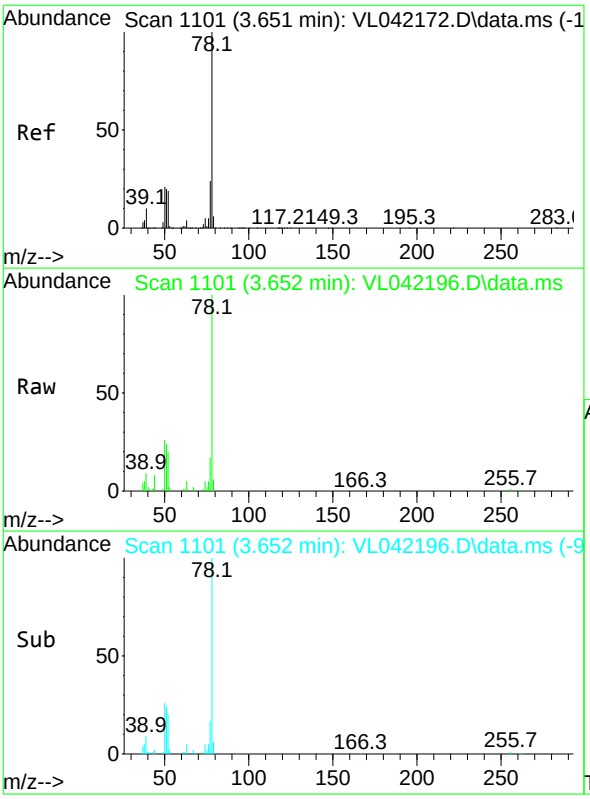


#35
Carbon Tetrachloride
Concen: 0.066 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:117 Resp: 2485

Ion	Ratio	Lower	Upper
117	100		
119	80.7	76.2	114.2
121	28.2	24.2	36.4

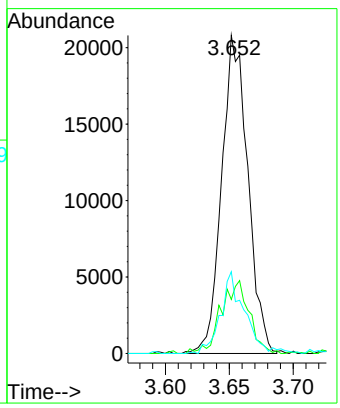




#36
Benzene
Concen: 0.622 ppbv
RT: 3.652 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 78 Resp: 29626

Ion	Ratio	Lower	Upper
78	100		
77	17.0	19.1	28.7#
50	25.7	16.6	24.8#



Instrument :
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ClientSampleId :
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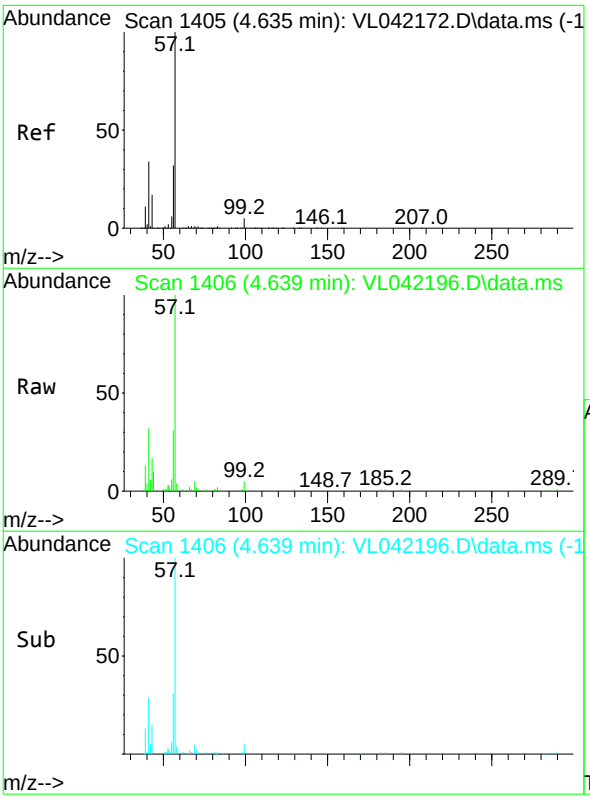
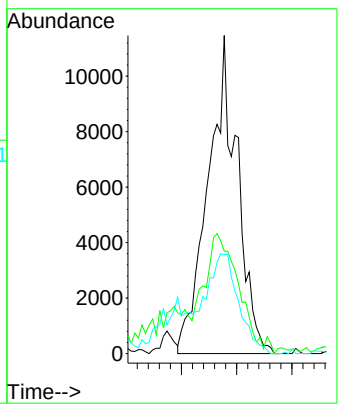
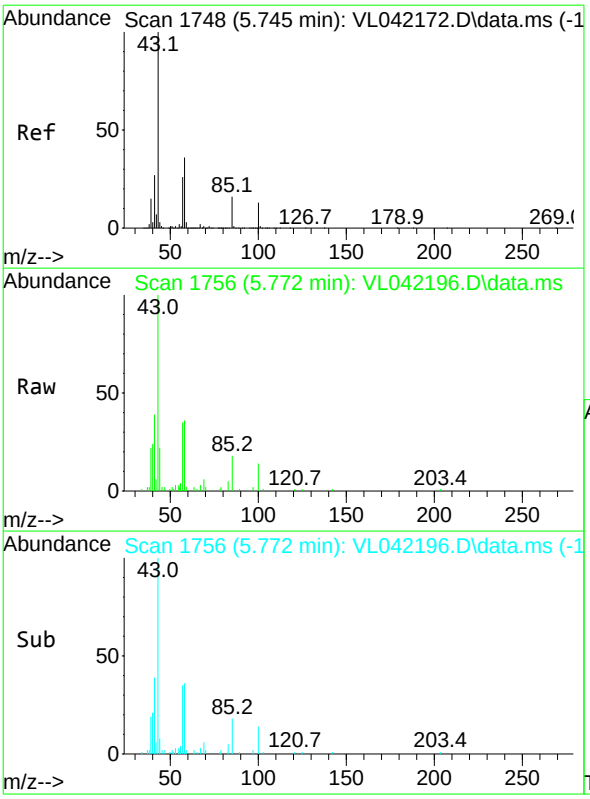


#44
2,2,4-Trimethylpentane
Concen: 0.262 ppbv m
RT: 4.639 min Scan# 1406
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 57 Resp: 21092

Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.8	40.2#
56	0.0	25.6	38.4#

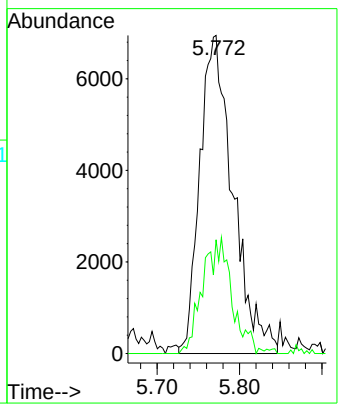




#50
4-Methyl-2-Pentanone
Concen: 0.351 ppbv m
RT: 5.772 min Scan# 17
Delta R.T. 0.026 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 19370

Ion	Ratio	Lower	Upper
43	100		
58	32.6	29.0	43.6



Instrument :
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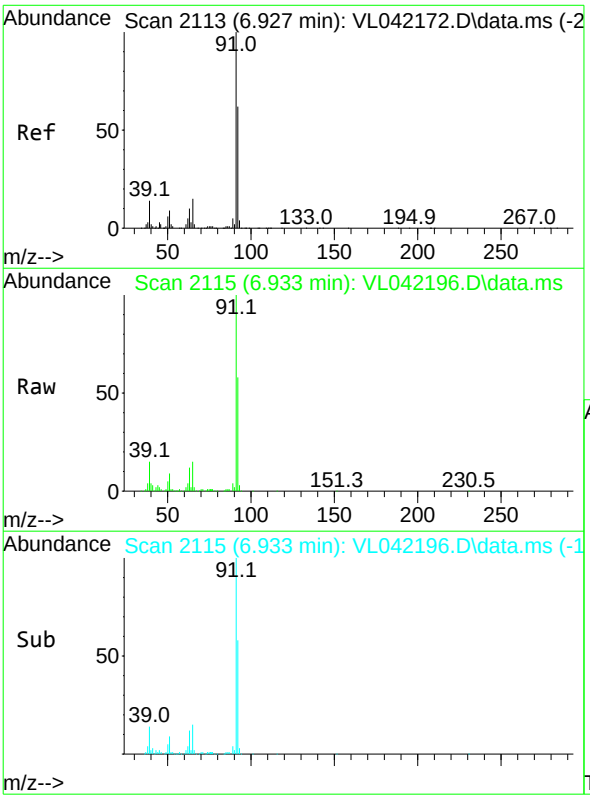
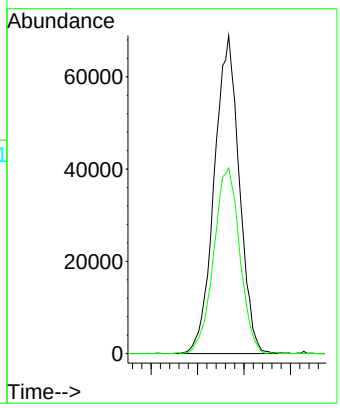
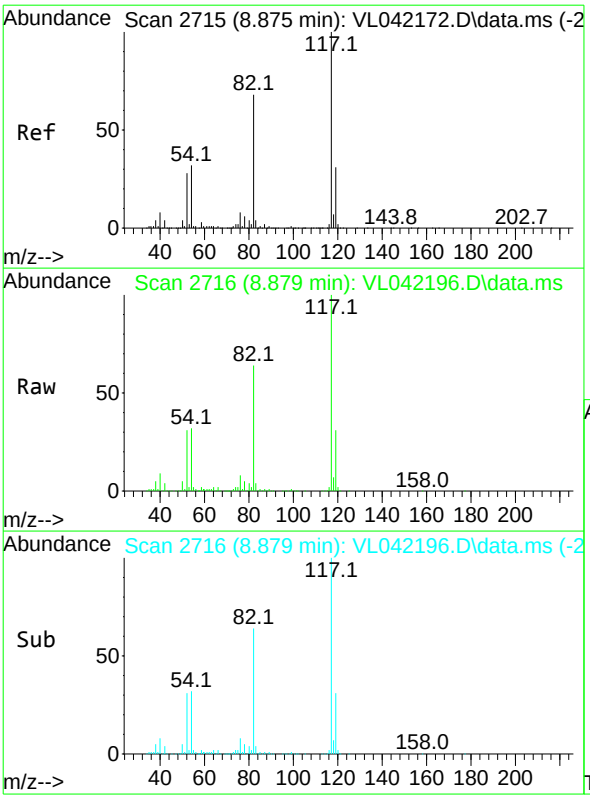


#53
Toluene
Concen: 2.284 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 91 Resp: 128886

Ion	Ratio	Lower	Upper
91	100		
92	61.0	48.4	72.6

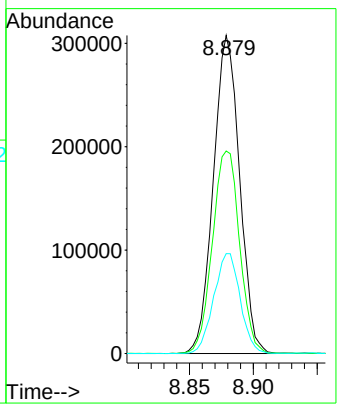




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:117 Resp: 439128

Ion	Ratio	Lower	Upper
117	100		
82	66.0	55.8	83.6
119	31.7	25.5	38.3



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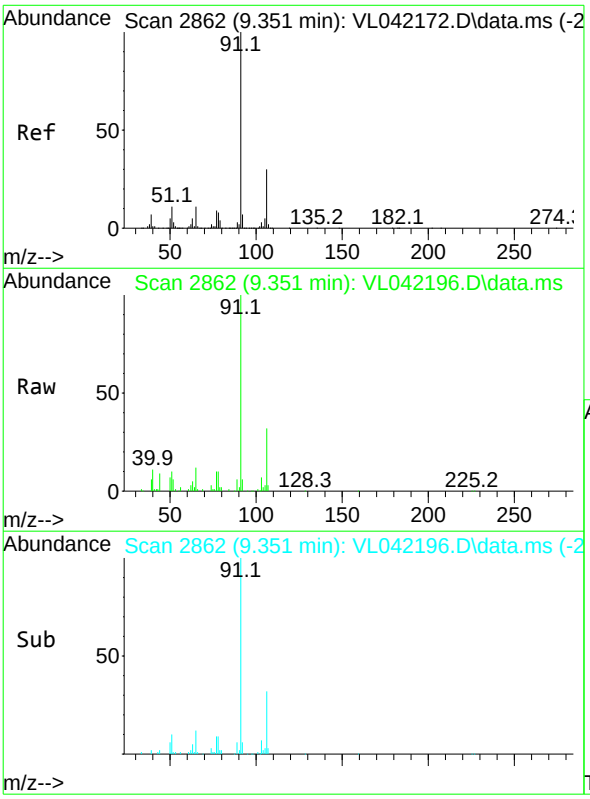
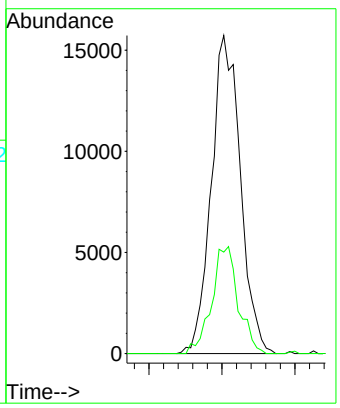
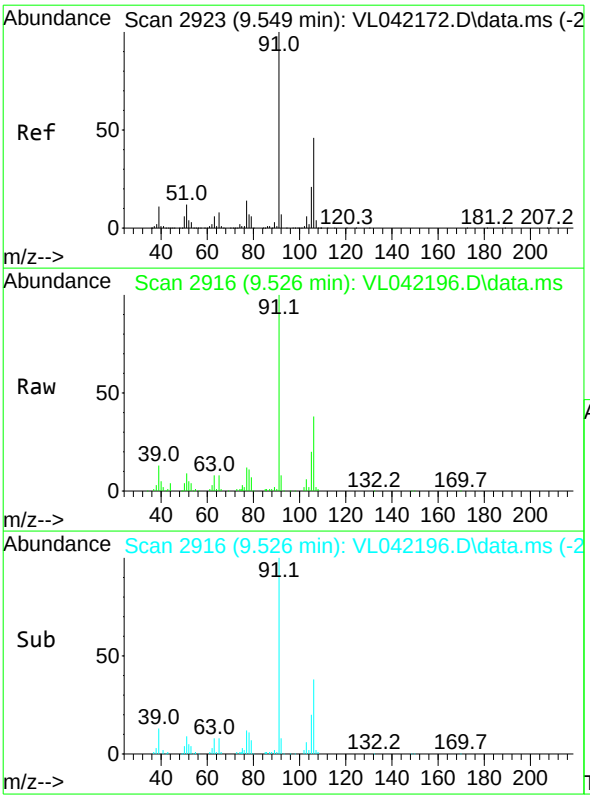


#58
Ethyl Benzene
Concen: 0.279 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 91 Resp: 21749

Ion	Ratio	Lower	Upper
91	100		
106	31.9	24.2	36.2

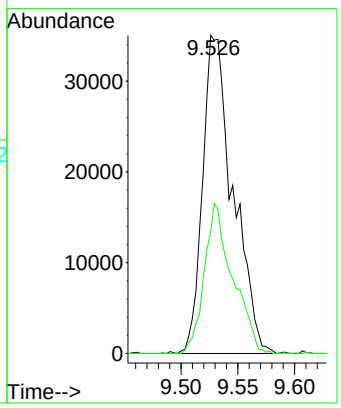




#59
m/p-Xylene
Concen: 1.051 ppbv
RT: 9.526 min Scan# 29
Delta R.T. -0.022 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 91 Resp: 65488

Ion	Ratio	Lower	Upper
91	100		
106	43.9	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
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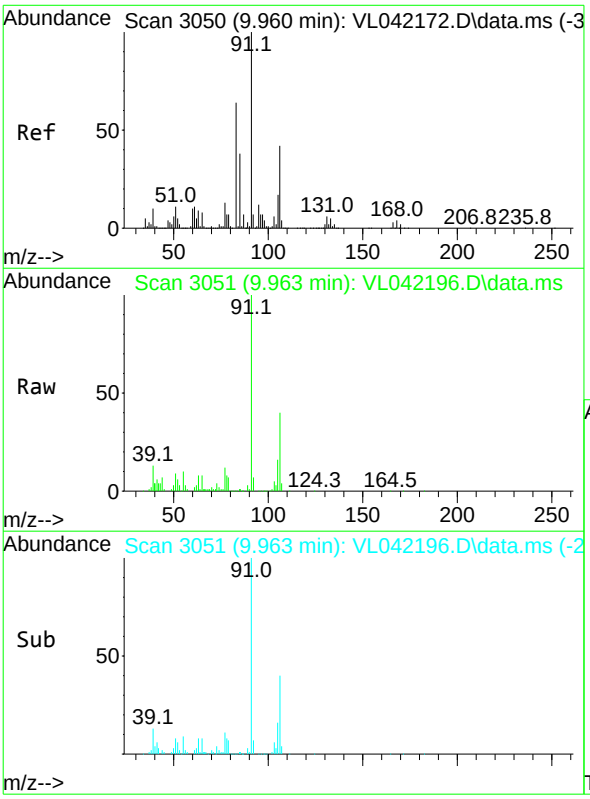
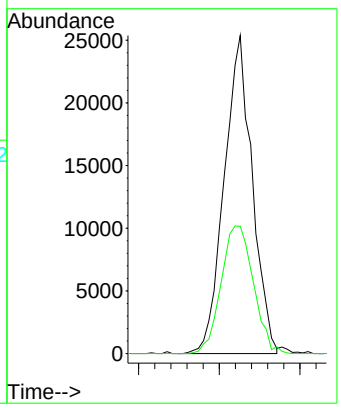
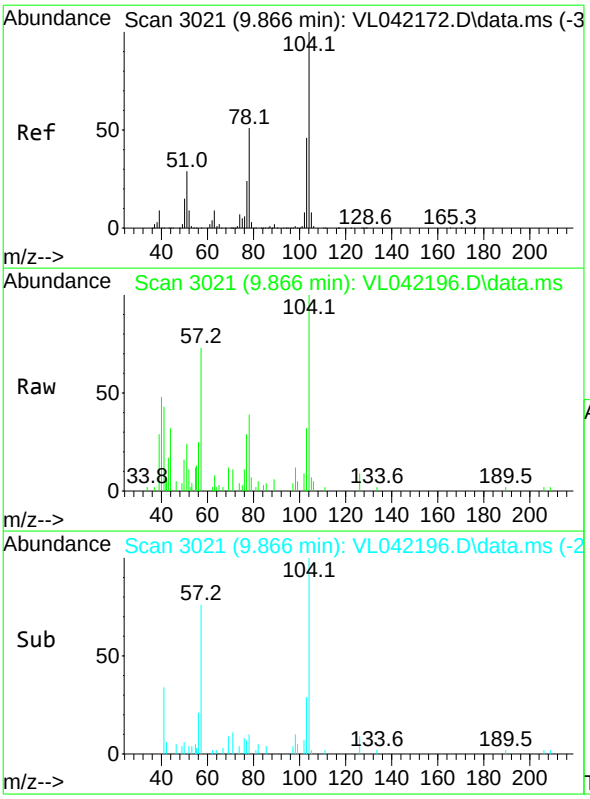


#60
o-Xylene
Concen: 0.491 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 91 Resp: 30665

Ion	Ratio	Lower	Upper
91	100		
106	46.1	20.8	62.5

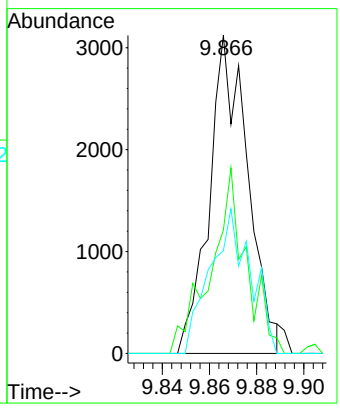




#61
Styrene
Concen: 0.114 ppbv
RT: 9.866 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:104 Resp: 3531

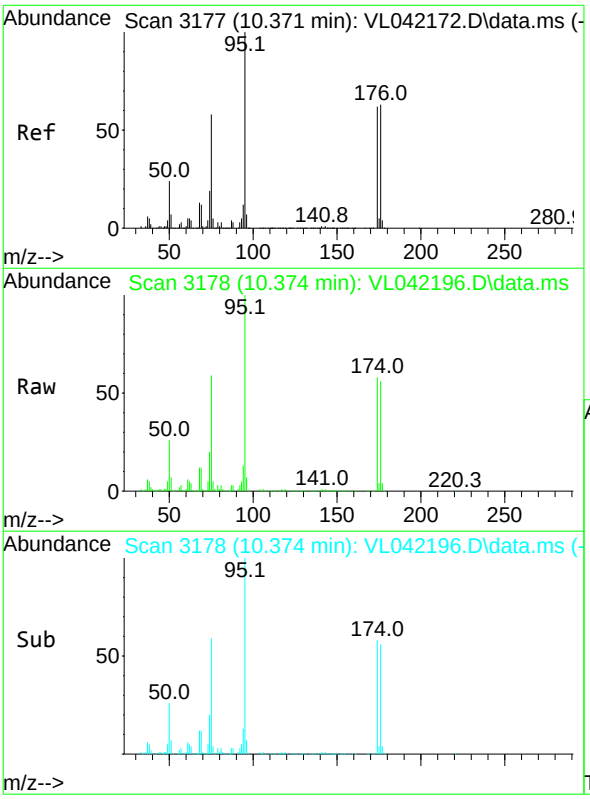
Ion	Ratio	Lower	Upper
104	100		
78	54.4	41.8	62.6
103	47.9	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Manual Integrations
APPROVED

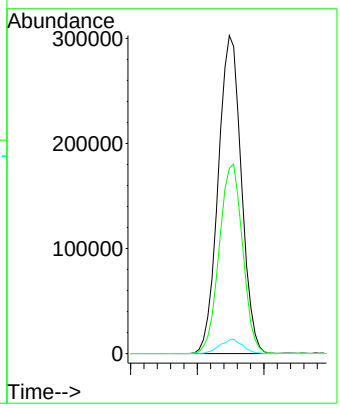
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

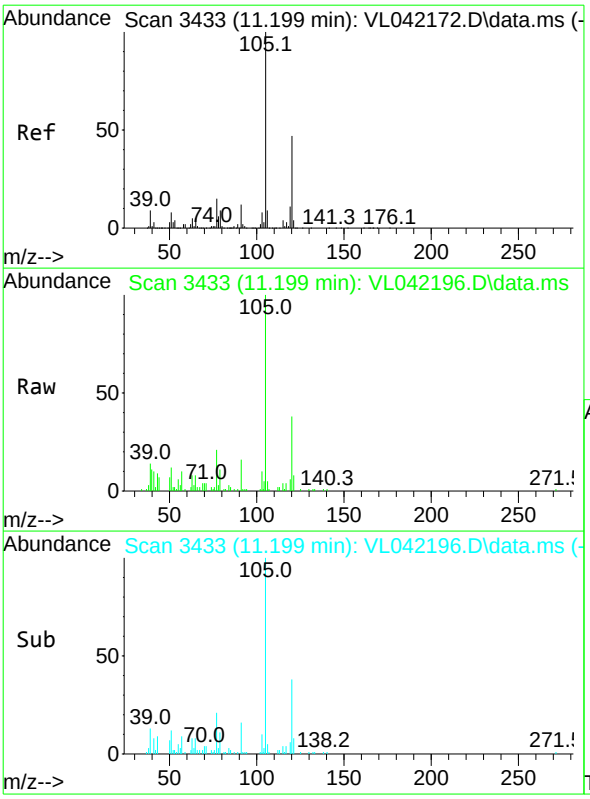


#68
1-Bromo-4-Fluorobenzene
Concen: 10.105 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 95 Resp: 364412

Ion	Ratio	Lower	Upper
95	100		
174	60.3	50.6	76.0
175	4.5	3.8	5.6

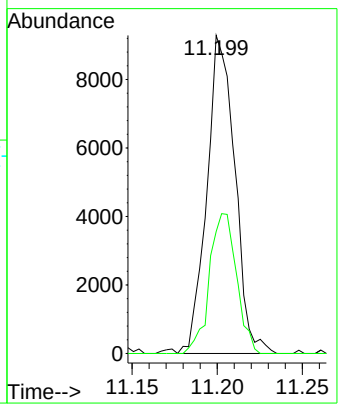




#73
1,3,5-Trimethylbenzene
Concen: 0.156 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:105 Resp: 10625

Ion	Ratio	Lower	Upper
105	100		
120	38.3	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Manual Integrations
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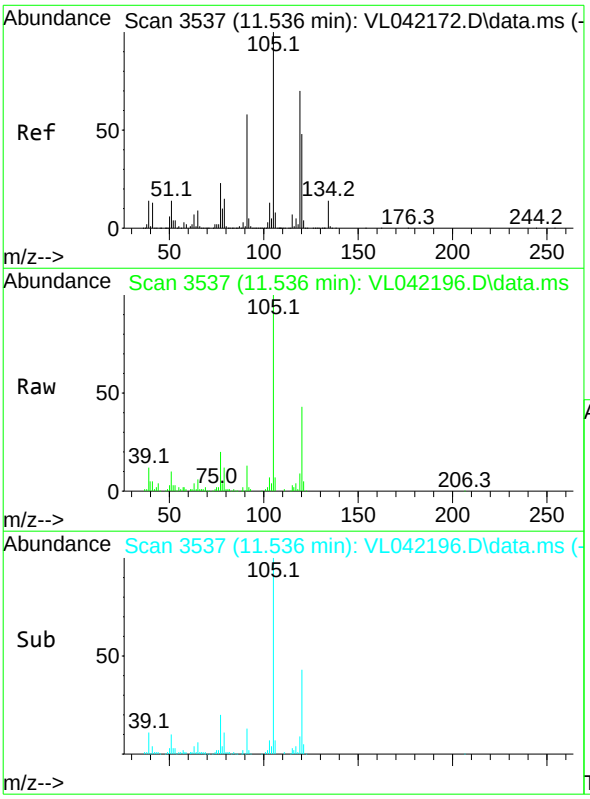
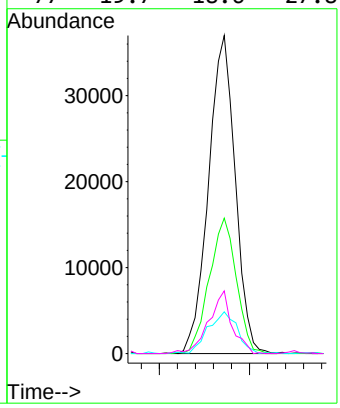
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.487 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:105 Resp: 38101

Ion	Ratio	Lower	Upper
105	100		
120	42.6	38.6	58.0
91	12.8	46.2	69.2#
77	19.7	18.6	27.8



Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042206.D
Acq On : 31 Mar 2025 12:26
Operator : SY/MD
Sample : Q1669-06DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

Quant Time: Apr 01 01:38:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.807	49	184777	10.000	ppbv		0.02
33) 1,4-Difluorobenzene	3.985	114	533717	10.000	ppbv		0.03
55) Chlorobenzene-d5	8.908	117	486289	10.000	ppbv		0.03
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.397	95	393432	9.852	ppbv		0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.506	85	12317	0.451	ppbv		97
3) Chlorodifluoromethane	1.483	51	8722	0.313	ppbv		94
4) Chloromethane	1.538	50	4692	0.421	ppbv		92
9) Propene	1.489	41	224043	17.538	ppbv		96
10) Heptane	5.011	43	56357	1.659	ppbv		94
11) Trichlorofluoromethane	1.888	101	5051	0.190	ppbv		88
13) Ethanol	1.732	45	130271	107.874	ppbv		84
15) Acetone	1.845	43	573624m	22.197	ppbv		
20) Methylene Chloride	2.072	84	5120	0.532	ppbv		86
26) Hexane	2.846	57	118243	4.564	ppbv	#	33
30) Cyclohexane	3.881	84	33679	1.497	ppbv		94
34) 2-Butanone	2.574	43	248177	6.413	ppbv		99
35) Carbon Tetrachloride	3.784	117	2736	0.066	ppbv	#	76
36) Benzene	3.681	78	309110	5.842	ppbv		100
41) Tetrahydrofuran	3.079	42	43424	1.948	ppbv		96
44) 2,2,4-Trimethylpentane	4.674	57	209735	2.346	ppbv	#	85
50) 4-Methyl-2-Pentanone	5.814	43	25203m	0.411	ppbv		
52) Tetrachloroethene	8.251	164	739m	0.035	ppbv		
53) Toluene	6.966	91	625978	9.980	ppbv		100
58) Ethyl Benzene	9.380	91	117204	1.357	ppbv		100
59) m/p-Xylene	9.555	91	353075	5.119	ppbv		99
60) o-Xylene	9.989	91	131916	1.908	ppbv		98
61) Styrene	9.892	104	47838	1.398	ppbv		98
64) n-propylbenzene	11.008	120	6104	0.229	ppbv		99
72) 4-Ethyltoluene	11.144	105	36900	0.429	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.222	105	32118	0.427	ppbv		87
74) 1,2,4-Trimethylbenzene	11.552	105	115741	1.336	ppbv	#	64
79) Naphthalene	13.530	128	34692	0.366	ppbv		99

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

Quantitation Report (LSC Reviewed)

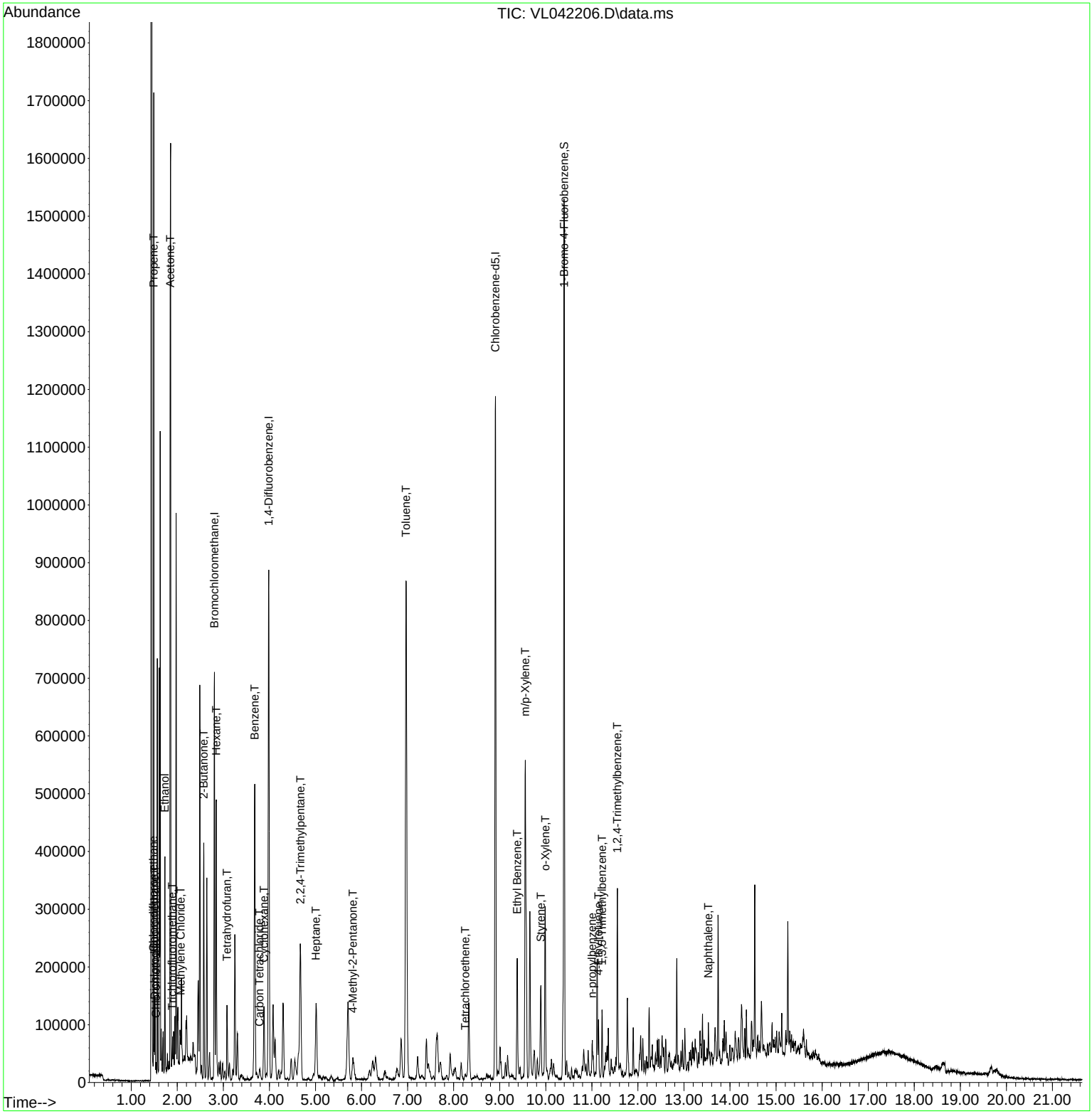
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042206.D
Acq On : 31 Mar 2025 12:26
Operator : SY/MD
Sample : Q1669-06DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

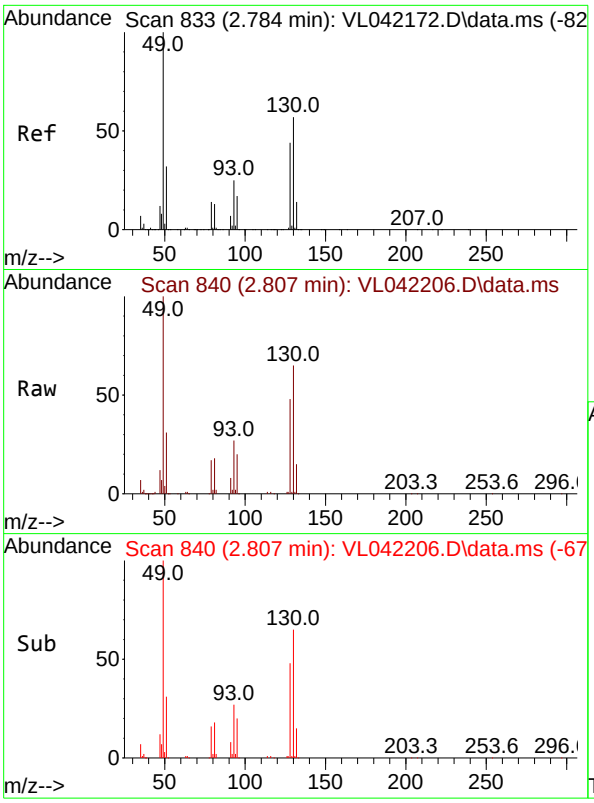
Quant Time: Apr 01 01:38:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.807 min Scan# 84
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 49 Resp: 18477

Ion	Ratio	Lower	Upper
49	100		
128	47.6	22.9	68.5
130	63.0	28.8	86.4

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations
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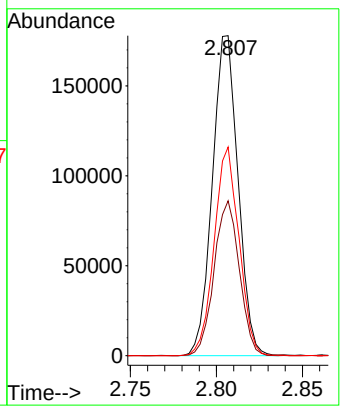
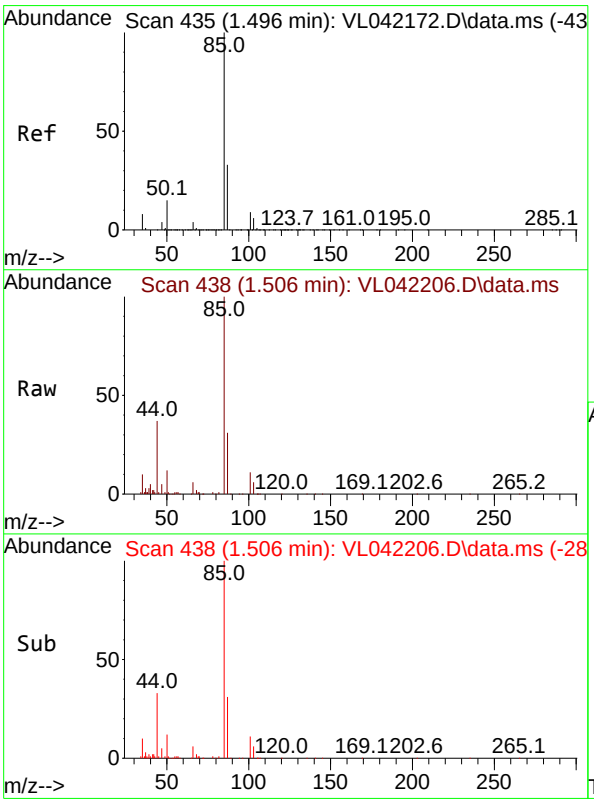
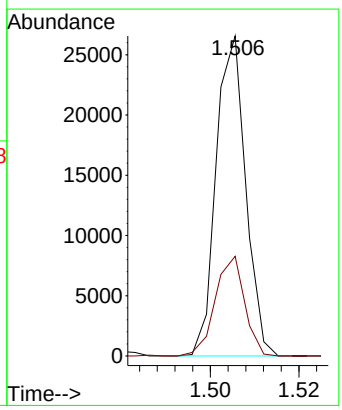


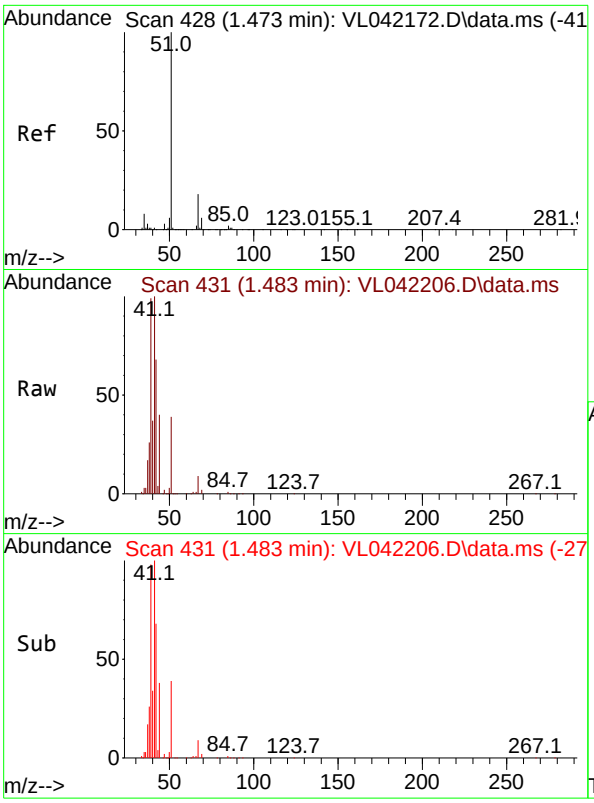


#2
Dichlorodifluoromethane
Concen: 0.451 ppbv
RT: 1.506 min Scan# 438
Delta R.T. 0.010 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 85 Resp: 12317

Ion	Ratio	Lower	Upper
85	100		
87	31.1	26.1	39.1





#3
Chlorodifluoromethane
Concen: 0.313 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

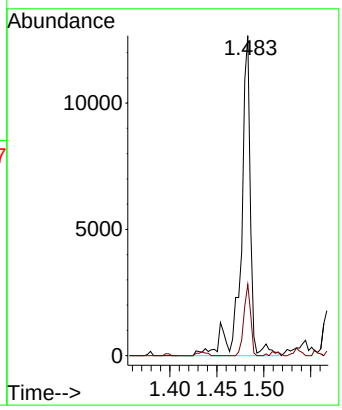
Tgt Ion: 51 Resp: 872

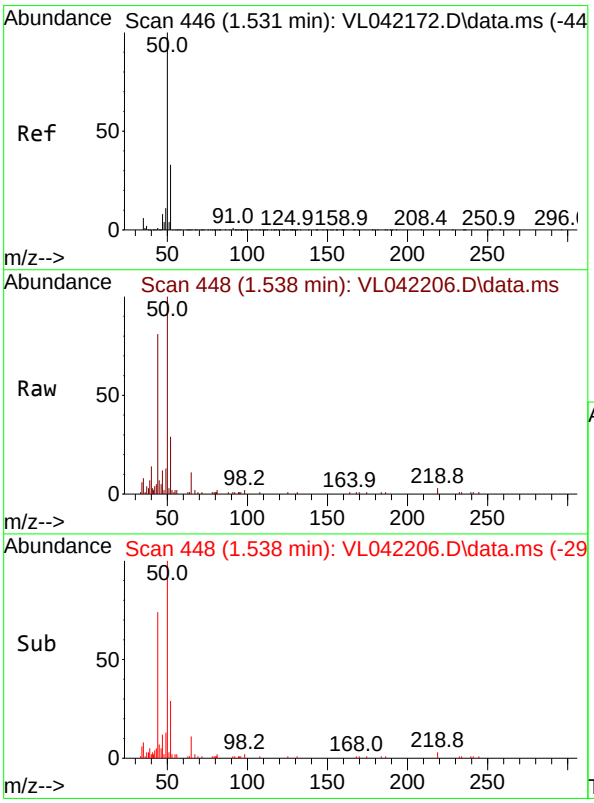
Ion	Ratio	Lower	Upper
51	100		
67	16.3	15.0	22.6

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

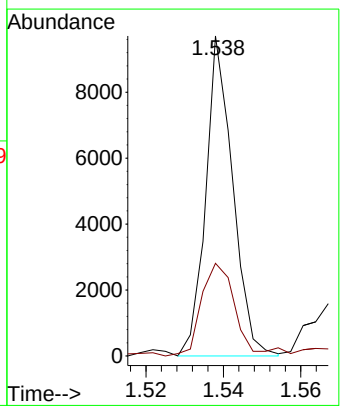


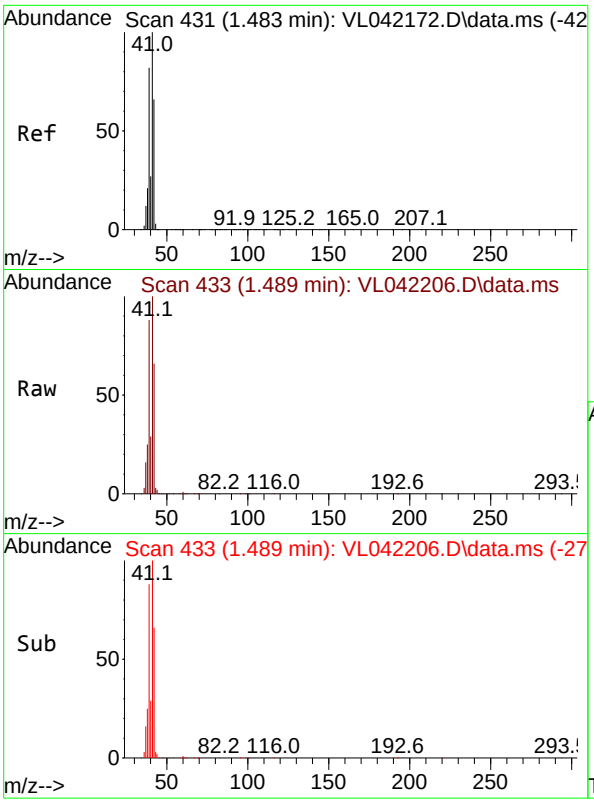


#4
Chloromethane
Concen: 0.421 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.007 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 50 Resp: 4692

Ion	Ratio	Lower	Upper
50	100		
52	28.2	26.1	39.1





#9
Propene
Concen: 17.538 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.007 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 41 Resp: 22404

Ion	Ratio	Lower	Upper
41	100		
42	65.9	55.4	83.2

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

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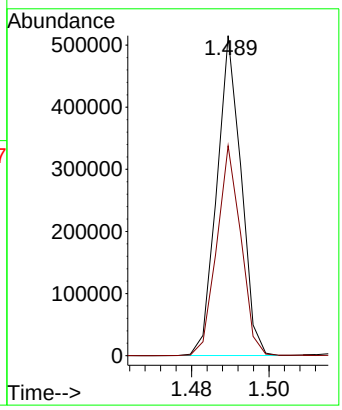
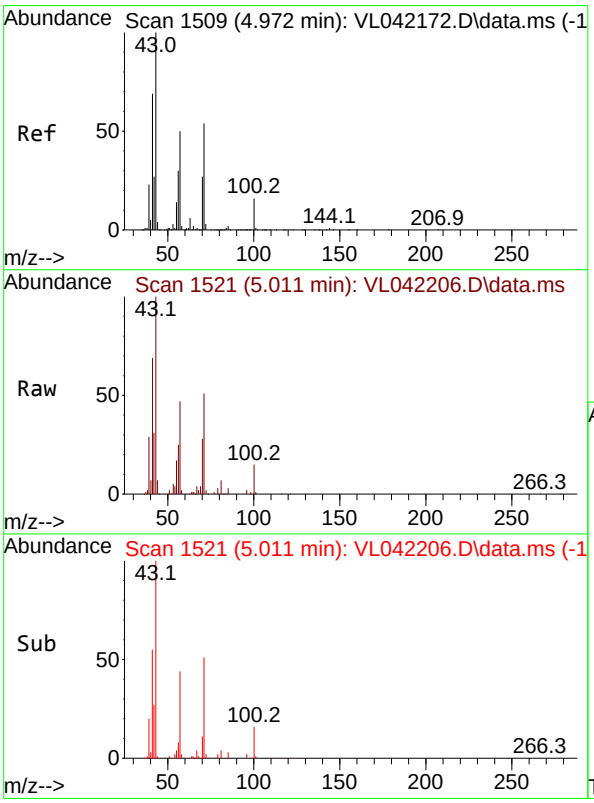
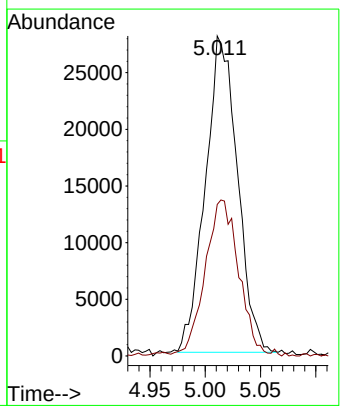


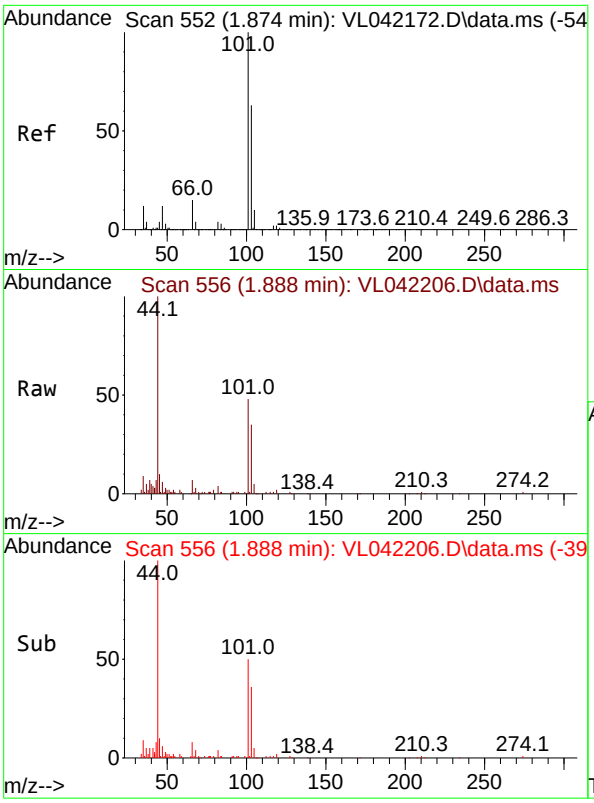


#10
Heptane
Concen: 1.659 ppbv
RT: 5.011 min Scan# 1521
Delta R.T. 0.039 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 43 Resp: 56357

Ion	Ratio	Lower	Upper
43	100		
57	53.1	39.4	59.2

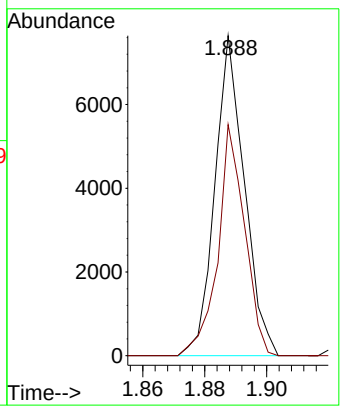




#11
Trichlorofluoromethane
Concen: 0.190 ppbv
RT: 1.888 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:101 Resp: 505

Ion	Ratio	Lower	Upper
101	100		
103	72.2	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations
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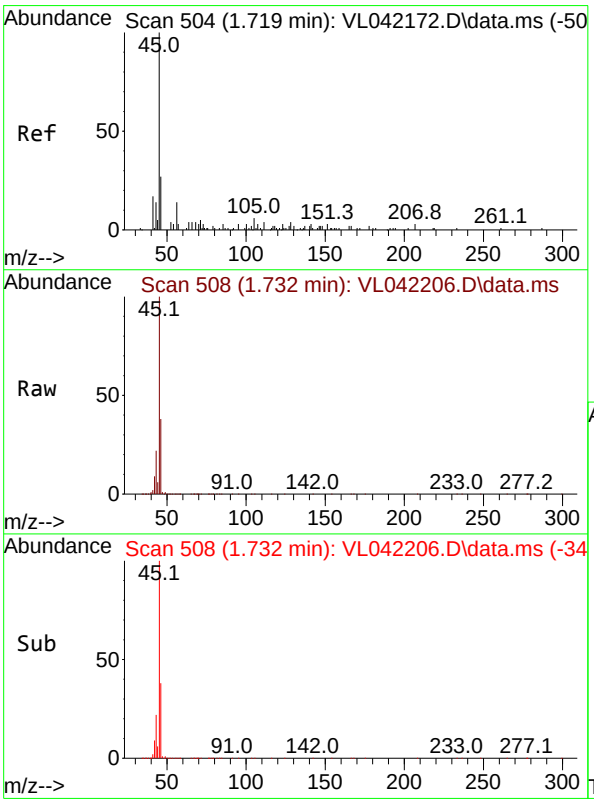
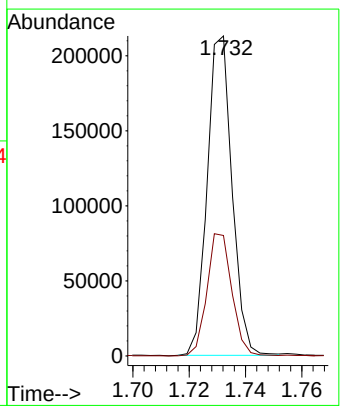
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

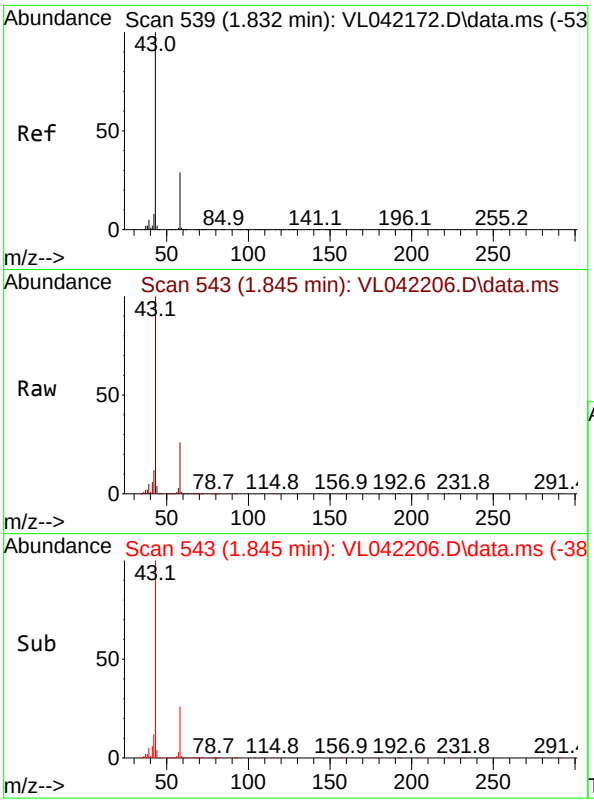


#13
Ethanol
Concen: 107.874 ppbv
RT: 1.732 min Scan# 508
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 45 Resp: 130271

Ion	Ratio	Lower	Upper
45	100		
46	39.2	20.2	80.8

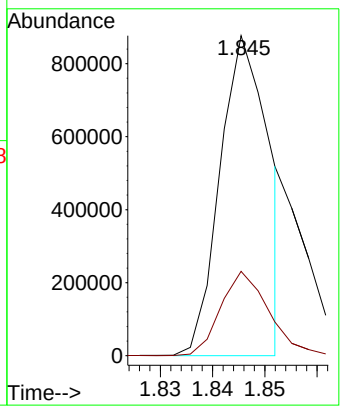




#15
Acetone
Concen: 22.197 ppbv m
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 43 Resp: 57362

Ion	Ratio	Lower	Upper
43	100		
58	26.2	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/01/2025
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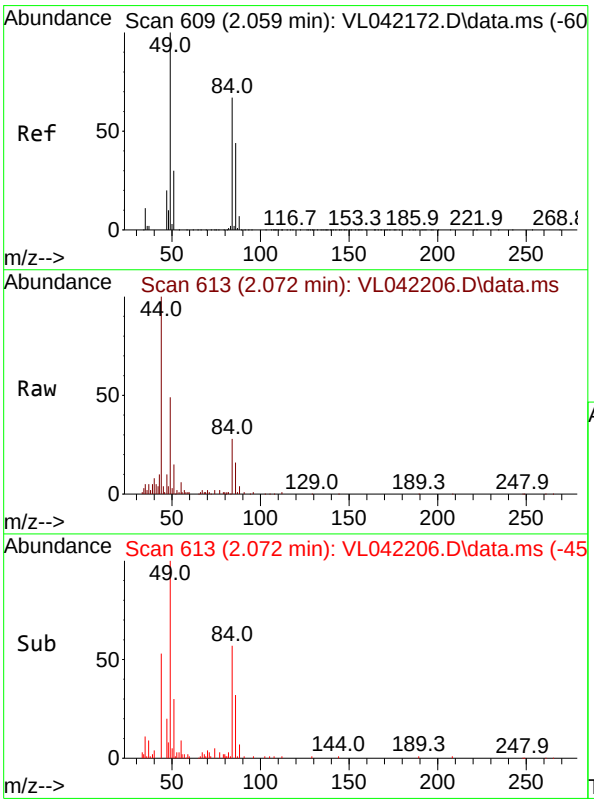
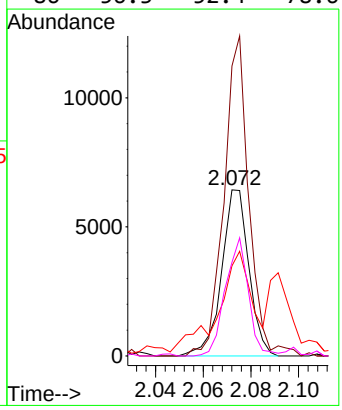
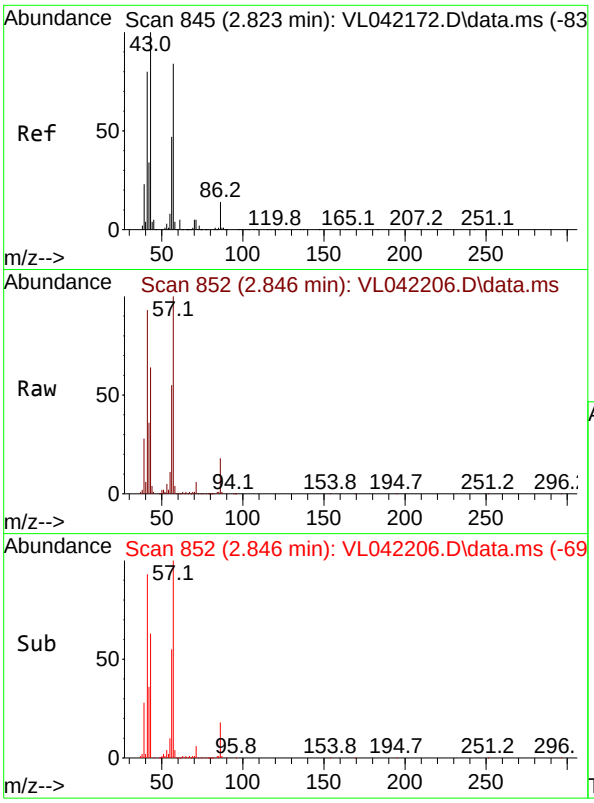


#20
Methylene Chloride
Concen: 0.532 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 84 Resp: 5120

Ion	Ratio	Lower	Upper
84	100		
49	174.5	120.2	180.4
51	46.7	37.4	56.0
86	56.3	52.4	78.6

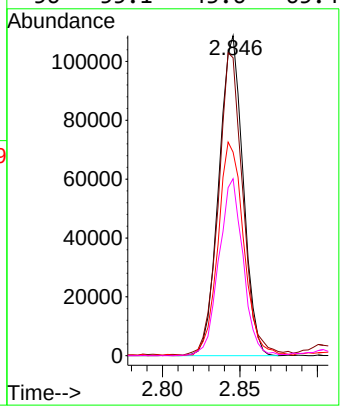




#26
Hexane
Concen: 4.564 ppbv
RT: 2.846 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 57 Resp: 11824

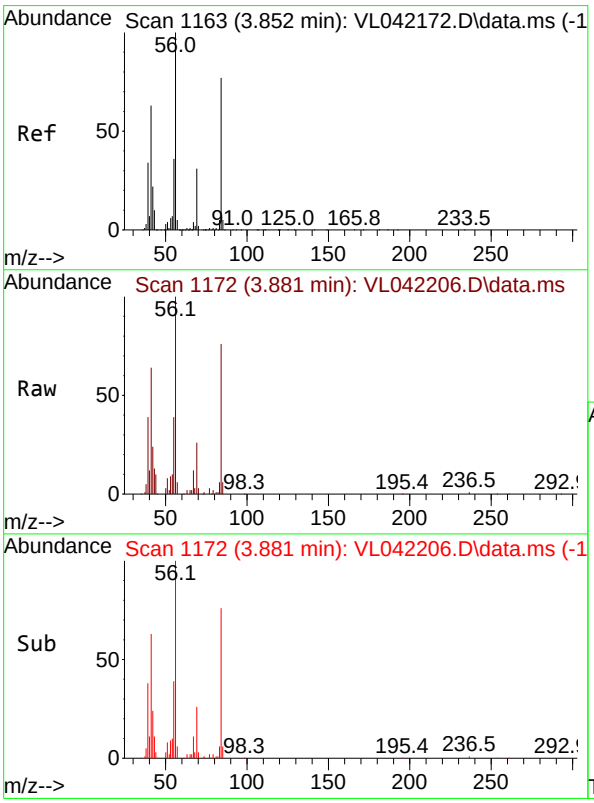
Ion	Ratio	Lower	Upper
57	100		
41	95.8	76.6	114.8
43	70.5	207.8	311.8
56	55.1	43.6	65.4



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations
APPROVED

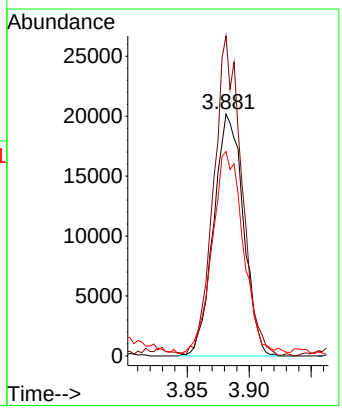
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025

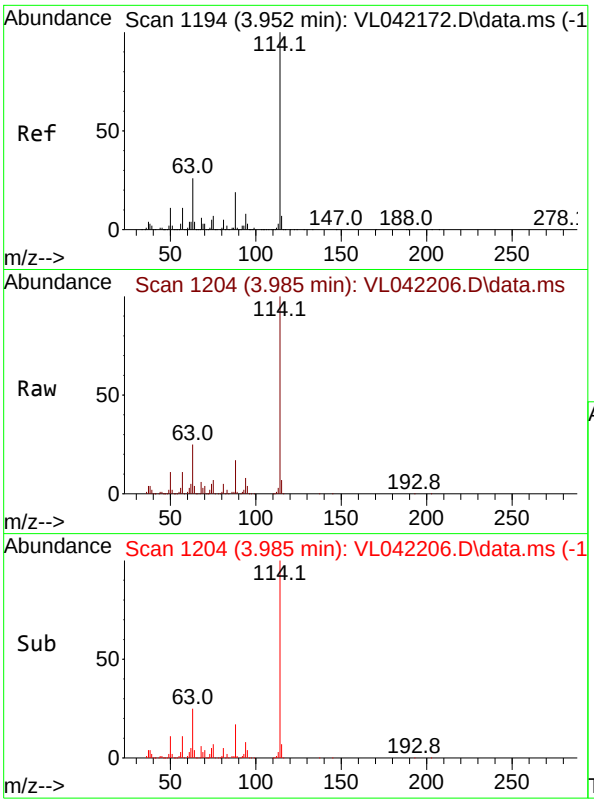


#30
Cyclohexane
Concen: 1.497 ppbv
RT: 3.881 min Scan# 1172
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 84 Resp: 33679

Ion	Ratio	Lower	Upper
84	100		
56	122.5	102.8	154.2
41	89.4	66.5	99.7





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.985 min Scan# 1
Delta R.T. 0.032 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:114 Resp: 53371

Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.7	31.1
88	18.0	15.0	22.4

Instrument :
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ClientSampleId :
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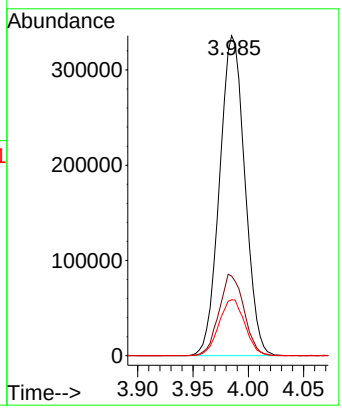
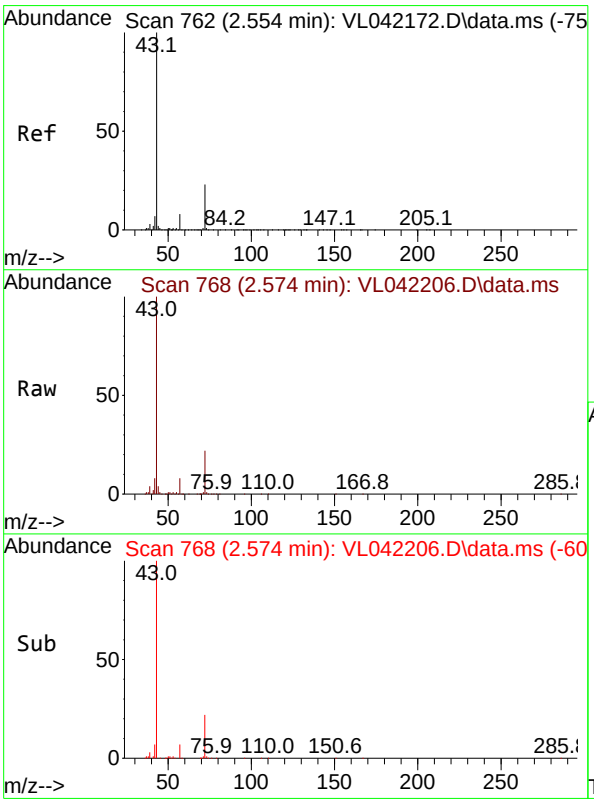
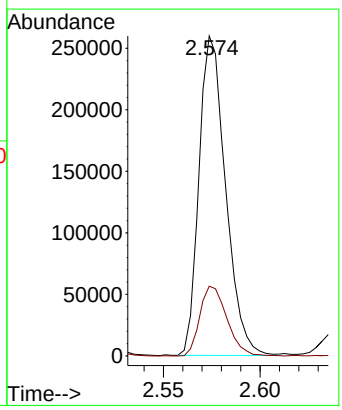


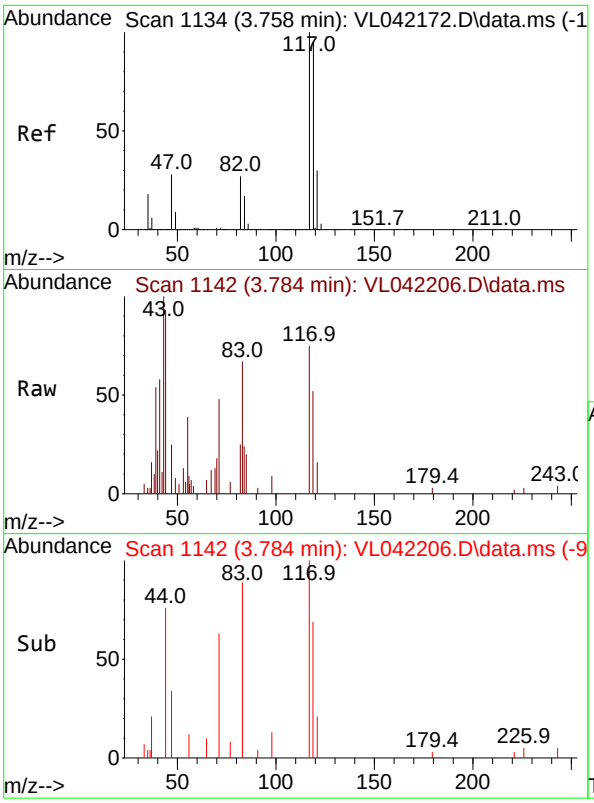


#34
2-Butanone
Concen: 6.413 ppbv
RT: 2.574 min Scan# 768
Delta R.T. 0.020 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 43 Resp: 248177

Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.2	27.2

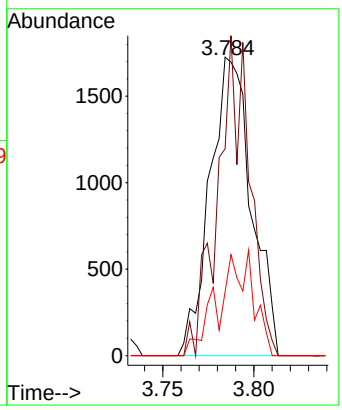




#35
Carbon Tetrachloride
Concen: 0.066 ppbv
RT: 3.784 min Scan# 1
Delta R.T. 0.026 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:117 Resp: 273

Ion	Ratio	Lower	Upper
117	100		
119	69.3	76.2	114.2#
121	21.4	24.2	36.4#



Instrument :
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ClientSampleId :
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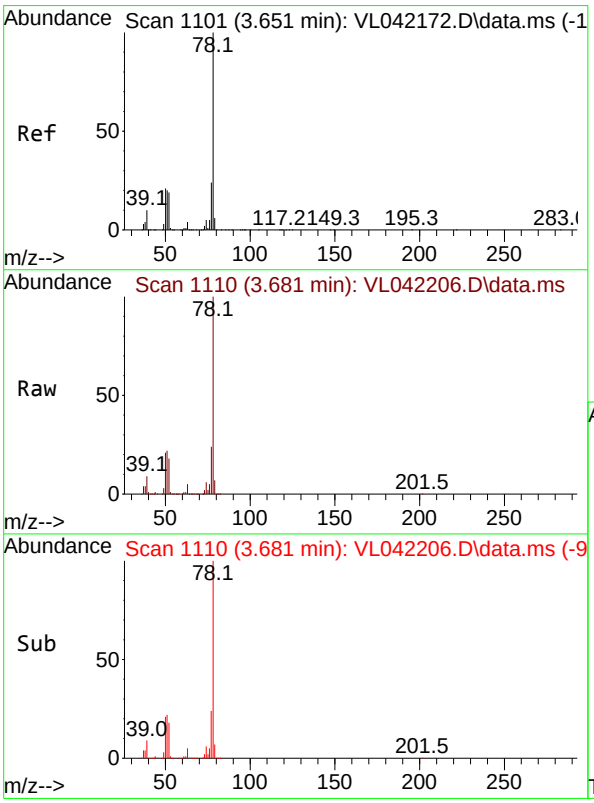
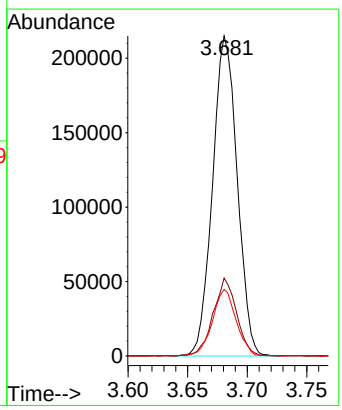
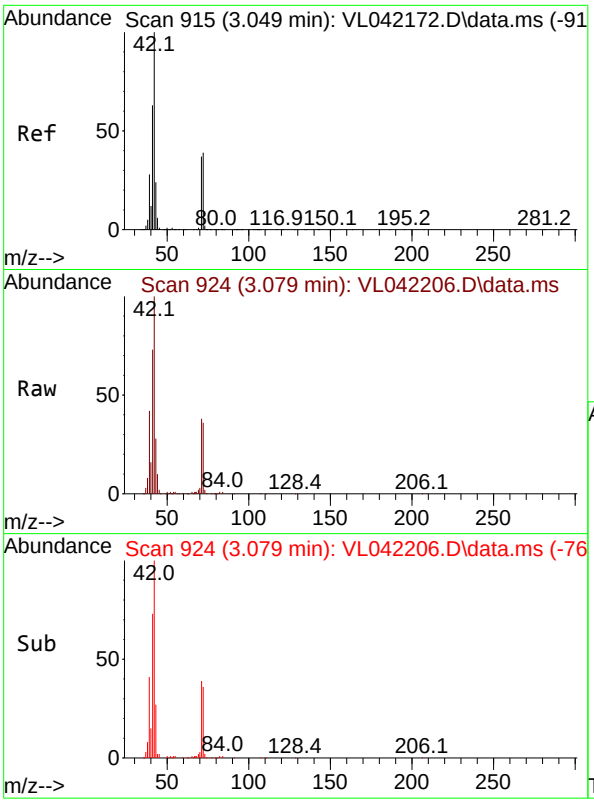


#36
Benzene
Concen: 5.842 ppbv
RT: 3.681 min Scan# 1110
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 78 Resp: 309110

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.1	28.7
50	20.8	16.6	24.8





#41
Tetrahydrofuran
Concen: 1.948 ppbv
RT: 3.079 min Scan# 9
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 42 Resp: 4342

Ion	Ratio	Lower	Upper
42	100		
72	42.0	31.4	47.0
71	39.9	30.2	45.4

Instrument :
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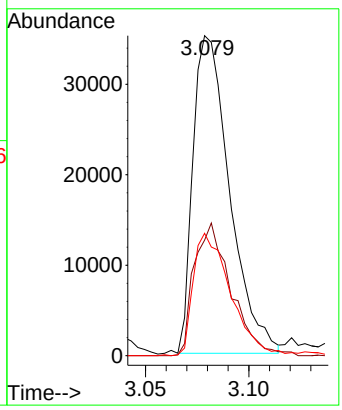
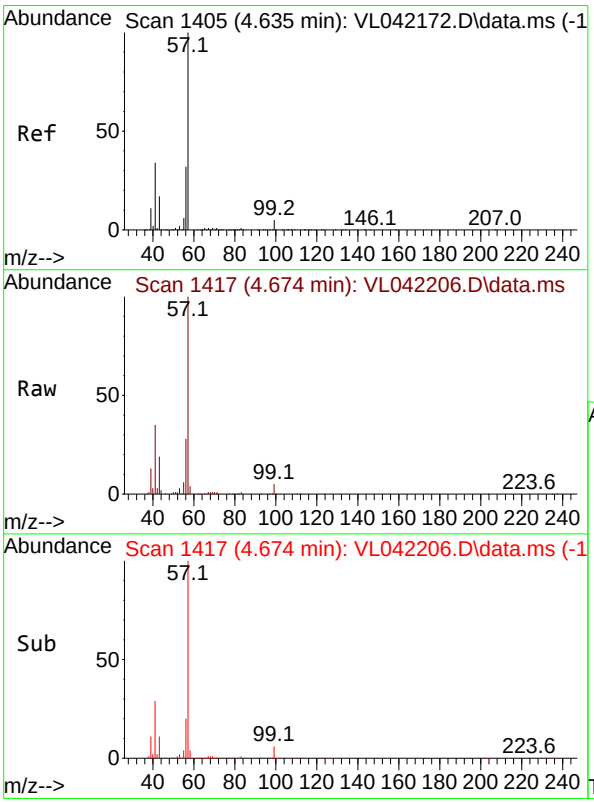
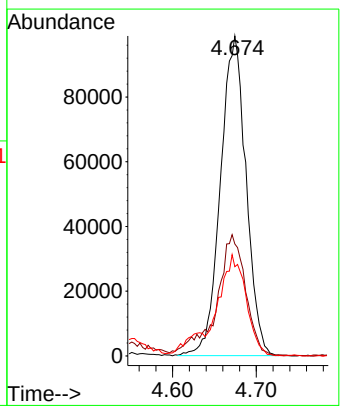


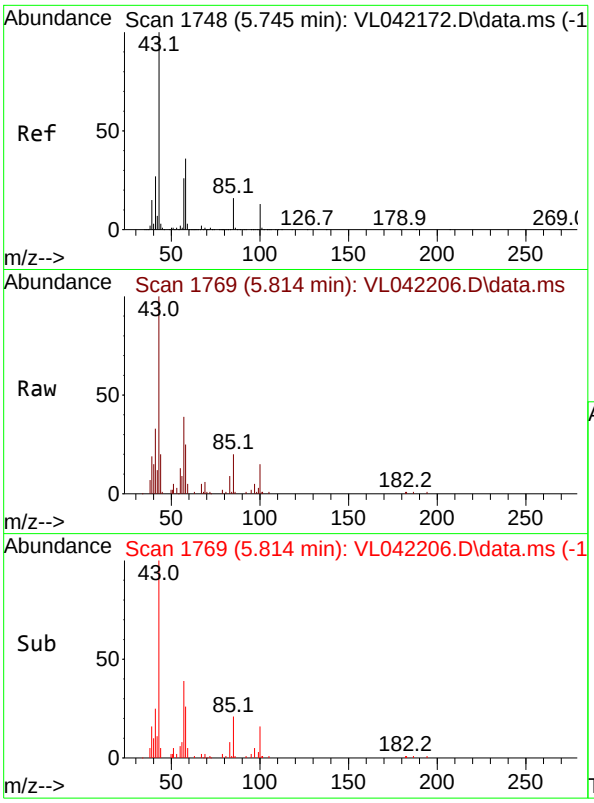


#44
2,2,4-Trimethylpentane
Concen: 2.346 ppbv
RT: 4.674 min Scan# 1417
Delta R.T. 0.039 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 57 Resp: 209735

Ion	Ratio	Lower	Upper
57	100		
41	43.9	26.8	40.2#
56	38.4	25.6	38.4#





#50
4-Methyl-2-Pentanone
Concen: 0.411 ppbv m
RT: 5.814 min Scan# 1
Delta R.T. 0.068 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 43 Resp: 2520

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#

Instrument :
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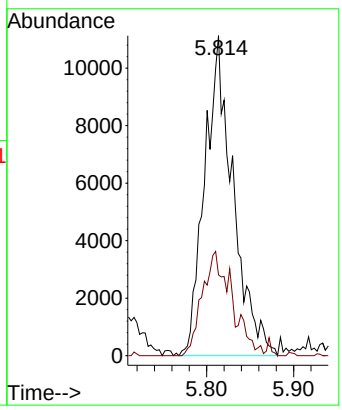
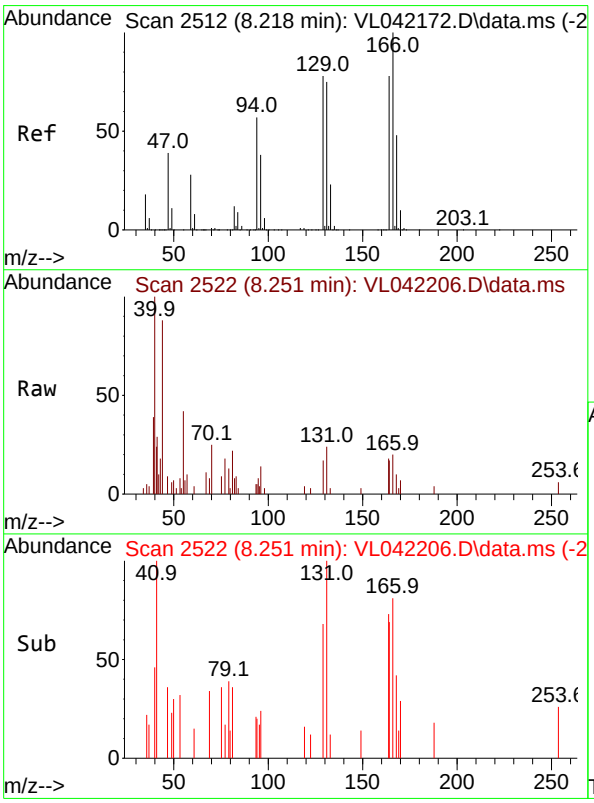
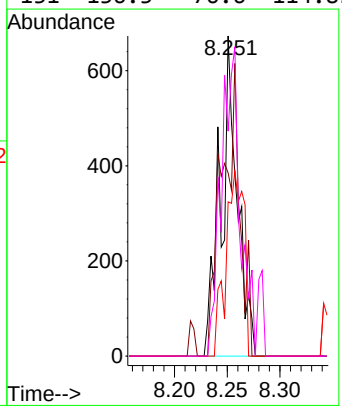


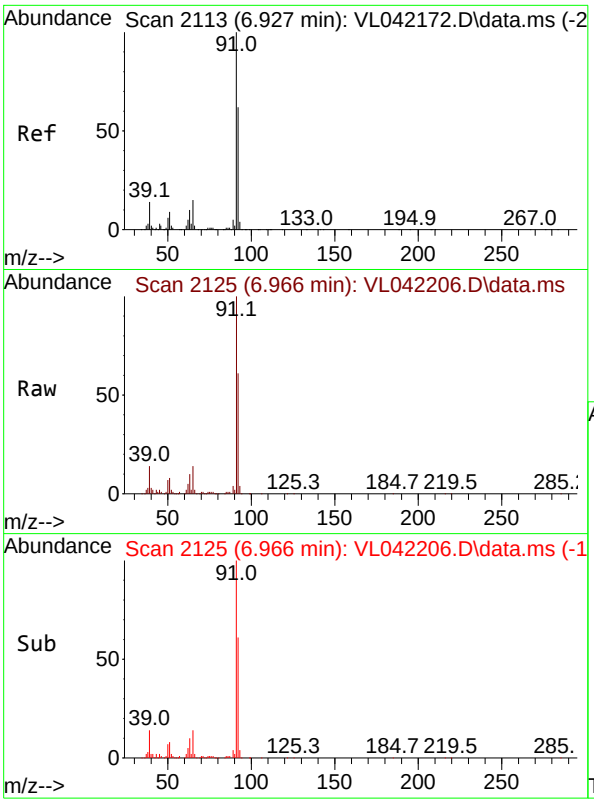


#52
Tetrachloroethene
Concen: 0.035 ppbv m
RT: 8.251 min Scan# 2522
Delta R.T. 0.032 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:164 Resp: 739

Ion	Ratio	Lower	Upper
164	100		
166	111.0	102.5	153.7
129	93.4	79.8	119.8
131	136.3	76.6	114.8#

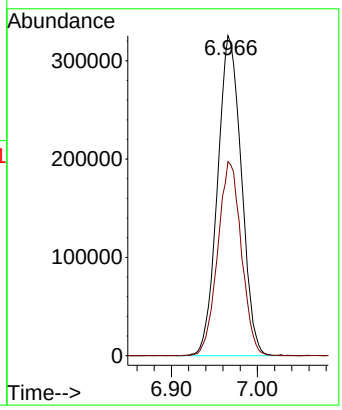




#53
Toluene
Concen: 9.980 ppbv
RT: 6.966 min Scan# 2
Delta R.T. 0.039 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 62597

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.4	72.6



Instrument :
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ClientSampleId :
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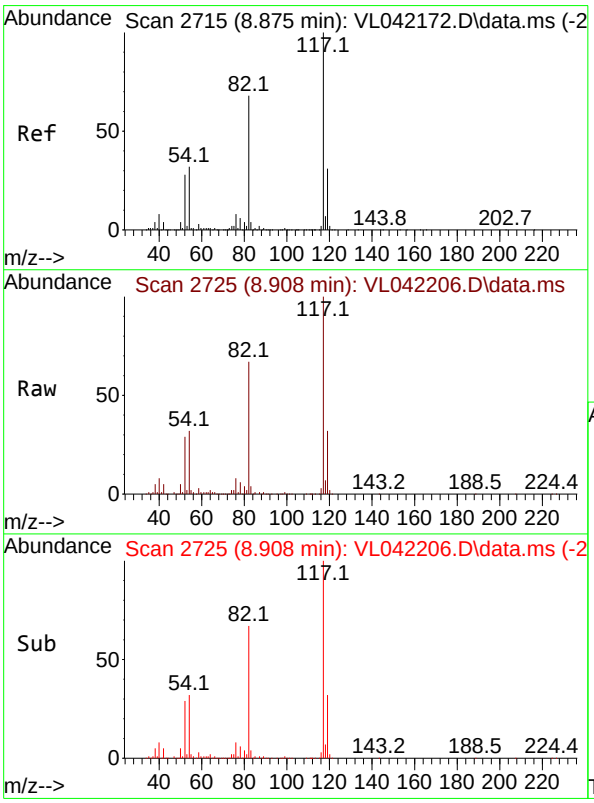
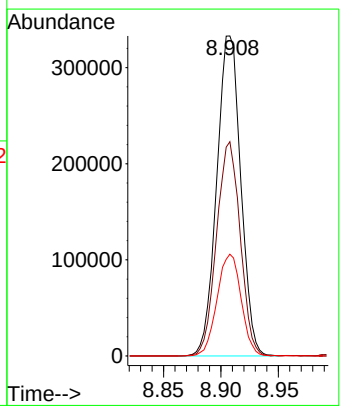
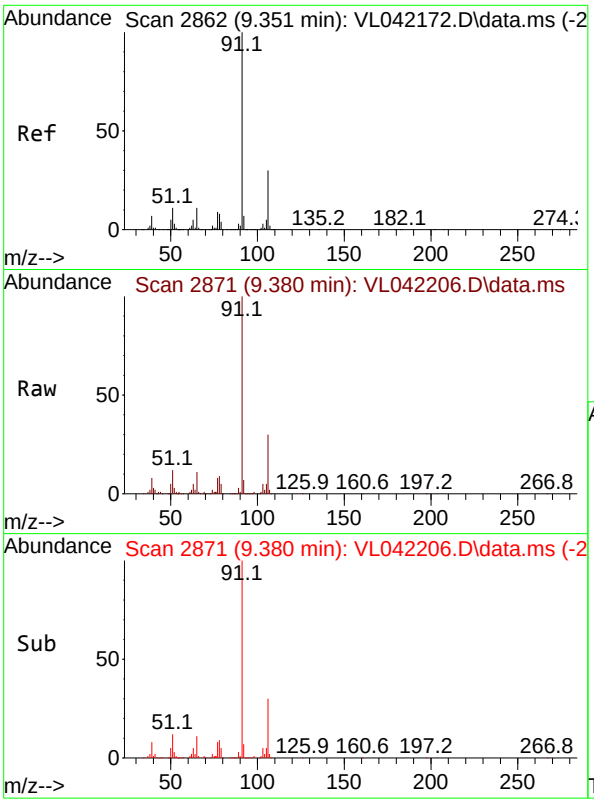


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.908 min Scan# 2725
Delta R.T. 0.032 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:117 Resp: 486289

Ion	Ratio	Lower	Upper
117	100		
82	65.8	55.8	83.6
119	31.9	25.5	38.3





#58
Ethyl Benzene
Concen: 1.357 ppbv
RT: 9.380 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 11720

Ion	Ratio	Lower	Upper
91	100		
106	30.0	24.2	36.2

Instrument :
MSVOA_L
ClientSampleId :
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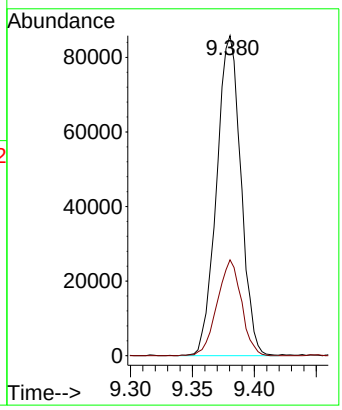
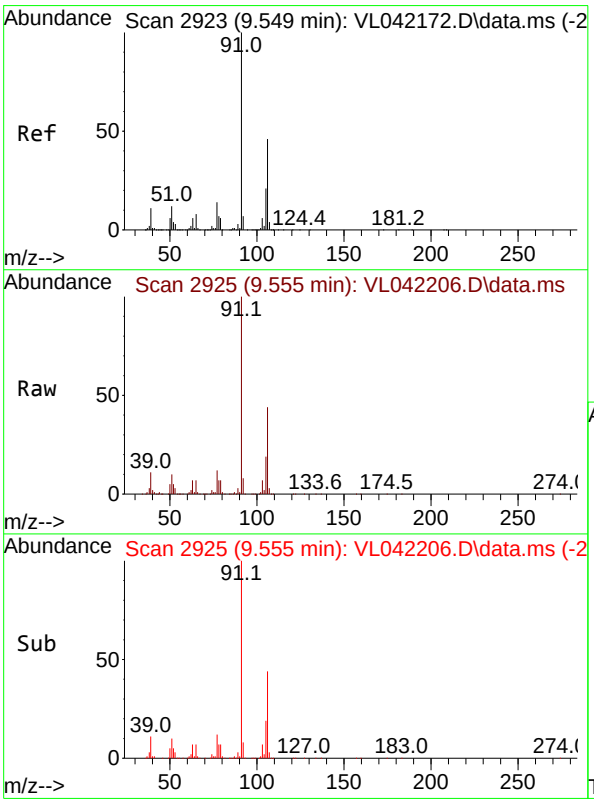
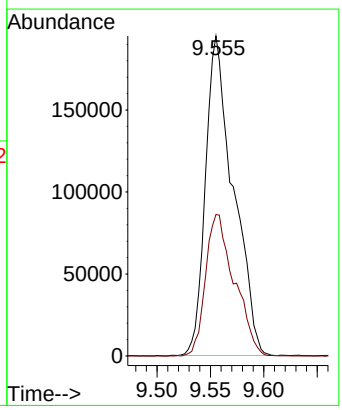


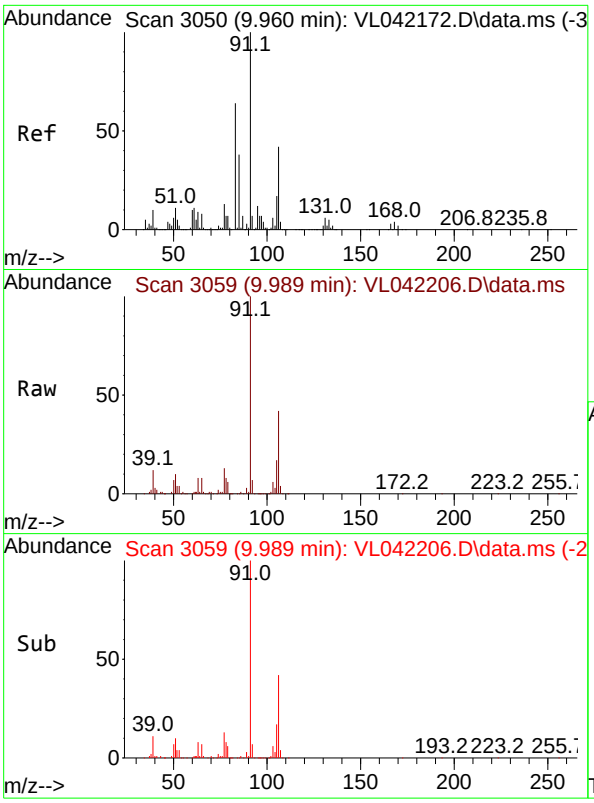


#59
m/p-Xylene
Concen: 5.119 ppbv
RT: 9.555 min Scan# 2925
Delta R.T. 0.007 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 353075

Ion	Ratio	Lower	Upper
91	100		
106	45.9	36.4	54.6





#60
o-Xylene
Concen: 1.908 ppbv
RT: 9.989 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 13191

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5

Instrument :
MSVOA_L
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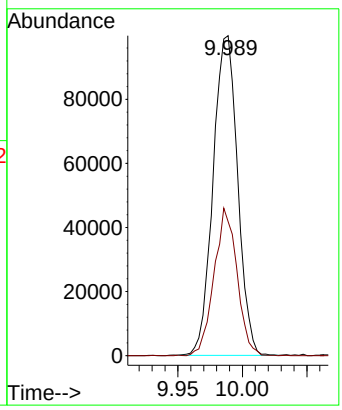
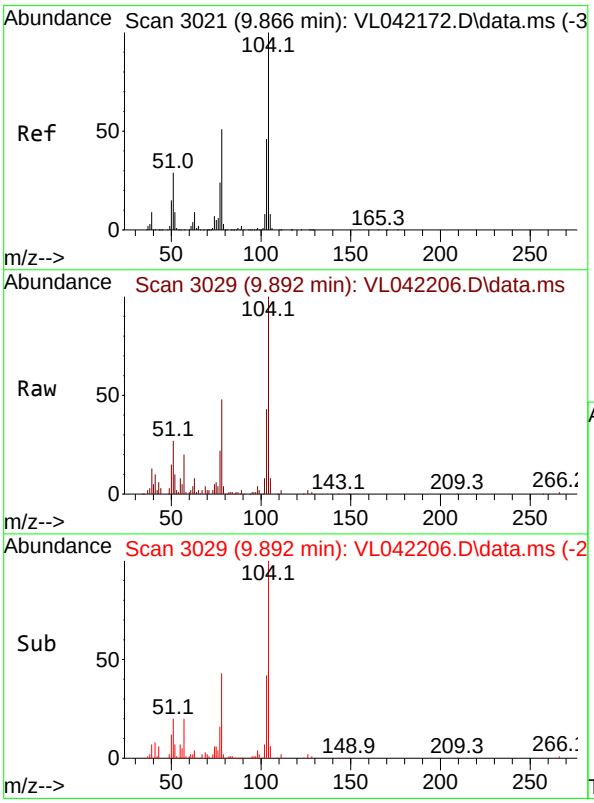
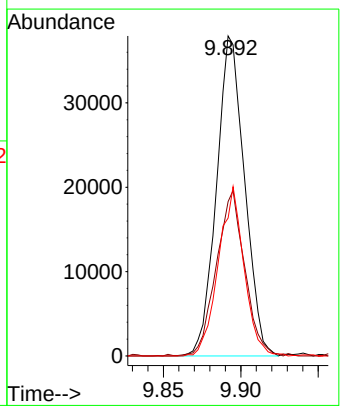


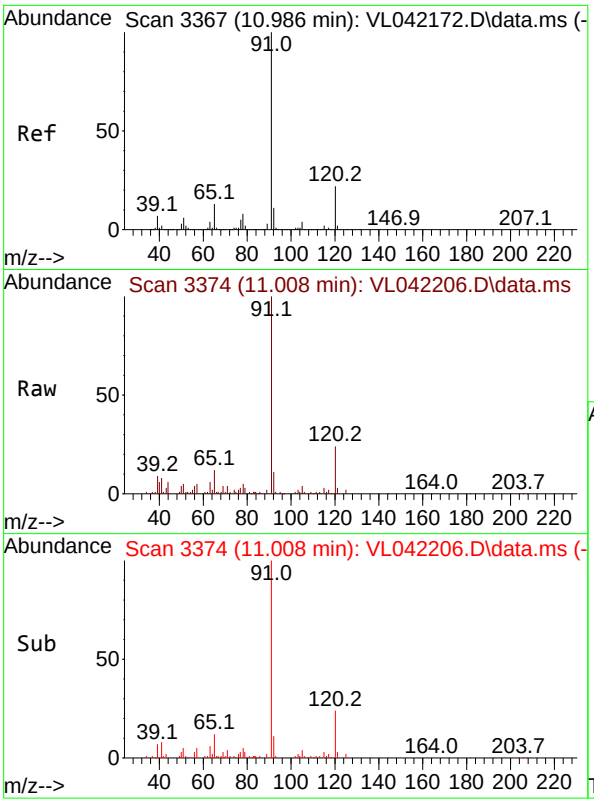


#61
Styrene
Concen: 1.398 ppbv
RT: 9.892 min Scan# 3029
Delta R.T. 0.026 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:104 Resp: 47838

Ion	Ratio	Lower	Upper
104	100		
78	52.6	41.8	62.6
103	48.6	37.0	55.4





#64
n-propylbenzene
Concen: 0.229 ppbv
RT: 11.008 min Scan# 3
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:120 Resp: 610

Ion	Ratio	Lower	Upper
120	100		
91	469.0	376.9	565.3

Instrument :
MSVOA_L
ClientSampleId :
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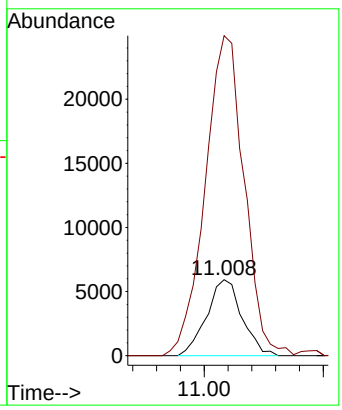
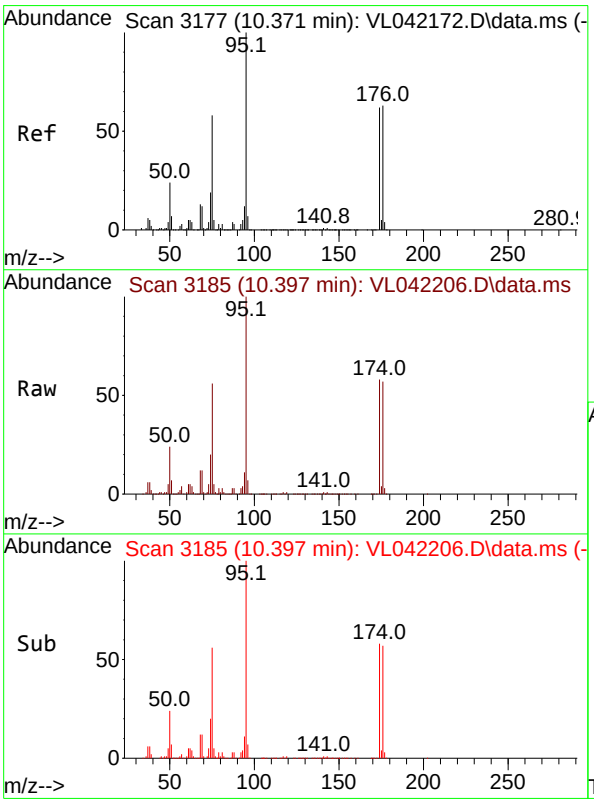
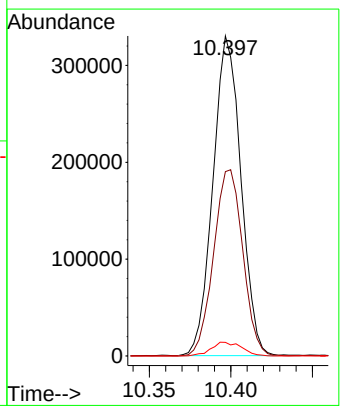


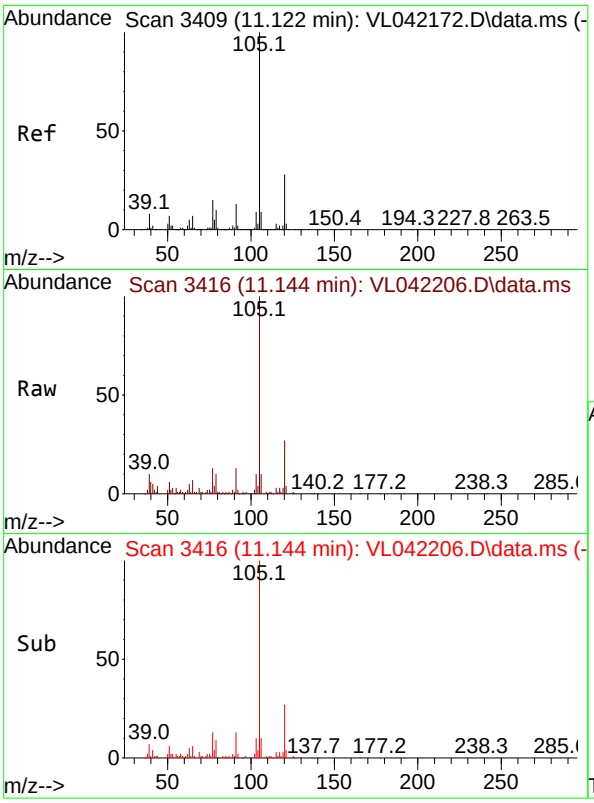


#68
1-Bromo-4-Fluorobenzene
Concen: 9.852 ppbv
RT: 10.397 min Scan# 3185
Delta R.T. 0.026 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 95 Resp: 393432

Ion	Ratio	Lower	Upper
95	100		
174	60.9	50.6	76.0
175	4.7	3.8	5.6

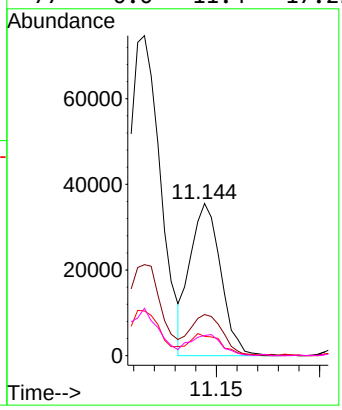




#72
4-Ethyltoluene
Concen: 0.429 ppbv
RT: 11.144 min Scan# 34
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:105 Resp: 3690

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#



Instrument :
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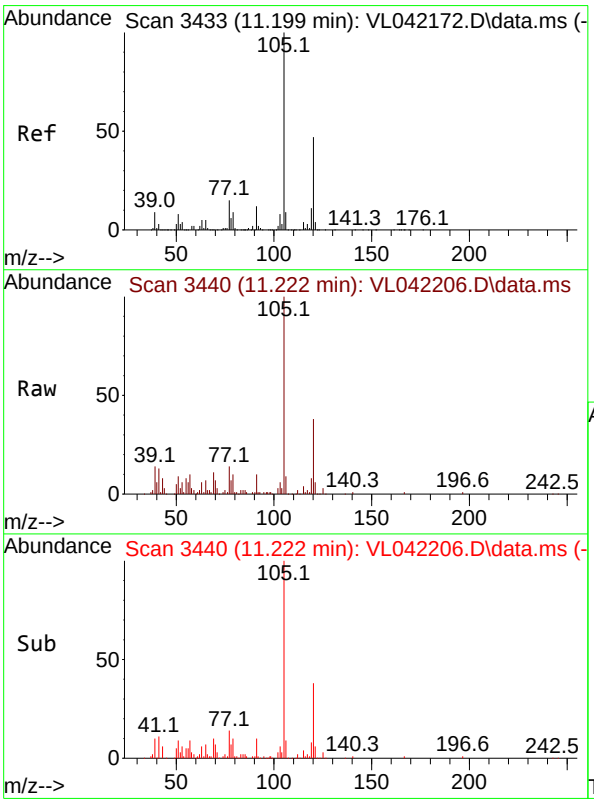
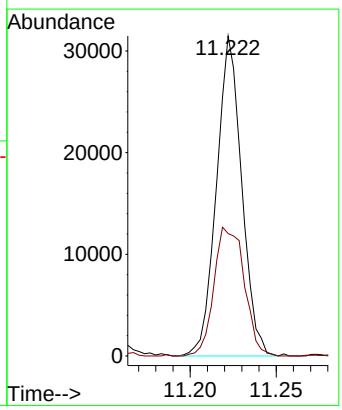
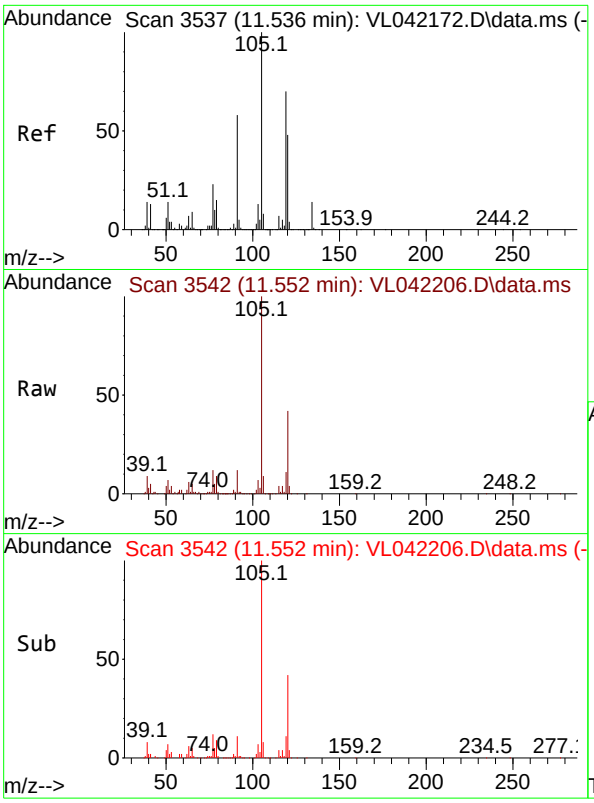


#73
1,3,5-Trimethylbenzene
Concen: 0.427 ppbv
RT: 11.222 min Scan# 3440
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:105 Resp: 32118

Ion	Ratio	Lower	Upper
105	100		
120	38.2	37.4	56.0

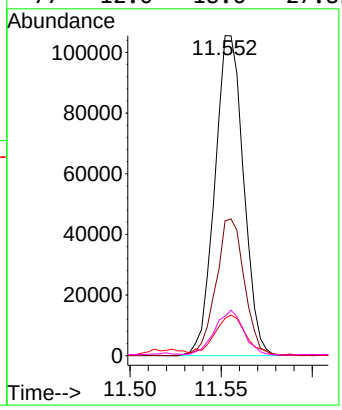




#74
1,2,4-Trimethylbenzene
Concen: 1.336 ppbv
RT: 11.552 min Scan# 3
Delta R.T. 0.016 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:105 Resp: 11574

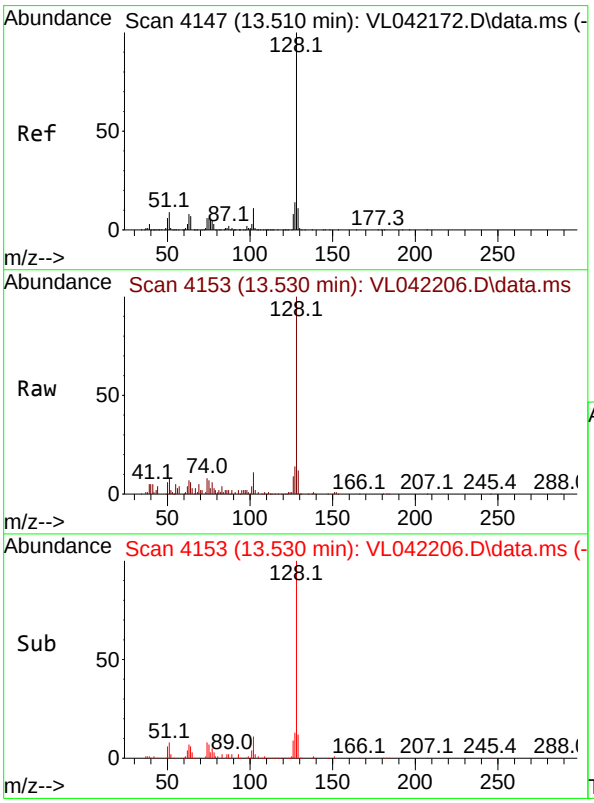
Ion	Ratio	Lower	Upper
105	100		
120	42.1	38.6	58.0
91	11.2	46.2	69.2#
77	12.0	18.6	27.8#



Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Manual Integrations
APPROVED

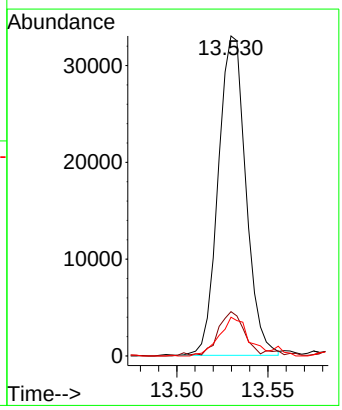
Reviewed By :Semsettin Yesilyurt 04/01/2025
Supervised By :Mahesh Dadoda 04/01/2025



#79
Naphthalene
Concen: 0.366 ppbv
RT: 13.530 min Scan# 4153
Delta R.T. 0.020 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:128 Resp: 34692

Ion	Ratio	Lower	Upper
128	100		
127	13.6	10.8	16.2
129	12.1	9.0	13.4



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042190.D
Acq On : 27 Mar 2025 21:24
Operator : SY/MD
Sample : Q1669-09DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:17:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	184637	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	532429	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	472897	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	386908	9.963	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11705	0.429	ppbv		100
3) Chlorodifluoromethane	1.476	51	12361	0.444	ppbv	#	91
4) Chloromethane	1.531	50	5052	0.453	ppbv	#	85
9) Propene	1.486	41	3425	0.268	ppbv		91
11) Trichlorofluoromethane	1.878	101	5282	0.199	ppbv		99
13) Ethanol	1.722	45	10556	8.748	ppbv	#	27
15) Acetone	1.836	43	60628	2.348	ppbv		94
20) Methylene Chloride	2.062	84	61810	6.427	ppbv		97
26) Hexane	2.829	57	99961	3.861	ppbv	#	32
34) 2-Butanone	2.564	43	8734	0.226	ppbv		98
35) Carbon Tetrachloride	3.765	117	2754m	0.066	ppbv		
36) Benzene	3.658	78	7766m	0.147	ppbv		
53) Toluene	6.940	91	20579m	0.329	ppbv		
59) m/p-Xylene	9.532	91	8618m	0.128	ppbv		
74) 1,2,4-Trimethylbenzene	11.539	105	24527	0.291	ppbv	#	65

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

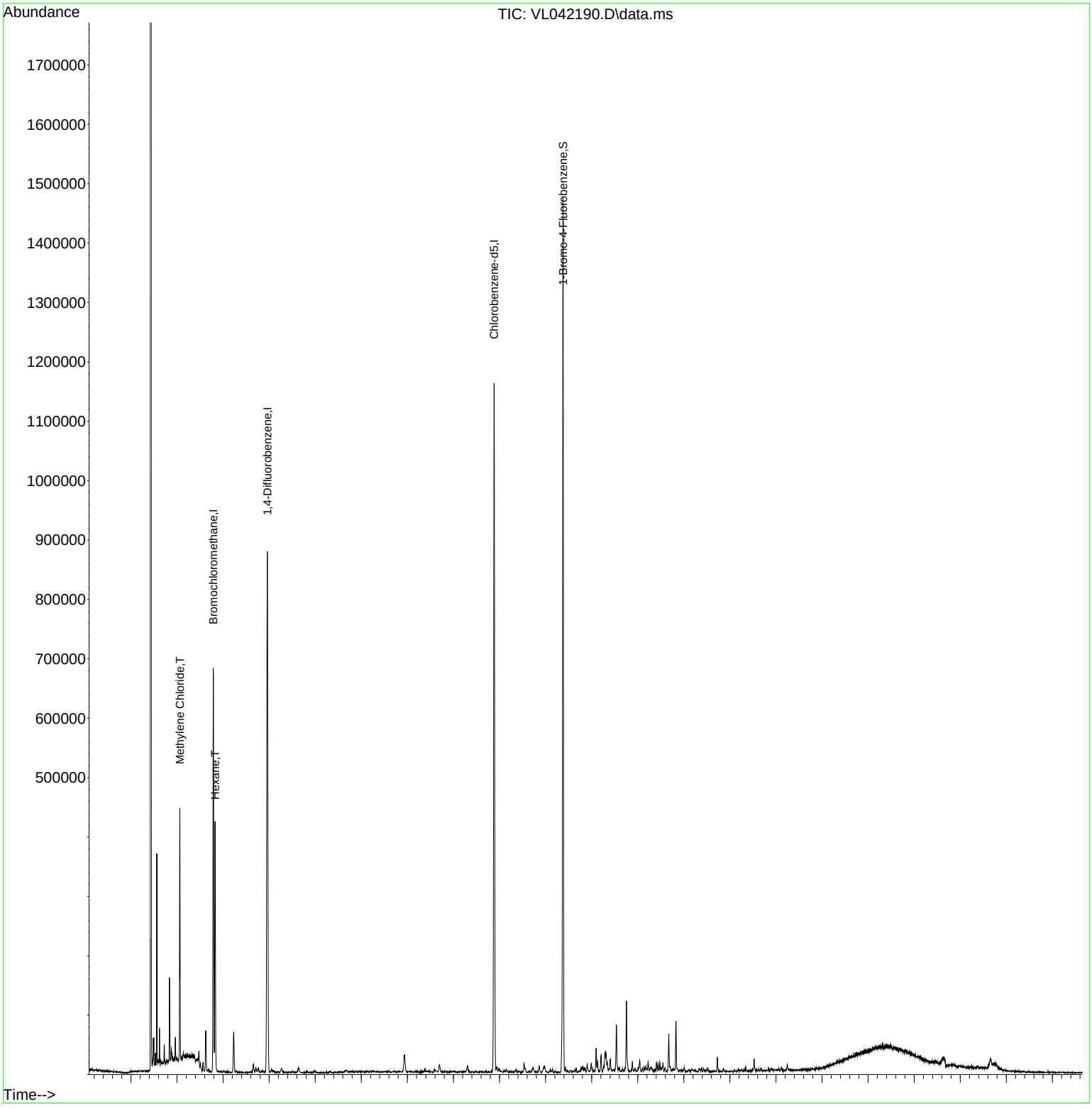
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042190.D
Acq On : 27 Mar 2025 21:24
Operator : SY/MD
Sample : Q1669-09DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

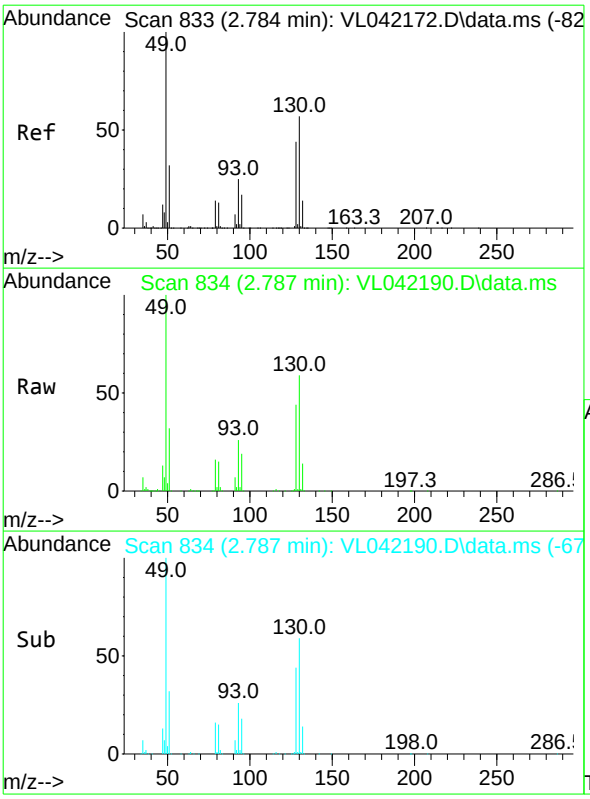
Quant Time: Mar 28 02:17:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

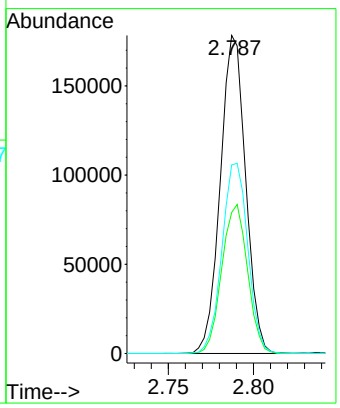




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 49 Resp: 184637

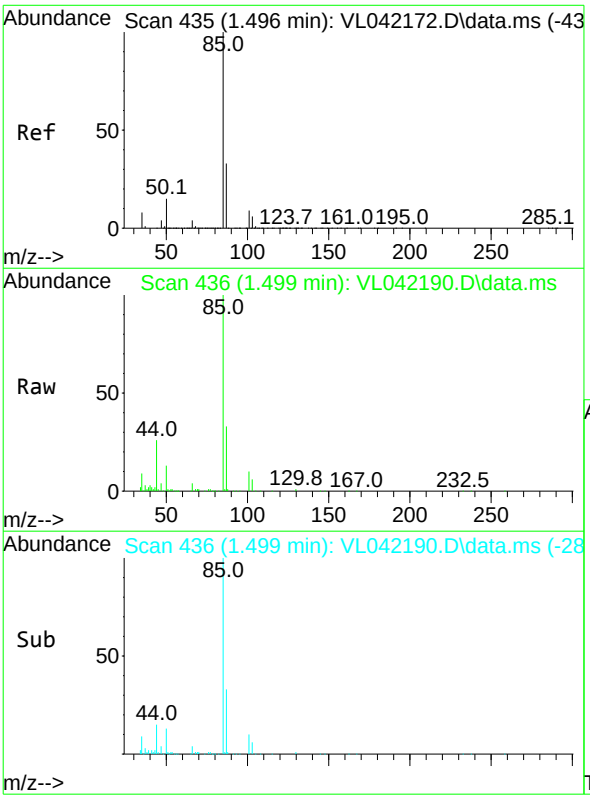
Ion	Ratio	Lower	Upper
49	100		
128	47.5	22.9	68.5
130	61.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
APPROVED

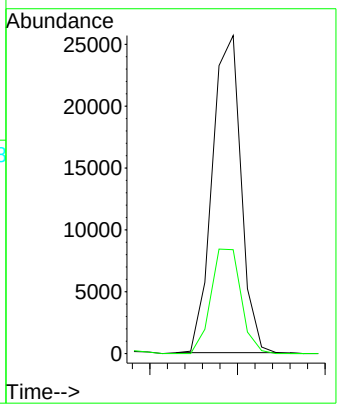
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

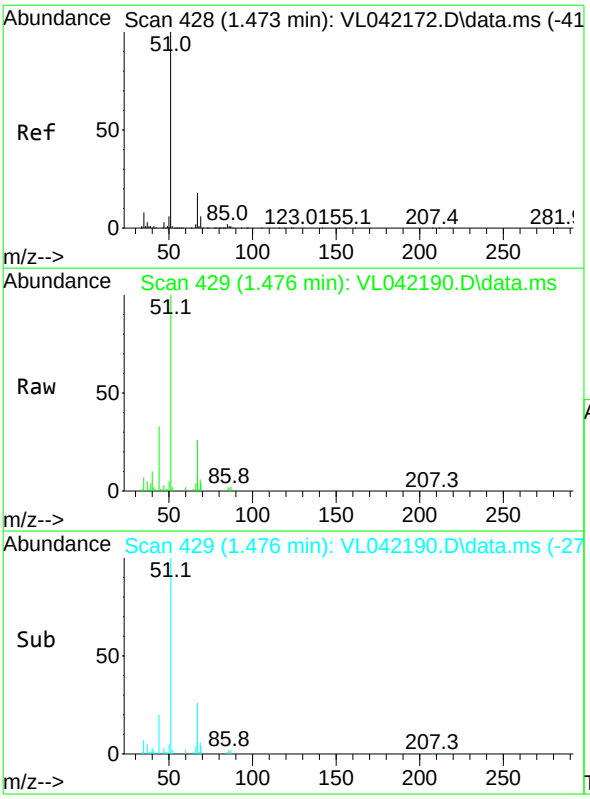


#2
Dichlorodifluoromethane
Concen: 0.429 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 85 Resp: 11705

Ion	Ratio	Lower	Upper
85	100		
87	32.8	26.1	39.1

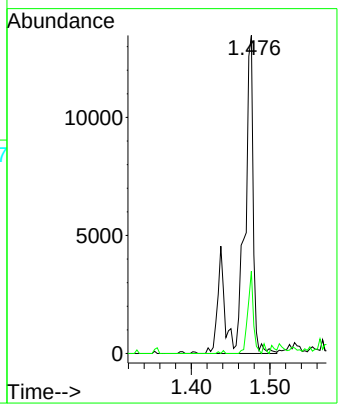




#3
Chlorodifluoromethane
Concen: 0.444 ppbv
RT: 1.476 min Scan# 42
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 51 Resp: 12361

Ion	Ratio	Lower	Upper
51	100		
67	14.9	15.0	22.6#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
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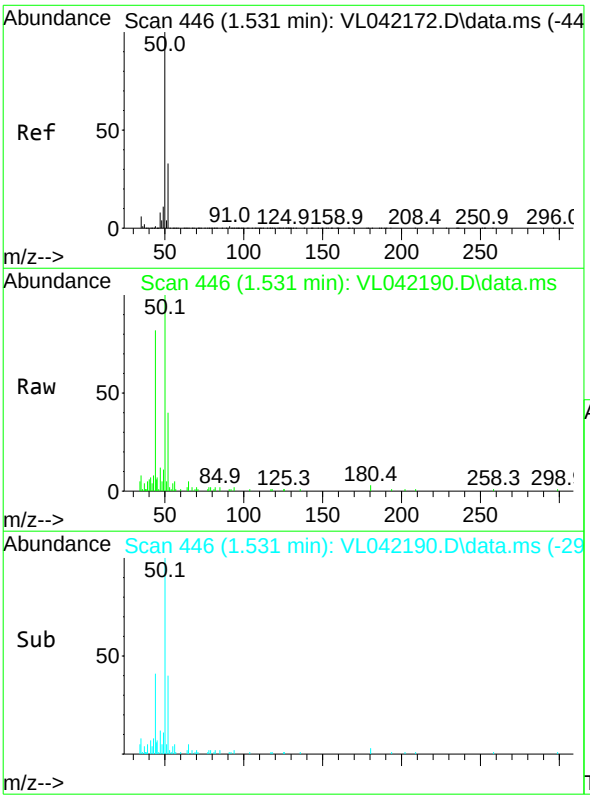
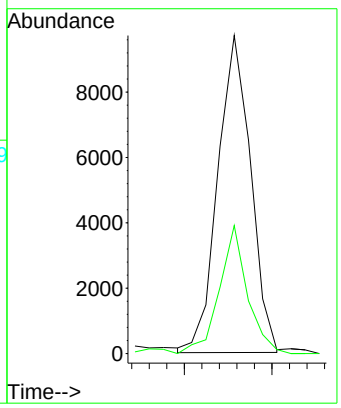
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

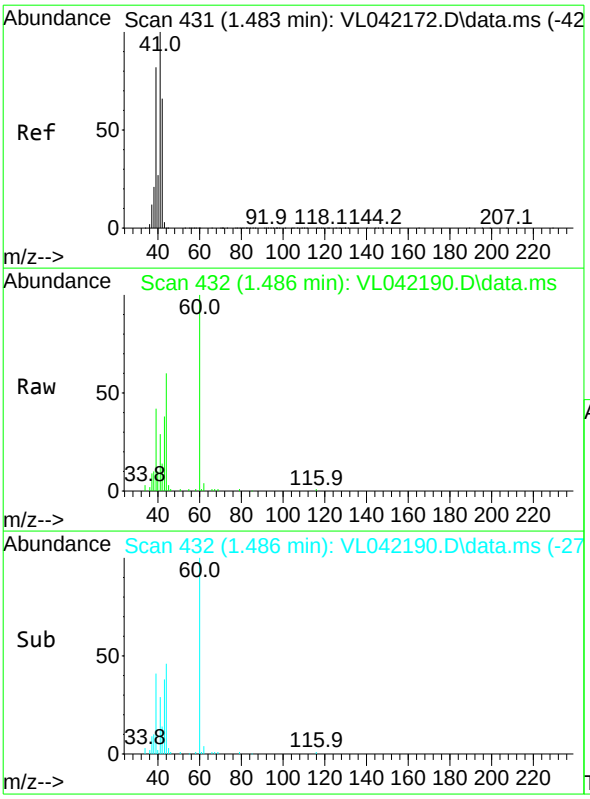


#4
Chloromethane
Concen: 0.453 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 50 Resp: 5052

Ion	Ratio	Lower	Upper
50	100		
52	40.8	26.1	39.1#

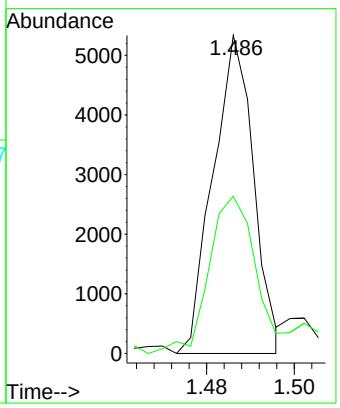




#9
Propene
Concen: 0.268 ppbv
RT: 1.486 min Scan# 43
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 41 Resp: 3425

Ion	Ratio	Lower	Upper
41	100		
42	76.6	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
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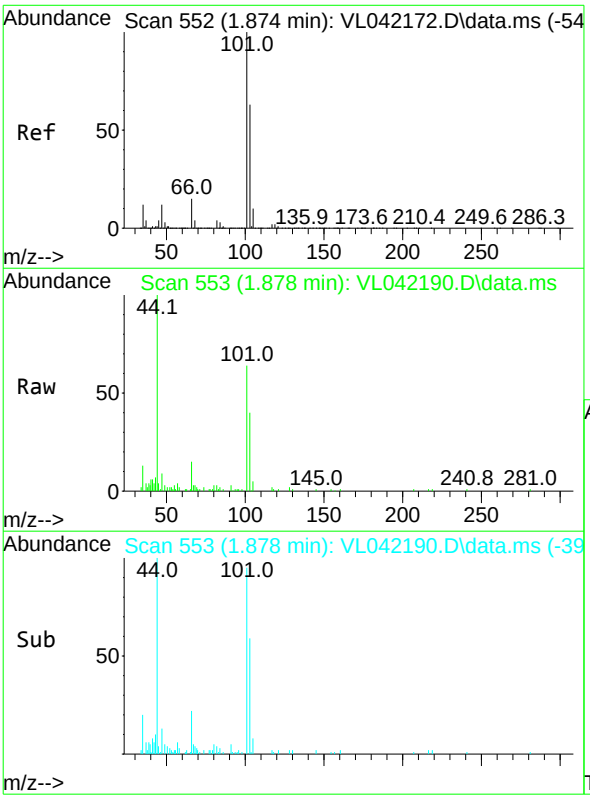
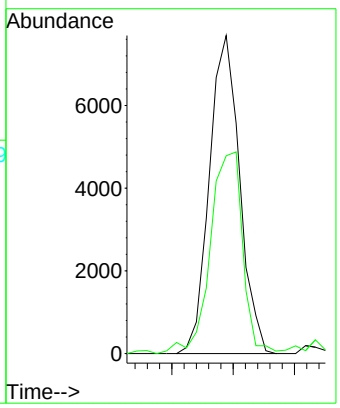
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

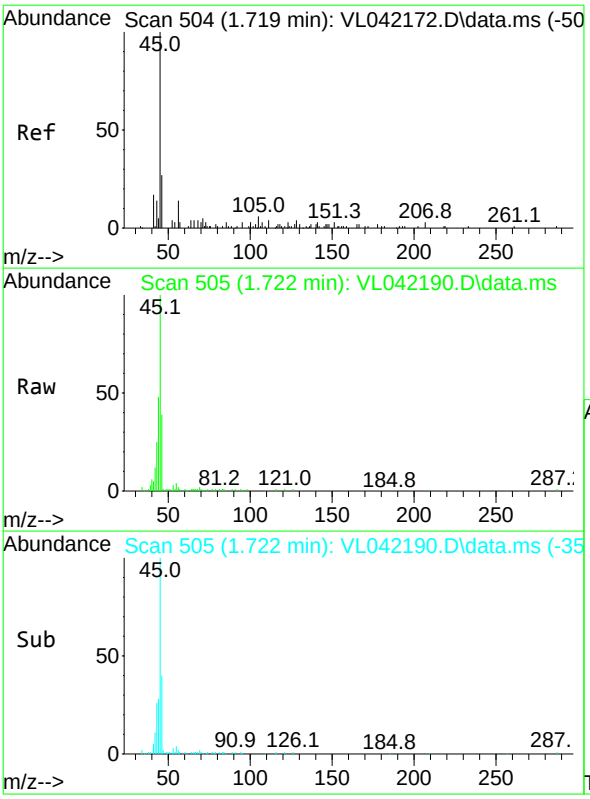


#11
Trichlorofluoromethane
Concen: 0.199 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:101 Resp: 5282

Ion	Ratio	Lower	Upper
101	100		
103	62.1	50.2	75.2

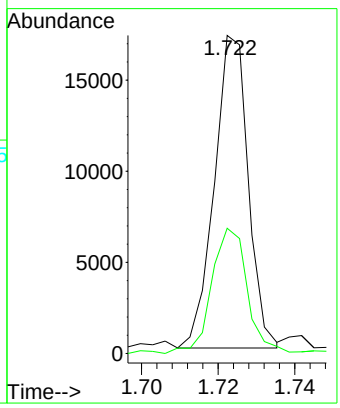




#13
Ethanol
Concen: 8.748 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 45 Resp: 10556

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
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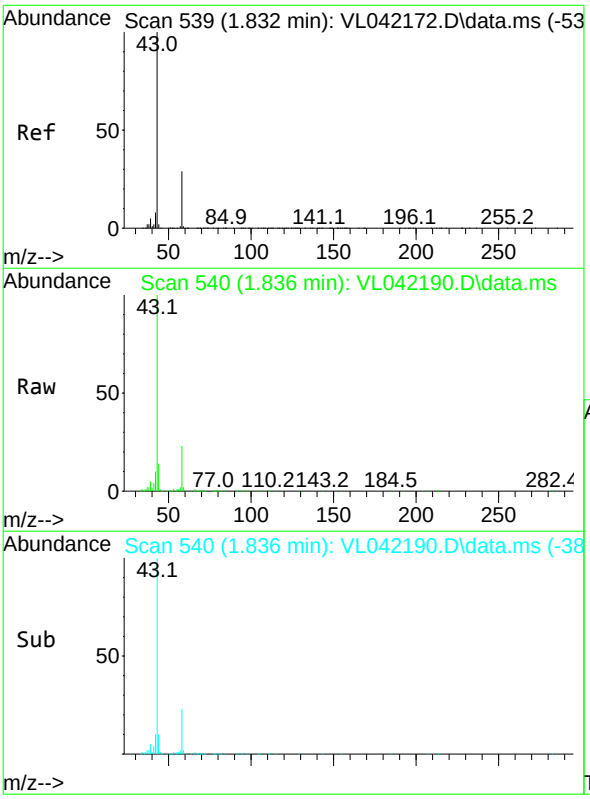
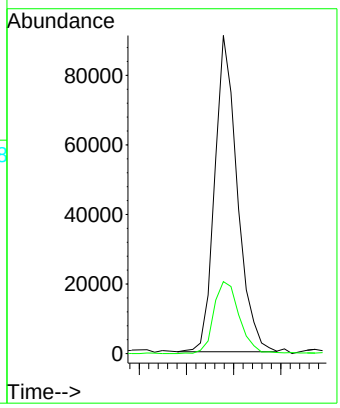
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

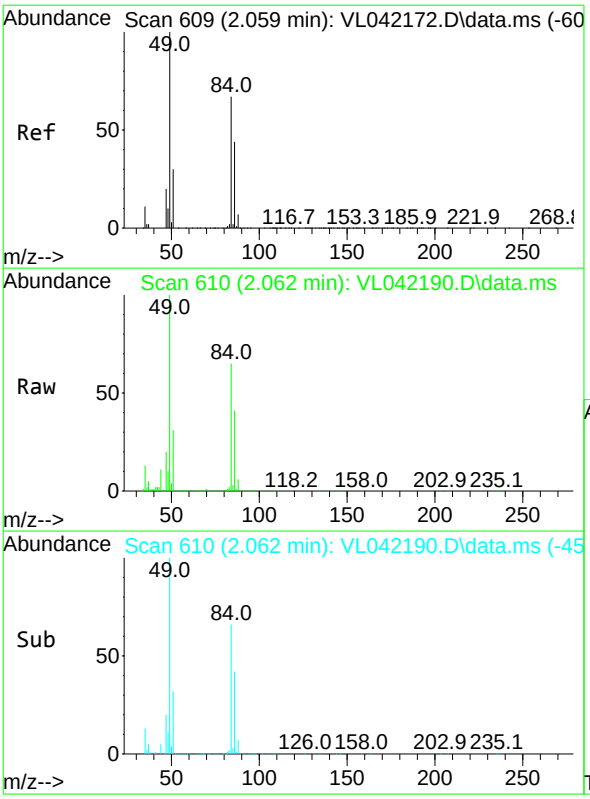


#15
Acetone
Concen: 2.348 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 43 Resp: 60628

Ion	Ratio	Lower	Upper
43	100		
58	25.8	23.2	34.8

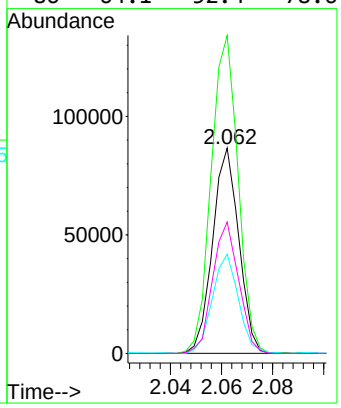




#20
Methylene Chloride
Concen: 6.427 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 84 Resp: 61810

Ion	Ratio	Lower	Upper
84	100		
49	155.0	120.2	180.4
51	48.5	37.4	56.0
86	64.1	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

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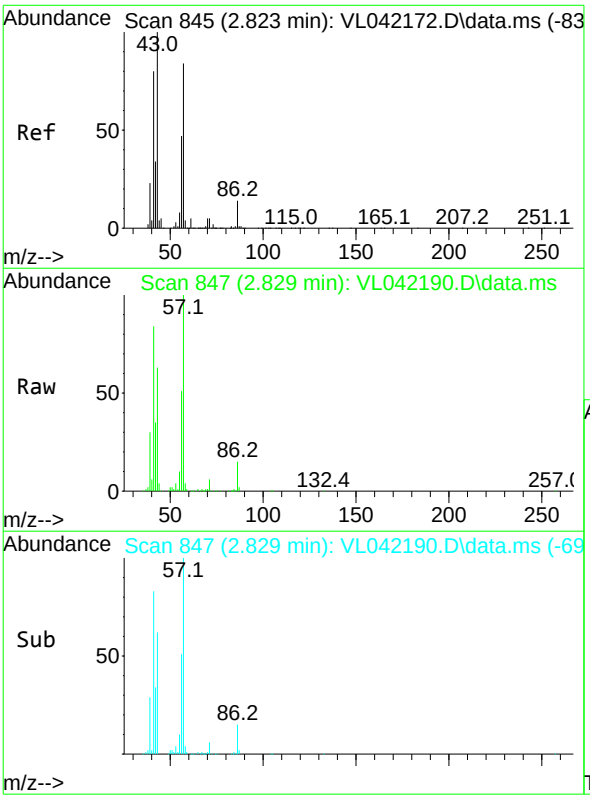
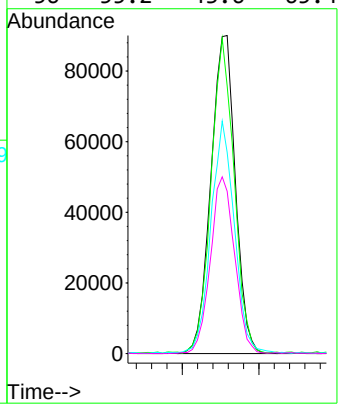
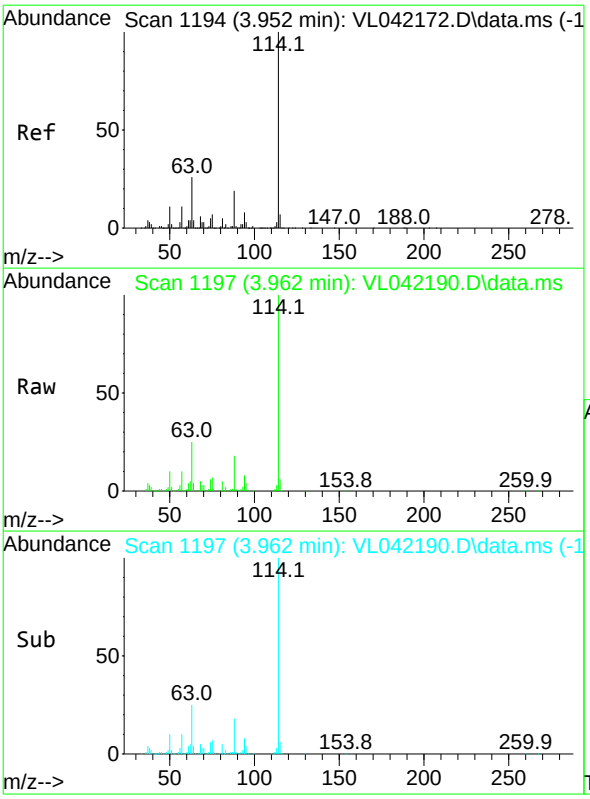


#26
Hexane
Concen: 3.861 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 57 Resp: 99961

Ion	Ratio	Lower	Upper
57	100		
41	93.0	76.6	114.8
43	71.0	207.8	311.8#
56	55.2	43.6	65.4

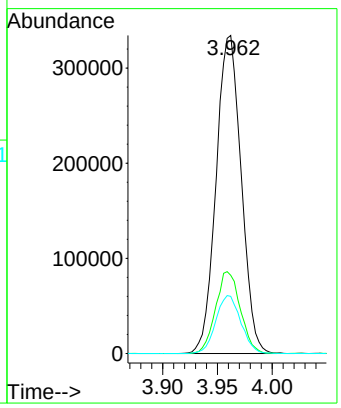




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:114 Resp: 532429

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	18.1	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
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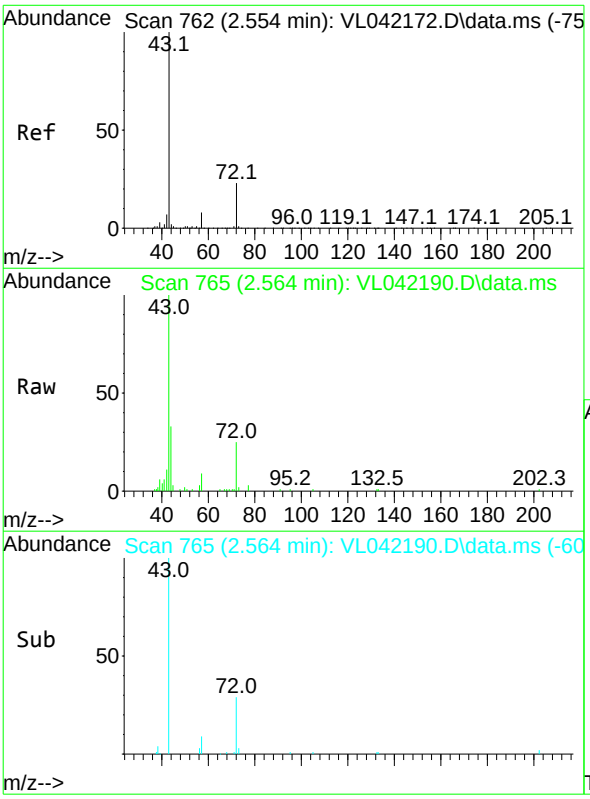
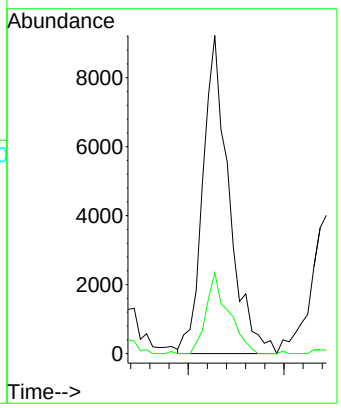
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

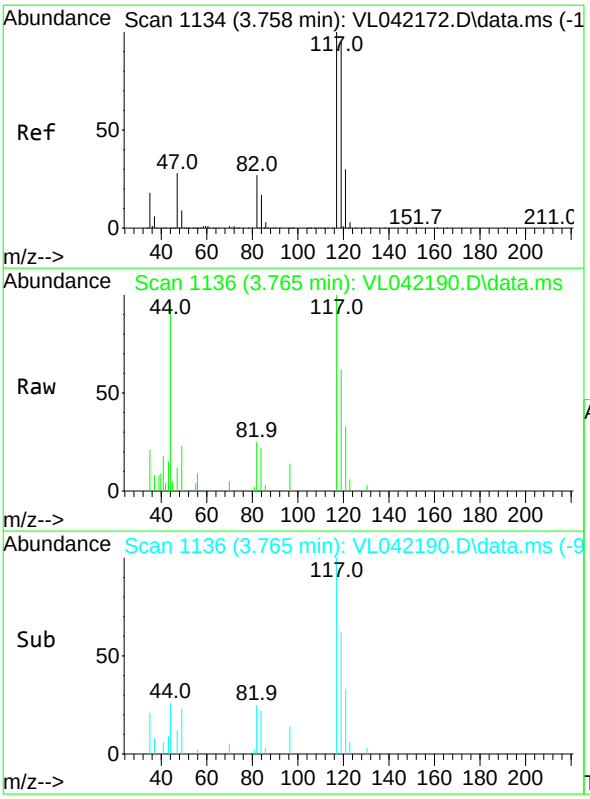


#34
2-Butanone
Concen: 0.226 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 43 Resp: 8734

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2

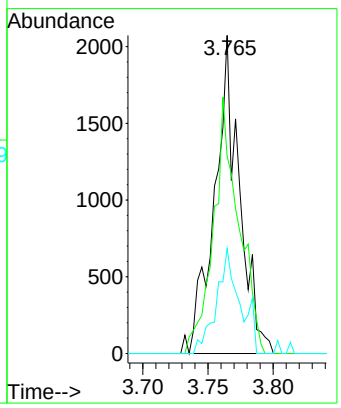




#35
Carbon Tetrachloride
Concen: 0.066 ppbv m
RT: 3.765 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:117 Resp: 2754

Ion	Ratio	Lower	Upper
117	100		
119	62.0	76.2	114.2#
121	33.0	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
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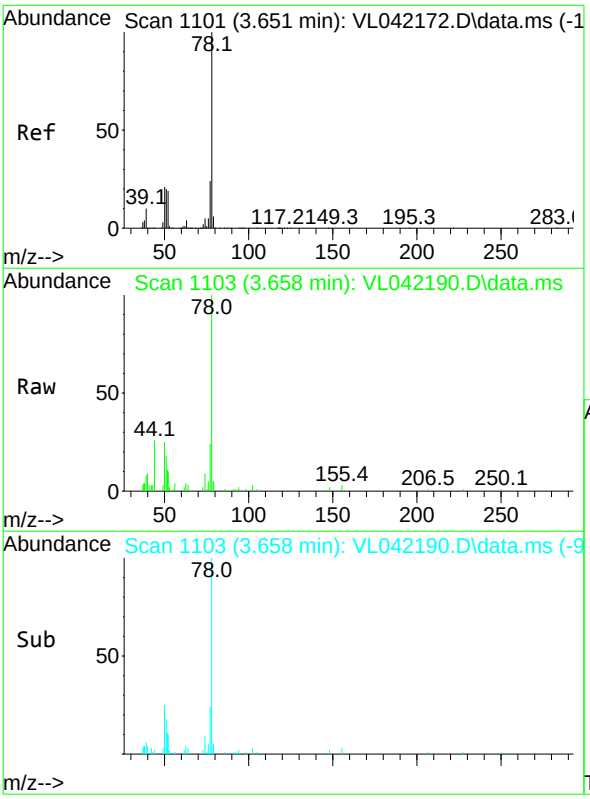
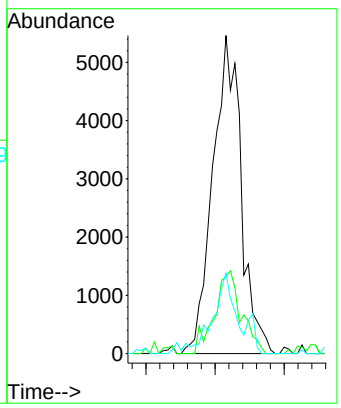
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

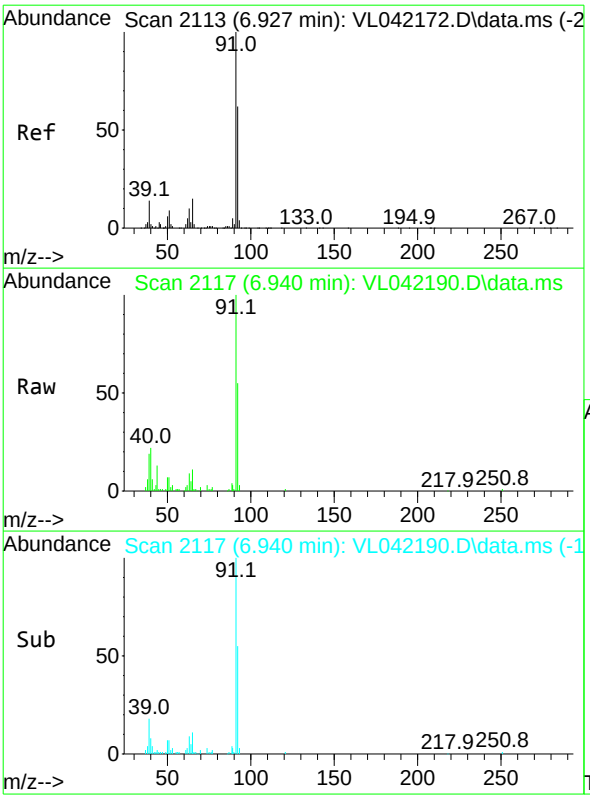


#36
Benzene
Concen: 0.147 ppbv m
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 78 Resp: 7766

Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.1	28.7
50	25.3	16.6	24.8#

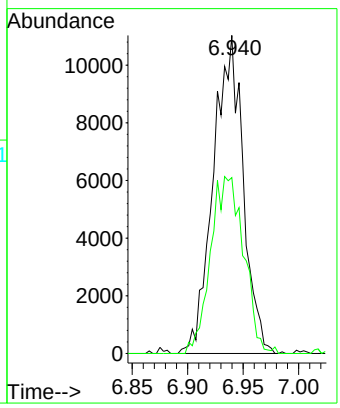




#53
Toluene
Concen: 0.329 ppbv m
RT: 6.940 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 91 Resp: 20579

Ion	Ratio	Lower	Upper
91	100		
92	61.9	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

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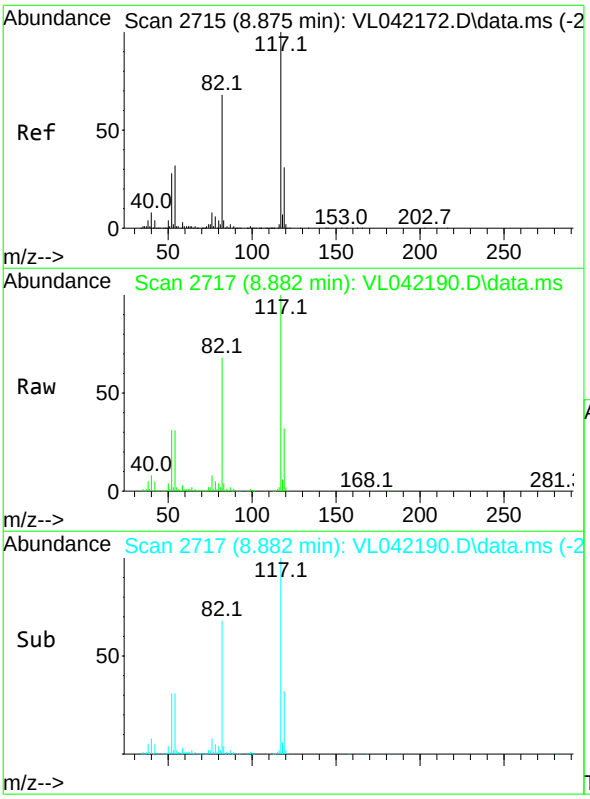
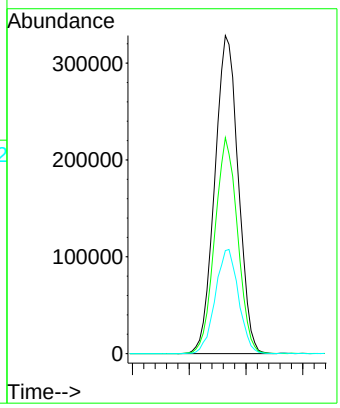
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

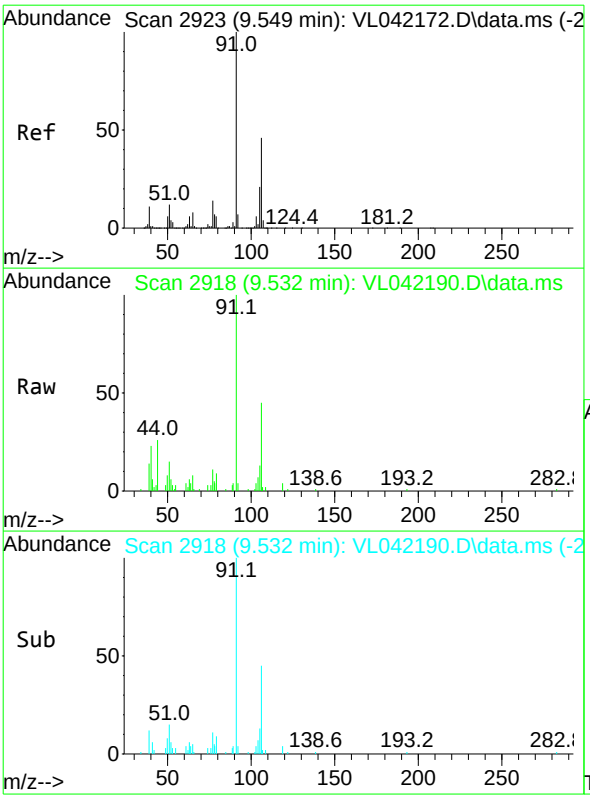


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.007 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:117 Resp: 472897

Ion	Ratio	Lower	Upper
117	100		
82	65.8	55.8	83.6
119	32.5	25.5	38.3

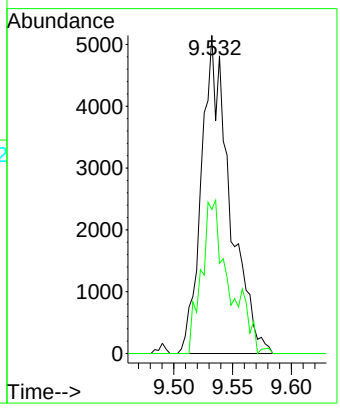




#59
m/p-Xylene
Concen: 0.128 ppbv m
RT: 9.532 min Scan# 29
Delta R.T. -0.016 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 91 Resp: 8618

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
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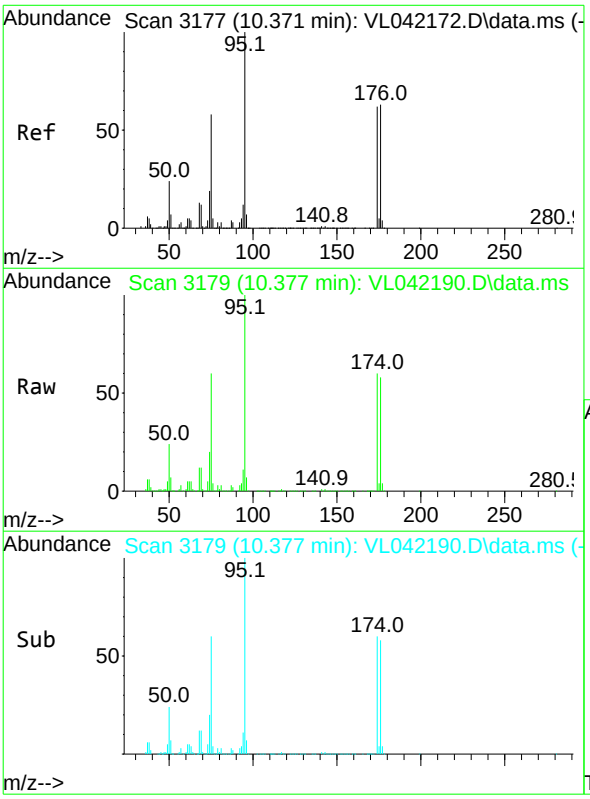
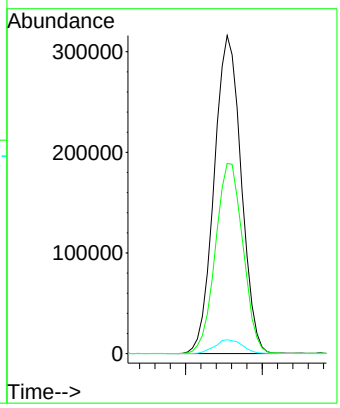
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

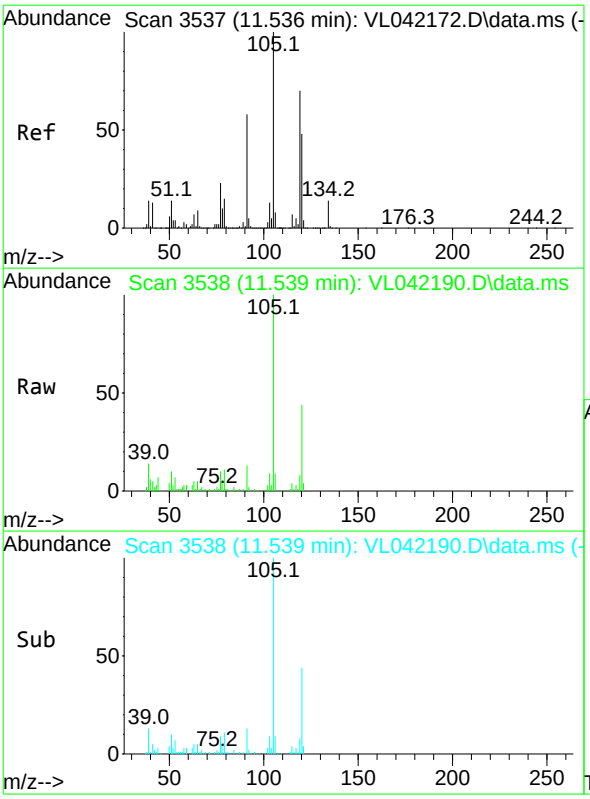


#68
1-Bromo-4-Fluorobenzene
Concen: 9.963 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 95 Resp: 386908

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.5	3.8	5.6

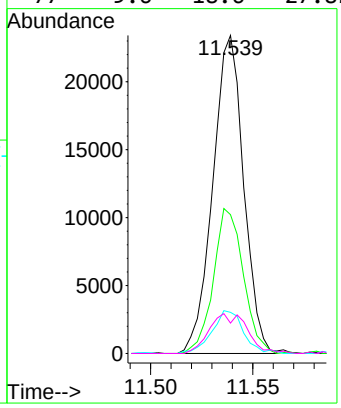




#74
1,2,4-Trimethylbenzene
Concen: 0.291 ppbv
RT: 11.539 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:105 Resp: 24527

Ion	Ratio	Lower	Upper
105	100		
120	43.6	38.6	58.0
91	12.9	46.2	69.2#
77	9.6	18.6	27.8#



Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042172.D	m/p-Xylene	SAM	3/31/2025 11:24:55 AM	MMDadoda	4/3/2025 8:05:09 AM	Peak Integrated by Software
VSTDICC002	VL042173.D	1,4-Dioxane	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software
VSTDICC002	VL042173.D	Ethanol	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software
VSTDICC002	VL042173.D	m/p-Xylene	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	1,4-Dioxane	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Ethanol	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	m/p-Xylene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Methyl Methacrylate	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Propene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	t-1,3-Dichloropropene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	trans-1,2-Dichloroethene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Vinyl Acetate	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VL042175.D	1,1,2-Trichloroethane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	1,4-Dioxane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	cis-1,3-Dichloropropene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Cyclohexane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	m/p-Xylene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Methyl Methacrylate	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Propene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Tetrahydrofuran	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Trichloroethene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	1,2-Dibromoethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.1	VL042176.D	Trichloroethene	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Tetrachloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Trichloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Vinyl Chloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC015	VL042178.D	m/p-Xylene	SAM	3/31/2025 11:25:14 AM	MMDadoda	4/3/2025 8:06:09 AM	Peak Integrated by Software
VSTDICV010	VL042179.D	m/p-Xylene	SAM	3/31/2025 11:28:50 AM	MMDadoda	4/3/2025 8:06:14 AM	Peak Integrated by Software
VL0327ABS01	VL042181.D	m/p-Xylene	SAM	3/31/2025 11:25:09 AM	MMDadoda	4/3/2025 8:06:19 AM	Peak Integrated by Software
Q1669-01	VL042185.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software
Q1669-01	VL042185.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software
Q1669-01	VL042185.D	Chlorodifluoromethane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1669-01	VL042185.D	Cyclohexane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software
Q1669-01	VL042185.D	Heptane	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software
Q1669-01	VL042185.D	m/p-Xylene	SAM	3/31/2025 11:26:49 AM	MMDadoda	4/3/2025 8:06:44 AM	Peak Integrated by Software
Q1669-02	VL042186.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-02	VL042186.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-02	VL042186.D	Chlorodifluoromethane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-02	VL042186.D	Cyclohexane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-02	VL042186.D	Heptane	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-02	VL042186.D	Propene	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-02	VL042186.D	Styrene	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-02	VL042186.D	Trichloroethene	SAM	3/31/2025 11:26:59 AM	MMDadoda	4/3/2025 8:06:49 AM	Peak Integrated by Software
Q1669-03	VL042187.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software
Q1669-03	VL042187.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software

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Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1669-03	VL042187.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software
Q1669-03	VL042187.D	Cyclohexane	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software
Q1669-03	VL042187.D	Heptane	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software
Q1669-03	VL042187.D	n-propylbenzene	SAM	3/31/2025 11:25:41 AM	MMDadoda	4/3/2025 8:06:54 AM	Peak Integrated by Software
Q1669-04	VL042188.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software
Q1669-04	VL042188.D	Chlorodifluoromethane	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software
Q1669-04	VL042188.D	m/p-Xylene	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software
Q1669-04	VL042188.D	Propene	SAM	3/31/2025 11:25:57 AM	MMDadoda	4/3/2025 8:07:00 AM	Peak Integrated by Software
Q1669-09	VL042189.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:37 AM	MMDadoda	4/3/2025 8:07:08 AM	Peak Integrated by Software
Q1669-09	VL042189.D	m/p-Xylene	SAM	3/31/2025 11:25:37 AM	MMDadoda	4/3/2025 8:07:08 AM	Peak Integrated by Software
Q1669-09	VL042189.D	Propene	SAM	3/31/2025 11:25:37 AM	MMDadoda	4/3/2025 8:07:08 AM	Peak Integrated by Software
Q1669-09DUP	VL042190.D	Benzene	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software
Q1669-09DUP	VL042190.D	Carbon Tetrachloride	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1669-09DUP	VL042190.D	m/p-Xylene	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software
Q1669-09DUP	VL042190.D	Toluene	SAM	3/31/2025 11:27:04 AM	MMDadoda	4/3/2025 8:07:18 AM	Peak Integrated by Software
Q1669-07DL	VL042192.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:27:27 AM	MMDadoda	4/3/2025 8:07:28 AM	Peak Integrated by Software
Q1669-07DL	VL042192.D	m/p-Xylene	SAM	3/31/2025 11:27:27 AM	MMDadoda	4/3/2025 8:07:28 AM	Peak Integrated by Software
Q1669-01DL	VL042195.D	m/p-Xylene	SAM	3/31/2025 11:27:14 AM	MMDadoda	4/3/2025 8:07:50 AM	Peak Integrated by Software
Q1669-01DL	VL042195.D	Propene	SAM	3/31/2025 11:27:14 AM	MMDadoda	4/3/2025 8:07:50 AM	Peak Integrated by Software
Q1669-01DUP	VL042196.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software
Q1669-01DUP	VL042196.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software
Q1669-01DUP	VL042196.D	Cyclohexane	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software
Q1669-01DUP	VL042196.D	Heptane	SAM	3/31/2025 11:25:32 AM	MMDadoda	4/3/2025 8:07:55 AM	Peak Integrated by Software
Q1669-05	VL042197.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software
Q1669-05	VL042197.D	Chlorodifluoromethane	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software
Q1669-05	VL042197.D	Cyclohexane	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software

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Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1669-05	VL042197.D	Propene	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software
Q1669-05	VL042197.D	Tetrachloroethene	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software
Q1669-05	VL042197.D	Tetrahydrofuran	SAM	3/31/2025 11:26:03 AM	MMDadoda	4/3/2025 8:08:00 AM	Peak Integrated by Software
Q1669-07	VL042198.D	2,2,4-Trimethylpentane	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software
Q1669-07	VL042198.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software
Q1669-07	VL042198.D	Cyclohexane	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software
Q1669-07	VL042198.D	Heptane	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software
Q1669-07	VL042198.D	n-propylbenzene	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software
Q1669-07	VL042198.D	Trichloroethene	SAM	3/31/2025 11:25:25 AM	MMDadoda	4/3/2025 8:08:04 AM	Peak Integrated by Software
Q1669-08	VL042199.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software
Q1669-08	VL042199.D	Chlorobenzene	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software
Q1669-08	VL042199.D	Chlorodifluoromethane	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software
Q1669-08	VL042199.D	Heptane	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1669-08	VL042199.D	m/p-Xylene	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software
Q1669-08	VL042199.D	Propene	SAM	3/31/2025 11:25:20 AM	MMDadoda	4/3/2025 8:08:09 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VL033125	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042201.D	1,1,2-Trichloroethane	SAM	4/1/2025 7:30:55 AM	MMDadoda	4/1/2025 1:19:08 PM	Peak Integrated by Software
VSTDCCC010	VL042201.D	1,4-Dioxane	SAM	4/1/2025 7:30:55 AM	MMDadoda	4/1/2025 1:19:08 PM	Peak Integrated by Software
VSTDCCC010	VL042201.D	m/p-Xylene	SAM	4/1/2025 7:30:55 AM	MMDadoda	4/1/2025 1:19:08 PM	Peak Integrated by Software
VL0331ABS01	VL042203.D	m/p-Xylene	SAM	4/1/2025 7:31:07 AM	MMDadoda	4/1/2025 1:19:10 PM	Peak Integrated by Software
Q1669-06	VL042204.D	4-Methyl-2-Pentanone	SAM	4/1/2025 7:47:12 AM	MMDadoda	4/1/2025 1:19:11 PM	Peak Integrated by Software
Q1669-06	VL042204.D	Trichloroethene	SAM	4/1/2025 7:47:12 AM	MMDadoda	4/1/2025 1:19:11 PM	Peak Integrated by Software
Q1669-06DL	VL042205.D	4-Methyl-2-Pentanone	SAM	4/1/2025 7:47:17 AM	MMDadoda	4/1/2025 1:19:13 PM	Peak Integrated by Software
Q1669-06DL	VL042205.D	Heptane	SAM	4/1/2025 7:47:17 AM	MMDadoda	4/1/2025 1:19:13 PM	Peak Integrated by Software
Q1669-06DL	VL042205.D	Tetrahydrofuran	SAM	4/1/2025 7:47:17 AM	MMDadoda	4/1/2025 1:19:13 PM	Peak Integrated by Software
Q1669-06DUP	VL042206.D	4-Methyl-2-Pentanone	SAM	4/1/2025 7:31:12 AM	MMDadoda	4/1/2025 1:19:14 PM	Peak Integrated by Software
Q1669-06DUP	VL042206.D	Naphthalene,2-methyl-	SAM	4/1/2025 7:31:12 AM	MMDadoda	4/1/2025 1:19:14 PM	Peak Integrated by Software
Q1669-06DUP	VL042206.D	Tetrachloroethene	SAM	4/1/2025 7:31:12 AM	MMDadoda	4/1/2025 1:19:14 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VL033125	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042171.D	27 Mar 2025 07:44	SY/MD	Ok
2	VSTDICCC010	VL042172.D	27 Mar 2025 08:26	SY/MD	Ok,M
3	VSTDICC002	VL042173.D	27 Mar 2025 08:59	SY/MD	Ok,M
4	VSTDICC001	VL042174.D	27 Mar 2025 09:30	SY/MD	Ok,M
5	VSTDICC0.5	VL042175.D	27 Mar 2025 10:01	SY/MD	Ok,M
6	VSTDICC0.1	VL042176.D	27 Mar 2025 10:32	SY/MD	Ok,M
7	VSTDICC0.03	VL042177.D	27 Mar 2025 11:03	SY/MD	Ok,M
8	VSTDICC015	VL042178.D	27 Mar 2025 11:36	SY/MD	Ok,M
9	VSTDICV010	VL042179.D	27 Mar 2025 12:23	SY/MD	Ok,M
10	VL0327ABL01	VL042180.D	27 Mar 2025 13:50	SY/MD	Ok
11	VL0327ABS01	VL042181.D	27 Mar 2025 14:39	SY/MD	Ok,M
12	QC032625 CAN 10448	VL042182.D	27 Mar 2025 16:41	SY/MD	Ok
13	Q1649-01	VL042183.D	27 Mar 2025 17:13	SY/MD	Not Ok
14	Q1649-02	VL042184.D	27 Mar 2025 17:45	SY/MD	Not Ok
15	Q1669-01	VL042185.D	27 Mar 2025 18:22	SY/MD	Dilution
16	Q1669-02	VL042186.D	27 Mar 2025 18:59	SY/MD	Ok,M
17	Q1669-03	VL042187.D	27 Mar 2025 19:36	SY/MD	Ok,M
18	Q1669-04	VL042188.D	27 Mar 2025 20:12	SY/MD	Ok,M
19	Q1669-09	VL042189.D	27 Mar 2025 20:48	SY/MD	Ok,M
20	Q1669-09DUP	VL042190.D	27 Mar 2025 21:24	SY/MD	Ok,M
21	Q1669-05	VL042191.D	27 Mar 2025 21:57	SY/MD	Not Ok

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1669-07DL	VL042192.D	27 Mar 2025 22:29	SY/MD	Ok,M
23	Q1669-08	VL042193.D	27 Mar 2025 23:01	SY/MD	Not Ok
24	VIBLK	VL042194.D	27 Mar 2025 23:34	SY/MD	Ok
25	Q1669-01DL	VL042195.D	28 Mar 2025 00:06	SY/MD	Ok,M
26	Q1669-01DUP	VL042196.D	28 Mar 2025 00:44	SY/MD	Ok,M
27	Q1669-05	VL042197.D	28 Mar 2025 01:20	SY/MD	Ok,M
28	Q1669-07	VL042198.D	28 Mar 2025 01:57	SY/MD	Dilution
29	Q1669-08	VL042199.D	28 Mar 2025 02:33	SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL033125

Review By	Semsettin Yesilyurt	Review On	4/1/2025 8:03:30 AM		
Supervise By	Amit Patel	Supervise On	4/1/2025 1:18:11 PM		
SubDirectory	VL033125	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042200.D	31 Mar 2025 08:09	SY/MD	Ok
2	VSTDCCC010	VL042201.D	31 Mar 2025 08:51	SY/MD	Ok,M
3	VL0331ABL01	VL042202.D	31 Mar 2025 09:34	SY/MD	Ok
4	VL0331ABS01	VL042203.D	31 Mar 2025 10:17	SY/MD	Ok,M
5	Q1669-06	VL042204.D	31 Mar 2025 11:06	SY/MD	Dilution
6	Q1669-06DL	VL042205.D	31 Mar 2025 11:52	SY/MD	Ok,M
7	Q1669-06DUP	VL042206.D	31 Mar 2025 12:26	SY/MD	Ok,M
8	Q1649-01	VL042207.D	31 Mar 2025 13:05	SY/MD	Ok,M
9	Q1649-02	VL042208.D	31 Mar 2025 13:36	SY/MD	Ok,M
10	VIBLK	VL042209.D	31 Mar 2025 14:07	SY/MD	Ok

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042171.D	27 Mar 2025 07:44		SY/MD	Ok
2	VSTDICCC010	VSTDICCC010	VL042172.D	27 Mar 2025 08:26		SY/MD	Ok,M
3	VSTDICC002	VSTDICC002	VL042173.D	27 Mar 2025 08:59		SY/MD	Ok,M
4	VSTDICC001	VSTDICC001	VL042174.D	27 Mar 2025 09:30		SY/MD	Ok,M
5	VSTDICC0.5	VSTDICC0.5	VL042175.D	27 Mar 2025 10:01		SY/MD	Ok,M
6	VSTDICC0.1	VSTDICC0.1	VL042176.D	27 Mar 2025 10:32		SY/MD	Ok,M
7	VSTDICC0.03	VSTDICC0.03	VL042177.D	27 Mar 2025 11:03		SY/MD	Ok,M
8	VSTDICC015	VSTDICC015	VL042178.D	27 Mar 2025 11:36		SY/MD	Ok,M
9	VSTDICV010	ICVVL032725	VL042179.D	27 Mar 2025 12:23		SY/MD	Ok,M
10	VL0327ABL01	VL0327ABL01	VL042180.D	27 Mar 2025 13:50		SY/MD	Ok
11	VL0327ABS01	VL0327ABS01	VL042181.D	27 Mar 2025 14:39		SY/MD	Ok,M
12	QC032625 CAN 10448	QC032625 CAN 10448	VL042182.D	27 Mar 2025 16:41		SY/MD	Ok
13	Q1649-01	SV1	VL042183.D	27 Mar 2025 17:13	rerun 4X,not required	SY/MD	Not Ok
14	Q1649-02	SV2	VL042184.D	27 Mar 2025 17:45	rerun 4X,not required	SY/MD	Not Ok
15	Q1669-01	IA-B9-3-3262025	VL042185.D	27 Mar 2025 18:22	Need 5x	SY/MD	Dilution
16	Q1669-02	IA-B9-2-3262025	VL042186.D	27 Mar 2025 18:59		SY/MD	Ok,M
17	Q1669-03	IA-B9-1-3262025	VL042187.D	27 Mar 2025 19:36		SY/MD	Ok,M
18	Q1669-04	AA-1-3262025	VL042188.D	27 Mar 2025 20:12		SY/MD	Ok,M

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1669-09	AA-2-3262025	VL042189.D	27 Mar 2025 20:48		SY/MD	Ok,M
20	Q1669-09DUP	AA-2-3262025DUP	VL042190.D	27 Mar 2025 21:24		SY/MD	Ok,M
21	Q1669-05	SSSG-B16-3-3262025	VL042191.D	27 Mar 2025 21:57	Need straight run	SY/MD	Not Ok
22	Q1669-07DL	SSSG-B16-1-3262025D	VL042192.D	27 Mar 2025 22:29		SY/MD	Ok,M
23	Q1669-08	SSSG-B16-2-3262025	VL042193.D	27 Mar 2025 23:01	Need straight run	SY/MD	Not Ok
24	VIBLK	VIBLK	VL042194.D	27 Mar 2025 23:34		SY/MD	Ok
25	Q1669-01DL	IA-B9-3-3262025DL	VL042195.D	28 Mar 2025 00:06		SY/MD	Ok,M
26	Q1669-01DUP	IA-B9-3-3262025DUP	VL042196.D	28 Mar 2025 00:44		SY/MD	Ok,M
27	Q1669-05	SSSG-B16-3-3262025	VL042197.D	28 Mar 2025 01:20		SY/MD	Ok,M
28	Q1669-07	SSSG-B16-1-3262025	VL042198.D	28 Mar 2025 01:57	Need 10X	SY/MD	Dilution
29	Q1669-08	SSSG-B16-2-3262025	VL042199.D	28 Mar 2025 02:33		SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL033125

Review By	Semsettin Yesilyurt	Review On	4/1/2025 8:03:30 AM		
Supervise By	Amit Patel	Supervise On	4/1/2025 1:18:11 PM		
SubDirectory	VL033125	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042200.D	31 Mar 2025 08:09		SY/MD	Ok
2	VSTDCCC010	VSTDCCC010	VL042201.D	31 Mar 2025 08:51		SY/MD	Ok,M
3	VL0331ABL01	VL0331ABL01	VL042202.D	31 Mar 2025 09:34		SY/MD	Ok
4	VL0331ABS01	VL0331ABS01	VL042203.D	31 Mar 2025 10:17		SY/MD	Ok,M
5	Q1669-06	SSSG-DUP-1-3262025	VL042204.D	31 Mar 2025 11:06	Need 4X	SY/MD	Dilution
6	Q1669-06DL	SSSG-DUP-1-3262025	VL042205.D	31 Mar 2025 11:52		SY/MD	Ok,M
7	Q1669-06DUP	SSSG-DUP-1-3262025	VL042206.D	31 Mar 2025 12:26		SY/MD	Ok,M
8	Q1649-01	SV1	VL042207.D	31 Mar 2025 13:05		SY/MD	Ok,M
9	Q1649-02	SV2	VL042208.D	31 Mar 2025 13:36		SY/MD	Ok,M
10	VIBLK	VIBLK	VL042209.D	31 Mar 2025 14:07		SY/MD	Ok

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q1669

Test : TO-15

Prepbatch ID :

Sequence ID/Qc Batch ID: vl032725,VL033125,

Standard ID :
AP2589,AP2593,AP2594,AP2595,AP2596,

Chemical ID :
A1117,A1135,A1136,A1137,

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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	AP2589	03/21/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 2.40000psi of A1135 + 27.60000psi of A1117 = 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	AP2593	03/21/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1136 = 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
2396	TO-15 15 PPBV CAL MIX	AP2594	03/21/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1137 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2397	TO-15 -2 PPBV CAL.MIX	AP2595	03/25/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 26.00000psi of A1117 + 4.00000psi of AP2593 = 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
2668	0.5 PPBV CAL.MIX	AP2596	03/25/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 29.00000psi of A1117 + 1.00000psi of AP2593 = 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	07/16/2025	07/22/2024 / SAM	07/22/2024 / SAM	A1135

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)	040424-003A	07/16/2025	07/25/2024 / SAM	07/22/2024 / SAM	A1136

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)	040424-003B	07/16/2025	07/25/2024 / SAM	07/22/2024 / SAM	A1137

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

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: 07/16/2025

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

Signature:

QA 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.

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

Certificate of Analysis

Customer:

ChemTech
284 Sheffield Street
Mountianside, NJ 07092

Cylinder Number: BC917782
Cylinder Size/CGA: 170/180
Fill Pressure: 1815 PSIA
Gas Volume: 110 liters
Date of Mfg: 07/16/2024
Expiration Date: 07/16/2025
Lot Number: 040424-003A

Ship To : Chemtech
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
Acetone	500 ppb	517 ppb +/- 50 ppb	Gravimetric Master Gas
Acetonitrile	500 ppb	534 ppb +/- 50 ppb	
Acrolein	500 ppb	545 ppb +/- 50 ppb	
Acrylonitrile	500 ppb	539 ppb +/- 50 ppb	
Allyl chloride	500 ppb	509 ppb +/- 50 ppb	
Benzene	500 ppb	483 ppb +/- 50 ppb	
Benzyl Chloride	500 ppb	489 ppb +/- 50 ppb	
Bromodichloromethane	500 ppb	509 ppb +/- 50 ppb	
Bromoform	500 ppb	495 ppb +/- 50 ppb	
1,3-Butadiene	500 ppb	504 ppb +/- 50 ppb	
tert-Butyl alcohol	500 ppb	532 ppb +/- 50 ppb	
n-Butyl benzene	500 ppb	529 ppb +/- 50 ppb	
sec-Butyl benzene	500 ppb	529 ppb +/- 50 ppb	
tert-Butyl benzene	500 ppb	529 ppb +/- 50 ppb	
Carbon disulfide	500 ppb	485 ppb +/- 50 ppb	
Carbon tetrachloride	500 ppb	506 ppb +/- 50 ppb	
Chlorobenzene	500 ppb	491 ppb +/- 50 ppb	
Chlorodibromomethane	500 ppb	488 ppb +/- 50 ppb	
Chloroform	500 ppb	492 ppb +/- 50 ppb	
2-Chlorotoluene	500 ppb	532 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	492 ppb +/- 50 ppb	
1,2-Dichloroethane	500 ppb	497 ppb +/- 50 ppb	
1,1-Dichlororethylene	500 ppb	493 ppb +/- 50 ppb	
cis 1,2-Dichloroethylene	500 ppb	488 ppb +/- 50 ppb	
trans 1,2-Dichloroethylene	500 ppb	488 ppb +/- 50 ppb	
1,2-Dichloropropane	500 ppb	490 ppb +/- 50 ppb	
cis 1,3-Dichloropropylene	500 ppb	516 ppb +/- 50 ppb	
trans 1,3-Dichloropropylene	500 ppb	466 ppb +/- 50 ppb	
1,2-Dichlorotetrafluoroethane	500 ppb	505 ppb +/- 50 ppb	
1,4-Dioxane	500 ppb	484 ppb +/- 50 ppb	
Ethyl acetate	500 ppb	486 ppb +/- 50 ppb	
Ethyl Alcohol	500 ppb	555 ppb +/- 50 ppb	
Ethyl benzene	500 ppb	497 ppb +/- 50 ppb	
Ethyl Chloride	500 ppb	506 ppb +/- 50 ppb	
4-Ethyltoluene	500 ppb	485 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	490 ppb +/- 50 ppb	
n-Hexane	500 ppb	485 ppb +/- 50 ppb	
Isopropyl alcohol	500 ppb	511 ppb +/- 50 ppb	
Isopropyl benzene	500 ppb	527 ppb +/- 50 ppb	
p-Isopropyl toluene	500 ppb	534 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	532 ppb +/- 50 ppb	
Methyl tertiary butyl ether	500 ppb	483 ppb +/- 50 ppb	
Methylene chloride	500 ppb	498 ppb +/- 50 ppb	
Naphthalene	500 ppb	542 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	483 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	505 ppb +/- 50 ppb	
Vinyl chloride	500 ppb	507 ppb +/- 50 ppb	
m-Xylene	500 ppb	492 ppb +/- 50 ppb	
o-Xylene	500 ppb	480 ppb +/- 50 ppb	
p-Xylene	500 ppb	486 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: 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.

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

Certificate of Analysis

Customer:

ChemTech
284 Sheffield Street
Mountianside, NJ 07092

Cylinder Number: BC169552
Cylinder Size/CGA: 170/180
Fill Pressure: 1815 PSIA
Gas Volume: 110 liters
Date of Mfg: 07/16/2024
Expiration Date: 07/16/2025
Lot Number: 040424-003B

Ship To : Chemtech
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
Acetone	500 ppb	502 ppb +/- 50 ppb	Gravimetric Master Gas
Acetonitrile	500 ppb	530 ppb +/- 50 ppb	
Acrolein	500 ppb	540 ppb +/- 50 ppb	
Acrylonitrile	500 ppb	535 ppb +/- 50 ppb	
Allyl chloride	500 ppb	494 ppb +/- 50 ppb	
Benzene	500 ppb	470 ppb +/- 50 ppb	
Benzyl Chloride	500 ppb	476 ppb +/- 50 ppb	
Bromodichloromethane	500 ppb	495 ppb +/- 50 ppb	
Bromoform	500 ppb	481 ppb +/- 50 ppb	
1,3-Butadiene	500 ppb	490 ppb +/- 50 ppb	
tert-Butyl alcohol	500 ppb	527 ppb +/- 50 ppb	
n-Butyl benzene	500 ppb	525 ppb +/- 50 ppb	
sec-Butyl benzene	500 ppb	525 ppb +/- 50 ppb	
tert-Butyl benzene	500 ppb	525 ppb +/- 50 ppb	
Carbon disulfide	500 ppb	471 ppb +/- 50 ppb	
Carbon tetrachloride	500 ppb	492 ppb +/- 50 ppb	
Chlorobenzene	500 ppb	478 ppb +/- 50 ppb	
Chlorodibromomethane	500 ppb	474 ppb +/- 50 ppb	
Chloroform	500 ppb	478 ppb +/- 50 ppb	
2-Chlorotoluene	500 ppb	527 ppb +/- 50 ppb	
Cyclohexane	500 ppb	469 ppb +/- 50 ppb	
1,2-Dibromoethane	500 ppb	477 ppb +/- 50 ppb	
1,2-Dichlorobenzene	500 ppb	495 ppb +/- 50 ppb	
1,3-Dichlorobenzene	500 ppb	475 ppb +/- 50 ppb	
1,4-Dichlorobenzene	500 ppb	476 ppb +/- 50 ppb	
Dichlorodifluoromethane (R12)	500 ppb	494 ppb +/- 50 ppb	

1,1-Dichloroethane	500 ppb	478 ppb +/- 50 ppb	
1,2-Dichloroethane	500 ppb	483 ppb +/- 50 ppb	
1,1-Dichlororethylene	500 ppb	479 ppb +/- 50 ppb	
cis 1,2-Dichloroethylene	500 ppb	475 ppb +/- 50 ppb	
trans 1,2-Dichloroethylene	500 ppb	475 ppb +/- 50 ppb	
1,2-Dichloropropane	500 ppb	476 ppb +/- 50 ppb	
cis 1,3-Dichloropropylene	500 ppb	501 ppb +/- 50 ppb	
trans 1,3-Dichloropropylene	500 ppb	466 ppb +/- 50 ppb	
1,2-Dichlorotetrafluoroethane	500 ppb	491 ppb +/- 50 ppb	
1,4-Dioxane	500 ppb	470 ppb +/- 50 ppb	
Ethyl acetate	500 ppb	472 ppb +/- 50 ppb	
Ethyl Alcohol	500 ppb	550 ppb +/- 50 ppb	
Ethyl benzene	500 ppb	483 ppb +/- 50 ppb	
Ethyl Chloride	500 ppb	492 ppb +/- 50 ppb	
4-Ethyltoluene	500 ppb	472 ppb +/- 50 ppb	
n-Heptane	500 ppb	473 ppb +/- 50 ppb	
Hexachloro-1,3-butadiene	500 ppb	475 ppb +/- 50 ppb	
2-Hexanone	500 ppb	477 ppb +/- 50 ppb	
n-Hexane	500 ppb	471 ppb +/- 50 ppb	
Isopropyl alcohol	500 ppb	497 ppb +/- 50 ppb	
Isopropyl benzene	500 ppb	522 ppb +/- 50 ppb	
p-Isopropyl toluene	500 ppb	530 ppb +/- 50 ppb	
Methyl Bromide	500 ppb	491 ppb +/- 50 ppb	
Methyl Chloride	500 ppb	494 ppb +/- 50 ppb	
Methyl ethyl ketone	500 ppb	482 ppb +/- 50 ppb	
Methyl isobutyl ketone	500 ppb	479 ppb +/- 50 ppb	
Methyl methacrylate	500 ppb	527 ppb +/- 50 ppb	
Methyl tertiary butyl ether	500 ppb	470 ppb +/- 50 ppb	
Methylene chloride	500 ppb	484 ppb +/- 50 ppb	
Naphthalene	500 ppb	537 ppb +/- 50 ppb	
n-Propylbenzene	500 ppb	525 ppb +/- 50 ppb	
Propylene	500 ppb	494 ppb +/- 50 ppb	
Styrene	500 ppb	472 ppb +/- 50 ppb	
1,1,1,2-Tetrachloroethane	500 ppb	530 ppb +/- 50 ppb	
1,1,2,2-Tetrachloroethane	500 ppb	470 ppb +/- 50 ppb	
Tetrachloroethylene	500 ppb	473 ppb +/- 50 ppb	
Tetrahydrofuran	500 ppb	520 ppb +/- 50 ppb	
Toluene	500 ppb	477 ppb +/- 50 ppb	
1,2,4-Trichlorobenzene	500 ppb	480 ppb +/- 50 ppb	
1,1,1-Trichloroethane	500 ppb	480 ppb +/- 50 ppb	
1,1,2-Trichloroethane	500 ppb	481 ppb +/- 50 ppb	
Trichloroethylene	500 ppb	474 ppb +/- 50 ppb	
Trichlorofluoromethane	500 ppb	494 ppb +/- 50 ppb	
1,1,2-Trichlorotrifluoroethane	500 ppb	481 ppb +/- 50 ppb	
1,2,4-Trimethylbenzene	500 ppb	480 ppb +/- 50 ppb	
1.3,5-Trimethylbenzene	500 ppb	484 ppb +/- 50 ppb	
2,2,4- Trimethylpentane	500 ppb	475 ppb +/- 50 ppb	
Vinyl acetate	500 ppb	485 ppb +/- 50 ppb	
Vinyl bromide	500 ppb	491 ppb +/- 50 ppb	
Vinyl chloride	500 ppb	493 ppb +/- 50 ppb	
m-Xylene	500 ppb	479 ppb +/- 50 ppb	
o-Xylene	500 ppb	466 ppb +/- 50 ppb	
p-Xylene	500 ppb	473 ppb +/- 50 ppb	
2-Methyl Naphthalene	500 ppb	497 ppb +/- 50 ppb	
R-22	500 ppb	589 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: 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.

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

Process Report

Order ID : Q1669

Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
03/28/2025	B2502051	Q1669-05	-3.5	10607	6 L	10633		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D
03/28/2025	B2502051	Q1669-06	-1.8	10606	6 L	10695		C2503001	**VL042143.D** Seq :VL031425 TUNE : VL042140.D ICAL : VL042046.D CCAL : VL042141.D MB : VL042142.D
03/28/2025	B2502051	Q1669-07	-8.0	10445	6 L	10769		C2503001	**VL042143.D** Seq :VL031425 TUNE : VL042140.D ICAL : VL042046.D CCAL : VL042141.D MB : VL042142.D
03/28/2025	B2502051	Q1669-03	-6.3	10320	6 L	10635		C2503001	**VL042143.D** Seq :VL031425 TUNE : VL042140.D ICAL : VL042046.D CCAL : VL042141.D MB : VL042142.D
03/28/2025	B2502051	Q1669-01	-7.5	10311	6 L	10506		C2502003	**VL042078.D** Seq :VL030325 TUNE : VL042074.D ICAL : VL042046.D CCAL : VL042075.D MB : VL042076.D
03/28/2025	B2502051	Q1669-09	-6.3	10285	6 L	10567		C2502003	**VL042078.D** Seq :VL030325 TUNE : VL042074.D ICAL : VL042046.D CCAL : VL042075.D MB : VL042076.D

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

Process Report

Order ID : Q1669

Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
03/28/2025	B2502051	Q1669-02	-5.9	10283	6 L	10520		C2502003	**VL042078.D** Seq :VL030325 TUNE : VL042074.D ICAL : VL042046.D CCAL : VL042075.D MB : VL042076.D
03/28/2025	B2502051	Q1669-08	-7.1	10282	6 L	10773		C2501004	**VL041966.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D
03/28/2025	B2502051	Q1669-04	-4.7	10267	6 L	10537		C2503001	**VL042143.D** Seq :VL031425 TUNE : VL042140.D ICAL : VL042046.D CCAL : VL042141.D MB : VL042142.D

Canister Cleaning

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

Canister Batch : C2503001

Type of Canister : 6 L

Cleaning Date : 03/10/2025

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
10445	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-07	10267	VL042143.D
10267	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-04	10267	VL042143.D
10492	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1665-10	10267	VL042143.D
10606	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-06	10267	VL042143.D
10280	-30	03/11/2025	03/14/2025	-30	03/12/2025		10267	VL042143.D
10597	-30	03/11/2025	03/14/2025	-30	03/12/2025		10267	VL042143.D
10320	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-03	10267	VL042143.D
10060	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1668-03	10267	VL042143.D

Canister Cleaning

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

Canister Batch : C2502003

Type of Canister : 6 L

Cleaning Date : 02/27/2025

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
10311	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1669-01	10331	VL042078.D
10315	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-13	10331	VL042078.D
10275	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-14	10331	VL042078.D
10285	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1669-09	10331	VL042078.D
10331	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-19	10331	VL042078.D
10283	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1669-02	10331	VL042078.D
10294	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-17	10331	VL042078.D

Canister Cleaning

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

Canister Batch : C2502001

Type of Canister : 6 L

Cleaning Date : 02/03/2025

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
10323	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-01	10599	VL041974.D
10607	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1669-05	10599	VL041974.D
10599	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-09	10599	VL041974.D
10053	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-08	10599	VL041974.D
10598	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-11	10599	VL041974.D
10154	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-03	10599	VL041974.D
10297	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-18	10599	VL041974.D
10608	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-16	10599	VL041974.D

Canister Cleaning

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

Canister Batch : C2501004

Type of Canister : 6 L

Cleaning Date : 01/28/2025

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
10596	-30	01/29/2025	02/03/2025	-30	01/30/2025		10439	VL041966.D
10321	-30	01/29/2025	02/03/2025	-30	01/30/2025	Q1533-02	10439	VL041966.D
10296	-30	01/29/2025	02/03/2025	-30	01/30/2025	Q1533-01	10439	VL041966.D
10439	-30	01/29/2025	02/03/2025	-30	01/30/2025	Q1649-02	10439	VL041966.D
10282	-30	01/29/2025	02/03/2025	-30	01/30/2025	Q1669-08	10439	VL041966.D
10588	-30	01/29/2025	02/03/2025	-30	01/30/2025	Q1668-01	10439	VL041966.D
10333	-30	01/29/2025	02/03/2025	-30	01/30/2025		10439	VL041966.D
10602	-30	01/29/2025	02/03/2025	-30	01/30/2025		10439	VL041966.D

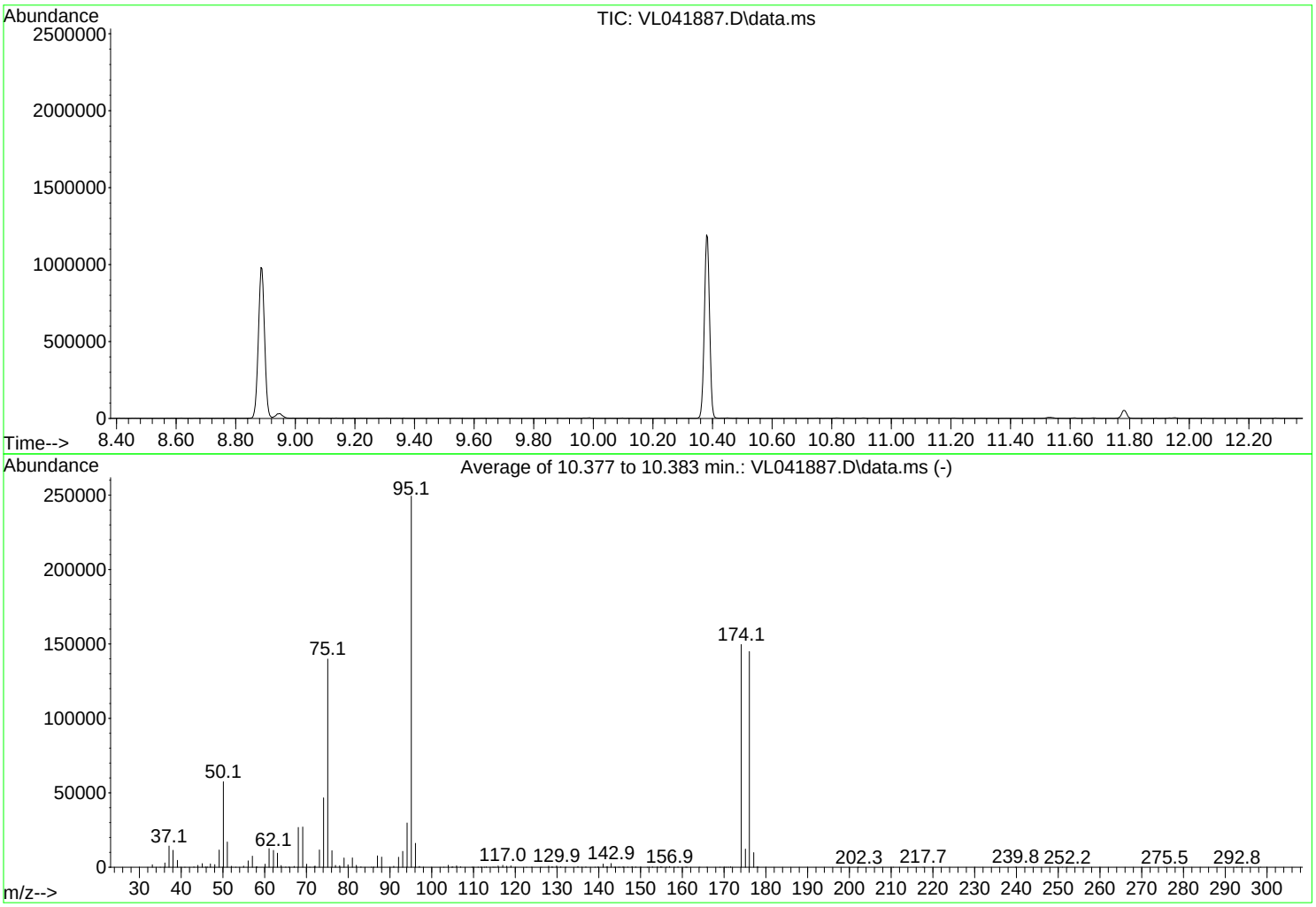
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041887.D
Acq On : 14 Jan 2025 07:50
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\VL011425AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Jan 14 23:15:42 2025



AutoFind: Scans 3179, 3180, 3181; 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	23.0	57448	PASS
75	95	30	66	56.1	139893	PASS
95	95	100	100	100.0	249280	PASS
96	95	5	9	6.5	16102	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	60.0	149632	PASS
175	174	4	9	8.2	12223	PASS
176	174	93	101	96.8	144917	PASS
177	176	5	9	6.8	9838	PASS

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL011425AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Jan 14 23:15:42 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL041894.D 0.1 =VL041893.D 0.5 =VL041892.D 1 =VL041891.D 2 =VL041890.D 10 =VL041889.D 15 =VL041895.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.450	1.406	1.359	1.300	1.295	1.362	4.93
3)		Chlorodifluoro...			1.448	1.547	1.466	1.330	1.343	1.427	6.34
4)		Chloromethane			0.546	0.499	0.525	0.492	0.499	0.512	4.41
5)	T	Vinyl Chloride	0.504	0.578	0.561	0.531	0.502	0.466	0.491	0.519	7.62
6)	T	Bromomethane			0.253	0.274	0.248	0.229	0.233	0.247	7.30
7)		Chloroethane			0.210	0.205	0.209	0.193	0.194	0.202	4.08
8)	T	Dichlorotetraf...			1.282	1.198	1.225	1.095	1.151	1.190	5.99
9)	T	Propene			0.642	0.577	0.605	0.568	0.548	0.588	6.21
10)	T	Heptane			1.536	1.616	1.635	1.530	1.538	1.571	3.19
11)	T	Trichlorofluor...			1.488	1.417	1.435	1.335	1.410	1.417	3.87
12)	T	1,1,2-Trichlor...			1.098	1.137	1.166	1.057	1.095	1.110	3.78
13)		Ethanol			0.065	0.043	0.051	0.027	0.029	0.043#	36.98
14)	T	Bromoethene			0.420	0.445	0.403	0.371	0.393	0.407	6.93
15)	T	Acetone			1.405	1.301	1.256	0.991	1.051	1.201	14.50
16)	T	1,3-Butadiene			0.552	0.589	0.545	0.494	0.515	0.539	6.74
17)		tert-Butyl alc...			1.527	1.559	1.503	1.399	1.404	1.478	4.91
18)	T	1,1-Dichloroet...			0.520	0.517	0.514	0.458	0.492	0.501	5.18
19)	T	Isopropyl Alcohol			0.864	0.731	0.714	0.621	0.631	0.712	13.77
20)	T	Methylene Chlo...			0.586	0.503	0.478	0.390	0.416	0.475	16.27
21)	T	Allyl Chloride			0.897	0.823	0.847	0.792	0.799	0.832	5.06
22)	T	trans-1,2-Dich...			0.549	0.583	0.595	0.540	0.556	0.565	4.13
23)	T	Vinyl Acetate			0.873	0.475	0.543	0.538	0.549	0.595	26.54
24)	T	1,1-Dichloroet...			1.165	1.099	1.100	1.016	1.083	1.093	4.84
25)	T	Ethyl Acetate			3.219	3.352	3.399	3.094	3.131	3.239	4.13
26)	T	Hexane			1.265	1.249	1.388	1.261	1.242	1.281	4.71
27)	T	Carbon Disulfide			1.210	1.256	1.304	1.258	1.311	1.268	3.22
28)	T	Methyl tert-Bu...			1.043	1.187	1.007	0.774	0.885	0.979	16.08
29)	T	Chloroform			2.101	2.060	2.105	1.911	1.947	2.025	4.45
30)	T	Cyclohexane			1.037	1.193	1.145	1.082	1.098	1.111	5.41
31)	T	cis-1,2-Dichlo...			1.406	1.397	1.390	1.272	1.279	1.349	4.98
32)	T	1,1,1-Trichlor...	1.937	1.841	1.942	2.010	1.956	1.905	1.973	1.938	2.76
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.649	0.646	0.679	0.602	0.605	0.636	5.13
35)	T	Carbon Tetrach...	0.605	0.608	0.584	0.616	0.657	0.649	0.677	0.628	5.32
36)	T	Benzene			0.926	0.949	0.949	0.882	0.879	0.917	3.78
37)	T	1,2-Dichloroet...			0.539	0.516	0.517	0.493	0.510	0.515	3.23
38)	T	Trichloroethene	0.286	0.427	0.381	0.374	0.373	0.354	0.353	0.364	11.62
39)	T	1,2-Dichloropr...			0.349	0.321	0.329	0.305	0.304	0.322	5.81

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL011425AIR.M

40)	T	1,4-Dioxane		0.187	0.162	0.161	0.147	0.155	0.162	9.21
41)	T	Tetrahydrofuran		0.333	0.344	0.358	0.348	0.346	0.346	2.53
42)	T	Bromodichlorom...		0.700	0.659	0.703	0.684	0.707	0.691	2.84
43)		Methyl Methacr...		0.340	0.336	0.349	0.338	0.341	0.341	1.41
44)	T	2,2,4-Trimethy...		1.450	1.501	1.566	1.457	1.444	1.484	3.45
45)	T	t-1,3-Dichloro...		0.300	0.292	0.319	0.338	0.346	0.319	7.38
46)	T	cis-1,3-Dichlo...		0.371	0.391	0.439	0.446	0.447	0.419	8.43
47)	T	1,1,2-Trichlor...		0.340	0.345	0.350	0.333	0.336	0.341	2.06
48)	T	Dibromochlorom...		0.490	0.489	0.541	0.545	0.566	0.526	6.64
49)	T	Bromoform		0.379	0.394	0.439	0.460	0.488	0.432	10.53
50)	T	4-Methyl-2-Pen...		0.892	0.870	0.899	0.833	0.846	0.868	3.29
51)	T	2-Hexanone		0.622	0.640	0.739	0.652	0.683	0.667	6.91
52)	T	Tetrachloroethene	0.320	0.348	0.317	0.329	0.330	0.292	0.291	0.318	6.46
53)	T	Toluene		0.934	0.996	1.048	1.011	1.008	0.999	4.14
54)	T	1,2-Dibromoethane	0.440	0.488	0.468	0.494	0.454	0.470	0.469	4.32
55)	I	Chlorobenzene-d5	----------ISTD----------							
56)		1,1,1,2-Tetrac...		0.502	0.514	0.510	0.481	0.488	0.499	2.86
57)	T	Chlorobenzene		0.986	0.968	0.977	0.848	0.832	0.922	8.18
58)	T	Ethyl Benzene		1.507	1.563	1.653	1.551	1.541	1.563	3.49
59)	T	m/p-Xylene		1.186	1.265	1.355	1.223	1.234	1.253	5.10
60)	T	o-Xylene		1.179	1.241	1.348	1.224	1.224	1.243	5.06
61)	T	Styrene		0.516	0.515	0.576	0.587	0.595	0.558	7.02
62)		Isopropylbenzene		1.927	1.925	2.066	1.854	1.848	1.924	4.56
63)	T	1,1,2,2-Tetrac...	0.756	0.816	0.845	0.858	0.751	0.741	0.795	6.52
64)		n-propylbenzene		0.481	0.495	0.521	0.469	0.464	0.486	4.78
65)		tert-Butylbenzene		1.746	1.782	1.919	1.675	1.645	1.753	6.12
66)	T	Benzyl Chloride		0.102	0.093	0.113	0.115	0.119	0.109	9.71
67)		sec-Butylbenzene		2.389	2.457	2.681	2.299	2.246	2.414	7.04
68)	S	1-Bromo-4-Fluo...	0.783	0.785	0.784	0.792	0.795	0.782	0.792	0.788	0.65
69)		p-Isopropyltol...		1.852	2.013	2.256	1.927	1.892	1.988	8.11
70)		n-Butylbenzene		1.867	2.048	2.206	1.898	1.840	1.972	7.80
71)		2-Chlorotoluene		1.394	1.410	1.537	1.389	1.385	1.423	4.54
72)	T	4-Ethyltoluene		1.442	1.447	1.610	1.466	1.472	1.487	4.67
73)	T	1,3,5-Trimethy...		1.222	1.360	1.448	1.263	1.275	1.313	6.88
74)	T	1,2,4-Trimethy...		1.359	1.456	1.607	1.346	1.344	1.422	7.97
75)	T	1,3-Dichlorobe...		0.881	0.884	0.903	0.776	0.771	0.843	7.61
76)	T	1,4-Dichlorobe...		0.830	0.859	0.889	0.769	0.777	0.825	6.29
77)	T	1,2-Dichlorobe...		0.863	0.902	0.909	0.757	0.745	0.835	9.43
78)	T	Hexachloro-1,3...		0.747	0.742	0.772	0.586	0.582	0.686	13.66
79)	T	Naphthalene	0.978	1.479	1.682	1.941	1.255	1.259	1.432	24.01
80)	T	Naphthalene,2-...		0.572	0.724	1.151	0.463	0.485	0.679	41.70
81)	T	1,2,4-Trichlor...		0.745	0.738	0.819	0.598	0.596	0.699	14.10

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041889.D
Acq On : 14 Jan 2025 12:55
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	152325	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	449256	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.894	117	400269	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	313194	9.934	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	197959	9.541	ppbv	100
3) Chlorodifluoromethane	1.479	51	202651	9.323	ppbv	100
4) Chloromethane	1.538	50	74977	9.608	ppbv	100
5) Vinyl Chloride	1.583	62	71006	8.984	ppbv	100
6) Bromomethane	1.674	94	34817	9.243	ppbv	100
7) Chloroethane	1.709	64	29349	9.544	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	166754	9.196	ppbv	100
9) Propene	1.486	41	86544	9.665	ppbv	100
10) Heptane	5.001	43	233062	9.738	ppbv	100
11) Trichlorofluoromethane	1.884	101	203374	9.423	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.146	101	160993	9.517	ppbv	100
13) Ethanol	1.725	45	4155	6.335	ppbv	98
14) Bromoethene	1.787	108	56447	9.114	ppbv	100
15) Acetone	1.842	43	151022	8.255	ppbv	100
16) 1,3-Butadiene	1.612	39	75244	9.163	ppbv	100
17) tert-Butyl alcohol	2.046	59	213109	9.464	ppbv	100
18) 1,1-Dichloroethene	2.039	96	69825	9.158	ppbv	100
19) Isopropyl Alcohol	1.890	45	94532	8.714	ppbv	100
20) Methylene Chloride	2.068	84	59427	8.219	ppbv	100
21) Allyl Chloride	2.101	41	120681	9.526	ppbv	100
22) trans-1,2-Dichloroethene	2.347	96	82326	9.568	ppbv	100
23) Vinyl Acetate	2.470	43	81885	10.281	ppbv	100
24) 1,1-Dichloroethane	2.418	63	154838	9.303	ppbv	100
25) Ethyl Acetate	2.845	43	471257	9.552	ppbv	100
26) Hexane	2.835	57	192009	9.841	ppbv	100
27) Carbon Disulfide	2.156	76	191567	9.921	ppbv	99
28) Methyl tert-Butyl Ether	2.450	73	117898	7.905	ppbv	100
29) Chloroform	2.858	83	291118	9.438	ppbv	100
30) Cyclohexane	3.868	84	164788	9.737	ppbv	100
31) cis-1,2-Dichloroethene	2.729	61	193774	9.432	ppbv	100
32) 1,1,1-Trichloroethane	3.379	97	290126	9.830	ppbv	100
34) 2-Butanone	2.567	43	270263	9.459	ppbv	100
35) Carbon Tetrachloride	3.777	117	291448	10.309	ppbv	100
36) Benzene	3.671	78	396344	9.619	ppbv	100
37) 1,2-Dichloroethane	3.230	62	221352	9.565	ppbv	100
38) Trichloroethene	4.564	130	159253	9.736	ppbv	100
39) 1,2-Dichloropropane	4.331	63	137090	9.484	ppbv	100
40) 1,4-Dioxane	4.606	88	66200	9.075	ppbv #	94
41) Tetrahydrofuran	3.065	42	156141	10.023	ppbv	100
42) Bromodichloromethane	4.509	83	307176	9.900	ppbv	100
43) Methyl Methacrylate	4.897	69	152001	9.930	ppbv	100
44) 2,2,4-Trimethylpentane	4.658	57	654395	9.819	ppbv	100
45) t-1,3-Dichloropropene	6.435	75	151920	10.603	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041889.D
Acq On : 14 Jan 2025 12:55
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.622	75	200330	10.649	ppbv		100
47) 1,1,2-Trichloroethane	6.600	97	149634	9.766	ppbv		100
48) Dibromochloromethane	7.402	129	245066	10.368	ppbv		100
49) Bromoform	9.496	173	206751	10.649	ppbv		100
50) 4-Methyl-2-Pentanone	5.778	43	374267	9.615	ppbv		100
51) 2-Hexanone	7.454	43	292941	9.775	ppbv	#	100
52) Tetrachloroethene	8.241	164	131334	9.193	ppbv		100
53) Toluene	6.952	91	454085	10.116	ppbv		100
54) 1,2-Dibromoethane	7.668	107	203859	9.679	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.940	131	192449	9.637	ppbv		99
57) Chlorobenzene	8.937	112	339570	9.197	ppbv		100
58) Ethyl Benzene	9.367	91	620719	9.923	ppbv		100
59) m/p-Xylene	9.564	91	979297m	19.504	ppbv		
60) o-Xylene	9.979	91	490108	9.848	ppbv		100
61) Styrene	9.885	104	234901	10.522	ppbv		100
62) Isopropylbenzene	10.552	105	742261	9.638	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.976	83	300600	9.596	ppbv		100
64) n-propylbenzene	11.002	120	187706	9.646	ppbv		99
65) tert-Butylbenzene	11.542	119	670259	9.550	ppbv		100
66) Benzyl Chloride	11.626	91	46008	10.591	ppbv		100
67) sec-Butylbenzene	11.778	105	920046	9.521	ppbv		100
69) p-Isopropyltoluene	11.937	119	771465	9.694	ppbv		100
70) n-Butylbenzene	12.293	91	759785	9.627	ppbv		100
71) 2-Chlorotoluene	10.914	91	556170	9.763	ppbv		100
72) 4-Ethyltoluene	11.137	105	586667	9.855	ppbv		100
73) 1,3,5-Trimethylbenzene	11.215	105	505443	9.614	ppbv		100
74) 1,2,4-Trimethylbenzene	11.549	105	538665	9.461	ppbv		100
75) 1,3-Dichlorobenzene	11.620	146	310421	9.201	ppbv		100
76) 1,4-Dichlorobenzene	11.684	146	307758	9.324	ppbv		100
77) 1,2-Dichlorobenzene	11.960	146	303196	9.068	ppbv		100
78) Hexachloro-1,3-Butadiene	13.895	225	234457	8.543	ppbv		100
79) Naphthalene	13.526	128	502354	8.764	ppbv		100
80) Naphthalene,2-methyl-	14.471	142	185336	6.819	ppbv		100
81) 1,2,4-Trichlorobenzene	13.452	180	239317	8.553	ppbv		100

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

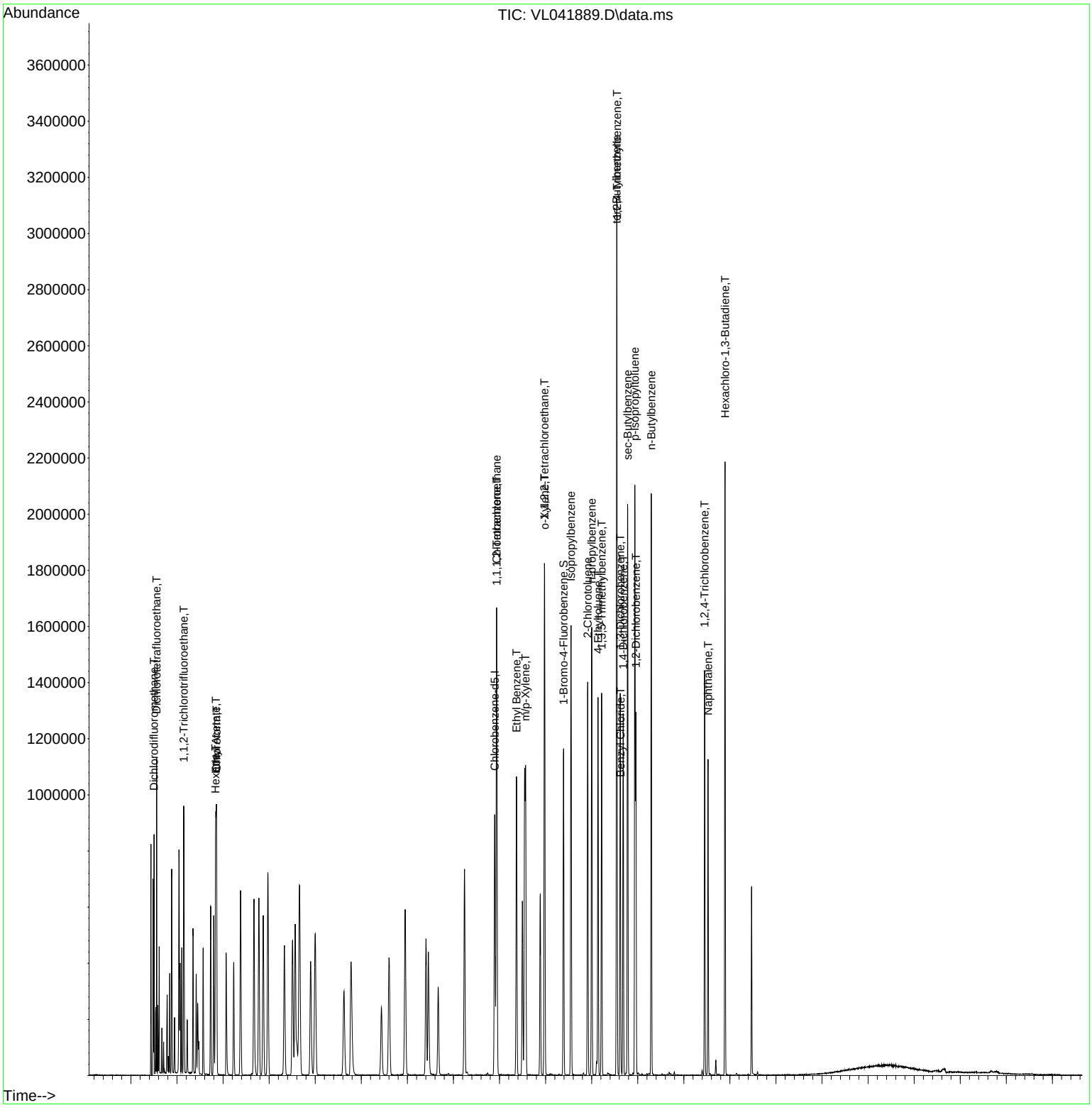
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041889.D
Acq On : 14 Jan 2025 12:55
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041890.D
Acq On : 14 Jan 2025 13:28
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	150761	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.971	114	452131	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.894	117	394865	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	313784	10.089	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	40991	1.996	ppbv		98
3) Chlorodifluoromethane	1.479	51	44207	2.055	ppbv		99
4) Chloromethane	1.538	50	15833	2.050	ppbv		93
5) Vinyl Chloride	1.583	62	15137	1.935	ppbv		99
6) Bromomethane	1.673	94	7486	2.008	ppbv		91
7) Chloroethane	1.709	64	6303	2.071	ppbv	#	84
8) Dichlorotetrafluoroethane	1.557	85	36941	2.058	ppbv		99
9) Propene	1.486	41	18248	2.059	ppbv		95
10) Heptane	5.001	43	49302	2.081	ppbv		97
11) Trichlorofluoromethane	1.884	101	43266	2.025	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.146	101	35162	2.100	ppbv		97
13) Ethanol	1.725	45	1534	2.363	ppbv		84
14) Bromoethene	1.787	108	12163	1.984	ppbv	#	95
15) Acetone	1.842	43	37867	2.091	ppbv		99
16) 1,3-Butadiene	1.612	39	16446	2.024	ppbv		100
17) tert-Butyl alcohol	2.049	59	45305	2.033	ppbv		99
18) 1,1-Dichloroethene	2.039	96	15508	2.055	ppbv		97
19) Isopropyl Alcohol	1.894	45	21530	2.005	ppbv		94
20) Methylene Chloride	2.068	84	14399	2.012	ppbv		95
21) Allyl Chloride	2.104	41	25533	2.036	ppbv		97
22) trans-1,2-Dichloroethene	2.350	96	17951	2.108	ppbv		83
23) Vinyl Acetate	2.470	43	16358	2.075	ppbv		99
24) 1,1-Dichloroethane	2.418	63	33175	2.014	ppbv		99
25) Ethyl Acetate	2.848	43	102475	2.099	ppbv		99
26) Hexane	2.835	57	41844	2.167	ppbv		99
27) Carbon Disulfide	2.156	76	39306	2.057	ppbv	#	70
28) Methyl tert-Butyl Ether	2.454	73	30355	2.056	ppbv		96
29) Chloroform	2.858	83	63457	2.079	ppbv		94
30) Cyclohexane	3.874	84	34518	2.061	ppbv		97
31) cis-1,2-Dichloroethene	2.729	61	41921	2.062	ppbv		89
32) 1,1,1-Trichloroethane	3.382	97	58965	2.019	ppbv		98
34) 2-Butanone	2.570	43	61381	2.135	ppbv		99
35) Carbon Tetrachloride	3.777	117	59430	2.089	ppbv		95
36) Benzene	3.670	78	85859	2.070	ppbv		96
37) 1,2-Dichloroethane	3.230	62	46786	2.009	ppbv		100
38) Trichloroethene	4.564	130	33773	2.052	ppbv		98
39) 1,2-Dichloropropane	4.334	63	29723	2.043	ppbv		96
40) 1,4-Dioxane	4.619	88	14566m	1.984	ppbv		
41) Tetrahydrofuran	3.072	42	32358	2.064	ppbv		96
42) Bromodichloromethane	4.509	83	63611	2.037	ppbv		99
43) Methyl Methacrylate	4.900	69	31519	2.046	ppbv		99
44) 2,2,4-Trimethylpentane	4.658	57	141602	2.111	ppbv		100
45) t-1,3-Dichloropropene	6.435	75	28818	1.999	ppbv		97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041890.D
Acq On : 14 Jan 2025 13:28
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.625	75	39668	2.095	ppbv		94
47) 1,1,2-Trichloroethane	6.600	97	31694m	2.055	ppbv		
48) Dibromochloromethane	7.406	129	48894	2.055	ppbv		99
49) Bromoform	9.496	173	39710	2.032	ppbv		99
50) 4-Methyl-2-Pentanone	5.784	43	81330	2.076	ppbv		98
51) 2-Hexanone	7.457	43	66831	2.216	ppbv	#	98
52) Tetrachloroethene	8.241	164	29814	2.074	ppbv		94
53) Toluene	6.952	91	94741	2.097	ppbv		98
54) 1,2-Dibromoethane	7.671	107	44636	2.106	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.940	131	40249	2.043	ppbv		93
57) Chlorobenzene	8.933	112	77180	2.119	ppbv		94
58) Ethyl Benzene	9.367	91	130554	2.116	ppbv		98
59) m/p-Xylene	9.561	91	214076m	4.322	ppbv		
60) o-Xylene	9.975	91	106458	2.168	ppbv		99
61) Styrene	9.885	104	45490	2.065	ppbv		99
62) Isopropylbenzene	10.552	105	163135	2.147	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.975	83	67775	2.193	ppbv		99
64) n-propylbenzene	11.001	120	41184	2.145	ppbv		99
65) tert-Butylbenzene	11.542	119	151534	2.189	ppbv		97
66) Benzyl Chloride	11.626	91	8925	2.083	ppbv		97
67) sec-Butylbenzene	11.778	105	211759	2.221	ppbv		99
69) p-Isopropyltoluene	11.937	119	178172	2.270	ppbv		100
70) n-Butylbenzene	12.293	91	174217	2.238	ppbv		99
71) 2-Chlorotoluene	10.914	91	121418	2.161	ppbv		100
72) 4-Ethyltoluene	11.137	105	127115	2.164	ppbv		100
73) 1,3,5-Trimethylbenzene	11.215	105	114342	2.205	ppbv		99
74) 1,2,4-Trimethylbenzene	11.548	105	126939	2.260	ppbv	#	89
75) 1,3-Dichlorobenzene	11.616	146	71332	2.143	ppbv		98
76) 1,4-Dichlorobenzene	11.684	146	70219	2.156	ppbv		99
77) 1,2-Dichlorobenzene	11.960	146	71818	2.177	ppbv		100
78) Hexachloro-1,3-Butadiene	13.892	225	60984	2.253	ppbv		99
79) Naphthalene	13.526	128	153268	2.710	ppbv		98
80) Naphthalene,2-methyl-	14.471	142	90910	3.391	ppbv		99
81) 1,2,4-Trichlorobenzene	13.452	180	64653	2.342	ppbv		98

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

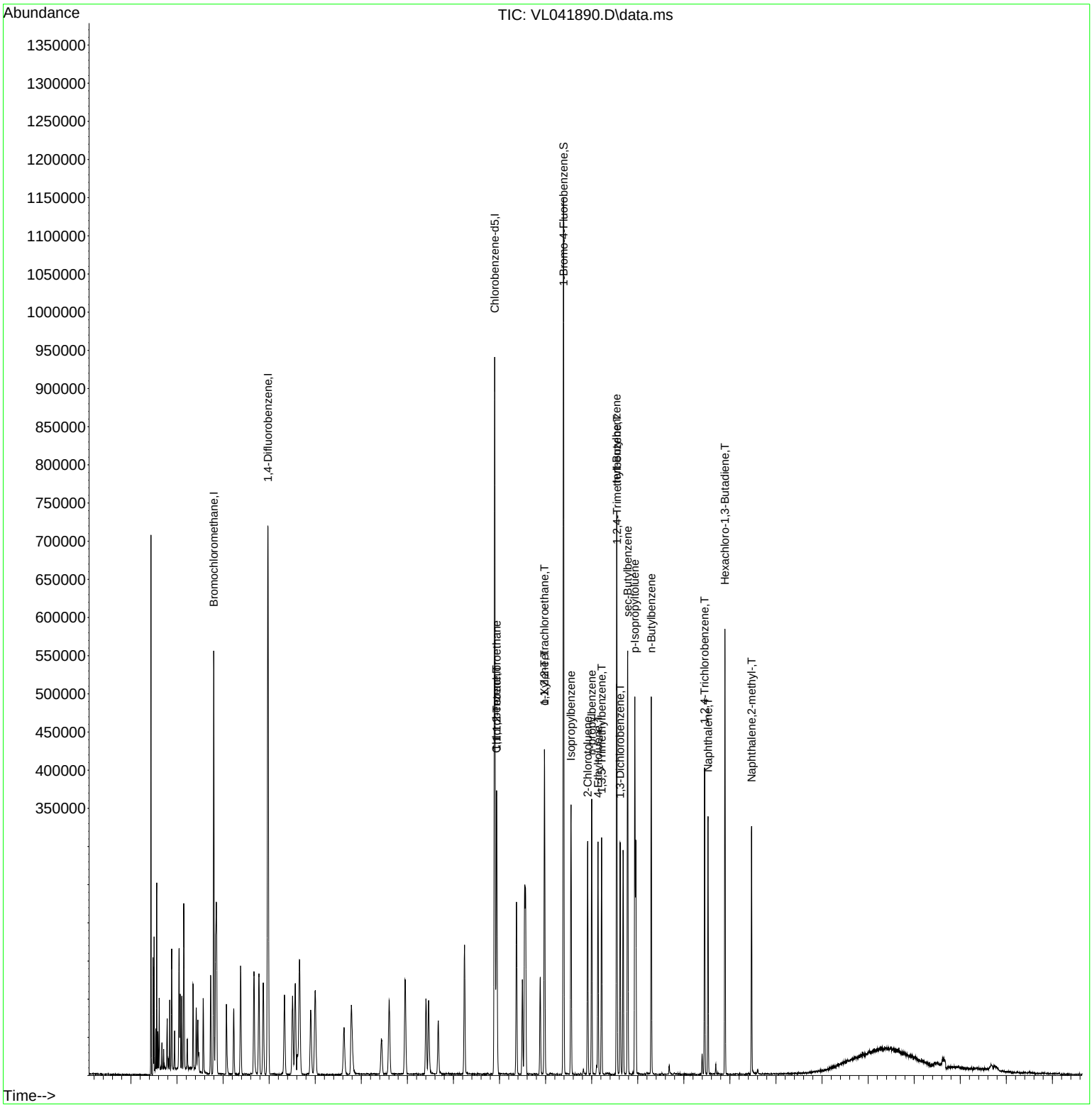
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041890.D
Acq On : 14 Jan 2025 13:28
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041891.D
Acq On : 14 Jan 2025 13:59
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	151226	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.972	114	453418	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.895	117	393836	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.387	95	312013	10.058	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	21262	1.032	ppbv		95
3) Chlorodifluoromethane	1.479	51	23396	1.084	ppbv		100
4) Chloromethane	1.534	50	7546	0.974	ppbv		94
5) Vinyl Chloride	1.583	62	8031	1.023	ppbv		97
6) Bromomethane	1.674	94	4139	1.107	ppbv	#	81
7) Chloroethane	1.709	64	3093	1.013	ppbv		92
8) Dichlorotetrafluoroethane	1.557	85	18122	1.007	ppbv		100
9) Propene	1.486	41	8719	0.981	ppbv		93
10) Heptane	5.001	43	24438	1.029	ppbv		96
11) Trichlorofluoromethane	1.884	101	21425	1.000	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.143	101	17187	1.023	ppbv		95
13) Ethanol	1.725	45	650	0.998	ppbv	#	29
14) Bromoethene	1.787	108	6736	1.096	ppbv	#	88
15) Acetone	1.842	43	19681	1.084	ppbv		95
16) 1,3-Butadiene	1.612	39	8901	1.092	ppbv		98
17) tert-Butyl alcohol	2.049	59	23571	1.054	ppbv		95
18) 1,1-Dichloroethene	2.039	96	7819m	1.033	ppbv		
19) Isopropyl Alcohol	1.894	45	11054	1.026	ppbv	#	32
20) Methylene Chloride	2.065	84	7608	1.060	ppbv	#	89
21) Allyl Chloride	2.101	41	12451	0.990	ppbv		98
22) trans-1,2-Dichloroethene	2.347	96	8819	1.032	ppbv		96
23) Vinyl Acetate	2.470	43	7181	0.908	ppbv	#	93
24) 1,1-Dichloroethane	2.415	63	16623	1.006	ppbv		97
25) Ethyl Acetate	2.845	43	50690	1.035	ppbv		98
26) Hexane	2.836	57	18893	0.975	ppbv		86
27) Carbon Disulfide	2.156	76	18993	0.991	ppbv	#	23
28) Methyl tert-Butyl Ether	2.450	73	17955	1.213	ppbv		98
29) Chloroform	2.858	83	31155	1.017	ppbv		97
30) Cyclohexane	3.871	84	18048	1.074	ppbv		96
31) cis-1,2-Dichloroethene	2.729	61	21124	1.036	ppbv		99
32) 1,1,1-Trichloroethane	3.383	97	30396	1.037	ppbv		98
34) 2-Butanone	2.570	43	29280	1.015	ppbv		99
35) Carbon Tetrachloride	3.774	117	27946	0.979	ppbv		96
36) Benzene	3.671	78	43023	1.035	ppbv		93
37) 1,2-Dichloroethane	3.230	62	23402	1.002	ppbv		98
38) Trichloroethene	4.564	130	16954m	1.027	ppbv		
39) 1,2-Dichloropropane	4.331	63	14570	0.999	ppbv		98
40) 1,4-Dioxane	4.613	88	7345m	0.998	ppbv		
41) Tetrahydrofuran	3.075	42	15580m	0.991	ppbv		
42) Bromodichloromethane	4.509	83	29893m	0.955	ppbv		
43) Methyl Methacrylate	4.901	69	15222	0.985	ppbv		95
44) 2,2,4-Trimethylpentane	4.661	57	68050	1.012	ppbv		98
45) t-1,3-Dichloropropene	6.438	75	13220	0.914	ppbv		92

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041891.D
Acq On : 14 Jan 2025 13:59
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.626	75	17749	0.935	ppbv		97
47) 1,1,2-Trichloroethane	6.603	97	15658m	1.013	ppbv		
48) Dibromochloromethane	7.402	129	22169	0.929	ppbv		100
49) Bromoform	9.497	173	17876	0.912	ppbv		100
50) 4-Methyl-2-Pentanone	5.787	43	39436m	1.004	ppbv		
51) 2-Hexanone	7.464	43	28999	0.959	ppbv	#	95
52) Tetrachloroethene	8.244	164	14903	1.034	ppbv	#	80
53) Toluene	6.956	91	45140m	0.996	ppbv		
54) 1,2-Dibromoethane	7.668	107	21202	0.997	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.937	131	20255	1.031	ppbv		94
57) Chlorobenzene	8.933	112	38141	1.050	ppbv		98
58) Ethyl Benzene	9.367	91	61537	1.000	ppbv		99
59) m/p-Xylene	9.561	91	99618m	2.016	ppbv		
60) o-Xylene	9.972	91	48888	0.998	ppbv		98
61) Styrene	9.882	104	20285	0.923	ppbv		99
62) Isopropylbenzene	10.549	105	75801	1.000	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.972	83	33289	1.080	ppbv		97
64) n-propylbenzene	11.002	120	19511	1.019	ppbv		99
65) tert-Butylbenzene	11.539	119	70183	1.016	ppbv		98
66) Benzyl Chloride	11.626	91	3681m	0.861	ppbv		
67) sec-Butylbenzene	11.778	105	96749	1.018	ppbv		97
69) p-Isopropyltoluene	11.937	119	79283	1.013	ppbv		98
70) n-Butylbenzene	12.290	91	80664	1.039	ppbv		99
71) 2-Chlorotoluene	10.911	91	55540	0.991	ppbv		99
72) 4-Ethyltoluene	11.134	105	56973	0.973	ppbv		97
73) 1,3,5-Trimethylbenzene	11.215	105	53550	1.035	ppbv		97
74) 1,2,4-Trimethylbenzene	11.545	105	57352	1.024	ppbv		96
75) 1,3-Dichlorobenzene	11.617	146	34810	1.049	ppbv		99
76) 1,4-Dichlorobenzene	11.681	146	33822	1.041	ppbv		97
77) 1,2-Dichlorobenzene	11.960	146	35516	1.080	ppbv		98
78) Hexachloro-1,3-Butadiene	13.892	225	29210	1.082	ppbv		99
79) Naphthalene	13.523	128	66232	1.174	ppbv		98
80) Naphthalene,2-methyl-	14.468	142	28506	1.066	ppbv		98
81) 1,2,4-Trichlorobenzene	13.452	180	29053	1.055	ppbv		99

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

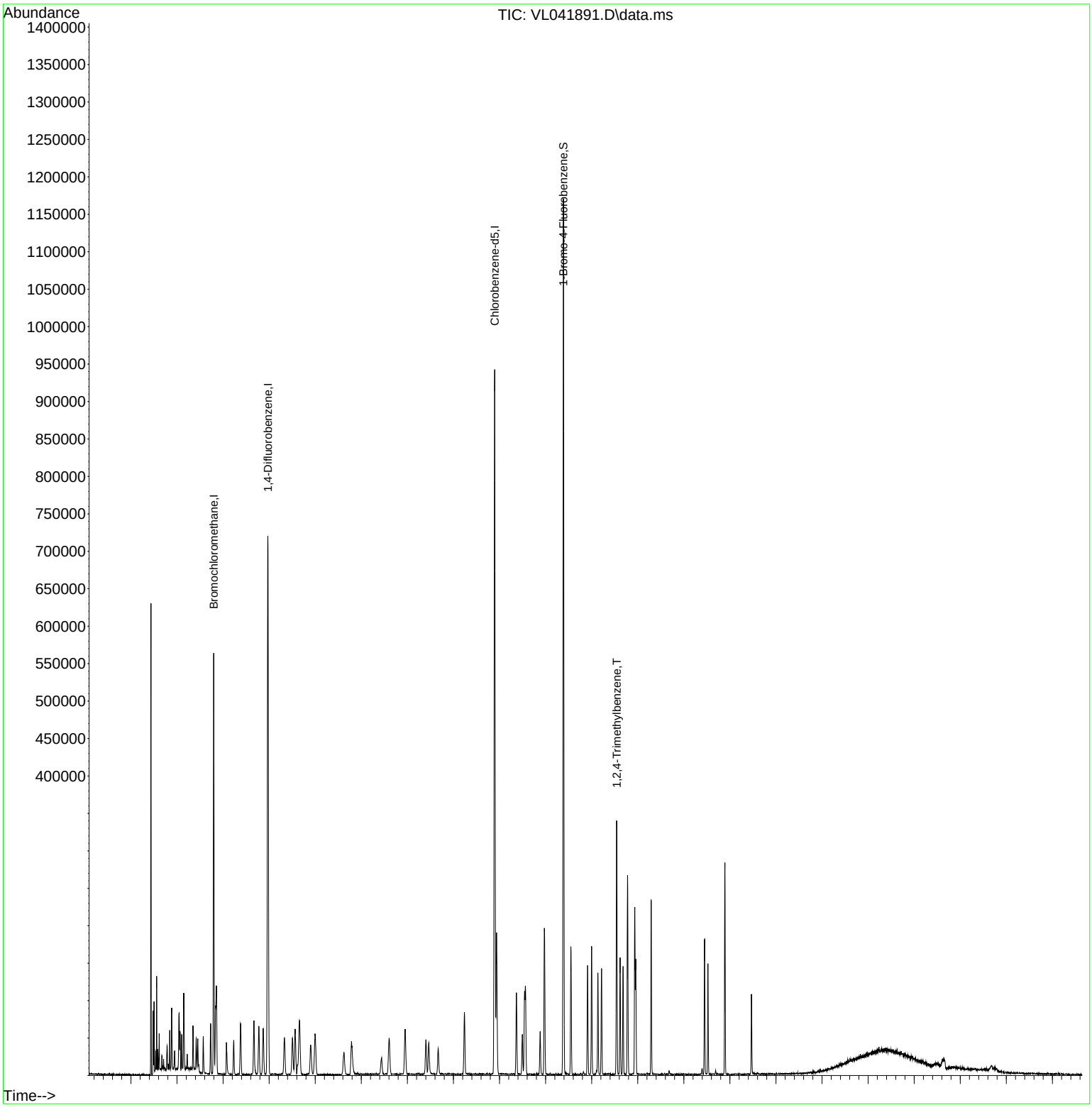
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041891.D
Acq On : 14 Jan 2025 13:59
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041892.D
Acq On : 14 Jan 2025 14:30
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	146186	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.968	114	430874	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.891	117	379402	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.383	95	297462	9.954	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10599	0.532	ppbv		99
3) Chlorodifluoromethane	1.476	51	10582	0.507	ppbv		98
4) Chloromethane	1.534	50	3990	0.533	ppbv		98
5) Vinyl Chloride	1.580	62	4097	0.540	ppbv		94
6) Bromomethane	1.670	94	1852	0.512	ppbv	#	78
7) Chloroethane	1.706	64	1532	0.519	ppbv	#	77
8) Dichlorotetrafluoroethane	1.557	85	9372	0.539	ppbv		95
9) Propene	1.486	41	4690	0.546	ppbv		85
10) Heptane	4.988	43	11230	0.489	ppbv		95
11) Trichlorofluoromethane	1.881	101	10873	0.525	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.143	101	8027	0.494	ppbv		90
13) Ethanol	1.725	45	478m	0.759	ppbv		
14) Bromoethene	1.784	108	3071	0.517	ppbv	#	94
15) Acetone	1.839	43	10273	0.585	ppbv		99
16) 1,3-Butadiene	1.612	39	4038	0.512	ppbv		99
17) tert-Butyl alcohol	2.046	59	11158	0.516	ppbv	#	94
18) 1,1-Dichloroethene	2.036	96	3803	0.520	ppbv		95
19) Isopropyl Alcohol	1.891	45	6317	0.607	ppbv	#	32
20) Methylene Chloride	2.065	84	4286	0.618	ppbv		93
21) Allyl Chloride	2.101	41	6553	0.539	ppbv		96
22) trans-1,2-Dichloroethene	2.347	96	4015	0.486	ppbv		89
23) Vinyl Acetate	2.467	43	6381m	0.835	ppbv		
24) 1,1-Dichloroethane	2.415	63	8512	0.533	ppbv		97
25) Ethyl Acetate	2.845	43	23529	0.497	ppbv		97
26) Hexane	2.829	57	9246m	0.494	ppbv		
27) Carbon Disulfide	2.153	76	8847	0.477	ppbv	#	1
28) Methyl tert-Butyl Ether	2.447	73	7621	0.532	ppbv		97
29) Chloroform	2.855	83	15360	0.519	ppbv		92
30) Cyclohexane	3.871	84	7579	0.467	ppbv		92
31) cis-1,2-Dichloroethene	2.726	61	10275	0.521	ppbv	#	89
32) 1,1,1-Trichloroethane	3.379	97	14198	0.501	ppbv		98
34) 2-Butanone	2.567	43	13981	0.510	ppbv		94
35) Carbon Tetrachloride	3.774	117	12590	0.464	ppbv		89
36) Benzene	3.667	78	19954	0.505	ppbv		95
37) 1,2-Dichloroethane	3.227	62	11613	0.523	ppbv		97
38) Trichloroethene	4.561	130	8199	0.523	ppbv	#	89
39) 1,2-Dichloropropane	4.324	63	7526m	0.543	ppbv		
40) 1,4-Dioxane	4.616	88	4031m	0.576	ppbv		
41) Tetrahydrofuran	3.072	42	7183	0.481	ppbv		94
42) Bromodichloromethane	4.499	83	15081m	0.507	ppbv		
43) Methyl Methacrylate	4.891	69	7332m	0.499	ppbv		
44) 2,2,4-Trimethylpentane	4.645	57	31243	0.489	ppbv		95
45) t-1,3-Dichloropropene	6.428	75	6465m	0.470	ppbv		

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041892.D
Acq On : 14 Jan 2025 14:30
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.609	75	7986m	0.443	ppbv		
47) 1,1,2-Trichloroethane	6.597	97	7324	0.498	ppbv	#	84
48) Dibromochloromethane	7.393	129	10548m	0.465	ppbv		
49) Bromoform	9.493	173	8162	0.438	ppbv		97
50) 4-Methyl-2-Pentanone	5.794	43	19221m	0.515	ppbv		
51) 2-Hexanone	7.454	43	13390	0.466	ppbv	#	97
52) Tetrachloroethene	8.238	164	6821m	0.498	ppbv		
53) Toluene	6.946	91	20118	0.467	ppbv		96
54) 1,2-Dibromoethane	7.665	107	10511	0.520	ppbv		89
56) 1,1,1,2-Tetrachloroethane	8.930	131	9524	0.503	ppbv	#	1
57) Chlorobenzene	8.930	112	18701	0.534	ppbv	#	90
58) Ethyl Benzene	9.364	91	28584	0.482	ppbv	#	88
59) m/p-Xylene	9.558	91	45003m	0.946	ppbv		
60) o-Xylene	9.972	91	22370	0.474	ppbv		97
61) Styrene	9.879	104	9788	0.463	ppbv		99
62) Isopropylbenzene	10.545	105	36561	0.501	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.969	83	15485	0.521	ppbv		98
64) n-propylbenzene	10.995	120	9128	0.495	ppbv		93
65) tert-Butylbenzene	11.536	119	33122	0.498	ppbv		98
66) Benzyl Chloride	11.620	91	1935	0.470	ppbv		99
67) sec-Butylbenzene	11.775	105	45326	0.495	ppbv		98
69) p-Isopropyltoluene	11.931	119	35136	0.466	ppbv		98
70) n-Butylbenzene	12.287	91	35409	0.473	ppbv		96
71) 2-Chlorotoluene	10.908	91	26436	0.490	ppbv		99
72) 4-Ethyltoluene	11.131	105	27363	0.485	ppbv		97
73) 1,3,5-Trimethylbenzene	11.209	105	23183	0.465	ppbv		93
74) 1,2,4-Trimethylbenzene	11.545	105	25777	0.478	ppbv		89
75) 1,3-Dichlorobenzene	11.610	146	16708	0.522	ppbv		100
76) 1,4-Dichlorobenzene	11.678	146	15738	0.503	ppbv		96
77) 1,2-Dichlorobenzene	11.953	146	16364	0.516	ppbv		93
78) Hexachloro-1,3-Butadiene	13.892	225	14162	0.544	ppbv		96
79) Naphthalene	13.520	128	28052	0.516	ppbv		98
80) Naphthalene,2-methyl-	14.468	142	10859	0.422	ppbv		97
81) 1,2,4-Trichlorobenzene	13.445	180	14136	0.533	ppbv		95

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

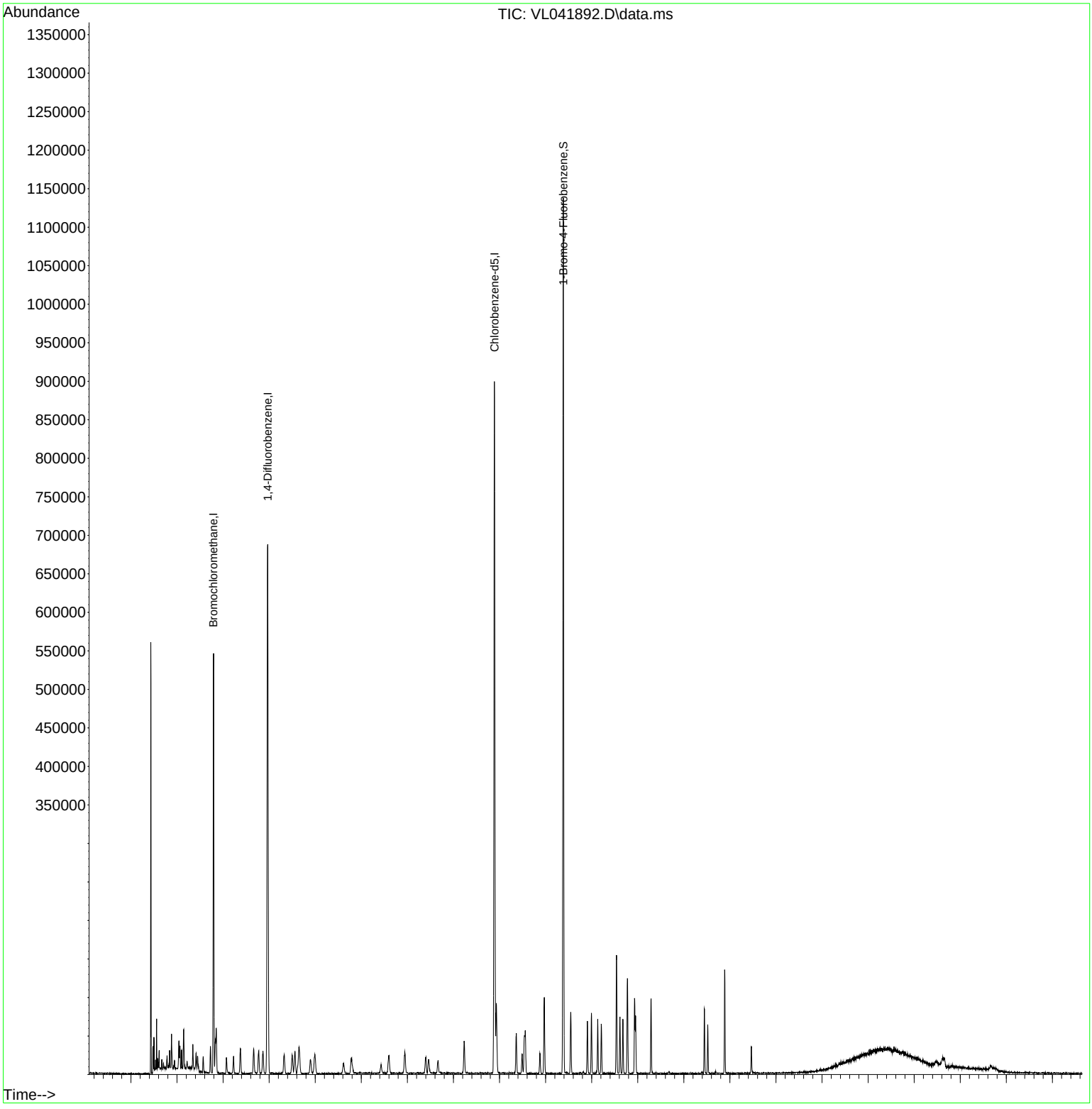
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041892.D
Acq On : 14 Jan 2025 14:30
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041893.D
Acq On : 14 Jan 2025 15:01
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 22:42:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	143362	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	425675	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	372545	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	292283	9.961	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.583	62	828	0.111	ppbv	96
32) 1,1,1-Trichloroethane	3.383	97	2640m	0.095	ppbv	
35) Carbon Tetrachloride	3.768	117	2587m	0.097	ppbv	
38) Trichloroethene	4.557	130	1816m	0.117	ppbv	
52) Tetrachloroethene	8.234	164	1480m	0.109	ppbv	
54) 1,2-Dibromoethane	7.668	107	1872m	0.094	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.976	83	2816	0.097	ppbv	95
79) Naphthalene	13.520	128	3643	0.068	ppbv #	96

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

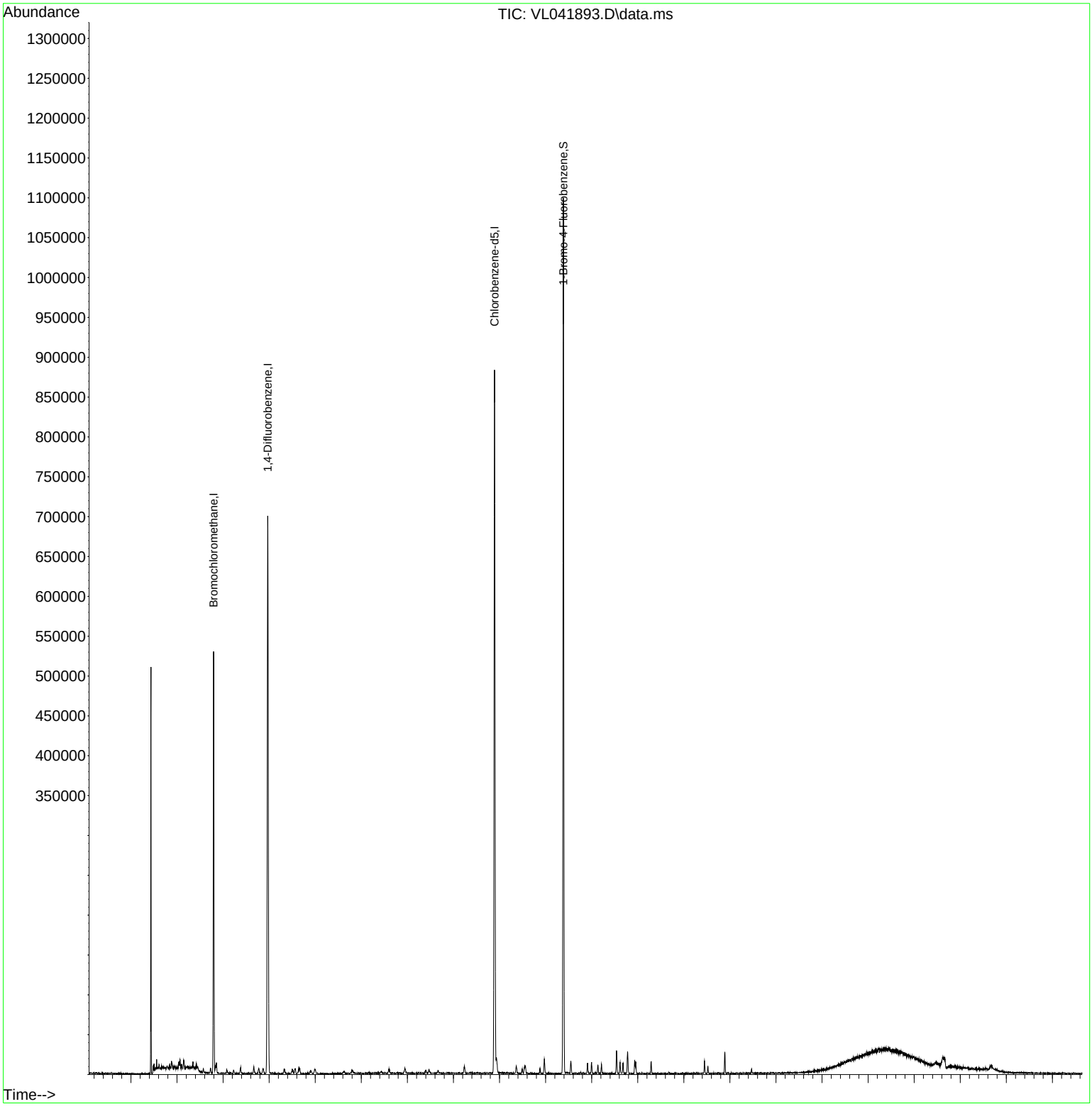
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041893.D
Acq On : 14 Jan 2025 15:01
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 22:42:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041894.D
Acq On : 14 Jan 2025 15:32
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	141659	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.972	114	424686	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	367402	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	287792	9.945	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.586	62	214m	0.029	ppbv	
32) 1,1,1-Trichloroethane	3.379	97	823	0.030	ppbv	85
35) Carbon Tetrachloride	3.774	117	771	0.029	ppbv #	56
38) Trichloroethene	4.557	130	364m	0.024	ppbv	
52) Tetrachloroethene	8.250	164	408m	0.030	ppbv	

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

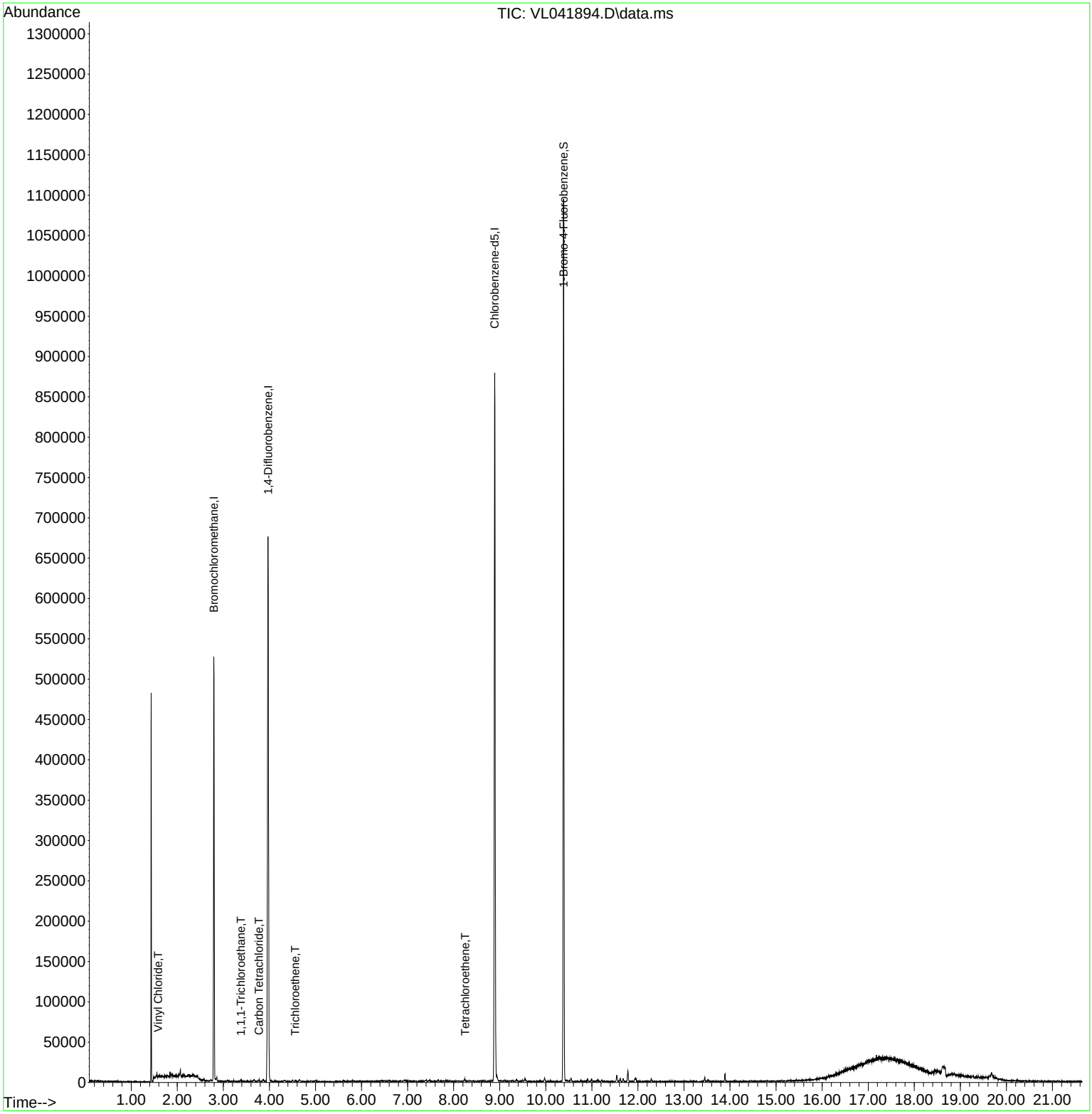
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041894.D
Acq On : 14 Jan 2025 15:32
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041895.D
Acq On : 14 Jan 2025 16:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.793	49	141652	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.968	114	419859	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.895	117	383799	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.387	95	304042	10.058	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	275248	14.266	ppbv		100
3) Chlorodifluoromethane	1.479	51	285437	14.121	ppbv		98
4) Chloromethane	1.534	50	106071	14.617	ppbv		98
5) Vinyl Chloride	1.583	62	104404	14.204	ppbv		98
6) Bromomethane	1.670	94	49415	14.106	ppbv		91
7) Chloroethane	1.709	64	41130	14.383	ppbv		100
8) Dichlorotetrafluoroethane	1.557	85	244666	14.510	ppbv		100
9) Propene	1.486	41	116343	13.972	ppbv		99
10) Heptane	4.998	43	326897	14.688	ppbv		98
11) Trichlorofluoromethane	1.881	101	299656	14.930	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.143	101	232607	14.787	ppbv		100
13) Ethanol	1.725	45	6109	10.016	ppbv		83
14) Bromoethene	1.784	108	83586	14.513	ppbv		98
15) Acetone	1.839	43	223353	13.128	ppbv		99
16) 1,3-Butadiene	1.612	39	109420	14.329	ppbv		99
17) tert-Butyl alcohol	2.046	59	298424	14.252	ppbv		99
18) 1,1-Dichloroethene	2.039	96	104645	14.759	ppbv		92
19) Isopropyl Alcohol	1.890	45	134050	13.288	ppbv		98
20) Methylene Chloride	2.065	84	88425	13.151	ppbv		98
21) Allyl Chloride	2.101	41	169875	14.419	ppbv		96
22) trans-1,2-Dichloroethene	2.347	96	118169	14.768	ppbv		97
23) Vinyl Acetate	2.470	43	116632	15.747	ppbv		98
24) 1,1-Dichloroethane	2.415	63	230015	14.862	ppbv		99
25) Ethyl Acetate	2.842	43	665170	14.499	ppbv		100
26) Hexane	2.836	57	263948	14.547	ppbv		97
27) Carbon Disulfide	2.156	76	278476	15.509	ppbv		99
28) Methyl tert-Butyl Ether	2.447	73	187986	13.555	ppbv		98
29) Chloroform	2.858	83	413733	14.424	ppbv		98
30) Cyclohexane	3.868	84	233398	14.830	ppbv		99
31) cis-1,2-Dichloroethene	2.729	61	271739	14.223	ppbv		94
32) 1,1,1-Trichloroethane	3.379	97	419117	15.271	ppbv		99
34) 2-Butanone	2.564	43	380813	14.262	ppbv		99
35) Carbon Tetrachloride	3.774	117	426619	16.146	ppbv		97
36) Benzene	3.667	78	553665	14.378	ppbv		100
37) 1,2-Dichloroethane	3.227	62	321362	14.859	ppbv		99
38) Trichloroethene	4.564	130	222328	14.543	ppbv		98
39) 1,2-Dichloropropane	4.328	63	191532	14.179	ppbv		98
40) 1,4-Dioxane	4.596	88	97521	14.305	ppbv	#	93
41) Tetrahydrofuran	3.062	42	217707	14.953	ppbv		99
42) Bromodichloromethane	4.502	83	445130	15.351	ppbv		95
43) Methyl Methacrylate	4.894	69	214564	14.999	ppbv		99
44) 2,2,4-Trimethylpentane	4.655	57	909437	14.601	ppbv		100
45) t-1,3-Dichloropropene	6.435	75	218001	16.281	ppbv		100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041895.D
Acq On : 14 Jan 2025 16:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.619	75	281492	16.011	ppbv		98
47) 1,1,2-Trichloroethane	6.597	97	211658	14.782	ppbv		95
48) Dibromochloromethane	7.402	129	356392	16.134	ppbv		100
49) Bromoform	9.493	173	307617	16.953	ppbv		99
50) 4-Methyl-2-Pentanone	5.774	43	533053	14.653	ppbv		99
51) 2-Hexanone	7.451	43	430297	15.363	ppbv	#	97
52) Tetrachloroethene	8.237	164	183208	13.721	ppbv		96
53) Toluene	6.949	91	634515	15.126	ppbv		99
54) 1,2-Dibromoethane	7.665	107	295967	15.036	ppbv		93
56) 1,1,1,2-Tetrachloroethane	8.937	131	280809	14.665	ppbv		98
57) Chlorobenzene	8.933	112	479092	13.533	ppbv		99
58) Ethyl Benzene	9.367	91	887072	14.789	ppbv		100
59) m/p-Xylene	9.565	91	1420585m	29.506	ppbv		
60) o-Xylene	9.976	91	704577	14.765	ppbv		100
61) Styrene	9.882	104	342490	15.999	ppbv		99
62) Isopropylbenzene	10.548	105	1063809	14.406	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.976	83	426347	14.194	ppbv		100
64) n-propylbenzene	10.998	120	266972	14.308	ppbv		100
65) tert-Butylbenzene	11.542	119	947297	14.077	ppbv		98
66) Benzyl Chloride	11.626	91	68623	16.475	ppbv		98
67) sec-Butylbenzene	11.778	105	1292858	13.952	ppbv		100
69) p-Isopropyltoluene	11.937	119	1089109	14.273	ppbv		99
70) n-Butylbenzene	12.290	91	1059002	13.994	ppbv		99
71) 2-Chlorotoluene	10.911	91	797555	14.601	ppbv		100
72) 4-Ethyltoluene	11.134	105	847451	14.846	ppbv		99
73) 1,3,5-Trimethylbenzene	11.215	105	733759	14.556	ppbv		96
74) 1,2,4-Trimethylbenzene	11.549	105	773569	14.170	ppbv		92
75) 1,3-Dichlorobenzene	11.620	146	443828	13.720	ppbv		99
76) 1,4-Dichlorobenzene	11.681	146	447164	14.129	ppbv		99
77) 1,2-Dichlorobenzene	11.956	146	429118	13.385	ppbv		99
78) Hexachloro-1,3-Butadiene	13.892	225	335016	12.731	ppbv		100
79) Naphthalene	13.523	128	724573	13.183	ppbv		99
80) Naphthalene,2-methyl-	14.468	142	278955	10.704	ppbv		99
81) 1,2,4-Trichlorobenzene	13.452	180	342977	12.784	ppbv		98

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

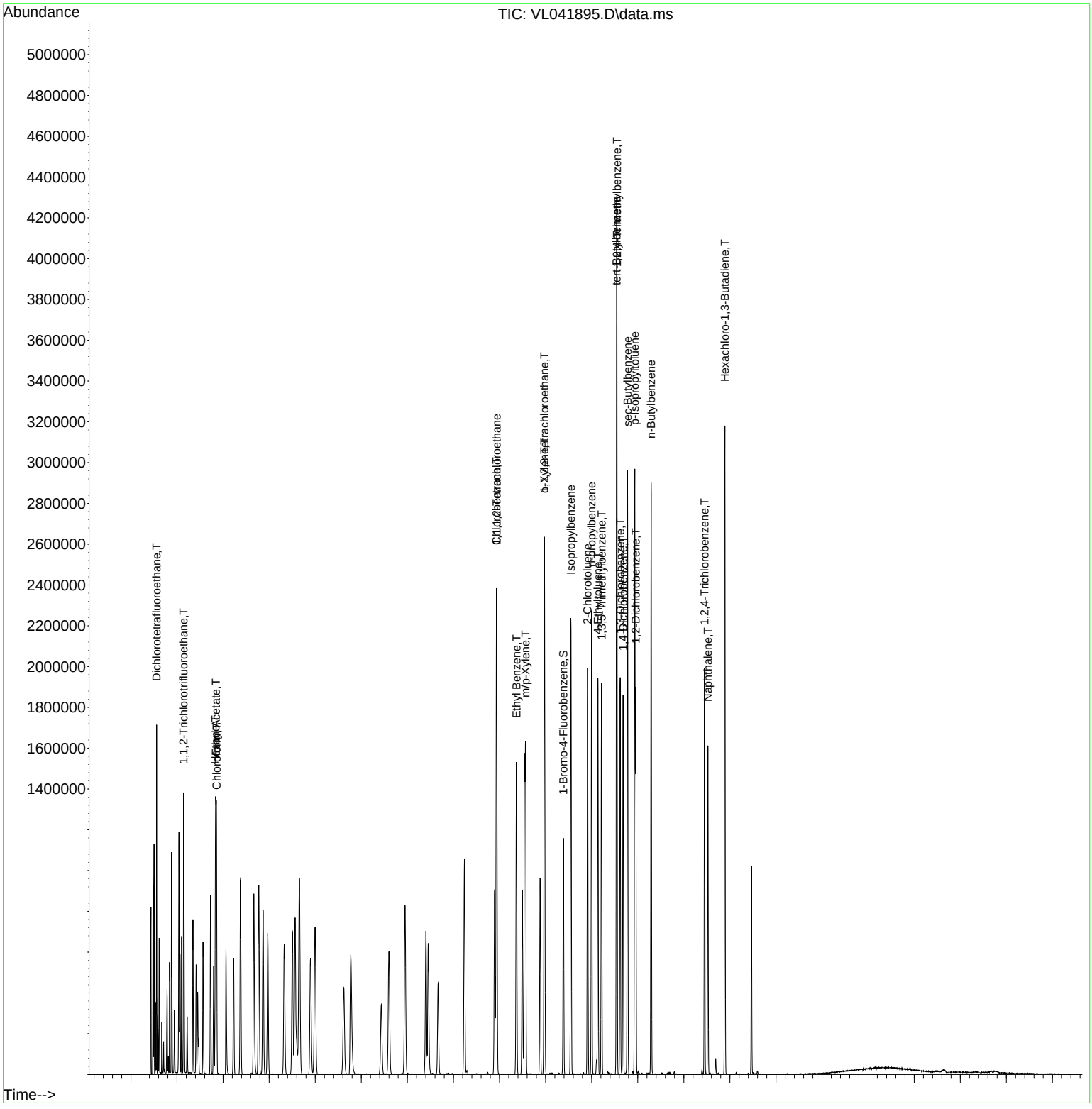
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041895.D
Acq On : 14 Jan 2025 16:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	141664	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	417936	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	373391	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	298000	10.133	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	190925	9.894	ppbv	97
3) Chlorodifluoromethane	1.479	51	200455	9.916	ppbv	100
4) Chloromethane	1.534	50	71767	9.889	ppbv	95
5) Vinyl Chloride	1.583	62	71974	9.791	ppbv	94
6) Bromomethane	1.670	94	33594	9.589	ppbv	96
7) Chloroethane	1.706	64	29553	10.333	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	163783	9.712	ppbv	99
9) Propene	1.486	41	82320	9.886	ppbv	99
10) Heptane	4.998	43	225230	10.119	ppbv	99
11) Trichlorofluoromethane	1.881	101	198523	9.890	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.143	101	159862	10.162	ppbv	100
13) Ethanol	1.725	45	3780	6.197	ppbv	97
14) Bromoethene	1.784	108	57260	9.941	ppbv	98
15) Acetone	1.839	43	150112	8.822	ppbv	98
16) 1,3-Butadiene	1.612	39	73640	9.643	ppbv	100
17) tert-Butyl alcohol	2.046	59	204358	9.758	ppbv	98
18) 1,1-Dichloroethene	2.039	96	71011	10.015	ppbv	96
19) Isopropyl Alcohol	1.890	45	93592	9.277	ppbv	97
20) Methylene Chloride	2.065	84	60115	8.940	ppbv	97
21) Allyl Chloride	2.101	41	118907	10.092	ppbv	97
22) trans-1,2-Dichloroethene	2.347	96	77379	9.669	ppbv	96
23) Vinyl Acetate	2.470	43	80428	9.536	ppbv #	95
24) 1,1-Dichloroethane	2.415	63	155440	10.042	ppbv	98
25) Ethyl Acetate	2.842	43	458484	9.993	ppbv	100
26) Hexane	2.832	57	184436	10.164	ppbv	99
27) Carbon Disulfide	2.156	76	186668	10.395	ppbv	98
28) Methyl tert-Butyl Ether	2.447	73	112489	8.110	ppbv	99
29) Chloroform	2.855	83	282467	9.847	ppbv	99
30) Cyclohexane	3.865	84	159296	10.120	ppbv	99
31) cis-1,2-Dichloroethene	2.729	61	187012	9.787	ppbv	97
32) 1,1,1-Trichloroethane	3.376	97	284661	10.371	ppbv	99
34) 2-Butanone	2.564	43	261536	9.840	ppbv	99
35) Carbon Tetrachloride	3.771	117	285391	10.871	ppbv	96
36) Benzene	3.667	78	374271	9.764	ppbv	99
37) 1,2-Dichloroethane	3.227	62	214545	9.966	ppbv	100
38) Trichloroethene	4.564	130	153255	10.075	ppbv	95
39) 1,2-Dichloropropane	4.324	63	130483	9.704	ppbv	97
40) 1,4-Dioxane	4.599	88	63736	9.386	ppbv #	99
41) Tetrahydrofuran	3.062	42	148132	10.255	ppbv	98
42) Bromodichloromethane	4.506	83	299656	10.381	ppbv	96
43) Methyl Methacrylate	4.894	69	145663	10.229	ppbv	100
44) 2,2,4-Trimethylpentane	4.654	57	619804	9.997	ppbv	100
45) t-1,3-Dichloropropene	6.428	75	145145	10.889	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.616	75	186898	10.680	ppbv		98
47)	1,1,2-Trichloroethane	6.596	97	140891	9.886	ppbv		97
48)	Dibromochloromethane	7.399	129	238244	10.835	ppbv		100
49)	Bromoform	9.493	173	201141	11.136	ppbv		99
50)	4-Methyl-2-Pentanone	5.771	43	363675	10.023	ppbv		99
51)	2-Hexanone	7.451	43	284058	10.189	ppbv	#	99
52)	Tetrachloroethene	8.237	164	127806	9.616	ppbv		98
53)	Toluene	6.949	91	427033	10.227	ppbv		99
54)	1,2-Dibromoethane	7.665	107	199339	10.175	ppbv		95
56)	1,1,1,2-Tetrachloroethane	8.937	131	188209	10.103	ppbv		99
57)	Chlorobenzene	8.933	112	329025	9.553	ppbv		99
58)	Ethyl Benzene	9.364	91	601857	10.314	ppbv		99
59)	m/p-Xylene	9.561	91	964838m	20.628	ppbv		
60)	o-Xylene	9.972	91	480442	10.348	ppbv		100
61)	Styrene	9.878	104	229797	11.034	ppbv		99
62)	Isopropylbenzene	10.548	105	728189	10.136	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.972	83	290998	9.809	ppbv		100
64)	n-propylbenzene	10.998	120	182397	10.048	ppbv		98
65)	tert-Butylbenzene	11.539	119	657521	10.043	ppbv		100
66)	Benzyl Chloride	11.623	91	42509	10.490	ppbv	#	97
67)	sec-Butylbenzene	11.778	105	901260	9.997	ppbv		98
69)	p-Isopropyltoluene	11.934	119	745566	10.043	ppbv		99
70)	n-Butylbenzene	12.290	91	733637	9.965	ppbv		99
71)	2-Chlorotoluene	10.911	91	543858	10.234	ppbv		100
72)	4-Ethyltoluene	11.134	105	568921	10.245	ppbv		99
73)	1,3,5-Trimethylbenzene	11.212	105	493388	10.061	ppbv		99
74)	1,2,4-Trimethylbenzene	11.545	105	528225	9.946	ppbv		98
75)	1,3-Dichlorobenzene	11.617	146	304133	9.664	ppbv		99
76)	1,4-Dichlorobenzene	11.681	146	297765	9.670	ppbv		99
77)	1,2-Dichlorobenzene	11.956	146	298039	9.555	ppbv		99
78)	Hexachloro-1,3-Butadiene	13.889	225	228592	8.929	ppbv		99
79)	Naphthalene	13.523	128	497063	9.295	ppbv		99
80)	Naphthalene,2-methyl-	14.468	142	187571	7.398	ppbv		98
81)	1,2,4-Trichlorobenzene	13.448	180	236181	9.049	ppbv		99

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

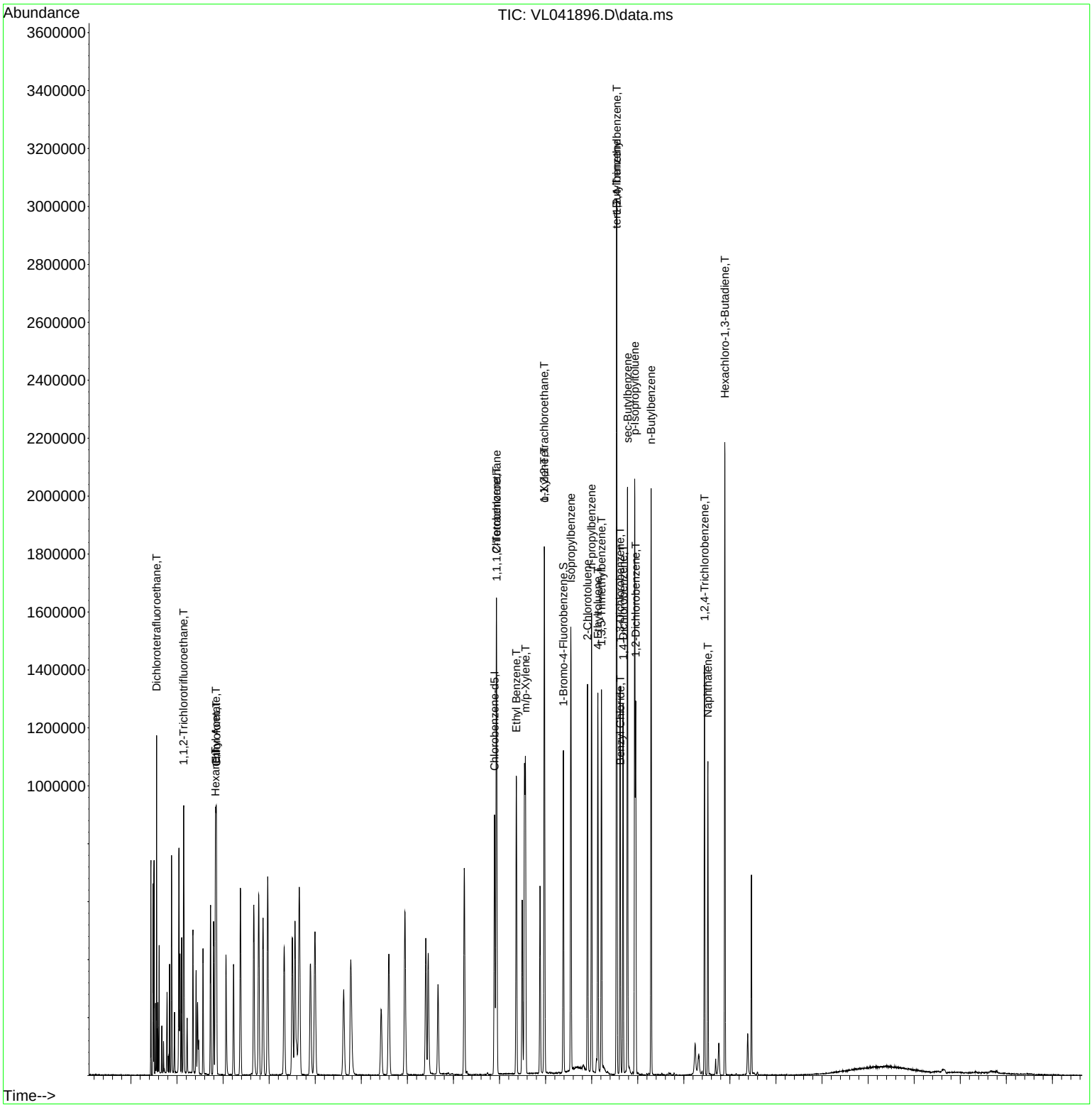
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 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	93	0.00
2	T	Dichlorodifluoromethane	1.362	1.348	1.0	96	0.00
3		Chlorodifluoromethane	1.427	1.415	0.8	99	0.00
4		Chloromethane	0.512	0.507	1.0	96	0.00
5	T	Vinyl Chloride	0.519	0.508	2.1	101	0.00
6	T	Bromomethane	0.247	0.237	4.0	96	0.00
7		Chloroethane	0.202	0.209	-3.5	101	0.00
8	T	Dichlorotetrafluoroethane	1.190	1.156	2.9	98	0.00
9	T	Propene	0.588	0.581	1.2	95	0.00
10	T	Heptane	1.571	1.590	-1.2	97	0.00
11	T	Trichlorofluoromethane	1.417	1.401	1.1	98	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.110	1.128	-1.6	99	0.00
13		Ethanol	0.043	0.027#	37.2#	91	0.00
14	T	Bromoethene	0.407	0.404	0.7	101	0.00
15	T	Acetone	1.201	1.060	11.7	99	0.00
16	T	1,3-Butadiene	0.539	0.520	3.5	98	0.00
17		tert-Butyl alcohol	1.478	1.443	2.4	96	0.00
18	T	1,1-Dichloroethene	0.501	0.501	0.0	102	0.00
19	T	Isopropyl Alcohol	0.712	0.661	7.2	99	0.00
20	T	Methylene Chloride	0.475	0.424	10.7	101	0.00
21	T	Allyl Chloride	0.832	0.839	-0.8	99	0.00
22	T	trans-1,2-Dichloroethene	0.565	0.546	3.4	94	0.00
23	T	Vinyl Acetate	0.595	0.568	4.5	98	0.00
24	T	1,1-Dichloroethane	1.093	1.097	-0.4	100	0.00
25	T	Ethyl Acetate	3.239	3.236	0.1	97	0.00
26	T	Hexane	1.281	1.302	-1.6	96	0.00
27	T	Carbon Disulfide	1.268	1.318	-3.9	97	0.00
28	T	Methyl tert-Butyl Ether	0.979	0.794	18.9	95	0.00
29	T	Chloroform	2.025	1.994	1.5	97	0.00
30	T	Cyclohexane	1.111	1.124	-1.2	97	0.00
31	T	cis-1,2-Dichloroethene	1.349	1.320	2.1	97	0.00
32	T	1,1,1-Trichloroethane	1.938	2.009	-3.7	98	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	93	0.00
34	T	2-Butanone	0.636	0.626	1.6	97	0.00
35	T	Carbon Tetrachloride	0.628	0.683	-8.8	98	0.00
36	T	Benzene	0.917	0.896	2.3	94	0.00
37	T	1,2-Dichloroethane	0.515	0.513	0.4	97	0.00
38	T	Trichloroethene	0.364	0.367	-0.8	96	0.00
39	T	1,2-Dichloropropane	0.322	0.312	3.1	95	0.00
40	T	1,4-Dioxane	0.162	0.153	5.6	96	0.00
41	T	Tetrahydrofuran	0.346	0.354	-2.3	95	0.00
42	T	Bromodichloromethane	0.691	0.717	-3.8	98	0.00
43		Methyl Methacrylate	0.341	0.349	-2.3	96	0.00
44	T	2,2,4-Trimethylpentane	1.484	1.483	0.1	95	0.00
45	T	t-1,3-Dichloropropene	0.319	0.347	-8.8	96	0.00
46	T	cis-1,3-Dichloropropene	0.419	0.447	-6.7	93	0.00
47	T	1,1,2-Trichloroethane	0.341	0.337	1.2	94	0.00
48	T	Dibromochloromethane	0.526	0.570	-8.4	97	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument : MSVOA_L
ClientSampleId : ICVVL011425

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 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	0.432	0.481	-11.3	97	0.00
50	T	4-Methyl-2-Pentanone	0.868	0.870	-0.2	97	0.00
51	T	2-Hexanone	0.667	0.680	-1.9	97	0.00
52	T	Tetrachloroethene	0.318	0.306	3.8	97	0.00
53	T	Toluene	0.999	1.022	-2.3	94	0.00
54	T	1,2-Dibromoethane	0.469	0.477	-1.7	98	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00
56		1,1,1,2-Tetrachloroethane	0.499	0.504	-1.0	98	0.00
57	T	Chlorobenzene	0.922	0.881	4.4	97	0.00
58	T	Ethyl Benzene	1.563	1.612	-3.1	97	0.00
59	T	m/p-Xylene	1.253	1.292	-3.1	99	0.00
60	T	o-Xylene	1.243	1.287	-3.5	98	0.00
61	T	Styrene	0.558	0.615	-10.2	98	0.00
62		Isopropylbenzene	1.924	1.950	-1.4	98	0.00
63	T	1,1,2,2-Tetrachloroethane	0.795	0.779	2.0	97	0.00
64		n-propylbenzene	0.486	0.488	-0.4	97	0.00
65		tert-Butylbenzene	1.753	1.761	-0.5	98	0.00
66	T	Benzyl Chloride	0.109	0.114	-4.6	92	0.00
67		sec-Butylbenzene	2.414	2.414	0.0	98	0.00
68	S	1-Bromo-4-Fluorobenzene	0.788	0.798	-1.3	95	0.00
69		p-Isopropyltoluene	1.988	1.997	-0.5	97	0.00
70		n-Butylbenzene	1.972	1.965	0.4	97	0.00
71		2-Chlorotoluene	1.423	1.457	-2.4	98	0.00
72	T	4-Ethyltoluene	1.487	1.524	-2.5	97	0.00
73	T	1,3,5-Trimethylbenzene	1.313	1.321	-0.6	98	0.00
74	T	1,2,4-Trimethylbenzene	1.422	1.415	0.5	98	0.00
75	T	1,3-Dichlorobenzene	0.843	0.815	3.3	98	0.00
76	T	1,4-Dichlorobenzene	0.825	0.797	3.4	97	0.00
77	T	1,2-Dichlorobenzene	0.835	0.798	4.4	98	0.00
78	T	Hexachloro-1,3-Butadiene	0.686	0.612	10.8	97	0.00
79	T	Naphthalene	1.432	1.331	7.1	99	0.00
80	T	Naphthalene,2-methyl-	0.679	0.502	26.1	101	0.00
81	T	1,2,4-Trichlorobenzene	0.699	0.633	9.4	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

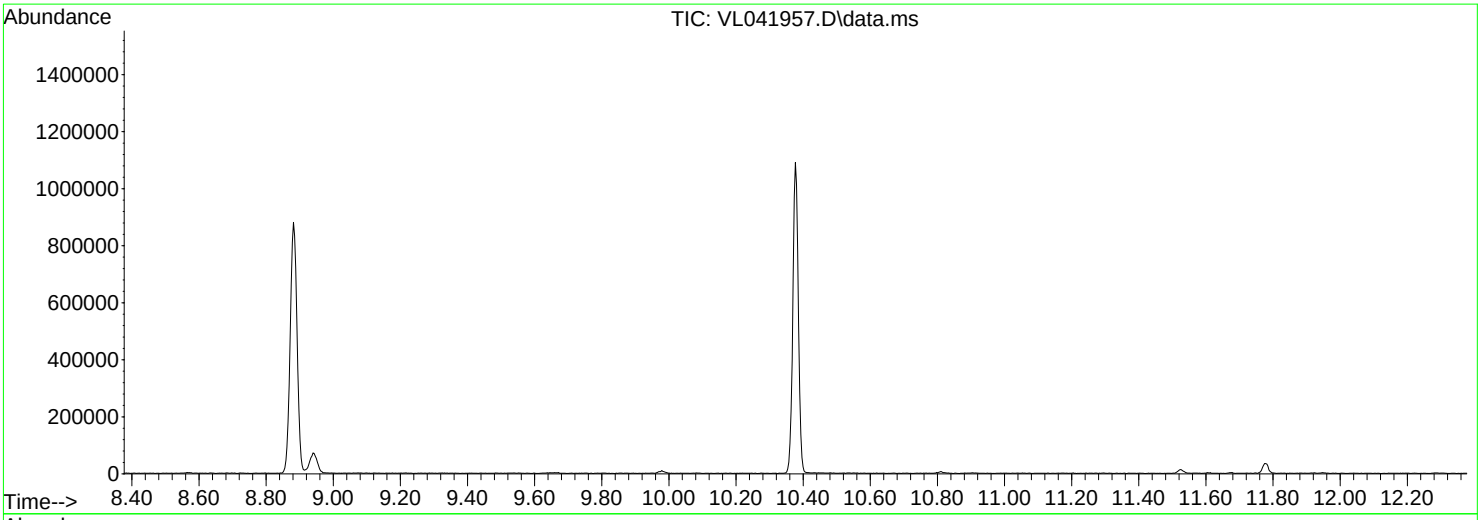
BFB

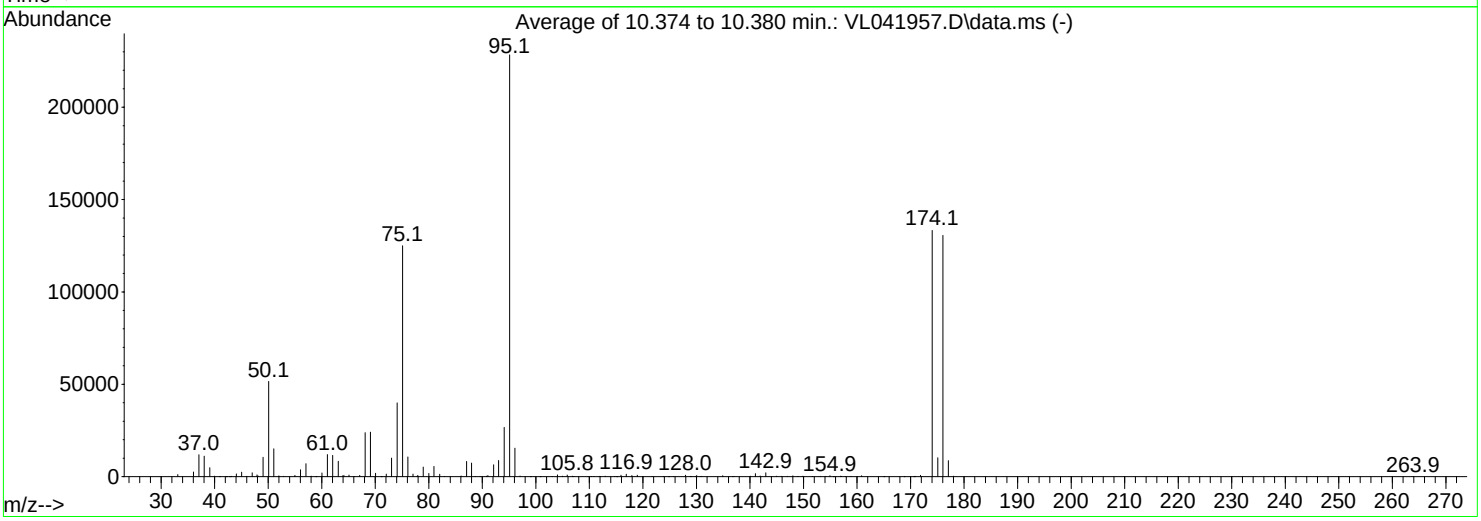
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041957.D
Acq On : 03 Feb 2025 09:47
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Jan 14 23:15:42 2025





AutoFind: Scans 3178, 3179, 3180; 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	22.6	51539	PASS
75	95	30	66	54.7	125019	PASS
95	95	100	100	100.0	228352	PASS
96	95	5	9	6.8	15439	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	58.4	133352	PASS
175	174	4	9	7.7	10244	PASS
176	174	93	101	98.0	130661	PASS
177	176	5	9	6.6	8641	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.791	49	157470	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	429487	10.000	ppbv	-0.01
55) Chlorobenzene-d5	8.885	117	371333	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.381	95	289698	9.905	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	218366	10.181	ppbv	100
3) Chlorodifluoromethane	1.477	51	231387	10.298	ppbv	99
4) Chloromethane	1.535	50	86482	10.721	ppbv	97
5) Vinyl Chloride	1.580	62	83248	10.188	ppbv	98
6) Bromomethane	1.667	94	38248	9.822	ppbv	99
7) Chloroethane	1.706	64	34164	10.747	ppbv	99
8) Dichlorotetrafluoroethane	1.554	85	186350	9.941	ppbv	99
9) Propene	1.483	41	95902	10.361	ppbv	98
10) Heptane	4.985	43	266975	10.790	ppbv	97
11) Trichlorofluoromethane	1.878	101	212261	9.513	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	162930	9.317	ppbv	99
13) Ethanol	1.722	45	4416	6.513	ppbv	99
14) Bromoethene	1.784	108	60620	9.468	ppbv	100
15) Acetone	1.836	43	176459	9.330	ppbv	99
16) 1,3-Butadiene	1.609	39	86792	10.224	ppbv	99
17) tert-Butyl alcohol	2.043	59	206522	8.872	ppbv	99
18) 1,1-Dichloroethene	2.036	96	74437	9.444	ppbv	93
19) Isopropyl Alcohol	1.888	45	101008	9.007	ppbv	94
20) Methylene Chloride	2.062	84	62977	8.426	ppbv	95
21) Allyl Chloride	2.098	41	126741	9.677	ppbv	98
22) trans-1,2-Dichloroethene	2.344	96	86281	9.700	ppbv	97
23) Vinyl Acetate	2.467	43	84390	9.001	ppbv #	98
24) 1,1-Dichloroethane	2.412	63	171515	9.969	ppbv	100
25) Ethyl Acetate	2.839	43	552271	10.829	ppbv	100
26) Hexane	2.829	57	216097	10.713	ppbv	95
27) Carbon Disulfide	2.153	76	200432	10.041	ppbv	99
28) Methyl tert-Butyl Ether	2.444	73	149839	9.719	ppbv	100
29) Chloroform	2.852	83	333879	10.471	ppbv	100
30) Cyclohexane	3.862	84	183180	10.470	ppbv	98
31) cis-1,2-Dichloroethene	2.723	61	208686	9.825	ppbv	95
32) 1,1,1-Trichloroethane	3.370	97	318650	10.444	ppbv	99
34) 2-Butanone	2.561	43	312946	11.458	ppbv	99
35) Carbon Tetrachloride	3.765	117	320703	11.888	ppbv	99
36) Benzene	3.661	78	444350	11.280	ppbv	97
37) 1,2-Dichloroethane	3.221	62	241263	10.905	ppbv	99
38) Trichloroethene	4.551	130	175365	11.218	ppbv	90
39) 1,2-Dichloropropane	4.322	63	155514	11.255	ppbv	98
40) 1,4-Dioxane	4.590	88	74675	10.701	ppbv #	97
41) Tetrahydrofuran	3.059	42	174208	11.736	ppbv	98
42) Bromodichloromethane	4.496	83	344670	11.620	ppbv	96
43) Methyl Methacrylate	4.888	69	156216	10.675	ppbv	95
44) 2,2,4-Trimethylpentane	4.645	57	751181	11.790	ppbv	99
45) t-1,3-Dichloropropene	6.425	75	148089	10.811	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.610	75	202762	11.274	ppbv		99
47)	1,1,2-Trichloroethane	6.590	97	167097	11.410	ppbv		98
48)	Dibromochloromethane	7.393	129	269437	11.924	ppbv		99
49)	Bromoform	9.487	173	225054	12.125	ppbv		100
50)	4-Methyl-2-Pentanone	5.762	43	428753	11.499	ppbv		98
51)	2-Hexanone	7.445	43	336693	11.752	ppbv	#	96
52)	Tetrachloroethene	8.231	164	139466	10.211	ppbv		95
53)	Toluene	6.940	91	483814	11.275	ppbv		100
54)	1,2-Dibromoethane	7.659	107	229203	11.384	ppbv		97
56)	1,1,1,2-Tetrachloroethane	8.931	131	220185	11.885	ppbv		99
57)	Chlorobenzene	8.927	112	386374	11.280	ppbv		98
58)	Ethyl Benzene	9.358	91	669174	11.531	ppbv		97
59)	m/p-Xylene	9.555	91	1106231m	23.782	ppbv		
60)	o-Xylene	9.969	91	555194	12.025	ppbv		98
61)	Styrene	9.876	104	246355	11.895	ppbv		99
62)	Isopropylbenzene	10.542	105	834260	11.677	ppbv		99
63)	1,1,2,2-Tetrachloroethane	9.966	83	362310	12.280	ppbv		99
64)	n-propylbenzene	10.992	120	215585	11.942	ppbv		98
65)	tert-Butylbenzene	11.536	119	746398	11.464	ppbv		99
66)	Benzyl Chloride	11.620	91	44973	11.160	ppbv		98
67)	sec-Butylbenzene	11.772	105	1044912	11.655	ppbv		100
69)	p-Isopropyltoluene	11.931	119	867909	11.756	ppbv		99
70)	n-Butylbenzene	12.284	91	848499	11.589	ppbv		100
71)	2-Chlorotoluene	10.905	91	615388	11.644	ppbv		98
72)	4-Ethyltoluene	11.128	105	658660	11.926	ppbv		100
73)	1,3,5-Trimethylbenzene	11.209	105	566361	11.613	ppbv		96
74)	1,2,4-Trimethylbenzene	11.542	105	616177	11.666	ppbv		90
75)	1,3-Dichlorobenzene	11.614	146	357966	11.437	ppbv		99
76)	1,4-Dichlorobenzene	11.675	146	352145	11.500	ppbv		100
77)	1,2-Dichlorobenzene	11.950	146	355386	11.457	ppbv		100
78)	Hexachloro-1,3-Butadiene	13.886	225	247691	9.729	ppbv		99
79)	Naphthalene	13.517	128	553420	10.407	ppbv		99
80)	Naphthalene,2-methyl-	14.465	142	173813	6.894	ppbv		97
81)	1,2,4-Trichlorobenzene	13.446	180	251038	9.671	ppbv		98

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

Quantitation Report (QT Reviewed)

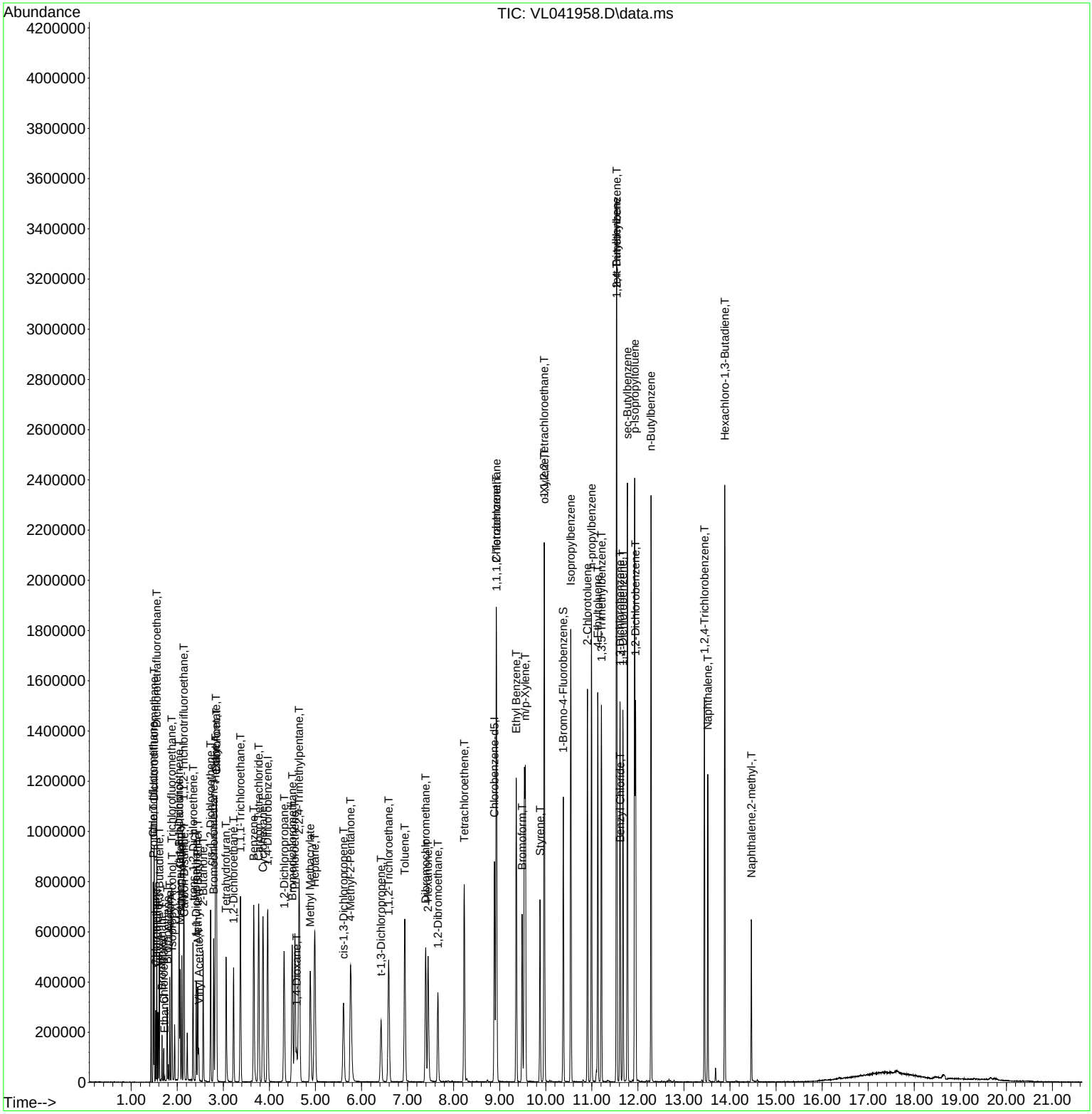
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 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	103	0.00
2	T	Dichlorodifluoromethane	1.362	1.387	-1.8	110	0.00
3		Chlorodifluoromethane	1.427	1.469	-2.9	114	0.00
4		Chloromethane	0.512	0.549	-7.2	115	0.00
5	T	Vinyl Chloride	0.519	0.529	-1.9	117	0.00
6	T	Bromomethane	0.247	0.243	1.6	110	0.00
7		Chloroethane	0.202	0.217	-7.4	116	0.00
8	T	Dichlorotetrafluoroethane	1.190	1.183	0.6	112	0.00
9	T	Propene	0.588	0.609	-3.6	111	0.00
10	T	Heptane	1.571	1.695	-7.9	115	-0.02
11	T	Trichlorofluoromethane	1.417	1.348	4.9	104	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.110	1.035	6.8	101	0.00
13		Ethanol	0.043	0.028#	34.9#	106	0.00
14	T	Bromoethene	0.407	0.385	5.4	107	0.00
15	T	Acetone	1.201	1.121	6.7	117	0.00
16	T	1,3-Butadiene	0.539	0.551	-2.2	115	0.00
17		tert-Butyl alcohol	1.478	1.312	11.2	97	0.00
18	T	1,1-Dichloroethene	0.501	0.473	5.6	107	0.00
19	T	Isopropyl Alcohol	0.712	0.641	10.0	107	0.00
20	T	Methylene Chloride	0.475	0.400	15.8	106	0.00
21	T	Allyl Chloride	0.832	0.805	3.2	105	0.00
22	T	trans-1,2-Dichloroethene	0.565	0.548	3.0	105	0.00
23	T	Vinyl Acetate	0.595	0.536	9.9	103	0.00
24	T	1,1-Dichloroethane	1.093	1.089	0.4	111	0.00
25	T	Ethyl Acetate	3.239	3.507	-8.3	117	0.00
26	T	Hexane	1.281	1.372	-7.1	113	0.00
27	T	Carbon Disulfide	1.268	1.273	-0.4	105	0.00
28	T	Methyl tert-Butyl Ether	0.979	0.952	2.8	127	0.00
29	T	Chloroform	2.025	2.120	-4.7	115	0.00
30	T	Cyclohexane	1.111	1.163	-4.7	111	0.00
31	T	cis-1,2-Dichloroethene	1.349	1.325	1.8	108	0.00
32	T	1,1,1-Trichloroethane	1.938	2.024	-4.4	110	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	-0.01
34	T	2-Butanone	0.636	0.729	-14.6	116	0.00
35	T	Carbon Tetrachloride	0.628	0.747	-18.9	110	-0.01
36	T	Benzene	0.917	1.035	-12.9	112	0.00
37	T	1,2-Dichloroethane	0.515	0.562	-9.1	109	0.00
38	T	Trichloroethene	0.364	0.408	-12.1	110	-0.01
39	T	1,2-Dichloropropane	0.322	0.362	-12.4	113	0.00
40	T	1,4-Dioxane	0.162	0.174	-7.4	113	-0.02
41	T	Tetrahydrofuran	0.346	0.406	-17.3	112	0.00
42	T	Bromodichloromethane	0.691	0.803	-16.2	112	-0.01
43		Methyl Methacrylate	0.341	0.364	-6.7	103	0.00
44	T	2,2,4-Trimethylpentane	1.484	1.749	-17.9	115	-0.01
45	T	t-1,3-Dichloropropene	0.319	0.345	-8.2	97	0.00
46	T	cis-1,3-Dichloropropene	0.419	0.472	-12.6	101	-0.01
47	T	1,1,2-Trichloroethane	0.341	0.389	-14.1	112	0.00
48	T	Dibromochloromethane	0.526	0.627	-19.2	110	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 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	0.432	0.524	-21.3	109	0.00
50	T	4-Methyl-2-Pentanone	0.868	0.998	-15.0	115	-0.02
51	T	2-Hexanone	0.667	0.784	-17.5	115	0.00
52	T	Tetrachloroethene	0.318	0.325	-2.2	106	0.00
53	T	Toluene	0.999	1.126	-12.7	107	-0.01
54	T	1,2-Dibromoethane	0.469	0.534	-13.9	112	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00
56		1,1,1,2-Tetrachloroethane	0.499	0.593	-18.8	114	0.00
57	T	Chlorobenzene	0.922	1.041	-12.9	114	0.00
58	T	Ethyl Benzene	1.563	1.802	-15.3	108	0.00
59	T	m/p-Xylene	1.253	1.490	-18.9	113	0.00
60	T	o-Xylene	1.243	1.495	-20.3	113	0.00
61	T	Styrene	0.558	0.663	-18.8	105	0.00
62		Isopropylbenzene	1.924	2.247	-16.8	112	0.00
63	T	1,1,2,2-Tetrachloroethane	0.795	0.976	-22.8	121	0.00
64		n-propylbenzene	0.486	0.581	-19.5	115	0.00
65		tert-Butylbenzene	1.753	2.010	-14.7	111	0.00
66	T	Benzyl Chloride	0.109	0.121	-11.0	98	0.00
67		sec-Butylbenzene	2.414	2.814	-16.6	114	0.00
68	S	1-Bromo-4-Fluorobenzene	0.788	0.780	1.0	92	0.00
69		p-Isopropyltoluene	1.988	2.337	-17.6	113	0.00
70		n-Butylbenzene	1.972	2.285	-15.9	112	0.00
71		2-Chlorotoluene	1.423	1.657	-16.4	111	0.00
72	T	4-Ethyltoluene	1.487	1.774	-19.3	112	0.00
73	T	1,3,5-Trimethylbenzene	1.313	1.525	-16.1	112	0.00
74	T	1,2,4-Trimethylbenzene	1.422	1.659	-16.7	114	0.00
75	T	1,3-Dichlorobenzene	0.843	0.964	-14.4	115	0.00
76	T	1,4-Dichlorobenzene	0.825	0.948	-14.9	114	0.00
77	T	1,2-Dichlorobenzene	0.835	0.957	-14.6	117	0.00
78	T	Hexachloro-1,3-Butadiene	0.686	0.667	2.8	106	0.00
79	T	Naphthalene	1.432	1.490	-4.1	110	0.00
80	T	Naphthalene,2-methyl-	0.679	0.468	31.1#	94	0.00
81	T	1,2,4-Trichlorobenzene	0.699	0.676	3.3	105	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041960.D
Acq On : 03 Feb 2025 12:05
Operator : SY/MD
Sample : VL0203ABL02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABL02

Quant Time: Feb 04 02:33:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

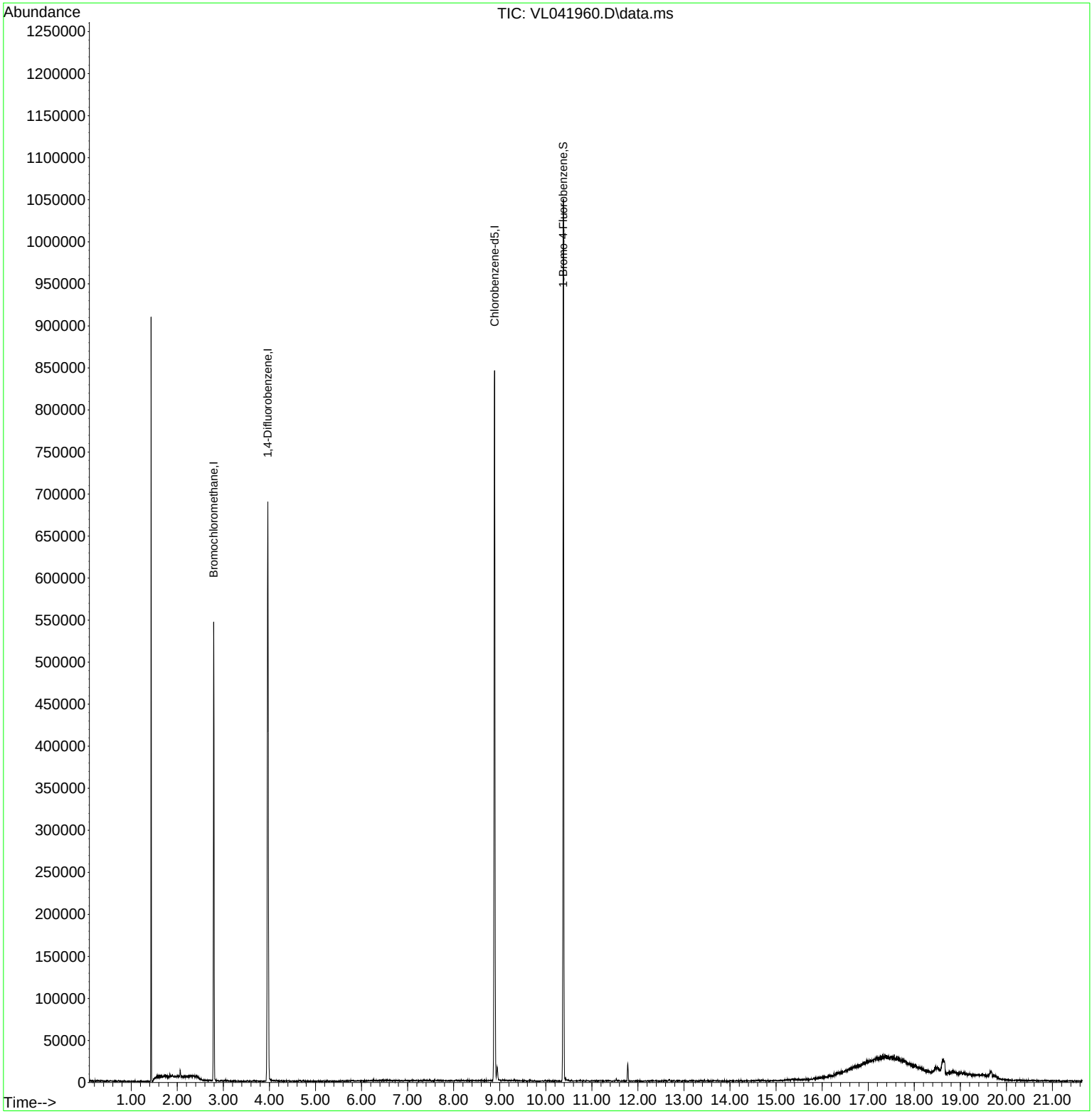
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	151198	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	407814	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	347345	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	262058	9.579	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.800%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041960.D
Acq On : 03 Feb 2025 12:05
Operator : SY/MD
Sample : VL0203ABL02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABL02

Quant Time: Feb 04 02:33:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041961.D
Acq On : 03 Feb 2025 12:57
Operator : SY/MD
Sample : VL0203ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 02:34:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	152847	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	418895	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	367437	10.000	ppbv	-0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	287209	9.924	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	203280	9.764	ppbv	99
3) Chlorodifluoromethane	1.476	51	225433	10.336	ppbv	99
4) Chloromethane	1.535	50	81880	10.457	ppbv	94
5) Vinyl Chloride	1.583	62	77713	9.799	ppbv	98
6) Bromomethane	1.670	94	36640	9.694	ppbv	88
7) Chloroethane	1.706	64	31280	10.137	ppbv	94
8) Dichlorotetrafluoroethane	1.557	85	179670	9.875	ppbv	98
9) Propene	1.486	41	91411	10.174	ppbv	99
10) Heptane	4.985	43	161638	6.731	ppbv	99
11) Trichlorofluoromethane	1.881	101	201683	9.312	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.143	101	164938	9.717	ppbv	98
13) Ethanol	1.722	45	4592	6.978	ppbv	91
14) Bromoethene	1.784	108	57833	9.306	ppbv	99
15) Acetone	1.839	43	165826	9.033	ppbv	98
16) 1,3-Butadiene	1.609	39	83163	10.093	ppbv	98
17) tert-Butyl alcohol	2.043	59	198776	8.797	ppbv	98
18) 1,1-Dichloroethene	2.036	96	70323	9.192	ppbv	97
19) Isopropyl Alcohol	1.891	45	99004	9.096	ppbv	95
20) Methylene Chloride	2.065	84	62278	8.584	ppbv	99
21) Allyl Chloride	2.098	41	122853	9.664	ppbv	98
22) trans-1,2-Dichloroethene	2.344	96	85089	9.855	ppbv	98
23) Vinyl Acetate	2.467	43	86919	9.552	ppbv #	96
24) 1,1-Dichloroethane	2.412	63	166034	9.942	ppbv	99
25) Ethyl Acetate	2.842	43	536156	10.831	ppbv	100
26) Hexane	2.832	57	210051	10.728	ppbv	95
27) Carbon Disulfide	2.153	76	198444	10.242	ppbv	99
28) Methyl tert-Butyl Ether	2.444	73	110198	7.364	ppbv	99
29) Chloroform	2.855	83	325966	10.532	ppbv	96
30) Cyclohexane	3.865	84	173840	10.236	ppbv	98
31) cis-1,2-Dichloroethene	2.726	61	204611	9.925	ppbv	95
32) 1,1,1-Trichloroethane	3.376	97	305623	10.320	ppbv	99
34) 2-Butanone	2.564	43	302190	11.344	ppbv	99
35) Carbon Tetrachloride	3.768	117	309917	11.778	ppbv	97
36) Benzene	3.664	78	426241	11.094	ppbv	99
37) 1,2-Dichloroethane	3.224	62	235620	10.920	ppbv	99
38) Trichloroethene	4.554	130	167629	10.995	ppbv	97
39) 1,2-Dichloropropane	4.318	63	151232	11.221	ppbv	97
40) 1,4-Dioxane	4.590	88	74021	10.876	ppbv #	100
41) Tetrahydrofuran	3.062	42	169798	11.728	ppbv	98
42) Bromodichloromethane	4.496	83	335595	11.600	ppbv	98
43) Methyl Methacrylate	4.884	69	102724	7.197	ppbv	96
44) 2,2,4-Trimethylpentane	4.648	57	725196	11.670	ppbv	99
45) t-1,3-Dichloropropene	6.422	75	145441	10.886	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041961.D
Acq On : 03 Feb 2025 12:57
Operator : SY/MD
Sample : VL0203ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 02:34:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.609	75	122518	6.985	ppbv		98
47)	1,1,2-Trichloroethane	6.590	97	167038	11.694	ppbv		95
48)	Dibromochloromethane	7.390	129	260120	11.803	ppbv		100
49)	Bromoform	9.487	173	217089	11.991	ppbv		99
50)	4-Methyl-2-Pentanone	5.765	43	267280	7.350	ppbv		98
51)	2-Hexanone	7.445	43	328817	11.767	ppbv	#	96
52)	Tetrachloroethene	8.225	164	136143	10.220	ppbv		97
53)	Toluene	6.936	91	469033	11.207	ppbv		99
54)	1,2-Dibromoethane	7.655	107	222983	11.356	ppbv		100
56)	1,1,1,2-Tetrachloroethane	8.927	131	214758	11.715	ppbv		99
57)	Chlorobenzene	8.924	112	382465	11.284	ppbv		99
58)	Ethyl Benzene	9.357	91	646825	11.264	ppbv		98
59)	m/p-Xylene	9.555	91	1068374m	23.212	ppbv		
60)	o-Xylene	9.966	91	537558	11.766	ppbv		98
61)	Styrene	9.872	104	239767	11.699	ppbv		98
62)	Isopropylbenzene	10.542	105	802003	11.345	ppbv		99
63)	1,1,2,2-Tetrachloroethane	9.966	83	357905	12.260	ppbv		100
64)	n-propylbenzene	10.992	120	208748	11.686	ppbv		99
65)	tert-Butylbenzene	11.536	119	731901	11.360	ppbv		99
66)	Benzyl Chloride	11.620	91	41013	10.285	ppbv		97
67)	sec-Butylbenzene	11.772	105	1015579	11.448	ppbv		99
69)	p-Isopropyltoluene	11.931	119	836492	11.451	ppbv		98
70)	n-Butylbenzene	12.290	91	824000	11.374	ppbv		100
71)	2-Chlorotoluene	10.905	91	592446	11.329	ppbv		99
72)	4-Ethyltoluene	11.131	105	634050	11.602	ppbv		99
73)	1,3,5-Trimethylbenzene	11.209	105	551677	11.432	ppbv		97
74)	1,2,4-Trimethylbenzene	11.542	105	602744	11.533	ppbv		96
75)	1,3-Dichlorobenzene	11.613	146	348392	11.249	ppbv		99
76)	1,4-Dichlorobenzene	11.678	146	344428	11.367	ppbv		99
77)	1,2-Dichlorobenzene	11.953	146	350456	11.418	ppbv		98
78)	Hexachloro-1,3-Butadiene	13.892	225	239328	9.500	ppbv		99
79)	Naphthalene	13.523	128	539332	10.249	ppbv		98
80)	Naphthalene,2-methyl-	14.468	142	172189	6.902	ppbv		97
81)	1,2,4-Trichlorobenzene	13.452	180	244059	9.502	ppbv		99

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

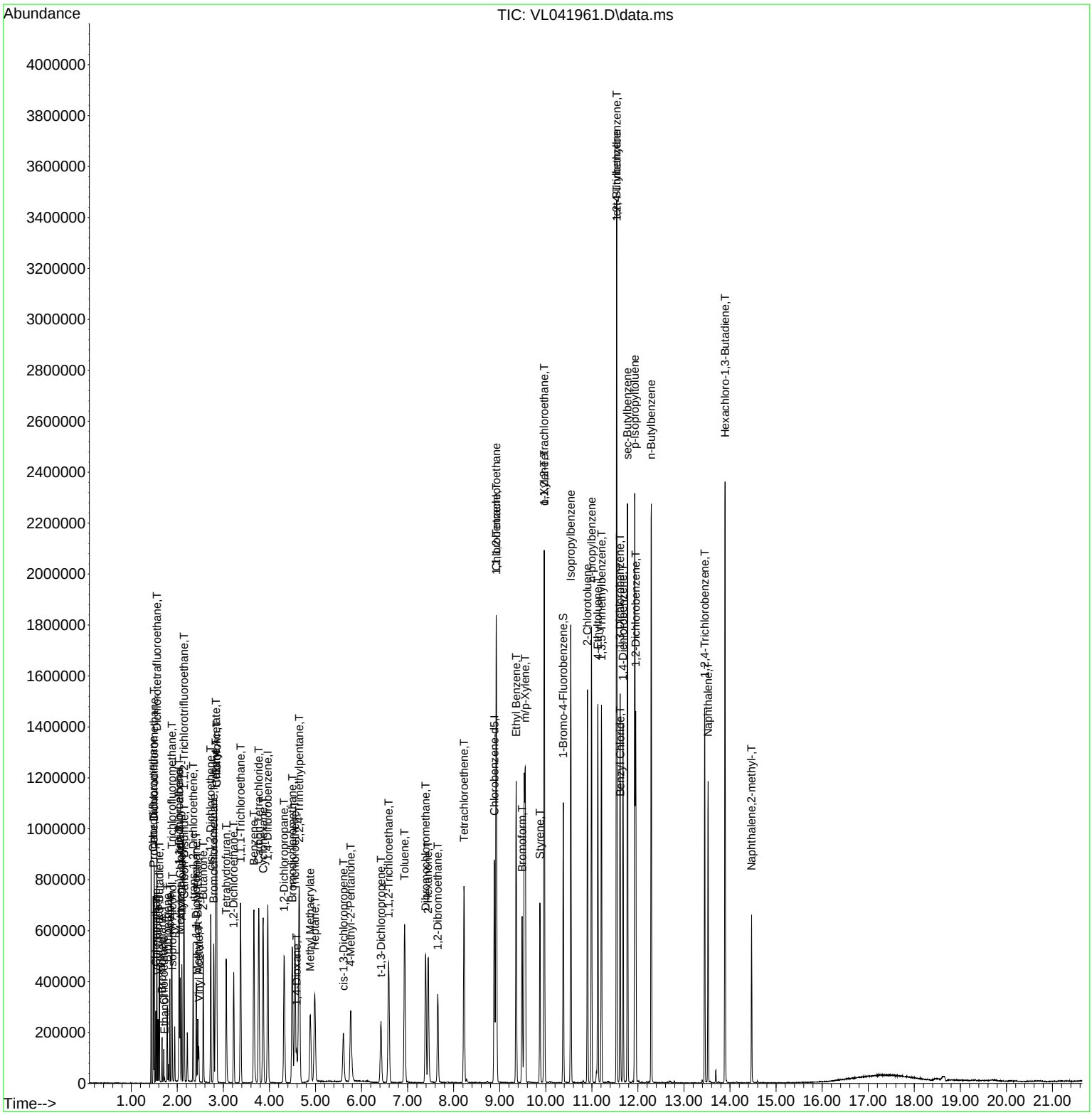
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041961.D
Acq On : 03 Feb 2025 12:57
Operator : SY/MD
Sample : VL0203ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 02:34:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041966.D
Acq On : 03 Feb 2025 16:02
Operator : SY/MD
Sample : QC012825 CAN 10439
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC012825 CAN 10439

Quant Time: Feb 04 02:38:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

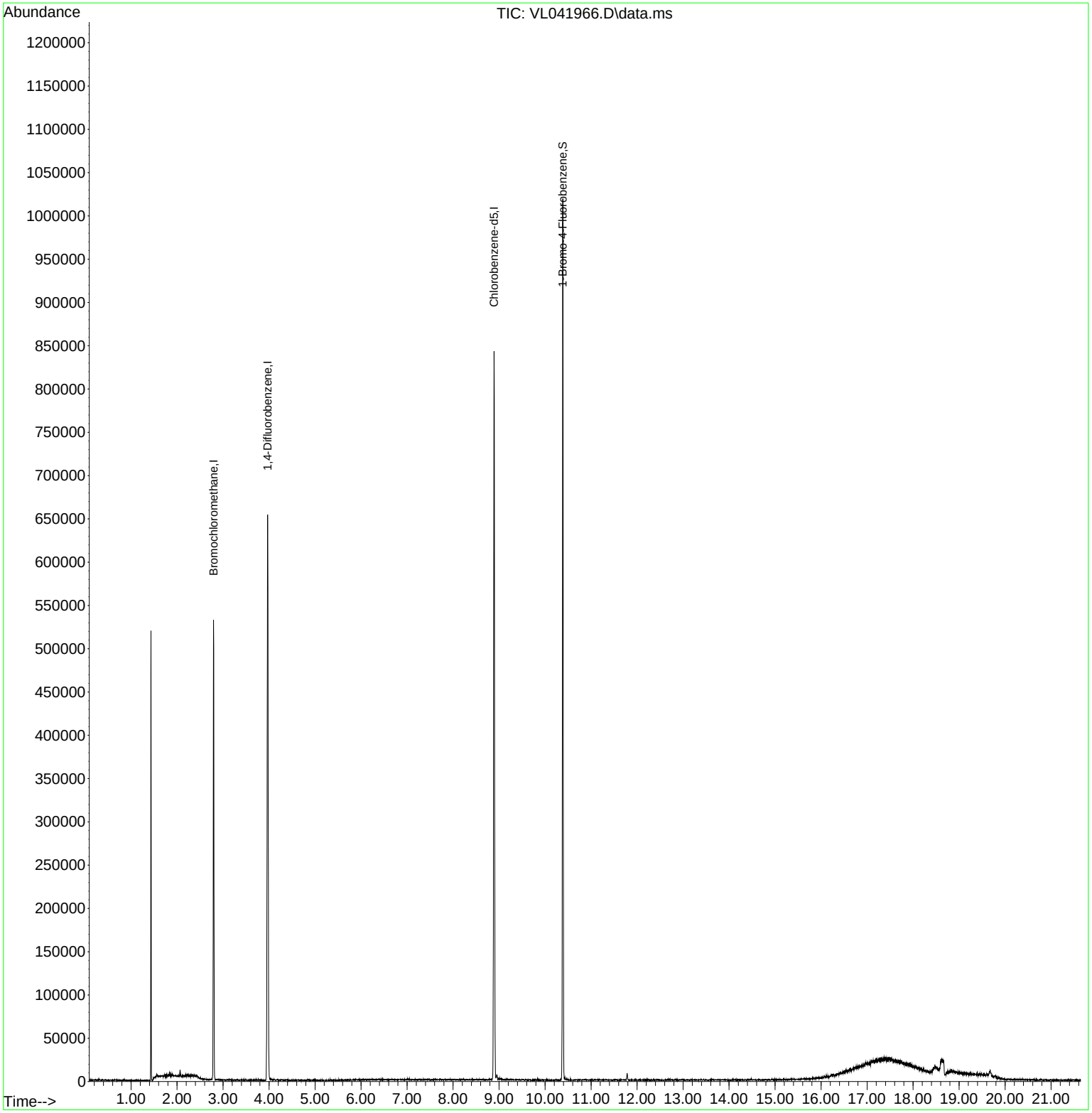
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	146182	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	402503	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	341049	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	256800	9.560	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.600%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041966.D
Acq On : 03 Feb 2025 16:02
Operator : SY/MD
Sample : QC012825 CAN 10439
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC012825 CAN 10439

Quant Time: Feb 04 02:38:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041974.D
Acq On : 04 Feb 2025 08:03
Operator : SY/MD
Sample : QC020325 CAN 10599
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC020325 CAN 10599

Quant Time: Feb 04 08:27:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

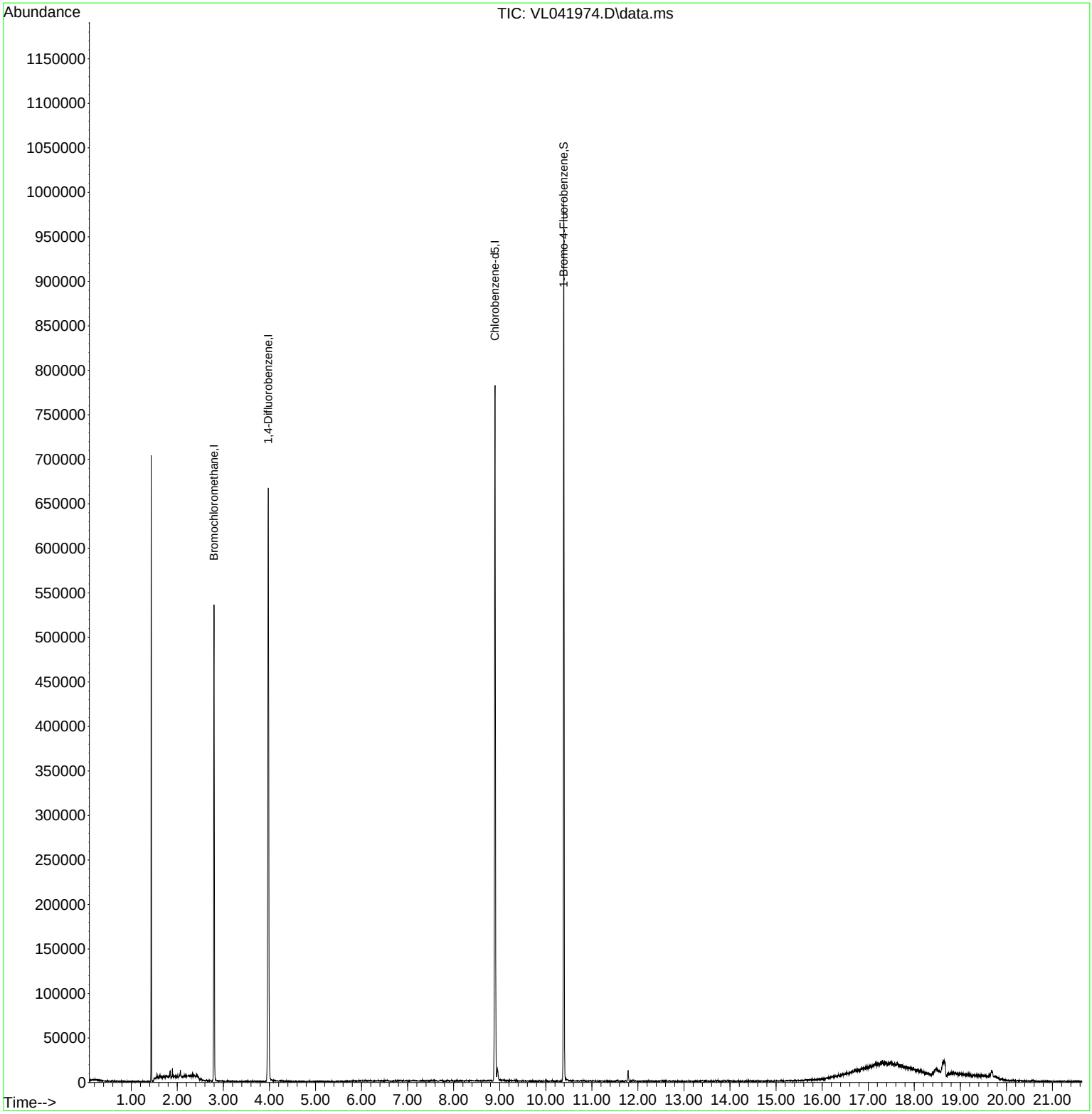
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	148524	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	371804	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	315945	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	232316	9.336	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.400%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041974.D
Acq On : 04 Feb 2025 08:03
Operator : SY/MD
Sample : QC020325 CAN 10599
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC020325 CAN 10599

Quant Time: Feb 04 08:27:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration



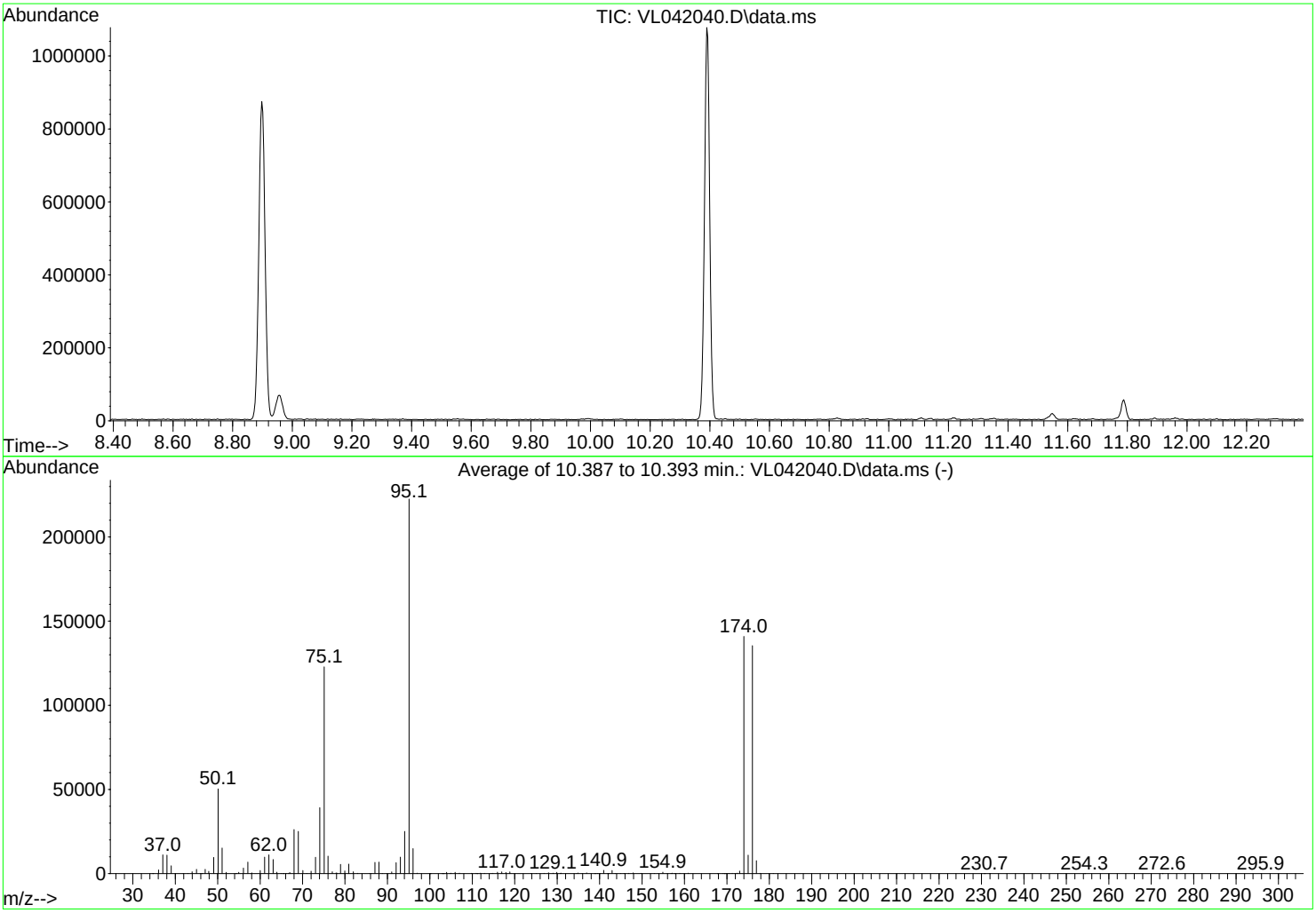
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042040.D
Acq On : 25 Feb 2025 07:56
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\VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025



AutoFind: Scans 3182, 3183, 3184; Background Corrected with Scan 3168

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.6	50320	PASS
75	95	30	66	55.2	122859	PASS
95	95	100	100	100.0	222571	PASS
96	95	5	9	6.7	14875	PASS
173	174	0.00	2	1.1	1534	PASS
174	95	50	120	63.3	140957	PASS
175	174	4	9	7.8	11014	PASS
176	174	93	101	96.1	135437	PASS
177	176	5	9	5.7	7676	PASS

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL042046.D 0.1 =VL042045.D 0.5 =VL042044.D 1 =VL042043.D 2 =VL042042.D 10 =VL042041.D 15 =VL042047.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.109	1.084	1.091	0.943	0.973	1.040	7.31
3)		Chlorodifluoro...			1.493	1.566	1.535	1.311	1.362	1.453	7.67
4)		Chloromethane			0.438	0.398	0.399	0.344	0.344	0.385	10.53
5)	T	Vinyl Chloride	0.447	0.336	0.376	0.346	0.361	0.337	0.343	0.364	10.89
6)	T	Bromomethane			0.170	0.184	0.186	0.160	0.165	0.173	6.63
7)		Chloroethane			0.151	0.158	0.156	0.135	0.140	0.148	6.83
8)	T	Dichlorotetraf...			0.892	0.910	0.901	0.779	0.791	0.855	7.47
9)	T	Propene			0.614	0.630	0.636	0.522	0.558	0.592	8.47
10)	T	Heptane			1.971	1.946	1.960	1.662	1.679	1.844	8.59
11)	T	Trichlorofluor...			1.056	1.122	1.119	0.944	0.968	1.042	7.98
12)	T	1,1,2-Trichlor...			0.919	0.902	0.865	0.697	0.773	0.831	11.28
13)		Ethanol			0.053	0.057	0.040	0.020	0.018	0.038#	48.50
14)	T	Bromoethene			0.325	0.304	0.299	0.264	0.275	0.293	8.41
15)	T	Acetone			1.084	0.960	0.933	0.714	0.723	0.883	18.17
16)	T	1,3-Butadiene			0.476	0.435	0.418	0.358	0.367	0.411	11.96
17)		tert-Butyl alc...			1.184	1.185	1.201	0.950	1.004	1.105	10.71
18)	T	1,1-Dichloroet...			0.398	0.437	0.386	0.320	0.338	0.376	12.57
19)	T	Isopropyl Alcohol			0.561	0.571	0.557	0.419	0.429	0.507	15.06
20)	T	Methylene Chlo...			0.429	0.374	0.329	0.261	0.278	0.334	20.72
21)	T	Allyl Chloride			0.707	0.717	0.639	0.538	0.590	0.638	11.94
22)	T	trans-1,2-Dich...			0.481	0.506	0.450	0.358	0.395	0.438	13.90
23)	T	Vinyl Acetate			0.689	0.614	0.695	0.520	0.586	0.621	11.82
24)	T	1,1-Dichloroet...			0.927	0.856	0.863	0.669	0.758	0.815	12.42
25)	T	Ethyl Acetate			3.833	3.674	3.776	3.174	3.217	3.535	8.91
26)	T	Hexane			1.596	1.462	1.519	1.282	1.287	1.429	9.83
27)	T	Carbon Disulfide			1.042	0.972	1.032	0.856	0.942	0.969	7.78
28)	T	Methyl tert-Bu...			0.650	0.844	0.838	0.522	0.705	0.711	19.02
29)	T	Chloroform			2.165	2.044	1.971	1.722	1.716	1.923	10.36
30)	T	Cyclohexane			1.154	1.239	1.255	1.076	1.076	1.160	7.39
31)	T	cis-1,2-Dichlo...			1.421	1.401	1.450	1.237	1.255	1.353	7.33
32)	T	1,1,1-Trichlor...	1.921	1.875	1.883	1.916	1.944	1.771	1.751	1.866	4.05
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.833	0.799	0.812	0.692	0.759	0.779	7.15
35)	T	Carbon Tetrach...	0.664	0.705	0.675	0.723	0.725	0.655	0.681	0.690	4.09
36)	T	Benzene			1.079	1.084	1.104	0.969	0.999	1.047	5.66
37)	T	1,2-Dichloroet...			0.624	0.604	0.598	0.520	0.556	0.580	7.20
38)	T	Trichloroethene	0.447	0.462	0.433	0.447	0.447	0.378	0.379	0.427	8.06
39)	T	1,2-Dichloropr...			0.421	0.415	0.414	0.357	0.379	0.397	7.02

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL022525AIR.M

40)	T	1,4-Dioxane			0.192	0.196	0.181	0.164	0.173	0.181	7.31
41)	T	Tetrahydrofuran			0.469	0.492	0.473	0.418	0.450	0.460	6.04
42)	T	Bromodichlorom...			0.806	0.791	0.810	0.739	0.765	0.782	3.81
43)		Methyl Methacr...			0.400	0.418	0.426	0.392	0.409	0.409	3.35
44)	T	2,2,4-Trimethy...			1.928	1.935	1.955	1.670	1.750	1.848	6.99
45)	T	t-1,3-Dichloro...			0.414	0.392	0.418	0.393	0.414	0.406	3.12
46)	T	cis-1,3-Dichlo...			0.514	0.523	0.548	0.516	0.526	0.526	2.59
47)	T	1,1,2-Trichlor...			0.426	0.429	0.426	0.361	0.375	0.403	8.12
48)	T	Dibromochlorom...			0.618	0.667	0.667	0.594	0.613	0.632	5.25
49)	T	Bromoform			0.553	0.551	0.588	0.525	0.526	0.549	4.68
50)	T	4-Methyl-2-Pen...			0.996	0.974	0.975	1.014	1.079	1.008	4.27
51)	T	2-Hexanone			0.577	0.570	0.608	0.834	0.879	0.693	21.69
52)	T	Tetrachloroethene	0.322	0.374	0.380	0.383	0.385	0.327	0.337	0.358	7.88
53)	T	Toluene			1.150	1.210	1.284	1.088	1.118	1.170	6.67
54)	T	1,2-Dibromoethane		0.563	0.556	0.553	0.586	0.500	0.514	0.545	5.87
55)	I	Chlorobenzene-d5	----------ISTD----------								
56)		1,1,1,2-Tetrac...			0.607	0.596	0.595	0.505	0.524	0.565	8.37
57)	T	Chlorobenzene			1.102	1.113	1.121	0.910	0.938	1.037	10.02
58)	T	Ethyl Benzene			1.886	1.906	1.974	1.694	1.749	1.842	6.31
59)	T	m/p-Xylene			1.488	1.550	1.580	1.330	1.380	1.466	7.35
60)	T	o-Xylene			1.572	1.550	1.577	1.317	1.351	1.473	8.68
61)	T	Styrene			0.659	0.719	0.738	0.658	0.690	0.693	5.18
62)		Isopropylbenzene			2.299	2.339	2.399	1.969	2.026	2.207	8.84
63)	T	1,1,2,2-Tetrac...	0.999	0.975	1.026	1.041	1.031	0.848	0.872	0.970	8.13
64)		n-propylbenzene			0.596	0.607	0.632	0.524	0.535	0.579	8.11
65)		tert-Butylbenzene			2.080	2.251	2.222	1.733	1.753	2.008	12.47
66)	T	Benzyl Chloride			0.141	0.159	0.163	0.153	0.150	0.153	5.40
67)		sec-Butylbenzene			2.973	3.229	3.182	2.482	2.494	2.872	12.65
68)	S	1-Bromo-4-Fluo...	0.773	0.760	0.768	0.777	0.765	0.764	0.779	0.769	0.92
69)		p-Isopropyltol...			2.240	2.533	2.575	2.021	2.056	2.285	11.38
70)		n-Butylbenzene			2.332	2.567	2.572	2.070	2.120	2.332	10.20
71)		2-Chlorotoluene			1.758	1.829	1.853	1.514	1.551	1.701	9.30
72)	T	4-Ethyltoluene			1.775	1.944	1.985	1.621	1.670	1.799	8.99
73)	T	1,3,5-Trimethy...			1.592	1.732	1.696	1.381	1.400	1.560	10.47
74)	T	1,2,4-Trimethy...			1.855	1.982	1.990	1.471	1.488	1.757	14.76
75)	T	1,3-Dichlorobe...			1.112	1.110	1.083	0.869	0.882	1.011	12.30
76)	T	1,4-Dichlorobe...			1.120	1.061	1.092	0.861	0.886	1.004	12.07
77)	T	1,2-Dichlorobe...			1.059	1.097	1.063	0.836	0.852	0.981	12.88
78)	T	Hexachloro-1,3...			0.840	0.832	0.844	0.637	0.666	0.764	13.53
79)	T	Naphthalene		0.841	0.978	1.237	1.352	1.371	1.450	1.205	20.15
80)	T	Naphthalene,2-...			0.090	0.142	0.240	0.562	0.615	0.330	73.74
81)	T	1,2,4-Trichlor...			0.589	0.687	0.765	0.644	0.673	0.671	9.58

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042041.D
Acq On : 25 Feb 2025 08:56
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:10:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	161135	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	422655	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.901	117	374249	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	285943	9.263	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	152005	5.480	ppbv	99
3) Chlorodifluoromethane	1.479	51	211185	6.887	ppbv	96
4) Chloromethane	1.538	50	55364	5.136	ppbv	98
5) Vinyl Chloride	1.586	62	54228	4.207	ppbv	98
6) Bromomethane	1.674	94	25846	5.173	ppbv	90
7) Chloroethane	1.709	64	21717	5.169	ppbv	96
8) Dichlorotetrafluoroethane	1.560	85	125595	5.147	ppbv	94
9) Propene	1.489	41	84038	6.357	ppbv	97
10) Heptane	5.007	43	267860	7.296	ppbv	97
11) Trichlorofluoromethane	1.884	101	152112	5.449	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.146	101	112374	5.162	ppbv	93
13) Ethanol	1.729	45	3178	2.131	ppbv	85
14) Bromoethene	1.787	108	42461	5.223	ppbv	99
15) Acetone	1.842	43	115085	4.327	ppbv	95
16) 1,3-Butadiene	1.615	39	57707	4.574	ppbv	100
17) tert-Butyl alcohol	2.049	59	153073	4.651	ppbv	100
18) 1,1-Dichloroethene	2.043	96	51534	4.954	ppbv	95
19) Isopropyl Alcohol	1.894	45	67445	4.522	ppbv	98
20) Methylene Chloride	2.069	84	41998	4.195	ppbv	94
21) Allyl Chloride	2.104	41	86723	4.504	ppbv	99
22) trans-1,2-Dichloroethene	2.350	96	57617	5.104	ppbv	96
23) Vinyl Acetate	2.473	43	83866	5.823	ppbv	98
24) 1,1-Dichloroethane	2.418	63	107817	4.704	ppbv	100
25) Ethyl Acetate	2.852	43	511505	7.007	ppbv	99
26) Hexane	2.839	57	206577	7.052	ppbv	98
27) Carbon Disulfide	2.159	76	137978	5.008	ppbv	97
28) Methyl tert-Butyl Ether	2.450	73	84091	4.696	ppbv	98
29) Chloroform	2.862	83	277411	6.538	ppbv	96
30) Cyclohexane	3.875	84	173351	7.295	ppbv	98
31) cis-1,2-Dichloroethene	2.732	61	199354	6.886	ppbv	98
32) 1,1,1-Trichloroethane	3.383	97	285335	6.064	ppbv	98
34) 2-Butanone	2.570	43	292449	8.043	ppbv	100
35) Carbon Tetrachloride	3.781	117	276677	6.741	ppbv	97
36) Benzene	3.674	78	409501	7.999	ppbv	98
37) 1,2-Dichloroethane	3.234	62	219829	7.543	ppbv	100
38) Trichloroethene	4.570	130	159933	7.689	ppbv	93
39) 1,2-Dichloropropane	4.337	63	151036	8.047	ppbv	99
40) 1,4-Dioxane	4.609	88	69399	7.105	ppbv #	76
41) Tetrahydrofuran	3.072	42	176830	8.509	ppbv	95
42) Bromodichloromethane	4.512	83	312250	7.908	ppbv	97
43) Methyl Methacrylate	4.907	69	165494	7.091	ppbv	97
44) 2,2,4-Trimethylpentane	4.661	57	705920	8.122	ppbv	97
45) t-1,3-Dichloropropene	6.444	75	166207	7.544	ppbv	91

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042041.D
Acq On : 25 Feb 2025 08:56
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:10:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.629	75	218294	7.809	ppbv		99
47) 1,1,2-Trichloroethane	6.610	97	152556	7.723	ppbv		97
48) Dibromochloromethane	7.412	129	251213	7.593	ppbv		99
49) Bromoform	9.503	173	222057	8.183	ppbv		98
50) 4-Methyl-2-Pentanone	5.787	43	428434	7.666	ppbv		100
51) 2-Hexanone	7.464	43	352331	7.709	ppbv	#	96
52) Tetrachloroethene	8.244	164	138263	7.743	ppbv		94
53) Toluene	6.959	91	460041	7.541	ppbv		97
54) 1,2-Dibromoethane	7.678	107	211395	7.772	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.943	131	188811	7.049	ppbv		97
57) Chlorobenzene	8.940	112	340525	7.735	ppbv		97
58) Ethyl Benzene	9.374	91	633939	7.739	ppbv		98
59) m/p-Xylene	9.552	91	995259m	15.427	ppbv		
60) o-Xylene	9.982	91	493069	7.557	ppbv		97
61) Styrene	9.888	104	246161	7.912	ppbv		98
62) Isopropylbenzene	10.555	105	736884	7.522	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.979	83	317313	7.538	ppbv		100
64) n-propylbenzene	11.005	120	196044	8.145	ppbv		90
65) tert-Butylbenzene	11.545	119	648698	7.596	ppbv		97
66) Benzyl Chloride	11.630	91	57345	6.699	ppbv	#	97
67) sec-Butylbenzene	11.782	105	928863	7.744	ppbv		99
69) p-Isopropyltoluene	11.940	119	756264	7.702	ppbv		98
70) n-Butylbenzene	12.296	91	774646	8.009	ppbv		99
71) 2-Chlorotoluene	10.918	91	566619	7.681	ppbv		97
72) 4-Ethyltoluene	11.141	105	606538	7.934	ppbv		98
73) 1,3,5-Trimethylbenzene	11.219	105	516875	7.838	ppbv		100
74) 1,2,4-Trimethylbenzene	11.552	105	550412	7.777	ppbv		98
75) 1,3-Dichlorobenzene	11.623	146	325160	8.535	ppbv		97
76) 1,4-Dichlorobenzene	11.685	146	322404	8.678	ppbv		97
77) 1,2-Dichlorobenzene	11.963	146	312942	8.593	ppbv		96
78) Hexachloro-1,3-Butadiene	13.895	225	238217	7.907	ppbv		100
79) Naphthalene	13.526	128	513192	7.372	ppbv		99
80) Naphthalene,2-methyl-	14.471	142	210405	6.676	ppbv		95
81) 1,2,4-Trichlorobenzene	13.455	180	241031	8.517	ppbv		99

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

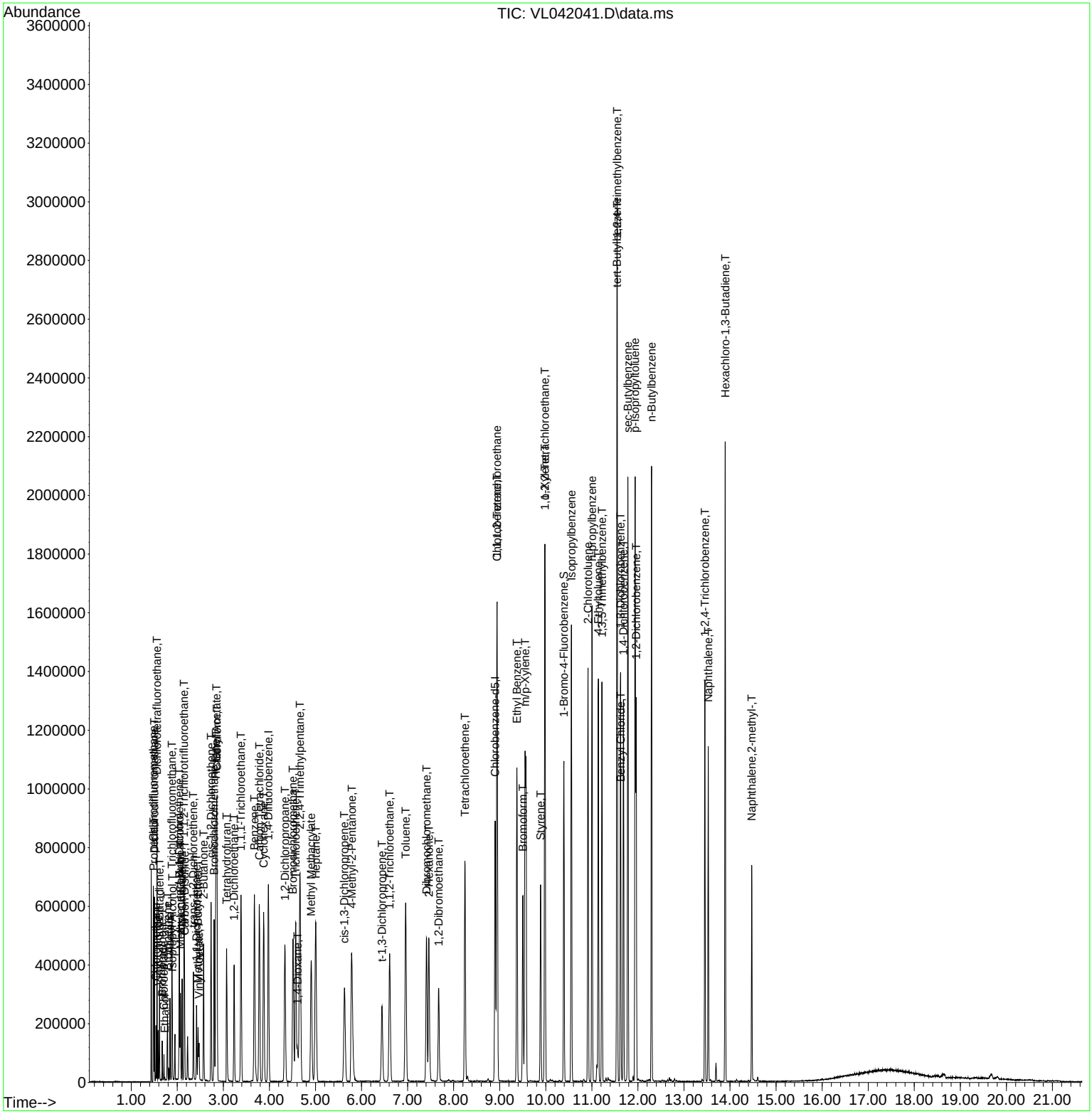
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042041.D
Acq On : 25 Feb 2025 08:56
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:10:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042042.D
Acq On : 25 Feb 2025 09:29
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:12:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.800	49	160999	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.981	114	427051	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.901	117	377910	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.393	95	289049	9.273	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.505	85	35122	1.267	ppbv		95
3) Chlorodifluoromethane	1.483	51	49423	1.613	ppbv		94
4) Chloromethane	1.538	50	12833	1.192	ppbv	#	87
5) Vinyl Chloride	1.586	62	11611	0.902	ppbv		97
6) Bromomethane	1.674	94	5996	1.201	ppbv		97
7) Chloroethane	1.712	64	5014	1.195	ppbv		90
8) Dichlorotetrafluoroethane	1.560	85	29028	1.191	ppbv		99
9) Propene	1.489	41	20484	1.551	ppbv		95
10) Heptane	5.004	43	63098	1.720	ppbv		94
11) Trichlorofluoromethane	1.884	101	36041	1.292	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.149	101	27846	1.280	ppbv		90
13) Ethanol	1.729	45	1291	0.866	ppbv		91
14) Bromoethene	1.790	108	9642	1.187	ppbv		93
15) Acetone	1.842	43	30058	1.131	ppbv		100
16) 1,3-Butadiene	1.615	39	13471	1.069	ppbv		100
17) tert-Butyl alcohol	2.052	59	38684	1.176	ppbv		96
18) 1,1-Dichloroethene	2.043	96	12417	1.195	ppbv		93
19) Isopropyl Alcohol	1.894	45	17927	1.203	ppbv		96
20) Methylene Chloride	2.072	84	10587	1.058	ppbv	#	80
21) Allyl Chloride	2.107	41	20564	1.069	ppbv		96
22) trans-1,2-Dichloroethene	2.350	96	14475	1.283	ppbv		81
23) Vinyl Acetate	2.473	43	22394	1.556	ppbv	#	94
24) 1,1-Dichloroethane	2.421	63	27804	1.214	ppbv		99
25) Ethyl Acetate	2.852	43	121593	1.667	ppbv		100
26) Hexane	2.839	57	48912	1.671	ppbv		98
27) Carbon Disulfide	2.159	76	33222	1.207	ppbv	#	57
28) Methyl tert-Butyl Ether	2.457	73	26968	1.507	ppbv		100
29) Chloroform	2.865	83	63463	1.497	ppbv		92
30) Cyclohexane	3.878	84	40420	1.702	ppbv		98
31) cis-1,2-Dichloroethene	2.732	61	46690	1.614	ppbv		96
32) 1,1,1-Trichloroethane	3.386	97	62586	1.331	ppbv		97
34) 2-Butanone	2.573	43	69370	1.888	ppbv		96
35) Carbon Tetrachloride	3.784	117	61895	1.493	ppbv		97
36) Benzene	3.677	78	94277	1.822	ppbv		98
37) 1,2-Dichloroethane	3.237	62	51050	1.734	ppbv		99
38) Trichloroethene	4.574	130	38184	1.817	ppbv		99
39) 1,2-Dichloropropane	4.341	63	35396	1.866	ppbv		95
40) 1,4-Dioxane	4.622	88	15442	1.565	ppbv	#	28
41) Tetrahydrofuran	3.075	42	40365	1.922	ppbv		96
42) Bromodichloromethane	4.512	83	69154	1.733	ppbv		94
43) Methyl Methacrylate	4.910	69	36393	1.543	ppbv		94
44) 2,2,4-Trimethylpentane	4.664	57	166945	1.901	ppbv		97
45) t-1,3-Dichloropropene	6.448	75	35707	1.604	ppbv		93

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042042.D
Acq On : 25 Feb 2025 09:29
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:12:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.632	75	46835	1.658	ppbv		93
47) 1,1,2-Trichloroethane	6.613	97	36368	1.822	ppbv		93
48) Dibromochloromethane	7.412	129	56931	1.703	ppbv		99
49) Bromoform	9.503	173	50259	1.833	ppbv		99
50) 4-Methyl-2-Pentanone	5.797	43	83246	1.474	ppbv		99
51) 2-Hexanone	7.470	43	51926	1.124	ppbv	#	94
52) Tetrachloroethene	8.244	164	32874	1.822	ppbv		95
53) Toluene	6.962	91	109646	1.779	ppbv		98
54) 1,2-Dibromoethane	7.678	107	50010	1.820	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.946	131	44947	1.662	ppbv		98
57) Chlorobenzene	8.943	112	84749	1.906	ppbv		95
58) Ethyl Benzene	9.374	91	149185	1.804	ppbv		99
59) m/p-Xylene	9.568	91	238800m	3.666	ppbv		
60) o-Xylene	9.982	91	119170	1.809	ppbv		97
61) Styrene	9.888	104	55798	1.776	ppbv		96
62) Isopropylbenzene	10.555	105	181311	1.833	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.982	83	77911	1.833	ppbv		96
64) n-propylbenzene	11.005	120	47764	1.965	ppbv		92
65) tert-Butylbenzene	11.545	119	167973	1.948	ppbv		96
66) Benzyl Chloride	11.630	91	12304	1.423	ppbv	#	98
67) sec-Butylbenzene	11.782	105	240504	1.986	ppbv		99
69) p-Isopropyltoluene	11.940	119	194660	1.963	ppbv		99
70) n-Butylbenzene	12.296	91	194416	1.991	ppbv		99
71) 2-Chlorotoluene	10.917	91	140068	1.880	ppbv		98
72) 4-Ethyltoluene	11.141	105	150038	1.944	ppbv		98
73) 1,3,5-Trimethylbenzene	11.218	105	128202	1.925	ppbv		99
74) 1,2,4-Trimethylbenzene	11.549	105	150380	2.104	ppbv	#	88
75) 1,3-Dichlorobenzene	11.623	146	81884	2.129	ppbv		98
76) 1,4-Dichlorobenzene	11.688	146	82560	2.201	ppbv		97
77) 1,2-Dichlorobenzene	11.963	146	80367	2.186	ppbv		96
78) Hexachloro-1,3-Butadiene	13.895	225	63815	2.098	ppbv		99
79) Naphthalene	13.526	128	102197	1.454	ppbv		98
80) Naphthalene,2-methyl-	14.475	142	18104	0.569	ppbv		94
81) 1,2,4-Trichlorobenzene	13.455	180	57798	2.023	ppbv		98

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

Quantitation Report (QT Reviewed)

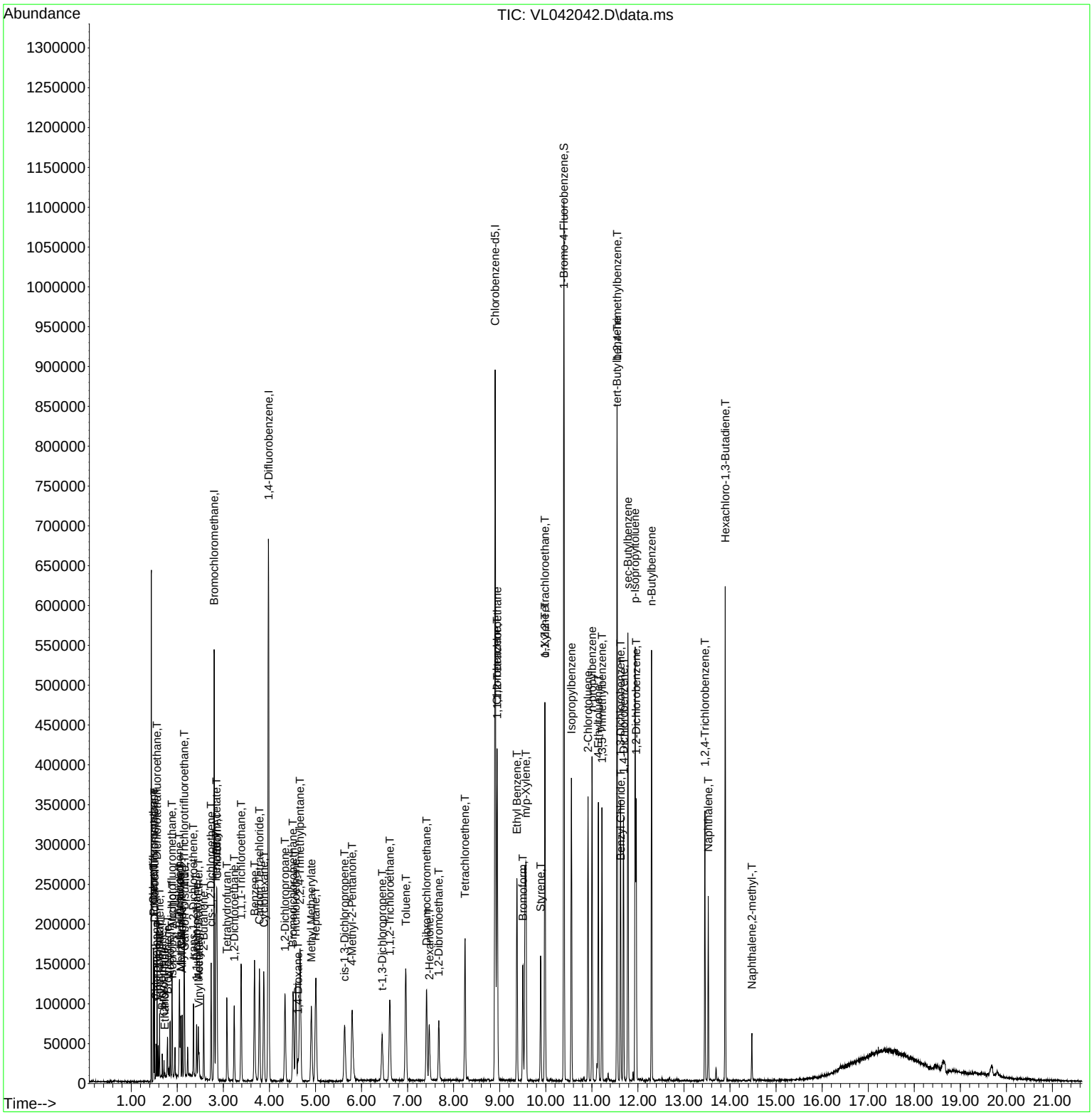
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042042.D
Acq On : 25 Feb 2025 09:29
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:12:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042043.D
Acq On : 25 Feb 2025 10:00
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:27:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:15:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.800	49	161096	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.978	114	423363	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.898	117	369917	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	287450	9.420	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 94.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	17457	0.629	ppbv		95
3) Chlorodifluoromethane	1.479	51	25229	0.823	ppbv		98
4) Chloromethane	1.538	50	6417	0.595	ppbv	#	75
5) Vinyl Chloride	1.586	62	5567	0.432	ppbv		96
6) Bromomethane	1.674	94	2966	0.594	ppbv		100
7) Chloroethane	1.709	64	2542	0.605	ppbv		96
8) Dichlorotetrafluoroethane	1.560	85	14655	0.601	ppbv		90
9) Propene	1.486	41	10156	0.768	ppbv		96
10) Heptane	4.998	43	31354m	0.854	ppbv		
11) Trichlorofluoromethane	1.884	101	18079	0.648	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.149	101	14527	0.667	ppbv		92
13) Ethanol	1.725	45	915m	0.614	ppbv		
14) Bromoethene	1.787	108	4905	0.604	ppbv	#	95
15) Acetone	1.845	43	15468	0.582	ppbv		98
16) 1,3-Butadiene	1.615	39	7010	0.556	ppbv		99
17) tert-Butyl alcohol	2.052	59	19092	0.580	ppbv		97
18) 1,1-Dichloroethene	2.043	96	7042	0.677	ppbv		94
19) Isopropyl Alcohol	1.894	45	9191	0.616	ppbv	#	32
20) Methylene Chloride	2.068	84	6026	0.602	ppbv		95
21) Allyl Chloride	2.104	41	11550	0.600	ppbv		95
22) trans-1,2-Dichloroethene	2.347	96	8145m	0.722	ppbv		
23) Vinyl Acetate	2.473	43	9893	0.687	ppbv	#	91
24) 1,1-Dichloroethane	2.418	63	13783	0.601	ppbv		98
25) Ethyl Acetate	2.852	43	59183	0.811	ppbv		99
26) Hexane	2.836	57	23549	0.804	ppbv		96
27) Carbon Disulfide	2.159	76	15659	0.568	ppbv	#	46
28) Methyl tert-Butyl Ether	2.454	73	13593	0.759	ppbv		95
29) Chloroform	2.861	83	32925	0.776	ppbv		94
30) Cyclohexane	3.874	84	19953	0.840	ppbv		97
31) cis-1,2-Dichloroethene	2.732	61	22565	0.780	ppbv		97
32) 1,1,1-Trichloroethane	3.386	97	30870	0.656	ppbv		96
34) 2-Butanone	2.570	43	33820	0.929	ppbv		99
35) Carbon Tetrachloride	3.777	117	30618	0.745	ppbv		90
36) Benzene	3.674	78	45892	0.895	ppbv		96
37) 1,2-Dichloroethane	3.234	62	25585	0.876	ppbv		99
38) Trichloroethene	4.570	130	18921	0.908	ppbv		91
39) 1,2-Dichloropropane	4.334	63	17557	0.934	ppbv		94
40) 1,4-Dioxane	4.619	88	8319m	0.850	ppbv		
41) Tetrahydrofuran	3.075	42	20823	1.000	ppbv		96
42) Bromodichloromethane	4.515	83	33481	0.847	ppbv		97
43) Methyl Methacrylate	4.907	69	17679	0.756	ppbv		99
44) 2,2,4-Trimethylpentane	4.661	57	81921	0.941	ppbv		98
45) t-1,3-Dichloropropene	6.444	75	16578m	0.751	ppbv		

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042043.D
Acq On : 25 Feb 2025 10:00
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:27:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:15:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.632	75	22127m	0.790	ppbv		
47) 1,1,2-Trichloroethane	6.616	97	18160m	0.918	ppbv		
48) Dibromochloromethane	7.412	129	28239	0.852	ppbv		97
49) Bromoform	9.500	173	23310	0.858	ppbv		94
50) 4-Methyl-2-Pentanone	5.791	43	41249m	0.737	ppbv		
51) 2-Hexanone	7.470	43	24117	0.527	ppbv	#	97
52) Tetrachloroethene	8.241	164	16217	0.907	ppbv		89
53) Toluene	6.959	91	51231	0.838	ppbv		99
54) 1,2-Dibromoethane	7.674	107	23427	0.860	ppbv		94
56) 1,1,1,2-Tetrachloroethane	8.943	131	22060	0.833	ppbv		97
57) Chlorobenzene	8.937	112	41173	0.946	ppbv		96
58) Ethyl Benzene	9.370	91	70507	0.871	ppbv		97
59) m/p-Xylene	9.568	91	114691m	1.799	ppbv		
60) o-Xylene	9.979	91	57322	0.889	ppbv		99
61) Styrene	9.885	104	26596	0.865	ppbv		98
62) Isopropylbenzene	10.555	105	86533	0.894	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.979	83	38520	0.926	ppbv		98
64) n-propylbenzene	11.002	120	22456	0.944	ppbv		94
65) tert-Butylbenzene	11.545	119	83284	0.987	ppbv		99
66) Benzyl Chloride	11.626	91	5880m	0.695	ppbv		
67) sec-Butylbenzene	11.782	105	119435	1.007	ppbv		99
69) p-Isopropyltoluene	11.940	119	93710	0.966	ppbv		99
70) n-Butylbenzene	12.293	91	94969	0.993	ppbv		98
71) 2-Chlorotoluene	10.914	91	67655	0.928	ppbv		98
72) 4-Ethyltoluene	11.137	105	71906	0.952	ppbv		99
73) 1,3,5-Trimethylbenzene	11.215	105	64087	0.983	ppbv		96
74) 1,2,4-Trimethylbenzene	11.549	105	73323	1.048	ppbv		100
75) 1,3-Dichlorobenzene	11.620	146	41063	1.091	ppbv		99
76) 1,4-Dichlorobenzene	11.685	146	39235	1.068	ppbv		99
77) 1,2-Dichlorobenzene	11.960	146	40574	1.127	ppbv		98
78) Hexachloro-1,3-Butadiene	13.895	225	30764	1.033	ppbv		99
79) Naphthalene	13.526	128	45743	0.665	ppbv		98
80) Naphthalene,2-methyl-	14.471	142	5244	0.168	ppbv		94
81) 1,2,4-Trichlorobenzene	13.452	180	25404	0.908	ppbv		95

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

Quantitation Report (QT Reviewed)

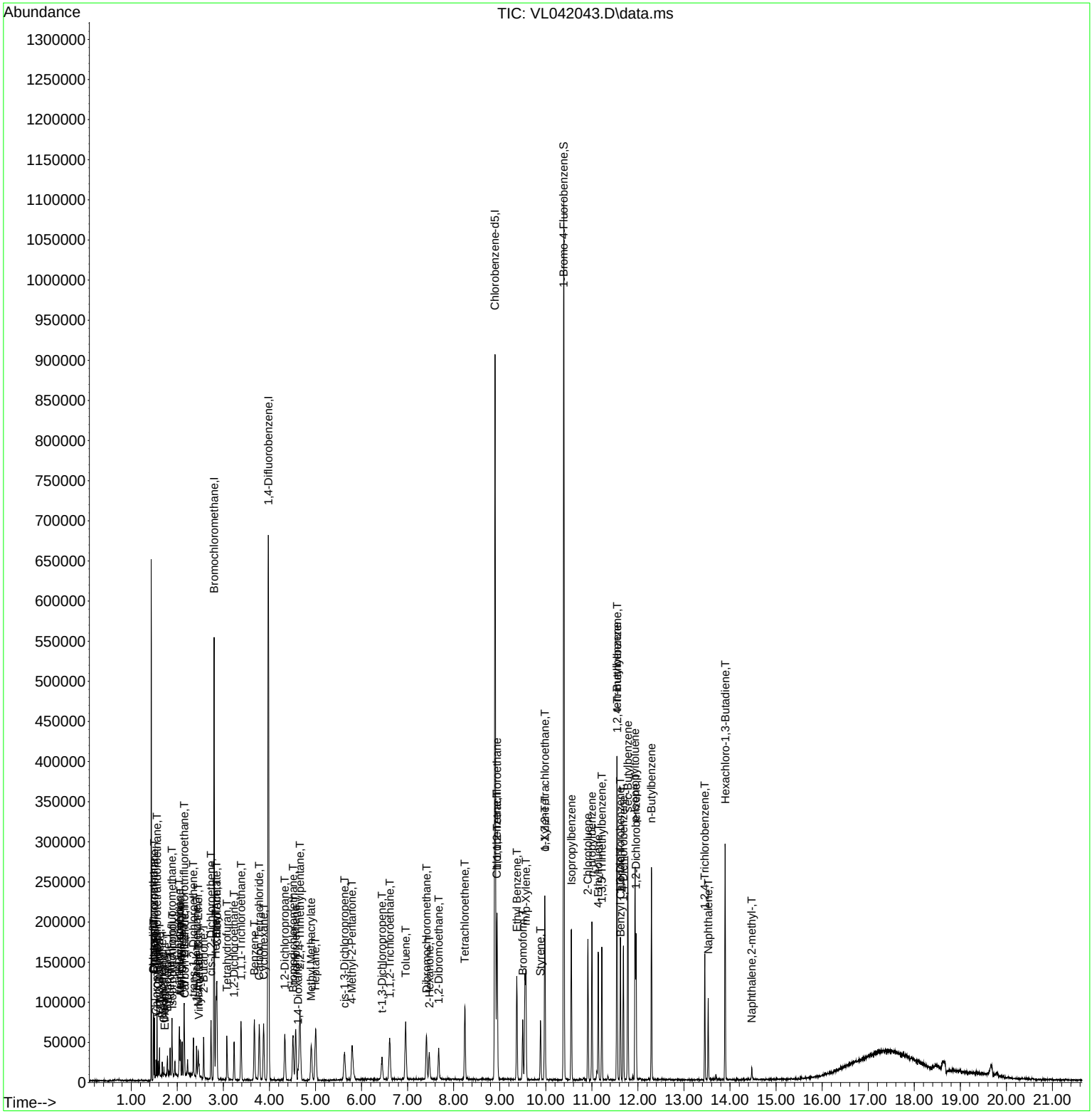
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042043.D
Acq On : 25 Feb 2025 10:00
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:27:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:15:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042044.D
Acq On : 25 Feb 2025 10:31
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:56:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	159644	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.975	114	421340	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.898	117	365954	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	281042	9.310	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	8852	0.322	ppbv		98
3) Chlorodifluoromethane	1.479	51	11921	0.392	ppbv		94
4) Chloromethane	1.537	50	3497	0.327	ppbv	#	88
5) Vinyl Chloride	1.583	62	3005	0.235	ppbv		98
6) Bromomethane	1.673	94	1359	0.275	ppbv		92
7) Chloroethane	1.709	64	1205	0.290	ppbv		89
8) Dichlorotetrafluoroethane	1.557	85	7123	0.295	ppbv		99
9) Propene	1.486	41	4904	0.374	ppbv		94
10) Heptane	5.004	43	15731	0.432	ppbv		98
11) Trichlorofluoromethane	1.884	101	8429	0.305	ppbv		92
12) 1,1,2-Trichlorotrifluo...	2.146	101	7336	0.340	ppbv		98
13) Ethanol	1.725	45	426	0.288	ppbv		75
14) Bromoethene	1.787	108	2598	0.323	ppbv	#	89
15) Acetone	1.842	43	8655	0.328	ppbv		96
16) 1,3-Butadiene	1.615	39	3803	0.304	ppbv		97
17) tert-Butyl alcohol	2.049	59	9447	0.290	ppbv	#	90
18) 1,1-Dichloroethene	2.039	96	3173	0.308	ppbv		94
19) Isopropyl Alcohol	1.894	45	4481	0.303	ppbv	#	32
20) Methylene Chloride	2.068	84	3423	0.345	ppbv		97
21) Allyl Chloride	2.104	41	5640	0.296	ppbv		100
22) trans-1,2-Dichloroethene	2.347	96	3838m	0.343	ppbv		
23) Vinyl Acetate	2.473	43	5499	0.385	ppbv	#	86
24) 1,1-Dichloroethane	2.418	63	7396	0.326	ppbv	#	88
25) Ethyl Acetate	2.848	43	30593	0.423	ppbv		98
26) Hexane	2.832	57	12739	0.439	ppbv		98
27) Carbon Disulfide	2.159	76	8316	0.305	ppbv	#	15
28) Methyl tert-Butyl Ether	2.450	73	5185	0.292	ppbv	#	80
29) Chloroform	2.858	83	17278	0.411	ppbv		93
30) Cyclohexane	3.874	84	9209	0.391	ppbv		88
31) cis-1,2-Dichloroethene	2.729	61	11344	0.395	ppbv		97
32) 1,1,1-Trichloroethane	3.382	97	15027	0.322	ppbv		93
34) 2-Butanone	2.570	43	17555	0.484	ppbv		99
35) Carbon Tetrachloride	3.780	117	14223	0.348	ppbv		90
36) Benzene	3.670	78	22728	0.445	ppbv		95
37) 1,2-Dichloroethane	3.230	62	13141	0.452	ppbv		100
38) Trichloroethene	4.570	130	9115	0.440	ppbv	#	87
39) 1,2-Dichloropropane	4.331	63	8877m	0.474	ppbv		
40) 1,4-Dioxane	4.622	88	4046m	0.416	ppbv		
41) Tetrahydrofuran	3.078	42	9880	0.477	ppbv		98
42) Bromodichloromethane	4.505	83	16973	0.431	ppbv	#	96
43) Methyl Methacrylate	4.904	69	8428	0.362	ppbv		93
44) 2,2,4-Trimethylpentane	4.661	57	40623	0.469	ppbv		98
45) t-1,3-Dichloropropene	6.441	75	8720m	0.397	ppbv		

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042044.D
Acq On : 25 Feb 2025 10:31
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:56:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.629	75	10834m	0.389	ppbv		
47)	1,1,2-Trichloroethane	6.609	97	8982m	0.456	ppbv		
48)	Dibromochloromethane	7.406	129	13014m	0.395	ppbv		
49)	Bromoform	9.496	173	11640	0.430	ppbv		98
50)	4-Methyl-2-Pentanone	5.794	43	20992m	0.377	ppbv		
51)	2-Hexanone	7.470	43	12149m	0.267	ppbv		
52)	Tetrachloroethene	8.241	164	8012	0.450	ppbv		95
53)	Toluene	6.956	91	24224	0.398	ppbv		96
54)	1,2-Dibromoethane	7.674	107	11718m	0.432	ppbv		
56)	1,1,1,2-Tetrachloroethane	8.940	131	11100	0.424	ppbv	#	61
57)	Chlorobenzene	8.936	112	20167	0.468	ppbv		97
58)	Ethyl Benzene	9.370	91	34506	0.431	ppbv		90
59)	m/p-Xylene	9.568	91	54449m	0.863	ppbv		
60)	o-Xylene	9.979	91	28757	0.451	ppbv		95
61)	Styrene	9.885	104	12051	0.396	ppbv		99
62)	Isopropylbenzene	10.552	105	42074	0.439	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.975	83	18774	0.456	ppbv		96
64)	n-propylbenzene	11.001	120	10900	0.463	ppbv		100
65)	tert-Butylbenzene	11.542	119	38066	0.456	ppbv		98
66)	Benzyl Chloride	11.626	91	2589	0.309	ppbv	#	96
67)	sec-Butylbenzene	11.778	105	54394	0.464	ppbv		97
69)	p-Isopropyltoluene	11.937	119	40978	0.427	ppbv		95
70)	n-Butylbenzene	12.293	91	42673	0.451	ppbv		99
71)	2-Chlorotoluene	10.914	91	32161	0.446	ppbv		99
72)	4-Ethyltoluene	11.137	105	32477	0.434	ppbv	#	95
73)	1,3,5-Trimethylbenzene	11.215	105	29130	0.452	ppbv		91
74)	1,2,4-Trimethylbenzene	11.548	105	33950	0.491	ppbv		97
75)	1,3-Dichlorobenzene	11.616	146	20339	0.546	ppbv		96
76)	1,4-Dichlorobenzene	11.684	146	20492	0.564	ppbv		93
77)	1,2-Dichlorobenzene	11.959	146	19373	0.544	ppbv		96
78)	Hexachloro-1,3-Butadiene	13.892	225	15367	0.522	ppbv		99
79)	Naphthalene	13.523	128	17897	0.263	ppbv	#	95
80)	Naphthalene,2-methyl-	14.478	142	1646	0.053	ppbv	#	81
81)	1,2,4-Trichlorobenzene	13.452	180	10771	0.389	ppbv		94

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

Quantitation Report (QT Reviewed)

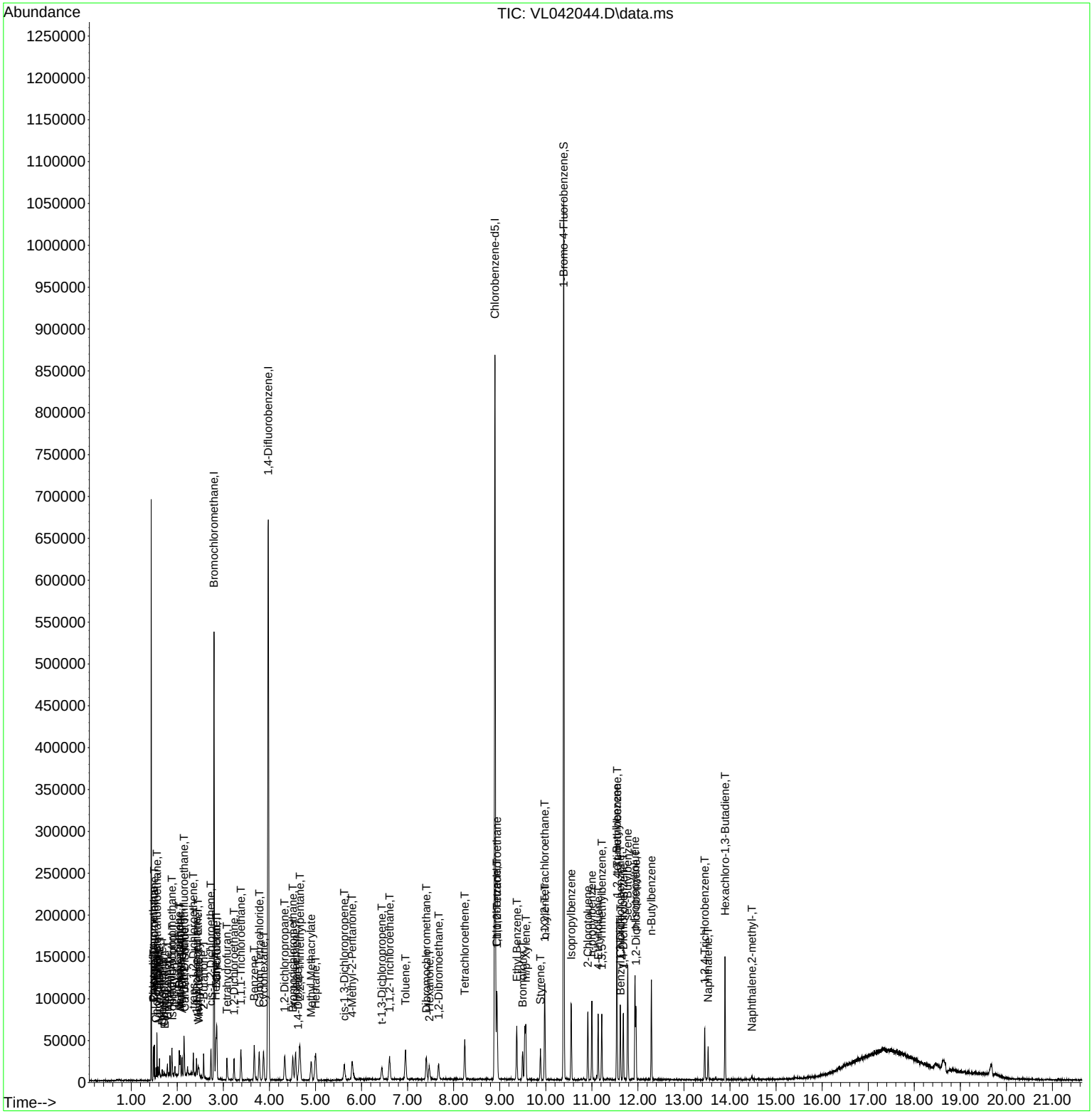
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042044.D
Acq On : 25 Feb 2025 10:31
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:56:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042045.D
Acq On : 25 Feb 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:33:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.803	49	161406	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.981	114	414875	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.904	117	363831	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	276484	9.213	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.100%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.586	62	543	0.042	ppbv	# 88
32) 1,1,1-Trichloroethane	3.386	97	3026	0.064	ppbv	# 86
35) Carbon Tetrachloride	3.787	117	2923m	0.073	ppbv	
38) Trichloroethene	4.577	130	1915m	0.094	ppbv	
52) Tetrachloroethene	8.254	164	1552m	0.089	ppbv	
54) 1,2-Dibromoethane	7.678	107	2335m	0.087	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.982	83	3549m	0.087	ppbv	
79) Naphthalene	13.529	128	3058	0.045	ppbv	# 91

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

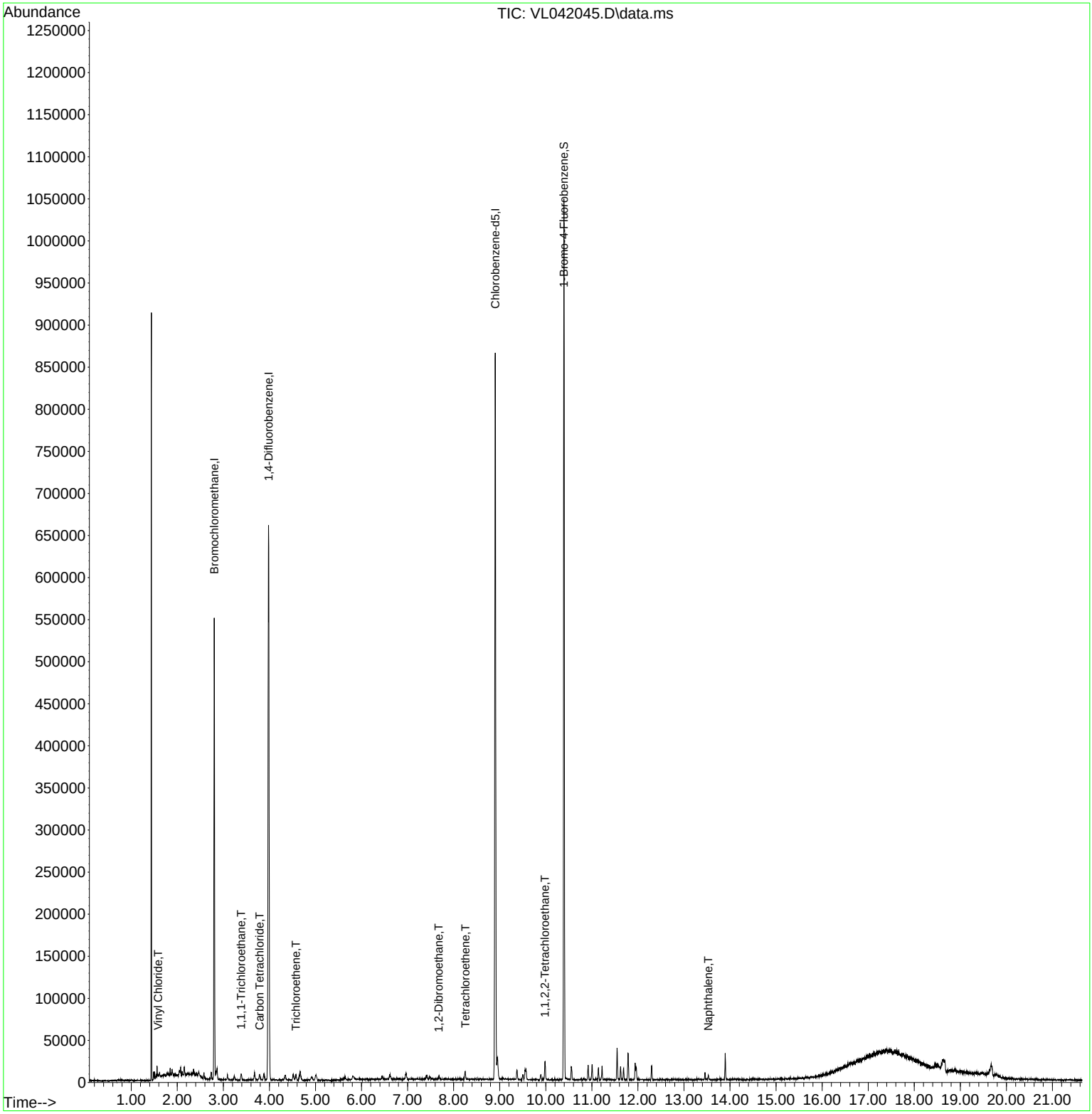
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042045.D
Acq On : 25 Feb 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:33:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042046.D
Acq On : 25 Feb 2025 11:34
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:34:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	160156	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	410900	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	353154	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	272906	9.368	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.700%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.586	62	215	0.017	ppbv	89
32) 1,1,1-Trichloroethane	3.379	97	923m	0.020	ppbv	
35) Carbon Tetrachloride	3.784	117	818m	0.021	ppbv	
38) Trichloroethene	4.577	130	551m	0.027	ppbv	
52) Tetrachloroethene	8.237	164	397m	0.023	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.979	83	1058m	0.027	ppbv	

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

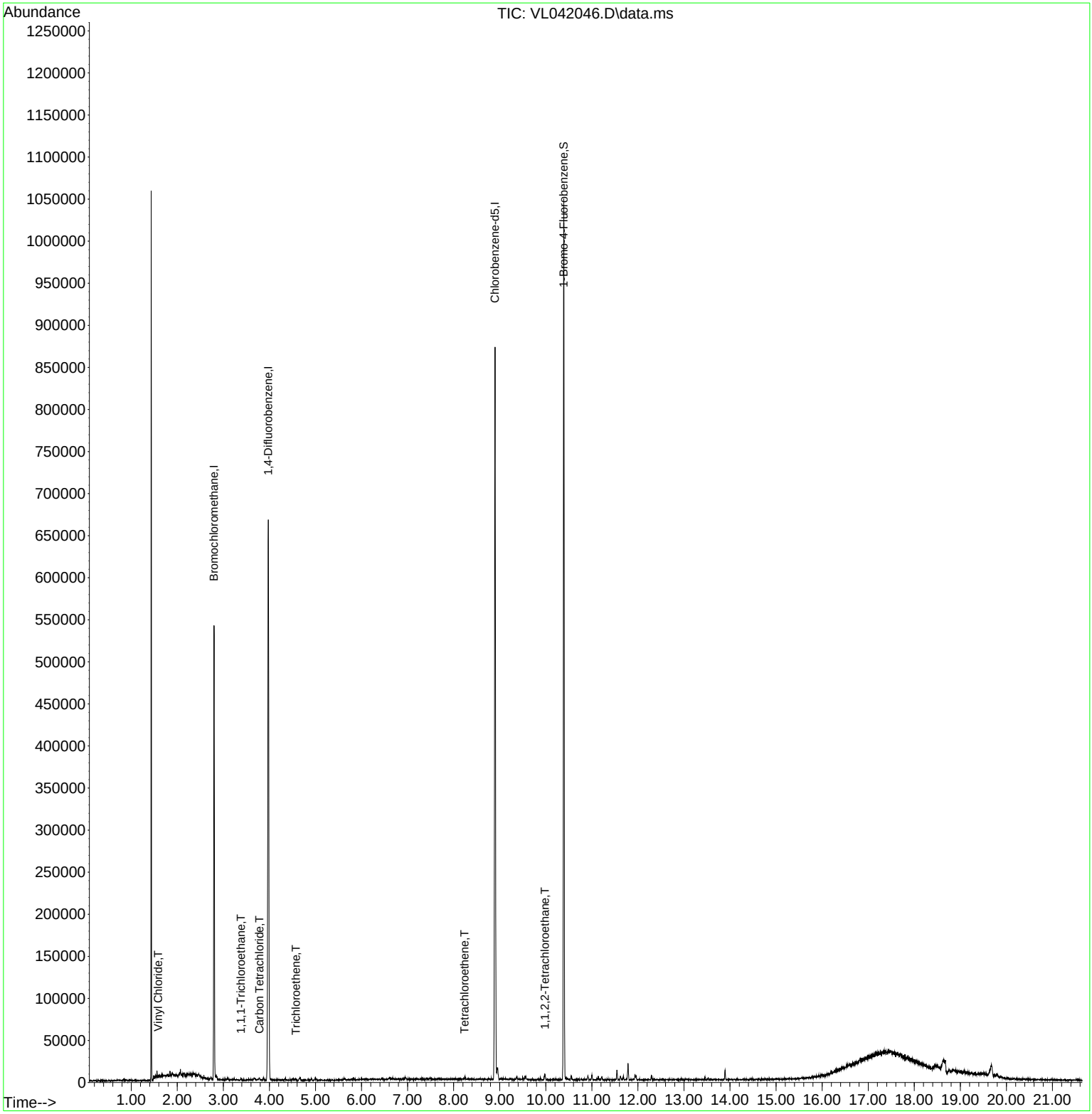
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042046.D
Acq On : 25 Feb 2025 11:34
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:34:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042047.D
Acq On : 25 Feb 2025 12:07
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:35:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	159015	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	401919	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.904	117	351637	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	273846	9.441	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 94.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	231978	8.474	ppbv	99
3) Chlorodifluoromethane	1.479	51	324821	10.733	ppbv	100
4) Chloromethane	1.537	50	82097	7.718	ppbv	98
5) Vinyl Chloride	1.586	62	81863	6.436	ppbv	99
6) Bromomethane	1.673	94	39366	7.983	ppbv	97
7) Chloroethane	1.709	64	33329	8.039	ppbv	92
8) Dichlorotetrafluoroethane	1.560	85	188716	7.837	ppbv	98
9) Propene	1.489	41	133086	10.201	ppbv	97
10) Heptane	5.004	43	400418	11.052	ppbv	99
11) Trichlorofluoromethane	1.884	101	230938	8.383	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.149	101	184306	8.579	ppbv	99
13) Ethanol	1.725	45	4281	2.909	ppbv	100
14) Bromoethene	1.787	108	65496	8.164	ppbv	99
15) Acetone	1.842	43	172538	6.574	ppbv	98
16) 1,3-Butadiene	1.615	39	87490	7.027	ppbv	100
17) tert-Butyl alcohol	2.049	59	239569	7.377	ppbv	98
18) 1,1-Dichloroethene	2.042	96	80535	7.845	ppbv	98
19) Isopropyl Alcohol	1.894	45	102365	6.955	ppbv	99
20) Methylene Chloride	2.068	84	66282	6.709	ppbv	98
21) Allyl Chloride	2.104	41	140726	7.406	ppbv	99
22) trans-1,2-Dichloroethene	2.350	96	94321	8.466	ppbv	95
23) Vinyl Acetate	2.473	43	139727	9.831	ppbv	99
24) 1,1-Dichloroethane	2.418	63	180882	7.997	ppbv	99
25) Ethyl Acetate	2.848	43	767353	10.652	ppbv	99
26) Hexane	2.839	57	306864	10.615	ppbv	99
27) Carbon Disulfide	2.159	76	224609	8.261	ppbv	98
28) Methyl tert-Butyl Ether	2.453	73	168058	9.510	ppbv	98
29) Chloroform	2.861	83	409240	9.774	ppbv	100
30) Cyclohexane	3.874	84	256687	10.946	ppbv	98
31) cis-1,2-Dichloroethene	2.732	61	299324	10.476	ppbv	96
32) 1,1,1-Trichloroethane	3.386	97	417615	8.994	ppbv	98
34) 2-Butanone	2.570	43	457602	13.234	ppbv	98
35) Carbon Tetrachloride	3.780	117	410730	10.524	ppbv	96
36) Benzene	3.674	78	602107	12.367	ppbv	97
37) 1,2-Dichloroethane	3.233	62	335275	12.097	ppbv	99
38) Trichloroethene	4.573	130	228298	11.542	ppbv	98
39) 1,2-Dichloropropane	4.337	63	228418	12.797	ppbv	98
40) 1,4-Dioxane	4.609	88	104519	11.253	ppbv #	96
41) Tetrahydrofuran	3.068	42	271202	13.724	ppbv	100
42) Bromodichloromethane	4.512	83	461272	12.285	ppbv	96
43) Methyl Methacrylate	4.907	69	246468	11.105	ppbv	97
44) 2,2,4-Trimethylpentane	4.667	57	1054880	12.763	ppbv	99
45) t-1,3-Dichloropropene	6.444	75	249612	11.914	ppbv	95

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042047.D
Acq On : 25 Feb 2025 12:07
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:35:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.635	75	317266	11.935	ppbv		98
47) 1,1,2-Trichloroethane	6.609	97	226021	12.032	ppbv		95
48) Dibromochloromethane	7.412	129	369666	11.750	ppbv		99
49) Bromoform	9.503	173	317322	12.297	ppbv		99
50) 4-Methyl-2-Pentanone	5.787	43	650307	12.237	ppbv		99
51) 2-Hexanone	7.461	43	530165	12.198	ppbv	#	100
52) Tetrachloroethene	8.247	164	203233	11.968	ppbv		94
53) Toluene	6.959	91	673822	11.615	ppbv		99
54) 1,2-Dibromoethane	7.677	107	309982	11.985	ppbv		95
56) 1,1,1,2-Tetrachloroethane	8.946	131	276326	10.979	ppbv		99
57) Chlorobenzene	8.943	112	494606	11.957	ppbv		98
58) Ethyl Benzene	9.373	91	922265	11.984	ppbv		100
59) m/p-Xylene	9.571	91	1456036m	24.020	ppbv		
60) o-Xylene	9.982	91	712735	11.626	ppbv		99
61) Styrene	9.888	104	363855	12.446	ppbv		99
62) Isopropylbenzene	10.558	105	1068777	11.612	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.982	83	459839	11.626	ppbv		100
64) n-propylbenzene	11.005	120	282364	12.486	ppbv		99
65) tert-Butylbenzene	11.548	119	924810	11.526	ppbv		99
66) Benzyl Chloride	11.633	91	78975	9.819	ppbv		98
67) sec-Butylbenzene	11.785	105	1315730	11.674	ppbv		99
69) p-Isopropyltoluene	11.940	119	1084253	11.752	ppbv		99
70) n-Butylbenzene	12.296	91	1118373	12.306	ppbv		99
71) 2-Chlorotoluene	10.917	91	818204	11.804	ppbv		100
72) 4-Ethyltoluene	11.141	105	880883	12.264	ppbv		99
73) 1,3,5-Trimethylbenzene	11.218	105	738619	11.921	ppbv		98
74) 1,2,4-Trimethylbenzene	11.552	105	784701	11.801	ppbv		91
75) 1,3-Dichlorobenzene	11.623	146	465436	13.003	ppbv		98
76) 1,4-Dichlorobenzene	11.688	146	467249	13.386	ppbv		99
77) 1,2-Dichlorobenzene	11.963	146	449222	13.129	ppbv		98
78) Hexachloro-1,3-Butadiene	13.895	225	351085	12.403	ppbv		100
79) Naphthalene	13.526	128	764990	11.696	ppbv		99
80) Naphthalene,2-methyl-	14.471	142	324431	10.956	ppbv		99
81) 1,2,4-Trichlorobenzene	13.455	180	354990	13.351	ppbv		99

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

Quantitation Report (QT Reviewed)

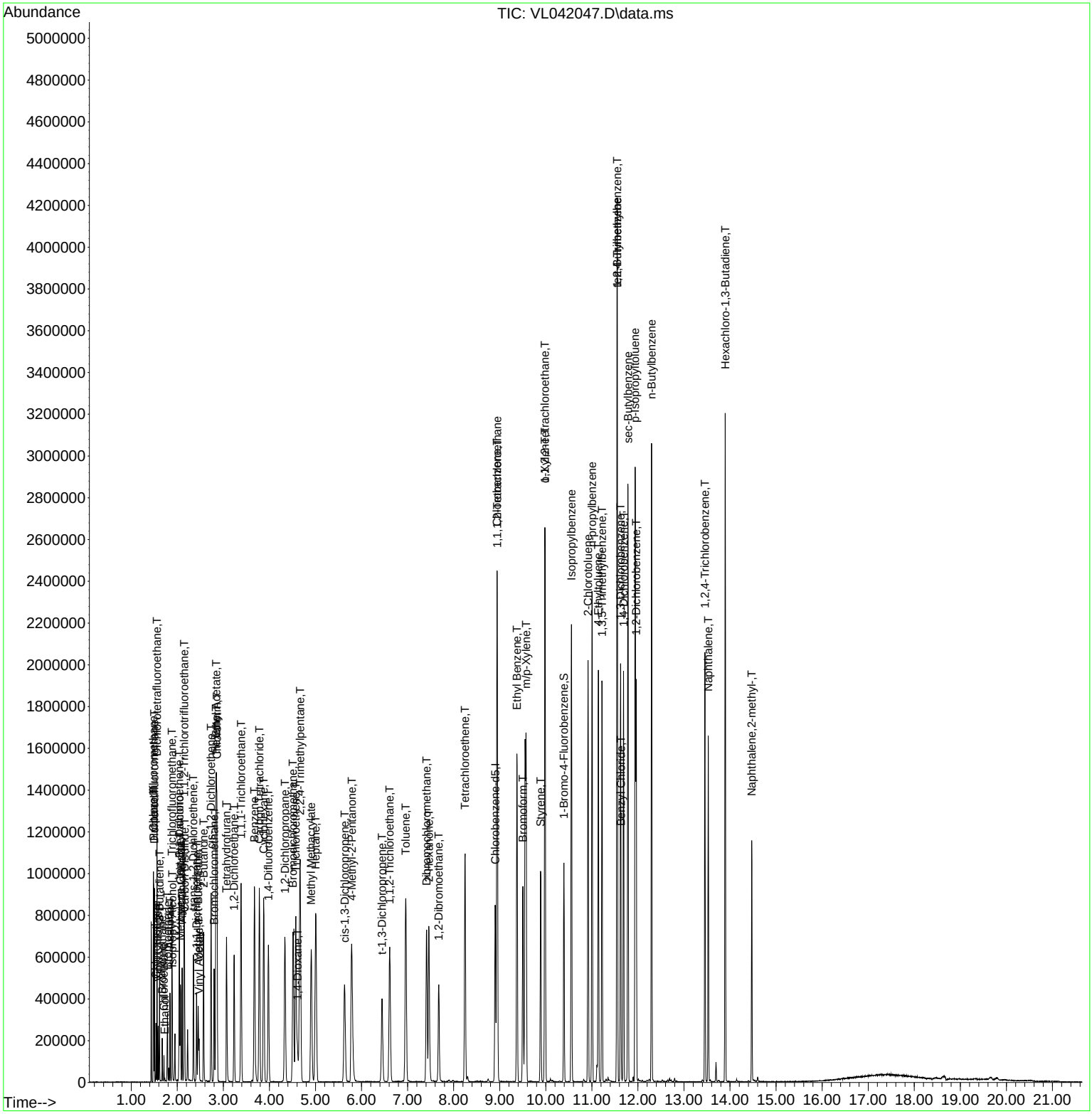
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042047.D
Acq On : 25 Feb 2025 12:07
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:35:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	158881	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.981	114	406520	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.904	117	350262	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	274527	10.188	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	158709	9.606	ppbv	99
3) Chlorodifluoromethane	1.479	51	219646	9.512	ppbv	100
4) Chloromethane	1.537	50	54628	8.941	ppbv	100
5) Vinyl Chloride	1.586	62	52672	9.114	ppbv	98
6) Bromomethane	1.673	94	25374	9.221	ppbv	100
7) Chloroethane	1.709	64	22174	9.443	ppbv #	87
8) Dichlorotetrafluoroethane	1.560	85	127046	9.354	ppbv	100
9) Propene	1.489	41	90844	9.657	ppbv	96
10) Heptane	5.010	43	269133	9.188	ppbv	99
11) Trichlorofluoromethane	1.884	101	156871	9.476	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.149	101	115089	8.715	ppbv	99
13) Ethanol	1.728	45	2630	4.404	ppbv	98
14) Bromoethene	1.790	108	43546	9.338	ppbv	98
15) Acetone	1.842	43	118697	8.460	ppbv	97
16) 1,3-Butadiene	1.615	39	61603	9.434	ppbv	98
17) tert-Butyl alcohol	2.049	59	154116	8.779	ppbv	98
18) 1,1-Dichloroethene	2.042	96	51973	8.711	ppbv	98
19) Isopropyl Alcohol	1.894	45	69546	8.629	ppbv	96
20) Methylene Chloride	2.072	84	42028	7.919	ppbv	96
21) Allyl Chloride	2.104	41	90745	8.951	ppbv	98
22) trans-1,2-Dichloroethene	2.350	96	59140	8.502	ppbv	98
23) Vinyl Acetate	2.476	43	93605	9.488	ppbv #	98
24) 1,1-Dichloroethane	2.421	63	112869	8.721	ppbv	100
25) Ethyl Acetate	2.852	43	533113	9.492	ppbv	99
26) Hexane	2.839	57	208955	9.203	ppbv	97
27) Carbon Disulfide	2.159	76	138176	8.978	ppbv	97
28) Methyl tert-Butyl Ether	2.453	73	94554	8.365	ppbv	100
29) Chloroform	2.865	83	281191	9.202	ppbv	97
30) Cyclohexane	3.878	84	168830	9.161	ppbv	94
31) cis-1,2-Dichloroethene	2.735	61	199564	9.285	ppbv	99
32) 1,1,1-Trichloroethane	3.386	97	278512	9.396	ppbv	98
34) 2-Butanone	2.570	43	308064	9.727	ppbv	97
35) Carbon Tetrachloride	3.784	117	276599	9.867	ppbv	98
36) Benzene	3.677	78	399804	9.395	ppbv	98
37) 1,2-Dichloroethane	3.233	62	223946	9.491	ppbv	99
38) Trichloroethene	4.573	130	156488	9.005	ppbv	96
39) 1,2-Dichloropropane	4.340	63	152063	9.414	ppbv	97
40) 1,4-Dioxane	4.616	88	65010	8.817	ppbv #	98
41) Tetrahydrofuran	3.072	42	181453	9.696	ppbv	99
42) Bromodichloromethane	4.512	83	305385	9.606	ppbv	97
43) Methyl Methacrylate	4.910	69	160954	9.685	ppbv	95
44) 2,2,4-Trimethylpentane	4.667	57	712051	9.480	ppbv	99
45) t-1,3-Dichloropropene	6.447	75	159680	9.671	ppbv	90

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.635	75	206836	9.680	ppbv		96
47)	1,1,2-Trichloroethane	6.613	97	148220	9.039	ppbv		95
48)	Dibromochloromethane	7.412	129	241593	9.407	ppbv		100
49)	Bromoform	9.503	173	210370	9.432	ppbv		98
50)	4-Methyl-2-Pentanone	5.790	43	431123	10.526	ppbv		98
51)	2-Hexanone	7.464	43	354515	12.576	ppbv	#	100
52)	Tetrachloroethene	8.247	164	134062	9.202	ppbv		97
53)	Toluene	6.962	91	448495	9.430	ppbv		98
54)	1,2-Dibromoethane	7.677	107	206335	9.307	ppbv		96
56)	1,1,1,2-Tetrachloroethane	8.946	131	182800	9.234	ppbv		99
57)	Chlorobenzene	8.943	112	334696	9.216	ppbv		99
58)	Ethyl Benzene	9.377	91	613622	9.513	ppbv		99
59)	m/p-Xylene	9.571	91	977425m	19.041	ppbv		
60)	o-Xylene	9.985	91	481683	9.334	ppbv		100
61)	Styrene	9.891	104	241617	9.959	ppbv		99
62)	Isopropylbenzene	10.558	105	729350	9.437	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.982	83	312794	9.204	ppbv		99
64)	n-propylbenzene	11.008	120	192704	9.506	ppbv		99
65)	tert-Butylbenzene	11.548	119	632202	8.988	ppbv		100
66)	Benzyl Chloride	11.633	91	52645	9.808	ppbv		98
67)	sec-Butylbenzene	11.785	105	914405	9.090	ppbv		99
69)	p-Isopropyltoluene	11.940	119	753761	9.418	ppbv		100
70)	n-Butylbenzene	12.296	91	781034	9.560	ppbv		99
71)	2-Chlorotoluene	10.917	91	559993	9.399	ppbv		100
72)	4-Ethyltoluene	11.144	105	602156	9.557	ppbv		99
73)	1,3,5-Trimethylbenzene	11.222	105	505451	9.248	ppbv		100
74)	1,2,4-Trimethylbenzene	11.555	105	547176	8.891	ppbv		95
75)	1,3-Dichlorobenzene	11.623	146	324491	9.161	ppbv		98
76)	1,4-Dichlorobenzene	11.688	146	322712	9.176	ppbv		99
77)	1,2-Dichlorobenzene	11.963	146	312159	9.081	ppbv		99
78)	Hexachloro-1,3-Butadiene	13.895	225	228480	8.543	ppbv		99
79)	Naphthalene	13.529	128	513148	12.160	ppbv		98
80)	Naphthalene,2-methyl-	14.474	142	198077	17.152	ppbv		98
81)	1,2,4-Trichlorobenzene	13.455	180	234354	9.965	ppbv		97

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

Quantitation Report (QT Reviewed)

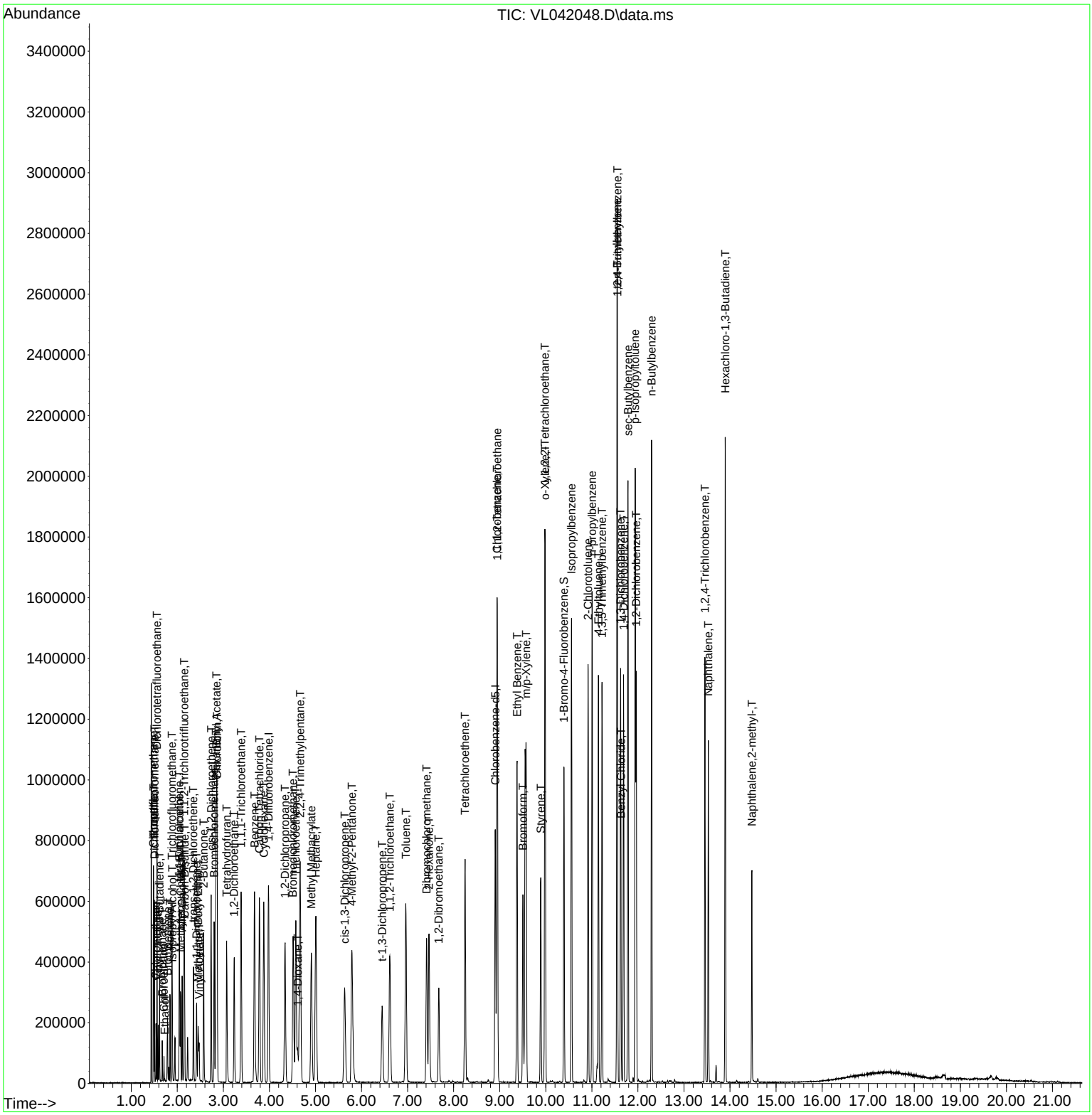
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 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	99	0.00
2	T	Dichlorodifluoromethane	1.040	0.999	3.9	104	0.00
3		Chlorodifluoromethane	1.453	1.382	4.9	104	0.00
4		Chloromethane	0.385	0.344	10.6	99	0.00
5	T	Vinyl Chloride	0.364	0.332	8.8	97	0.00
6	T	Bromomethane	0.173	0.160	7.5	98	0.00
7		Chloroethane	0.148	0.140	5.4	102	0.00
8	T	Dichlorotetrafluoroethane	0.855	0.800	6.4	101	0.00
9	T	Propene	0.592	0.572	3.4	108	0.00
10	T	Heptane	1.844	1.694	8.1	100	0.00
11	T	Trichlorofluoromethane	1.042	0.987	5.3	103	0.00
12	T	1,1,2-Trichlorotrifluoroeth	0.831	0.724	12.9	102	0.00
13		Ethanol	0.038	0.017#	55.3#	83	0.00
14	T	Bromoethene	0.293	0.274	6.5	103	0.00
15	T	Acetone	0.883	0.747	15.4	103	0.00
16	T	1,3-Butadiene	0.411	0.388	5.6	107	0.00
17		tert-Butyl alcohol	1.105	0.970	12.2	101	0.00
18	T	1,1-Dichloroethene	0.376	0.327	13.0	101	0.00
19	T	Isopropyl Alcohol	0.507	0.438	13.6	103	0.00
20	T	Methylene Chloride	0.334	0.265	20.7	100	0.00
21	T	Allyl Chloride	0.638	0.571	10.5	105	0.00
22	T	trans-1,2-Dichloroethene	0.438	0.372	15.1	103	0.00
23	T	Vinyl Acetate	0.621	0.589	5.2	112	0.00
24	T	1,1-Dichloroethane	0.815	0.710	12.9	105	0.00
25	T	Ethyl Acetate	3.535	3.355	5.1	104	0.00
26	T	Hexane	1.429	1.315	8.0	101	0.00
27	T	Carbon Disulfide	0.969	0.870	10.2	100	0.00
28	T	Methyl tert-Butyl Ether	0.711	0.595	16.3	112	0.00
29	T	Chloroform	1.923	1.770	8.0	101	0.00
30	T	Cyclohexane	1.160	1.063	8.4	97	0.00
31	T	cis-1,2-Dichloroethene	1.353	1.256	7.2	100	0.00
32	T	1,1,1-Trichloroethane	1.866	1.753	6.1	98	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	0.00
34	T	2-Butanone	0.779	0.758	2.7	105	0.00
35	T	Carbon Tetrachloride	0.690	0.680	1.4	100	0.00
36	T	Benzene	1.047	0.983	6.1	98	0.00
37	T	1,2-Dichloroethane	0.580	0.551	5.0	102	0.00
38	T	Trichloroethene	0.427	0.385	9.8	98	0.00
39	T	1,2-Dichloropropane	0.397	0.374	5.8	101	0.00
40	T	1,4-Dioxane	0.181	0.160	11.6	94	0.00
41	T	Tetrahydrofuran	0.460	0.446	3.0	103	0.00
42	T	Bromodichloromethane	0.782	0.751	4.0	98	0.00
43		Methyl Methacrylate	0.409	0.396	3.2	97	0.00
44	T	2,2,4-Trimethylpentane	1.848	1.752	5.2	101	0.00
45	T	t-1,3-Dichloropropene	0.406	0.393	3.2	96	0.00
46	T	cis-1,3-Dichloropropene	0.526	0.509	3.2	95	0.00
47	T	1,1,2-Trichloroethane	0.403	0.365	9.4	97	0.00
48	T	Dibromochloromethane	0.632	0.594	6.0	96	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 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	0.549	0.517	5.8	95	0.00
50	T	4-Methyl-2-Pentanone	1.008	1.061	-5.3	101	0.00
51	T	2-Hexanone	0.693	0.872	-25.8	101	0.00
52	T	Tetrachloroethene	0.358	0.330	7.8	97	0.00
53	T	Toluene	1.170	1.103	5.7	97	0.00
54	T	1,2-Dibromoethane	0.545	0.508	6.8	98	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00
56		1,1,1,2-Tetrachloroethane	0.565	0.522	7.6	97	0.00
57	T	Chlorobenzene	1.037	0.956	7.8	98	0.00
58	T	Ethyl Benzene	1.842	1.752	4.9	97	0.00
59	T	m/p-Xylene	1.466	1.395	4.8	98	0.02
60	T	o-Xylene	1.473	1.375	6.7	98	0.00
61	T	Styrene	0.693	0.690	0.4	98	0.00
62		Isopropylbenzene	2.207	2.082	5.7	99	0.00
63	T	1,1,2,2-Tetrachloroethane	0.970	0.893	7.9	99	0.00
64		n-propylbenzene	0.579	0.550	5.0	98	0.00
65		tert-Butylbenzene	2.008	1.805	10.1	97	0.00
66	T	Benzyl Chloride	0.153	0.150	2.0	92	0.00
67		sec-Butylbenzene	2.872	2.611	9.1	98	0.00
68	S	1-Bromo-4-Fluorobenzene	0.769	0.784	-2.0	96	0.00
69		p-Isopropyltoluene	2.285	2.152	5.8	100	0.00
70		n-Butylbenzene	2.332	2.230	4.4	101	0.00
71		2-Chlorotoluene	1.701	1.599	6.0	99	0.00
72	T	4-Ethyltoluene	1.799	1.719	4.4	99	0.00
73	T	1,3,5-Trimethylbenzene	1.560	1.443	7.5	98	0.00
74	T	1,2,4-Trimethylbenzene	1.757	1.562	11.1	99	0.00
75	T	1,3-Dichlorobenzene	1.011	0.926	8.4	100	0.00
76	T	1,4-Dichlorobenzene	1.004	0.921	8.3	100	0.00
77	T	1,2-Dichlorobenzene	0.981	0.891	9.2	100	0.00
78	T	Hexachloro-1,3-Butadiene	0.764	0.652	14.7	96	0.00
79	T	Naphthalene	1.205	1.465	-21.6	100	0.00
80	T	Naphthalene,2-methyl-	0.330	0.566	-71.5#	94	0.00
81	T	1,2,4-Trichlorobenzene	0.671	0.669	0.3	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

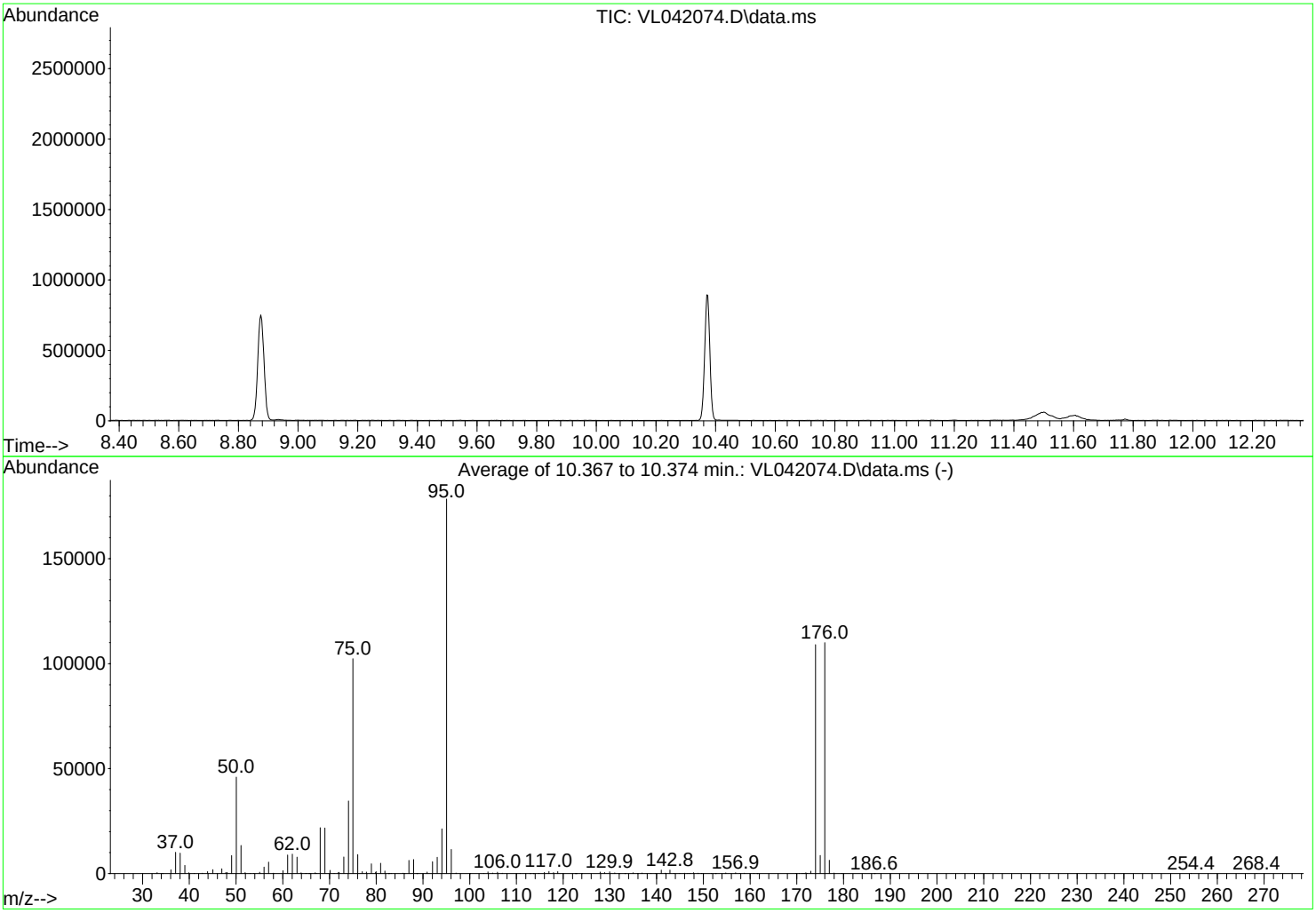
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042074.D
Acq On : 03 Mar 2025 11:45
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\VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025



AutoFind: Scans 3176, 3177, 3178; Background Corrected with Scan 3162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	25.8	45971	PASS
75	95	30	66	57.4	102347	PASS
95	95	100	100	100.0	178453	PASS
96	95	5	9	6.5	11542	PASS
173	174	0.00	2	1.0	1135	PASS
174	95	50	120	61.1	109091	PASS
175	174	4	9	7.9	8641	PASS
176	174	93	101	100.9	110029	PASS
177	176	5	9	5.8	6386	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	173325	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	3.952	114	409365	10.000	ppbv	-0.03
55) Chlorobenzene-d5	8.875	117	350236	10.000	ppbv	-0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	273654	10.156	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.495	85	176895	9.815	ppbv	98
3) Chlorodifluoromethane	1.473	51	229308	9.103	ppbv	100
4) Chloromethane	1.531	50	61184	9.180	ppbv	99
5) Vinyl Chloride	1.576	62	60317	9.567	ppbv	100
6) Bromomethane	1.664	94	30156	10.045	ppbv	92
7) Chloroethane	1.703	64	24074	9.398	ppbv	98
8) Dichlorotetrafluoroethane	1.550	85	144041	9.722	ppbv	99
9) Propene	1.482	41	95116	9.268	ppbv	99
10) Heptane	4.972	43	285343	8.930	ppbv	96
11) Trichlorofluoromethane	1.874	101	187492	10.382	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.136	101	142259	9.875	ppbv	98
13) Ethanol	1.719	45	3376	5.182	ppbv	95
14) Bromoethene	1.780	108	48570	9.548	ppbv	100
15) Acetone	1.832	43	133956	8.752	ppbv	99
16) 1,3-Butadiene	1.605	39	64990	9.124	ppbv	99
17) tert-Butyl alcohol	2.036	59	174843	9.130	ppbv	97
18) 1,1-Dichloroethene	2.029	96	62817	9.651	ppbv	98
19) Isopropyl Alcohol	1.884	45	79667	9.061	ppbv	100
20) Methylene Chloride	2.059	84	53086	9.169	ppbv	97
21) Allyl Chloride	2.091	41	107750	9.743	ppbv	99
22) trans-1,2-Dichloroethene	2.337	96	72547	9.561	ppbv	93
23) Vinyl Acetate	2.460	43	89888	8.352	ppbv	99
24) 1,1-Dichloroethane	2.405	63	136644	9.678	ppbv	99
25) Ethyl Acetate	2.832	43	563012	9.189	ppbv	99
26) Hexane	2.822	57	216702	8.749	ppbv	94
27) Carbon Disulfide	2.146	76	166324	9.906	ppbv	97
28) Methyl tert-Butyl Ether	2.437	73	102443	8.307	ppbv	99
29) Chloroform	2.845	83	294142	8.824	ppbv	100
30) Cyclohexane	3.852	84	170364	8.474	ppbv	91
31) cis-1,2-Dichloroethene	2.716	61	209328	8.928	ppbv	95
32) 1,1,1-Trichloroethane	3.363	97	275584	8.522	ppbv	94
34) 2-Butanone	2.554	43	324639	10.179	ppbv	96
35) Carbon Tetrachloride	3.755	117	281106	9.958	ppbv	93
36) Benzene	3.651	78	410714	9.584	ppbv	98
37) 1,2-Dichloroethane	3.214	62	235420	9.908	ppbv	98
38) Trichloroethene	4.541	130	154616	8.836	ppbv	99
39) 1,2-Dichloropropane	4.308	63	159010	9.776	ppbv	95
40) 1,4-Dioxane	4.577	88	69401	9.347	ppbv #	99
41) Tetrahydrofuran	3.052	42	189509	10.057	ppbv	97
42) Bromodichloromethane	4.483	83	315387	9.852	ppbv	97
43) Methyl Methacrylate	4.871	69	160485	9.589	ppbv	92
44) 2,2,4-Trimethylpentane	4.635	57	731737	9.675	ppbv	98
45) t-1,3-Dichloropropene	6.409	75	150198	9.033	ppbv	89

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.590	75	201389	9.360	ppbv		97
47) 1,1,2-Trichloroethane	6.574	97	155548	9.419	ppbv		94
48) Dibromochloromethane	7.380	129	244551	9.456	ppbv		99
49) Bromoform	9.477	173	215068	9.576	ppbv		99
50) 4-Methyl-2-Pentanone	5.742	43	451104	10.937	ppbv		97
51) 2-Hexanone	7.428	43	364047	12.824	ppbv	#	98
52) Tetrachloroethene	8.218	164	135049	9.205	ppbv		96
53) Toluene	6.926	91	448652	9.368	ppbv		99
54) 1,2-Dibromoethane	7.645	107	207672	9.302	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.917	131	186364	9.414	ppbv		99
57) Chlorobenzene	8.917	112	344415	9.485	ppbv		99
58) Ethyl Benzene	9.351	91	617808	9.578	ppbv		99
59) m/p-Xylene	9.545	91	999203m	19.467	ppbv		
60) o-Xylene	9.959	91	499183	9.674	ppbv		99
61) Styrene	9.865	104	239891	9.888	ppbv		99
62) Isopropylbenzene	10.535	105	742029	9.602	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.956	83	327826	9.647	ppbv		99
64) n-propylbenzene	10.985	120	194972	9.618	ppbv		95
65) tert-Butylbenzene	11.529	119	655219	9.316	ppbv		98
66) Benzyl Chloride	11.613	91	44259	8.247	ppbv		99
67) sec-Butylbenzene	11.765	105	956463	9.509	ppbv		100
69) p-Isopropyltoluene	11.924	119	773774	9.669	ppbv		99
70) n-Butylbenzene	12.280	91	803607	9.837	ppbv		99
71) 2-Chlorotoluene	10.898	91	568423	9.541	ppbv		99
72) 4-Ethyltoluene	11.121	105	607815	9.647	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	516320	9.447	ppbv		99
74) 1,2,4-Trimethylbenzene	11.532	105	569704	9.257	ppbv	#	91
75) 1,3-Dichlorobenzene	11.603	146	332997	9.402	ppbv		98
76) 1,4-Dichlorobenzene	11.668	146	334533	9.513	ppbv		99
77) 1,2-Dichlorobenzene	11.943	146	328836	9.567	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	235840	8.819	ppbv		98
79) Naphthalene	13.510	128	519908	12.321	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	193268	16.737	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	237980	10.120	ppbv		98

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

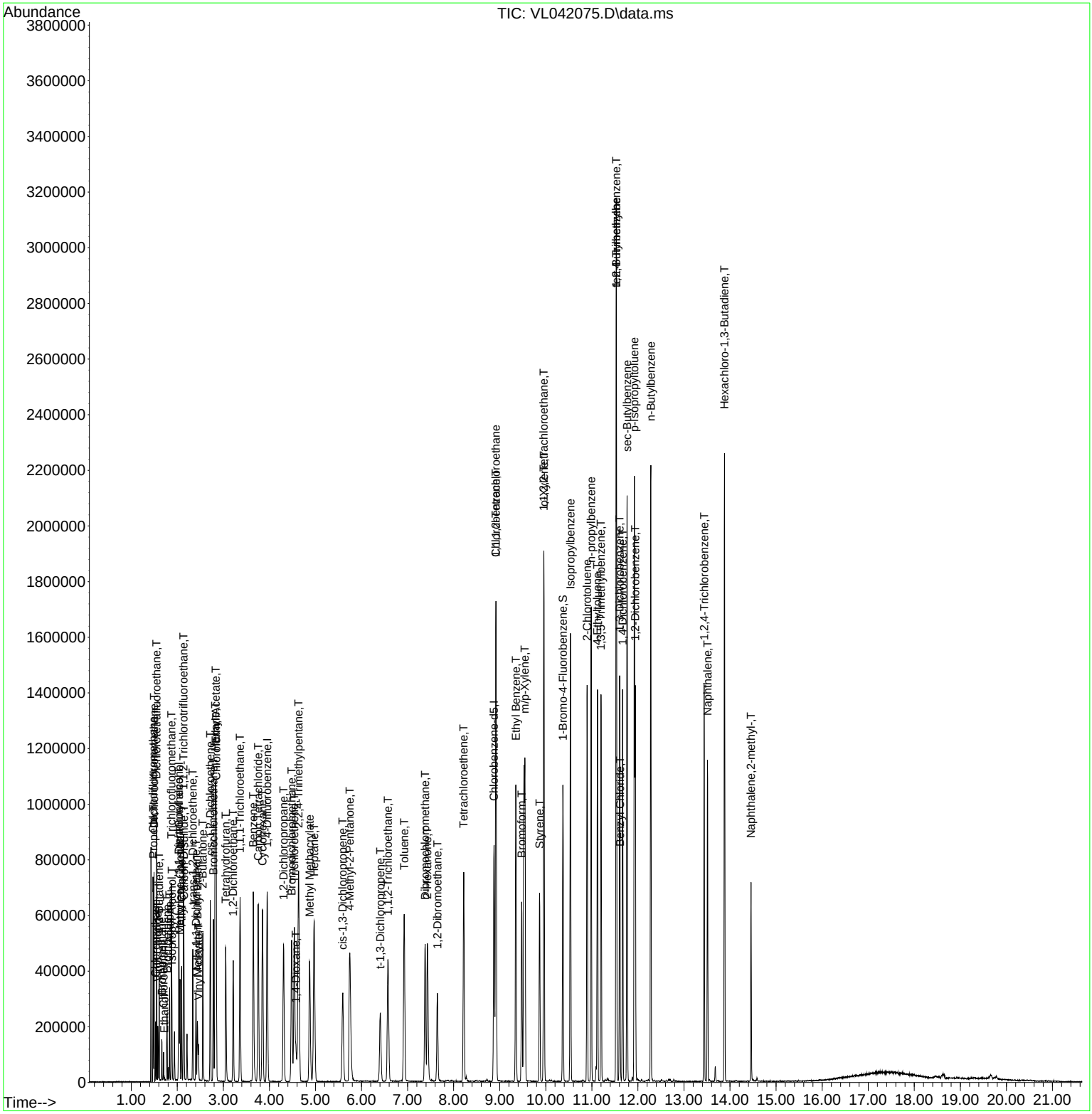
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 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	108	-0.02
2	T	Dichlorodifluoromethane	1.040	1.021	1.8	116	0.00
3		Chlorodifluoromethane	1.453	1.323	8.9	109	0.00
4		Chloromethane	0.385	0.353	8.3	111	0.00
5	T	Vinyl Chloride	0.364	0.348	4.4	111	0.00
6	T	Bromomethane	0.173	0.174	-0.6	117	0.00
7		Chloroethane	0.148	0.139	6.1	111	0.00
8	T	Dichlorotetrafluoroethane	0.855	0.831	2.8	115	0.00
9	T	Propene	0.592	0.549	7.3	113	0.00
10	T	Heptane	1.844	1.646	10.7	107	-0.04
11	T	Trichlorofluoromethane	1.042	1.082	-3.8	123	0.00
12	T	1,1,2-Trichlorotrifluoroeth	0.831	0.821	1.2	127	0.00
13		Ethanol	0.038	0.019#	50.0#	106	0.00
14	T	Bromoethene	0.293	0.280	4.4	114	0.00
15	T	Acetone	0.883	0.773	12.5	116	0.00
16	T	1,3-Butadiene	0.411	0.375	8.8	113	0.00
17		tert-Butyl alcohol	1.105	1.009	8.7	114	-0.01
18	T	1,1-Dichloroethene	0.376	0.362	3.7	122	-0.01
19	T	Isopropyl Alcohol	0.507	0.460	9.3	118	0.00
20	T	Methylene Chloride	0.334	0.306	8.4	126	0.00
21	T	Allyl Chloride	0.638	0.622	2.5	124	-0.01
22	T	trans-1,2-Dichloroethene	0.438	0.419	4.3	126	-0.01
23	T	Vinyl Acetate	0.621	0.519	16.4	107	-0.01
24	T	1,1-Dichloroethane	0.815	0.788	3.3	127	-0.01
25	T	Ethyl Acetate	3.535	3.248	8.1	110	-0.02
26	T	Hexane	1.429	1.250	12.5	105	-0.02
27	T	Carbon Disulfide	0.969	0.960	0.9	121	-0.01
28	T	Methyl tert-Butyl Ether	0.711	0.591	16.9	122	-0.01
29	T	Chloroform	1.923	1.697	11.8	106	-0.02
30	T	Cyclohexane	1.160	0.983	15.3	98	-0.02
31	T	cis-1,2-Dichloroethene	1.353	1.208	10.7	105	-0.02
32	T	1,1,1-Trichloroethane	1.866	1.590	14.8	97	-0.02
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	-0.03
34	T	2-Butanone	0.779	0.793	-1.8	111	-0.02
35	T	Carbon Tetrachloride	0.690	0.687	0.4	102	-0.03
36	T	Benzene	1.047	1.003	4.2	100	-0.02
37	T	1,2-Dichloroethane	0.580	0.575	0.9	107	-0.02
38	T	Trichloroethene	0.427	0.378	11.5	97	-0.03
39	T	1,2-Dichloropropane	0.397	0.388	2.3	105	-0.03
40	T	1,4-Dioxane	0.181	0.170	6.1	100	-0.03
41	T	Tetrahydrofuran	0.460	0.463	-0.7	107	-0.02
42	T	Bromodichloromethane	0.782	0.770	1.5	101	-0.03
43		Methyl Methacrylate	0.409	0.392	4.2	97	-0.04
44	T	2,2,4-Trimethylpentane	1.848	1.787	3.3	104	-0.03
45	T	t-1,3-Dichloropropene	0.406	0.367	9.6	90	-0.04
46	T	cis-1,3-Dichloropropene	0.526	0.492	6.5	92	-0.04
47	T	1,1,2-Trichloroethane	0.403	0.380	5.7	102	-0.04
48	T	Dibromochloromethane	0.632	0.597	5.5	97	-0.03

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 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	0.549	0.525	4.4	97	-0.03
50	T	4-Methyl-2-Pentanone	1.008	1.102	-9.3	105	-0.05
51	T	2-Hexanone	0.693	0.889	-28.3	103	-0.04
52	T	Tetrachloroethene	0.358	0.330	7.8	98	-0.03
53	T	Toluene	1.170	1.096	6.3	98	-0.03
54	T	1,2-Dibromoethane	0.545	0.507	7.0	98	-0.03
55	I	Chlorobenzene-d5	1.000	1.000	0.0	94	-0.03
56		1,1,1,2-Tetrachloroethane	0.565	0.532	5.8	99	-0.03
57	T	Chlorobenzene	1.037	0.983	5.2	101	-0.02
58	T	Ethyl Benzene	1.842	1.764	4.2	97	-0.02
59	T	m/p-Xylene	1.466	1.426	2.7	100	0.00
60	T	o-Xylene	1.473	1.425	3.3	101	-0.02
61	T	Styrene	0.693	0.685	1.2	97	-0.02
62		Isopropylbenzene	2.207	2.119	4.0	101	-0.02
63	T	1,1,2,2-Tetrachloroethane	0.970	0.936	3.5	103	-0.02
64		n-propylbenzene	0.579	0.557	3.8	99	-0.02
65		tert-Butylbenzene	2.008	1.871	6.8	101	-0.02
66	T	Benzyl Chloride	0.153	0.126	17.6	77	-0.02
67		sec-Butylbenzene	2.872	2.731	4.9	103	-0.02
68	S	1-Bromo-4-Fluorobenzene	0.769	0.781	-1.6	96	-0.02
69		p-Isopropyltoluene	2.285	2.209	3.3	102	-0.02
70		n-Butylbenzene	2.332	2.294	1.6	104	-0.02
71		2-Chlorotoluene	1.701	1.623	4.6	100	-0.02
72	T	4-Ethyltoluene	1.799	1.735	3.6	100	-0.02
73	T	1,3,5-Trimethylbenzene	1.560	1.474	5.5	100	-0.02
74	T	1,2,4-Trimethylbenzene	1.757	1.627	7.4	104	-0.02
75	T	1,3-Dichlorobenzene	1.011	0.951	5.9	102	-0.02
76	T	1,4-Dichlorobenzene	1.004	0.955	4.9	104	-0.02
77	T	1,2-Dichlorobenzene	0.981	0.939	4.3	105	-0.02
78	T	Hexachloro-1,3-Butadiene	0.764	0.673	11.9	99	-0.02
79	T	Naphthalene	1.205	1.484	-23.2	101	-0.02
80	T	Naphthalene,2-methyl-	0.330	0.552	-67.3#	92	-0.02
81	T	1,2,4-Trichlorobenzene	0.671	0.679	-1.2	99	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042076.D
Acq On : 03 Mar 2025 14:49
Operator : SY/MD
Sample : VL0303ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABL01

Quant Time: Mar 04 00:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

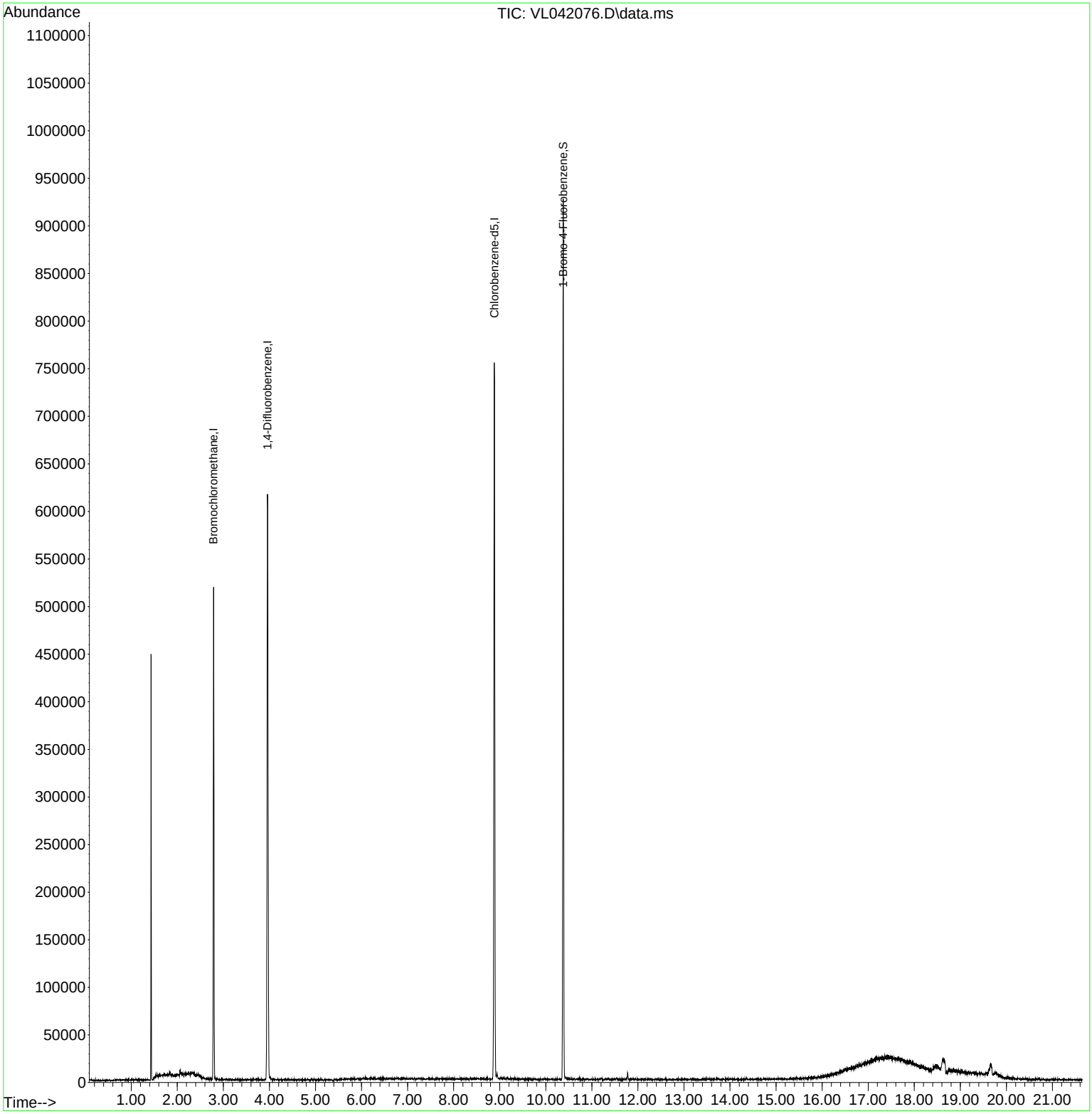
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	156551	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.959	114	349743	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.882	117	302717	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	224142	9.624	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 96.200%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042076.D
Acq On : 03 Mar 2025 14:49
Operator : SY/MD
Sample : VL0303ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABL01

Quant Time: Mar 04 00:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042077.D
Acq On : 03 Mar 2025 15:19
Operator : SY/MD
Sample : VL0303ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:17:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	157956	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.959	114	356972	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.882	117	309763	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	242622	10.181	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	174930	10.650	ppbv	99
3) Chlorodifluoromethane	1.476	51	222297	9.683	ppbv	100
4) Chloromethane	1.531	50	62156	10.233	ppbv	97
5) Vinyl Chloride	1.580	62	59385	10.336	ppbv	100
6) Bromomethane	1.667	94	28458	10.402	ppbv	97
7) Chloroethane	1.703	64	24205	10.368	ppbv	93
8) Dichlorotetrafluoroethane	1.554	85	142918	10.584	ppbv	98
9) Propene	1.483	41	90270	9.652	ppbv	98
10) Heptane	4.978	43	279114	9.585	ppbv	97
11) Trichlorofluoromethane	1.878	101	191850	11.657	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	147601	11.243	ppbv	95
13) Ethanol	1.722	45	3648	6.145	ppbv	97
14) Bromoethene	1.780	108	48227	10.403	ppbv	100
15) Acetone	1.835	43	137515	9.858	ppbv	100
16) 1,3-Butadiene	1.609	39	64593	9.950	ppbv	97
17) tert-Butyl alcohol	2.039	59	167124	9.576	ppbv	100
18) 1,1-Dichloroethene	2.033	96	61659	10.394	ppbv	91
19) Isopropyl Alcohol	1.887	45	78936	9.851	ppbv	98
20) Methylene Chloride	2.062	84	52065	9.868	ppbv	96
21) Allyl Chloride	2.098	41	105683	10.486	ppbv	99
22) trans-1,2-Dichloroethene	2.340	96	70753	10.232	ppbv	93
23) Vinyl Acetate	2.463	43	74937	7.640	ppbv	98
24) 1,1-Dichloroethane	2.408	63	137183	10.661	ppbv	100
25) Ethyl Acetate	2.836	43	548497	9.824	ppbv	99
26) Hexane	2.826	57	207965	9.213	ppbv	92
27) Carbon Disulfide	2.149	76	168252	10.996	ppbv	99
28) Methyl tert-Butyl Ether	2.441	73	94112	8.374	ppbv	100
29) Chloroform	2.849	83	286765	9.439	ppbv	97
30) Cyclohexane	3.858	84	163145	8.905	ppbv	91
31) cis-1,2-Dichloroethene	2.722	61	199200	9.322	ppbv	97
32) 1,1,1-Trichloroethane	3.370	97	269140	9.133	ppbv	95
34) 2-Butanone	2.557	43	313084	11.258	ppbv	95
35) Carbon Tetrachloride	3.765	117	268731	10.917	ppbv	96
36) Benzene	3.658	78	390842	10.459	ppbv	96
37) 1,2-Dichloroethane	3.218	62	227067	10.959	ppbv	98
38) Trichloroethene	4.551	130	148971	9.762	ppbv	94
39) 1,2-Dichloropropane	4.315	63	151311	10.668	ppbv	96
40) 1,4-Dioxane	4.587	88	67241	10.385	ppbv #	91
41) Tetrahydrofuran	3.056	42	183578	11.172	ppbv	93
42) Bromodichloromethane	4.490	83	302583	10.839	ppbv	100
43) Methyl Methacrylate	4.881	69	150871	10.338	ppbv	91
44) 2,2,4-Trimethylpentane	4.638	57	718377	10.892	ppbv	98
45) t-1,3-Dichloropropene	6.415	75	139814	9.643	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042077.D
Acq On : 03 Mar 2025 15:19
Operator : SY/MD
Sample : VL0303ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:17:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.606	75	189075	10.077	ppbv		95
47)	1,1,2-Trichloroethane	6.587	97	146747	10.191	ppbv		97
48)	Dibromochloromethane	7.390	129	229765	10.188	ppbv		99
49)	Bromoform	9.487	173	205188	10.477	ppbv		98
50)	4-Methyl-2-Pentanone	5.752	43	434273	12.074	ppbv		95
51)	2-Hexanone	7.438	43	347904	14.054	ppbv	#	96
52)	Tetrachloroethene	8.225	164	128803	10.068	ppbv		97
53)	Toluene	6.933	91	428586	10.262	ppbv		97
54)	1,2-Dibromoethane	7.652	107	199250	10.235	ppbv		100
56)	1,1,1,2-Tetrachloroethane	8.927	131	181131	10.346	ppbv		99
57)	Chlorobenzene	8.924	112	328409	10.225	ppbv		98
58)	Ethyl Benzene	9.357	91	596825	10.462	ppbv		100
59)	m/p-Xylene	9.552	91	977538m	21.533	ppbv		
60)	o-Xylene	9.966	91	488769	10.710	ppbv		100
61)	Styrene	9.872	104	226533	10.558	ppbv		99
62)	Isopropylbenzene	10.542	105	733758	10.735	ppbv		99
63)	1,1,2,2-Tetrachloroethane	9.963	83	327069	10.882	ppbv		99
64)	n-propylbenzene	10.992	120	192573	10.741	ppbv		97
65)	tert-Butylbenzene	11.532	119	643195	10.340	ppbv		98
66)	Benzyl Chloride	11.617	91	39375	8.295	ppbv		98
67)	sec-Butylbenzene	11.769	105	940060	10.567	ppbv		100
69)	p-Isopropyltoluene	11.927	119	759761	10.734	ppbv		100
70)	n-Butylbenzene	12.283	91	795433	11.010	ppbv		99
71)	2-Chlorotoluene	10.901	91	553780	10.510	ppbv		99
72)	4-Ethyltoluene	11.128	105	592316	10.629	ppbv		99
73)	1,3,5-Trimethylbenzene	11.206	105	508702	10.524	ppbv		98
74)	1,2,4-Trimethylbenzene	11.539	105	557804	10.248	ppbv		97
75)	1,3-Dichlorobenzene	11.610	146	328061	10.473	ppbv		98
76)	1,4-Dichlorobenzene	11.675	146	328671	10.568	ppbv		100
77)	1,2-Dichlorobenzene	11.950	146	324906	10.688	ppbv		100
78)	Hexachloro-1,3-Butadiene	13.886	225	232449	9.827	ppbv		99
79)	Naphthalene	13.517	128	503470	13.490	ppbv		98
80)	Naphthalene,2-methyl-	14.462	142	184155	18.031	ppbv		97
81)	1,2,4-Trichlorobenzene	13.442	180	227832	10.954	ppbv		98

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

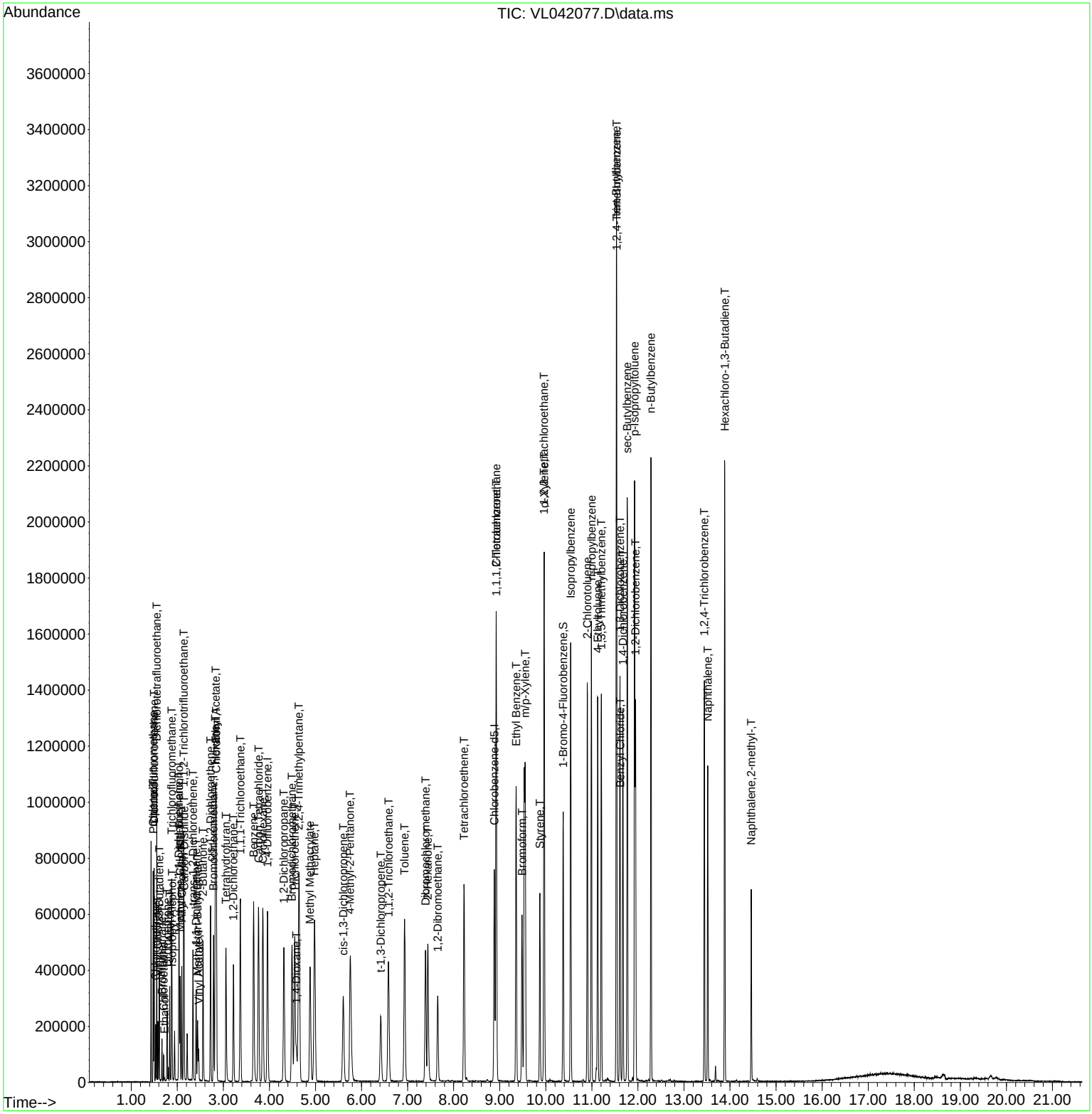
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042077.D
Acq On : 03 Mar 2025 15:19
Operator : SY/MD
Sample : VL0303ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:17:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042078.D
Acq On : 03 Mar 2025 15:52
Operator : SY/MD
Sample : QC022725 CAN 10331
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC022725 CAN 10331

Quant Time: Mar 04 00:18:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

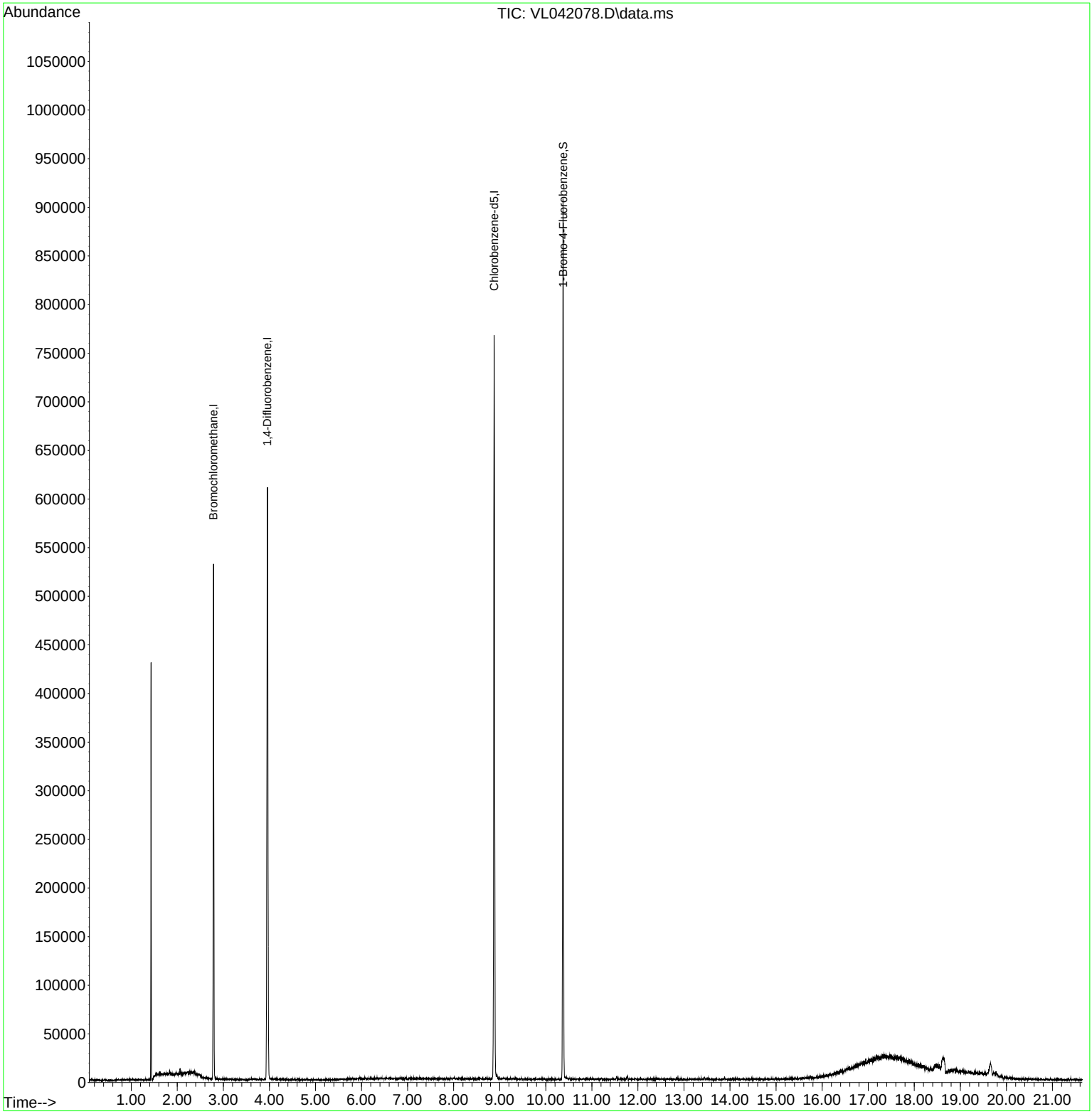
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	158432	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.955	114	355709	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.878	117	304769	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	223606	9.537	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.400%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042078.D
Acq On : 03 Mar 2025 15:52
Operator : SY/MD
Sample : QC022725 CAN 10331
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC022725 CAN 10331

Quant Time: Mar 04 00:18:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



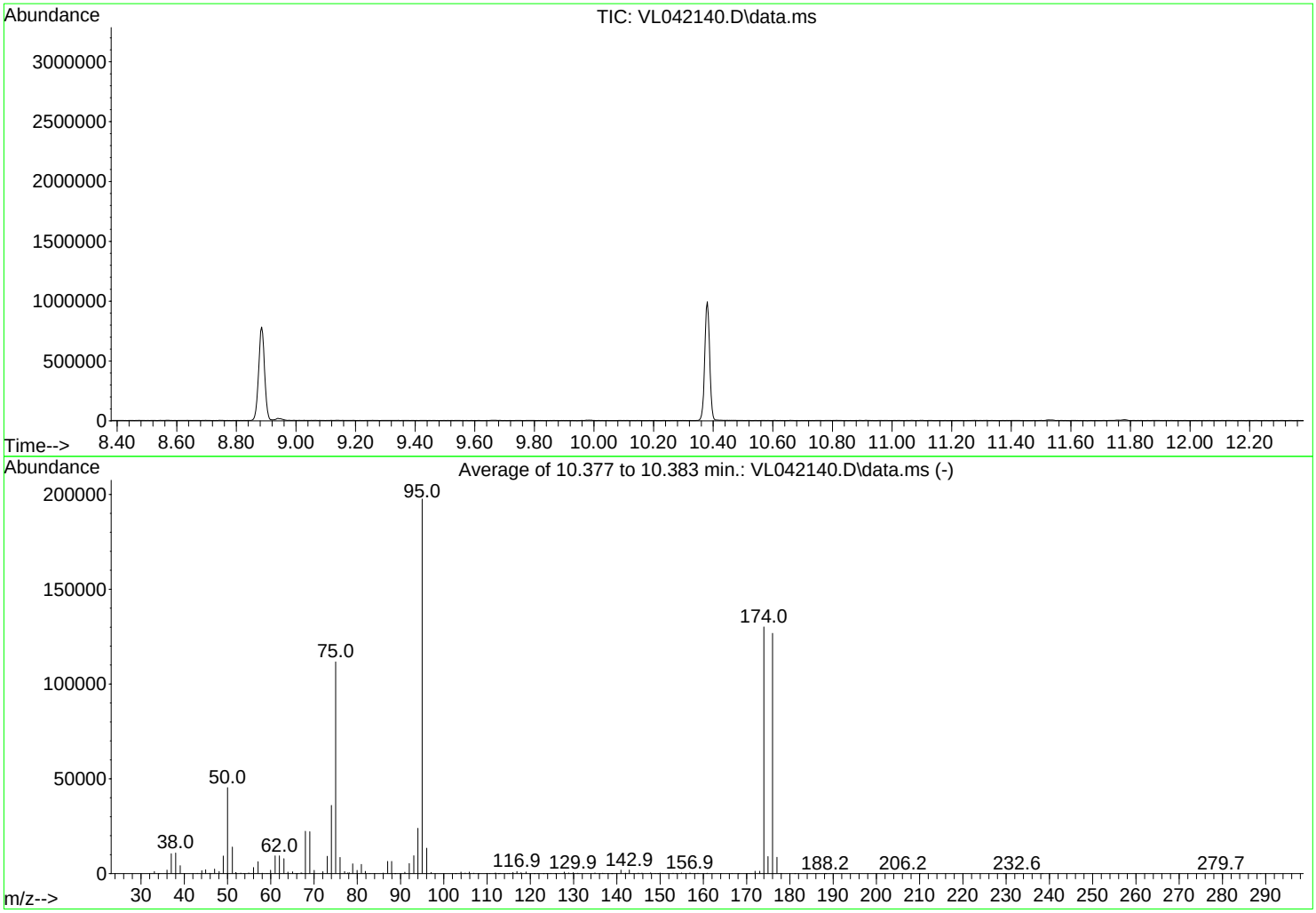
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042140.D
Acq On : 14 Mar 2025 07:56
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\VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025



AutoFind: Scans 3179, 3180, 3181; 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	22.9	45333	PASS
75	95	30	66	56.5	111685	PASS
95	95	100	100	100.0	197589	PASS
96	95	5	9	6.8	13388	PASS
173	174	0.00	2	1.0	1315	PASS
174	95	50	120	65.9	130120	PASS
175	174	4	9	6.9	8967	PASS
176	174	93	101	97.4	126715	PASS
177	176	5	9	6.8	8618	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	175939	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	3.959	114	420429	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.882	117	358414	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	293332	10.638	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 106.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	191974	10.493	ppbv	100
3) Chlorodifluoromethane	1.476	51	228149	8.922	ppbv	100
4) Chloromethane	1.532	50	72618	10.733	ppbv	97
5) Vinyl Chloride	1.580	62	70955	11.087	ppbv	96
6) Bromomethane	1.667	94	34387	11.284	ppbv	97
7) Chloroethane	1.703	64	27399	10.537	ppbv	94
8) Dichlorotetrafluoroethane	1.554	85	161623	10.746	ppbv	98
9) Propene	1.483	41	95933	9.209	ppbv	98
10) Heptane	4.979	43	269945	8.323	ppbv	98
11) Trichlorofluoromethane	1.875	101	202929	11.070	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.137	101	150319	10.280	ppbv	96
13) Ethanol	1.719	45	5940	8.982	ppbv	91
14) Bromoethene	1.781	108	55223	10.694	ppbv	99
15) Acetone	1.836	43	157921	10.164	ppbv	98
16) 1,3-Butadiene	1.609	39	76015	10.513	ppbv	99
17) tert-Butyl alcohol	2.040	59	177586	9.136	ppbv	100
18) 1,1-Dichloroethene	2.033	96	64716	9.795	ppbv	92
19) Isopropyl Alcohol	1.884	45	90039	10.088	ppbv	96
20) Methylene Chloride	2.059	84	64336	10.947	ppbv	97
21) Allyl Chloride	2.095	41	113949	10.150	ppbv	97
22) trans-1,2-Dichloroethene	2.341	96	80485	10.449	ppbv	90
23) Vinyl Acetate	2.460	43	94433	8.644	ppbv	99
24) 1,1-Dichloroethane	2.409	63	154561	10.784	ppbv	99
25) Ethyl Acetate	2.836	43	552236	8.880	ppbv	99
26) Hexane	2.823	57	224625	8.934	ppbv	98
27) Carbon Disulfide	2.150	76	186073	10.918	ppbv	99
28) Methyl tert-Butyl Ether	2.438	73	106326	8.494	ppbv	99
29) Chloroform	2.849	83	296552	8.764	ppbv	99
30) Cyclohexane	3.855	84	163459	8.010	ppbv	95
31) cis-1,2-Dichloroethene	2.719	61	193004	8.109	ppbv	98
32) 1,1,1-Trichloroethane	3.367	97	268630	8.184	ppbv	95
34) 2-Butanone	2.558	43	305355	9.323	ppbv	96
35) Carbon Tetrachloride	3.762	117	279849	9.653	ppbv	99
36) Benzene	3.655	78	399974	9.088	ppbv	95
37) 1,2-Dichloroethane	3.218	62	217321	8.906	ppbv	100
38) Trichloroethene	4.548	130	152158	8.466	ppbv	96
39) 1,2-Dichloropropane	4.315	63	150906	9.033	ppbv	96
40) 1,4-Dioxane	4.580	88	67340	8.830	ppbv #	99
41) Tetrahydrofuran	3.056	42	174452	9.014	ppbv	98
42) Bromodichloromethane	4.487	83	307764	9.361	ppbv	93
43) Methyl Methacrylate	4.881	69	145265	8.451	ppbv	96
44) 2,2,4-Trimethylpentane	4.635	57	717940	9.243	ppbv	98
45) t-1,3-Dichloropropene	6.412	75	135149	7.914	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.603	75	183303	8.295	ppbv		98
47)	1,1,2-Trichloroethane	6.581	97	154904	9.134	ppbv		96
48)	Dibromochloromethane	7.387	129	239456	9.015	ppbv		98
49)	Bromoform	9.484	173	213827	9.270	ppbv		99
50)	4-Methyl-2-Pentanone	5.755	43	408504	9.644	ppbv		96
51)	2-Hexanone	7.438	43	316988	10.872	ppbv	#	98
52)	Tetrachloroethene	8.225	164	129959	8.625	ppbv		98
53)	Toluene	6.933	91	423735	8.614	ppbv		98
54)	1,2-Dibromoethane	7.652	107	201881	8.805	ppbv		90
56)	1,1,1,2-Tetrachloroethane	8.924	131	192287	9.492	ppbv		100
57)	Chlorobenzene	8.921	112	344848	9.280	ppbv		99
58)	Ethyl Benzene	9.354	91	572580	8.675	ppbv		100
59)	m/p-Xylene	9.552	91	960961m	18.294	ppbv		
60)	o-Xylene	9.963	91	485048	9.185	ppbv		99
61)	Styrene	9.872	104	211885	8.535	ppbv		99
62)	Isopropylbenzene	10.539	105	718498	9.085	ppbv		99
63)	1,1,2,2-Tetrachloroethane	9.963	83	341487	9.820	ppbv		100
64)	n-propylbenzene	10.989	120	196285	9.462	ppbv		100
65)	tert-Butylbenzene	11.533	119	655886	9.113	ppbv		98
66)	Benzyl Chloride	11.617	91	45818	8.342	ppbv		97
67)	sec-Butylbenzene	11.769	105	924266	8.979	ppbv		98
69)	p-Isopropyltoluene	11.928	119	753153	9.197	ppbv		99
70)	n-Butylbenzene	12.280	91	771737	9.232	ppbv		100
71)	2-Chlorotoluene	10.902	91	537863	8.822	ppbv		100
72)	4-Ethyltoluene	11.125	105	585082	9.074	ppbv		99
73)	1,3,5-Trimethylbenzene	11.203	105	494157	8.836	ppbv		98
74)	1,2,4-Trimethylbenzene	11.536	105	560827	8.905	ppbv		92
75)	1,3-Dichlorobenzene	11.607	146	336601	9.287	ppbv		98
76)	1,4-Dichlorobenzene	11.672	146	327927	9.113	ppbv		99
77)	1,2-Dichlorobenzene	11.947	146	330229	9.389	ppbv		99
78)	Hexachloro-1,3-Butadiene	13.883	225	230108	8.408	ppbv		99
79)	Naphthalene	13.514	128	481899	11.160	ppbv		100
80)	Naphthalene,2-methyl-	14.459	142	151227	12.797	ppbv		99
81)	1,2,4-Trichlorobenzene	13.439	180	219258	9.111	ppbv		99

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

Quantitation Report (QT Reviewed)

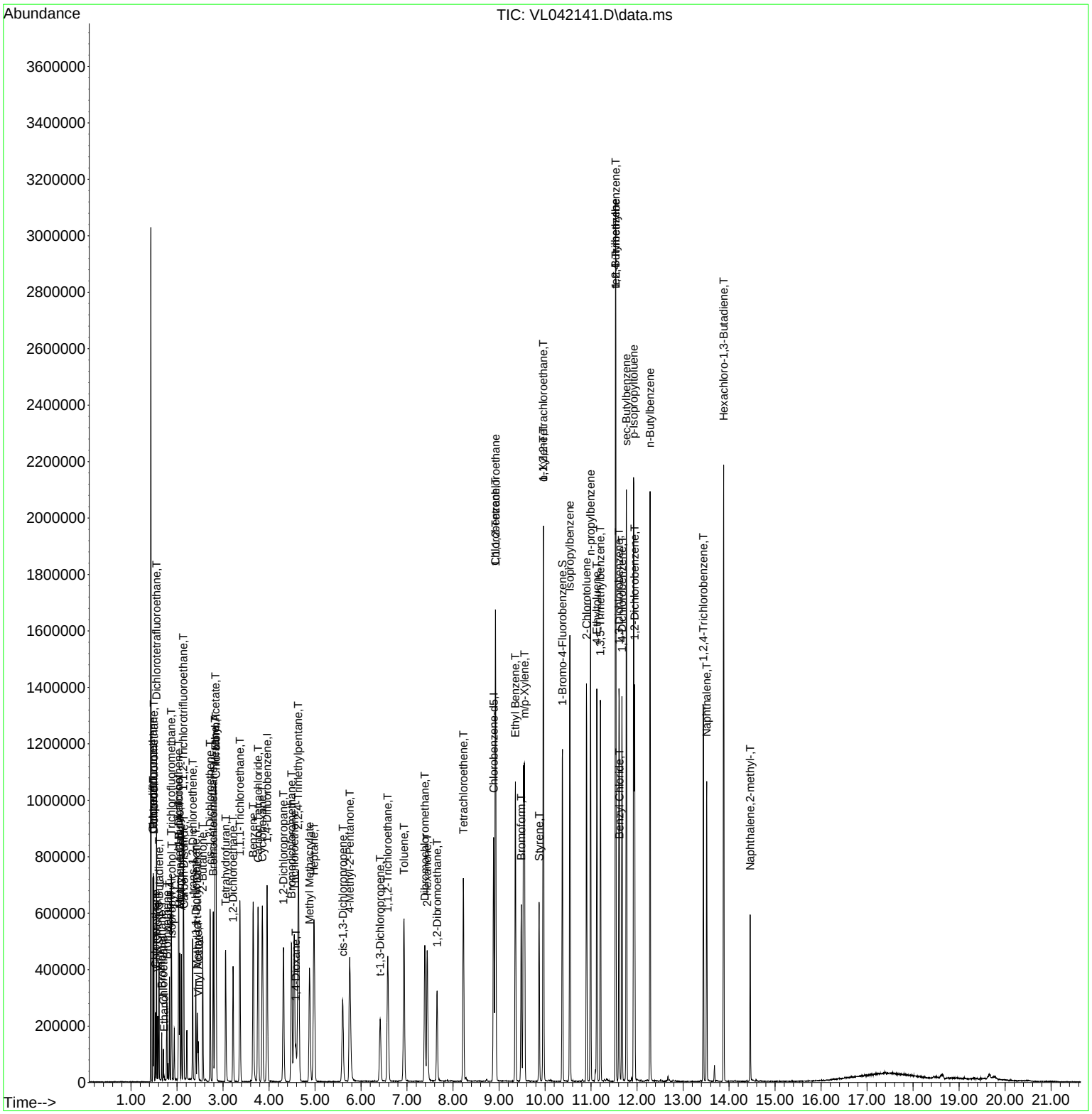
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 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	109	-0.02
2	T	Dichlorodifluoromethane	1.040	1.091	-4.9	126	0.00
3		Chlorodifluoromethane	1.453	1.297	10.7	108	0.00
4		Chloromethane	0.385	0.413	-7.3	131	0.00
5	T	Vinyl Chloride	0.364	0.403	-10.7	131	0.00
6	T	Bromomethane	0.173	0.195	-12.7	133	0.00
7		Chloroethane	0.148	0.156	-5.4	126	0.00
8	T	Dichlorotetrafluoroethane	0.855	0.919	-7.5	129	0.00
9	T	Propene	0.592	0.545	7.9	114	0.00
10	T	Heptane	1.844	1.534	16.8	101	-0.03
11	T	Trichlorofluoromethane	1.042	1.153	-10.7	133	0.00
12	T	1,1,2-Trichlorotrifluoroeth	0.831	0.854	-2.8	134	0.00
13		Ethanol	0.038	0.034#	10.5	187#	0.00
14	T	Bromoethene	0.293	0.314	-7.2	130	0.00
15	T	Acetone	0.883	0.898	-1.7	137	0.00
16	T	1,3-Butadiene	0.411	0.432	-5.1	132	0.00
17		tert-Butyl alcohol	1.105	1.009	8.7	116	0.00
18	T	1,1-Dichloroethene	0.376	0.368	2.1	126	0.00
19	T	Isopropyl Alcohol	0.507	0.512	-1.0	133	0.00
20	T	Methylene Chloride	0.334	0.366	-9.6	153#	0.00
21	T	Allyl Chloride	0.638	0.648	-1.6	131	0.00
22	T	trans-1,2-Dichloroethene	0.438	0.457	-4.3	140	0.00
23	T	Vinyl Acetate	0.621	0.537	13.5	113	-0.01
24	T	1,1-Dichloroethane	0.815	0.878	-7.7	143	0.00
25	T	Ethyl Acetate	3.535	3.139	11.2	108	-0.02
26	T	Hexane	1.429	1.277	10.6	109	-0.02
27	T	Carbon Disulfide	0.969	1.058	-9.2	135	0.00
28	T	Methyl tert-Butyl Ether	0.711	0.604	15.0	126	-0.01
29	T	Chloroform	1.923	1.686	12.3	107	-0.01
30	T	Cyclohexane	1.160	0.929	19.9	94	-0.02
31	T	cis-1,2-Dichloroethene	1.353	1.097	18.9	97	-0.01
32	T	1,1,1-Trichloroethane	1.866	1.527	18.2	94	-0.02
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	99	-0.02
34	T	2-Butanone	0.779	0.726	6.8	104	-0.01
35	T	Carbon Tetrachloride	0.690	0.666	3.5	101	-0.02
36	T	Benzene	1.047	0.951	9.2	98	-0.02
37	T	1,2-Dichloroethane	0.580	0.517	10.9	99	-0.02
38	T	Trichloroethene	0.427	0.362	15.2	95	-0.02
39	T	1,2-Dichloropropane	0.397	0.359	9.6	100	-0.02
40	T	1,4-Dioxane	0.181	0.160	11.6	97	-0.03
41	T	Tetrahydrofuran	0.460	0.415	9.8	99	-0.02
42	T	Bromodichloromethane	0.782	0.732	6.4	99	-0.03
43		Methyl Methacrylate	0.409	0.346	15.4	88	-0.03
44	T	2,2,4-Trimethylpentane	1.848	1.708	7.6	102	-0.03
45	T	t-1,3-Dichloropropene	0.406	0.321	20.9	81	-0.03
46	T	cis-1,3-Dichloropropene	0.526	0.436	17.1	84	-0.03
47	T	1,1,2-Trichloroethane	0.403	0.368	8.7	102	-0.03
48	T	Dibromochloromethane	0.632	0.570	9.8	95	-0.03

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 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	0.549	0.509	7.3	96	-0.02
50	T	4-Methyl-2-Pentanone	1.008	0.972	3.6	95	-0.03
51	T	2-Hexanone	0.693	0.754	-8.8	90	-0.03
52	T	Tetrachloroethene	0.358	0.309	13.7	94	-0.02
53	T	Toluene	1.170	1.008	13.8	92	-0.03
54	T	1,2-Dibromoethane	0.545	0.480	11.9	95	-0.03
55	I	Chlorobenzene-d5	1.000	1.000	0.0	96	-0.02
56		1,1,1,2-Tetrachloroethane	0.565	0.536	5.1	102	-0.02
57	T	Chlorobenzene	1.037	0.962	7.2	101	-0.02
58	T	Ethyl Benzene	1.842	1.598	13.2	90	-0.02
59	T	m/p-Xylene	1.466	1.341	8.5	97	0.00
60	T	o-Xylene	1.473	1.353	8.1	98	-0.02
61	T	Styrene	0.693	0.591	14.7	86	-0.02
62		Isopropylbenzene	2.207	2.005	9.2	98	-0.02
63	T	1,1,2,2-Tetrachloroethane	0.970	0.953	1.8	108	-0.02
64		n-propylbenzene	0.579	0.548	5.4	100	-0.02
65		tert-Butylbenzene	2.008	1.830	8.9	101	-0.01
66	T	Benzyl Chloride	0.153	0.128	16.3	80	-0.01
67		sec-Butylbenzene	2.872	2.579	10.2	100	-0.01
68	S	1-Bromo-4-Fluorobenzene	0.769	0.818	-6.4	103	-0.02
69		p-Isopropyltoluene	2.285	2.101	8.1	100	-0.01
70		n-Butylbenzene	2.332	2.153	7.7	100	-0.02
71		2-Chlorotoluene	1.701	1.501	11.8	95	-0.02
72	T	4-Ethyltoluene	1.799	1.632	9.3	96	-0.02
73	T	1,3,5-Trimethylbenzene	1.560	1.379	11.6	96	-0.02
74	T	1,2,4-Trimethylbenzene	1.757	1.565	10.9	102	-0.02
75	T	1,3-Dichlorobenzene	1.011	0.939	7.1	104	-0.02
76	T	1,4-Dichlorobenzene	1.004	0.915	8.9	102	-0.01
77	T	1,2-Dichlorobenzene	0.981	0.921	6.1	106	-0.02
78	T	Hexachloro-1,3-Butadiene	0.764	0.642	16.0	97	-0.01
79	T	Naphthalene	1.205	1.345	-11.6	94	-0.01
80	T	Naphthalene,2-methyl-	0.330	0.422	-27.9	72	-0.01
81	T	1,2,4-Trichlorobenzene	0.671	0.612	8.8	91	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042142.D
Acq On : 14 Mar 2025 09:23
Operator : SY/MD
Sample : VL0314ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABL01

Quant Time: Mar 14 23:17:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

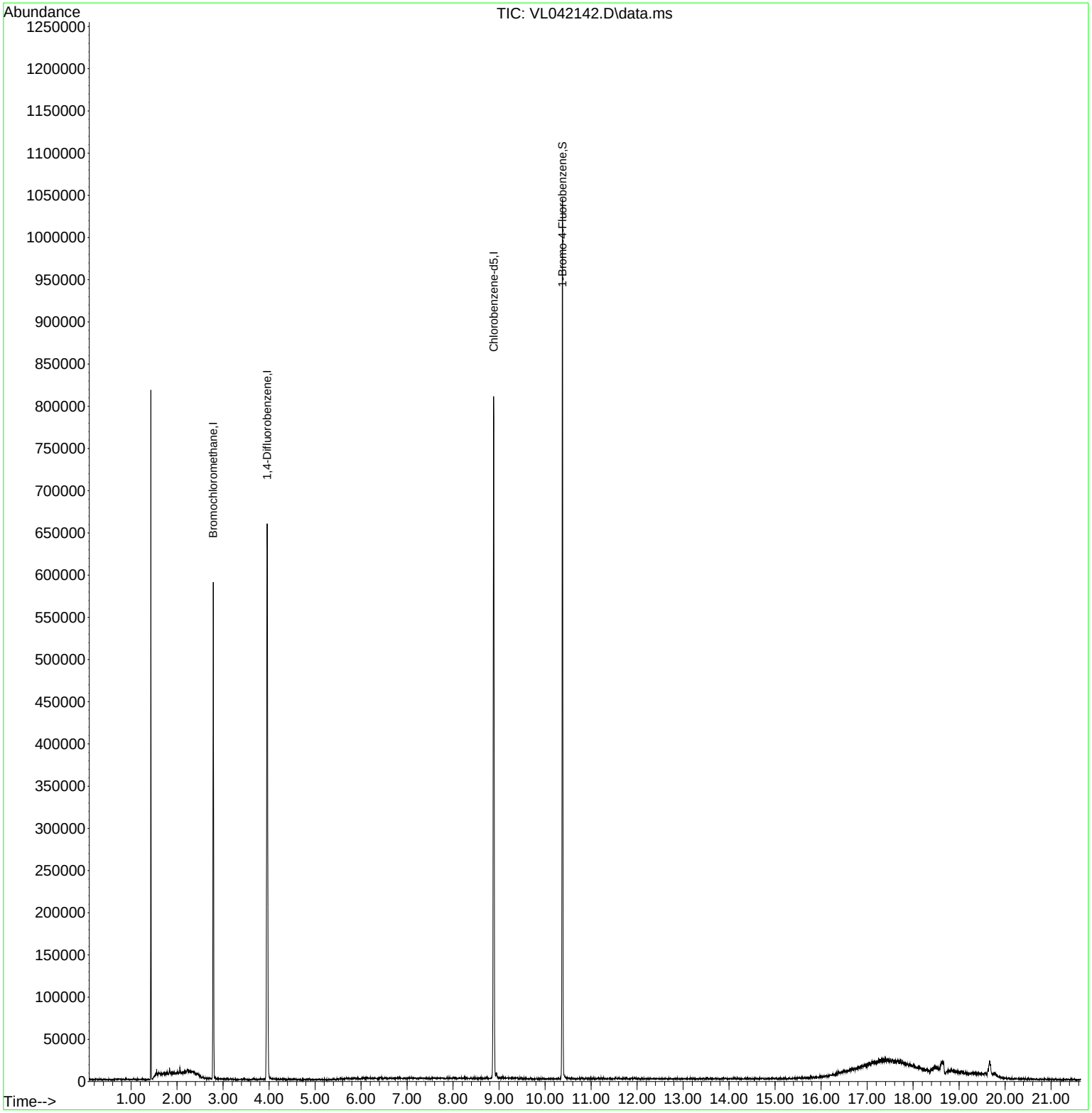
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	167826	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.958	114	392046	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.881	117	329113	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	250856	9.907	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042142.D
Acq On : 14 Mar 2025 09:23
Operator : SY/MD
Sample : VL0314ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABL01

Quant Time: Mar 14 23:17:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042143.D
Acq On : 14 Mar 2025 10:09
Operator : SY/MD
Sample : QC031025 CAN 10267
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC031025 CAN 10267

Quant Time: Mar 14 23:17:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

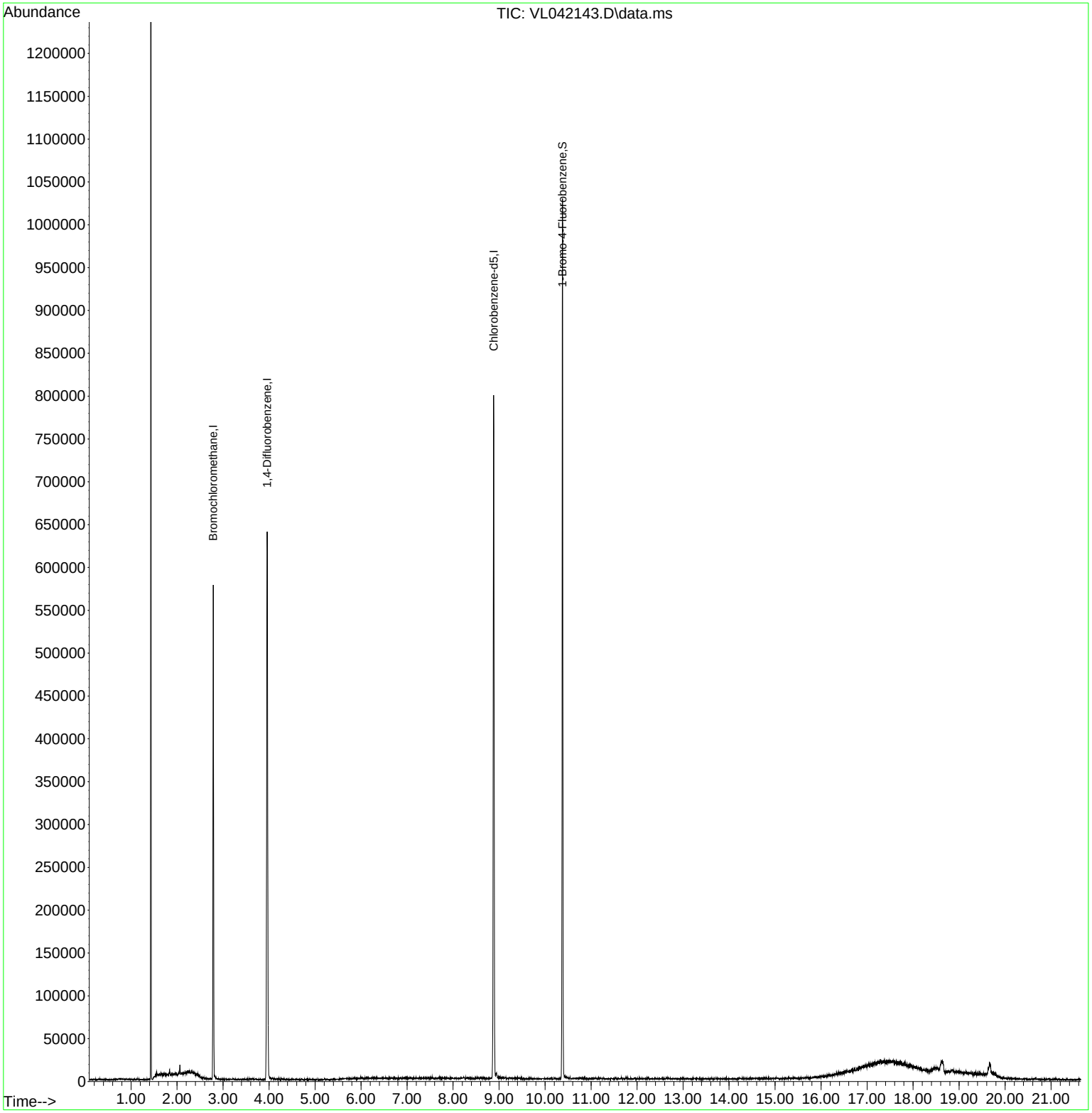
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	165110	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.958	114	377773	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.881	117	315162	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	245153	10.111	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042143.D
Acq On : 14 Mar 2025 10:09
Operator : SY/MD
Sample : QC031025 CAN 10267
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC031025 CAN 10267

Quant Time: Mar 14 23:17:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042146.D
Acq On : 14 Mar 2025 12:27
Operator : SY/MD
Sample : VL0314ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:18:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	163026	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	381842	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.885	117	325786	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	276407	11.028	ppbv	-0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 110.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	183411	10.819	ppbv	99
3) Chlorodifluoromethane	1.476	51	224569	9.478	ppbv	99
4) Chloromethane	1.534	50	72105	11.502	ppbv	95
5) Vinyl Chloride	1.580	62	69189	11.667	ppbv	98
6) Bromomethane	1.667	94	31681	11.220	ppbv	96
7) Chloroethane	1.706	64	27615	11.461	ppbv	92
8) Dichlorotetrafluoroethane	1.554	85	159489	11.444	ppbv	99
9) Propene	1.486	41	85053	8.811	ppbv	99
10) Heptane	4.985	43	257569	8.570	ppbv	99
11) Trichlorofluoromethane	1.877	101	201423	11.858	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	144035	10.630	ppbv	97
13) Ethanol	1.722	45	5622	9.175	ppbv	97
14) Bromoethene	1.784	108	55222	11.541	ppbv	97
15) Acetone	1.835	43	154842	10.755	ppbv	98
16) 1,3-Butadiene	1.609	39	74468	11.115	ppbv	99
17) tert-Butyl alcohol	2.042	59	168993	9.382	ppbv	96
18) 1,1-Dichloroethene	2.036	96	64700	10.568	ppbv	97
19) Isopropyl Alcohol	1.887	45	85819	10.377	ppbv #	35
20) Methylene Chloride	2.062	84	64018	11.756	ppbv	96
21) Allyl Chloride	2.098	41	110336	10.607	ppbv	97
22) trans-1,2-Dichloroethene	2.340	96	72399	10.144	ppbv	99
23) Vinyl Acetate	2.463	43	87289	8.623	ppbv #	94
24) 1,1-Dichloroethane	2.411	63	140322	10.566	ppbv	99
25) Ethyl Acetate	2.839	43	528086	9.164	ppbv	100
26) Hexane	2.826	57	215050	9.231	ppbv	98
27) Carbon Disulfide	2.153	76	170348	10.787	ppbv	100
28) Methyl tert-Butyl Ether	2.444	73	91925	7.925	ppbv	98
29) Chloroform	2.852	83	284422	9.071	ppbv	98
30) Cyclohexane	3.861	84	155818	8.240	ppbv	94
31) cis-1,2-Dichloroethene	2.722	61	180243	8.173	ppbv	99
32) 1,1,1-Trichloroethane	3.369	97	256963	8.448	ppbv	95
34) 2-Butanone	2.560	43	289331	9.726	ppbv	95
35) Carbon Tetrachloride	3.764	117	267662	10.165	ppbv	97
36) Benzene	3.661	78	376328	9.415	ppbv	99
37) 1,2-Dichloroethane	3.221	62	209658	9.460	ppbv	99
38) Trichloroethene	4.554	130	143571	8.796	ppbv	94
39) 1,2-Dichloropropane	4.318	63	142402	9.386	ppbv	97
40) 1,4-Dioxane	4.590	88	65583	9.469	ppbv #	98
41) Tetrahydrofuran	3.059	42	161433	9.184	ppbv	97
42) Bromodichloromethane	4.493	83	289116	9.682	ppbv	99
43) Methyl Methacrylate	4.884	69	133935	8.580	ppbv	95
44) 2,2,4-Trimethylpentane	4.645	57	687261	9.742	ppbv	98
45) t-1,3-Dichloropropene	6.418	75	122213	7.880	ppbv	97

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042146.D
Acq On : 14 Mar 2025 12:27
Operator : SY/MD
Sample : VL0314ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:18:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.606	75	173008	8.620	ppbv		98
47)	1,1,2-Trichloroethane	6.590	97	148902	9.667	ppbv		96
48)	Dibromochloromethane	7.393	129	230834	9.569	ppbv		98
49)	Bromoform	9.487	173	207997	9.928	ppbv		98
50)	4-Methyl-2-Pentanone	5.761	43	388572	10.100	ppbv		95
51)	2-Hexanone	7.444	43	302871	11.438	ppbv	#	97
52)	Tetrachloroethene	8.228	164	123920	9.056	ppbv		98
53)	Toluene	6.940	91	392631	8.789	ppbv		98
54)	1,2-Dibromoethane	7.655	107	196312	9.427	ppbv		97
56)	1,1,1,2-Tetrachloroethane	8.930	131	188895	10.258	ppbv		99
57)	Chlorobenzene	8.924	112	335300	9.927	ppbv		98
58)	Ethyl Benzene	9.357	91	553145	9.220	ppbv		99
59)	m/p-Xylene	9.555	91	938027m	19.646	ppbv		
60)	o-Xylene	9.966	91	472738	9.849	ppbv		99
61)	Styrene	9.875	104	200572	8.888	ppbv		99
62)	Isopropylbenzene	10.542	105	698706	9.720	ppbv		98
63)	1,1,2,2-Tetrachloroethane	9.966	83	335051	10.599	ppbv		99
64)	n-propylbenzene	10.992	120	189167	10.032	ppbv		99
65)	tert-Butylbenzene	11.536	119	645167	9.861	ppbv		99
66)	Benzyl Chloride	11.620	91	46836	9.382	ppbv		97
67)	sec-Butylbenzene	11.772	105	930077	9.940	ppbv		99
69)	p-Isopropyltoluene	11.930	119	755360	10.147	ppbv		99
70)	n-Butylbenzene	12.283	91	760425	10.007	ppbv		100
71)	2-Chlorotoluene	10.904	91	519669	9.378	ppbv		99
72)	4-Ethyltoluene	11.128	105	580446	9.904	ppbv		99
73)	1,3,5-Trimethylbenzene	11.209	105	489177	9.623	ppbv		99
74)	1,2,4-Trimethylbenzene	11.542	105	558174	9.751	ppbv		94
75)	1,3-Dichlorobenzene	11.610	146	329807	10.011	ppbv		100
76)	1,4-Dichlorobenzene	11.675	146	327949	10.026	ppbv		100
77)	1,2-Dichlorobenzene	11.950	146	329758	10.314	ppbv		100
78)	Hexachloro-1,3-Butadiene	13.885	225	227664	9.152	ppbv		99
79)	Naphthalene	13.516	128	477761	12.172	ppbv		99
80)	Naphthalene,2-methyl-	14.461	142	148881	13.860	ppbv		100
81)	1,2,4-Trichlorobenzene	13.445	180	217204	9.930	ppbv		100

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

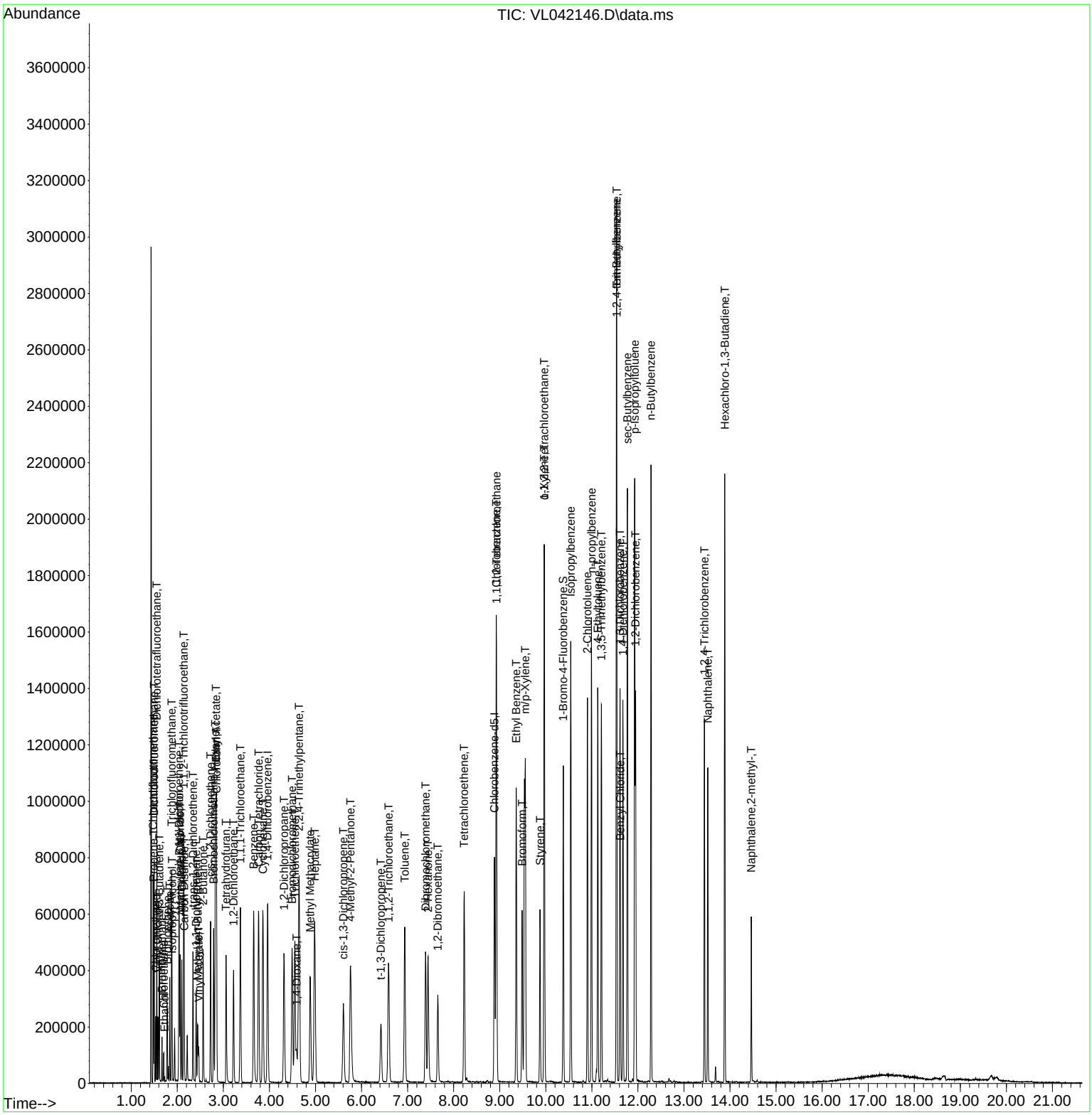
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042146.D
Acq On : 14 Mar 2025 12:27
Operator : SY/MD
Sample : VL0314ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:18:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025



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 # VL011425

Review By	Mahesh Dadoda	Review On	1/15/2025 12:59:33 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	1/15/2025 1:00:29 PM		
SubDirectory	VL011425	HP Acquire Method	TO15AIR.M	HP Processing Method	VL011425AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2569
Initial Calibration Stds	AP2571,AP2572,AP2573
CCC	AP2571
Internal Standard/PEM	AP2569
ICV/I.BLK	AP2574,MDL,AP2572,AP2573
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL041887.D	14 Jan 2025 07:50	SY/MD	Ok
2	VSTDICC0.5	VL041888.D	14 Jan 2025 11:40	SY/MD	Not Ok
3	VSTDICCC010	VL041889.D	14 Jan 2025 12:55	SY/MD	Ok,M
4	VSTDICC002	VL041890.D	14 Jan 2025 13:28	SY/MD	Ok,M
5	VSTDICC001	VL041891.D	14 Jan 2025 13:59	SY/MD	Ok,M
6	VSTDICC0.5	VL041892.D	14 Jan 2025 14:30	SY/MD	Ok,M
7	VSTDICC0.1	VL041893.D	14 Jan 2025 15:01	SY/MD	Ok,M
8	VSTDICC0.03	VL041894.D	14 Jan 2025 15:32	SY/MD	Ok,M
9	VSTDICC015	VL041895.D	14 Jan 2025 16:05	SY/MD	Ok,M
10	VSTDICV010	VL041896.D	14 Jan 2025 17:33	SY/MD	Ok,M
11	VL0114ABL01	VL041897.D	14 Jan 2025 18:34	SY/MD	Ok
12	VL0114ABL02	VL041898.D	14 Jan 2025 19:05	SY/MD	Ok
13	VL0114ABS01	VL041899.D	14 Jan 2025 19:36	SY/MD	Ok,M
14	VIBLK	VL041900.D	14 Jan 2025 20:07	SY/MD	Ok
15	Q1073-04	VL041901.D	14 Jan 2025 20:40	SY/MD	Ok,M
16	Q1073-04DUP	VL041902.D	14 Jan 2025 21:14	SY/MD	Ok,M
17	Q1073-05	VL041903.D	14 Jan 2025 21:47	SY/MD	Ok,M
18	Q1073-06	VL041904.D	14 Jan 2025 22:21	SY/MD	Ok,M
19	Q1073-01	VL041905.D	14 Jan 2025 22:51	SY/MD	Ok,M
20	Q1073-02	VL041906.D	14 Jan 2025 23:22	SY/MD	Ok,M
21	Q1073-03	VL041907.D	14 Jan 2025 23:52	SY/MD	Ok,M

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Fax : 908 789 8922

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL011425

Review By	Mahesh Dadoda	Review On	1/15/2025 12:59:33 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	1/15/2025 1:00:29 PM		
SubDirectory	VL011425	HP Acquire Method	TO15AIR.M	HP Processing Method	VL011425AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2569
Initial Calibration Stds	AP2571,AP2572,AP2573
CCC	AP2571
Internal Standard/PEM	AP2569
ICV/I.BLK	AP2574,MDL,AP2572,AP2573
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	VIBLK	VL041908.D	15 Jan 2025 00:22	SY/MD	Ok
23	MDL 0.4	VL041909.D	15 Jan 2025 00:52	SY/MD	Ok,M
24	MDL 0.4	VL041910.D	15 Jan 2025 01:23	SY/MD	Ok,M
25	MDL 0.1	VL041911.D	15 Jan 2025 01:53	SY/MD	Ok,M
26	MDL 0.1	VL041912.D	15 Jan 2025 02:23	SY/MD	Ok,M
27	MDL 0.03	VL041913.D	15 Jan 2025 02:53	SY/MD	Ok,M
28	MDL 0.03	VL041914.D	15 Jan 2025 03:23	SY/MD	Ok,M
29	VSTDCCC010	VL041915.D	15 Jan 2025 08:37	SY/MD	Not Ok

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL020325

Review By	Semsettin Yesilyurt	Review On	2/4/2025 9:24:56 AM				
Supervise By	Mahesh Dadoda	Supervise On	2/4/2025 3:44:53 PM				
SubDirectory	VL020325	HP Acquire Method	TO15AIR.M		HP Processing Method	VL011425AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2569
Initial Calibration Stds	AP2571,AP2572,AP2573
CCC	AP2571
Internal Standard/PEM	AP2569
ICV/I.BLK	AP2574
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL041957.D	03 Feb 2025 09:47	SY/MD	Ok
2	VSTDCCC010	VL041958.D	03 Feb 2025 10:48	SY/MD	Ok,M
3	VL0203ABL01	VL041959.D	03 Feb 2025 11:34	SY/MD	Ok
4	VL0203ABL02	VL041960.D	03 Feb 2025 12:05	SY/MD	Ok
5	VL0203ABS01	VL041961.D	03 Feb 2025 12:57	SY/MD	Ok,M
6	Q1222-01	VL041962.D	03 Feb 2025 13:57	SY/MD	Ok,M
7	Q1222-01DL	VL041963.D	03 Feb 2025 14:28	SY/MD	Not Ok
8	Q1256-01	VL041964.D	03 Feb 2025 14:59	SY/MD	Ok,M
9	Q1256-01DL	VL041965.D	03 Feb 2025 15:30	SY/MD	Not Ok
10	QC012825 CAN 10439	VL041966.D	03 Feb 2025 16:02	SY/MD	Ok
11	Q1222-02	VL041967.D	03 Feb 2025 16:35	SY/MD	Ok,M
12	Q1222-02DUP	VL041968.D	03 Feb 2025 17:08	SY/MD	Ok,M
13	Q1222-03	VL041969.D	03 Feb 2025 17:41	SY/MD	Ok,M
14	Q1256-02	VL041970.D	03 Feb 2025 18:15	SY/MD	Ok,M
15	Q1168-14 0.03	VL041971.D	03 Feb 2025 21:01	SY/MD	Not Ok
16	Q1168-13 0.03	VL041972.D	03 Feb 2025 21:32	SY/MD	Ok,M
17	Q1168-14 0.03	VL041973.D	03 Feb 2025 22:13	SY/MD	Ok,M
18	QC020325 CAN 10599	VL041974.D	04 Feb 2025 08:03	SY/MD	Ok
19	VSTDCCC010	VL041975.D	04 Feb 2025 08:34	SY/MD	Ok,M

M : Manual Integration

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 # VL022525

Review By	Semsettin Yesilyurt	Review On	2/26/2025 8:27:25 AM				
Supervise By	Mahesh Dadoda	Supervise On	2/26/2025 1:45:21 PM				
SubDirectory	VL022525	HP Acquire Method	TO15AIR.M	HP Processing Method	VL022525AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2576
Initial Calibration Stds	AP2582,AP2584,AP2585
CCC	AP2582
Internal Standard/PEM	AP2576
ICV/I.BLK	AP2586
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042040.D	25 Feb 2025 07:56	SY/MD	Ok
2	VSTDICCC010	VL042041.D	25 Feb 2025 08:56	SY/MD	Ok,M
3	VSTDICC002	VL042042.D	25 Feb 2025 09:29	SY/MD	Ok,M
4	VSTDICC001	VL042043.D	25 Feb 2025 10:00	SY/MD	Ok,M
5	VSTDICC0.5	VL042044.D	25 Feb 2025 10:31	SY/MD	Ok,M
6	VSTDICC0.1	VL042045.D	25 Feb 2025 11:03	SY/MD	Ok,M
7	VSTDICC0.03	VL042046.D	25 Feb 2025 11:34	SY/MD	Ok,M
8	VSTDICC015	VL042047.D	25 Feb 2025 12:07	SY/MD	Ok,M
9	VSTDICV010	VL042048.D	25 Feb 2025 13:15	SY/MD	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL030325

Review By	Semsettin Yesilyurt	Review On	3/4/2025 4:05:35 PM				
Supervise By	Mahesh Dadoda	Supervise On	3/5/2025 12:17:04 PM				
SubDirectory	VL030325	HP Acquire Method	TO15AIR.M		HP Processing Method	VL022525AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2587
Initial Calibration Stds	AP2582,AP2584,AP2585
CCC	AP2582
Internal Standard/PEM	AP2587
ICV/I.BLK	AP2586
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042074.D	03 Mar 2025 11:45	SY/MD	Ok
2	VSTDCCC010	VL042075.D	03 Mar 2025 12:15	SY/MD	Ok,M
3	VL0303ABL01	VL042076.D	03 Mar 2025 14:49	SY/MD	Ok
4	VL0303ABS01	VL042077.D	03 Mar 2025 15:19	SY/MD	Ok,M
5	QC022725 CAN 10331	VL042078.D	03 Mar 2025 15:52	SY/MD	Ok
6	Q1430-03	VL042079.D	03 Mar 2025 16:23	SY/MD	Ok,M
7	Q1430-03DL	VL042080.D	03 Mar 2025 16:53	SY/MD	Not Ok
8	Q1430-02	VL042081.D	03 Mar 2025 17:24	SY/MD	Ok,M
9	Q1430-02DL	VL042082.D	03 Mar 2025 17:55	SY/MD	Not Ok
10	Q1430-04	VL042083.D	03 Mar 2025 18:26	SY/MD	Ok,M
11	Q1430-04DL	VL042084.D	03 Mar 2025 18:57	SY/MD	Not Ok
12	Q1430-01	VL042085.D	03 Mar 2025 19:28	SY/MD	Ok,M
13	Q1430-01DL	VL042086.D	03 Mar 2025 19:59	SY/MD	Not Ok
14	Q1430-01DUP	VL042087.D	03 Mar 2025 20:29	SY/MD	Ok,M
15	VIBLK	VL042088.D	03 Mar 2025 21:00	SY/MD	Ok
16	QC022625 CAN 10682	VL042089.D	03 Mar 2025 21:31	SY/MD	Not Ok
17	QC022625 CAN 10746	VL042090.D	03 Mar 2025 22:02	SY/MD	Ok
18	VL0303ABS02	VL042091.D	03 Mar 2025 22:33	SY/MD	Not Ok
19	QC022625 CAN 10682	VL042092.D	04 Mar 2025 08:07	SY/MD	Ok
20	VSTDCCC010	VL042093.D	04 Mar 2025 09:04	SY/MD	Ok,M

M : Manual Integration

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 # VL031425

Review By	Semsettin Yesilyurt	Review On	3/17/2025 8:36:35 AM				
Supervise By	Mahesh Dadoda	Supervise On	3/17/2025 1:46:41 PM				
SubDirectory	VL031425	HP Acquire Method	TO15AIR.M	HP Processing Method	VL022525AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2588
Initial Calibration Stds	AP2582,AP2584,AP2585
CCC	AP2582
Internal Standard/PEM	AP2588
ICV/I.BLK	AP2586
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042140.D	14 Mar 2025 07:56	SY/MD	Ok
2	VSTDCCC010	VL042141.D	14 Mar 2025 08:39	SY/MD	Ok,M
3	VL0314ABL01	VL042142.D	14 Mar 2025 09:23	SY/MD	Ok
4	QC031025 CAN 10267	VL042143.D	14 Mar 2025 10:09	SY/MD	Ok
5	QC031225 CAN 10300	VL042144.D	14 Mar 2025 10:40	SY/MD	Not Ok
6	QC031325 CAN 10266	VL042145.D	14 Mar 2025 11:11	SY/MD	Ok
7	VL0314ABS01	VL042146.D	14 Mar 2025 12:27	SY/MD	Ok,M
8	QC031225 CAN 10300	VL042147.D	14 Mar 2025 15:56	SY/MD	Ok
9	QC031225 CAN 10300	VL042148.D	14 Mar 2025 16:29	SY/MD	Not Ok

M : Manual Integration

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	187002	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	545068	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	519536	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	422410	9.901	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	262496	9.507	ppbv	100
3) Chlorodifluoromethane	1.473	51	272522	9.662	ppbv	100
4) Chloromethane	1.531	50	107099	9.491	ppbv	100
5) Vinyl Chloride	1.577	62	102699	8.925	ppbv	100
6) Bromomethane	1.664	94	47950	9.377	ppbv	100
7) Chloroethane	1.703	64	42516	9.387	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	227041	9.656	ppbv	100
9) Propene	1.483	41	123386	9.709	ppbv	100
10) Heptane	4.972	43	335086	9.744	ppbv	100
11) Trichlorofluoromethane	1.874	101	250349	9.318	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	209365	9.481	ppbv	100
13) Ethanol	1.719	45	5338	5.364	ppbv	100
14) Bromoethene	1.777	108	77999	9.220	ppbv	100
15) Acetone	1.832	43	208061	7.955	ppbv	100
16) 1,3-Butadiene	1.606	39	107104	9.105	ppbv	100
17) tert-Butyl alcohol	2.036	59	302616	9.290	ppbv	100
18) 1,1-Dichloroethene	2.030	96	94236	9.128	ppbv	100
19) Isopropyl Alcohol	1.884	45	131359	8.902	ppbv	100
20) Methylene Chloride	2.059	84	81828	8.401	ppbv	100
21) Allyl Chloride	2.091	41	168602	9.141	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	110371	9.149	ppbv	100
23) Vinyl Acetate	2.460	43	93080	8.563	ppbv	100
24) 1,1-Dichloroethane	2.405	63	209753	9.484	ppbv	100
25) Ethyl Acetate	2.833	43	646501	9.524	ppbv	100
26) Hexane	2.823	57	249331	9.510	ppbv	100
27) Carbon Disulfide	2.146	76	268507	9.550	ppbv	100
28) Methyl tert-Butyl Ether	2.438	73	155398	9.520	ppbv	100
29) Chloroform	2.845	83	361264	9.415	ppbv	100
30) Cyclohexane	3.852	84	217215	9.537	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	256425	9.634	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	385628	8.784	ppbv	100
34) 2-Butanone	2.554	43	363735	9.203	ppbv	100
35) Carbon Tetrachloride	3.758	117	382925	9.129	ppbv	100
36) Benzene	3.651	78	508860	9.417	ppbv	100
37) 1,2-Dichloroethane	3.214	62	292937	9.469	ppbv	100
38) Trichloroethene	4.545	130	204027	9.045	ppbv	100
39) 1,2-Dichloropropane	4.312	63	183439	9.321	ppbv	100
40) 1,4-Dioxane	4.577	88	92327	9.042	ppbv #	100
41) Tetrahydrofuran	3.049	42	216851	9.643	ppbv	100
42) Bromodichloromethane	4.483	83	418887	9.822	ppbv	100
43) Methyl Methacrylate	4.872	69	219399	9.618	ppbv	100
44) 2,2,4-Trimethylpentane	4.635	57	876649	9.600	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	239180	9.746	ppbv	100

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	300021	9.973	ppbv		100
47) 1,1,2-Trichloroethane	6.574	97	198176	9.526	ppbv		100
48) Dibromochloromethane	7.380	129	346499	9.828	ppbv		100
49) Bromoform	9.477	173	317189	10.021	ppbv		100
50) 4-Methyl-2-Pentanone	5.745	43	559800	8.934	ppbv		100
51) 2-Hexanone	7.432	43	460013	8.848	ppbv	#	100
52) Tetrachloroethene	8.218	164	186912	8.722	ppbv		100
53) Toluene	6.927	91	613378	9.576	ppbv		100
54) 1,2-Dibromoethane	7.649	107	276797	9.536	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.917	131	265037	9.268	ppbv		100
57) Chlorobenzene	8.917	112	454511	9.223	ppbv		100
58) Ethyl Benzene	9.351	91	868003	9.406	ppbv		100
59) m/p-Xylene	9.549	91	595445	8.071	ppbv	#	9
60) o-Xylene	9.960	91	689933	9.340	ppbv		100
61) Styrene	9.866	104	354697	9.706	ppbv		100
62) Isopropylbenzene	10.536	105	1019255	9.227	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.960	83	413392	9.210	ppbv		100
64) n-propylbenzene	10.986	120	259405	9.122	ppbv		100
65) tert-Butylbenzene	11.529	119	901951	8.828	ppbv		100
66) Benzyl Chloride	11.610	91	105411	9.724	ppbv		100
67) sec-Butylbenzene	11.766	105	1249106	8.796	ppbv		100
69) p-Isopropyltoluene	11.924	119	1079675	8.830	ppbv		100
70) n-Butylbenzene	12.277	91	1110351	8.879	ppbv		100
71) 2-Chlorotoluene	10.898	91	799102	9.320	ppbv		100
72) 4-Ethyltoluene	11.122	105	846232	9.200	ppbv		100
73) 1,3,5-Trimethylbenzene	11.199	105	720566	8.970	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	784745	8.480	ppbv		100
75) 1,3-Dichlorobenzene	11.604	146	458226	9.028	ppbv		100
76) 1,4-Dichlorobenzene	11.669	146	461371	9.134	ppbv		100
77) 1,2-Dichlorobenzene	11.944	146	441473	8.933	ppbv		100
78) Hexachloro-1,3-Butadiene	13.879	225	416735	8.284	ppbv		100
79) Naphthalene	13.510	128	938470	9.271	ppbv		100
80) Naphthalene,2-methyl-	14.455	142	514394	10.436	ppbv		100
81) 1,2,4-Trichlorobenzene	13.439	180	446420	9.561	ppbv		100

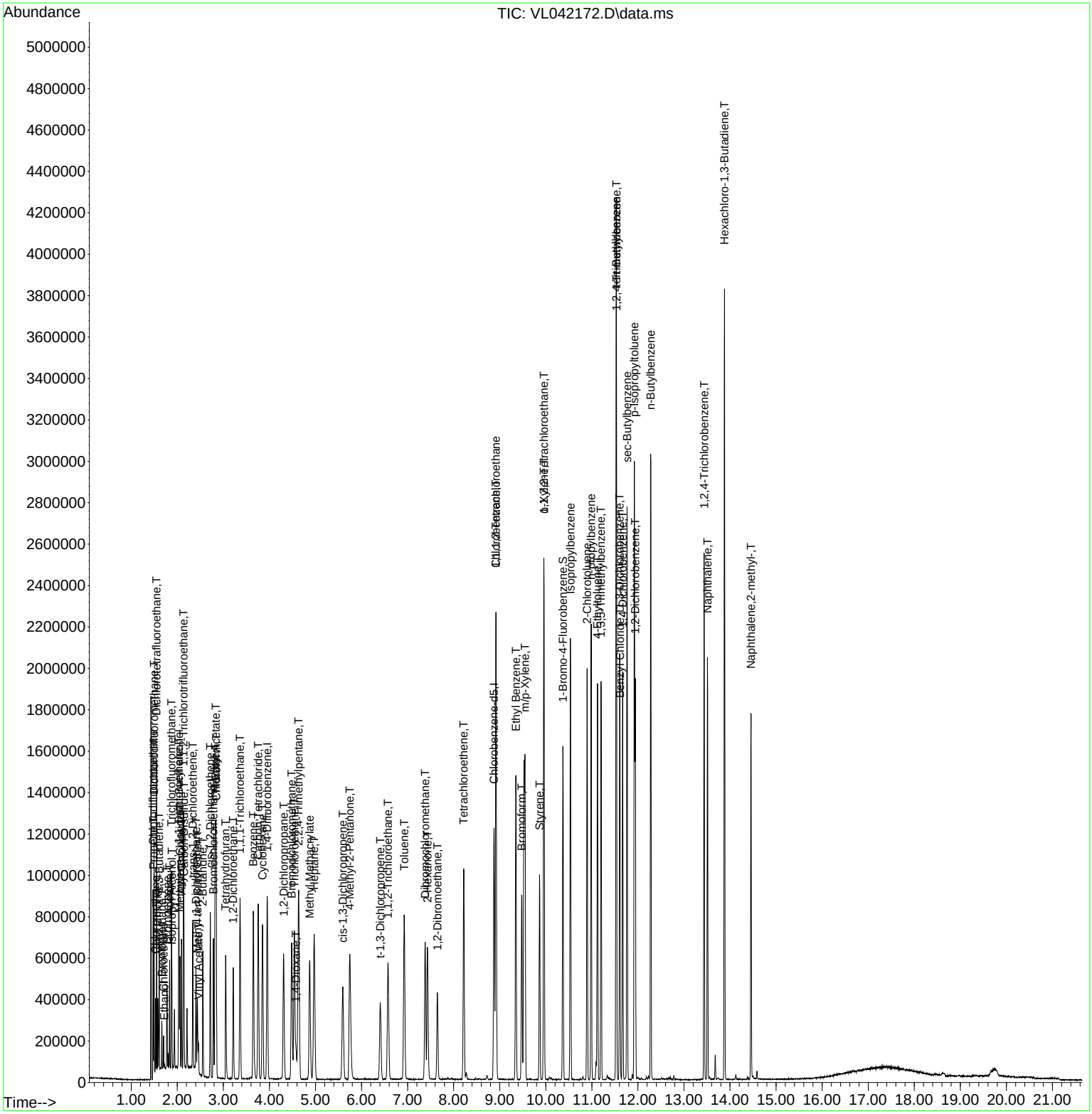
(#) = qualifier out of range (m) = manual integration (+) = signals summed

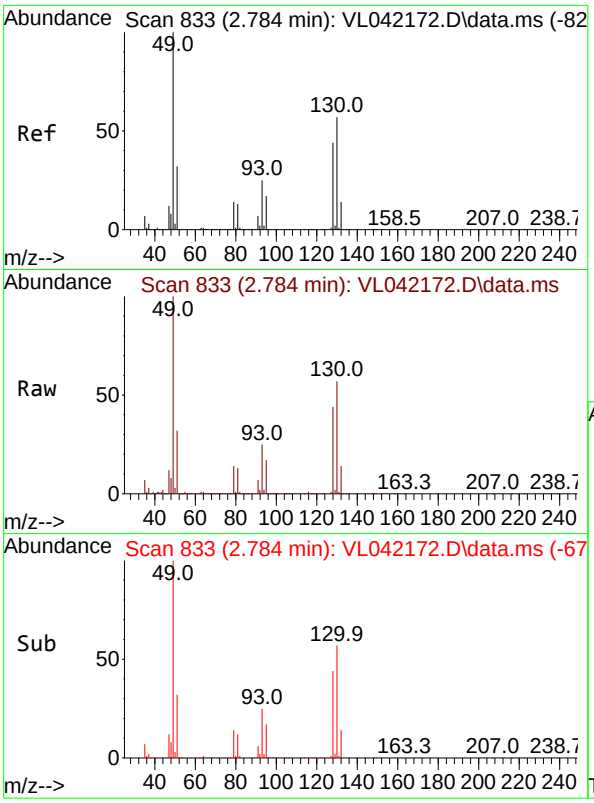
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



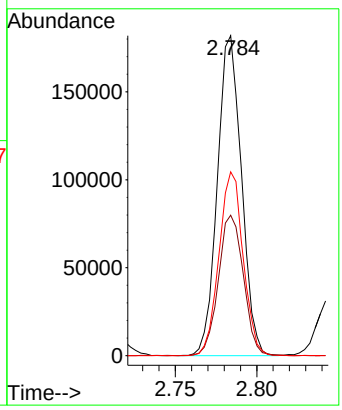


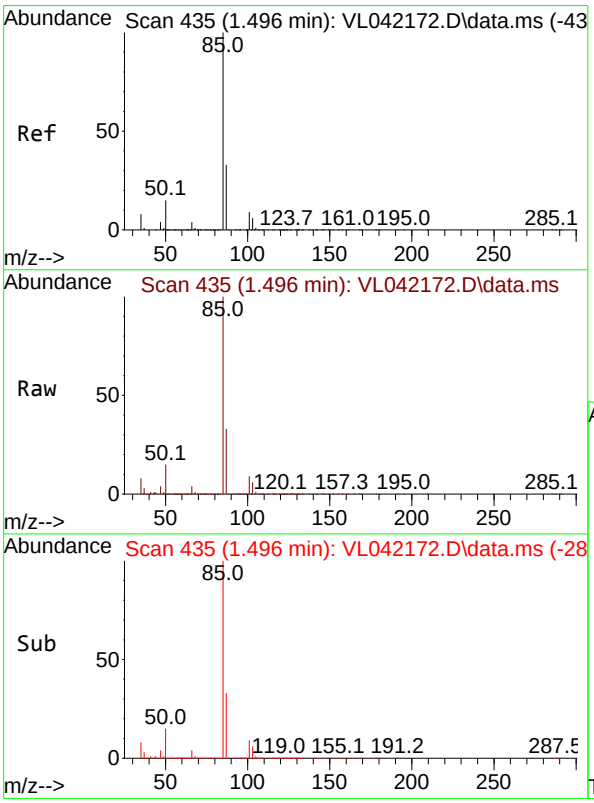
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 49 Resp: 187002

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.6	28.8	86.4

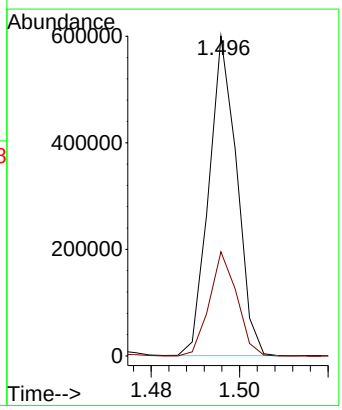


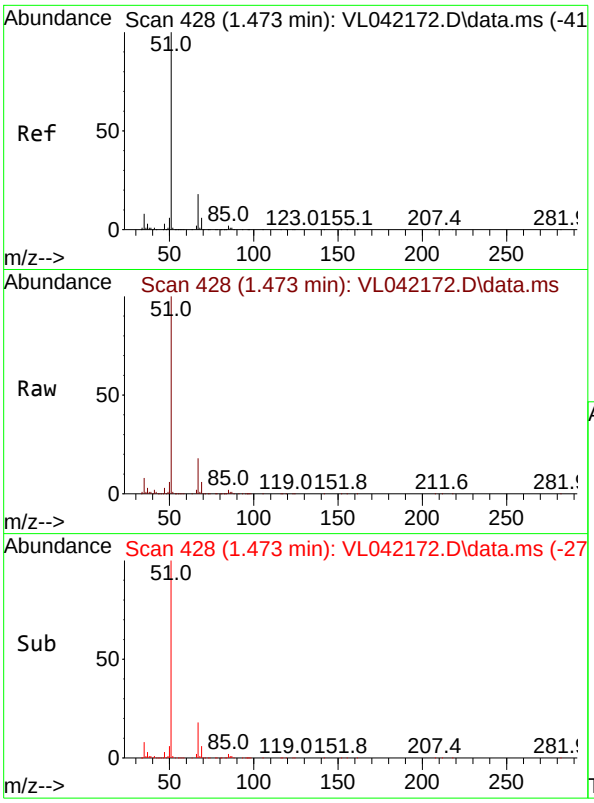


#2
Dichlorodifluoromethane
Concen: 9.507 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 262496

Ion	Ratio	Lower	Upper
85	100		
87	32.6	26.1	39.1



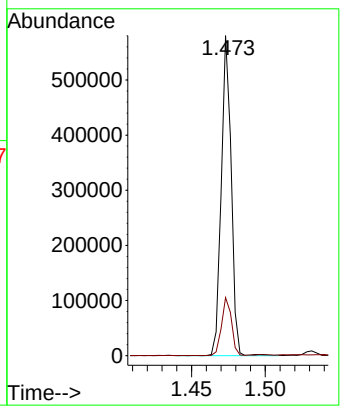


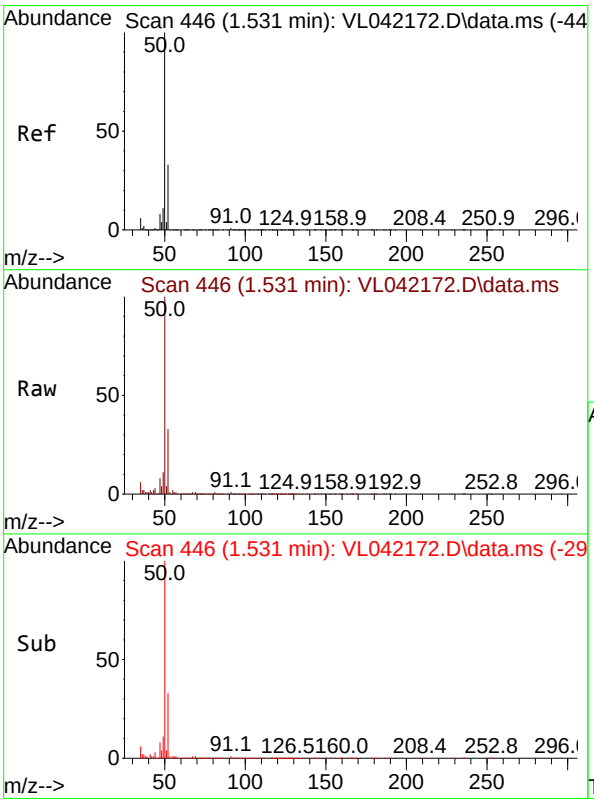
#3
Chlorodifluoromethane
Concen: 9.662 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 51 Resp: 272522

Ion	Ratio	Lower	Upper
51	100		
67	18.8	15.0	22.6

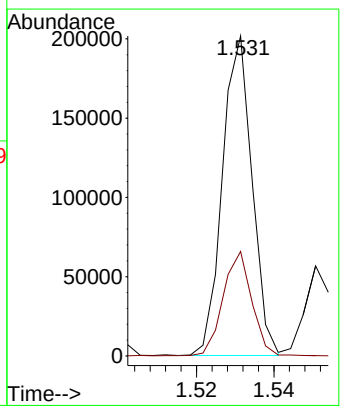


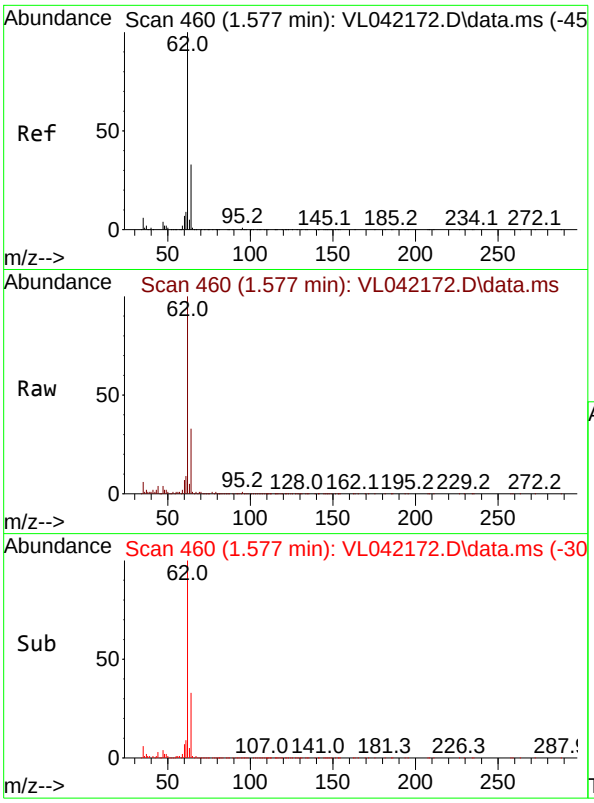


#4
Chloromethane
Concen: 9.491 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 50 Resp: 107099

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.1	39.1



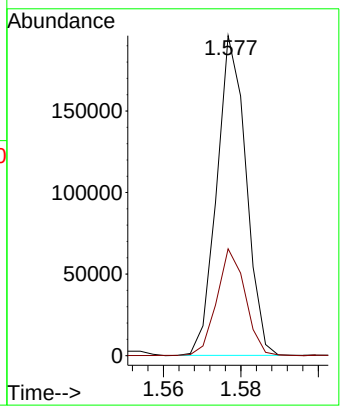


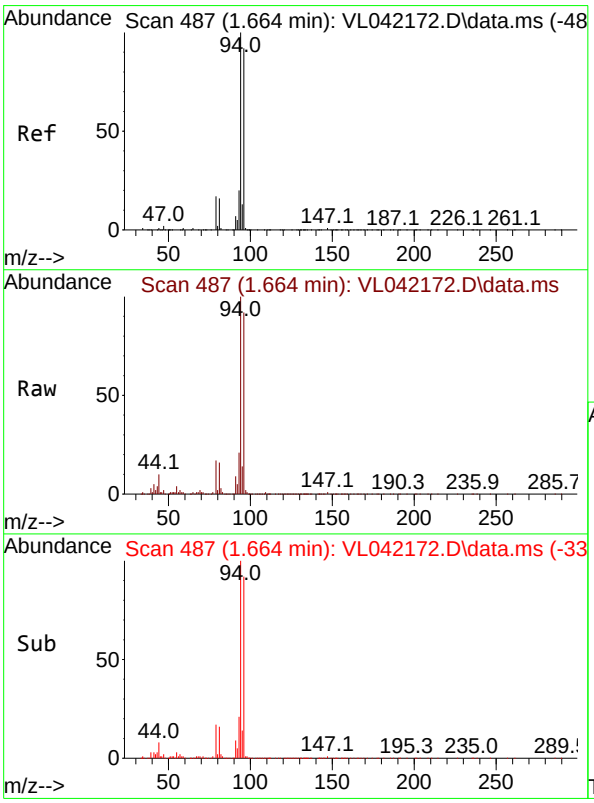
#5
Vinyl Chloride
Concen: 8.925 ppbv
RT: 1.577 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 102699

Ion	Ratio	Lower	Upper
62	100		
64	33.3	26.6	40.0

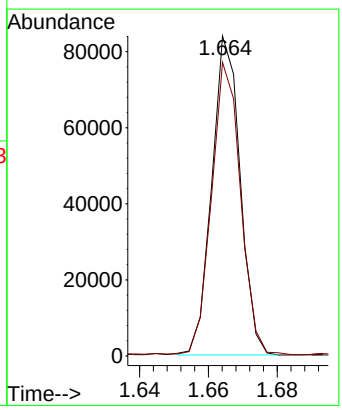


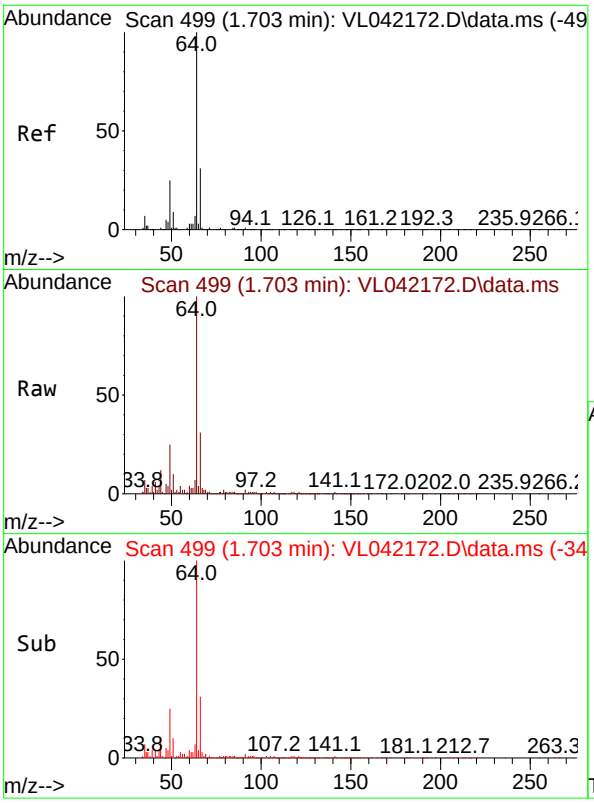


#6
Bromomethane
Concen: 9.377 ppbv
RT: 1.664 min Scan# 487
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 94 Resp: 47950

Ion	Ratio	Lower	Upper
94	100		
96	91.4	73.1	109.7



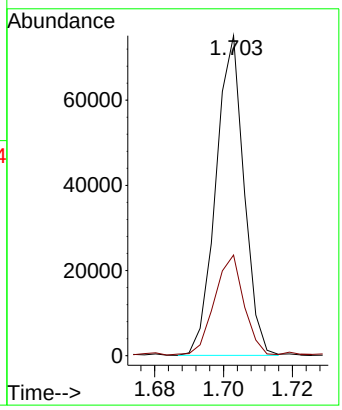


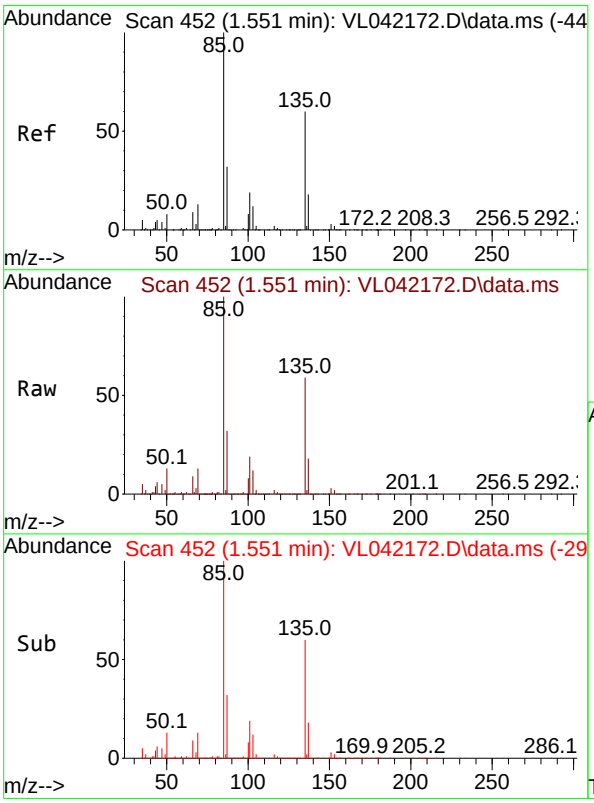
#7
Chloroethane
Concen: 9.387 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 64 Resp: 42516

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8

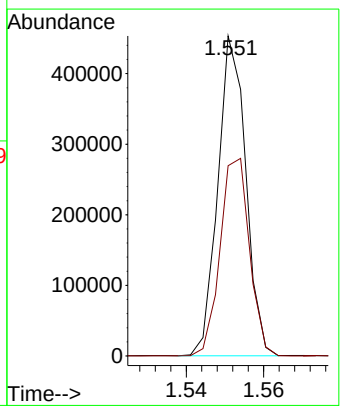


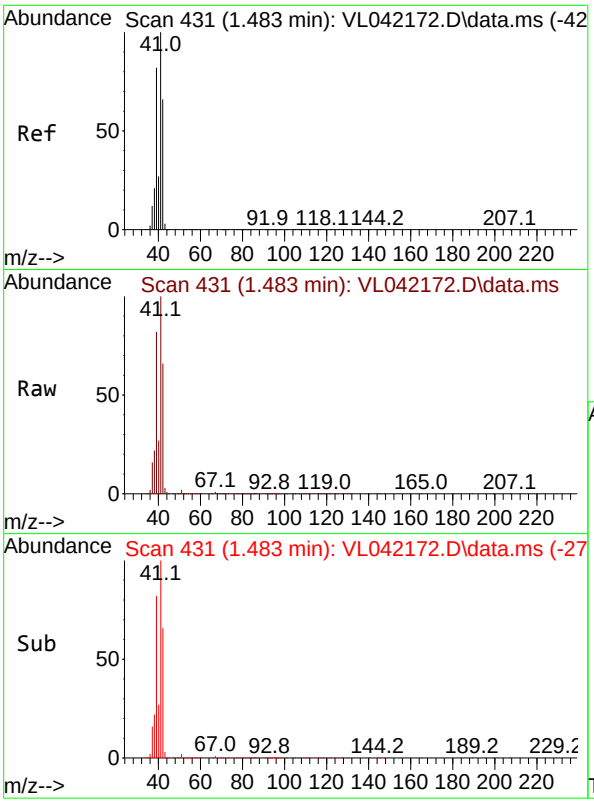


#8
Dichlorotetrafluoroethane
Concen: 9.656 ppbv
RT: 1.551 min Scan# 452
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 227041

Ion	Ratio	Lower	Upper
85	100		
135	65.5	52.4	78.6



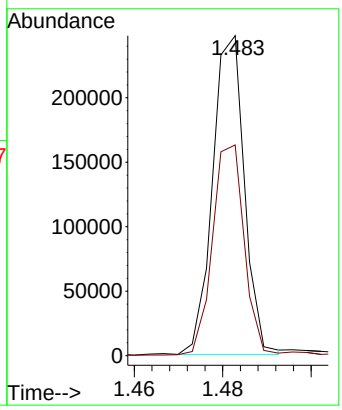


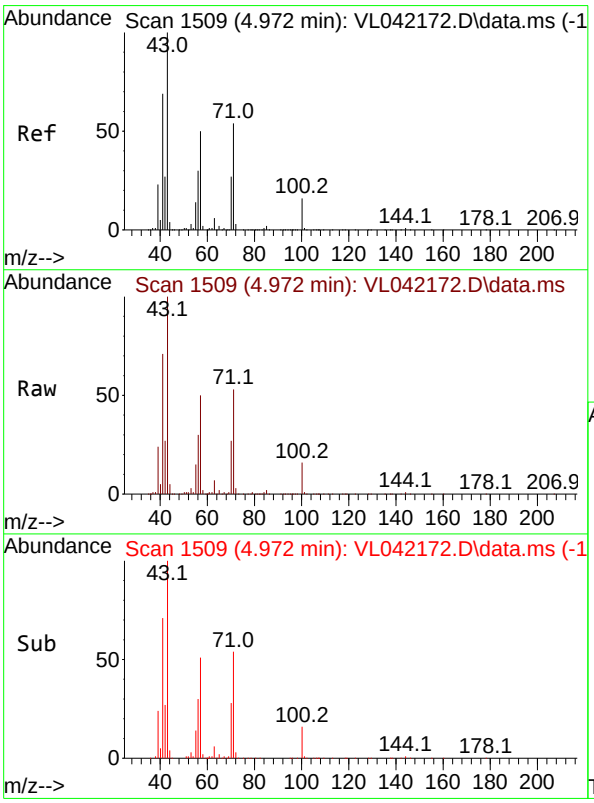
#9
Propene
Concen: 9.709 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 123386

Ion	Ratio	Lower	Upper
41	100		
42	69.3	55.4	83.2

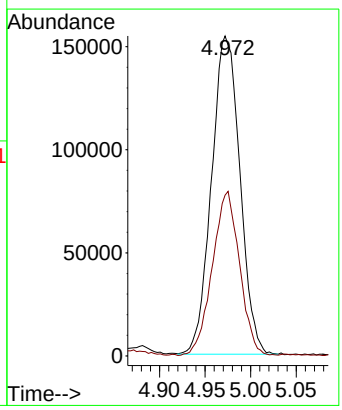


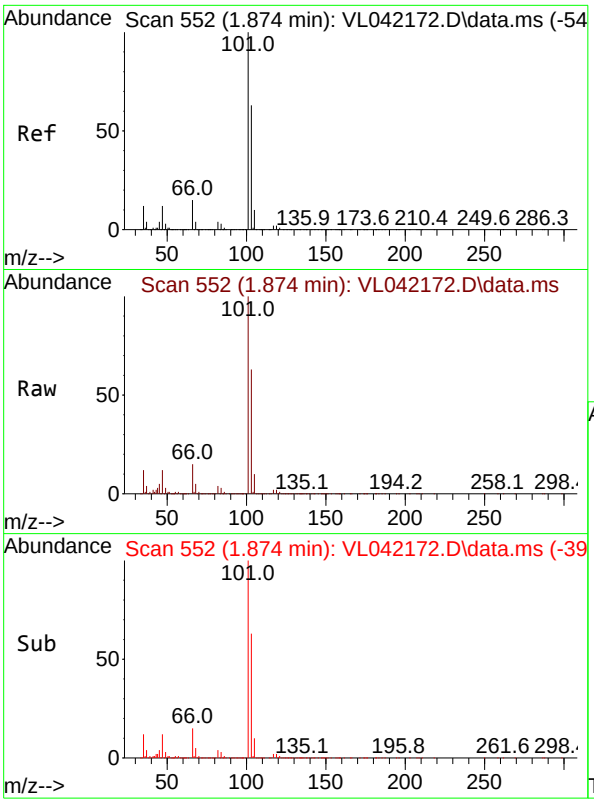


#10
Heptane
Concen: 9.744 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 335086

Ion	Ratio	Lower	Upper
43	100		
57	49.3	39.4	59.2



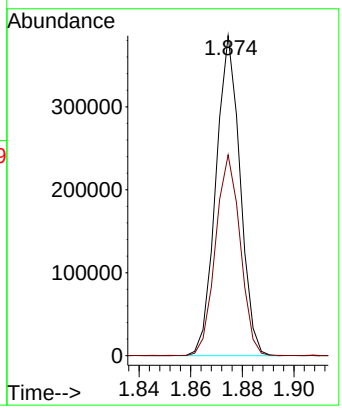


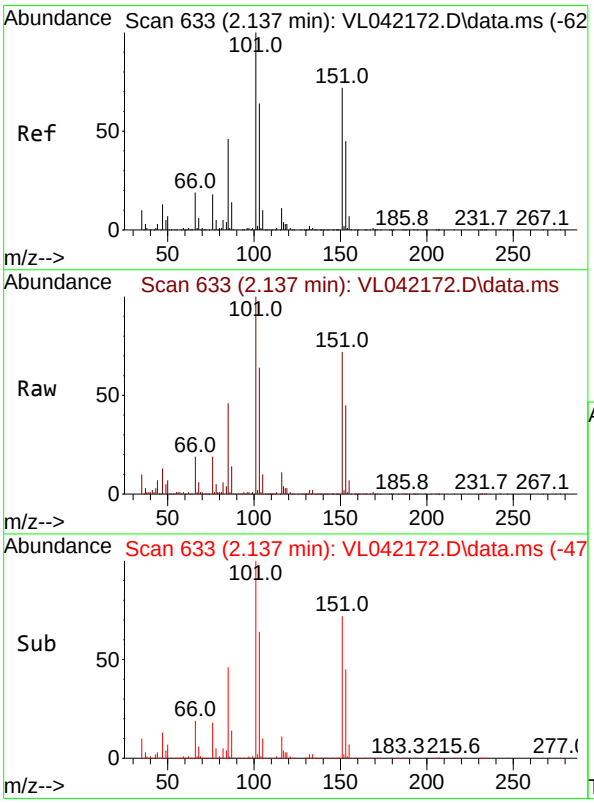
#11
Trichlorofluoromethane
Concen: 9.318 ppbv
RT: 1.874 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:101 Resp: 250349

Ion	Ratio	Lower	Upper
101	100		
103	62.7	50.2	75.2

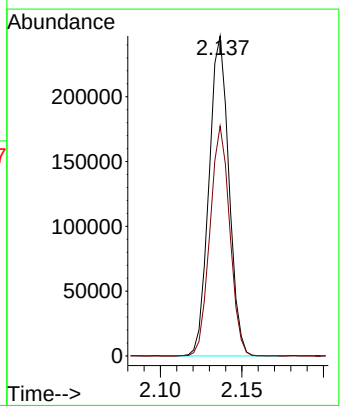


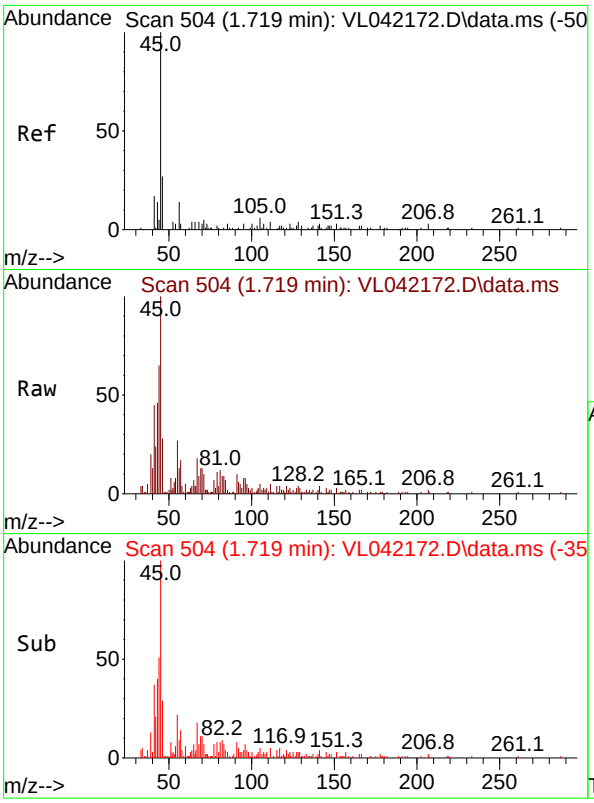


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.481 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:101 Resp: 209365

Ion	Ratio	Lower	Upper
101	100		
151	71.4	57.1	85.7



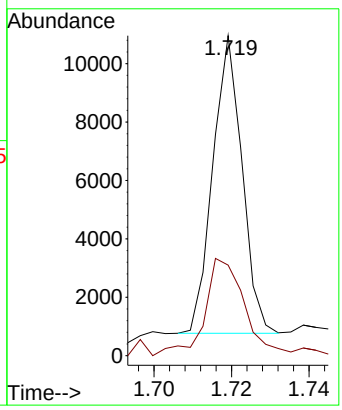


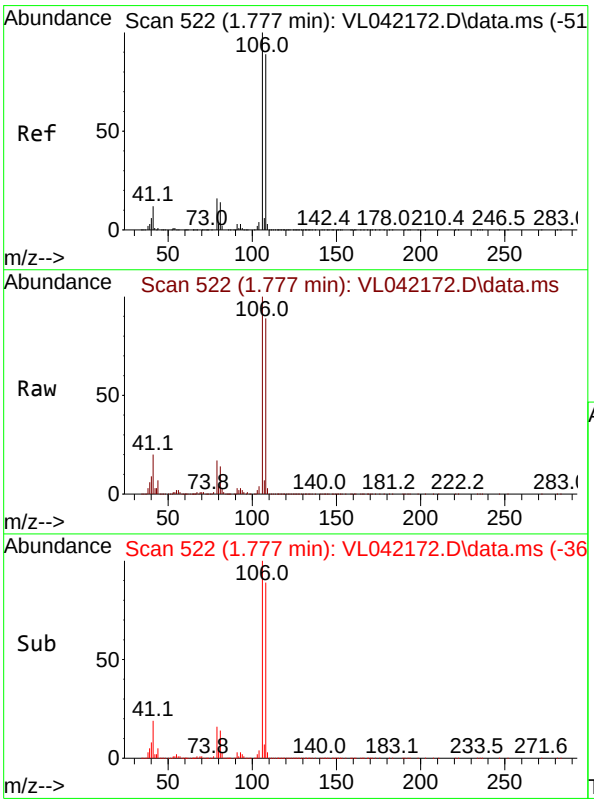
#13
Ethanol
Concen: 5.364 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 5338

Ion	Ratio	Lower	Upper
45	100		
46	50.5	20.2	80.8

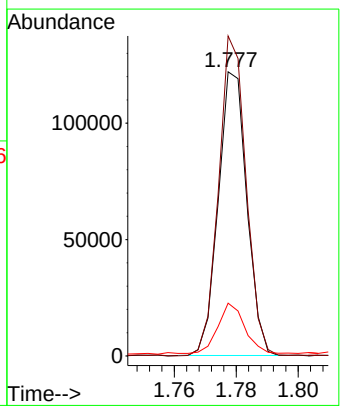


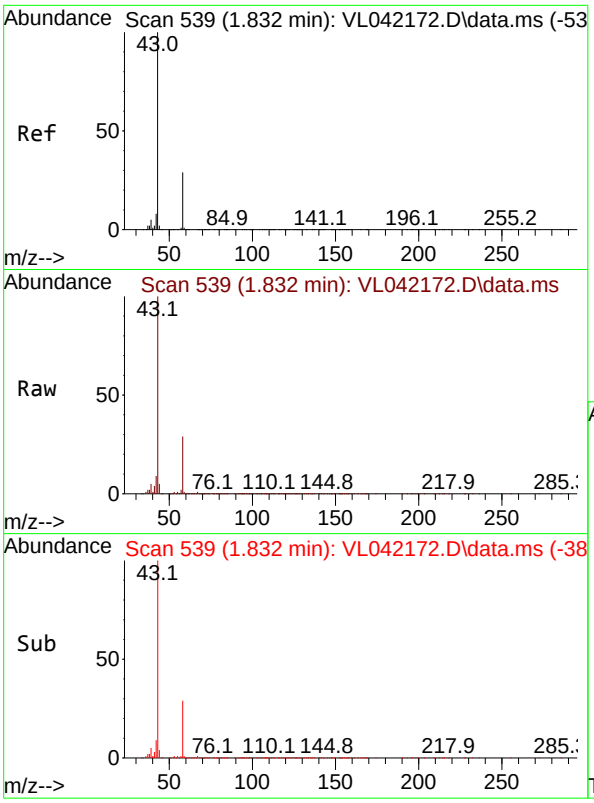


#14
Bromoethene
Concen: 9.220 ppbv
RT: 1.777 min Scan# 522
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:108 Resp: 77999

Ion	Ratio	Lower	Upper
108	100		
106	108.5	86.8	130.2
79	18.8	15.0	22.6



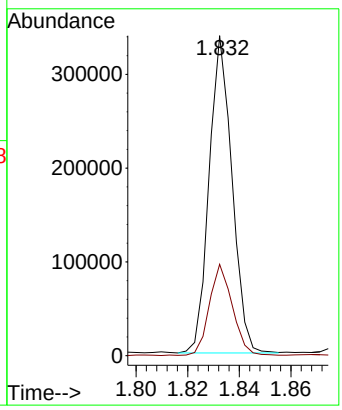


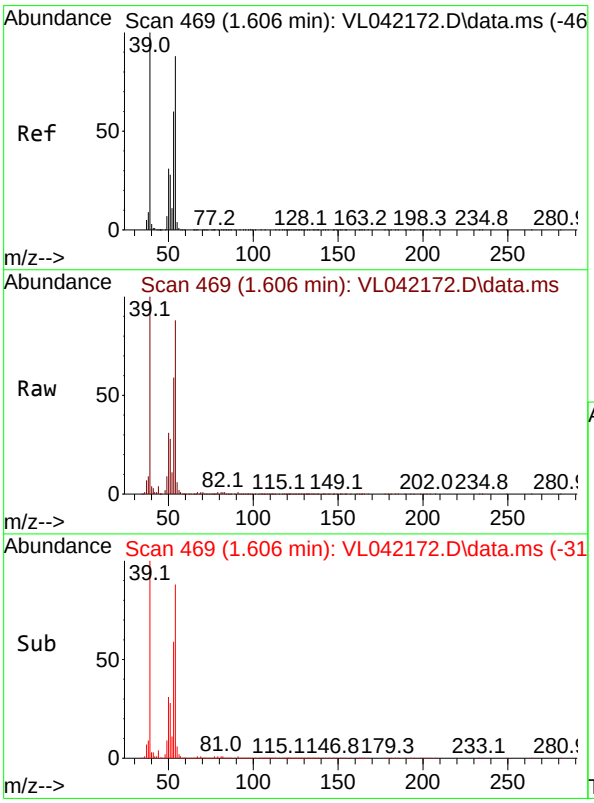
#15
Acetone
Concen: 7.955 ppbv
RT: 1.832 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 208061

Ion	Ratio	Lower	Upper
43	100		
58	29.0	23.2	34.8

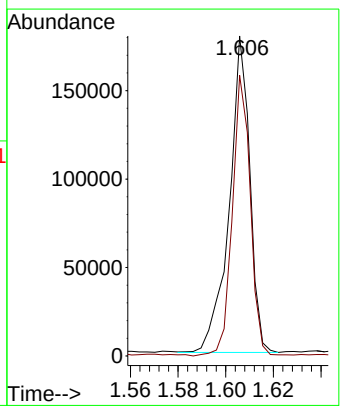


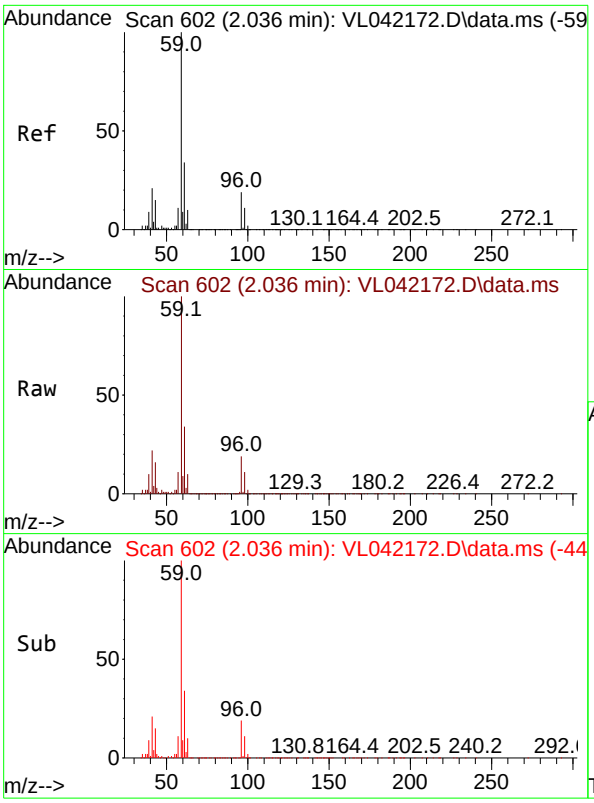


#16
1,3-Butadiene
Concen: 9.105 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 39 Resp: 107104

Ion	Ratio	Lower	Upper
39	100		
54	75.9	60.7	91.1



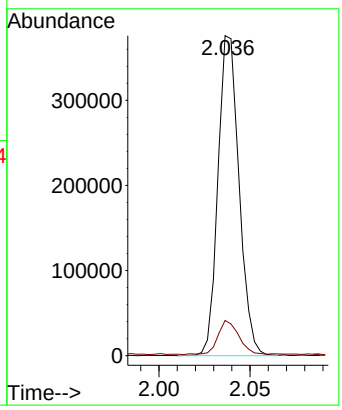


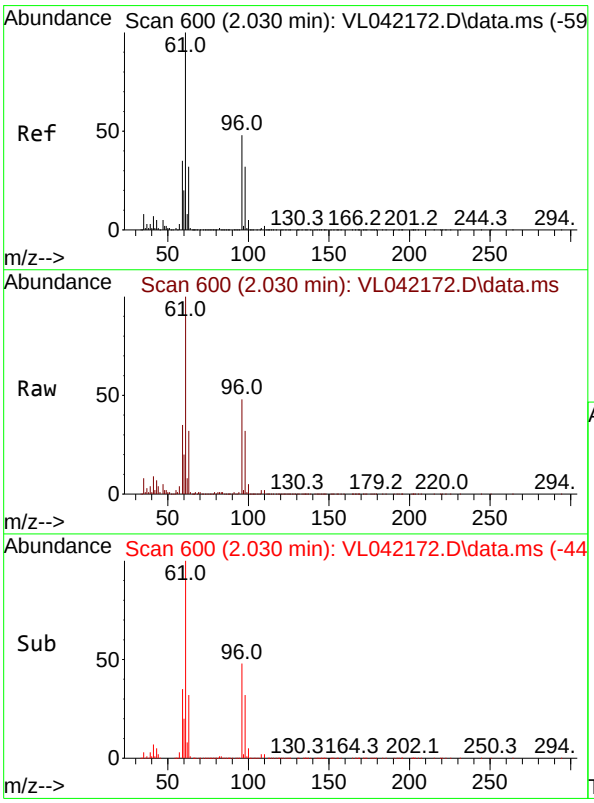
#17
tert-Butyl alcohol
Concen: 9.290 ppbv
RT: 2.036 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 59 Resp: 302616

Ion	Ratio	Lower	Upper
59	100		
57	11.1	8.9	13.3

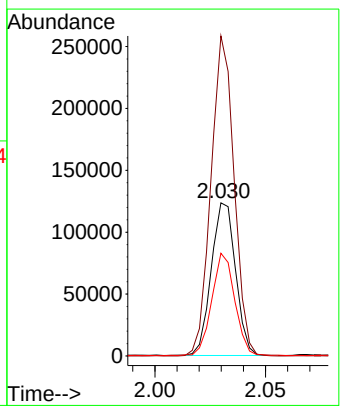


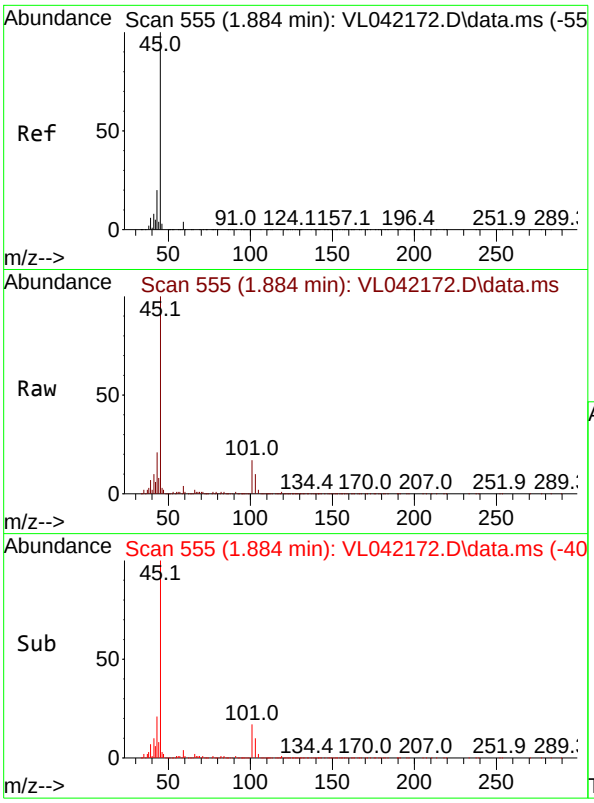


#18
1,1-Dichloroethene
Concen: 9.128 ppbv
RT: 2.030 min Scan# 600
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 94236

Ion	Ratio	Lower	Upper
96	100		
61	209.5	167.6	251.4
98	66.9	53.5	80.3



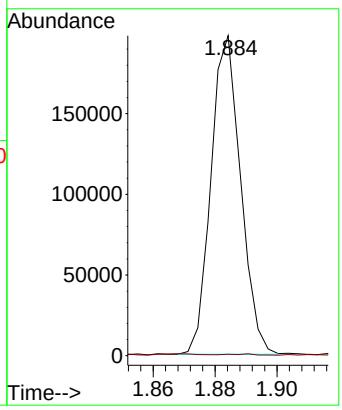


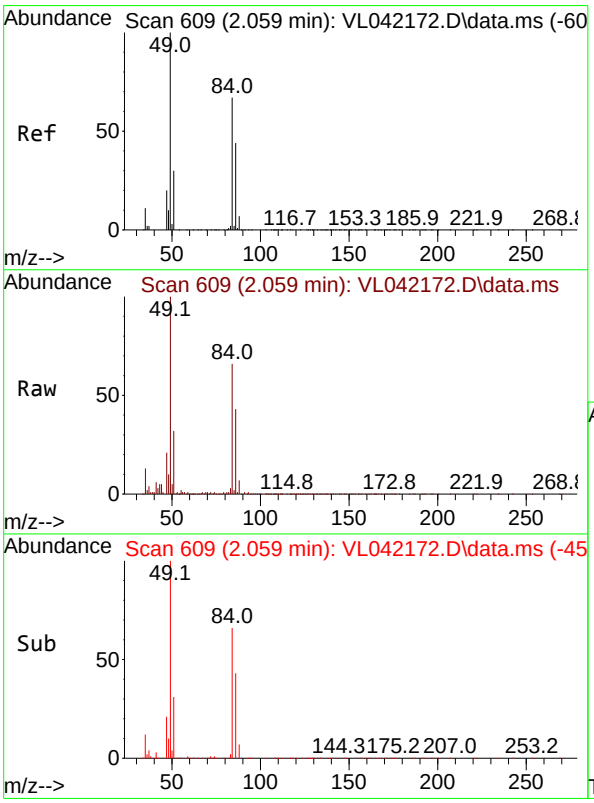
#19
Isopropyl Alcohol
Concen: 8.902 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 131359

Ion	Ratio	Lower	Upper
45	100		
58	46.1	36.9	55.3

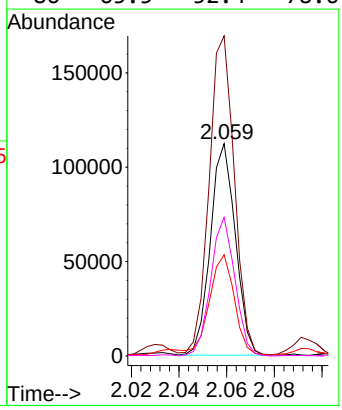


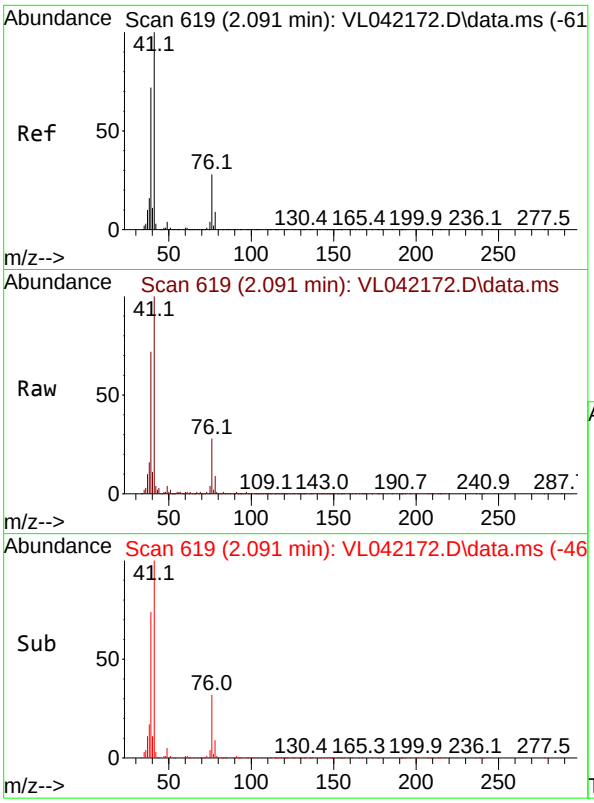


#20
Methylene Chloride
Concen: 8.401 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 81828

Ion	Ratio	Lower	Upper
84	100		
49	150.3	120.2	180.4
51	46.7	37.4	56.0
86	65.5	52.4	78.6



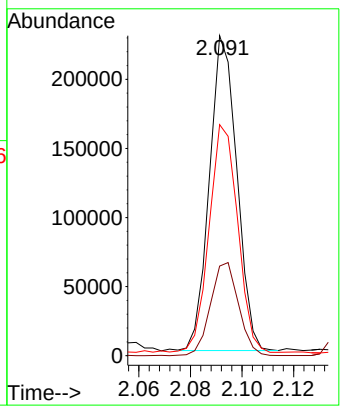


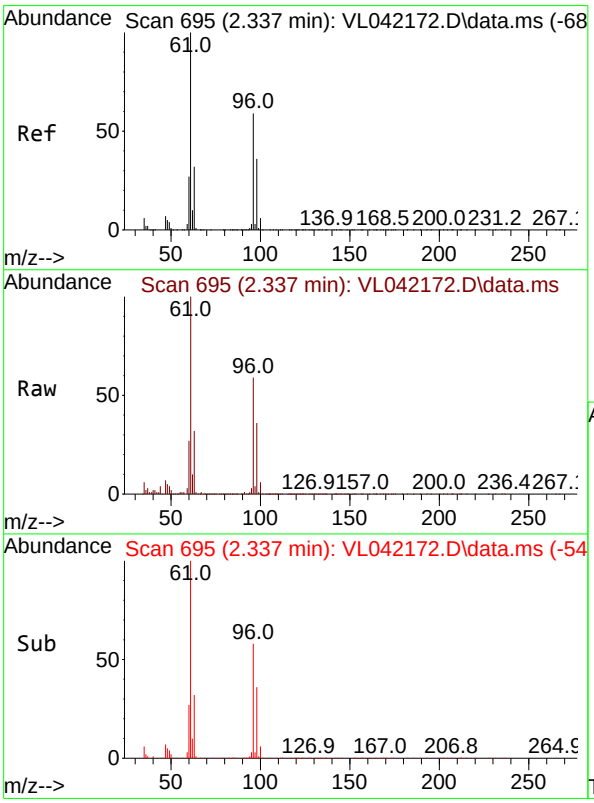
#21
Allyl Chloride
Concen: 9.141 ppbv
RT: 2.091 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 168602

Ion	Ratio	Lower	Upper
41	100		
76	30.1	24.1	36.1
39	76.4	61.1	91.7

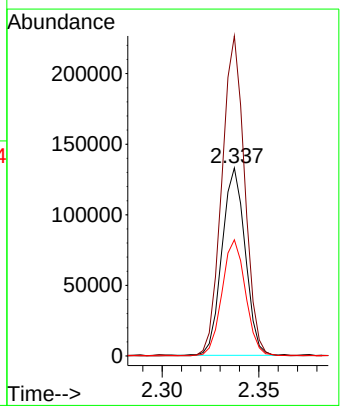


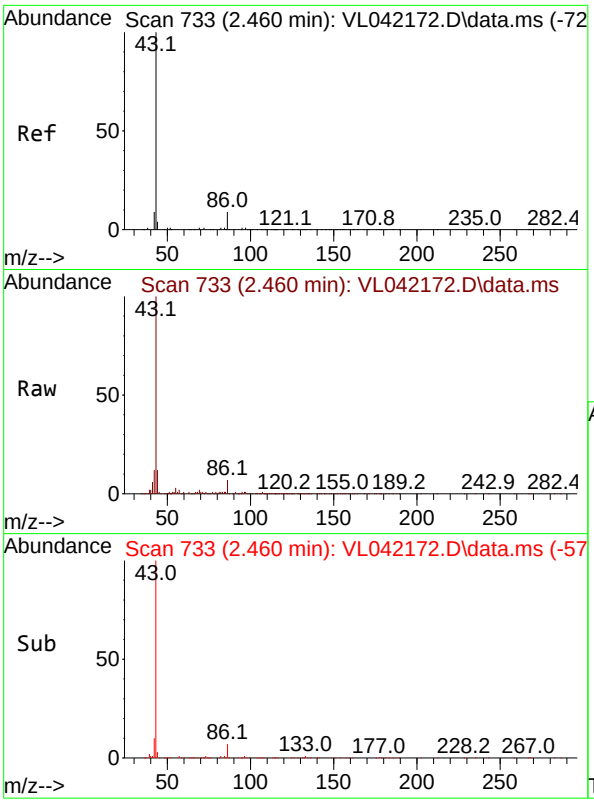


#22
trans-1,2-Dichloroethene
Concen: 9.149 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 110371

Ion	Ratio	Lower	Upper
96	100		
61	170.7	136.6	204.8
98	61.8	49.4	74.2



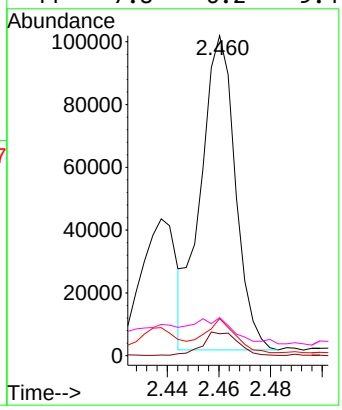


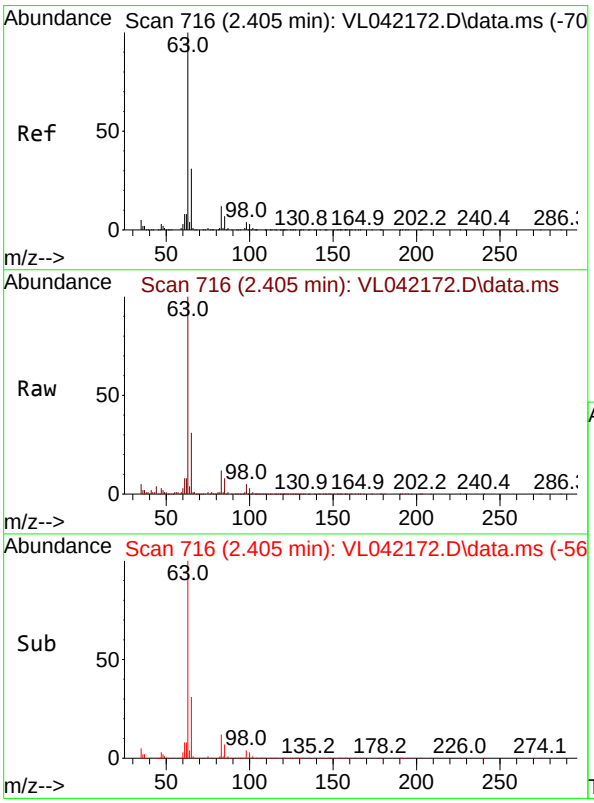
#23
Vinyl Acetate
Concen: 8.563 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 93080

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	10.8	8.6	13.0
44	7.8	6.2	9.4

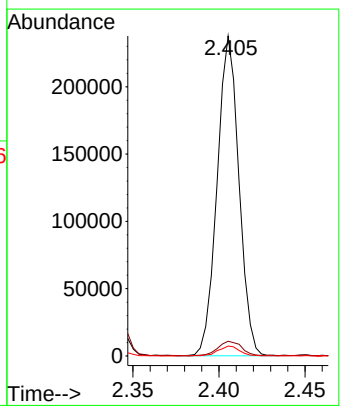


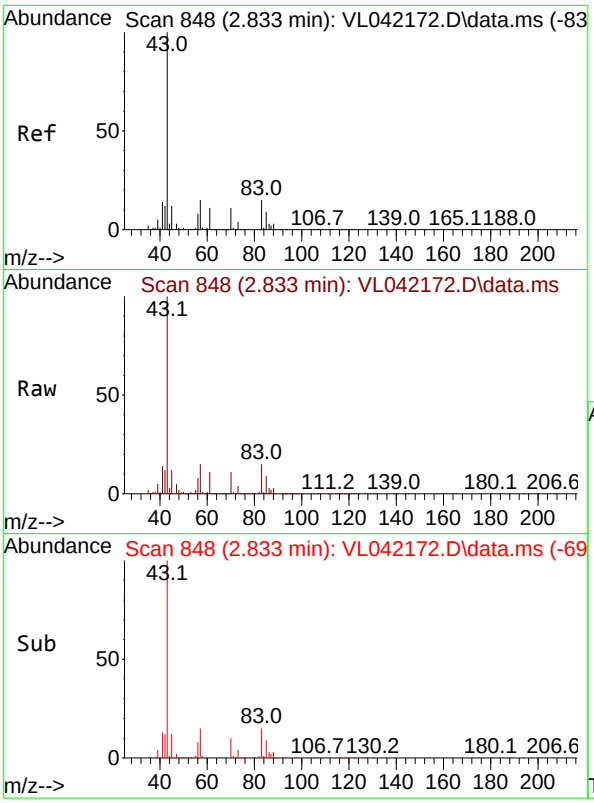


#24
1,1-Dichloroethane
Concen: 9.484 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 63 Resp: 209753

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.1	1.6	4.7



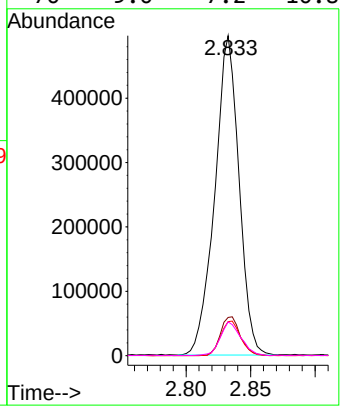


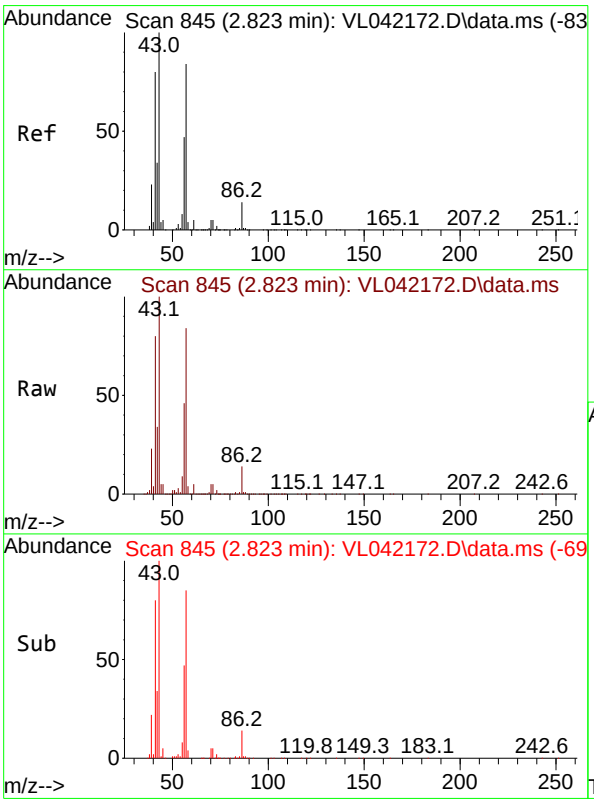
#25
Ethyl Acetate
Concen: 9.524 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 646501

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.1	7.3	10.9
70	9.0	7.2	10.8

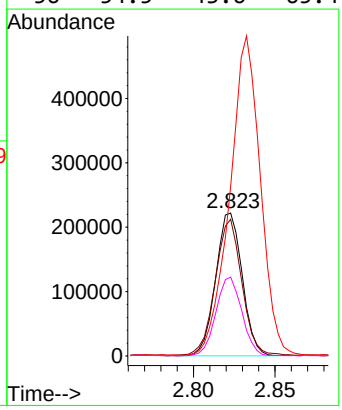


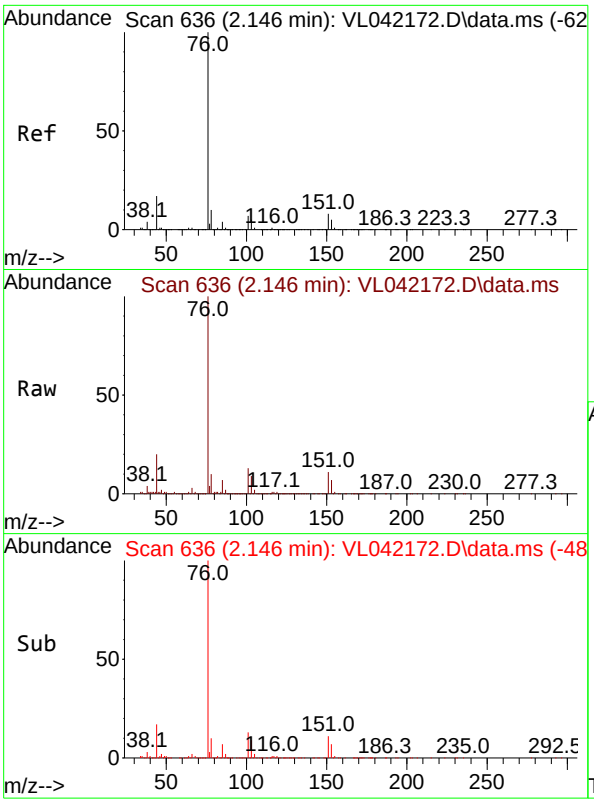


#26
Hexane
Concen: 9.510 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 249331

Ion	Ratio	Lower	Upper
57	100		
41	95.7	76.6	114.8
43	259.8	207.8	311.8
56	54.5	43.6	65.4



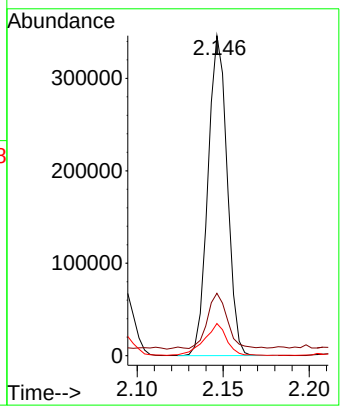


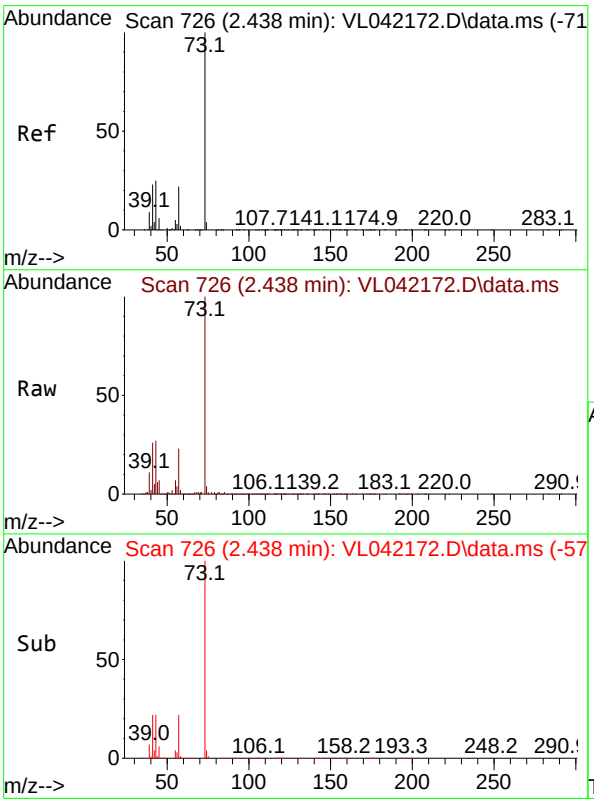
#27
Carbon Disulfide
Concen: 9.550 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 76 Resp: 268507

Ion	Ratio	Lower	Upper
76	100		
44	18.4	14.7	22.1
78	11.6	9.3	13.9

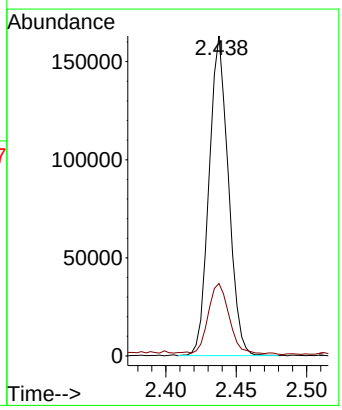


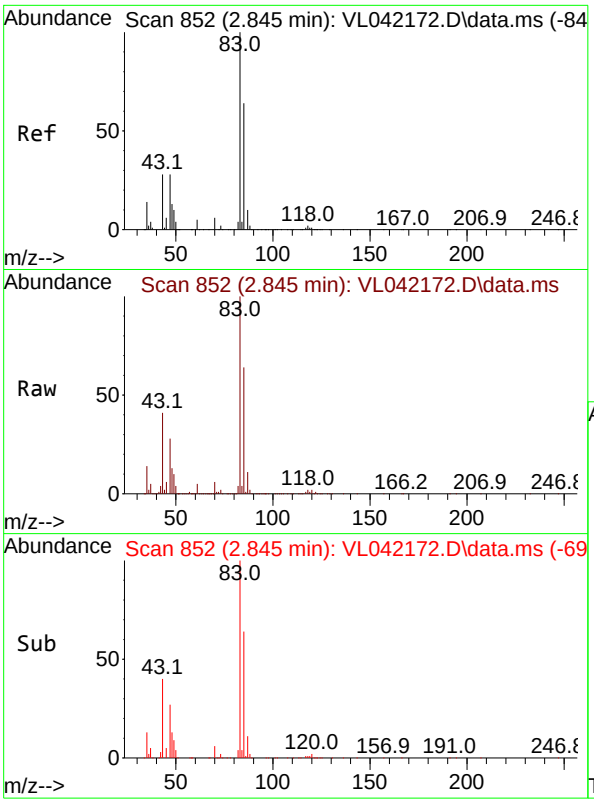


#28
Methyl tert-Butyl Ether
Concen: 9.520 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 73 Resp: 155398

Ion	Ratio	Lower	Upper
73	100		
57	25.6	20.5	30.7



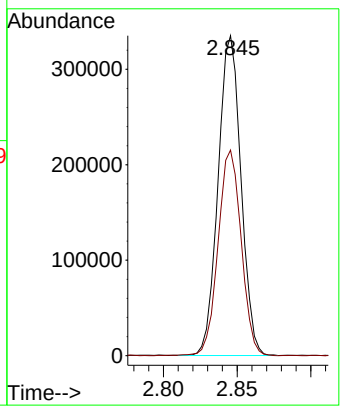


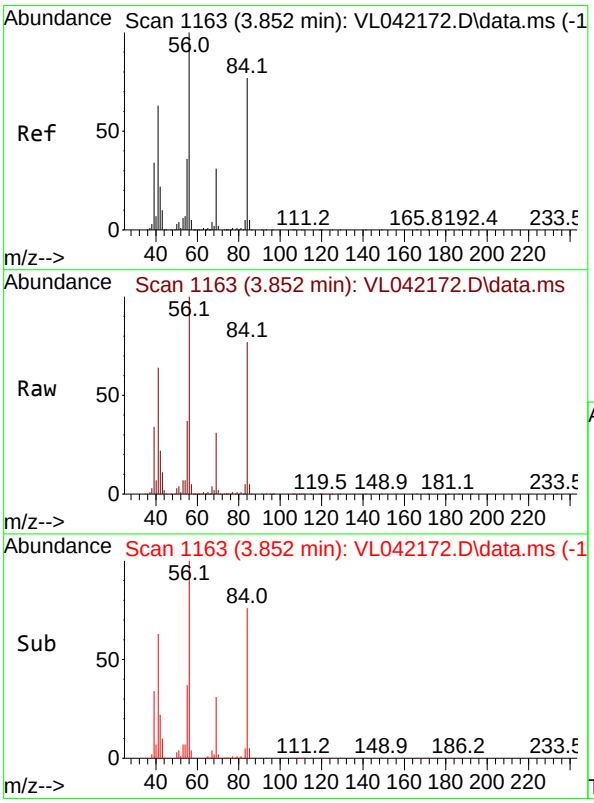
#29
Chloroform
Concen: 9.415 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 361264

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.4	77.2

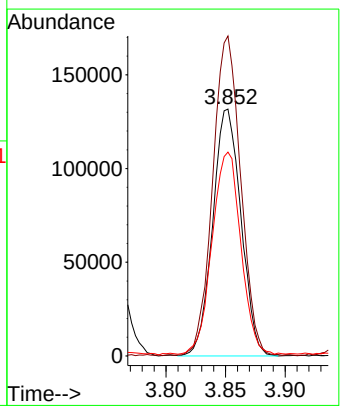


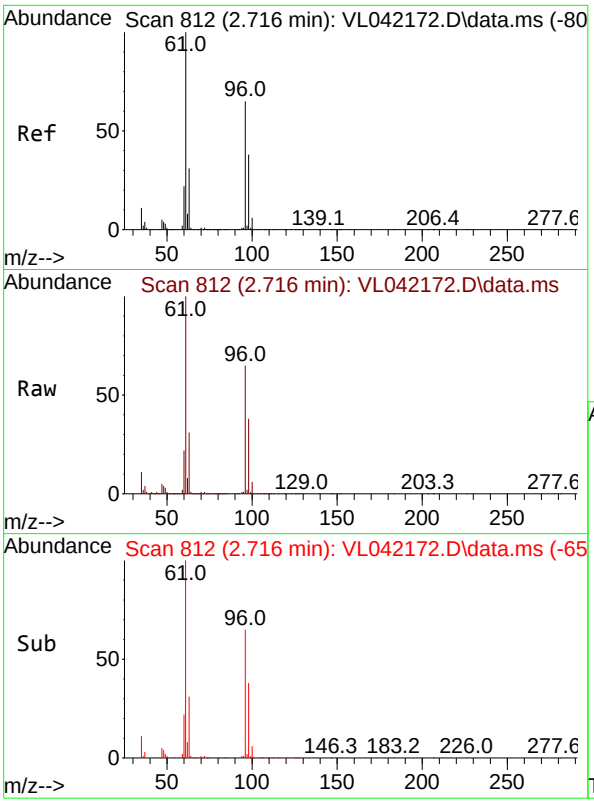


#30
Cyclohexane
Concen: 9.537 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 217215

Ion	Ratio	Lower	Upper
84	100		
56	128.5	102.8	154.2
41	83.1	66.5	99.7



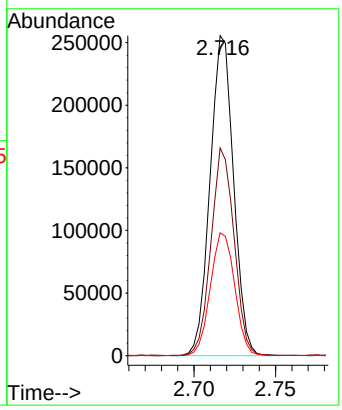


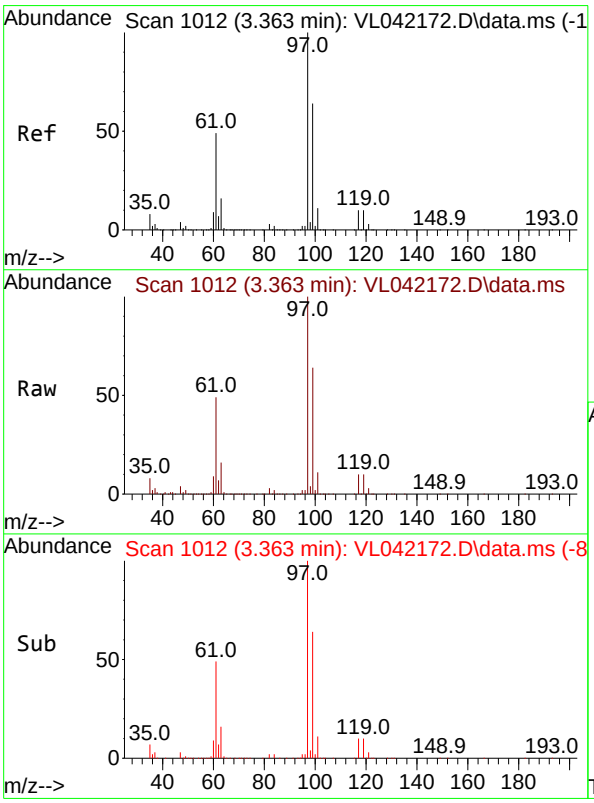
#31
cis-1,2-Dichloroethene
Concen: 9.634 ppbv
RT: 2.716 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 61 Resp: 256425

Ion	Ratio	Lower	Upper
61	100		
96	64.8	51.8	77.8
98	38.3	30.6	46.0

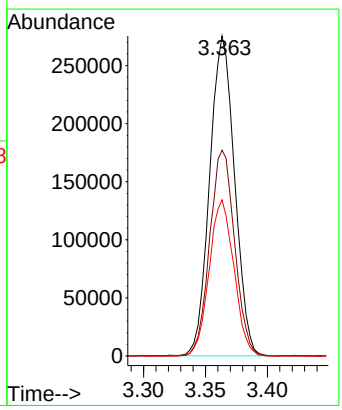


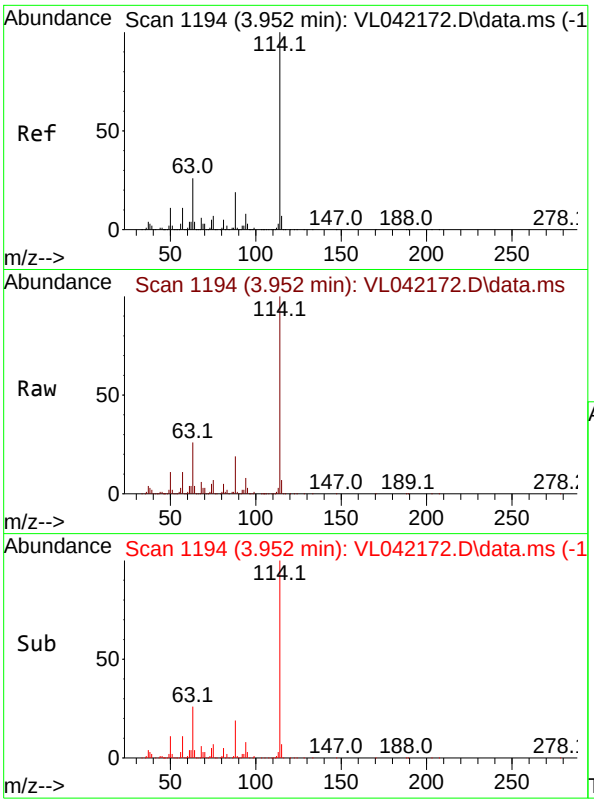


#32
1,1,1-Trichloroethane
Concen: 8.784 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 97 Resp: 385628

Ion	Ratio	Lower	Upper
97	100		
99	64.4	51.5	77.3
61	48.4	38.7	58.1



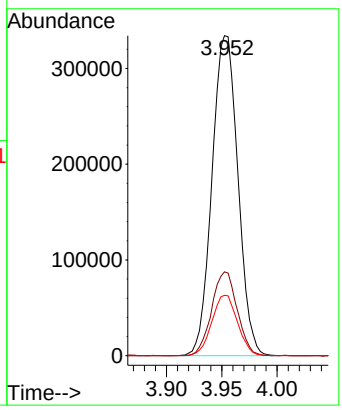


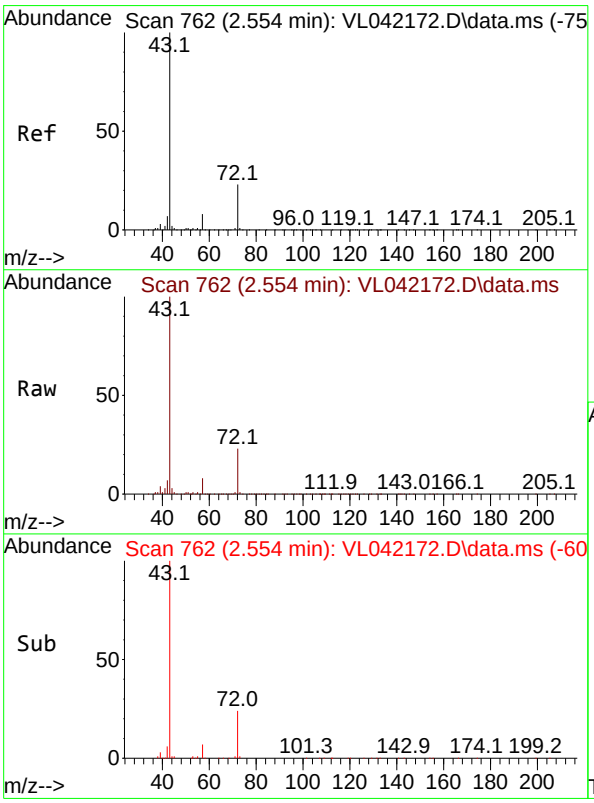
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:114 Resp: 545068

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.7	15.0	22.4

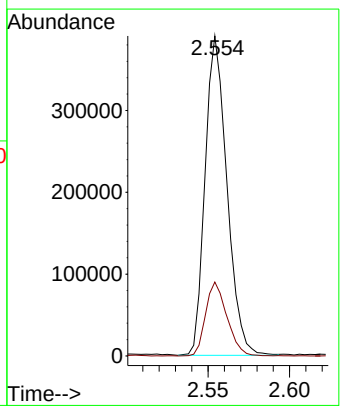


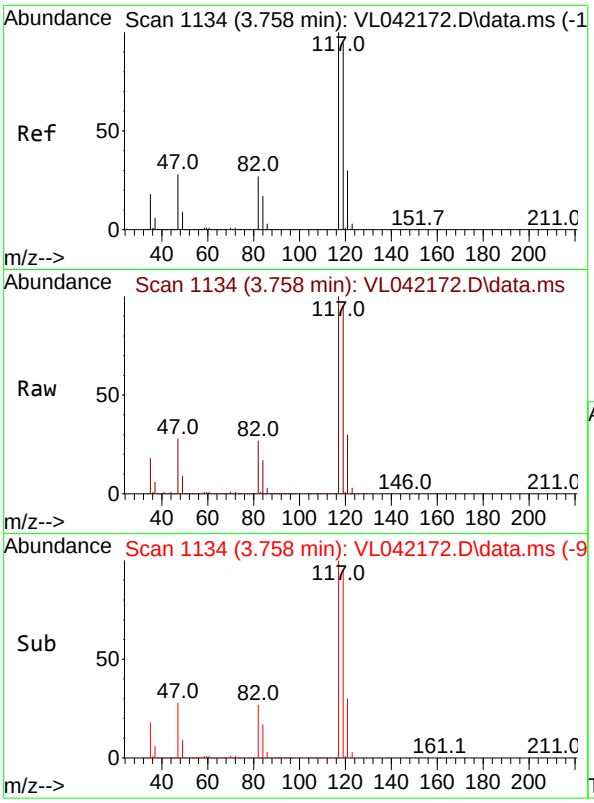


#34
2-Butanone
Concen: 9.203 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 363735

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2



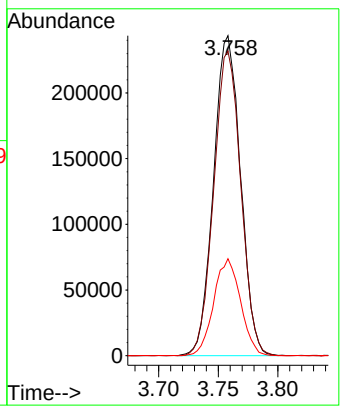


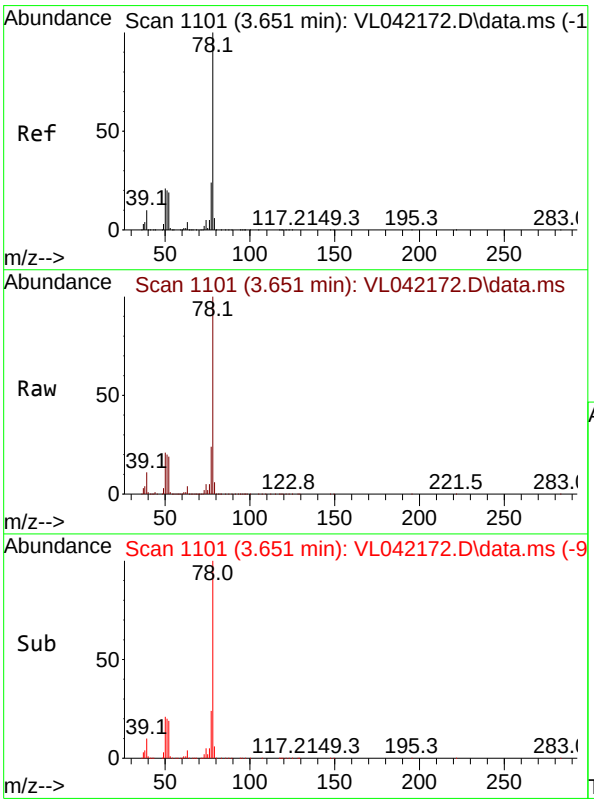
#35
Carbon Tetrachloride
Concen: 9.129 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 382925

Ion	Ratio	Lower	Upper
117	100		
119	95.2	76.2	114.2
121	30.3	24.2	36.4

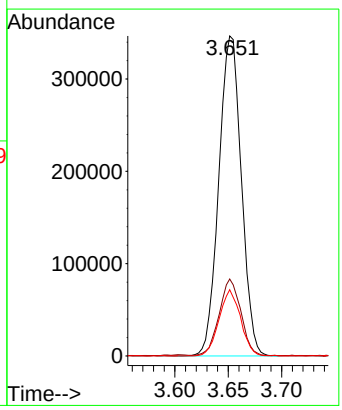


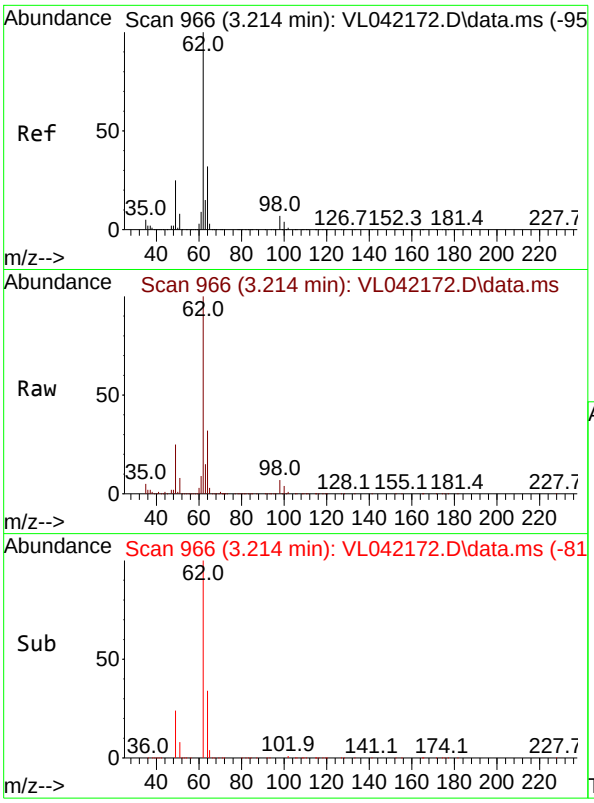


#36
Benzene
Concen: 9.417 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 78 Resp: 508860

Ion	Ratio	Lower	Upper
78	100		
77	23.9	19.1	28.7
50	20.7	16.6	24.8



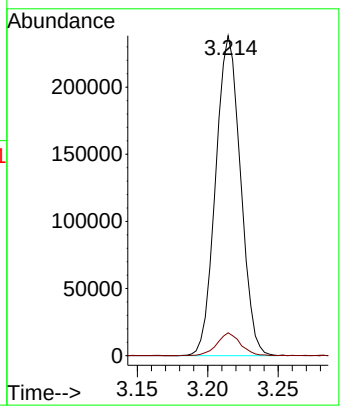


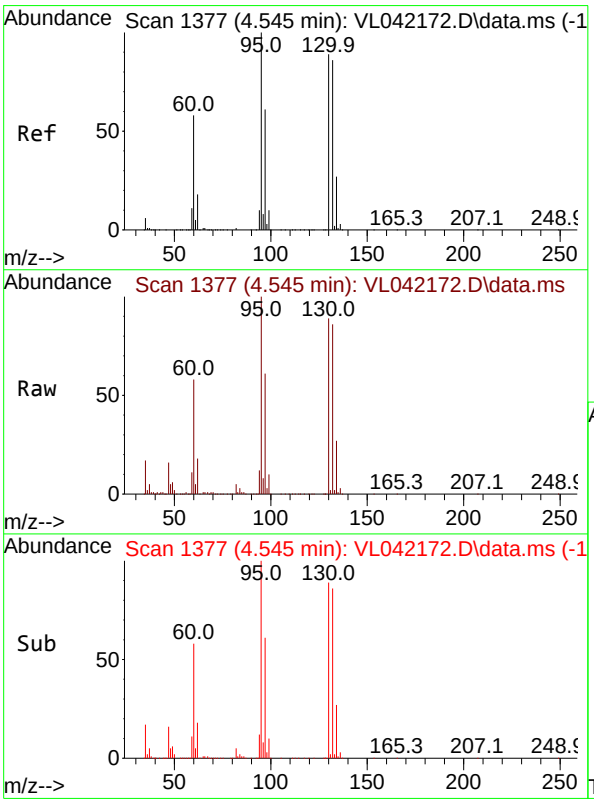
#37
1,2-Dichloroethane
Concen: 9.469 ppbv
RT: 3.214 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 292937

Ion	Ratio	Lower	Upper
62	100		
98	6.8	5.4	8.2

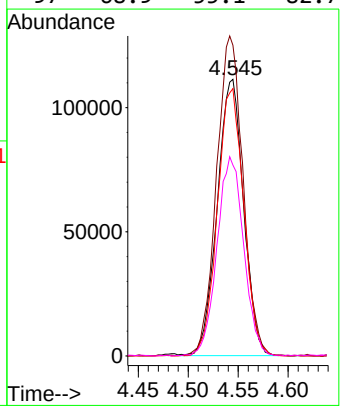


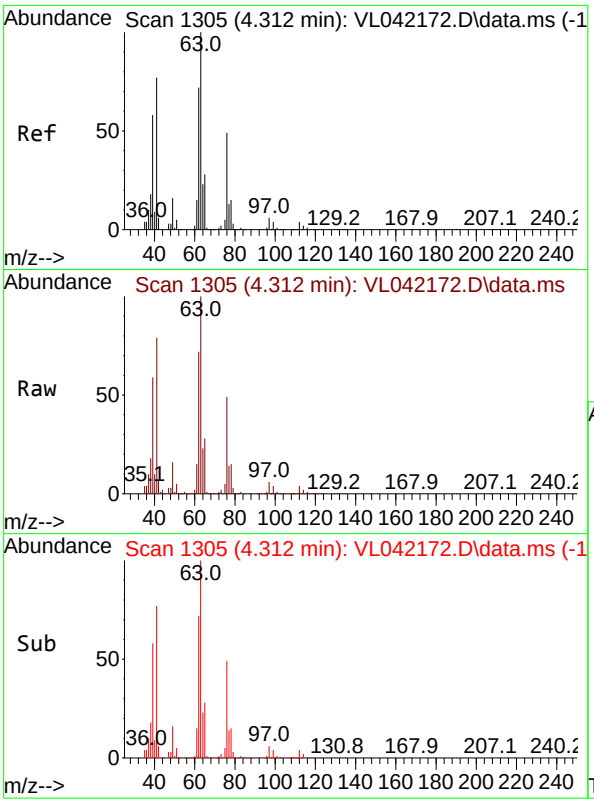


#38
Trichloroethene
Concen: 9.045 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:130 Resp: 204027

Ion	Ratio	Lower	Upper
130	100		
95	112.3	89.8	134.8
132	96.8	77.4	116.2
97	68.9	55.1	82.7



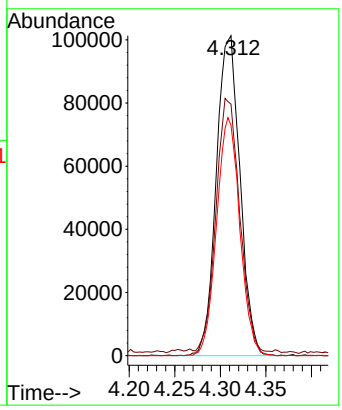


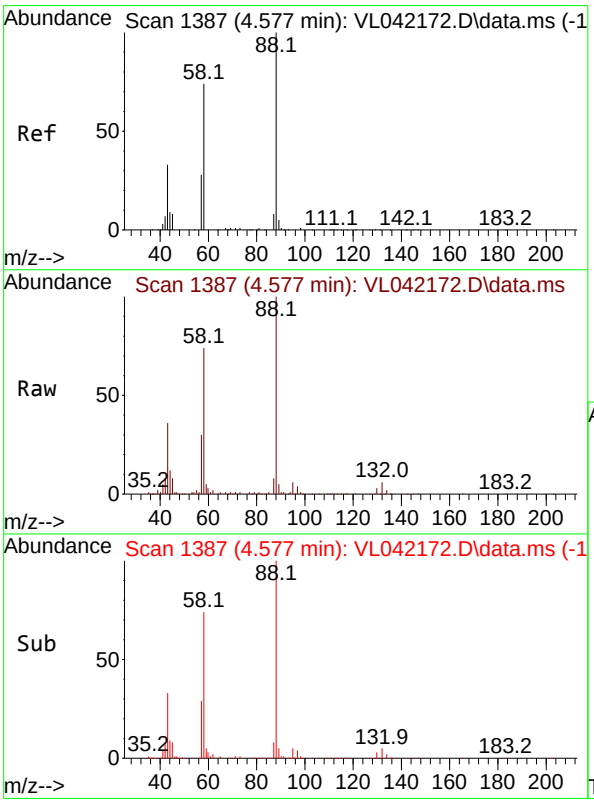
#39
1,2-Dichloropropane
Concen: 9.321 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 63 Resp: 183439

Ion	Ratio	Lower	Upper
63	100		
41	77.1	61.7	92.5
62	72.0	57.6	86.4

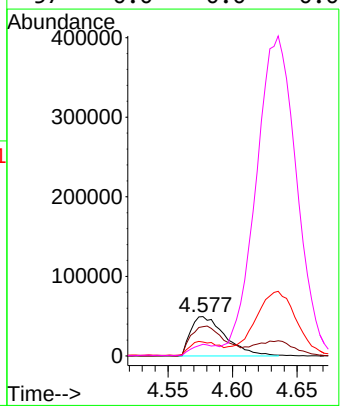


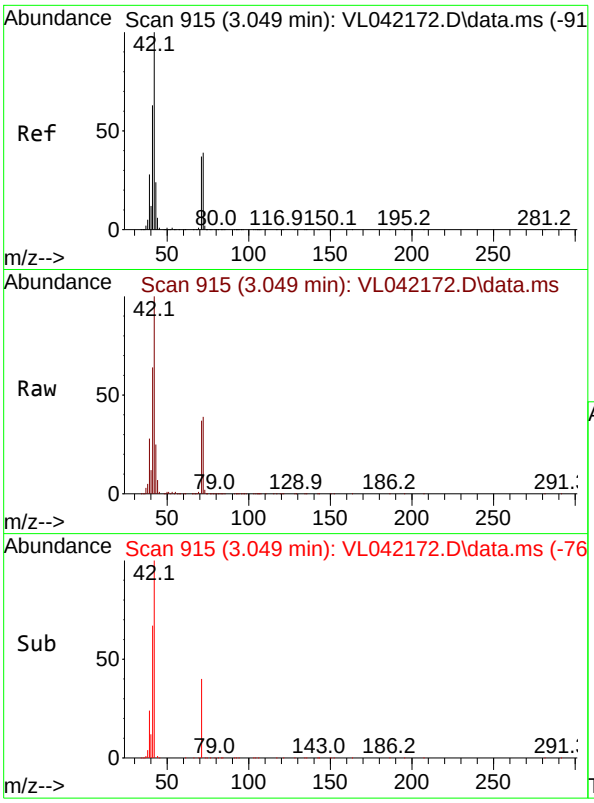


#40
1,4-Dioxane
Concen: 9.042 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 88 Resp: 92327

Ion	Ratio	Lower	Upper
88	100		
58	78.4	62.7	94.1
43	28.7	23.0	34.4
57	0.0	0.0	0.0



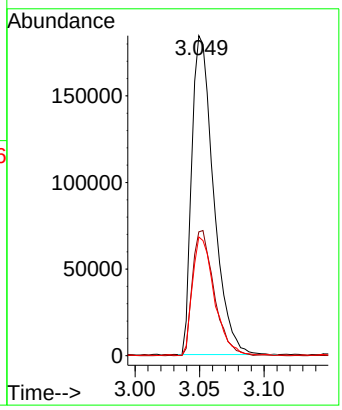


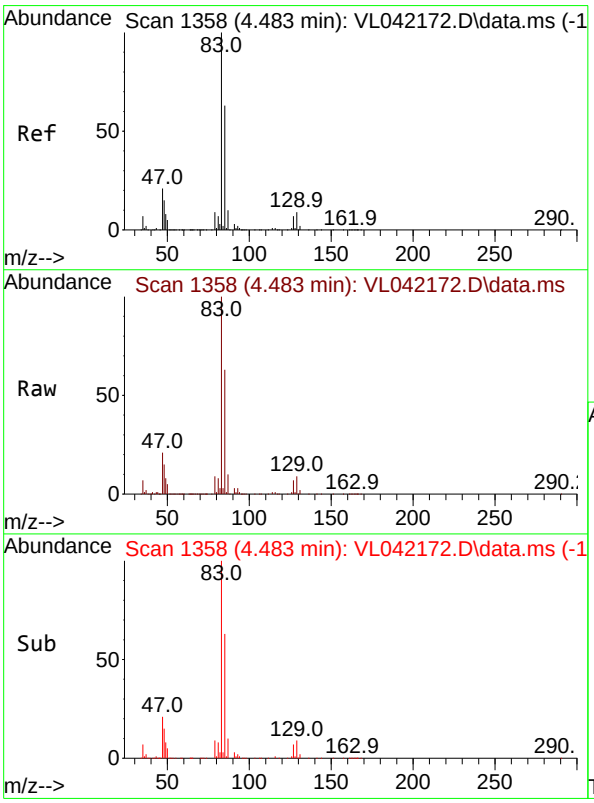
#41
Tetrahydrofuran
Concen: 9.643 ppbv
RT: 3.049 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 42 Resp: 216851

Ion	Ratio	Lower	Upper
42	100		
72	39.2	31.4	47.0
71	37.8	30.2	45.4

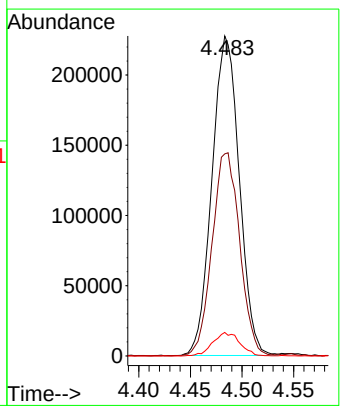


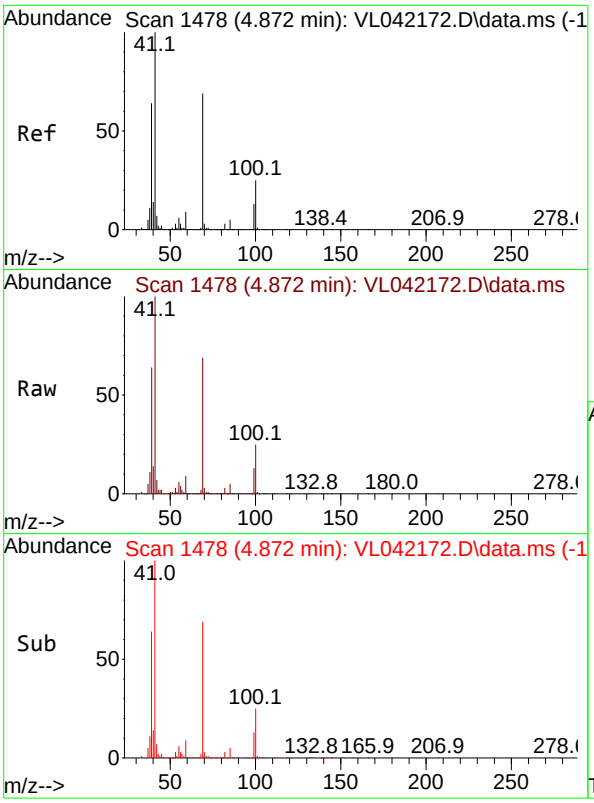


#42
Bromodichloromethane
Concen: 9.822 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 418887

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.4	5.9	8.9



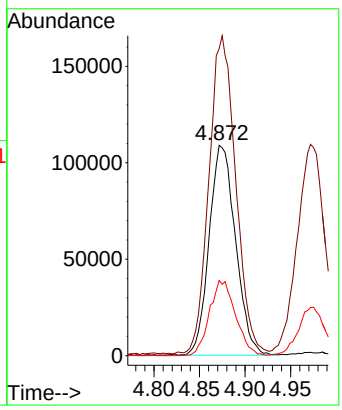


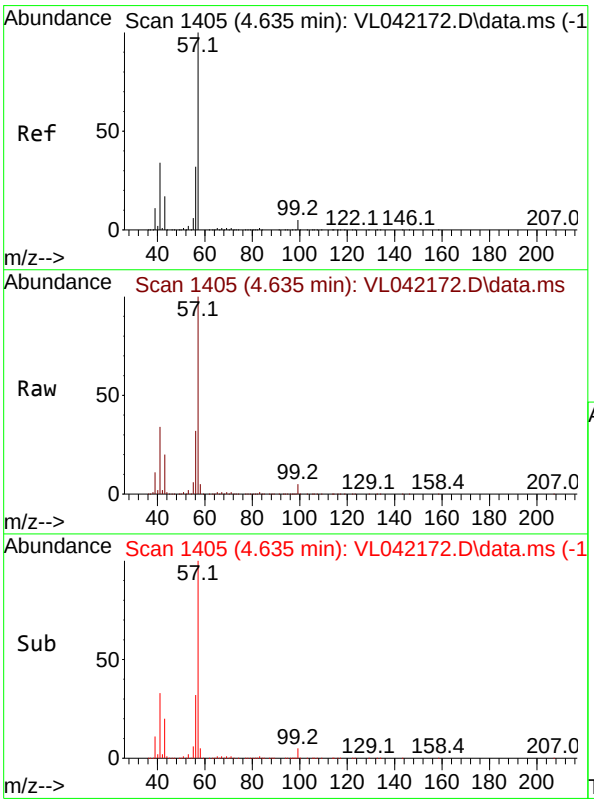
#43
Methyl Methacrylate
Concen: 9.618 ppbv
RT: 4.872 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 69 Resp: 219399

Ion	Ratio	Lower	Upper
69	100		
41	154.7	123.8	185.6
100	35.5	28.4	42.6

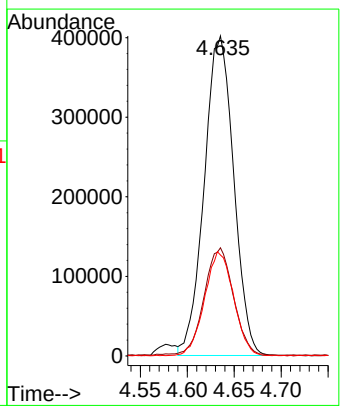


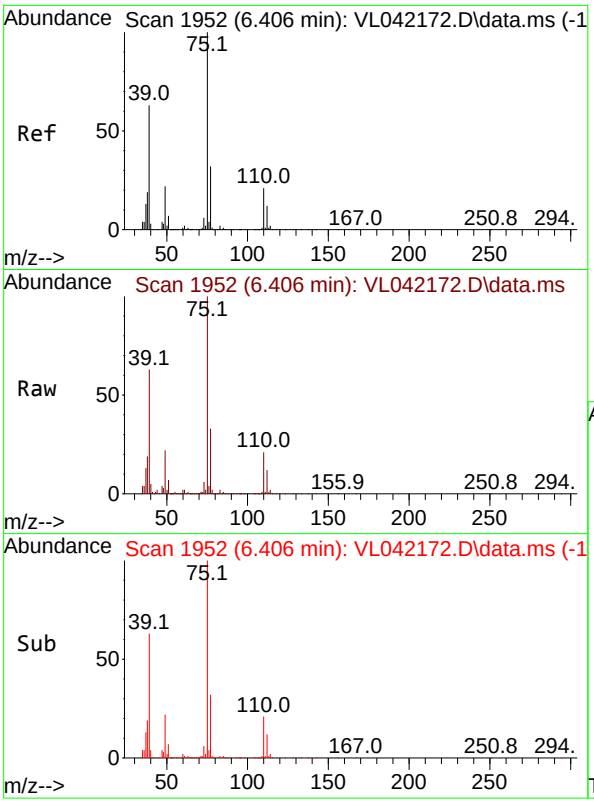


#44
2,2,4-Trimethylpentane
Concen: 9.600 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 876649

Ion	Ratio	Lower	Upper
57	100		
41	33.5	26.8	40.2
56	32.0	25.6	38.4



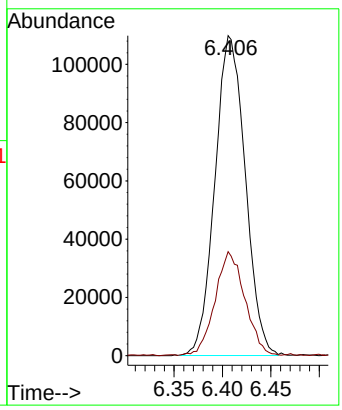


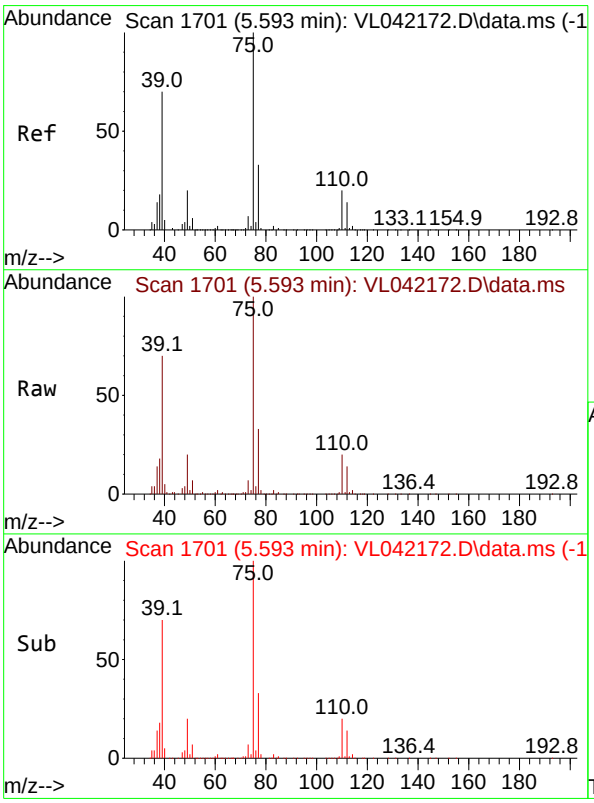
#45
t-1,3-Dichloropropene
Concen: 9.746 ppbv
RT: 6.406 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 75 Resp: 239180

Ion	Ratio	Lower	Upper
75	100		
77	32.5	26.0	39.0

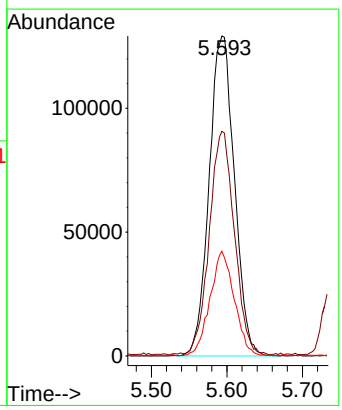


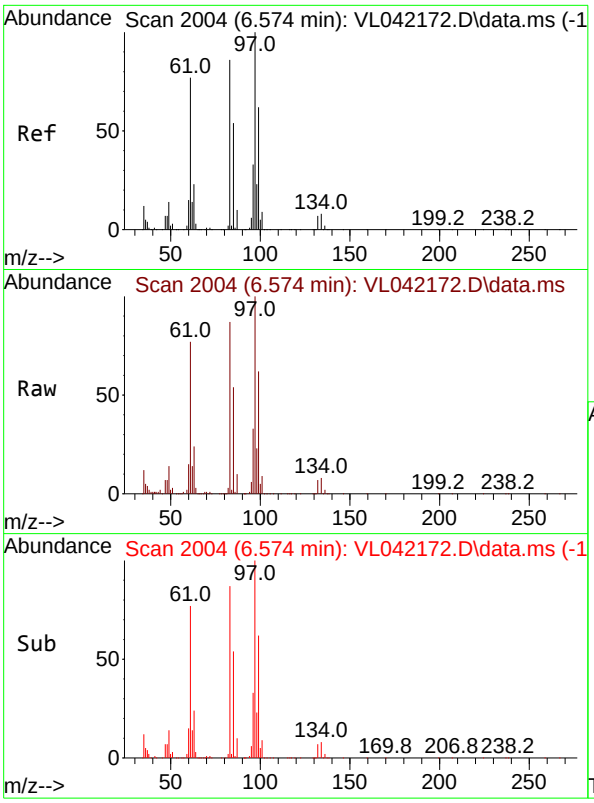


#46
cis-1,3-Dichloropropene
Concen: 9.973 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 75 Resp: 300021

Ion	Ratio	Lower	Upper
75	100		
39	69.7	55.8	83.6
77	32.5	26.0	39.0



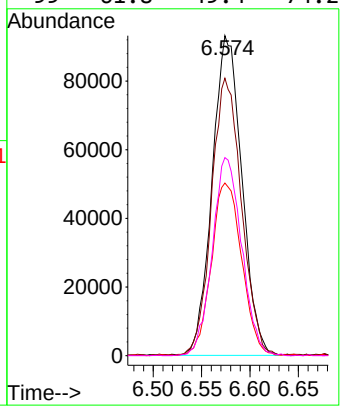


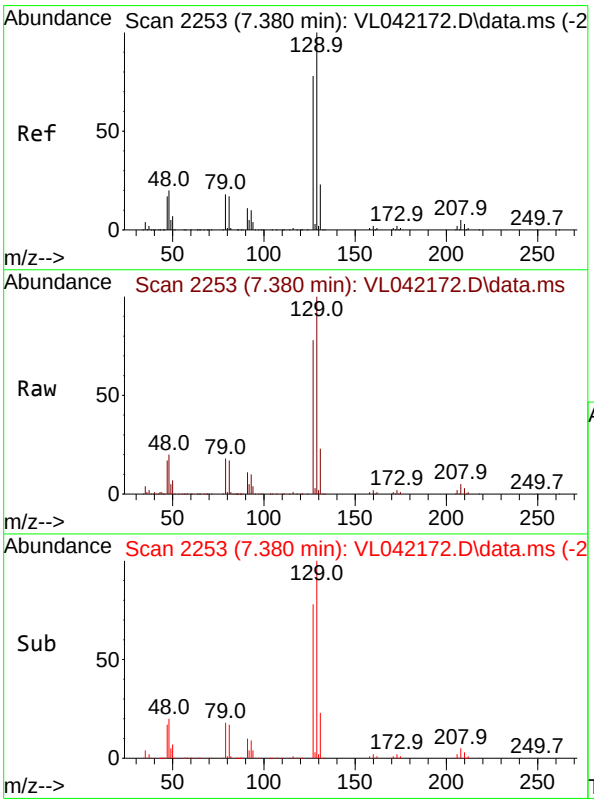
#47
1,1,2-Trichloroethane
Concen: 9.526 ppbv
RT: 6.574 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 97 Resp: 198176

Ion	Ratio	Lower	Upper
97	100		
83	86.5	69.2	103.8
85	53.9	43.1	64.7
99	61.8	49.4	74.2

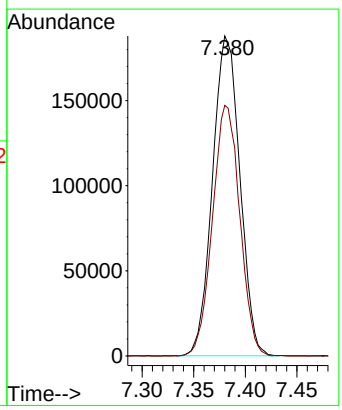


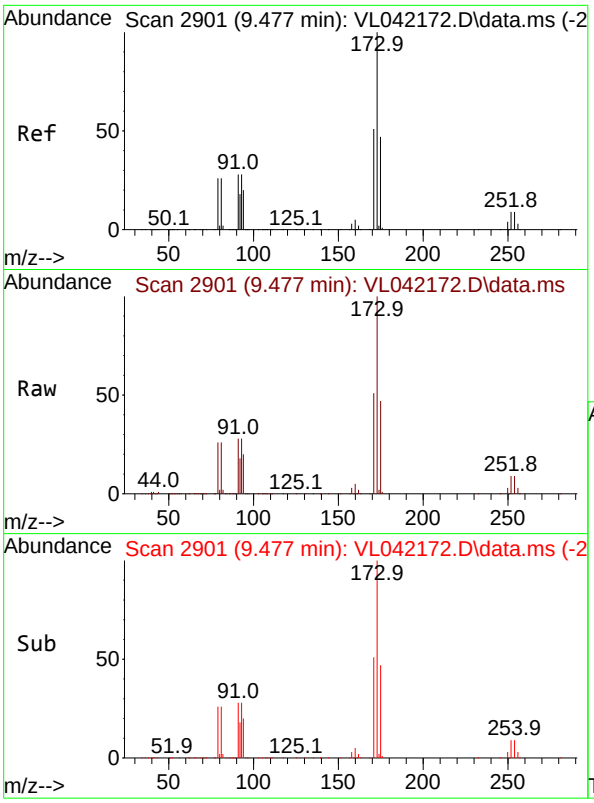


#48
Dibromochloromethane
Concen: 9.828 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:129 Resp: 346499

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2



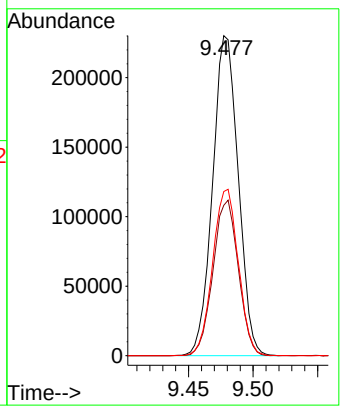


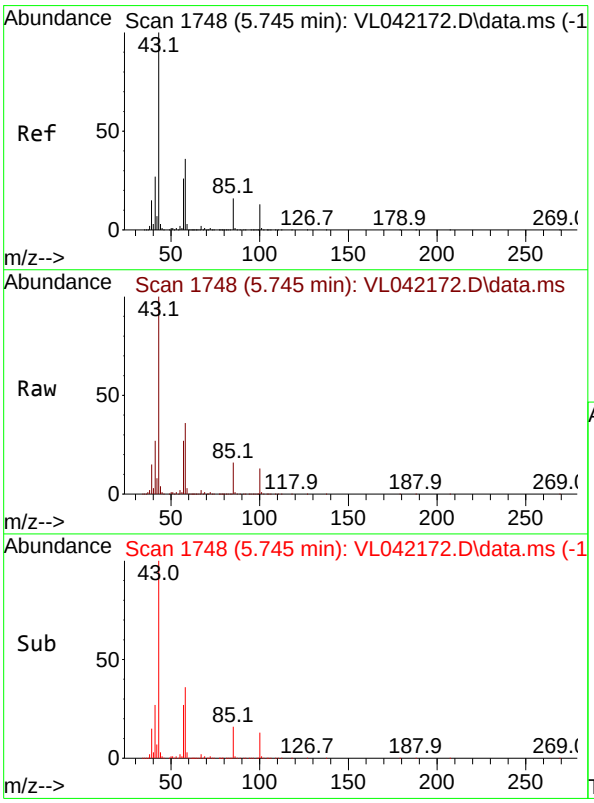
#49
Bromoform
Concen: 10.021 ppbv
RT: 9.477 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:173 Resp: 317189

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.6	57.8
171	52.2	41.8	62.6

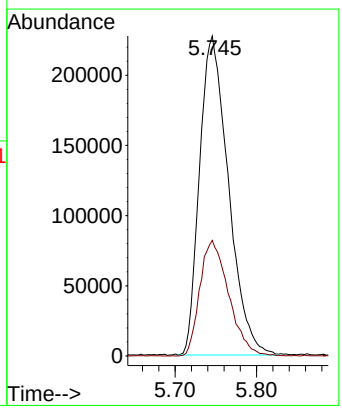


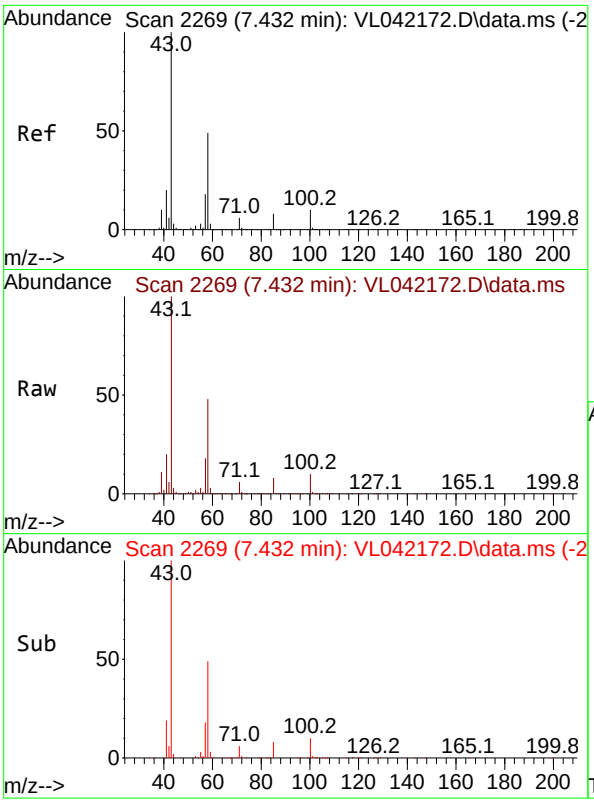


#50
4-Methyl-2-Pentanone
Concen: 8.934 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 559800

Ion	Ratio	Lower	Upper
43	100		
58	36.3	29.0	43.6



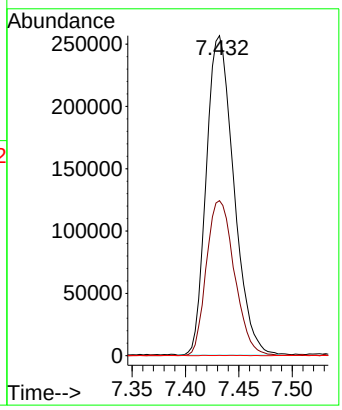


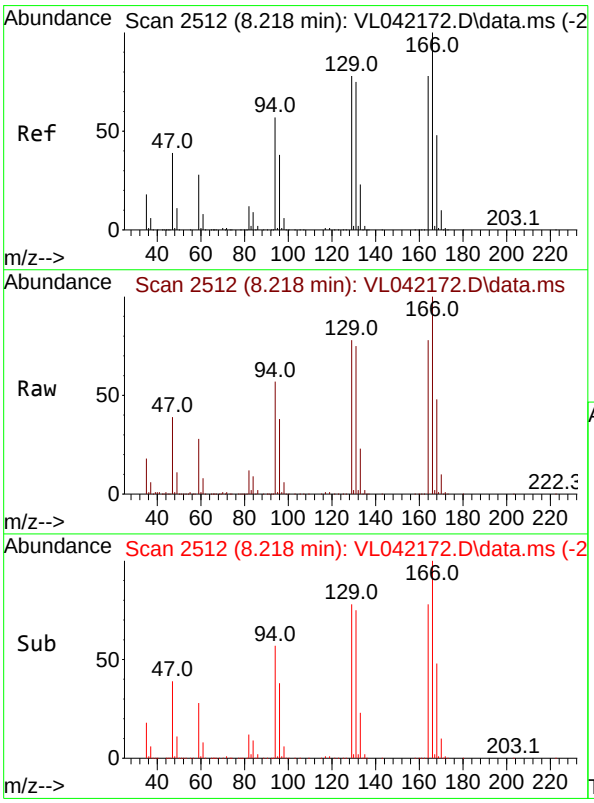
#51
2-Hexanone
Concen: 8.848 ppbv
RT: 7.432 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 460013

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

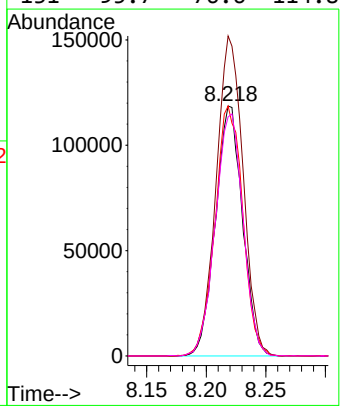


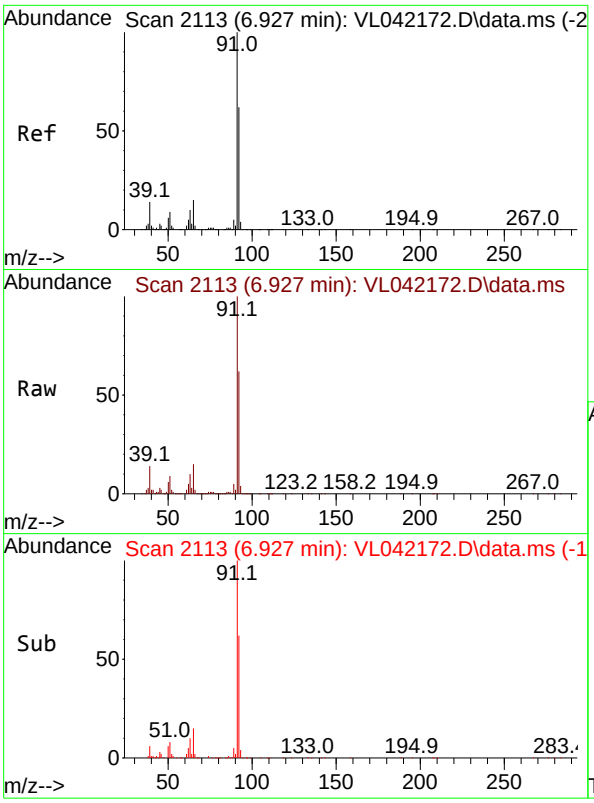


#52
Tetrachloroethene
Concen: 8.722 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:164 Resp: 186912

Ion	Ratio	Lower	Upper
164	100		
166	128.1	102.5	153.7
129	99.8	79.8	119.8
131	95.7	76.6	114.8



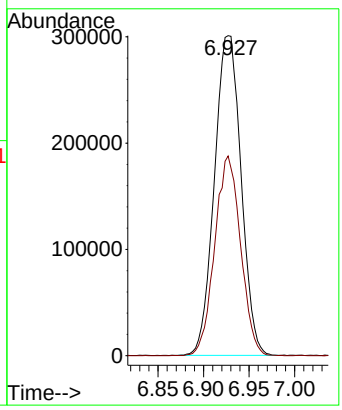


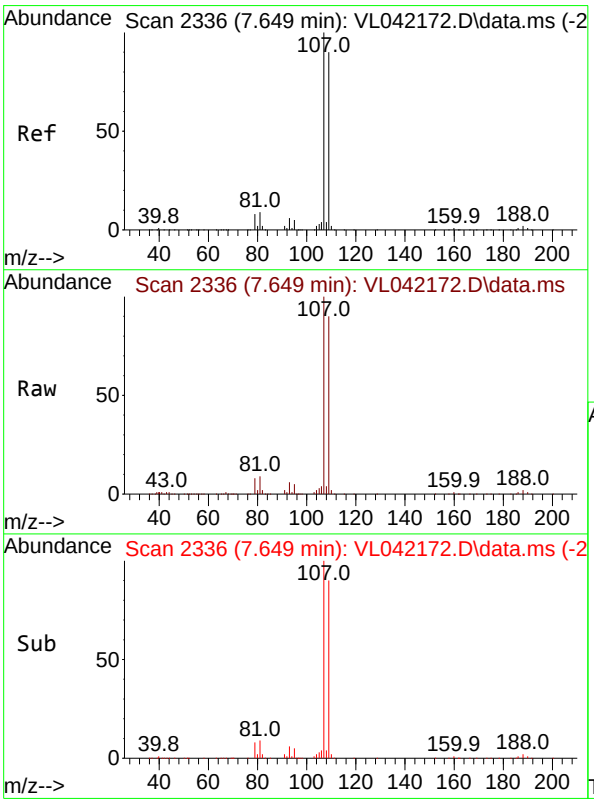
#53
Toluene
Concen: 9.576 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 613378

Ion	Ratio	Lower	Upper
91	100		
92	60.5	48.4	72.6

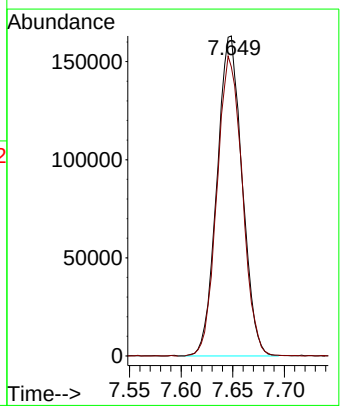


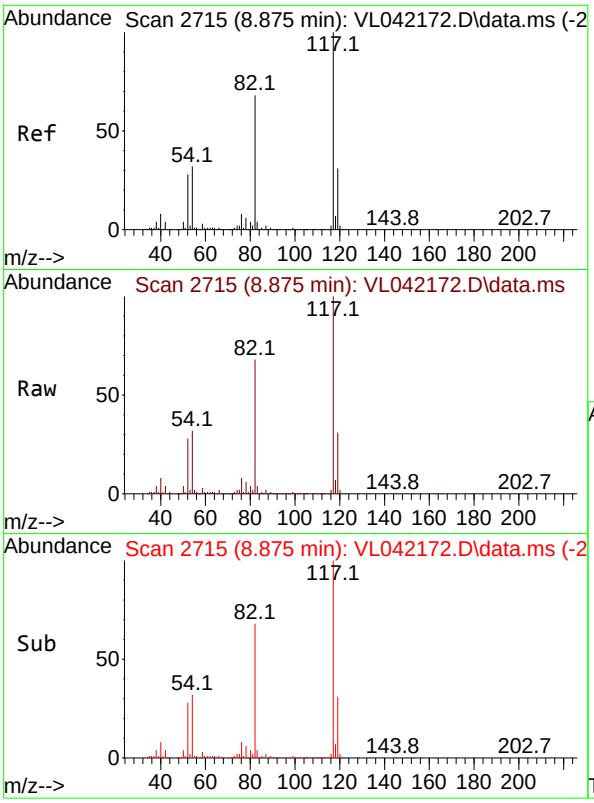


#54
1,2-Dibromoethane
Concen: 9.536 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:107 Resp: 276797

Ion	Ratio	Lower	Upper
107	100		
109	90.3	72.2	108.4



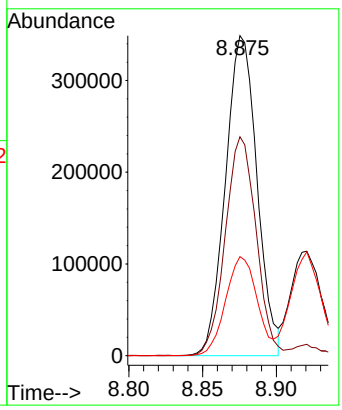


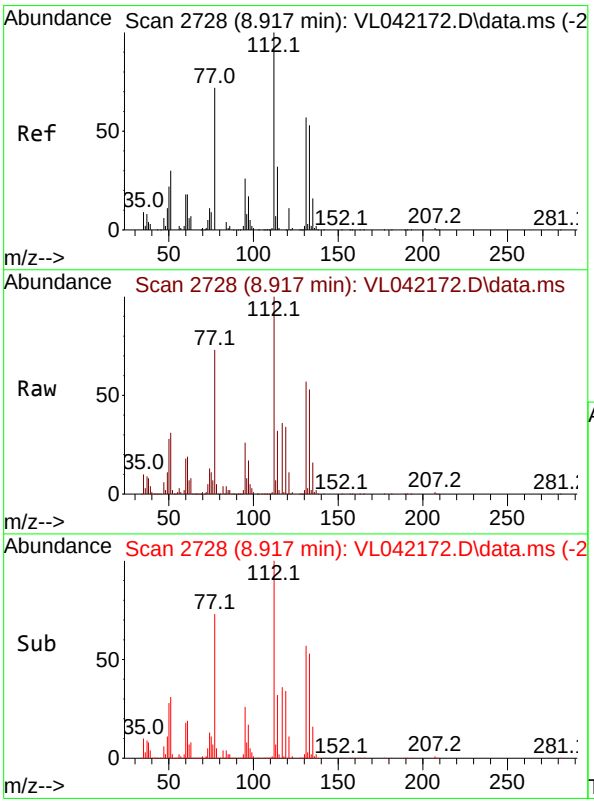
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 519536

Ion	Ratio	Lower	Upper
117	100		
82	69.7	55.8	83.6
119	31.9	25.5	38.3

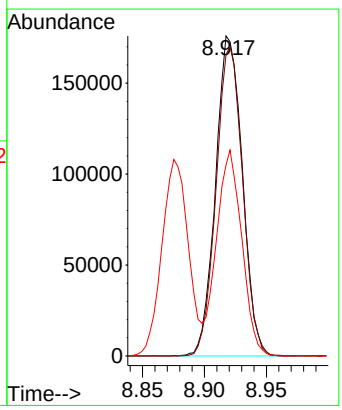


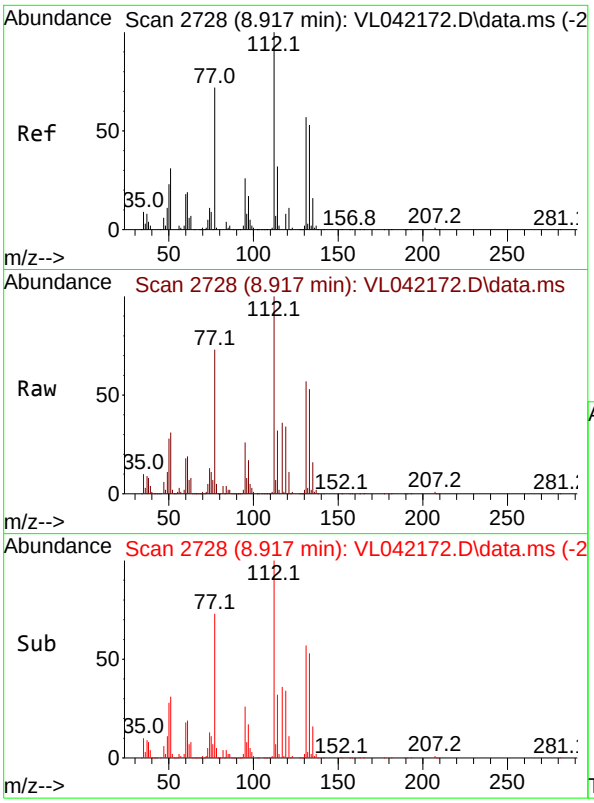


#56
1,1,1,2-Tetrachloroethane
Concen: 9.268 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:131 Resp: 265037

Ion	Ratio	Lower	Upper
131	100		
133	95.7	76.6	114.8
119	62.2	49.8	74.6



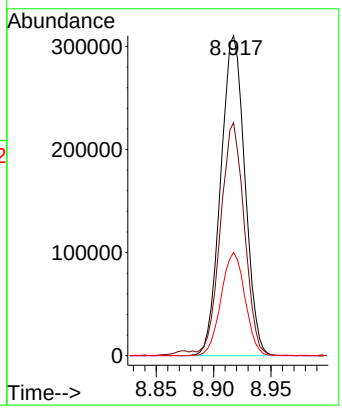


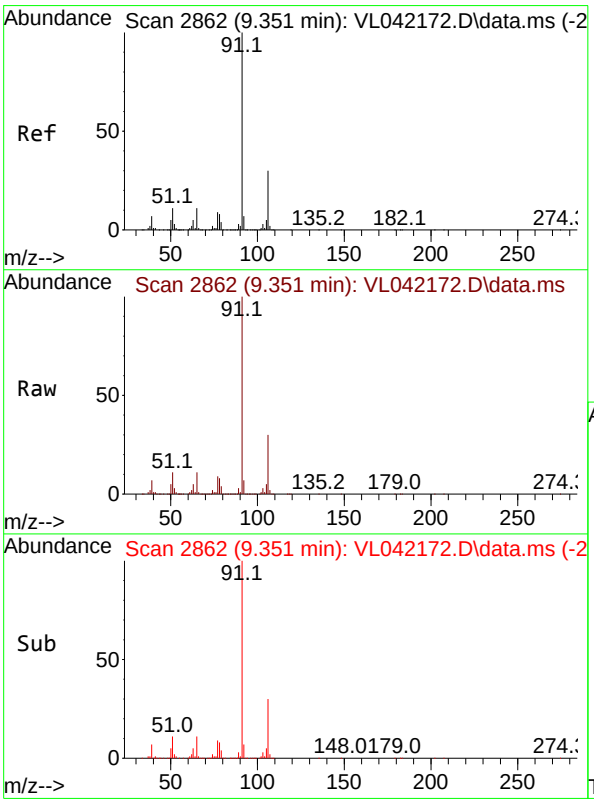
#57
Chlorobenzene
Concen: 9.223 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:112 Resp: 454511

Ion	Ratio	Lower	Upper
112	100		
77	72.7	58.2	87.2
114	32.3	29.1	35.5

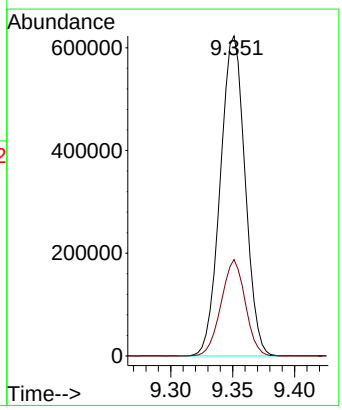


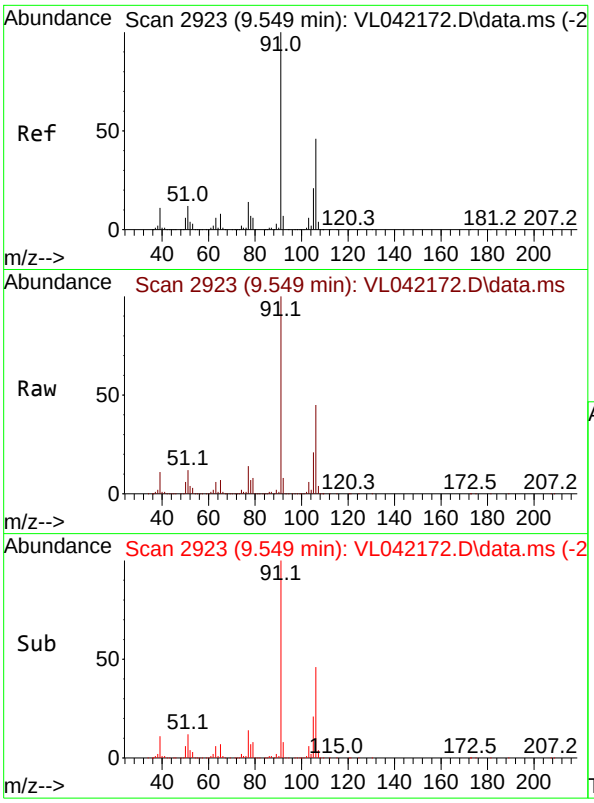


#58
Ethyl Benzene
Concen: 9.406 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 868003

Ion	Ratio	Lower	Upper
91	100		
106	30.2	24.2	36.2



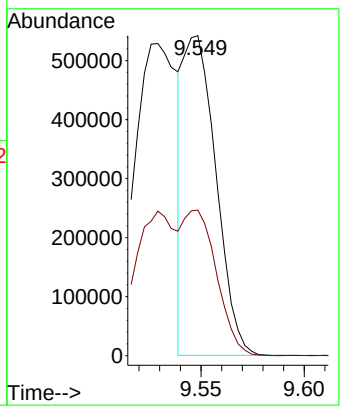


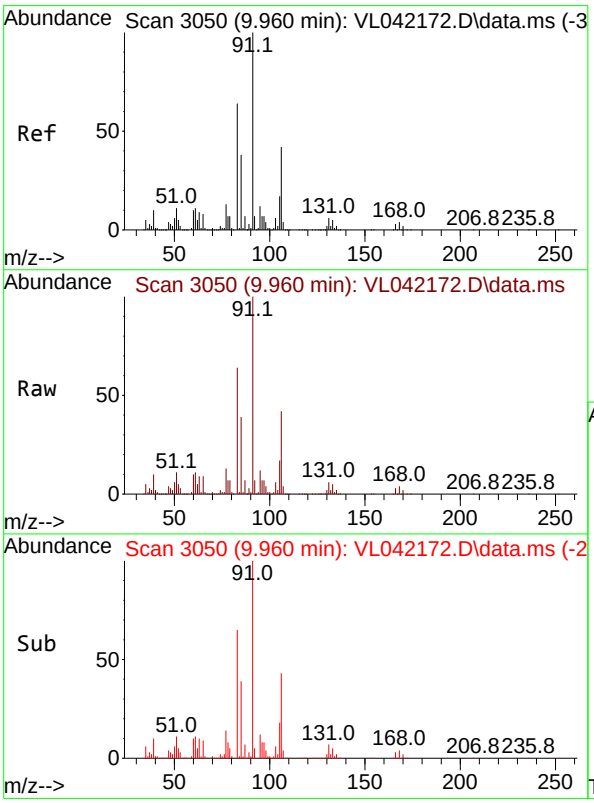
#59
m/p-Xylene
Concen: 8.071 ppbv
RT: 9.549 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 595445

Ion	Ratio	Lower	Upper
91	100		
106	105.0	36.4	54.6#

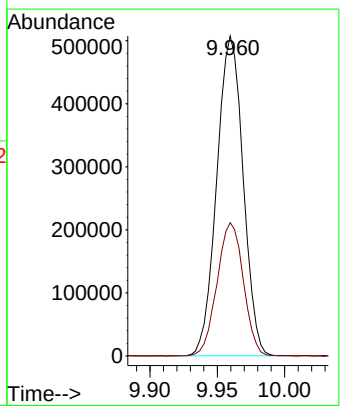


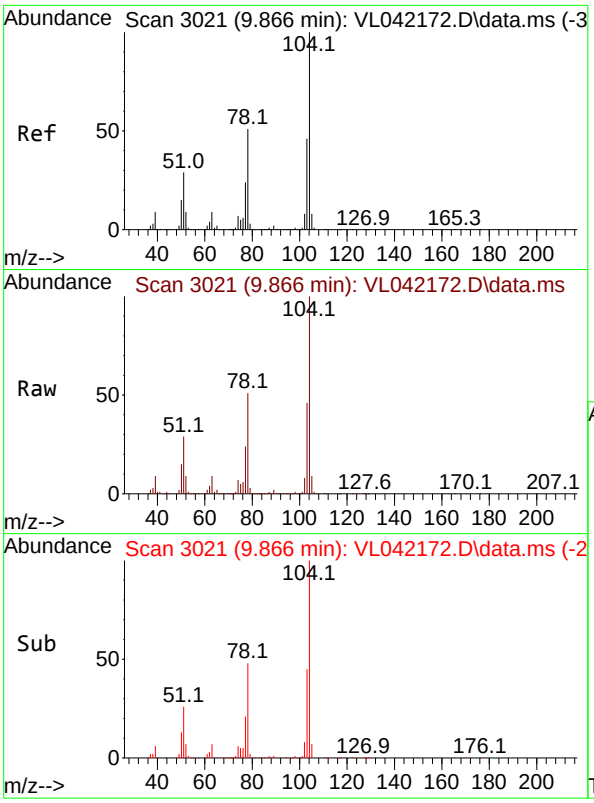


#60
o-Xylene
Concen: 9.340 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 689933

Ion	Ratio	Lower	Upper
91	100		
106	41.7	20.8	62.5



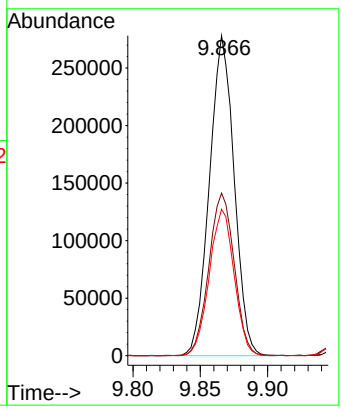


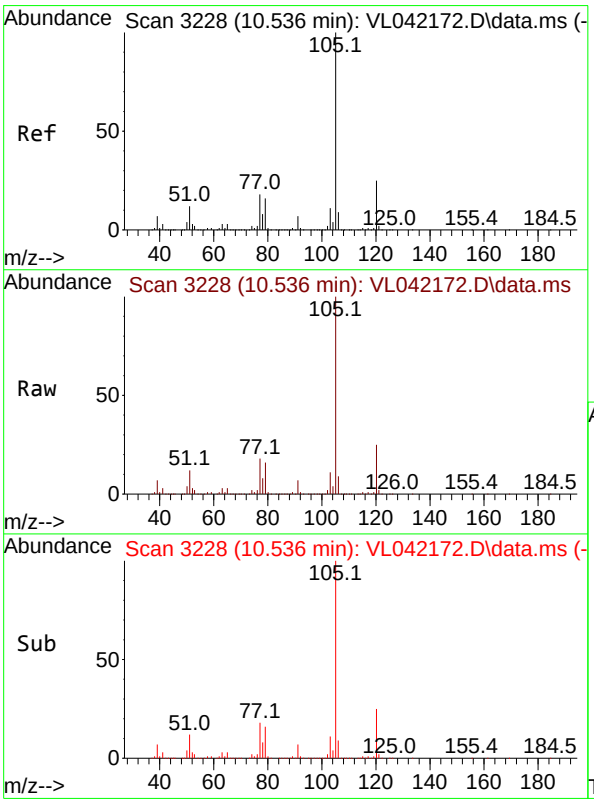
#61
Styrene
Concen: 9.706 ppbv
RT: 9.866 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:104 Resp: 354697

Ion	Ratio	Lower	Upper
104	100		
78	52.2	41.8	62.6
103	46.2	37.0	55.4

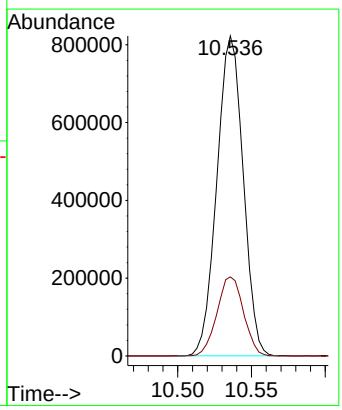


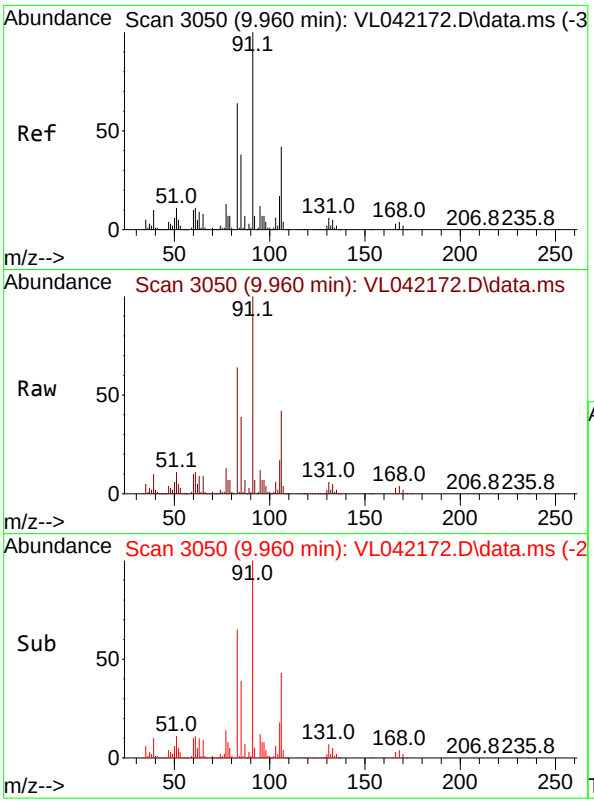


#62
Isopropylbenzene
Concen: 9.227 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 1019255

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9



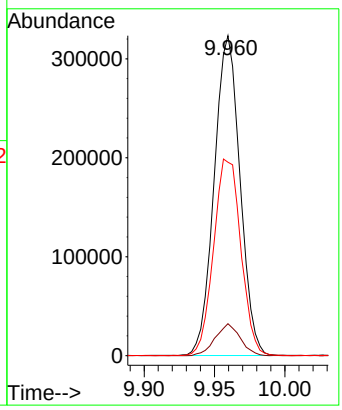


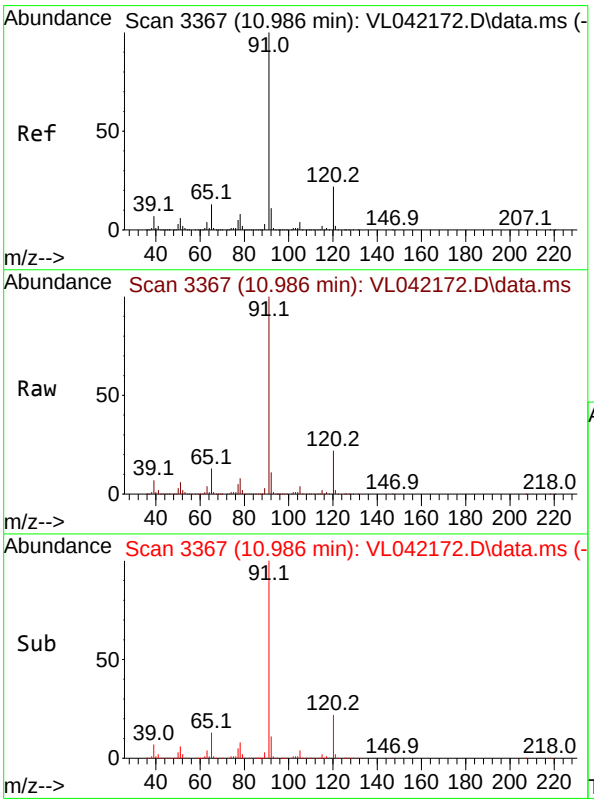
#63
1,1,2,2-Tetrachloroethane
Concen: 9.210 ppbv
RT: 9.960 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 413392

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	65.0	32.5	97.5

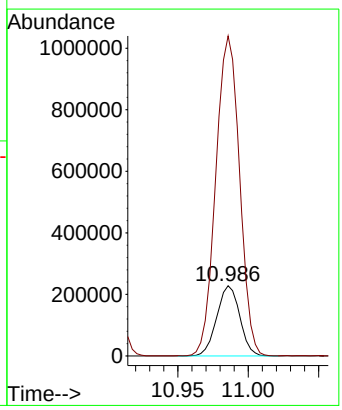


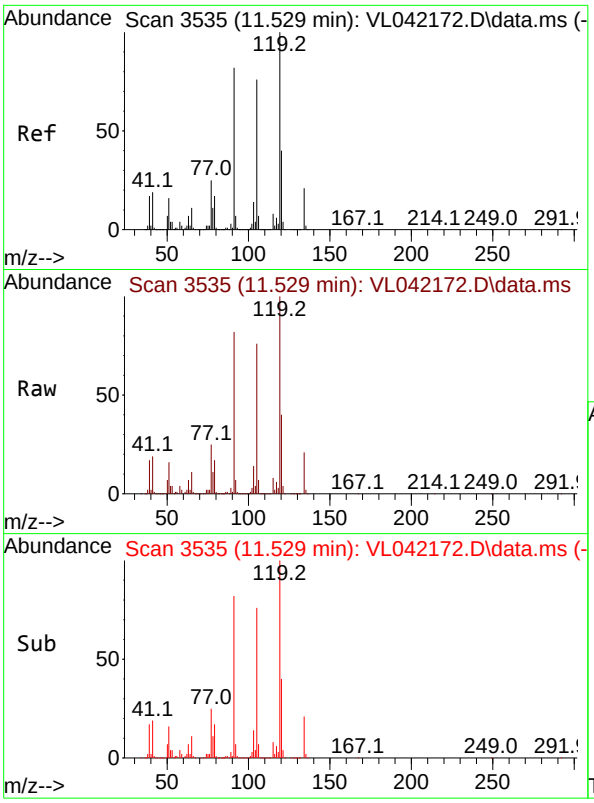


#64
n-propylbenzene
Concen: 9.122 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:120 Resp: 259405

Ion	Ratio	Lower	Upper
120	100		
91	471.1	376.9	565.3



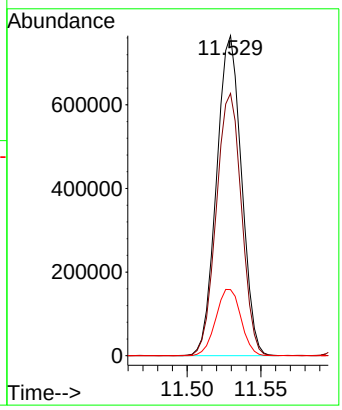


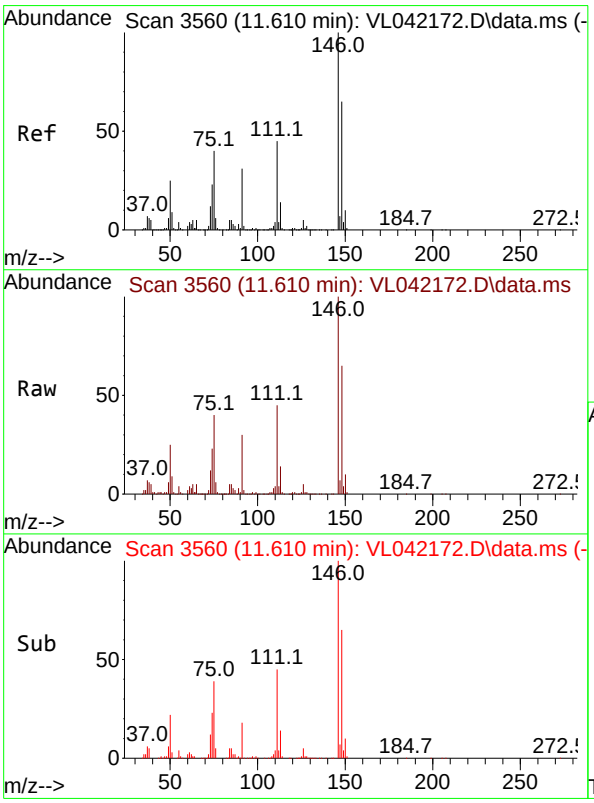
#65
tert-Butylbenzene
Concen: 8.828 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 901951

Ion	Ratio	Lower	Upper
119	100		
91	82.5	66.0	99.0
134	20.9	16.7	25.1

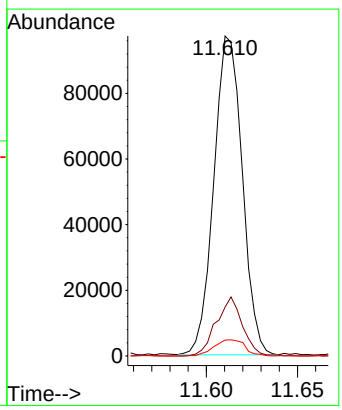


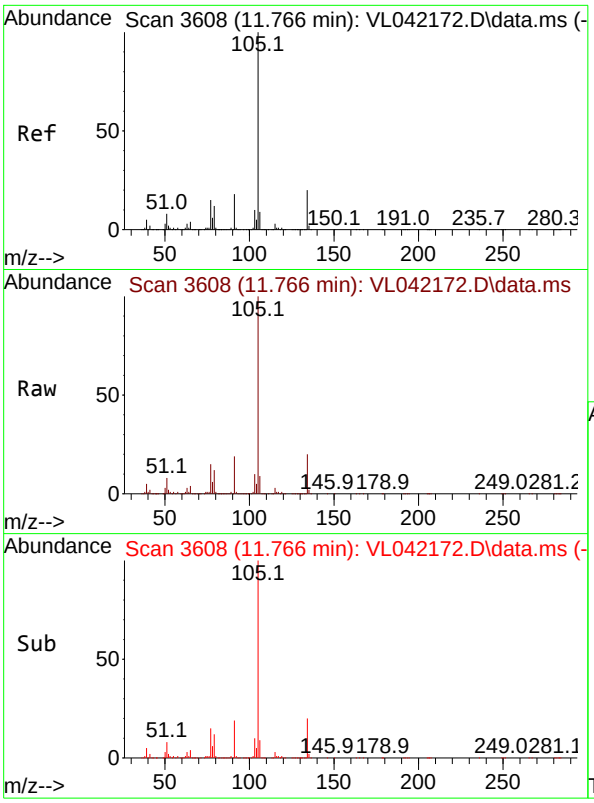


#66
Benzyl Chloride
Concen: 9.724 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 105411

Ion	Ratio	Lower	Upper
91	100		
126	17.2	13.8	20.6
128	5.6	4.5	6.7



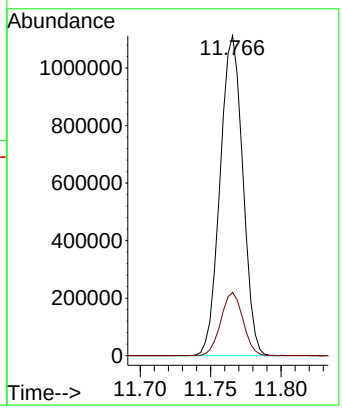


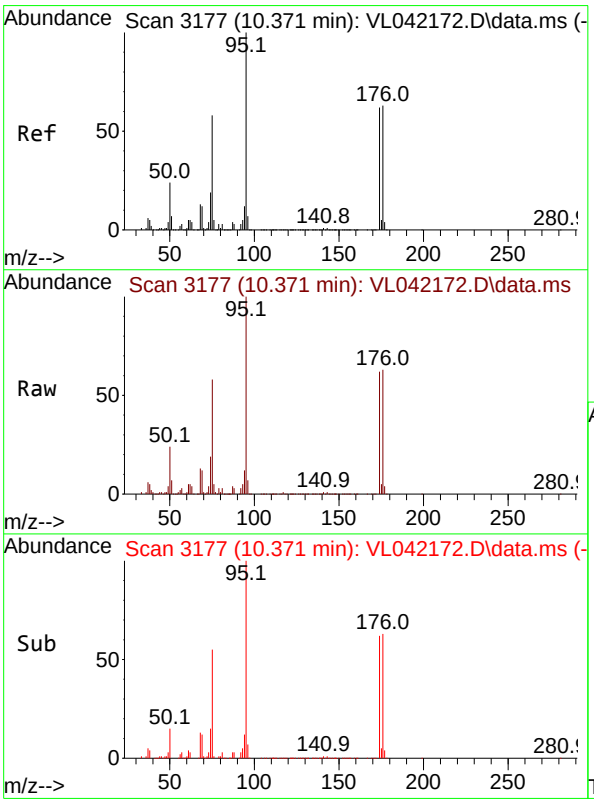
#67
sec-Butylbenzene
Concen: 8.796 ppbv
RT: 11.766 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 1249106

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3

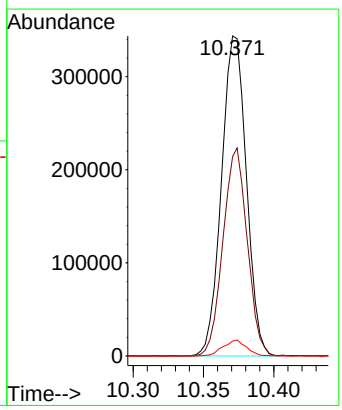


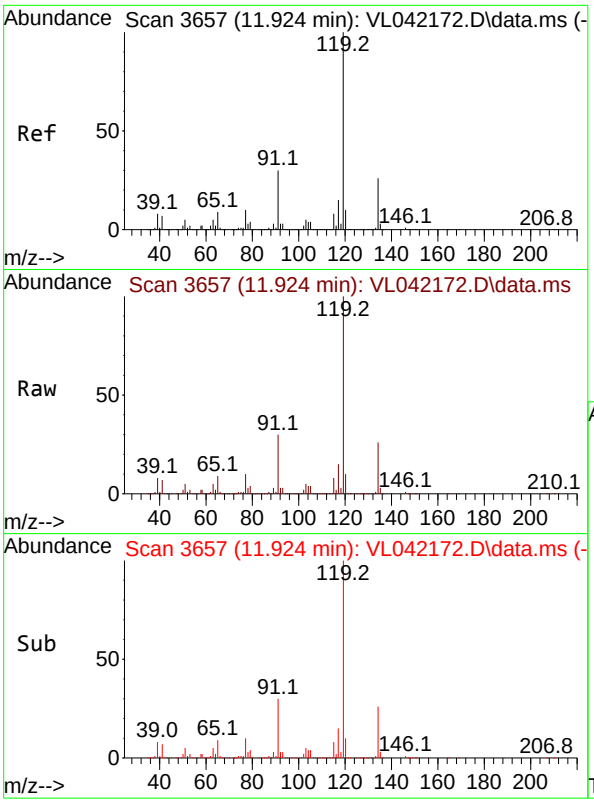


#68
1-Bromo-4-Fluorobenzene
Concen: 9.901 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 95 Resp: 422410

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.7	3.8	5.6



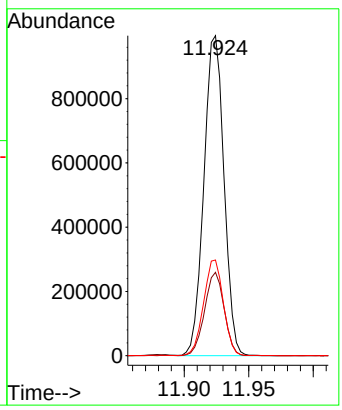


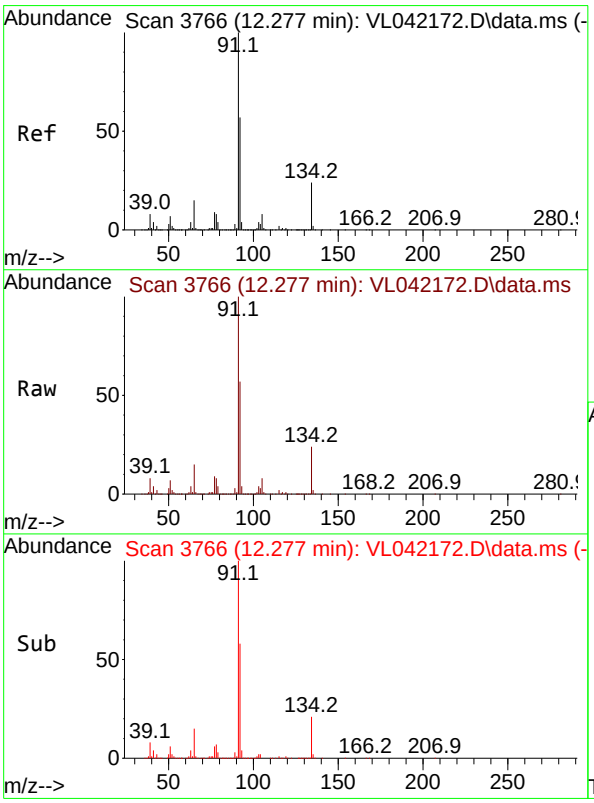
#69
p-Isopropyltoluene
Concen: 8.830 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 1079675

Ion	Ratio	Lower	Upper
119	100		
134	25.5	20.4	30.6
91	29.6	23.7	35.5

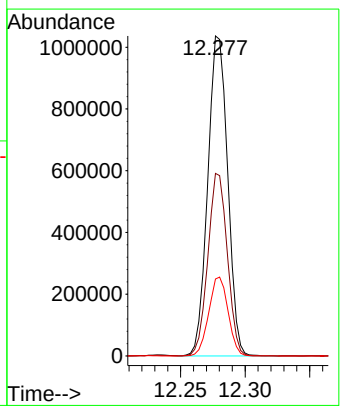


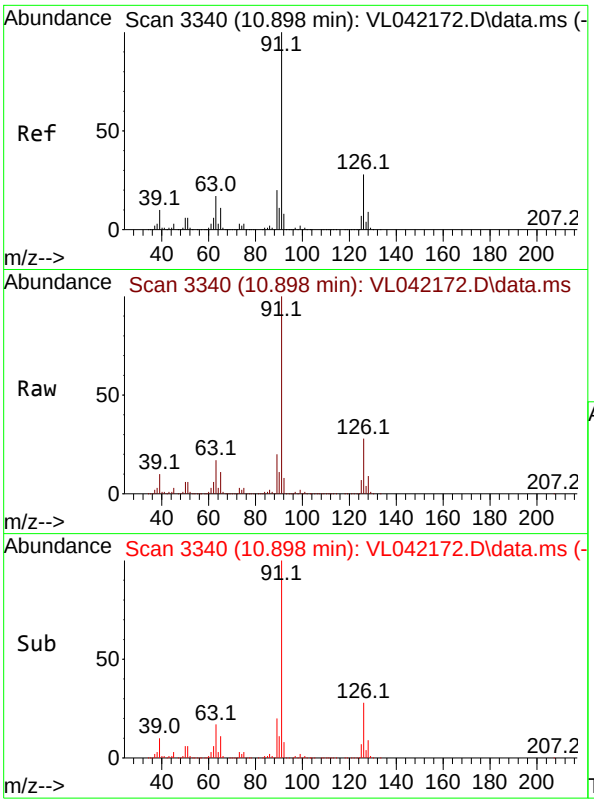


#70
n-Butylbenzene
Concen: 8.879 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 1110351

Ion	Ratio	Lower	Upper
91	100		
92	56.1	44.9	67.3
134	24.0	19.2	28.8



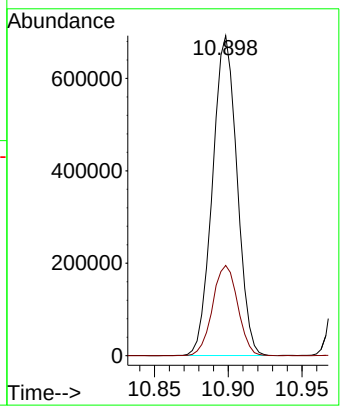


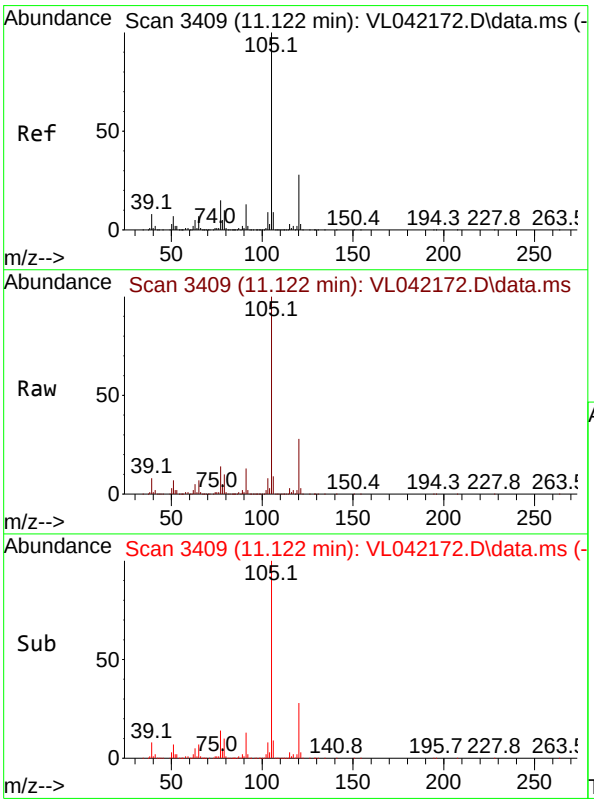
#71
2-Chlorotoluene
Concen: 9.320 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 799102

Ion	Ratio	Lower	Upper
91	100		
126	29.0	11.6	46.4

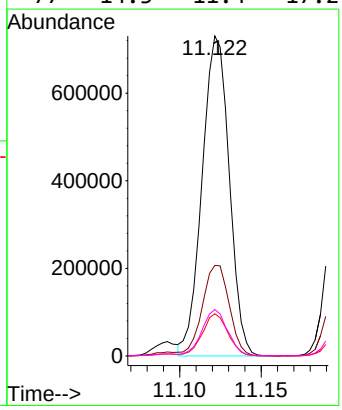


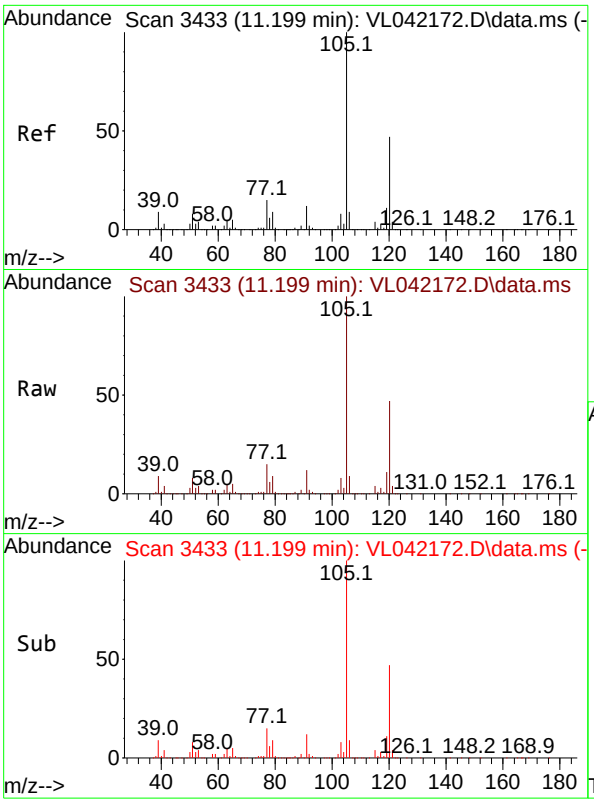


#72
4-Ethyltoluene
Concen: 9.200 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 846232

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	12.9	10.3	15.5
77	14.3	11.4	17.2



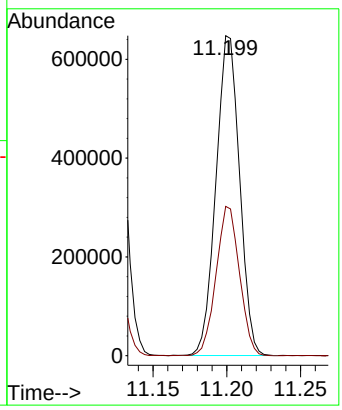


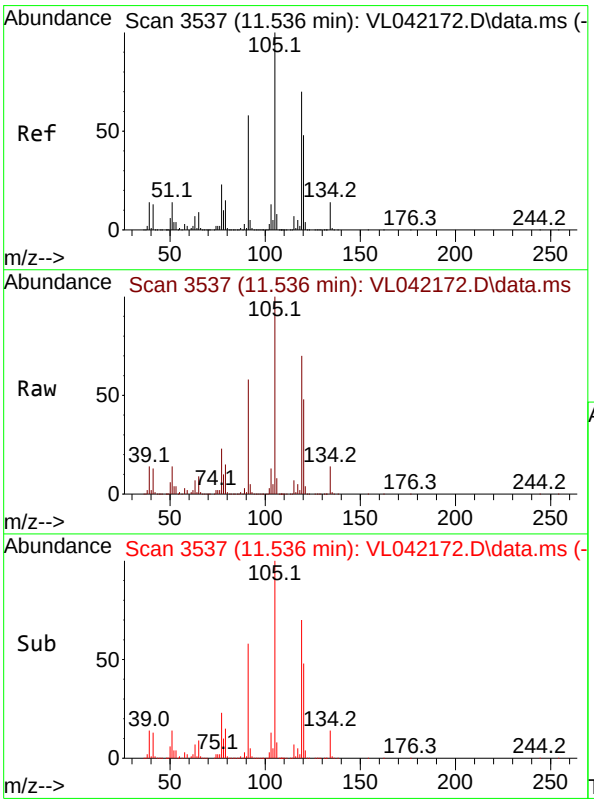
#73
1,3,5-Trimethylbenzene
Concen: 8.970 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 720566

Ion	Ratio	Lower	Upper
105	100		
120	46.7	37.4	56.0

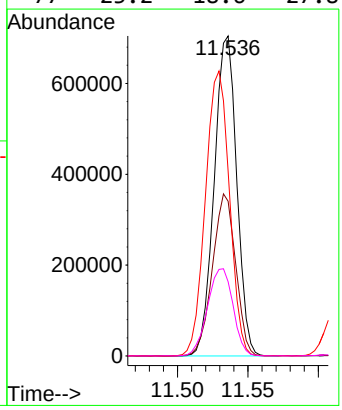


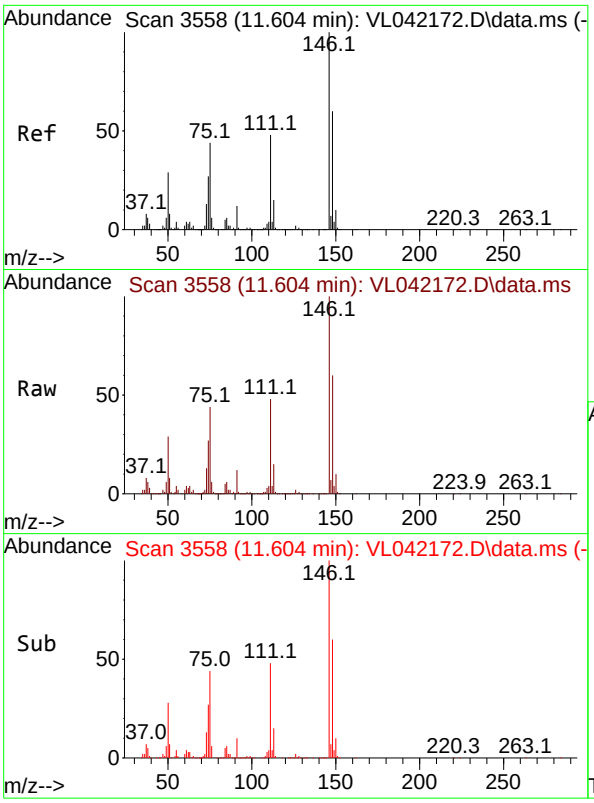


#74
1,2,4-Trimethylbenzene
Concen: 8.480 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 784745

Ion	Ratio	Lower	Upper
105	100		
120	48.3	38.6	58.0
91	57.7	46.2	69.2
77	23.2	18.6	27.8



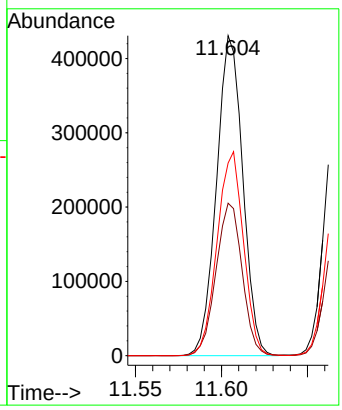


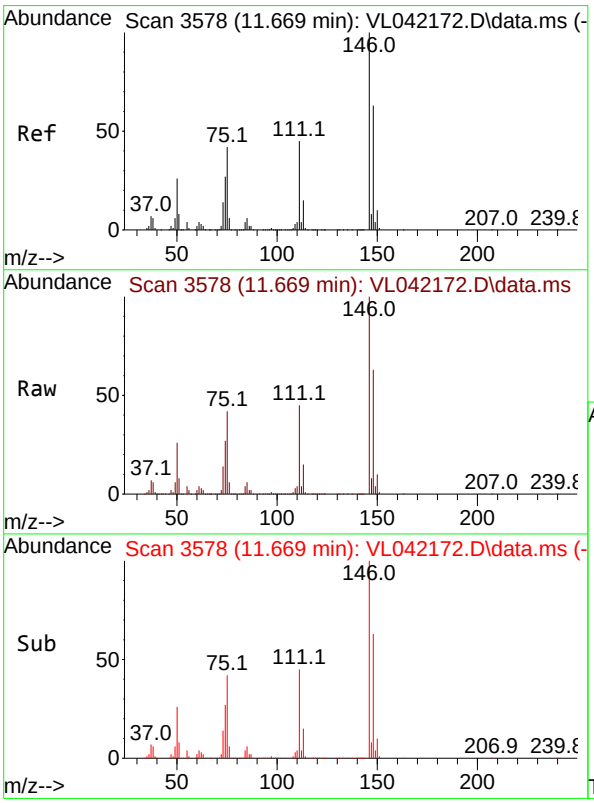
#75
1,3-Dichlorobenzene
Concen: 9.028 ppbv
RT: 11.604 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 458226

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.9	31.9	95.9

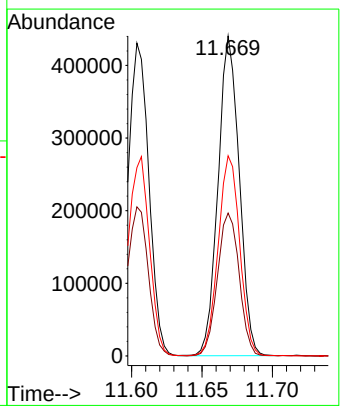


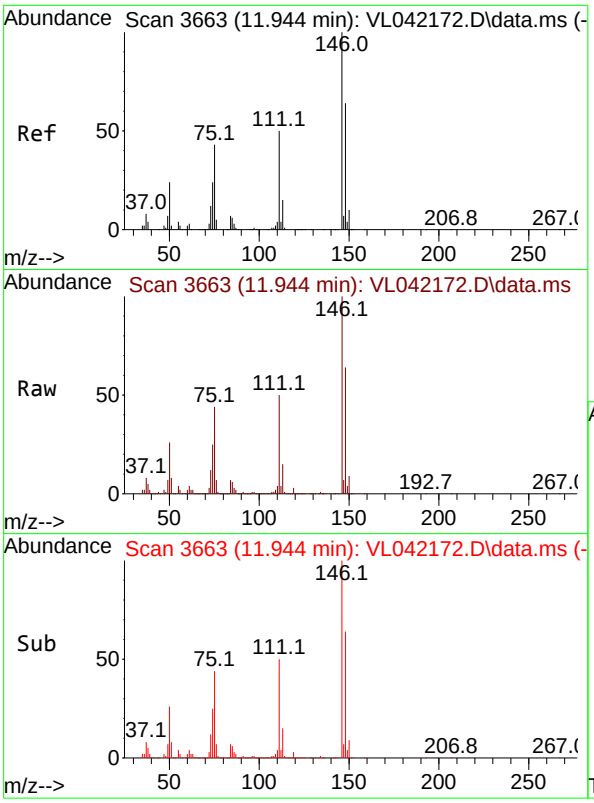


#76
1,4-Dichlorobenzene
Concen: 9.134 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 461371

Ion	Ratio	Lower	Upper
146	100		
111	46.0	23.0	69.0
148	63.8	31.9	95.7



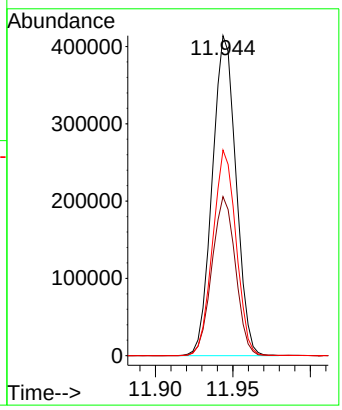


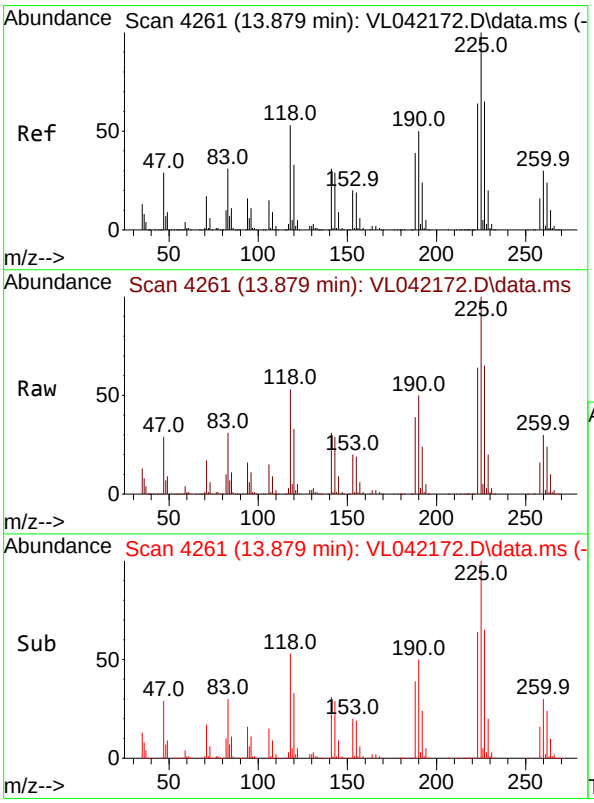
#77
1,2-Dichlorobenzene
Concen: 8.933 ppbv
RT: 11.944 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 441473

Ion	Ratio	Lower	Upper
146	100		
111	49.5	24.8	74.3
148	63.2	31.6	94.8

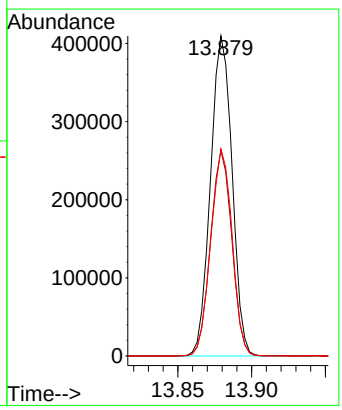


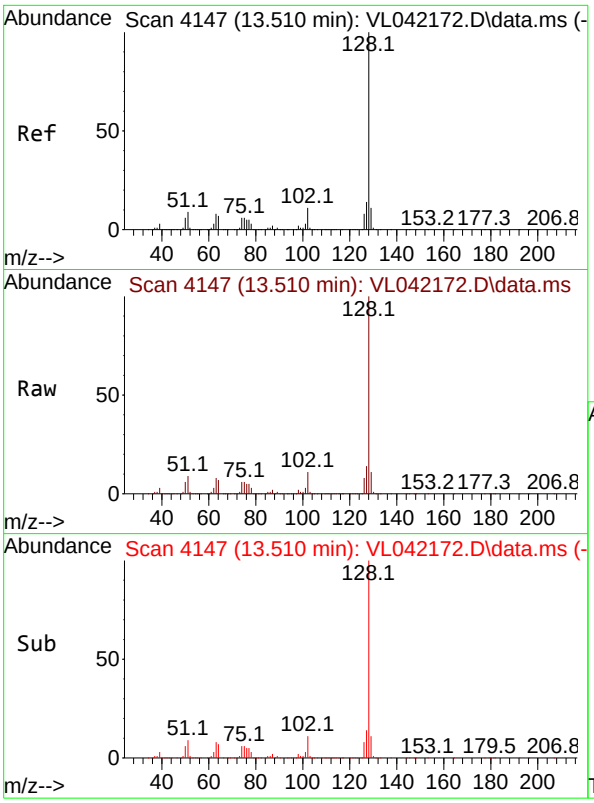


#78
Hexachloro-1,3-Butadiene
Concen: 8.284 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:225 Resp: 416735

Ion	Ratio	Lower	Upper
225	100		
223	63.3	50.6	76.0
227	64.0	51.2	76.8



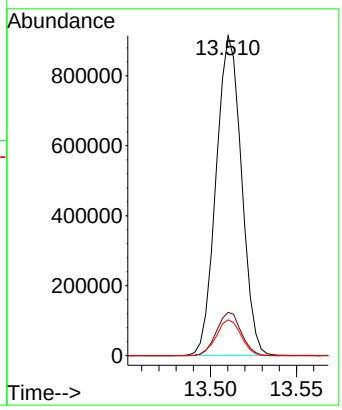


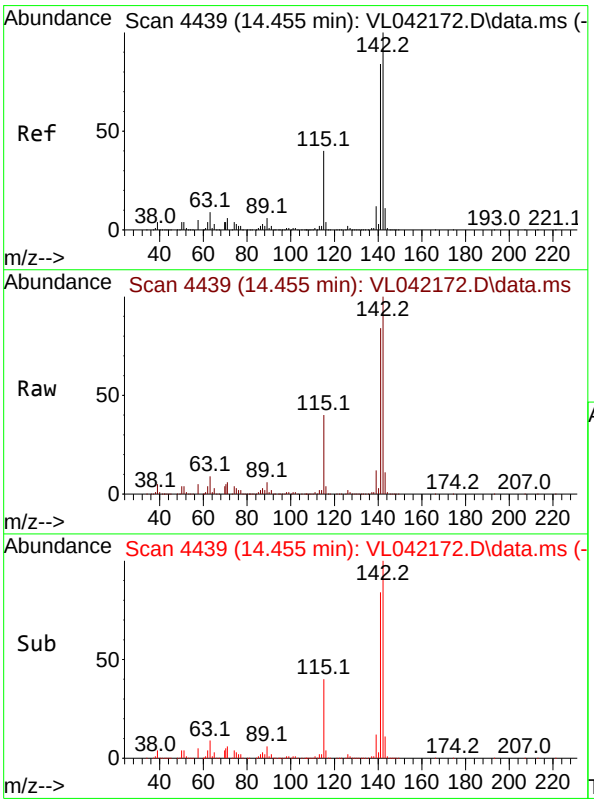
#79
Naphthalene
Concen: 9.271 ppbv
RT: 13.510 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:128 Resp: 938470

Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.8	16.2
129	11.2	9.0	13.4

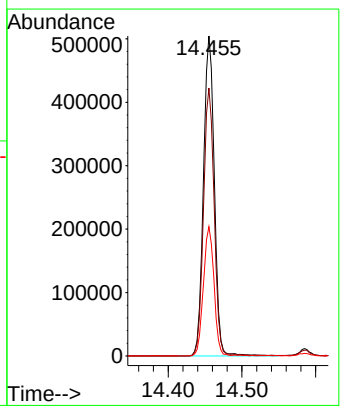


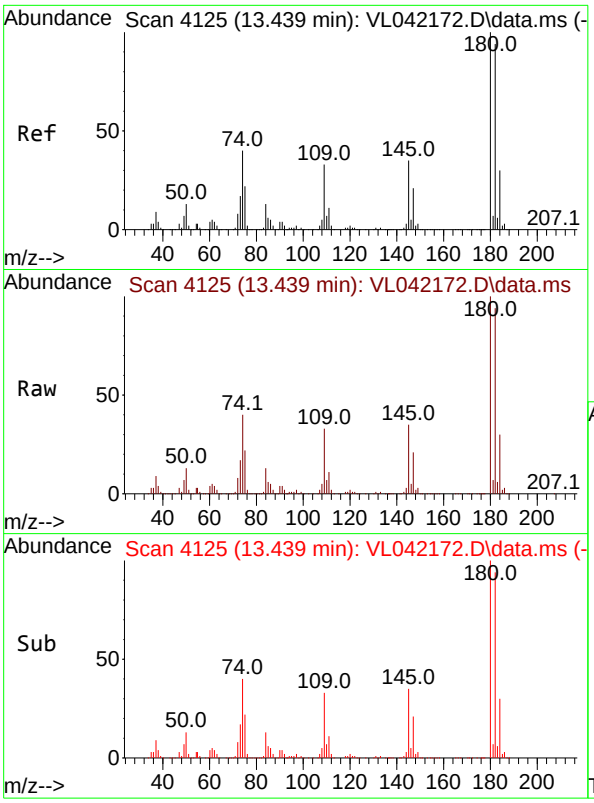


#80
Naphthalene,2-methyl-
Concen: 10.436 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:142 Resp: 514394

Ion	Ratio	Lower	Upper
142	100		
141	82.9	66.3	99.5
115	39.5	31.6	47.4



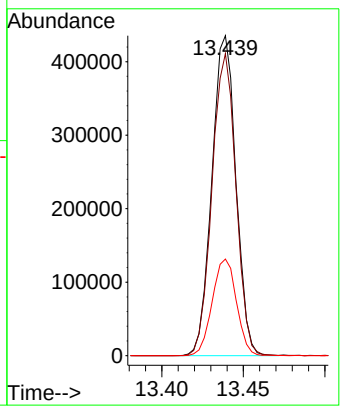


#81
1,2,4-Trichlorobenzene
Concen: 9.561 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:180 Resp: 446420

Ion	Ratio	Lower	Upper
180	100		
182	93.9	75.1	112.7
184	30.5	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	188395	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	546394	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	504538	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	417532	10.077	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	55859	2.008	ppbv		99
3) Chlorodifluoromethane	1.473	51	57045	2.007	ppbv		99
4) Chloromethane	1.531	50	23293	2.049	ppbv		94
5) Vinyl Chloride	1.576	62	21989	1.897	ppbv		99
6) Bromomethane	1.664	94	10027	1.946	ppbv		98
7) Chloroethane	1.703	64	8413	1.844	ppbv		92
8) Dichlorotetrafluoroethane	1.551	85	48008	2.027	ppbv		98
9) Propene	1.483	41	26295	2.054	ppbv		94
10) Heptane	4.972	43	71466	2.063	ppbv		99
11) Trichlorofluoromethane	1.874	101	55754	2.060	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.136	101	44761	2.012	ppbv		98
13) Ethanol	1.719	45	1827	1.822	ppbv	#	49
14) Bromoethene	1.780	108	17323	2.033	ppbv	#	89
15) Acetone	1.832	43	55365	2.101	ppbv		95
16) 1,3-Butadiene	1.606	39	22894	1.932	ppbv		95
17) tert-Butyl alcohol	2.039	59	66174	2.016	ppbv		100
18) 1,1-Dichloroethene	2.030	96	21103	2.029	ppbv		95
19) Isopropyl Alcohol	1.884	45	27804	1.870	ppbv	#	35
20) Methylene Chloride	2.059	84	20518	2.091	ppbv		96
21) Allyl Chloride	2.094	41	38425	2.068	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	23384	1.924	ppbv		92
23) Vinyl Acetate	2.460	43	20736	1.894	ppbv	#	97
24) 1,1-Dichloroethane	2.405	63	44740	2.008	ppbv		99
25) Ethyl Acetate	2.832	43	139516	2.040	ppbv		99
26) Hexane	2.823	57	52095	1.972	ppbv		92
27) Carbon Disulfide	2.146	76	57969	2.047	ppbv	#	76
28) Methyl tert-Butyl Ether	2.437	73	33703	2.049	ppbv		99
29) Chloroform	2.845	83	78043	2.019	ppbv		95
30) Cyclohexane	3.852	84	45641	1.989	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	53713	2.003	ppbv		96
32) 1,1,1-Trichloroethane	3.363	97	81070	1.833	ppbv		99
34) 2-Butanone	2.554	43	84157	2.124	ppbv		99
35) Carbon Tetrachloride	3.758	117	81735	1.944	ppbv		96
36) Benzene	3.651	78	110727	2.044	ppbv		97
37) 1,2-Dichloroethane	3.214	62	61476	1.982	ppbv		97
38) Trichloroethene	4.541	130	43501	1.924	ppbv		97
39) 1,2-Dichloropropane	4.308	63	39912	2.023	ppbv		93
40) 1,4-Dioxane	4.587	88	14008	1.369	ppbv	#	2
41) Tetrahydrofuran	3.056	42	47262	2.097	ppbv		99
42) Bromodichloromethane	4.483	83	87640	2.050	ppbv		99
43) Methyl Methacrylate	4.878	69	44624	1.952	ppbv		97
44) 2,2,4-Trimethylpentane	4.632	57	188282	2.057	ppbv		100
45) t-1,3-Dichloropropene	6.406	75	49461	2.011	ppbv		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

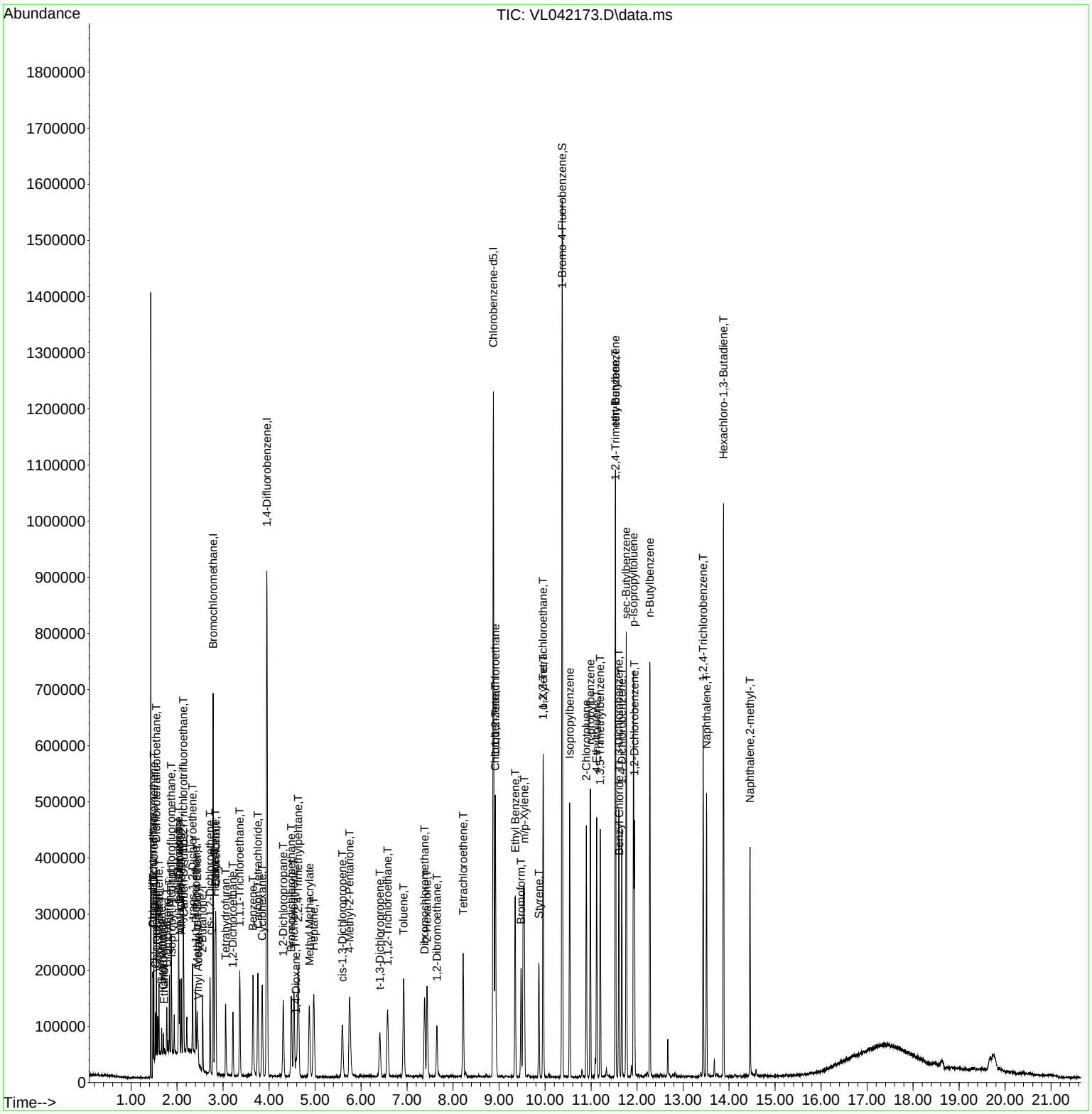
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	61829	2.050	ppbv	#	91
47) 1,1,2-Trichloroethane	6.577	97	41387	1.985	ppbv		95
48) Dibromochloromethane	7.383	129	72441	2.050	ppbv		100
49) Bromoform	9.477	173	65221	2.056	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	132328	2.107	ppbv		99
51) 2-Hexanone	7.435	43	112681	2.162	ppbv	#	99
52) Tetrachloroethene	8.221	164	40558	1.888	ppbv		98
53) Toluene	6.923	91	131314	2.045	ppbv		99
54) 1,2-Dibromoethane	7.648	107	56799	1.952	ppbv		90
56) 1,1,1,2-Tetrachloroethane	8.920	131	58141	2.093	ppbv		97
57) Chlorobenzene	8.914	112	100308	2.096	ppbv	#	94
58) Ethyl Benzene	9.351	91	191114	2.132	ppbv		96
59) m/p-Xylene	9.548	91	167182	2.333	ppbv	#	31
60) o-Xylene	9.959	91	151292	2.109	ppbv		98
61) Styrene	9.865	104	74134	2.089	ppbv		98
62) Isopropylbenzene	10.535	105	228191	2.127	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.956	83	90114	2.067	ppbv		99
64) n-propylbenzene	10.985	120	58105	2.104	ppbv		92
65) tert-Butylbenzene	11.529	119	216336	2.180	ppbv		99
66) Benzyl Chloride	11.610	91	22272	2.116	ppbv		95
67) sec-Butylbenzene	11.762	105	297381	2.156	ppbv		99
69) p-Isopropyltoluene	11.921	119	258357	2.176	ppbv		100
70) n-Butylbenzene	12.277	91	270616	2.228	ppbv		99
71) 2-Chlorotoluene	10.898	91	177487	2.132	ppbv		100
72) 4-Ethyltoluene	11.121	105	194660	2.179	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	169221	2.169	ppbv		96
74) 1,2,4-Trimethylbenzene	11.532	105	198351	2.207	ppbv		96
75) 1,3-Dichlorobenzene	11.604	146	107217	2.175	ppbv		97
76) 1,4-Dichlorobenzene	11.668	146	104925	2.139	ppbv		99
77) 1,2-Dichlorobenzene	11.943	146	102310	2.132	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	109539	2.242	ppbv		99
79) Naphthalene	13.510	128	233451	2.375	ppbv		97
80) Naphthalene,2-methyl-	14.455	142	117313	2.451	ppbv		99
81) 1,2,4-Trichlorobenzene	13.435	180	103765	2.288	ppbv		97

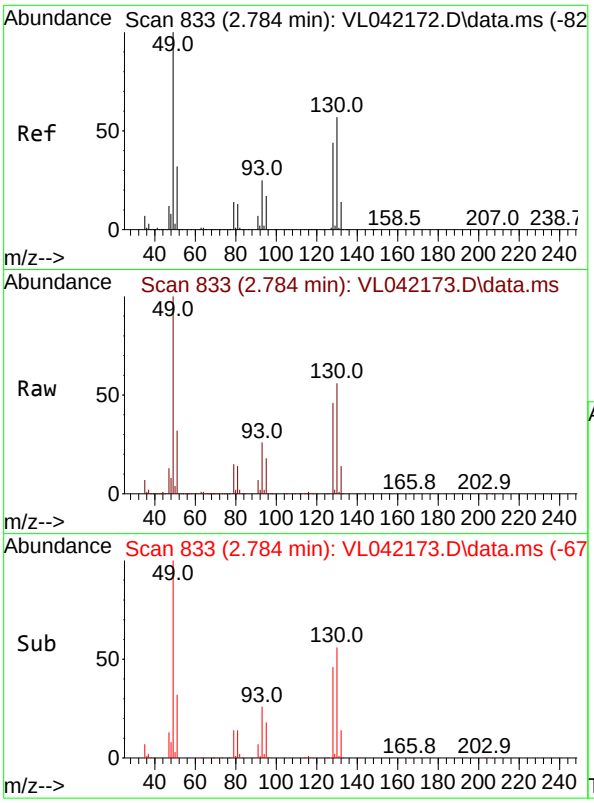
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



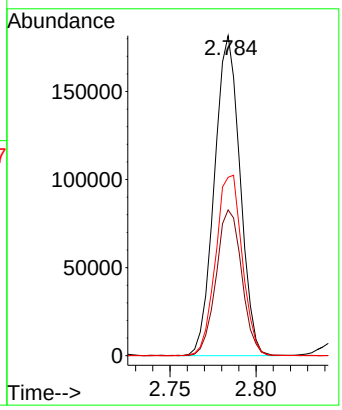


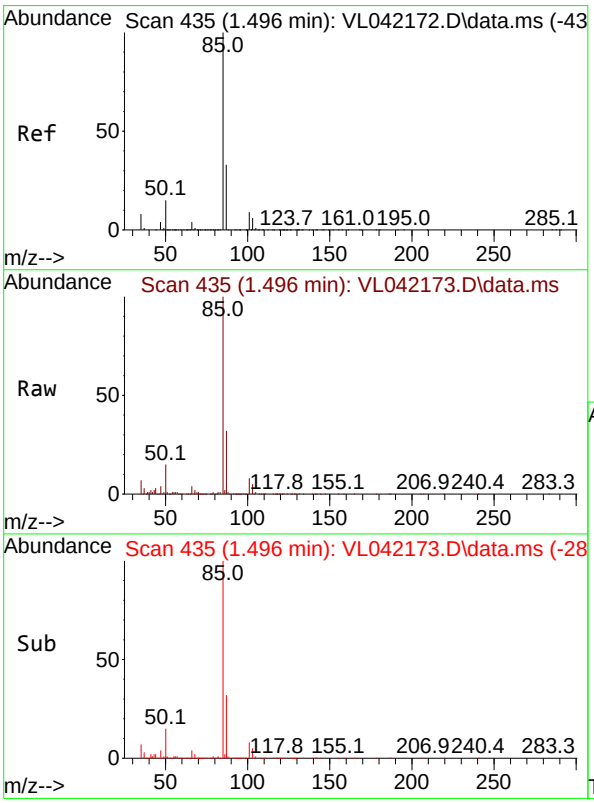
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 49 Resp: 188395

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.5	28.8	86.4

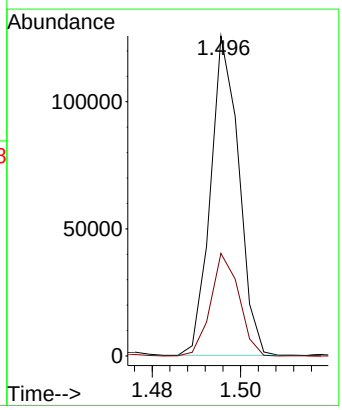


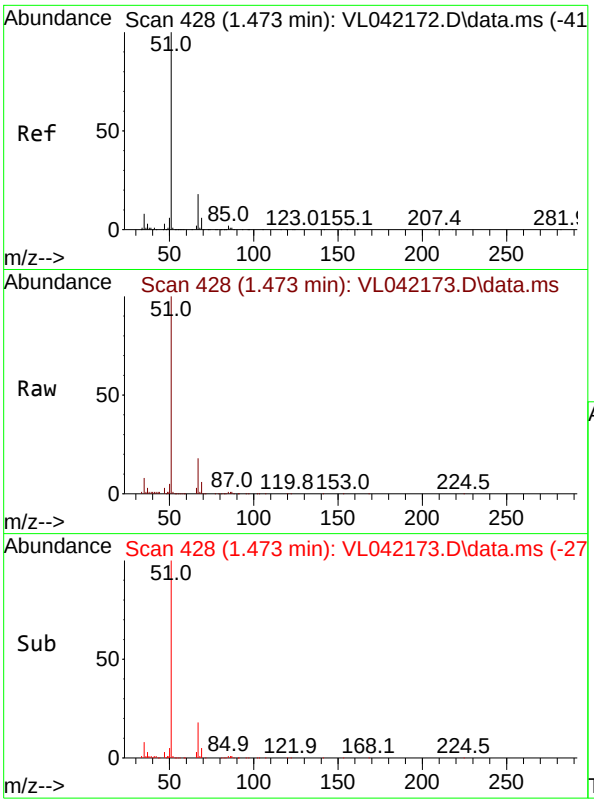


#2
Dichlorodifluoromethane
Concen: 2.008 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 55859

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1



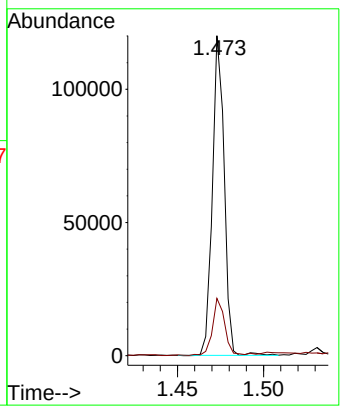


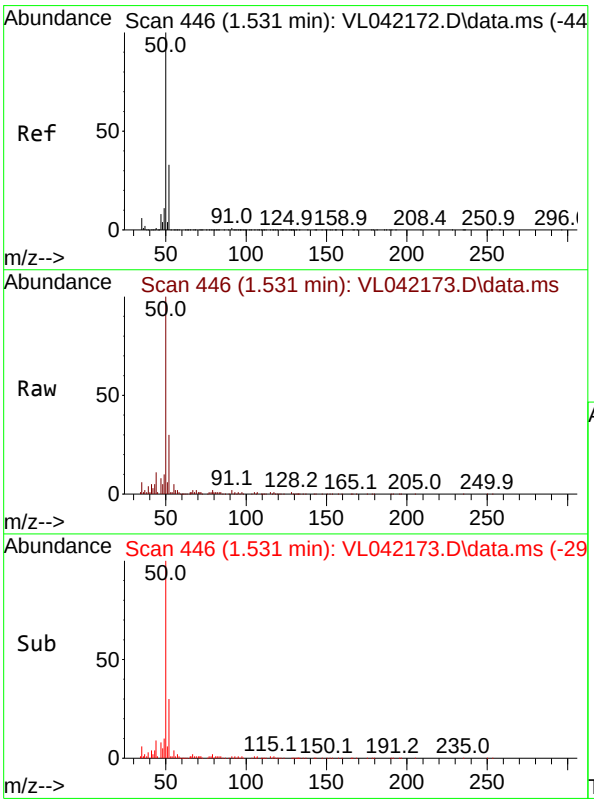
#3
Chlorodifluoromethane
Concen: 2.007 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 51 Resp: 57045

Ion	Ratio	Lower	Upper
51	100		
67	19.4	15.0	22.6

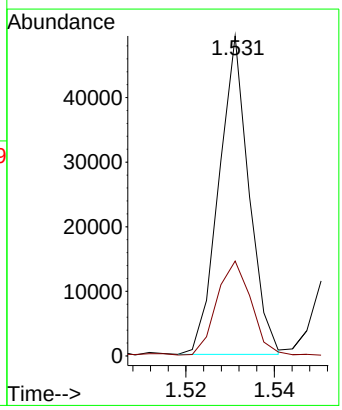


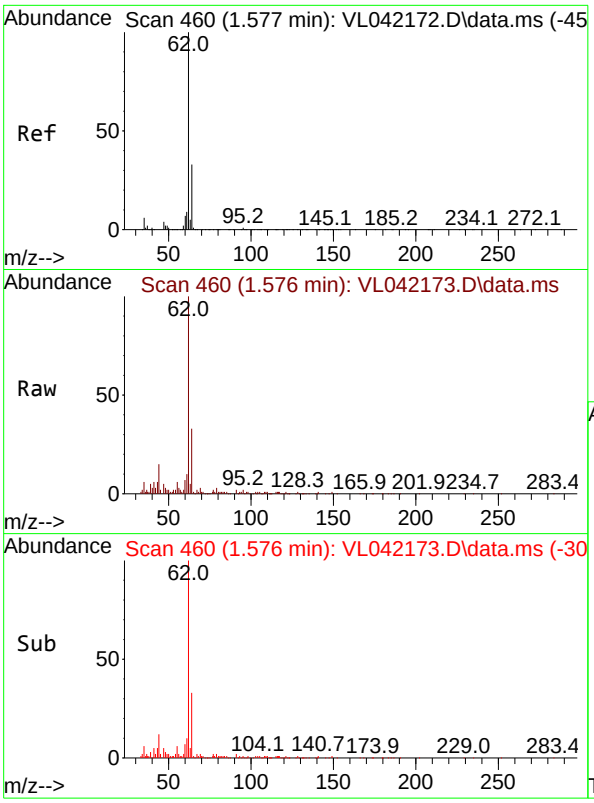


#4
Chloromethane
Concen: 2.049 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 50 Resp: 23293

Ion	Ratio	Lower	Upper
50	100		
52	29.5	26.1	39.1



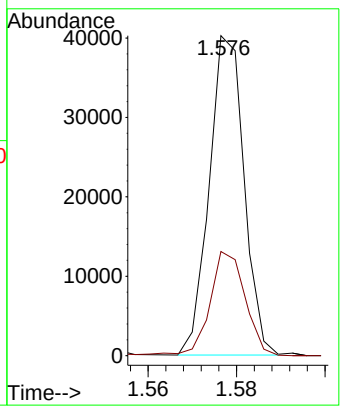


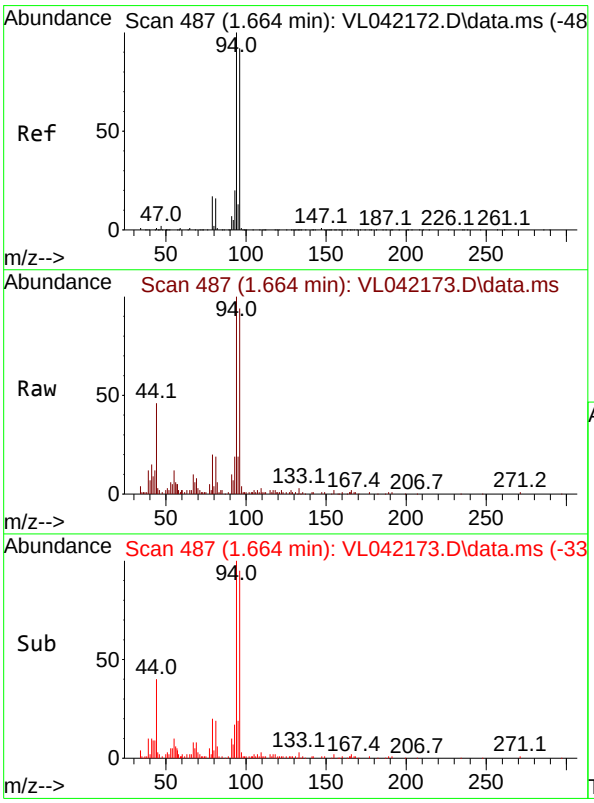
#5
Vinyl Chloride
Concen: 1.897 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 21989

Ion	Ratio	Lower	Upper
62	100		
64	32.5	26.6	40.0

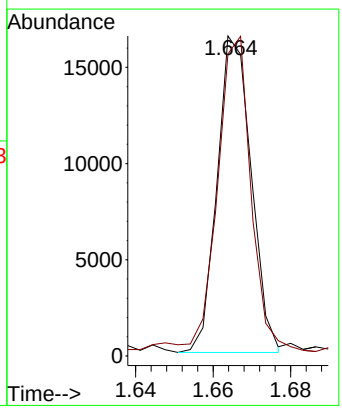


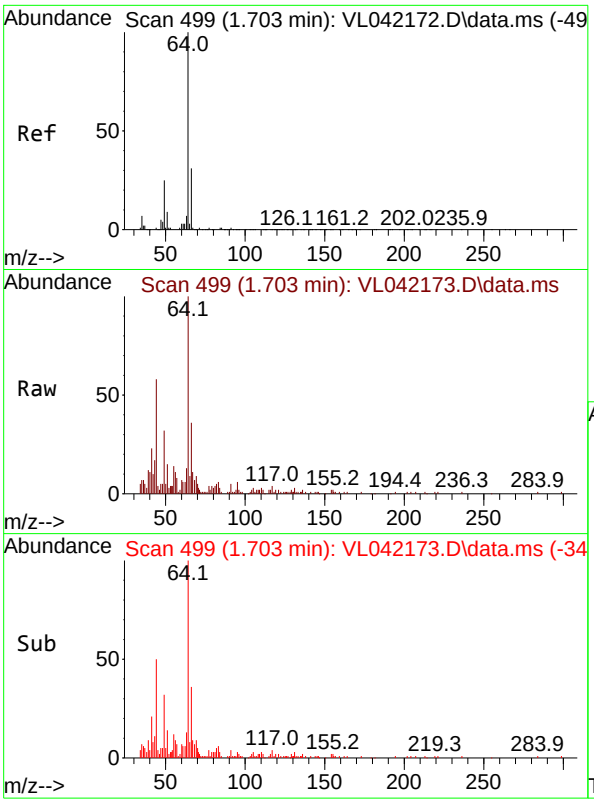


#6
Bromomethane
Concen: 1.946 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 94 Resp: 10027

Ion	Ratio	Lower	Upper
94	100		
96	93.6	73.1	109.7



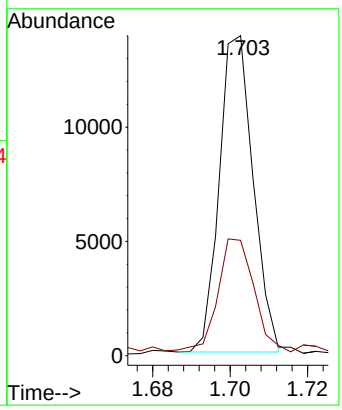


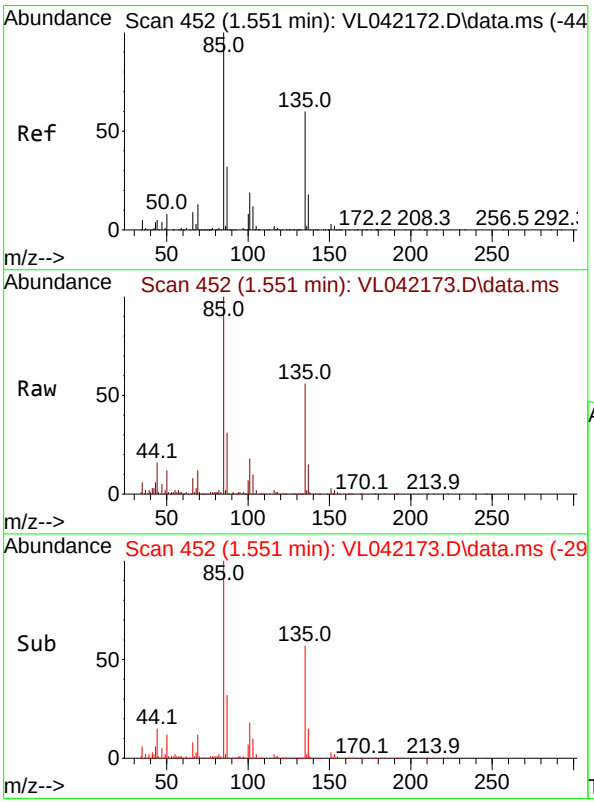
#7
Chloroethane
Concen: 1.844 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 64 Resp: 8413

Ion	Ratio	Lower	Upper
64	100		
66	36.1	25.2	37.8

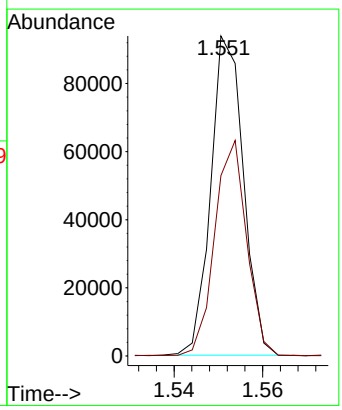


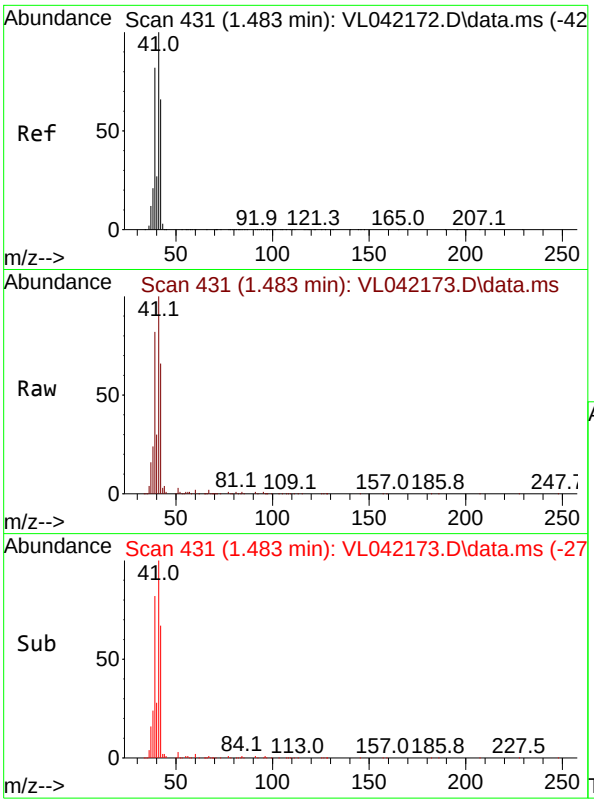


#8
Dichlorotetrafluoroethane
Concen: 2.027 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 48008

Ion	Ratio	Lower	Upper
85	100		
135	66.8	52.4	78.6



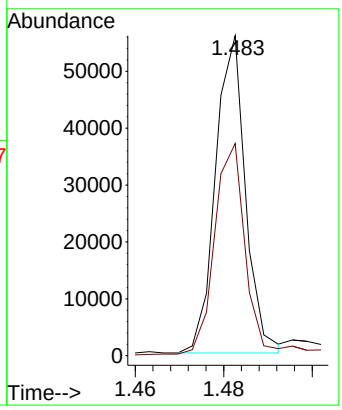


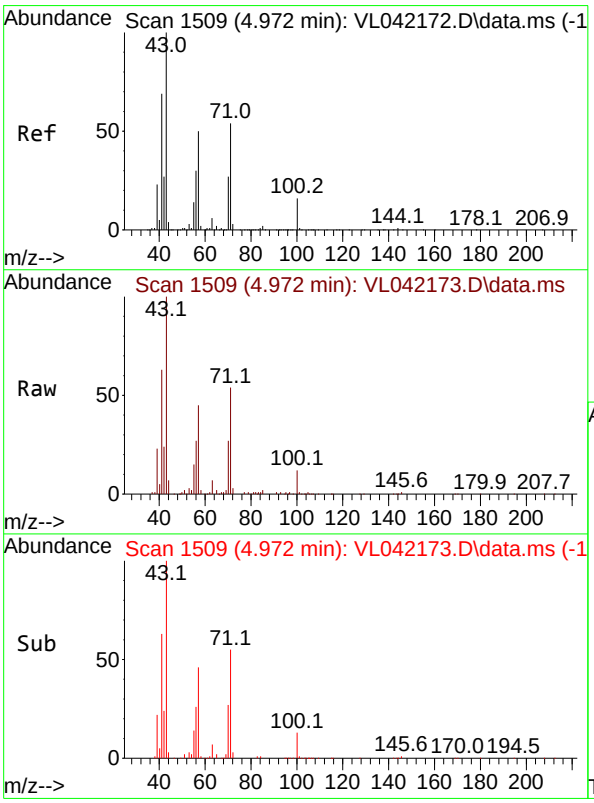
#9
Propene
Concen: 2.054 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 26295

Ion	Ratio	Lower	Upper
41	100		
42	73.9	55.4	83.2

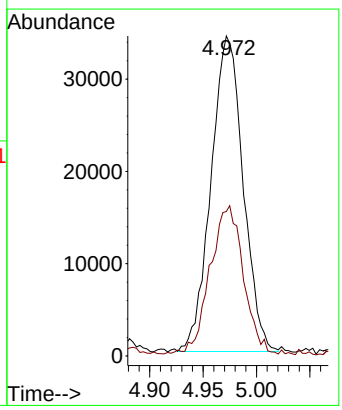


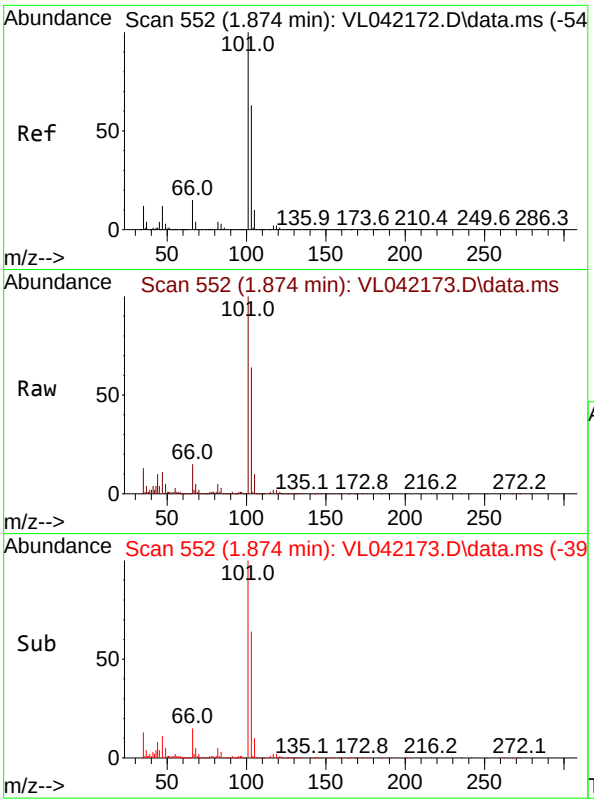


#10
Heptane
Concen: 2.063 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 71466

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2



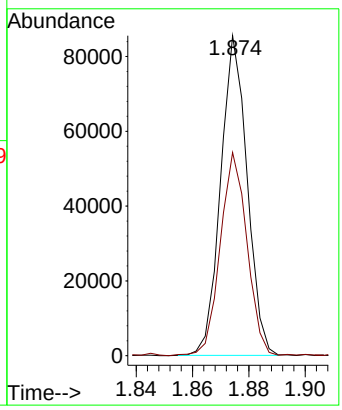


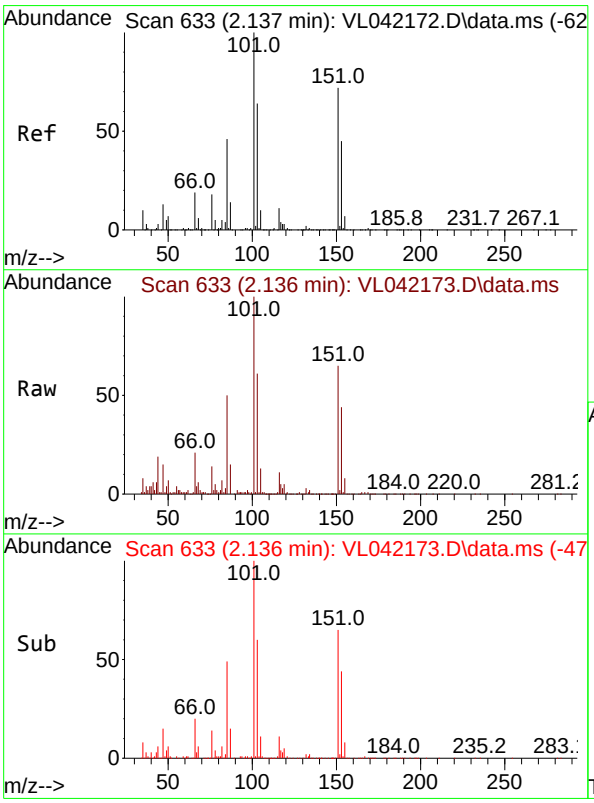
#11
Trichlorofluoromethane
Concen: 2.060 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:101 Resp: 55754

Ion	Ratio	Lower	Upper
101	100		
103	63.5	50.2	75.2

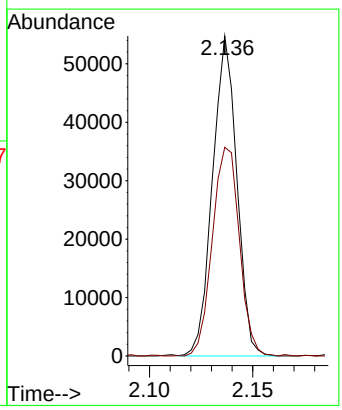


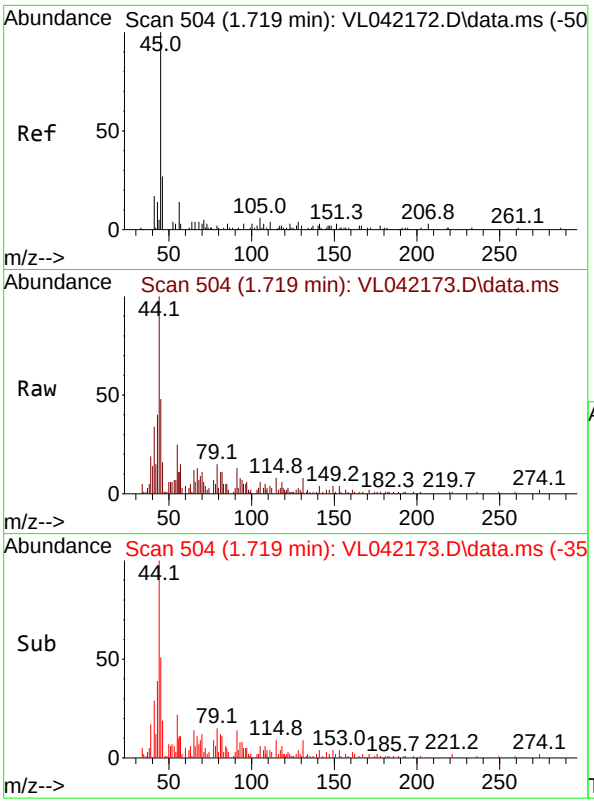


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.012 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:101 Resp: 44761

Ion	Ratio	Lower	Upper
101	100		
151	73.0	57.1	85.7



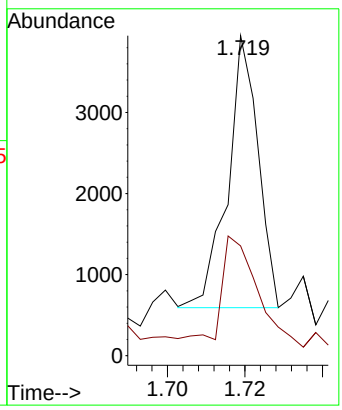


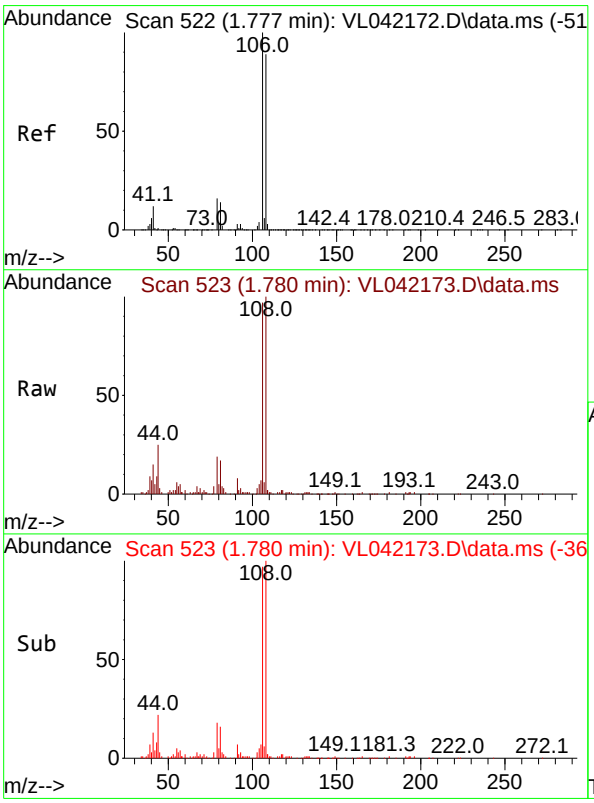
#13
Ethanol
Concen: 1.822 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 1827

Ion	Ratio	Lower	Upper
45	100		
46	85.6	20.2	80.8#

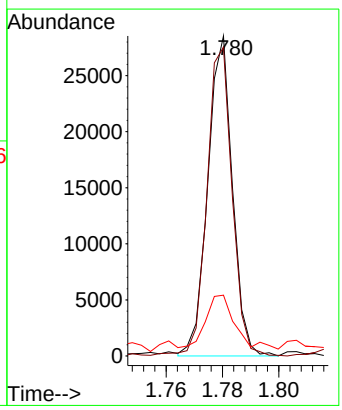


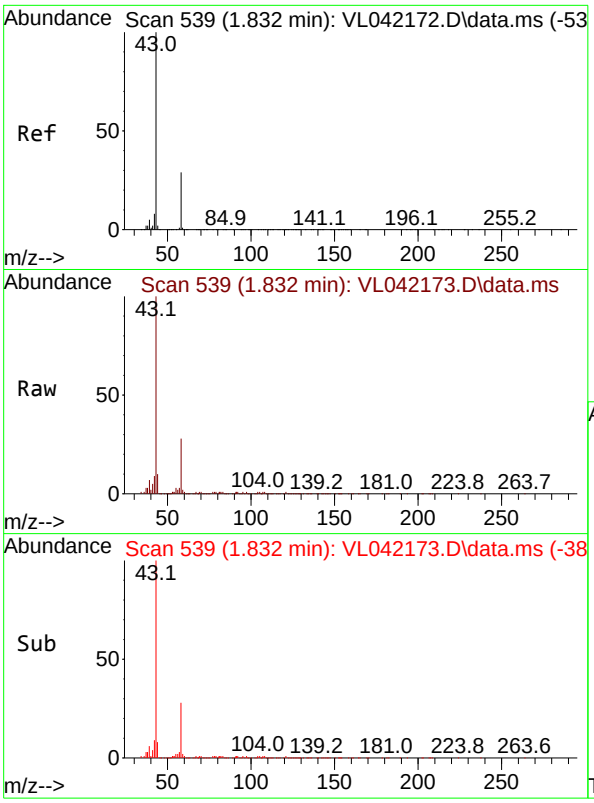


#14
Bromoethene
Concen: 2.033 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:108 Resp: 17323

Ion	Ratio	Lower	Upper
108	100		
106	100.6	86.8	130.2
79	32.0	15.0	22.6#



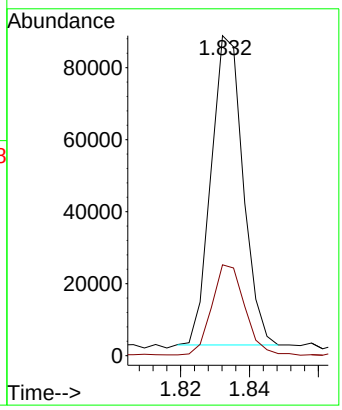


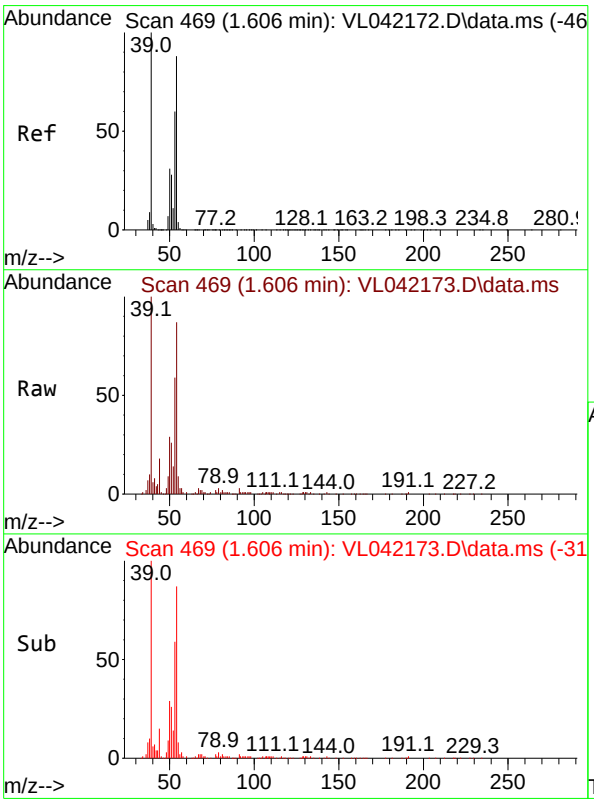
#15
Acetone
Concen: 2.101 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 55365

Ion	Ratio	Lower	Upper
43	100		
58	31.8	23.2	34.8

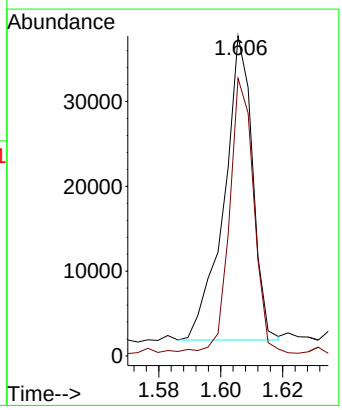


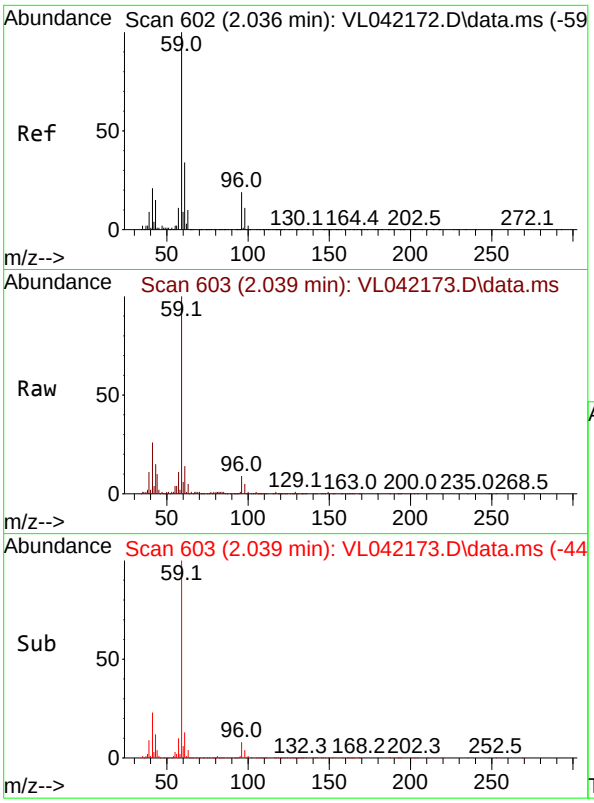


#16
1,3-Butadiene
Concen: 1.932 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 39 Resp: 22894

Ion	Ratio	Lower	Upper
39	100		
54	79.9	60.7	91.1



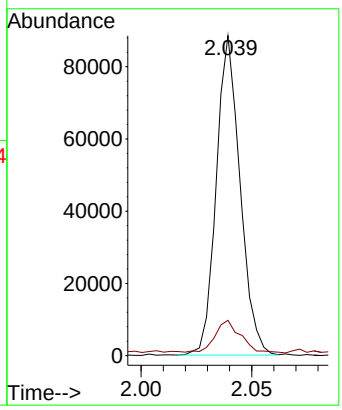


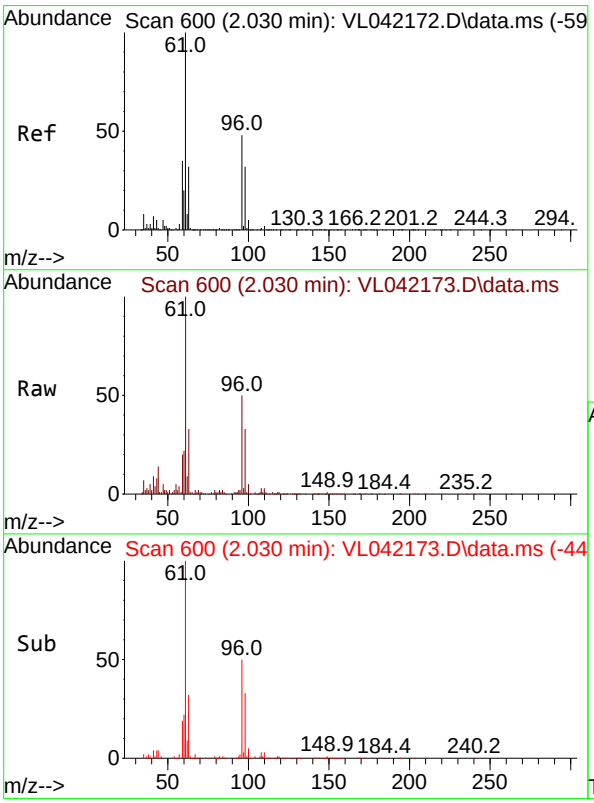
#17
tert-Butyl alcohol
Concen: 2.016 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 59 Resp: 66174

Ion	Ratio	Lower	Upper
59	100		
57	11.2	8.9	13.3

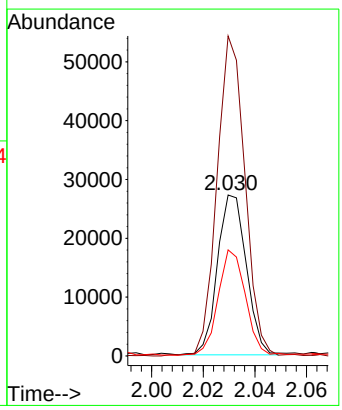


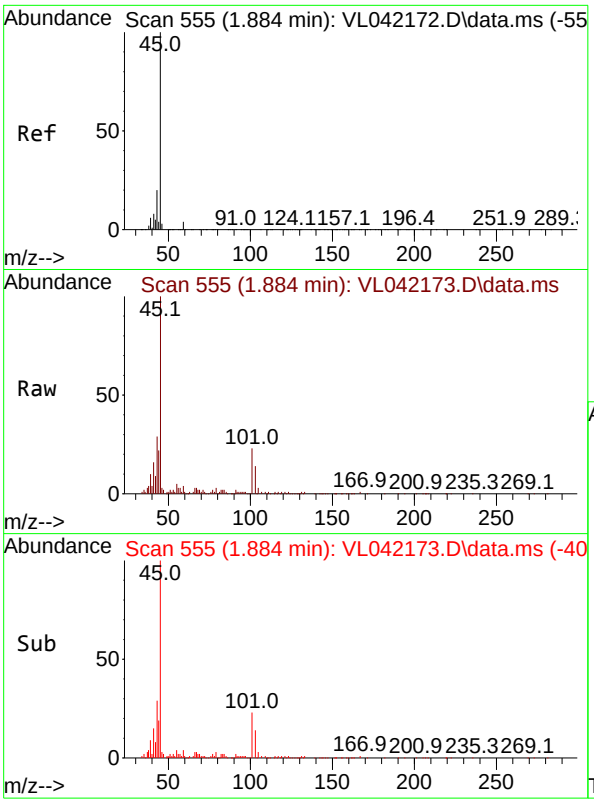


#18
1,1-Dichloroethene
Concen: 2.029 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 21103

Ion	Ratio	Lower	Upper
96	100		
61	199.8	167.6	251.4
98	66.0	53.5	80.3



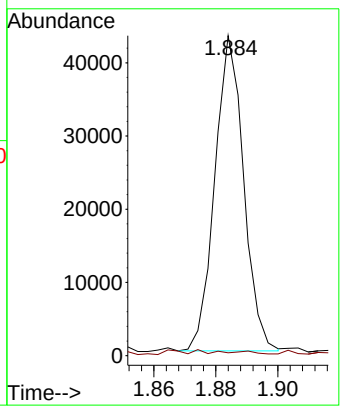


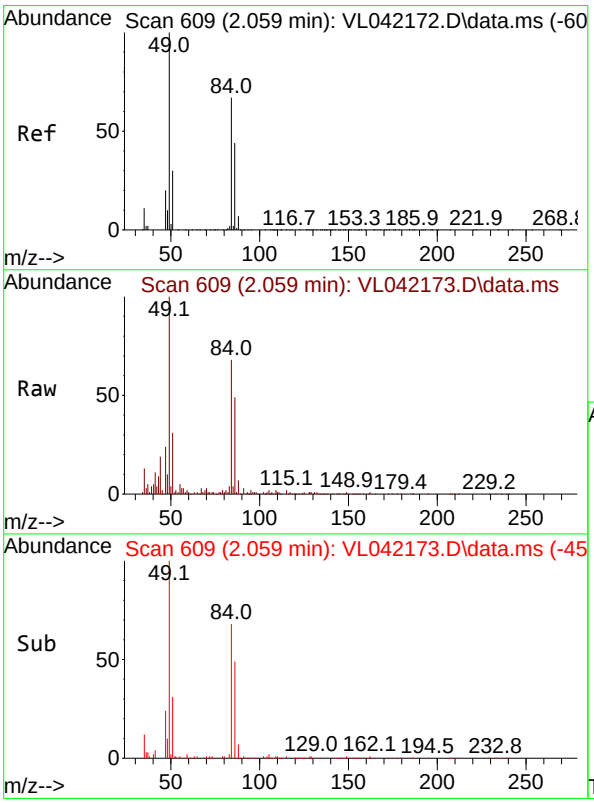
#19
Isopropyl Alcohol
Concen: 1.870 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 27804

Ion	Ratio	Lower	Upper
45	100		
58	3.3	36.9	55.3#

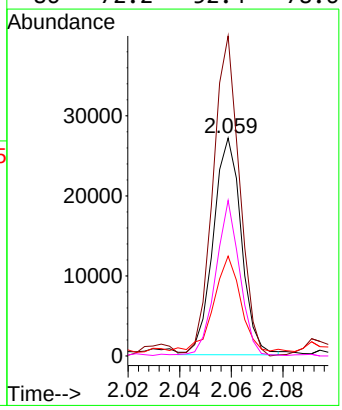


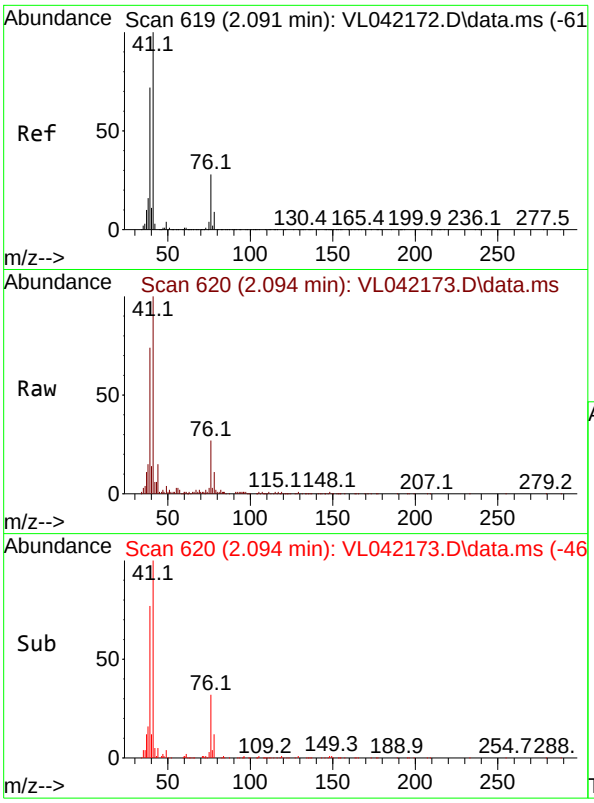


#20
Methylene Chloride
Concen: 2.091 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 20518

Ion	Ratio	Lower	Upper
84	100		
49	148.8	120.2	180.4
51	43.5	37.4	56.0
86	72.2	52.4	78.6



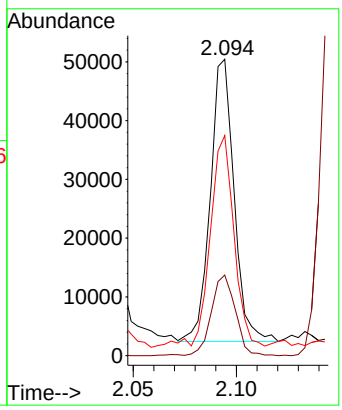


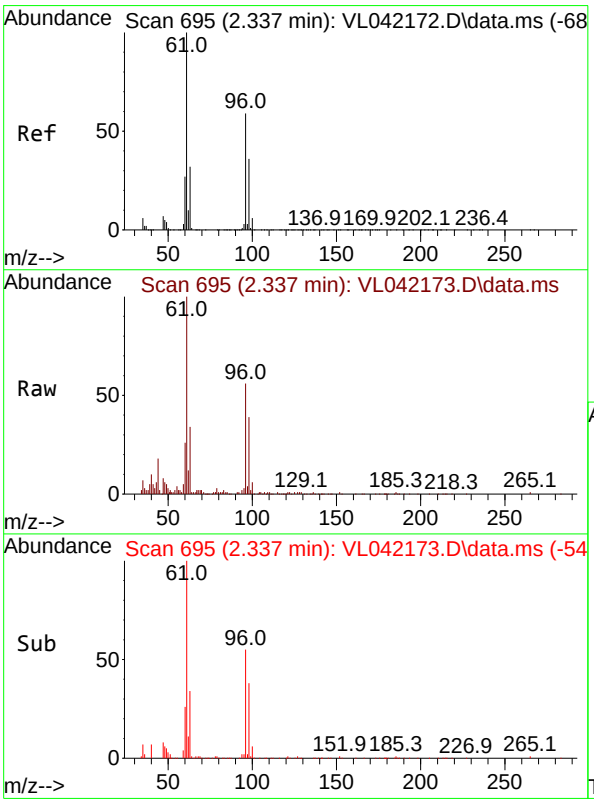
#21
Allyl Chloride
Concen: 2.068 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 38425

Ion	Ratio	Lower	Upper
41	100		
76	29.0	24.1	36.1
39	77.5	61.1	91.7

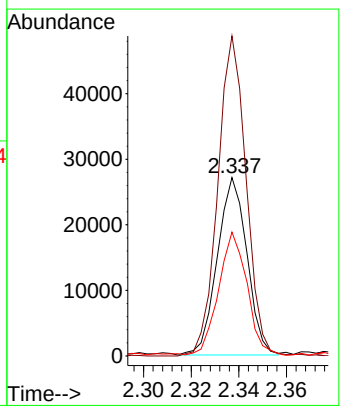


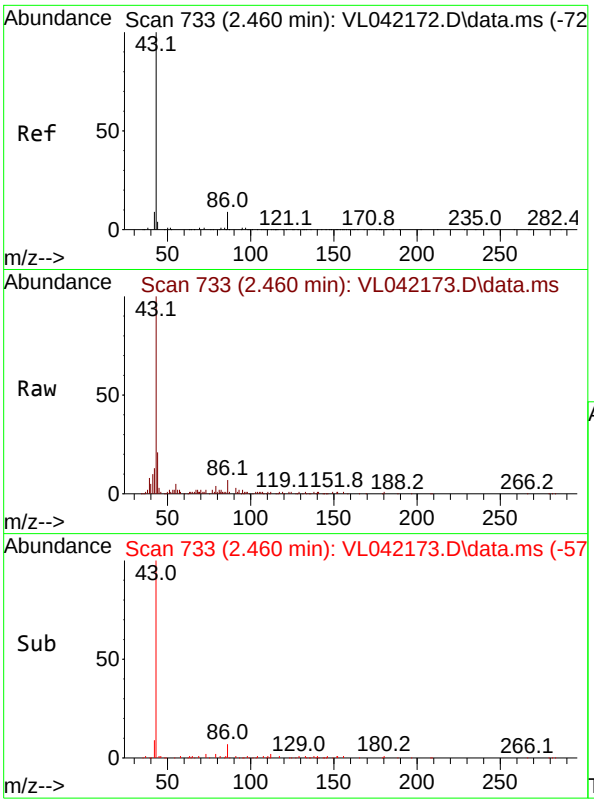


#22
trans-1,2-Dichloroethene
Concen: 1.924 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 23384

Ion	Ratio	Lower	Upper
96	100		
61	180.3	136.6	204.8
98	68.6	49.4	74.2



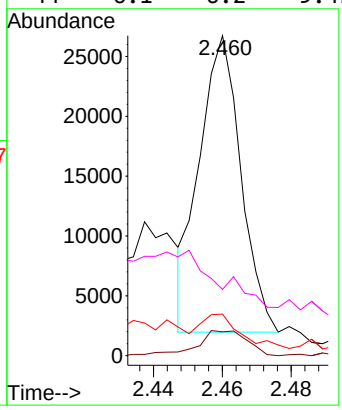


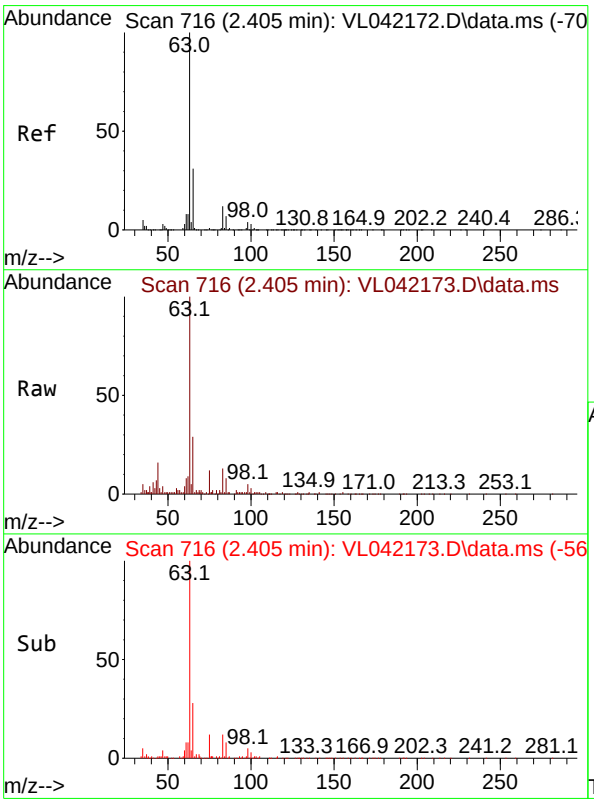
#23
Vinyl Acetate
Concen: 1.894 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 20736

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.4	8.6	13.0
44	6.1	6.2	9.4#

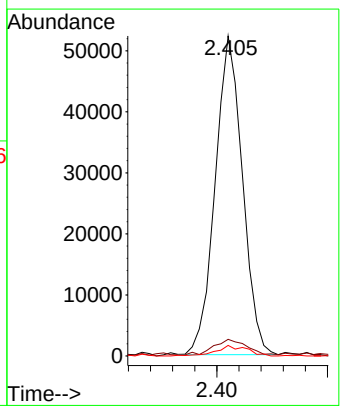


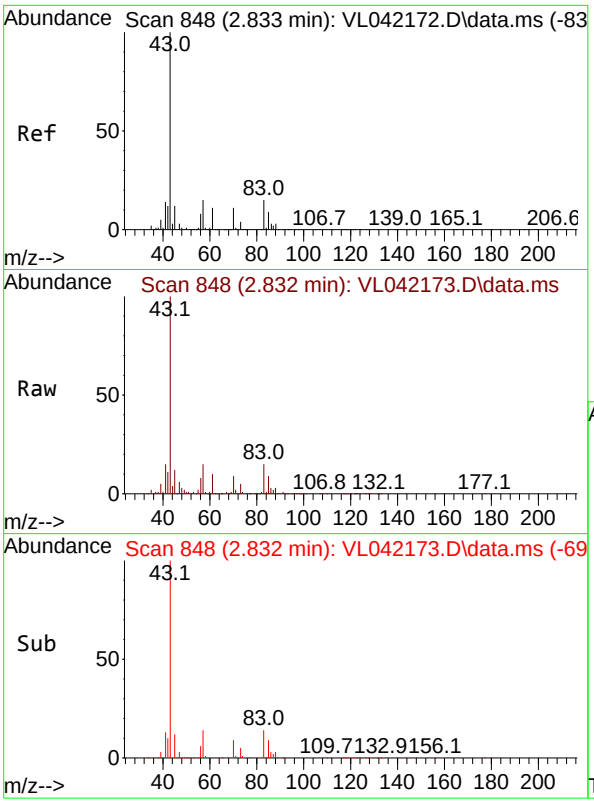


#24
1,1-Dichloroethane
Concen: 2.008 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 63 Resp: 44740

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	3.3	1.6	4.7



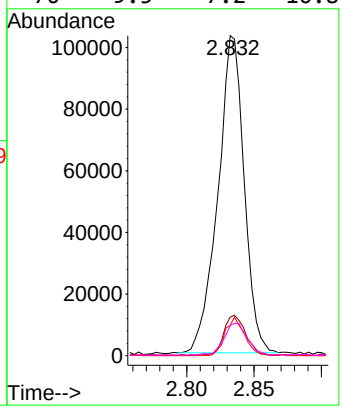


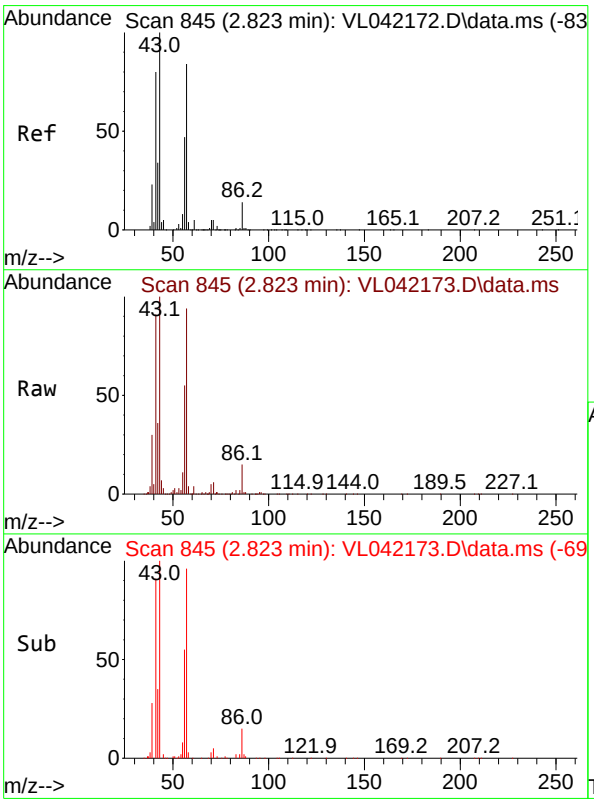
#25
Ethyl Acetate
Concen: 2.040 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 139516

Ion	Ratio	Lower	Upper
43	100		
45	10.9	8.2	12.2
61	9.1	7.3	10.9
70	9.5	7.2	10.8

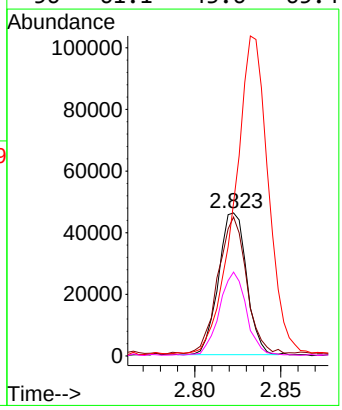


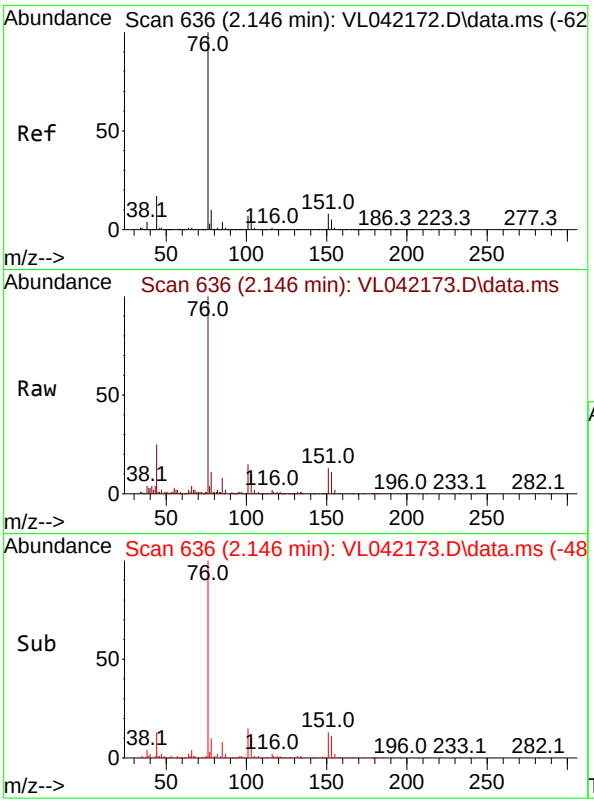


#26
Hexane
Concen: 1.972 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 52095

Ion	Ratio	Lower	Upper
57	100		
41	100.9	76.6	114.8
43	274.8	207.8	311.8
56	61.1	43.6	65.4



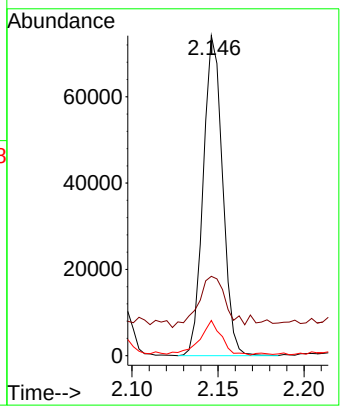


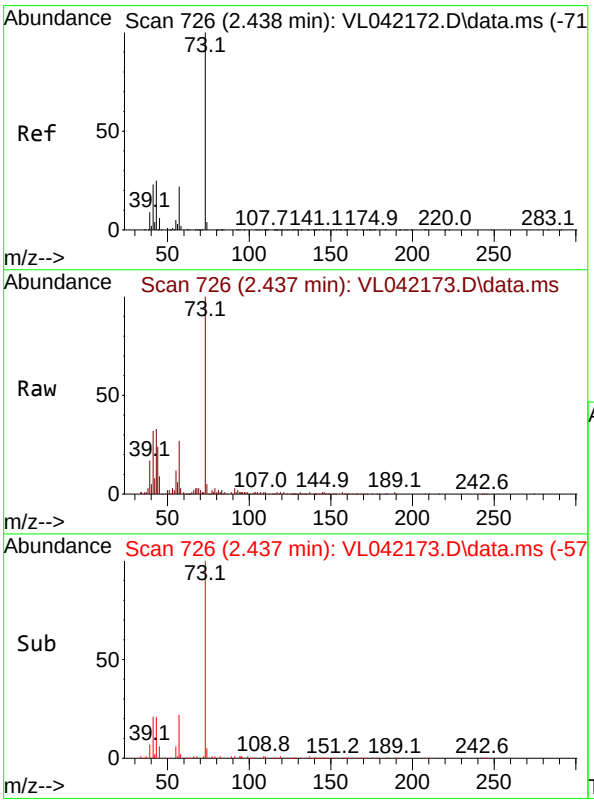
#27
Carbon Disulfide
Concen: 2.047 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 76 Resp: 57969

Ion	Ratio	Lower	Upper
76	100		
44	35.2	14.7	22.1#
78	12.0	9.3	13.9

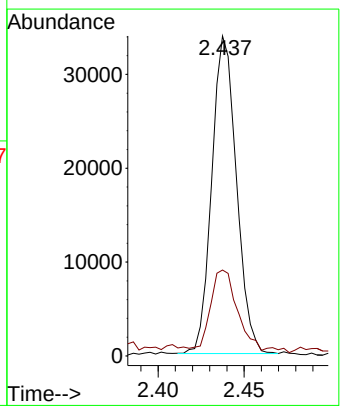


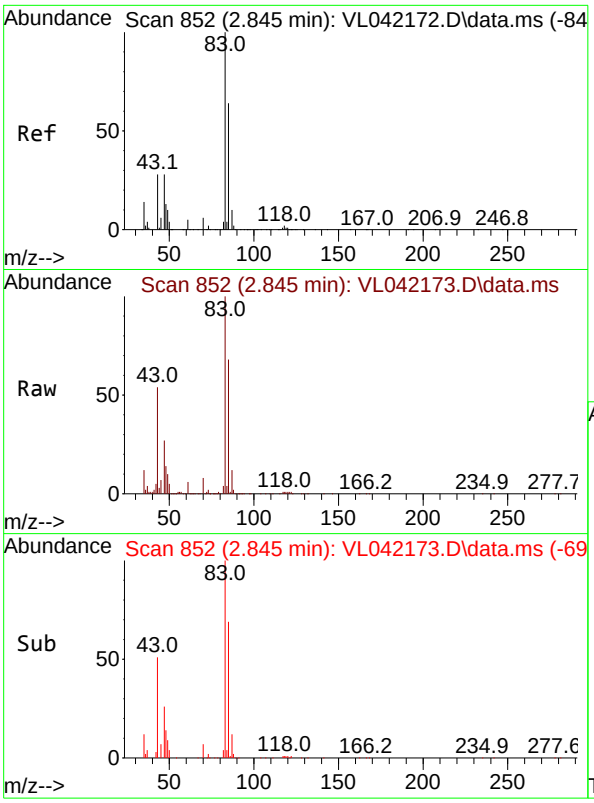


#28
Methyl tert-Butyl Ether
Concen: 2.049 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 73 Resp: 33703

Ion	Ratio	Lower	Upper
73	100		
57	25.2	20.5	30.7



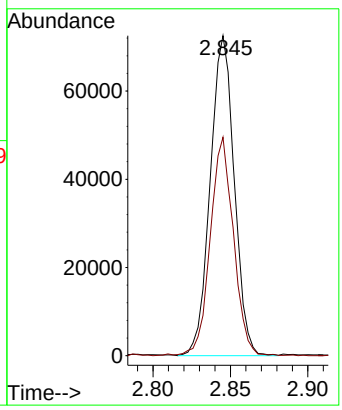


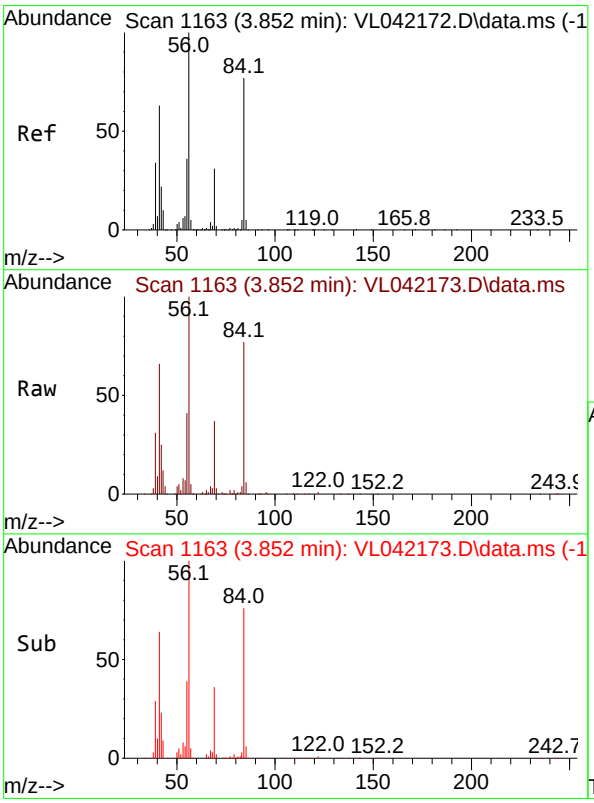
#29
Chloroform
Concen: 2.019 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 78043

Ion	Ratio	Lower	Upper
83	100		
85	68.2	51.4	77.2

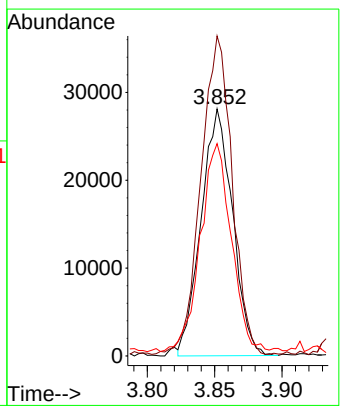


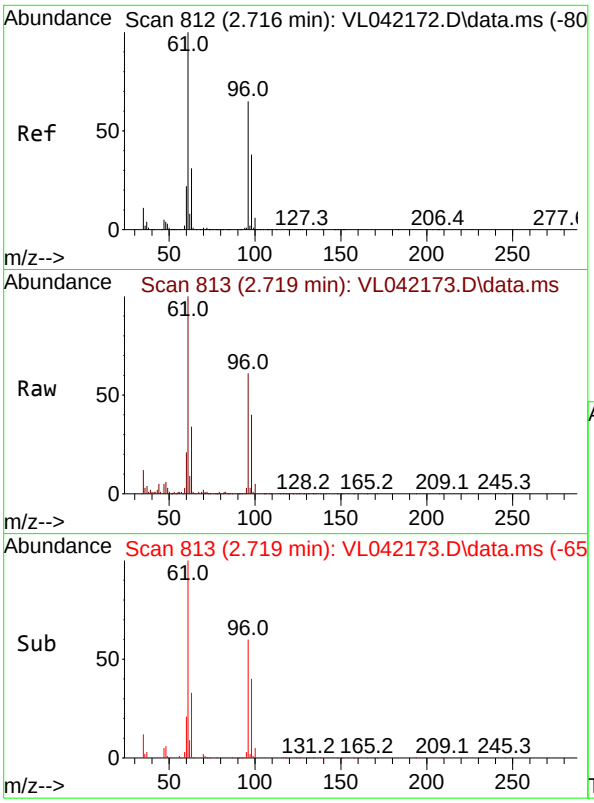


#30
Cyclohexane
Concen: 1.989 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 45641

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.8	154.2
41	84.6	66.5	99.7



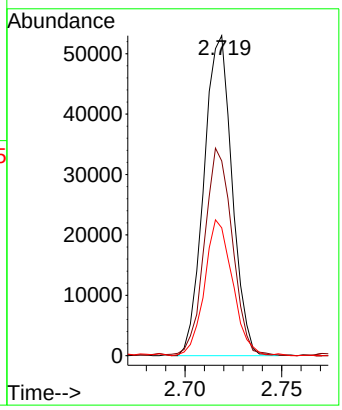


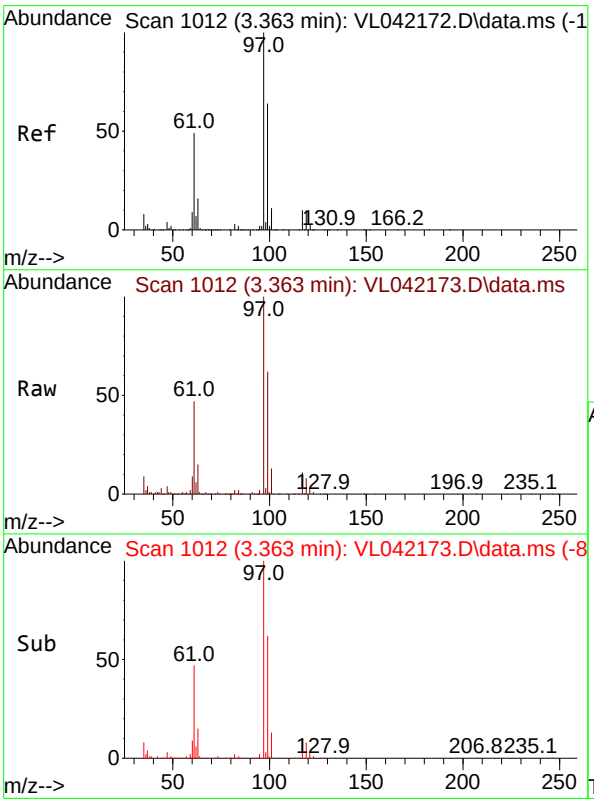
#31
cis-1,2-Dichloroethene
Concen: 2.003 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 61 Resp: 53713

Ion	Ratio	Lower	Upper
61	100		
96	60.6	51.8	77.8
98	39.6	30.6	46.0

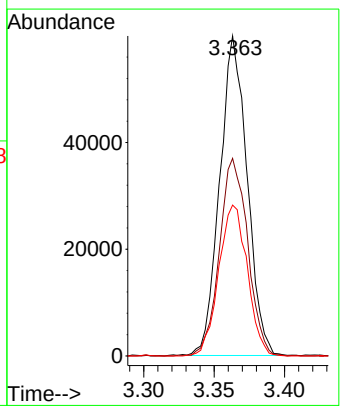


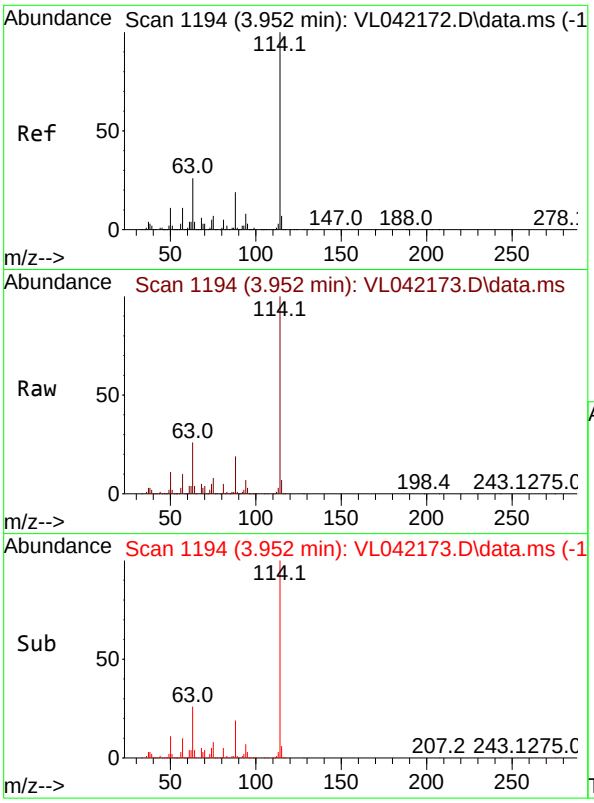


#32
1,1,1-Trichloroethane
Concen: 1.833 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 97 Resp: 81070

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.5	77.3
61	49.3	38.7	58.1



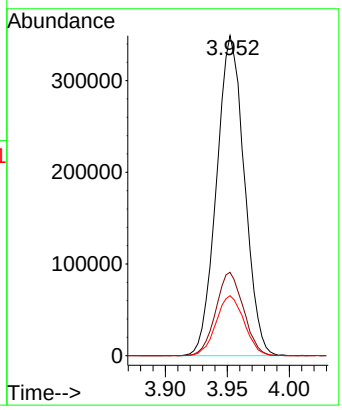


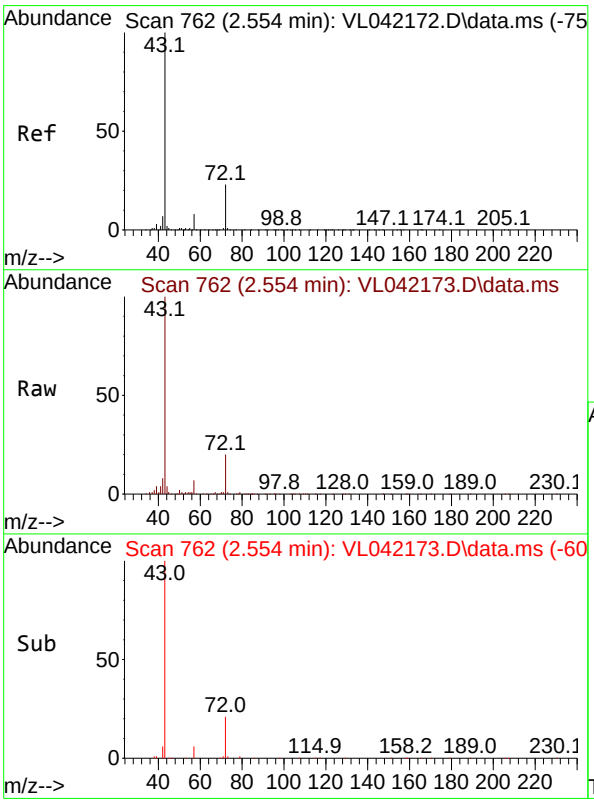
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:114 Resp: 546394

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.9	15.0	22.4

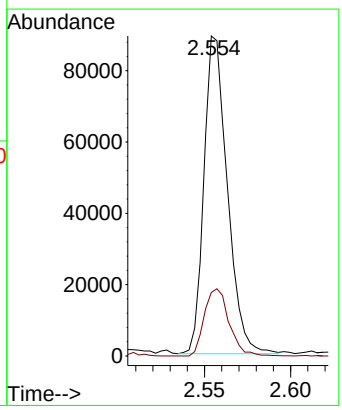


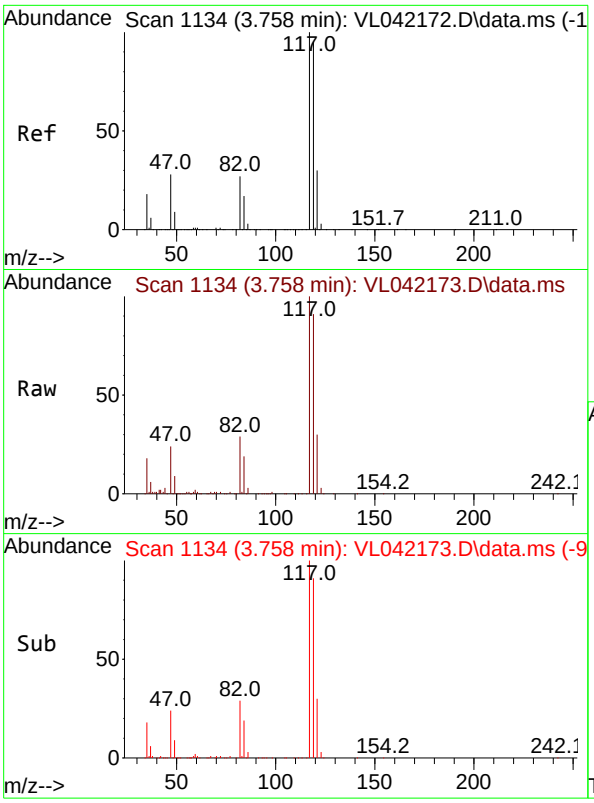


#34
2-Butanone
Concen: 2.124 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 84157

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2



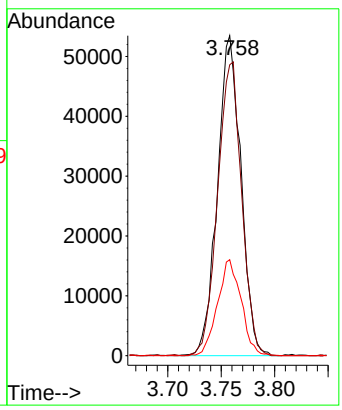


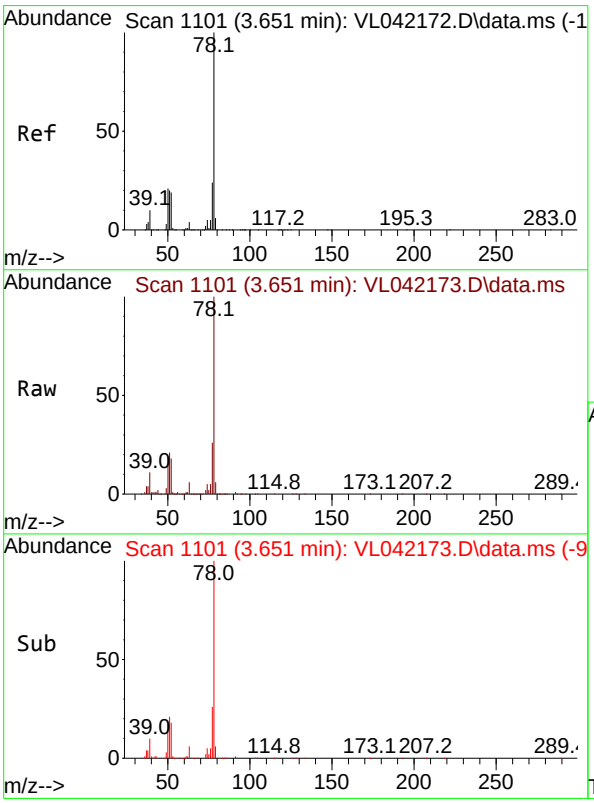
#35
Carbon Tetrachloride
Concen: 1.944 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 81735

Ion	Ratio	Lower	Upper
117	100		
119	90.8	76.2	114.2
121	30.0	24.2	36.4

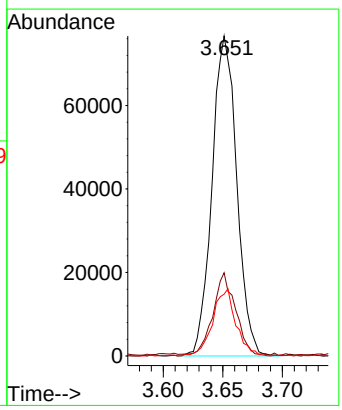


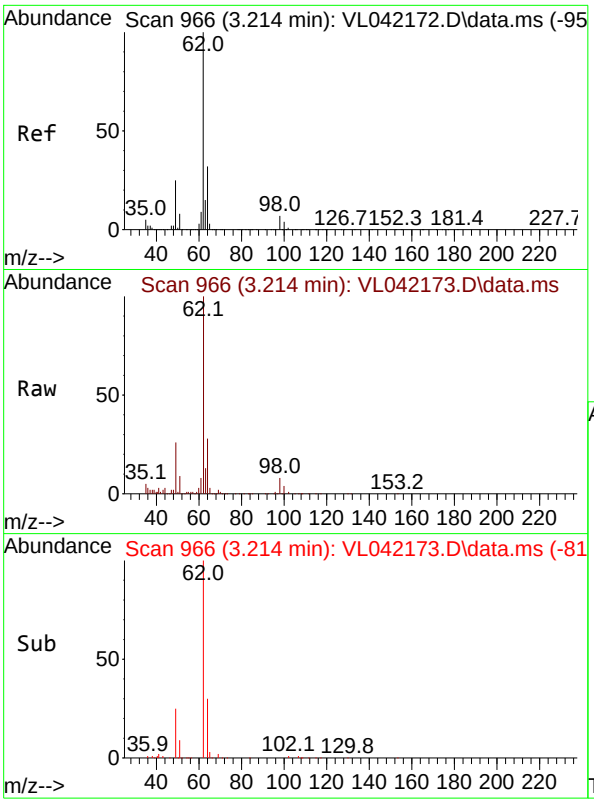


#36
Benzene
Concen: 2.044 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 78 Resp: 110727

Ion	Ratio	Lower	Upper
78	100		
77	25.7	19.1	28.7
50	19.3	16.6	24.8



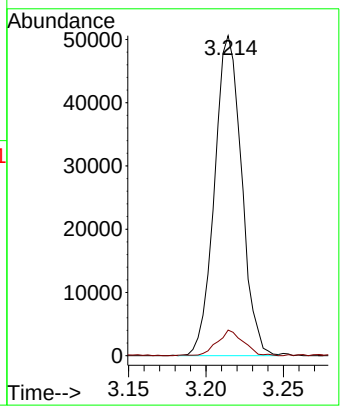


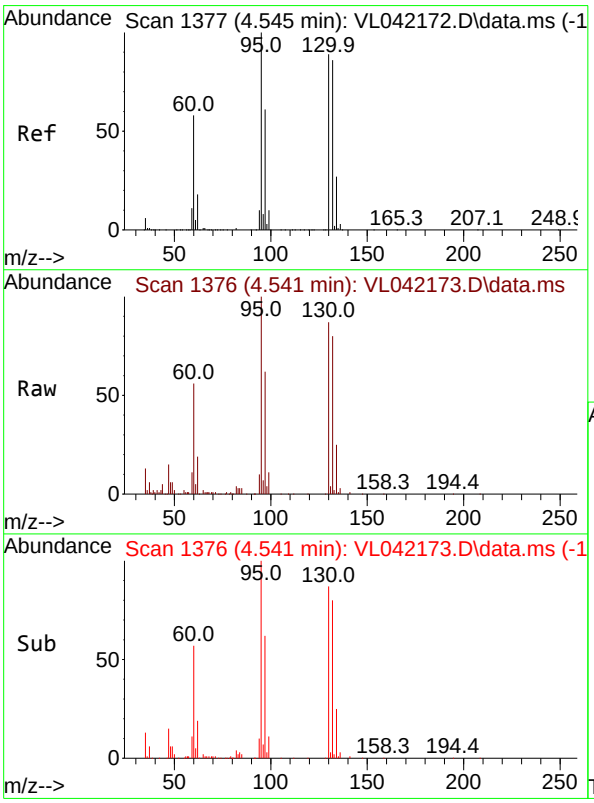
#37
1,2-Dichloroethane
Concen: 1.982 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 61476

Ion	Ratio	Lower	Upper
62	100		
98	7.7	5.4	8.2

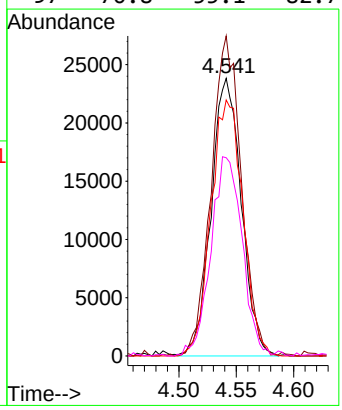


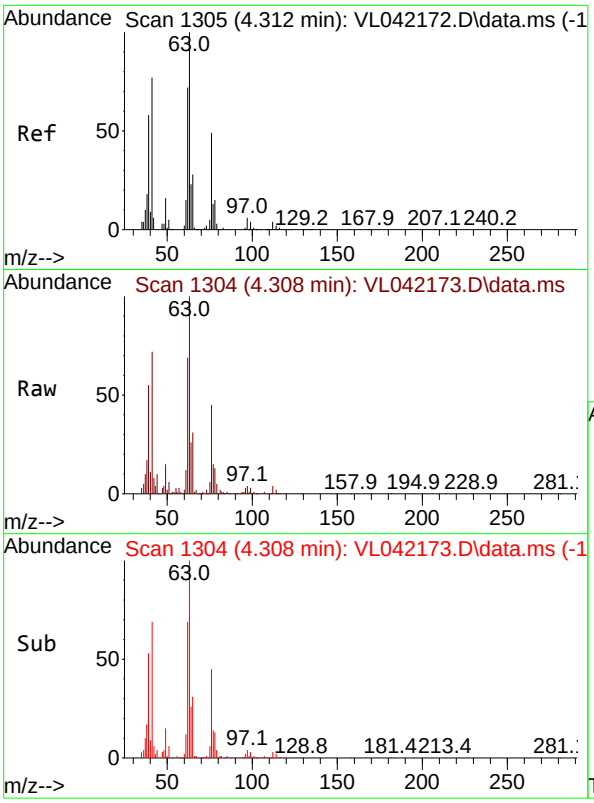


#38
Trichloroethene
Concen: 1.924 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:130 Resp: 43501

Ion	Ratio	Lower	Upper
130	100		
95	114.8	89.8	134.8
132	92.2	77.4	116.2
97	70.8	55.1	82.7



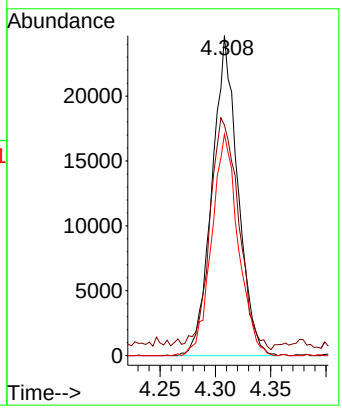


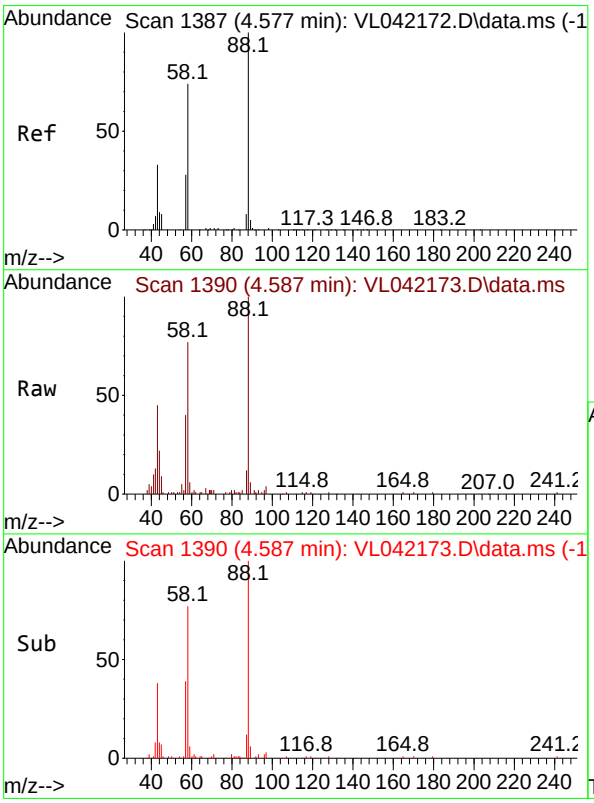
#39
1,2-Dichloropropane
Concen: 2.023 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 63 Resp: 39912

Ion	Ratio	Lower	Upper
63	100		
41	68.6	61.7	92.5
62	69.2	57.6	86.4

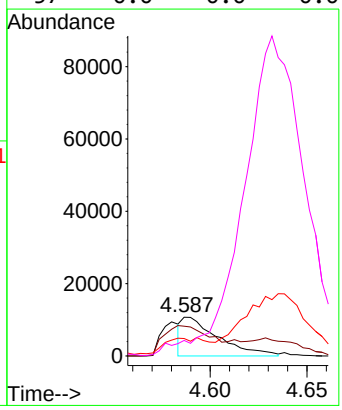


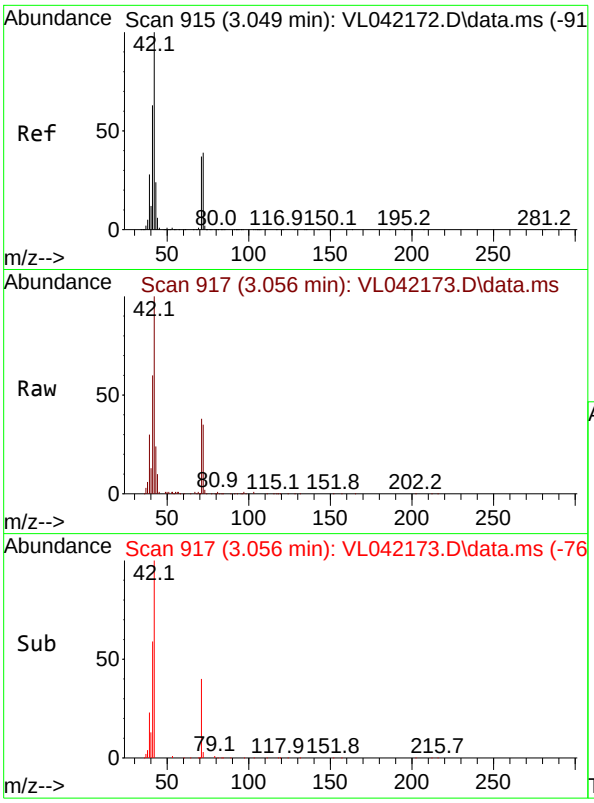


#40
1,4-Dioxane
Concen: 1.369 ppbv
RT: 4.587 min Scan# 1390
Delta R.T. 0.009 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 88 Resp: 14008

Ion	Ratio	Lower	Upper
88	100		
58	178.2	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0



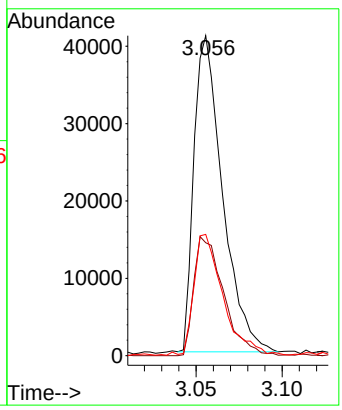


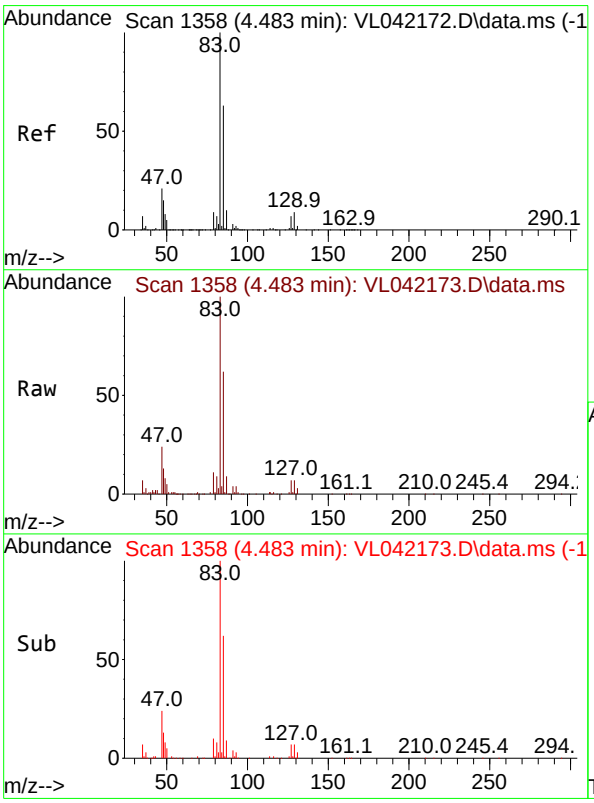
#41
Tetrahydrofuran
Concen: 2.097 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 42 Resp: 47262

Ion	Ratio	Lower	Upper
42	100		
72	39.6	31.4	47.0
71	39.0	30.2	45.4

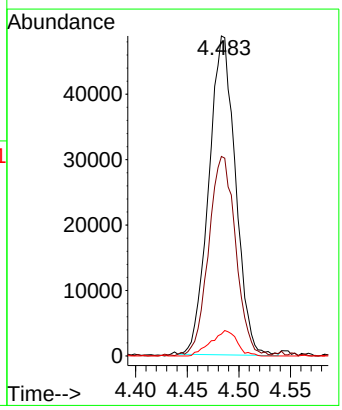


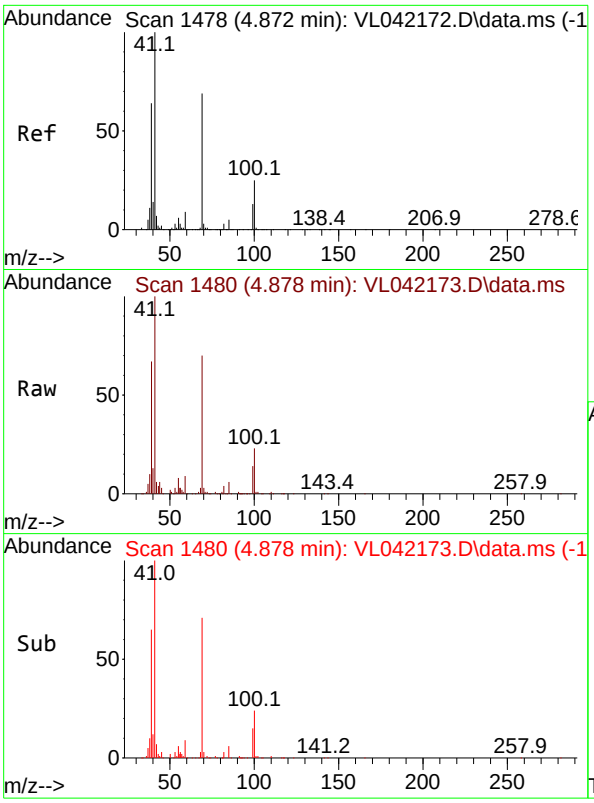


#42
Bromodichloromethane
Concen: 2.050 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 87640

Ion	Ratio	Lower	Upper
83	100		
85	62.2	50.5	75.7
127	6.9	5.9	8.9



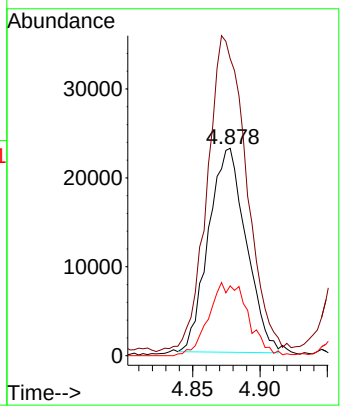


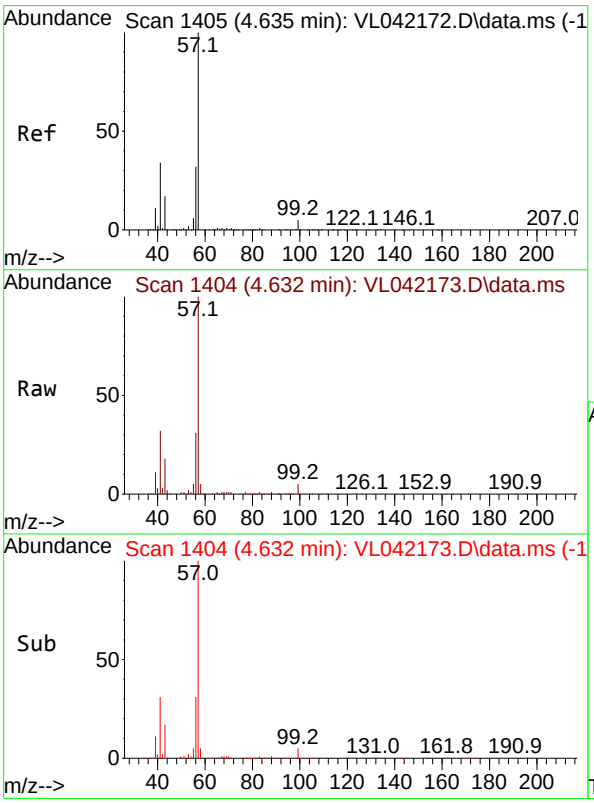
#43
Methyl Methacrylate
Concen: 1.952 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 69 Resp: 44624

Ion	Ratio	Lower	Upper
69	100		
41	158.7	123.8	185.6
100	37.5	28.4	42.6

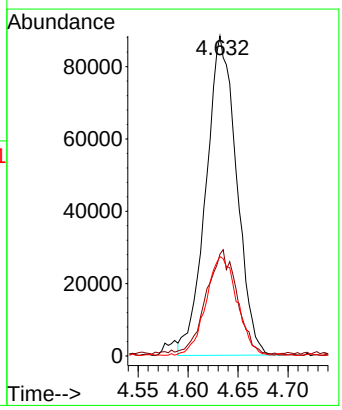


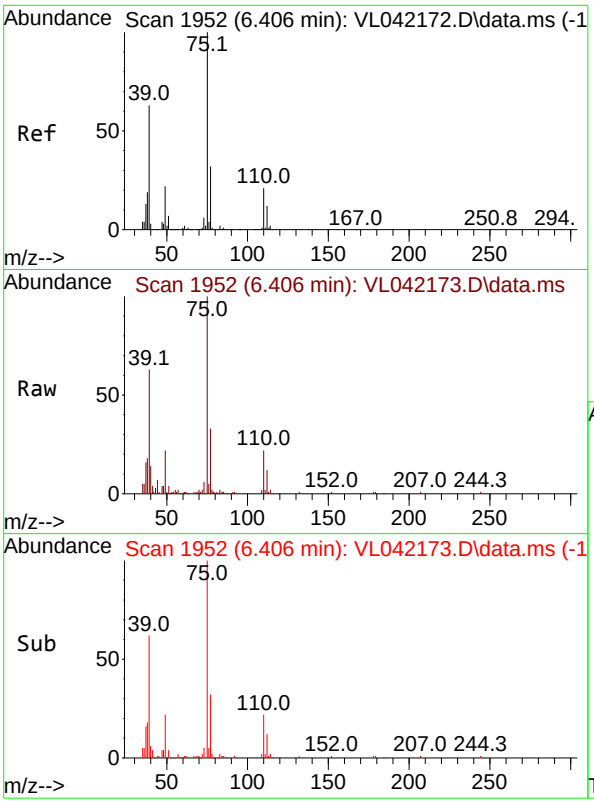


#44
2,2,4-Trimethylpentane
Concen: 2.057 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 188282

Ion	Ratio	Lower	Upper
57	100		
41	33.8	26.8	40.2
56	31.8	25.6	38.4



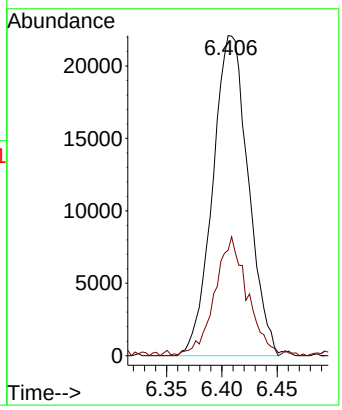


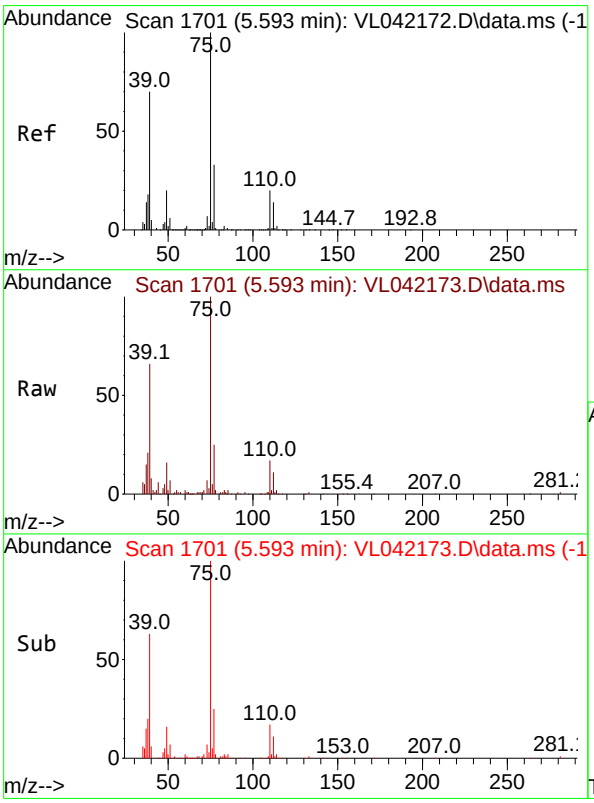
#45
t-1,3-Dichloropropene
Concen: 2.011 ppbv
RT: 6.406 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 75 Resp: 49461

Ion	Ratio	Lower	Upper
75	100		
77	32.9	26.0	39.0

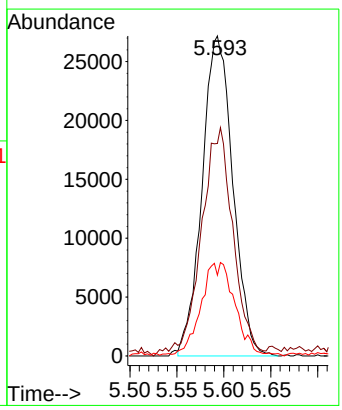


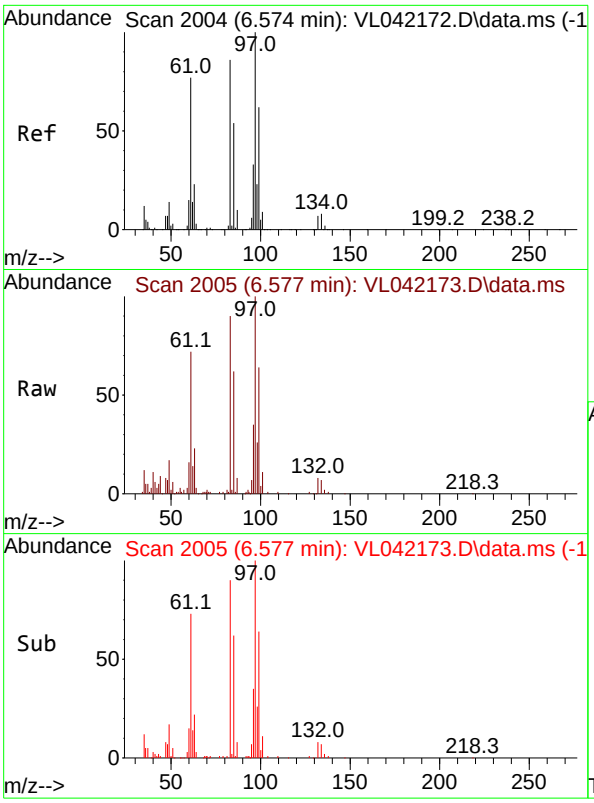


#46
cis-1,3-Dichloropropene
Concen: 2.050 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 75 Resp: 61829

Ion	Ratio	Lower	Upper
75	100		
39	64.4	55.8	83.6
77	24.5	26.0	39.0#



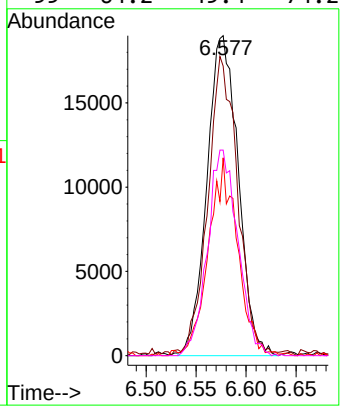


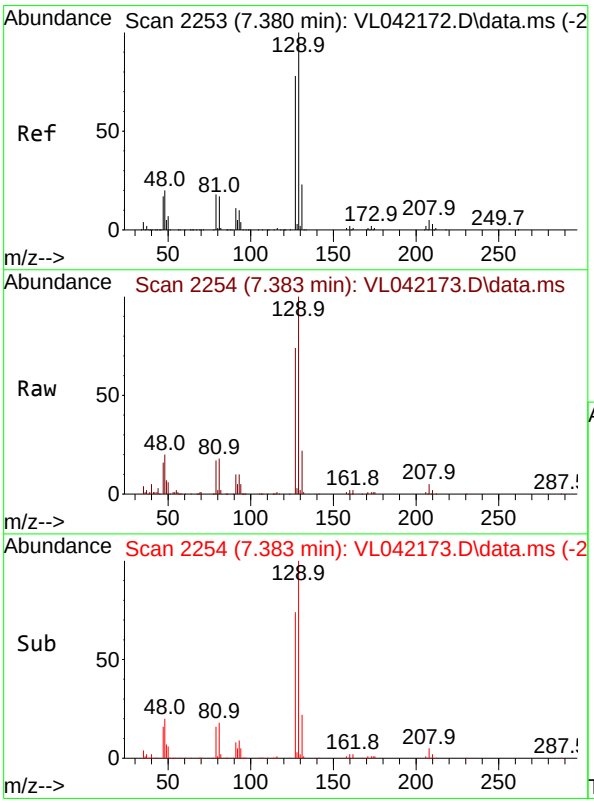
#47
1,1,2-Trichloroethane
Concen: 1.985 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 97 Resp: 41387

Ion	Ratio	Lower	Upper
97	100		
83	89.4	69.2	103.8
85	61.3	43.1	64.7
99	64.2	49.4	74.2

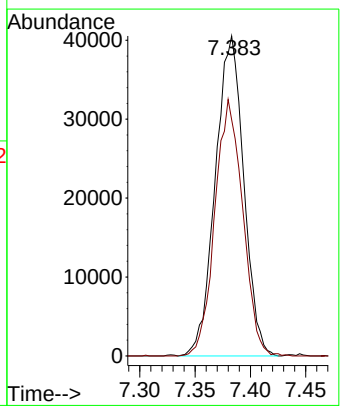


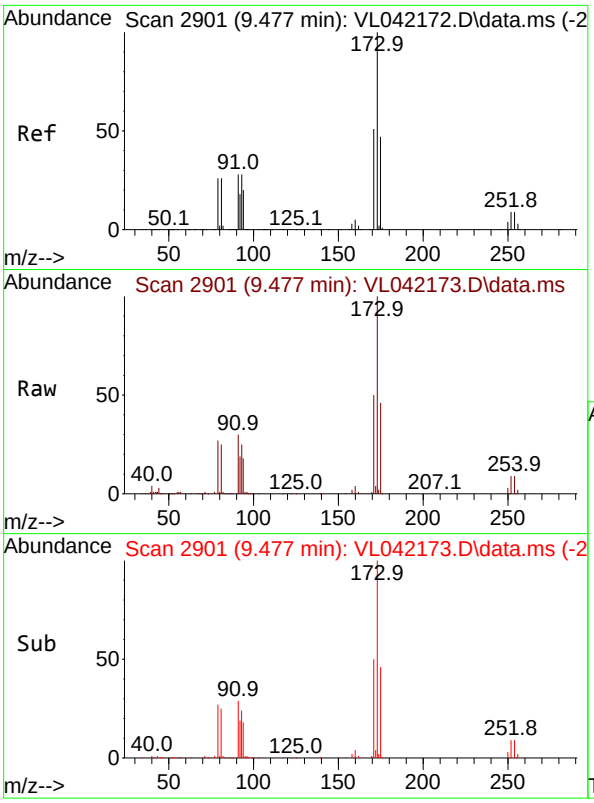


#48
Dibromochloromethane
Concen: 2.050 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:129 Resp: 72441

Ion	Ratio	Lower	Upper
129	100		
127	78.5	39.1	117.2



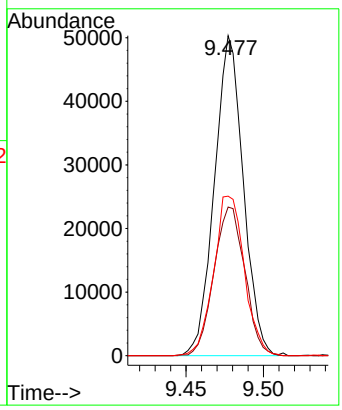


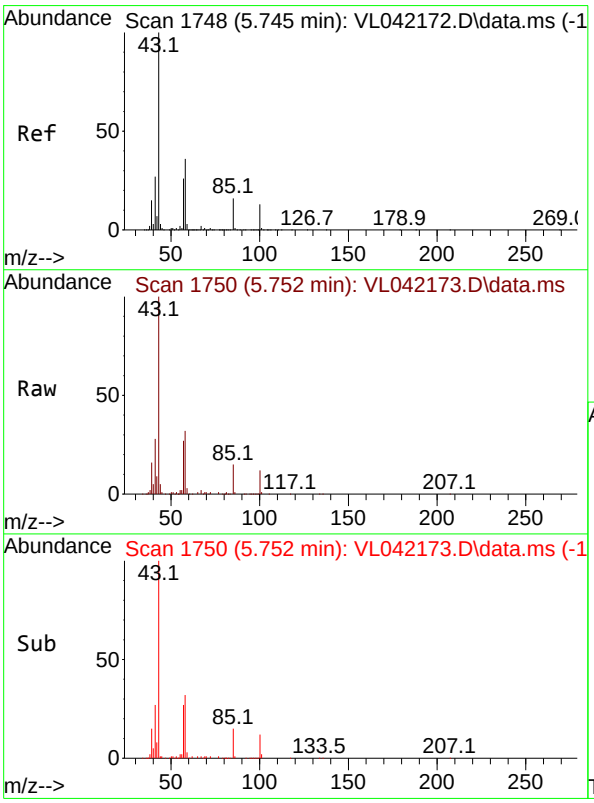
#49
Bromoform
Concen: 2.056 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:173 Resp: 65221

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.0	41.8	62.6

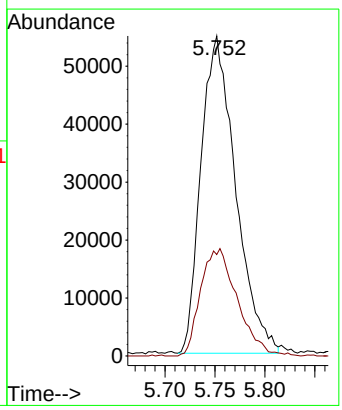


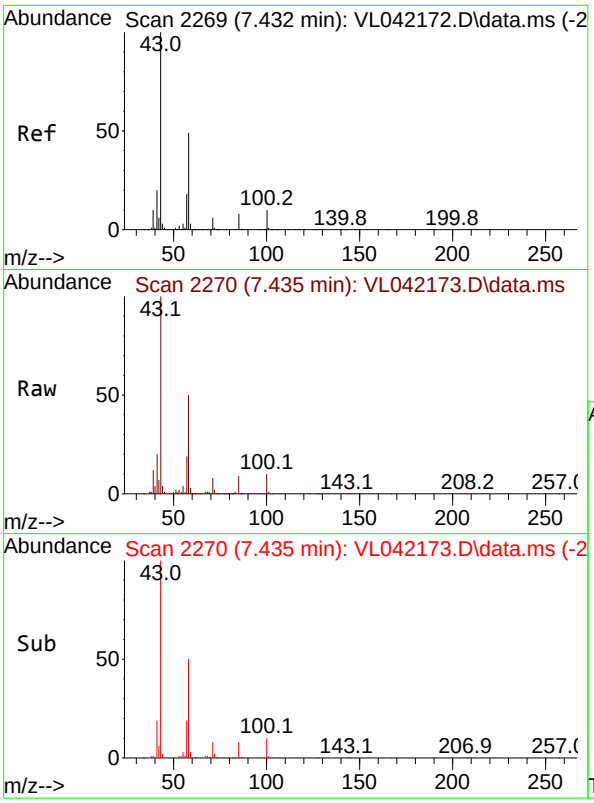


#50
4-Methyl-2-Pentanone
Concen: 2.107 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 132328

Ion	Ratio	Lower	Upper
43	100		
58	35.9	29.0	43.6



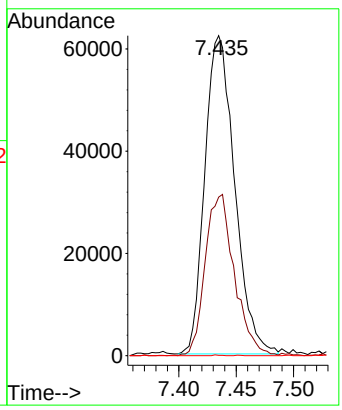


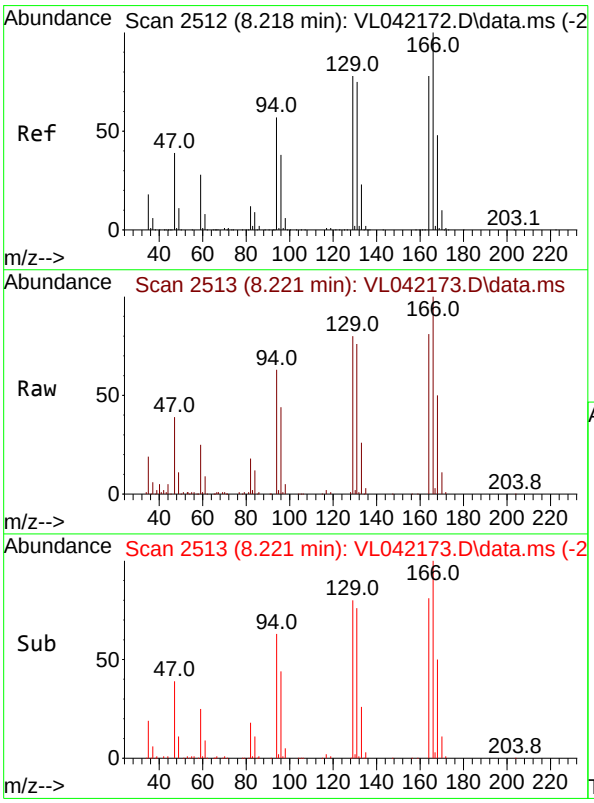
#51
2-Hexanone
Concen: 2.162 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 112681

Ion	Ratio	Lower	Upper
43	100		
58	50.0	39.7	59.5
98	0.0	0.1	0.1#

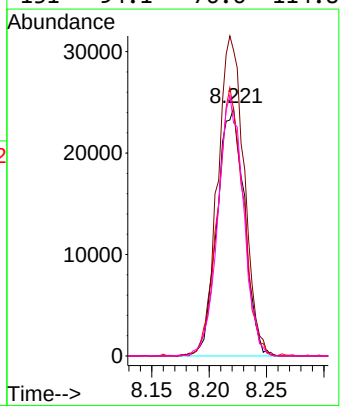


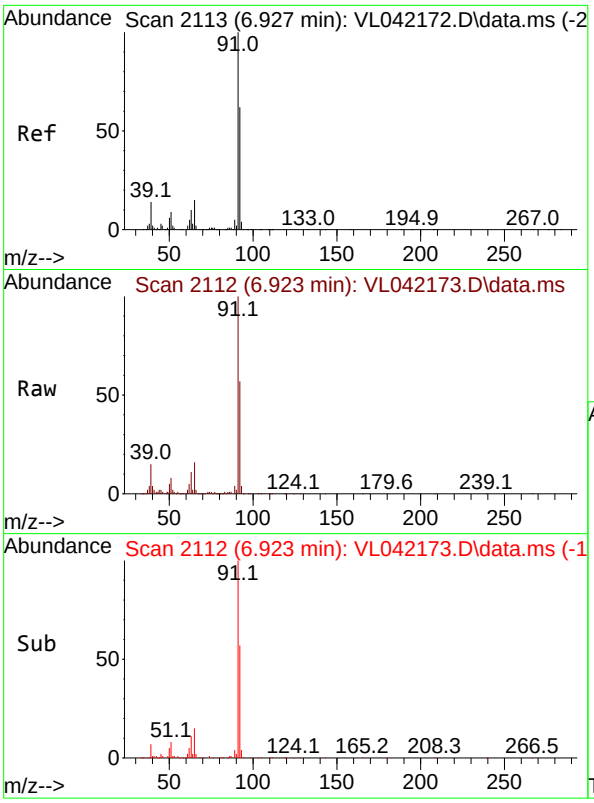


#52
Tetrachloroethene
Concen: 1.888 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:164 Resp: 40558

Ion	Ratio	Lower	Upper
164	100		
166	123.4	102.5	153.7
129	99.2	79.8	119.8
131	94.1	76.6	114.8



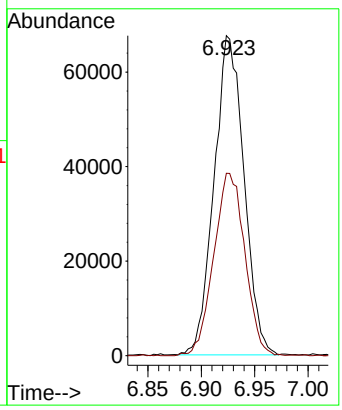


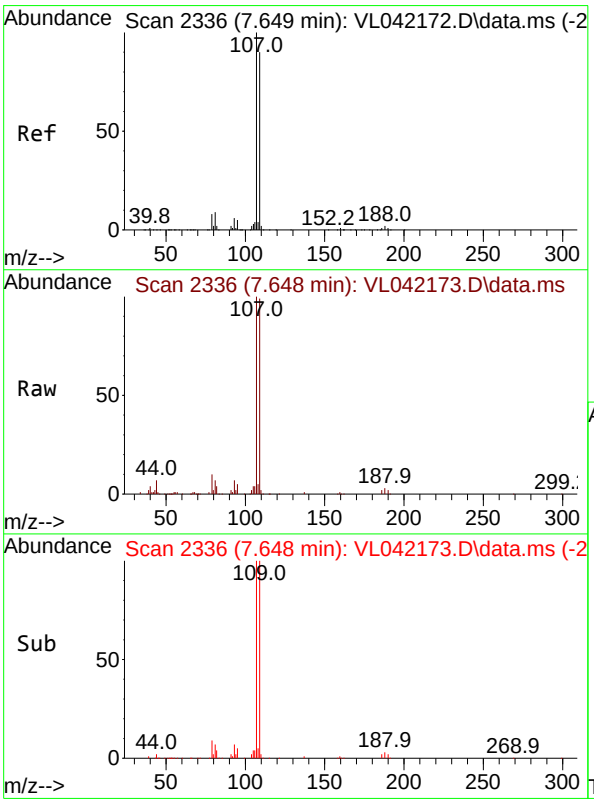
#53
Toluene
Concen: 2.045 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 131314

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.4	72.6

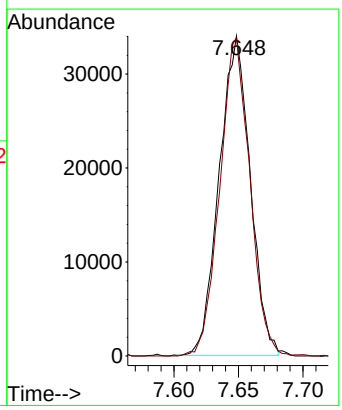


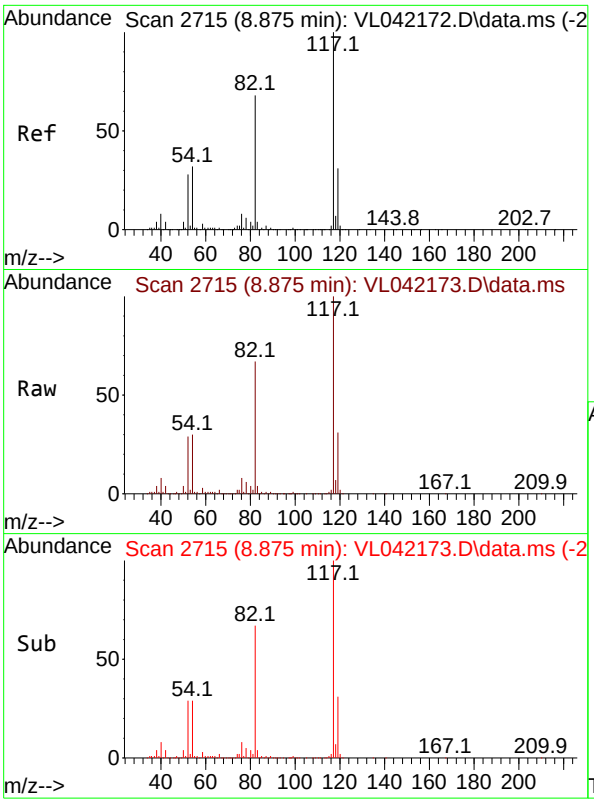


#54
1,2-Dibromoethane
Concen: 1.952 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:107 Resp: 56799

Ion	Ratio	Lower	Upper
107	100		
109	99.7	72.2	108.4



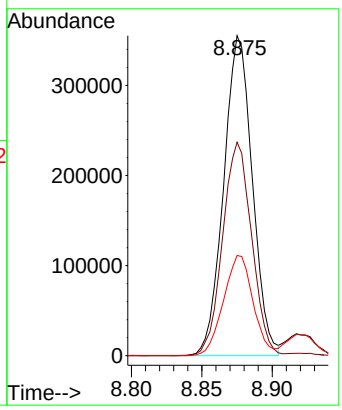


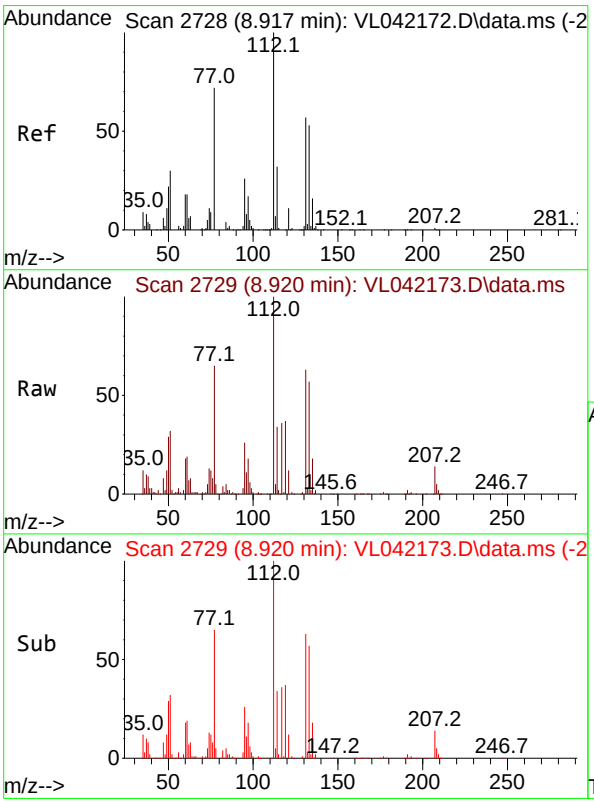
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 504538

Ion	Ratio	Lower	Upper
117	100		
82	68.2	55.8	83.6
119	33.0	25.5	38.3

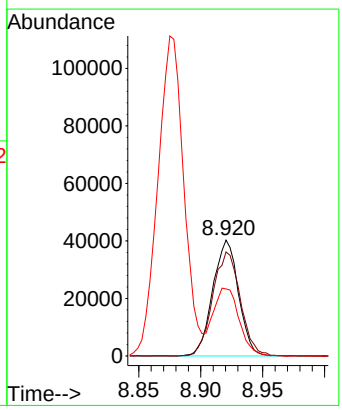


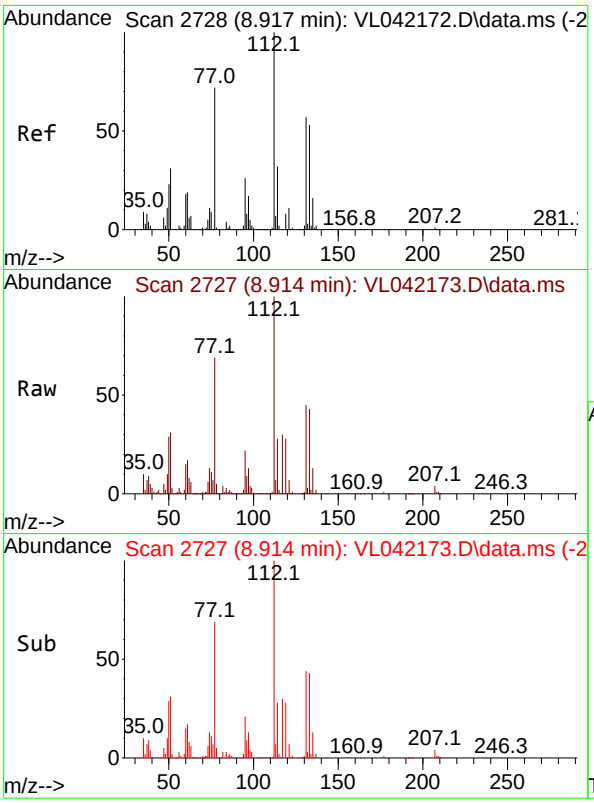


#56
1,1,1,2-Tetrachloroethane
Concen: 2.093 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:131 Resp: 58141

Ion	Ratio	Lower	Upper
131	100		
133	96.6	76.6	114.8
119	58.3	49.8	74.6



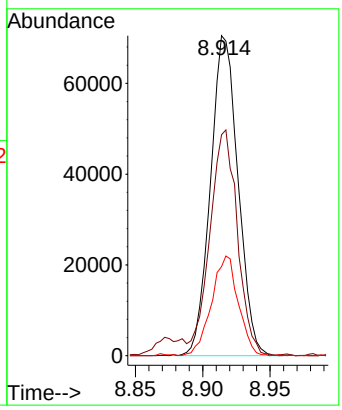


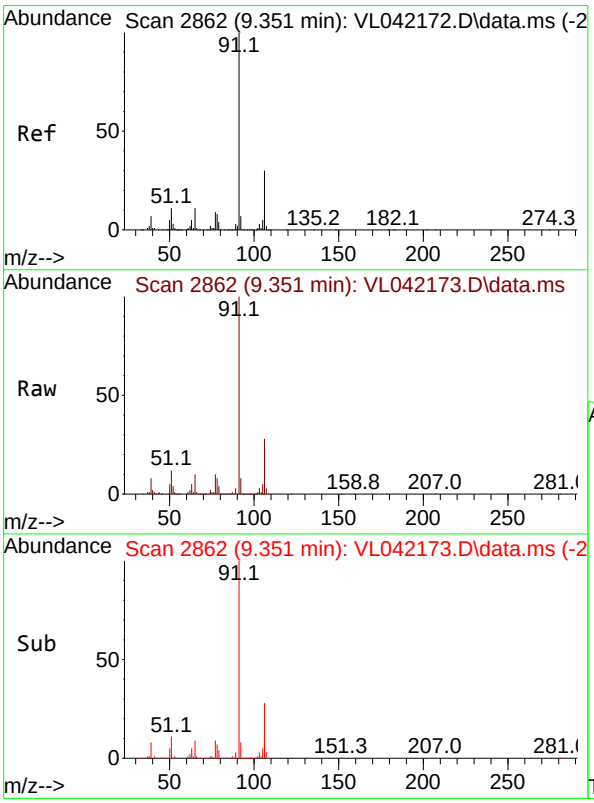
#57
Chlorobenzene
Concen: 2.096 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:112 Resp: 100308

Ion	Ratio	Lower	Upper
112	100		
77	68.8	58.2	87.2
114	27.8	29.1	35.5#

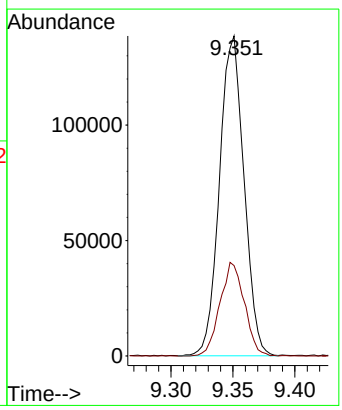


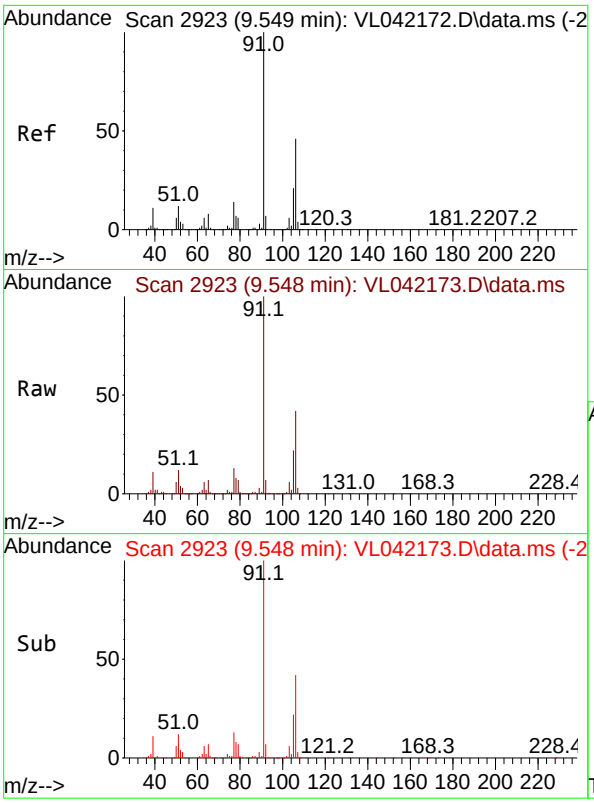


#58
Ethyl Benzene
Concen: 2.132 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 191114

Ion	Ratio	Lower	Upper
91	100		
106	28.3	24.2	36.2



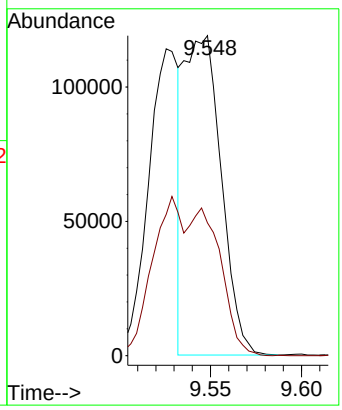


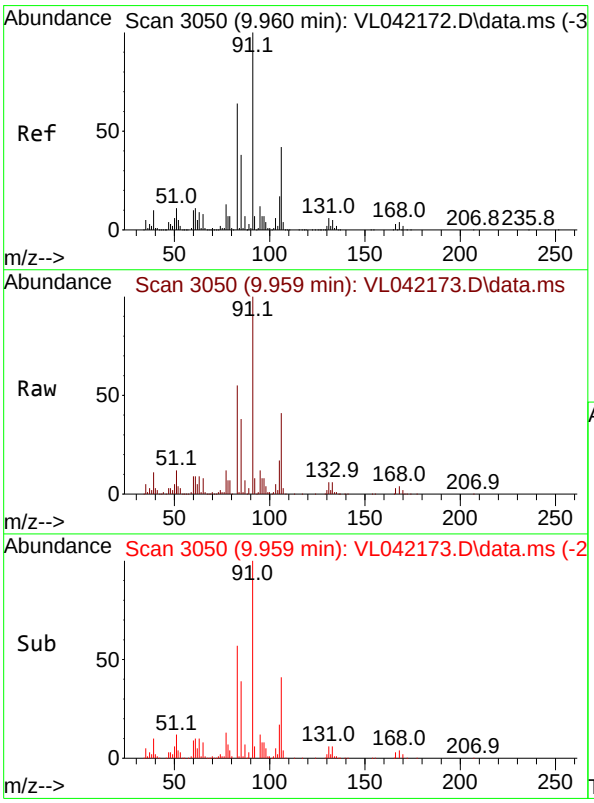
#59
m/p-Xylene
Concen: 2.333 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 167182

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

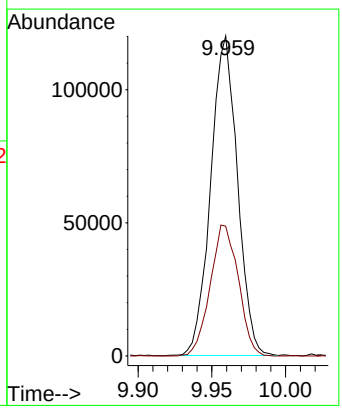


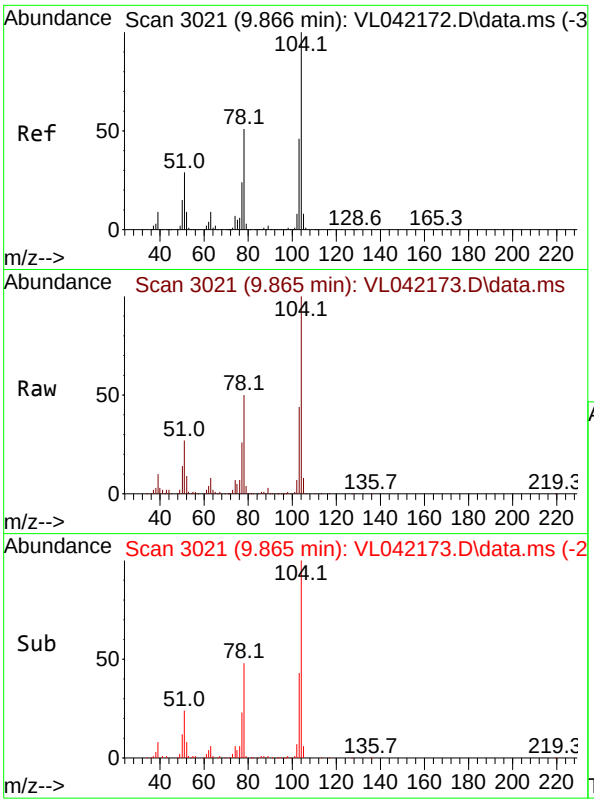


#60
o-Xylene
Concen: 2.109 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 151292

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5



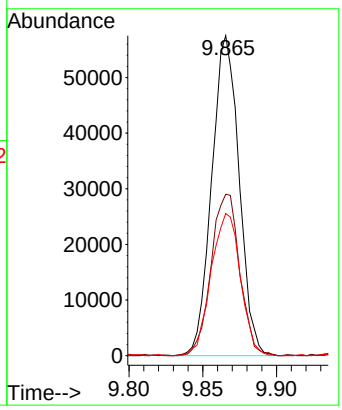


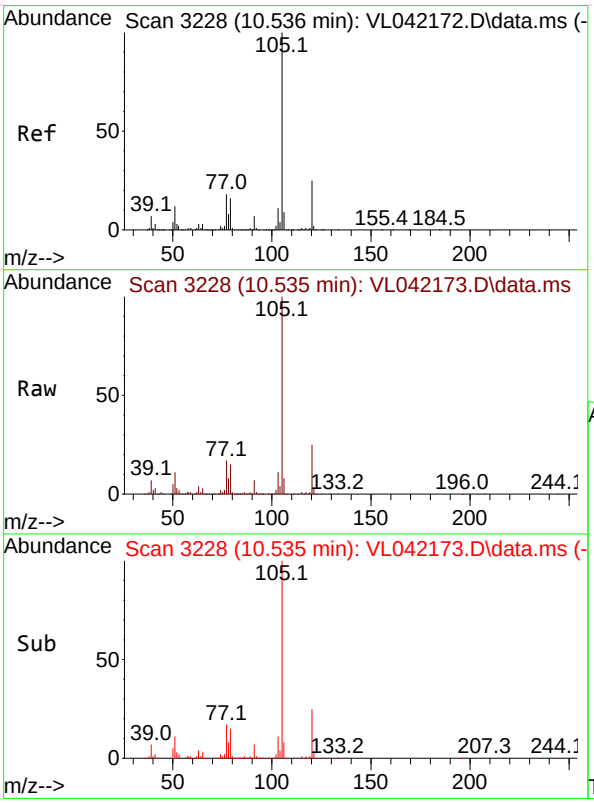
#61
Styrene
Concen: 2.089 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:104 Resp: 74134

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	47.8	37.0	55.4

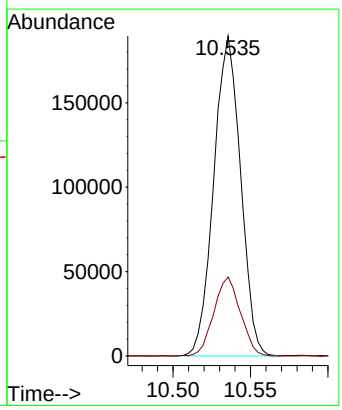


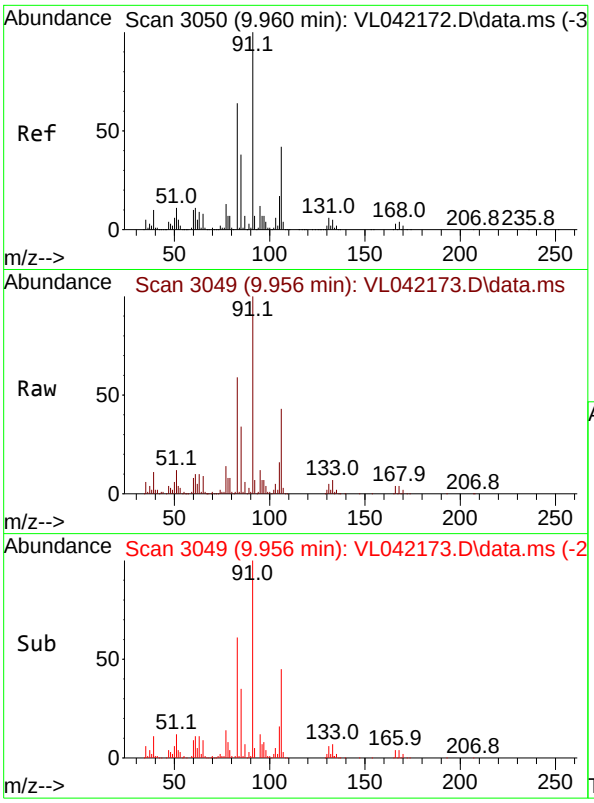


#62
Isopropylbenzene
Concen: 2.127 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 228191

Ion	Ratio	Lower	Upper
105	100		
120	24.4	19.9	29.9



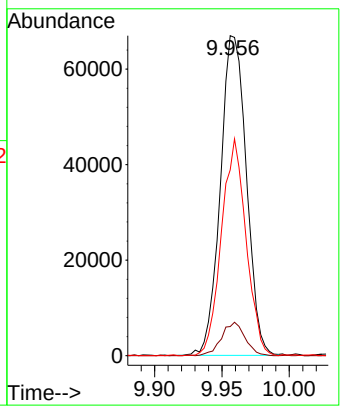


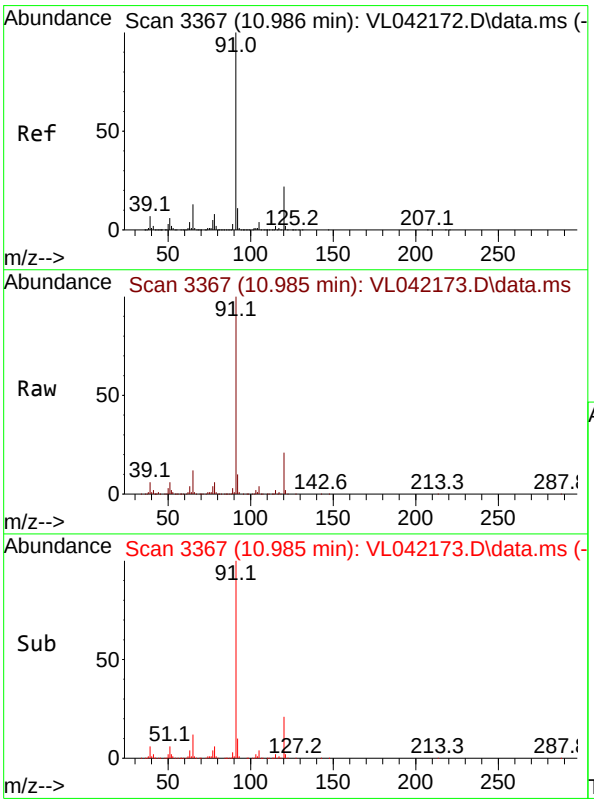
#63
1,1,2,2-Tetrachloroethane
Concen: 2.067 ppbv
RT: 9.956 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 90114

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.4	32.5	97.5

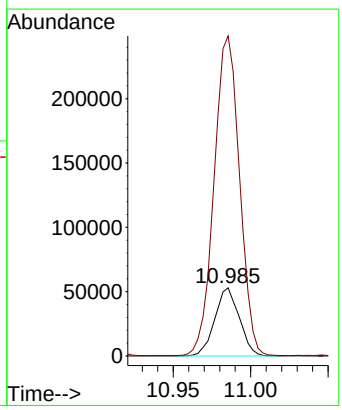


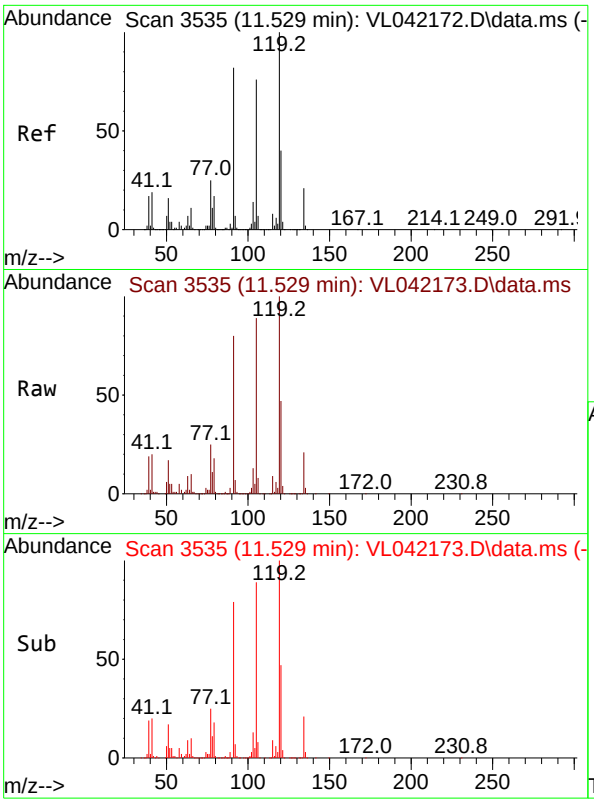


#64
n-propylbenzene
Concen: 2.104 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:120 Resp: 58105

Ion	Ratio	Lower	Upper
120	100		
91	491.1	376.9	565.3



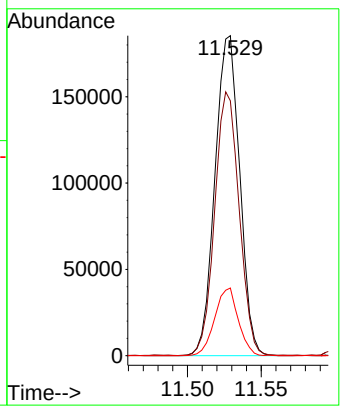


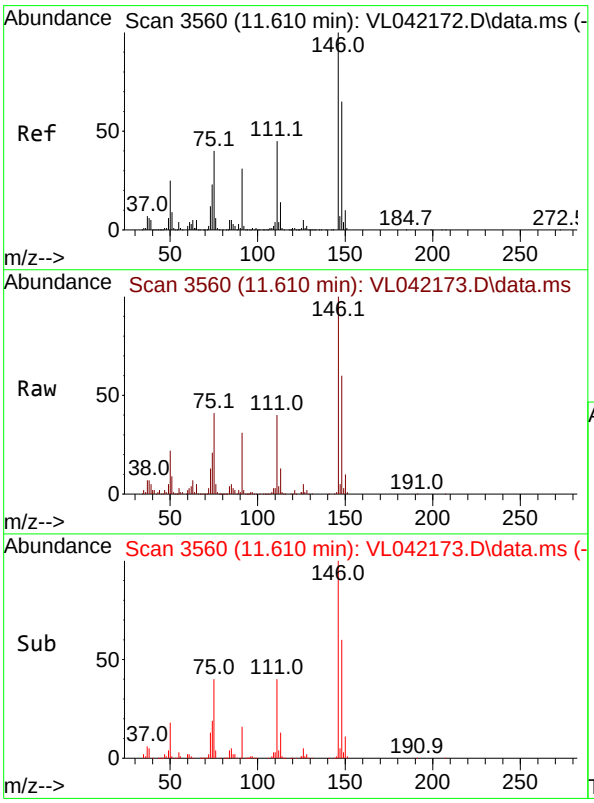
#65
tert-Butylbenzene
Concen: 2.180 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 216336

Ion	Ratio	Lower	Upper
119	100		
91	81.5	66.0	99.0
134	20.2	16.7	25.1

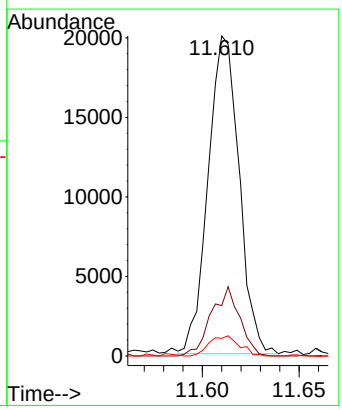


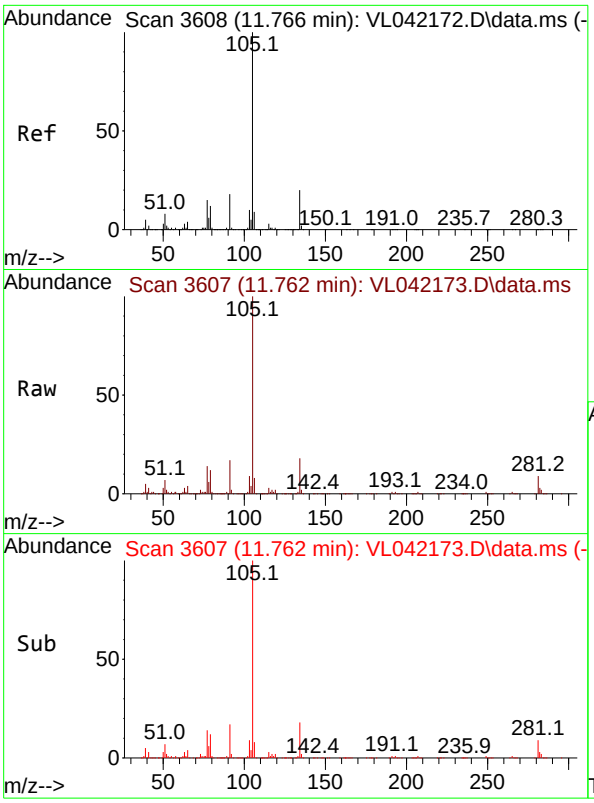


#66
Benzyl Chloride
Concen: 2.116 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 22272

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	6.5	4.5	6.7



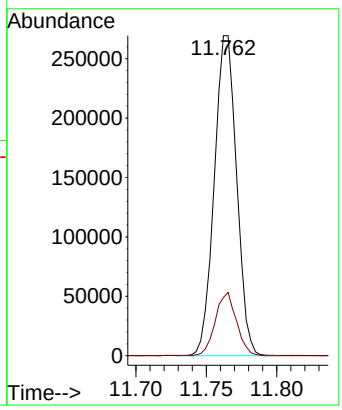


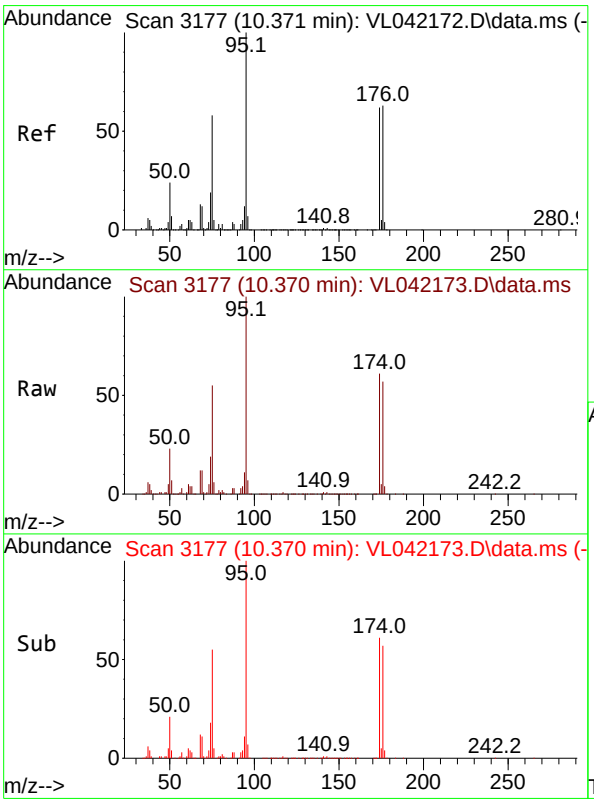
#67
sec-Butylbenzene
Concen: 2.156 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 297381

Ion	Ratio	Lower	Upper
105	100		
134	18.8	15.5	23.3

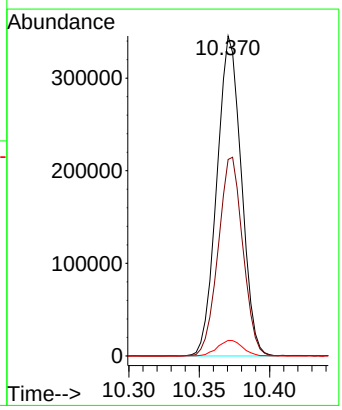


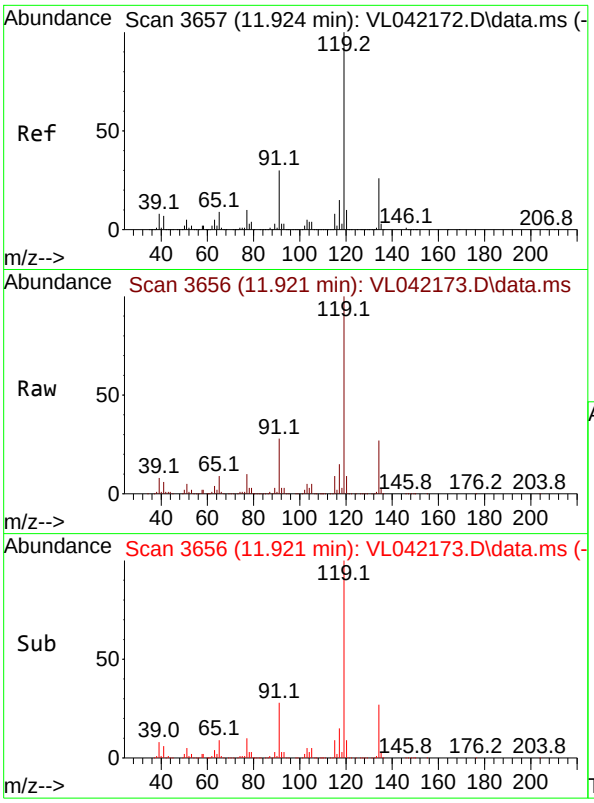


#68
1-Bromo-4-Fluorobenzene
Concen: 10.077 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 95 Resp: 417532

Ion	Ratio	Lower	Upper
95	100		
174	62.6	50.6	76.0
175	5.0	3.8	5.6



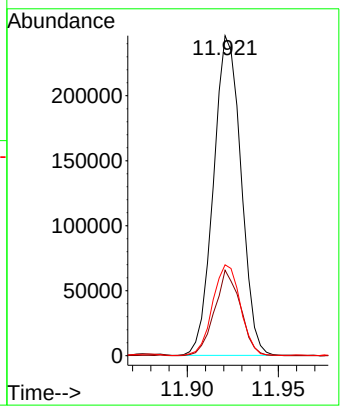


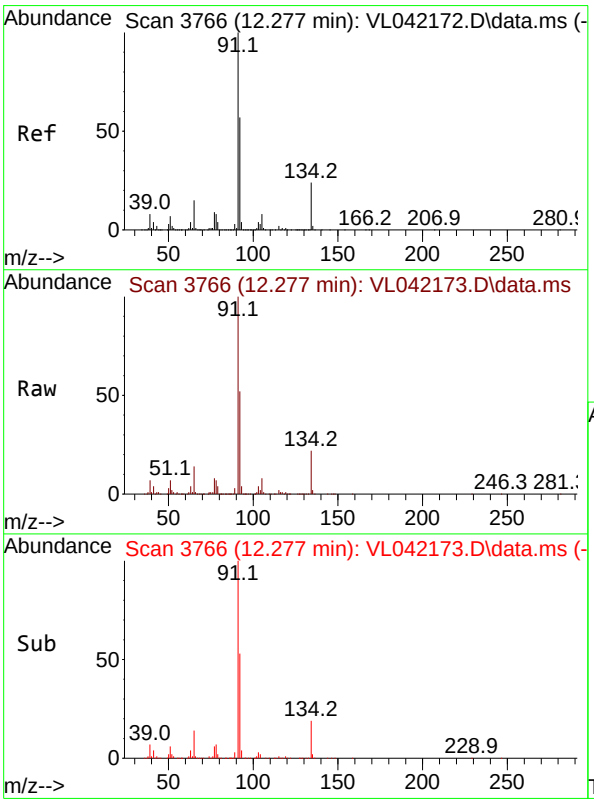
#69
p-Isopropyltoluene
Concen: 2.176 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 258357

Ion	Ratio	Lower	Upper
119	100		
134	25.2	20.4	30.6
91	29.5	23.7	35.5

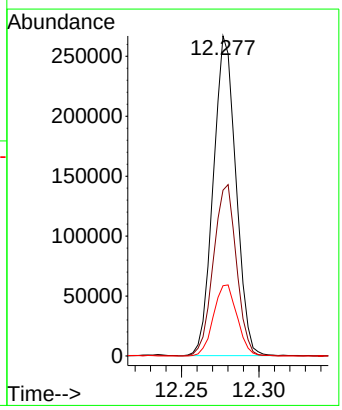


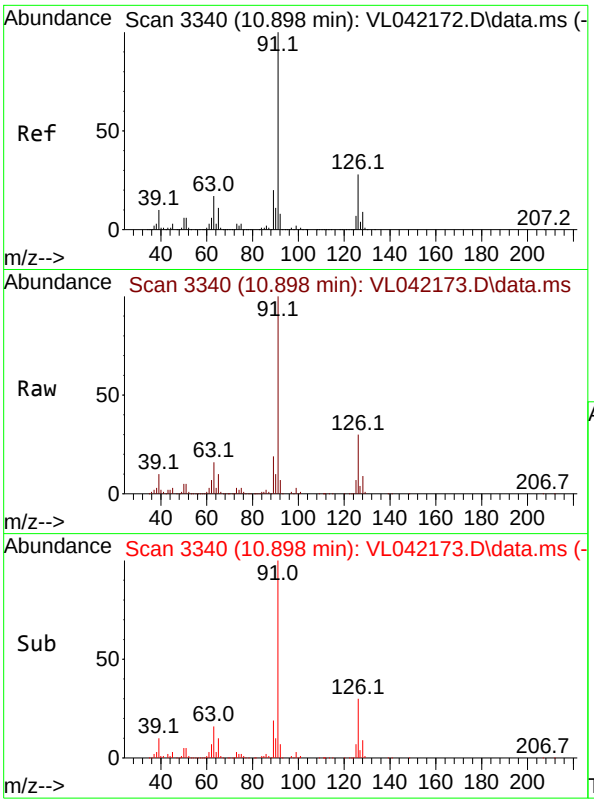


#70
n-Butylbenzene
Concen: 2.228 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 270616

Ion	Ratio	Lower	Upper
91	100		
92	55.1	44.9	67.3
134	23.3	19.2	28.8



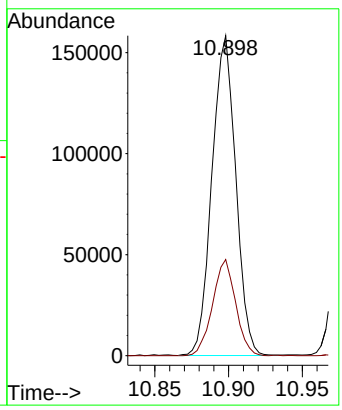


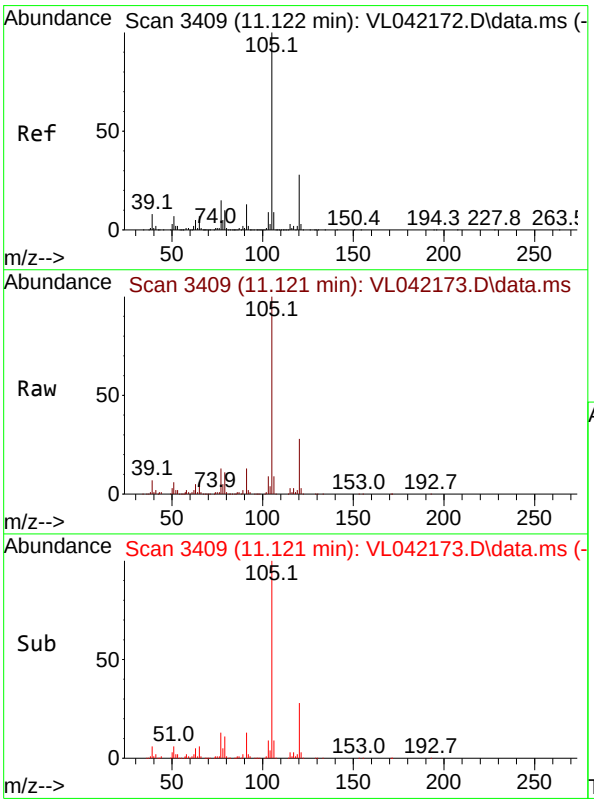
#71
2-Chlorotoluene
Concen: 2.132 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 177487

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4

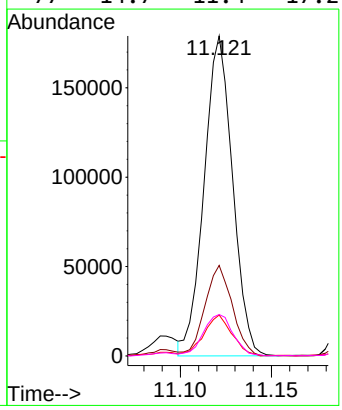


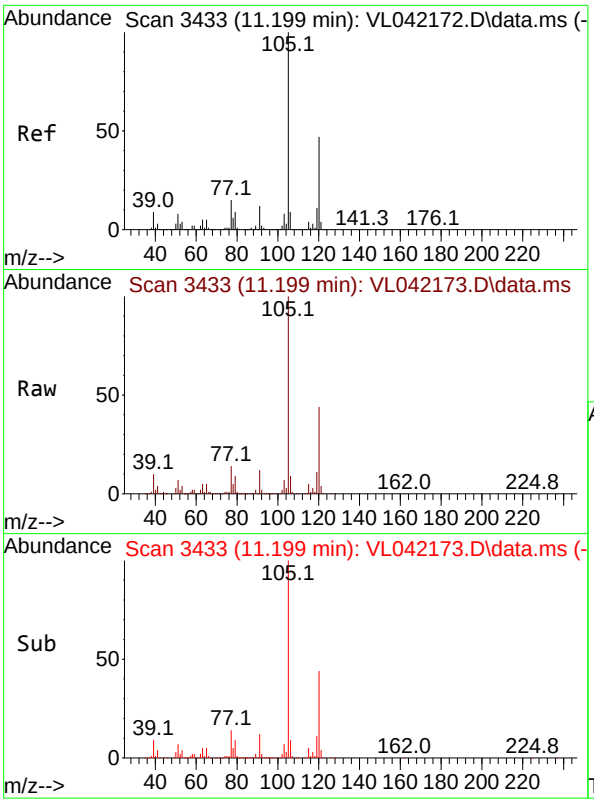


#72
4-Ethyltoluene
Concen: 2.179 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 194660

Ion	Ratio	Lower	Upper
105	100		
120	29.1	23.4	35.0
91	13.7	10.3	15.5
77	14.7	11.4	17.2



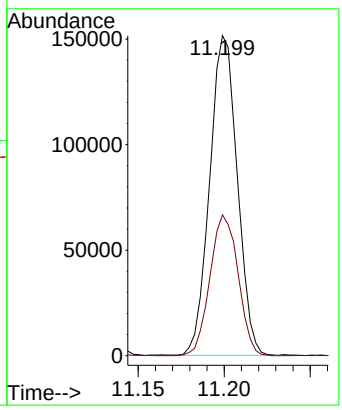


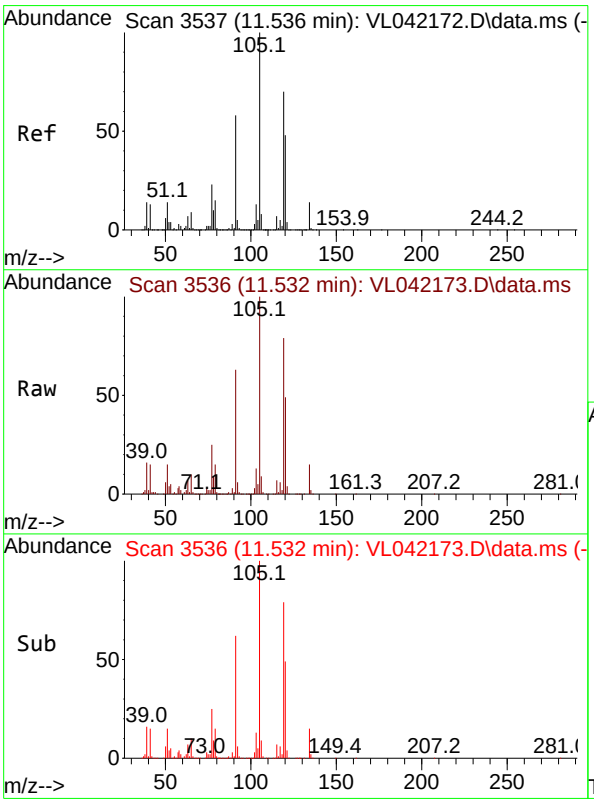
#73
1,3,5-Trimethylbenzene
Concen: 2.169 ppbv
RT: 11.199 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 169221

Ion	Ratio	Lower	Upper
105	100		
120	44.0	37.4	56.0

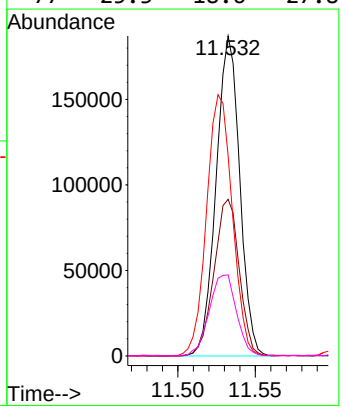


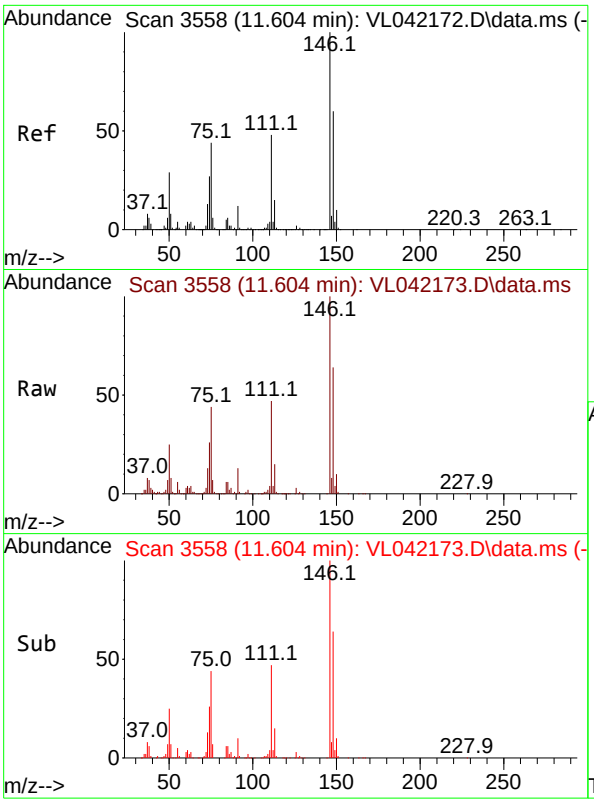


#74
1,2,4-Trimethylbenzene
Concen: 2.207 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 198351

Ion	Ratio	Lower	Upper
105	100		
120	49.0	38.6	58.0
91	62.4	46.2	69.2
77	25.3	18.6	27.8



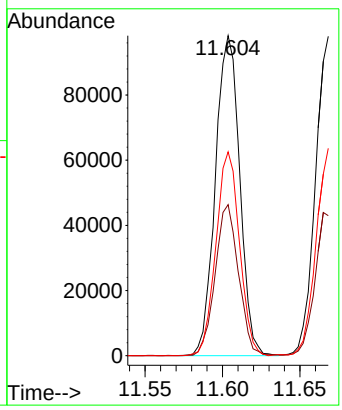


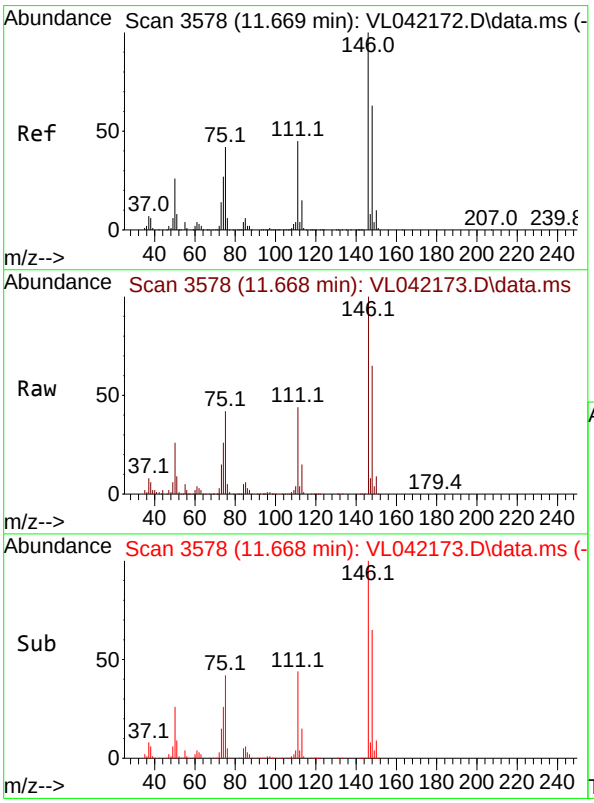
#75
1,3-Dichlorobenzene
Concen: 2.175 ppbv
RT: 11.604 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 107217

Ion	Ratio	Lower	Upper
146	100		
111	45.5	23.8	71.2
148	61.6	31.9	95.9

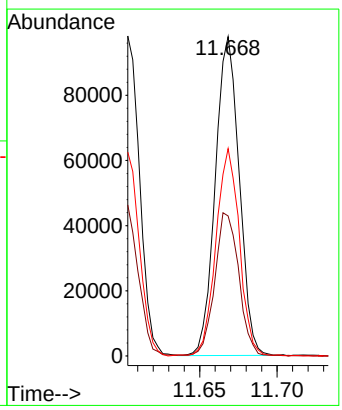


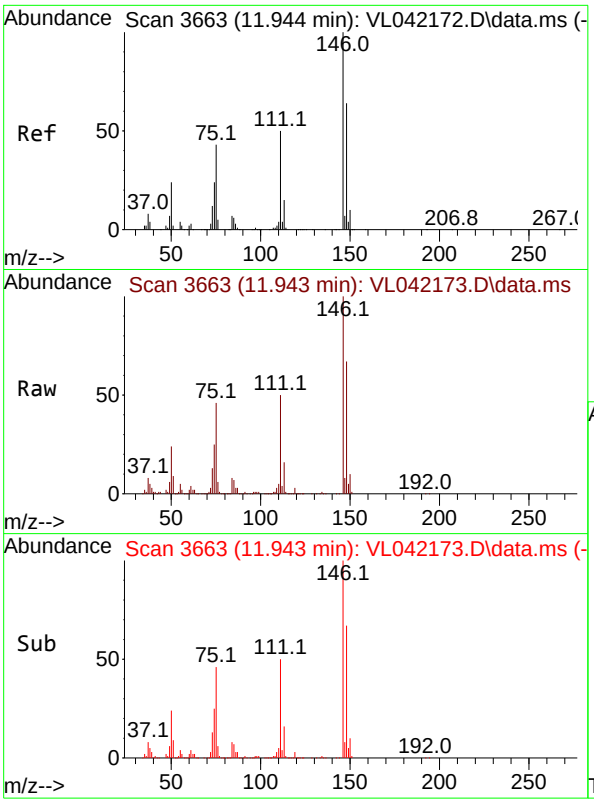


#76
1,4-Dichlorobenzene
Concen: 2.139 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 104925

Ion	Ratio	Lower	Upper
146	100		
111	45.3	23.0	69.0
148	64.0	31.9	95.7



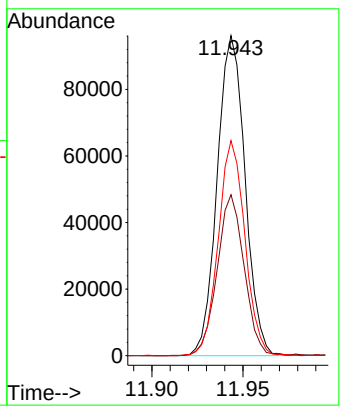


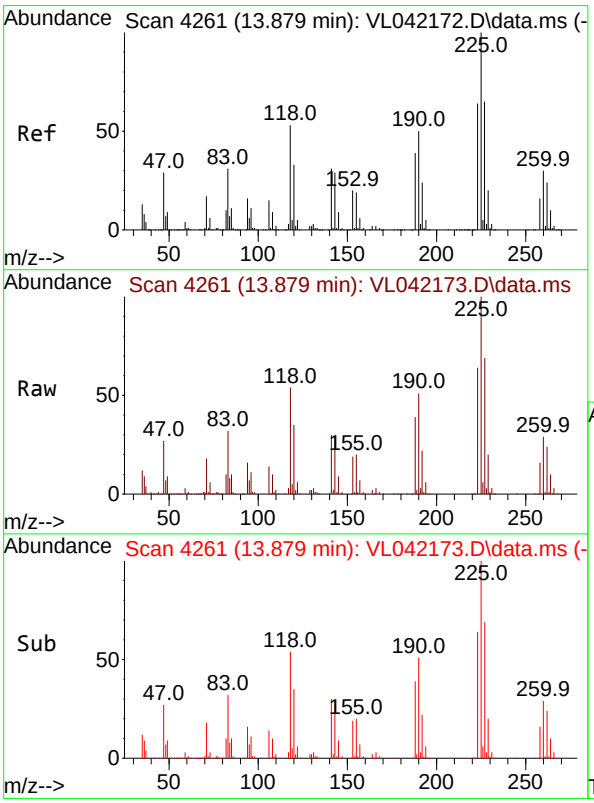
#77
1,2-Dichlorobenzene
Concen: 2.132 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 102310

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	64.6	31.6	94.8

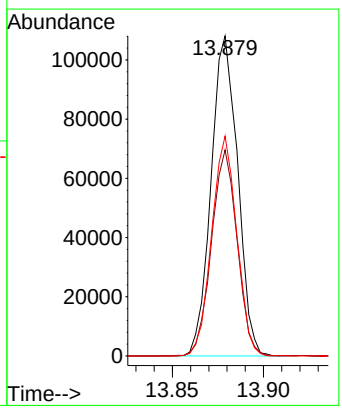


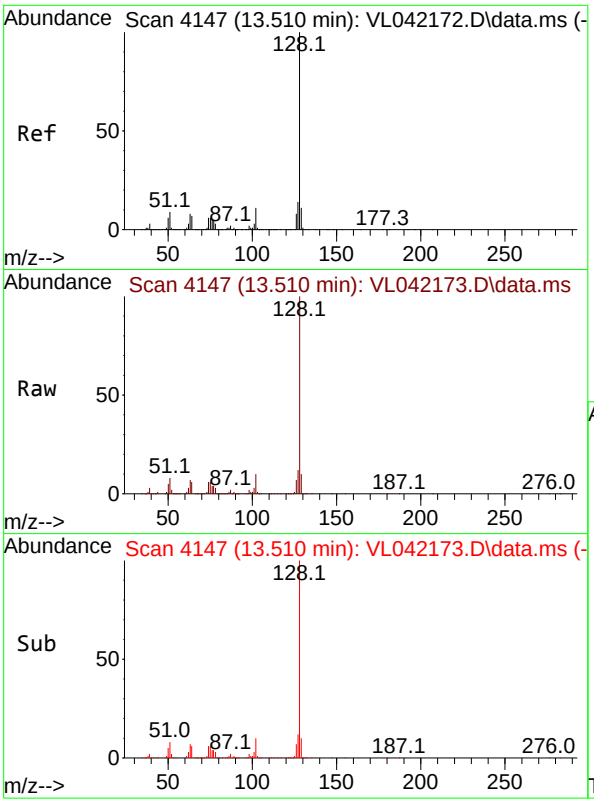


#78
Hexachloro-1,3-Butadiene
Concen: 2.242 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:225 Resp: 109539

Ion	Ratio	Lower	Upper
225	100		
223	62.2	50.6	76.0
227	64.9	51.2	76.8



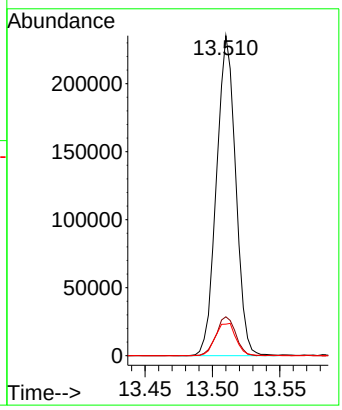


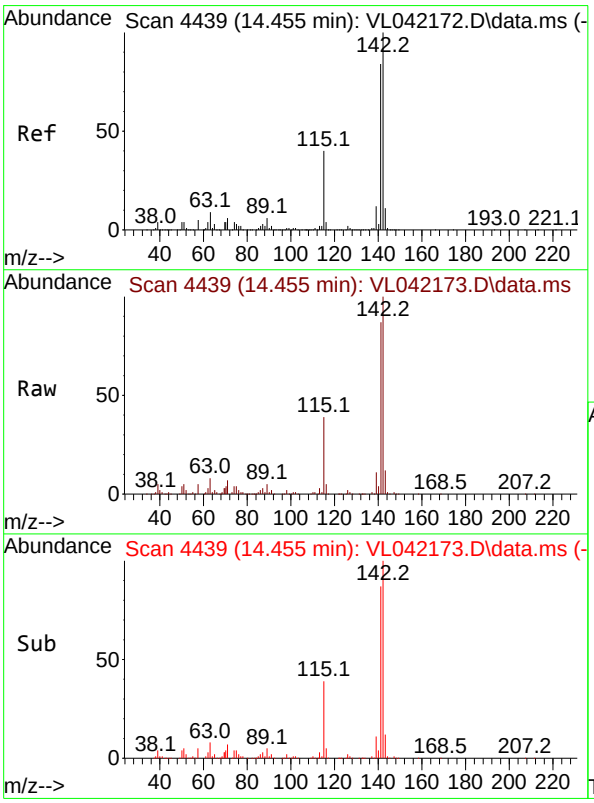
#79
Naphthalene
Concen: 2.375 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:128 Resp: 233451

Ion	Ratio	Lower	Upper
128	100		
127	12.1	10.8	16.2
129	9.9	9.0	13.4

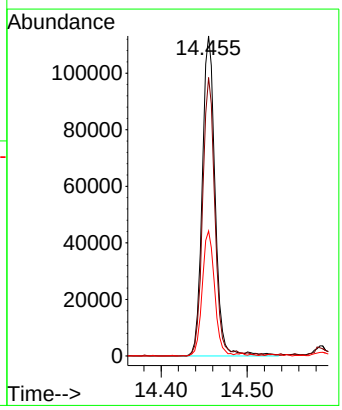


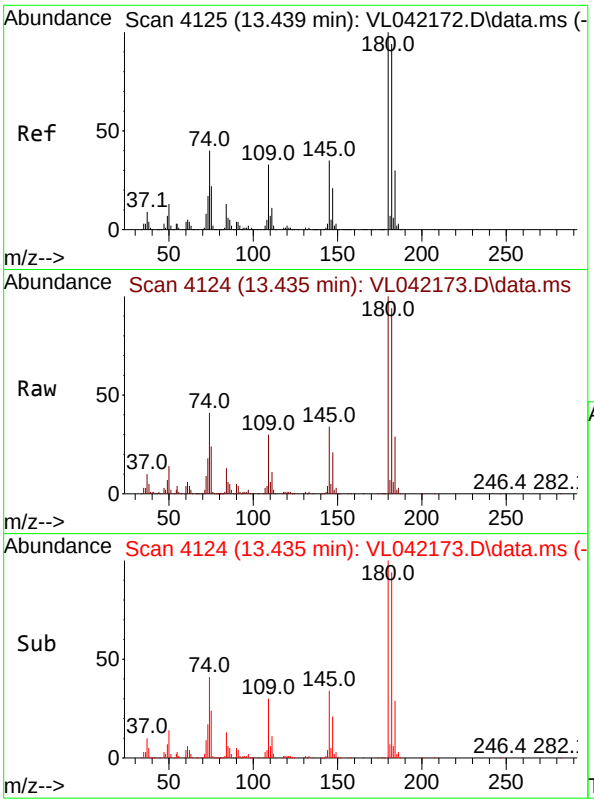


#80
Naphthalene,2-methyl-
Concen: 2.451 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:142 Resp: 117313

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	38.5	31.6	47.4



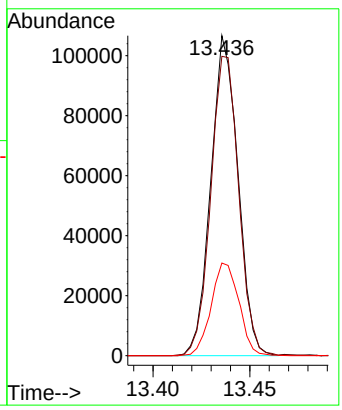


#81
1,2,4-Trichlorobenzene
Concen: 2.288 ppbv
RT: 13.435 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:180 Resp: 103765

Ion	Ratio	Lower	Upper
180	100		
182	97.0	75.1	112.7
184	29.6	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument : MSVOA_L
ClientSampleId : VSTDICC001

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	186244	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	537244	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	499830	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	404753	9.861	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	28203	1.026	ppbv		99
3) Chlorodifluoromethane	1.473	51	28693	1.021	ppbv		94
4) Chloromethane	1.531	50	11111	0.989	ppbv		99
5) Vinyl Chloride	1.577	62	10723	0.936	ppbv		98
6) Bromomethane	1.667	94	4984	0.979	ppbv		97
7) Chloroethane	1.703	64	4622	1.025	ppbv		100
8) Dichlorotetrafluoroethane	1.554	85	23886	1.020	ppbv		98
9) Propene	1.884	41	1465	0.116	ppbv		99
10) Heptane	4.975	43	36132	1.055	ppbv		100
11) Trichlorofluoromethane	1.875	101	27136	1.014	ppbv		96
12) 1,1,2-Trichlorotrifluo...	2.137	101	22629	1.029	ppbv		99
13) Ethanol	1.719	45	935	0.943	ppbv	#	1
14) Bromoethene	1.781	108	8330	0.989	ppbv	#	82
15) Acetone	1.836	43	29294	1.125	ppbv		95
16) 1,3-Butadiene	1.606	39	13133	1.121	ppbv		97
17) tert-Butyl alcohol	2.040	59	33500	1.033	ppbv		97
18) 1,1-Dichloroethene	2.033	96	10532	1.024	ppbv		89
19) Isopropyl Alcohol	1.884	45	14903	1.014	ppbv	#	38
20) Methylene Chloride	2.059	84	10481	1.080	ppbv		93
21) Allyl Chloride	2.095	41	19039	1.036	ppbv		99
22) trans-1,2-Dichloroethene	2.033	96	10532	0.877	ppbv		86
23) Vinyl Acetate	2.464	43	10644	0.983	ppbv	#	85
24) 1,1-Dichloroethane	2.409	63	22505	1.022	ppbv		99
25) Ethyl Acetate	2.836	43	67402	0.997	ppbv	#	96
26) Hexane	2.823	57	27223	1.043	ppbv		98
27) Carbon Disulfide	2.146	76	28167	1.006	ppbv	#	47
28) Methyl tert-Butyl Ether	2.441	73	16501	1.015	ppbv		95
29) Chloroform	2.845	83	38516	1.008	ppbv		96
30) Cyclohexane	3.852	84	23052	1.016	ppbv		97
31) cis-1,2-Dichloroethene	2.716	61	27187	1.026	ppbv		89
32) 1,1,1-Trichloroethane	3.363	97	40993	0.938	ppbv		99
34) 2-Butanone	2.557	43	41423	1.063	ppbv		98
35) Carbon Tetrachloride	3.758	117	39345	0.952	ppbv		93
36) Benzene	3.651	78	55156	1.036	ppbv		94
37) 1,2-Dichloroethane	3.218	62	30543	1.002	ppbv		98
38) Trichloroethene	4.545	130	21906	0.985	ppbv		93
39) 1,2-Dichloropropane	4.312	63	20020	1.032	ppbv		99
40) 1,4-Dioxane	4.593	88	10031	0.997	ppbv	#	49
41) Tetrahydrofuran	3.056	42	22818	1.029	ppbv		97
42) Bromodichloromethane	4.483	83	41864	0.996	ppbv		90
43) Methyl Methacrylate	4.875	69	14387	0.640	ppbv	#	31
44) 2,2,4-Trimethylpentane	4.632	57	90727	1.008	ppbv		96
45) t-1,3-Dichloropropene	6.412	75	13431	0.555	ppbv		97

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	30063	1.014	ppbv		93
47) 1,1,2-Trichloroethane	6.577	97	20546	1.002	ppbv		96
48) Dibromochloromethane	7.383	129	34425	0.991	ppbv		100
49) Bromoform	9.481	173	31610	1.013	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	34358	0.556	ppbv	#	39
51) 2-Hexanone	7.438	43	54680	1.067	ppbv	#	100
52) Tetrachloroethene	8.222	164	19415	0.919	ppbv		95
53) Toluene	6.927	91	64612	1.023	ppbv		99
54) 1,2-Dibromoethane	7.652	107	28879	1.009	ppbv		95
56) 1,1,1,2-Tetrachloroethane	8.924	131	28764	1.045	ppbv	#	87
57) Chlorobenzene	8.917	112	48930	1.032	ppbv		93
58) Ethyl Benzene	9.348	91	91086	1.026	ppbv		97
59) m/p-Xylene	9.545	91	73295	1.033	ppbv	#	31
60) o-Xylene	9.960	91	73702	1.037	ppbv		96
61) Styrene	9.866	104	36110	1.027	ppbv		97
62) Isopropylbenzene	10.536	105	109897	1.034	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.960	83	44431	1.029	ppbv		99
64) n-propylbenzene	10.986	120	29054	1.062	ppbv		98
65) tert-Butylbenzene	11.526	119	103520	1.053	ppbv		96
66) Benzyl Chloride	11.614	91	10660	1.022	ppbv	#	93
67) sec-Butylbenzene	11.762	105	149660	1.095	ppbv		97
69) p-Isopropyltoluene	11.921	119	127509	1.084	ppbv		99
70) n-Butylbenzene	12.280	91	129860	1.079	ppbv		99
71) 2-Chlorotoluene	10.898	91	86356	1.047	ppbv		100
72) 4-Ethyltoluene	11.122	105	92912	1.050	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	83497	1.080	ppbv		92
74) 1,2,4-Trimethylbenzene	11.533	105	97858	1.099	ppbv		94
75) 1,3-Dichlorobenzene	11.604	146	51096	1.046	ppbv		99
76) 1,4-Dichlorobenzene	11.669	146	50841	1.046	ppbv		99
77) 1,2-Dichlorobenzene	11.944	146	51523	1.084	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	55611	1.149	ppbv		97
79) Naphthalene	13.510	128	109031	1.120	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	44518	0.939	ppbv		99
81) 1,2,4-Trichlorobenzene	13.436	180	47040	1.047	ppbv		98

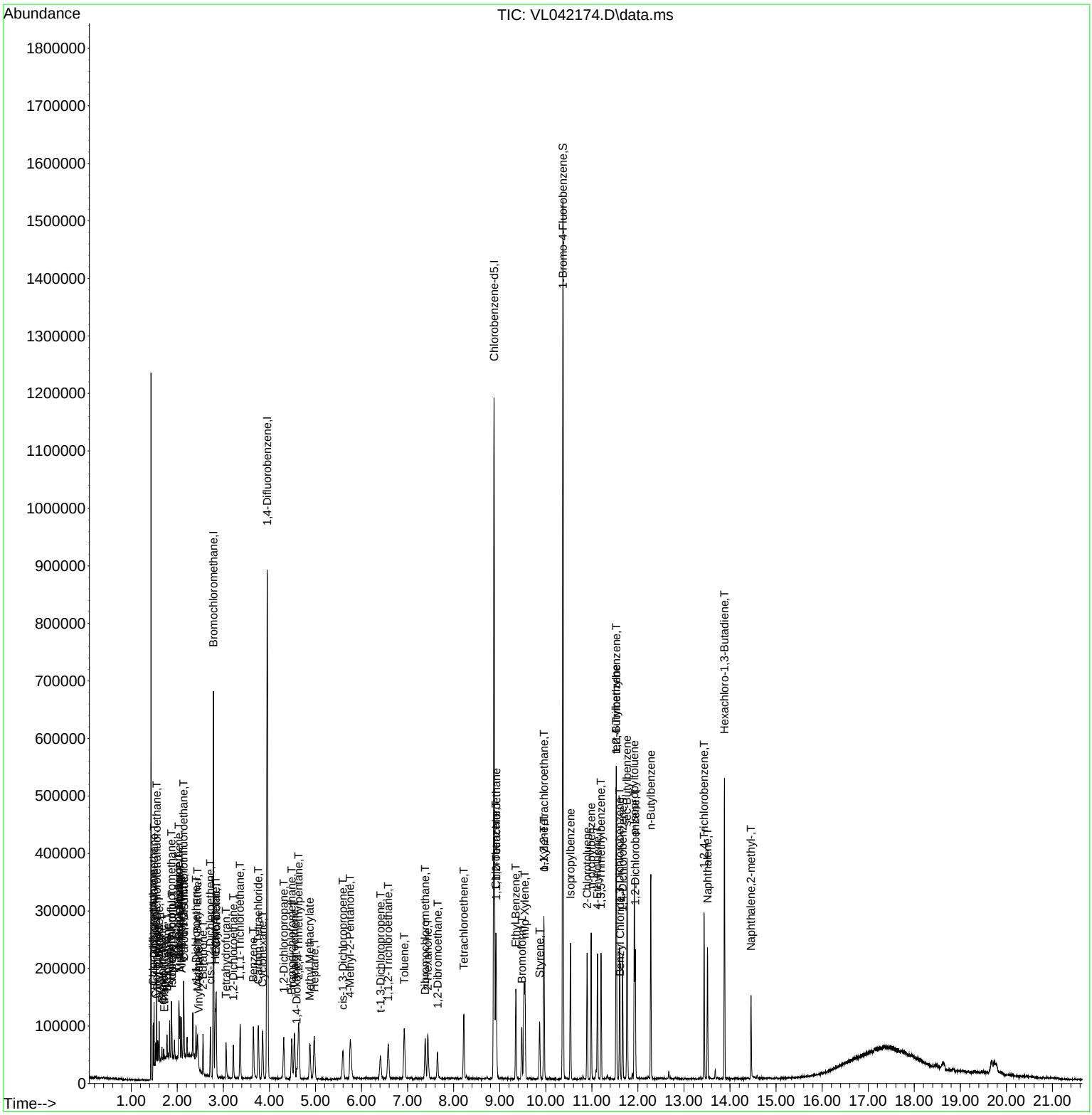
(#) = qualifier out of range (m) = manual integration (+) = signals summed

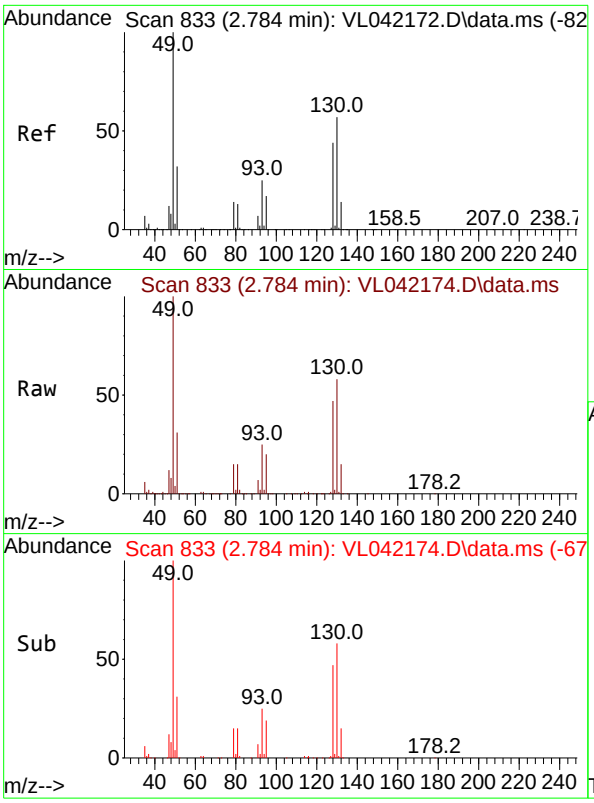
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



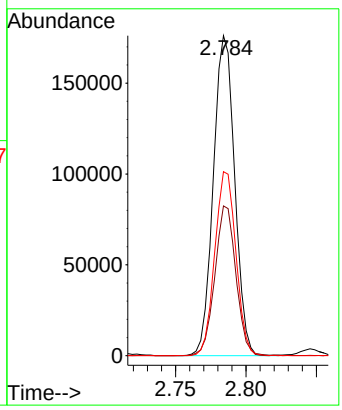


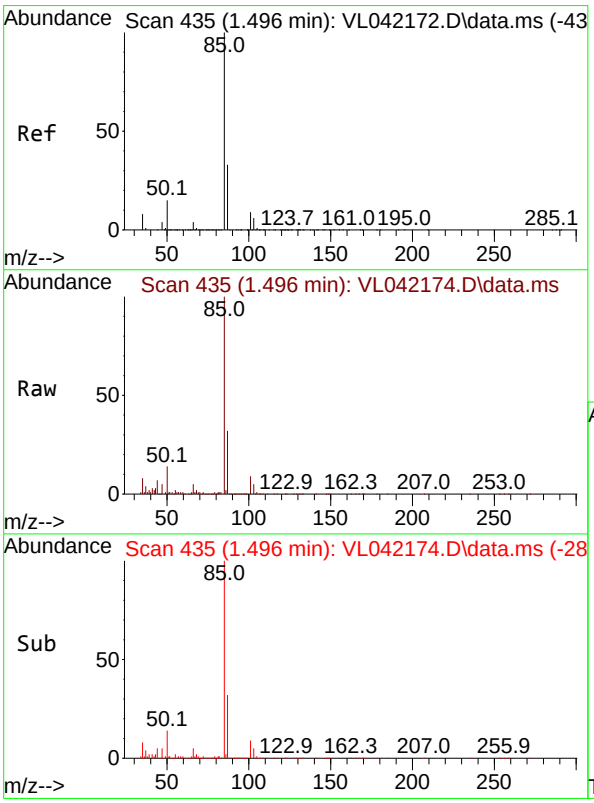
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 49 Resp: 186244

Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.9	68.5
130	57.0	28.8	86.4

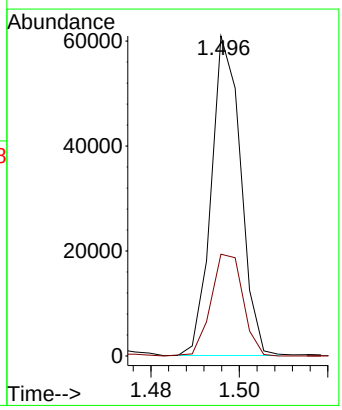


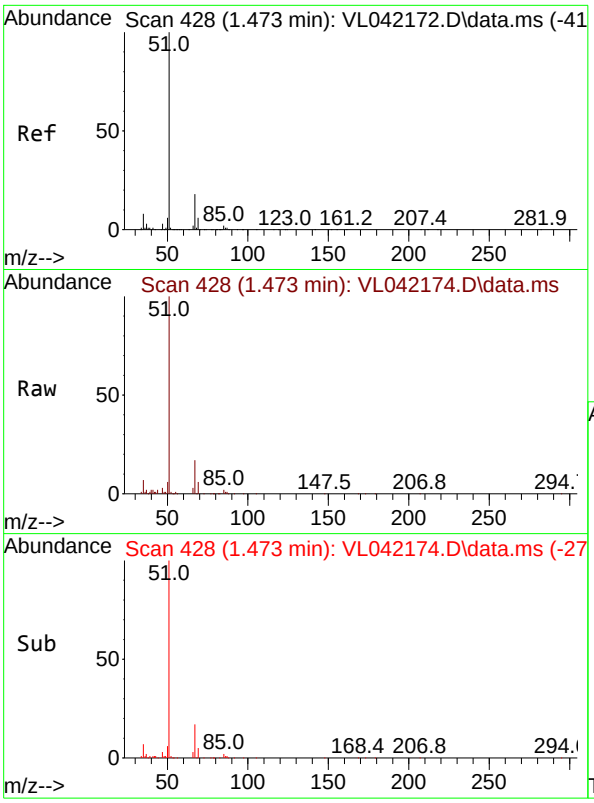


#2
Dichlorodifluoromethane
Concen: 1.026 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 28203

Ion	Ratio	Lower	Upper
85	100		
87	31.9	26.1	39.1



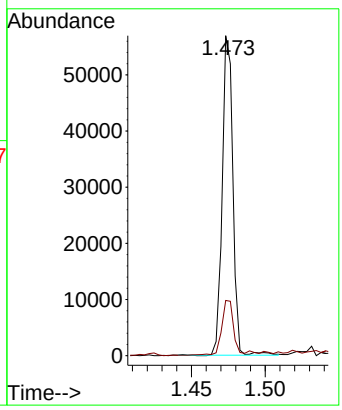


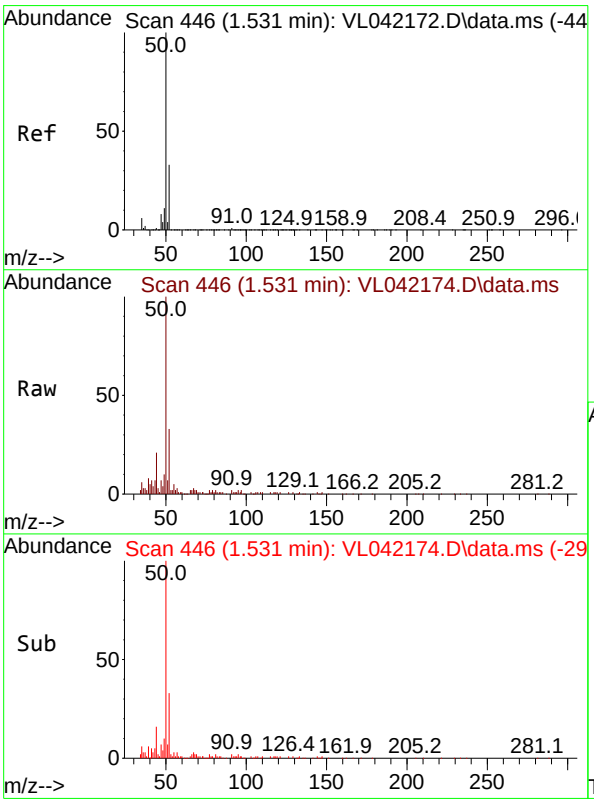
#3
Chlorodifluoromethane
Concen: 1.021 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 51 Resp: 28693

Ion	Ratio	Lower	Upper
51	100		
67	21.5	15.0	22.6

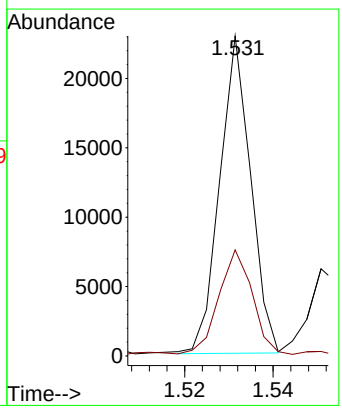


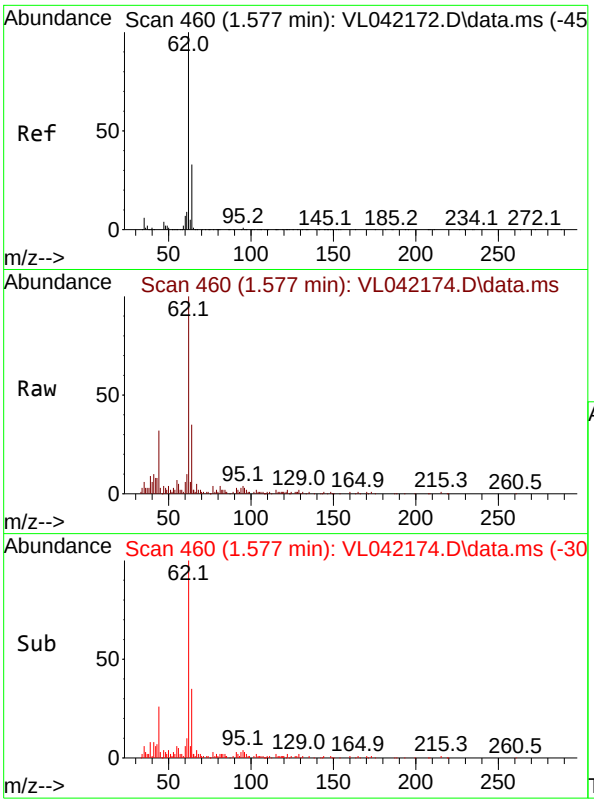


#4
Chloromethane
Concen: 0.989 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 50 Resp: 11111

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1



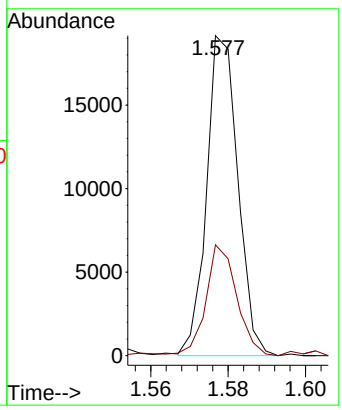


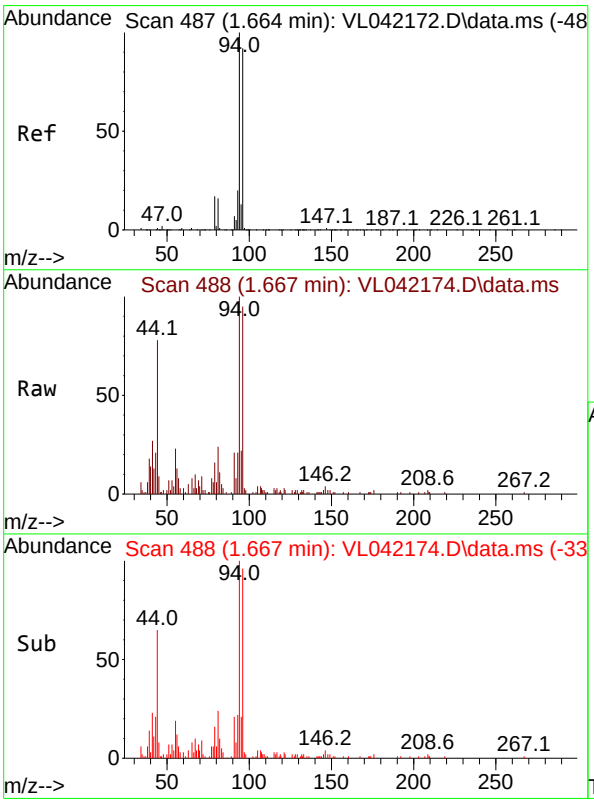
#5
Vinyl Chloride
Concen: 0.936 ppbv
RT: 1.577 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 10723

Ion	Ratio	Lower	Upper
62	100		
64	34.6	26.6	40.0

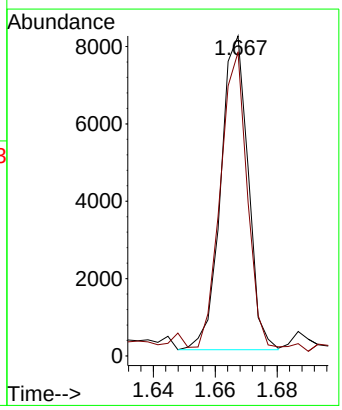


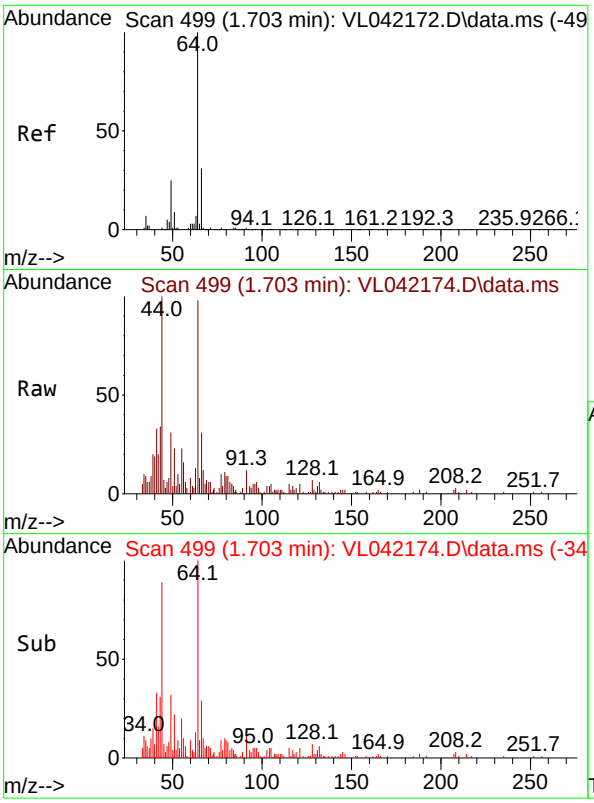


#6
Bromomethane
Concen: 0.979 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 94 Resp: 4984

Ion	Ratio	Lower	Upper
94	100		
96	93.8	73.1	109.7



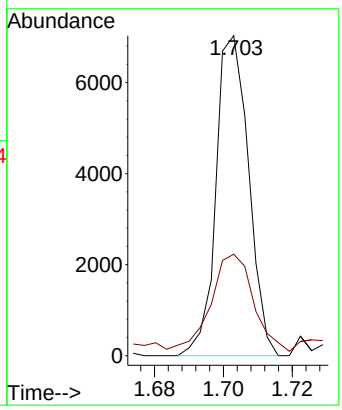


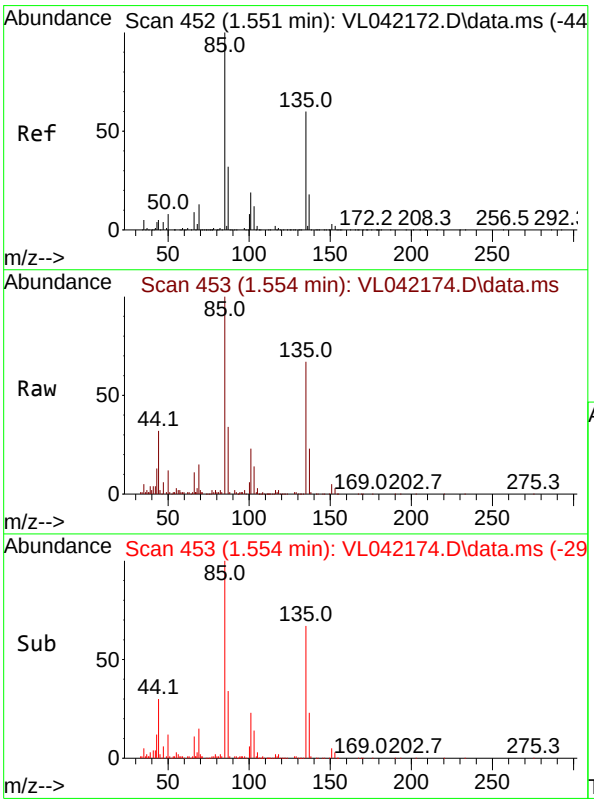
#7
Chloroethane
Concen: 1.025 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 64 Resp: 4622

Ion	Ratio	Lower	Upper
64	100		
66	31.7	25.2	37.8

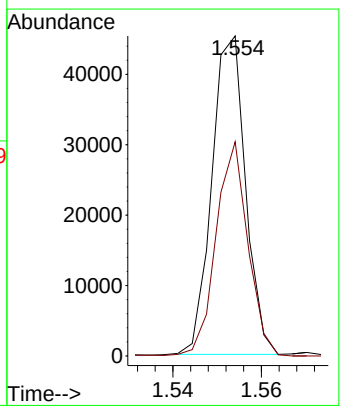


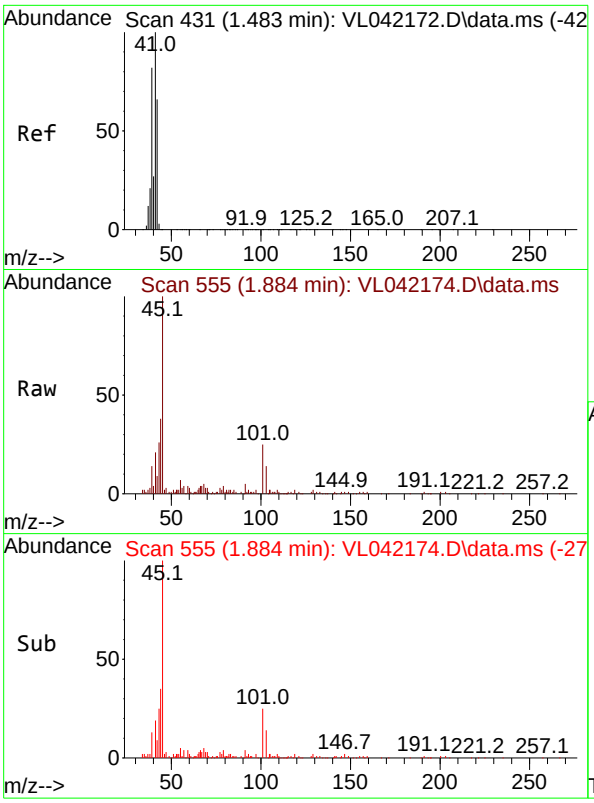


#8
Dichlorotetrafluoroethane
Concen: 1.020 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 23886

Ion	Ratio	Lower	Upper
85	100		
135	64.2	52.4	78.6



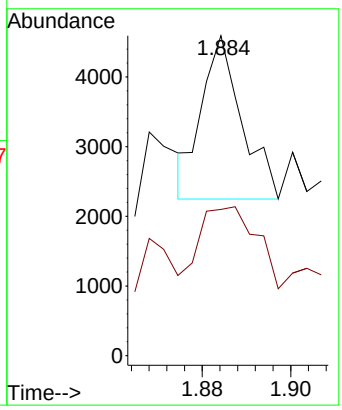


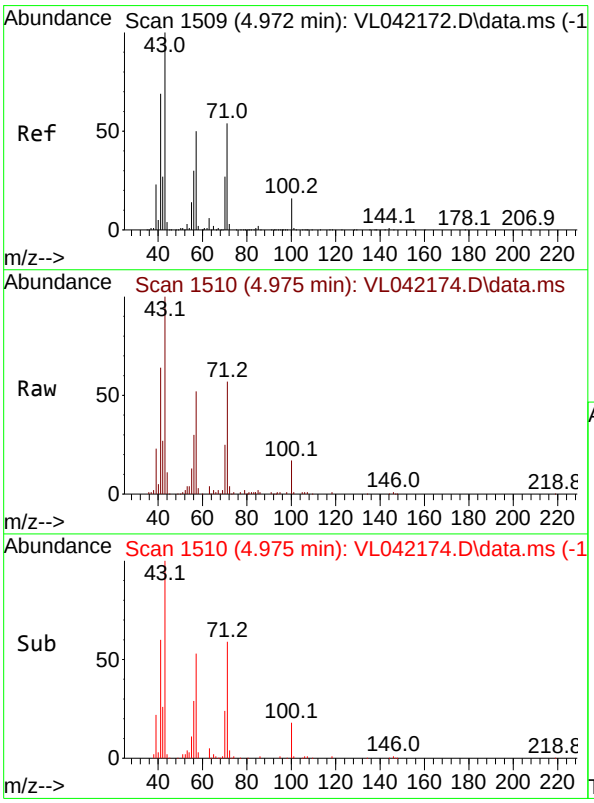
#9
Propene
Concen: 0.116 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.401 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 1465

Ion	Ratio	Lower	Upper
41	100		
42	69.8	55.4	83.2

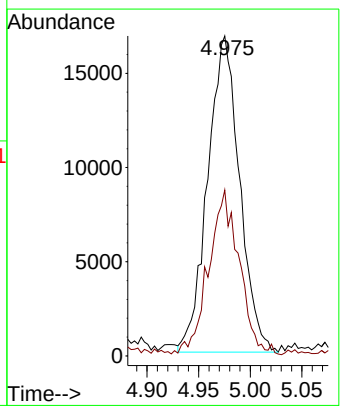


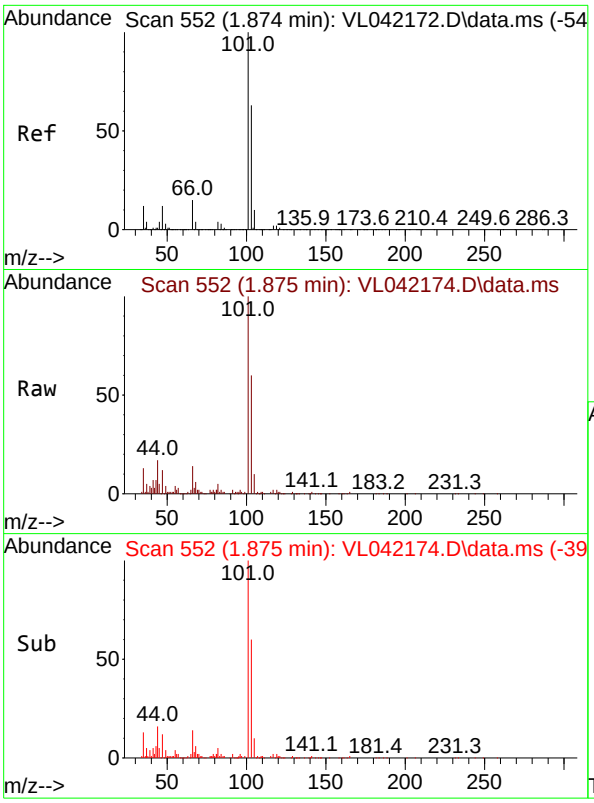


#10
Heptane
Concen: 1.055 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 36132

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2



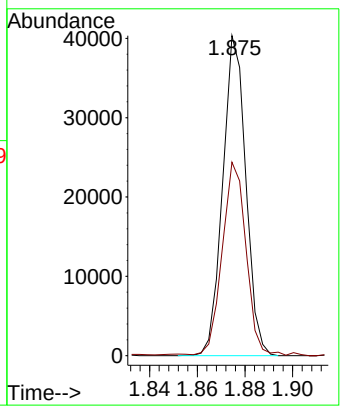


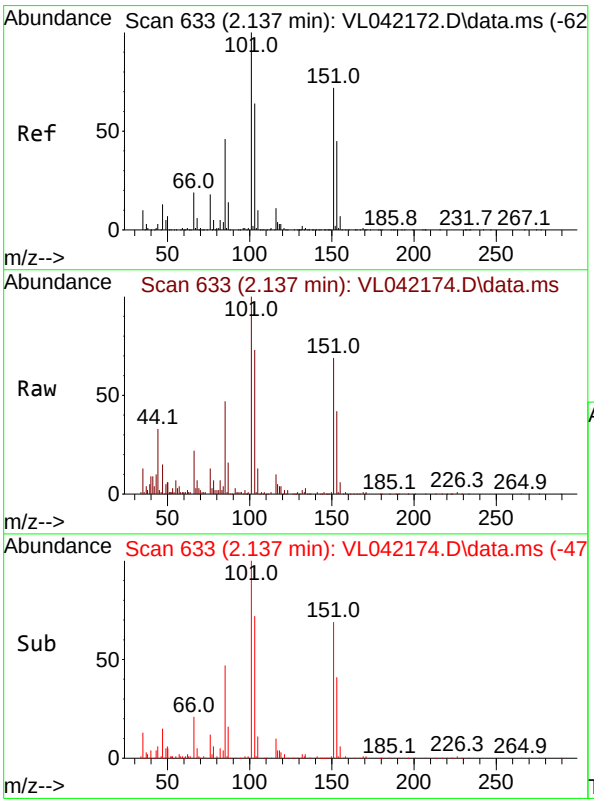
#11
Trichlorofluoromethane
Concen: 1.014 ppbv
RT: 1.875 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:101 Resp: 27136

Ion	Ratio	Lower	Upper
101	100		
103	59.9	50.2	75.2

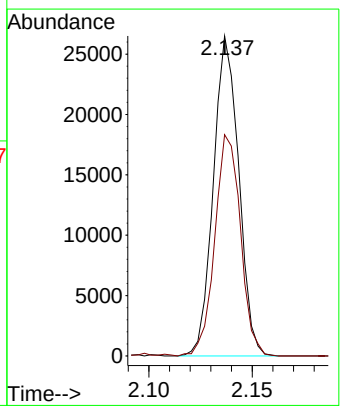


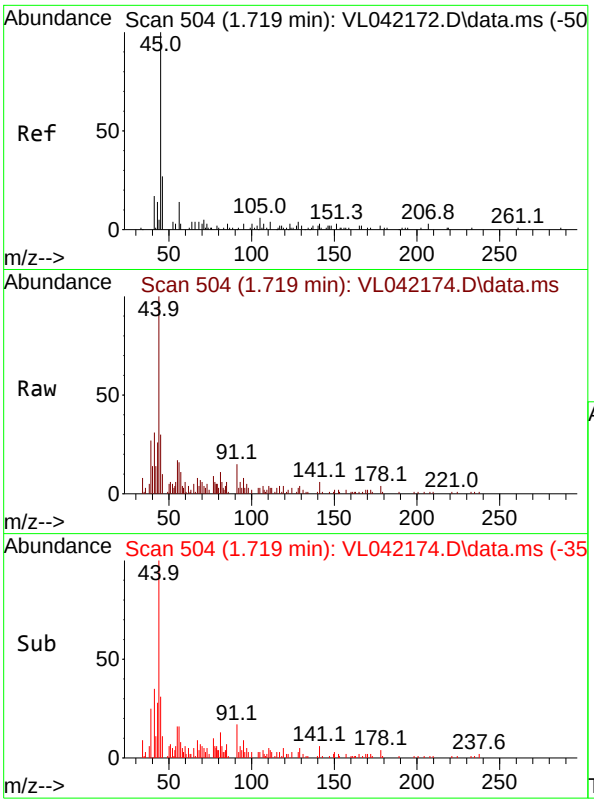


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.029 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:101 Resp: 22629

Ion	Ratio	Lower	Upper
101	100		
151	70.3	57.1	85.7



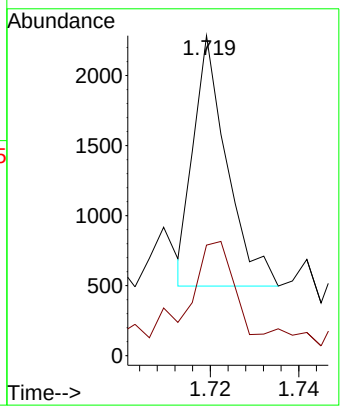


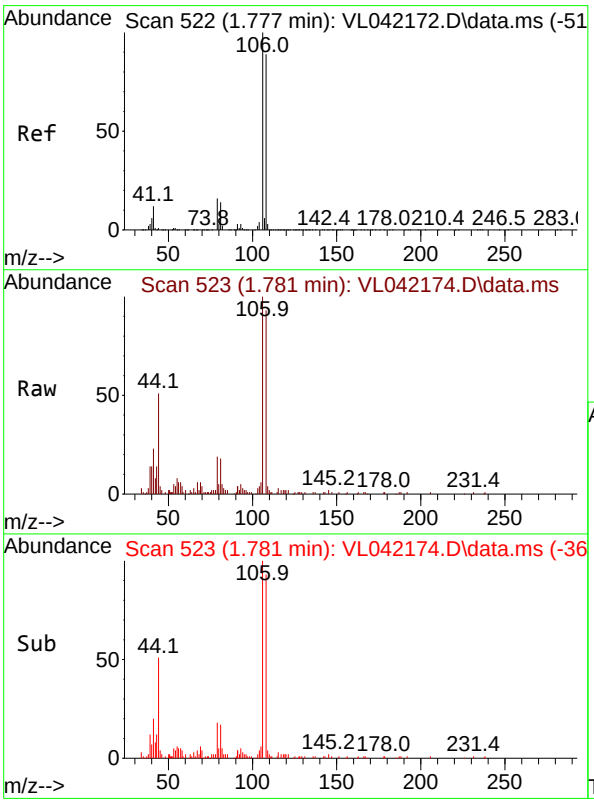
#13
Ethanol
Concen: 0.943 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 935

Ion	Ratio	Lower	Upper
45	100		
46	126.3	20.2	80.8#

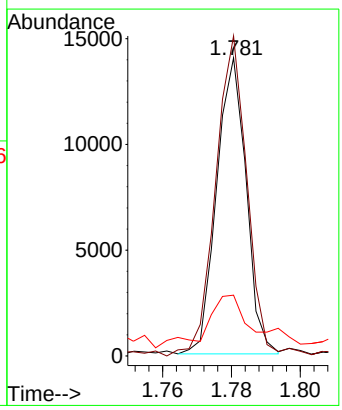


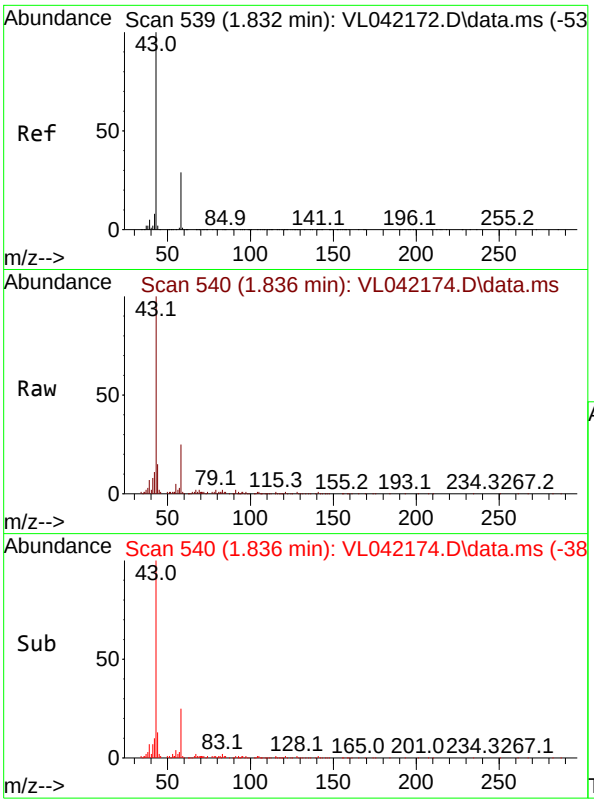


#14
Bromoethene
Concen: 0.989 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:108 Resp: 8330

Ion	Ratio	Lower	Upper
108	100		
106	115.2	86.8	130.2
79	57.0	15.0	22.6#



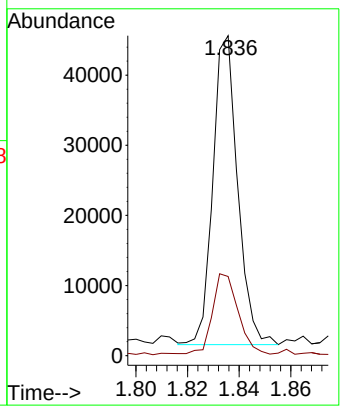


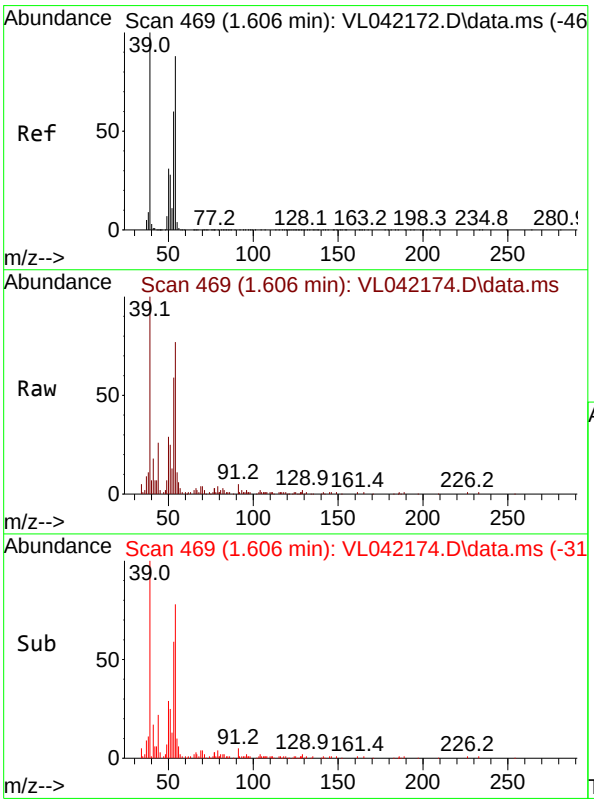
#15
Acetone
Concen: 1.125 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 29294

Ion	Ratio	Lower	Upper
43	100		
58	31.6	23.2	34.8

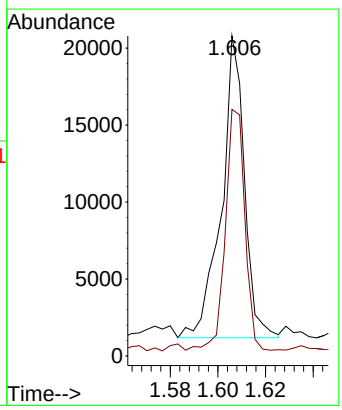


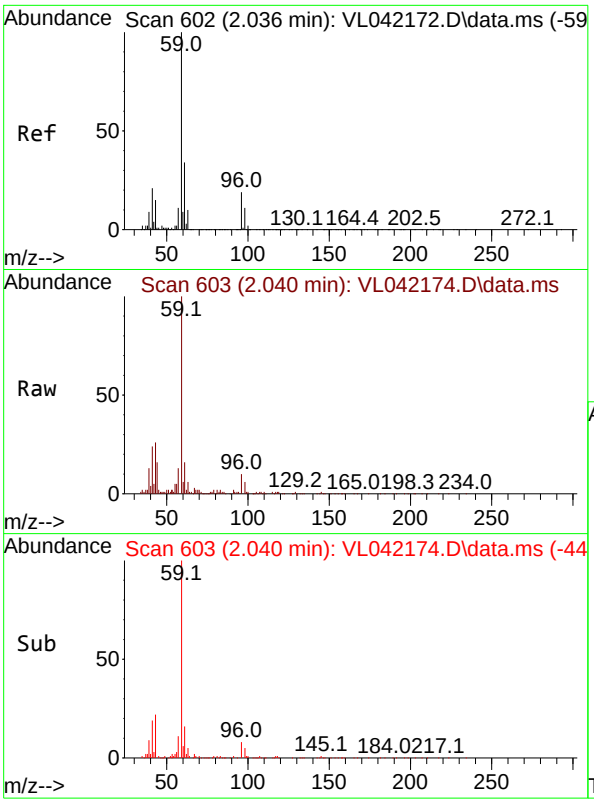


#16
1,3-Butadiene
Concen: 1.121 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 39 Resp: 13133

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1



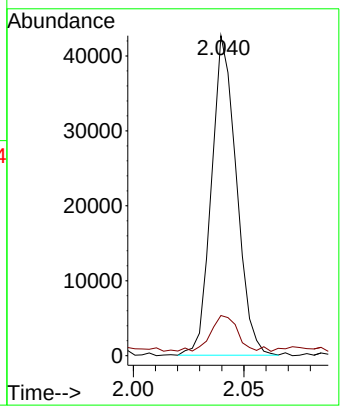


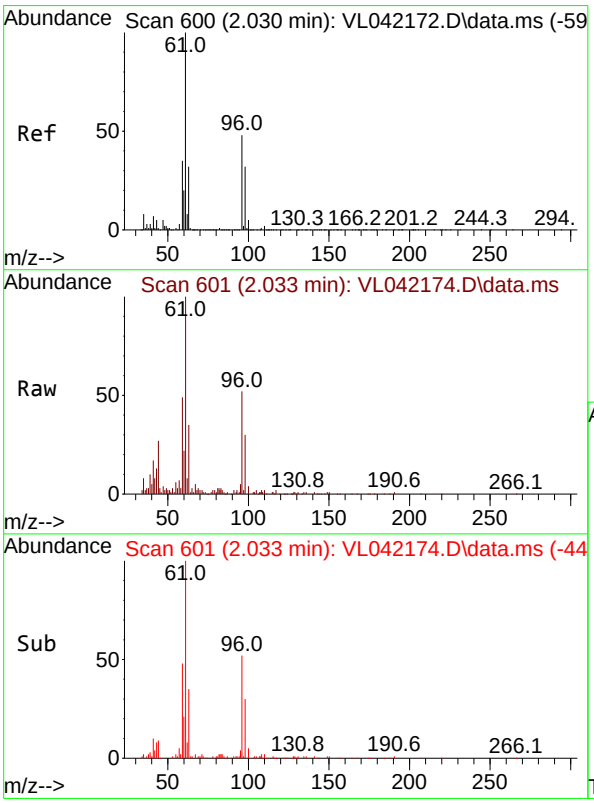
#17
tert-Butyl alcohol
Concen: 1.033 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 59 Resp: 33500

Ion	Ratio	Lower	Upper
59	100		
57	12.3	8.9	13.3

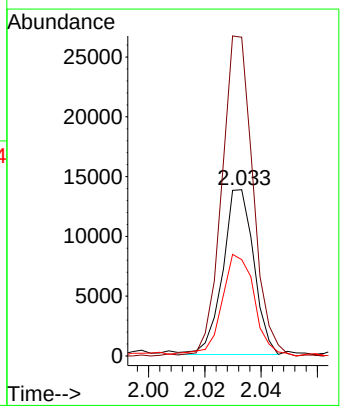


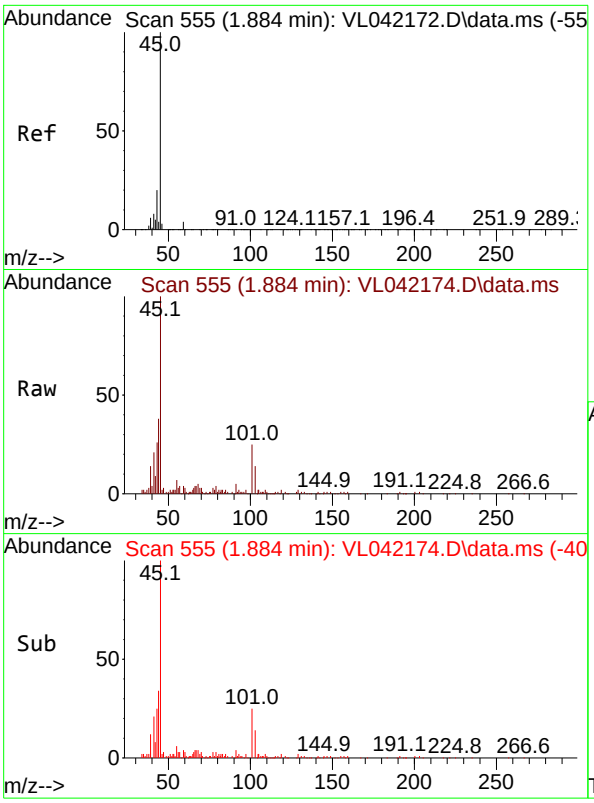


#18
1,1-Dichloroethene
Concen: 1.024 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 10532

Ion	Ratio	Lower	Upper
96	100		
61	192.9	167.6	251.4
98	56.7	53.5	80.3



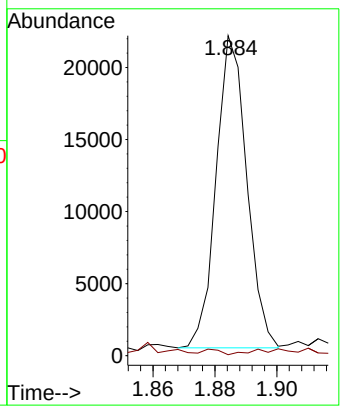


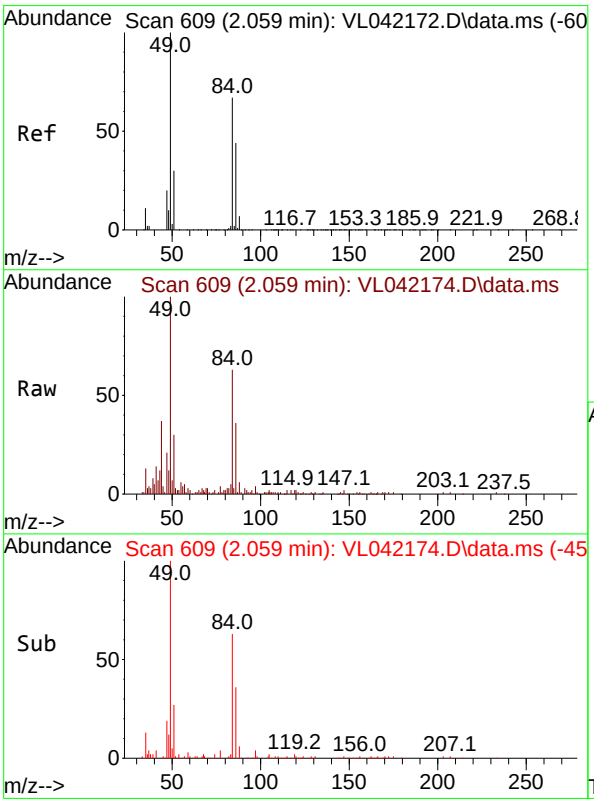
#19
Isopropyl Alcohol
Concen: 1.014 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 14903

Ion	Ratio	Lower	Upper
45	100		
58	4.9	36.9	55.3#

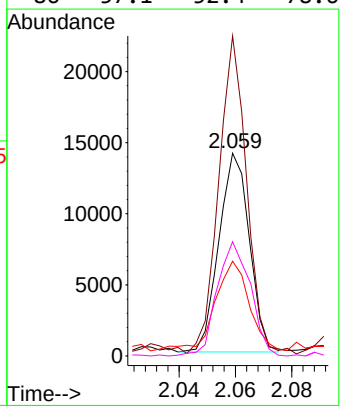


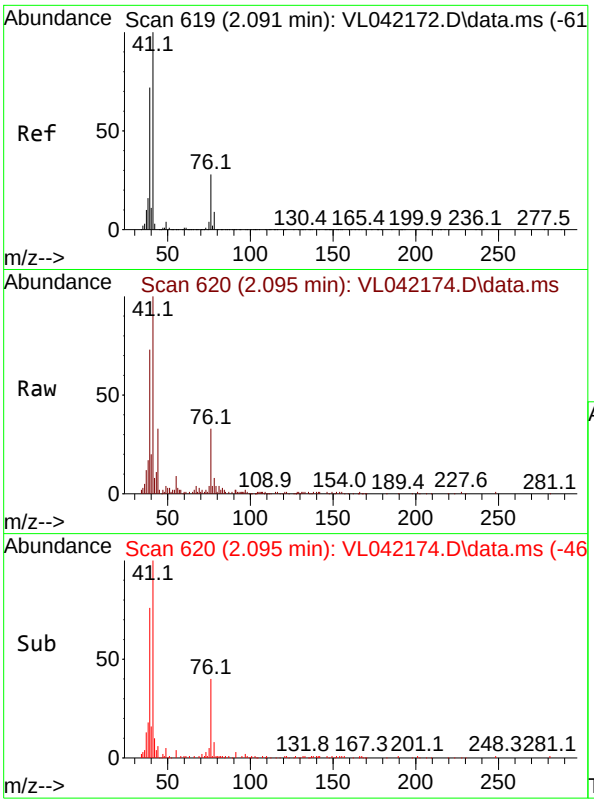


#20
Methylene Chloride
Concen: 1.080 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 10481

Ion	Ratio	Lower	Upper
84	100		
49	158.3	120.2	180.4
51	44.3	37.4	56.0
86	57.1	52.4	78.6



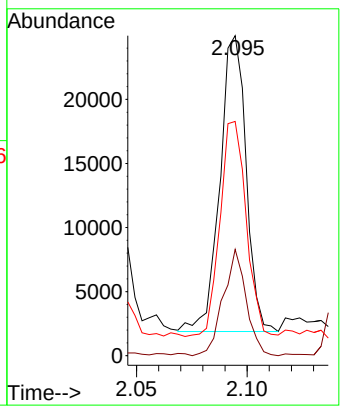


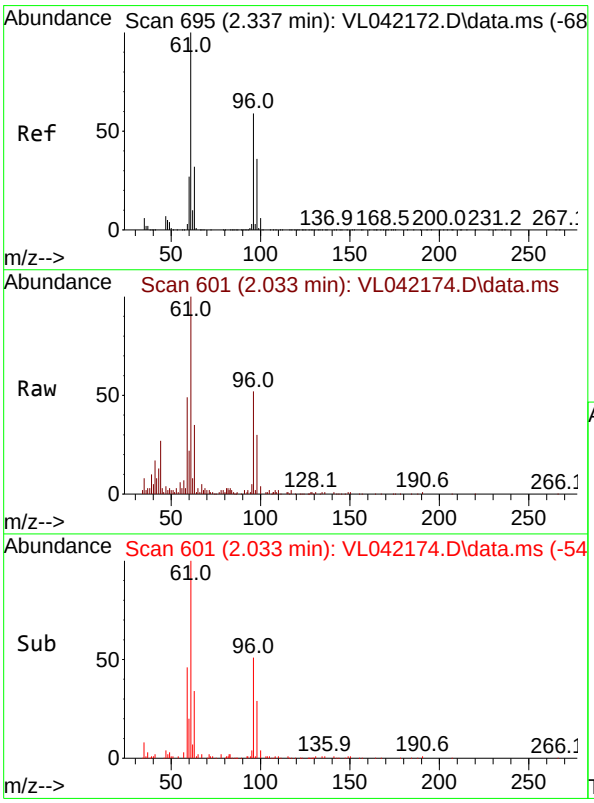
#21
Allyl Chloride
Concen: 1.036 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 19039

Ion	Ratio	Lower	Upper
41	100		
76	30.5	24.1	36.1
39	77.8	61.1	91.7

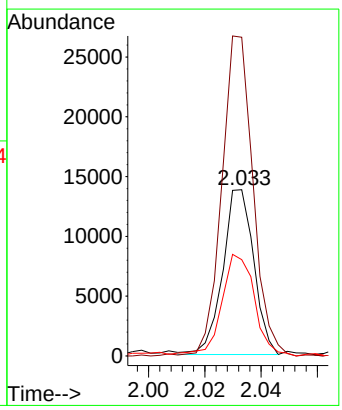


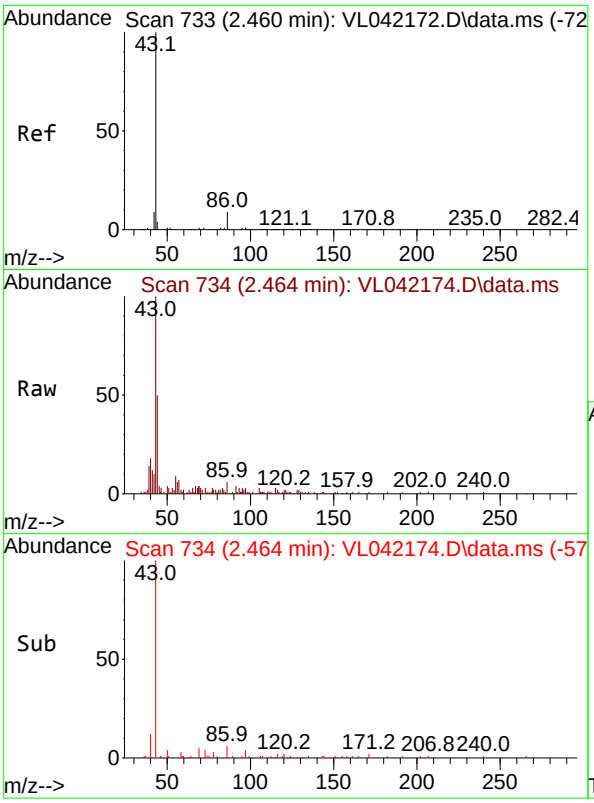


#22
trans-1,2-Dichloroethene
Concen: 0.877 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.304 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 10532

Ion	Ratio	Lower	Upper
96	100		
61	192.9	136.6	204.8
98	56.7	49.4	74.2



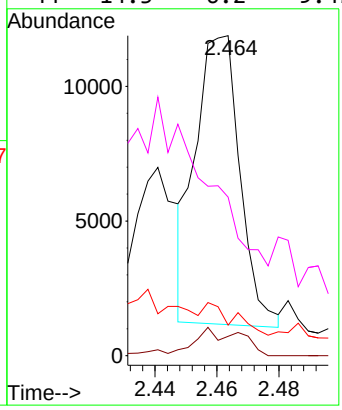


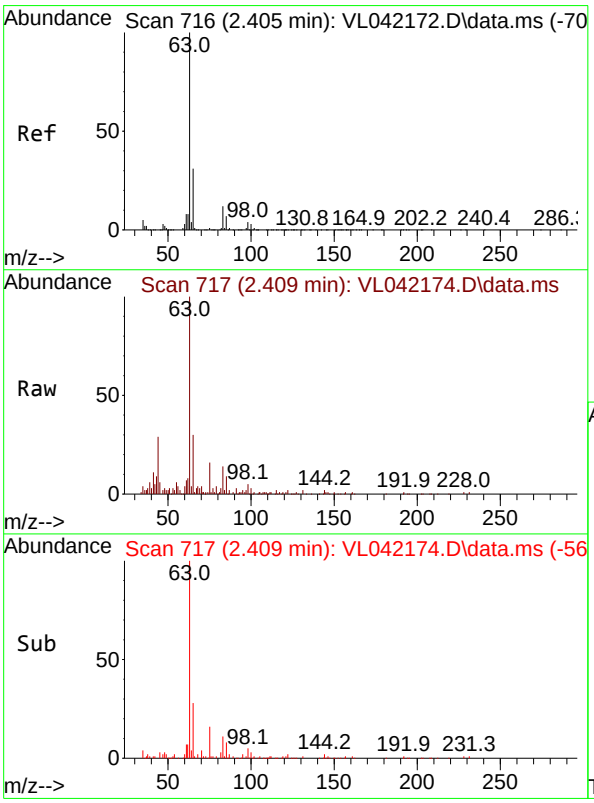
#23
Vinyl Acetate
Concen: 0.983 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 10644

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	2.4	8.6	13.0#
44	14.3	6.2	9.4#

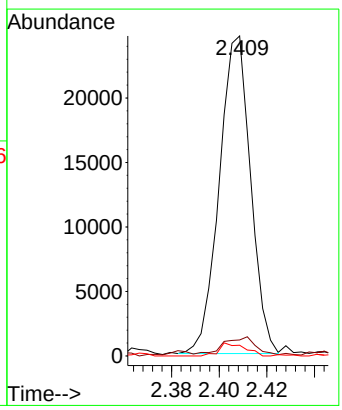


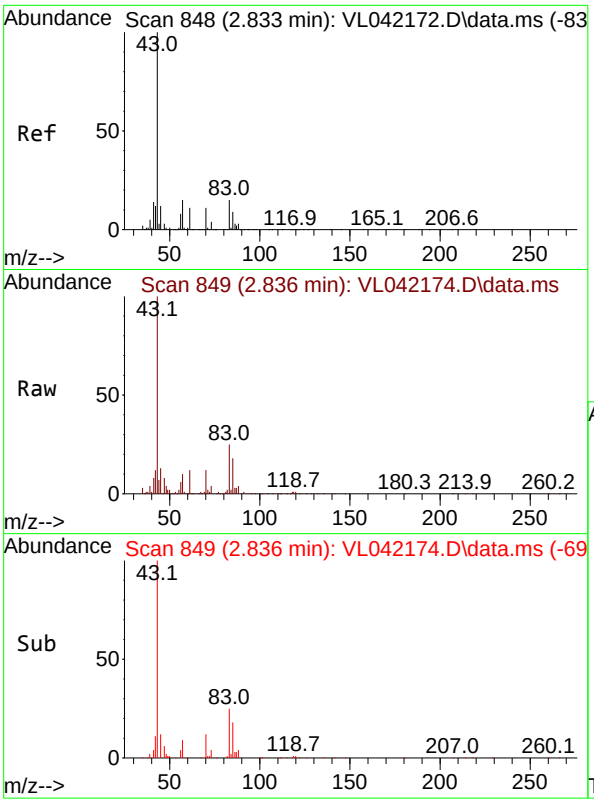


#24
1,1-Dichloroethane
Concen: 1.022 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 63 Resp: 22505

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.3	6.8
100	3.4	1.6	4.7



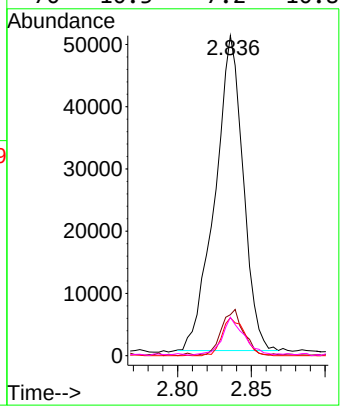


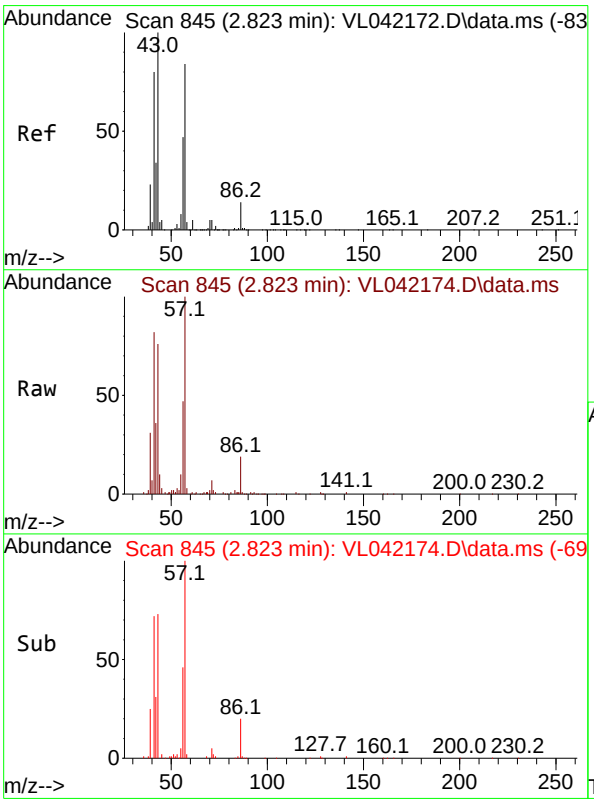
#25
Ethyl Acetate
Concen: 0.997 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 67402

Ion	Ratio	Lower	Upper
43	100		
45	12.3	8.2	12.2#
61	9.6	7.3	10.9
70	10.3	7.2	10.8

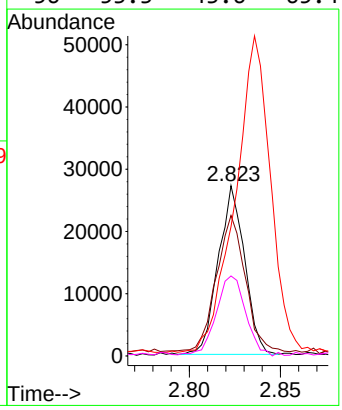


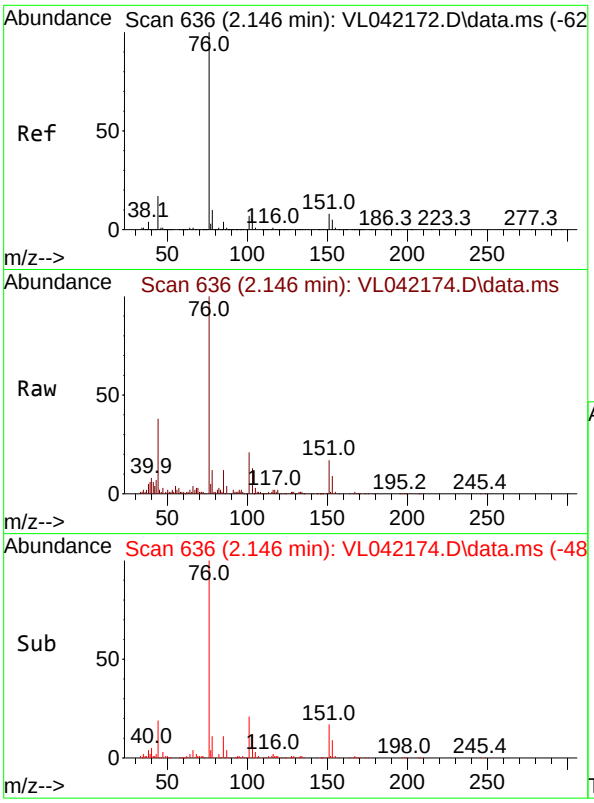


#26
Hexane
Concen: 1.043 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 27223

Ion	Ratio	Lower	Upper
57	100		
41	93.5	76.6	114.8
43	256.9	207.8	311.8
56	53.3	43.6	65.4



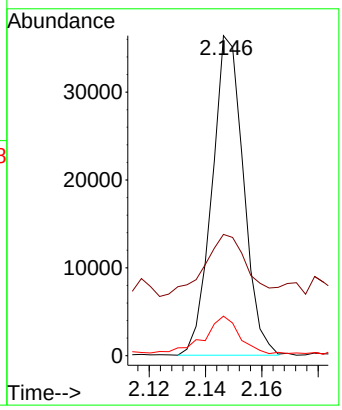


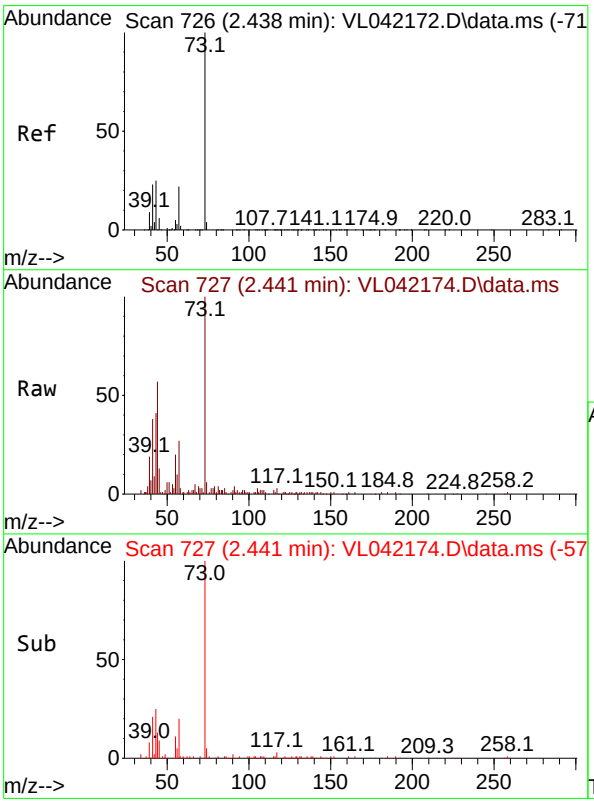
#27
Carbon Disulfide
Concen: 1.006 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 76 Resp: 28167

Ion	Ratio	Lower	Upper
76	100		
44	54.6	14.7	22.1#
78	15.0	9.3	13.9#

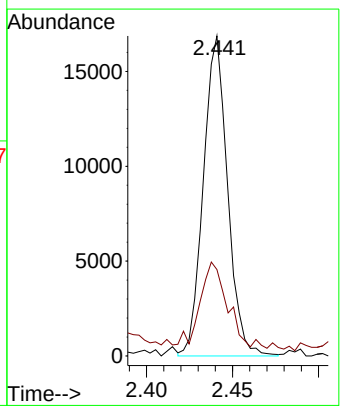


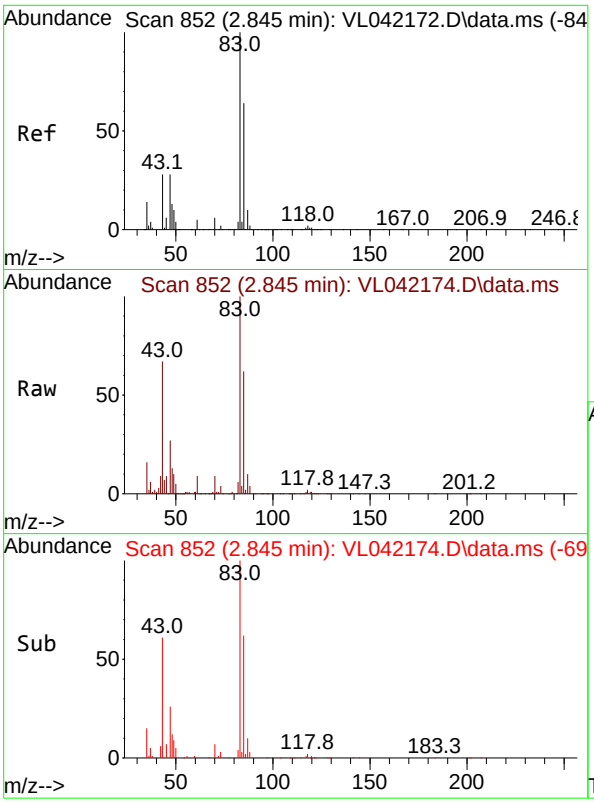


#28
Methyl tert-Butyl Ether
Concen: 1.015 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 73 Resp: 16501

Ion	Ratio	Lower	Upper
73	100		
57	28.0	20.5	30.7



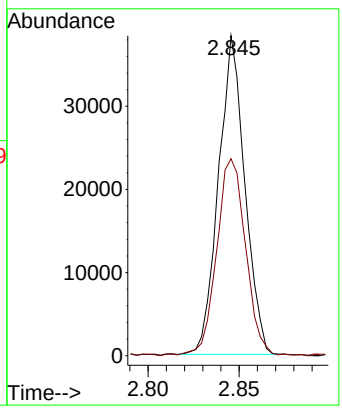


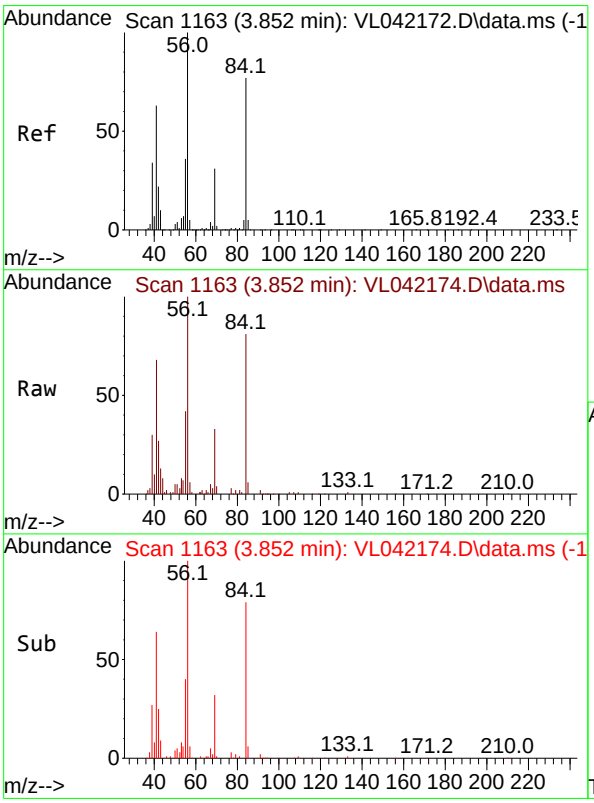
#29
Chloroform
Concen: 1.008 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 38516

Ion	Ratio	Lower	Upper
83	100		
85	61.6	51.4	77.2

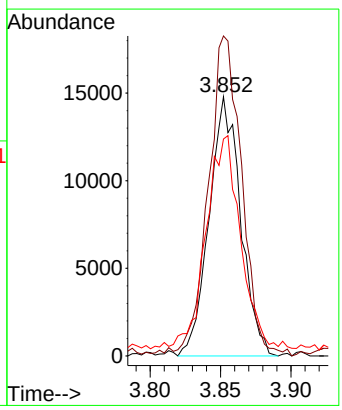


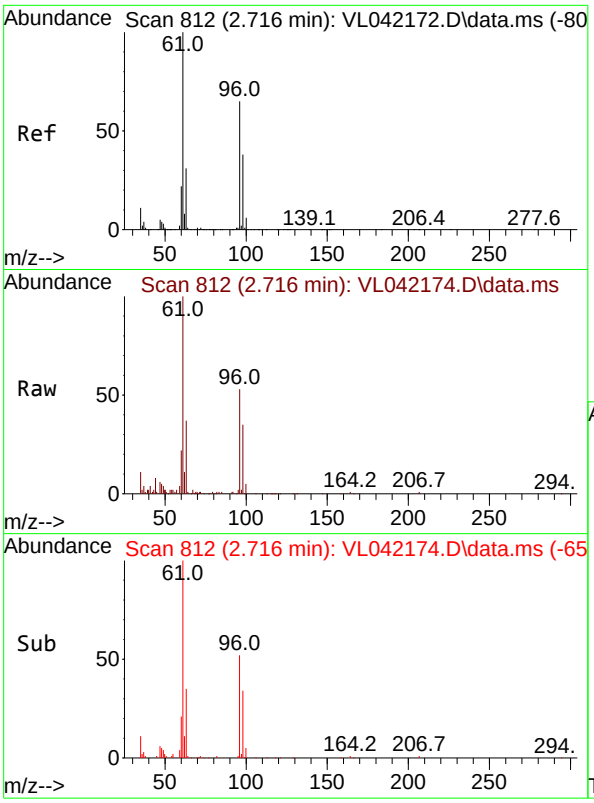


#30
Cyclohexane
Concen: 1.016 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 23052

Ion	Ratio	Lower	Upper
84	100		
56	128.9	102.8	154.2
41	89.3	66.5	99.7



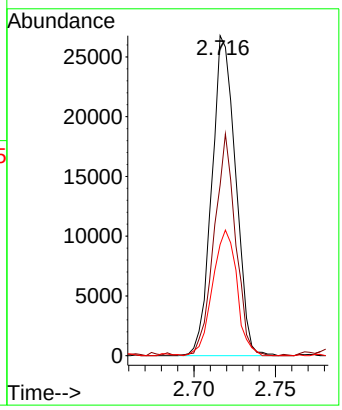


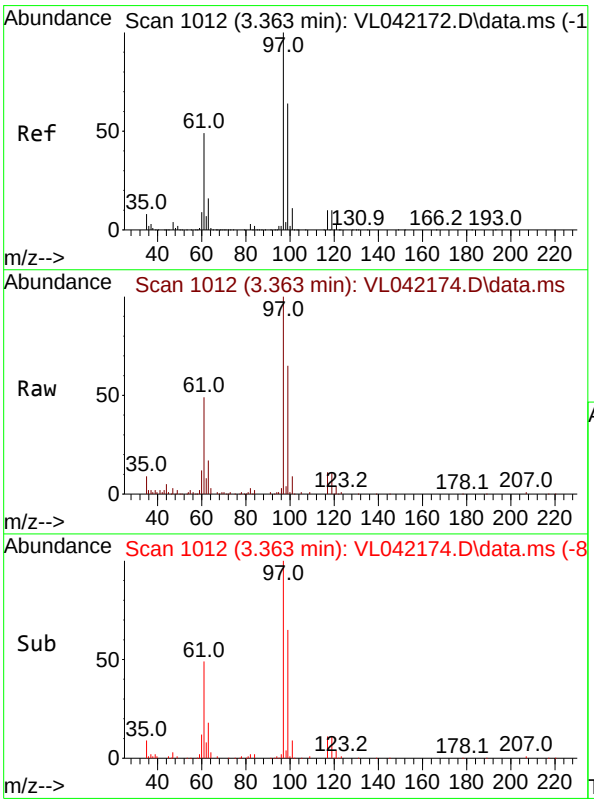
#31
cis-1,2-Dichloroethene
Concen: 1.026 ppbv
RT: 2.716 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 61 Resp: 27187

Ion	Ratio	Lower	Upper
61	100		
96	53.3	51.8	77.8
98	34.8	30.6	46.0

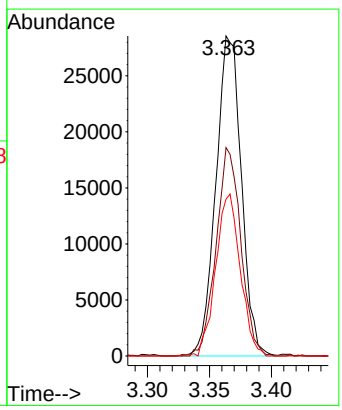


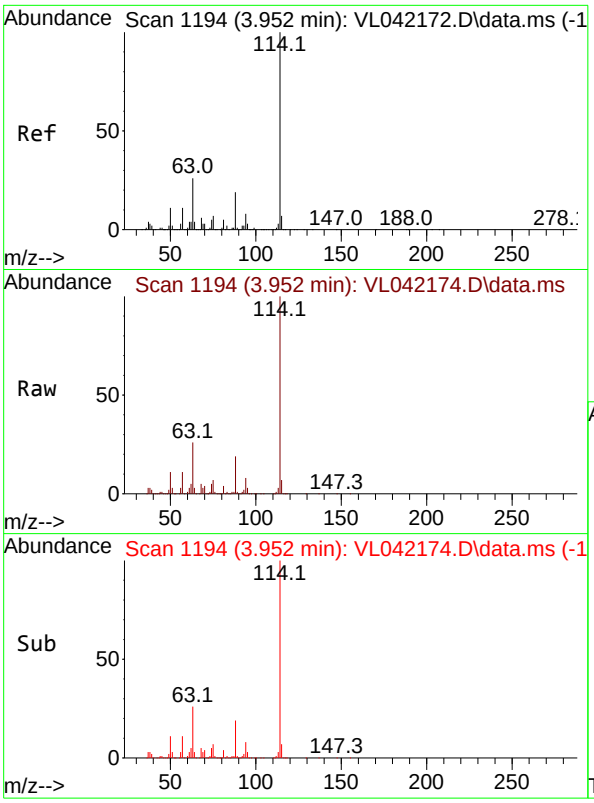


#32
1,1,1-Trichloroethane
Concen: 0.938 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 97 Resp: 40993

Ion	Ratio	Lower	Upper
97	100		
99	63.0	51.5	77.3
61	48.8	38.7	58.1



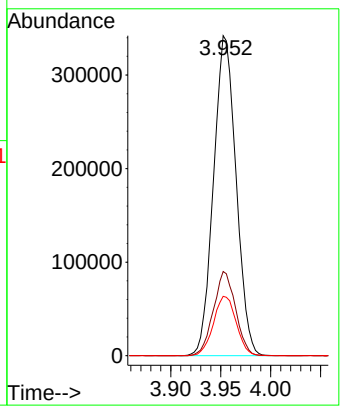


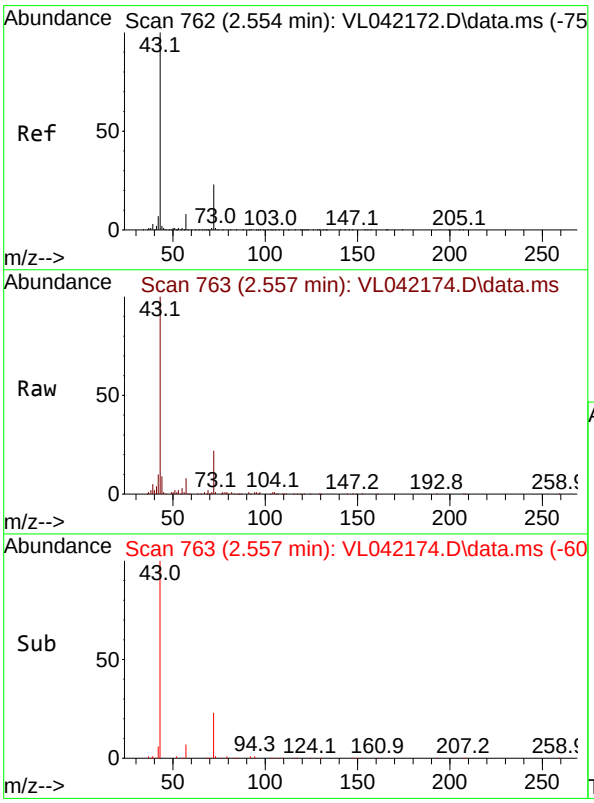
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:114 Resp: 537244

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.8	15.0	22.4

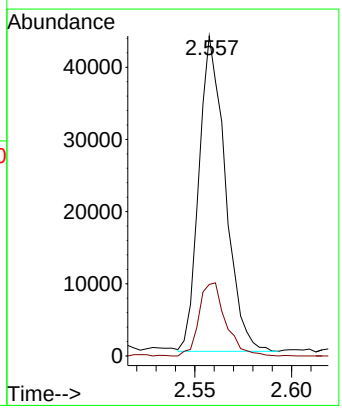


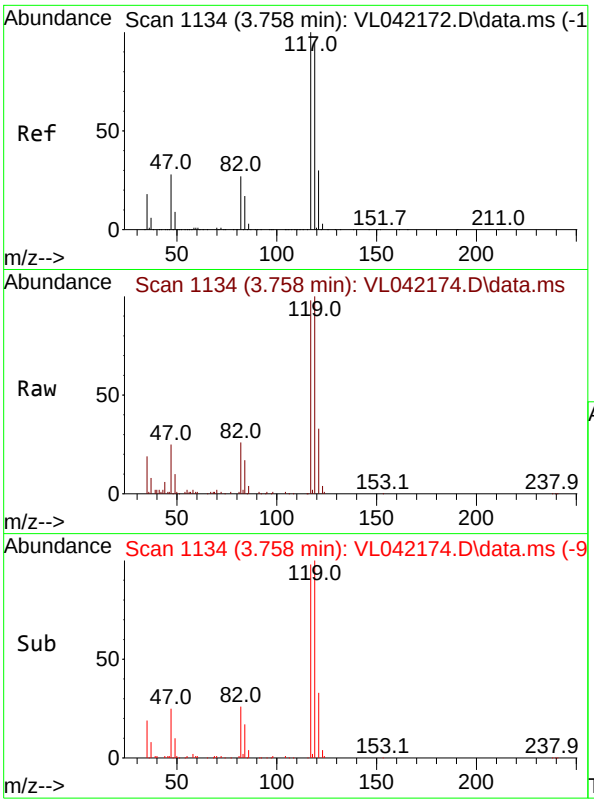


#34
2-Butanone
Concen: 1.063 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 41423

Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2



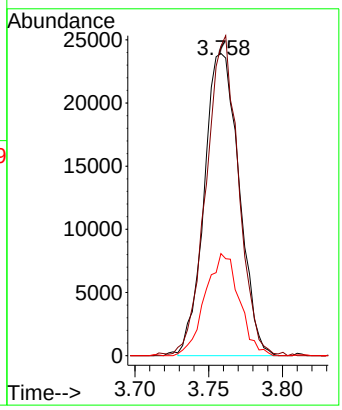


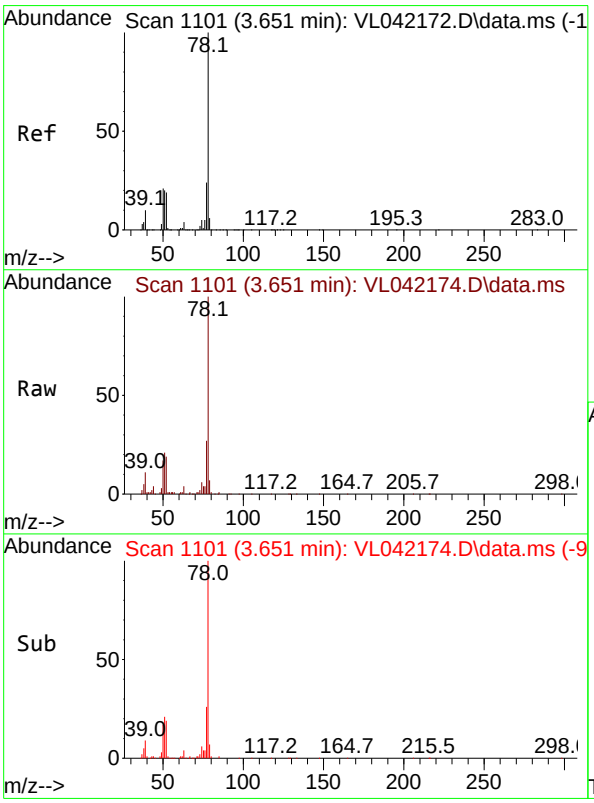
#35
Carbon Tetrachloride
Concen: 0.952 ppbv
RT: 3.758 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 39345

Ion	Ratio	Lower	Upper
117	100		
119	101.8	76.2	114.2
121	33.7	24.2	36.4

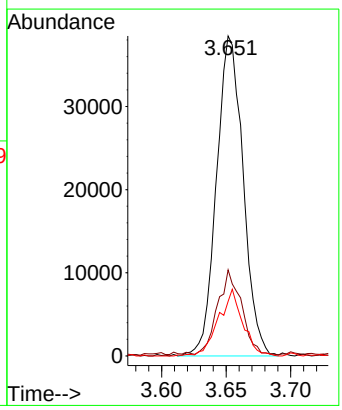


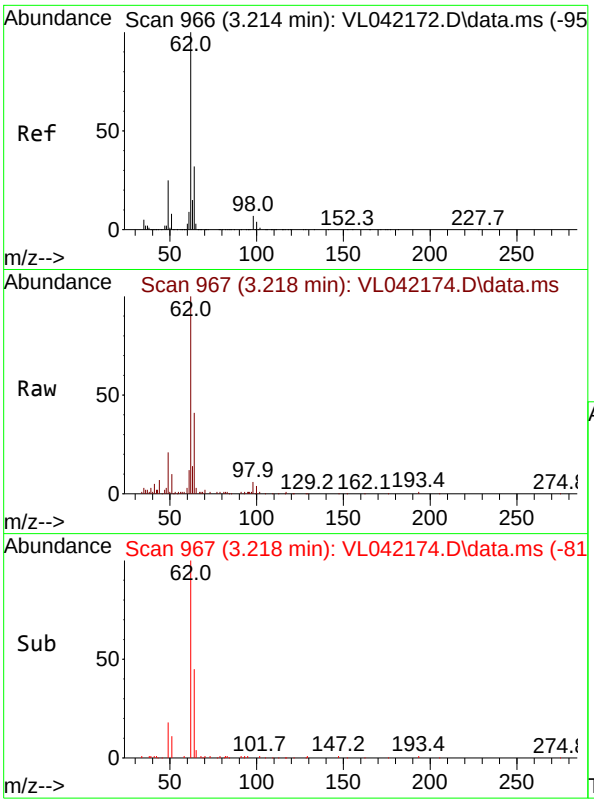


#36
Benzene
Concen: 1.036 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 78 Resp: 55156

Ion	Ratio	Lower	Upper
78	100		
77	26.5	19.1	28.7
50	17.1	16.6	24.8



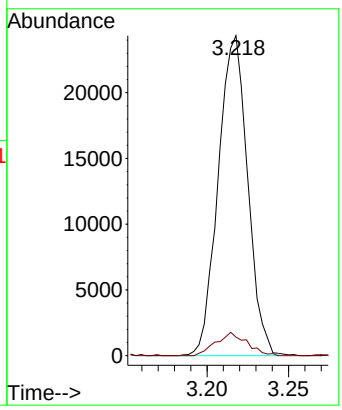


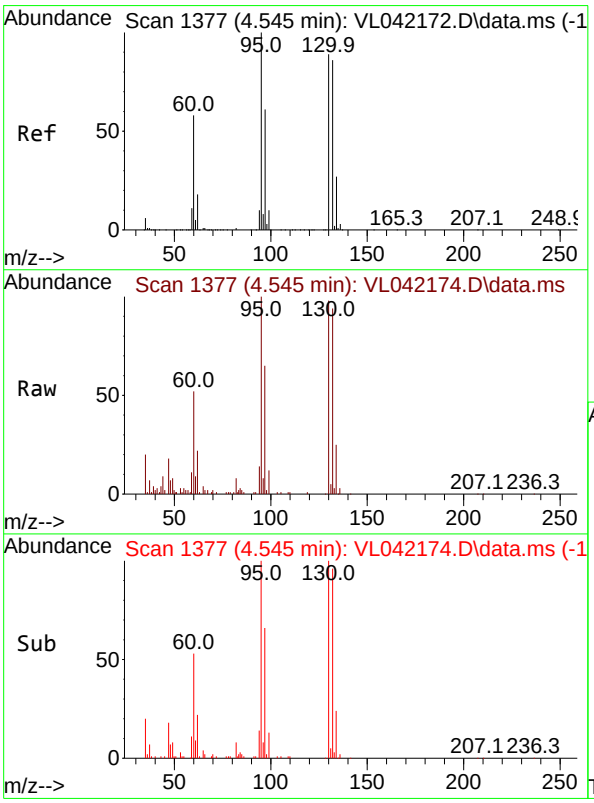
#37
1,2-Dichloroethane
Concen: 1.002 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 30543

Ion	Ratio	Lower	Upper
62	100		
98	7.6	5.4	8.2

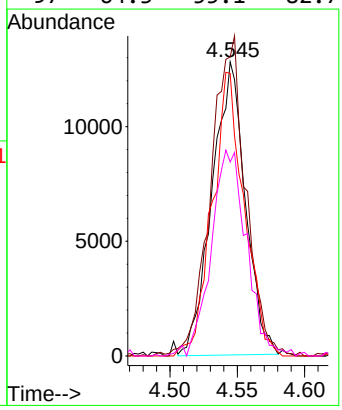


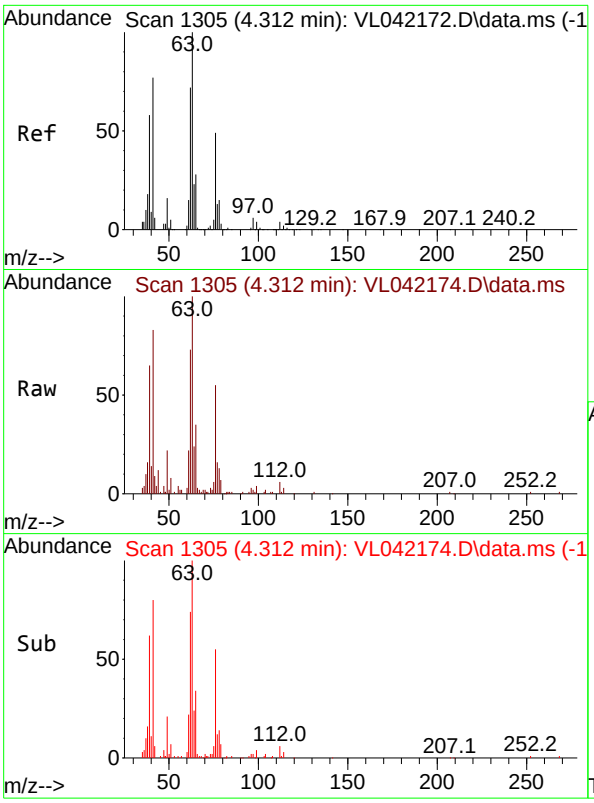


#38
Trichloroethene
Concen: 0.985 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:130 Resp: 21906

Ion	Ratio	Lower	Upper
130	100		
95	100.2	89.8	134.8
132	95.3	77.4	116.2
97	64.3	55.1	82.7



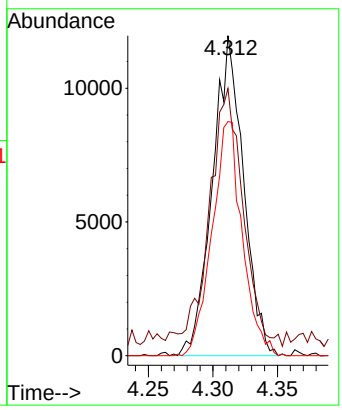


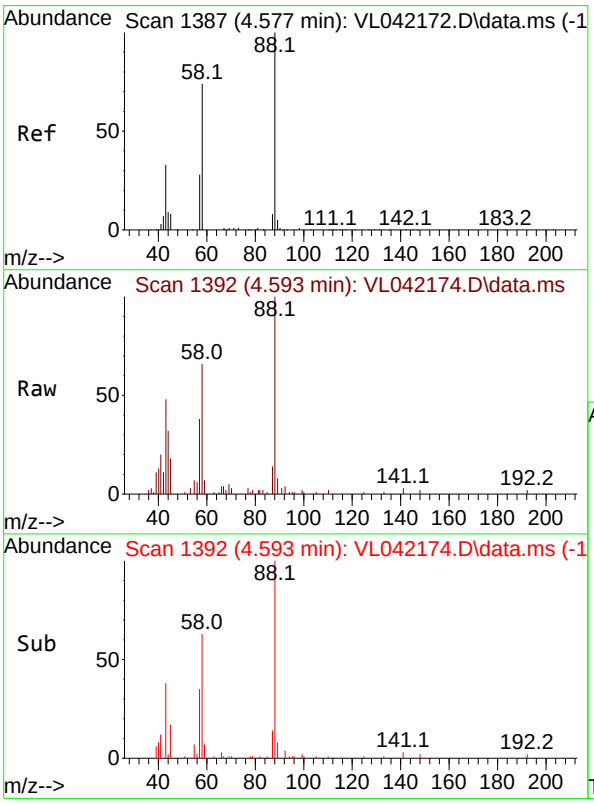
#39
1,2-Dichloropropane
Concen: 1.032 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 63 Resp: 20020

Ion	Ratio	Lower	Upper
63	100		
41	76.8	61.7	92.5
62	73.1	57.6	86.4

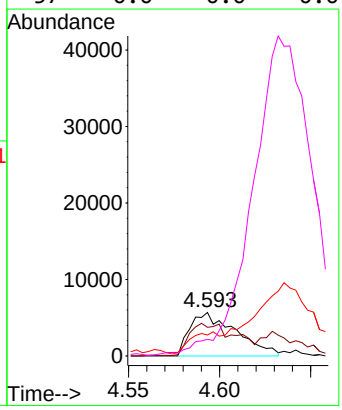


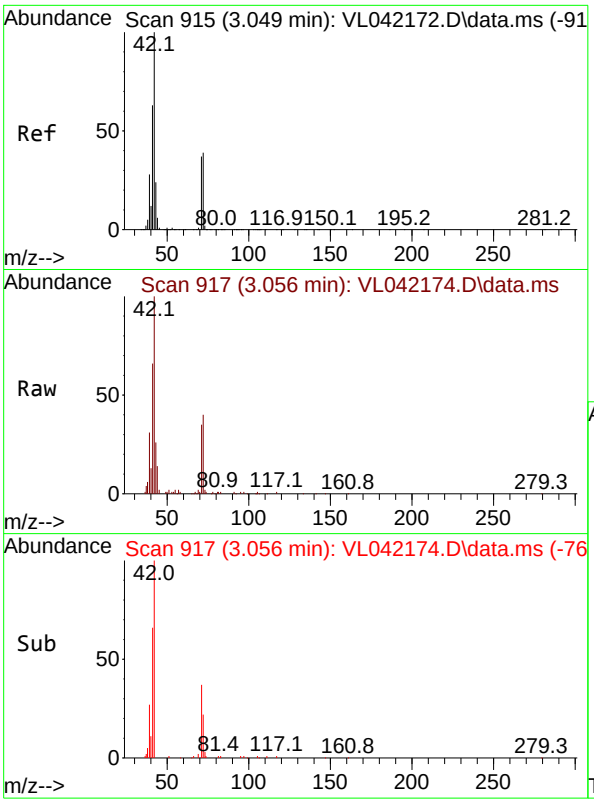


#40
1,4-Dioxane
Concen: 0.997 ppbv
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 88 Resp: 10031

Ion	Ratio	Lower	Upper
88	100		
58	121.8	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0



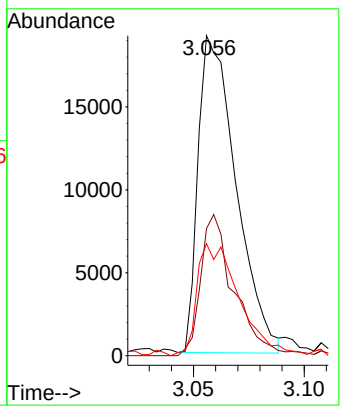


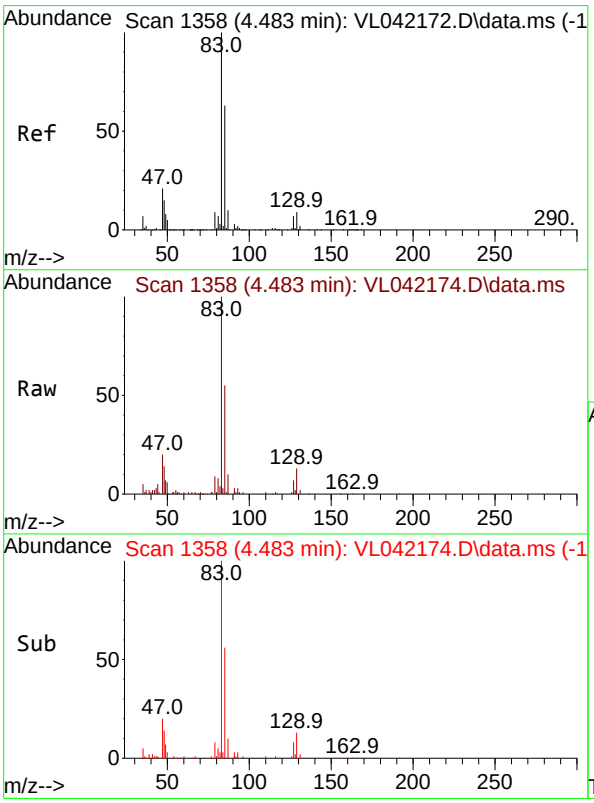
#41
Tetrahydrofuran
Concen: 1.029 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 42 Resp: 22818

Ion	Ratio	Lower	Upper
42	100		
72	39.4	31.4	47.0
71	40.8	30.2	45.4

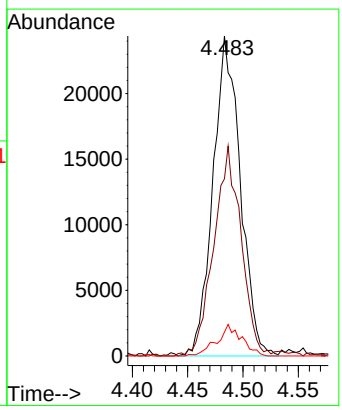


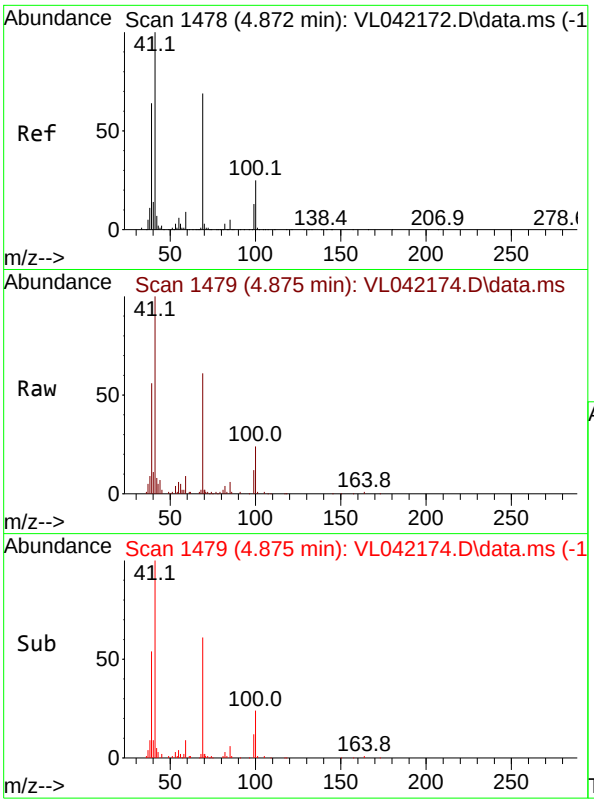


#42
Bromodichloromethane
Concen: 0.996 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 41864

Ion	Ratio	Lower	Upper
83	100		
85	54.7	50.5	75.7
127	7.5	5.9	8.9



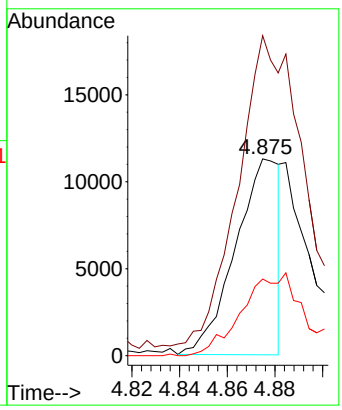


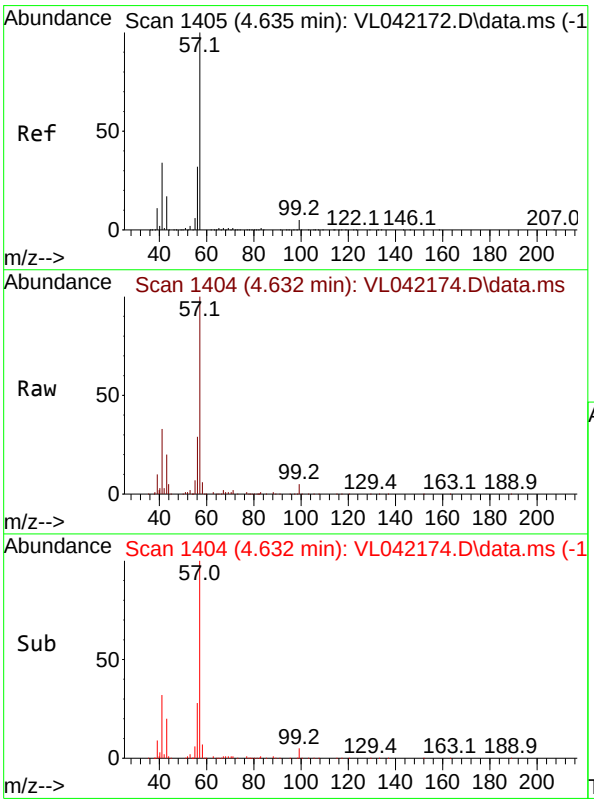
#43
Methyl Methacrylate
Concen: 0.640 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 69 Resp: 14387

Ion	Ratio	Lower	Upper
69	100		
41	246.1	123.8	185.6#
100	0.0	28.4	42.6#

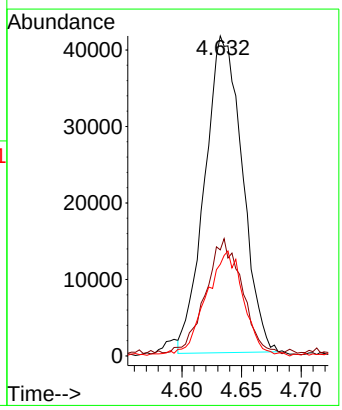


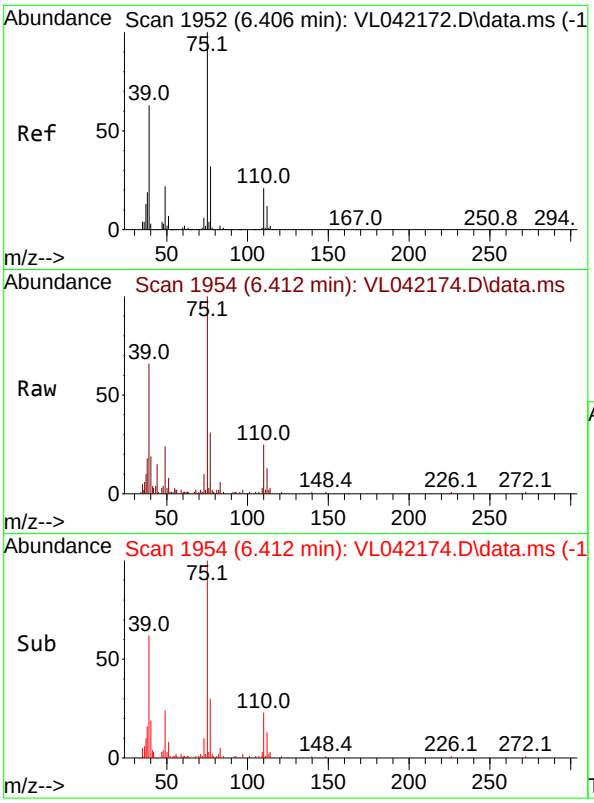


#44
2,2,4-Trimethylpentane
Concen: 1.008 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 90727

Ion	Ratio	Lower	Upper
57	100		
41	35.9	26.8	40.2
56	33.7	25.6	38.4



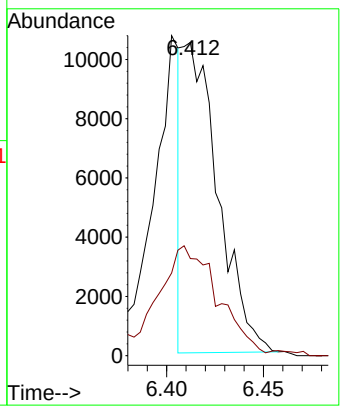


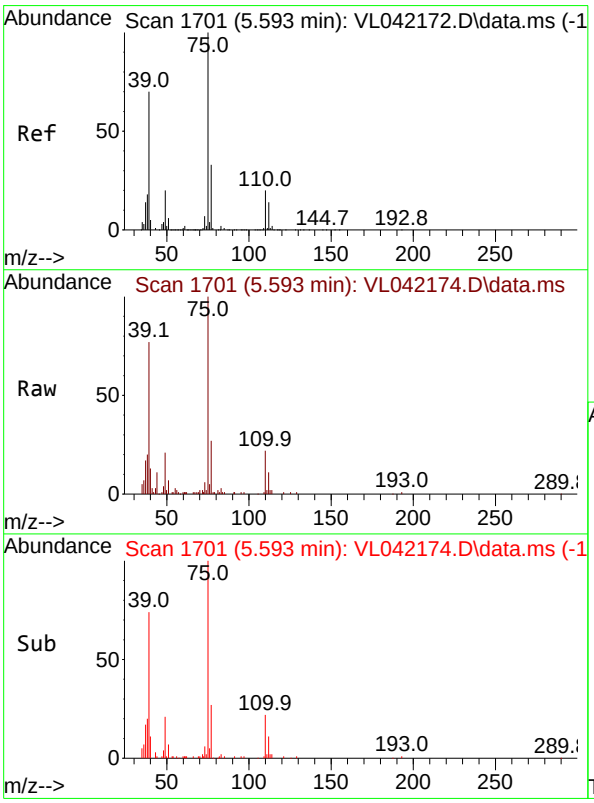
#45
t-1,3-Dichloropropene
Concen: 0.555 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 75 Resp: 13431

Ion	Ratio	Lower	Upper
75	100		
77	31.0	26.0	39.0

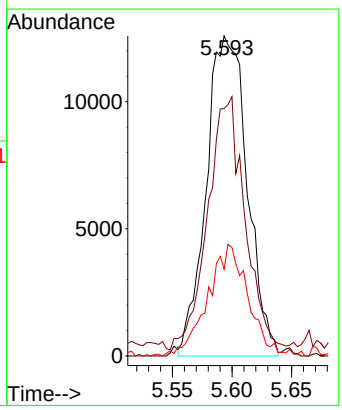


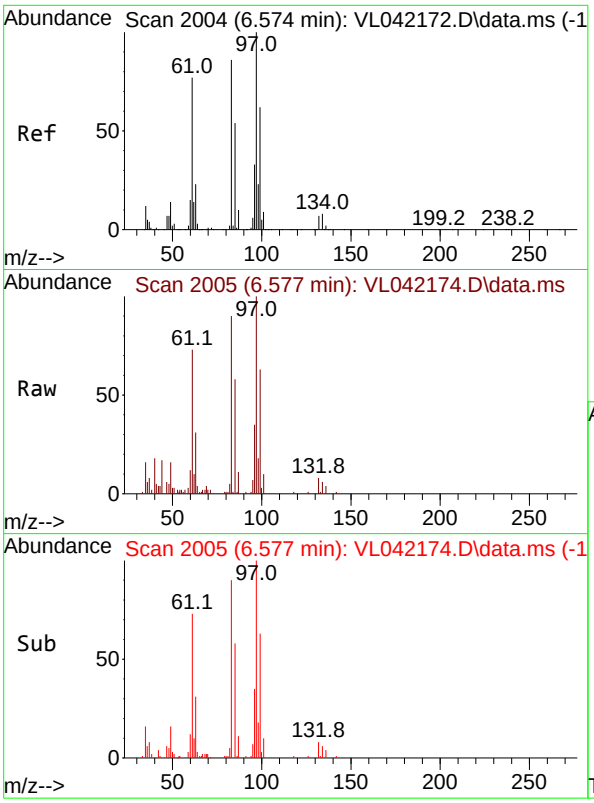


#46
cis-1,3-Dichloropropene
Concen: 1.014 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 75 Resp: 30063

Ion	Ratio	Lower	Upper
75	100		
39	74.2	55.8	83.6
77	26.4	26.0	39.0



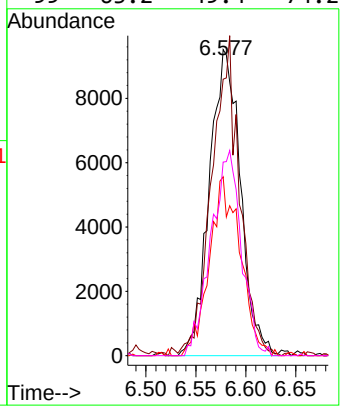


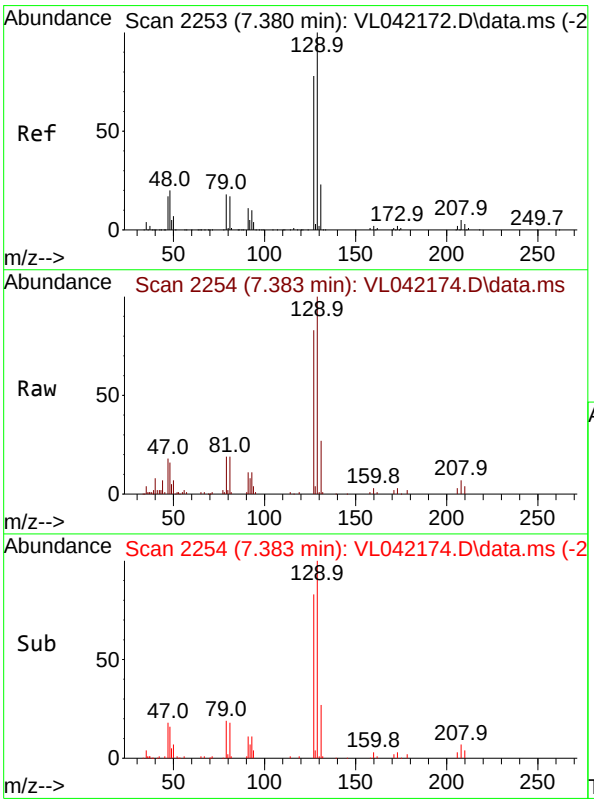
#47
1,1,2-Trichloroethane
Concen: 1.002 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 97 Resp: 20546

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	58.4	43.1	64.7
99	63.2	49.4	74.2

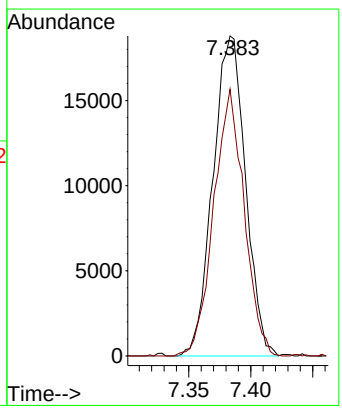


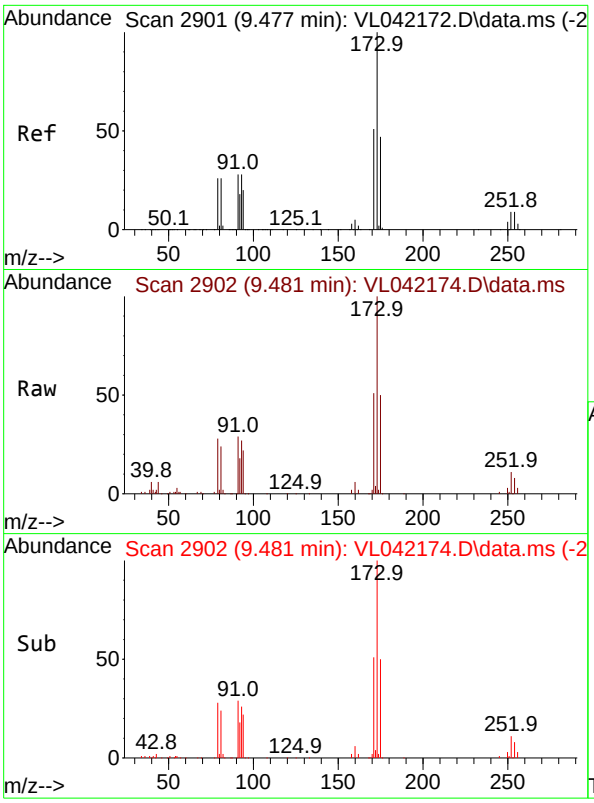


#48
Dibromochloromethane
Concen: 0.991 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:129 Resp: 34425

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2



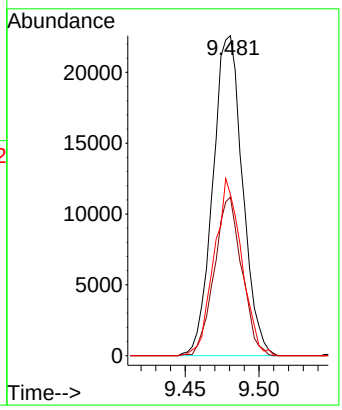


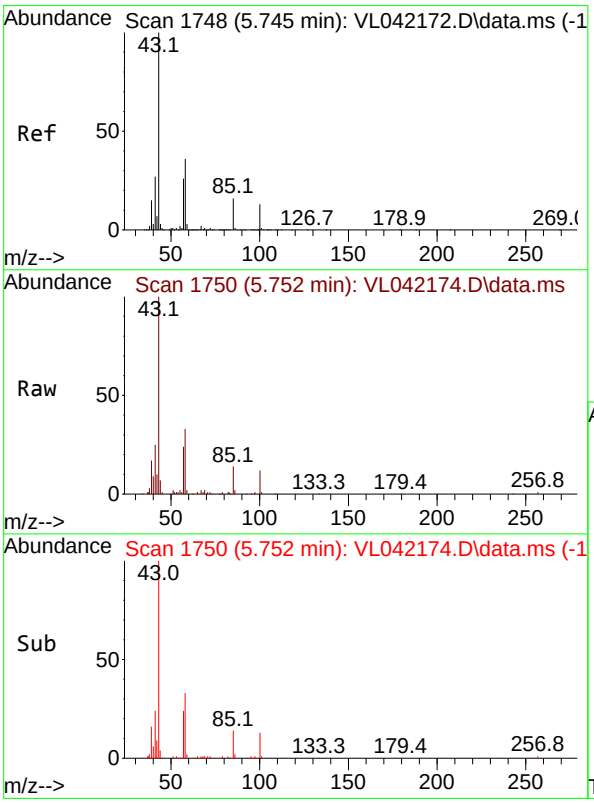
#49
Bromoform
Concen: 1.013 ppbv
RT: 9.481 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:173 Resp: 31610

Ion	Ratio	Lower	Upper
173	100		
175	46.1	38.6	57.8
171	51.3	41.8	62.6

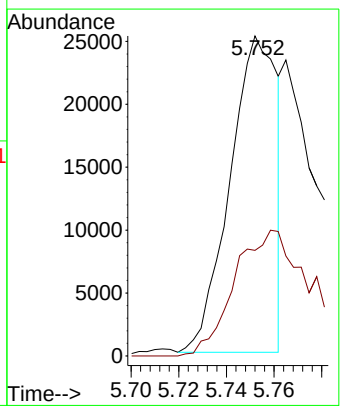


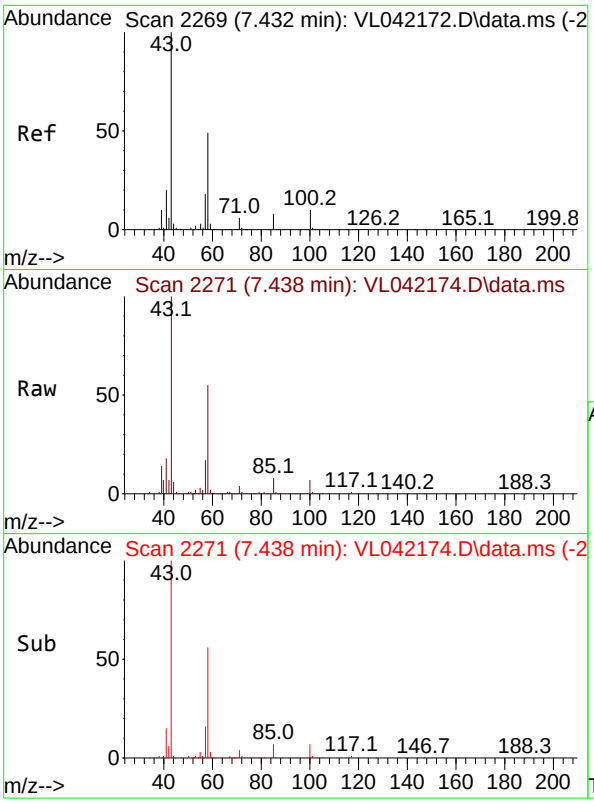


#50
4-Methyl-2-Pentanone
Concen: 0.556 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 34358

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#



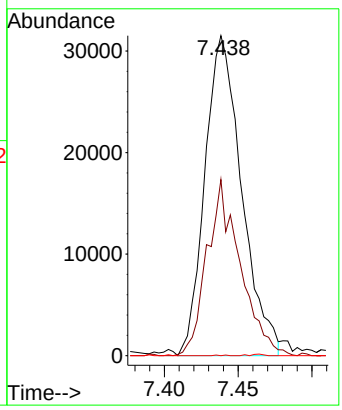


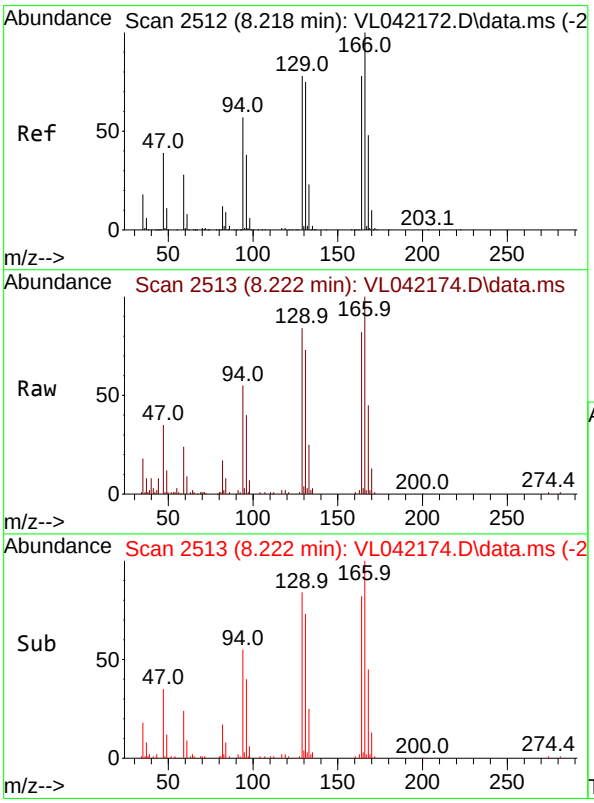
#51
2-Hexanone
Concen: 1.067 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 54680

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.2	0.1	0.1#

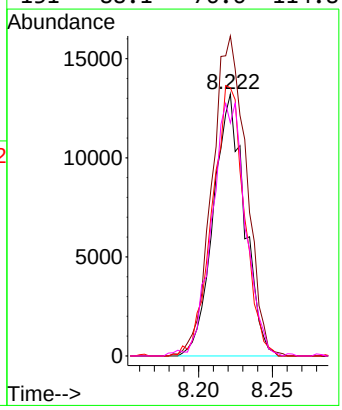


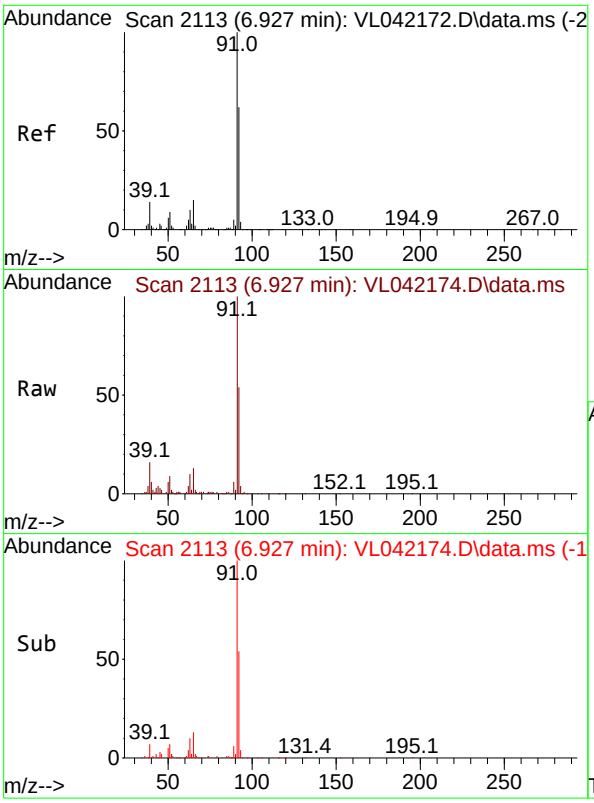


#52
Tetrachloroethene
Concen: 0.919 ppbv
RT: 8.222 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:164 Resp: 19415

Ion	Ratio	Lower	Upper
164	100		
166	121.4	102.5	153.7
129	102.4	79.8	119.8
131	88.1	76.6	114.8



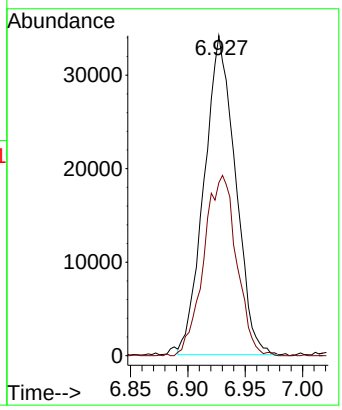


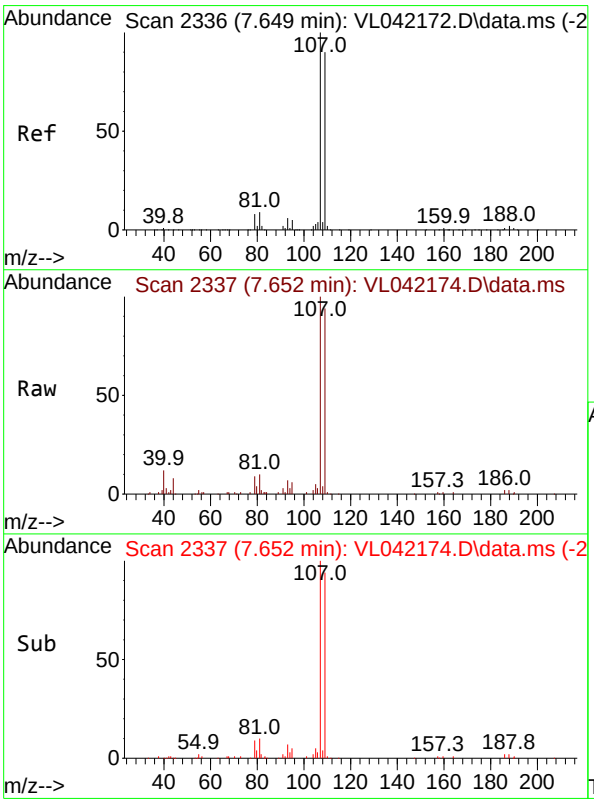
#53
Toluene
Concen: 1.023 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 64612

Ion	Ratio	Lower	Upper
91	100		
92	59.4	48.4	72.6

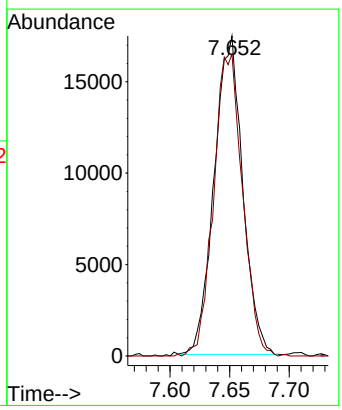


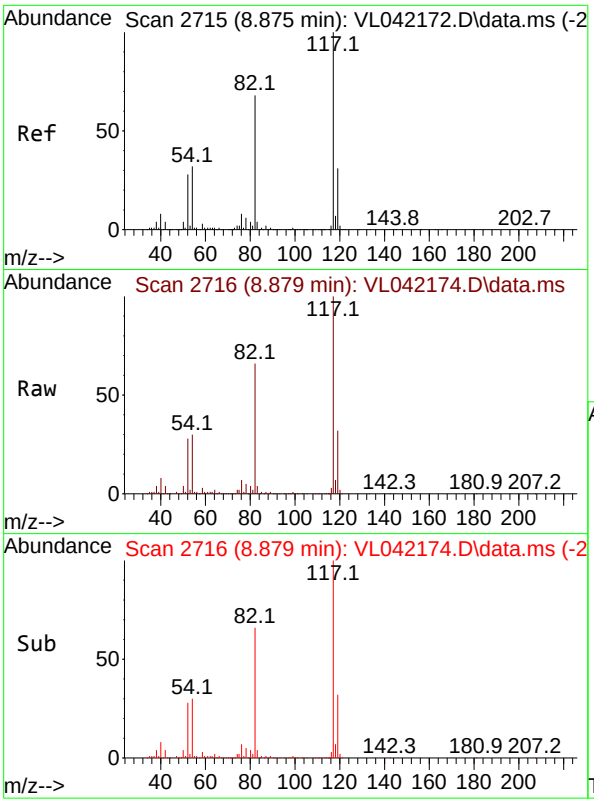


#54
1,2-Dibromoethane
Concen: 1.009 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:107 Resp: 28879

Ion	Ratio	Lower	Upper
107	100		
109	94.8	72.2	108.4



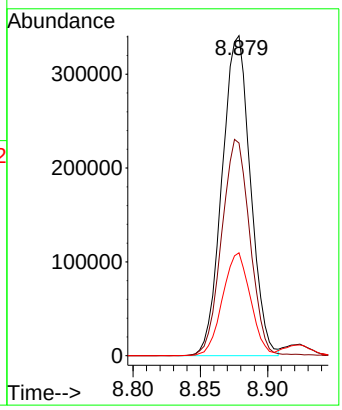


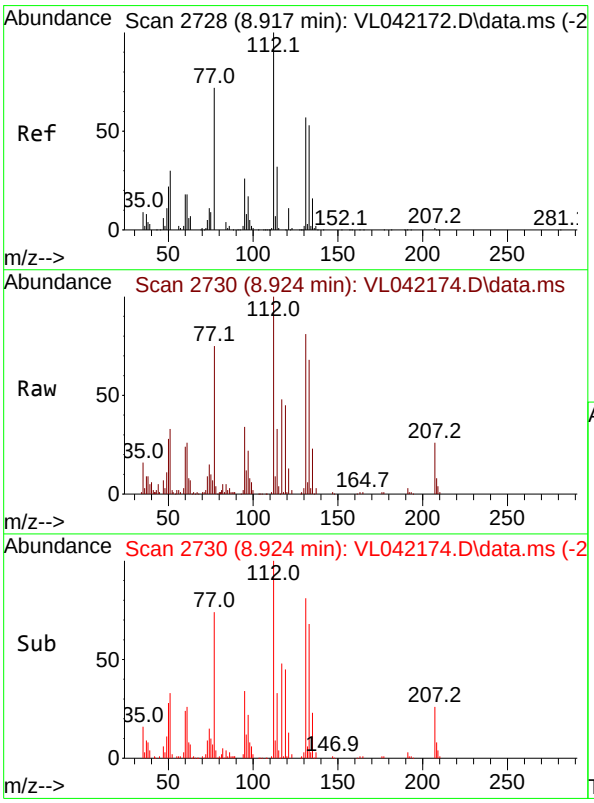
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 499830

Ion	Ratio	Lower	Upper
117	100		
82	67.6	55.8	83.6
119	32.2	25.5	38.3

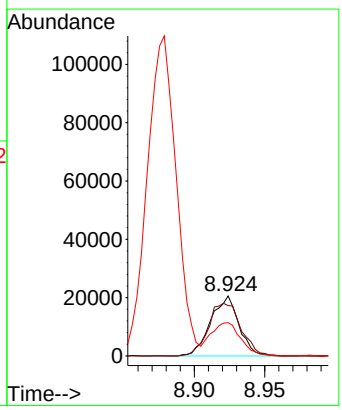


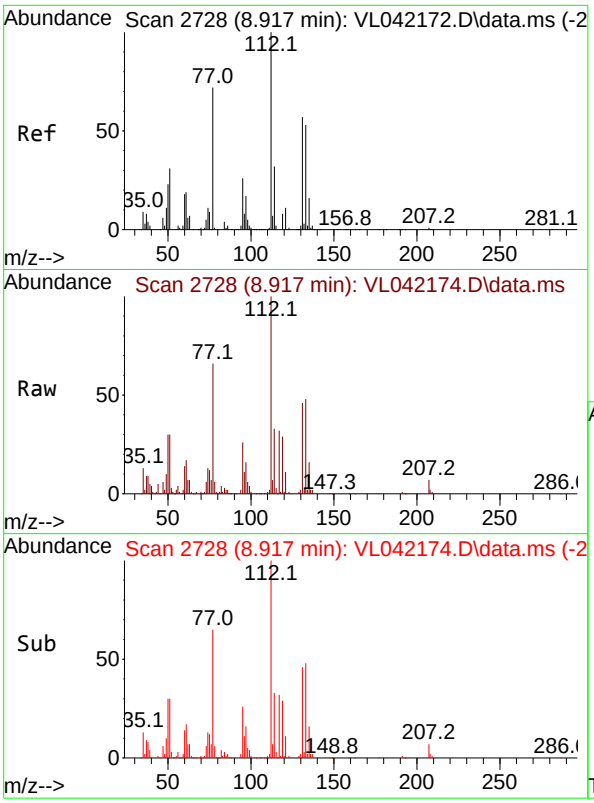


#56
1,1,1,2-Tetrachloroethane
Concen: 1.045 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:131 Resp: 28764

Ion	Ratio	Lower	Upper
131	100		
133	101.7	76.6	114.8
119	44.1	49.8	74.6#



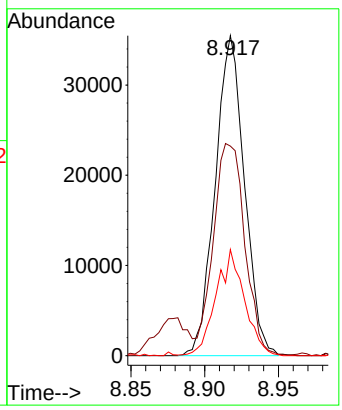


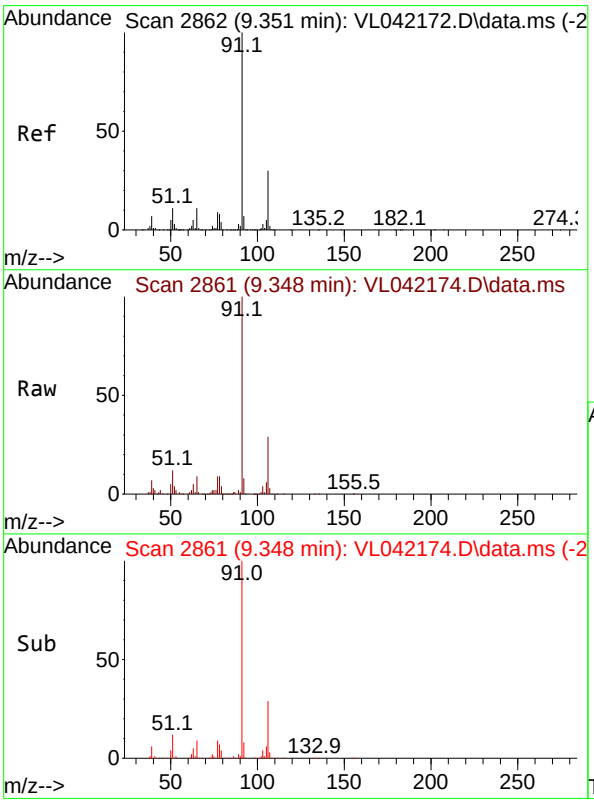
#57
Chlorobenzene
Concen: 1.032 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:112 Resp: 48930

Ion	Ratio	Lower	Upper
112	100		
77	65.0	58.2	87.2
114	32.9	29.1	35.5

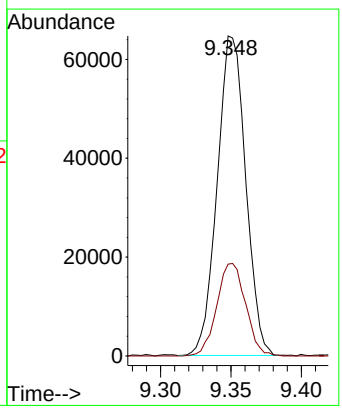


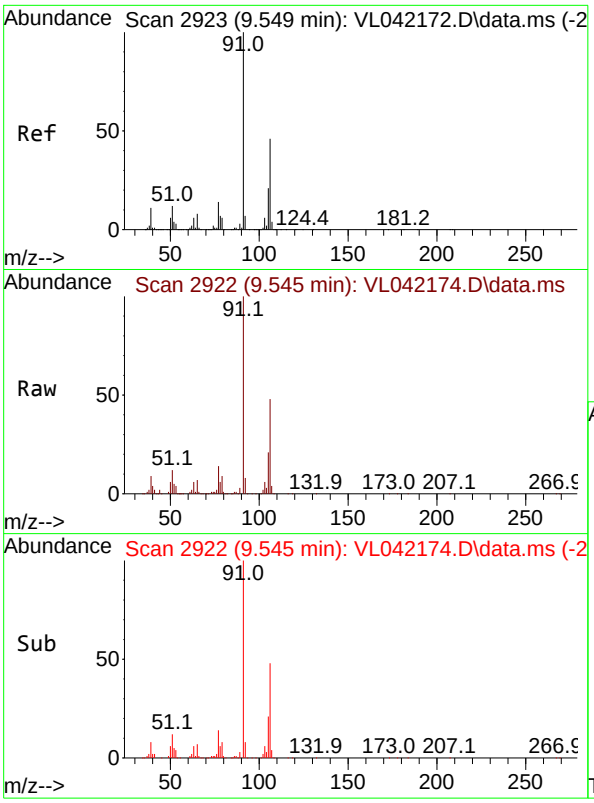


#58
Ethyl Benzene
Concen: 1.026 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 91086

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2



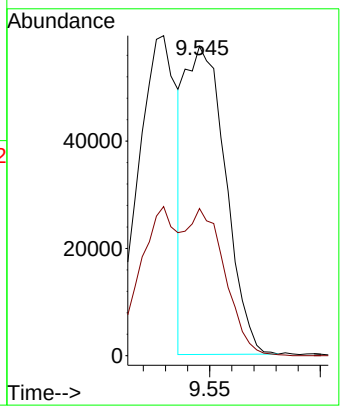


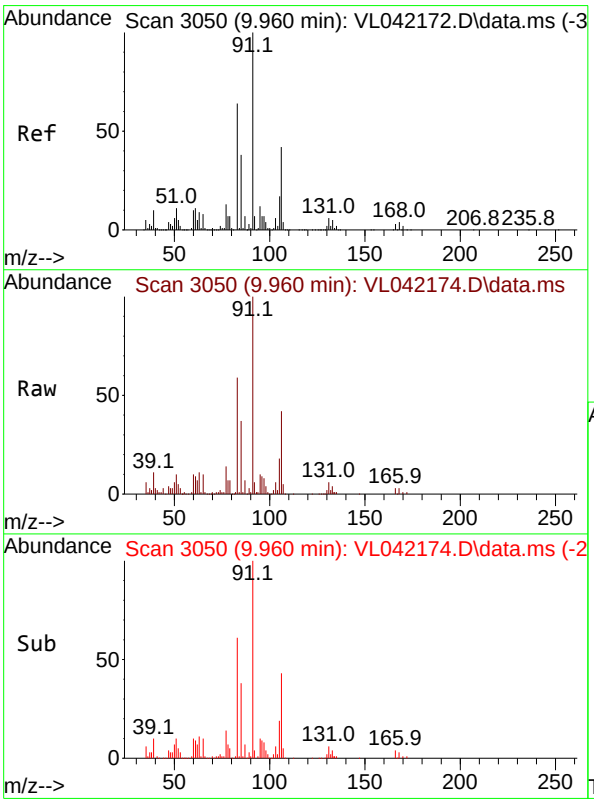
#59
m/p-Xylene
Concen: 1.033 ppbv
RT: 9.545 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 73295

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

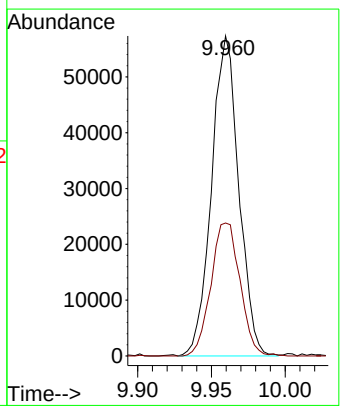


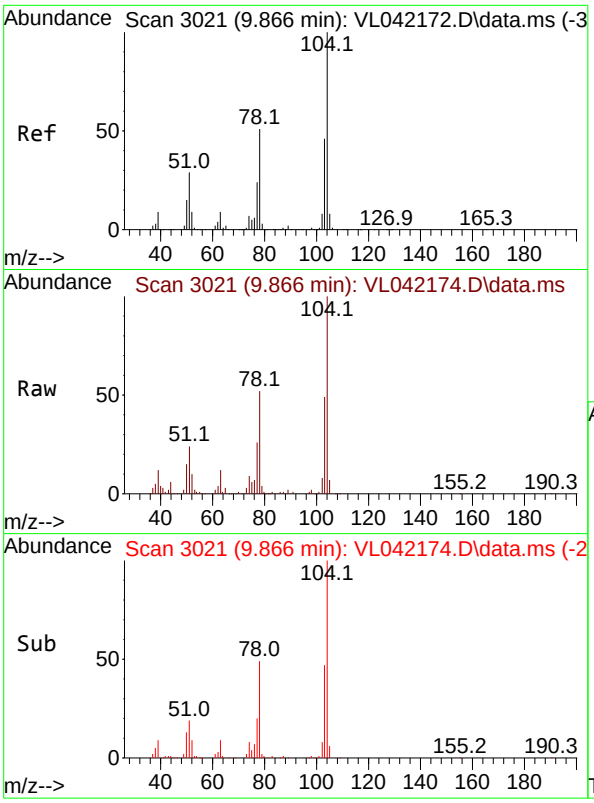


#60
o-Xylene
Concen: 1.037 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 73702

Ion	Ratio	Lower	Upper
91	100		
106	44.3	20.8	62.5



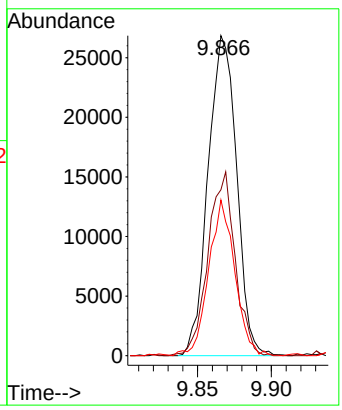


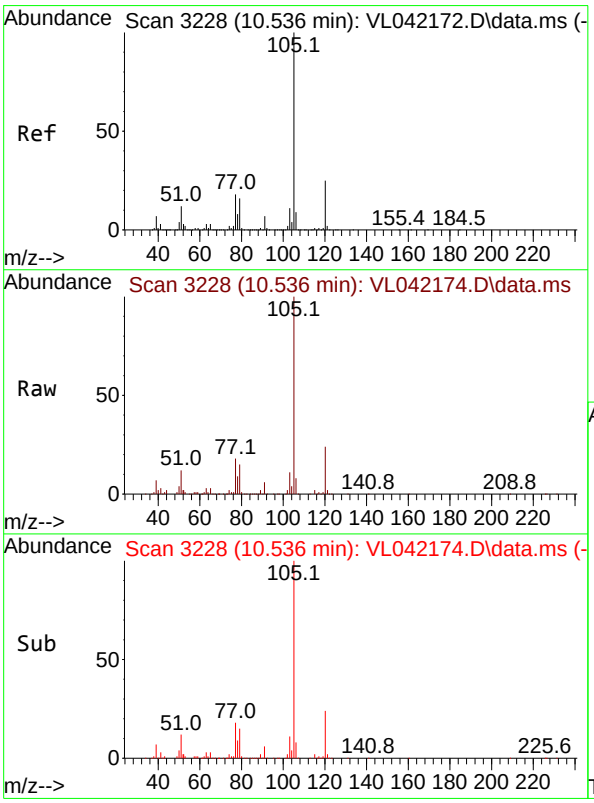
#61
Styrene
Concen: 1.027 ppbv
RT: 9.866 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:104 Resp: 36110

Ion	Ratio	Lower	Upper
104	100		
78	54.9	41.8	62.6
103	45.1	37.0	55.4

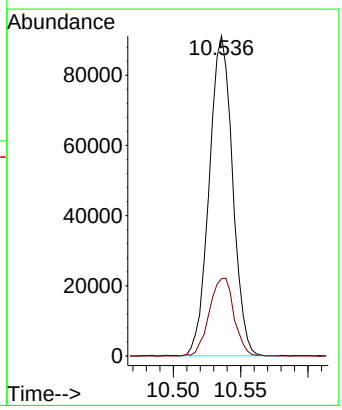


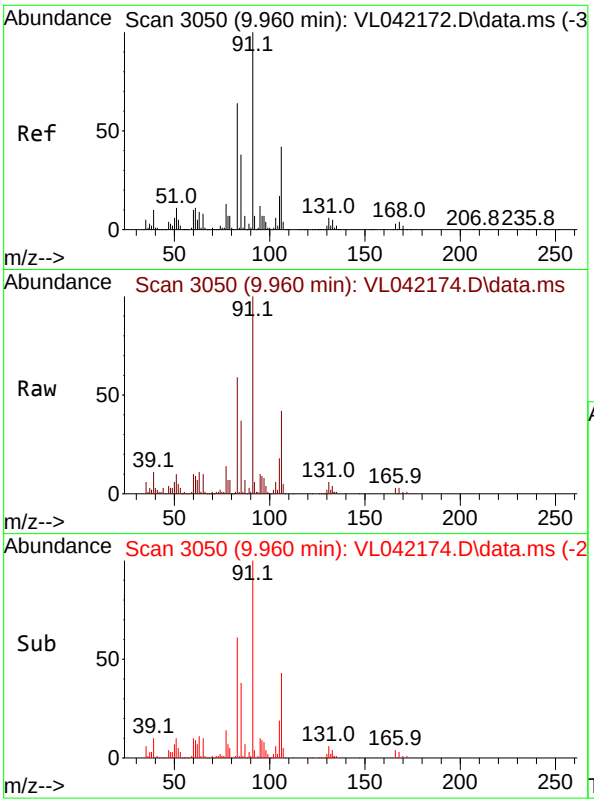


#62
Isopropylbenzene
Concen: 1.034 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 109897

Ion	Ratio	Lower	Upper
105	100		
120	25.7	19.9	29.9



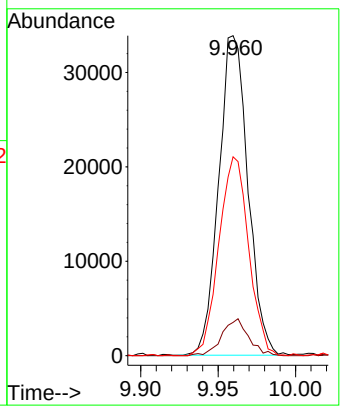


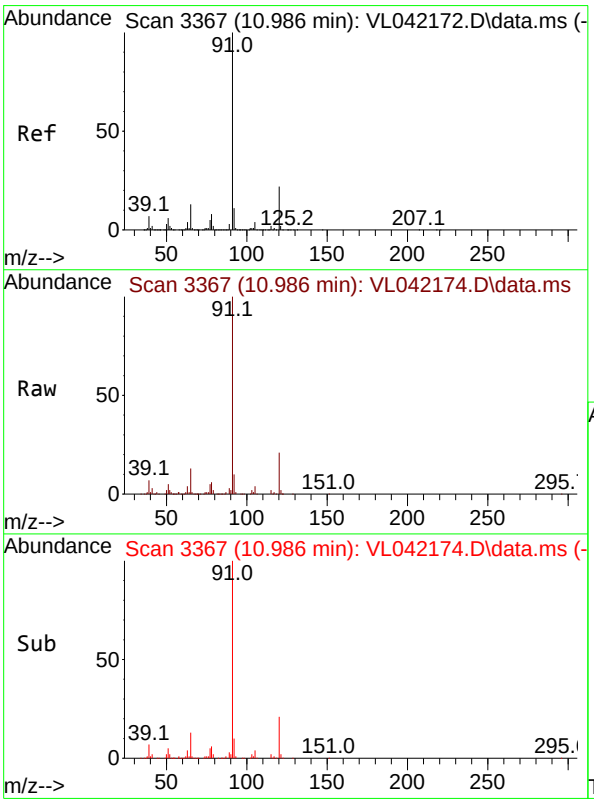
#63
1,1,2,2-Tetrachloroethane
Concen: 1.029 ppbv
RT: 9.960 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 44431

Ion	Ratio	Lower	Upper
83	100		
131	10.6	4.8	14.4
85	64.0	32.5	97.5

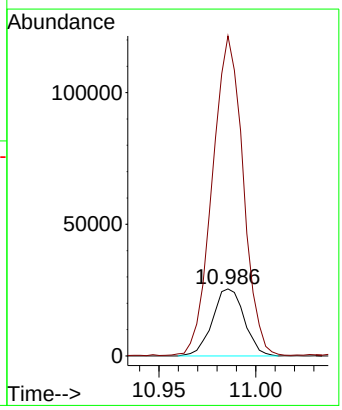


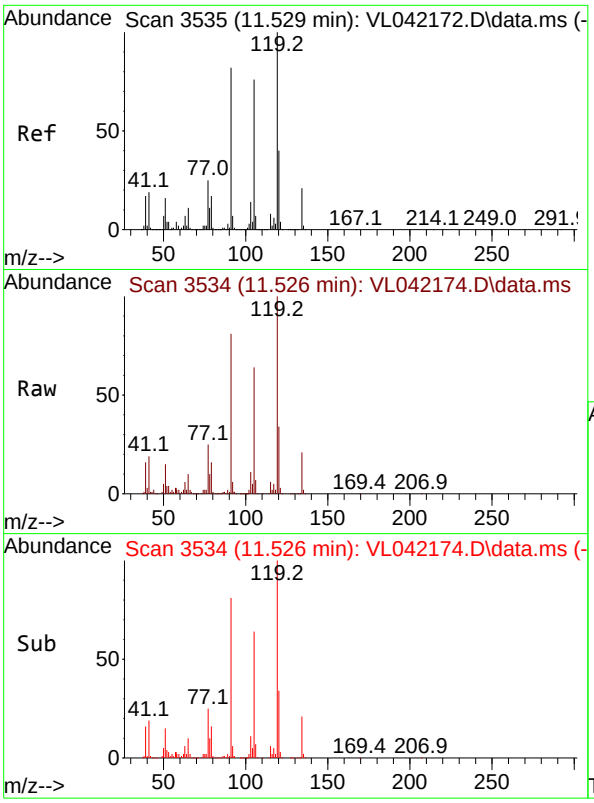


#64
n-propylbenzene
Concen: 1.062 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:120 Resp: 29054

Ion	Ratio	Lower	Upper
120	100		
91	466.9	376.9	565.3



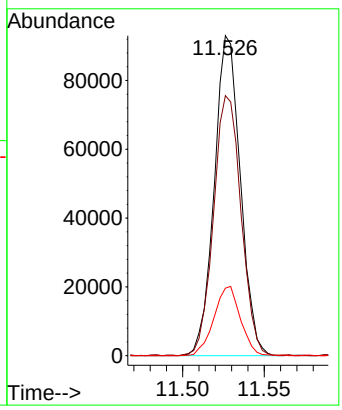


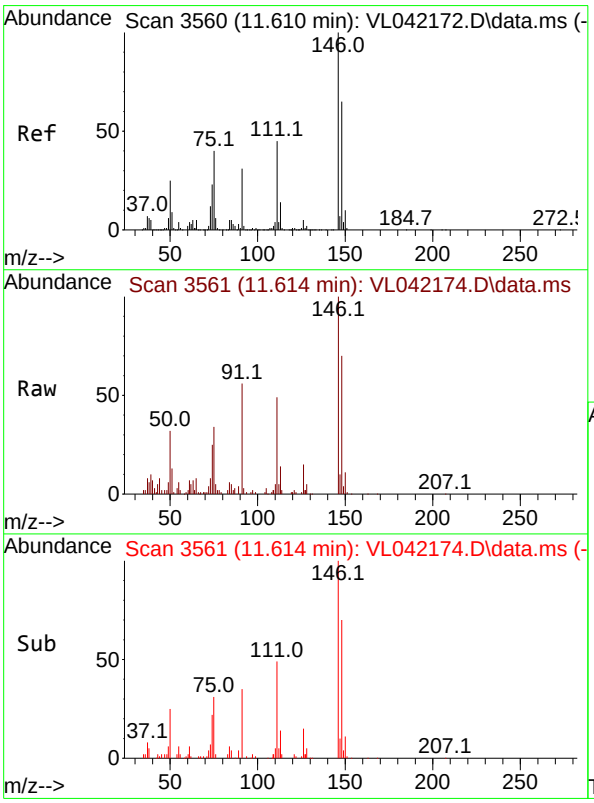
#65
tert-Butylbenzene
Concen: 1.053 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 103520

Ion	Ratio	Lower	Upper
119	100		
91	85.9	66.0	99.0
134	22.1	16.7	25.1

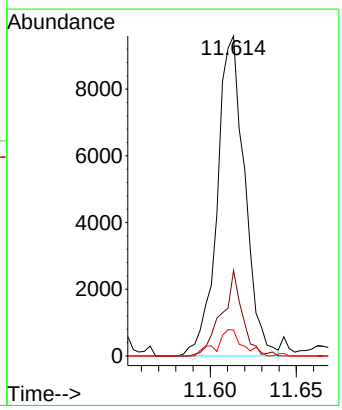


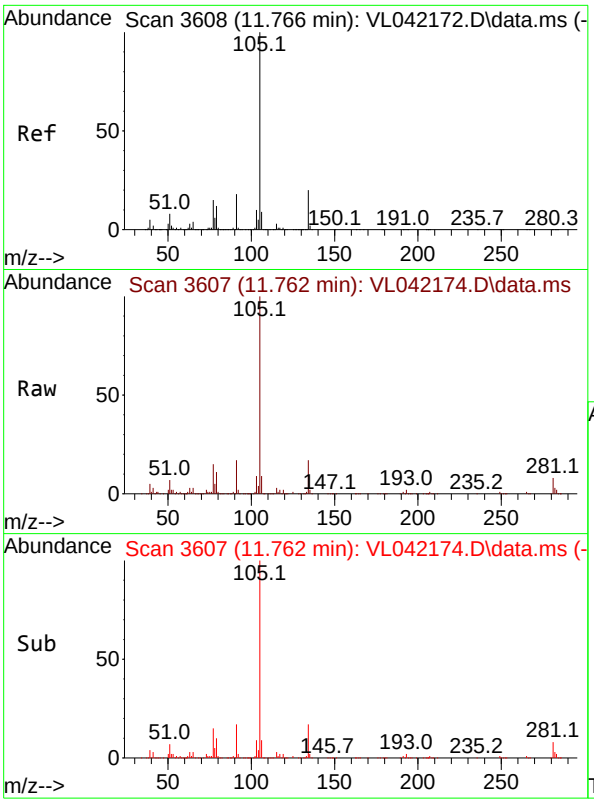


#66
Benzyl Chloride
Concen: 1.022 ppbv
RT: 11.614 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 10660

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	8.0	4.5	6.7#



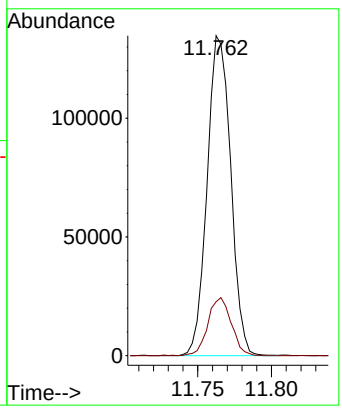


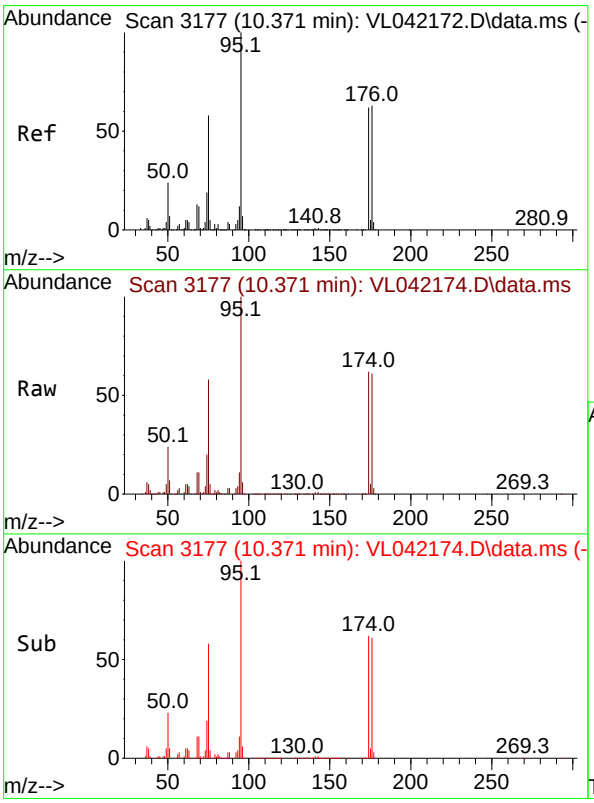
#67
sec-Butylbenzene
Concen: 1.095 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 149660

Ion	Ratio	Lower	Upper
105	100		
134	18.1	15.5	23.3

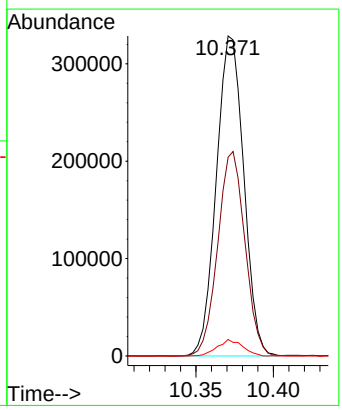


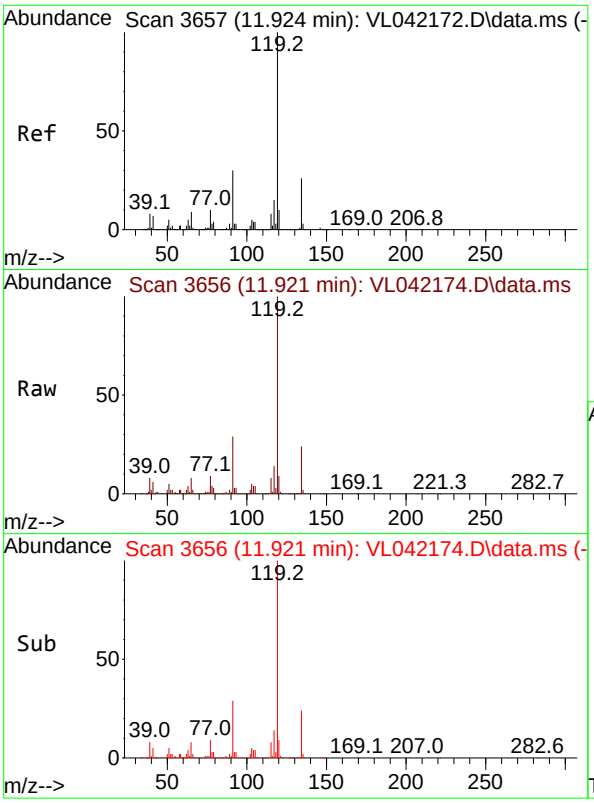


#68
1-Bromo-4-Fluorobenzene
Concen: 9.861 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 95 Resp: 404753

Ion	Ratio	Lower	Upper
95	100		
174	63.4	50.6	76.0
175	4.7	3.8	5.6



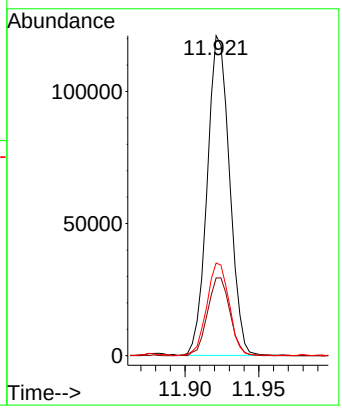


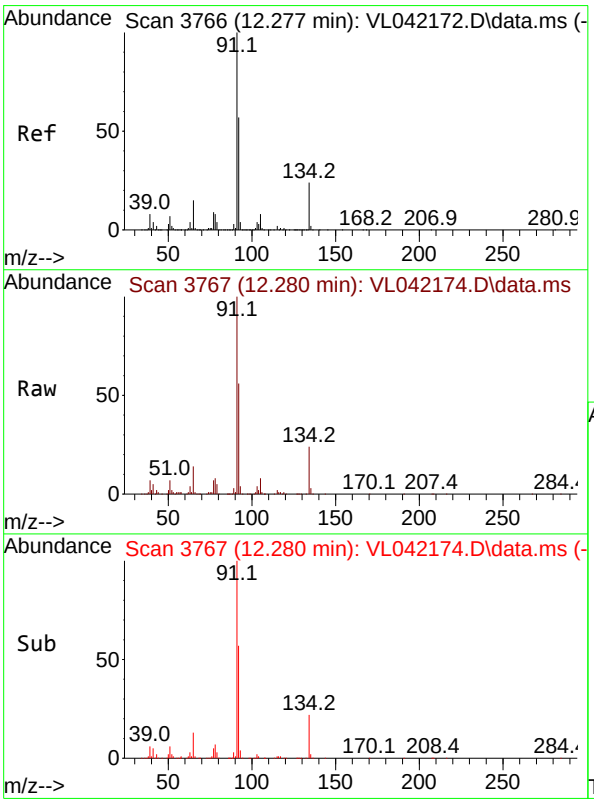
#69
p-Isopropyltoluene
Concen: 1.084 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 127509

Ion	Ratio	Lower	Upper
119	100		
134	24.6	20.4	30.6
91	30.0	23.7	35.5

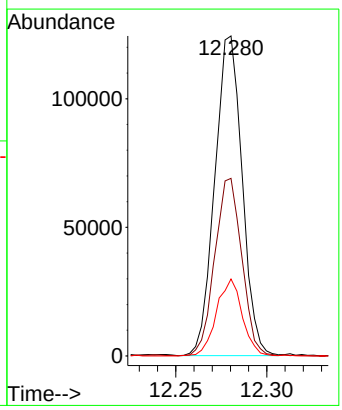


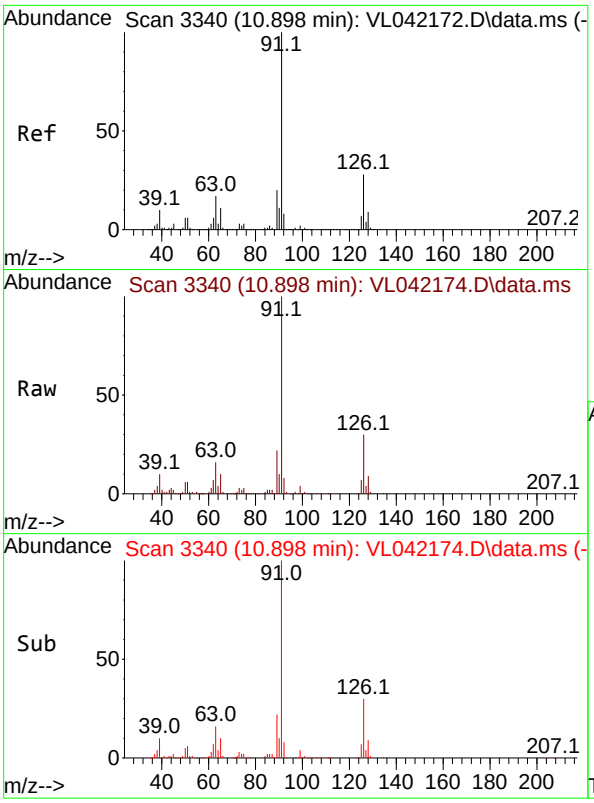


#70
n-Butylbenzene
Concen: 1.079 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 129860

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.9	67.3
134	22.8	19.2	28.8



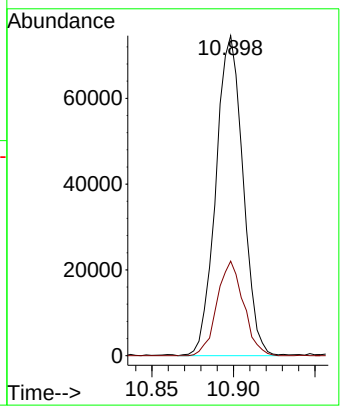


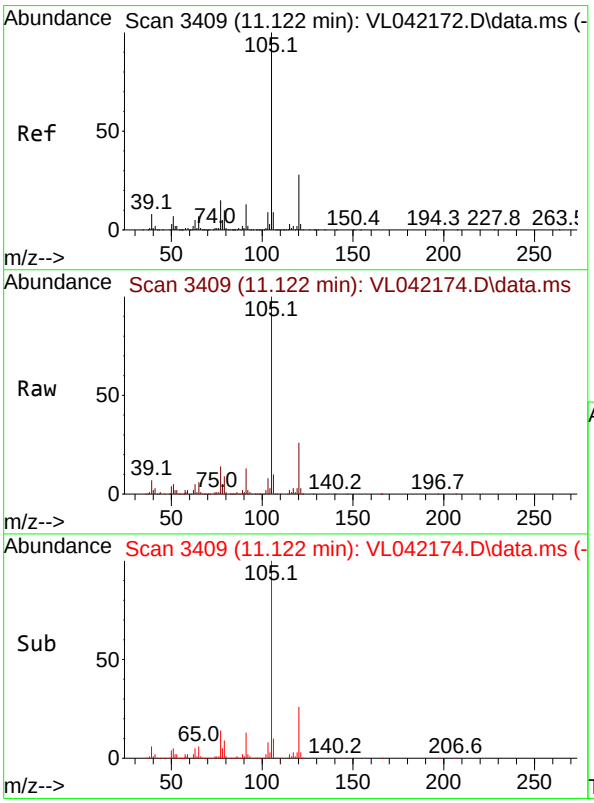
#71
2-Chlorotoluene
Concen: 1.047 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 86356

Ion	Ratio	Lower	Upper
91	100		
126	28.8	11.6	46.4

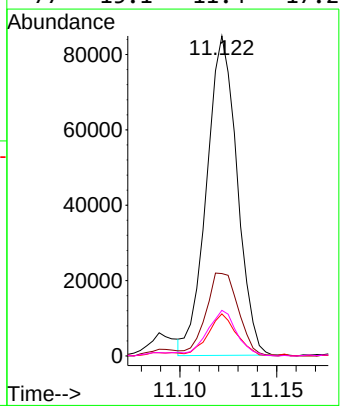


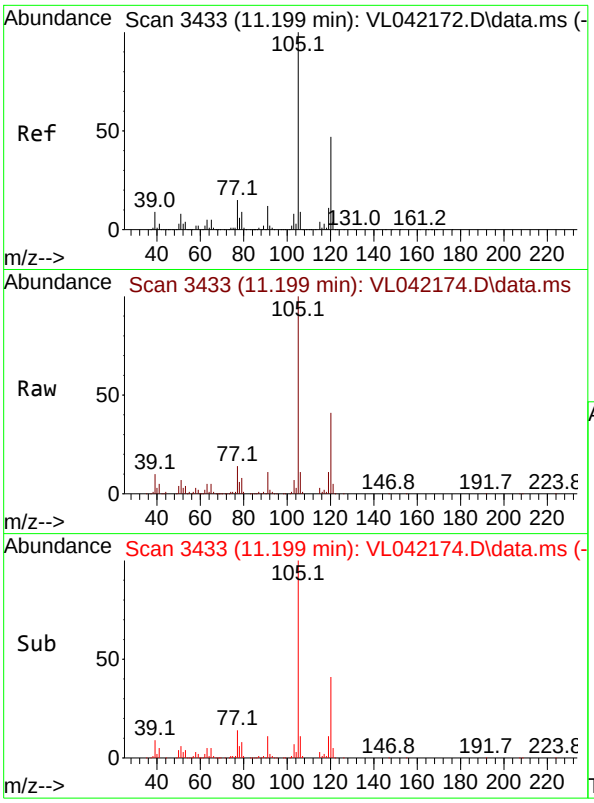


#72
4-Ethyltoluene
Concen: 1.050 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 92912

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.5	10.3	15.5
77	15.1	11.4	17.2



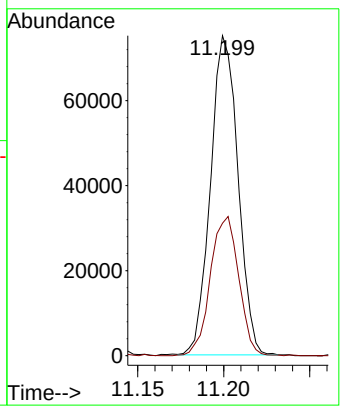


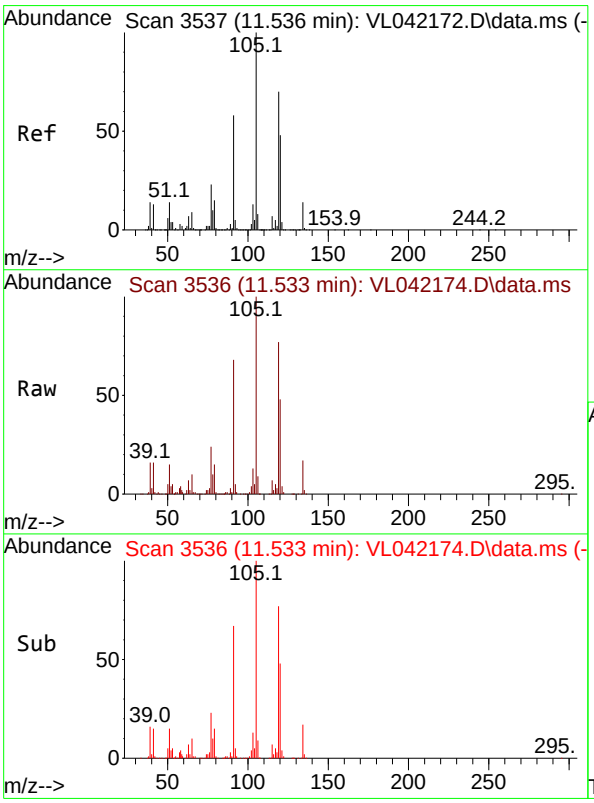
#73
1,3,5-Trimethylbenzene
Concen: 1.080 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 83497

Ion	Ratio	Lower	Upper
105	100		
120	41.3	37.4	56.0

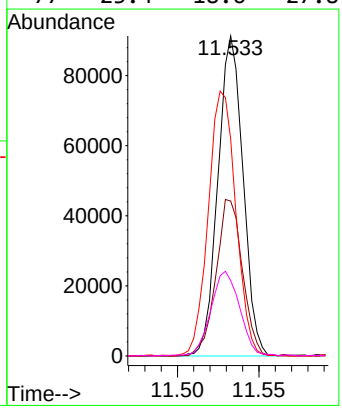


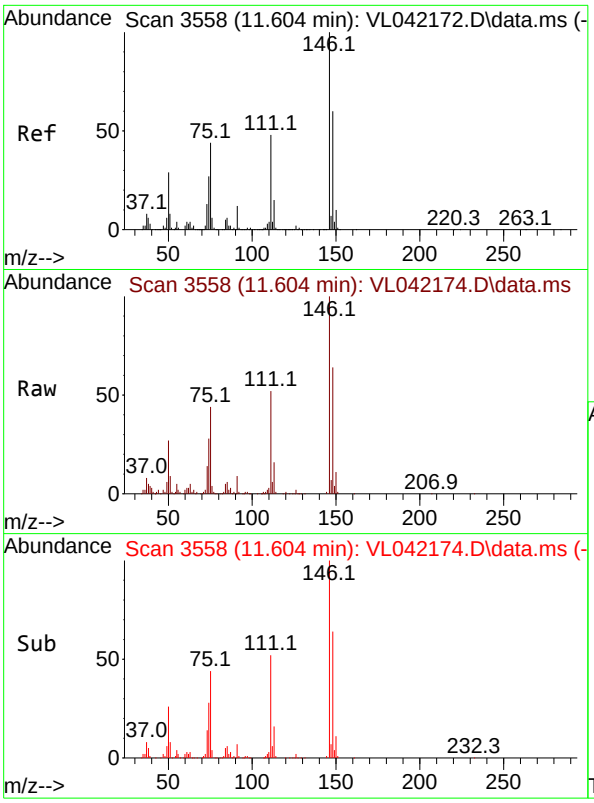


#74
1,2,4-Trimethylbenzene
Concen: 1.099 ppbv
RT: 11.533 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 97858

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	67.6	46.2	69.2
77	23.4	18.6	27.8



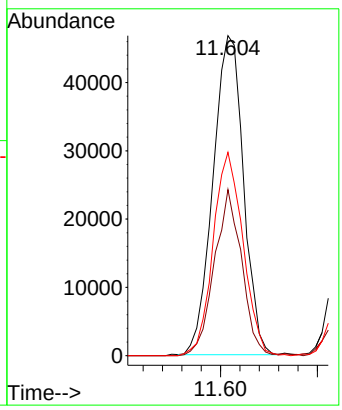


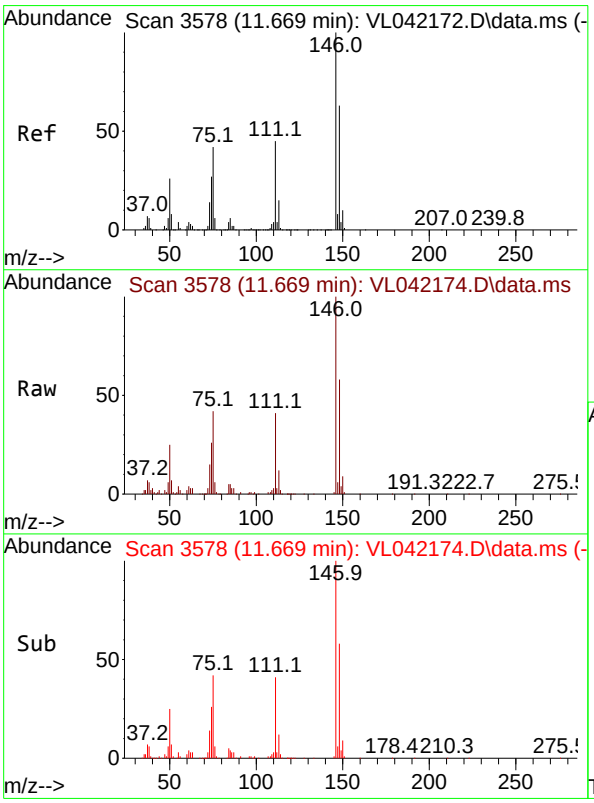
#75
1,3-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.604 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 51096

Ion	Ratio	Lower	Upper
146	100		
111	46.8	23.8	71.2
148	62.6	31.9	95.9

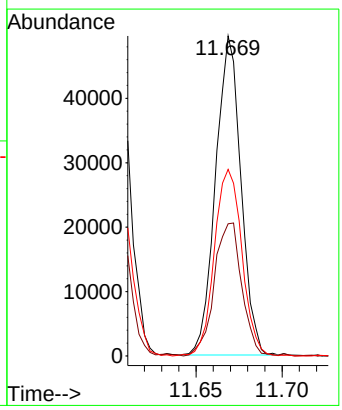


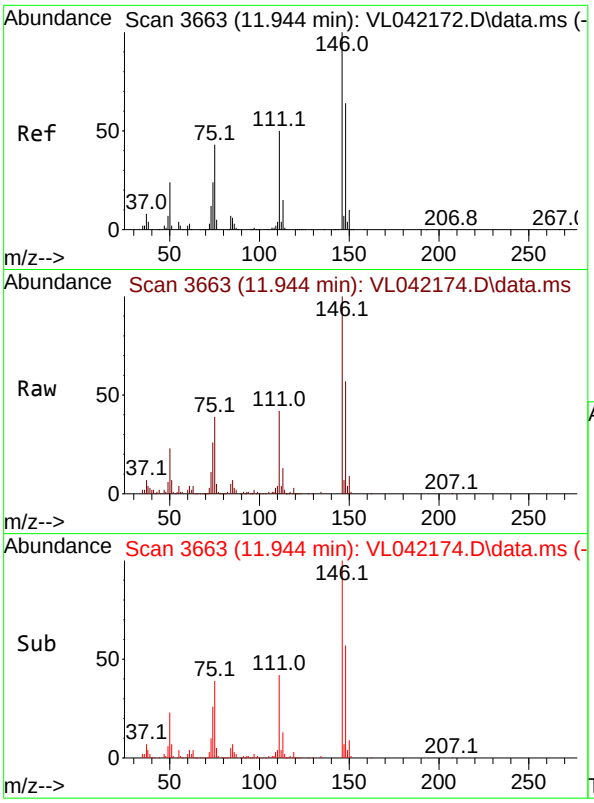


#76
1,4-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 50841

Ion	Ratio	Lower	Upper
146	100		
111	45.4	23.0	69.0
148	63.6	31.9	95.7



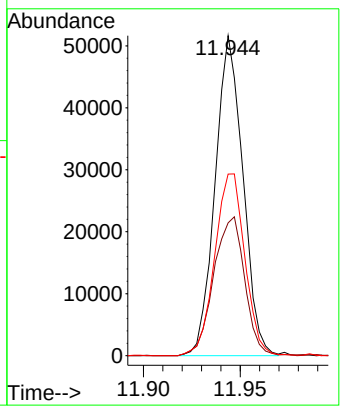


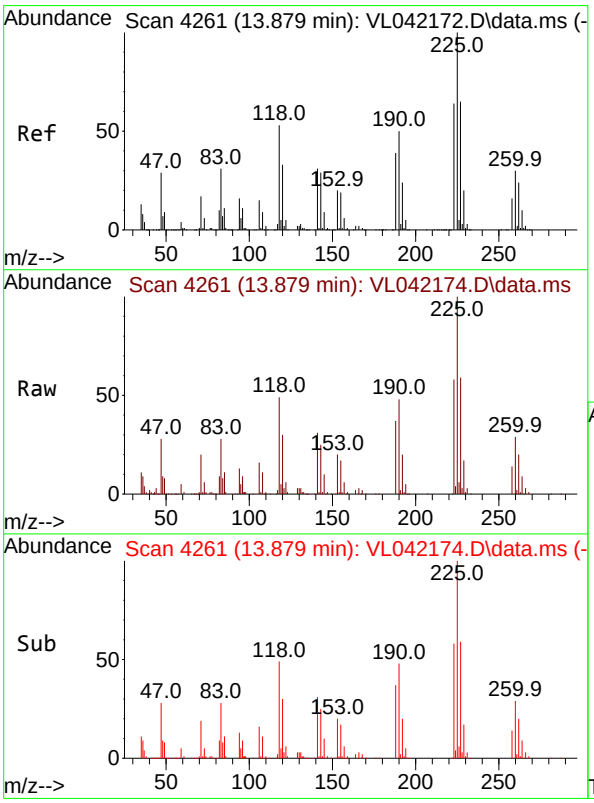
#77
1,2-Dichlorobenzene
Concen: 1.084 ppbv
RT: 11.944 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 51523

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.8	74.3
148	61.9	31.6	94.8

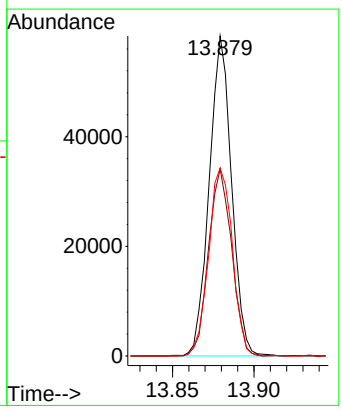


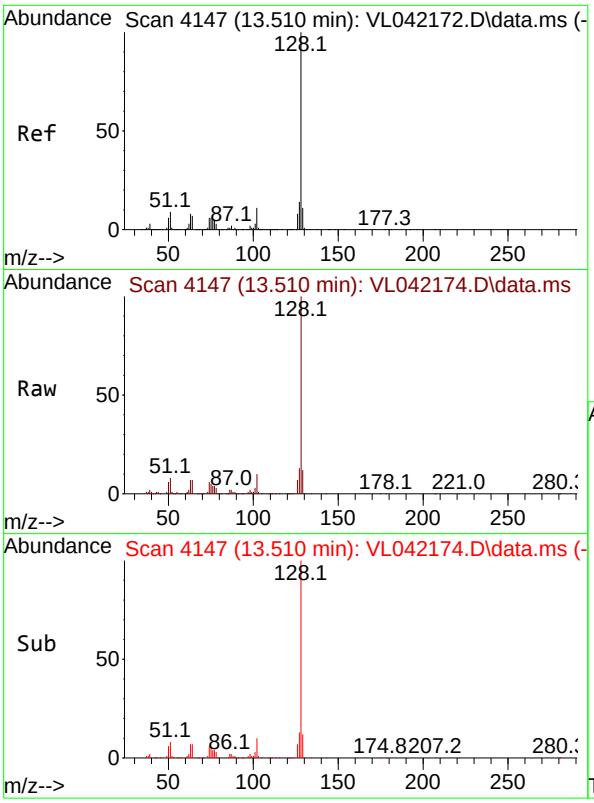


#78
Hexachloro-1,3-Butadiene
Concen: 1.149 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:225 Resp: 55611

Ion	Ratio	Lower	Upper
225	100		
223	60.8	50.6	76.0
227	62.3	51.2	76.8



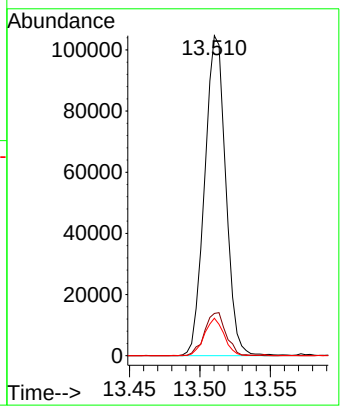


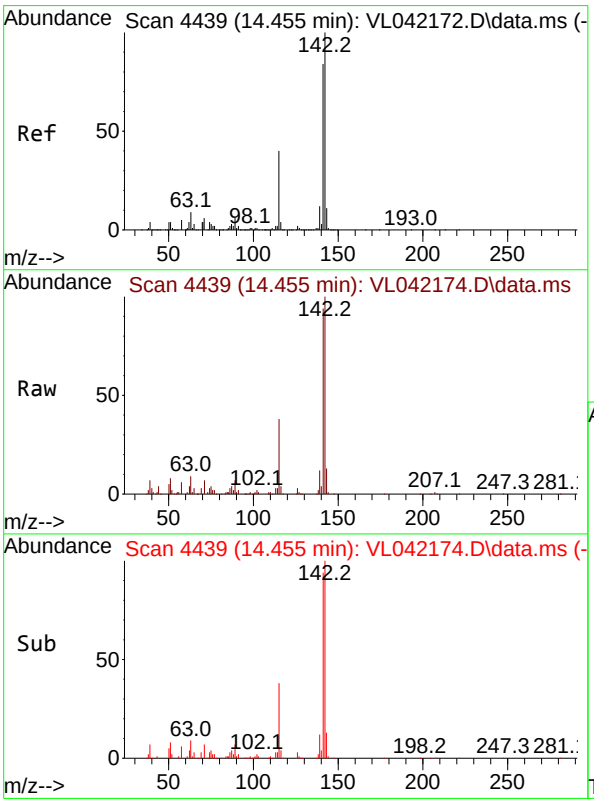
#79
Naphthalene
Concen: 1.120 ppbv
RT: 13.510 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:128 Resp: 109031

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.8	16.2
129	11.7	9.0	13.4

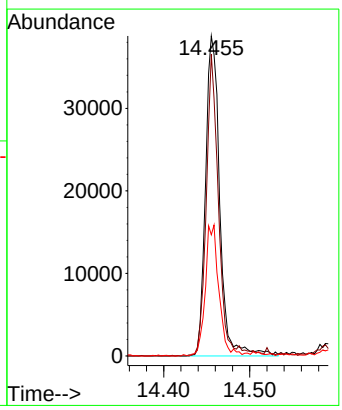


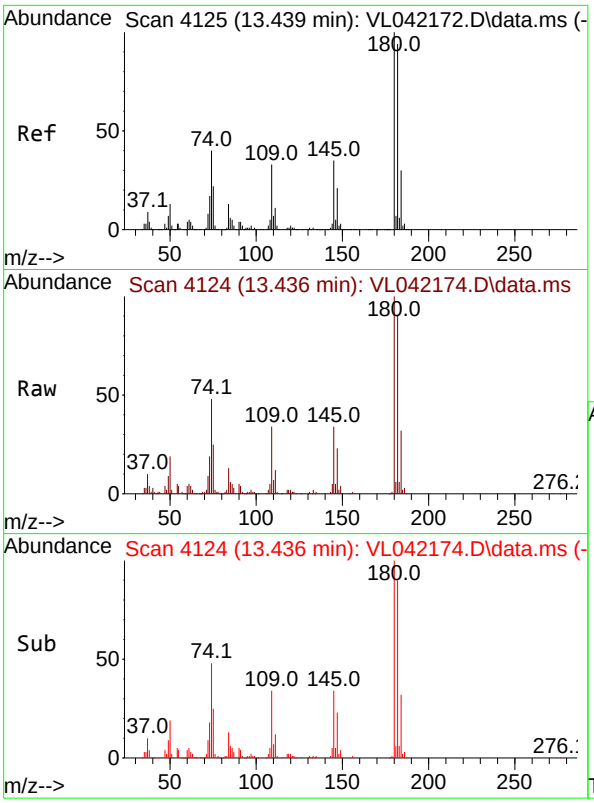


#80
Naphthalene,2-methyl-
Concen: 0.939 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:142 Resp: 44518

Ion	Ratio	Lower	Upper
142	100		
141	83.4	66.3	99.5
115	41.5	31.6	47.4



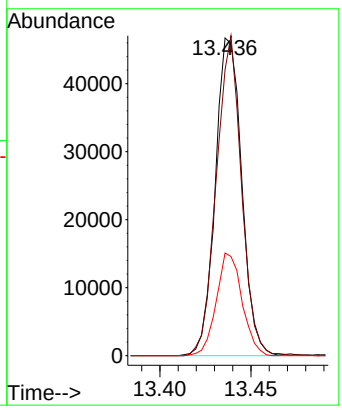


#81
1,2,4-Trichlorobenzene
Concen: 1.047 ppbv
RT: 13.436 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:180 Resp: 47040

Ion	Ratio	Lower	Upper
180	100		
182	95.7	75.1	112.7
184	31.4	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	180502	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	523832	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	485078	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	403513	10.130	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	14455	0.542	ppbv		95
3) Chlorodifluoromethane	1.473	51	14637	0.538	ppbv	#	89
4) Chloromethane	1.531	50	5956	0.547	ppbv		94
5) Vinyl Chloride	1.577	62	5732	0.516	ppbv		92
6) Bromomethane	1.664	94	2949	0.597	ppbv		95
7) Chloroethane	1.703	64	2582	0.591	ppbv	#	87
8) Dichlorotetrafluoroethane	1.551	85	11783	0.519	ppbv		98
9) Propene	1.557	41	2054	0.167	ppbv		92
10) Heptane	4.972	43	16673	0.502	ppbv		89
11) Trichlorofluoromethane	1.874	101	14099	0.544	ppbv		92
12) 1,1,2-Trichlorotrifluo...	2.136	101	11252	0.528	ppbv		99
13) Ethanol	1.722	45	997	1.038	ppbv	#	36
14) Bromoethene	1.780	108	4770	0.584	ppbv	#	86
15) Acetone	1.835	43	15331	0.607	ppbv	#	85
16) 1,3-Butadiene	1.606	39	8594	0.757	ppbv		82
17) tert-Butyl alcohol	2.039	59	17467	0.556	ppbv		97
18) 1,1-Dichloroethene	2.030	96	5634	0.565	ppbv	#	92
19) Isopropyl Alcohol	1.884	45	9171	0.644	ppbv	#	39
20) Methylene Chloride	2.059	84	5634	0.599	ppbv	#	93
21) Allyl Chloride	2.091	41	9632	0.541	ppbv		89
22) trans-1,2-Dichloroethene	2.334	96	6353	0.546	ppbv		83
23) Vinyl Acetate	2.457	43	6809	0.649	ppbv	#	91
24) 1,1-Dichloroethane	2.405	63	11258	0.527	ppbv		97
25) Ethyl Acetate	2.836	43	36258	0.553	ppbv		98
26) Hexane	2.823	57	13605	0.538	ppbv		92
27) Carbon Disulfide	2.146	76	14510	0.535	ppbv	#	1
28) Methyl tert-Butyl Ether	2.437	73	8310	0.527	ppbv	#	89
29) Chloroform	2.845	83	20149	0.544	ppbv		98
30) Cyclohexane	3.852	84	9635	0.438	ppbv	#	70
31) cis-1,2-Dichloroethene	2.719	61	13601	0.529	ppbv		92
32) 1,1,1-Trichloroethane	3.360	97	20567	0.485	ppbv		100
34) 2-Butanone	2.557	43	19739	0.520	ppbv		96
35) Carbon Tetrachloride	3.755	117	18558	0.460	ppbv		93
36) Benzene	3.651	78	27488	0.529	ppbv	#	87
37) 1,2-Dichloroethane	3.214	62	16062	0.540	ppbv		100
38) Trichloroethene	4.545	130	4992	0.230	ppbv		95
39) 1,2-Dichloropropane	4.308	63	10123	0.535	ppbv		92
40) 1,4-Dioxane	4.593	88	4487	0.457	ppbv	#	24
41) Tetrahydrofuran	3.059	42	10856	0.502	ppbv		94
42) Bromodichloromethane	4.483	83	20374	0.497	ppbv	#	98
43) Methyl Methacrylate	4.875	69	6229	0.284	ppbv	#	10
44) 2,2,4-Trimethylpentane	4.632	57	46646	0.532	ppbv		95
45) t-1,3-Dichloropropene	6.406	75	12404	0.526	ppbv	#	79

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	8584	0.297	ppbv	#	91
47) 1,1,2-Trichloroethane	6.574	97	8374	0.419	ppbv		96
48) Dibromochloromethane	7.380	129	17042	0.503	ppbv		99
49) Bromoform	9.480	173	14828	0.487	ppbv		98
50) 4-Methyl-2-Pentanone	5.758	43	33674	0.559	ppbv		97
51) 2-Hexanone	7.438	43	26154	0.523	ppbv	#	100
52) Tetrachloroethene	8.218	164	10502	0.510	ppbv		94
53) Toluene	6.923	91	32444	0.527	ppbv		98
54) 1,2-Dibromoethane	7.648	107	14220	0.510	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.920	131	13959	0.523	ppbv	#	1
57) Chlorobenzene	8.914	112	24826	0.540	ppbv	#	91
58) Ethyl Benzene	9.348	91	44862	0.521	ppbv		96
59) m/p-Xylene	9.548	91	18711	0.272	ppbv	#	1
60) o-Xylene	9.959	91	36879	0.535	ppbv		98
61) Styrene	9.866	104	17198	0.504	ppbv		96
62) Isopropylbenzene	10.536	105	55531	0.538	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	21989	0.525	ppbv		96
64) n-propylbenzene	10.985	120	14030	0.528	ppbv		95
65) tert-Butylbenzene	11.526	119	53115	0.557	ppbv		100
66) Benzyl Chloride	11.613	91	5263	0.520	ppbv		97
67) sec-Butylbenzene	11.762	105	72879	0.550	ppbv		98
69) p-Isopropyltoluene	11.921	119	61933	0.542	ppbv		100
70) n-Butylbenzene	12.277	91	61507	0.527	ppbv		99
71) 2-Chlorotoluene	10.895	91	41637	0.520	ppbv		95
72) 4-Ethyltoluene	11.121	105	44473	0.518	ppbv	#	94
73) 1,3,5-Trimethylbenzene	11.199	105	39190	0.523	ppbv		97
74) 1,2,4-Trimethylbenzene	11.532	105	48370	0.560	ppbv		97
75) 1,3-Dichlorobenzene	11.600	146	25122	0.530	ppbv		100
76) 1,4-Dichlorobenzene	11.668	146	24991	0.530	ppbv		97
77) 1,2-Dichlorobenzene	11.943	146	24548	0.532	ppbv		96
78) Hexachloro-1,3-Butadiene	13.879	225	25636	0.546	ppbv		99
79) Naphthalene	13.510	128	47990	0.508	ppbv		95
80) Naphthalene,2-methyl-	14.458	142	17486	0.380	ppbv		98
81) 1,2,4-Trichlorobenzene	13.436	180	19924	0.457	ppbv		97

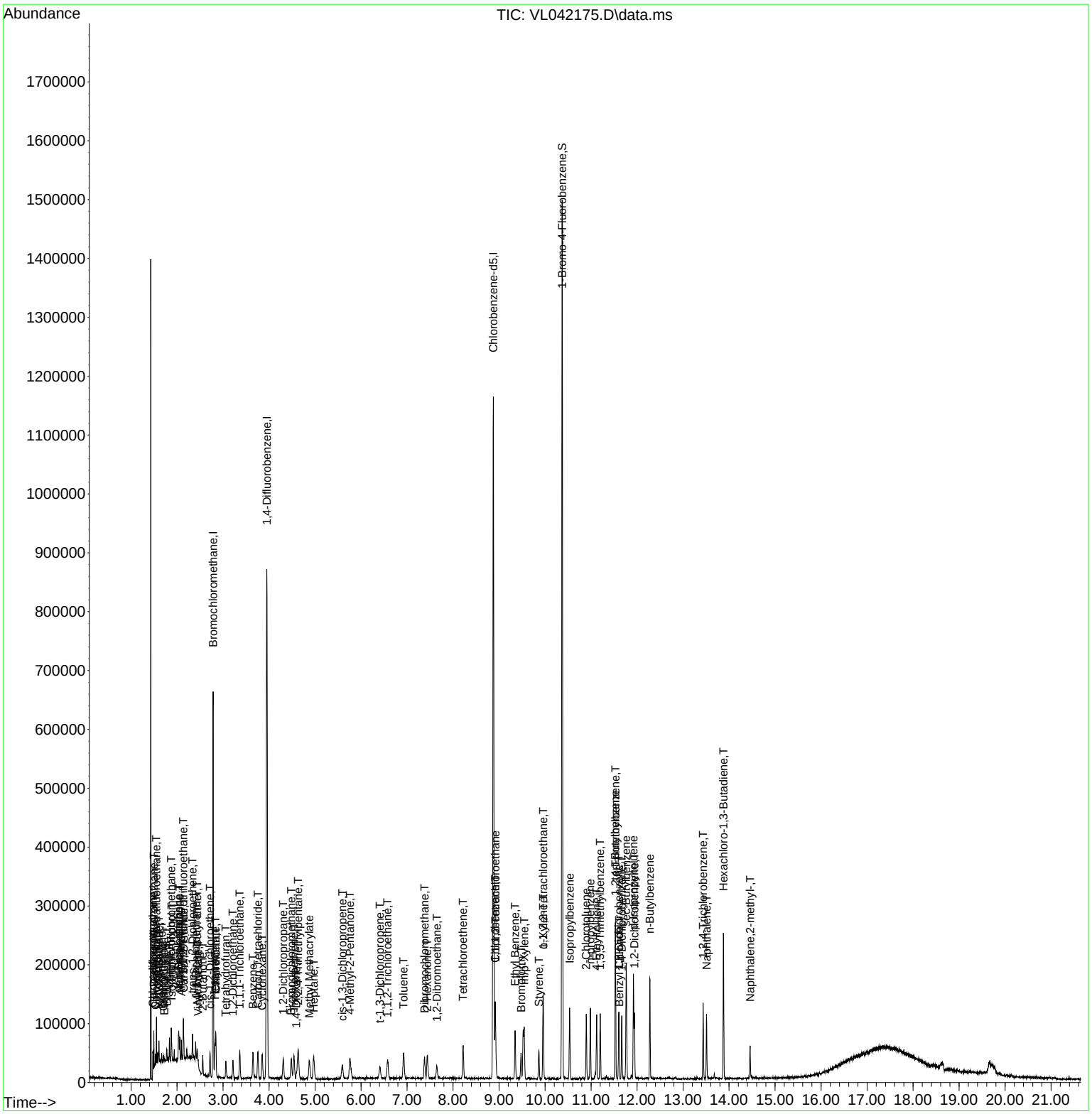
(#) = qualifier out of range (m) = manual integration (+) = signals summed

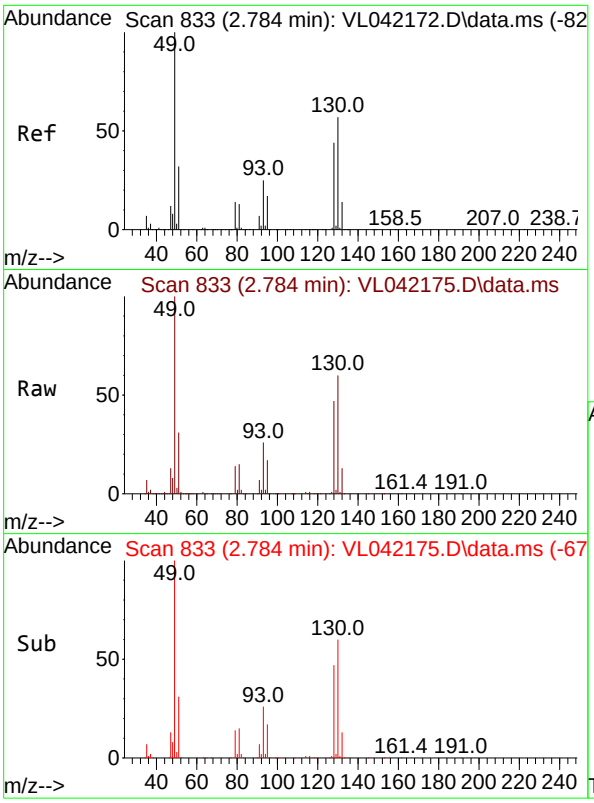
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



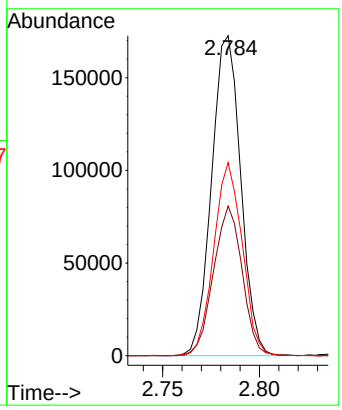


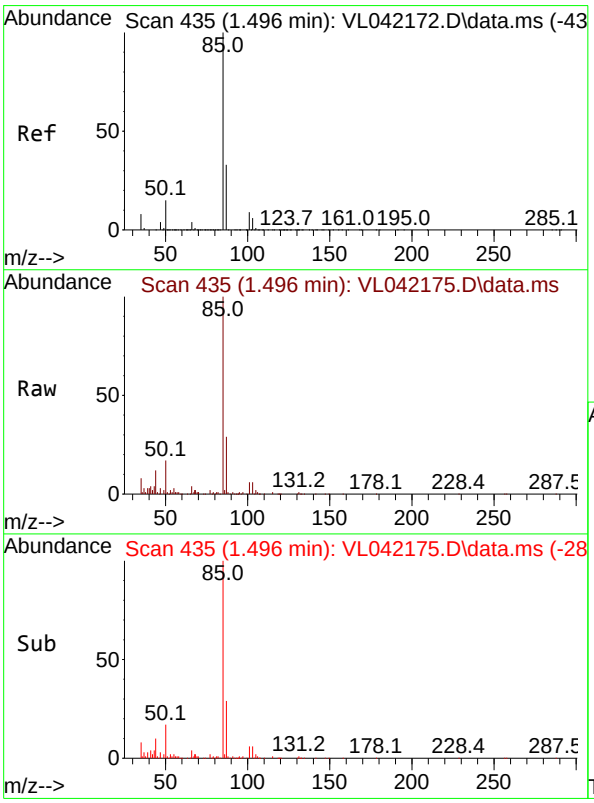
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 49 Resp: 180502

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	59.2	28.8	86.4

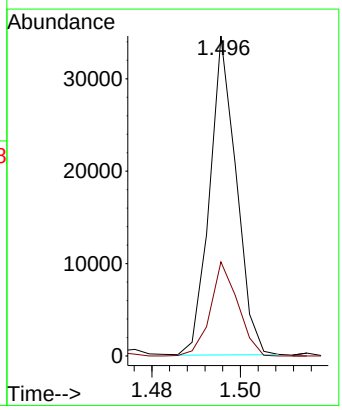


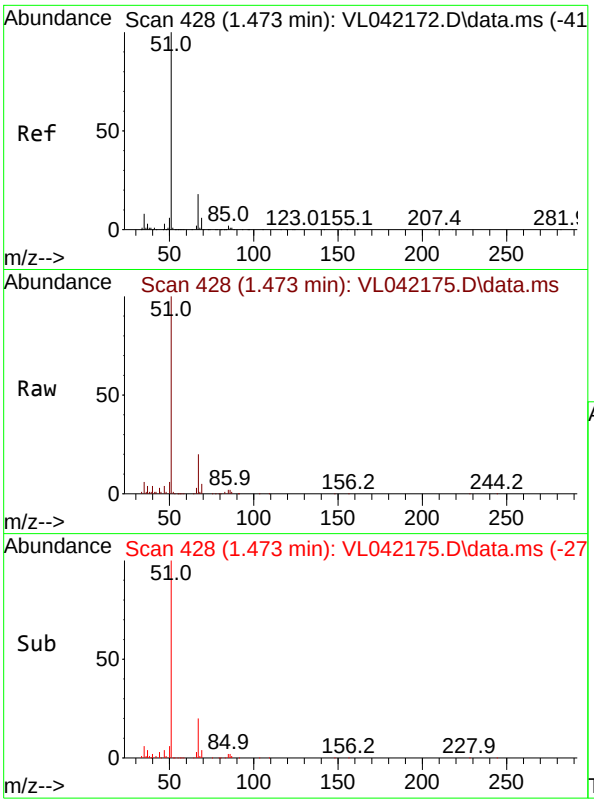


#2
Dichlorodifluoromethane
Concen: 0.542 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 14455

Ion	Ratio	Lower	Upper
85	100		
87	29.5	26.1	39.1



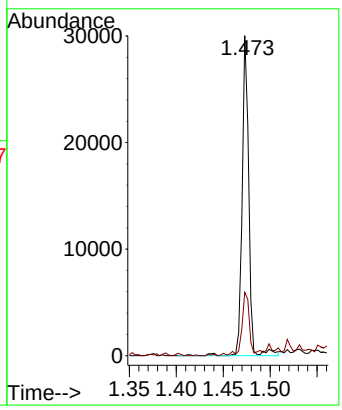


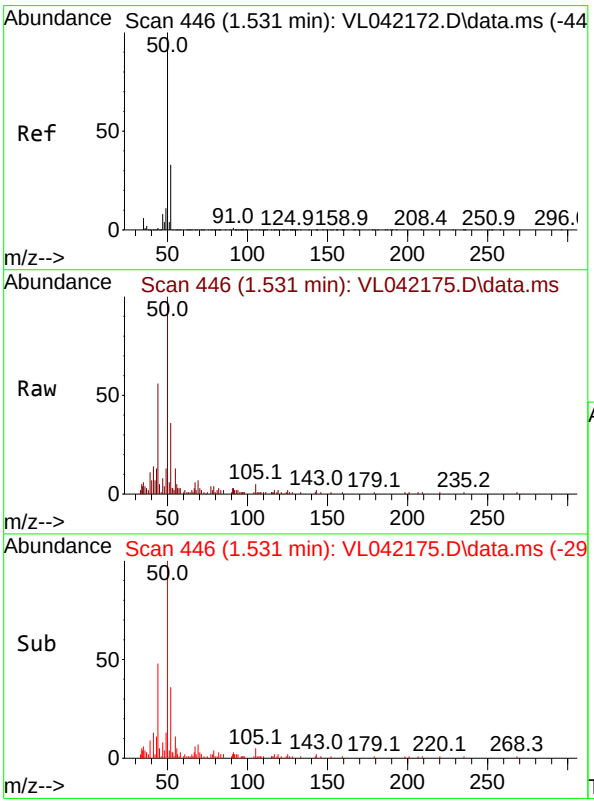
#3
Chlorodifluoromethane
Concen: 0.538 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 51 Resp: 14637

Ion	Ratio	Lower	Upper
51	100		
67	23.6	15.0	22.6#

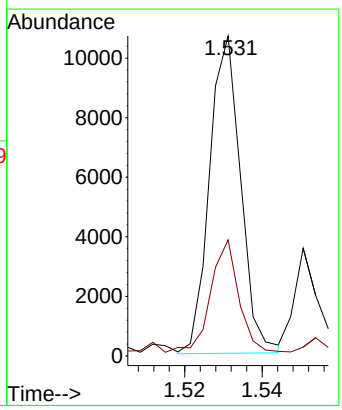


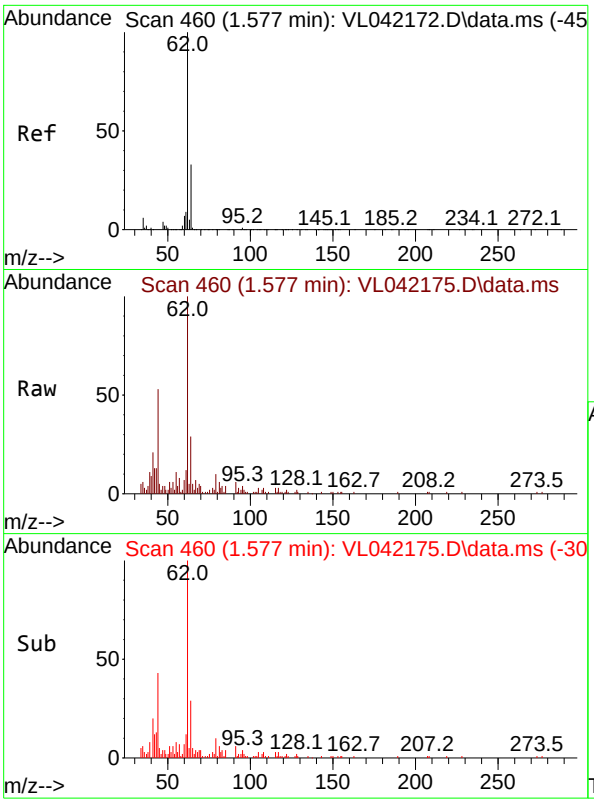


#4
Chloromethane
Concen: 0.547 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 50 Resp: 5956

Ion	Ratio	Lower	Upper
50	100		
52	36.1	26.1	39.1



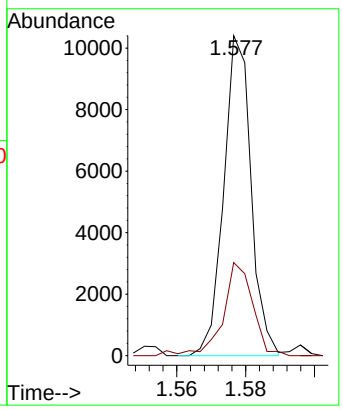


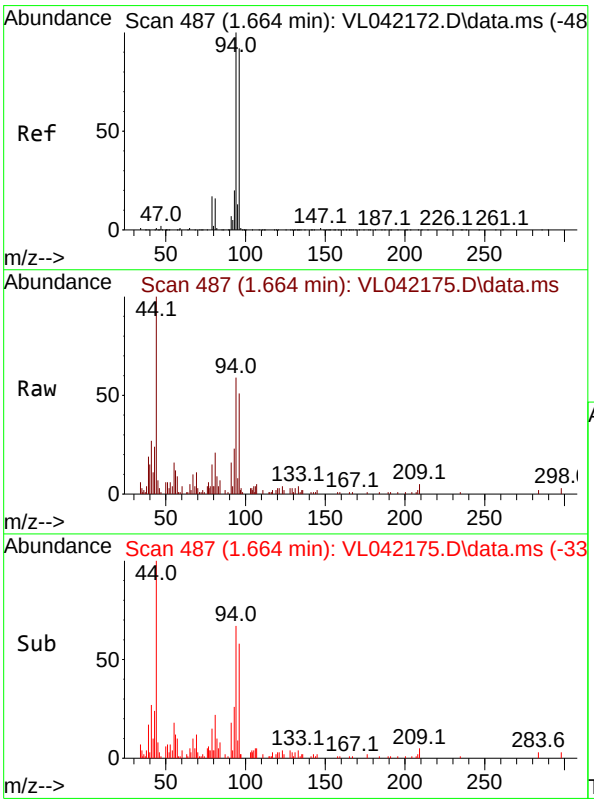
#5
Vinyl Chloride
Concen: 0.516 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 5732

Ion	Ratio	Lower	Upper
62	100		
64	28.5	26.6	40.0

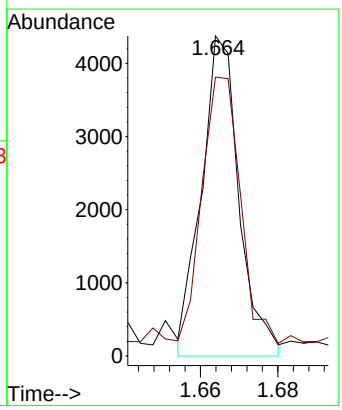


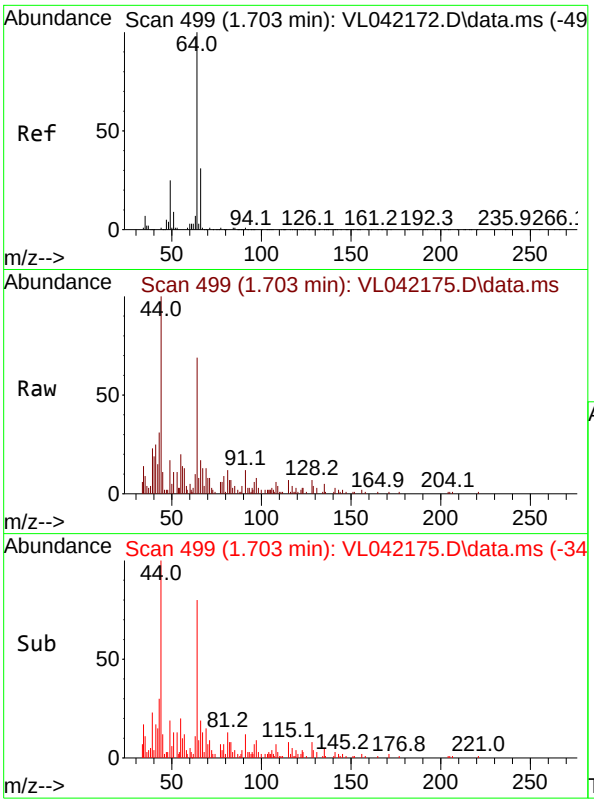


#6
Bromomethane
Concen: 0.597 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 94 Resp: 2949

Ion	Ratio	Lower	Upper
94	100		
96	86.2	73.1	109.7



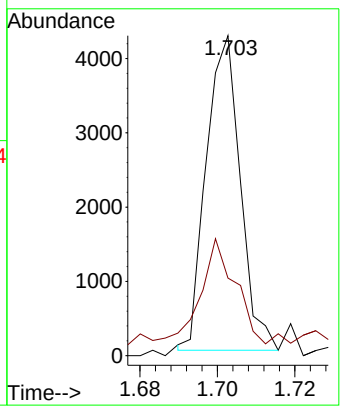


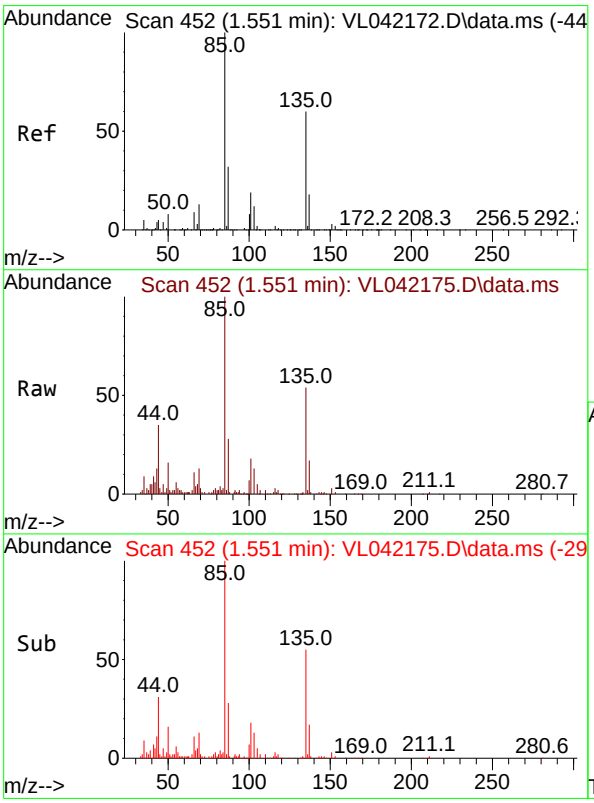
#7
Chloroethane
Concen: 0.591 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 64 Resp: 2582

Ion	Ratio	Lower	Upper
64	100		
66	24.2	25.2	37.8#

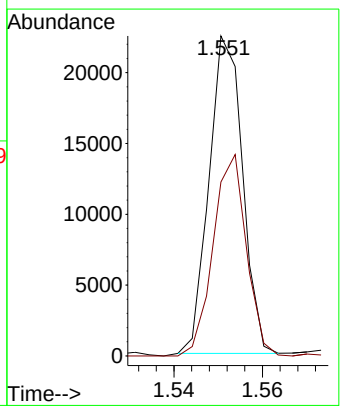


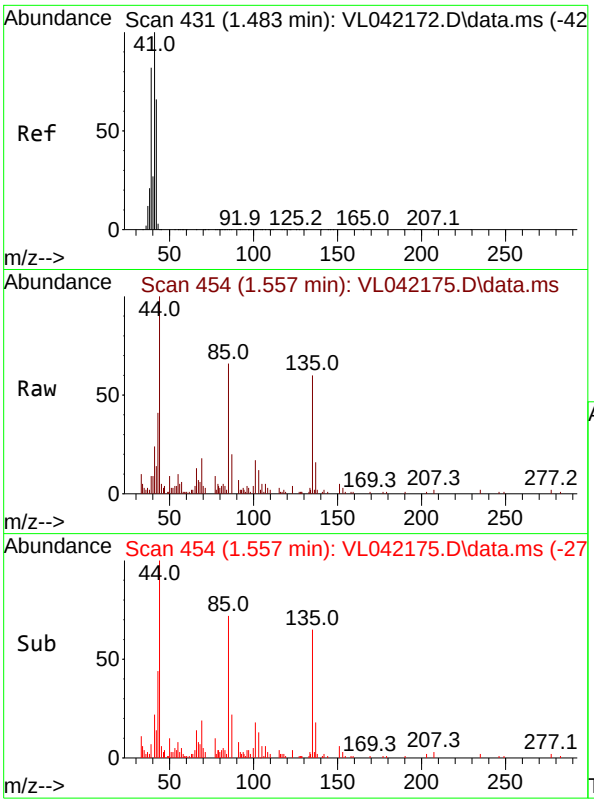


#8
Dichlorotetrafluoroethane
Concen: 0.519 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 11783

Ion	Ratio	Lower	Upper
85	100		
135	63.7	52.4	78.6



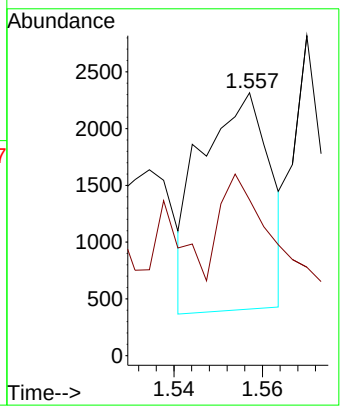


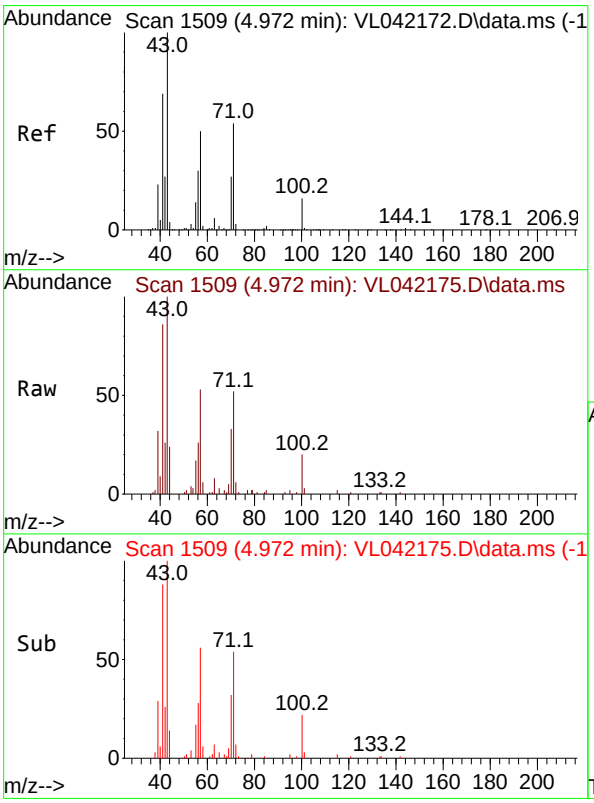
#9
Propene
Concen: 0.167 ppbv
RT: 1.557 min Scan# 4
Delta R.T. 0.074 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 2054

Ion	Ratio	Lower	Upper
41	100		
42	62.9	55.4	83.2

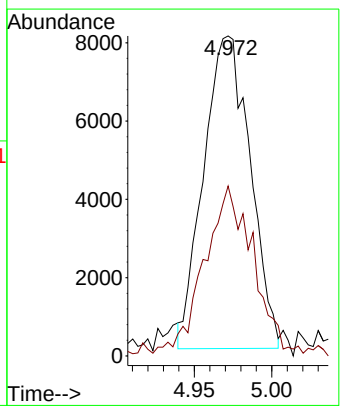


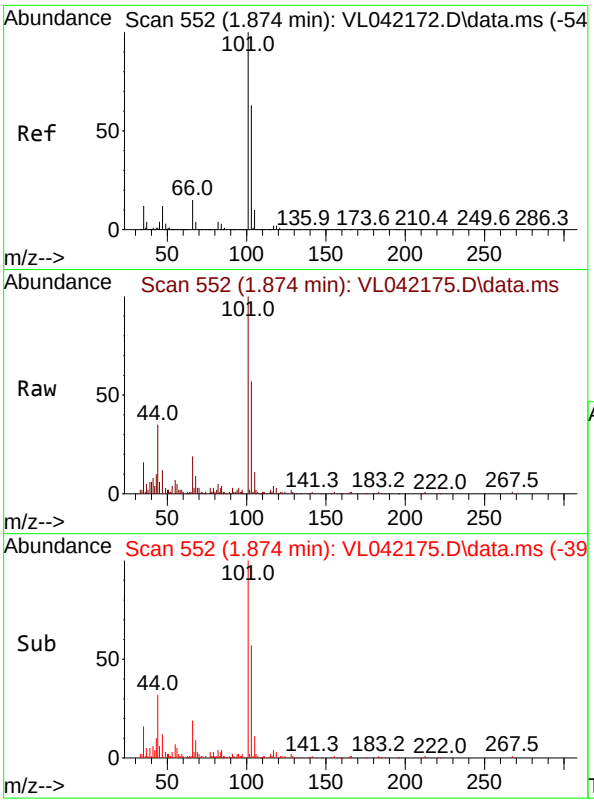


#10
Heptane
Concen: 0.502 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 16673

Ion	Ratio	Lower	Upper
43	100		
57	57.0	39.4	59.2



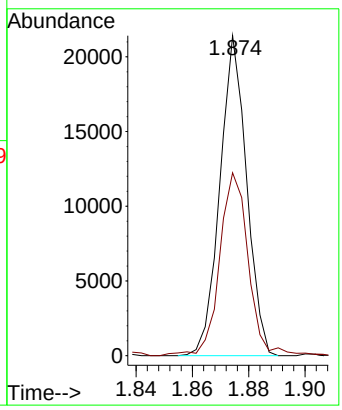


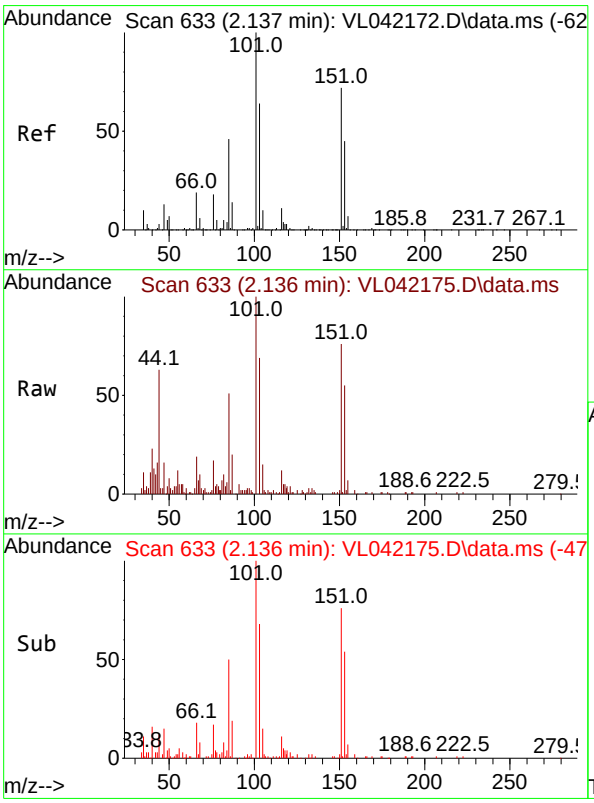
#11
Trichlorofluoromethane
Concen: 0.544 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:101 Resp: 14099

Ion	Ratio	Lower	Upper
101	100		
103	56.3	50.2	75.2

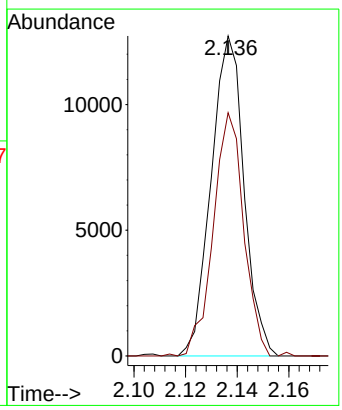


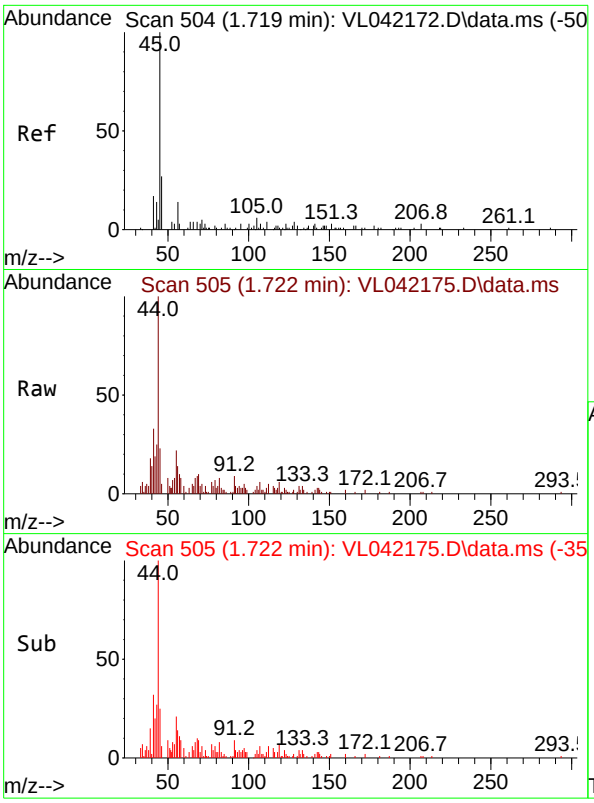


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.528 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:101 Resp: 11252

Ion	Ratio	Lower	Upper
101	100		
151	70.6	57.1	85.7



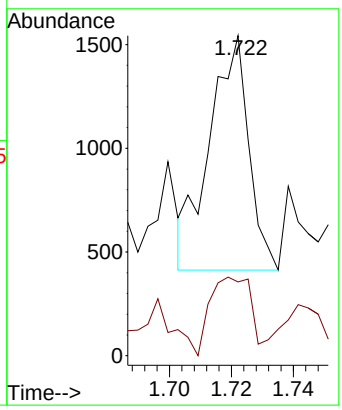


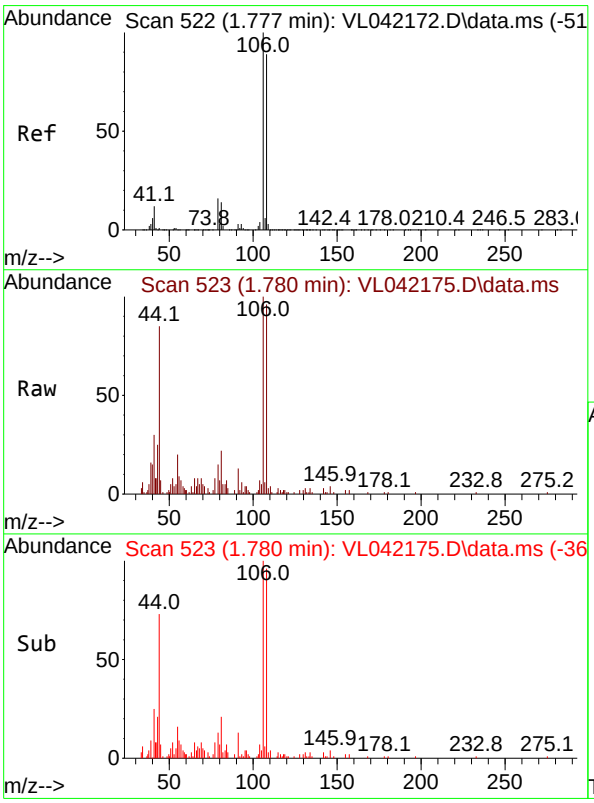
#13
Ethanol
Concen: 1.038 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 997

Ion	Ratio	Lower	Upper
45	100		
46	94.5	20.2	80.8#

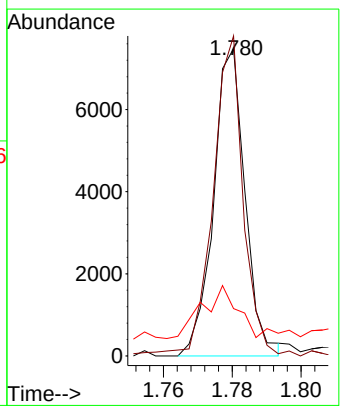


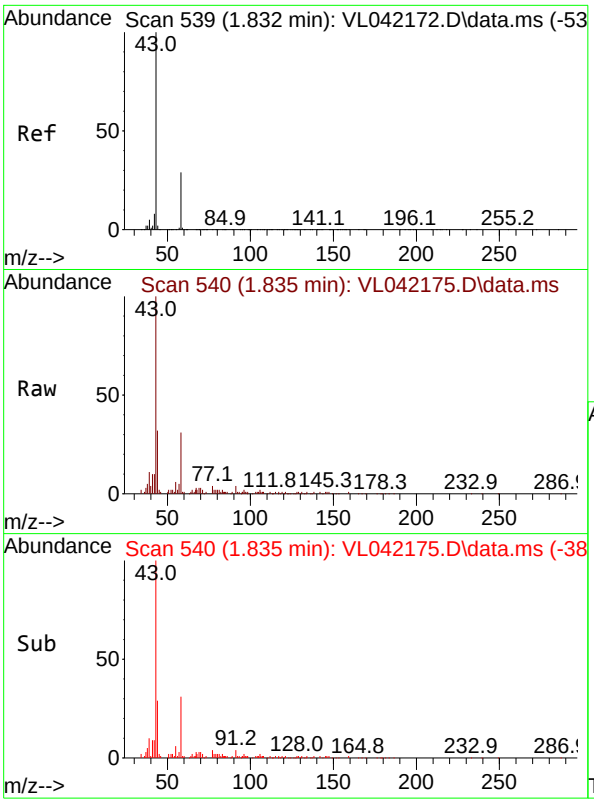


#14
Bromoethene
Concen: 0.584 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:108 Resp: 4770

Ion	Ratio	Lower	Upper
108	100		
106	101.3	86.8	130.2
79	42.6	15.0	22.6#



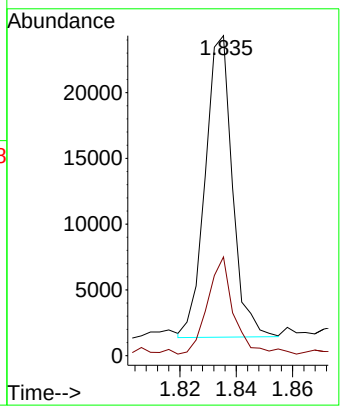


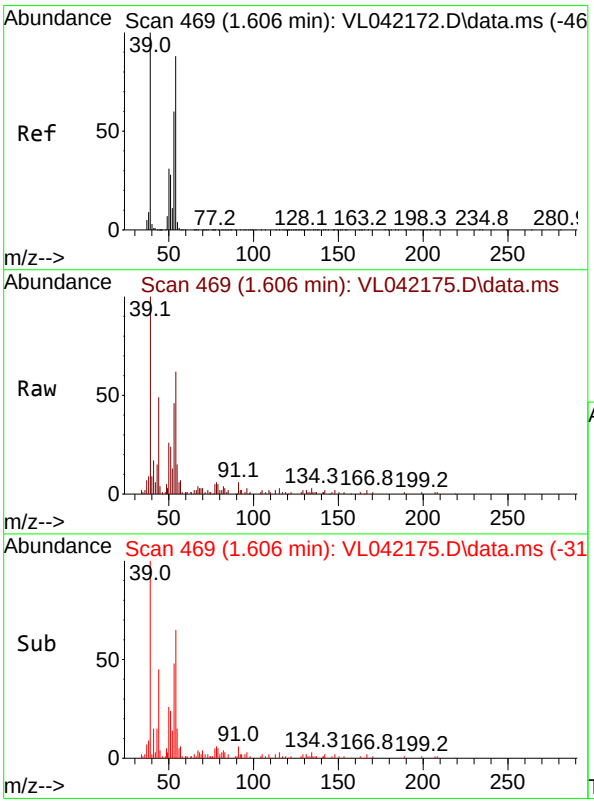
#15
Acetone
Concen: 0.607 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 15331

Ion	Ratio	Lower	Upper
43	100		
58	37.1	23.2	34.8#

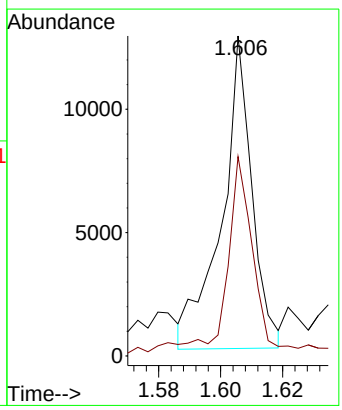


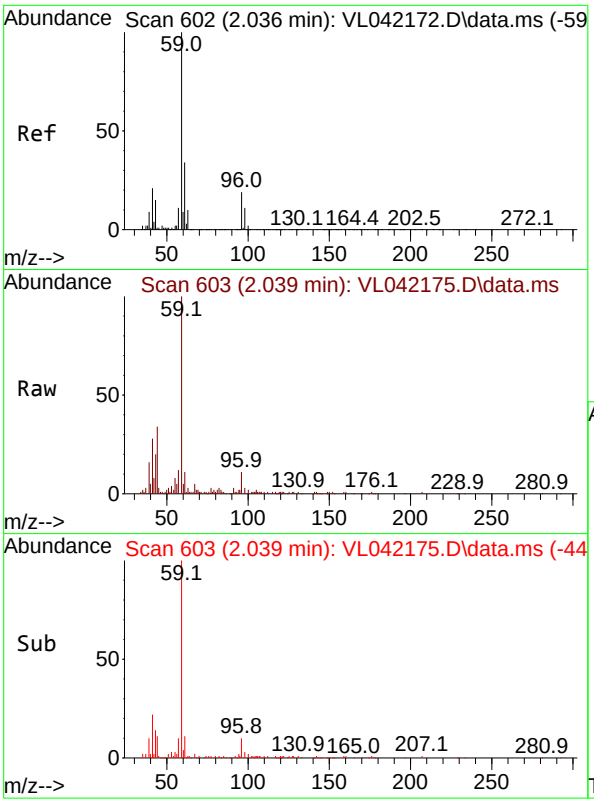


#16
1,3-Butadiene
Concen: 0.757 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 39 Resp: 8594

Ion	Ratio	Lower	Upper
39	100		
54	60.7	60.7	91.1



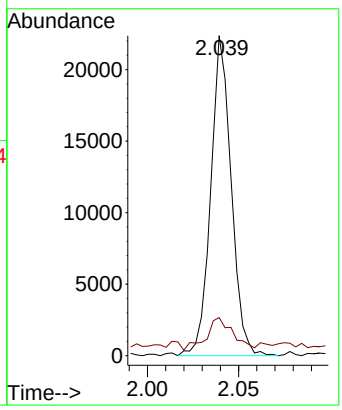


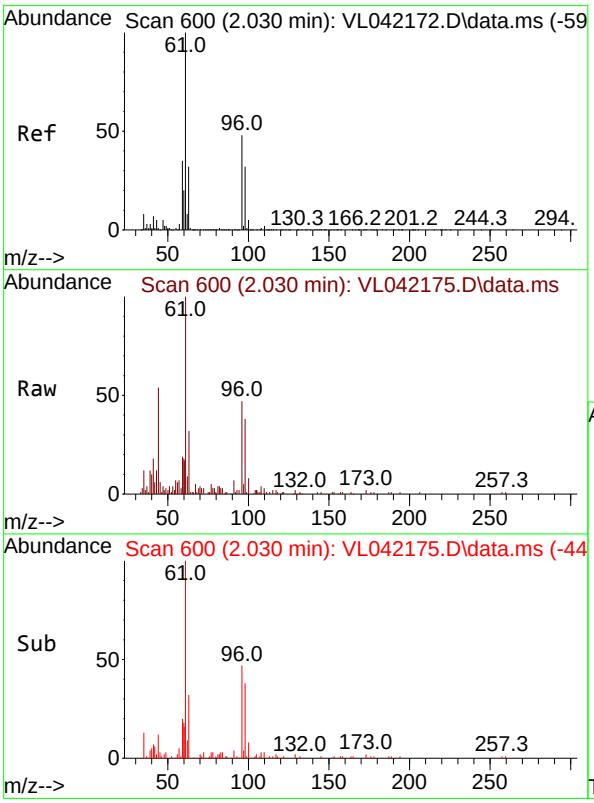
#17
tert-Butyl alcohol
Concen: 0.556 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 59 Resp: 17467

Ion	Ratio	Lower	Upper
59	100		
57	12.1	8.9	13.3

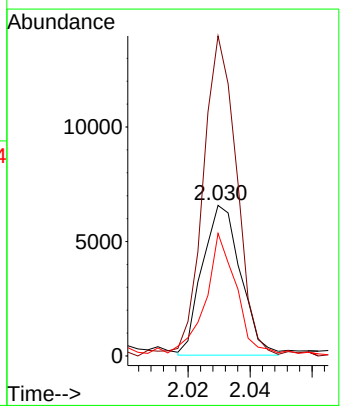


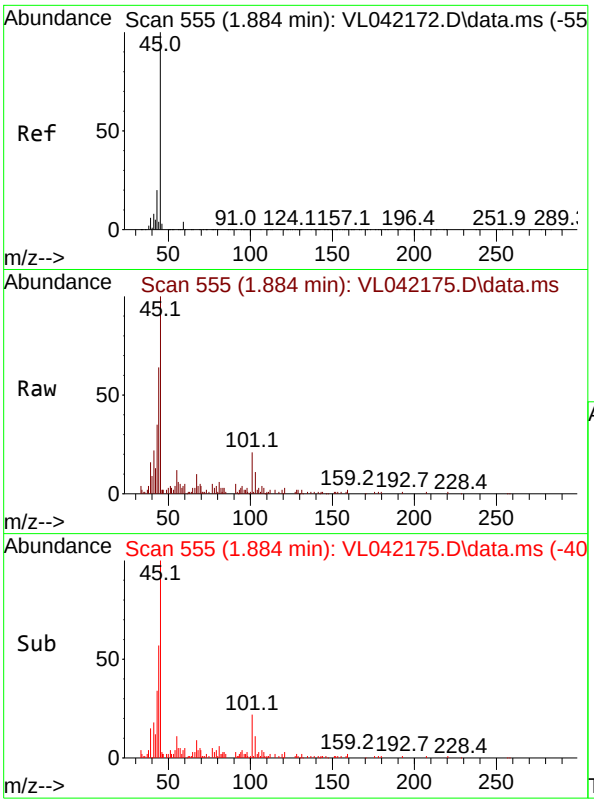


#18
1,1-Dichloroethene
Concen: 0.565 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 5634

Ion	Ratio	Lower	Upper
96	100		
61	216.6	167.6	251.4
98	81.2	53.5	80.3#



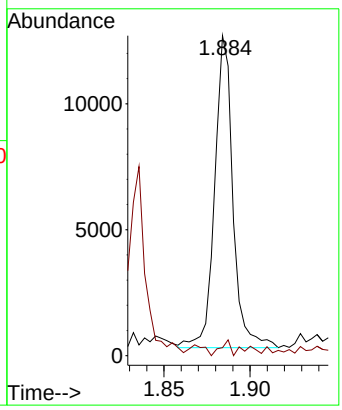


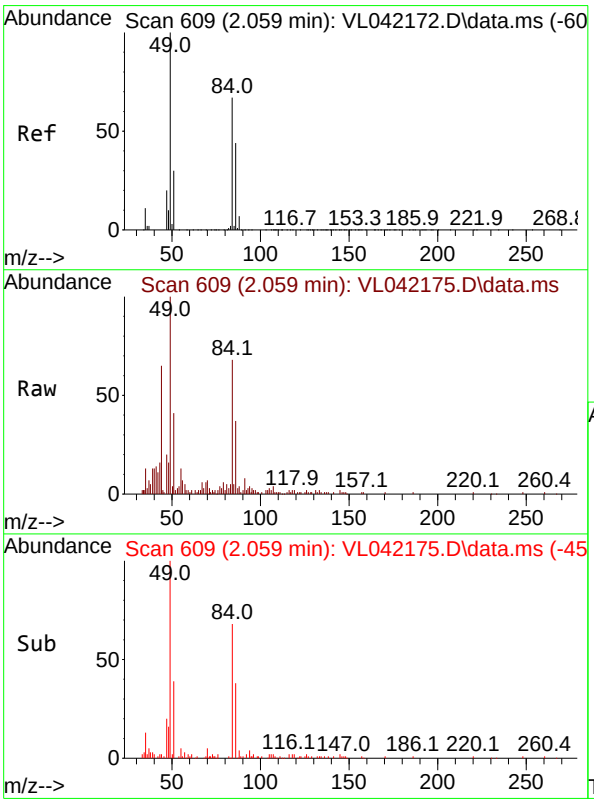
#19
Isopropyl Alcohol
Concen: 0.644 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 9171

Ion	Ratio	Lower	Upper
45	100		
58	5.5	36.9	55.3#

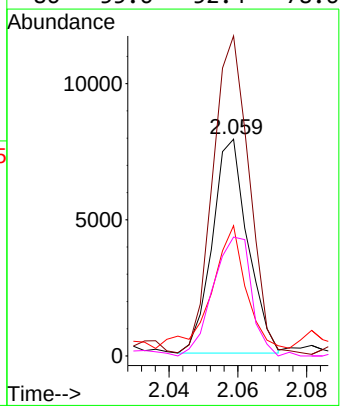


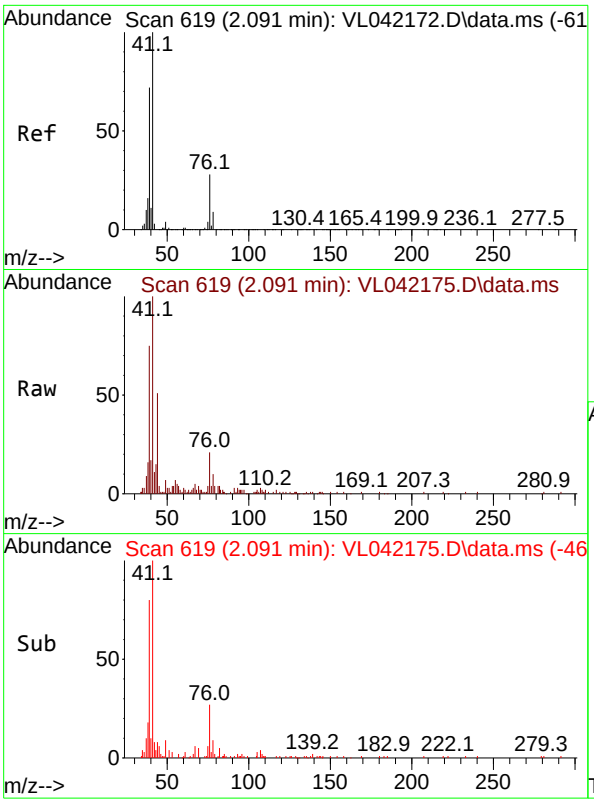


#20
Methylene Chloride
Concen: 0.599 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 5634

Ion	Ratio	Lower	Upper
84	100		
49	148.1	120.2	180.4
51	56.1	37.4	56.0#
86	55.6	52.4	78.6



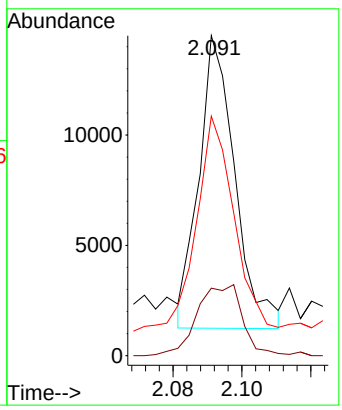


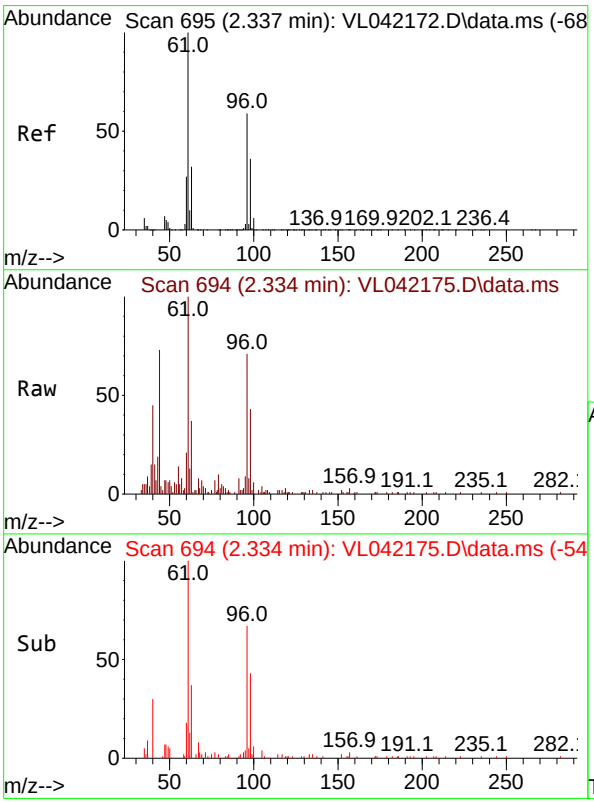
#21
Allyl Chloride
Concen: 0.541 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 9632

Ion	Ratio	Lower	Upper
41	100		
76	30.9	24.1	36.1
39	88.9	61.1	91.7

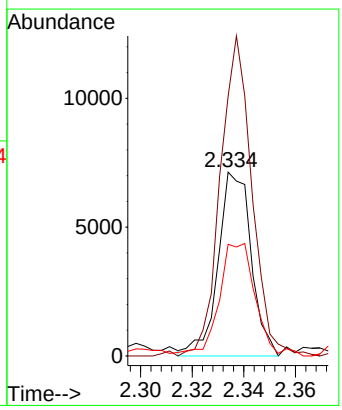


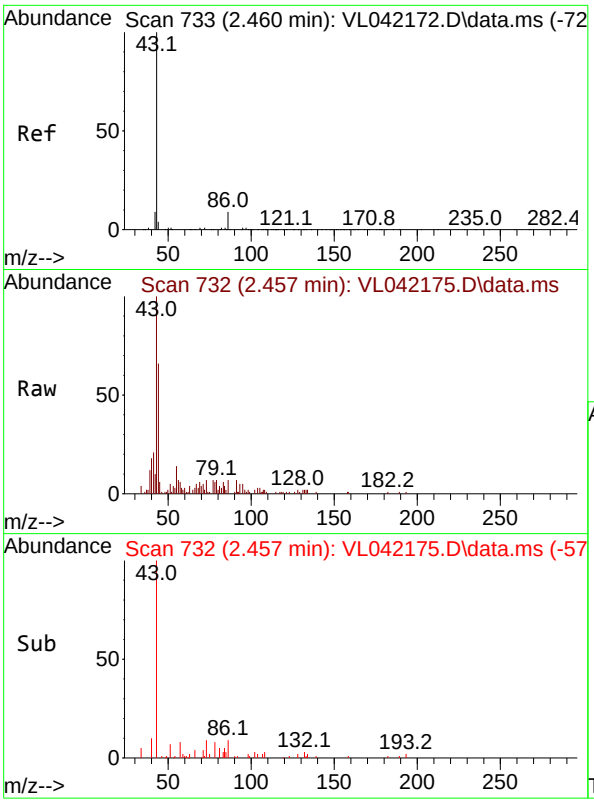


#22
trans-1,2-Dichloroethene
Concen: 0.546 ppbv
RT: 2.334 min Scan# 694
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 6353

Ion	Ratio	Lower	Upper
96	100		
61	141.3	136.6	204.8
98	59.4	49.4	74.2



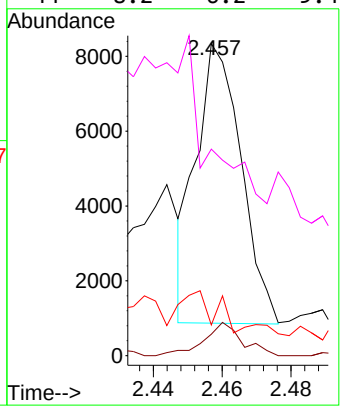


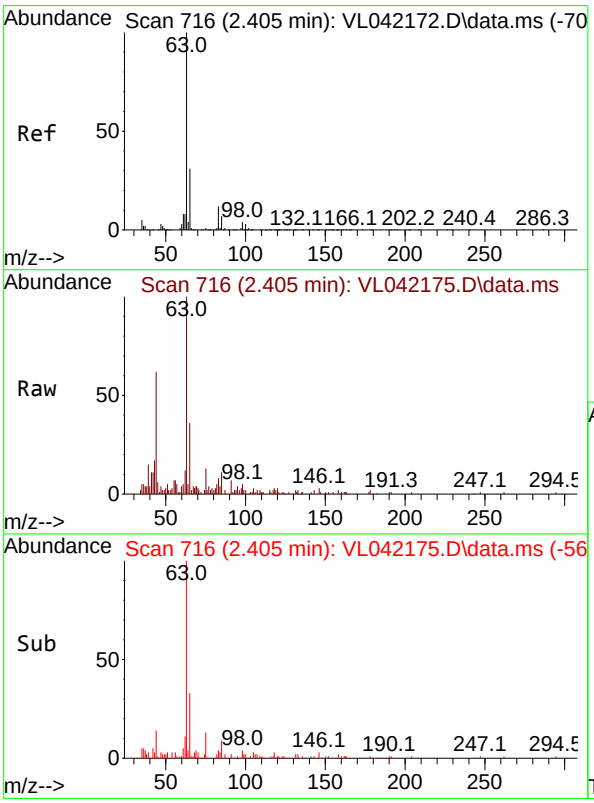
#23
Vinyl Acetate
Concen: 0.649 ppbv
RT: 2.457 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 6809

Ion	Ratio	Lower	Upper
43	100		
86	7.7	5.5	8.3
42	3.2	8.6	13.0#
44	8.2	6.2	9.4

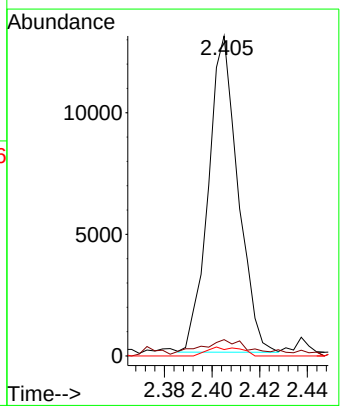


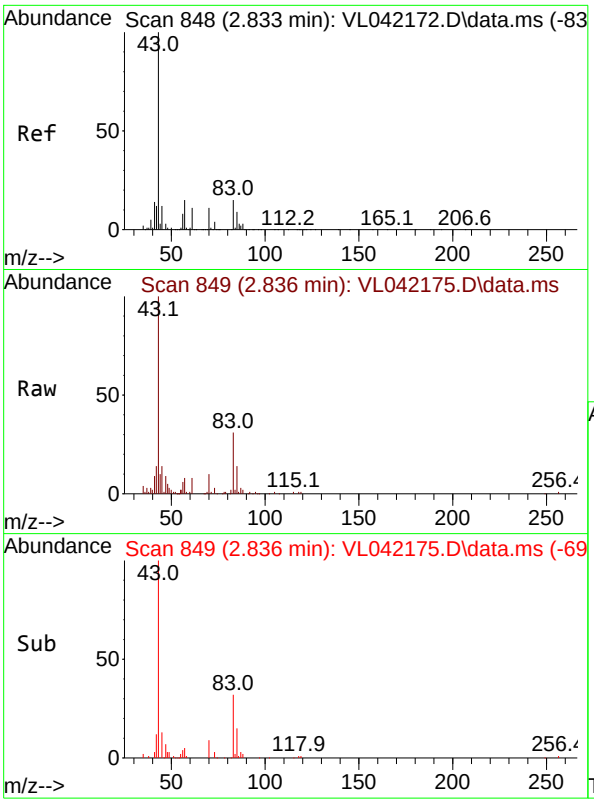


#24
1,1-Dichloroethane
Concen: 0.527 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 63 Resp: 11258

Ion	Ratio	Lower	Upper
63	100		
98	3.7	2.3	6.8
100	2.0	1.6	4.7



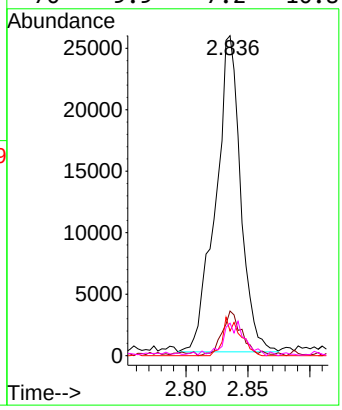


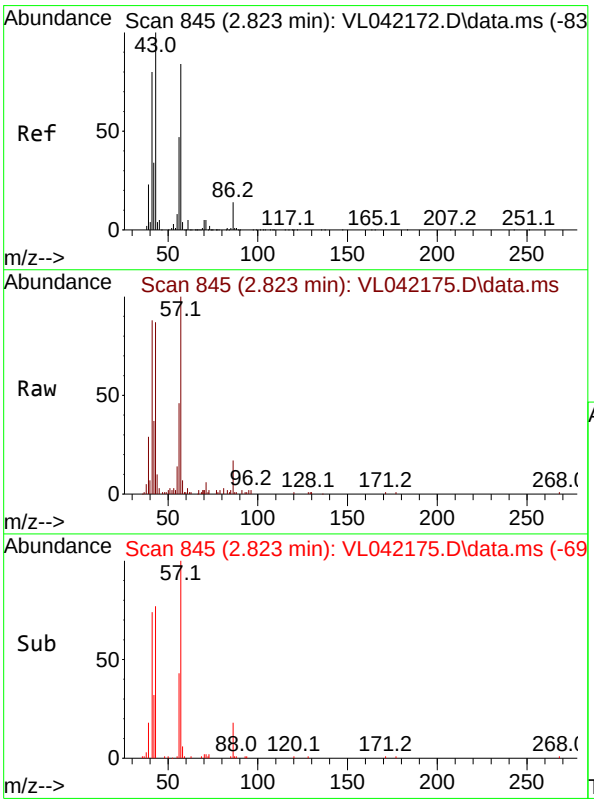
#25
Ethyl Acetate
Concen: 0.553 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 36258

Ion	Ratio	Lower	Upper
43	100		
45	11.2	8.2	12.2
61	8.3	7.3	10.9
70	9.9	7.2	10.8

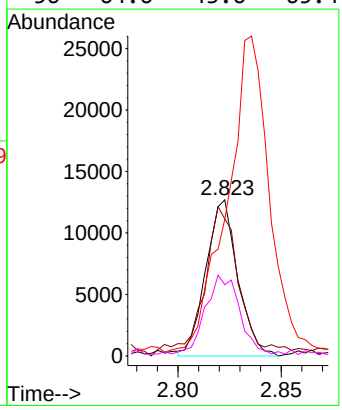


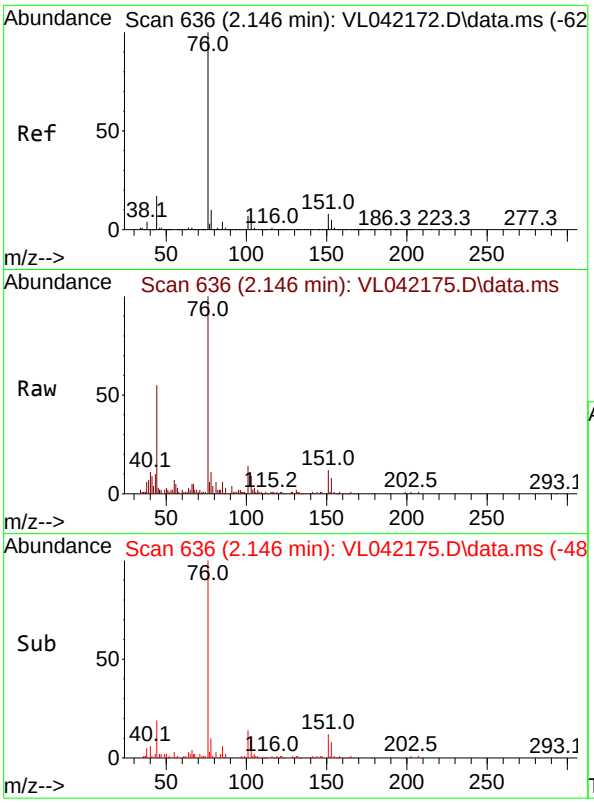


#26
Hexane
Concen: 0.538 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 13605

Ion	Ratio	Lower	Upper
57	100		
41	92.1	76.6	114.8
43	273.4	207.8	311.8
56	64.6	43.6	65.4



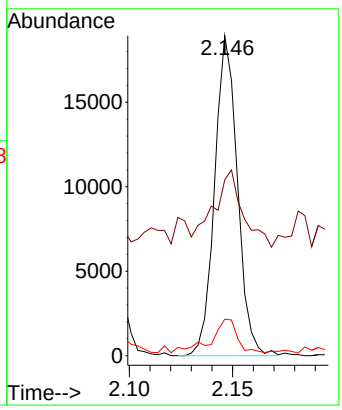


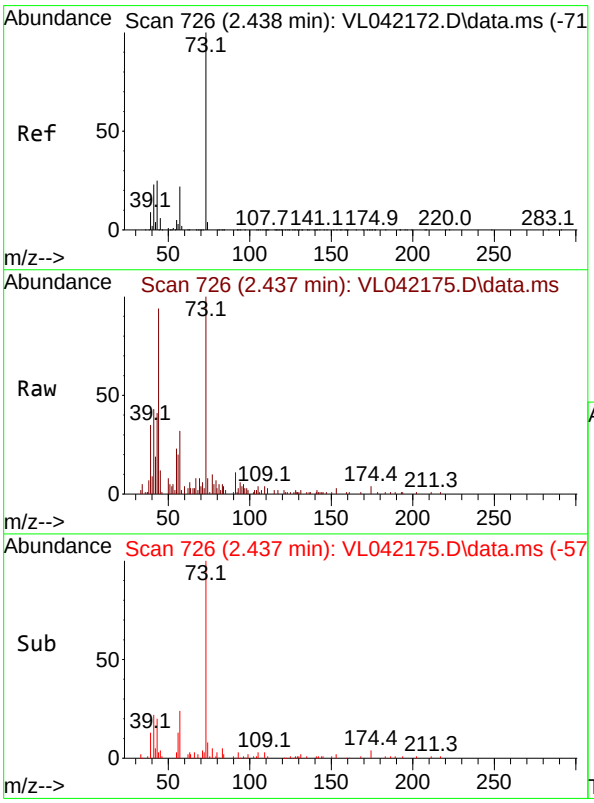
#27
Carbon Disulfide
Concen: 0.535 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 76 Resp: 14510

Ion	Ratio	Lower	Upper
76	100		
44	115.5	14.7	22.1#
78	14.9	9.3	13.9#

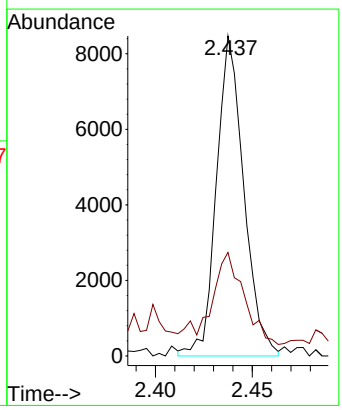


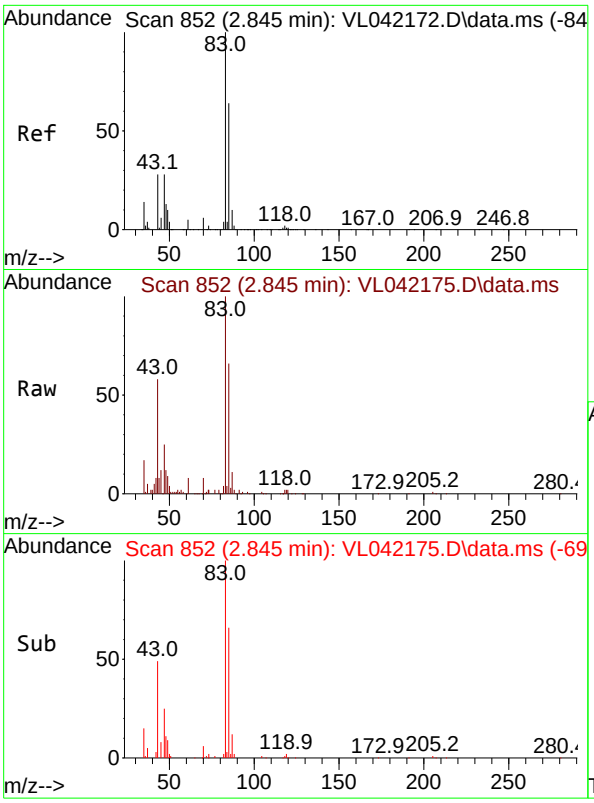


#28
Methyl tert-Butyl Ether
Concen: 0.527 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 73 Resp: 8310

Ion	Ratio	Lower	Upper
73	100		
57	31.1	20.5	30.7#



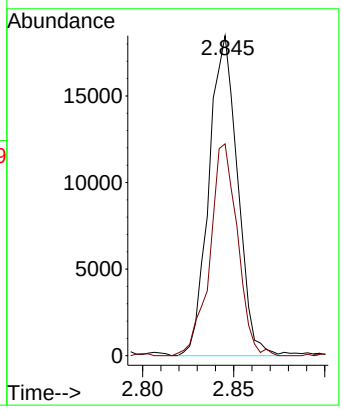


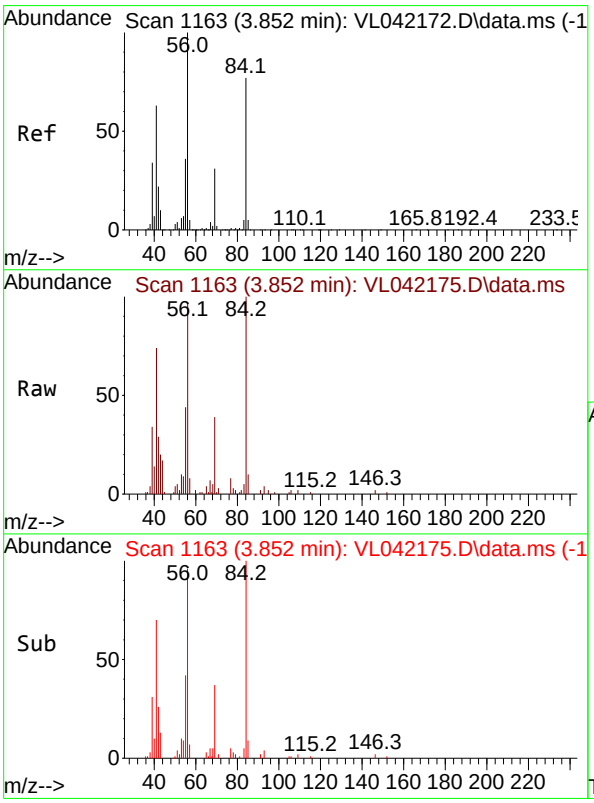
#29
Chloroform
Concen: 0.544 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 20149

Ion	Ratio	Lower	Upper
83	100		
85	66.2	51.4	77.2

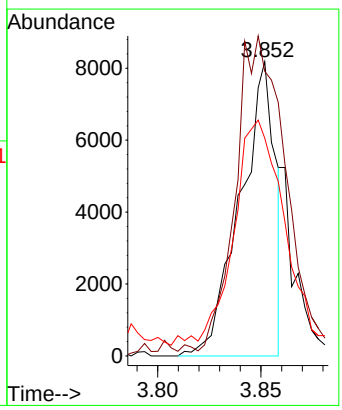


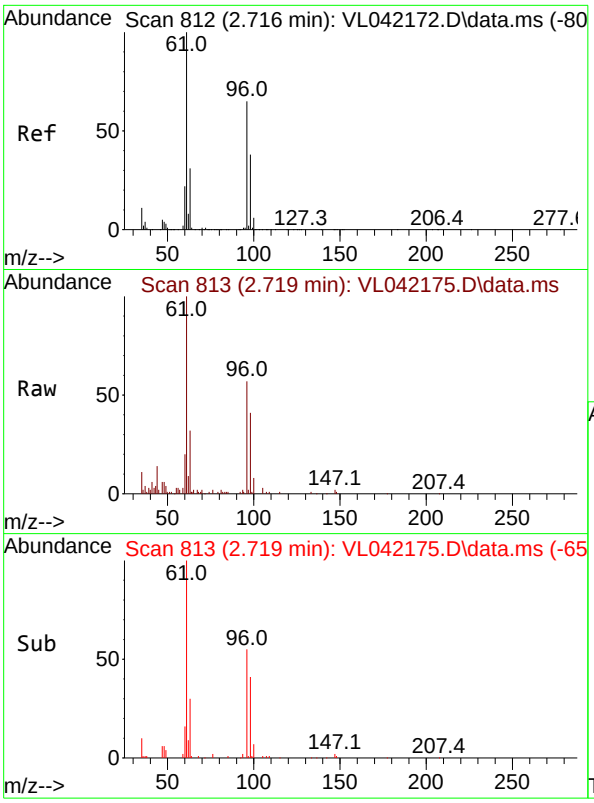


#30
Cyclohexane
Concen: 0.438 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 9635

Ion	Ratio	Lower	Upper
84	100		
56	158.1	102.8	154.2#
41	117.1	66.5	99.7#



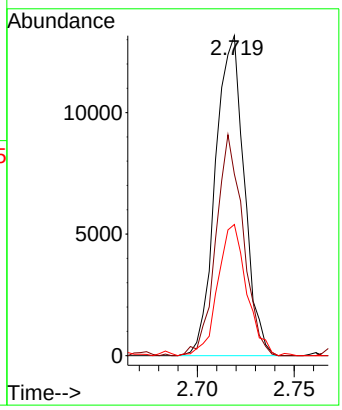


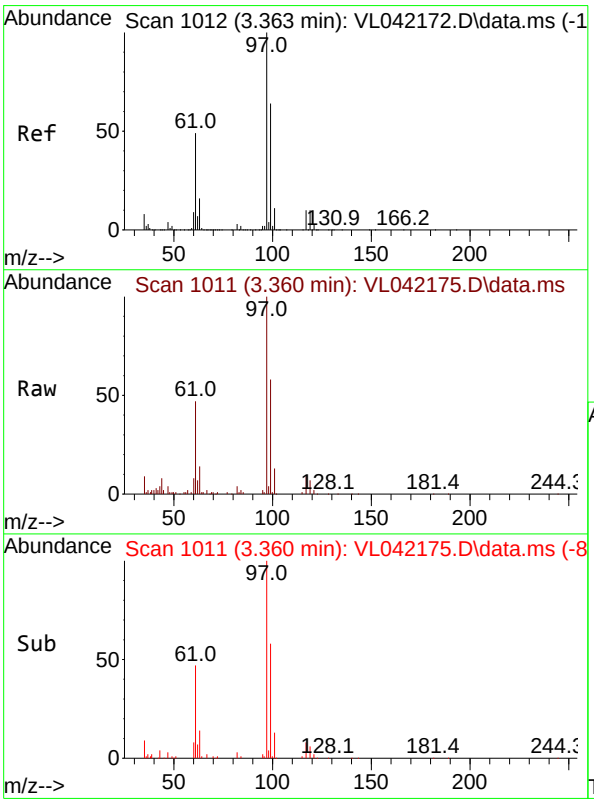
#31
cis-1,2-Dichloroethene
Concen: 0.529 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 61 Resp: 13601

Ion	Ratio	Lower	Upper
61	100		
96	56.8	51.8	77.8
98	41.0	30.6	46.0

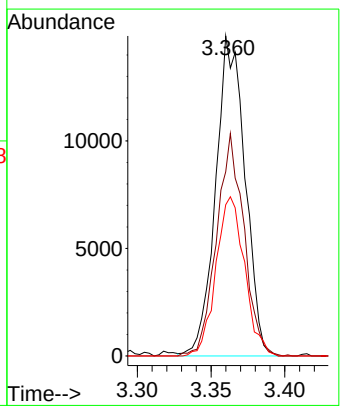


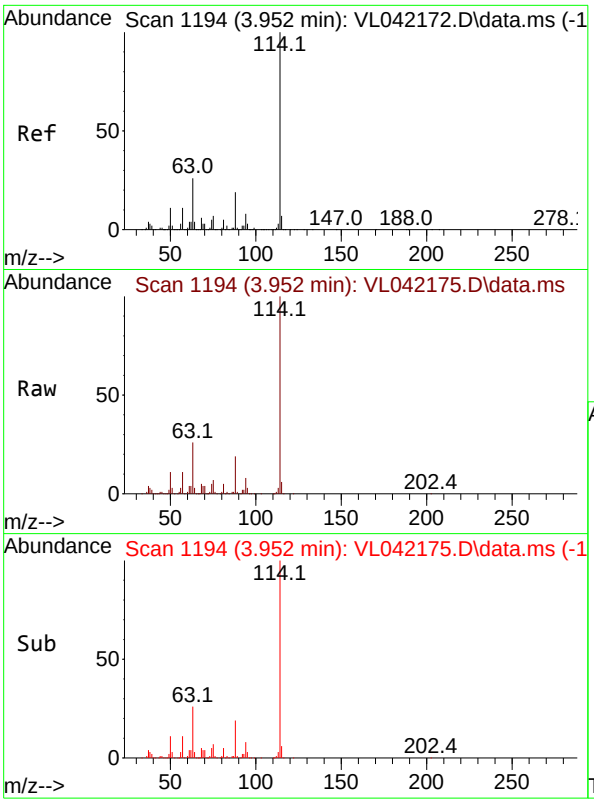


#32
1,1,1-Trichloroethane
Concen: 0.485 ppbv
RT: 3.360 min Scan# 1011
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 97 Resp: 20567

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.5	77.3
61	48.6	38.7	58.1



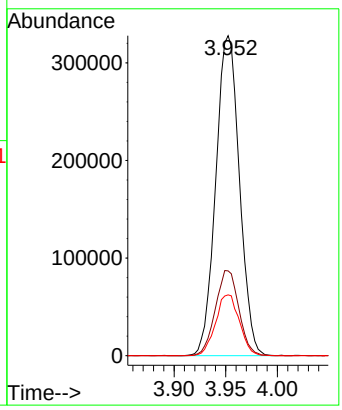


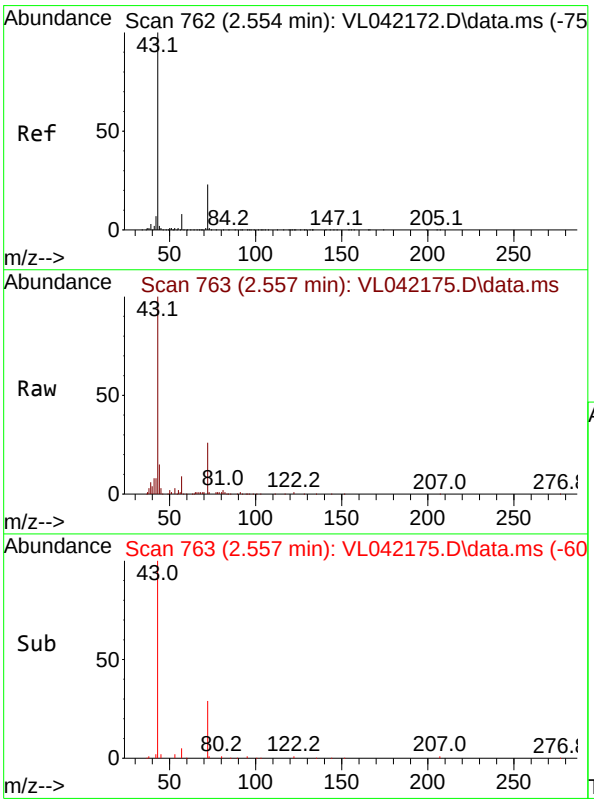
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:114 Resp: 523832

Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.7	31.1
88	19.1	15.0	22.4

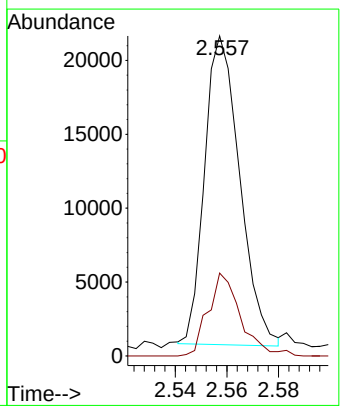


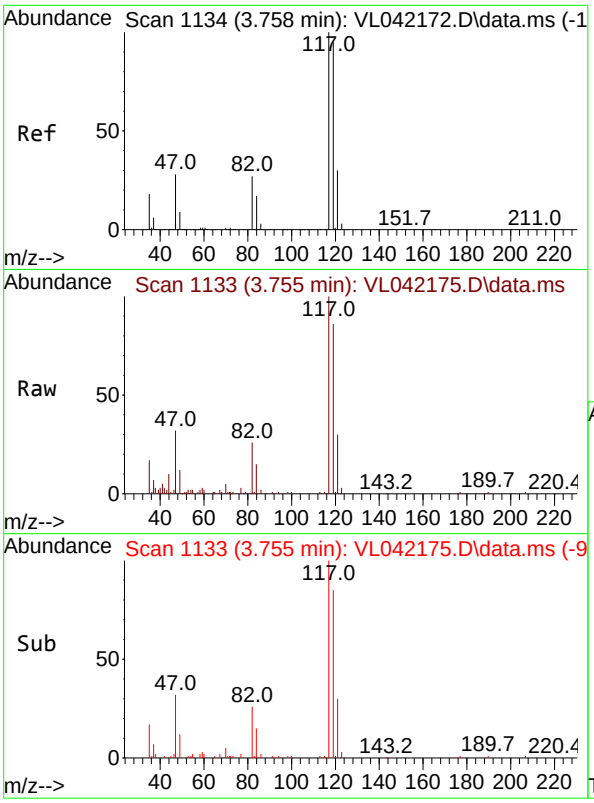


#34
2-Butanone
Concen: 0.520 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 19739

Ion	Ratio	Lower	Upper
43	100		
72	24.8	18.2	27.2



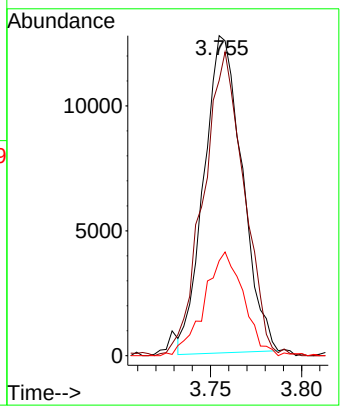


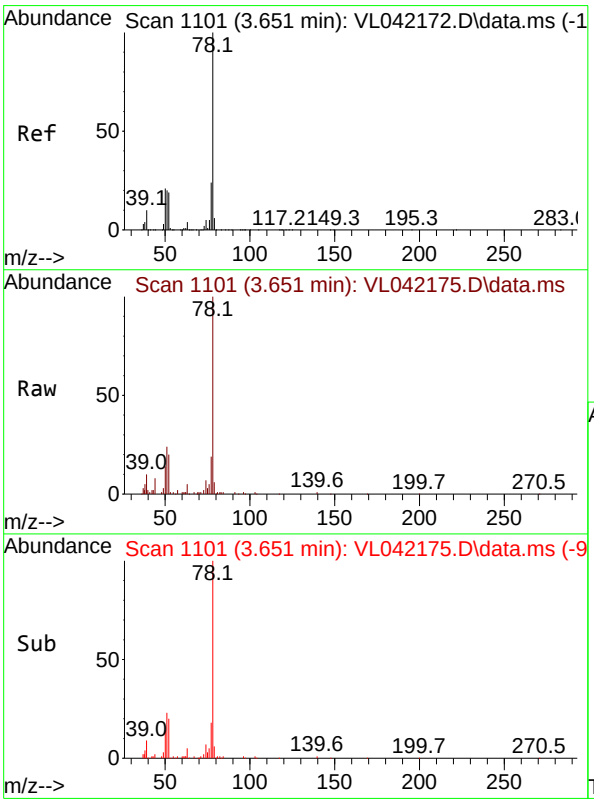
#35
Carbon Tetrachloride
Concen: 0.460 ppbv
RT: 3.755 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 18558

Ion	Ratio	Lower	Upper
117	100		
119	86.4	76.2	114.2
121	30.1	24.2	36.4

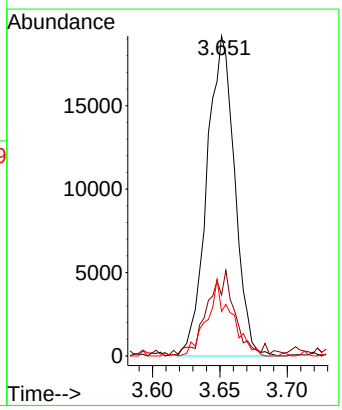


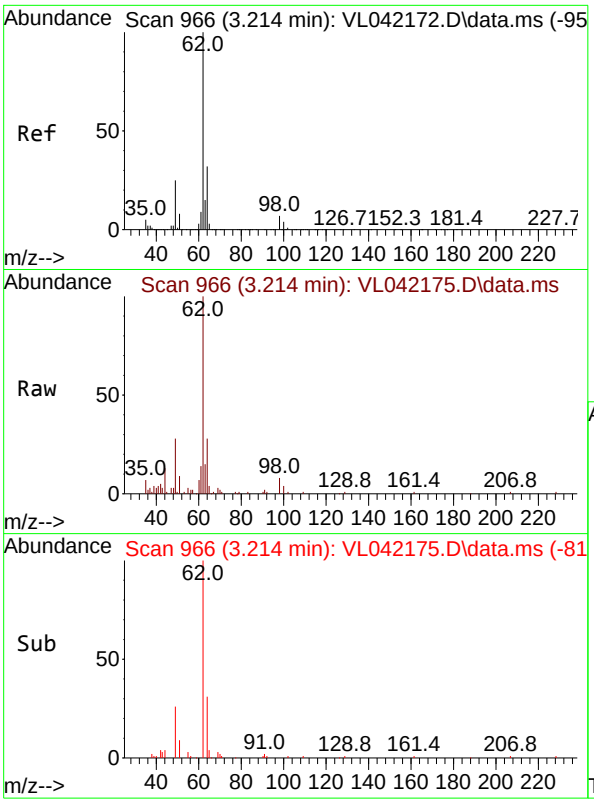


#36
Benzene
Concen: 0.529 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 78 Resp: 27488

Ion	Ratio	Lower	Upper
78	100		
77	18.5	19.1	28.7#
50	13.9	16.6	24.8#



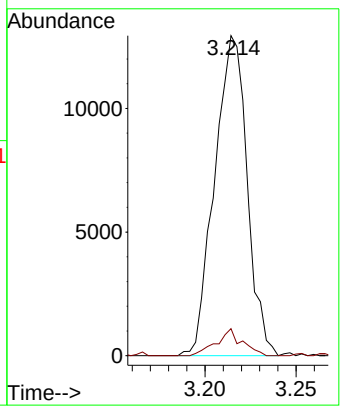


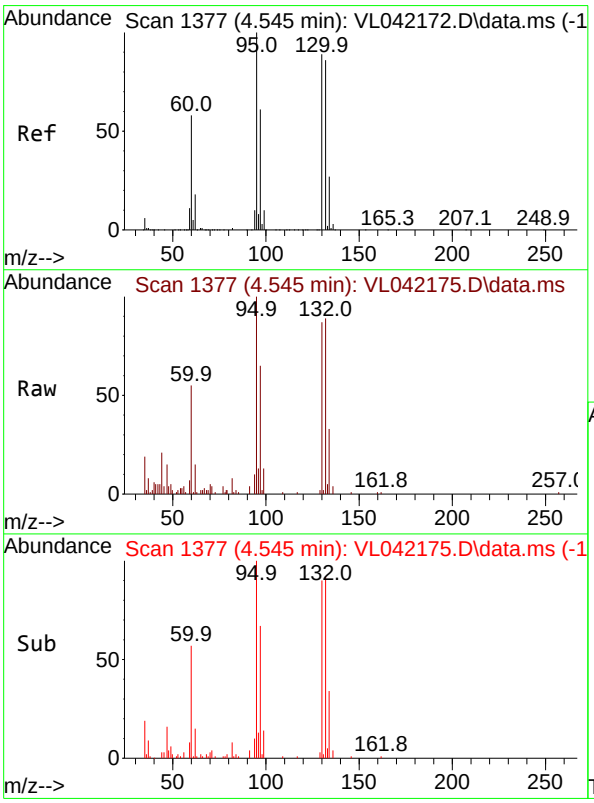
#37
1,2-Dichloroethane
Concen: 0.540 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 16062

Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.4	8.2

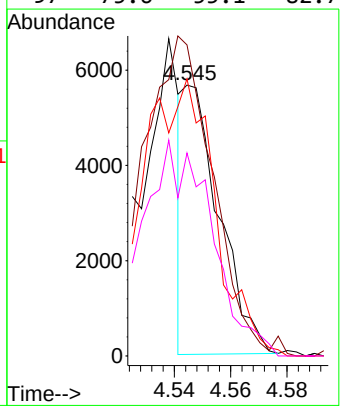


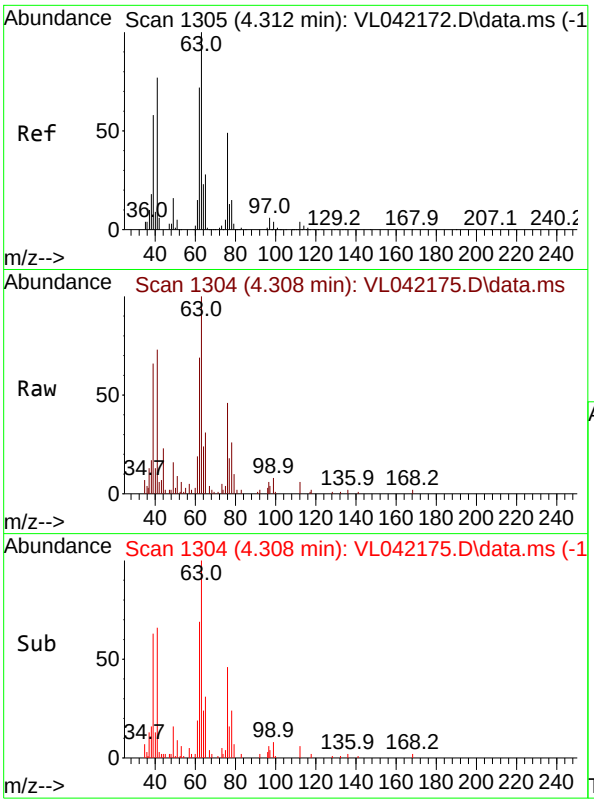


#38
Trichloroethene
Concen: 0.230 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:130 Resp: 4992

Ion	Ratio	Lower	Upper
130	100		
95	108.5	89.8	134.8
132	100.9	77.4	116.2
97	75.6	55.1	82.7



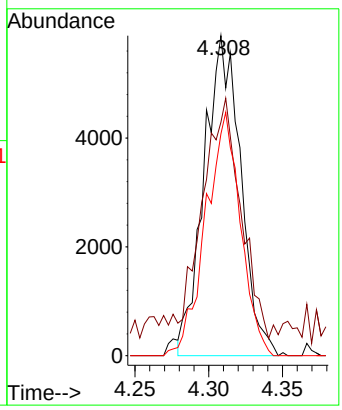


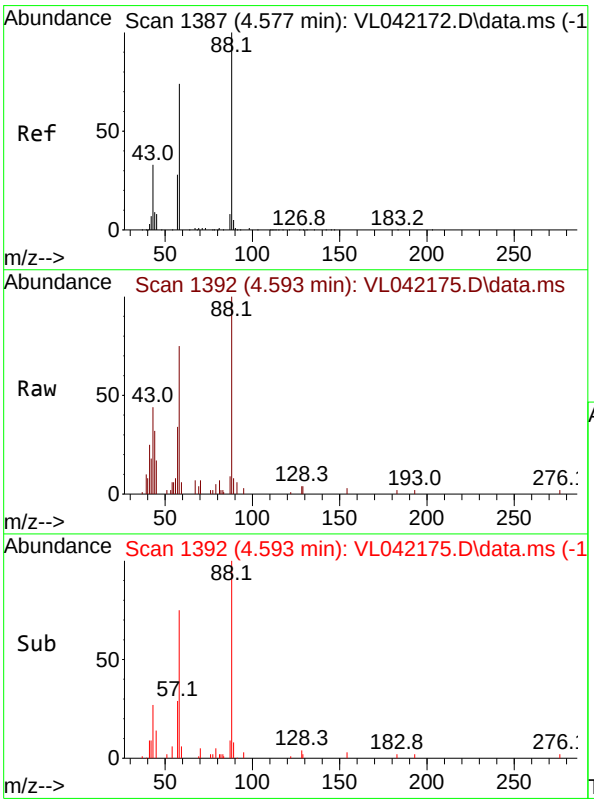
#39
1,2-Dichloropropane
Concen: 0.535 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 63 Resp: 10123

Ion	Ratio	Lower	Upper
63	100		
41	66.4	61.7	92.5
62	69.3	57.6	86.4

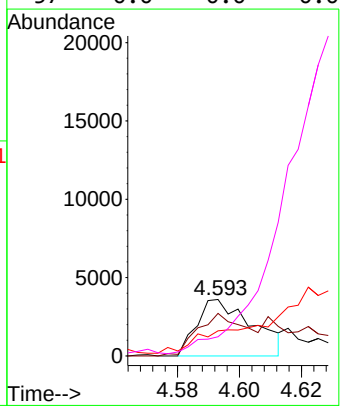


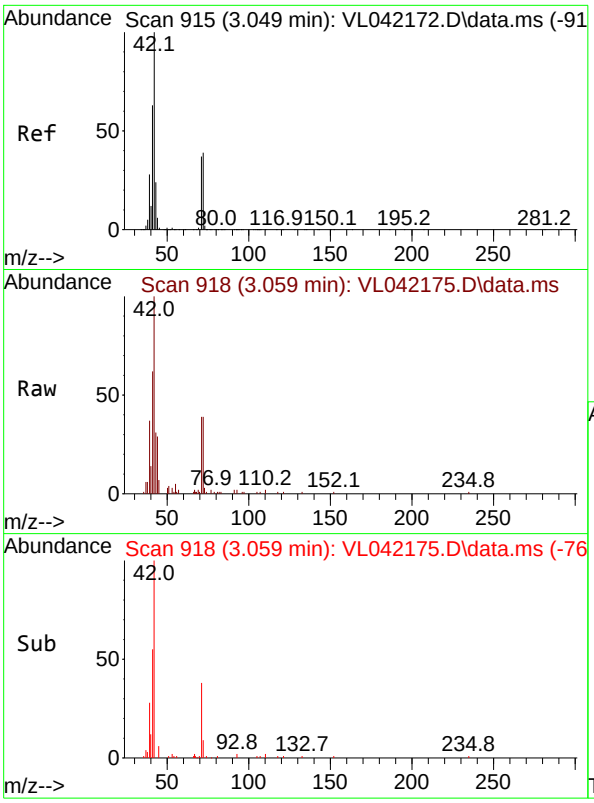


#40
1,4-Dioxane
Concen: 0.457 ppbv
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 88 Resp: 4487

Ion	Ratio	Lower	Upper
88	100		
58	151.6	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0



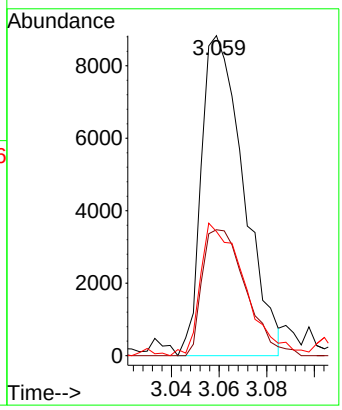


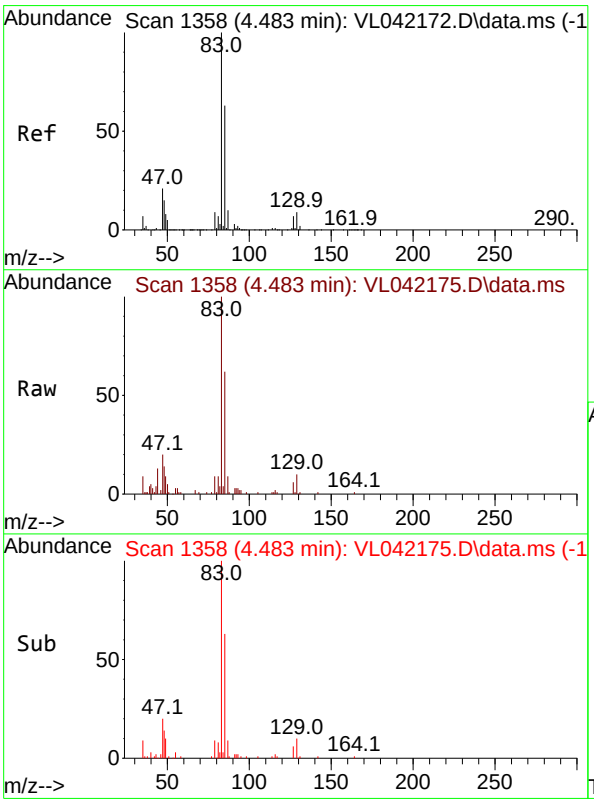
#41
Tetrahydrofuran
Concen: 0.502 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 42 Resp: 10856

Ion	Ratio	Lower	Upper
42	100		
72	40.7	31.4	47.0
71	43.1	30.2	45.4

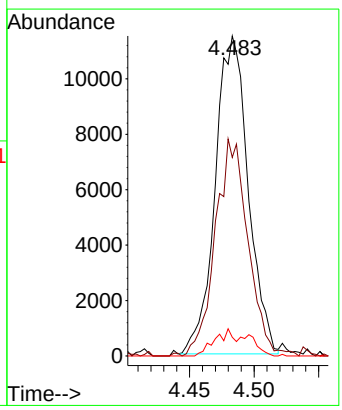


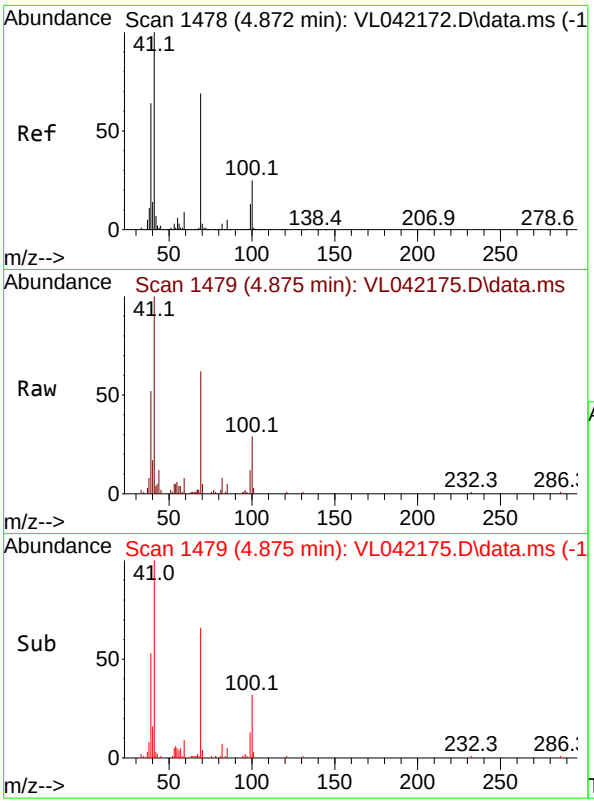


#42
Bromodichloromethane
Concen: 0.497 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 20374

Ion	Ratio	Lower	Upper
83	100		
85	61.6	50.5	75.7
127	5.9	5.9	8.9#



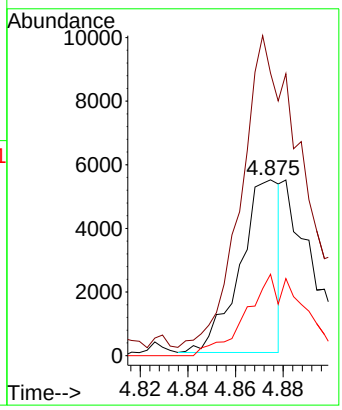


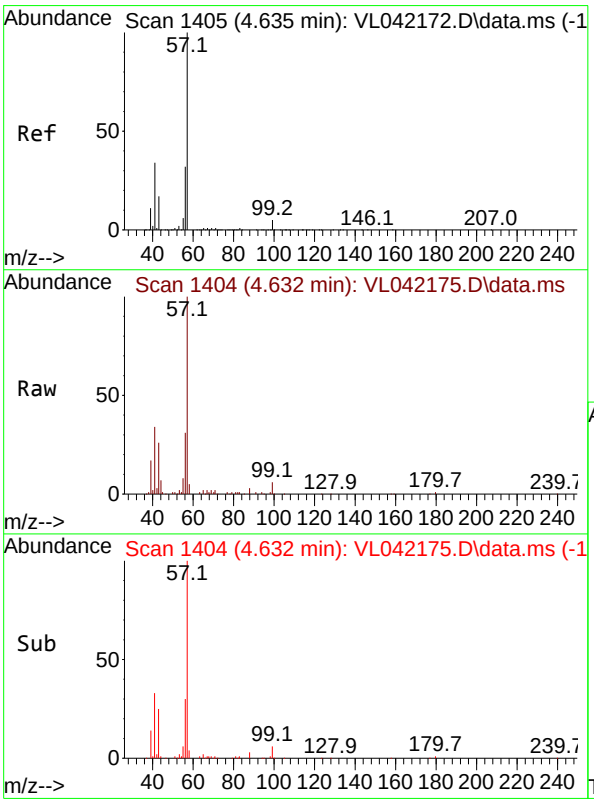
#43
Methyl Methacrylate
Concen: 0.284 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 69 Resp: 6229

Ion	Ratio	Lower	Upper
69	100		
41	279.4	123.8	185.6#
100	70.5	28.4	42.6#

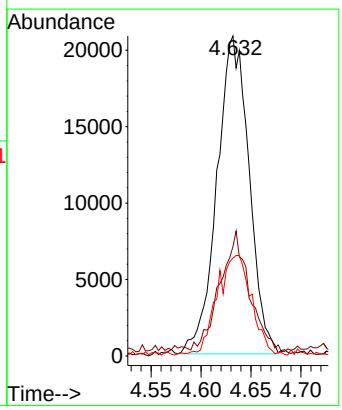


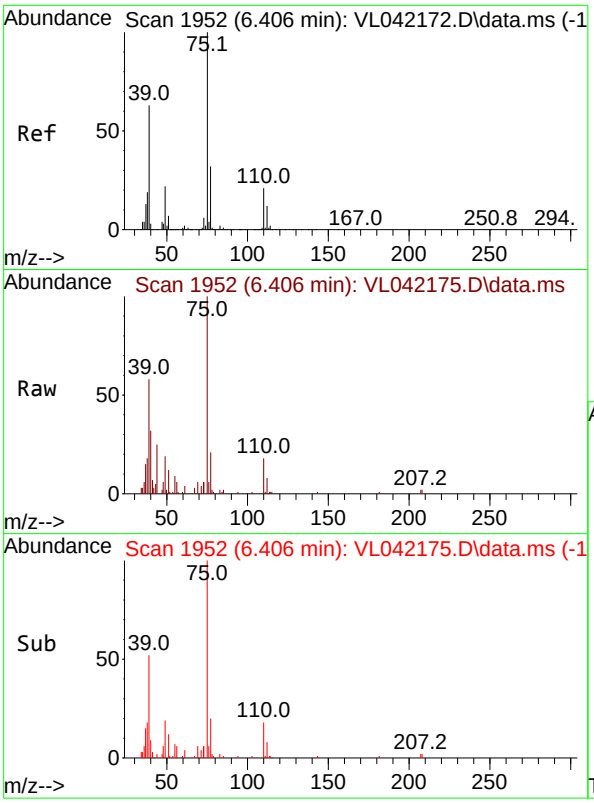


#44
2,2,4-Trimethylpentane
Concen: 0.532 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 46646

Ion	Ratio	Lower	Upper
57	100		
41	36.7	26.8	40.2
56	34.3	25.6	38.4



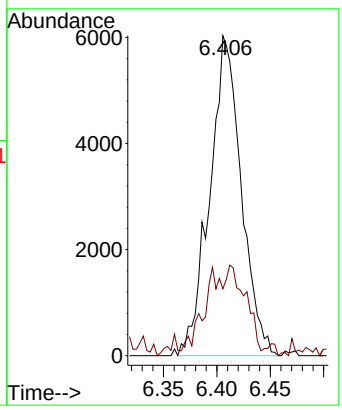


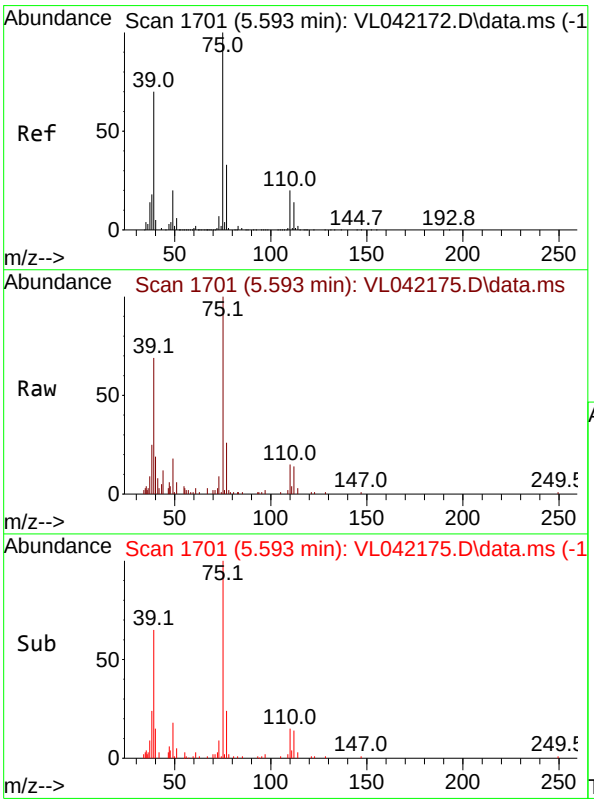
#45
t-1,3-Dichloropropene
Concen: 0.526 ppbv
RT: 6.406 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 75 Resp: 12404

Ion	Ratio	Lower	Upper
75	100		
77	20.9	26.0	39.0#

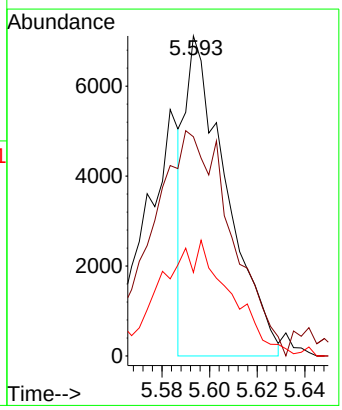


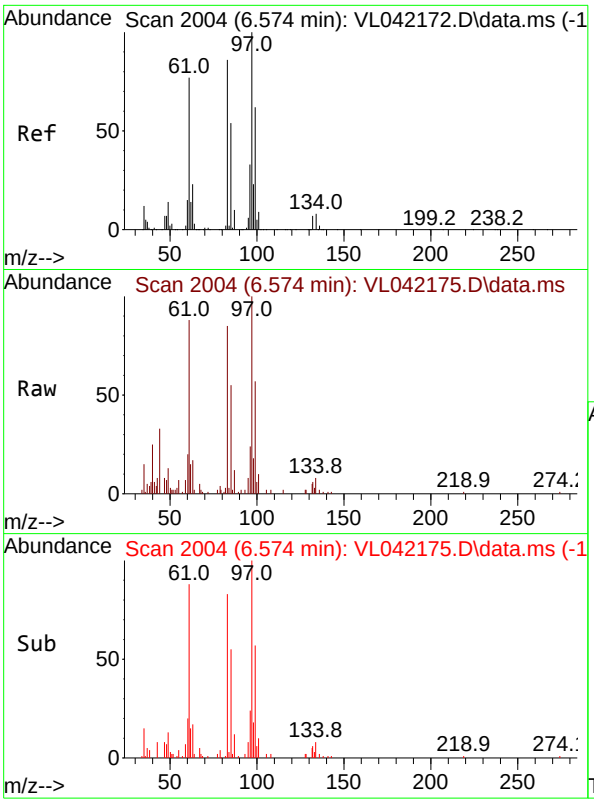


#46
cis-1,3-Dichloropropene
Concen: 0.297 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 75 Resp: 8584

Ion	Ratio	Lower	Upper
75	100		
39	65.0	55.8	83.6
77	23.4	26.0	39.0#



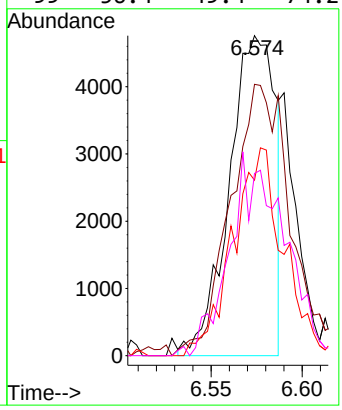


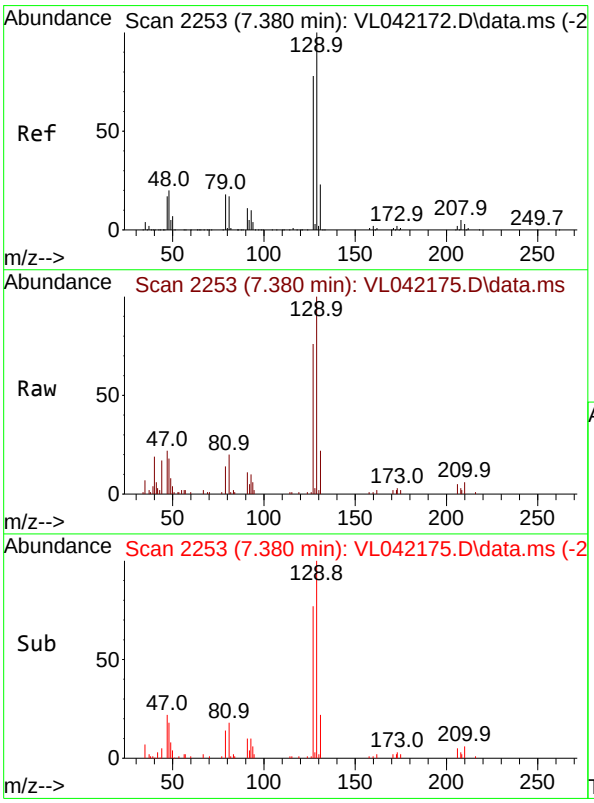
#47
1,1,2-Trichloroethane
Concen: 0.419 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 97 Resp: 8374

Ion	Ratio	Lower	Upper
97	100		
83	84.5	69.2	103.8
85	55.9	43.1	64.7
99	56.4	49.4	74.2

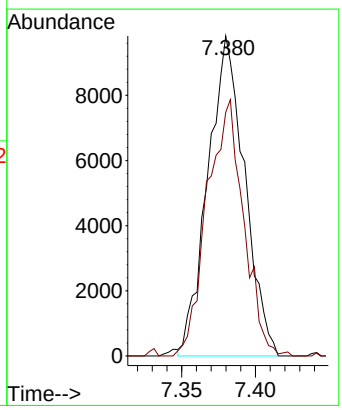


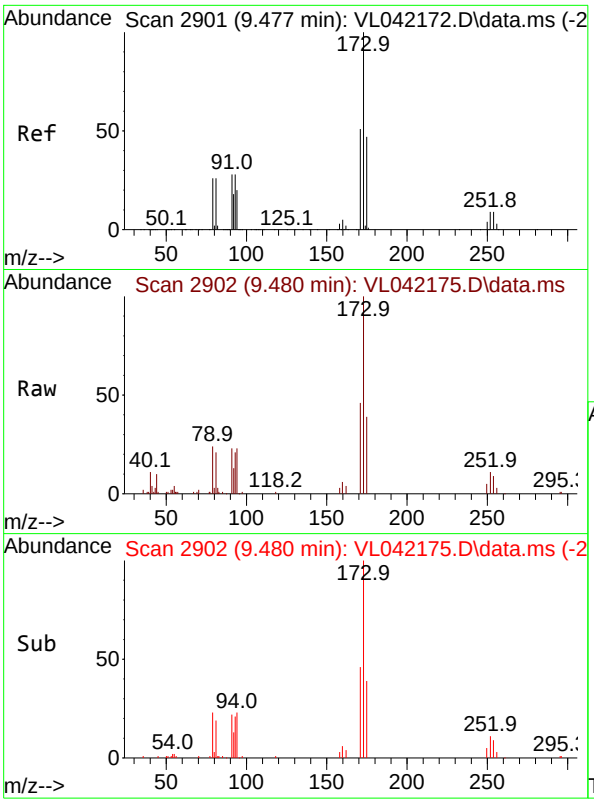


#48
Dibromochloromethane
Concen: 0.503 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:129 Resp: 17042

Ion	Ratio	Lower	Upper
129	100		
127	79.4	39.1	117.2



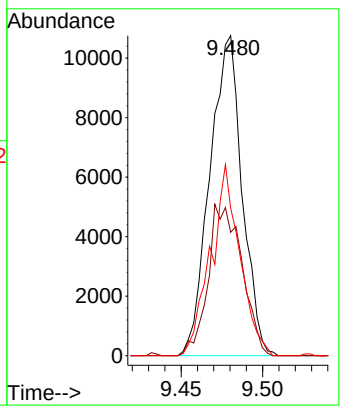


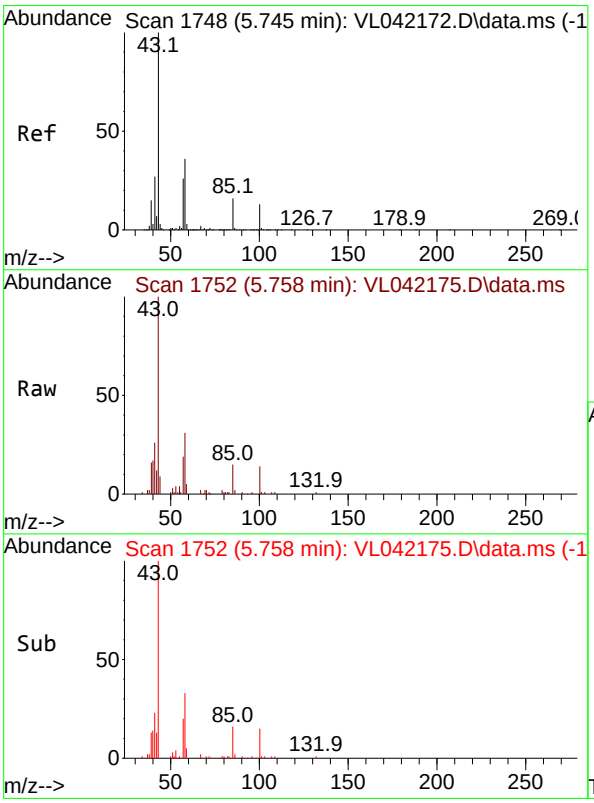
#49
Bromoform
Concen: 0.487 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:173 Resp: 14828

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.8	41.8	62.6

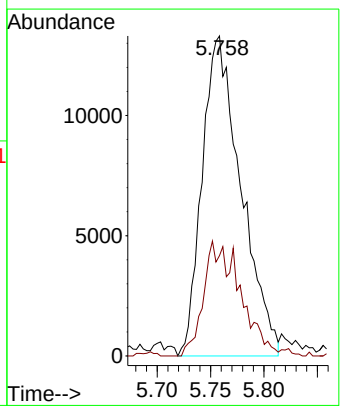


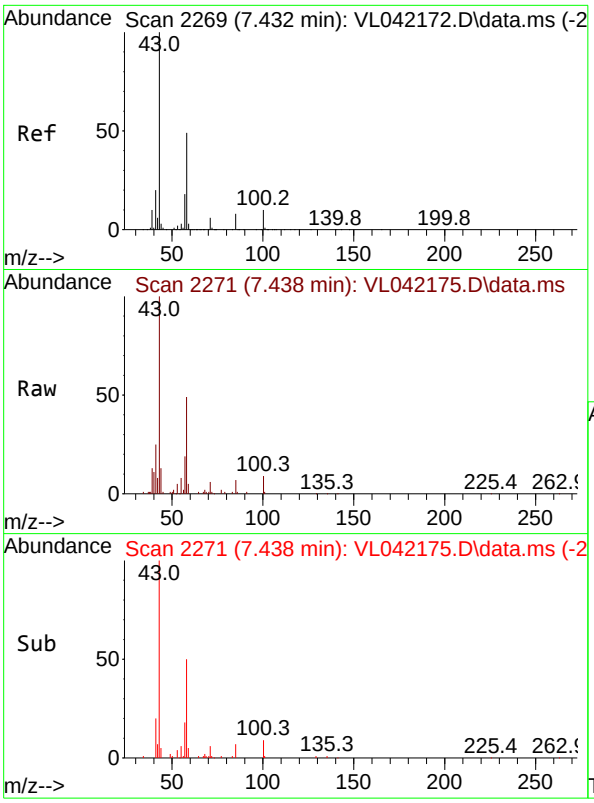


#50
4-Methyl-2-Pentanone
Concen: 0.559 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.013 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 33674

Ion	Ratio	Lower	Upper
43	100		
58	34.4	29.0	43.6



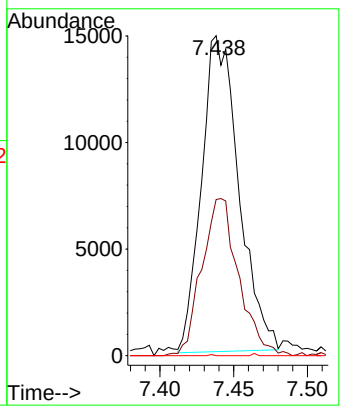


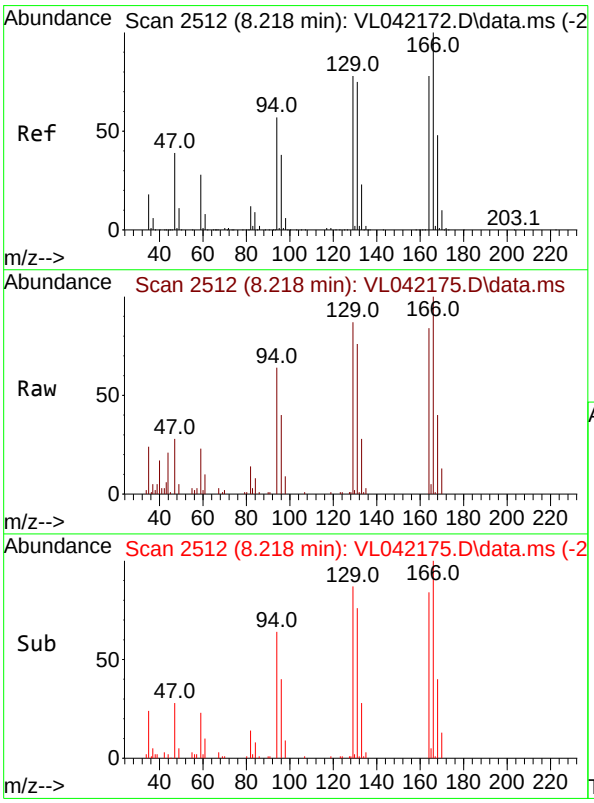
#51
2-Hexanone
Concen: 0.523 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 26154

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.0	0.1	0.1#

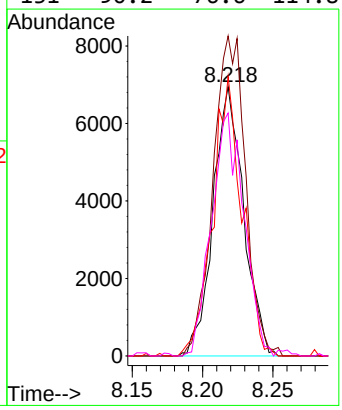


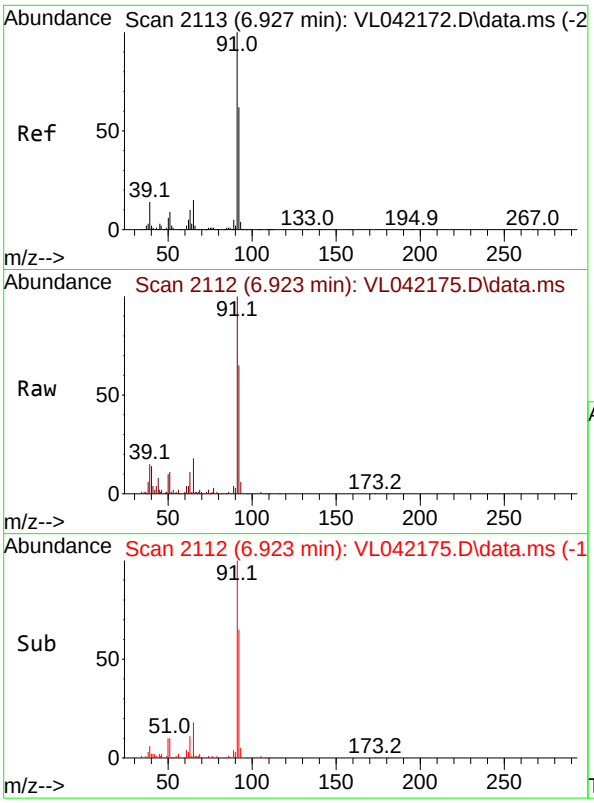


#52
Tetrachloroethene
Concen: 0.510 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:164 Resp: 10502

Ion	Ratio	Lower	Upper
164	100		
166	118.9	102.5	153.7
129	103.8	79.8	119.8
131	90.2	76.6	114.8



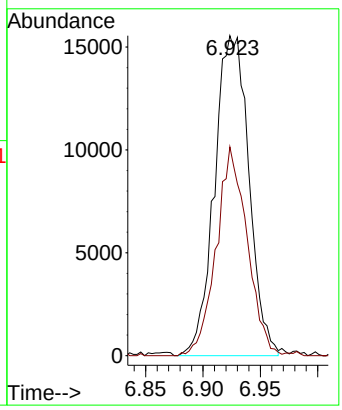


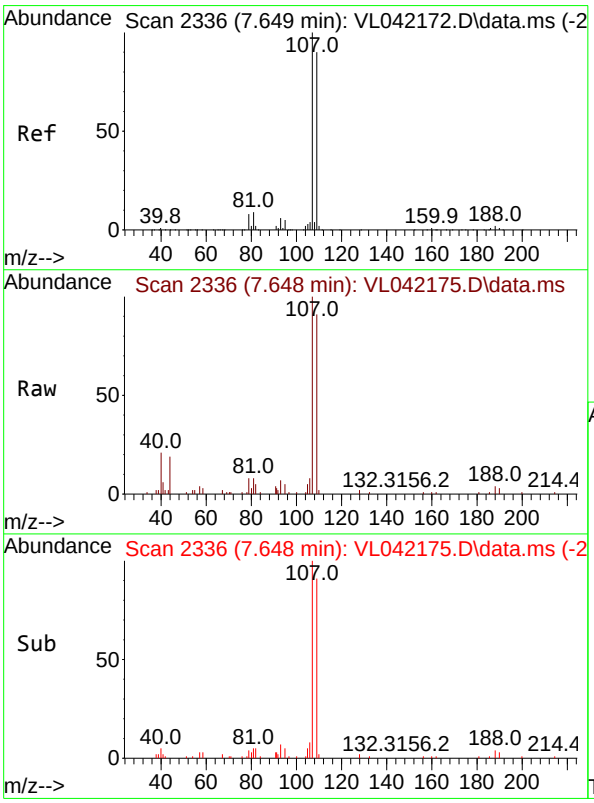
#53
Toluene
Concen: 0.527 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 32444

Ion	Ratio	Lower	Upper
91	100		
92	58.9	48.4	72.6

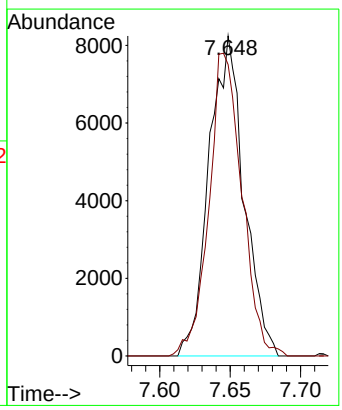


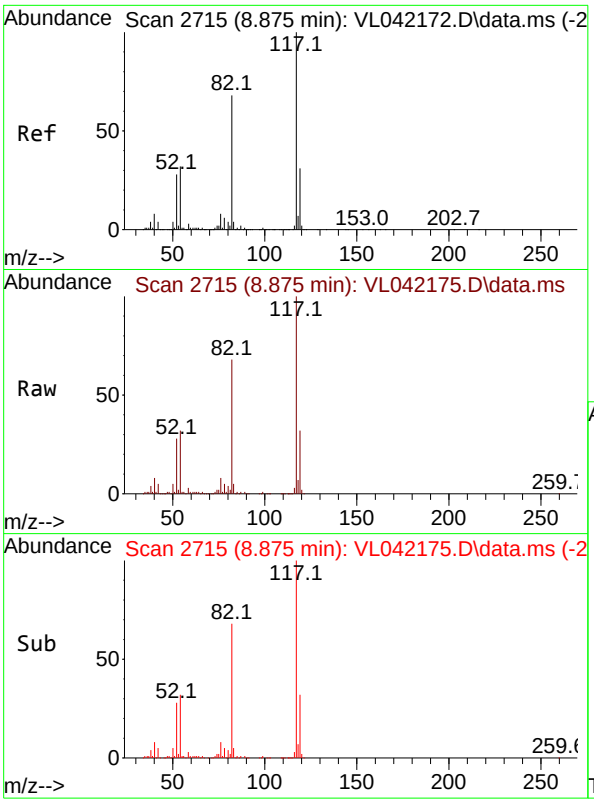


#54
1,2-Dibromoethane
Concen: 0.510 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:107 Resp: 14220

Ion	Ratio	Lower	Upper
107	100		
109	89.1	72.2	108.4



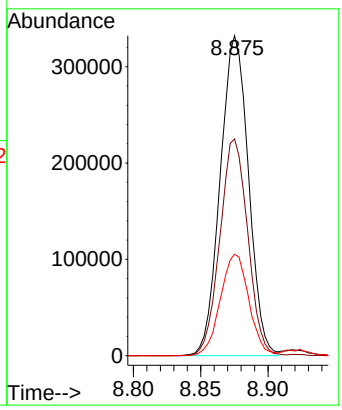


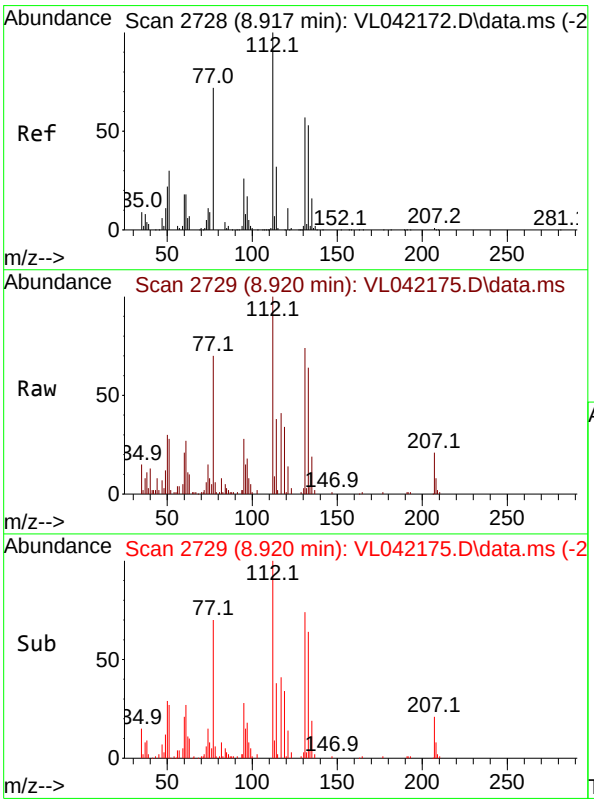
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 485078

Ion	Ratio	Lower	Upper
117	100		
82	67.0	55.8	83.6
119	33.7	25.5	38.3

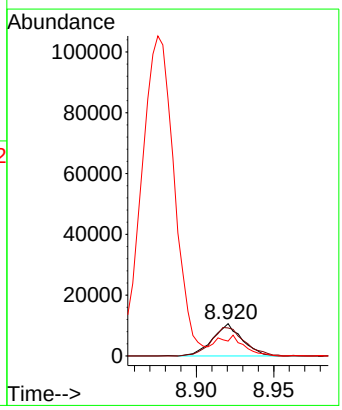


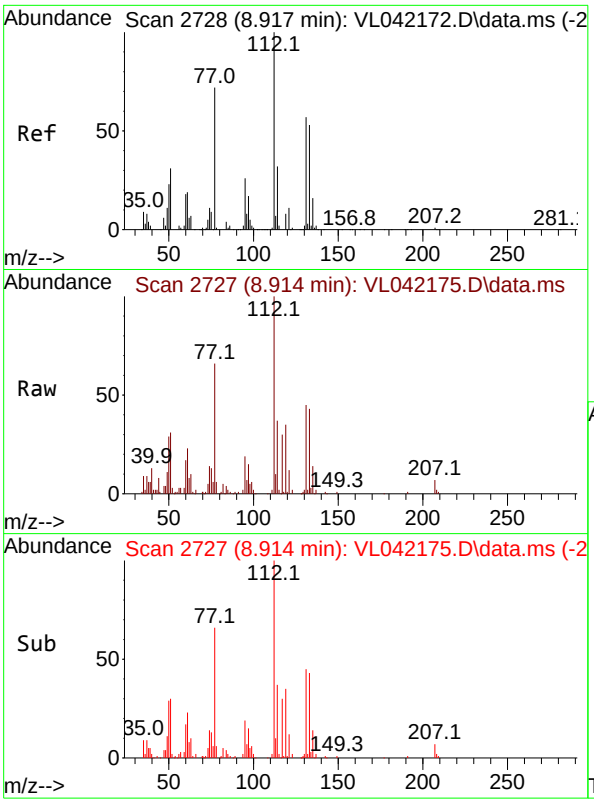


#56
1,1,1,2-Tetrachloroethane
Concen: 0.523 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:131 Resp: 13959

Ion	Ratio	Lower	Upper
131	100		
133	99.6	76.6	114.8
119	1170.3	49.8	74.6#



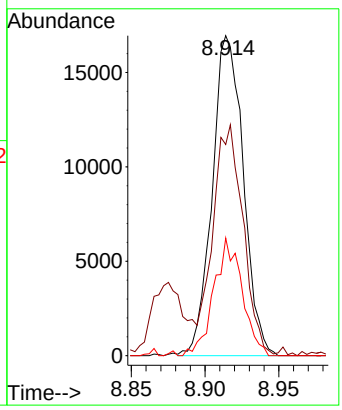


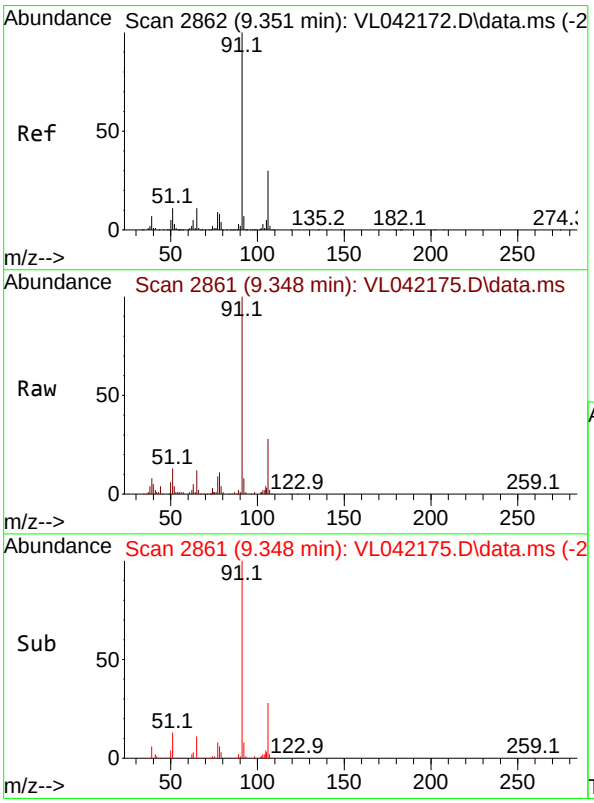
#57
Chlorobenzene
Concen: 0.540 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:112 Resp: 24826

Ion	Ratio	Lower	Upper
112	100		
77	65.1	58.2	87.2
114	36.8	29.1	35.5#

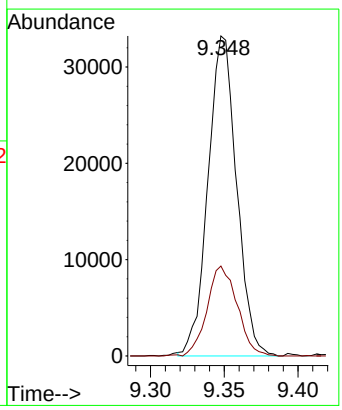


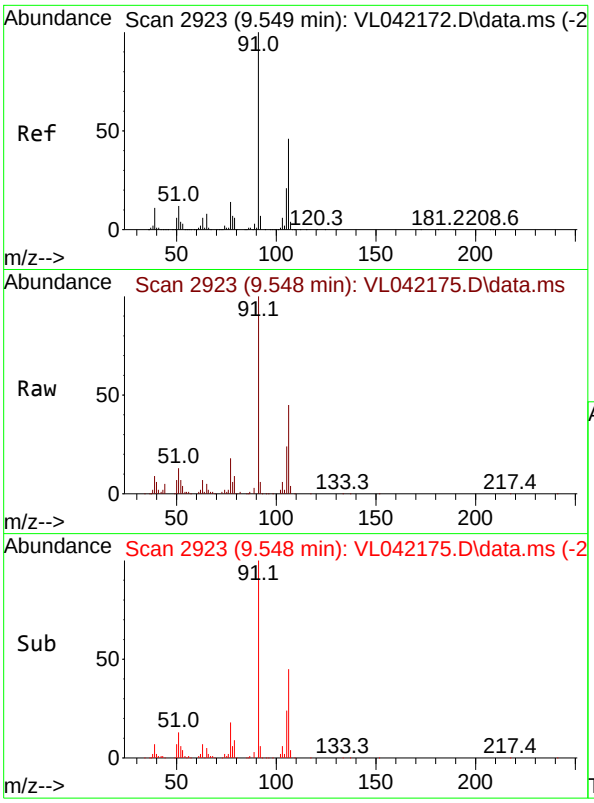


#58
Ethyl Benzene
Concen: 0.521 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 44862

Ion	Ratio	Lower	Upper
91	100		
106	28.1	24.2	36.2



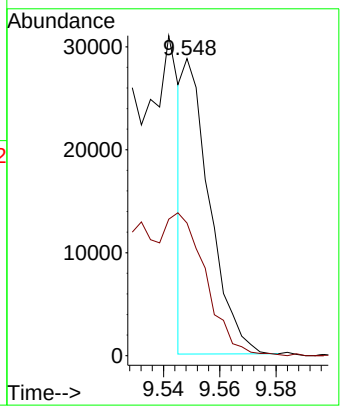


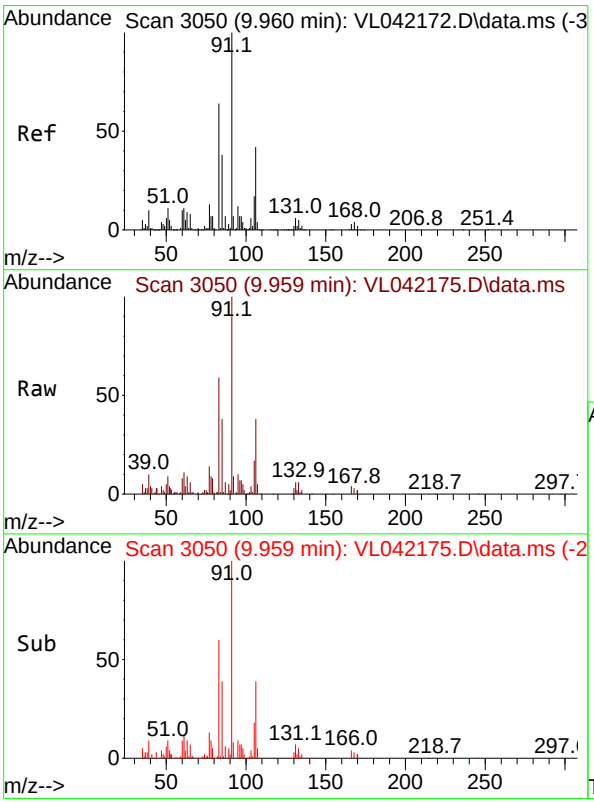
#59
m/p-Xylene
Concen: 0.272 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 18711

Ion	Ratio	Lower	Upper
91	100		
106	176.2	36.4	54.6#

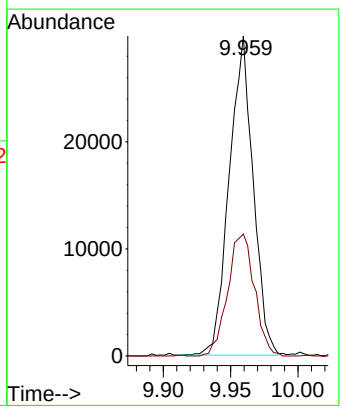


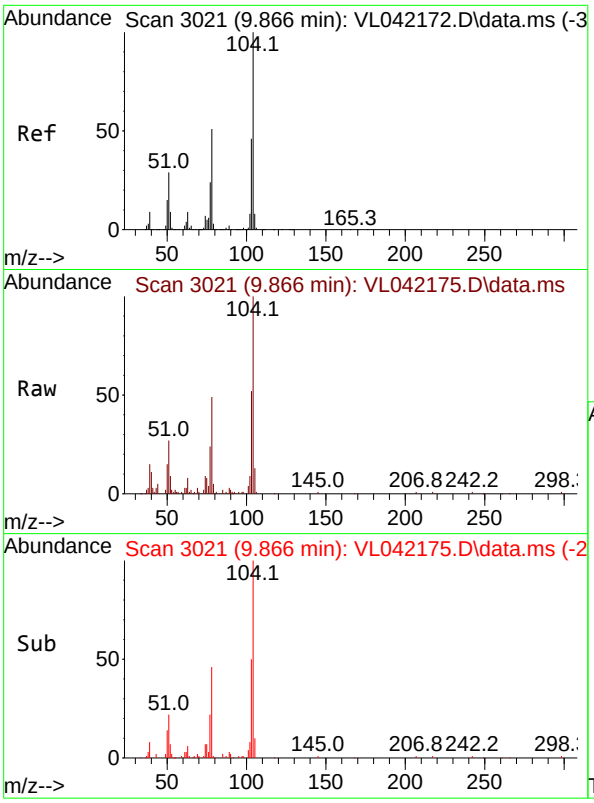


#60
o-Xylene
Concen: 0.535 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 36879

Ion	Ratio	Lower	Upper
91	100		
106	42.7	20.8	62.5



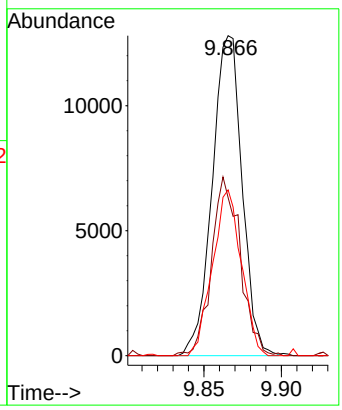


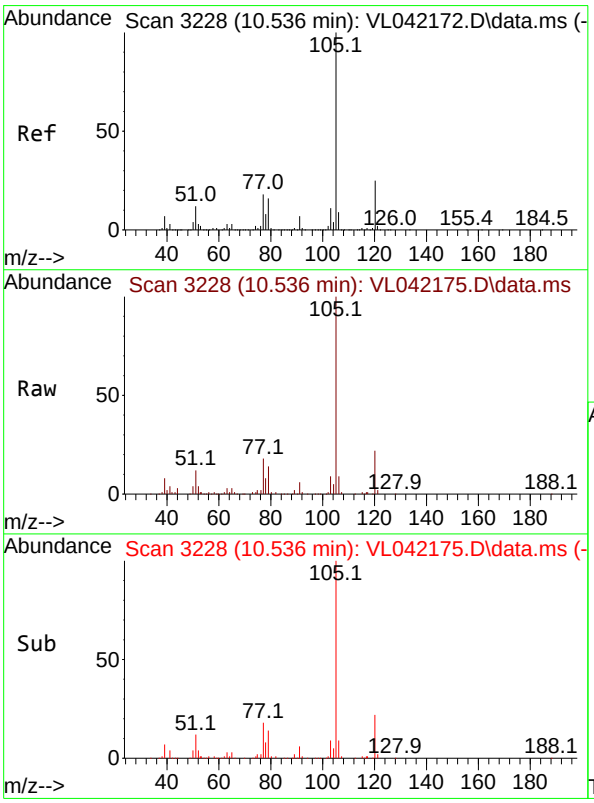
#61
Styrene
Concen: 0.504 ppbv
RT: 9.866 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:104 Resp: 17198

Ion	Ratio	Lower	Upper
104	100		
78	53.7	41.8	62.6
103	50.2	37.0	55.4

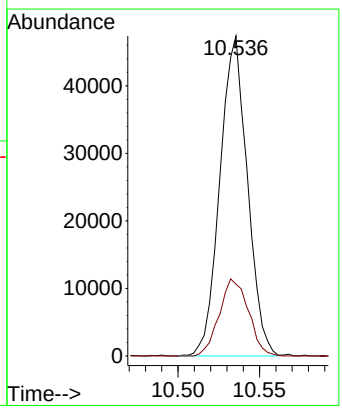


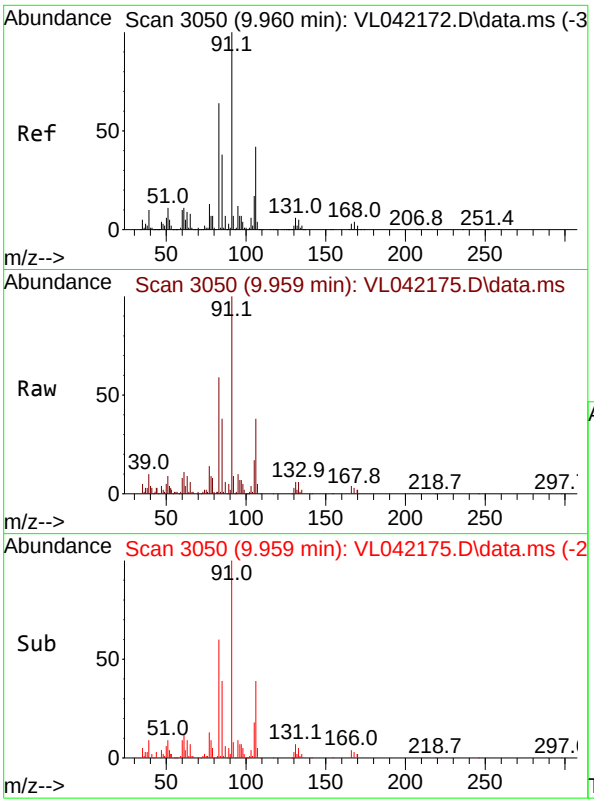


#62
Isopropylbenzene
Concen: 0.538 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 55531

Ion	Ratio	Lower	Upper
105	100		
120	25.5	19.9	29.9



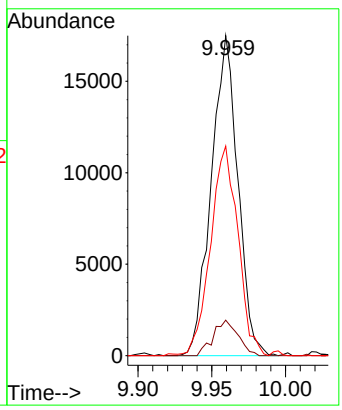


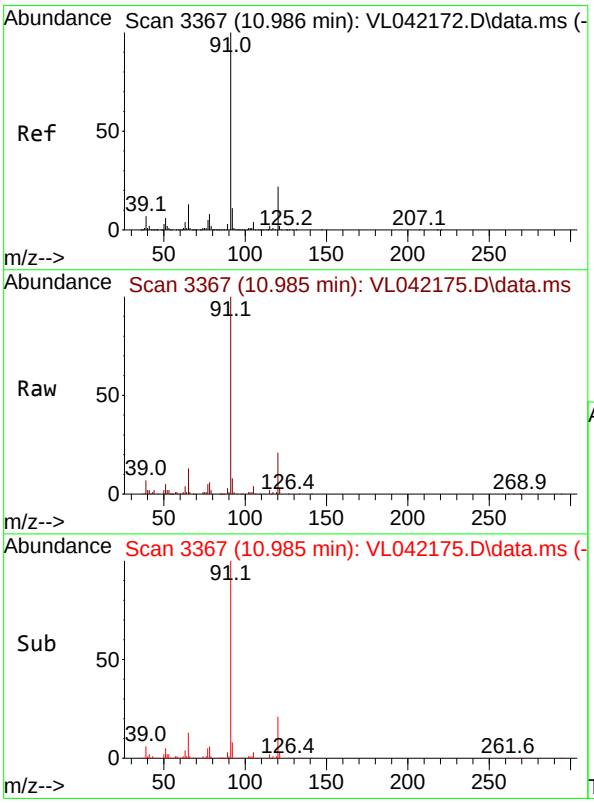
#63
1,1,2,2-Tetrachloroethane
Concen: 0.525 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 21989

Ion	Ratio	Lower	Upper
83	100		
131	10.4	4.8	14.4
85	68.1	32.5	97.5

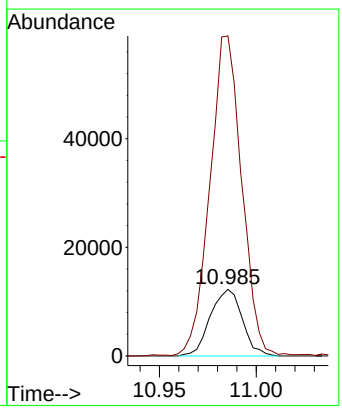


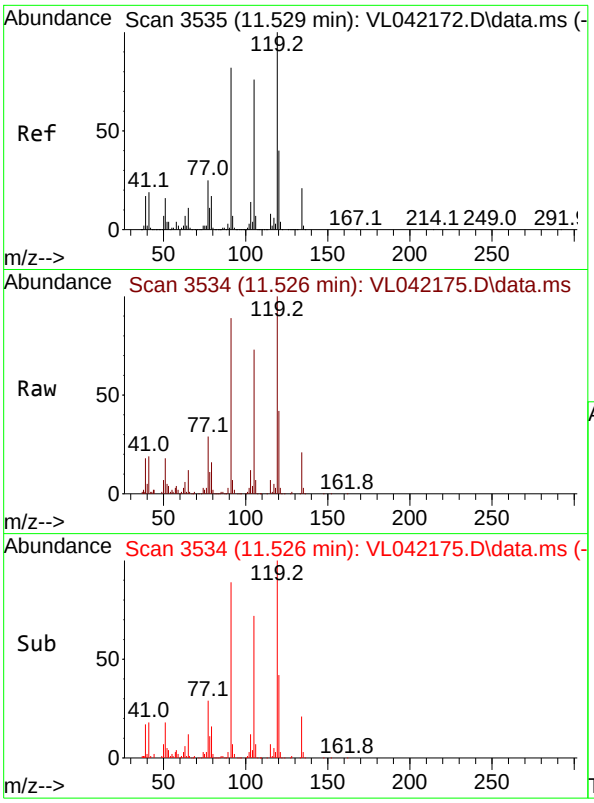


#64
n-propylbenzene
Concen: 0.528 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:120 Resp: 14030

Ion	Ratio	Lower	Upper
120	100		
91	483.1	376.9	565.3



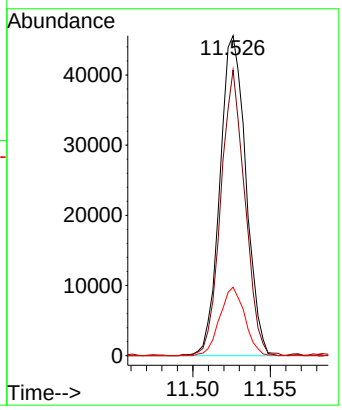


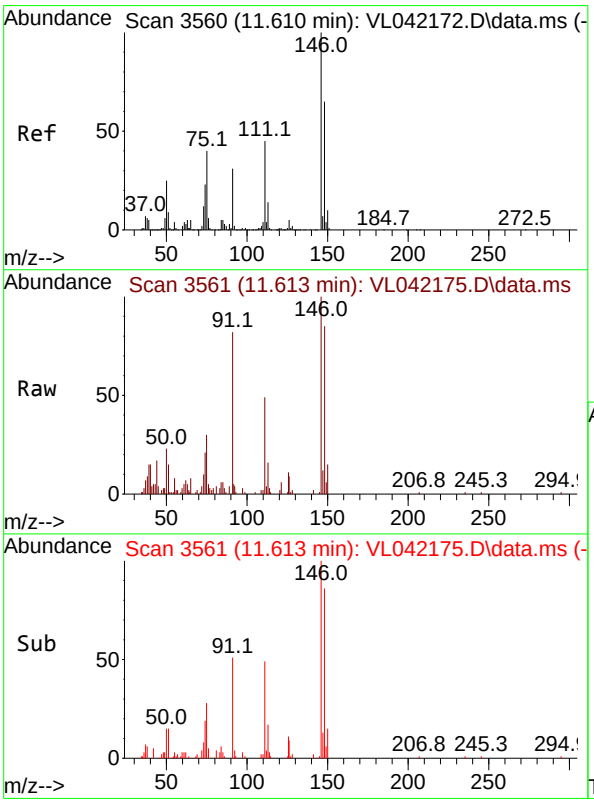
#65
tert-Butylbenzene
Concen: 0.557 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 53115

Ion	Ratio	Lower	Upper
119	100		
91	82.9	66.0	99.0
134	20.6	16.7	25.1

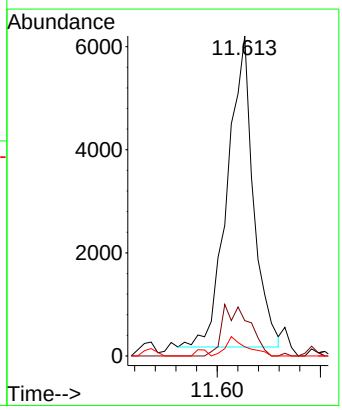


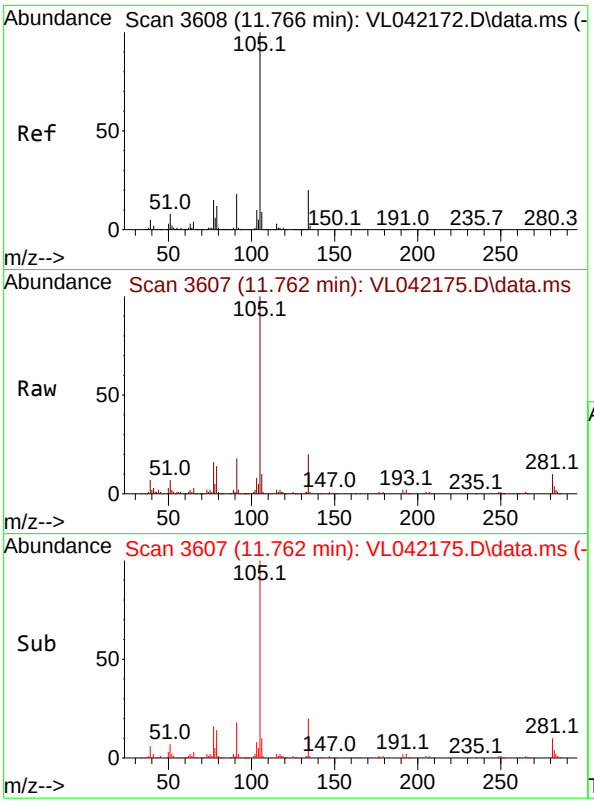


#66
Benzyl Chloride
Concen: 0.520 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 5263

Ion	Ratio	Lower	Upper
91	100		
126	18.7	13.8	20.6
128	5.8	4.5	6.7



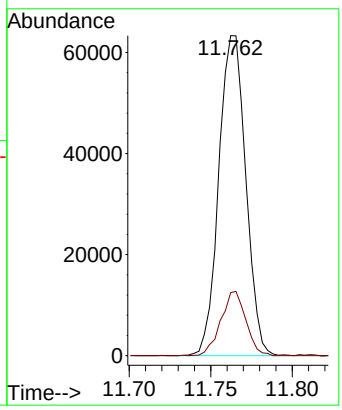


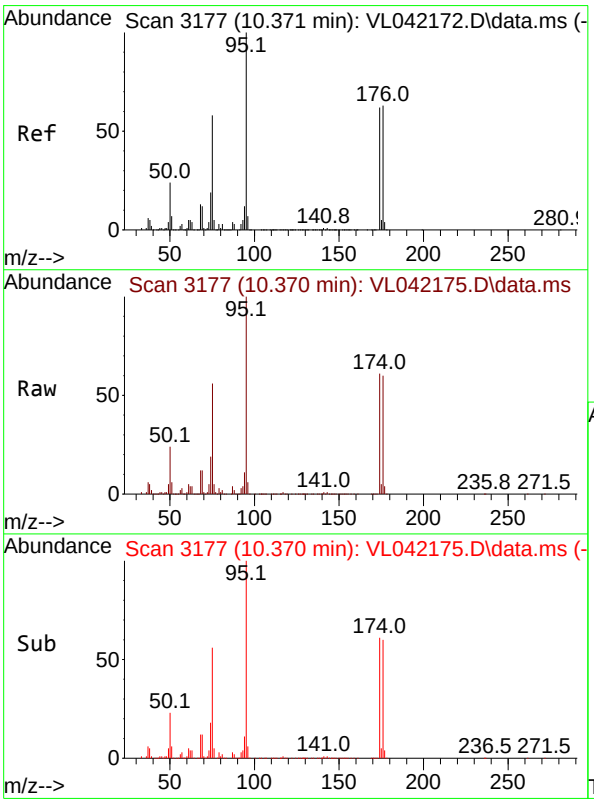
#67
sec-Butylbenzene
Concen: 0.550 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 72879

Ion	Ratio	Lower	Upper
105	100		
134	18.6	15.5	23.3

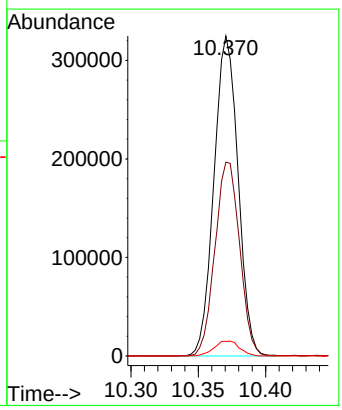


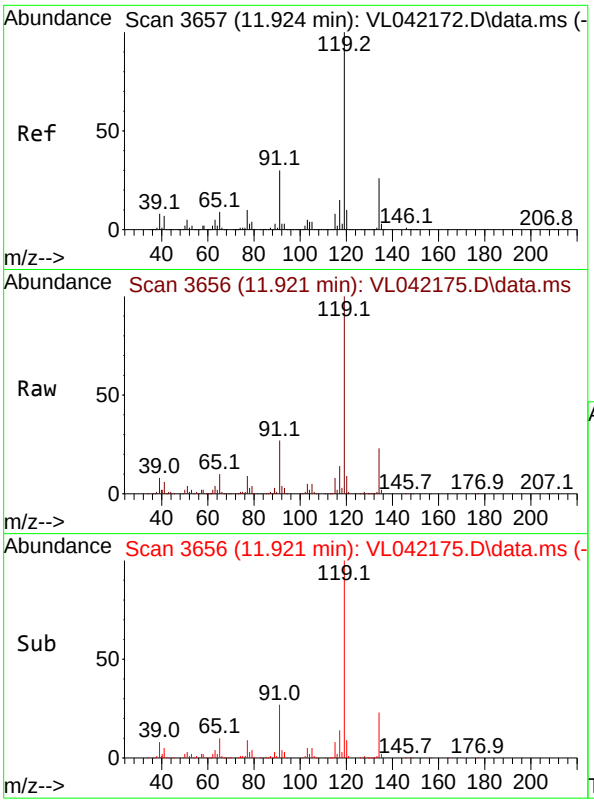


#68
1-Bromo-4-Fluorobenzene
Concen: 10.130 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 95 Resp: 403513

Ion	Ratio	Lower	Upper
95	100		
174	62.3	50.6	76.0
175	4.9	3.8	5.6



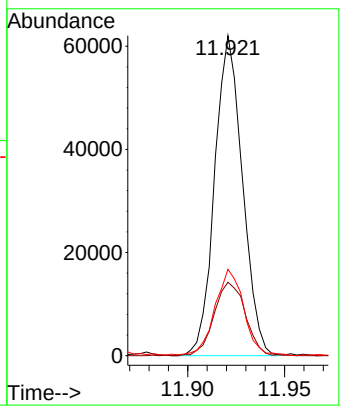


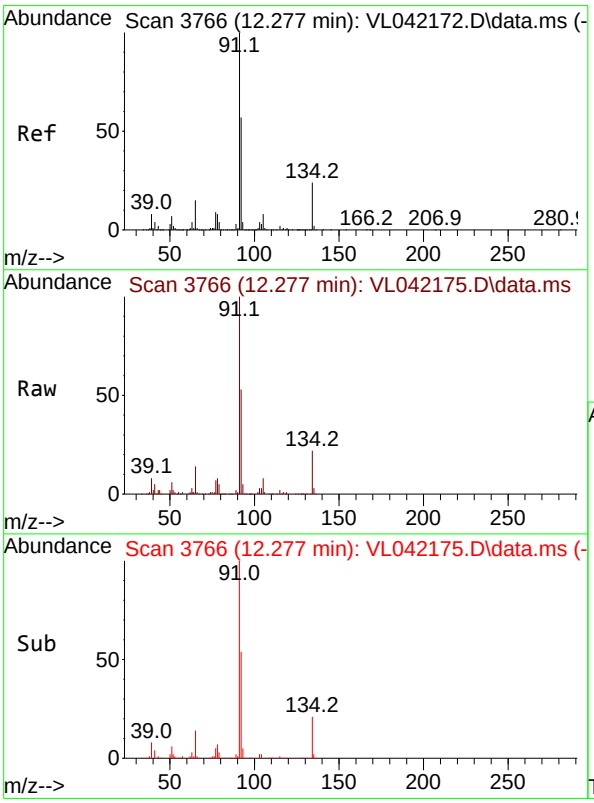
#69
p-Isopropyltoluene
Concen: 0.542 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 61933

Ion	Ratio	Lower	Upper
119	100		
134	25.8	20.4	30.6
91	29.4	23.7	35.5

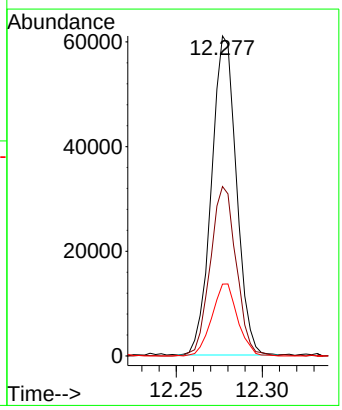


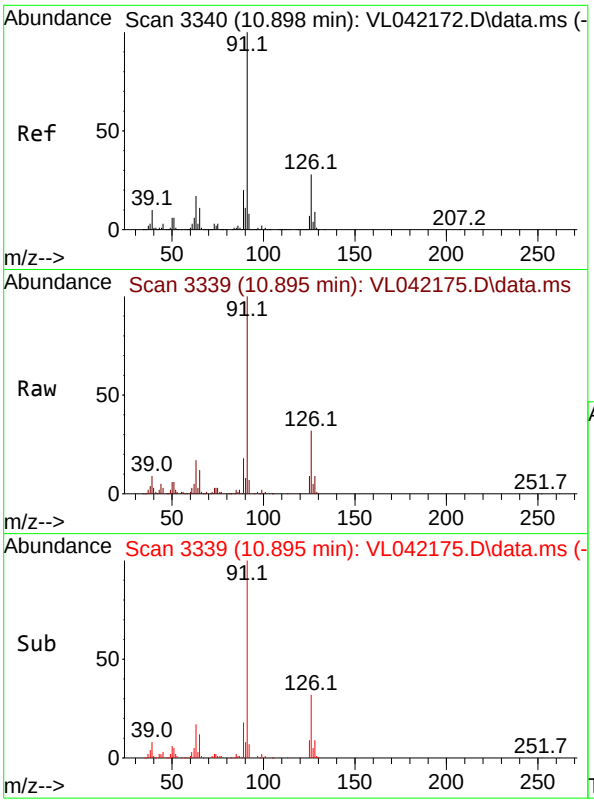


#70
n-Butylbenzene
Concen: 0.527 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 61507

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.4	19.2	28.8



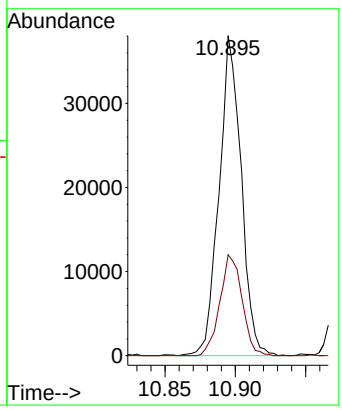


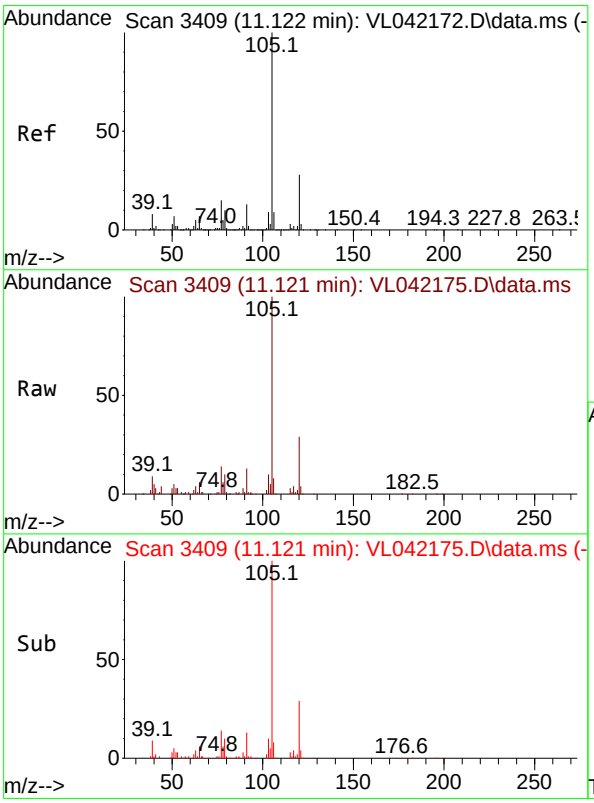
#71
2-Chlorotoluene
Concen: 0.520 ppbv
RT: 10.895 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 41637

Ion	Ratio	Lower	Upper
91	100		
126	31.7	11.6	46.4

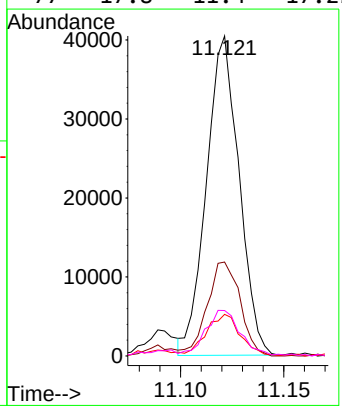


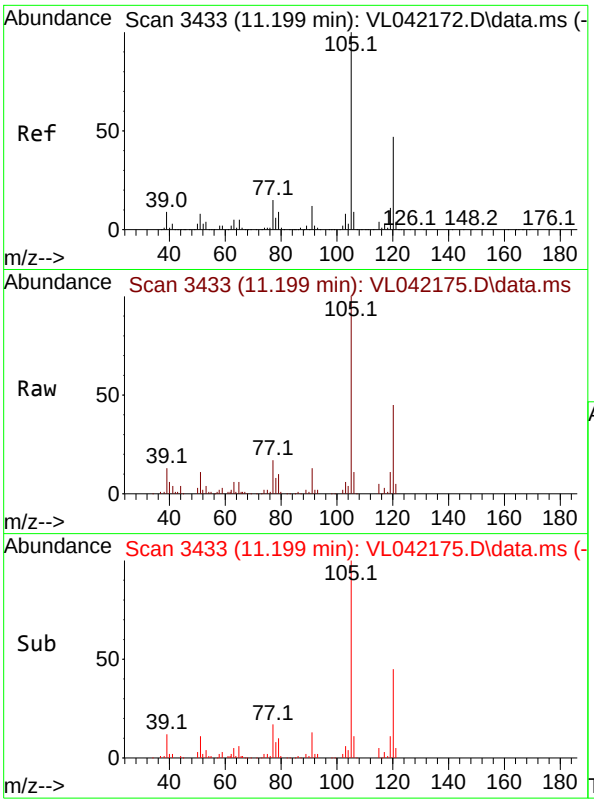


#72
4-Ethyltoluene
Concen: 0.518 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 44473

Ion	Ratio	Lower	Upper
105	100		
120	32.3	23.4	35.0
91	14.9	10.3	15.5
77	17.8	11.4	17.2#



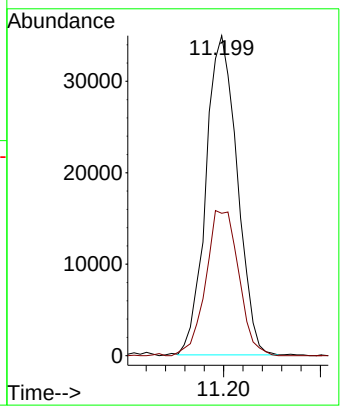


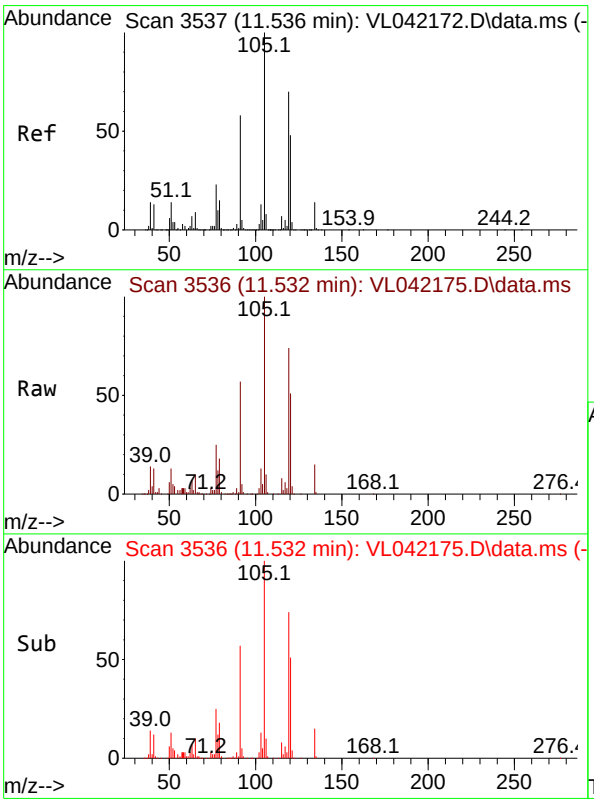
#73
1,3,5-Trimethylbenzene
Concen: 0.523 ppbv
RT: 11.199 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 39190

Ion	Ratio	Lower	Upper
105	100		
120	44.6	37.4	56.0

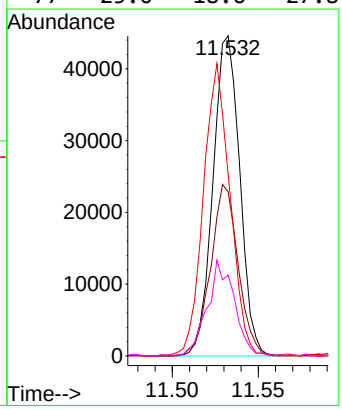


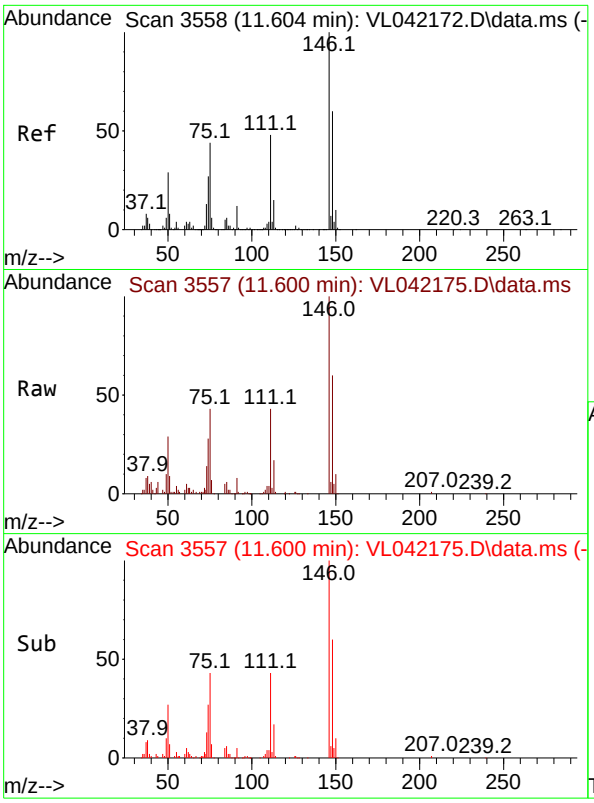


#74
1,2,4-Trimethylbenzene
Concen: 0.560 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 48370

Ion	Ratio	Lower	Upper
105	100		
120	51.3	38.6	58.0
91	56.5	46.2	69.2
77	25.0	18.6	27.8



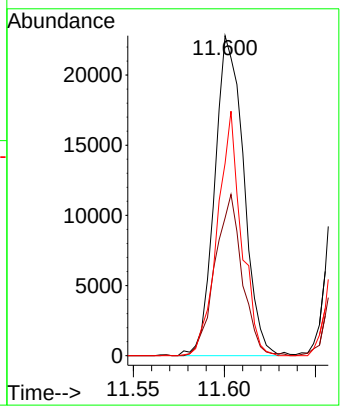


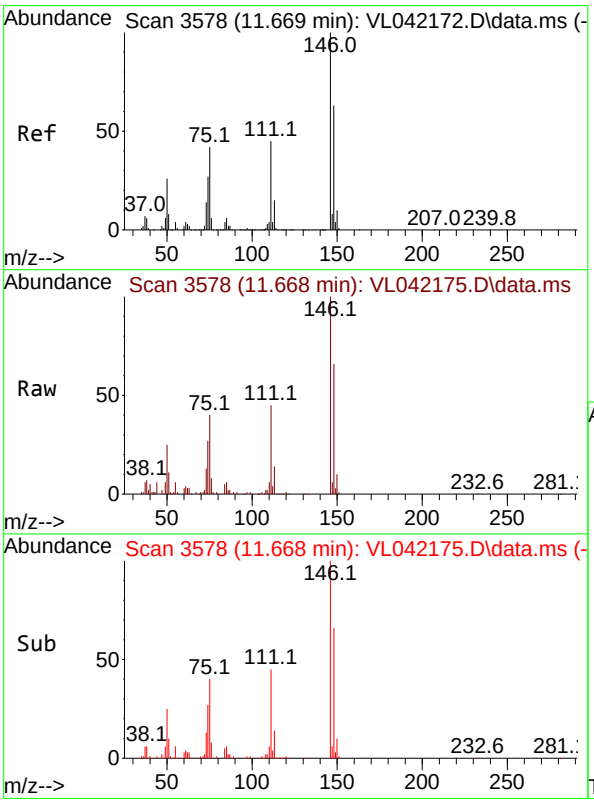
#75
1,3-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.600 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 25122

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.7	31.9	95.9

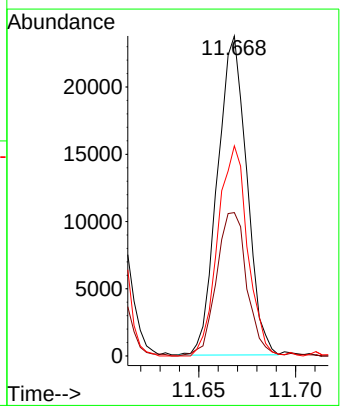


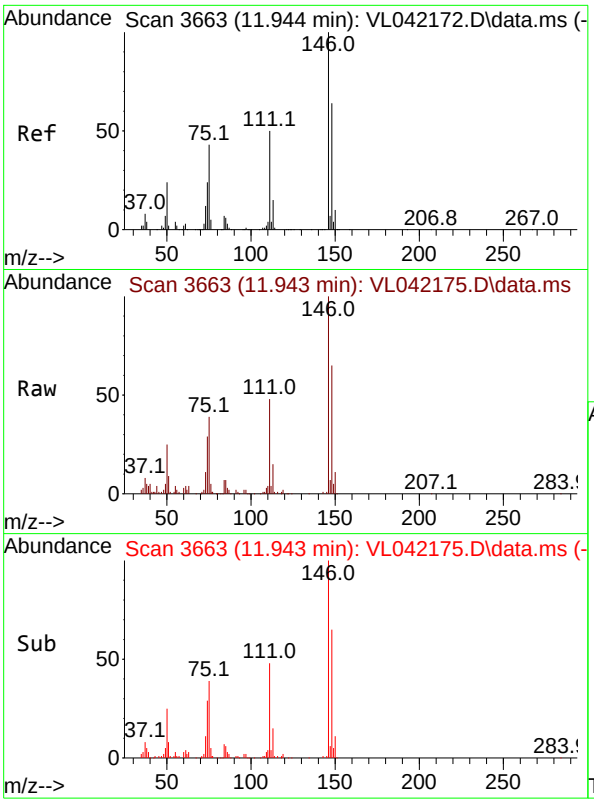


#76
1,4-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 24991

Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.0	69.0
148	67.5	31.9	95.7



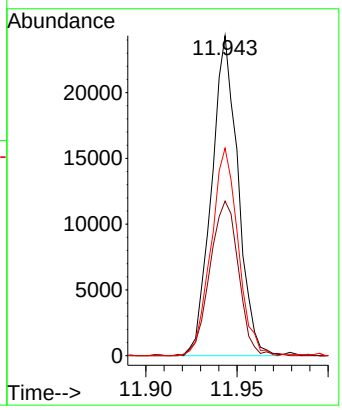


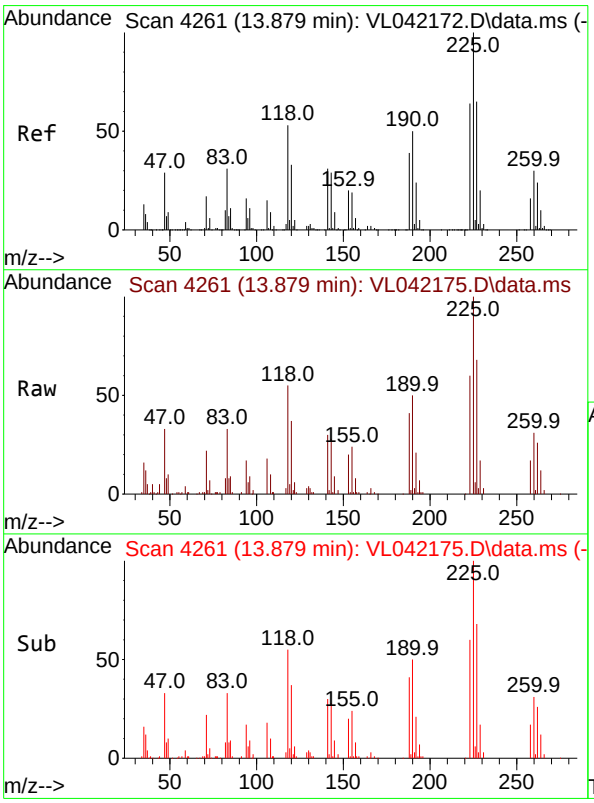
#77
1,2-Dichlorobenzene
Concen: 0.532 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 24548

Ion	Ratio	Lower	Upper
146	100		
111	52.2	24.8	74.3
148	66.6	31.6	94.8

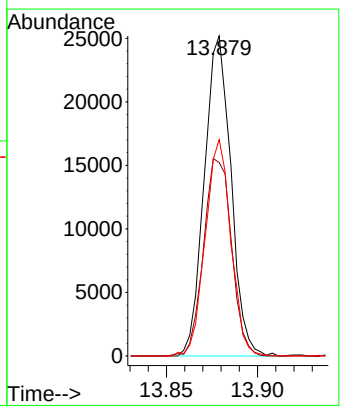


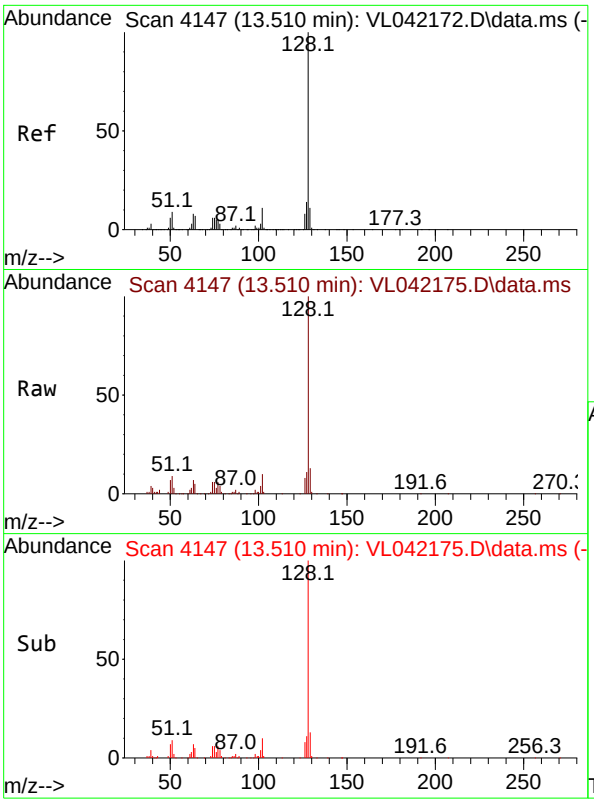


#78
Hexachloro-1,3-Butadiene
Concen: 0.546 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:225 Resp: 25636

Ion	Ratio	Lower	Upper
225	100		
223	64.5	50.6	76.0
227	64.8	51.2	76.8



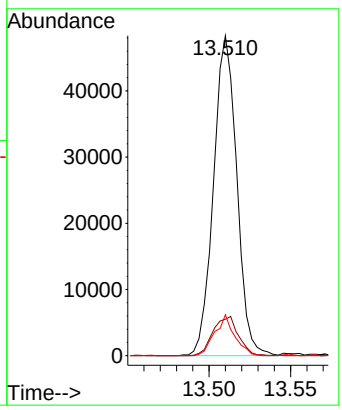


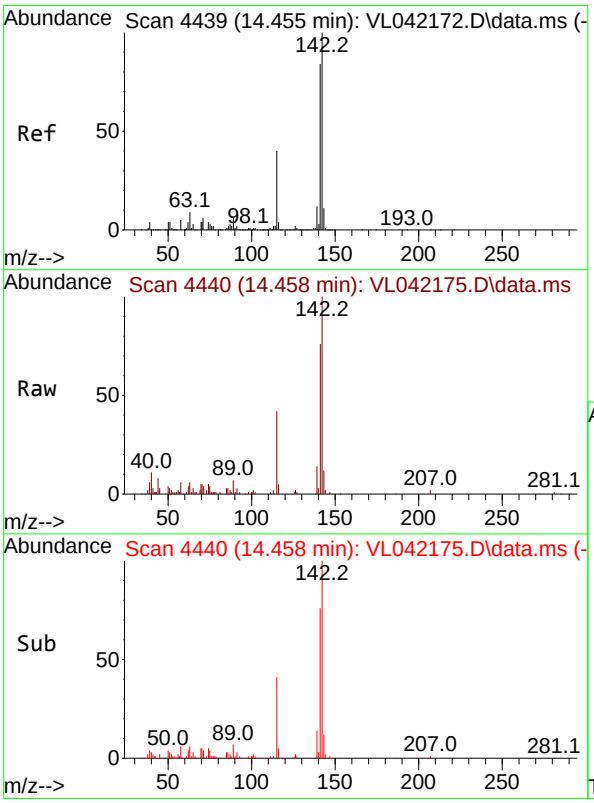
#79
Naphthalene
Concen: 0.508 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:128 Resp: 47990

Ion	Ratio	Lower	Upper
128	100		
127	11.4	10.8	16.2
129	12.8	9.0	13.4

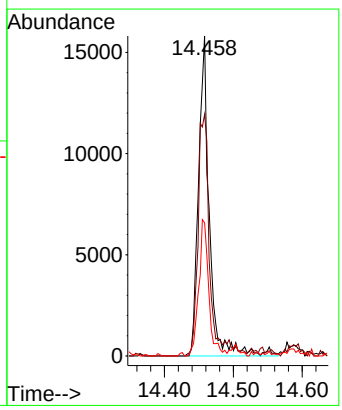


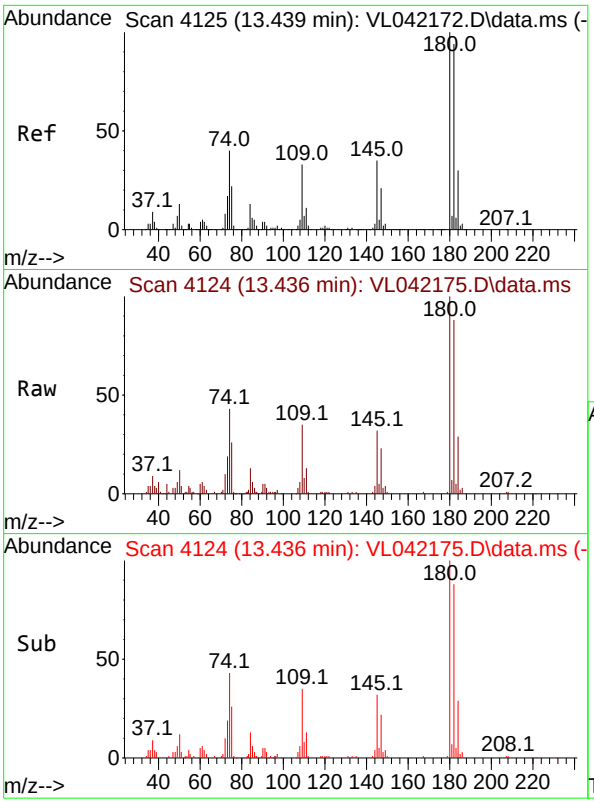


#80
Naphthalene,2-methyl-
Concen: 0.380 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:142 Resp: 17486

Ion	Ratio	Lower	Upper
142	100		
141	83.3	66.3	99.5
115	43.5	31.6	47.4



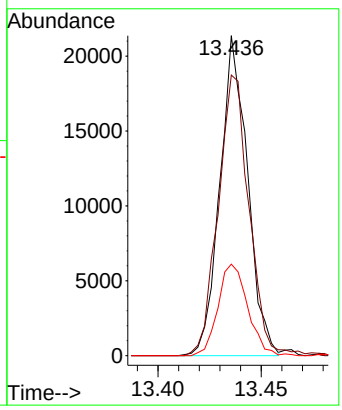


#81
1,2,4-Trichlorobenzene
Concen: 0.457 ppbv
RT: 13.436 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:180 Resp: 19924

Ion	Ratio	Lower	Upper
180	100		
182	97.9	75.1	112.7
184	31.1	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	180740	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	528028	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	481506	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	398069	10.067	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.554	85	2353	0.088	ppbv		100
3) Chlorodifluoromethane	1.476	51	3006	0.110	ppbv	#	40
4) Chloromethane	1.531	50	1330	0.122	ppbv	#	53
5) Vinyl Chloride	1.580	62	1274	0.115	ppbv	#	42
6) Bromomethane	1.667	94	537	0.109	ppbv	#	73
7) Chloroethane	1.703	64	616	0.141	ppbv	#	49
8) Dichlorotetrafluoroethane	1.554	85	2353	0.104	ppbv		92
9) Propene	1.486	41	1664	0.135	ppbv	#	44
11) Trichlorofluoromethane	1.878	101	2644	0.102	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.136	101	2551	0.120	ppbv	#	81
13) Ethanol	1.716	45	721	0.750	ppbv		60
14) Bromoethene	1.780	108	956	0.117	ppbv	#	11
15) Acetone	1.835	43	5179	0.205	ppbv		92
16) 1,3-Butadiene	1.609	39	1912	0.168	ppbv		94
17) tert-Butyl alcohol	2.046	59	3546	0.113	ppbv	#	30
18) 1,1-Dichloroethene	2.033	96	1155	0.116	ppbv	#	72
19) Isopropyl Alcohol	1.891	45	1838	0.129	ppbv	#	49
20) Methylene Chloride	2.059	84	2388	0.254	ppbv	#	88
21) Allyl Chloride	2.091	41	3040	0.171	ppbv	#	77
22) trans-1,2-Dichloroethene	2.722	96	1512	0.130	ppbv		99
23) Vinyl Acetate	2.457	43	1746	0.166	ppbv	#	1
24) 1,1-Dichloroethane	2.408	63	2446	0.114	ppbv	#	92
25) Ethyl Acetate	2.842	43	6359	0.097	ppbv	#	80
26) Hexane	2.823	57	3126	0.123	ppbv	#	5
27) Carbon Disulfide	2.149	76	3075	0.113	ppbv	#	1
28) Methyl tert-Butyl Ether	2.438	73	875	0.055	ppbv	#	49
29) Chloroform	2.845	83	4120	0.111	ppbv		92
30) Cyclohexane	3.855	84	1113	0.051	ppbv	#	1
31) cis-1,2-Dichloroethene	2.722	61	2587	0.101	ppbv		95
32) 1,1,1-Trichloroethane	3.366	97	2773	0.065	ppbv	#	50
34) 2-Butanone	2.564	43	4331	0.113	ppbv		91
35) Carbon Tetrachloride	3.768	117	3523	0.087	ppbv	#	71
36) Benzene	3.658	78	5031	0.096	ppbv	#	82
37) 1,2-Dichloroethane	3.218	62	2942	0.098	ppbv		97
39) 1,2-Dichloropropane	3.959	63	135792	7.123	ppbv	#	22
40) 1,4-Dioxane	4.616	88	843	0.085	ppbv	#	25
42) Bromodichloromethane	4.490	83	4103	0.099	ppbv	#	94
43) Methyl Methacrylate	4.878	69	930	0.042	ppbv	#	1
45) t-1,3-Dichloropropene	6.419	75	1449	0.061	ppbv	#	64
48) Dibromochloromethane	7.383	129	2284	0.067	ppbv		68
49) Bromoform	9.480	173	2928	0.095	ppbv		94
51) 2-Hexanone	7.448	43	4284	0.085	ppbv	#	87
53) Toluene	6.930	91	3144	0.051	ppbv	#	25

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) 1,2-Dibromoethane	7.652	107	1864	0.066	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.924	131	2963	0.112	ppbv	#	1
57) Chlorobenzene	8.917	112	4904	0.107	ppbv	#	74
58) Ethyl Benzene	9.354	91	8648	0.101	ppbv		93
59) m/p-Xylene	9.545	91	6005	0.088	ppbv	#	12
60) o-Xylene	9.959	91	8048	0.118	ppbv		96
61) Styrene	9.872	104	1723	0.051	ppbv	#	25
62) Isopropylbenzene	10.536	105	10359	0.101	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.959	83	1910	0.046	ppbv	#	25
64) n-propylbenzene	10.989	120	2375	0.090	ppbv	#	62
65) tert-Butylbenzene	11.526	119	9418	0.099	ppbv		94
66) Benzyl Chloride	11.617	91	844	0.084	ppbv	#	86
67) sec-Butylbenzene	11.765	105	13775	0.105	ppbv		96
69) p-Isopropyltoluene	11.924	119	11366	0.100	ppbv		98
70) n-Butylbenzene	12.280	91	10697	0.092	ppbv		97
71) 2-Chlorotoluene	10.898	91	8347	0.105	ppbv		98
72) 4-Ethyltoluene	11.125	105	8579	0.101	ppbv	#	84
73) 1,3,5-Trimethylbenzene	11.202	105	8407	0.113	ppbv		91
74) 1,2,4-Trimethylbenzene	11.536	105	10341	0.121	ppbv	#	95
75) 1,3-Dichlorobenzene	11.604	146	4426	0.094	ppbv		94
76) 1,4-Dichlorobenzene	11.672	146	4552	0.097	ppbv		95
77) 1,2-Dichlorobenzene	11.947	146	4867	0.106	ppbv		93
78) Hexachloro-1,3-Butadiene	13.882	225	4755	0.102	ppbv		94
79) Naphthalene	13.513	128	7882	0.084	ppbv	#	92
80) Naphthalene,2-methyl-	14.471	142	2174	0.048	ppbv	#	78
81) 1,2,4-Trichlorobenzene	13.442	180	2557	0.059	ppbv		98

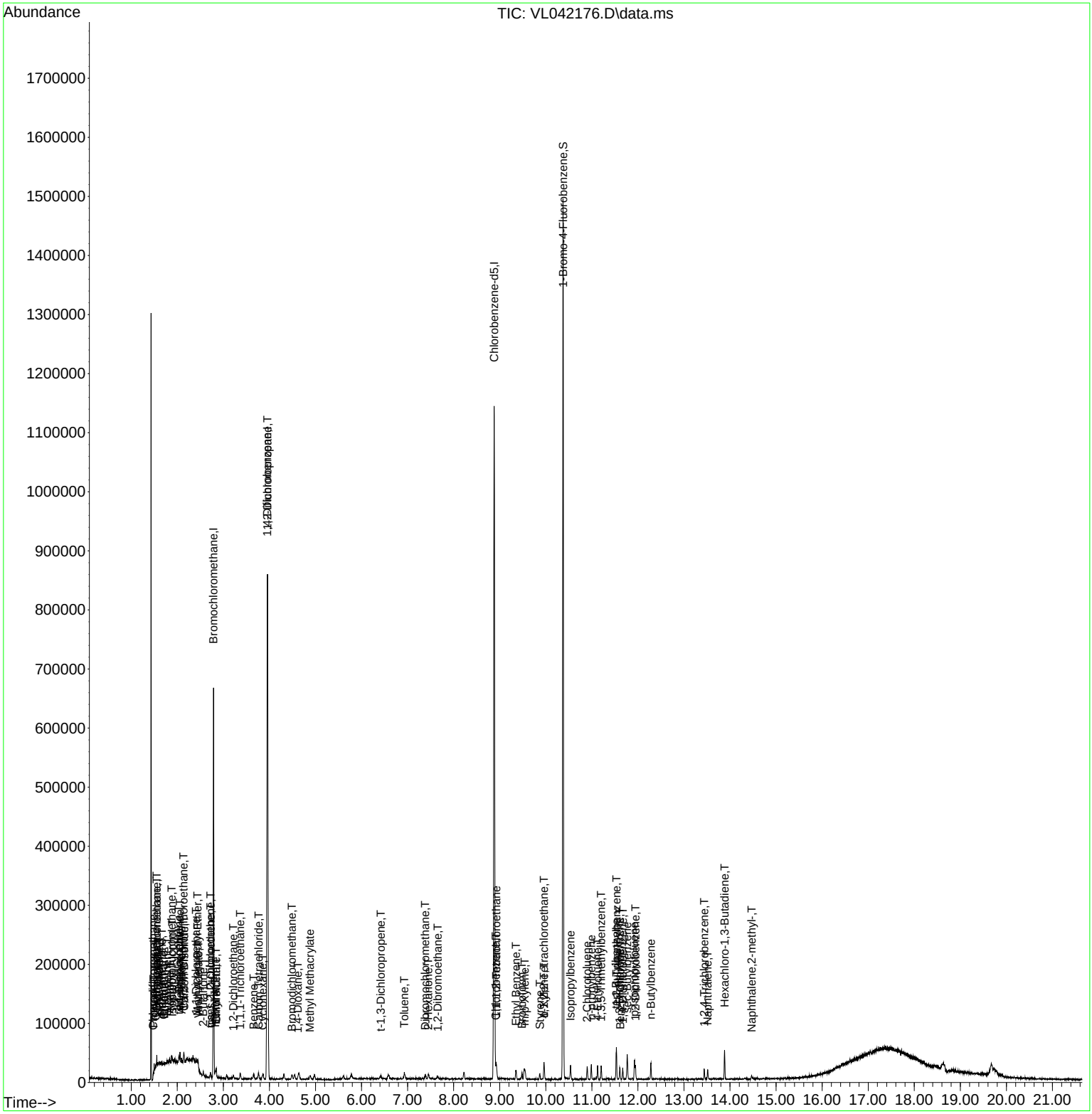
(#) = qualifier out of range (m) = manual integration (+) = signals summed

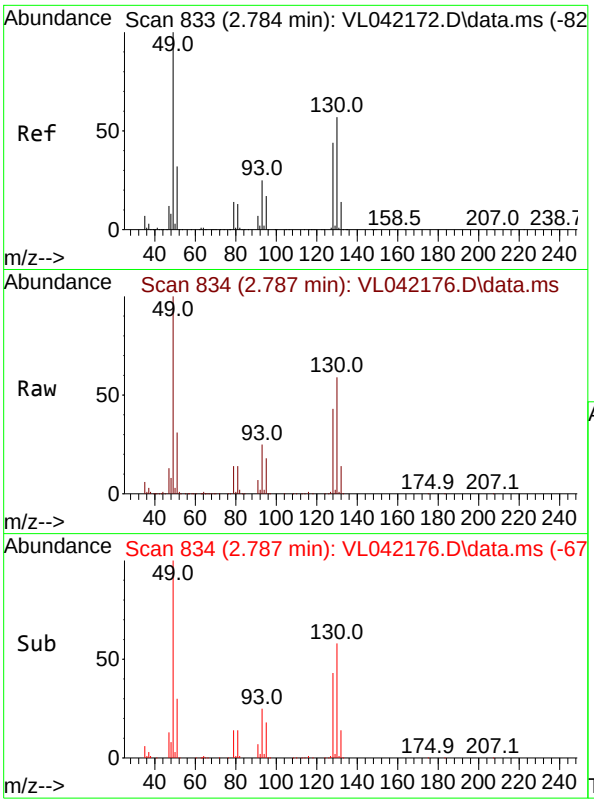
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



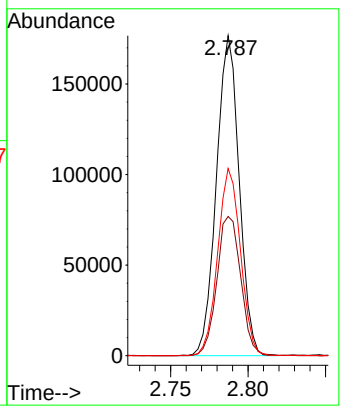


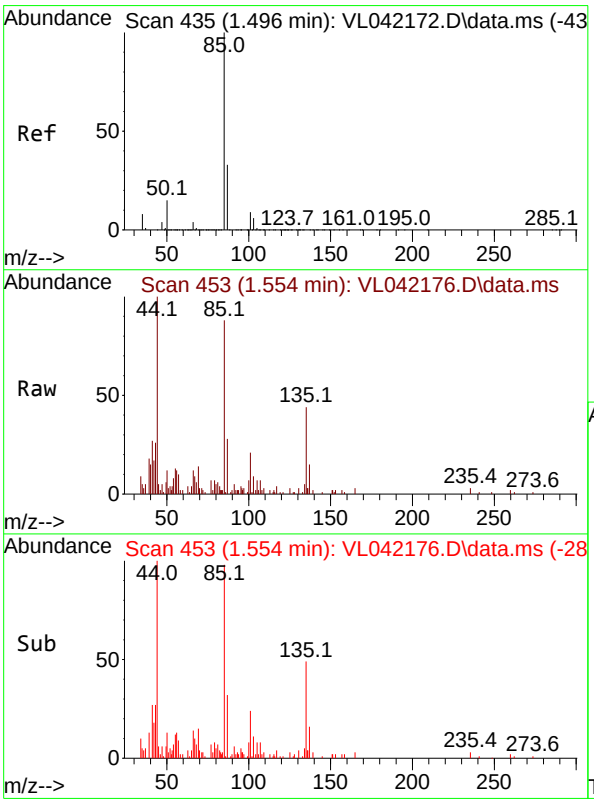
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 49 Resp: 180740

Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.9	68.5
130	58.5	28.8	86.4

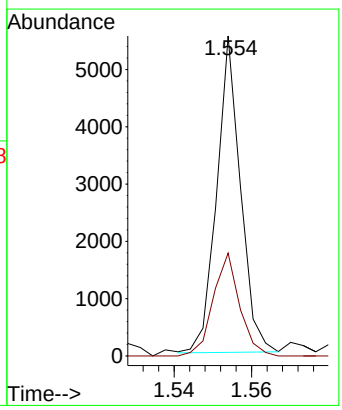


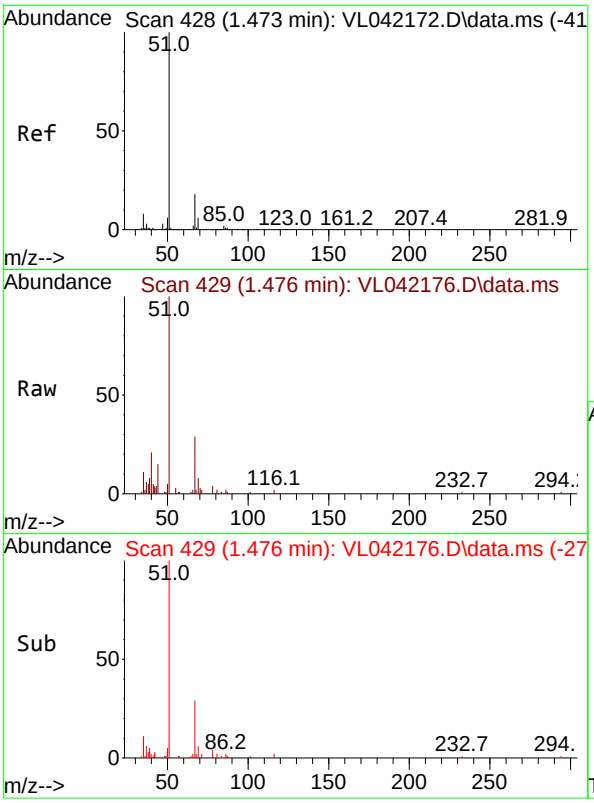


#2
Dichlorodifluoromethane
Concen: 0.088 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.058 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 85 Resp: 2353

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.1	39.1



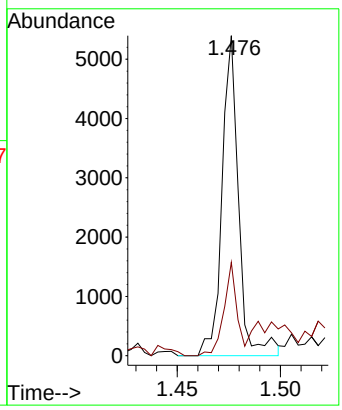


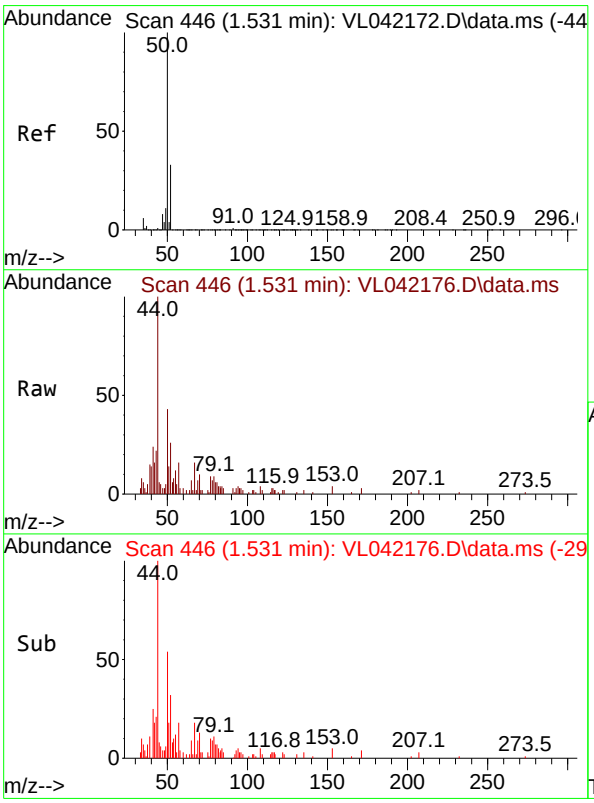
#3
Chlorodifluoromethane
Concen: 0.110 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 51 Resp: 3006

Ion	Ratio	Lower	Upper
51	100		
67	45.8	15.0	22.6#

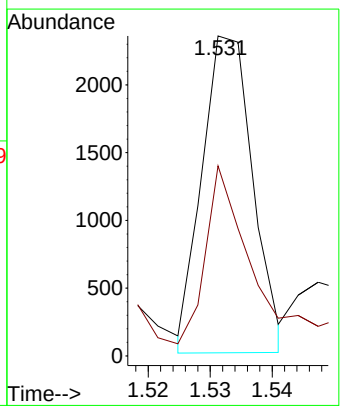


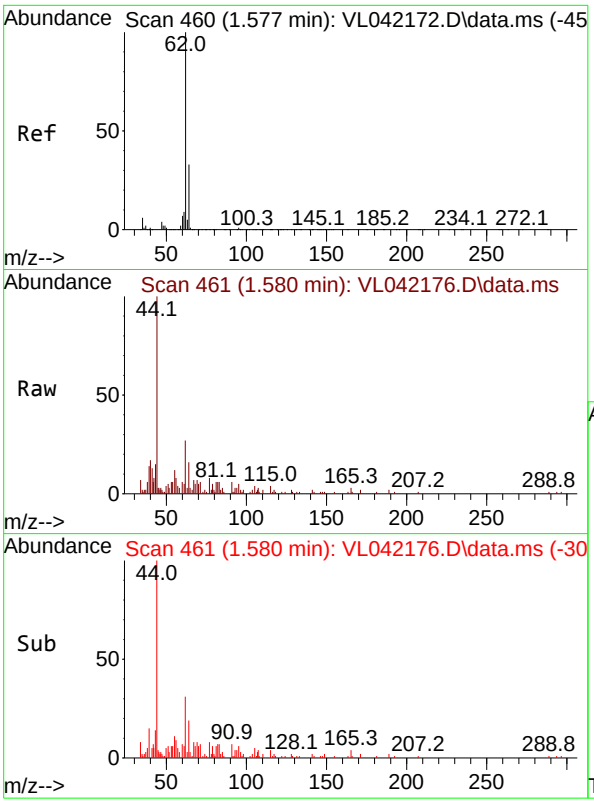


#4
Chloromethane
Concen: 0.122 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 50 Resp: 1330

Ion	Ratio	Lower	Upper
50	100		
52	59.3	26.1	39.1#



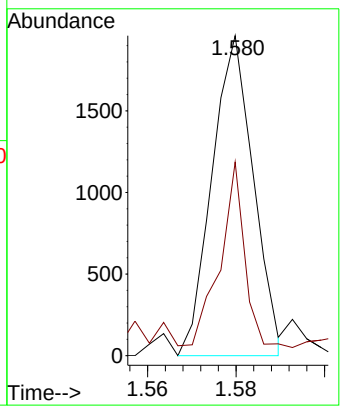


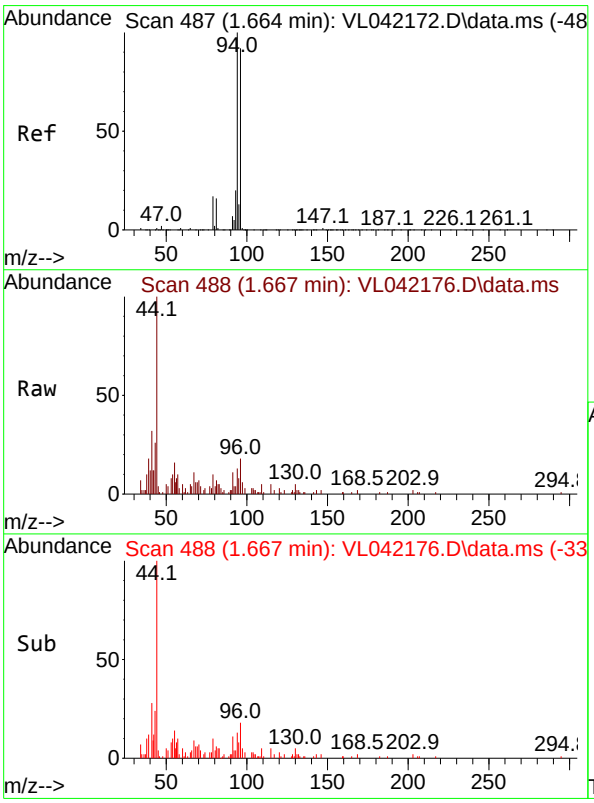
#5
Vinyl Chloride
Concen: 0.115 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 62 Resp: 1274

Ion	Ratio	Lower	Upper
62	100		
64	66.4	26.6	40.0#

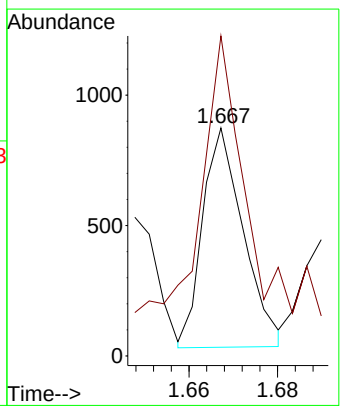


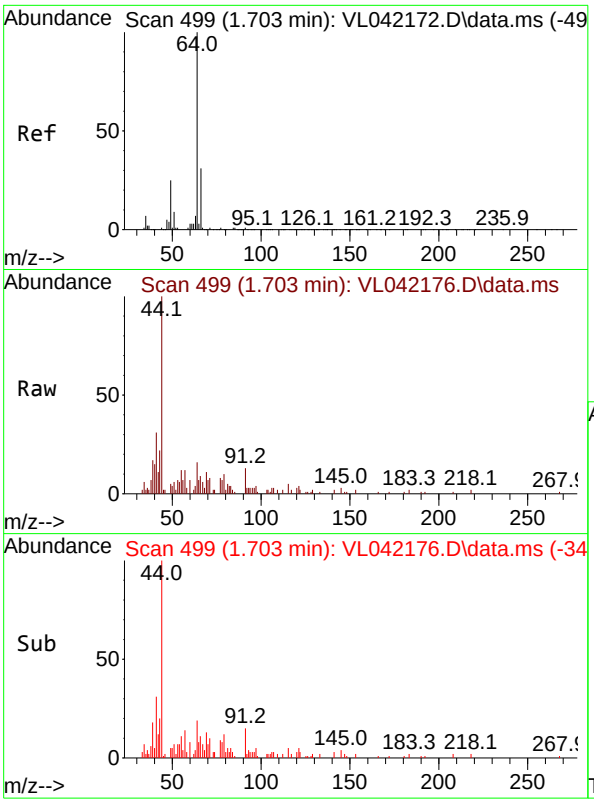


#6
Bromomethane
Concen: 0.109 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 94 Resp: 537

Ion	Ratio	Lower	Upper
94	100		
96	116.6	73.1	109.7#



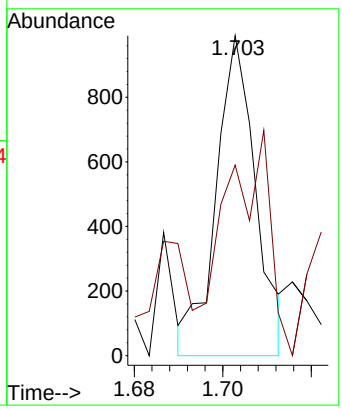


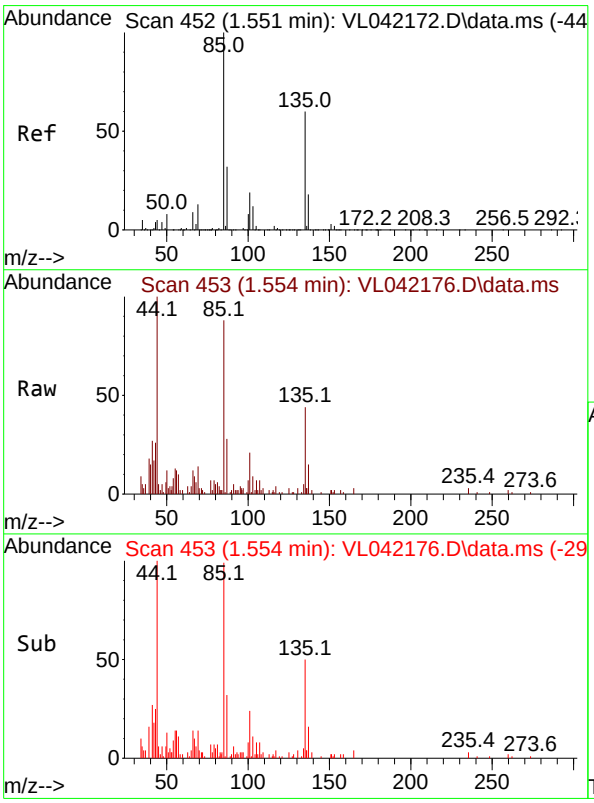
#7
Chloroethane
Concen: 0.141 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 64 Resp: 616

Ion	Ratio	Lower	Upper
64	100		
66	59.5	25.2	37.8#

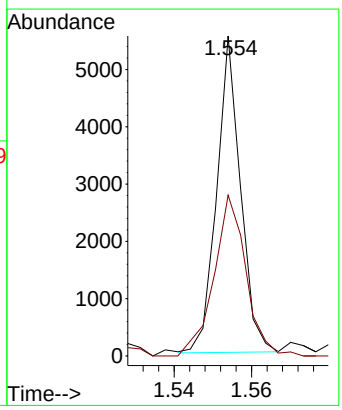


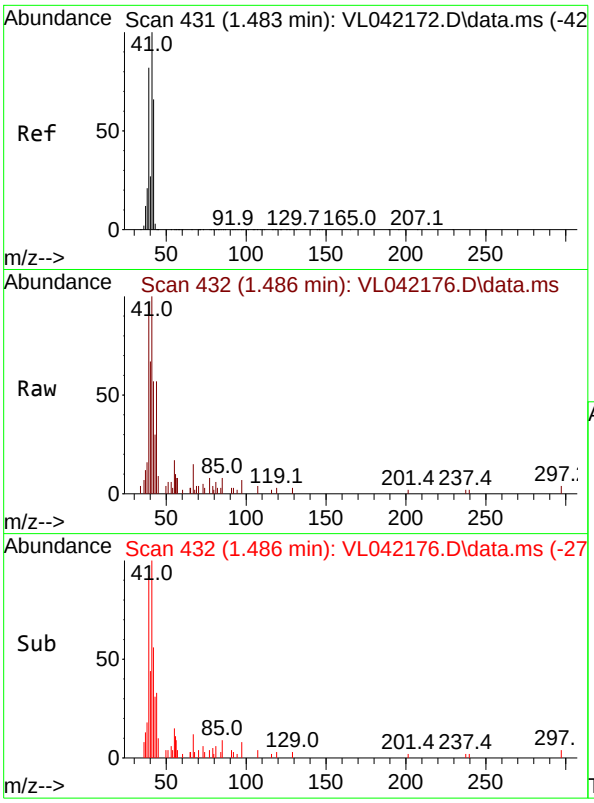


#8
Dichlorotetrafluoroethane
Concen: 0.104 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 85 Resp: 2353

Ion	Ratio	Lower	Upper
85	100		
135	71.7	52.4	78.6



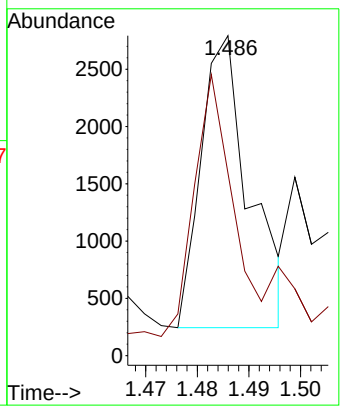


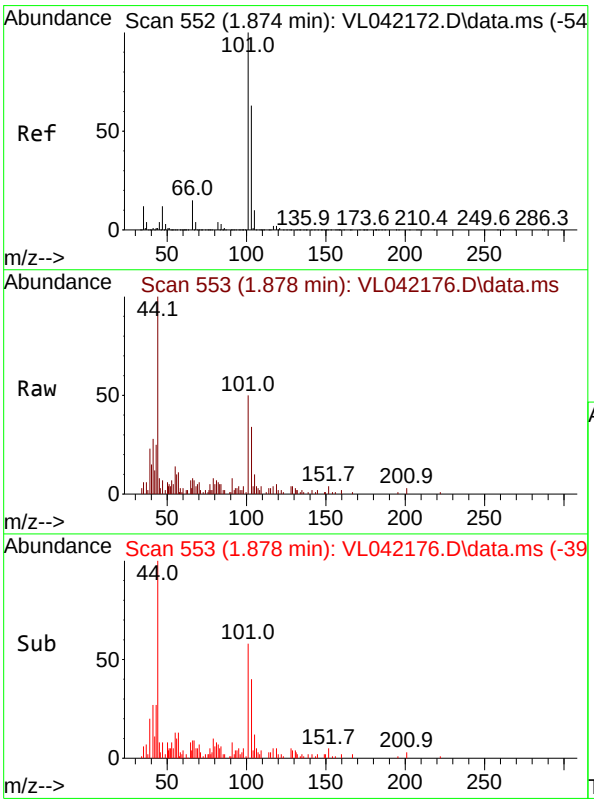
#9
Propene
Concen: 0.135 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 41 Resp: 1664

Ion	Ratio	Lower	Upper
41	100		
42	115.3	55.4	83.2#

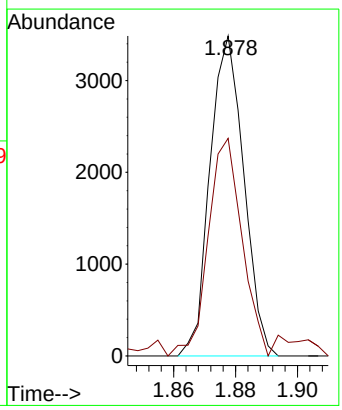


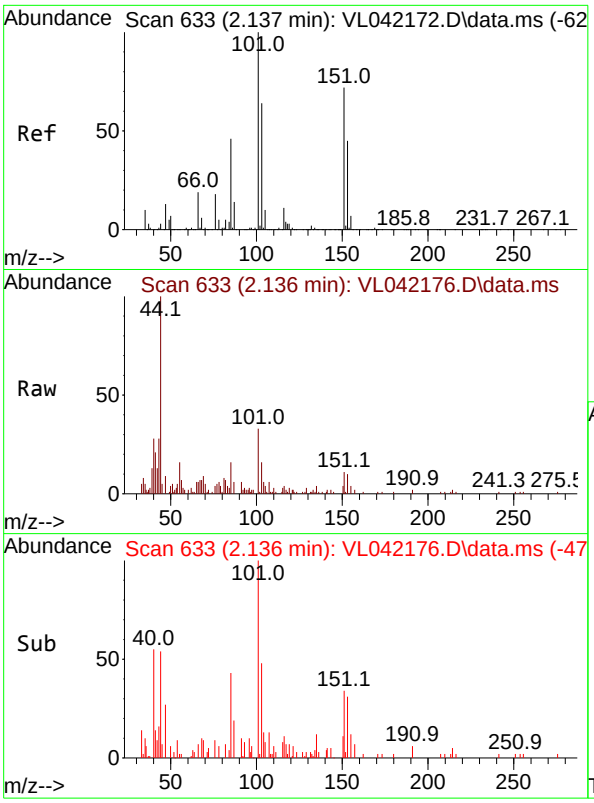


#11
Trichlorofluoromethane
Concen: 0.102 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:101 Resp: 2644

Ion	Ratio	Lower	Upper
101	100		
103	64.7	50.2	75.2



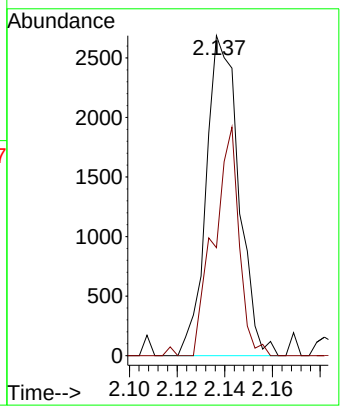


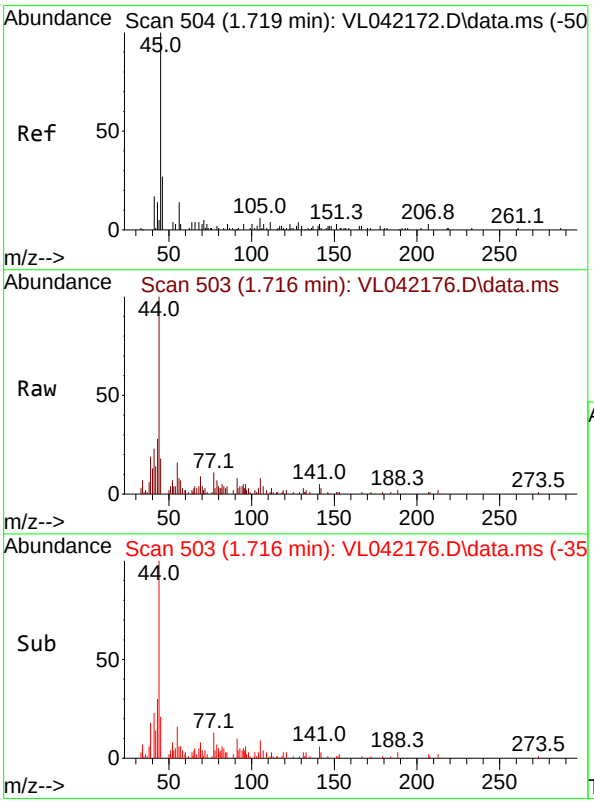
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.120 ppbv
RT: 2.136 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:101 Resp: 2551

Ion	Ratio	Lower	Upper
101	100		
151	55.7	57.1	85.7#

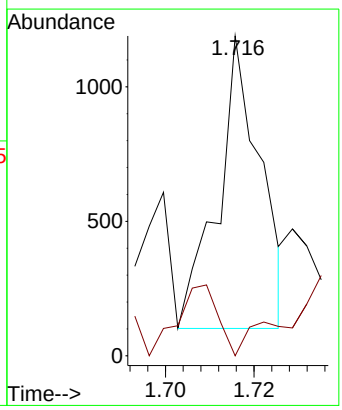


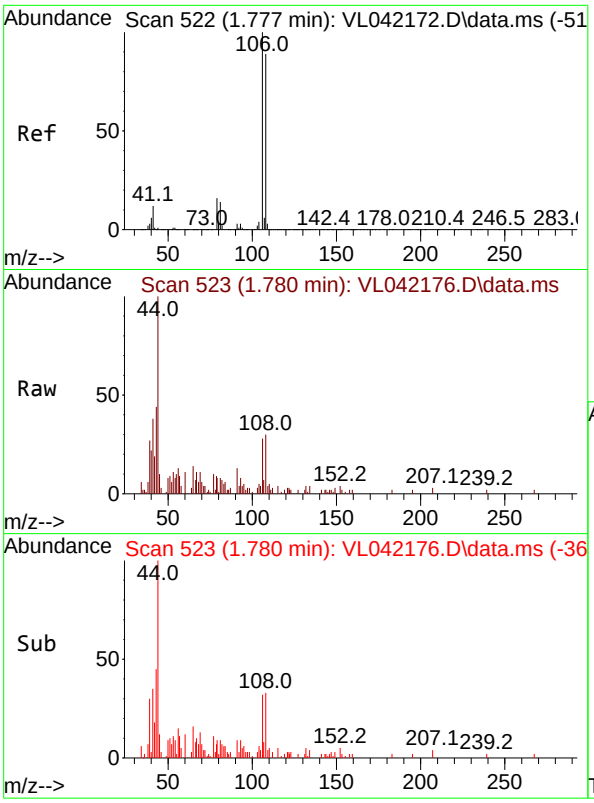


#13
Ethanol
Concen: 0.750 ppbv
RT: 1.716 min Scan# 503
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 45 Resp: 721

Ion	Ratio	Lower	Upper
45	100		
46	22.9	20.2	80.8



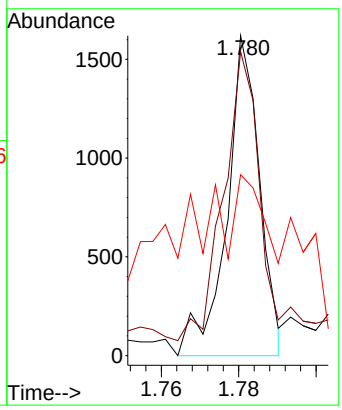


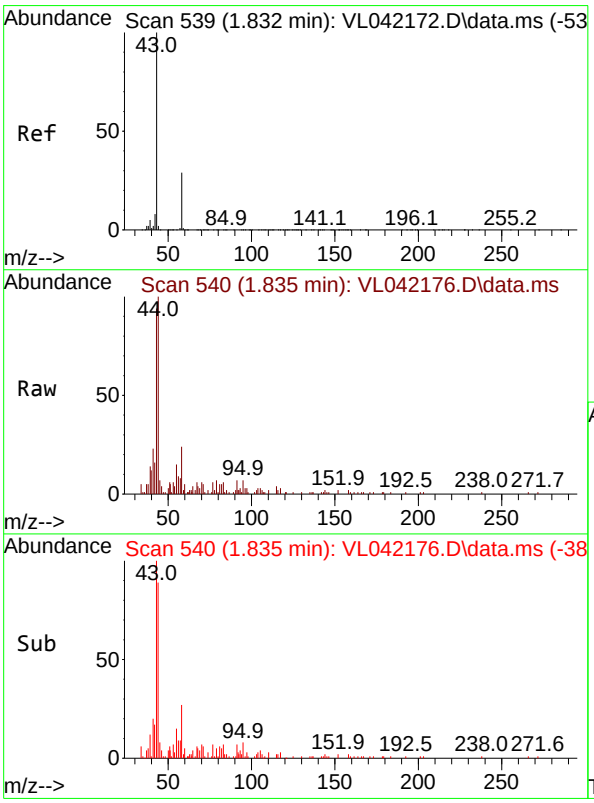
#14
Bromoethene
Concen: 0.117 ppbv
RT: 1.780 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:108 Resp: 956

Ion	Ratio	Lower	Upper
108	100		
106	177.0	86.8	130.2#
79	120.6	15.0	22.6#

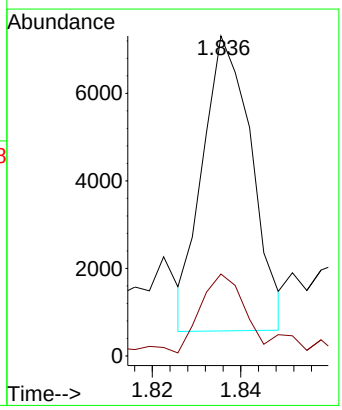


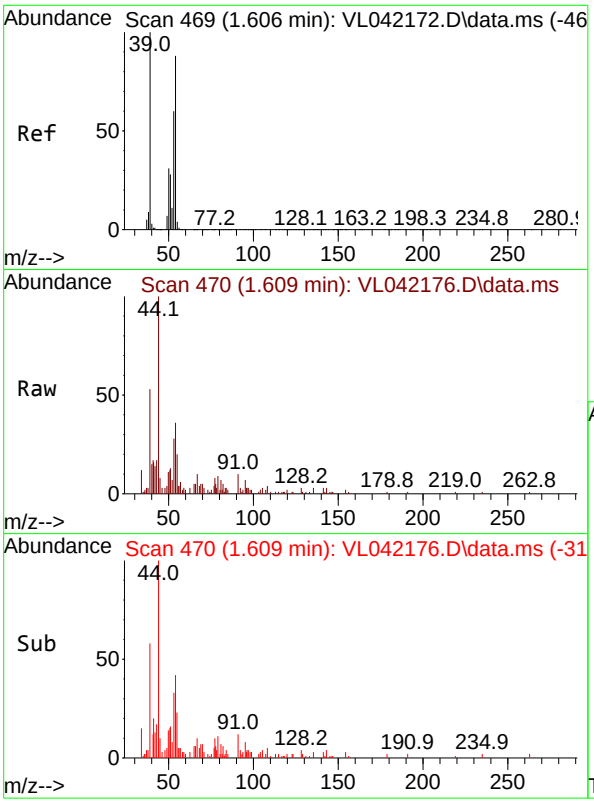


#15
Acetone
Concen: 0.205 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 5179

Ion	Ratio	Lower	Upper
43	100		
58	33.1	23.2	34.8



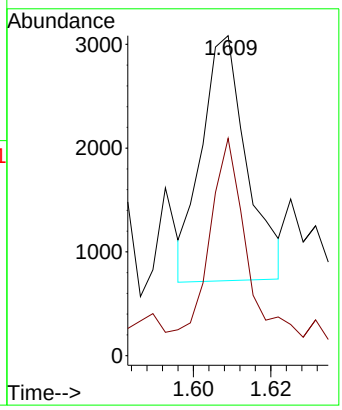


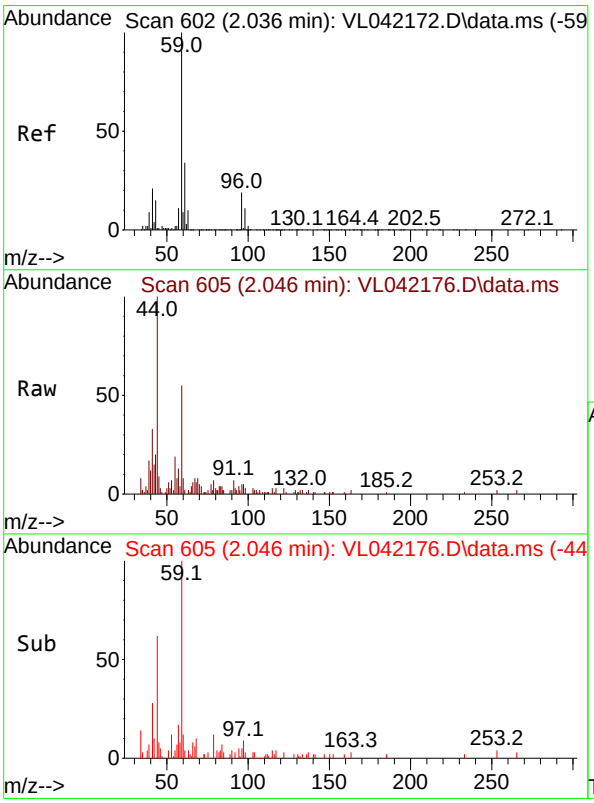
#16
1,3-Butadiene
Concen: 0.168 ppbv
RT: 1.609 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 39 Resp: 1912

Ion	Ratio	Lower	Upper
39	100		
54	70.7	60.7	91.1

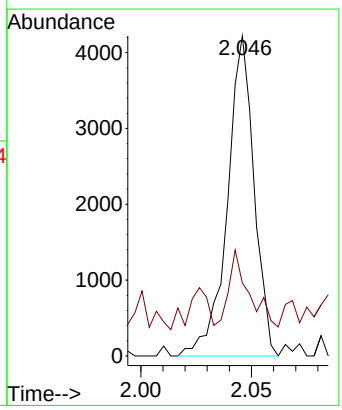


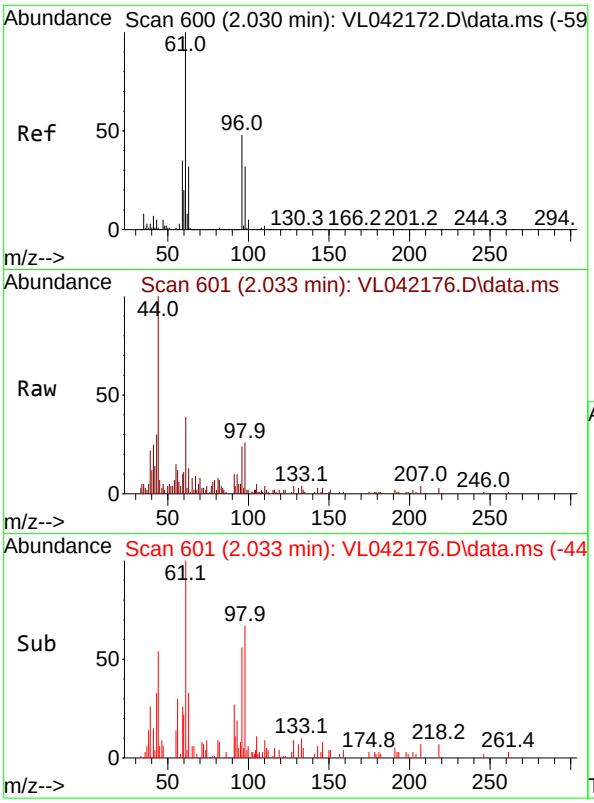


#17
tert-Butyl alcohol
Concen: 0.113 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 59 Resp: 3546

Ion	Ratio	Lower	Upper
59	100		
57	37.8	8.9	13.3#



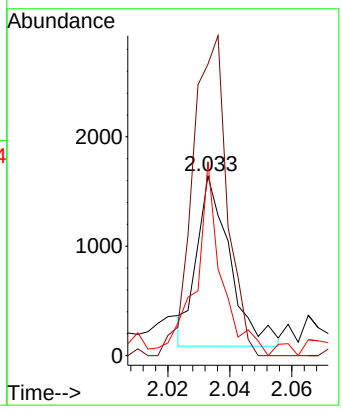


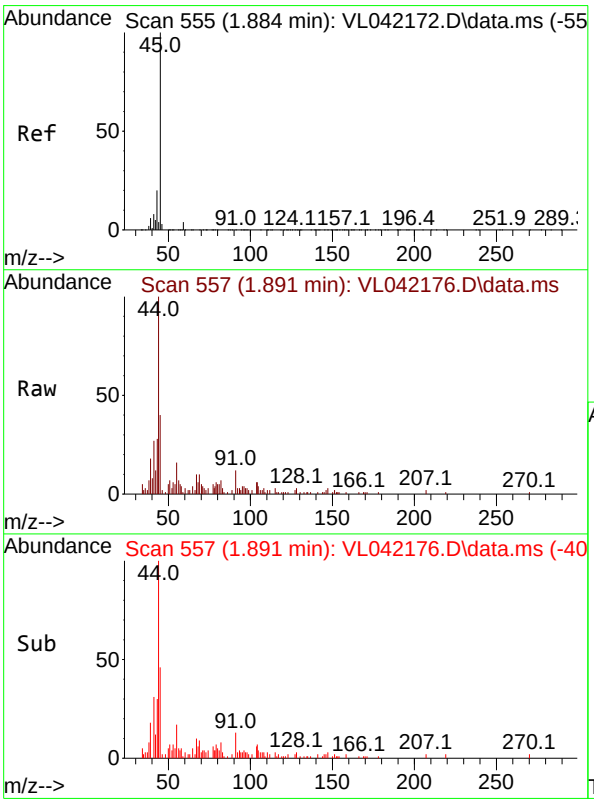
#18
1,1-Dichloroethene
Concen: 0.116 ppbv
RT: 2.033 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 96 Resp: 1155

Ion	Ratio	Lower	Upper
96	100		
61	179.9	167.6	251.4
98	112.6	53.5	80.3#

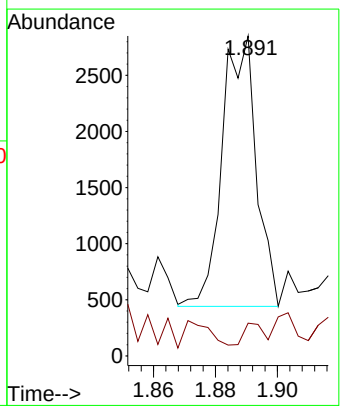


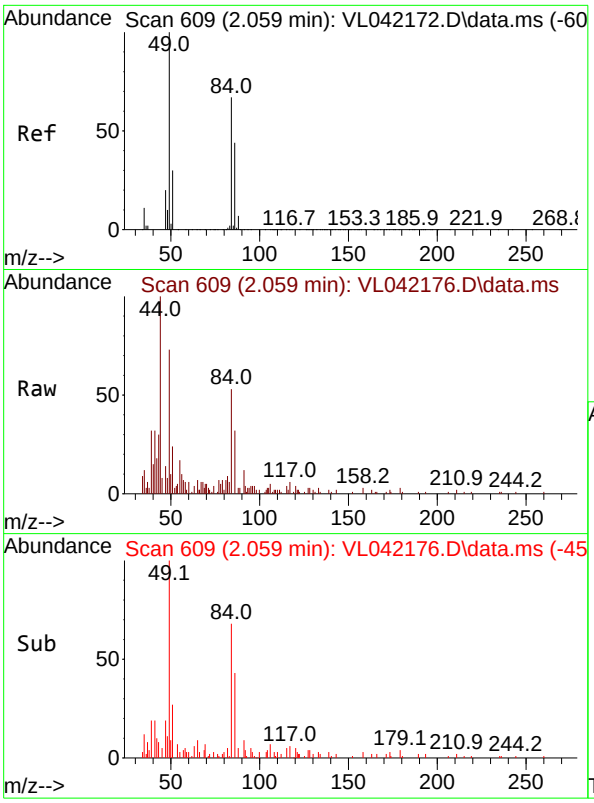


#19
Isopropyl Alcohol
Concen: 0.129 ppbv
RT: 1.891 min Scan# 557
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 45 Resp: 1838

Ion	Ratio	Lower	Upper
45	100		
58	12.5	36.9	55.3#



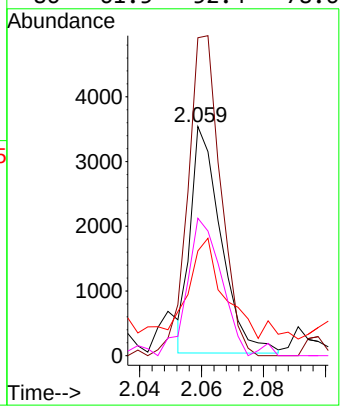


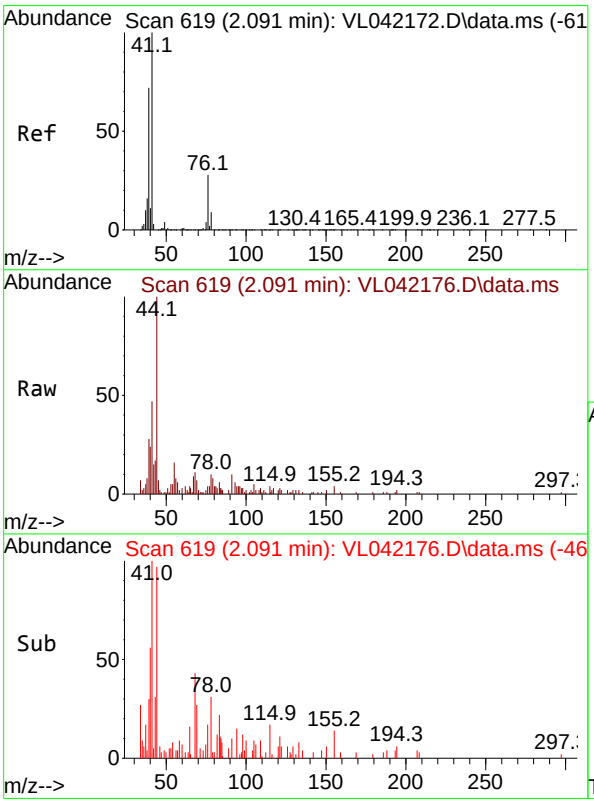
#20
Methylene Chloride
Concen: 0.254 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 84 Resp: 2388

Ion	Ratio	Lower	Upper
84	100		
49	132.5	120.2	180.4
51	37.3	37.4	56.0#
86	61.5	52.4	78.6

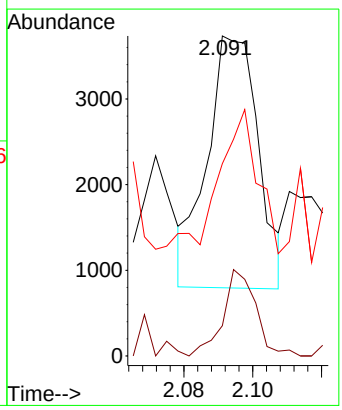


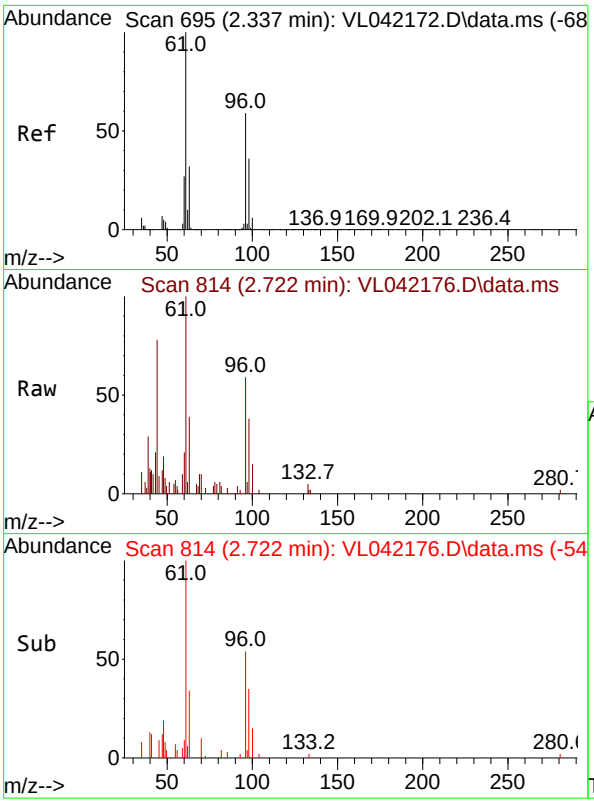


#21
Allyl Chloride
Concen: 0.171 ppbv
RT: 2.091 min Scan# 619
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 41 Resp: 3040

Ion	Ratio	Lower	Upper
41	100		
76	21.8	24.1	36.1#
39	98.7	61.1	91.7#



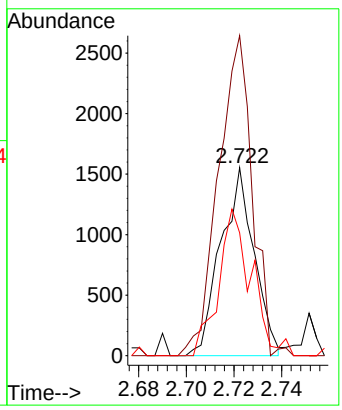


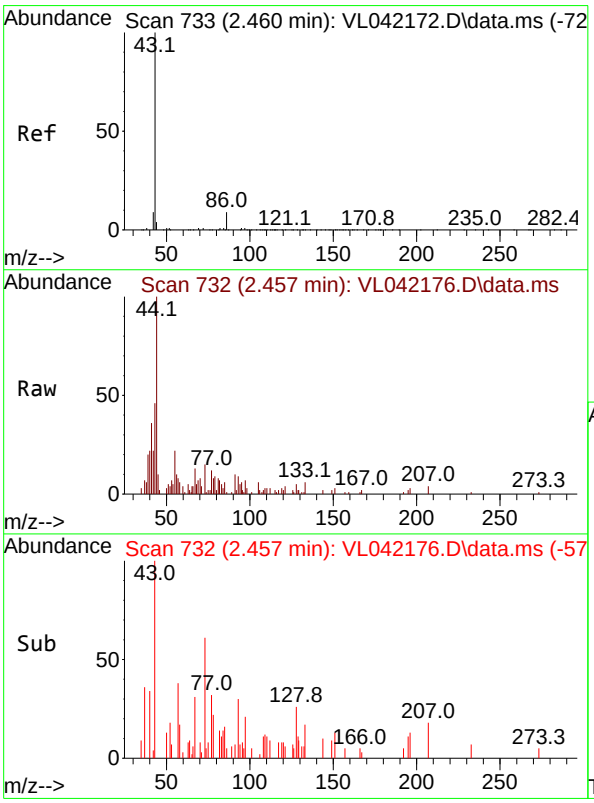
#22
trans-1,2-Dichloroethene
Concen: 0.130 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.385 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 96 Resp: 1512

Ion	Ratio	Lower	Upper
96	100		
61	170.3	136.6	204.8
98	65.4	49.4	74.2

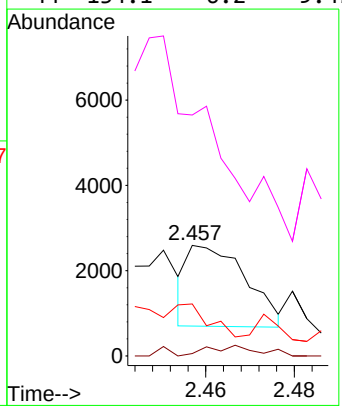


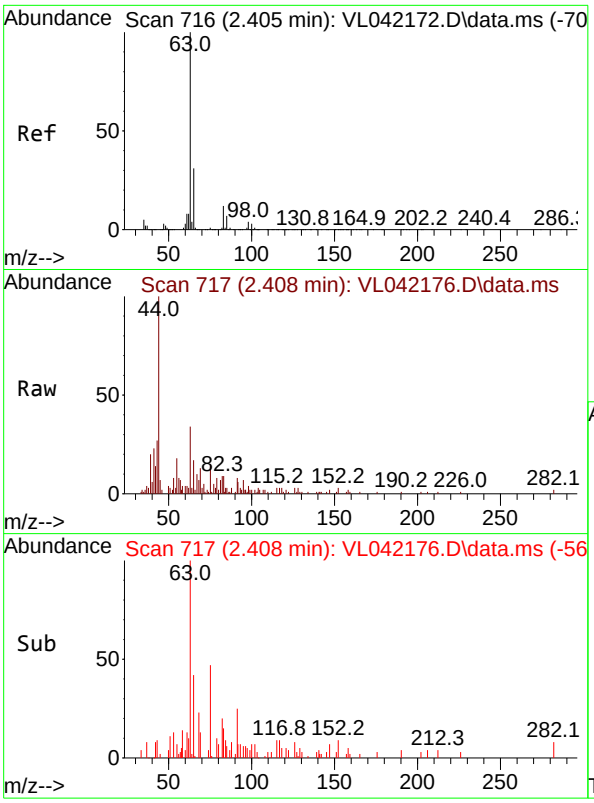


#23
Vinyl Acetate
Concen: 0.166 ppbv
RT: 2.457 min Scan# 732
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 1746

Ion	Ratio	Lower	Upper
43	100		
86	3.5	5.5	8.3#
42	32.0	8.6	13.0#
44	134.1	6.2	9.4#



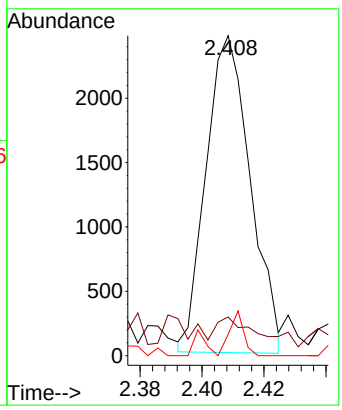


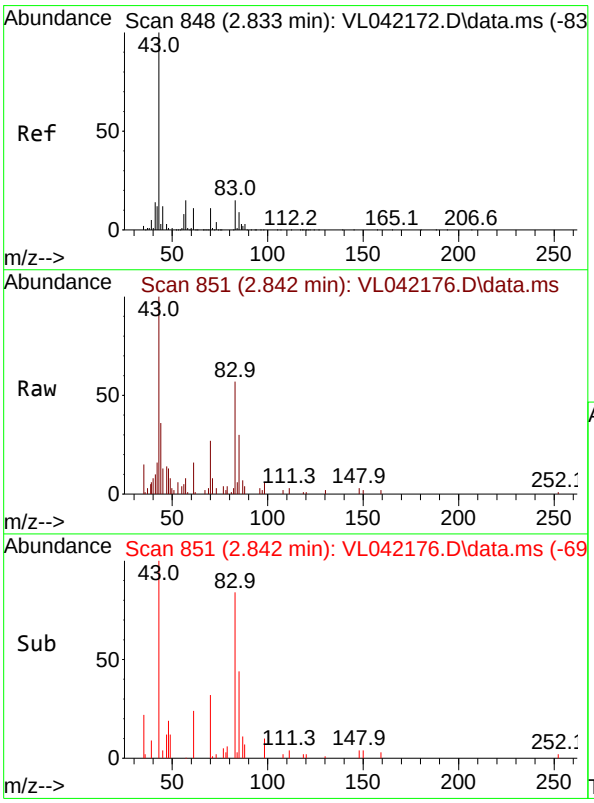
#24
1,1-Dichloroethane
Concen: 0.114 ppbv
RT: 2.408 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 63 Resp: 2446

Ion	Ratio	Lower	Upper
63	100		
98	6.3	2.3	6.8
100	6.9	1.6	4.7#

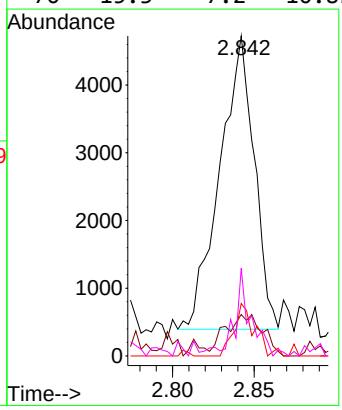


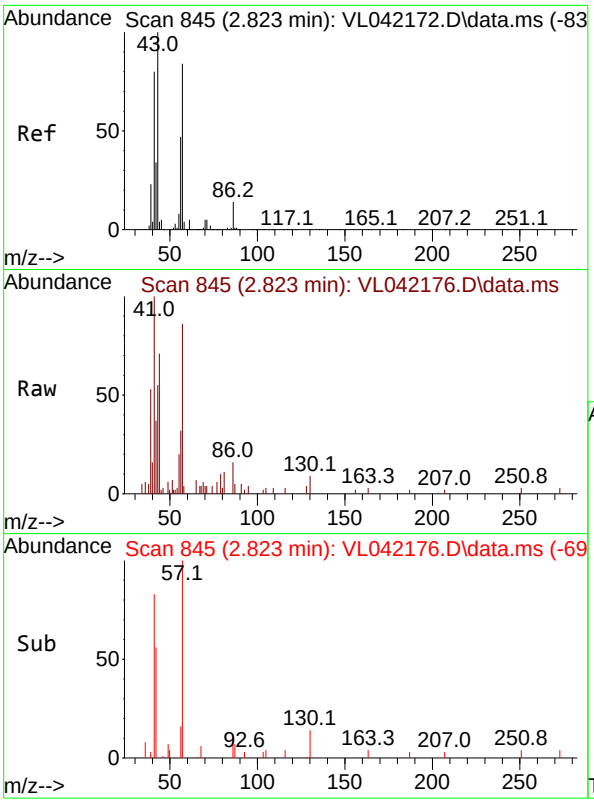


#25
Ethyl Acetate
Concen: 0.097 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 6359

Ion	Ratio	Lower	Upper
43	100		
45	22.8	8.2	12.2#
61	11.2	7.3	10.9#
70	15.3	7.2	10.8#



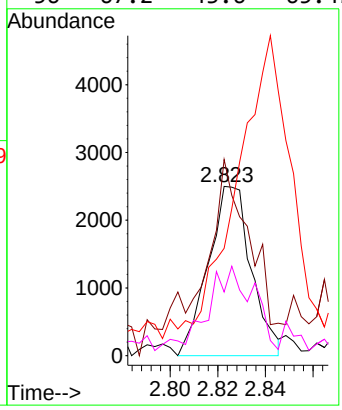


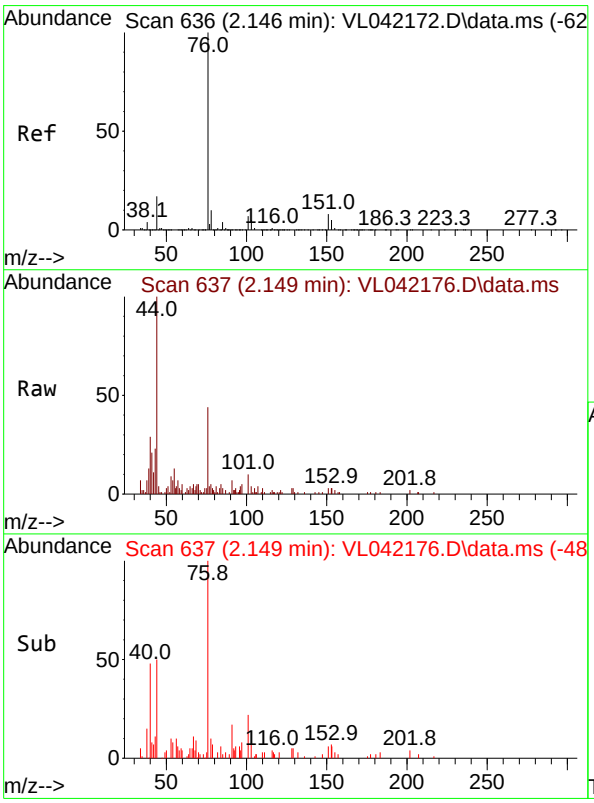
#26
Hexane
Concen: 0.123 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 57 Resp: 3126

Ion	Ratio	Lower	Upper
57	100		
41	96.0	76.6	114.8
43	0.0	207.8	311.8#
56	67.2	43.6	65.4#

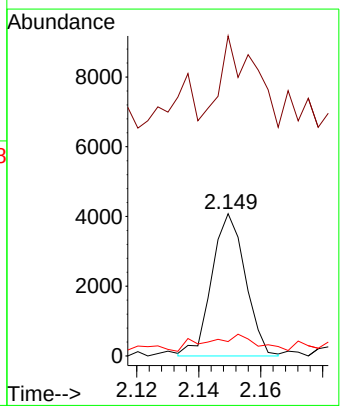


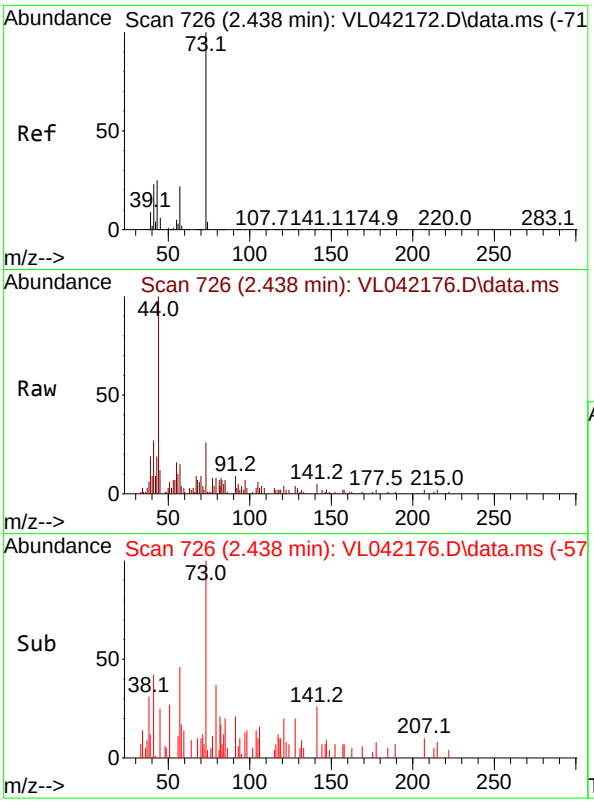


#27
Carbon Disulfide
Concen: 0.113 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 76 Resp: 3075

Ion	Ratio	Lower	Upper
76	100		
44	436.3	14.7	22.1#
78	28.7	9.3	13.9#



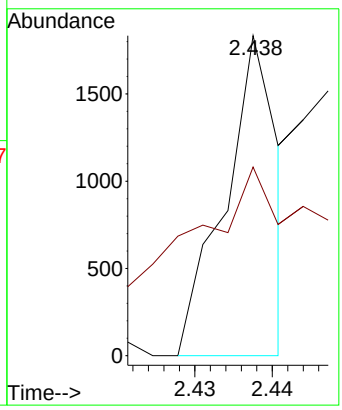


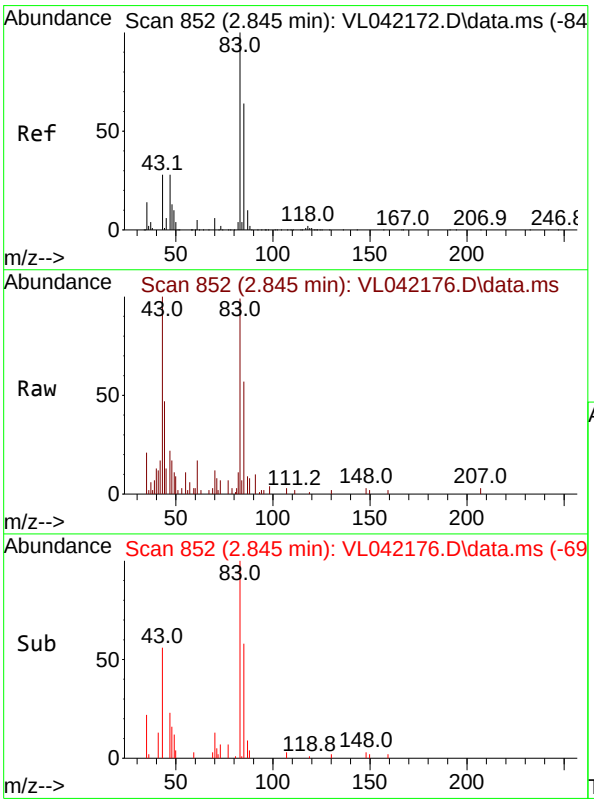
#28
Methyl tert-Butyl Ether
Concen: 0.055 ppbv
RT: 2.438 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 73 Resp: 875

Ion	Ratio	Lower	Upper
73	100		
57	0.0	20.5	30.7#

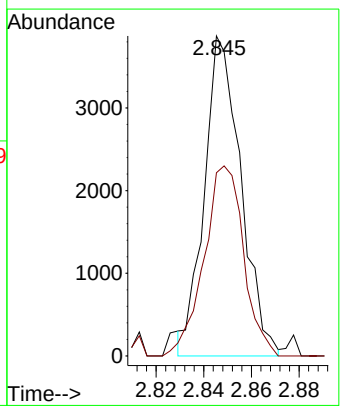


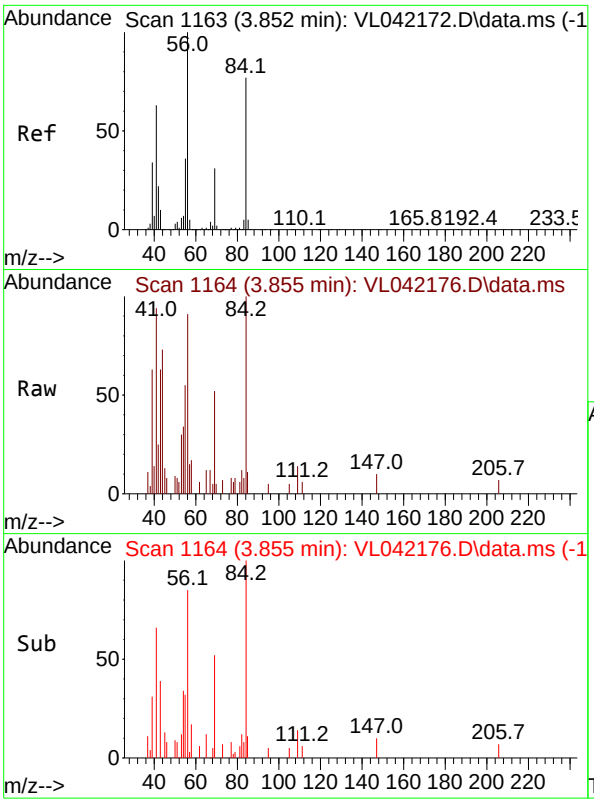


#29
Chloroform
Concen: 0.111 ppbv
RT: 2.845 min Scan# 852
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 83 Resp: 4120

Ion	Ratio	Lower	Upper
83	100		
85	58.4	51.4	77.2



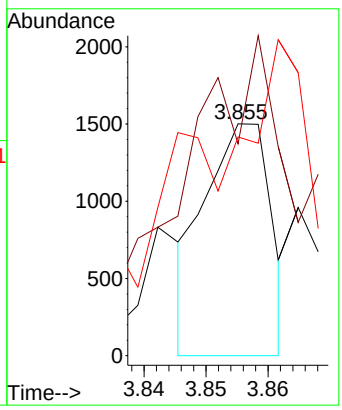


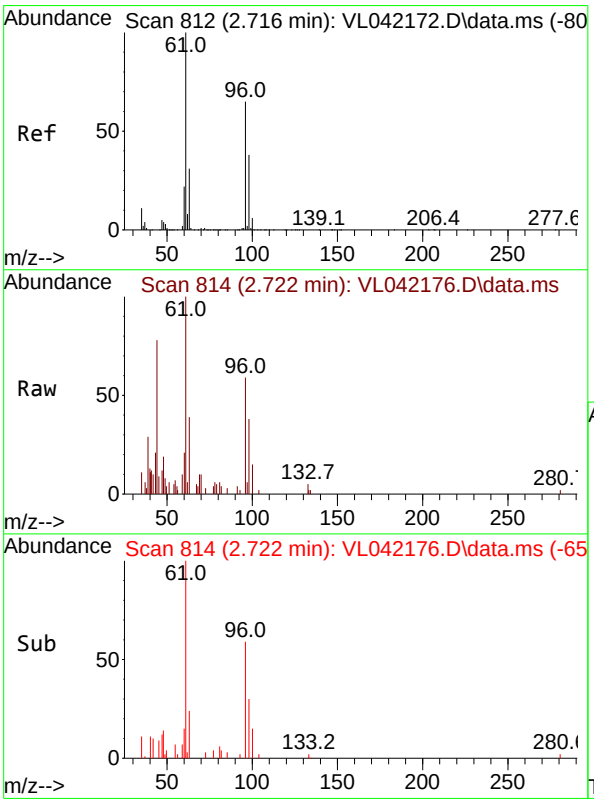
#30
Cyclohexane
Concen: 0.051 ppbv
RT: 3.855 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 84 Resp: 1113

Ion	Ratio	Lower	Upper
84	100		
56	0.0	102.8	154.2#
41	0.0	66.5	99.7#

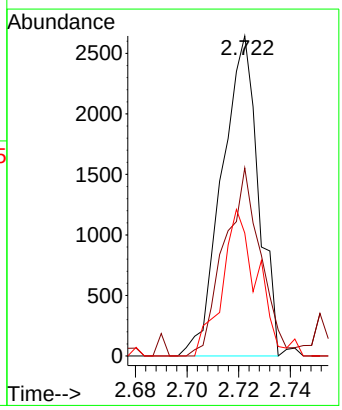


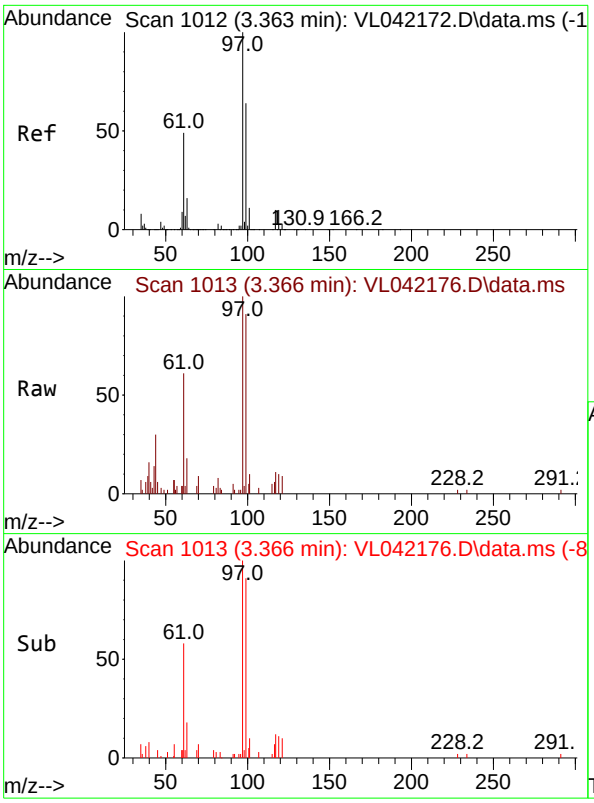


#31
cis-1,2-Dichloroethene
Concen: 0.101 ppbv
RT: 2.722 min Scan# 814
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 61 Resp: 2587

Ion	Ratio	Lower	Upper
61	100		
96	58.7	51.8	77.8
98	38.4	30.6	46.0



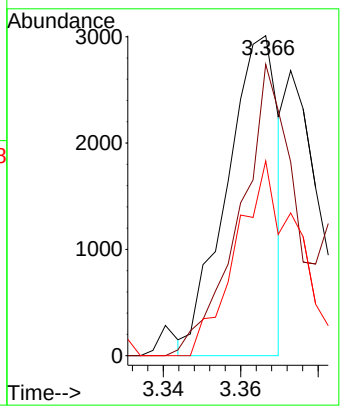


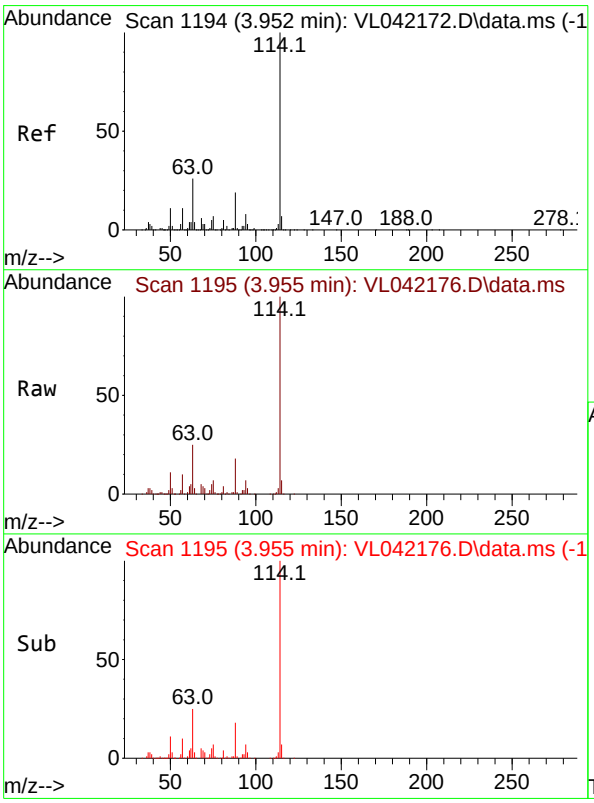
#32
1,1,1-Trichloroethane
Concen: 0.065 ppbv
RT: 3.366 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 97 Resp: 2773

Ion	Ratio	Lower	Upper
97	100		
99	111.5	51.5	77.3#
61	73.8	38.7	58.1#

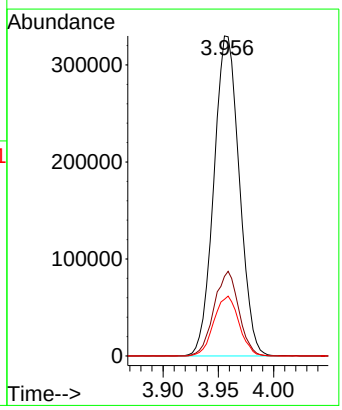


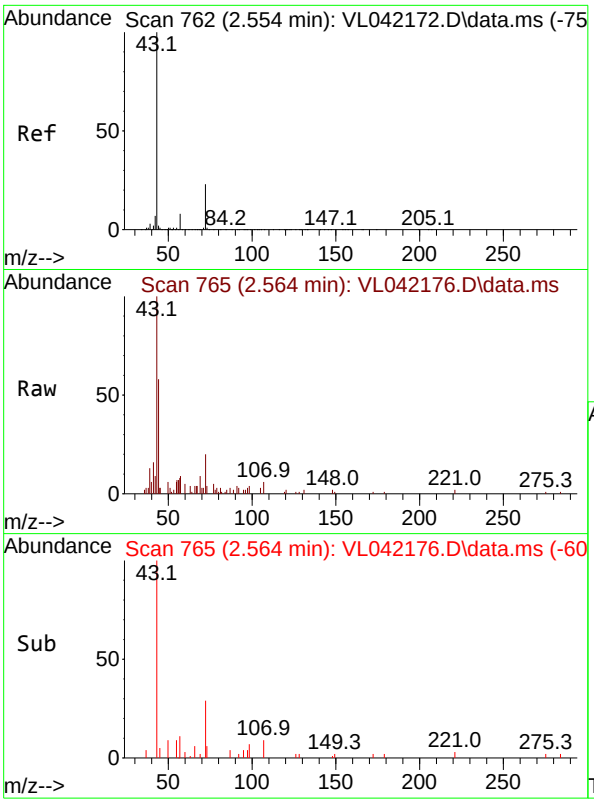


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:114 Resp: 528028

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.5	15.0	22.4



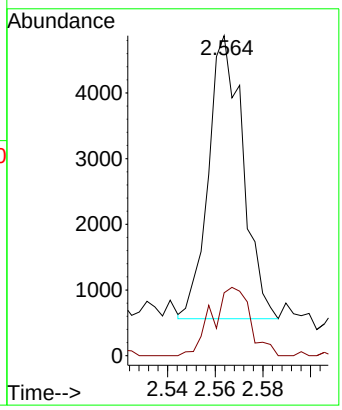


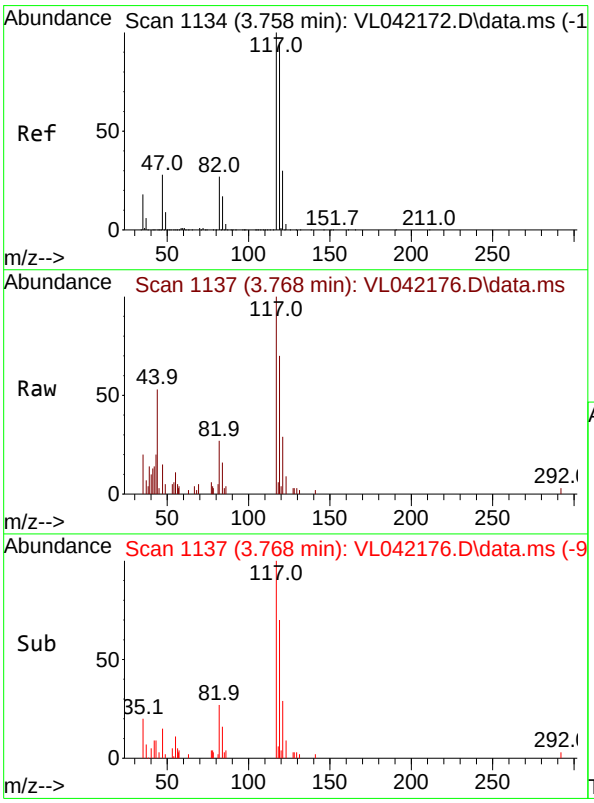
#34
2-Butanone
Concen: 0.113 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 43 Resp: 4331

Ion	Ratio	Lower	Upper
43	100		
72	27.0	18.2	27.2

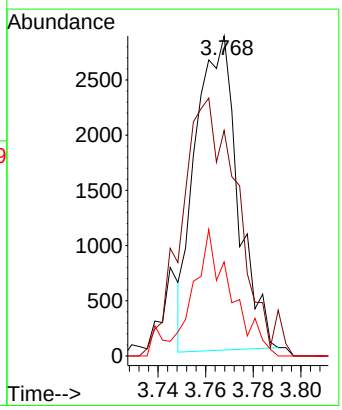


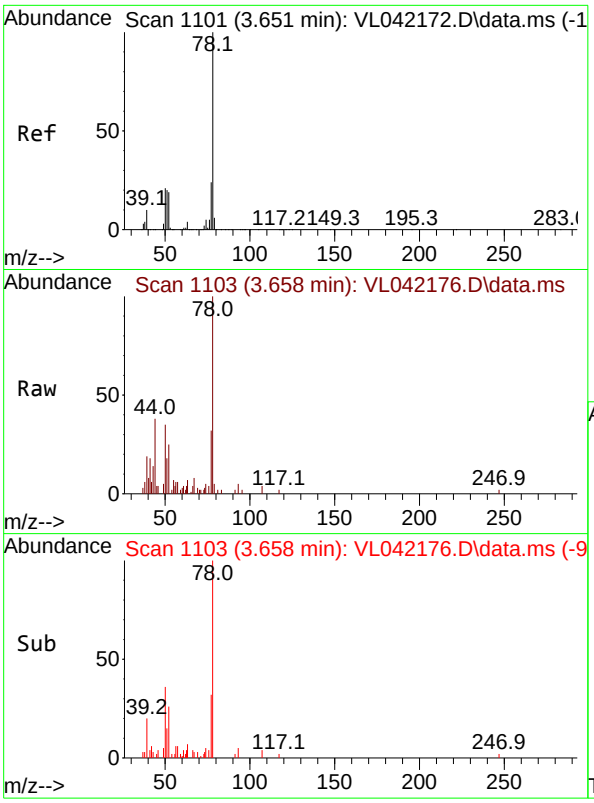


#35
Carbon Tetrachloride
Concen: 0.087 ppbv
RT: 3.768 min Scan# 1137
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:117 Resp: 3523

Ion	Ratio	Lower	Upper
117	100		
119	57.7	76.2	114.2#
121	30.1	24.2	36.4



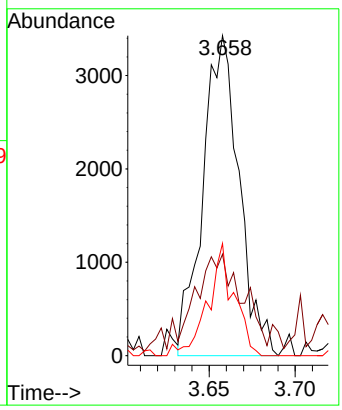


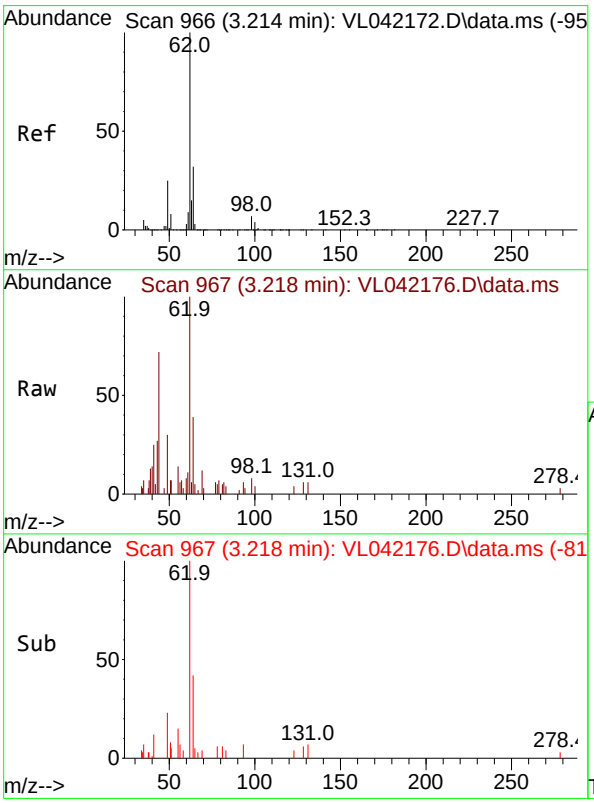
#36
Benzene
Concen: 0.096 ppbv
RT: 3.658 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 78 Resp: 5031

Ion	Ratio	Lower	Upper
78	100		
77	27.2	19.1	28.7
50	35.0	16.6	24.8#

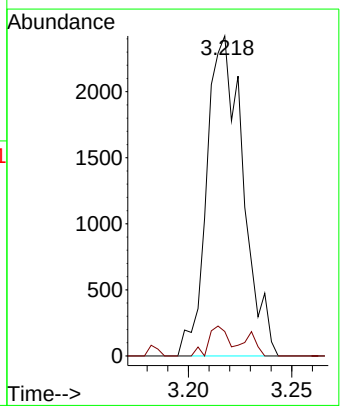


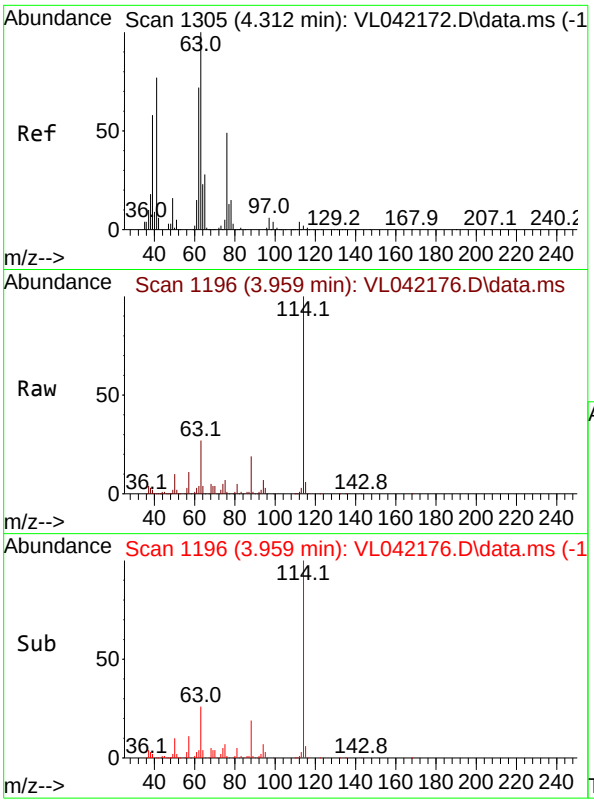


#37
1,2-Dichloroethane
Concen: 0.098 ppbv
RT: 3.218 min Scan# 967
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 62 Resp: 2942

Ion	Ratio	Lower	Upper
62	100		
98	7.7	5.4	8.2



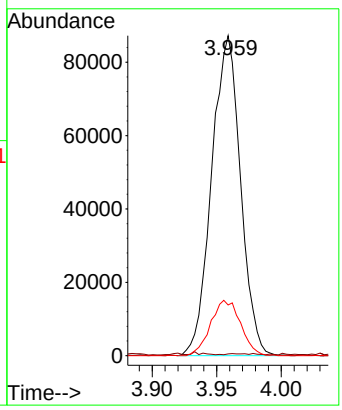


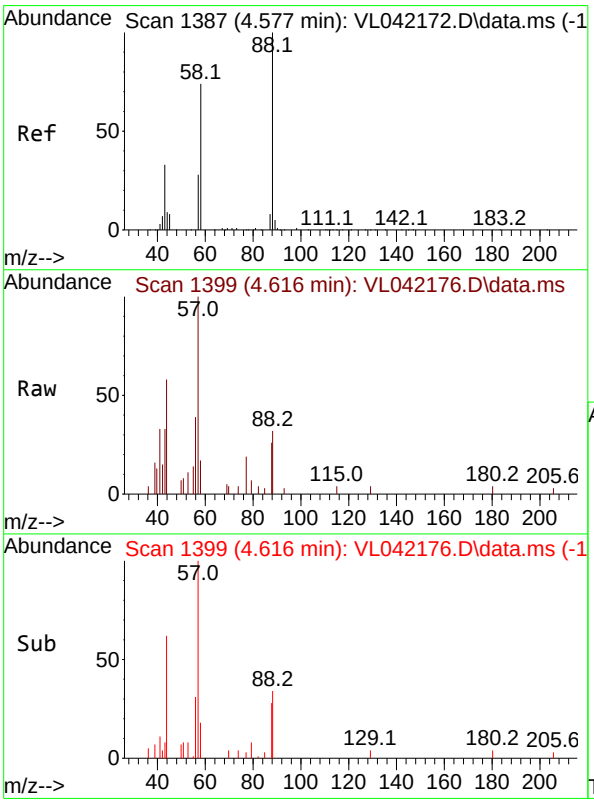
#39
1,2-Dichloropropane
Concen: 7.123 ppbv
RT: 3.959 min Scan# 1
Delta R.T. -0.353 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 63 Resp: 135792

Ion	Ratio	Lower	Upper
63	100		
41	0.3	61.7	92.5#
62	15.9	57.6	86.4#

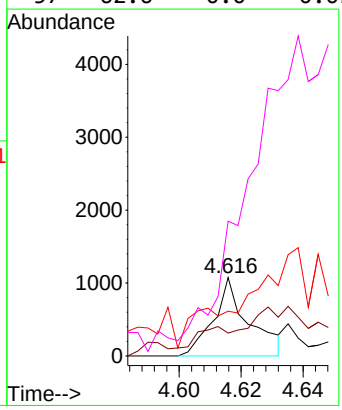


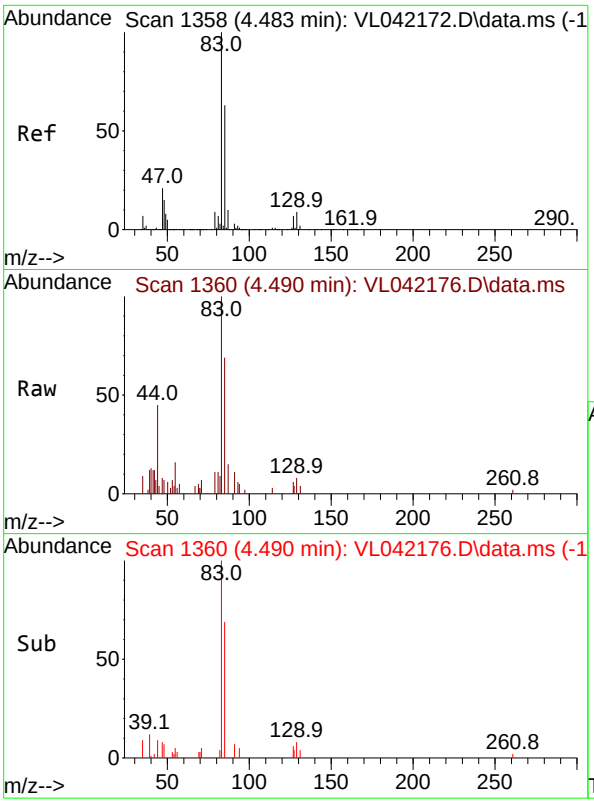


#40
1,4-Dioxane
Concen: 0.085 ppbv
RT: 4.616 min Scan# 1399
Delta R.T. 0.039 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 88 Resp: 843

Ion	Ratio	Lower	Upper
88	100		
58	0.0	62.7	94.1#
43	47.9	23.0	34.4#
57	62.6	0.0	0.0#



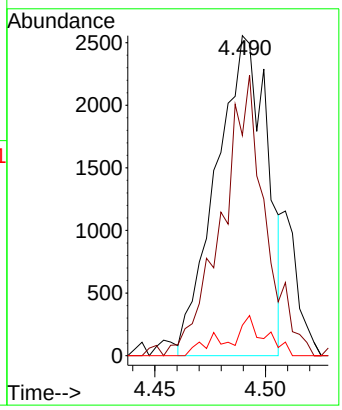


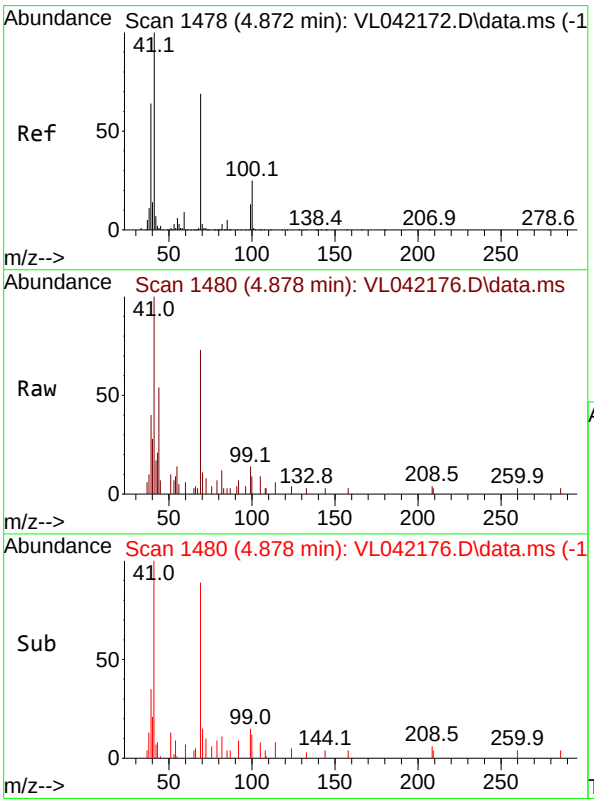
#42
Bromodichloromethane
Concen: 0.099 ppbv
RT: 4.490 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 4103

Ion	Ratio	Lower	Upper
83	100		
85	67.5	50.5	75.7
127	9.8	5.9	8.9#

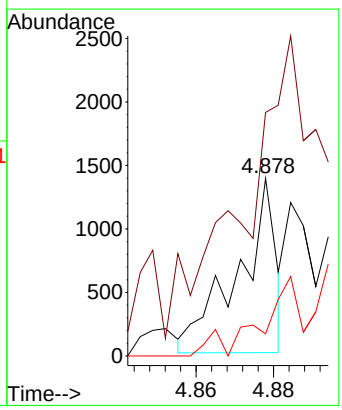


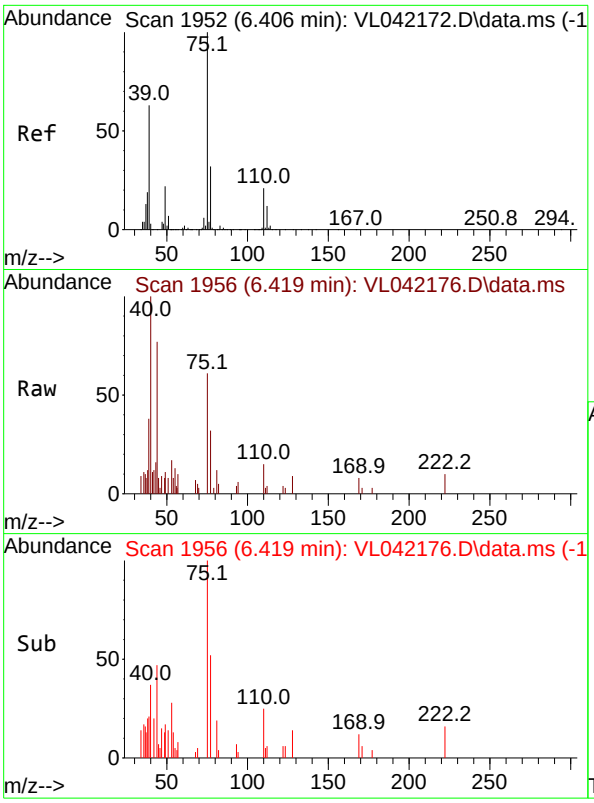


#43
Methyl Methacrylate
Concen: 0.042 ppbv
RT: 4.878 min Scan# 1480
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 69 Resp: 930

Ion	Ratio	Lower	Upper
69	100		
41	0.0	123.8	185.6#
100	0.0	28.4	42.6#



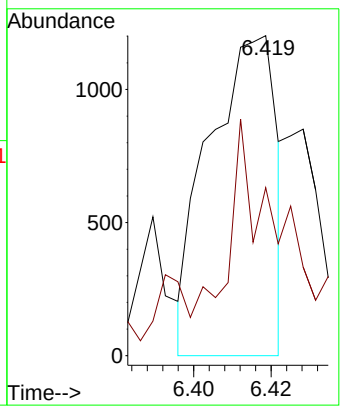


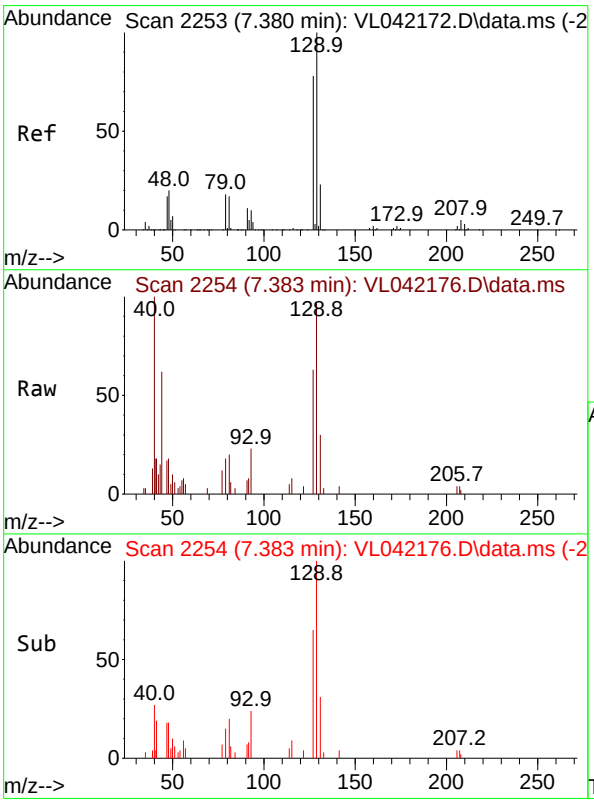
#45
t-1,3-Dichloropropene
Concen: 0.061 ppbv
RT: 6.419 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 75 Resp: 1449

Ion	Ratio	Lower	Upper
75	100		
77	52.5	26.0	39.0#

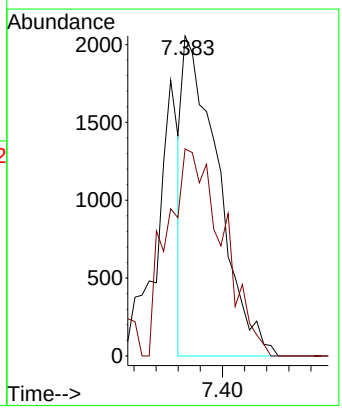


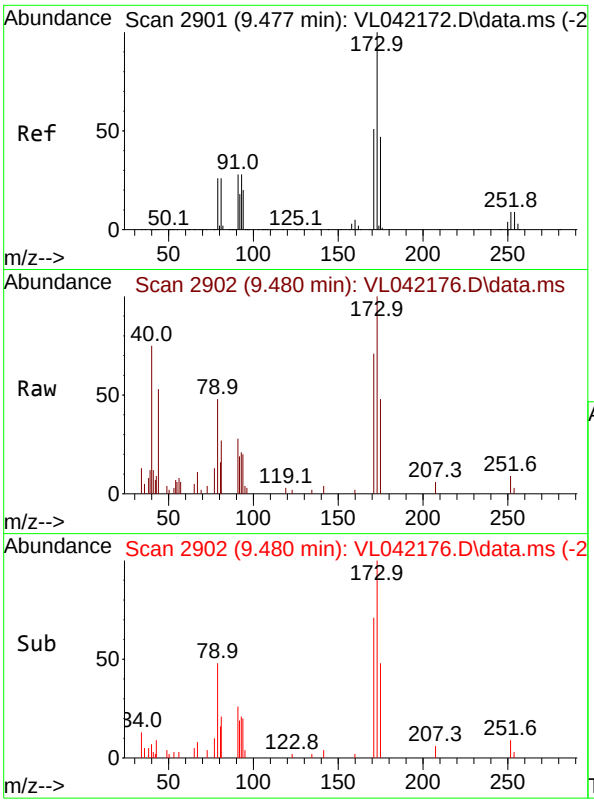


#48
Dibromochloromethane
Concen: 0.067 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:129 Resp: 2284

Ion	Ratio	Lower	Upper
129	100		
127	106.0	39.1	117.2



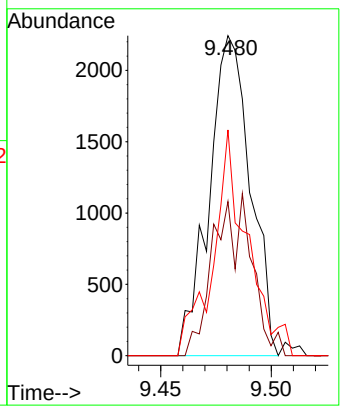


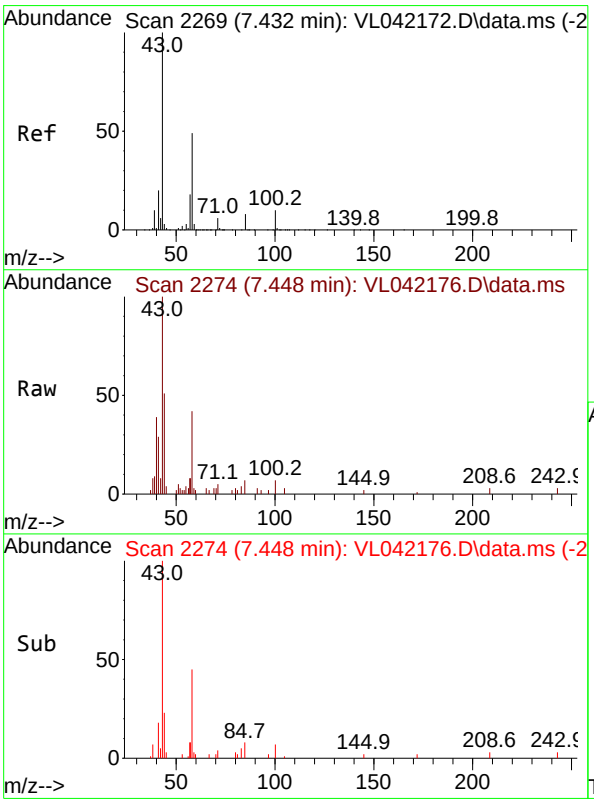
#49
Bromoform
Concen: 0.095 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:173 Resp: 2928

Ion	Ratio	Lower	Upper
173	100		
175	46.4	38.6	57.8
171	58.1	41.8	62.6

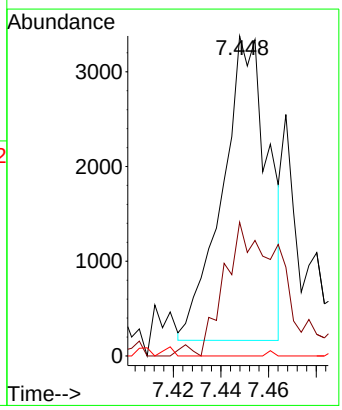


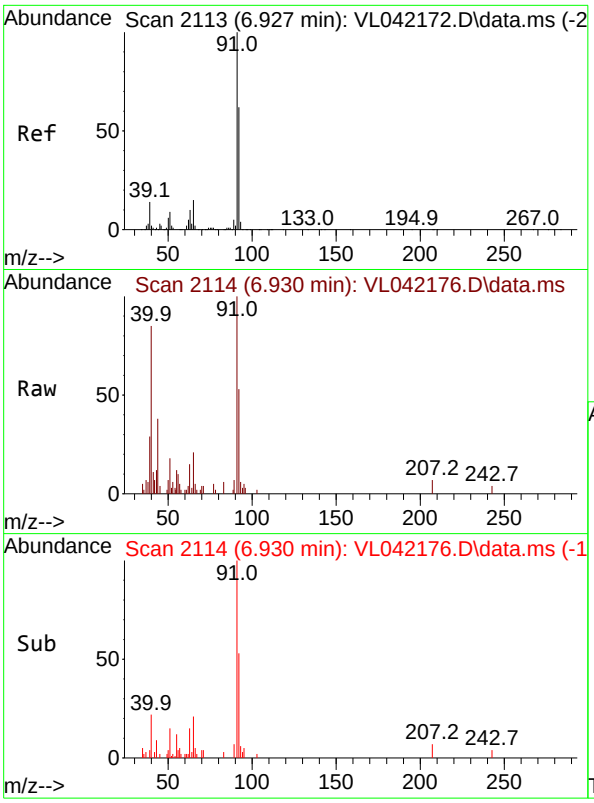


#51
2-Hexanone
Concen: 0.085 ppbv
RT: 7.448 min Scan# 2274
Delta R.T. 0.016 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 4284

Ion	Ratio	Lower	Upper
43	100		
58	58.3	39.7	59.5
98	0.0	0.1	0.1#



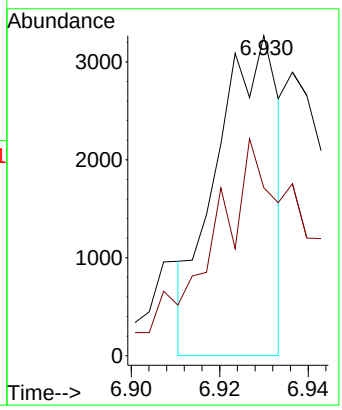


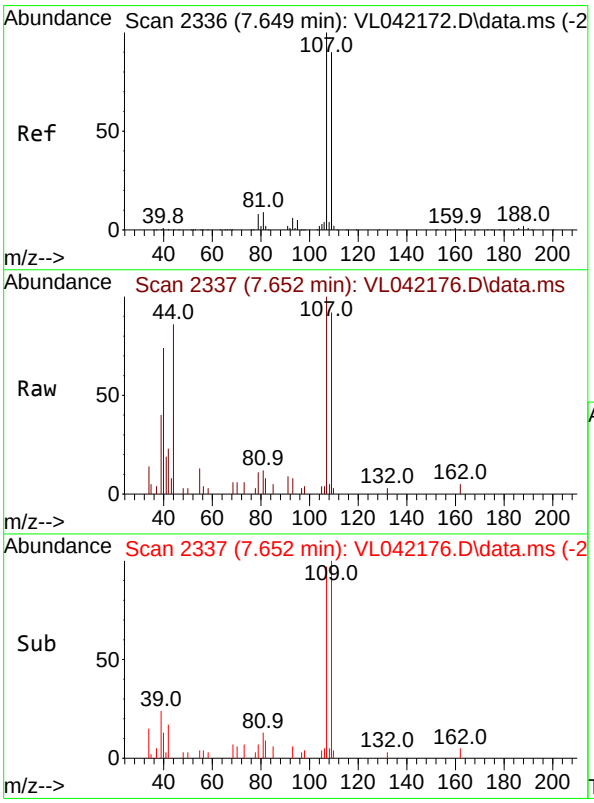
#53
Toluene
Concen: 0.051 ppbv
RT: 6.930 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 3144

Ion	Ratio	Lower	Upper
91	100		
92	117.7	48.4	72.6#

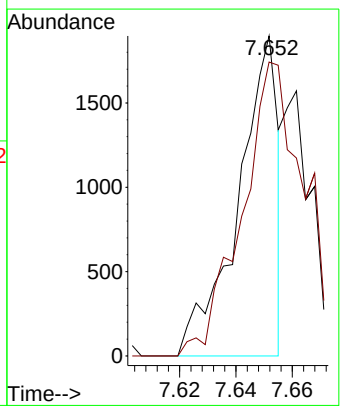


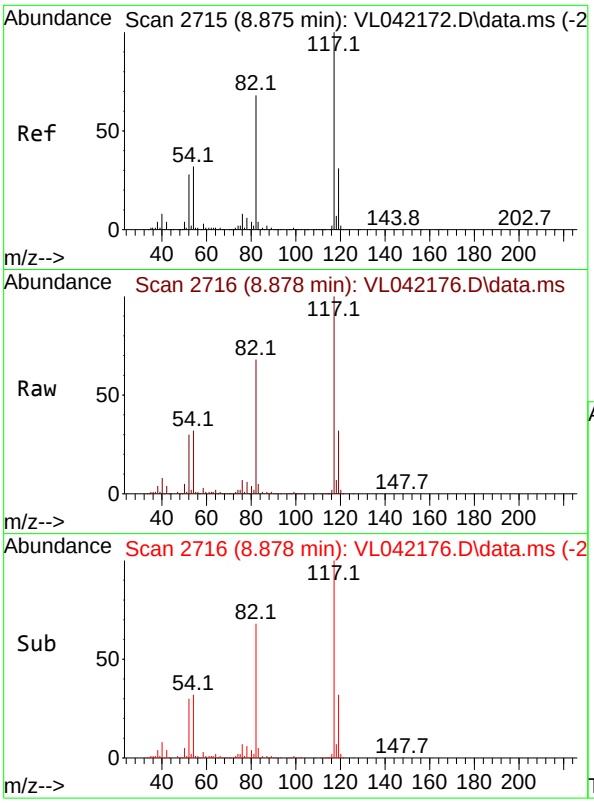


#54
1,2-Dibromoethane
Concen: 0.066 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:107 Resp: 1864

Ion	Ratio	Lower	Upper
107	100		
109	91.8	72.2	108.4



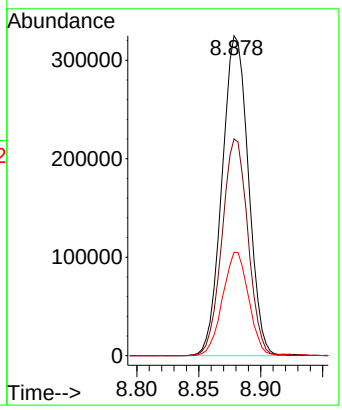


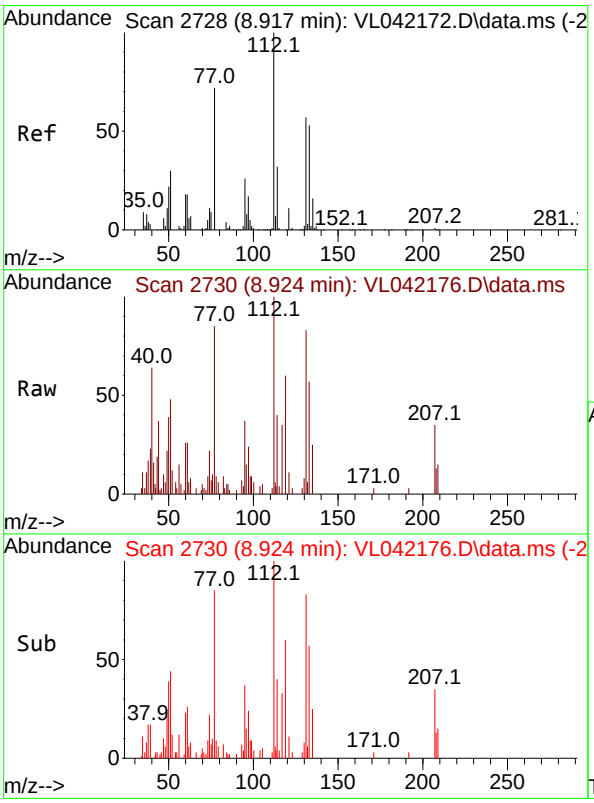
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:117 Resp: 481506

Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	32.3	25.5	38.3

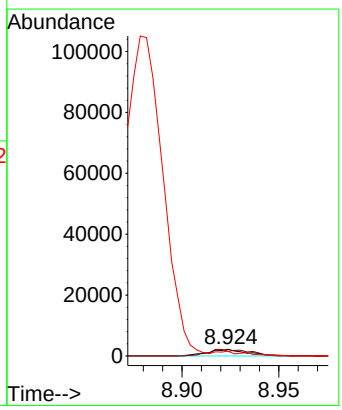


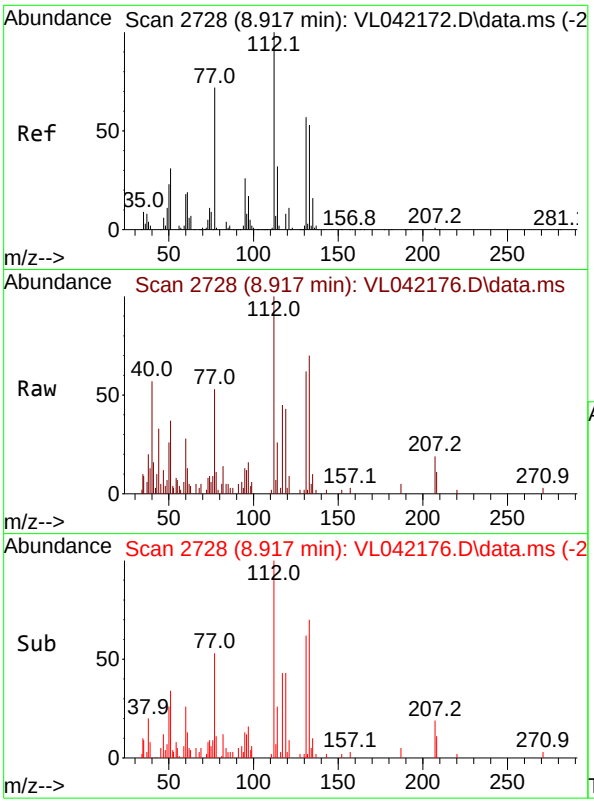


#56
1,1,1,2-Tetrachloroethane
Concen: 0.112 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:131 Resp: 2963

Ion	Ratio	Lower	Upper
131	100		
133	115.5	76.6	114.8#
119	5254.7	49.8	74.6#



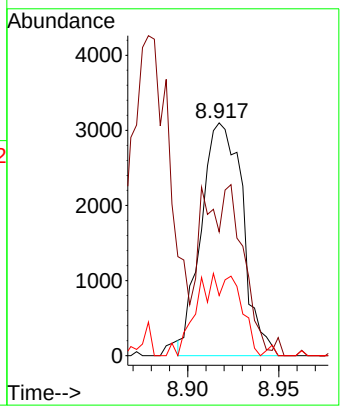


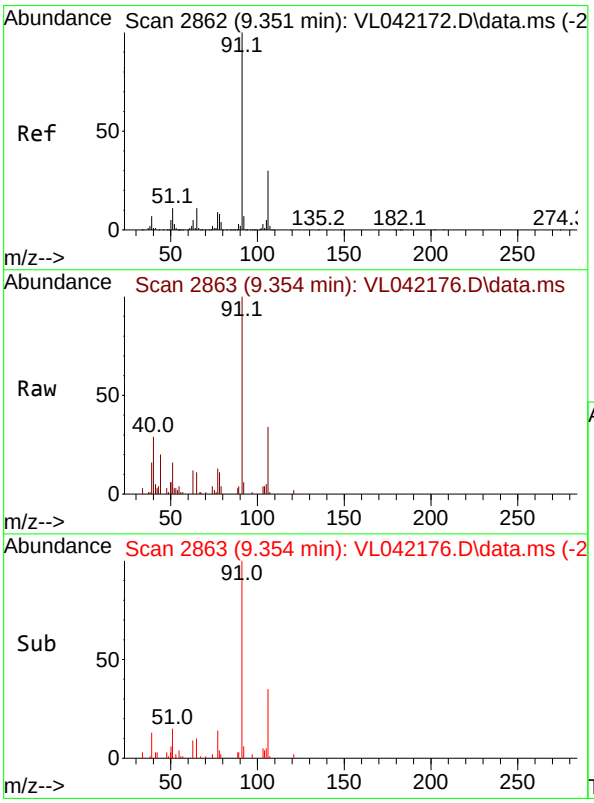
#57
Chlorobenzene
Concen: 0.107 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:112 Resp: 4904

Ion	Ratio	Lower	Upper
112	100		
77	45.4	58.2	87.2#
114	25.8	29.1	35.5#

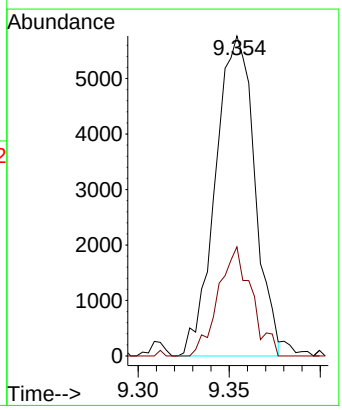


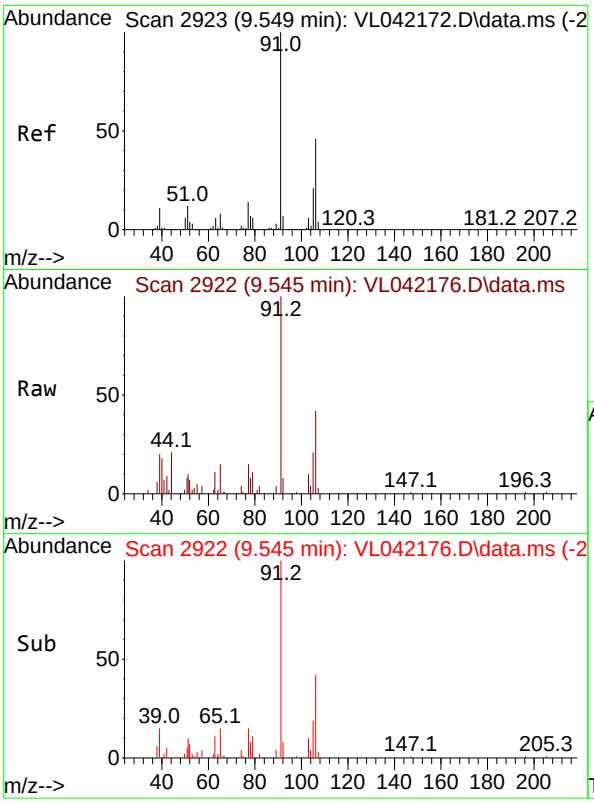


#58
Ethyl Benzene
Concen: 0.101 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 8648

Ion	Ratio	Lower	Upper
91	100		
106	34.1	24.2	36.2



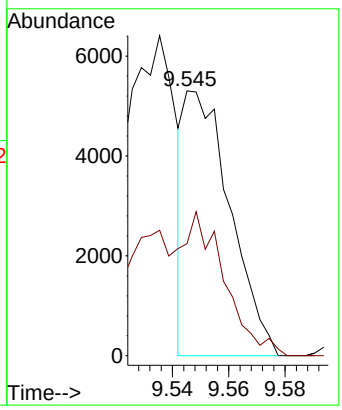


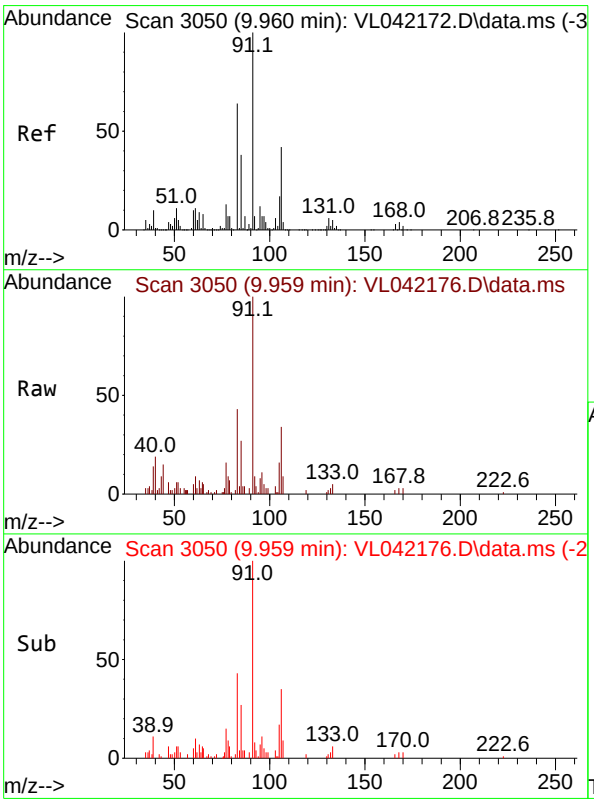
#59
m/p-Xylene
Concen: 0.088 ppbv
RT: 9.545 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 6005

Ion	Ratio	Lower	Upper
91	100		
106	103.4	36.4	54.6#

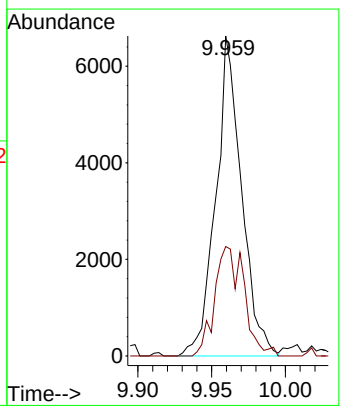


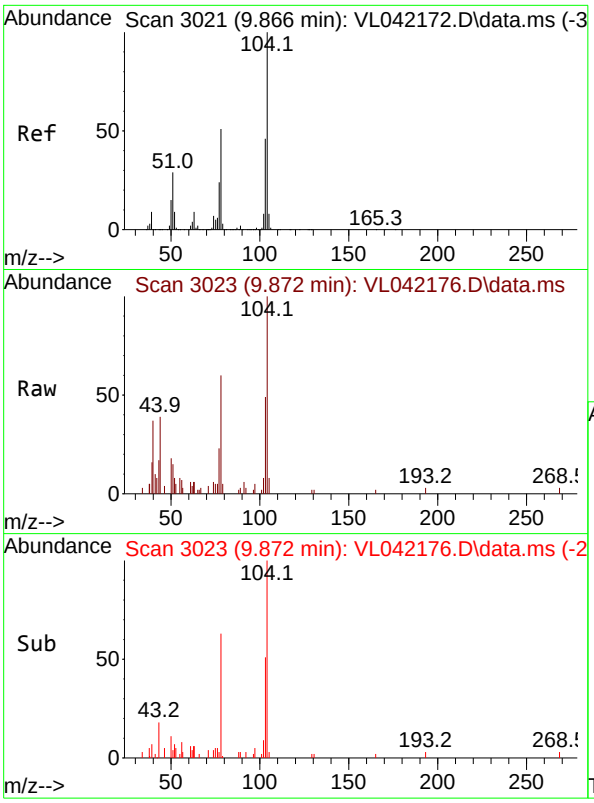


#60
o-Xylene
Concen: 0.118 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 8048

Ion	Ratio	Lower	Upper
91	100		
106	39.0	20.8	62.5



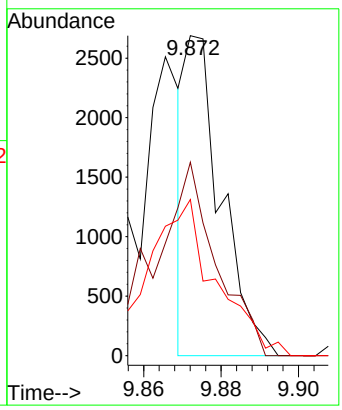


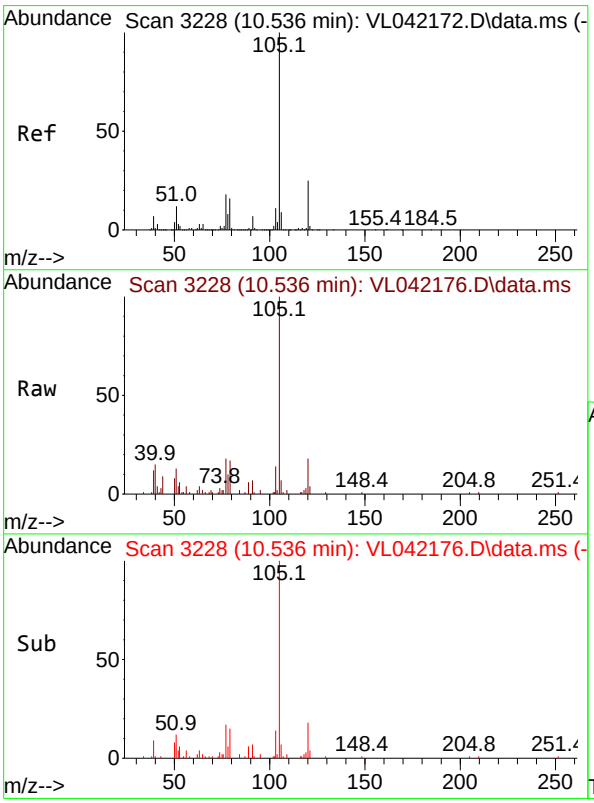
#61
Styrene
Concen: 0.051 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:104 Resp: 1723

Ion	Ratio	Lower	Upper
104	100		
78	105.9	41.8	62.6#
103	95.0	37.0	55.4#

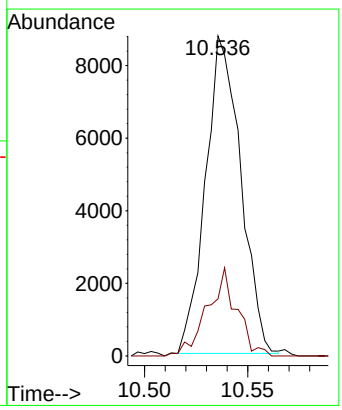


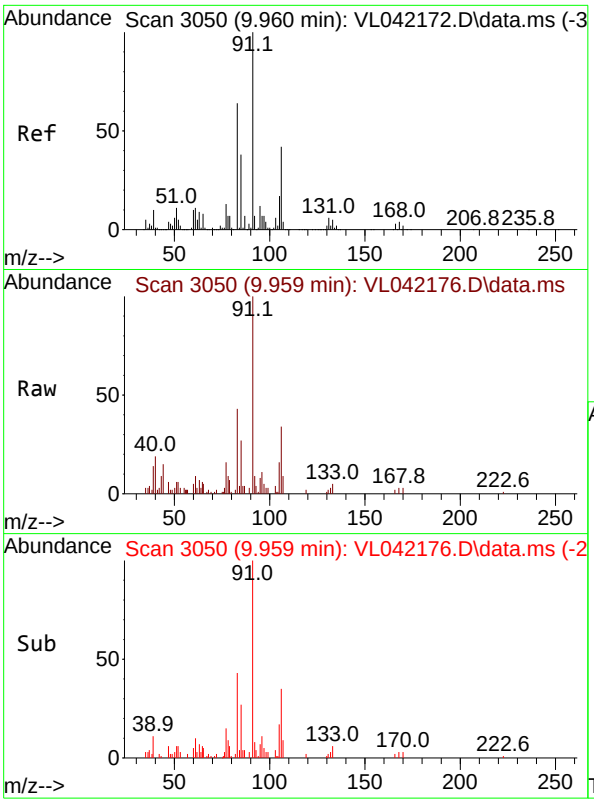


#62
Isopropylbenzene
Concen: 0.101 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:105 Resp: 10359

Ion	Ratio	Lower	Upper
105	100		
120	23.2	19.9	29.9



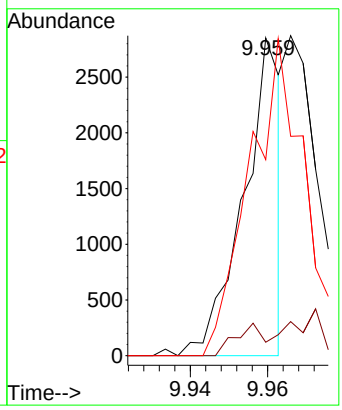


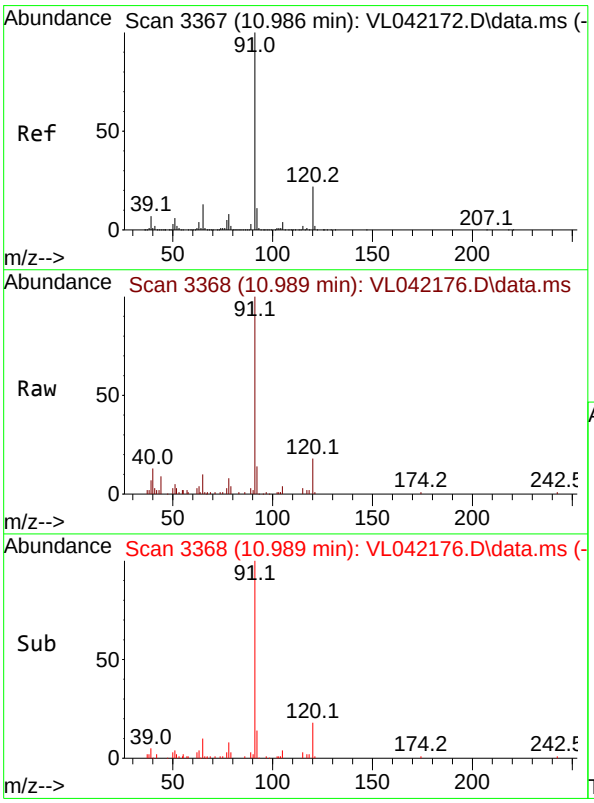
#63
1,1,2,2-Tetrachloroethane
Concen: 0.046 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 1910

Ion	Ratio	Lower	Upper
83	100		
131	0.0	4.8	14.4#
85	0.0	32.5	97.5#

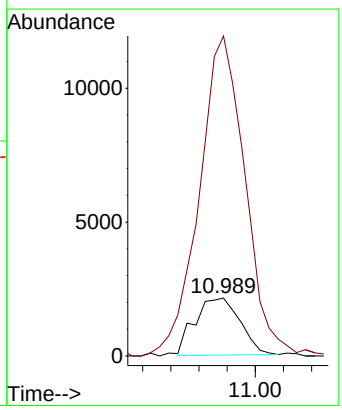


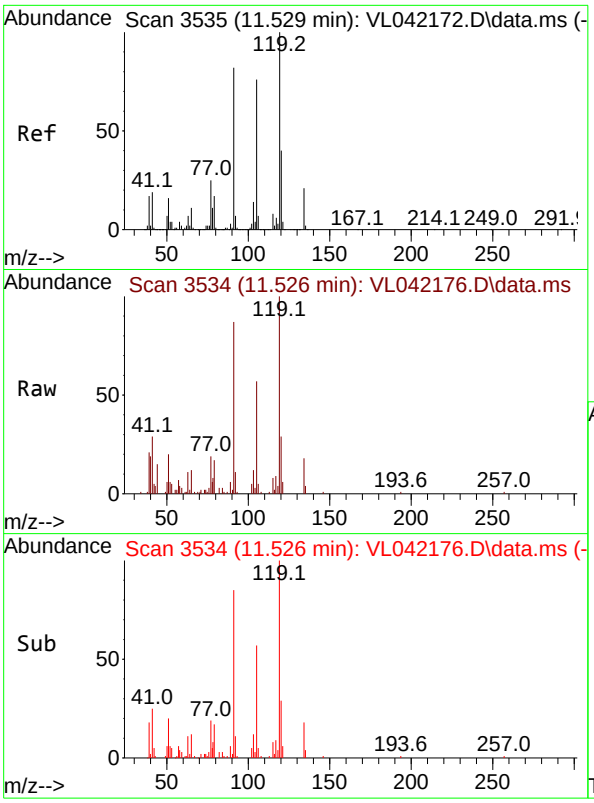


#64
n-propylbenzene
Concen: 0.090 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:120 Resp: 2375

Ion	Ratio	Lower	Upper
120	100		
91	572.3	376.9	565.3#



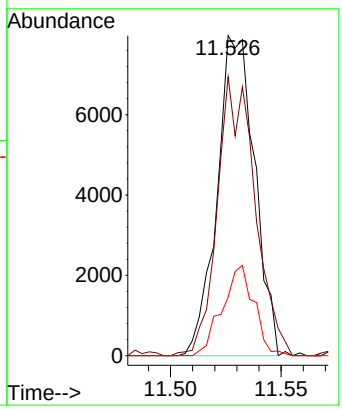


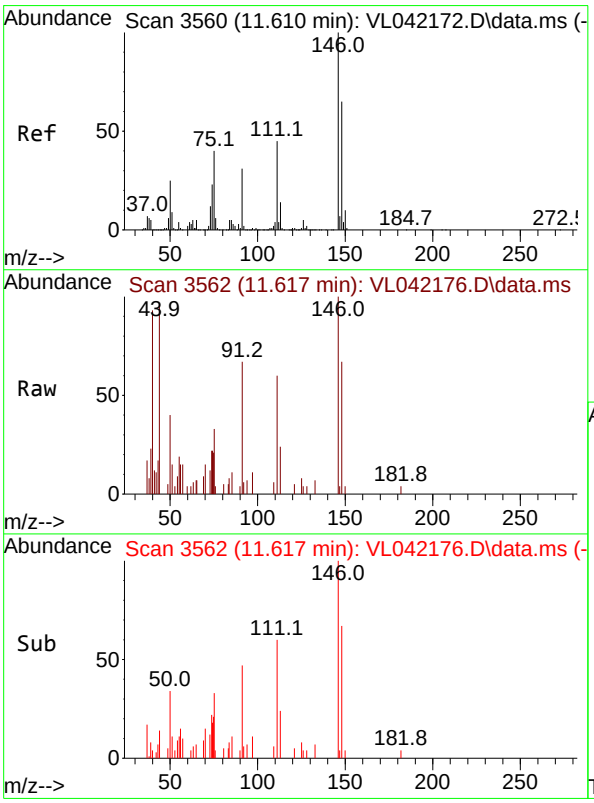
#65
tert-Butylbenzene
Concen: 0.099 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 9418

Ion	Ratio	Lower	Upper
119	100		
91	87.8	66.0	99.0
134	23.9	16.7	25.1

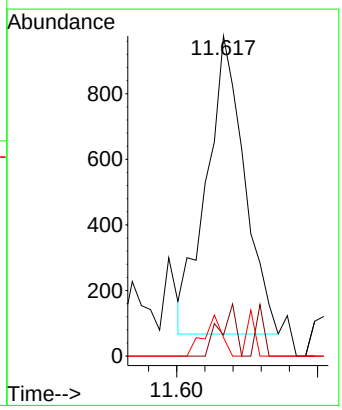


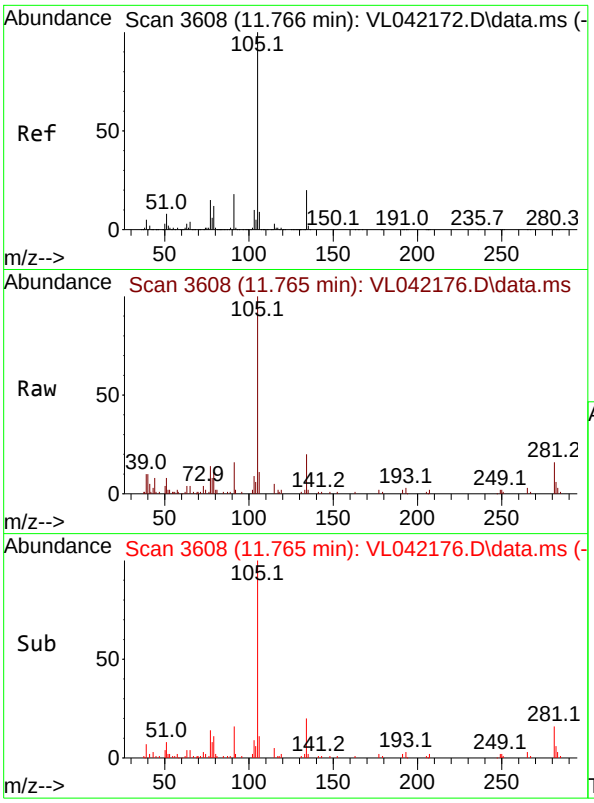


#66
Benzyl Chloride
Concen: 0.084 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 844

Ion	Ratio	Lower	Upper
91	100		
126	11.0	13.8	20.6#
128	10.0	4.5	6.7#



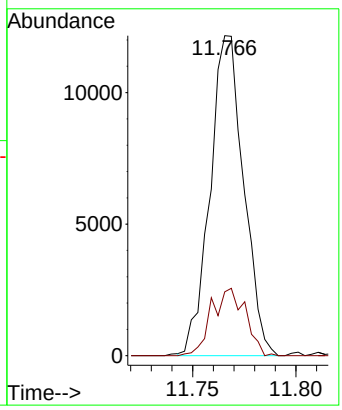


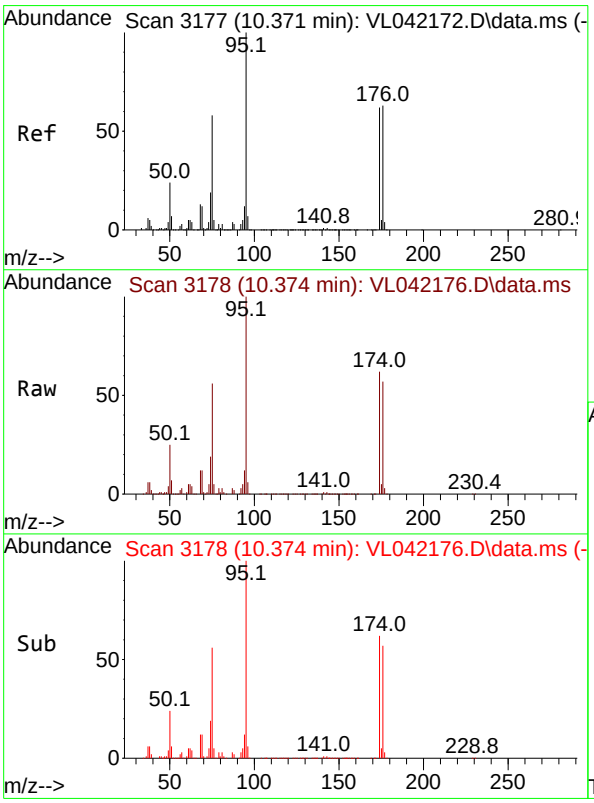
#67
sec-Butylbenzene
Concen: 0.105 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 13775

Ion	Ratio	Lower	Upper
105	100		
134	21.2	15.5	23.3

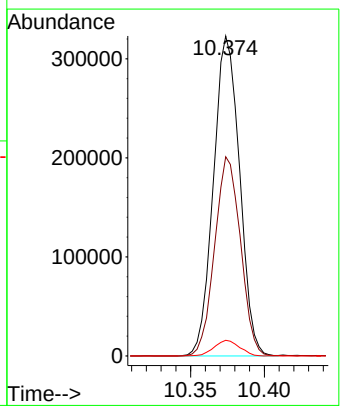


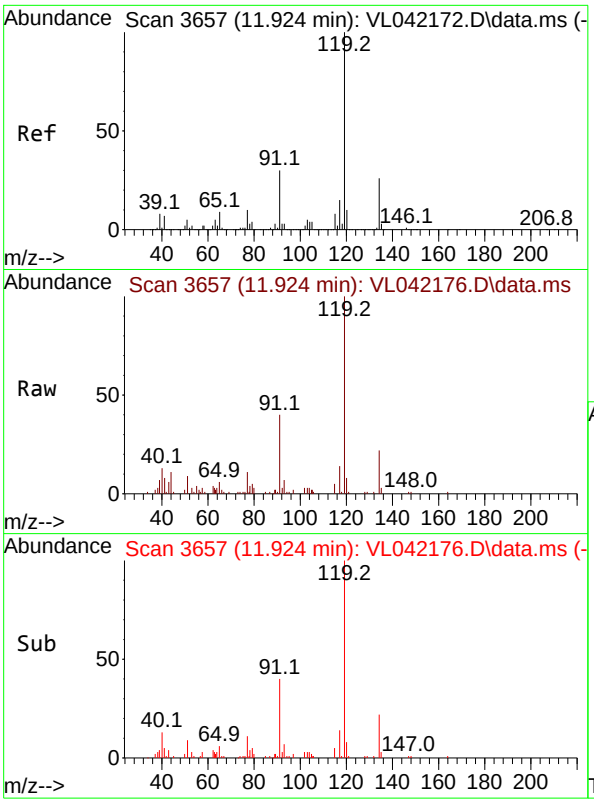


#68
1-Bromo-4-Fluorobenzene
Concen: 10.067 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 95 Resp: 398069

Ion	Ratio	Lower	Upper
95	100		
174	61.5	50.6	76.0
175	4.8	3.8	5.6



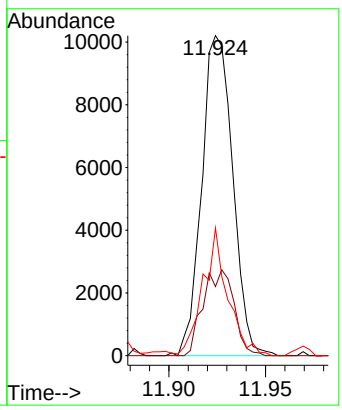


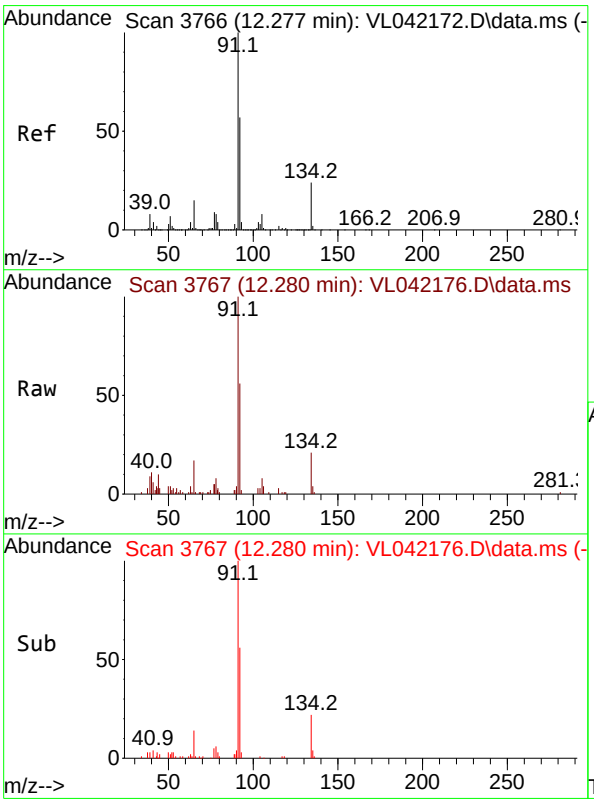
#69
p-Isopropyltoluene
Concen: 0.100 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 11366

Ion	Ratio	Lower	Upper
119	100		
134	26.8	20.4	30.6
91	30.7	23.7	35.5

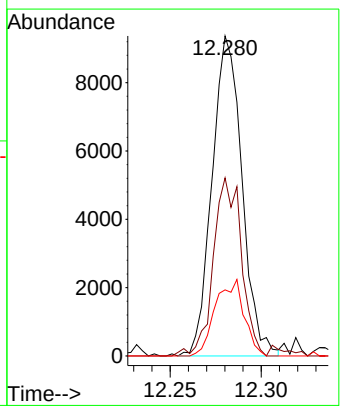


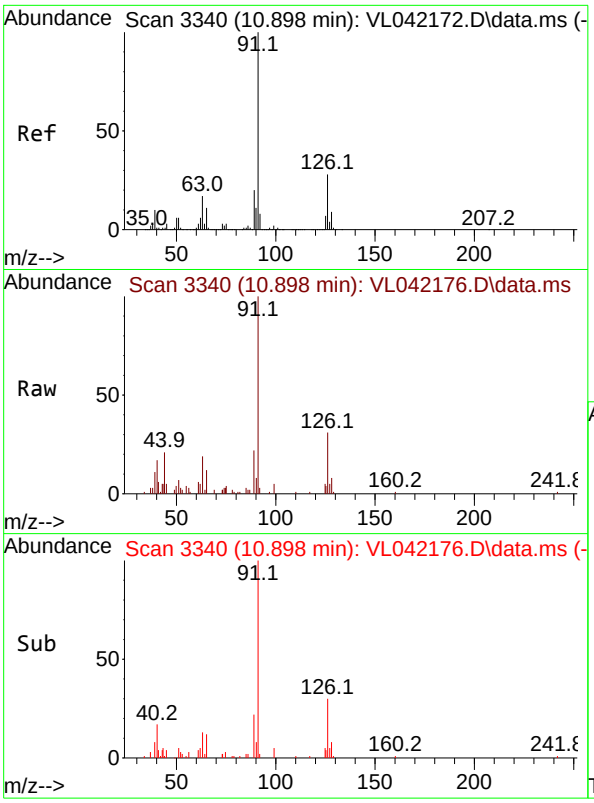


#70
n-Butylbenzene
Concen: 0.092 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 10697

Ion	Ratio	Lower	Upper
91	100		
92	54.0	44.9	67.3
134	22.9	19.2	28.8



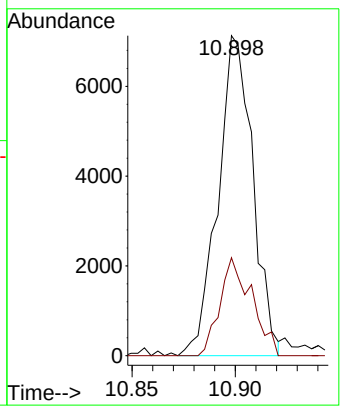


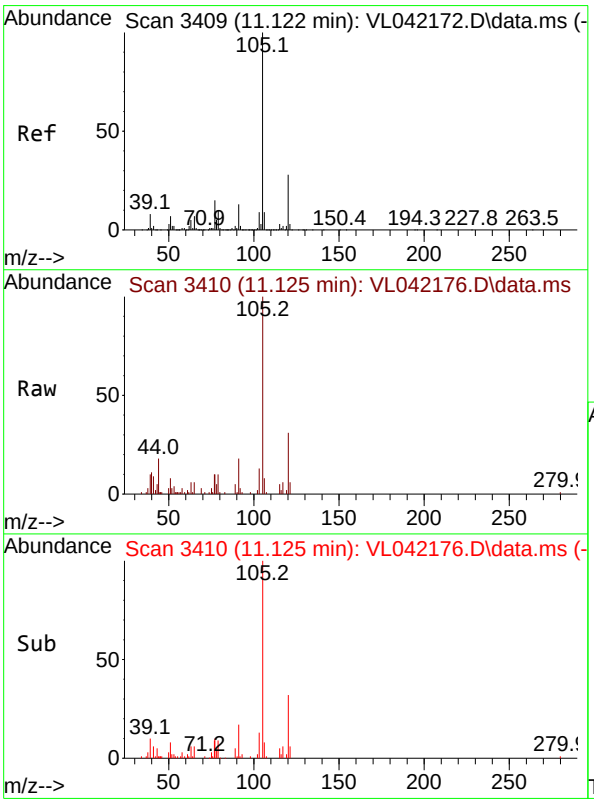
#71
2-Chlorotoluene
Concen: 0.105 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 8347

Ion	Ratio	Lower	Upper
91	100		
126	28.0	11.6	46.4

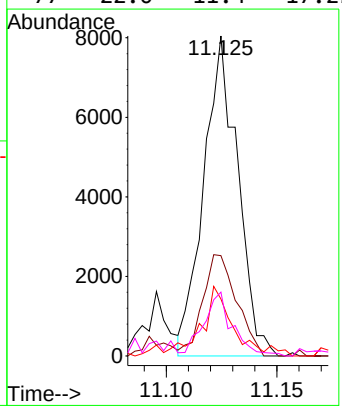


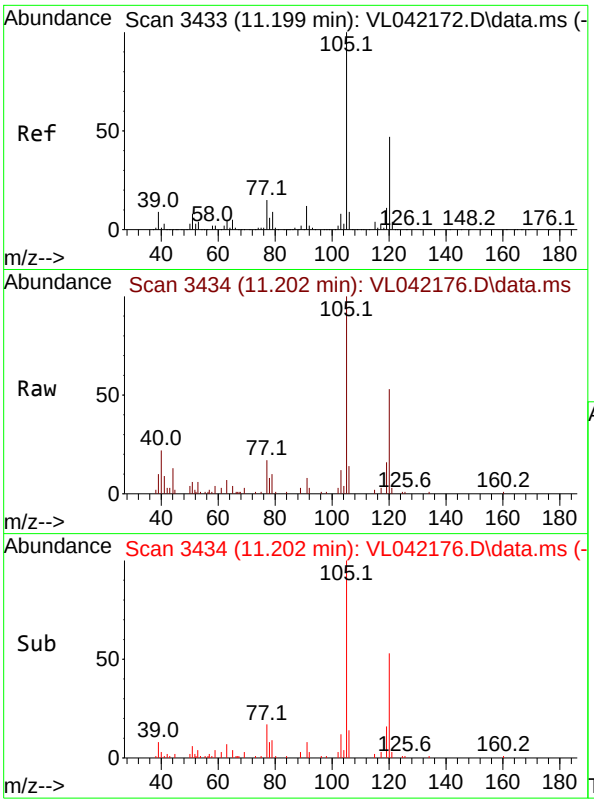


#72
4-Ethyltoluene
Concen: 0.101 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:105 Resp: 8579

Ion	Ratio	Lower	Upper
105	100		
120	36.1	23.4	35.0#
91	21.4	10.3	15.5#
77	22.0	11.4	17.2#



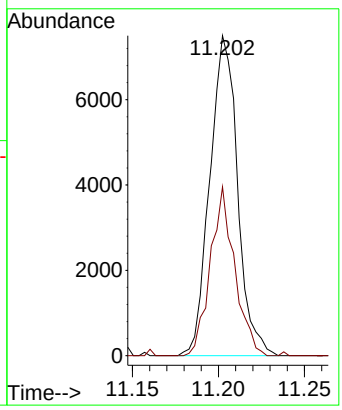


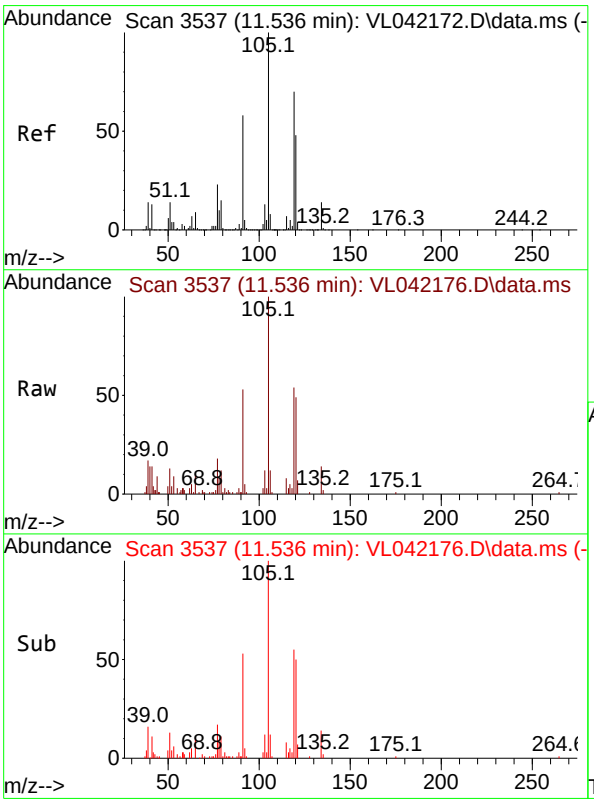
#73
1,3,5-Trimethylbenzene
Concen: 0.113 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 8407

Ion	Ratio	Lower	Upper
105	100		
120	52.7	37.4	56.0

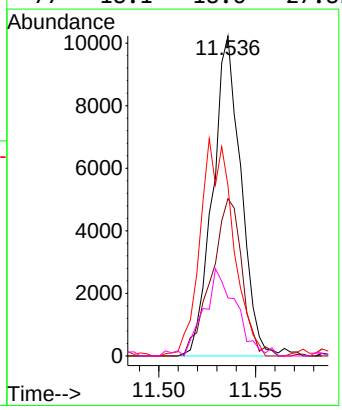


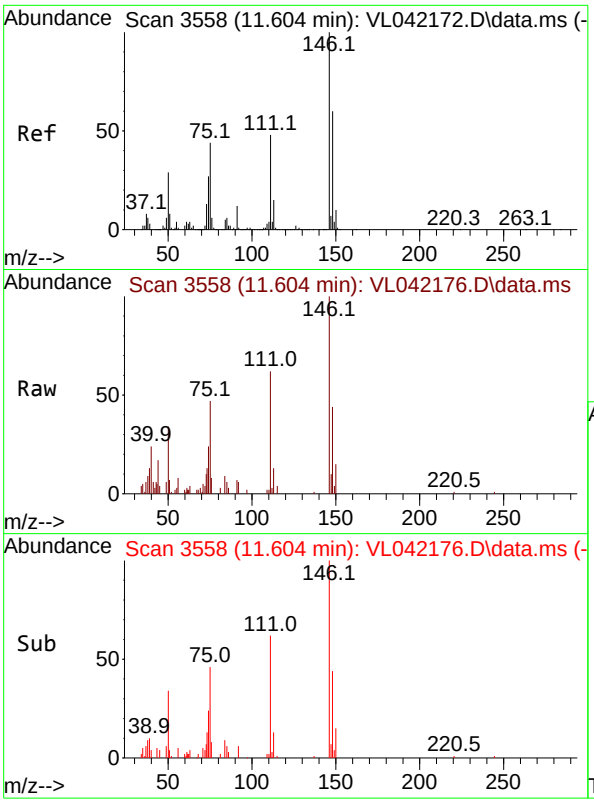


#74
1,2,4-Trimethylbenzene
Concen: 0.121 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:105 Resp: 10341

Ion	Ratio	Lower	Upper
105	100		
120	49.2	38.6	58.0
91	53.2	46.2	69.2
77	18.1	18.6	27.8#



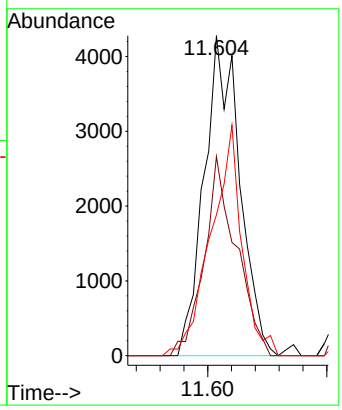


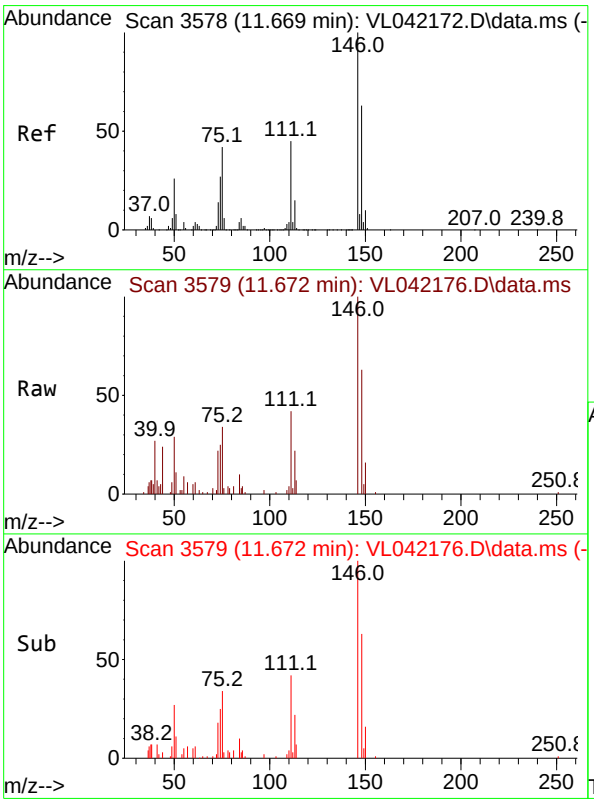
#75
1,3-Dichlorobenzene
Concen: 0.094 ppbv
RT: 11.604 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 4426

Ion	Ratio	Lower	Upper
146	100		
111	56.3	23.8	71.2
148	62.9	31.9	95.9

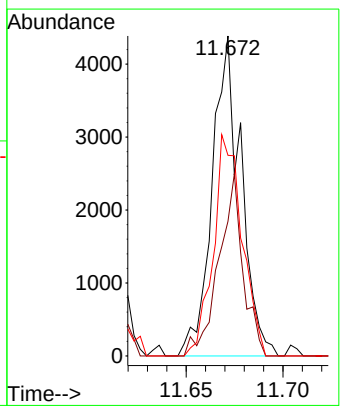


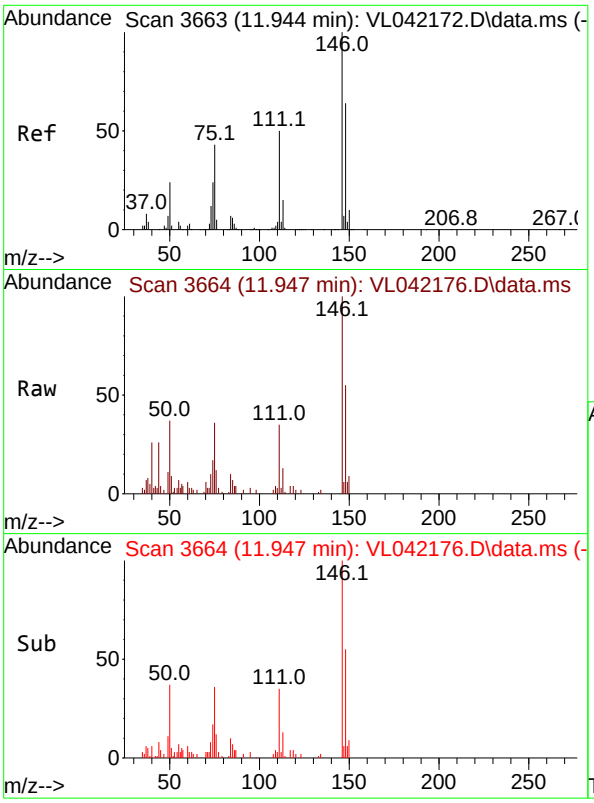


#76
1,4-Dichlorobenzene
Concen: 0.097 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:146 Resp: 4552

Ion	Ratio	Lower	Upper
146	100		
111	47.6	23.0	69.0
148	68.6	31.9	95.7



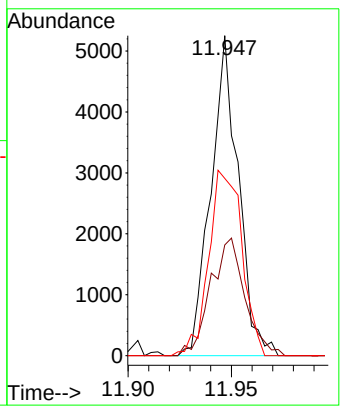


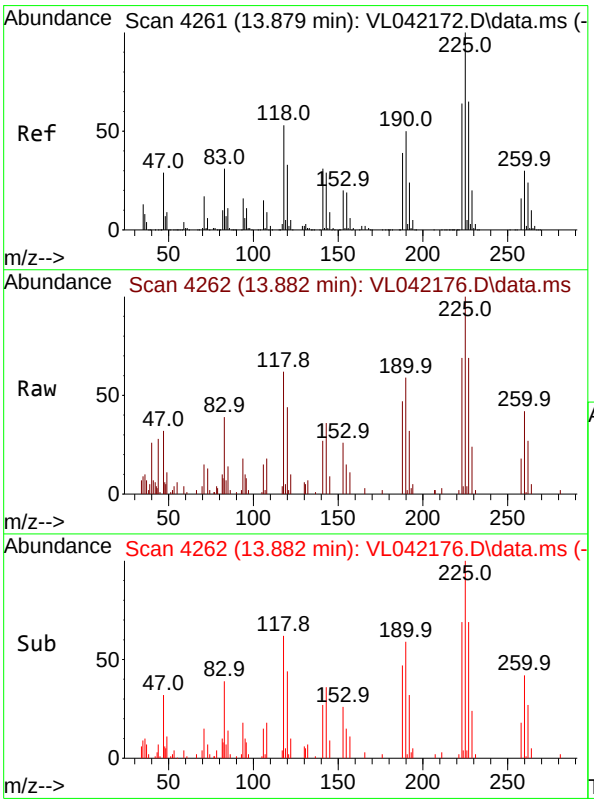
#77
1,2-Dichlorobenzene
Concen: 0.106 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 4867

Ion	Ratio	Lower	Upper
146	100		
111	45.8	24.8	74.3
148	69.7	31.6	94.8

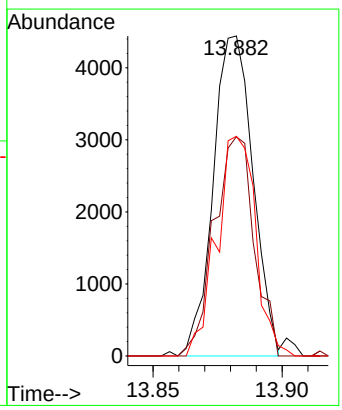


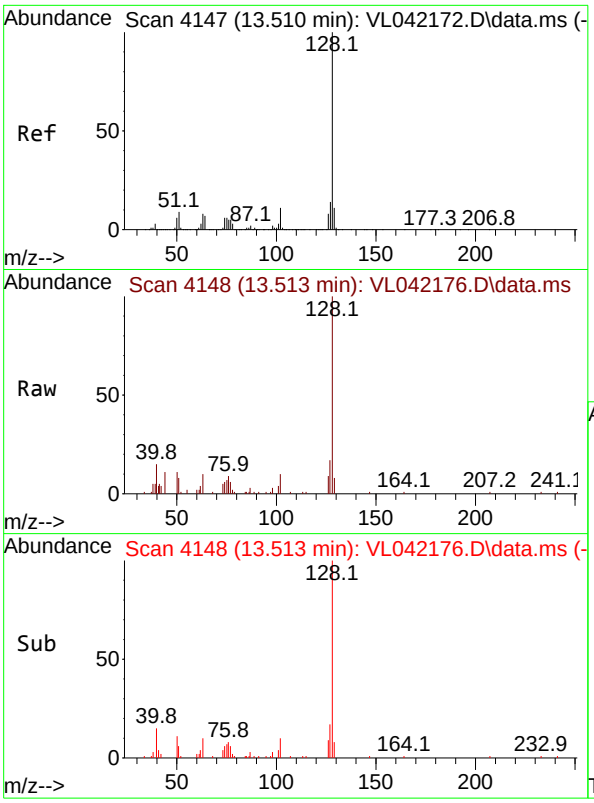


#78
Hexachloro-1,3-Butadiene
Concen: 0.102 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:225 Resp: 4755

Ion	Ratio	Lower	Upper
225	100		
223	68.9	50.6	76.0
227	67.4	51.2	76.8



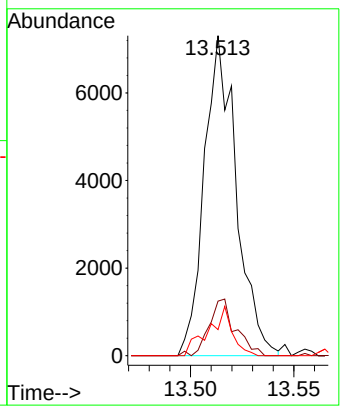


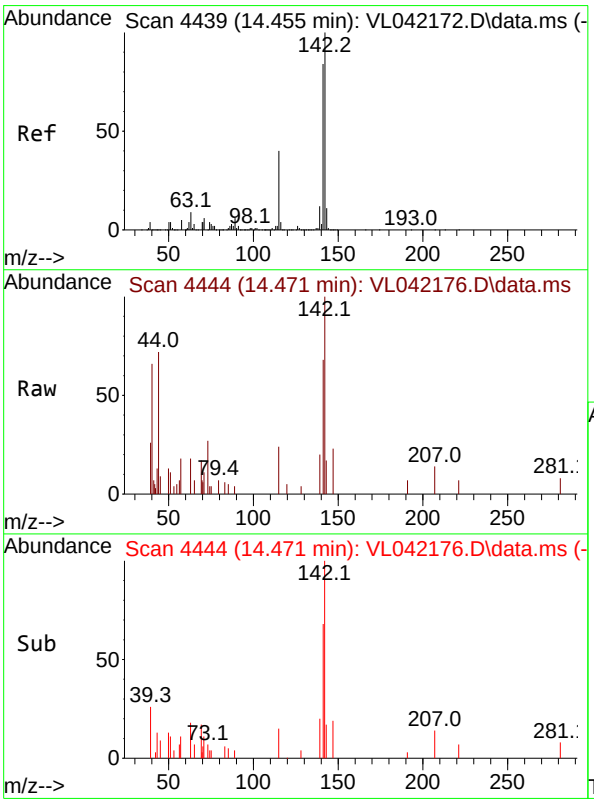
#79
Naphthalene
Concen: 0.084 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:128 Resp: 7882

Ion	Ratio	Lower	Upper
128	100		
127	17.1	10.8	16.2#
129	8.1	9.0	13.4#

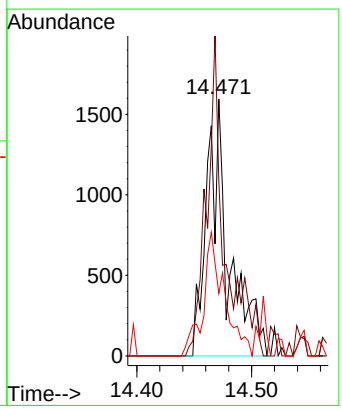


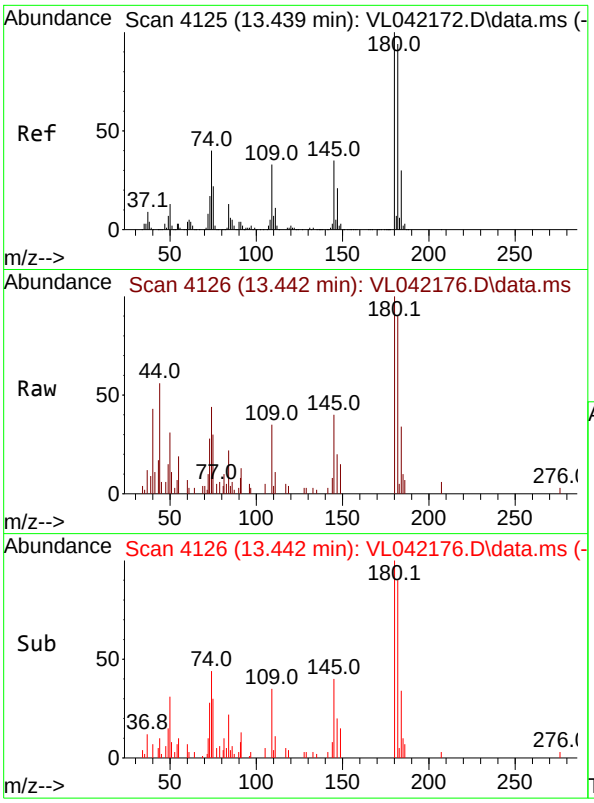


#80
Naphthalene,2-methyl-
Concen: 0.048 ppbv
RT: 14.471 min Scan# 4444
Delta R.T. 0.016 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:142 Resp: 2174

Ion	Ratio	Lower	Upper
142	100		
141	109.3	66.3	99.5#
115	44.3	31.6	47.4



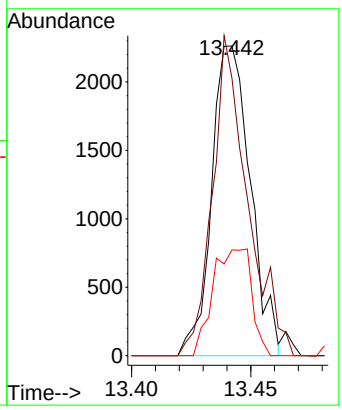


#81
1,2,4-Trichlorobenzene
Concen: 0.059 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:180 Resp: 2557

Ion	Ratio	Lower	Upper
180	100		
182	93.6	75.1	112.7
184	34.5	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	178058	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	512915	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	475617	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	389935	9.983	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	914	0.035	ppbv #	73
3) Chlorodifluoromethane	1.476	51	1354	0.050	ppbv #	1
4) Chloromethane	1.531	50	675	0.063	ppbv #	86
5) Vinyl Chloride	1.580	62	534	0.049	ppbv #	79
6) Bromomethane	1.670	94	483	0.099	ppbv #	9
7) Chloroethane	1.703	64	361	0.084	ppbv #	45
8) Dichlorotetrafluoroethane	1.554	85	815	0.036	ppbv #	79
13) Ethanol	1.719	45	312	0.329	ppbv #	27
14) Bromoethene	1.780	108	482	0.060	ppbv #	31
15) Acetone	1.835	43	3574	0.144	ppbv #	63
16) 1,3-Butadiene	1.606	39	1101	0.098	ppbv #	57
17) tert-Butyl alcohol	2.043	59	1215	0.039	ppbv #	1
18) 1,1-Dichloroethene	2.036	96	560	0.057	ppbv #	38
19) Isopropyl Alcohol	1.887	45	1071	0.076	ppbv #	30
20) Methylene Chloride	2.059	84	1823	0.197	ppbv #	91
21) Allyl Chloride	2.091	41	1518	0.086	ppbv #	29
22) trans-1,2-Dichloroethene	2.719	96	586	0.051	ppbv	96
23) Vinyl Acetate	2.463	43	689	0.067	ppbv #	1
24) 1,1-Dichloroethane	2.412	63	961	0.046	ppbv #	72
26) Hexane	2.819	57	1040	0.042	ppbv #	46
27) Carbon Disulfide	2.149	76	1061	0.040	ppbv #	1
29) Chloroform	2.848	83	1619	0.044	ppbv	92
31) cis-1,2-Dichloroethene	2.719	61	846	0.033	ppbv	92
35) Carbon Tetrachloride	3.758	117	1520	0.039	ppbv #	42
37) 1,2-Dichloroethane	3.214	62	1029	0.035	ppbv #	88
39) 1,2-Dichloropropane	3.955	63	136518	7.372	ppbv #	23
57) Chlorobenzene	8.924	112	1382	0.031	ppbv #	61
60) o-Xylene	9.959	91	2844	0.042	ppbv	96
62) Isopropylbenzene	10.535	105	3380	0.033	ppbv	95
65) tert-Butylbenzene	11.529	119	3543	0.038	ppbv	98
67) sec-Butylbenzene	11.765	105	4317	0.033	ppbv	92
71) 2-Chlorotoluene	10.898	91	2666	0.034	ppbv	97
72) 4-Ethyltoluene	11.121	105	3017	0.036	ppbv #	64
73) 1,3,5-Trimethylbenzene	11.205	105	3101	0.042	ppbv	94
74) 1,2,4-Trimethylbenzene	11.539	105	5313	0.063	ppbv #	73
75) 1,3-Dichlorobenzene	11.607	146	1577	0.034	ppbv	90
77) 1,2-Dichlorobenzene	11.947	146	1591	0.035	ppbv	92
78) Hexachloro-1,3-Butadiene	13.882	225	1821	0.040	ppbv	94

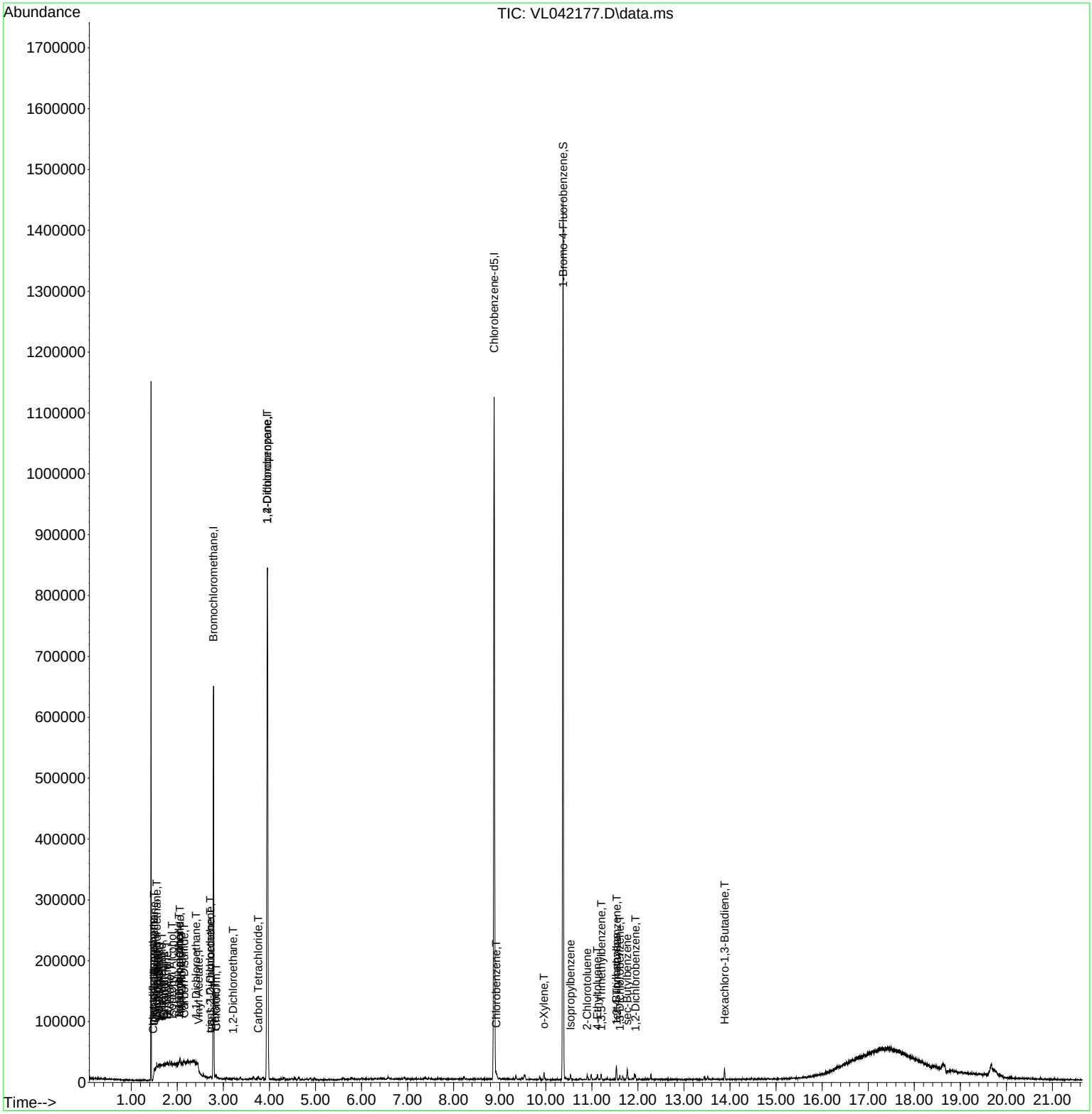
(#) = qualifier out of range (m) = manual integration (+) = signals summed

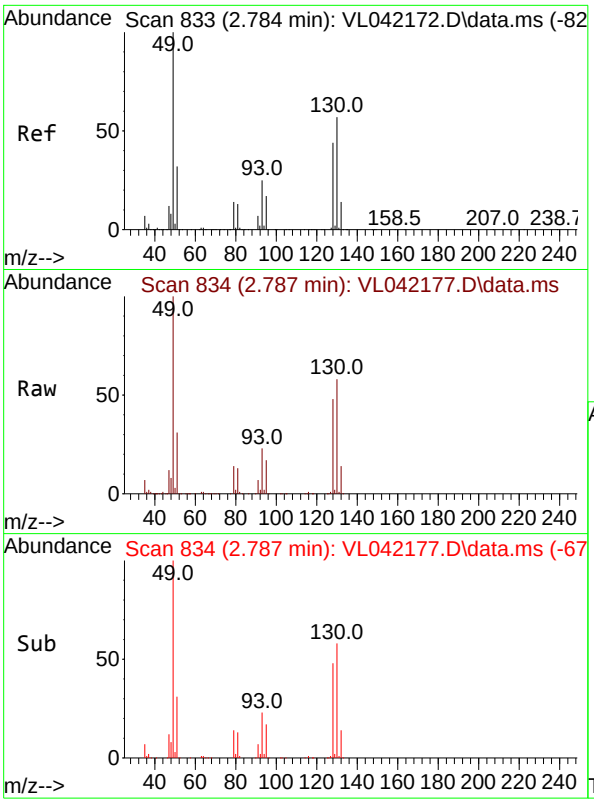
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



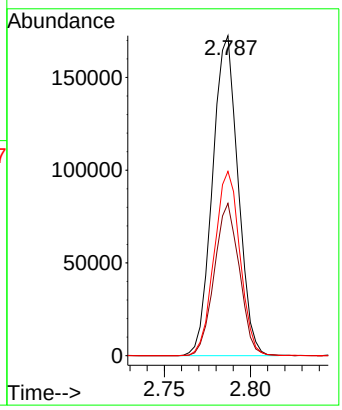


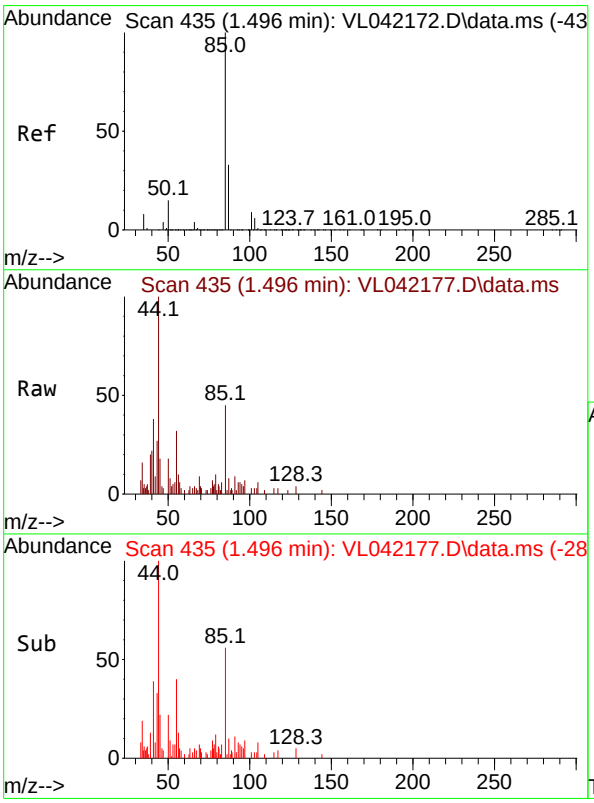
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 49 Resp: 178058

Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	57.9	28.8	86.4

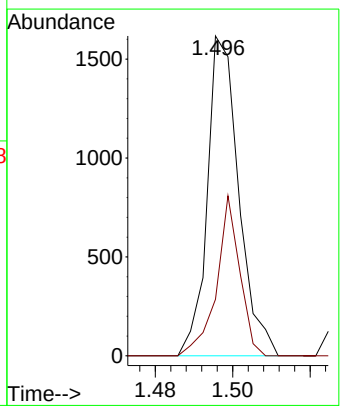


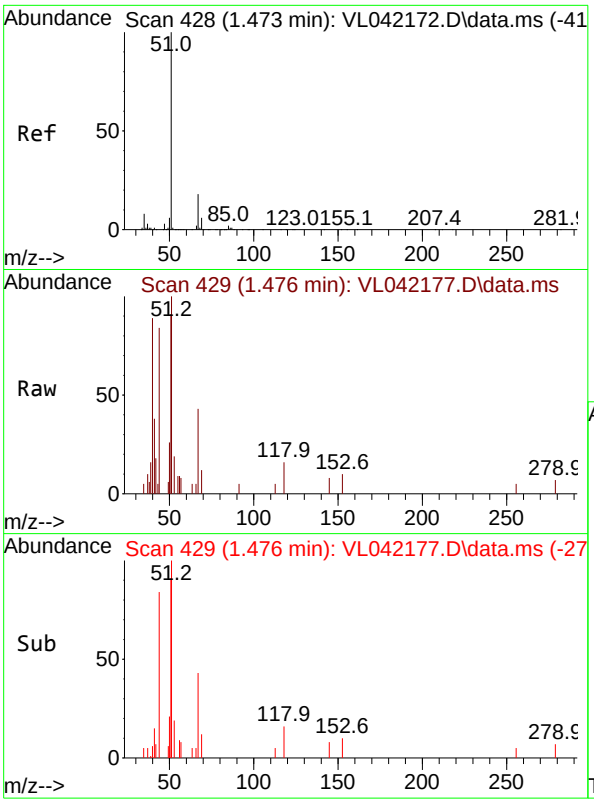


#2
Dichlorodifluoromethane
Concen: 0.035 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 85 Resp: 914

Ion	Ratio	Lower	Upper
85	100		
87	17.7	26.1	39.1#



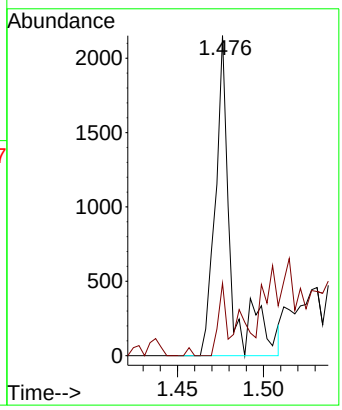


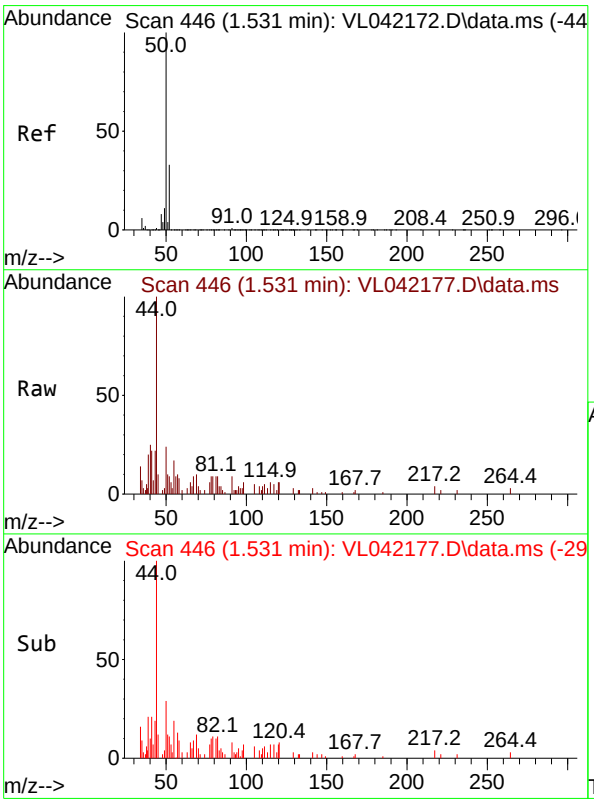
#3
Chlorodifluoromethane
Concen: 0.050 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 51 Resp: 1354

Ion	Ratio	Lower	Upper
51	100		
67	71.0	15.0	22.6#

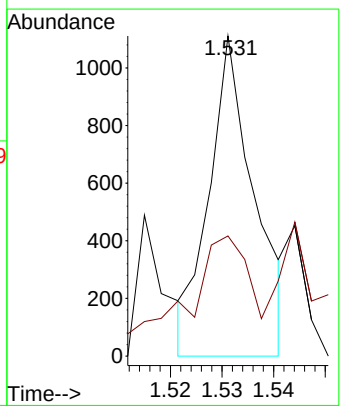


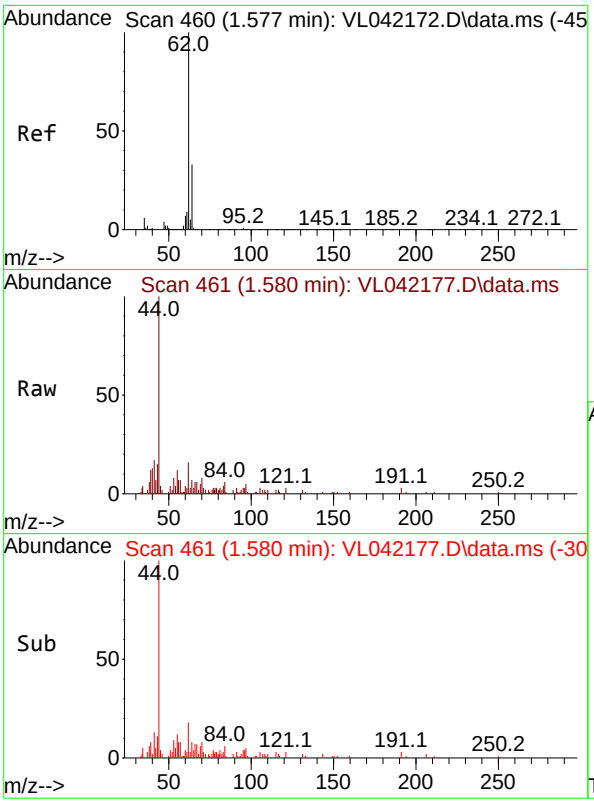


#4
Chloromethane
Concen: 0.063 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 50 Resp: 675

Ion	Ratio	Lower	Upper
50	100		
52	24.6	26.1	39.1#



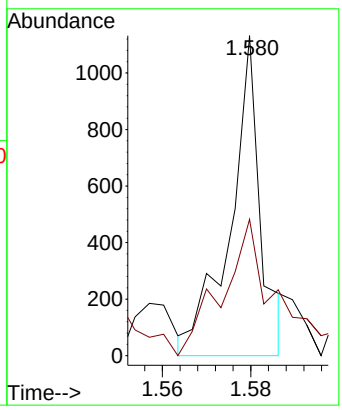


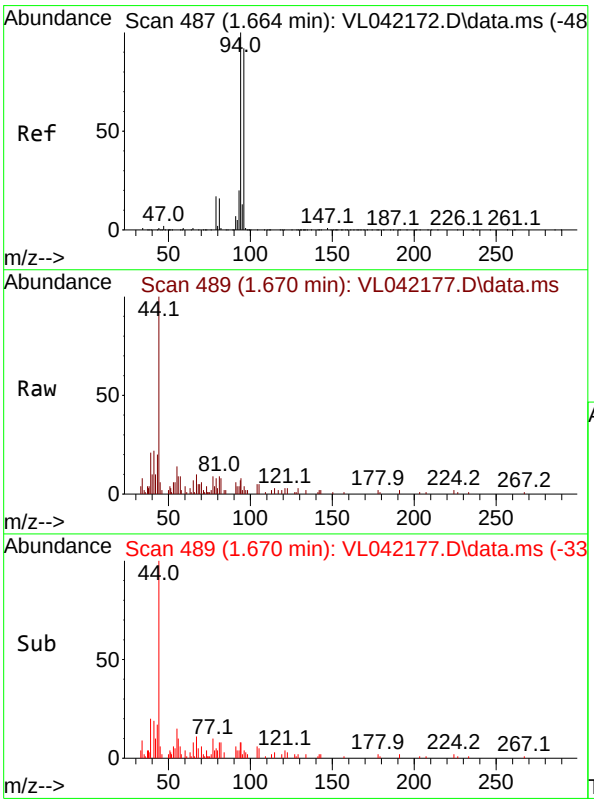
#5
Vinyl Chloride
Concen: 0.049 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 62 Resp: 534

Ion	Ratio	Lower	Upper
62	100		
64	45.4	26.6	40.0#

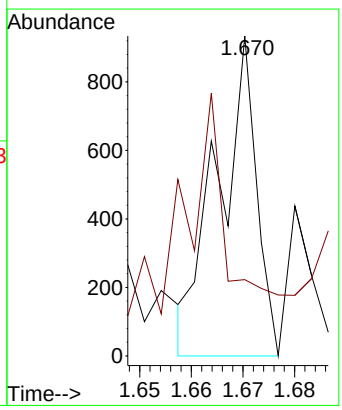


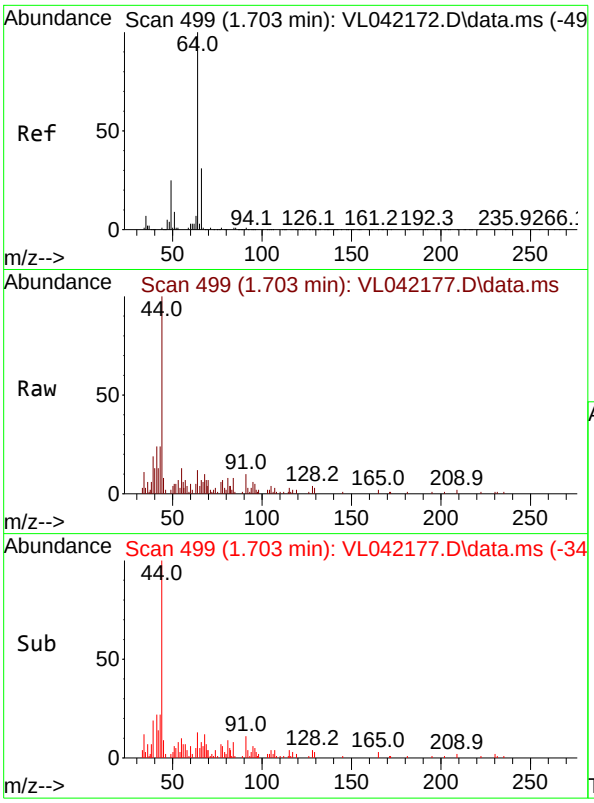


#6
Bromomethane
Concen: 0.099 ppbv
RT: 1.670 min Scan# 489
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 94 Resp: 483

Ion	Ratio	Lower	Upper
94	100		
96	4.8	73.1	109.7#



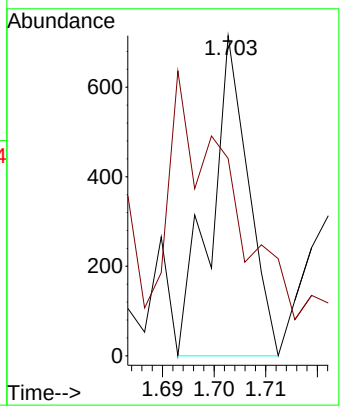


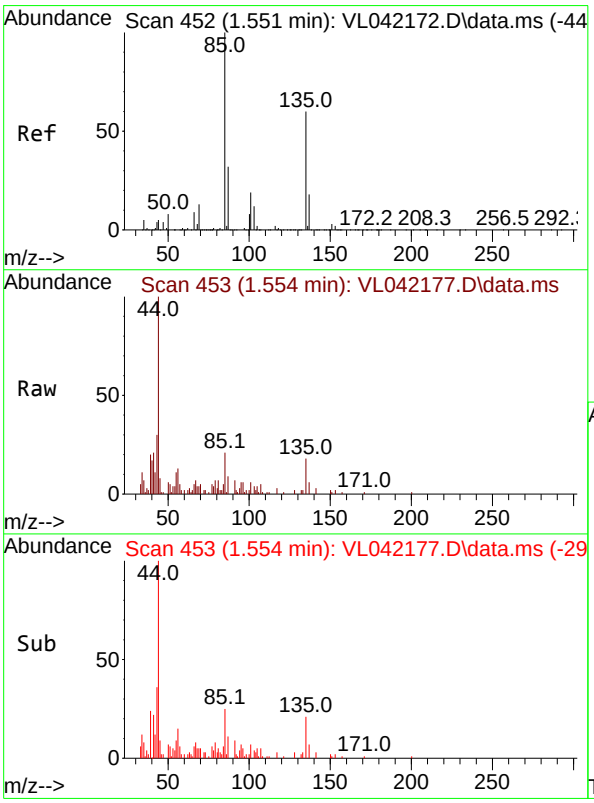
#7
Chloroethane
Concen: 0.084 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 64 Resp: 361

Ion	Ratio	Lower	Upper
64	100		
66	61.7	25.2	37.8#

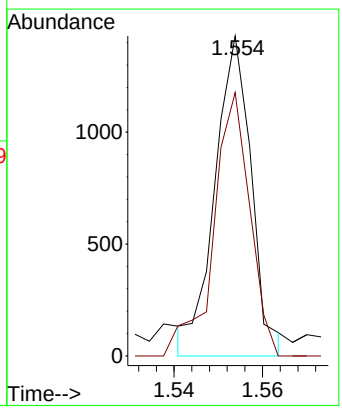


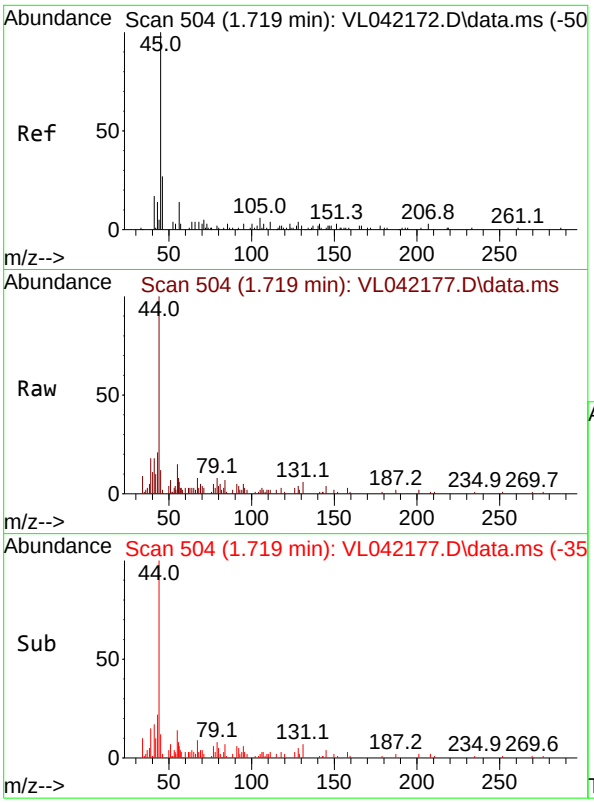


#8
Dichlorotetrafluoroethane
Concen: 0.036 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 85 Resp: 815

Ion	Ratio	Lower	Upper
85	100		
135	82.3	52.4	78.6#



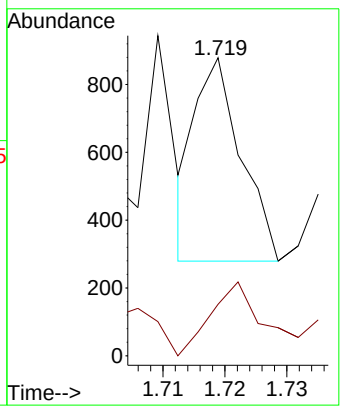


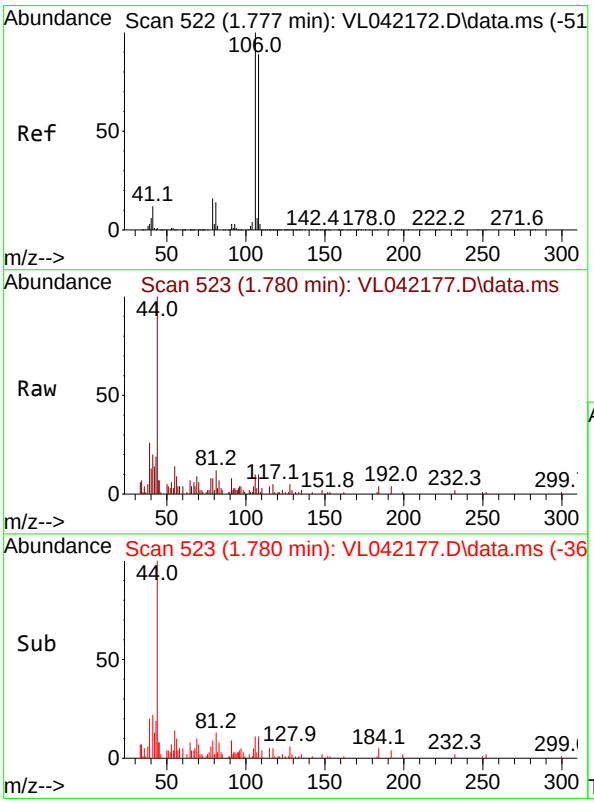
#13
Ethanol
Concen: 0.329 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 312

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#

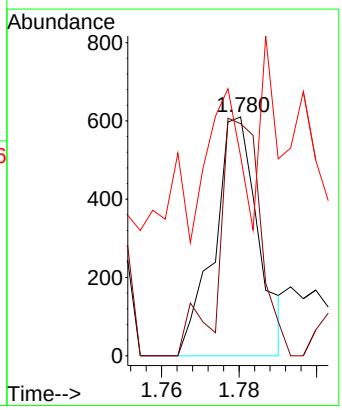


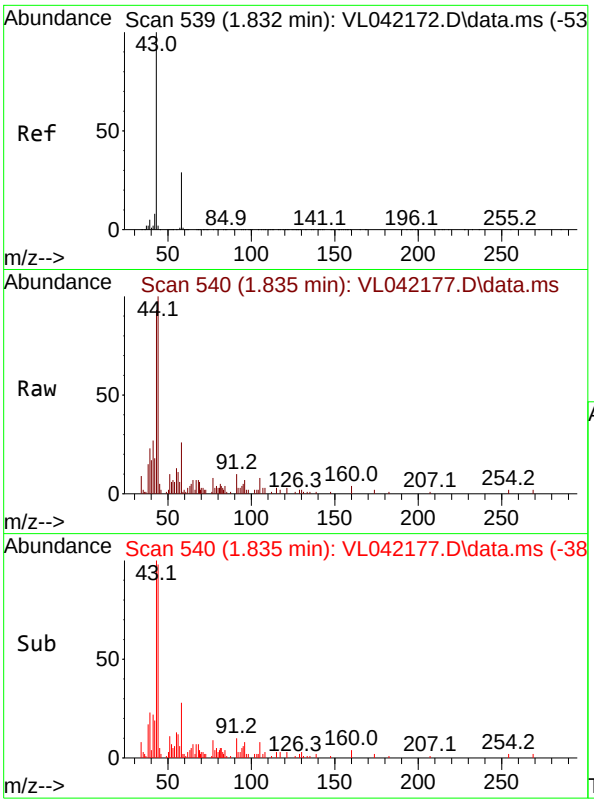


#14
Bromoethene
Concen: 0.060 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:108 Resp: 482

Ion	Ratio	Lower	Upper
108	100		
106	100.4	86.8	130.2
79	208.5	15.0	22.6#



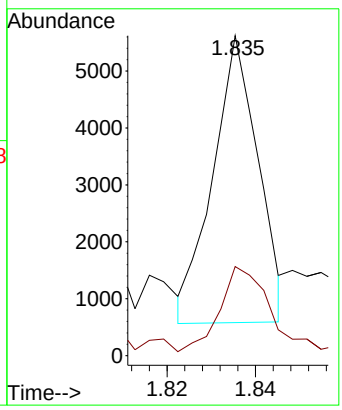


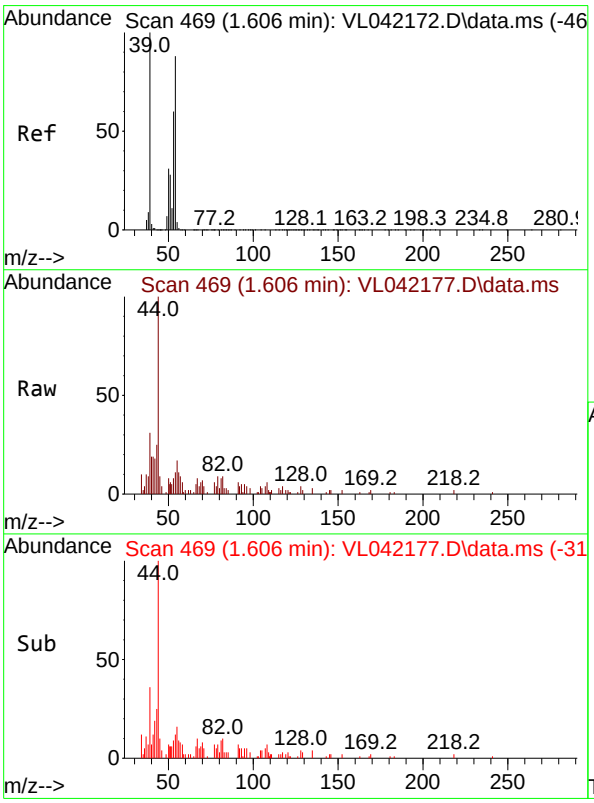
#15
Acetone
Concen: 0.144 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 3574

Ion	Ratio	Lower	Upper
43	100		
58	48.5	23.2	34.8#

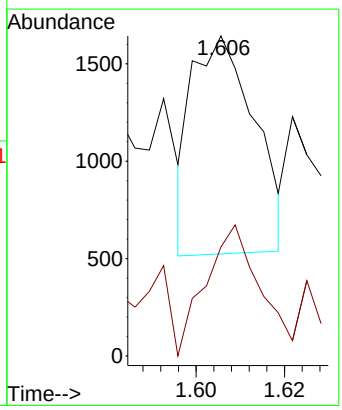


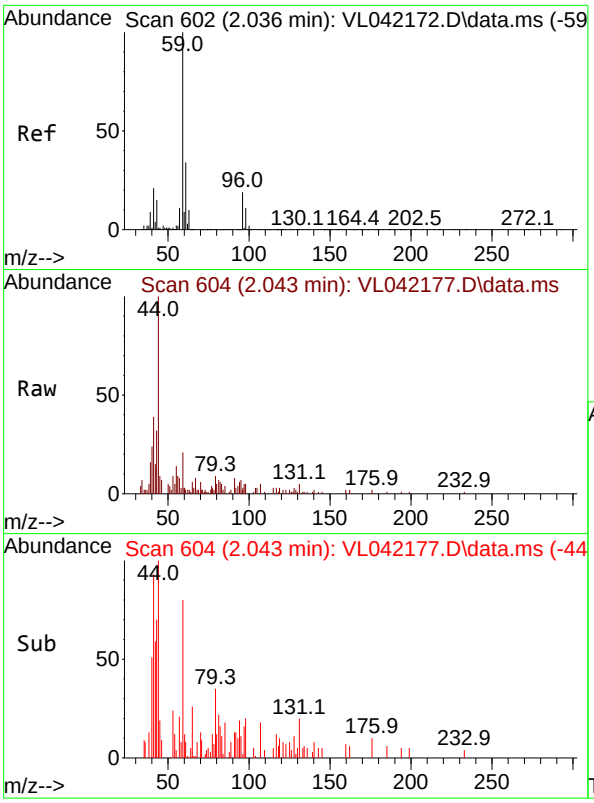


#16
1,3-Butadiene
Concen: 0.098 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 39 Resp: 1101

Ion	Ratio	Lower	Upper
39	100		
54	113.1	60.7	91.1#



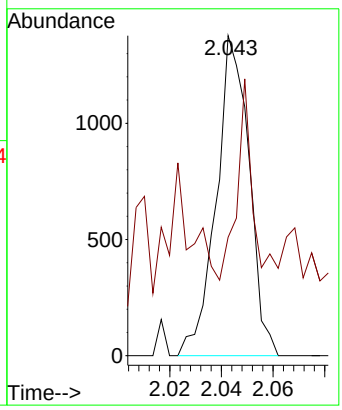


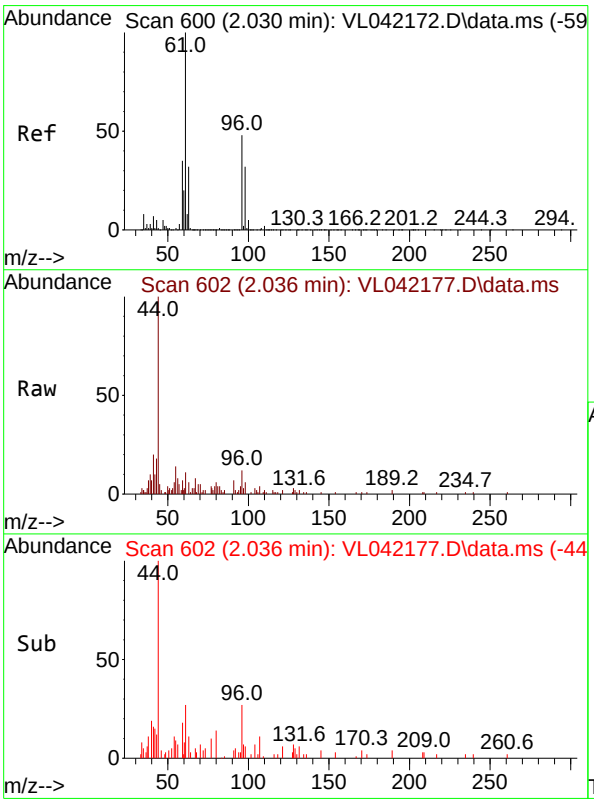
#17
tert-Butyl alcohol
Concen: 0.039 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 59 Resp: 1215

Ion	Ratio	Lower	Upper
59	100		
57	107.2	8.9	13.3#

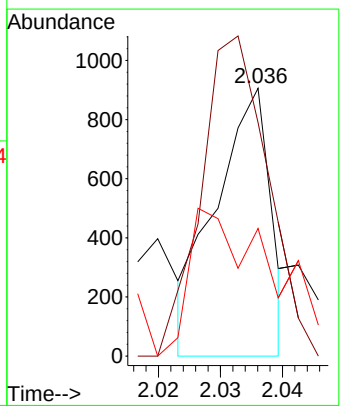


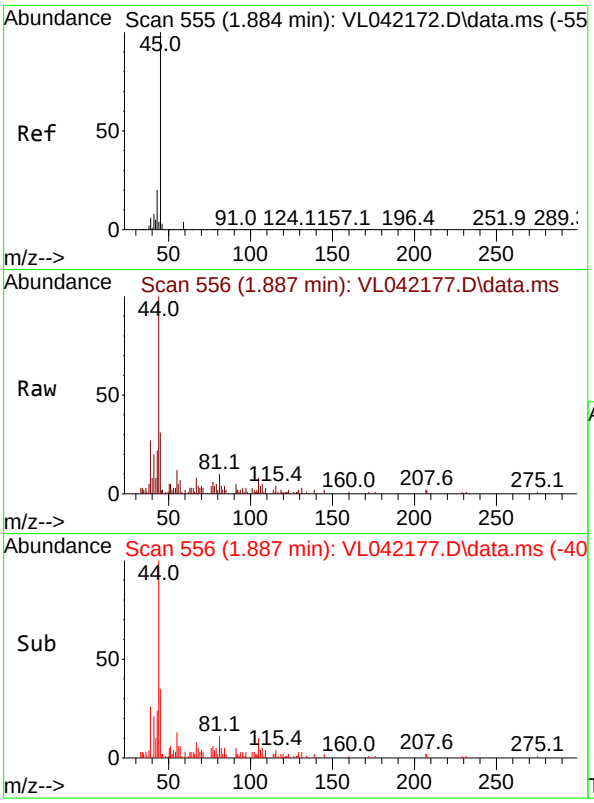


#18
1,1-Dichloroethene
Concen: 0.057 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 96 Resp: 560

Ion	Ratio	Lower	Upper
96	100		
61	87.3	167.6	251.4#
98	56.8	53.5	80.3



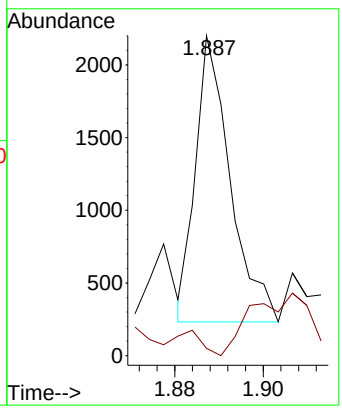


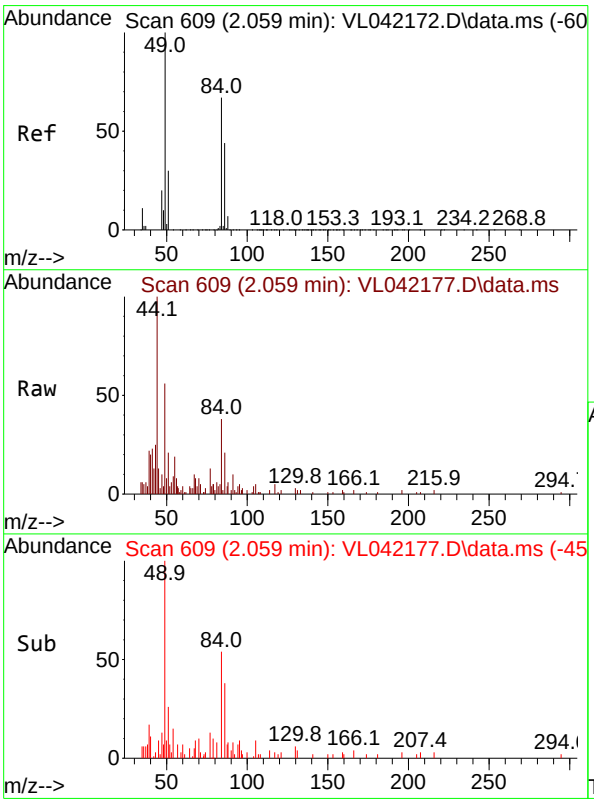
#19
Isopropyl Alcohol
Concen: 0.076 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 1071

Ion	Ratio	Lower	Upper
45	100		
58	0.0	36.9	55.3#

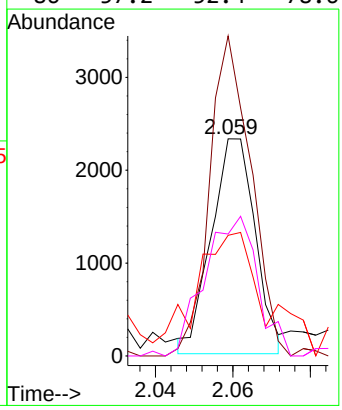


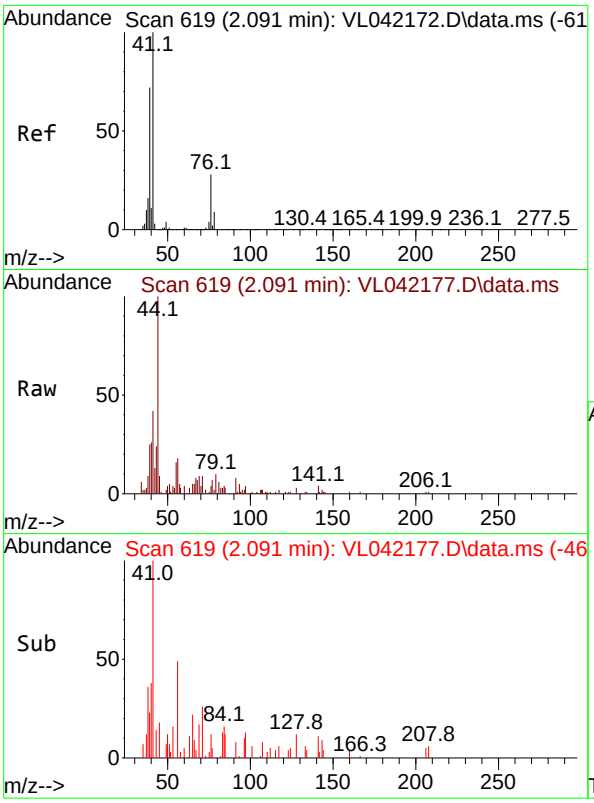


#20
Methylene Chloride
Concen: 0.197 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 84 Resp: 1823

Ion	Ratio	Lower	Upper
84	100		
49	156.6	120.2	180.4
51	34.6	37.4	56.0#
86	57.2	52.4	78.6



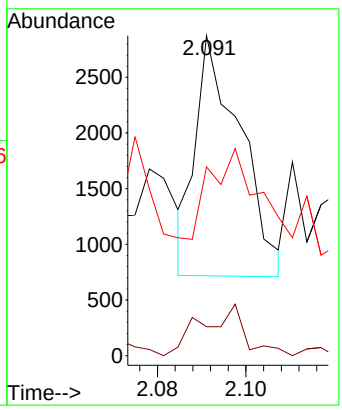


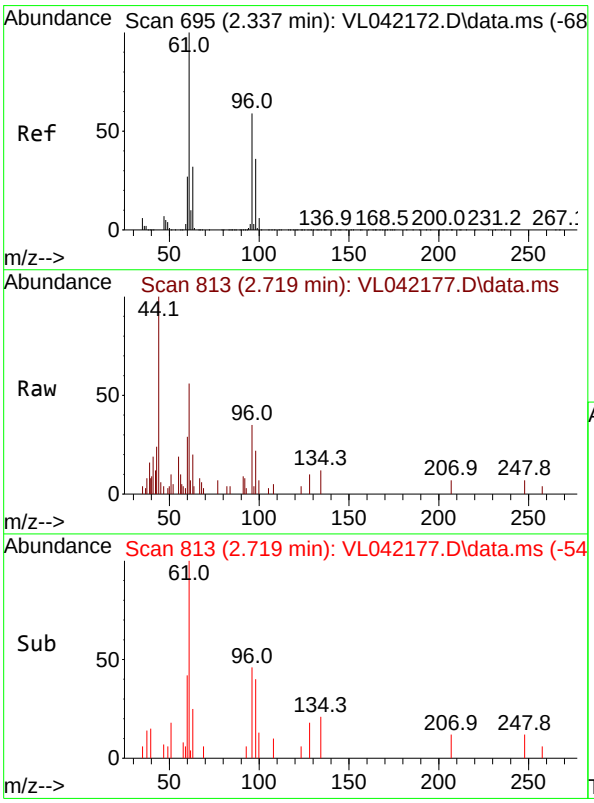
#21
Allyl Chloride
Concen: 0.086 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 41 Resp: 1518

Ion	Ratio	Lower	Upper
41	100		
76	25.9	24.1	36.1
39	158.8	61.1	91.7#

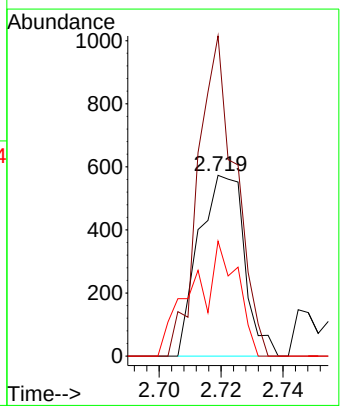


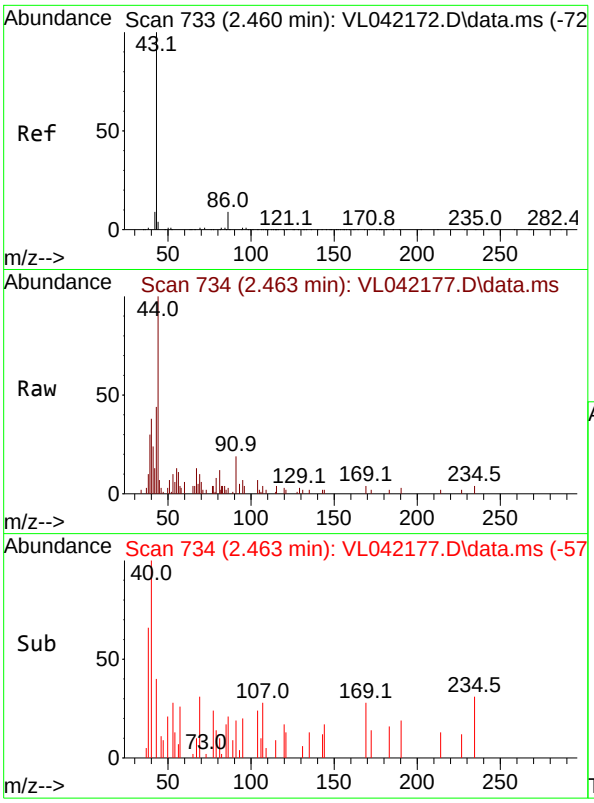


#22
trans-1,2-Dichloroethene
Concen: 0.051 ppbv
RT: 2.719 min Scan# 813
Delta R.T. 0.382 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 96 Resp: 586

Ion	Ratio	Lower	Upper
96	100		
61	177.1	136.6	204.8
98	63.5	49.4	74.2



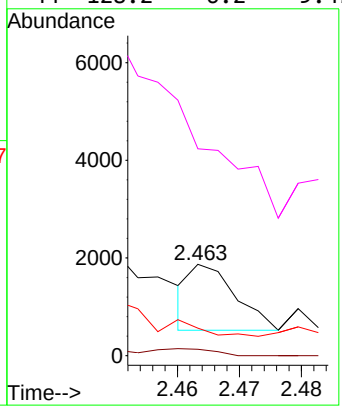


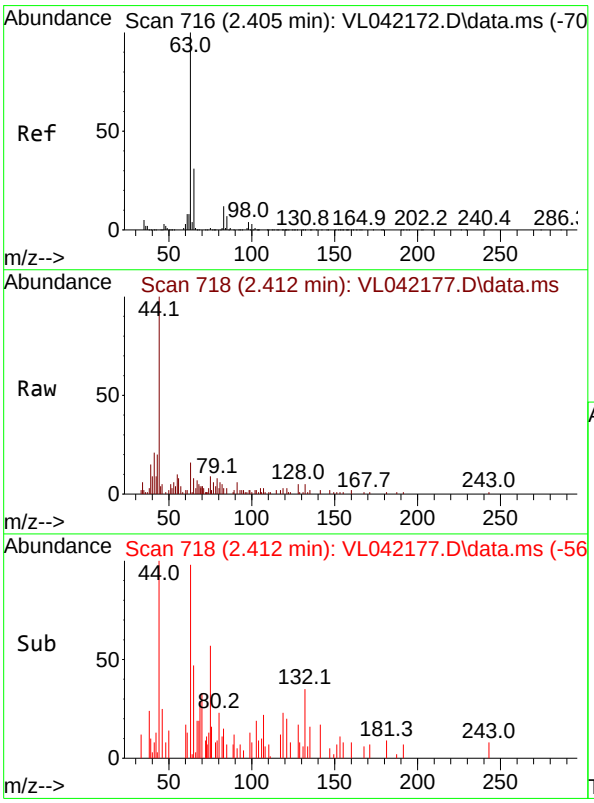
#23
Vinyl Acetate
Concen: 0.067 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 689

Ion	Ratio	Lower	Upper
43	100		
86	9.7	5.5	8.3#
42	6.8	8.6	13.0#
44	128.2	6.2	9.4#

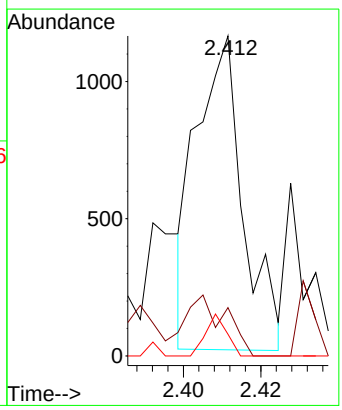


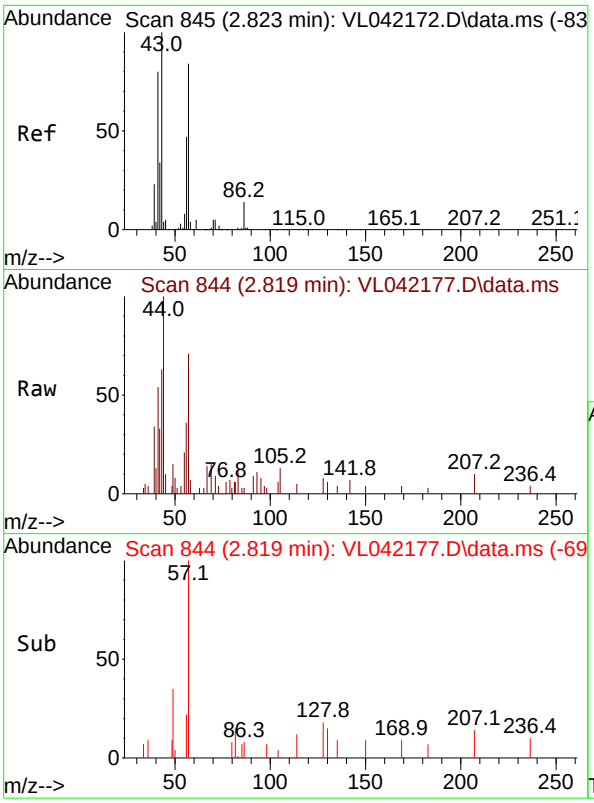


#24
1,1-Dichloroethane
Concen: 0.046 ppbv
RT: 2.412 min Scan# 718
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 63 Resp: 961

Ion	Ratio	Lower	Upper
63	100		
98	16.8	2.3	6.8#
100	7.6	1.6	4.7#



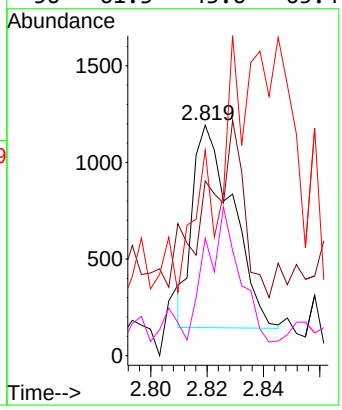


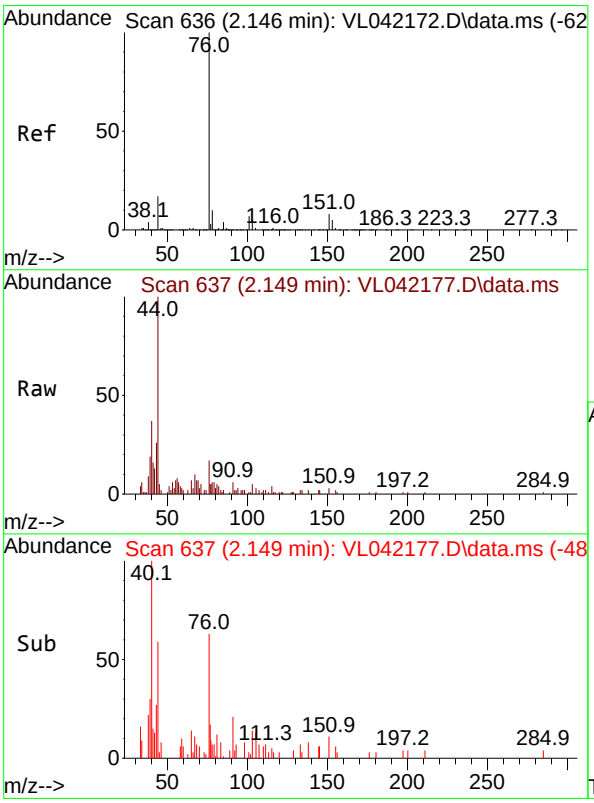
#26
Hexane
Concen: 0.042 ppbv
RT: 2.819 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 57 Resp: 1040

Ion	Ratio	Lower	Upper
57	100		
41	179.4	76.6	114.8#
43	351.5	207.8	311.8#
56	61.3	43.6	65.4

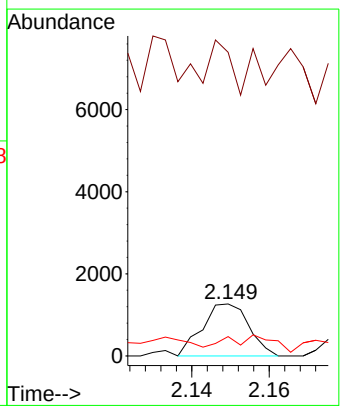


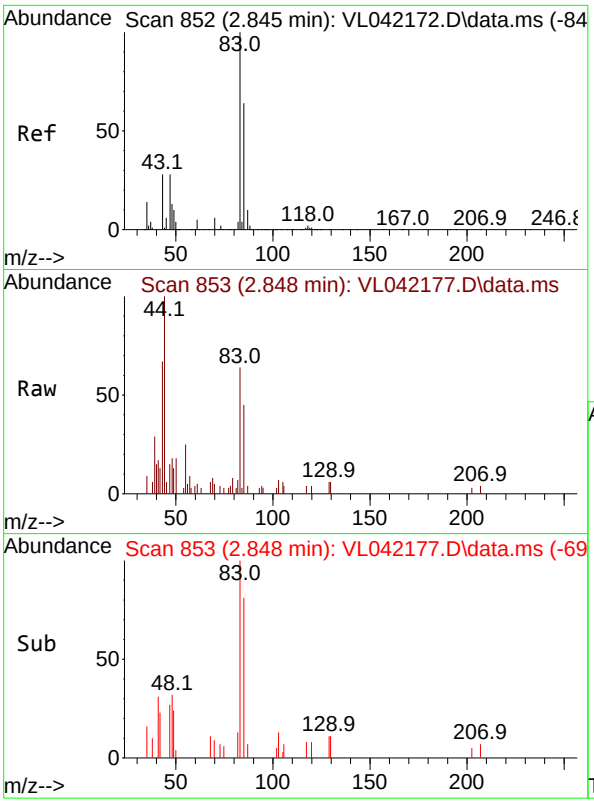


#27
Carbon Disulfide
Concen: 0.040 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 76 Resp: 1061

Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.7	22.1#
78	112.4	9.3	13.9#



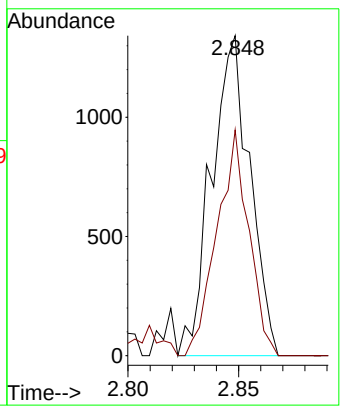


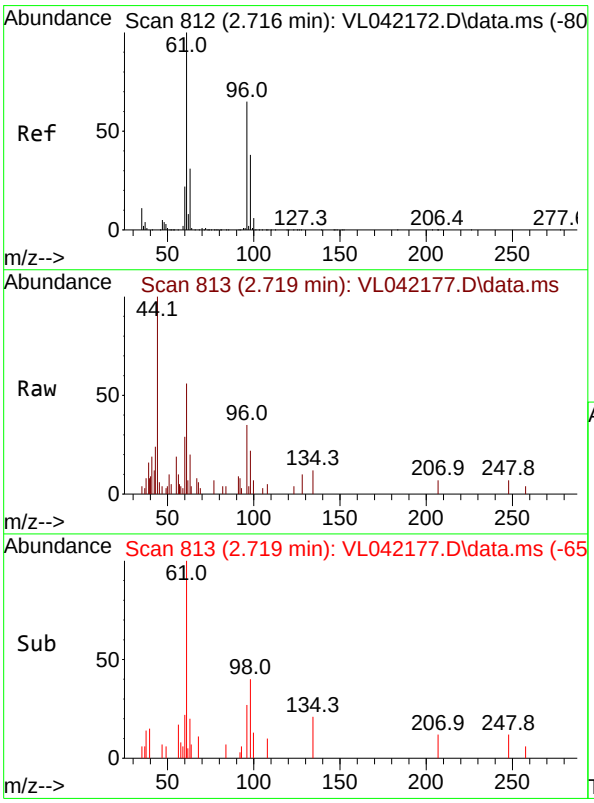
#29
Chloroform
Concen: 0.044 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 83 Resp: 1619

Ion	Ratio	Lower	Upper
83	100		
85	70.6	51.4	77.2

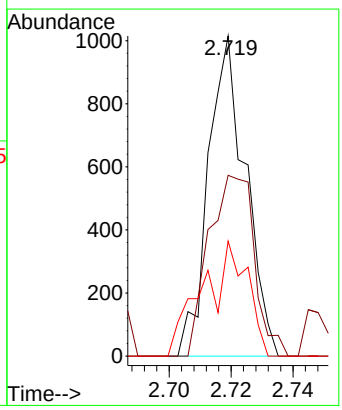


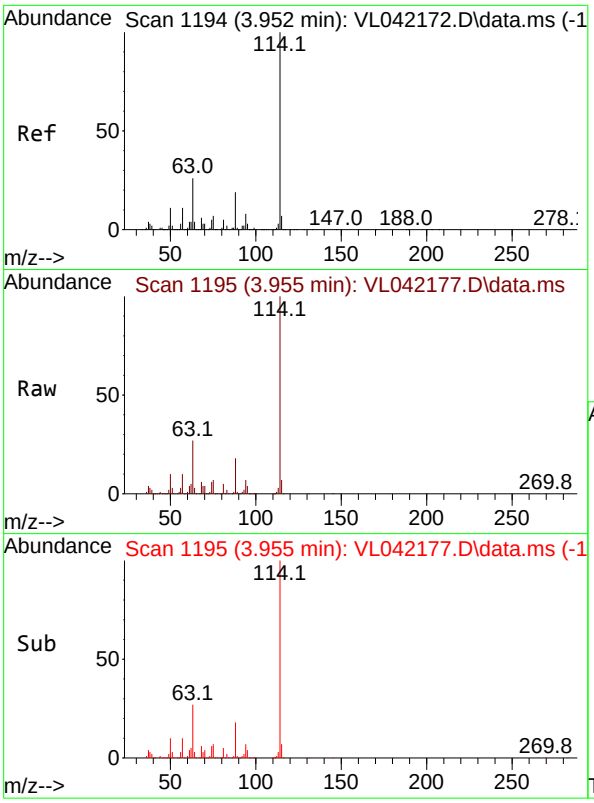


#31
cis-1,2-Dichloroethene
Concen: 0.033 ppbv
RT: 2.719 min Scan# 813
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 61 Resp: 846

Ion	Ratio	Lower	Upper
61	100		
96	56.5	51.8	77.8
98	35.9	30.6	46.0



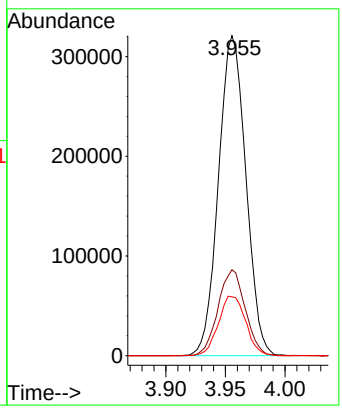


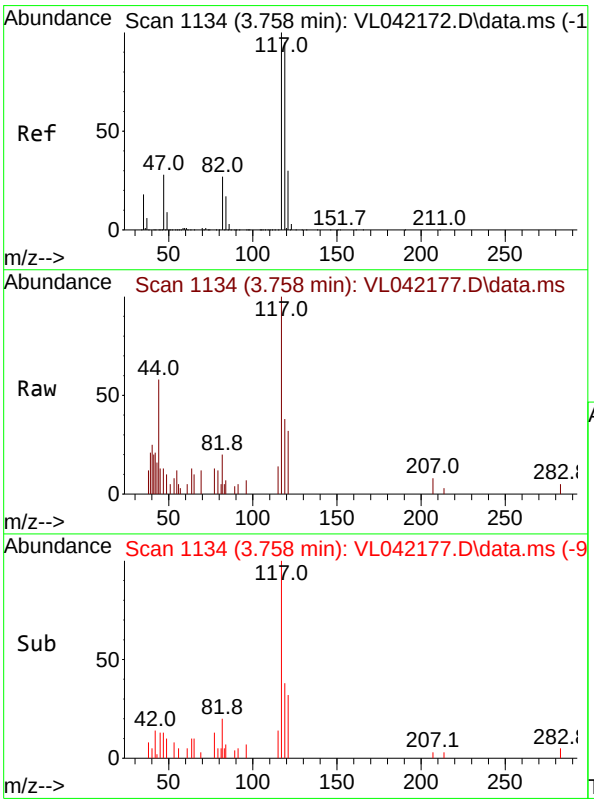
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:114 Resp: 512915

Ion	Ratio	Lower	Upper
114	100		
63	26.6	20.7	31.1
88	18.6	15.0	22.4

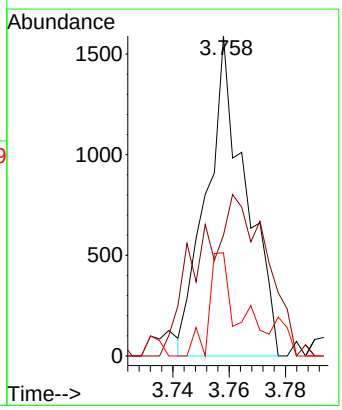


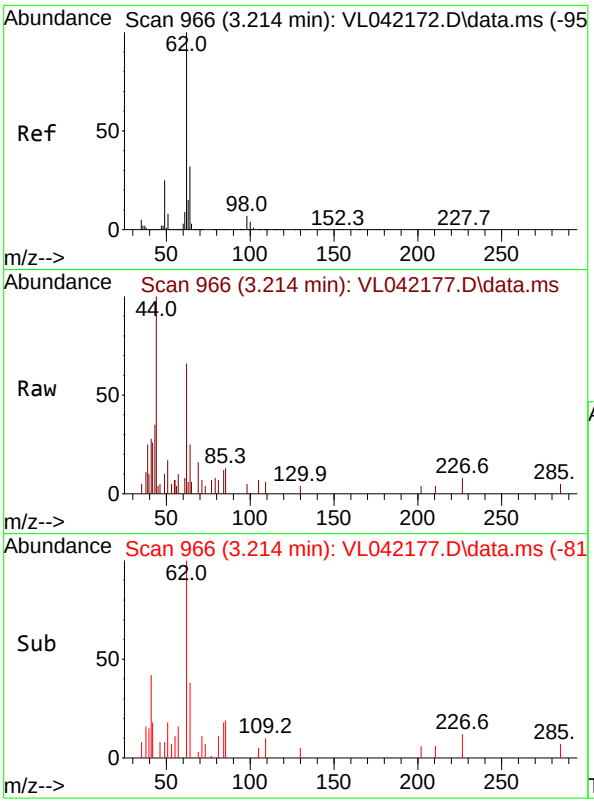


#35
Carbon Tetrachloride
Concen: 0.039 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:117 Resp: 1520

Ion	Ratio	Lower	Upper
117	100		
119	22.1	76.2	114.2#
121	32.3	24.2	36.4



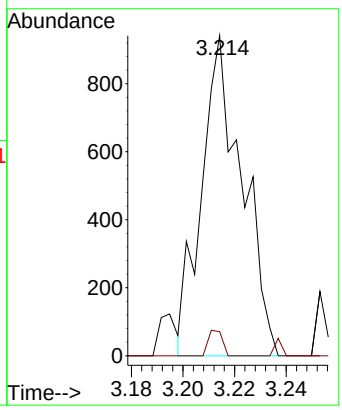


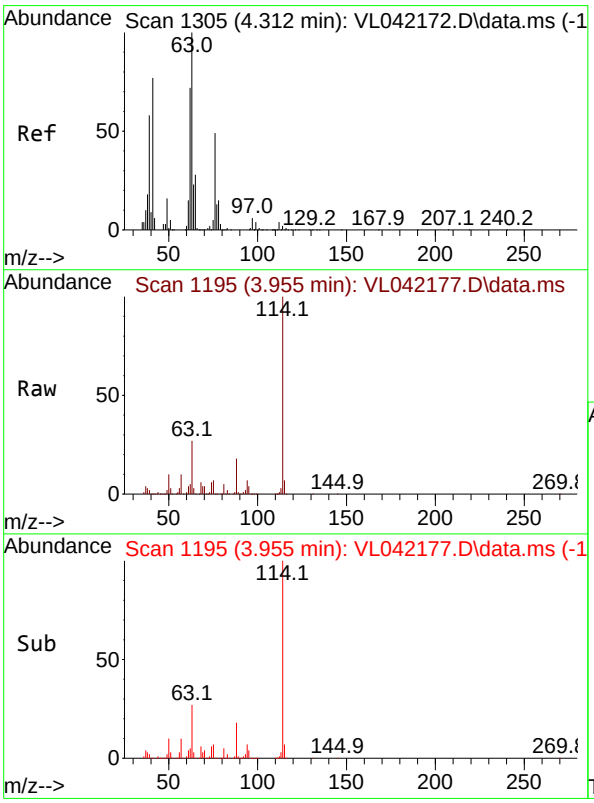
#37
1,2-Dichloroethane
Concen: 0.035 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 62 Resp: 1029

Ion	Ratio	Lower	Upper
62	100		
98	2.7	5.4	8.2#

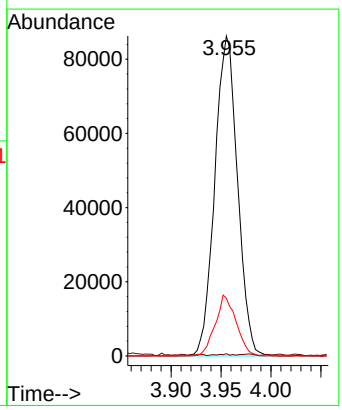


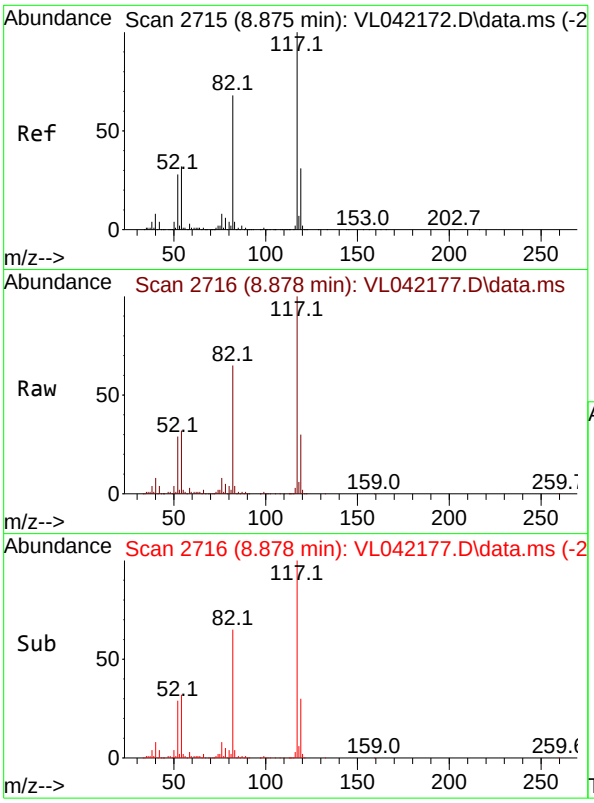


#39
1,2-Dichloropropane
Concen: 7.372 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 63 Resp: 136518

Ion	Ratio	Lower	Upper
63	100		
41	0.4	61.7	92.5#
62	18.0	57.6	86.4#



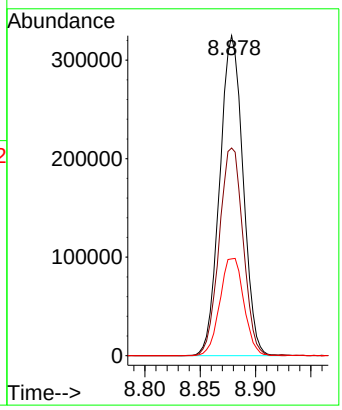


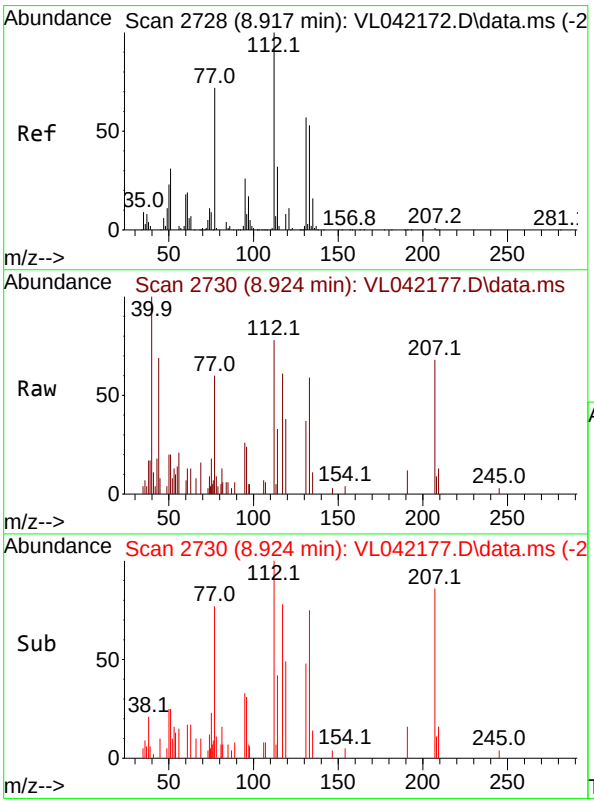
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:117 Resp: 475617

Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	31.5	25.5	38.3

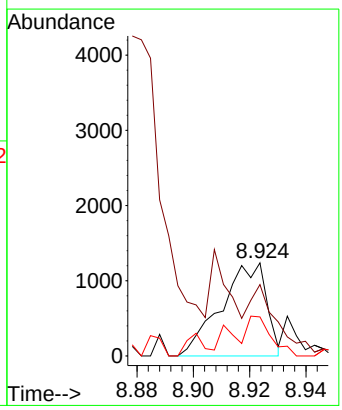


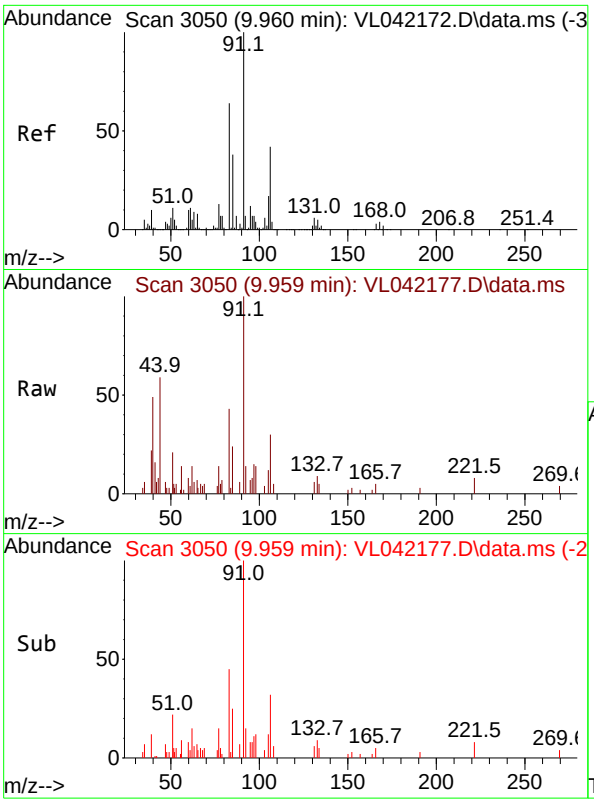


#57
Chlorobenzene
Concen: 0.031 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:112 Resp: 1382

Ion	Ratio	Lower	Upper
112	100		
77	32.1	58.2	87.2#
114	41.8	29.1	35.5#



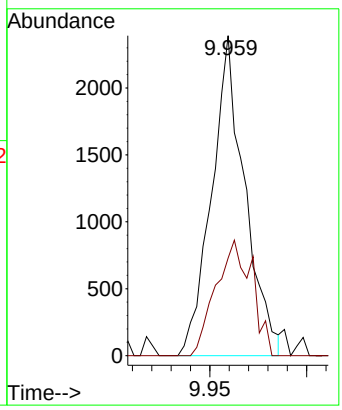


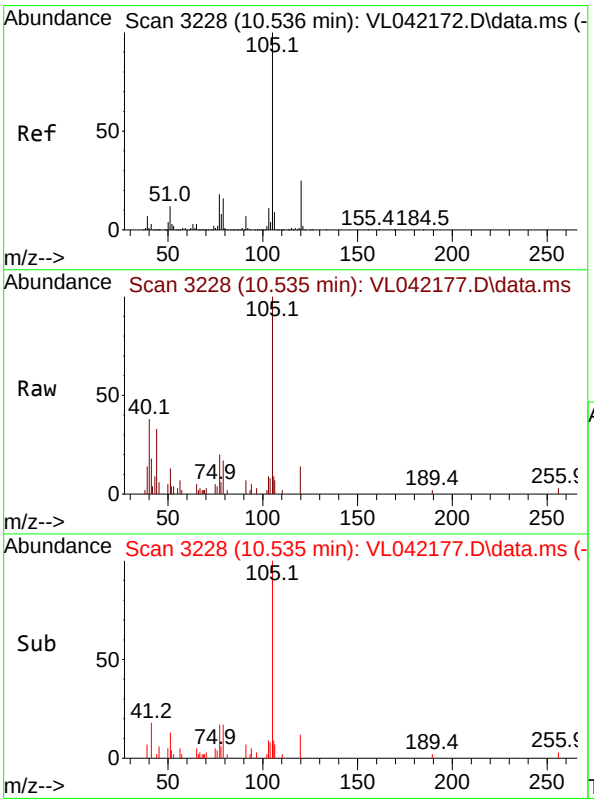
#60
o-Xylene
Concen: 0.042 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 2844

Ion	Ratio	Lower	Upper
91	100		
106	39.4	20.8	62.5

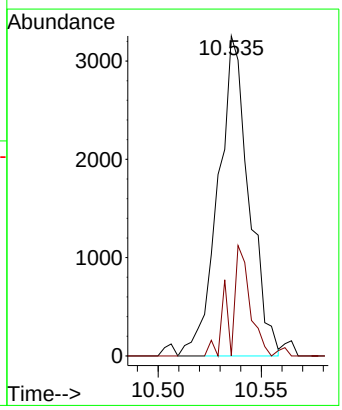


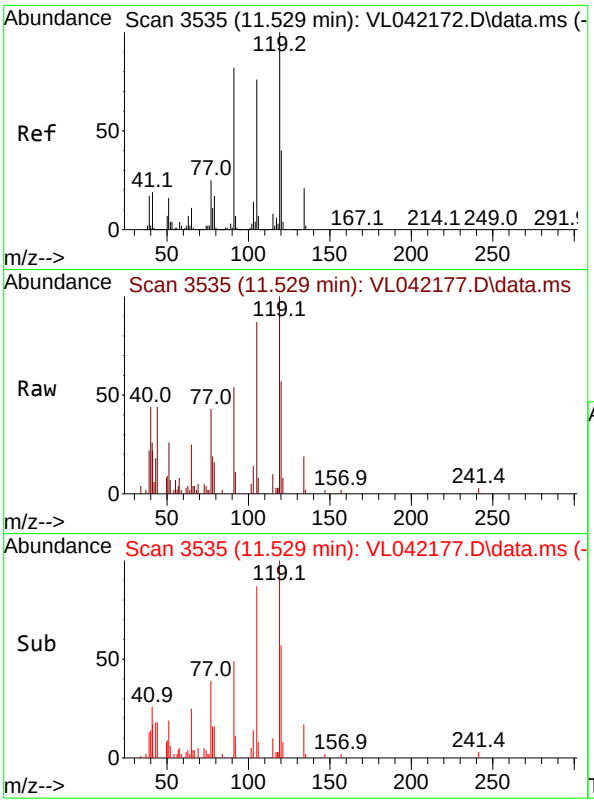


#62
Isopropylbenzene
Concen: 0.033 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:105 Resp: 3380

Ion	Ratio	Lower	Upper
105	100		
120	22.3	19.9	29.9



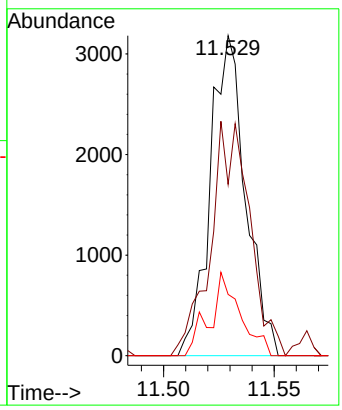


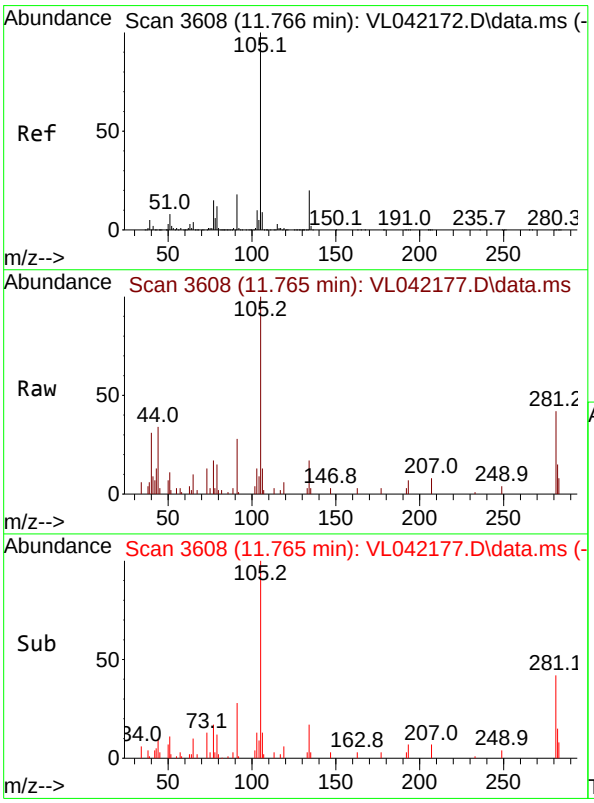
#65
tert-Butylbenzene
Concen: 0.038 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:119 Resp: 3543

Ion	Ratio	Lower	Upper
119	100		
91	83.5	66.0	99.0
134	22.4	16.7	25.1

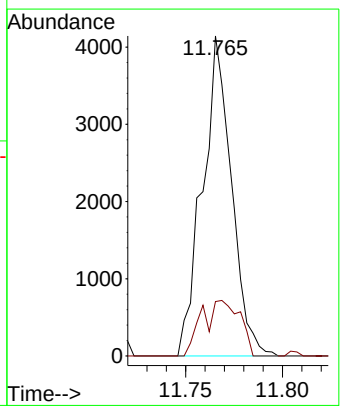


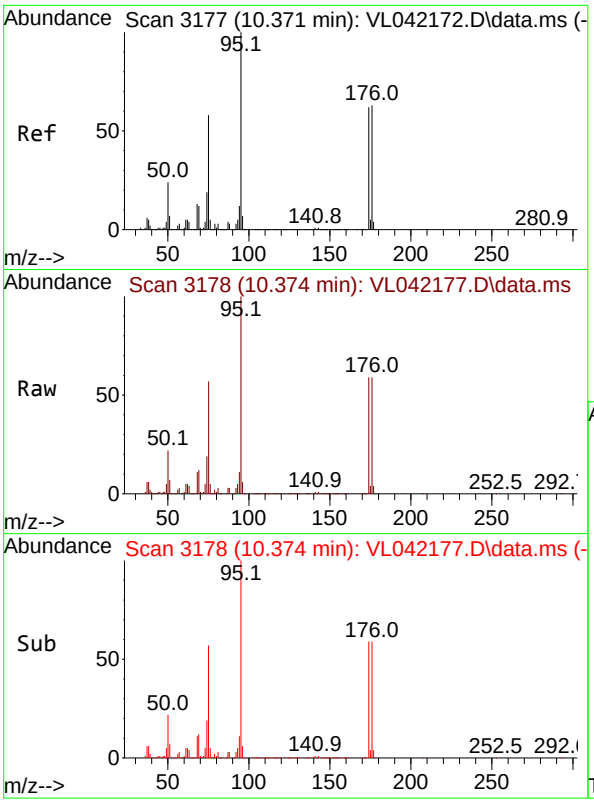


#67
sec-Butylbenzene
Concen: 0.033 ppbv
RT: 11.765 min Scan# 3608
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:105 Resp: 4317

Ion	Ratio	Lower	Upper
105	100		
134	22.8	15.5	23.3



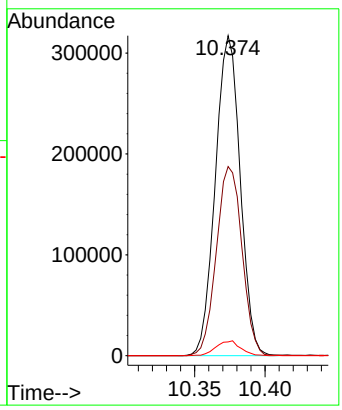


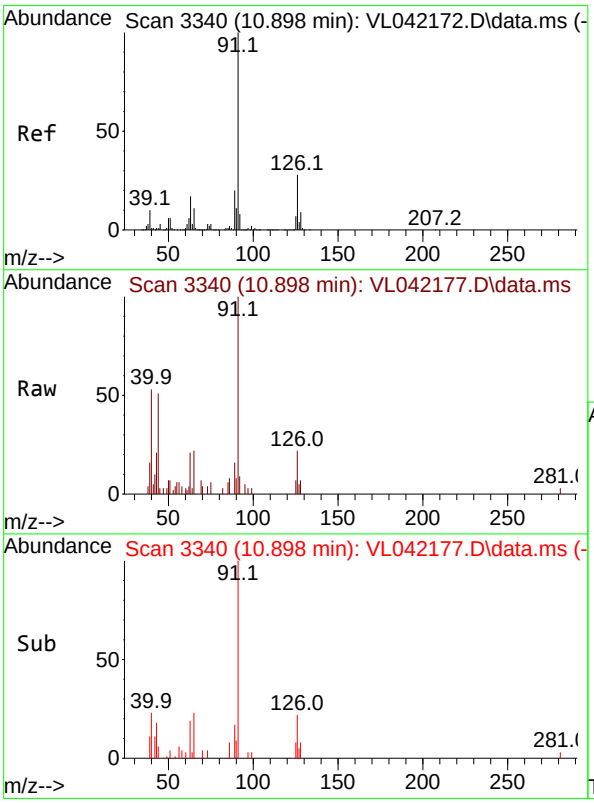
#68
1-Bromo-4-Fluorobenzene
Concen: 9.983 ppbv
RT: 10.374 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 95 Resp: 389935

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.6	3.8	5.6

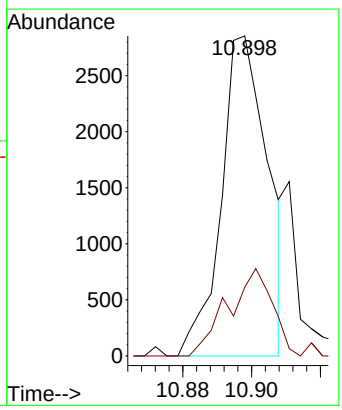


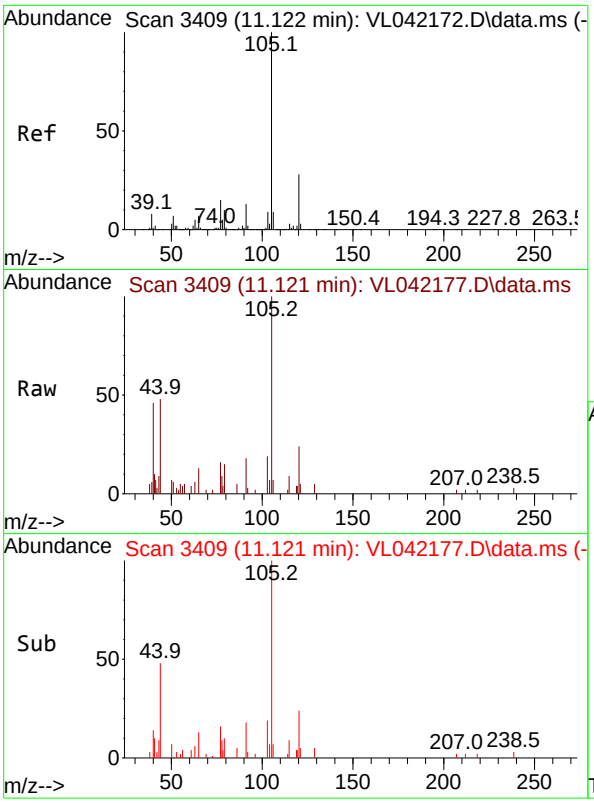


#71
2-Chlorotoluene
Concen: 0.034 ppbv
RT: 10.898 min Scan# 3340
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 91 Resp: 2666

Ion	Ratio	Lower	Upper
91	100		
126	27.2	11.6	46.4



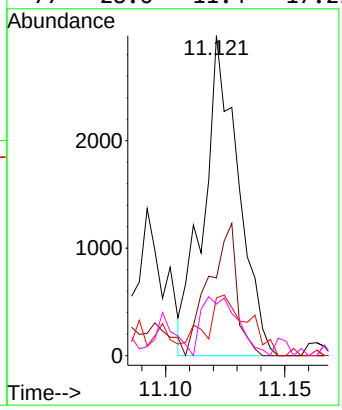


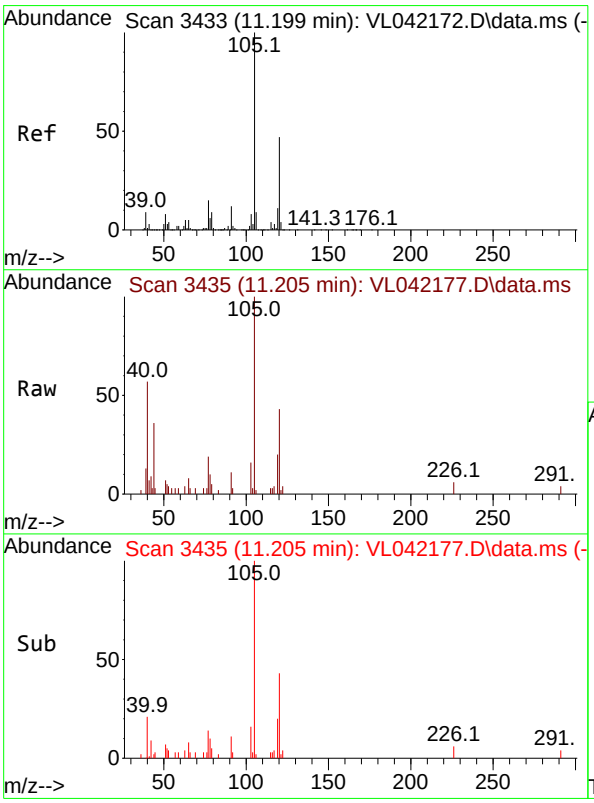
#72
4-Ethyltoluene
Concen: 0.036 ppbv
RT: 11.121 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 3017

Ion	Ratio	Lower	Upper
105	100		
120	44.5	23.4	35.0#
91	34.0	10.3	15.5#
77	28.6	11.4	17.2#

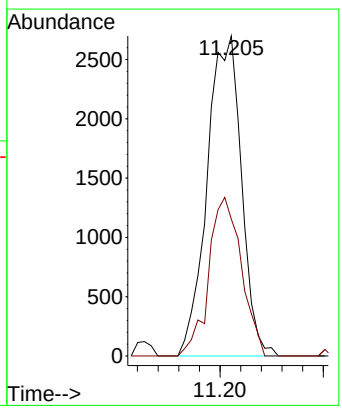


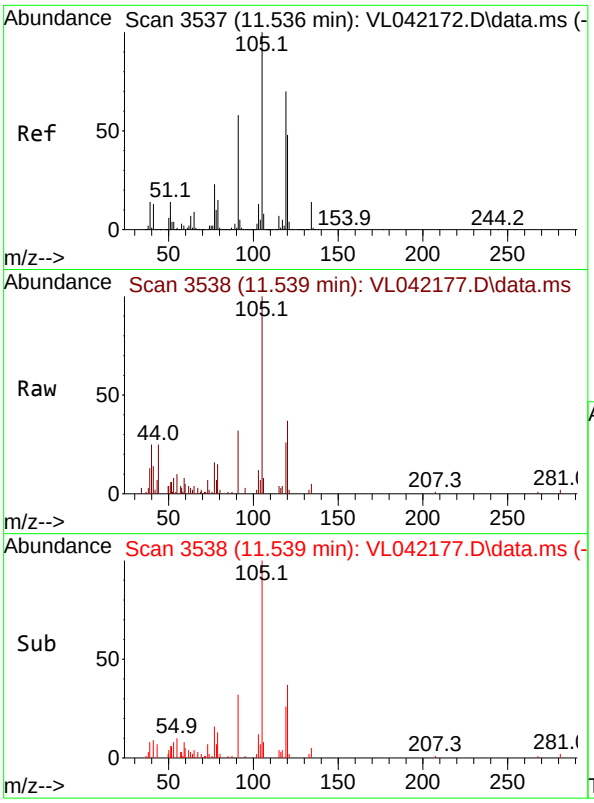


#73
1,3,5-Trimethylbenzene
Concen: 0.042 ppbv
RT: 11.205 min Scan# 3435
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:105 Resp: 3101

Ion	Ratio	Lower	Upper
105	100		
120	42.8	37.4	56.0



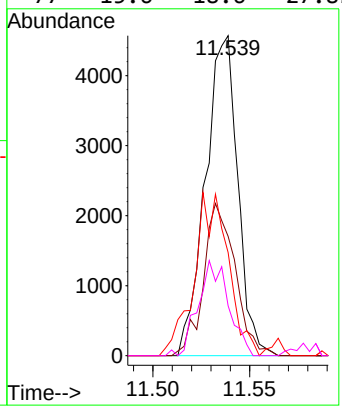


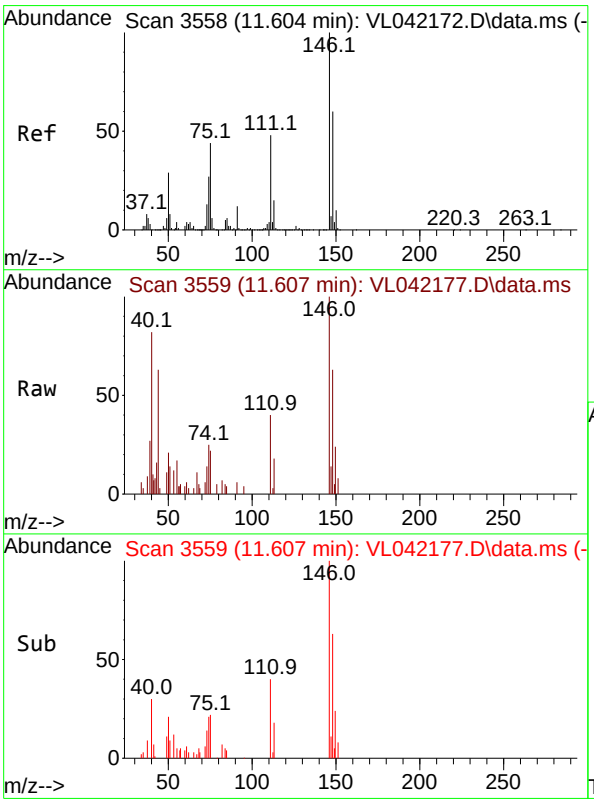
#74
1,2,4-Trimethylbenzene
Concen: 0.063 ppbv
RT: 11.539 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 5313

Ion	Ratio	Lower	Upper
105	100		
120	37.3	38.6	58.0#
91	26.8	46.2	69.2#
77	15.6	18.6	27.8#

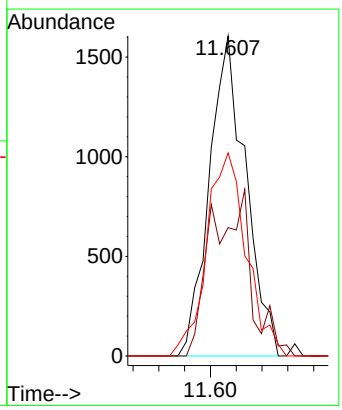


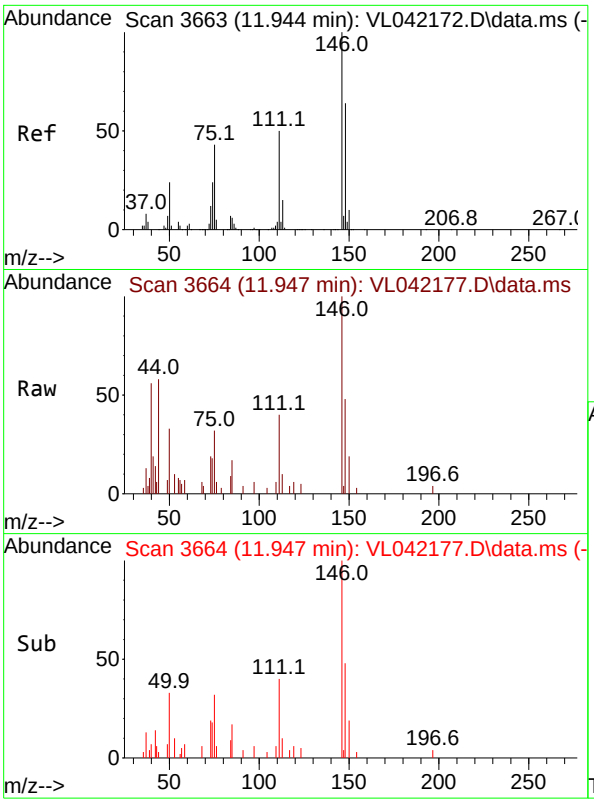


#75
1,3-Dichlorobenzene
Concen: 0.034 ppbv
RT: 11.607 min Scan# 3559
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:146 Resp: 1577

Ion	Ratio	Lower	Upper
146	100		
111	56.6	23.8	71.2
148	69.2	31.9	95.9



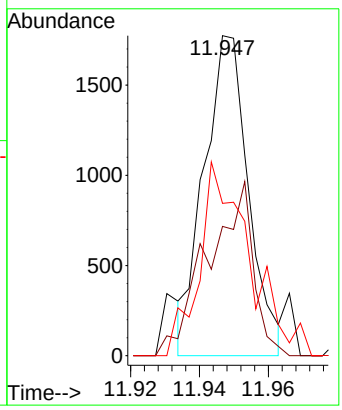


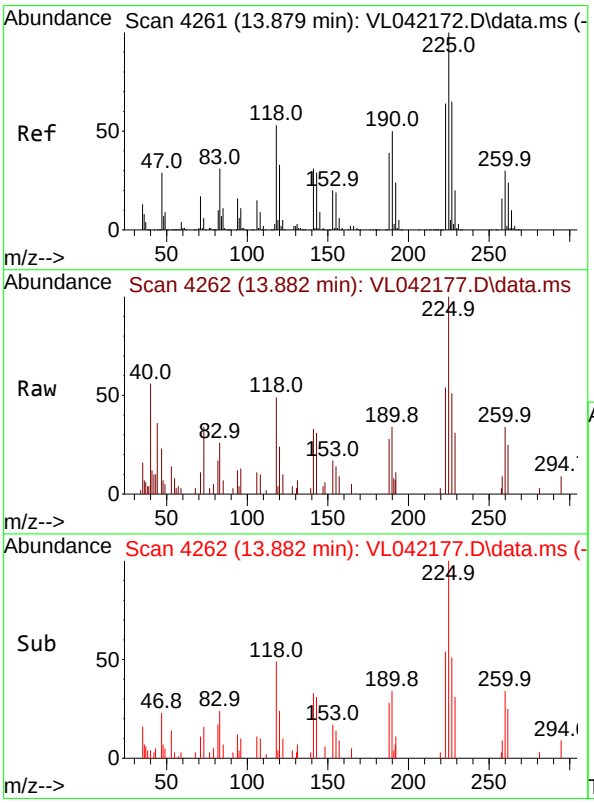
#77
1,2-Dichlorobenzene
Concen: 0.035 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:146 Resp: 1591

Ion	Ratio	Lower	Upper
146	100		
111	55.6	24.8	74.3
148	68.3	31.6	94.8

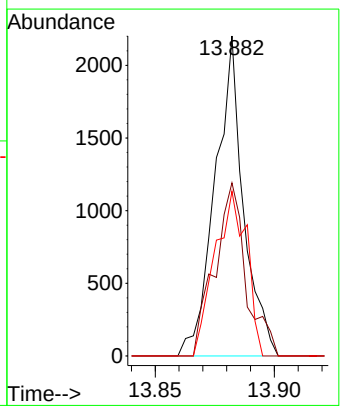




#78
Hexachloro-1,3-Butadiene
Concen: 0.040 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:225 Resp: 1821

Ion	Ratio	Lower	Upper
225	100		
223	59.6	50.6	76.0
227	58.0	51.2	76.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	173372	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	499360	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	473077	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	387777	9.981	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	358962	14.023	ppbv		99
3) Chlorodifluoromethane	1.473	51	366164	14.002	ppbv		98
4) Chloromethane	1.531	50	148133	14.160	ppbv		98
5) Vinyl Chloride	1.576	62	141938	13.304	ppbv		97
6) Bromomethane	1.667	94	65113	13.734	ppbv		99
7) Chloroethane	1.703	64	58820	14.007	ppbv		99
8) Dichlorotetrafluoroethane	1.550	85	314834	14.442	ppbv		98
9) Propene	1.482	41	163799	13.902	ppbv		95
10) Heptane	4.972	43	446949	14.019	ppbv		99
11) Trichlorofluoromethane	1.874	101	349967	14.050	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.136	101	295217	14.419	ppbv		99
13) Ethanol	1.719	45	7382	8.001	ppbv		92
14) Bromoethene	1.780	108	106436	13.571	ppbv		98
15) Acetone	1.832	43	296254	12.218	ppbv		98
16) 1,3-Butadiene	1.605	39	150122	13.766	ppbv		100
17) tert-Butyl alcohol	2.039	59	416362	13.787	ppbv		99
18) 1,1-Dichloroethene	2.029	96	131720	13.762	ppbv		99
19) Isopropyl Alcohol	1.884	45	179117	13.093	ppbv		100
20) Methylene Chloride	2.059	84	113183	12.533	ppbv		95
21) Allyl Chloride	2.094	41	239440	14.002	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	149455	13.362	ppbv		98
23) Vinyl Acetate	2.460	43	138419	13.736	ppbv	#	96
24) 1,1-Dichloroethane	2.405	63	298760	14.570	ppbv		99
25) Ethyl Acetate	2.832	43	871882	13.855	ppbv		100
26) Hexane	2.822	57	344636	14.178	ppbv		98
27) Carbon Disulfide	2.146	76	370022	14.196	ppbv		97
28) Methyl tert-Butyl Ether	2.437	73	216463	14.303	ppbv		95
29) Chloroform	2.845	83	508614	14.297	ppbv		100
30) Cyclohexane	3.852	84	296458	14.040	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	351945	14.262	ppbv		97
32) 1,1,1-Trichloroethane	3.363	97	547329	13.448	ppbv		99
34) 2-Butanone	2.554	43	497020	13.726	ppbv		99
35) Carbon Tetrachloride	3.758	117	543385	14.140	ppbv		100
36) Benzene	3.651	78	699549	14.131	ppbv		98
37) 1,2-Dichloroethane	3.214	62	416544	14.697	ppbv		99
38) Trichloroethene	4.541	130	283430	13.715	ppbv		98
39) 1,2-Dichloropropane	4.308	63	257891	14.304	ppbv		99
40) 1,4-Dioxane	4.577	88	124925	13.354	ppbv	#	91
41) Tetrahydrofuran	3.049	42	294634	14.301	ppbv		100
42) Bromodichloromethane	4.483	83	587772	15.043	ppbv		99
43) Methyl Methacrylate	4.874	69	295300	14.130	ppbv		99
44) 2,2,4-Trimethylpentane	4.635	57	1180275	14.108	ppbv		99
45) t-1,3-Dichloropropene	6.405	75	329360	14.649	ppbv		96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	400813	14.542	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	273137	14.331	ppbv		98
48) Dibromochloromethane	7.383	129	482431	14.936	ppbv		100
49) Bromoform	9.480	173	427143	14.730	ppbv		99
50) 4-Methyl-2-Pentanone	5.745	43	755146	13.155	ppbv		99
51) 2-Hexanone	7.431	43	619419	13.005	ppbv	#	99
52) Tetrachloroethene	8.221	164	258356	13.159	ppbv		95
53) Toluene	6.926	91	829648	14.137	ppbv		100
54) 1,2-Dibromoethane	7.645	107	381823	14.359	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.920	131	365410	14.032	ppbv		99
57) Chlorobenzene	8.917	112	618201	13.777	ppbv		100
58) Ethyl Benzene	9.351	91	1167096	13.889	ppbv		97
59) m/p-Xylene	9.548	91	866684	12.901	ppbv	#	22
60) o-Xylene	9.962	91	913234	13.577	ppbv		99
61) Styrene	9.865	104	474195	14.250	ppbv		99
62) Isopropylbenzene	10.535	105	1362416	13.544	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	551386	13.491	ppbv		99
64) n-propylbenzene	10.985	120	356118	13.753	ppbv		94
65) tert-Butylbenzene	11.529	119	1200149	12.901	ppbv		98
66) Benzyl Chloride	11.613	91	134397	13.615	ppbv		100
67) sec-Butylbenzene	11.765	105	1643629	12.711	ppbv		99
69) p-Isopropyltoluene	11.924	119	1437016	12.906	ppbv		98
70) n-Butylbenzene	12.280	91	1477443	12.975	ppbv		99
71) 2-Chlorotoluene	10.898	91	1071432	13.724	ppbv		99
72) 4-Ethyltoluene	11.121	105	1136415	13.569	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	979783	13.395	ppbv		99
74) 1,2,4-Trimethylbenzene	11.535	105	1048874	12.447	ppbv		92
75) 1,3-Dichlorobenzene	11.607	146	626015	13.545	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	628694	13.668	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	602844	13.396	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	556392	12.147	ppbv		99
79) Naphthalene	13.513	128	1258479	13.653	ppbv		98
80) Naphthalene,2-methyl-	14.455	142	718900	16.018	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	598416	14.075	ppbv		99

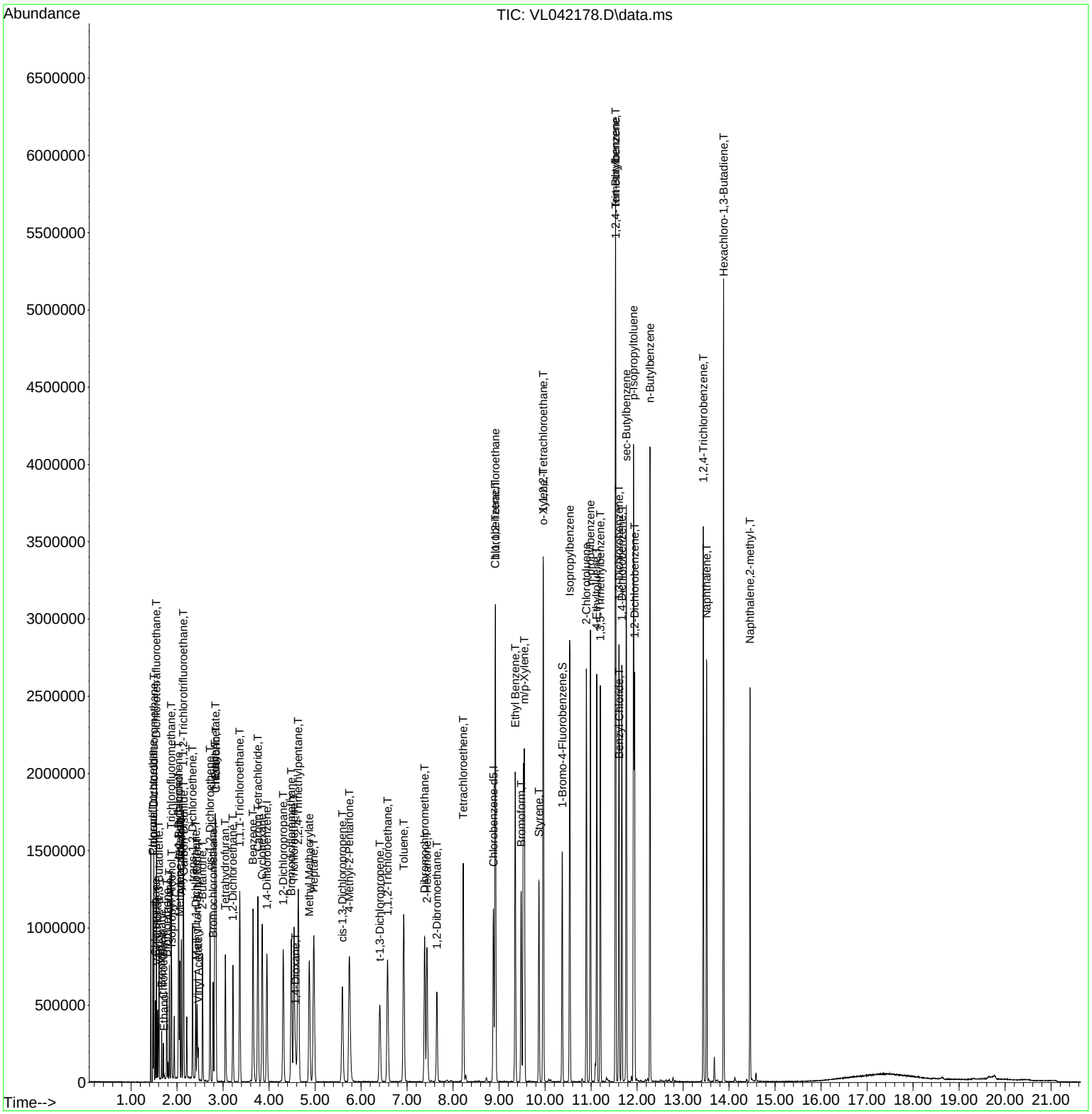
(#) = qualifier out of range (m) = manual integration (+) = signals summed

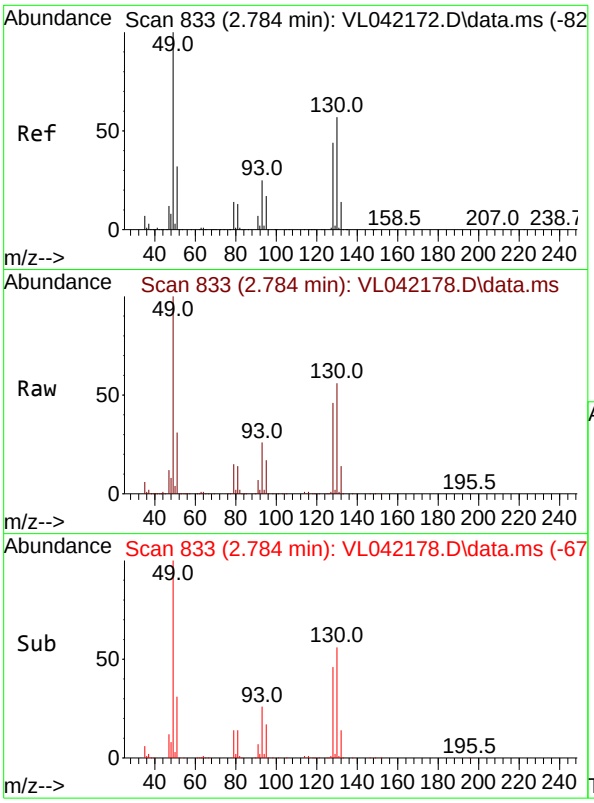
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



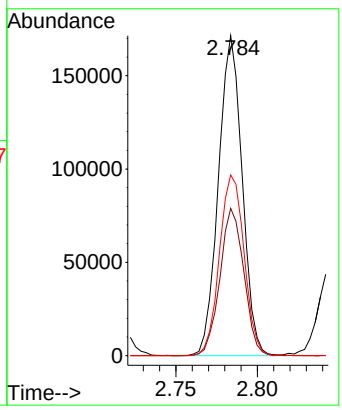


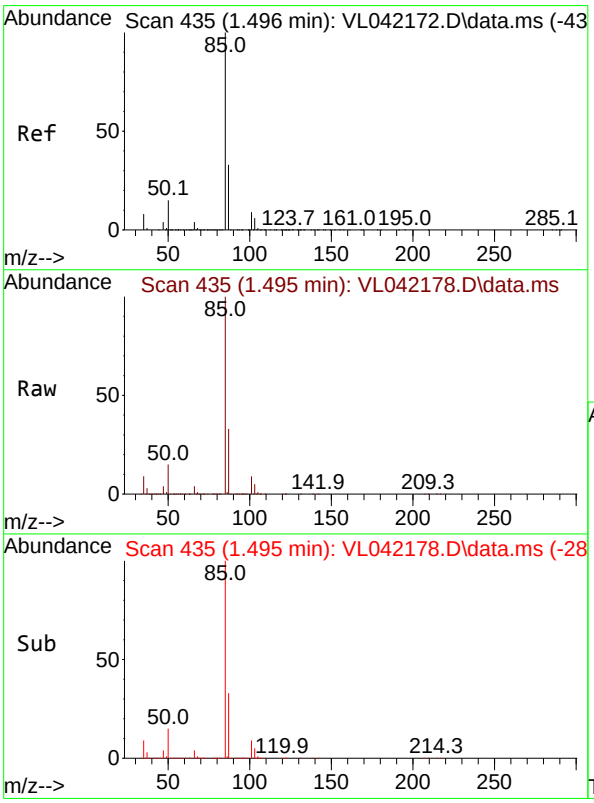
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 49 Resp: 173372

Ion	Ratio	Lower	Upper
49	100		
128	46.4	22.9	68.5
130	58.7	28.8	86.4

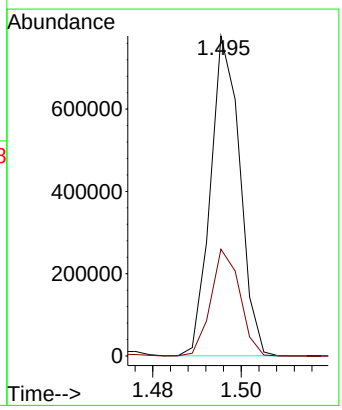


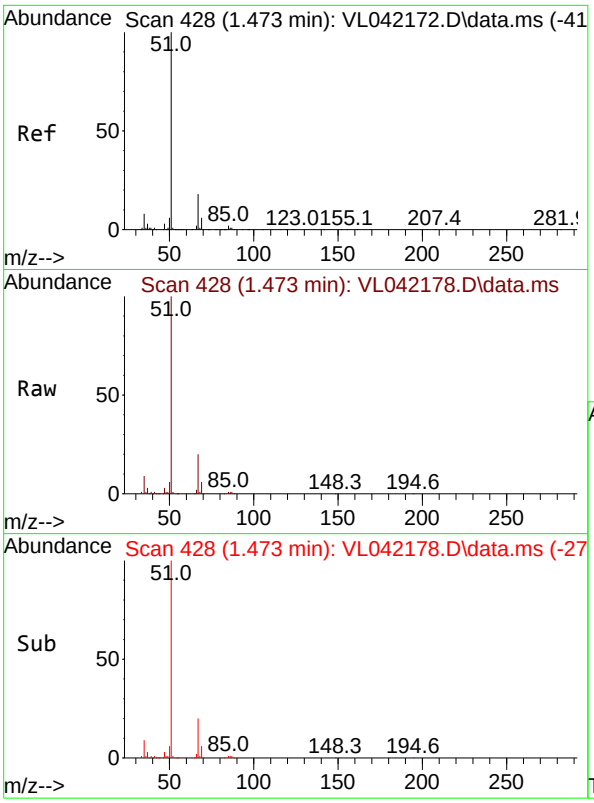


#2
Dichlorodifluoromethane
Concen: 14.023 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 358962

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.1	39.1



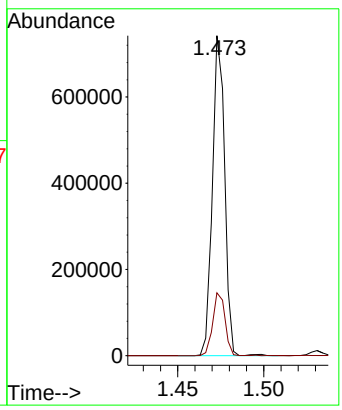


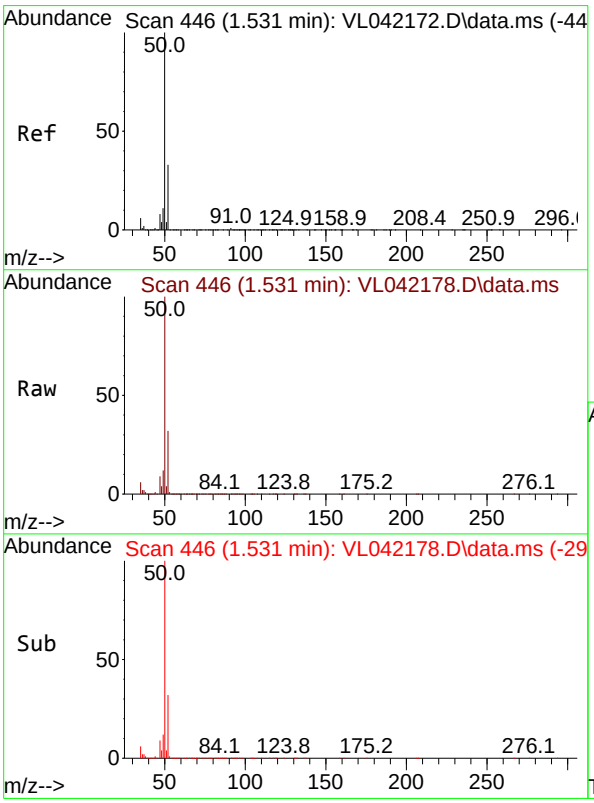
#3
Chlorodifluoromethane
Concen: 14.002 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 51 Resp: 366164

Ion	Ratio	Lower	Upper
51	100		
67	19.8	15.0	22.6

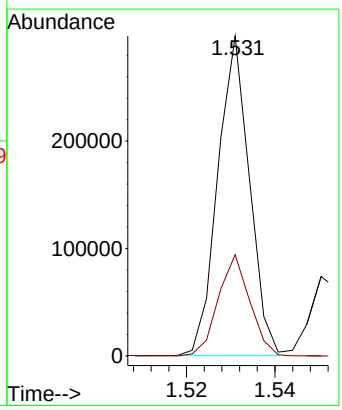


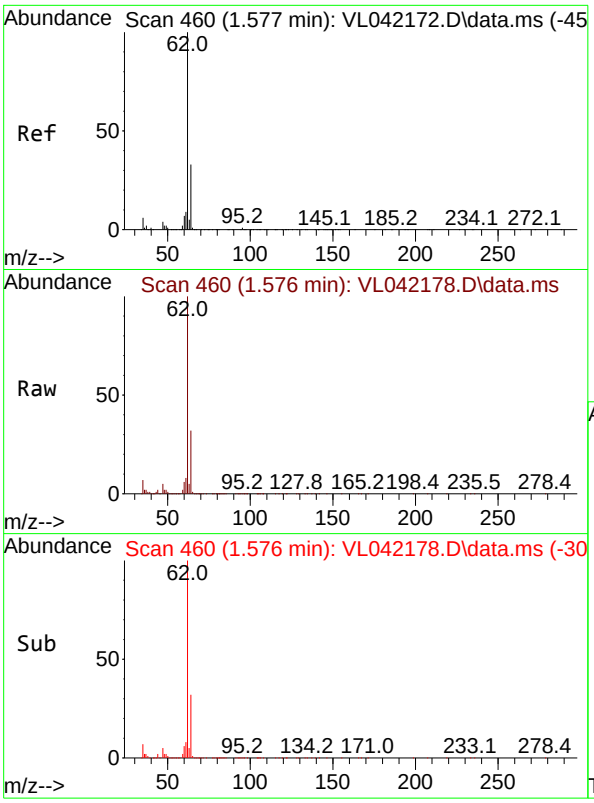


#4
Chloromethane
Concen: 14.160 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 50 Resp: 148133

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1



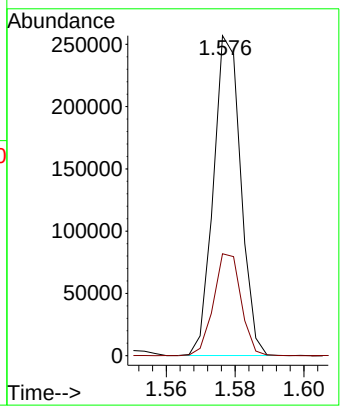


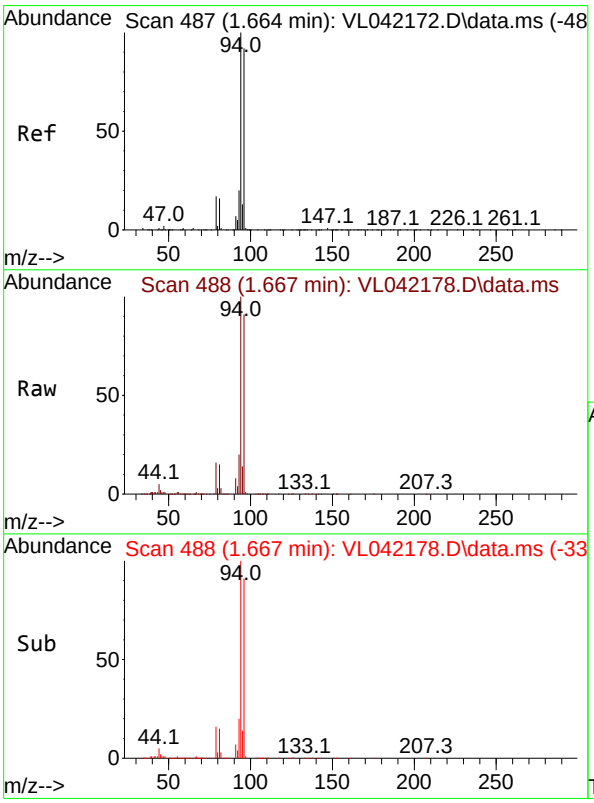
#5
Vinyl Chloride
Concen: 13.304 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 141938

Ion	Ratio	Lower	Upper
62	100		
64	31.9	26.6	40.0

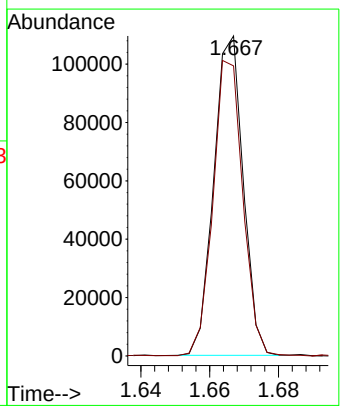


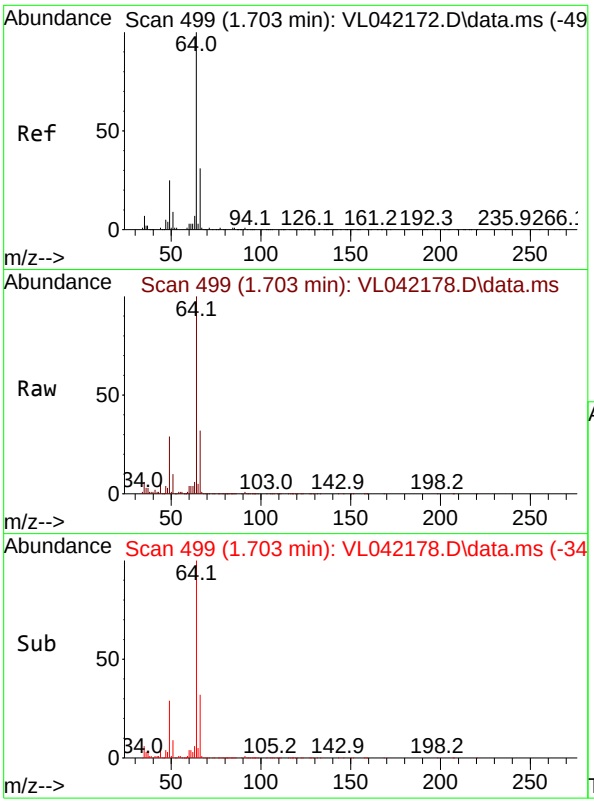


#6
Bromomethane
Concen: 13.734 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 94 Resp: 65113

Ion	Ratio	Lower	Upper
94	100		
96	90.7	73.1	109.7



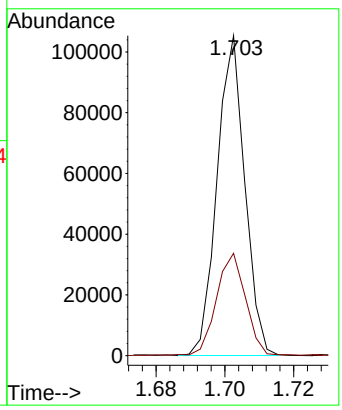


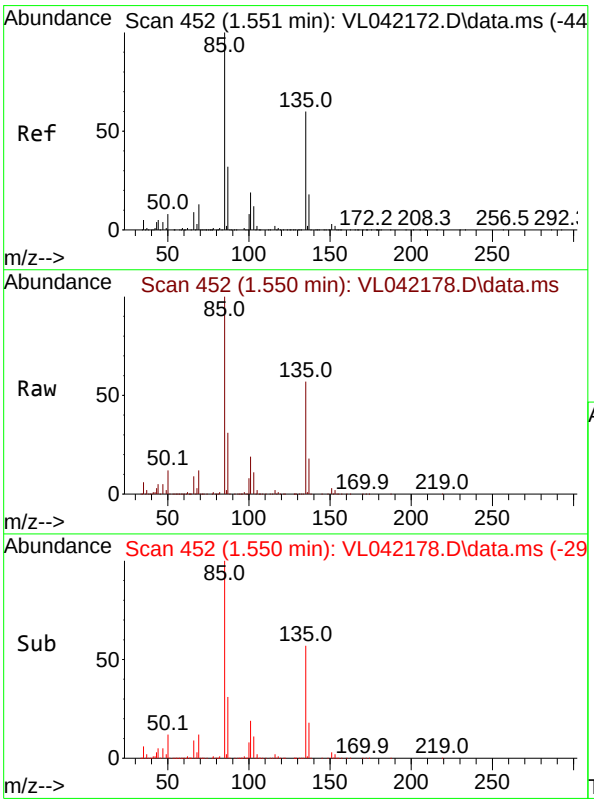
#7
Chloroethane
Concen: 14.007 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 64 Resp: 58820

Ion	Ratio	Lower	Upper
64	100		
66	32.0	25.2	37.8

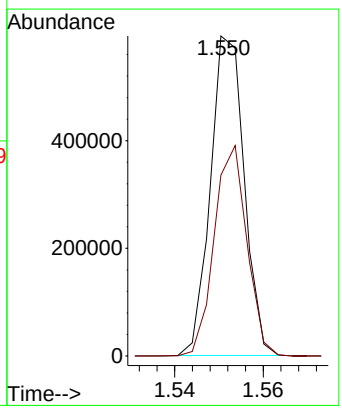


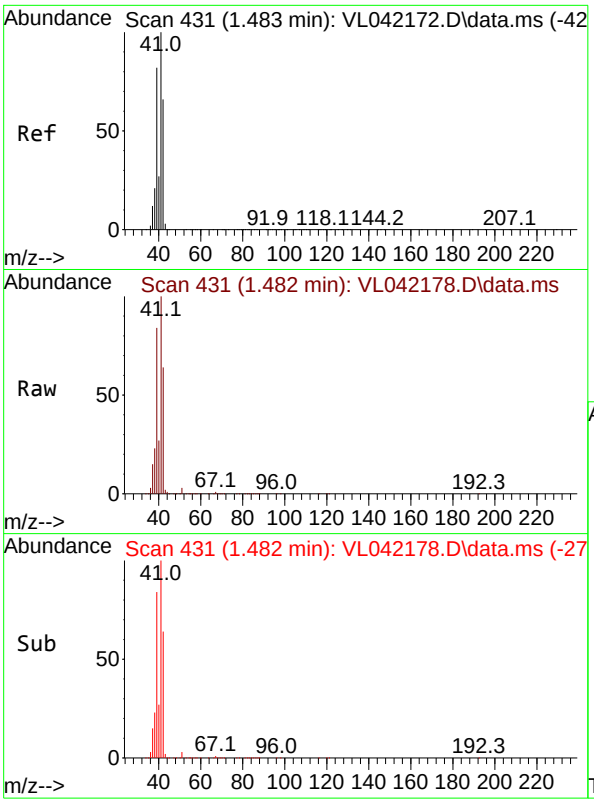


#8
Dichlorotetrafluoroethane
Concen: 14.442 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 314834

Ion	Ratio	Lower	Upper
85	100		
135	63.8	52.4	78.6



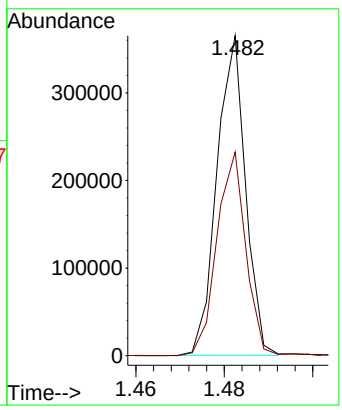


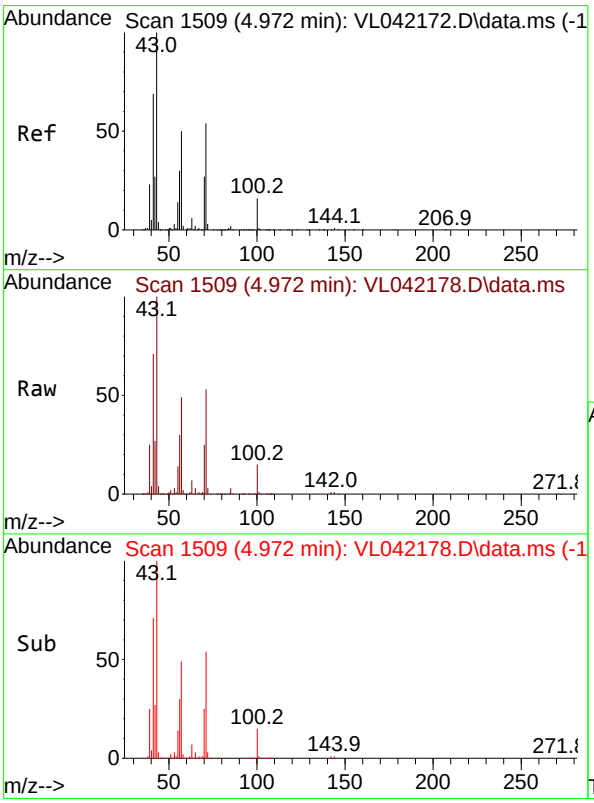
#9
Propene
Concen: 13.902 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 163799

Ion	Ratio	Lower	Upper
41	100		
42	65.3	55.4	83.2

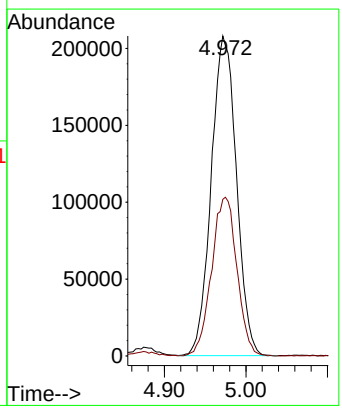


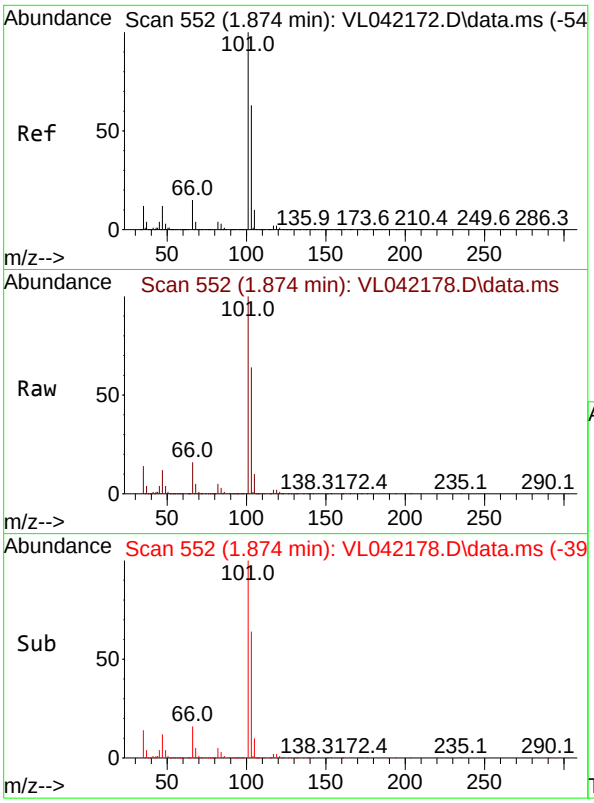


#10
Heptane
Concen: 14.019 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 446949

Ion	Ratio	Lower	Upper
43	100		
57	49.9	39.4	59.2



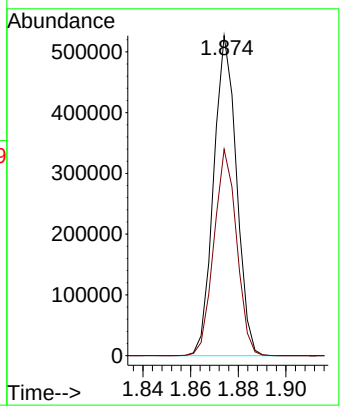


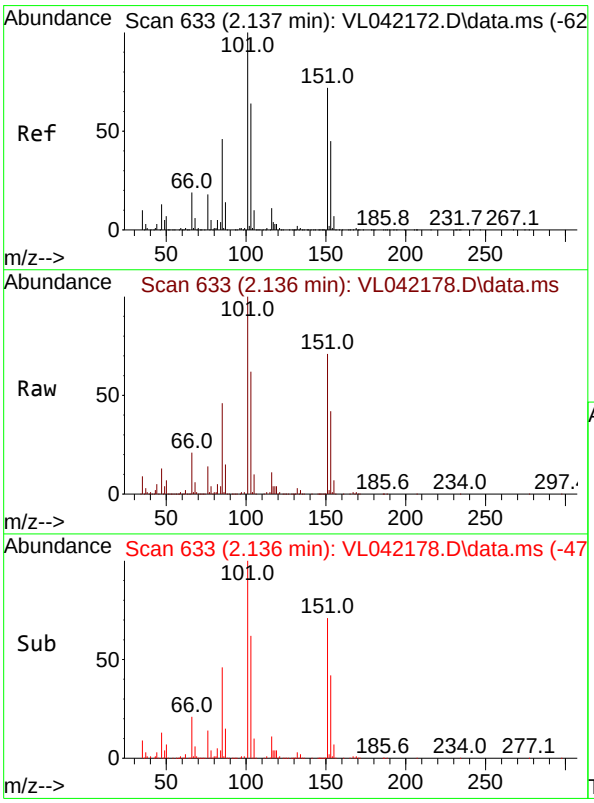
#11
Trichlorofluoromethane
Concen: 14.050 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:101 Resp: 349967

Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.2	75.2

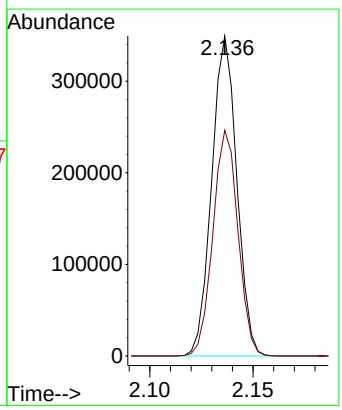


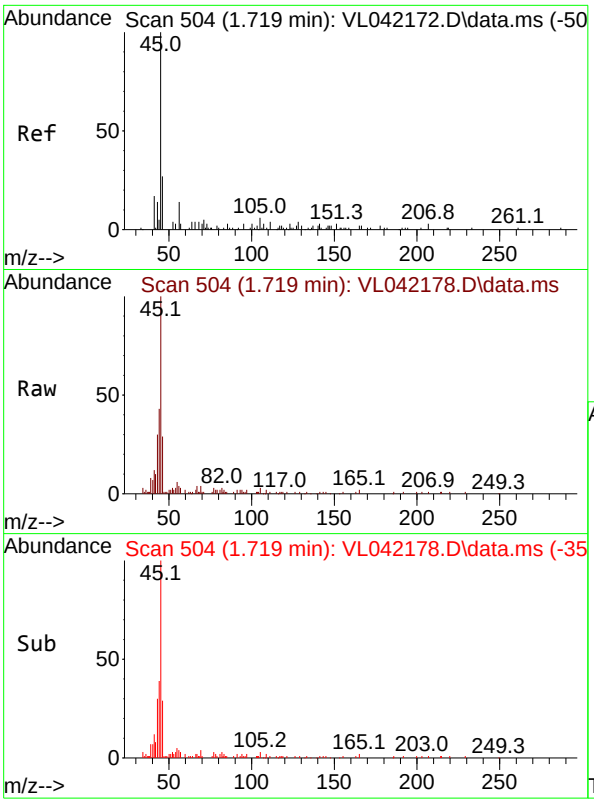


#12
1,1,2-Trichlorotrifluoroethane
Concen: 14.419 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:101 Resp: 295217

Ion	Ratio	Lower	Upper
101	100		
151	70.4	57.1	85.7



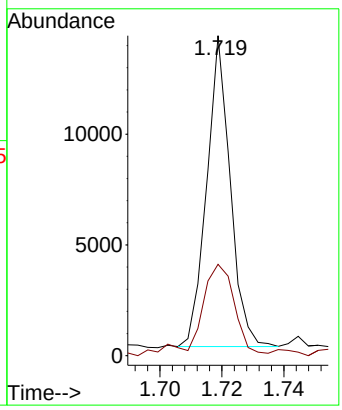


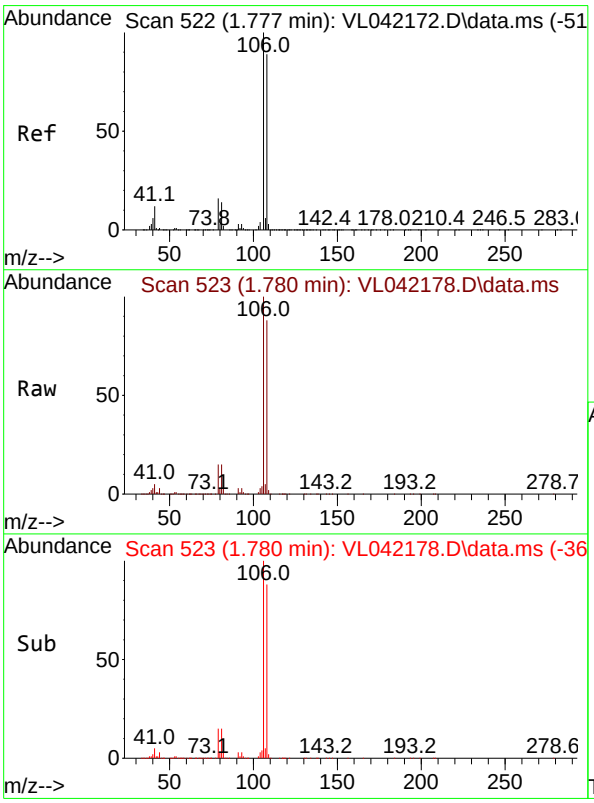
#13
Ethanol
Concen: 8.001 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 7382

Ion	Ratio	Lower	Upper
45	100		
46	44.6	20.2	80.8

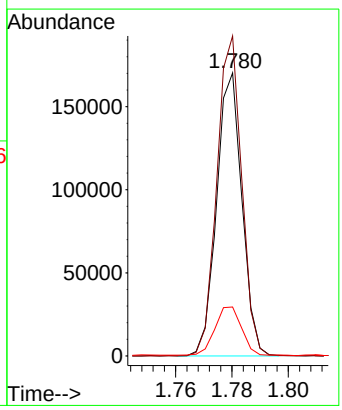


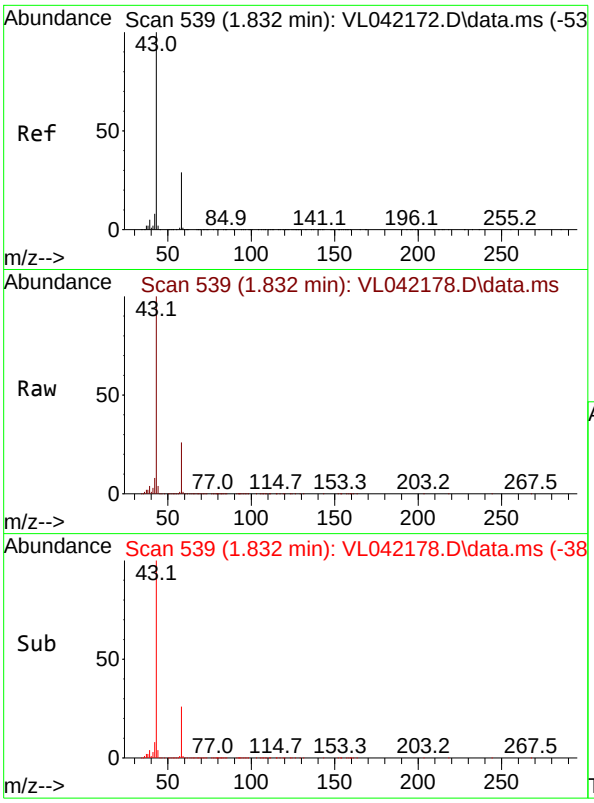


#14
Bromoethene
Concen: 13.571 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:108 Resp: 106436

Ion	Ratio	Lower	Upper
108	100		
106	110.9	86.8	130.2
79	18.8	15.0	22.6



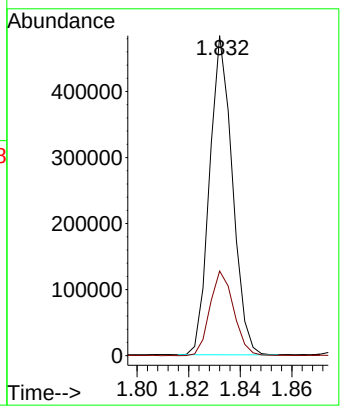


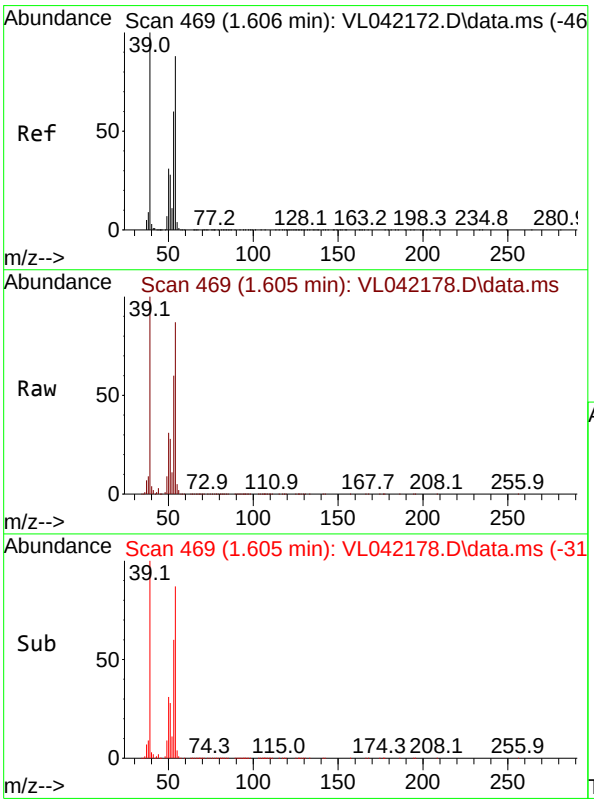
#15
Acetone
Concen: 12.218 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 296254

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8

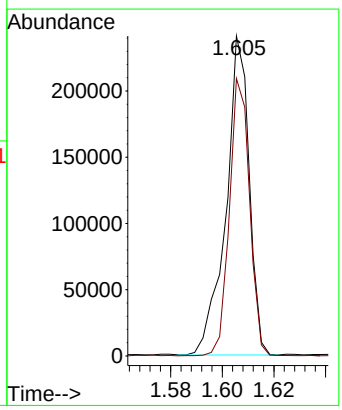


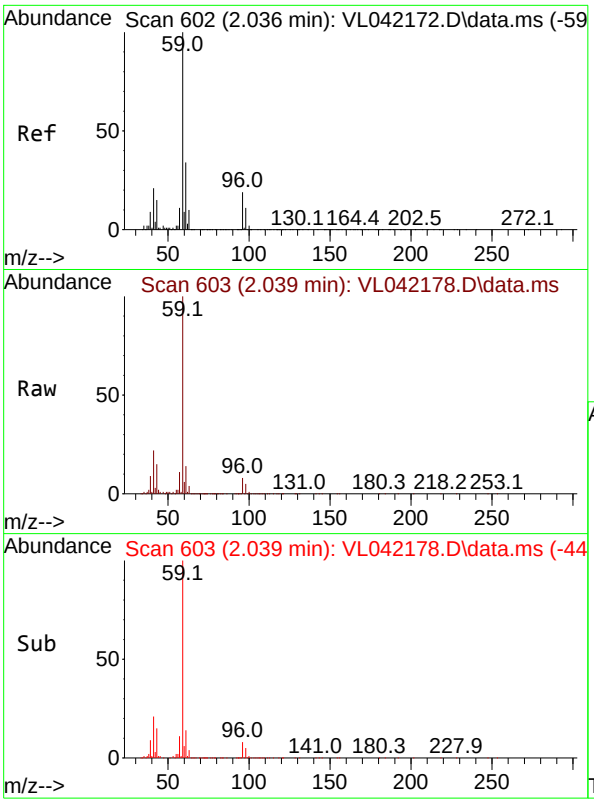


#16
1,3-Butadiene
Concen: 13.766 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 39 Resp: 150122

Ion	Ratio	Lower	Upper
39	100		
54	76.3	60.7	91.1



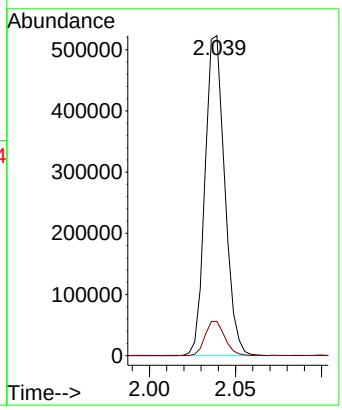


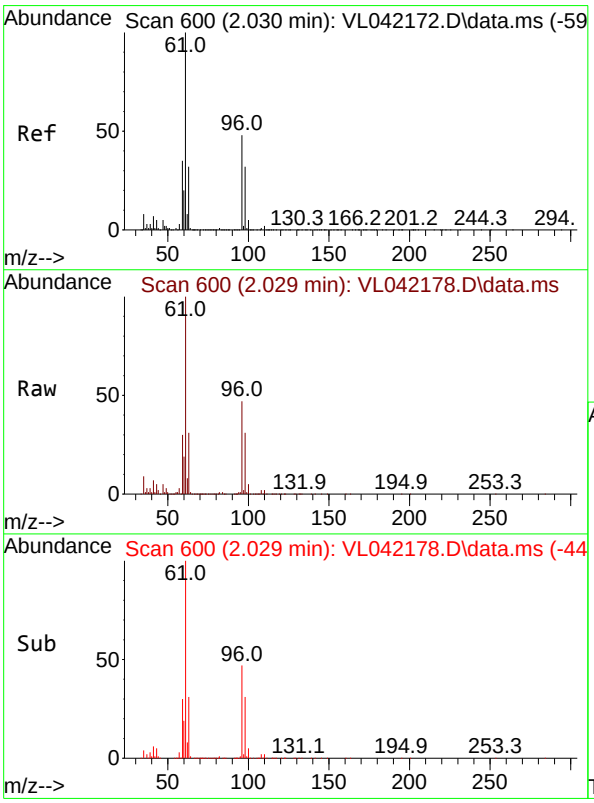
#17
tert-Butyl alcohol
Concen: 13.787 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 59 Resp: 416362

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3

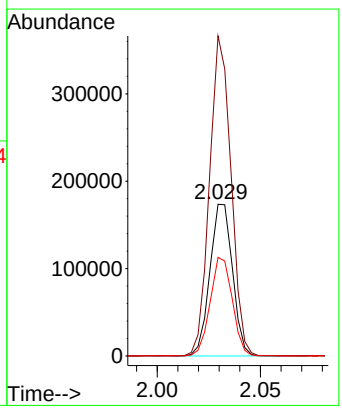


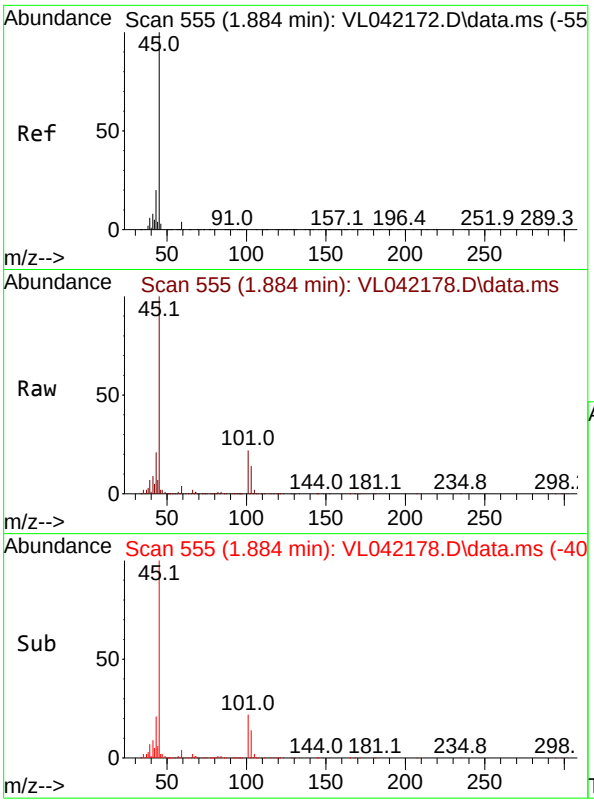


#18
1,1-Dichloroethene
Concen: 13.762 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 131720

Ion	Ratio	Lower	Upper
96	100		
61	211.1	167.6	251.4
98	64.9	53.5	80.3



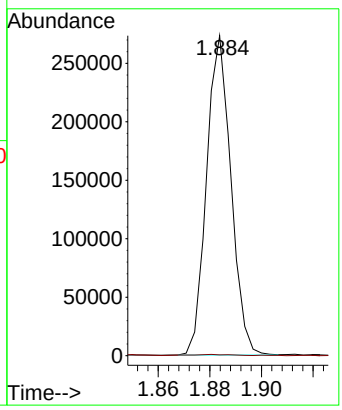


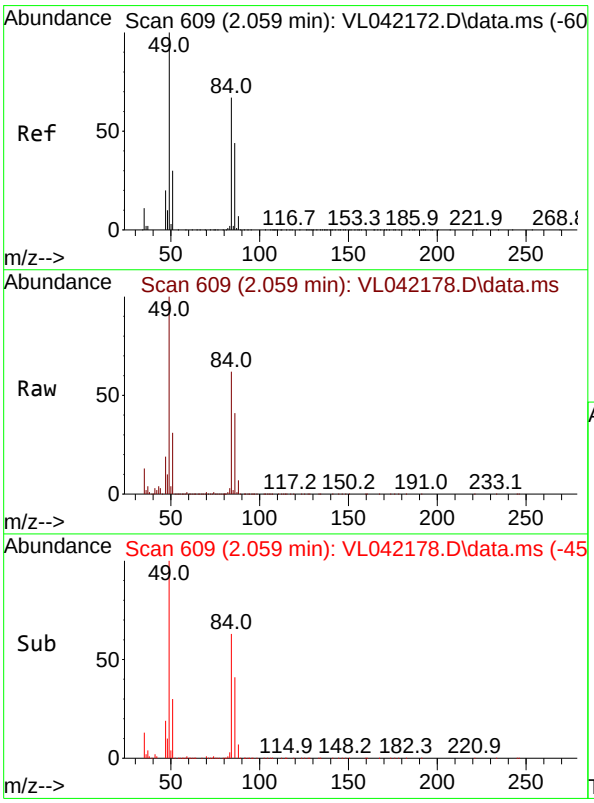
#19
Isopropyl Alcohol
Concen: 13.093 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 179117

Ion	Ratio	Lower	Upper
45	100		
58	46.4	36.9	55.3

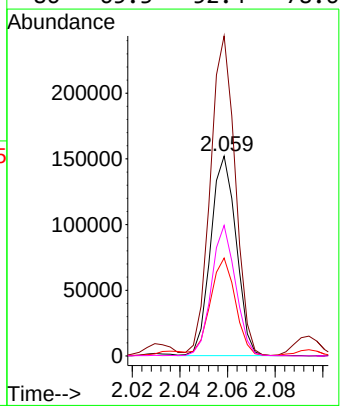


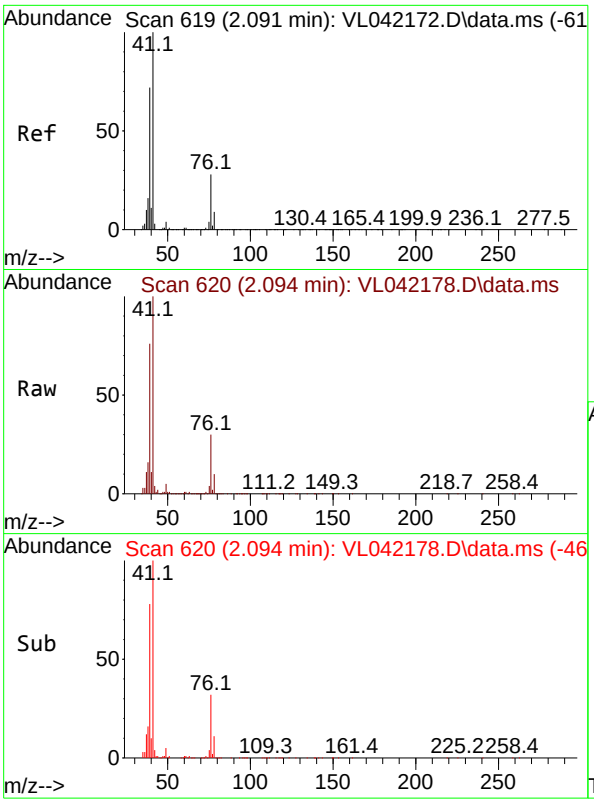


#20
Methylene Chloride
Concen: 12.533 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 113183

Ion	Ratio	Lower	Upper
84	100		
49	159.7	120.2	180.4
51	48.7	37.4	56.0
86	65.3	52.4	78.6



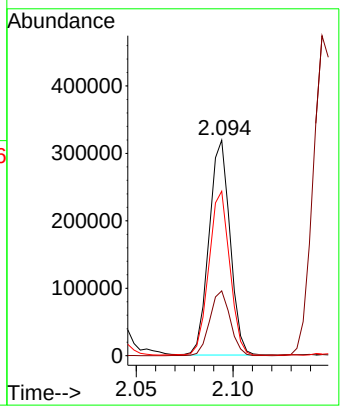


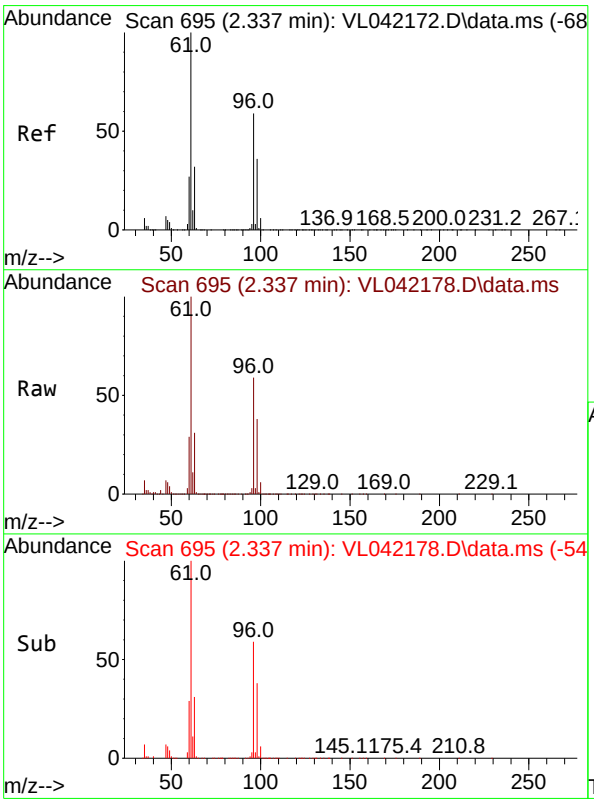
#21
Allyl Chloride
Concen: 14.002 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 239440

Ion	Ratio	Lower	Upper
41	100		
76	29.5	24.1	36.1
39	76.1	61.1	91.7

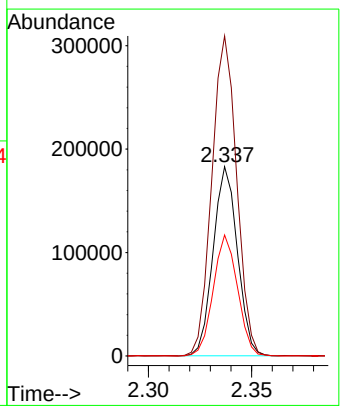


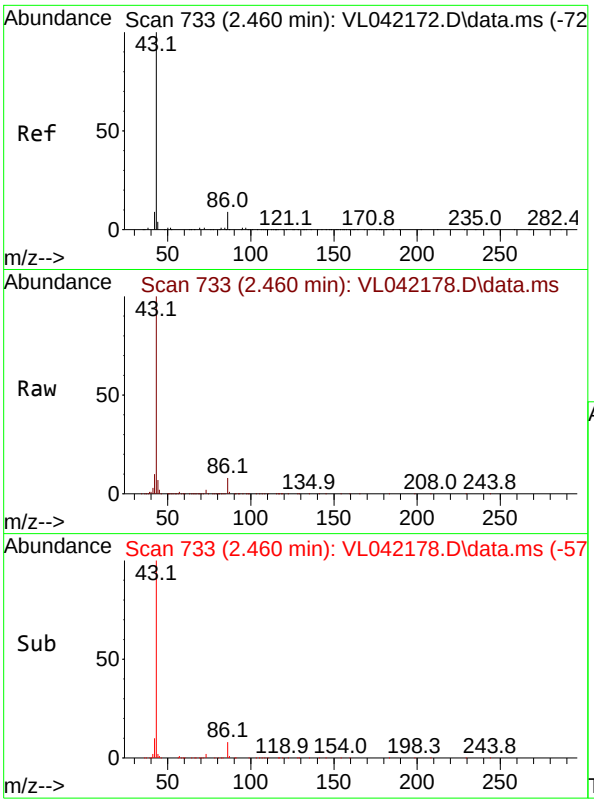


#22
trans-1,2-Dichloroethene
Concen: 13.362 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 149455

Ion	Ratio	Lower	Upper
96	100		
61	169.2	136.6	204.8
98	63.9	49.4	74.2



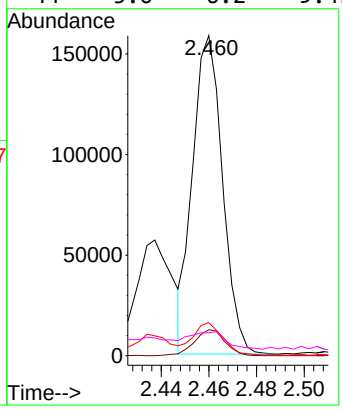


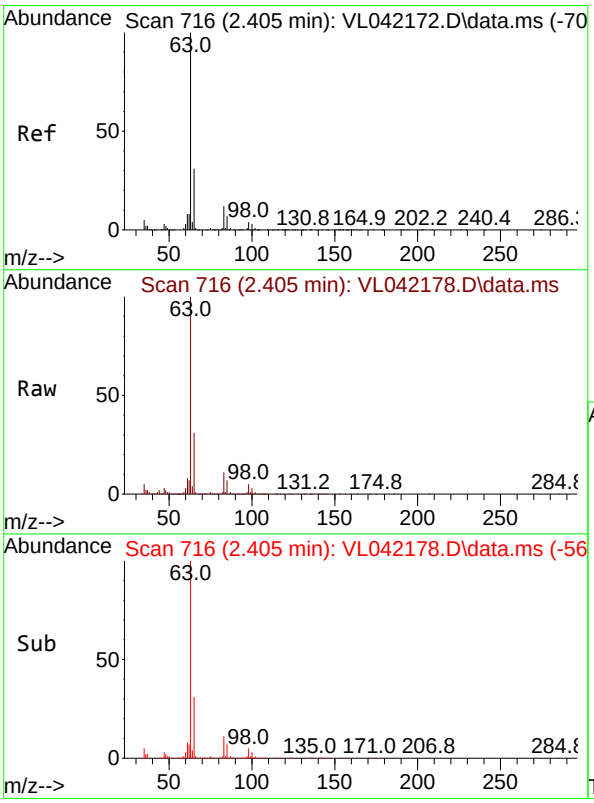
#23
Vinyl Acetate
Concen: 13.736 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 138419

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.1	8.6	13.0
44	5.0	6.2	9.4#

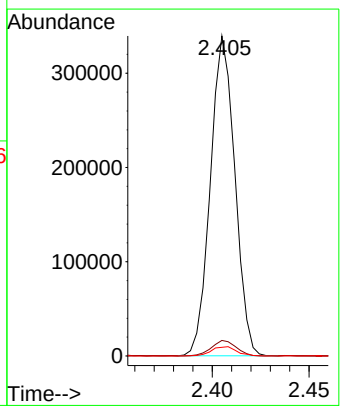


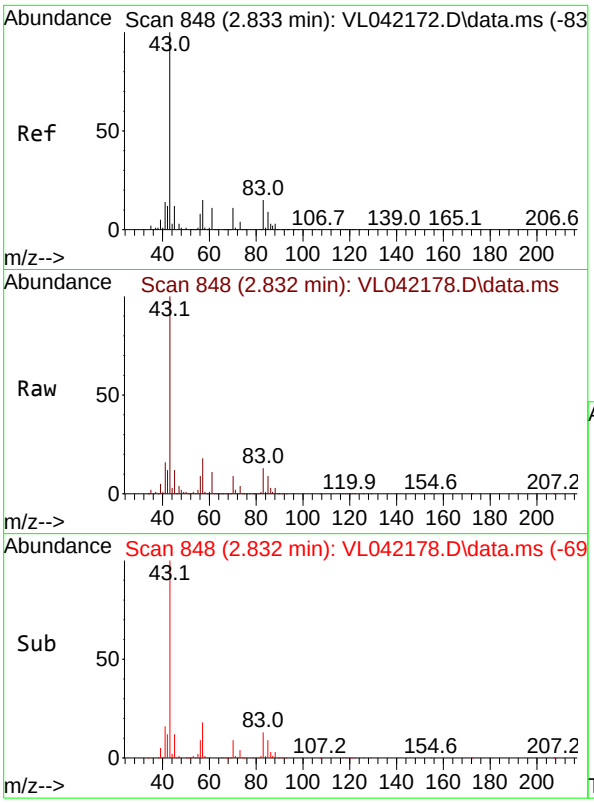


#24
1,1-Dichloroethane
Concen: 14.570 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 63 Resp: 298760

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	2.7	1.6	4.7



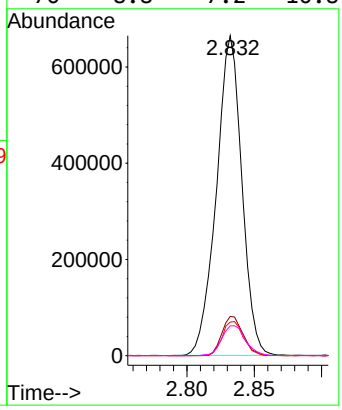


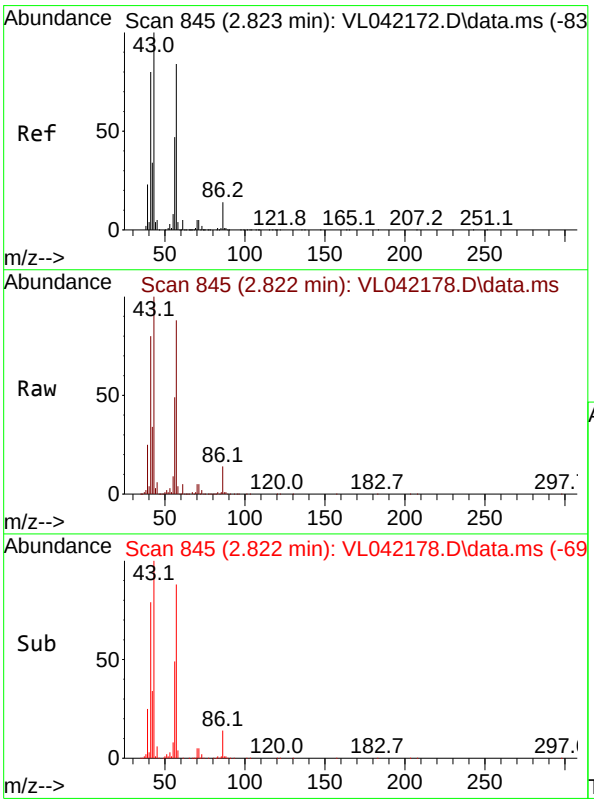
#25
Ethyl Acetate
Concen: 13.855 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 871882

Ion	Ratio	Lower	Upper
43	100		
45	10.3	8.2	12.2
61	9.0	7.3	10.9
70	8.8	7.2	10.8

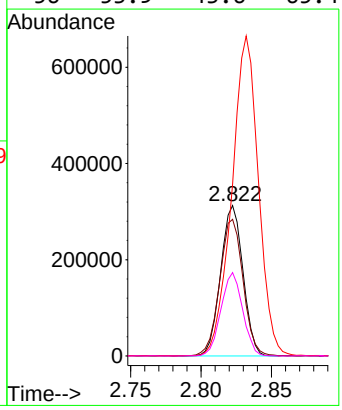


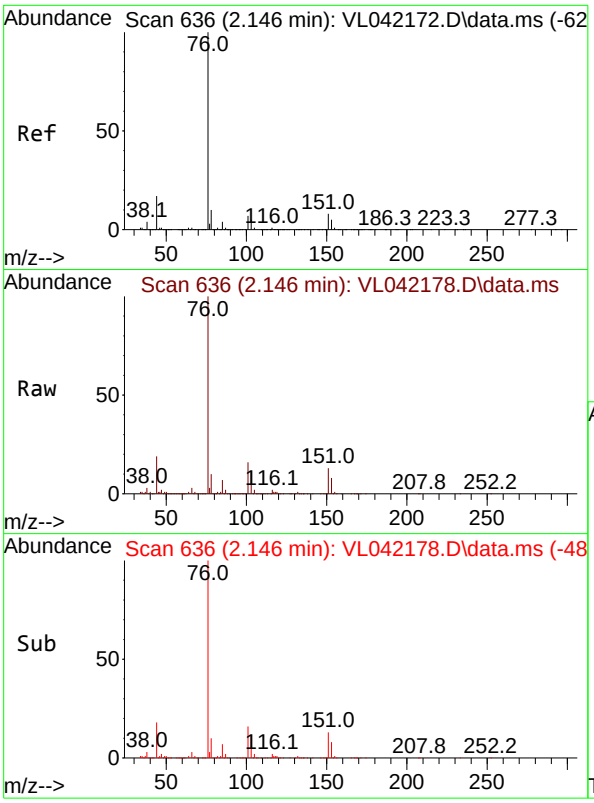


#26
Hexane
Concen: 14.178 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 344636

Ion	Ratio	Lower	Upper
57	100		
41	96.1	76.6	114.8
43	254.0	207.8	311.8
56	53.9	43.6	65.4



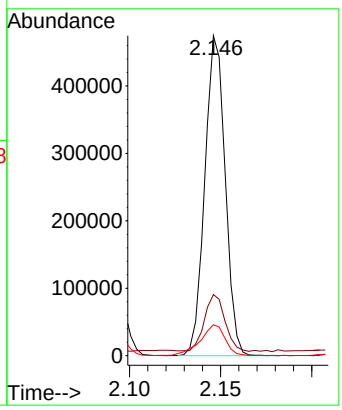


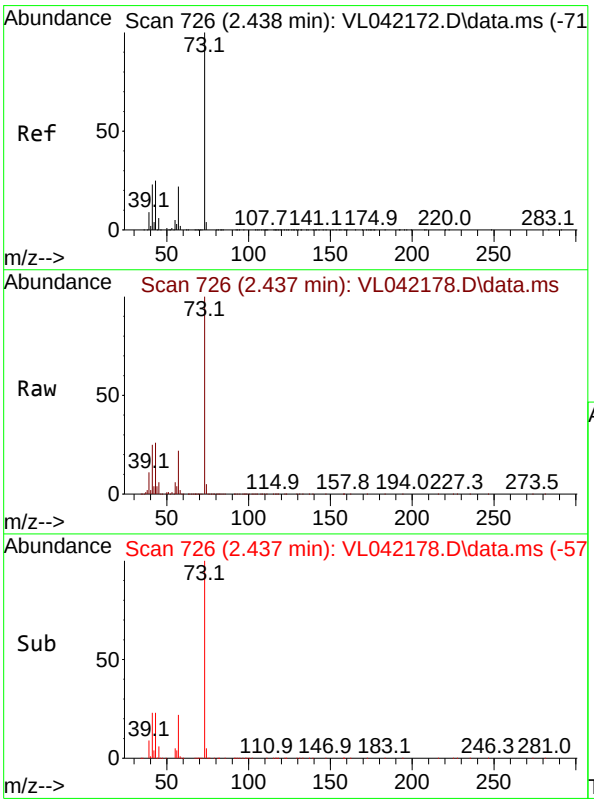
#27
Carbon Disulfide
Concen: 14.196 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 76 Resp: 370022

Ion	Ratio	Lower	Upper
76	100		
44	20.3	14.7	22.1
78	11.7	9.3	13.9

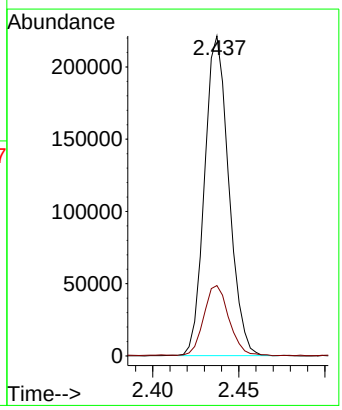


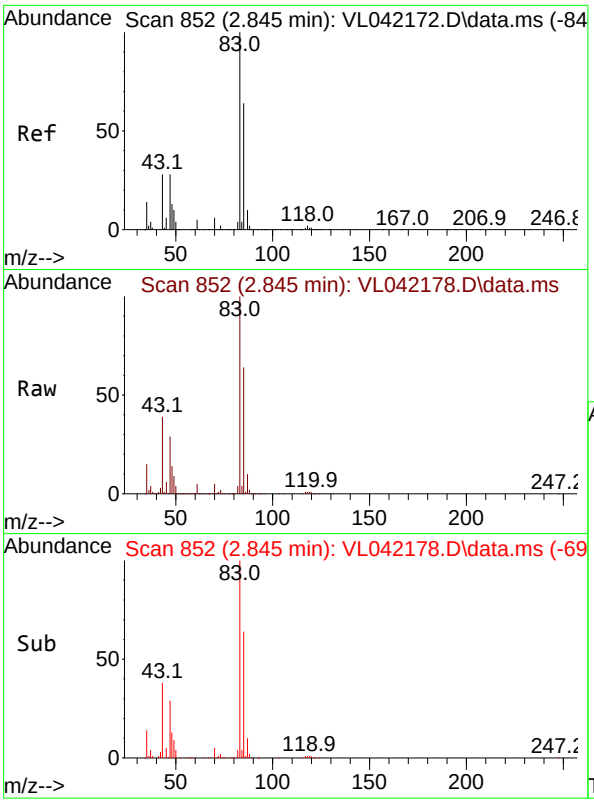


#28
Methyl tert-Butyl Ether
Concen: 14.303 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 73 Resp: 216463

Ion	Ratio	Lower	Upper
73	100		
57	23.2	20.5	30.7



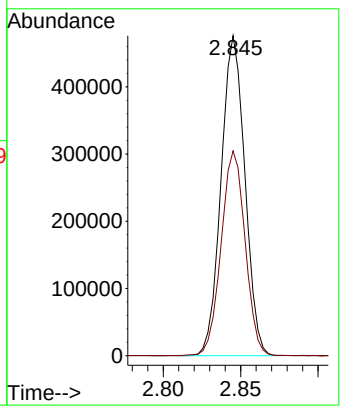


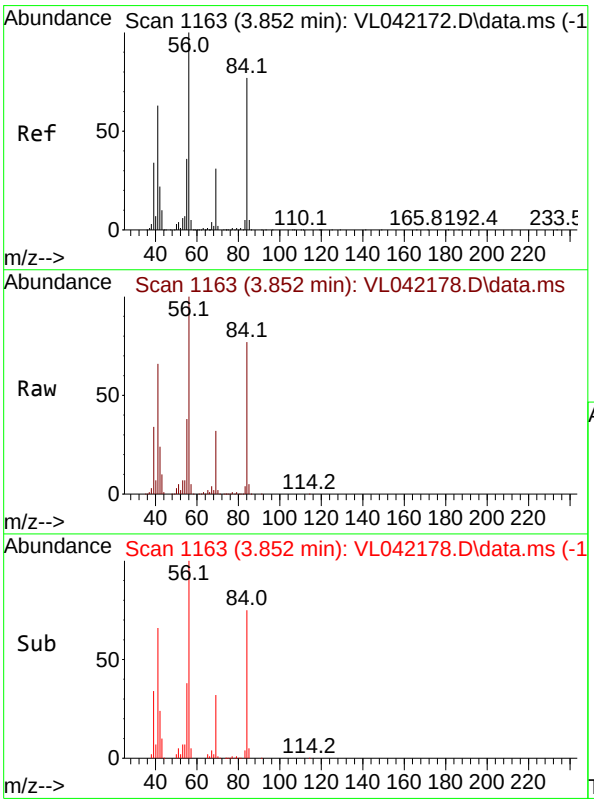
#29
Chloroform
Concen: 14.297 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 508614

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.4	77.2

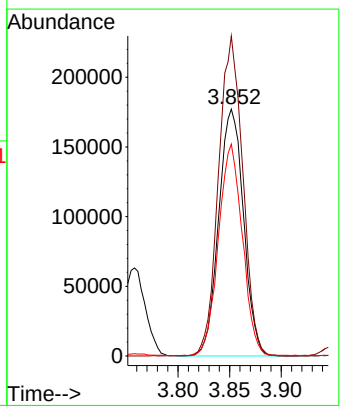


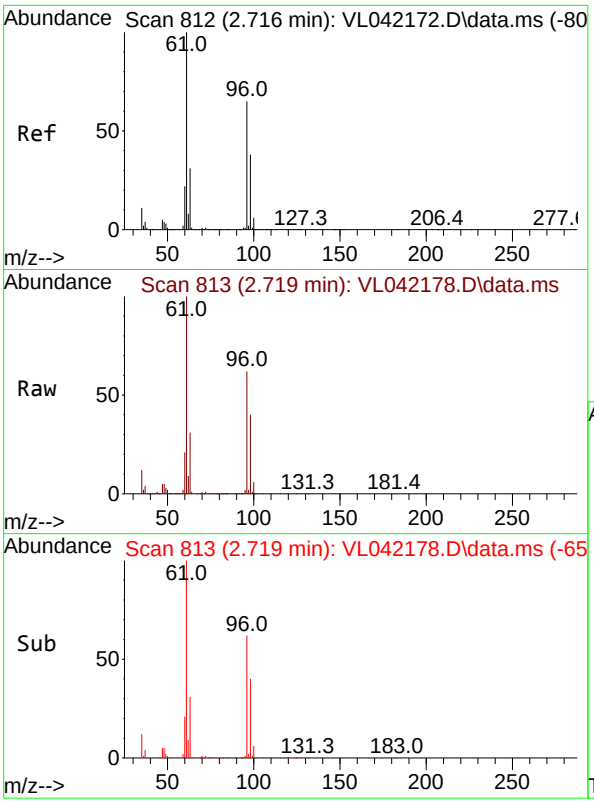


#30
Cyclohexane
Concen: 14.040 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 296458

Ion	Ratio	Lower	Upper
84	100		
56	126.7	102.8	154.2
41	82.6	66.5	99.7



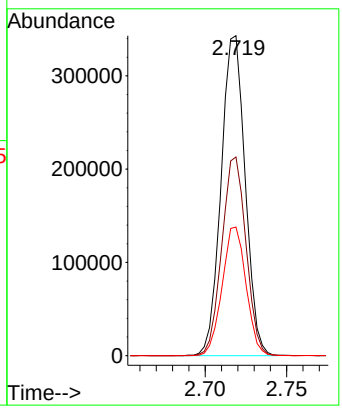


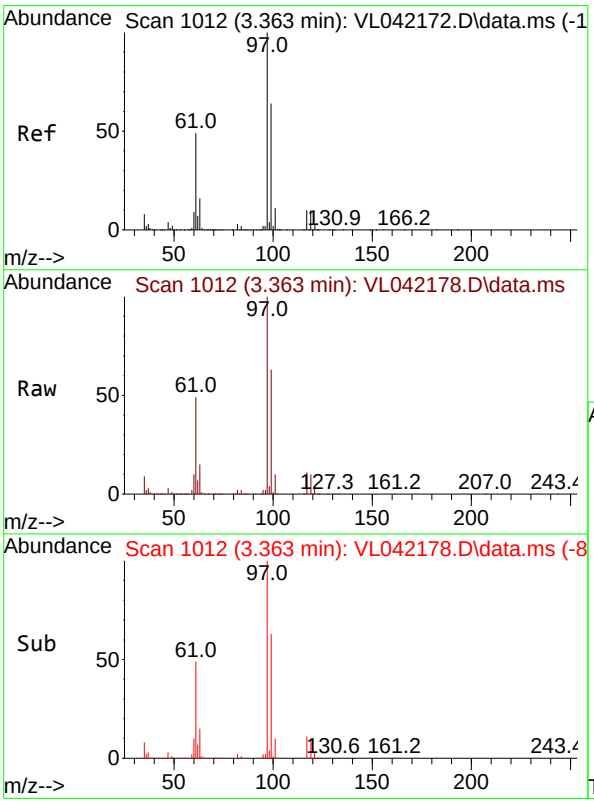
#31
cis-1,2-Dichloroethene
Concen: 14.262 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 61 Resp: 351945

Ion	Ratio	Lower	Upper
61	100		
96	62.1	51.8	77.8
98	40.2	30.6	46.0

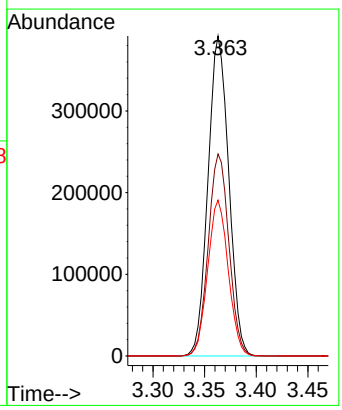


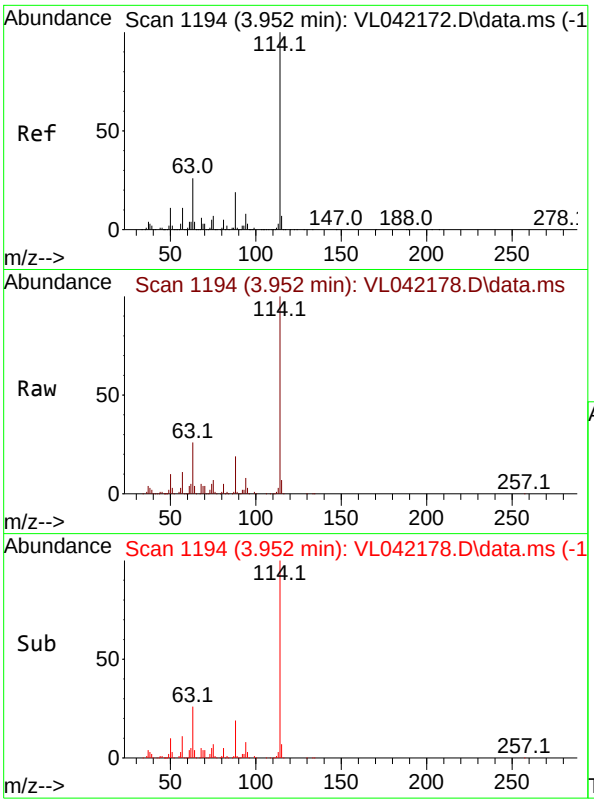


#32
1,1,1-Trichloroethane
Concen: 13.448 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 97 Resp: 547329

Ion	Ratio	Lower	Upper
97	100		
99	62.8	51.5	77.3
61	48.4	38.7	58.1



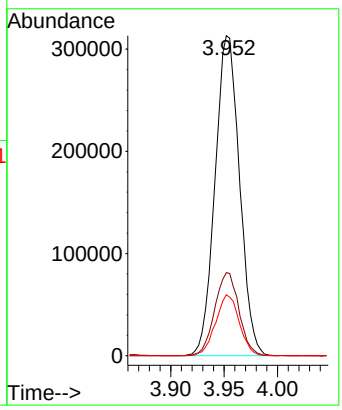


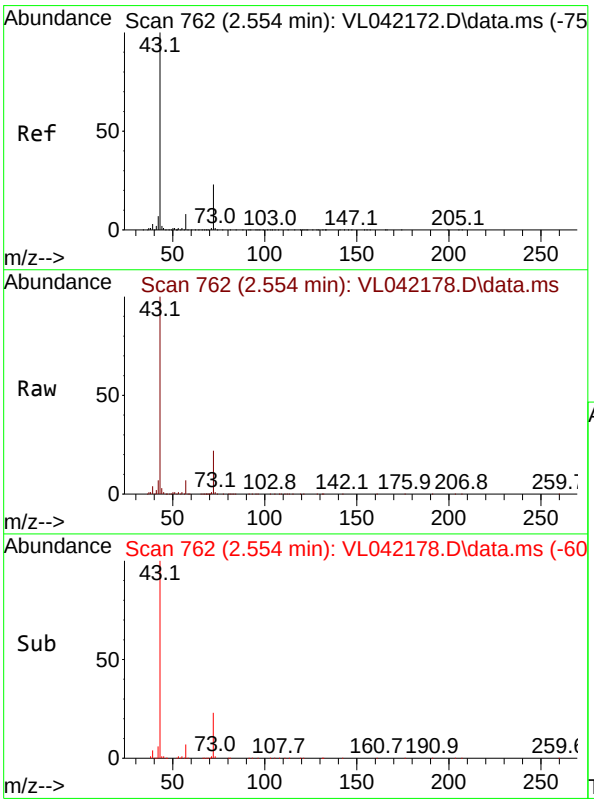
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:114 Resp: 499360

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.4	15.0	22.4

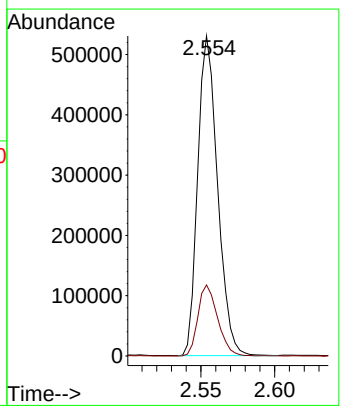


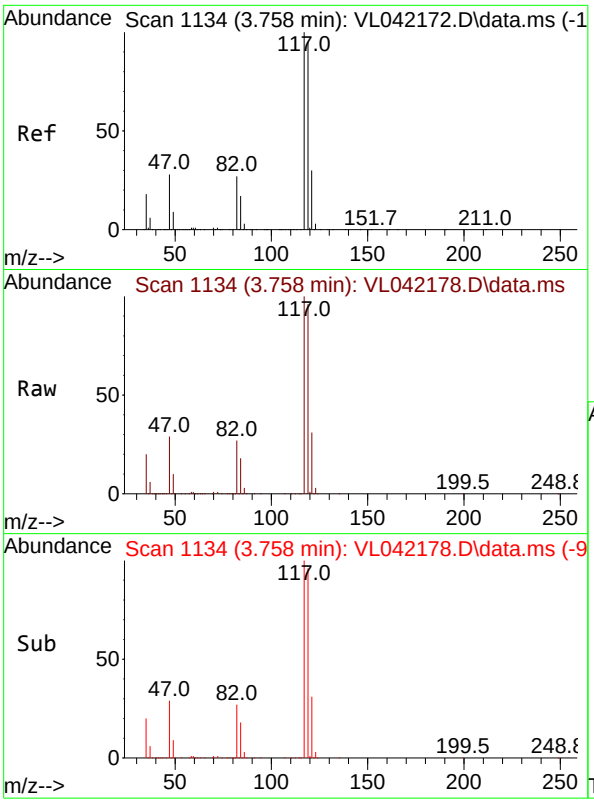


#34
2-Butanone
Concen: 13.726 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 497020

Ion	Ratio	Lower	Upper
43	100		
72	22.0	18.2	27.2



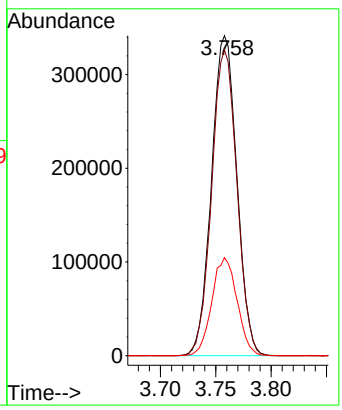


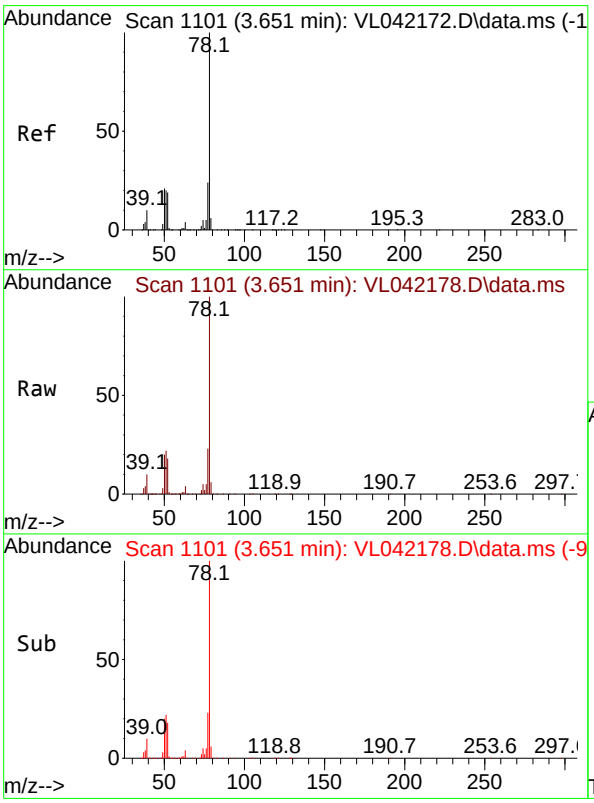
#35
Carbon Tetrachloride
Concen: 14.140 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 543385

Ion	Ratio	Lower	Upper
117	100		
119	95.5	76.2	114.2
121	30.6	24.2	36.4

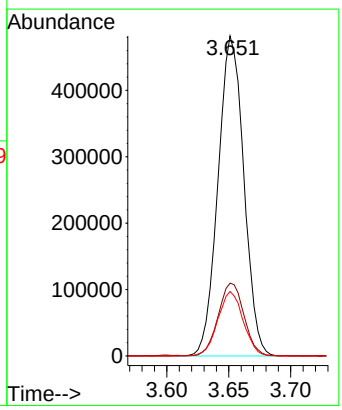


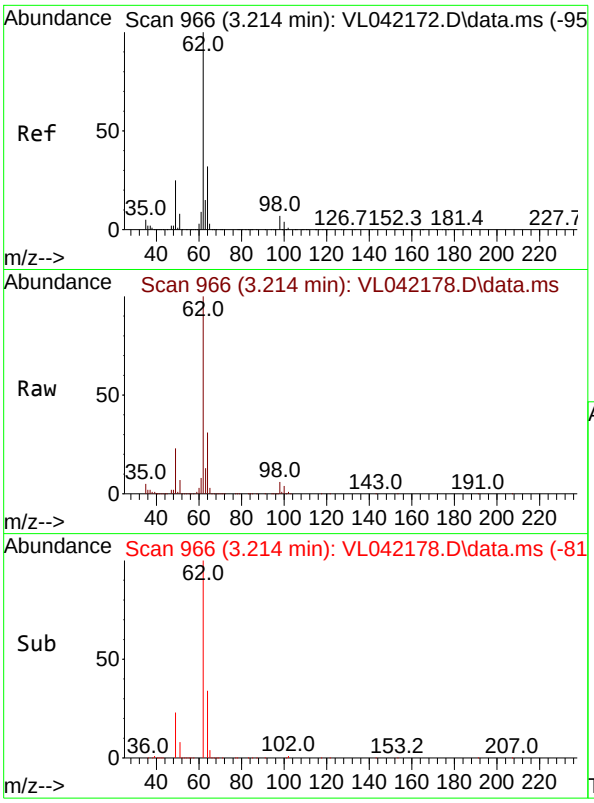


#36
Benzene
Concen: 14.131 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 78 Resp: 699549

Ion	Ratio	Lower	Upper
78	100		
77	22.7	19.1	28.7
50	20.1	16.6	24.8



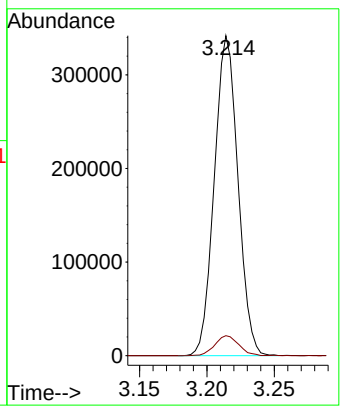


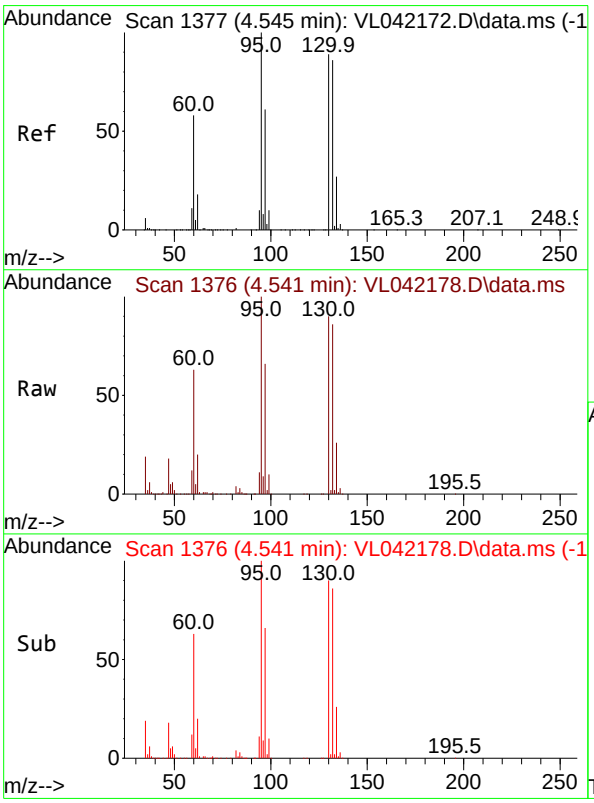
#37
1,2-Dichloroethane
Concen: 14.697 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 416544

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.4	8.2

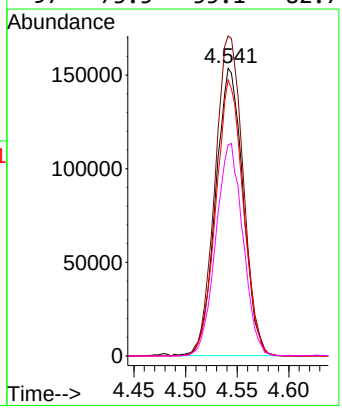


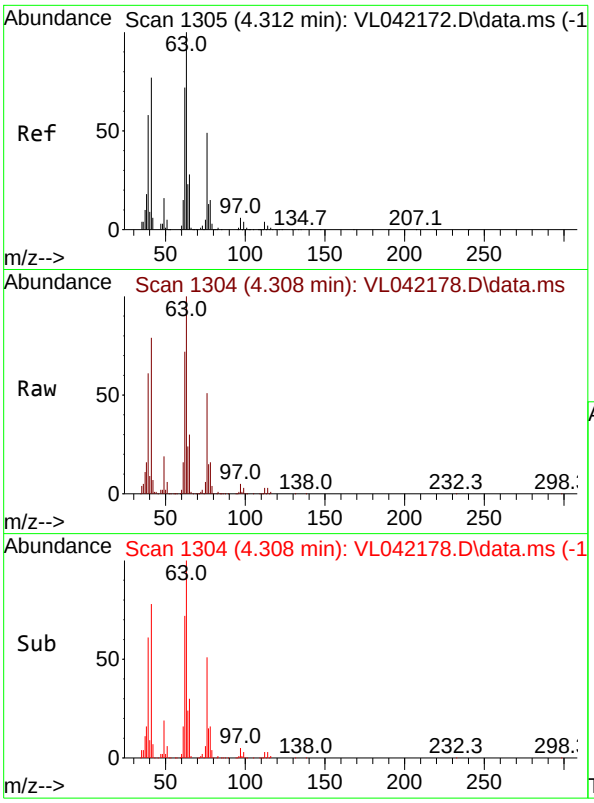


#38
Trichloroethene
Concen: 13.715 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:130 Resp: 283430

Ion	Ratio	Lower	Upper
130	100		
95	111.3	89.8	134.8
132	96.0	77.4	116.2
97	73.5	55.1	82.7



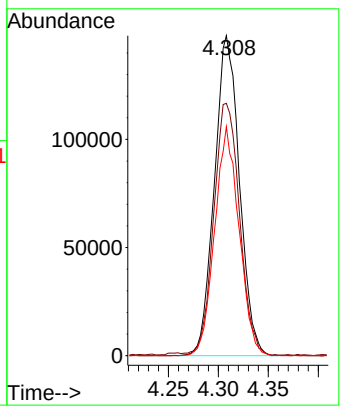


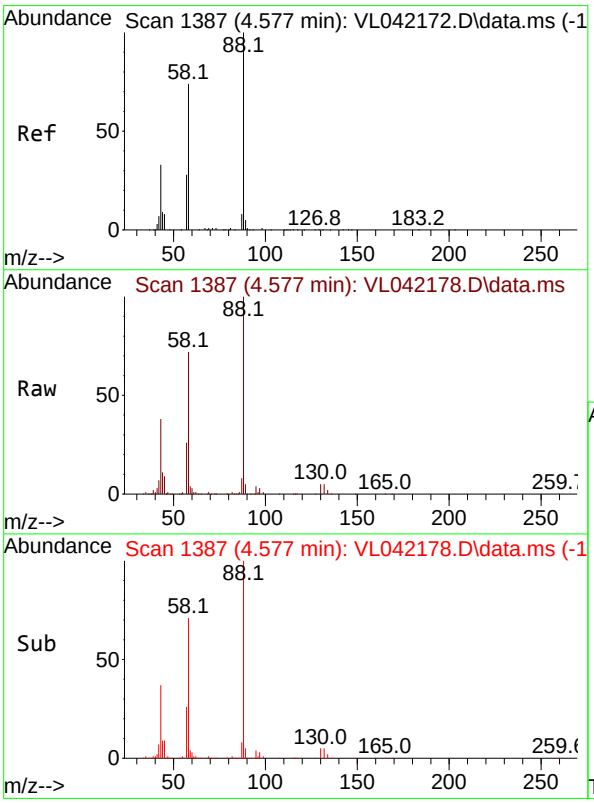
#39
1,2-Dichloropropane
Concen: 14.304 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 63 Resp: 257891

Ion	Ratio	Lower	Upper
63	100		
41	78.7	61.7	92.5
62	71.6	57.6	86.4

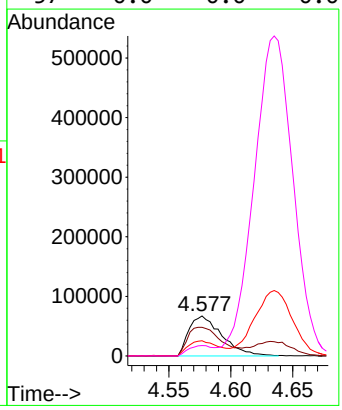


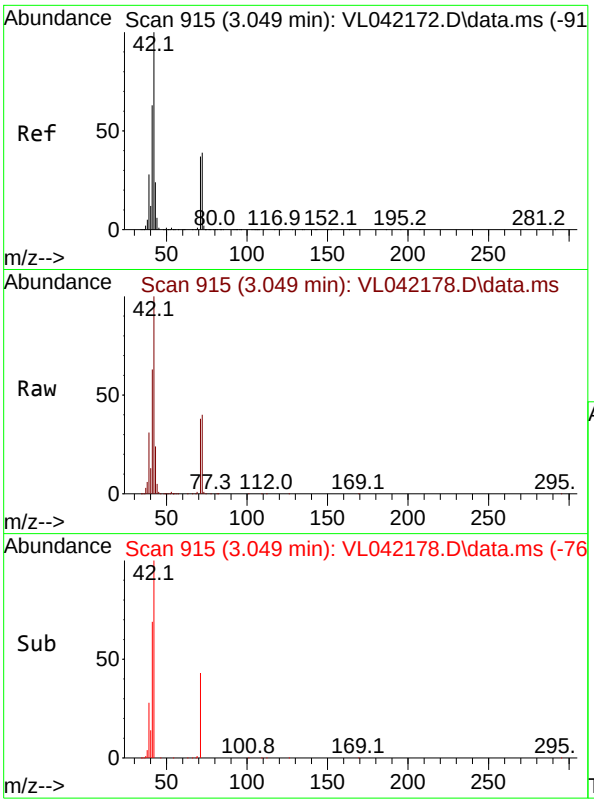


#40
1,4-Dioxane
Concen: 13.354 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 88 Resp: 124925

Ion	Ratio	Lower	Upper
88	100		
58	69.6	62.7	94.1
43	31.6	23.0	34.4
57	0.0	0.0	0.0



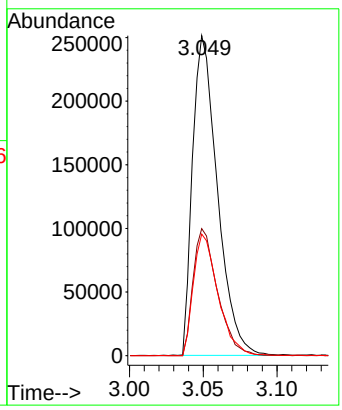


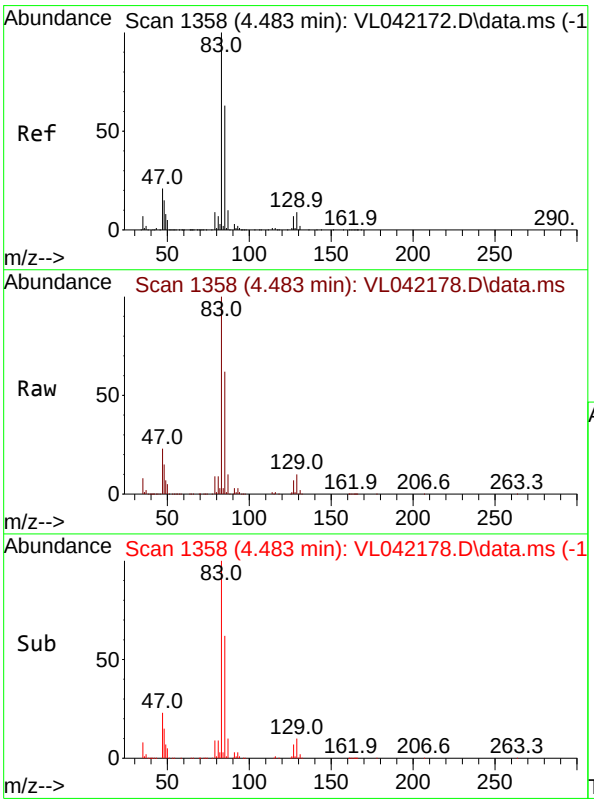
#41
Tetrahydrofuran
Concen: 14.301 ppbv
RT: 3.049 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 42 Resp: 294634

Ion	Ratio	Lower	Upper
42	100		
72	39.0	31.4	47.0
71	37.9	30.2	45.4

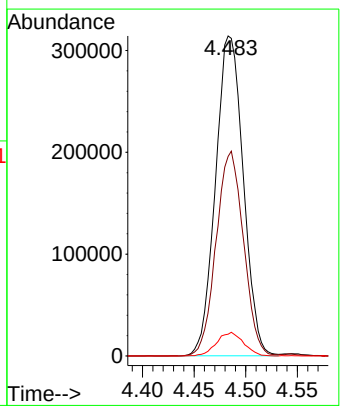


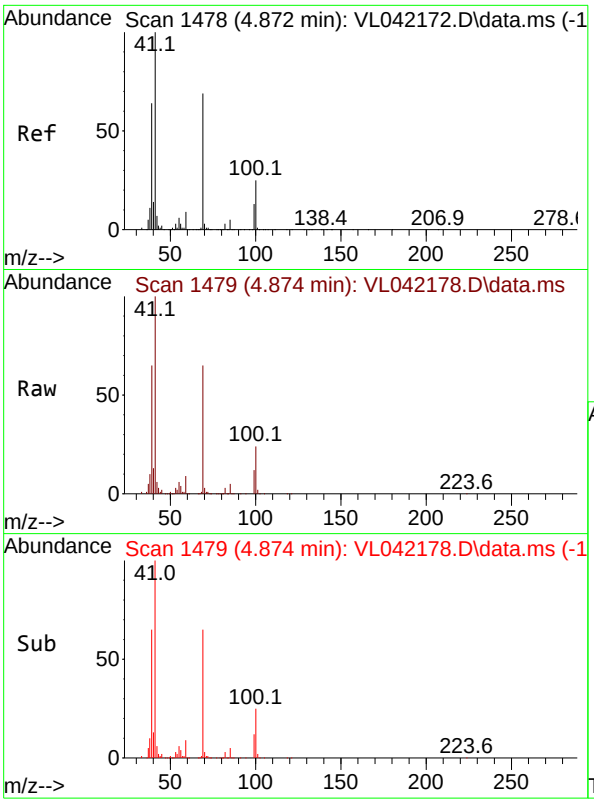


#42
Bromodichloromethane
Concen: 15.043 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 587772

Ion	Ratio	Lower	Upper
83	100		
85	62.4	50.5	75.7
127	6.8	5.9	8.9



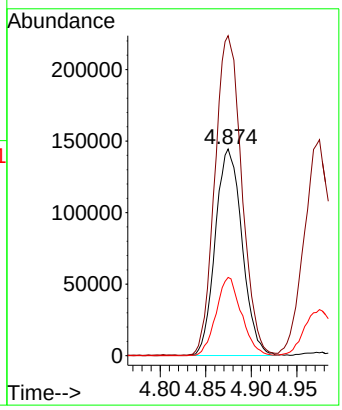


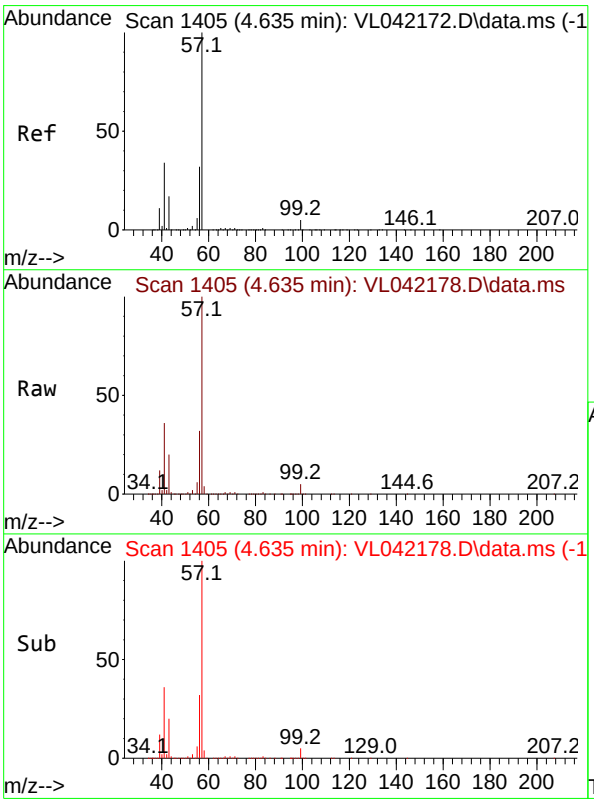
#43
Methyl Methacrylate
Concen: 14.130 ppbv
RT: 4.874 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 69 Resp: 295300

Ion	Ratio	Lower	Upper
69	100		
41	155.4	123.8	185.6
100	36.0	28.4	42.6

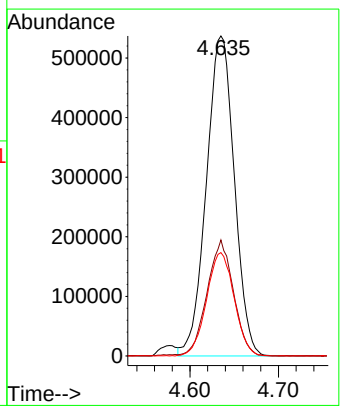


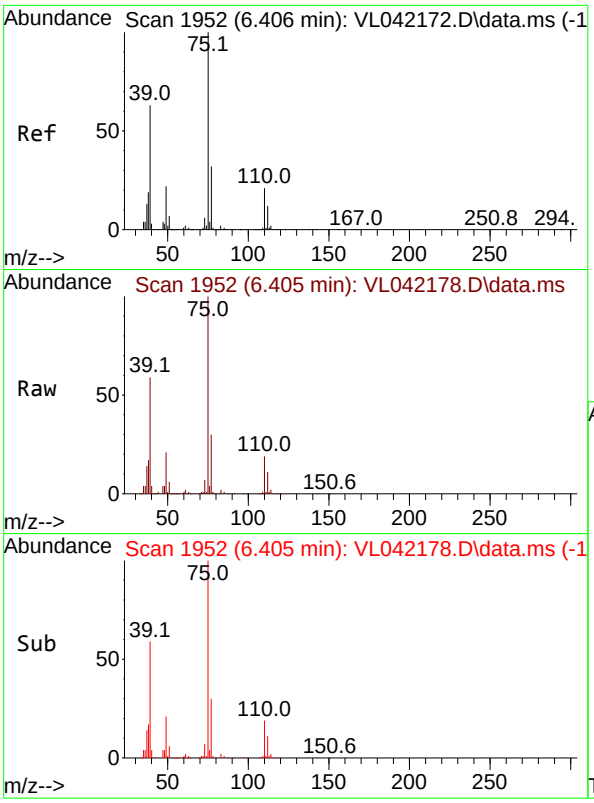


#44
2,2,4-Trimethylpentane
Concen: 14.108 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 1180275

Ion	Ratio	Lower	Upper
57	100		
41	34.2	26.8	40.2
56	31.9	25.6	38.4



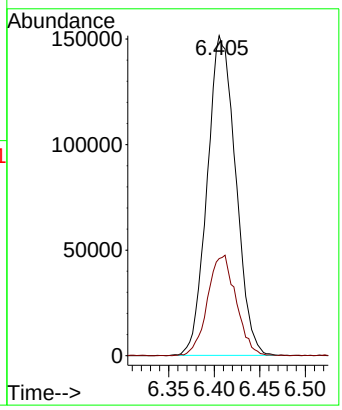


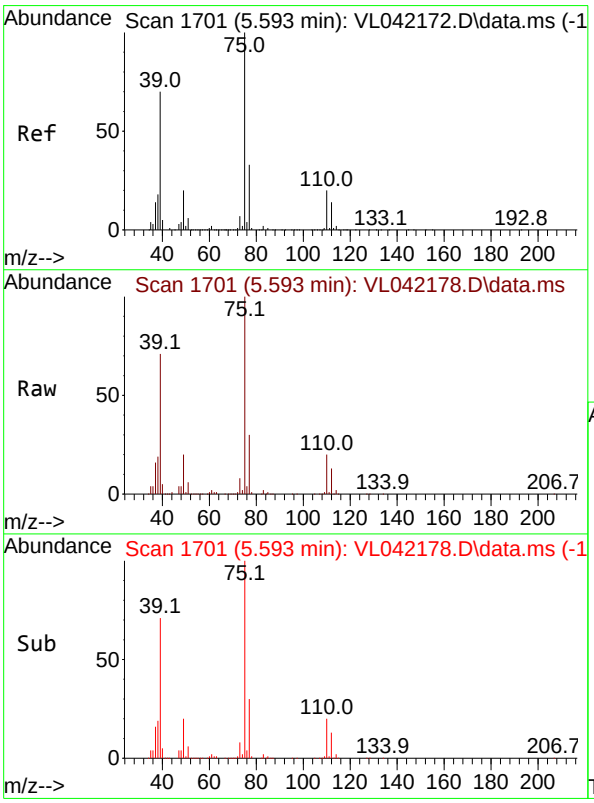
#45
t-1,3-Dichloropropene
Concen: 14.649 ppbv
RT: 6.405 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 75 Resp: 329360

Ion	Ratio	Lower	Upper
75	100		
77	30.4	26.0	39.0

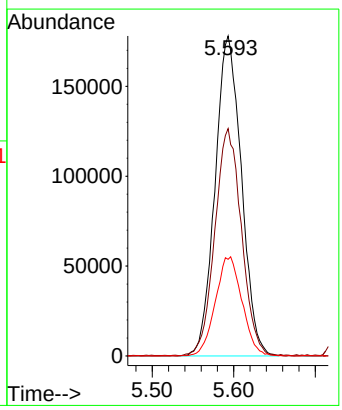


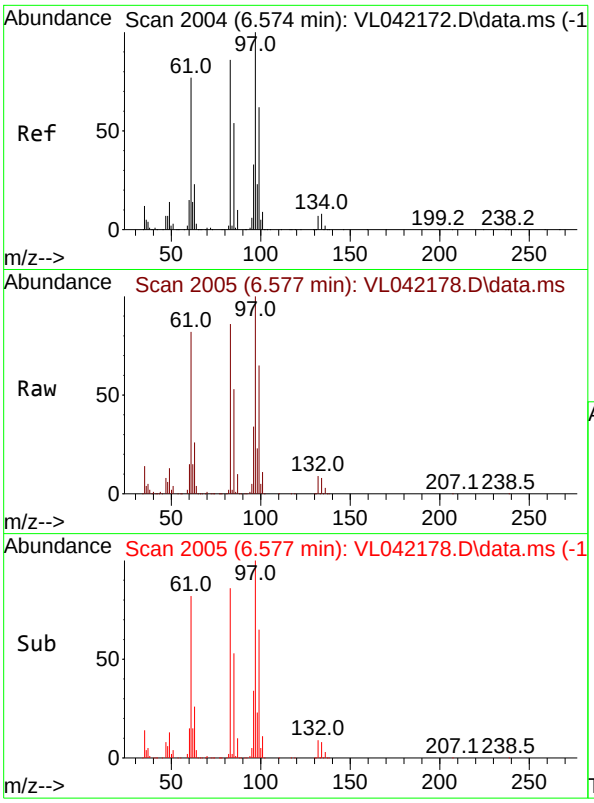


#46
cis-1,3-Dichloropropene
Concen: 14.542 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 75 Resp: 400813

Ion	Ratio	Lower	Upper
75	100		
39	70.9	55.8	83.6
77	30.2	26.0	39.0



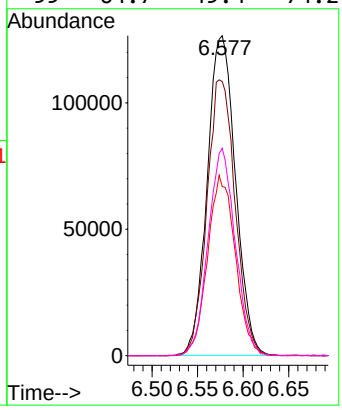


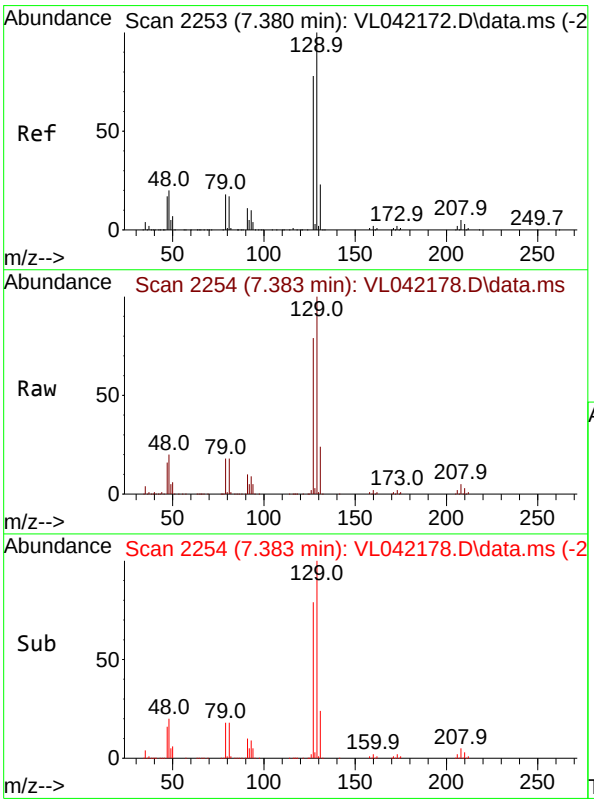
#47
1,1,2-Trichloroethane
Concen: 14.331 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 97 Resp: 273137

Ion	Ratio	Lower	Upper
97	100		
83	85.7	69.2	103.8
85	52.7	43.1	64.7
99	64.7	49.4	74.2

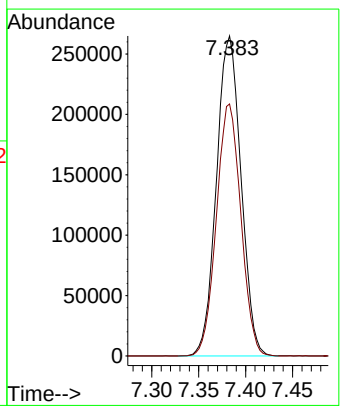


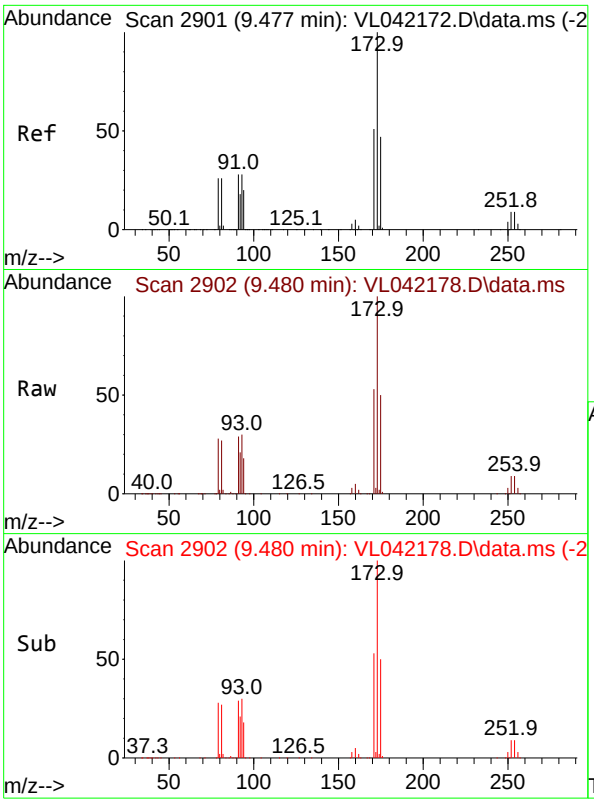


#48
Dibromochloromethane
Concen: 14.936 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:129 Resp: 482431

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.2



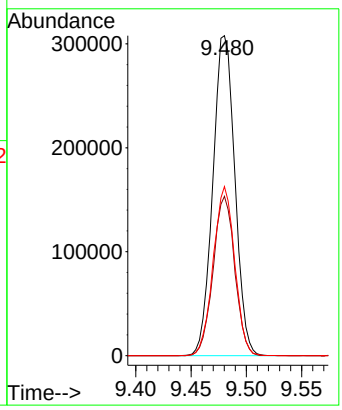


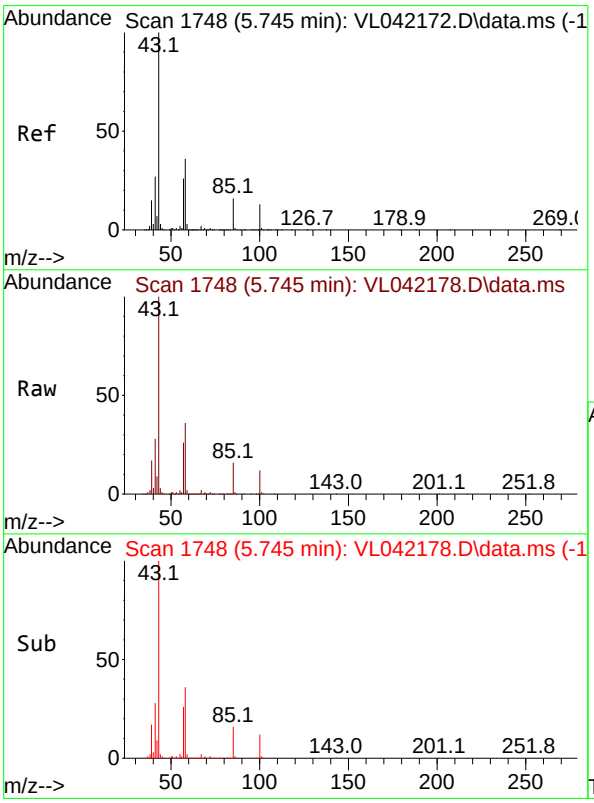
#49
Bromoform
Concen: 14.730 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:173 Resp: 427143

Ion	Ratio	Lower	Upper
173	100		
175	48.9	38.6	57.8
171	51.5	41.8	62.6

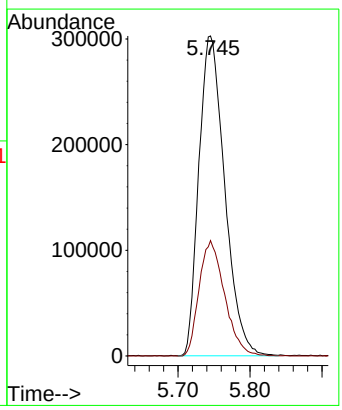


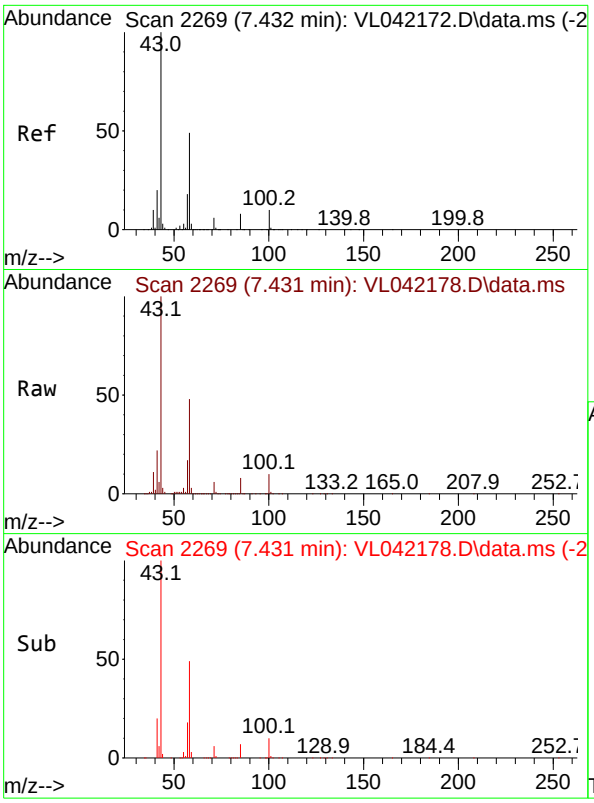


#50
4-Methyl-2-Pentanone
Concen: 13.155 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 755146

Ion	Ratio	Lower	Upper
43	100		
58	35.5	29.0	43.6



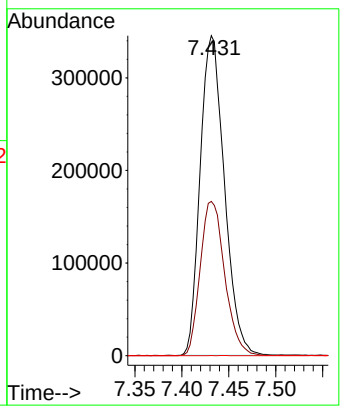


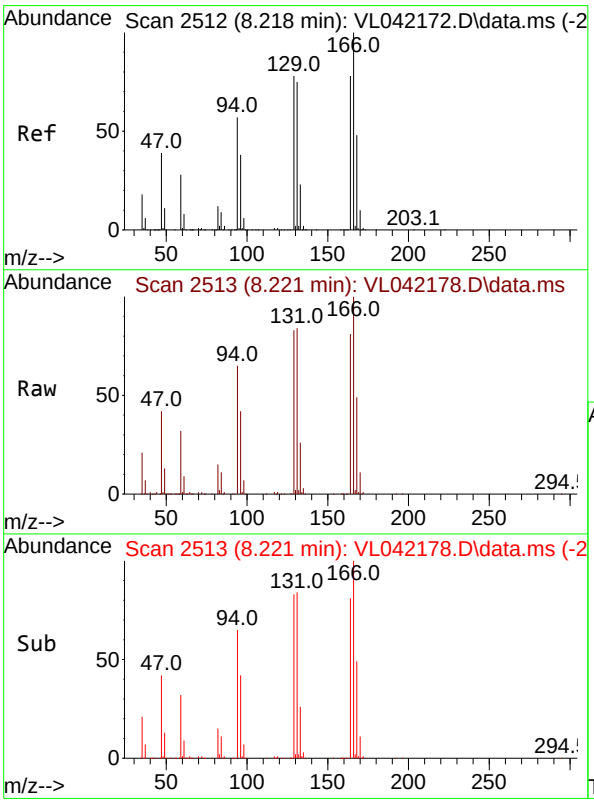
#51
2-Hexanone
Concen: 13.005 ppbv
RT: 7.431 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 619419

Ion	Ratio	Lower	Upper
43	100		
58	49.0	39.7	59.5
98	0.0	0.1	0.1#

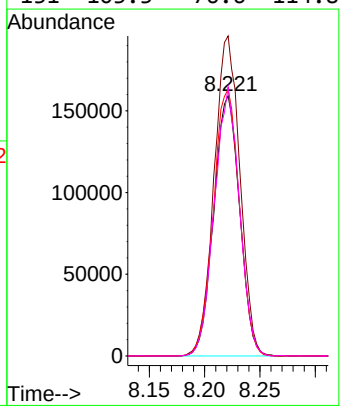


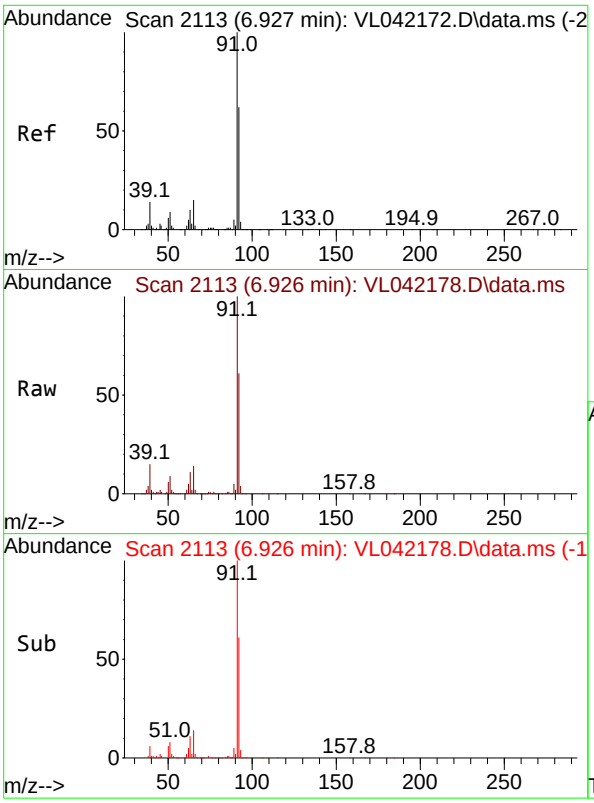


#52
Tetrachloroethene
Concen: 13.159 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:164 Resp: 258356

Ion	Ratio	Lower	Upper
164	100		
166	123.0	102.5	153.7
129	102.5	79.8	119.8
131	103.3	76.6	114.8



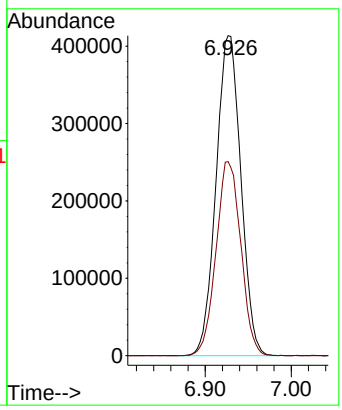


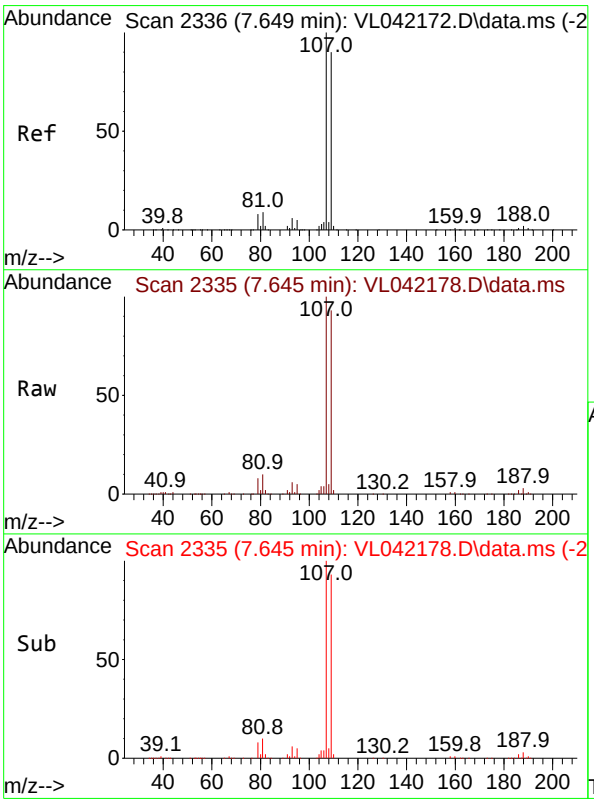
#53
Toluene
Concen: 14.137 ppbv
RT: 6.926 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 829648

Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.4	72.6

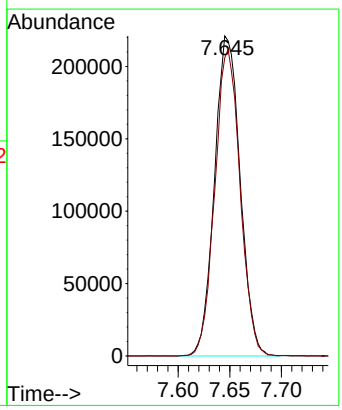


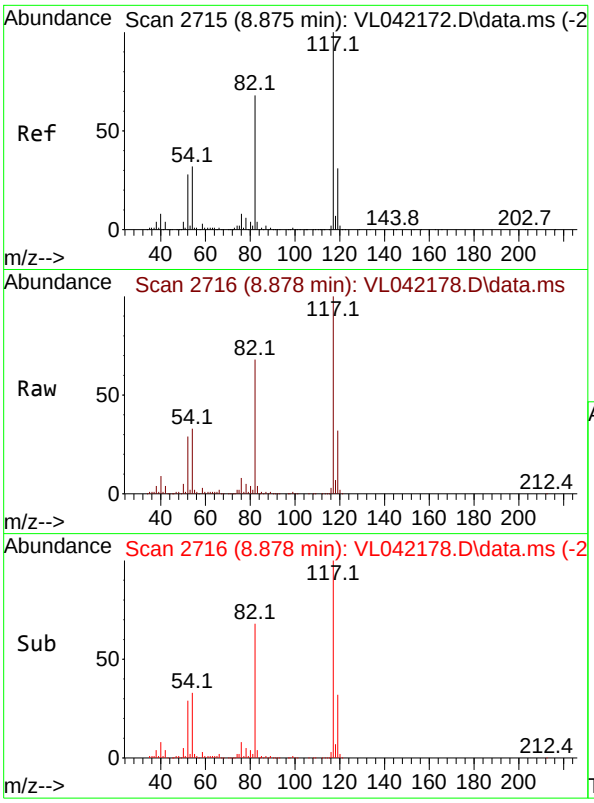


#54
1,2-Dibromoethane
Concen: 14.359 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:107 Resp: 381823

Ion	Ratio	Lower	Upper
107	100		
109	93.2	72.2	108.4



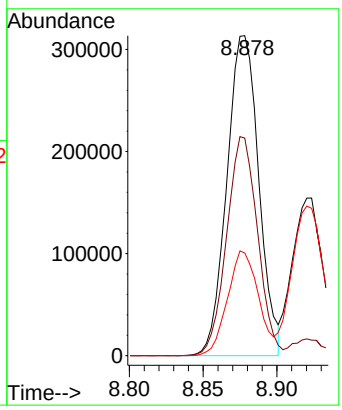


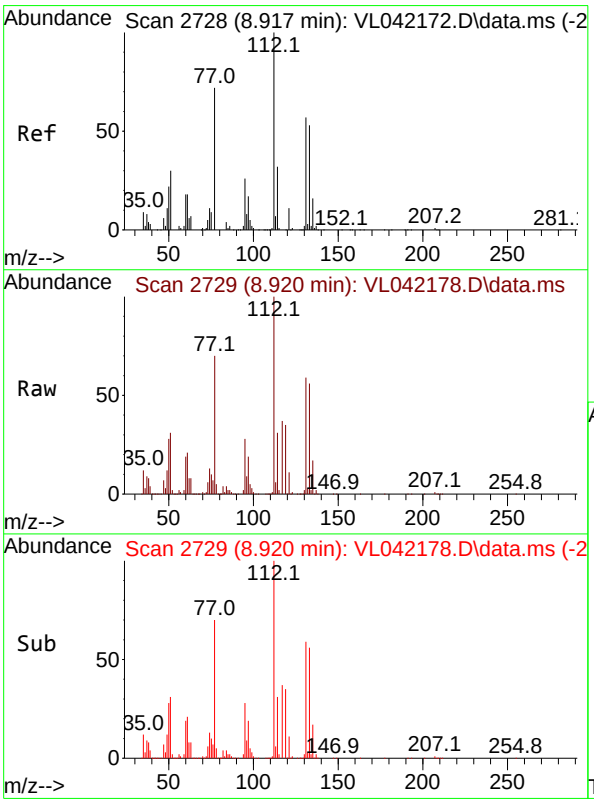
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 473077

Ion	Ratio	Lower	Upper
117	100		
82	71.4	55.8	83.6
119	31.7	25.5	38.3

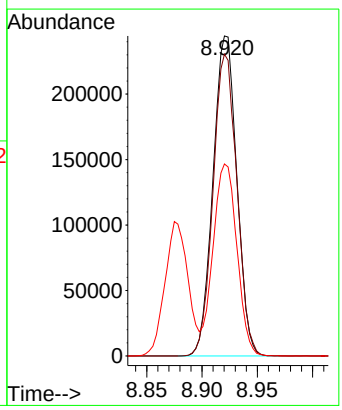


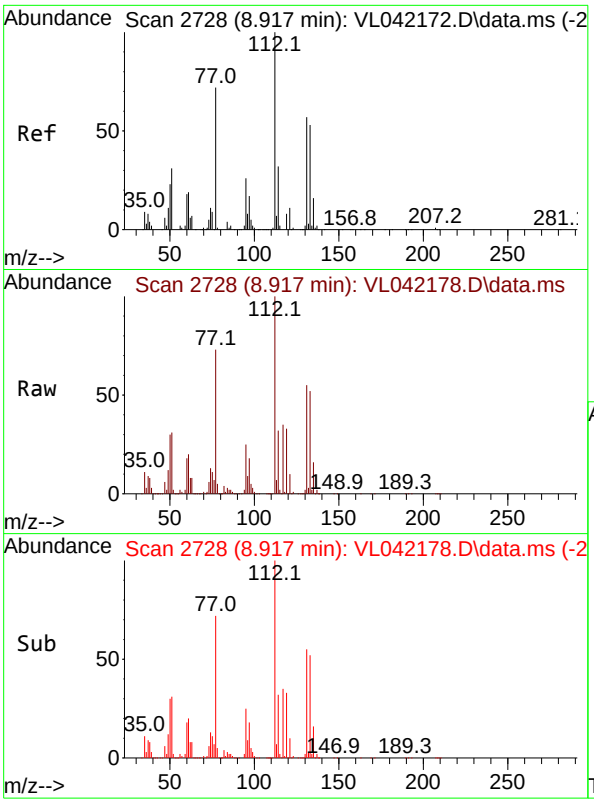


#56
1,1,1,2-Tetrachloroethane
Concen: 14.032 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:131 Resp: 365410

Ion	Ratio	Lower	Upper
131	100		
133	94.5	76.6	114.8
119	61.2	49.8	74.6



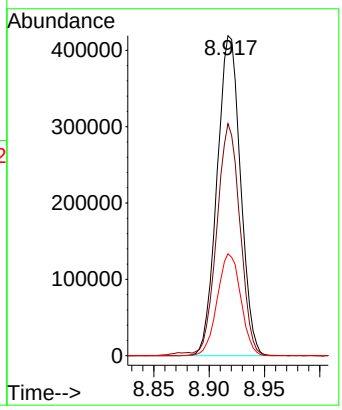


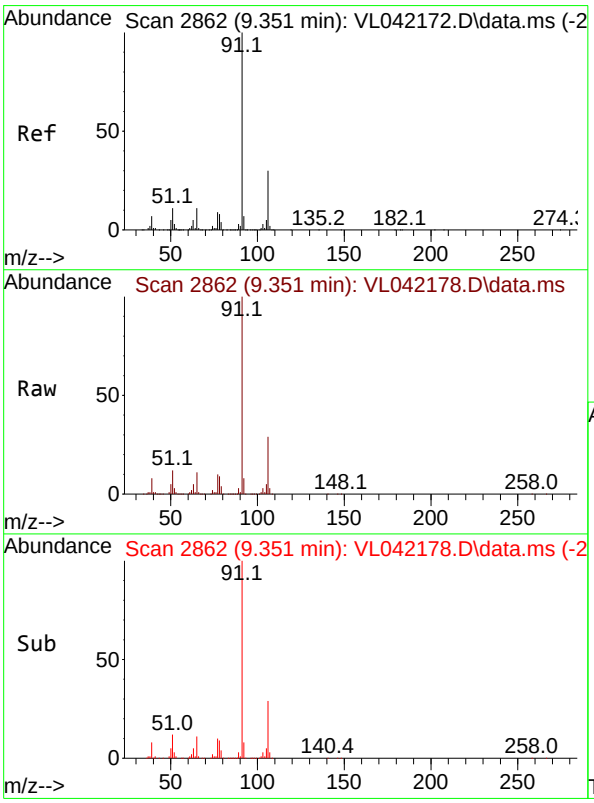
#57
Chlorobenzene
Concen: 13.777 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:112 Resp: 618201

Ion	Ratio	Lower	Upper
112	100		
77	72.5	58.2	87.2
114	31.8	29.1	35.5

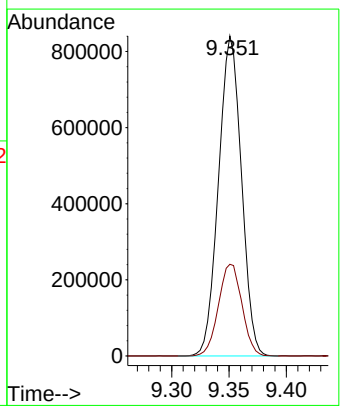


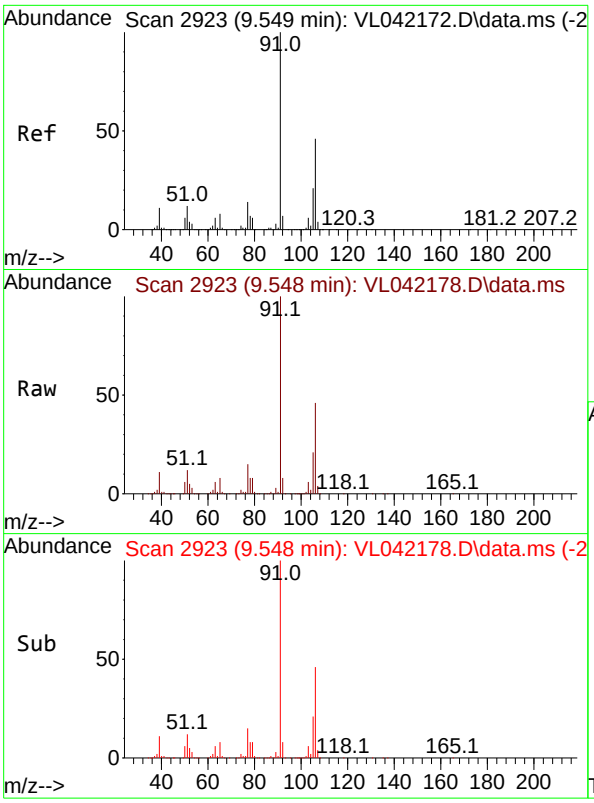


#58
Ethyl Benzene
Concen: 13.889 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1167096

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2



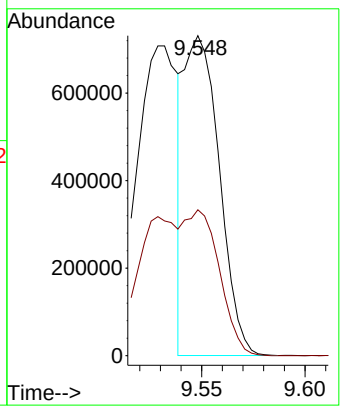


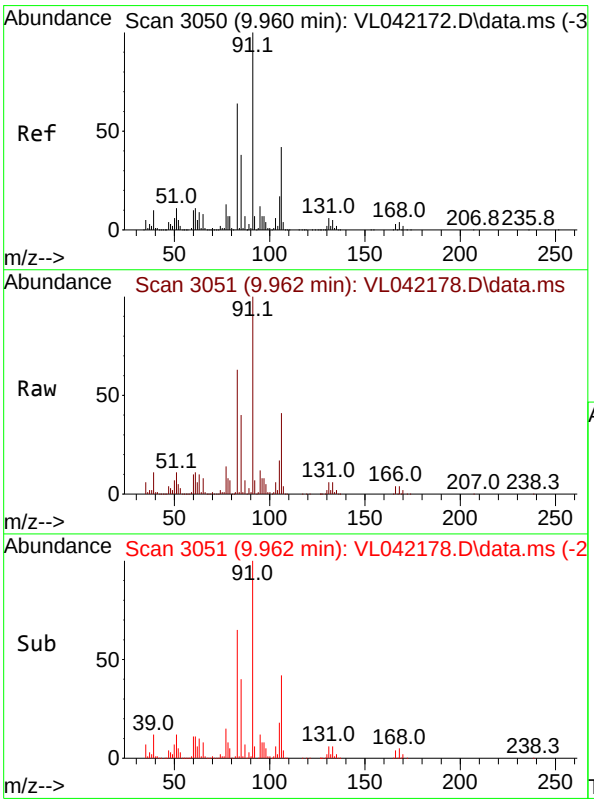
#59
m/p-Xylene
Concen: 12.901 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 866684

Ion	Ratio	Lower	Upper
91	100		
106	96.9	36.4	54.6#

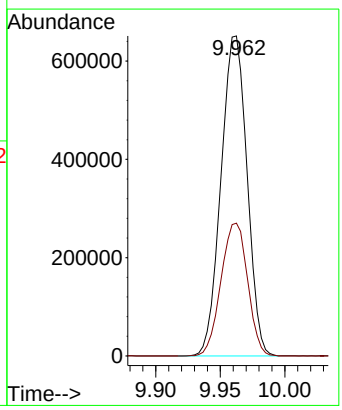


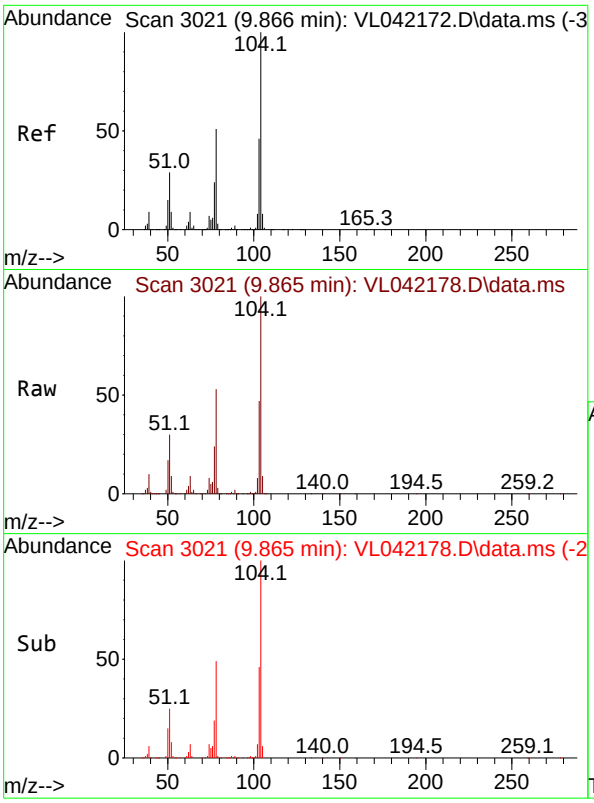


#60
o-Xylene
Concen: 13.577 ppbv
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 913234

Ion	Ratio	Lower	Upper
91	100		
106	42.4	20.8	62.5



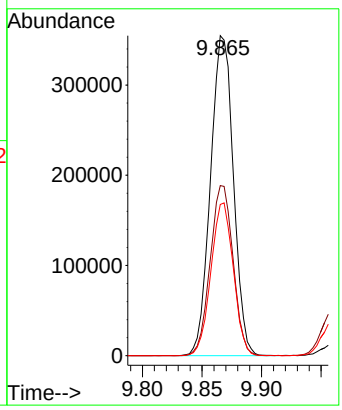


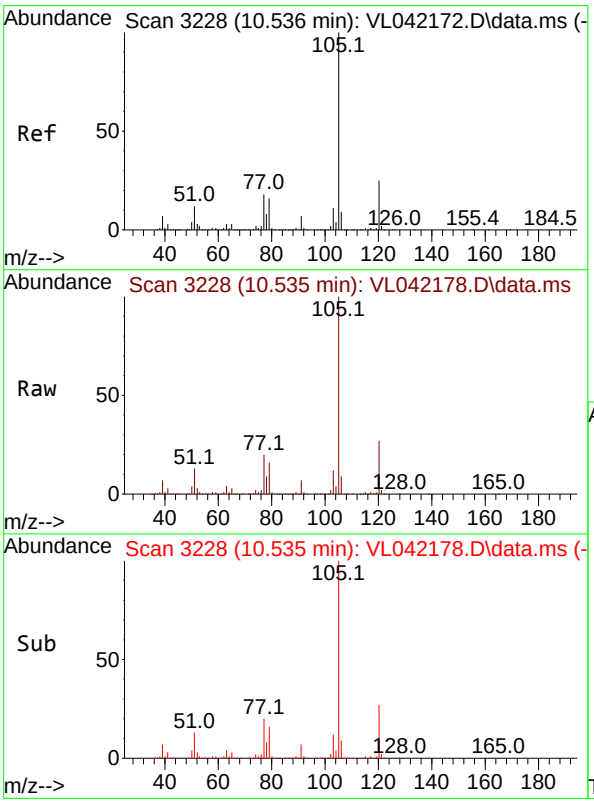
#61
Styrene
Concen: 14.250 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:104 Resp: 474195

Ion	Ratio	Lower	Upper
104	100		
78	53.0	41.8	62.6
103	46.7	37.0	55.4

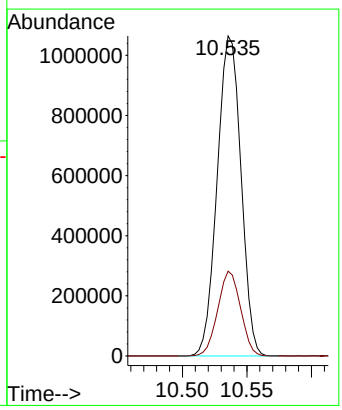


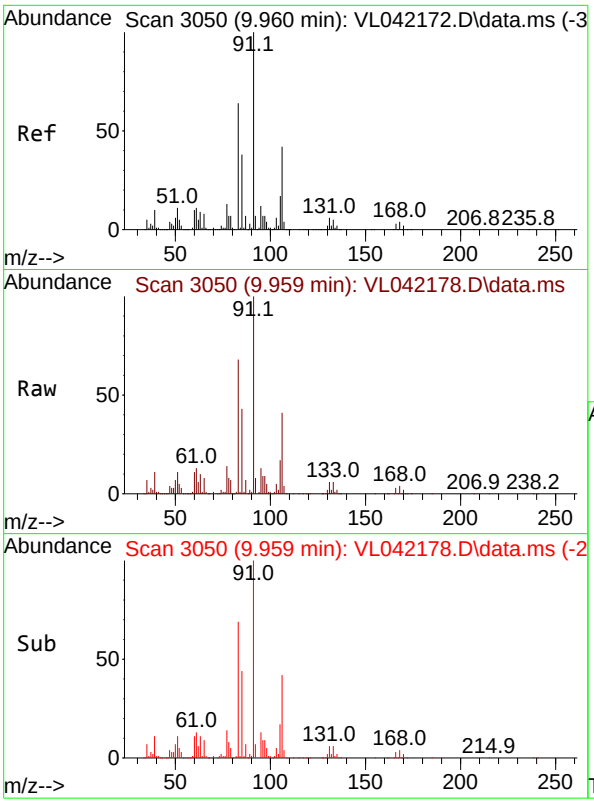


#62
Isopropylbenzene
Concen: 13.544 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1362416

Ion	Ratio	Lower	Upper
105	100		
120	25.3	19.9	29.9



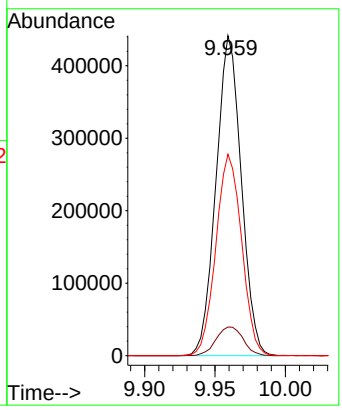


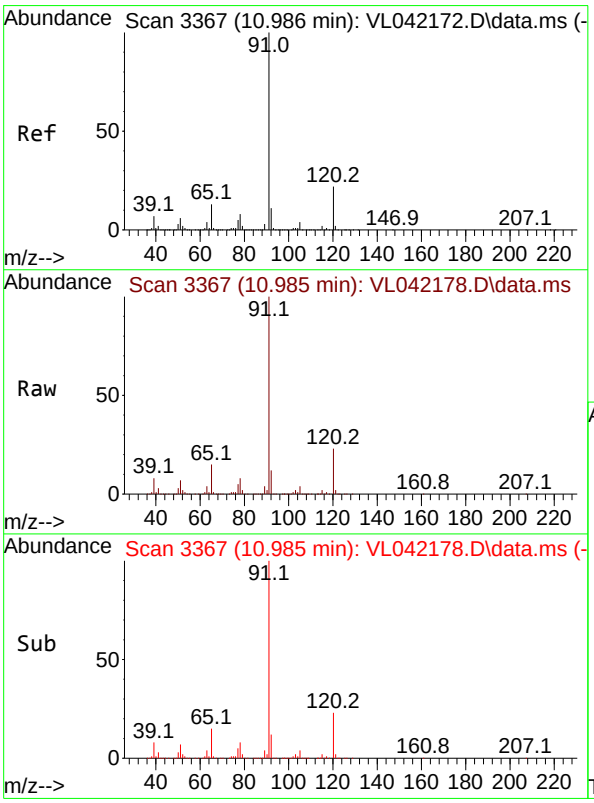
#63
1,1,2,2-Tetrachloroethane
Concen: 13.491 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 551386

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.2	32.5	97.5

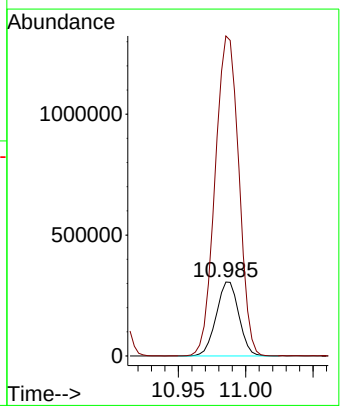


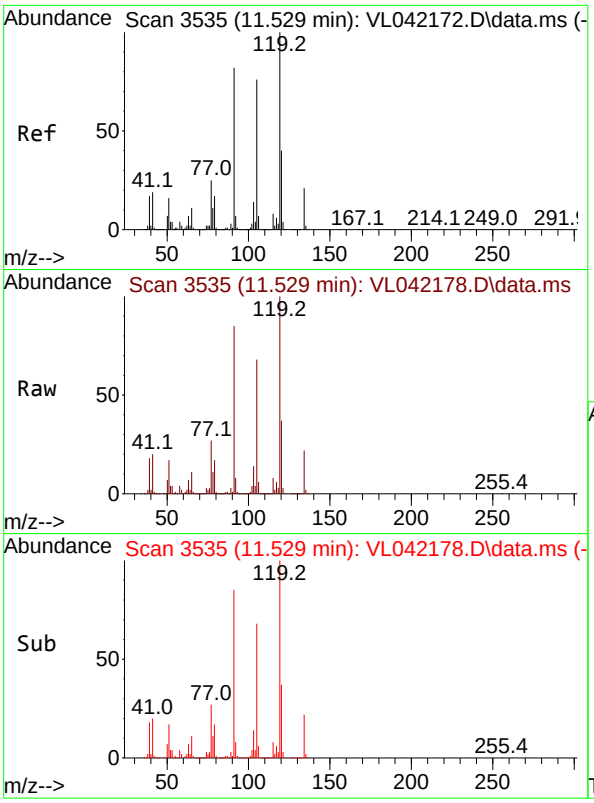


#64
n-propylbenzene
Concen: 13.753 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:120 Resp: 356118

Ion	Ratio	Lower	Upper
120	100		
91	455.4	376.9	565.3



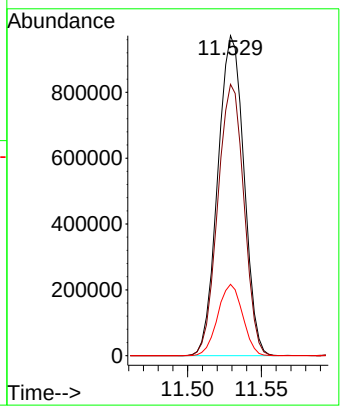


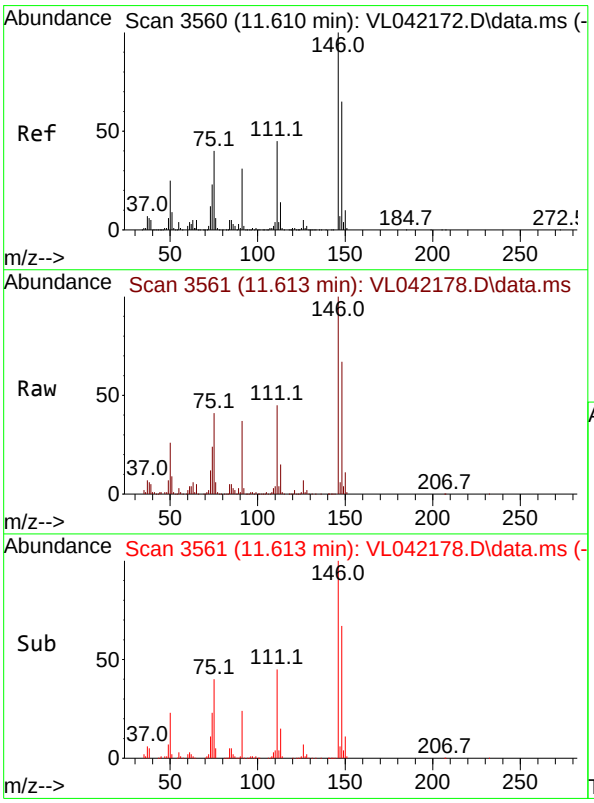
#65
tert-Butylbenzene
Concen: 12.901 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 1200149

Ion	Ratio	Lower	Upper
119	100		
91	84.6	66.0	99.0
134	21.2	16.7	25.1

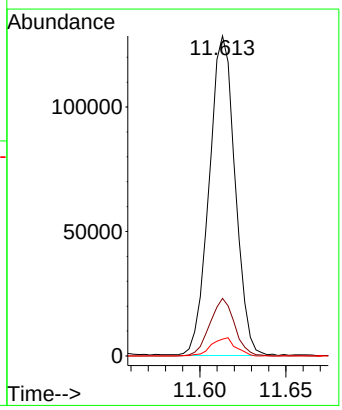


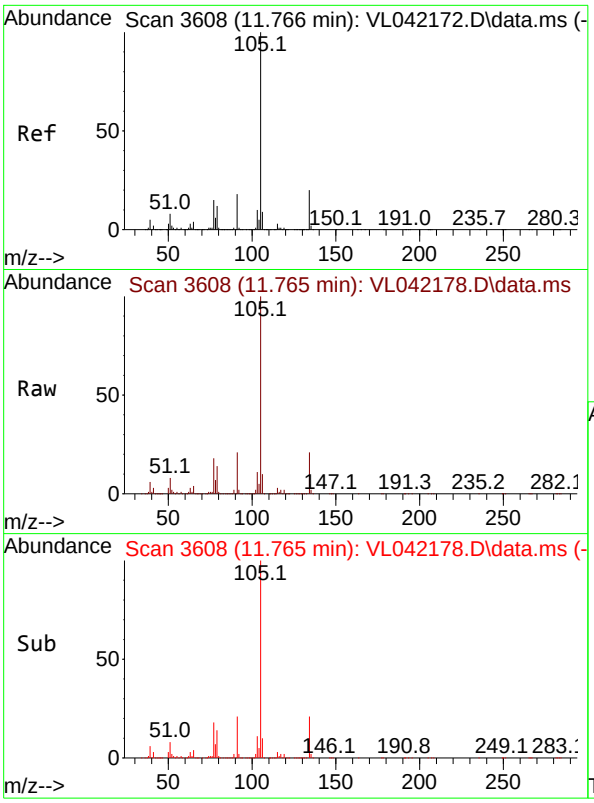


#66
Benzyl Chloride
Concen: 13.615 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 134397

Ion	Ratio	Lower	Upper
91	100		
126	17.3	13.8	20.6
128	5.4	4.5	6.7



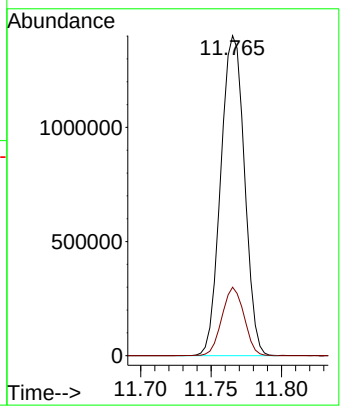


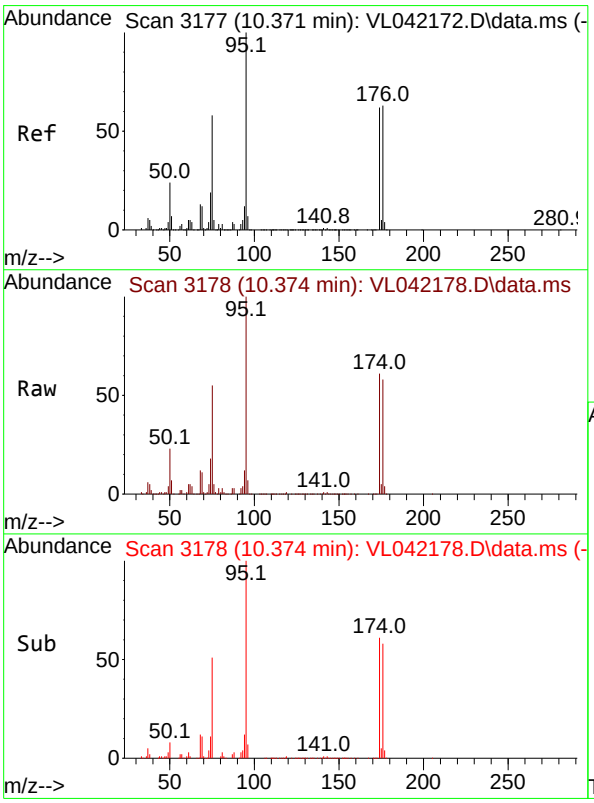
#67
sec-Butylbenzene
Concen: 12.711 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 1643629

Ion	Ratio	Lower	Upper
105	100		
134	20.0	15.5	23.3

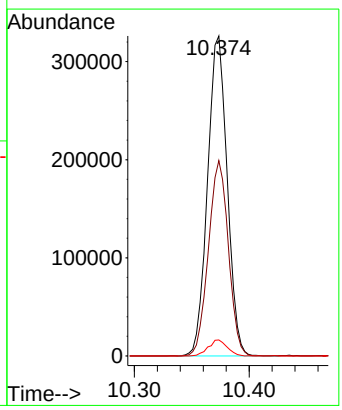


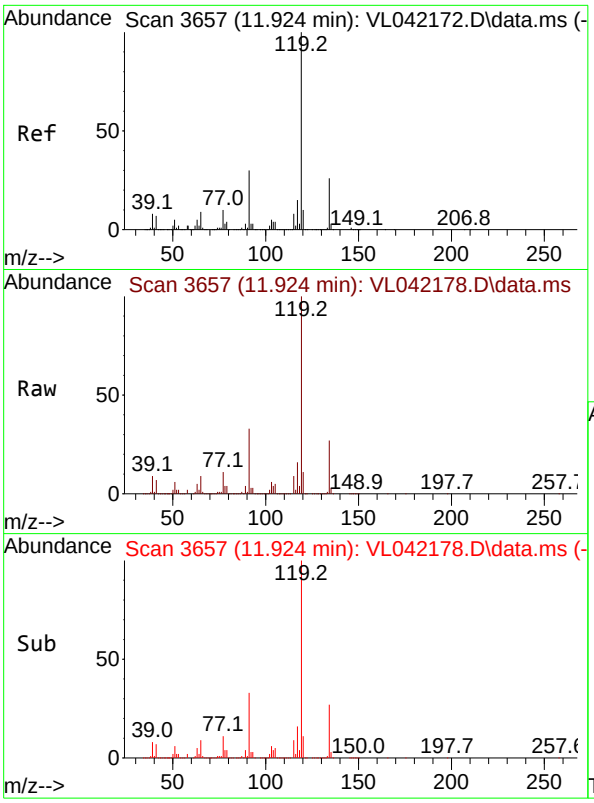


#68
1-Bromo-4-Fluorobenzene
Concen: 9.981 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 95 Resp: 387777

Ion	Ratio	Lower	Upper
95	100		
174	62.1	50.6	76.0
175	4.8	3.8	5.6



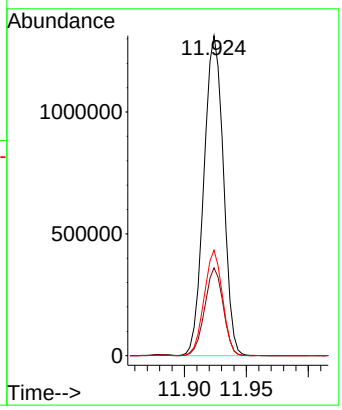


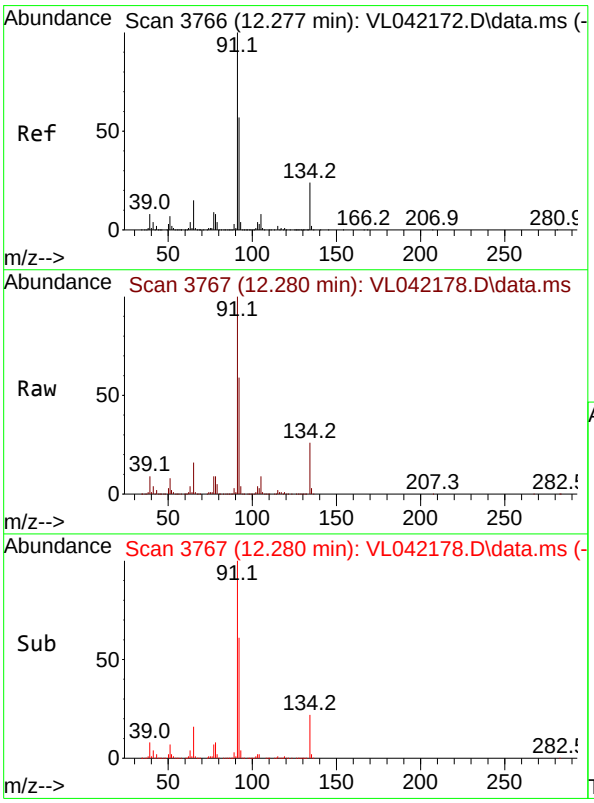
#69
p-Isopropyltoluene
Concen: 12.906 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 1437016

Ion	Ratio	Lower	Upper
119	100		
134	26.2	20.4	30.6
91	31.2	23.7	35.5

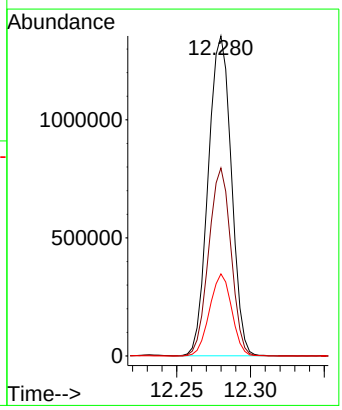


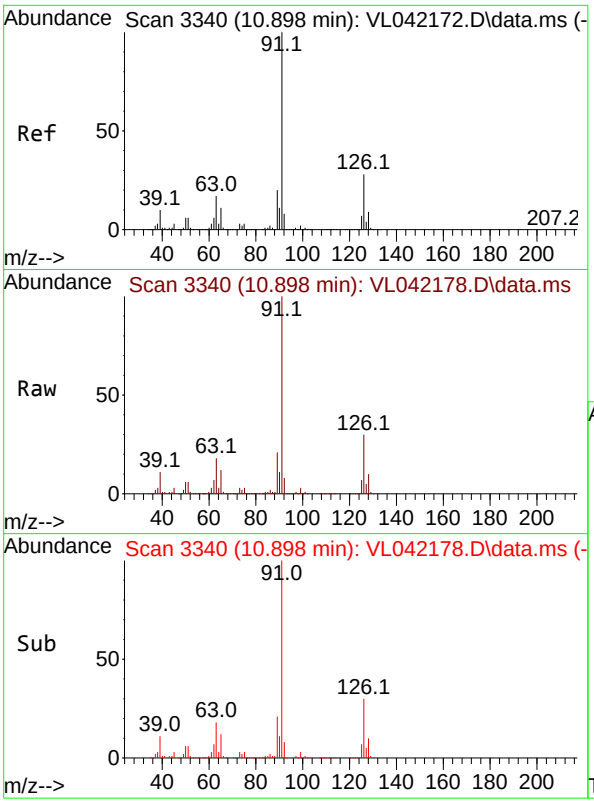


#70
n-Butylbenzene
Concen: 12.975 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1477443

Ion	Ratio	Lower	Upper
91	100		
92	57.0	44.9	67.3
134	24.6	19.2	28.8



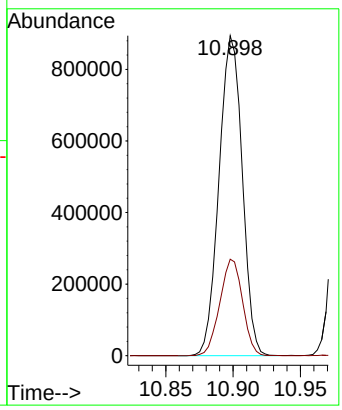


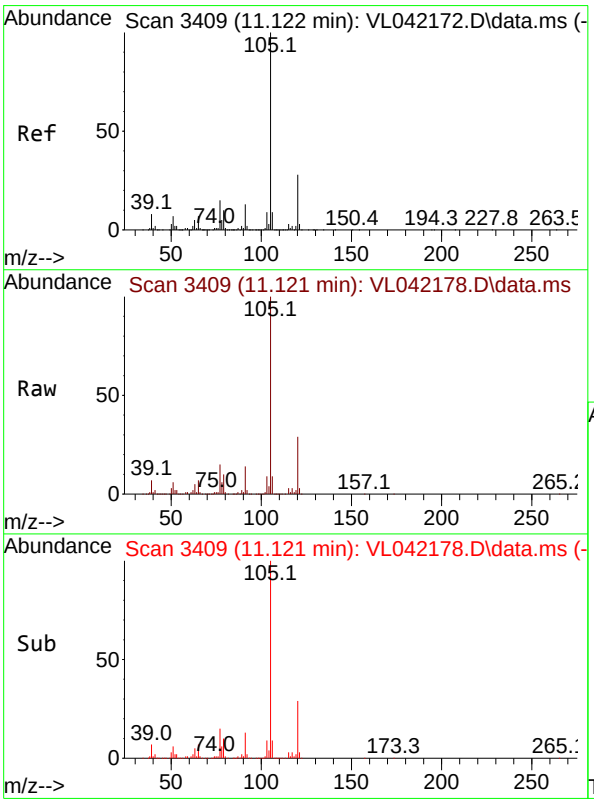
#71
2-Chlorotoluene
Concen: 13.724 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 1071432

Ion	Ratio	Lower	Upper
91	100		
126	29.5	11.6	46.4

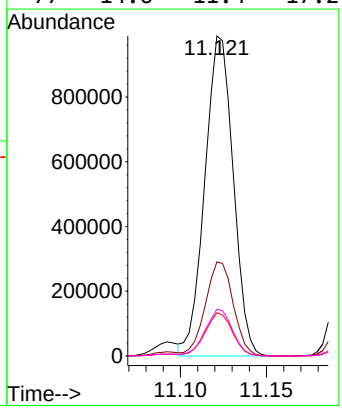


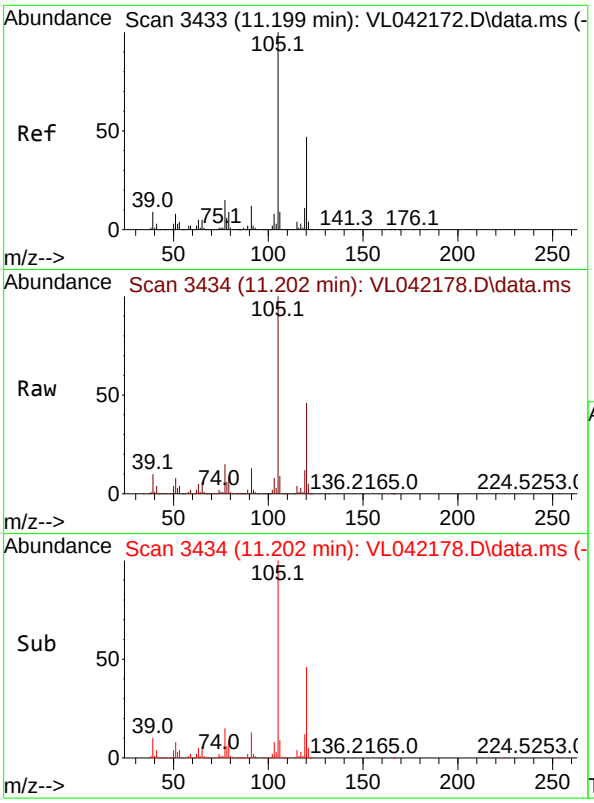


#72
4-Ethyltoluene
Concen: 13.569 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1136415

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.4	35.0
91	13.5	10.3	15.5
77	14.6	11.4	17.2



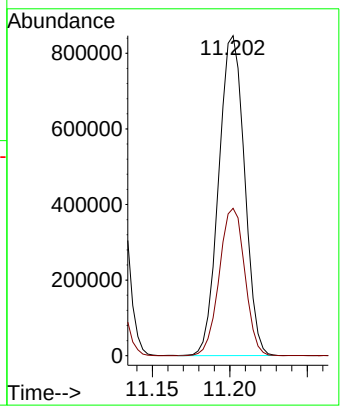


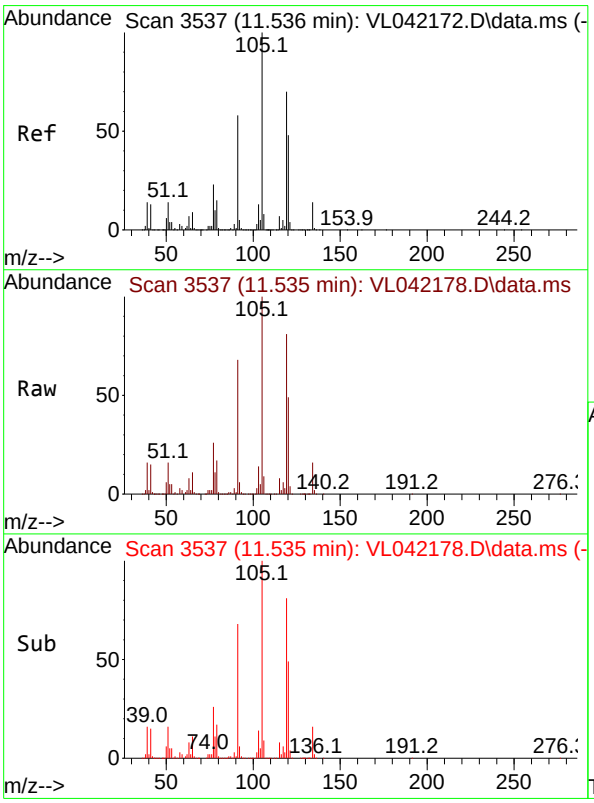
#73
1,3,5-Trimethylbenzene
Concen: 13.395 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 979783

Ion	Ratio	Lower	Upper
105	100		
120	46.1	37.4	56.0

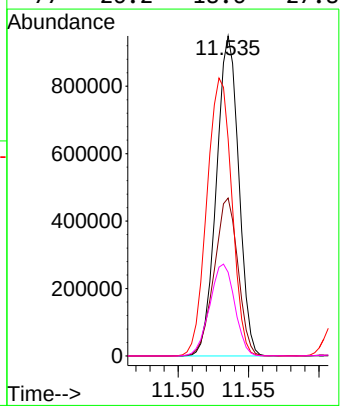


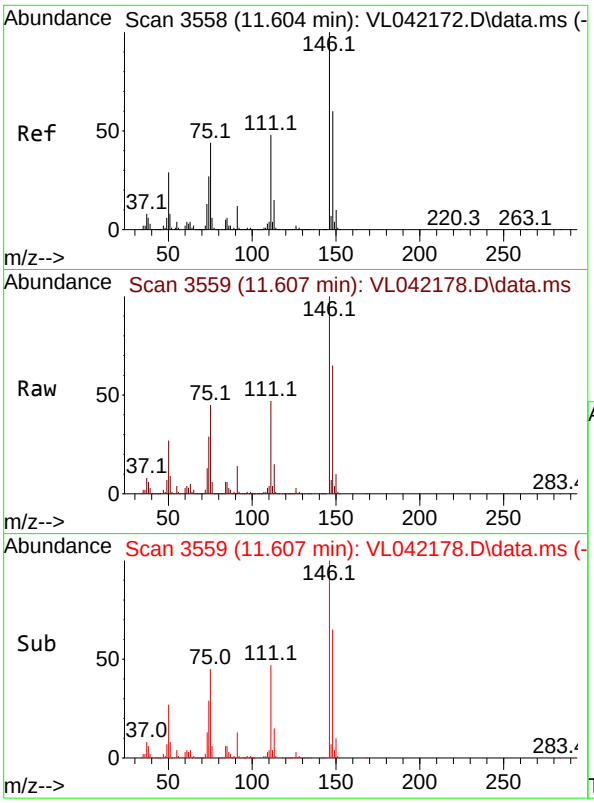


#74
1,2,4-Trimethylbenzene
Concen: 12.447 ppbv
RT: 11.535 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1048874

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.6	58.0
91	67.8	46.2	69.2
77	26.2	18.6	27.8



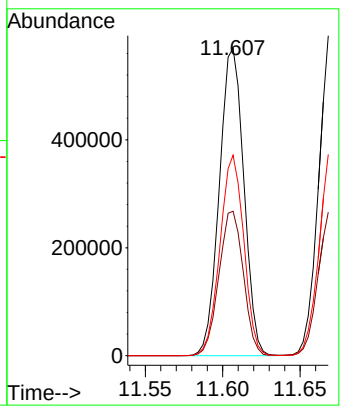


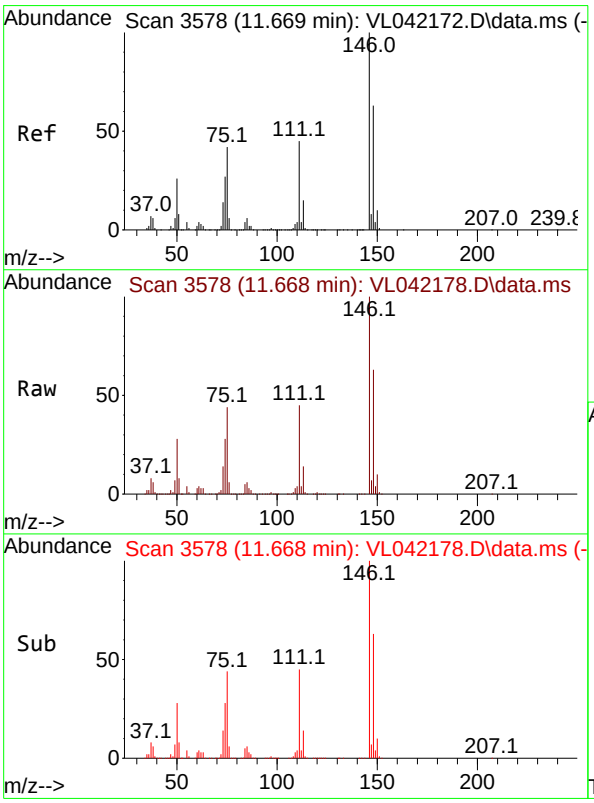
#75
1,3-Dichlorobenzene
Concen: 13.545 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 626015

Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.8	71.2
148	63.5	31.9	95.9

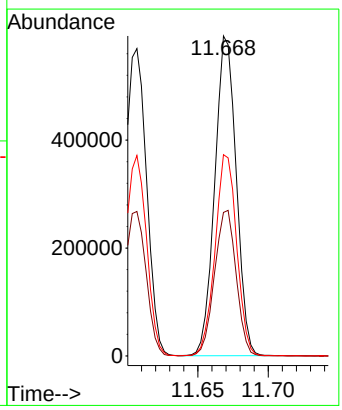


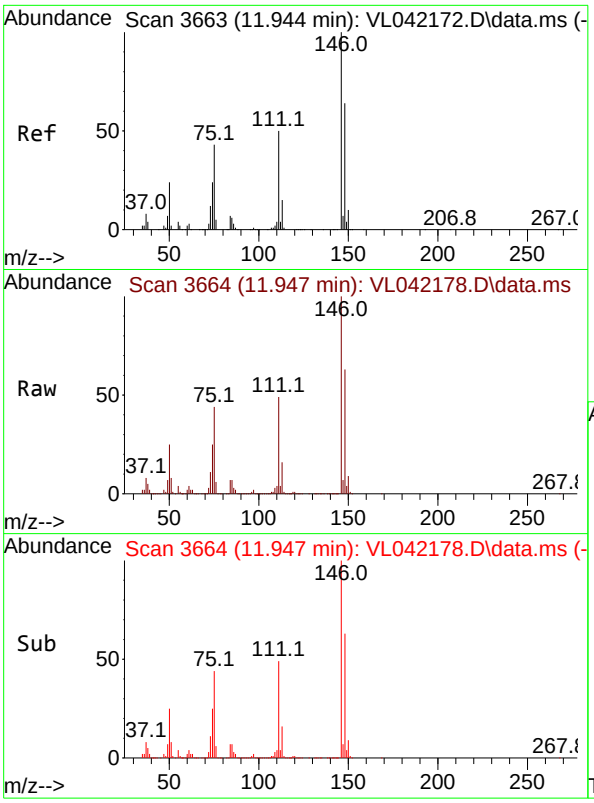


#76
1,4-Dichlorobenzene
Concen: 13.668 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 628694

Ion	Ratio	Lower	Upper
146	100		
111	46.1	23.0	69.0
148	63.6	31.9	95.7



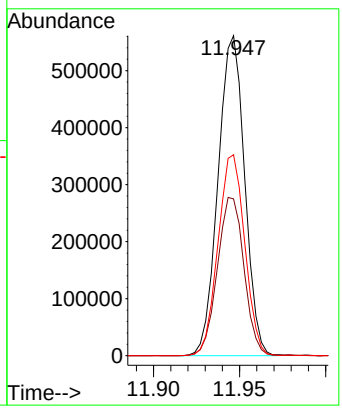


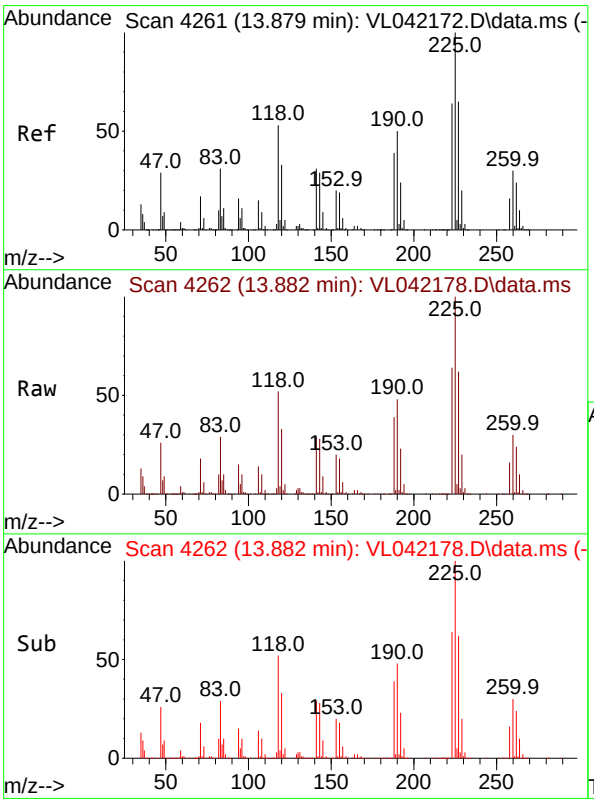
#77
1,2-Dichlorobenzene
Concen: 13.396 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 602844

Ion	Ratio	Lower	Upper
146	100		
111	49.7	24.8	74.3
148	63.3	31.6	94.8

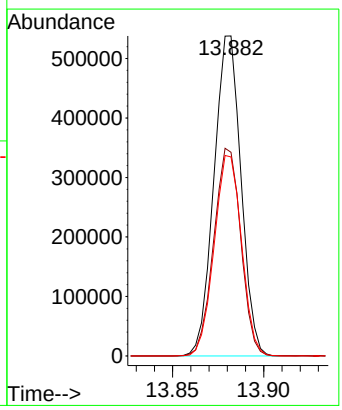


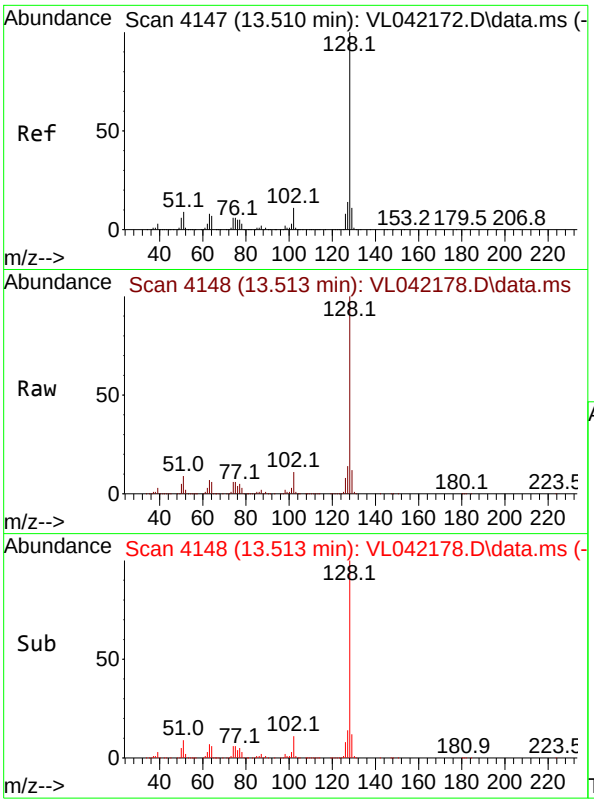


#78
Hexachloro-1,3-Butadiene
Concen: 12.147 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:225 Resp: 556392

Ion	Ratio	Lower	Upper
225	100		
223	64.7	50.6	76.0
227	63.3	51.2	76.8



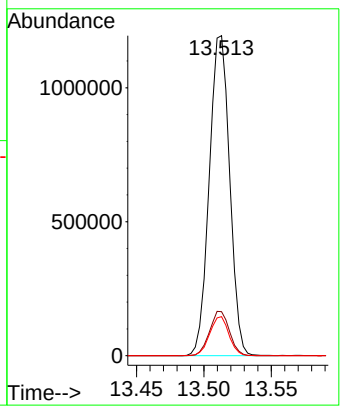


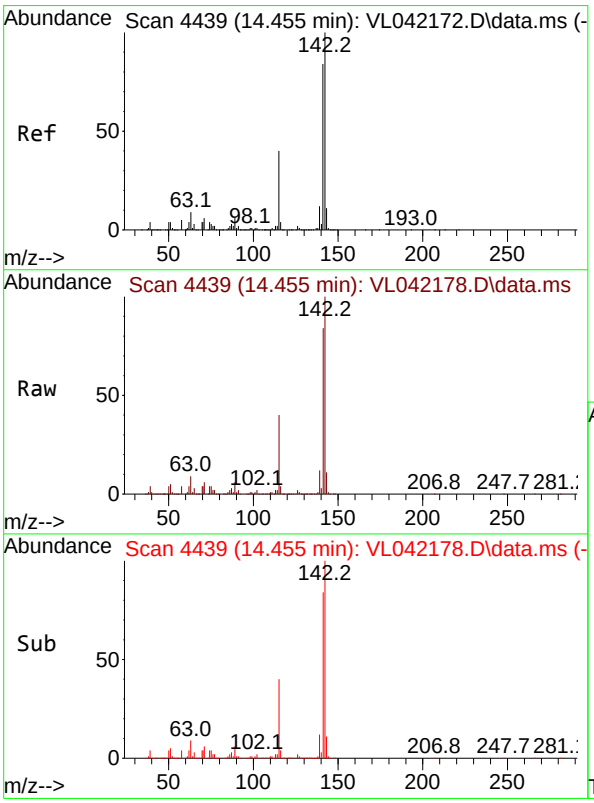
#79
Naphthalene
Concen: 13.653 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:128 Resp: 1258479

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.8	16.2
129	12.2	9.0	13.4

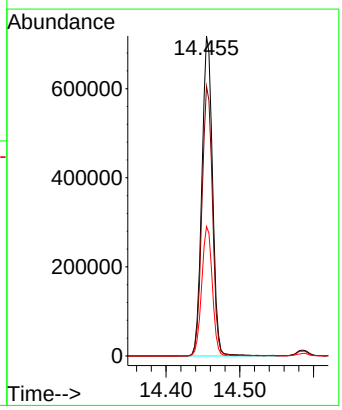


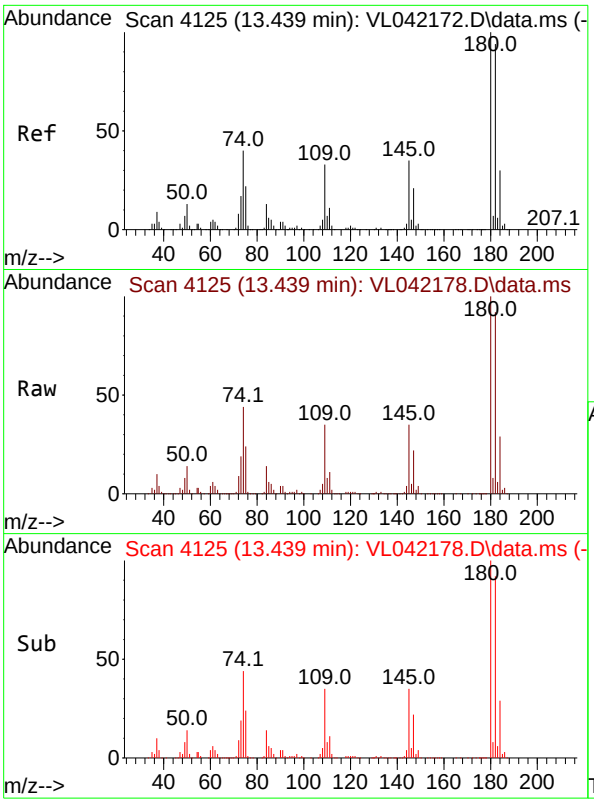


#80
Naphthalene,2-methyl-
Concen: 16.018 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:142 Resp: 718900

Ion	Ratio	Lower	Upper
142	100		
141	84.3	66.3	99.5
115	40.6	31.6	47.4



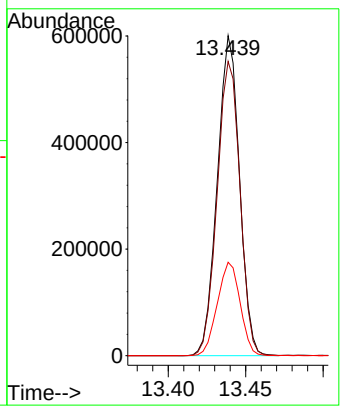


#81
1,2,4-Trichlorobenzene
Concen: 14.075 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:180 Resp: 598416

Ion	Ratio	Lower	Upper
180	100		
182	94.7	75.1	112.7
184	30.1	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	174350	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	498105	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	473357	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	379929	9.774	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	245714	9.545	ppbv	100
3) Chlorodifluoromethane	1.473	51	247046	9.394	ppbv	97
4) Chloromethane	1.531	50	98527	9.365	ppbv	98
5) Vinyl Chloride	1.577	62	95578	8.573	ppbv	97
6) Bromomethane	1.667	94	41950	8.799	ppbv	97
7) Chloroethane	1.703	64	37400	8.856	ppbv	94
8) Dichlorotetrafluoroethane	1.551	85	213819	9.753	ppbv	95
9) Propene	1.483	41	105338	8.739	ppbv	99
10) Heptane	4.972	43	298768	9.318	ppbv	100
11) Trichlorofluoromethane	1.874	101	236793	9.453	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.136	101	193965	9.421	ppbv	98
13) Ethanol	1.719	45	5773	5.066	ppbv	97
14) Bromoethene	1.780	108	73572	9.328	ppbv	97
15) Acetone	1.832	43	198300	8.132	ppbv	98
16) 1,3-Butadiene	1.606	39	97840	8.216	ppbv	99
17) tert-Butyl alcohol	2.039	59	276195	9.094	ppbv	99
18) 1,1-Dichloroethene	2.033	96	87137	9.053	ppbv	89
19) Isopropyl Alcohol	1.884	45	122768	8.923	ppbv	98
20) Methylene Chloride	2.059	84	72813	8.018	ppbv	97
21) Allyl Chloride	2.094	41	157418	9.154	ppbv	99
22) trans-1,2-Dichloroethene	2.337	96	101141	9.092	ppbv	93
23) Vinyl Acetate	2.460	43	90260	8.553	ppbv #	97
24) 1,1-Dichloroethane	2.405	63	197968	9.600	ppbv	99
25) Ethyl Acetate	2.832	43	592585	9.364	ppbv	99
26) Hexane	2.823	57	231125	9.455	ppbv	99
27) Carbon Disulfide	2.146	76	248834	9.493	ppbv	97
28) Methyl tert-Butyl Ether	2.437	73	146470	9.624	ppbv	95
29) Chloroform	2.845	83	344106	9.619	ppbv	100
30) Cyclohexane	3.852	84	197897	9.323	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	234487	9.449	ppbv	96
32) 1,1,1-Trichloroethane	3.363	97	365364	8.921	ppbv	99
34) 2-Butanone	2.554	43	331236	9.171	ppbv	99
35) Carbon Tetrachloride	3.758	117	363392	9.339	ppbv	98
36) Benzene	3.651	78	461261	9.341	ppbv	99
37) 1,2-Dichloroethane	3.217	62	273559	9.676	ppbv	99
38) Trichloroethene	4.541	130	191746	9.306	ppbv	97
39) 1,2-Dichloropropane	4.311	63	170839	9.500	ppbv	95
40) 1,4-Dioxane	4.577	88	80592	8.443	ppbv #	97
41) Tetrahydrofuran	3.052	42	196163	9.431	ppbv	99
42) Bromodichloromethane	4.486	83	384006	9.853	ppbv	100
43) Methyl Methacrylate	4.878	69	195339	9.344	ppbv	99
44) 2,2,4-Trimethylpentane	4.635	57	787400	9.436	ppbv	99
45) t-1,3-Dichloropropene	6.409	75	212335	9.467	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

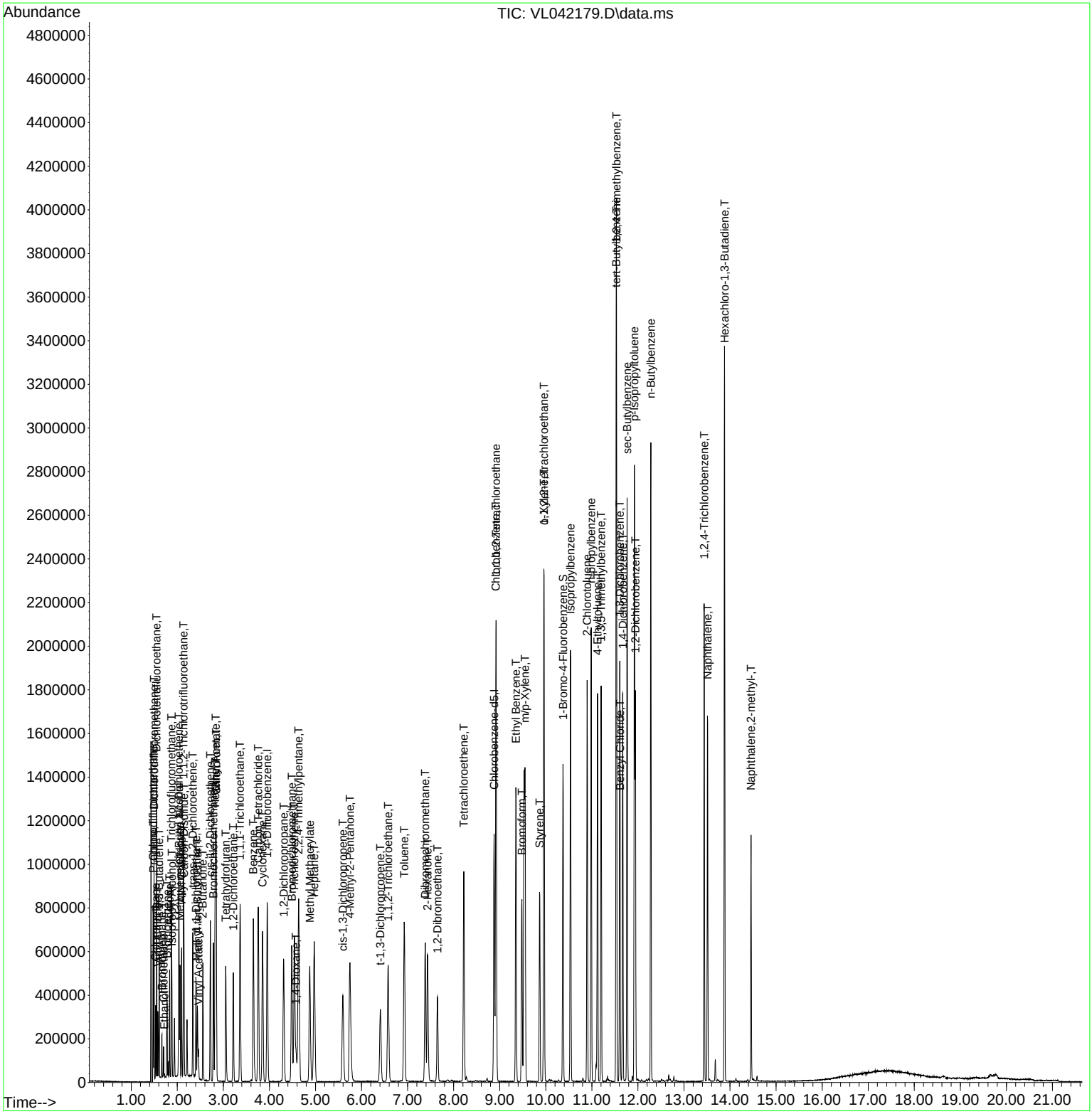
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	265101	9.643	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	183228	9.638	ppbv		98
48) Dibromochloromethane	7.383	129	322766	10.018	ppbv		100
49) Bromoform	9.480	173	285149	9.858	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	500791	8.749	ppbv		99
51) 2-Hexanone	7.432	43	410889	8.741	ppbv	#	99
52) Tetrachloroethene	8.221	164	173420	8.855	ppbv		93
53) Toluene	6.927	91	556897	9.514	ppbv		99
54) 1,2-Dibromoethane	7.645	107	256930	9.695	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.920	131	249270	9.567	ppbv		99
57) Chlorobenzene	8.917	112	422531	9.411	ppbv		98
58) Ethyl Benzene	9.351	91	791360	9.412	ppbv		98
59) m/p-Xylene	9.548	91	583773	8.695	ppbv	#	20
60) o-Xylene	9.959	91	632918	9.404	ppbv		99
61) Styrene	9.866	104	315910	9.488	ppbv		99
62) Isopropylbenzene	10.539	105	944938	9.388	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	382635	9.357	ppbv		99
64) n-propylbenzene	10.985	120	244547	9.439	ppbv		98
65) tert-Butylbenzene	11.529	119	843828	9.065	ppbv		98
66) Benzyl Chloride	11.613	91	86804	8.789	ppbv		97
67) sec-Butylbenzene	11.765	105	1172636	9.063	ppbv		100
69) p-Isopropyltoluene	11.924	119	1019694	9.153	ppbv		100
70) n-Butylbenzene	12.280	91	1038548	9.115	ppbv		100
71) 2-Chlorotoluene	10.898	91	732874	9.382	ppbv		100
72) 4-Ethyltoluene	11.125	105	785185	9.370	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	673541	9.203	ppbv		98
74) 1,2,4-Trimethylbenzene	11.536	105	729155	8.648	ppbv		94
75) 1,3-Dichlorobenzene	11.607	146	426573	9.224	ppbv		99
76) 1,4-Dichlorobenzene	11.672	146	426318	9.263	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	412180	9.154	ppbv		99
78) Hexachloro-1,3-Butadiene	13.882	225	356386	7.776	ppbv		100
79) Naphthalene	13.513	128	773311	8.385	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	323443	7.151	ppbv		99
81) 1,2,4-Trichlorobenzene	13.439	180	363863	8.553	ppbv		98

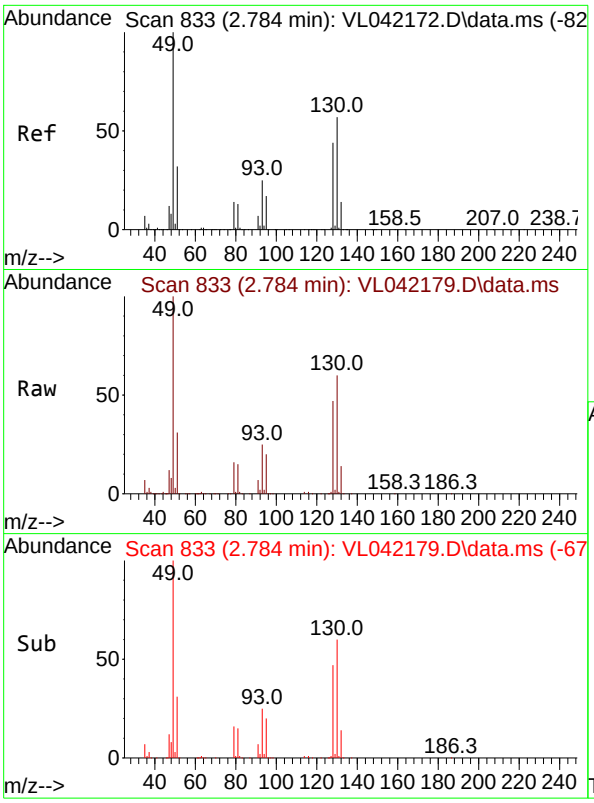
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



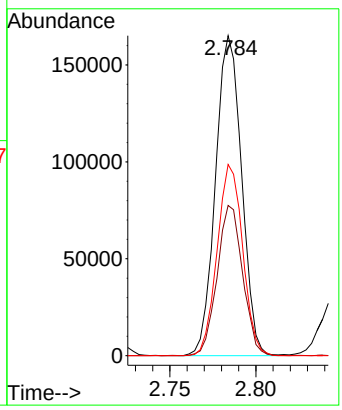


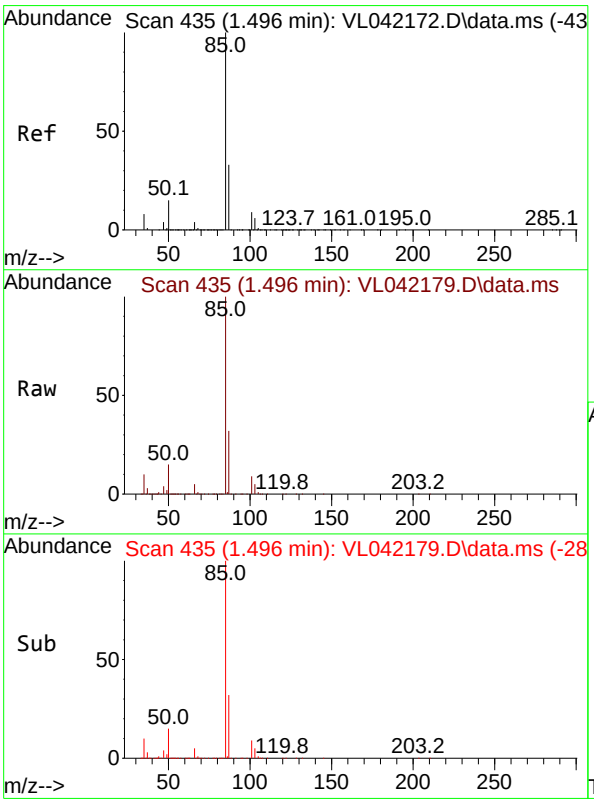
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 49 Resp: 174350

Ion	Ratio	Lower	Upper
49	100		
128	45.8	22.9	68.5
130	58.4	28.8	86.4

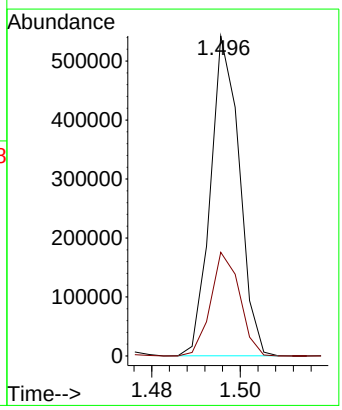


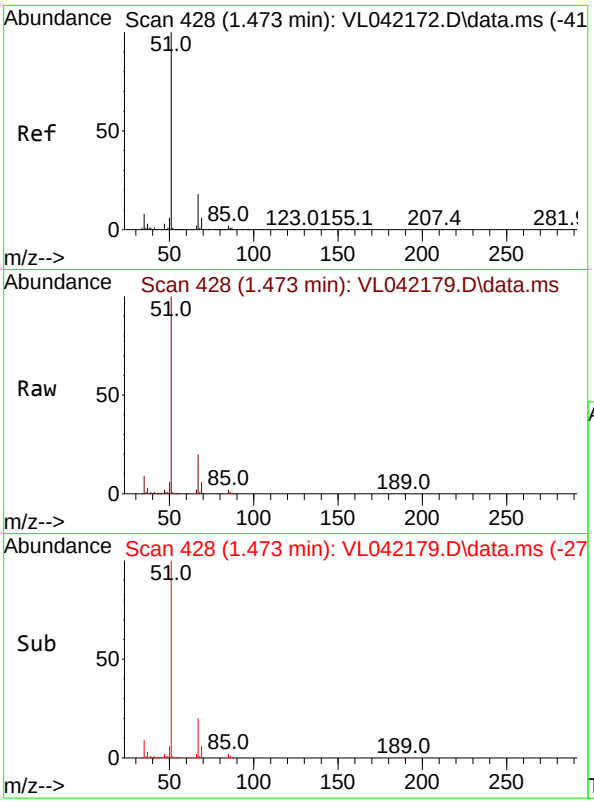


#2
Dichlorodifluoromethane
Concen: 9.545 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 245714

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1



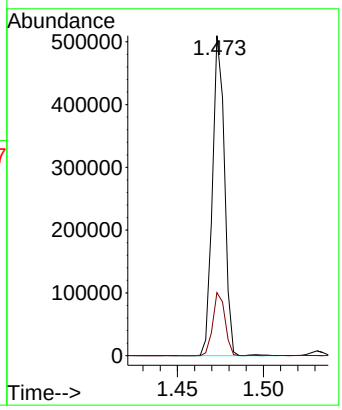


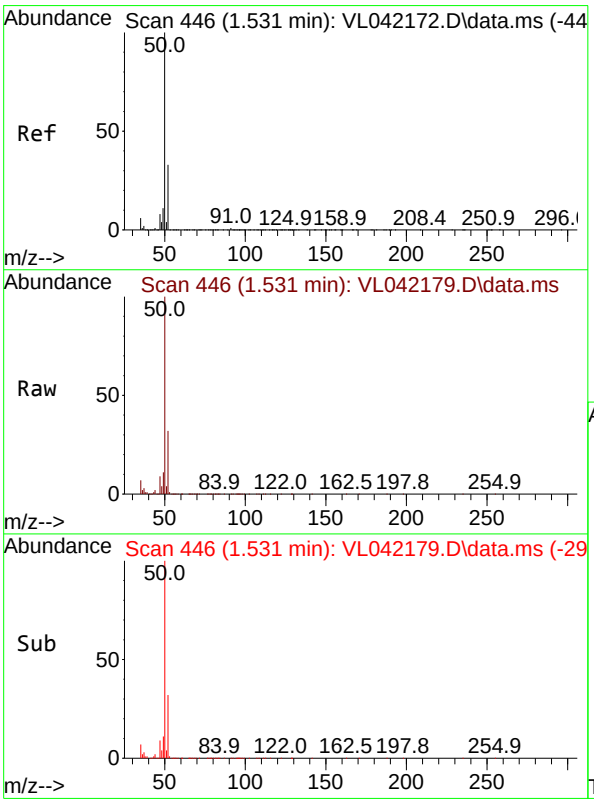
#3
Chlorodifluoromethane
Concen: 9.394 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 51 Resp: 247046

Ion	Ratio	Lower	Upper
51	100		
67	20.1	15.0	22.6

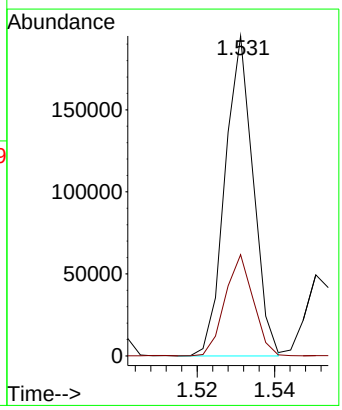


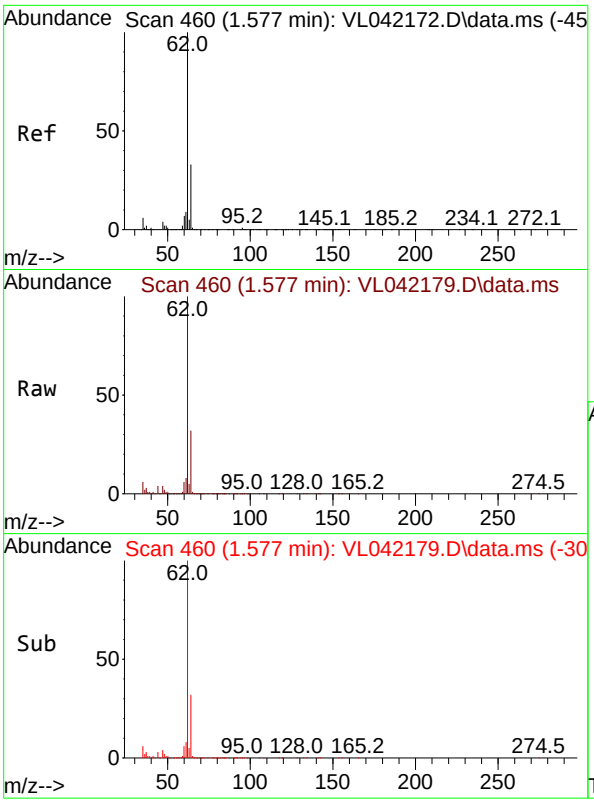


#4
Chloromethane
Concen: 9.365 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 50 Resp: 98527

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1



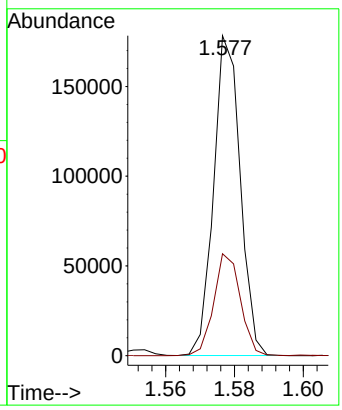


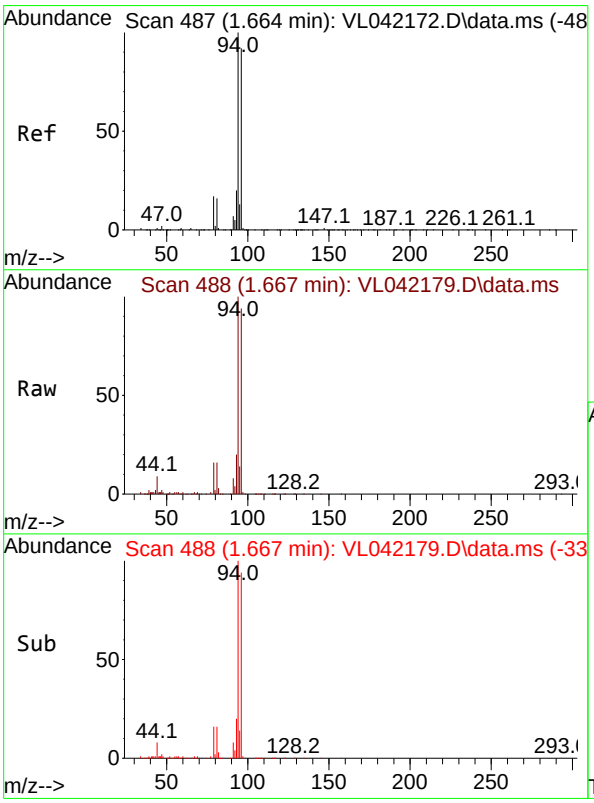
#5
Vinyl Chloride
Concen: 8.573 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 62 Resp: 95578

Ion	Ratio	Lower	Upper
62	100		
64	31.8	26.6	40.0

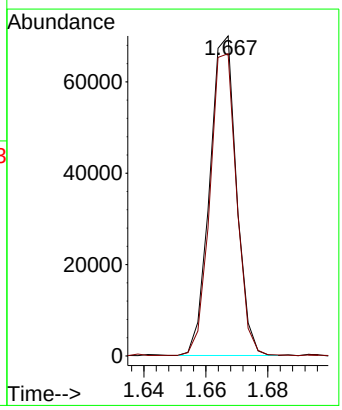


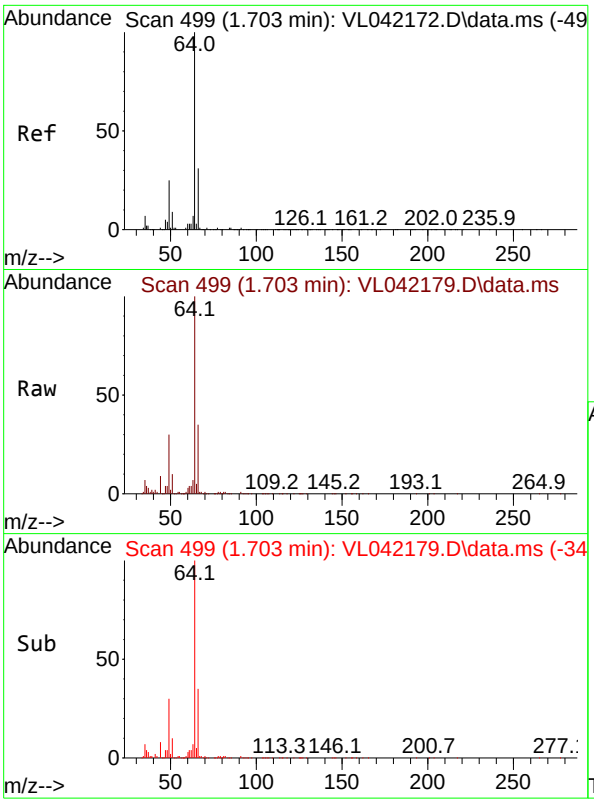


#6
Bromomethane
Concen: 8.799 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 94 Resp: 41950

Ion	Ratio	Lower	Upper
94	100		
96	94.4	73.1	109.7



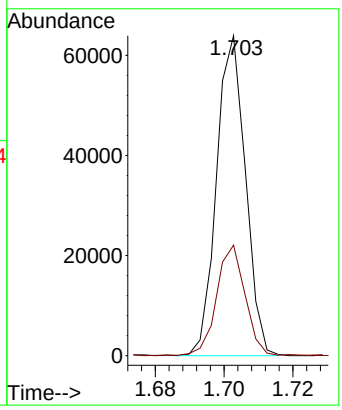


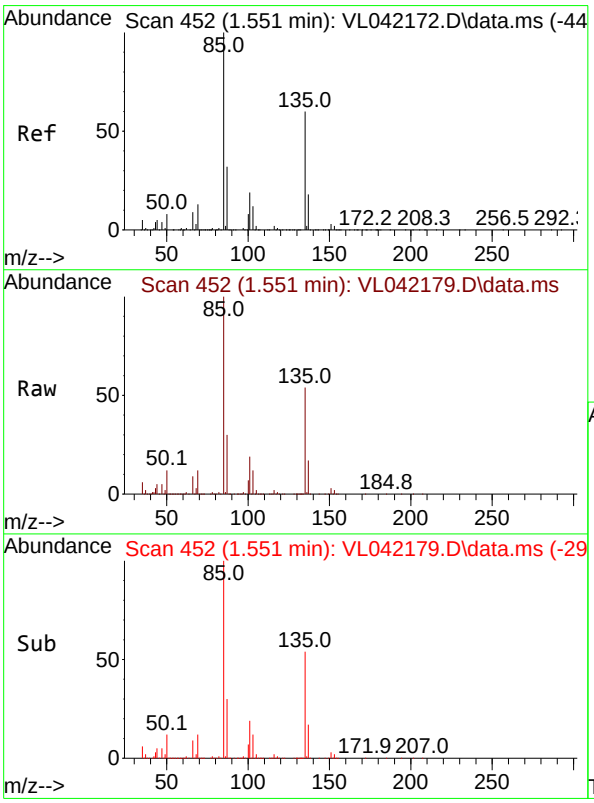
#7
Chloroethane
Concen: 8.856 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 64 Resp: 37400

Ion	Ratio	Lower	Upper
64	100		
66	34.5	25.2	37.8

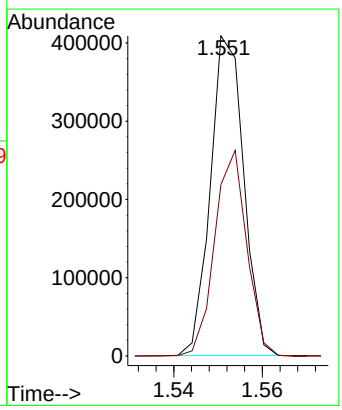


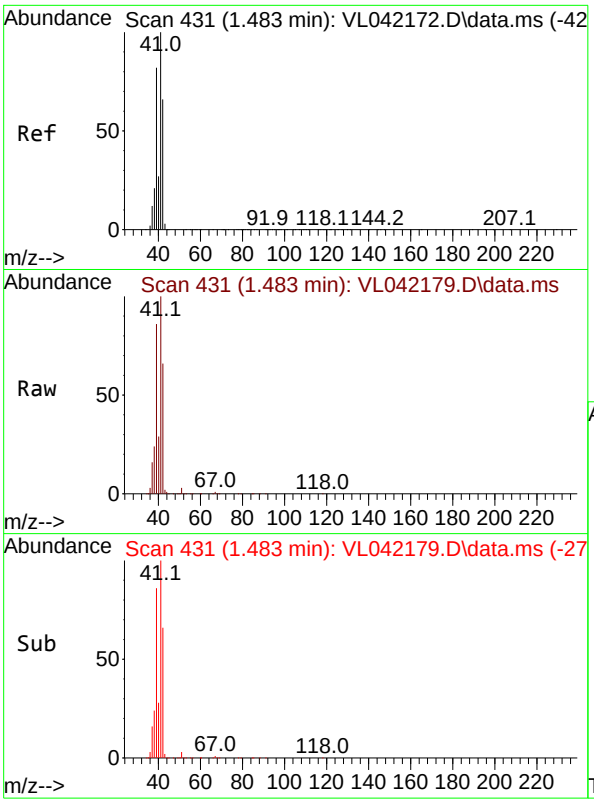


#8
Dichlorotetrafluoroethane
Concen: 9.753 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 213819

Ion	Ratio	Lower	Upper
85	100		
135	61.9	52.4	78.6



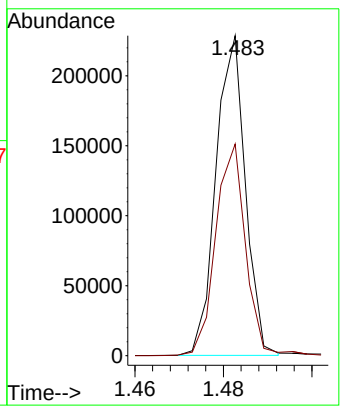


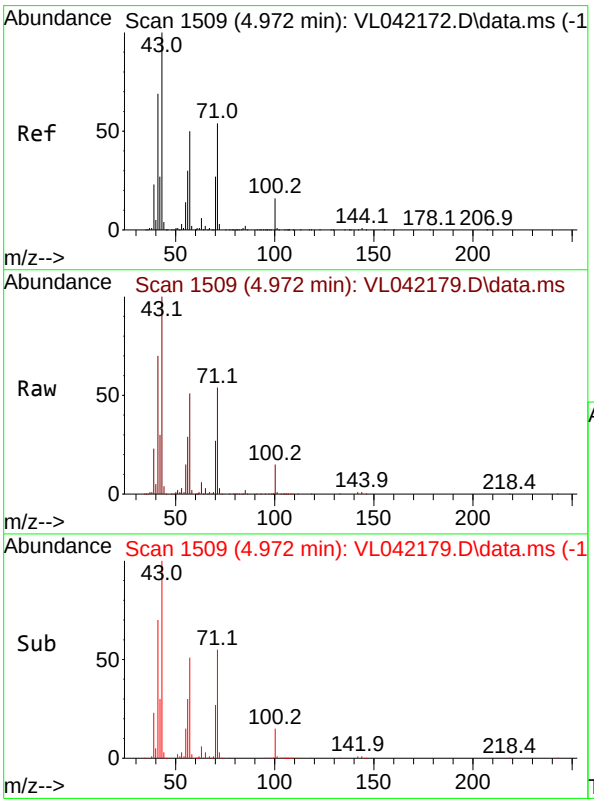
#9
Propene
Concen: 8.739 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 41 Resp: 105338

Ion	Ratio	Lower	Upper
41	100		
42	68.1	55.4	83.2

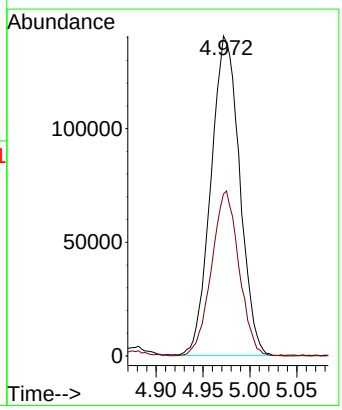


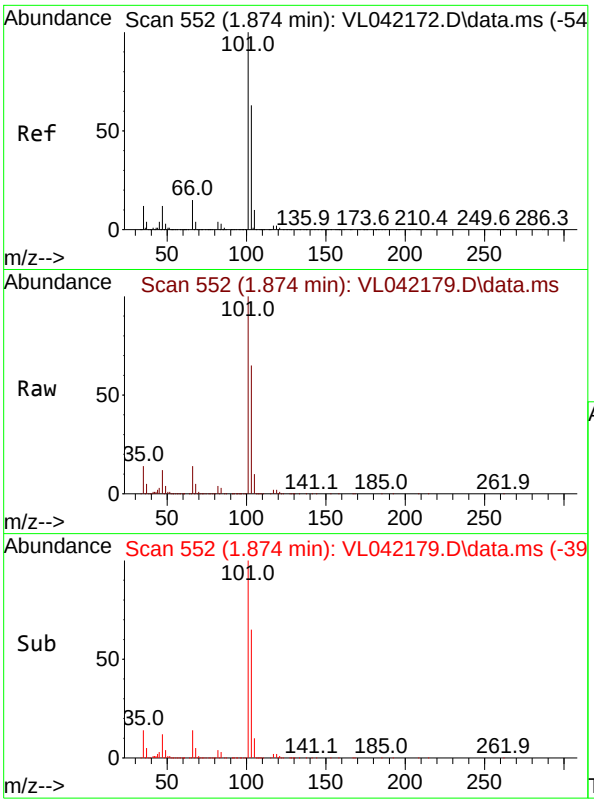


#10
Heptane
Concen: 9.318 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 298768

Ion	Ratio	Lower	Upper
43	100		
57	49.5	39.4	59.2



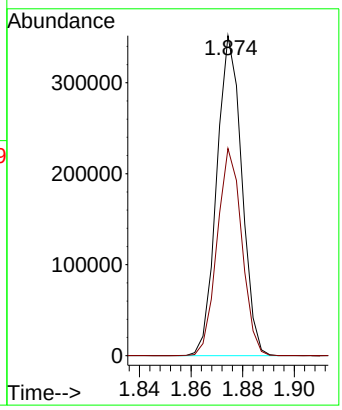


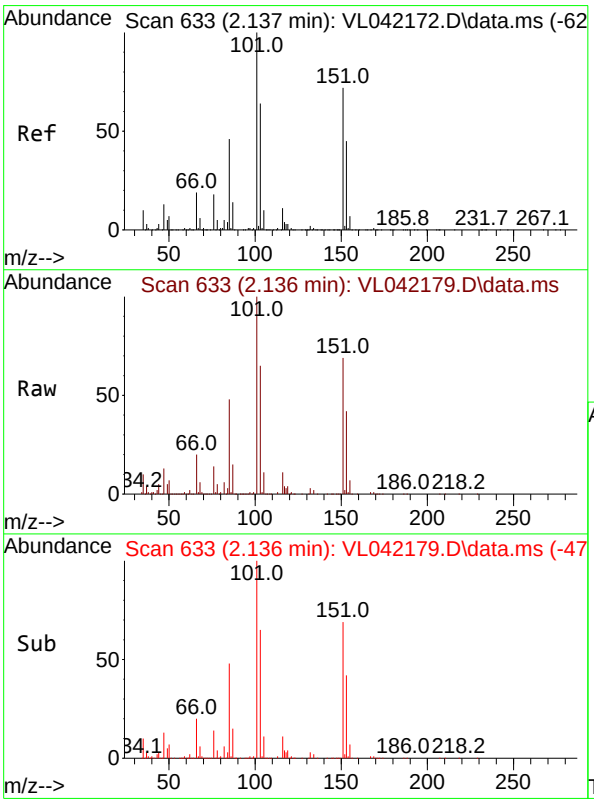
#11
Trichlorofluoromethane
Concen: 9.453 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:101 Resp: 236793

Ion	Ratio	Lower	Upper
101	100		
103	64.7	50.2	75.2

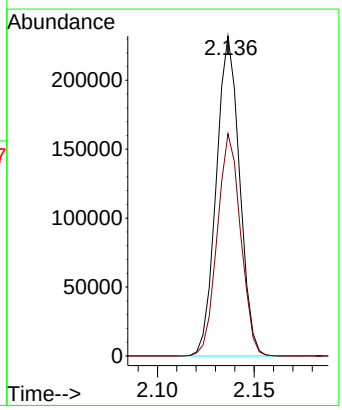


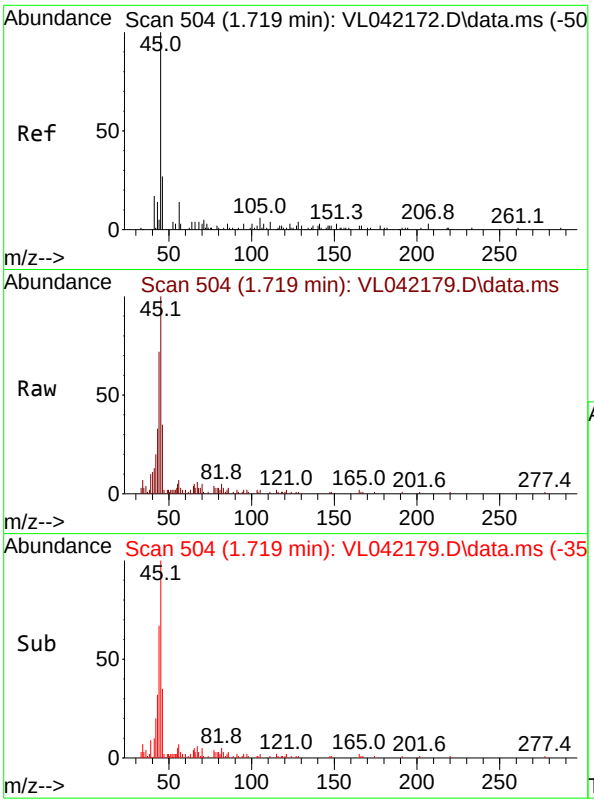


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.421 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:101 Resp: 193965

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.1	85.7



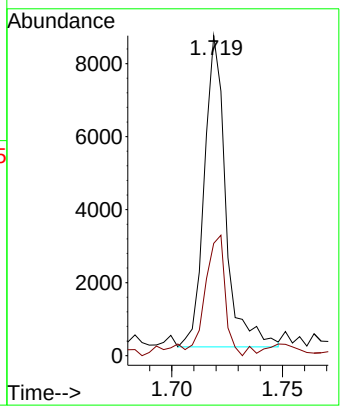


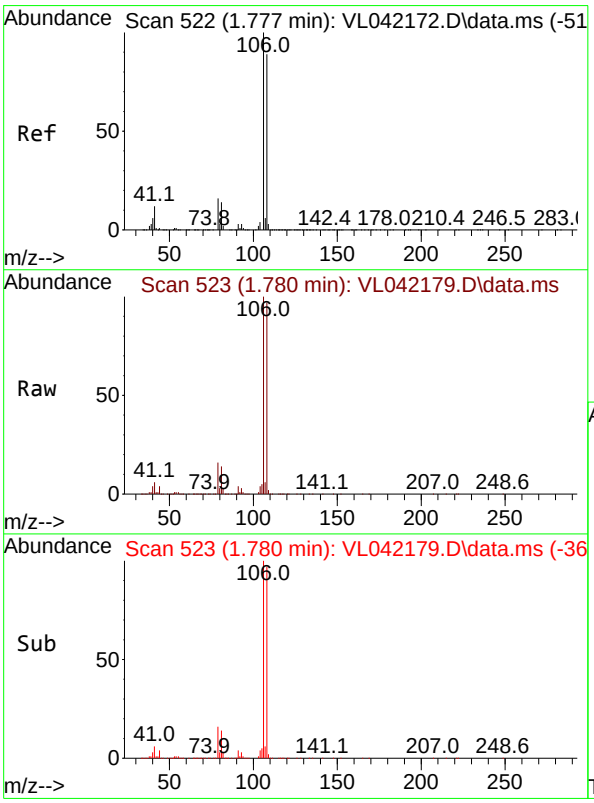
#13
Ethanol
Concen: 5.066 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 45 Resp: 5773

Ion	Ratio	Lower	Upper
45	100		
46	48.5	20.2	80.8

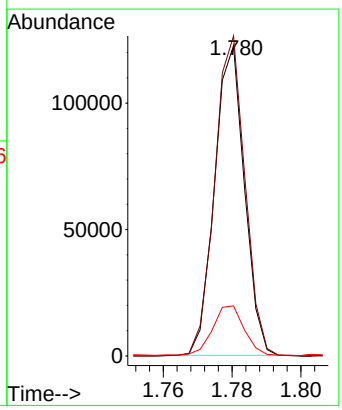


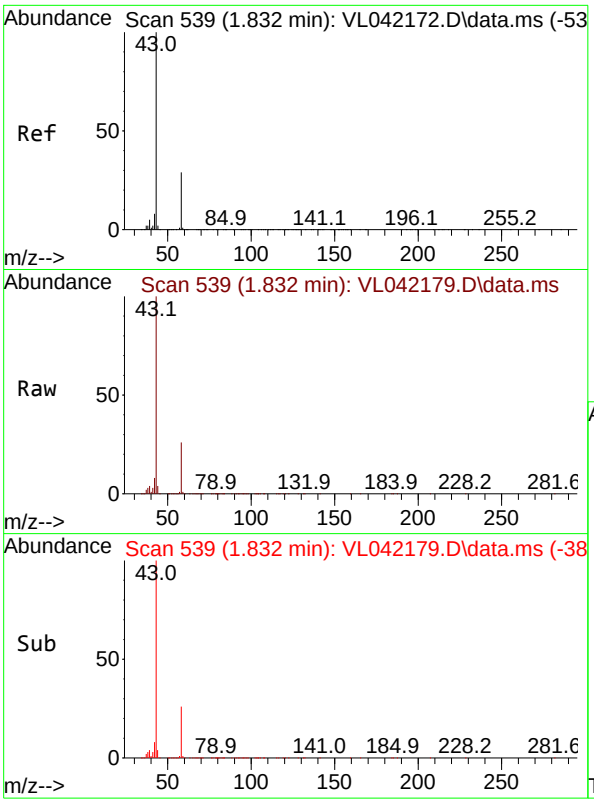


#14
Bromoethene
Concen: 9.328 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:108 Resp: 73572

Ion	Ratio	Lower	Upper
108	100		
106	105.0	86.8	130.2
79	18.8	15.0	22.6



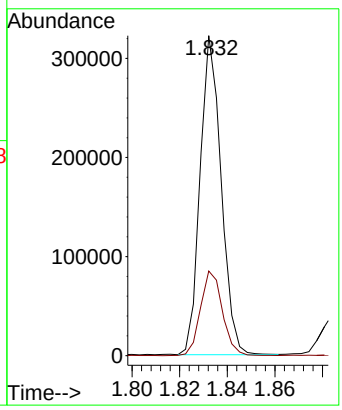


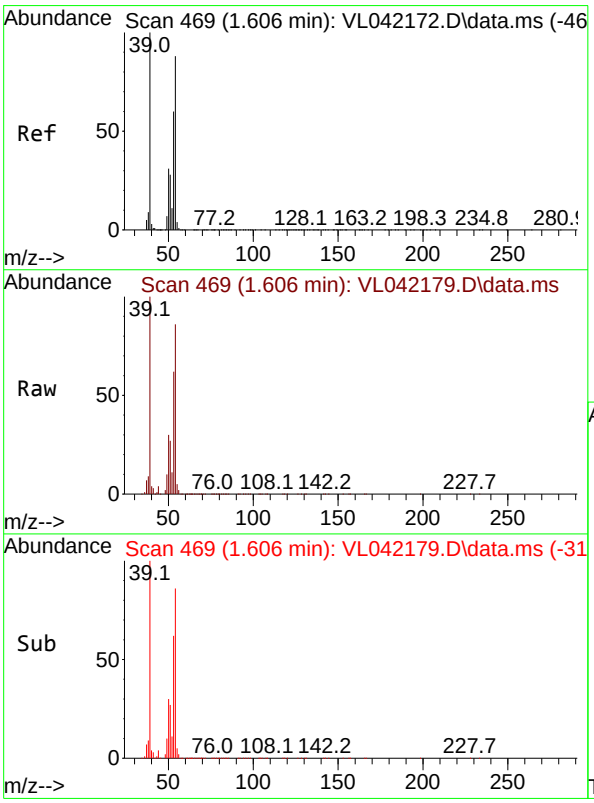
#15
Acetone
Concen: 8.132 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 198300

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8

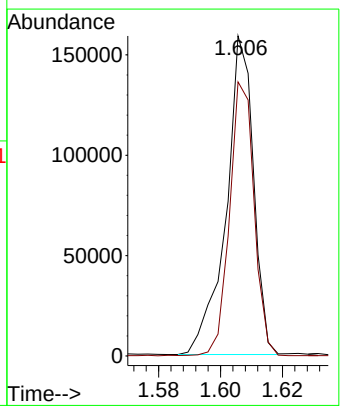


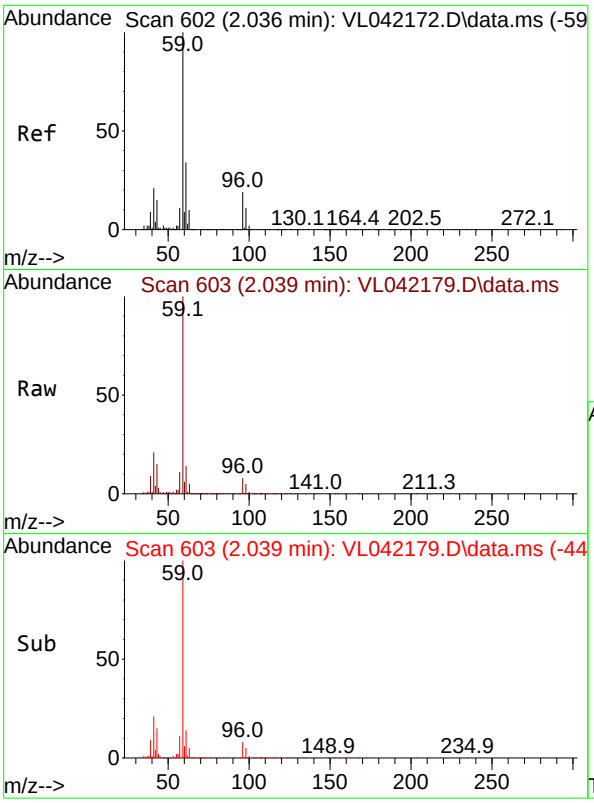


#16
1,3-Butadiene
Concen: 8.216 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 39 Resp: 97840

Ion	Ratio	Lower	Upper
39	100		
54	76.9	60.7	91.1



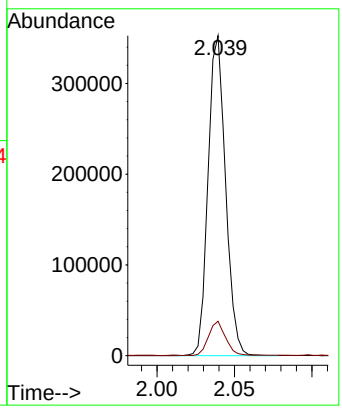


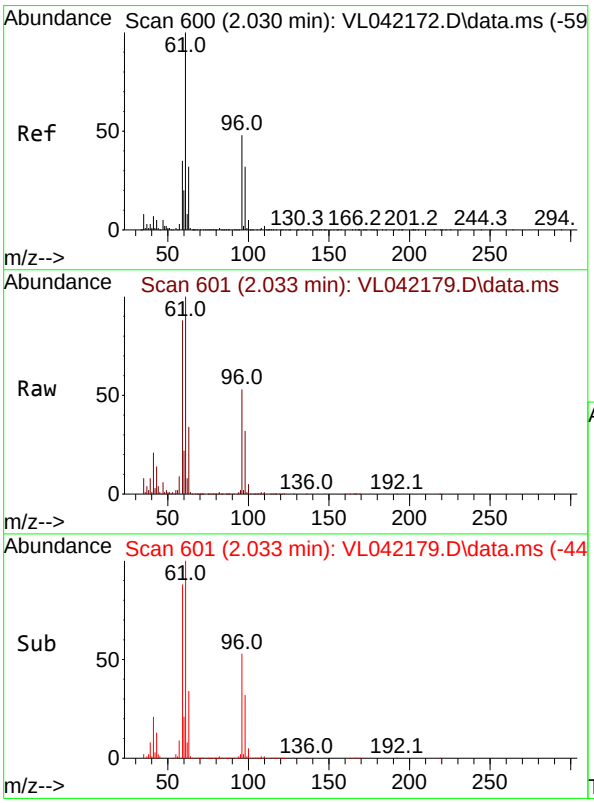
#17
tert-Butyl alcohol
Concen: 9.094 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 59 Resp: 276195

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.9	13.3

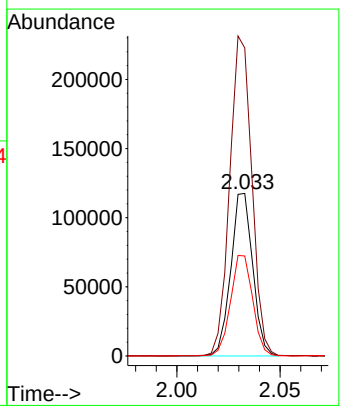


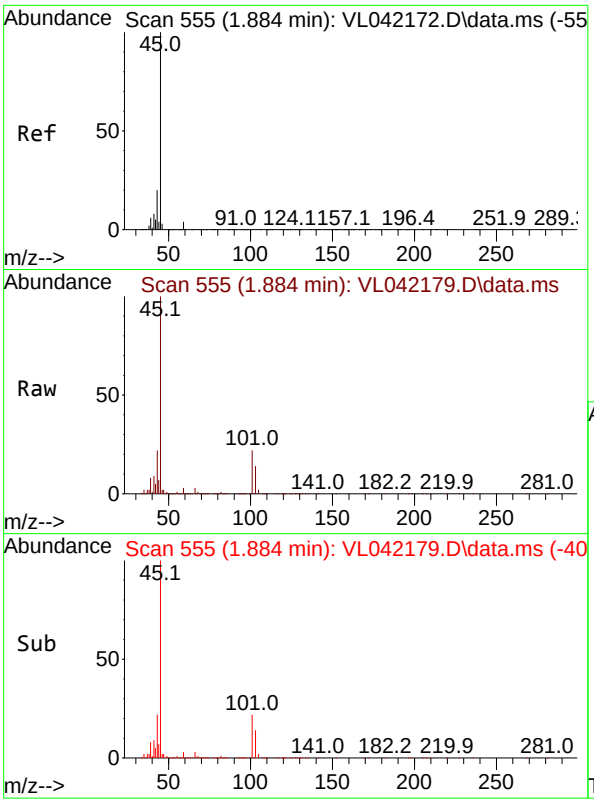


#18
1,1-Dichloroethene
Concen: 9.053 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 87137

Ion	Ratio	Lower	Upper
96	100		
61	189.6	167.6	251.4
98	61.5	53.5	80.3



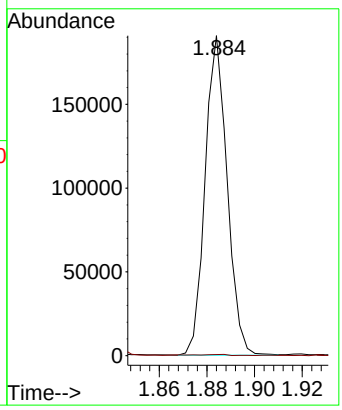


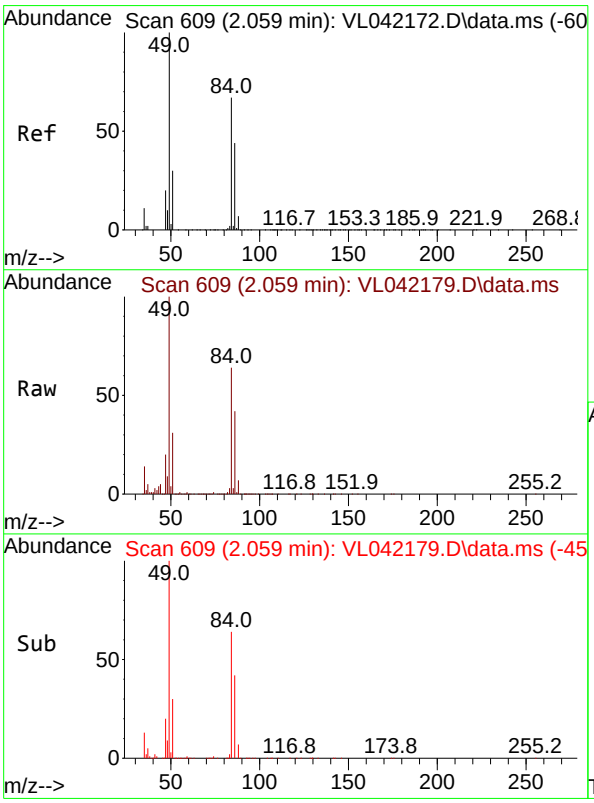
#19
Isopropyl Alcohol
Concen: 8.923 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 45 Resp: 122768

Ion	Ratio	Lower	Upper
45	100		
58	44.9	36.9	55.3

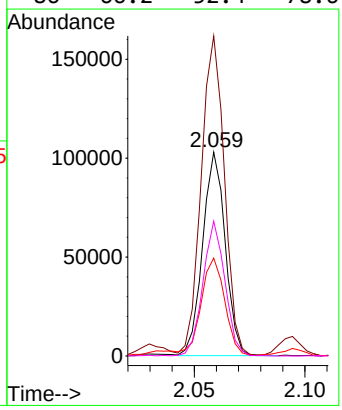


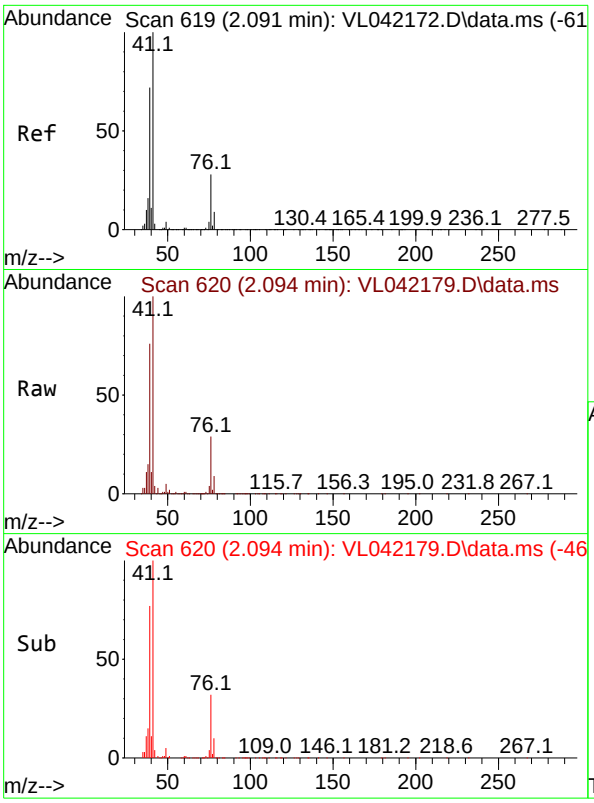


#20
Methylene Chloride
Concen: 8.018 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 72813

Ion	Ratio	Lower	Upper
84	100		
49	155.8	120.2	180.4
51	46.4	37.4	56.0
86	66.2	52.4	78.6



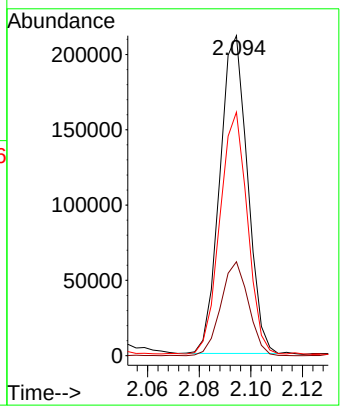


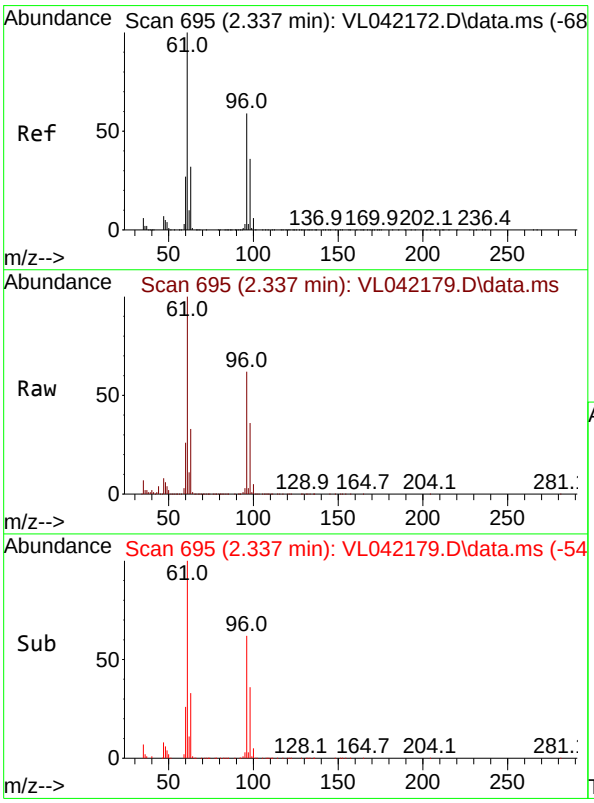
#21
Allyl Chloride
Concen: 9.154 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 41 Resp: 157418

Ion	Ratio	Lower	Upper
41	100		
76	29.6	24.1	36.1
39	75.5	61.1	91.7

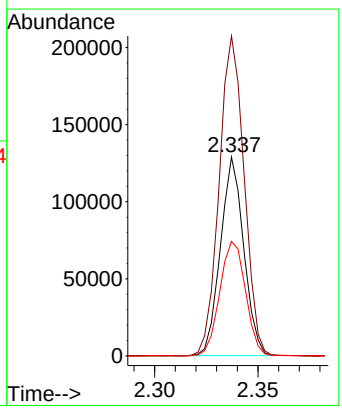


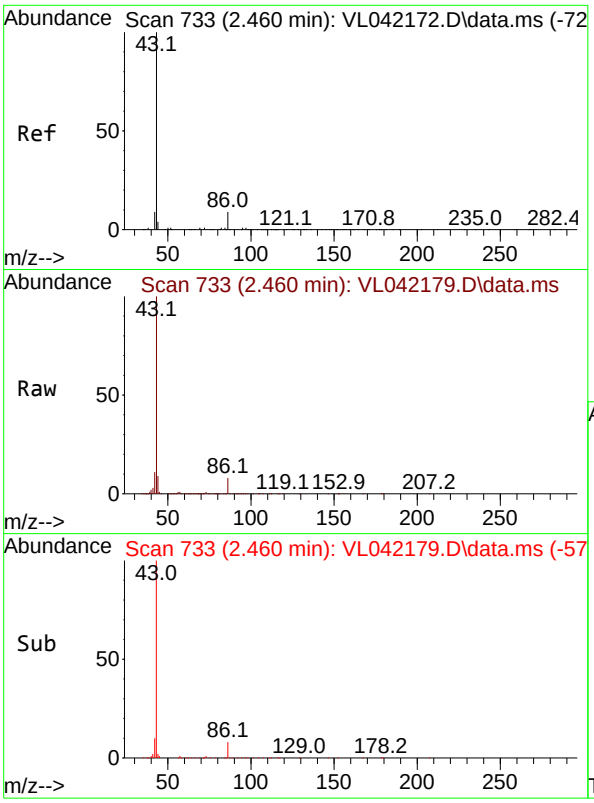


#22
trans-1,2-Dichloroethene
Concen: 9.092 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 101141

Ion	Ratio	Lower	Upper
96	100		
61	161.2	136.6	204.8
98	57.7	49.4	74.2



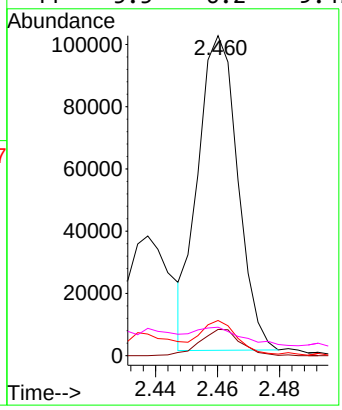


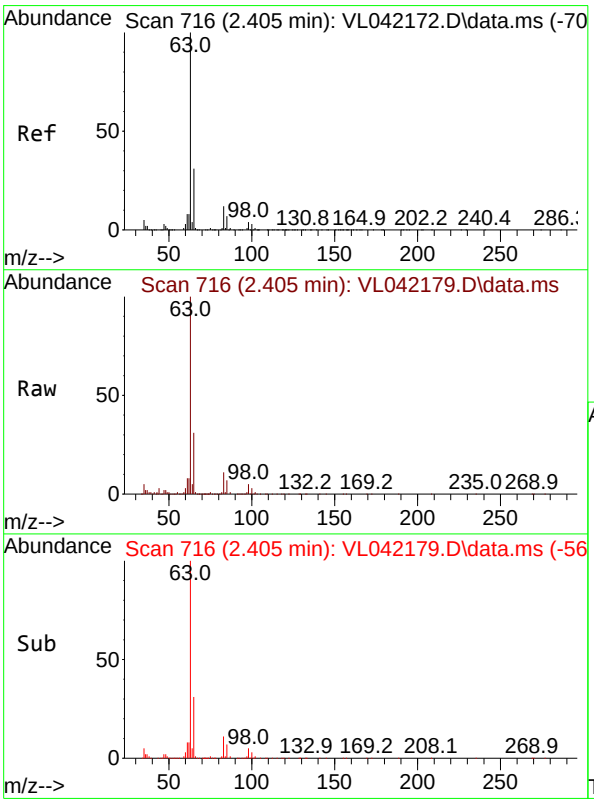
#23
Vinyl Acetate
Concen: 8.553 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 90260

Ion	Ratio	Lower	Upper
43	100		
86	8.3	5.5	8.3#
42	10.7	8.6	13.0
44	5.5	6.2	9.4#

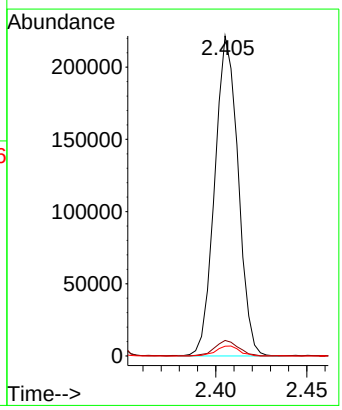


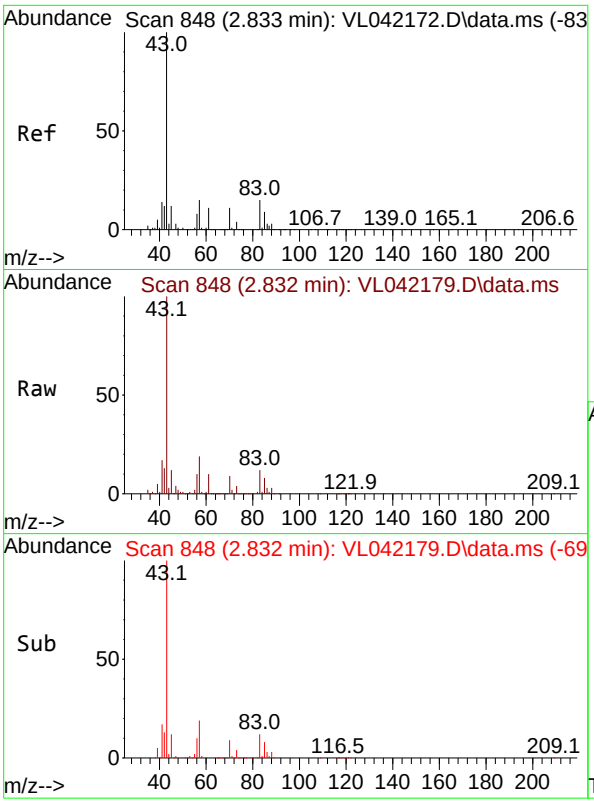


#24
1,1-Dichloroethane
Concen: 9.600 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 63 Resp: 197968

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.3	6.8
100	3.0	1.6	4.7



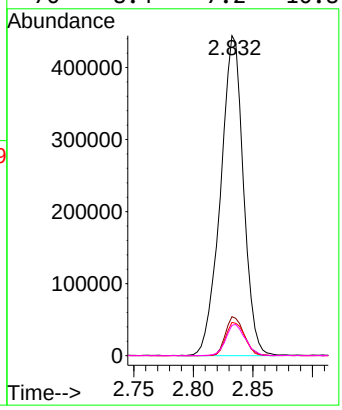


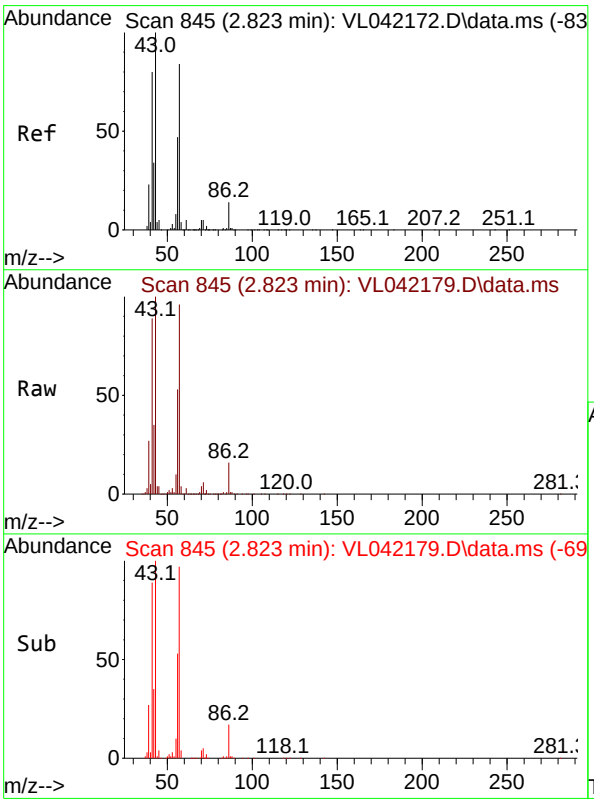
#25
Ethyl Acetate
Concen: 9.364 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 592585

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.2	12.2
61	8.7	7.3	10.9
70	8.4	7.2	10.8

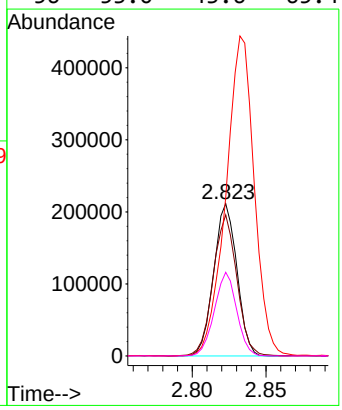


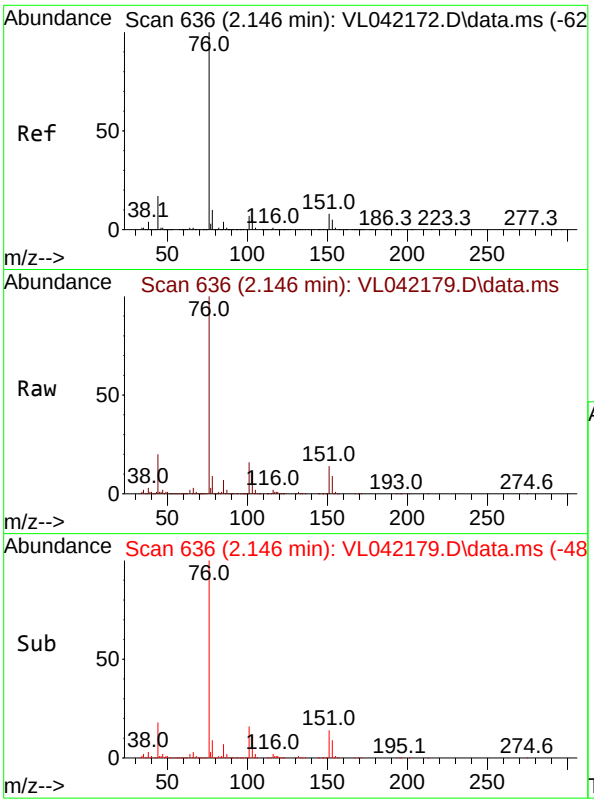


#26
Hexane
Concen: 9.455 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 231125

Ion	Ratio	Lower	Upper
57	100		
41	95.2	76.6	114.8
43	256.8	207.8	311.8
56	53.0	43.6	65.4



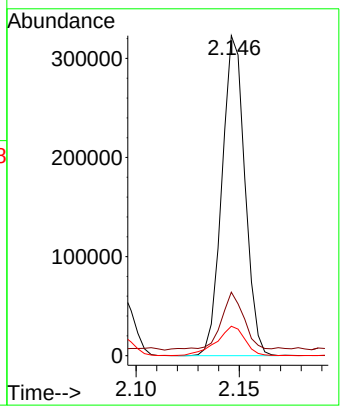


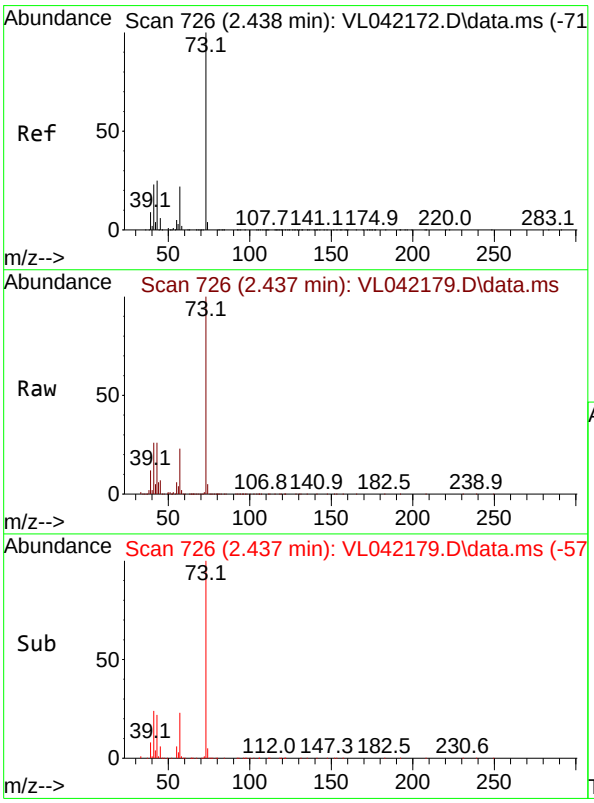
#27
Carbon Disulfide
Concen: 9.493 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 76 Resp: 248834

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.3	9.3	13.9

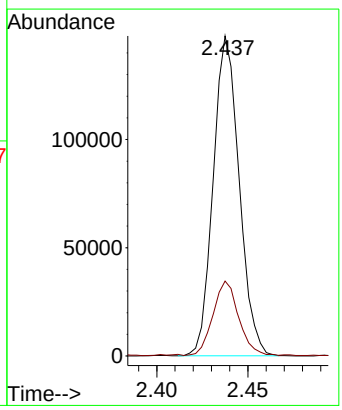


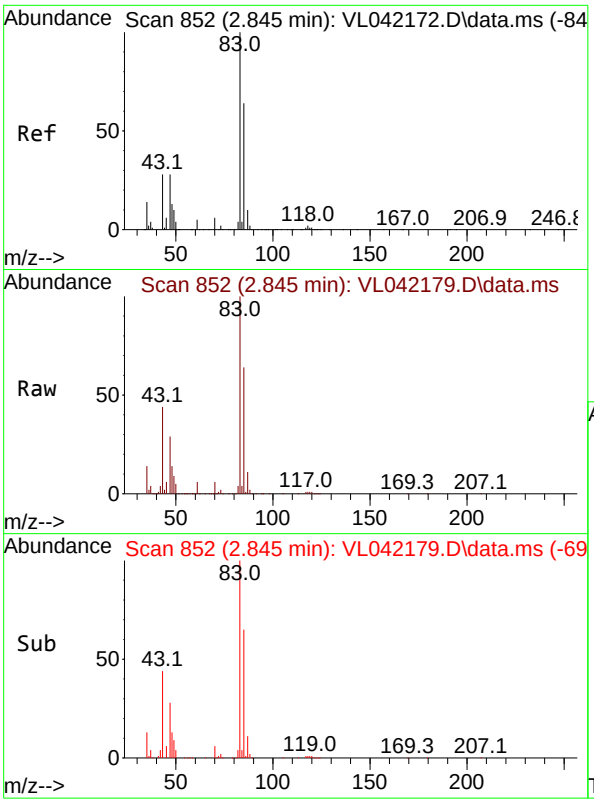


#28
Methyl tert-Butyl Ether
Concen: 9.624 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 73 Resp: 146470

Ion	Ratio	Lower	Upper
73	100		
57	23.3	20.5	30.7



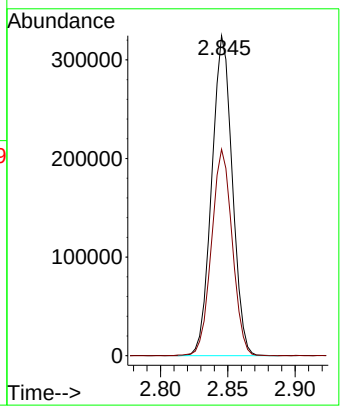


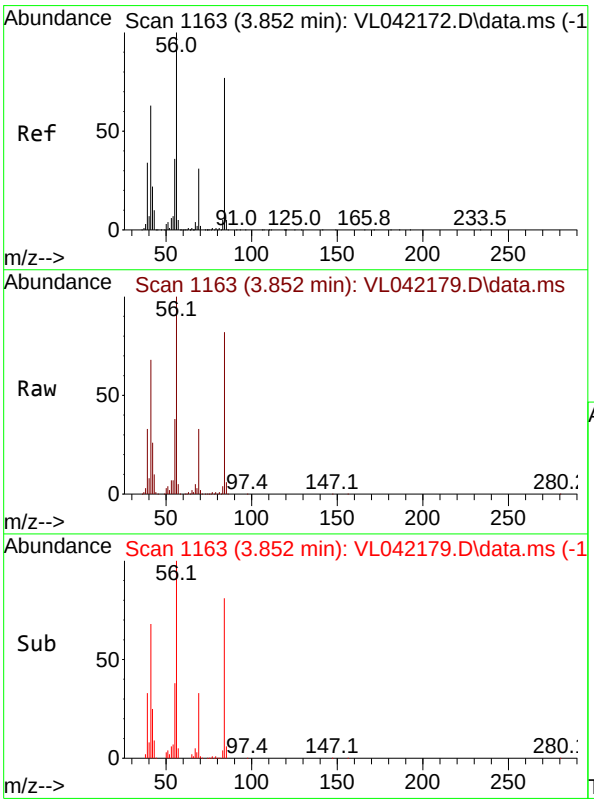
#29
Chloroform
Concen: 9.619 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 83 Resp: 344106

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.4	77.2

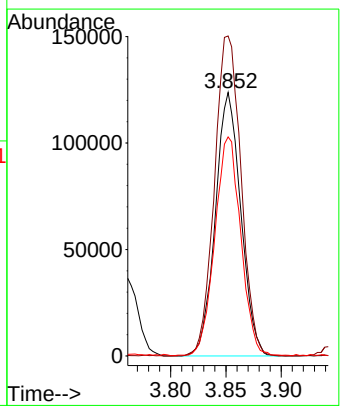


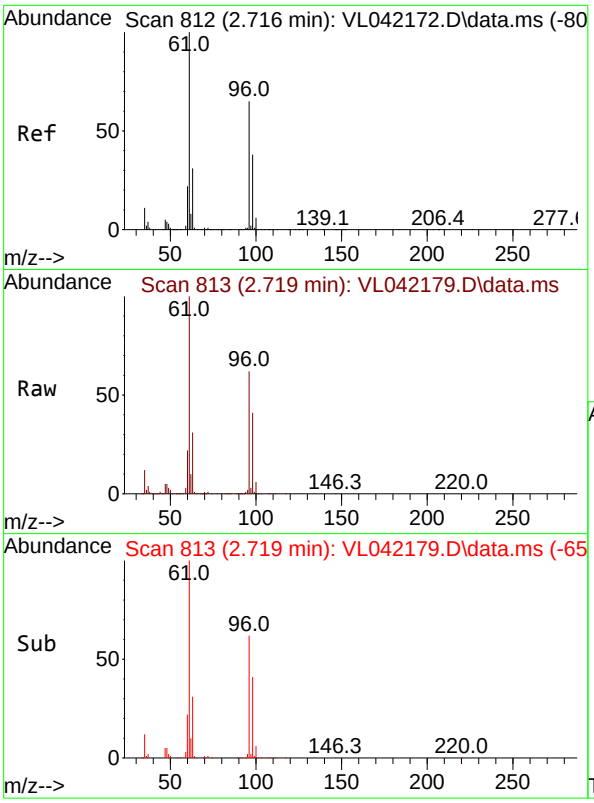


#30
Cyclohexane
Concen: 9.323 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 197897

Ion	Ratio	Lower	Upper
84	100		
56	126.8	102.8	154.2
41	84.6	66.5	99.7



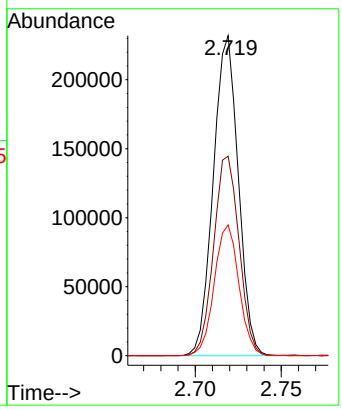


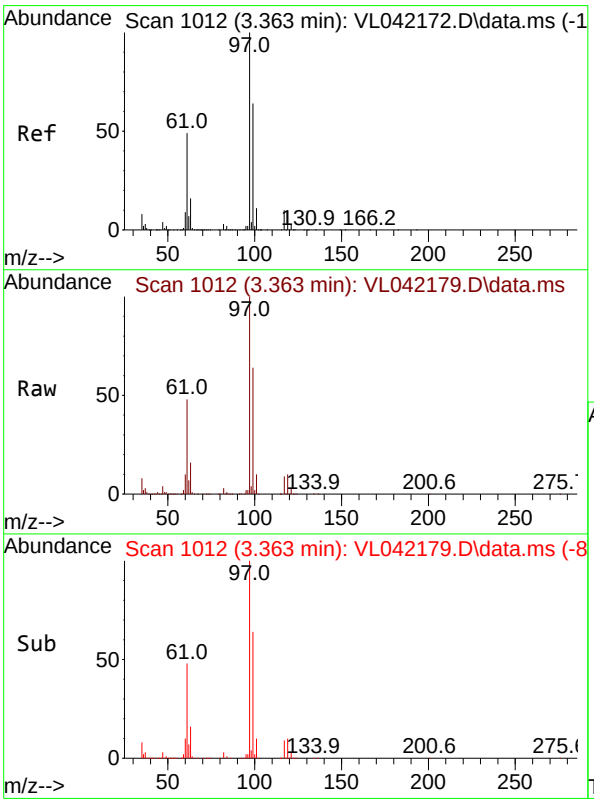
#31
cis-1,2-Dichloroethene
Concen: 9.449 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 61 Resp: 234487

Ion	Ratio	Lower	Upper
61	100		
96	62.3	51.8	77.8
98	40.9	30.6	46.0

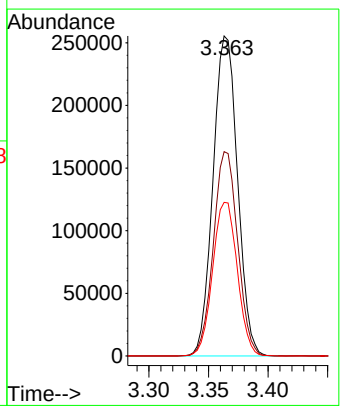


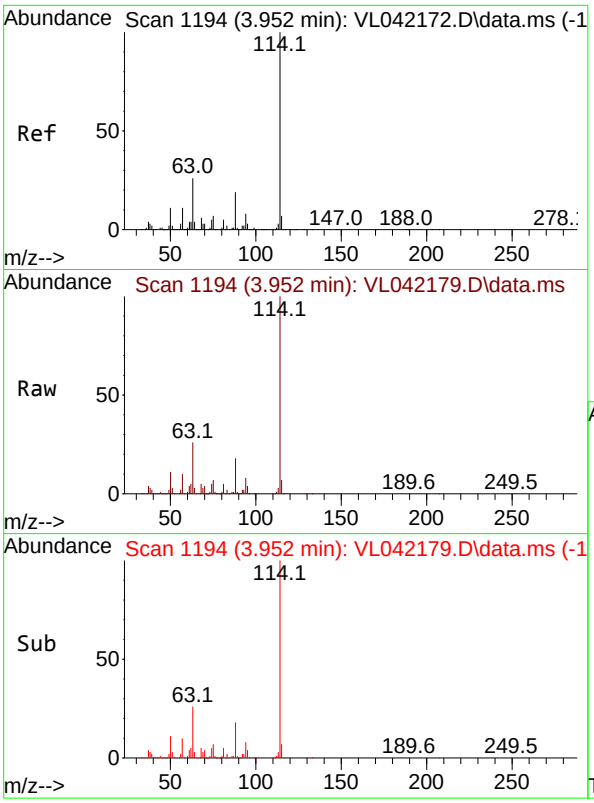


#32
1,1,1-Trichloroethane
Concen: 8.921 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 97 Resp: 365364

Ion	Ratio	Lower	Upper
97	100		
99	63.4	51.5	77.3
61	48.4	38.7	58.1



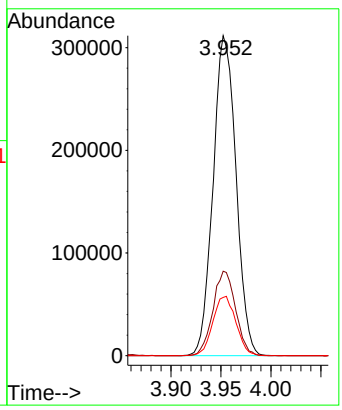


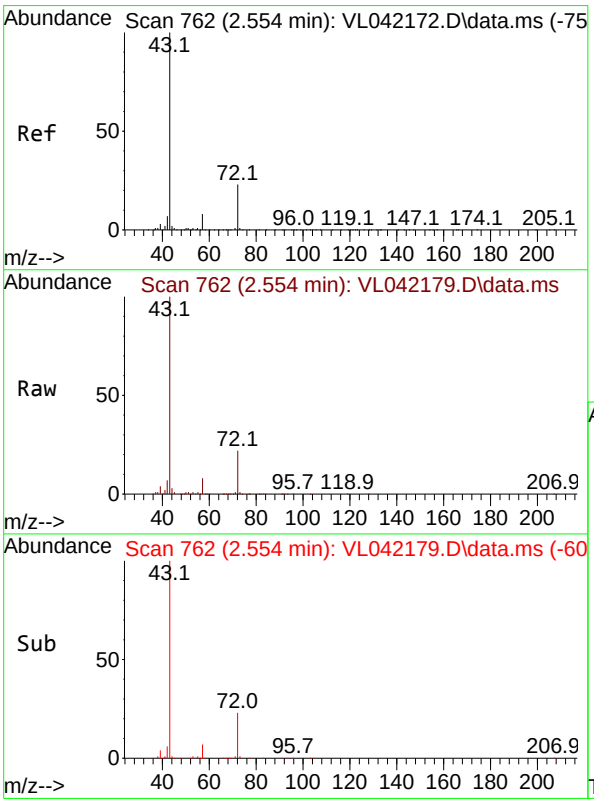
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:114 Resp: 498105

Ion	Ratio	Lower	Upper
114	100		
63	26.1	20.7	31.1
88	18.7	15.0	22.4

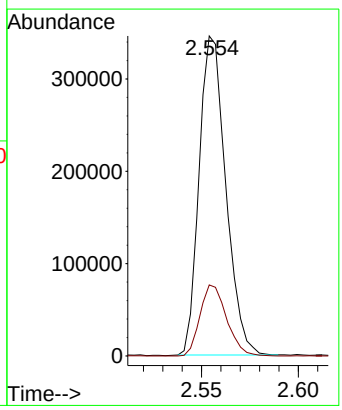


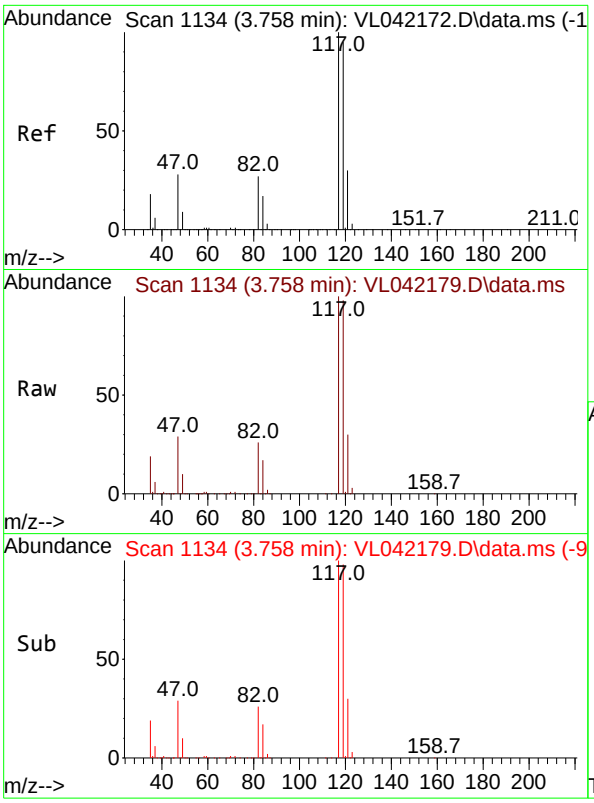


#34
2-Butanone
Concen: 9.171 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 331236

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2



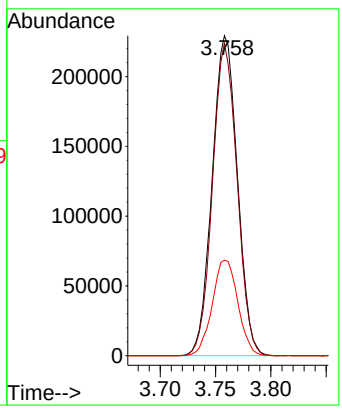


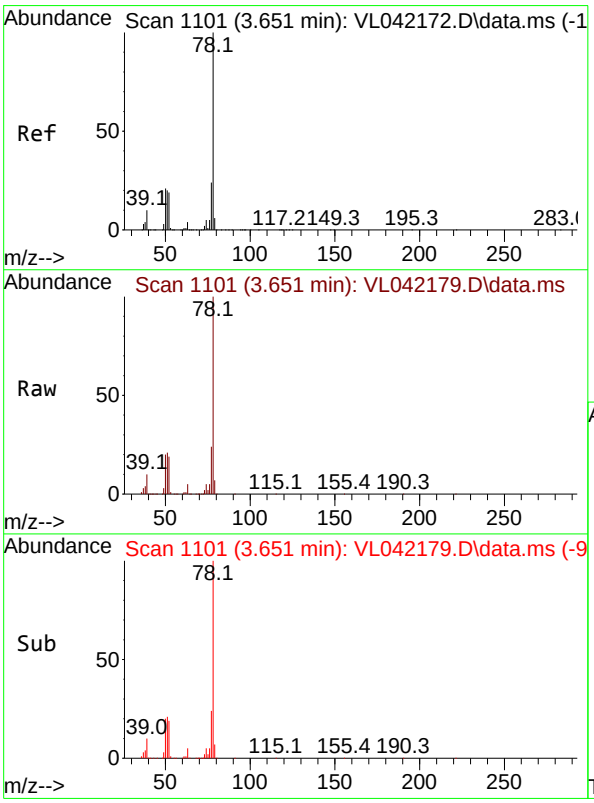
#35
Carbon Tetrachloride
Concen: 9.339 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:117 Resp: 363392

Ion	Ratio	Lower	Upper
117	100		
119	97.7	76.2	114.2
121	29.9	24.2	36.4

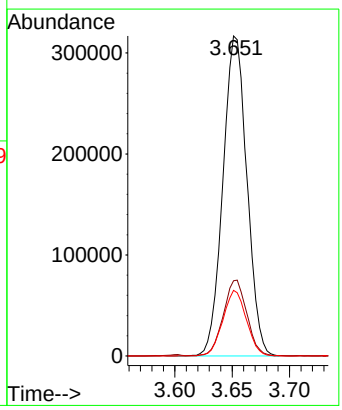


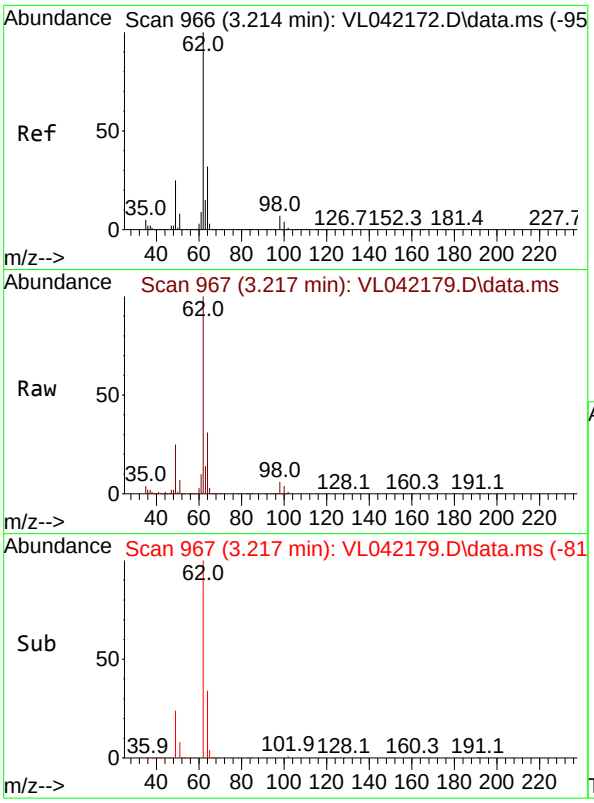


#36
Benzene
Concen: 9.341 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 78 Resp: 461261

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	20.4	16.6	24.8



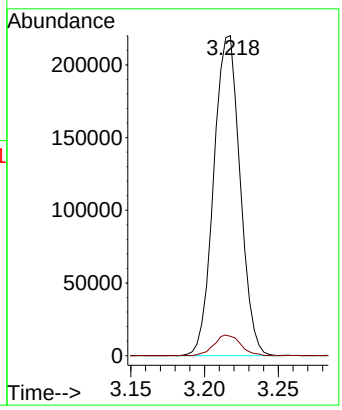


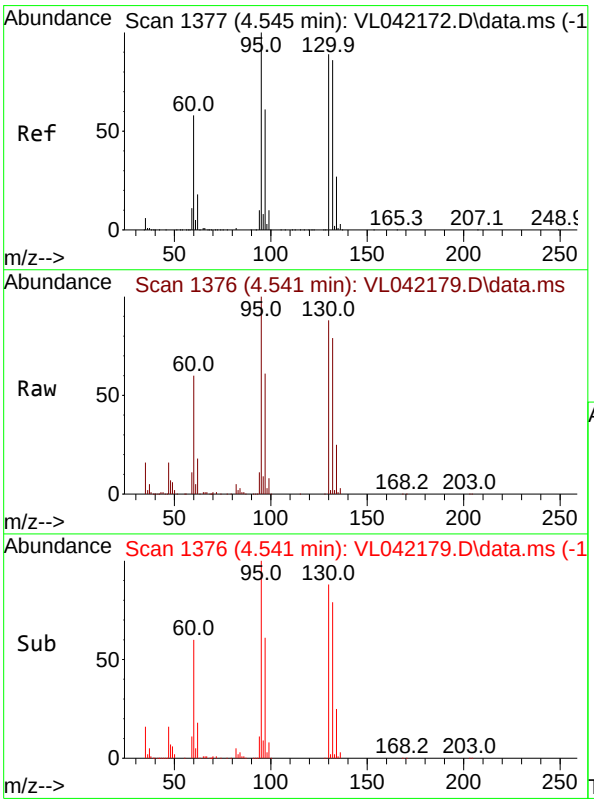
#37
1,2-Dichloroethane
Concen: 9.676 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 62 Resp: 273559

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2

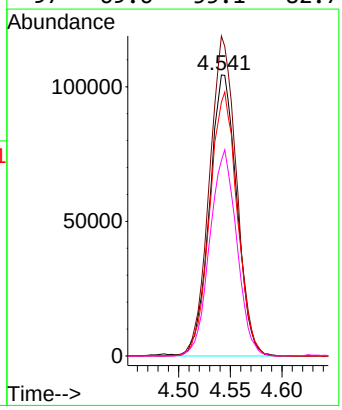


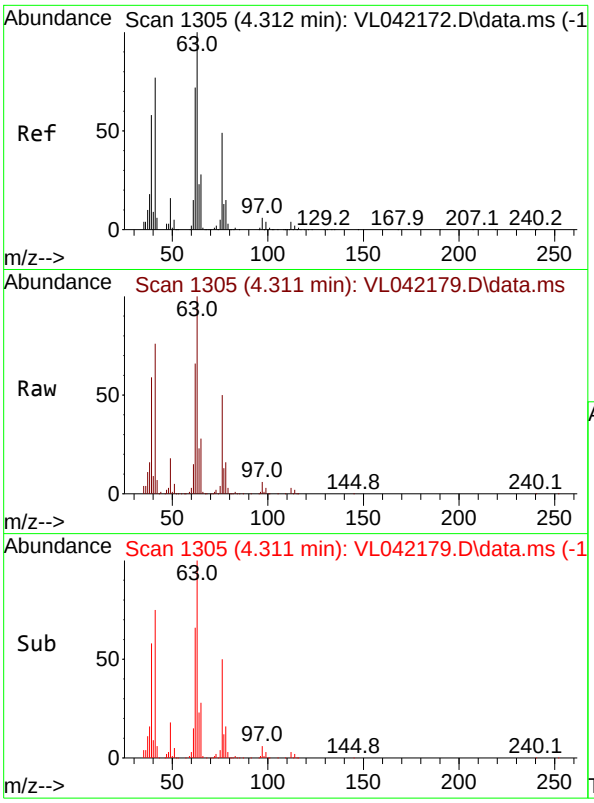


#38
Trichloroethene
Concen: 9.306 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:130 Resp: 191746

Ion	Ratio	Lower	Upper
130	100		
95	113.9	89.8	134.8
132	90.3	77.4	116.2
97	69.6	55.1	82.7



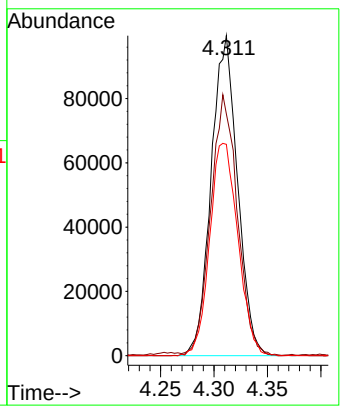


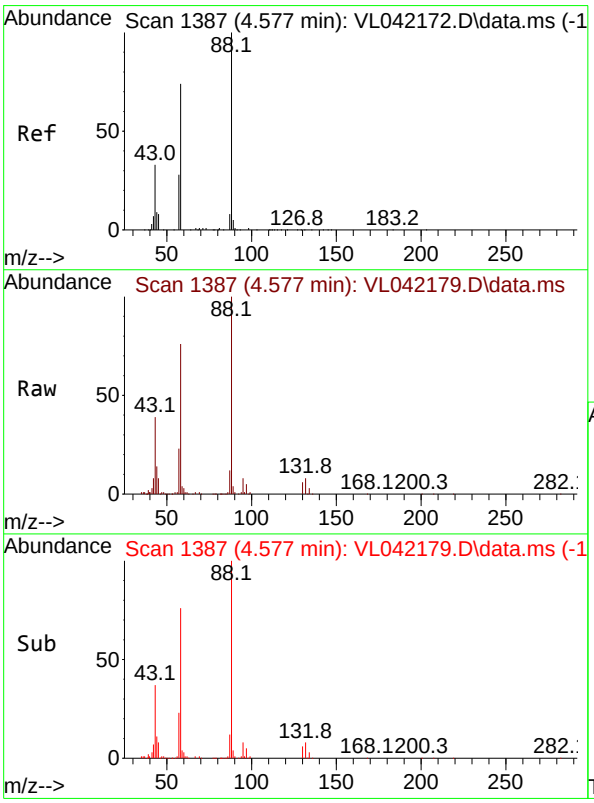
#39
1,2-Dichloropropane
Concen: 9.500 ppbv
RT: 4.311 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 63 Resp: 170839

Ion	Ratio	Lower	Upper
63	100		
41	75.3	61.7	92.5
62	66.0	57.6	86.4

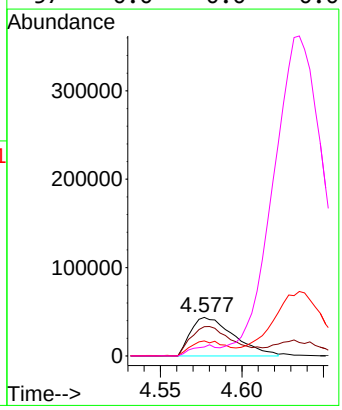


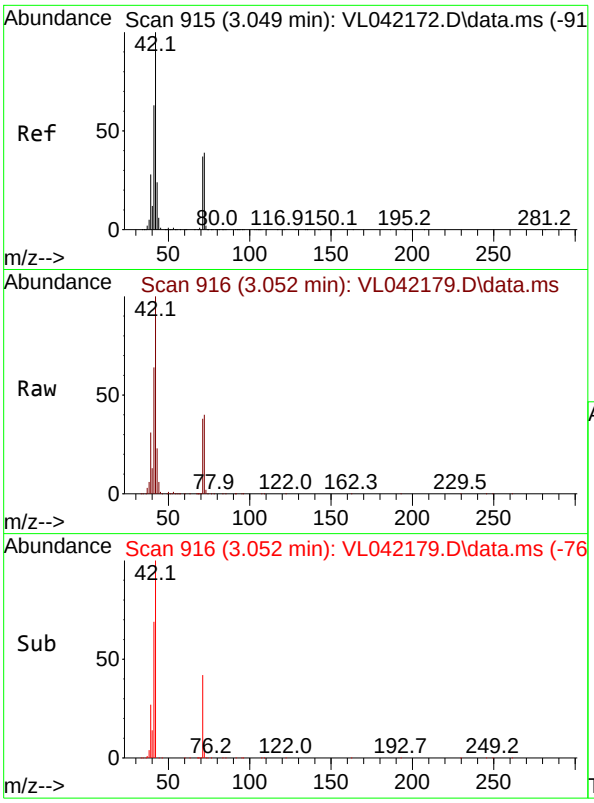


#40
1,4-Dioxane
Concen: 8.443 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 88 Resp: 80592

Ion	Ratio	Lower	Upper
88	100		
58	76.2	62.7	94.1
43	31.4	23.0	34.4
57	0.0	0.0	0.0



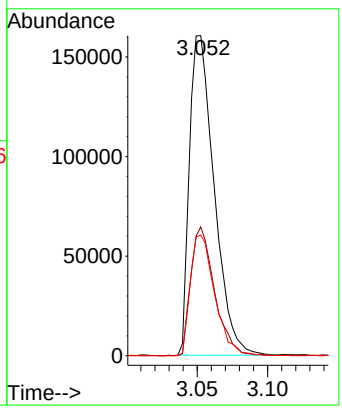


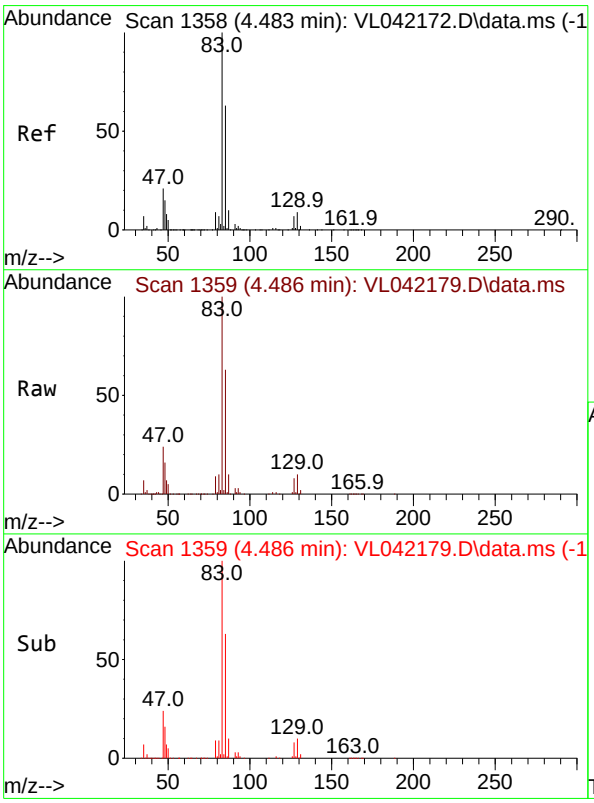
#41
Tetrahydrofuran
Concen: 9.431 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 42 Resp: 196163

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	37.2	30.2	45.4

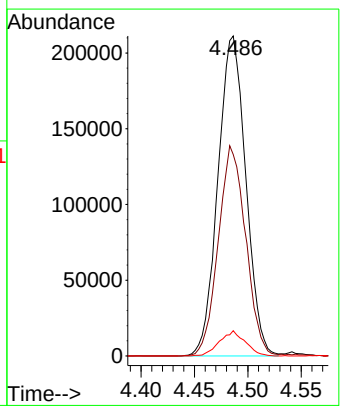


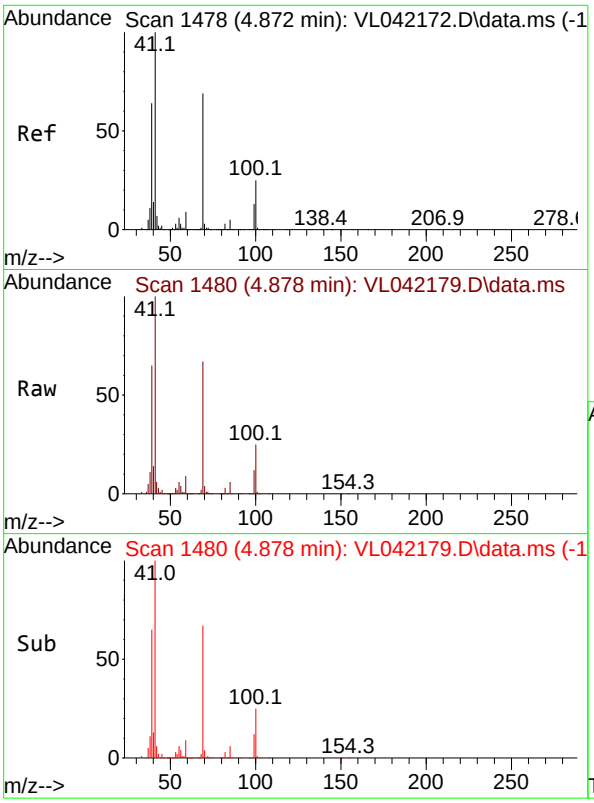


#42
Bromodichloromethane
Concen: 9.853 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 384006

Ion	Ratio	Lower	Upper
83	100		
85	63.0	50.5	75.7
127	7.9	5.9	8.9



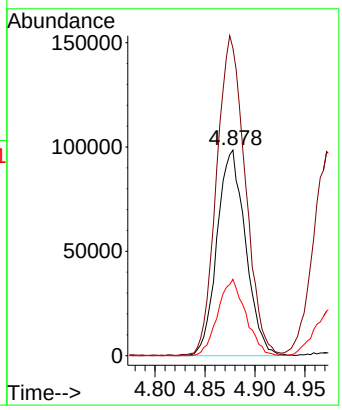


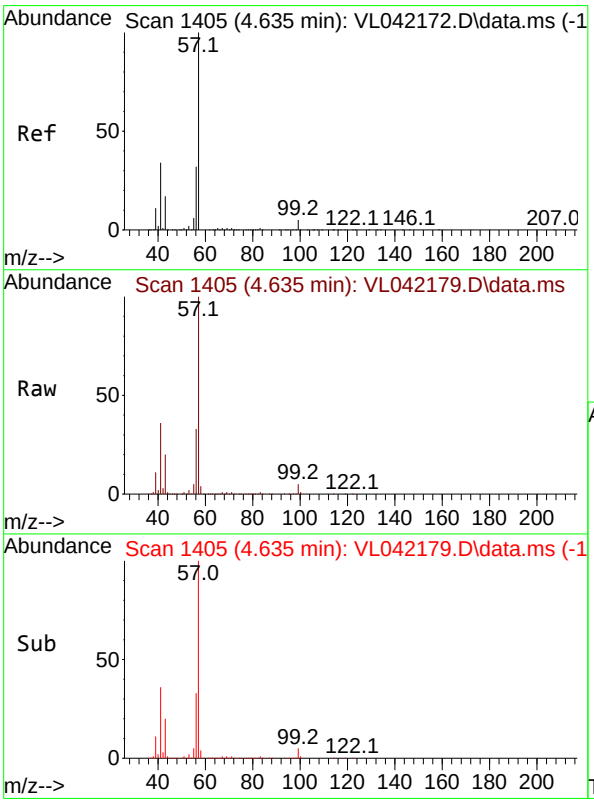
#43
Methyl Methacrylate
Concen: 9.344 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 69 Resp: 195339

Ion	Ratio	Lower	Upper
69	100		
41	156.4	123.8	185.6
100	36.4	28.4	42.6

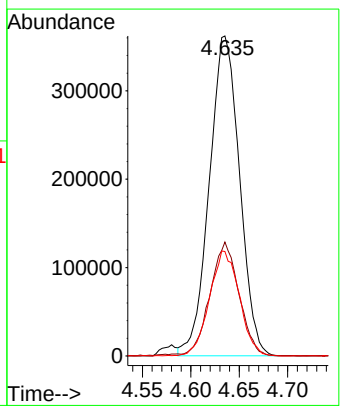


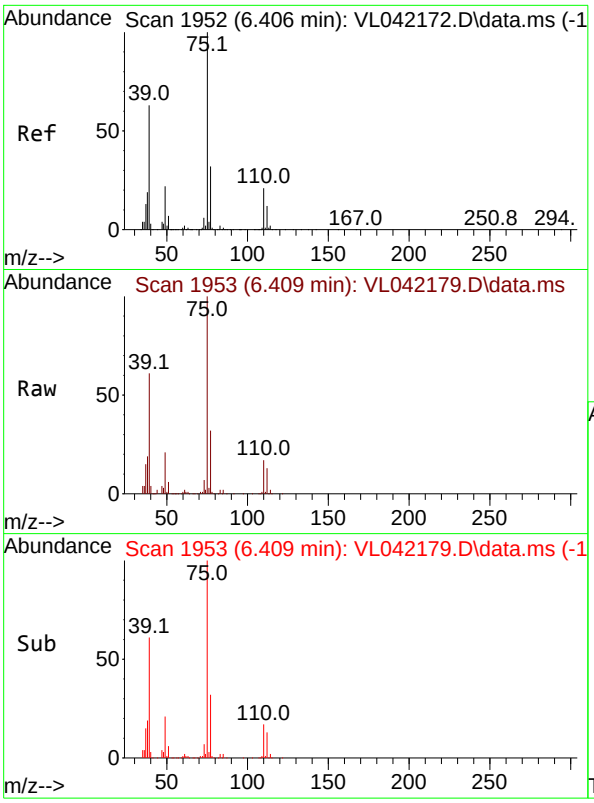


#44
2,2,4-Trimethylpentane
Concen: 9.436 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 787400

Ion	Ratio	Lower	Upper
57	100		
41	34.3	26.8	40.2
56	32.5	25.6	38.4



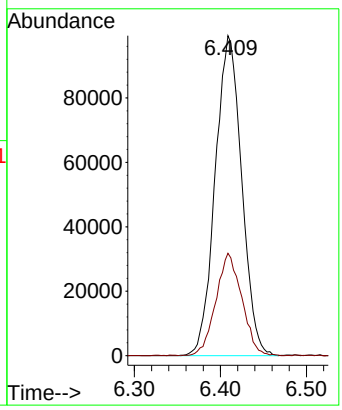


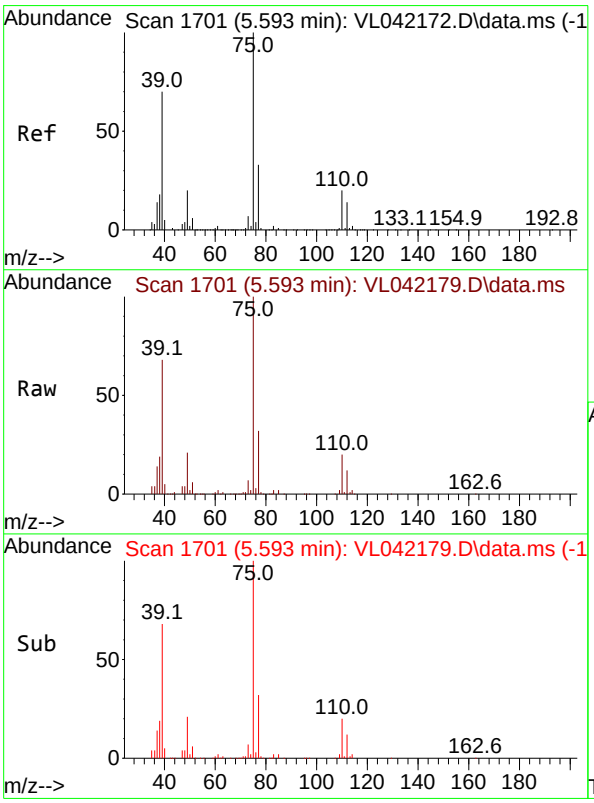
#45
t-1,3-Dichloropropene
Concen: 9.467 ppbv
RT: 6.409 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 75 Resp: 212335

Ion	Ratio	Lower	Upper
75	100		
77	32.0	26.0	39.0

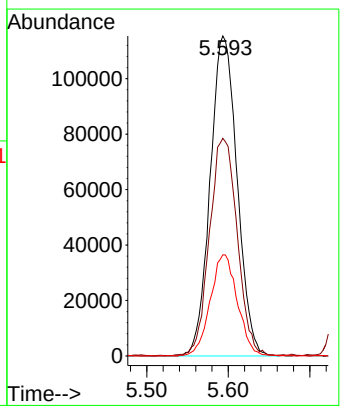


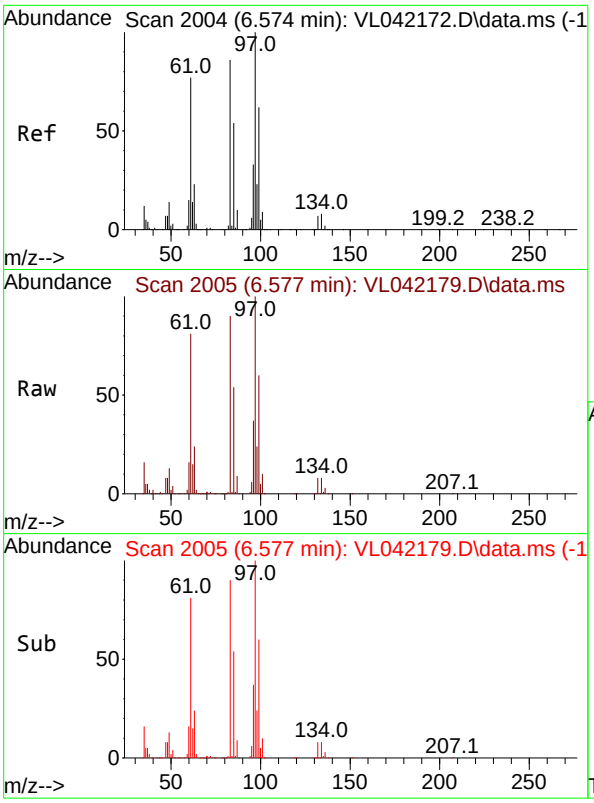


#46
cis-1,3-Dichloropropene
Concen: 9.643 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 75 Resp: 265101

Ion	Ratio	Lower	Upper
75	100		
39	67.8	55.8	83.6
77	31.6	26.0	39.0



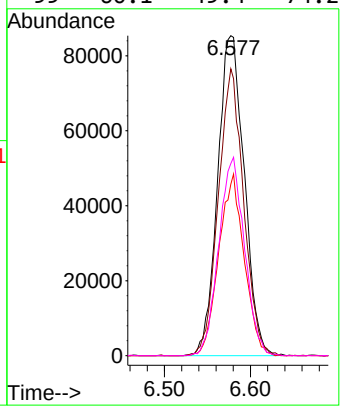


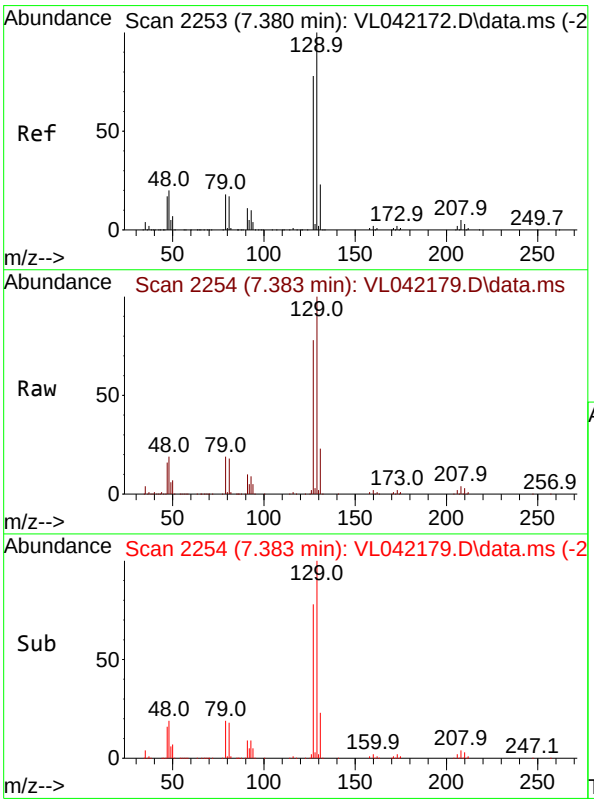
#47
1,1,2-Trichloroethane
Concen: 9.638 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 97 Resp: 183228

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	53.6	43.1	64.7
99	60.1	49.4	74.2

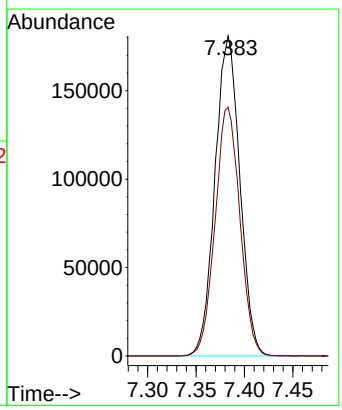


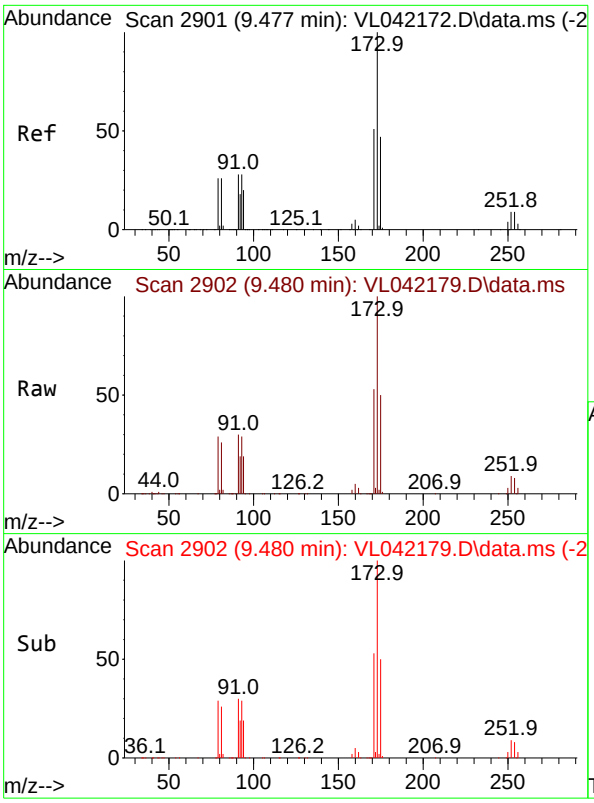


#48
Dibromochloromethane
Concen: 10.018 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:129 Resp: 322766

Ion	Ratio	Lower	Upper
129	100		
127	77.7	39.1	117.2



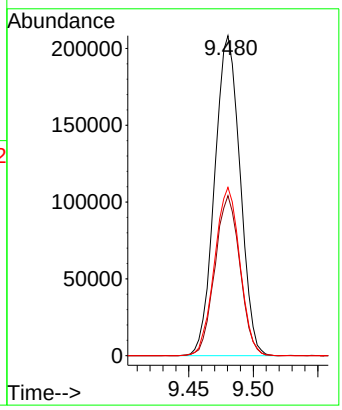


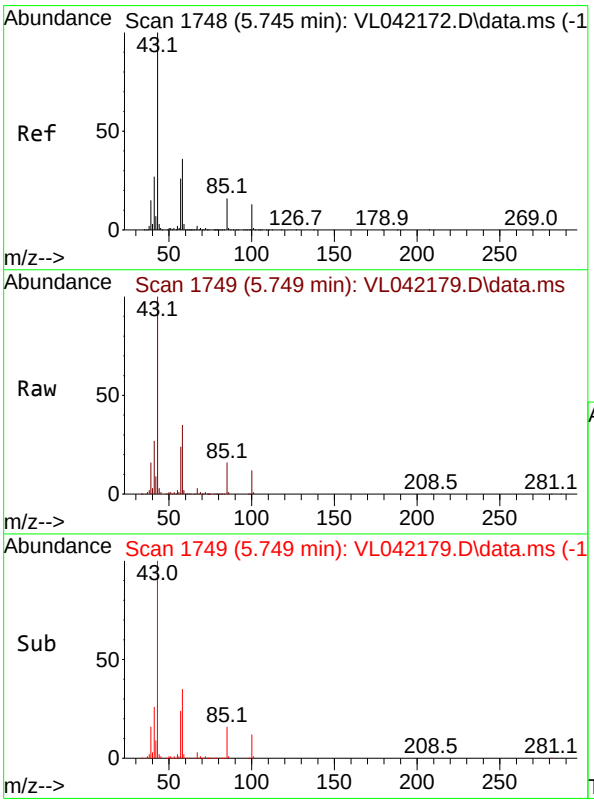
#49
Bromoform
Concen: 9.858 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:173 Resp: 285149

Ion	Ratio	Lower	Upper
173	100		
175	49.2	38.6	57.8
171	52.4	41.8	62.6

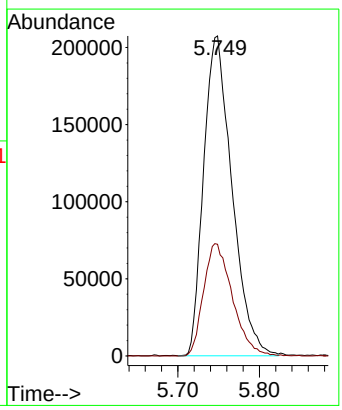


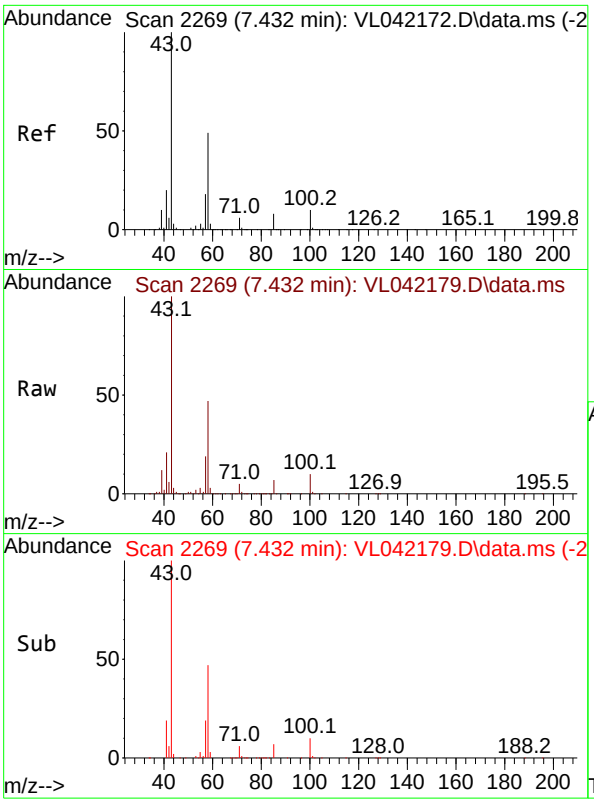


#50
4-Methyl-2-Pentanone
Concen: 8.749 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 500791

Ion	Ratio	Lower	Upper
43	100		
58	35.8	29.0	43.6



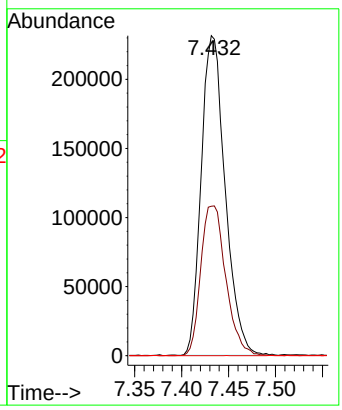


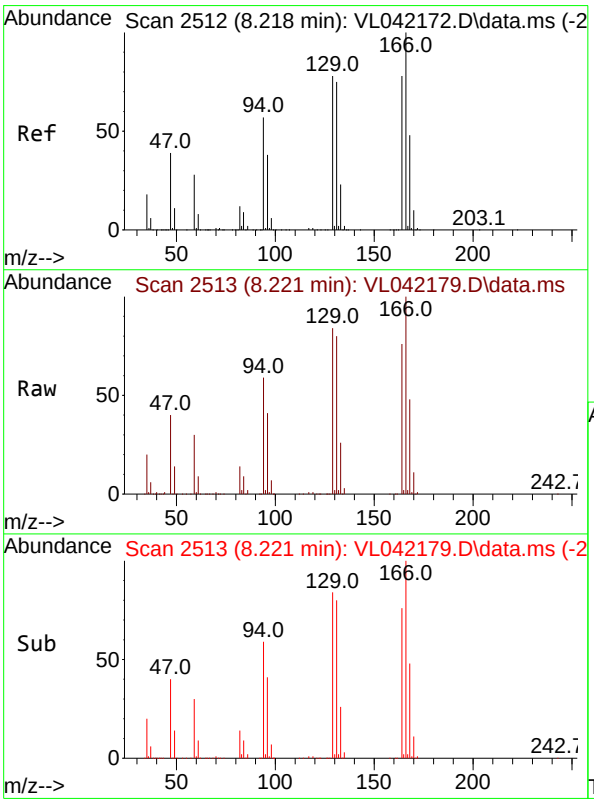
#51
2-Hexanone
Concen: 8.741 ppbv
RT: 7.432 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 410889

Ion	Ratio	Lower	Upper
43	100		
58	48.9	39.7	59.5
98	0.0	0.1	0.1#

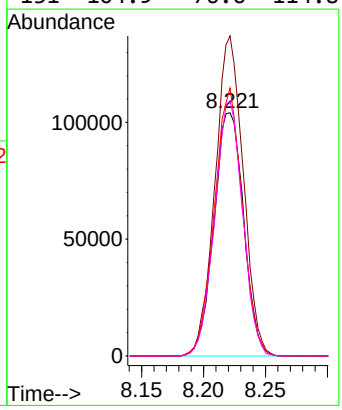


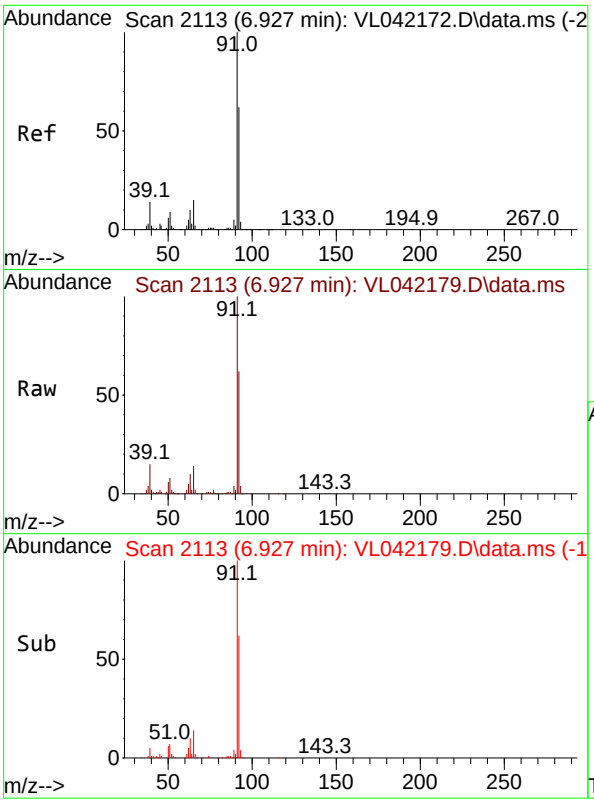


#52
Tetrachloroethene
Concen: 8.855 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:164 Resp: 173420

Ion	Ratio	Lower	Upper
164	100		
166	131.6	102.5	153.7
129	110.1	79.8	119.8
131	104.9	76.6	114.8



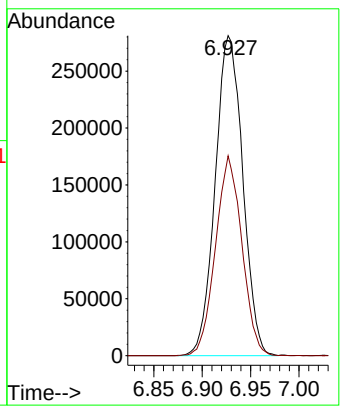


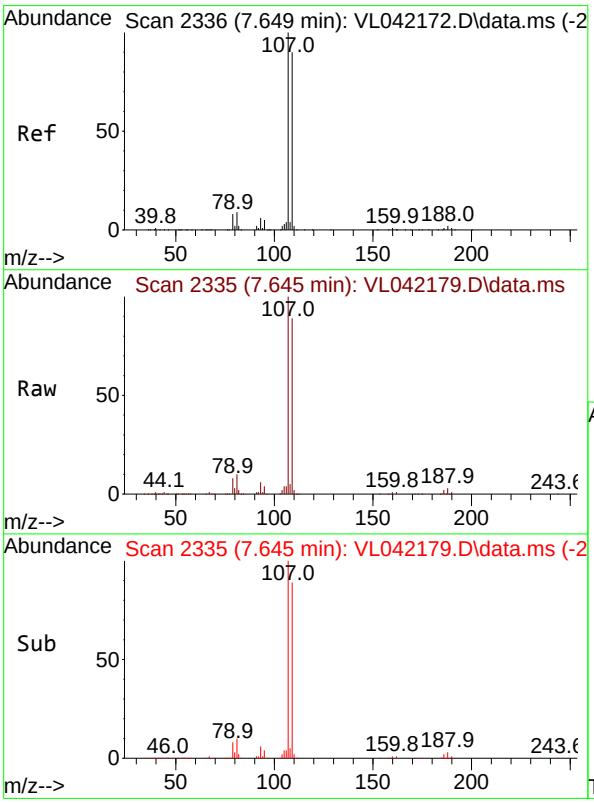
#53
Toluene
Concen: 9.514 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 91 Resp: 556897

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.4	72.6

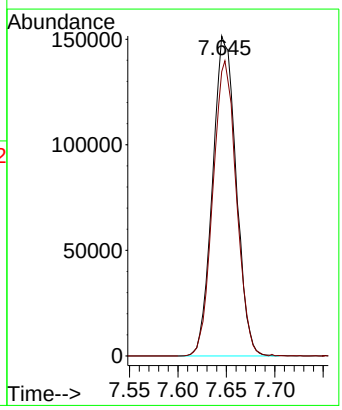


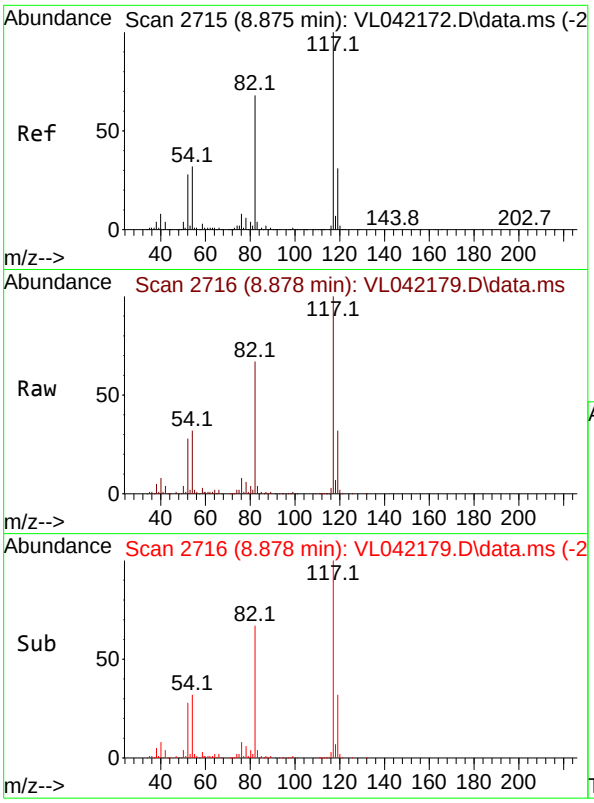


#54
1,2-Dibromoethane
Concen: 9.695 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:107 Resp: 256930

Ion	Ratio	Lower	Upper
107	100		
109	88.9	72.2	108.4



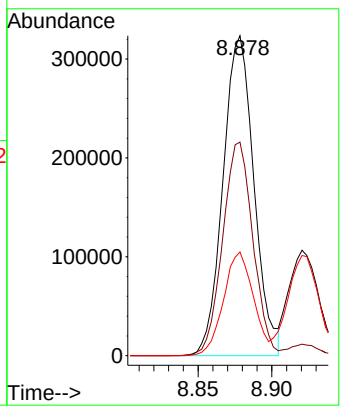


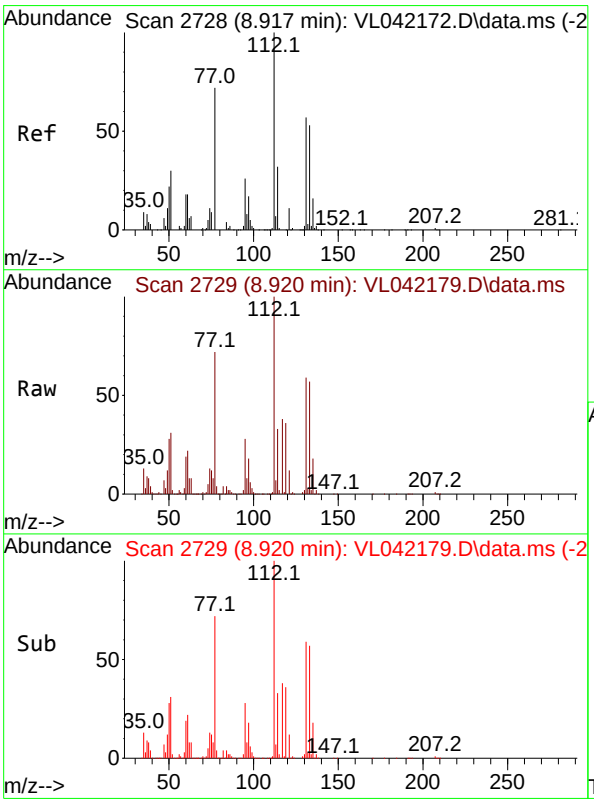
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:117 Resp: 473357

Ion	Ratio	Lower	Upper
117	100		
82	68.7	55.8	83.6
119	31.2	25.5	38.3

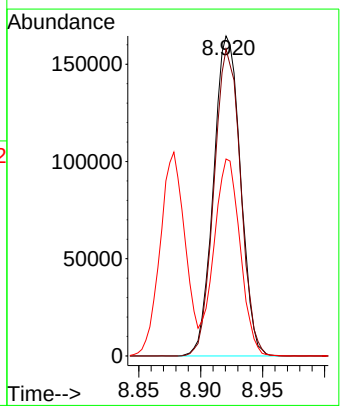


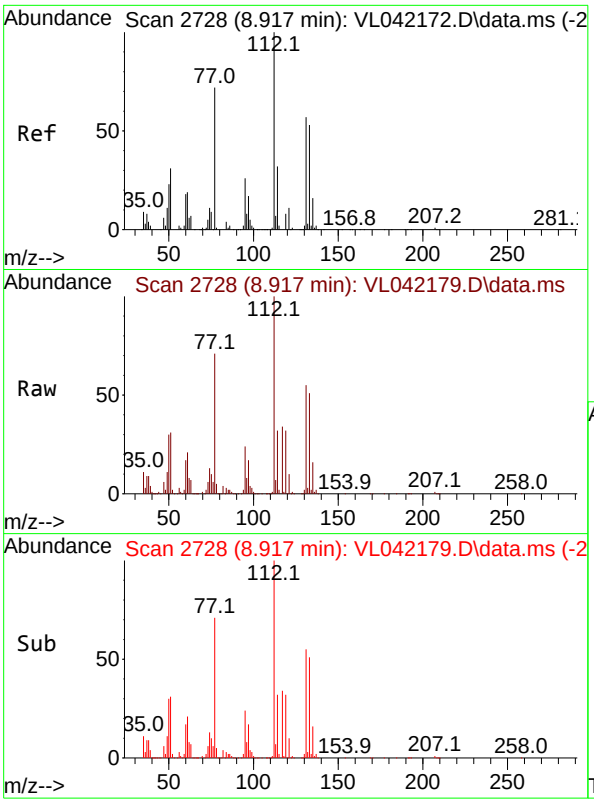


#56
1,1,1,2-Tetrachloroethane
Concen: 9.567 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:131 Resp: 249270

Ion	Ratio	Lower	Upper
131	100		
133	95.0	76.6	114.8
119	61.3	49.8	74.6



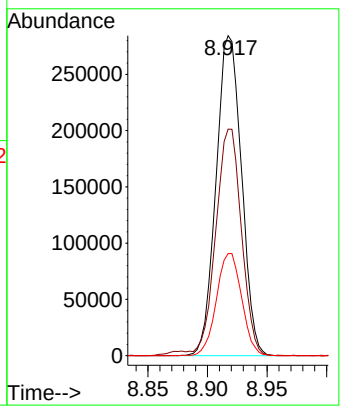


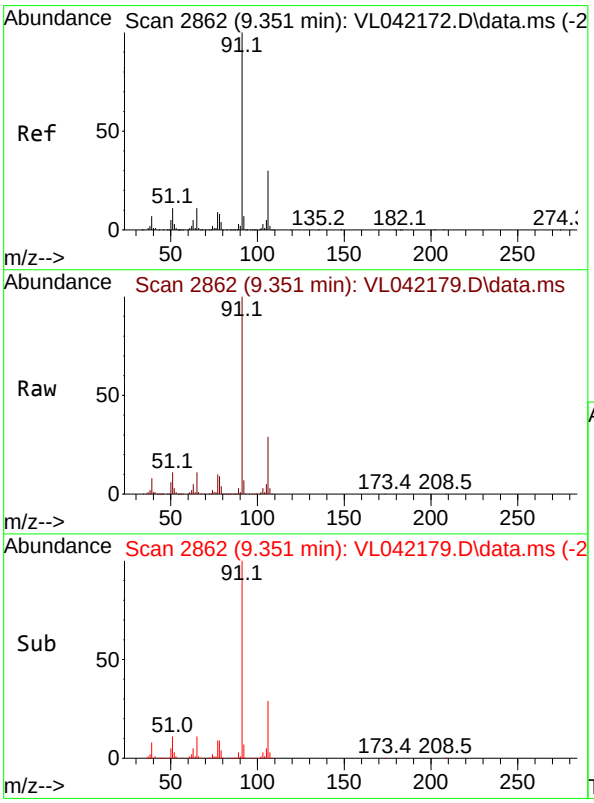
#57
Chlorobenzene
Concen: 9.411 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:112 Resp: 422531

Ion	Ratio	Lower	Upper
112	100		
77	70.6	58.2	87.2
114	31.9	29.1	35.5

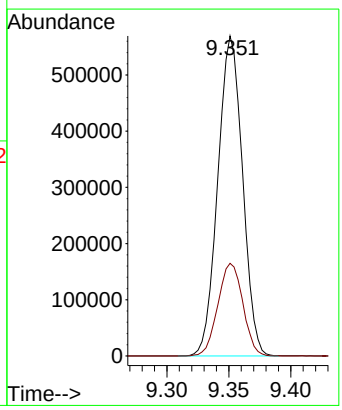


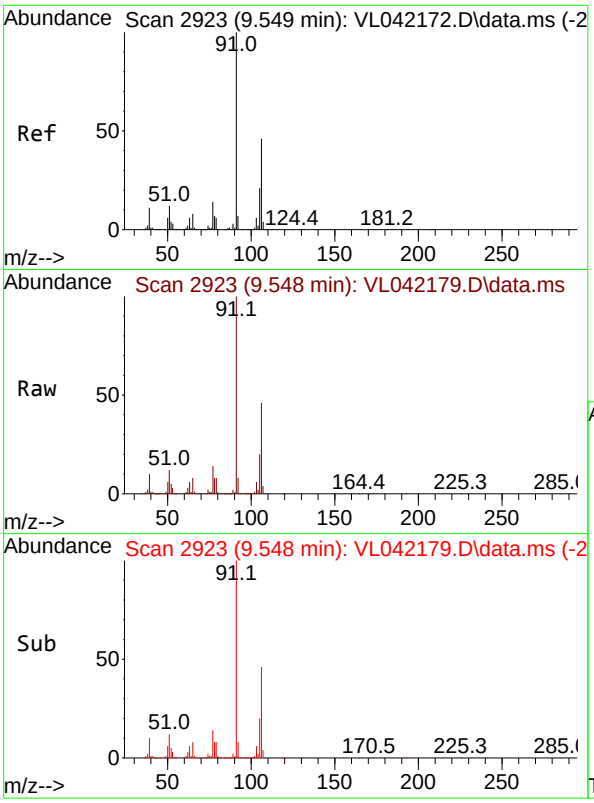


#58
Ethyl Benzene
Concen: 9.412 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 791360

Ion	Ratio	Lower	Upper
91	100		
106	28.9	24.2	36.2



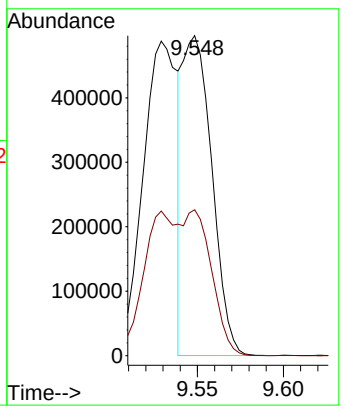


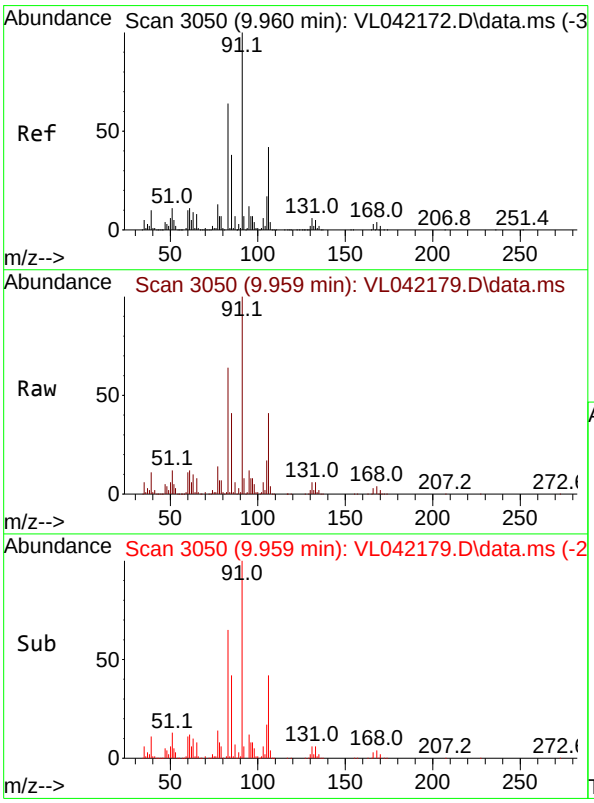
#59
m/p-Xylene
Concen: 8.695 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 91 Resp: 583773

Ion	Ratio	Lower	Upper
91	100		
106	97.9	36.4	54.6#

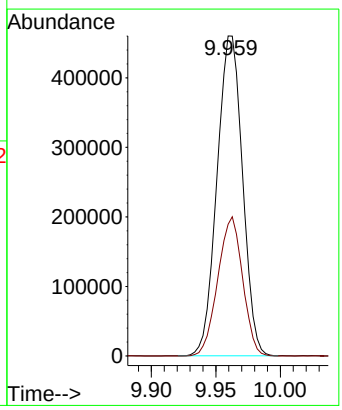


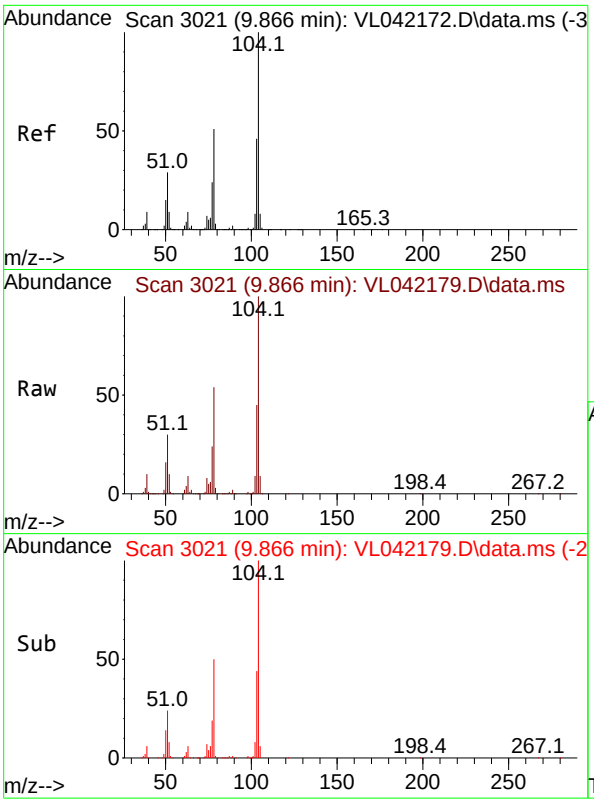


#60
o-Xylene
Concen: 9.404 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 632918

Ion	Ratio	Lower	Upper
91	100		
106	42.2	20.8	62.5



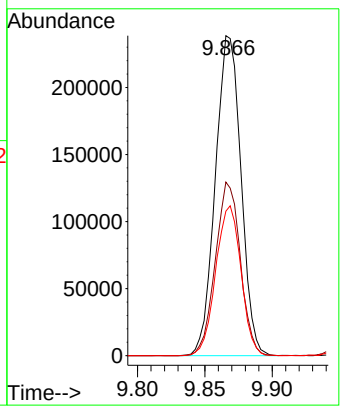


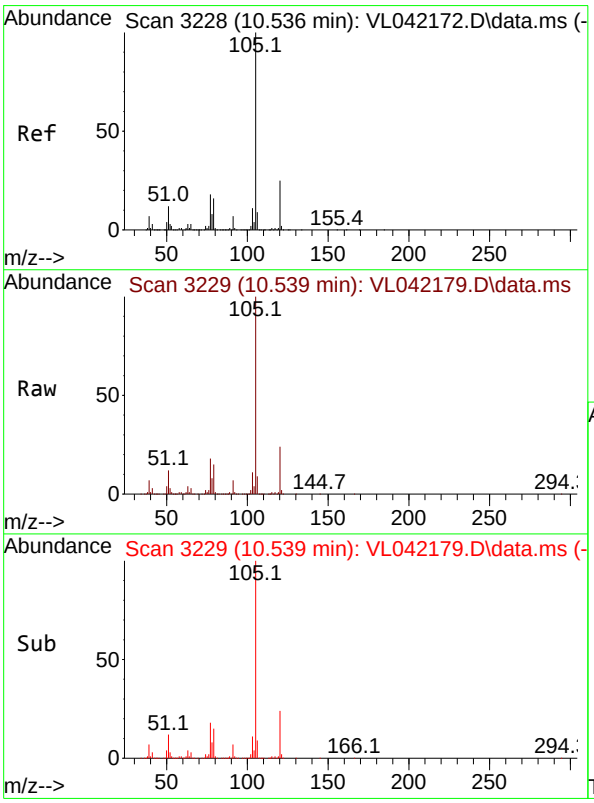
#61
Styrene
Concen: 9.488 ppbv
RT: 9.866 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:104 Resp: 315910

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	46.3	37.0	55.4

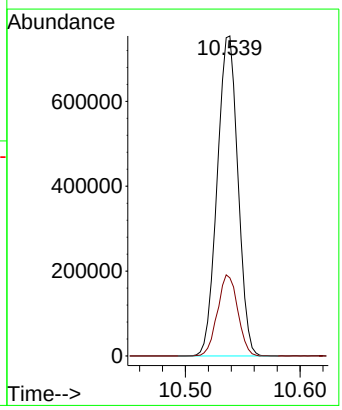


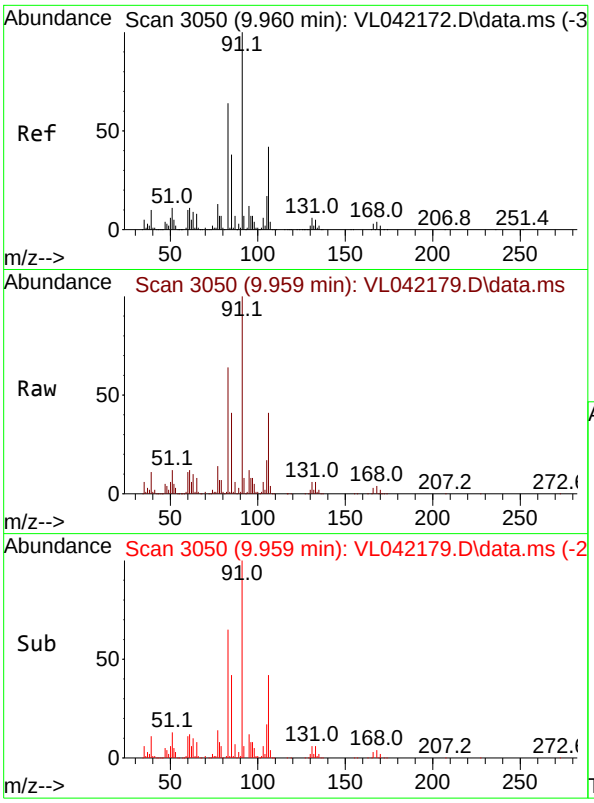


#62
Isopropylbenzene
Concen: 9.388 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 944938

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9



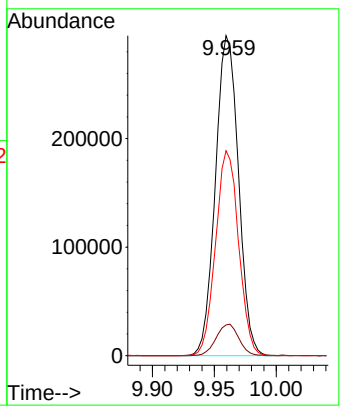


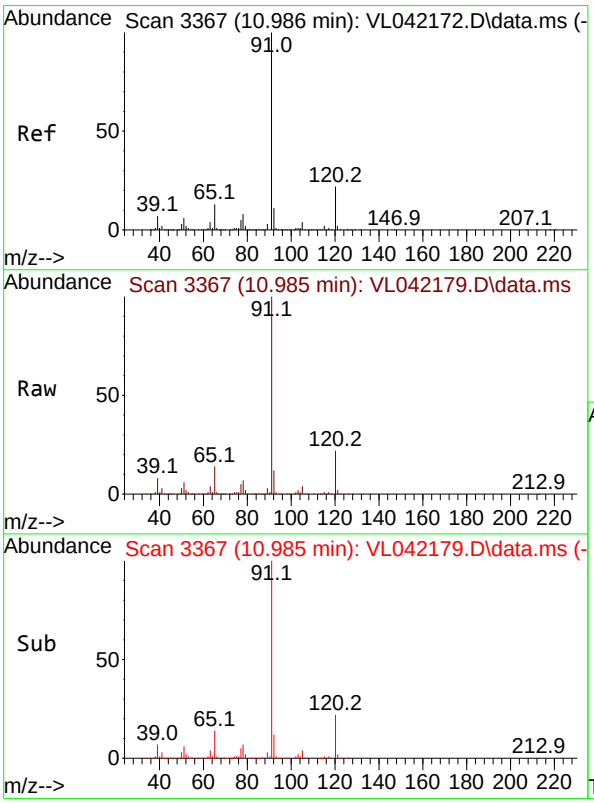
#63
1,1,2,2-Tetrachloroethane
Concen: 9.357 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 83 Resp: 382635

Ion	Ratio	Lower	Upper
83	100		
131	9.7	4.8	14.4
85	63.9	32.5	97.5

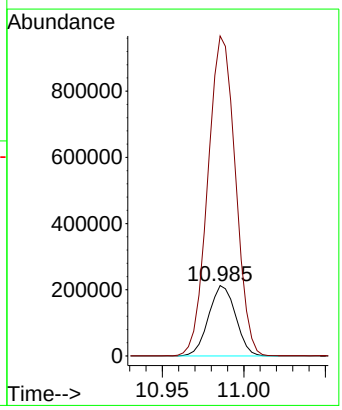


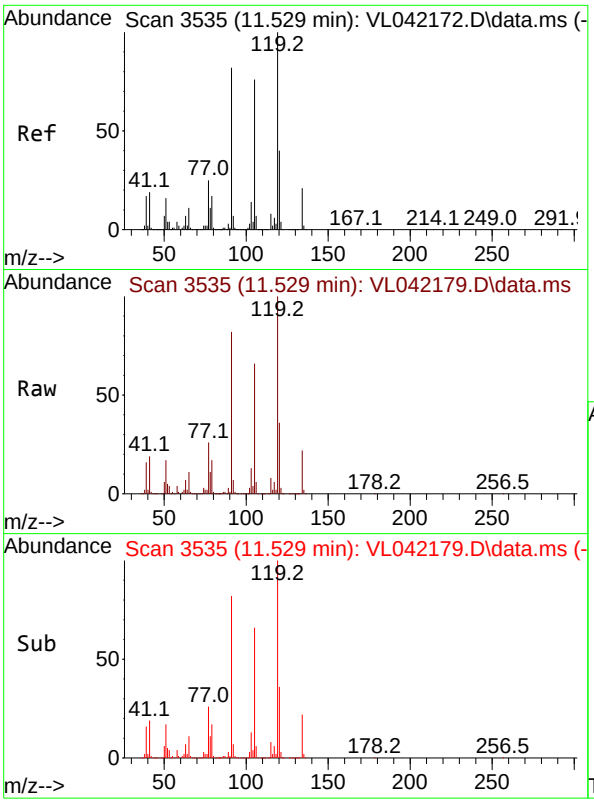


#64
n-propylbenzene
Concen: 9.439 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:120 Resp: 244547

Ion	Ratio	Lower	Upper
120	100		
91	465.9	376.9	565.3



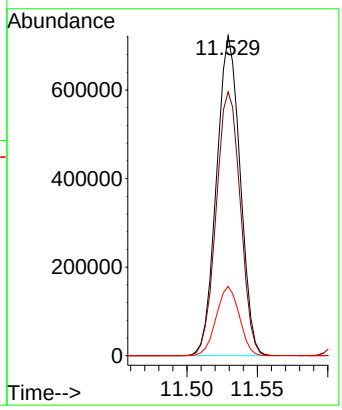


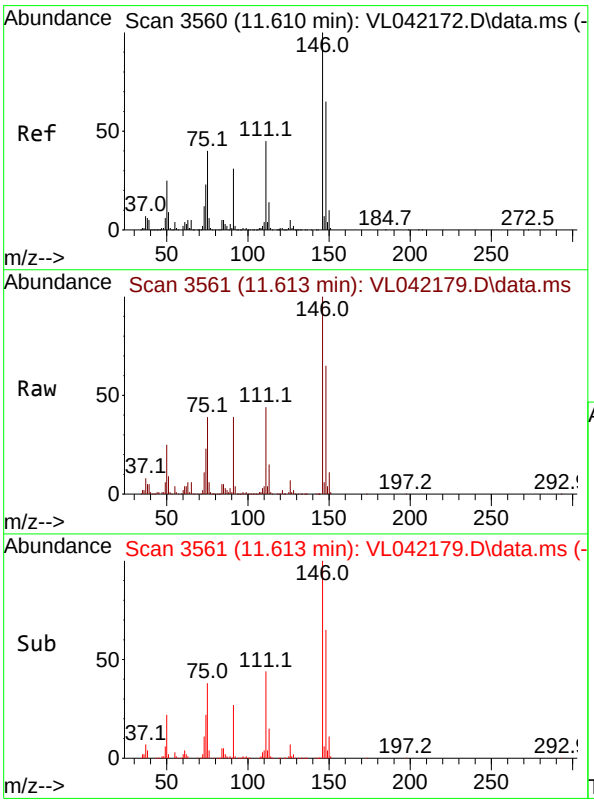
#65
tert-Butylbenzene
Concen: 9.065 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:119 Resp: 843828

Ion	Ratio	Lower	Upper
119	100		
91	84.3	66.0	99.0
134	21.2	16.7	25.1

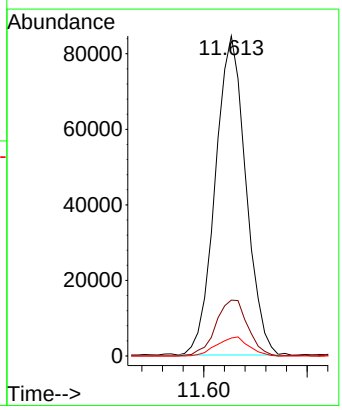


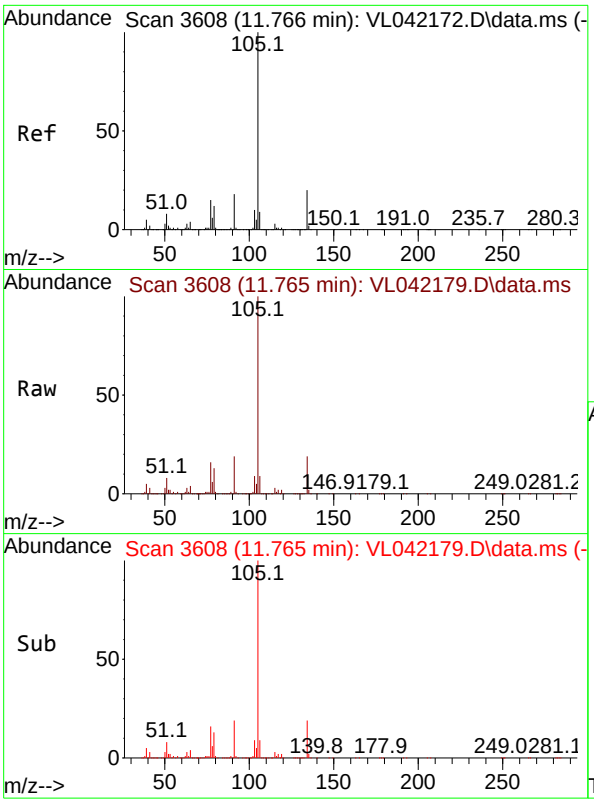


#66
Benzyl Chloride
Concen: 8.789 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 86804

Ion	Ratio	Lower	Upper
91	100		
126	18.5	13.8	20.6
128	6.2	4.5	6.7



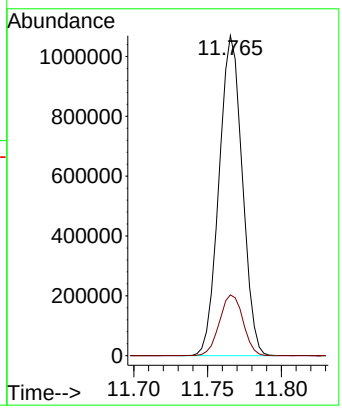


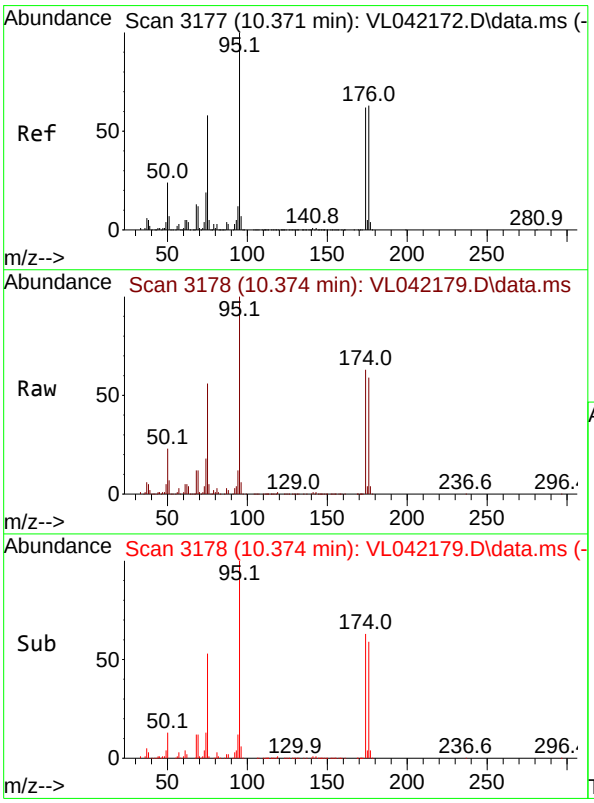
#67
sec-Butylbenzene
Concen: 9.063 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:105 Resp: 1172636

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3

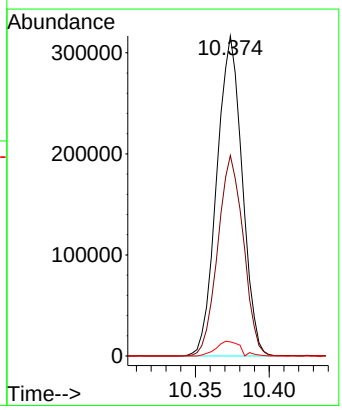


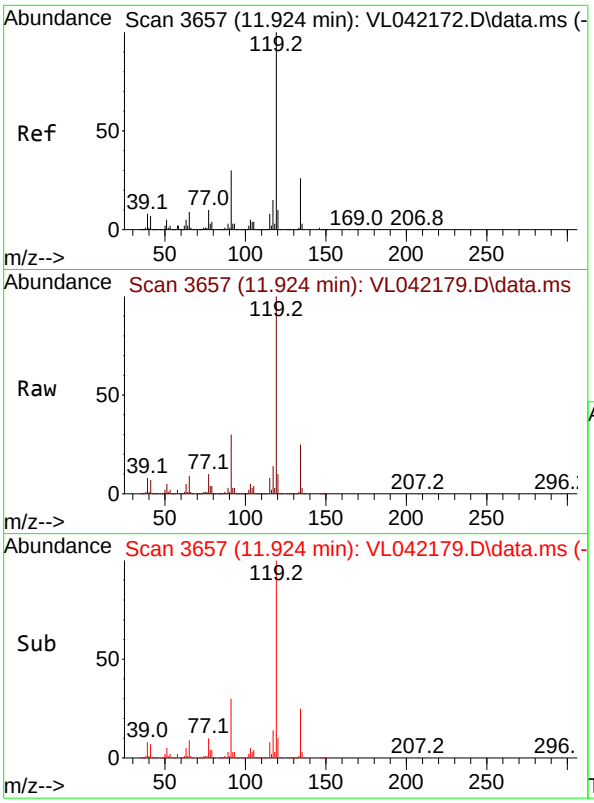


#68
1-Bromo-4-Fluorobenzene
Concen: 9.774 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 95 Resp: 379929

Ion	Ratio	Lower	Upper
95	100		
174	63.0	50.6	76.0
175	4.4	3.8	5.6



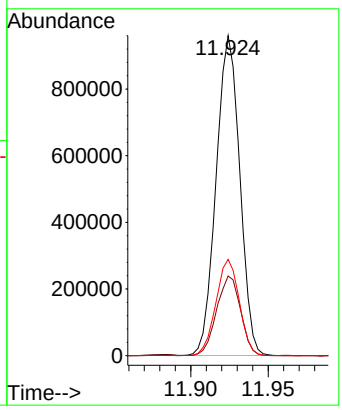


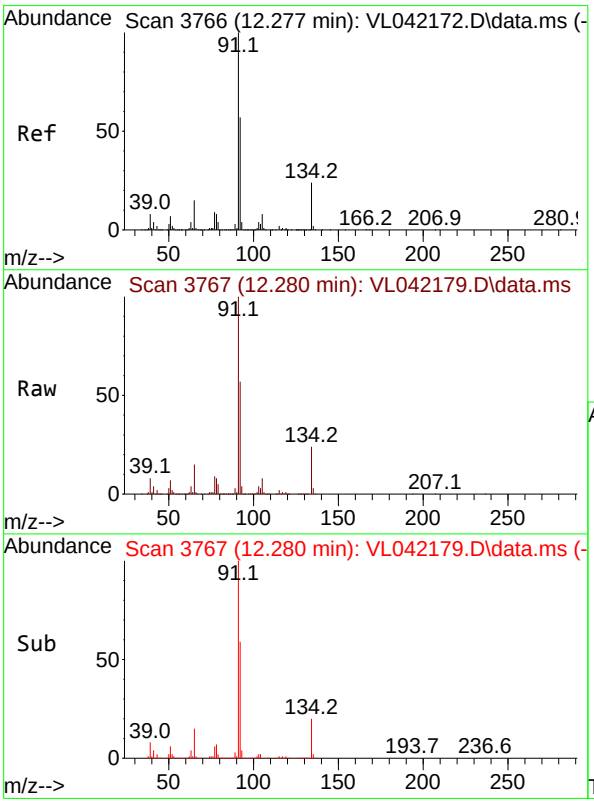
#69
p-Isopropyltoluene
Concen: 9.153 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:119 Resp: 1019694

Ion	Ratio	Lower	Upper
119	100		
134	25.3	20.4	30.6
91	29.9	23.7	35.5

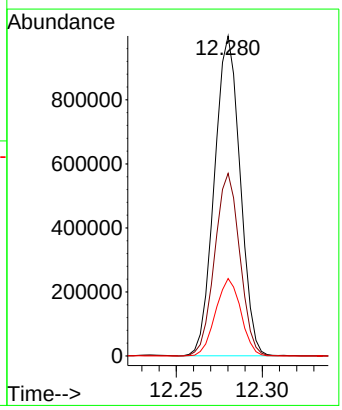


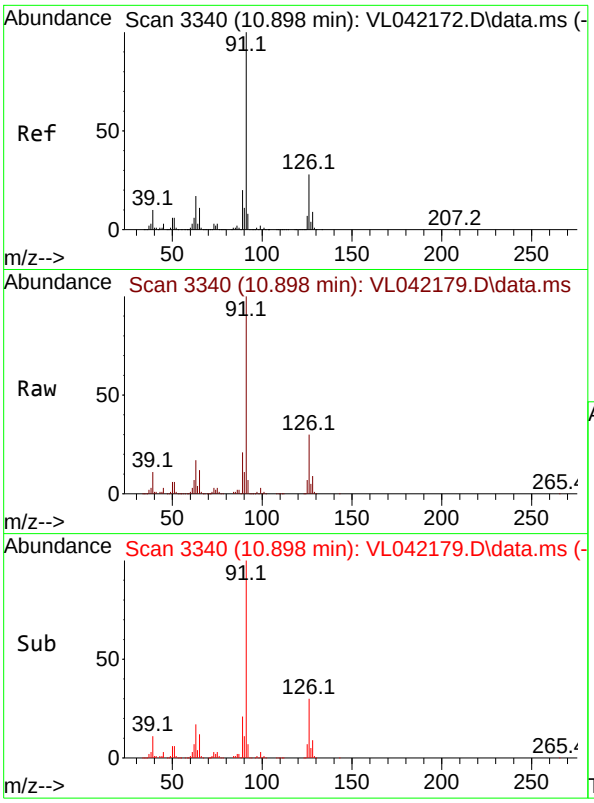


#70
n-Butylbenzene
Concen: 9.115 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 1038548

Ion	Ratio	Lower	Upper
91	100		
92	56.0	44.9	67.3
134	23.8	19.2	28.8



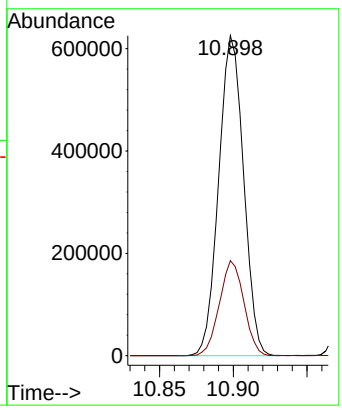


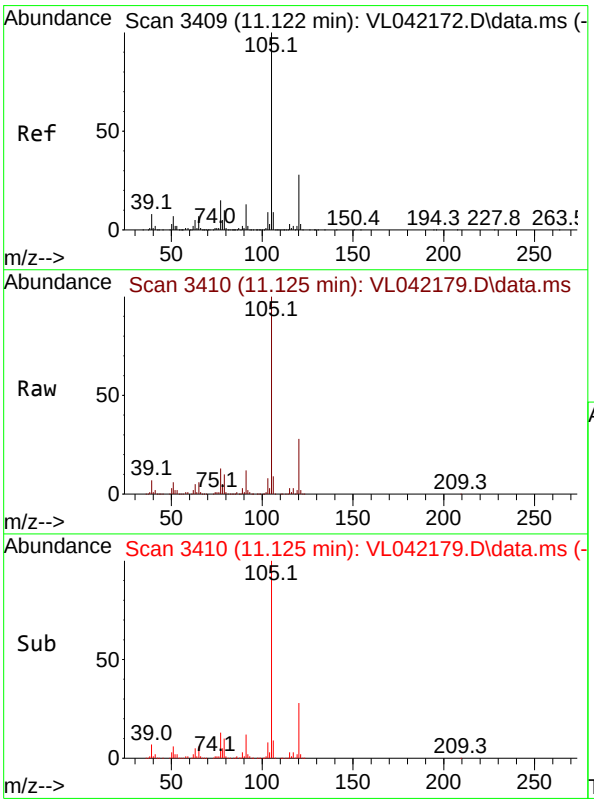
#71
2-Chlorotoluene
Concen: 9.382 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 91 Resp: 732874

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4

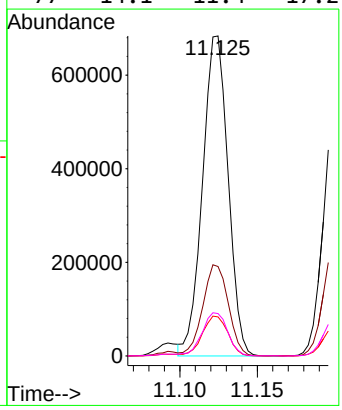


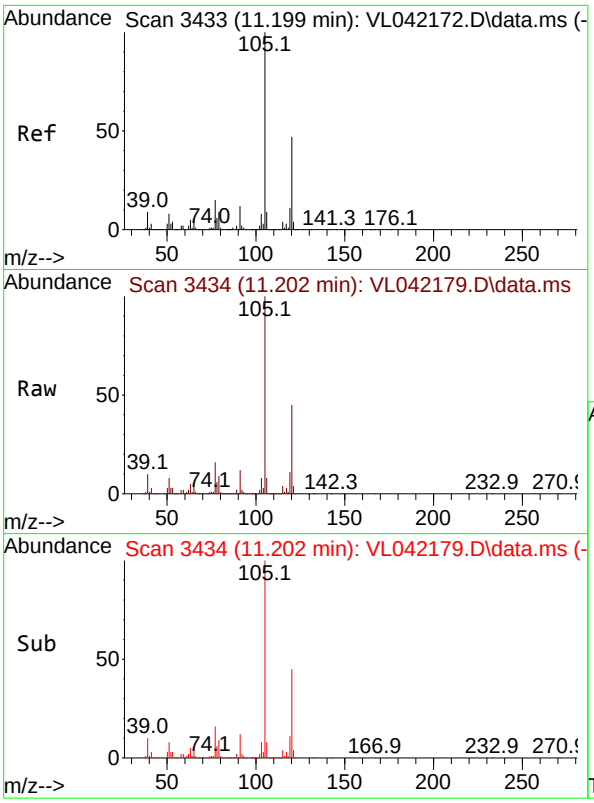


#72
4-Ethyltoluene
Concen: 9.370 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 785185

Ion	Ratio	Lower	Upper
105	100		
120	29.6	23.4	35.0
91	12.9	10.3	15.5
77	14.1	11.4	17.2



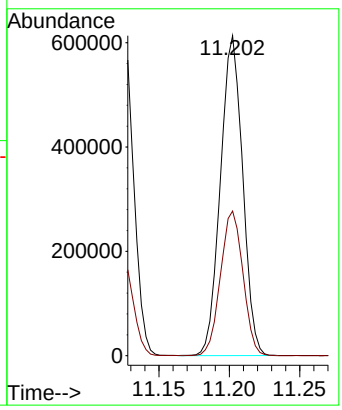


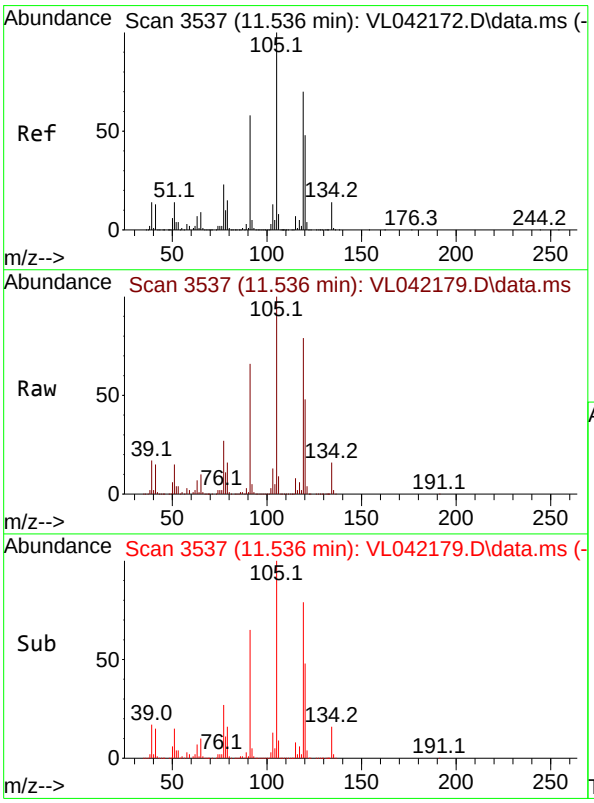
#73
1,3,5-Trimethylbenzene
Concen: 9.203 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:105 Resp: 673541

Ion	Ratio	Lower	Upper
105	100		
120	45.2	37.4	56.0

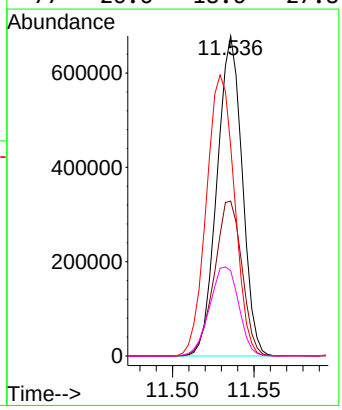


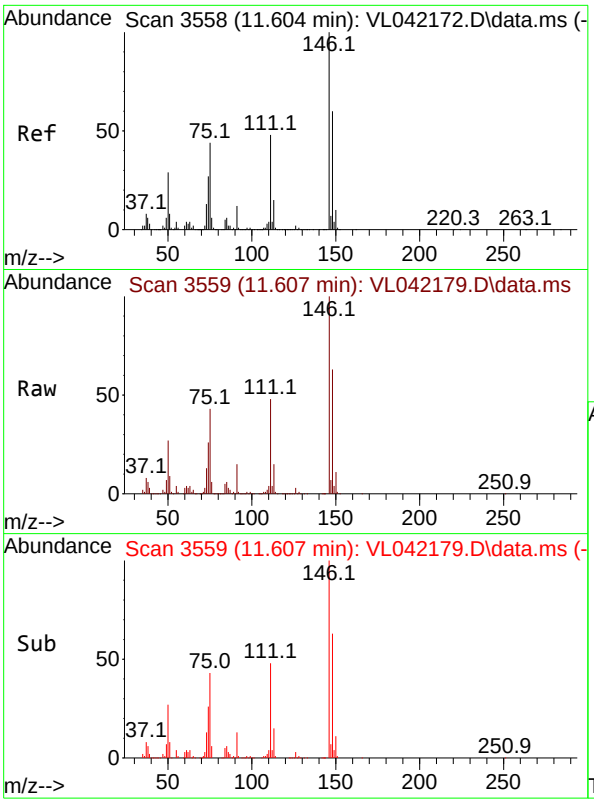


#74
1,2,4-Trimethylbenzene
Concen: 8.648 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 729155

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	65.6	46.2	69.2
77	26.6	18.6	27.8



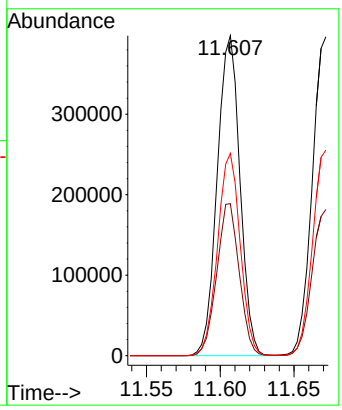


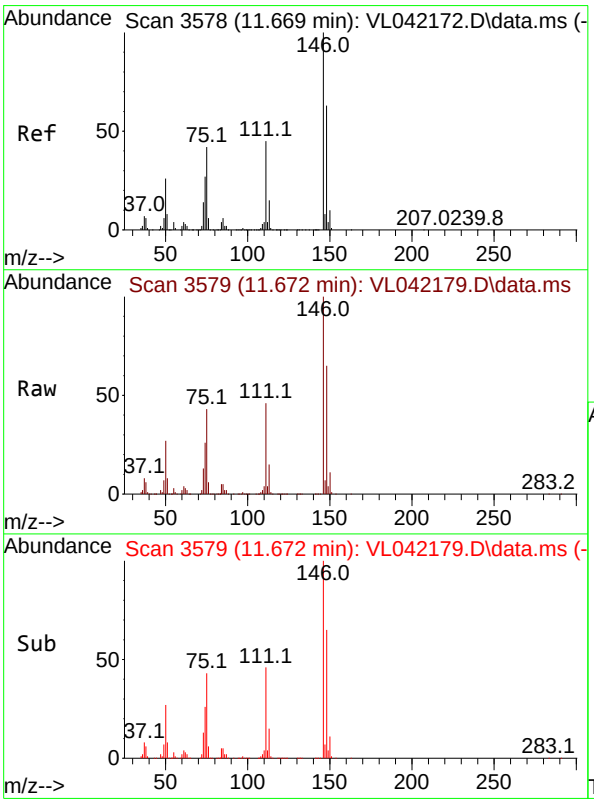
#75
1,3-Dichlorobenzene
Concen: 9.224 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:146 Resp: 426573

Ion	Ratio	Lower	Upper
146	100		
111	47.2	23.8	71.2
148	62.9	31.9	95.9

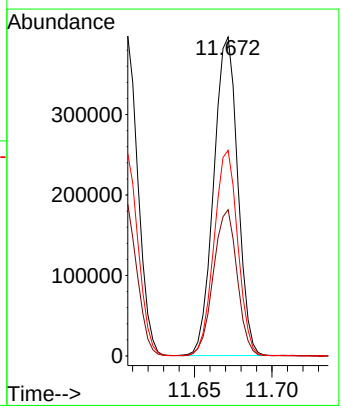


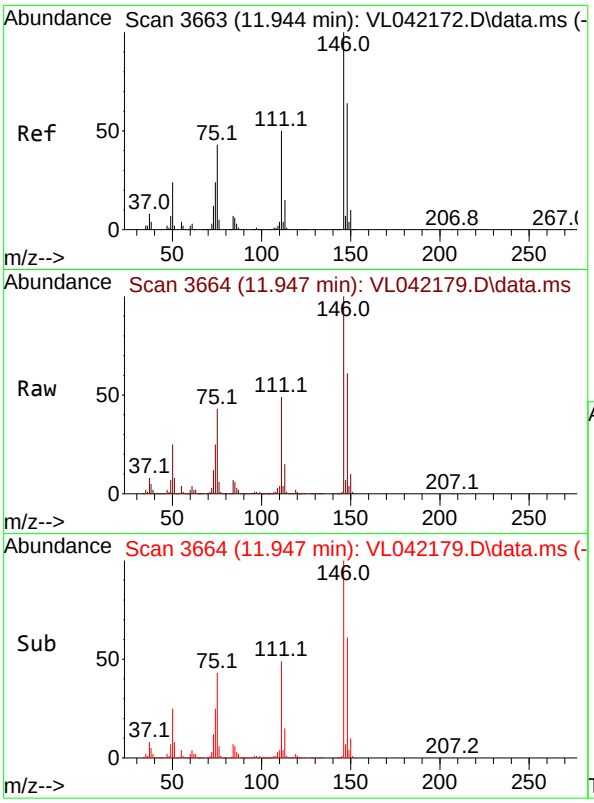


#76
1,4-Dichlorobenzene
Concen: 9.263 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 426318

Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.0	69.0
148	64.1	31.9	95.7



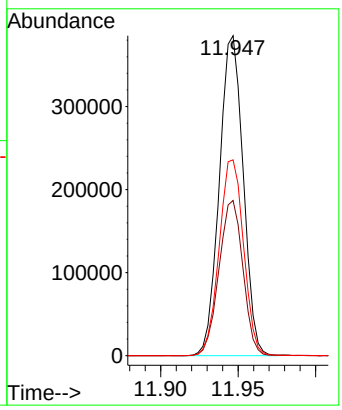


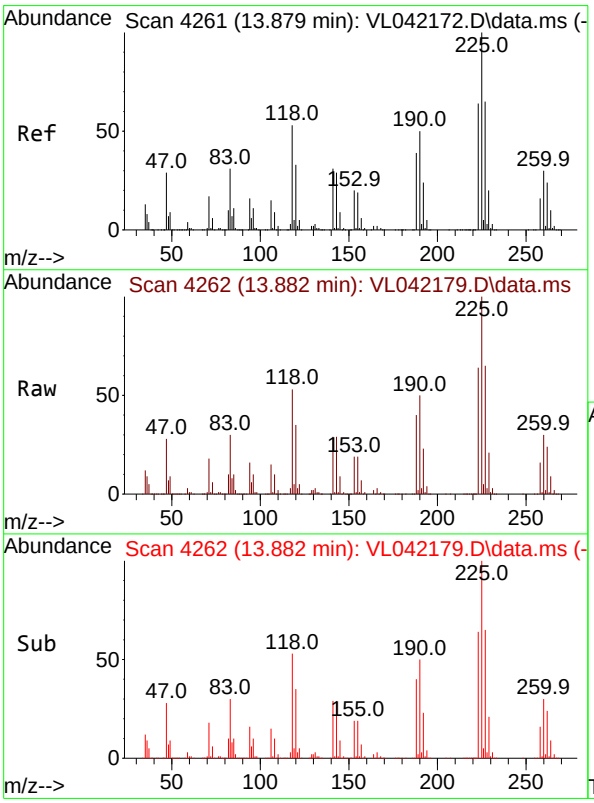
#77
1,2-Dichlorobenzene
Concen: 9.154 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:146 Resp: 412180

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	62.8	31.6	94.8

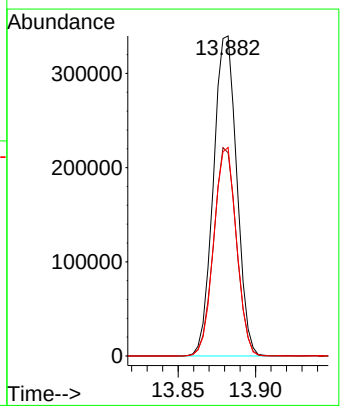


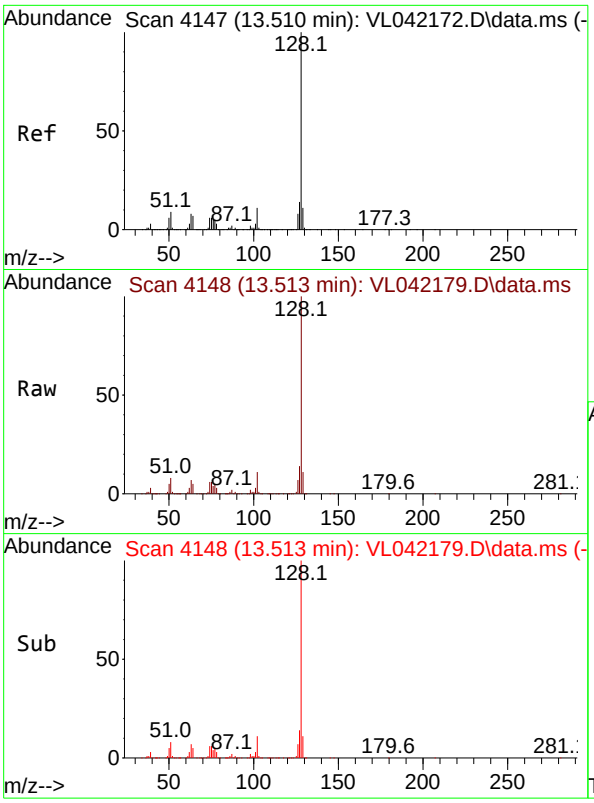


#78
Hexachloro-1,3-Butadiene
Concen: 7.776 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:225 Resp: 356386

Ion	Ratio	Lower	Upper
225	100		
223	63.4	50.6	76.0
227	63.4	51.2	76.8



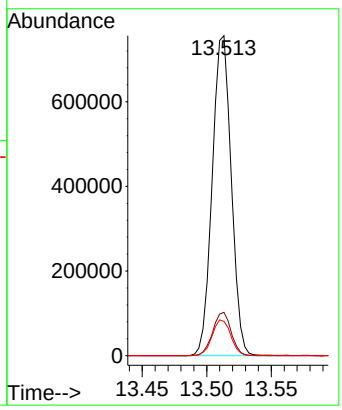


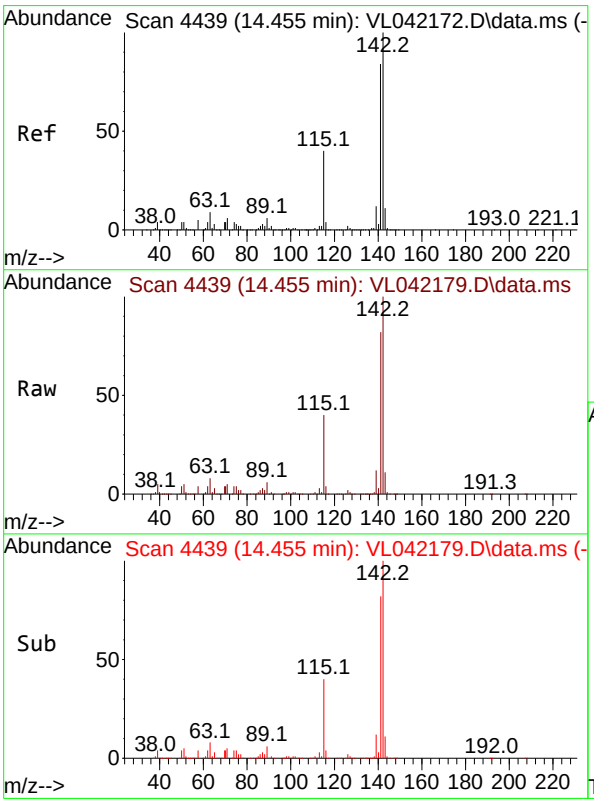
#79
Naphthalene
Concen: 8.385 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:128 Resp: 773311

Ion	Ratio	Lower	Upper
128	100		
127	13.6	10.8	16.2
129	10.7	9.0	13.4

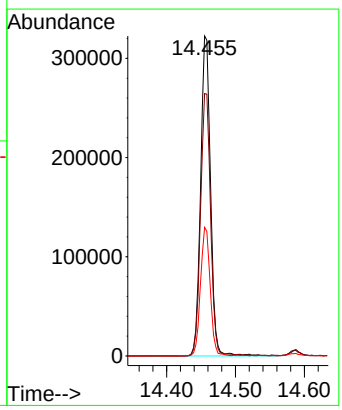


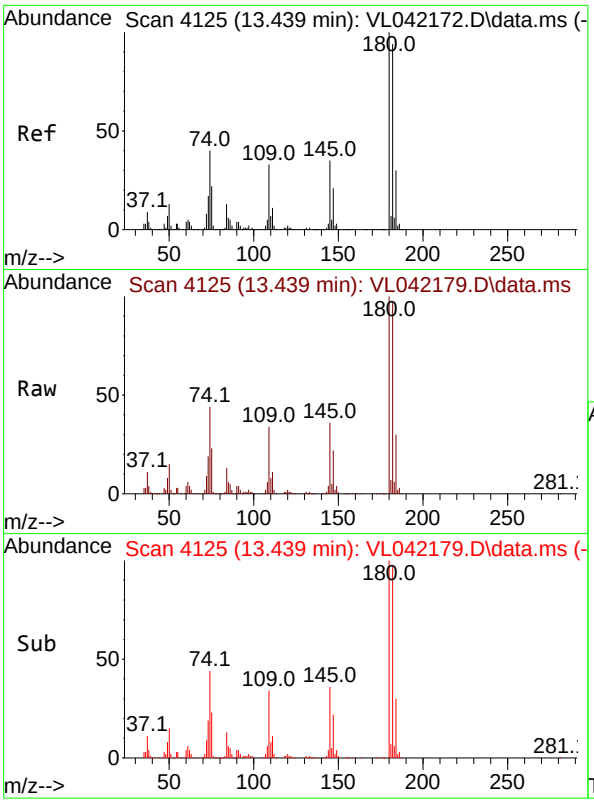


#80
Naphthalene,2-methyl-
Concen: 7.151 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:142 Resp: 323443

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	39.8	31.6	47.4



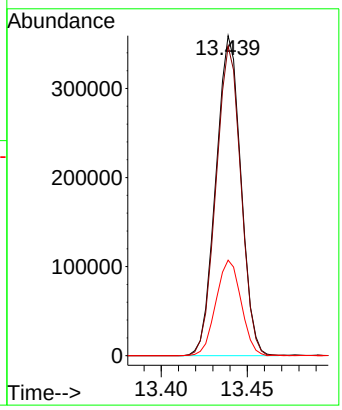


#81
1,2,4-Trichlorobenzene
Concen: 8.553 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:180 Resp: 363863

Ion	Ratio	Lower	Upper
180	100		
182	96.2	75.1	112.7
184	30.1	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042181.D
Acq On : 27 Mar 2025 14:39
Operator : SY/MD
Sample : VL0327ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Quant Time: Mar 28 02:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	166105	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	483209	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	452250	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	368941	9.934	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	243063	9.911	ppbv	100
3) Chlorodifluoromethane	1.476	51	241481	9.638	ppbv	99
4) Chloromethane	1.531	50	96241	9.602	ppbv	99
5) Vinyl Chloride	1.580	62	91865	8.649	ppbv	94
6) Bromomethane	1.667	94	40361	8.886	ppbv	92
7) Chloroethane	1.703	64	37307	9.273	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	208981	10.006	ppbv	94
9) Propene	1.482	41	102862	8.957	ppbv	99
10) Heptane	4.978	43	290621	9.514	ppbv	100
11) Trichlorofluoromethane	1.877	101	232086	9.725	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.140	101	178792	9.115	ppbv	99
13) Ethanol	1.719	45	5124	4.720	ppbv	93
14) Bromoethene	1.780	108	69775	9.286	ppbv	98
15) Acetone	1.835	43	195717	8.425	ppbv	96
16) 1,3-Butadiene	1.609	39	98877	8.716	ppbv	100
17) tert-Butyl alcohol	2.039	59	266424	9.208	ppbv	98
18) 1,1-Dichloroethene	2.033	96	83339	9.088	ppbv	95
19) Isopropyl Alcohol	1.884	45	120986	9.230	ppbv	97
20) Methylene Chloride	2.062	84	69930	8.083	ppbv	96
21) Allyl Chloride	2.094	41	147810	9.022	ppbv	99
22) trans-1,2-Dichloroethene	2.340	96	96616	9.116	ppbv	99
23) Vinyl Acetate	2.463	43	94696	9.418	ppbv	96
24) 1,1-Dichloroethane	2.408	63	189793	9.661	ppbv	99
25) Ethyl Acetate	2.835	43	574442	9.528	ppbv	99
26) Hexane	2.826	57	224704	9.649	ppbv	98
27) Carbon Disulfide	2.149	76	230410	9.226	ppbv #	94
28) Methyl tert-Butyl Ether	2.441	73	149961	10.342	ppbv	95
29) Chloroform	2.848	83	336404	9.870	ppbv	96
30) Cyclohexane	3.855	84	194220	9.604	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	231151	9.777	ppbv	97
32) 1,1,1-Trichloroethane	3.366	97	359860	9.223	ppbv	99
34) 2-Butanone	2.557	43	320843	9.157	ppbv	100
35) Carbon Tetrachloride	3.761	117	361037	9.565	ppbv	99
36) Benzene	3.658	78	452718	9.450	ppbv	98
37) 1,2-Dichloroethane	3.217	62	277247	10.109	ppbv	98
38) Trichloroethene	4.548	130	187209	9.366	ppbv	98
39) 1,2-Dichloropropane	4.315	63	164374	9.422	ppbv	95
40) 1,4-Dioxane	4.583	88	82012	8.857	ppbv #	92
41) Tetrahydrofuran	3.052	42	188907	9.362	ppbv	99
42) Bromodichloromethane	4.489	83	377092	9.974	ppbv	98
43) Methyl Methacrylate	4.881	69	190156	9.377	ppbv	100
44) 2,2,4-Trimethylpentane	4.638	57	769803	9.509	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	204004	9.376	ppbv	98

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042181.D
Acq On : 27 Mar 2025 14:39
Operator : SY/MD
Sample : VL0327ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument : MSVOA_L
ClientSampleId : VL0327ABS01

Quant Time: Mar 28 02:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.599	75	251694	9.437	ppbv		97
47) 1,1,2-Trichloroethane	6.583	97	175509	9.517	ppbv		99
48) Dibromochloromethane	7.386	129	310158	9.923	ppbv		99
49) Bromoform	9.483	173	279382	9.957	ppbv		99
50) 4-Methyl-2-Pentanone	5.748	43	481919	8.679	ppbv		98
51) 2-Hexanone	7.435	43	395520	8.674	ppbv		99
52) Tetrachloroethene	8.224	164	167015	8.791	ppbv		95
53) Toluene	6.930	91	540612	9.520	ppbv		99
54) 1,2-Dibromoethane	7.655	107	246519	9.589	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.924	131	240905	9.677	ppbv		96
57) Chlorobenzene	8.920	112	407816	9.507	ppbv		98
58) Ethyl Benzene	9.354	91	769818	9.583	ppbv		97
59) m/p-Xylene	9.551	91	574799	8.961	ppbv	#	23
60) o-Xylene	9.962	91	612011	9.518	ppbv		98
61) Styrene	9.869	104	306658	9.639	ppbv		99
62) Isopropylbenzene	10.539	105	923163	9.600	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.962	83	370486	9.483	ppbv		99
64) n-propylbenzene	10.989	120	239652	9.682	ppbv		98
65) tert-Butylbenzene	11.532	119	828438	9.315	ppbv		98
66) Benzyl Chloride	11.616	91	81404	8.627	ppbv		98
67) sec-Butylbenzene	11.769	105	1155378	9.347	ppbv		99
69) p-Isopropyltoluene	11.927	119	1011573	9.503	ppbv		99
70) n-Butylbenzene	12.283	91	1022935	9.397	ppbv		99
71) 2-Chlorotoluene	10.901	91	713648	9.562	ppbv		98
72) 4-Ethyltoluene	11.128	105	766720	9.576	ppbv		100
73) 1,3,5-Trimethylbenzene	11.205	105	660905	9.451	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	718683	8.921	ppbv		97
75) 1,3-Dichlorobenzene	11.610	146	415378	9.401	ppbv		100
76) 1,4-Dichlorobenzene	11.671	146	418670	9.521	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	401634	9.336	ppbv		99
78) Hexachloro-1,3-Butadiene	13.882	225	346566	7.914	ppbv		100
79) Naphthalene	13.513	128	762976	8.659	ppbv		99
80) Naphthalene,2-methyl-	14.458	142	308264	7.134	ppbv		98
81) 1,2,4-Trichlorobenzene	13.442	180	356193	8.764	ppbv		99

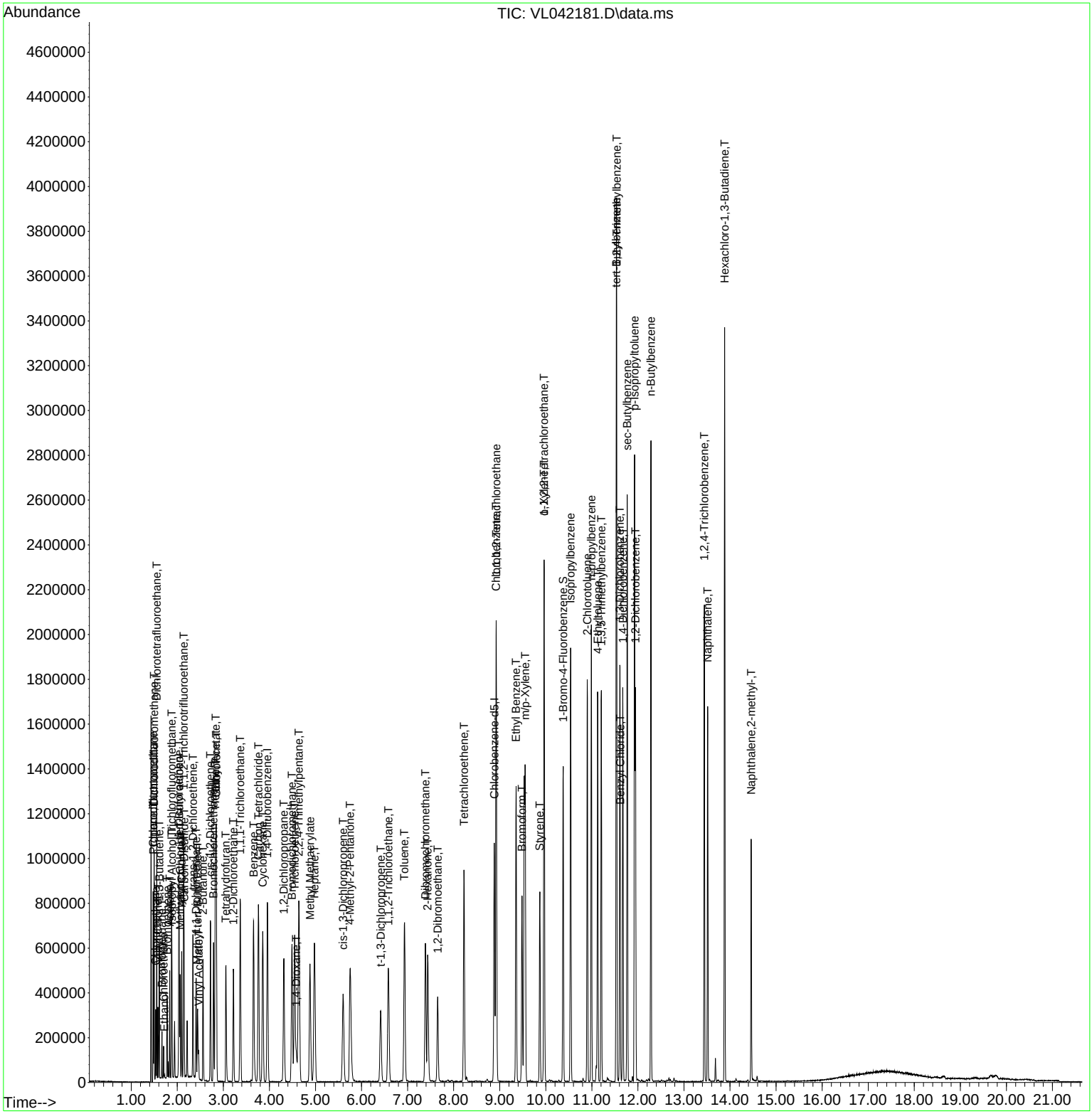
(#) = qualifier out of range (m) = manual integration (+) = signals summed

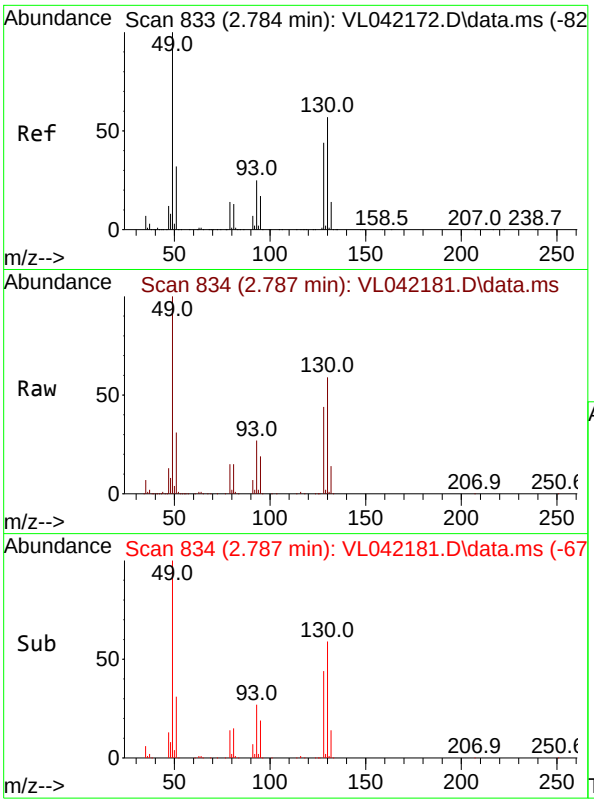
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042181.D
Acq On : 27 Mar 2025 14:39
Operator : SY/MD
Sample : VL0327ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Quant Time: Mar 28 02:12:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



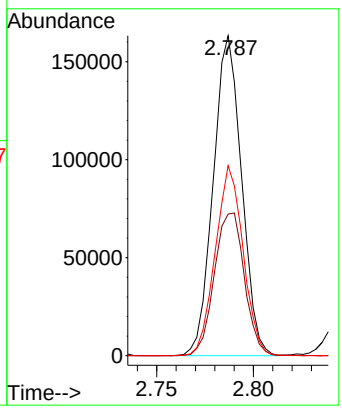


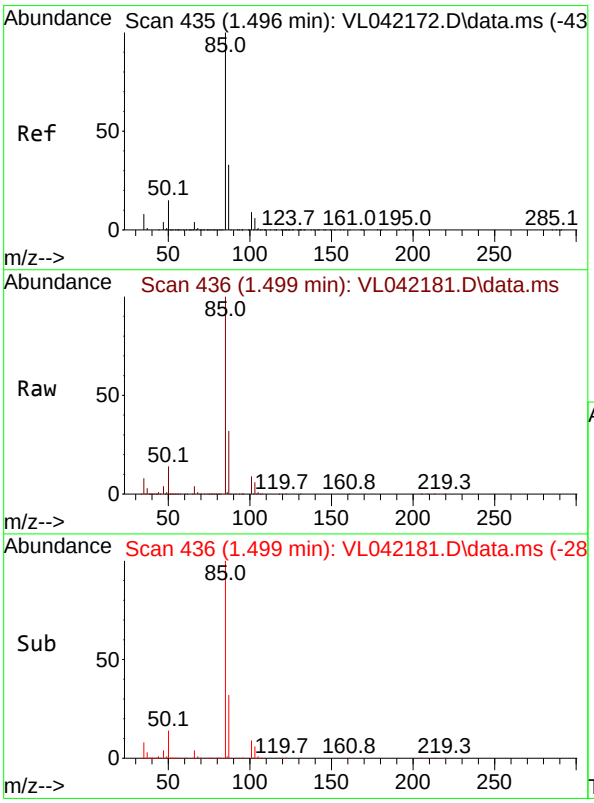
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 49 Resp: 166105

Ion	Ratio	Lower	Upper
49	100		
128	47.4	22.9	68.5
130	58.3	28.8	86.4

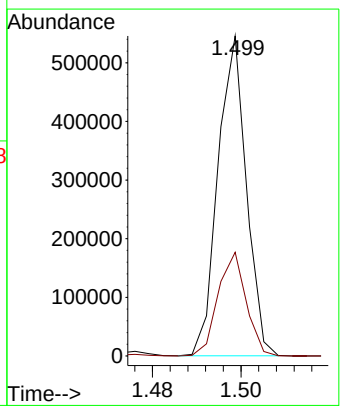


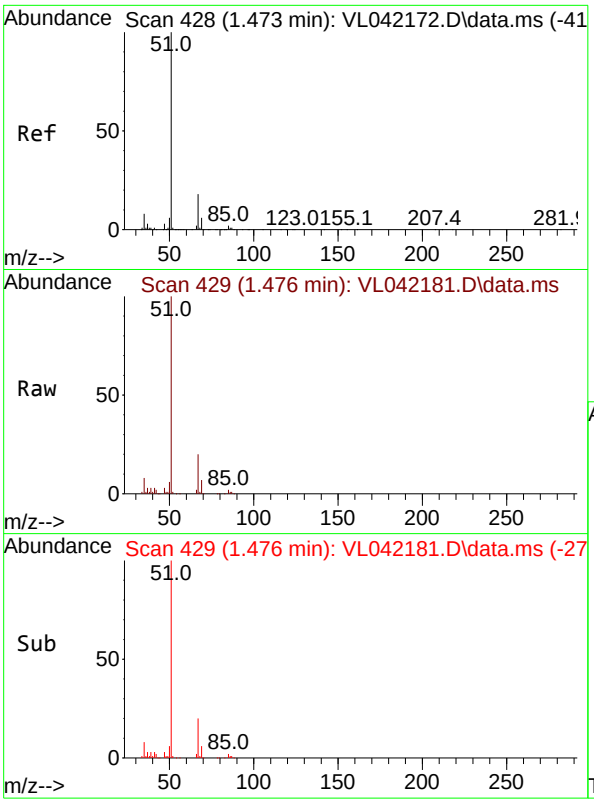


#2
Dichlorodifluoromethane
Concen: 9.911 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 85 Resp: 243063

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1



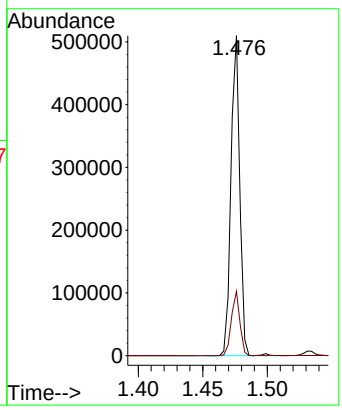


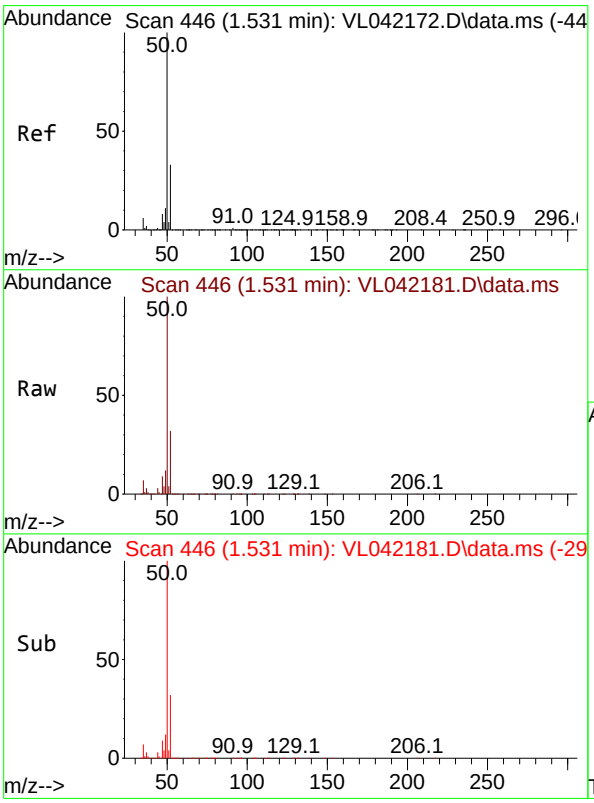
#3
Chlorodifluoromethane
Concen: 9.638 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 51 Resp: 241481

Ion	Ratio	Lower	Upper
51	100		
67	19.4	15.0	22.6

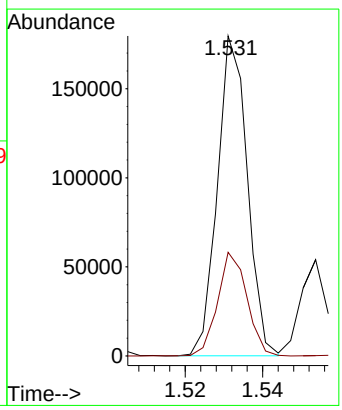


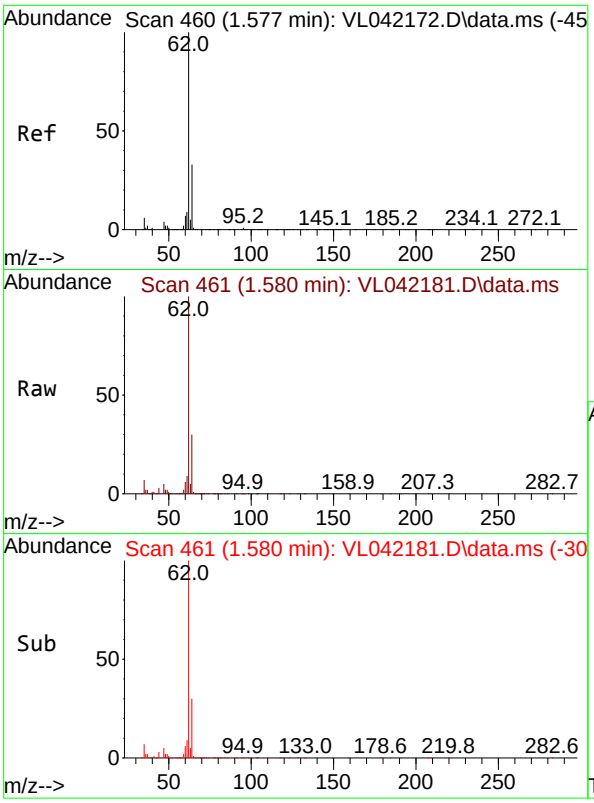


#4
Chloromethane
Concen: 9.602 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 50 Resp: 96241

Ion	Ratio	Lower	Upper
50	100		
52	32.2	26.1	39.1



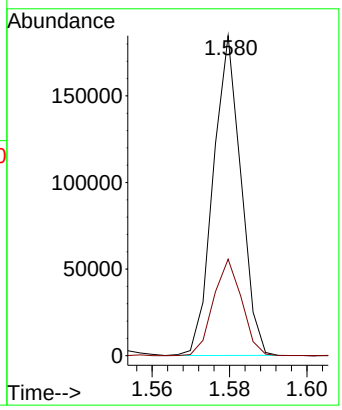


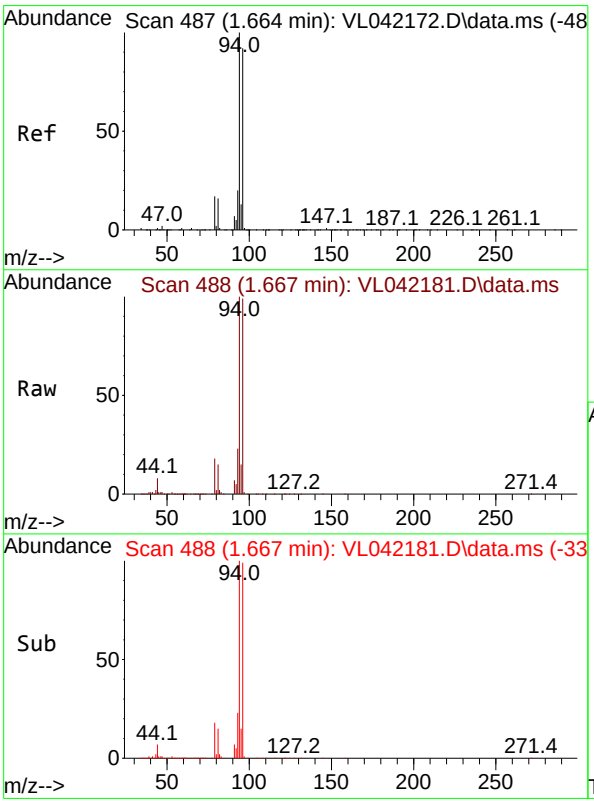
#5
Vinyl Chloride
Concen: 8.649 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 62 Resp: 91865

Ion	Ratio	Lower	Upper
62	100		
64	30.2	26.6	40.0

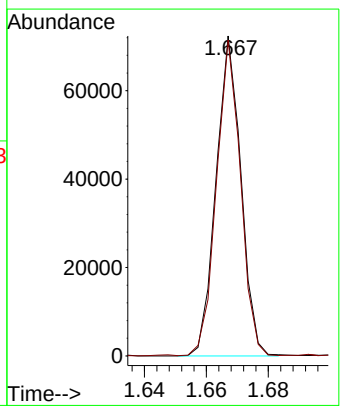


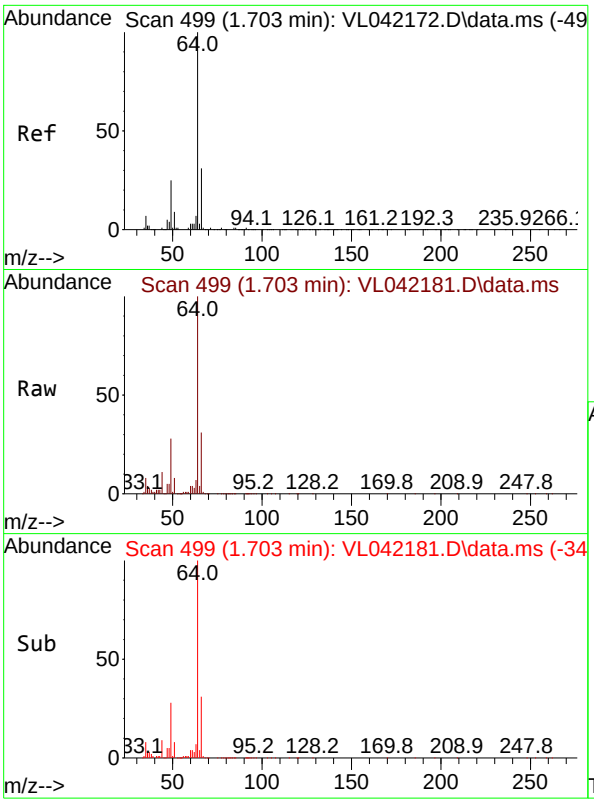


#6
Bromomethane
Concen: 8.886 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 94 Resp: 40361

Ion	Ratio	Lower	Upper
94	100		
96	98.7	73.1	109.7



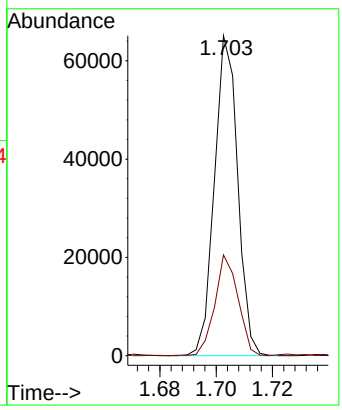


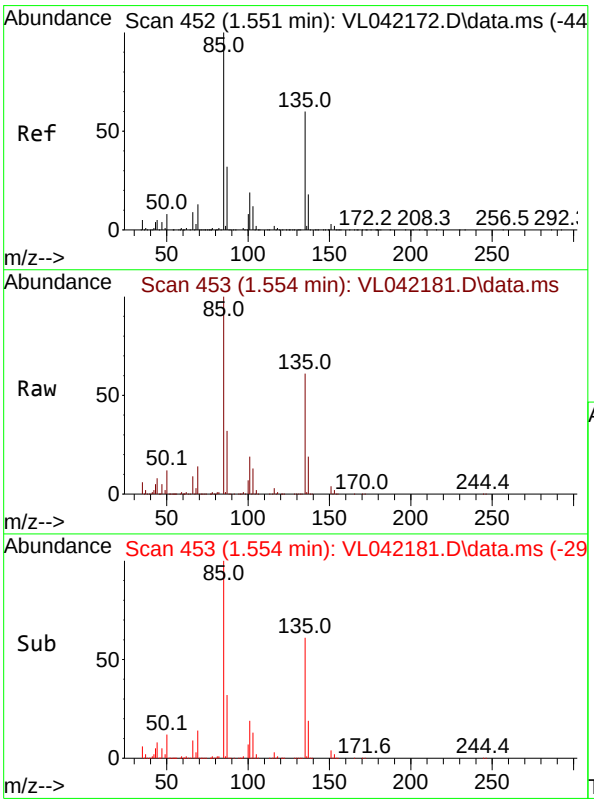
#7
Chloroethane
Concen: 9.273 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 64 Resp: 37307

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8

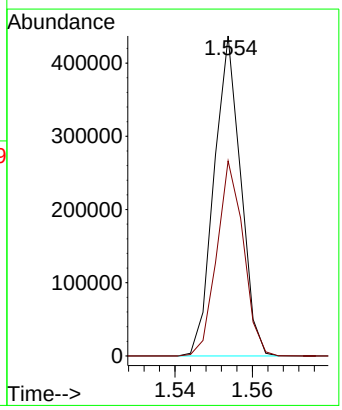


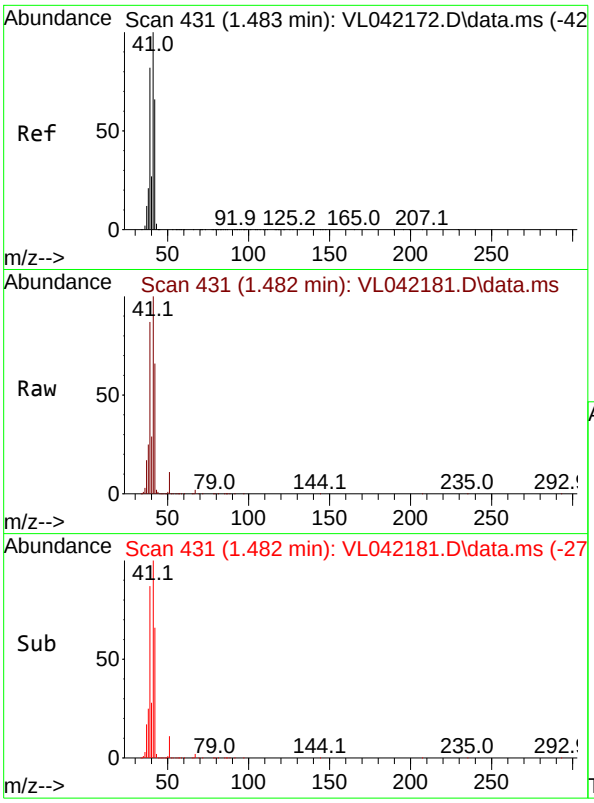


#8
Dichlorotetrafluoroethane
Concen: 10.006 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 85 Resp: 208981

Ion	Ratio	Lower	Upper
85	100		
135	61.1	52.4	78.6



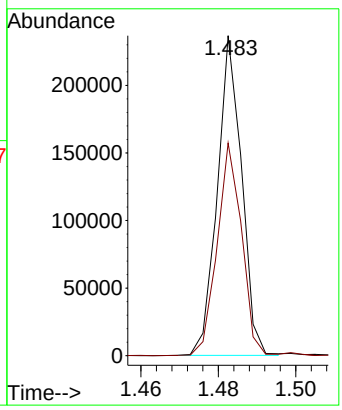


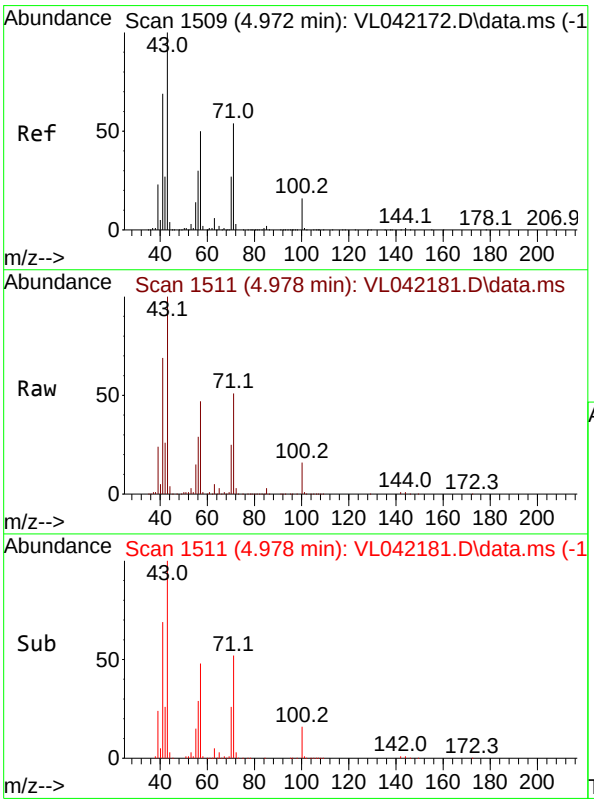
#9
Propene
Concen: 8.957 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 41 Resp: 102862

Ion	Ratio	Lower	Upper
41	100		
42	68.5	55.4	83.2

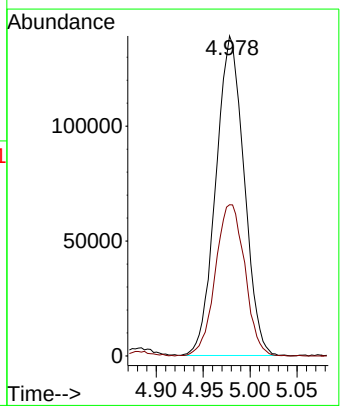


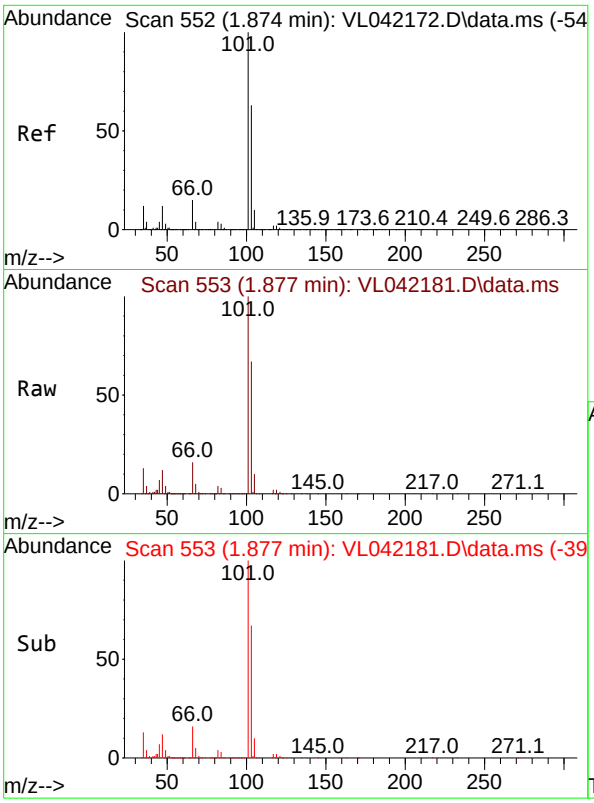


#10
Heptane
Concen: 9.514 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 290621

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2



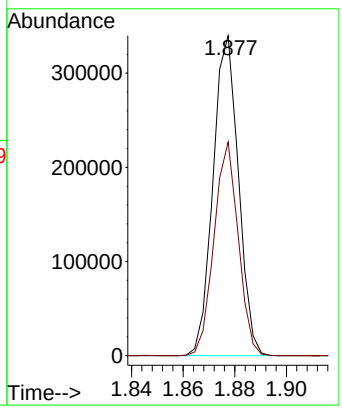


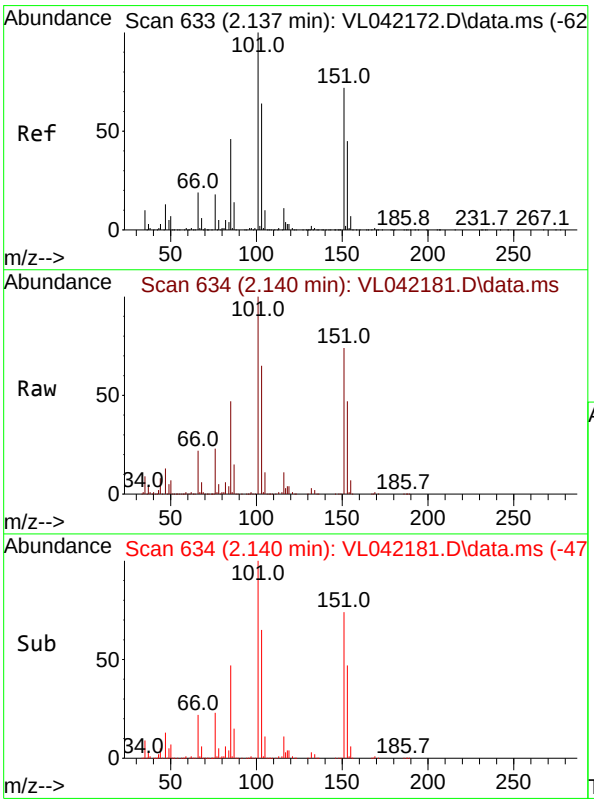
#11
Trichlorofluoromethane
Concen: 9.725 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:101 Resp: 232086

Ion	Ratio	Lower	Upper
101	100		
103	66.8	50.2	75.2

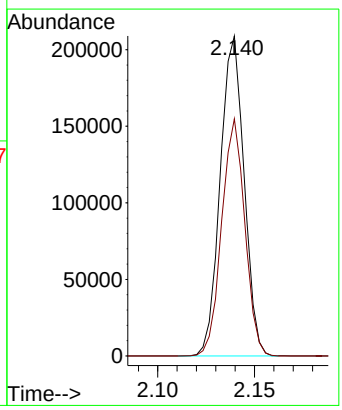


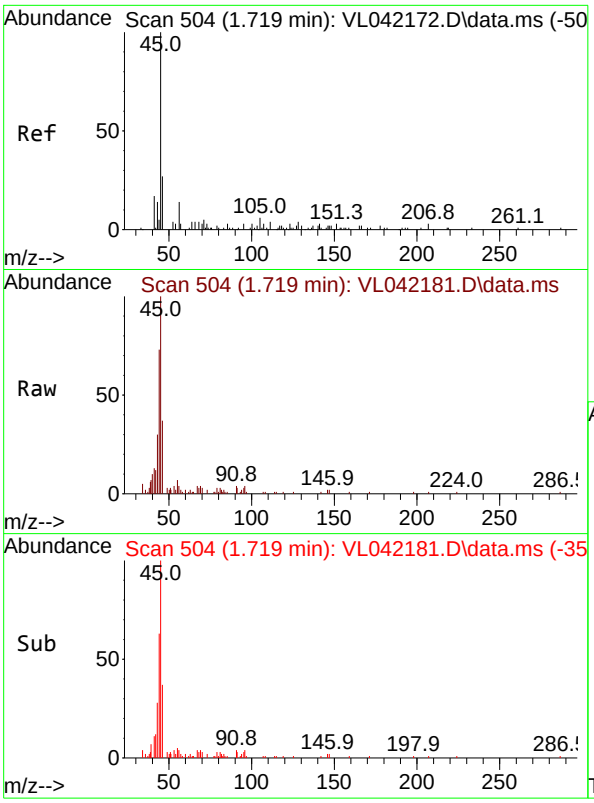


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.115 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:101 Resp: 178792

Ion	Ratio	Lower	Upper
101	100		
151	71.9	57.1	85.7



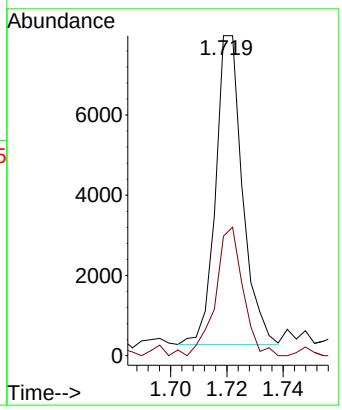


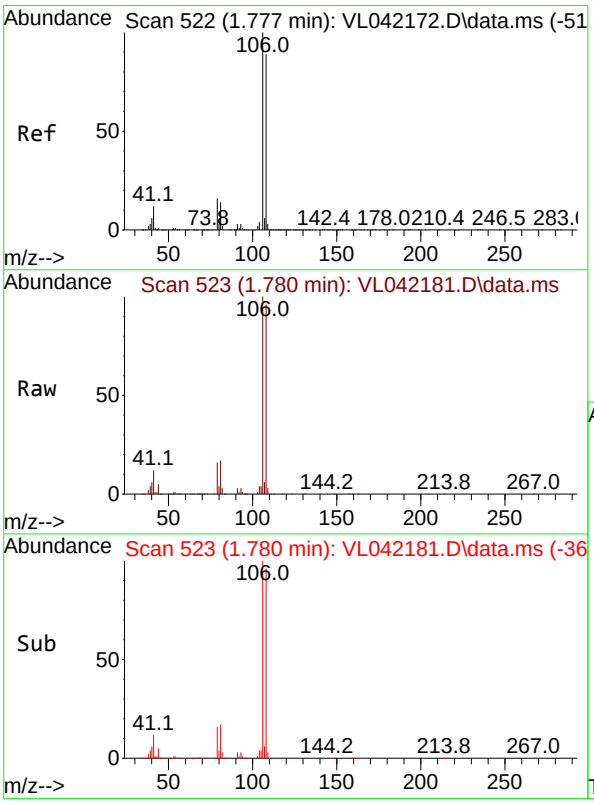
#13
Ethanol
Concen: 4.720 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 45 Resp: 5124

Ion	Ratio	Lower	Upper
45	100		
46	45.5	20.2	80.8

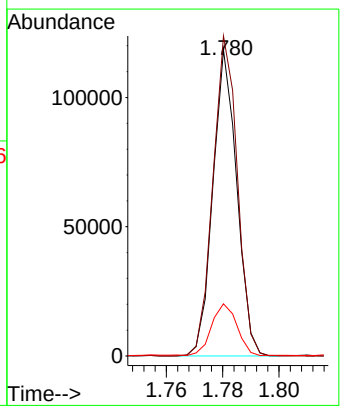


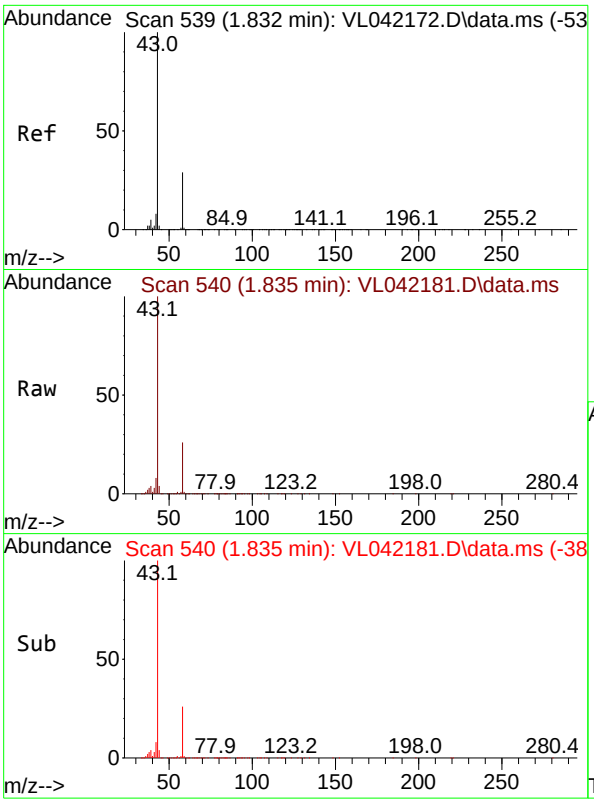


#14
Bromoethene
Concen: 9.286 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:108 Resp: 69775

Ion	Ratio	Lower	Upper
108	100		
106	106.9	86.8	130.2
79	18.1	15.0	22.6



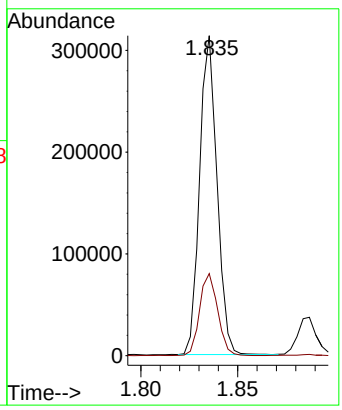


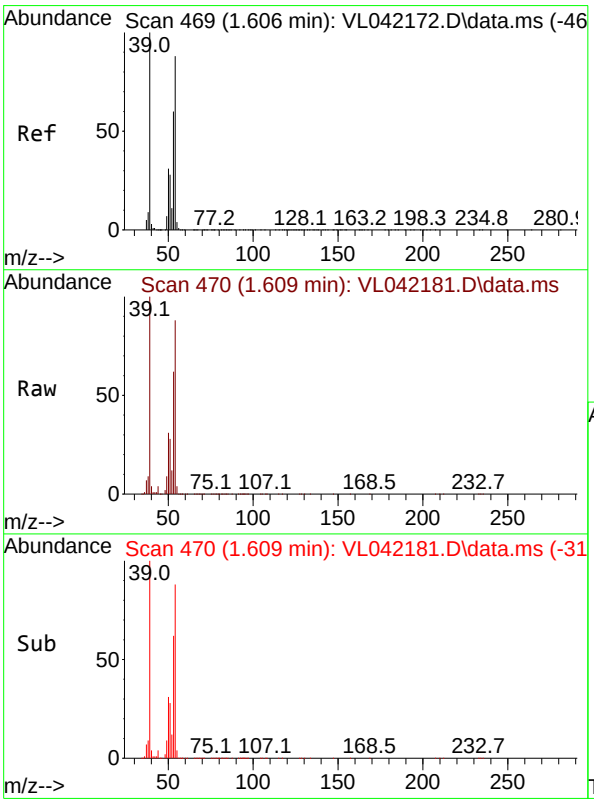
#15
Acetone
Concen: 8.425 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 43 Resp: 195717

Ion	Ratio	Lower	Upper
43	100		
58	27.1	23.2	34.8

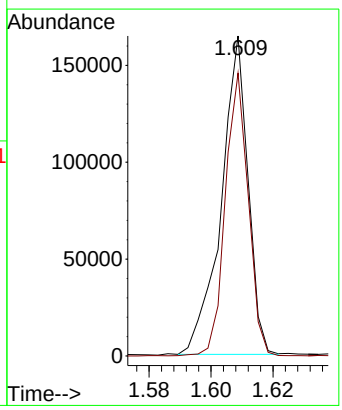


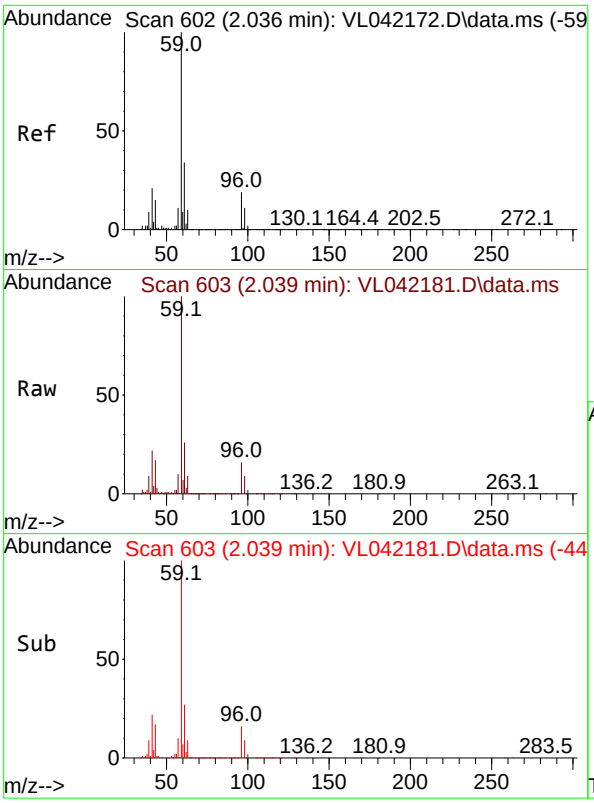


#16
1,3-Butadiene
Concen: 8.716 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 39 Resp: 98877

Ion	Ratio	Lower	Upper
39	100		
54	76.1	60.7	91.1



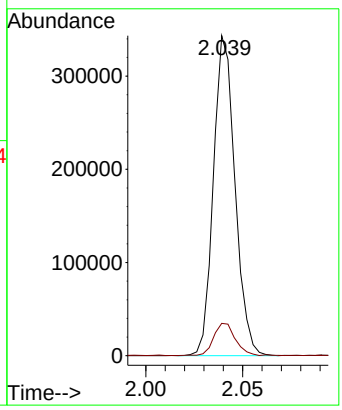


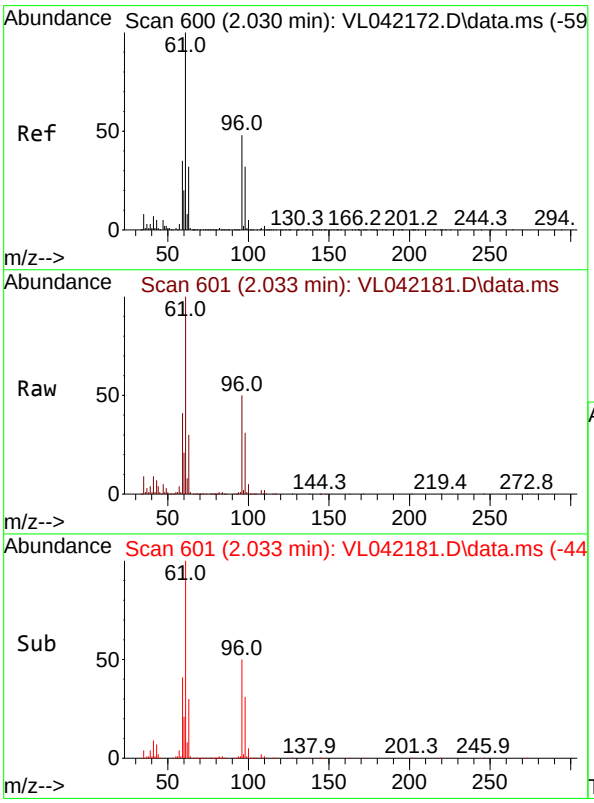
#17
tert-Butyl alcohol
Concen: 9.208 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 59 Resp: 266424

Ion	Ratio	Lower	Upper
59	100		
57	10.3	8.9	13.3

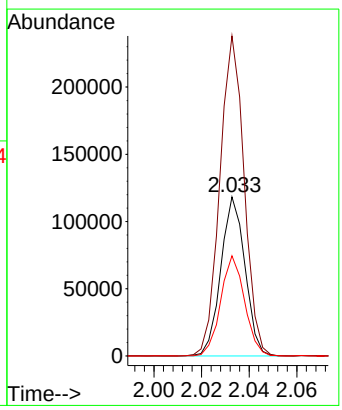


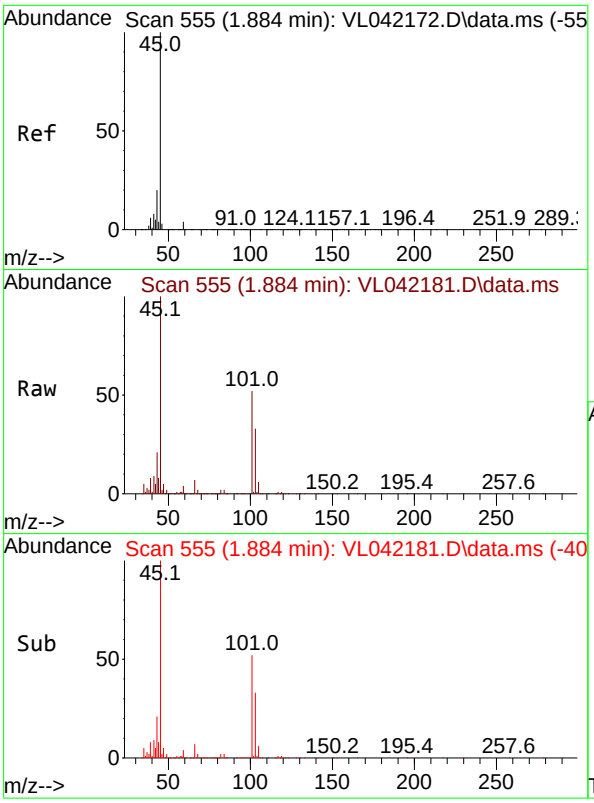


#18
1,1-Dichloroethene
Concen: 9.088 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 96 Resp: 83339

Ion	Ratio	Lower	Upper
96	100		
61	201.2	167.6	251.4
98	62.9	53.5	80.3



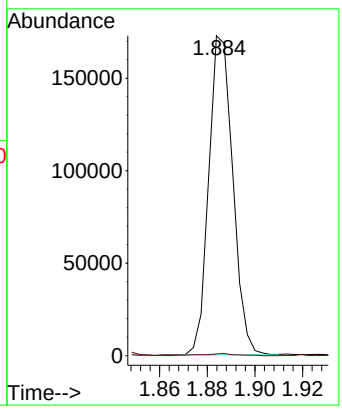


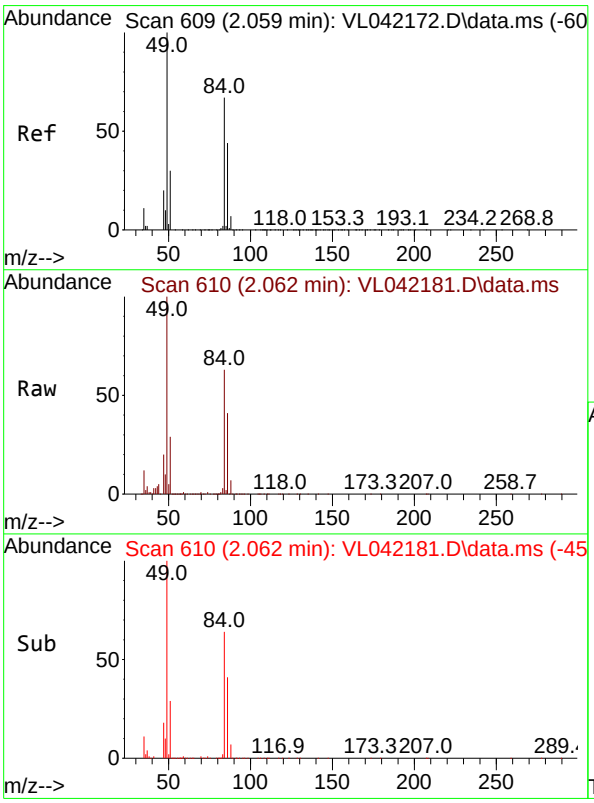
#19
Isopropyl Alcohol
Concen: 9.230 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 45 Resp: 120986

Ion	Ratio	Lower	Upper
45	100		
58	43.8	36.9	55.3

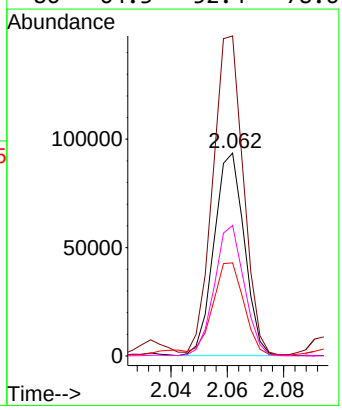


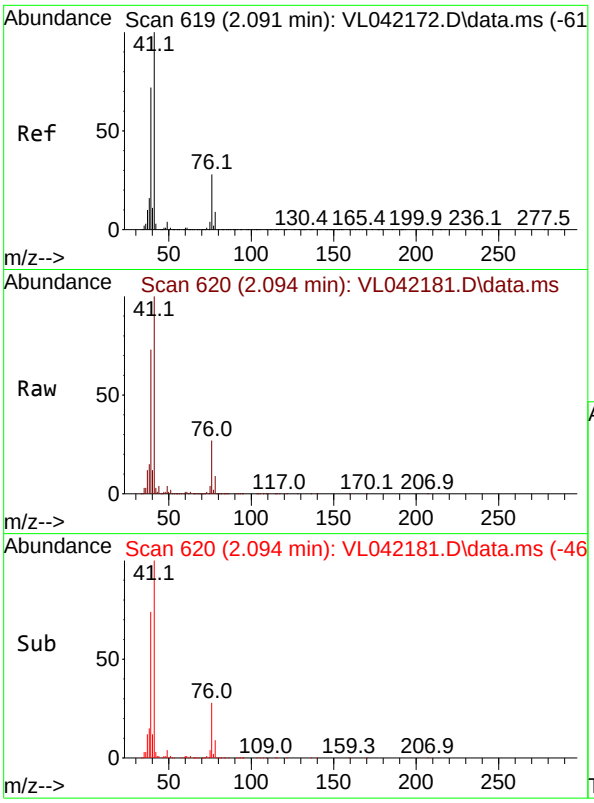


#20
Methylene Chloride
Concen: 8.083 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 84 Resp: 69930

Ion	Ratio	Lower	Upper
84	100		
49	157.4	120.2	180.4
51	45.2	37.4	56.0
86	64.3	52.4	78.6



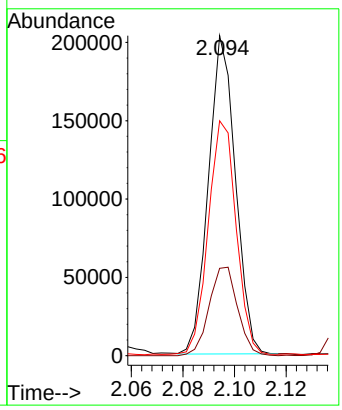


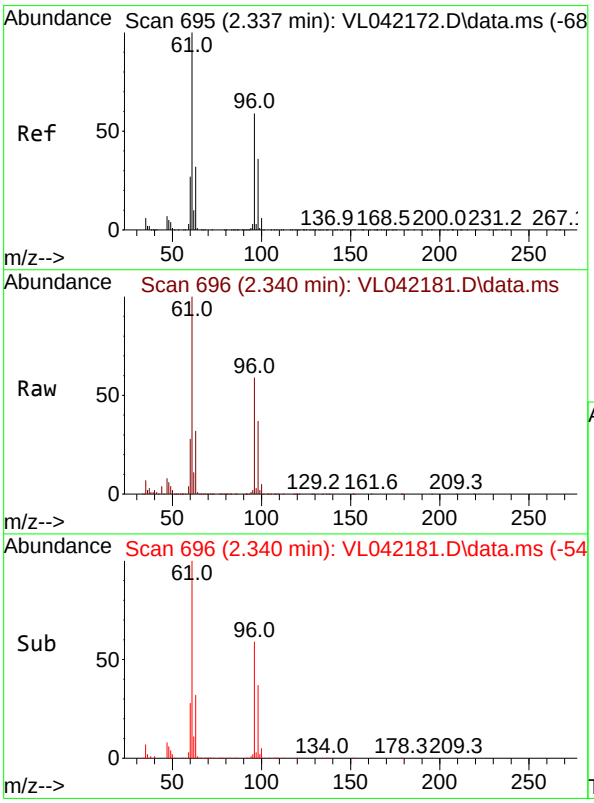
#21
Allyl Chloride
Concen: 9.022 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 41 Resp: 147810

Ion	Ratio	Lower	Upper
41	100		
76	29.4	24.1	36.1
39	76.2	61.1	91.7

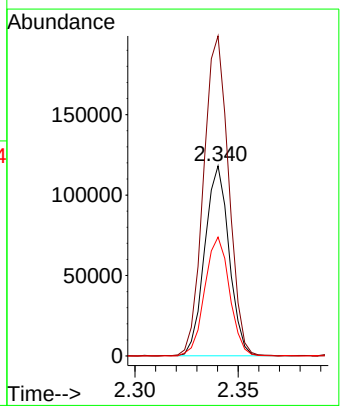


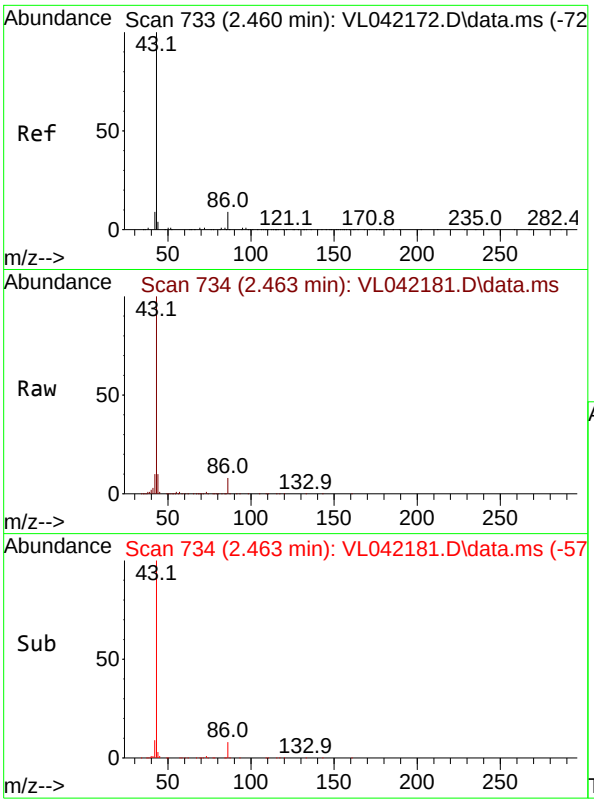


#22
trans-1,2-Dichloroethene
Concen: 9.116 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 96 Resp: 96616

Ion	Ratio	Lower	Upper
96	100		
61	168.4	136.6	204.8
98	62.5	49.4	74.2



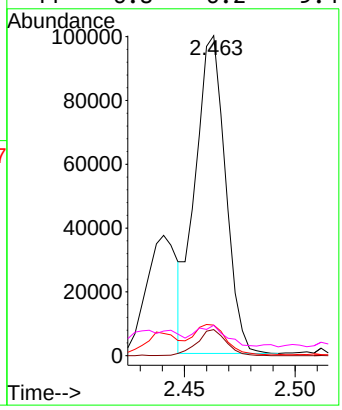


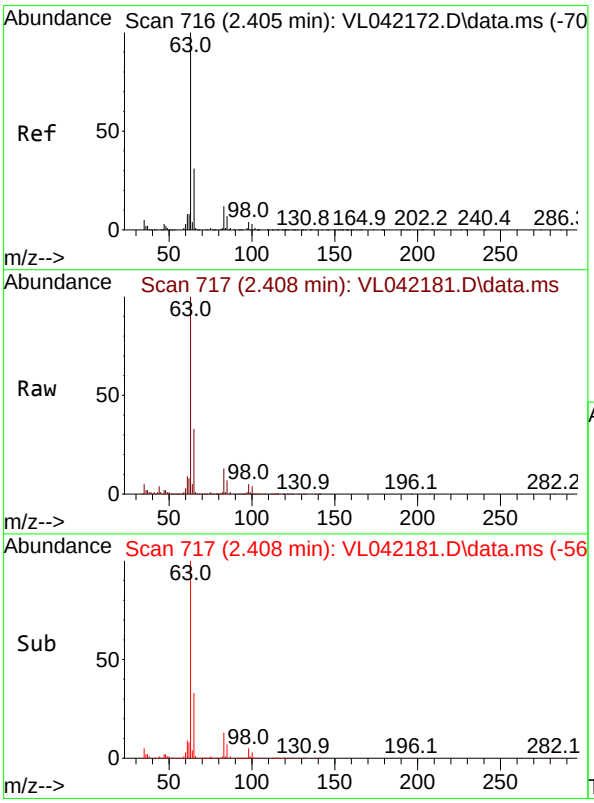
#23
Vinyl Acetate
Concen: 9.418 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 43 Resp: 94696

Ion	Ratio	Lower	Upper
43	100		
86	8.2	5.5	8.3
42	9.2	8.6	13.0
44	6.8	6.2	9.4

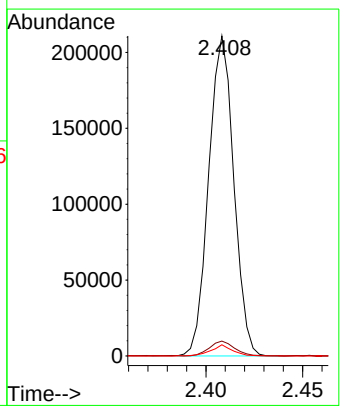


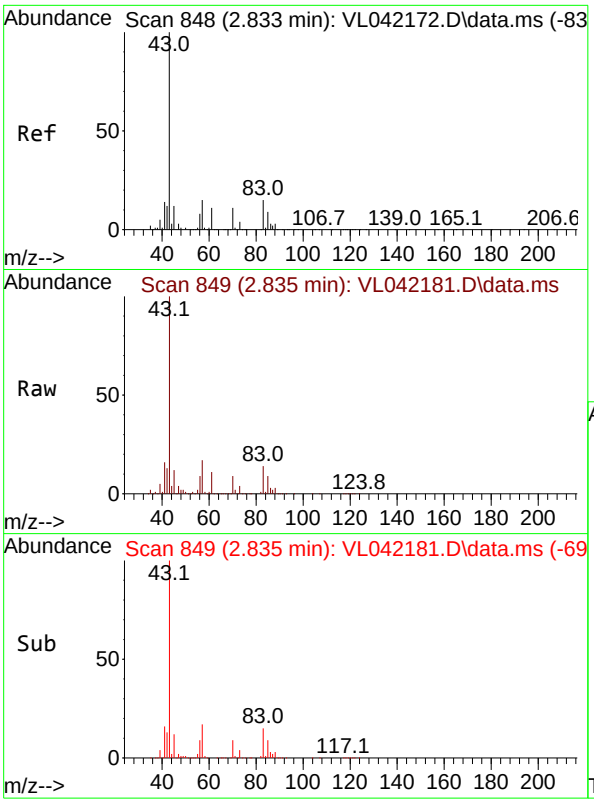


#24
1,1-Dichloroethane
Concen: 9.661 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 63 Resp: 189793

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.5	1.6	4.7



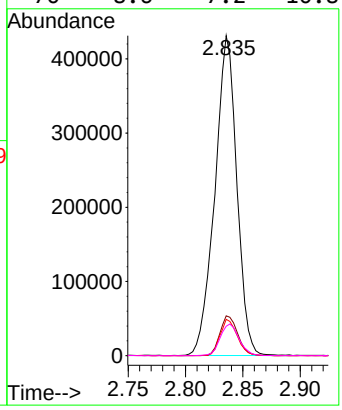


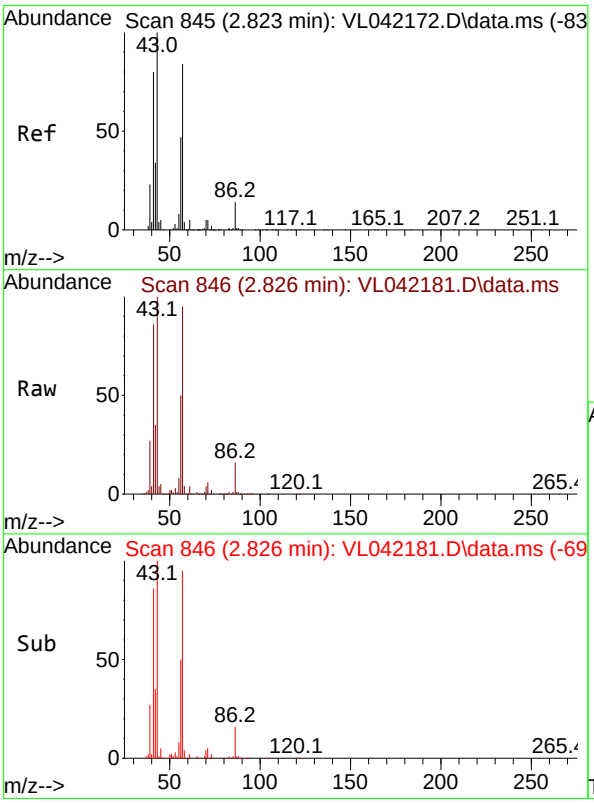
#25
Ethyl Acetate
Concen: 9.528 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 43 Resp: 574442

Ion	Ratio	Lower	Upper
43	100		
45	10.1	8.2	12.2
61	9.0	7.3	10.9
70	8.6	7.2	10.8

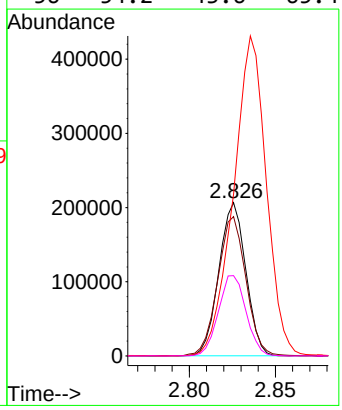


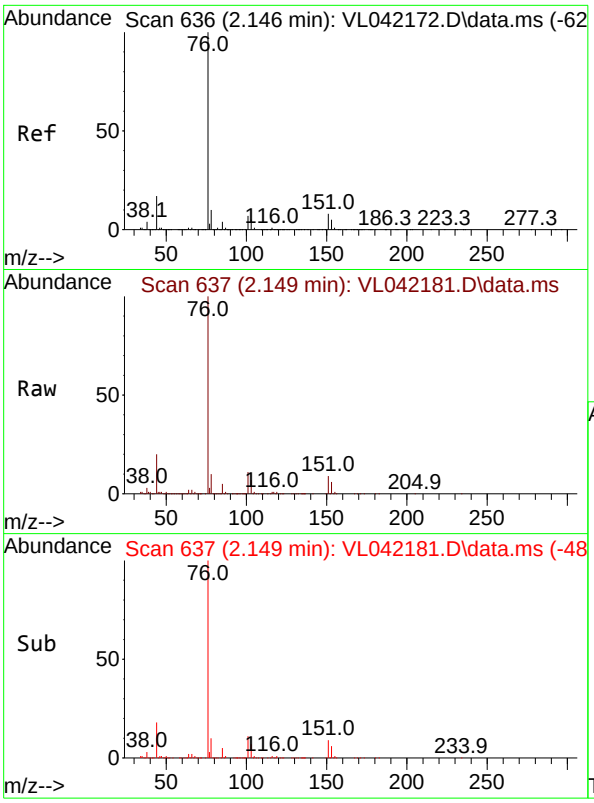


#26
Hexane
Concen: 9.649 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 57 Resp: 224704

Ion	Ratio	Lower	Upper
57	100		
41	95.3	76.6	114.8
43	255.9	207.8	311.8
56	54.2	43.6	65.4



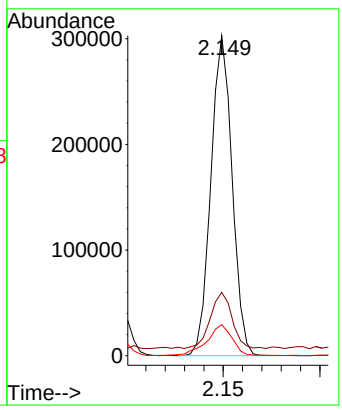


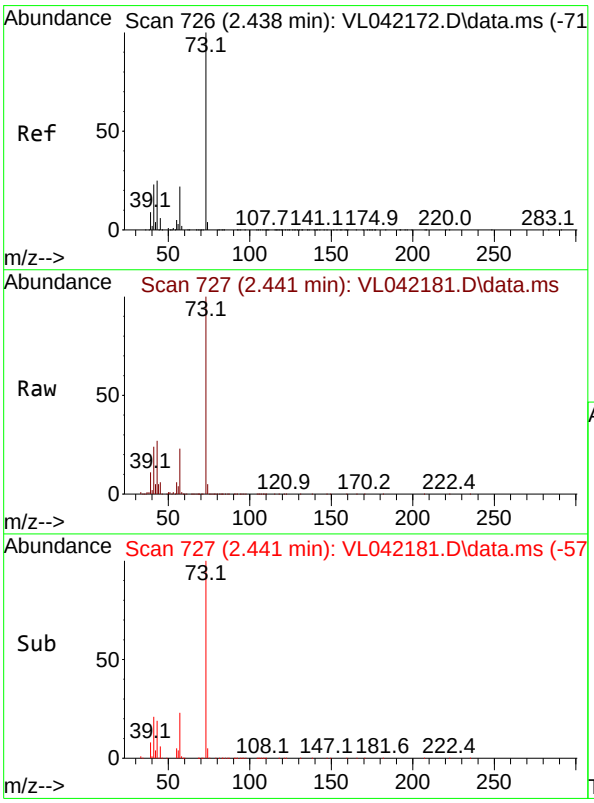
#27
Carbon Disulfide
Concen: 9.226 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 76 Resp: 230410

Ion	Ratio	Lower	Upper
76	100		
44	22.5	14.7	22.1#
78	11.5	9.3	13.9

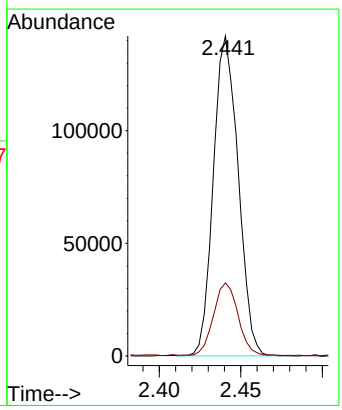


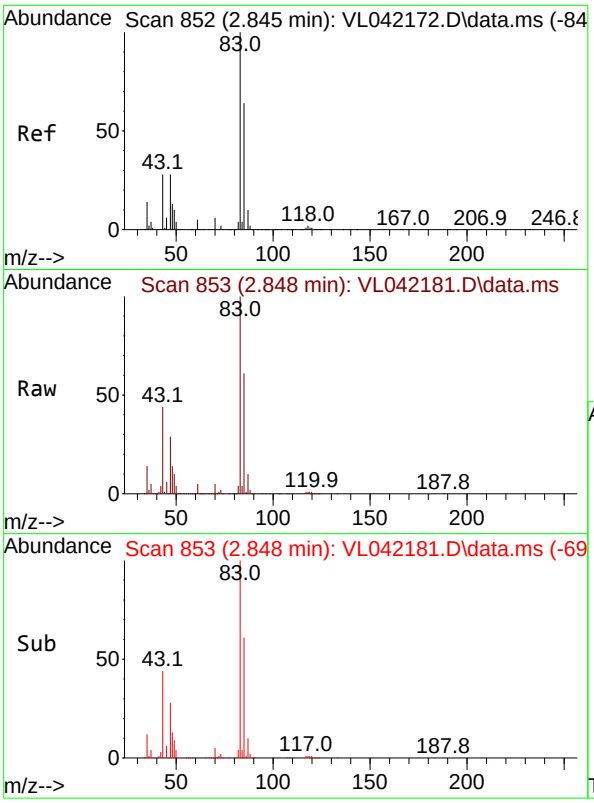


#28
Methyl tert-Butyl Ether
Concen: 10.342 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 73 Resp: 149961

Ion	Ratio	Lower	Upper
73	100		
57	23.0	20.5	30.7



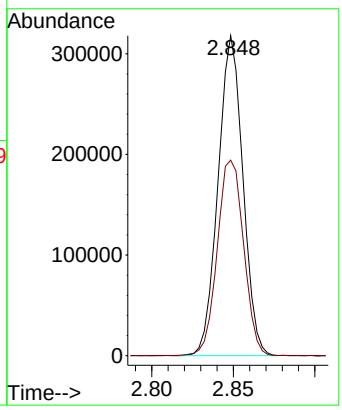


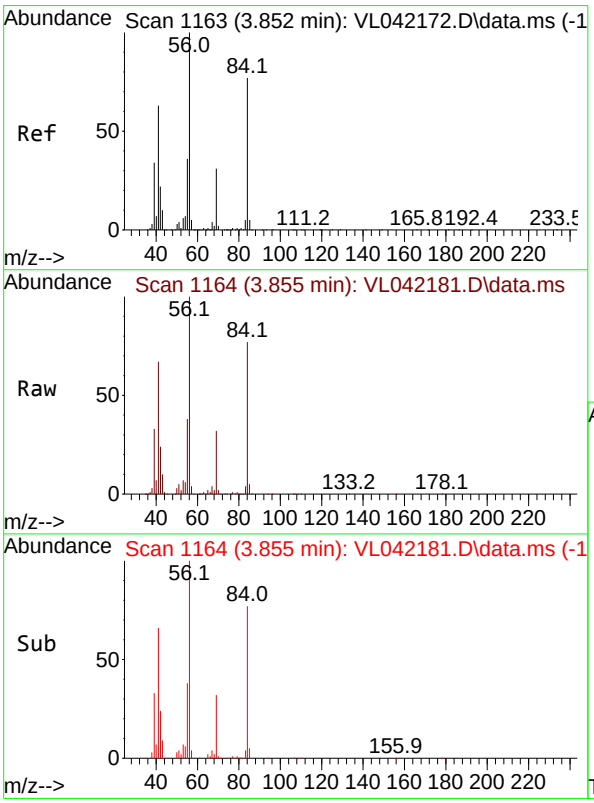
#29
Chloroform
Concen: 9.870 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 83 Resp: 336404

Ion	Ratio	Lower	Upper
83	100		
85	61.0	51.4	77.2

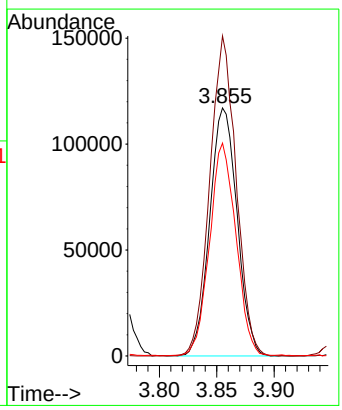


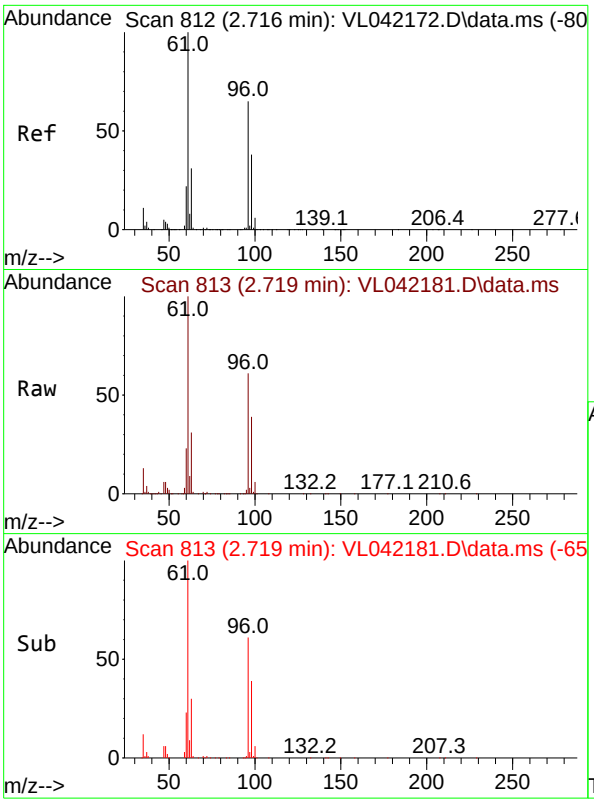


#30
Cyclohexane
Concen: 9.604 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 84 Resp: 194220

Ion	Ratio	Lower	Upper
84	100		
56	124.4	102.8	154.2
41	82.7	66.5	99.7



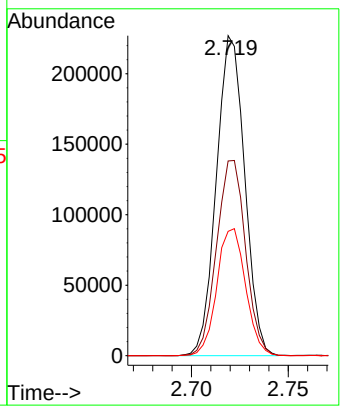


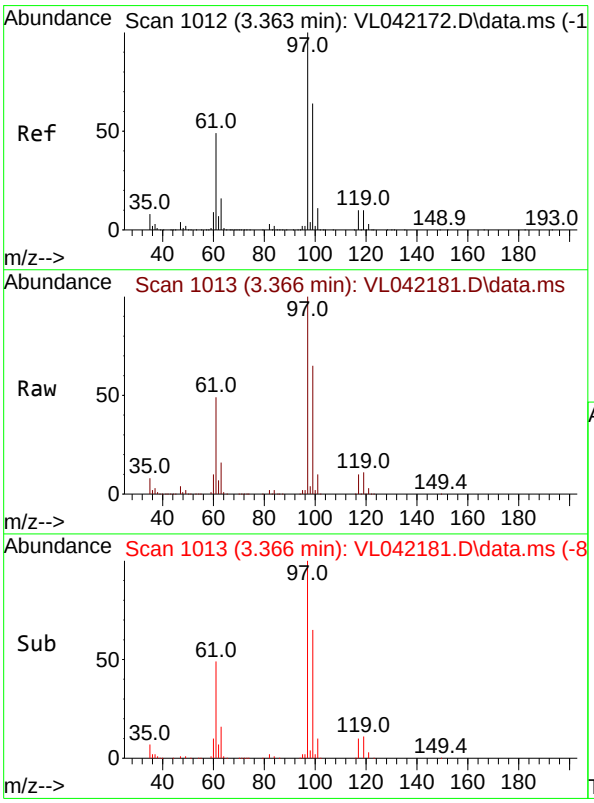
#31
cis-1,2-Dichloroethene
Concen: 9.777 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 61 Resp: 231151

Ion	Ratio	Lower	Upper
61	100		
96	60.8	51.8	77.8
98	38.8	30.6	46.0

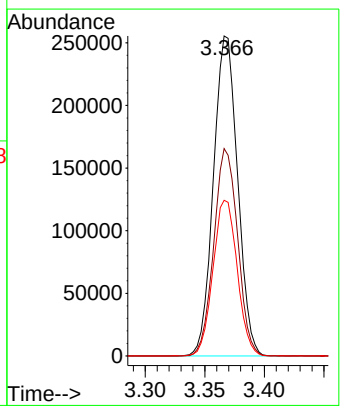


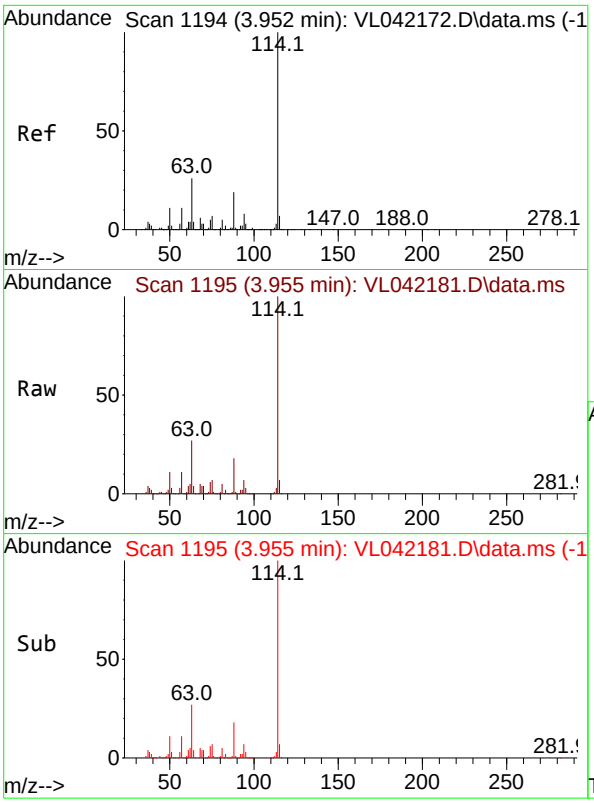


#32
1,1,1-Trichloroethane
Concen: 9.223 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 97 Resp: 359860

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.5	77.3
61	48.9	38.7	58.1



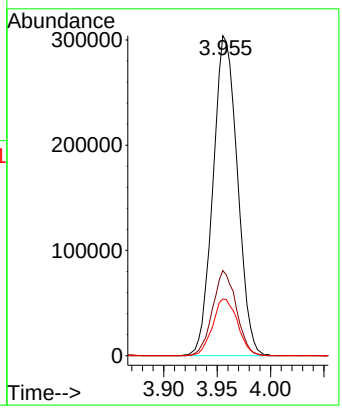


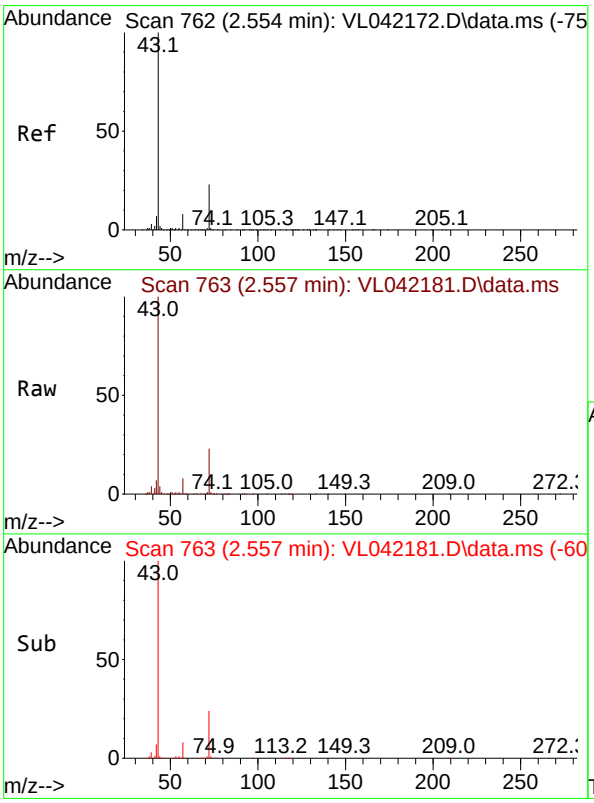
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:114 Resp: 483209

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.1	15.0	22.4

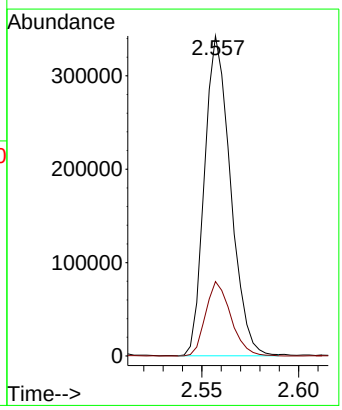


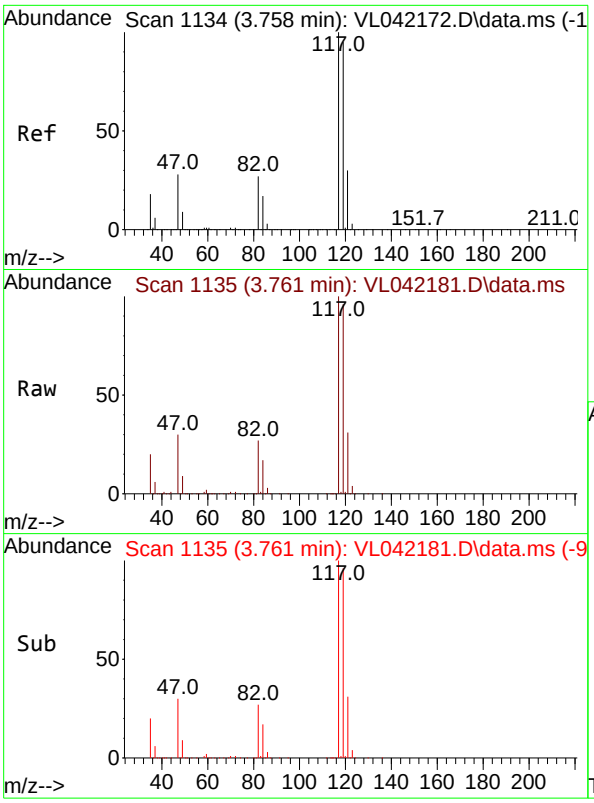


#34
2-Butanone
Concen: 9.157 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 320843

Ion	Ratio	Lower	Upper
43	100		
72	22.6	18.2	27.2



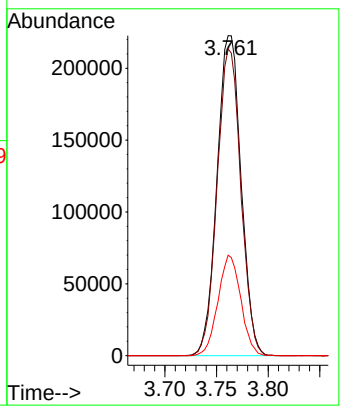


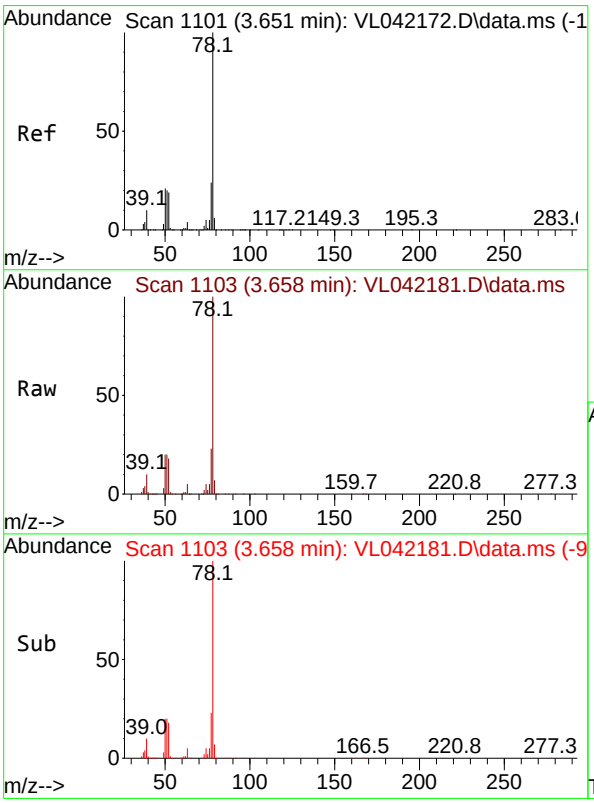
#35
Carbon Tetrachloride
Concen: 9.565 ppbv
RT: 3.761 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:117 Resp: 361037

Ion	Ratio	Lower	Upper
117	100		
119	95.8	76.2	114.2
121	31.4	24.2	36.4

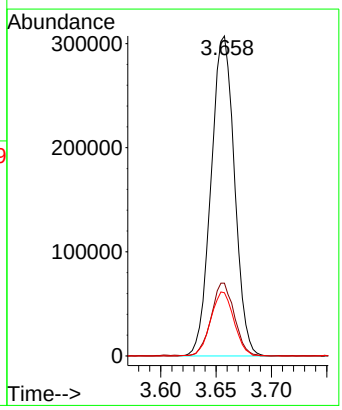


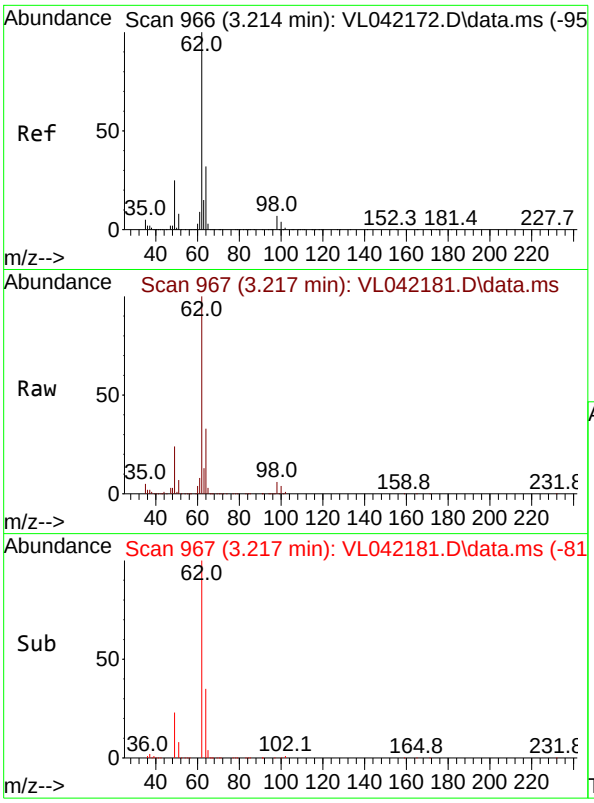


#36
Benzene
Concen: 9.450 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 78 Resp: 452718

Ion	Ratio	Lower	Upper
78	100		
77	22.7	19.1	28.7
50	19.7	16.6	24.8



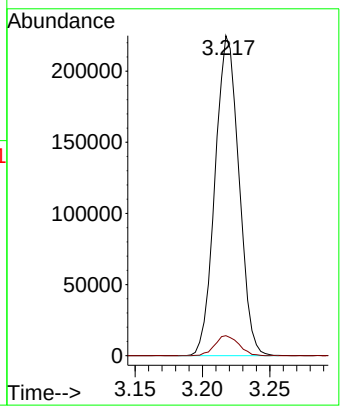


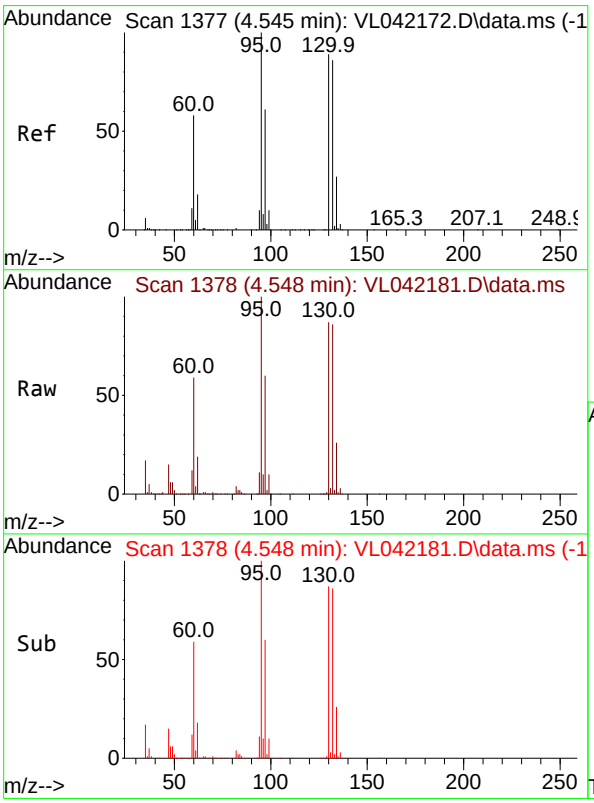
#37
1,2-Dichloroethane
Concen: 10.109 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 62 Resp: 277247

Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.4	8.2

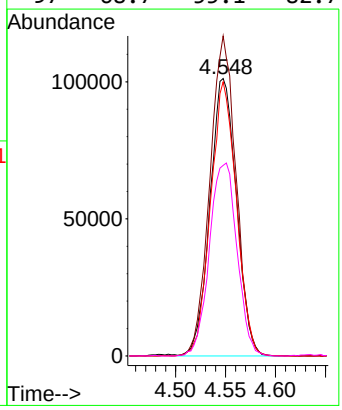


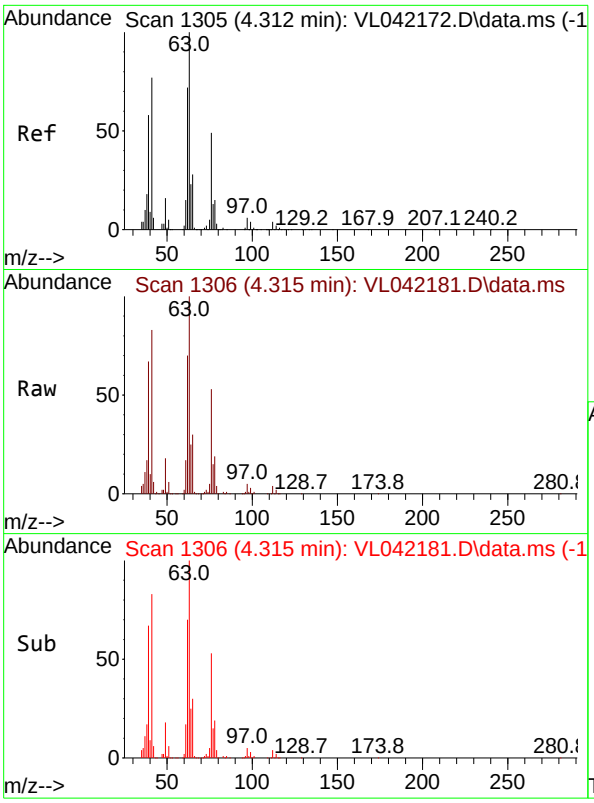


#38
Trichloroethene
Concen: 9.366 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:130 Resp: 187209

Ion	Ratio	Lower	Upper
130	100		
95	115.3	89.8	134.8
132	98.7	77.4	116.2
97	68.7	55.1	82.7



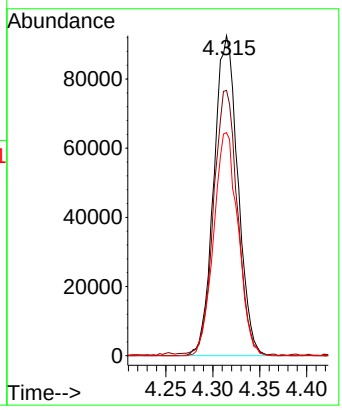


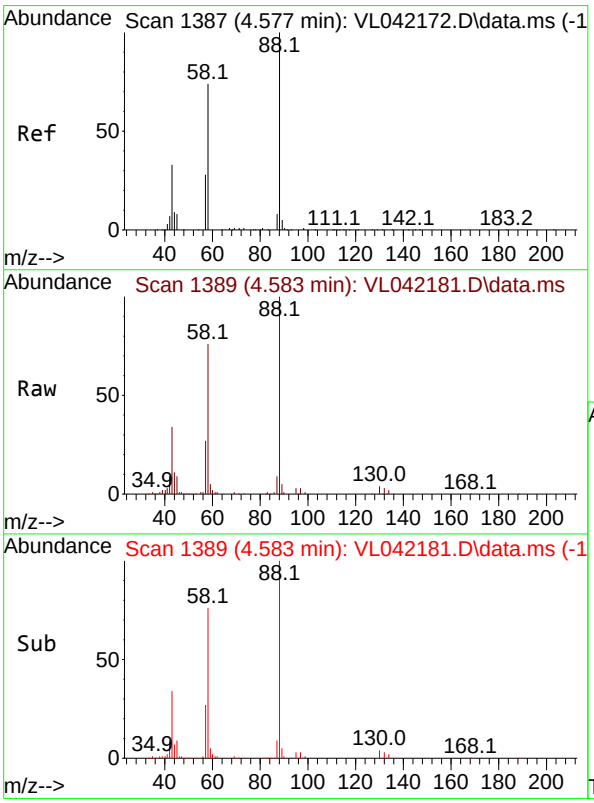
#39
1,2-Dichloropropane
Concen: 9.422 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 63 Resp: 164374

Ion	Ratio	Lower	Upper
63	100		
41	82.9	61.7	92.5
62	69.7	57.6	86.4

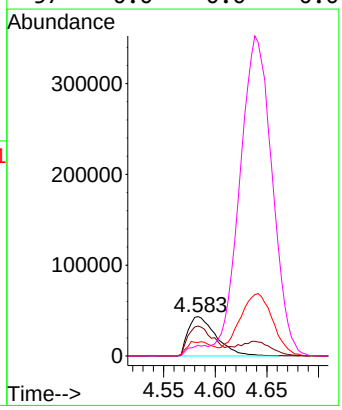


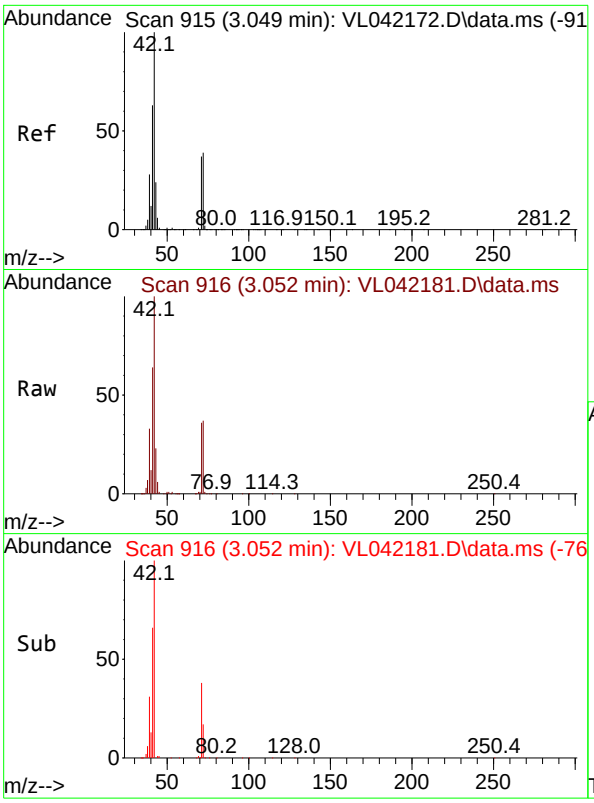


#40
1,4-Dioxane
Concen: 8.857 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 88 Resp: 82012

Ion	Ratio	Lower	Upper
88	100		
58	73.5	62.7	94.1
43	35.8	23.0	34.4#
57	0.0	0.0	0.0



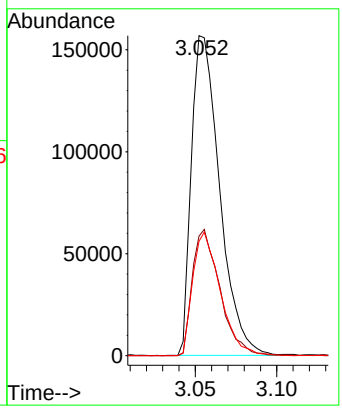


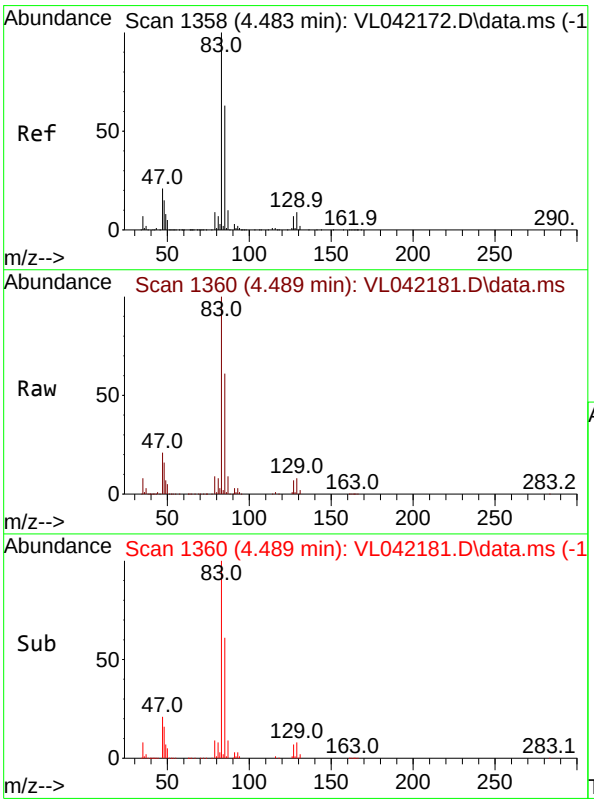
#41
Tetrahydrofuran
Concen: 9.362 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 42 Resp: 188907

Ion	Ratio	Lower	Upper
42	100		
72	38.5	31.4	47.0
71	37.8	30.2	45.4

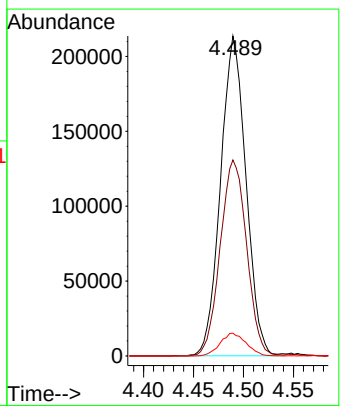


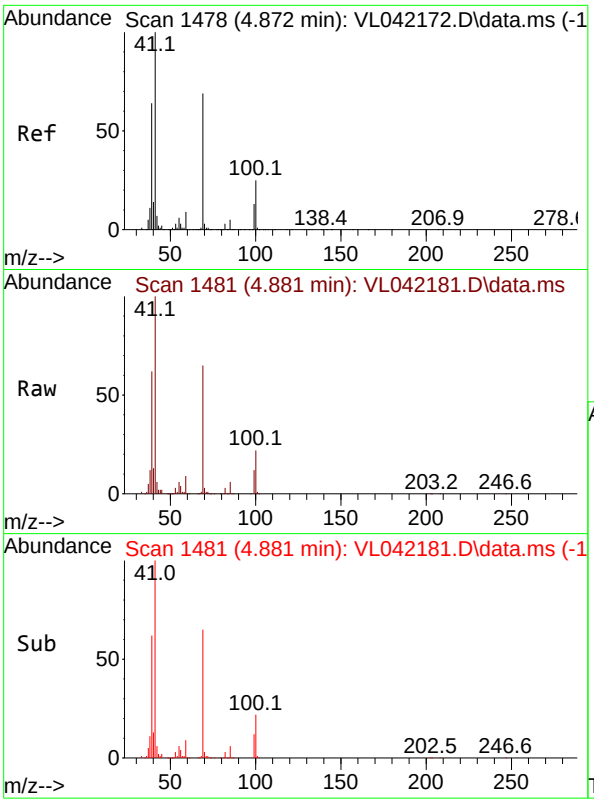


#42
Bromodichloromethane
Concen: 9.974 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 83 Resp: 377092

Ion	Ratio	Lower	Upper
83	100		
85	61.3	50.5	75.7
127	7.1	5.9	8.9



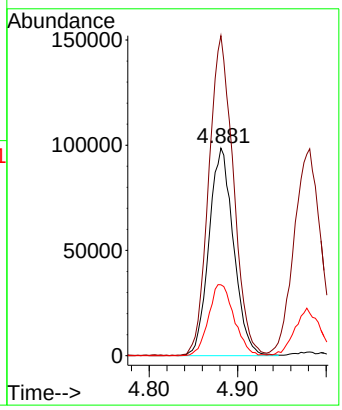


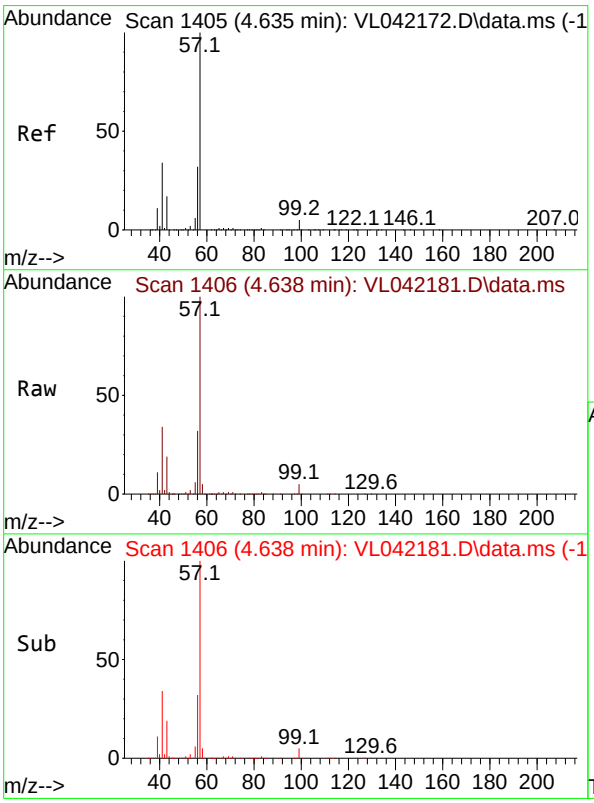
#43
Methyl Methacrylate
Concen: 9.377 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.009 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 69 Resp: 190156

Ion	Ratio	Lower	Upper
69	100		
41	154.1	123.8	185.6
100	35.7	28.4	42.6

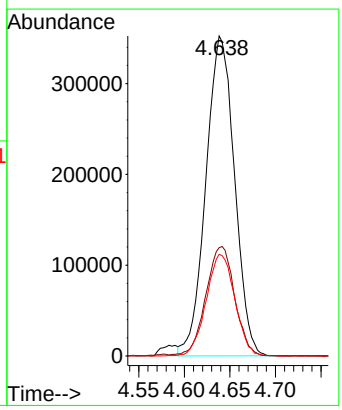


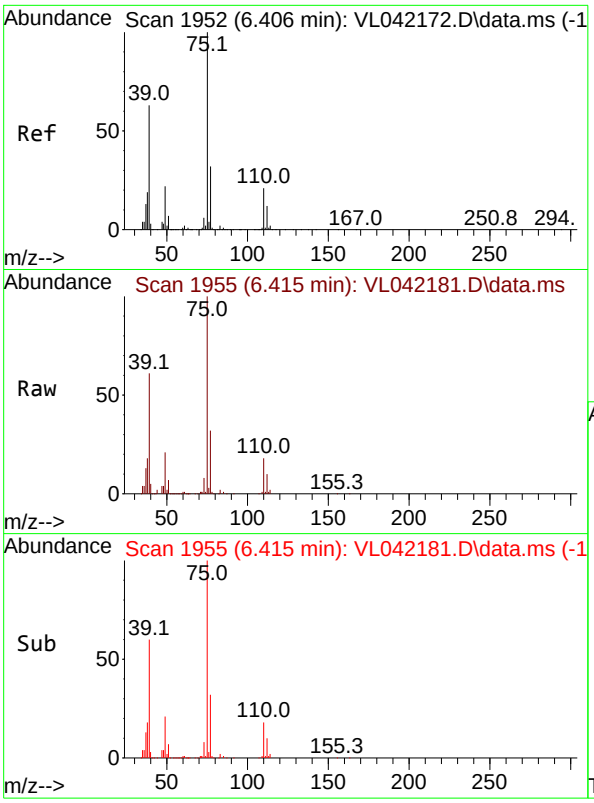


#44
2,2,4-Trimethylpentane
Concen: 9.509 ppbv
RT: 4.638 min Scan# 1406
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 57 Resp: 769803

Ion	Ratio	Lower	Upper
57	100		
41	34.8	26.8	40.2
56	31.8	25.6	38.4



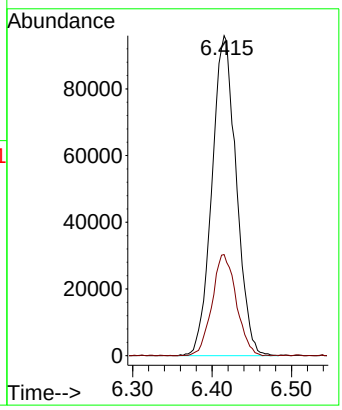


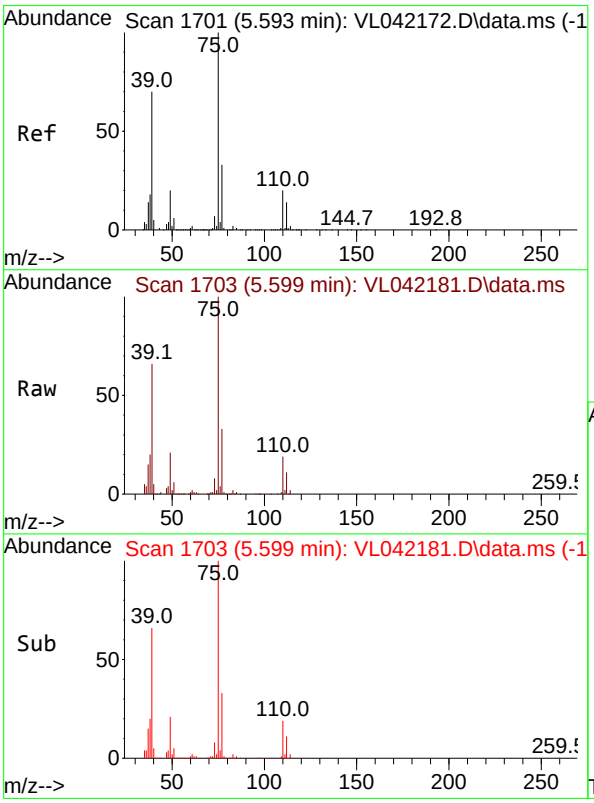
#45
t-1,3-Dichloropropene
Concen: 9.376 ppbv
RT: 6.415 min Scan# 1
Delta R.T. 0.009 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 75 Resp: 204004

Ion	Ratio	Lower	Upper
75	100		
77	31.6	26.0	39.0

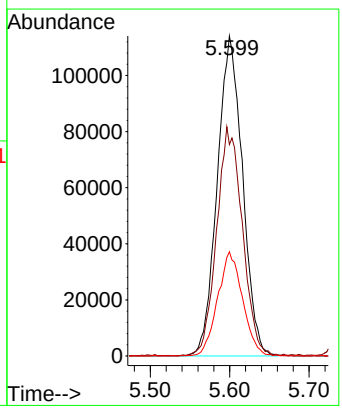


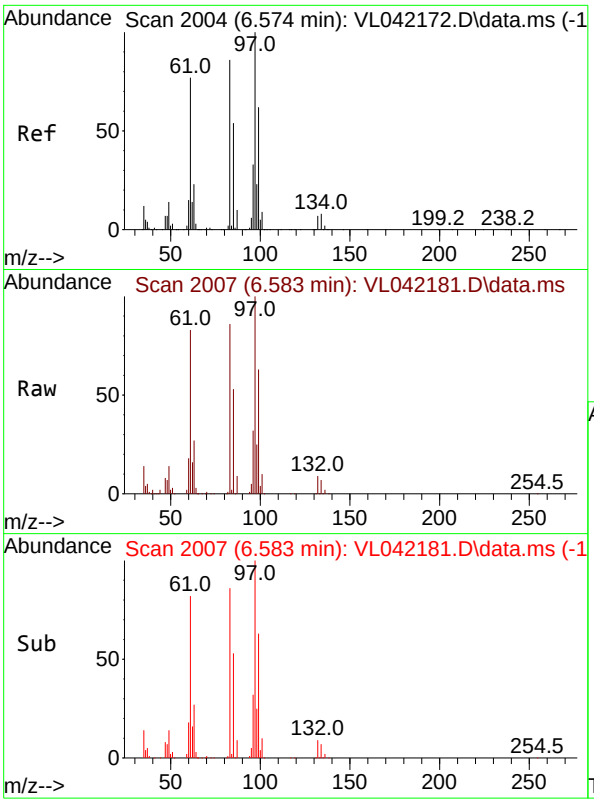


#46
cis-1,3-Dichloropropene
Concen: 9.437 ppbv
RT: 5.599 min Scan# 1703
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 75 Resp: 251694

Ion	Ratio	Lower	Upper
75	100		
39	66.0	55.8	83.6
77	32.6	26.0	39.0



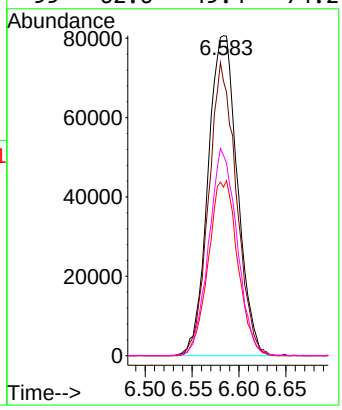


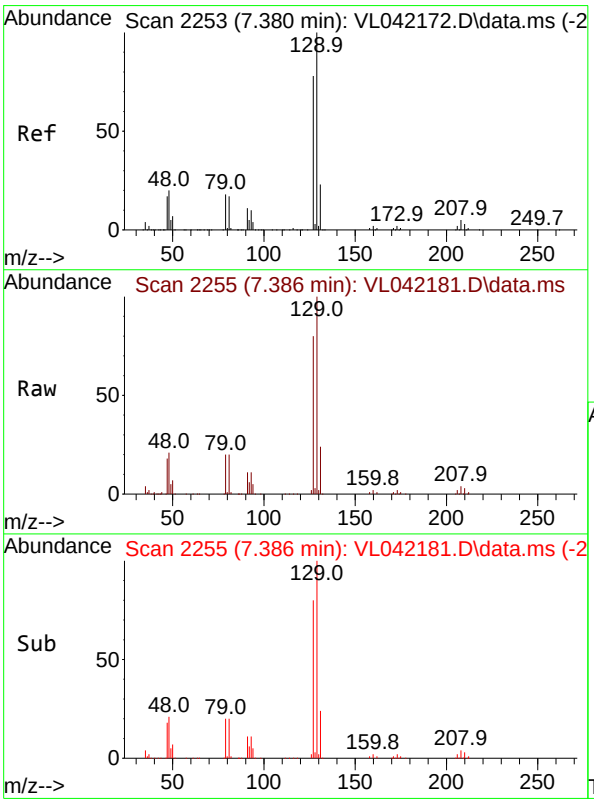
#47
1,1,2-Trichloroethane
Concen: 9.517 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.009 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 97 Resp: 175509

Ion	Ratio	Lower	Upper
97	100		
83	85.6	69.2	103.8
85	52.6	43.1	64.7
99	62.6	49.4	74.2

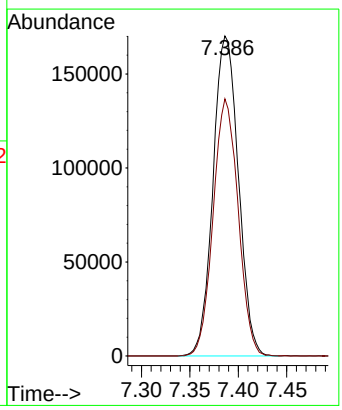


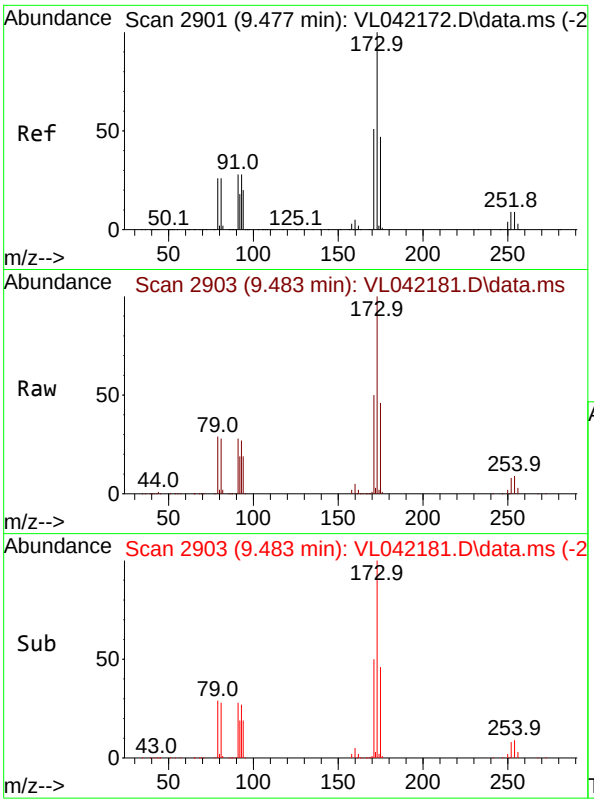


#48
Dibromochloromethane
Concen: 9.923 ppbv
RT: 7.386 min Scan# 2255
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:129 Resp: 310158

Ion	Ratio	Lower	Upper
129	100		
127	79.1	39.1	117.2



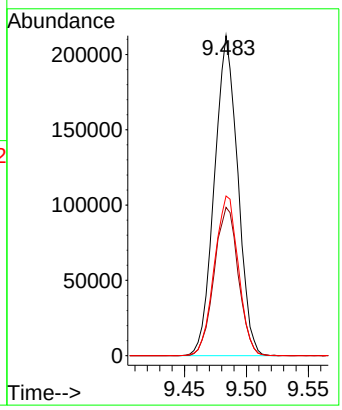


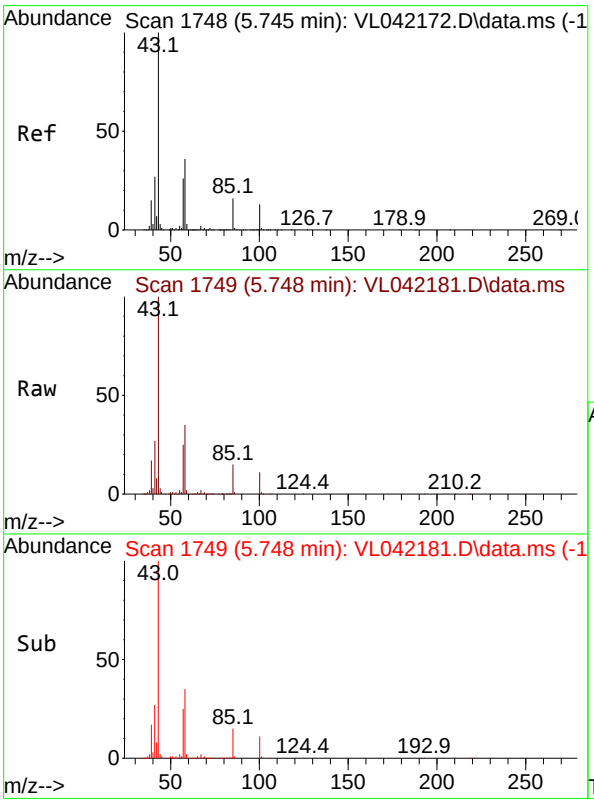
#49
Bromoform
Concen: 9.957 ppbv
RT: 9.483 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:173 Resp: 279382

Ion	Ratio	Lower	Upper
173	100		
175	48.0	38.6	57.8
171	51.4	41.8	62.6

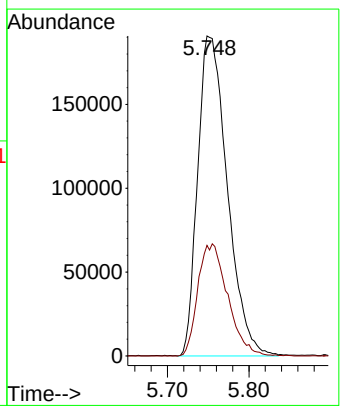


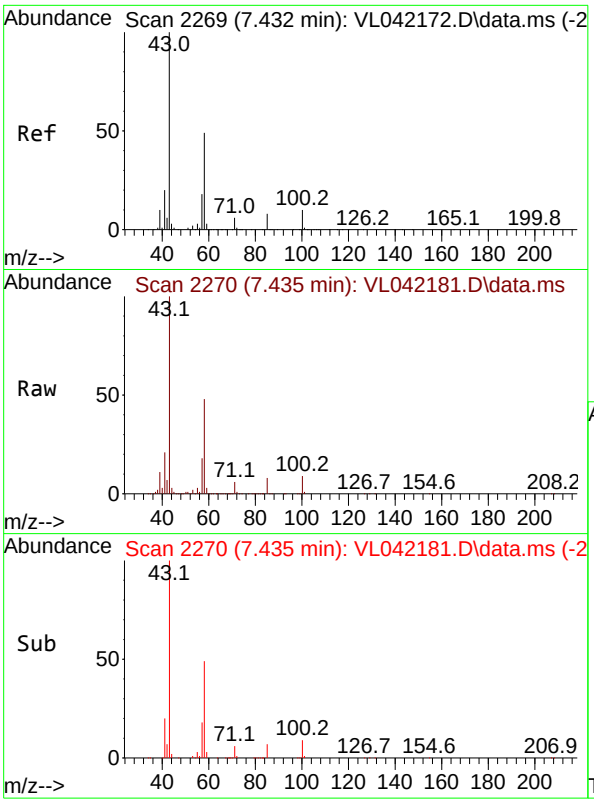


#50
4-Methyl-2-Pentanone
Concen: 8.679 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 43 Resp: 481919

Ion	Ratio	Lower	Upper
43	100		
58	35.3	29.0	43.6



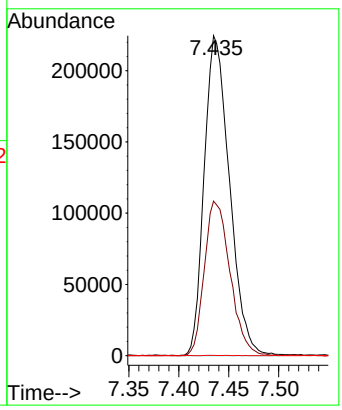


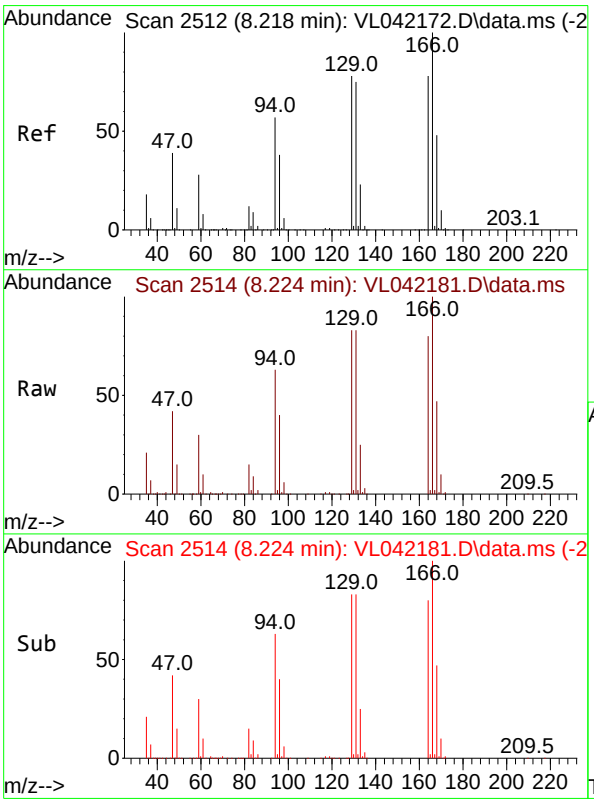
#51
2-Hexanone
Concen: 8.674 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 43 Resp: 395520

Ion	Ratio	Lower	Upper
43	100		
58	49.0	39.7	59.5
98	0.1	0.1	0.1

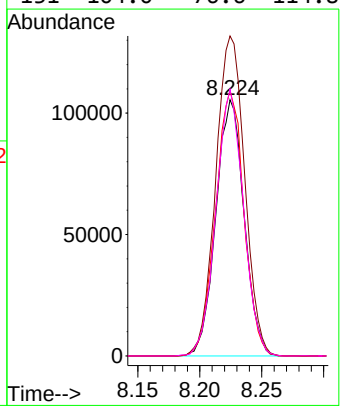


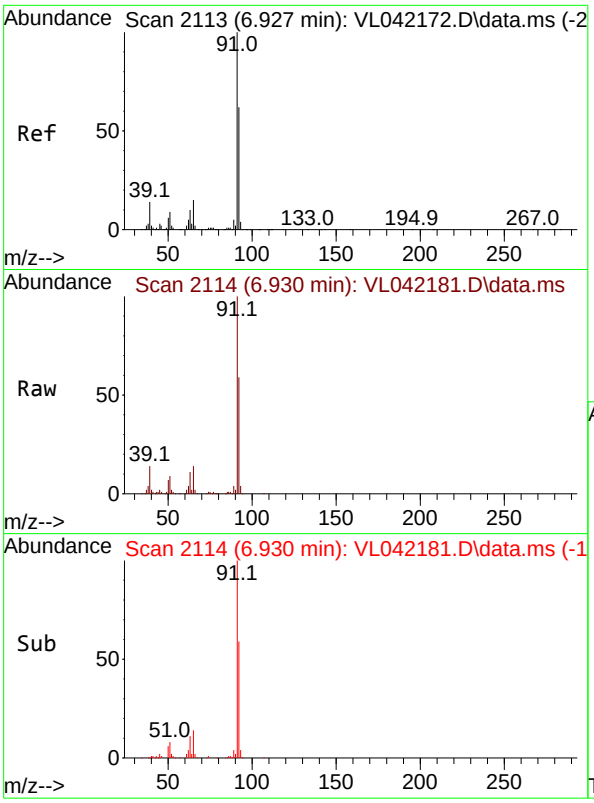


#52
Tetrachloroethene
Concen: 8.791 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:164 Resp: 167015

Ion	Ratio	Lower	Upper
164	100		
166	124.8	102.5	153.7
129	103.6	79.8	119.8
131	104.0	76.6	114.8



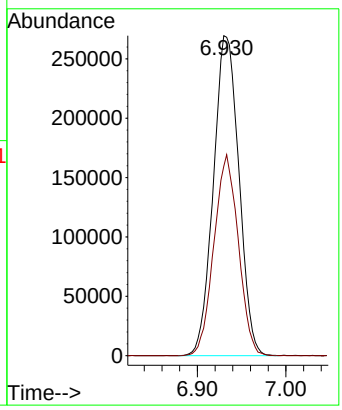


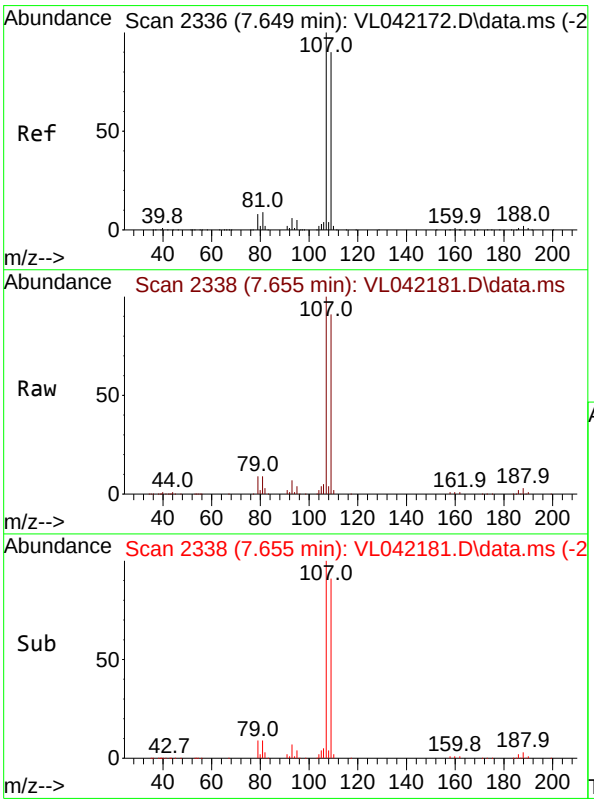
#53
Toluene
Concen: 9.520 ppbv
RT: 6.930 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 91 Resp: 540612

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.4	72.6

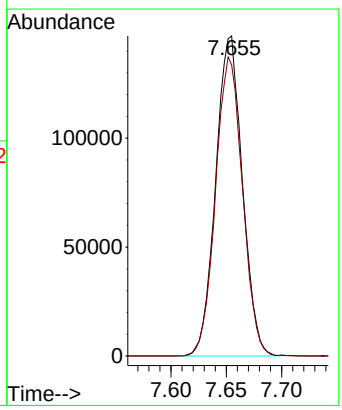


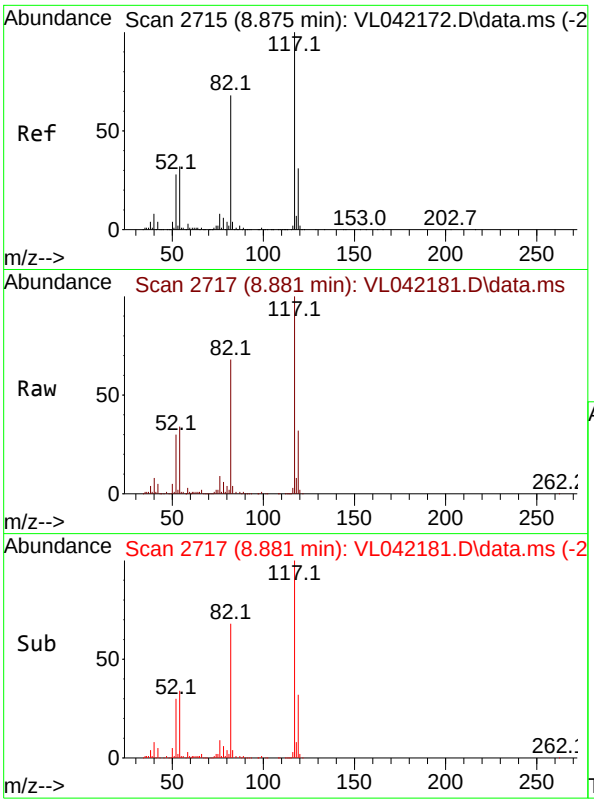


#54
1,2-Dibromoethane
Concen: 9.589 ppbv
RT: 7.655 min Scan# 2338
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:107 Resp: 246519

Ion	Ratio	Lower	Upper
107	100		
109	90.9	72.2	108.4



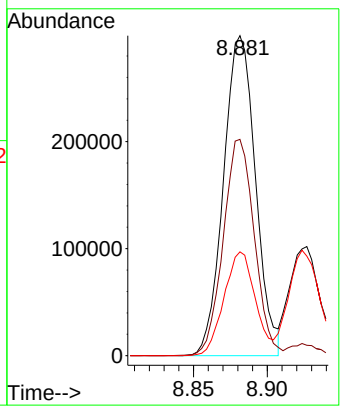


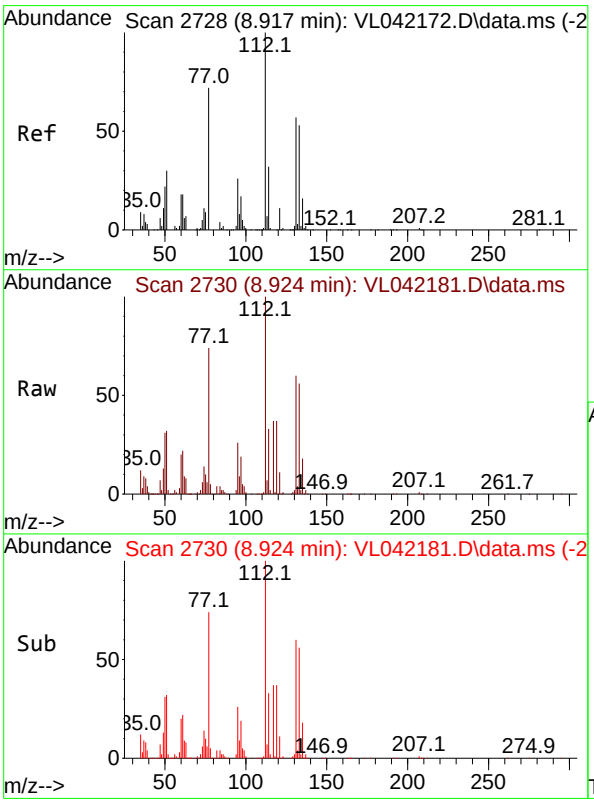
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:117 Resp: 452250

Ion	Ratio	Lower	Upper
117	100		
82	68.9	55.8	83.6
119	32.8	25.5	38.3

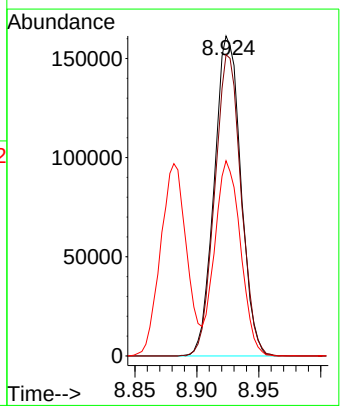


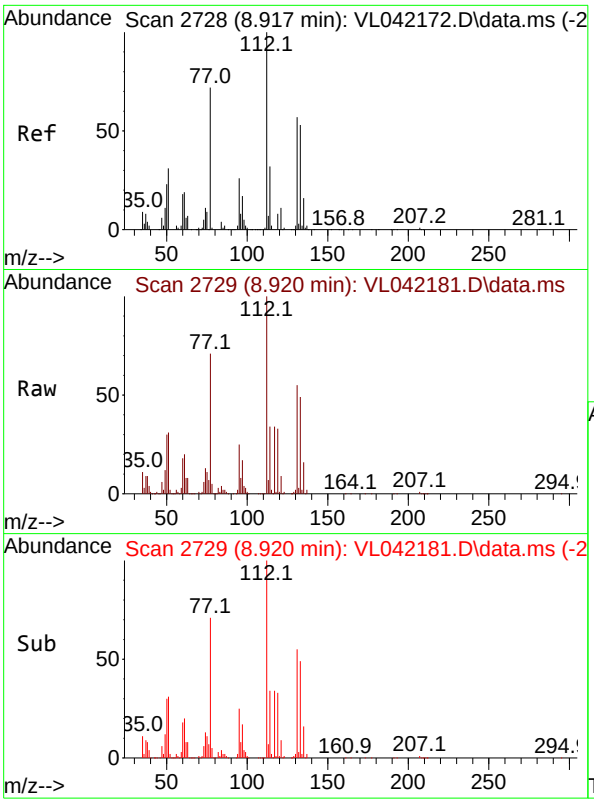


#56
1,1,1,2-Tetrachloroethane
Concen: 9.677 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:131 Resp: 240905

Ion	Ratio	Lower	Upper
131	100		
133	93.5	76.6	114.8
119	57.6	49.8	74.6



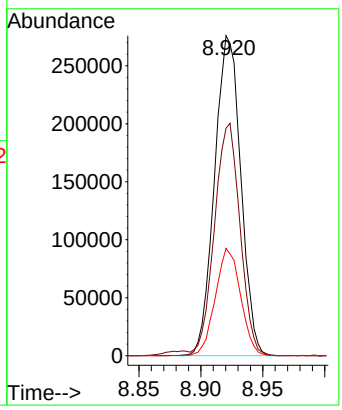


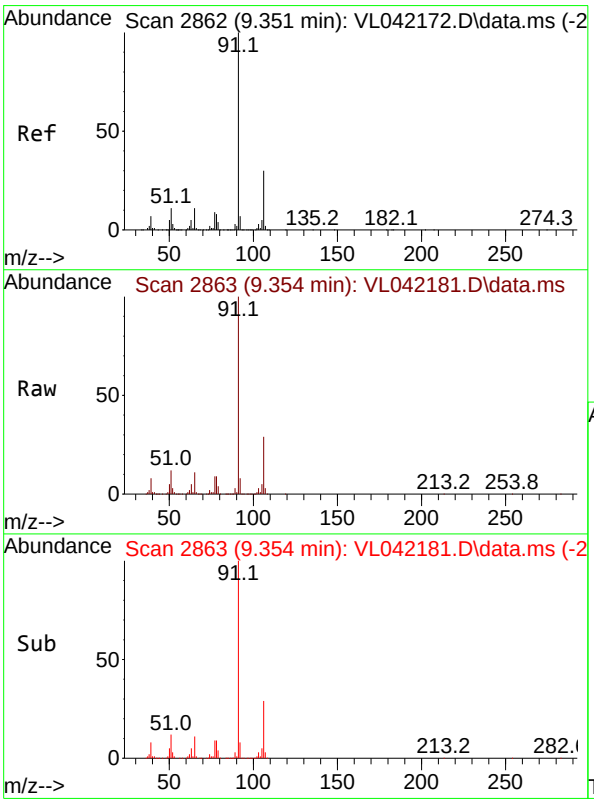
#57
Chlorobenzene
Concen: 9.507 ppbv
RT: 8.920 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:112 Resp: 407816

Ion	Ratio	Lower	Upper
112	100		
77	71.1	58.2	87.2
114	33.6	29.1	35.5

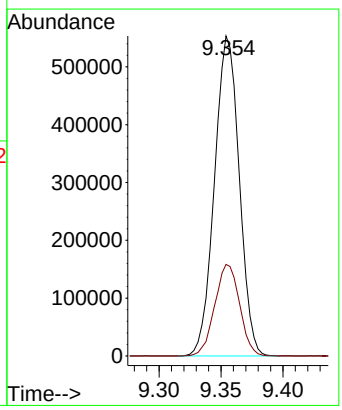


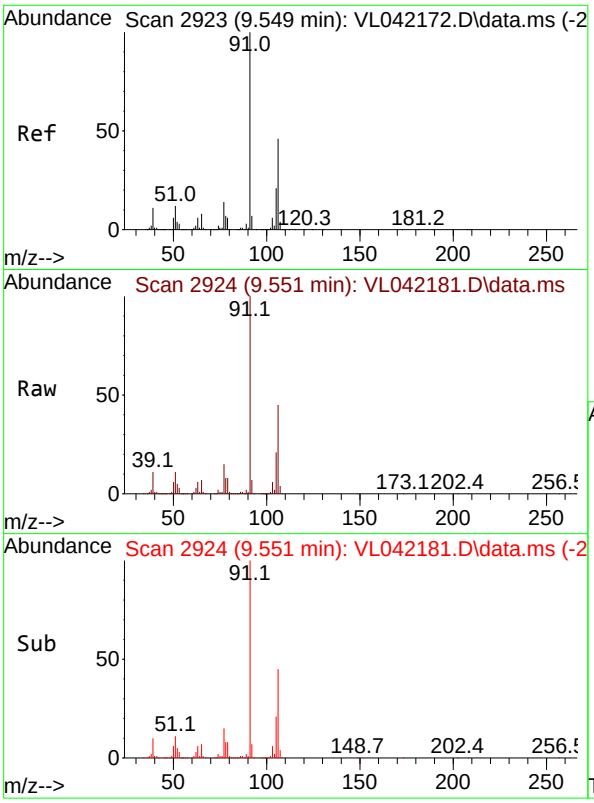


#58
Ethyl Benzene
Concen: 9.583 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 769818

Ion	Ratio	Lower	Upper
91	100		
106	28.6	24.2	36.2



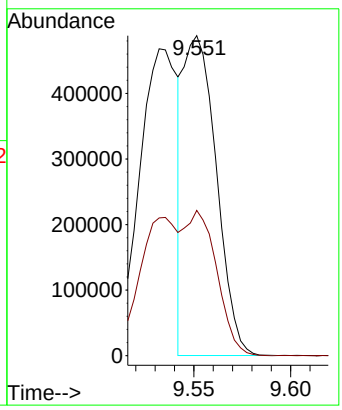


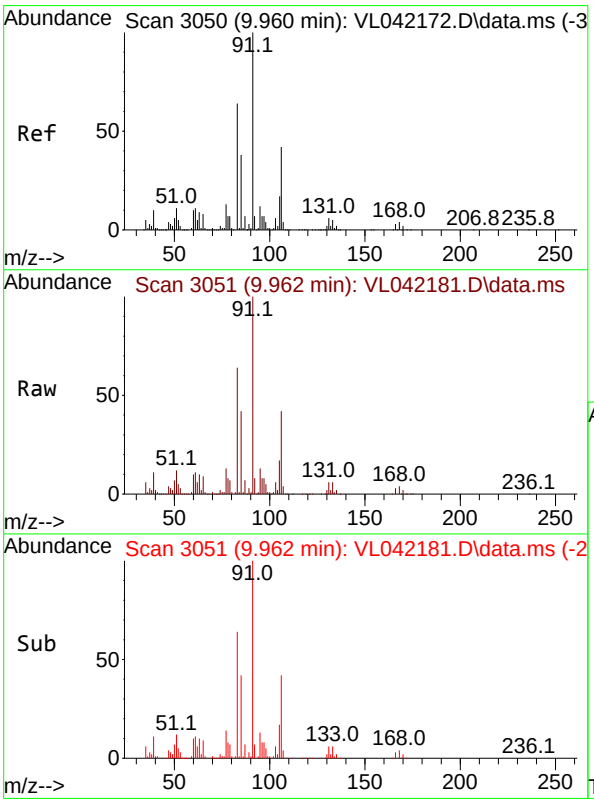
#59
m/p-Xylene
Concen: 8.961 ppbv
RT: 9.551 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 91 Resp: 574799

Ion	Ratio	Lower	Upper
91	100		
106	95.9	36.4	54.6#

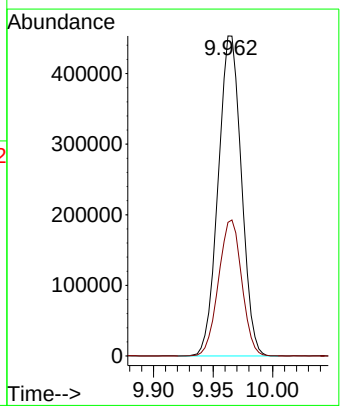


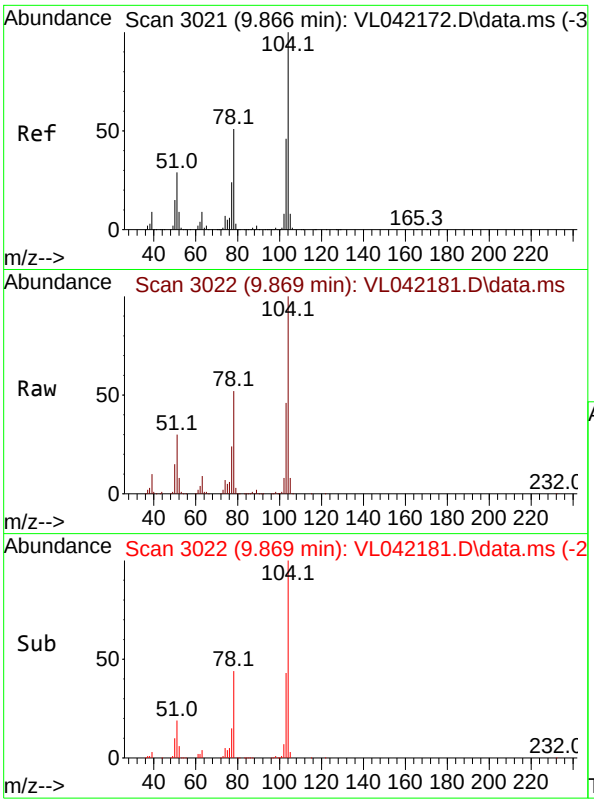


#60
o-Xylene
Concen: 9.518 ppbv
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 612011

Ion	Ratio	Lower	Upper
91	100		
106	42.7	20.8	62.5



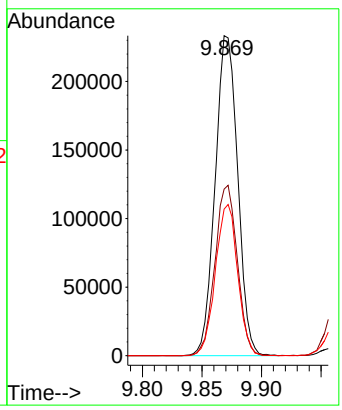


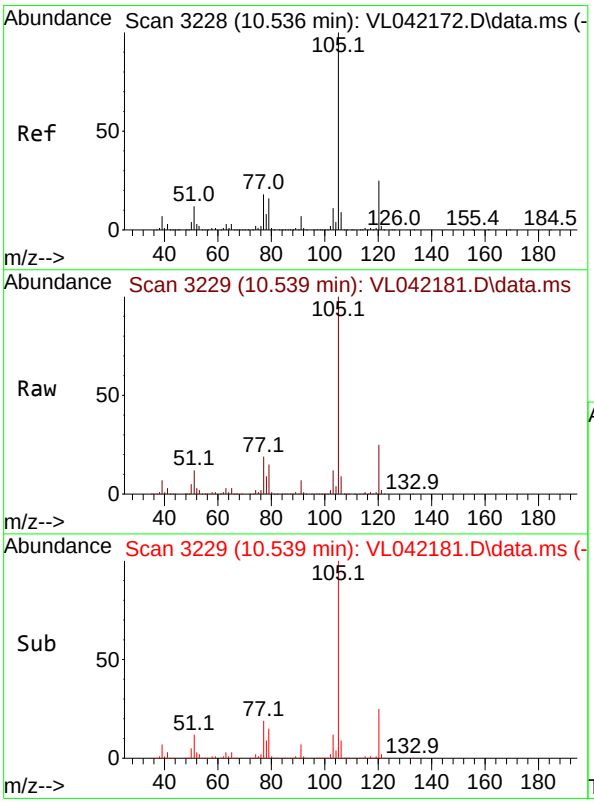
#61
Styrene
Concen: 9.639 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:104 Resp: 306658

Ion	Ratio	Lower	Upper
104	100		
78	52.9	41.8	62.6
103	46.8	37.0	55.4

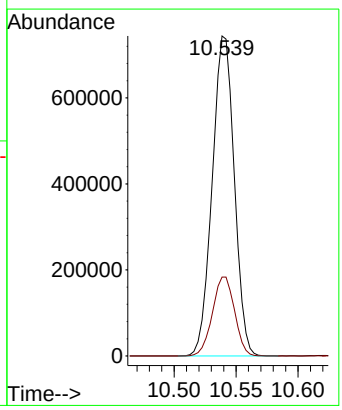


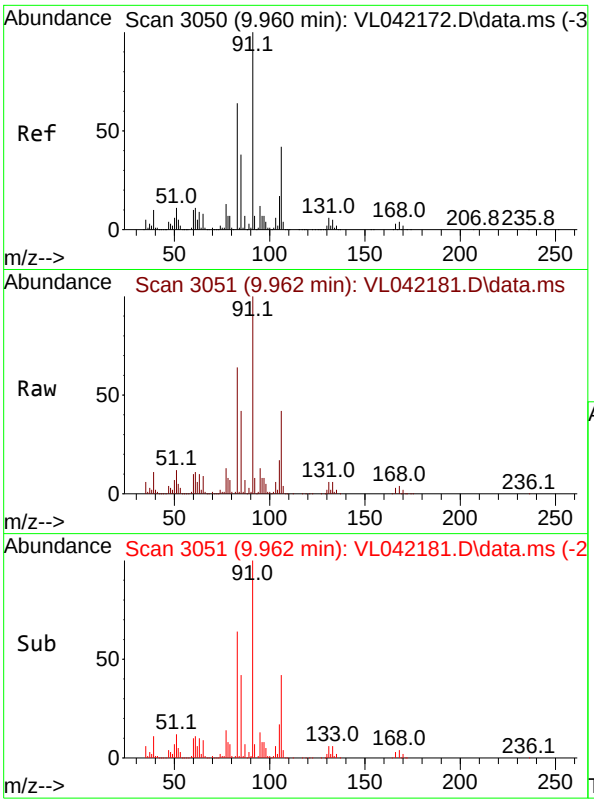


#62
Isopropylbenzene
Concen: 9.600 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 923163

Ion	Ratio	Lower	Upper
105	100		
120	24.8	19.9	29.9



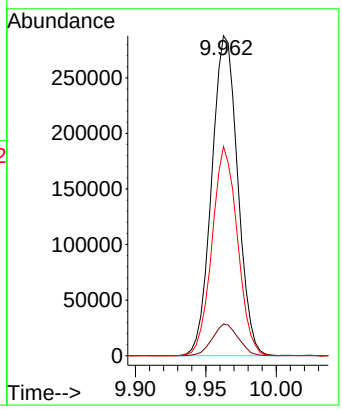


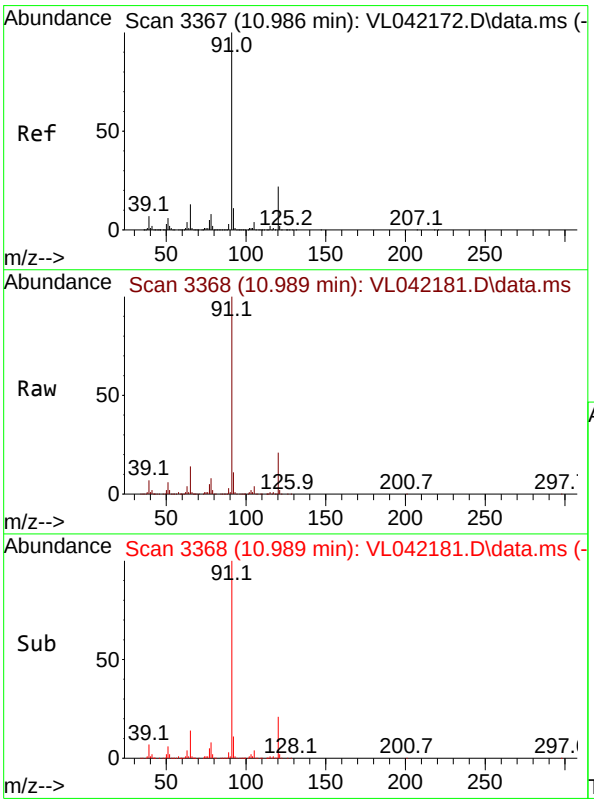
#63
1,1,2,2-Tetrachloroethane
Concen: 9.483 ppbv
RT: 9.962 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 83 Resp: 370486

Ion	Ratio	Lower	Upper
83	100		
131	9.9	4.8	14.4
85	63.9	32.5	97.5

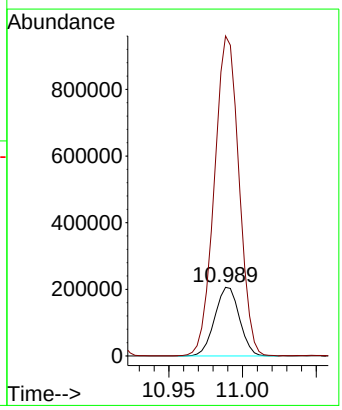


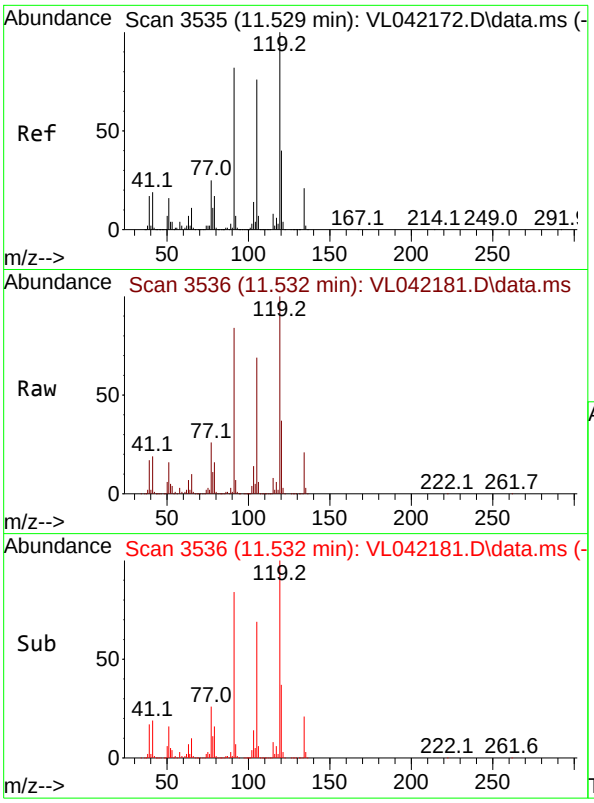


#64
n-propylbenzene
Concen: 9.682 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:120 Resp: 239652

Ion	Ratio	Lower	Upper
120	100		
91	465.1	376.9	565.3



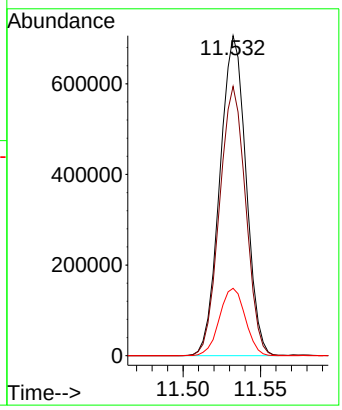


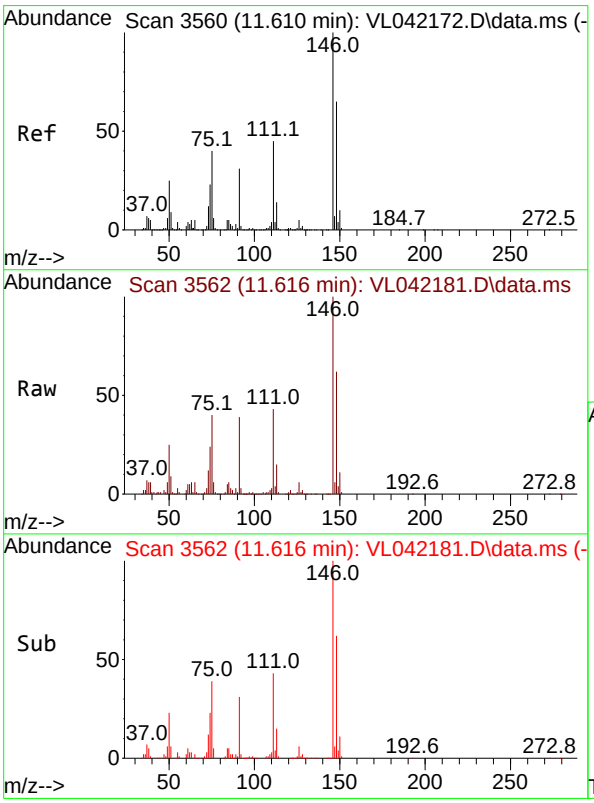
#65
tert-Butylbenzene
Concen: 9.315 ppbv
RT: 11.532 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:119 Resp: 828438

Ion	Ratio	Lower	Upper
119	100		
91	84.2	66.0	99.0
134	20.8	16.7	25.1

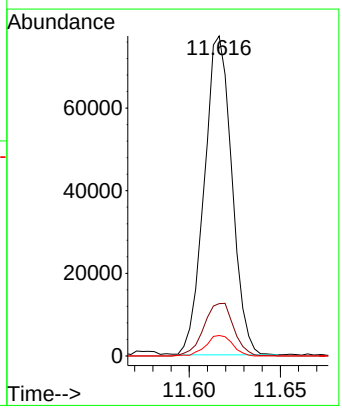


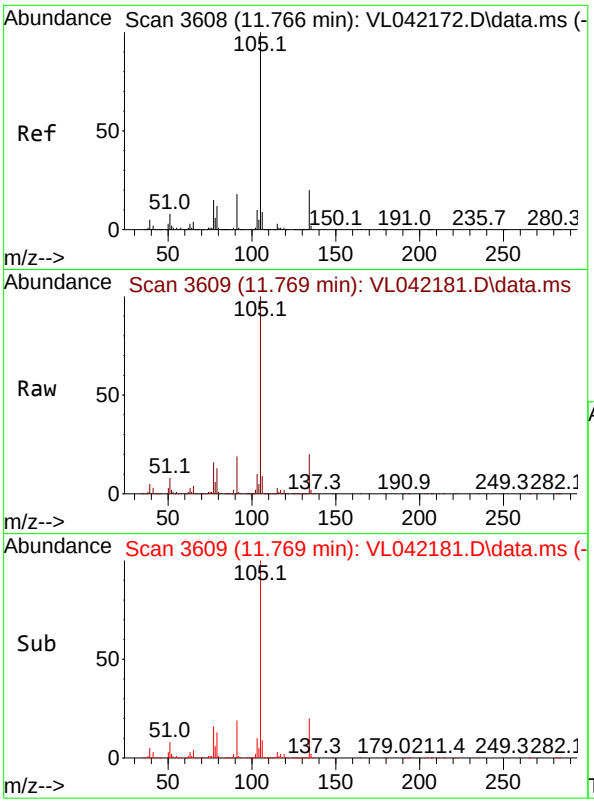


#66
Benzyl Chloride
Concen: 8.627 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 81404

Ion	Ratio	Lower	Upper
91	100		
126	17.8	13.8	20.6
128	6.2	4.5	6.7



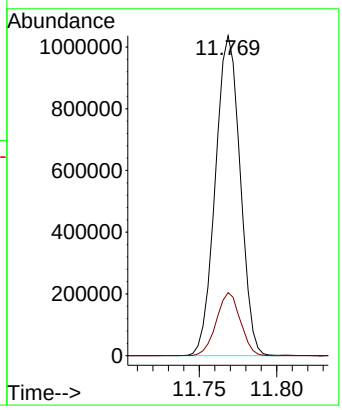


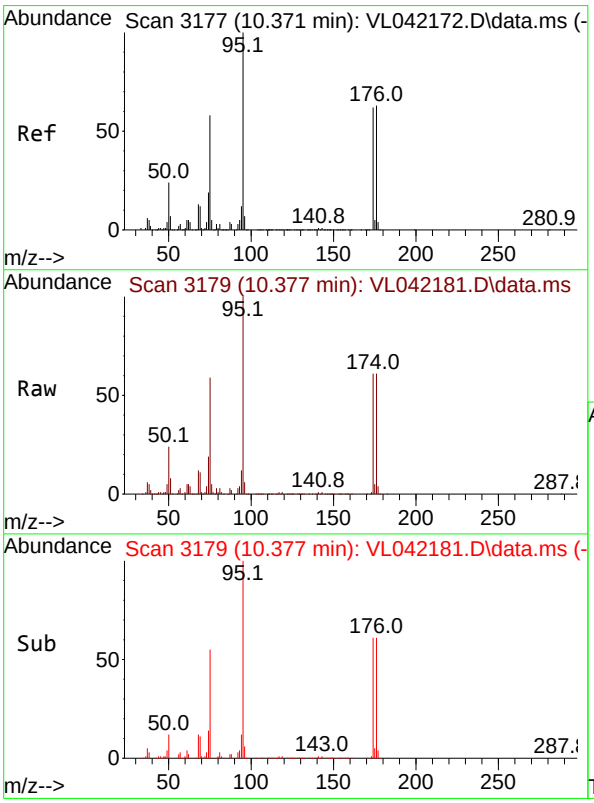
#67
sec-Butylbenzene
Concen: 9.347 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:105 Resp: 1155378

Ion	Ratio	Lower	Upper
105	100		
134	19.1	15.5	23.3

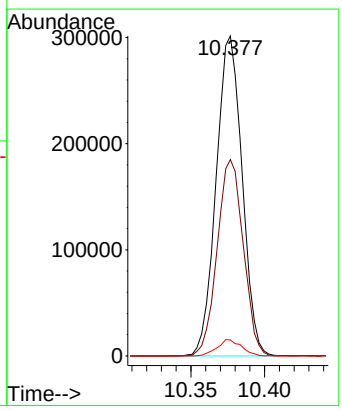


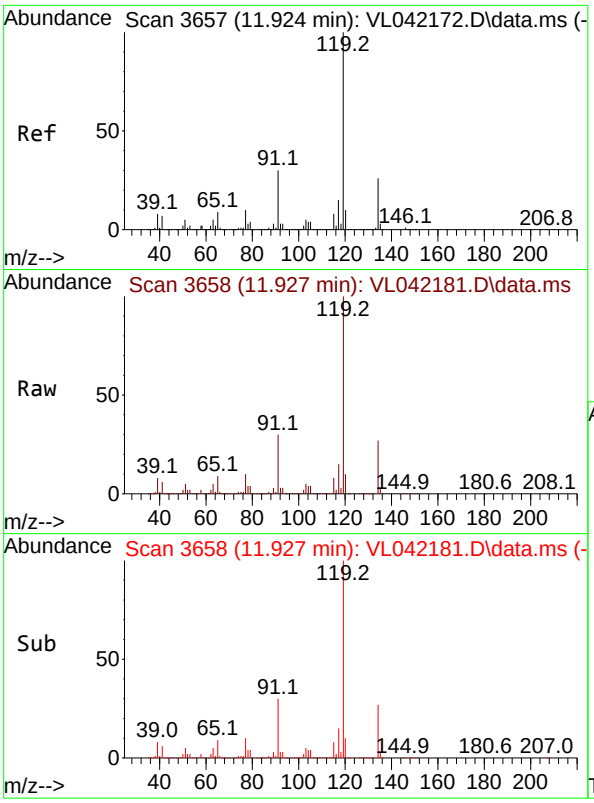


#68
1-Bromo-4-Fluorobenzene
Concen: 9.934 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 95 Resp: 368941

Ion	Ratio	Lower	Upper
95	100		
174	61.7	50.6	76.0
175	4.8	3.8	5.6



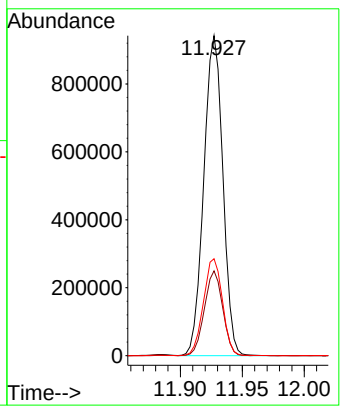


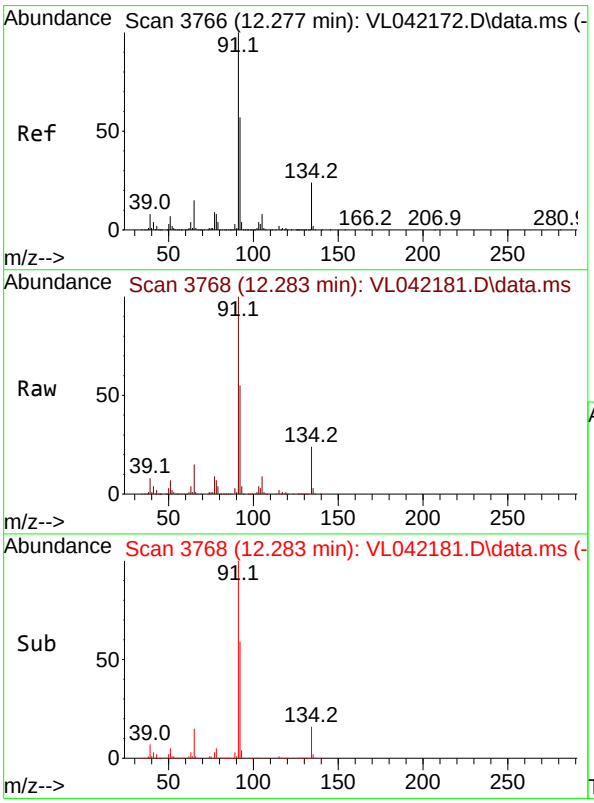
#69
p-Isopropyltoluene
Concen: 9.503 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:119 Resp: 1011573

Ion	Ratio	Lower	Upper
119	100		
134	25.5	20.4	30.6
91	30.3	23.7	35.5

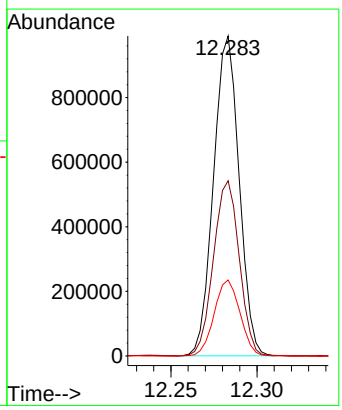


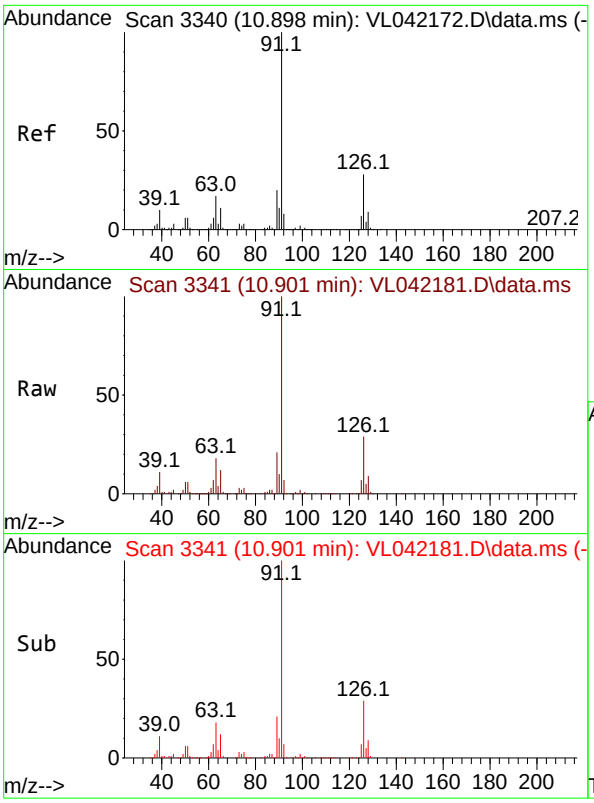


#70
n-Butylbenzene
Concen: 9.397 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion: 91 Resp: 1022935

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.9	67.3
134	24.0	19.2	28.8



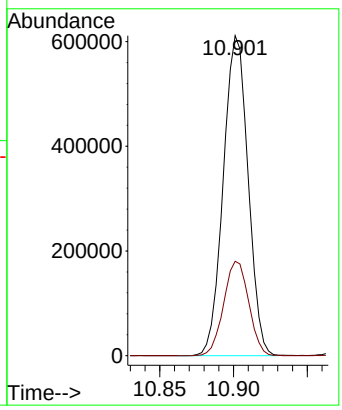


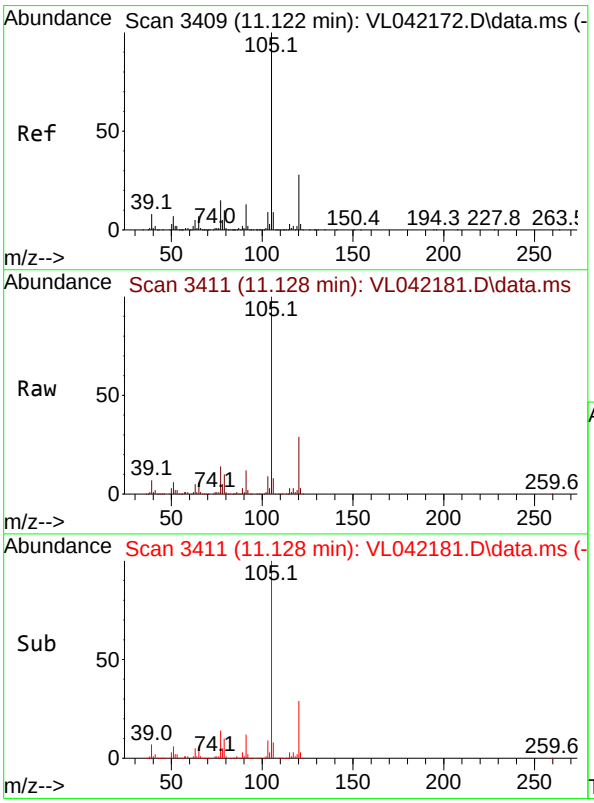
#71
2-Chlorotoluene
Concen: 9.562 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion: 91 Resp: 713648

Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4

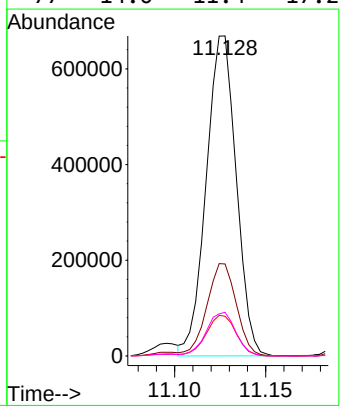


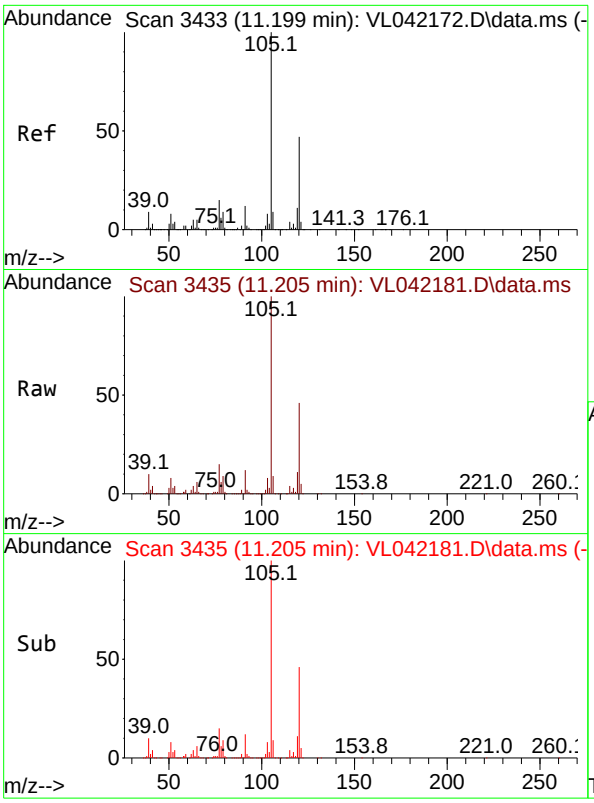


#72
4-Ethyltoluene
Concen: 9.576 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 766720

Ion	Ratio	Lower	Upper
105	100		
120	29.4	23.4	35.0
91	13.1	10.3	15.5
77	14.0	11.4	17.2



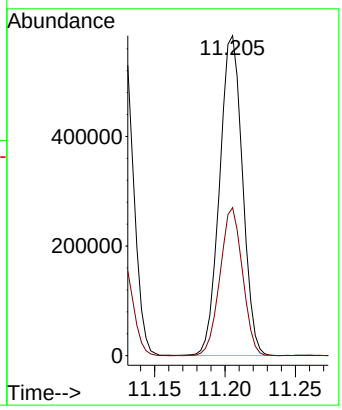


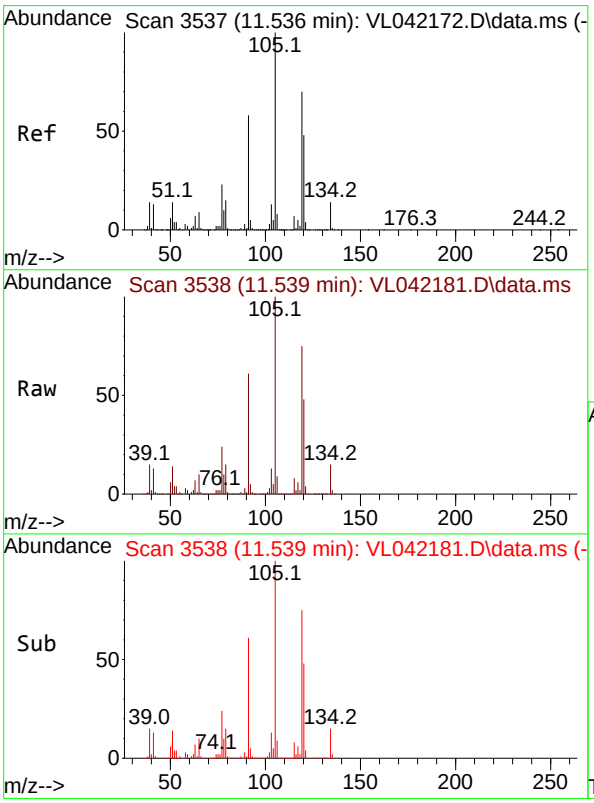
#73
1,3,5-Trimethylbenzene
Concen: 9.451 ppbv
RT: 11.205 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:105 Resp: 660905

Ion	Ratio	Lower	Upper
105	100		
120	46.3	37.4	56.0

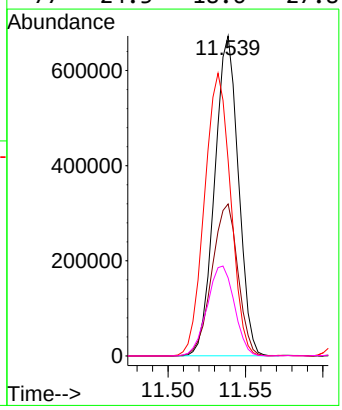


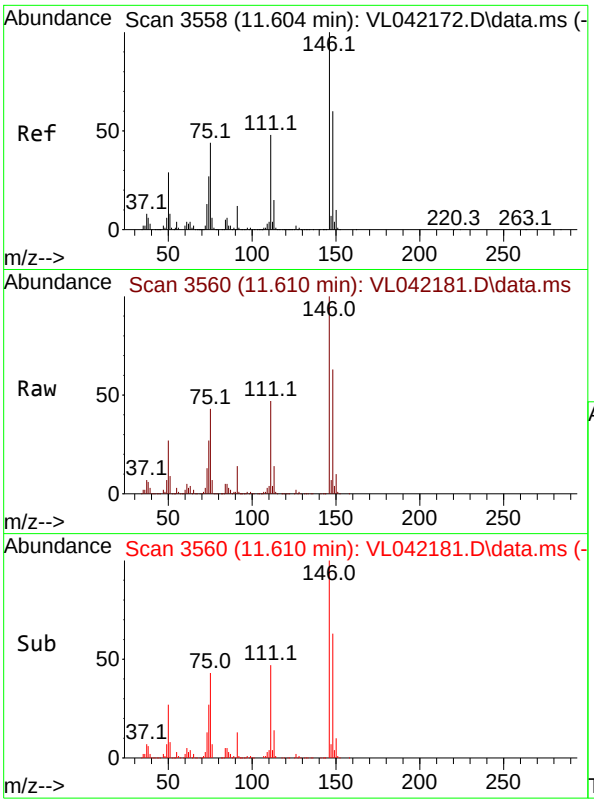


#74
1,2,4-Trimethylbenzene
Concen: 8.921 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:105 Resp: 718683

Ion	Ratio	Lower	Upper
105	100		
120	47.5	38.6	58.0
91	61.0	46.2	69.2
77	24.3	18.6	27.8



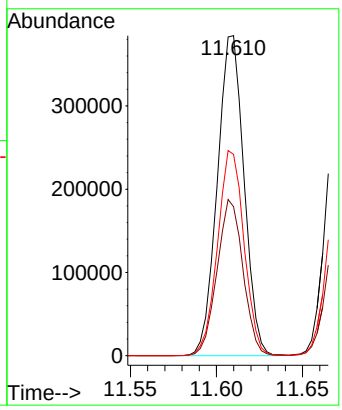


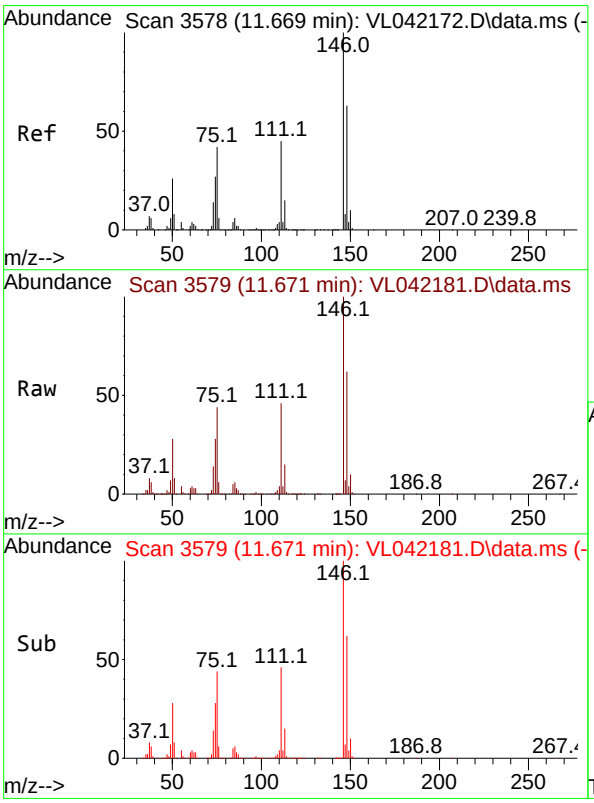
#75
1,3-Dichlorobenzene
Concen: 9.401 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:146 Resp: 415378

Ion	Ratio	Lower	Upper
146	100		
111	47.4	23.8	71.2
148	63.6	31.9	95.9

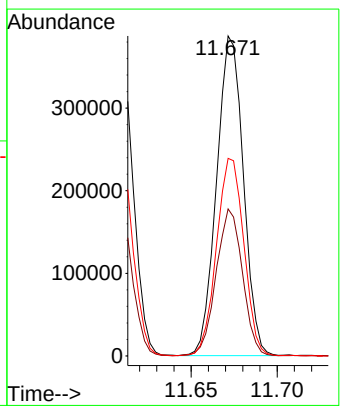


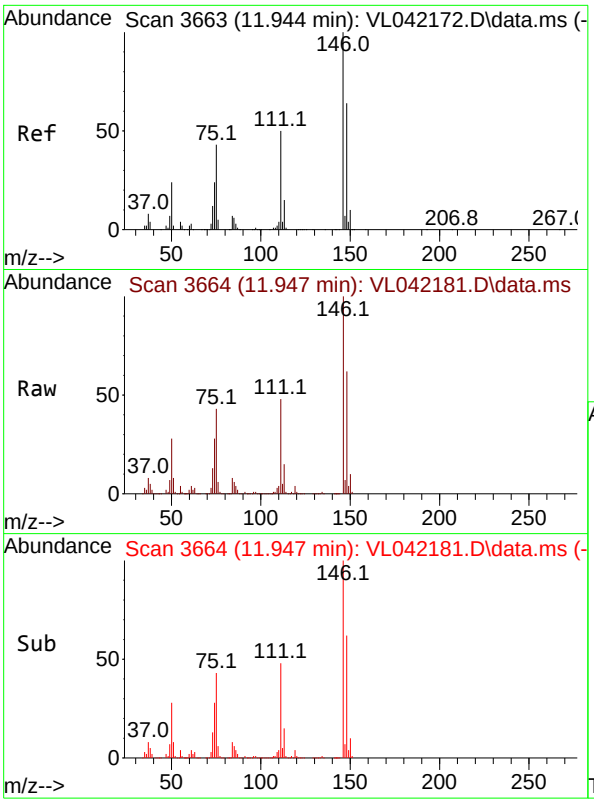


#76
1,4-Dichlorobenzene
Concen: 9.521 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:146 Resp: 418670

Ion	Ratio	Lower	Upper
146	100		
111	45.4	23.0	69.0
148	63.4	31.9	95.7



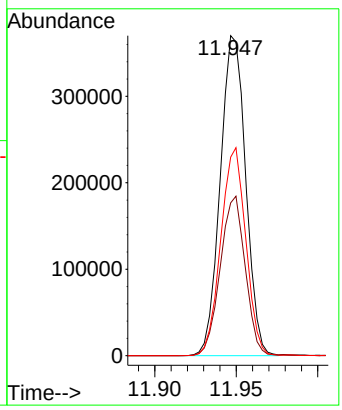


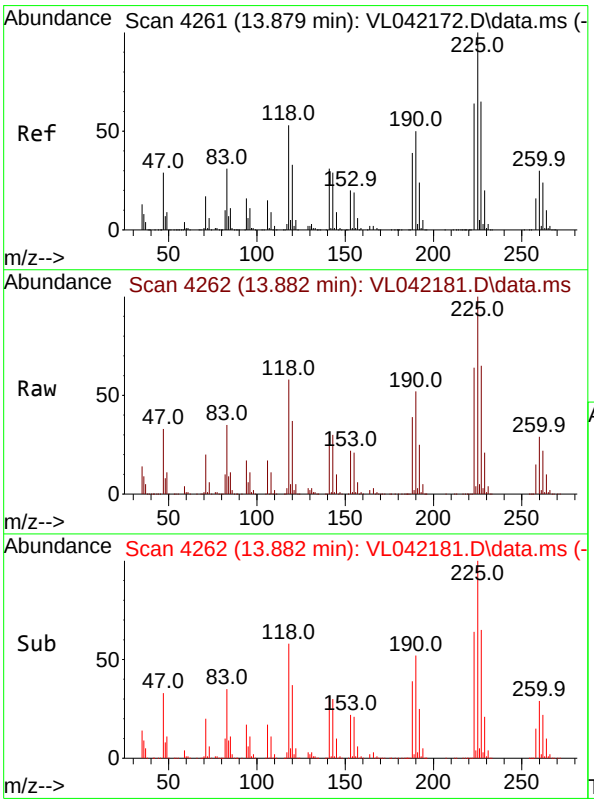
#77
1,2-Dichlorobenzene
Concen: 9.336 ppbv
RT: 11.947 min Scan# 3(
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:146 Resp: 401634

Ion	Ratio	Lower	Upper
146	100		
111	49.0	24.8	74.3
148	64.0	31.6	94.8

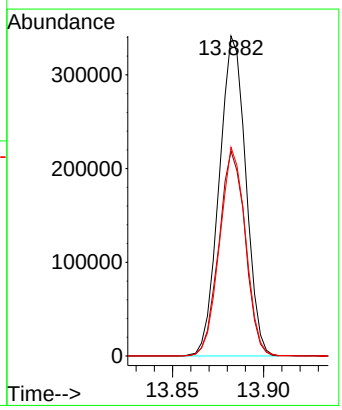


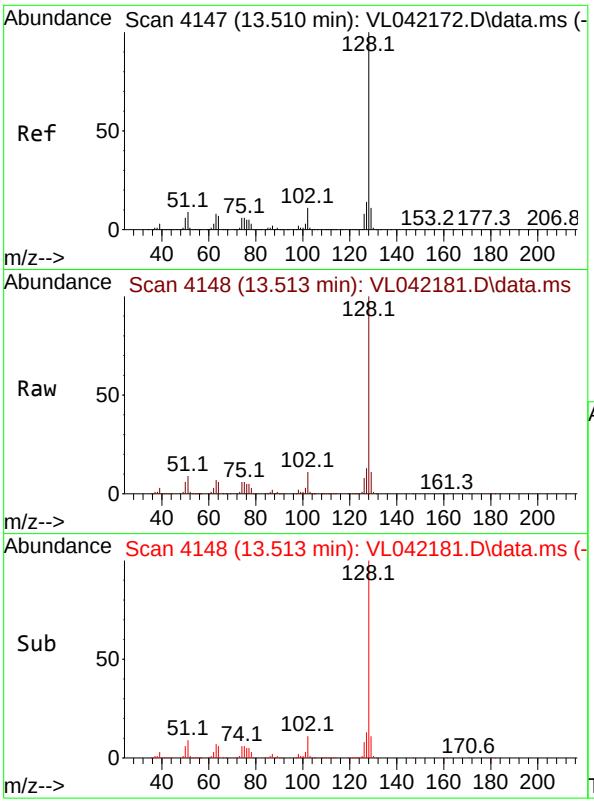


#78
Hexachloro-1,3-Butadiene
Concen: 7.914 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:225 Resp: 346566

Ion	Ratio	Lower	Upper
225	100		
223	63.5	50.6	76.0
227	63.5	51.2	76.8



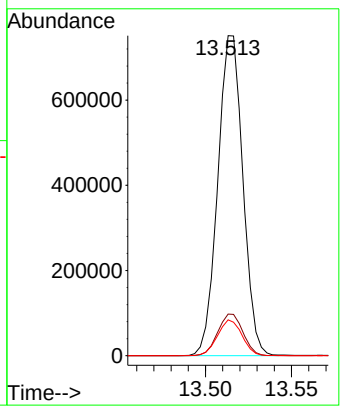


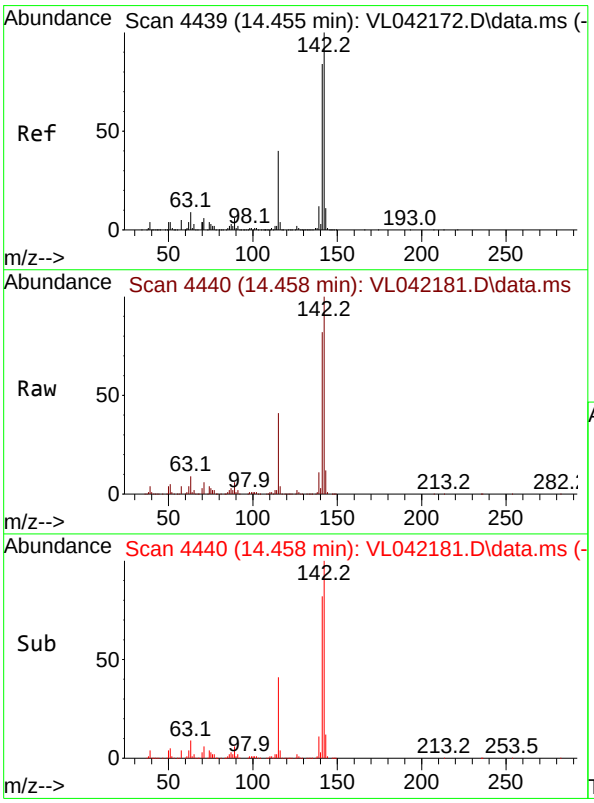
#79
Naphthalene
Concen: 8.659 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:128 Resp: 762976

Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.8	16.2
129	11.2	9.0	13.4

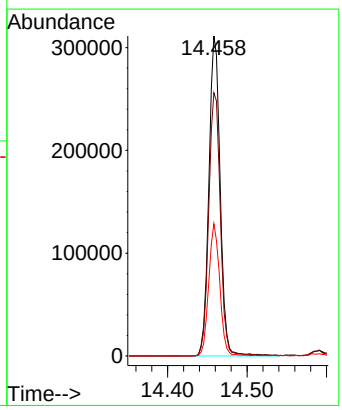


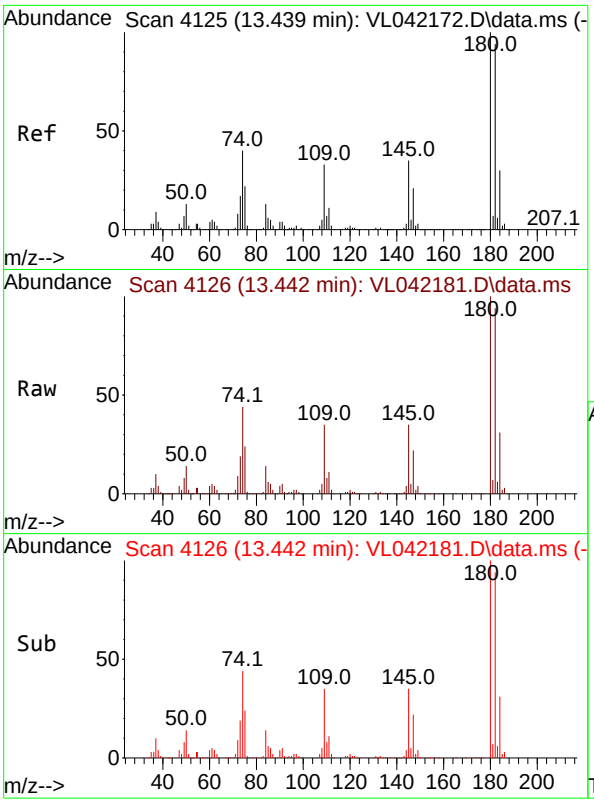


#80
Naphthalene,2-methyl-
Concen: 7.134 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Tgt Ion:142 Resp: 308264

Ion	Ratio	Lower	Upper
142	100		
141	84.9	66.3	99.5
115	40.7	31.6	47.4



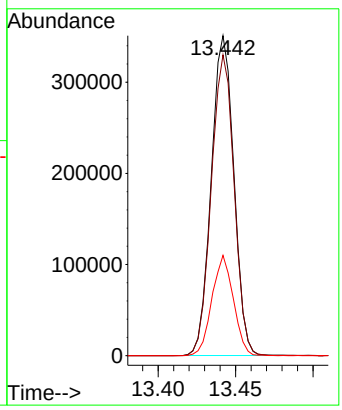


#81
1,2,4-Trichlorobenzene
Concen: 8.764 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042181.D
Acq: 27 Mar 2025 14:39

Instrument :
MSVOA_L
ClientSampleId :
VL0327ABS01

Tgt Ion:180 Resp: 356193

Ion	Ratio	Lower	Upper
180	100		
182	95.1	75.1	112.7
184	29.8	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Time: Mar 28 02:14:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.791	49	182164	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	537249	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	488802	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	399253	9.946	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10784	0.401	ppbv		94
3) Chlorodifluoromethane	1.476	51	9810	0.357	ppbv	#	90
4) Chloromethane	1.532	50	4102	0.373	ppbv		97
7) Chloroethane	1.706	64	630	0.143	ppbv	#	72
9) Propene	1.483	41	9886	0.785	ppbv		90
10) Heptane	4.982	43	4978	0.149	ppbv	#	12
11) Trichlorofluoromethane	1.881	101	5615	0.215	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.140	101	1646	0.077	ppbv	#	80
13) Ethanol	1.722	45	66284	55.675	ppbv		87
15) Acetone	1.836	43	884107	34.703	ppbv		98
16) 1,3-Butadiene	1.603	39	39589	3.182	ppbv	#	22
17) tert-Butyl alcohol	2.043	59	15704	0.495	ppbv	#	88
19) Isopropyl Alcohol	1.891	45	15772	1.097	ppbv	#	1
20) Methylene Chloride	2.062	84	3433	0.362	ppbv	#	83
21) Allyl Chloride	2.079	41	1674	0.093	ppbv	#	7
23) Vinyl Acetate	2.473	43	54408	4.934	ppbv	#	52
25) Ethyl Acetate	2.826	43	37903	0.573	ppbv	#	87
26) Hexane	2.829	57	49383	1.934	ppbv	#	35
27) Carbon Disulfide	2.153	76	927	0.034	ppbv	#	1
30) Cyclohexane	3.862	84	1978	0.089	ppbv	#	1
34) 2-Butanone	2.561	43	35584	0.913	ppbv		98
35) Carbon Tetrachloride	3.765	117	2627	0.063	ppbv		91
36) Benzene	3.661	78	34017	0.639	ppbv	#	92
39) 1,2-Dichloropropane	3.962	63	138666	7.149	ppbv	#	23
44) 2,2,4-Trimethylpentane	4.642	57	13063	0.145	ppbv	#	1
50) 4-Methyl-2-Pentanone	5.772	43	9108	0.148	ppbv	#	39
51) 2-Hexanone	7.455	43	2476	0.049	ppbv	#	84
53) Toluene	6.937	91	146384	2.319	ppbv		99
58) Ethyl Benzene	9.358	91	27191	0.313	ppbv		95
59) m/p-Xylene	9.533	91	61979	0.894	ppbv	#	85
60) o-Xylene	9.966	91	35115	0.505	ppbv		99
61) Styrene	9.872	104	4273	0.124	ppbv		91
62) Isopropylbenzene	10.542	105	3524	0.034	ppbv		94
64) n-propylbenzene	10.992	120	2677	0.100	ppbv		96
65) tert-Butylbenzene	11.539	119	5380	0.056	ppbv	#	71
72) 4-Ethyltoluene	11.128	105	11701	0.135	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.206	105	12679	0.168	ppbv		96
74) 1,2,4-Trimethylbenzene	11.539	105	44446	0.510	ppbv	#	64

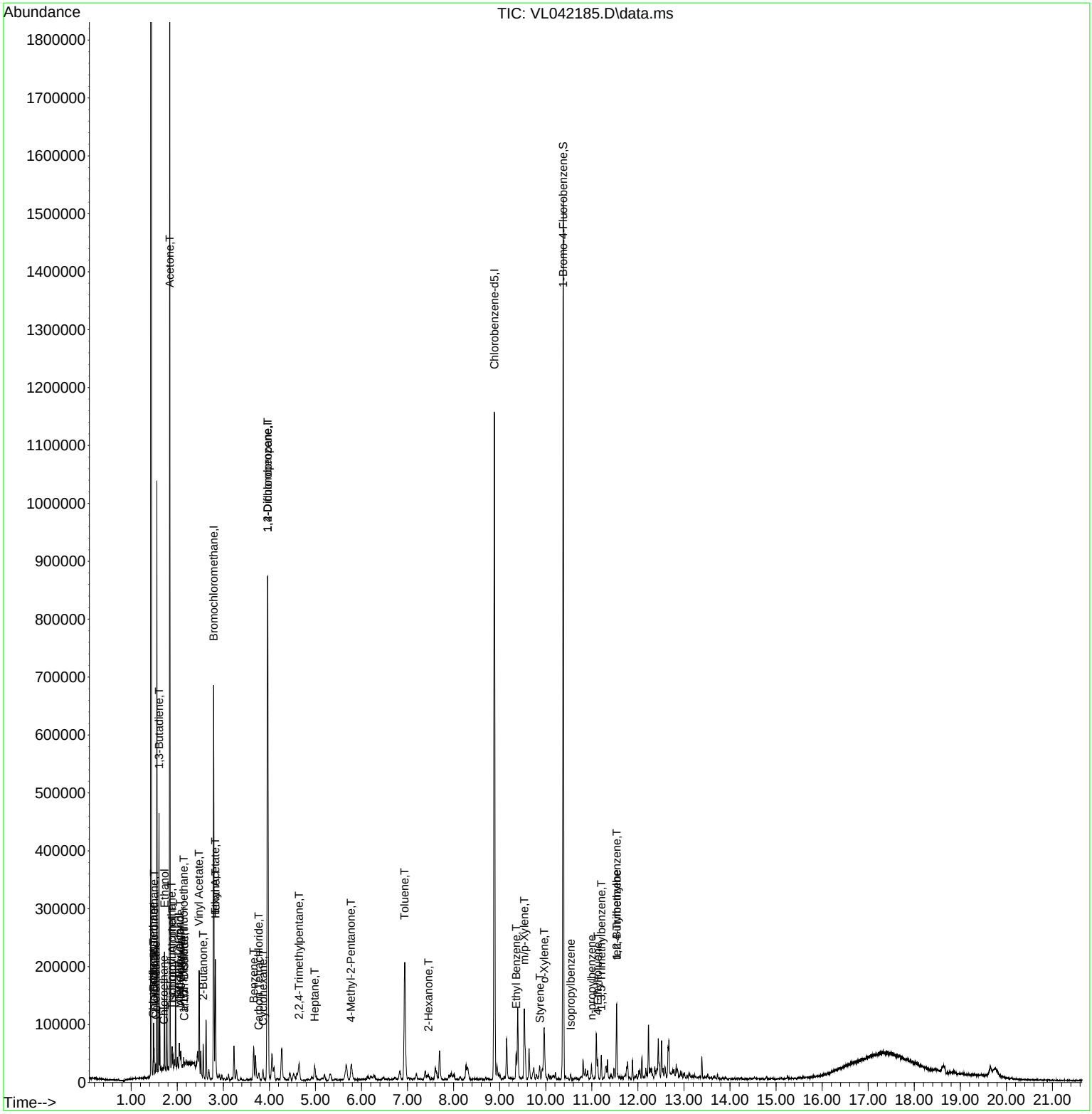
(#) = qualifier out of range (m) = manual integration (+) = signals summed

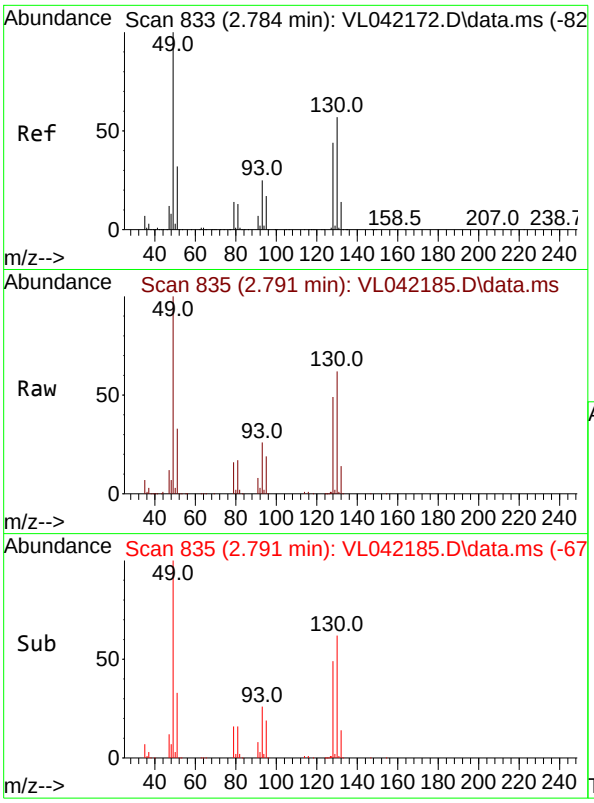
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
Acq On : 27 Mar 2025 18:22
Operator : SY/MD
Sample : Q1669-01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Quant Time: Mar 28 02:14:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



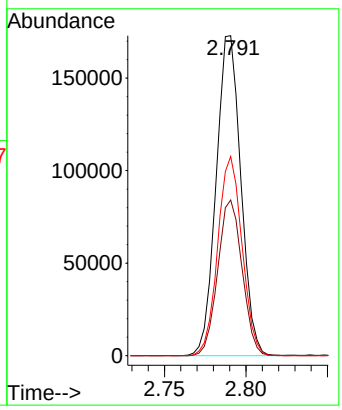


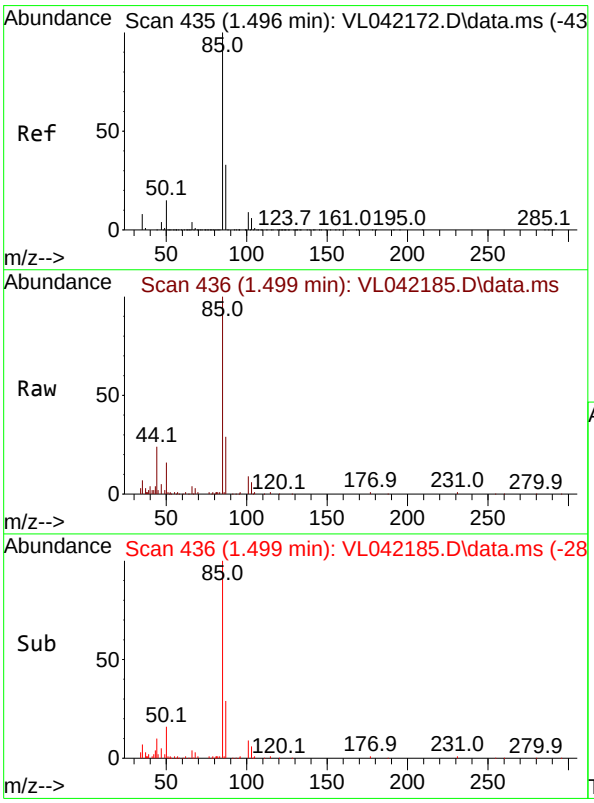
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 49 Resp: 182164

Ion	Ratio	Lower	Upper
49	100		
128	47.9	22.9	68.5
130	61.0	28.8	86.4

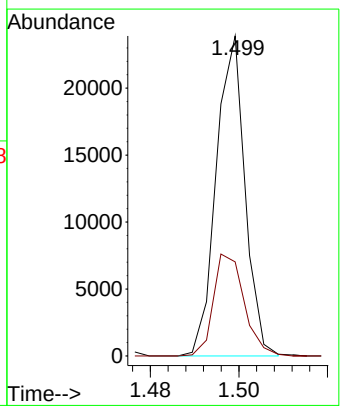


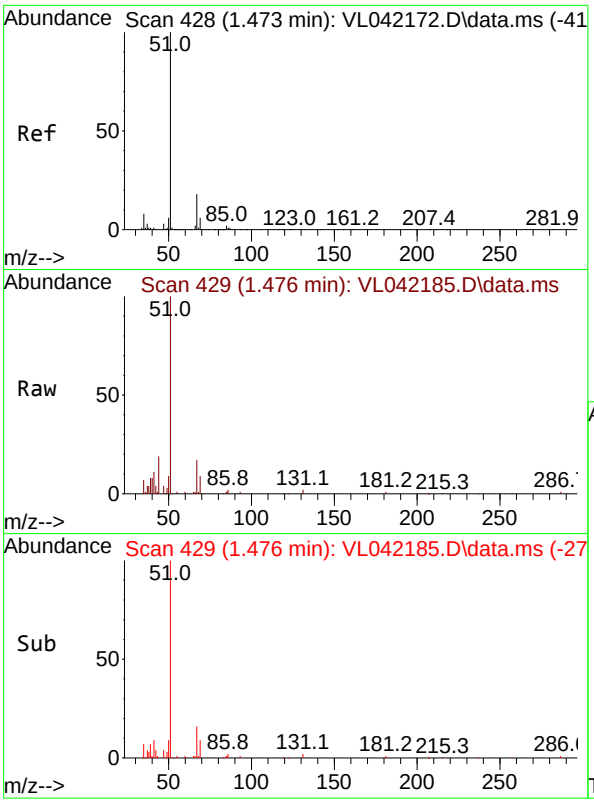


#2
Dichlorodifluoromethane
Concen: 0.401 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 85 Resp: 10784

Ion	Ratio	Lower	Upper
85	100		
87	29.4	26.1	39.1



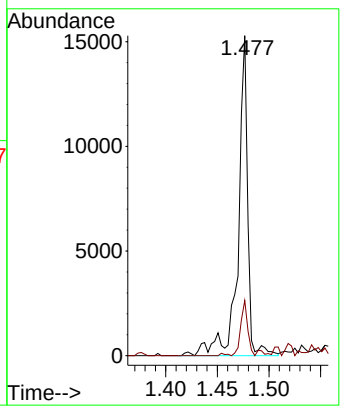


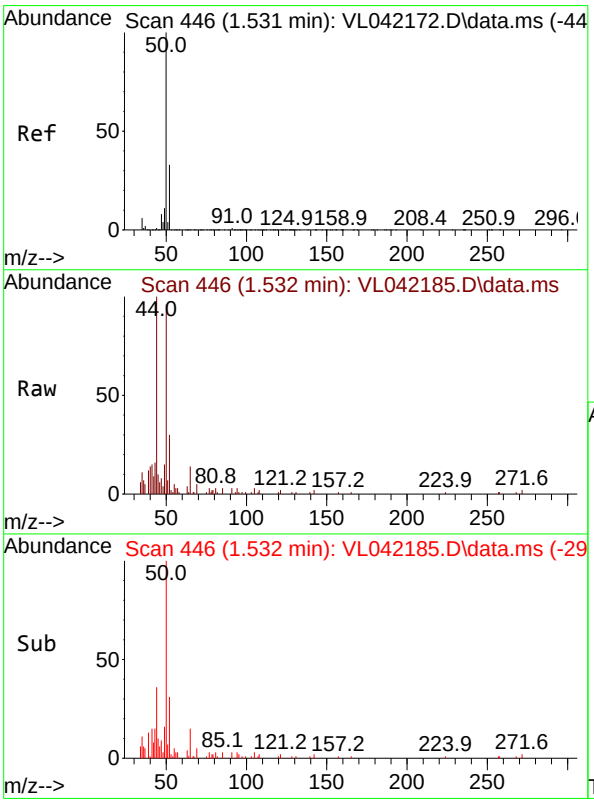
#3
Chlorodifluoromethane
Concen: 0.357 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 51 Resp: 9810

Ion	Ratio	Lower	Upper
51	100		
67	14.2	15.0	22.6#

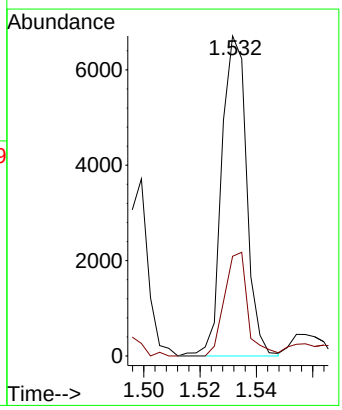


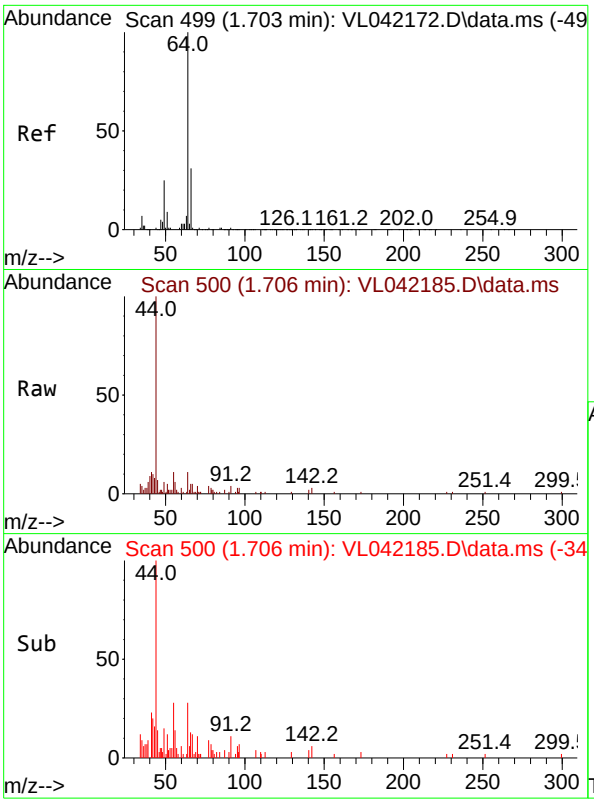


#4
Chloromethane
Concen: 0.373 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 50 Resp: 4102

Ion	Ratio	Lower	Upper
50	100		
52	31.2	26.1	39.1



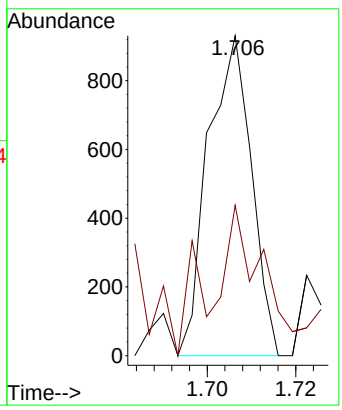


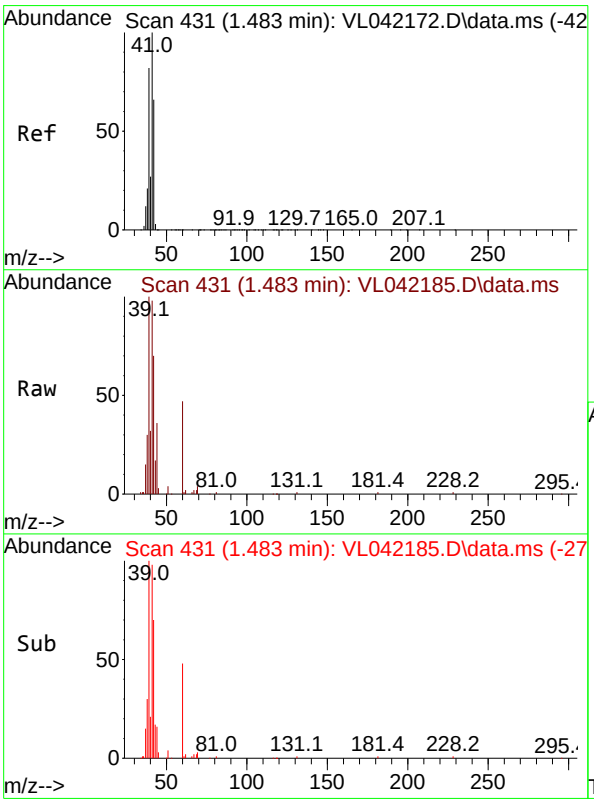
#7
Chloroethane
Concen: 0.143 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 64 Resp: 630

Ion	Ratio	Lower	Upper
64	100		
66	46.9	25.2	37.8#

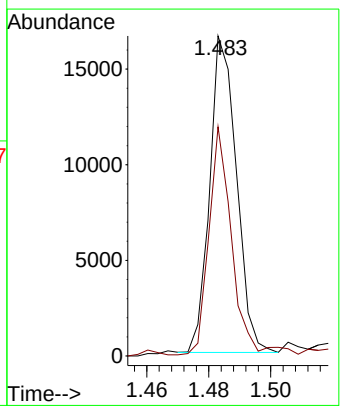


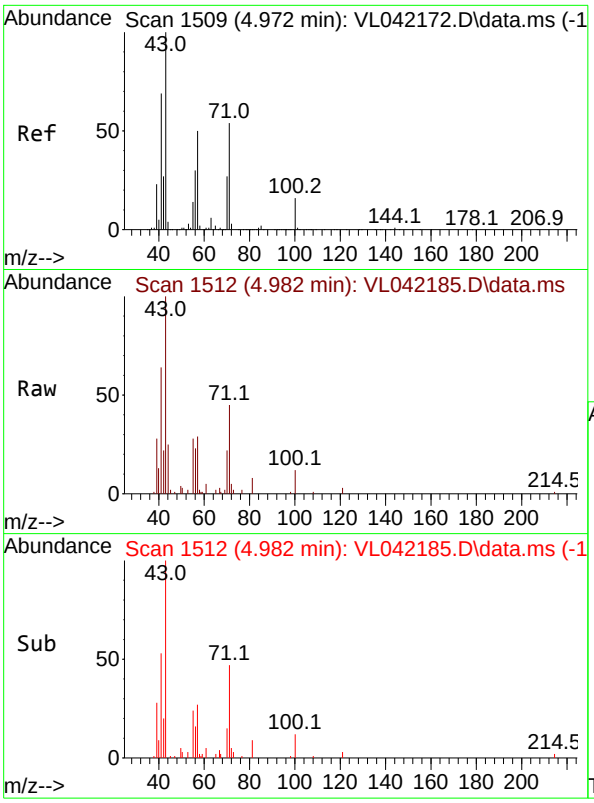


#9
Propene
Concen: 0.785 ppbv
RT: 1.483 min Scan# 431
Delta R.T. 0.000 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 41 Resp: 9886

Ion	Ratio	Lower	Upper
41	100		
42	61.2	55.4	83.2



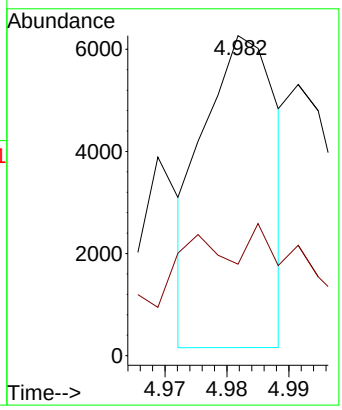


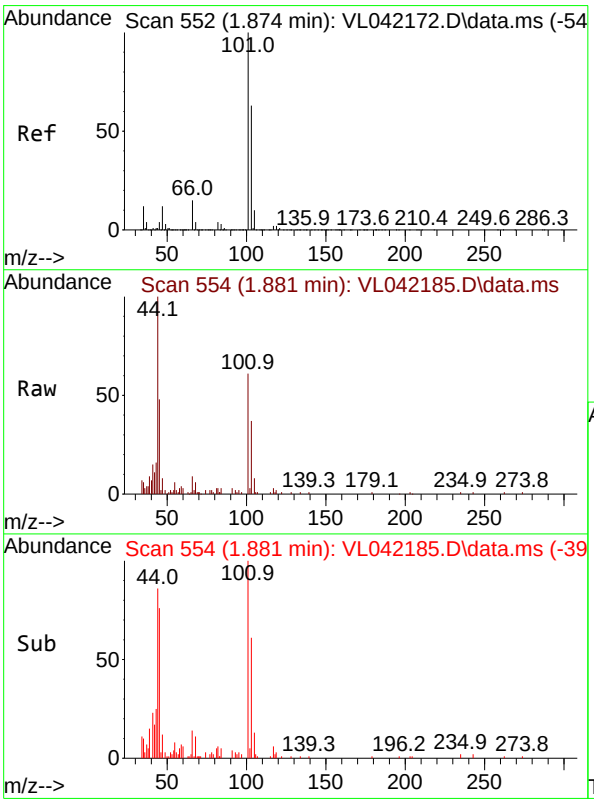
#10
Heptane
Concen: 0.149 ppbv
RT: 4.982 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 43 Resp: 4978

Ion	Ratio	Lower	Upper
43	100		
57	109.6	39.4	59.2#

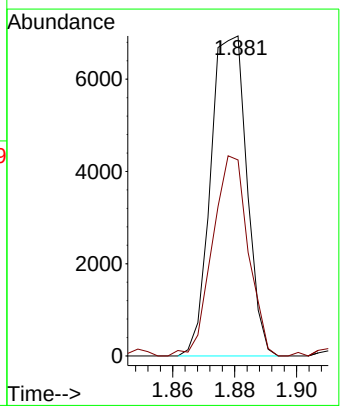


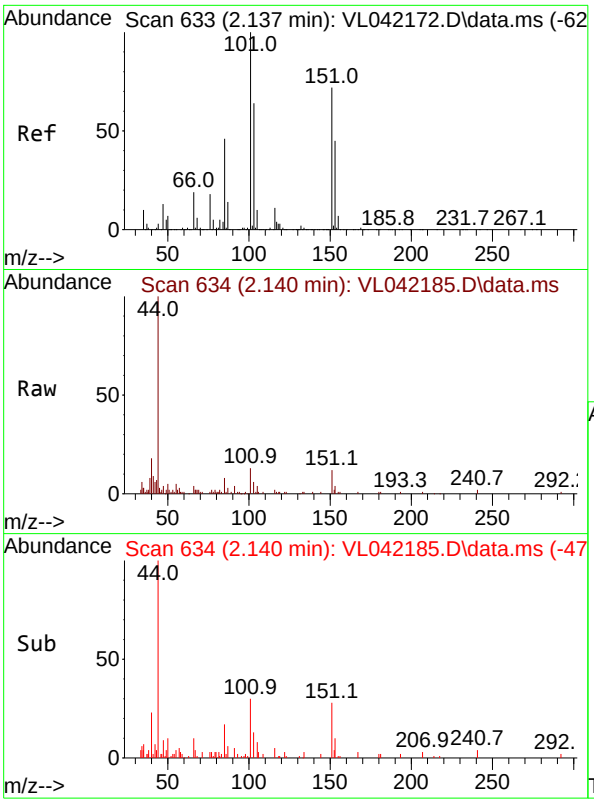


#11
Trichlorofluoromethane
Concen: 0.215 ppbv
RT: 1.881 min Scan# 554
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:101 Resp: 5615

Ion	Ratio	Lower	Upper
101	100		
103	61.3	50.2	75.2



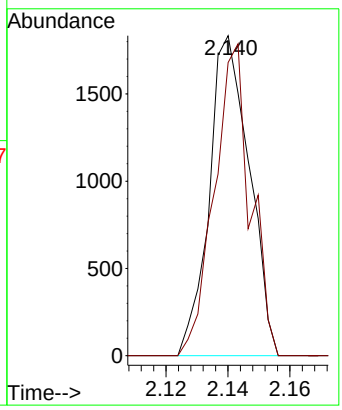


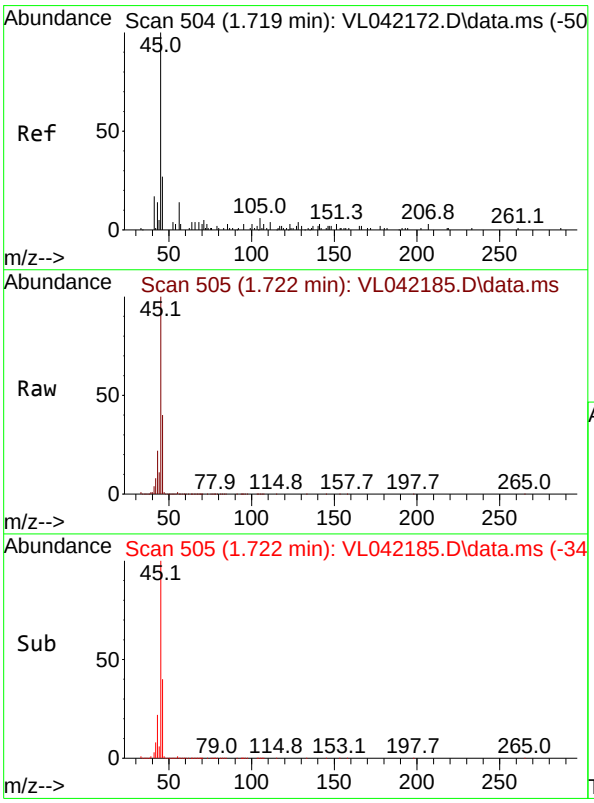
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.077 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion:101 Resp: 1646

Ion	Ratio	Lower	Upper
101	100		
151	88.0	57.1	85.7#

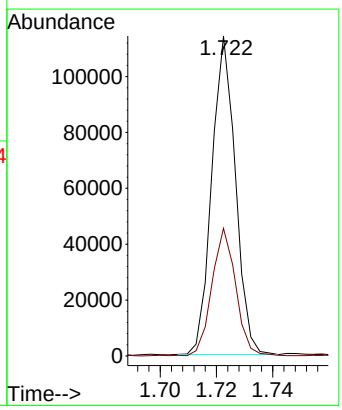


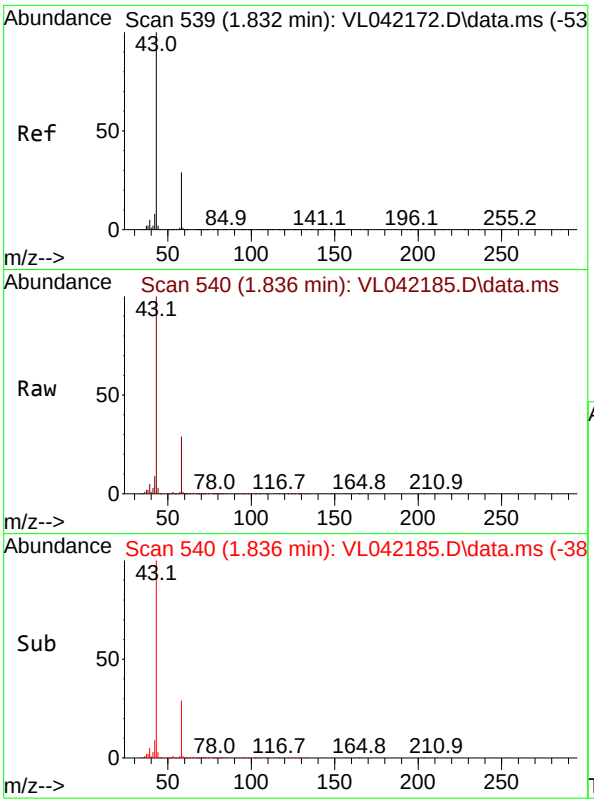


#13
Ethanol
Concen: 55.675 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 45 Resp: 66284

Ion	Ratio	Lower	Upper
45	100		
46	41.8	20.2	80.8



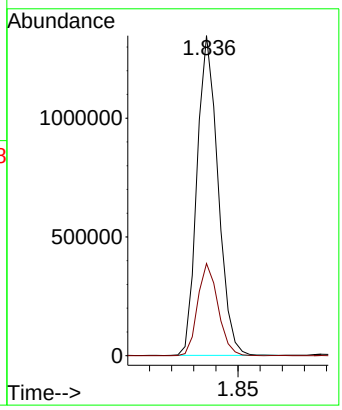


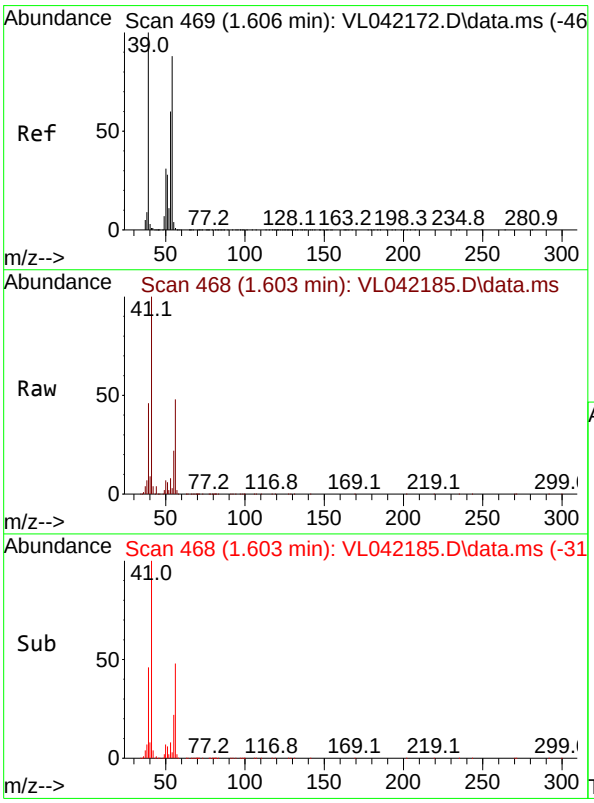
#15
Acetone
Concen: 34.703 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 43 Resp: 884107

Ion	Ratio	Lower	Upper
43	100		
58	28.0	23.2	34.8

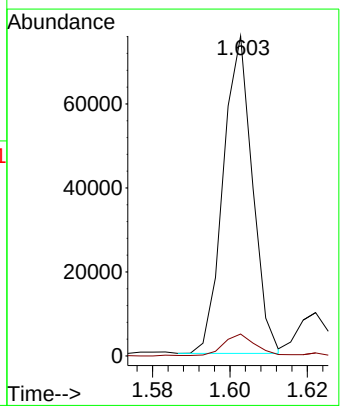


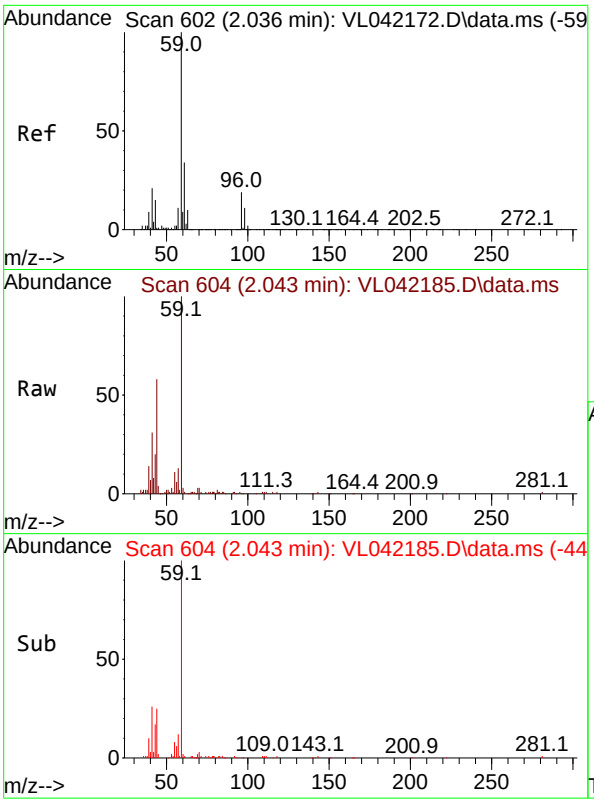


#16
1,3-Butadiene
Concen: 3.182 ppbv
RT: 1.603 min Scan# 468
Delta R.T. -0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 39 Resp: 39589

Ion	Ratio	Lower	Upper
39	100		
54	9.1	60.7	91.1#



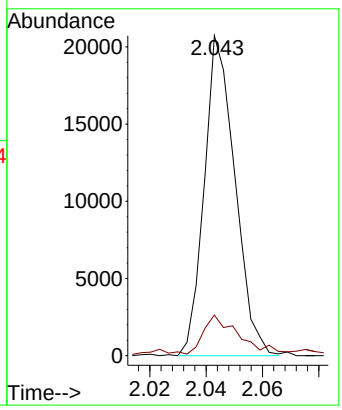


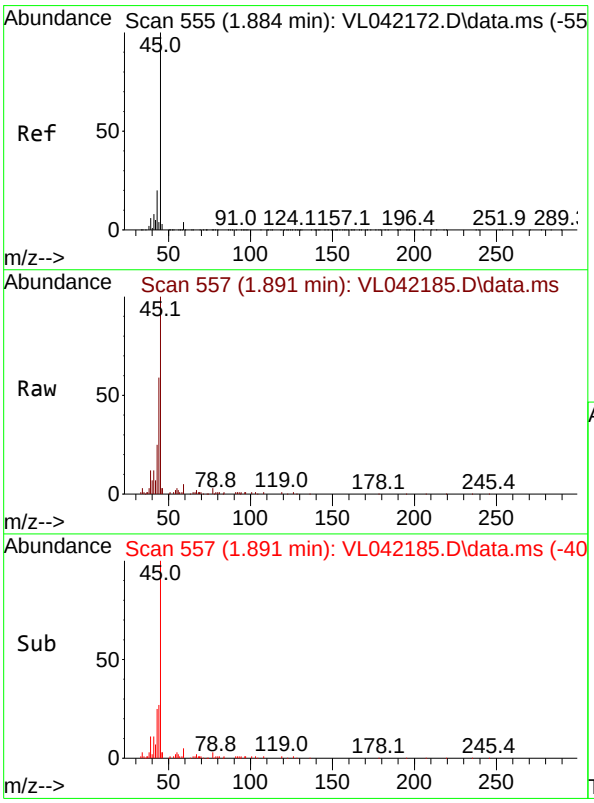
#17
tert-Butyl alcohol
Concen: 0.495 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 59 Resp: 15704

Ion	Ratio	Lower	Upper
59	100		
57	15.8	8.9	13.3#

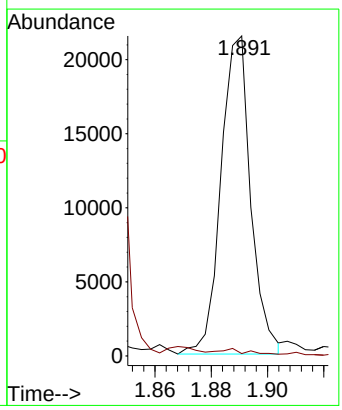


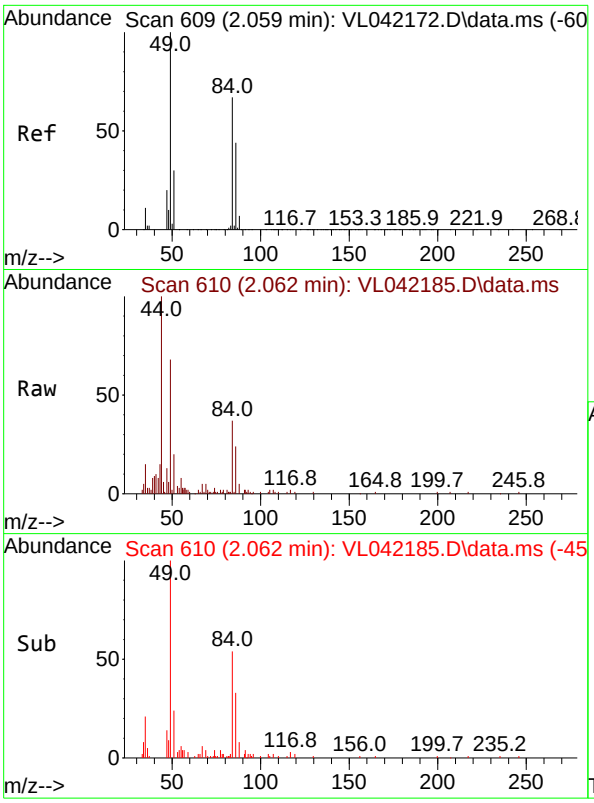


#19
Isopropyl Alcohol
Concen: 1.097 ppbv
RT: 1.891 min Scan# 557
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 45 Resp: 15772

Ion	Ratio	Lower	Upper
45	100		
58	1574.5	36.9	55.3#



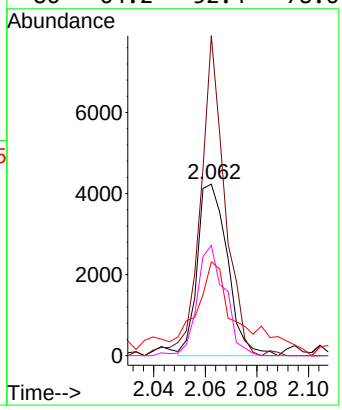


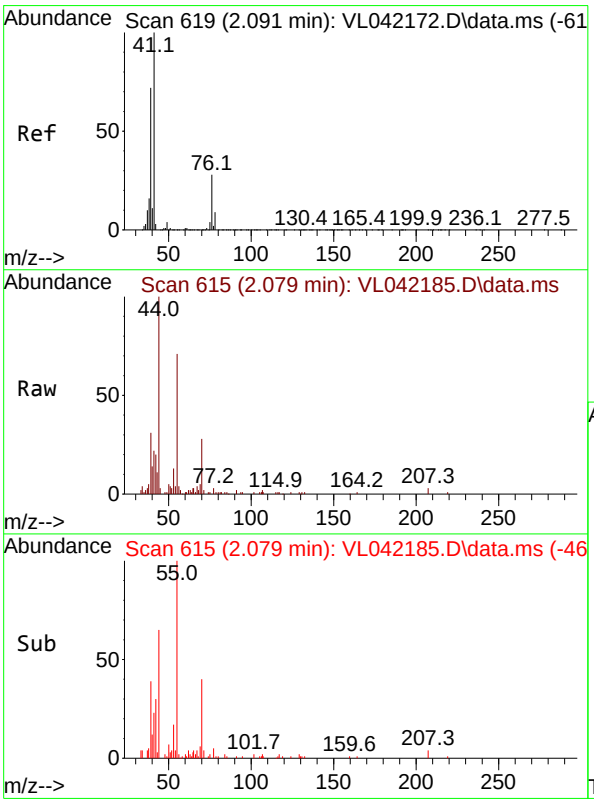
#20
Methylene Chloride
Concen: 0.362 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 84 Resp: 3433

Ion	Ratio	Lower	Upper
84	100		
49	184.6	120.2	180.4#
51	43.8	37.4	56.0
86	64.2	52.4	78.6

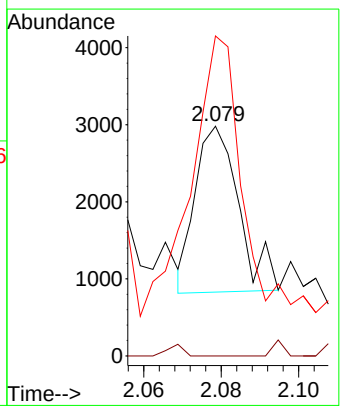


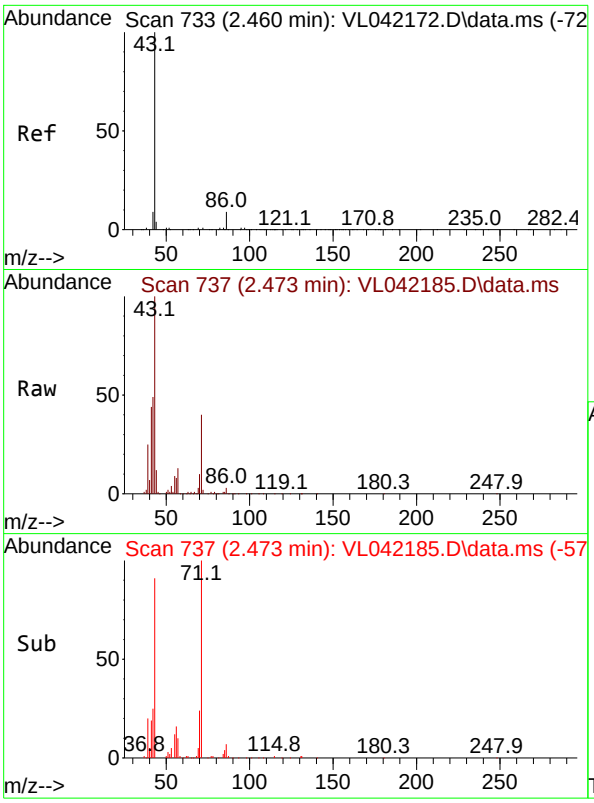


#21
Allyl Chloride
Concen: 0.093 ppbv
RT: 2.079 min Scan# 615
Delta R.T. -0.013 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 41 Resp: 1674

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.1	36.1#
39	168.6	61.1	91.7#



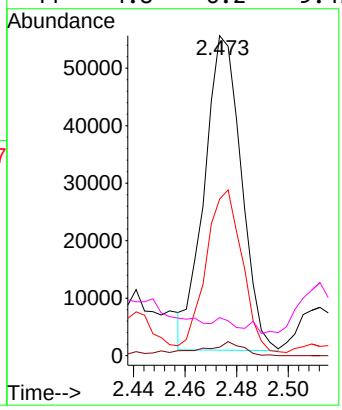


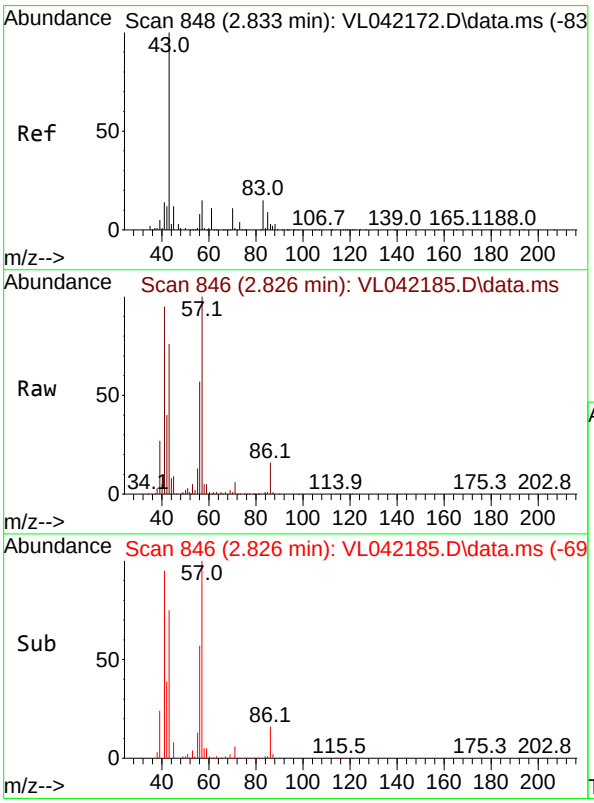
#23
Vinyl Acetate
Concen: 4.934 ppbv
RT: 2.473 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 43 Resp: 54408

Ion	Ratio	Lower	Upper
43	100		
86	2.7	5.5	8.3#
42	48.7	8.6	13.0#
44	4.8	6.2	9.4#

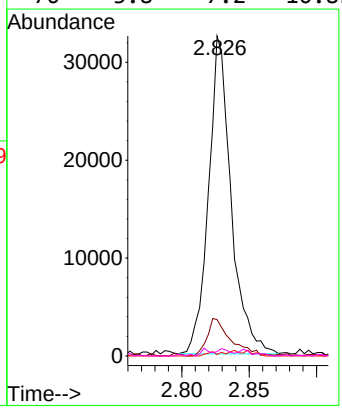


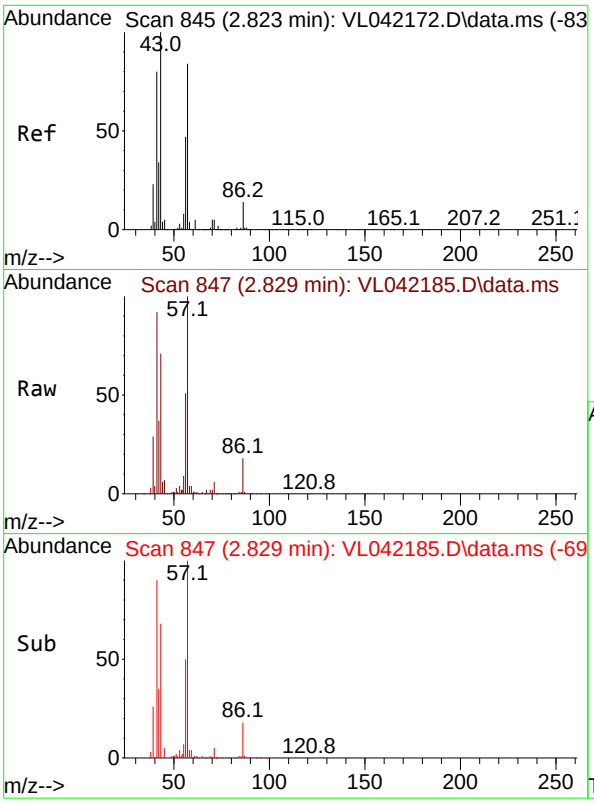


#25
Ethyl Acetate
Concen: 0.573 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.006 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 43 Resp: 37903

Ion	Ratio	Lower	Upper
43	100		
45	13.0	8.2	12.2#
61	2.3	7.3	10.9#
70	3.8	7.2	10.8#



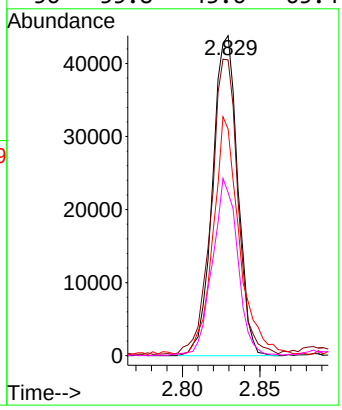


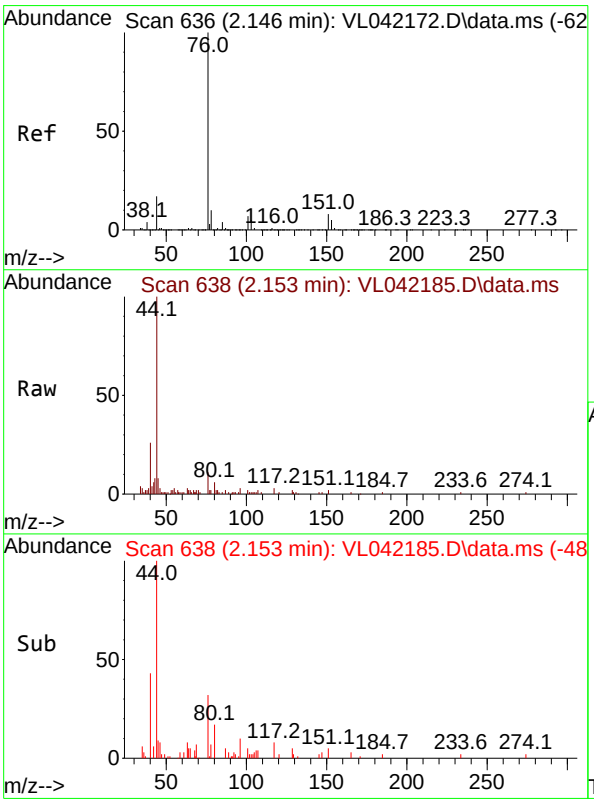
#26
Hexane
Concen: 1.934 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 57 Resp: 49383

Ion	Ratio	Lower	Upper
57	100		
41	97.4	76.6	114.8
43	78.3	207.8	311.8#
56	55.8	43.6	65.4

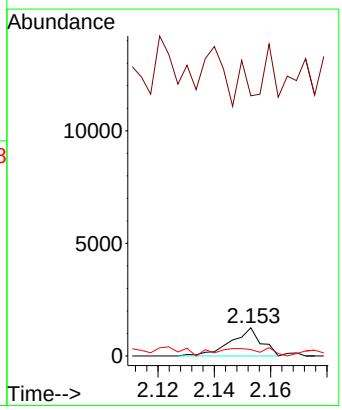


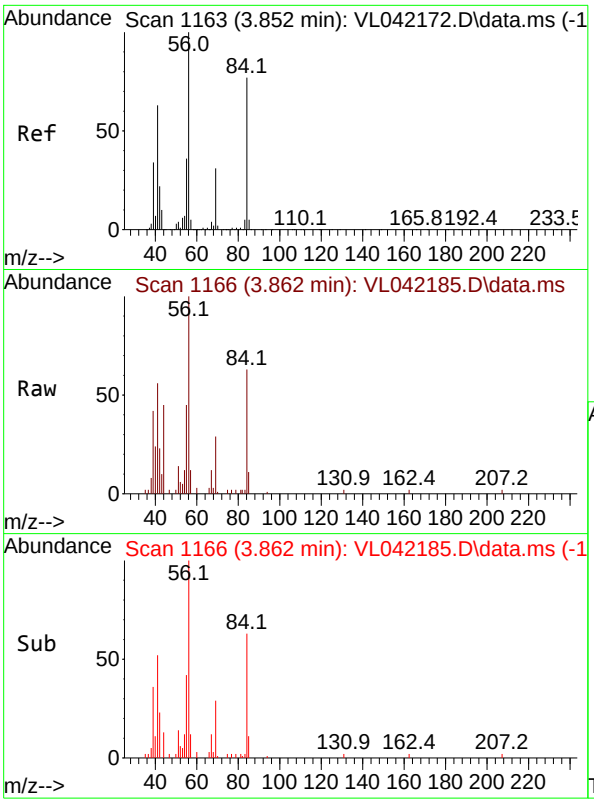


#27
Carbon Disulfide
Concen: 0.034 ppbv
RT: 2.153 min Scan# 638
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 76 Resp: 927

Ion	Ratio	Lower	Upper
76	100		
44	1231.7	14.7	22.1#
78	74.4	9.3	13.9#



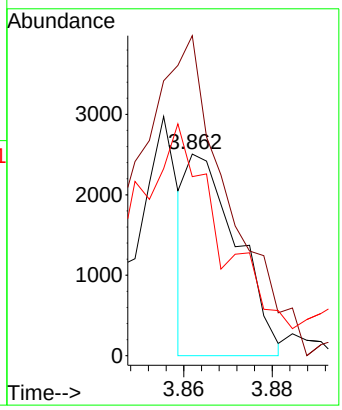


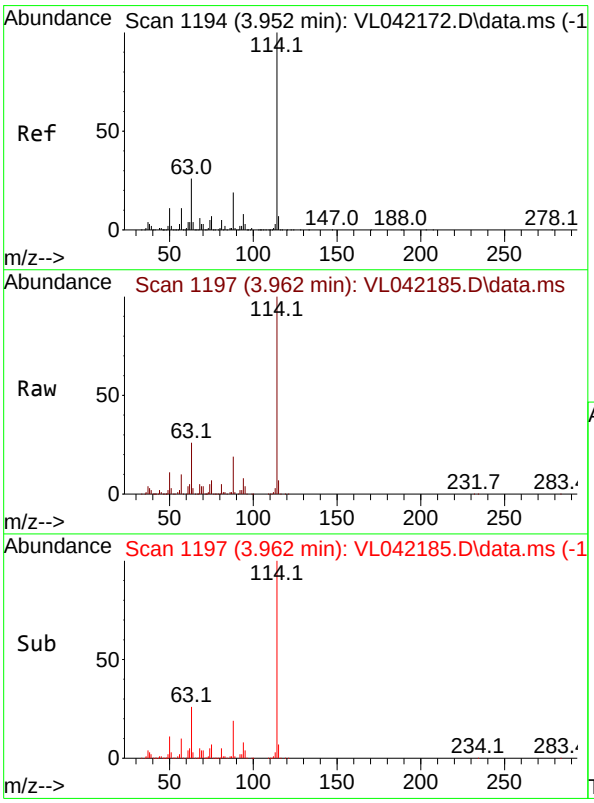
#30
Cyclohexane
Concen: 0.089 ppbv
RT: 3.862 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 84 Resp: 1978

Ion	Ratio	Lower	Upper
84	100		
56	332.5	102.8	154.2#
41	0.0	66.5	99.7#

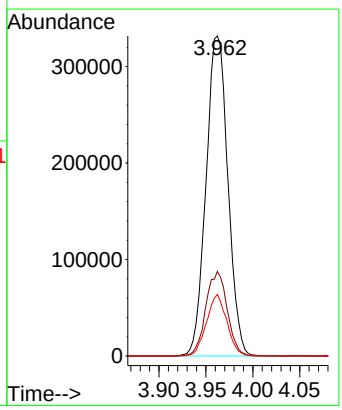


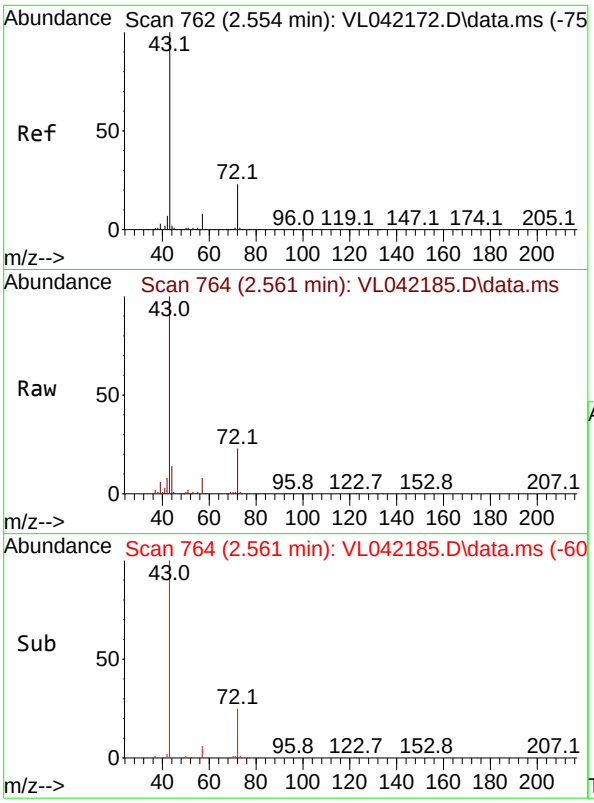


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:114 Resp: 537249

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	17.9	15.0	22.4



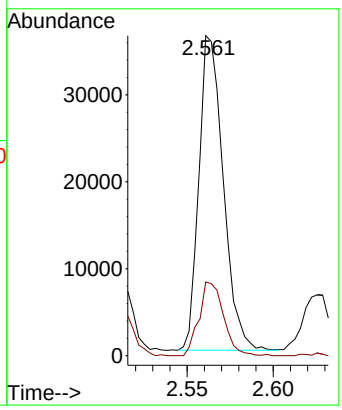


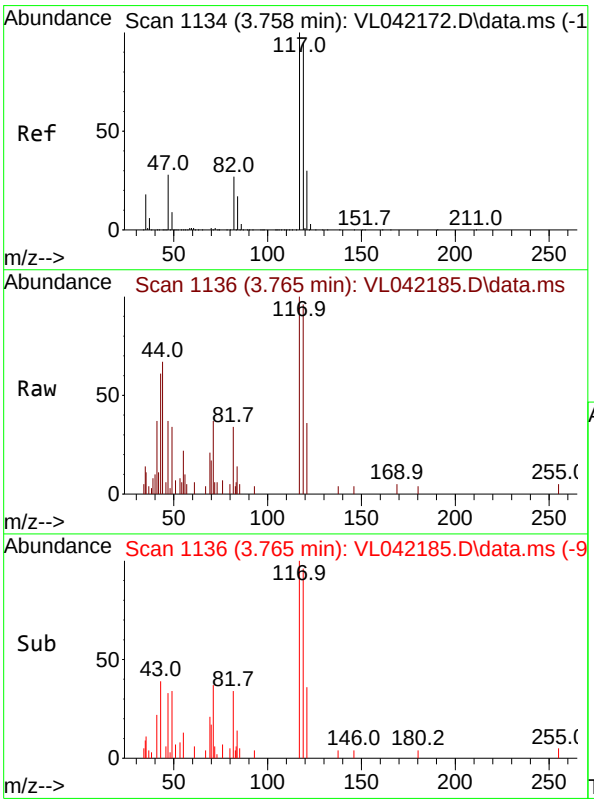
#34
2-Butanone
Concen: 0.913 ppbv
RT: 2.561 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 43 Resp: 35584

Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2

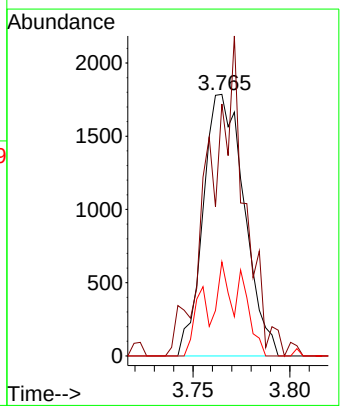


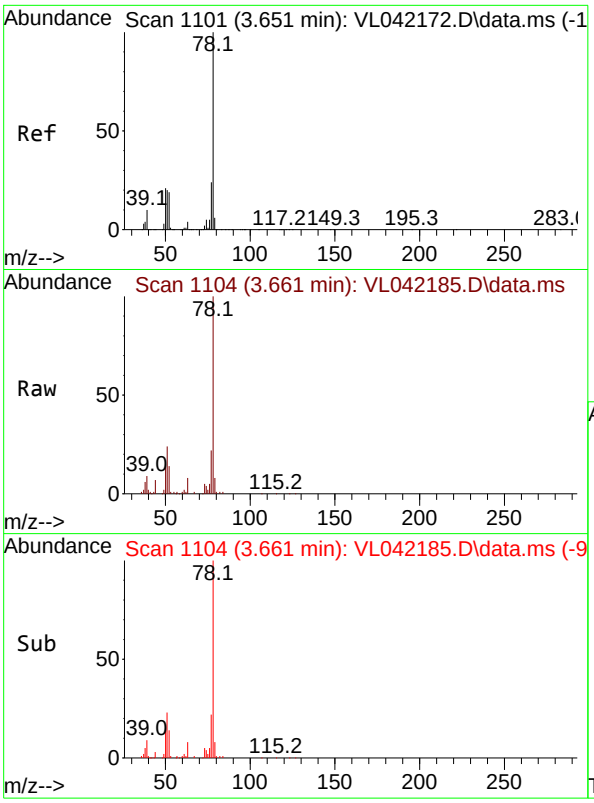


#35
Carbon Tetrachloride
Concen: 0.063 ppbv
RT: 3.765 min Scan# 1136
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:117 Resp: 2627

Ion	Ratio	Lower	Upper
117	100		
119	86.6	76.2	114.2
121	35.9	24.2	36.4



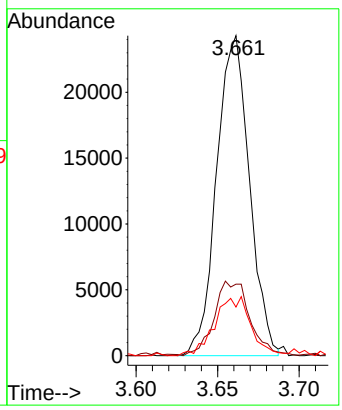


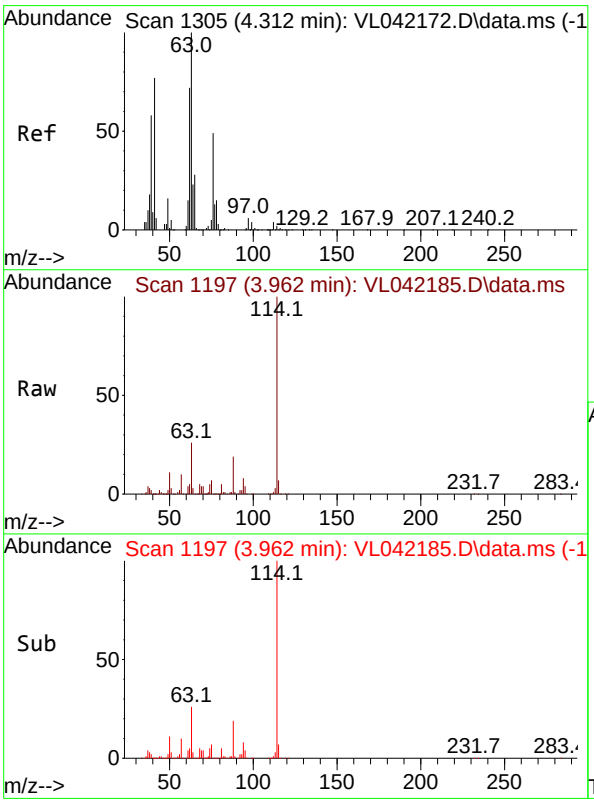
#36
Benzene
Concen: 0.639 ppbv
RT: 3.661 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 78 Resp: 34017

Ion	Ratio	Lower	Upper
78	100		
77	22.0	19.1	28.7
50	14.3	16.6	24.8#

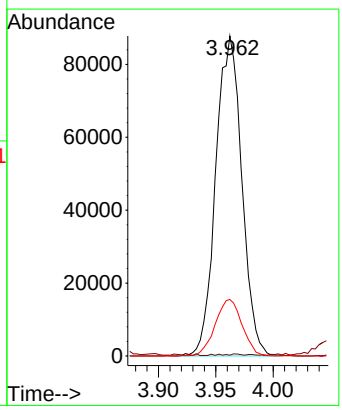


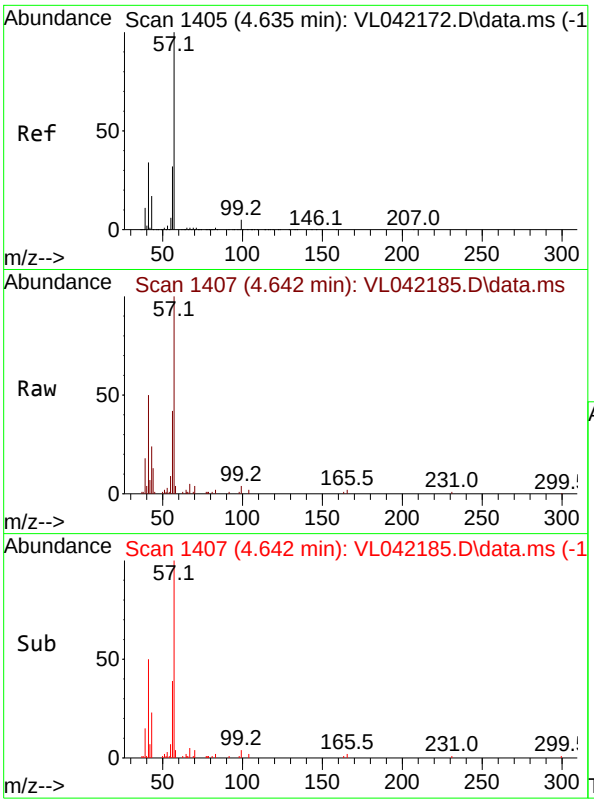


#39
1,2-Dichloropropane
Concen: 7.149 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.349 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 63 Resp: 138666

Ion	Ratio	Lower	Upper
63	100		
41	0.2	61.7	92.5#
62	17.7	57.6	86.4#



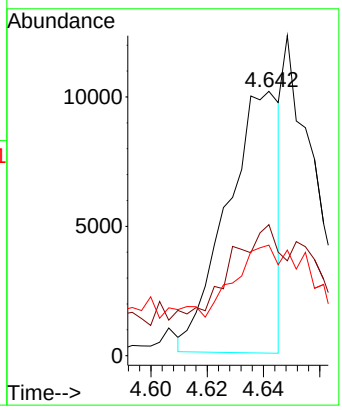


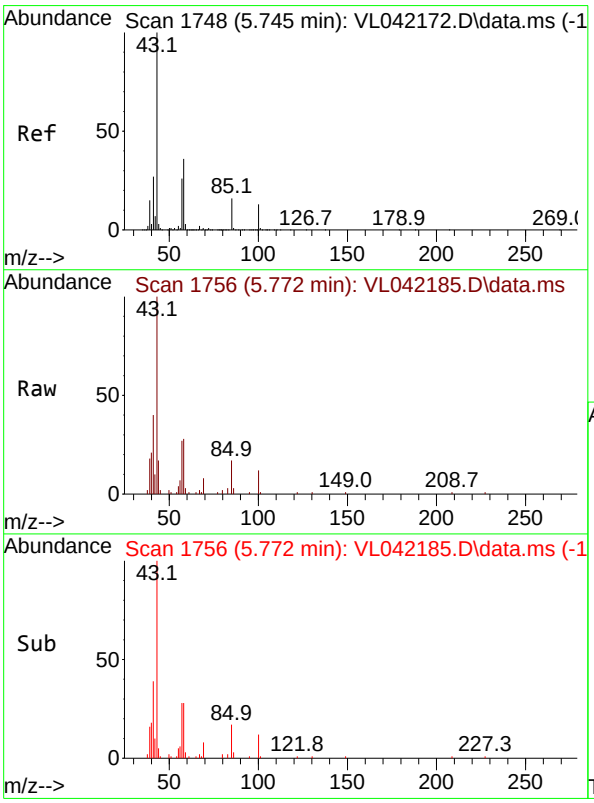
#44
2,2,4-Trimethylpentane
Concen: 0.145 ppbv
RT: 4.642 min Scan# 14
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 57 Resp: 13063

Ion	Ratio	Lower	Upper
57	100		
41	113.7	26.8	40.2#
56	106.1	25.6	38.4#

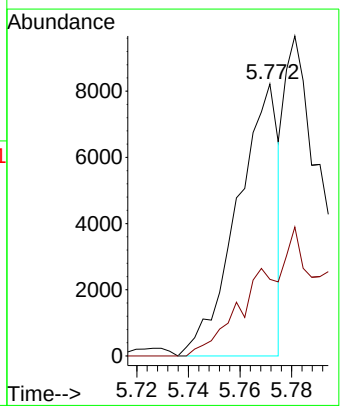


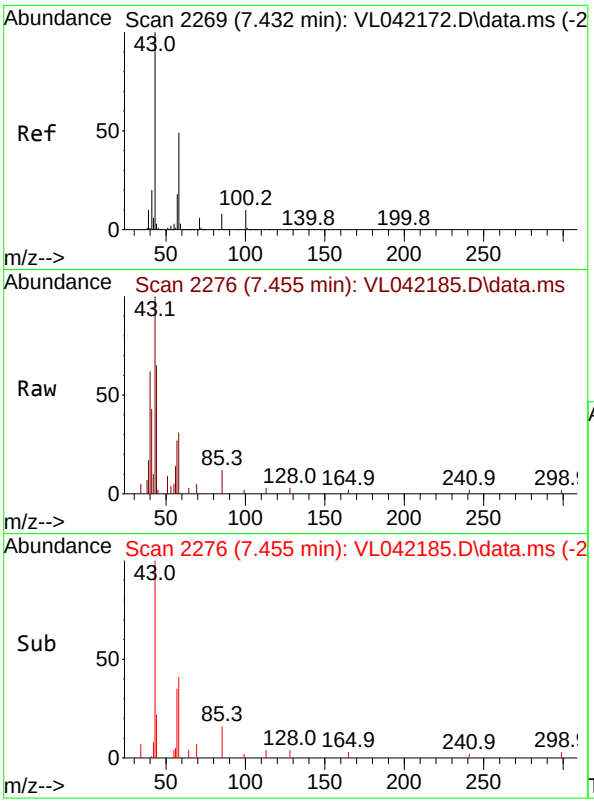


#50
4-Methyl-2-Pentanone
Concen: 0.148 ppbv
RT: 5.772 min Scan# 1756
Delta R.T. 0.026 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 43 Resp: 9108

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#



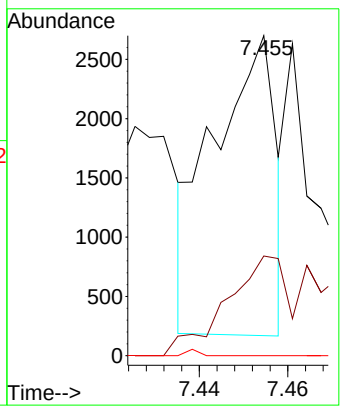


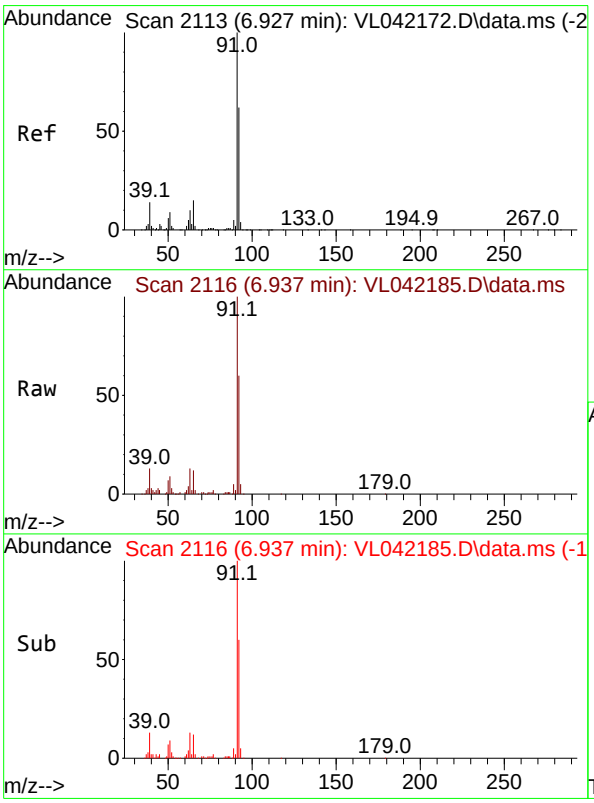
#51
2-Hexanone
Concen: 0.049 ppbv
RT: 7.455 min Scan# 2
Delta R.T. 0.023 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 43 Resp: 2476

Ion	Ratio	Lower	Upper
43	100		
58	60.8	39.7	59.5#
98	0.0	0.1	0.1#

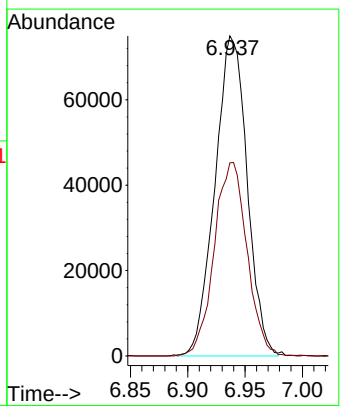


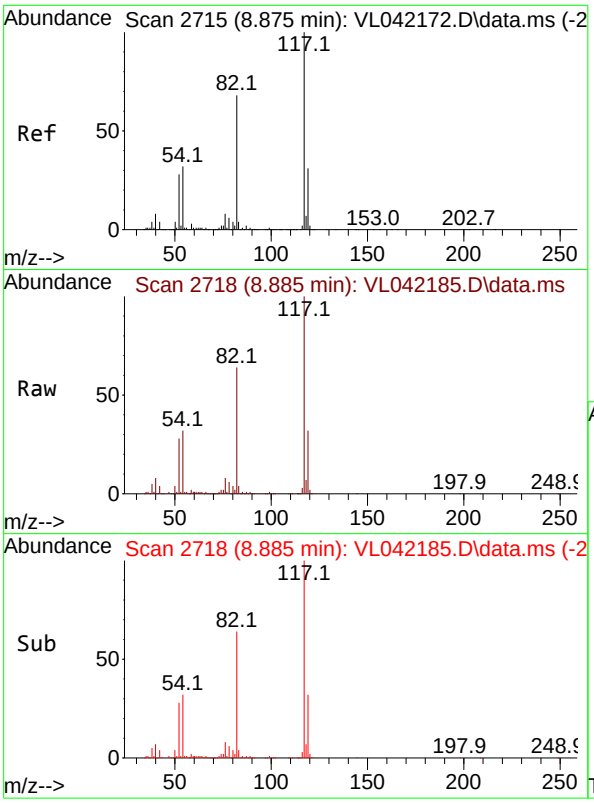


#53
Toluene
Concen: 2.319 ppbv
RT: 6.937 min Scan# 2116
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 146384

Ion	Ratio	Lower	Upper
91	100		
92	61.6	48.4	72.6



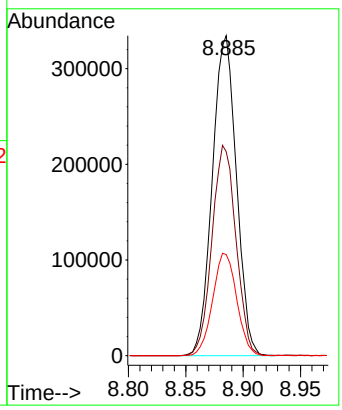


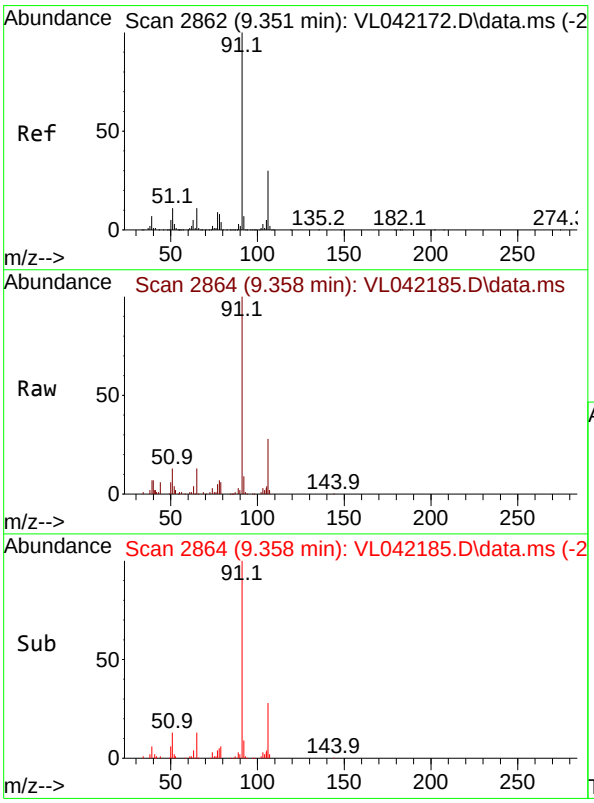
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion:117 Resp: 488802

Ion	Ratio	Lower	Upper
117	100		
82	65.5	55.8	83.6
119	32.1	25.5	38.3

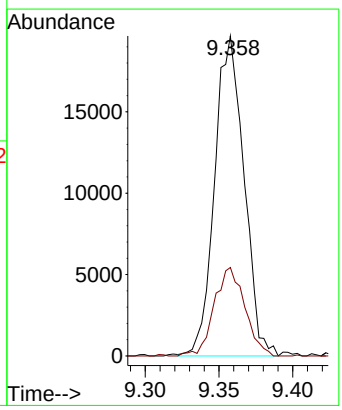


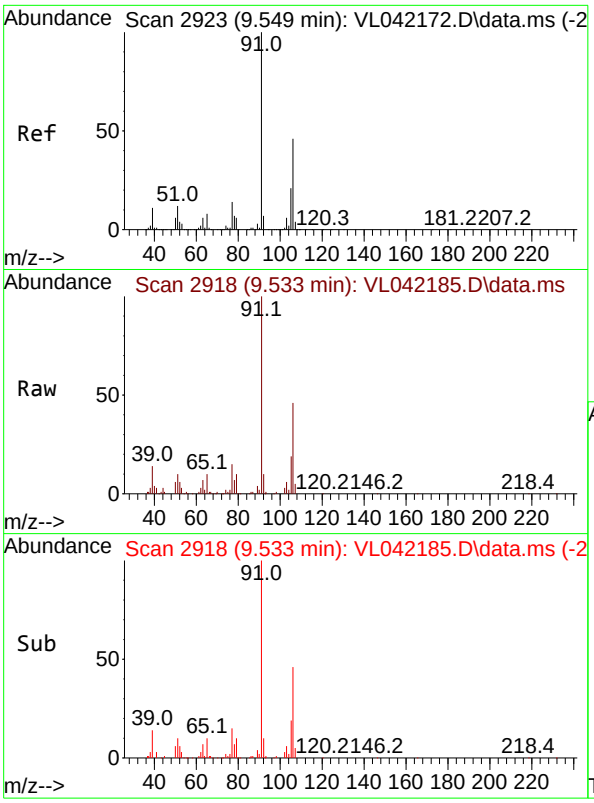


#58
Ethyl Benzene
Concen: 0.313 ppbv
RT: 9.358 min Scan# 2864
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 27191

Ion	Ratio	Lower	Upper
91	100		
106	27.7	24.2	36.2



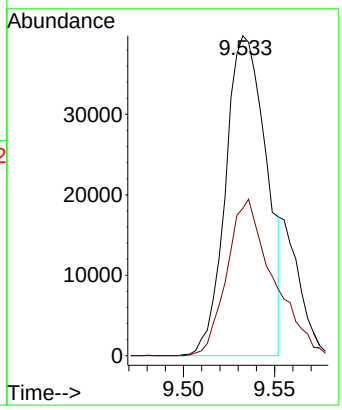


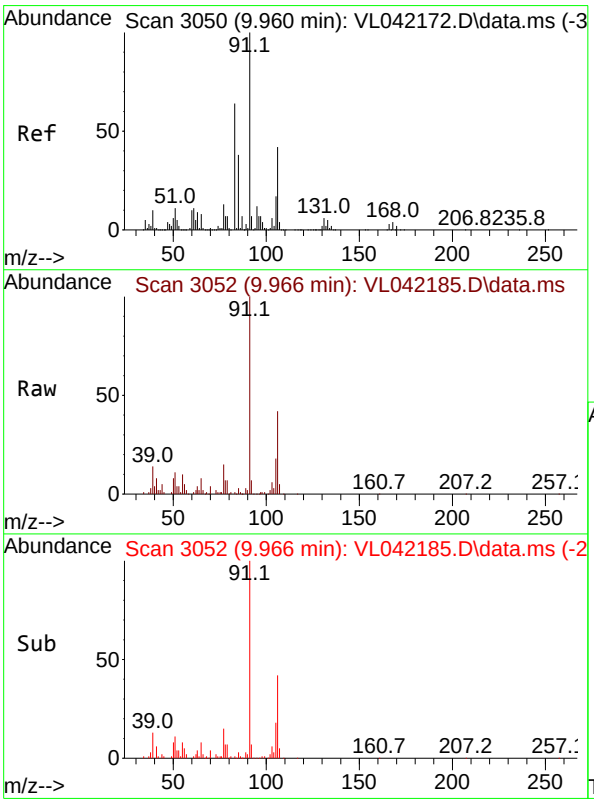
#59
m/p-Xylene
Concen: 0.894 ppbv
RT: 9.533 min Scan# 2
Delta R.T. -0.016 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 91 Resp: 61979

Ion	Ratio	Lower	Upper
91	100		
106	55.4	36.4	54.6#

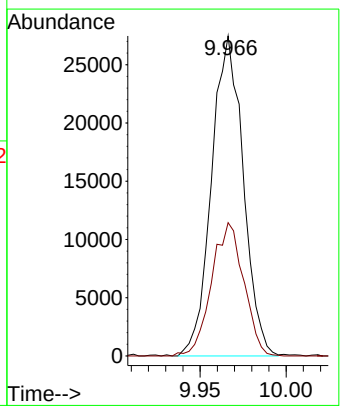


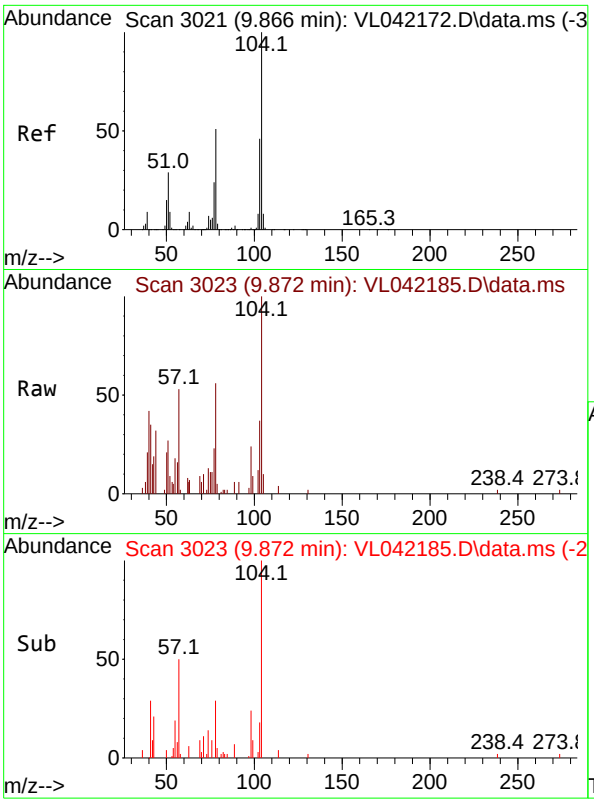


#60
o-Xylene
Concen: 0.505 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 35115

Ion	Ratio	Lower	Upper
91	100		
106	42.3	20.8	62.5



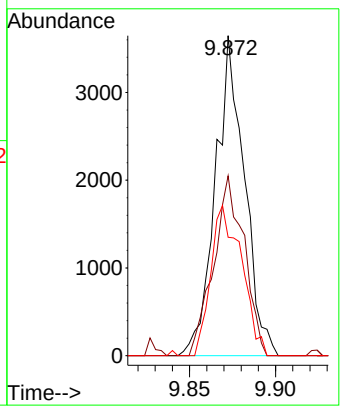


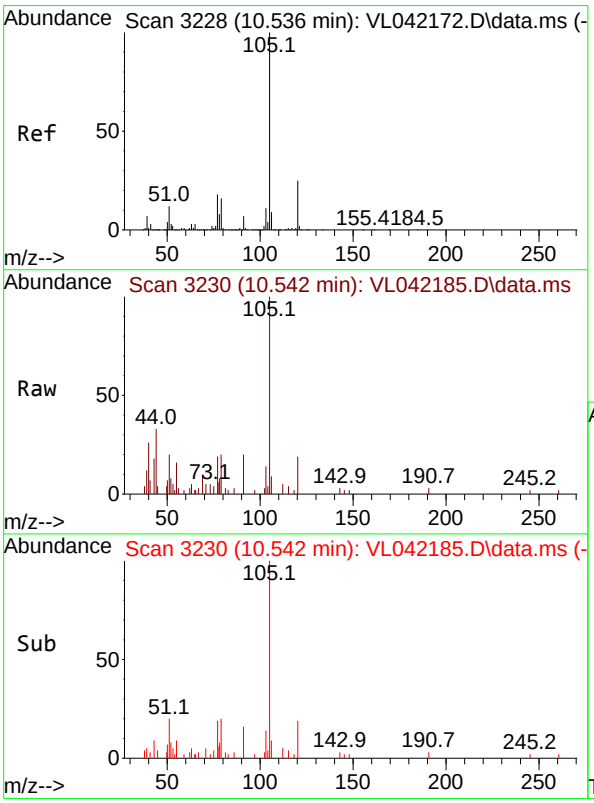
#61
Styrene
Concen: 0.124 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion:104 Resp: 4273

Ion	Ratio	Lower	Upper
104	100		
78	60.5	41.8	62.6
103	49.9	37.0	55.4

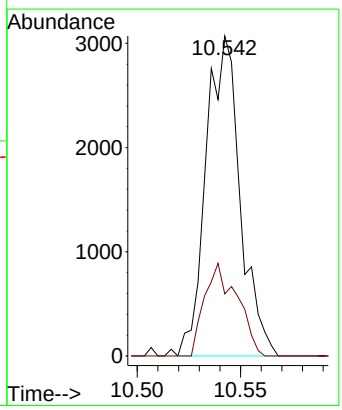


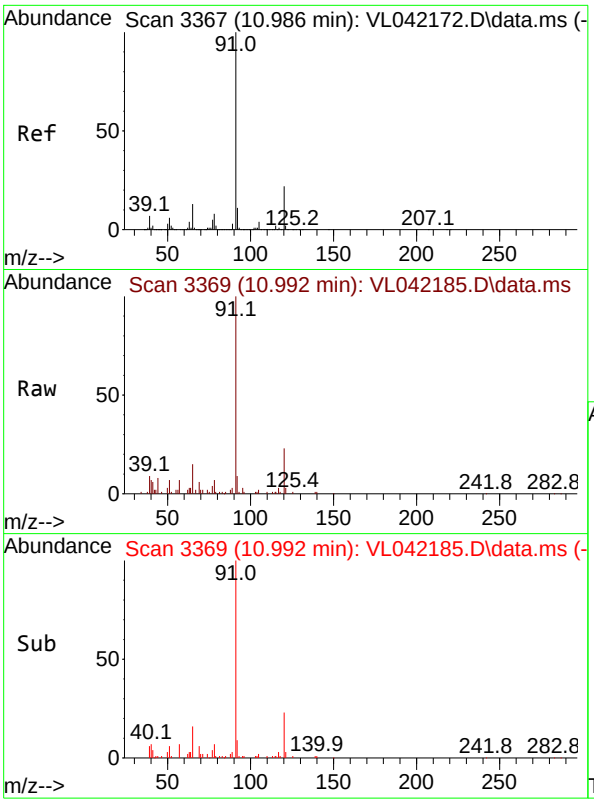


#62
Isopropylbenzene
Concen: 0.034 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:105 Resp: 3524

Ion	Ratio	Lower	Upper
105	100		
120	27.8	19.9	29.9



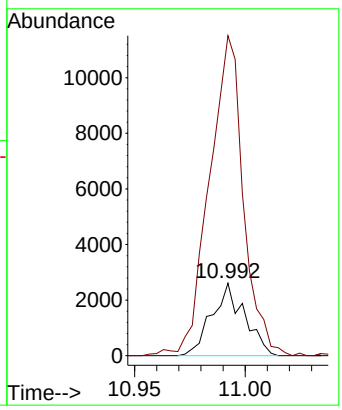


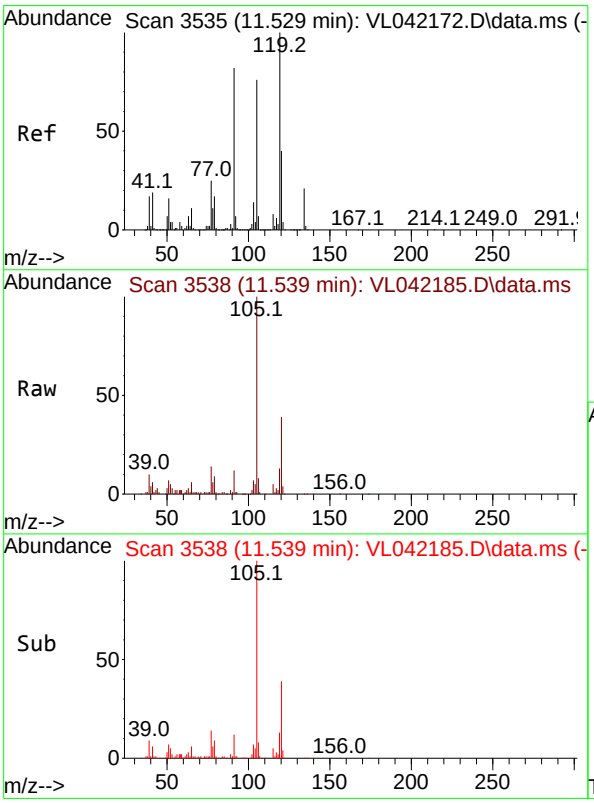
#64
n-propylbenzene
Concen: 0.100 ppbv
RT: 10.992 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion:120 Resp: 2677

Ion	Ratio	Lower	Upper
120	100		
91	461.2	376.9	565.3

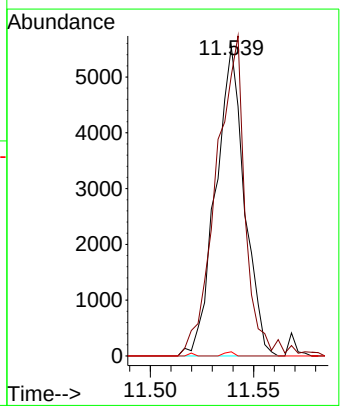


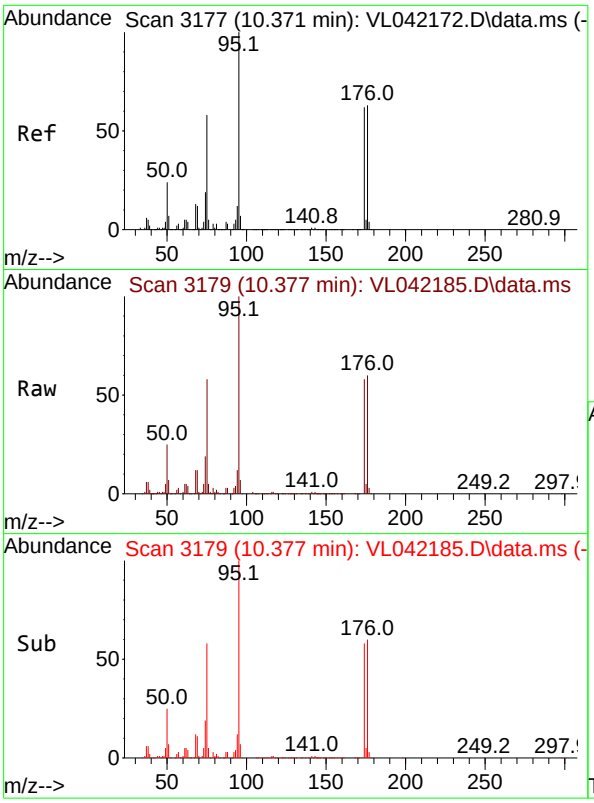


#65
tert-Butylbenzene
Concen: 0.056 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:119 Resp: 5380

Ion	Ratio	Lower	Upper
119	100		
91	105.0	66.0	99.0#
134	0.7	16.7	25.1#



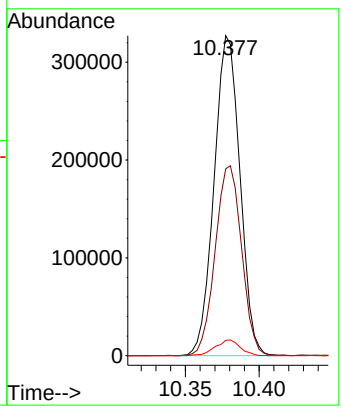


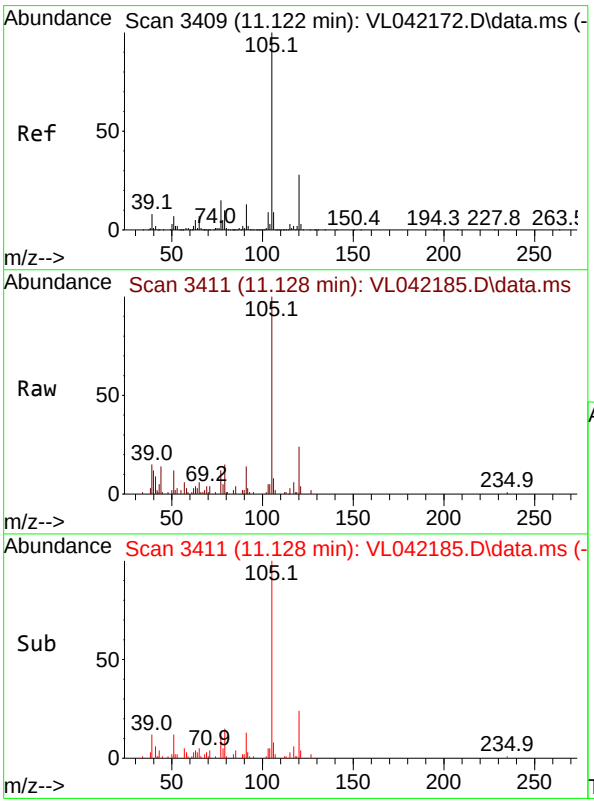
#68
1-Bromo-4-Fluorobenzene
Concen: 9.946 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion: 95 Resp: 399253

Ion	Ratio	Lower	Upper
95	100		
174	60.5	50.6	76.0
175	4.8	3.8	5.6

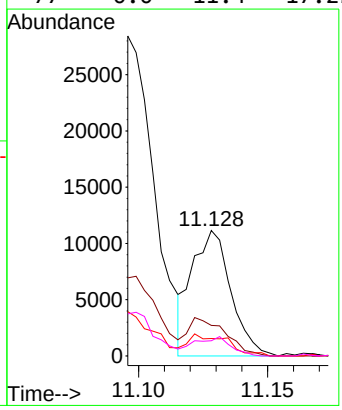


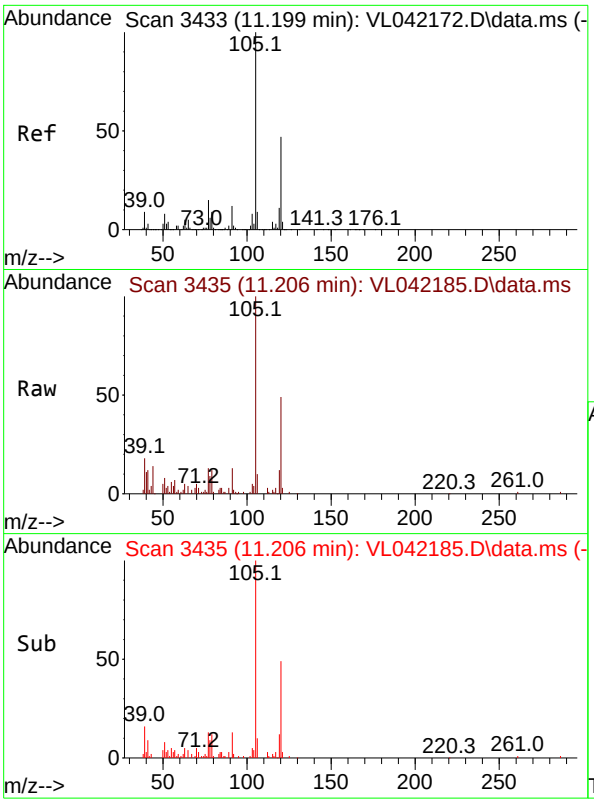


#72
4-Ethyltoluene
Concen: 0.135 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:105 Resp: 11701

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#



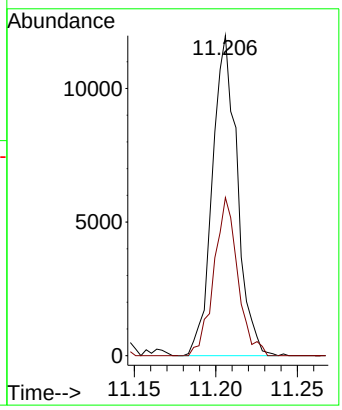


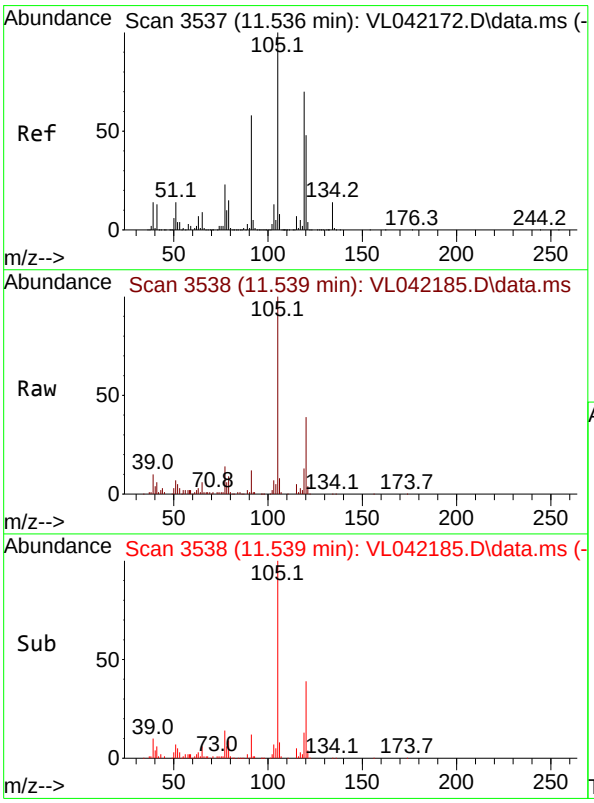
#73
1,3,5-Trimethylbenzene
Concen: 0.168 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

Tgt Ion:105 Resp: 12679

Ion	Ratio	Lower	Upper
105	100		
120	49.4	37.4	56.0

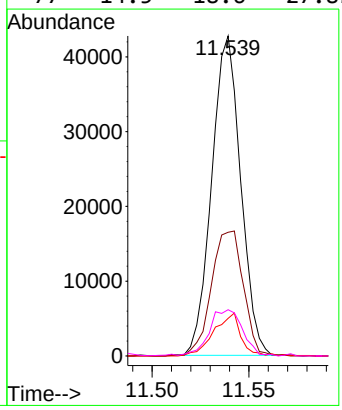




#74
1,2,4-Trimethylbenzene
Concen: 0.510 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:105 Resp: 44446

Ion	Ratio	Lower	Upper
105	100		
120	38.5	38.6	58.0#
91	11.8	46.2	69.2#
77	14.5	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Time: Mar 28 02:15:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	187729	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	538422	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	491411	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	400118	9.915	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	11483	0.414	ppbv		94
3) Chlorodifluoromethane	1.473	51	9481	0.335	ppbv		99
4) Chloromethane	1.531	50	2440	0.215	ppbv		96
7) Chloroethane	1.706	64	355	0.078	ppbv	#	58
9) Propene	1.557	41	9472	0.730	ppbv		97
10) Heptane	4.978	43	12851	0.372	ppbv		93
11) Trichlorofluoromethane	1.877	101	5432	0.201	ppbv		87
12) 1,1,2-Trichlorotrifluo...	2.140	101	1424	0.064	ppbv		86
13) Ethanol	1.719	45	57647	46.985	ppbv		83
15) Acetone	1.835	43	64251	2.447	ppbv	#	82
16) 1,3-Butadiene	1.599	39	710	0.055	ppbv	#	82
17) tert-Butyl alcohol	2.043	59	12249	0.375	ppbv	#	83
19) Isopropyl Alcohol	1.887	45	20907	1.411	ppbv	#	82
20) Methylene Chloride	2.059	84	3376	0.345	ppbv	#	91
21) Allyl Chloride	2.075	41	1290	0.070	ppbv	#	1
23) Vinyl Acetate	2.470	43	66536	5.855	ppbv	#	51
25) Ethyl Acetate	2.823	43	42904	0.630	ppbv	#	81
26) Hexane	2.826	57	60389	2.294	ppbv	#	34
29) Chloroform	2.845	83	4455	0.116	ppbv		92
30) Cyclohexane	3.849	84	3691	0.161	ppbv	#	58
34) 2-Butanone	2.564	43	16547	0.424	ppbv		96
35) Carbon Tetrachloride	3.758	117	1590	0.038	ppbv	#	56
36) Benzene	3.654	78	35891	0.672	ppbv	#	90
39) 1,2-Dichloropropane	3.955	63	138560	7.128	ppbv	#	24
44) 2,2,4-Trimethylpentane	4.638	57	31601	0.350	ppbv	#	80
50) 4-Methyl-2-Pentanone	5.765	43	26447	0.427	ppbv		99
53) Toluene	6.933	91	146301	2.312	ppbv		99
58) Ethyl Benzene	9.351	91	33902	0.388	ppbv	#	89
59) m/p-Xylene	9.532	91	96658	1.387	ppbv		97
60) o-Xylene	9.959	91	45203	0.647	ppbv		99
61) Styrene	9.872	104	1858	0.054	ppbv	#	1
62) Isopropylbenzene	10.539	105	5047	0.048	ppbv	#	88
64) n-propylbenzene	10.989	120	2657	0.099	ppbv	#	52
71) 2-Chlorotoluene	10.989	91	15693	0.194	ppbv	#	46
72) 4-Ethyltoluene	11.125	105	17501	0.201	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.199	105	13983	0.184	ppbv		97
74) 1,2,4-Trimethylbenzene	11.536	105	47154	0.539	ppbv	#	63

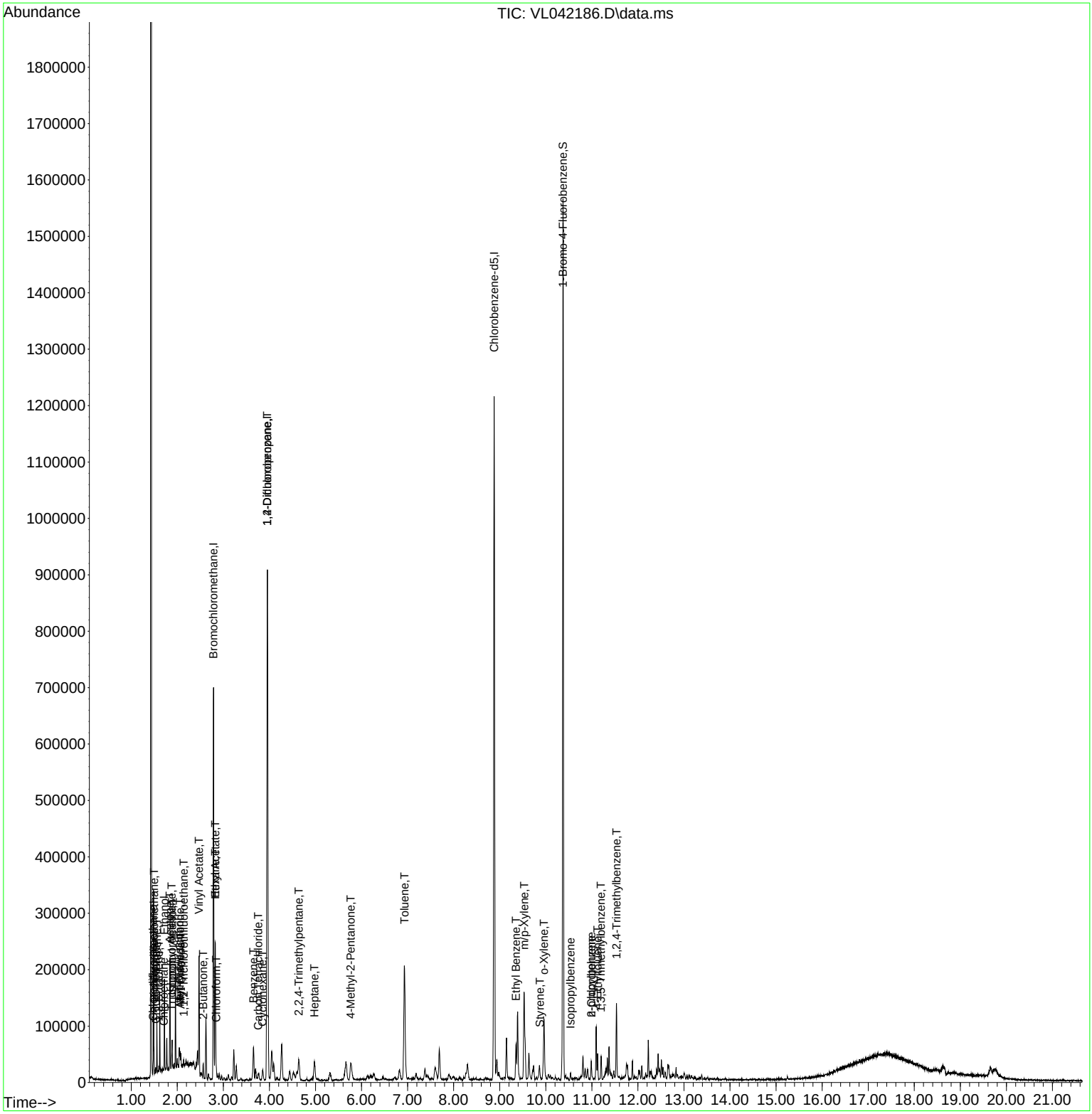
(#) = qualifier out of range (m) = manual integration (+) = signals summed

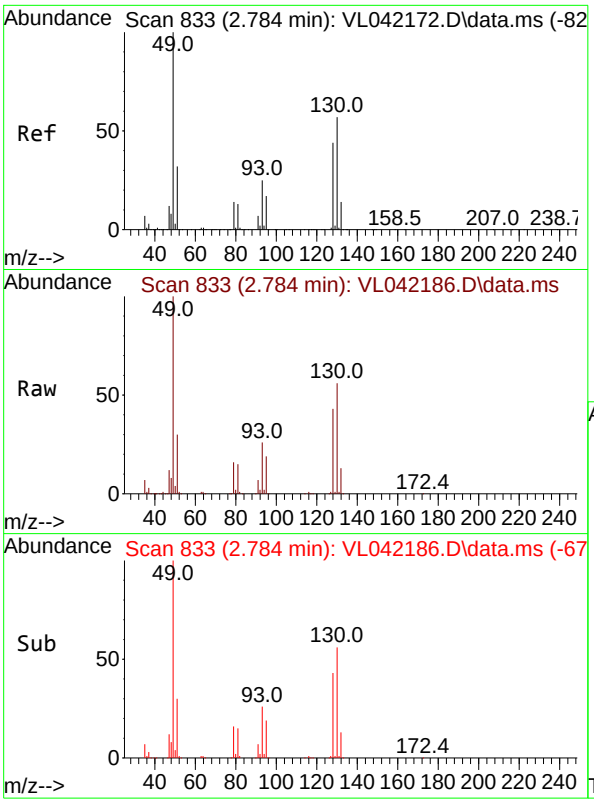
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
Acq On : 27 Mar 2025 18:59
Operator : SY/MD
Sample : Q1669-02
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Quant Time: Mar 28 02:15:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



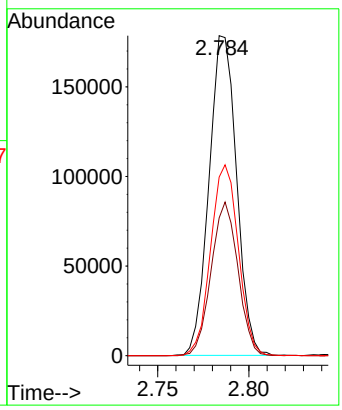


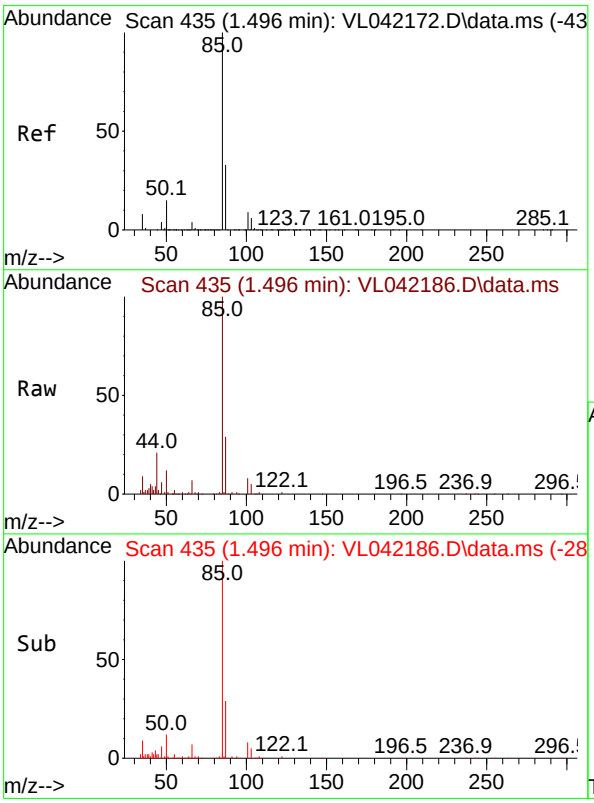
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 49 Resp: 187729

Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	60.0	28.8	86.4

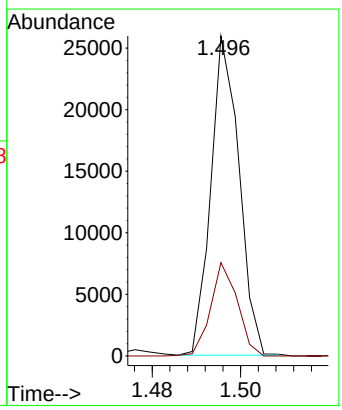


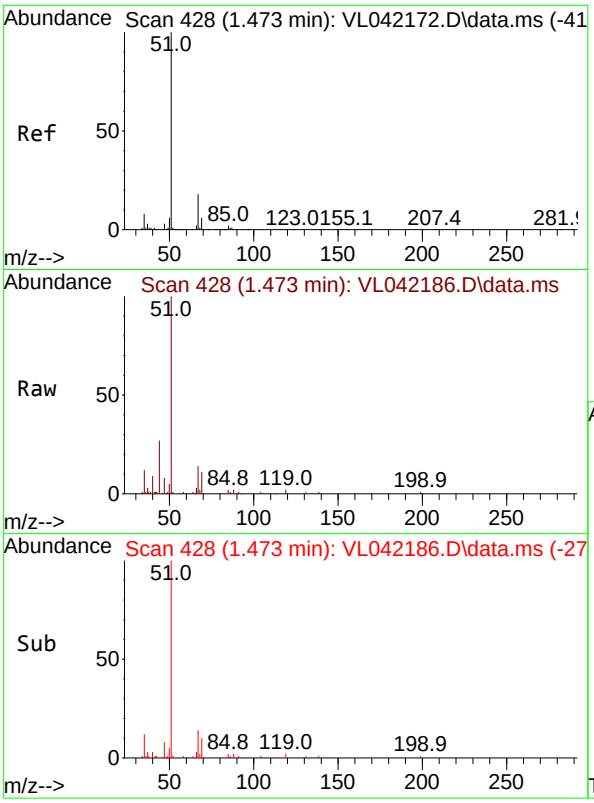


#2
Dichlorodifluoromethane
Concen: 0.414 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 85 Resp: 11483

Ion	Ratio	Lower	Upper
85	100		
87	29.2	26.1	39.1



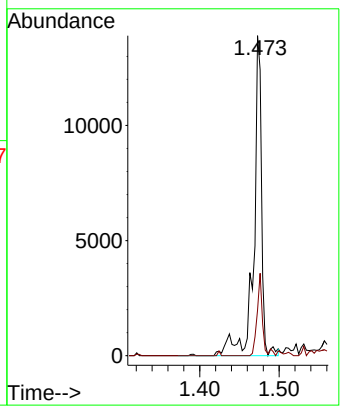


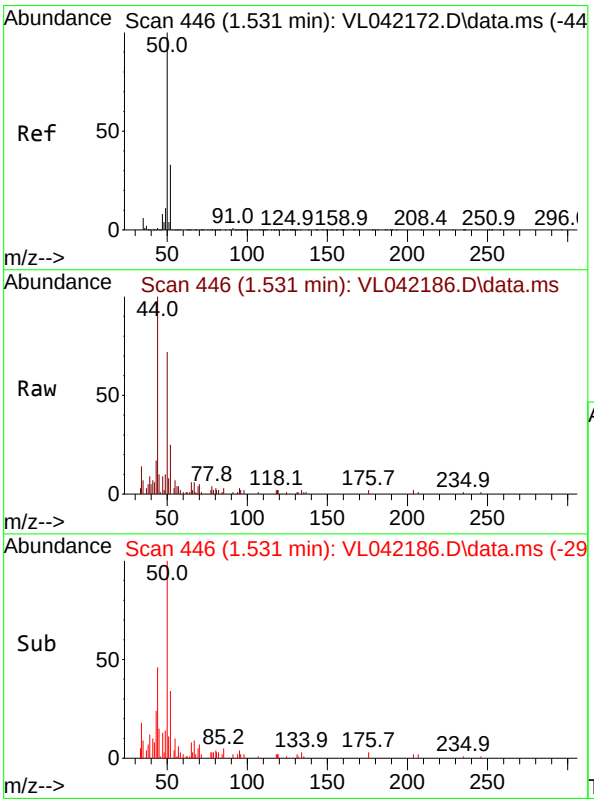
#3
Chlorodifluoromethane
Concen: 0.335 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 51 Resp: 9481

Ion	Ratio	Lower	Upper
51	100		
67	19.2	15.0	22.6

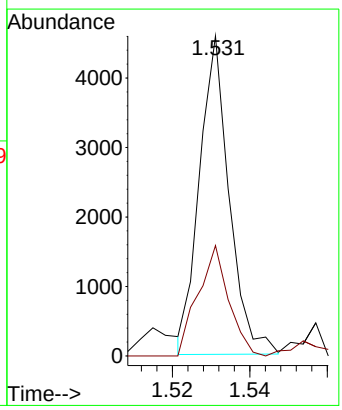


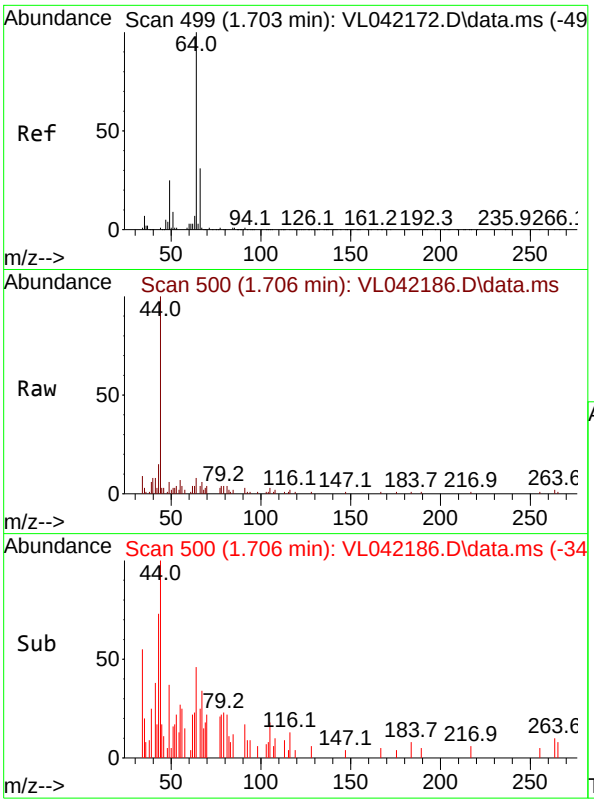


#4
Chloromethane
Concen: 0.215 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 50 Resp: 2440

Ion	Ratio	Lower	Upper
50	100		
52	34.9	26.1	39.1



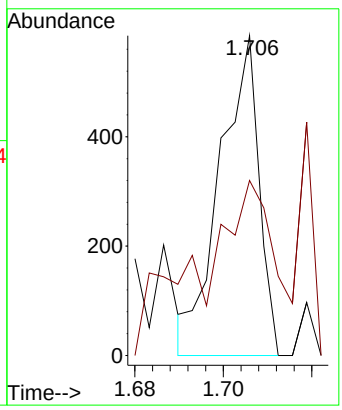


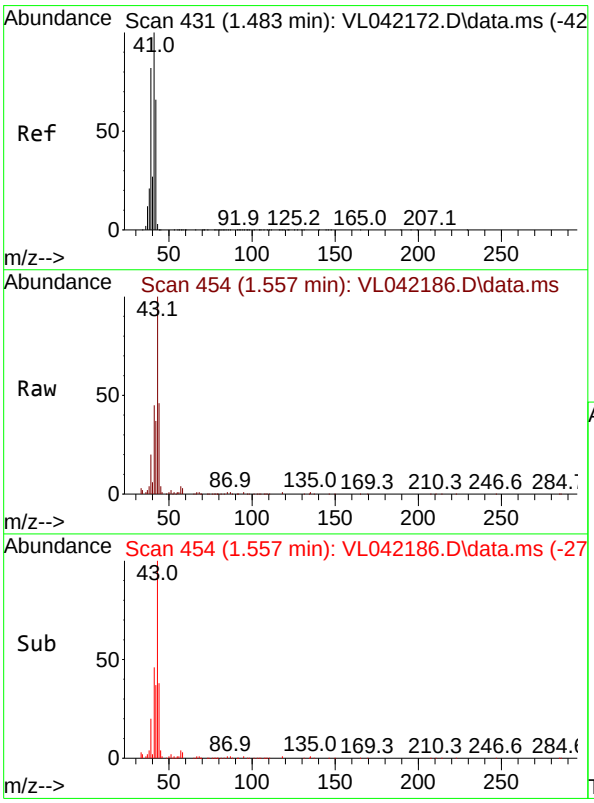
#7
Chloroethane
Concen: 0.078 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 64 Resp: 355

Ion	Ratio	Lower	Upper
64	100		
66	54.7	25.2	37.8#

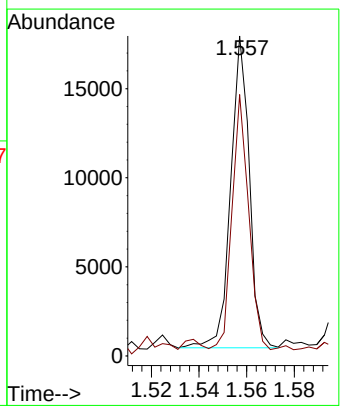


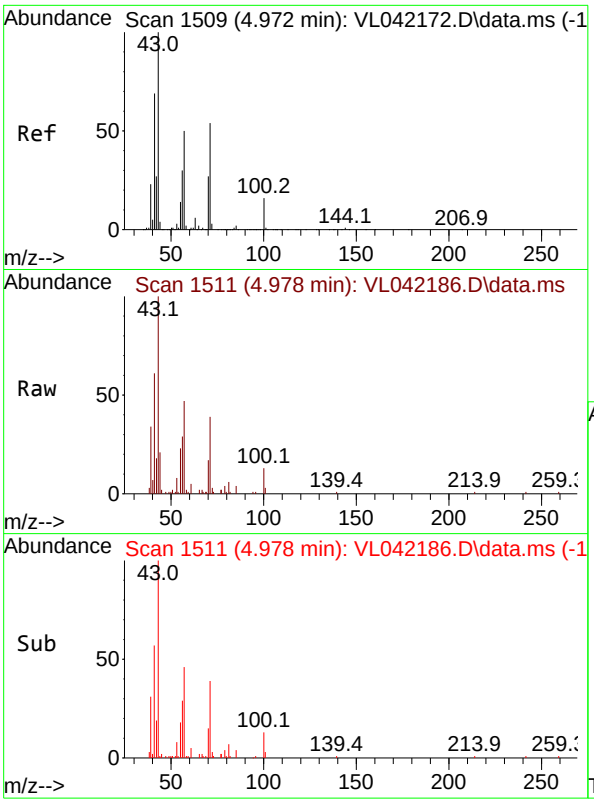


#9
Propene
Concen: 0.730 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.074 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 41 Resp: 9472

Ion	Ratio	Lower	Upper
41	100		
42	71.6	55.4	83.2



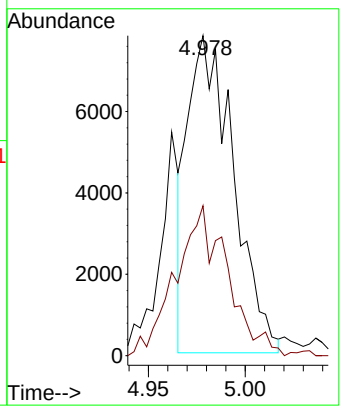


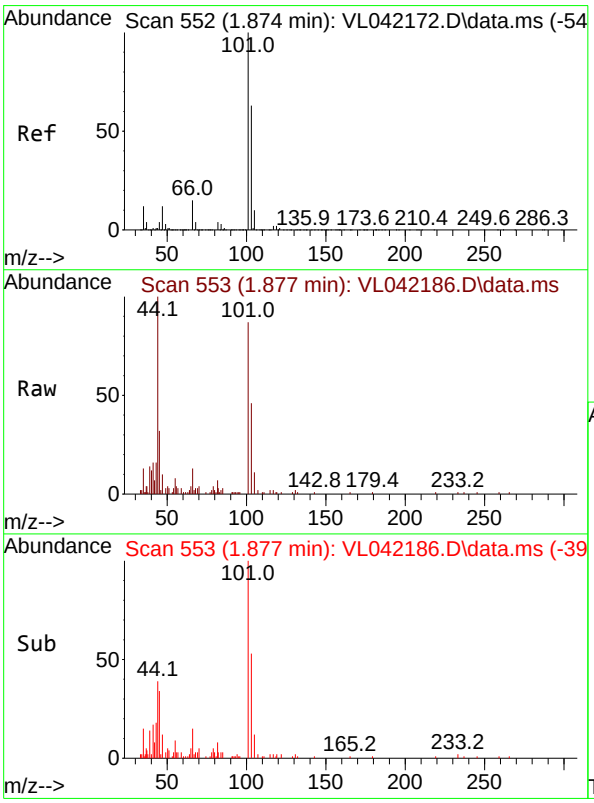
#10
Heptane
Concen: 0.372 ppbv
RT: 4.978 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 43 Resp: 12851

Ion	Ratio	Lower	Upper
43	100		
57	54.3	39.4	59.2

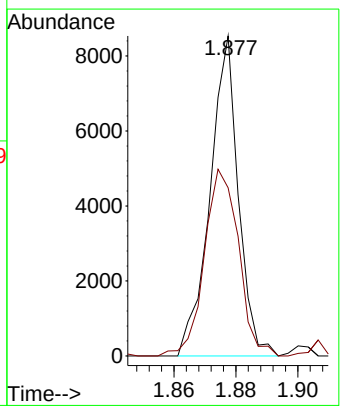


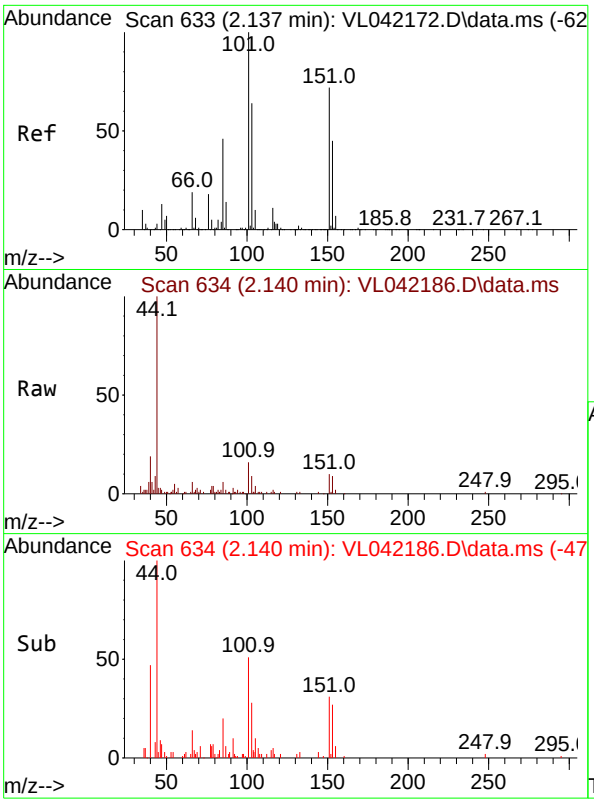


#11
Trichlorofluoromethane
Concen: 0.201 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:101 Resp: 5432

Ion	Ratio	Lower	Upper
101	100		
103	52.5	50.2	75.2



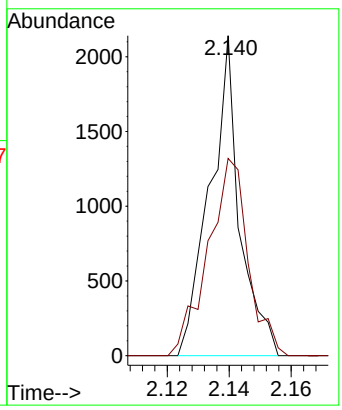


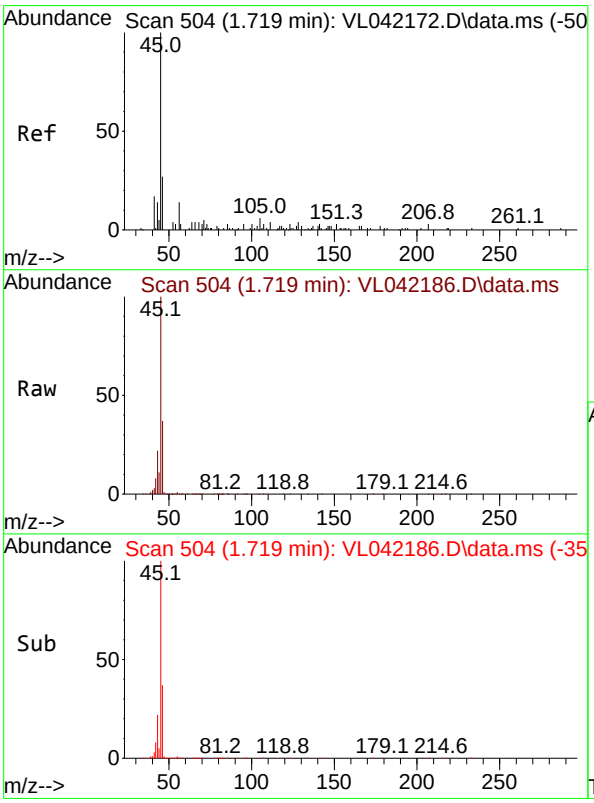
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.064 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion:101 Resp: 1424

Ion	Ratio	Lower	Upper
101	100		
151	83.1	57.1	85.7

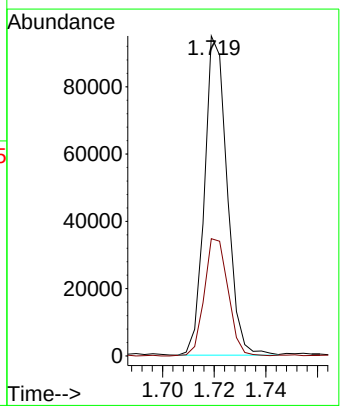


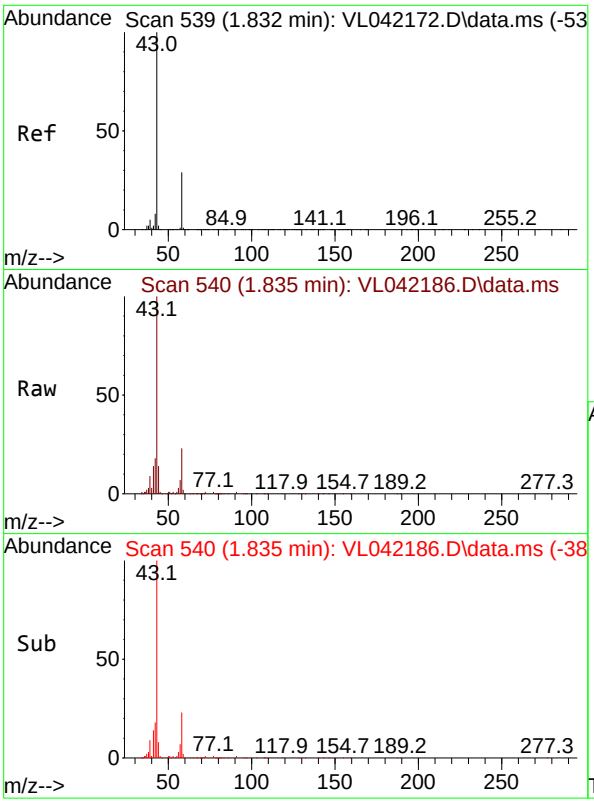


#13
Ethanol
Concen: 46.985 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 45 Resp: 57647

Ion	Ratio	Lower	Upper
45	100		
46	39.0	20.2	80.8



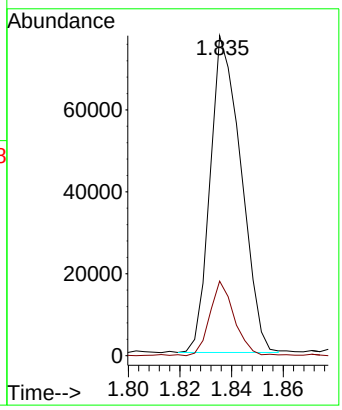


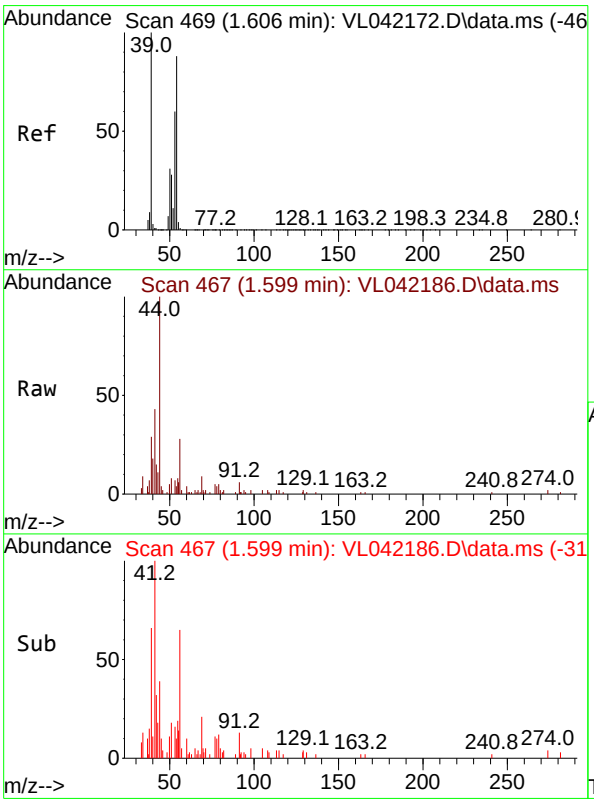
#15
Acetone
Concen: 2.447 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 43 Resp: 64251

Ion	Ratio	Lower	Upper
43	100		
58	19.2	23.2	34.8#

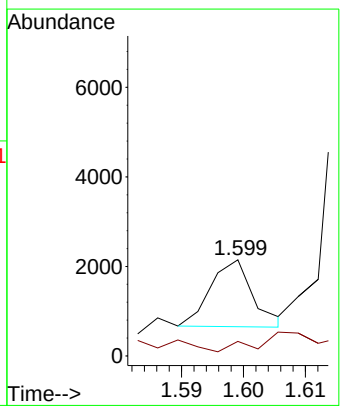


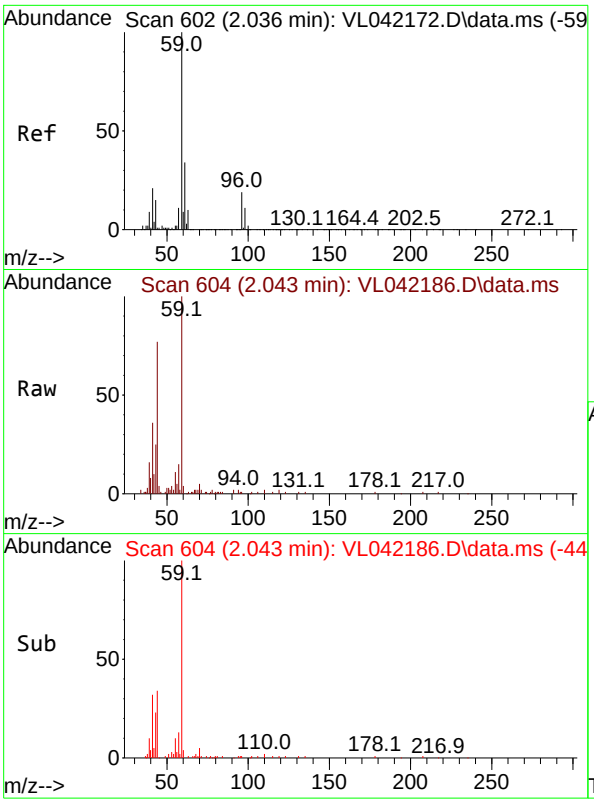


#16
1,3-Butadiene
Concen: 0.055 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 39 Resp: 710

Ion	Ratio	Lower	Upper
39	100		
54	91.3	60.7	91.1#



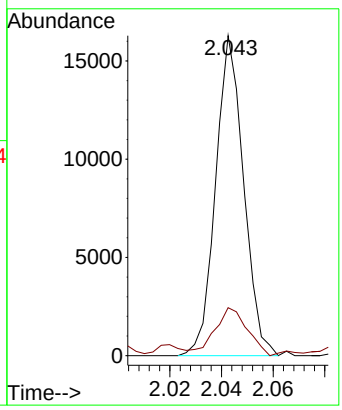


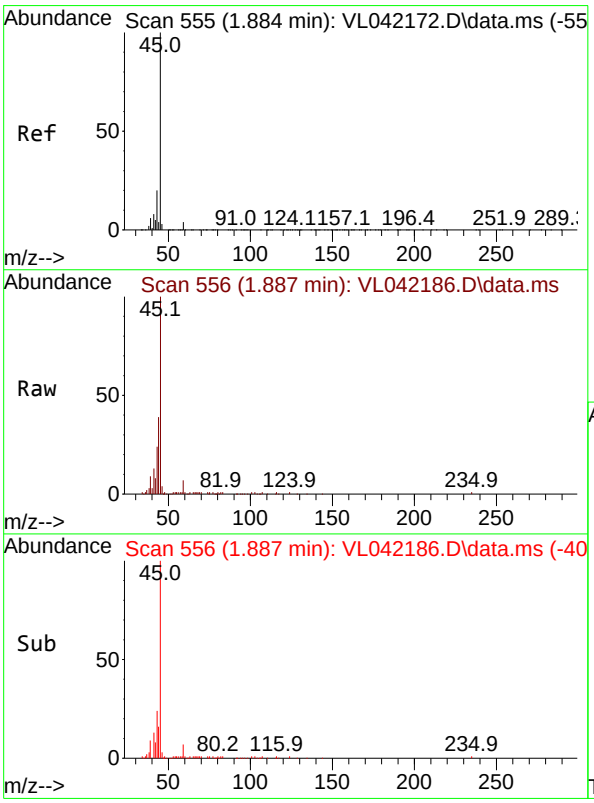
#17
tert-Butyl alcohol
Concen: 0.375 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 59 Resp: 12249

Ion	Ratio	Lower	Upper
59	100		
57	17.6	8.9	13.3#

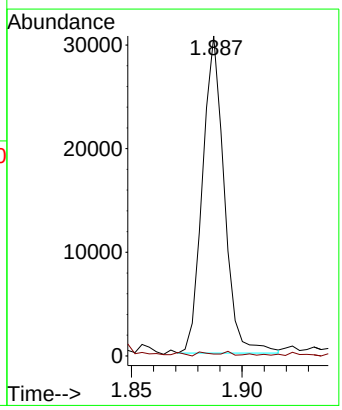


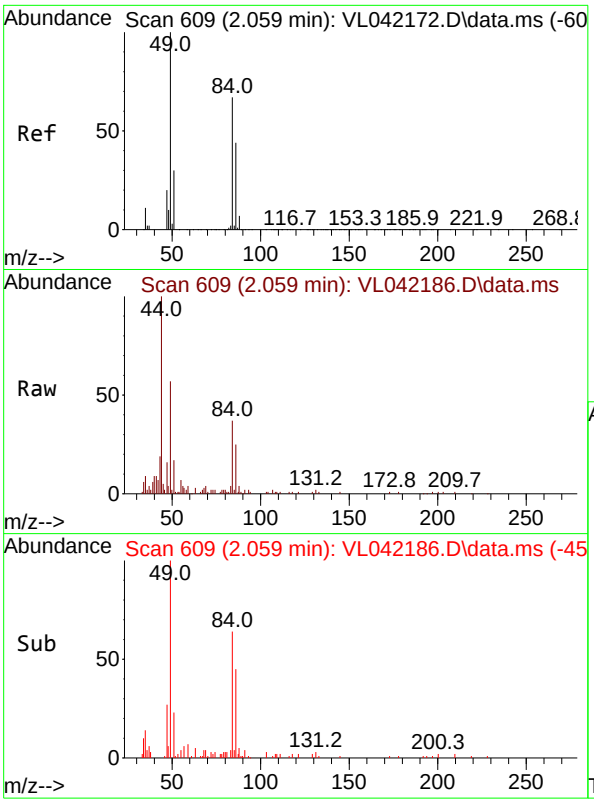


#19
Isopropyl Alcohol
Concen: 1.411 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 45 Resp: 20907

Ion	Ratio	Lower	Upper
45	100		
58	58.1	36.9	55.3#



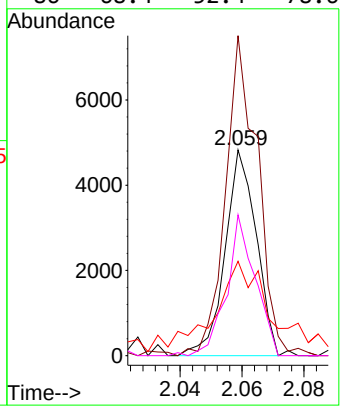


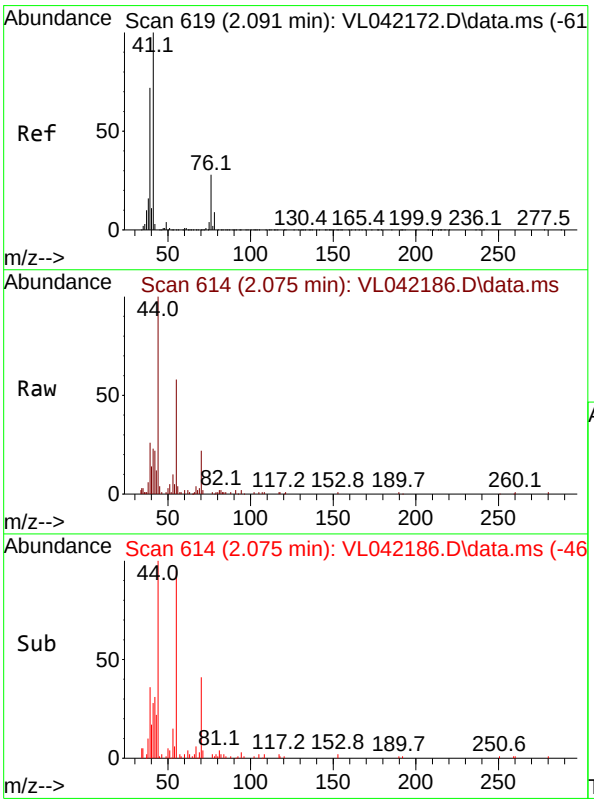
#20
Methylene Chloride
Concen: 0.345 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 84 Resp: 3376

Ion	Ratio	Lower	Upper
84	100		
49	161.5	120.2	180.4
51	34.0	37.4	56.0#
86	68.4	52.4	78.6

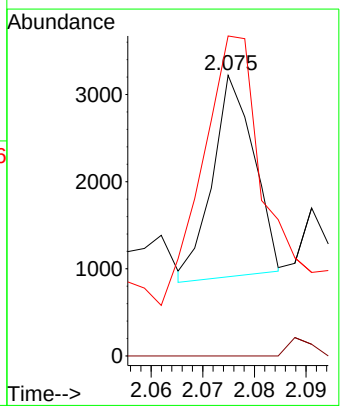


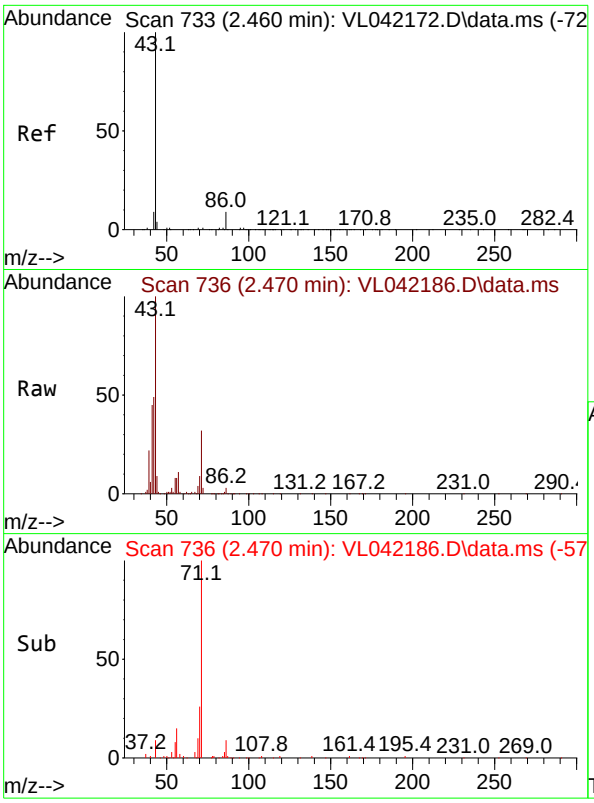


#21
Allyl Chloride
Concen: 0.070 ppbv
RT: 2.075 min Scan# 614
Delta R.T. -0.016 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 41 Resp: 1290

Ion	Ratio	Lower	Upper
41	100		
76	5.2	24.1	36.1#
39	242.2	61.1	91.7#



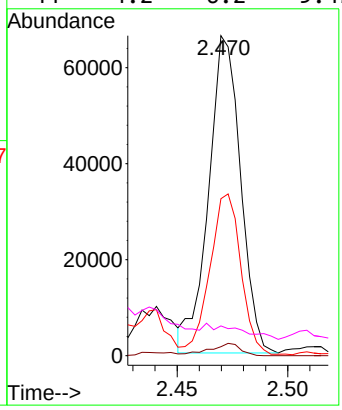


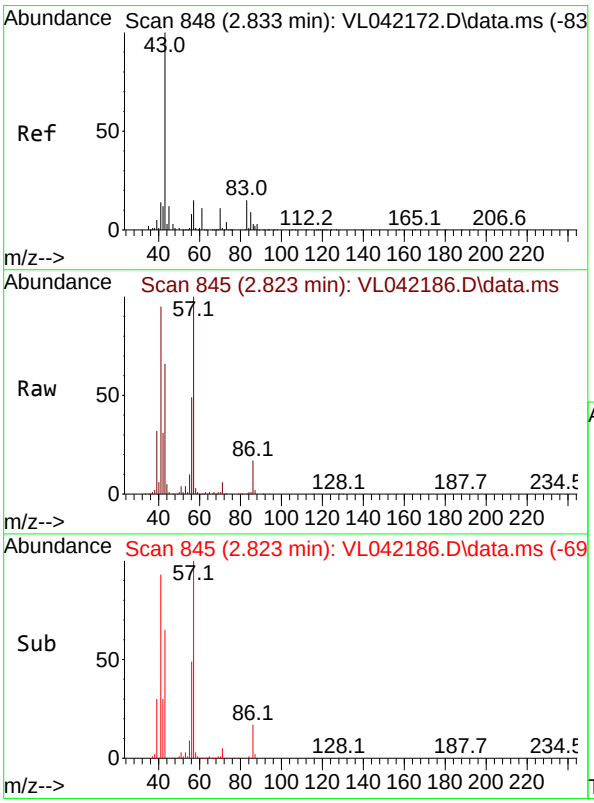
#23
Vinyl Acetate
Concen: 5.855 ppbv
RT: 2.470 min Scan# 7
Delta R.T. 0.009 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 43 Resp: 66536

Ion	Ratio	Lower	Upper
43	100		
86	2.8	5.5	8.3#
42	49.0	8.6	13.0#
44	4.2	6.2	9.4#

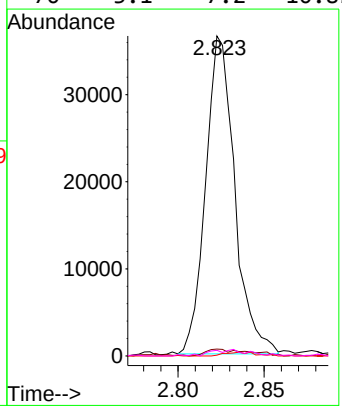


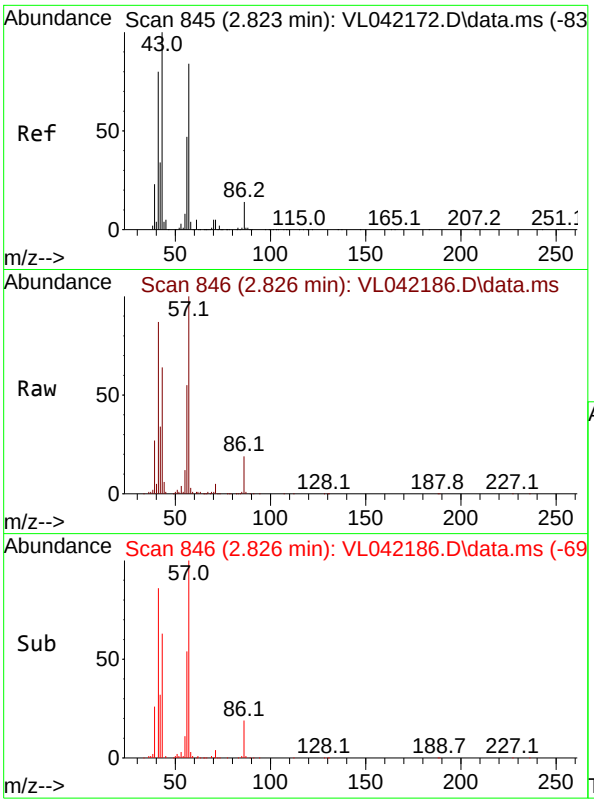


#25
Ethyl Acetate
Concen: 0.630 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.010 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 43 Resp: 42904

Ion	Ratio	Lower	Upper
43	100		
45	2.7	8.2	12.2#
61	1.3	7.3	10.9#
70	3.1	7.2	10.8#



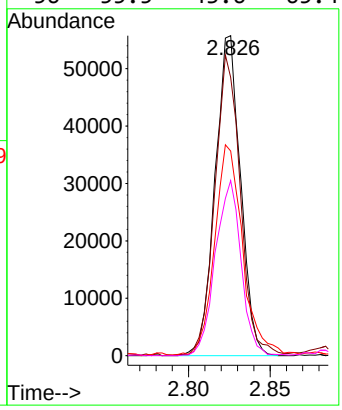


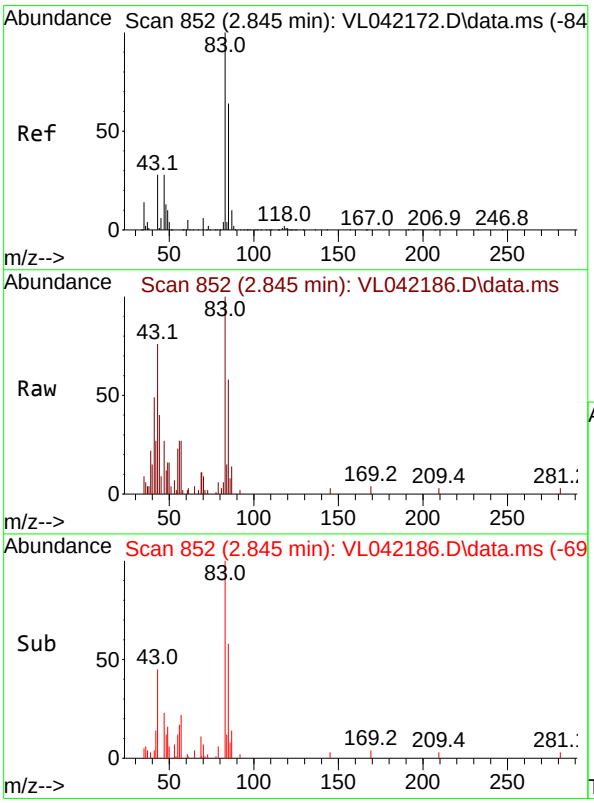
#26
Hexane
Concen: 2.294 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 57 Resp: 60389

Ion	Ratio	Lower	Upper
57	100		
41	94.6	76.6	114.8
43	73.8	207.8	311.8#
56	55.5	43.6	65.4

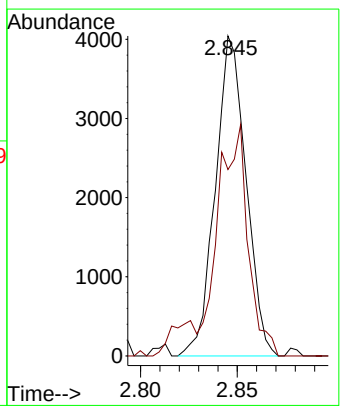


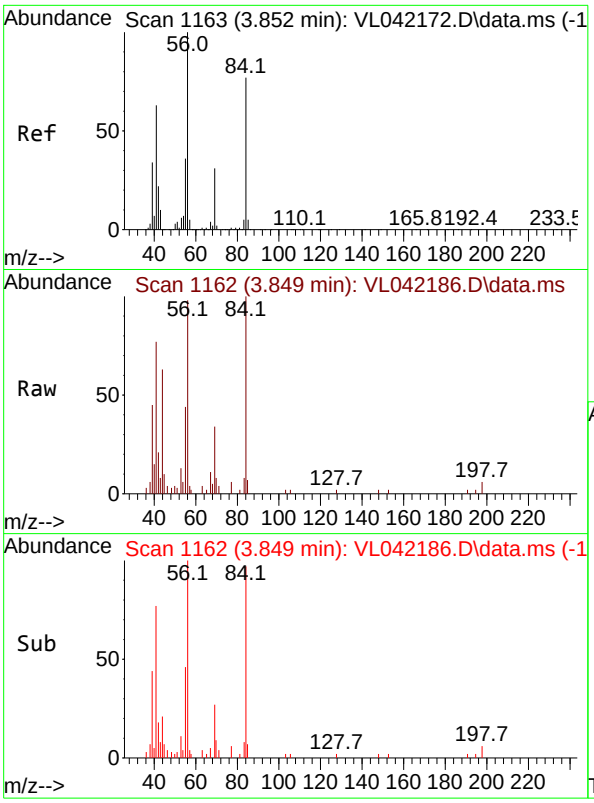


#29
Chloroform
Concen: 0.116 ppbv
RT: 2.845 min Scan# 852
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 83 Resp: 4455

Ion	Ratio	Lower	Upper
83	100		
85	58.3	51.4	77.2



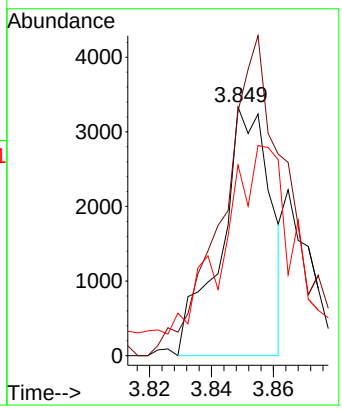


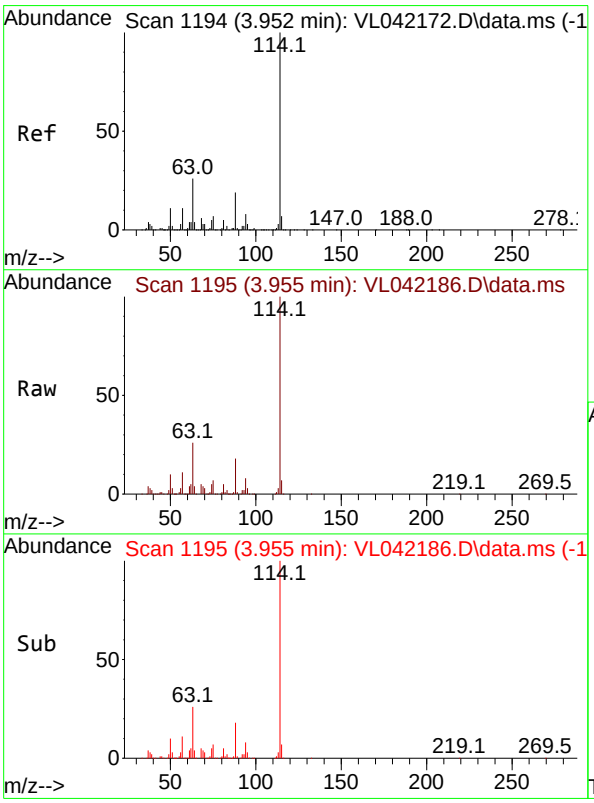
#30
Cyclohexane
Concen: 0.161 ppbv
RT: 3.849 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 84 Resp: 3691

Ion	Ratio	Lower	Upper
84	100		
56	174.5	102.8	154.2#
41	123.8	66.5	99.7#

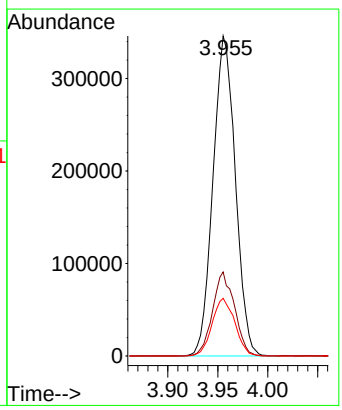


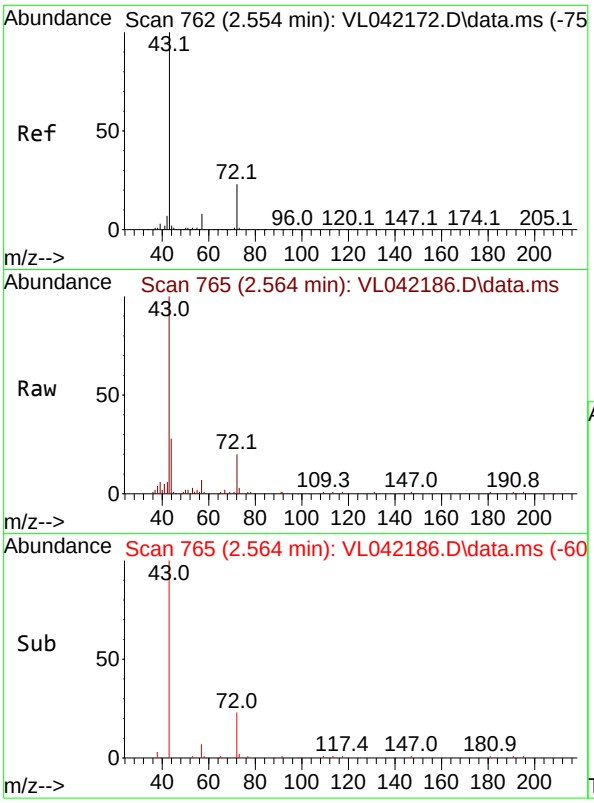


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:114 Resp: 538422

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.3	15.0	22.4



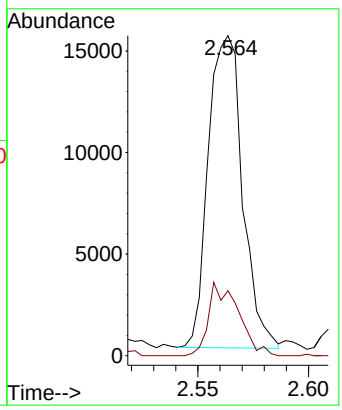


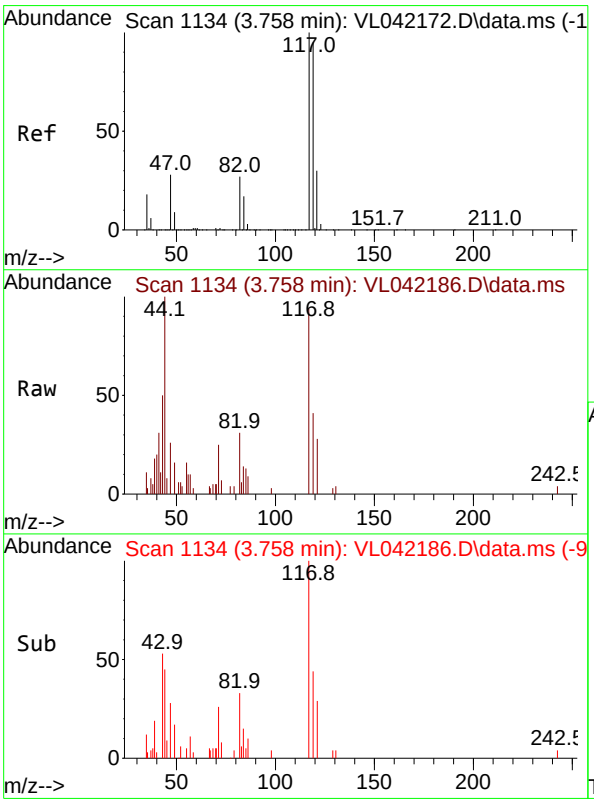
#34
2-Butanone
Concen: 0.424 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.009 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 43 Resp: 16547

Ion	Ratio	Lower	Upper
43	100		
72	20.6	18.2	27.2

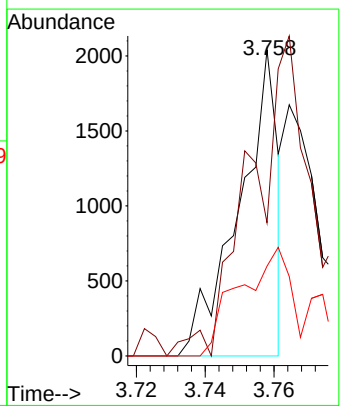


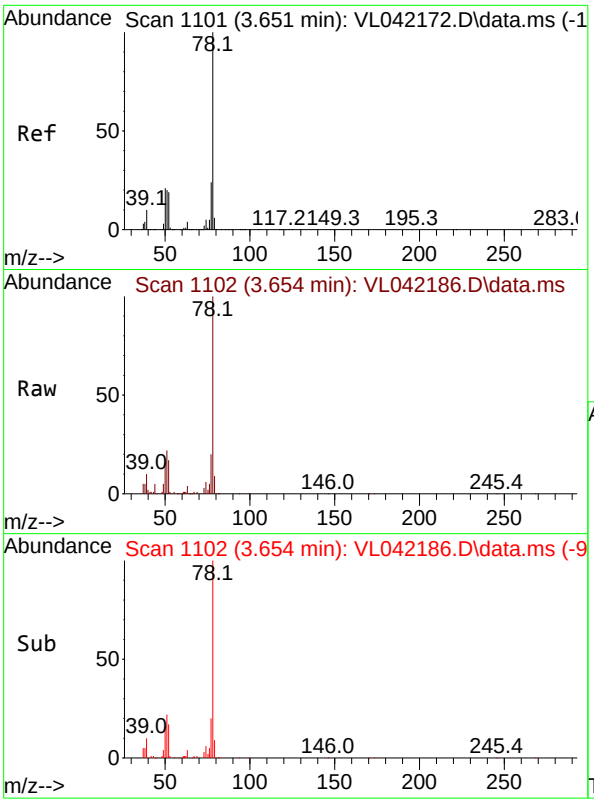


#35
Carbon Tetrachloride
Concen: 0.038 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:117 Resp: 1590

Ion	Ratio	Lower	Upper
117	100		
119	39.0	76.2	114.2#
121	29.3	24.2	36.4



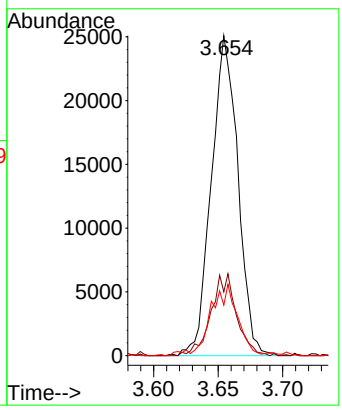


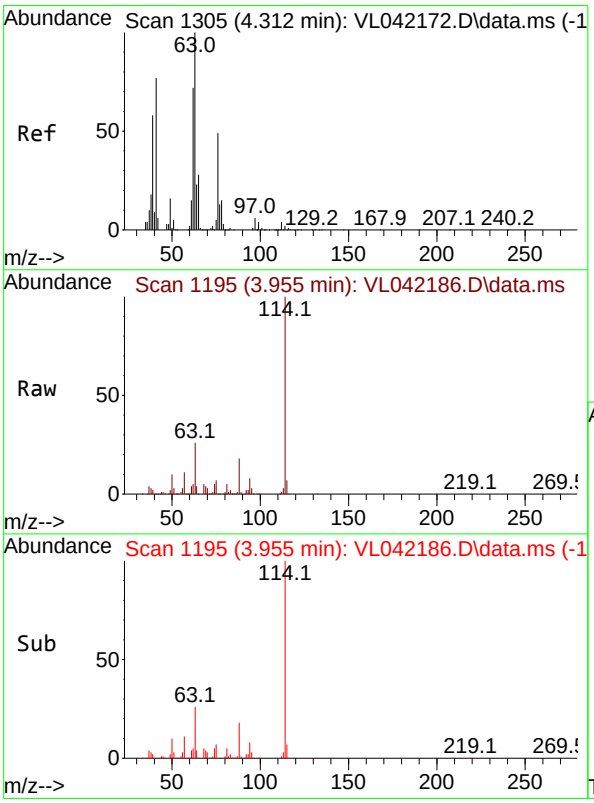
#36
Benzene
Concen: 0.672 ppbv
RT: 3.654 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 78 Resp: 35891

Ion	Ratio	Lower	Upper
78	100		
77	19.9	19.1	28.7
50	15.3	16.6	24.8#

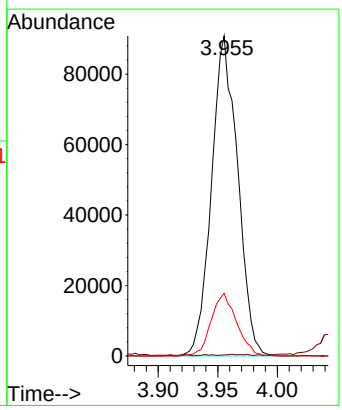


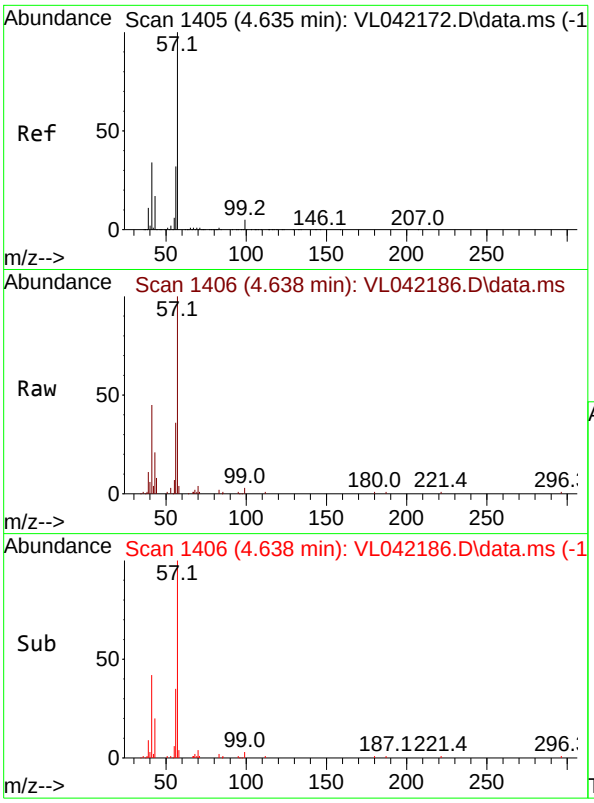


#39
1,2-Dichloropropane
Concen: 7.128 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 63 Resp: 138560

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	19.6	57.6	86.4#



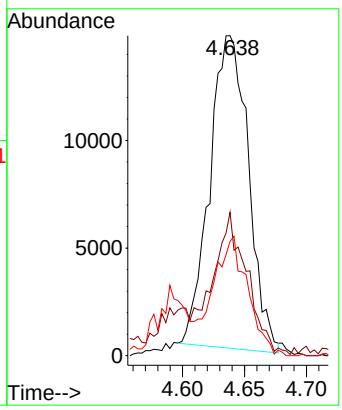


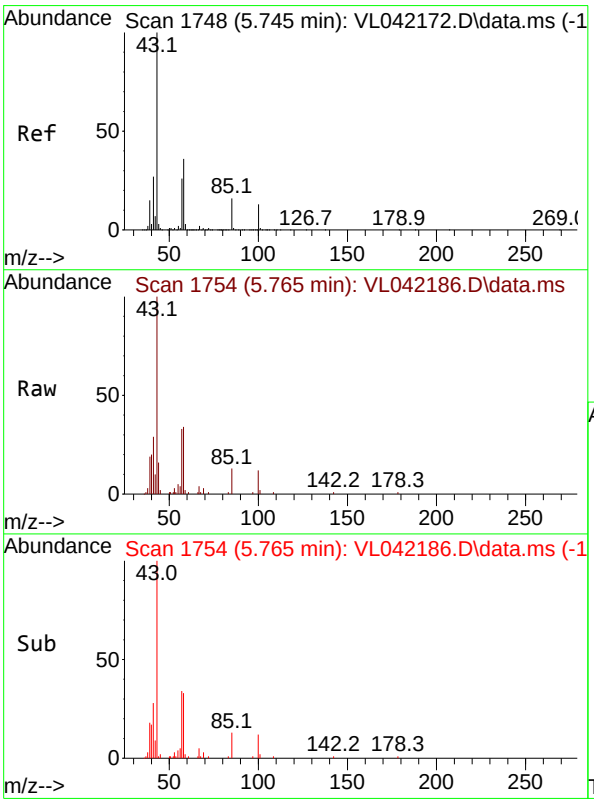
#44
2,2,4-Trimethylpentane
Concen: 0.350 ppbv
RT: 4.638 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 57 Resp: 31601

Ion	Ratio	Lower	Upper
57	100		
41	52.3	26.8	40.2#
56	35.5	25.6	38.4

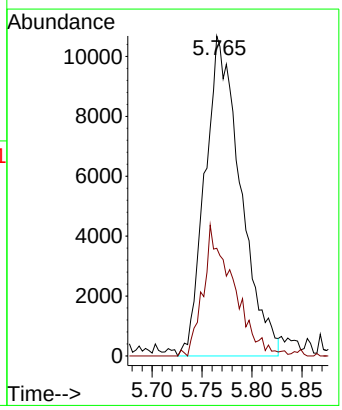


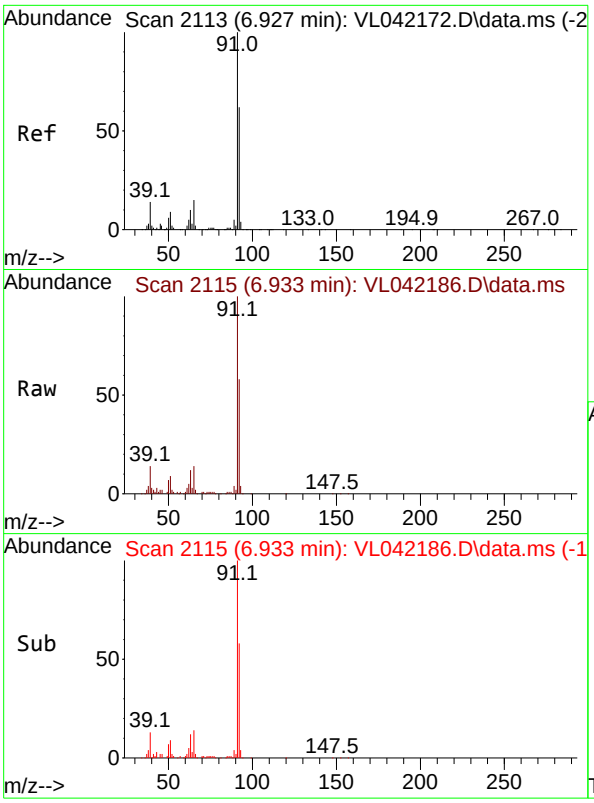


#50
4-Methyl-2-Pentanone
Concen: 0.427 ppbv
RT: 5.765 min Scan# 1754
Delta R.T. 0.019 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 43 Resp: 26447

Ion	Ratio	Lower	Upper
43	100		
58	35.4	29.0	43.6



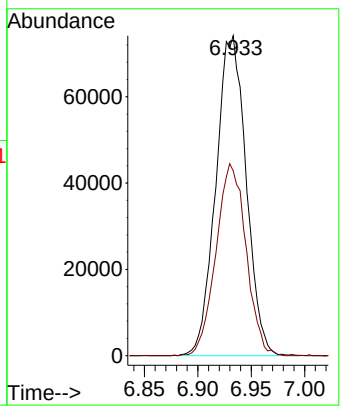


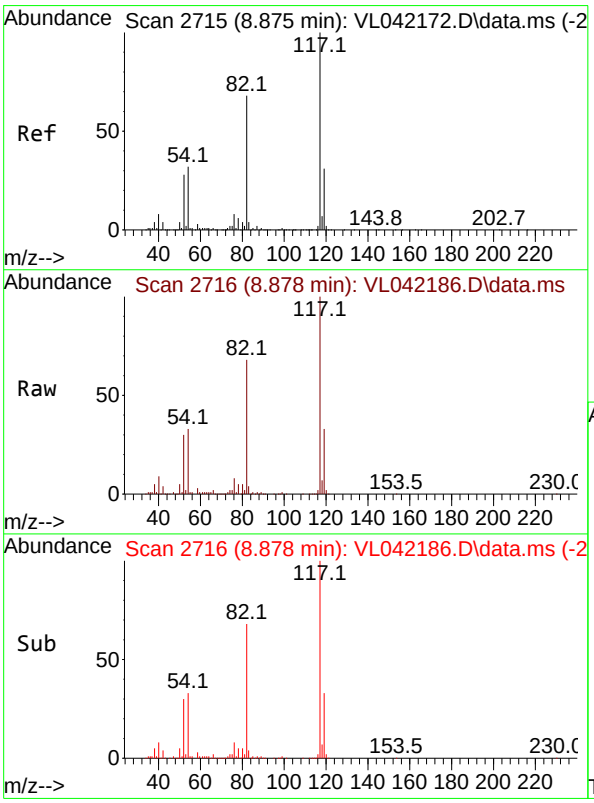
#53
Toluene
Concen: 2.312 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 91 Resp: 146301

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.4	72.6

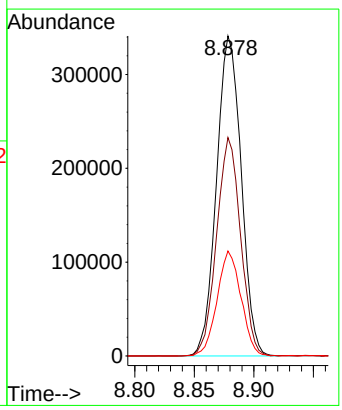


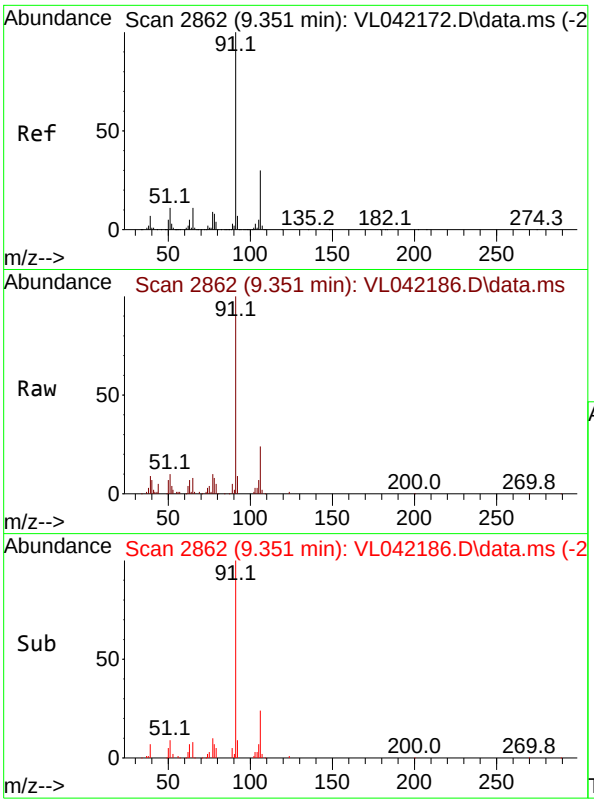


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:117 Resp: 491411

Ion	Ratio	Lower	Upper
117	100		
82	66.3	55.8	83.6
119	31.8	25.5	38.3



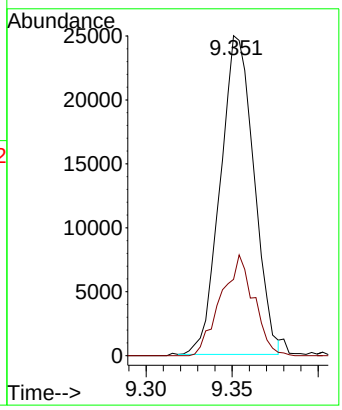


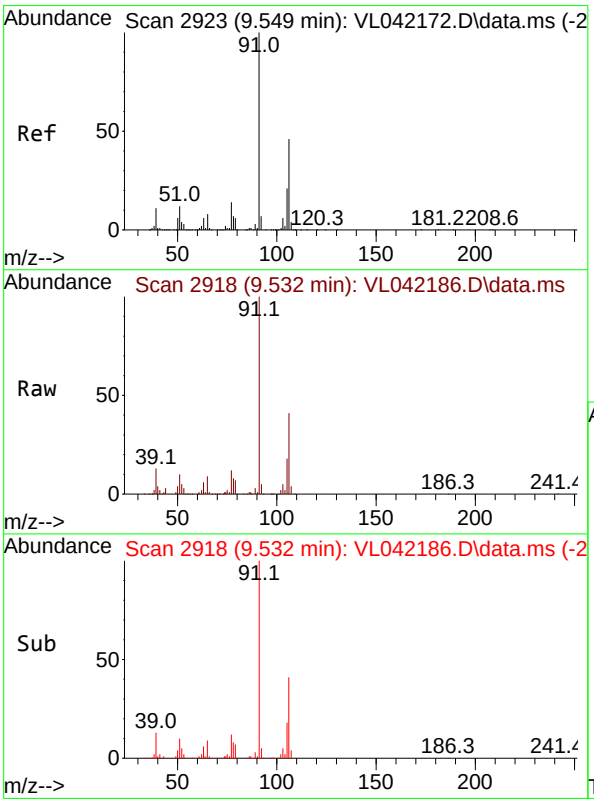
#58
Ethyl Benzene
Concen: 0.388 ppbv
RT: 9.351 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 91 Resp: 33902

Ion	Ratio	Lower	Upper
91	100		
106	24.0	24.2	36.2#

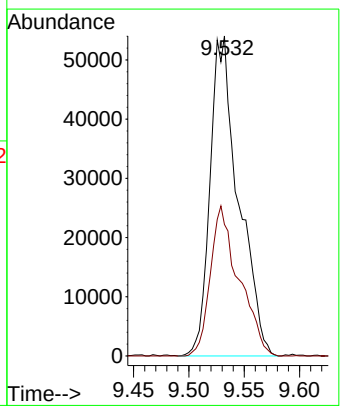


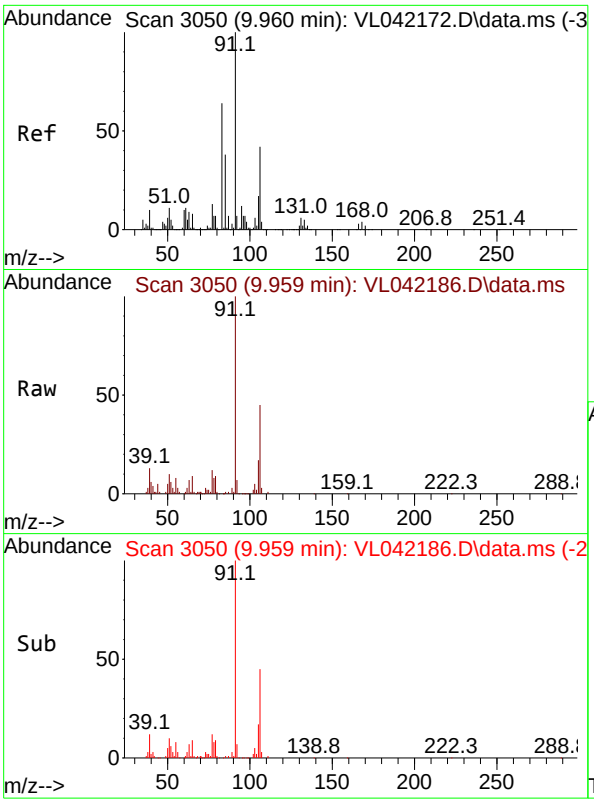


#59
m/p-Xylene
Concen: 1.387 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 91 Resp: 96658

Ion	Ratio	Lower	Upper
91	100		
106	47.3	36.4	54.6



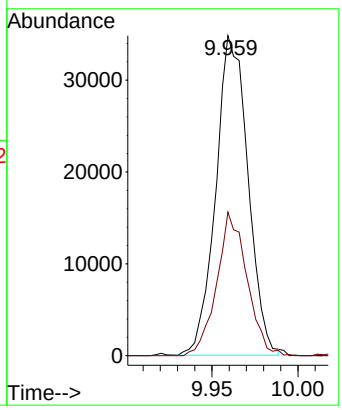


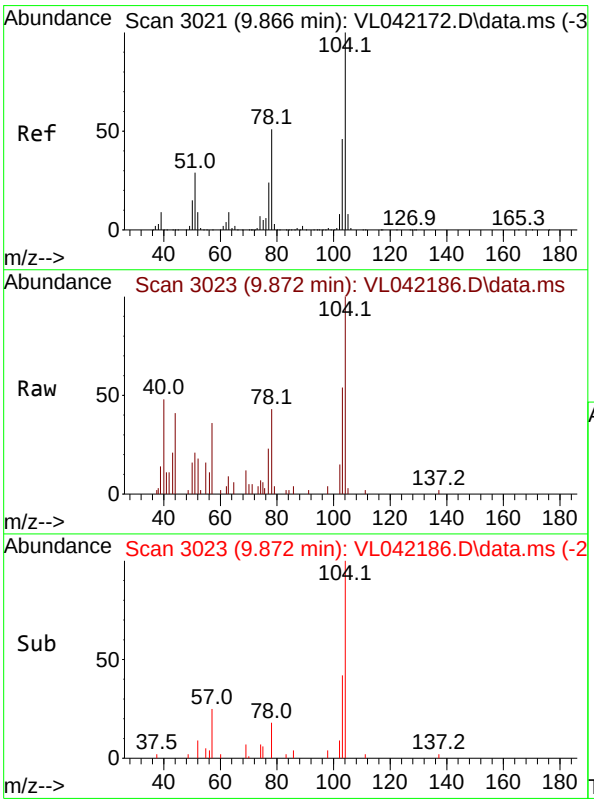
#60
o-Xylene
Concen: 0.647 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 91 Resp: 45203

Ion	Ratio	Lower	Upper
91	100		
106	42.1	20.8	62.5

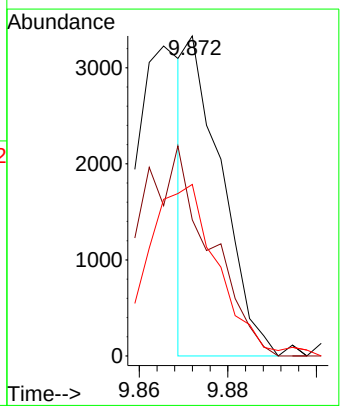


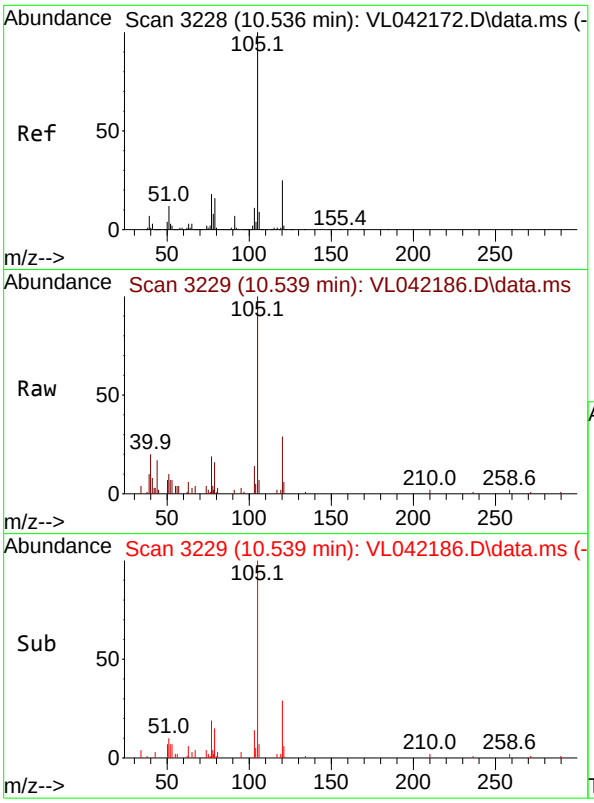


#61
Styrene
Concen: 0.054 ppbv
RT: 9.872 min Scan# 3023
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:104 Resp: 1858

Ion	Ratio	Lower	Upper
104	100		
78	132.3	41.8	62.6#
103	122.3	37.0	55.4#



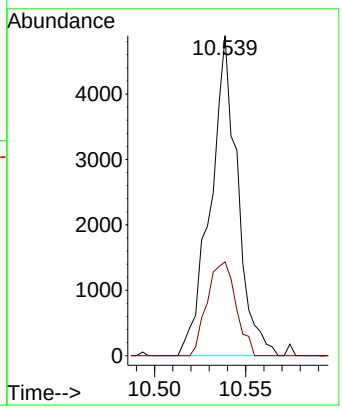


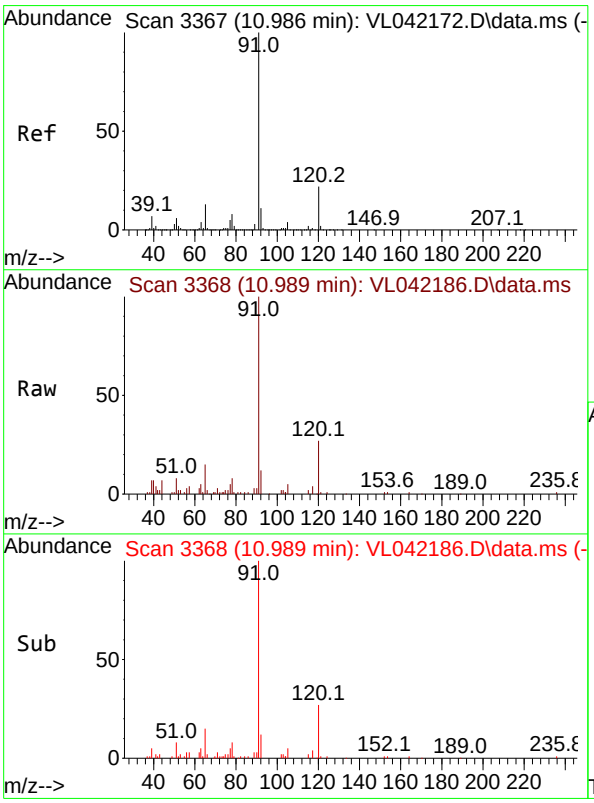
#62
Isopropylbenzene
Concen: 0.048 ppbv
RT: 10.539 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion:105 Resp: 5047

Ion	Ratio	Lower	Upper
105	100		
120	31.1	19.9	29.9#

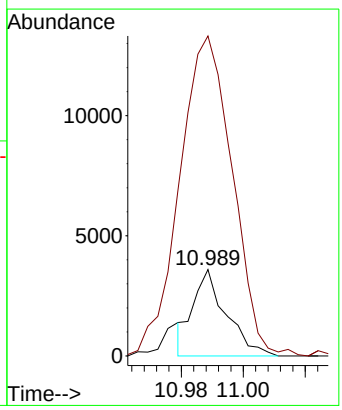


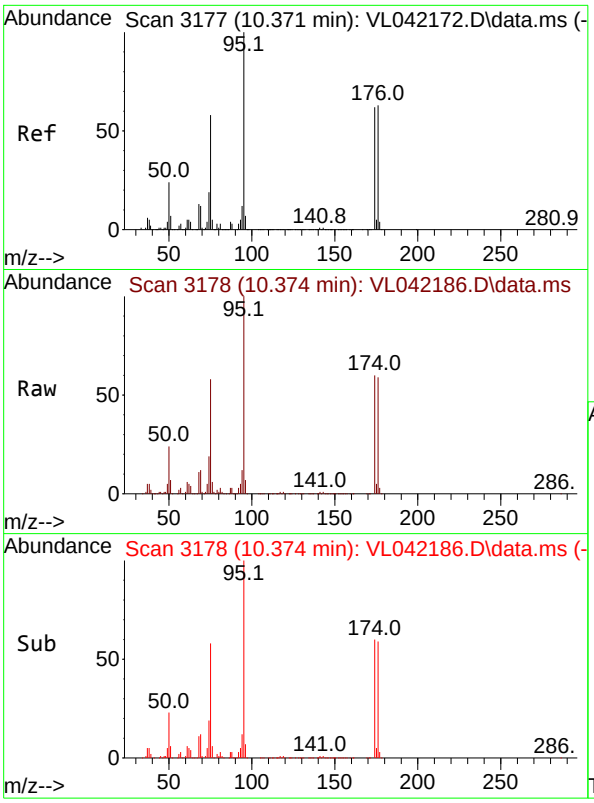


#64
n-propylbenzene
Concen: 0.099 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:120 Resp: 2657

Ion	Ratio	Lower	Upper
120	100		
91	599.4	376.9	565.3#



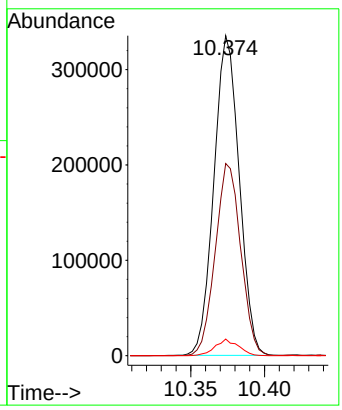


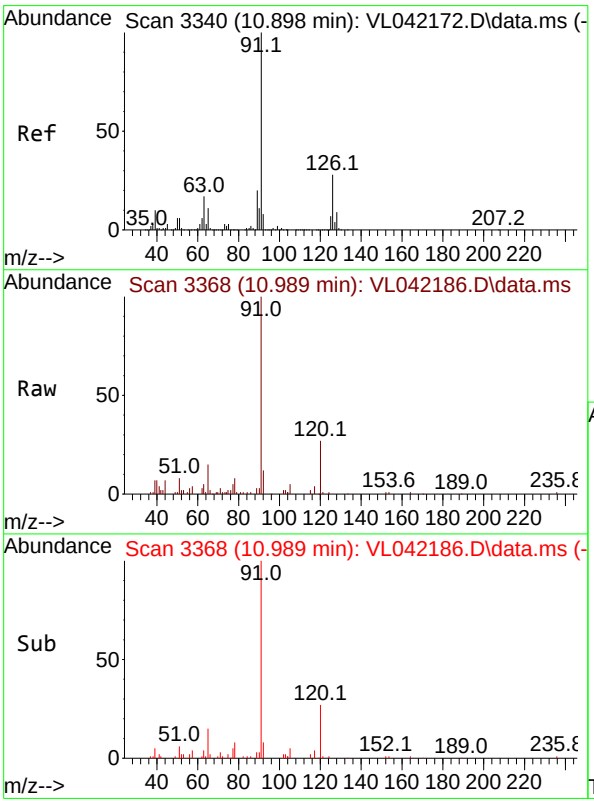
#68
1-Bromo-4-Fluorobenzene
Concen: 9.915 ppbv
RT: 10.374 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 95 Resp: 400118

Ion	Ratio	Lower	Upper
95	100		
174	60.8	50.6	76.0
175	4.7	3.8	5.6

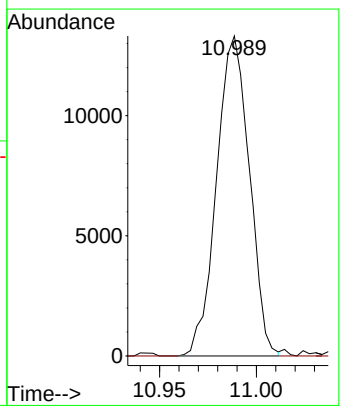


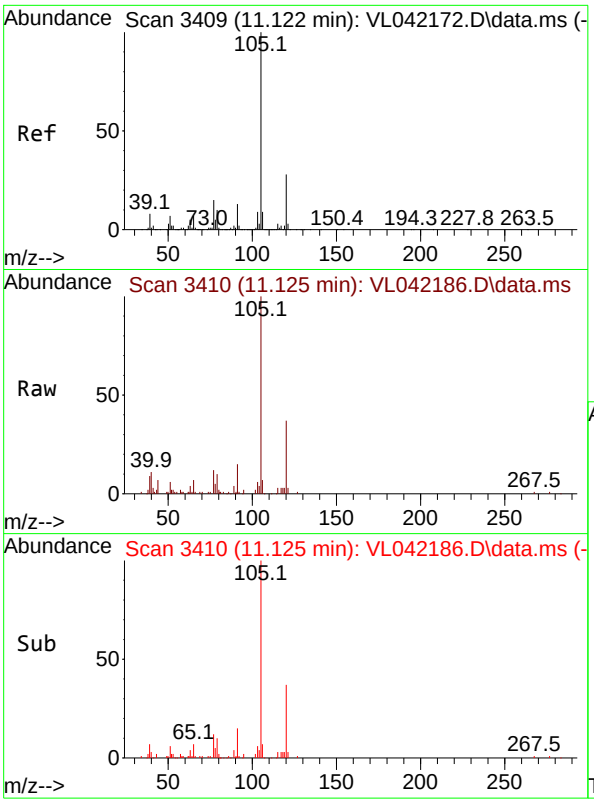


#71
2-Chlorotoluene
Concen: 0.194 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.090 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 91 Resp: 15693

Ion	Ratio	Lower	Upper
91	100		
126	0.2	11.6	46.4#



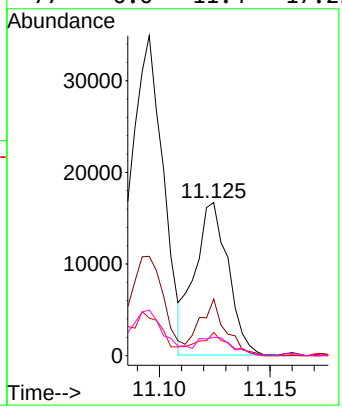


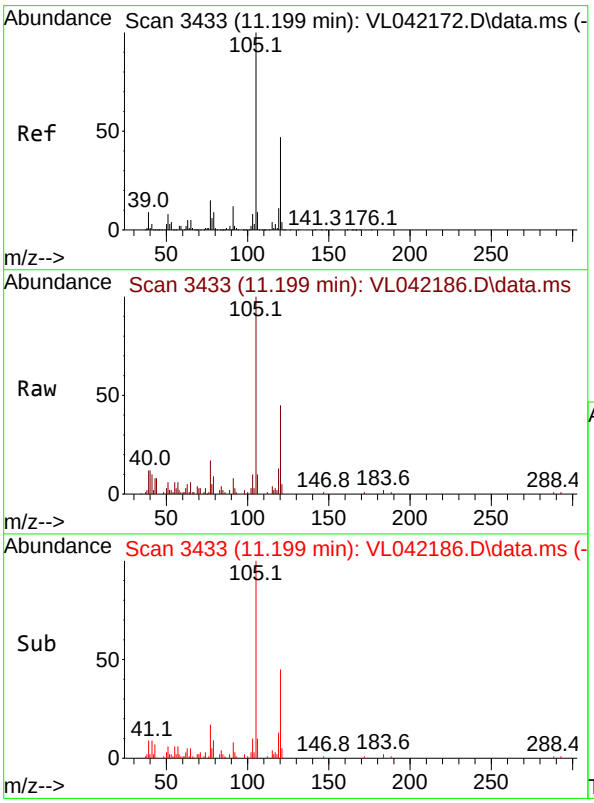
#72
4-Ethyltoluene
Concen: 0.201 ppbv
RT: 11.125 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion:105 Resp: 17501

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#

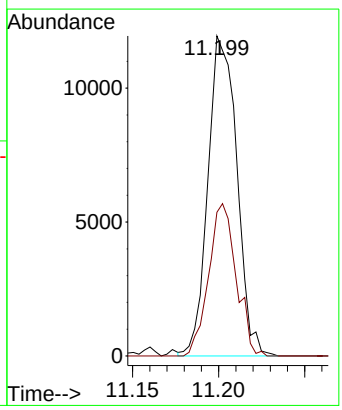


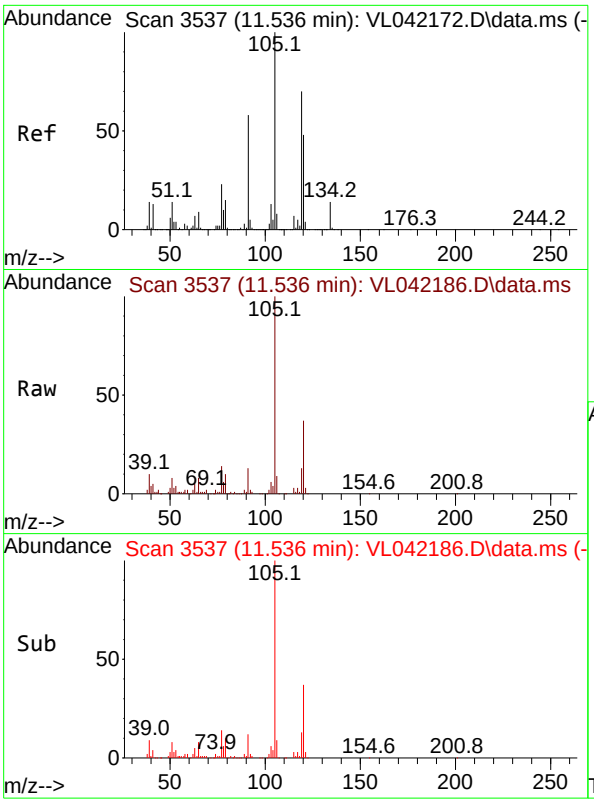


#73
1,3,5-Trimethylbenzene
Concen: 0.184 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion:105 Resp: 13983

Ion	Ratio	Lower	Upper
105	100		
120	44.9	37.4	56.0



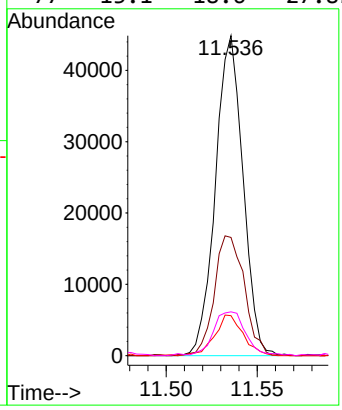


#74
1,2,4-Trimethylbenzene
Concen: 0.539 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion:105 Resp: 47154

Ion	Ratio	Lower	Upper
105	100		
120	36.7	38.6	58.0#
91	12.5	46.2	69.2#
77	13.1	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Quant Time: Mar 28 02:16:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	185410	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	523694	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	484321	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	389805	9.801	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	10428	0.381	ppbv		96
3) Chlorodifluoromethane	1.473	51	9747	0.349	ppbv		97
4) Chloromethane	1.528	50	2809	0.251	ppbv	#	86
6) Bromomethane	1.657	94	186	0.037	ppbv	#	4
7) Chloroethane	1.703	64	596	0.133	ppbv	#	85
9) Propene	1.486	41	7879	0.615	ppbv		84
10) Heptane	4.972	43	7577	0.222	ppbv	#	37
11) Trichlorofluoromethane	1.877	101	5528	0.208	ppbv		96
12) 1,1,2-Trichlorotrifluo...	2.133	101	1407	0.064	ppbv		98
13) Ethanol	1.719	45	58391	48.187	ppbv		80
15) Acetone	1.835	43	82901	3.197	ppbv	#	82
16) 1,3-Butadiene	1.599	39	1297	0.102	ppbv	#	11
17) tert-Butyl alcohol	2.042	59	13650	0.423	ppbv		95
19) Isopropyl Alcohol	1.887	45	11631	0.795	ppbv	#	1
20) Methylene Chloride	2.059	84	7860	0.814	ppbv	#	86
21) Allyl Chloride	2.078	41	2669	0.146	ppbv	#	59
23) Vinyl Acetate	2.473	43	64181	5.719	ppbv	#	50
25) Ethyl Acetate	2.822	43	41018	0.609	ppbv	#	83
26) Hexane	2.822	57	57580	2.215	ppbv	#	34
29) Chloroform	2.845	83	1640	0.043	ppbv		100
30) Cyclohexane	3.849	84	6200	0.275	ppbv	#	87
34) 2-Butanone	2.560	43	20631	0.543	ppbv		95
35) Carbon Tetrachloride	3.758	117	1881	0.046	ppbv	#	82
36) Benzene	3.651	78	38888	0.749	ppbv		99
39) 1,2-Dichloropropane	3.955	63	138319	7.316	ppbv	#	21
44) 2,2,4-Trimethylpentane	4.641	57	26219	0.299	ppbv	#	77
50) 4-Methyl-2-Pentanone	5.761	43	44105	0.733	ppbv		92
53) Toluene	6.930	91	159613	2.593	ppbv		99
58) Ethyl Benzene	9.351	91	32819	0.381	ppbv		93
59) m/p-Xylene	9.529	91	96052	1.398	ppbv		100
60) o-Xylene	9.959	91	38965	0.566	ppbv		97
61) Styrene	9.869	104	86112	2.528	ppbv		99
62) Isopropylbenzene	10.539	105	4633	0.045	ppbv		96
64) n-propylbenzene	10.992	120	1218	0.046	ppbv	#	1
65) tert-Butylbenzene	11.532	119	3977	0.042	ppbv	#	62
72) 4-Ethyltoluene	11.124	105	10792	0.126	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.199	105	10875	0.145	ppbv		92
74) 1,2,4-Trimethylbenzene	11.536	105	35817	0.415	ppbv	#	66

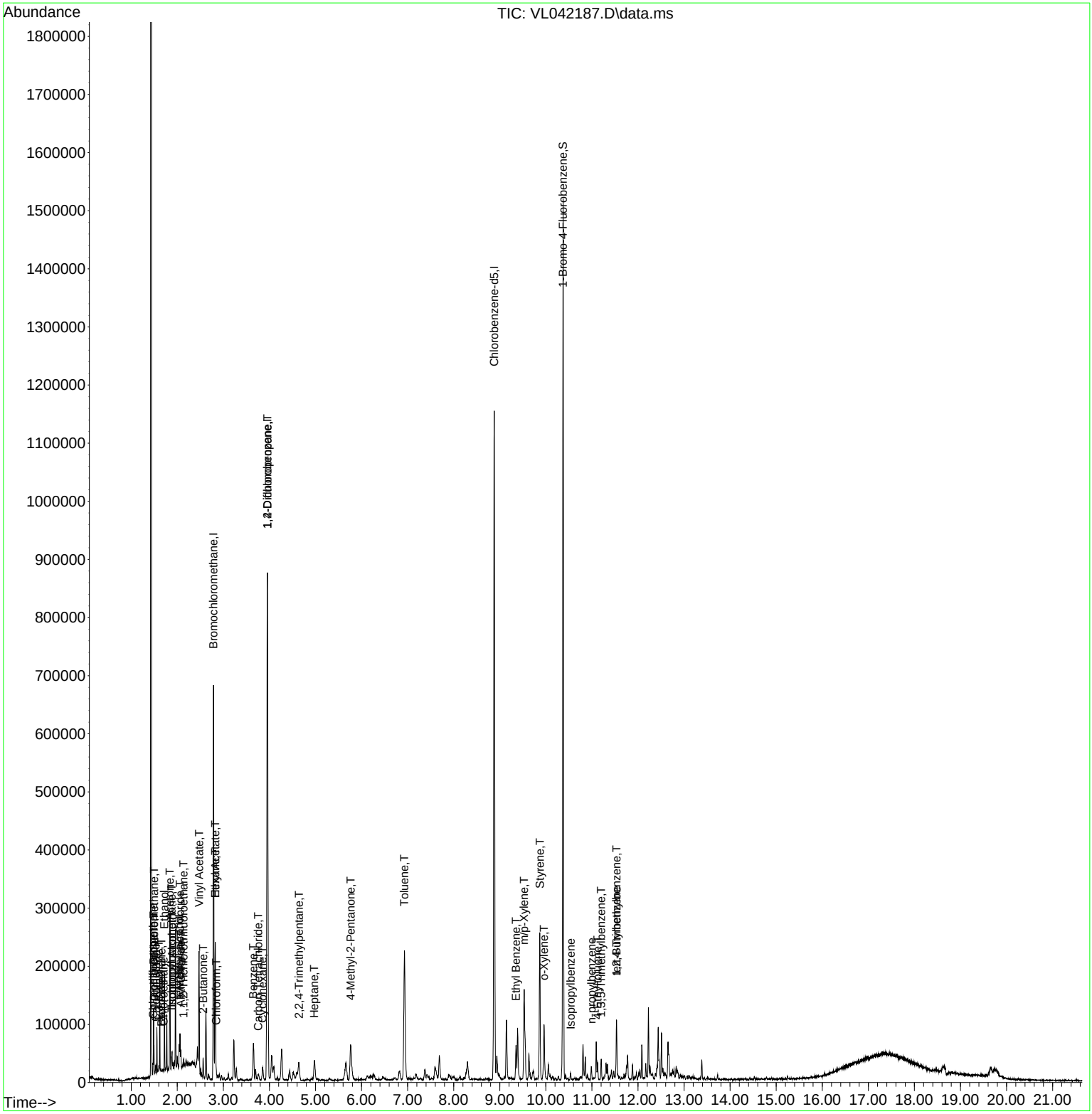
(#) = qualifier out of range (m) = manual integration (+) = signals summed

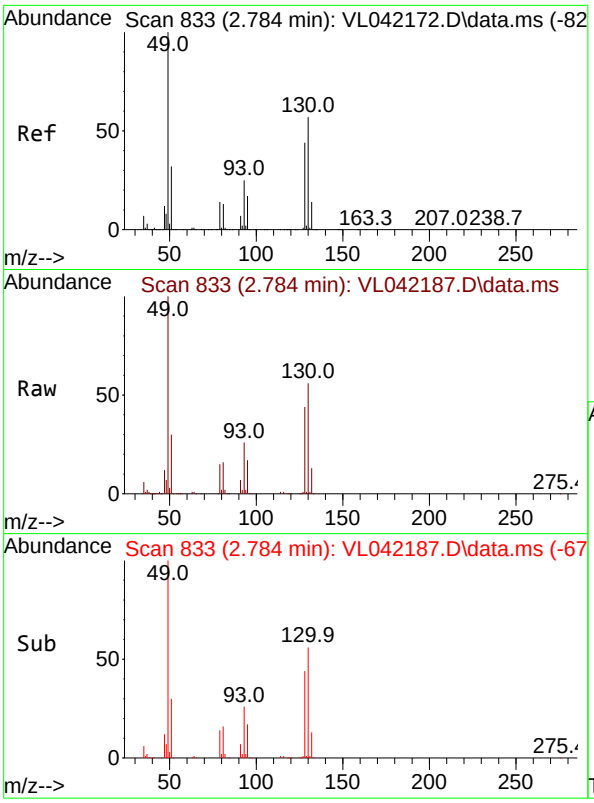
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
Acq On : 27 Mar 2025 19:36
Operator : SY/MD
Sample : Q1669-03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Quant Time: Mar 28 02:16:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



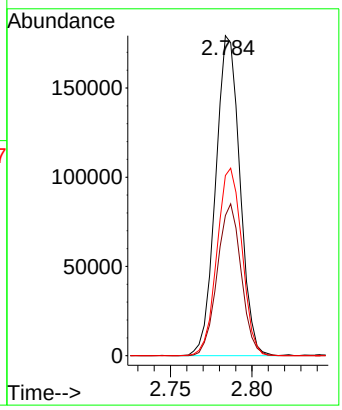


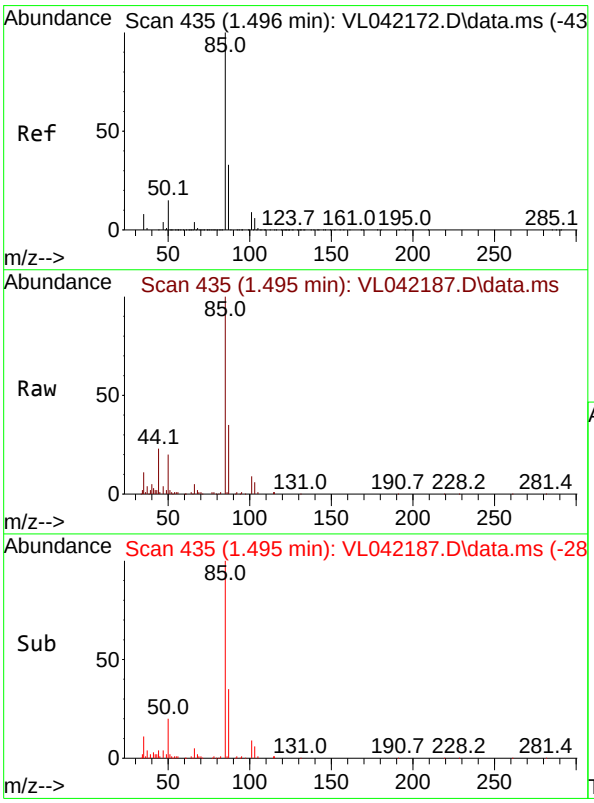
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 49 Resp: 185410

Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	60.2	28.8	86.4

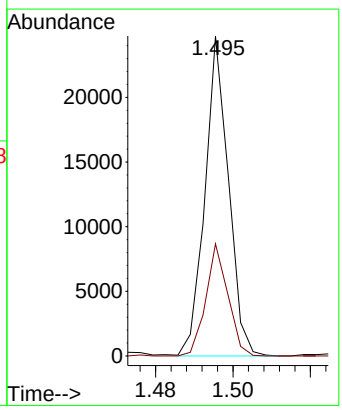


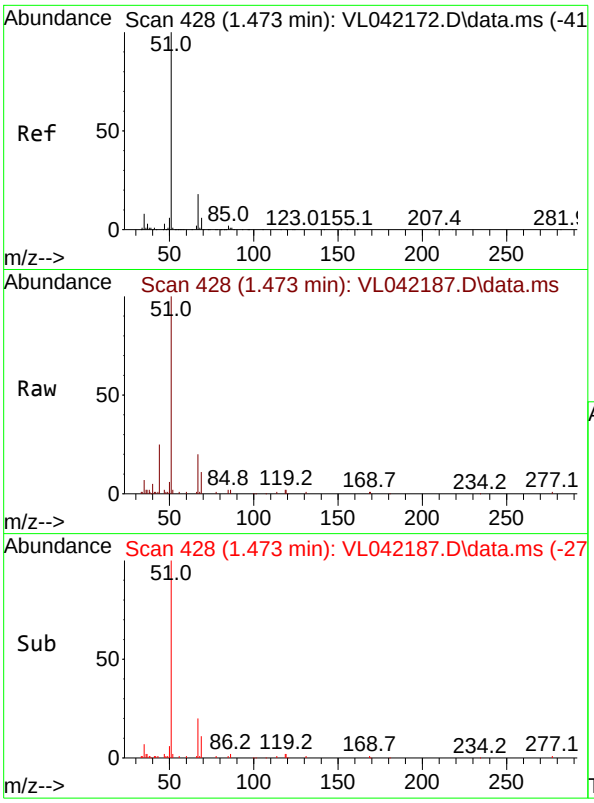


#2
Dichlorodifluoromethane
Concen: 0.381 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 85 Resp: 10428

Ion	Ratio	Lower	Upper
85	100		
87	35.1	26.1	39.1



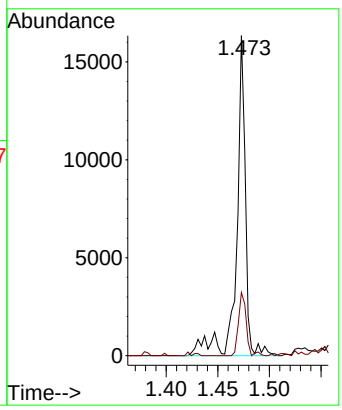


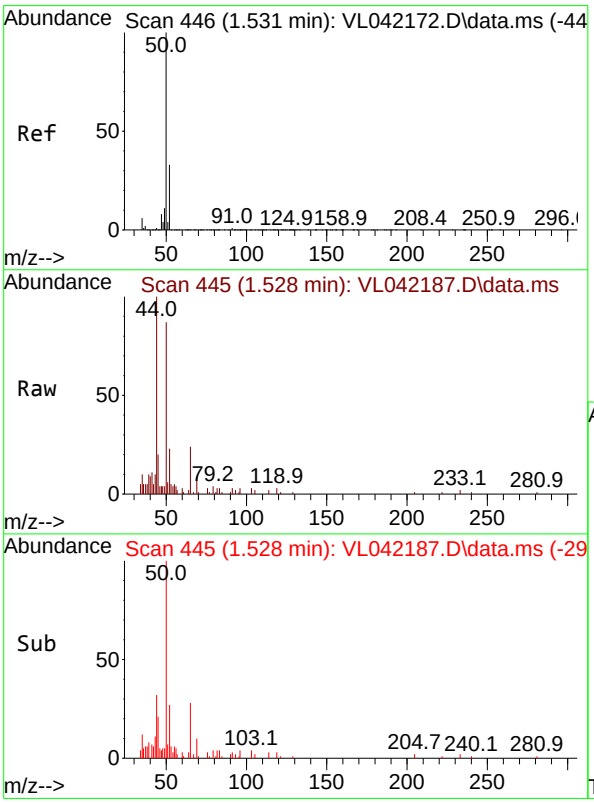
#3
Chlorodifluoromethane
Concen: 0.349 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 51 Resp: 9747

Ion	Ratio	Lower	Upper
51	100		
67	17.4	15.0	22.6

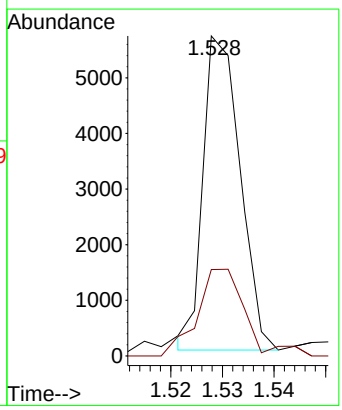


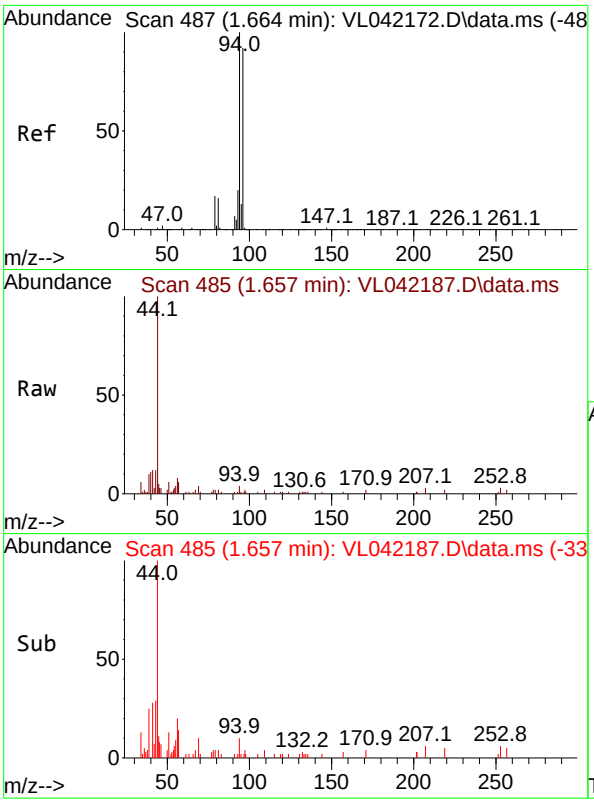


#4
Chloromethane
Concen: 0.251 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.004 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 50 Resp: 2809

Ion	Ratio	Lower	Upper
50	100		
52	24.5	26.1	39.1#



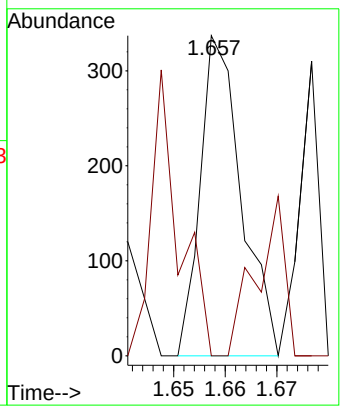


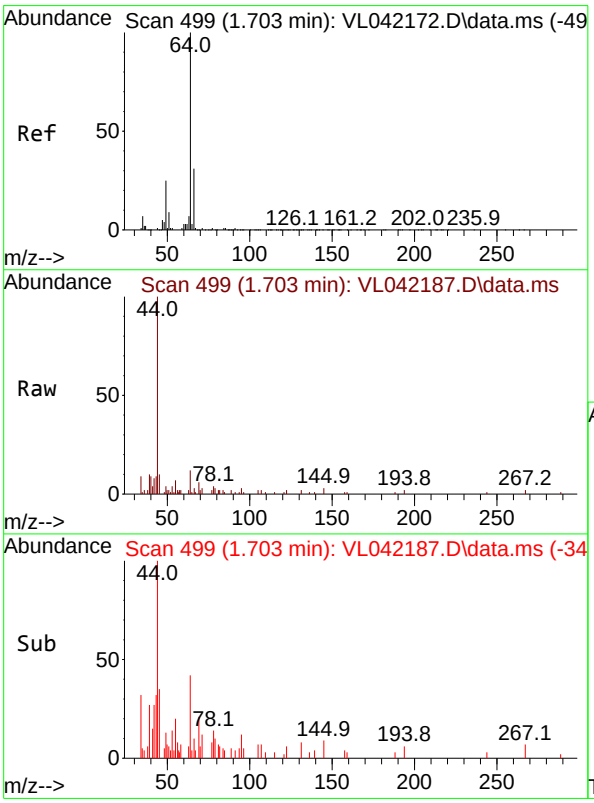
#6
Bromomethane
Concen: 0.037 ppbv
RT: 1.657 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 94 Resp: 186

Ion	Ratio	Lower	Upper
94	100		
96	0.0	73.1	109.7#

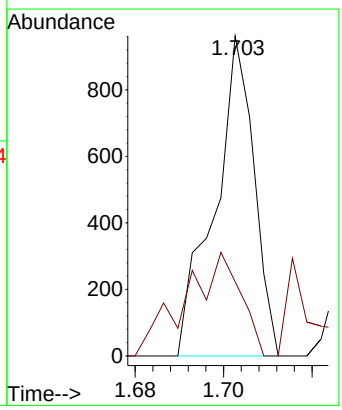


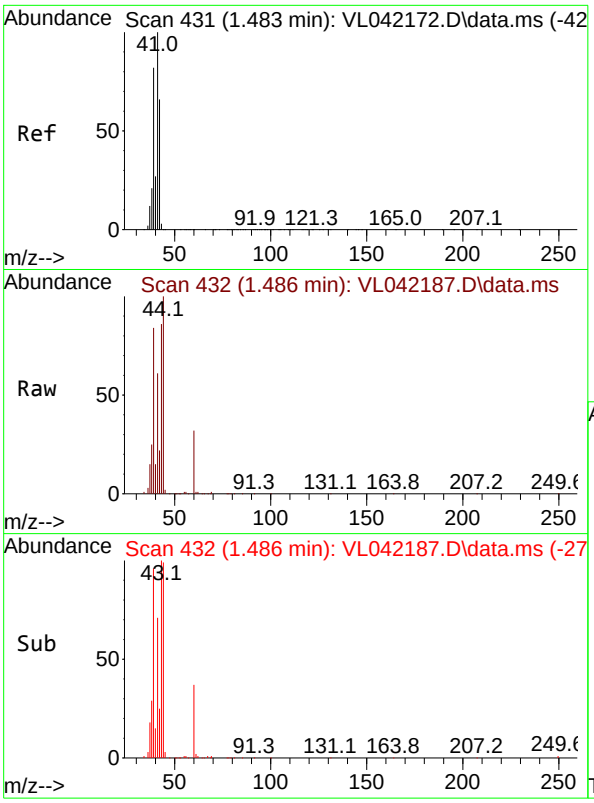


#7
Chloroethane
Concen: 0.133 ppbv
RT: 1.703 min Scan# 499
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 64 Resp: 596

Ion	Ratio	Lower	Upper
64	100		
66	23.2	25.2	37.8#



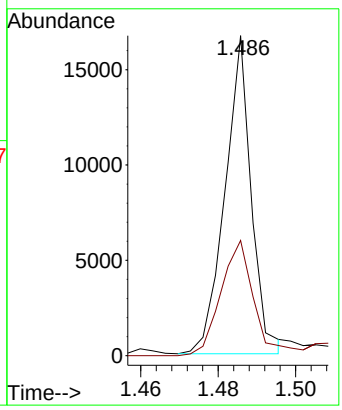


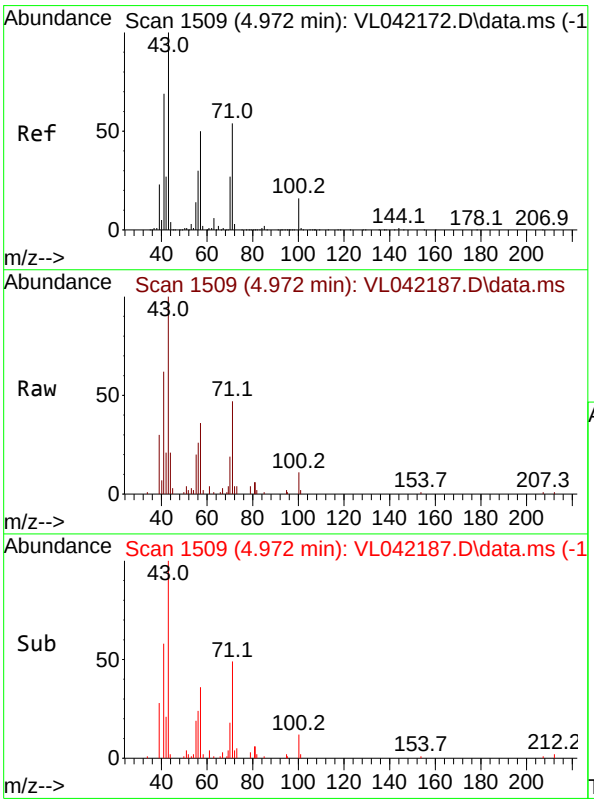
#9
Propene
Concen: 0.615 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 41 Resp: 7879

Ion	Ratio	Lower	Upper
41	100		
42	56.3	55.4	83.2

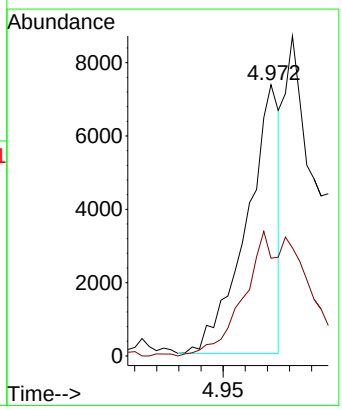


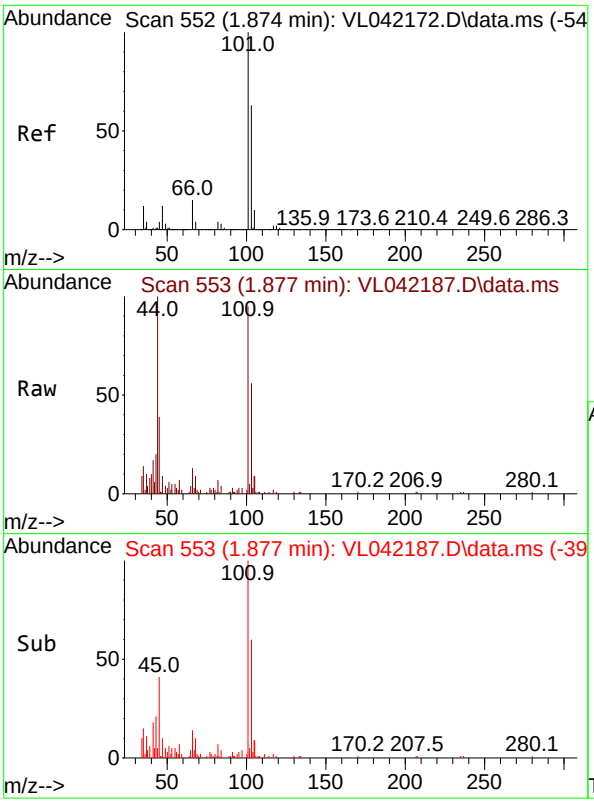


#10
Heptane
Concen: 0.222 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 7577

Ion	Ratio	Lower	Upper
43	100		
57	92.2	39.4	59.2#



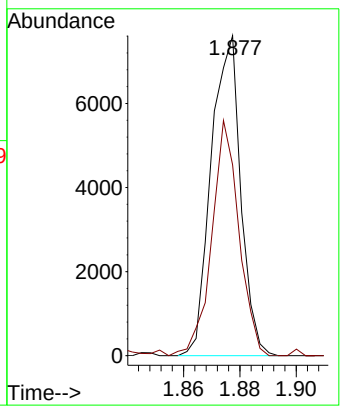


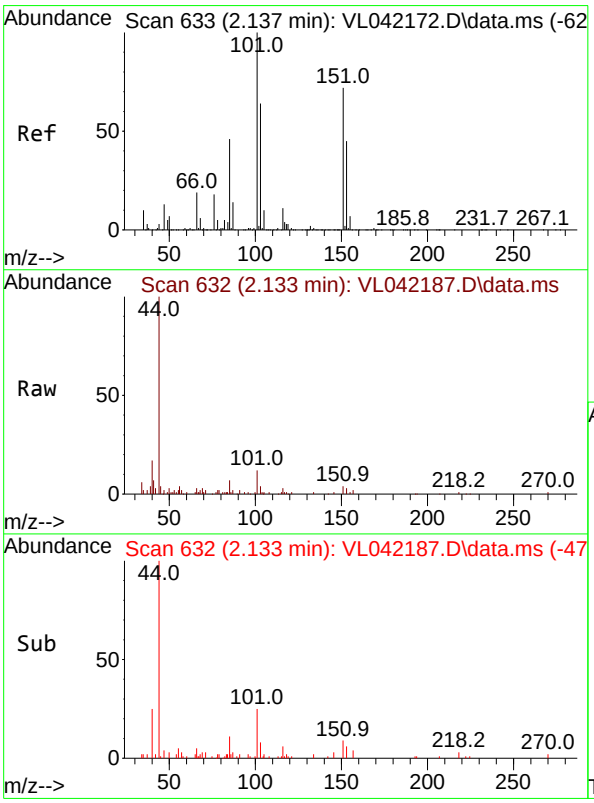
#11
Trichlorofluoromethane
Concen: 0.208 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion:101 Resp: 5528

Ion	Ratio	Lower	Upper
101	100		
103	59.6	50.2	75.2

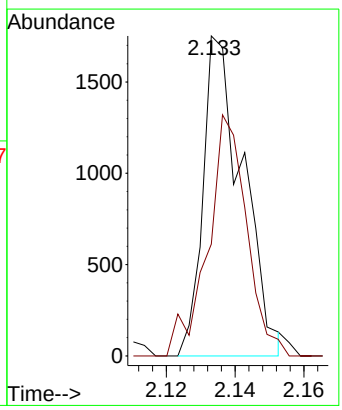


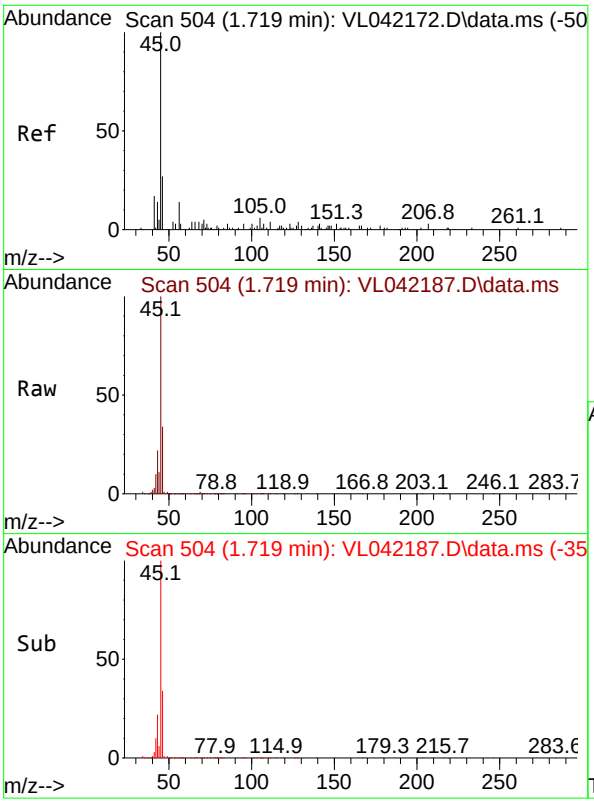


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.064 ppbv
RT: 2.133 min Scan# 632
Delta R.T. -0.004 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:101 Resp: 1407

Ion	Ratio	Lower	Upper
101	100		
151	73.3	57.1	85.7



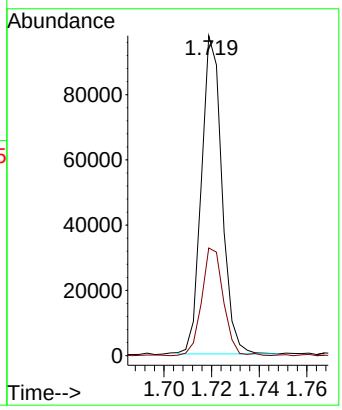


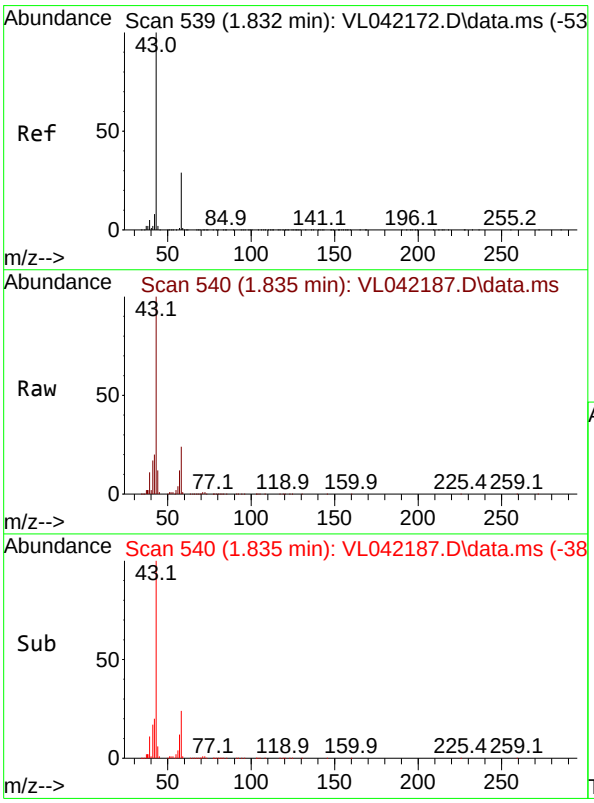
#13
Ethanol
Concen: 48.187 ppbv
RT: 1.719 min Scan# 5(
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 45 Resp: 58391

Ion	Ratio	Lower	Upper
45	100		
46	36.4	20.2	80.8

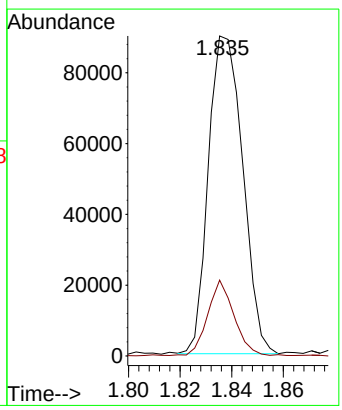


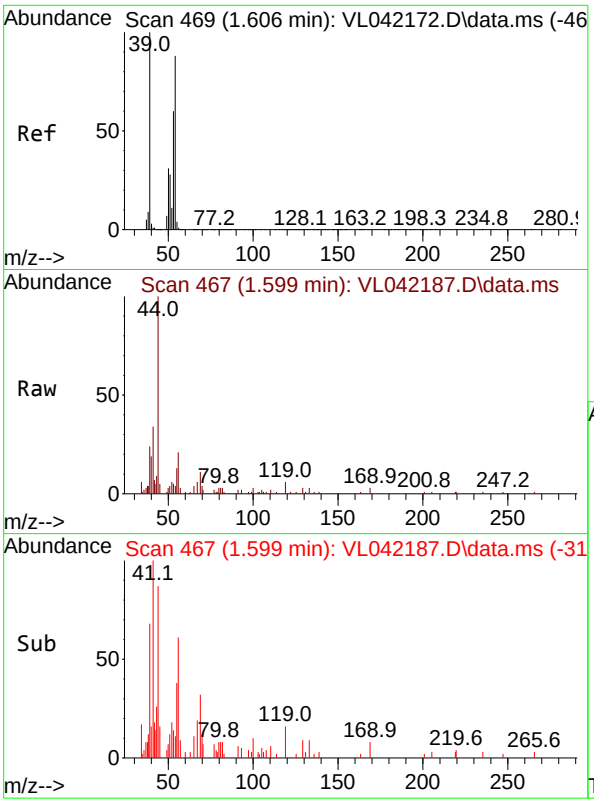


#15
Acetone
Concen: 3.197 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 82901

Ion	Ratio	Lower	Upper
43	100		
58	19.3	23.2	34.8#



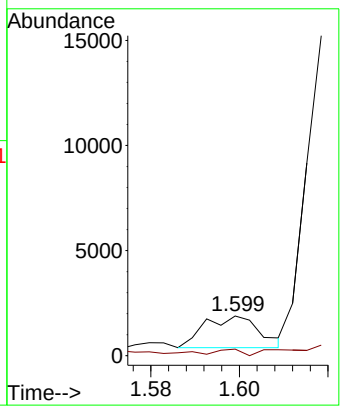


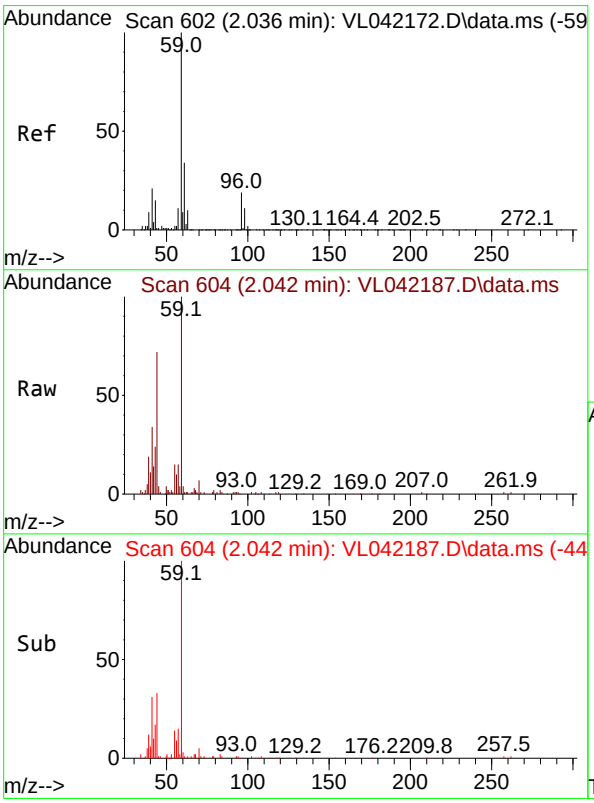
#16
1,3-Butadiene
Concen: 0.102 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 39 Resp: 1297

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.7	91.1#

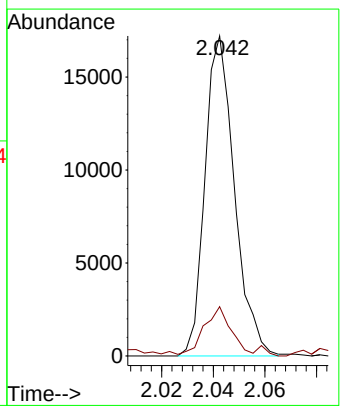


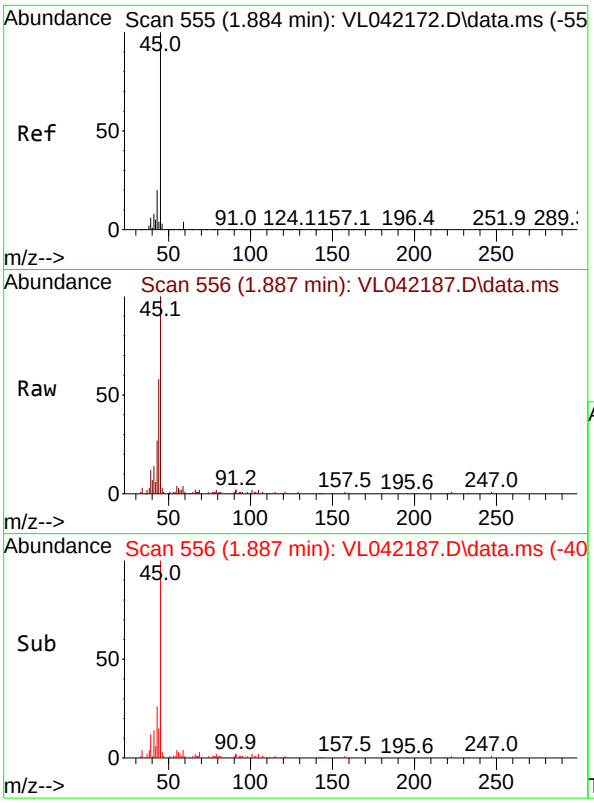


#17
tert-Butyl alcohol
Concen: 0.423 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 59 Resp: 13650

Ion	Ratio	Lower	Upper
59	100		
57	13.1	8.9	13.3



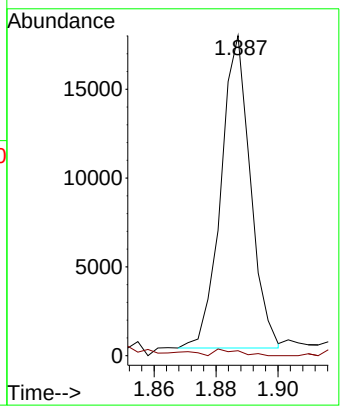


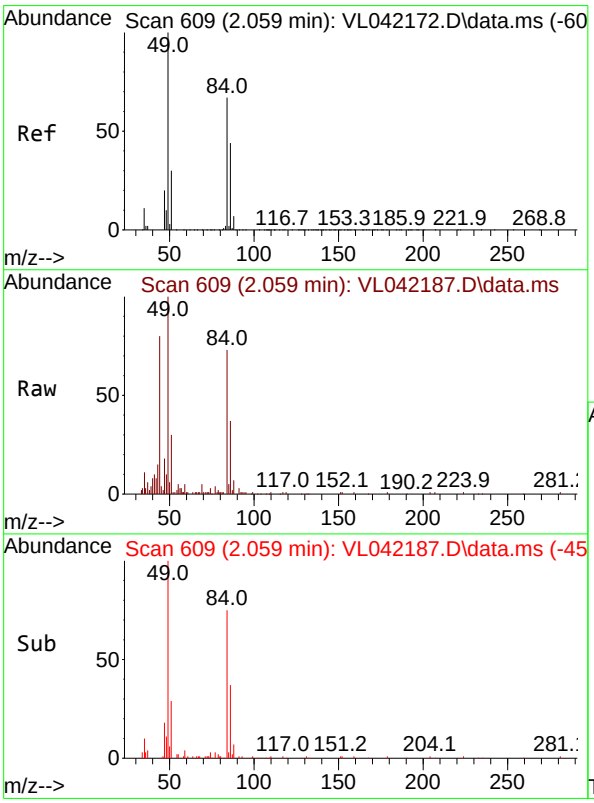
#19
Isopropyl Alcohol
Concen: 0.795 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 45 Resp: 11631

Ion	Ratio	Lower	Upper
45	100		
58	137.8	36.9	55.3#

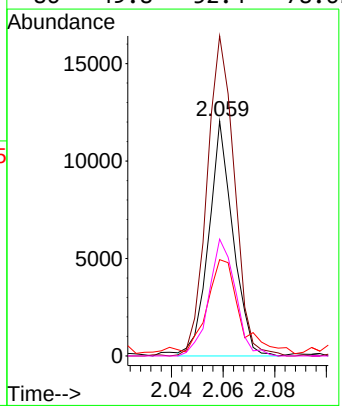


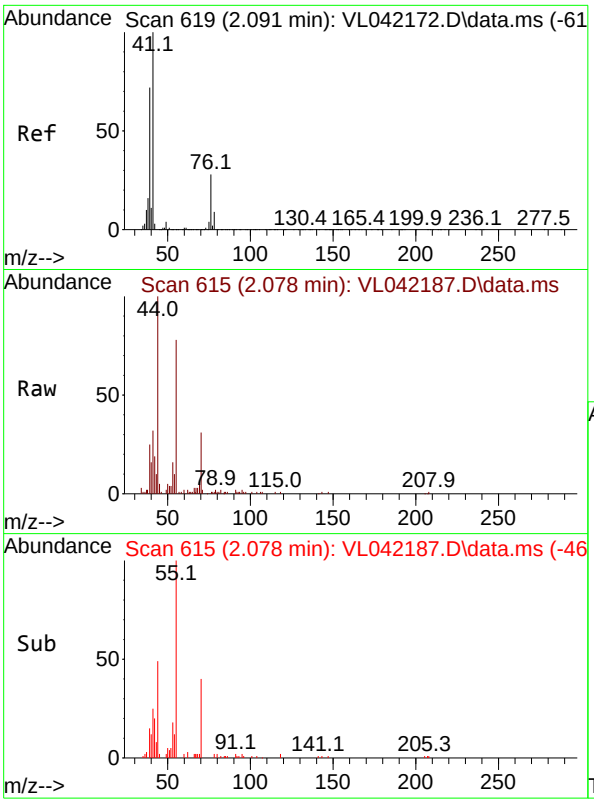


#20
Methylene Chloride
Concen: 0.814 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 84 Resp: 7860

Ion	Ratio	Lower	Upper
84	100		
49	135.0	120.2	180.4
51	38.4	37.4	56.0
86	49.8	52.4	78.6#



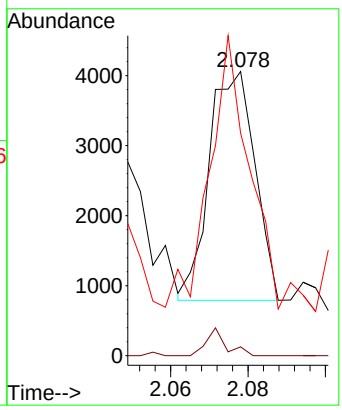


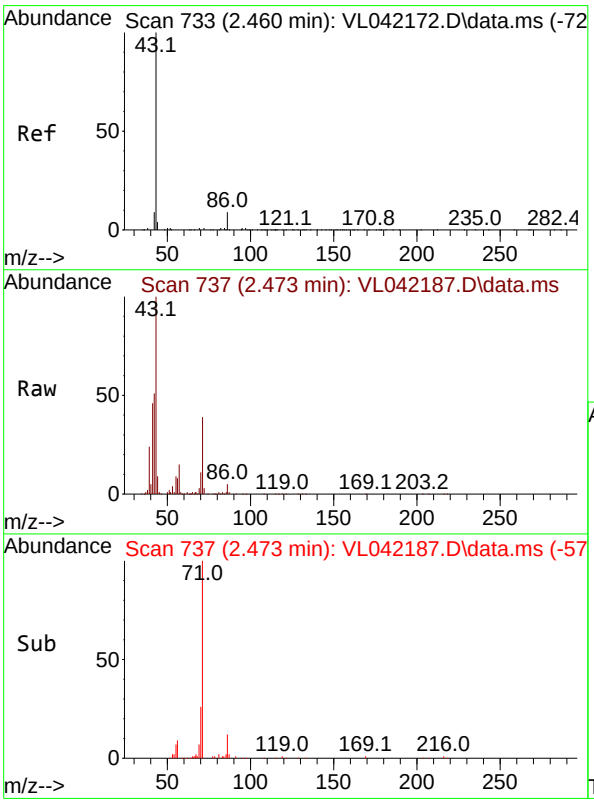
#21
Allyl Chloride
Concen: 0.146 ppbv
RT: 2.078 min Scan# 61
Delta R.T. -0.013 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 41 Resp: 2669

Ion	Ratio	Lower	Upper
41	100		
76	5.2	24.1	36.1#
39	109.9	61.1	91.7#

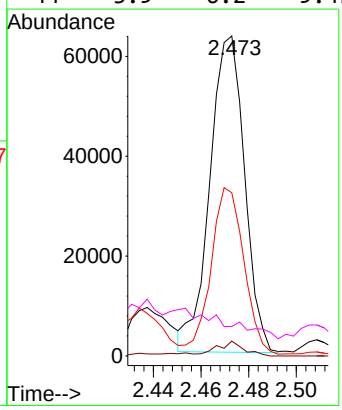


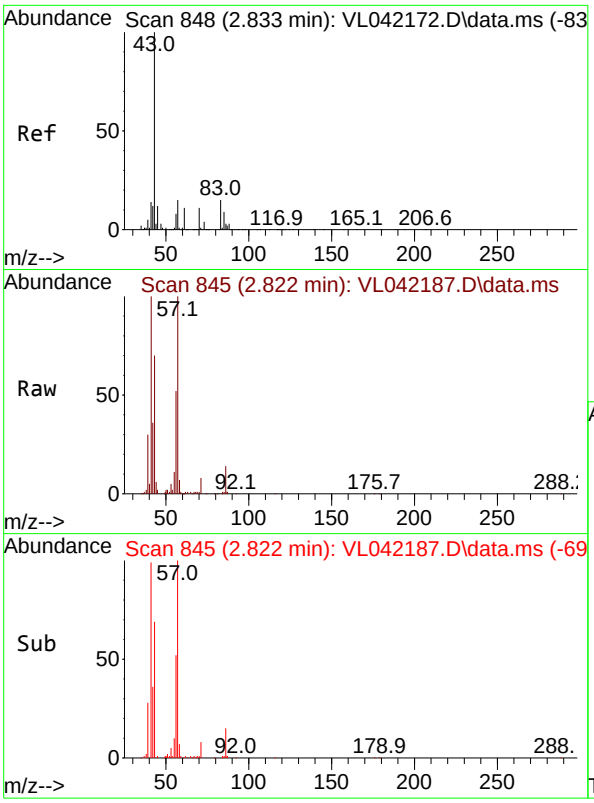


#23
Vinyl Acetate
Concen: 5.719 ppbv
RT: 2.473 min Scan# 737
Delta R.T. 0.013 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 64181

Ion	Ratio	Lower	Upper
43	100		
86	4.7	5.5	8.3#
42	51.2	8.6	13.0#
44	3.9	6.2	9.4#



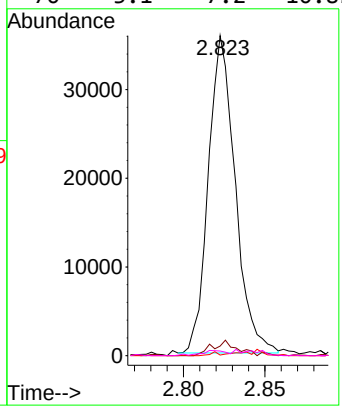


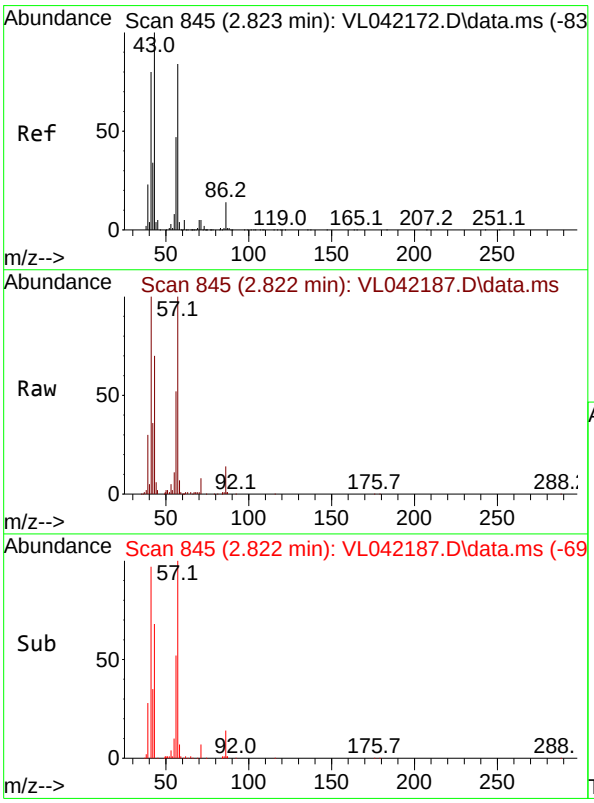
#25
Ethyl Acetate
Concen: 0.609 ppbv
RT: 2.822 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 43 Resp: 41018

Ion	Ratio	Lower	Upper
43	100		
45	4.9	8.2	12.2#
61	1.8	7.3	10.9#
70	3.1	7.2	10.8#

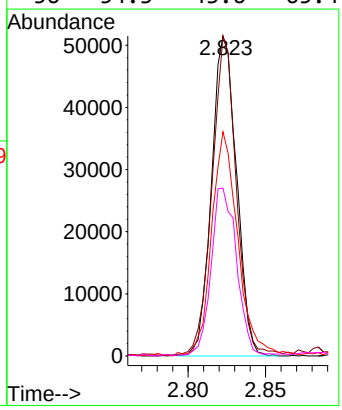


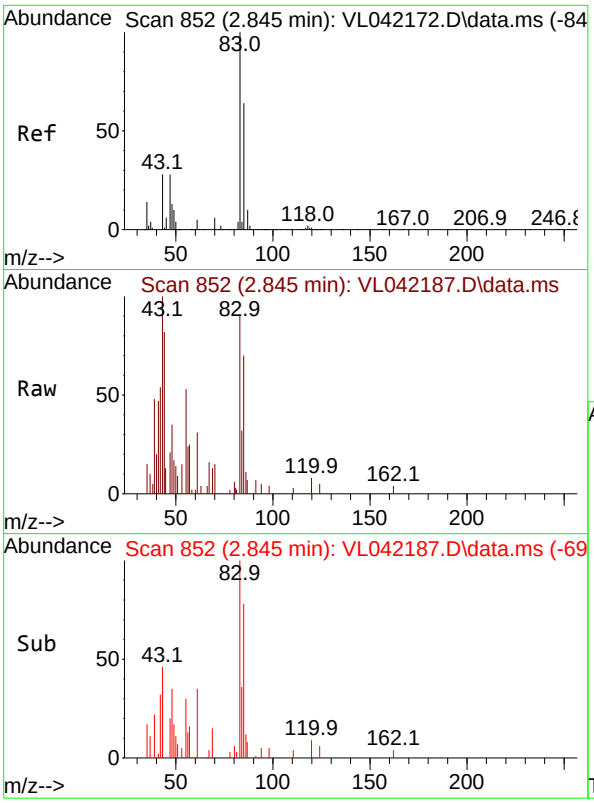


#26
Hexane
Concen: 2.215 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 57 Resp: 57580

Ion	Ratio	Lower	Upper
57	100		
41	98.0	76.6	114.8
43	74.4	207.8	311.8#
56	54.3	43.6	65.4



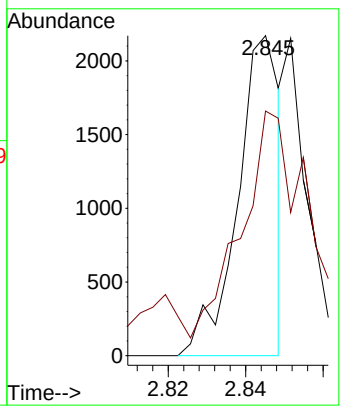


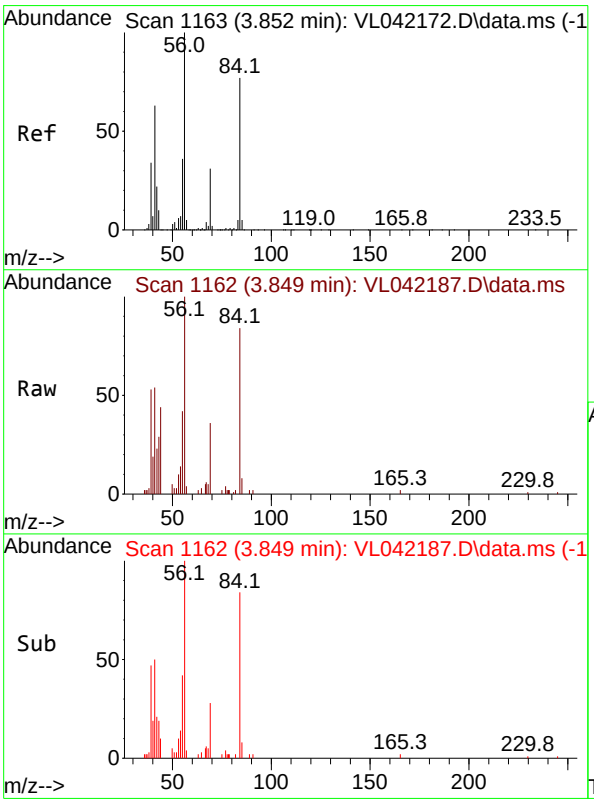
#29
Chloroform
Concen: 0.043 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 83 Resp: 1640

Ion	Ratio	Lower	Upper
83	100		
85	64.2	51.4	77.2

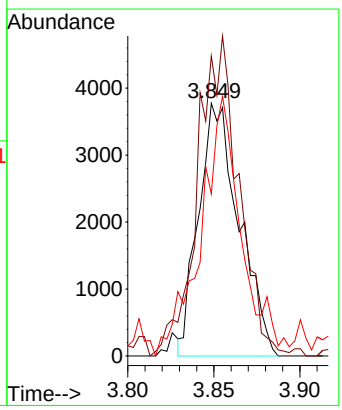


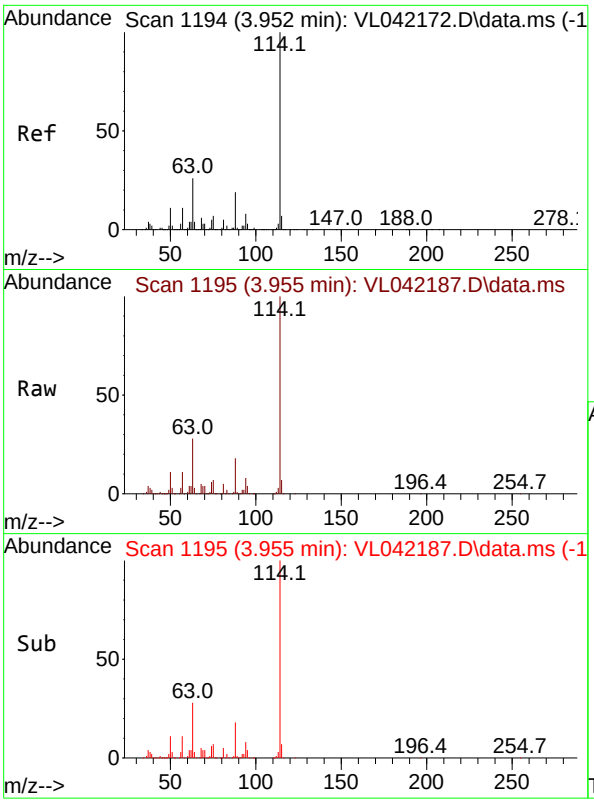


#30
Cyclohexane
Concen: 0.275 ppbv
RT: 3.849 min Scan# 1162
Delta R.T. -0.004 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 84 Resp: 6200

Ion	Ratio	Lower	Upper
84	100		
56	131.8	102.8	154.2
41	109.3	66.5	99.7#



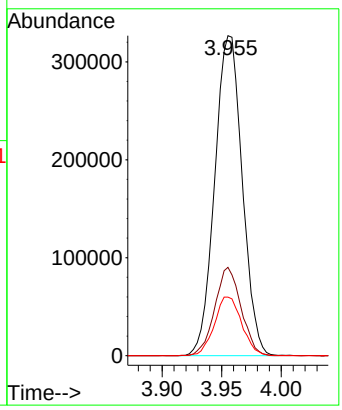


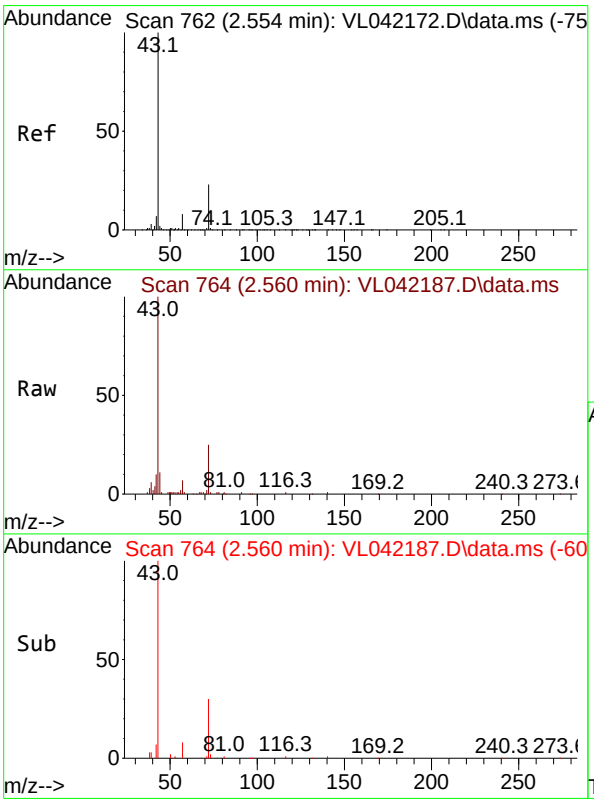
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion:114 Resp: 523694

Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.7	31.1
88	18.3	15.0	22.4

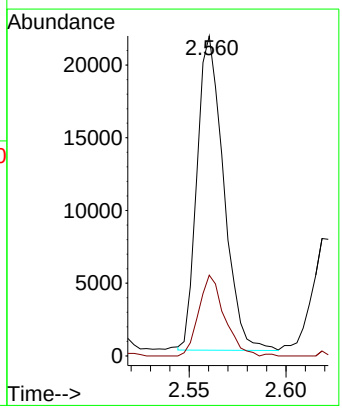


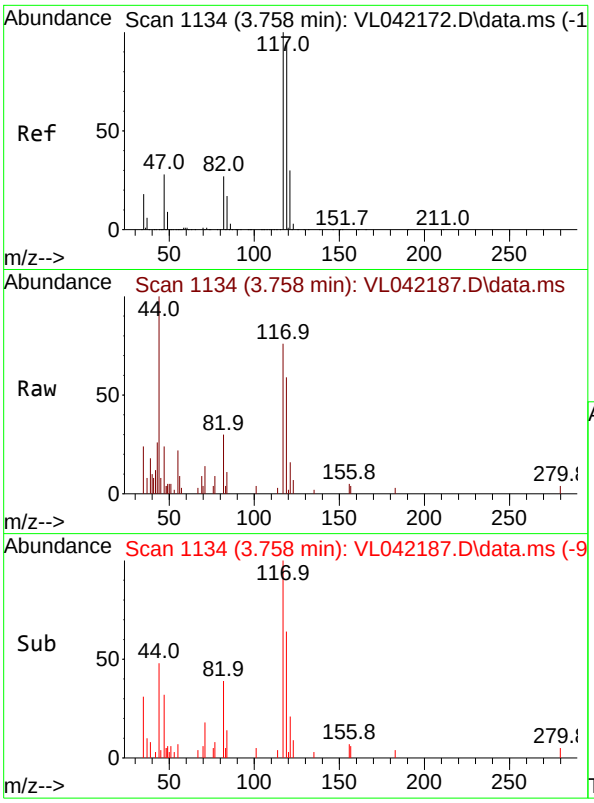


#34
2-Butanone
Concen: 0.543 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 20631

Ion	Ratio	Lower	Upper
43	100		
72	24.9	18.2	27.2



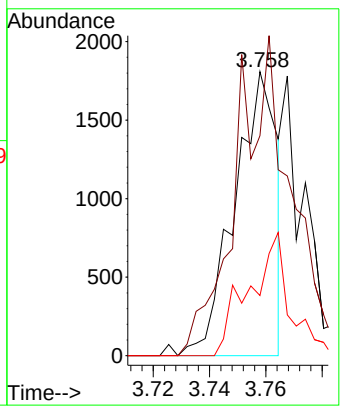


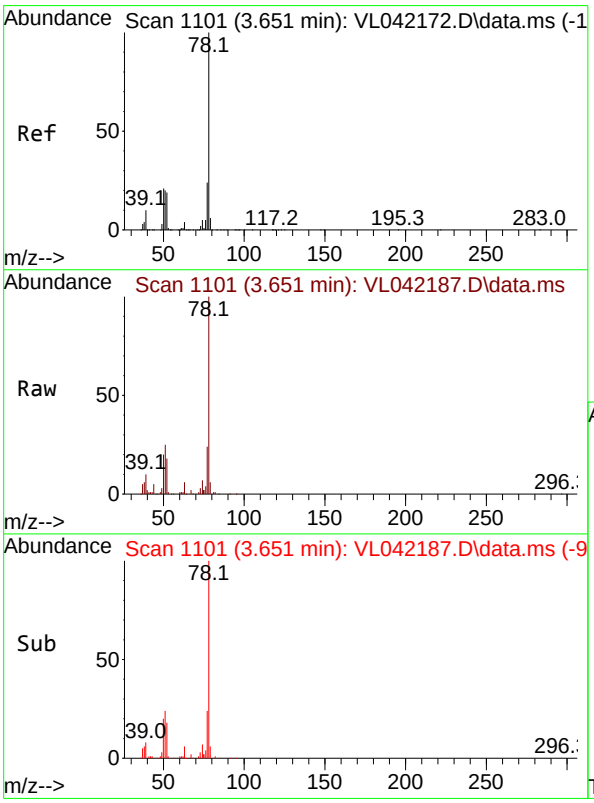
#35
Carbon Tetrachloride
Concen: 0.046 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion:117 Resp: 1881

Ion	Ratio	Lower	Upper
117	100		
119	77.4	76.2	114.2
121	21.2	24.2	36.4#

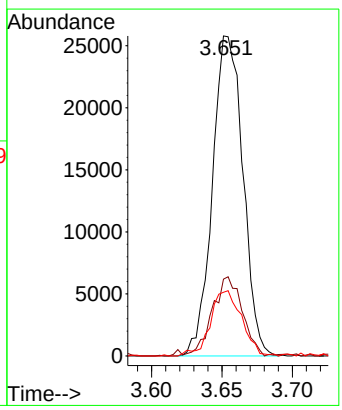


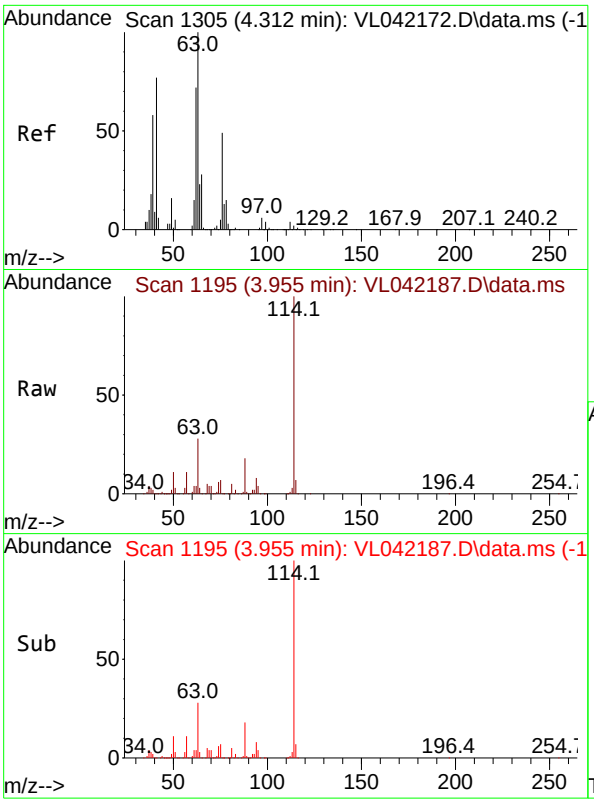


#36
Benzene
Concen: 0.749 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 78 Resp: 38888

Ion	Ratio	Lower	Upper
78	100		
77	23.6	19.1	28.7
50	19.9	16.6	24.8



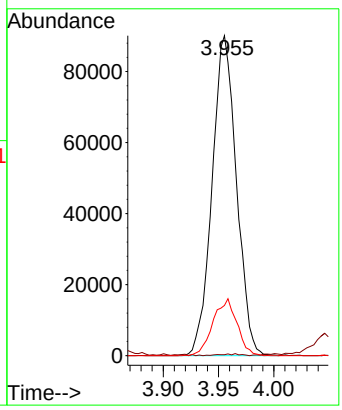


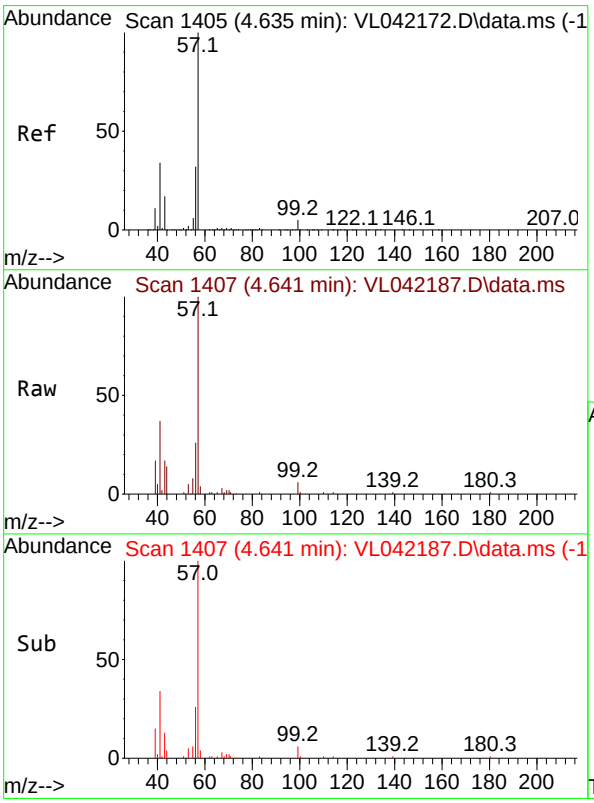
#39
1,2-Dichloropropane
Concen: 7.316 ppbv
RT: 3.955 min Scan# 11
Delta R.T. -0.356 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 63 Resp: 138319

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	15.7	57.6	86.4#

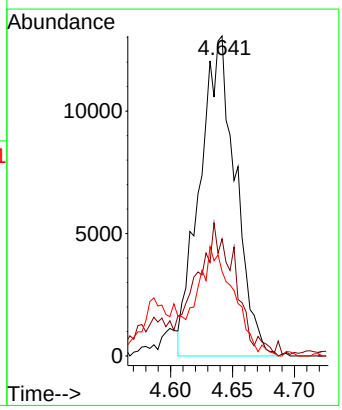


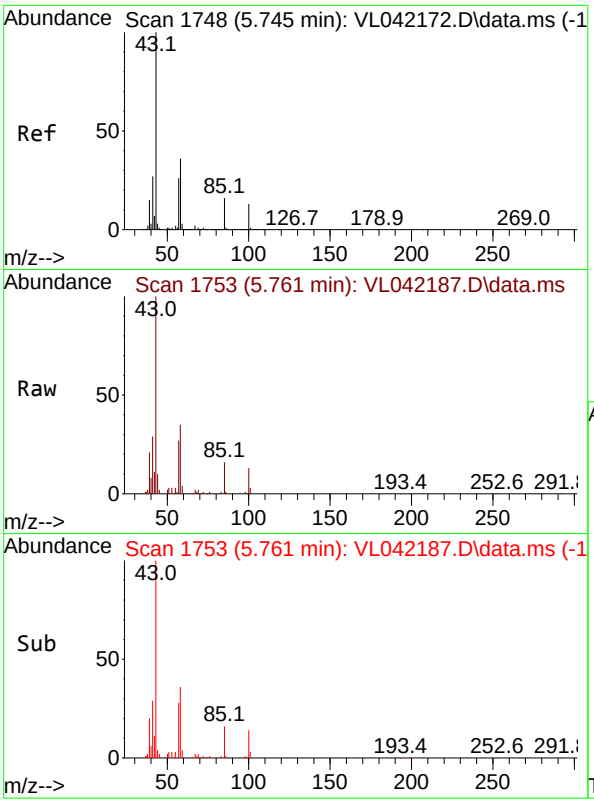


#44
2,2,4-Trimethylpentane
Concen: 0.299 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 57 Resp: 26219

Ion	Ratio	Lower	Upper
57	100		
41	54.7	26.8	40.2#
56	36.5	25.6	38.4



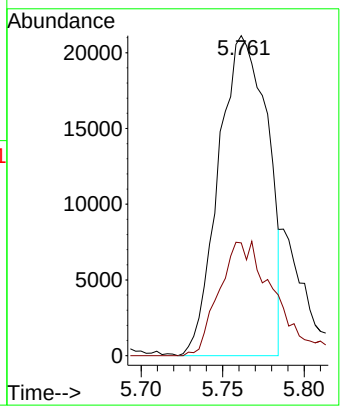


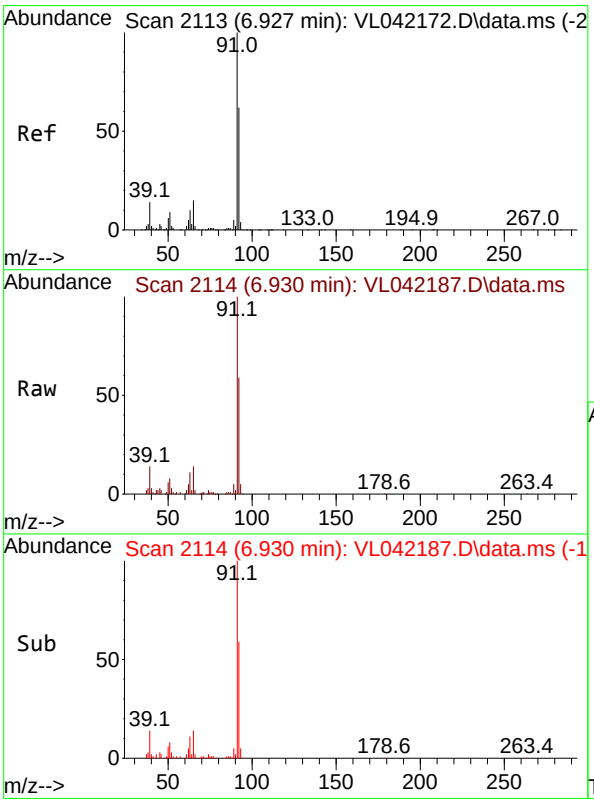
#50
4-Methyl-2-Pentanone
Concen: 0.733 ppbv
RT: 5.761 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 43 Resp: 44105

Ion	Ratio	Lower	Upper
43	100		
58	40.9	29.0	43.6

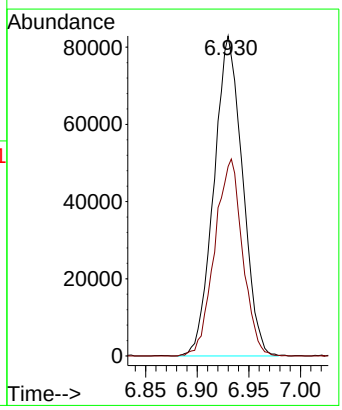


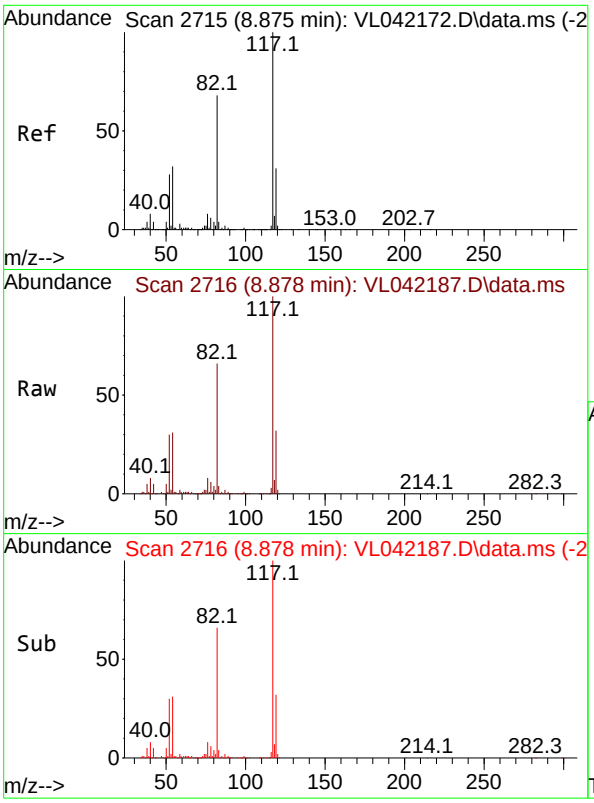


#53
Toluene
Concen: 2.593 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 159613

Ion	Ratio	Lower	Upper
91	100		
92	60.1	48.4	72.6



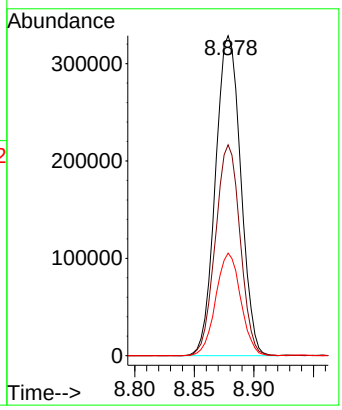


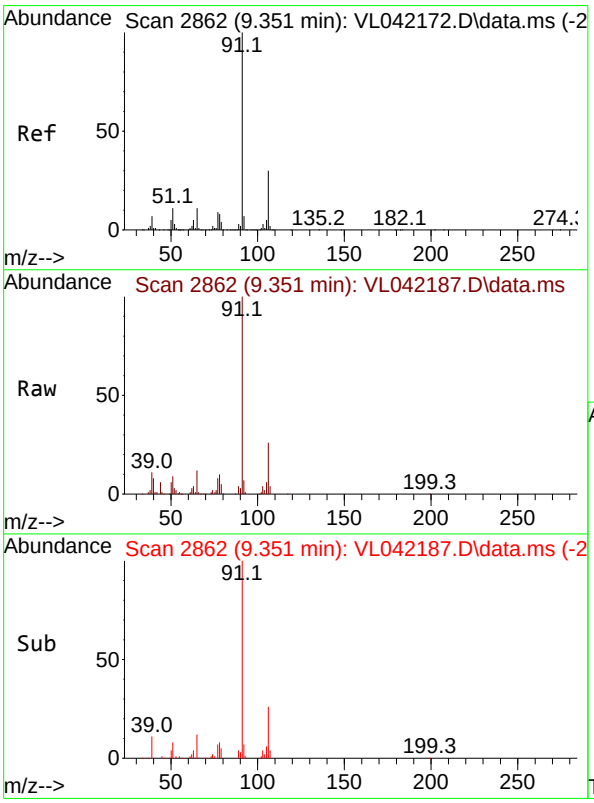
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion:117 Resp: 484321

Ion	Ratio	Lower	Upper
117	100		
82	64.6	55.8	83.6
119	31.9	25.5	38.3

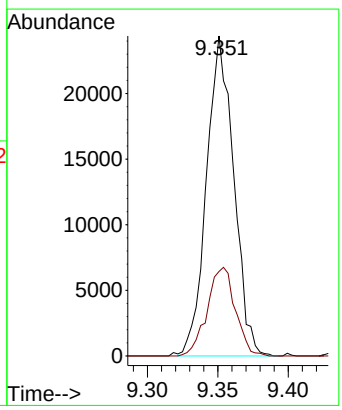


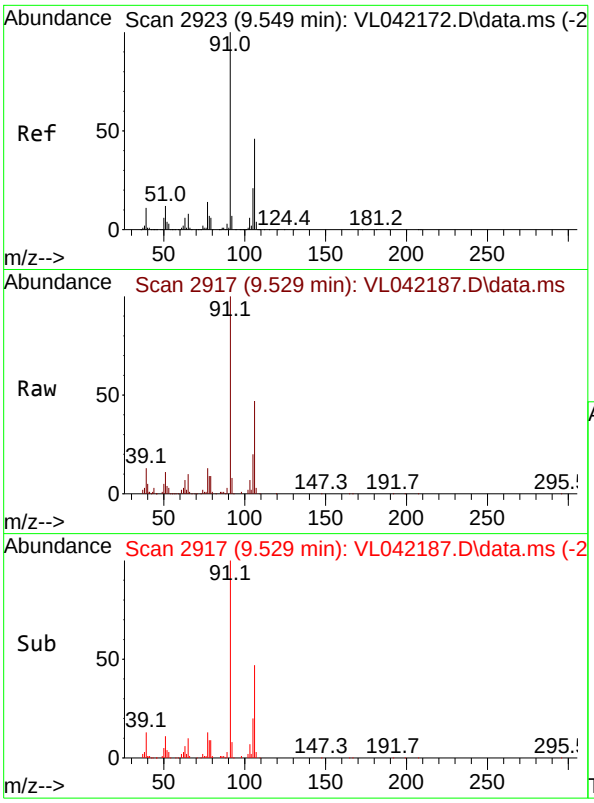


#58
Ethyl Benzene
Concen: 0.381 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 32819

Ion	Ratio	Lower	Upper
91	100		
106	26.4	24.2	36.2



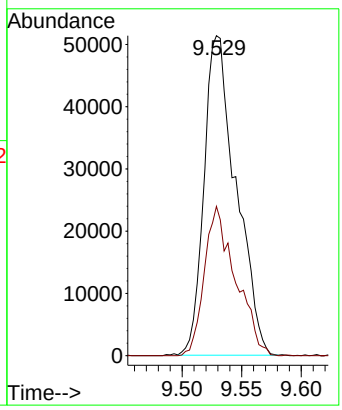


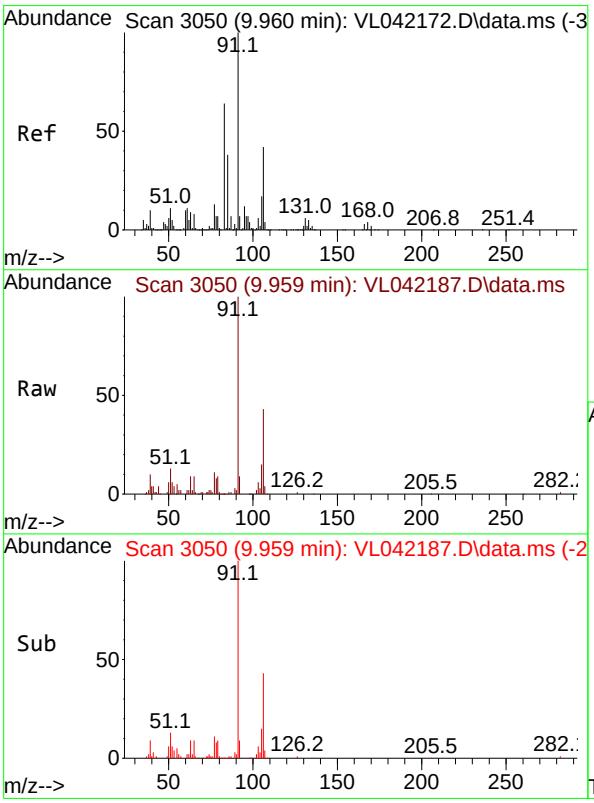
#59
m/p-Xylene
Concen: 1.398 ppbv
RT: 9.529 min Scan# 2
Delta R.T. -0.020 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 91 Resp: 96052

Ion	Ratio	Lower	Upper
91	100		
106	45.6	36.4	54.6

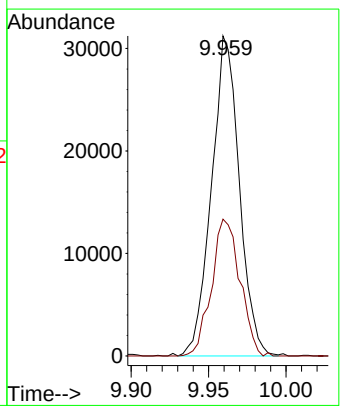


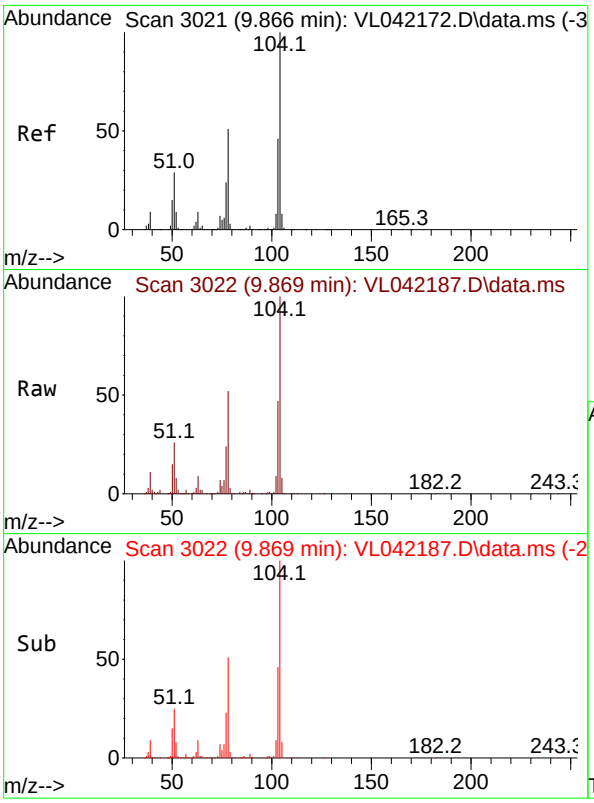


#60
o-Xylene
Concen: 0.566 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 38965

Ion	Ratio	Lower	Upper
91	100		
106	43.9	20.8	62.5



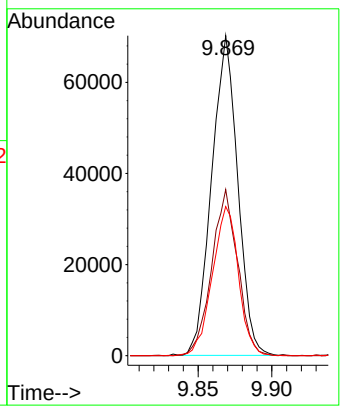


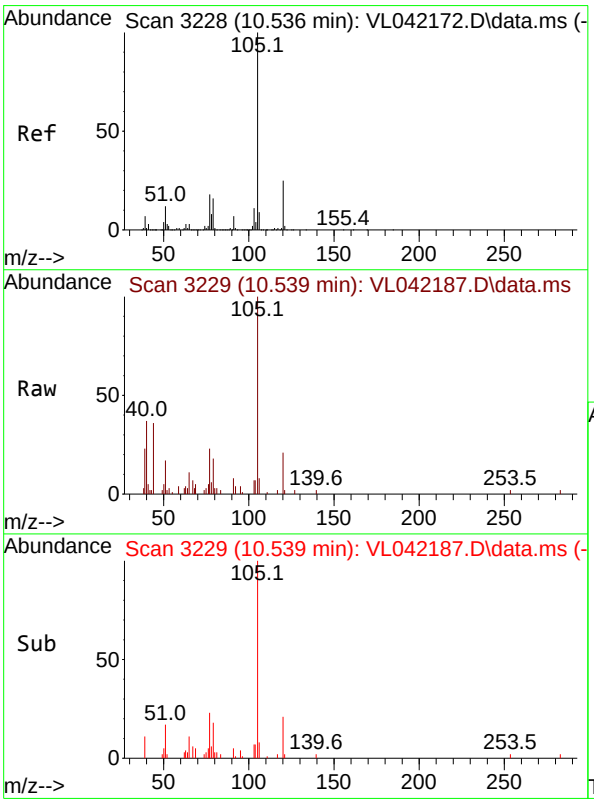
#61
Styrene
Concen: 2.528 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion:104 Resp: 86112

Ion	Ratio	Lower	Upper
104	100		
78	51.9	41.8	62.6
103	46.9	37.0	55.4

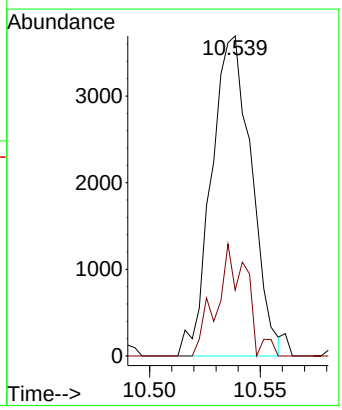


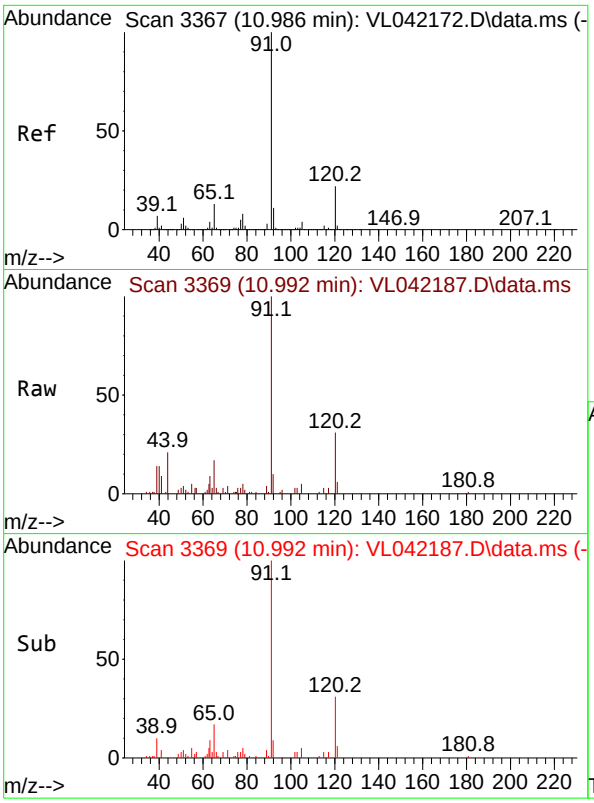


#62
Isopropylbenzene
Concen: 0.045 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:105 Resp: 4633

Ion	Ratio	Lower	Upper
105	100		
120	26.7	19.9	29.9



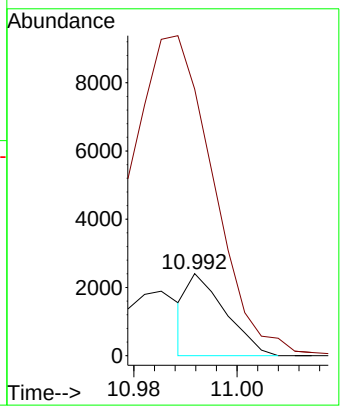


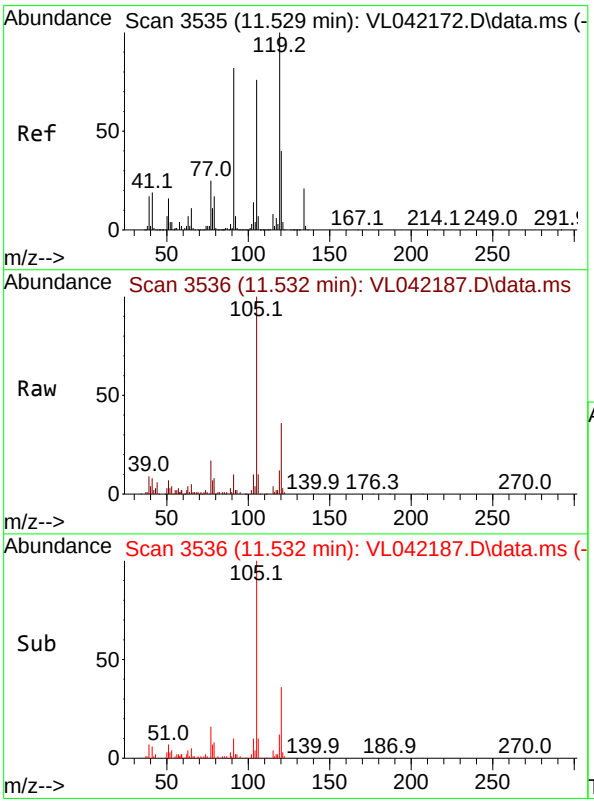
#64
n-propylbenzene
Concen: 0.046 ppbv
RT: 10.992 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion:120 Resp: 1218

Ion	Ratio	Lower	Upper
120	100		
91	914.7	376.9	565.3#

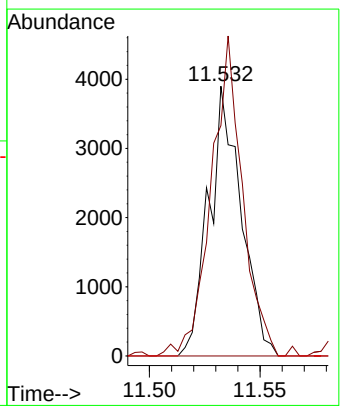


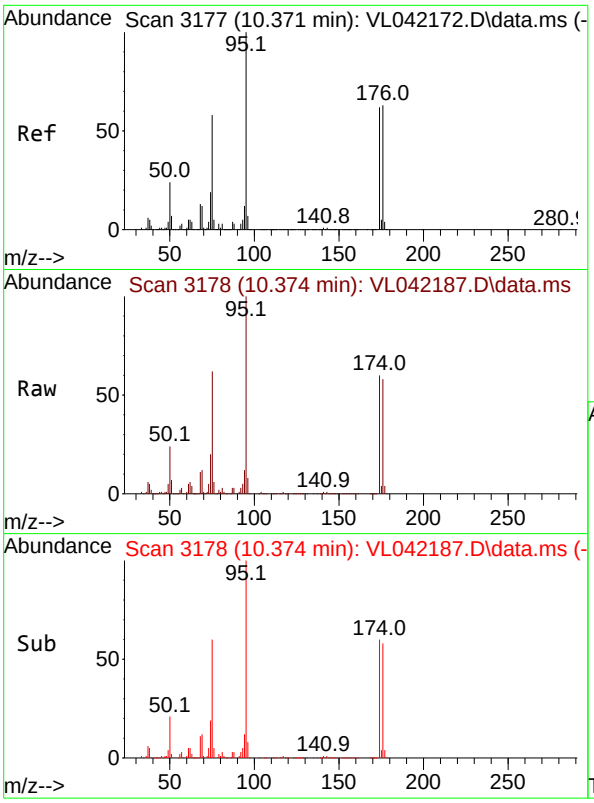


#65
tert-Butylbenzene
Concen: 0.042 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:119 Resp: 3977

Ion	Ratio	Lower	Upper
119	100		
91	114.7	66.0	99.0#
134	0.0	16.7	25.1#



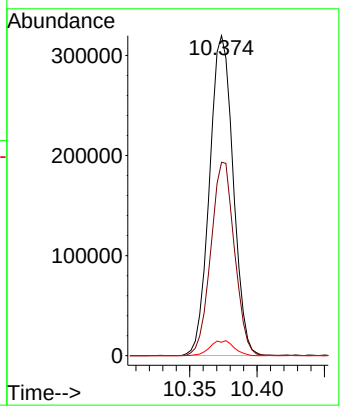


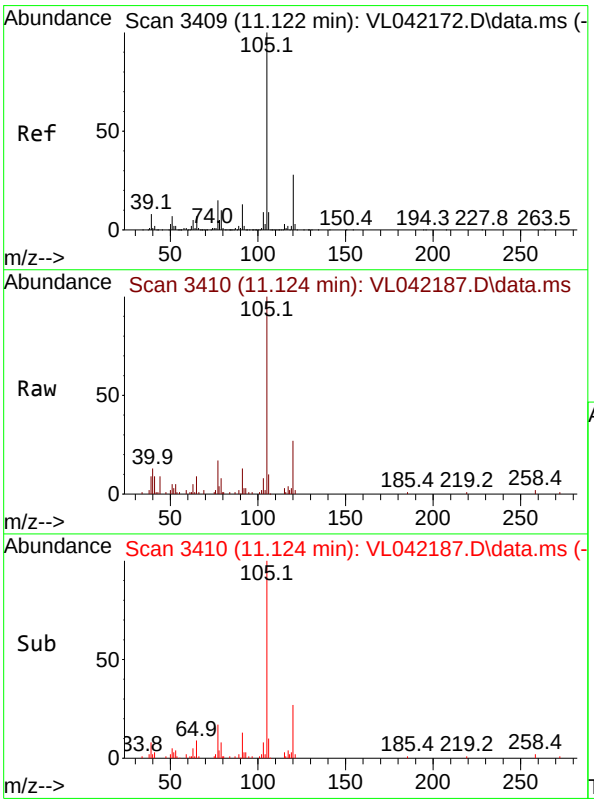
#68
1-Bromo-4-Fluorobenzene
Concen: 9.801 ppbv
RT: 10.374 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 95 Resp: 389805

Ion	Ratio	Lower	Upper
95	100		
174	60.8	50.6	76.0
175	4.8	3.8	5.6

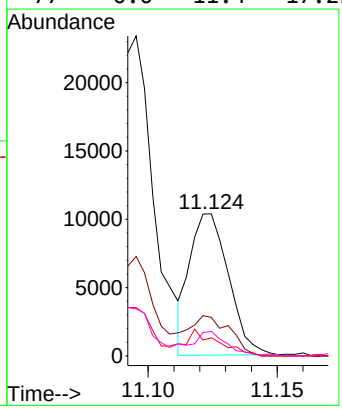


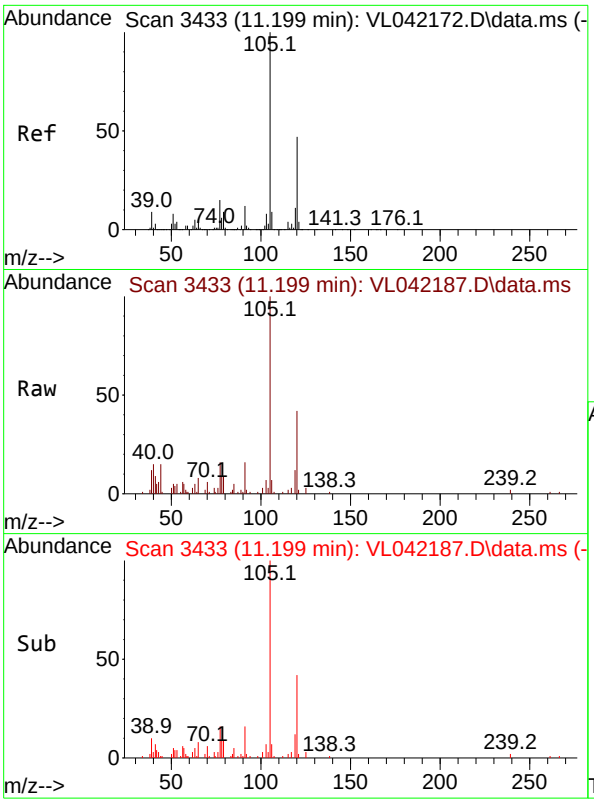


#72
4-Ethyltoluene
Concen: 0.126 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:105 Resp: 10792

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#



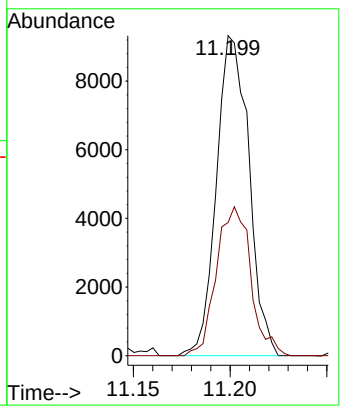


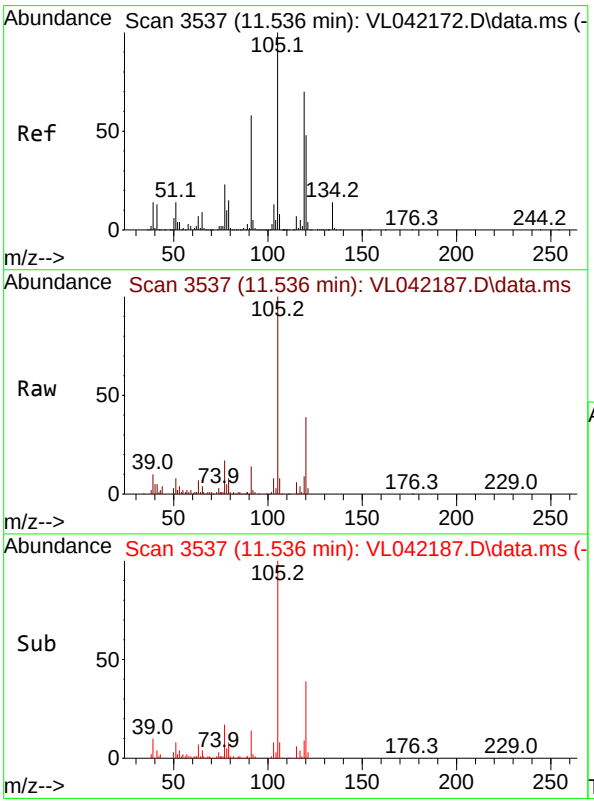
#73
1,3,5-Trimethylbenzene
Concen: 0.145 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion:105 Resp: 10875

Ion	Ratio	Lower	Upper
105	100		
120	41.6	37.4	56.0

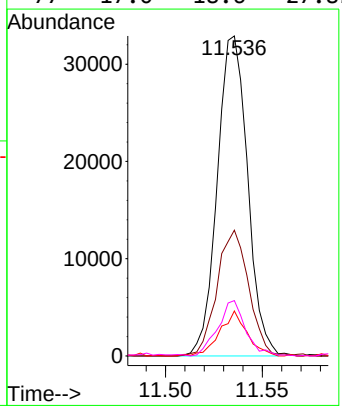




#74
1,2,4-Trimethylbenzene
Concen: 0.415 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion:105 Resp: 35817

Ion	Ratio	Lower	Upper
105	100		
120	39.3	38.6	58.0
91	14.1	46.2	69.2#
77	17.0	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Quant Time: Mar 28 02:16:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	185847	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	529516	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	474604	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	386837	9.925	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	10856	0.396	ppbv		94
3) Chlorodifluoromethane	1.473	51	10278	0.367	ppbv		99
4) Chloromethane	1.531	50	5306	0.473	ppbv		100
6) Bromomethane	1.670	94	185	0.036	ppbv	#	38
9) Propene	1.774	41	1755	0.137	ppbv		84
10) Heptane	4.978	43	1567	0.046	ppbv	#	40
11) Trichlorofluoromethane	1.878	101	5846	0.219	ppbv		95
12) 1,1,2-Trichlorotrifluo...	2.140	101	1399	0.064	ppbv		95
13) Ethanol	1.719	45	15071	12.408	ppbv		93
15) Acetone	1.836	43	83691	3.220	ppbv		92
16) 1,3-Butadiene	1.599	39	1660	0.131	ppbv	#	69
17) tert-Butyl alcohol	2.043	59	1963	0.061	ppbv	#	48
19) Isopropyl Alcohol	1.887	45	9528	0.650	ppbv	#	1
20) Methylene Chloride	2.059	84	7575	0.783	ppbv		85
21) Allyl Chloride	2.082	41	706	0.039	ppbv	#	1
23) Vinyl Acetate	2.473	43	24377	2.167	ppbv	#	52
25) Ethyl Acetate	2.823	43	31575	0.468	ppbv	#	81
26) Hexane	2.823	57	44184	1.696	ppbv	#	33
30) Cyclohexane	3.855	84	1537	0.068	ppbv	#	43
34) 2-Butanone	2.564	43	9069	0.236	ppbv		98
36) Benzene	3.651	78	16130	0.307	ppbv	#	93
39) 1,2-Dichloropropane	3.959	63	136667	7.149	ppbv	#	22
44) 2,2,4-Trimethylpentane	4.635	57	3242	0.037	ppbv	#	1
53) Toluene	6.930	91	19259	0.309	ppbv		97
58) Ethyl Benzene	9.529	91	4355	0.052	ppbv		100
60) o-Xylene	9.959	91	3145	0.047	ppbv		96
74) 1,2,4-Trimethylbenzene	11.536	105	6973	0.082	ppbv	#	62

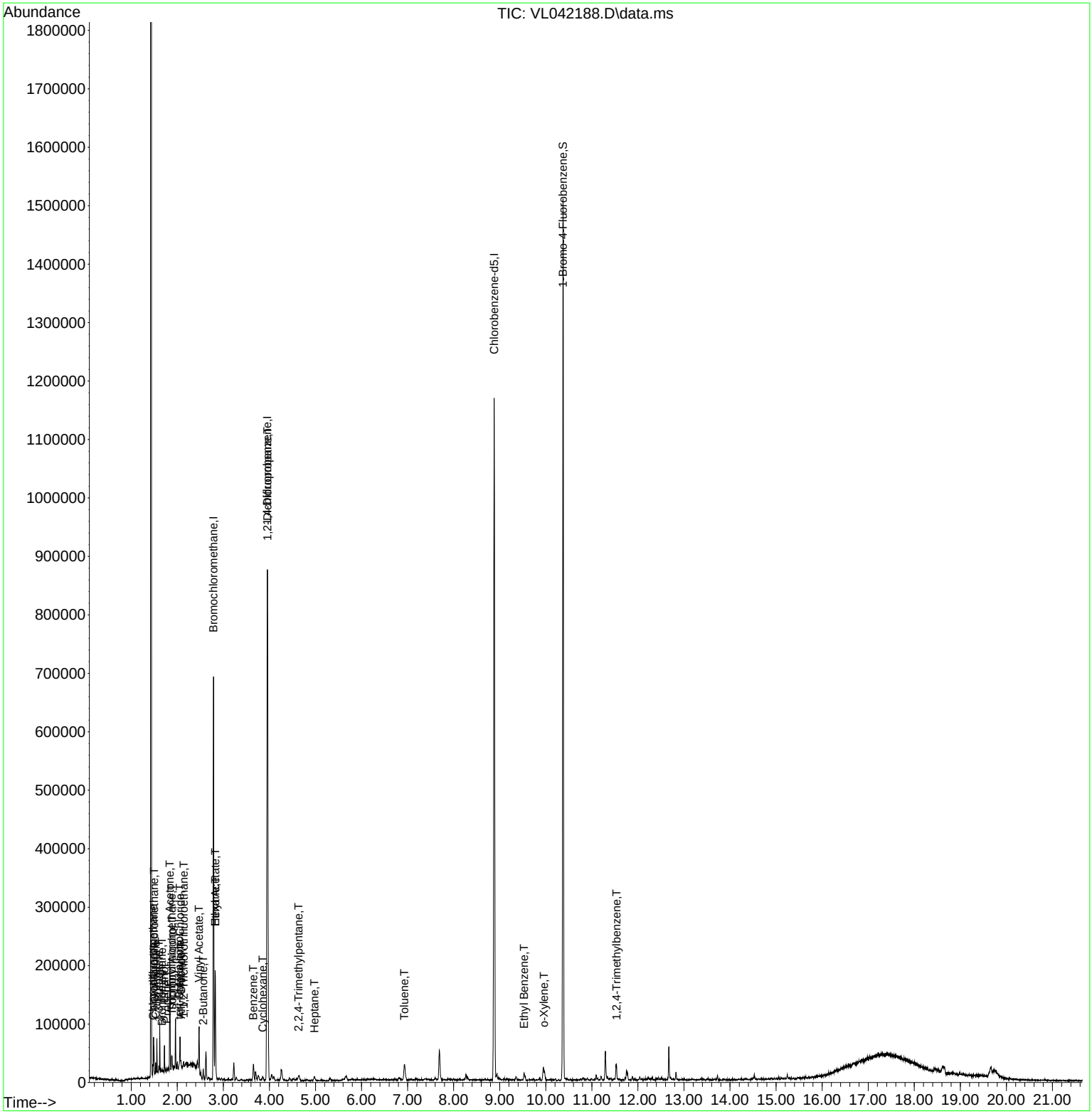
(#) = qualifier out of range (m) = manual integration (+) = signals summed

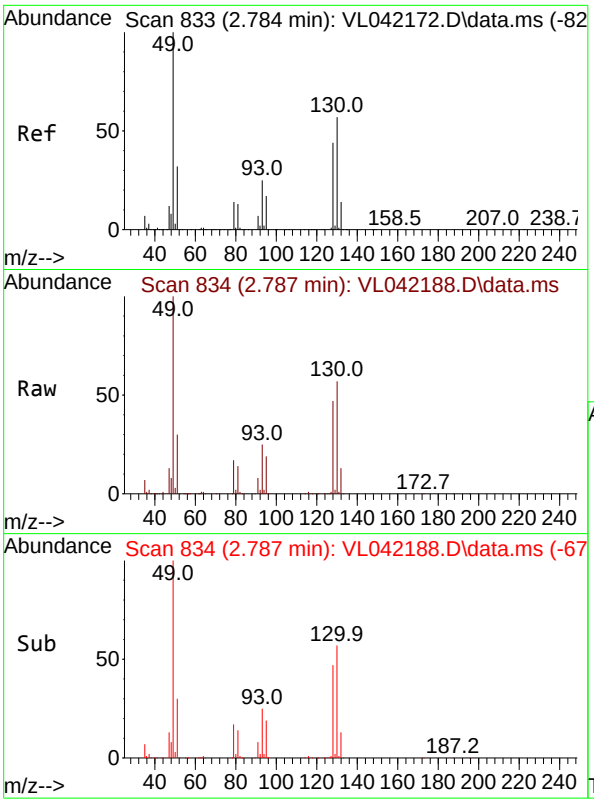
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042188.D
Acq On : 27 Mar 2025 20:12
Operator : SY/MD
Sample : Q1669-04
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Quant Time: Mar 28 02:16:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



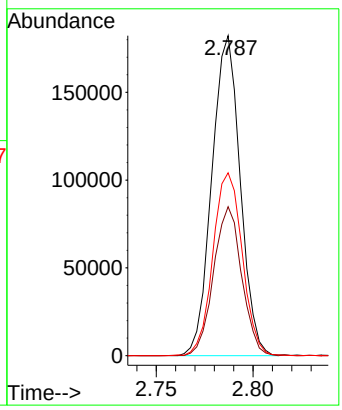


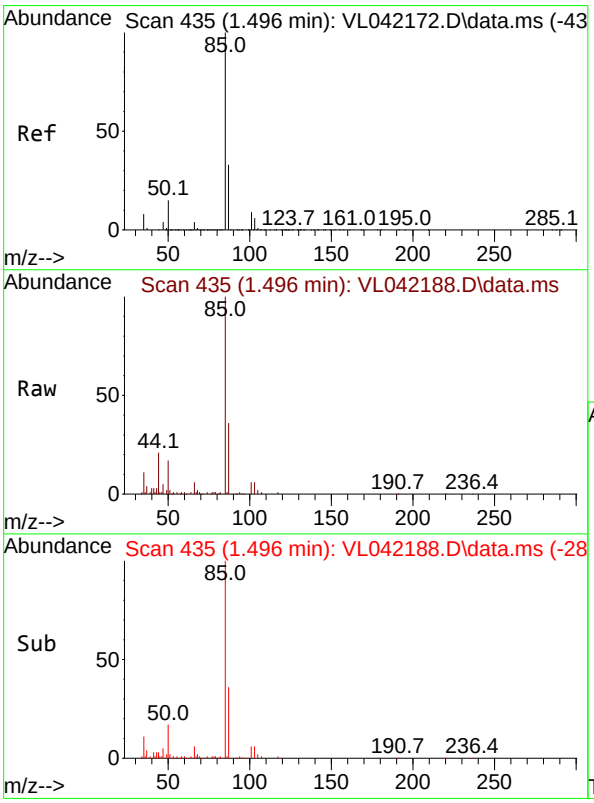
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 49 Resp: 185847

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	59.0	28.8	86.4

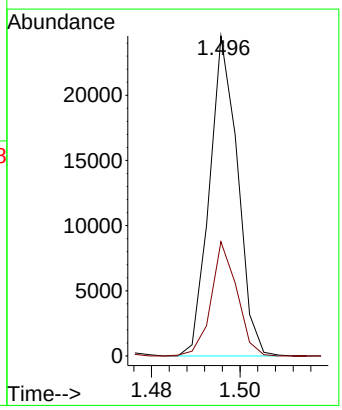


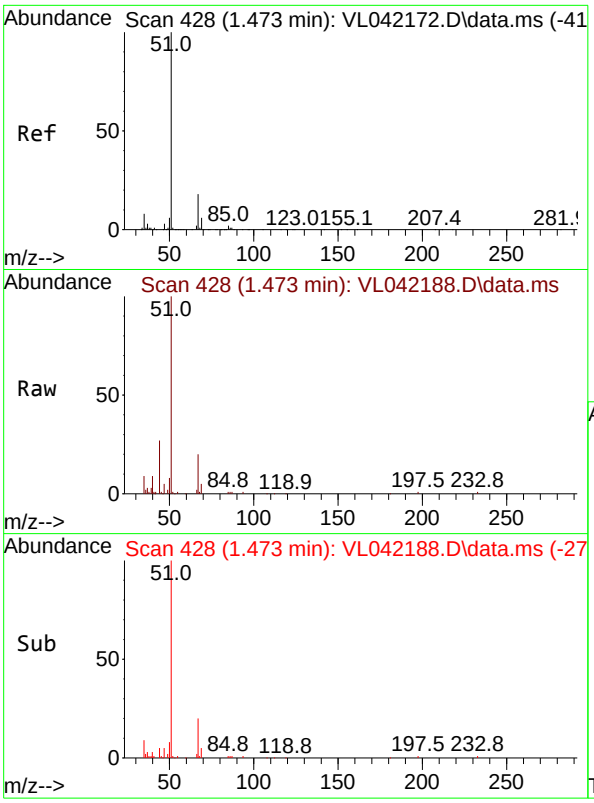


#2
Dichlorodifluoromethane
Concen: 0.396 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 85 Resp: 10856

Ion	Ratio	Lower	Upper
85	100		
87	35.7	26.1	39.1



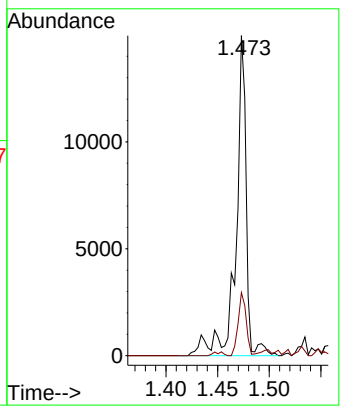


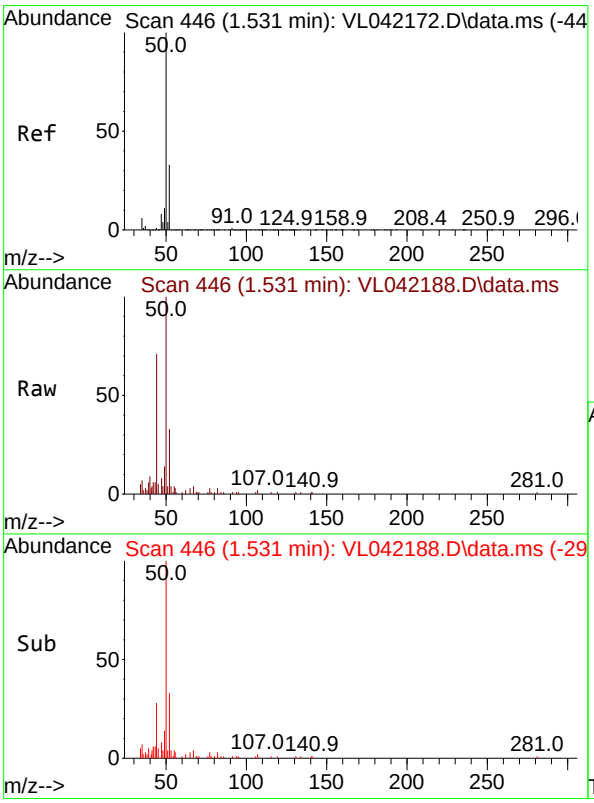
#3
Chlorodifluoromethane
Concen: 0.367 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 51 Resp: 10278

Ion	Ratio	Lower	Upper
51	100		
67	19.1	15.0	22.6

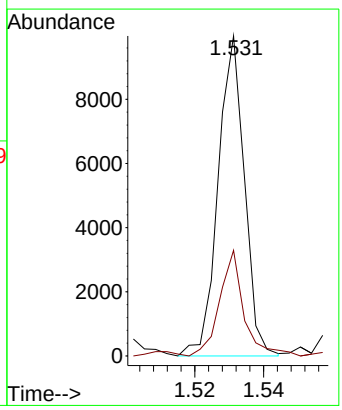


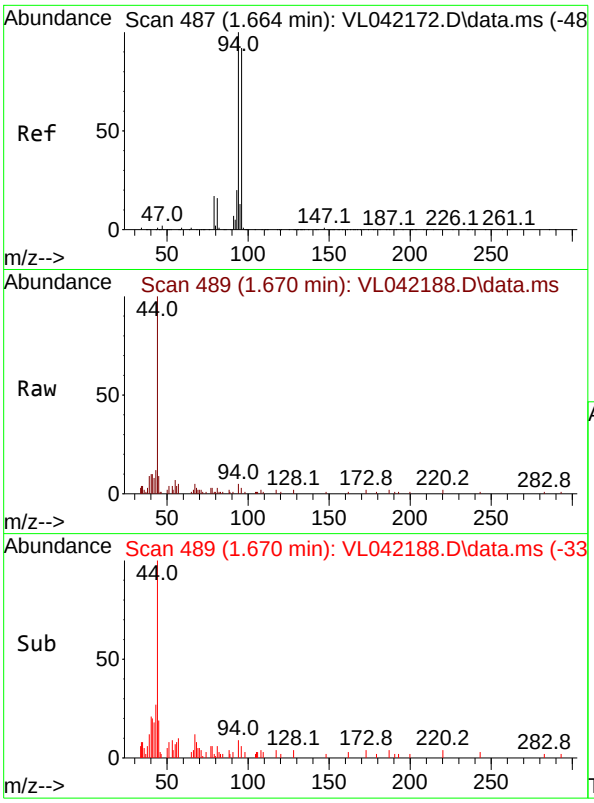


#4
Chloromethane
Concen: 0.473 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 50 Resp: 5306

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.1	39.1



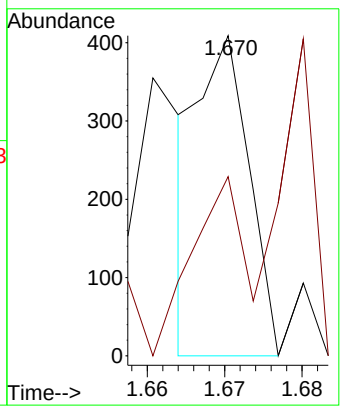


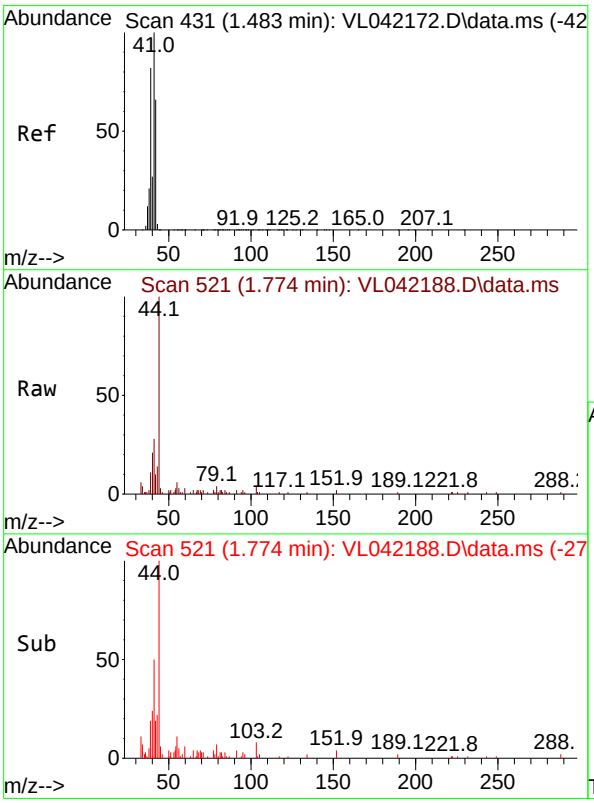
#6
Bromomethane
Concen: 0.036 ppbv
RT: 1.670 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 94 Resp: 185

Ion	Ratio	Lower	Upper
94	100		
96	32.8	73.1	109.7#

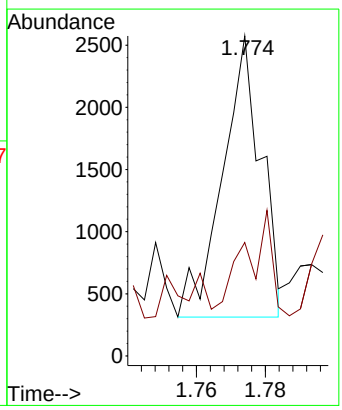


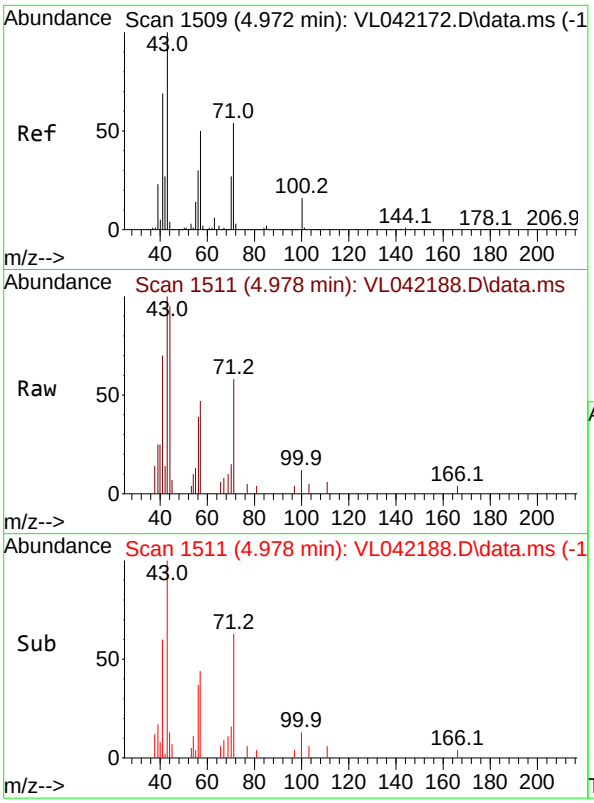


#9
Propene
Concen: 0.137 ppbv
RT: 1.774 min Scan# 521
Delta R.T. 0.291 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 41 Resp: 1755

Ion	Ratio	Lower	Upper
41	100		
42	82.2	55.4	83.2



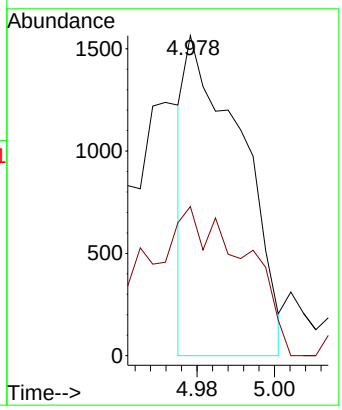


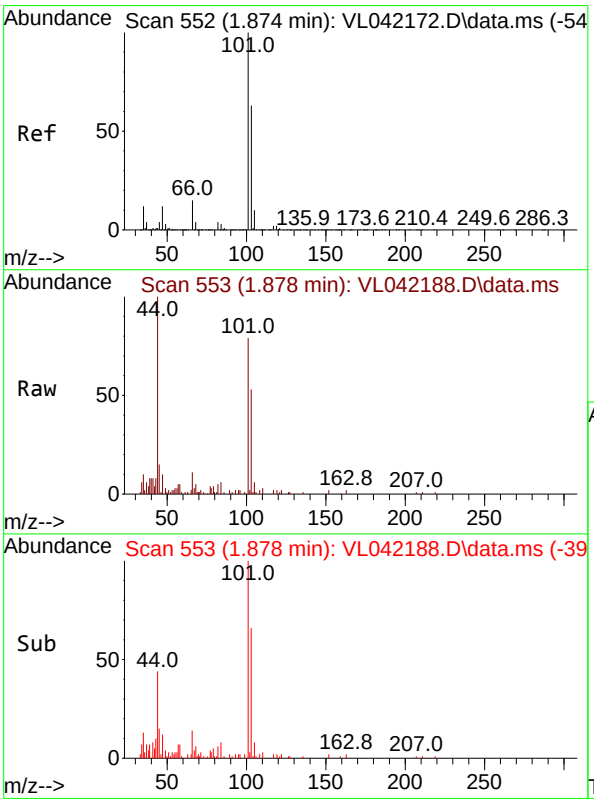
#10
Heptane
Concen: 0.046 ppbv
RT: 4.978 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 43 Resp: 1567

Ion	Ratio	Lower	Upper
43	100		
57	90.7	39.4	59.2#

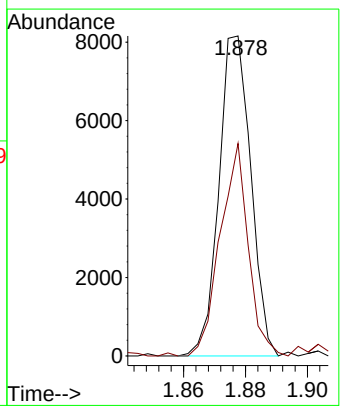


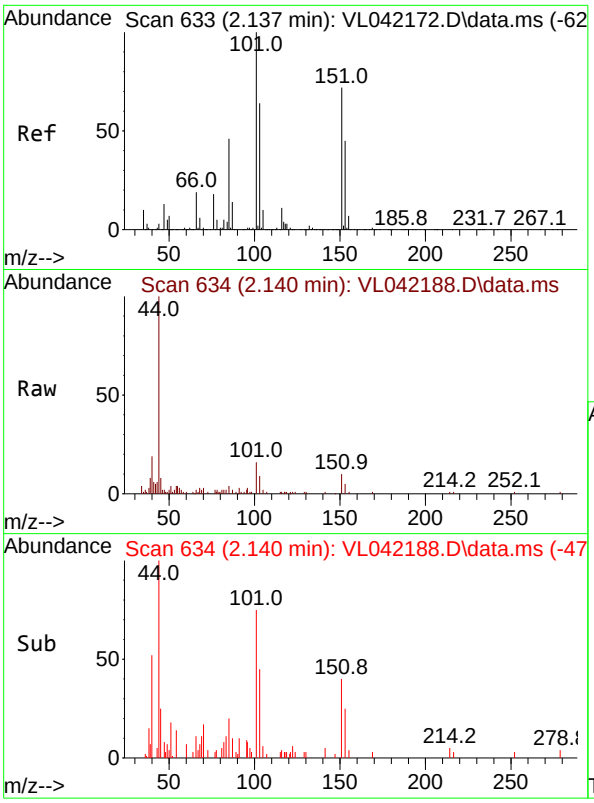


#11
Trichlorofluoromethane
Concen: 0.219 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion:101 Resp: 5846

Ion	Ratio	Lower	Upper
101	100		
103	66.4	50.2	75.2



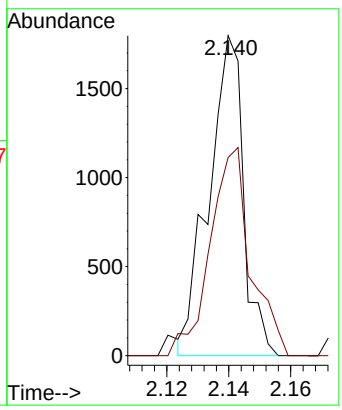


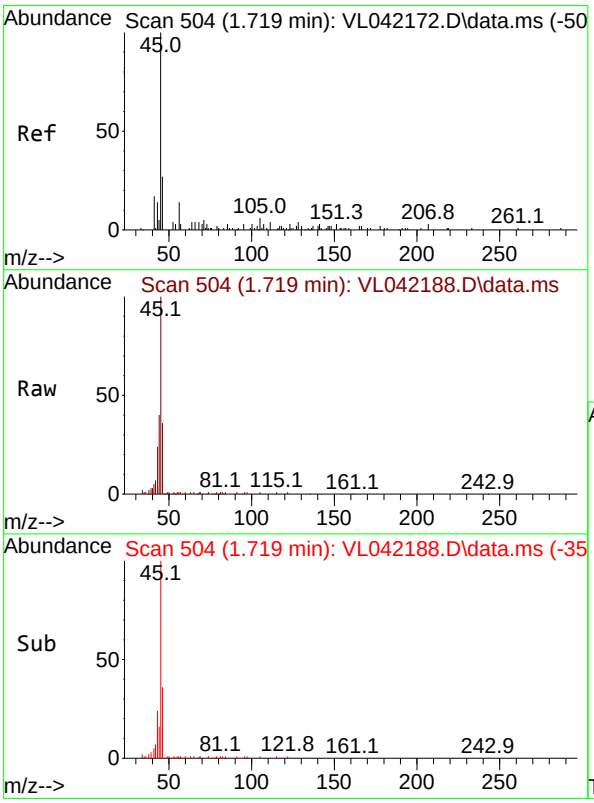
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.064 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion:101 Resp: 1399

Ion	Ratio	Lower	Upper
101	100		
151	75.7	57.1	85.7

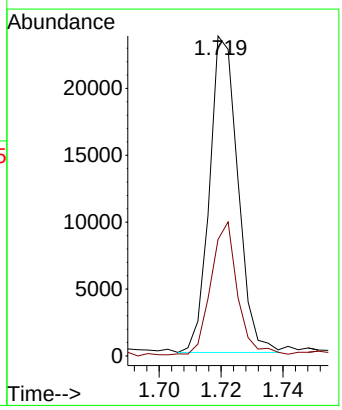


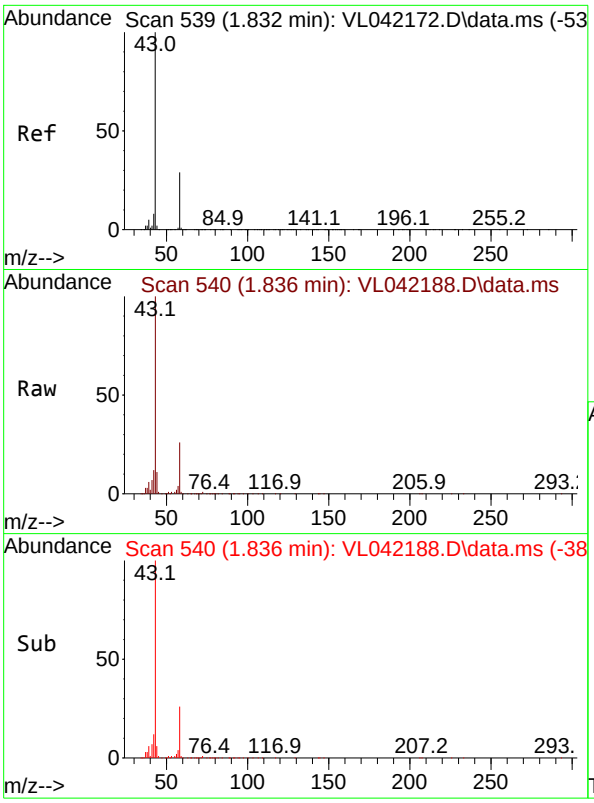


#13
Ethanol
Concen: 12.408 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 45 Resp: 15071

Ion	Ratio	Lower	Upper
45	100		
46	45.5	20.2	80.8



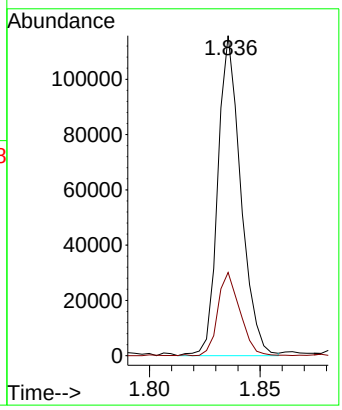


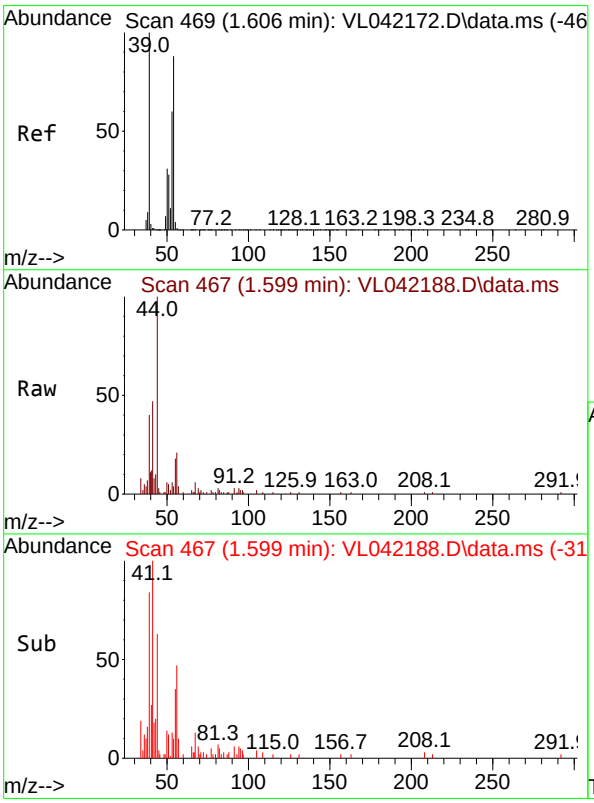
#15
Acetone
Concen: 3.220 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 43 Resp: 83691

Ion	Ratio	Lower	Upper
43	100		
58	24.7	23.2	34.8

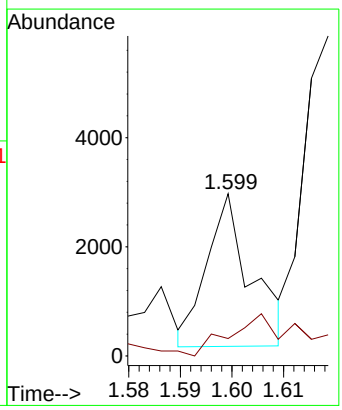


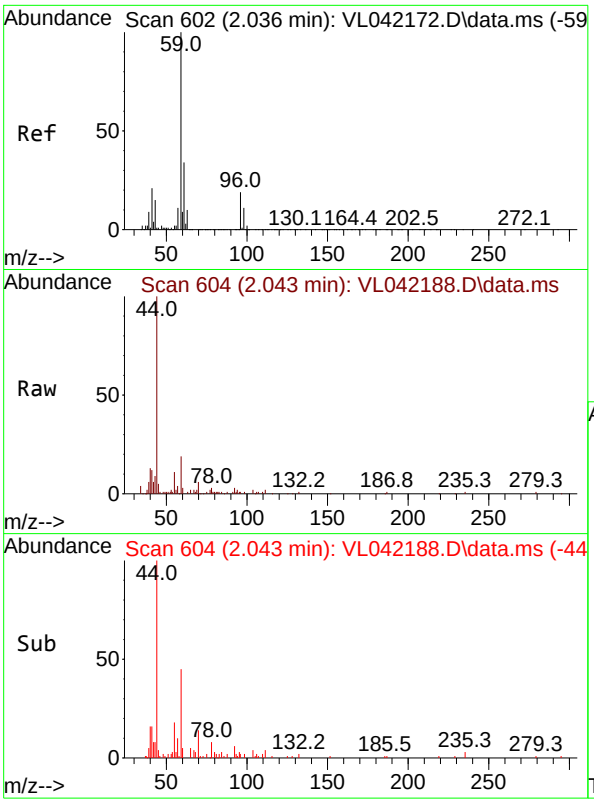


#16
1,3-Butadiene
Concen: 0.131 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 39 Resp: 1660

Ion	Ratio	Lower	Upper
39	100		
54	49.1	60.7	91.1#



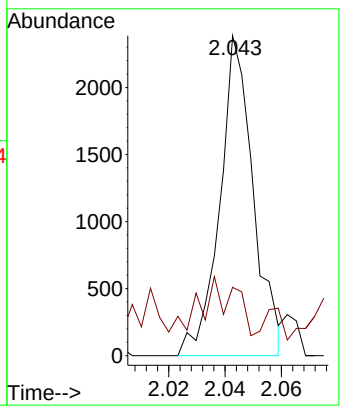


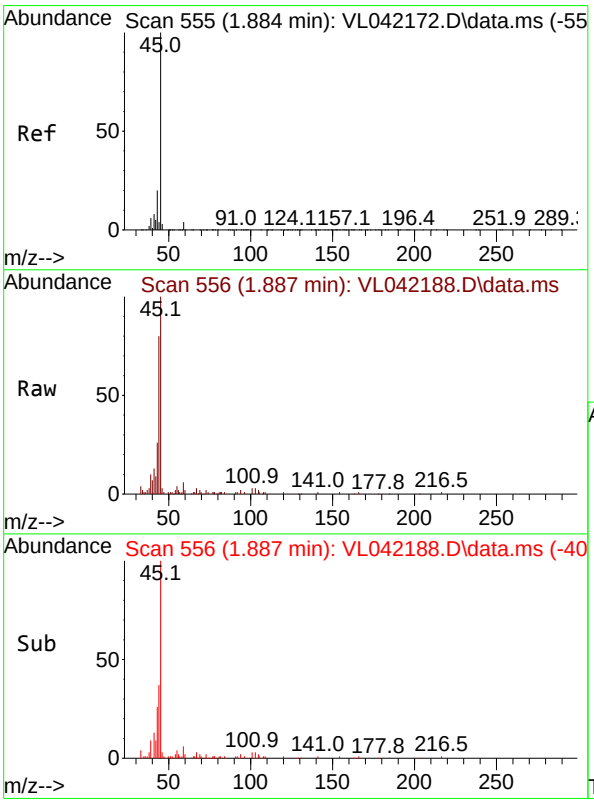
#17
tert-Butyl alcohol
Concen: 0.061 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 59 Resp: 1963

Ion	Ratio	Lower	Upper
59	100		
57	30.9	8.9	13.3#

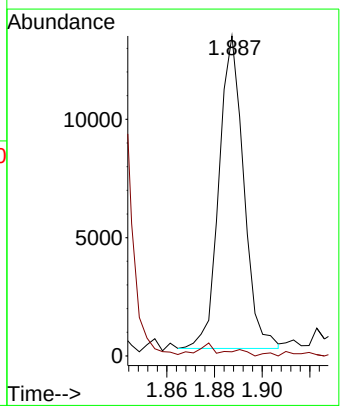


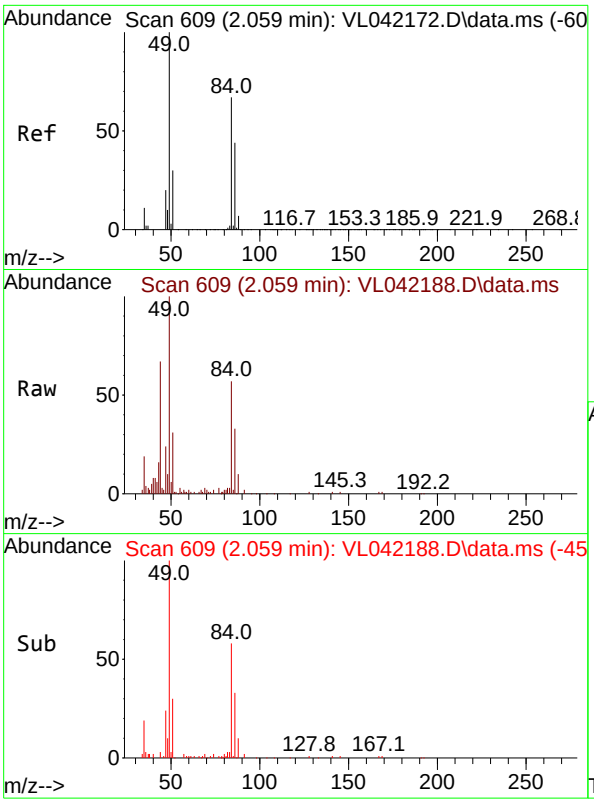


#19
Isopropyl Alcohol
Concen: 0.650 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 45 Resp: 9528

Ion	Ratio	Lower	Upper
45	100		
58	223.8	36.9	55.3#



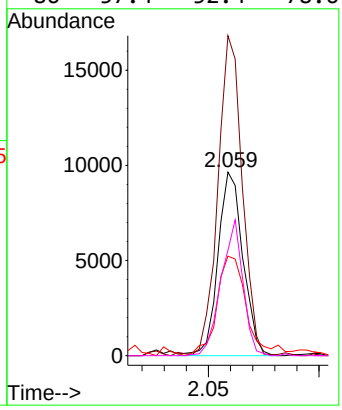


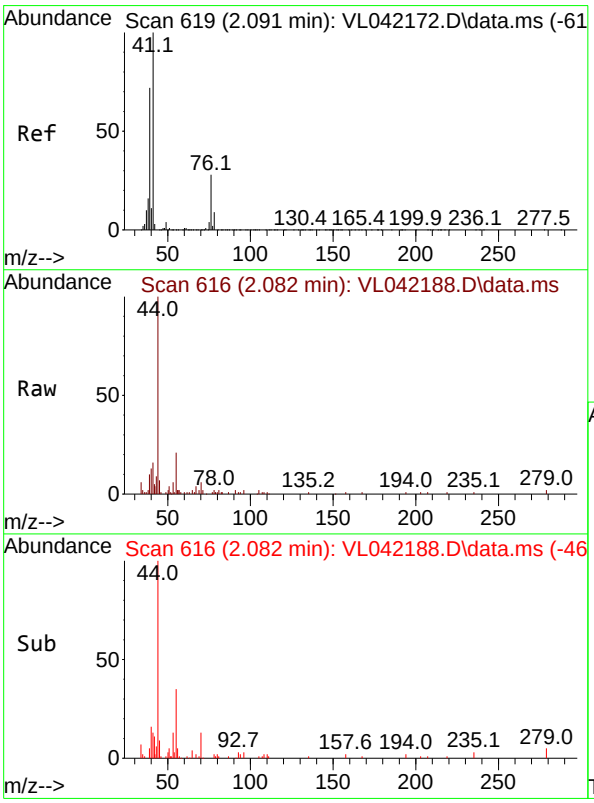
#20
Methylene Chloride
Concen: 0.783 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 84 Resp: 7575

Ion	Ratio	Lower	Upper
84	100		
49	173.6	120.2	180.4
51	53.1	37.4	56.0
86	57.4	52.4	78.6

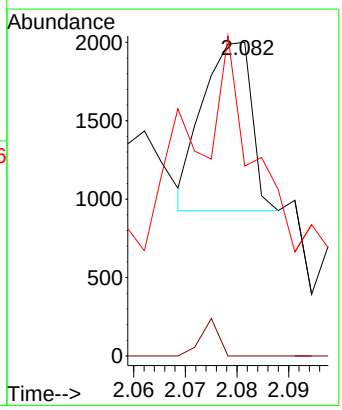


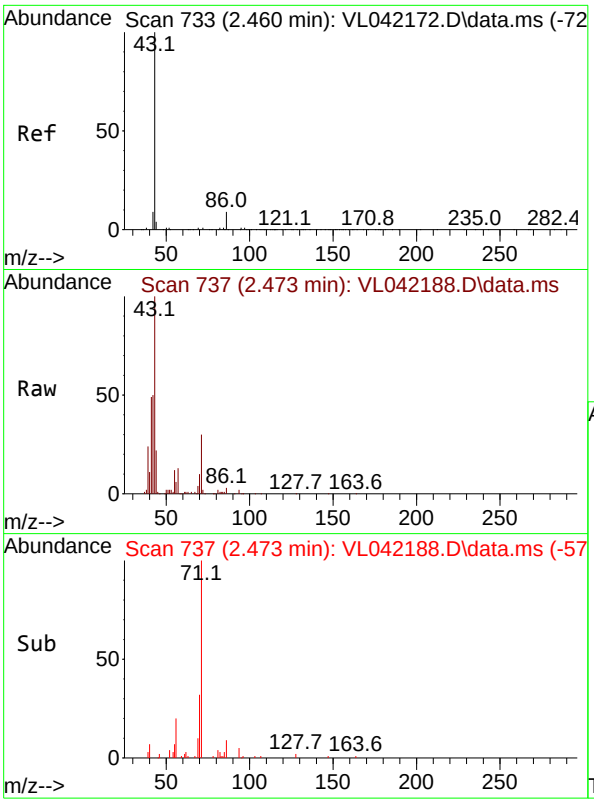


#21
Allyl Chloride
Concen: 0.039 ppbv
RT: 2.082 min Scan# 616
Delta R.T. -0.010 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 41 Resp: 706

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.1	36.1#
39	259.5	61.1	91.7#



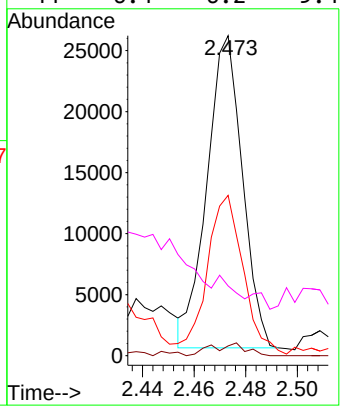


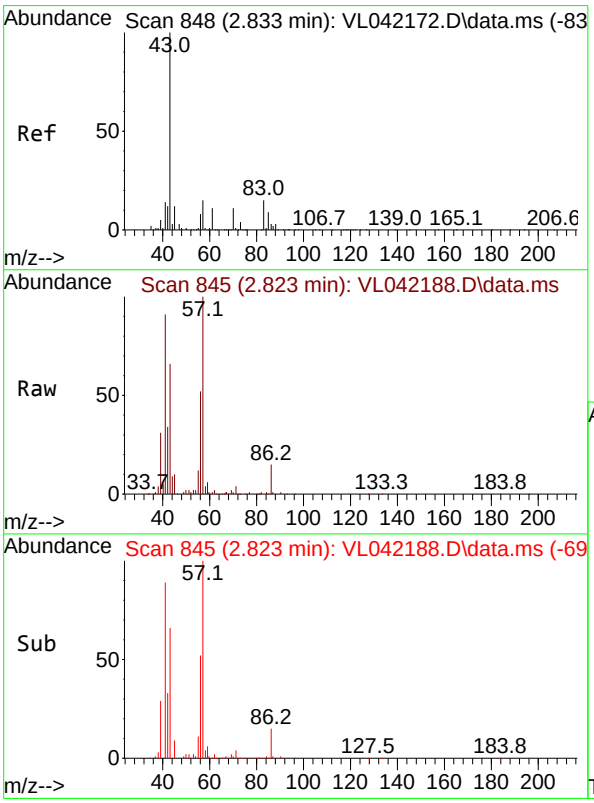
#23
Vinyl Acetate
Concen: 2.167 ppbv
RT: 2.473 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 43 Resp: 24377

Ion	Ratio	Lower	Upper
43	100		
86	3.1	5.5	8.3#
42	49.6	8.6	13.0#
44	6.4	6.2	9.4

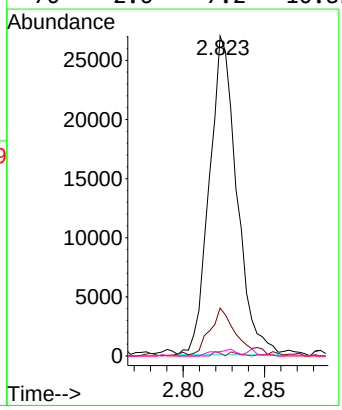


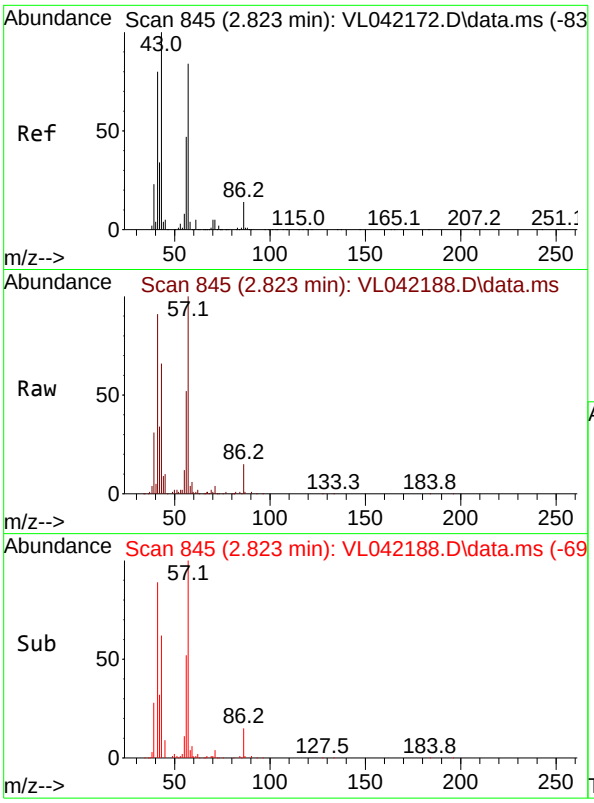


#25
Ethyl Acetate
Concen: 0.468 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.010 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 43 Resp: 31575

Ion	Ratio	Lower	Upper
43	100		
45	16.1	8.2	12.2#
61	1.1	7.3	10.9#
70	2.6	7.2	10.8#



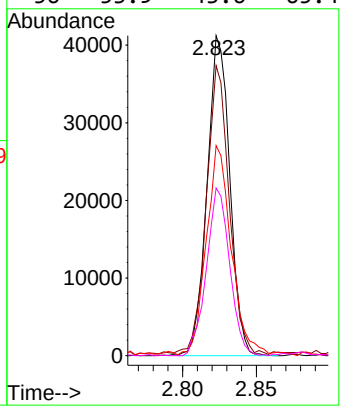


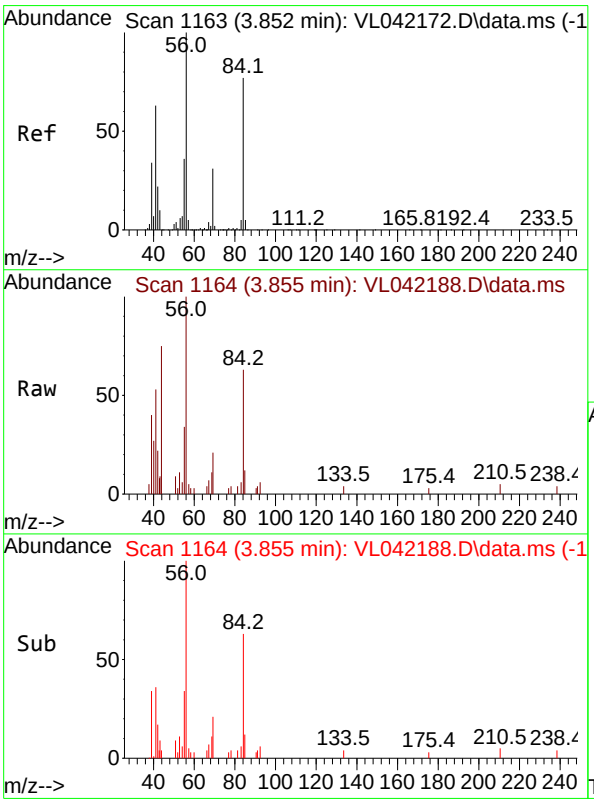
#26
Hexane
Concen: 1.696 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 57 Resp: 44184

Ion	Ratio	Lower	Upper
57	100		
41	91.3	76.6	114.8
43	74.7	207.8	311.8#
56	53.9	43.6	65.4

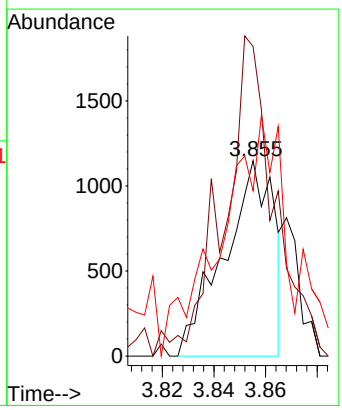


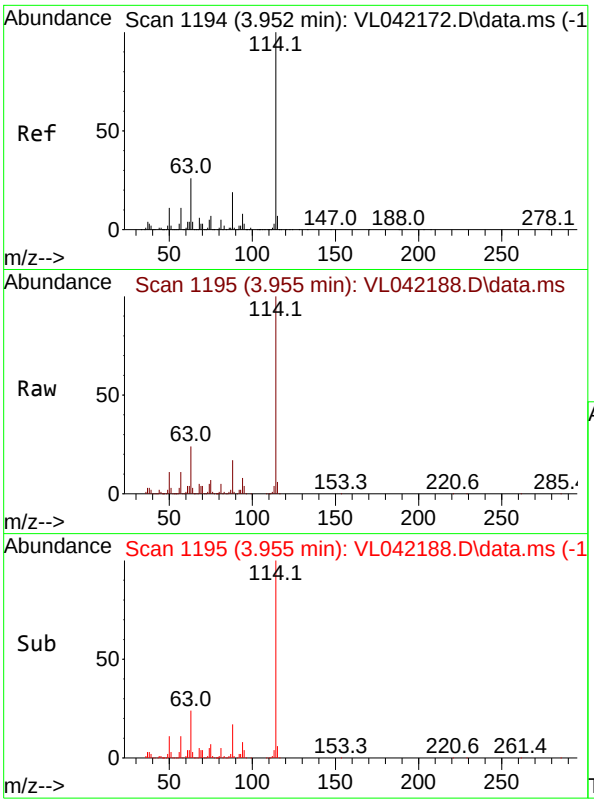


#30
Cyclohexane
Concen: 0.068 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 84 Resp: 1537

Ion	Ratio	Lower	Upper
84	100		
56	172.0	102.8	154.2#
41	160.4	66.5	99.7#



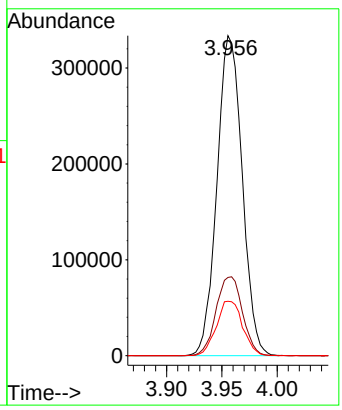


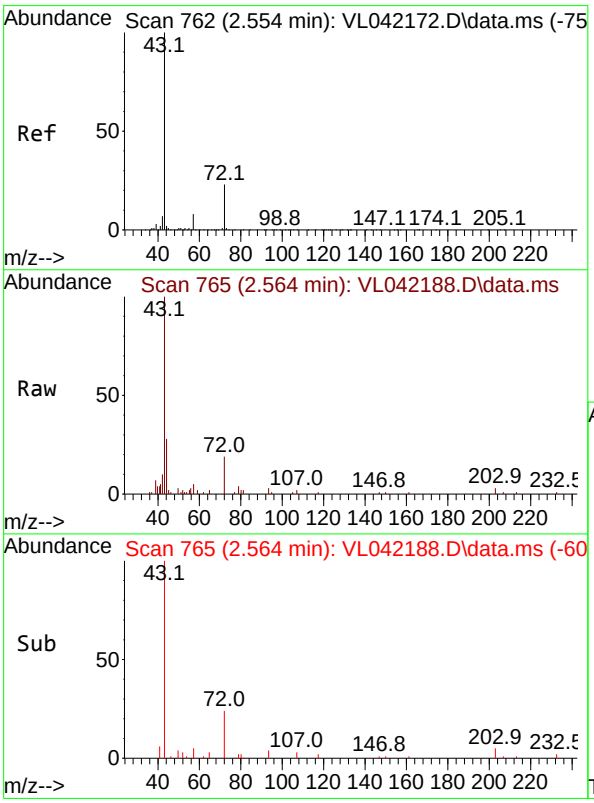
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion:114 Resp: 529516

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	17.8	15.0	22.4

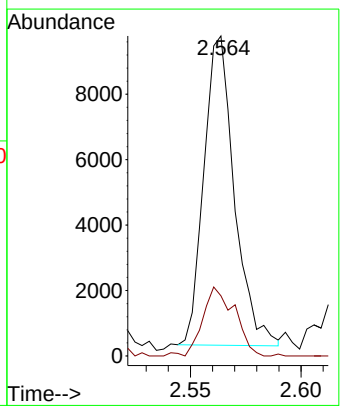


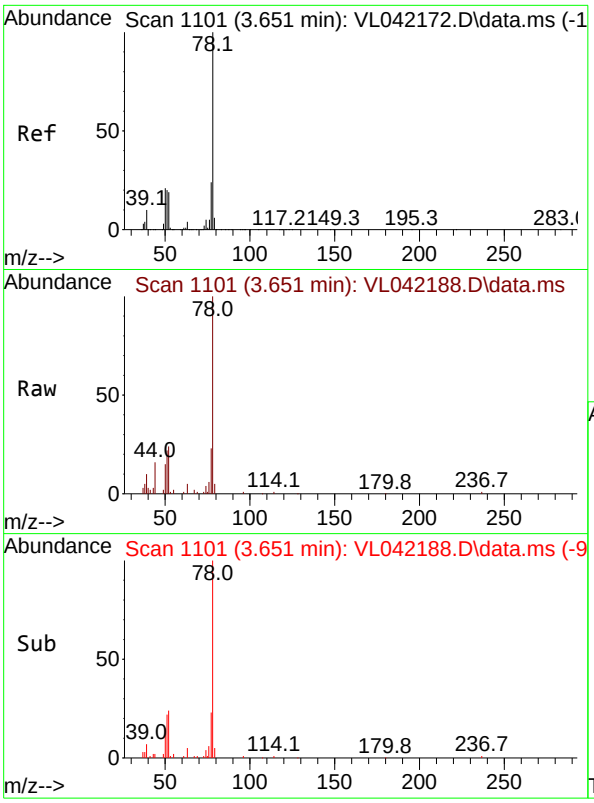


#34
2-Butanone
Concen: 0.236 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 43 Resp: 9069

Ion	Ratio	Lower	Upper
43	100		
72	23.6	18.2	27.2



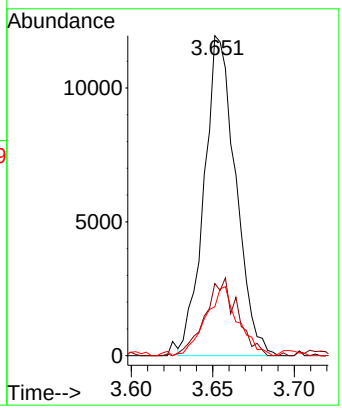


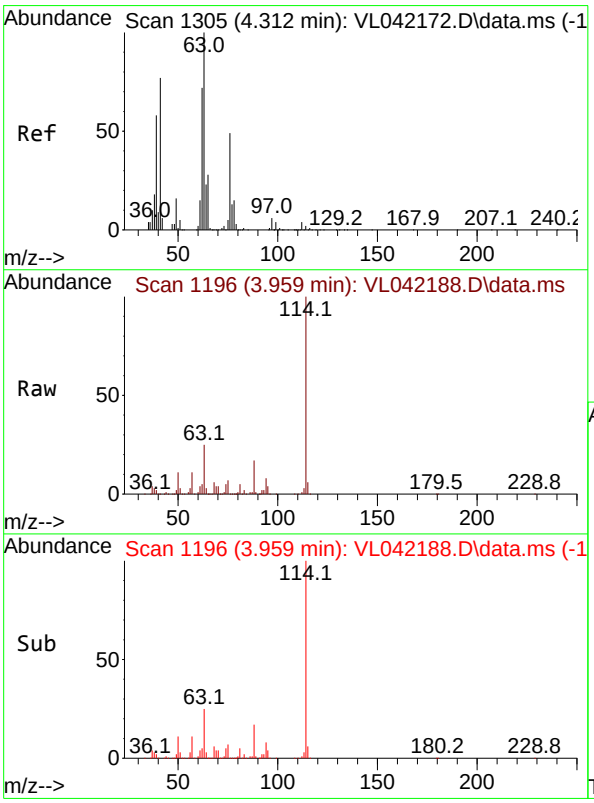
#36
Benzene
Concen: 0.307 ppbv
RT: 3.651 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 78 Resp: 16130

Ion	Ratio	Lower	Upper
78	100		
77	22.6	19.1	28.7
50	14.8	16.6	24.8#

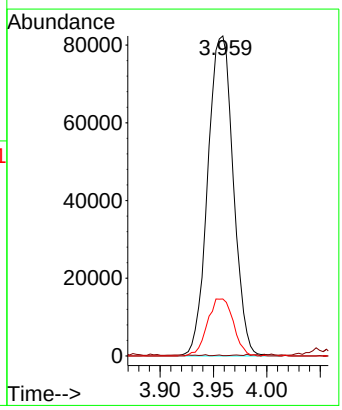


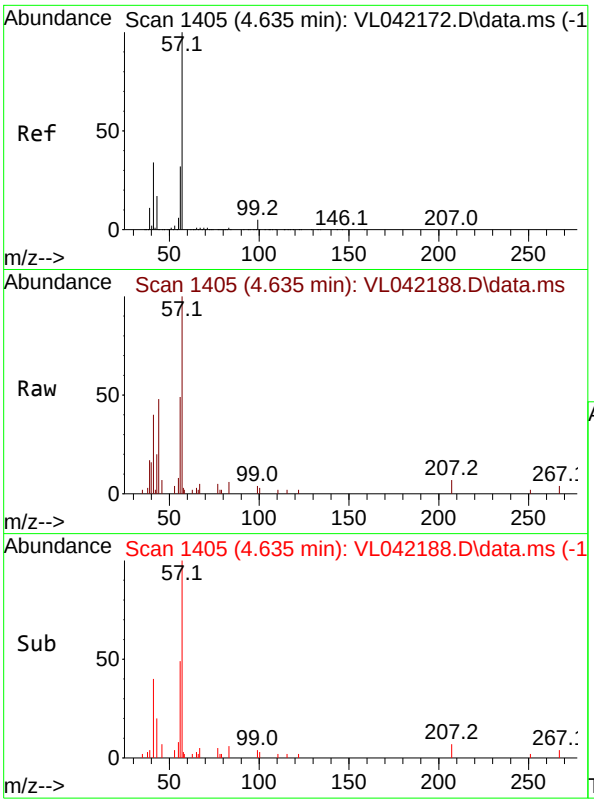


#39
1,2-Dichloropropane
Concen: 7.149 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 63 Resp: 136667

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	17.8	57.6	86.4#



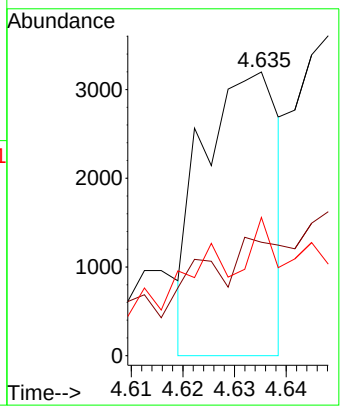


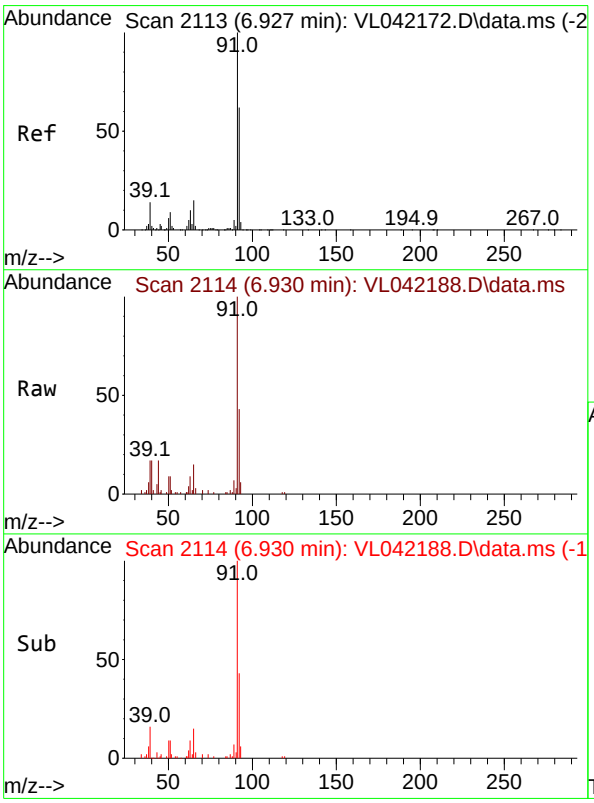
#44
2,2,4-Trimethylpentane
Concen: 0.037 ppbv
RT: 4.635 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 57 Resp: 3242

Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.8	40.2#
56	122.0	25.6	38.4#

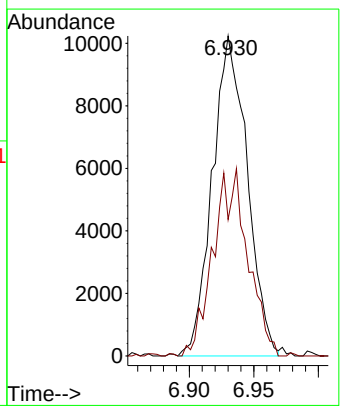


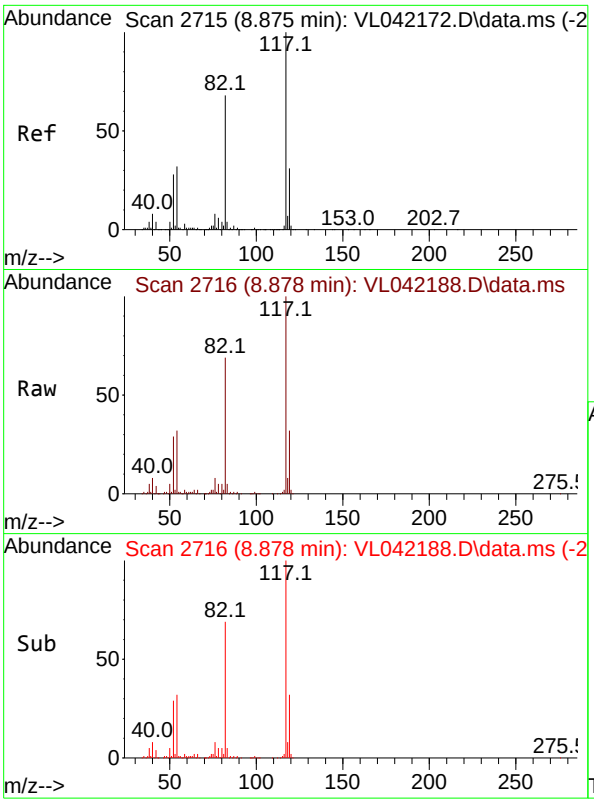


#53
Toluene
Concen: 0.309 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 91 Resp: 19259

Ion	Ratio	Lower	Upper
91	100		
92	58.4	48.4	72.6



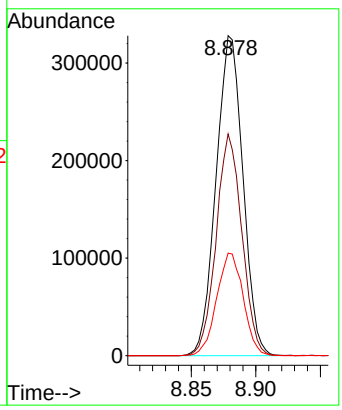


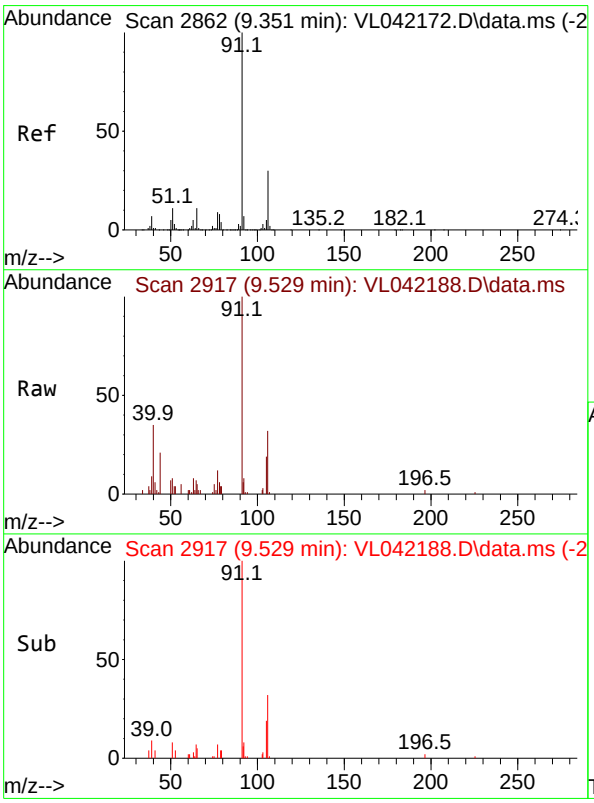
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion:117 Resp: 474604

Ion	Ratio	Lower	Upper
117	100		
82	66.3	55.8	83.6
119	31.6	25.5	38.3

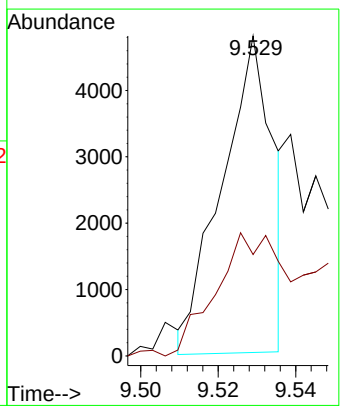


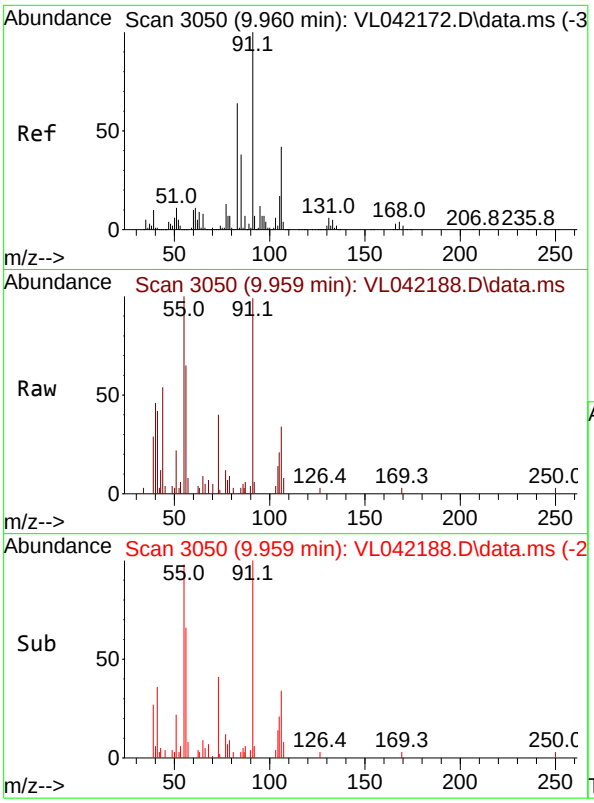


#58
Ethyl Benzene
Concen: 0.052 ppbv
RT: 9.529 min Scan# 2917
Delta R.T. 0.178 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 91 Resp: 4355

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.2	36.2



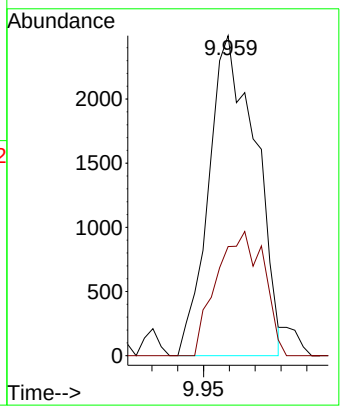


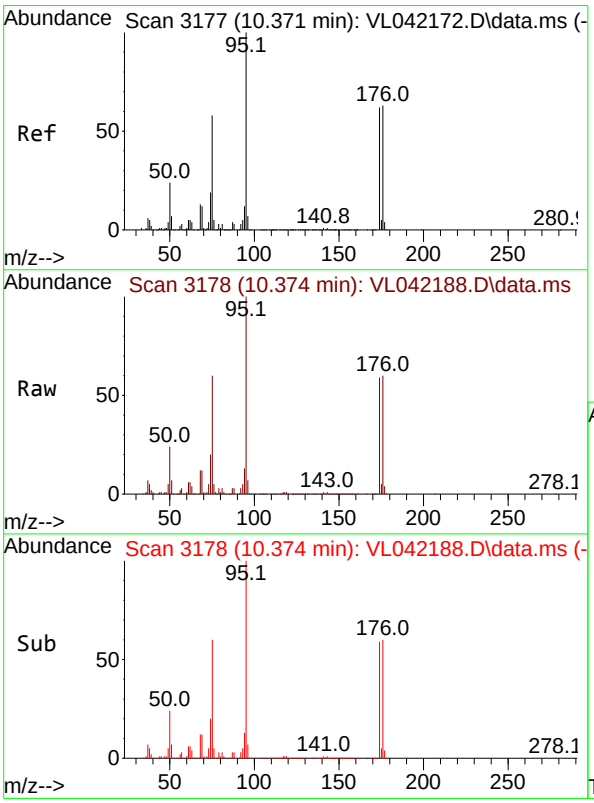
#60
o-Xylene
Concen: 0.047 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion: 91 Resp: 3145

Ion	Ratio	Lower	Upper
91	100		
106	39.1	20.8	62.5

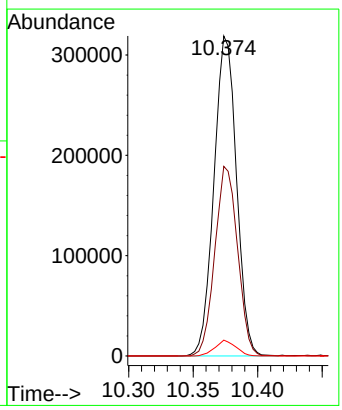


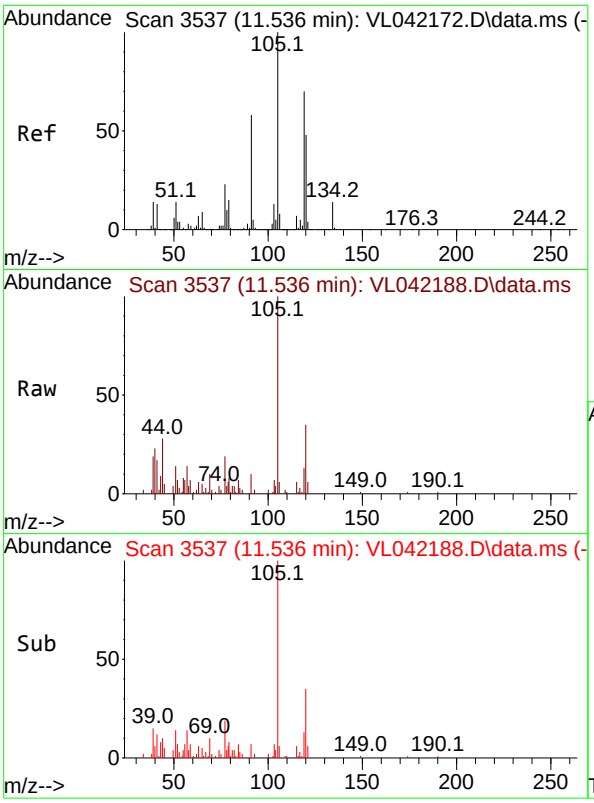


#68
1-Bromo-4-Fluorobenzene
Concen: 9.925 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Tgt Ion: 95 Resp: 386837

Ion	Ratio	Lower	Upper
95	100		
174	59.7	50.6	76.0
175	4.6	3.8	5.6



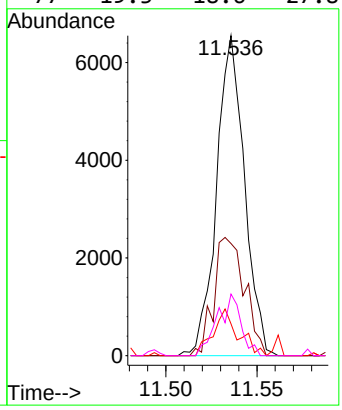


#74
1,2,4-Trimethylbenzene
Concen: 0.082 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042188.D
Acq: 27 Mar 2025 20:12

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3262025

Tgt Ion:105 Resp: 6973

Ion	Ratio	Lower	Upper
105	100		
120	35.0	38.6	58.0#
91	9.9	46.2	69.2#
77	19.3	18.6	27.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Quant Time: Mar 28 02:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	185013	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	523099	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	477151	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	387301	9.884	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	12204	0.447	ppbv		100
3) Chlorodifluoromethane	1.476	51	11994	0.430	ppbv	#	85
4) Chloromethane	1.531	50	4911	0.440	ppbv		91
6) Bromomethane	1.664	94	236	0.047	ppbv	#	4
9) Propene	1.619	41	5365	0.419	ppbv		96
11) Trichlorofluoromethane	1.878	101	5874	0.221	ppbv		88
12) 1,1,2-Trichlorotrifluo...	2.136	101	1274	0.058	ppbv		86
13) Ethanol	1.722	45	10166	8.407	ppbv	#	27
15) Acetone	1.835	43	63981	2.473	ppbv		97
16) 1,3-Butadiene	1.599	39	831	0.066	ppbv	#	11
19) Isopropyl Alcohol	1.722	45	10166	0.696	ppbv	#	57
20) Methylene Chloride	2.062	84	67627	7.018	ppbv		95
23) Vinyl Acetate	2.454	43	906	0.081	ppbv	#	23
25) Ethyl Acetate	2.826	43	78801	1.173	ppbv	#	79
26) Hexane	2.826	57	116880	4.506	ppbv	#	31
34) 2-Butanone	2.567	43	6879	0.181	ppbv		96
35) Carbon Tetrachloride	3.764	117	1236	0.030	ppbv	#	61
36) Benzene	3.654	78	6925	0.134	ppbv	#	90
39) 1,2-Dichloropropane	3.959	63	135050	7.151	ppbv	#	22
41) Tetrahydrofuran	3.224	42	6258	0.287	ppbv	#	38
53) Toluene	6.933	91	20704	0.337	ppbv		99
58) Ethyl Benzene	9.532	91	4747	0.056	ppbv		92
64) n-propylbenzene	10.989	120	1201	0.046	ppbv		84
65) tert-Butylbenzene	11.539	119	3276	0.035	ppbv	#	64
72) 4-Ethyltoluene	11.128	105	7264	0.086	ppbv	#	92
73) 1,3,5-Trimethylbenzene	11.202	105	7241	0.098	ppbv		88
74) 1,2,4-Trimethylbenzene	11.539	105	24773	0.291	ppbv	#	65
75) 1,3-Dichlorobenzene	11.672	146	1457	0.031	ppbv		93
76) 1,4-Dichlorobenzene	11.672	146	1457	0.031	ppbv	#	68
77) 1,2-Dichlorobenzene	11.672	146	1457	0.032	ppbv		91
79) Naphthalene	13.516	128	3117	0.034	ppbv	#	88

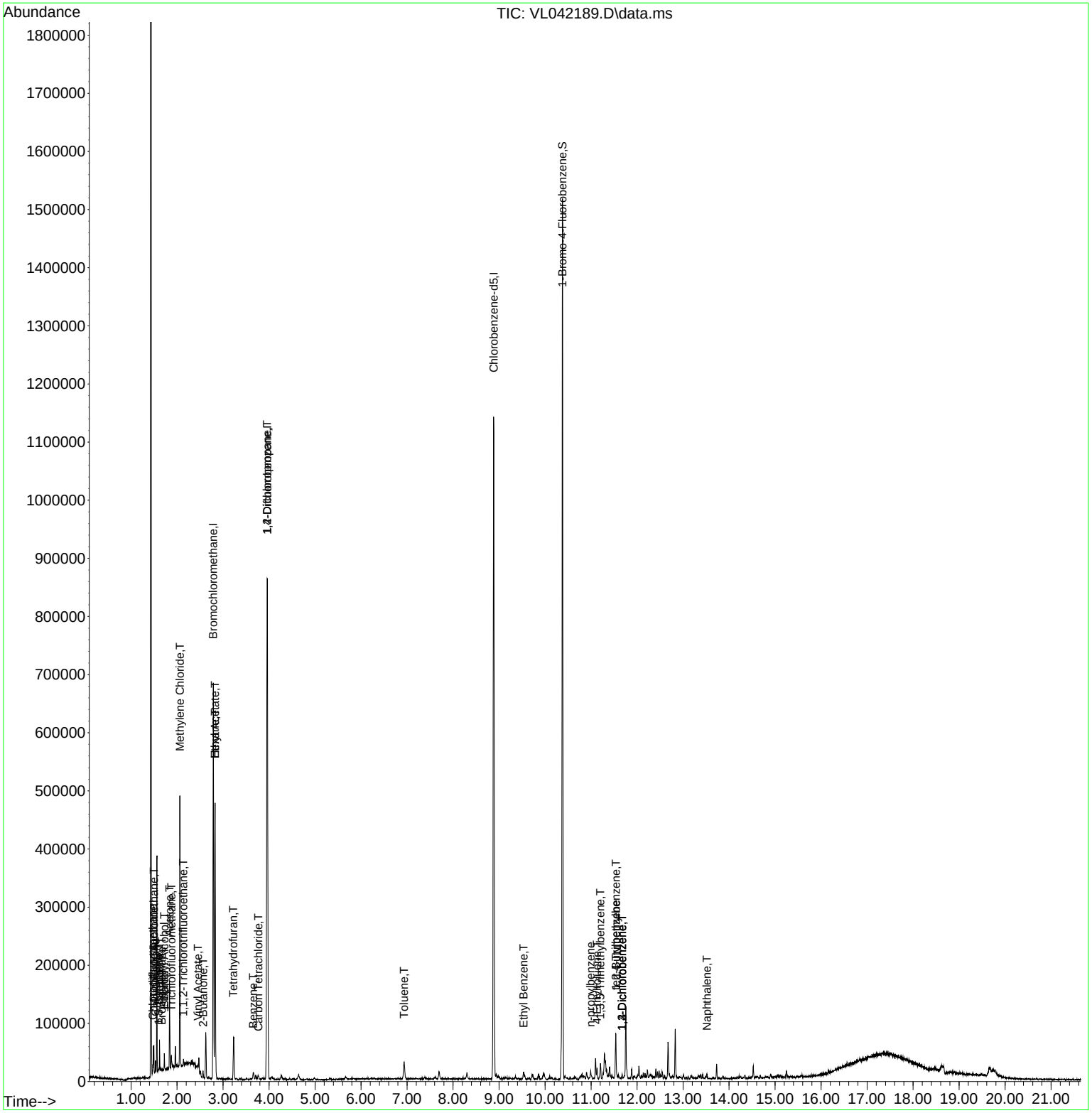
(#) = qualifier out of range (m) = manual integration (+) = signals summed

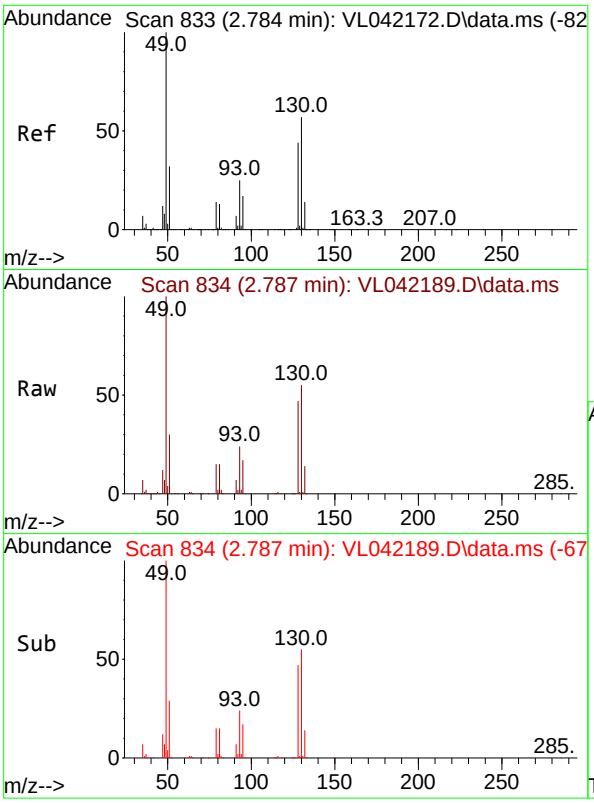
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042189.D
Acq On : 27 Mar 2025 20:48
Operator : SY/MD
Sample : Q1669-09
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Quant Time: Mar 28 02:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



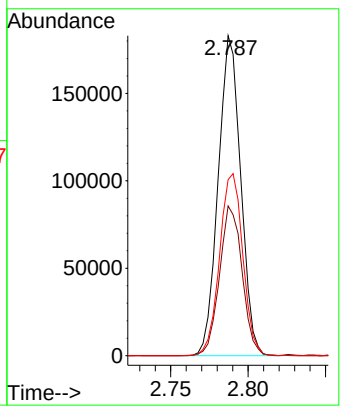


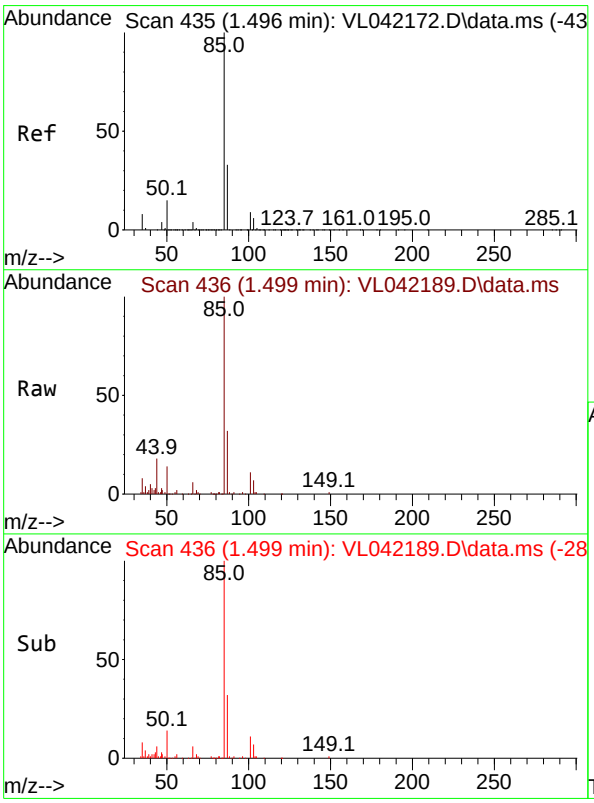
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 49 Resp: 185013

Ion	Ratio	Lower	Upper
49	100		
128	47.0	22.9	68.5
130	58.7	28.8	86.4

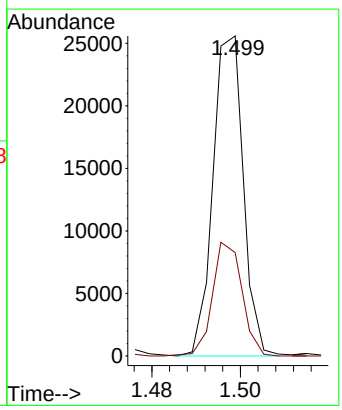


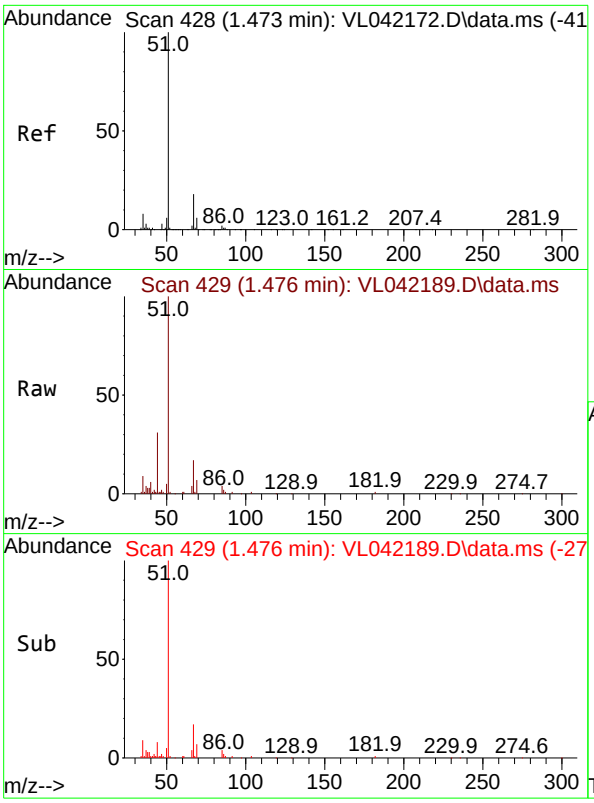


#2
Dichlorodifluoromethane
Concen: 0.447 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 85 Resp: 12204

Ion	Ratio	Lower	Upper
85	100		
87	32.3	26.1	39.1



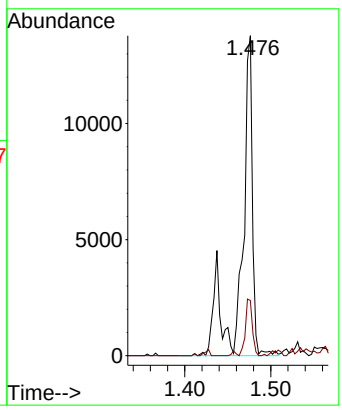


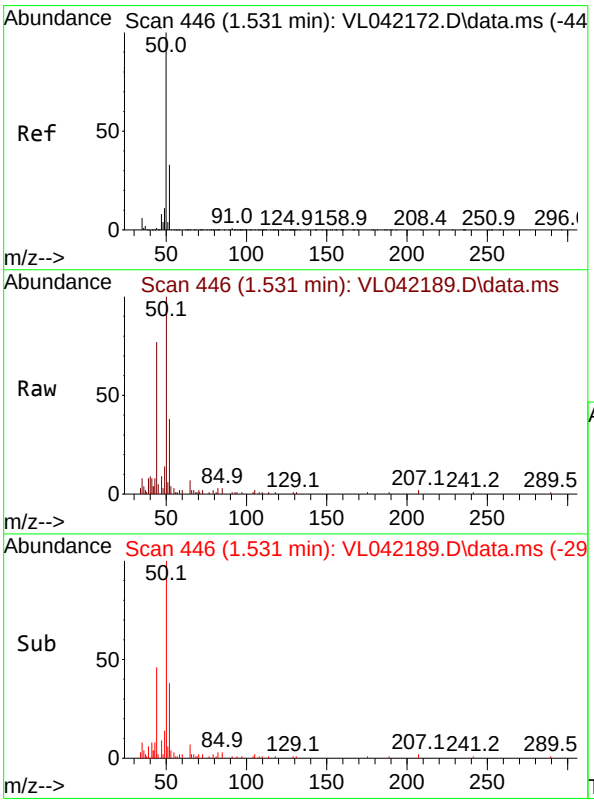
#3
Chlorodifluoromethane
Concen: 0.430 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 51 Resp: 11994

Ion	Ratio	Lower	Upper
51	100		
67	12.0	15.0	22.6#

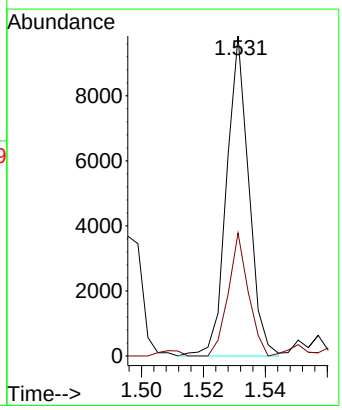


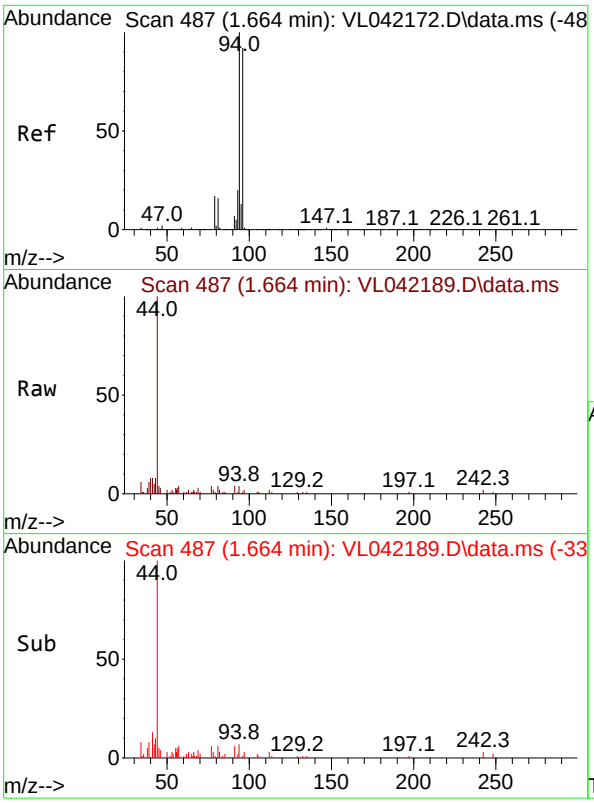


#4
Chloromethane
Concen: 0.440 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 50 Resp: 4911

Ion	Ratio	Lower	Upper
50	100		
52	37.7	26.1	39.1



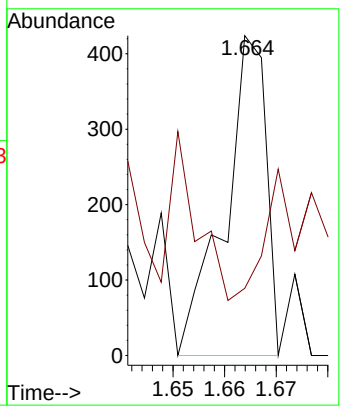


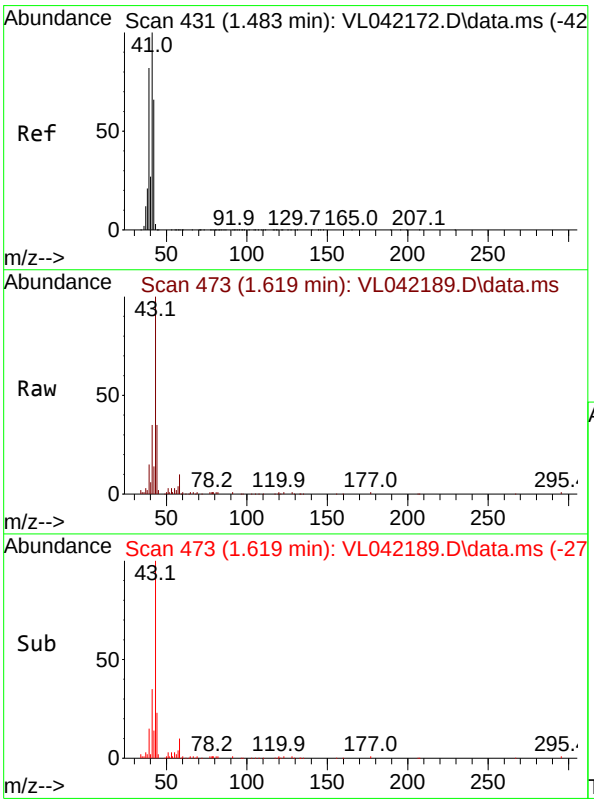
#6
Bromomethane
Concen: 0.047 ppbv
RT: 1.664 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 94 Resp: 236

Ion	Ratio	Lower	Upper
94	100		
96	0.0	73.1	109.7#

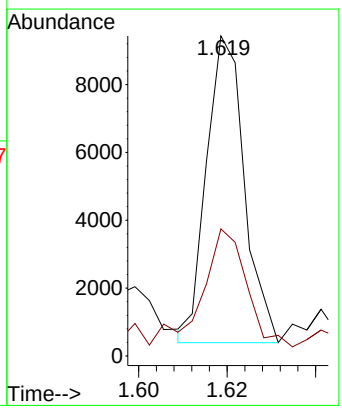


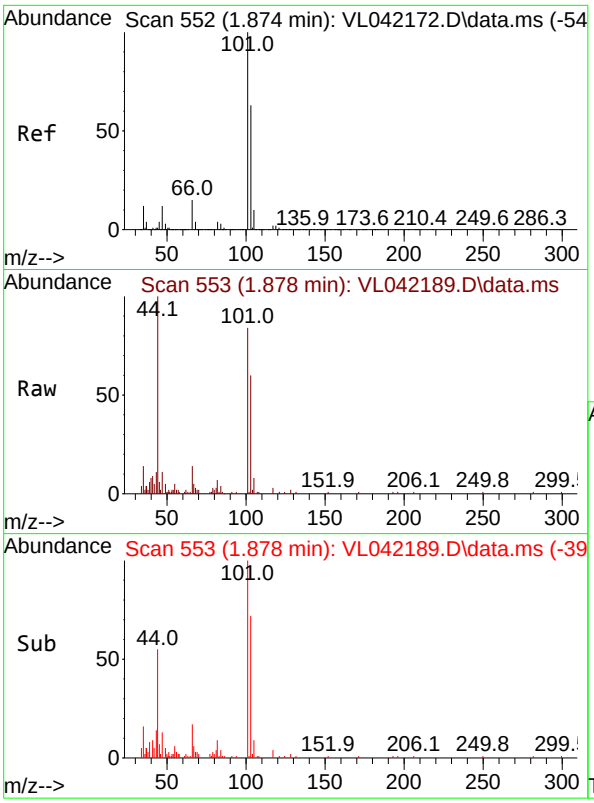


#9
Propene
Concen: 0.419 ppbv
RT: 1.619 min Scan# 473
Delta R.T. 0.136 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 41 Resp: 5365

Ion	Ratio	Lower	Upper
41	100		
42	65.7	55.4	83.2



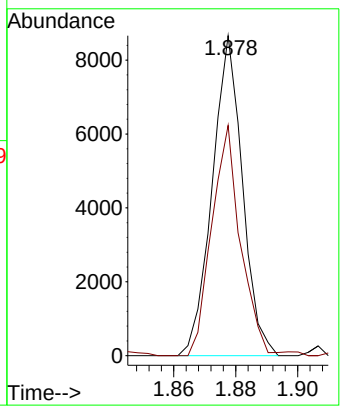


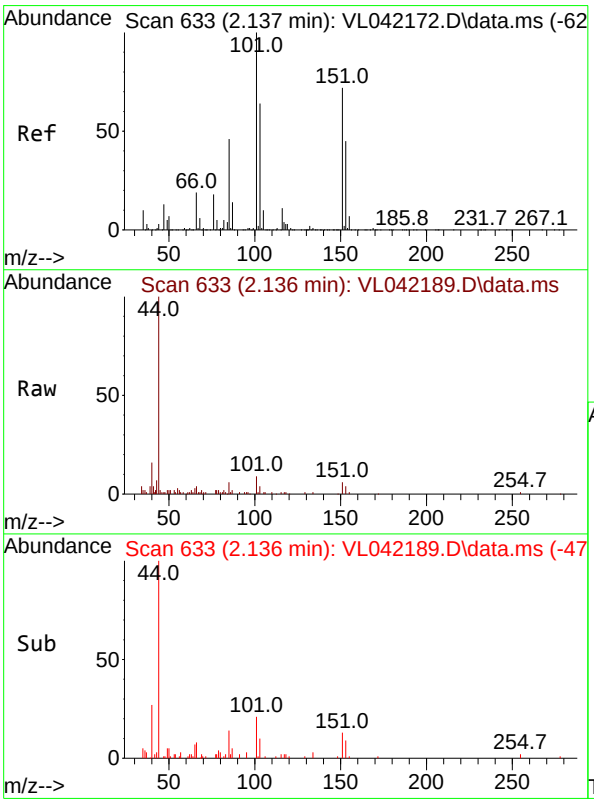
#11
Trichlorofluoromethane
Concen: 0.221 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:101 Resp: 5874

Ion	Ratio	Lower	Upper
101	100		
103	71.9	50.2	75.2

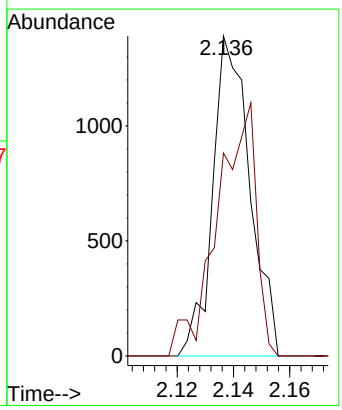


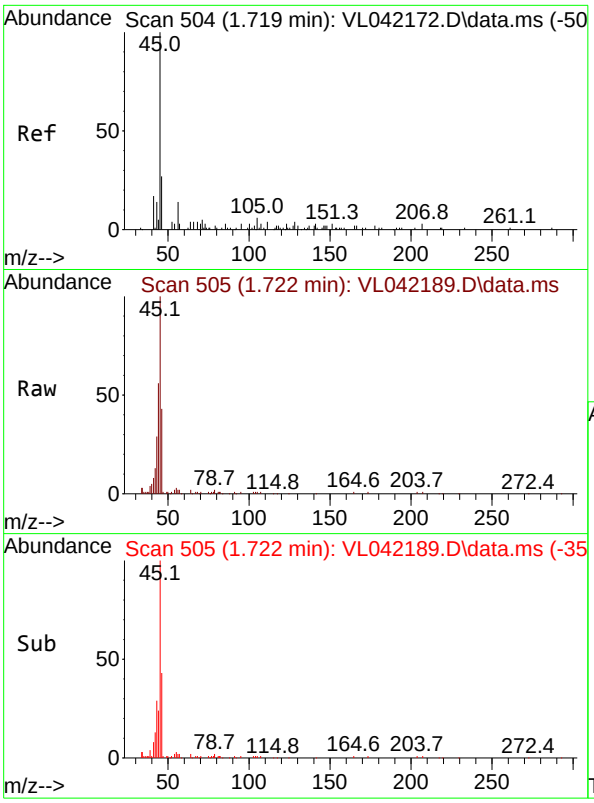


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.058 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:101 Resp: 1274

Ion	Ratio	Lower	Upper
101	100		
151	82.8	57.1	85.7



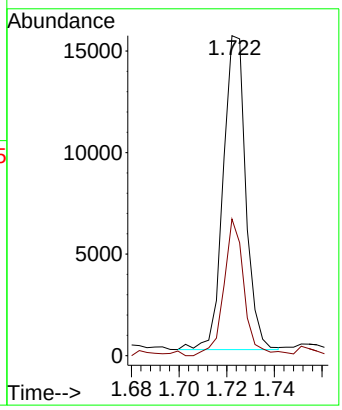


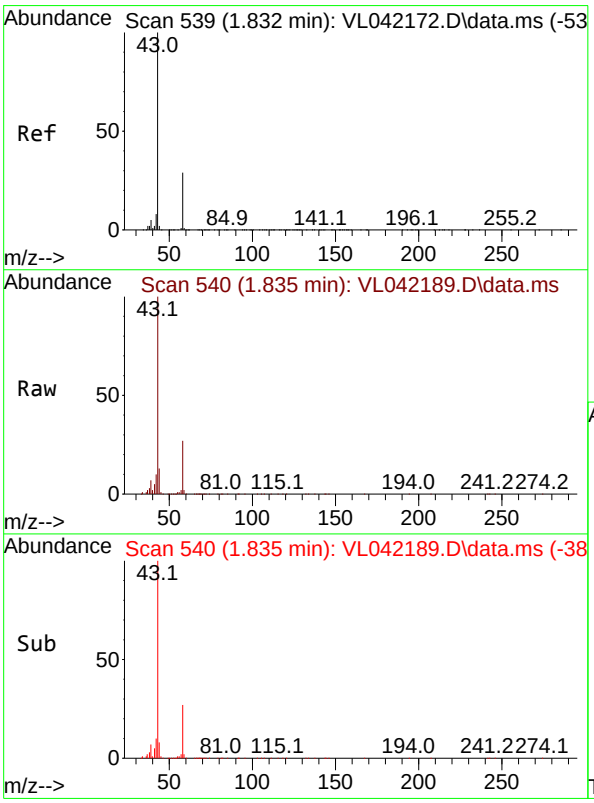
#13
Ethanol
Concen: 8.407 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 45 Resp: 10166

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#

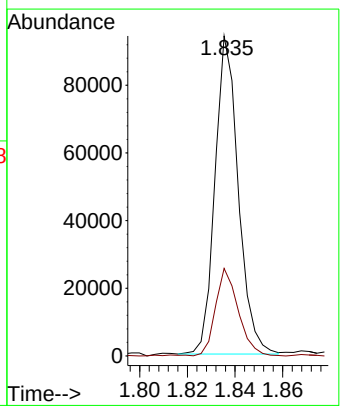


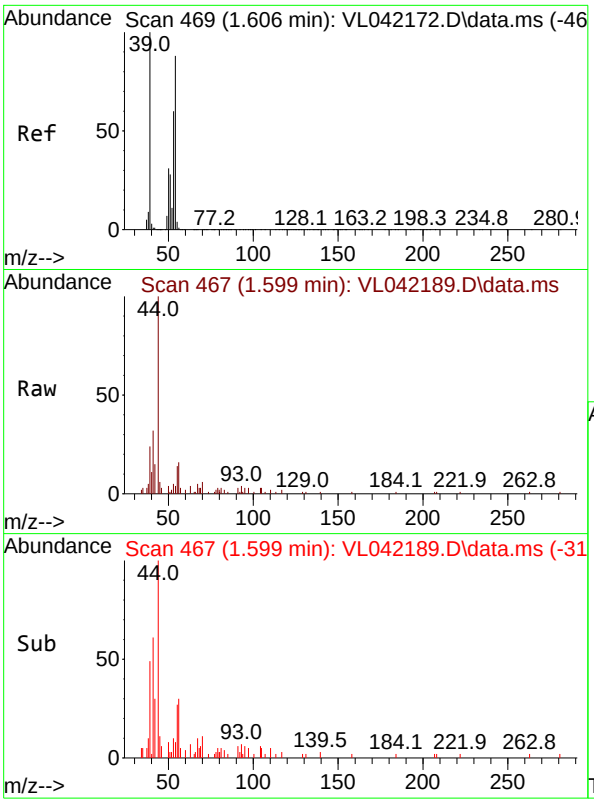


#15
Acetone
Concen: 2.473 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 43 Resp: 63981

Ion	Ratio	Lower	Upper
43	100		
58	27.4	23.2	34.8



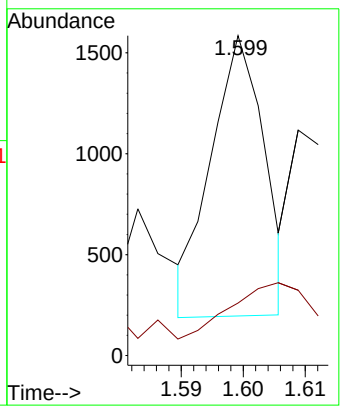


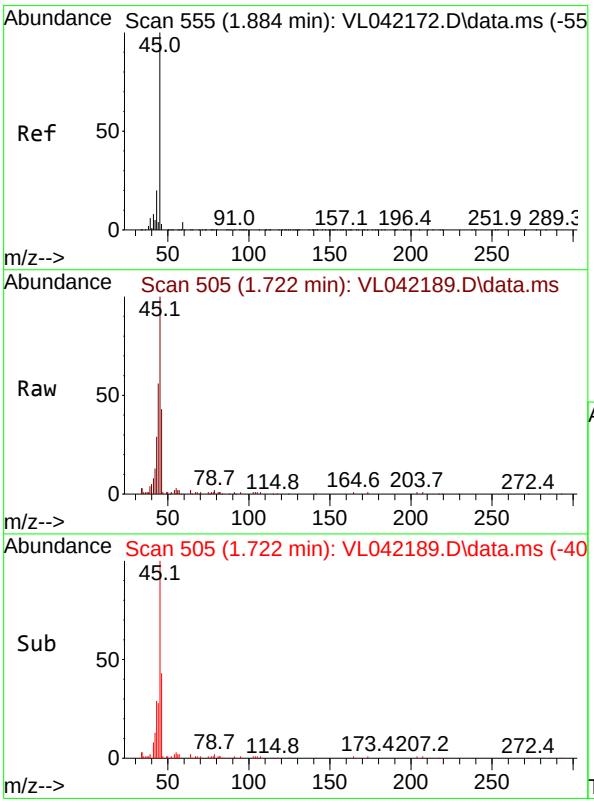
#16
1,3-Butadiene
Concen: 0.066 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 39 Resp: 831

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.7	91.1#

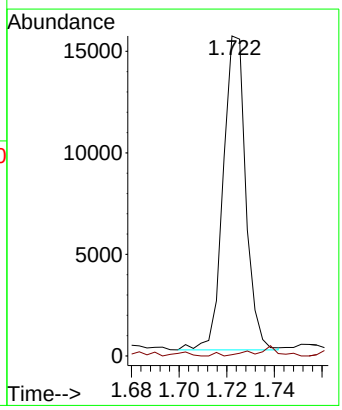


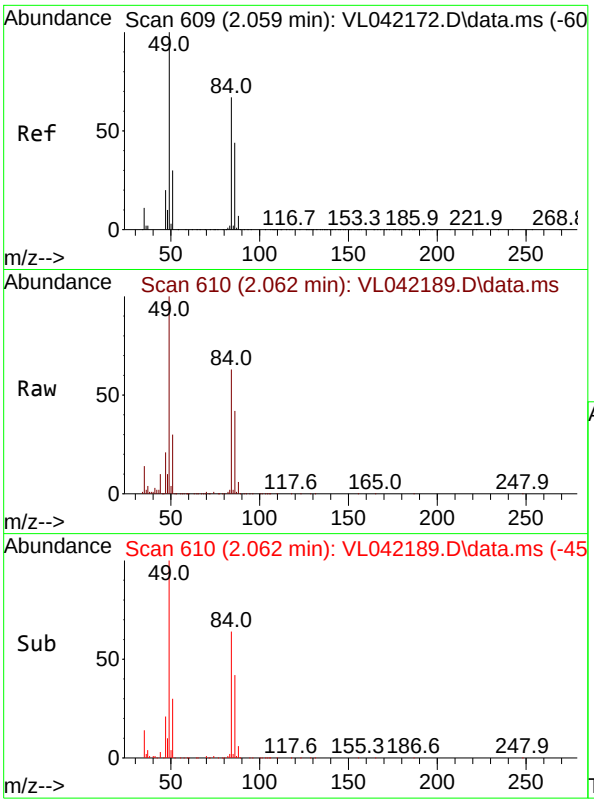


#19
Isopropyl Alcohol
Concen: 0.696 ppbv
RT: 1.722 min Scan# 505
Delta R.T. -0.162 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 45 Resp: 10166

Ion	Ratio	Lower	Upper
45	100		
58	17.5	36.9	55.3#



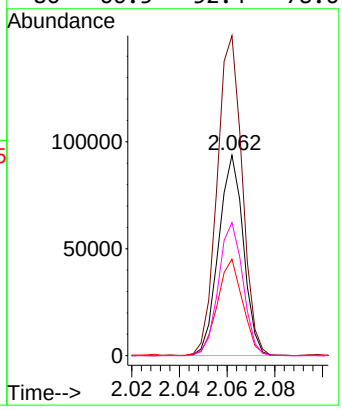


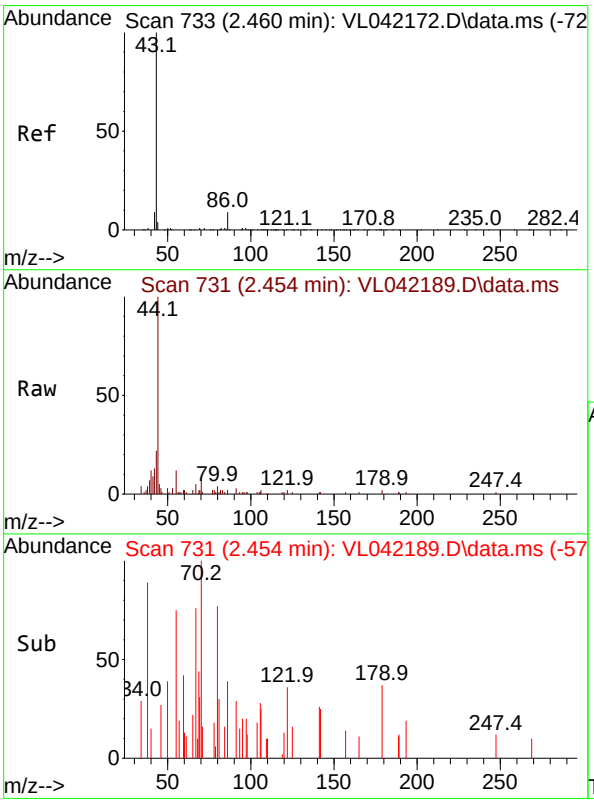
#20
Methylene Chloride
Concen: 7.018 ppbv
RT: 2.062 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 84 Resp: 67627

Ion	Ratio	Lower	Upper
84	100		
49	159.6	120.2	180.4
51	48.2	37.4	56.0
86	66.5	52.4	78.6

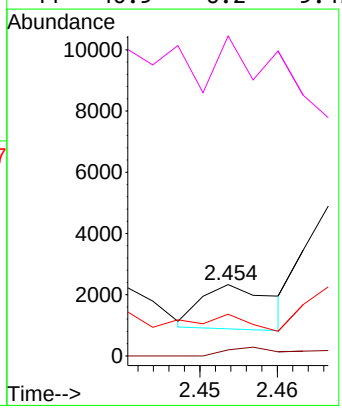


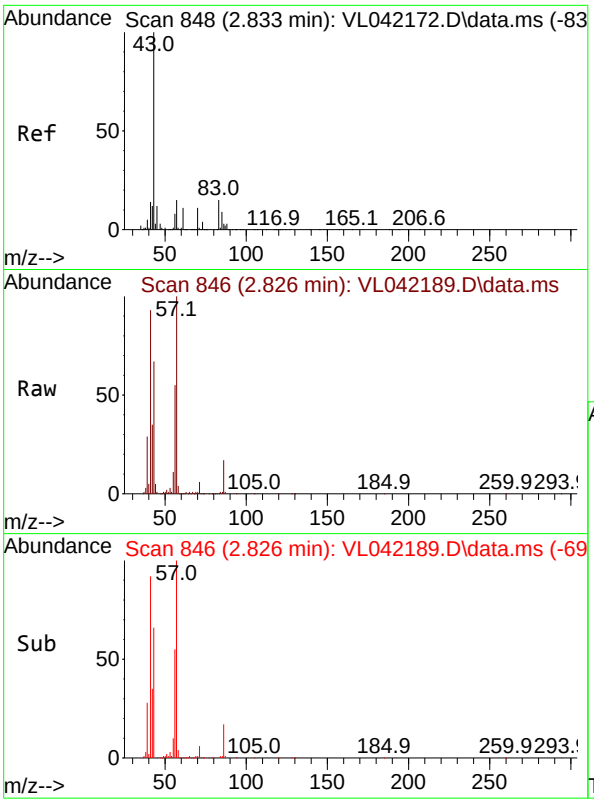


#23
Vinyl Acetate
Concen: 0.081 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.007 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 43 Resp: 906

Ion	Ratio	Lower	Upper
43	100		
86	16.6	5.5	8.3#
42	46.6	8.6	13.0#
44	40.9	6.2	9.4#



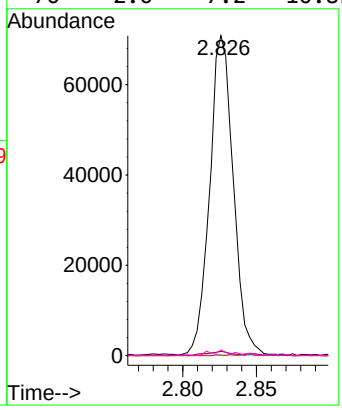


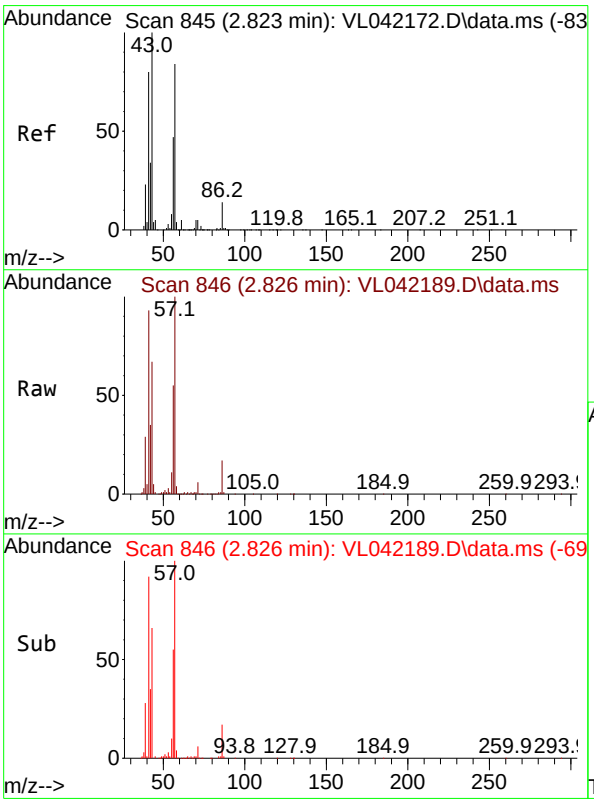
#25
Ethyl Acetate
Concen: 1.173 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.007 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 43 Resp: 78801

Ion	Ratio	Lower	Upper
43	100		
45	2.2	8.2	12.2#
61	0.6	7.3	10.9#
70	2.0	7.2	10.8#

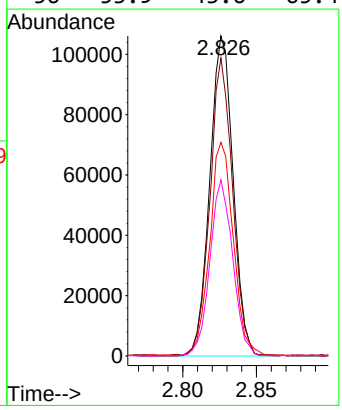


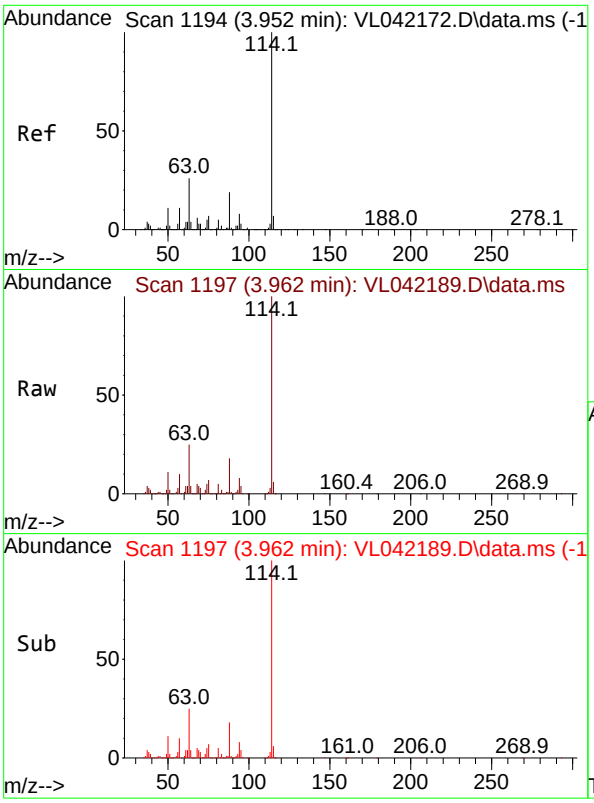


#26
Hexane
Concen: 4.506 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 57 Resp: 116880

Ion	Ratio	Lower	Upper
57	100		
41	90.1	76.6	114.8
43	68.0	207.8	311.8#
56	53.9	43.6	65.4



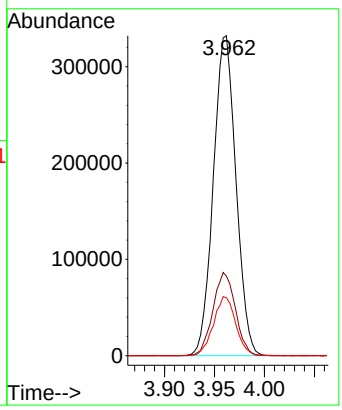


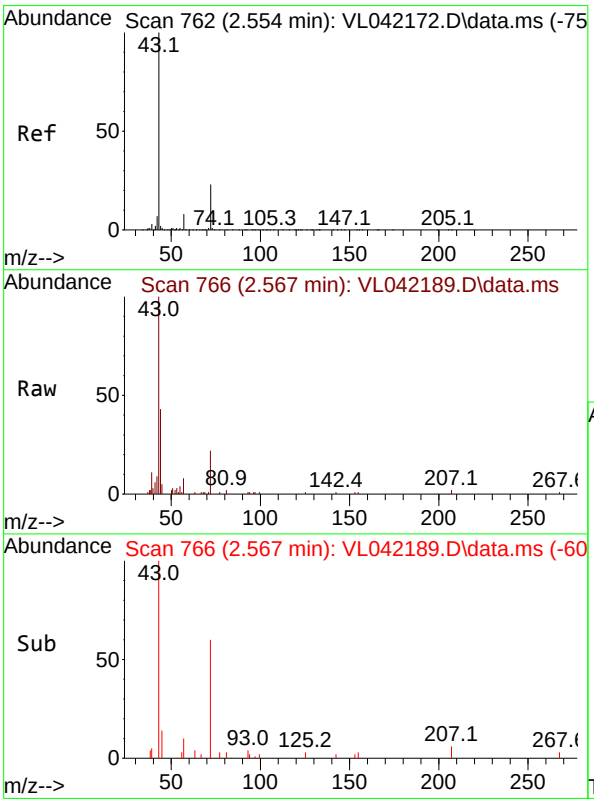
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:114 Resp: 523099

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.1	15.0	22.4

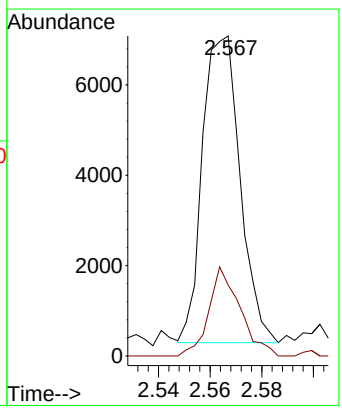


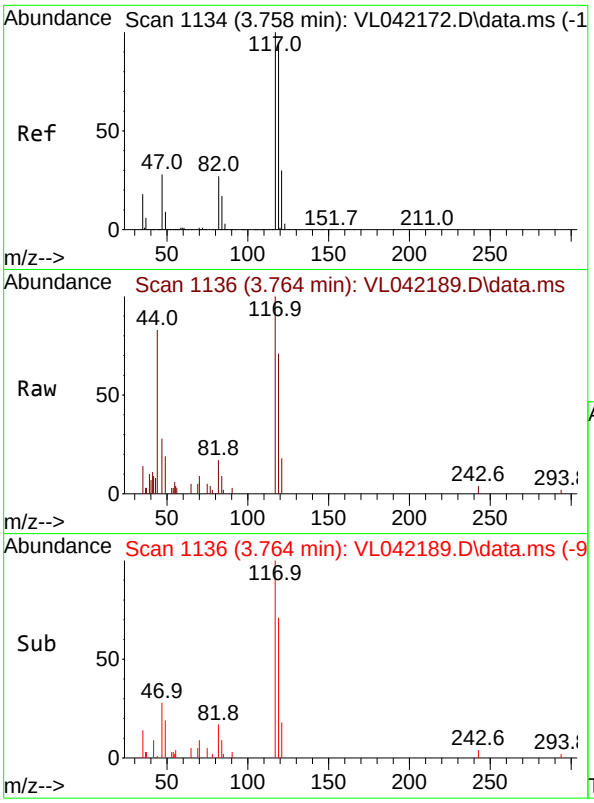


#34
2-Butanone
Concen: 0.181 ppbv
RT: 2.567 min Scan# 766
Delta R.T. 0.013 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 43 Resp: 6879

Ion	Ratio	Lower	Upper
43	100		
72	24.6	18.2	27.2



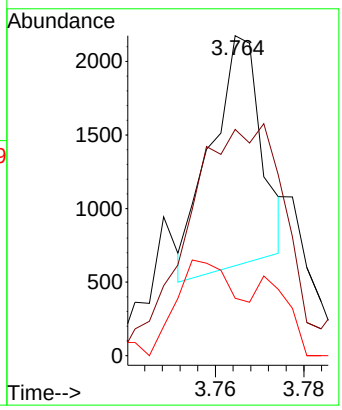


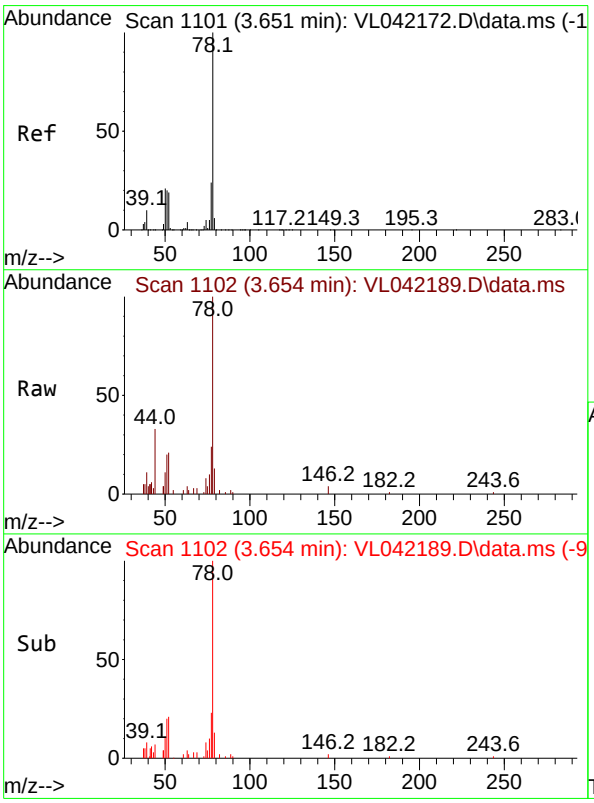
#35
Carbon Tetrachloride
Concen: 0.030 ppbv
RT: 3.764 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:117 Resp: 1236

Ion	Ratio	Lower	Upper
117	100		
119	62.3	76.2	114.2#
121	0.1	24.2	36.4#

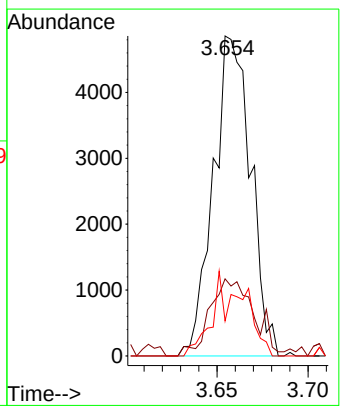


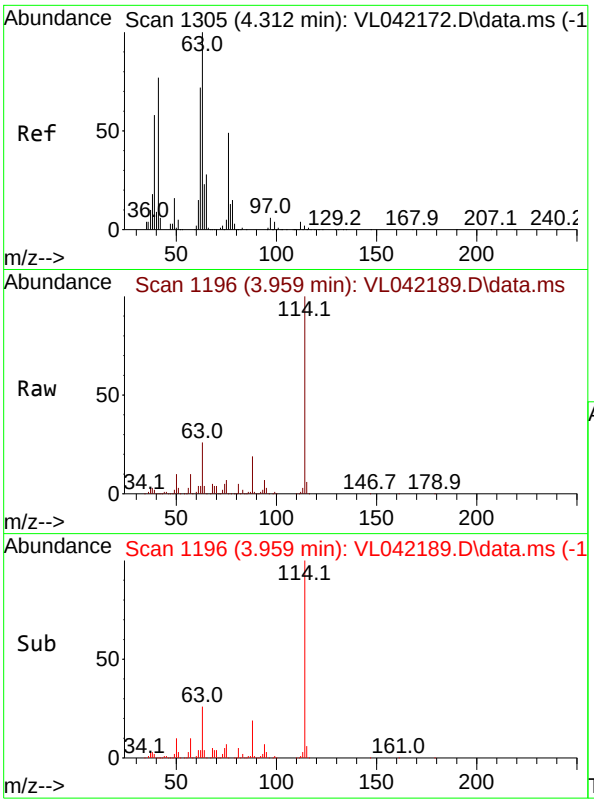


#36
Benzene
Concen: 0.134 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 78 Resp: 6925

Ion	Ratio	Lower	Upper
78	100		
77	24.1	19.1	28.7
50	10.9	16.6	24.8#



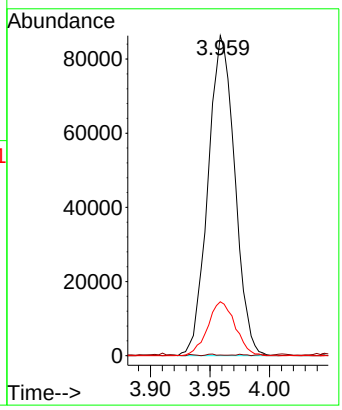


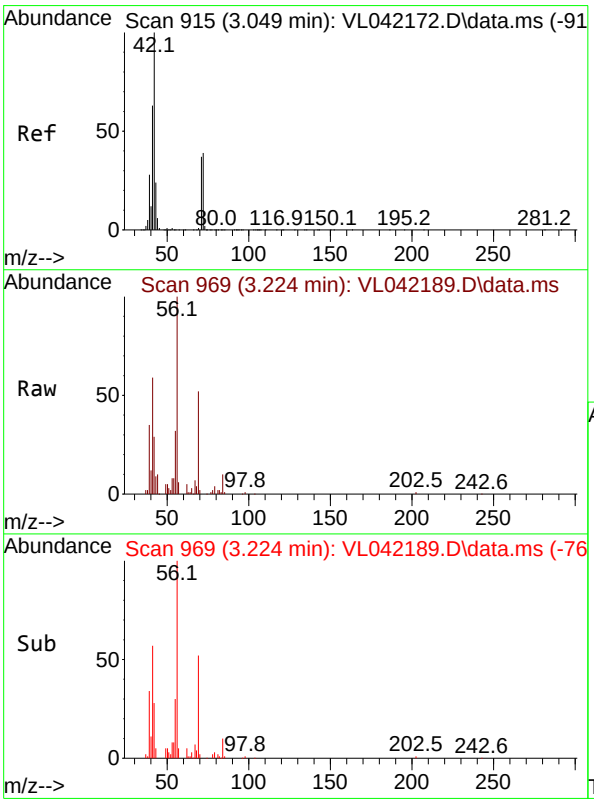
#39
1,2-Dichloropropane
Concen: 7.151 ppbv
RT: 3.959 min Scan# 11
Delta R.T. -0.353 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 63 Resp: 135050

Ion	Ratio	Lower	Upper
63	100		
41	0.1	61.7	92.5#
62	16.9	57.6	86.4#

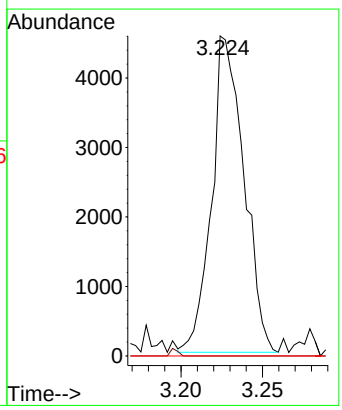


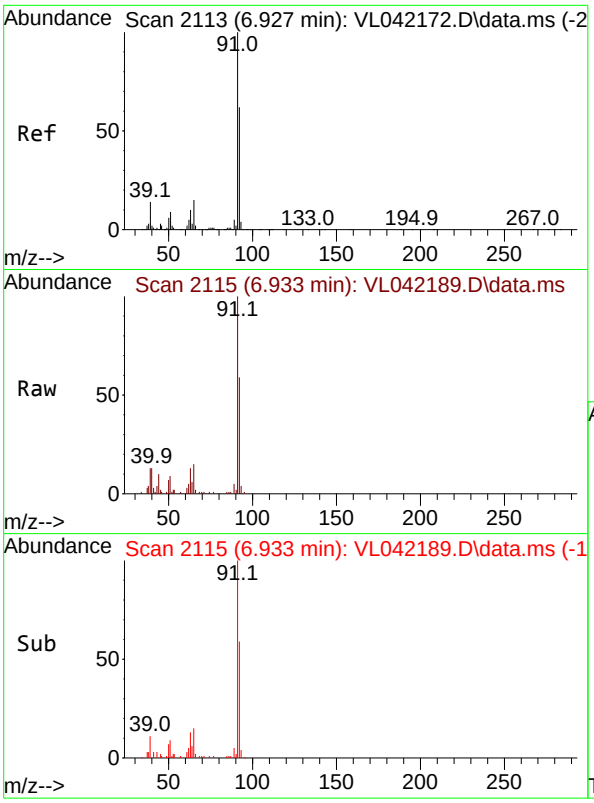


#41
Tetrahydrofuran
Concen: 0.287 ppbv
RT: 3.224 min Scan# 969
Delta R.T. 0.175 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 42 Resp: 6258

Ion	Ratio	Lower	Upper
42	100		
72	1.6	31.4	47.0#
71	0.0	30.2	45.4#



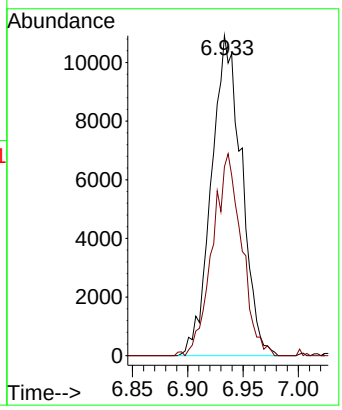


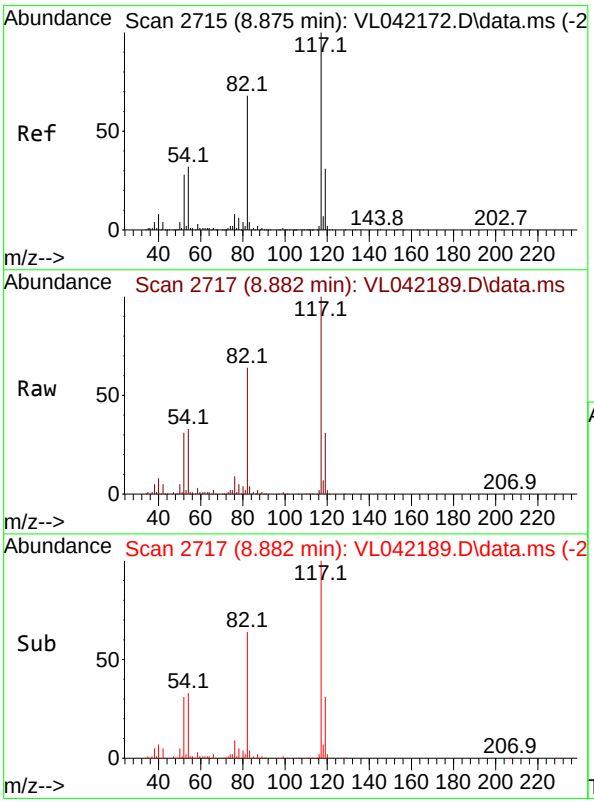
#53
Toluene
Concen: 0.337 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 91 Resp: 20704

Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.4	72.6

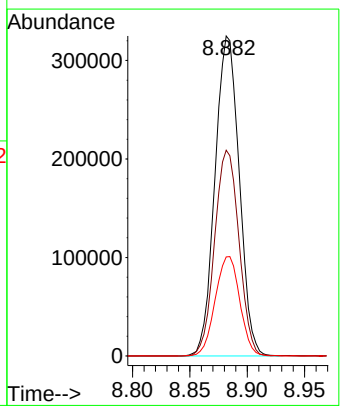


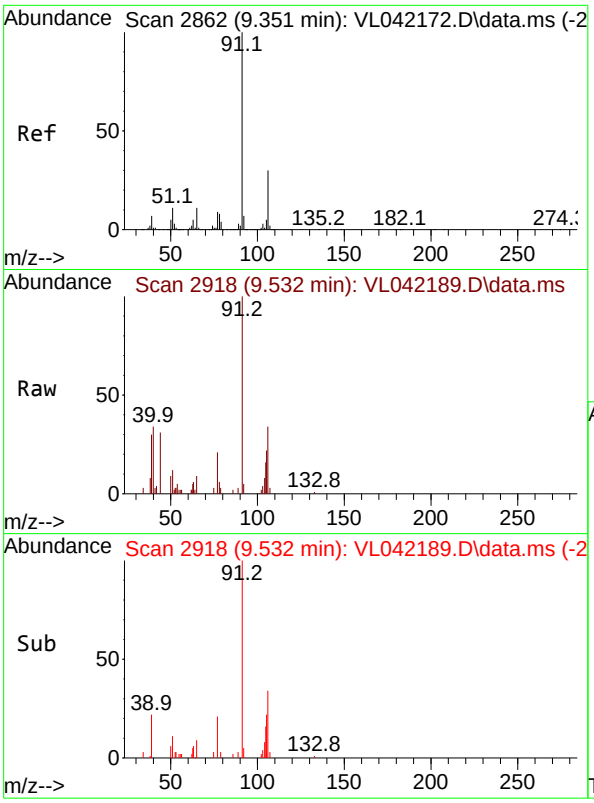


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:117 Resp: 477151

Ion	Ratio	Lower	Upper
117	100		
82	64.6	55.8	83.6
119	31.6	25.5	38.3



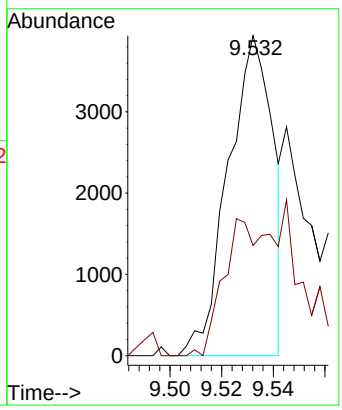


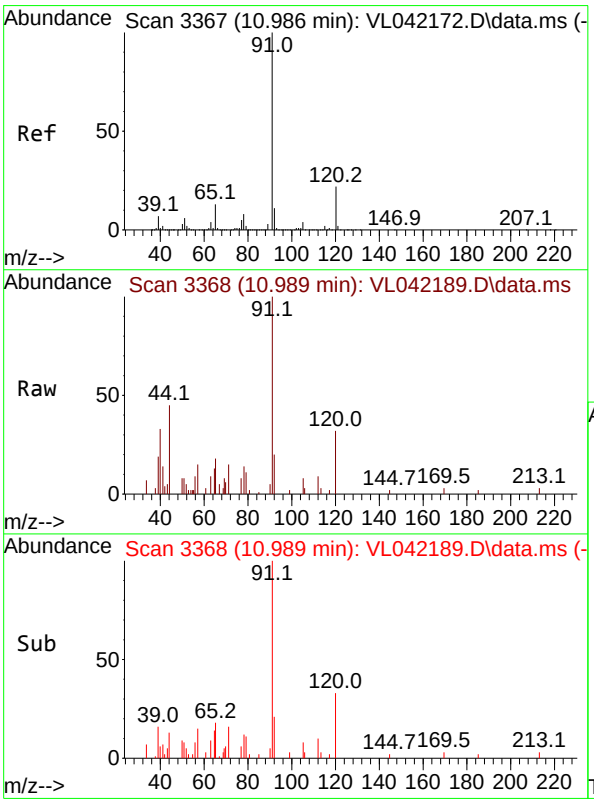
#58
Ethyl Benzene
Concen: 0.056 ppbv
RT: 9.532 min Scan# 2
Delta R.T. 0.181 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion: 91 Resp: 4747

Ion	Ratio	Lower	Upper
91	100		
106	34.4	24.2	36.2

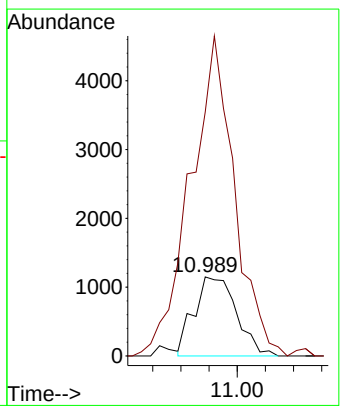


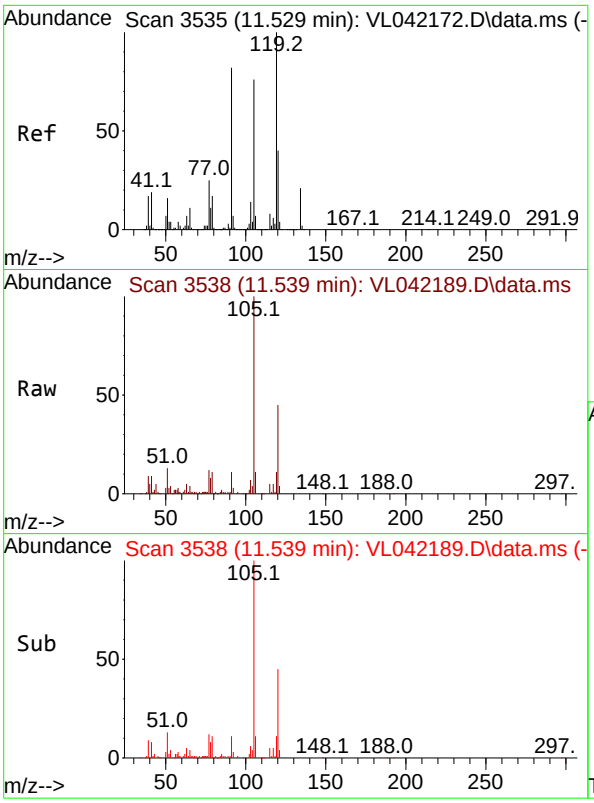


#64
n-propylbenzene
Concen: 0.046 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:120 Resp: 1201

Ion	Ratio	Lower	Upper
120	100		
91	427.6	376.9	565.3



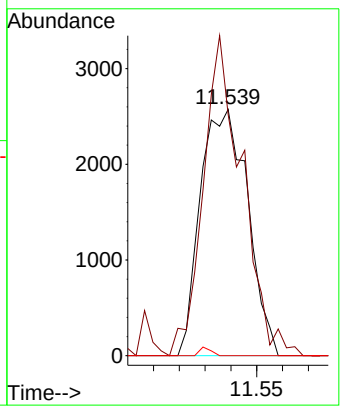


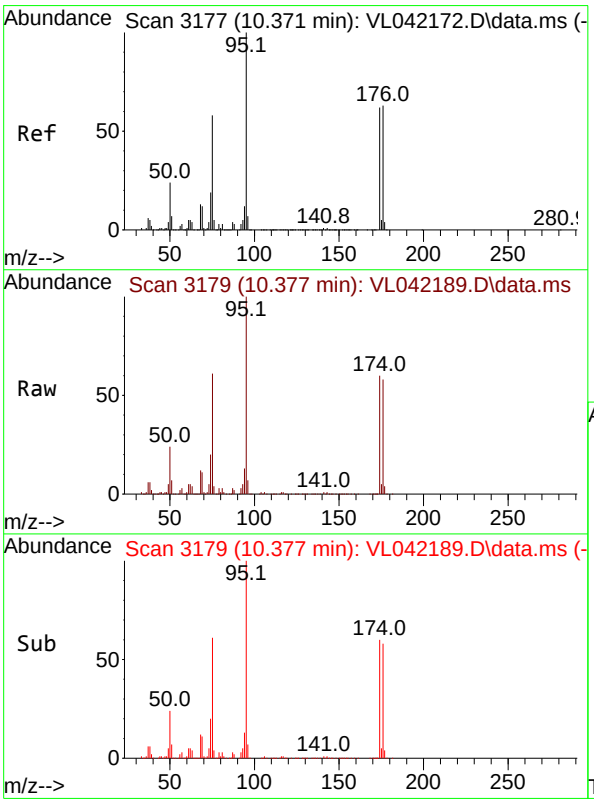
#65
tert-Butylbenzene
Concen: 0.035 ppbv
RT: 11.539 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:119 Resp: 3276

Ion	Ratio	Lower	Upper
119	100		
91	113.4	66.0	99.0#
134	0.8	16.7	25.1#

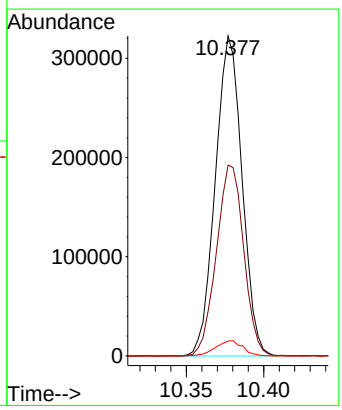


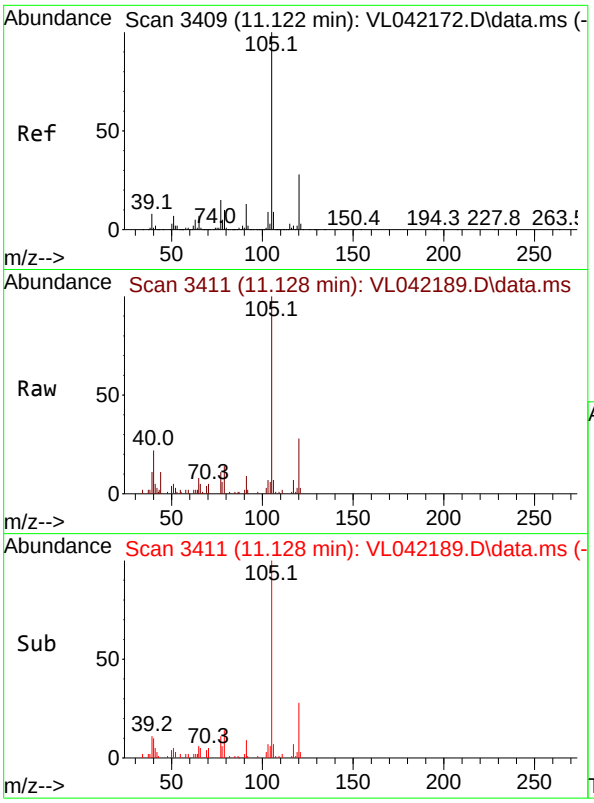


#68
1-Bromo-4-Fluorobenzene
Concen: 9.884 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion: 95 Resp: 387301

Ion	Ratio	Lower	Upper
95	100		
174	61.0	50.6	76.0
175	4.9	3.8	5.6



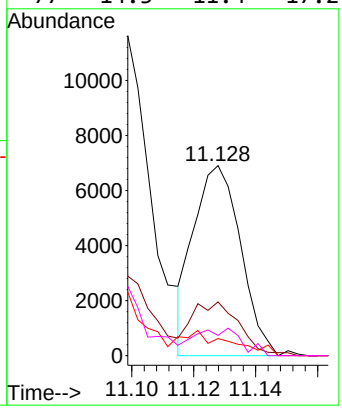


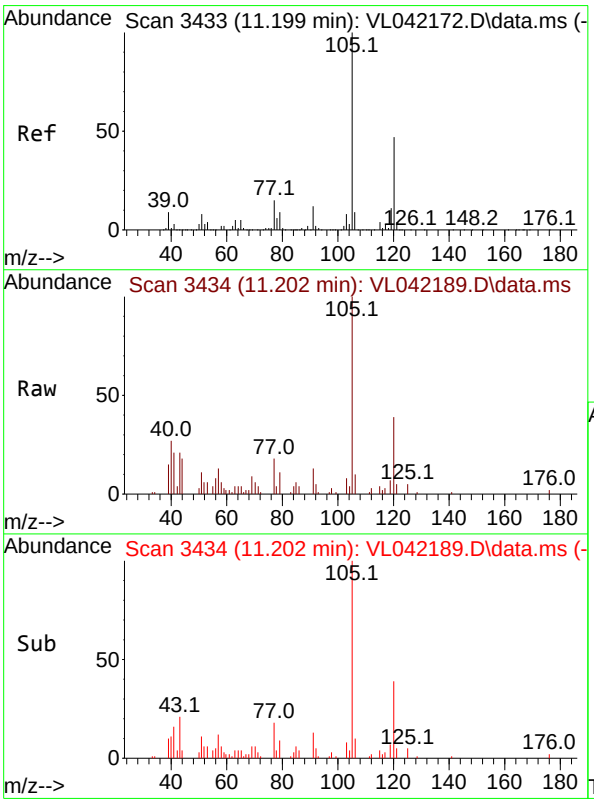
#72
4-Ethyltoluene
Concen: 0.086 ppbv
RT: 11.128 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:105 Resp: 7264

Ion	Ratio	Lower	Upper
105	100		
120	28.7	23.4	35.0
91	0.0	10.3	15.5#
77	14.3	11.4	17.2

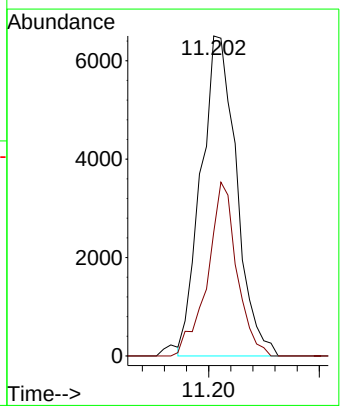


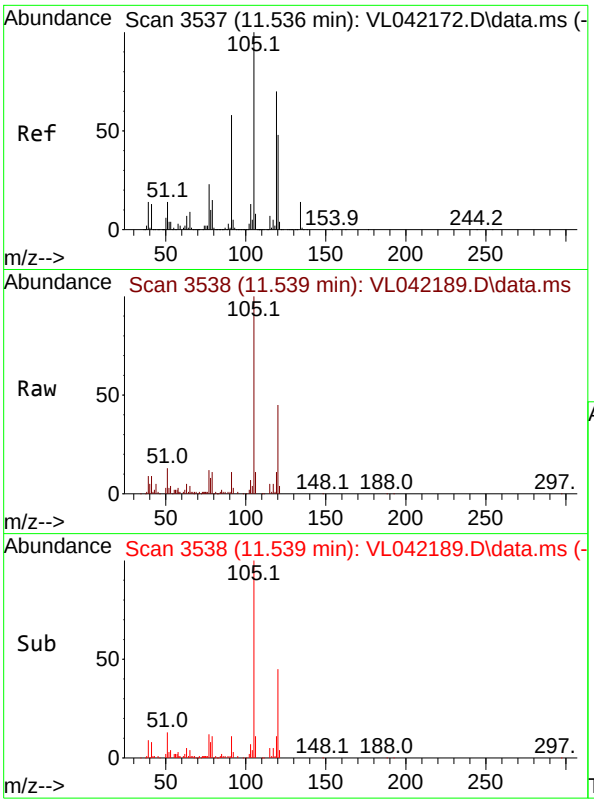


#73
1,3,5-Trimethylbenzene
Concen: 0.098 ppbv
RT: 11.202 min Scan# 3434
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:105 Resp: 7241

Ion	Ratio	Lower	Upper
105	100		
120	38.6	37.4	56.0



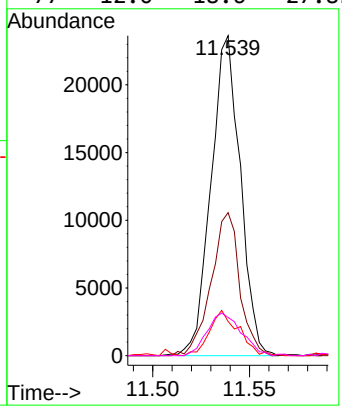


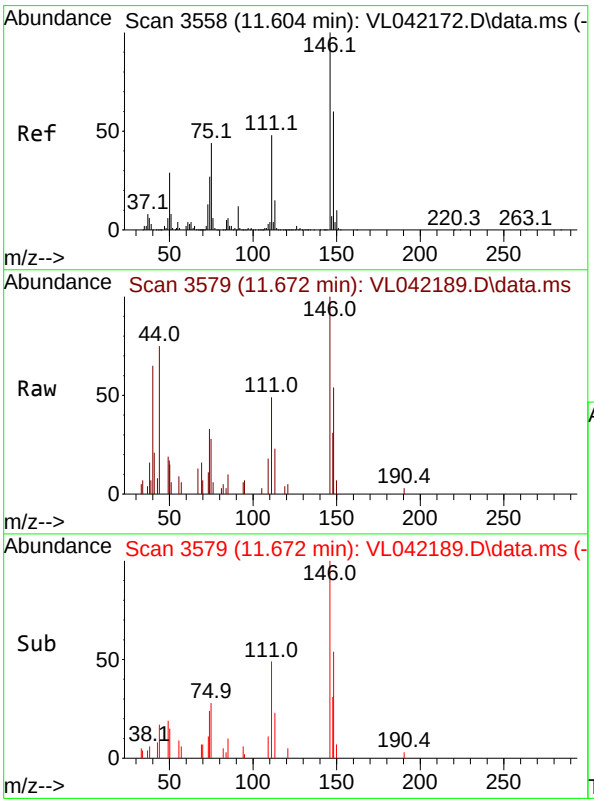
#74
1,2,4-Trimethylbenzene
Concen: 0.291 ppbv
RT: 11.539 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:105 Resp: 24773

Ion	Ratio	Lower	Upper
105	100		
120	44.7	38.6	58.0
91	10.5	46.2	69.2#
77	12.0	18.6	27.8#

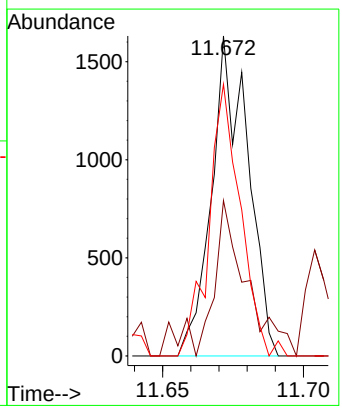


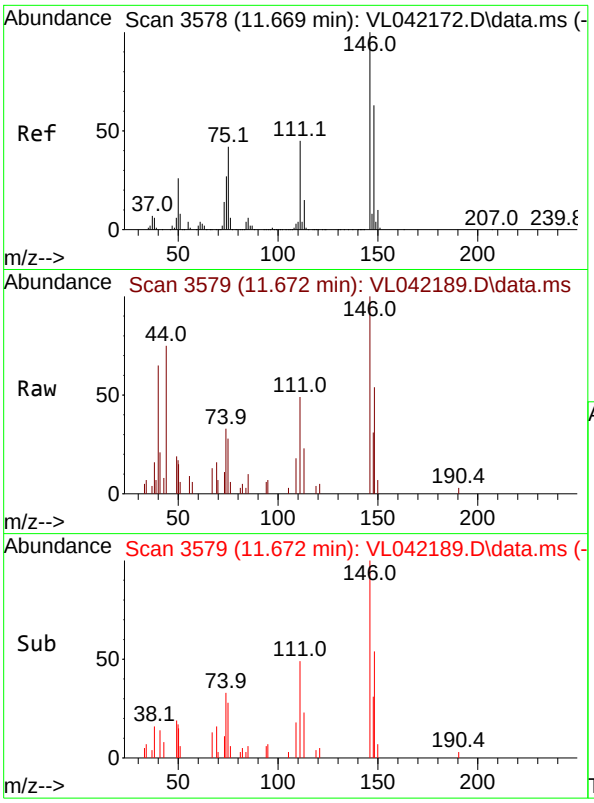


#75
1,3-Dichlorobenzene
Concen: 0.031 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.068 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:146 Resp: 1457

Ion	Ratio	Lower	Upper
146	100		
111	47.4	23.8	71.2
148	74.1	31.9	95.9



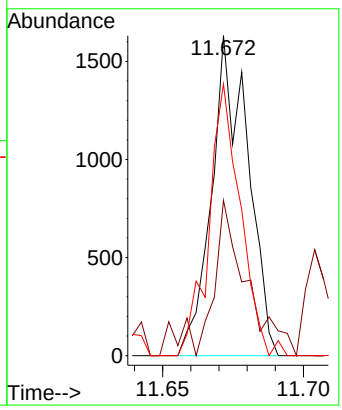


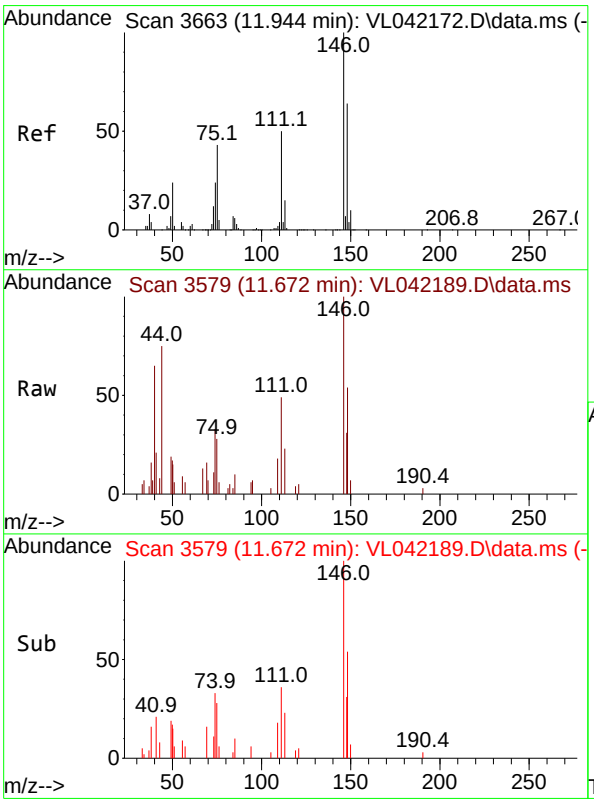
#76
1,4-Dichlorobenzene
Concen: 0.031 ppbv
RT: 11.672 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:146 Resp: 1457

Ion	Ratio	Lower	Upper
146	100		
111	80.4	23.0	69.0#
148	76.9	31.9	95.7

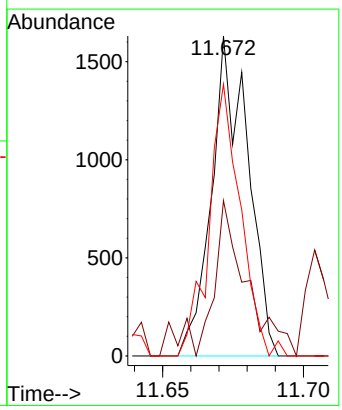


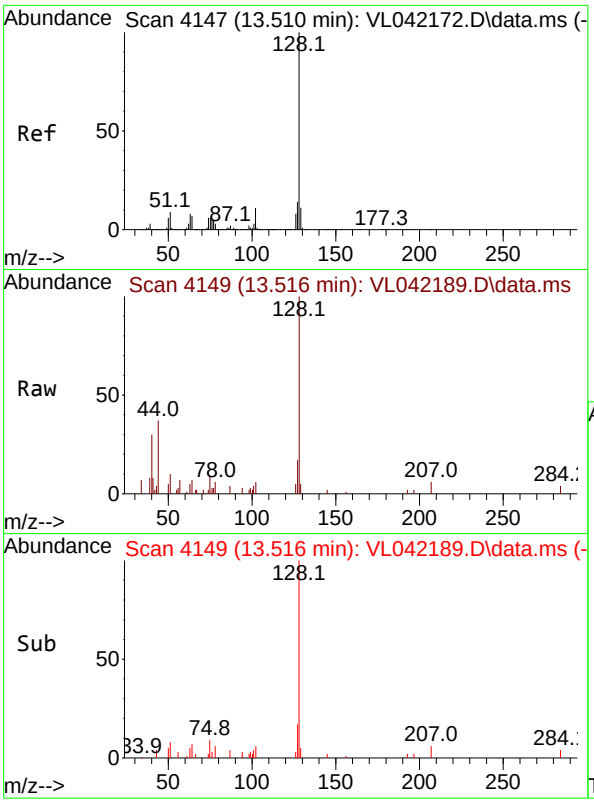


#77
1,2-Dichlorobenzene
Concen: 0.032 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. -0.272 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Tgt Ion:146 Resp: 1457

Ion	Ratio	Lower	Upper
146	100		
111	47.4	24.8	74.3
148	74.1	31.6	94.8



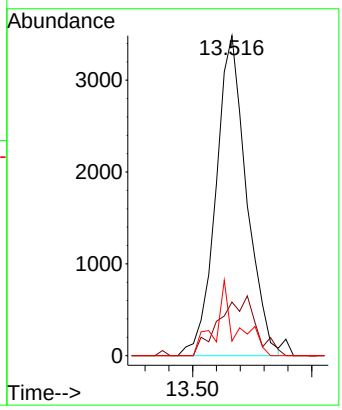


#79
Naphthalene
Concen: 0.034 ppbv
RT: 13.516 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042189.D
Acq: 27 Mar 2025 20:48

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025

Tgt Ion:128 Resp: 3117

Ion	Ratio	Lower	Upper
128	100		
127	16.7	10.8	16.2#
129	4.6	9.0	13.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042190.D
Acq On : 27 Mar 2025 21:24
Operator : SY/MD
Sample : Q1669-09DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Quant Time: Mar 28 02:17:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

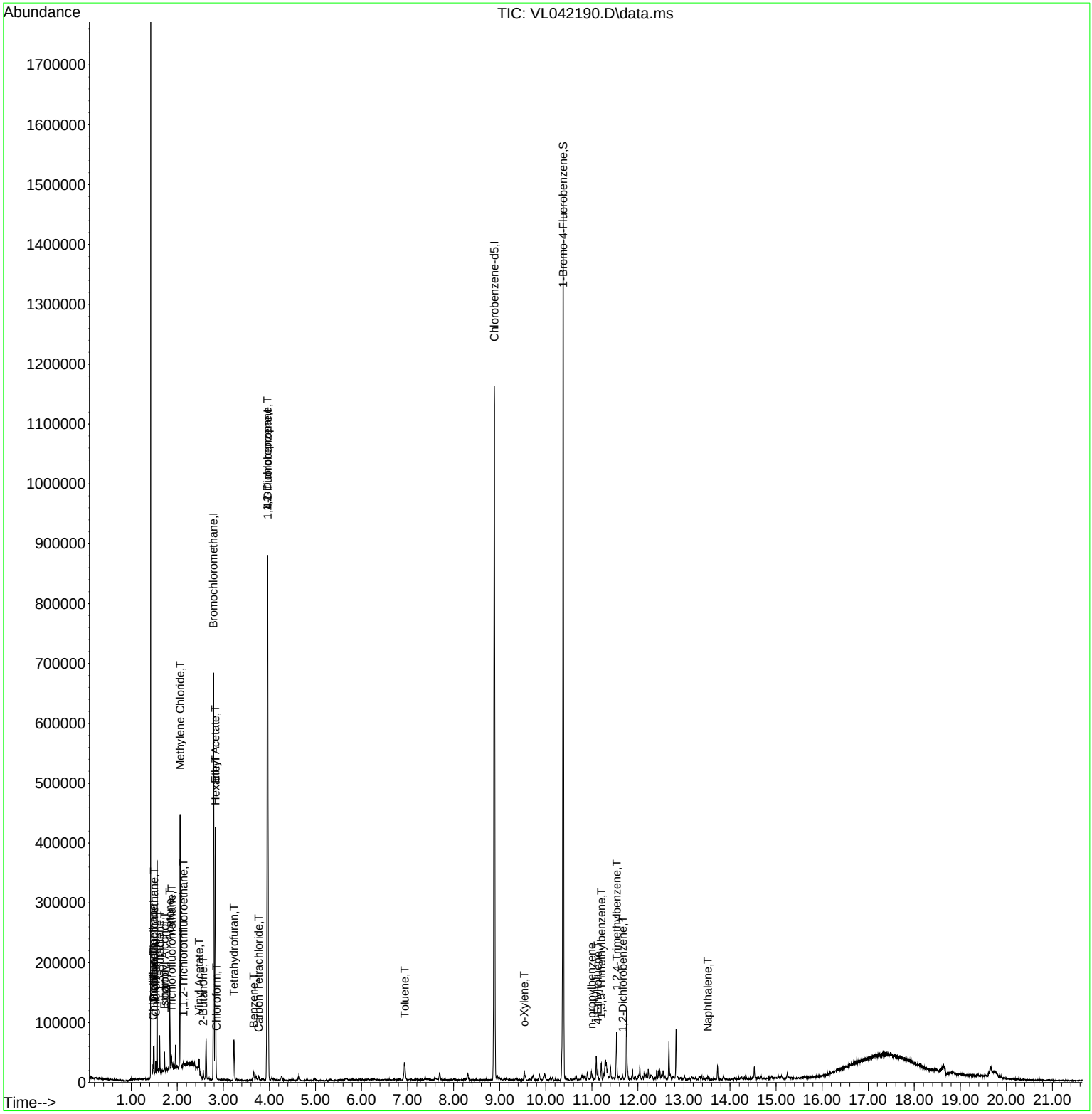
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	184637	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	532429	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	472897	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	386908	9.963	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11705	0.429	ppbv		100
3) Chlorodifluoromethane	1.476	51	12361	0.444	ppbv	#	91
4) Chloromethane	1.531	50	5052	0.453	ppbv	#	85
9) Propene	1.486	41	3425	0.268	ppbv		91
11) Trichlorofluoromethane	1.878	101	5282	0.199	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.137	101	1250	0.057	ppbv		93
13) Ethanol	1.722	45	10556	8.748	ppbv	#	27
15) Acetone	1.836	43	60628	2.348	ppbv		94
16) 1,3-Butadiene	1.619	39	3018	0.239	ppbv	#	11
19) Isopropyl Alcohol	1.722	45	10556	0.725	ppbv	#	61
20) Methylene Chloride	2.062	84	61810	6.427	ppbv		97
23) Vinyl Acetate	2.476	43	8578	0.768	ppbv	#	56
25) Ethyl Acetate	2.826	43	69220	1.033	ppbv	#	78
26) Hexane	2.829	57	99961	3.861	ppbv	#	32
29) Chloroform	2.852	83	1916	0.051	ppbv		90
34) 2-Butanone	2.564	43	8734	0.226	ppbv		98
35) Carbon Tetrachloride	3.765	117	1397	0.034	ppbv	#	65
36) Benzene	3.658	78	5053	0.096	ppbv		96
39) 1,2-Dichloropropane	3.959	63	134884	7.017	ppbv	#	23
41) Tetrahydrofuran	3.231	42	5776	0.260	ppbv	#	38
53) Toluene	6.940	91	19535	0.312	ppbv		94
60) o-Xylene	9.532	91	7376	0.110	ppbv		78
64) n-propylbenzene	10.992	120	1074	0.041	ppbv	#	55
72) 4-Ethyltoluene	11.131	105	7187	0.086	ppbv	#	61
73) 1,3,5-Trimethylbenzene	11.206	105	7022	0.096	ppbv		91
74) 1,2,4-Trimethylbenzene	11.539	105	24527	0.291	ppbv	#	65
77) 1,2-Dichlorobenzene	11.675	146	1366	0.030	ppbv		87
79) Naphthalene	13.517	128	3226	0.035	ppbv	#	83

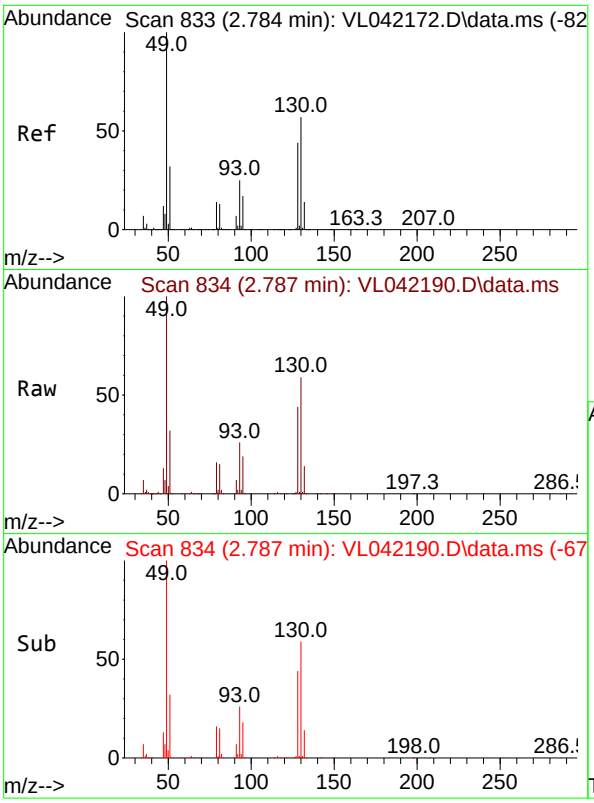
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042190.D
Acq On : 27 Mar 2025 21:24
Operator : SY/MD
Sample : Q1669-09DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Quant Time: Mar 28 02:17:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



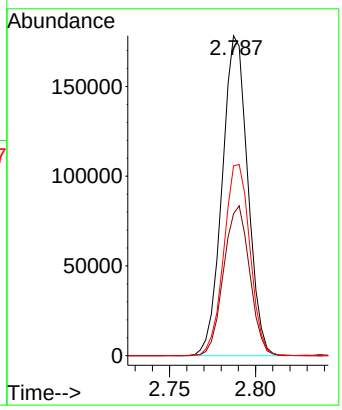


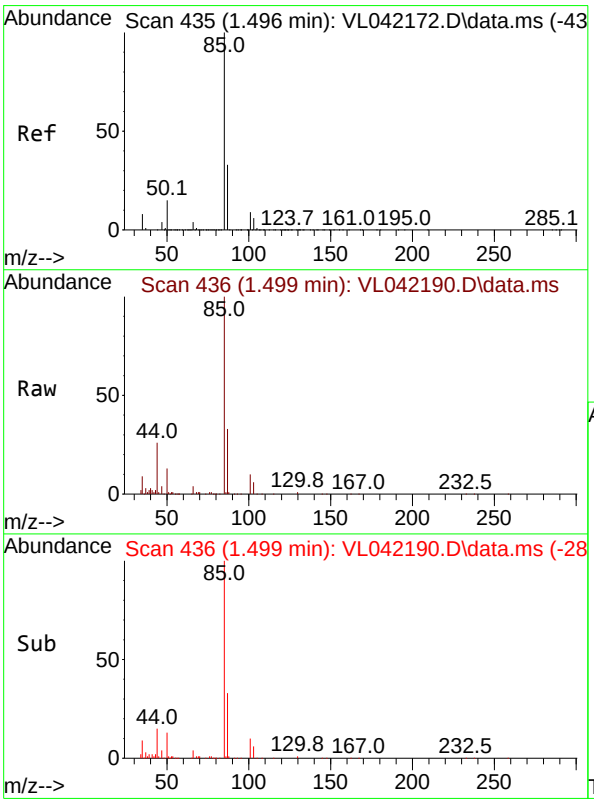
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 49 Resp: 184637

Ion	Ratio	Lower	Upper
49	100		
128	47.5	22.9	68.5
130	61.0	28.8	86.4

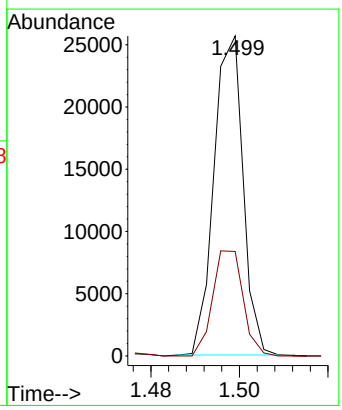


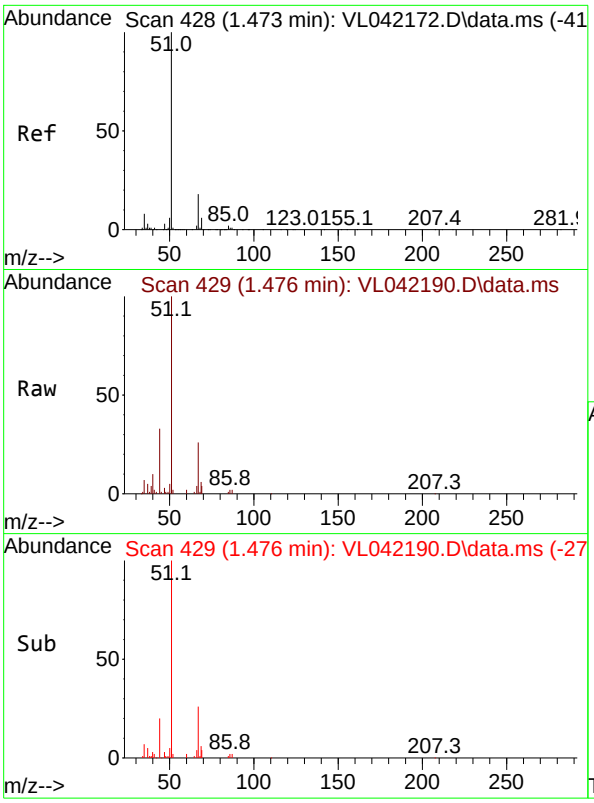


#2
Dichlorodifluoromethane
Concen: 0.429 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 85 Resp: 11705

Ion	Ratio	Lower	Upper
85	100		
87	32.8	26.1	39.1



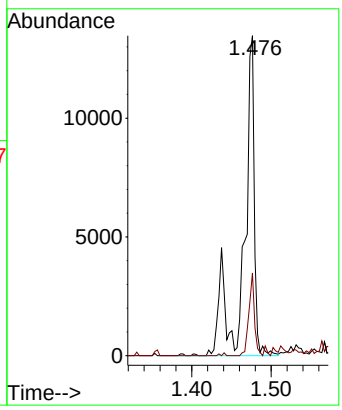


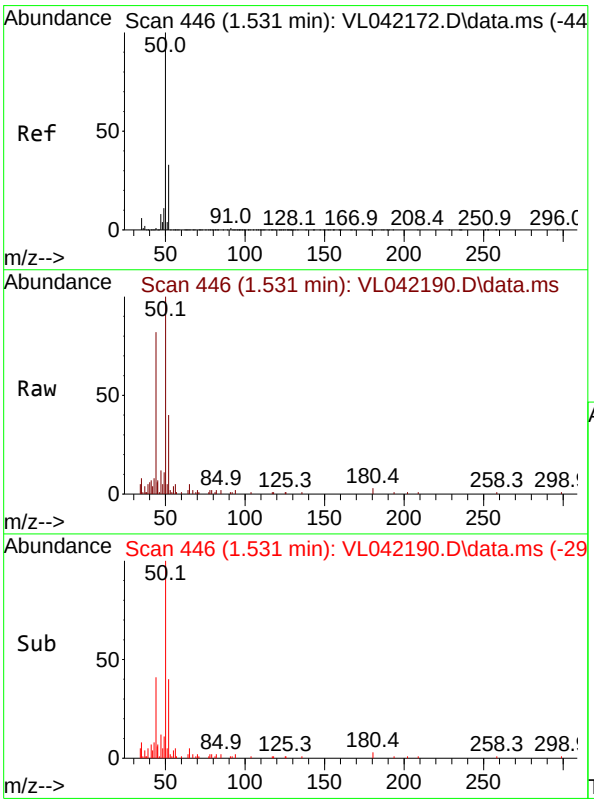
#3
Chlorodifluoromethane
Concen: 0.444 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 51 Resp: 12361

Ion	Ratio	Lower	Upper
51	100		
67	14.9	15.0	22.6#

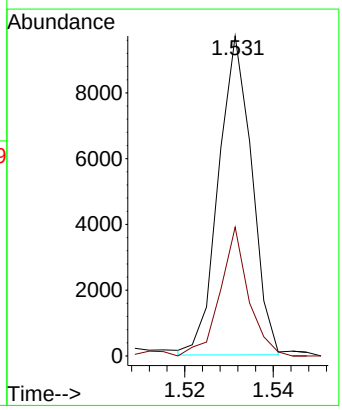


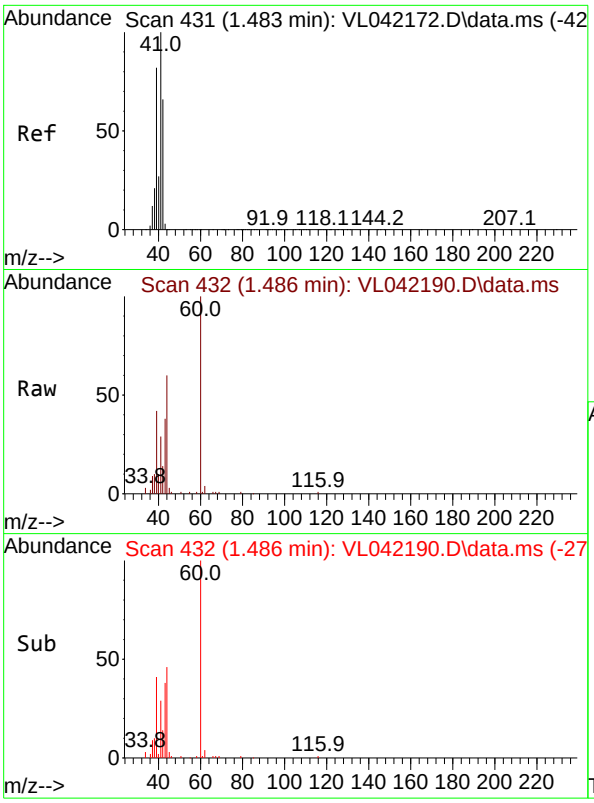


#4
Chloromethane
Concen: 0.453 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 50 Resp: 5052

Ion	Ratio	Lower	Upper
50	100		
52	40.8	26.1	39.1#



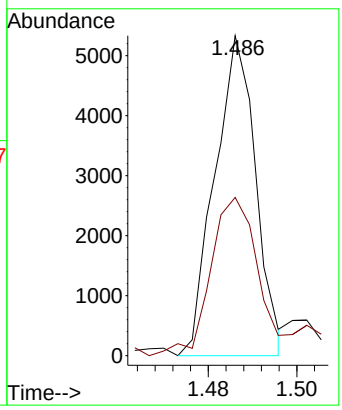


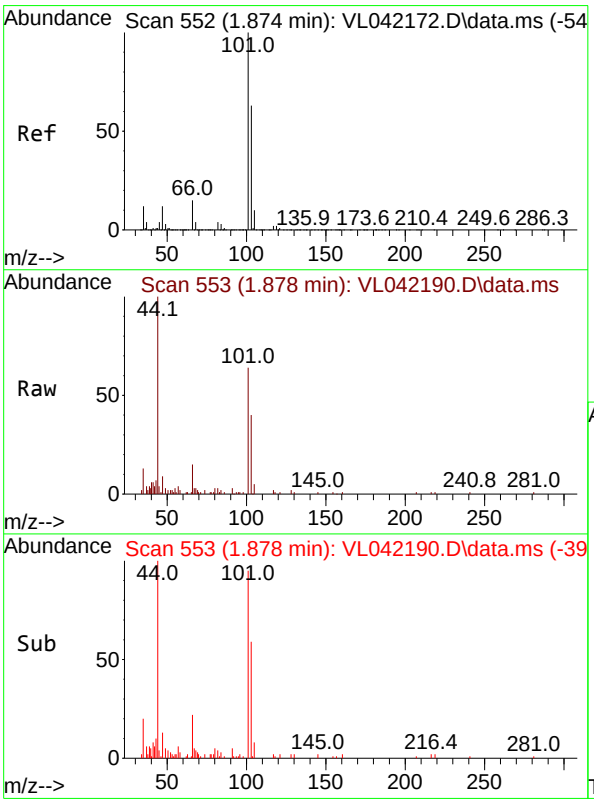
#9
Propene
Concen: 0.268 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 41 Resp: 3425

Ion	Ratio	Lower	Upper
41	100		
42	76.6	55.4	83.2

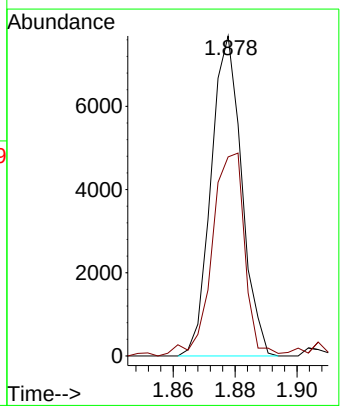


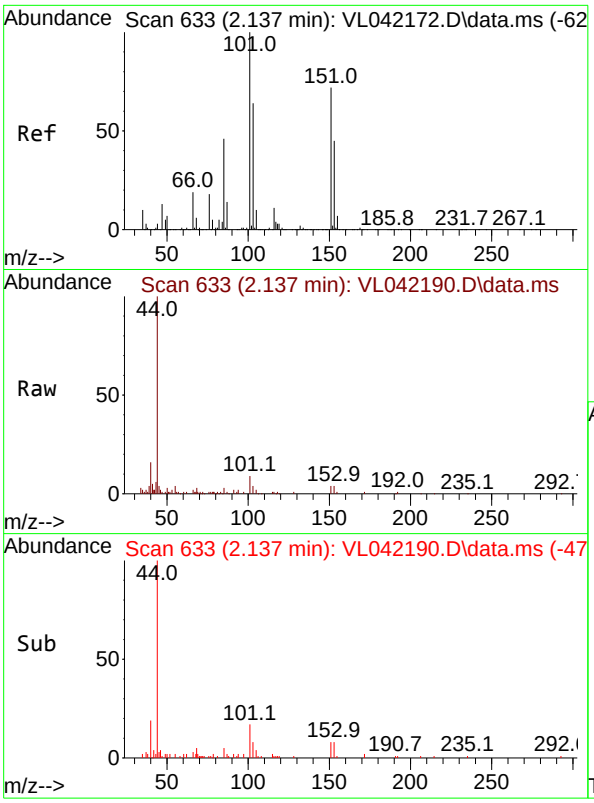


#11
Trichlorofluoromethane
Concen: 0.199 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:101 Resp: 5282

Ion	Ratio	Lower	Upper
101	100		
103	62.1	50.2	75.2



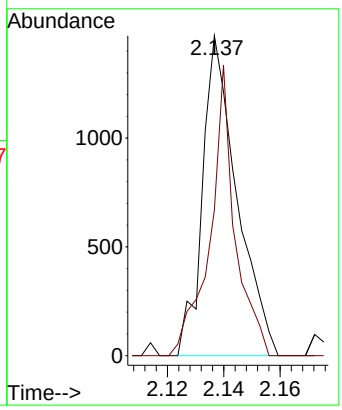


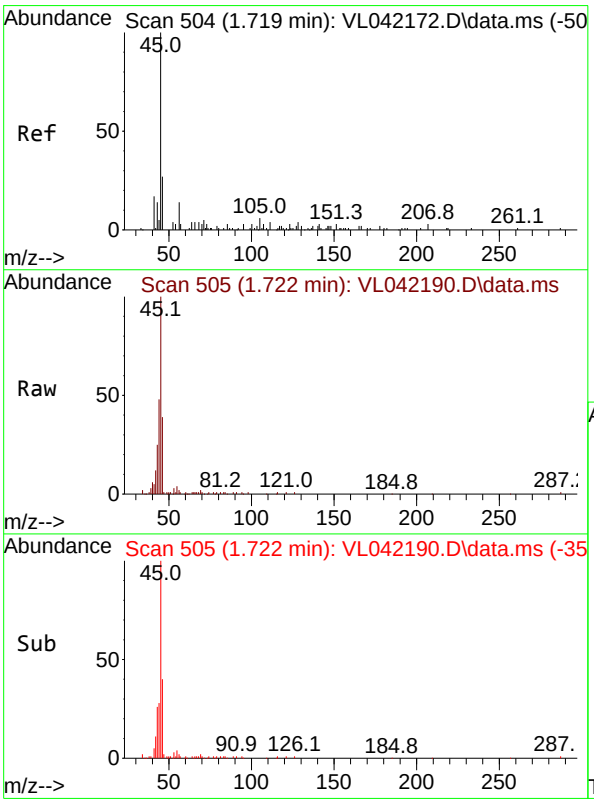
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.057 ppbv
RT: 2.137 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion:101 Resp: 1250

Ion	Ratio	Lower	Upper
101	100		
151	65.2	57.1	85.7

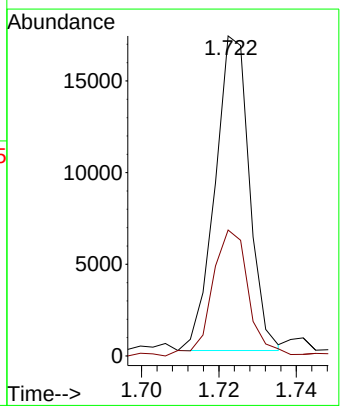


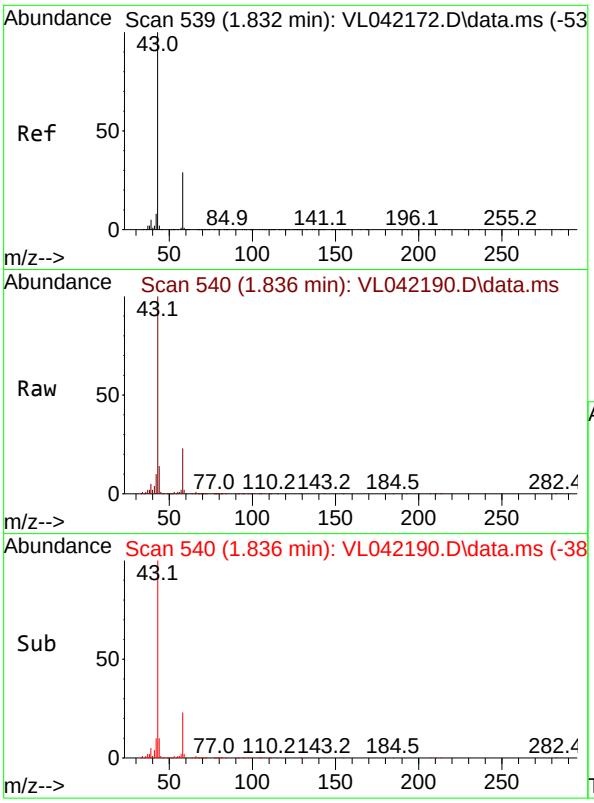


#13
Ethanol
Concen: 8.748 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 45 Resp: 10556

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#



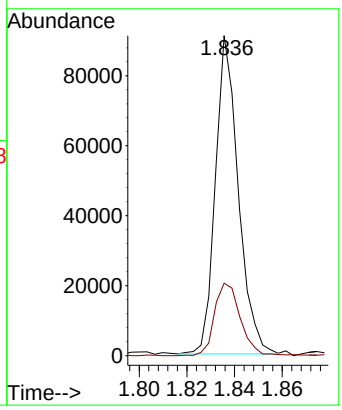


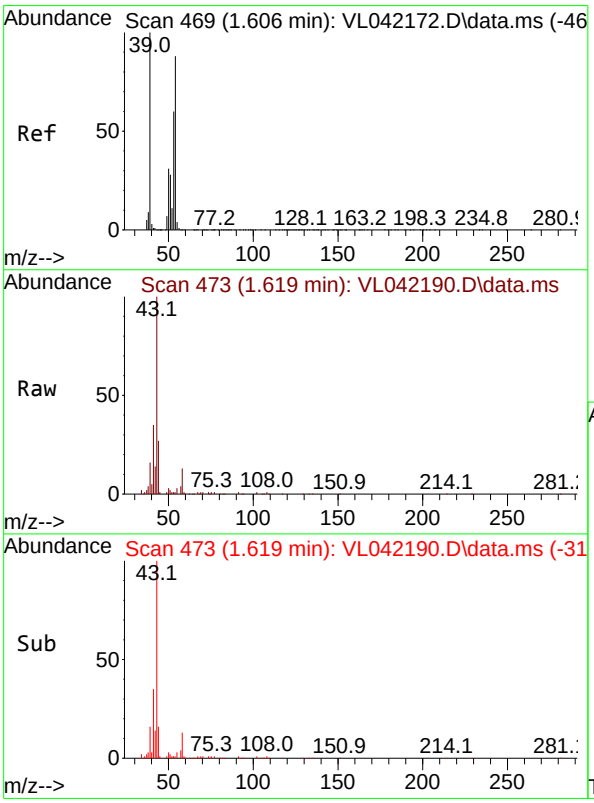
#15
Acetone
Concen: 2.348 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 43 Resp: 60628

Ion	Ratio	Lower	Upper
43	100		
58	25.8	23.2	34.8

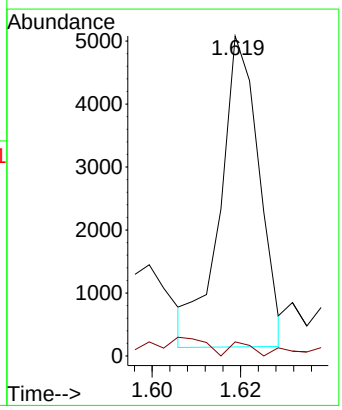


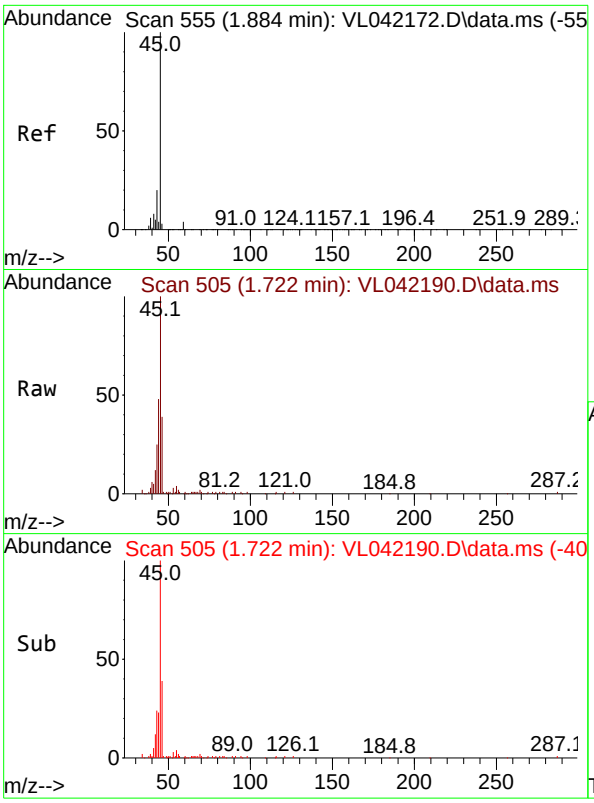


#16
1,3-Butadiene
Concen: 0.239 ppbv
RT: 1.619 min Scan# 473
Delta R.T. 0.013 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 39 Resp: 3018

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.7	91.1#



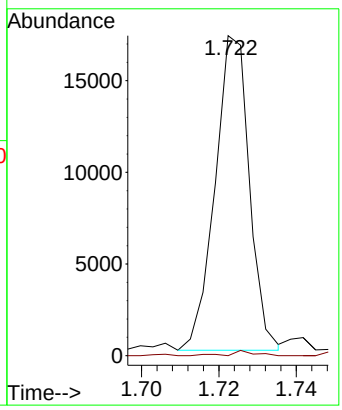


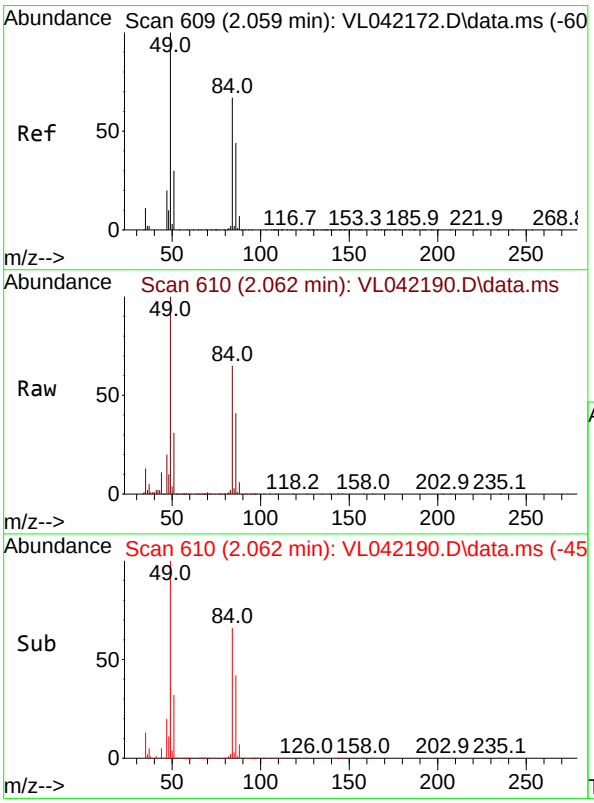
#19
Isopropyl Alcohol
Concen: 0.725 ppbv
RT: 1.722 min Scan# 5
Delta R.T. -0.162 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 45 Resp: 10556

Ion	Ratio	Lower	Upper
45	100		
58	20.6	36.9	55.3#

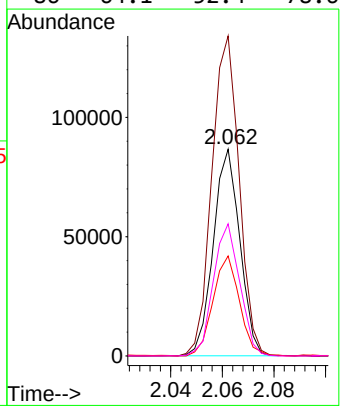


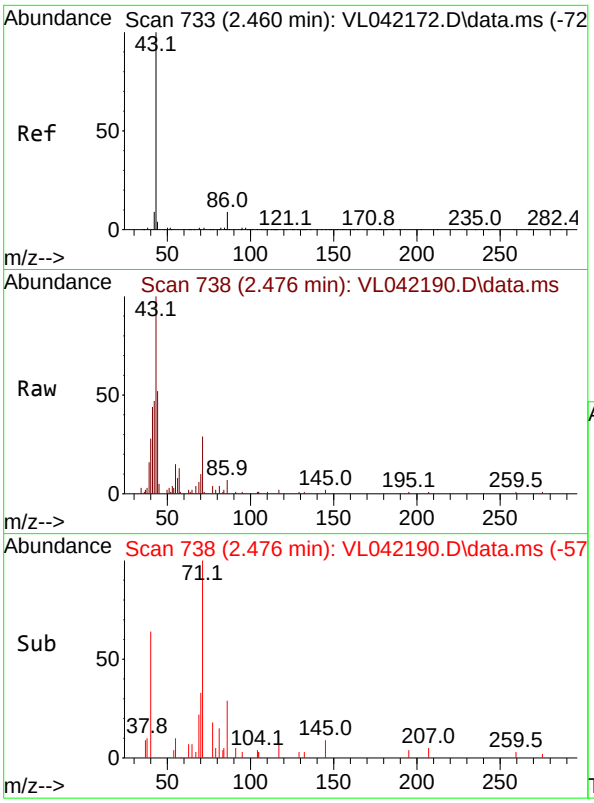


#20
Methylene Chloride
Concen: 6.427 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 84 Resp: 61810

Ion	Ratio	Lower	Upper
84	100		
49	155.0	120.2	180.4
51	48.5	37.4	56.0
86	64.1	52.4	78.6



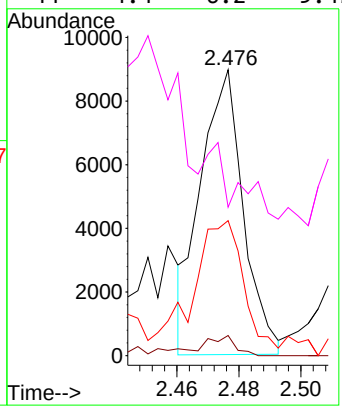


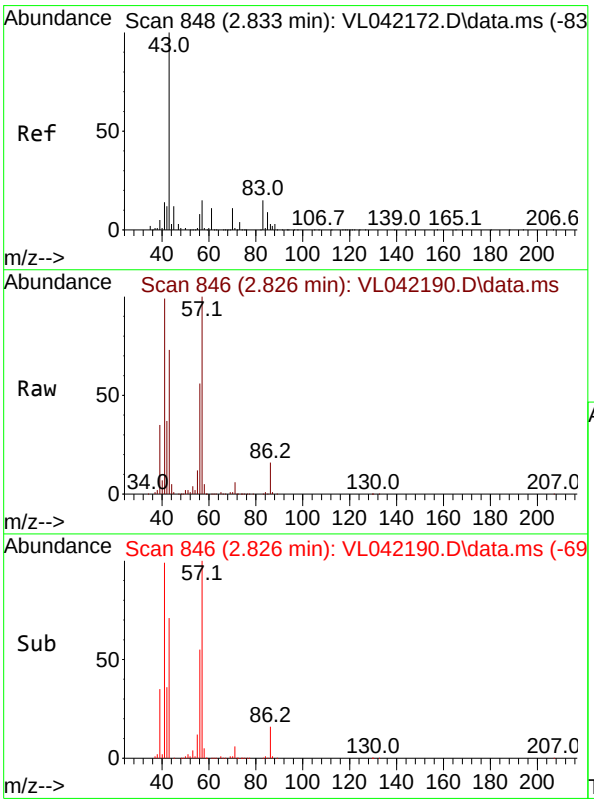
#23
Vinyl Acetate
Concen: 0.768 ppbv
RT: 2.476 min Scan# 7
Delta R.T. 0.016 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 43 Resp: 8578

Ion	Ratio	Lower	Upper
43	100		
86	7.5	5.5	8.3
42	47.2	8.6	13.0#
44	4.4	6.2	9.4#

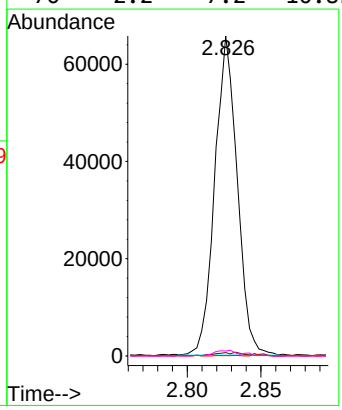


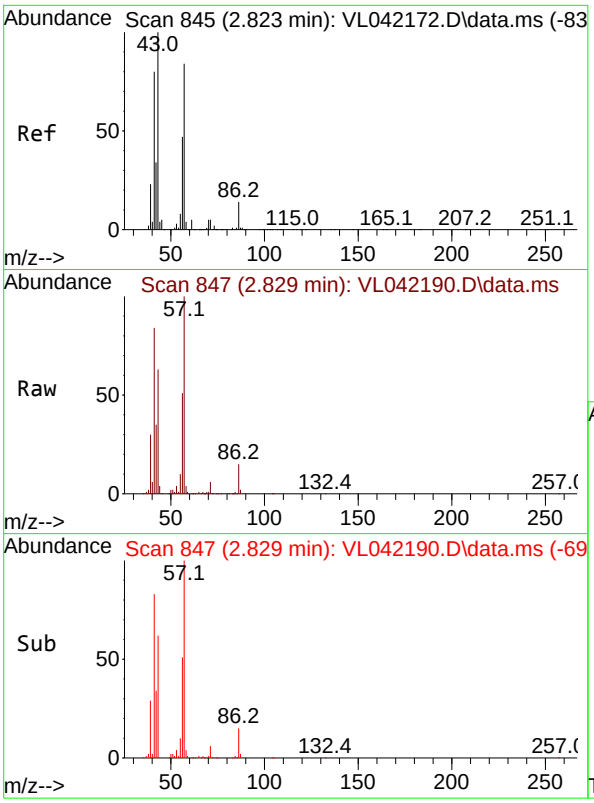


#25
Ethyl Acetate
Concen: 1.033 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 43 Resp: 69220

Ion	Ratio	Lower	Upper
43	100		
45	1.9	8.2	12.2#
61	0.4	7.3	10.9#
70	2.2	7.2	10.8#



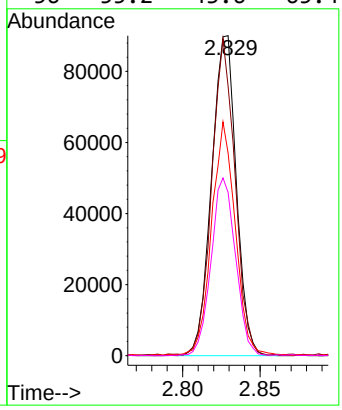


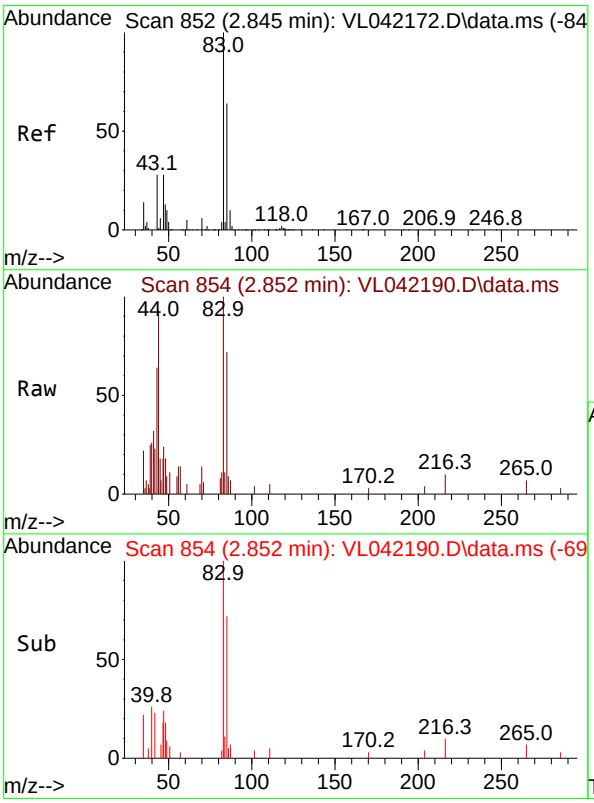
#26
Hexane
Concen: 3.861 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 57 Resp: 99961

Ion	Ratio	Lower	Upper
57	100		
41	93.0	76.6	114.8
43	71.0	207.8	311.8#
56	55.2	43.6	65.4

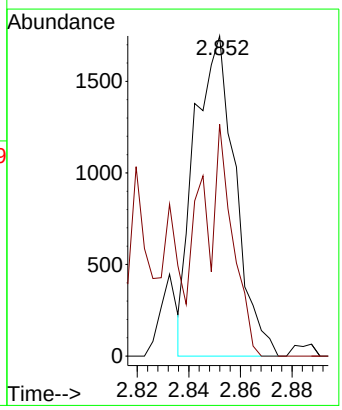


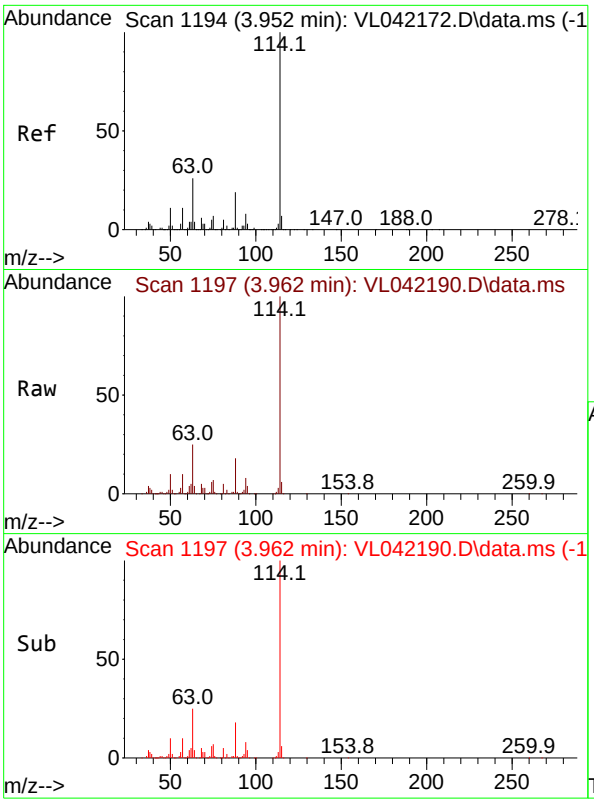


#29
Chloroform
Concen: 0.051 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 83 Resp: 1916

Ion	Ratio	Lower	Upper
83	100		
85	72.4	51.4	77.2



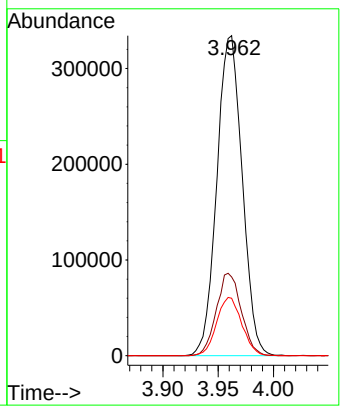


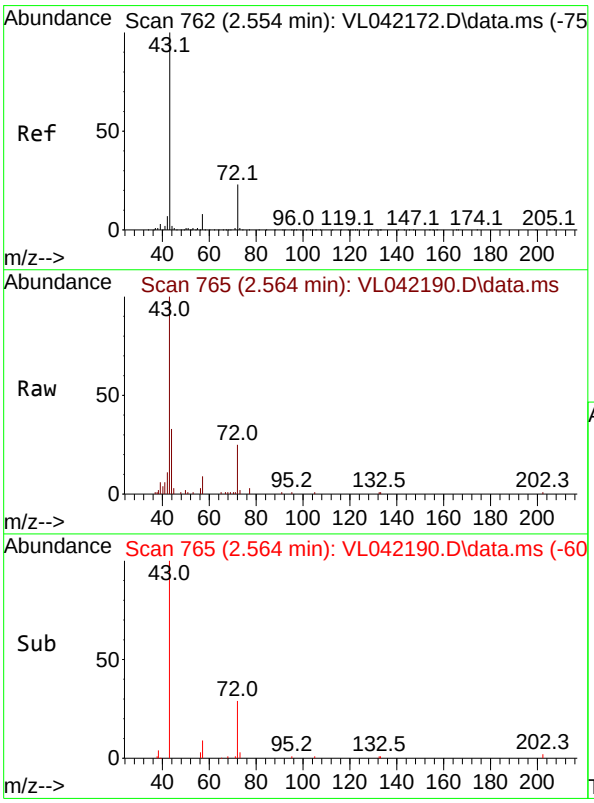
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion:114 Resp: 532429

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	18.1	15.0	22.4

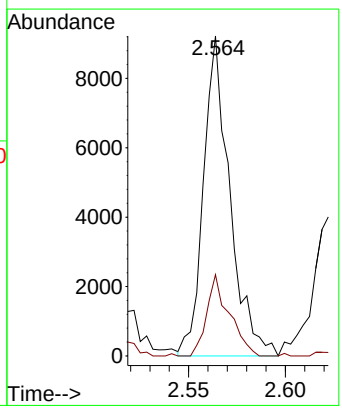


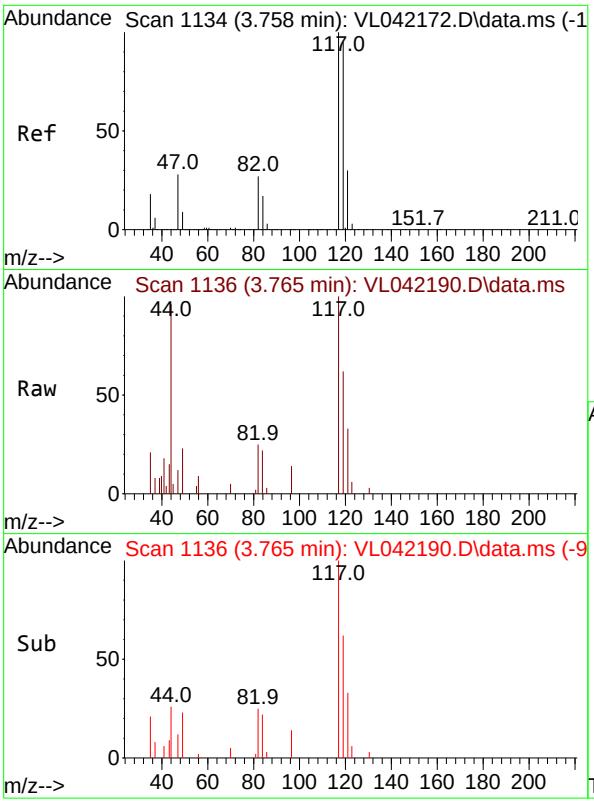


#34
2-Butanone
Concen: 0.226 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 43 Resp: 8734

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2



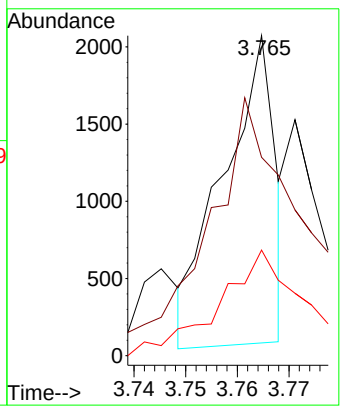


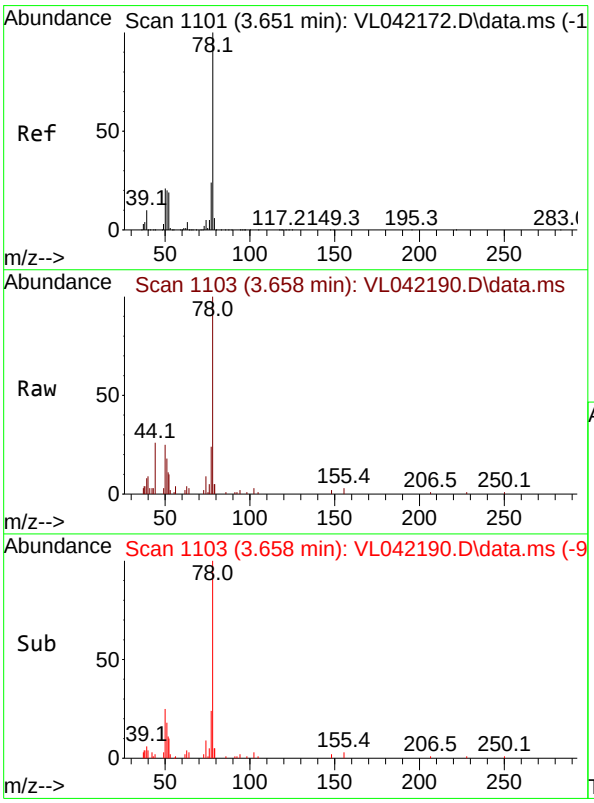
#35
Carbon Tetrachloride
Concen: 0.034 ppbv
RT: 3.765 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion:117 Resp: 1397

Ion	Ratio	Lower	Upper
117	100		
119	51.0	76.2	114.2#
121	31.2	24.2	36.4

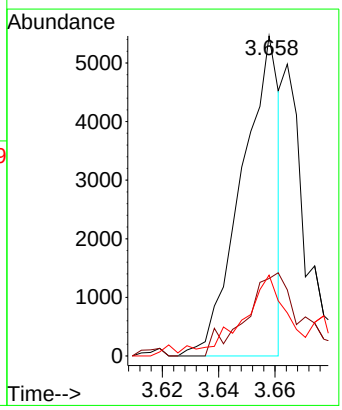


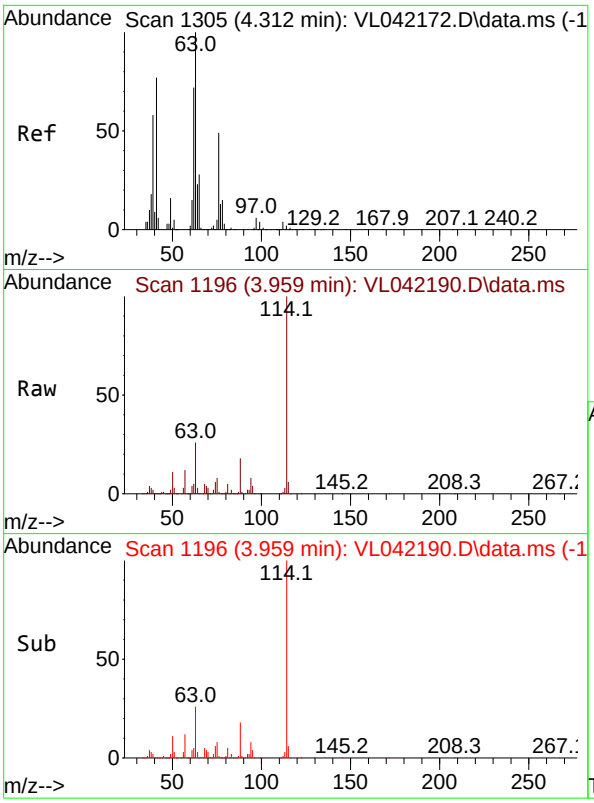


#36
Benzene
Concen: 0.096 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 78 Resp: 5053

Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.1	28.7
50	24.3	16.6	24.8



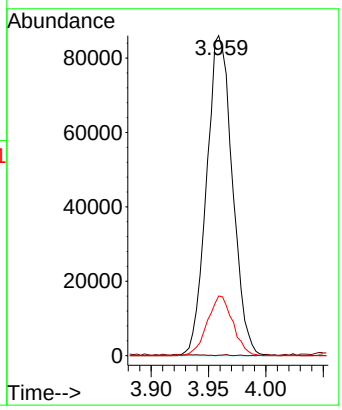


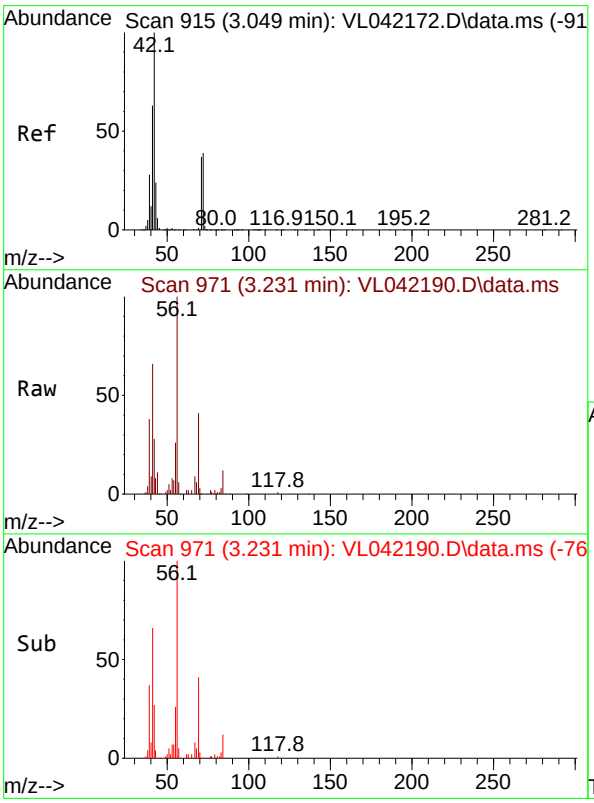
#39
1,2-Dichloropropane
Concen: 7.017 ppbv
RT: 3.959 min Scan# 11
Delta R.T. -0.353 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 63 Resp: 134884

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	18.7	57.6	86.4#

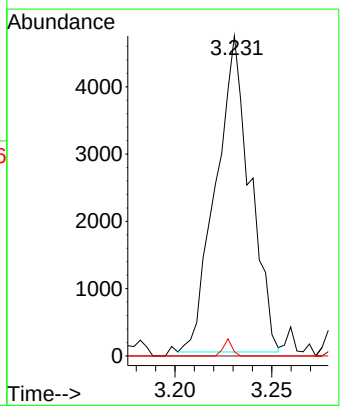


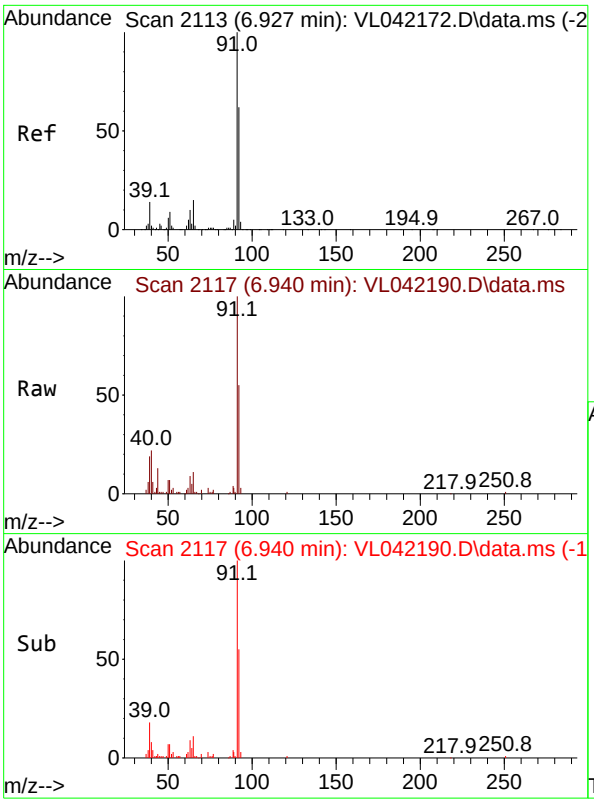


#41
Tetrahydrofuran
Concen: 0.260 ppbv
RT: 3.231 min Scan# 971
Delta R.T. 0.181 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion: 42 Resp: 5776

Ion	Ratio	Lower	Upper
42	100		
72	1.6	31.4	47.0#
71	0.0	30.2	45.4#



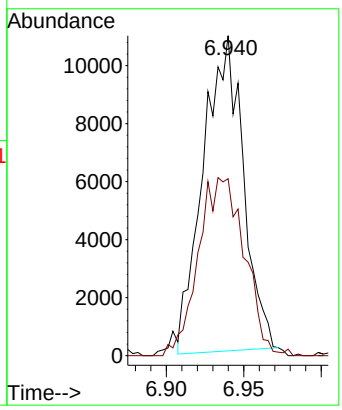


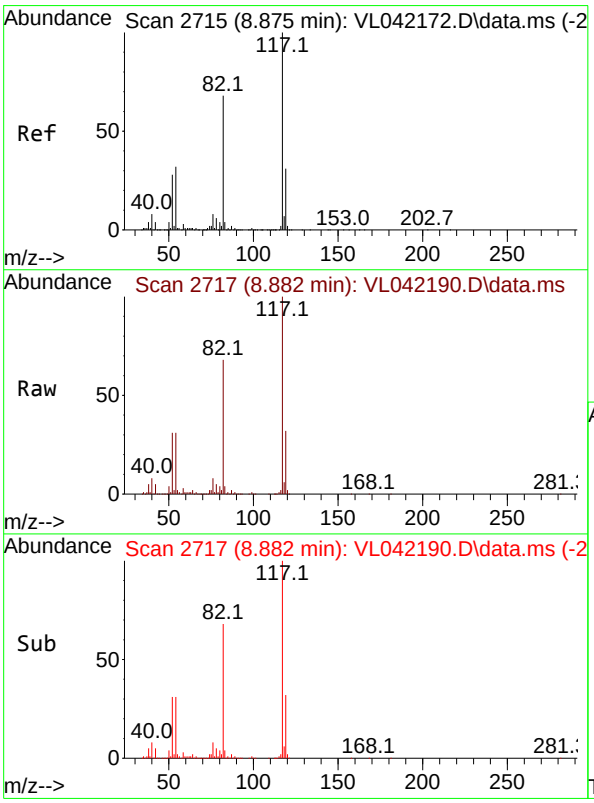
#53
Toluene
Concen: 0.312 ppbv
RT: 6.940 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 91 Resp: 19535

Ion	Ratio	Lower	Upper
91	100		
92	65.2	48.4	72.6

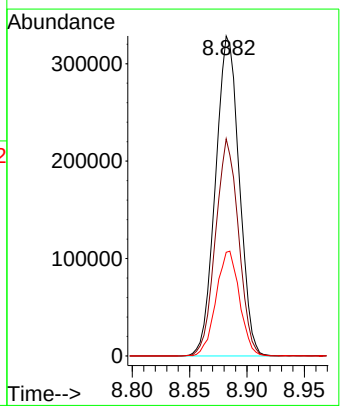


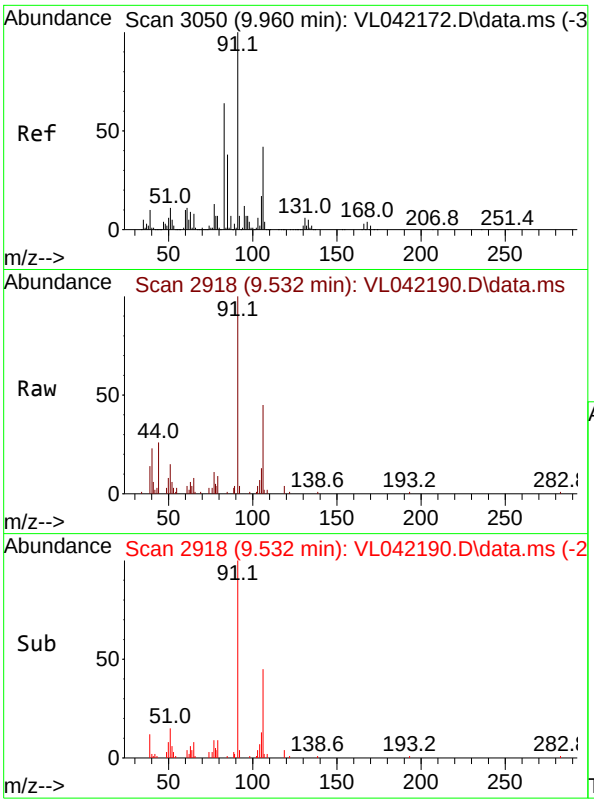


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.007 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:117 Resp: 472897

Ion	Ratio	Lower	Upper
117	100		
82	65.8	55.8	83.6
119	32.5	25.5	38.3



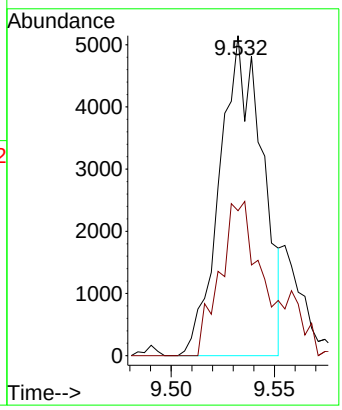


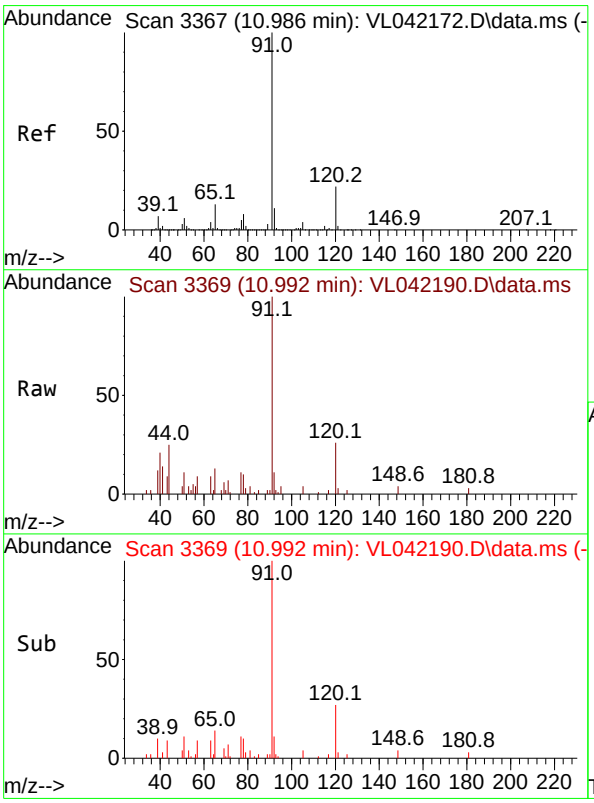
#60
o-Xylene
Concen: 0.110 ppbv
RT: 9.532 min Scan# 2
Delta R.T. -0.427 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 91 Resp: 7376

Ion	Ratio	Lower	Upper
91	100		
106	55.3	20.8	62.5

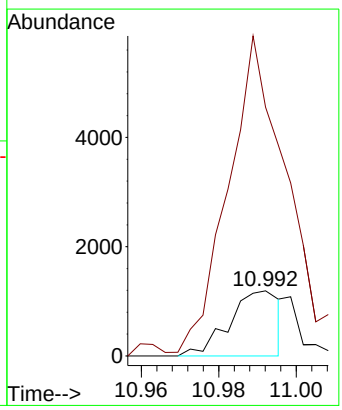


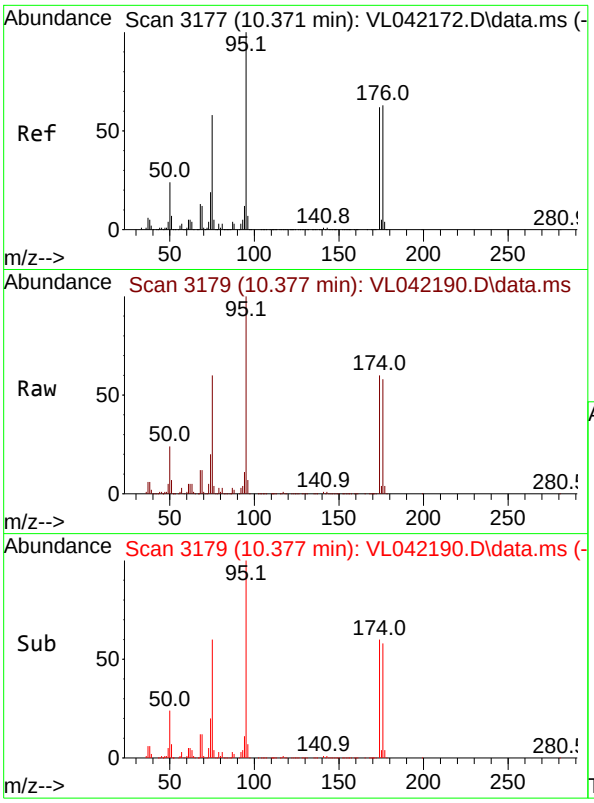


#64
n-propylbenzene
Concen: 0.041 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.007 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:120 Resp: 1074

Ion	Ratio	Lower	Upper
120	100		
91	590.9	376.9	565.3#



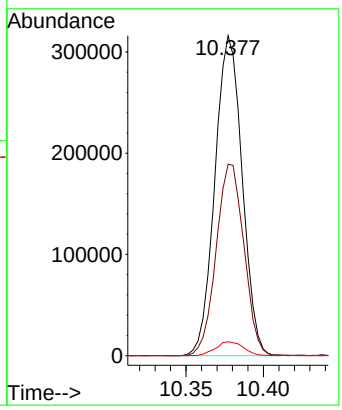


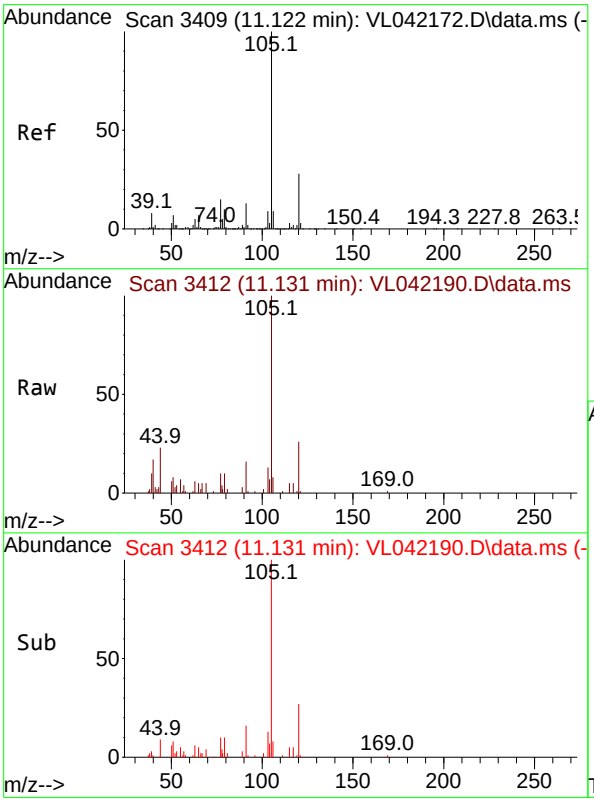
#68
1-Bromo-4-Fluorobenzene
Concen: 9.963 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion: 95 Resp: 386908

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.5	3.8	5.6

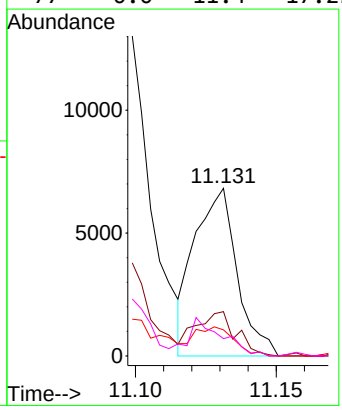


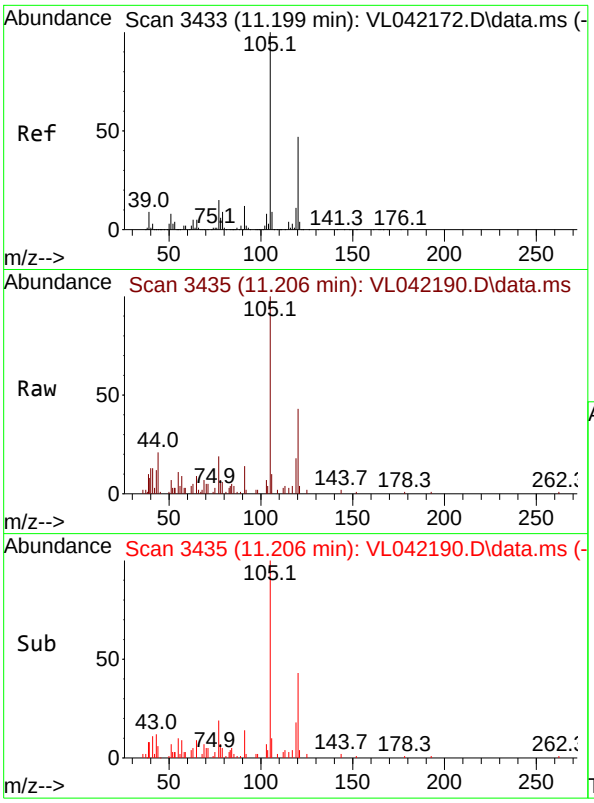


#72
4-Ethyltoluene
Concen: 0.086 ppbv
RT: 11.131 min Scan# 3412
Delta R.T. 0.010 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:105 Resp: 7187

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	16.8	10.3	15.5#
77	0.0	11.4	17.2#



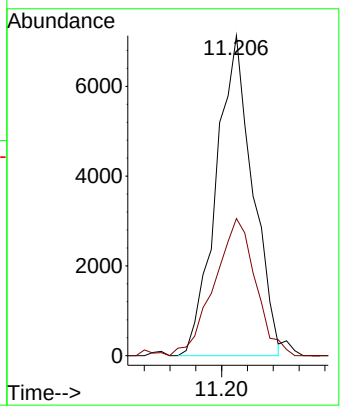


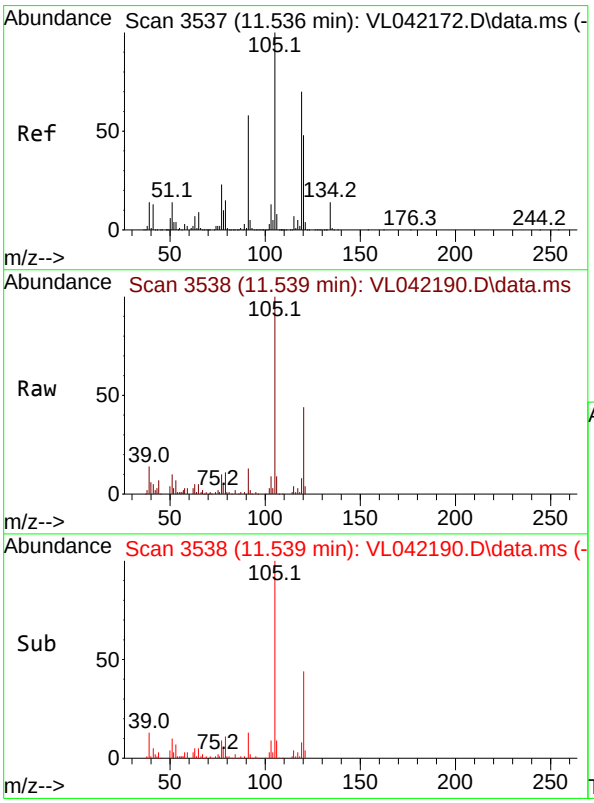
#73
1,3,5-Trimethylbenzene
Concen: 0.096 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.007 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion:105 Resp: 7022

Ion	Ratio	Lower	Upper
105	100		
120	40.5	37.4	56.0

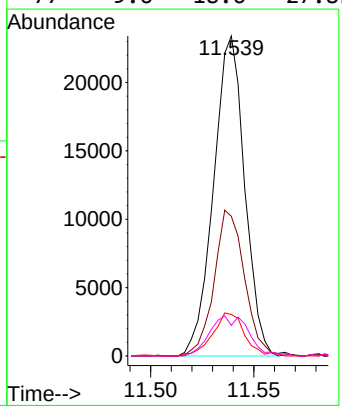


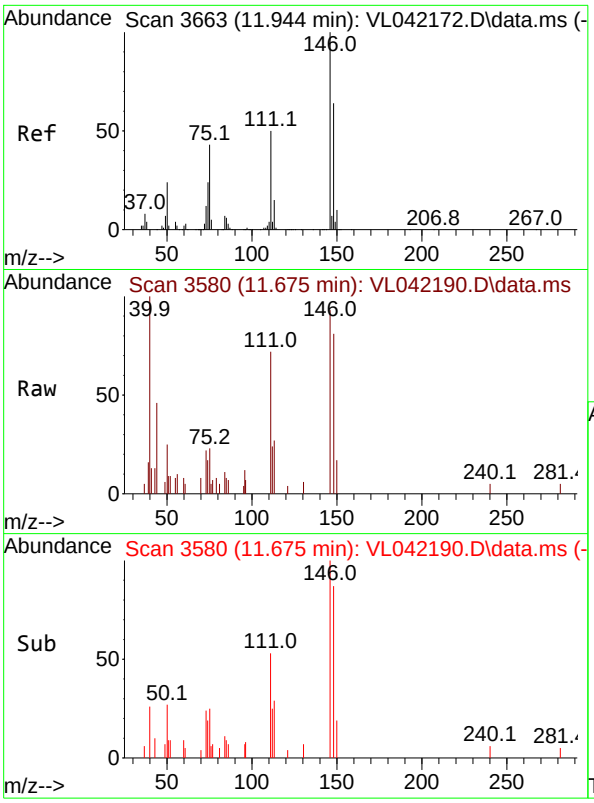


#74
1,2,4-Trimethylbenzene
Concen: 0.291 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:105 Resp: 24527

Ion	Ratio	Lower	Upper
105	100		
120	43.6	38.6	58.0
91	12.9	46.2	69.2#
77	9.6	18.6	27.8#



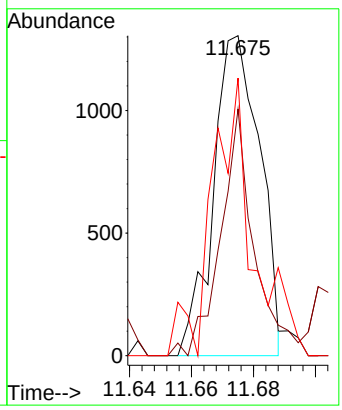


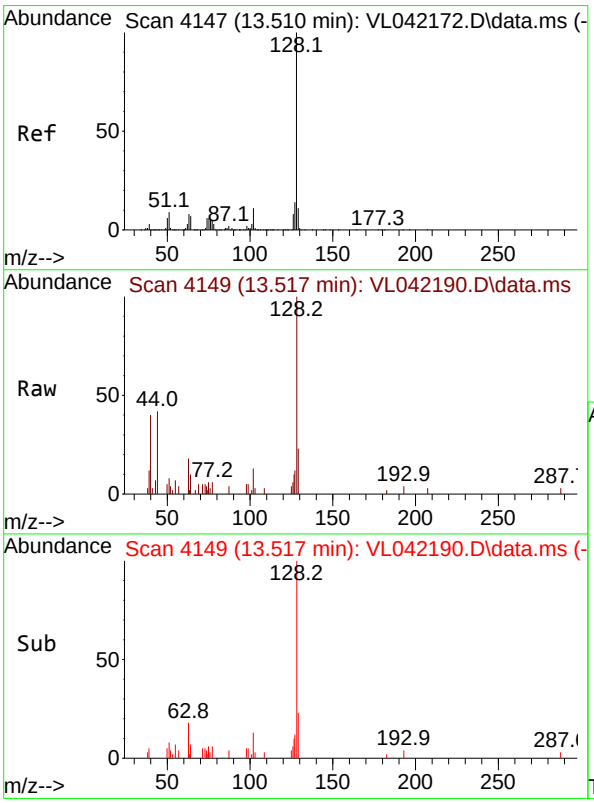
#77
1,2-Dichlorobenzene
Concen: 0.030 ppbv
RT: 11.675 min Scan# 3
Delta R.T. -0.269 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Instrument :
MSVOA_L
ClientSampleId :
AA-2-3262025DUP

Tgt Ion:146 Resp: 1366

Ion	Ratio	Lower	Upper
146	100		
111	55.1	24.8	74.3
148	76.3	31.6	94.8

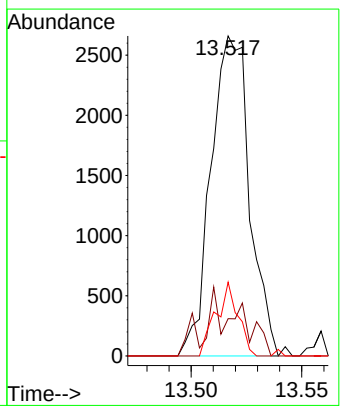




#79
Naphthalene
Concen: 0.035 ppbv
RT: 13.517 min Scan# 4149
Delta R.T. 0.007 min
Lab File: VL042190.D
Acq: 27 Mar 2025 21:24

Tgt Ion:128 Resp: 3226

Ion	Ratio	Lower	Upper
128	100		
127	11.7	10.8	16.2
129	23.0	9.0	13.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042192.D
Acq On : 27 Mar 2025 22:29
Operator : SY/MD
Sample : Q1669-07DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Quant Time: Mar 28 02:18:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	182834	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	517445	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	472334	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	383930	9.898	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.492	85	1740	0.064	ppbv #	72
6) Bromomethane	1.664	94	165	0.033	ppbv #	4
8) Dichlorotetrafluoroethane	1.492	85	1740	0.076	ppbv #	19
9) Propene	1.473	41	506	0.040	ppbv #	49
13) Ethanol	1.722	45	18353	15.359	ppbv #	27
15) Acetone	1.835	43	97895	3.828	ppbv	95
16) 1,3-Butadiene	1.615	39	1080	0.086	ppbv #	11
17) tert-Butyl alcohol	2.043	59	2121	0.067	ppbv #	41
19) Isopropyl Alcohol	1.722	45	18353	1.272	ppbv #	1
20) Methylene Chloride	2.062	84	2299	0.241	ppbv #	79
23) Vinyl Acetate	2.463	43	2010	0.182	ppbv #	56
25) Ethyl Acetate	2.829	43	2478	0.037	ppbv #	79
26) Hexane	2.832	57	2488	0.097	ppbv #	50
34) 2-Butanone	2.564	43	9065	0.242	ppbv	97
36) Benzene	3.658	78	1901	0.037	ppbv #	81
39) 1,2-Dichloropropane	3.959	63	133500	7.146	ppbv #	22
50) 4-Methyl-2-Pentanone	5.774	43	5613	0.094	ppbv #	57
53) Toluene	6.933	91	34361	0.565	ppbv	100
60) o-Xylene	9.532	91	9817	0.146	ppbv	73
61) Styrene	9.872	104	2418	0.073	ppbv	95
74) 1,2,4-Trimethylbenzene	11.536	105	4405	0.052	ppbv #	66

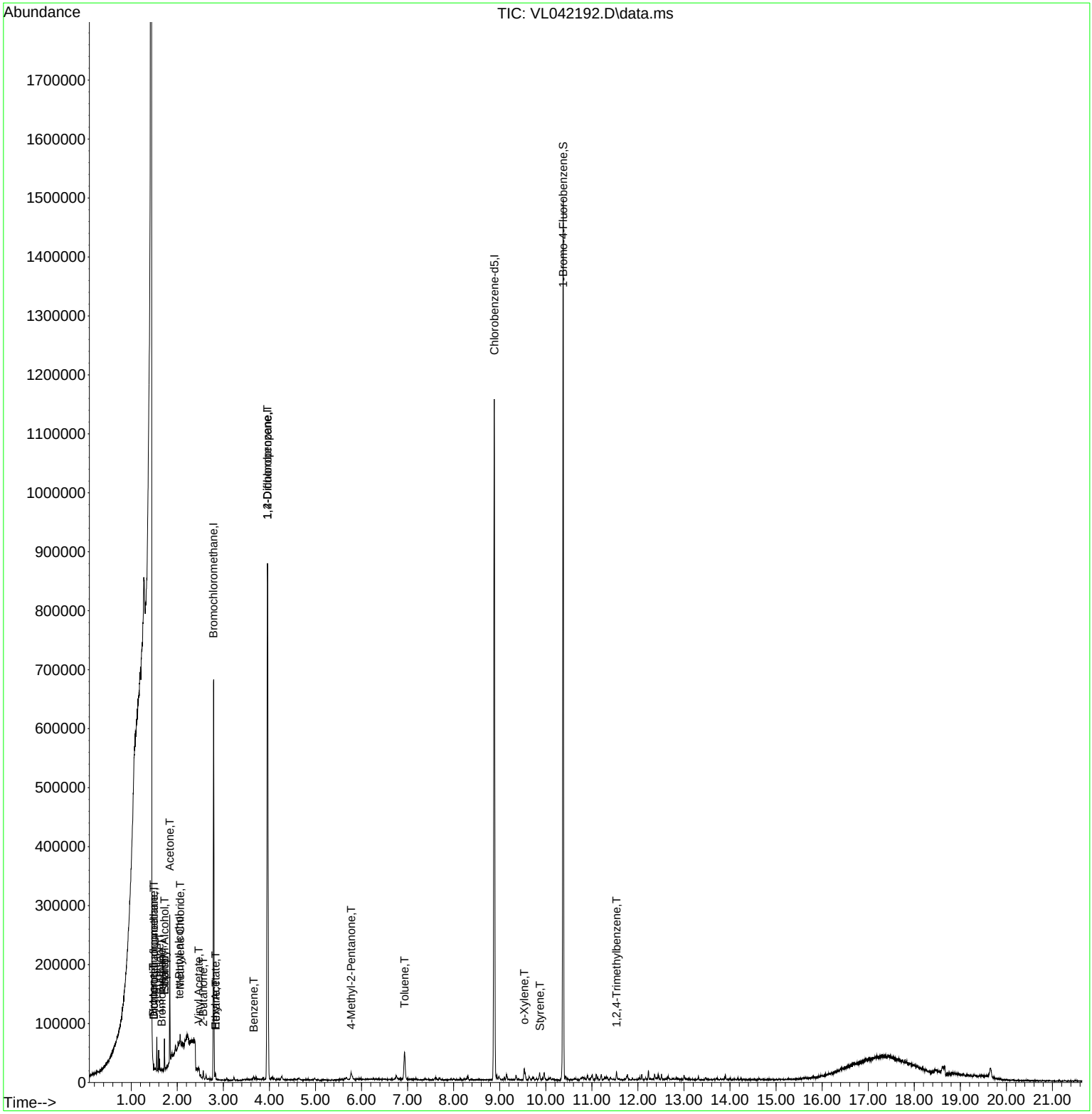
(#) = qualifier out of range (m) = manual integration (+) = signals summed

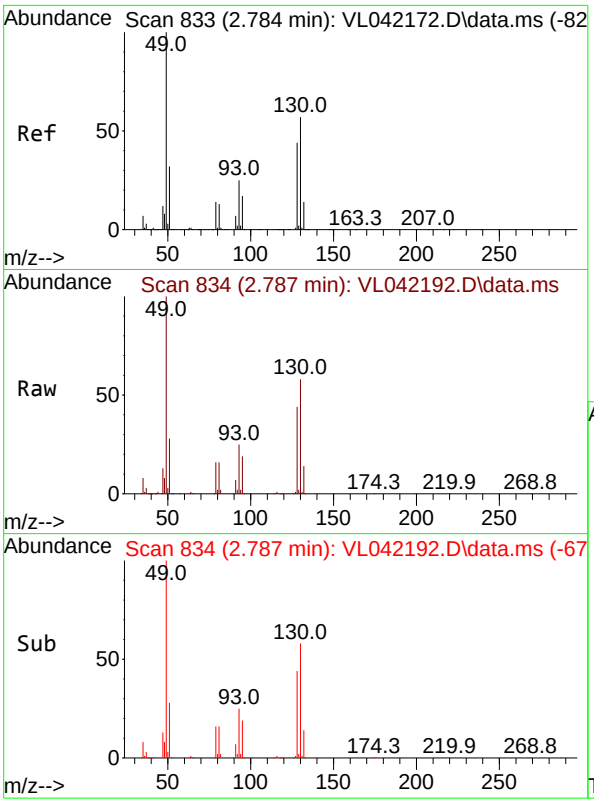
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042192.D
Acq On : 27 Mar 2025 22:29
Operator : SY/MD
Sample : Q1669-07DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Quant Time: Mar 28 02:18:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



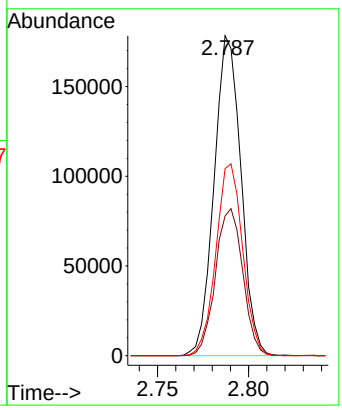


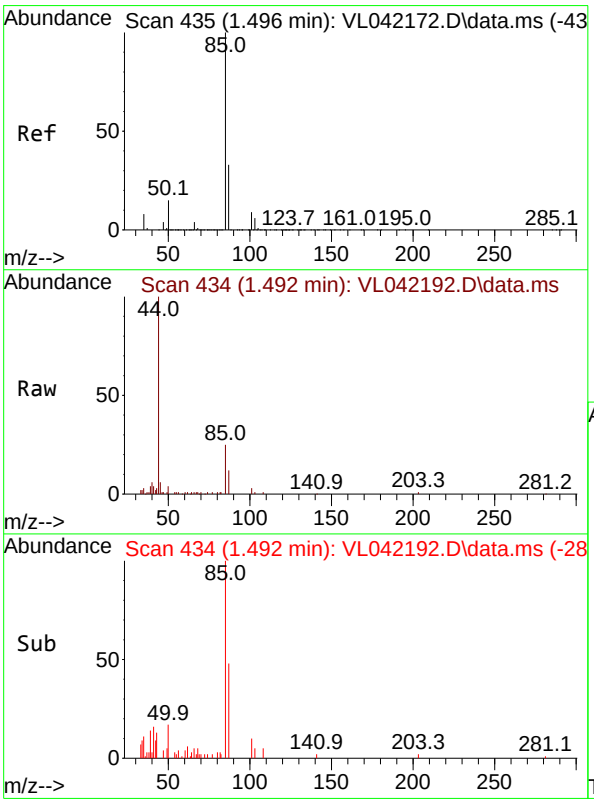
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 49 Resp: 182834

Ion	Ratio	Lower	Upper
49	100		
128	46.7	22.9	68.5
130	59.8	28.8	86.4

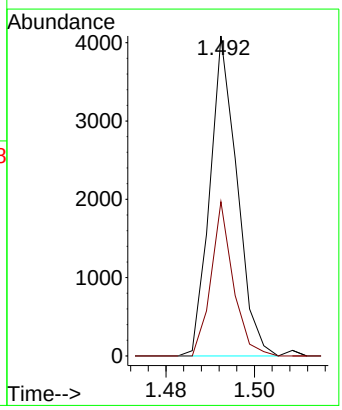


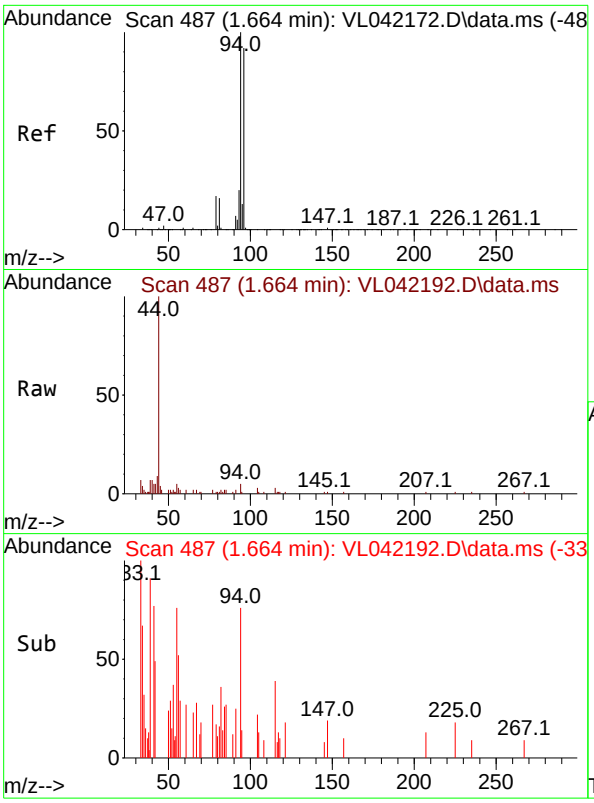


#2
Dichlorodifluoromethane
Concen: 0.064 ppbv
RT: 1.492 min Scan# 434
Delta R.T. -0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 85 Resp: 1740

Ion	Ratio	Lower	Upper
85	100		
87	48.2	26.1	39.1#



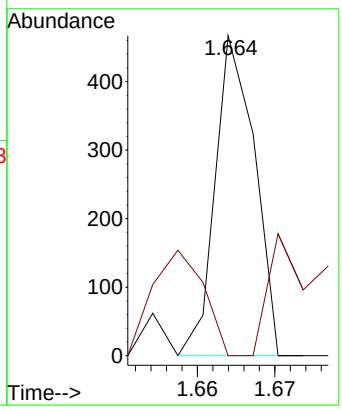


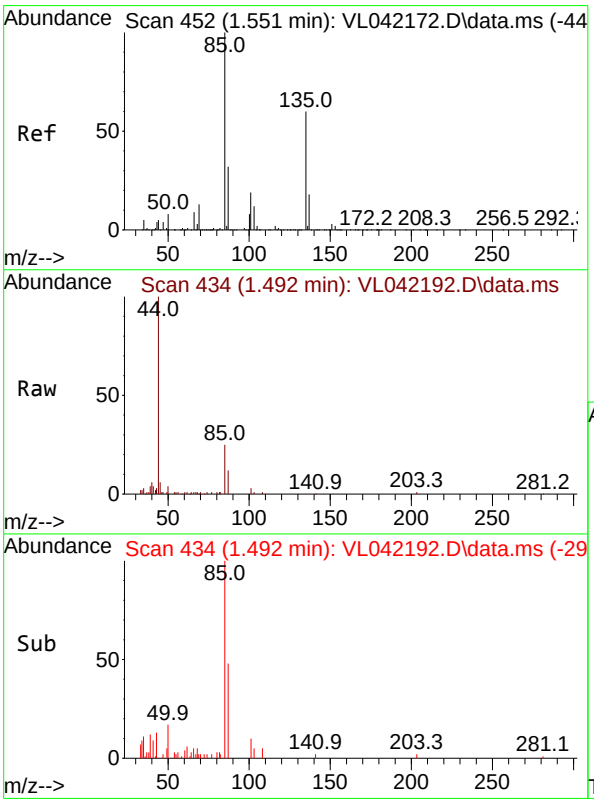
#6
Bromomethane
Concen: 0.033 ppbv
RT: 1.664 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 94 Resp: 165

Ion	Ratio	Lower	Upper
94	100		
96	0.0	73.1	109.7#

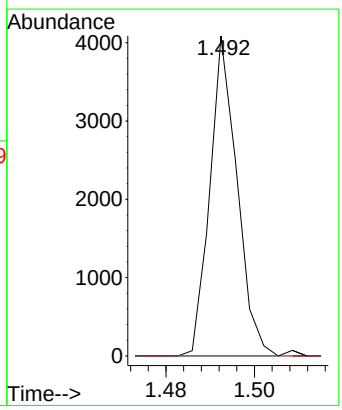


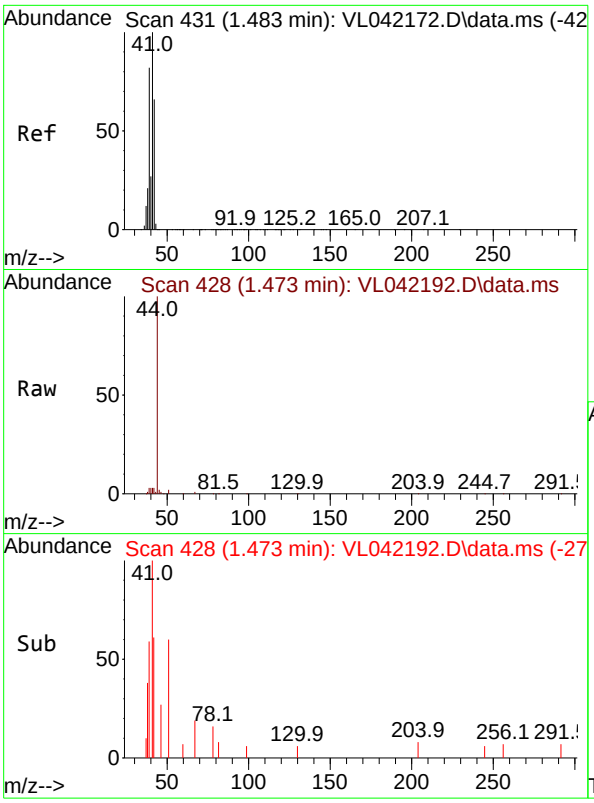


#8
Dichlorotetrafluoroethane
Concen: 0.076 ppbv
RT: 1.492 min Scan# 434
Delta R.T. -0.058 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 85 Resp: 1740

Ion	Ratio	Lower	Upper
85	100		
135	1.5	52.4	78.6#



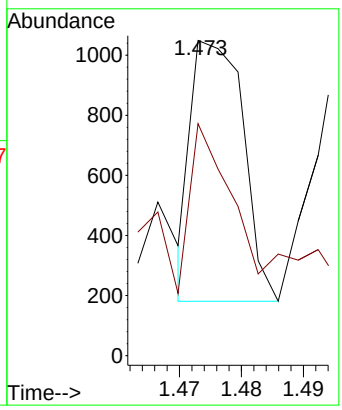


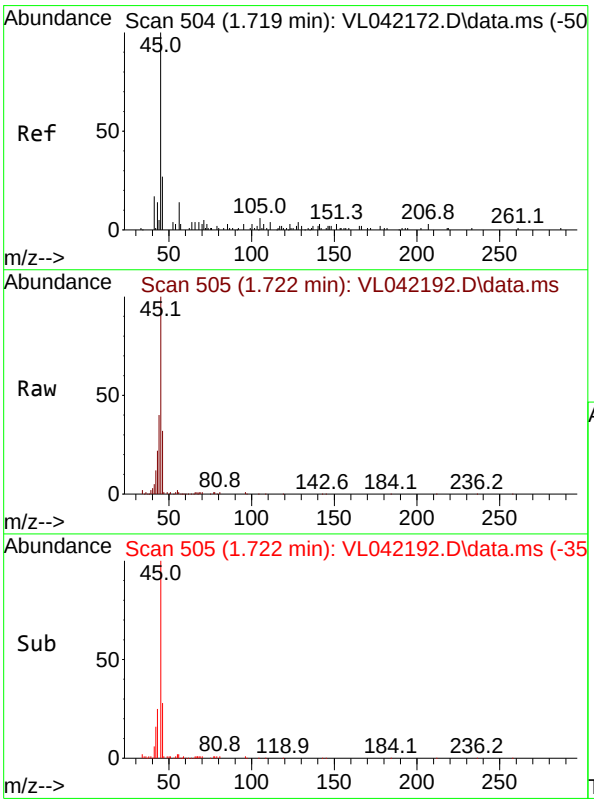
#9
Propene
Concen: 0.040 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.010 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 41 Resp: 506

Ion	Ratio	Lower	Upper
41	100		
42	110.7	55.4	83.2#

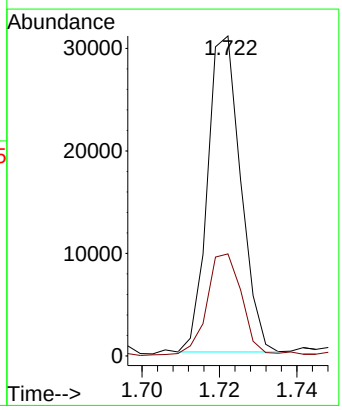


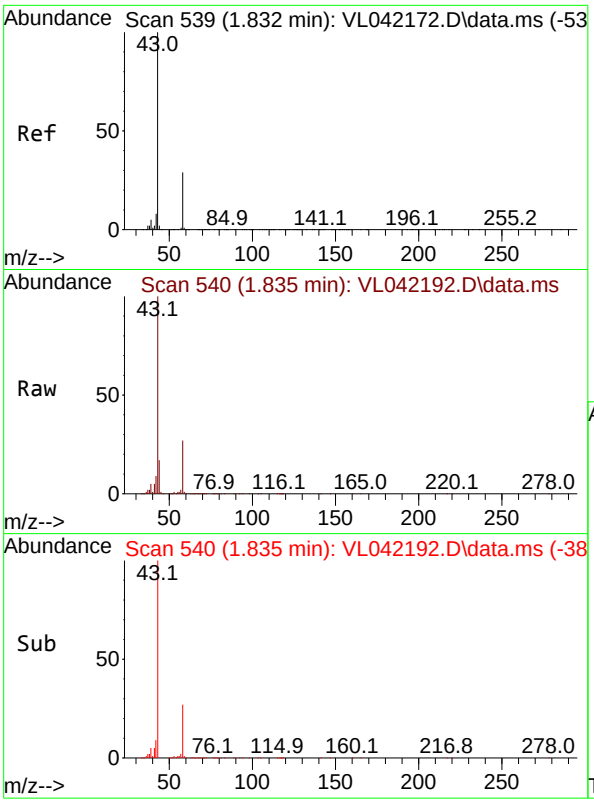


#13
Ethanol
Concen: 15.359 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 45 Resp: 18353

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#



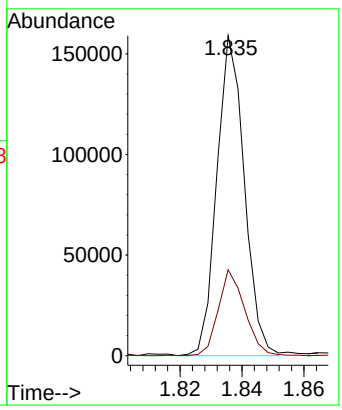


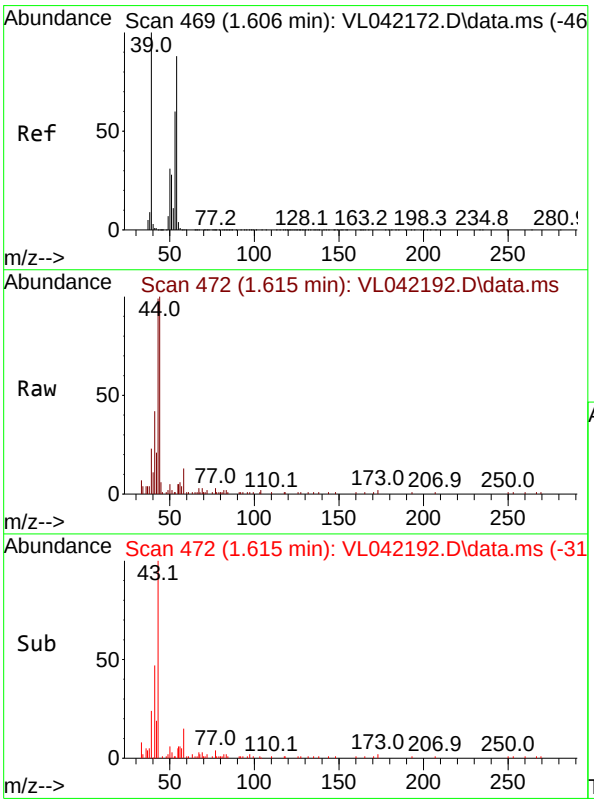
#15
Acetone
Concen: 3.828 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 43 Resp: 97895

Ion	Ratio	Lower	Upper
43	100		
58	26.4	23.2	34.8

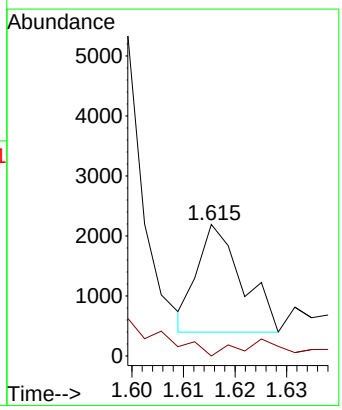


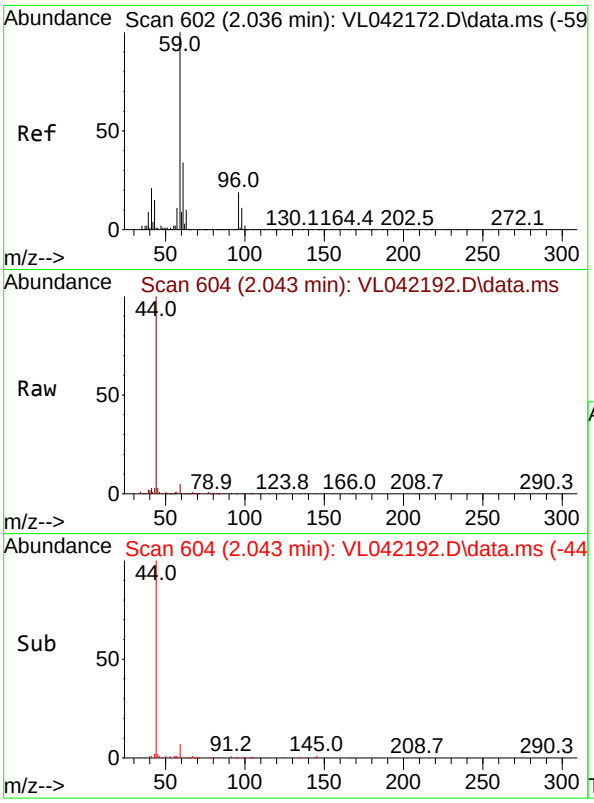


#16
1,3-Butadiene
Concen: 0.086 ppbv
RT: 1.615 min Scan# 472
Delta R.T. 0.010 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 39 Resp: 1080

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.7	91.1#



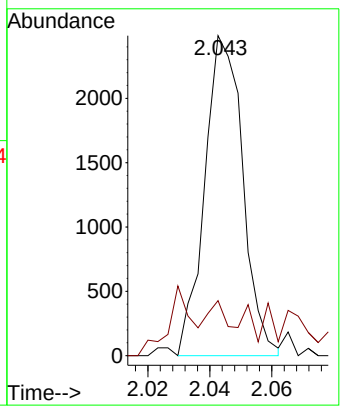


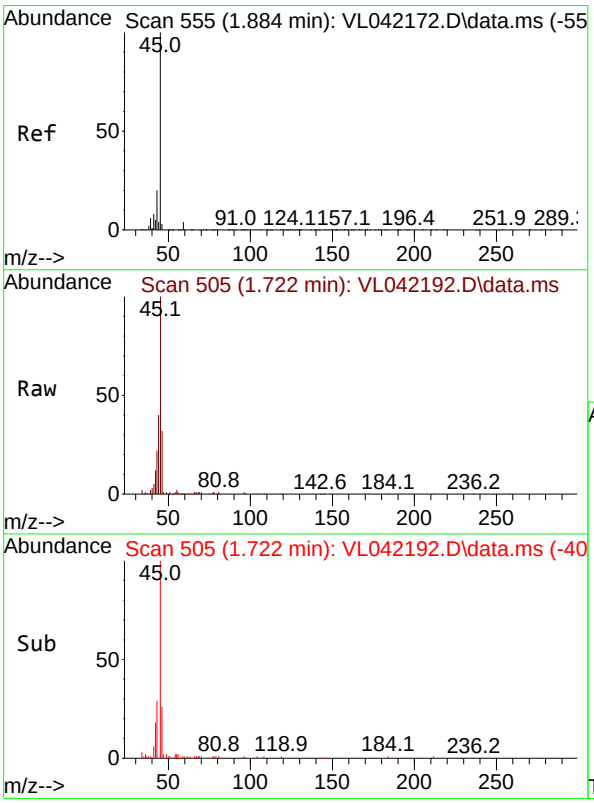
#17
tert-Butyl alcohol
Concen: 0.067 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 59 Resp: 2121

Ion	Ratio	Lower	Upper
59	100		
57	33.7	8.9	13.3#

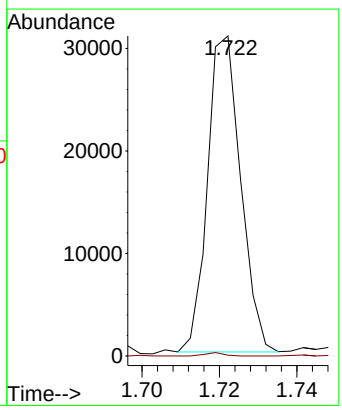


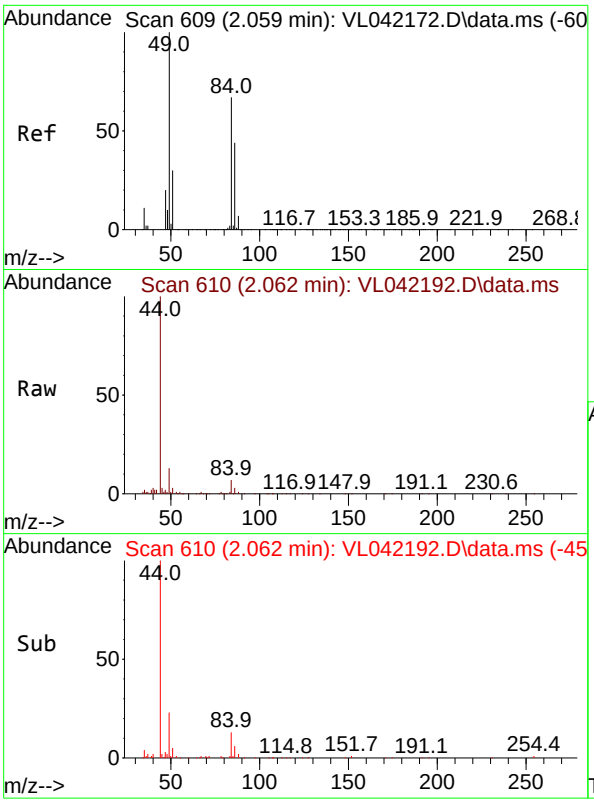


#19
Isopropyl Alcohol
Concen: 1.272 ppbv
RT: 1.722 min Scan# 505
Delta R.T. -0.162 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 45 Resp: 18353

Ion	Ratio	Lower	Upper
45	100		
58	139.5	36.9	55.3#



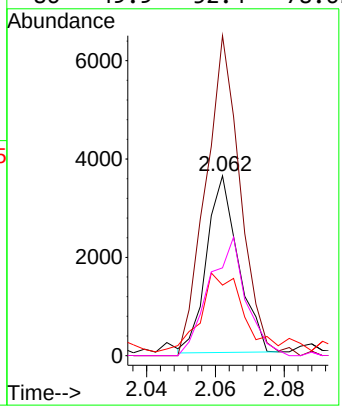


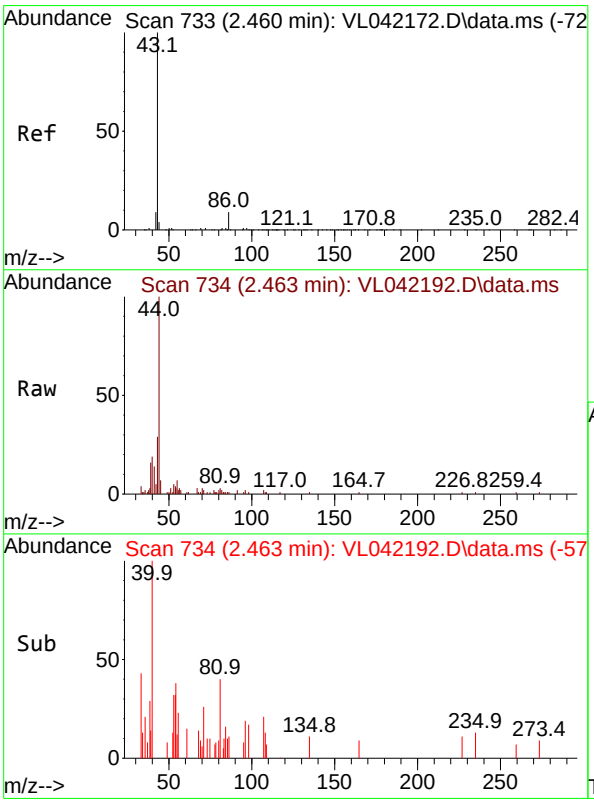
#20
Methylene Chloride
Concen: 0.241 ppbv
RT: 2.062 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 84 Resp: 2299

Ion	Ratio	Lower	Upper
84	100		
49	179.1	120.2	180.4
51	34.5	37.4	56.0#
86	49.9	52.4	78.6#

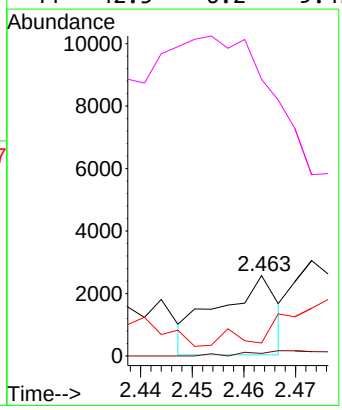


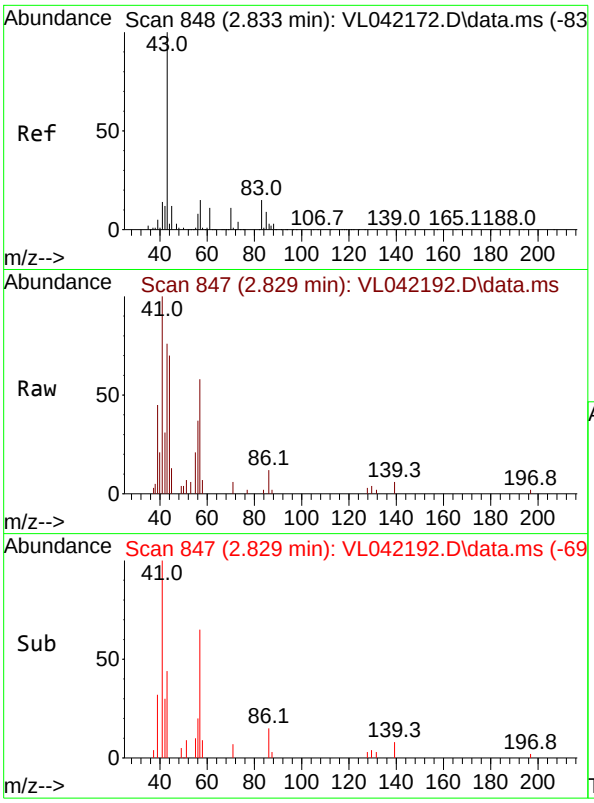


#23
Vinyl Acetate
Concen: 0.182 ppbv
RT: 2.463 min Scan# 734
Delta R.T. 0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 43 Resp: 2010

Ion	Ratio	Lower	Upper
43	100		
86	5.3	5.5	8.3#
42	0.0	8.6	13.0#
44	42.5	6.2	9.4#



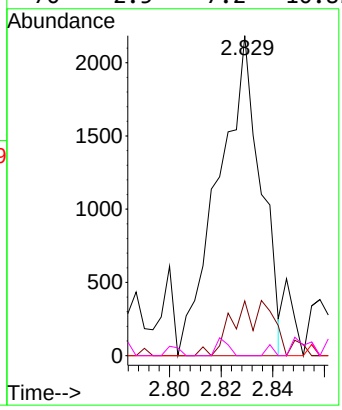


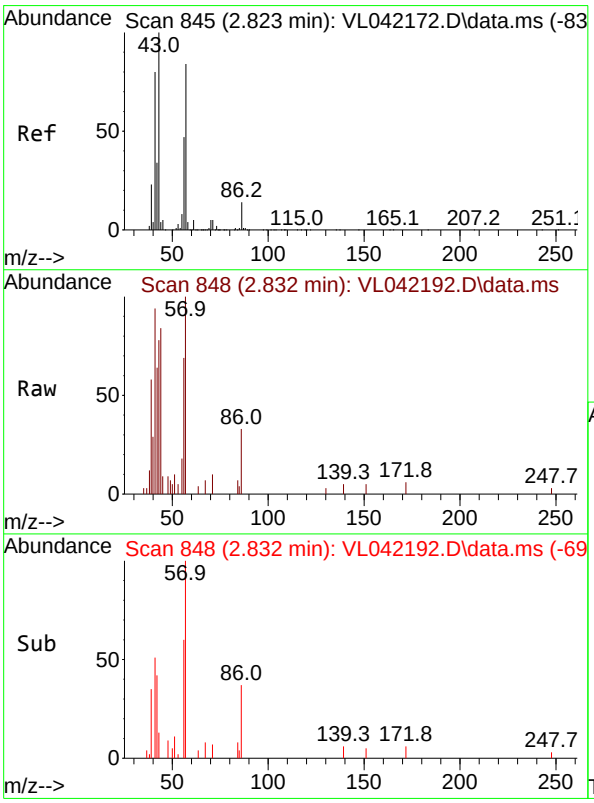
#25
Ethyl Acetate
Concen: 0.037 ppbv
RT: 2.829 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 43 Resp: 2478

Ion	Ratio	Lower	Upper
43	100		
45	17.3	8.2	12.2#
61	0.0	7.3	10.9#
70	2.5	7.2	10.8#

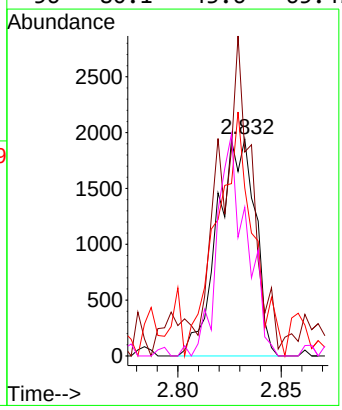


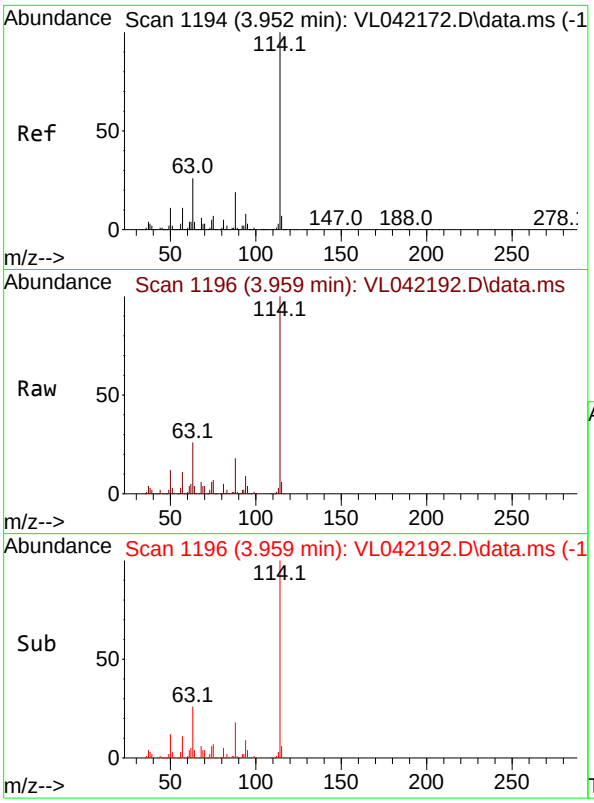


#26
Hexane
Concen: 0.097 ppbv
RT: 2.832 min Scan# 848
Delta R.T. 0.010 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 57 Resp: 2488

Ion	Ratio	Lower	Upper
57	100		
41	115.4	76.6	114.8#
43	145.8	207.8	311.8#
56	80.1	43.6	65.4#



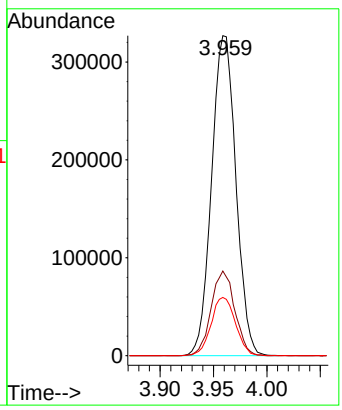


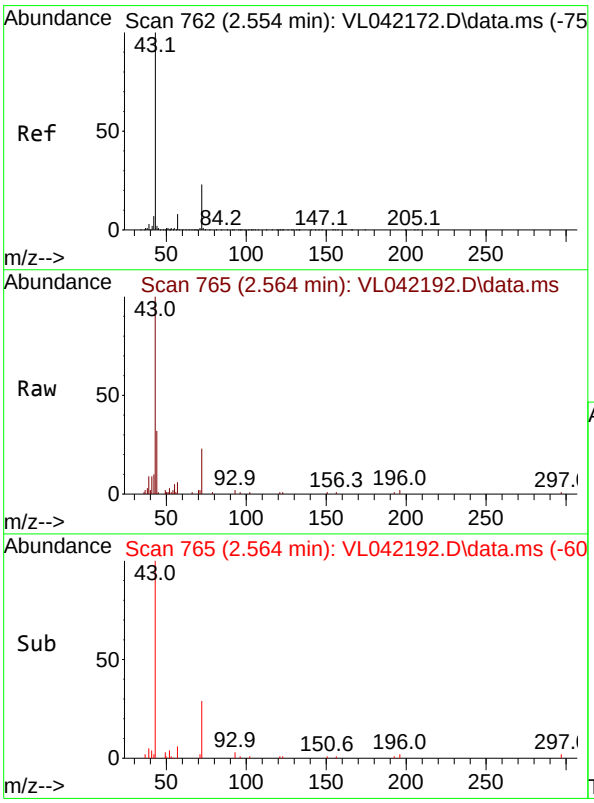
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion:114 Resp: 517445

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.3	15.0	22.4

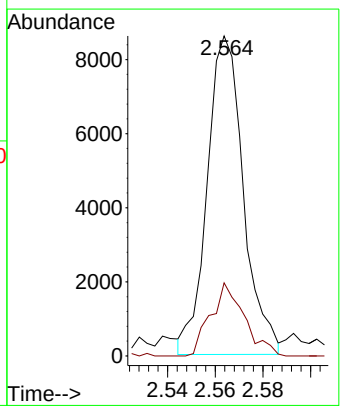


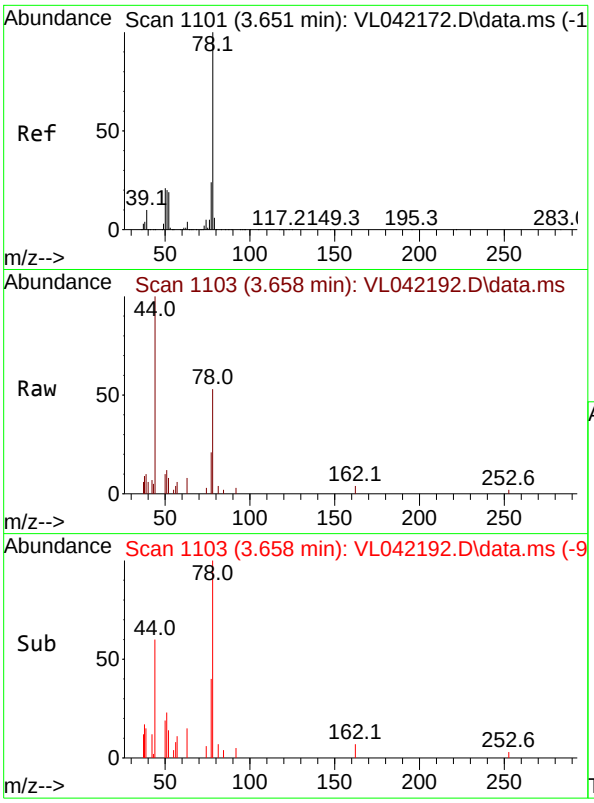


#34
2-Butanone
Concen: 0.242 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 43 Resp: 9065

Ion	Ratio	Lower	Upper
43	100		
72	21.4	18.2	27.2



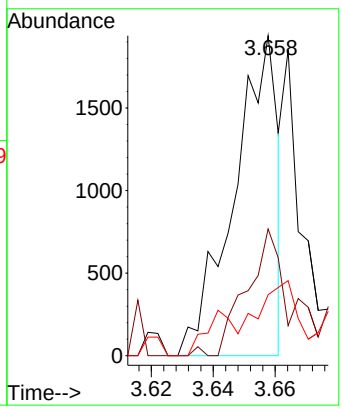


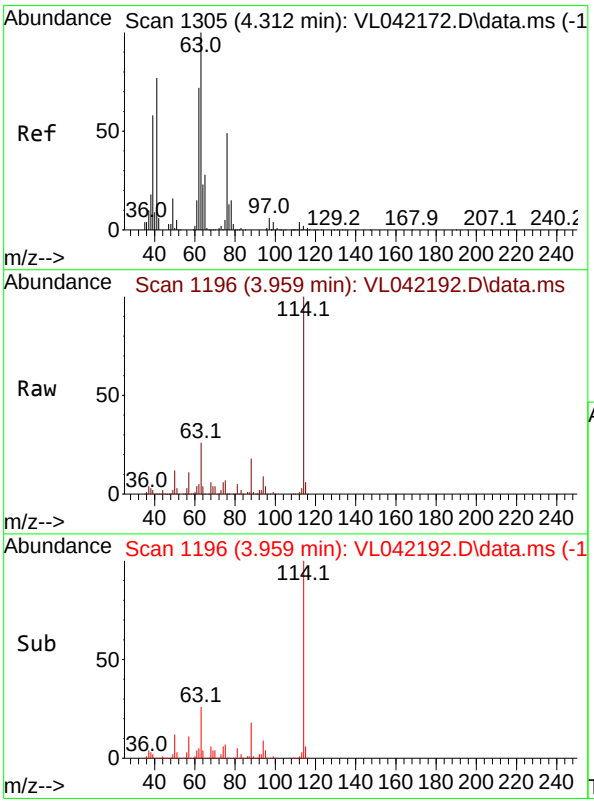
#36
Benzene
Concen: 0.037 ppbv
RT: 3.658 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 78 Resp: 1901

Ion	Ratio	Lower	Upper
78	100		
77	39.6	19.1	28.7#
50	19.0	16.6	24.8

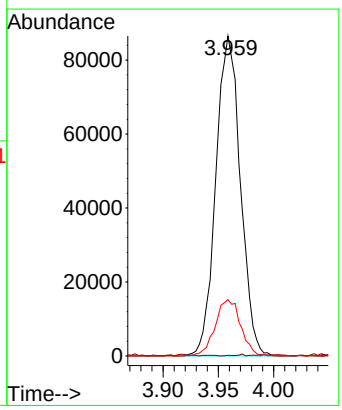


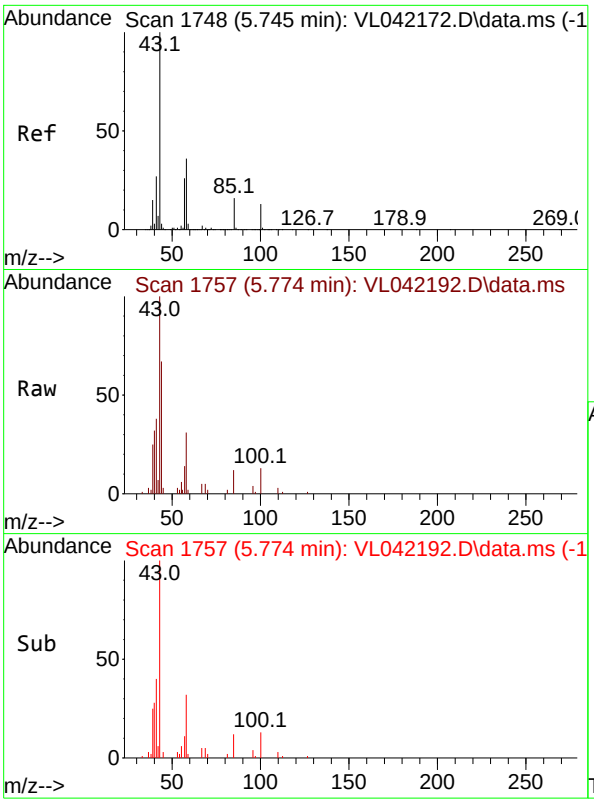


#39
1,2-Dichloropropane
Concen: 7.146 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 63 Resp: 133500

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	17.6	57.6	86.4#



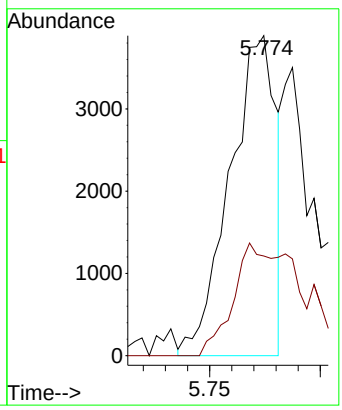


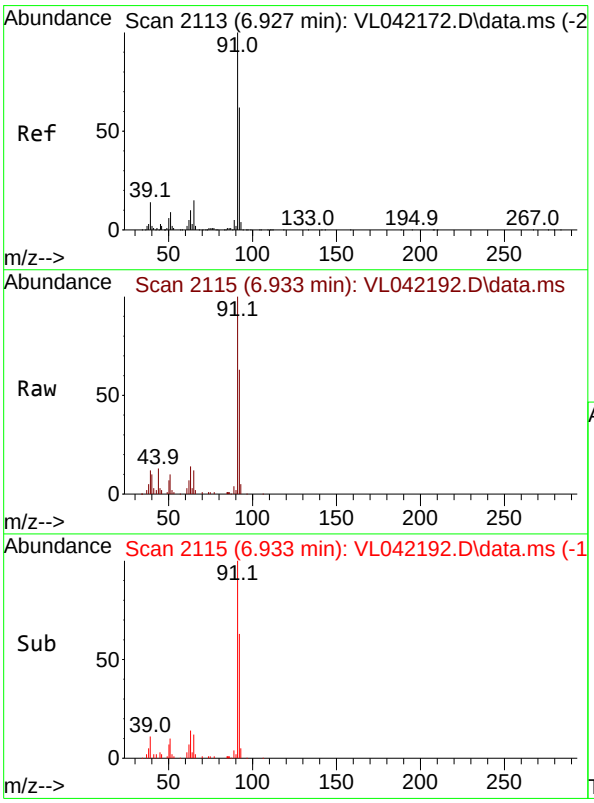
#50
4-Methyl-2-Pentanone
Concen: 0.094 ppbv
RT: 5.774 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion: 43 Resp: 5613

Ion	Ratio	Lower	Upper
43	100		
58	61.6	29.0	43.6#

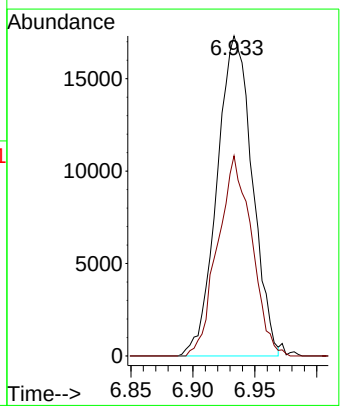


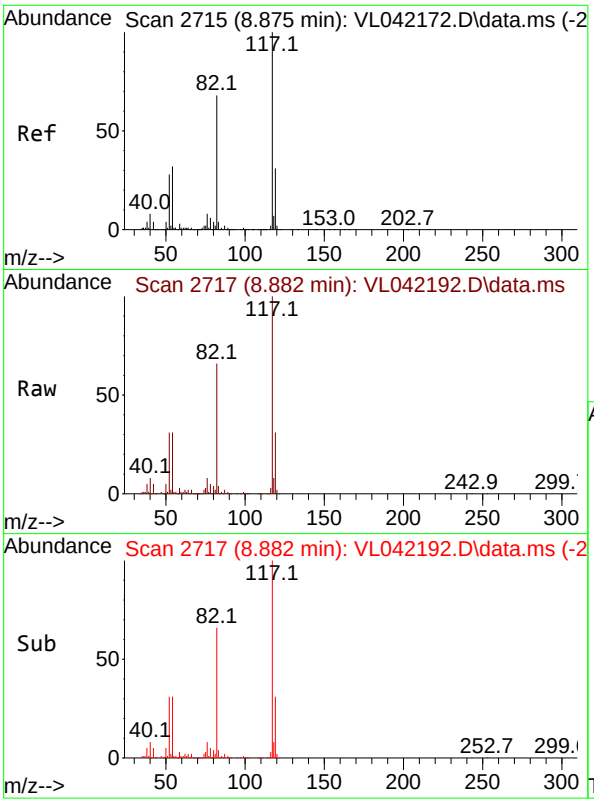


#53
Toluene
Concen: 0.565 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 91 Resp: 34361

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.4	72.6



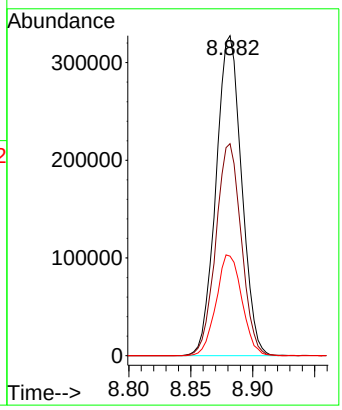


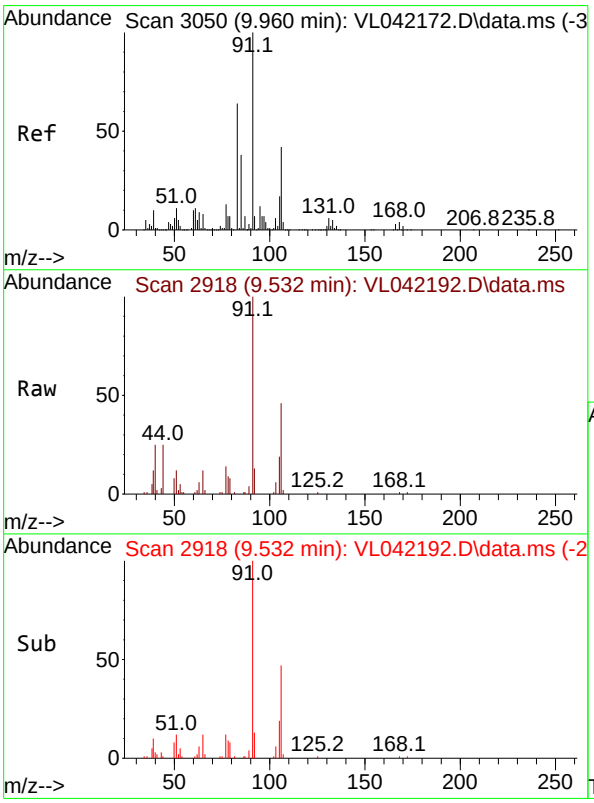
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion:117 Resp: 472334

Ion	Ratio	Lower	Upper
117	100		
82	65.9	55.8	83.6
119	31.7	25.5	38.3

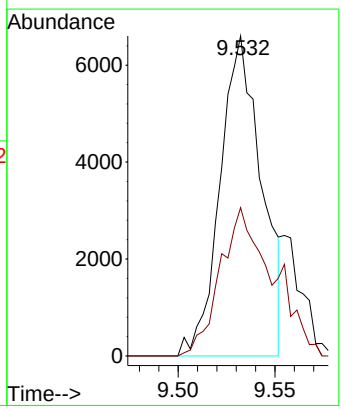


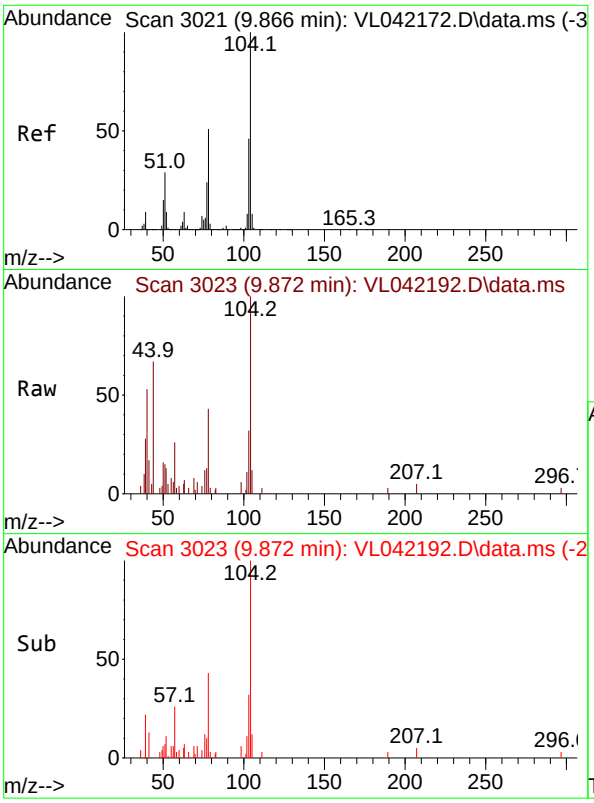


#60
o-Xylene
Concen: 0.146 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. -0.427 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 91 Resp: 9817

Ion	Ratio	Lower	Upper
91	100		
106	58.9	20.8	62.5



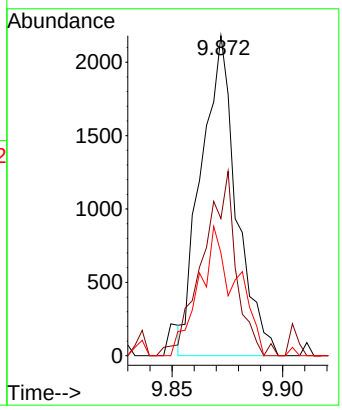


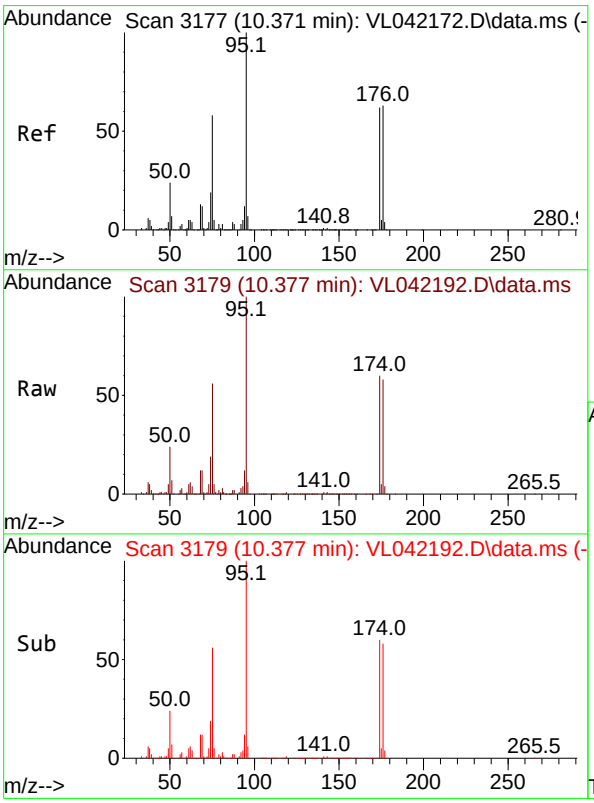
#61
Styrene
Concen: 0.073 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion:104 Resp: 2418

Ion	Ratio	Lower	Upper
104	100		
78	56.3	41.8	62.6
103	43.0	37.0	55.4

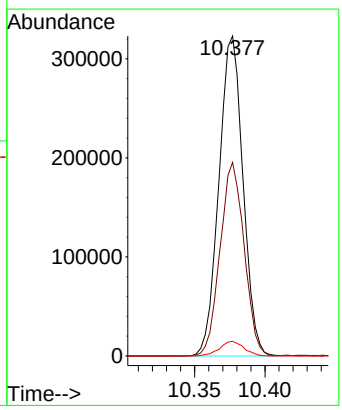


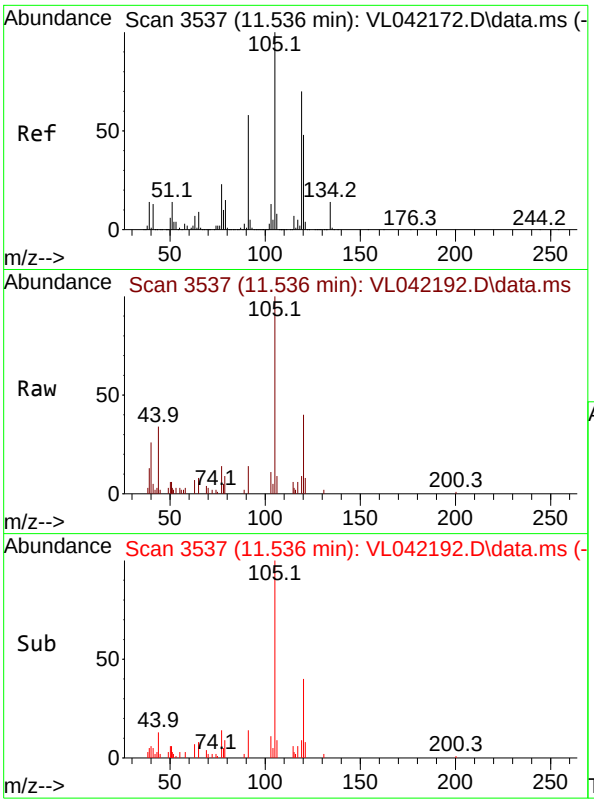


#68
1-Bromo-4-Fluorobenzene
Concen: 9.898 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Tgt Ion: 95 Resp: 383930

Ion	Ratio	Lower	Upper
95	100		
174	60.5	50.6	76.0
175	4.6	3.8	5.6



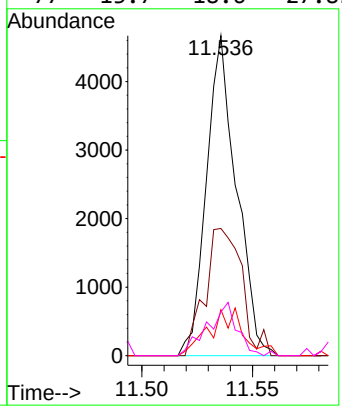


#74
1,2,4-Trimethylbenzene
Concen: 0.052 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042192.D
Acq: 27 Mar 2025 22:29

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025DL

Tgt Ion:105 Resp: 4405

Ion	Ratio	Lower	Upper
105	100		
120	39.7	38.6	58.0
91	14.4	46.2	69.2#
77	13.7	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042195.D
Acq On : 28 Mar 2025 00:06
Operator : SY/MD
Sample : Q1669-01DL 5X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Quant Time: Mar 28 02:19:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

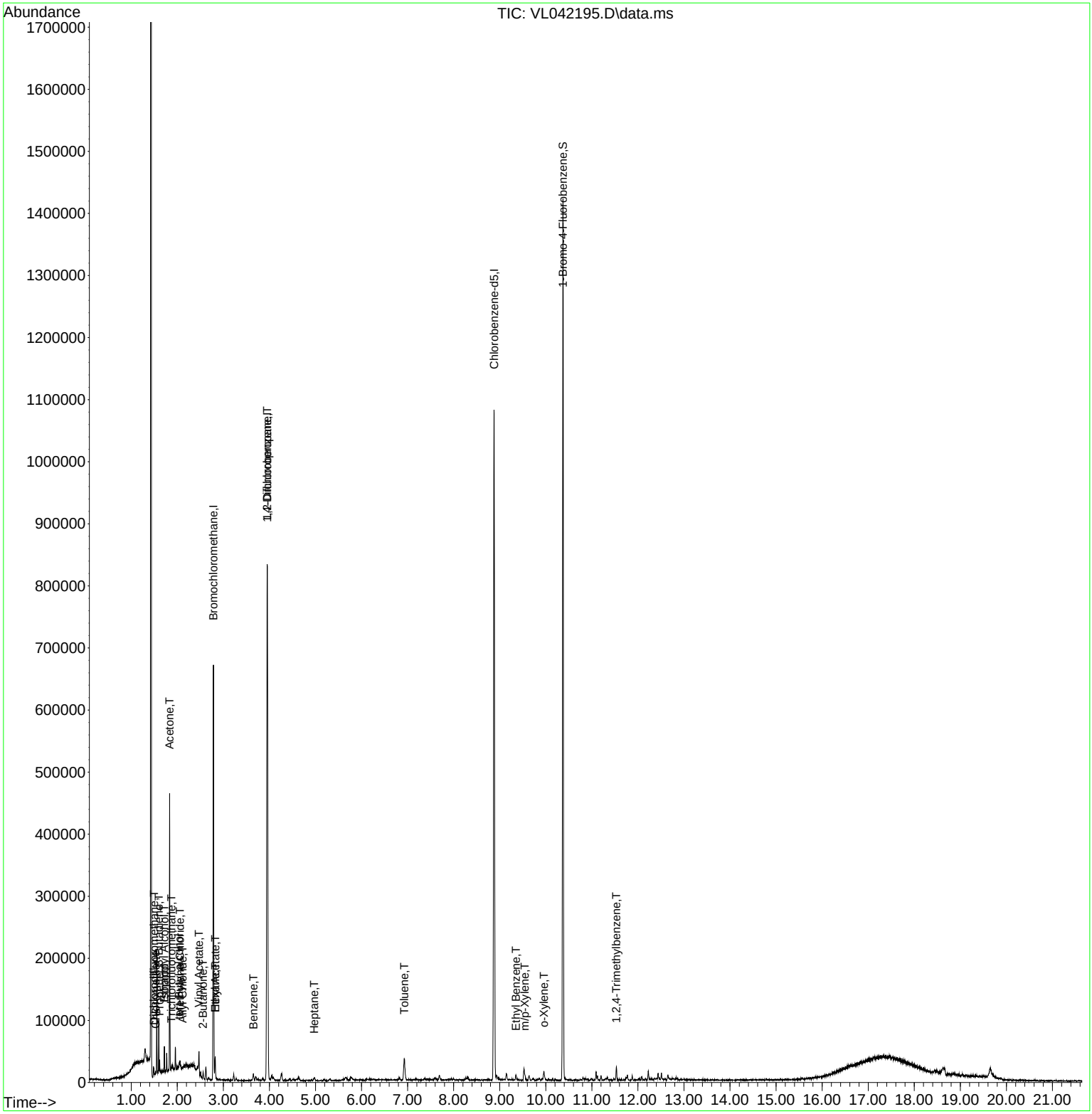
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	175494	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	495493	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.879	117	449375	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	365476	9.904	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	2323	0.090	ppbv #	63
4) Chloromethane	1.528	50	885	0.084	ppbv	95
9) Propene	1.615	41	1849	0.152	ppbv	96
10) Heptane	4.972	43	1355	0.042	ppbv #	68
11) Trichlorofluoromethane	1.874	101	1086	0.043	ppbv	87
13) Ethanol	1.719	45	13574	11.835	ppbv	85
15) Acetone	1.832	43	182020	7.416	ppbv	96
16) 1,3-Butadiene	1.599	39	7635	0.637	ppbv #	31
17) tert-Butyl alcohol	2.039	59	2983	0.098	ppbv #	58
19) Isopropyl Alcohol	1.719	45	13574	0.980	ppbv #	1
20) Methylene Chloride	2.059	84	2019	0.221	ppbv #	68
21) Allyl Chloride	2.114	41	549	0.032	ppbv #	26
23) Vinyl Acetate	2.470	43	10533	0.992	ppbv #	32
25) Ethyl Acetate	2.823	43	6375	0.100	ppbv #	77
26) Hexane	2.823	57	8040	0.327	ppbv #	32
34) 2-Butanone	2.557	43	6791	0.189	ppbv	100
36) Benzene	3.655	78	5647	0.115	ppbv	92
39) 1,2-Dichloropropane	3.952	63	129498	7.239	ppbv #	23
53) Toluene	6.927	91	24689	0.424	ppbv	97
58) Ethyl Benzene	9.351	91	4541	0.057	ppbv #	81
59) m/p-Xylene	9.545	91	2140	0.034	ppbv #	31
60) o-Xylene	9.963	91	5392	0.084	ppbv	94
74) 1,2,4-Trimethylbenzene	11.533	105	7390	0.092	ppbv #	59

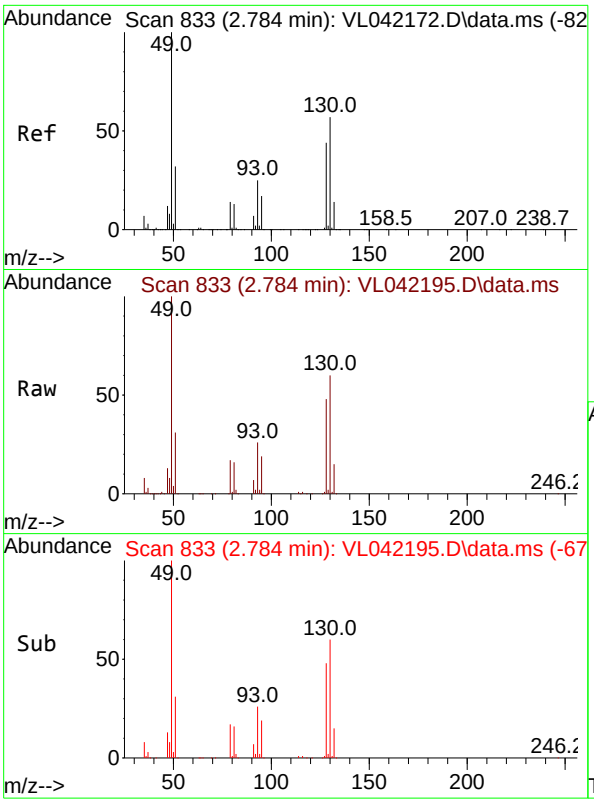
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042195.D
Acq On : 28 Mar 2025 00:06
Operator : SY/MD
Sample : Q1669-01DL 5X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Quant Time: Mar 28 02:19:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



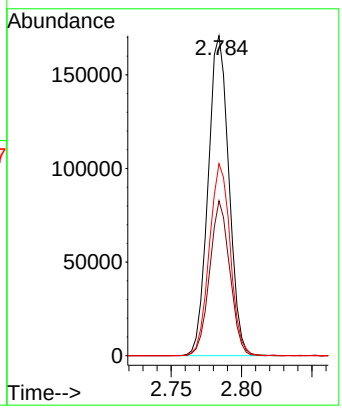


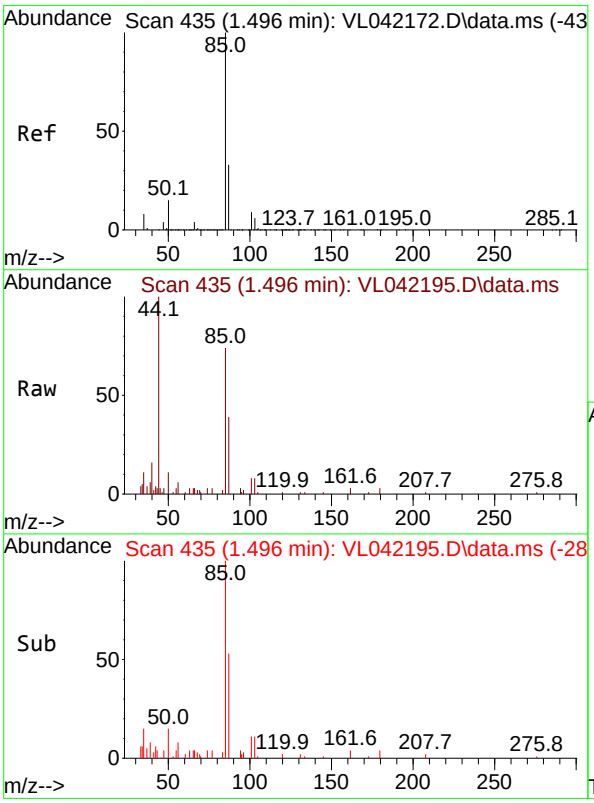
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 49 Resp: 175494

Ion	Ratio	Lower	Upper
49	100		
128	47.0	22.9	68.5
130	60.4	28.8	86.4

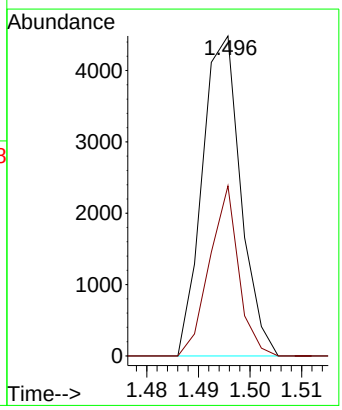


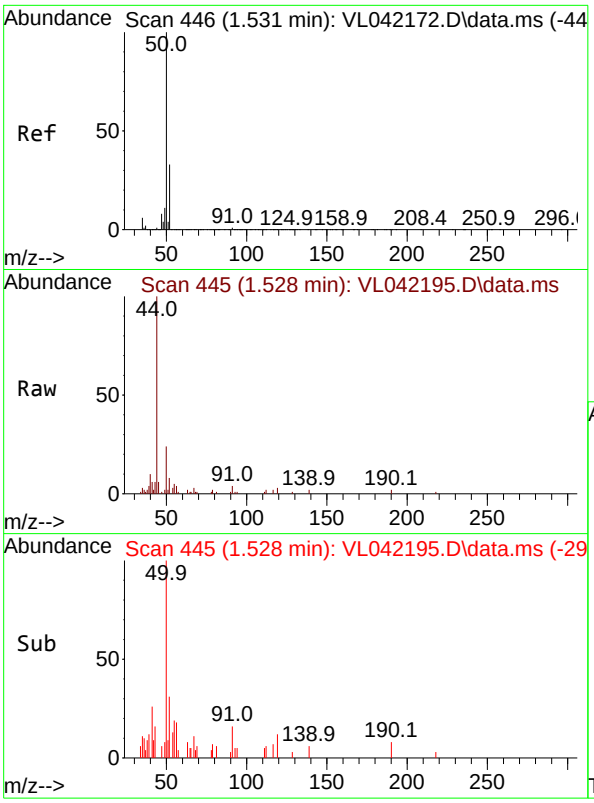


#2
Dichlorodifluoromethane
Concen: 0.090 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 85 Resp: 2323

Ion	Ratio	Lower	Upper
85	100		
87	53.2	26.1	39.1#



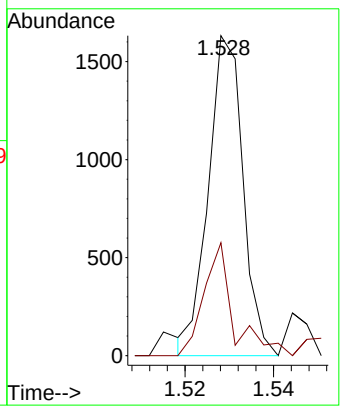


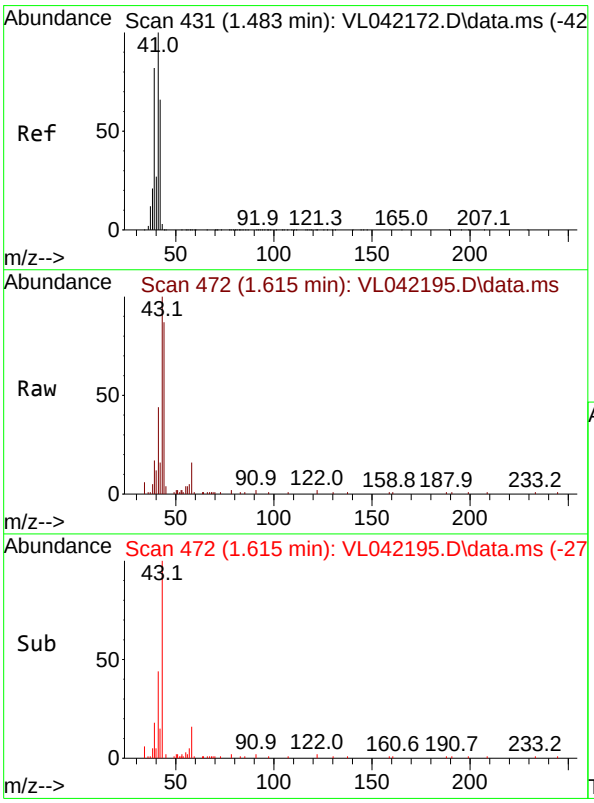
#4
Chloromethane
Concen: 0.084 ppbv
RT: 1.528 min Scan# 44
Delta R.T. -0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 50 Resp: 885

Ion	Ratio	Lower	Upper
50	100		
52	35.3	26.1	39.1

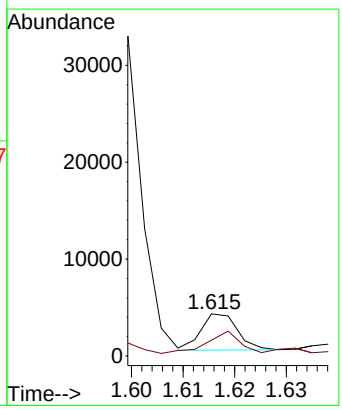


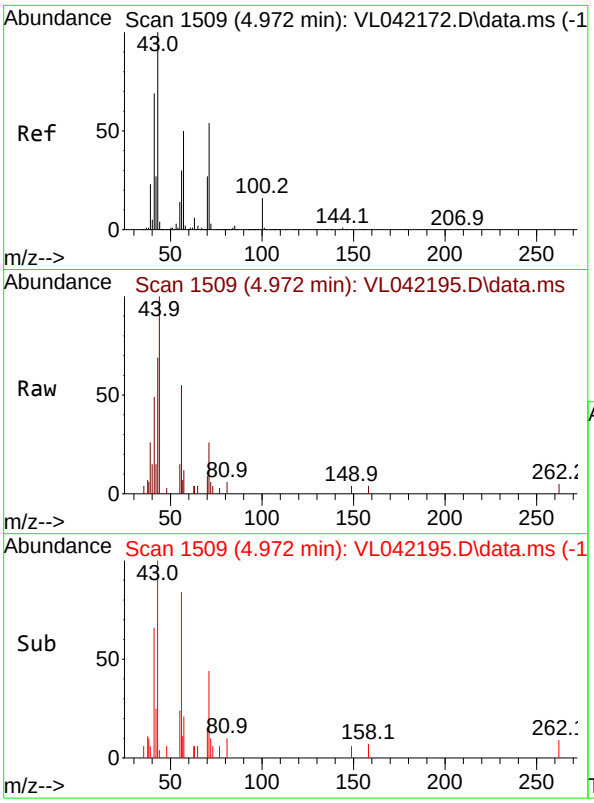


#9
Propene
Concen: 0.152 ppbv
RT: 1.615 min Scan# 472
Delta R.T. 0.133 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 41 Resp: 1849

Ion	Ratio	Lower	Upper
41	100		
42	66.0	55.4	83.2



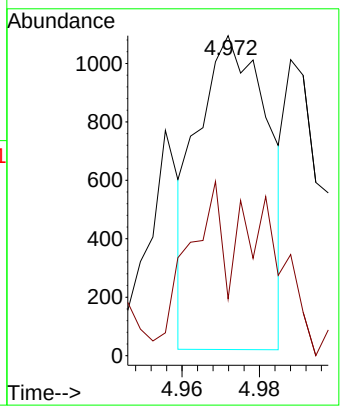


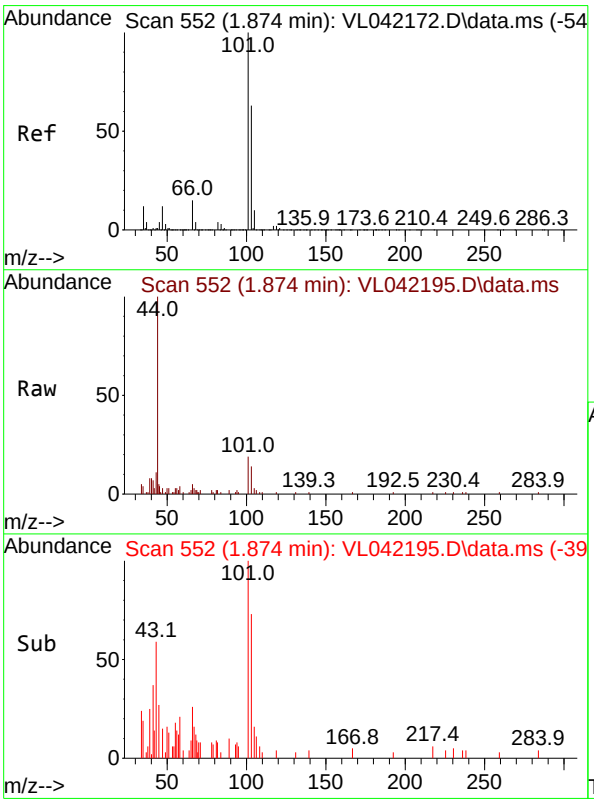
#10
Heptane
Concen: 0.042 ppbv
RT: 4.972 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 43 Resp: 1355

Ion	Ratio	Lower	Upper
43	100		
57	71.4	39.4	59.2#

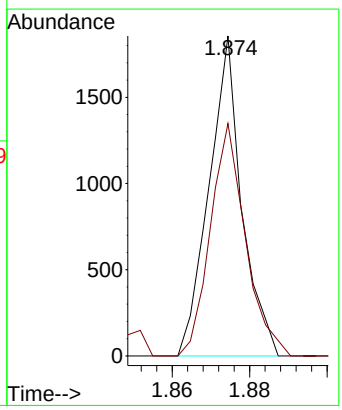


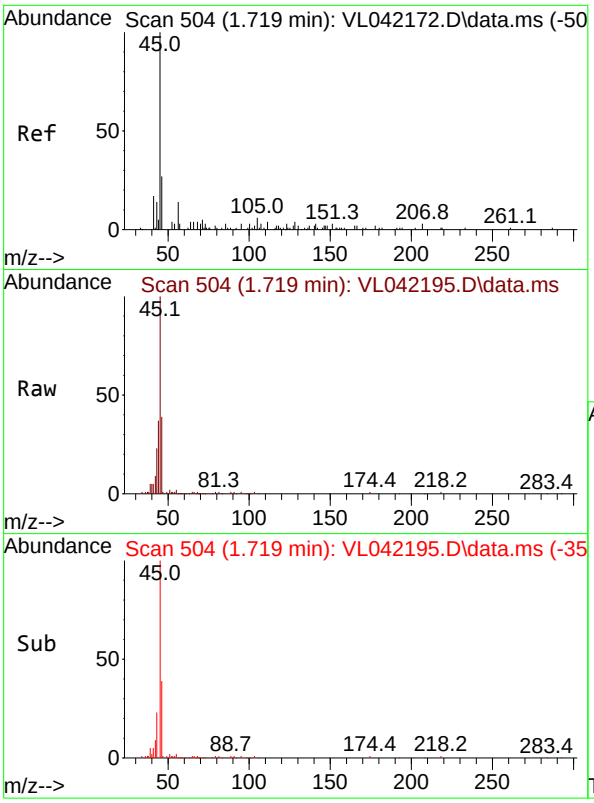


#11
Trichlorofluoromethane
Concen: 0.043 ppbv
RT: 1.874 min Scan# 552
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion:101 Resp: 1086

Ion	Ratio	Lower	Upper
101	100		
103	72.6	50.2	75.2



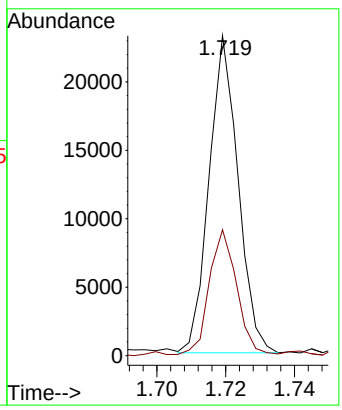


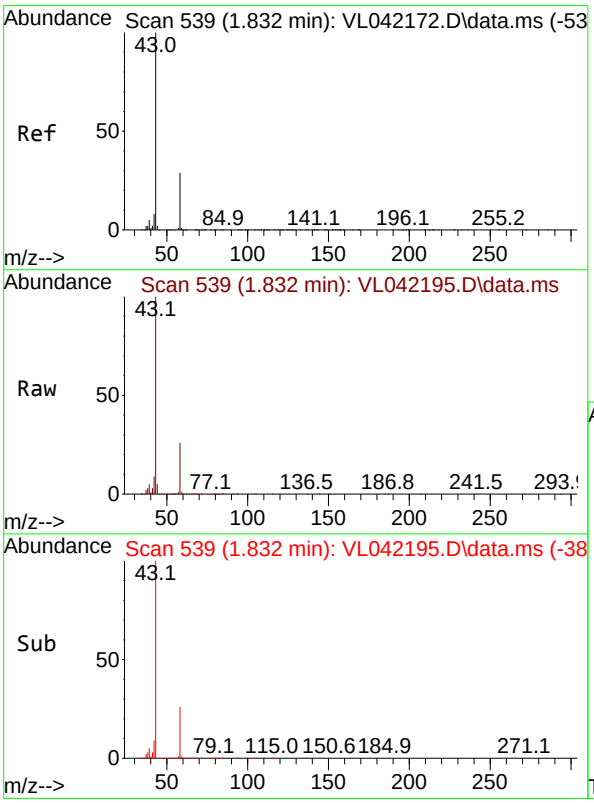
#13
Ethanol
Concen: 11.835 ppbv
RT: 1.719 min Scan# 5(
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 45 Resp: 13574

Ion	Ratio	Lower	Upper
45	100		
46	40.2	20.2	80.8

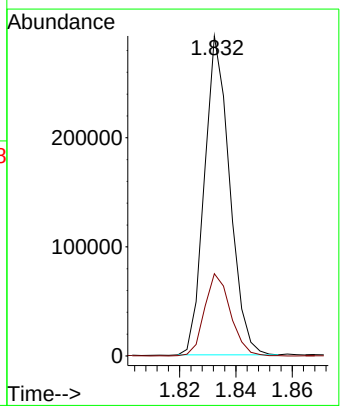


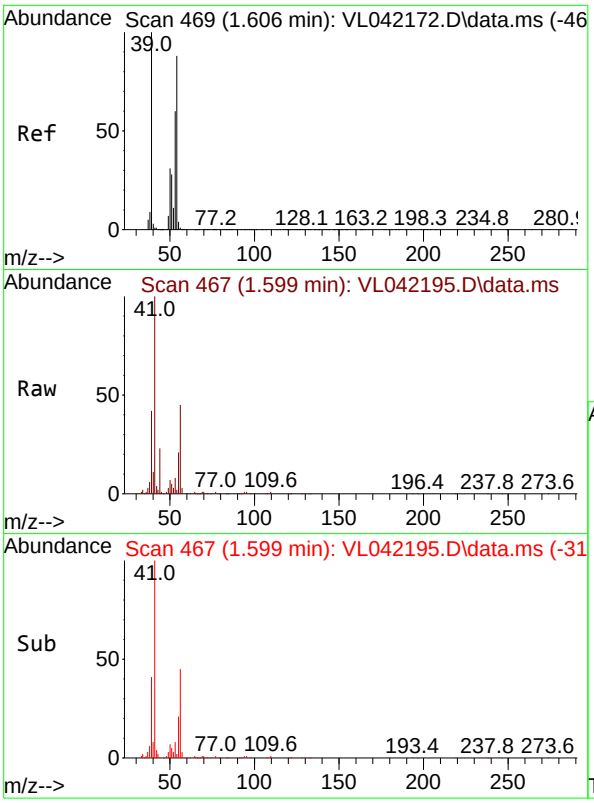


#15
Acetone
Concen: 7.416 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 43 Resp: 182020

Ion	Ratio	Lower	Upper
43	100		
58	26.8	23.2	34.8



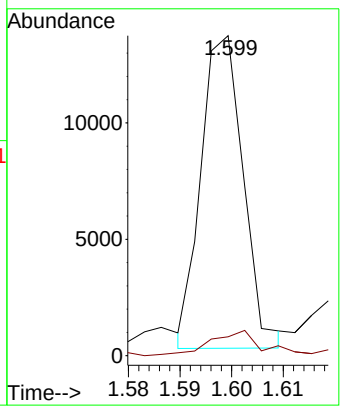


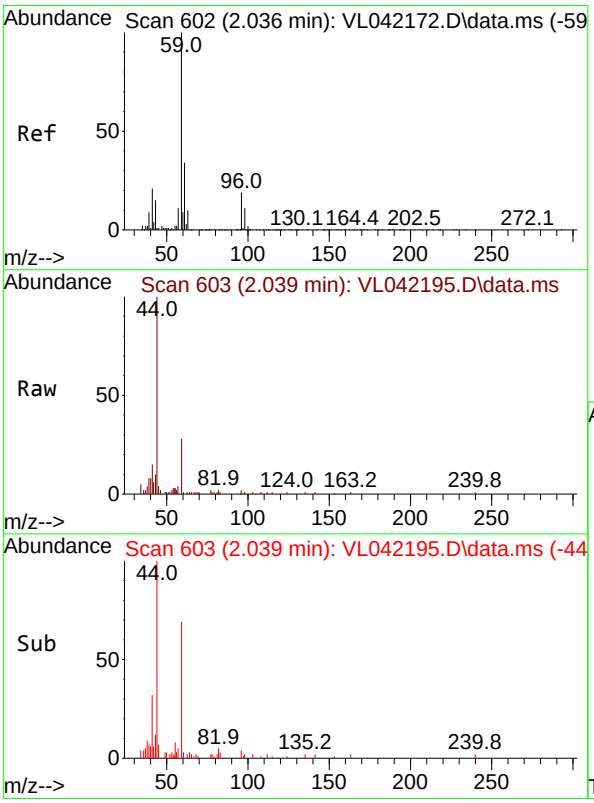
#16
1,3-Butadiene
Concen: 0.637 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 39 Resp: 7635

Ion	Ratio	Lower	Upper
39	100		
54	17.1	60.7	91.1#

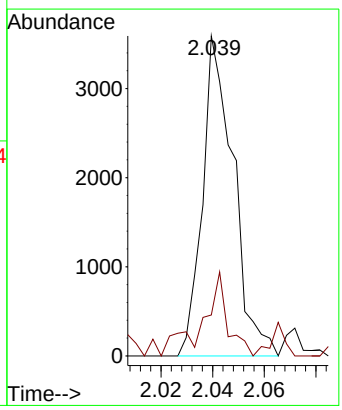


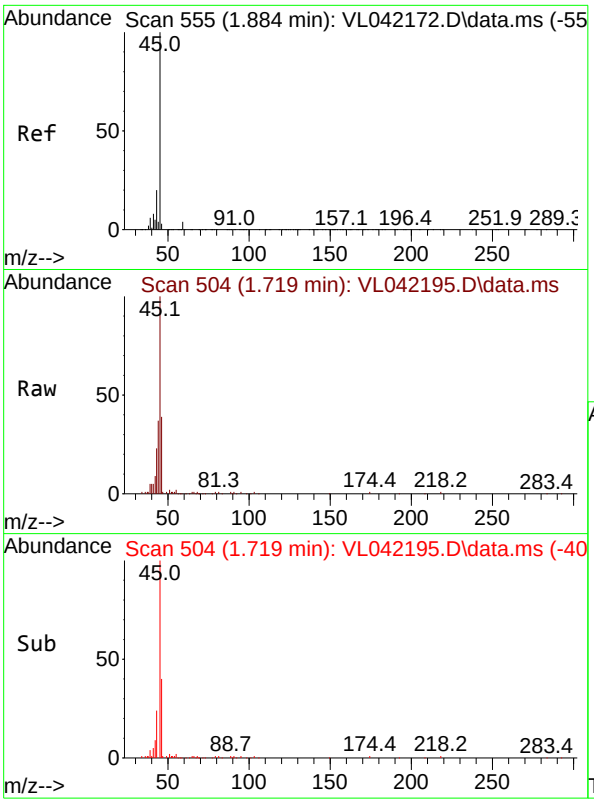


#17
tert-Butyl alcohol
Concen: 0.098 ppbv
RT: 2.039 min Scan# 603
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 59 Resp: 2983

Ion	Ratio	Lower	Upper
59	100		
57	27.3	8.9	13.3#



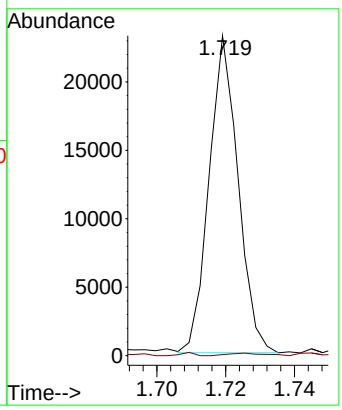


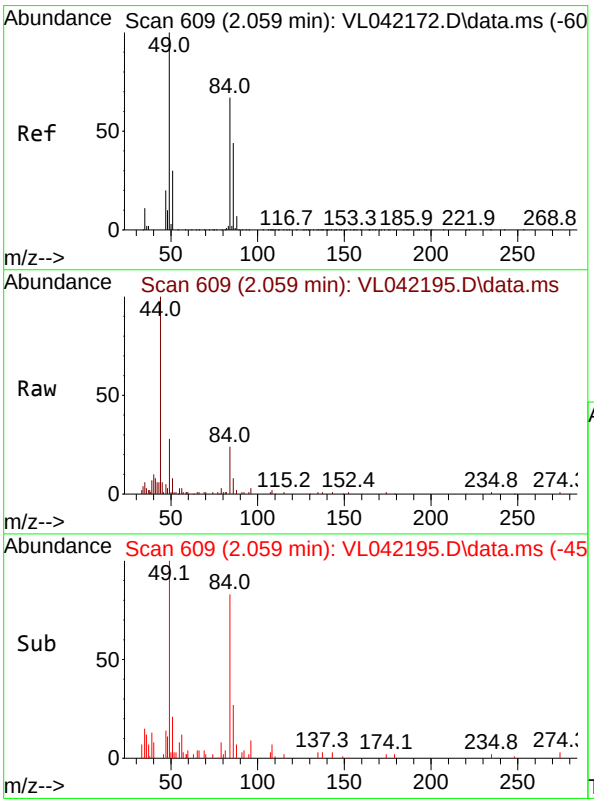
#19
Isopropyl Alcohol
Concen: 0.980 ppbv
RT: 1.719 min Scan# 5(
Delta R.T. -0.165 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 45 Resp: 13574

Ion	Ratio	Lower	Upper
45	100		
58	358.8	36.9	55.3#

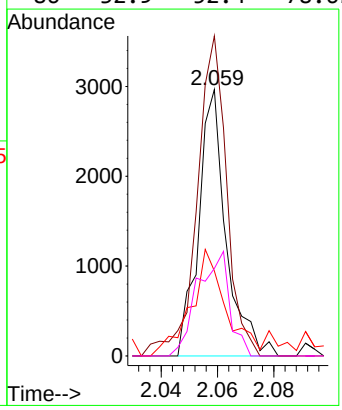


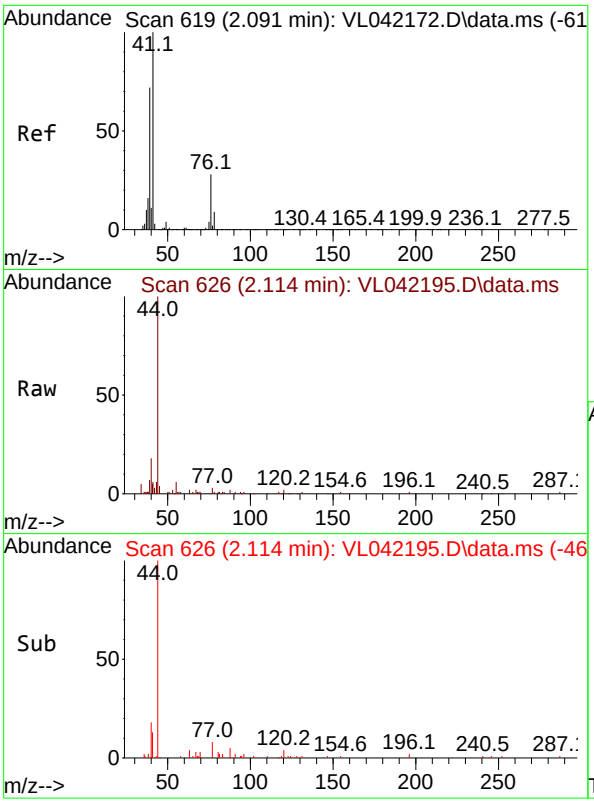


#20
Methylene Chloride
Concen: 0.221 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 84 Resp: 2019

Ion	Ratio	Lower	Upper
84	100		
49	111.6	120.2	180.4#
51	31.6	37.4	56.0#
86	32.9	52.4	78.6#



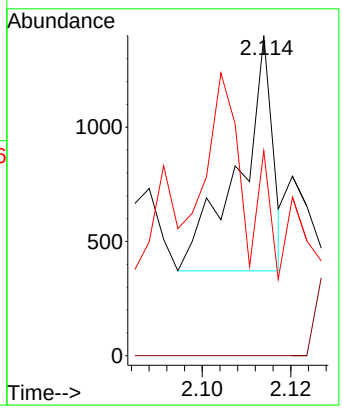


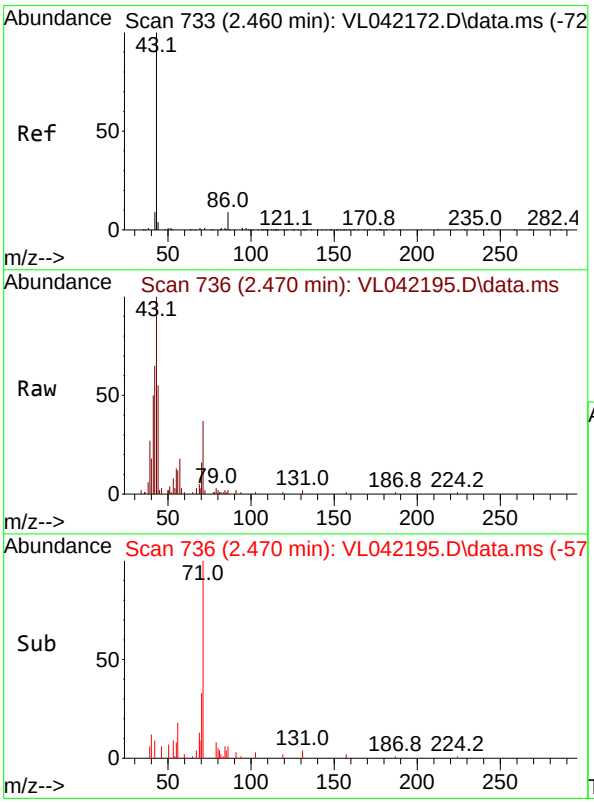
#21
Allyl Chloride
Concen: 0.032 ppbv
RT: 2.114 min Scan# 6
Delta R.T. 0.023 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 41 Resp: 549

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.1	36.1#
39	146.1	61.1	91.7#

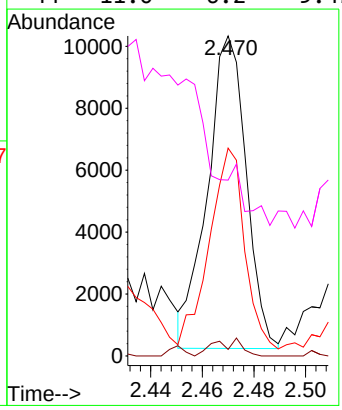


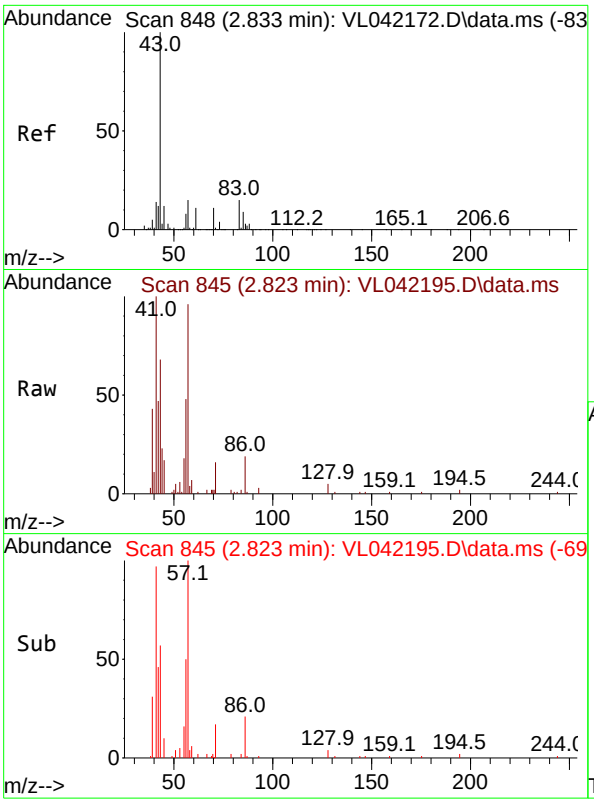


#23
Vinyl Acetate
Concen: 0.992 ppbv
RT: 2.470 min Scan# 736
Delta R.T. 0.010 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 43 Resp: 10533

Ion	Ratio	Lower	Upper
43	100		
86	2.1	5.5	8.3#
42	65.2	8.6	13.0#
44	11.0	6.2	9.4#



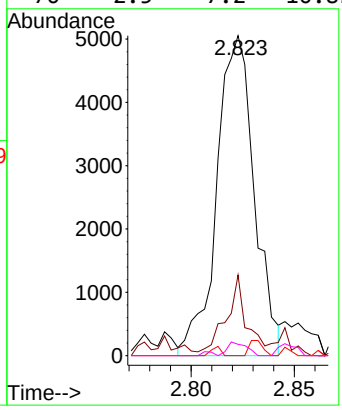


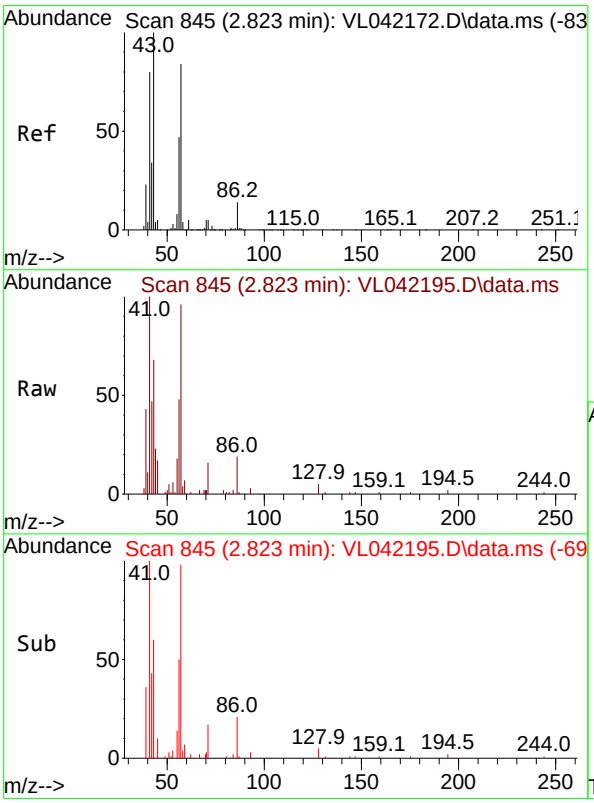
#25
Ethyl Acetate
Concen: 0.100 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 43 Resp: 6375

Ion	Ratio	Lower	Upper
43	100		
45	22.8	8.2	12.2#
61	3.3	7.3	10.9#
70	2.5	7.2	10.8#

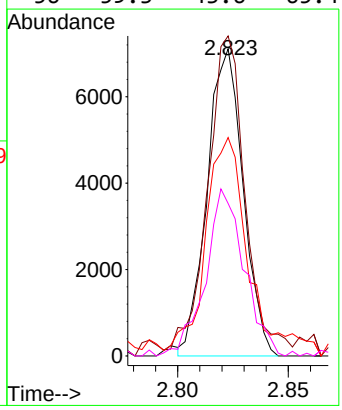


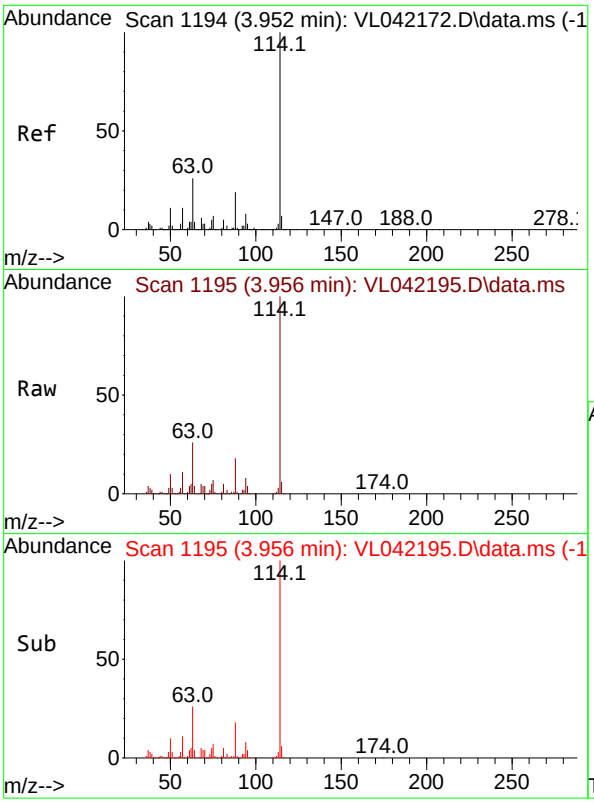


#26
Hexane
Concen: 0.327 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 57 Resp: 8040

Ion	Ratio	Lower	Upper
57	100		
41	117.4	76.6	114.8#
43	86.5	207.8	311.8#
56	59.3	43.6	65.4



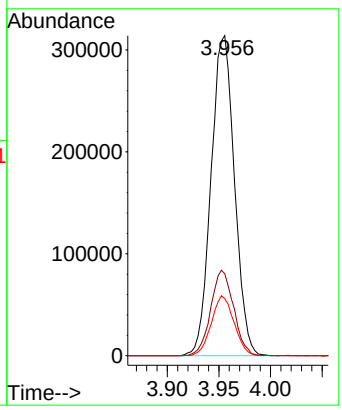


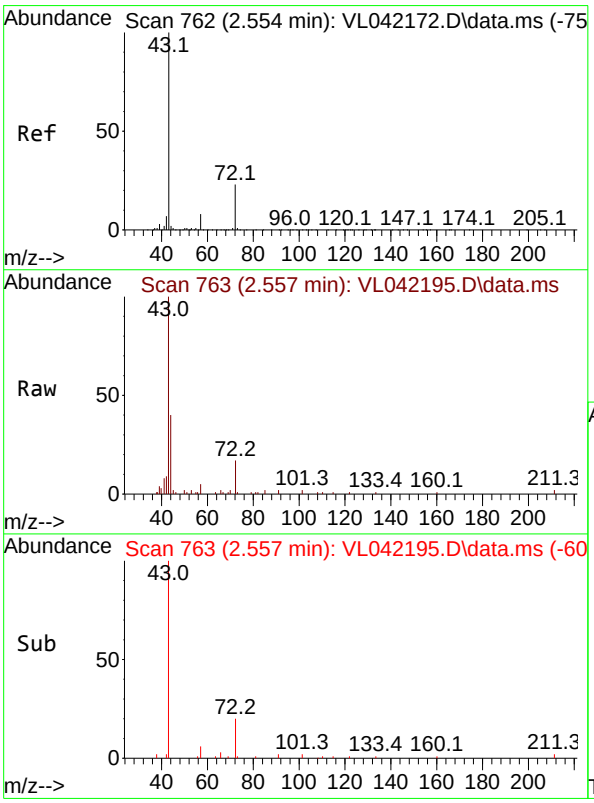
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion:114 Resp: 495493

Ion	Ratio	Lower	Upper
114	100		
63	26.2	20.7	31.1
88	18.1	15.0	22.4

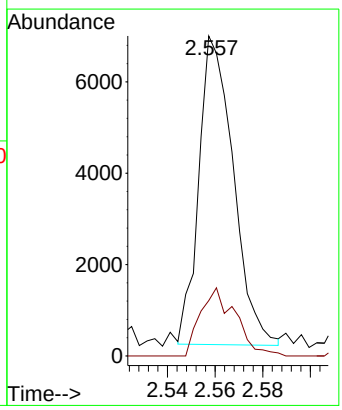


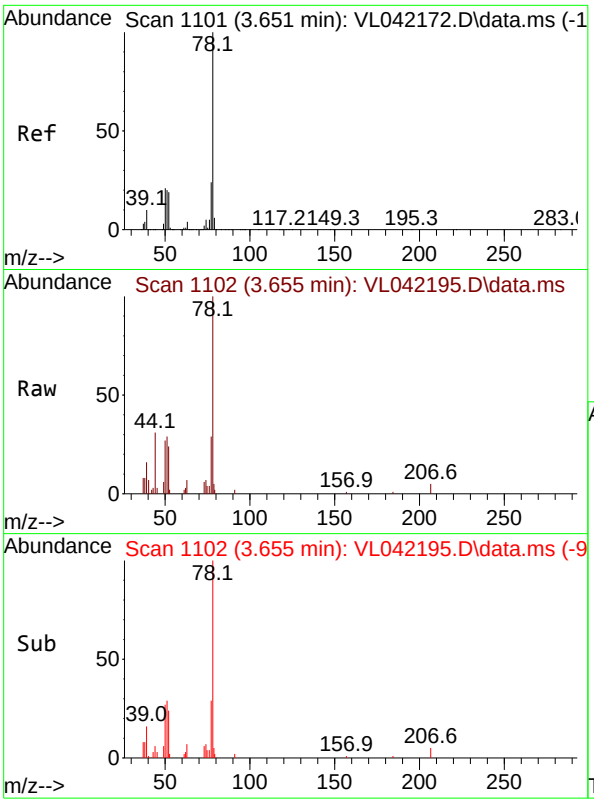


#34
2-Butanone
Concen: 0.189 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 43 Resp: 6791

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2



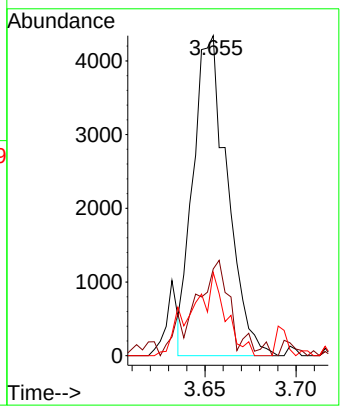


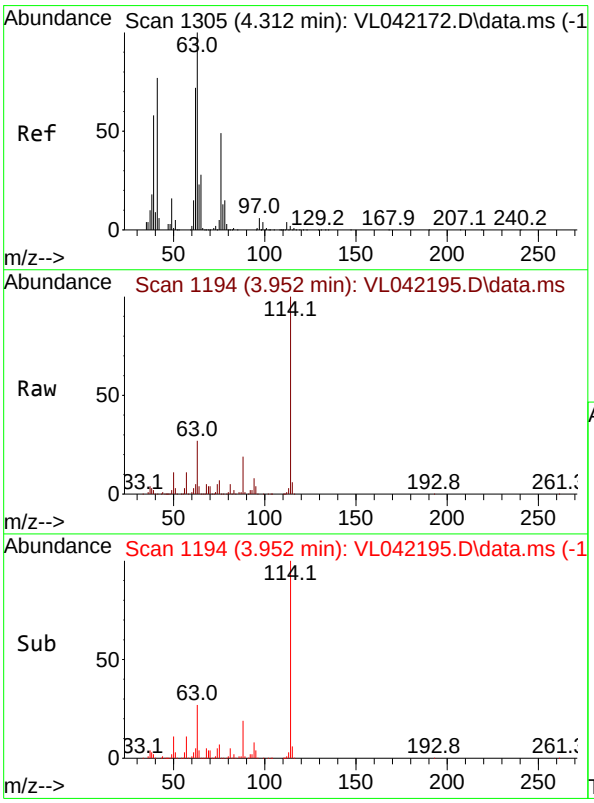
#36
Benzene
Concen: 0.115 ppbv
RT: 3.655 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 78 Resp: 5647

Ion	Ratio	Lower	Upper
78	100		
77	27.1	19.1	28.7
50	16.7	16.6	24.8

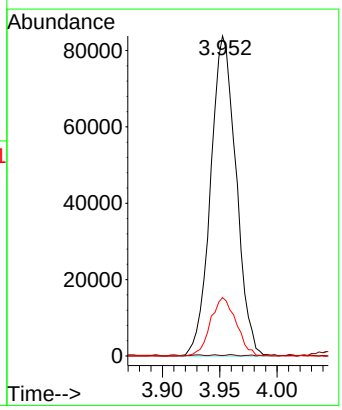


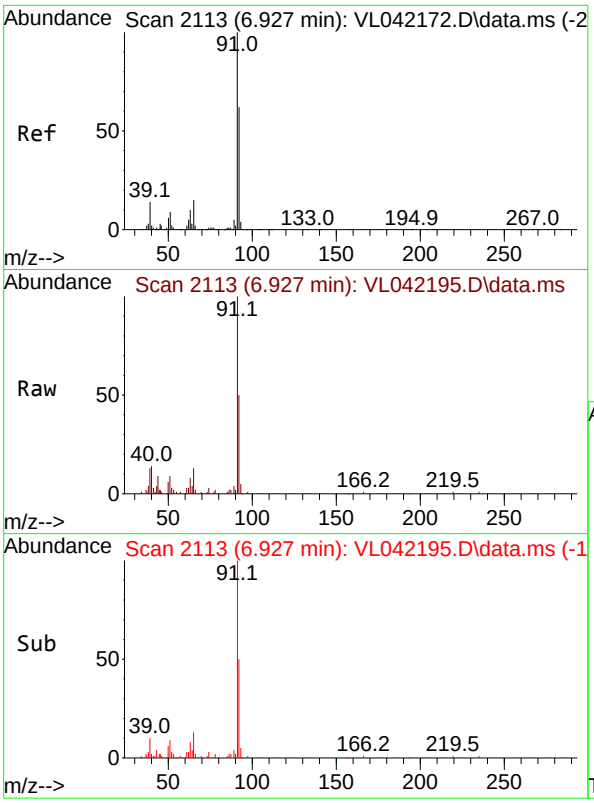


#39
1,2-Dichloropropane
Concen: 7.239 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.359 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 63 Resp: 129498

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	18.3	57.6	86.4#



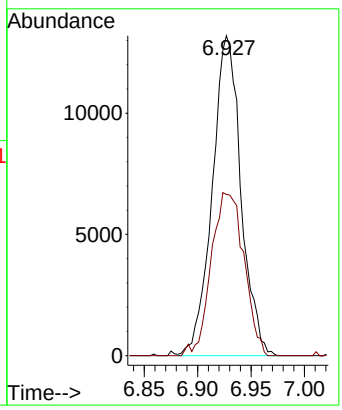


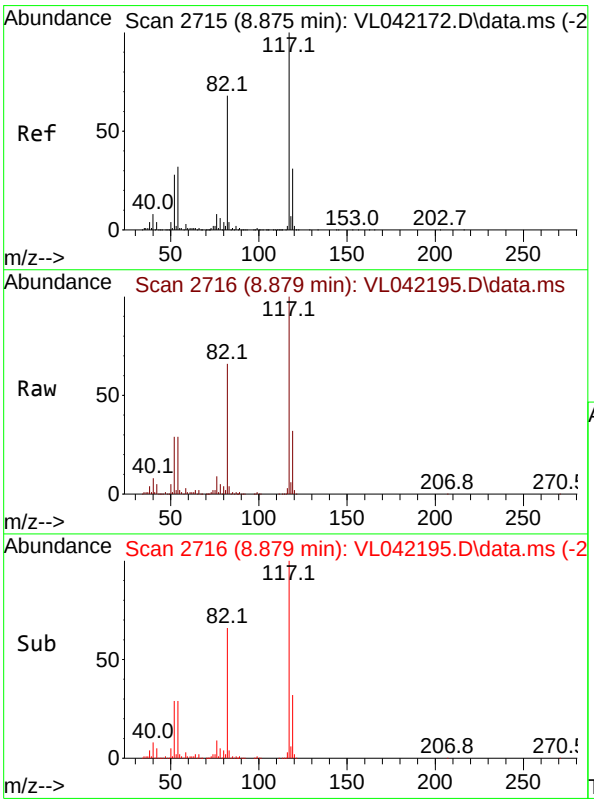
#53
Toluene
Concen: 0.424 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 91 Resp: 24689

Ion	Ratio	Lower	Upper
91	100		
92	58.1	48.4	72.6

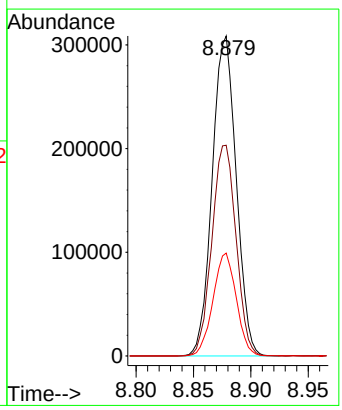


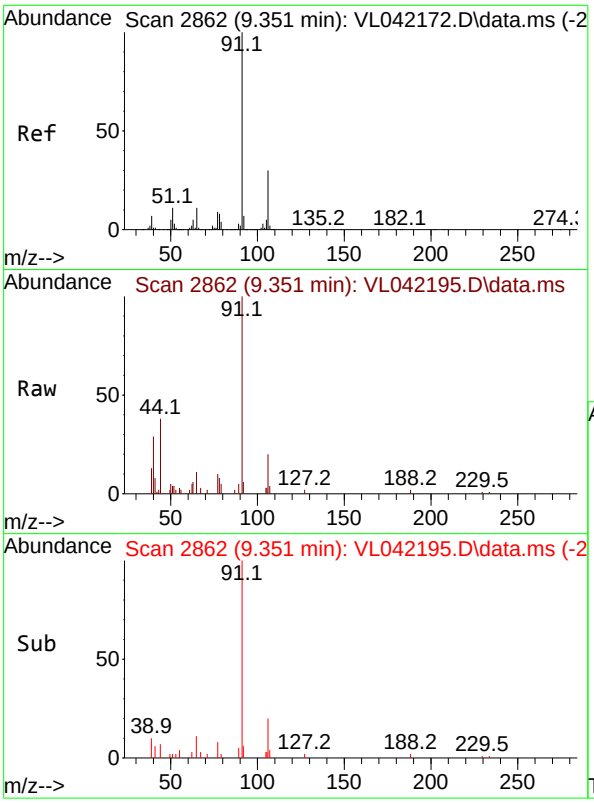


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2716
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion:117 Resp: 449375

Ion	Ratio	Lower	Upper
117	100		
82	66.4	55.8	83.6
119	31.3	25.5	38.3



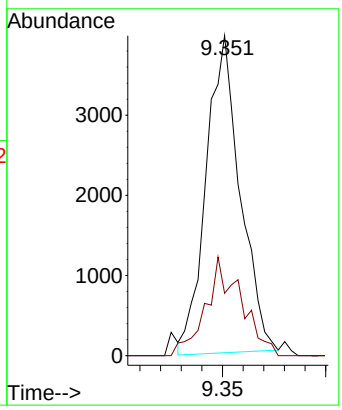


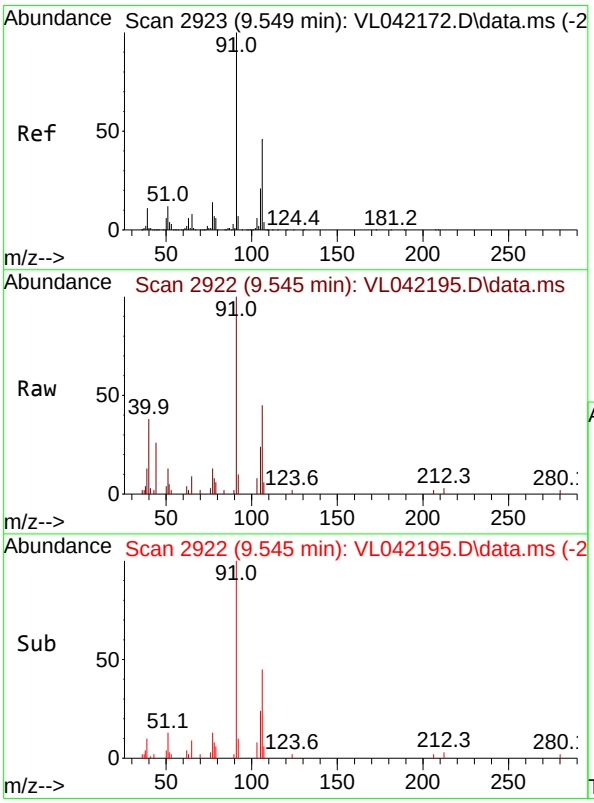
#58
Ethyl Benzene
Concen: 0.057 ppbv
RT: 9.351 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 91 Resp: 4541

Ion	Ratio	Lower	Upper
91	100		
106	19.9	24.2	36.2#

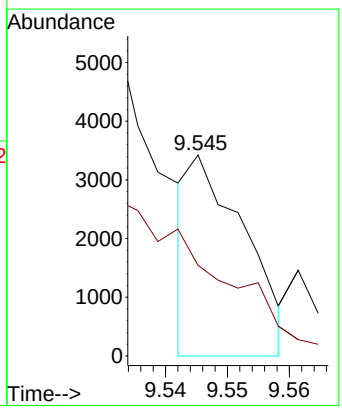


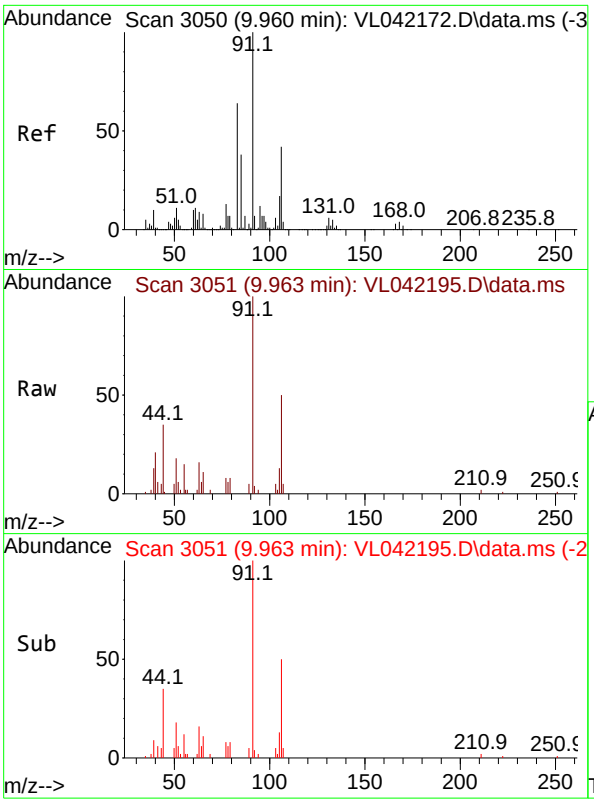


#59
m/p-Xylene
Concen: 0.034 ppbv
RT: 9.545 min Scan# 2922
Delta R.T. -0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 91 Resp: 2140

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#



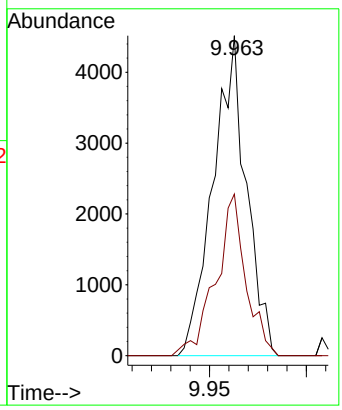


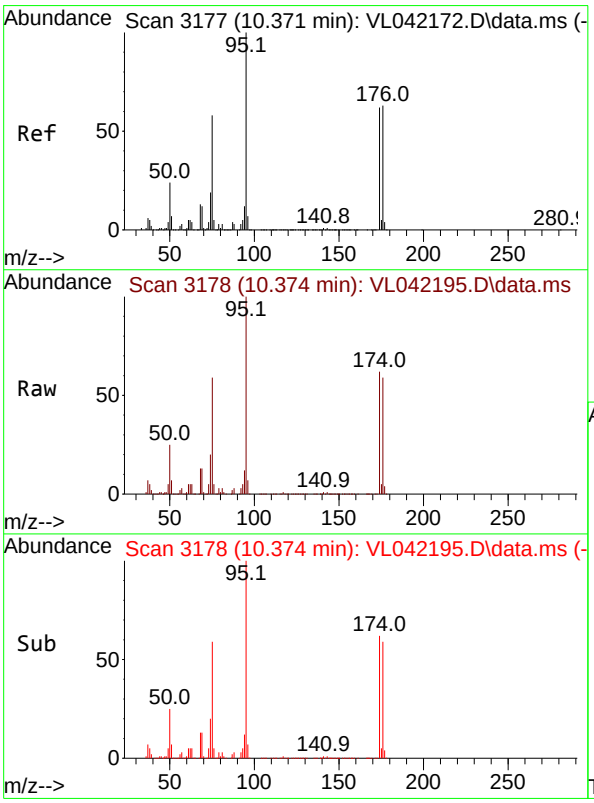
#60
o-Xylene
Concen: 0.084 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion: 91 Resp: 5392

Ion	Ratio	Lower	Upper
91	100		
106	45.6	20.8	62.5

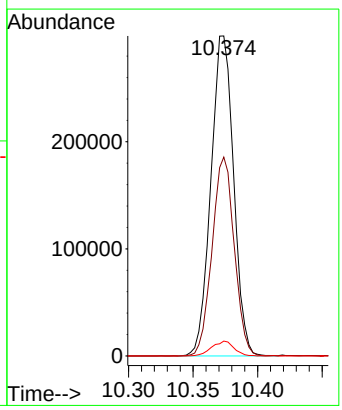


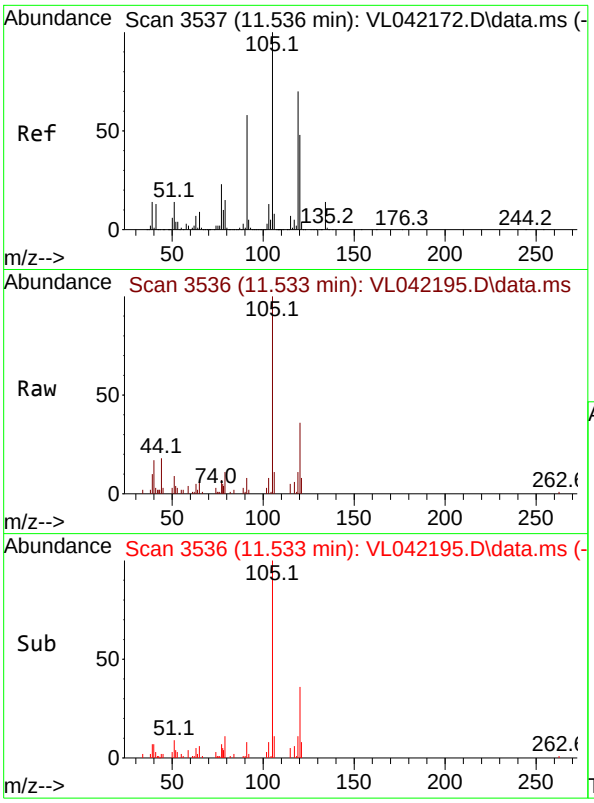


#68
1-Bromo-4-Fluorobenzene
Concen: 9.904 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Tgt Ion: 95 Resp: 365476

Ion	Ratio	Lower	Upper
95	100		
174	60.7	50.6	76.0
175	4.6	3.8	5.6



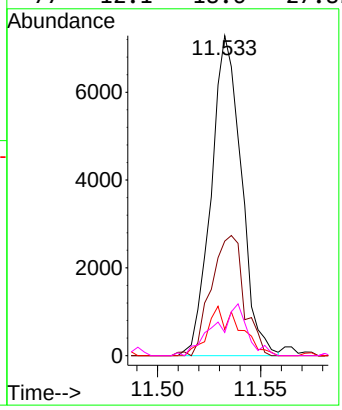


#74
1,2,4-Trimethylbenzene
Concen: 0.092 ppbv
RT: 11.533 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042195.D
Acq: 28 Mar 2025 00:06

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DL

Tgt Ion:105 Resp: 7390

Ion	Ratio	Lower	Upper
105	100		
120	35.8	38.6	58.0#
91	8.2	46.2	69.2#
77	12.1	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042196.D
Acq On : 28 Mar 2025 00:44
Operator : SY/MD
Sample : Q1669-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Quant Time: Mar 28 02:20:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	169076	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.956	114	480272	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	439128	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	364412	10.105	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	10520	0.421	ppbv		95
3) Chlorodifluoromethane	1.473	51	8616	0.338	ppbv		93
4) Chloromethane	1.532	50	3735	0.366	ppbv		90
6) Bromomethane	1.667	94	351	0.076	ppbv	#	73
7) Chloroethane	1.706	64	606	0.148	ppbv	#	57
9) Propene	1.483	41	9977	0.854	ppbv		88
10) Heptane	4.969	43	3770	0.121	ppbv	#	28
11) Trichlorofluoromethane	1.875	101	5375	0.221	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.140	101	1528	0.077	ppbv		98
13) Ethanol	1.719	45	64469	58.343	ppbv		85
15) Acetone	1.833	43	856935	36.240	ppbv		98
16) 1,3-Butadiene	1.599	39	39942	3.459	ppbv	#	21
17) tert-Butyl alcohol	2.043	59	15220	0.517	ppbv	#	91
19) Isopropyl Alcohol	1.884	45	14009	1.050	ppbv	#	1
20) Methylene Chloride	2.059	84	3137	0.356	ppbv		94
21) Allyl Chloride	2.079	41	1778	0.107	ppbv	#	22
23) Vinyl Acetate	2.470	43	52228	5.103	ppbv	#	51
25) Ethyl Acetate	2.823	43	32884	0.536	ppbv	#	87
26) Hexane	2.826	57	41919	1.768	ppbv	#	34
30) Cyclohexane	3.852	84	2703	0.131	ppbv	#	19
34) 2-Butanone	2.561	43	32222	0.925	ppbv		99
35) Carbon Tetrachloride	3.758	117	2485	0.066	ppbv		88
36) Benzene	3.652	78	29626	0.622	ppbv	#	88
39) 1,2-Dichloropropane	3.956	63	124212	7.163	ppbv	#	24
44) 2,2,4-Trimethylpentane	4.639	57	4920	0.061	ppbv	#	42
50) 4-Methyl-2-Pentanone	5.772	43	15022	0.272	ppbv		90
53) Toluene	6.933	91	128886	2.284	ppbv		99
58) Ethyl Benzene	9.351	91	21749	0.279	ppbv		97
59) m/p-Xylene	9.526	91	65488	1.051	ppbv		98
60) o-Xylene	9.963	91	30665	0.491	ppbv		93
61) Styrene	9.866	104	3531	0.114	ppbv		97
62) Isopropylbenzene	10.536	105	3147	0.034	ppbv		92
64) n-propylbenzene	10.989	120	1763	0.073	ppbv	#	48
65) tert-Butylbenzene	11.536	119	4264	0.049	ppbv	#	49
72) 4-Ethyltoluene	11.125	105	11451	0.147	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.199	105	10625	0.156	ppbv		87
74) 1,2,4-Trimethylbenzene	11.536	105	38101	0.487	ppbv	#	69

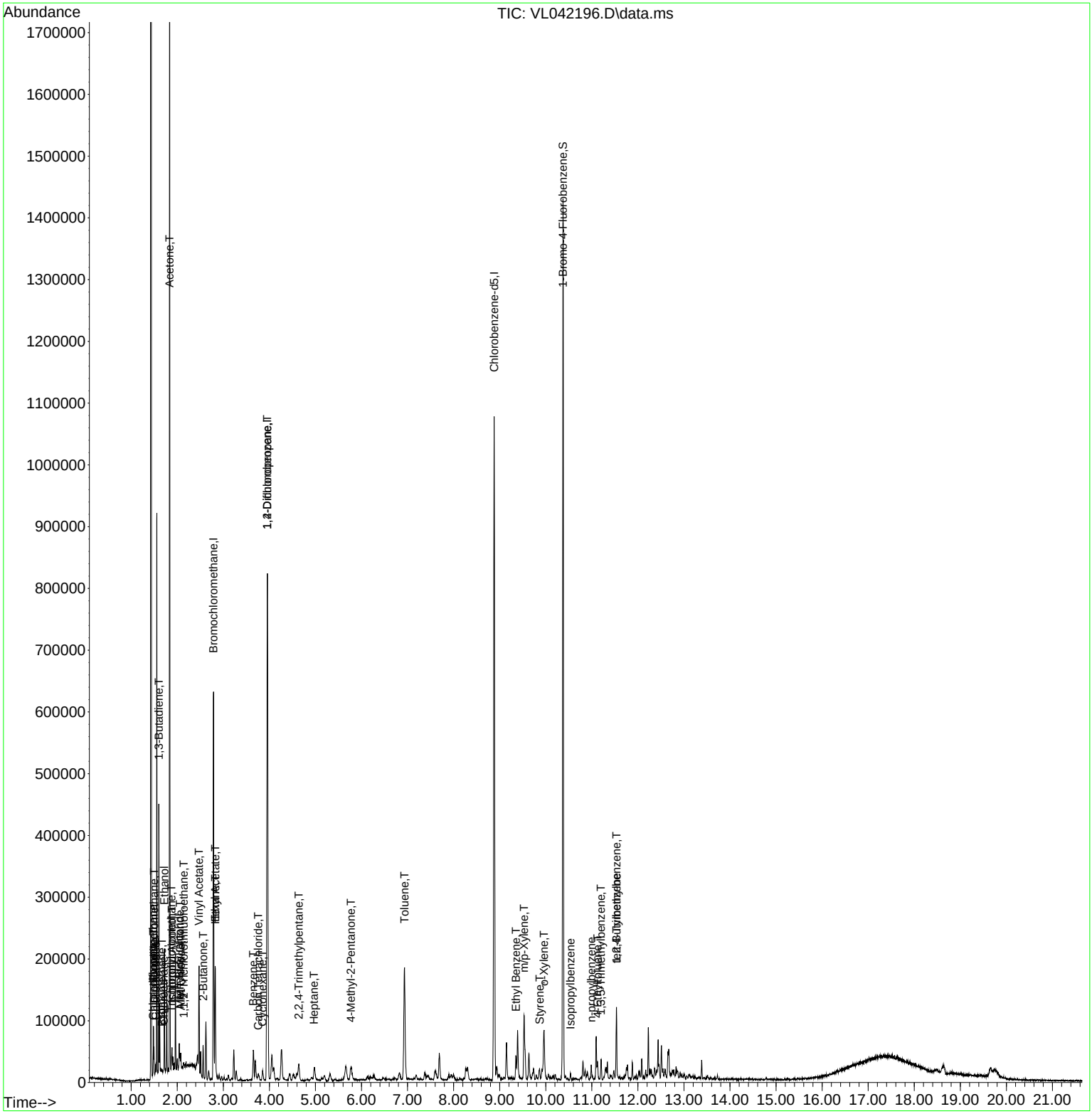
(#) = qualifier out of range (m) = manual integration (+) = signals summed

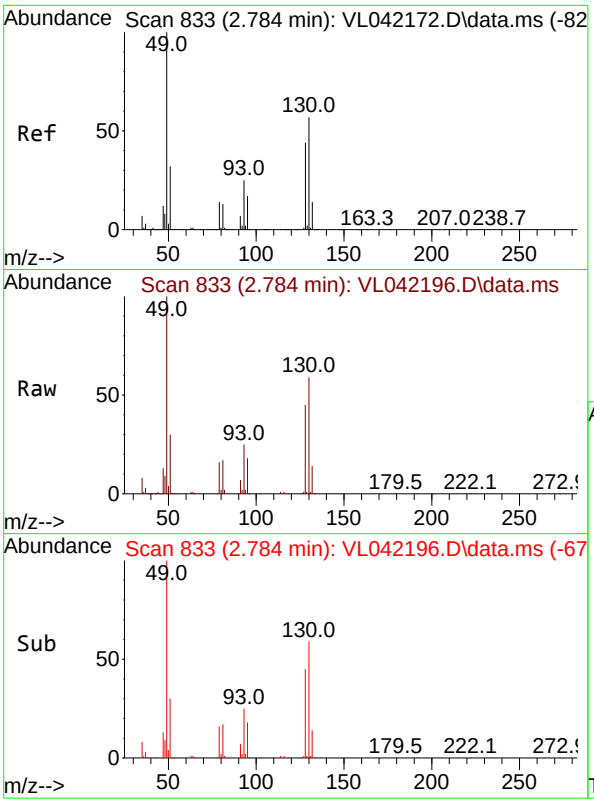
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042196.D
Acq On : 28 Mar 2025 00:44
Operator : SY/MD
Sample : Q1669-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Quant Time: Mar 28 02:20:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



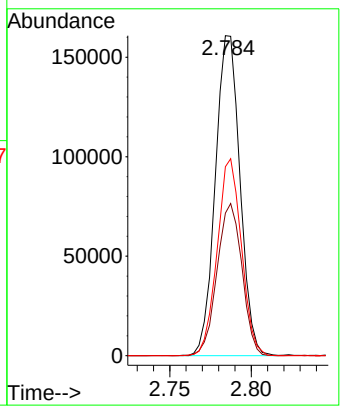


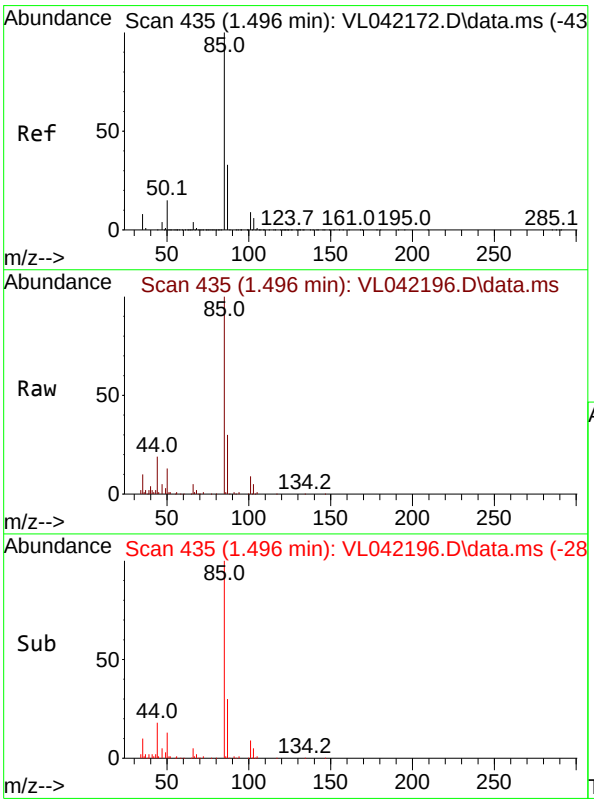
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 49 Resp: 169076

Ion	Ratio	Lower	Upper
49	100		
128	48.0	22.9	68.5
130	60.4	28.8	86.4

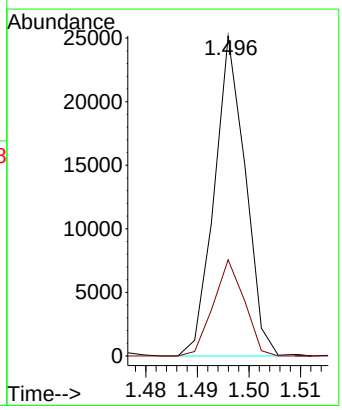


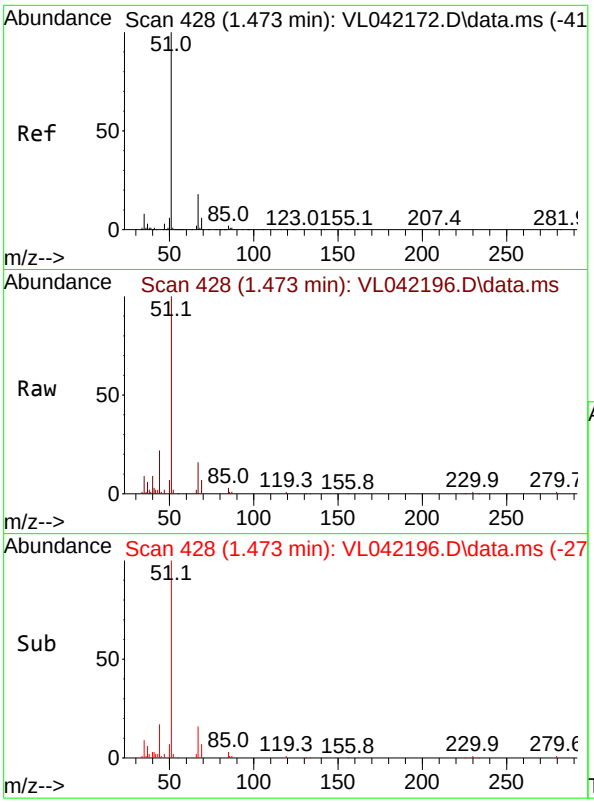


#2
Dichlorodifluoromethane
Concen: 0.421 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 85 Resp: 10520

Ion	Ratio	Lower	Upper
85	100		
87	30.1	26.1	39.1



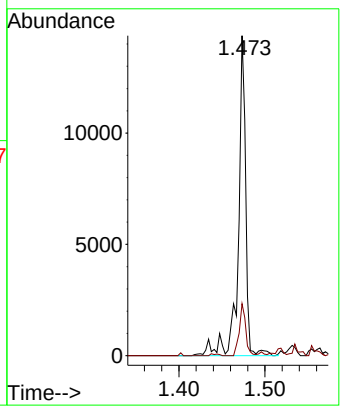


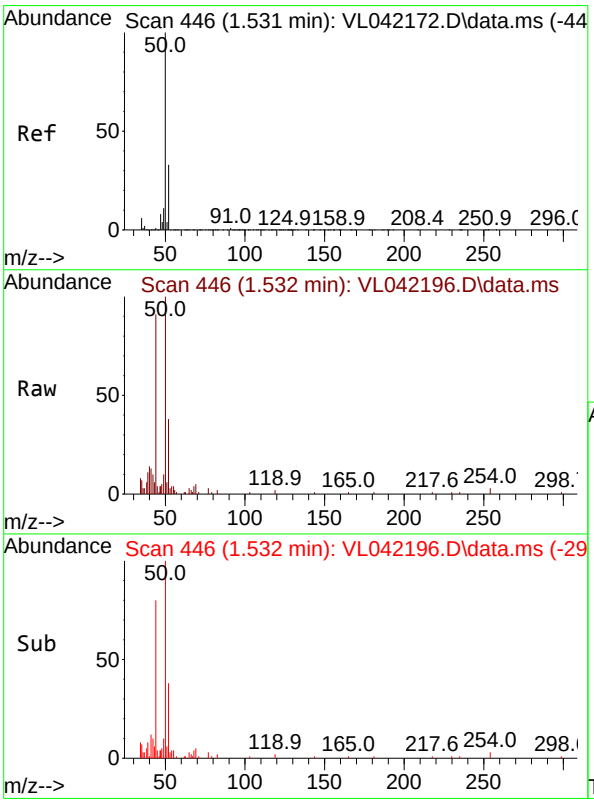
#3
Chlorodifluoromethane
Concen: 0.338 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 51 Resp: 8616

Ion	Ratio	Lower	Upper
51	100		
67	15.8	15.0	22.6

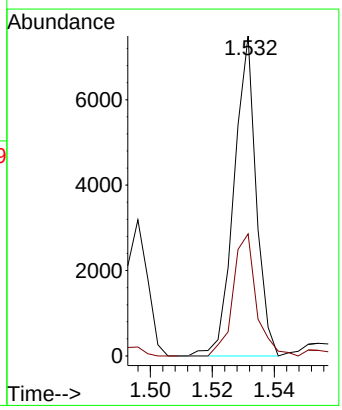


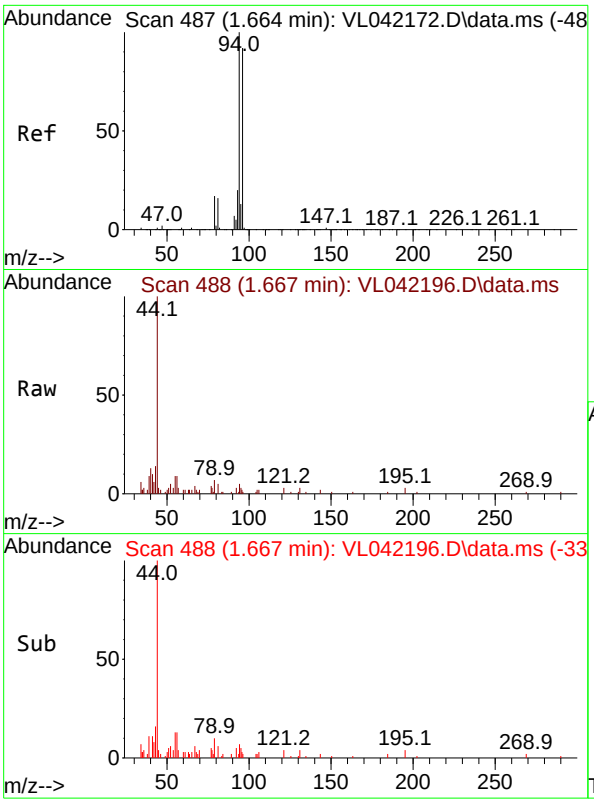


#4
Chloromethane
Concen: 0.366 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 50 Resp: 3735

Ion	Ratio	Lower	Upper
50	100		
52	38.1	26.1	39.1



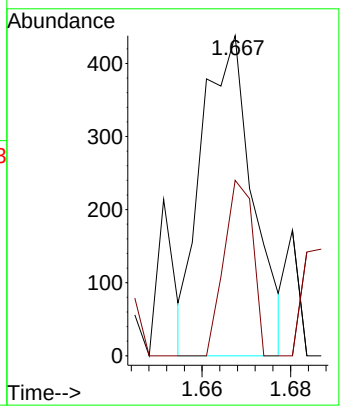


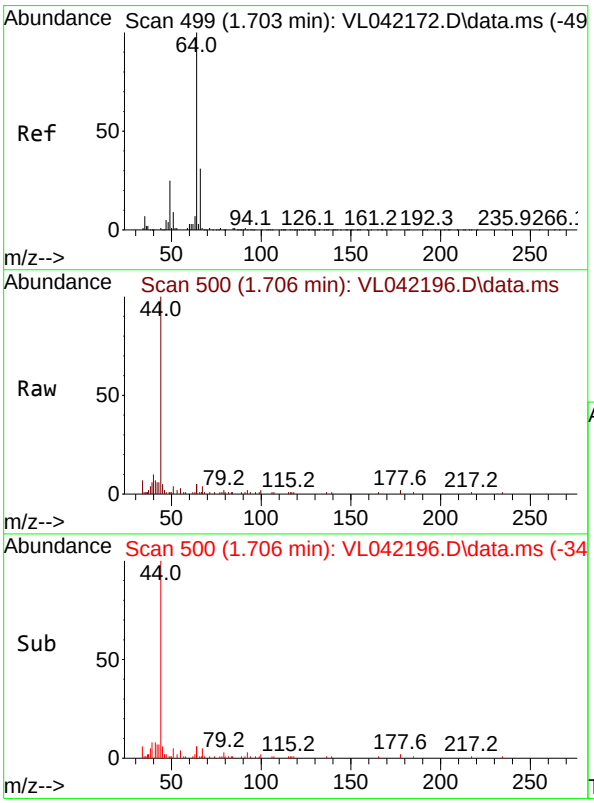
#6
Bromomethane
Concen: 0.076 ppbv
RT: 1.667 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 94 Resp: 351

Ion	Ratio	Lower	Upper
94	100		
96	65.6	73.1	109.7#

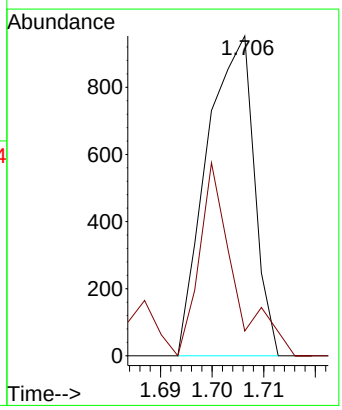


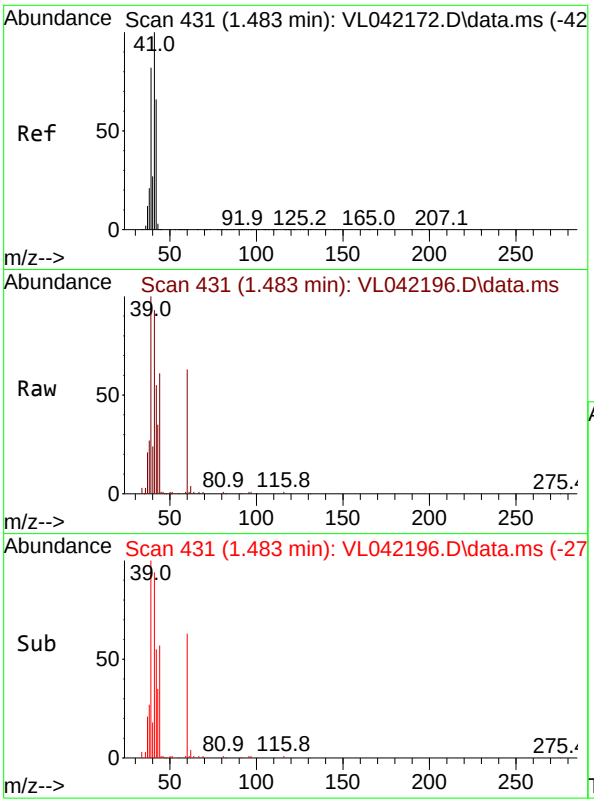


#7
Chloroethane
Concen: 0.148 ppbv
RT: 1.706 min Scan# 500
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 64 Resp: 606

Ion	Ratio	Lower	Upper
64	100		
66	7.8	25.2	37.8#



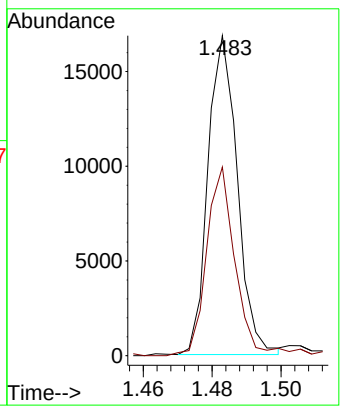


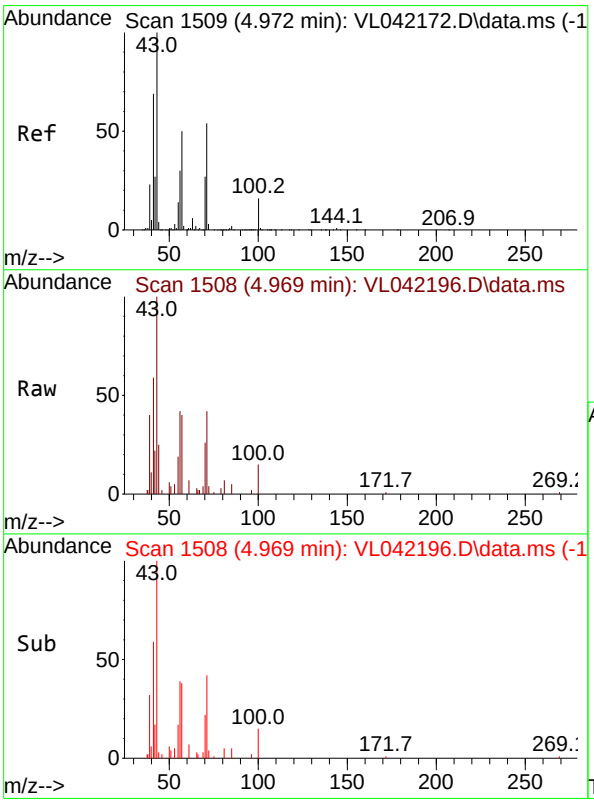
#9
Propene
Concen: 0.854 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 41 Resp: 9977

Ion	Ratio	Lower	Upper
41	100		
42	59.7	55.4	83.2

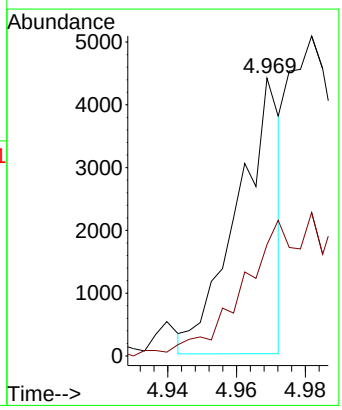


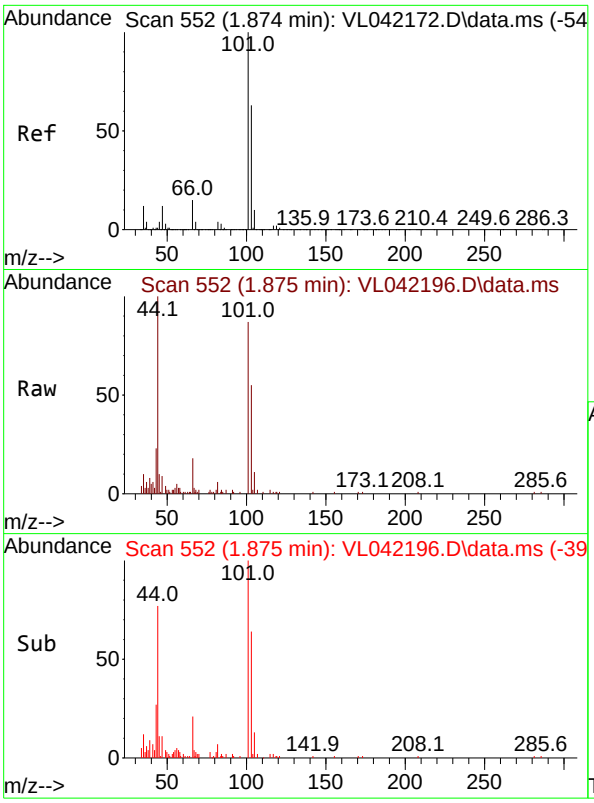


#10
Heptane
Concen: 0.121 ppbv
RT: 4.969 min Scan# 1508
Delta R.T. -0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 3770

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#



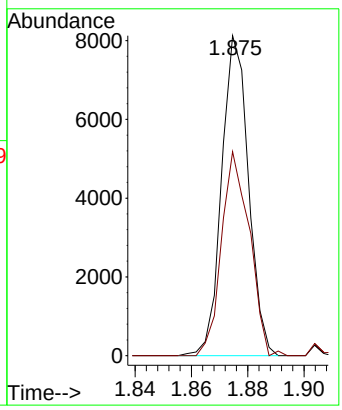


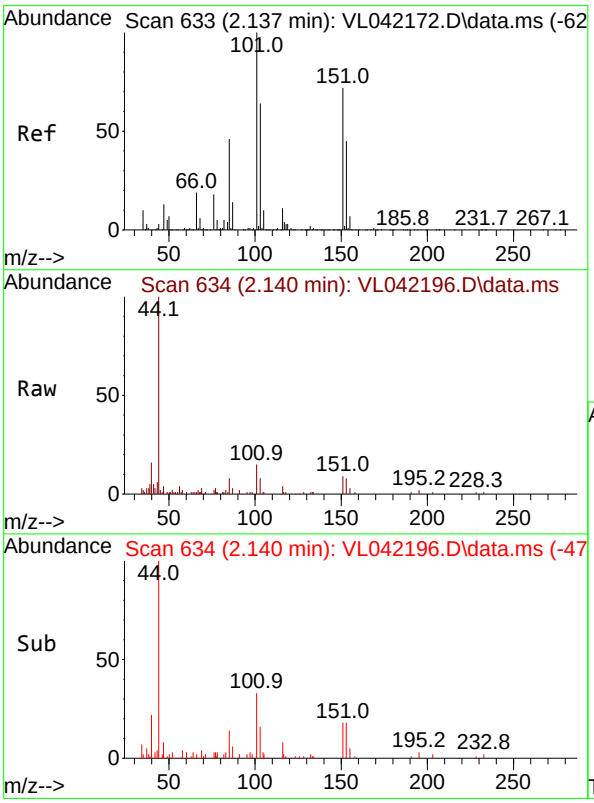
#11
Trichlorofluoromethane
Concen: 0.221 ppbv
RT: 1.875 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion:101 Resp: 5375

Ion	Ratio	Lower	Upper
101	100		
103	63.7	50.2	75.2

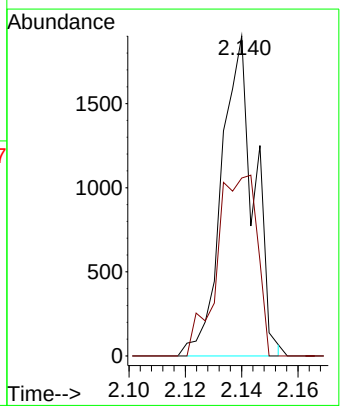


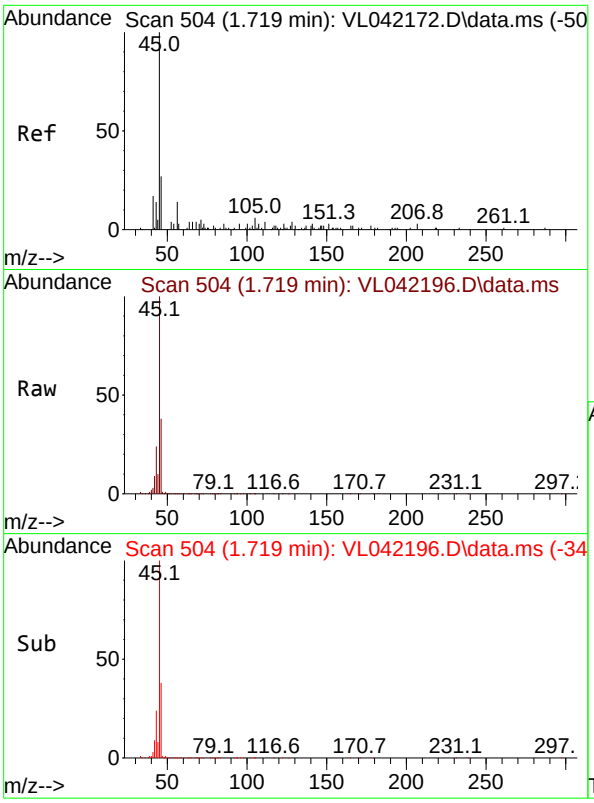


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.077 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:101 Resp: 1528

Ion	Ratio	Lower	Upper
101	100		
151	69.8	57.1	85.7



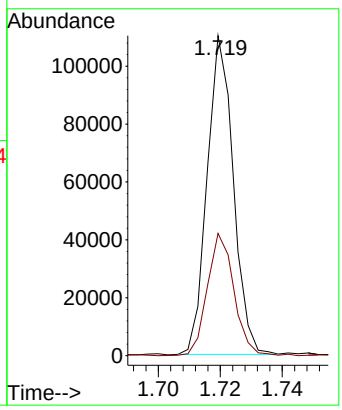


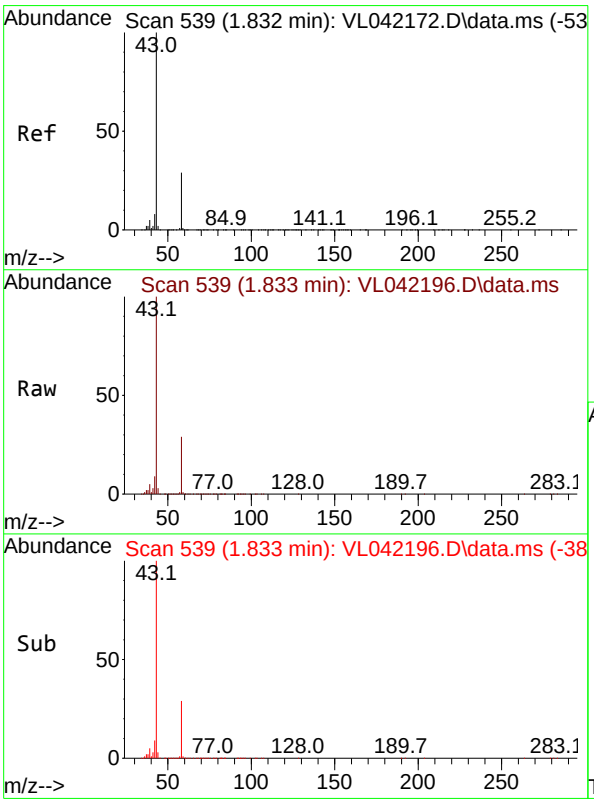
#13
Ethanol
Concen: 58.343 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 45 Resp: 64469

Ion	Ratio	Lower	Upper
45	100		
46	40.2	20.2	80.8

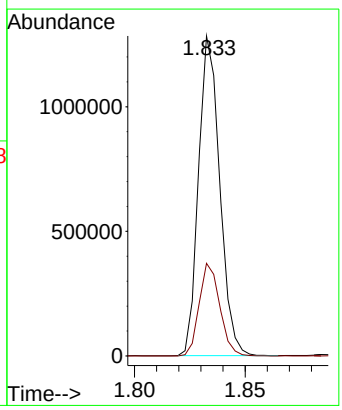


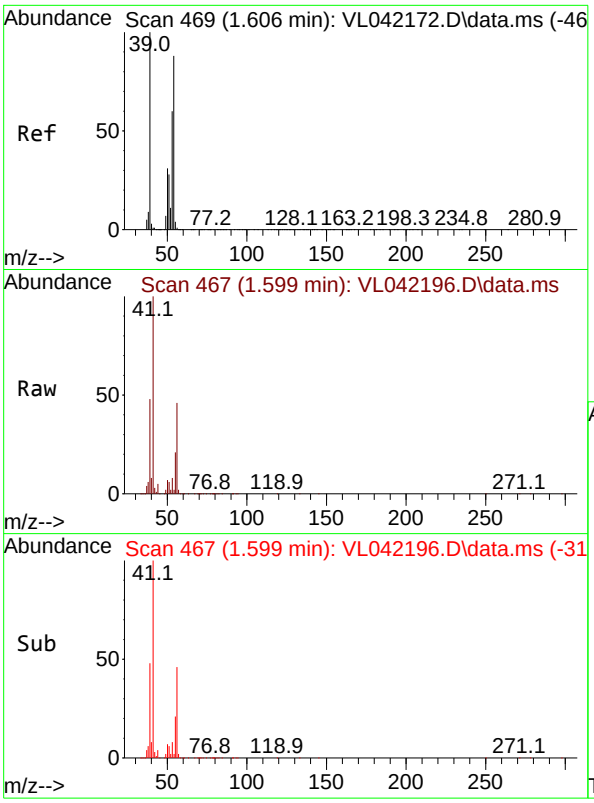


#15
Acetone
Concen: 36.240 ppbv
RT: 1.833 min Scan# 539
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 856935

Ion	Ratio	Lower	Upper
43	100		
58	28.2	23.2	34.8



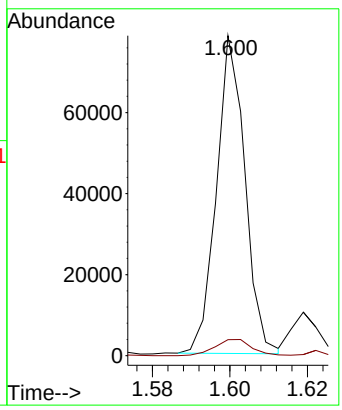


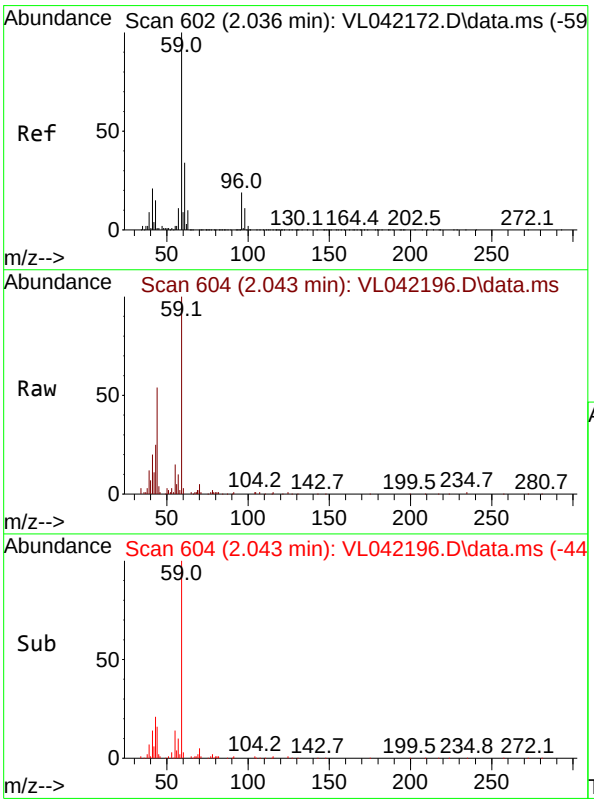
#16
1,3-Butadiene
Concen: 3.459 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.006 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 39 Resp: 39942

Ion	Ratio	Lower	Upper
39	100		
54	7.9	60.7	91.1#

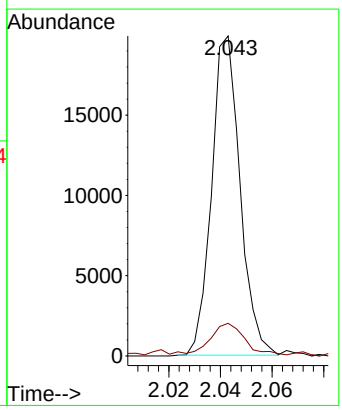


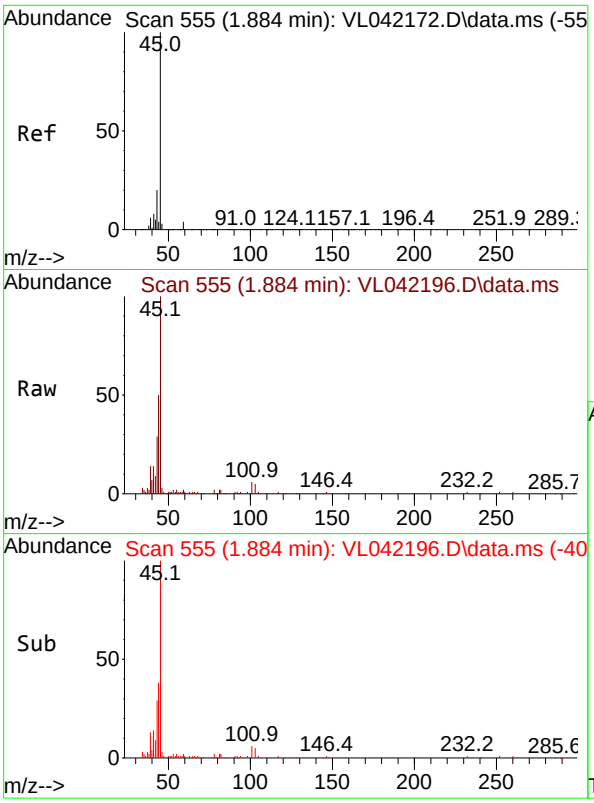


#17
tert-Butyl alcohol
Concen: 0.517 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 59 Resp: 15220

Ion	Ratio	Lower	Upper
59	100		
57	14.7	8.9	13.3#



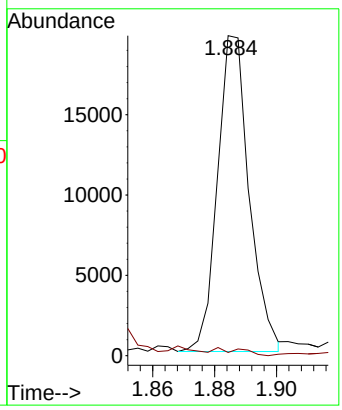


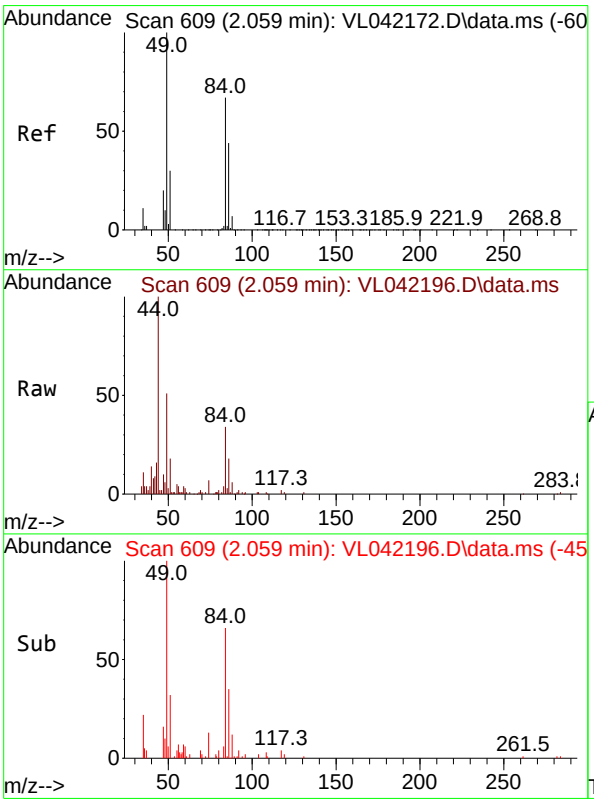
#19
Isopropyl Alcohol
Concen: 1.050 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 45 Resp: 14009

Ion	Ratio	Lower	Upper
45	100		
58	1723.3	36.9	55.3#

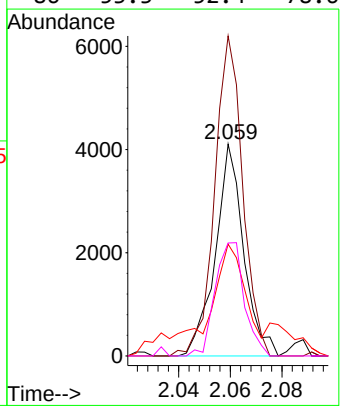


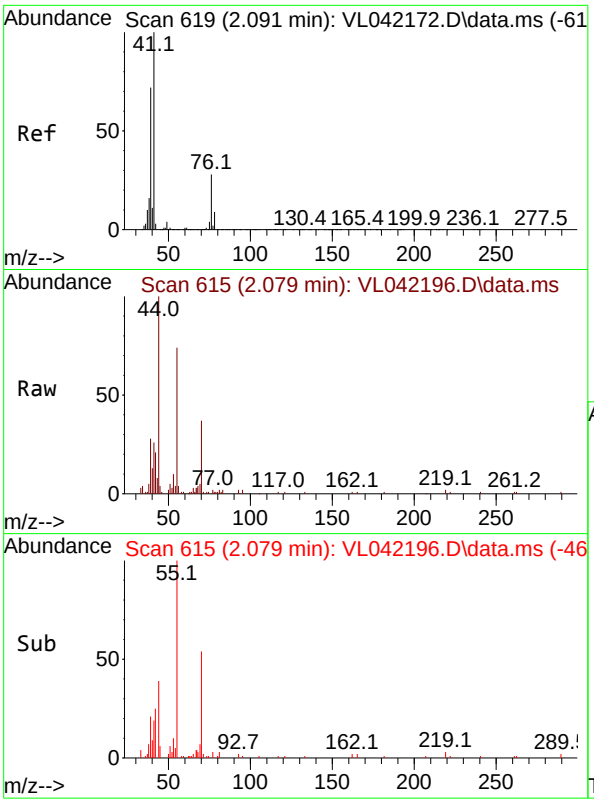


#20
Methylene Chloride
Concen: 0.356 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 84 Resp: 3137

Ion	Ratio	Lower	Upper
84	100		
49	151.0	120.2	180.4
51	39.1	37.4	56.0
86	53.3	52.4	78.6



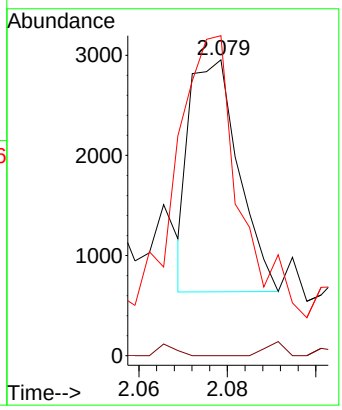


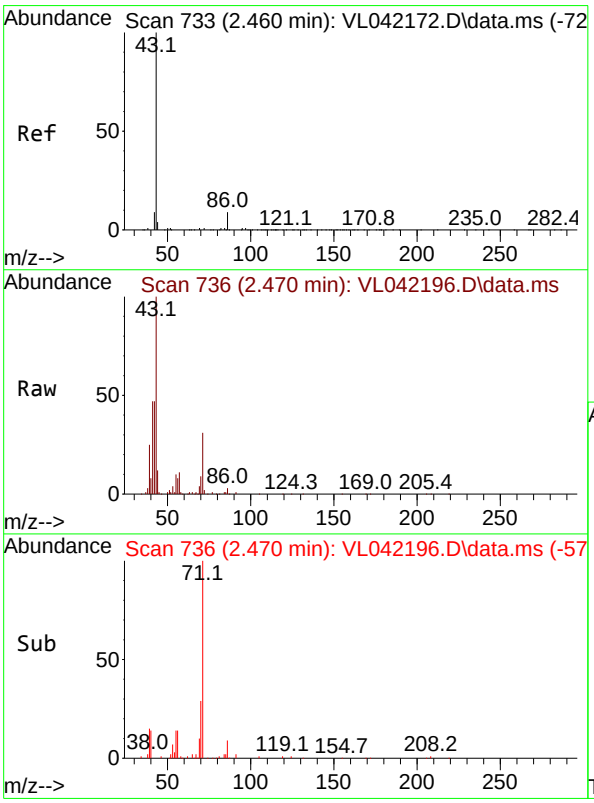
#21
Allyl Chloride
Concen: 0.107 ppbv
RT: 2.079 min Scan# 61
Delta R.T. -0.013 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 41 Resp: 1778

Ion	Ratio	Lower	Upper
41	100		
76	1.9	24.1	36.1#
39	0.0	61.1	91.7#

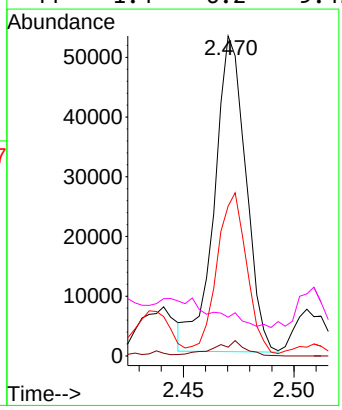


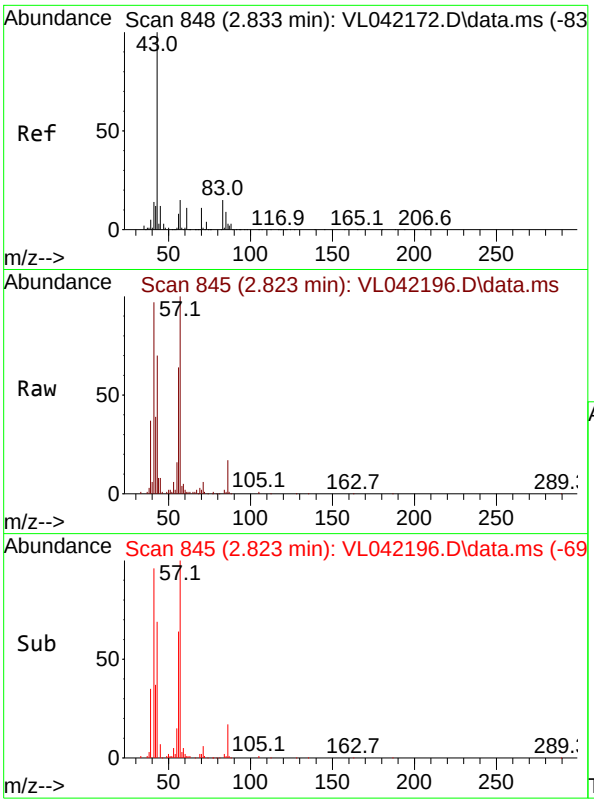


#23
Vinyl Acetate
Concen: 5.103 ppbv
RT: 2.470 min Scan# 736
Delta R.T. 0.010 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 52228

Ion	Ratio	Lower	Upper
43	100		
86	2.7	5.5	8.3#
42	46.8	8.6	13.0#
44	1.4	6.2	9.4#



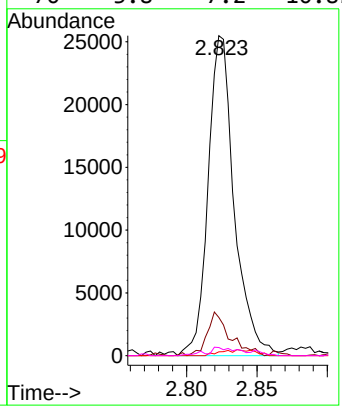


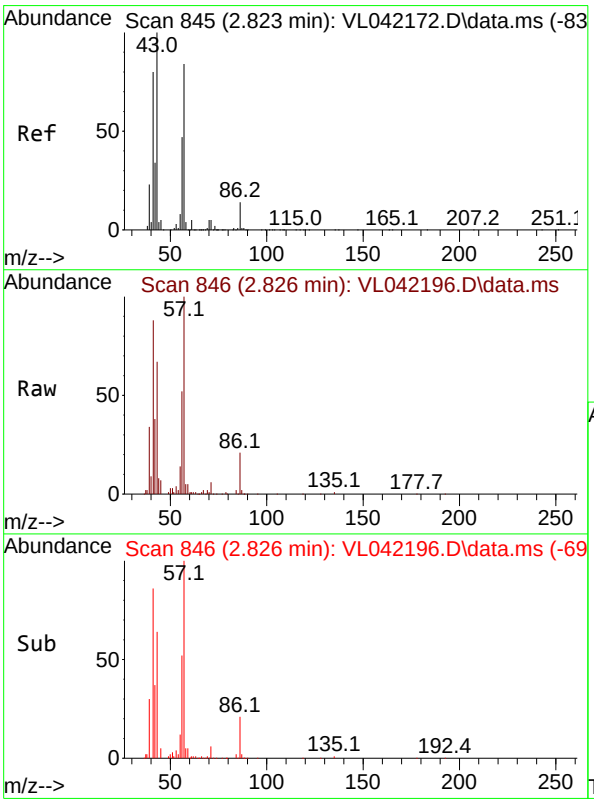
#25
Ethyl Acetate
Concen: 0.536 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 43 Resp: 32884

Ion	Ratio	Lower	Upper
43	100		
45	13.1	8.2	12.2#
61	2.4	7.3	10.9#
70	3.8	7.2	10.8#

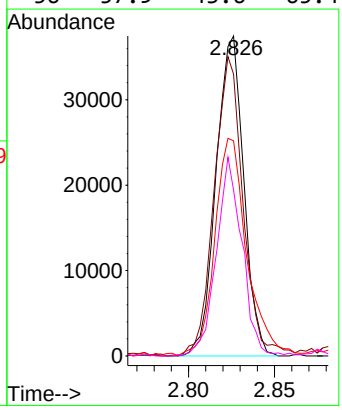


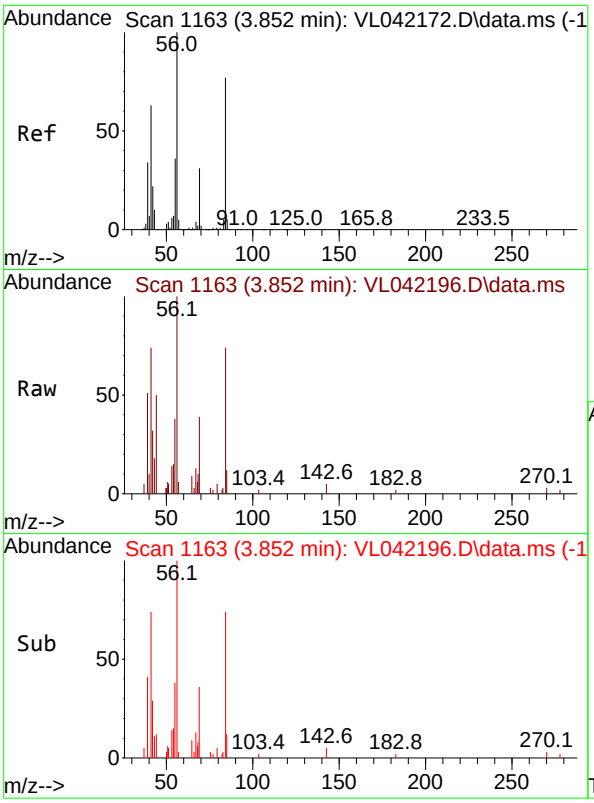


#26
Hexane
Concen: 1.768 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 57 Resp: 41919

Ion	Ratio	Lower	Upper
57	100		
41	99.1	76.6	114.8
43	78.9	207.8	311.8#
56	57.9	43.6	65.4



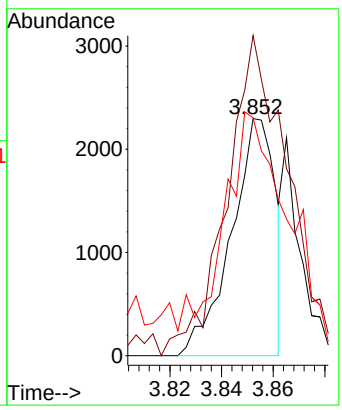


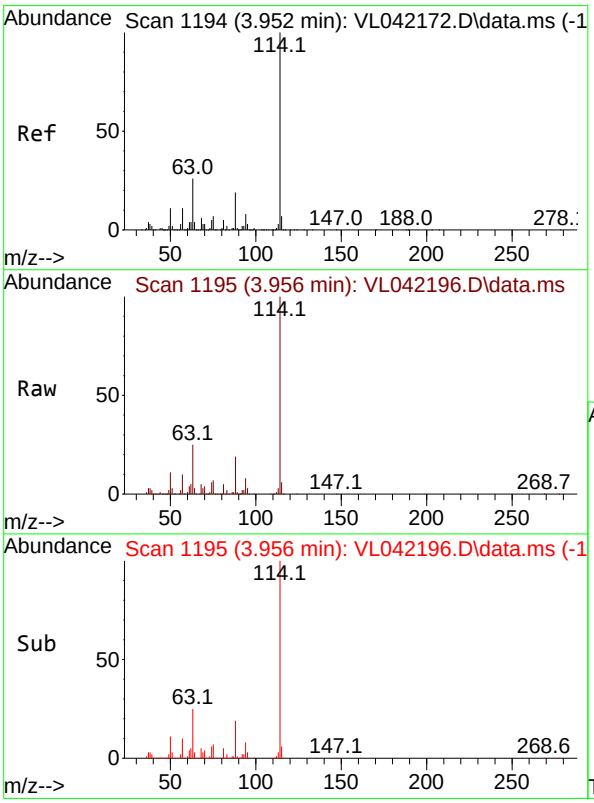
#30
Cyclohexane
Concen: 0.131 ppbv
RT: 3.852 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 84 Resp: 2703

Ion	Ratio	Lower	Upper
84	100		
56	193.4	102.8	154.2#
41	191.5	66.5	99.7#

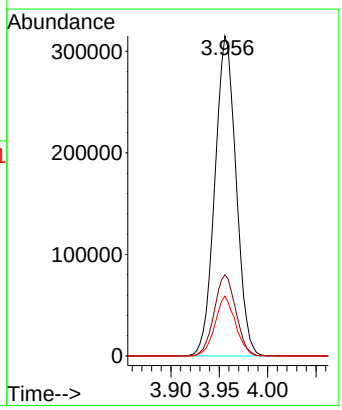


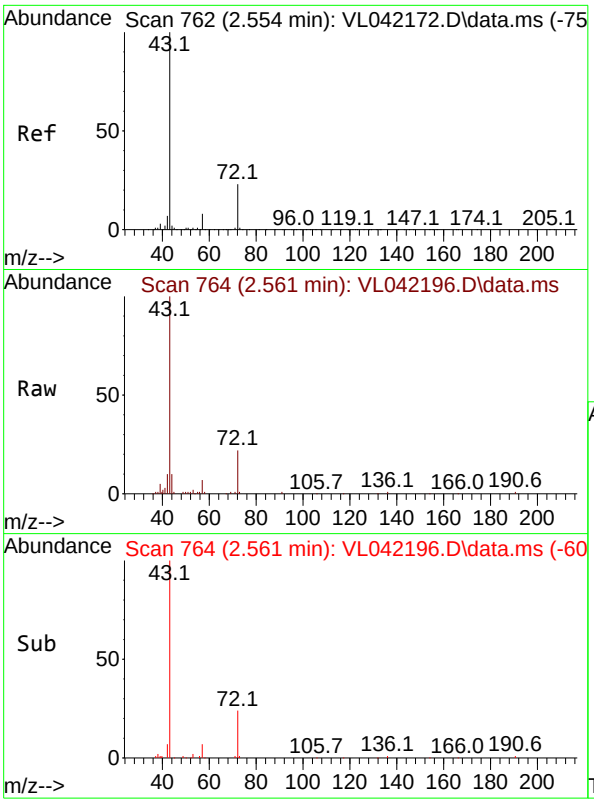


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:114 Resp: 480272

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.0	15.0	22.4



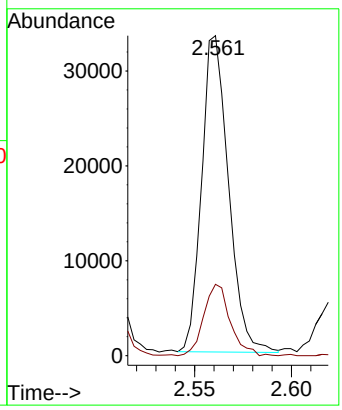


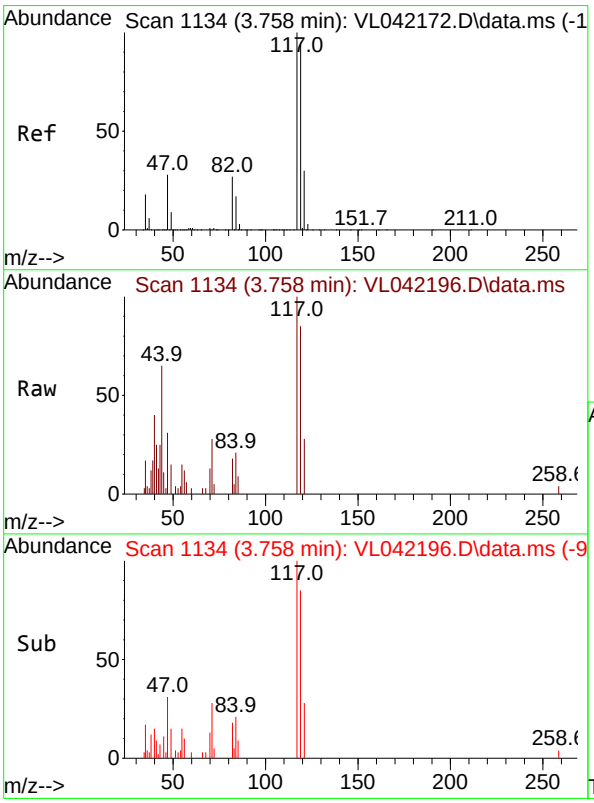
#34
2-Butanone
Concen: 0.925 ppbv
RT: 2.561 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 43 Resp: 32222

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2

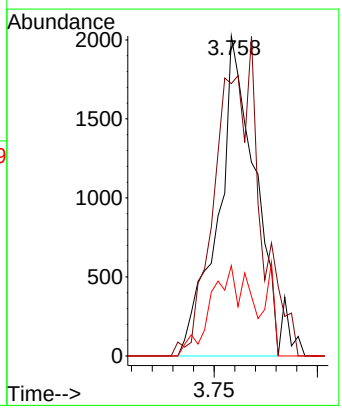


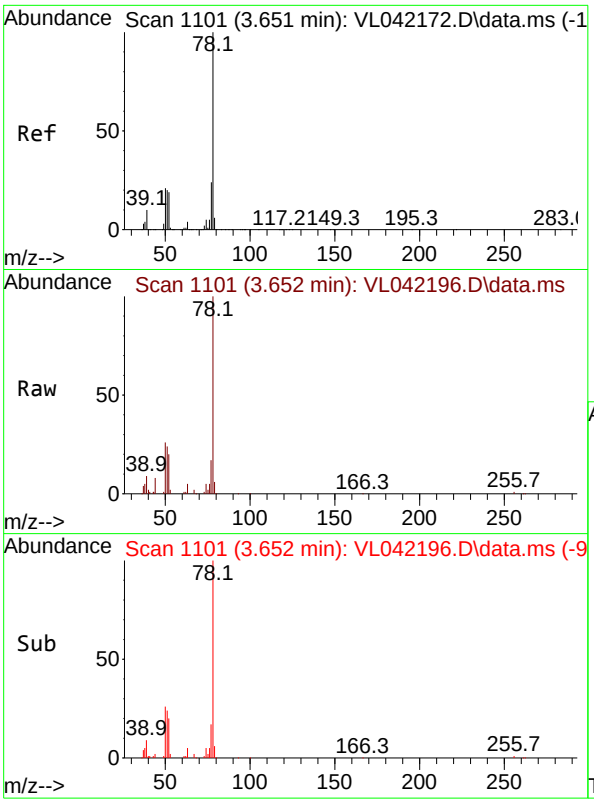


#35
Carbon Tetrachloride
Concen: 0.066 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:117 Resp: 2485

Ion	Ratio	Lower	Upper
117	100		
119	80.7	76.2	114.2
121	28.2	24.2	36.4



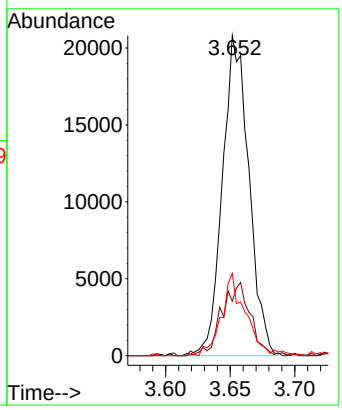


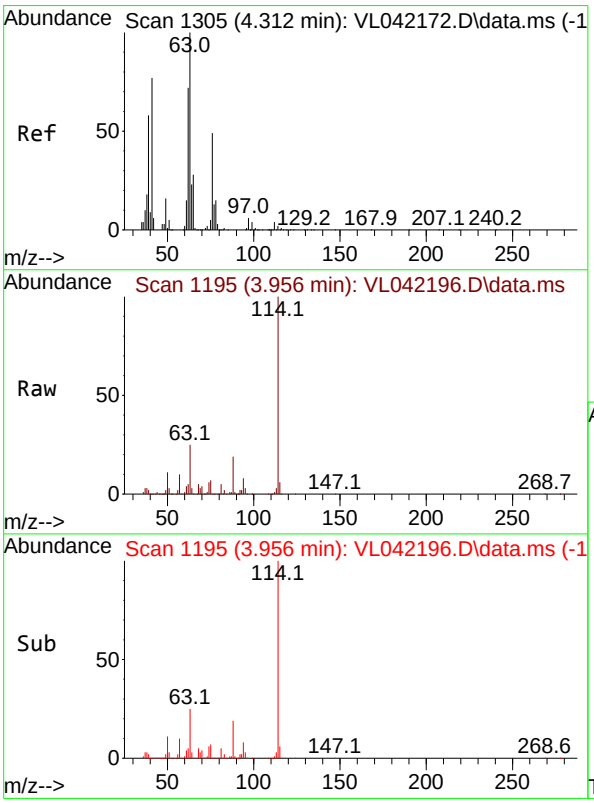
#36
Benzene
Concen: 0.622 ppbv
RT: 3.652 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 78 Resp: 29626

Ion	Ratio	Lower	Upper
78	100		
77	17.0	19.1	28.7#
50	25.7	16.6	24.8#

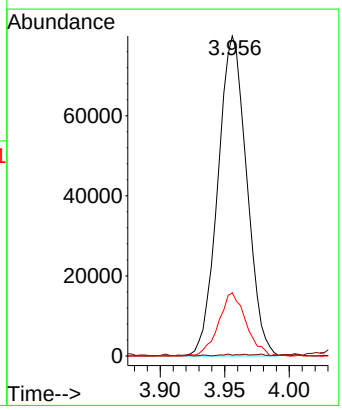


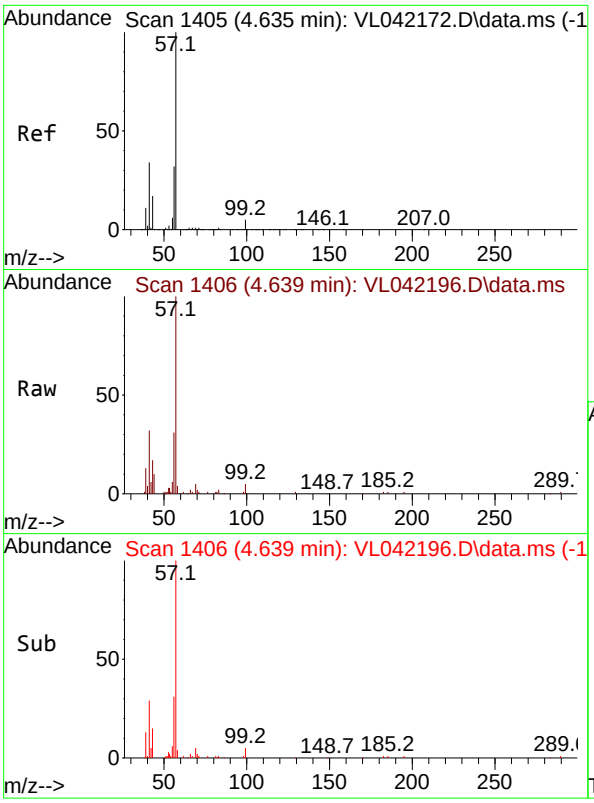


#39
1,2-Dichloropropane
Concen: 7.163 ppbv
RT: 3.956 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 63 Resp: 124212

Ion	Ratio	Lower	Upper
63	100		
41	0.5	61.7	92.5#
62	19.7	57.6	86.4#



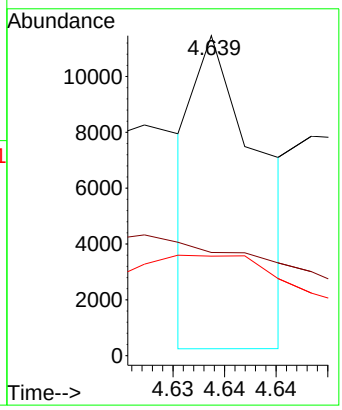


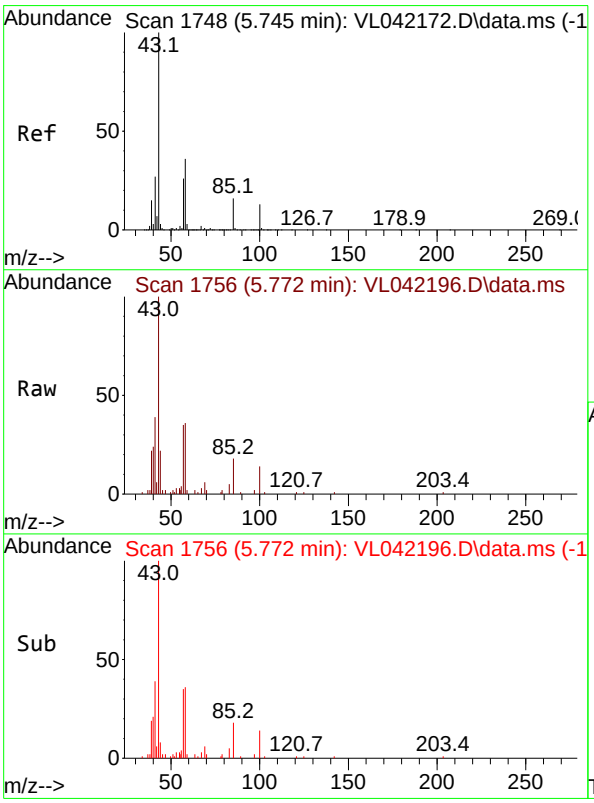
#44
2,2,4-Trimethylpentane
Concen: 0.061 ppbv
RT: 4.639 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 57 Resp: 4920

Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.8	40.2#
56	0.0	25.6	38.4#

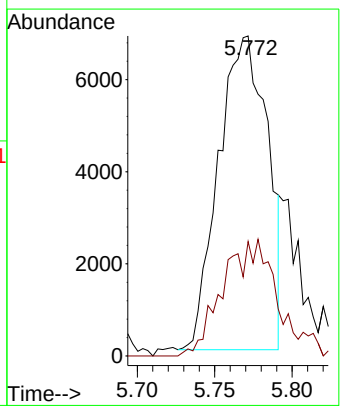


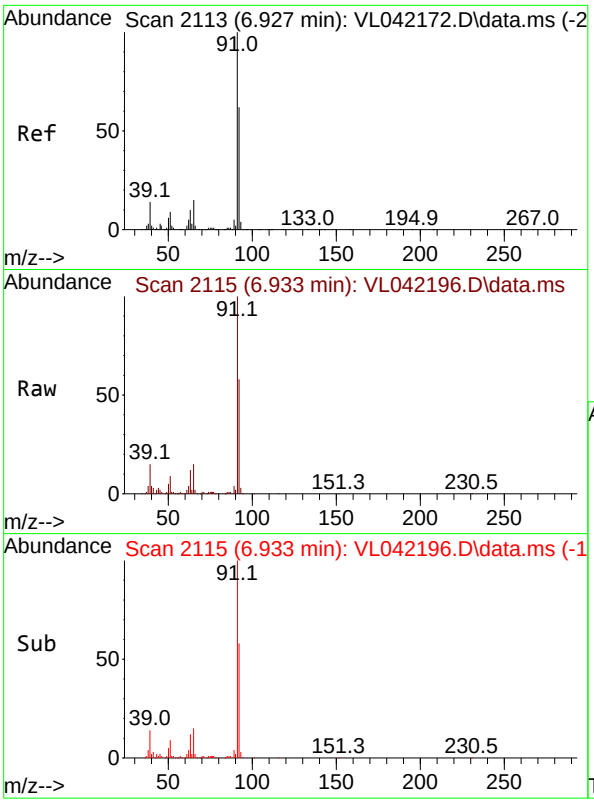


#50
4-Methyl-2-Pentanone
Concen: 0.272 ppbv
RT: 5.772 min Scan# 1756
Delta R.T. 0.026 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 43 Resp: 15022

Ion	Ratio	Lower	Upper
43	100		
58	42.0	29.0	43.6



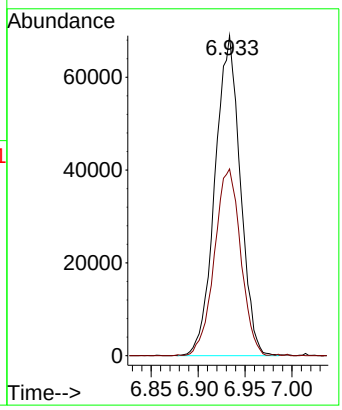


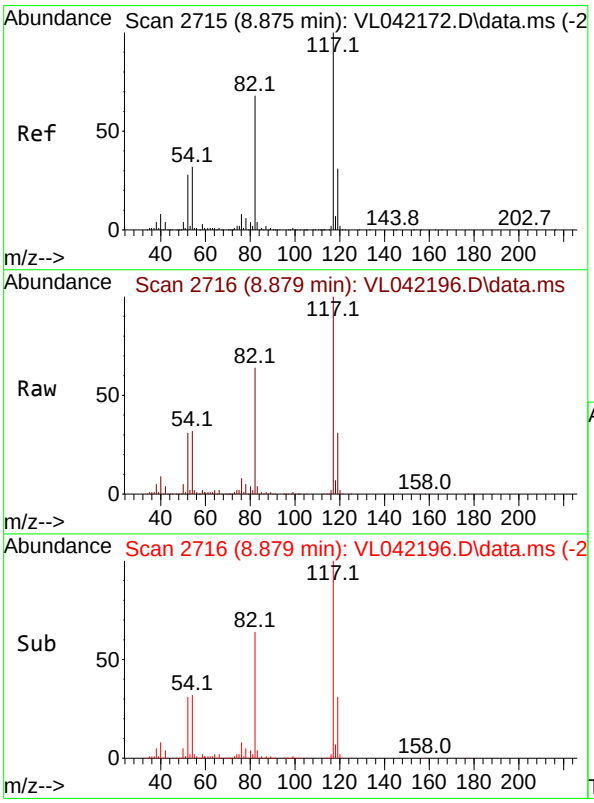
#53
Toluene
Concen: 2.284 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 91 Resp: 128886

Ion	Ratio	Lower	Upper
91	100		
92	61.0	48.4	72.6

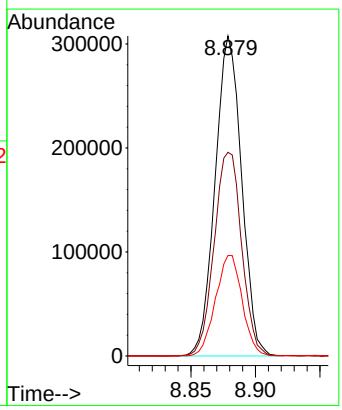


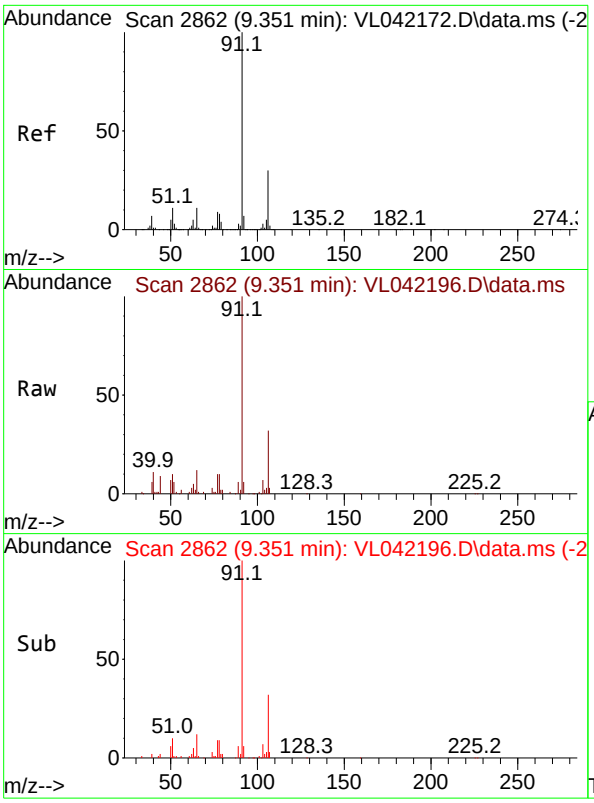


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2716
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:117 Resp: 439128

Ion	Ratio	Lower	Upper
117	100		
82	66.0	55.8	83.6
119	31.7	25.5	38.3



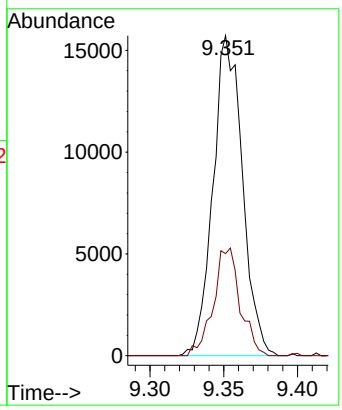


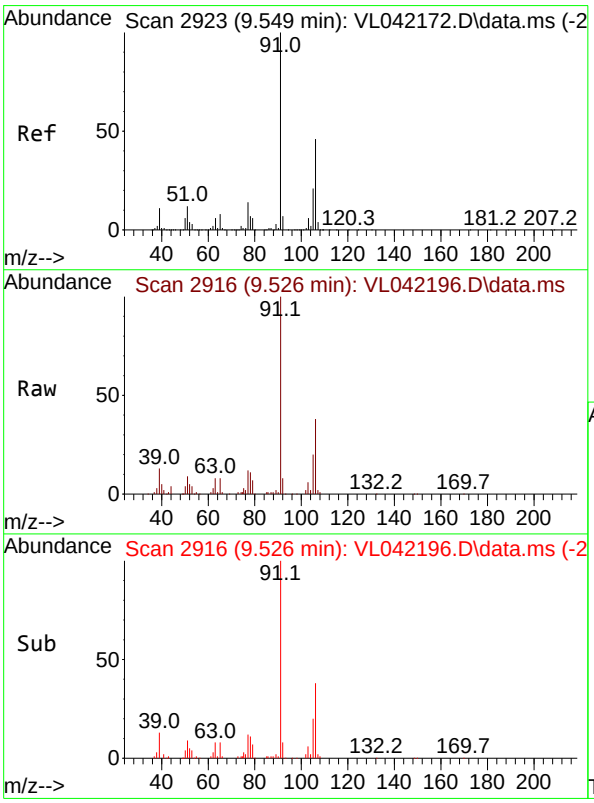
#58
Ethyl Benzene
Concen: 0.279 ppbv
RT: 9.351 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 91 Resp: 21749

Ion	Ratio	Lower	Upper
91	100		
106	31.9	24.2	36.2

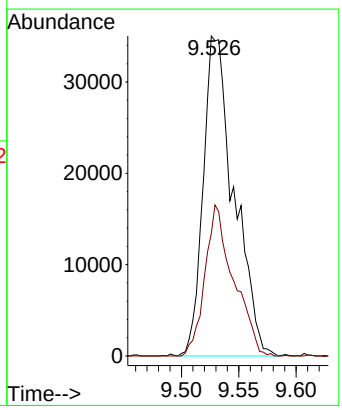


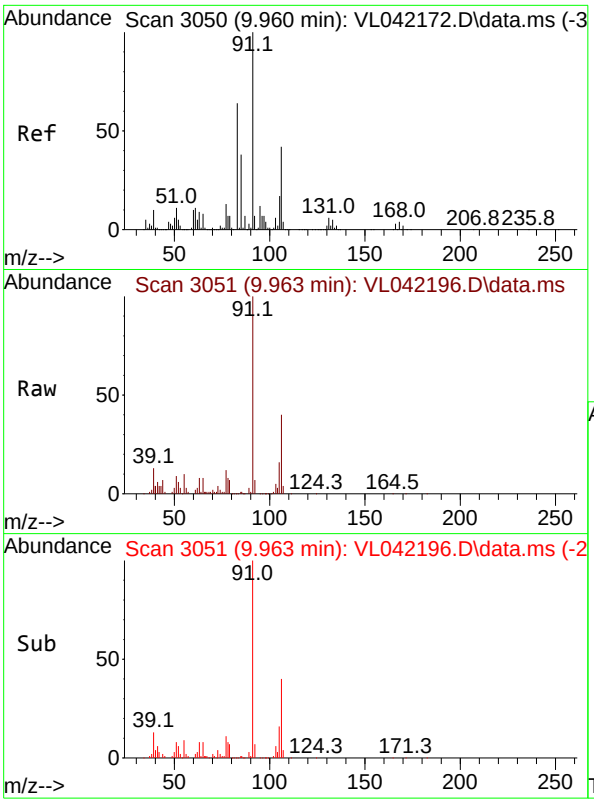


#59
m/p-Xylene
Concen: 1.051 ppbv
RT: 9.526 min Scan# 2916
Delta R.T. -0.022 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 91 Resp: 65488

Ion	Ratio	Lower	Upper
91	100		
106	43.9	36.4	54.6



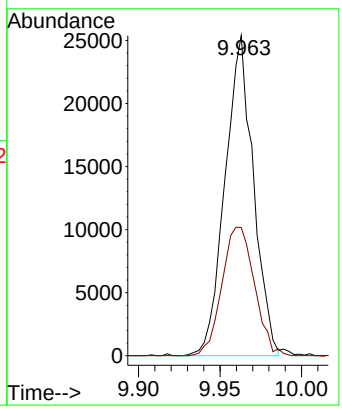


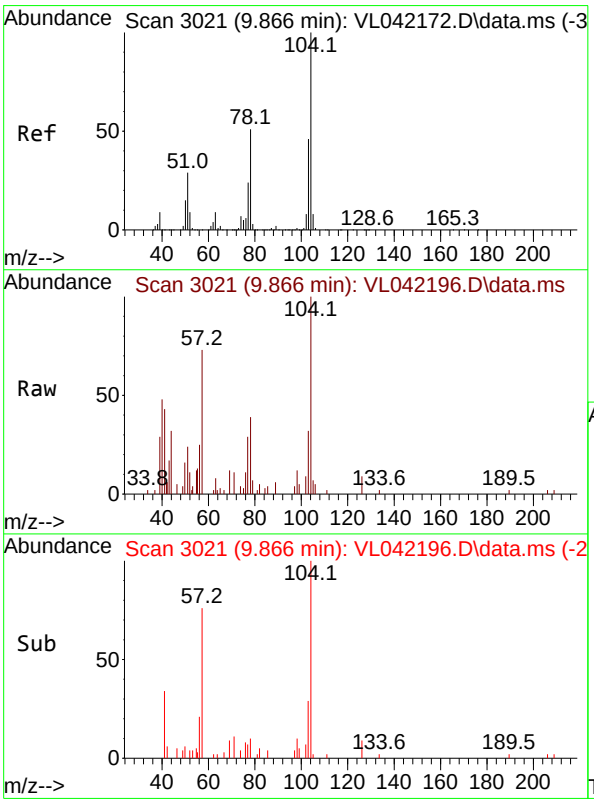
#60
o-Xylene
Concen: 0.491 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 91 Resp: 30665

Ion	Ratio	Lower	Upper
91	100		
106	46.1	20.8	62.5

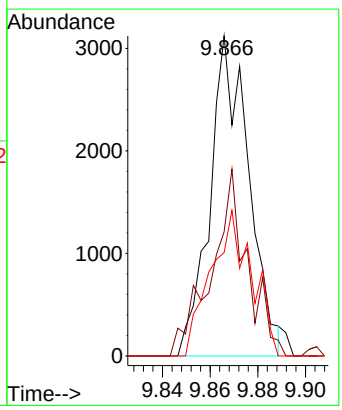


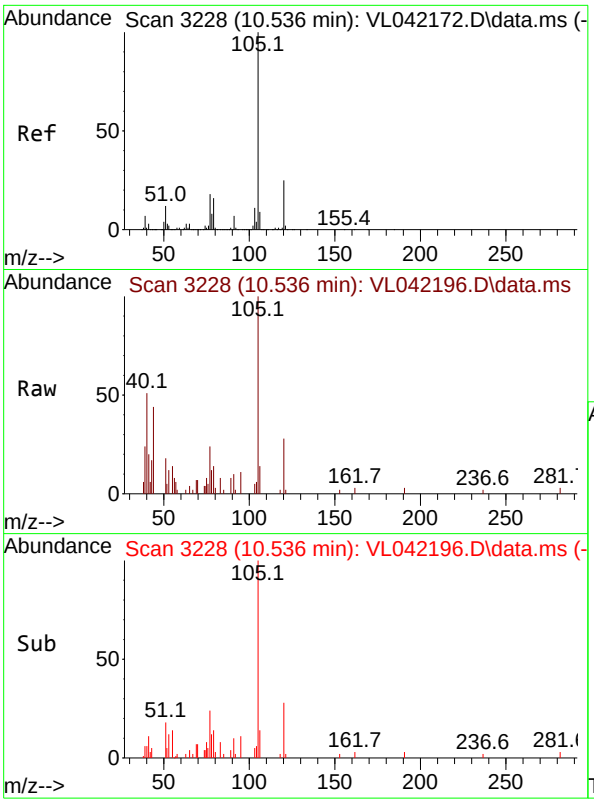


#61
Styrene
Concen: 0.114 ppbv
RT: 9.866 min Scan# 3021
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:104 Resp: 3531

Ion	Ratio	Lower	Upper
104	100		
78	54.4	41.8	62.6
103	47.9	37.0	55.4



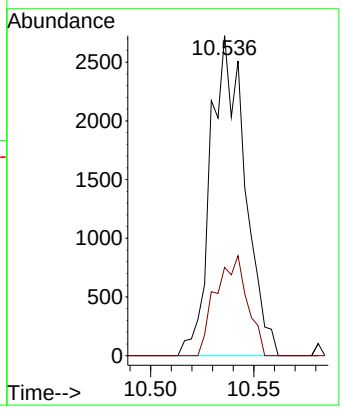


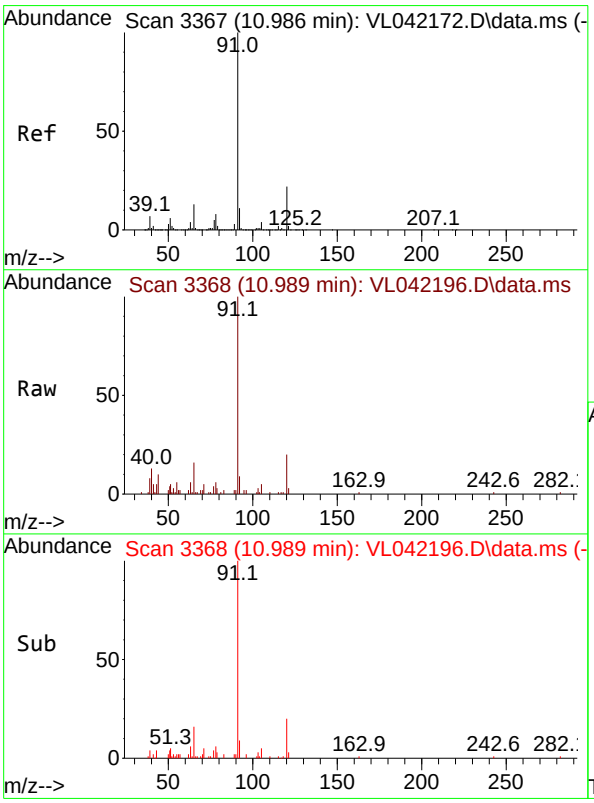
#62
Isopropylbenzene
Concen: 0.034 ppbv
RT: 10.536 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion:105 Resp: 3147

Ion	Ratio	Lower	Upper
105	100		
120	28.7	19.9	29.9

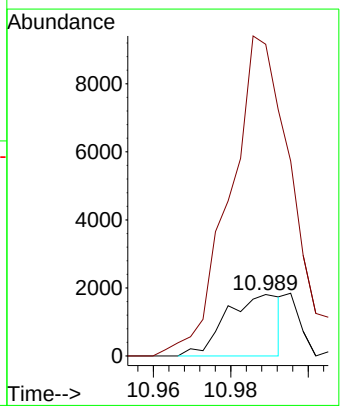


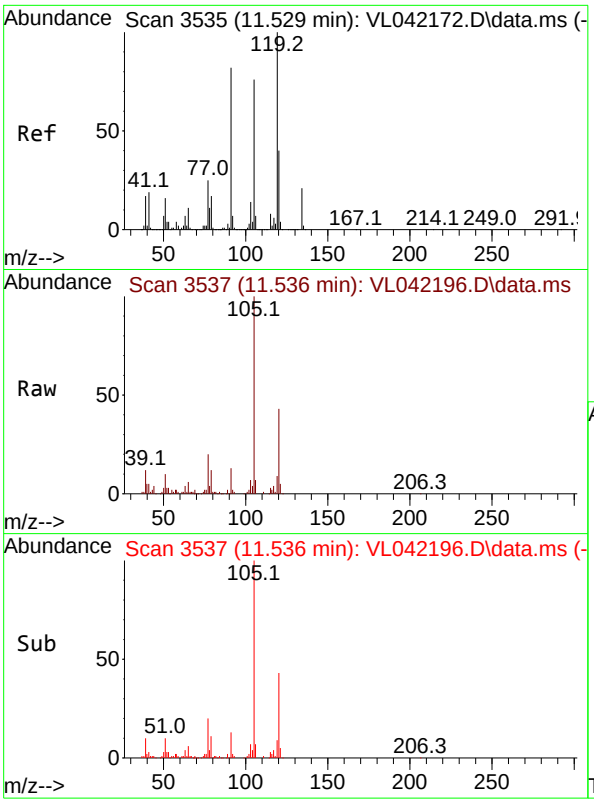


#64
n-propylbenzene
Concen: 0.073 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:120 Resp: 1763

Ion	Ratio	Lower	Upper
120	100		
91	609.8	376.9	565.3#



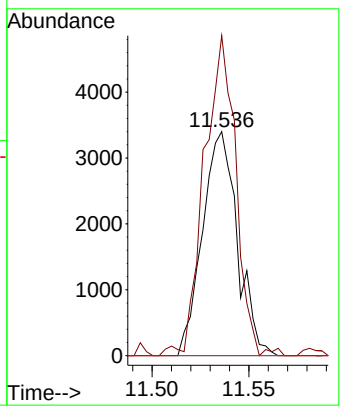


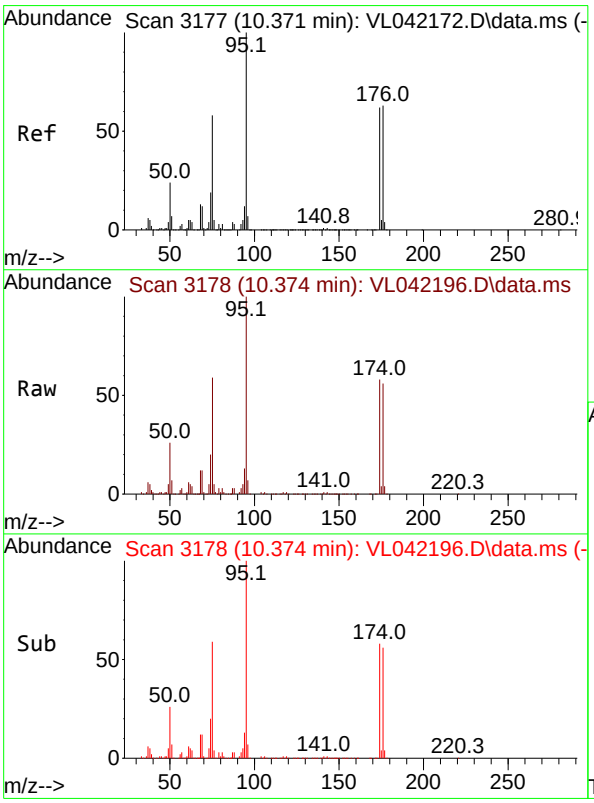
#65
tert-Butylbenzene
Concen: 0.049 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion:119 Resp: 4264

Ion	Ratio	Lower	Upper
119	100		
91	129.5	66.0	99.0#
134	0.0	16.7	25.1#

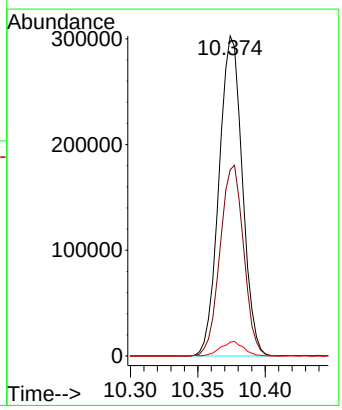


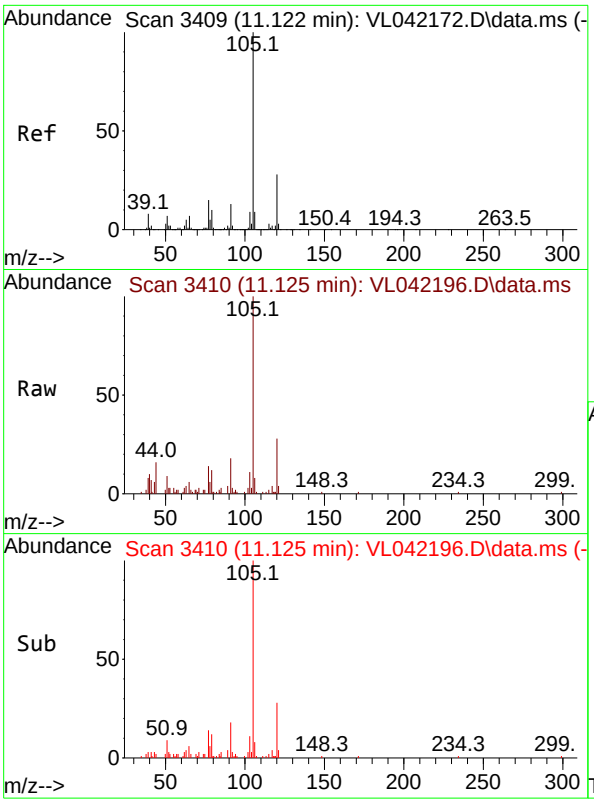


#68
1-Bromo-4-Fluorobenzene
Concen: 10.105 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 95 Resp: 364412

Ion	Ratio	Lower	Upper
95	100		
174	60.3	50.6	76.0
175	4.5	3.8	5.6



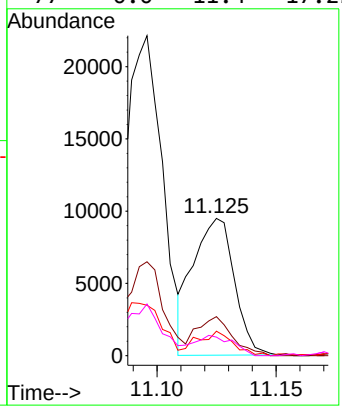


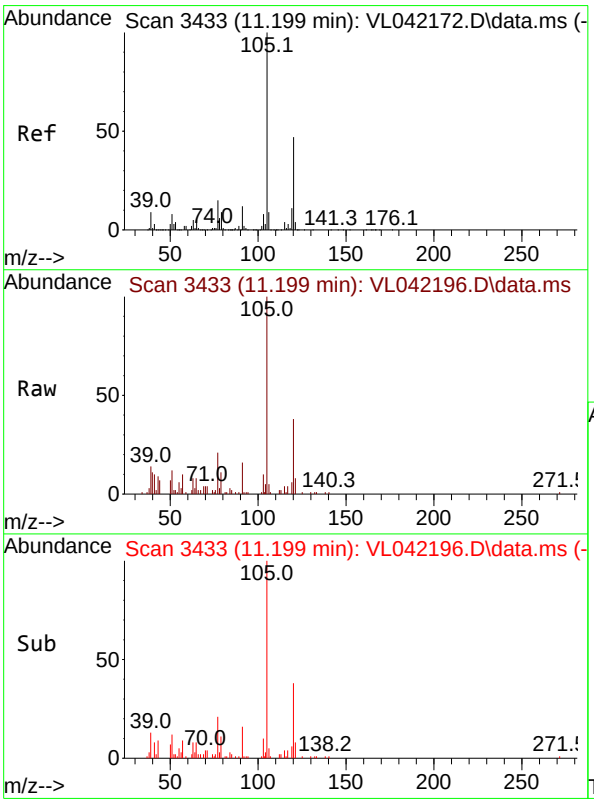
#72
4-Ethyltoluene
Concen: 0.147 ppbv
RT: 11.125 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion:105 Resp: 11451

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#

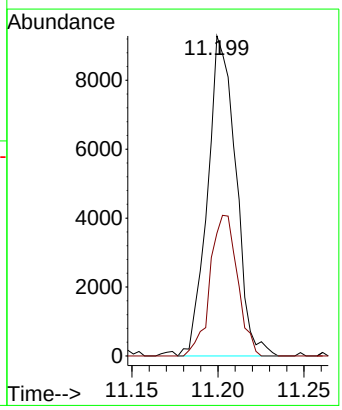


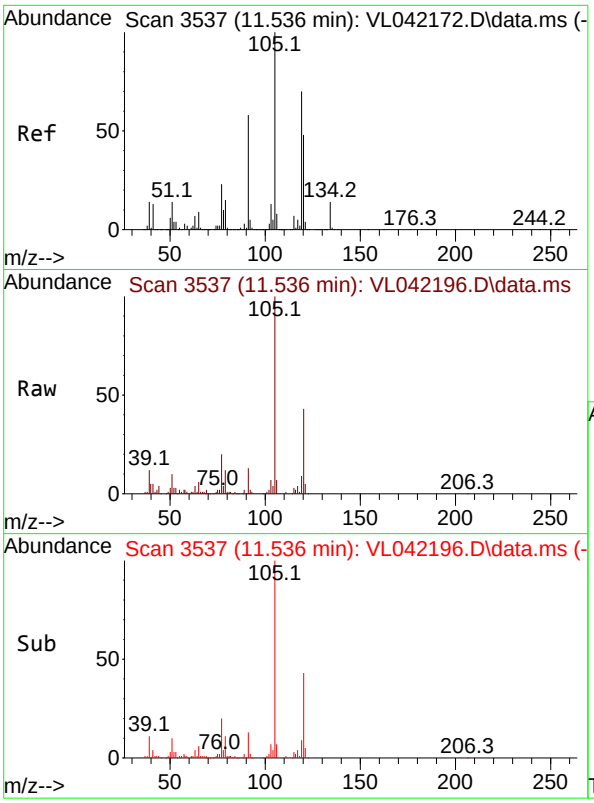


#73
1,3,5-Trimethylbenzene
Concen: 0.156 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion:105 Resp: 10625

Ion	Ratio	Lower	Upper
105	100		
120	38.3	37.4	56.0



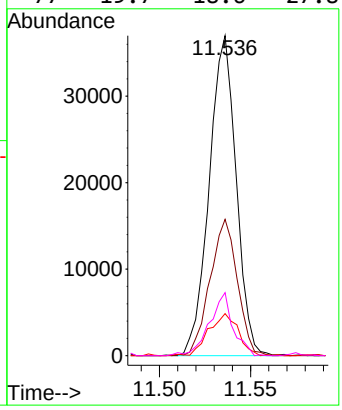


#74
1,2,4-Trimethylbenzene
Concen: 0.487 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion:105 Resp: 38101

Ion	Ratio	Lower	Upper
105	100		
120	42.6	38.6	58.0
91	12.8	46.2	69.2#
77	19.7	18.6	27.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Time: Mar 28 23:03:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	172645	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.965	114	493948	10.000	ppbv		0.01
55) Chlorobenzene-d5	8.885	117	445312	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	368899	10.088	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10972	0.430	ppbv		92
3) Chlorodifluoromethane	1.476	51	9198	0.353	ppbv		93
4) Chloromethane	1.531	50	3716	0.357	ppbv		99
6) Bromomethane	1.667	94	189	0.040	ppbv	#	64
9) Propene	1.560	41	73858	6.188	ppbv		98
10) Heptane	4.985	43	12702	0.400	ppbv		91
11) Trichlorofluoromethane	1.881	101	5673	0.229	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.143	101	1548	0.076	ppbv		99
13) Ethanol	1.722	45	56814	50.352	ppbv		81
15) Acetone	1.845	43	266878	11.053	ppbv	#	74
16) 1,3-Butadiene	1.602	39	5398	0.458	ppbv	#	11
17) tert-Butyl alcohol	2.046	59	3401	0.113	ppbv	#	71
19) Isopropyl Alcohol	1.890	45	16035	1.177	ppbv	#	1
20) Methylene Chloride	2.065	84	6666	0.741	ppbv		95
21) Allyl Chloride	2.081	41	8576	0.504	ppbv	#	1
23) Vinyl Acetate	2.476	43	76691	7.339	ppbv	#	54
25) Ethyl Acetate	2.829	43	35772	0.571	ppbv	#	85
26) Hexane	2.829	57	45421	1.876	ppbv	#	34
29) Chloroform	2.852	83	21281	0.601	ppbv		99
30) Cyclohexane	3.858	84	7683	0.366	ppbv	#	87
34) 2-Butanone	2.564	43	104671	2.922	ppbv		96
35) Carbon Tetrachloride	3.774	117	1373	0.036	ppbv	#	69
36) Benzene	3.658	78	26954	0.550	ppbv		97
39) 1,2-Dichloropropane	3.962	63	126240	7.079	ppbv	#	22
41) Tetrahydrofuran	3.065	42	4698	0.228	ppbv	#	60
44) 2,2,4-Trimethylpentane	4.648	57	32093	0.388	ppbv	#	76
53) Toluene	6.940	91	124001	2.136	ppbv		98
58) Ethyl Benzene	9.361	91	20976	0.265	ppbv		95
59) m/p-Xylene	9.532	91	64820	1.026	ppbv		99
60) o-Xylene	9.969	91	22977	0.363	ppbv		94
61) Styrene	9.875	104	11230	0.359	ppbv		96
64) n-propylbenzene	10.995	120	1196	0.049	ppbv		66
72) 4-Ethyltoluene	11.128	105	5978	0.076	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.205	105	5610	0.081	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	20838	0.263	ppbv	#	72
80) Naphthalene,2-methyl-	14.468	142	2467	0.058	ppbv	#	60

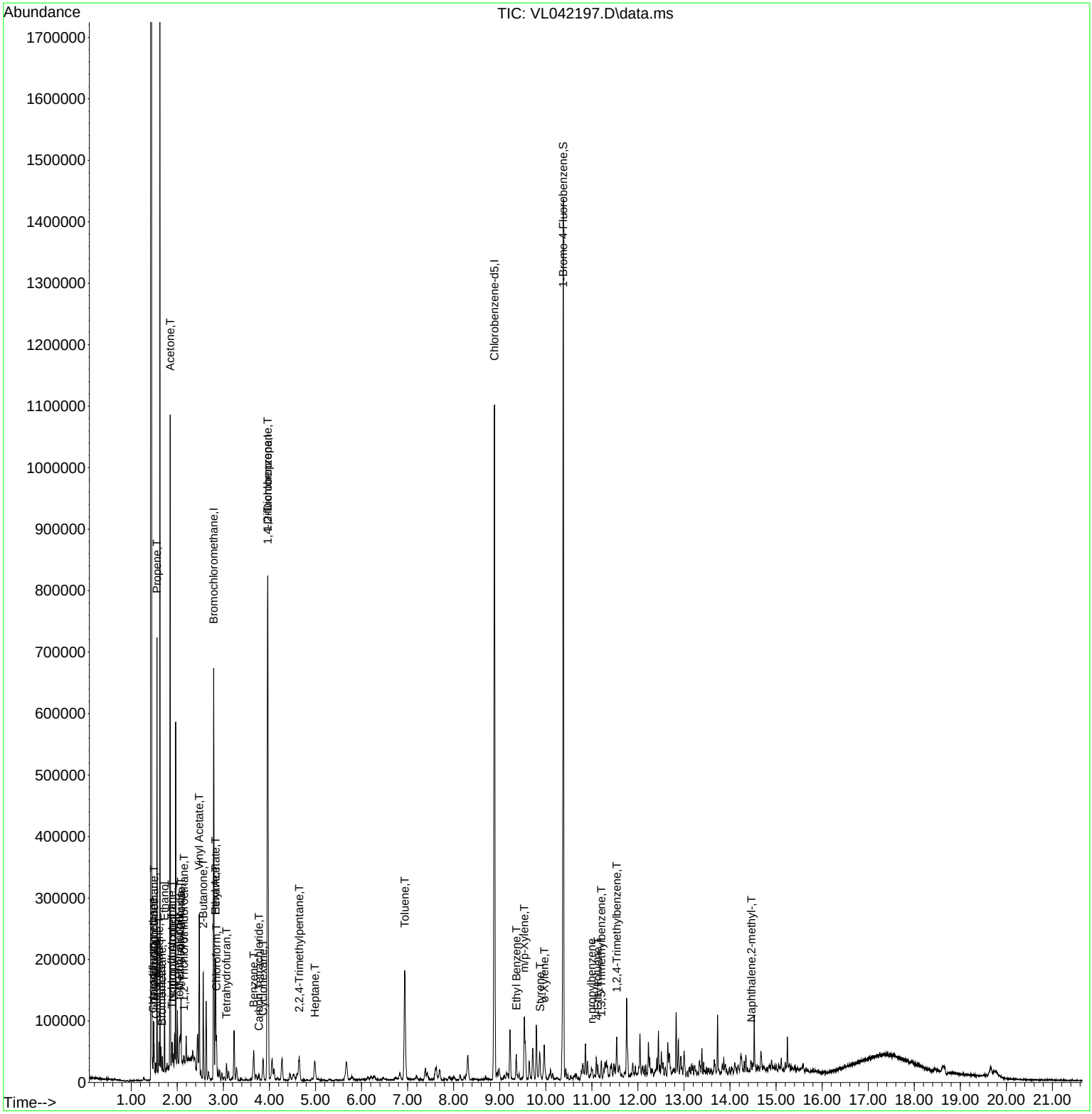
(#) = qualifier out of range (m) = manual integration (+) = signals summed

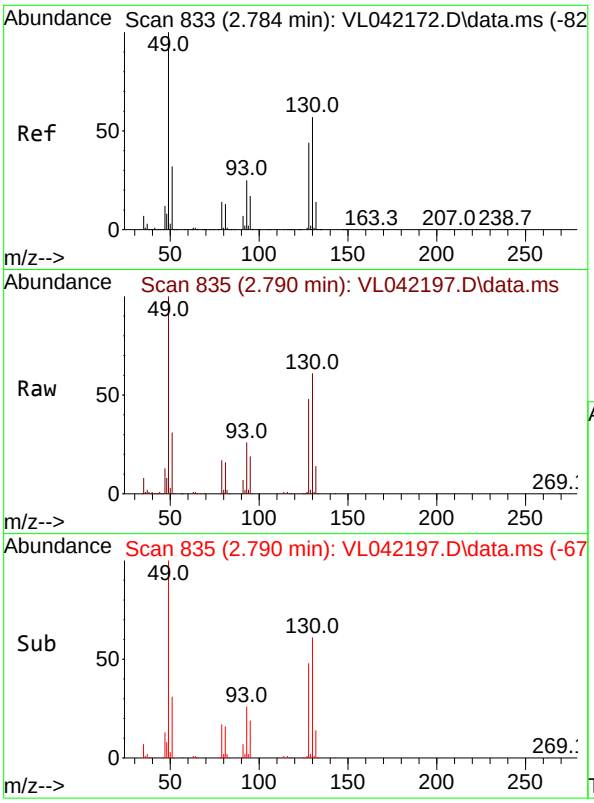
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
Acq On : 28 Mar 2025 01:20
Operator : SY/MD
Sample : Q1669-05
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Quant Time: Mar 28 23:03:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



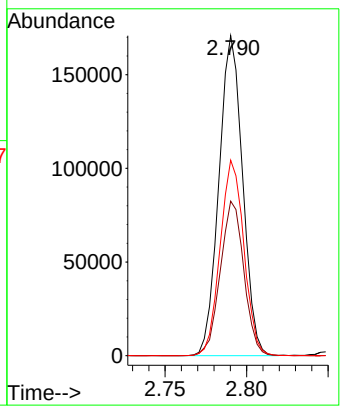


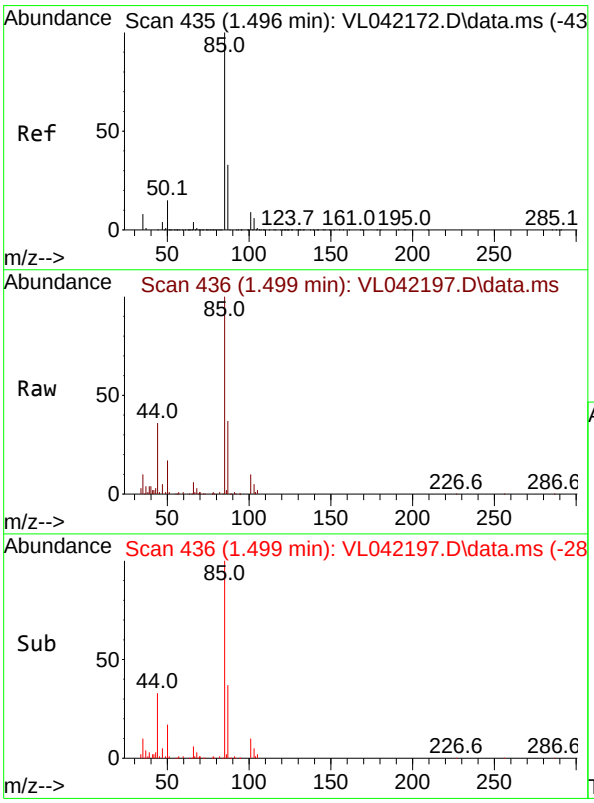
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 49 Resp: 172645

Ion	Ratio	Lower	Upper
49	100		
128	48.0	22.9	68.5
130	61.2	28.8	86.4

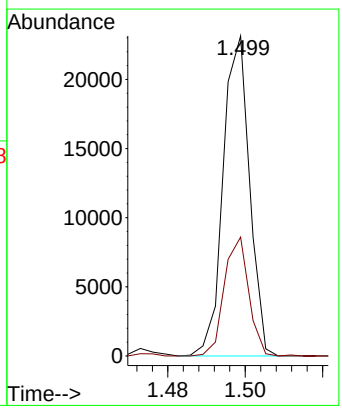


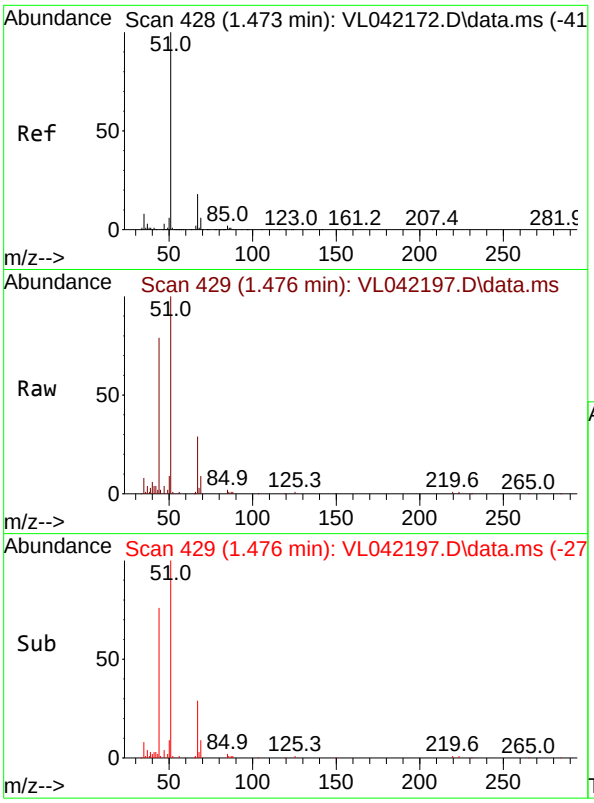


#2
Dichlorodifluoromethane
Concen: 0.430 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 85 Resp: 10972

Ion	Ratio	Lower	Upper
85	100		
87	37.1	26.1	39.1



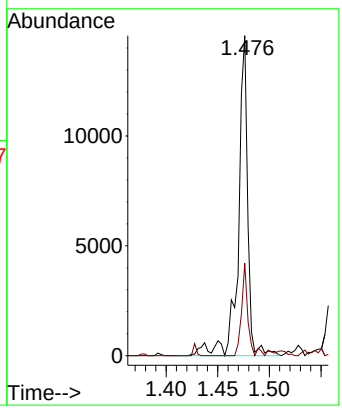


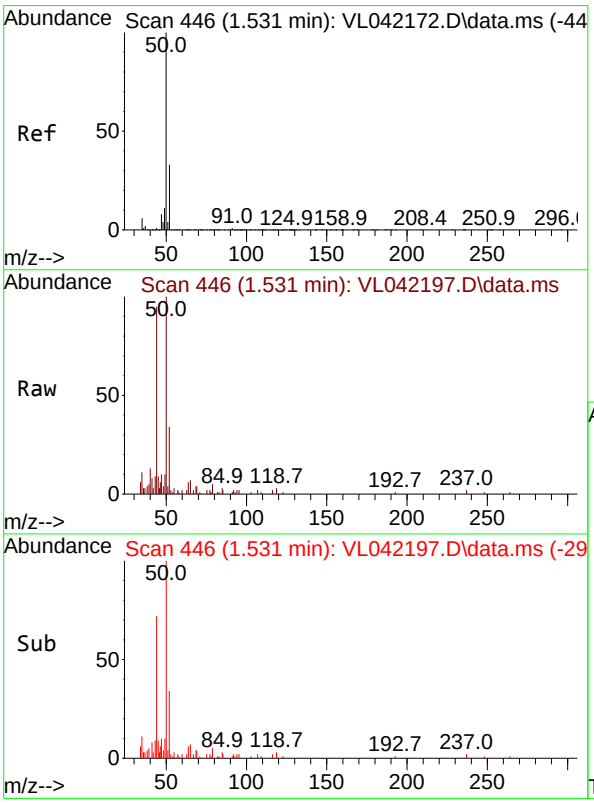
#3
Chlorodifluoromethane
Concen: 0.353 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 51 Resp: 9198

Ion	Ratio	Lower	Upper
51	100		
67	22.0	15.0	22.6

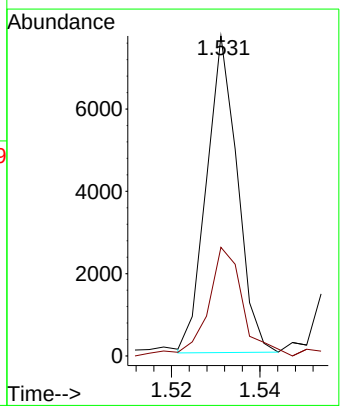


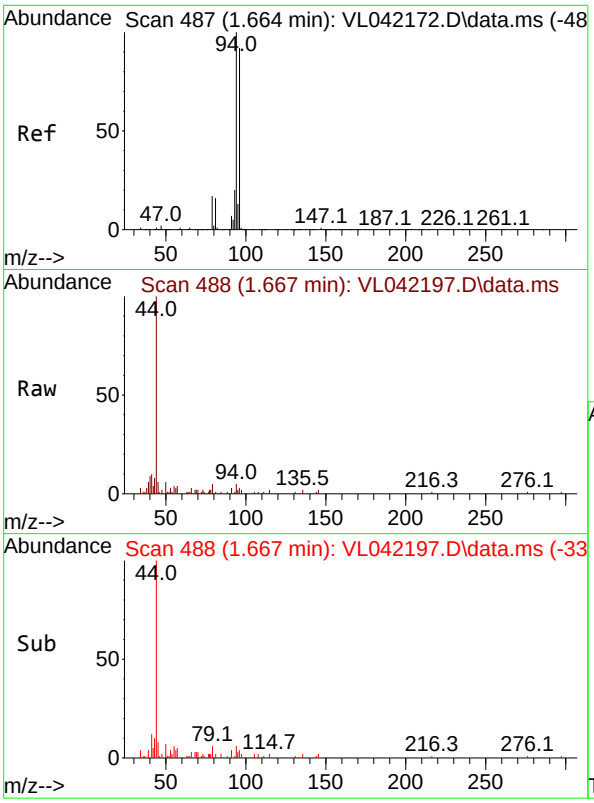


#4
Chloromethane
Concen: 0.357 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 50 Resp: 3716

Ion	Ratio	Lower	Upper
50	100		
52	33.2	26.1	39.1



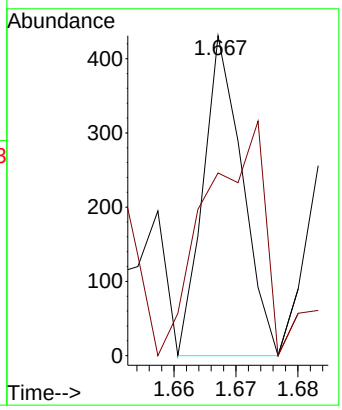


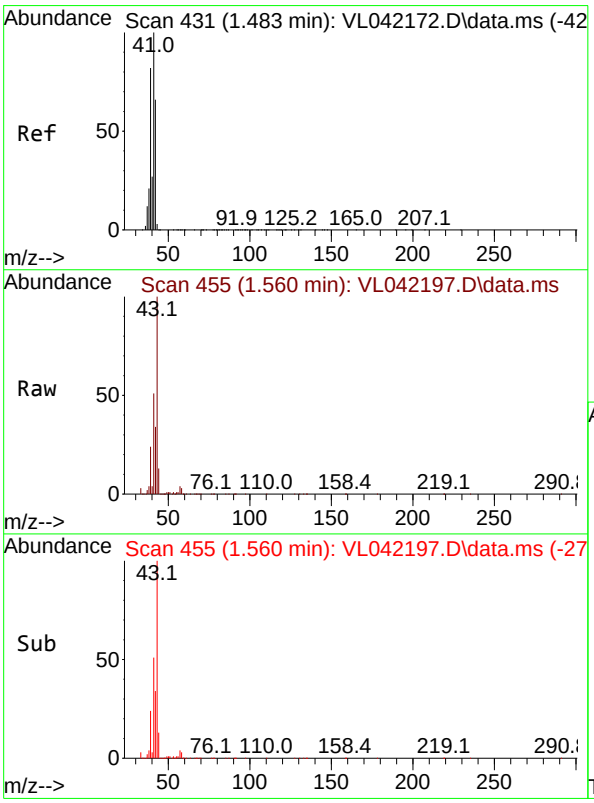
#6
Bromomethane
Concen: 0.040 ppbv
RT: 1.667 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 94 Resp: 189

Ion	Ratio	Lower	Upper
94	100		
96	57.1	73.1	109.7#

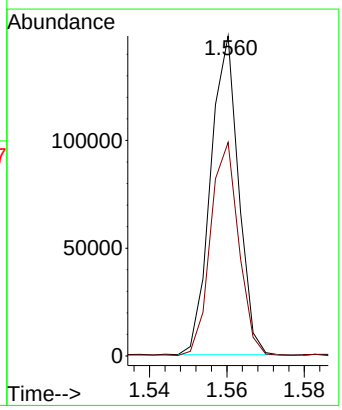


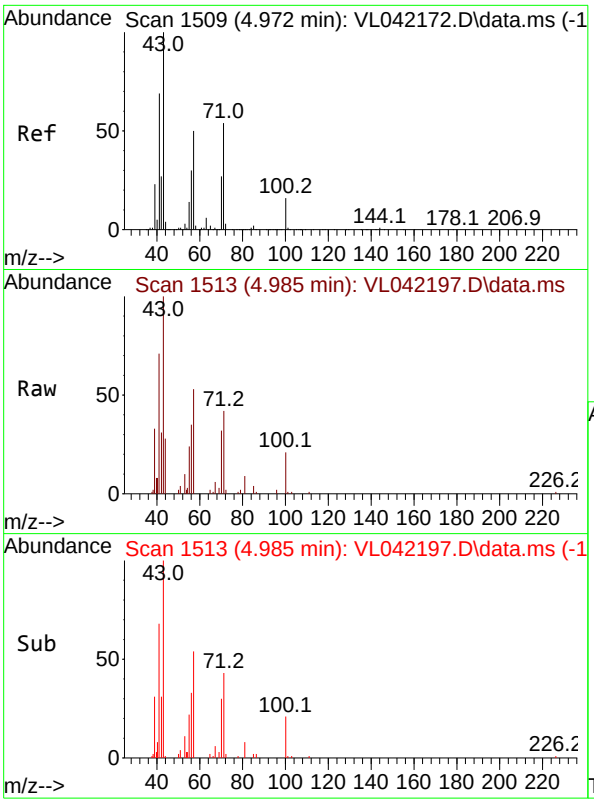


#9
Propene
Concen: 6.188 ppbv
RT: 1.560 min Scan# 455
Delta R.T. 0.077 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 41 Resp: 73858

Ion	Ratio	Lower	Upper
41	100		
42	68.0	55.4	83.2



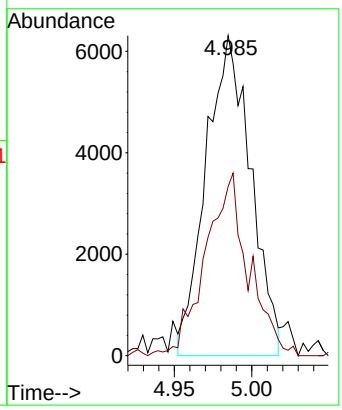


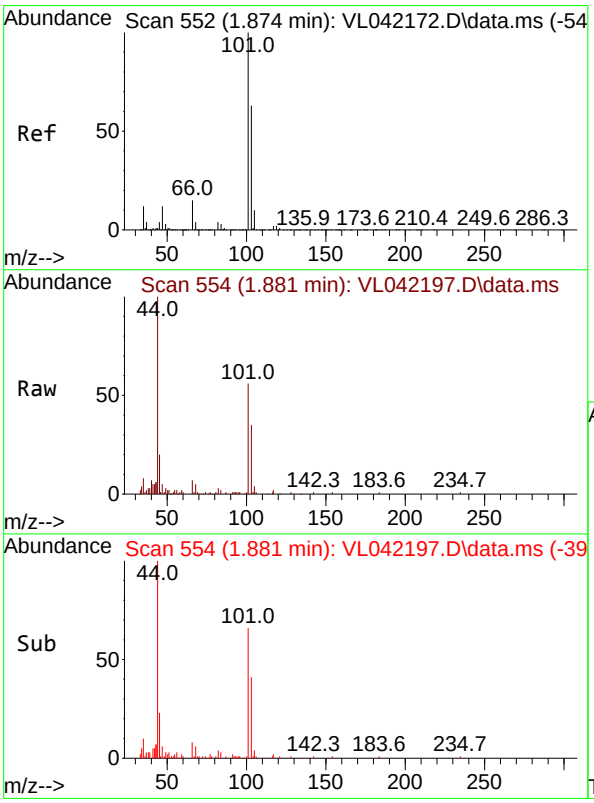
#10
Heptane
Concen: 0.400 ppbv
RT: 4.985 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 43 Resp: 12702

Ion	Ratio	Lower	Upper
43	100		
57	55.1	39.4	59.2

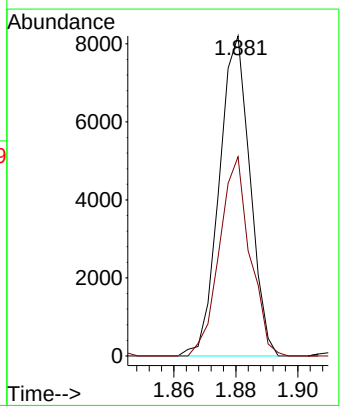


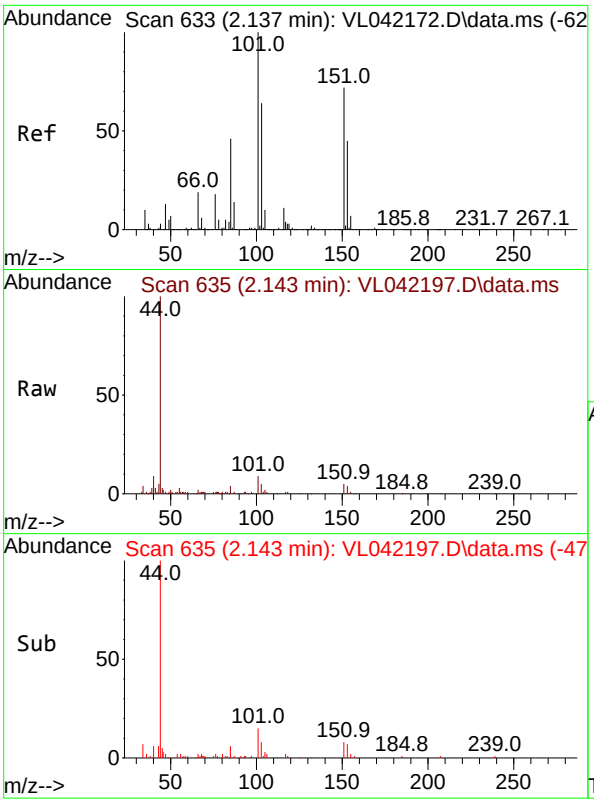


#11
Trichlorofluoromethane
Concen: 0.229 ppbv
RT: 1.881 min Scan# 554
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:101 Resp: 5673

Ion	Ratio	Lower	Upper
101	100		
103	62.2	50.2	75.2



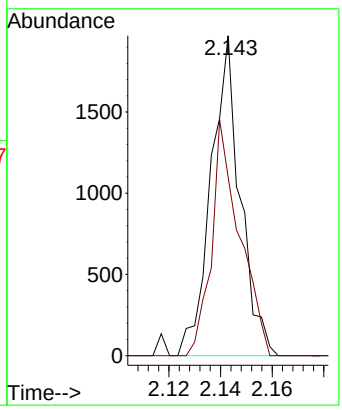


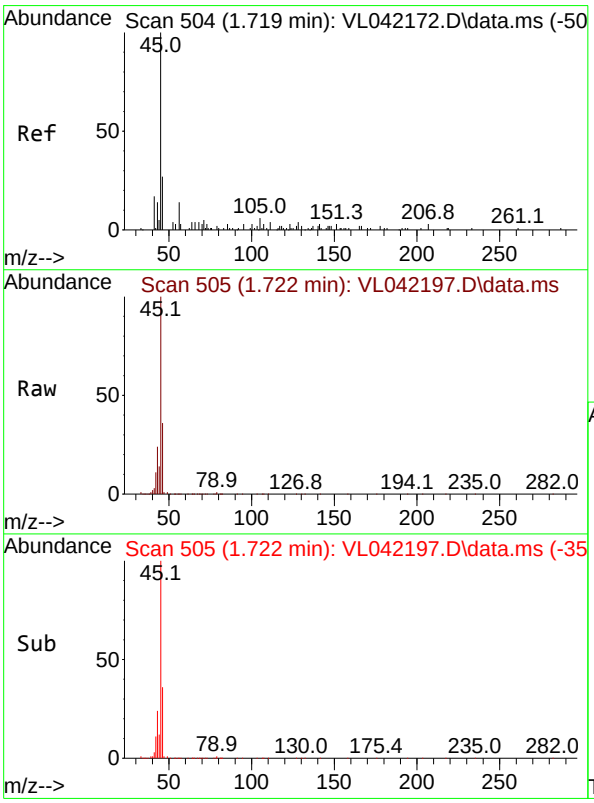
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.076 ppbv
RT: 2.143 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion:101 Resp: 1548

Ion	Ratio	Lower	Upper
101	100		
151	70.3	57.1	85.7

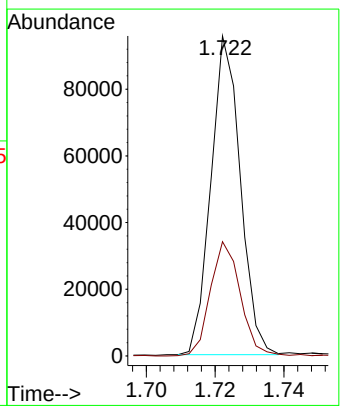


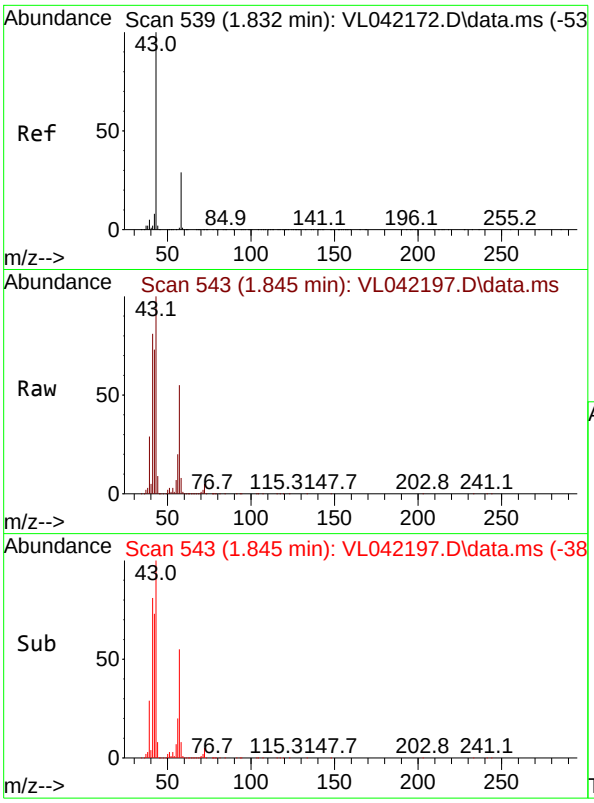


#13
Ethanol
Concen: 50.352 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 45 Resp: 56814

Ion	Ratio	Lower	Upper
45	100		
46	37.5	20.2	80.8



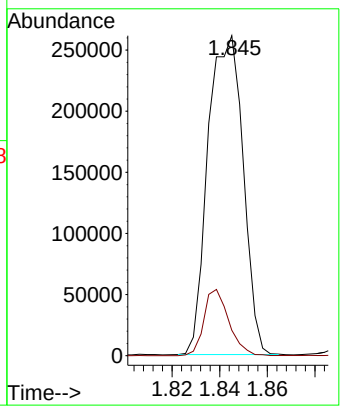


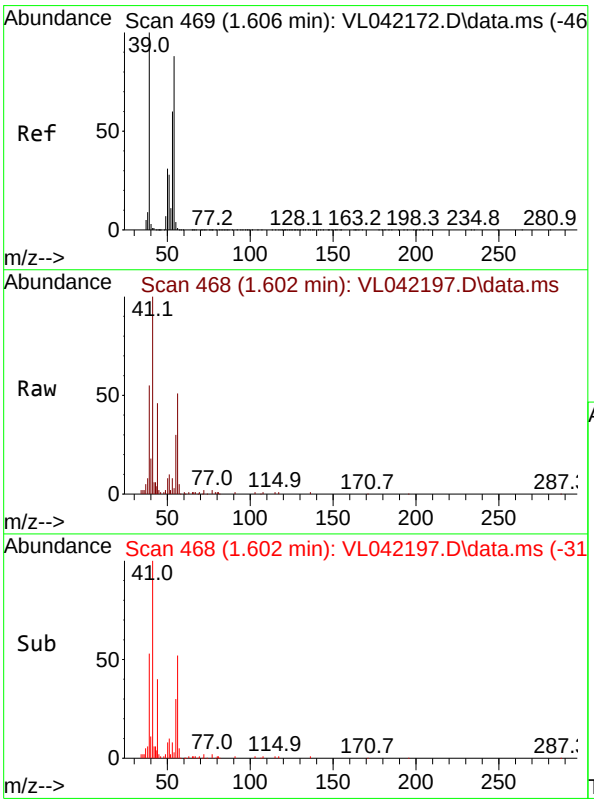
#15
Acetone
Concen: 11.053 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 43 Resp: 266878

Ion	Ratio	Lower	Upper
43	100		
58	15.1	23.2	34.8#

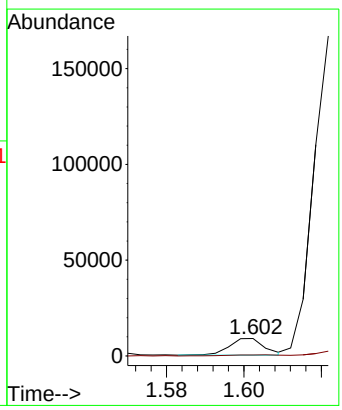


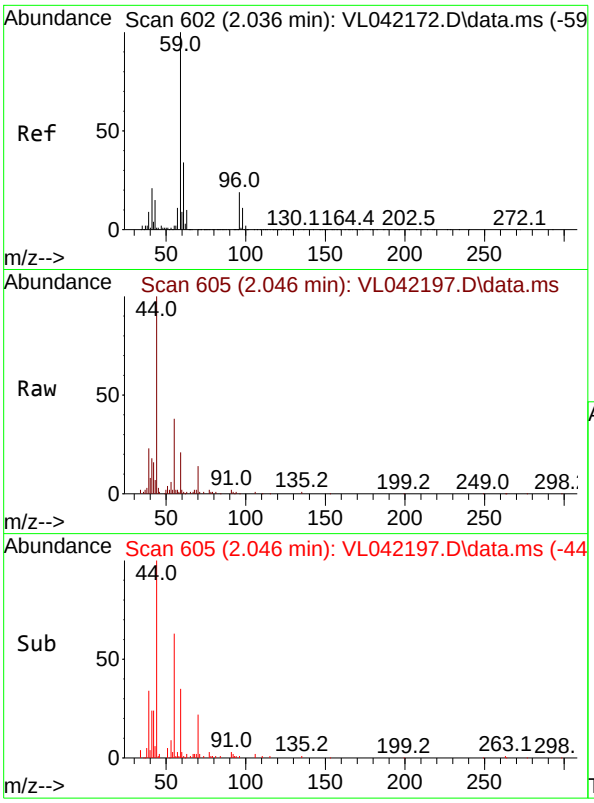


#16
1,3-Butadiene
Concen: 0.458 ppbv
RT: 1.602 min Scan# 468
Delta R.T. -0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 39 Resp: 5398

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.7	91.1#



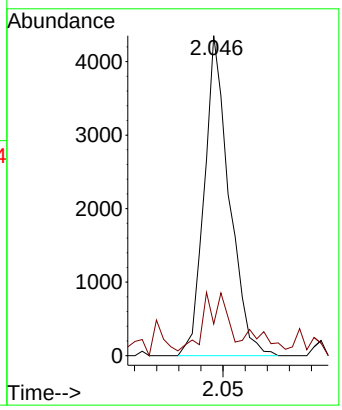


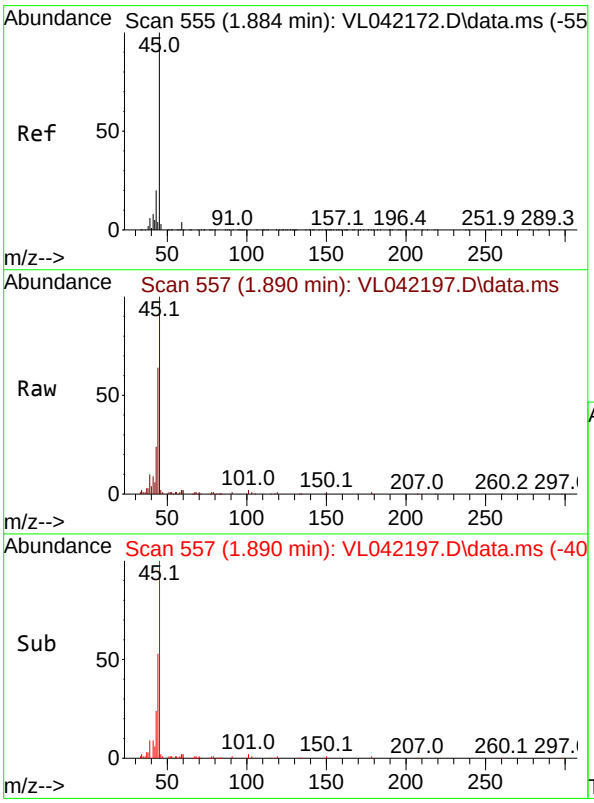
#17
tert-Butyl alcohol
Concen: 0.113 ppbv
RT: 2.046 min Scan# 6
Delta R.T. 0.010 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 59 Resp: 3401

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.9	13.3#

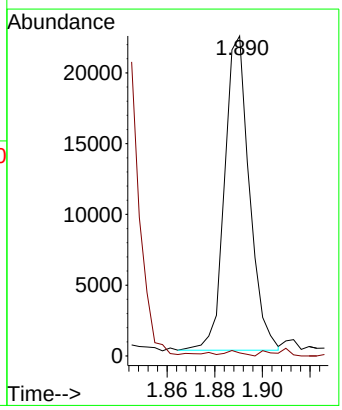


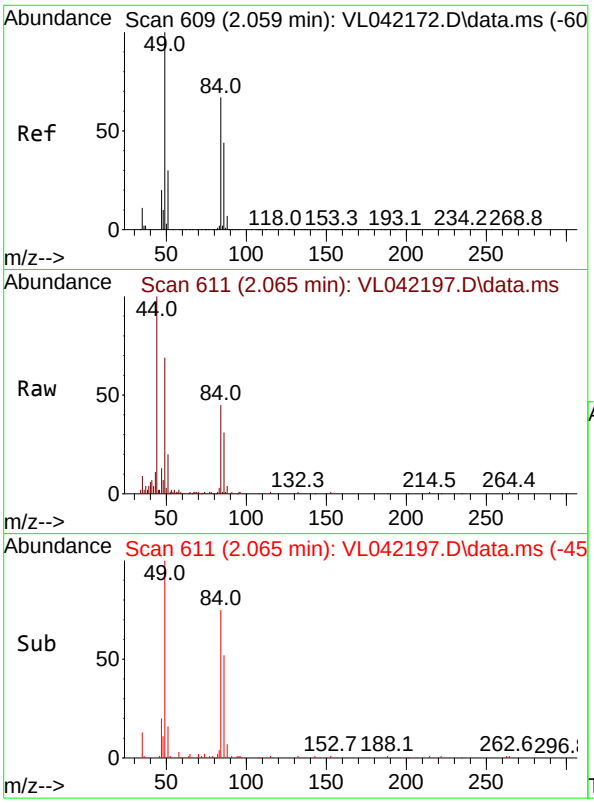


#19
Isopropyl Alcohol
Concen: 1.177 ppbv
RT: 1.890 min Scan# 557
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 45 Resp: 16035

Ion	Ratio	Lower	Upper
45	100		
58	247.8	36.9	55.3#



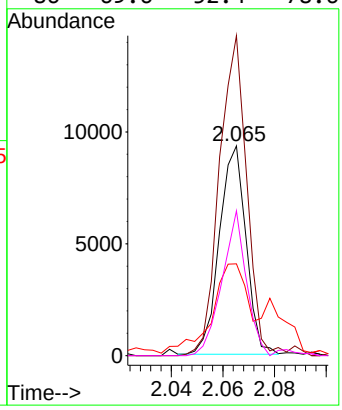


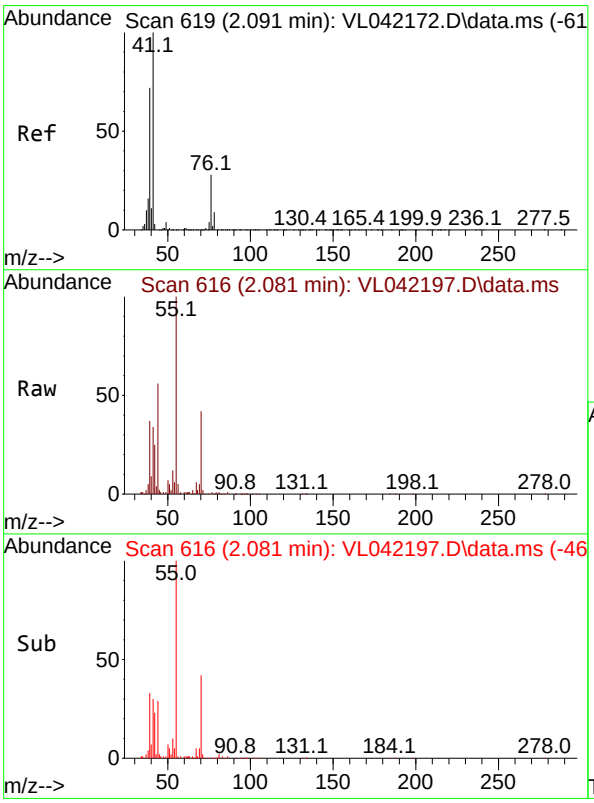
#20
Methylene Chloride
Concen: 0.741 ppbv
RT: 2.065 min Scan# 61
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 84 Resp: 6666

Ion	Ratio	Lower	Upper
84	100		
49	153.7	120.2	180.4
51	37.5	37.4	56.0
86	69.6	52.4	78.6

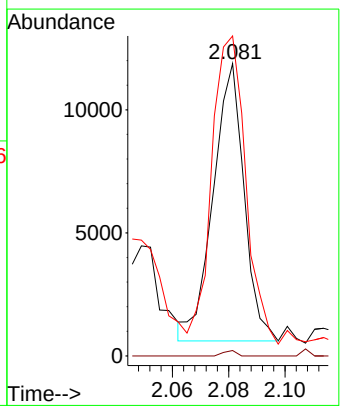


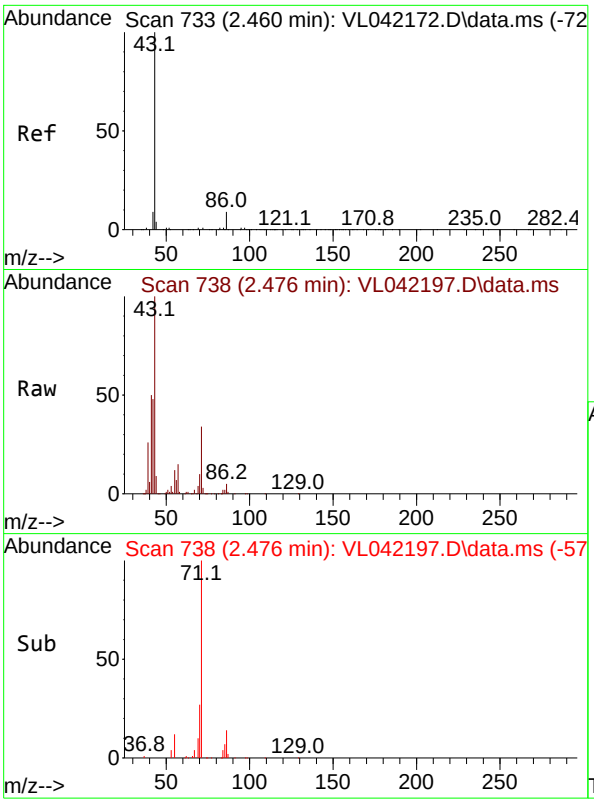


#21
Allyl Chloride
Concen: 0.504 ppbv
RT: 2.081 min Scan# 616
Delta R.T. -0.010 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 41 Resp: 8576

Ion	Ratio	Lower	Upper
41	100		
76	0.8	24.1	36.1#
39	177.4	61.1	91.7#



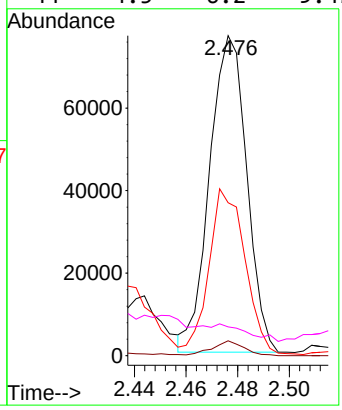


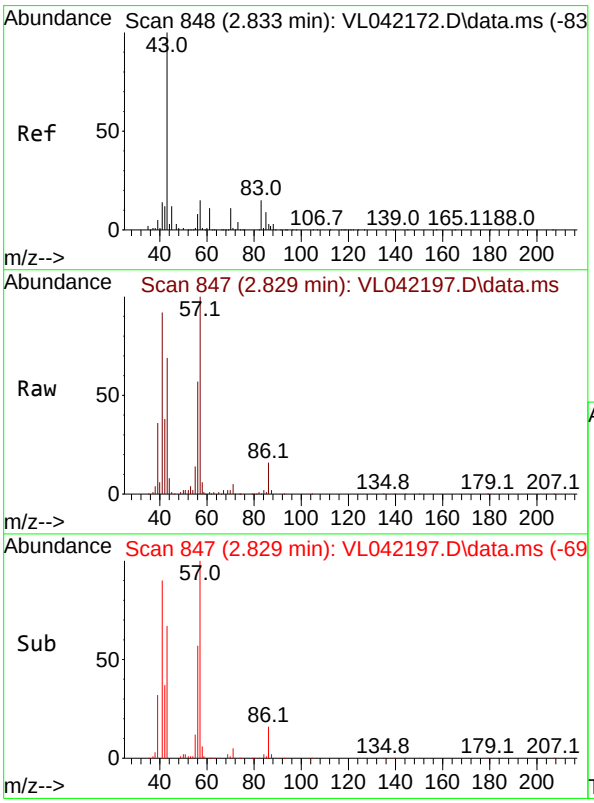
#23
Vinyl Acetate
Concen: 7.339 ppbv
RT: 2.476 min Scan# 7
Delta R.T. 0.016 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 43 Resp: 76691

Ion	Ratio	Lower	Upper
43	100		
86	4.7	5.5	8.3#
42	47.5	8.6	13.0#
44	4.5	6.2	9.4#

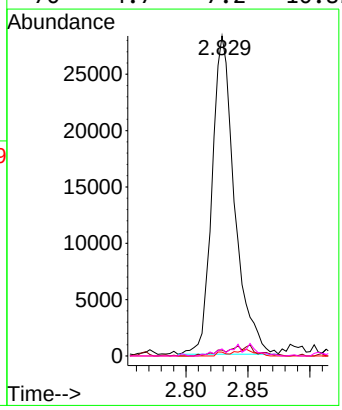


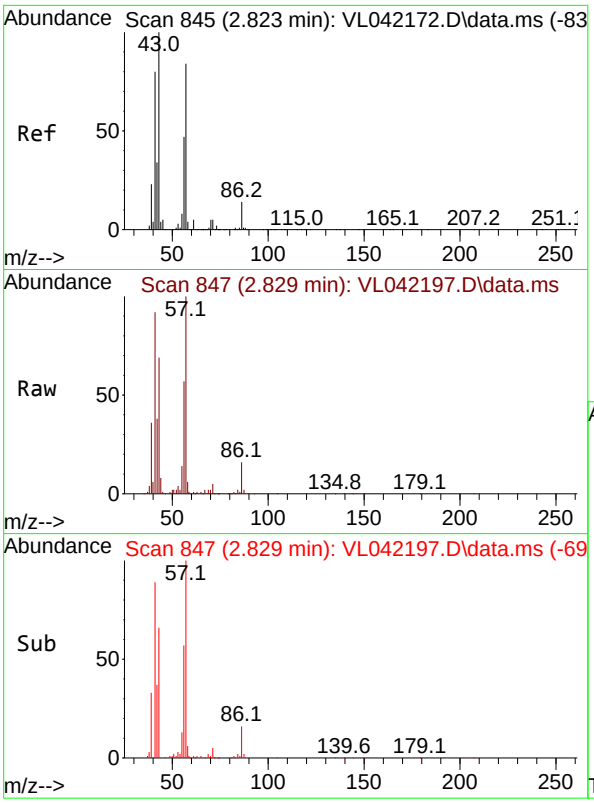


#25
Ethyl Acetate
Concen: 0.571 ppbv
RT: 2.829 min Scan# 847
Delta R.T. -0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 43 Resp: 35772

Ion	Ratio	Lower	Upper
43	100		
45	4.5	8.2	12.2#
61	2.3	7.3	10.9#
70	4.7	7.2	10.8#



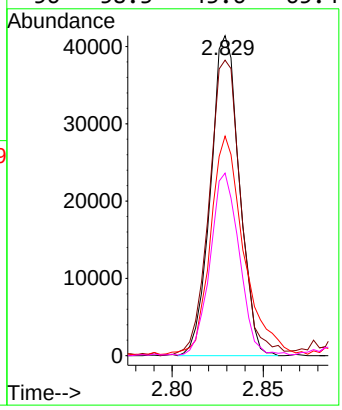


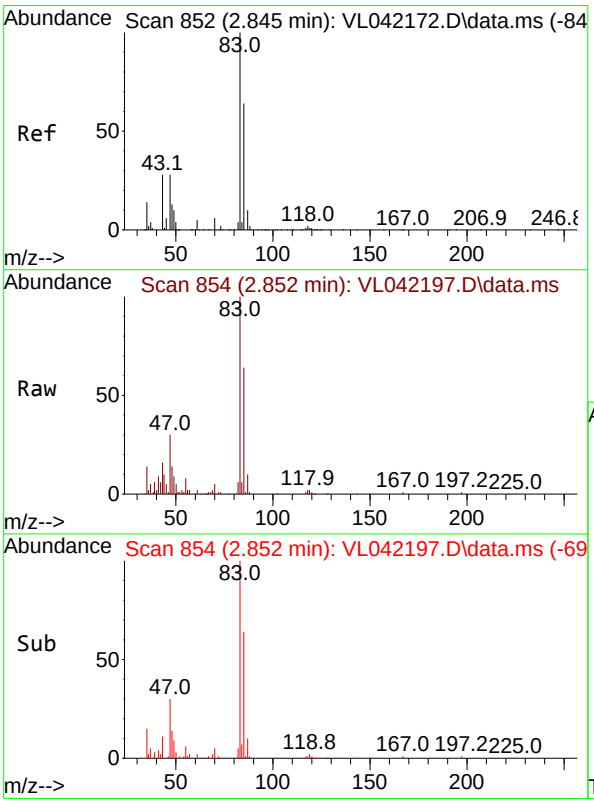
#26
Hexane
Concen: 1.876 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 57 Resp: 45421

Ion	Ratio	Lower	Upper
57	100		
41	102.0	76.6	114.8
43	79.1	207.8	311.8#
56	58.3	43.6	65.4

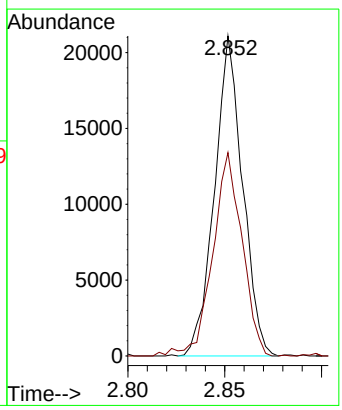


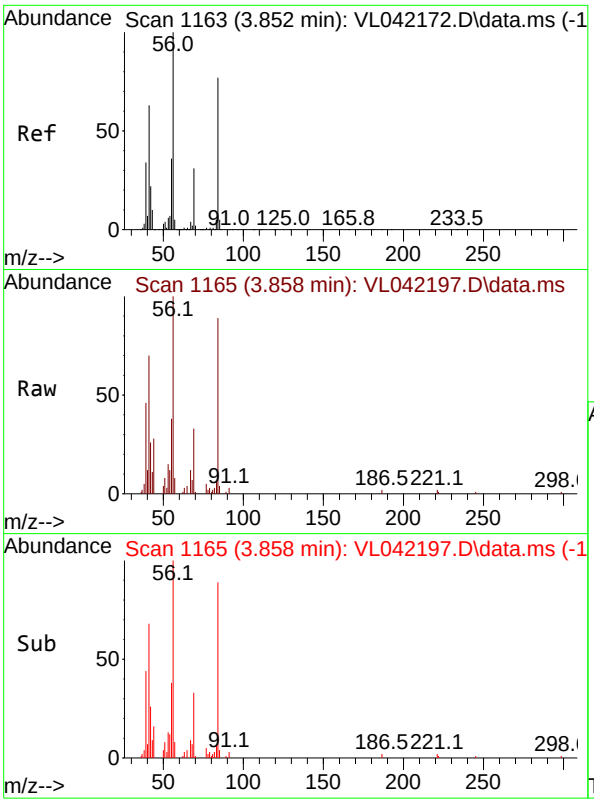


#29
Chloroform
Concen: 0.601 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 83 Resp: 21281

Ion	Ratio	Lower	Upper
83	100		
85	63.6	51.4	77.2



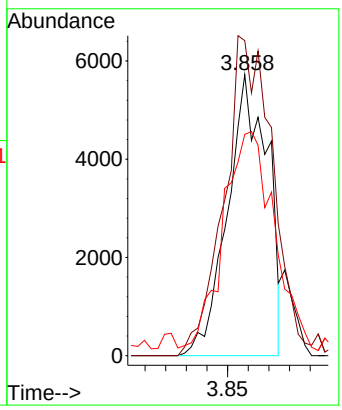


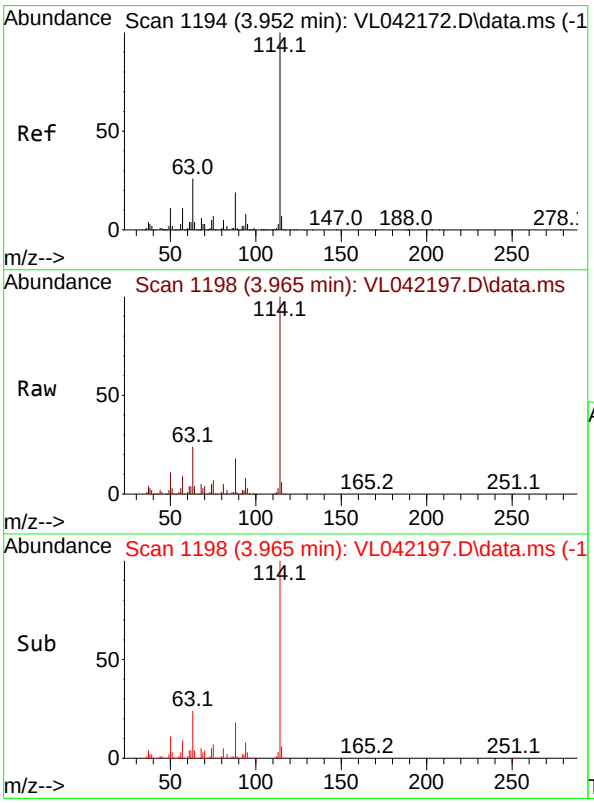
#30
Cyclohexane
Concen: 0.366 ppbv
RT: 3.858 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 84 Resp: 7683

Ion	Ratio	Lower	Upper
84	100		
56	139.1	102.8	154.2
41	100.9	66.5	99.7#

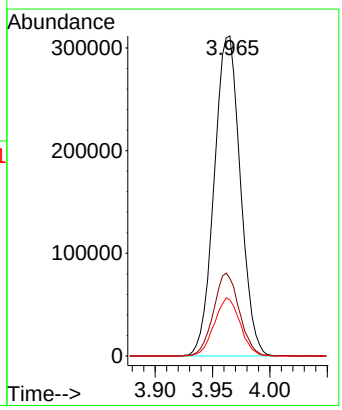


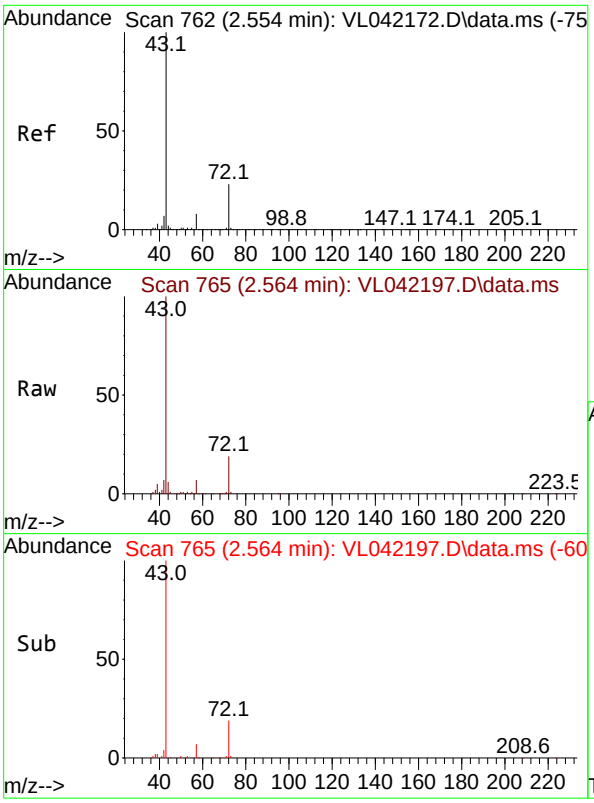


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:114 Resp: 493948

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.9	15.0	22.4



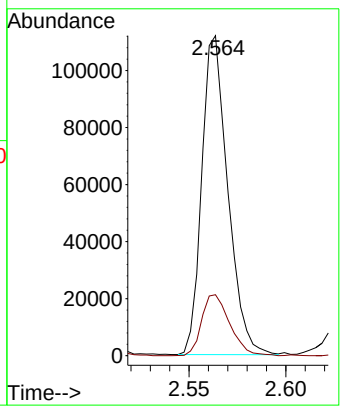


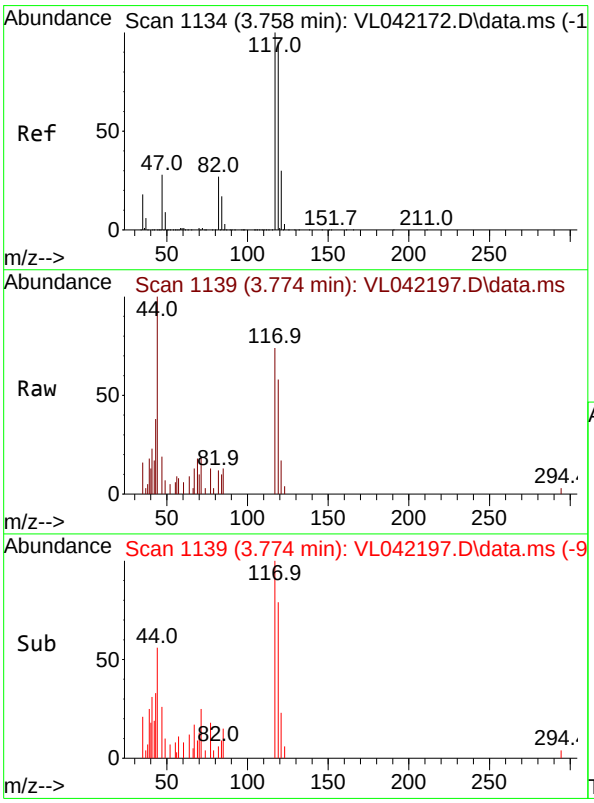
#34
2-Butanone
Concen: 2.922 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 43 Resp: 104671

Ion	Ratio	Lower	Upper
43	100		
72	20.7	18.2	27.2

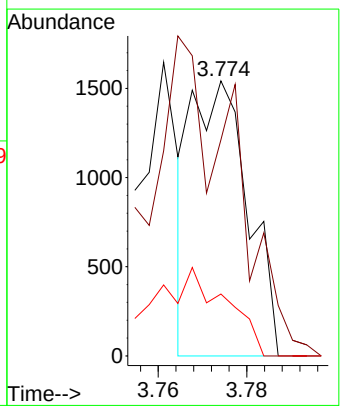


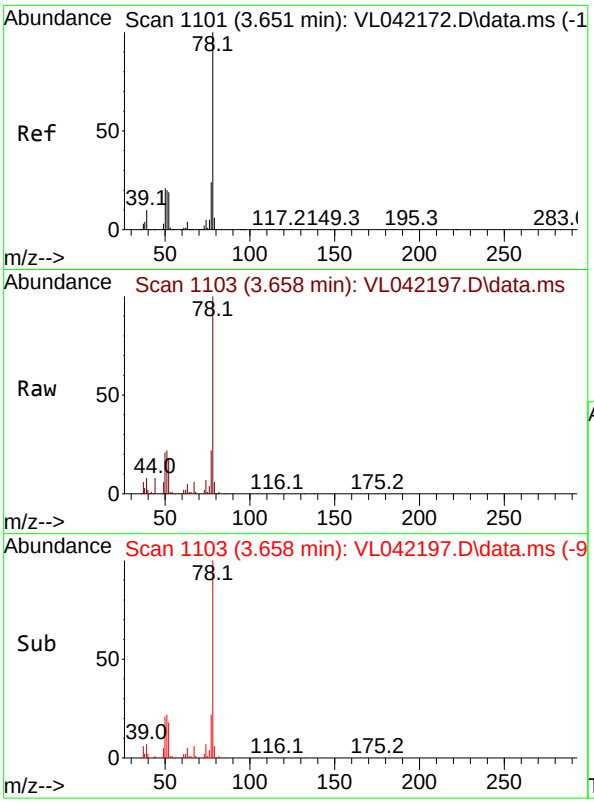


#35
Carbon Tetrachloride
Concen: 0.036 ppbv
RT: 3.774 min Scan# 1139
Delta R.T. 0.016 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:117 Resp: 1373

Ion	Ratio	Lower	Upper
117	100		
119	60.2	76.2	114.2#
121	22.5	24.2	36.4#



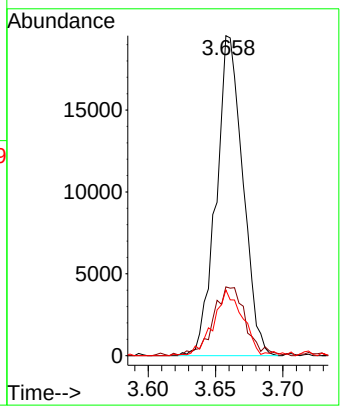


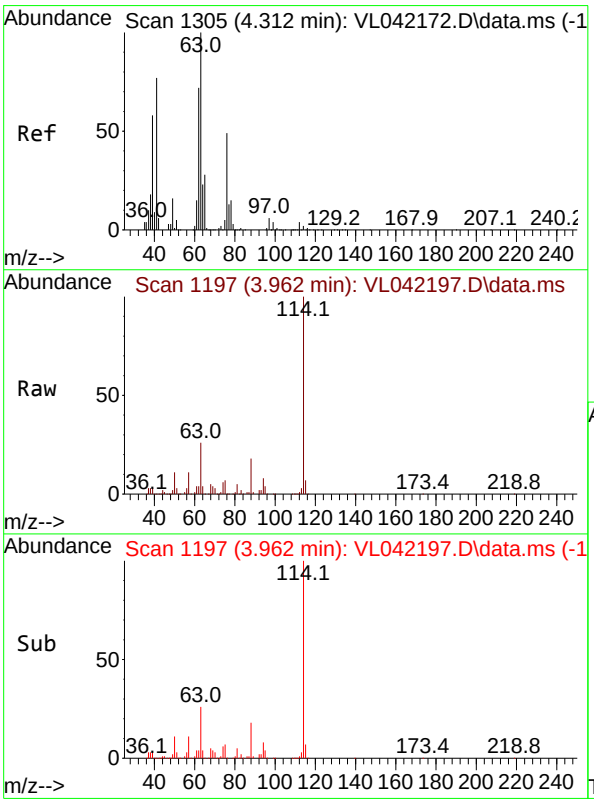
#36
Benzene
Concen: 0.550 ppbv
RT: 3.658 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 78 Resp: 26954

Ion	Ratio	Lower	Upper
78	100		
77	21.2	19.1	28.7
50	20.3	16.6	24.8

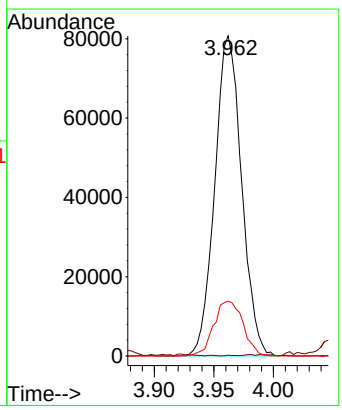


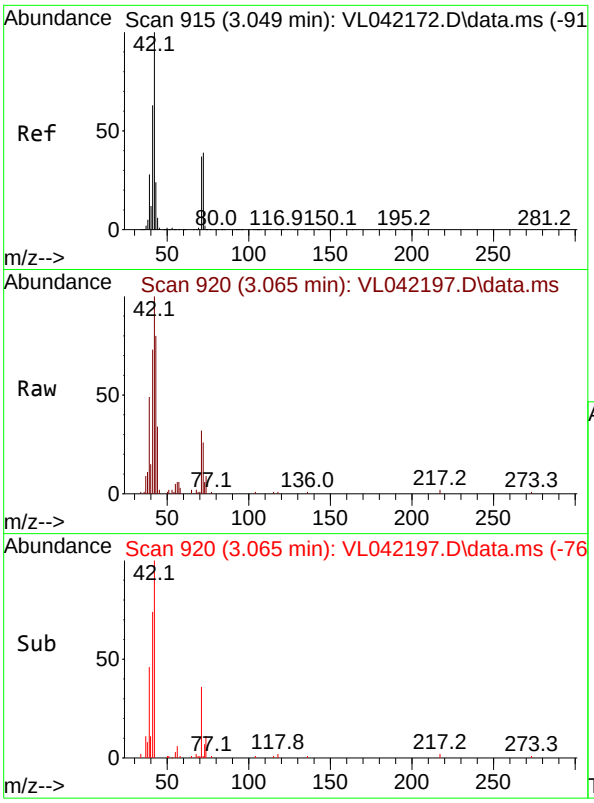


#39
1,2-Dichloropropane
Concen: 7.079 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.350 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 63 Resp: 126240

Ion	Ratio	Lower	Upper
63	100		
41	0.2	61.7	92.5#
62	17.2	57.6	86.4#



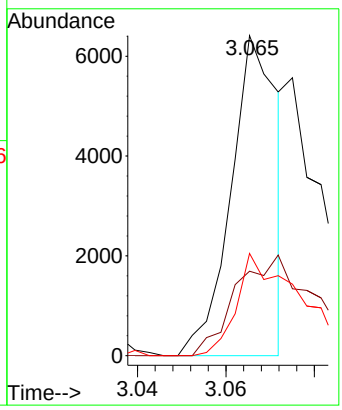


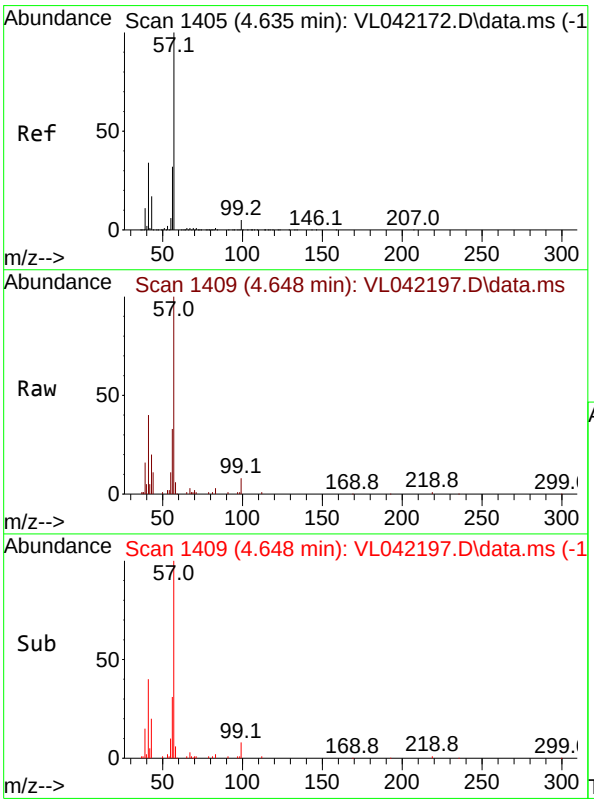
#41
Tetrahydrofuran
Concen: 0.228 ppbv
RT: 3.065 min Scan# 9
Delta R.T. 0.016 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 42 Resp: 4698

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	47.1	30.2	45.4#

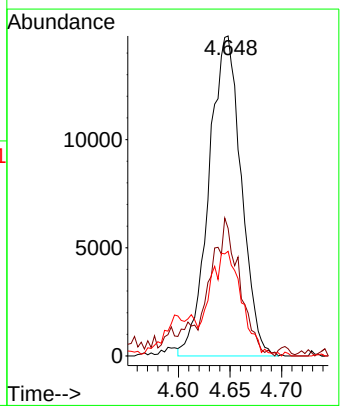


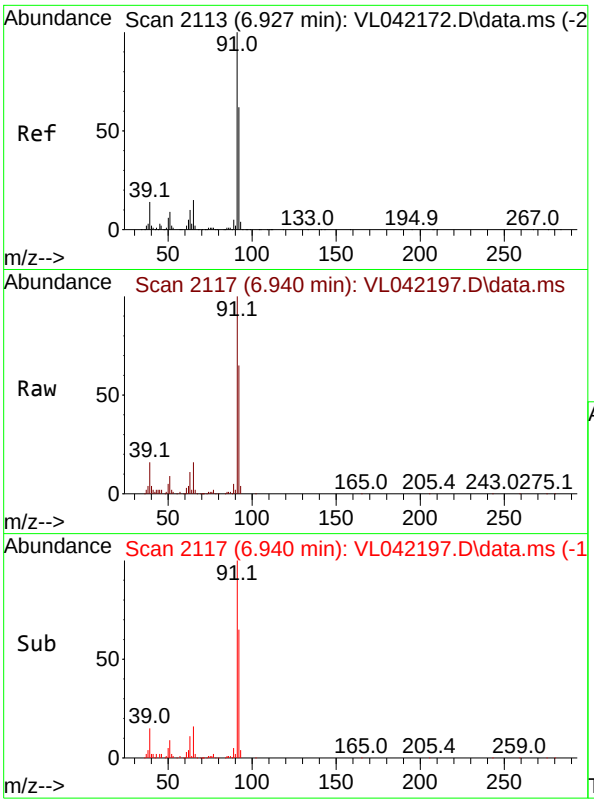


#44
2,2,4-Trimethylpentane
Concen: 0.388 ppbv
RT: 4.648 min Scan# 1409
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 57 Resp: 32093

Ion	Ratio	Lower	Upper
57	100		
41	47.6	26.8	40.2#
56	44.7	25.6	38.4#



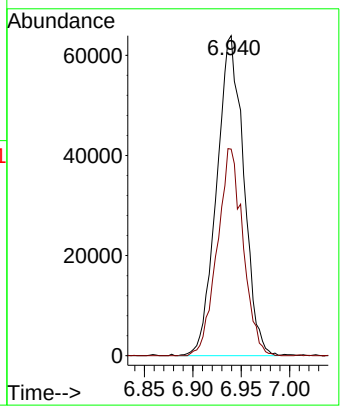


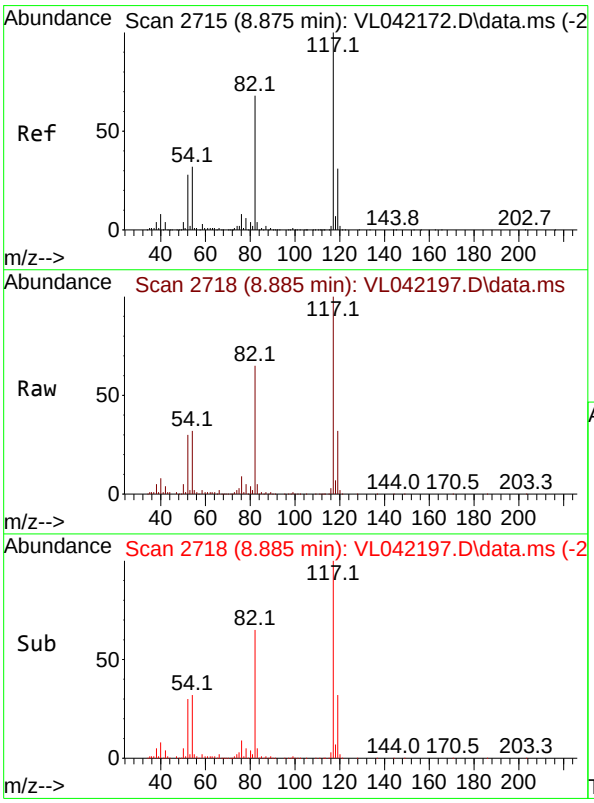
#53
Toluene
Concen: 2.136 ppbv
RT: 6.940 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 91 Resp: 124001

Ion	Ratio	Lower	Upper
91	100		
92	61.8	48.4	72.6

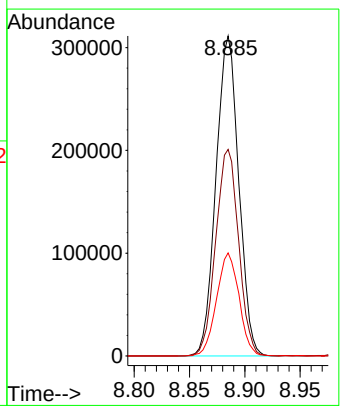


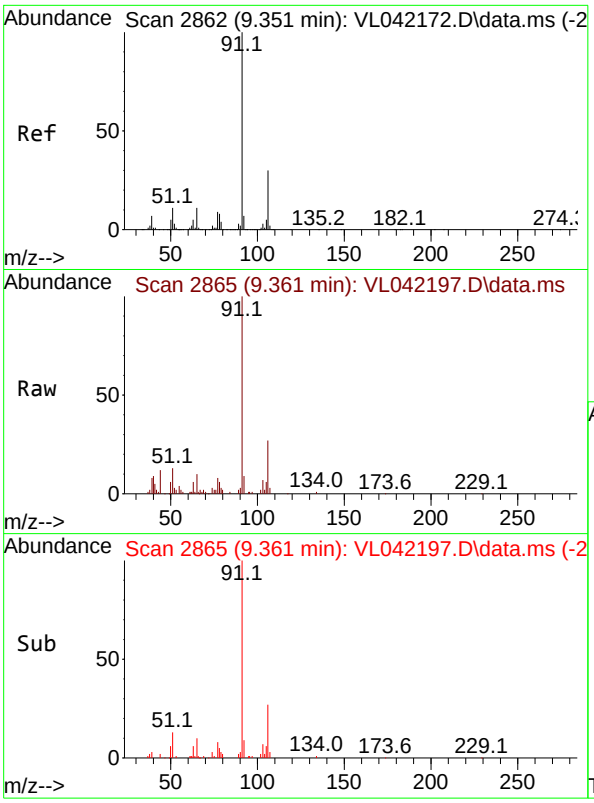


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:117 Resp: 445312

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	32.0	25.5	38.3



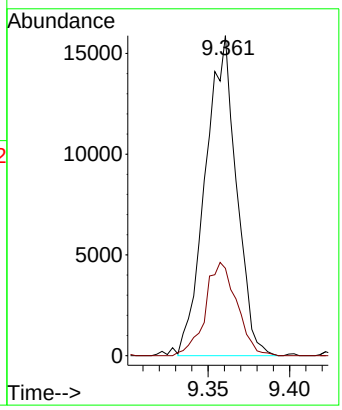


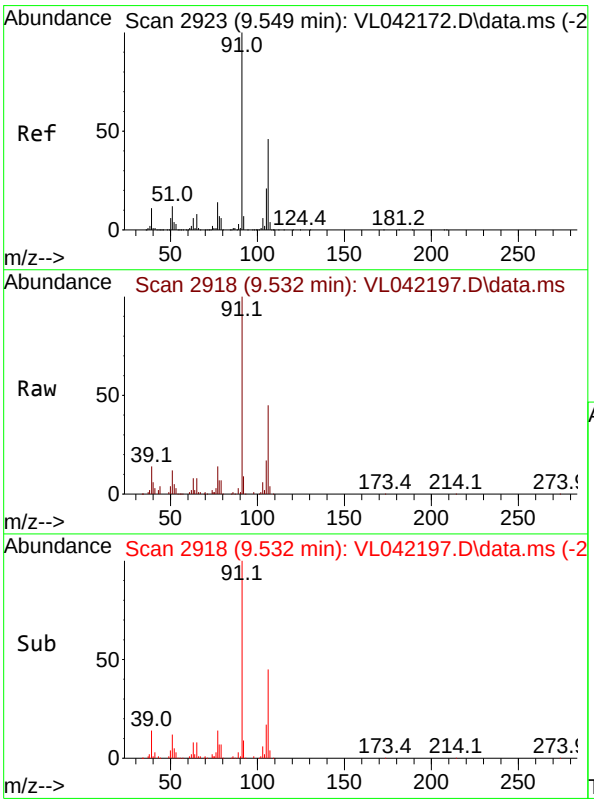
#58
Ethyl Benzene
Concen: 0.265 ppbv
RT: 9.361 min Scan# 2
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 91 Resp: 20976

Ion	Ratio	Lower	Upper
91	100		
106	27.3	24.2	36.2

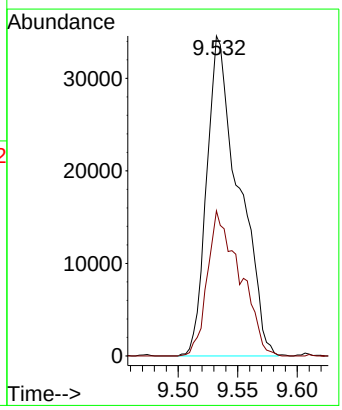


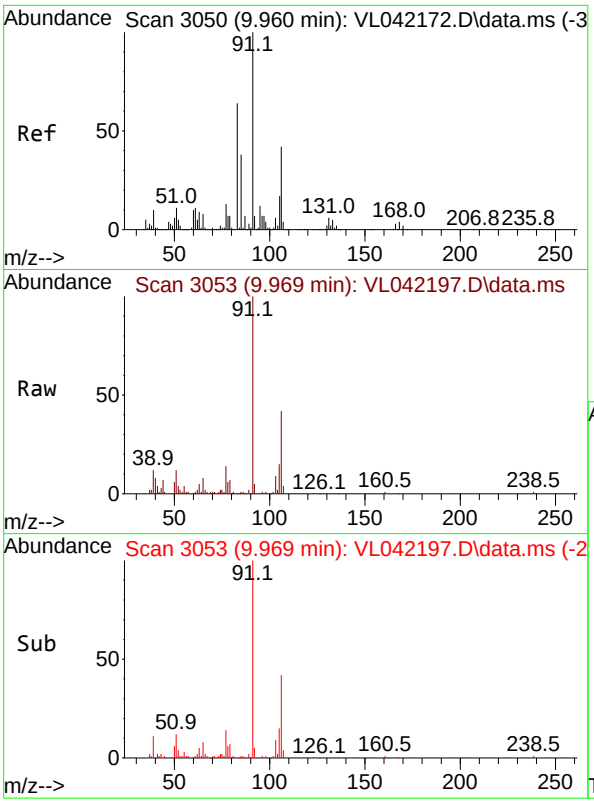


#59
m/p-Xylene
Concen: 1.026 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 91 Resp: 64820

Ion	Ratio	Lower	Upper
91	100		
106	46.1	36.4	54.6



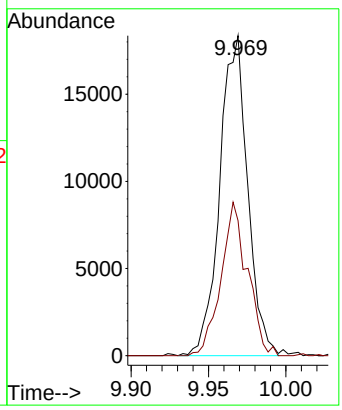


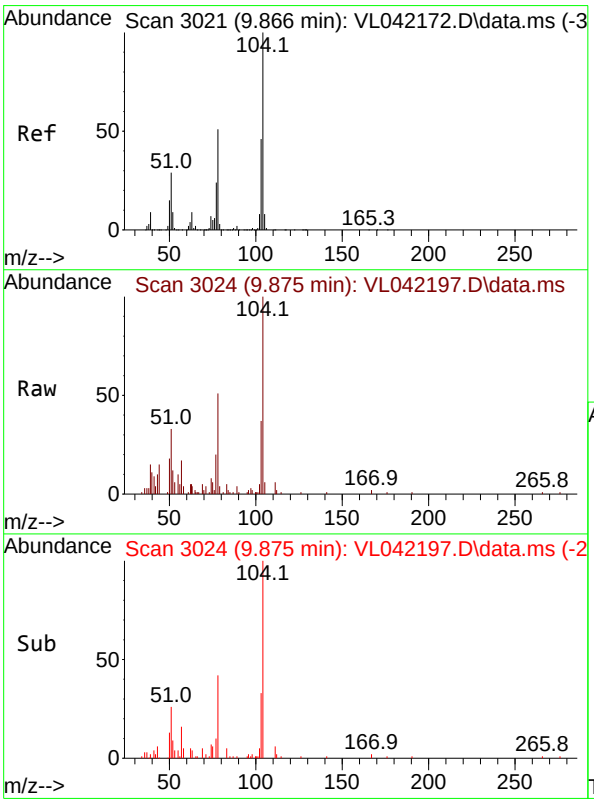
#60
o-Xylene
Concen: 0.363 ppbv
RT: 9.969 min Scan# 3
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 91 Resp: 22977

Ion	Ratio	Lower	Upper
91	100		
106	45.7	20.8	62.5

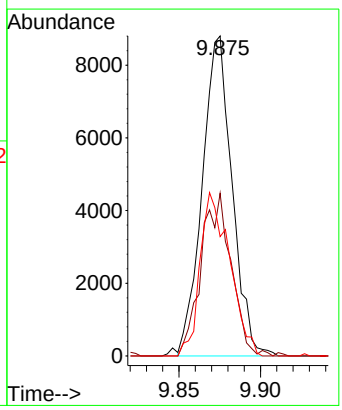


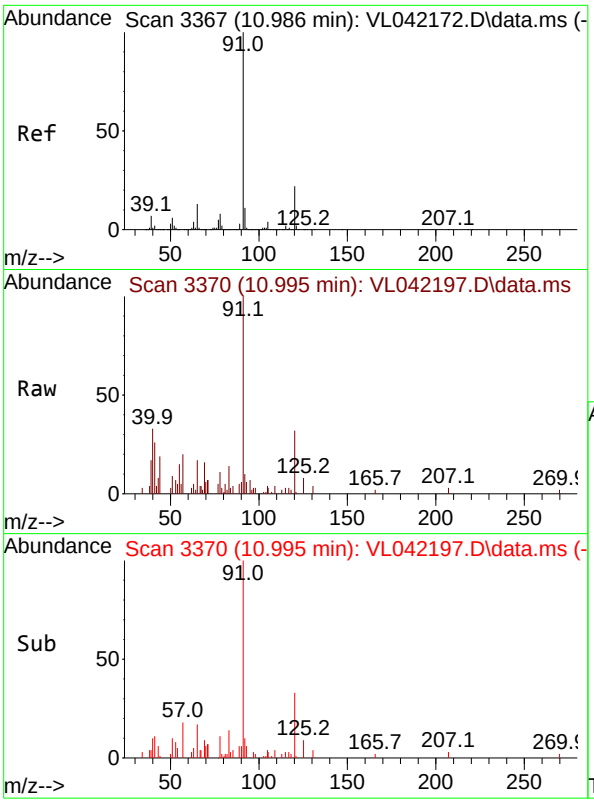


#61
Styrene
Concen: 0.359 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:104 Resp: 11230

Ion	Ratio	Lower	Upper
104	100		
78	51.4	41.8	62.6
103	50.7	37.0	55.4



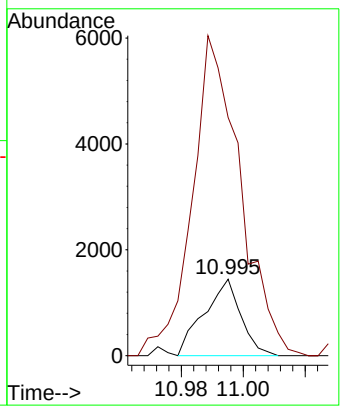


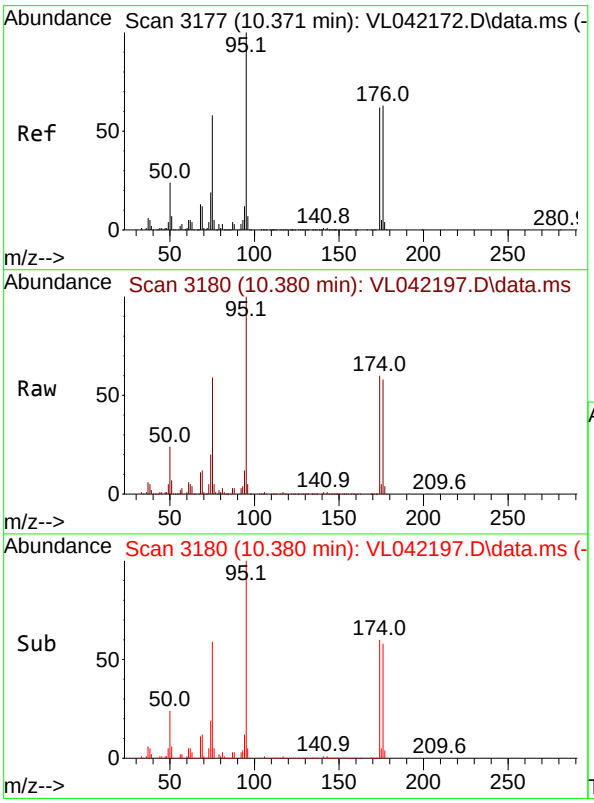
#64
n-propylbenzene
Concen: 0.049 ppbv
RT: 10.995 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion:120 Resp: 1196

Ion	Ratio	Lower	Upper
120	100		
91	560.8	376.9	565.3

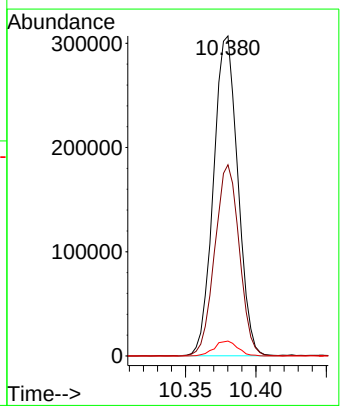


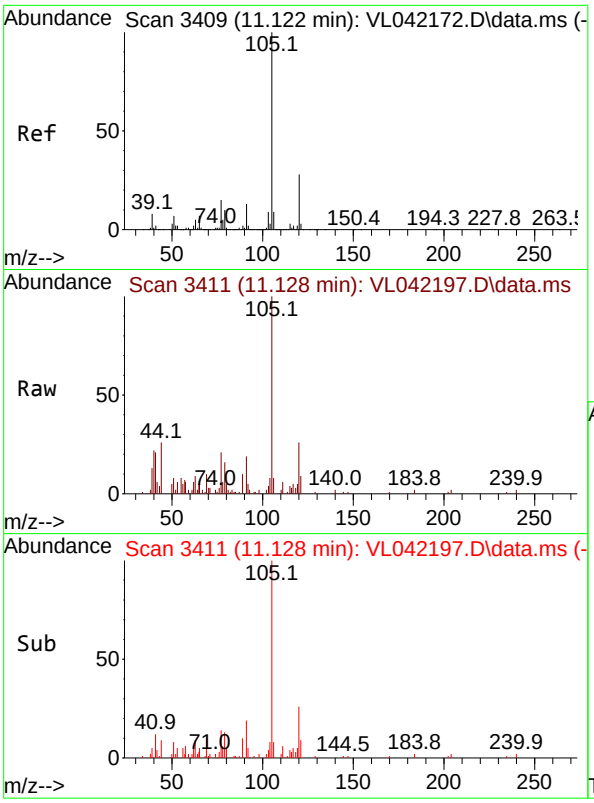


#68
1-Bromo-4-Fluorobenzene
Concen: 10.088 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 95 Resp: 368899

Ion	Ratio	Lower	Upper
95	100		
174	60.5	50.6	76.0
175	4.5	3.8	5.6



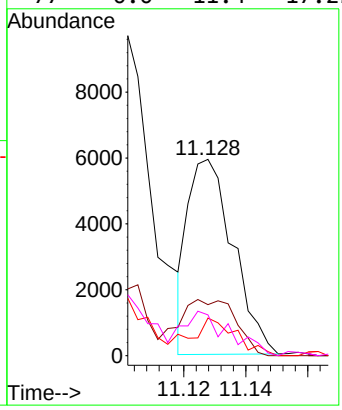


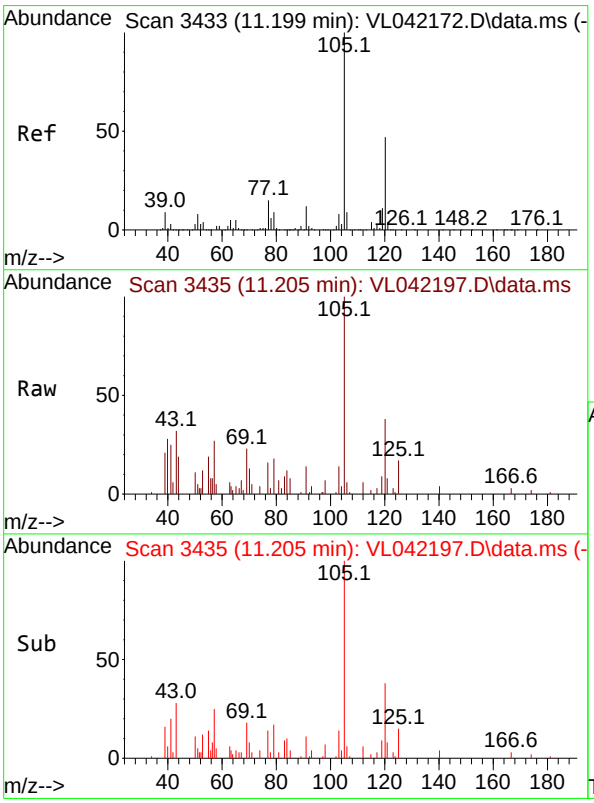
#72
4-Ethyltoluene
Concen: 0.076 ppbv
RT: 11.128 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion:105 Resp: 5978

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#

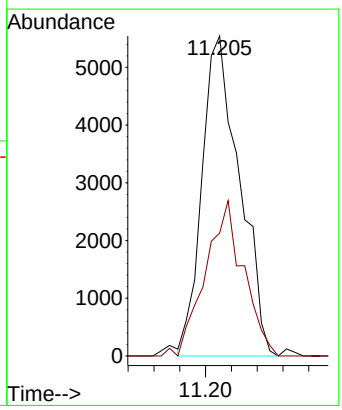


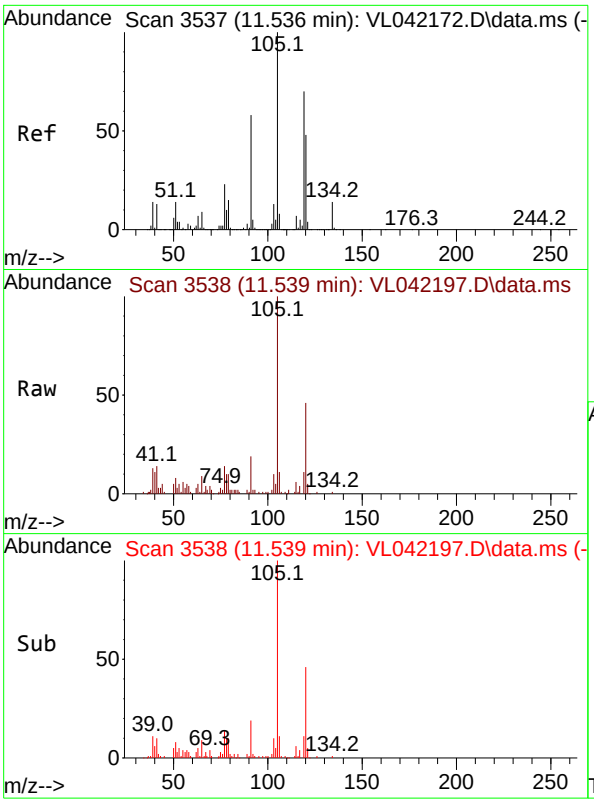


#73
1,3,5-Trimethylbenzene
Concen: 0.081 ppbv
RT: 11.205 min Scan# 3435
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:105 Resp: 5610

Ion	Ratio	Lower	Upper
105	100		
120	46.2	37.4	56.0



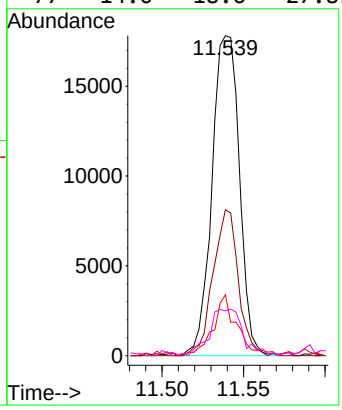


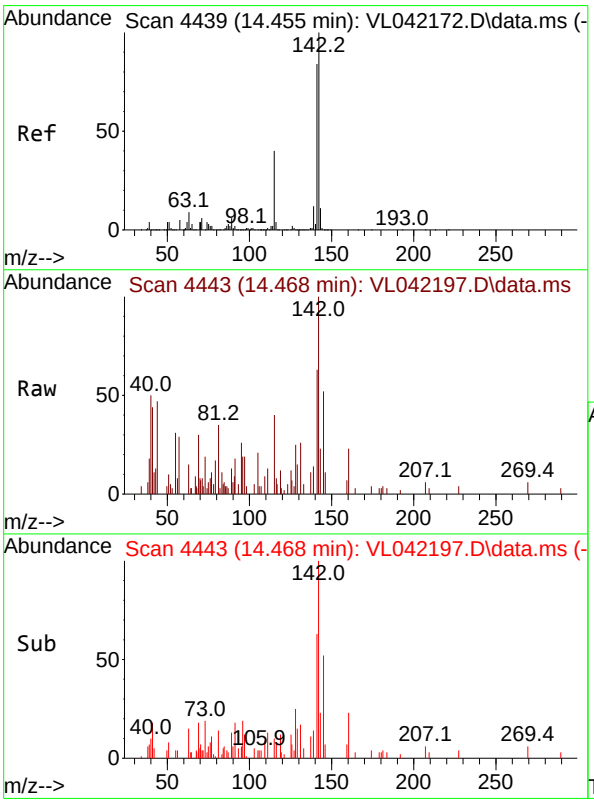
#74
1,2,4-Trimethylbenzene
Concen: 0.263 ppbv
RT: 11.539 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion:105 Resp: 20838

Ion	Ratio	Lower	Upper
105	100		
120	45.6	38.6	58.0
91	19.0	46.2	69.2#
77	14.0	18.6	27.8#

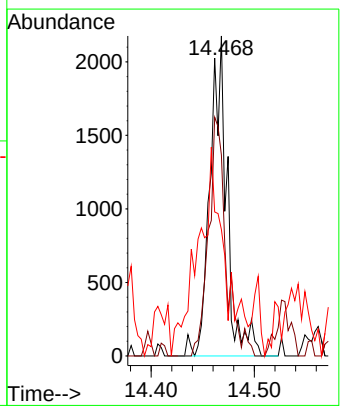




#80
Naphthalene,2-methyl-
Concen: 0.058 ppbv
RT: 14.468 min Scan# 4443
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:142 Resp: 2467

Ion	Ratio	Lower	Upper
142	100		
141	77.0	66.3	99.5
115	106.3	31.6	47.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Quant Time: Mar 28 23:03:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	175214	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	504192	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	456695	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	374920	9.997	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.495	85	13401	0.518	ppbv	96
3) Chlorodifluoromethane	1.473	51	4505	0.170	ppbv #	91
4) Chloromethane	1.528	50	1536	0.145	ppbv #	64
9) Propene	1.479	41	10650	0.879	ppbv	96
10) Heptane	4.978	43	6715	0.208	ppbv #	66
11) Trichlorofluoromethane	1.877	101	5125	0.204	ppbv	91
12) 1,1,2-Trichlorotrifluo...	2.143	101	1240	0.060	ppbv	89
13) Ethanol	1.722	45	170673	149.043	ppbv	82
15) Acetone	1.835	43	866562	35.363	ppbv	98
16) 1,3-Butadiene	1.599	39	29502	2.465	ppbv #	24
17) tert-Butyl alcohol	2.042	59	19215	0.630	ppbv #	89
19) Isopropyl Alcohol	1.887	45	17071	1.235	ppbv #	1
20) Methylene Chloride	2.065	84	14093	1.544	ppbv	94
21) Allyl Chloride	2.081	41	1234	0.071	ppbv #	1
23) Vinyl Acetate	2.476	43	29318	2.764	ppbv #	49
25) Ethyl Acetate	2.829	43	19645	0.309	ppbv #	89
26) Hexane	2.829	57	26539	1.080	ppbv #	33
27) Carbon Disulfide	2.146	76	1202	0.046	ppbv #	1
29) Chloroform	2.852	83	3953	0.110	ppbv	93
30) Cyclohexane	3.858	84	3437	0.161	ppbv #	37
32) 1,1,1-Trichloroethane	3.376	97	2054	0.050	ppbv	89
34) 2-Butanone	2.564	43	85672	2.343	ppbv	99
36) Benzene	3.661	78	22692	0.454	ppbv #	92
39) 1,2-Dichloropropane	3.962	63	130214	7.153	ppbv #	23
41) Tetrahydrofuran	3.065	42	9870	0.469	ppbv	95
44) 2,2,4-Trimethylpentane	4.641	57	19657	0.233	ppbv #	61
50) 4-Methyl-2-Pentanone	5.768	43	90838	1.568	ppbv	99
52) Tetrachloroethene	8.224	164	2909	0.147	ppbv #	78
53) Toluene	6.936	91	360213	6.079	ppbv	100
57) Chlorobenzene	8.924	112	2905	0.067	ppbv #	64
58) Ethyl Benzene	9.354	91	43413	0.535	ppbv #	87
59) m/p-Xylene	9.532	91	127535	1.969	ppbv	99
60) o-Xylene	9.966	91	56023	0.863	ppbv	98
61) Styrene	9.869	104	25026	0.779	ppbv	98
62) Isopropylbenzene	10.535	105	7520	0.077	ppbv	92
64) n-propylbenzene	10.989	120	2528	0.101	ppbv #	9
65) tert-Butylbenzene	11.539	119	4406	0.049	ppbv #	60
67) sec-Butylbenzene	12.225	105	3942	0.032	ppbv	94
72) 4-Ethyltoluene	11.124	105	14976	0.185	ppbv #	62
73) 1,3,5-Trimethylbenzene	11.205	105	14315	0.203	ppbv	98
74) 1,2,4-Trimethylbenzene	11.536	105	39507	0.486	ppbv #	70

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Quant Time: Mar 28 23:03:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

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

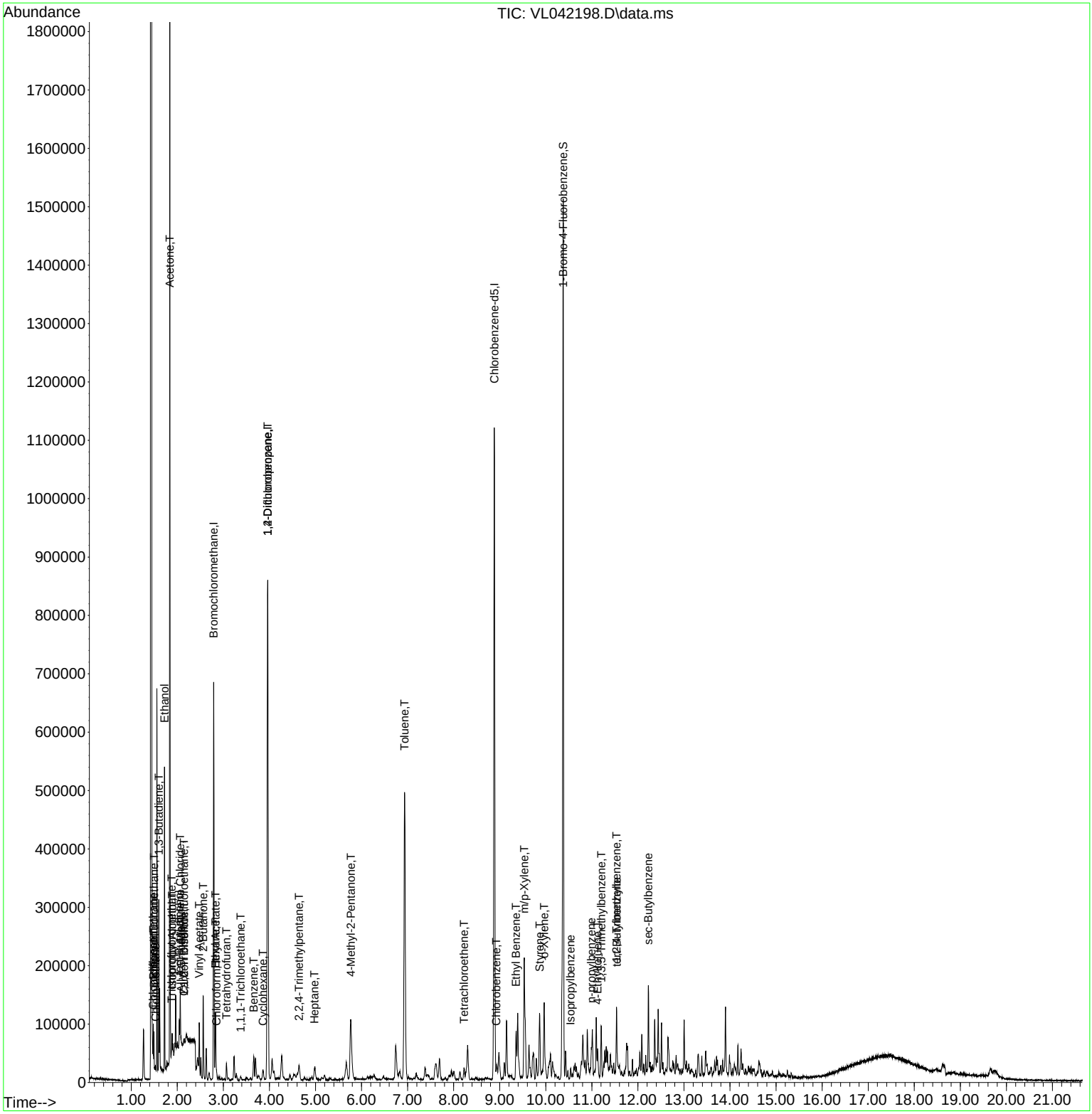
(#) = qualifier out of range (m) = manual integration (+) = signals summed

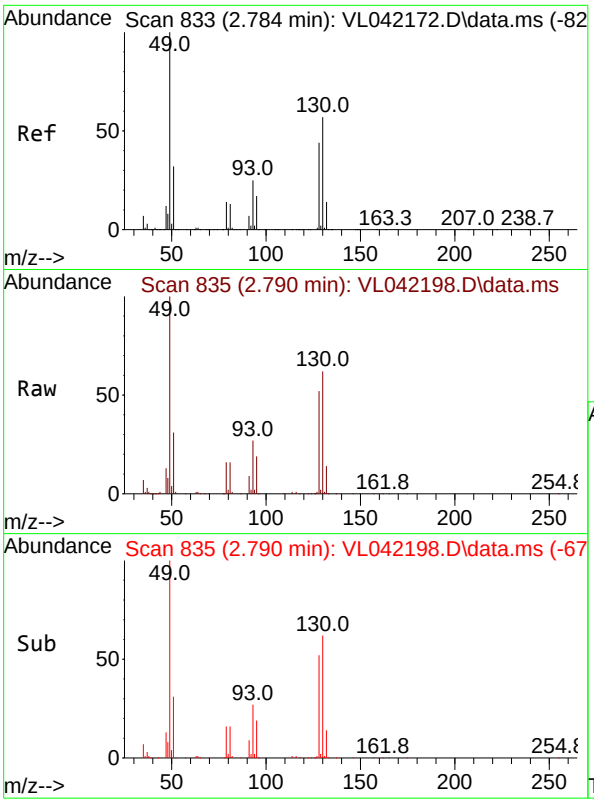
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042198.D
Acq On : 28 Mar 2025 01:57
Operator : SY/MD
Sample : Q1669-07
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Quant Time: Mar 28 23:03:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



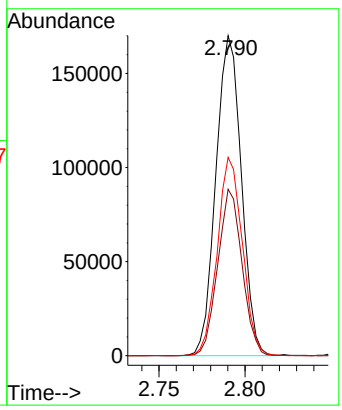


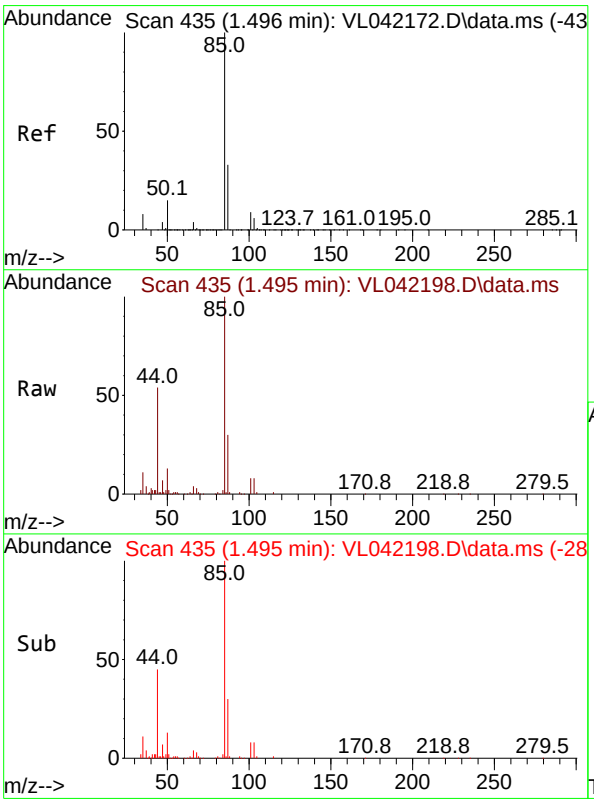
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 49 Resp: 175214

Ion	Ratio	Lower	Upper
49	100		
128	49.8	22.9	68.5
130	61.1	28.8	86.4

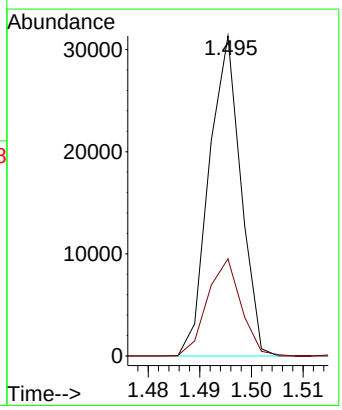


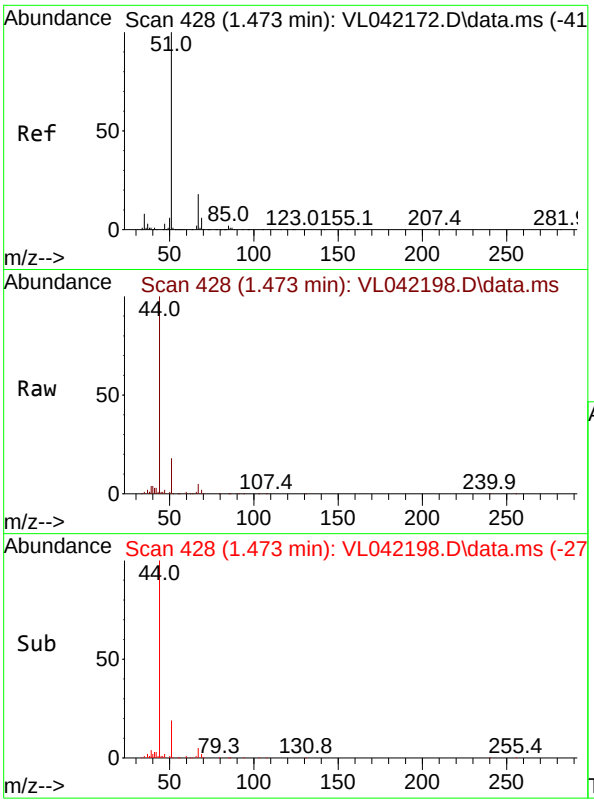


#2
Dichlorodifluoromethane
Concen: 0.518 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 85 Resp: 13401

Ion	Ratio	Lower	Upper
85	100		
87	30.2	26.1	39.1



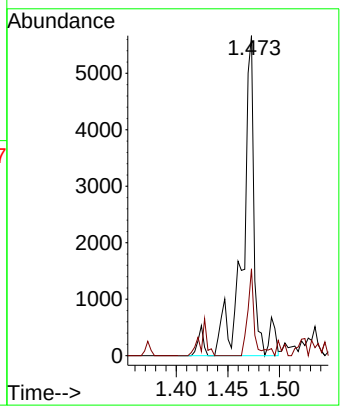


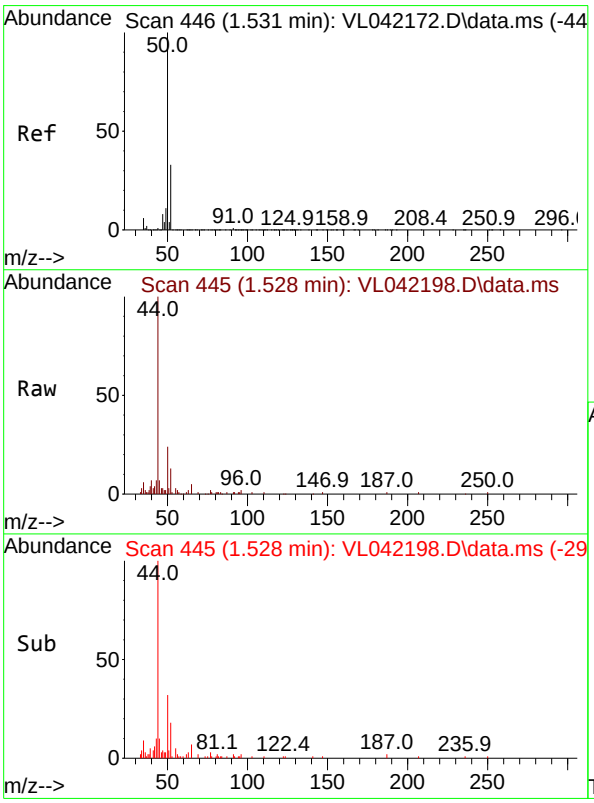
#3
Chlorodifluoromethane
Concen: 0.170 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 51 Resp: 4505

Ion	Ratio	Lower	Upper
51	100		
67	15.0	15.0	22.6#

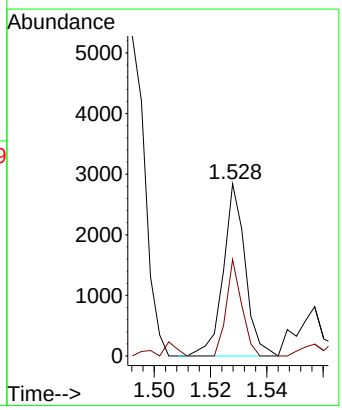


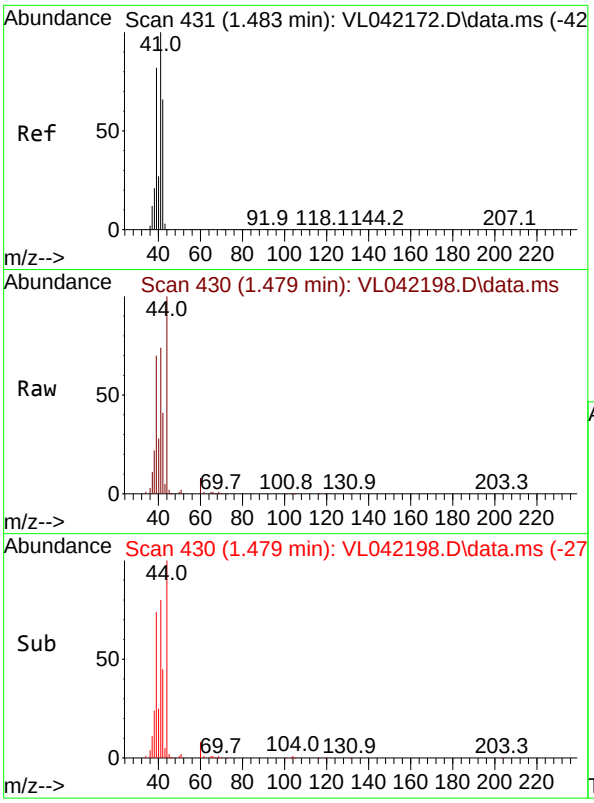


#4
Chloromethane
Concen: 0.145 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.004 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 50 Resp: 1536

Ion	Ratio	Lower	Upper
50	100		
52	52.7	26.1	39.1#



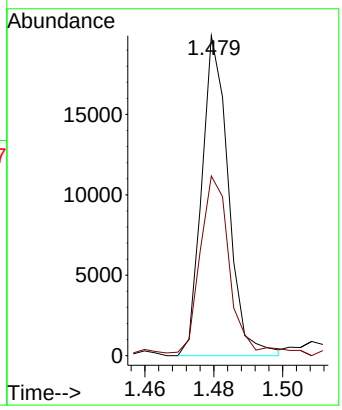


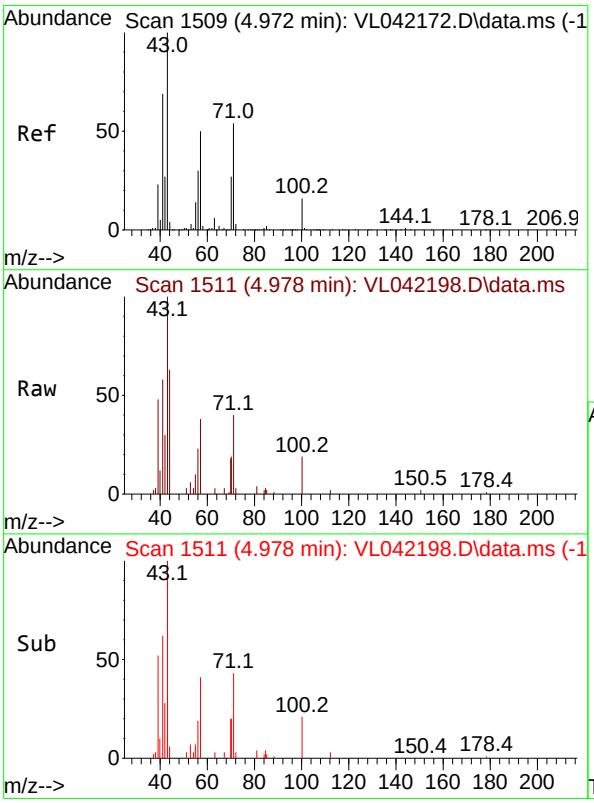
#9
Propene
Concen: 0.879 ppbv
RT: 1.479 min Scan# 4
Delta R.T. -0.004 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 41 Resp: 10650

Ion	Ratio	Lower	Upper
41	100		
42	66.4	55.4	83.2

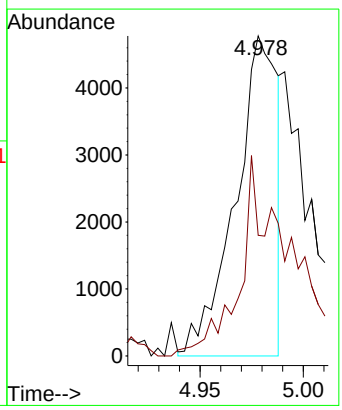


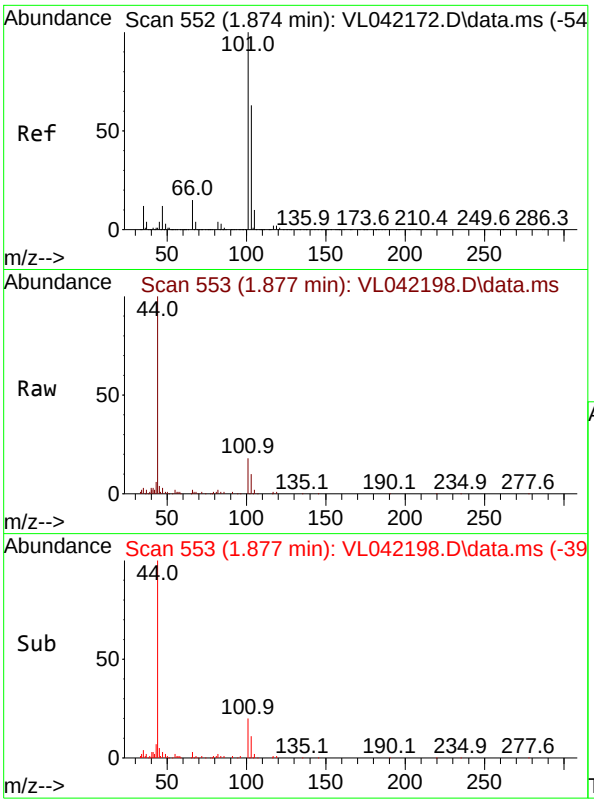


#10
Heptane
Concen: 0.208 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 6715

Ion	Ratio	Lower	Upper
43	100		
57	72.8	39.4	59.2#



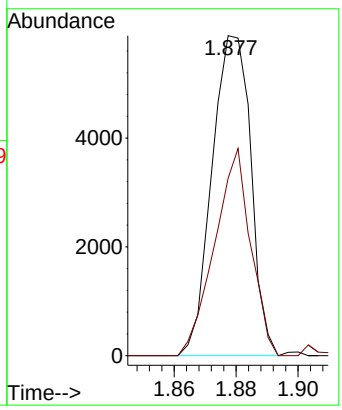


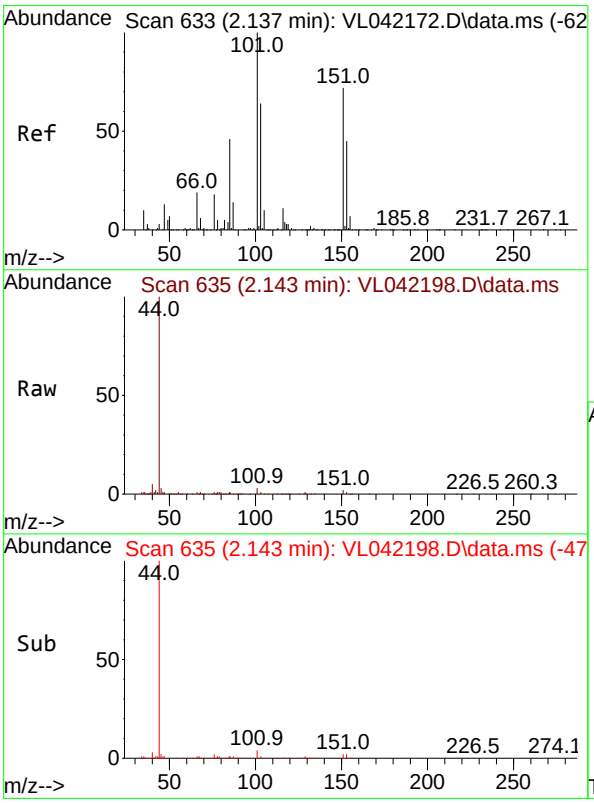
#11
Trichlorofluoromethane
Concen: 0.204 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:101 Resp: 5125

Ion	Ratio	Lower	Upper
101	100		
103	55.4	50.2	75.2

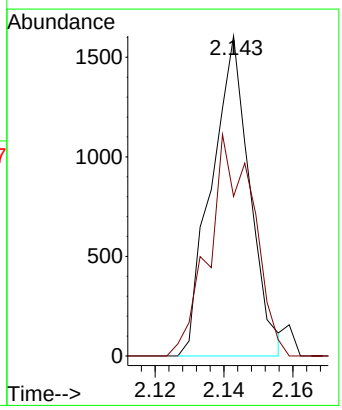


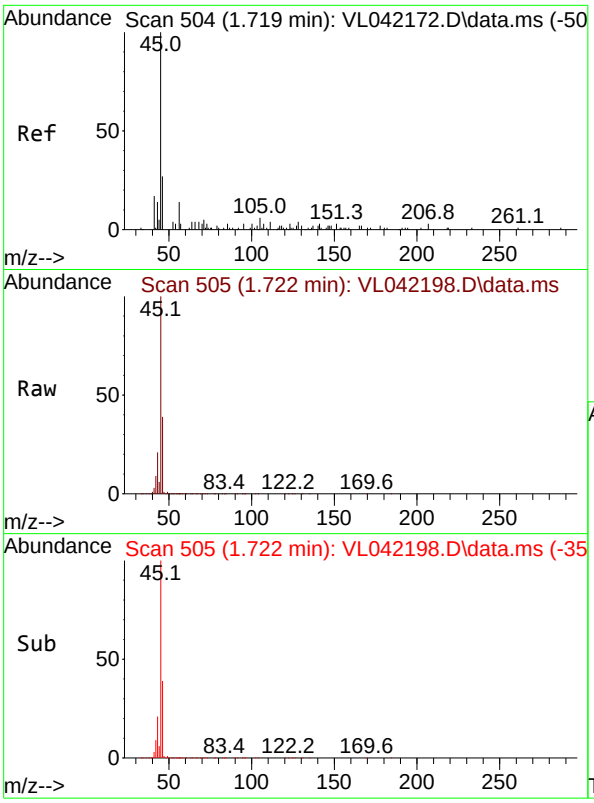


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.060 ppbv
RT: 2.143 min Scan# 635
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:101 Resp: 1240

Ion	Ratio	Lower	Upper
101	100		
151	80.2	57.1	85.7



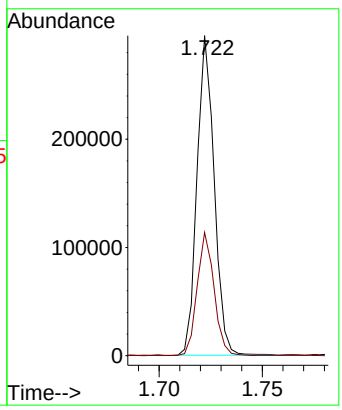


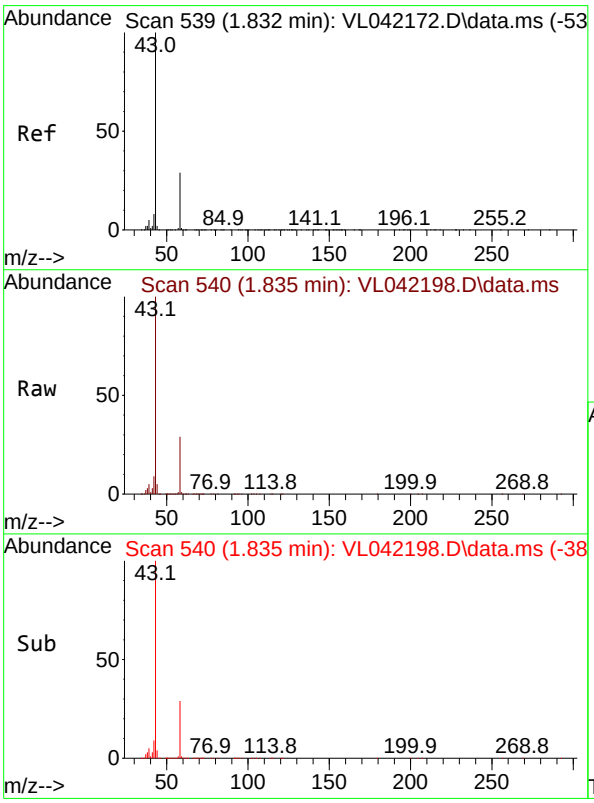
#13
Ethanol
Concen: 149.043 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 45 Resp: 170673

Ion	Ratio	Lower	Upper
45	100		
46	38.0	20.2	80.8

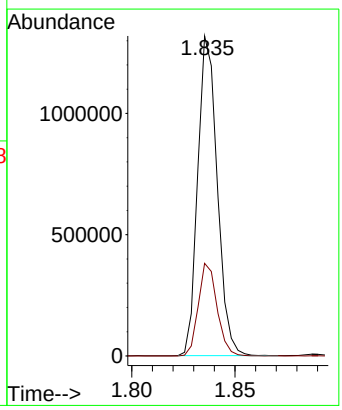


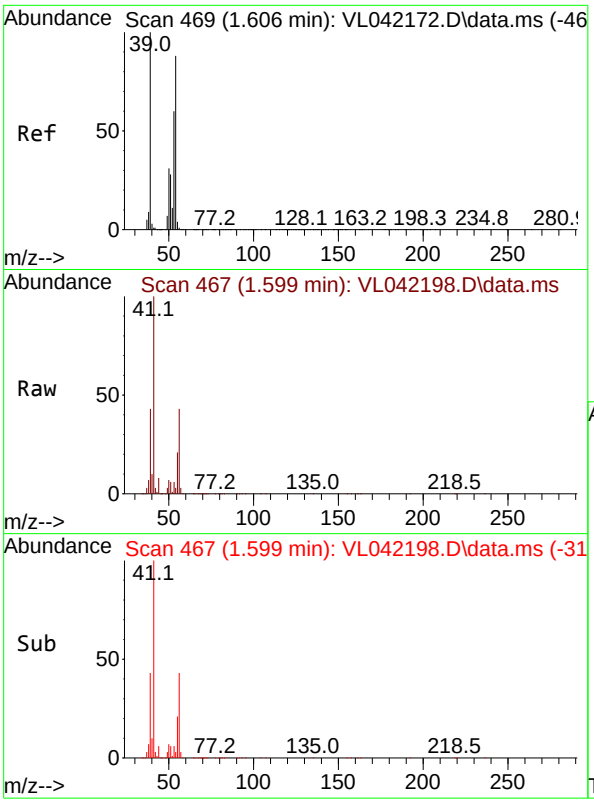


#15
Acetone
Concen: 35.363 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 866562

Ion	Ratio	Lower	Upper
43	100		
58	28.0	23.2	34.8



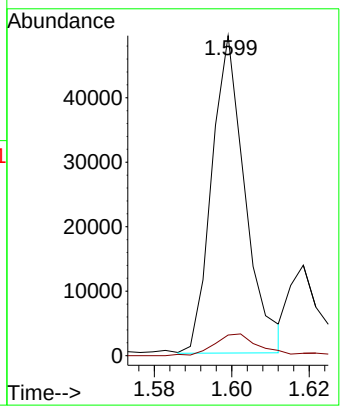


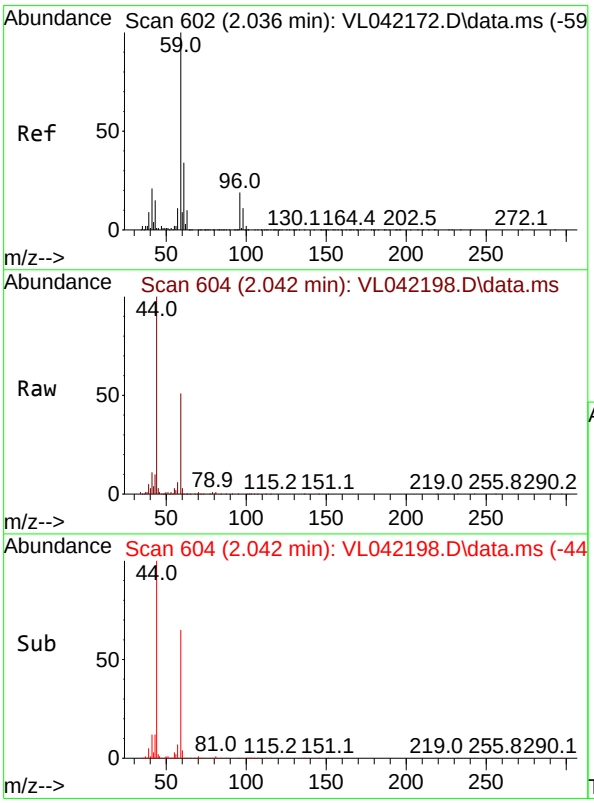
#16
1,3-Butadiene
Concen: 2.465 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 39 Resp: 29502

Ion	Ratio	Lower	Upper
39	100		
54	10.7	60.7	91.1#

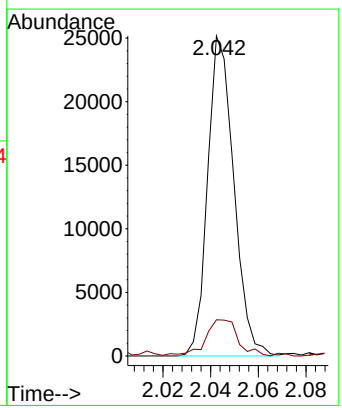


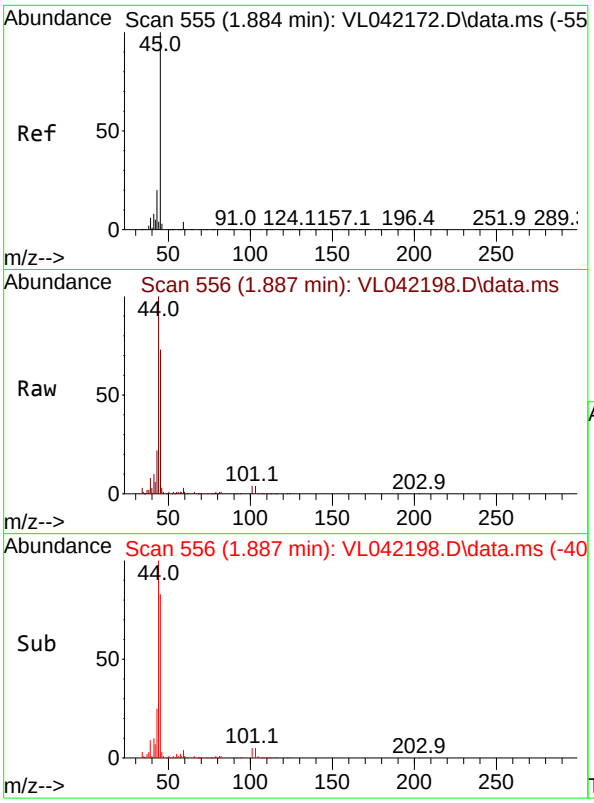


#17
tert-Butyl alcohol
Concen: 0.630 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 59 Resp: 19215

Ion	Ratio	Lower	Upper
59	100		
57	15.1	8.9	13.3#



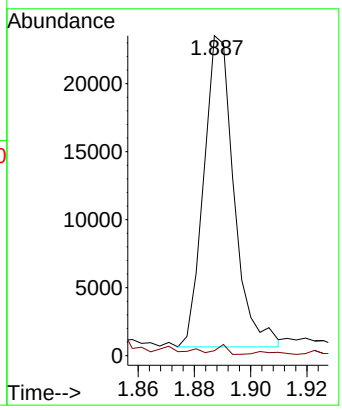


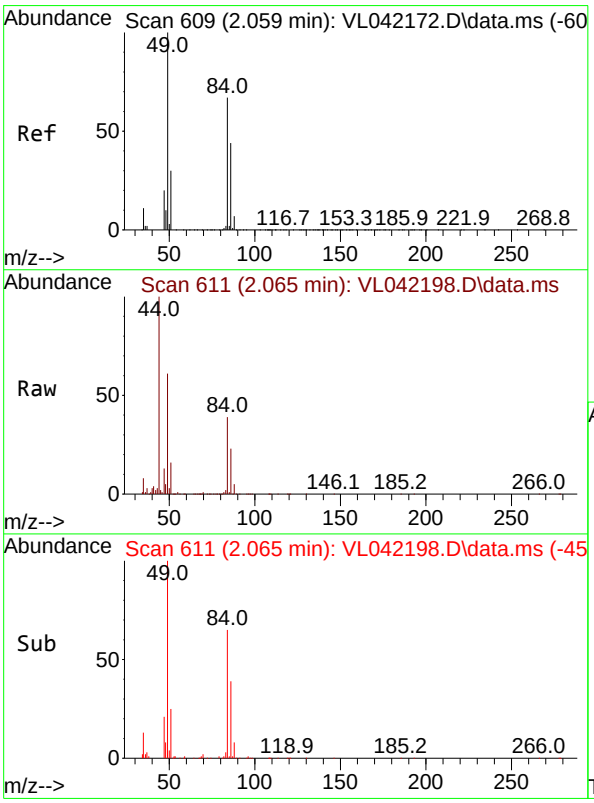
#19
Isopropyl Alcohol
Concen: 1.235 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 45 Resp: 17071

Ion	Ratio	Lower	Upper
45	100		
58	1417.2	36.9	55.3#

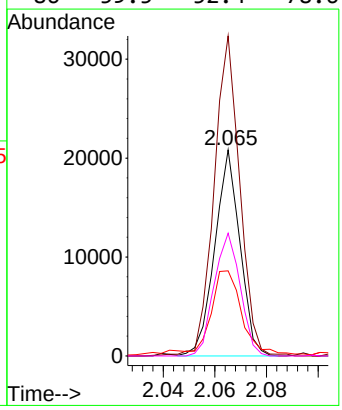


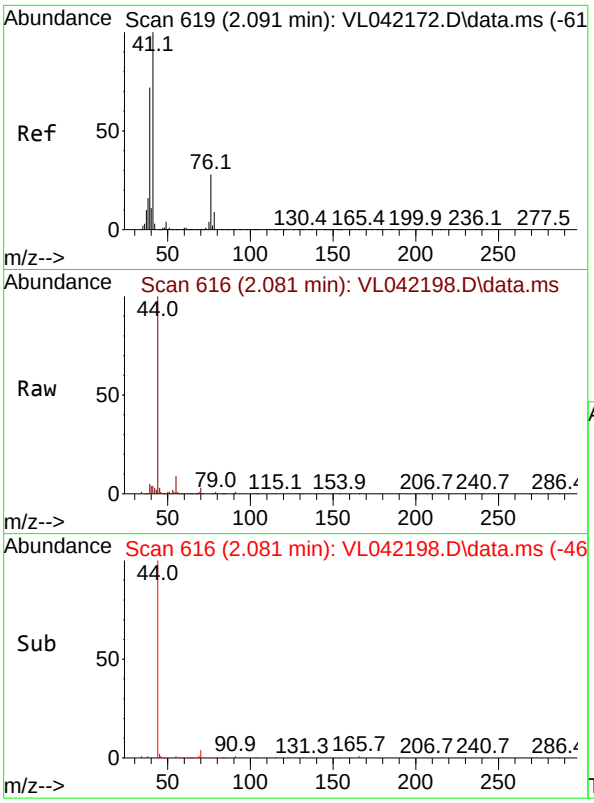


#20
Methylene Chloride
Concen: 1.544 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 84 Resp: 14093

Ion	Ratio	Lower	Upper
84	100		
49	154.4	120.2	180.4
51	39.8	37.4	56.0
86	59.5	52.4	78.6



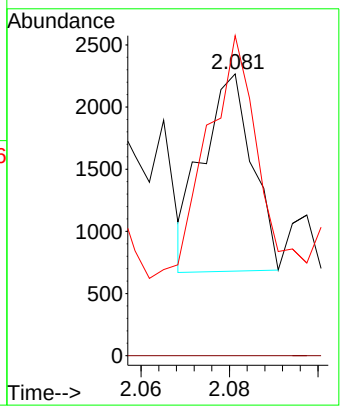


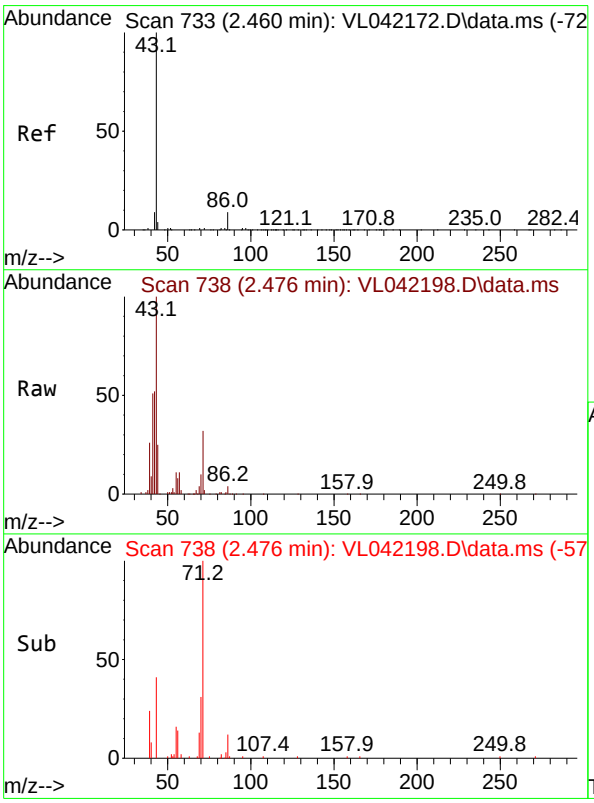
#21
Allyl Chloride
Concen: 0.071 ppbv
RT: 2.081 min Scan# 61
Delta R.T. -0.010 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 41 Resp: 1234

Ion	Ratio	Lower	Upper
41	100		
76	5.0	24.1	36.1#
39	191.2	61.1	91.7#

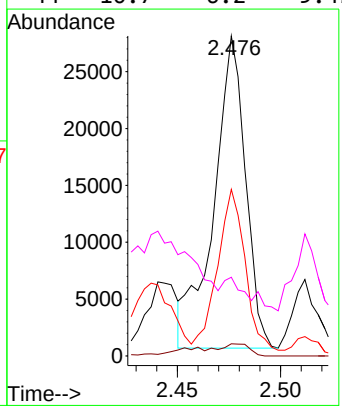


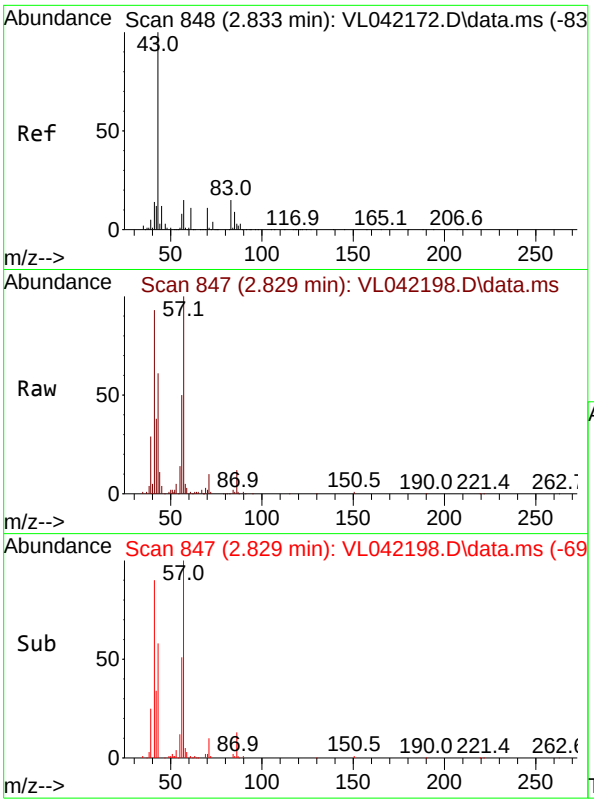


#23
Vinyl Acetate
Concen: 2.764 ppbv
RT: 2.476 min Scan# 738
Delta R.T. 0.016 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 29318

Ion	Ratio	Lower	Upper
43	100		
86	3.9	5.5	8.3#
42	51.5	8.6	13.0#
44	10.7	6.2	9.4#



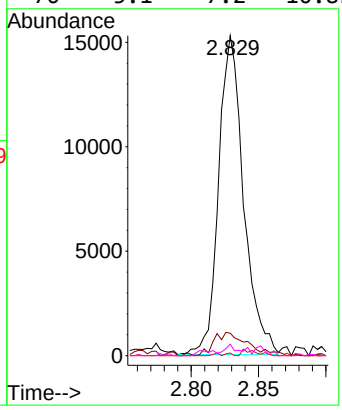


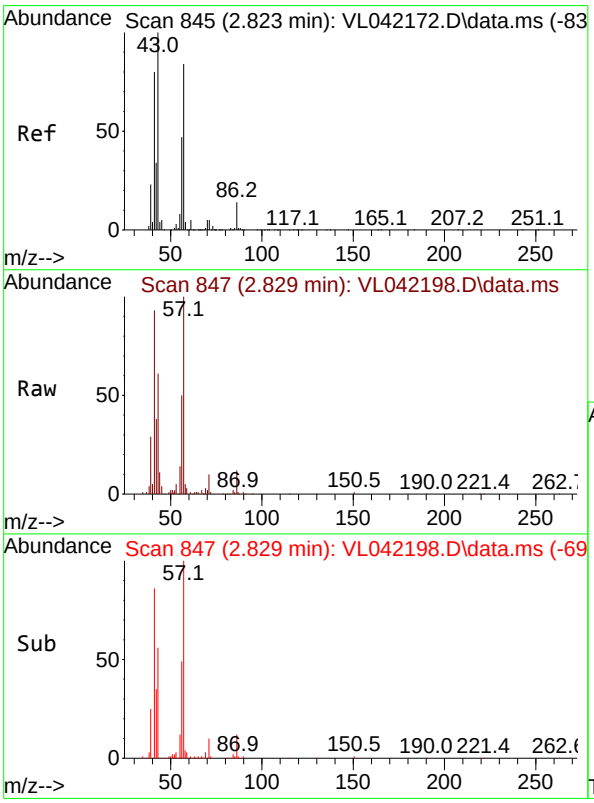
#25
Ethyl Acetate
Concen: 0.309 ppbv
RT: 2.829 min Scan# 84
Delta R.T. -0.004 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 43 Resp: 19645

Ion	Ratio	Lower	Upper
43	100		
45	10.0	8.2	12.2
61	1.3	7.3	10.9#
70	5.1	7.2	10.8#

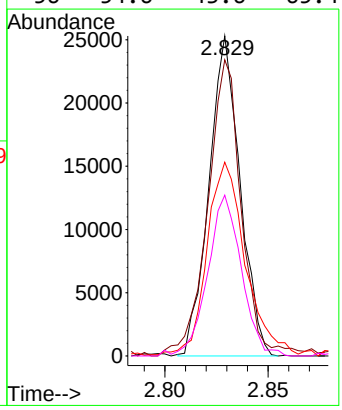


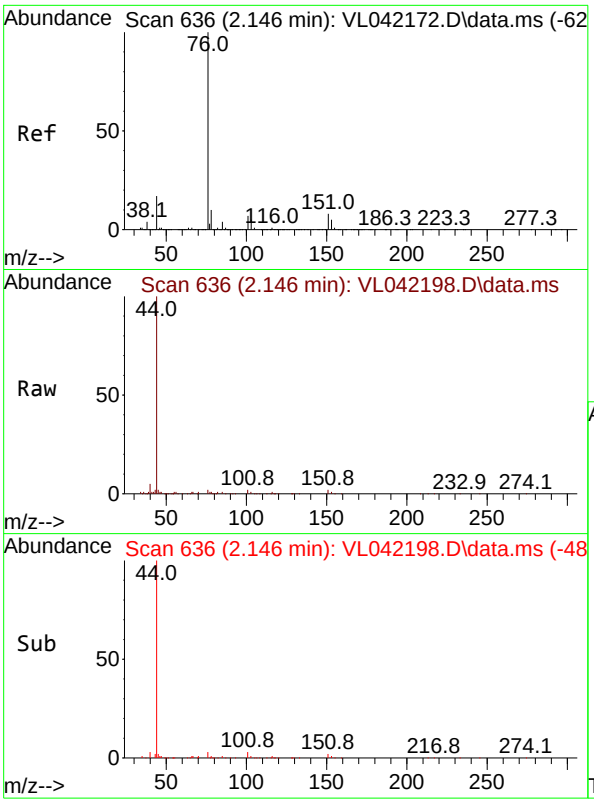


#26
Hexane
Concen: 1.080 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 57 Resp: 26539

Ion	Ratio	Lower	Upper
57	100		
41	104.4	76.6	114.8
43	75.7	207.8	311.8#
56	54.6	43.6	65.4



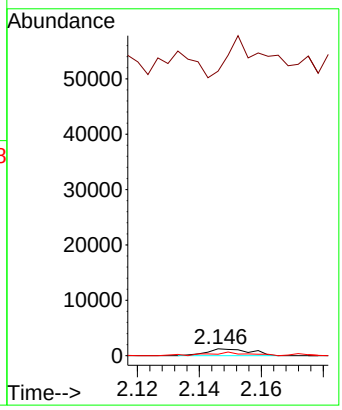


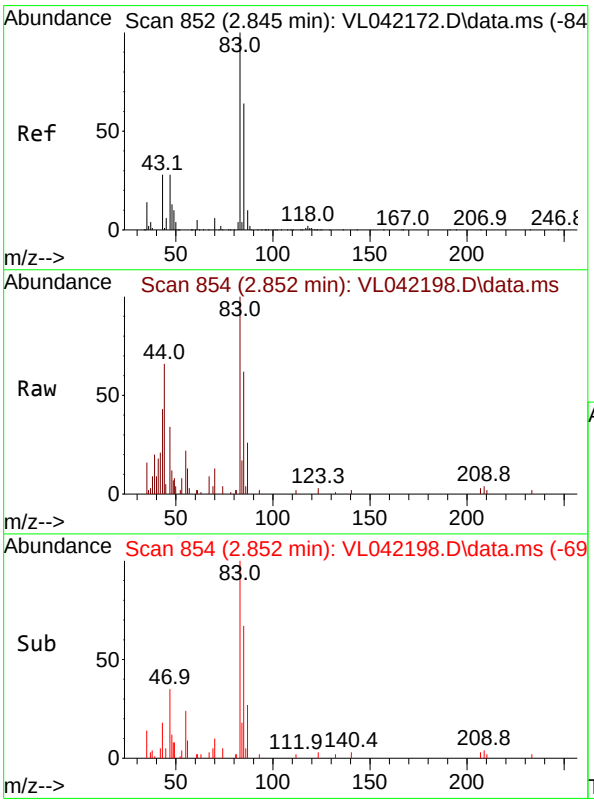
#27
Carbon Disulfide
Concen: 0.046 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 76 Resp: 1202

Ion	Ratio	Lower	Upper
76	100		
44	3310.7	14.7	22.1#
78	55.1	9.3	13.9#

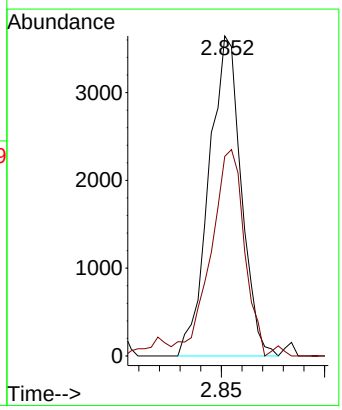


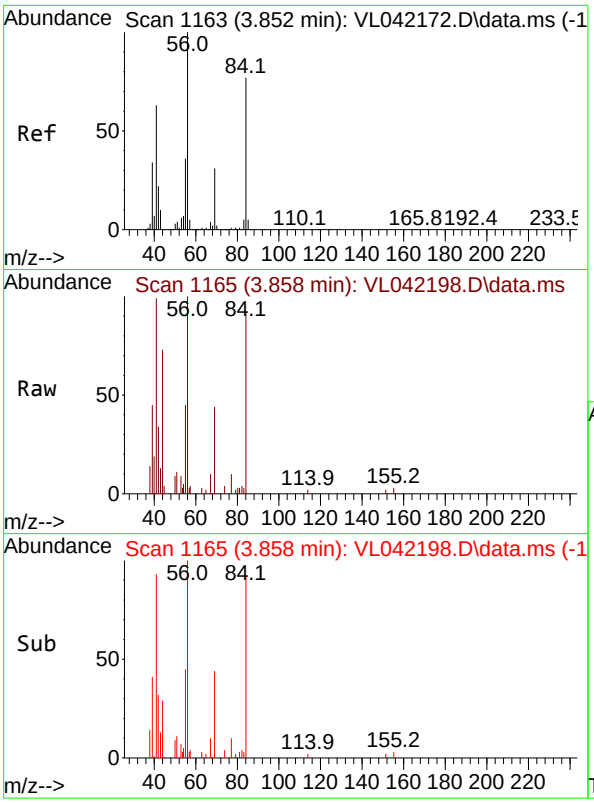


#29
Chloroform
Concen: 0.110 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 83 Resp: 3953

Ion	Ratio	Lower	Upper
83	100		
85	59.2	51.4	77.2



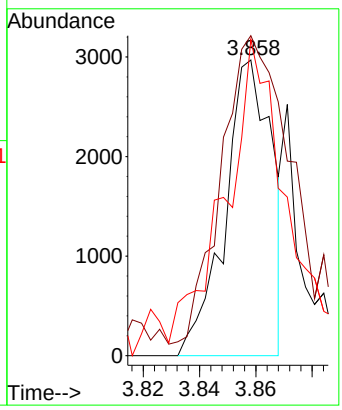


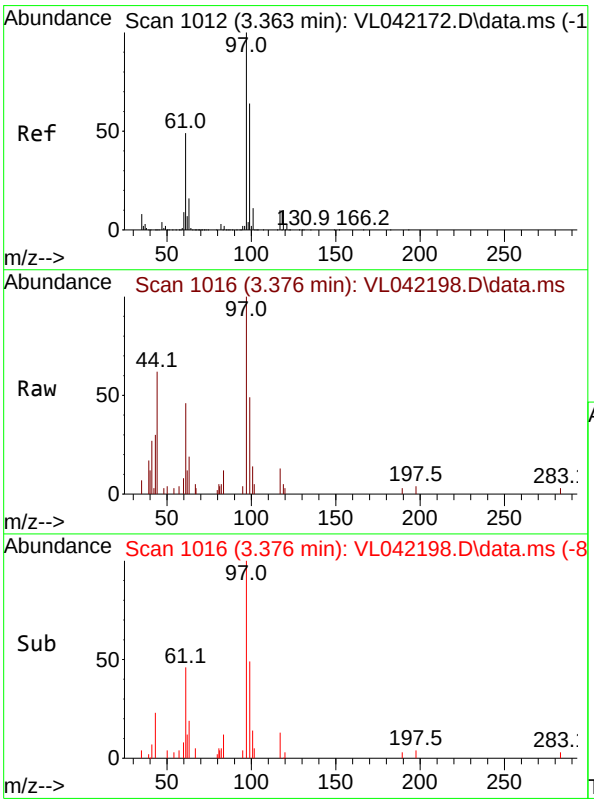
#30
Cyclohexane
Concen: 0.161 ppbv
RT: 3.858 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 84 Resp: 3437

Ion	Ratio	Lower	Upper
84	100		
56	173.7	102.8	154.2#
41	172.7	66.5	99.7#

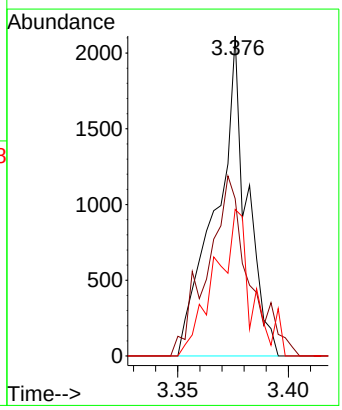


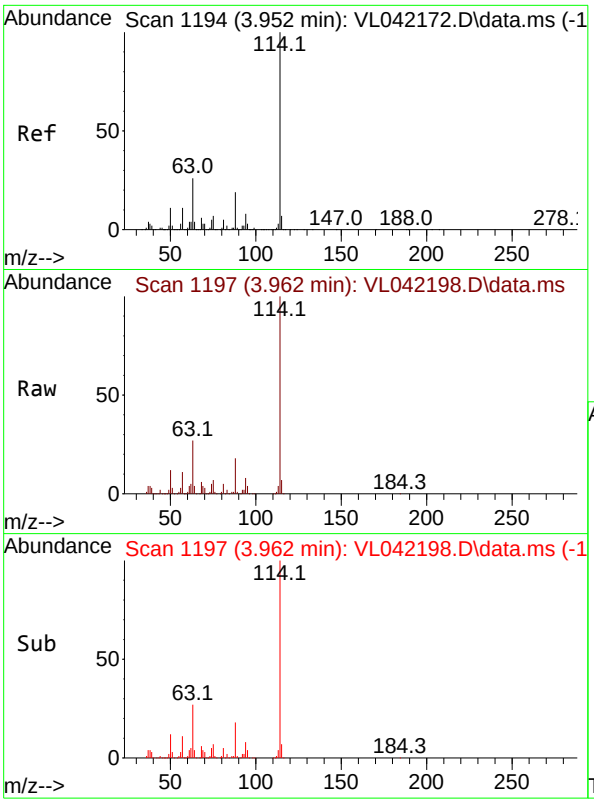


#32
1,1,1-Trichloroethane
Concen: 0.050 ppbv
RT: 3.376 min Scan# 1016
Delta R.T. 0.013 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 97 Resp: 2054

Ion	Ratio	Lower	Upper
97	100		
99	74.8	51.5	77.3
61	54.2	38.7	58.1



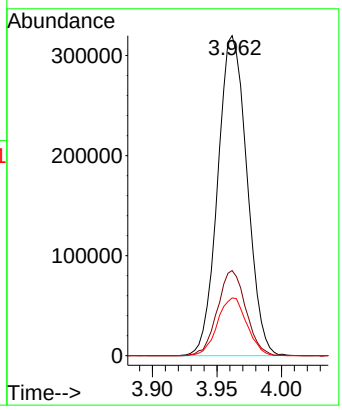


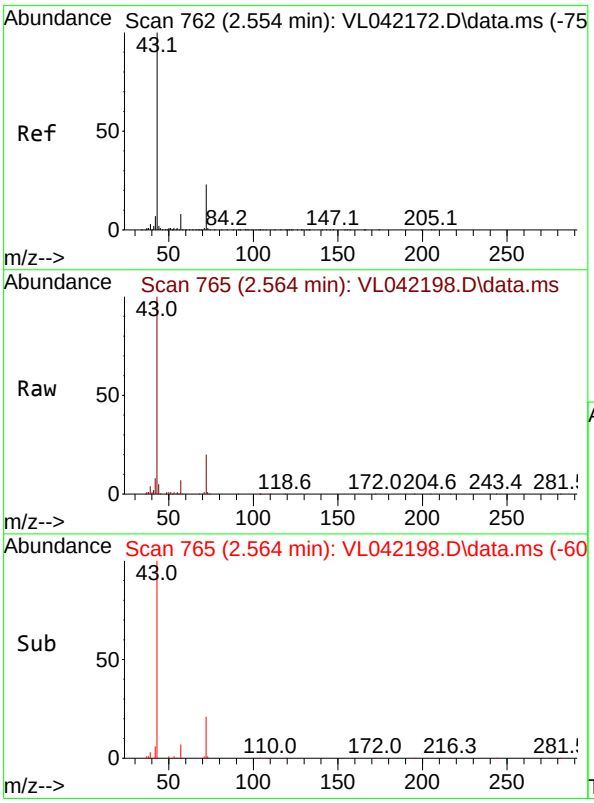
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:114 Resp: 504192

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.2	15.0	22.4

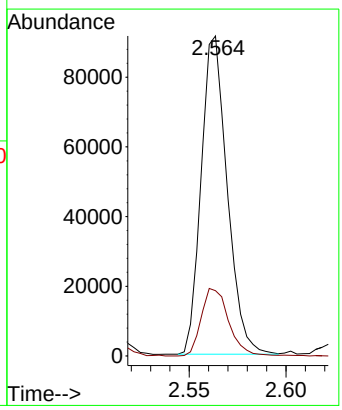


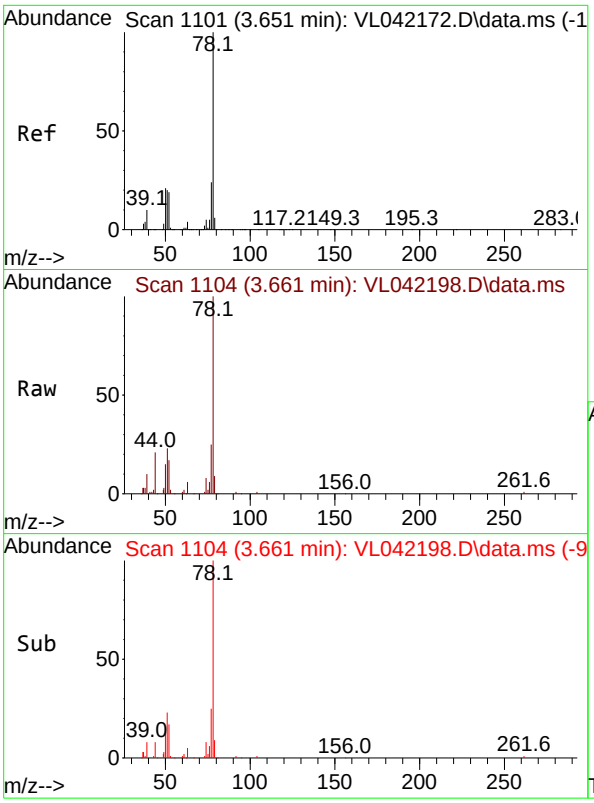


#34
2-Butanone
Concen: 2.343 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 43 Resp: 85672

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2



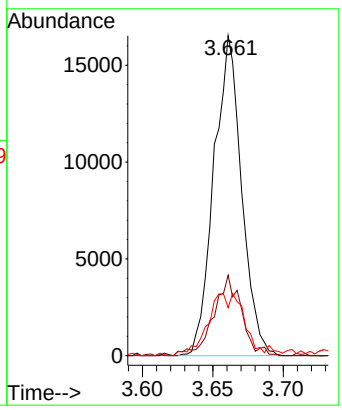


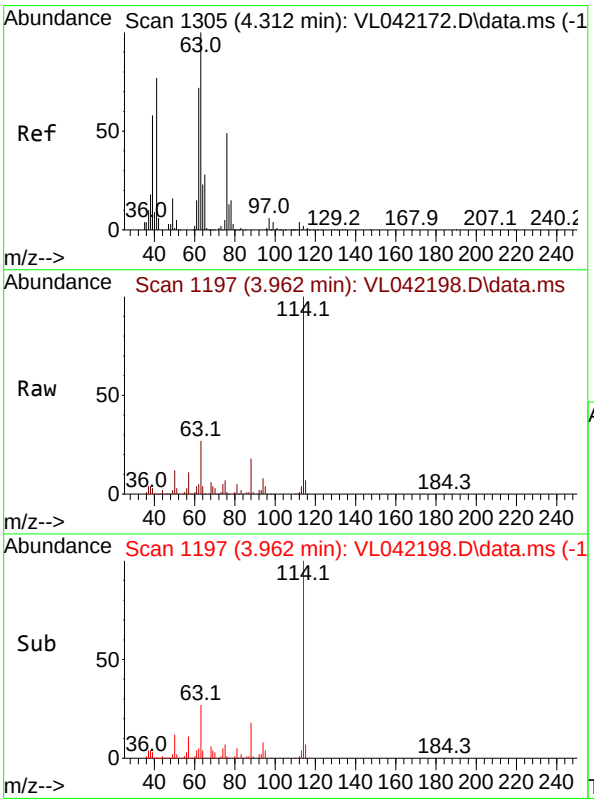
#36
Benzene
Concen: 0.454 ppbv
RT: 3.661 min Scan# 11
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 78 Resp: 22692

Ion	Ratio	Lower	Upper
78	100		
77	24.7	19.1	28.7
50	13.8	16.6	24.8#

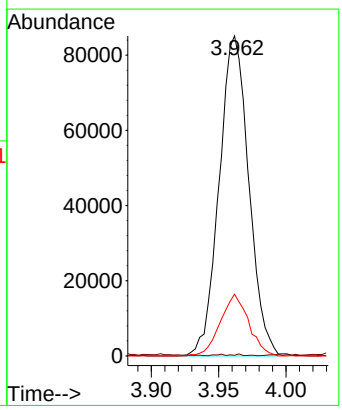


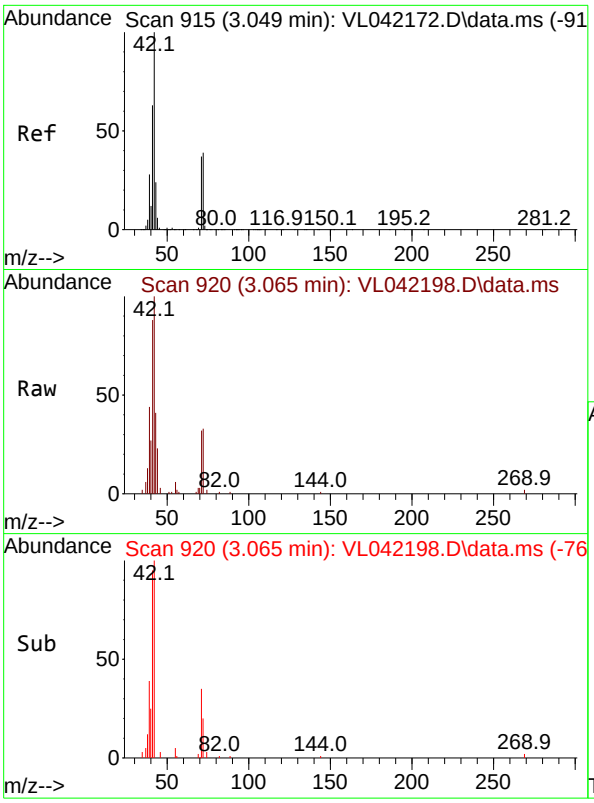


#39
1,2-Dichloropropane
Concen: 7.153 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.350 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 63 Resp: 130214

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	19.3	57.6	86.4#



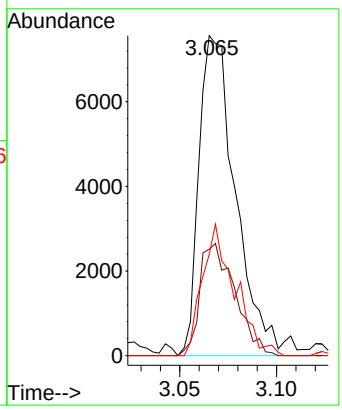


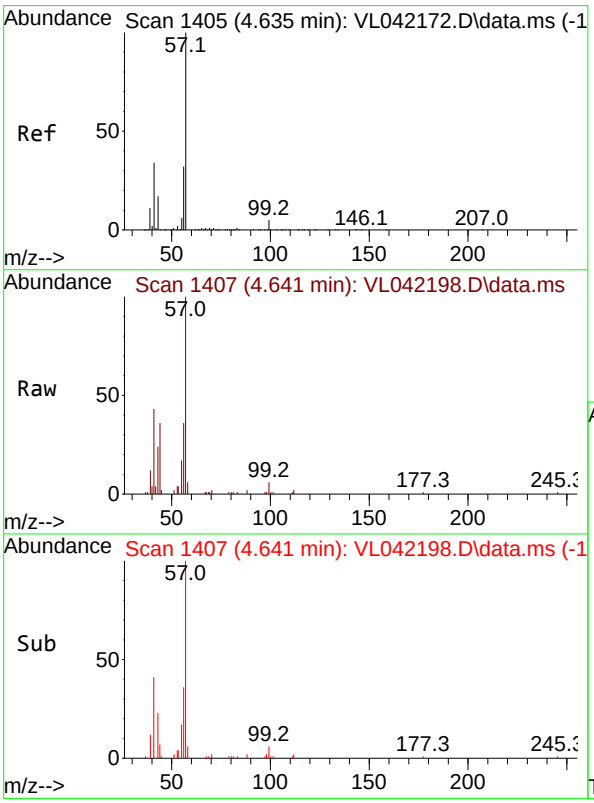
#41
Tetrahydrofuran
Concen: 0.469 ppbv
RT: 3.065 min Scan# 9
Delta R.T. 0.016 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 42 Resp: 9870

Ion	Ratio	Lower	Upper
42	100		
72	34.1	31.4	47.0
71	36.7	30.2	45.4

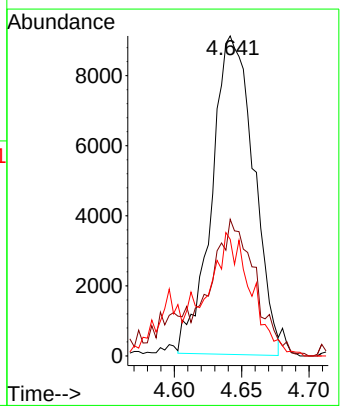


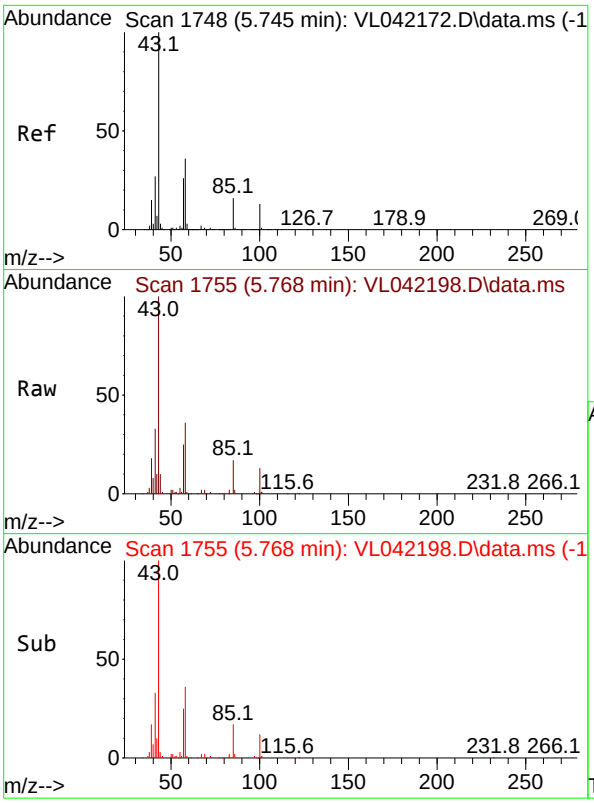


#44
2,2,4-Trimethylpentane
Concen: 0.233 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 57 Resp: 19657

Ion	Ratio	Lower	Upper
57	100		
41	57.4	26.8	40.2#
56	52.5	25.6	38.4#



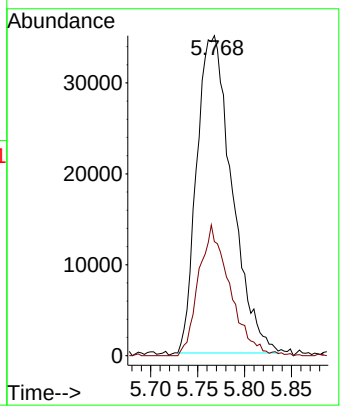


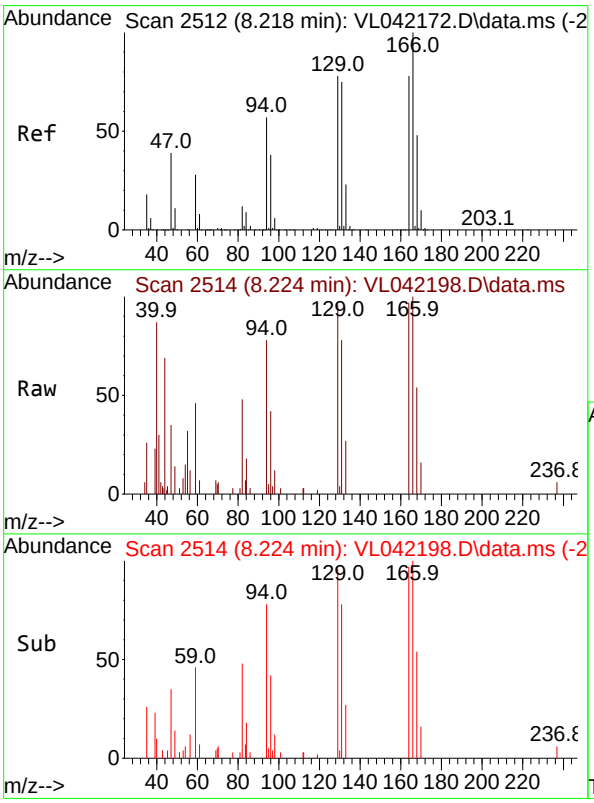
#50
4-Methyl-2-Pentanone
Concen: 1.568 ppbv
RT: 5.768 min Scan# 1
Delta R.T. 0.022 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 43 Resp: 90838

Ion	Ratio	Lower	Upper
43	100		
58	36.8	29.0	43.6

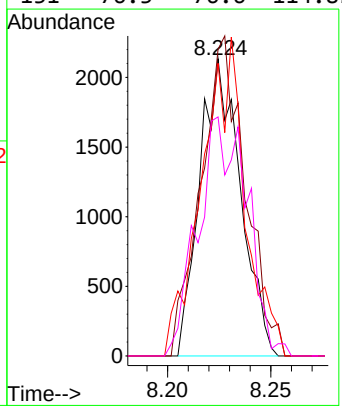


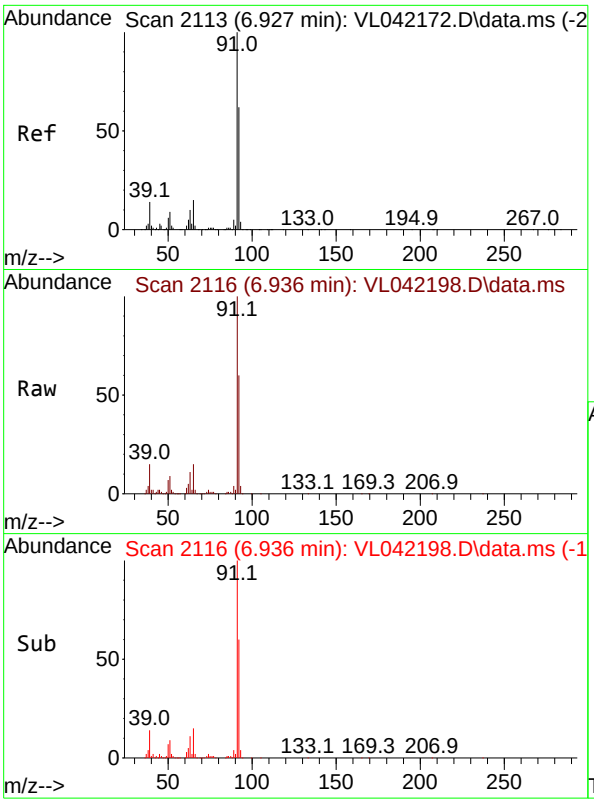


#52
Tetrachloroethene
Concen: 0.147 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:164 Resp: 2909

Ion	Ratio	Lower	Upper
164	100		
166	92.3	102.5	153.7#
129	88.4	79.8	119.8
131	76.3	76.6	114.8#



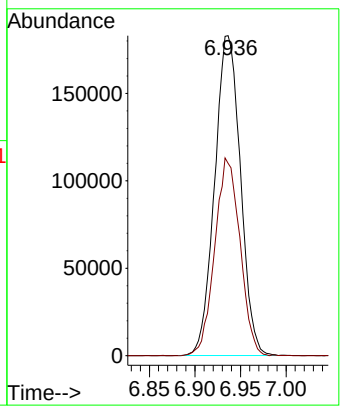


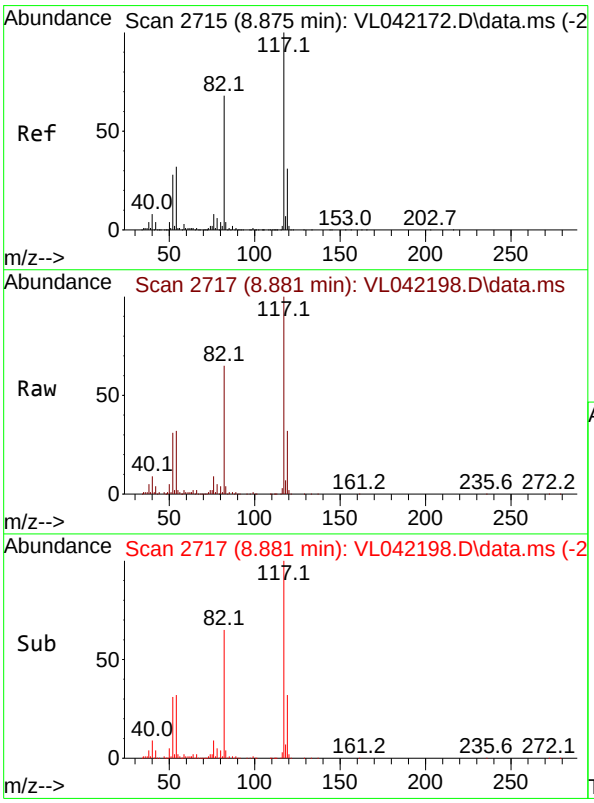
#53
Toluene
Concen: 6.079 ppbv
RT: 6.936 min Scan# 21
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 91 Resp: 360213

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.4	72.6

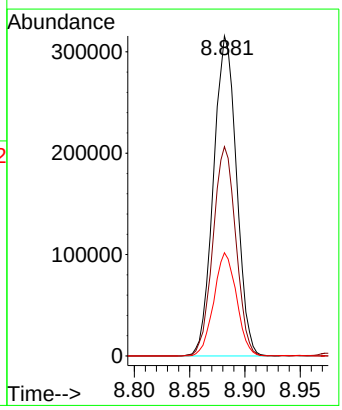


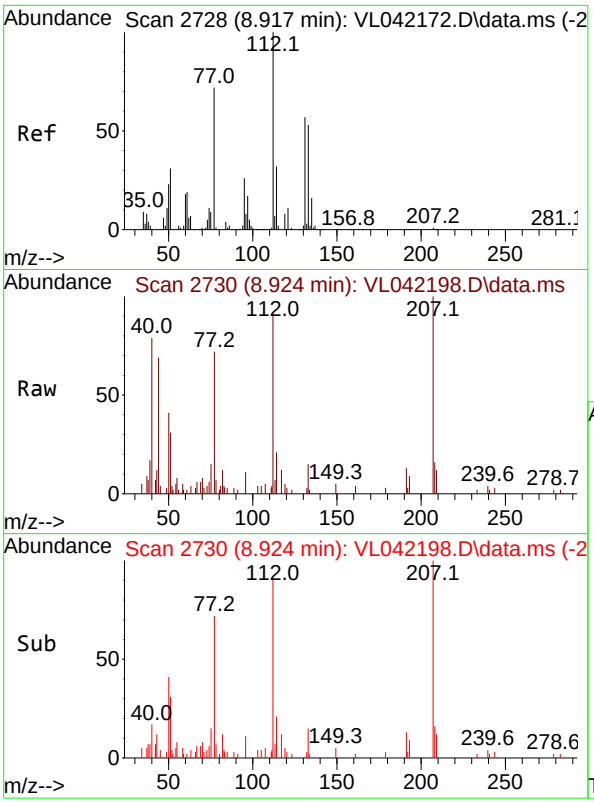


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:117 Resp: 456695

Ion	Ratio	Lower	Upper
117	100		
82	65.0	55.8	83.6
119	31.9	25.5	38.3



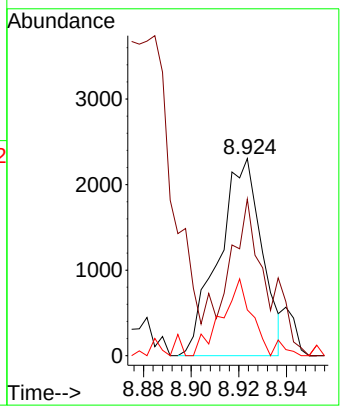


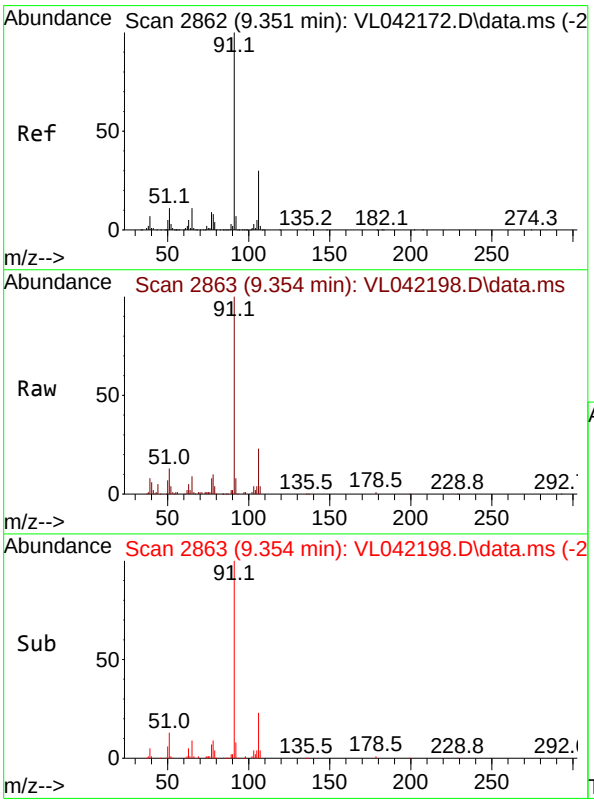
#57
Chlorobenzene
Concen: 0.067 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:112 Resp: 2905

Ion	Ratio	Lower	Upper
112	100		
77	40.0	58.2	87.2#
114	15.3	29.1	35.5#

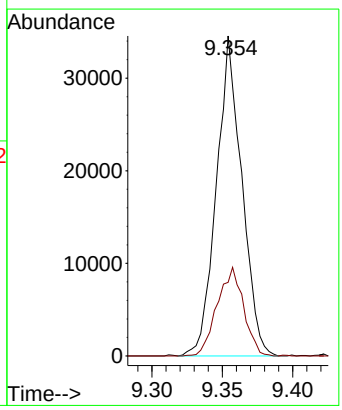


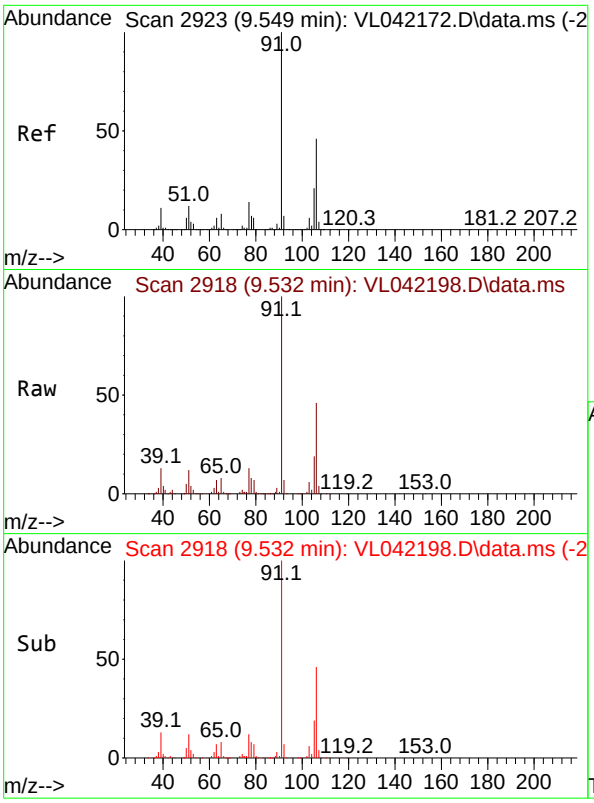


#58
Ethyl Benzene
Concen: 0.535 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 91 Resp: 43413

Ion	Ratio	Lower	Upper
91	100		
106	23.0	24.2	36.2#



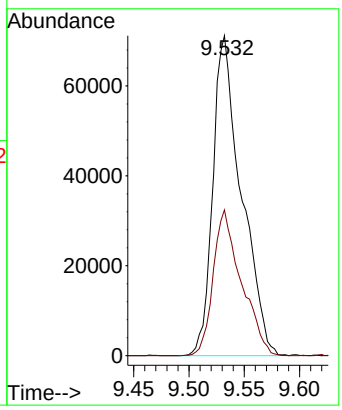


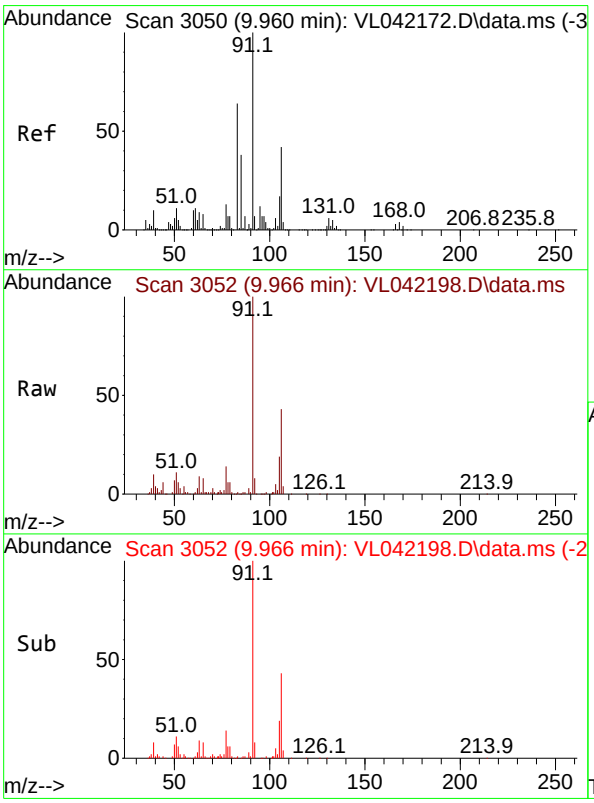
#59
m/p-Xylene
Concen: 1.969 ppbv
RT: 9.532 min Scan# 2
Delta R.T. -0.016 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion: 91 Resp: 127535

Ion	Ratio	Lower	Upper
91	100		
106	44.9	36.4	54.6

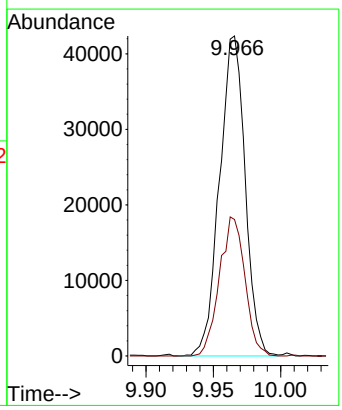


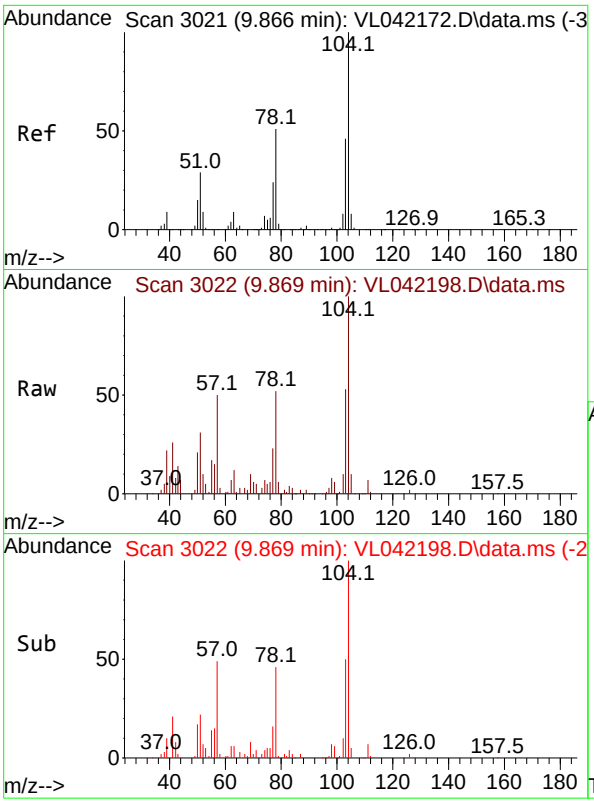


#60
o-Xylene
Concen: 0.863 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 91 Resp: 56023

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5



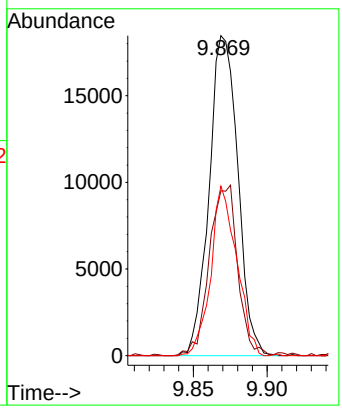


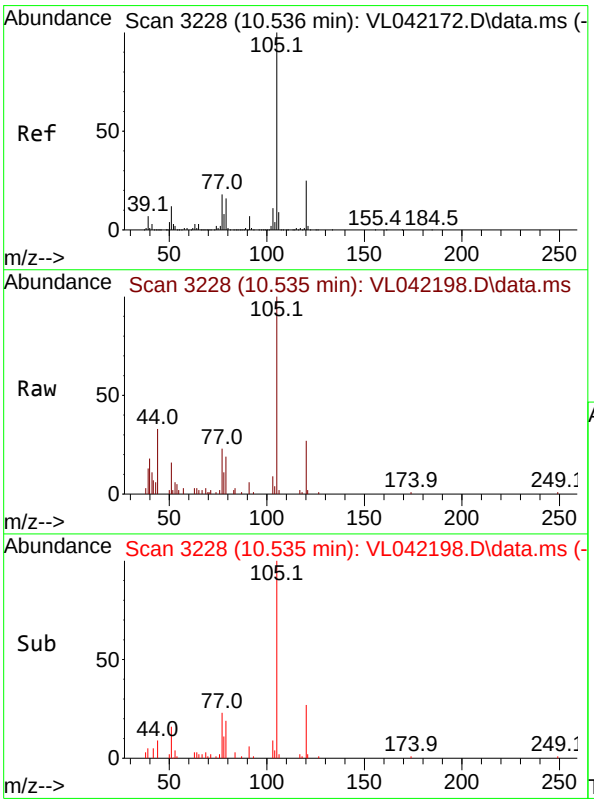
#61
Styrene
Concen: 0.779 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:104 Resp: 25026

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	48.0	37.0	55.4

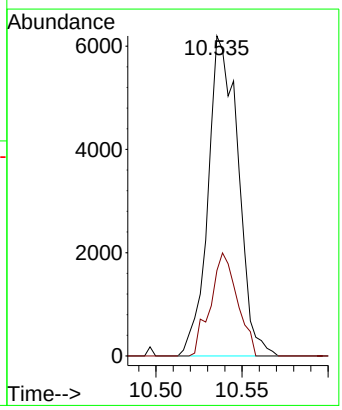


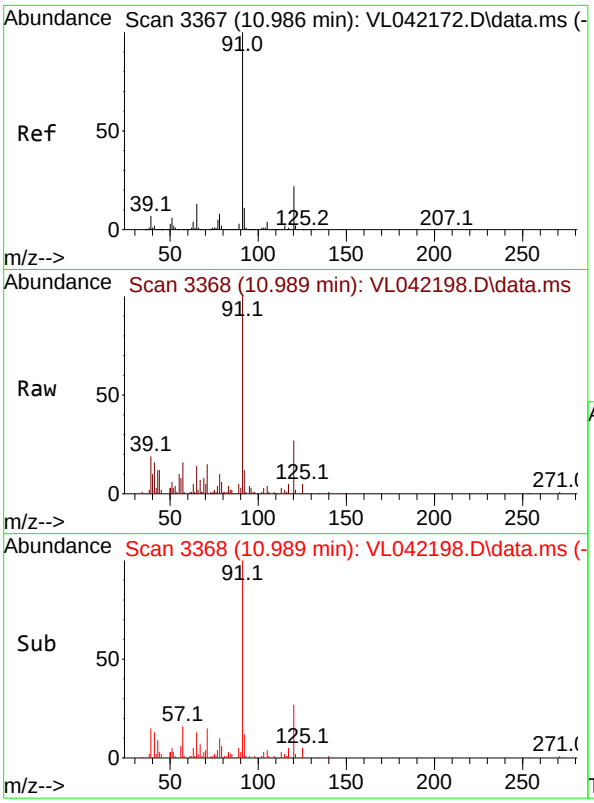


#62
Isopropylbenzene
Concen: 0.077 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:105 Resp: 7520

Ion	Ratio	Lower	Upper
105	100		
120	29.0	19.9	29.9



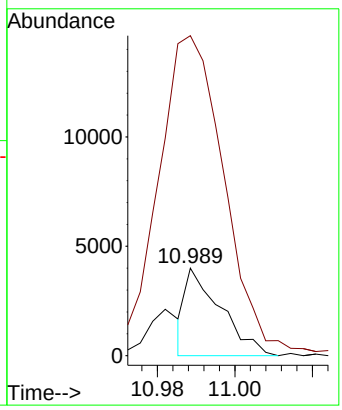


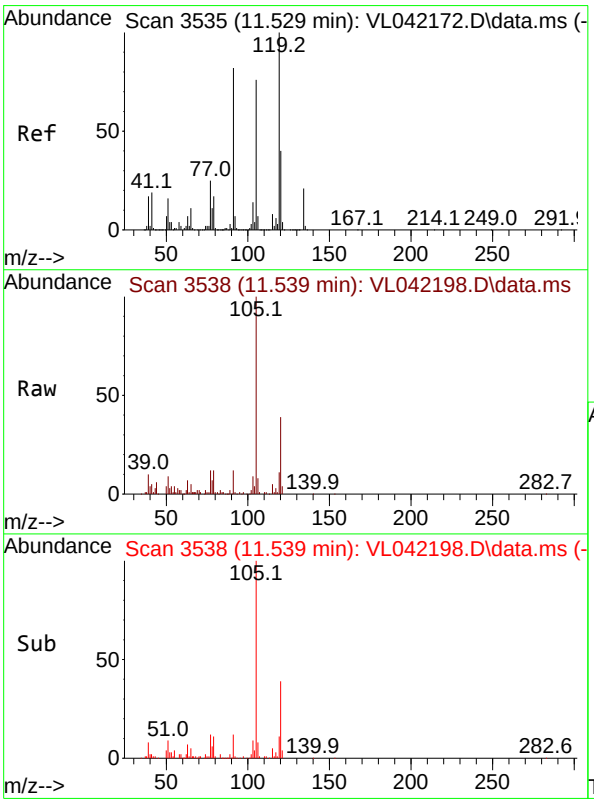
#64
n-propylbenzene
Concen: 0.101 ppbv
RT: 10.989 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:120 Resp: 2528

Ion	Ratio	Lower	Upper
120	100		
91	712.1	376.9	565.3#

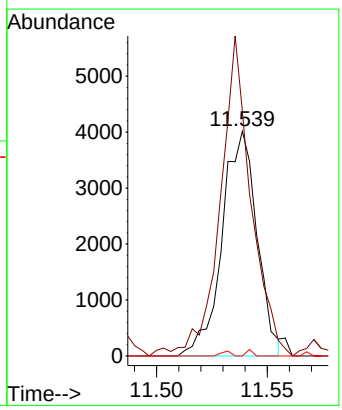


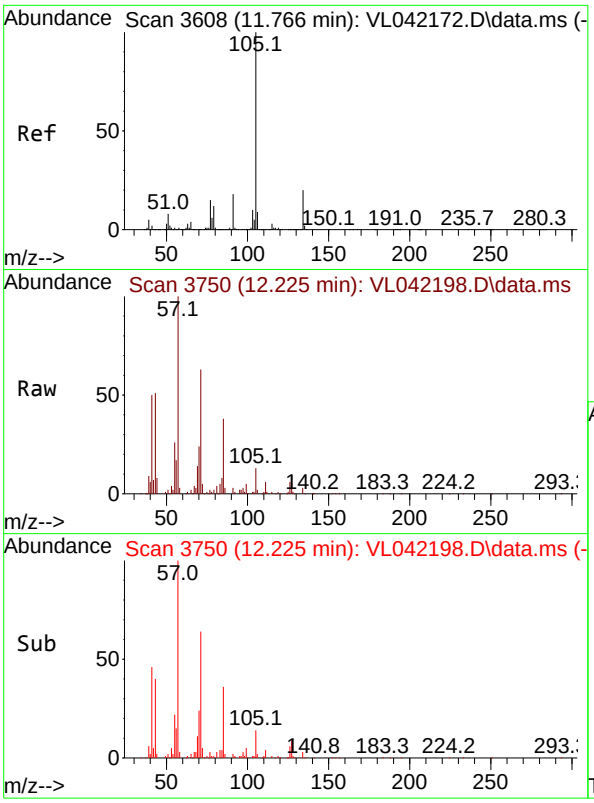


#65
tert-Butylbenzene
Concen: 0.049 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.009 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:119 Resp: 4406

Ion	Ratio	Lower	Upper
119	100		
91	118.3	66.0	99.0#
134	1.1	16.7	25.1#



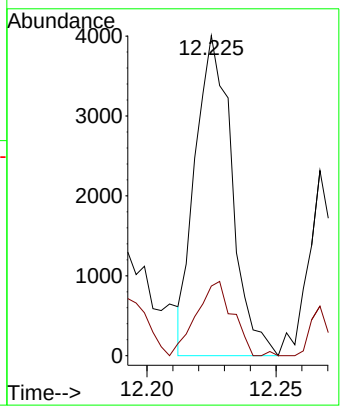


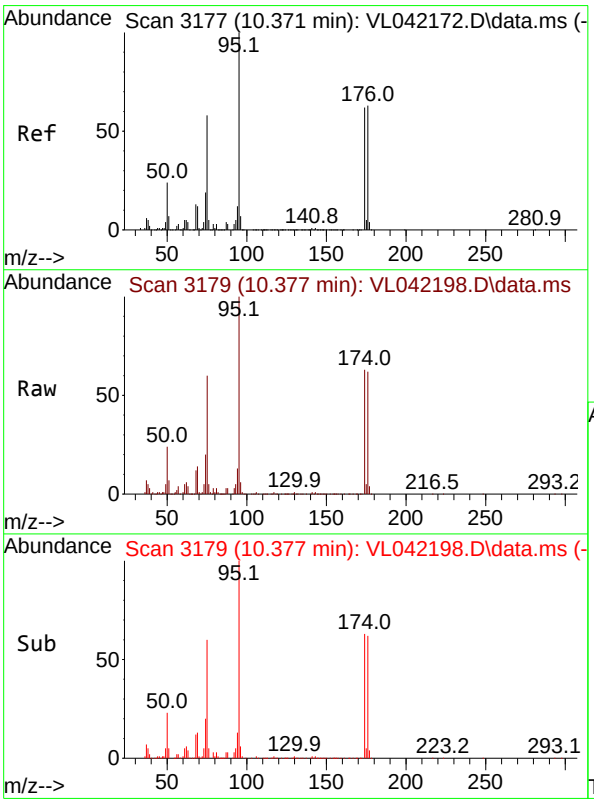
#67
sec-Butylbenzene
Concen: 0.032 ppbv
RT: 12.225 min Scan# 3
Delta R.T. 0.459 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:105 Resp: 3942

Ion	Ratio	Lower	Upper
105	100		
134	16.7	15.5	23.3

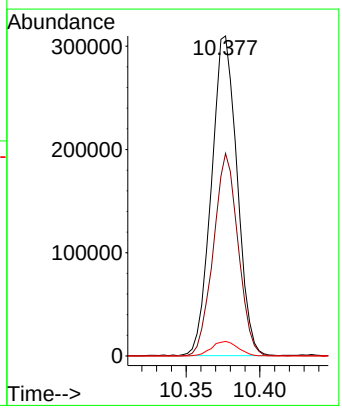


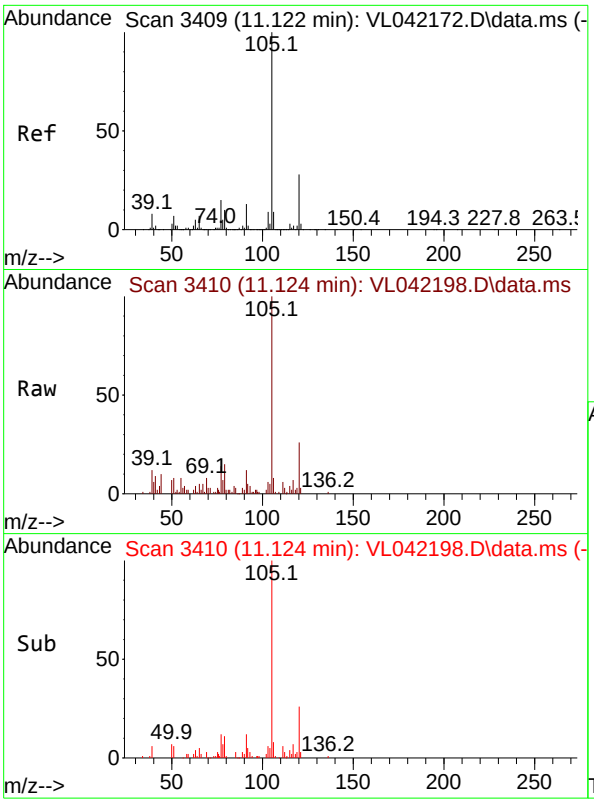


#68
1-Bromo-4-Fluorobenzene
Concen: 9.997 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion: 95 Resp: 374920

Ion	Ratio	Lower	Upper
95	100		
174	61.3	50.6	76.0
175	4.7	3.8	5.6



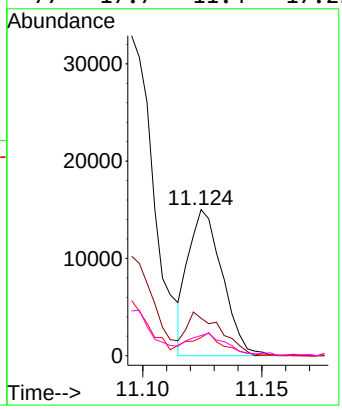


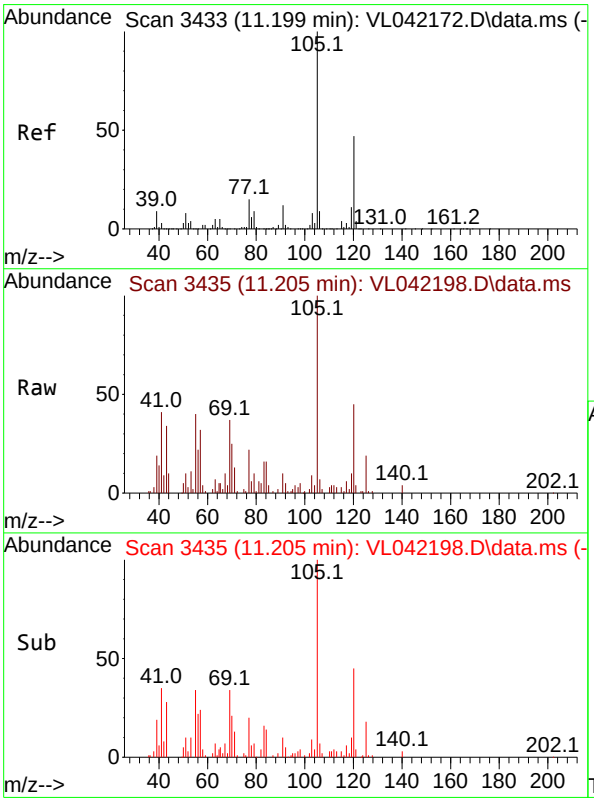
#72
4-Ethyltoluene
Concen: 0.185 ppbv
RT: 11.124 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:105 Resp: 14976

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	17.7	11.4	17.2#

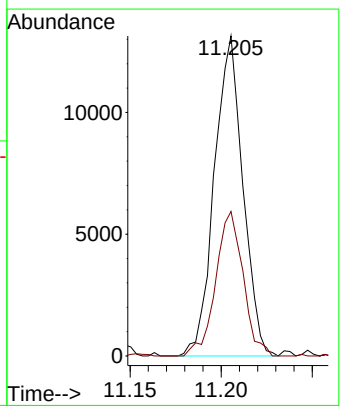


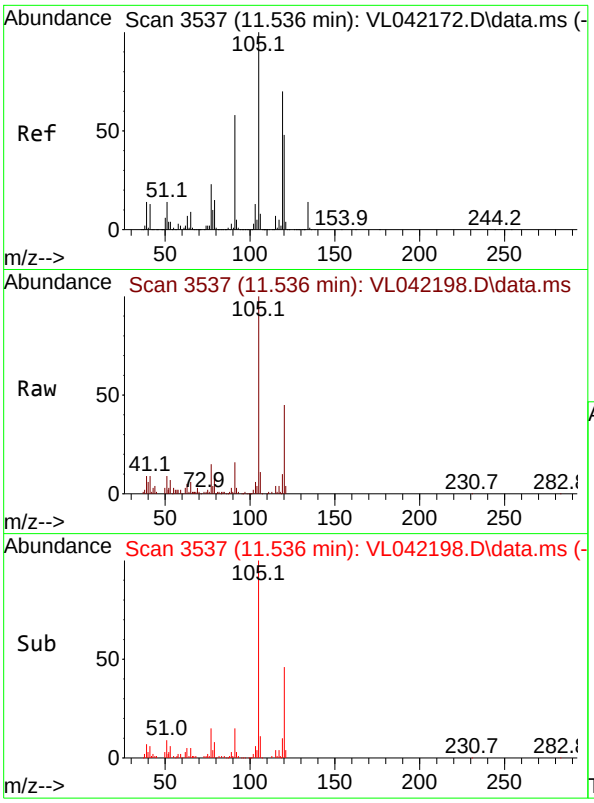


#73
1,3,5-Trimethylbenzene
Concen: 0.203 ppbv
RT: 11.205 min Scan# 3435
Delta R.T. 0.006 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Tgt Ion:105 Resp: 14315

Ion	Ratio	Lower	Upper
105	100		
120	45.1	37.4	56.0



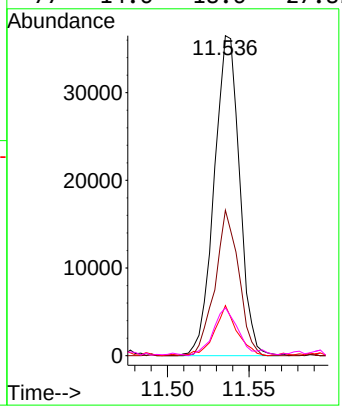


#74
1,2,4-Trimethylbenzene
Concen: 0.486 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042198.D
Acq: 28 Mar 2025 01:57

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-1-3262025

Tgt Ion:105 Resp: 39507

Ion	Ratio	Lower	Upper
105	100		
120	45.4	38.6	58.0
91	15.4	46.2	69.2#
77	14.6	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Quant Time: Mar 28 23:04:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

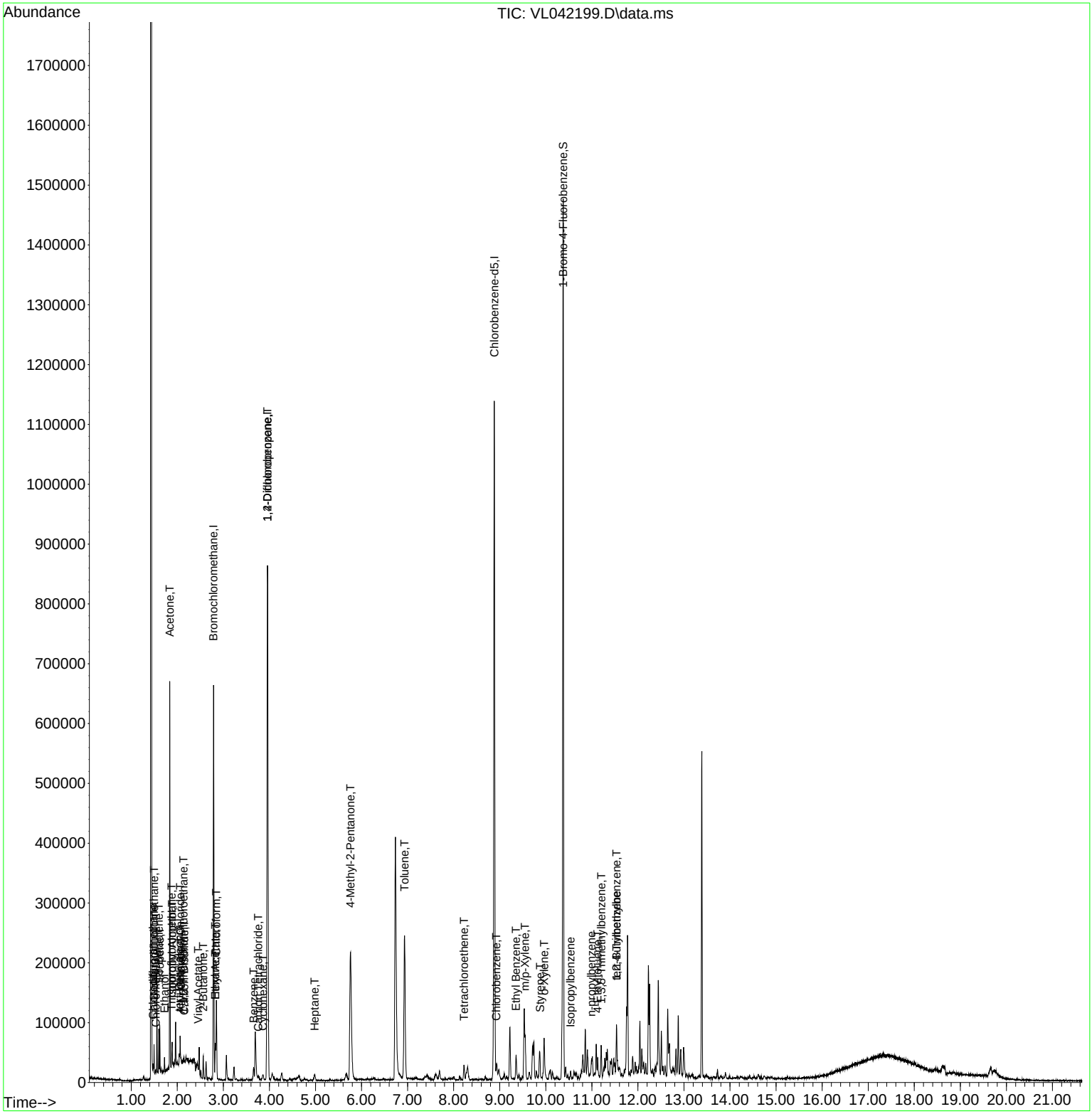
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	181183	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	509062	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	458107	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	379865	10.097	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	11194	0.418	ppbv	99
3) Chlorodifluoromethane	1.473	51	7603	0.278	ppbv	93
4) Chloromethane	1.531	50	782	0.072	ppbv #	59
9) Propene	1.619	41	8400	0.671	ppbv	88
10) Heptane	4.982	43	2470	0.074	ppbv #	54
11) Trichlorofluoromethane	1.878	101	4706	0.181	ppbv	94
12) 1,1,2-Trichlorotrifluo...	2.137	101	1363	0.064	ppbv	91
13) Ethanol	1.722	45	8952	7.560	ppbv #	27
15) Acetone	1.836	43	272395	10.750	ppbv	94
16) 1,3-Butadiene	1.599	39	7289	0.589	ppbv #	33
17) tert-Butyl alcohol	2.046	59	5649	0.179	ppbv #	71
19) Isopropyl Alcohol	1.887	45	15527	1.086	ppbv #	1
20) Methylene Chloride	2.062	84	6239	0.661	ppbv	92
21) Allyl Chloride	2.078	41	865	0.048	ppbv #	59
23) Vinyl Acetate	2.454	43	1458	0.133	ppbv #	76
25) Ethyl Acetate	2.826	43	12939	0.197	ppbv #	91
26) Hexane	2.826	57	14117	0.556	ppbv #	40
27) Carbon Disulfide	2.149	76	1385	0.051	ppbv #	44
29) Chloroform	2.849	83	47910	1.289	ppbv	97
30) Cyclohexane	3.858	84	1524	0.069	ppbv #	18
34) 2-Butanone	2.564	43	23343	0.632	ppbv	95
35) Carbon Tetrachloride	3.758	117	1195	0.030	ppbv #	60
36) Benzene	3.658	78	11929	0.236	ppbv	98
39) 1,2-Dichloropropane	3.959	63	131902	7.177	ppbv #	23
50) 4-Methyl-2-Pentanone	5.762	43	196564	3.360	ppbv	97
52) Tetrachloroethene	8.225	164	3844	0.192	ppbv	85
53) Toluene	6.933	91	171948	2.874	ppbv	100
57) Chlorobenzene	8.927	112	1488	0.034	ppbv #	80
58) Ethyl Benzene	9.354	91	20640	0.254	ppbv	90
59) m/p-Xylene	9.548	91	21772	0.335	ppbv #	31
60) o-Xylene	9.966	91	29151	0.448	ppbv	100
61) Styrene	9.875	104	11979	0.372	ppbv	96
62) Isopropylbenzene	10.536	105	5968	0.061	ppbv	98
64) n-propylbenzene	10.989	120	2419	0.096	ppbv	97
65) tert-Butylbenzene	11.536	119	2907	0.032	ppbv #	30
72) 4-Ethyltoluene	11.125	105	10586	0.131	ppbv #	89
73) 1,3,5-Trimethylbenzene	11.206	105	9797	0.138	ppbv	95
74) 1,2,4-Trimethylbenzene	11.536	105	25878	0.317	ppbv #	69

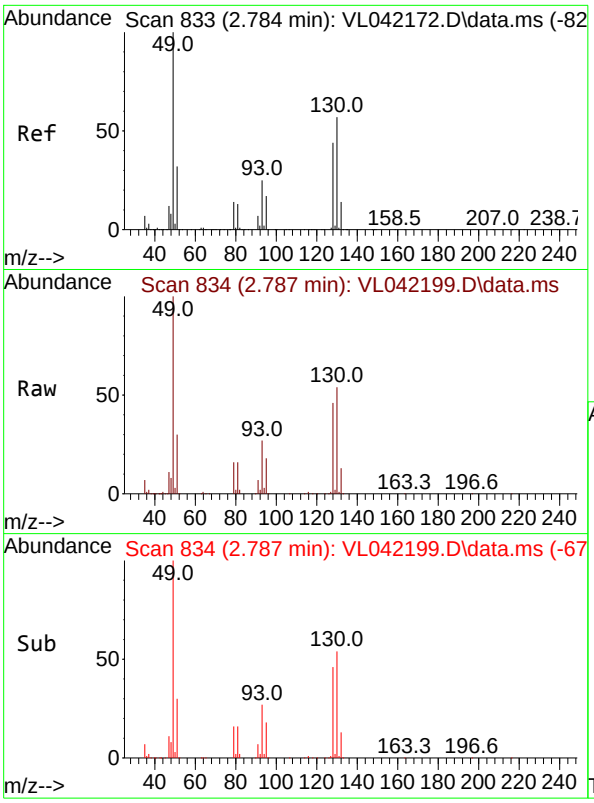
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042199.D
Acq On : 28 Mar 2025 02:33
Operator : SY/MD
Sample : Q1669-08
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Quant Time: Mar 28 23:04:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



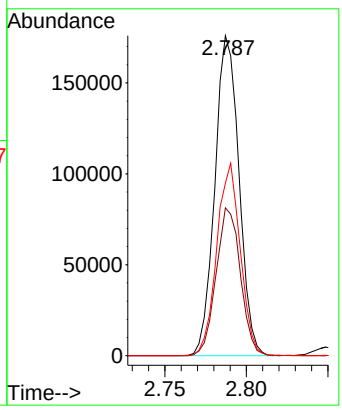


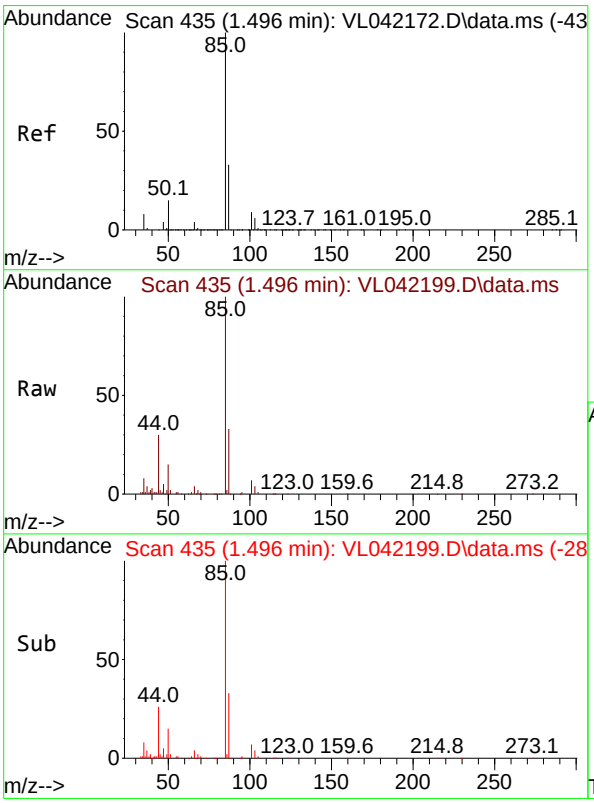
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 49 Resp: 181183

Ion	Ratio	Lower	Upper
49	100		
128	46.5	22.9	68.5
130	58.6	28.8	86.4

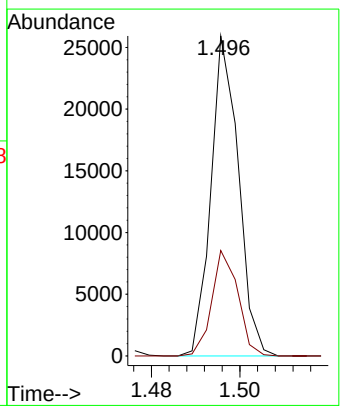


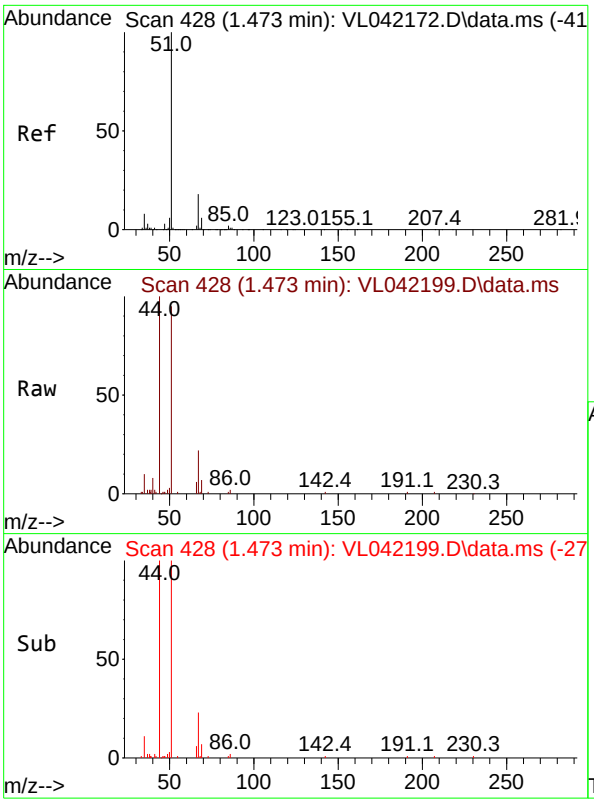


#2
Dichlorodifluoromethane
Concen: 0.418 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 85 Resp: 11194

Ion	Ratio	Lower	Upper
85	100		
87	32.9	26.1	39.1



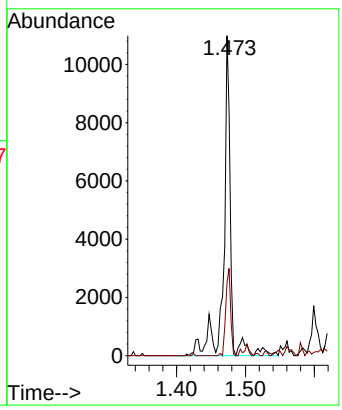


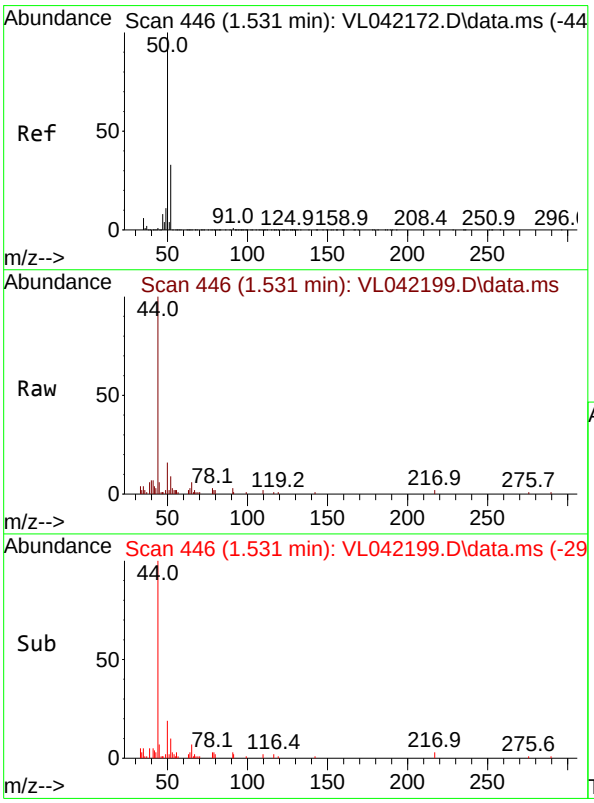
#3
Chlorodifluoromethane
Concen: 0.278 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 51 Resp: 7603

Ion	Ratio	Lower	Upper
51	100		
67	22.1	15.0	22.6

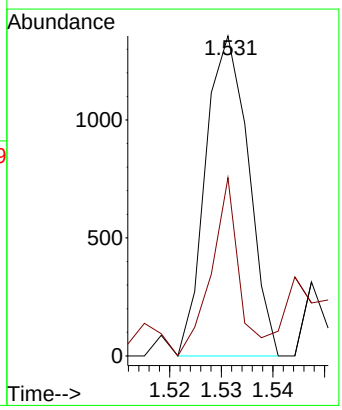


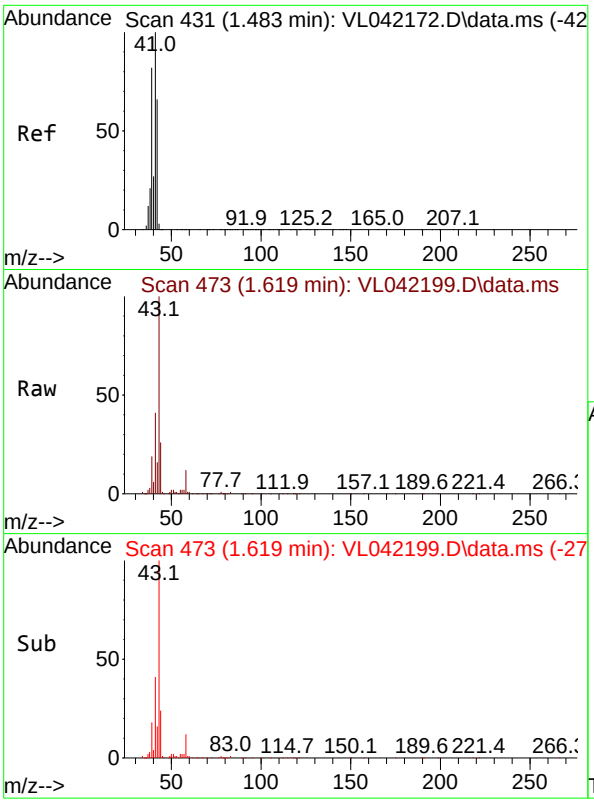


#4
Chloromethane
Concen: 0.072 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 50 Resp: 782

Ion	Ratio	Lower	Upper
50	100		
52	55.7	26.1	39.1#



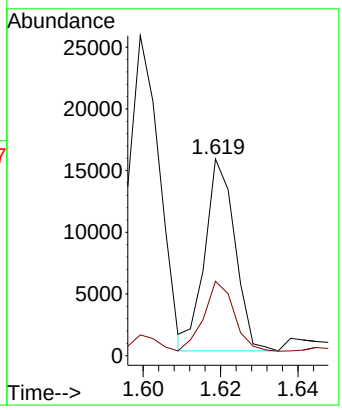


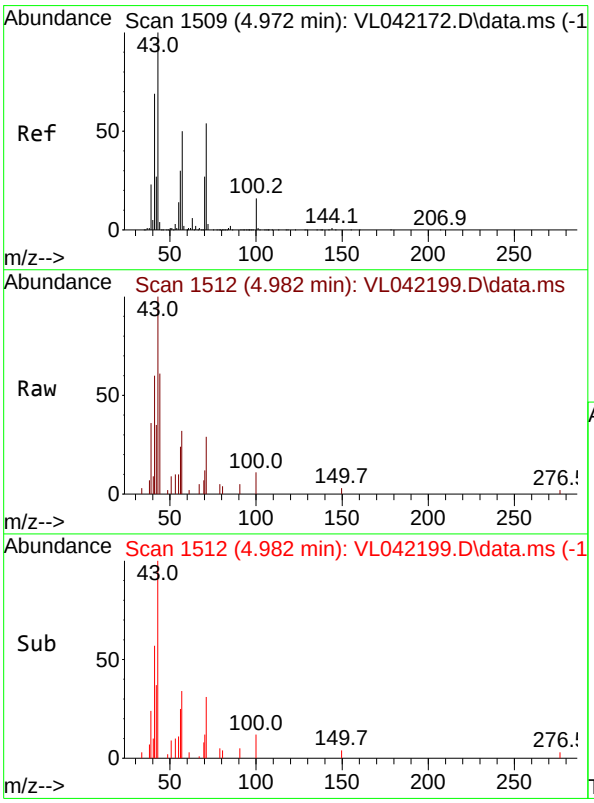
#9
Propene
Concen: 0.671 ppbv
RT: 1.619 min Scan# 4
Delta R.T. 0.136 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 41 Resp: 8400

Ion	Ratio	Lower	Upper
41	100		
42	59.2	55.4	83.2

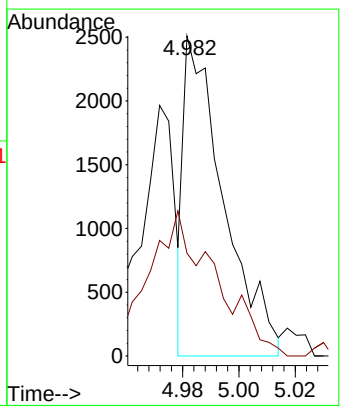


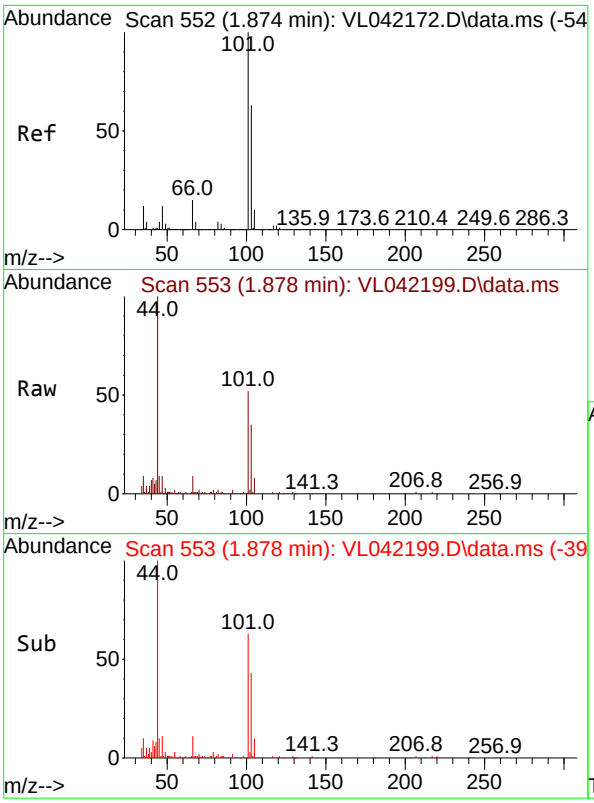


#10
Heptane
Concen: 0.074 ppbv
RT: 4.982 min Scan# 1512
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 43 Resp: 2470

Ion	Ratio	Lower	Upper
43	100		
57	80.9	39.4	59.2#



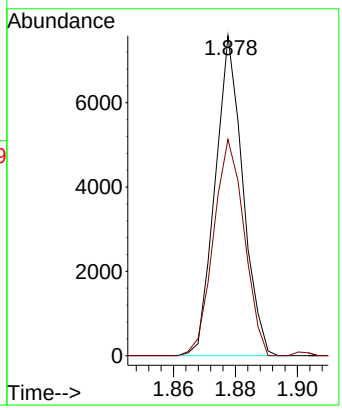


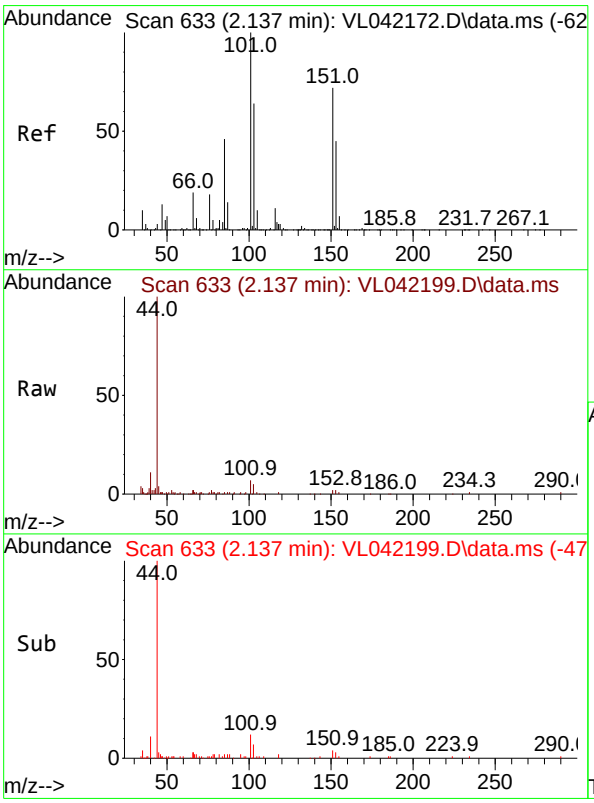
#11
Trichlorofluoromethane
Concen: 0.181 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion:101 Resp: 4706

Ion	Ratio	Lower	Upper
101	100		
103	67.6	50.2	75.2

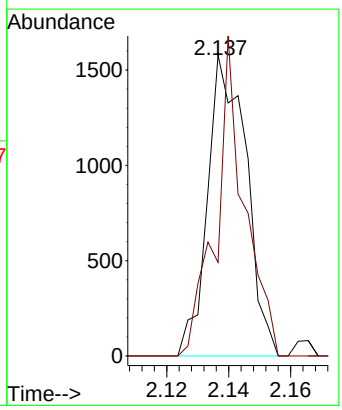


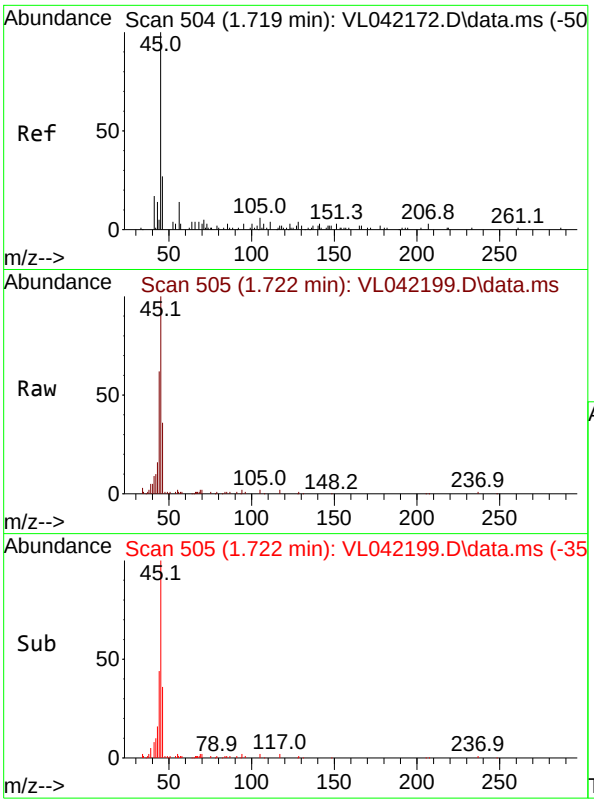


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.064 ppbv
RT: 2.137 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:101 Resp: 1363

Ion	Ratio	Lower	Upper
101	100		
151	78.6	57.1	85.7



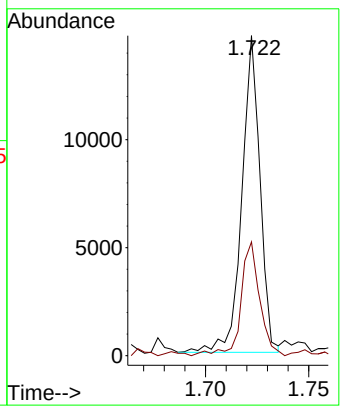


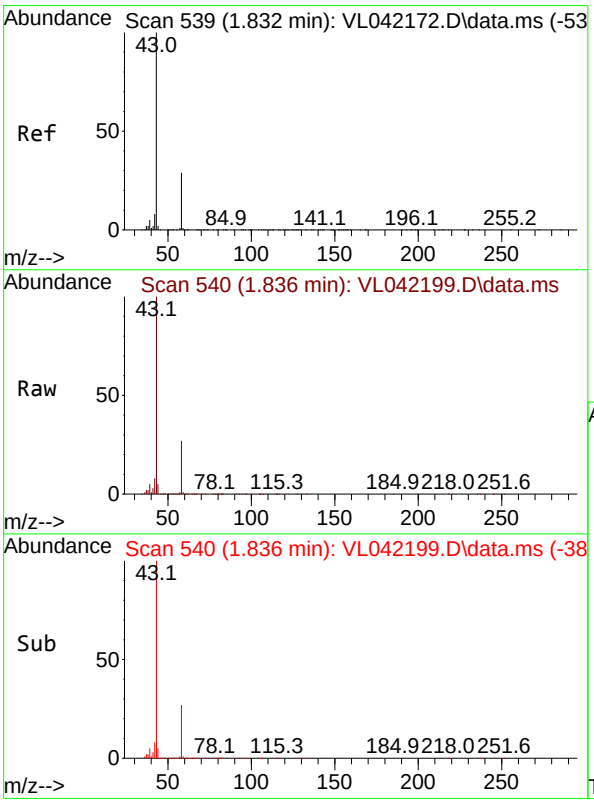
#13
Ethanol
Concen: 7.560 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 45 Resp: 8952

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#

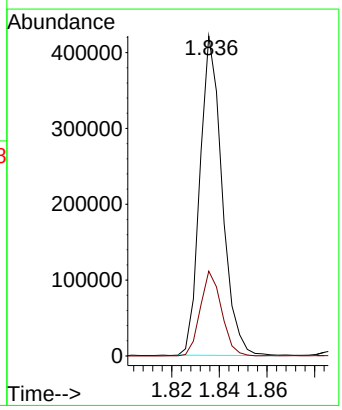


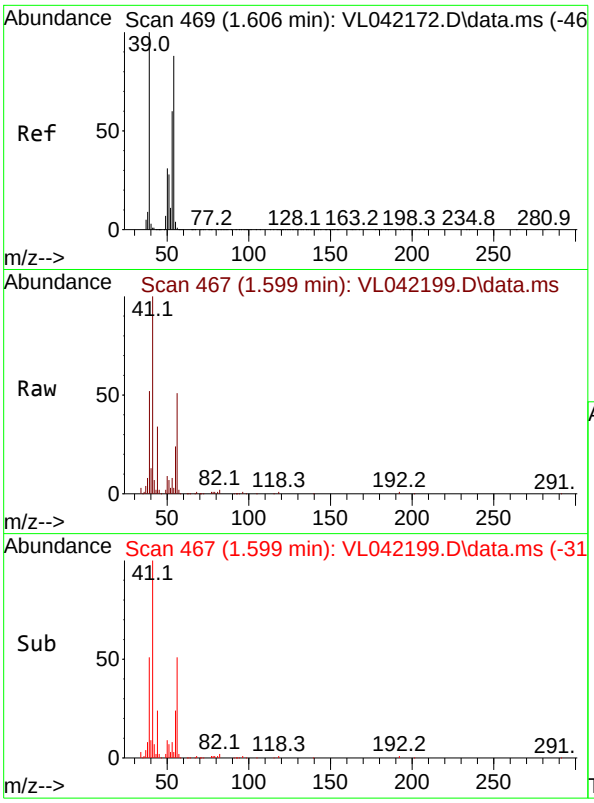


#15
Acetone
Concen: 10.750 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 43 Resp: 272395

Ion	Ratio	Lower	Upper
43	100		
58	25.7	23.2	34.8



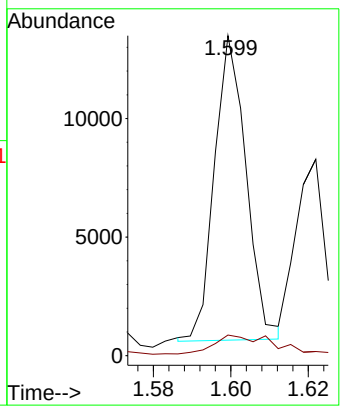


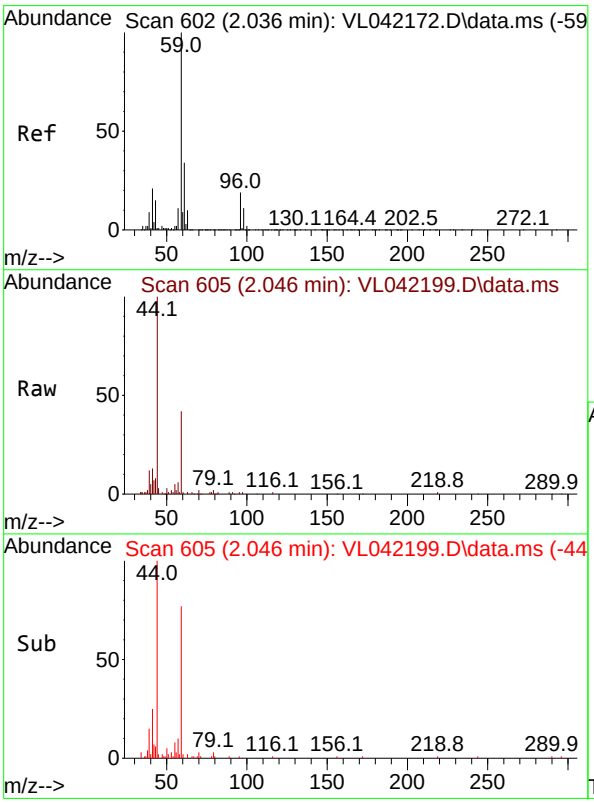
#16
1,3-Butadiene
Concen: 0.589 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 39 Resp: 7289

Ion	Ratio	Lower	Upper
39	100		
54	18.2	60.7	91.1#

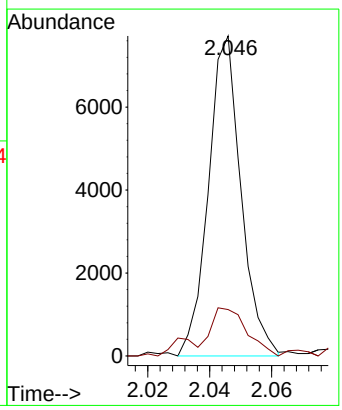


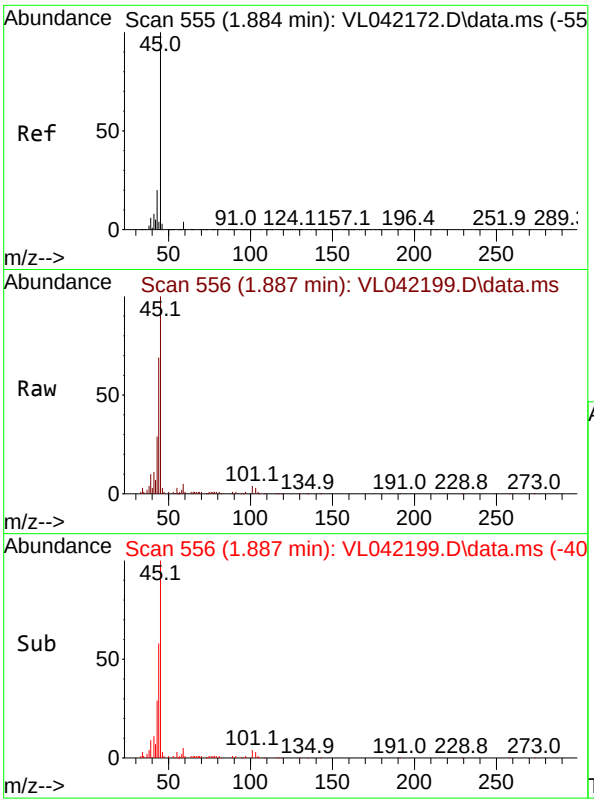


#17
tert-Butyl alcohol
Concen: 0.179 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 59 Resp: 5649

Ion	Ratio	Lower	Upper
59	100		
57	22.0	8.9	13.3#



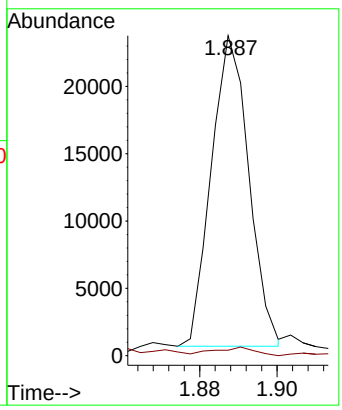


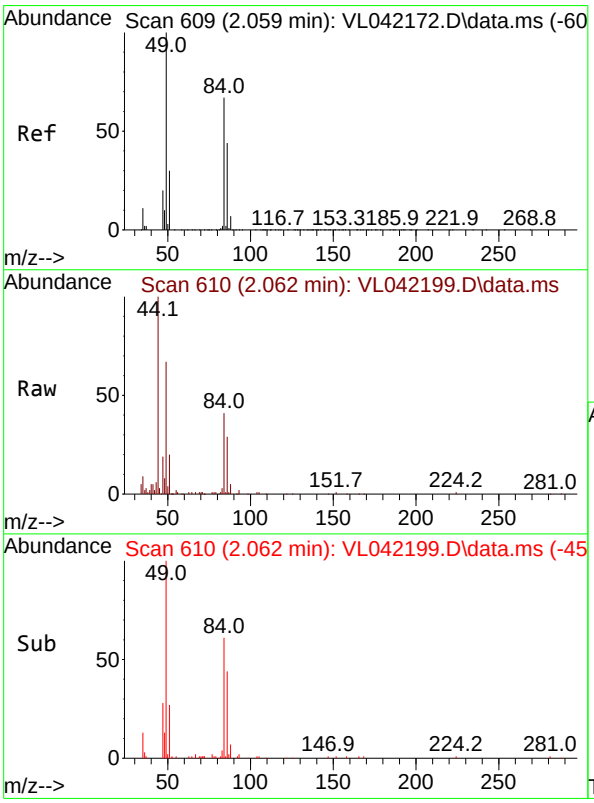
#19
Isopropyl Alcohol
Concen: 1.086 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 45 Resp: 15527

Ion	Ratio	Lower	Upper
45	100		
58	454.8	36.9	55.3#

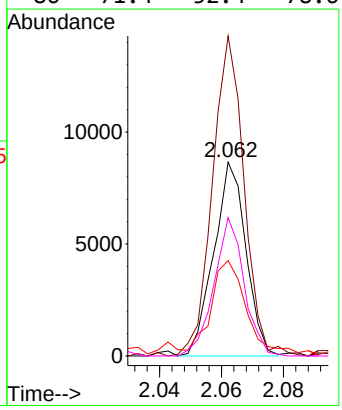


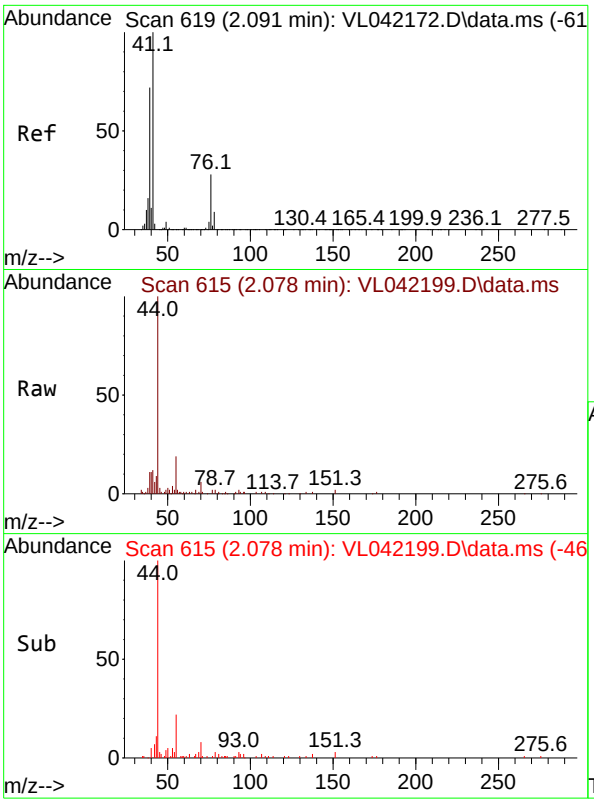


#20
Methylene Chloride
Concen: 0.661 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 84 Resp: 6239

Ion	Ratio	Lower	Upper
84	100		
49	164.3	120.2	180.4
51	46.0	37.4	56.0
86	71.4	52.4	78.6



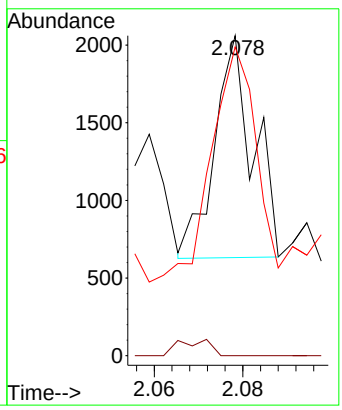


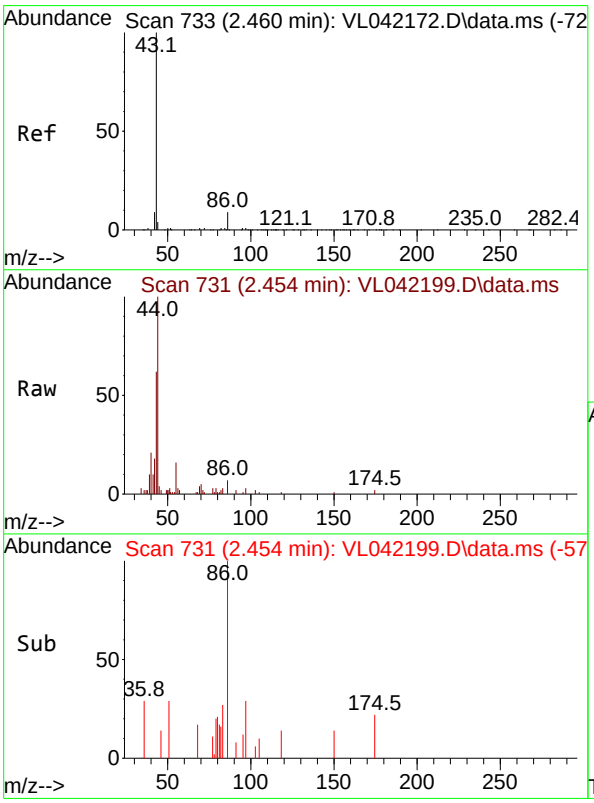
#21
Allyl Chloride
Concen: 0.048 ppbv
RT: 2.078 min Scan# 61
Delta R.T. -0.013 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 41 Resp: 865

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.1	36.1#
39	107.3	61.1	91.7#

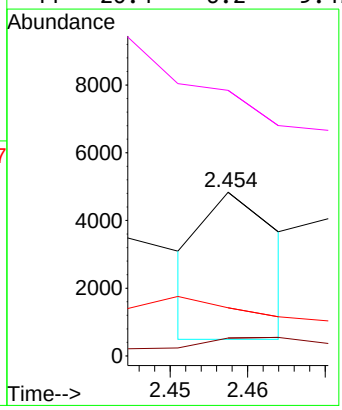


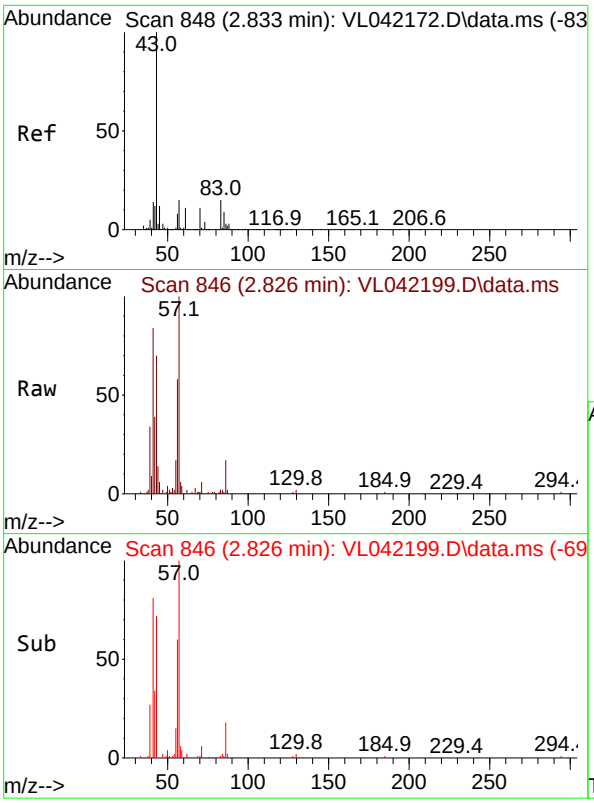


#23
Vinyl Acetate
Concen: 0.133 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.007 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 43 Resp: 1458

Ion	Ratio	Lower	Upper
43	100		
86	17.1	5.5	8.3#
42	15.4	8.6	13.0#
44	20.4	6.2	9.4#



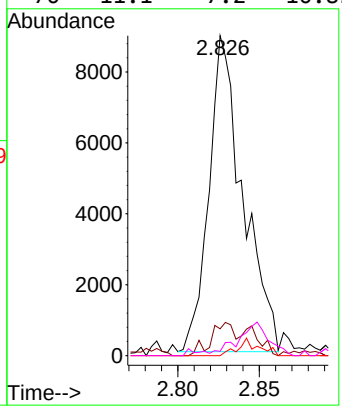


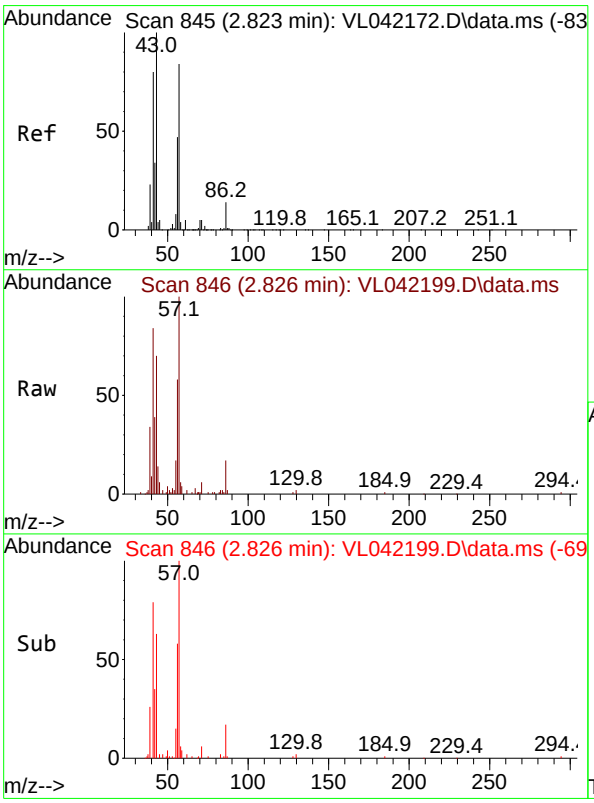
#25
Ethyl Acetate
Concen: 0.197 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.007 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 43 Resp: 12939

Ion	Ratio	Lower	Upper
43	100		
45	12.5	8.2	12.2#
61	3.3	7.3	10.9#
70	11.1	7.2	10.8#

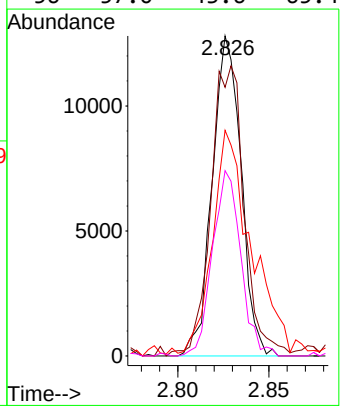


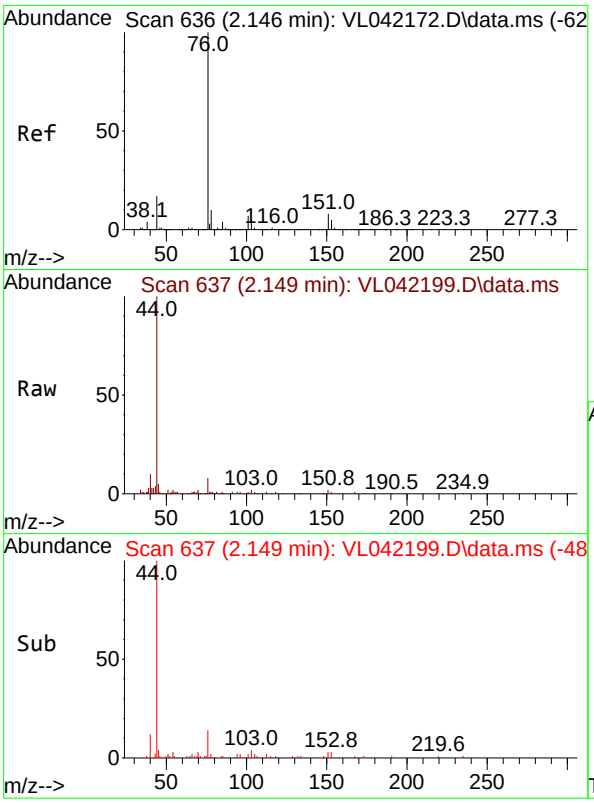


#26
Hexane
Concen: 0.556 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 57 Resp: 14117

Ion	Ratio	Lower	Upper
57	100		
41	107.0	76.6	114.8
43	100.8	207.8	311.8#
56	57.0	43.6	65.4



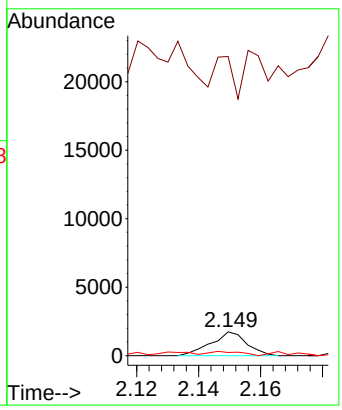


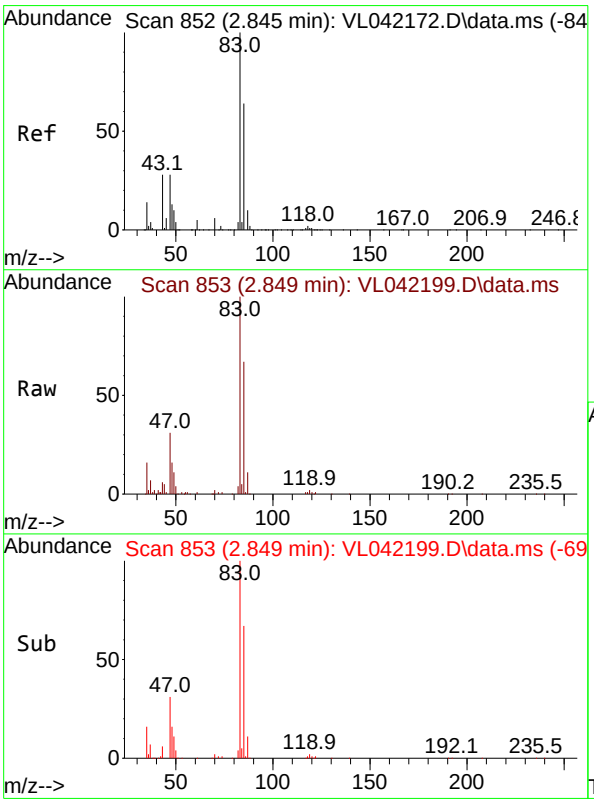
#27
Carbon Disulfide
Concen: 0.051 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 76 Resp: 1385

Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.7	22.1#
78	42.5	9.3	13.9#

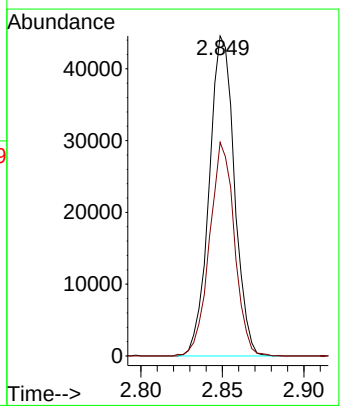


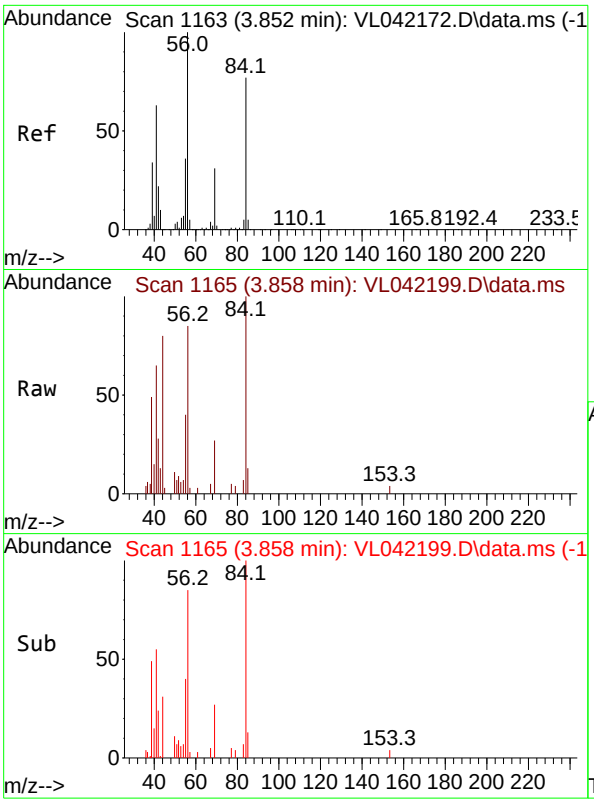


#29
Chloroform
Concen: 1.289 ppbv
RT: 2.849 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 83 Resp: 47910

Ion	Ratio	Lower	Upper
83	100		
85	66.6	51.4	77.2



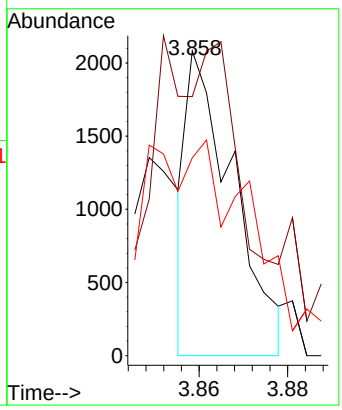


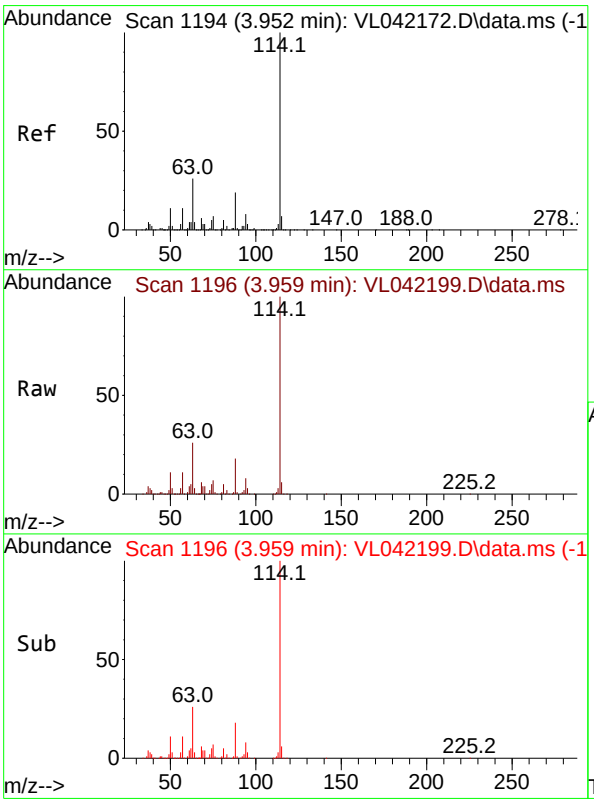
#30
Cyclohexane
Concen: 0.069 ppbv
RT: 3.858 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 84 Resp: 1524

Ion	Ratio	Lower	Upper
84	100		
56	0.0	102.8	154.2#
41	115.6	66.5	99.7#

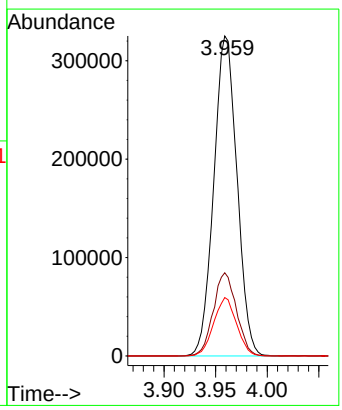


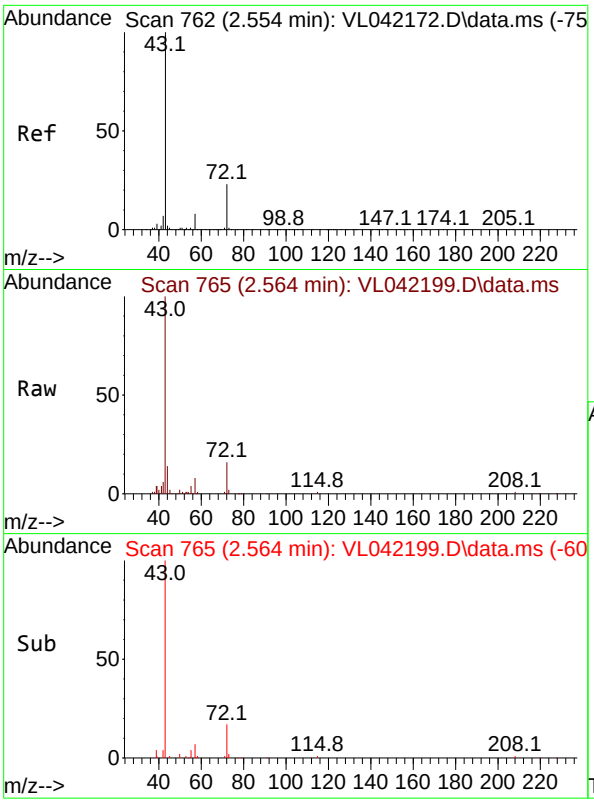


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:114 Resp: 509062

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.0	15.0	22.4



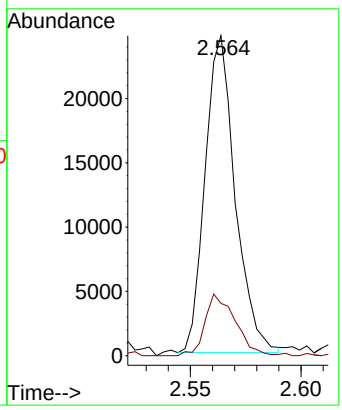


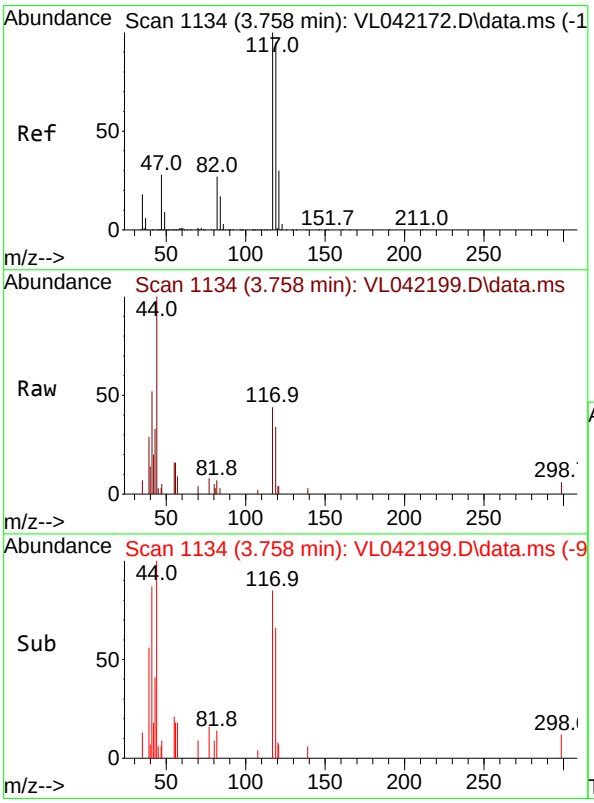
#34
2-Butanone
Concen: 0.632 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 43 Resp: 23343

Ion	Ratio	Lower	Upper
43	100		
72	20.2	18.2	27.2

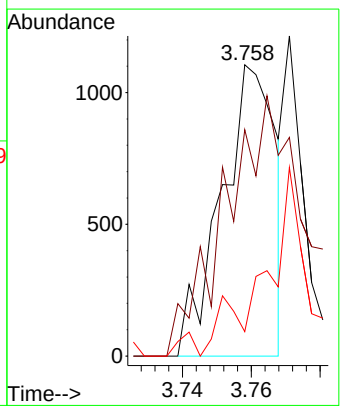


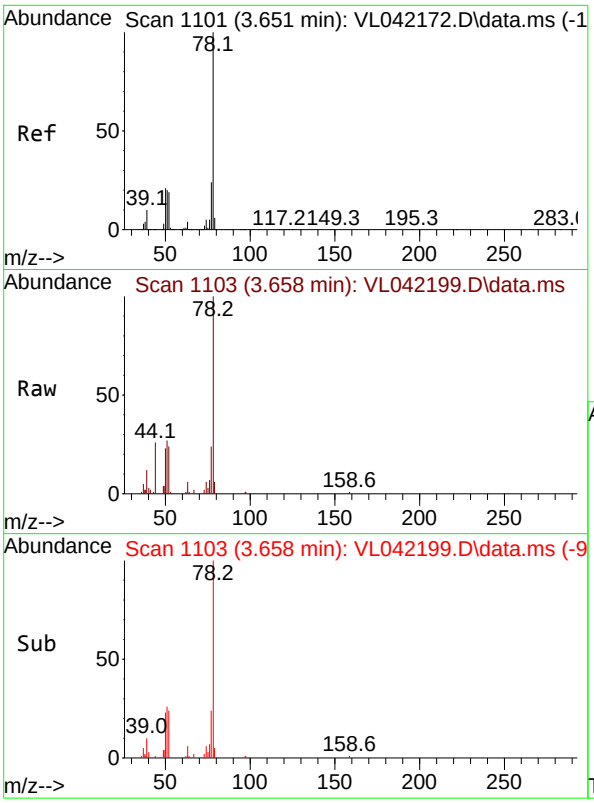


#35
Carbon Tetrachloride
Concen: 0.030 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:117 Resp: 1195

Ion	Ratio	Lower	Upper
117	100		
119	59.7	76.2	114.2#
121	3.4	24.2	36.4#



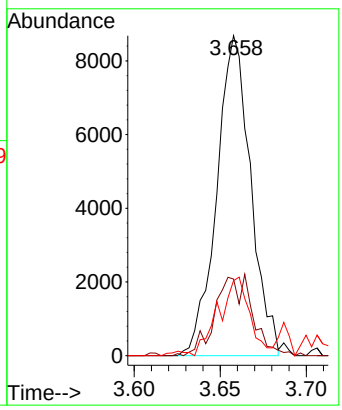


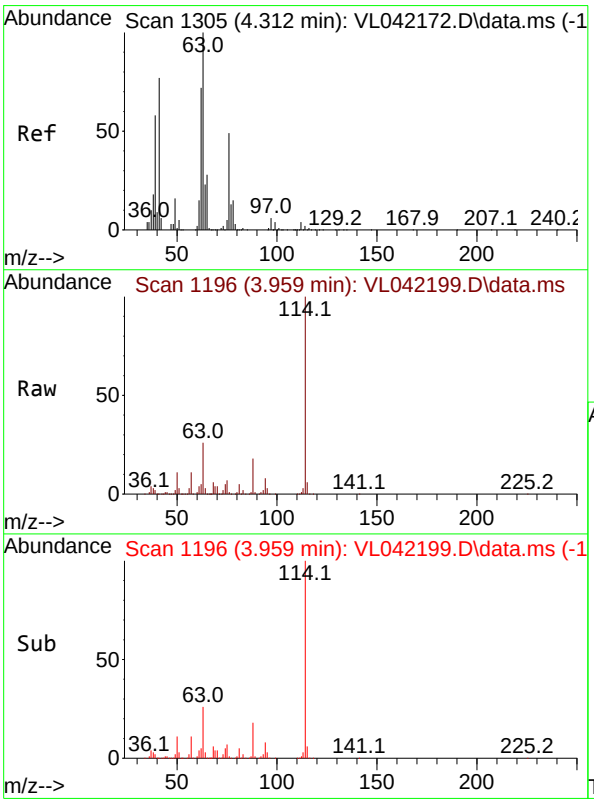
#36
Benzene
Concen: 0.236 ppbv
RT: 3.658 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 78 Resp: 11929

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.1	28.7
50	22.0	16.6	24.8

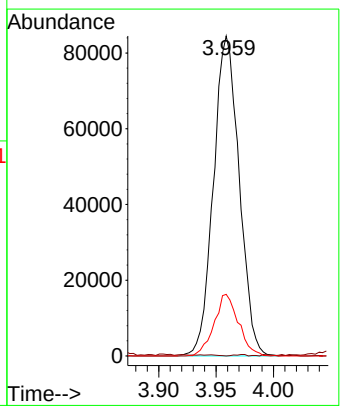


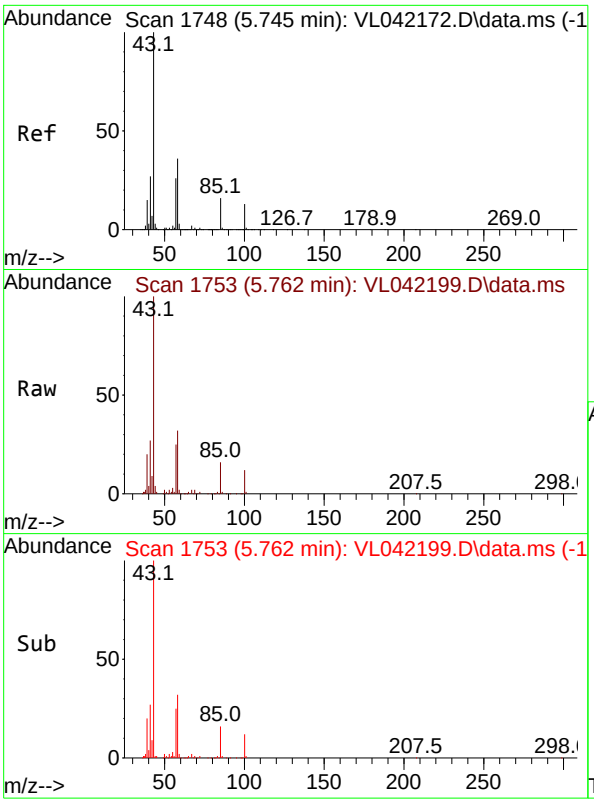


#39
1,2-Dichloropropane
Concen: 7.177 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 63 Resp: 131902

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	19.2	57.6	86.4#



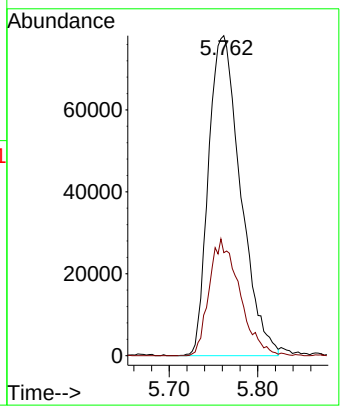


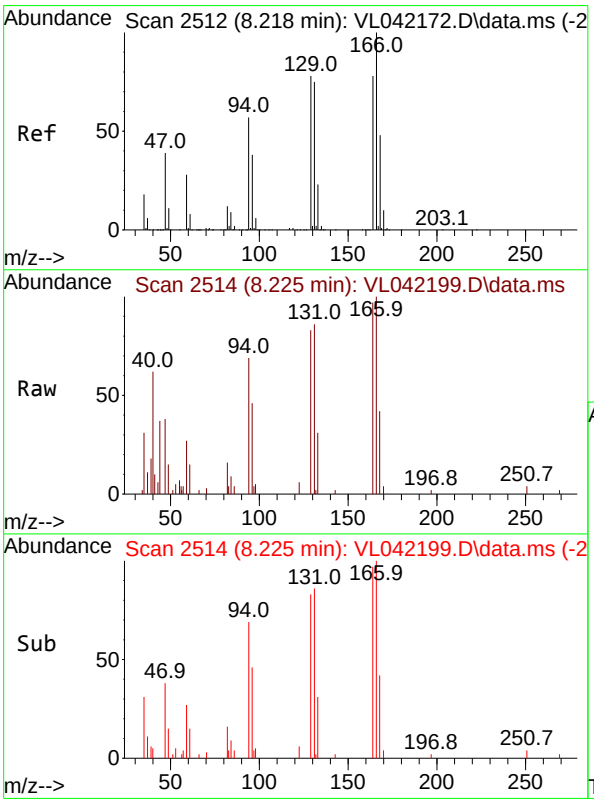
#50
4-Methyl-2-Pentanone
Concen: 3.360 ppbv
RT: 5.762 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 43 Resp: 196564

Ion	Ratio	Lower	Upper
43	100		
58	34.8	29.0	43.6

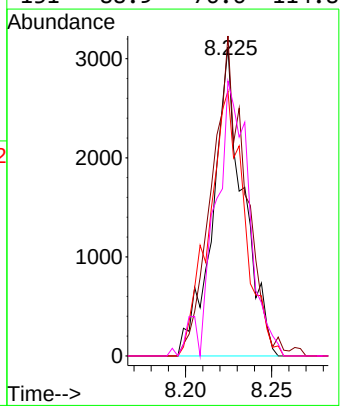


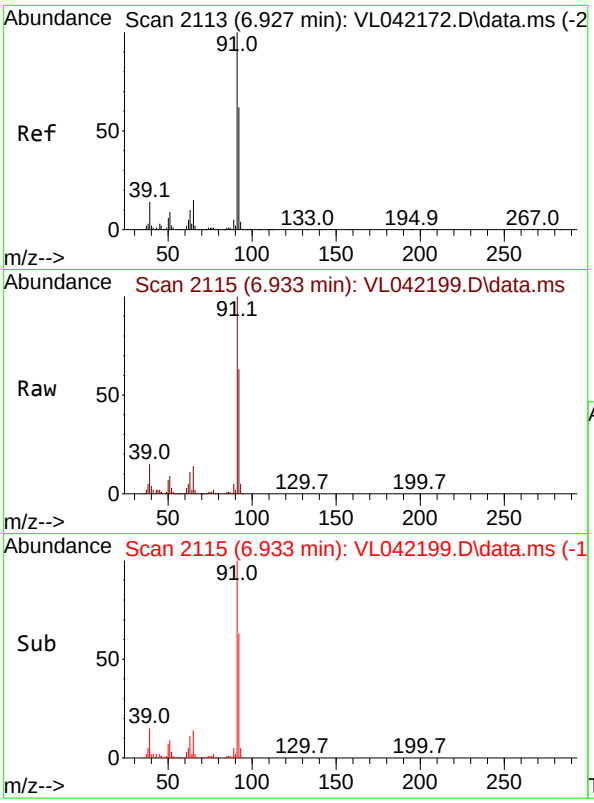


#52
Tetrachloroethene
Concen: 0.192 ppbv
RT: 8.225 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:164 Resp: 3844

Ion	Ratio	Lower	Upper
164	100		
166	103.6	102.5	153.7
129	85.8	79.8	119.8
131	88.9	76.6	114.8



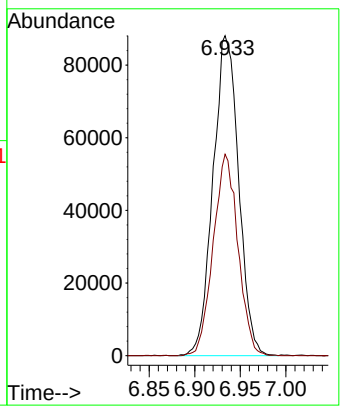


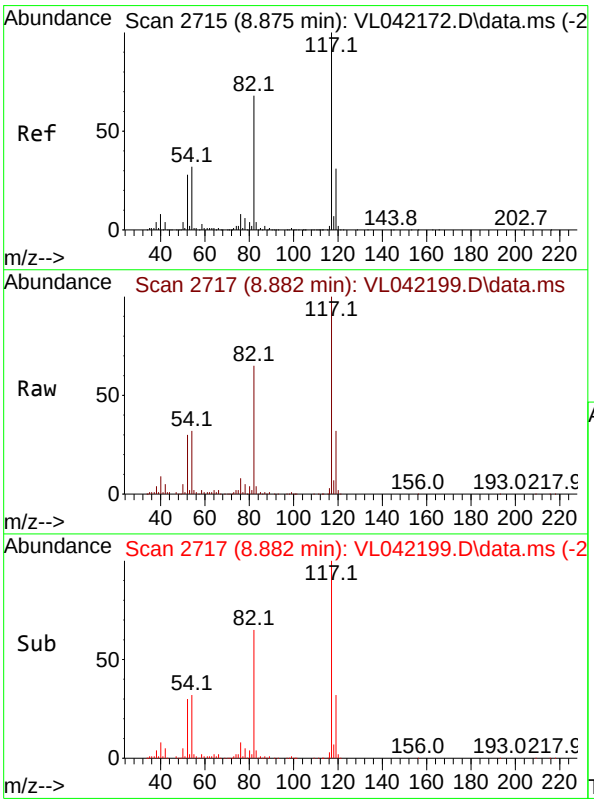
#53
Toluene
Concen: 2.874 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 91 Resp: 171948

Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.4	72.6

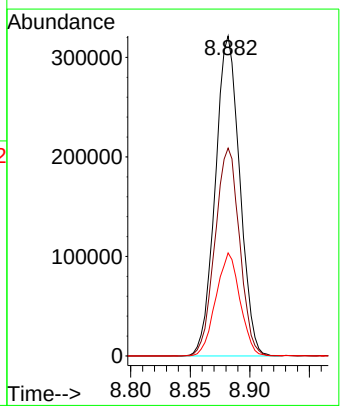


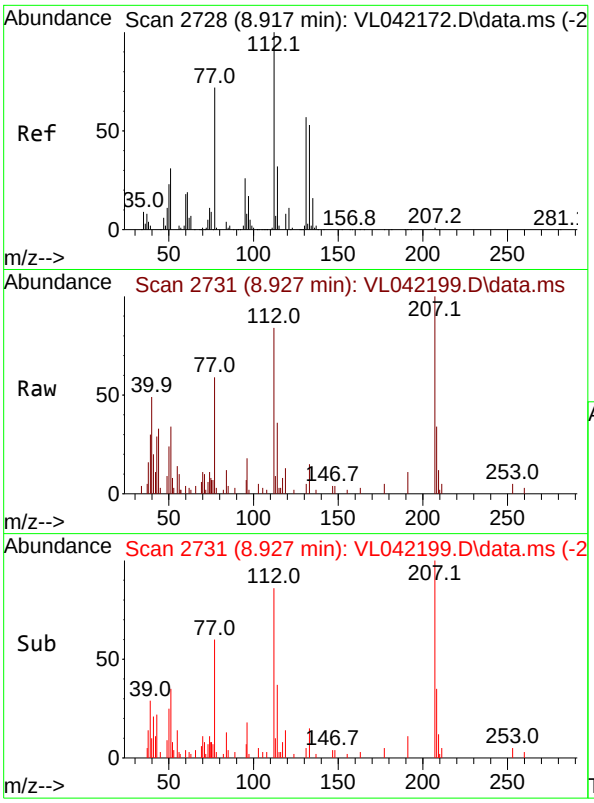


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:117 Resp: 458107

Ion	Ratio	Lower	Upper
117	100		
82	65.5	55.8	83.6
119	32.0	25.5	38.3



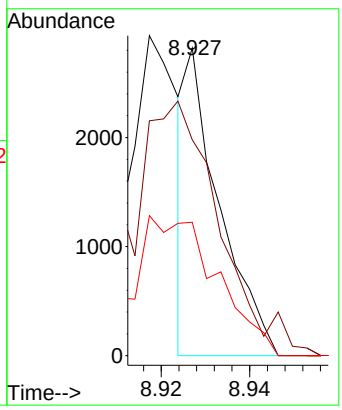


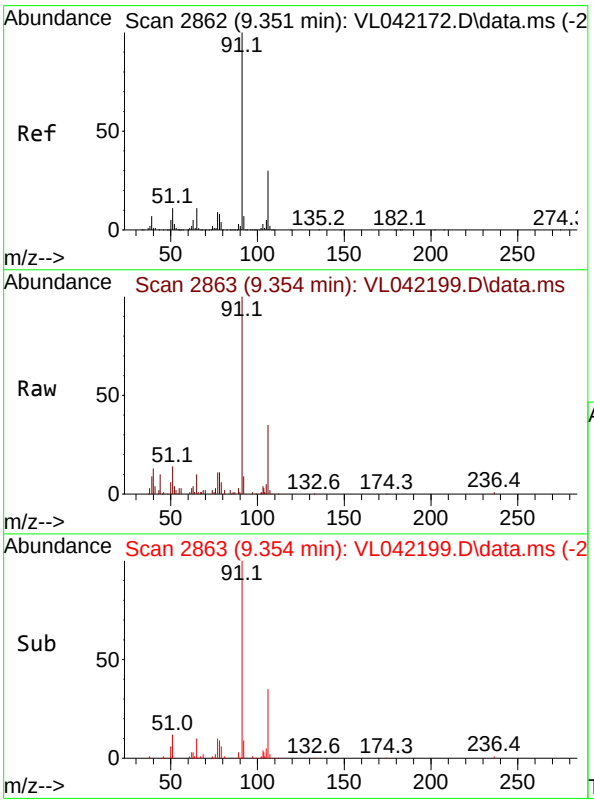
#57
Chlorobenzene
Concen: 0.034 ppbv
RT: 8.927 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion:112 Resp: 1488

Ion	Ratio	Lower	Upper
112	100		
77	55.9	58.2	87.2#
114	43.4	29.1	35.5#

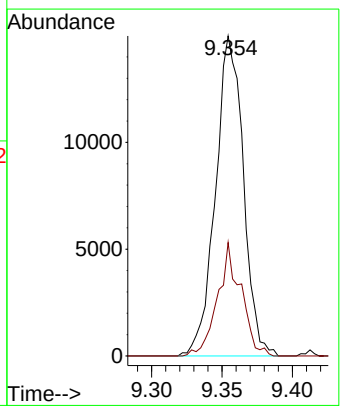


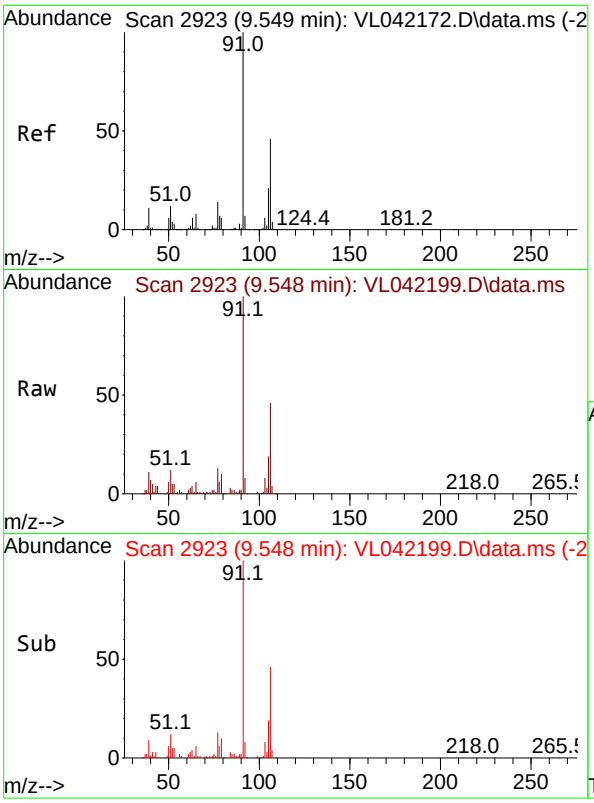


#58
Ethyl Benzene
Concen: 0.254 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 91 Resp: 20640

Ion	Ratio	Lower	Upper
91	100		
106	35.4	24.2	36.2



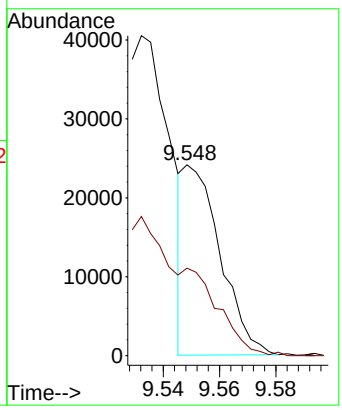


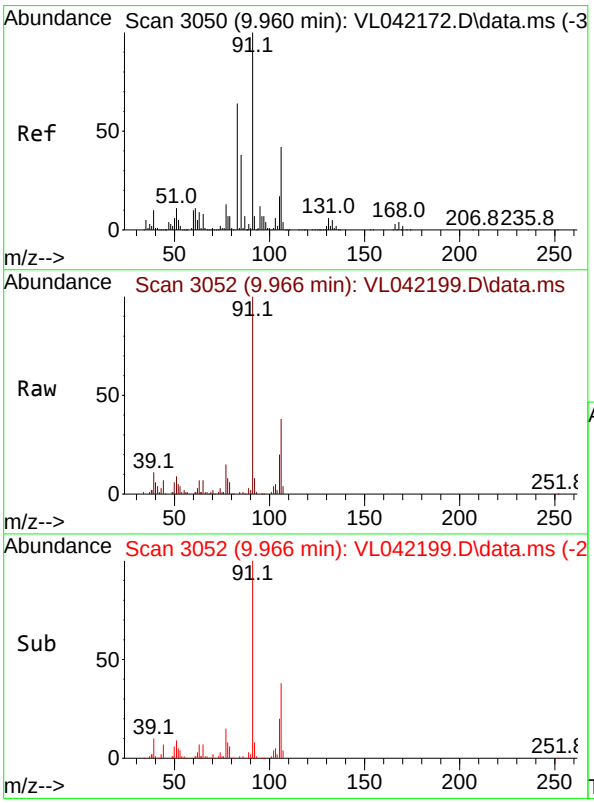
#59
m/p-Xylene
Concen: 0.335 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 91 Resp: 21772

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

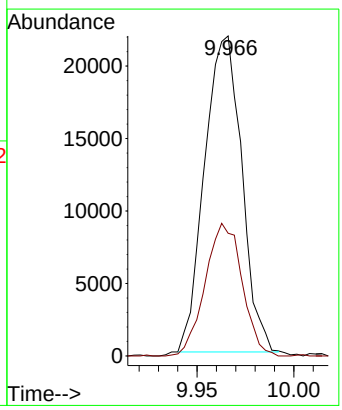


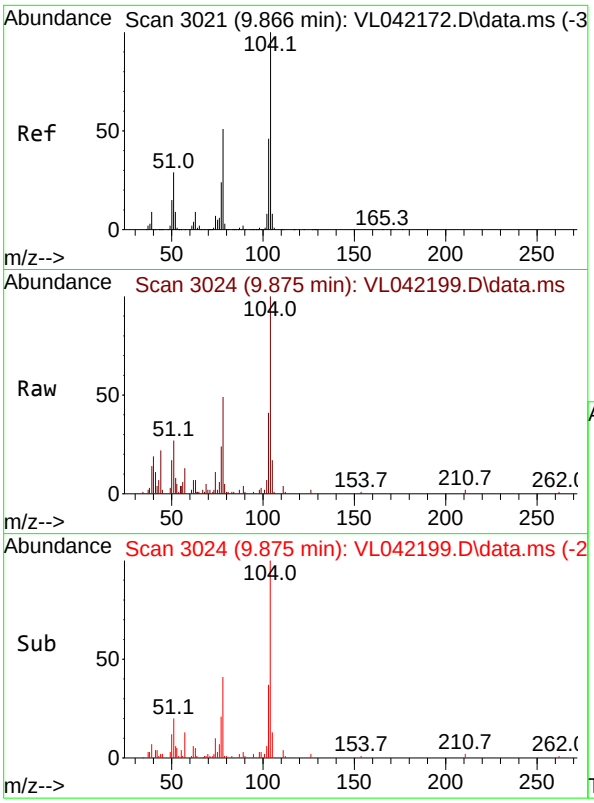


#60
o-Xylene
Concen: 0.448 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion: 91 Resp: 29151

Ion	Ratio	Lower	Upper
91	100		
106	41.7	20.8	62.5



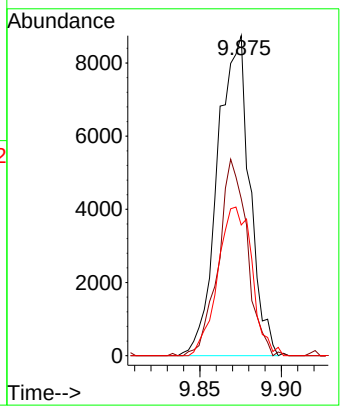


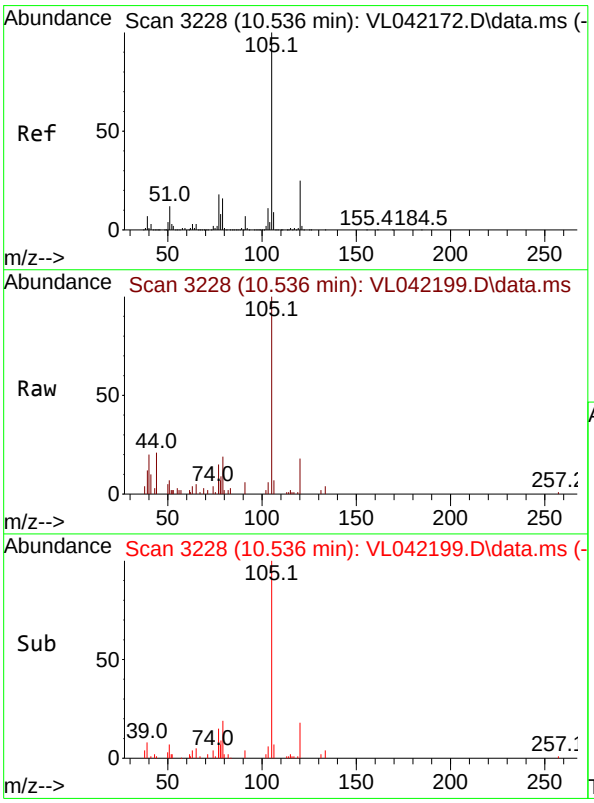
#61
Styrene
Concen: 0.372 ppbv
RT: 9.875 min Scan# 3(
Delta R.T. 0.010 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion:104 Resp: 11979

Ion	Ratio	Lower	Upper
104	100		
78	55.0	41.8	62.6
103	49.5	37.0	55.4

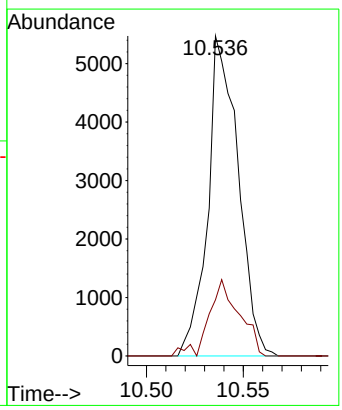


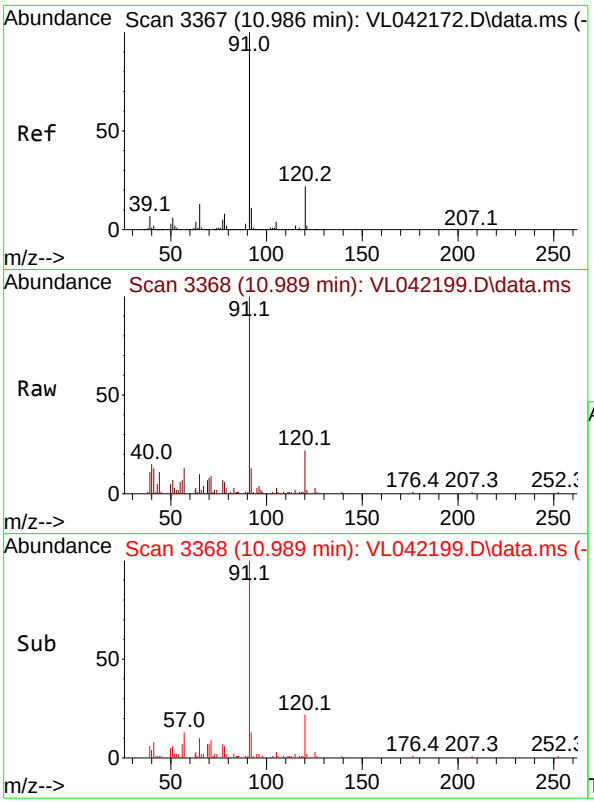


#62
Isopropylbenzene
Concen: 0.061 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:105 Resp: 5968

Ion	Ratio	Lower	Upper
105	100		
120	24.1	19.9	29.9



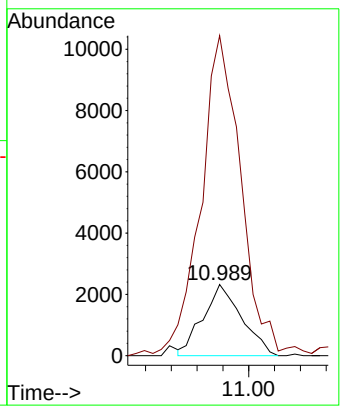


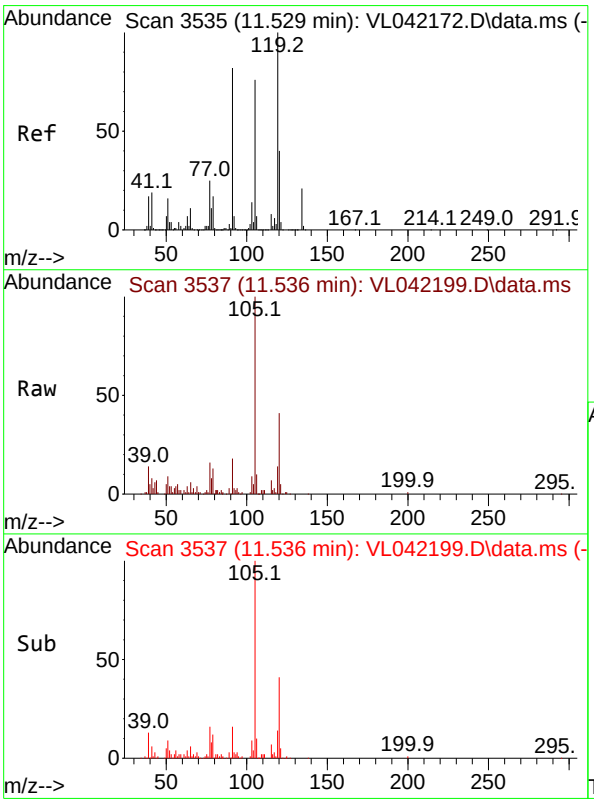
#64
n-propylbenzene
Concen: 0.096 ppbv
RT: 10.989 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion:120 Resp: 2419

Ion	Ratio	Lower	Upper
120	100		
91	479.7	376.9	565.3

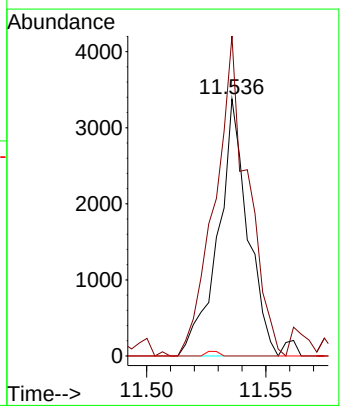


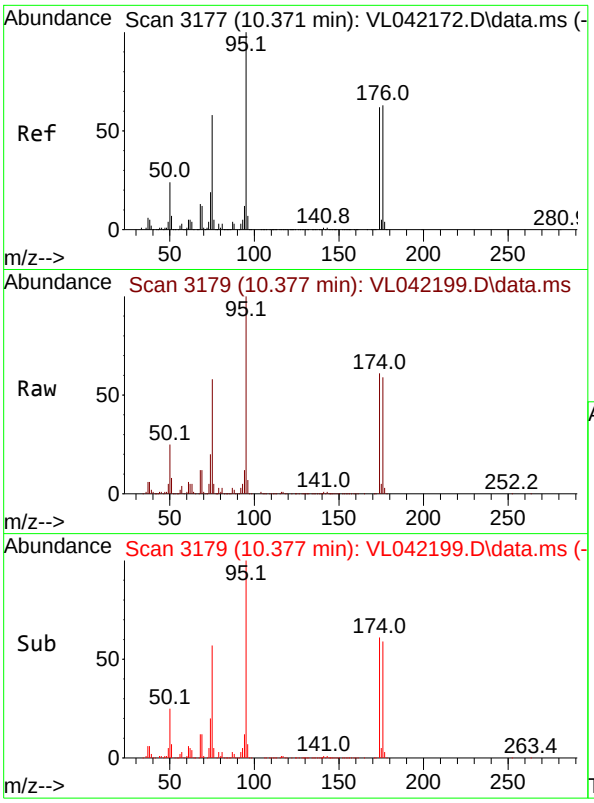


#65
tert-Butylbenzene
Concen: 0.032 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:119 Resp: 2907

Ion	Ratio	Lower	Upper
119	100		
91	151.4	66.0	99.0#
134	0.0	16.7	25.1#



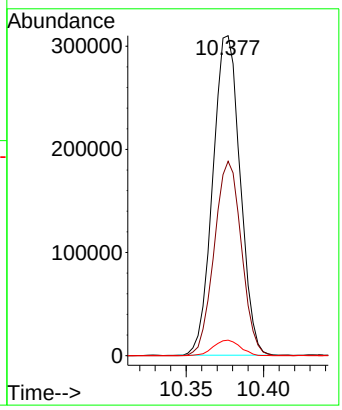


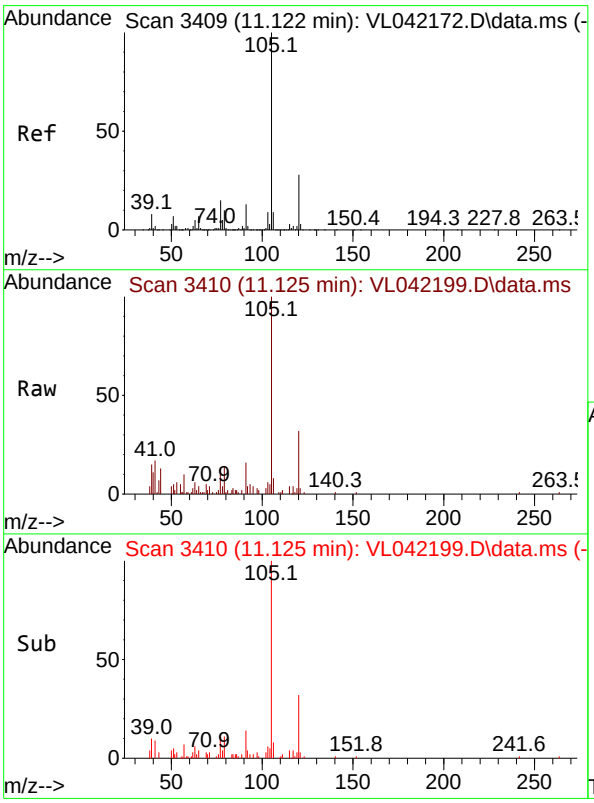
#68
1-Bromo-4-Fluorobenzene
Concen: 10.097 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion: 95 Resp: 379865

Ion	Ratio	Lower	Upper
95	100		
174	60.7	50.6	76.0
175	4.8	3.8	5.6

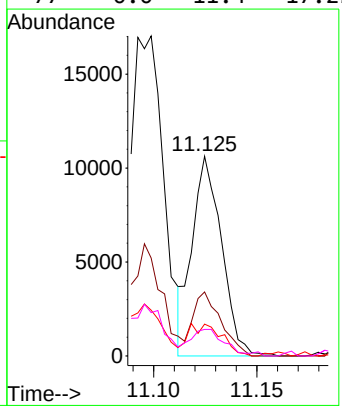


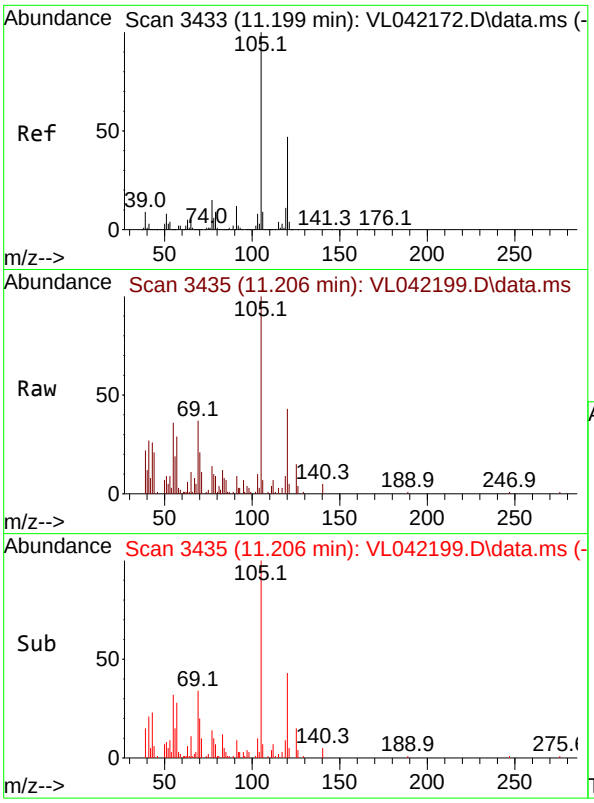


#72
4-Ethyltoluene
Concen: 0.131 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:105 Resp: 10586

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.4	35.0
91	14.4	10.3	15.5
77	0.0	11.4	17.2#



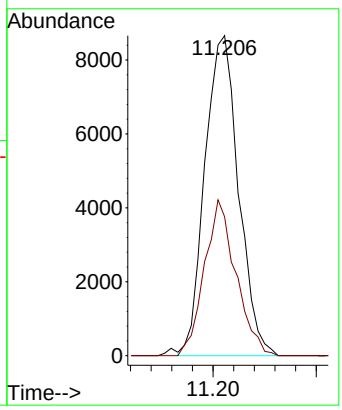


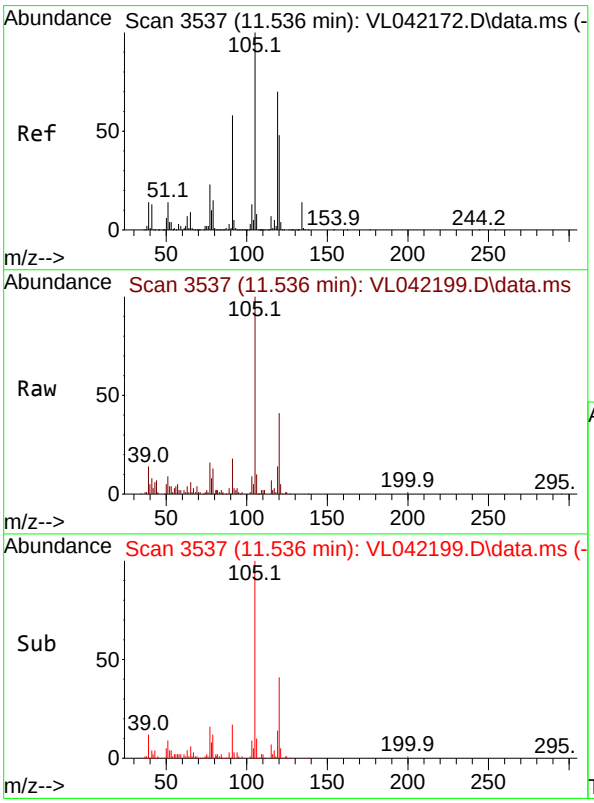
#73
1,3,5-Trimethylbenzene
Concen: 0.138 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-2-3262025

Tgt Ion:105 Resp: 9797

Ion	Ratio	Lower	Upper
105	100		
120	43.4	37.4	56.0

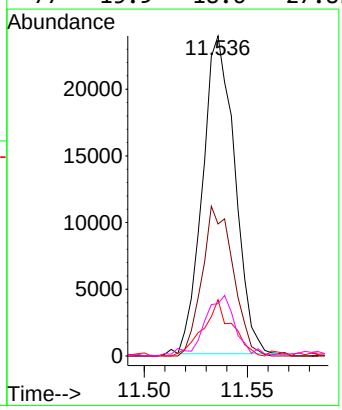




#74
1,2,4-Trimethylbenzene
Concen: 0.317 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042199.D
Acq: 28 Mar 2025 02:33

Tgt Ion:105 Resp: 25878

Ion	Ratio	Lower	Upper
105	100		
120	41.5	38.6	58.0
91	16.8	46.2	69.2#
77	15.9	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 01 01:34:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	161478	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.982	114	460403	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.904	117	424671	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	355372	10.190	ppbv	0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.506	85	243672	10.220	ppbv	98
3) Chlorodifluoromethane	1.483	51	233931	9.604	ppbv	96
4) Chloromethane	1.538	50	91967	9.439	ppbv	99
5) Vinyl Chloride	1.586	62	88747	8.595	ppbv	96
6) Bromomethane	1.674	94	40765	9.232	ppbv	98
7) Chloroethane	1.713	64	35638	9.112	ppbv	98
8) Dichlorotetrafluoroethane	1.561	85	203570	10.026	ppbv	96
9) Propene	1.489	41	95128	8.521	ppbv	97
10) Heptane	5.011	43	261936	8.821	ppbv	99
11) Trichlorofluoromethane	1.887	101	231721	9.988	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.150	101	182824	9.588	ppbv	98
13) Ethanol	1.729	45	4473	4.238	ppbv	87
14) Bromoethene	1.790	108	66903	9.159	ppbv	99
15) Acetone	1.842	43	193773	8.580	ppbv	96
16) 1,3-Butadiene	1.616	39	96046	8.709	ppbv	97
17) tert-Butyl alcohol	2.049	59	252420	8.974	ppbv	99
18) 1,1-Dichloroethene	2.043	96	82868	9.296	ppbv	100
19) Isopropyl Alcohol	1.894	45	115180	9.039	ppbv	98
20) Methylene Chloride	2.072	84	67877	8.070	ppbv	94
21) Allyl Chloride	2.108	41	144599	9.079	ppbv	98
22) trans-1,2-Dichloroethene	2.353	96	91942	8.924	ppbv	96
23) Vinyl Acetate	2.473	43	82938	8.485	ppbv #	96
24) 1,1-Dichloroethane	2.421	63	185830	9.730	ppbv	99
25) Ethyl Acetate	2.852	43	536366	9.151	ppbv	99
26) Hexane	2.842	57	209103	9.236	ppbv	98
27) Carbon Disulfide	2.159	76	230171	9.481	ppbv	98
28) Methyl tert-Butyl Ether	2.454	73	178093	12.635	ppbv	92
29) Chloroform	2.865	83	337970	10.200	ppbv	99
30) Cyclohexane	3.878	84	180110	9.162	ppbv	95
31) cis-1,2-Dichloroethene	2.735	61	219389	9.545	ppbv	98
32) 1,1,1-Trichloroethane	3.386	97	359718	9.483	ppbv	98
34) 2-Butanone	2.570	43	301334	9.026	ppbv	99
35) Carbon Tetrachloride	3.784	117	371691	10.335	ppbv	98
36) Benzene	3.677	78	426758	9.350	ppbv	98
37) 1,2-Dichloroethane	3.234	62	273137	10.453	ppbv	99
38) Trichloroethene	4.574	130	179999	9.452	ppbv	96
39) 1,2-Dichloropropane	4.338	63	153124	9.212	ppbv	94
40) 1,4-Dioxane	4.613	88	46600	5.282	ppbv #	20
41) Tetrahydrofuran	3.069	42	170829	8.886	ppbv	100
42) Bromodichloromethane	4.516	83	373399	10.365	ppbv	99
43) Methyl Methacrylate	4.907	69	170312	8.814	ppbv	98
44) 2,2,4-Trimethylpentane	4.664	57	705253	9.143	ppbv	98
45) t-1,3-Dichloropropene	6.445	75	190040	9.167	ppbv	96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 01 01:34:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.632	75	232713	9.158	ppbv		96
47) 1,1,2-Trichloroethane	6.616	97	81186	4.620	ppbv		98
48) Dibromochloromethane	7.416	129	303330	10.186	ppbv		100
49) Bromoform	9.503	173	261484	9.780	ppbv		99
50) 4-Methyl-2-Pentanone	5.791	43	437050	8.261	ppbv		97
51) 2-Hexanone	7.464	43	351622	8.093	ppbv	#	96
52) Tetrachloroethene	8.247	164	155203	8.574	ppbv		96
53) Toluene	6.962	91	492717	9.106	ppbv		100
54) 1,2-Dibromoethane	7.675	107	239347	9.771	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.947	131	236930	10.136	ppbv		98
57) Chlorobenzene	8.943	112	389475	9.669	ppbv		97
58) Ethyl Benzene	9.374	91	712533	9.446	ppbv		98
59) m/p-Xylene	9.571	91	553998	9.197	ppbv	#	25
60) o-Xylene	9.986	91	575224	9.526	ppbv		97
61) Styrene	9.892	104	281518	9.424	ppbv		100
62) Isopropylbenzene	10.558	105	874894	9.689	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.982	83	349199	9.518	ppbv		100
64) n-propylbenzene	11.008	120	228400	9.826	ppbv		97
65) tert-Butylbenzene	11.549	119	795482	9.526	ppbv		98
66) Benzyl Chloride	11.633	91	72526	8.185	ppbv		99
67) sec-Butylbenzene	11.785	105	1123267	9.677	ppbv		99
69) p-Isopropyltoluene	11.940	119	967912	9.684	ppbv		99
70) n-Butylbenzene	12.296	91	1006907	9.850	ppbv		98
71) 2-Chlorotoluene	10.918	91	676396	9.652	ppbv		98
72) 4-Ethyltoluene	11.141	105	734909	9.775	ppbv		100
73) 1,3,5-Trimethylbenzene	11.222	105	637499	9.709	ppbv		97
74) 1,2,4-Trimethylbenzene	11.555	105	696079	9.202	ppbv		99
75) 1,3-Dichlorobenzene	11.623	146	410546	9.895	ppbv		99
76) 1,4-Dichlorobenzene	11.688	146	413478	10.014	ppbv		100
77) 1,2-Dichlorobenzene	11.963	146	399386	9.887	ppbv		99
78) Hexachloro-1,3-Butadiene	13.895	225	345217	8.395	ppbv		99
79) Naphthalene	13.530	128	833346	10.072	ppbv		99
80) Naphthalene,2-methyl-	14.471	142	427563	10.537	ppbv		98
81) 1,2,4-Trichlorobenzene	13.455	180	373226	9.779	ppbv		99

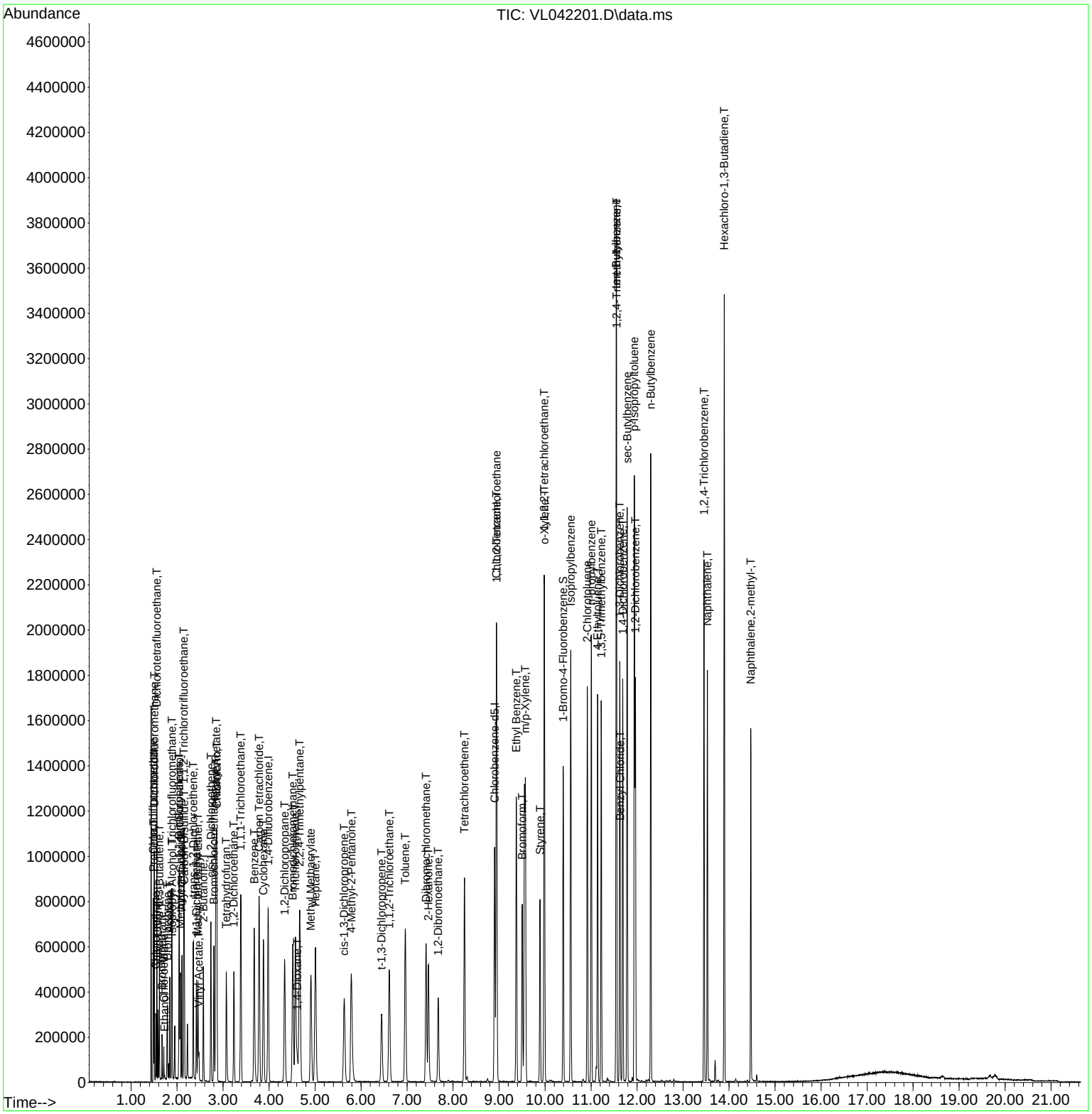
(#) = qualifier out of range (m) = manual integration (+) = signals summed

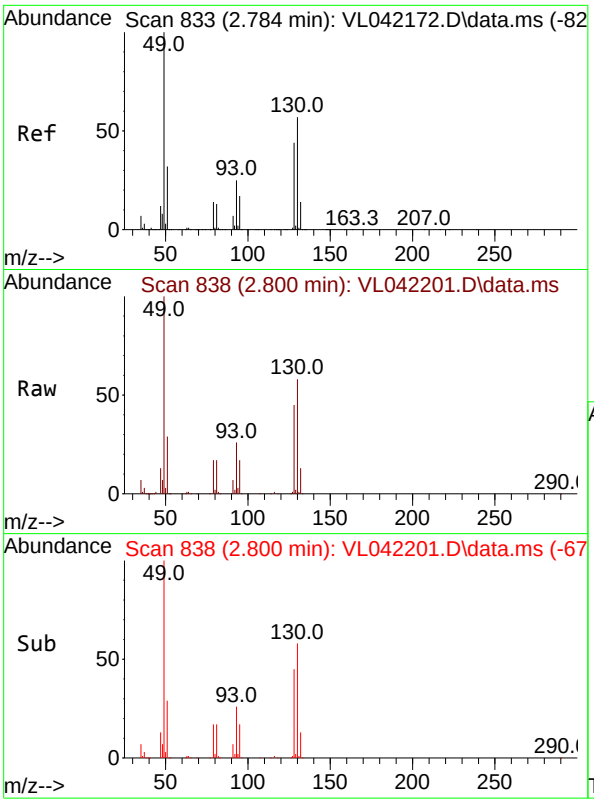
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042201.D
Acq On : 31 Mar 2025 08:51
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 01 01:34:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



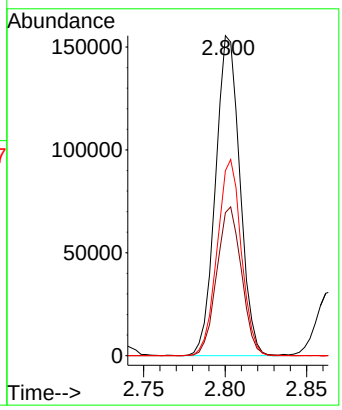


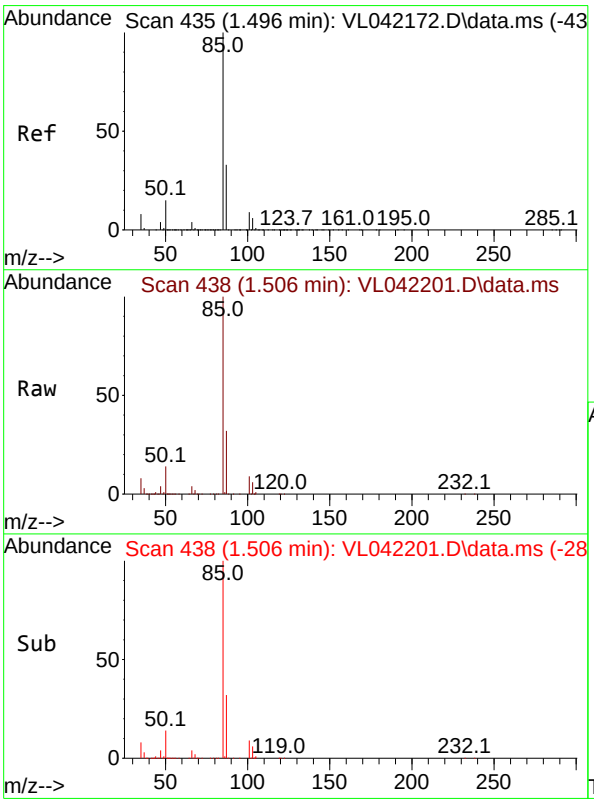
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.800 min Scan# 8
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 49 Resp: 161478

Ion	Ratio	Lower	Upper
49	100		
128	47.1	22.9	68.5
130	60.6	28.8	86.4

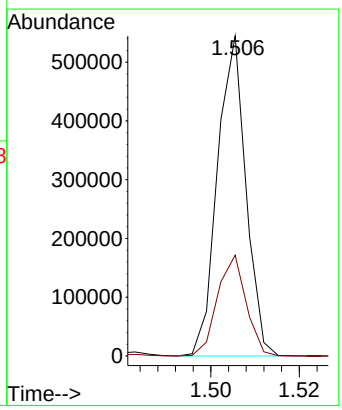


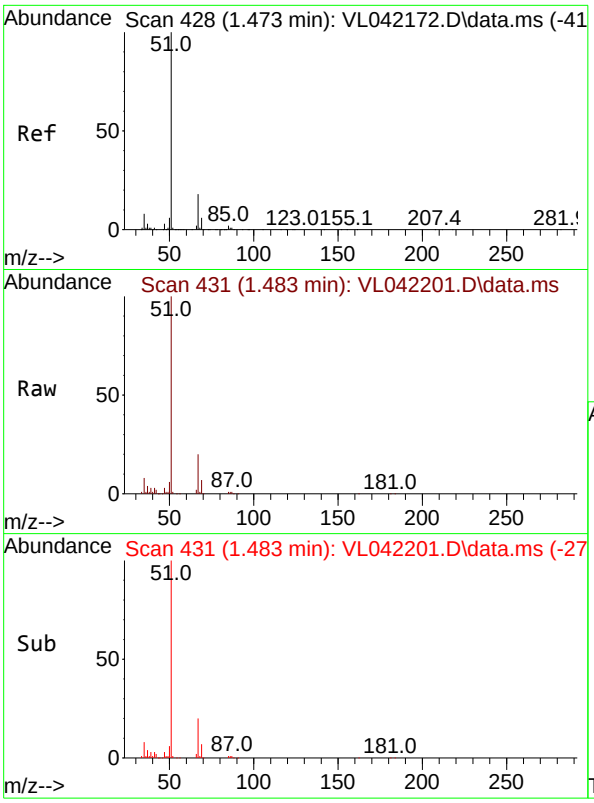


#2
Dichlorodifluoromethane
Concen: 10.220 ppbv
RT: 1.506 min Scan# 438
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 85 Resp: 243672

Ion	Ratio	Lower	Upper
85	100		
87	31.5	26.1	39.1



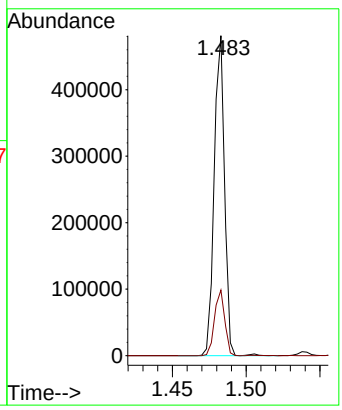


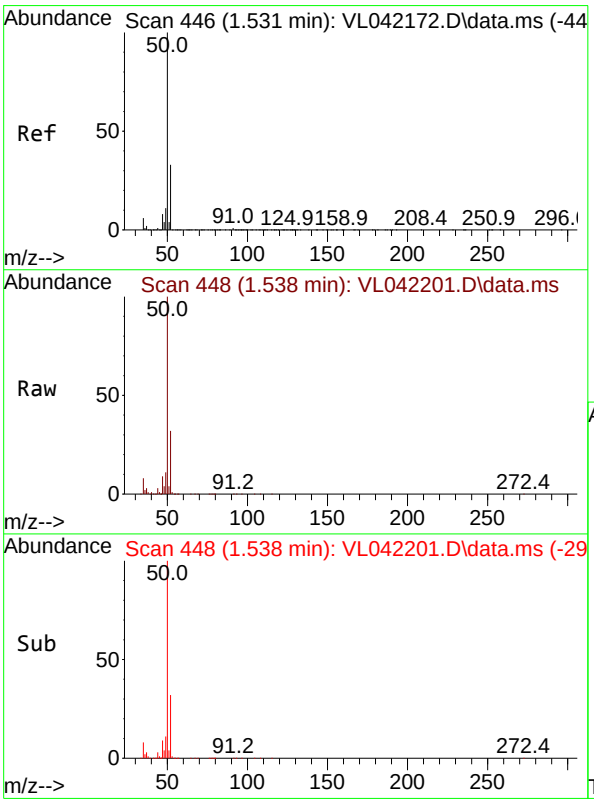
#3
Chlorodifluoromethane
Concen: 9.604 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 51 Resp: 233931

Ion	Ratio	Lower	Upper
51	100		
67	20.4	15.0	22.6

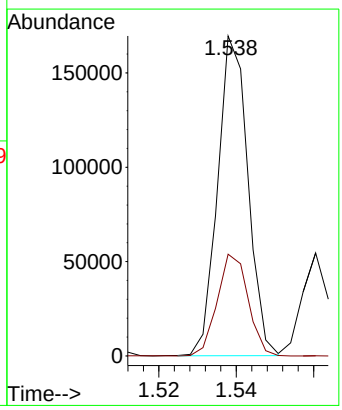


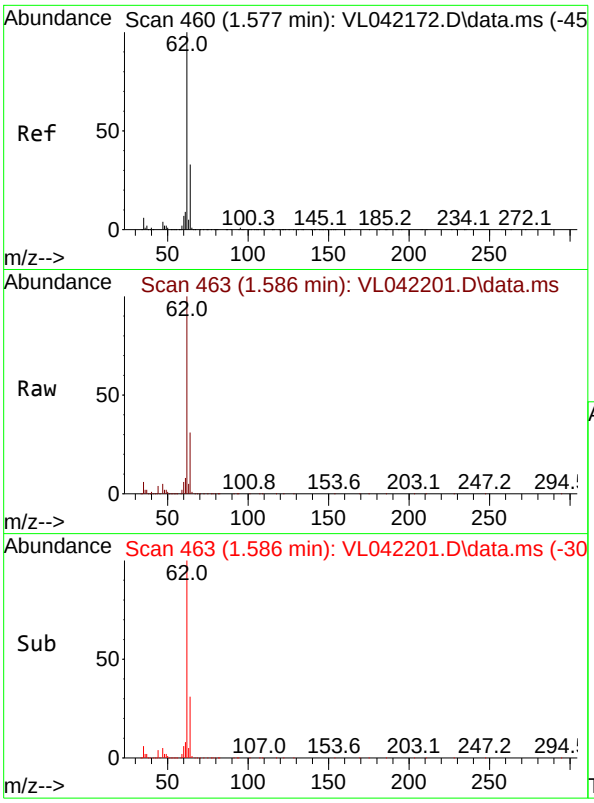


#4
Chloromethane
Concen: 9.439 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 50 Resp: 91967

Ion	Ratio	Lower	Upper
50	100		
52	31.8	26.1	39.1



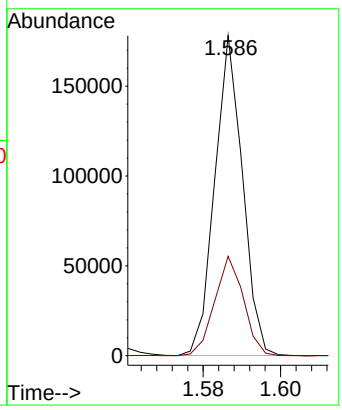


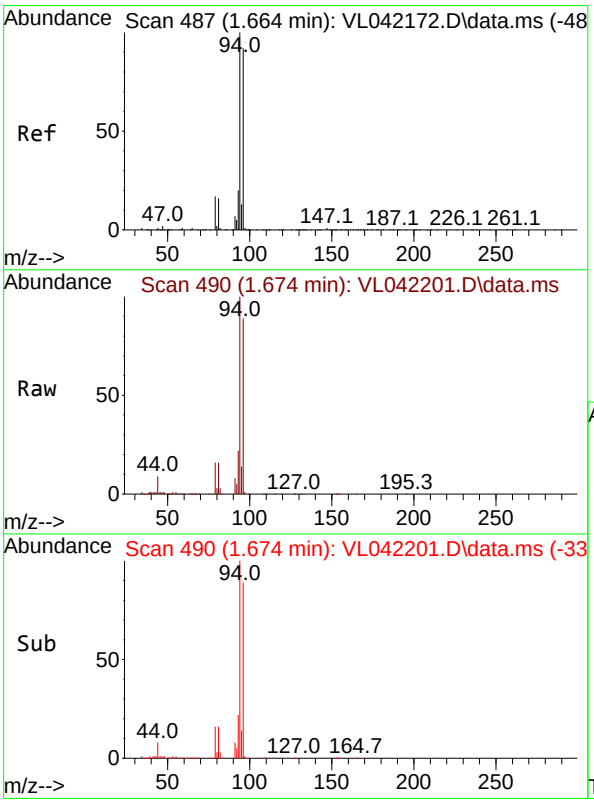
#5
Vinyl Chloride
Concen: 8.595 ppbv
RT: 1.586 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 88747

Ion	Ratio	Lower	Upper
62	100		
64	31.1	26.6	40.0

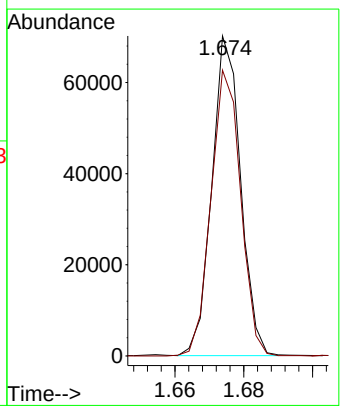


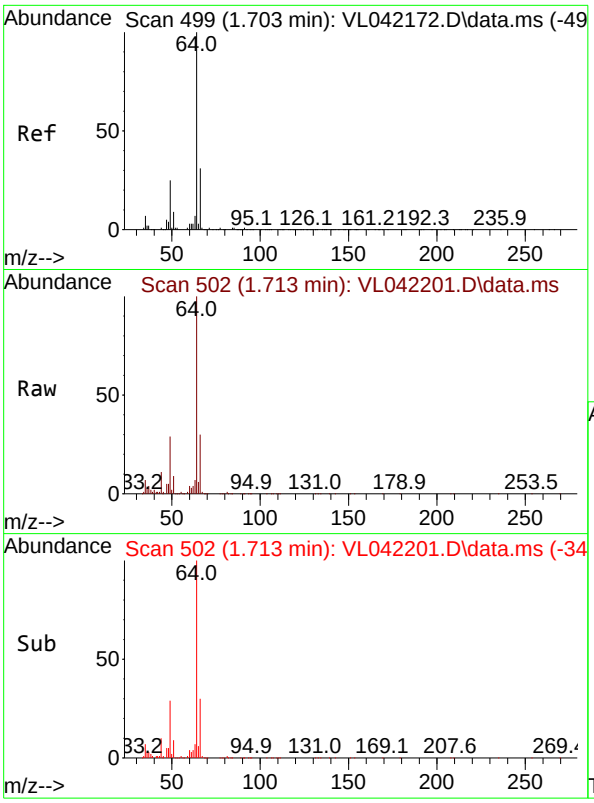


#6
Bromomethane
Concen: 9.232 ppbv
RT: 1.674 min Scan# 490
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 94 Resp: 40765

Ion	Ratio	Lower	Upper
94	100		
96	89.3	73.1	109.7



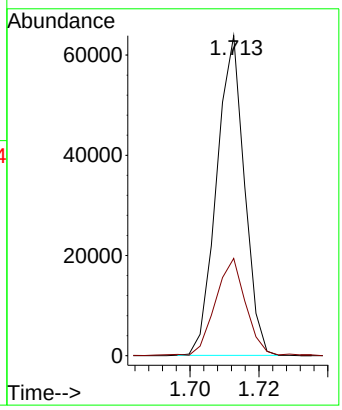


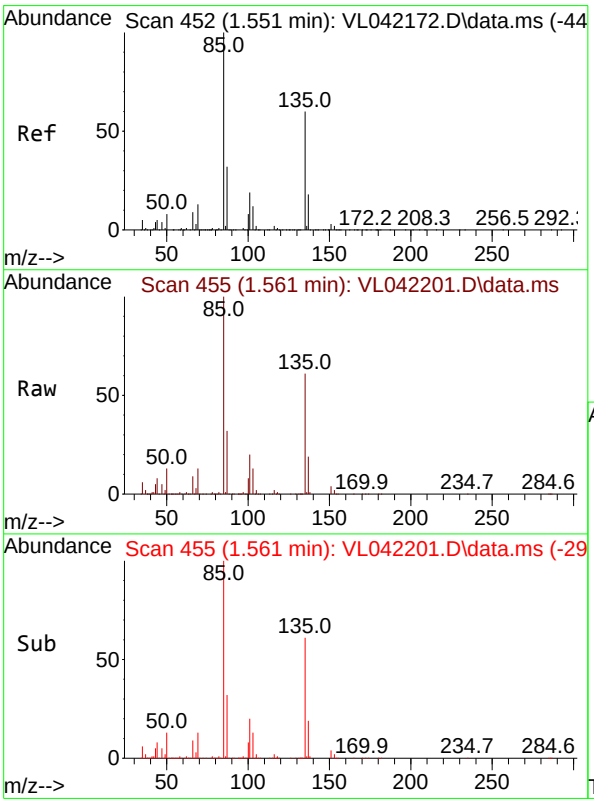
#7
Chloroethane
Concen: 9.112 ppbv
RT: 1.713 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 64 Resp: 35638

Ion	Ratio	Lower	Upper
64	100		
66	30.4	25.2	37.8

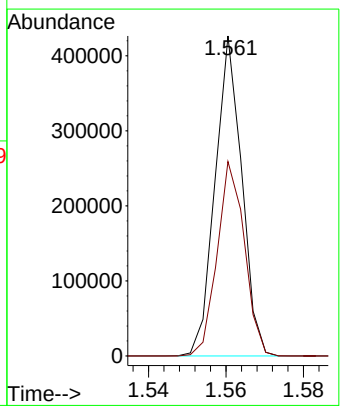


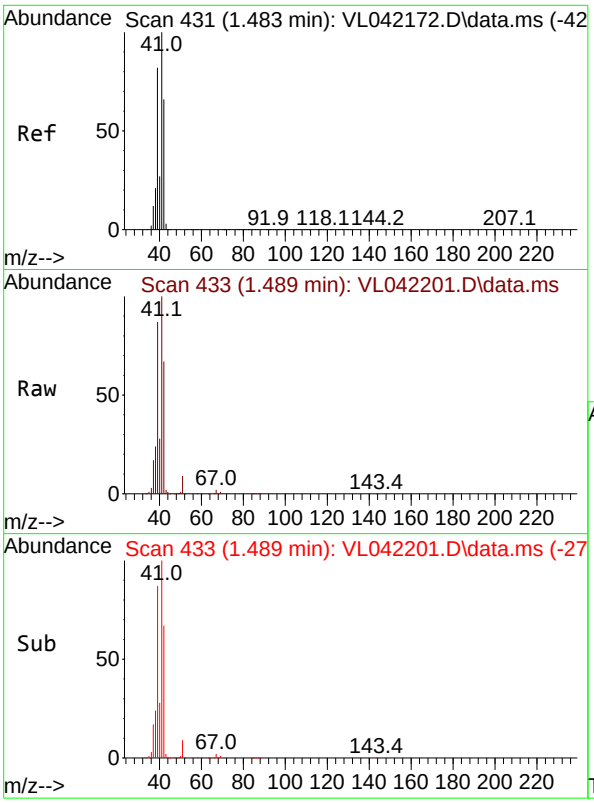


#8
Dichlorotetrafluoroethane
Concen: 10.026 ppbv
RT: 1.561 min Scan# 455
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 85 Resp: 203570

Ion	Ratio	Lower	Upper
85	100		
135	62.2	52.4	78.6



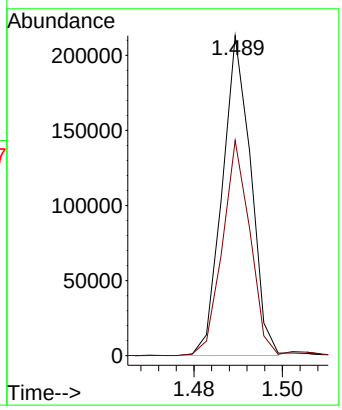


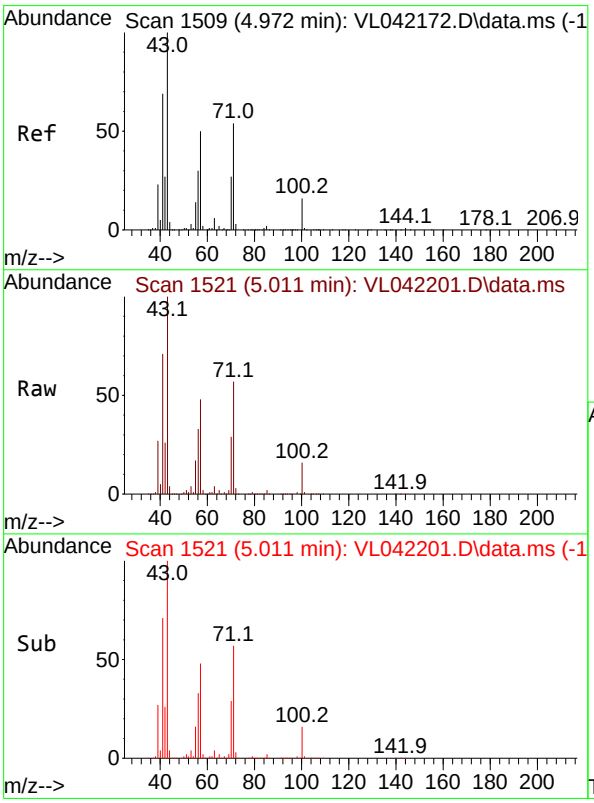
#9
Propene
Concen: 8.521 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 95128

Ion	Ratio	Lower	Upper
41	100		
42	67.2	55.4	83.2

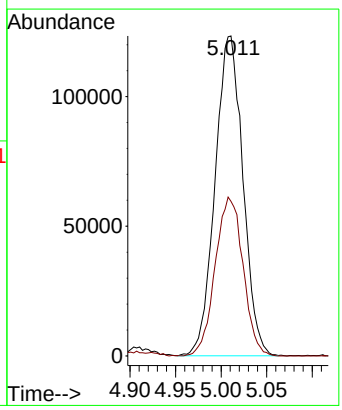


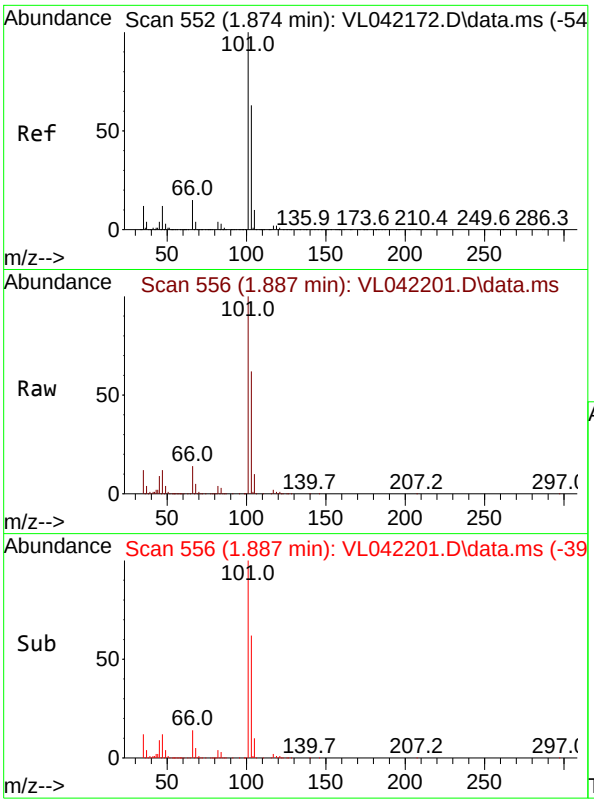


#10
Heptane
Concen: 8.821 ppbv
RT: 5.011 min Scan# 1521
Delta R.T. 0.039 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 261936

Ion	Ratio	Lower	Upper
43	100		
57	49.7	39.4	59.2



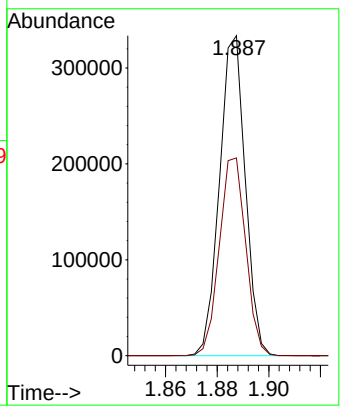


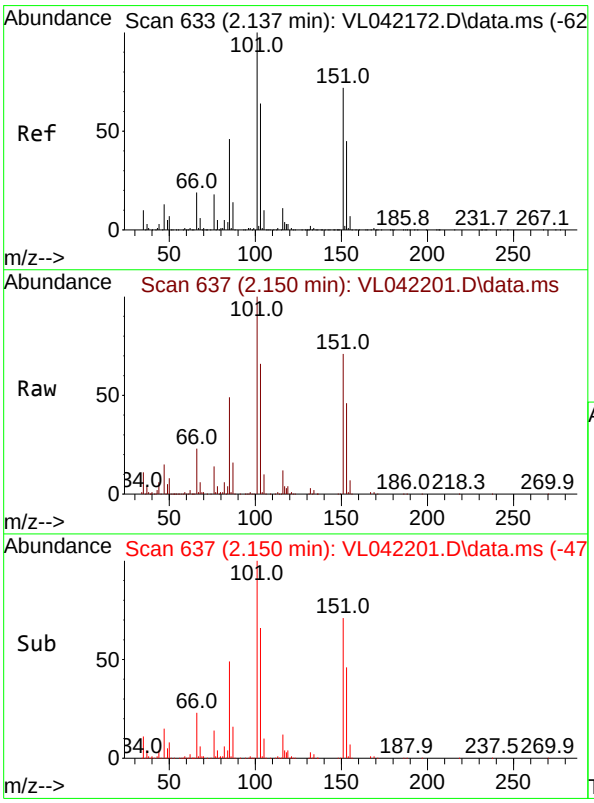
#11
Trichlorofluoromethane
Concen: 9.988 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:101 Resp: 231721

Ion	Ratio	Lower	Upper
101	100		
103	61.8	50.2	75.2

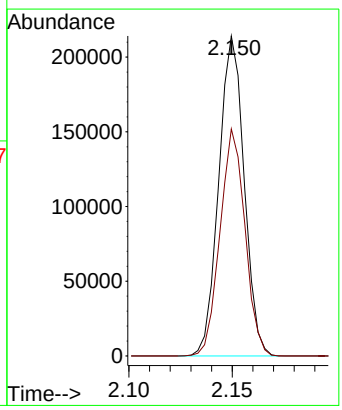


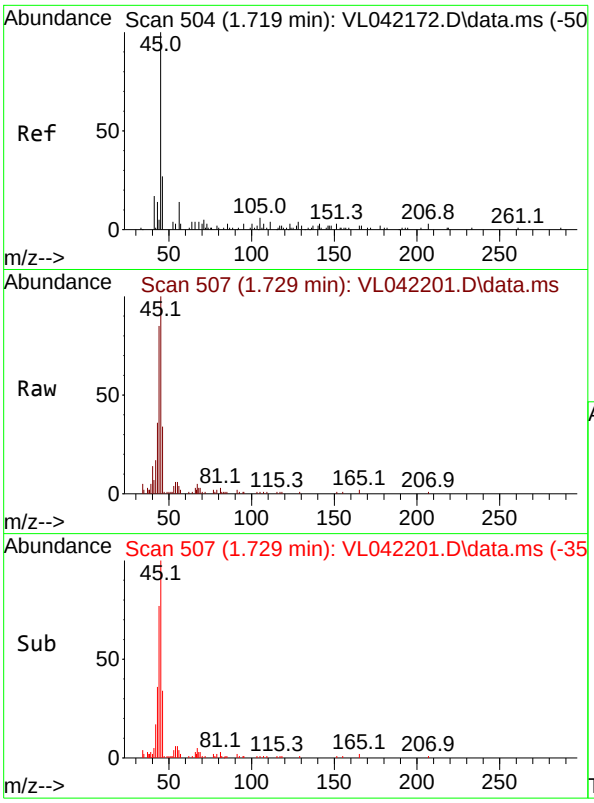


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.588 ppbv
RT: 2.150 min Scan# 637
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:101 Resp: 182824

Ion	Ratio	Lower	Upper
101	100		
151	69.9	57.1	85.7



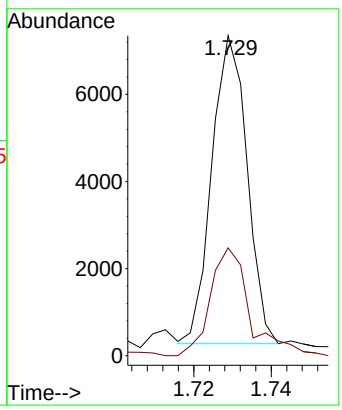


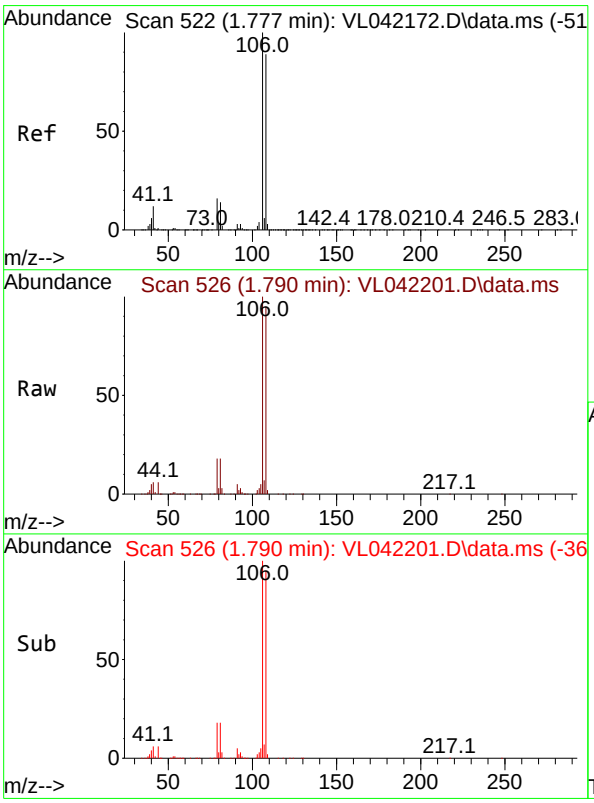
#13
Ethanol
Concen: 4.238 ppbv
RT: 1.729 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 4473

Ion	Ratio	Lower	Upper
45	100		
46	41.3	20.2	80.8

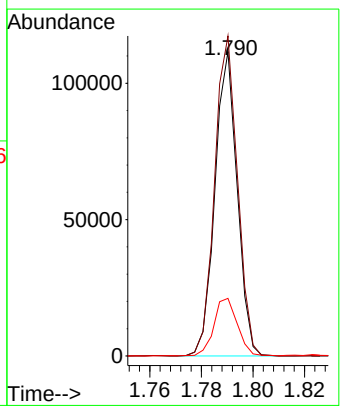


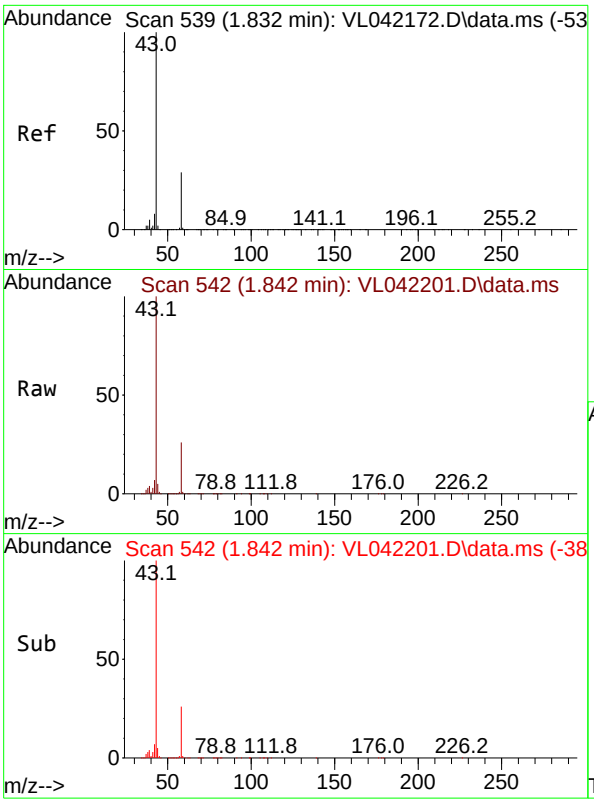


#14
Bromoethene
Concen: 9.159 ppbv
RT: 1.790 min Scan# 526
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:108 Resp: 66903

Ion	Ratio	Lower	Upper
108	100		
106	107.5	86.8	130.2
79	20.9	15.0	22.6



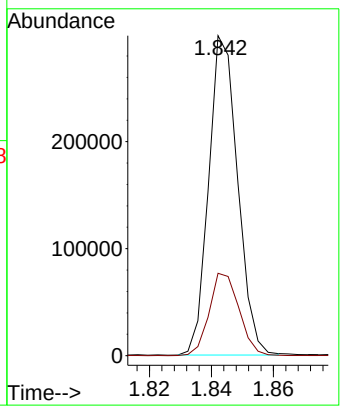


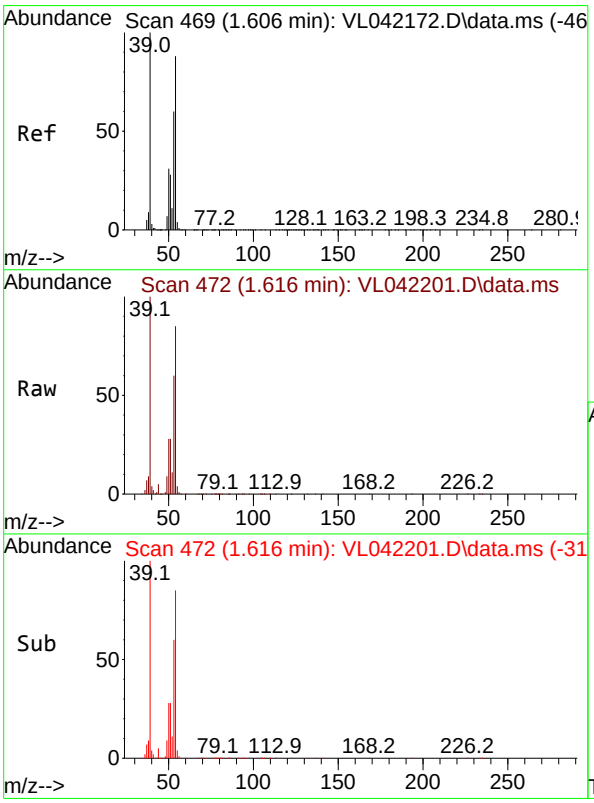
#15
Acetone
Concen: 8.580 ppbv
RT: 1.842 min Scan# 54
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 193773

Ion	Ratio	Lower	Upper
43	100		
58	26.7	23.2	34.8

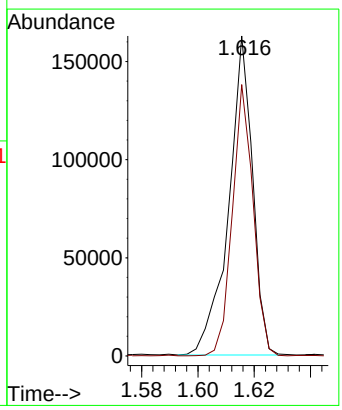


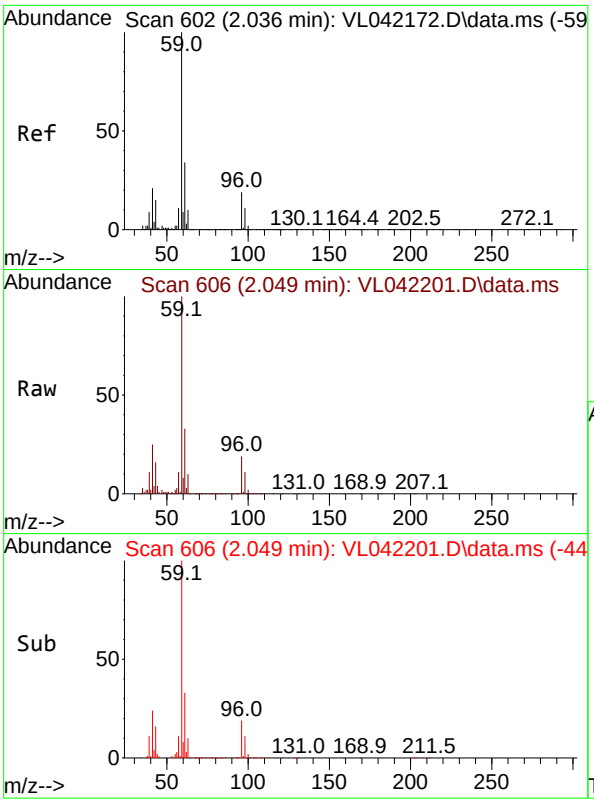


#16
1,3-Butadiene
Concen: 8.709 ppbv
RT: 1.616 min Scan# 472
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 39 Resp: 96046

Ion	Ratio	Lower	Upper
39	100		
54	73.7	60.7	91.1



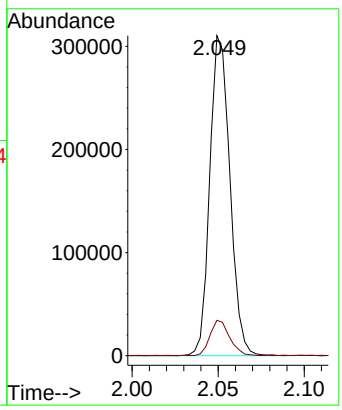


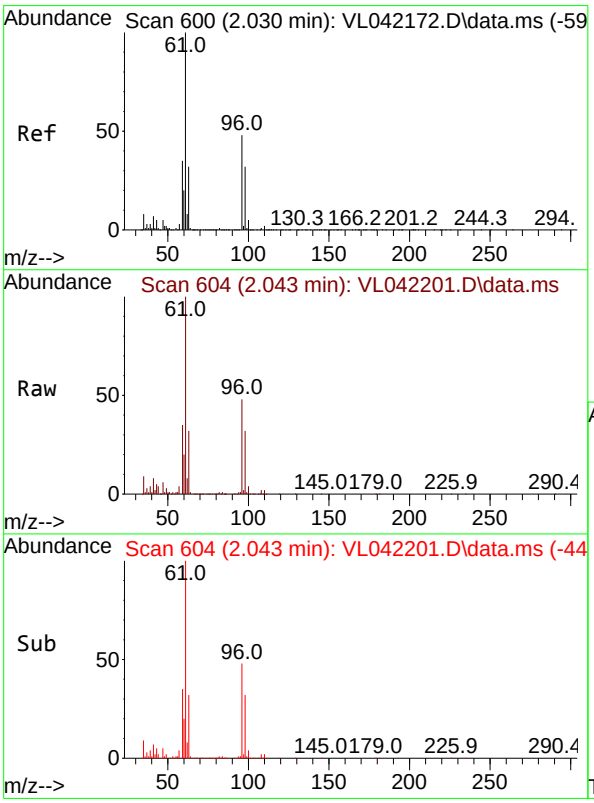
#17
tert-Butyl alcohol
Concen: 8.974 ppbv
RT: 2.049 min Scan# 6
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 59 Resp: 252420

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3

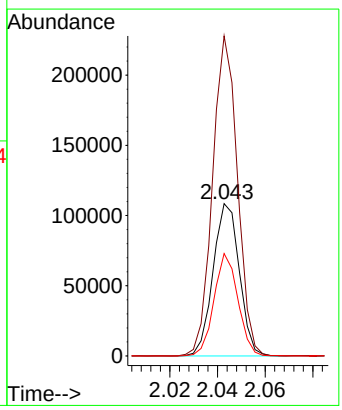


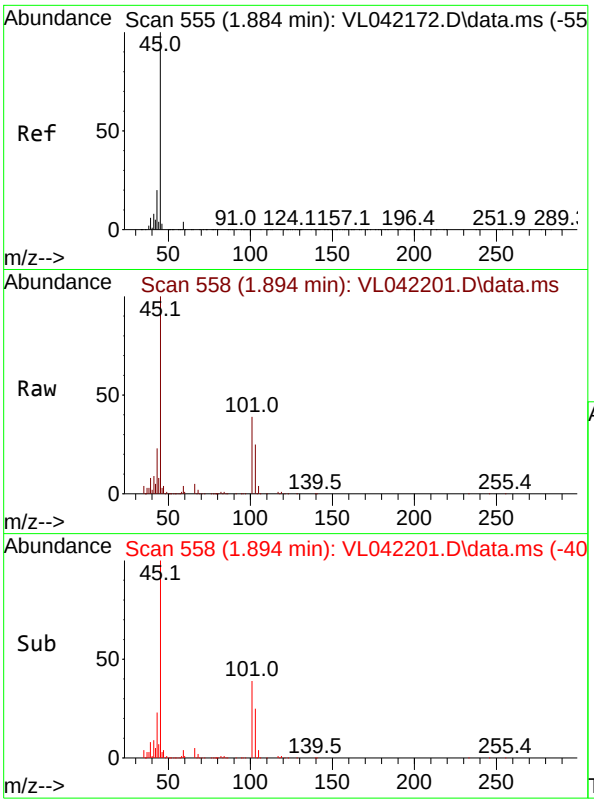


#18
1,1-Dichloroethene
Concen: 9.296 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 96 Resp: 82868

Ion	Ratio	Lower	Upper
96	100		
61	209.9	167.6	251.4
98	67.2	53.5	80.3



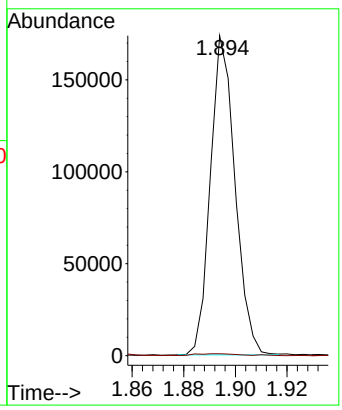


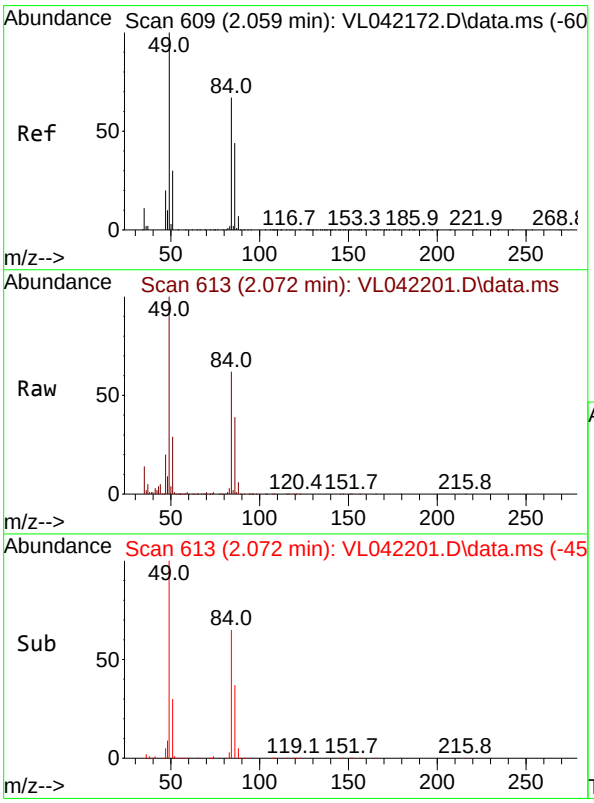
#19
Isopropyl Alcohol
Concen: 9.039 ppbv
RT: 1.894 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 115180

Ion	Ratio	Lower	Upper
45	100		
58	45.0	36.9	55.3

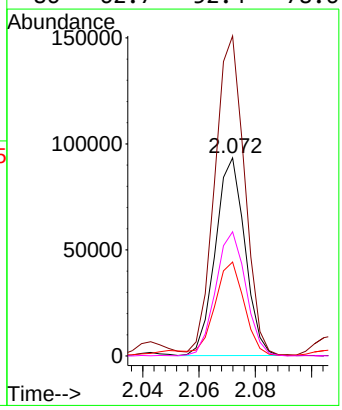


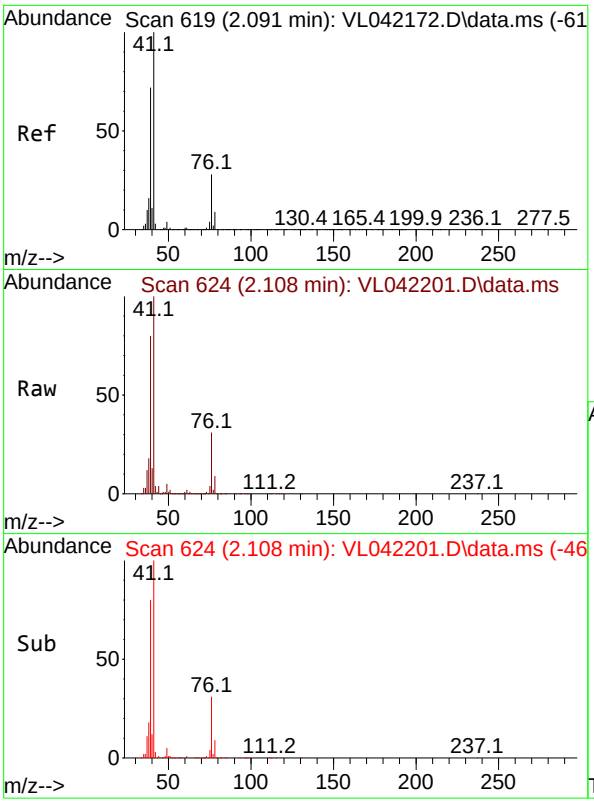


#20
Methylene Chloride
Concen: 8.070 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 84 Resp: 67877

Ion	Ratio	Lower	Upper
84	100		
49	161.2	120.2	180.4
51	47.1	37.4	56.0
86	62.7	52.4	78.6



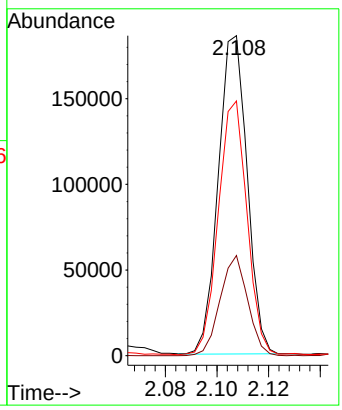


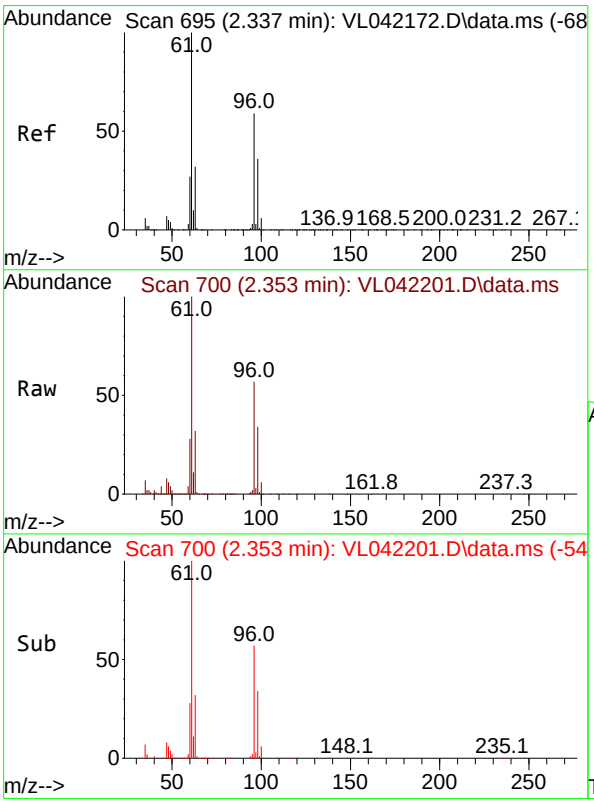
#21
Allyl Chloride
Concen: 9.079 ppbv
RT: 2.108 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 144599

Ion	Ratio	Lower	Upper
41	100		
76	30.0	24.1	36.1
39	79.1	61.1	91.7

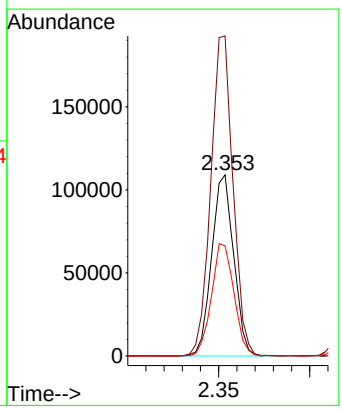


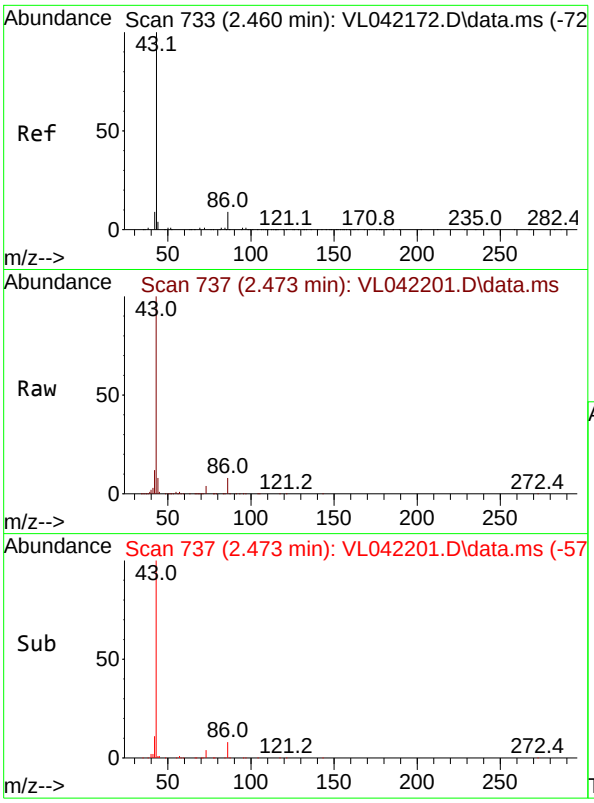


#22
trans-1,2-Dichloroethene
Concen: 8.924 ppbv
RT: 2.353 min Scan# 700
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 96 Resp: 91942

Ion	Ratio	Lower	Upper
96	100		
61	176.6	136.6	204.8
98	60.8	49.4	74.2



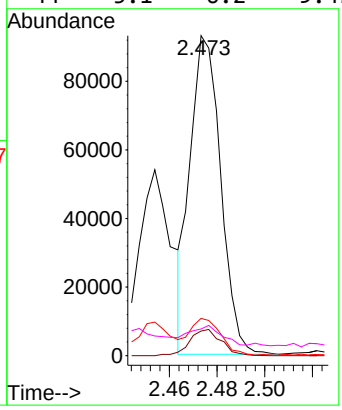


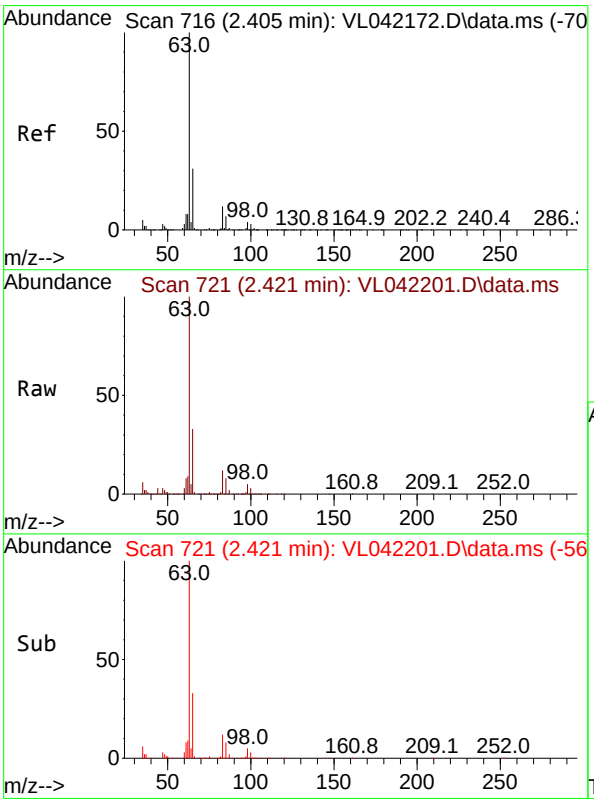
#23
Vinyl Acetate
Concen: 8.485 ppbv
RT: 2.473 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 82938

Ion	Ratio	Lower	Upper
43	100		
86	7.8	5.5	8.3
42	11.5	8.6	13.0
44	5.1	6.2	9.4#

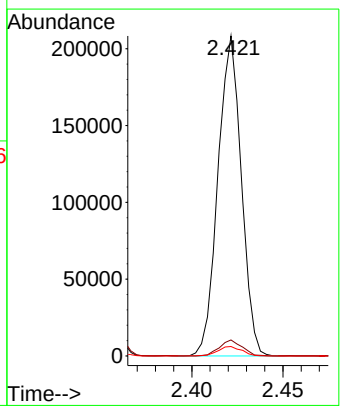


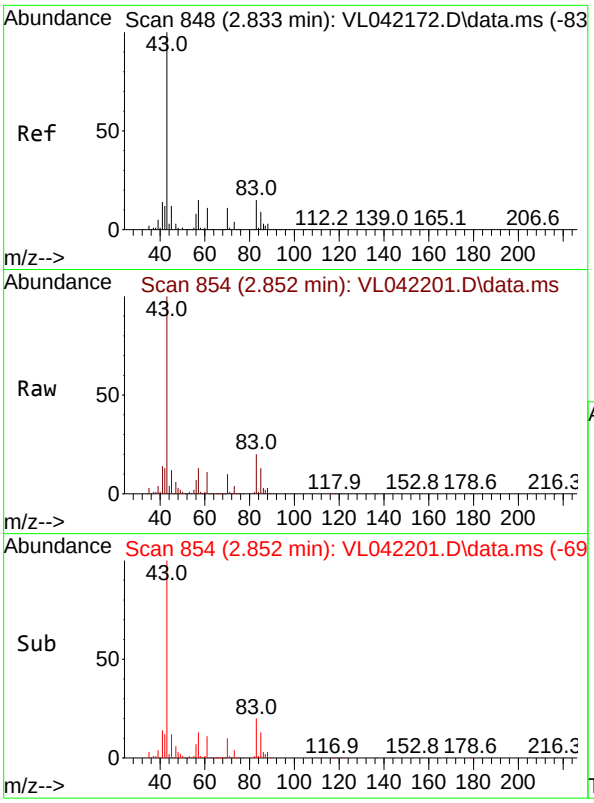


#24
1,1-Dichloroethane
Concen: 9.730 ppbv
RT: 2.421 min Scan# 721
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 63 Resp: 185830

Ion	Ratio	Lower	Upper
63	100		
98	5.0	2.3	6.8
100	2.9	1.6	4.7



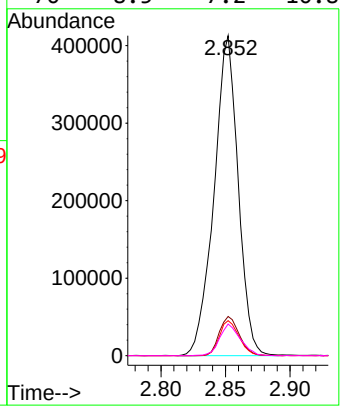


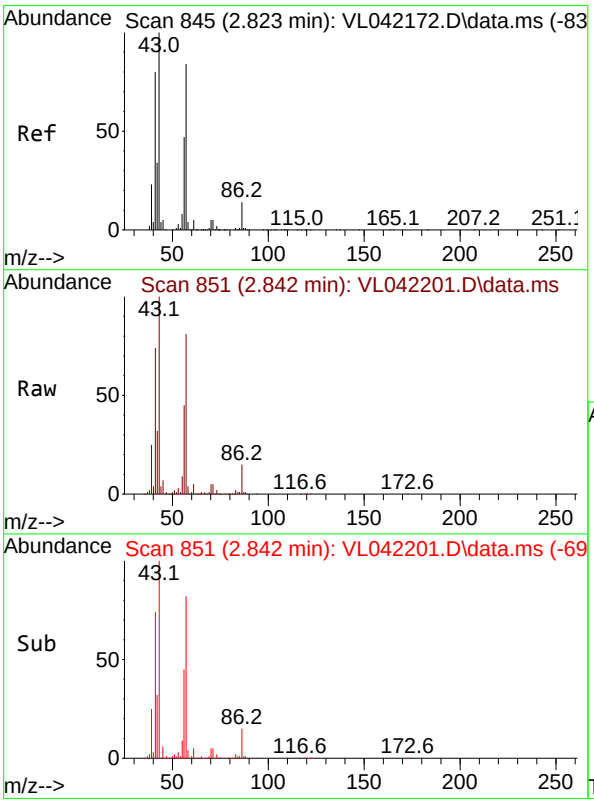
#25
Ethyl Acetate
Concen: 9.151 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 536366

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.0	7.3	10.9
70	8.5	7.2	10.8

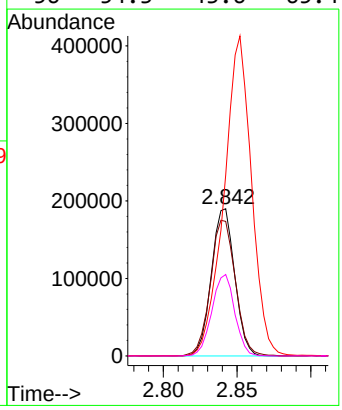


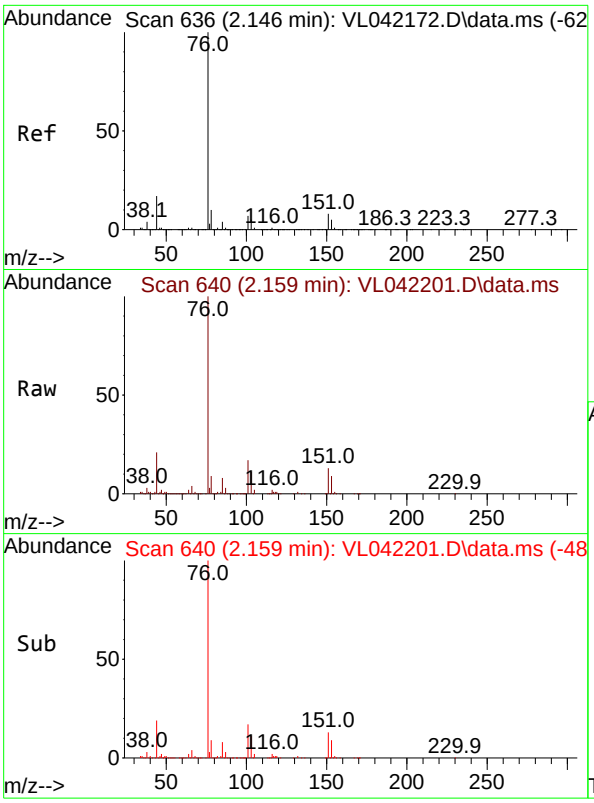


#26
Hexane
Concen: 9.236 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 57 Resp: 209103

Ion	Ratio	Lower	Upper
57	100		
41	98.8	76.6	114.8
43	257.3	207.8	311.8
56	54.3	43.6	65.4



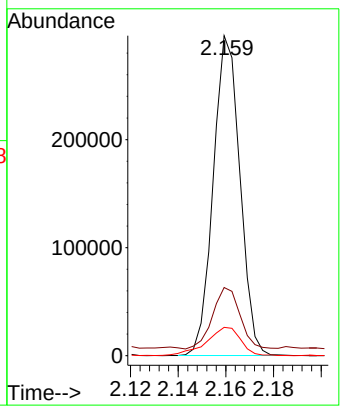


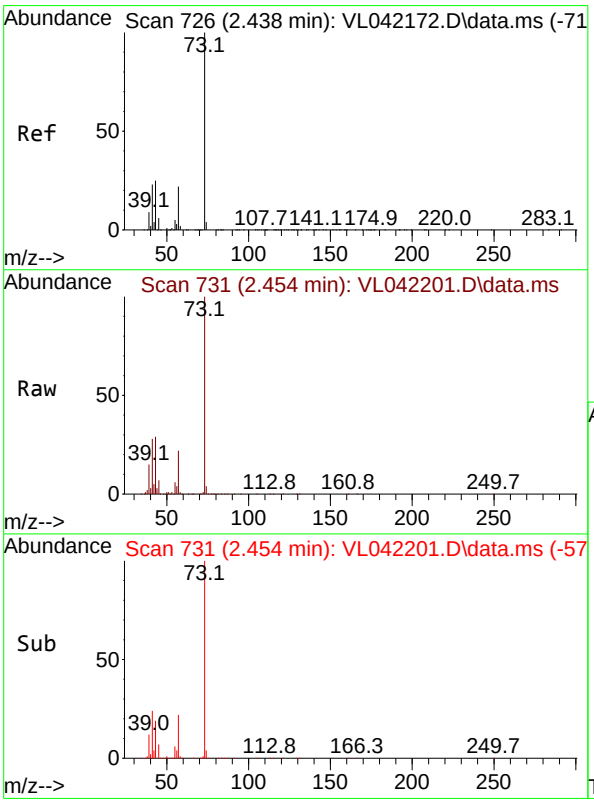
#27
Carbon Disulfide
Concen: 9.481 ppbv
RT: 2.159 min Scan# 64
Delta R.T. 0.013 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 76 Resp: 230171

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.4	9.3	13.9

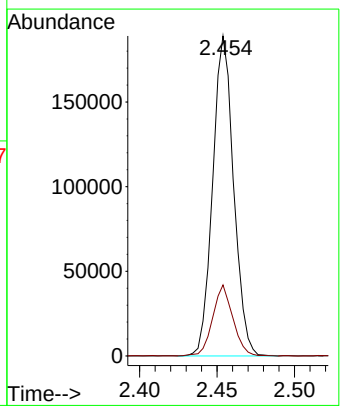


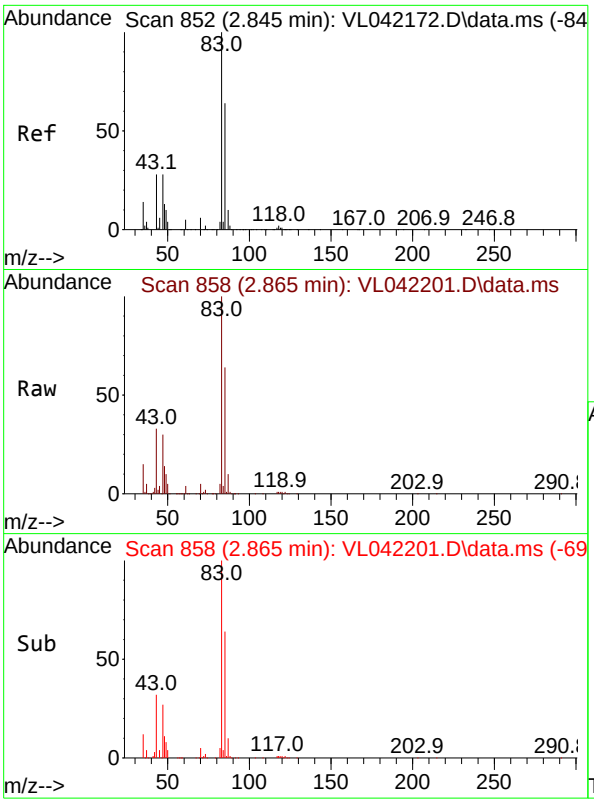


#28
Methyl tert-Butyl Ether
Concen: 12.635 ppbv
RT: 2.454 min Scan# 731
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 73 Resp: 178093

Ion	Ratio	Lower	Upper
73	100		
57	21.4	20.5	30.7



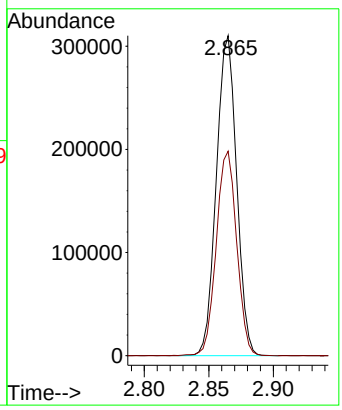


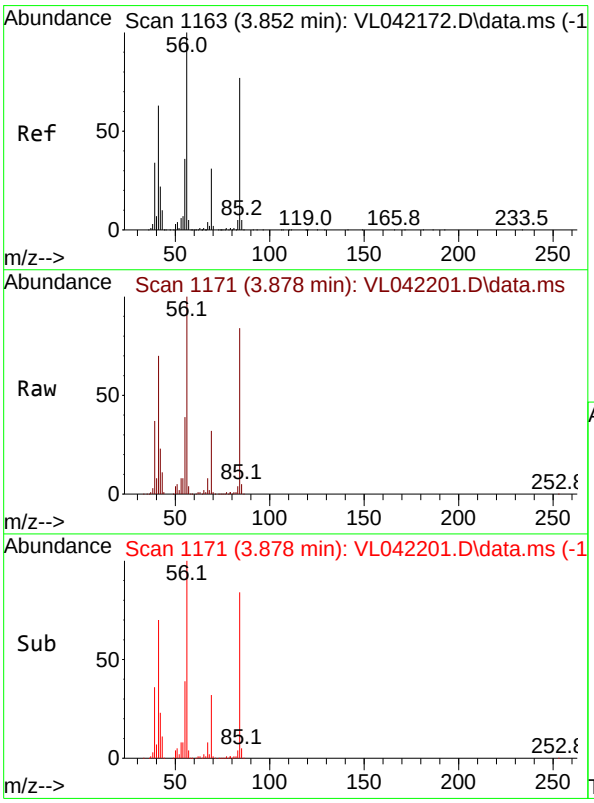
#29
Chloroform
Concen: 10.200 ppbv
RT: 2.865 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 337970

Ion	Ratio	Lower	Upper
83	100		
85	63.9	51.4	77.2

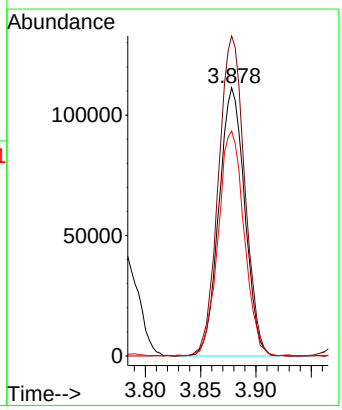


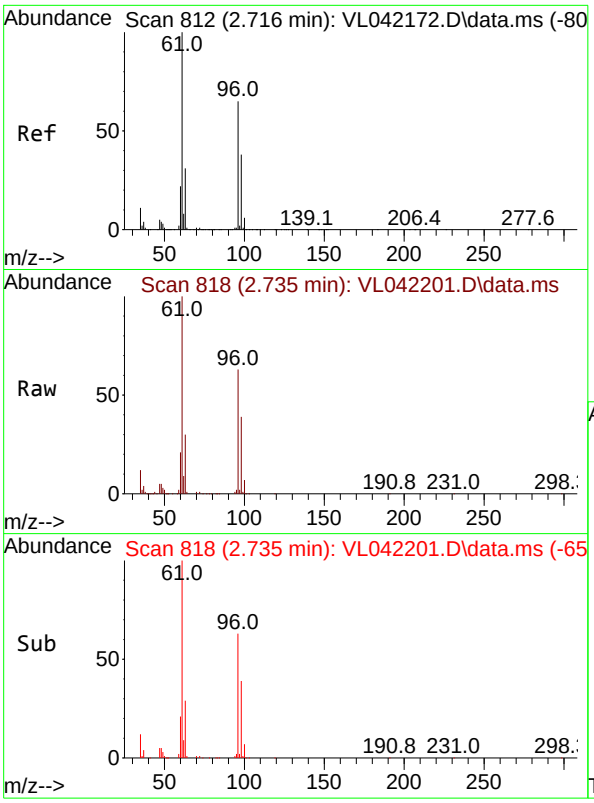


#30
Cyclohexane
Concen: 9.162 ppbv
RT: 3.878 min Scan# 1171
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 84 Resp: 180110

Ion	Ratio	Lower	Upper
84	100		
56	121.1	102.8	154.2
41	84.6	66.5	99.7



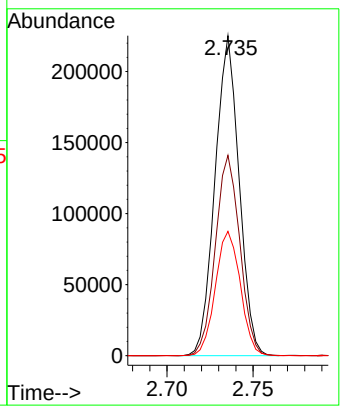


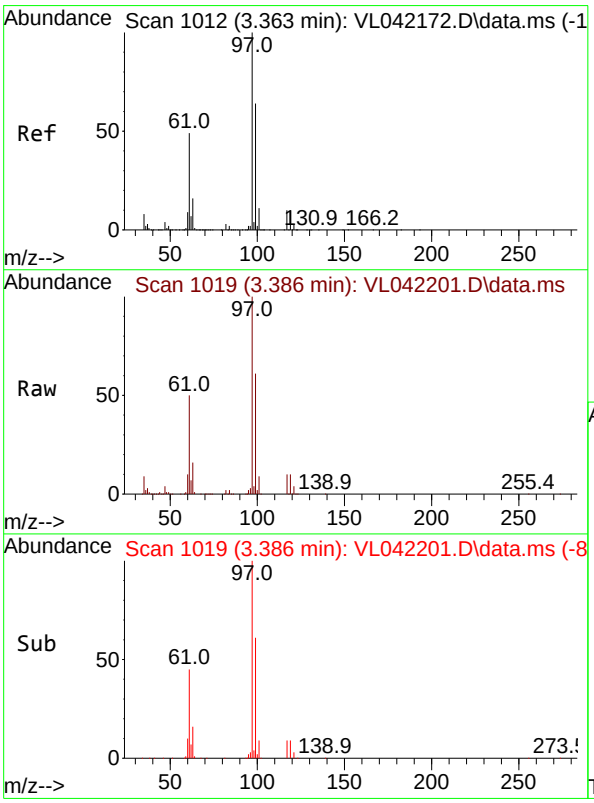
#31
cis-1,2-Dichloroethene
Concen: 9.545 ppbv
RT: 2.735 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 61 Resp: 219389

Ion	Ratio	Lower	Upper
61	100		
96	62.6	51.8	77.8
98	38.9	30.6	46.0

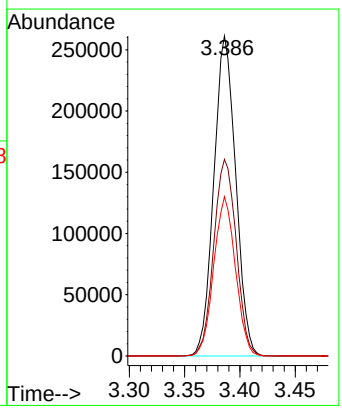


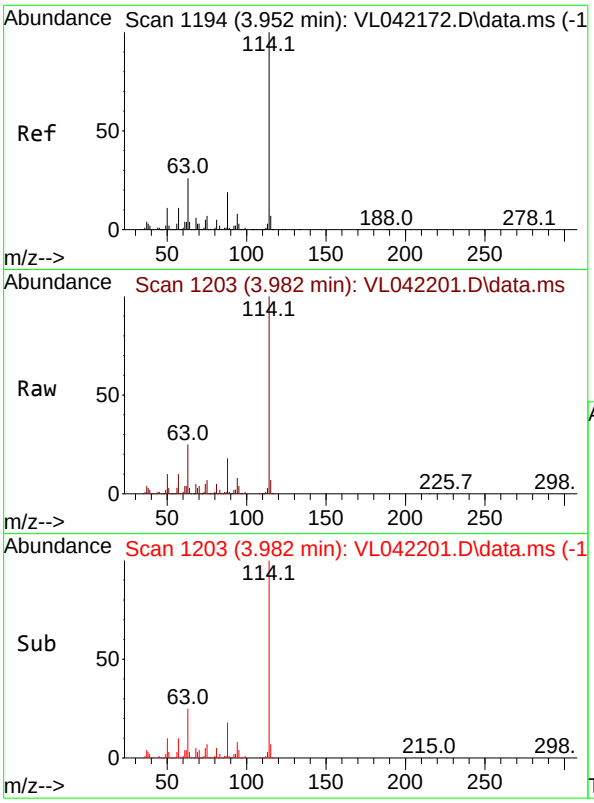


#32
1,1,1-Trichloroethane
Concen: 9.483 ppbv
RT: 3.386 min Scan# 1019
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 97 Resp: 359718

Ion	Ratio	Lower	Upper
97	100		
99	63.0	51.5	77.3
61	49.3	38.7	58.1



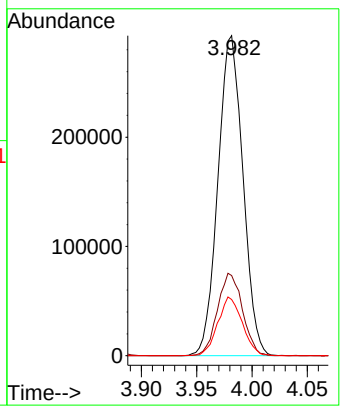


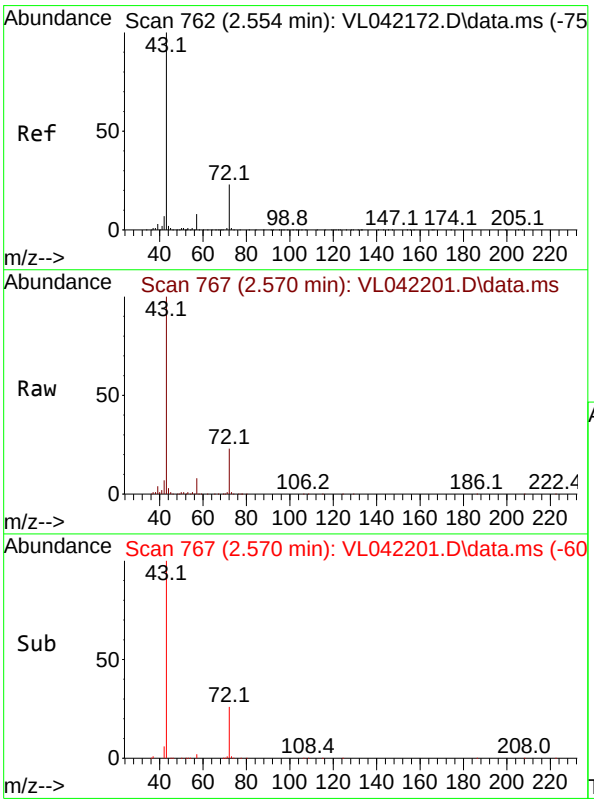
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.982 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:114 Resp: 460403

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.0	15.0	22.4

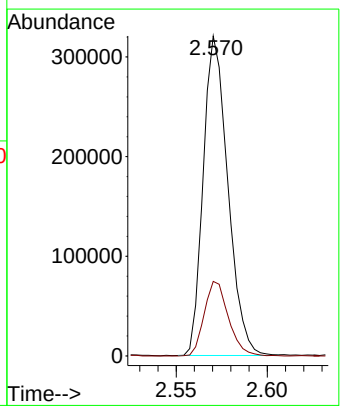


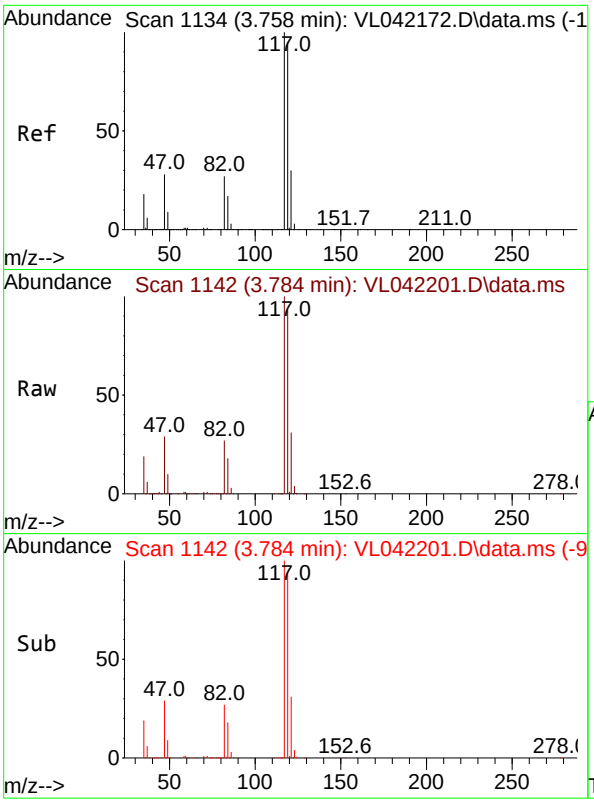


#34
2-Butanone
Concen: 9.026 ppbv
RT: 2.570 min Scan# 767
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 301334

Ion	Ratio	Lower	Upper
43	100		
72	23.0	18.2	27.2



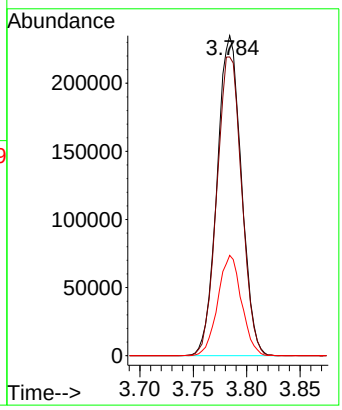


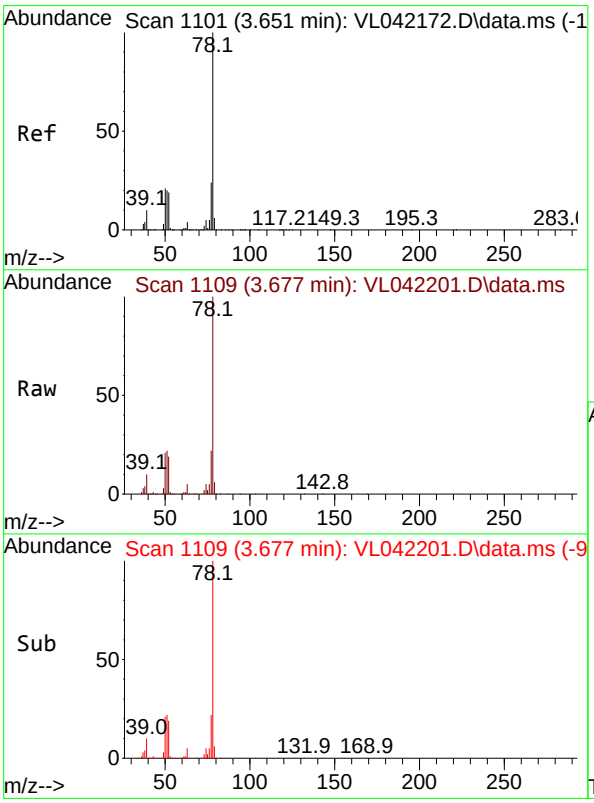
#35
Carbon Tetrachloride
Concen: 10.335 ppbv
RT: 3.784 min Scan# 11
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 371691

Ion	Ratio	Lower	Upper
117	100		
119	93.4	76.2	114.2
121	31.3	24.2	36.4

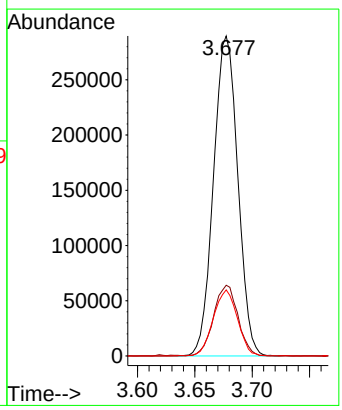


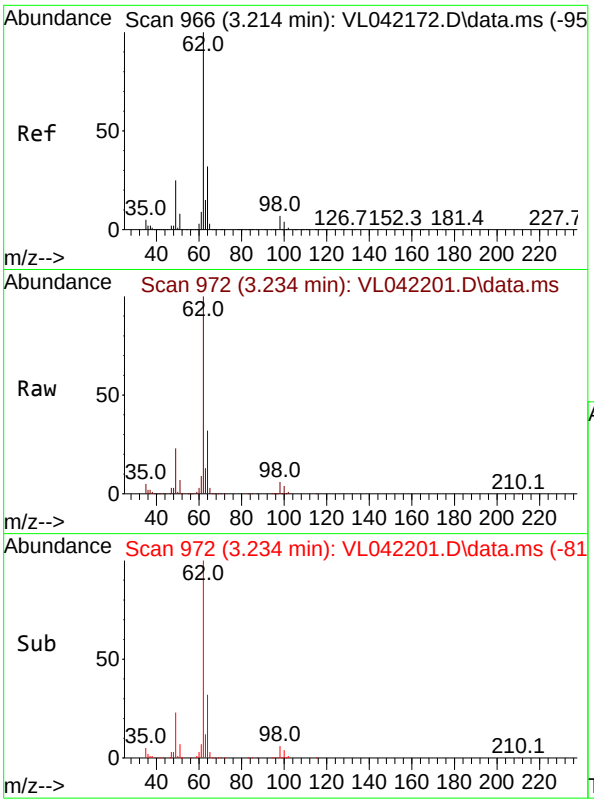


#36
Benzene
Concen: 9.350 ppbv
RT: 3.677 min Scan# 1109
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 78 Resp: 426758

Ion	Ratio	Lower	Upper
78	100		
77	22.1	19.1	28.7
50	20.6	16.6	24.8



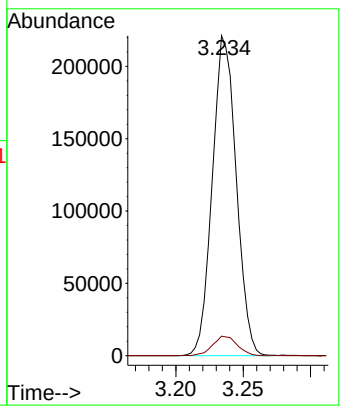


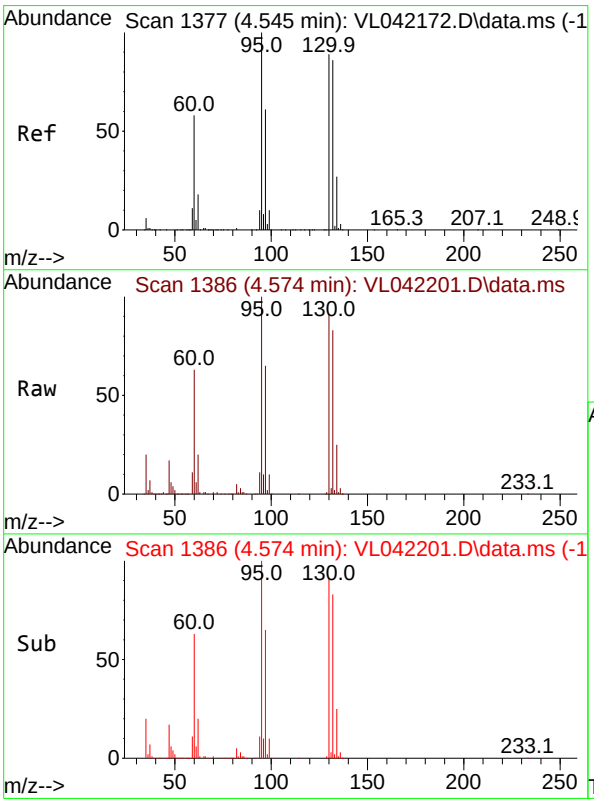
#37
1,2-Dichloroethane
Concen: 10.453 ppbv
RT: 3.234 min Scan# 9
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 273137

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.4	8.2

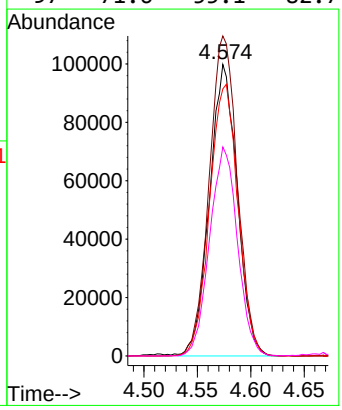


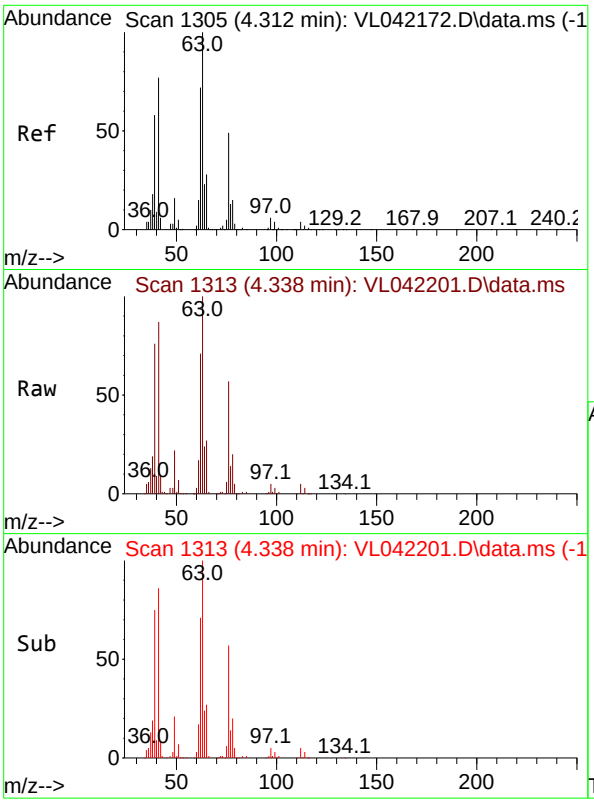


#38
Trichloroethene
Concen: 9.452 ppbv
RT: 4.574 min Scan# 1386
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:130 Resp: 179999

Ion	Ratio	Lower	Upper
130	100		
95	109.7	89.8	134.8
132	91.5	77.4	116.2
97	71.6	55.1	82.7



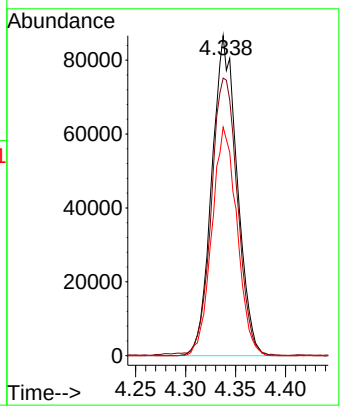


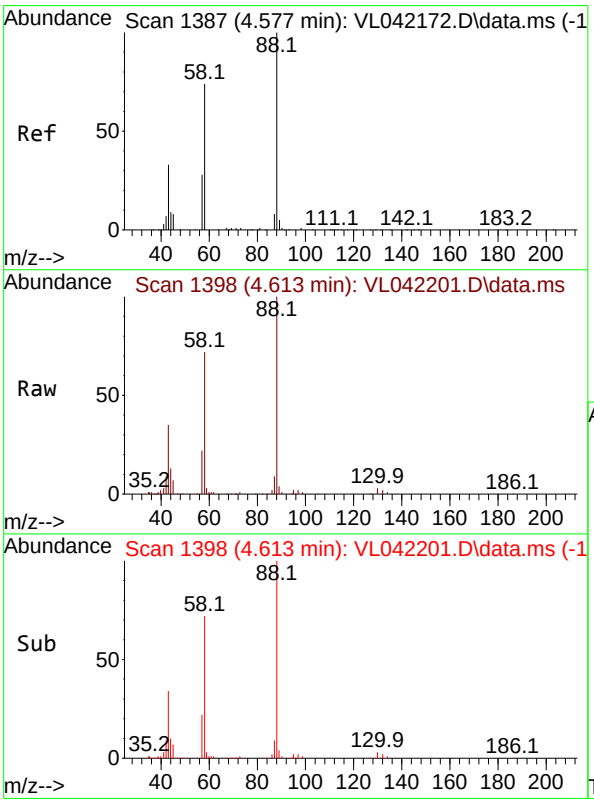
#39
1,2-Dichloropropane
Concen: 9.212 ppbv
RT: 4.338 min Scan# 1
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 63 Resp: 153124

Ion	Ratio	Lower	Upper
63	100		
41	86.5	61.7	92.5
62	71.4	57.6	86.4

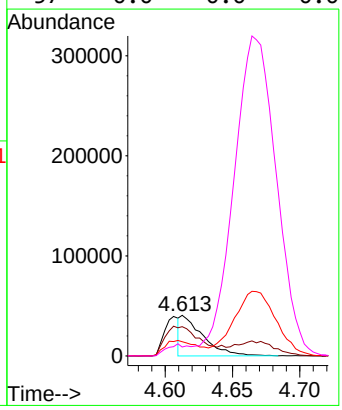


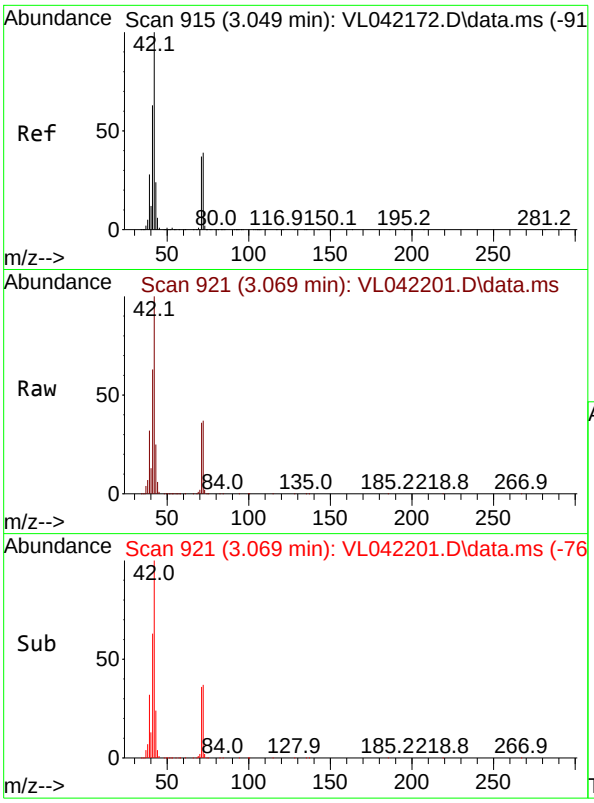


#40
1,4-Dioxane
Concen: 5.282 ppbv
RT: 4.613 min Scan# 1398
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 88 Resp: 46600

Ion	Ratio	Lower	Upper
88	100		
58	0.0	62.7	94.1#
43	56.5	23.0	34.4#
57	0.0	0.0	0.0



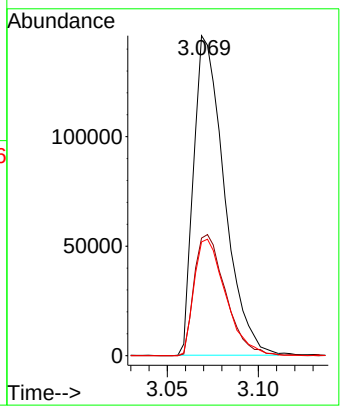


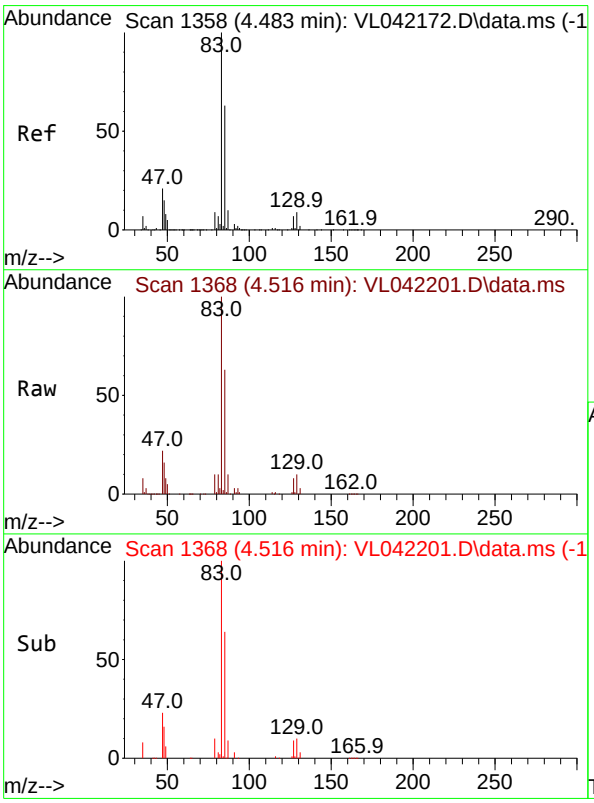
#41
Tetrahydrofuran
Concen: 8.886 ppbv
RT: 3.069 min Scan# 9
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 42 Resp: 170829

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	37.7	30.2	45.4

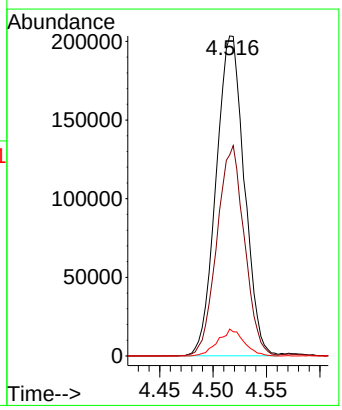


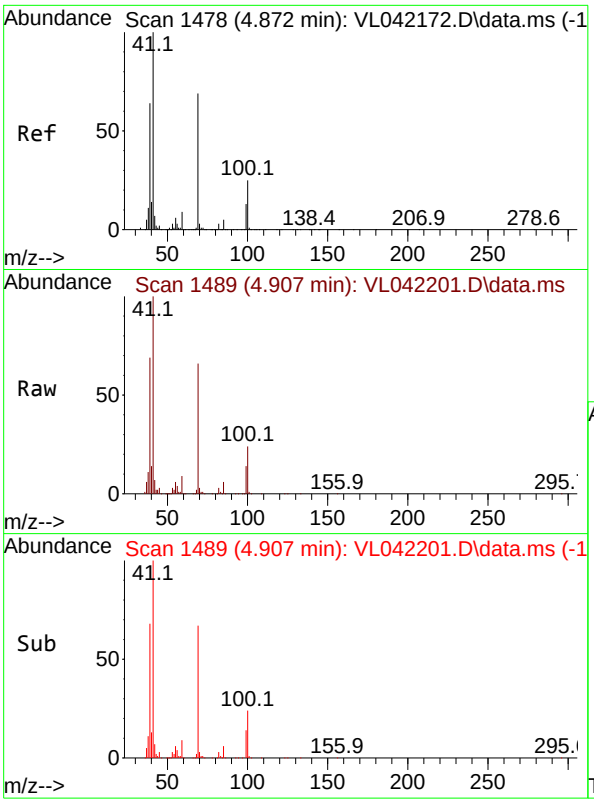


#42
Bromodichloromethane
Concen: 10.365 ppbv
RT: 4.516 min Scan# 1368
Delta R.T. 0.032 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 83 Resp: 373399

Ion	Ratio	Lower	Upper
83	100		
85	62.9	50.5	75.7
127	8.4	5.9	8.9



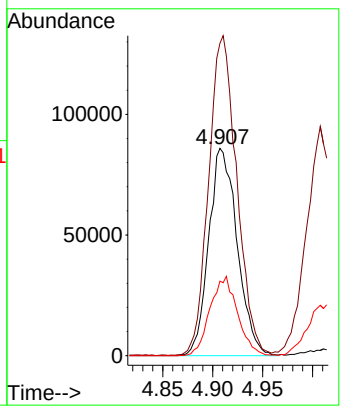


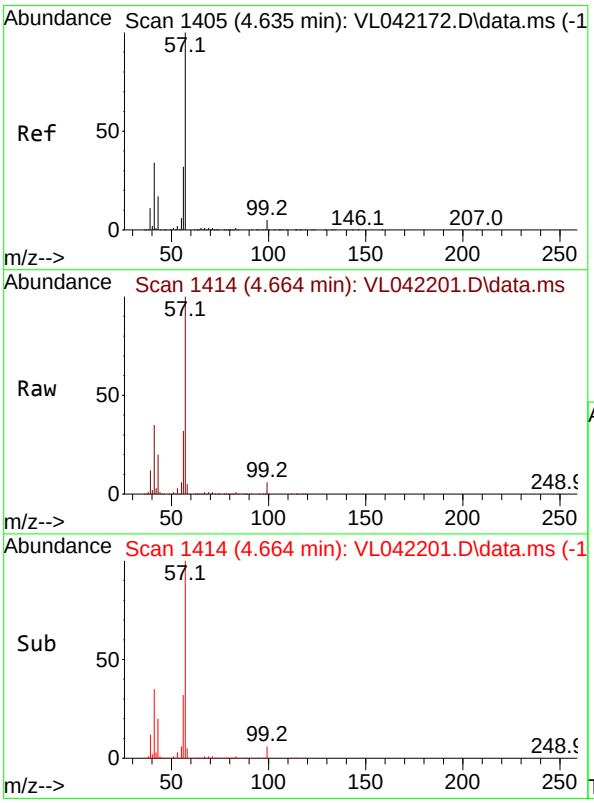
#43
Methyl Methacrylate
Concen: 8.814 ppbv
RT: 4.907 min Scan# 14
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 69 Resp: 170312

Ion	Ratio	Lower	Upper
69	100		
41	152.5	123.8	185.6
100	37.0	28.4	42.6

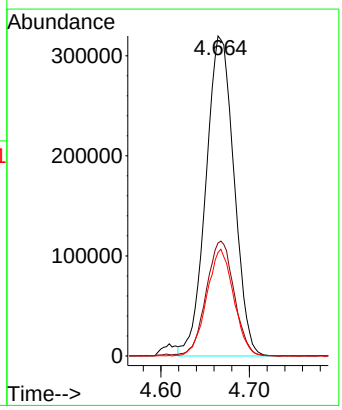


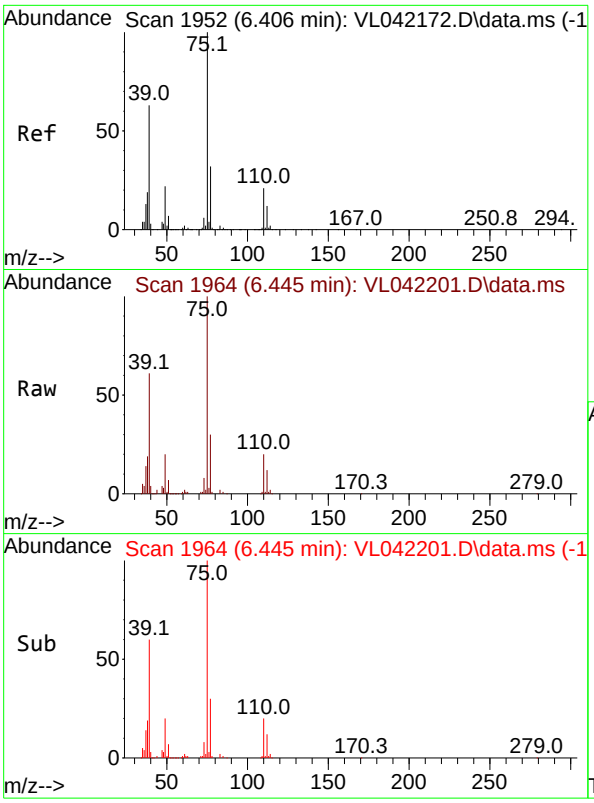


#44
2,2,4-Trimethylpentane
Concen: 9.143 ppbv
RT: 4.664 min Scan# 1414
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 57 Resp: 705253

Ion	Ratio	Lower	Upper
57	100		
41	36.1	26.8	40.2
56	32.2	25.6	38.4



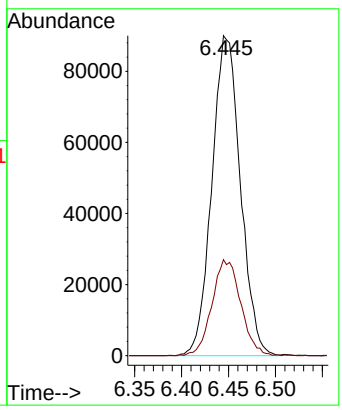


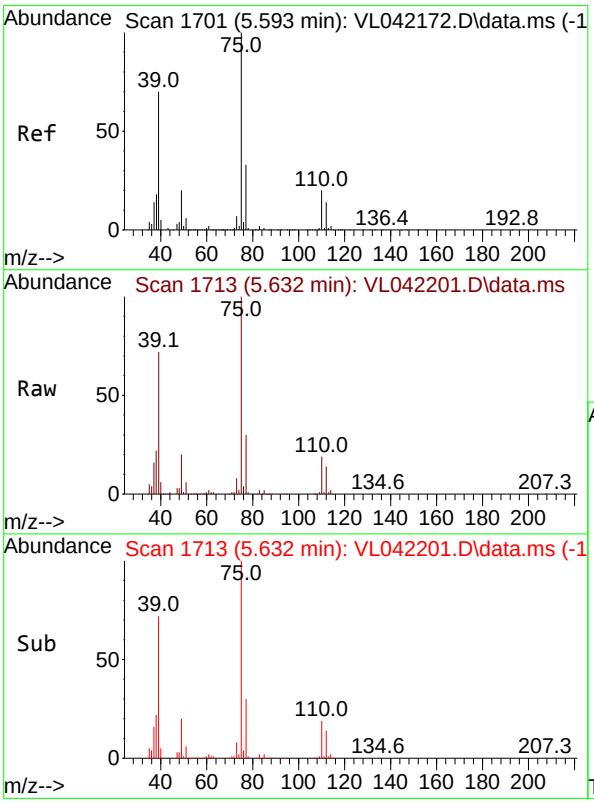
#45
t-1,3-Dichloropropene
Concen: 9.167 ppbv
RT: 6.445 min Scan# 1
Delta R.T. 0.039 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 75 Resp: 190040

Ion	Ratio	Lower	Upper
75	100		
77	30.0	26.0	39.0

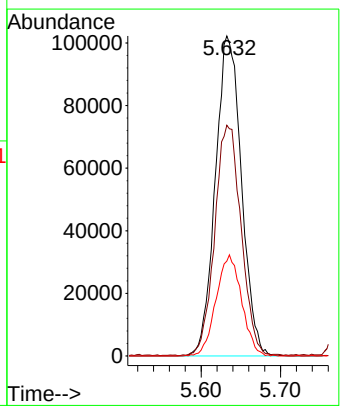


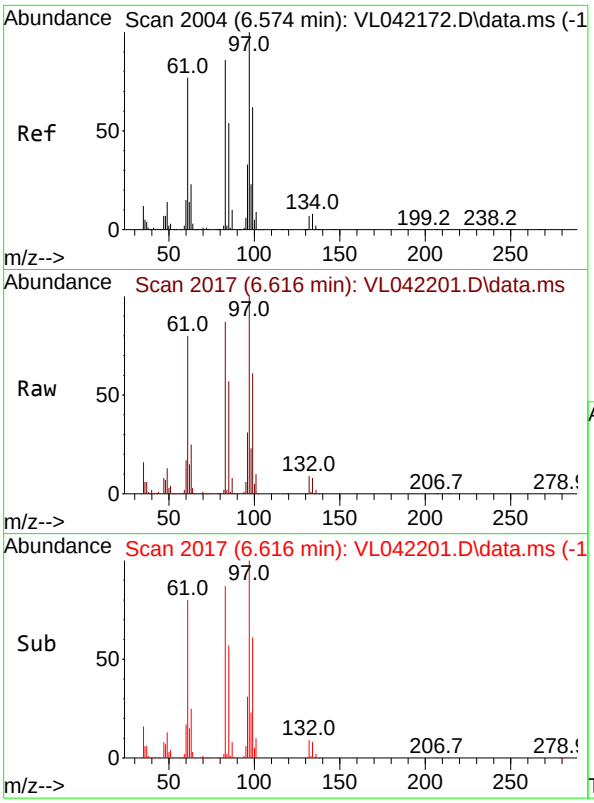


#46
cis-1,3-Dichloropropene
Concen: 9.158 ppbv
RT: 5.632 min Scan# 1713
Delta R.T. 0.039 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 75 Resp: 232713

Ion	Ratio	Lower	Upper
75	100		
39	72.0	55.8	83.6
77	29.7	26.0	39.0



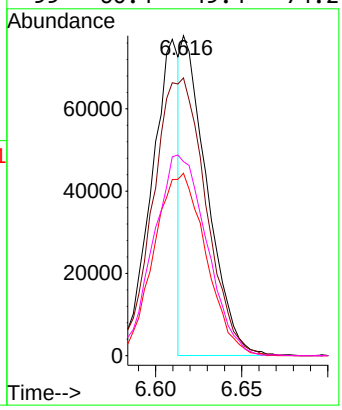


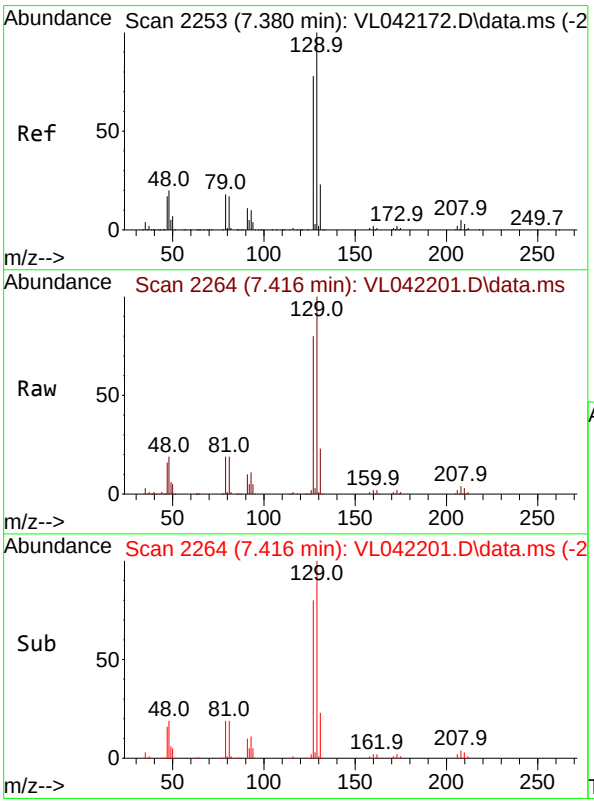
#47
1,1,2-Trichloroethane
Concen: 4.620 ppbv
RT: 6.616 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 97 Resp: 81186

Ion	Ratio	Lower	Upper
97	100		
83	86.7	69.2	103.8
85	57.1	43.1	64.7
99	60.4	49.4	74.2

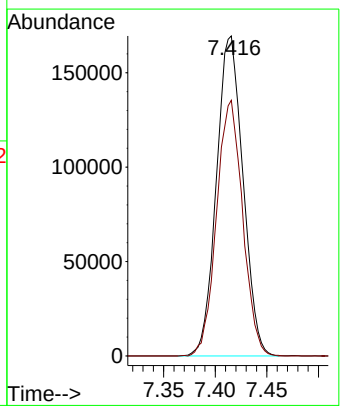


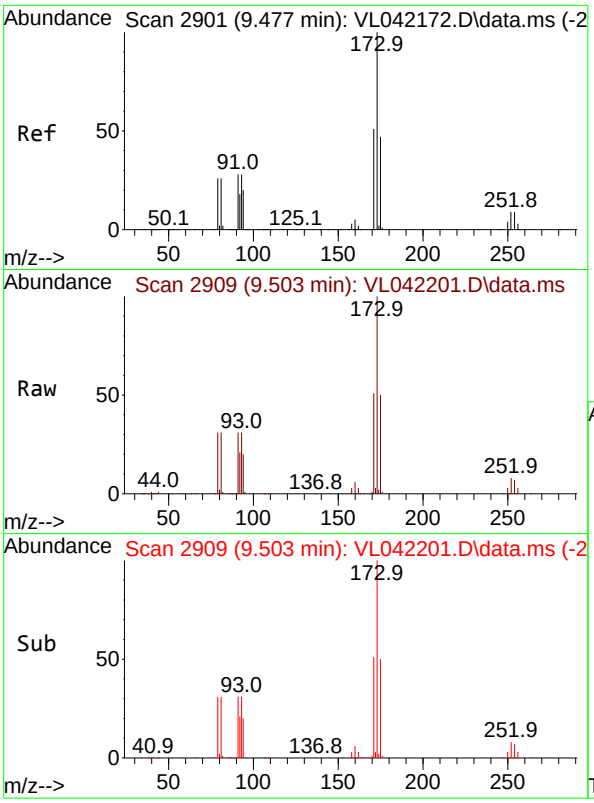


#48
Dibromochloromethane
Concen: 10.186 ppbv
RT: 7.416 min Scan# 2264
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:129 Resp: 303330

Ion	Ratio	Lower	Upper
129	100		
127	78.5	39.1	117.2



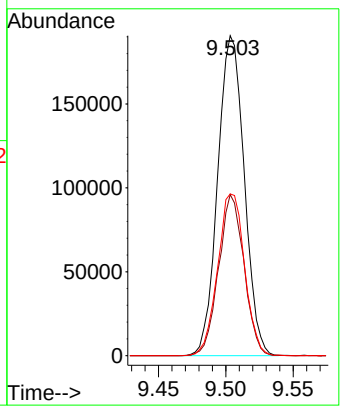


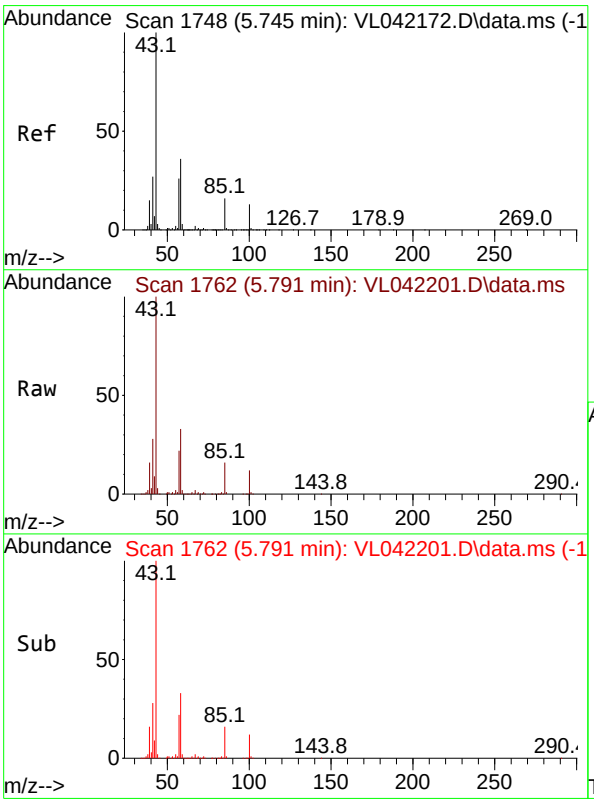
#49
Bromoform
Concen: 9.780 ppbv
RT: 9.503 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:173 Resp: 261484

Ion	Ratio	Lower	Upper
173	100		
175	47.9	38.6	57.8
171	51.3	41.8	62.6

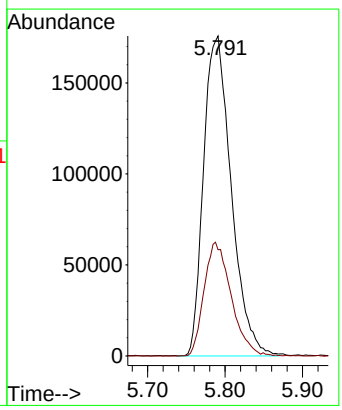


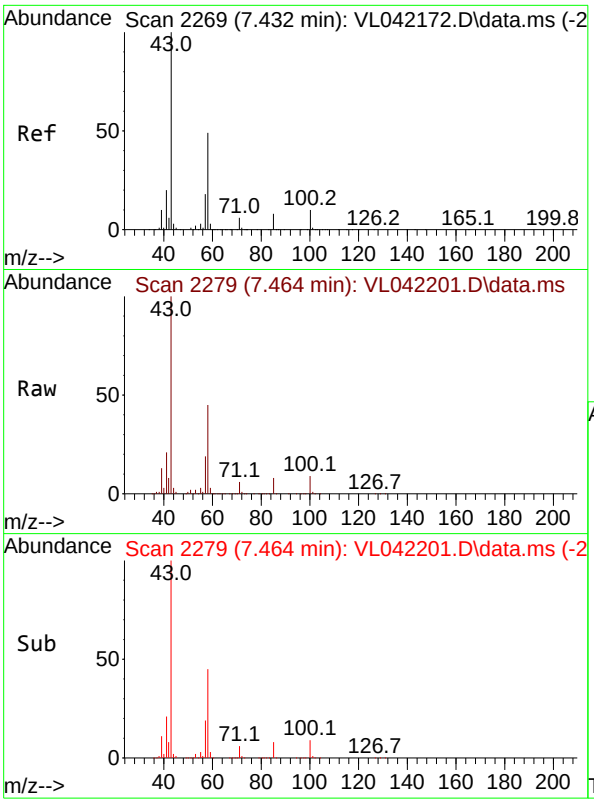


#50
4-Methyl-2-Pentanone
Concen: 8.261 ppbv
RT: 5.791 min Scan# 1762
Delta R.T. 0.045 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 43 Resp: 437050

Ion	Ratio	Lower	Upper
43	100		
58	34.8	29.0	43.6



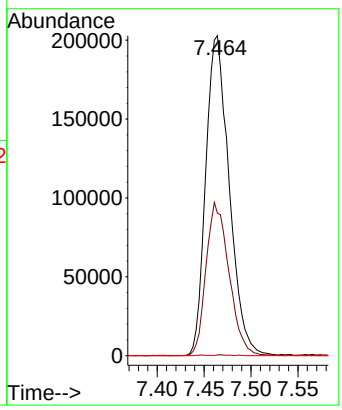


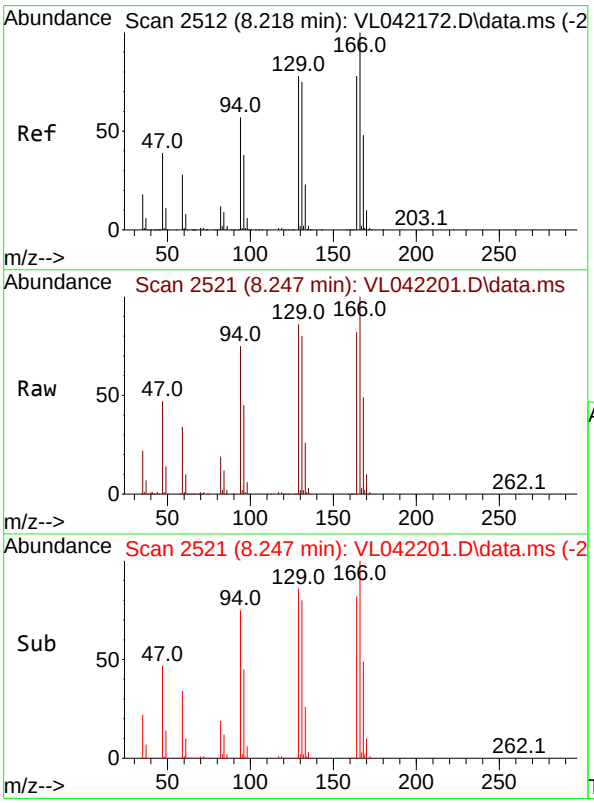
#51
2-Hexanone
Concen: 8.093 ppbv
RT: 7.464 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 351622

Ion	Ratio	Lower	Upper
43	100		
58	47.0	39.7	59.5
98	0.3	0.1	0.1#

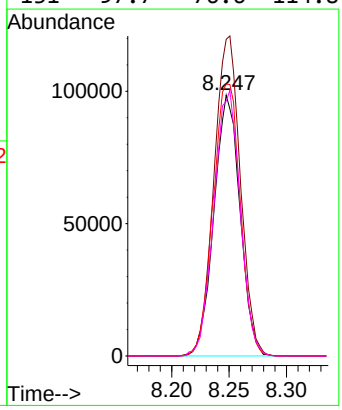


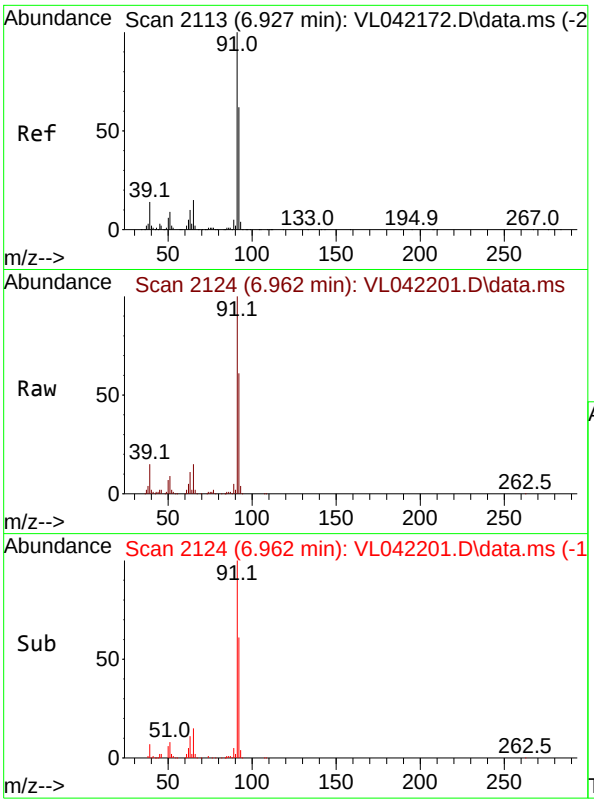


#52
Tetrachloroethene
Concen: 8.574 ppbv
RT: 8.247 min Scan# 2521
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:164 Resp: 155203

Ion	Ratio	Lower	Upper
164	100		
166	121.4	102.5	153.7
129	104.3	79.8	119.8
131	97.7	76.6	114.8



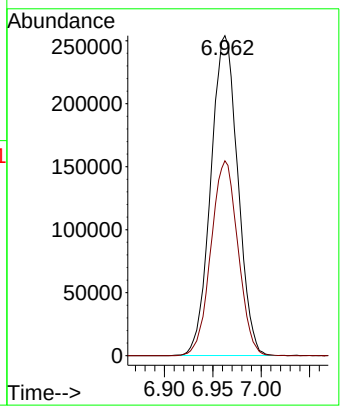


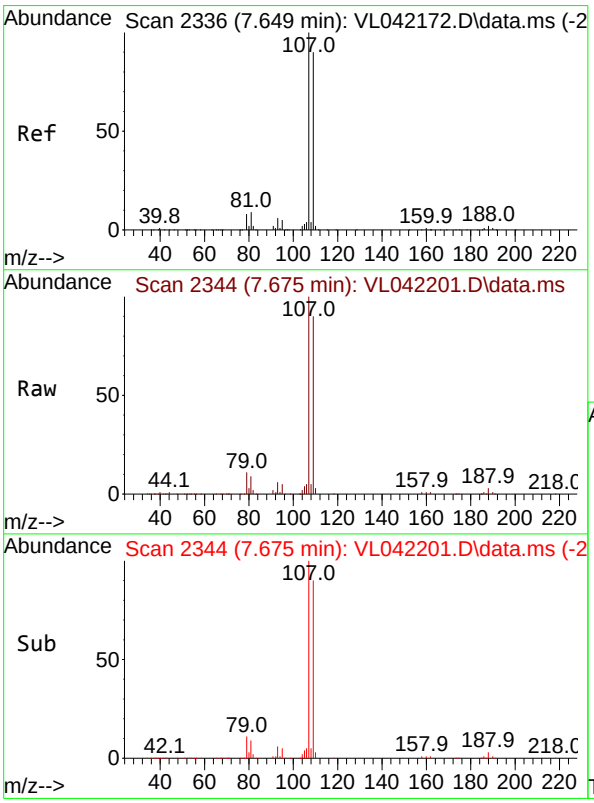
#53
Toluene
Concen: 9.106 ppbv
RT: 6.962 min Scan# 21
Delta R.T. 0.036 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 492717

Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.4	72.6

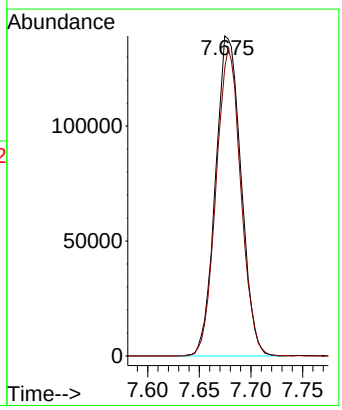


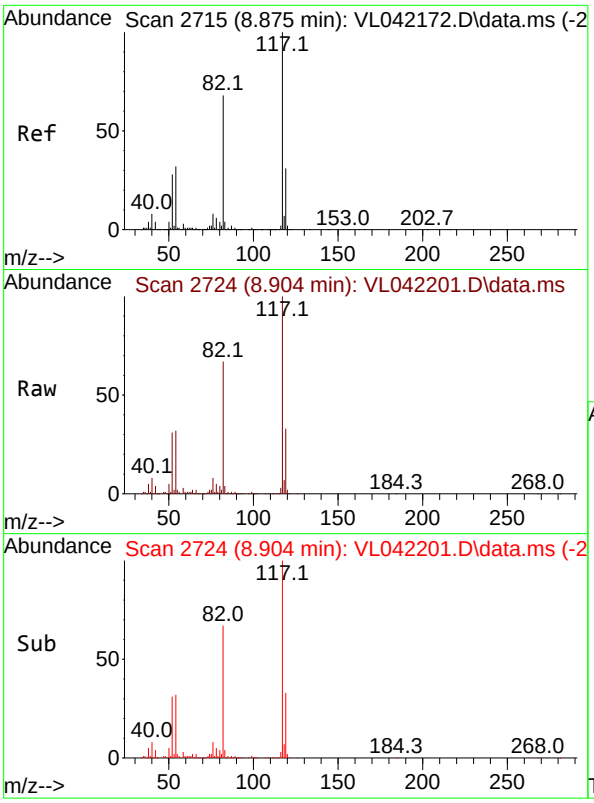


#54
1,2-Dibromoethane
Concen: 9.771 ppbv
RT: 7.675 min Scan# 2344
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:107 Resp: 239347

Ion	Ratio	Lower	Upper
107	100		
109	90.0	72.2	108.4



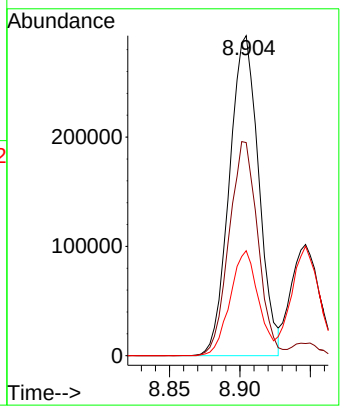


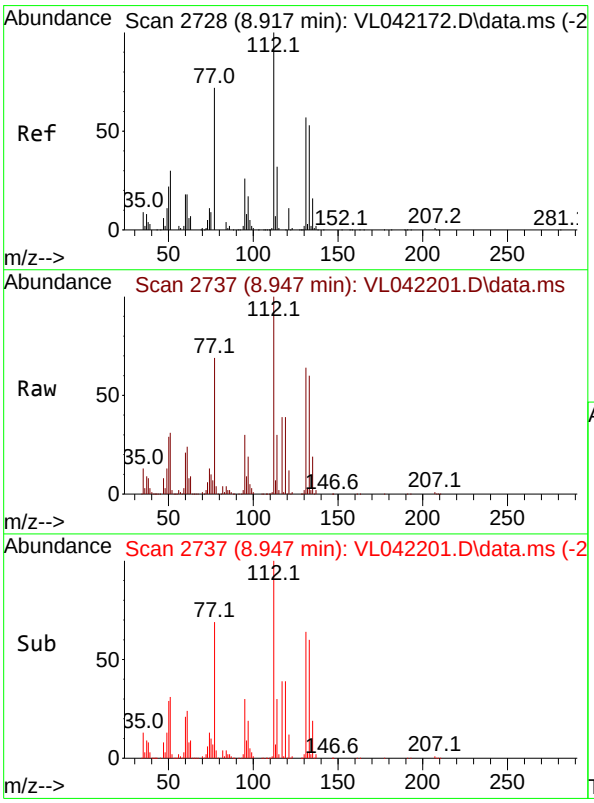
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.904 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 424671

Ion	Ratio	Lower	Upper
117	100		
82	69.3	55.8	83.6
119	31.7	25.5	38.3

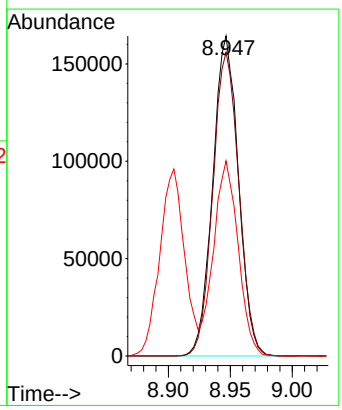


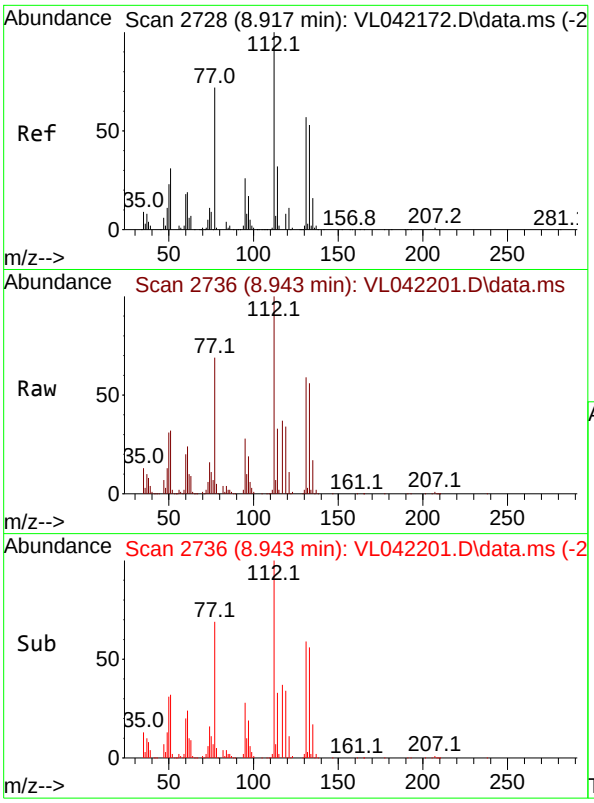


#56
1,1,1,2-Tetrachloroethane
Concen: 10.136 ppbv
RT: 8.947 min Scan# 2737
Delta R.T. 0.029 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:131 Resp: 236930

Ion	Ratio	Lower	Upper
131	100		
133	96.5	76.6	114.8
119	60.1	49.8	74.6



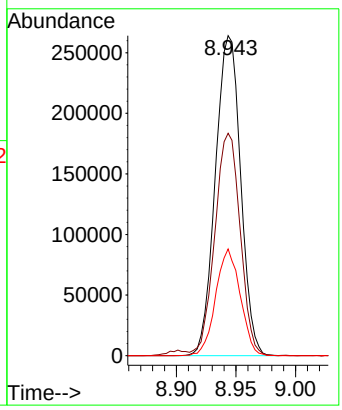


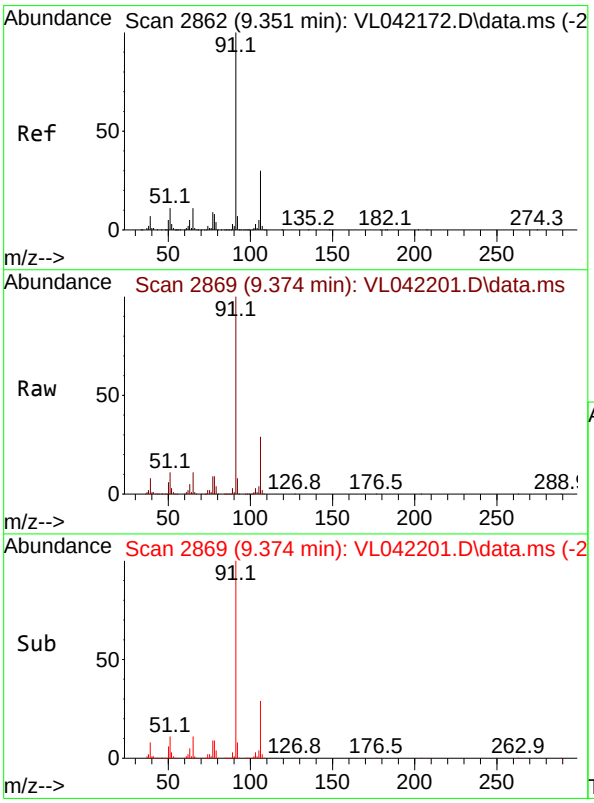
#57
Chlorobenzene
Concen: 9.669 ppbv
RT: 8.943 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:112 Resp: 389475

Ion	Ratio	Lower	Upper
112	100		
77	69.5	58.2	87.2
114	33.4	29.1	35.5

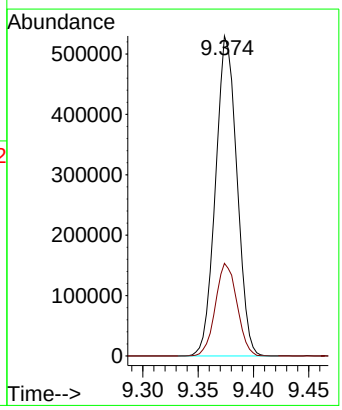


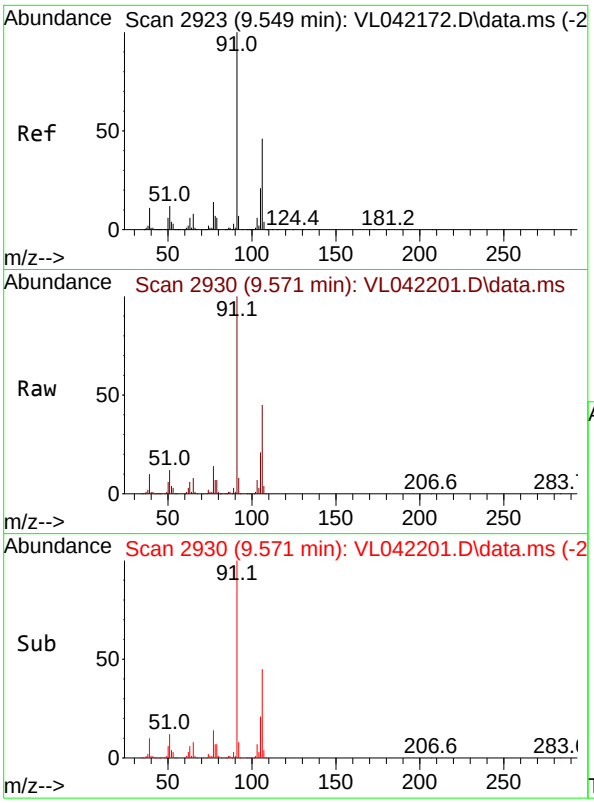


#58
Ethyl Benzene
Concen: 9.446 ppbv
RT: 9.374 min Scan# 2869
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 712533

Ion	Ratio	Lower	Upper
91	100		
106	29.0	24.2	36.2



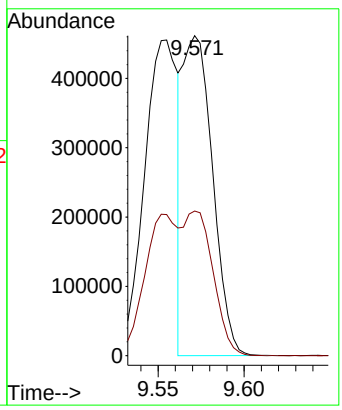


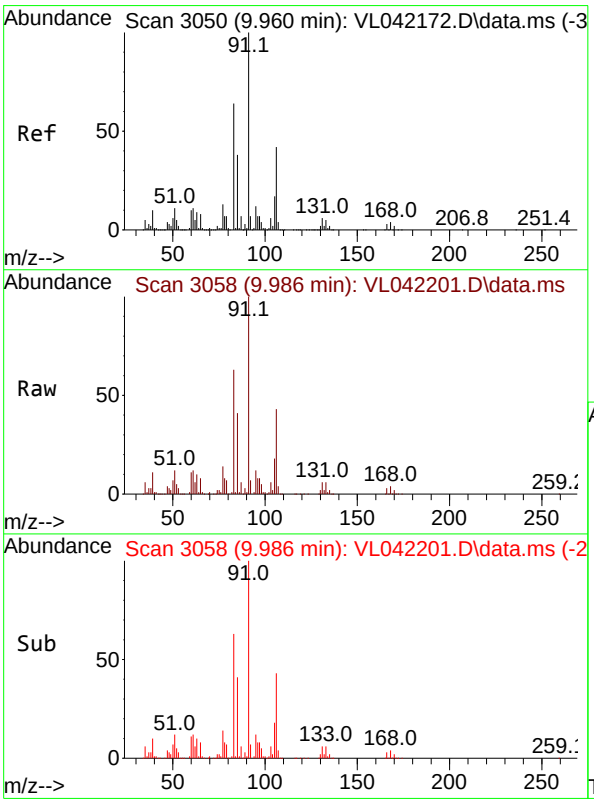
#59
m/p-Xylene
Concen: 9.197 ppbv
RT: 9.571 min Scan# 2
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 553998

Ion	Ratio	Lower	Upper
91	100		
106	95.0	36.4	54.6#

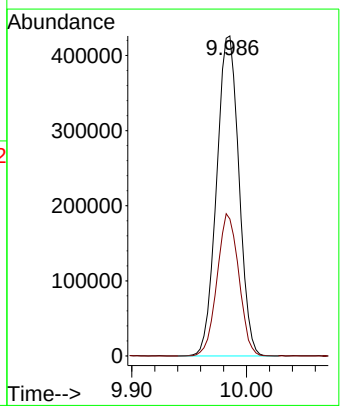


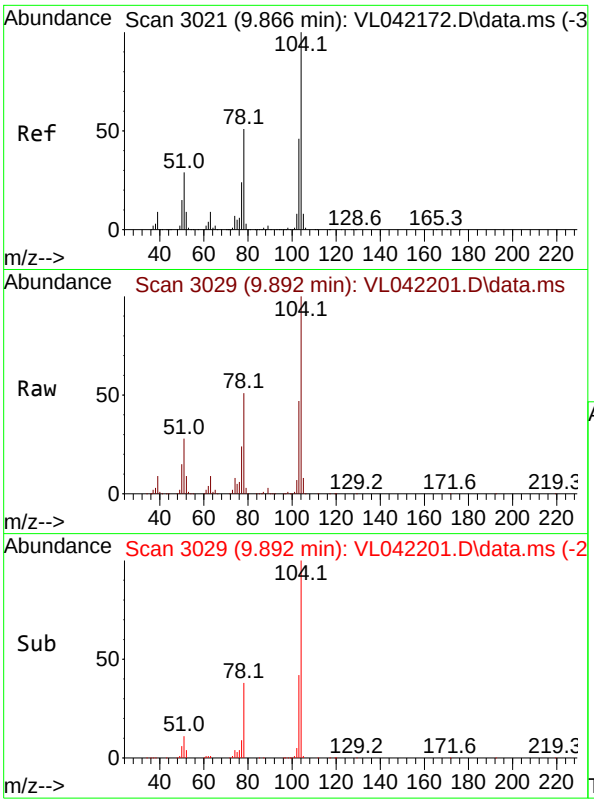


#60
o-Xylene
Concen: 9.526 ppbv
RT: 9.986 min Scan# 3058
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 575224

Ion	Ratio	Lower	Upper
91	100		
106	43.3	20.8	62.5



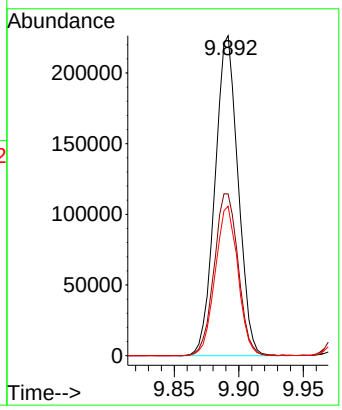


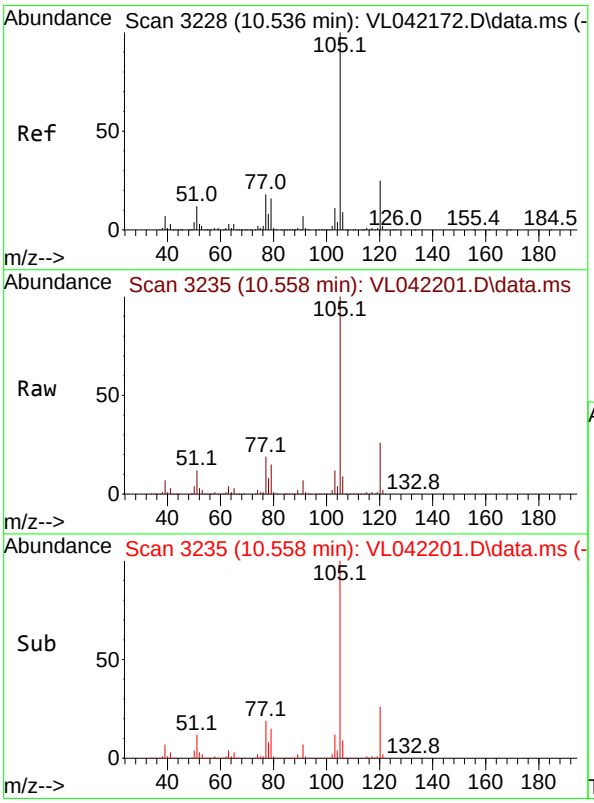
#61
Styrene
Concen: 9.424 ppbv
RT: 9.892 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:104 Resp: 281518

Ion	Ratio	Lower	Upper
104	100		
78	52.6	41.8	62.6
103	46.2	37.0	55.4

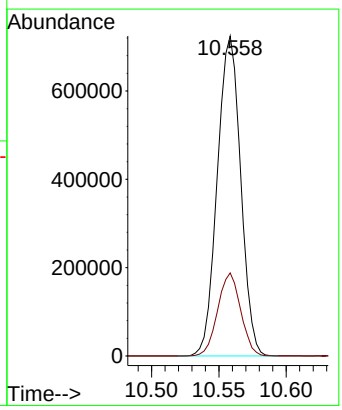


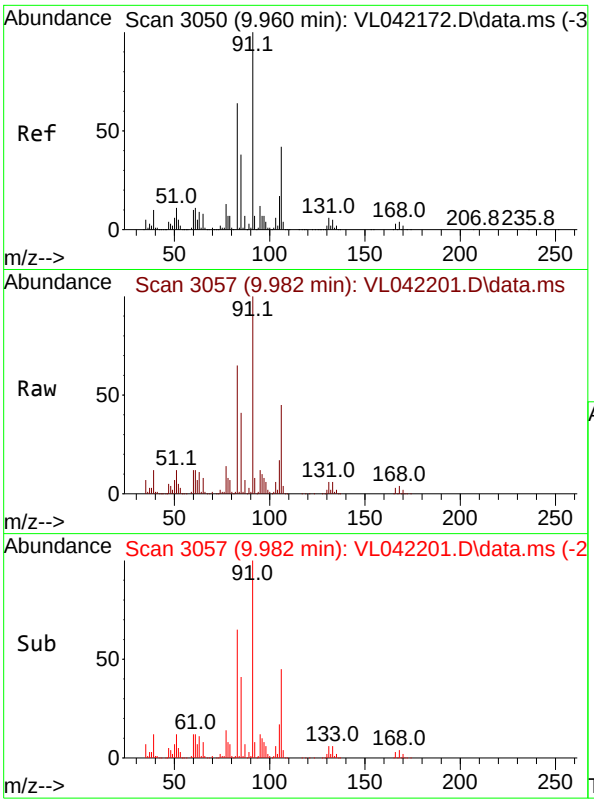


#62
Isopropylbenzene
Concen: 9.689 ppbv
RT: 10.558 min Scan# 3235
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 874894

Ion	Ratio	Lower	Upper
105	100		
120	25.4	19.9	29.9



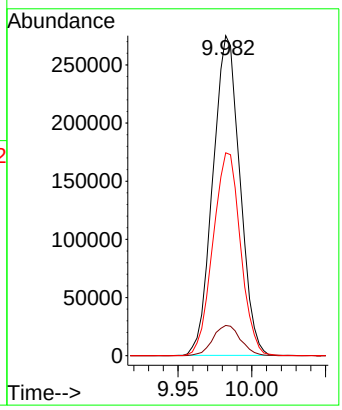


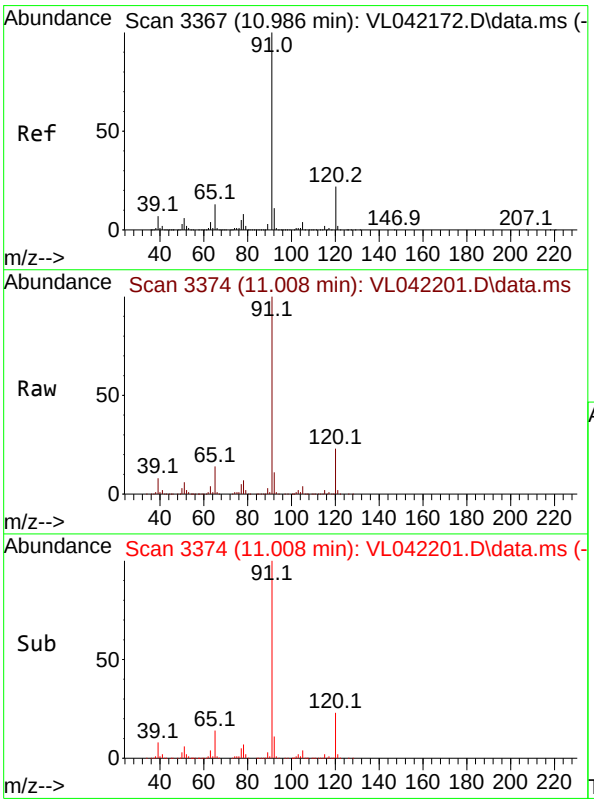
#63
1,1,2,2-Tetrachloroethane
Concen: 9.518 ppbv
RT: 9.982 min Scan# 3
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 349199

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.8	14.4
85	64.9	32.5	97.5

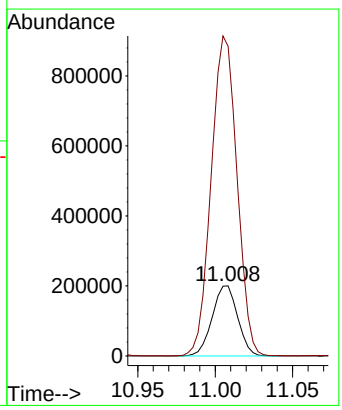


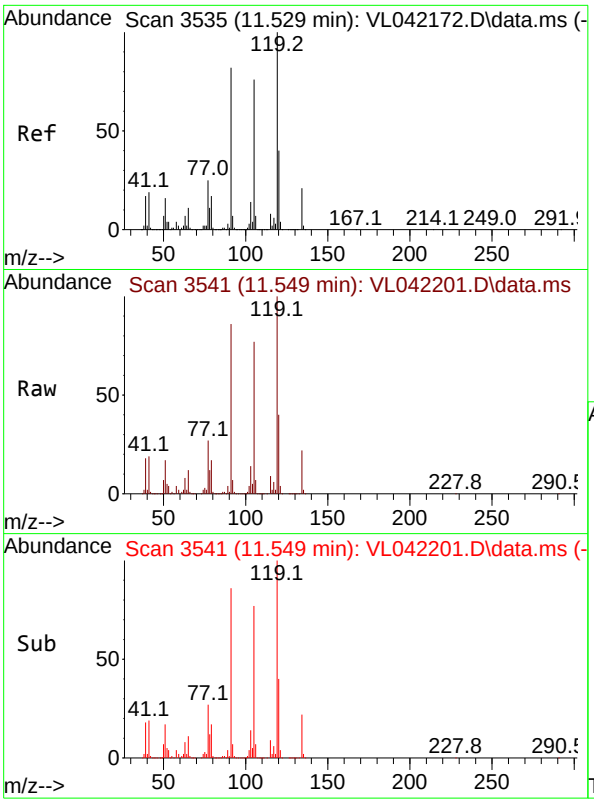


#64
n-propylbenzene
Concen: 9.826 ppbv
RT: 11.008 min Scan# 3374
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:120 Resp: 228400

Ion	Ratio	Lower	Upper
120	100		
91	463.7	376.9	565.3



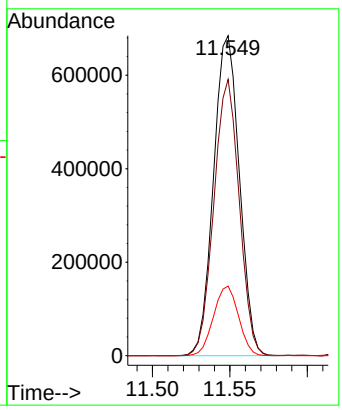


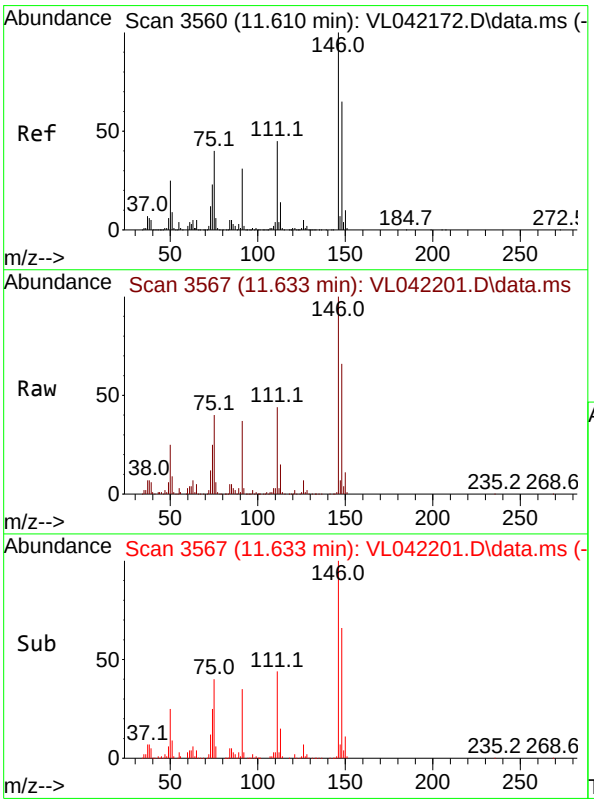
#65
tert-Butylbenzene
Concen: 9.526 ppbv
RT: 11.549 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 795482

Ion	Ratio	Lower	Upper
119	100		
91	84.5	66.0	99.0
134	21.1	16.7	25.1

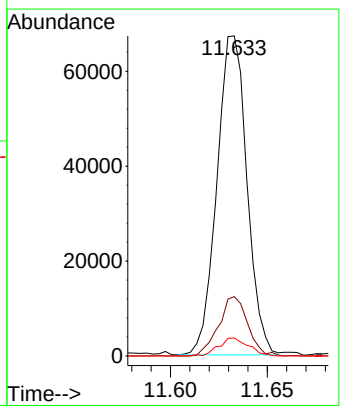


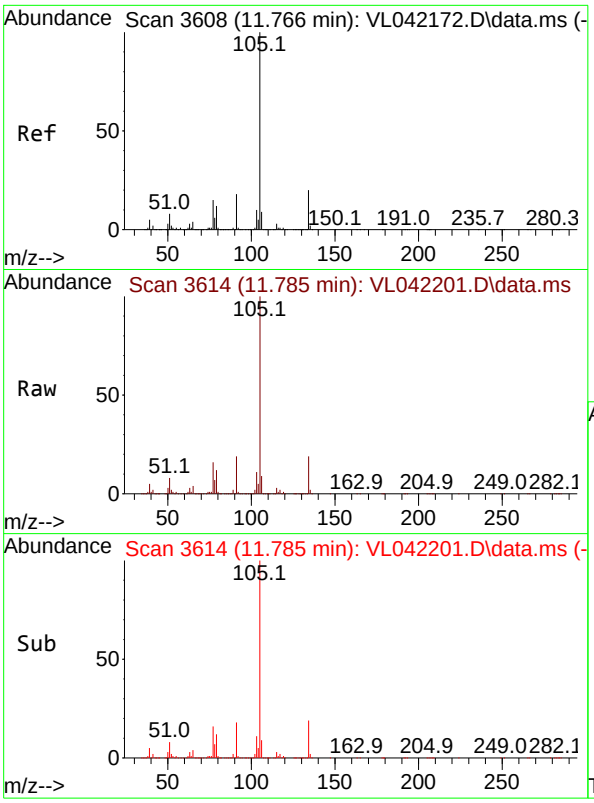


#66
Benzyl Chloride
Concen: 8.185 ppbv
RT: 11.633 min Scan# 3567
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 72526

Ion	Ratio	Lower	Upper
91	100		
126	18.0	13.8	20.6
128	5.6	4.5	6.7



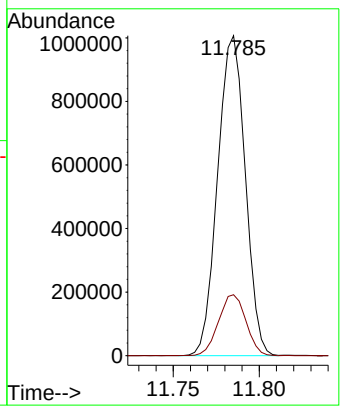


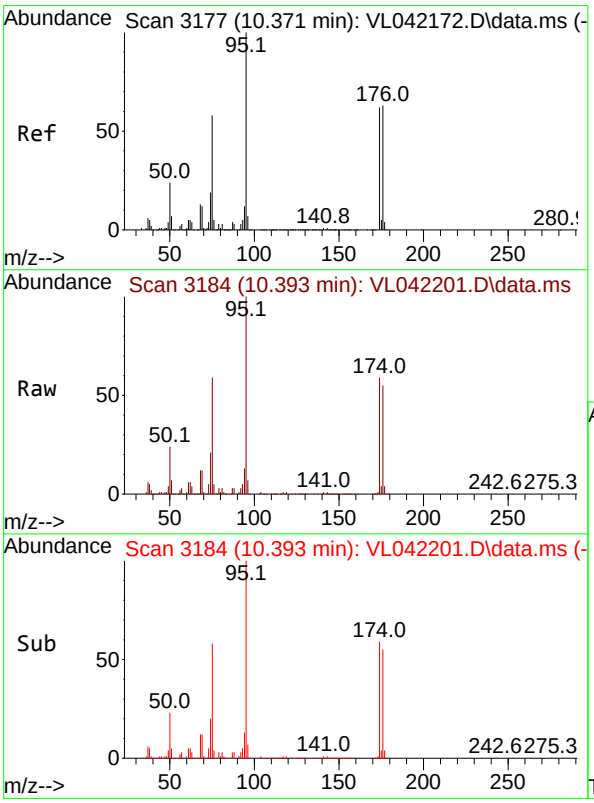
#67
sec-Butylbenzene
Concen: 9.677 ppbv
RT: 11.785 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 1123267

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.5	23.3

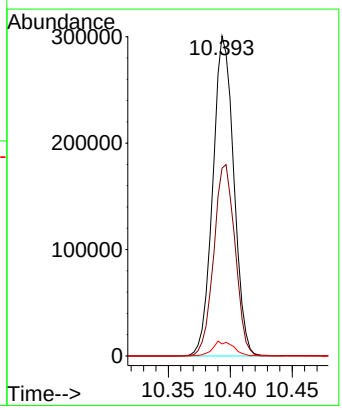


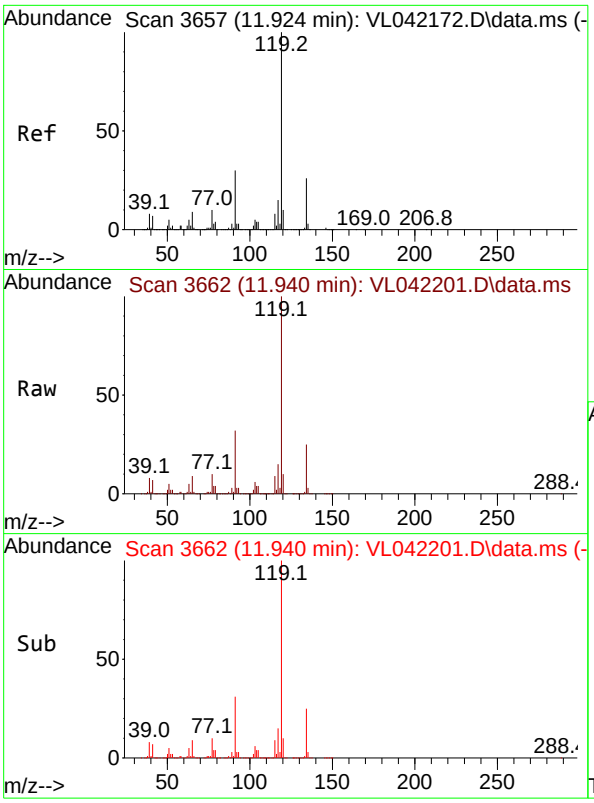


#68
1-Bromo-4-Fluorobenzene
Concen: 10.190 ppbv
RT: 10.393 min Scan# 3184
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 95 Resp: 355372

Ion	Ratio	Lower	Upper
95	100		
174	60.6	50.6	76.0
175	4.6	3.8	5.6



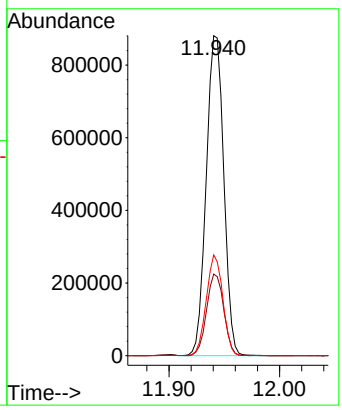


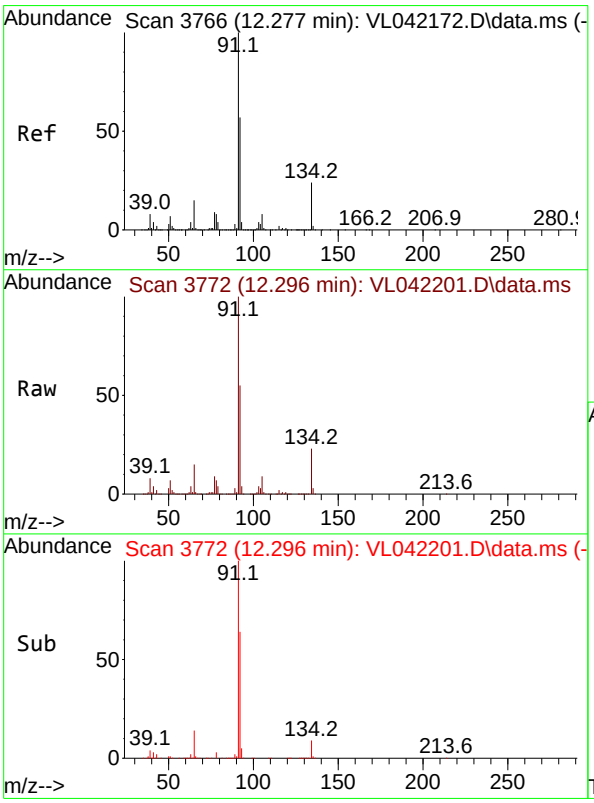
#69
p-Isopropyltoluene
Concen: 9.684 ppbv
RT: 11.940 min Scan# 3
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 967912

Ion	Ratio	Lower	Upper
119	100		
134	25.1	20.4	30.6
91	30.0	23.7	35.5

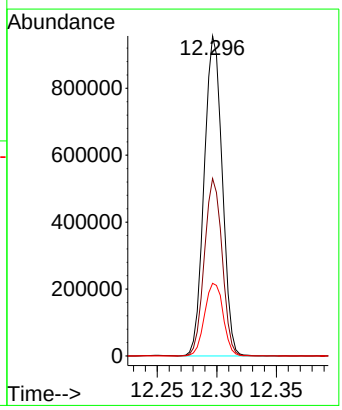


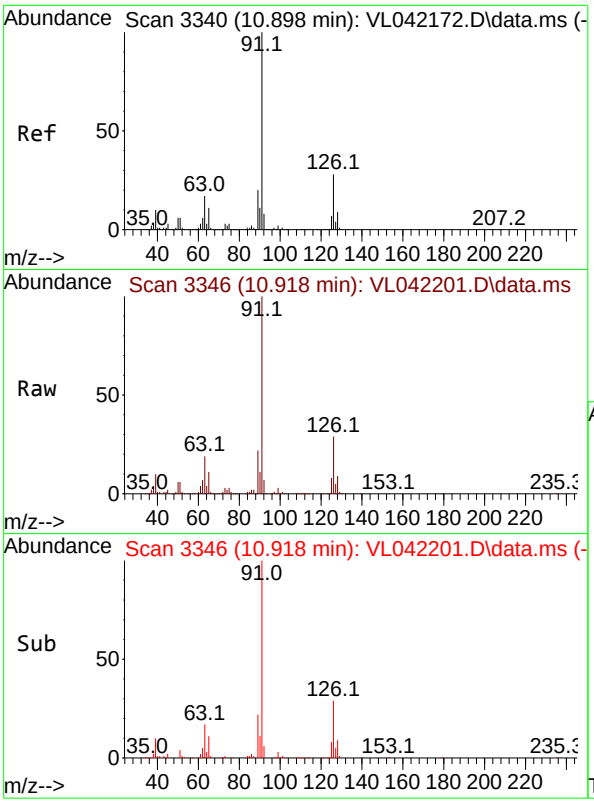


#70
n-Butylbenzene
Concen: 9.850 ppbv
RT: 12.296 min Scan# 3772
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion: 91 Resp: 1006907

Ion	Ratio	Lower	Upper
91	100		
92	54.8	44.9	67.3
134	23.4	19.2	28.8



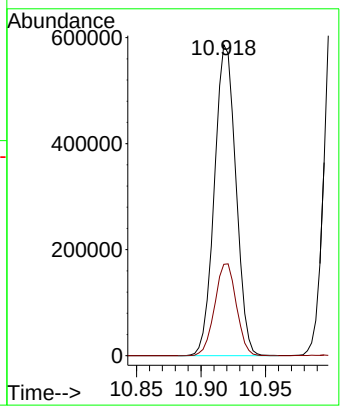


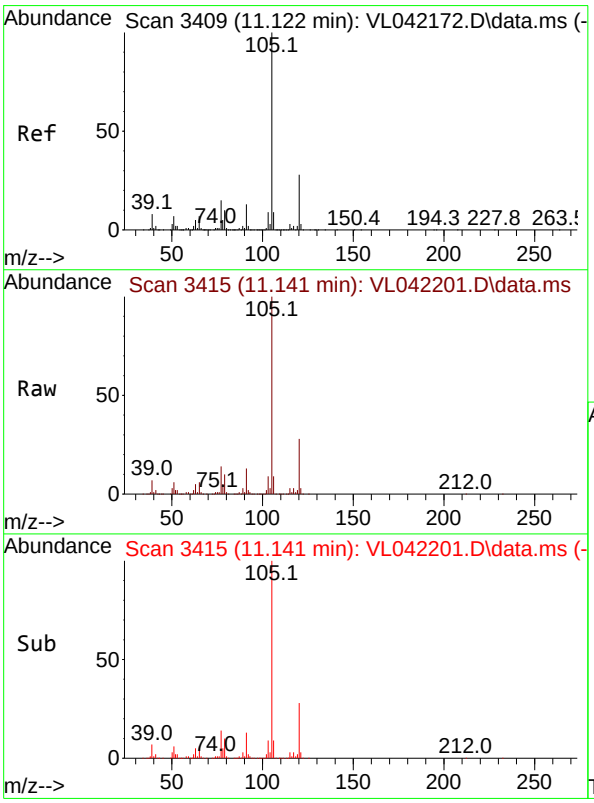
#71
2-Chlorotoluene
Concen: 9.652 ppbv
RT: 10.918 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 676396

Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4

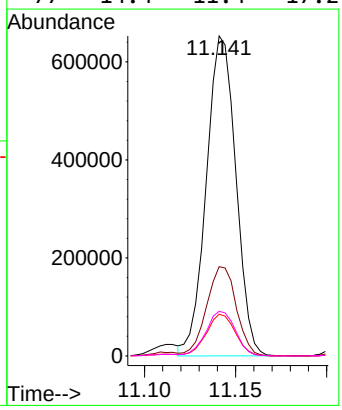


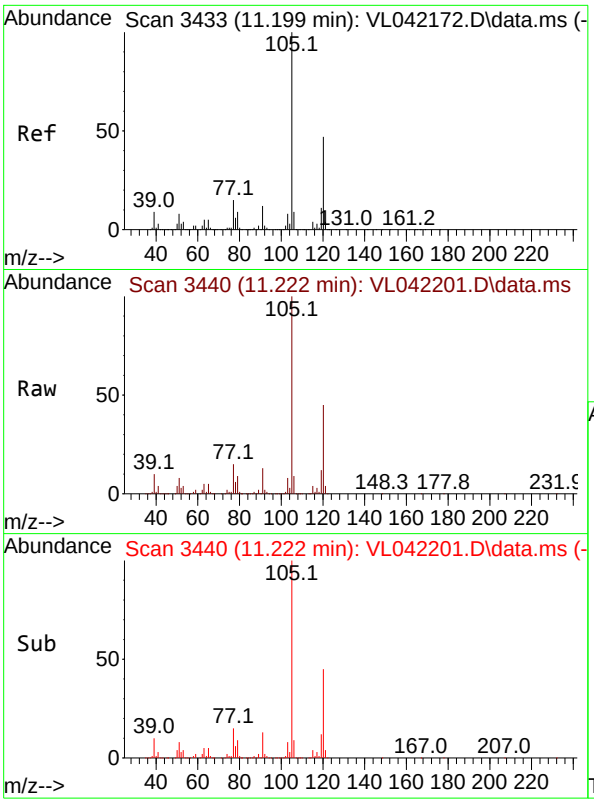


#72
4-Ethyltoluene
Concen: 9.775 ppbv
RT: 11.141 min Scan# 3415
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 734909

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	13.3	10.3	15.5
77	14.4	11.4	17.2



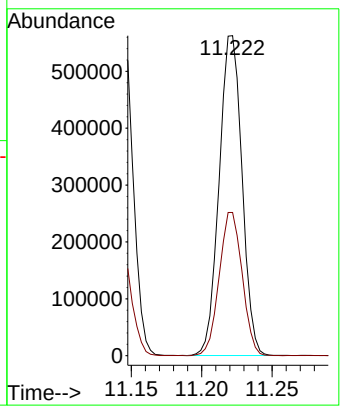


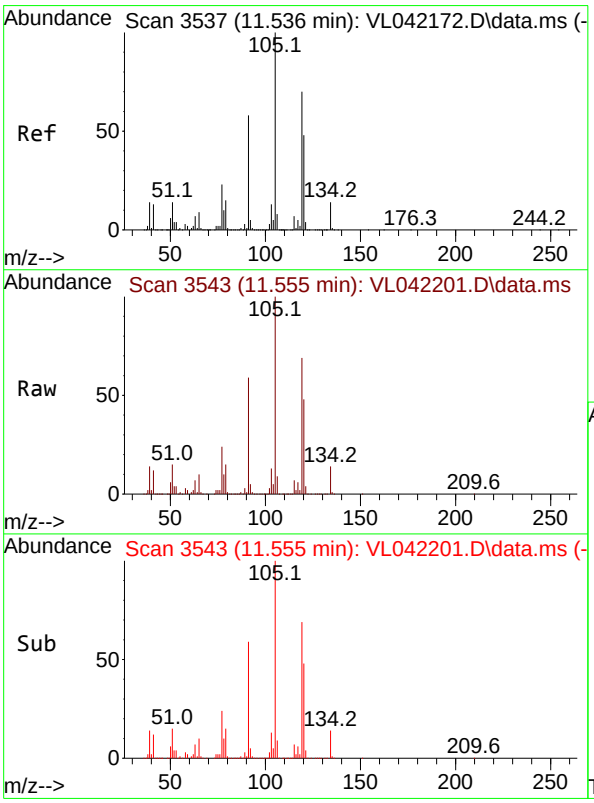
#73
1,3,5-Trimethylbenzene
Concen: 9.709 ppbv
RT: 11.222 min Scan# 34
Delta R.T. 0.023 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 637499

Ion	Ratio	Lower	Upper
105	100		
120	44.7	37.4	56.0

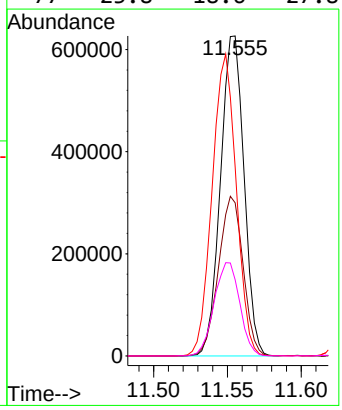


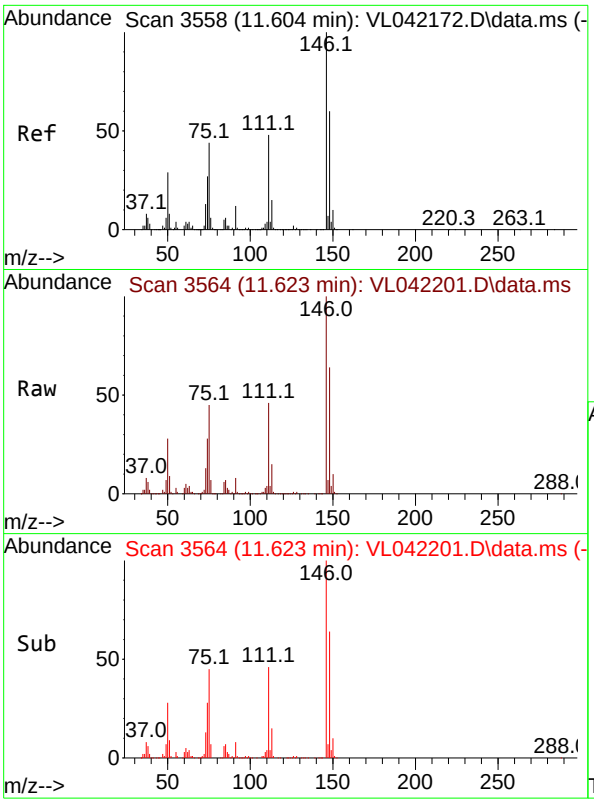


#74
1,2,4-Trimethylbenzene
Concen: 9.202 ppbv
RT: 11.555 min Scan# 3543
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:105 Resp: 696079

Ion	Ratio	Lower	Upper
105	100		
120	47.8	38.6	58.0
91	59.0	46.2	69.2
77	23.8	18.6	27.8



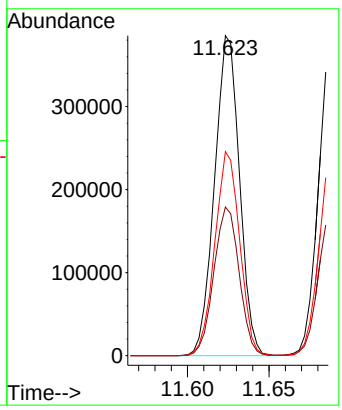


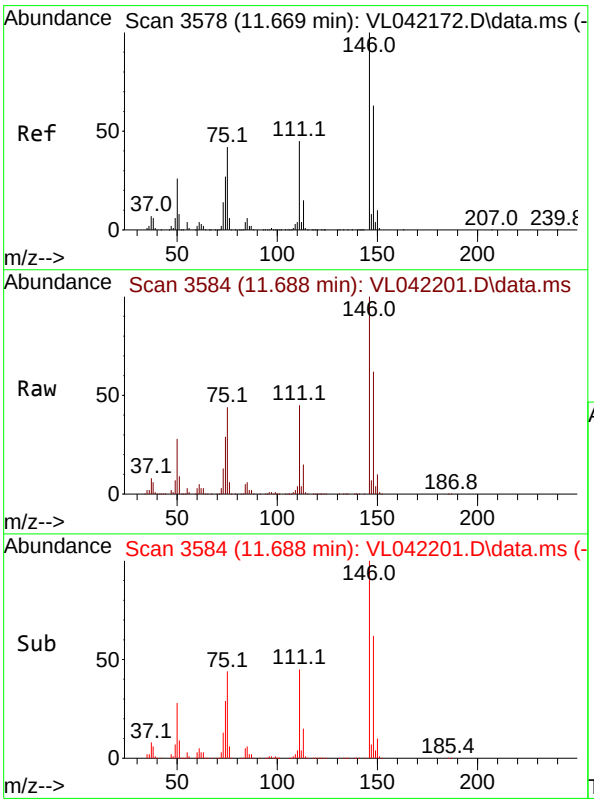
#75
1,3-Dichlorobenzene
Concen: 9.895 ppbv
RT: 11.623 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 410546

Ion	Ratio	Lower	Upper
146	100		
111	47.1	23.8	71.2
148	63.5	31.9	95.9

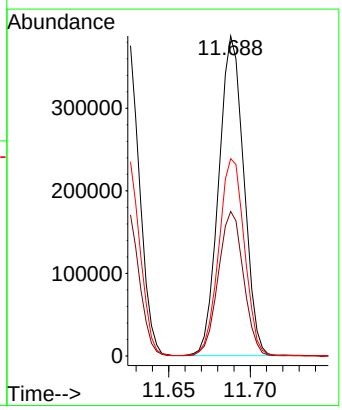


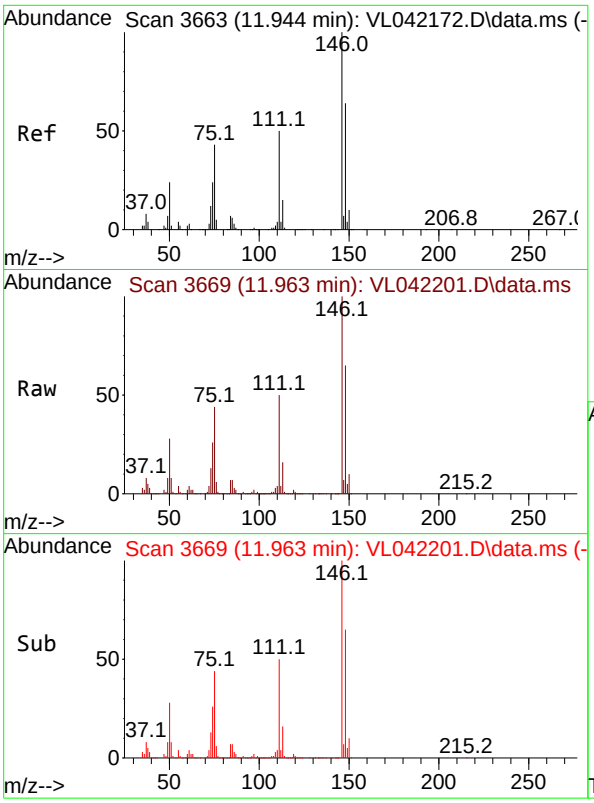


#76
1,4-Dichlorobenzene
Concen: 10.014 ppbv
RT: 11.688 min Scan# 3584
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:146 Resp: 413478

Ion	Ratio	Lower	Upper
146	100		
111	45.8	23.0	69.0
148	63.5	31.9	95.7



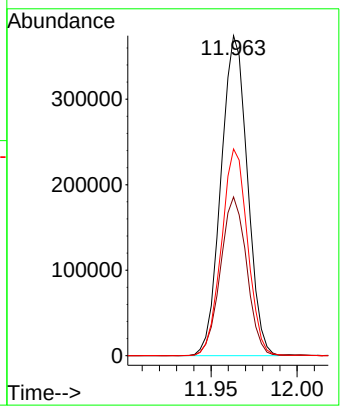


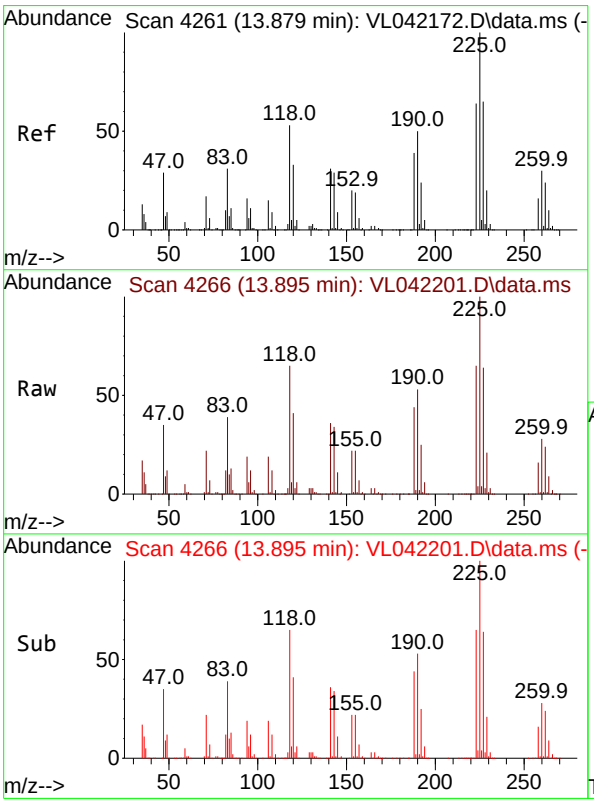
#77
1,2-Dichlorobenzene
Concen: 9.887 ppbv
RT: 11.963 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 399386

Ion	Ratio	Lower	Upper
146	100		
111	49.4	24.8	74.3
148	64.0	31.6	94.8

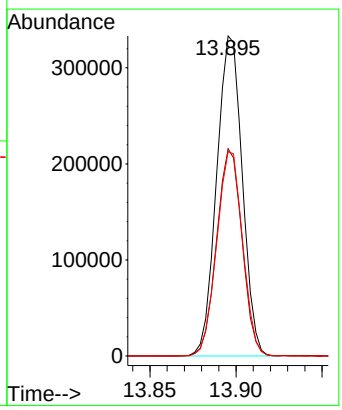


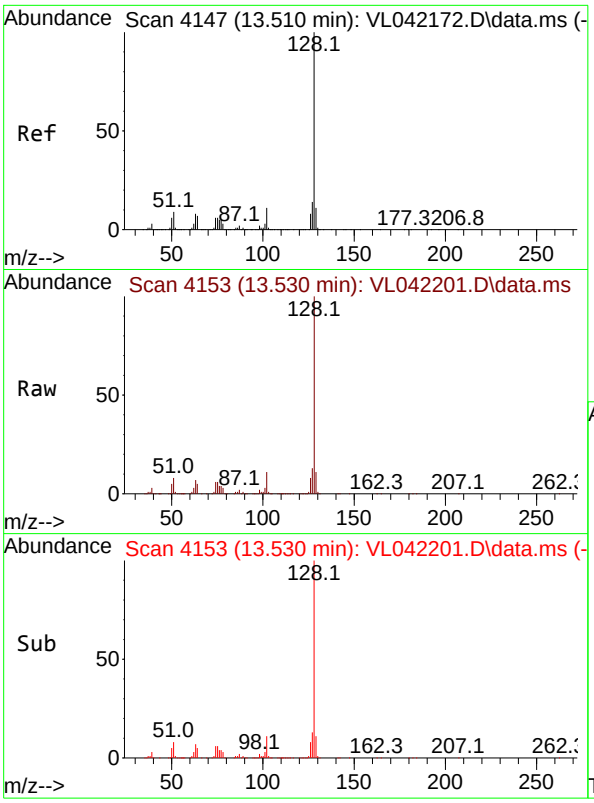


#78
Hexachloro-1,3-Butadiene
Concen: 8.395 ppbv
RT: 13.895 min Scan# 4266
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:225 Resp: 345217

Ion	Ratio	Lower	Upper
225	100		
223	64.1	50.6	76.0
227	64.4	51.2	76.8



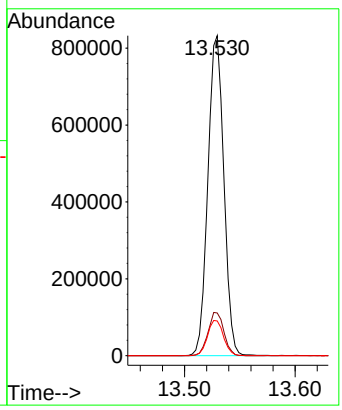


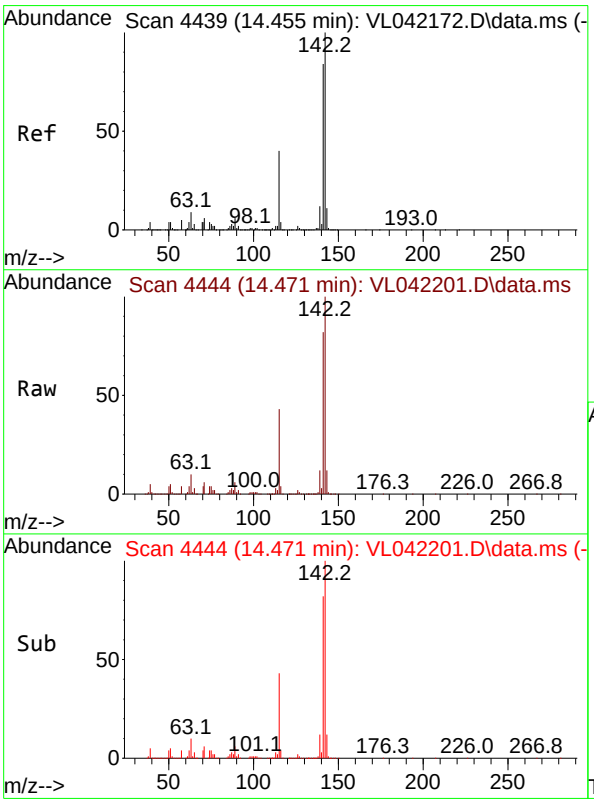
#79
Naphthalene
Concen: 10.072 ppbv
RT: 13.530 min Scan# 4
Delta R.T. 0.019 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:128 Resp: 833346

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	10.9	9.0	13.4

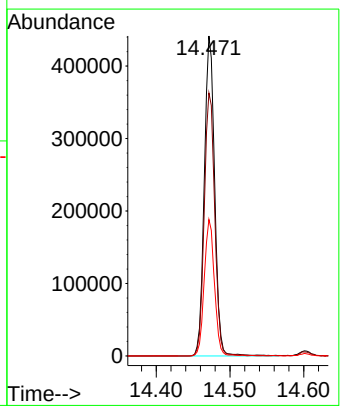


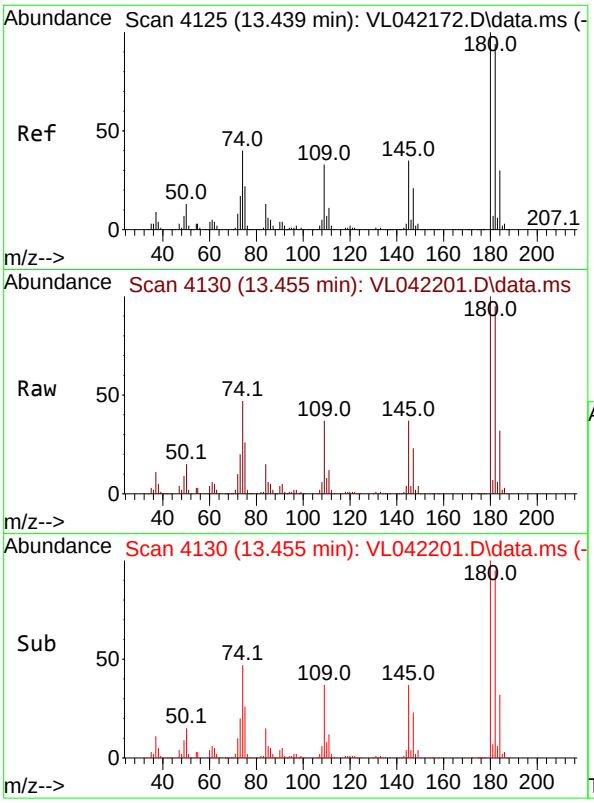


#80
Naphthalene,2-methyl-
Concen: 10.537 ppbv
RT: 14.471 min Scan# 4444
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Tgt Ion:142 Resp: 427563

Ion	Ratio	Lower	Upper
142	100		
141	84.2	66.3	99.5
115	42.4	31.6	47.4



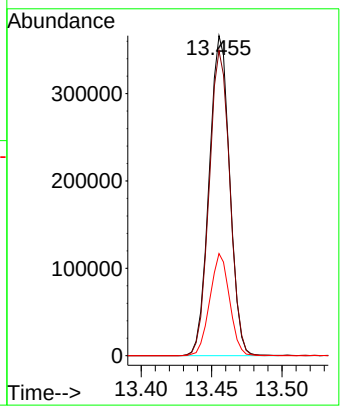


#81
1,2,4-Trichlorobenzene
Concen: 9.779 ppbv
RT: 13.455 min Scan# 4
Delta R.T. 0.016 min
Lab File: VL042201.D
Acq: 31 Mar 2025 08:51

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:180 Resp: 373226

Ion	Ratio	Lower	Upper
180	100		
182	95.8	75.1	112.7
184	30.5	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042203.D
Acq On : 31 Mar 2025 10:17
Operator : SY/MD
Sample : VL0331ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Quant Time: Apr 01 01:35:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.803	49	175685	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.981	114	498986	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.904	117	456400	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.396	95	385330	10.281	ppbv	0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	270376	10.423	ppbv	99
3) Chlorodifluoromethane	1.482	51	262345	9.900	ppbv	95
4) Chloromethane	1.538	50	102731	9.691	ppbv	100
5) Vinyl Chloride	1.586	62	97910	8.716	ppbv	95
6) Bromomethane	1.673	94	43862	9.130	ppbv	98
7) Chloroethane	1.712	64	39774	9.347	ppbv	100
8) Dichlorotetrafluoroethane	1.560	85	228198	10.330	ppbv	94
9) Propene	1.489	41	104679	8.618	ppbv	98
10) Heptane	5.007	43	298492	9.239	ppbv	99
11) Trichlorofluoromethane	1.887	101	258953	10.260	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.149	101	200210	9.650	ppbv	96
13) Ethanol	1.732	45	5239	4.563	ppbv	91
14) Bromoethene	1.790	108	74401	9.361	ppbv	98
15) Acetone	1.845	43	218378	8.888	ppbv	95
16) 1,3-Butadiene	1.615	39	104247	8.688	ppbv	99
17) tert-Butyl alcohol	2.049	59	276592	9.038	ppbv	99
18) 1,1-Dichloroethene	2.042	96	89252	9.202	ppbv	99
19) Isopropyl Alcohol	1.894	45	127449	9.193	ppbv	99
20) Methylene Chloride	2.072	84	76788	8.391	ppbv	97
21) Allyl Chloride	2.107	41	154876	8.938	ppbv	98
22) trans-1,2-Dichloroethene	2.353	96	102643	9.157	ppbv	96
23) Vinyl Acetate	2.476	43	89760	8.441	ppbv #	95
24) 1,1-Dichloroethane	2.421	63	208334	10.026	ppbv	99
25) Ethyl Acetate	2.852	43	609975	9.565	ppbv	99
26) Hexane	2.842	57	234267	9.511	ppbv	99
27) Carbon Disulfide	2.159	76	245905	9.310	ppbv	99
28) Methyl tert-Butyl Ether	2.454	73	169404	11.046	ppbv	94
29) Chloroform	2.865	83	382690	10.616	ppbv	100
30) Cyclohexane	3.881	84	200894	9.393	ppbv	97
31) cis-1,2-Dichloroethene	2.735	61	249599	9.981	ppbv	97
32) 1,1,1-Trichloroethane	3.386	97	402506	9.753	ppbv	99
34) 2-Butanone	2.570	43	343896	9.504	ppbv	100
35) Carbon Tetrachloride	3.784	117	412312	10.578	ppbv	99
36) Benzene	3.677	78	482499	9.754	ppbv	97
37) 1,2-Dichloroethane	3.237	62	310502	10.964	ppbv	98
38) Trichloroethene	4.577	130	201215	9.749	ppbv	95
39) 1,2-Dichloropropane	4.340	63	174119	9.665	ppbv	92
40) 1,4-Dioxane	4.616	88	84833	8.872	ppbv #	91
41) Tetrahydrofuran	3.072	42	194140	9.318	ppbv	99
42) Bromodichloromethane	4.515	83	422881	10.831	ppbv	97
43) Methyl Methacrylate	4.913	69	191894	9.163	ppbv	100
44) 2,2,4-Trimethylpentane	4.667	57	792762	9.483	ppbv	98
45) t-1,3-Dichloropropene	6.447	75	203792	9.071	ppbv	94

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042203.D
Acq On : 31 Mar 2025 10:17
Operator : SY/MD
Sample : VL0331ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Quant Time: Apr 01 01:35:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.632	75	258084	9.371	ppbv		98
47) 1,1,2-Trichloroethane	6.616	97	194204	10.197	ppbv		98
48) Dibromochloromethane	7.415	129	342254	10.604	ppbv		99
49) Bromoform	9.506	173	298349	10.296	ppbv		100
50) 4-Methyl-2-Pentanone	5.787	43	493320	8.603	ppbv		98
51) 2-Hexanone	7.464	43	405558	8.613	ppbv		97
52) Tetrachloroethene	8.250	164	176804	9.012	ppbv		95
53) Toluene	6.965	91	560307	9.555	ppbv		100
54) 1,2-Dibromoethane	7.681	107	273381	10.298	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.946	131	266468	10.607	ppbv		98
57) Chlorobenzene	8.946	112	448854	10.368	ppbv	#	95
58) Ethyl Benzene	9.377	91	815513	10.059	ppbv		99
59) m/p-Xylene	9.574	91	672913	10.395	ppbv	#	32
60) o-Xylene	9.985	91	673552	10.379	ppbv		99
61) Styrene	9.891	104	322981	10.060	ppbv		99
62) Isopropylbenzene	10.558	105	1021273	10.524	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.985	83	411620	10.440	ppbv		100
64) n-propylbenzene	11.008	120	264706	10.596	ppbv		97
65) tert-Butylbenzene	11.548	119	913025	10.173	ppbv		97
66) Benzyl Chloride	11.633	91	78394	8.232	ppbv		99
67) sec-Butylbenzene	11.785	105	1292454	10.360	ppbv		100
69) p-Isopropyltoluene	11.943	119	1113087	10.362	ppbv		99
70) n-Butylbenzene	12.296	91	1144962	10.422	ppbv		99
71) 2-Chlorotoluene	10.921	91	775424	10.295	ppbv		99
72) 4-Ethyltoluene	11.144	105	848380	10.500	ppbv		100
73) 1,3,5-Trimethylbenzene	11.222	105	736772	10.441	ppbv		97
74) 1,2,4-Trimethylbenzene	11.555	105	800063	9.841	ppbv		97
75) 1,3-Dichlorobenzene	11.626	146	470306	10.548	ppbv		99
76) 1,4-Dichlorobenzene	11.688	146	467631	10.538	ppbv		99
77) 1,2-Dichlorobenzene	11.963	146	460911	10.617	ppbv		99
78) Hexachloro-1,3-Butadiene	13.898	225	371995	8.418	ppbv		100
79) Naphthalene	13.529	128	840768	9.455	ppbv		99
80) Naphthalene,2-methyl-	14.471	142	328839	7.541	ppbv		99
81) 1,2,4-Trichlorobenzene	13.455	180	381981	9.313	ppbv		99

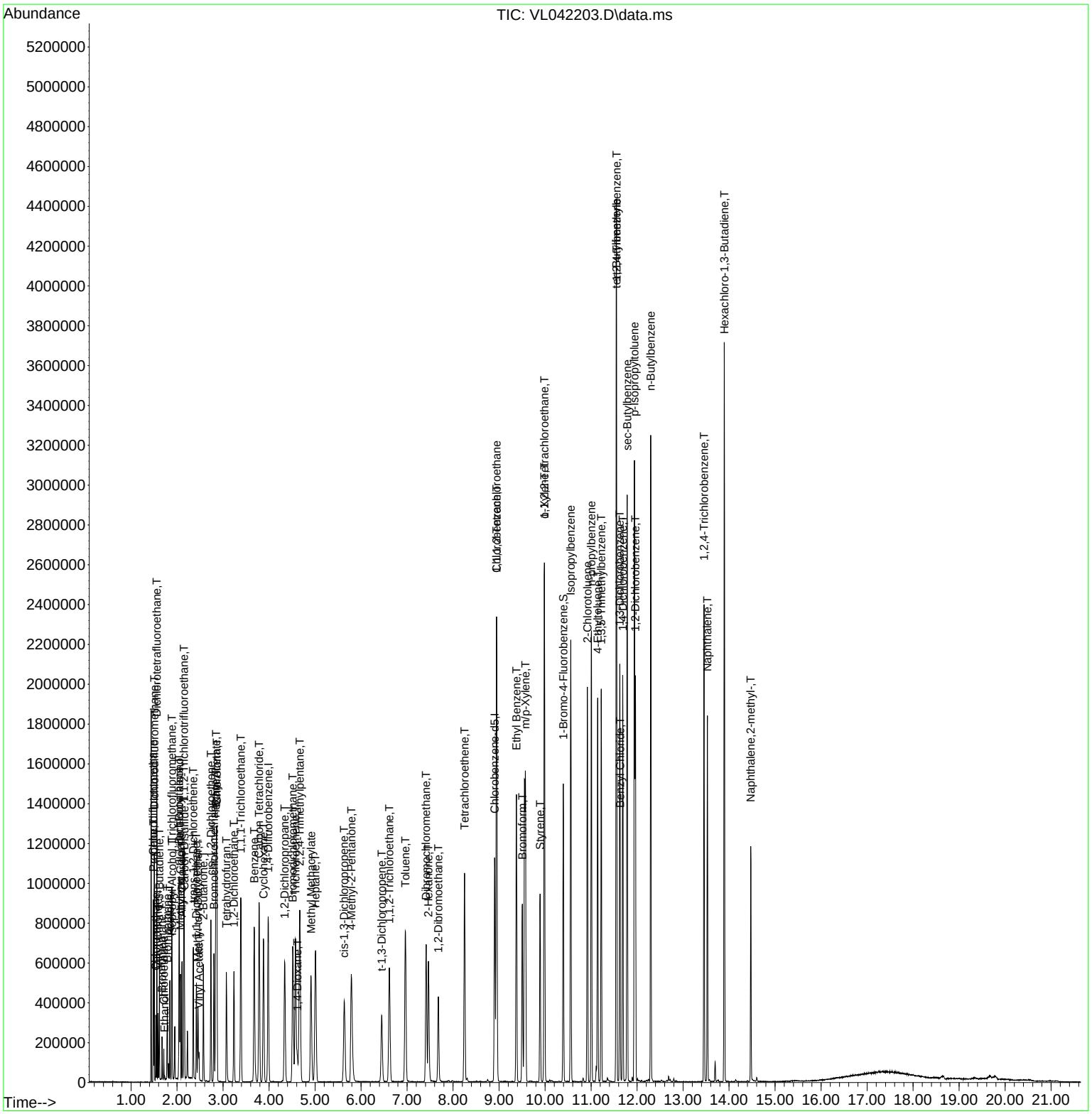
(#) = qualifier out of range (m) = manual integration (+) = signals summed

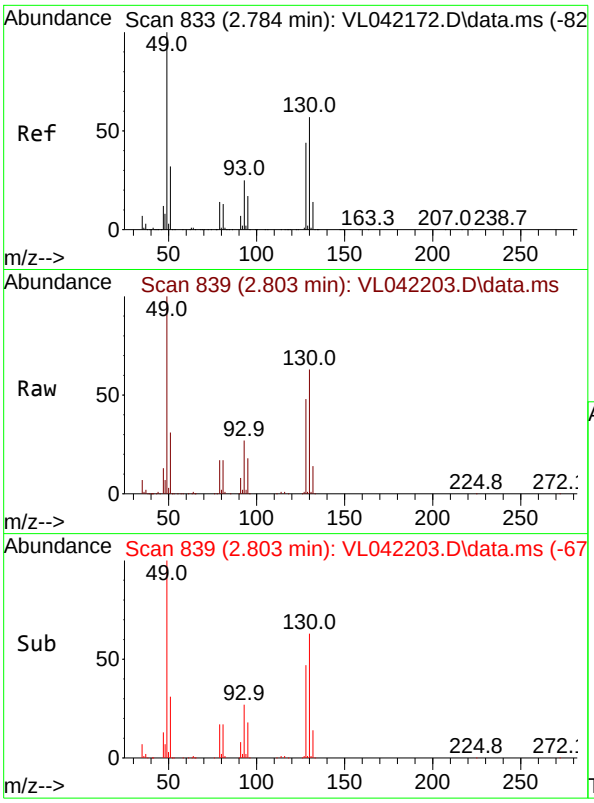
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042203.D
Acq On : 31 Mar 2025 10:17
Operator : SY/MD
Sample : VL0331ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Quant Time: Apr 01 01:35:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



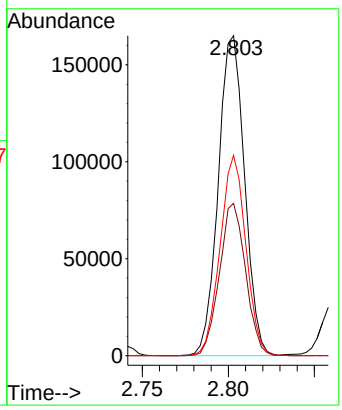


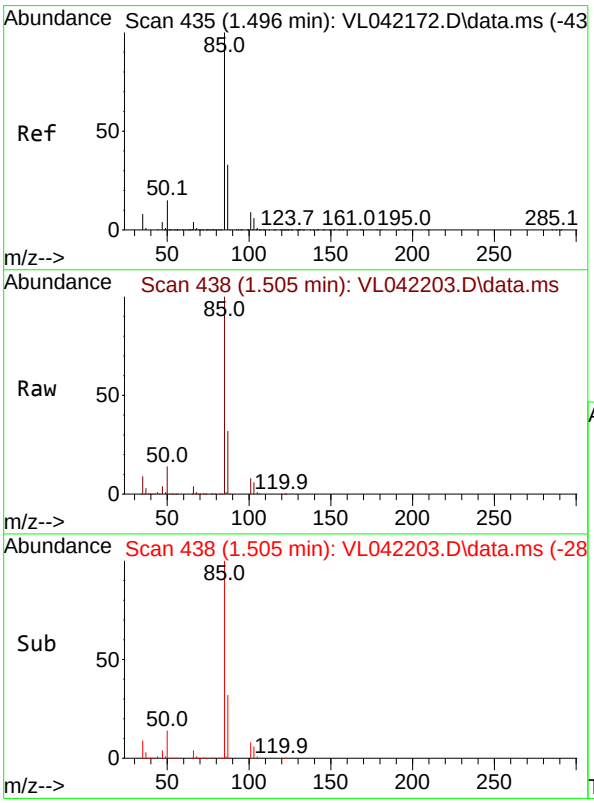
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.803 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 49 Resp: 175685

Ion	Ratio	Lower	Upper
49	100		
128	47.2	22.9	68.5
130	61.2	28.8	86.4

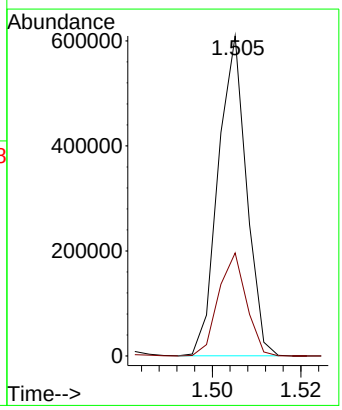


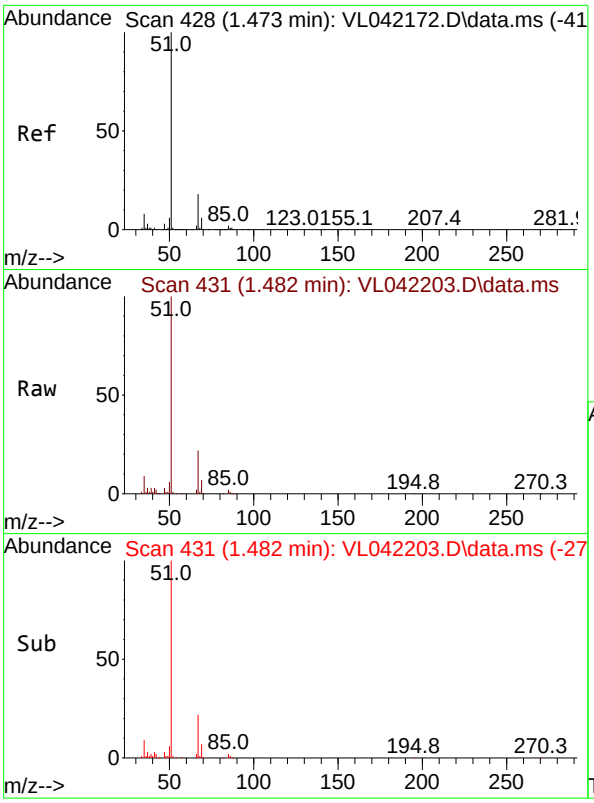


#2
Dichlorodifluoromethane
Concen: 10.423 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 85 Resp: 270376

Ion	Ratio	Lower	Upper
85	100		
87	32.2	26.1	39.1



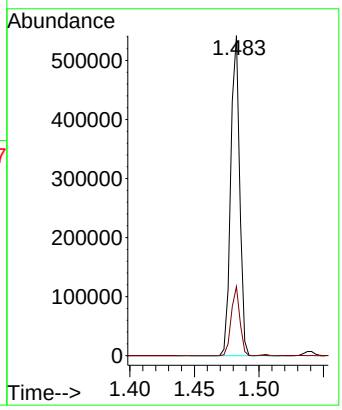


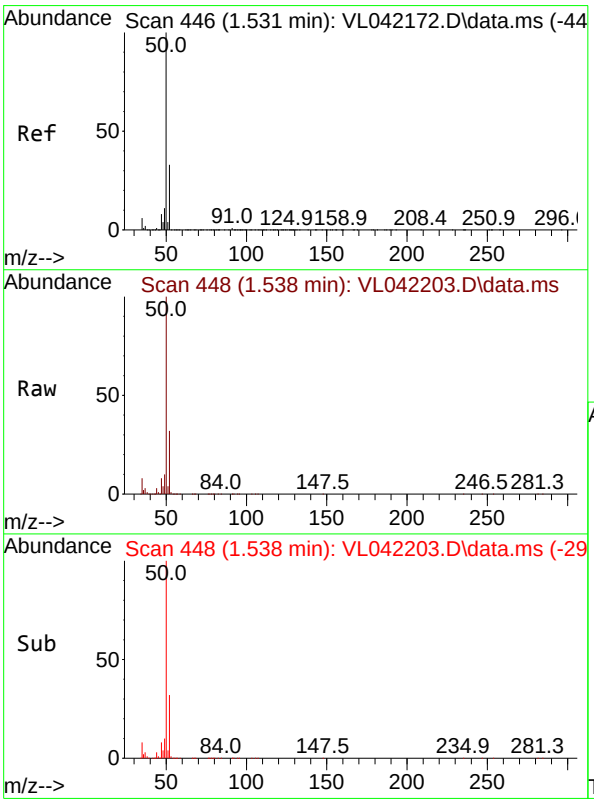
#3
Chlorodifluoromethane
Concen: 9.900 ppbv
RT: 1.482 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 51 Resp: 262345

Ion	Ratio	Lower	Upper
51	100		
67	21.0	15.0	22.6

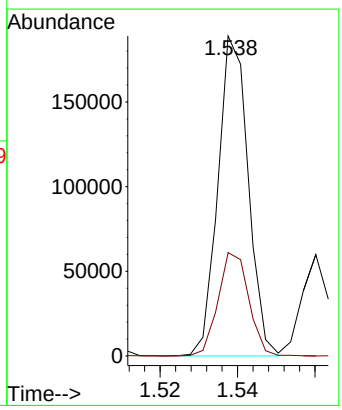


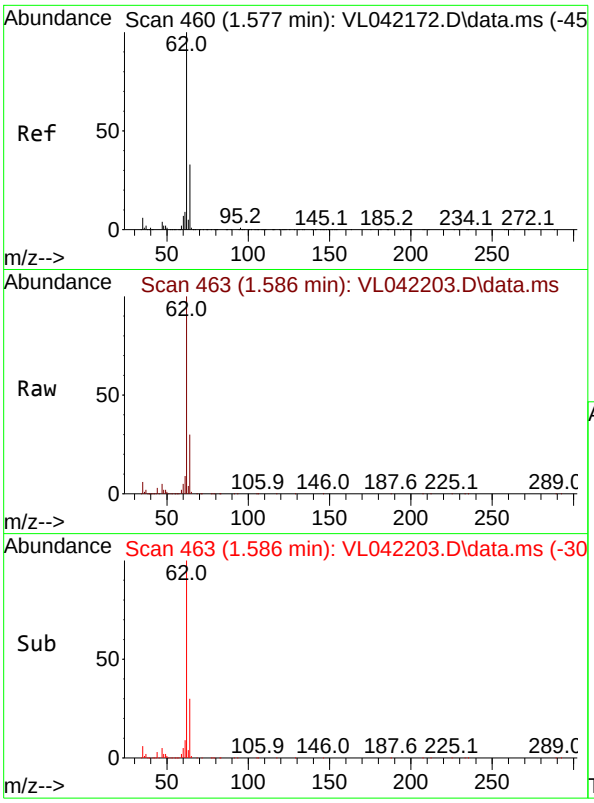


#4
Chloromethane
Concen: 9.691 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 50 Resp: 102731

Ion	Ratio	Lower	Upper
50	100		
52	32.3	26.1	39.1



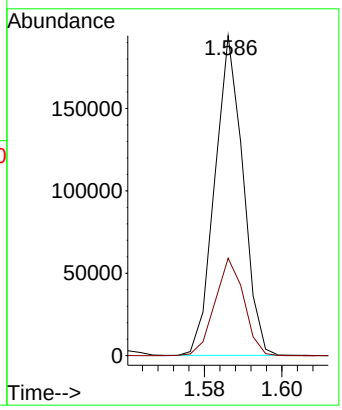


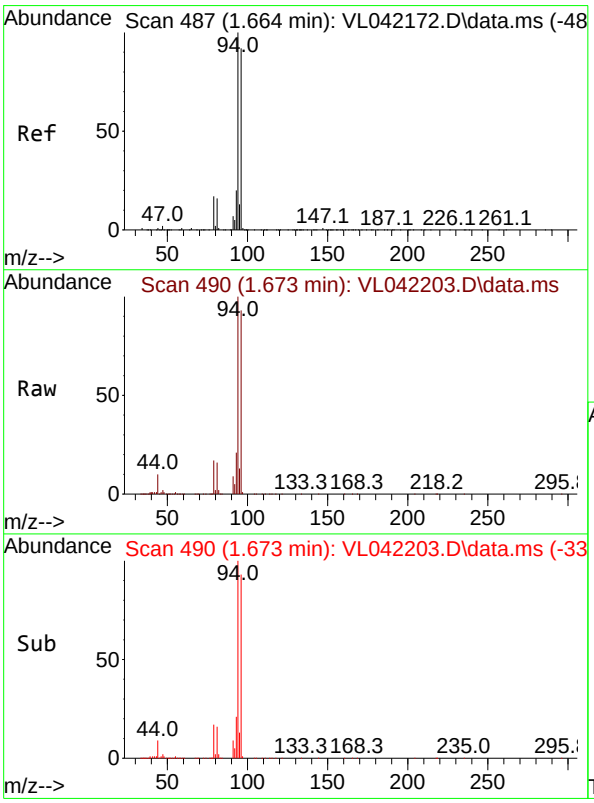
#5
Vinyl Chloride
Concen: 8.716 ppbv
RT: 1.586 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 62 Resp: 97910

Ion	Ratio	Lower	Upper
62	100		
64	30.5	26.6	40.0

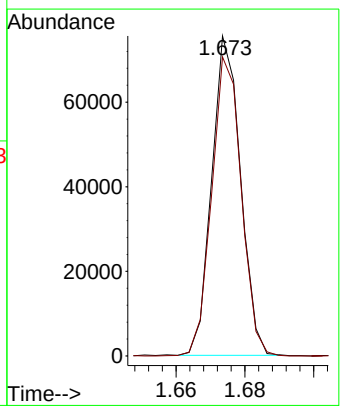


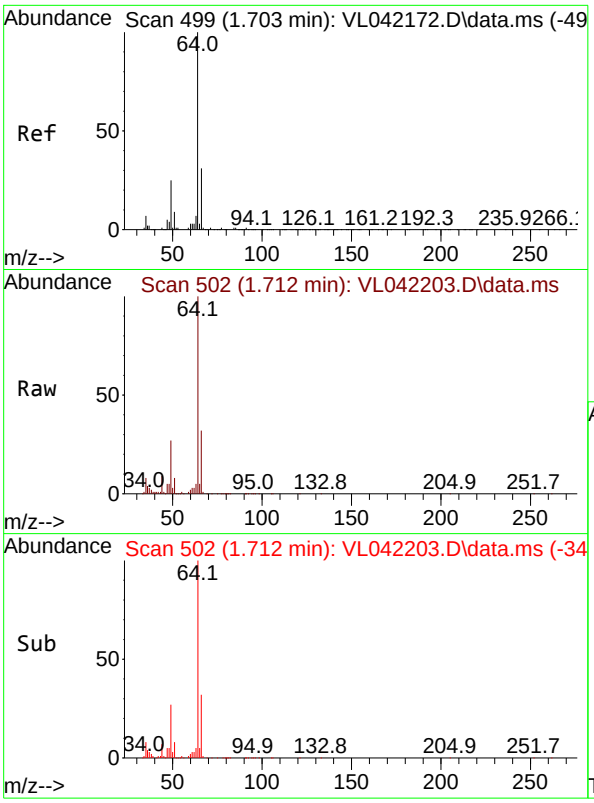


#6
Bromomethane
Concen: 9.130 ppbv
RT: 1.673 min Scan# 490
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 94 Resp: 43862

Ion	Ratio	Lower	Upper
94	100		
96	93.5	73.1	109.7



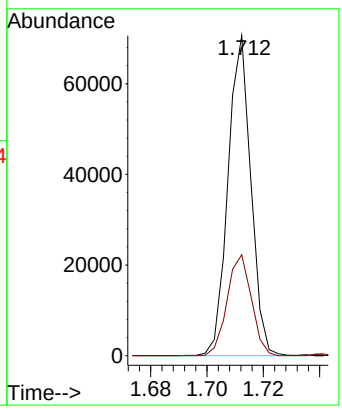


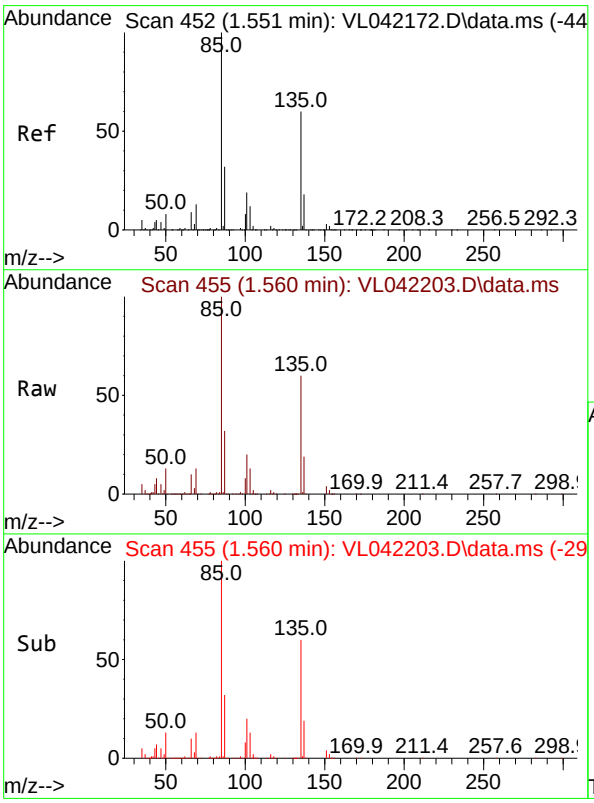
#7
Chloroethane
Concen: 9.347 ppbv
RT: 1.712 min Scan# 5
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 64 Resp: 39774

Ion	Ratio	Lower	Upper
64	100		
66	31.6	25.2	37.8

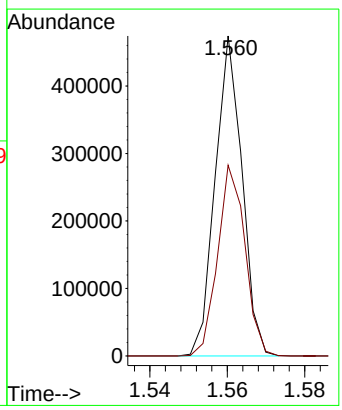


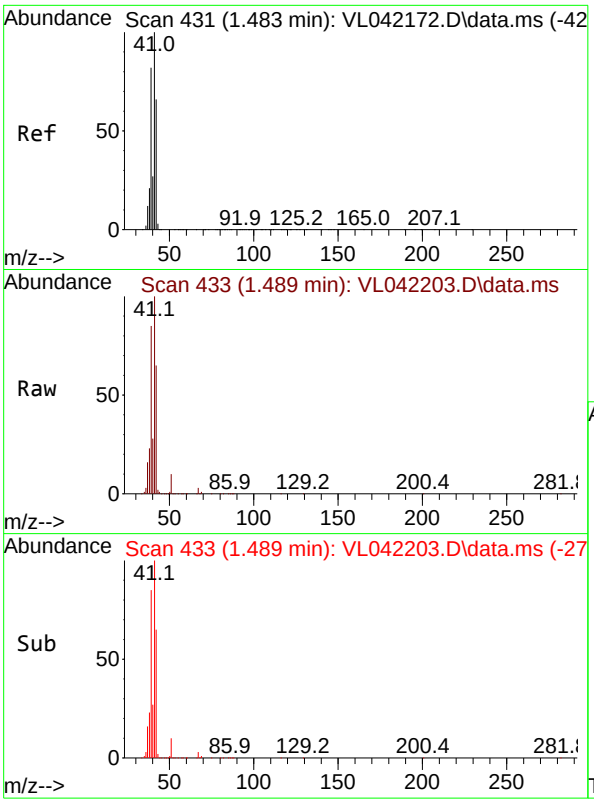


#8
Dichlorotetrafluoroethane
Concen: 10.330 ppbv
RT: 1.560 min Scan# 455
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 85 Resp: 228198

Ion	Ratio	Lower	Upper
85	100		
135	60.9	52.4	78.6



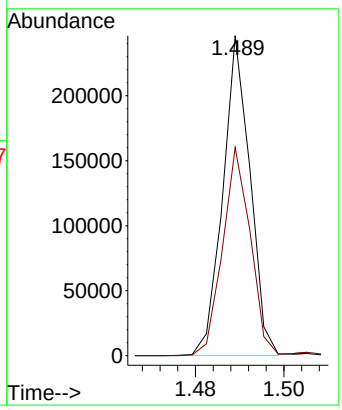


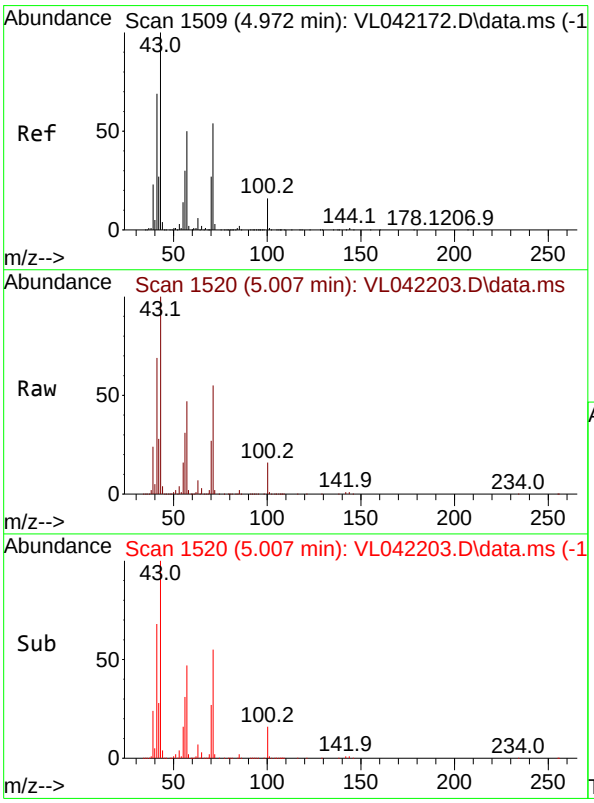
#9
Propene
Concen: 8.618 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 41 Resp: 104679

Ion	Ratio	Lower	Upper
41	100		
42	67.9	55.4	83.2

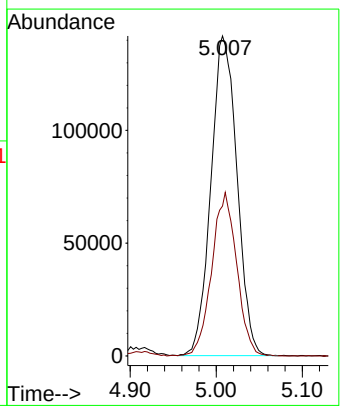


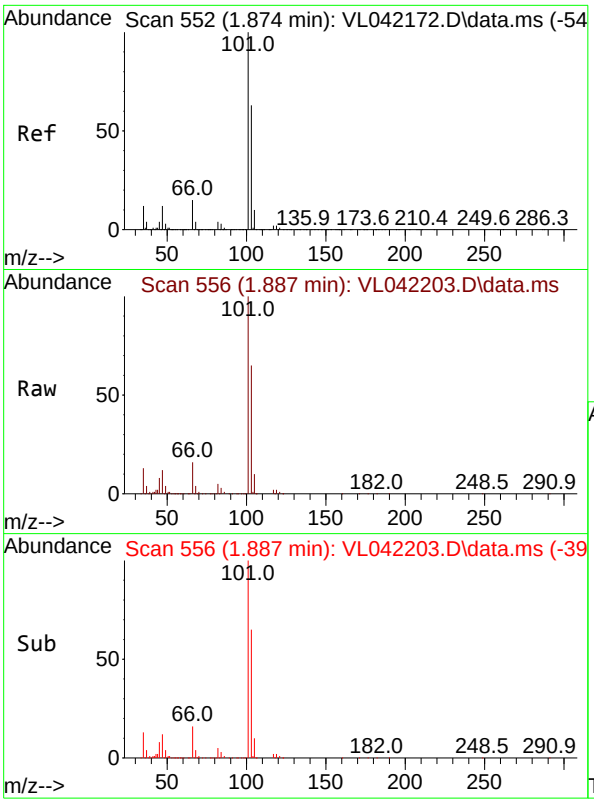


#10
Heptane
Concen: 9.239 ppbv
RT: 5.007 min Scan# 1520
Delta R.T. 0.035 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 298492

Ion	Ratio	Lower	Upper
43	100		
57	48.9	39.4	59.2



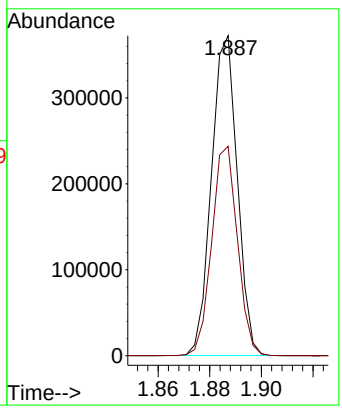


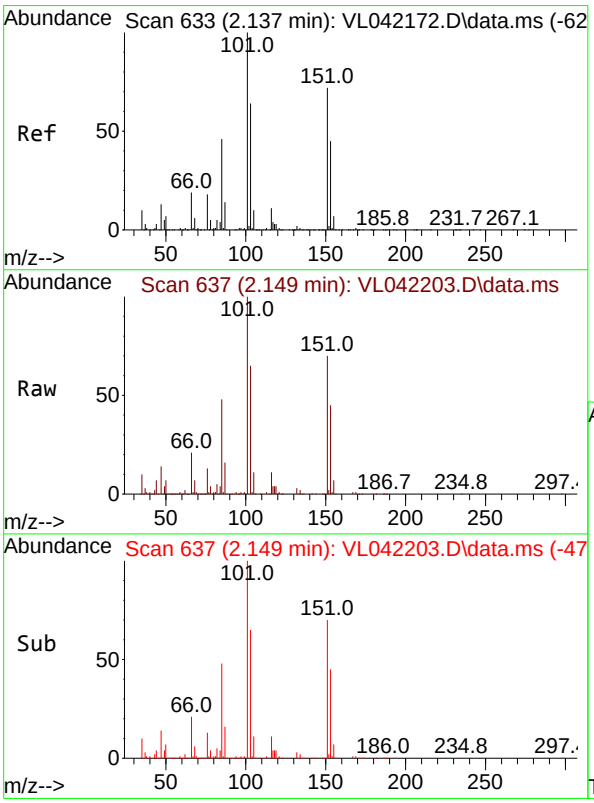
#11
Trichlorofluoromethane
Concen: 10.260 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:101 Resp: 258953

Ion	Ratio	Lower	Upper
101	100		
103	65.5	50.2	75.2

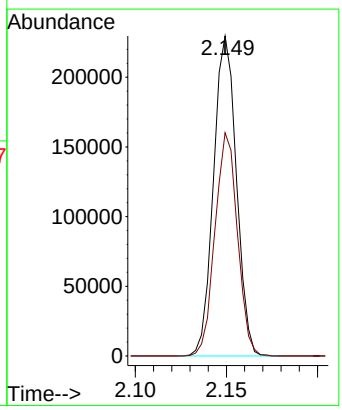


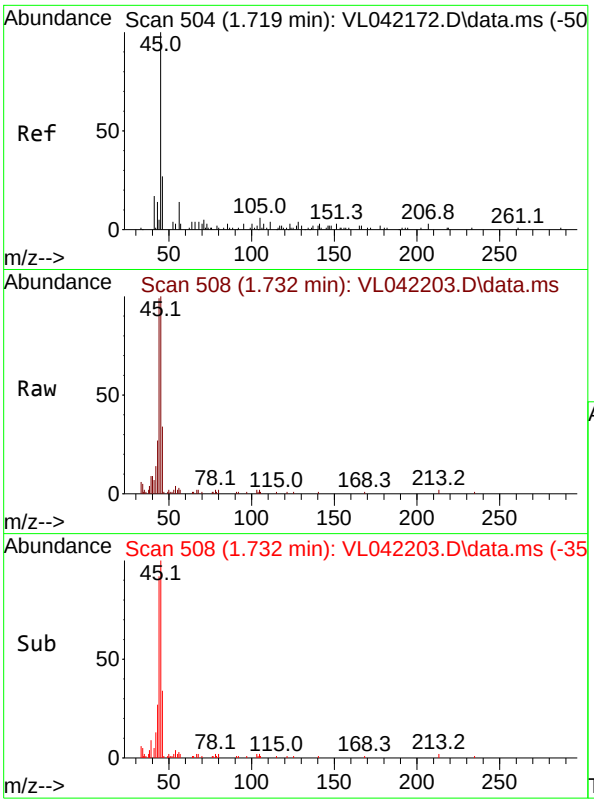


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.650 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:101 Resp: 200210

Ion	Ratio	Lower	Upper
101	100		
151	68.5	57.1	85.7



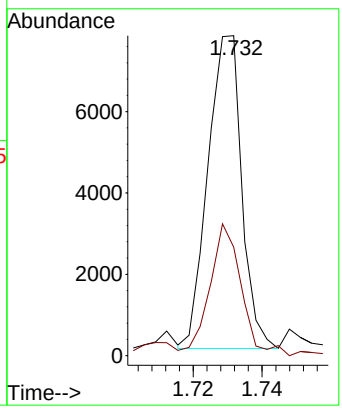


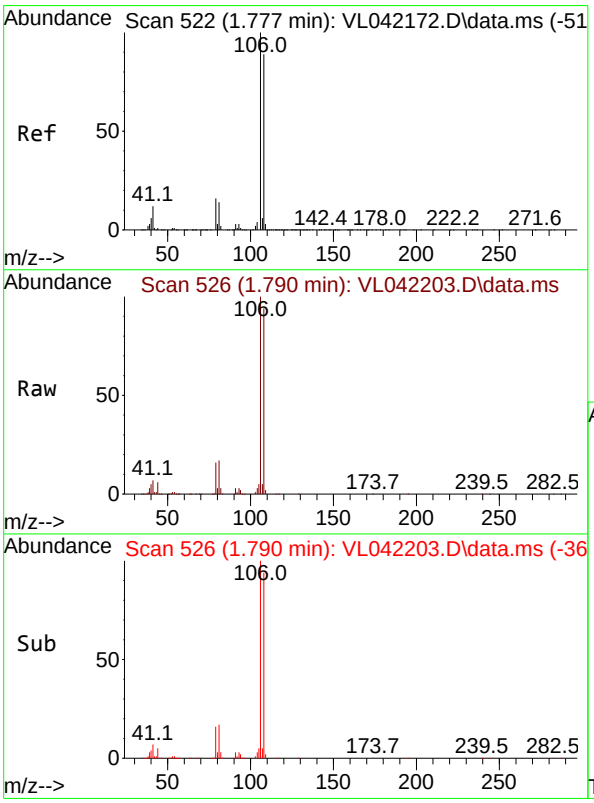
#13
Ethanol
Concen: 4.563 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 45 Resp: 5239

Ion	Ratio	Lower	Upper
45	100		
46	44.4	20.2	80.8

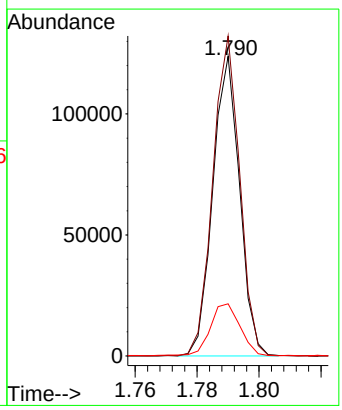


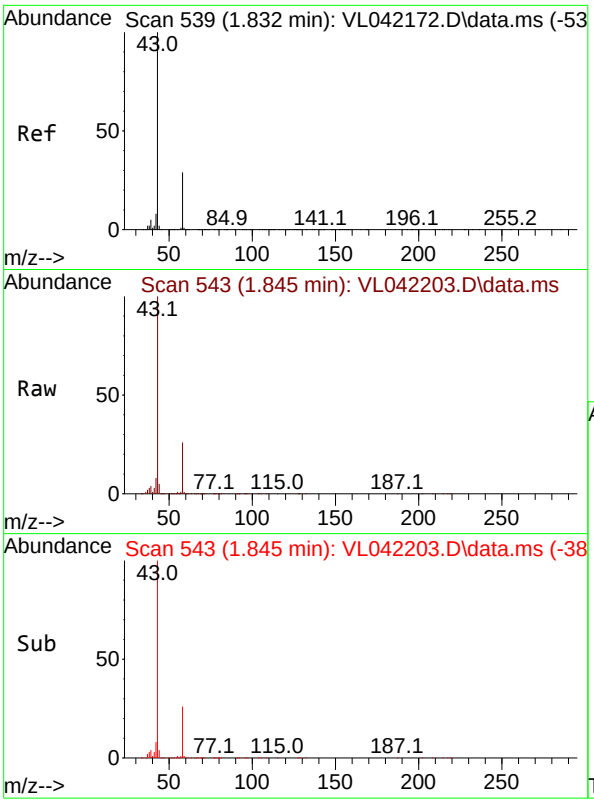


#14
Bromoethene
Concen: 9.361 ppbv
RT: 1.790 min Scan# 526
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:108 Resp: 74401

Ion	Ratio	Lower	Upper
108	100		
106	107.1	86.8	130.2
79	20.2	15.0	22.6



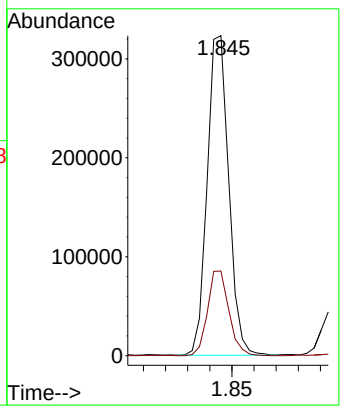


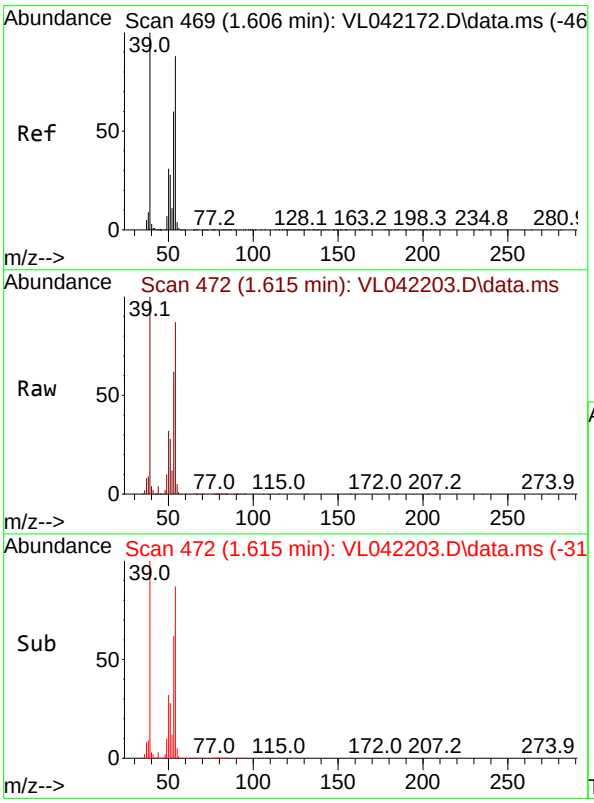
#15
Acetone
Concen: 8.888 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 43 Resp: 218378

Ion	Ratio	Lower	Upper
43	100		
58	26.4	23.2	34.8

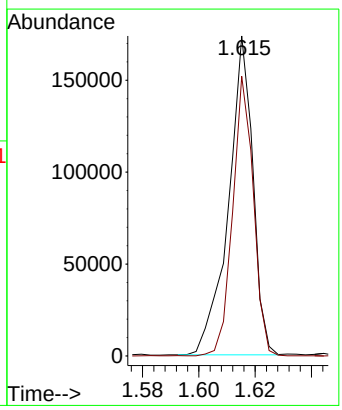


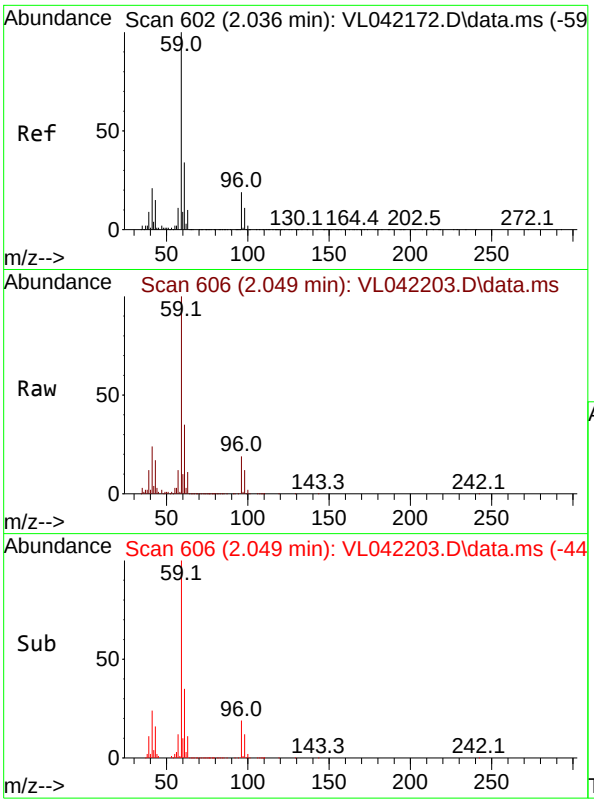


#16
1,3-Butadiene
Concen: 8.688 ppbv
RT: 1.615 min Scan# 472
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 39 Resp: 104247

Ion	Ratio	Lower	Upper
39	100		
54	74.6	60.7	91.1



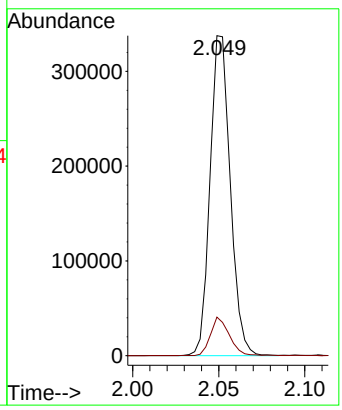


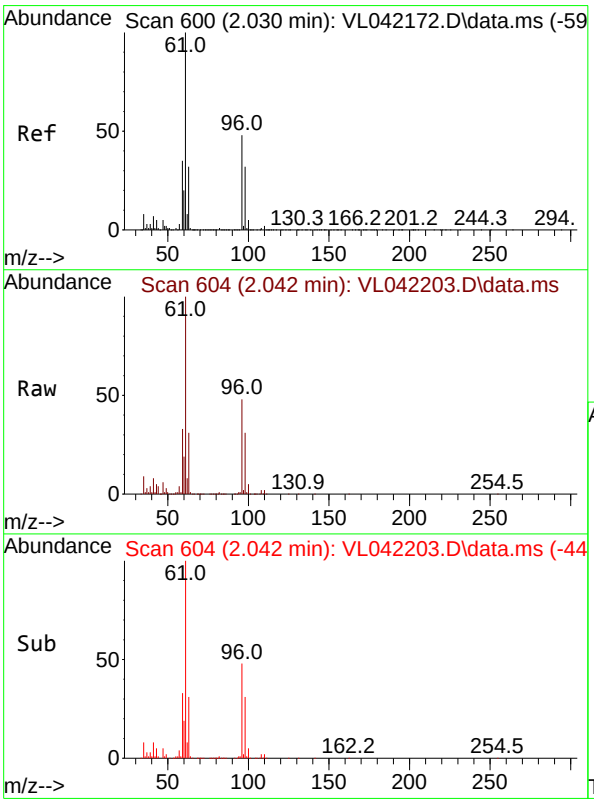
#17
tert-Butyl alcohol
Concen: 9.038 ppbv
RT: 2.049 min Scan# 6
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 59 Resp: 276592

Ion	Ratio	Lower	Upper
59	100		
57	11.4	8.9	13.3

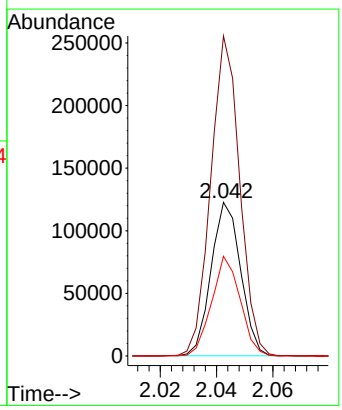


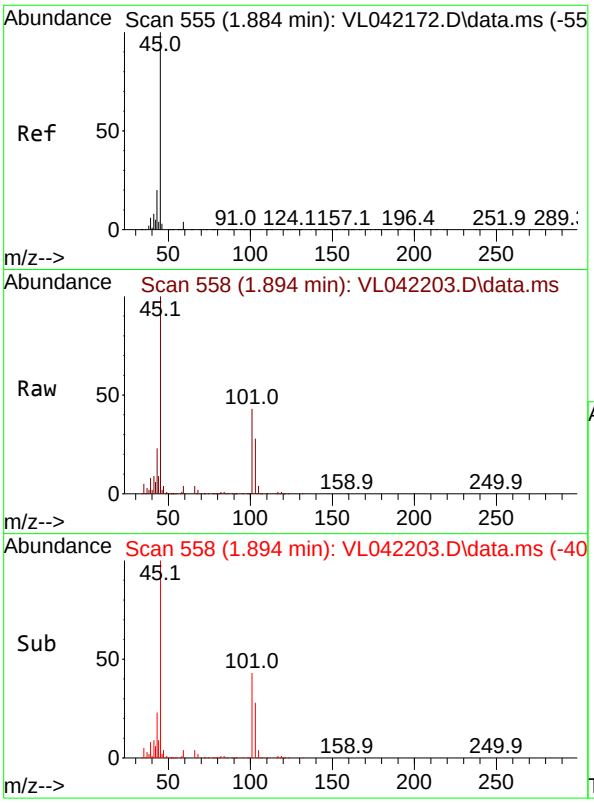


#18
1,1-Dichloroethene
Concen: 9.202 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 96 Resp: 89252

Ion	Ratio	Lower	Upper
96	100		
61	208.4	167.6	251.4
98	65.0	53.5	80.3



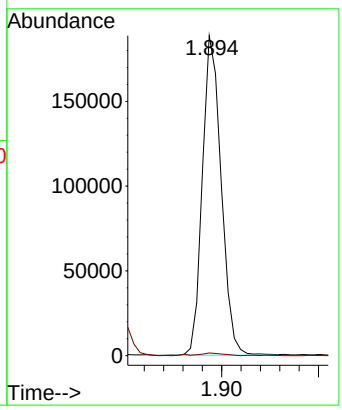


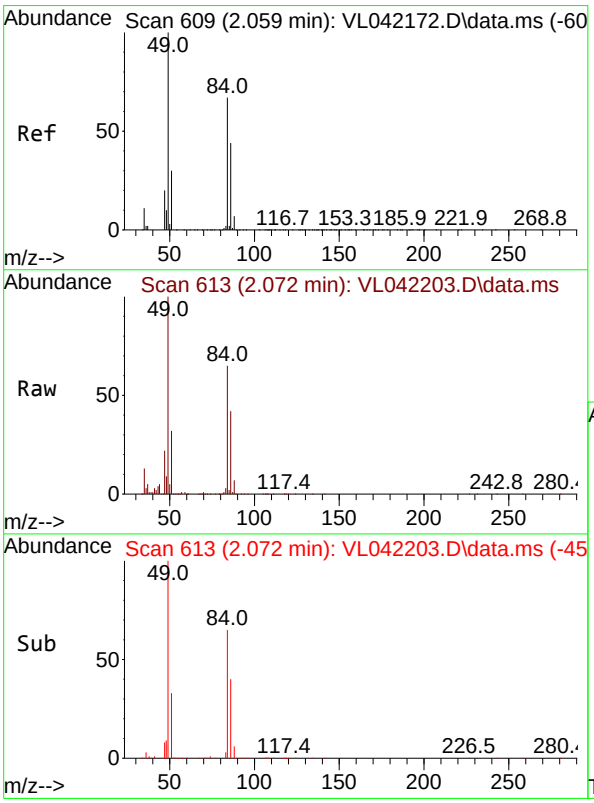
#19
Isopropyl Alcohol
Concen: 9.193 ppbv
RT: 1.894 min Scan# 5
Delta R.T. 0.009 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 45 Resp: 127449

Ion	Ratio	Lower	Upper
45	100		
58	45.3	36.9	55.3

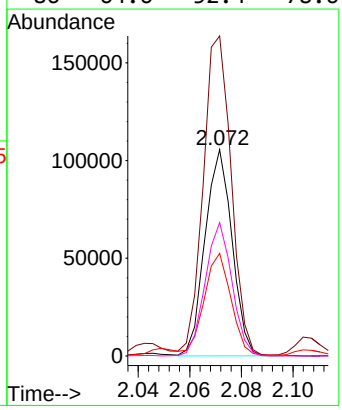


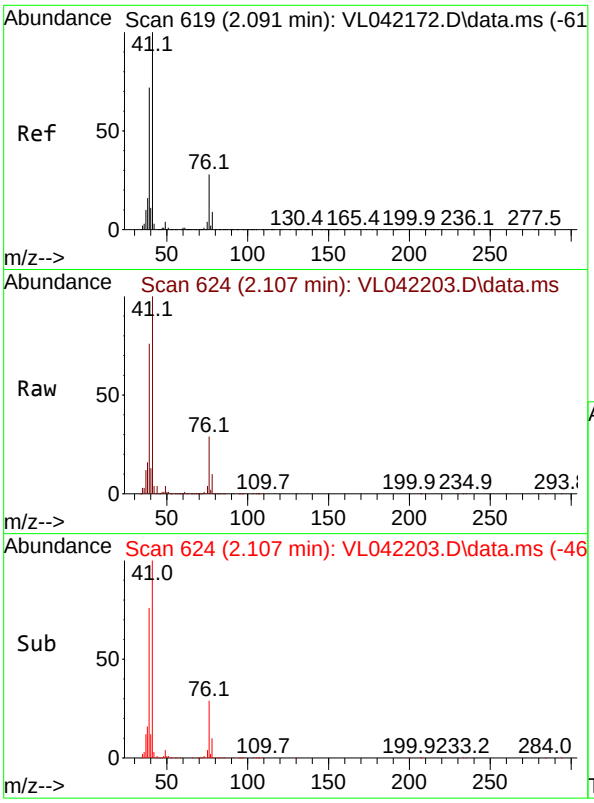


#20
Methylene Chloride
Concen: 8.391 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 84 Resp: 76788

Ion	Ratio	Lower	Upper
84	100		
49	154.6	120.2	180.4
51	49.3	37.4	56.0
86	64.6	52.4	78.6



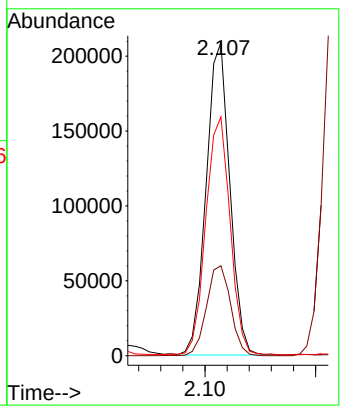


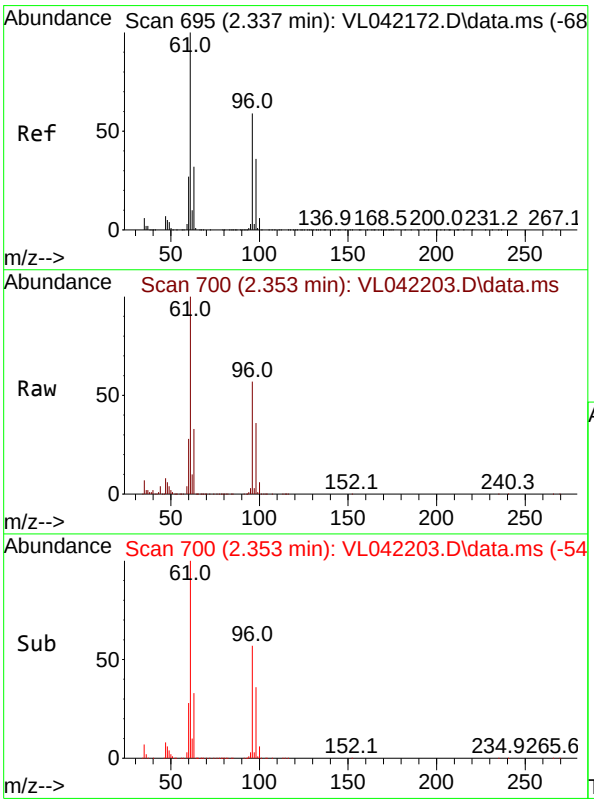
#21
Allyl Chloride
Concen: 8.938 ppbv
RT: 2.107 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 41 Resp: 154876

Ion	Ratio	Lower	Upper
41	100		
76	29.3	24.1	36.1
39	78.1	61.1	91.7

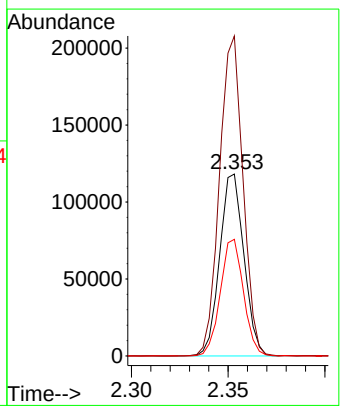


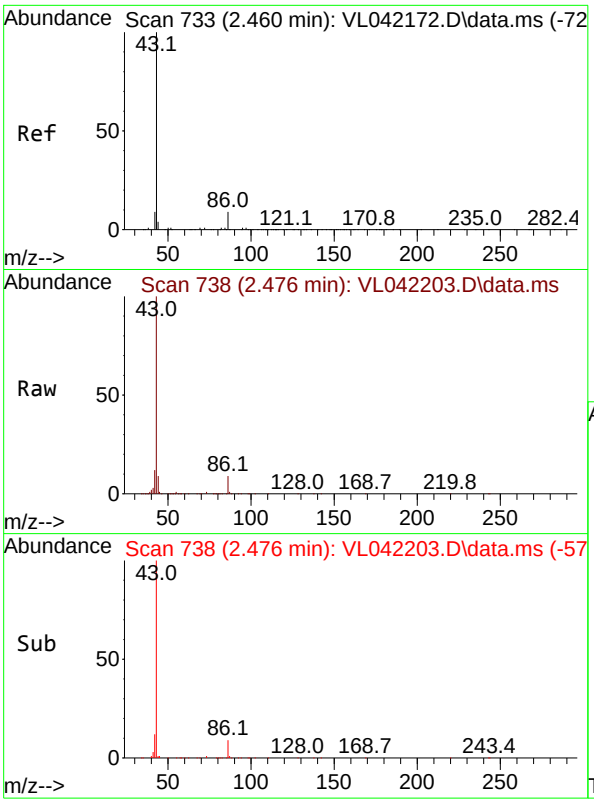


#22
trans-1,2-Dichloroethene
Concen: 9.157 ppbv
RT: 2.353 min Scan# 700
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 96 Resp: 102643

Ion	Ratio	Lower	Upper
96	100		
61	175.8	136.6	204.8
98	64.1	49.4	74.2



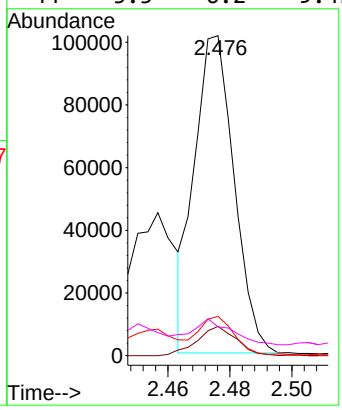


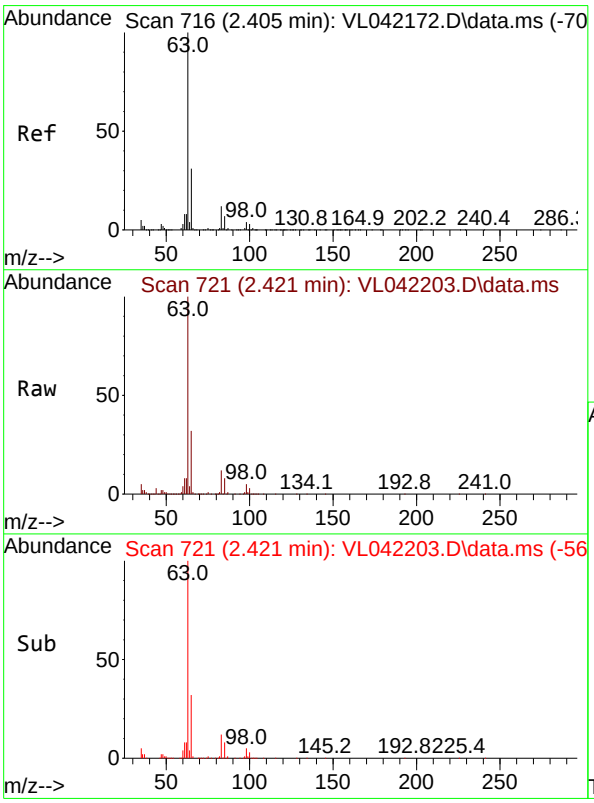
#23
Vinyl Acetate
Concen: 8.441 ppbv
RT: 2.476 min Scan# 7
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 43 Resp: 89760

Ion	Ratio	Lower	Upper
43	100		
86	9.2	5.5	8.3#
42	11.8	8.6	13.0
44	5.5	6.2	9.4#

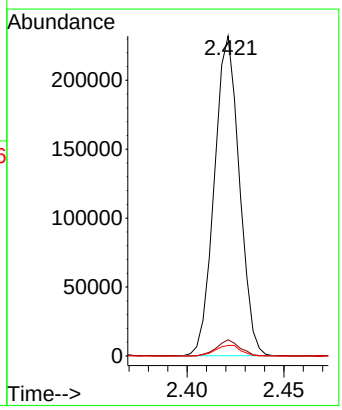


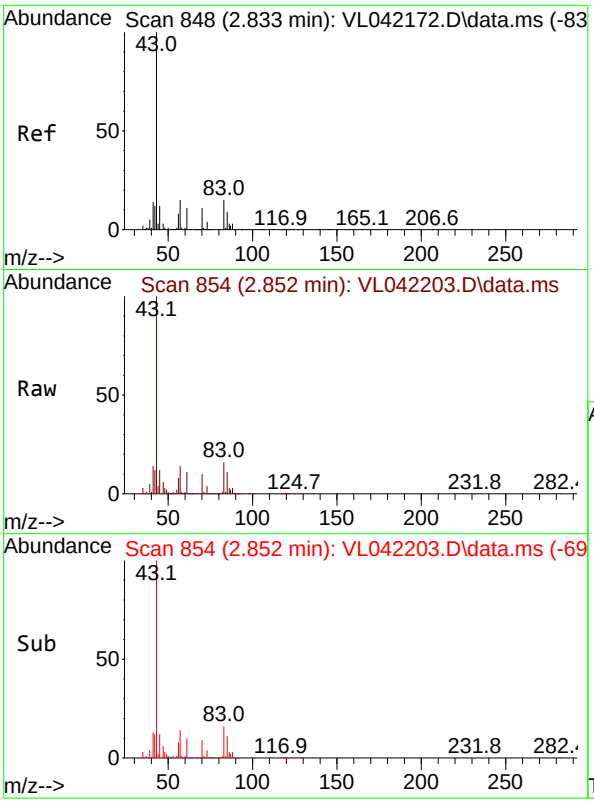


#24
1,1-Dichloroethane
Concen: 10.026 ppbv
RT: 2.421 min Scan# 721
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 63 Resp: 208334

Ion	Ratio	Lower	Upper
63	100		
98	5.0	2.3	6.8
100	3.3	1.6	4.7



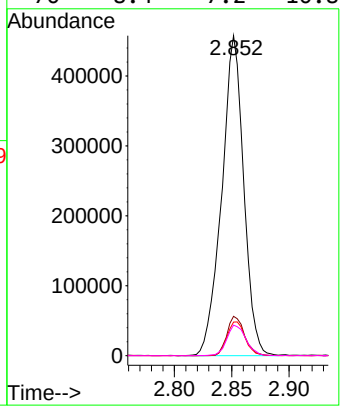


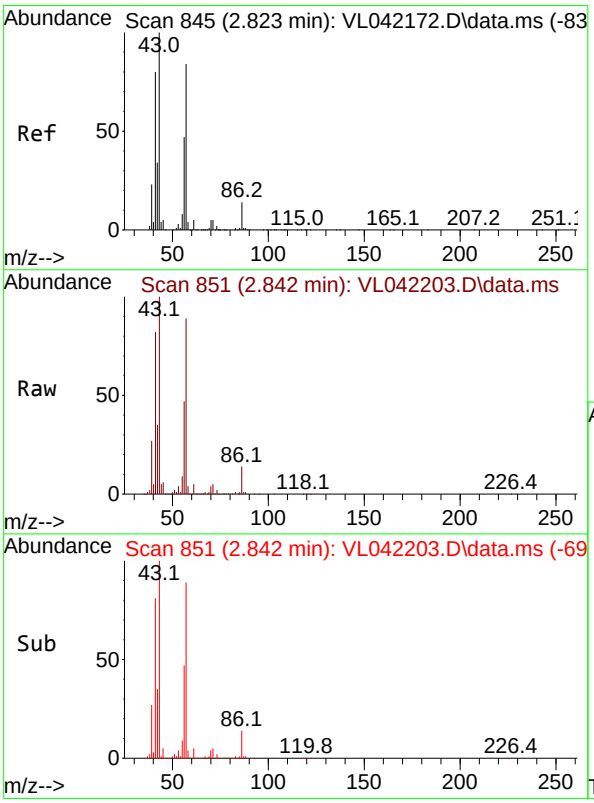
#25
Ethyl Acetate
Concen: 9.565 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 43 Resp: 609975

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.2	12.2
61	8.8	7.3	10.9
70	8.4	7.2	10.8

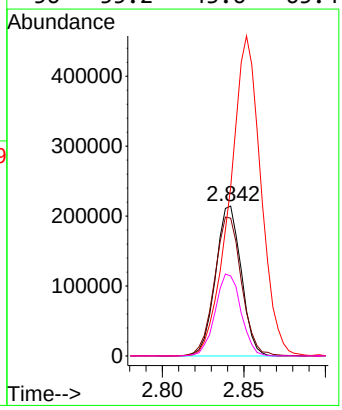


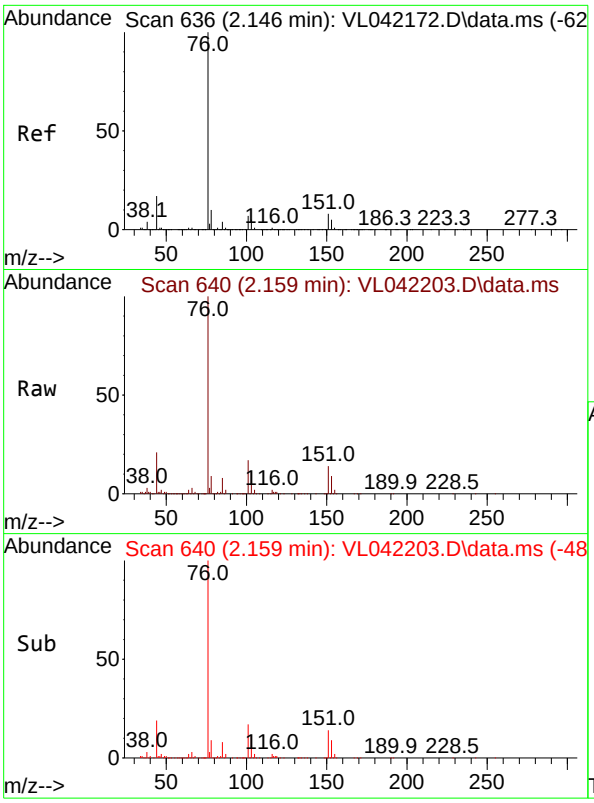


#26
Hexane
Concen: 9.511 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 57 Resp: 234267

Ion	Ratio	Lower	Upper
57	100		
41	97.6	76.6	114.8
43	261.1	207.8	311.8
56	55.2	43.6	65.4



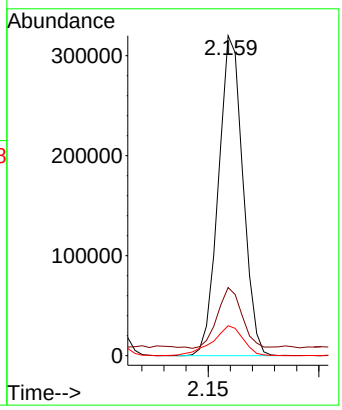


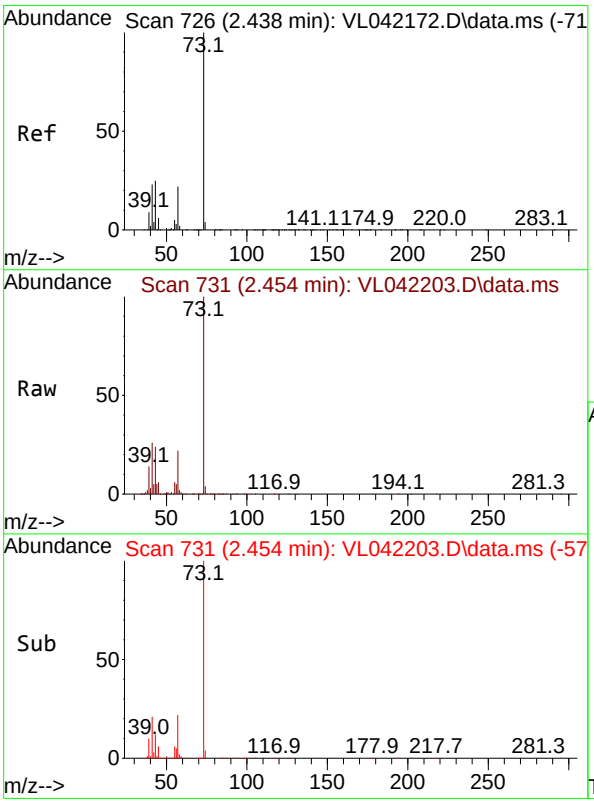
#27
Carbon Disulfide
Concen: 9.310 ppbv
RT: 2.159 min Scan# 64
Delta R.T. 0.013 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 76 Resp: 245905

Ion	Ratio	Lower	Upper
76	100		
44	19.4	14.7	22.1
78	11.7	9.3	13.9

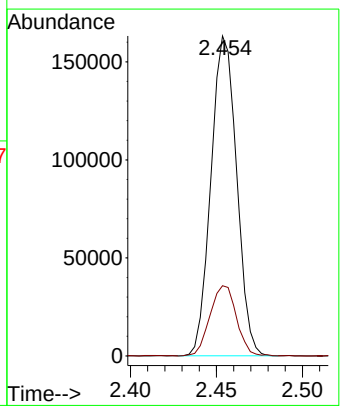


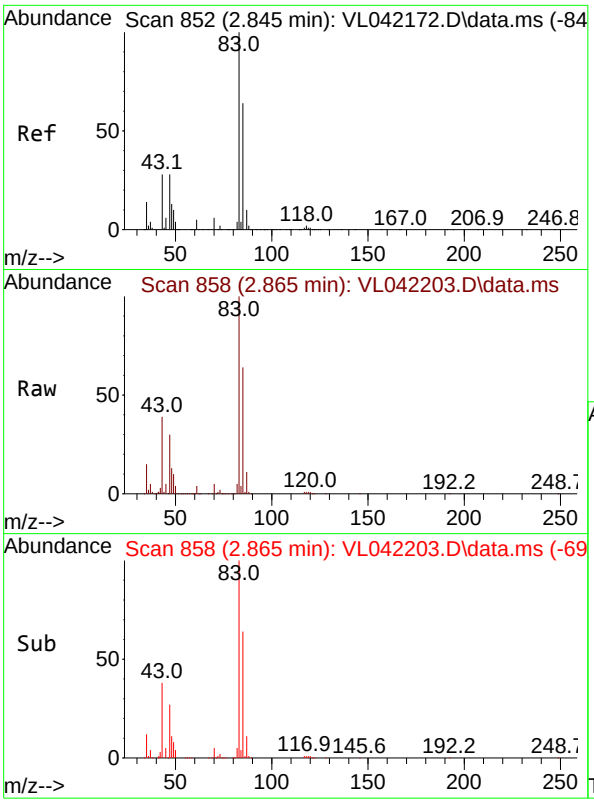


#28
Methyl tert-Butyl Ether
Concen: 11.046 ppbv
RT: 2.454 min Scan# 731
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 73 Resp: 169404

Ion	Ratio	Lower	Upper
73	100		
57	22.8	20.5	30.7



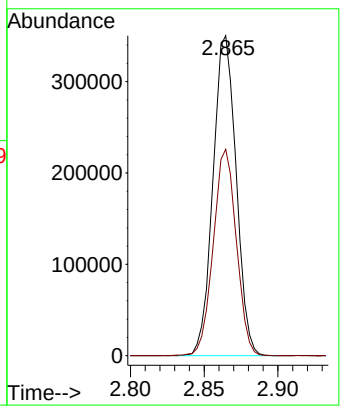


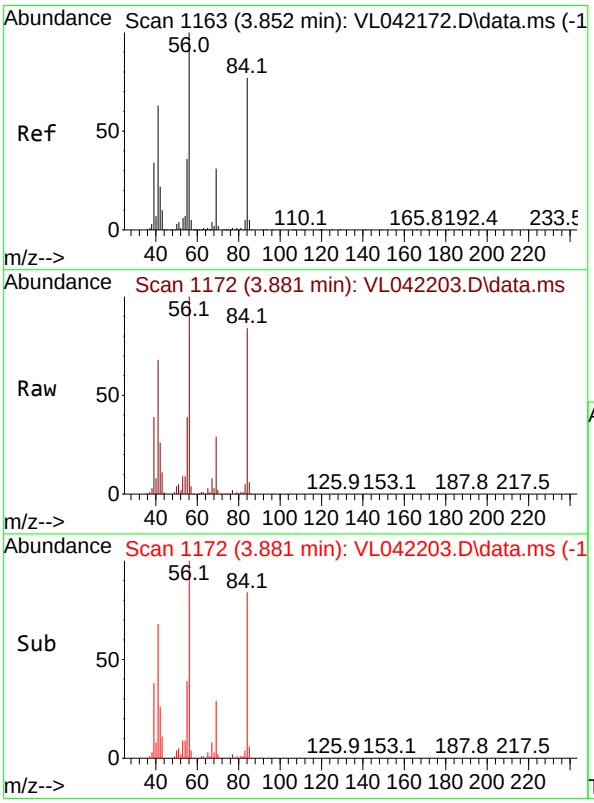
#29
Chloroform
Concen: 10.616 ppbv
RT: 2.865 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 83 Resp: 382690

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.4	77.2

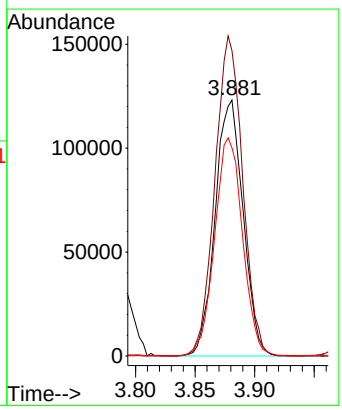


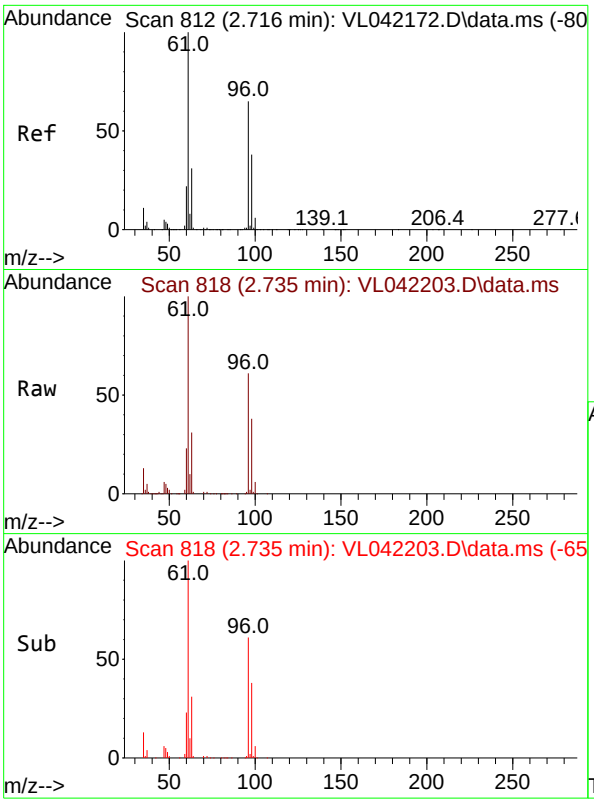


#30
Cyclohexane
Concen: 9.393 ppbv
RT: 3.881 min Scan# 1172
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 84 Resp: 200894

Ion	Ratio	Lower	Upper
84	100		
56	123.7	102.8	154.2
41	85.2	66.5	99.7



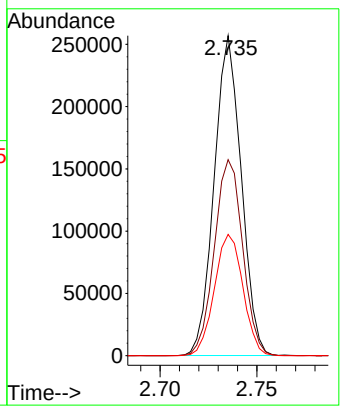


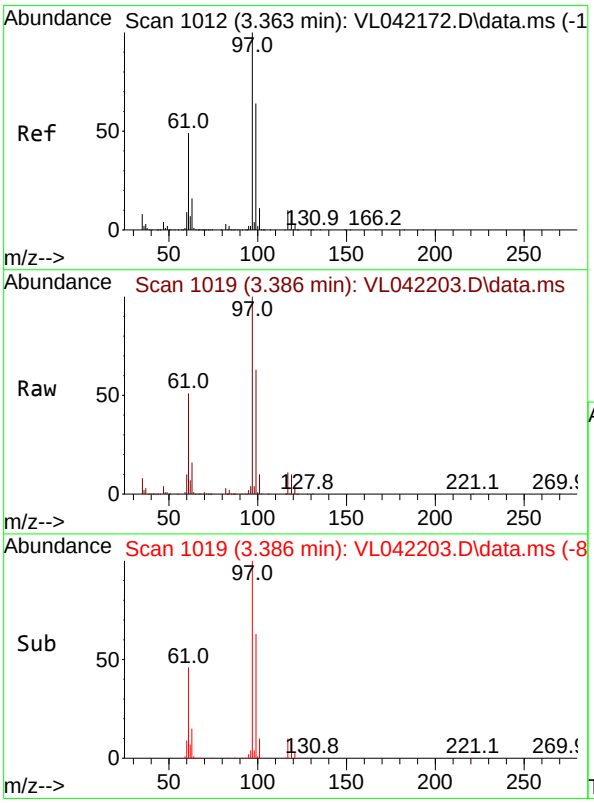
#31
cis-1,2-Dichloroethene
Concen: 9.981 ppbv
RT: 2.735 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 61 Resp: 249599

Ion	Ratio	Lower	Upper
61	100		
96	61.3	51.8	77.8
98	38.0	30.6	46.0

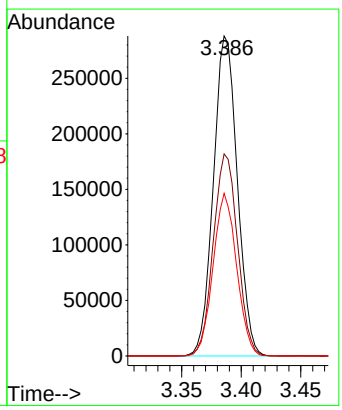


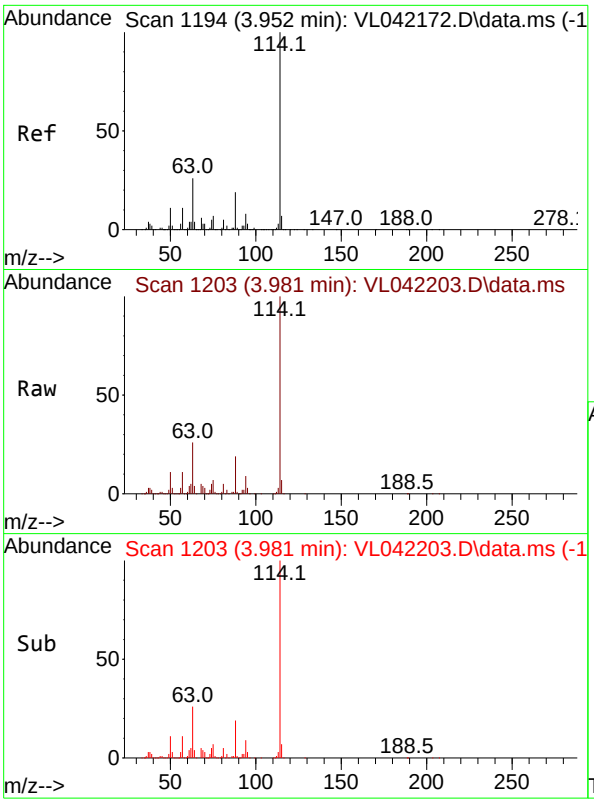


#32
1,1,1-Trichloroethane
Concen: 9.753 ppbv
RT: 3.386 min Scan# 1019
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 97 Resp: 402506

Ion	Ratio	Lower	Upper
97	100		
99	63.8	51.5	77.3
61	50.0	38.7	58.1



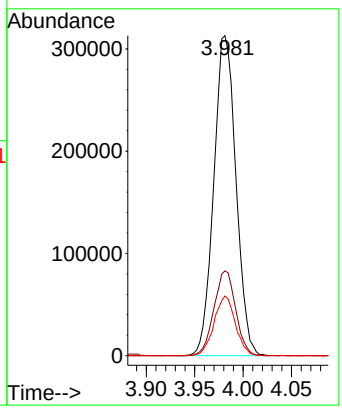


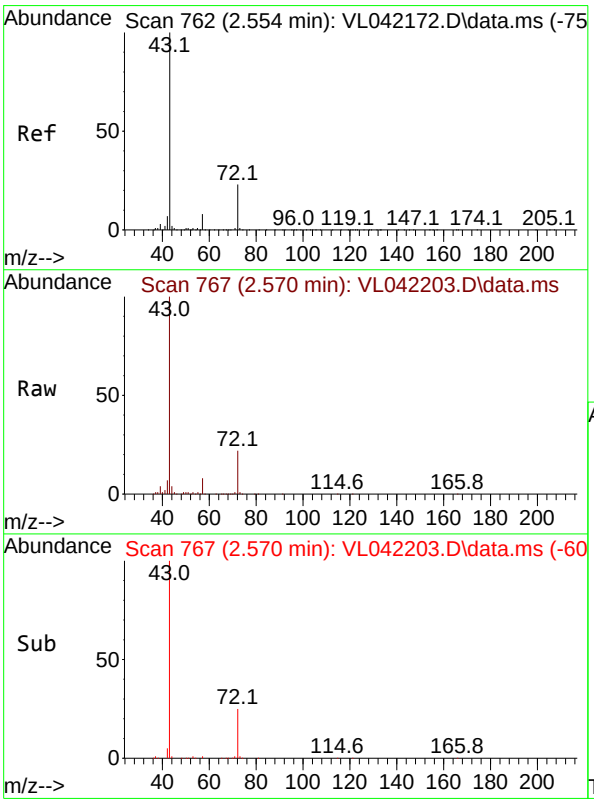
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.981 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:114 Resp: 498986

Ion	Ratio	Lower	Upper
114	100		
63	26.0	20.7	31.1
88	17.9	15.0	22.4

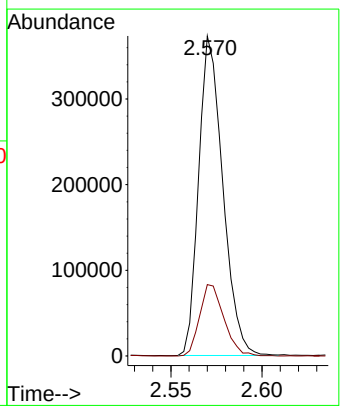


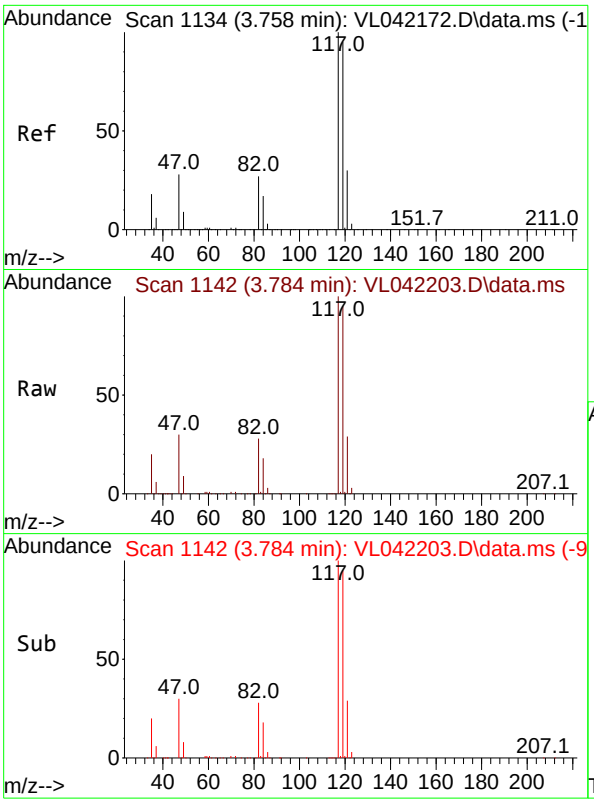


#34
2-Butanone
Concen: 9.504 ppbv
RT: 2.570 min Scan# 767
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 343896

Ion	Ratio	Lower	Upper
43	100		
72	22.6	18.2	27.2



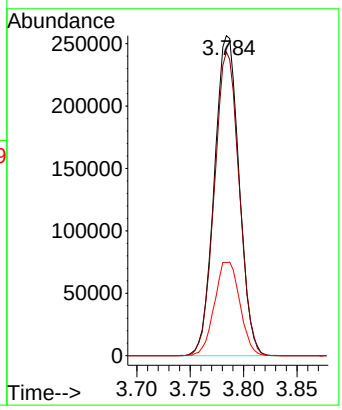


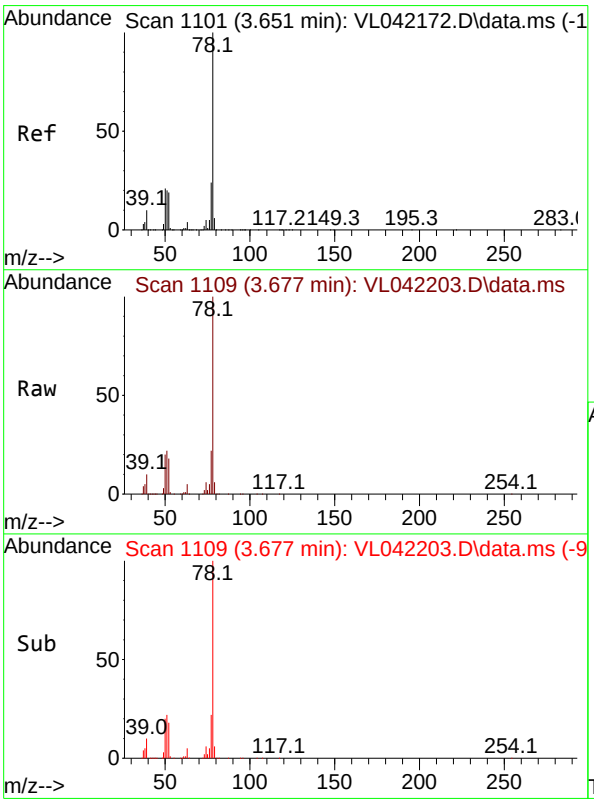
#35
Carbon Tetrachloride
Concen: 10.578 ppbv
RT: 3.784 min Scan# 11
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:117 Resp: 412312

Ion	Ratio	Lower	Upper
117	100		
119	94.9	76.2	114.2
121	29.1	24.2	36.4

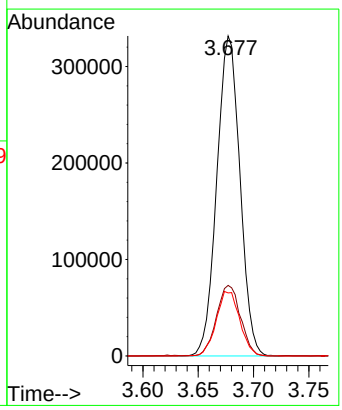


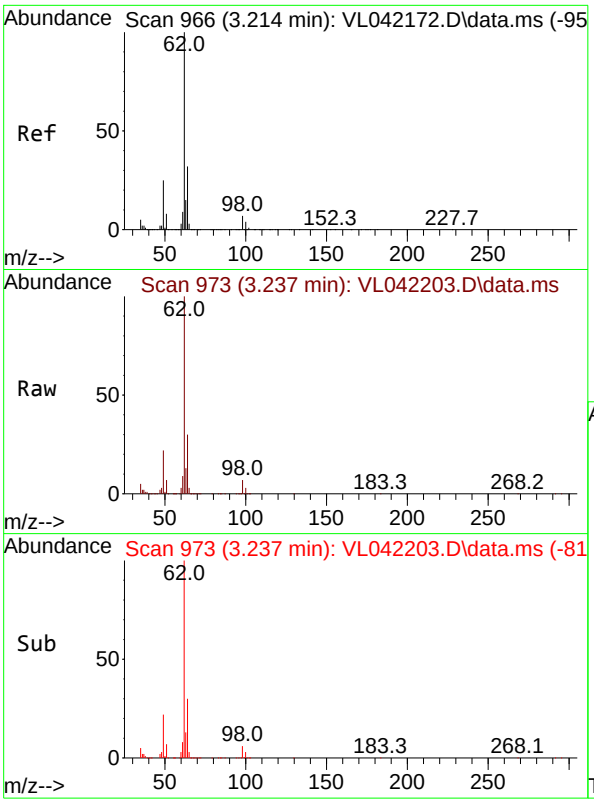


#36
Benzene
Concen: 9.754 ppbv
RT: 3.677 min Scan# 1109
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 78 Resp: 482499

Ion	Ratio	Lower	Upper
78	100		
77	22.0	19.1	28.7
50	19.7	16.6	24.8



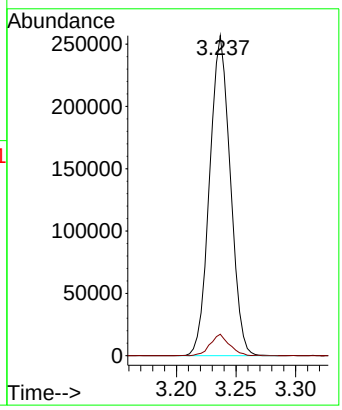


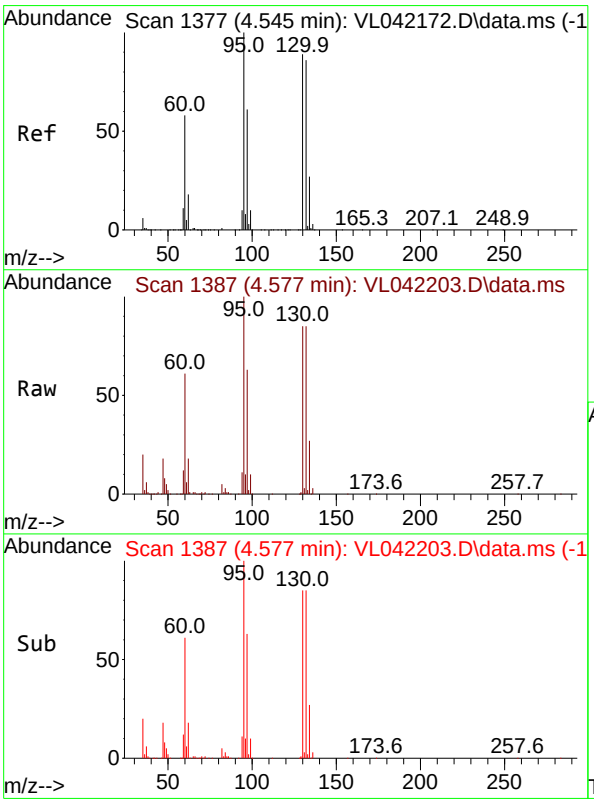
#37
1,2-Dichloroethane
Concen: 10.964 ppbv
RT: 3.237 min Scan# 9
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 62 Resp: 310502

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.4	8.2

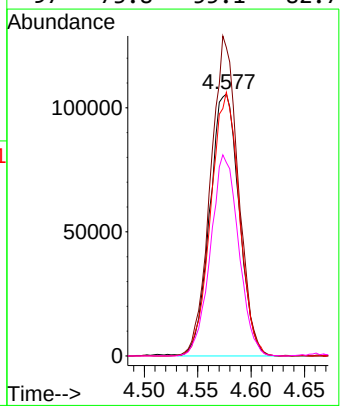


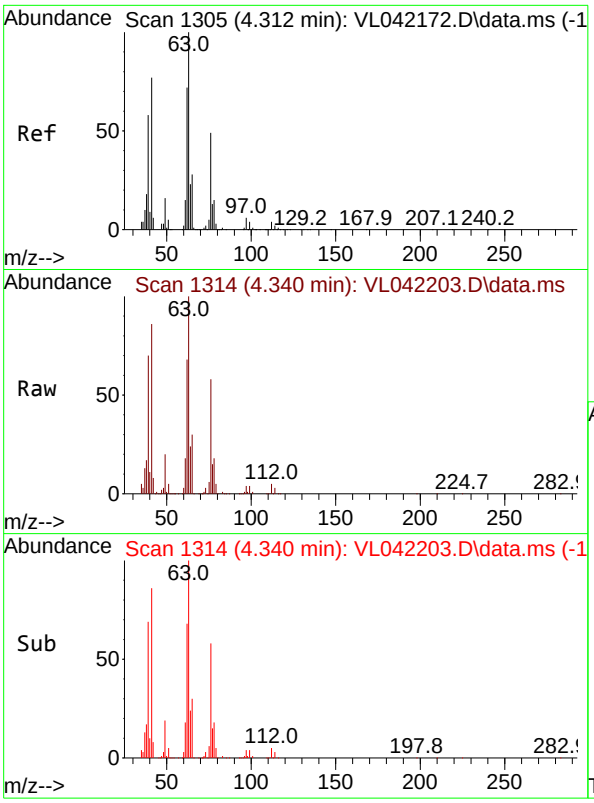


#38
Trichloroethene
Concen: 9.749 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:130 Resp: 201215

Ion	Ratio	Lower	Upper
130	100		
95	117.8	89.8	134.8
132	100.6	77.4	116.2
97	73.8	55.1	82.7



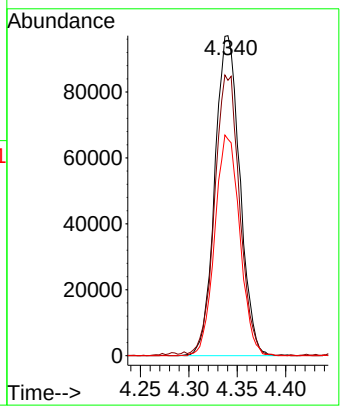


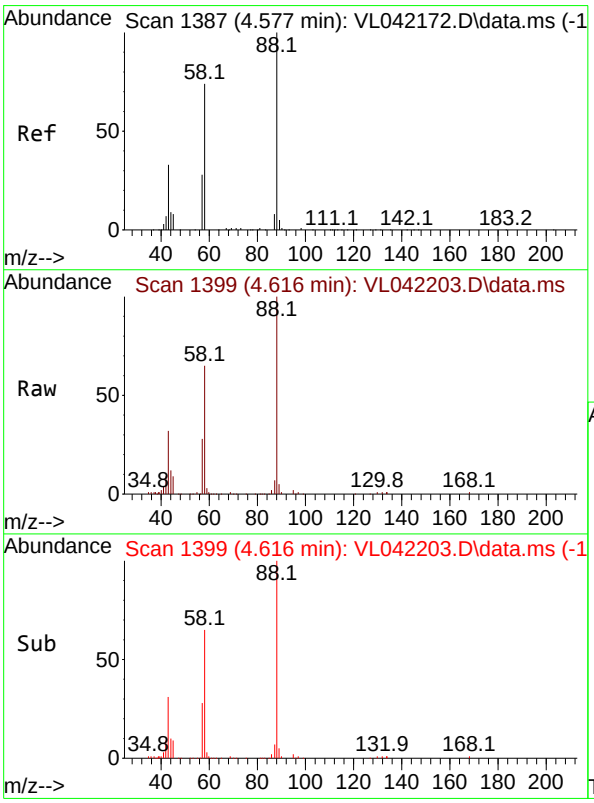
#39
1,2-Dichloropropane
Concen: 9.665 ppbv
RT: 4.340 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 63 Resp: 174119

Ion	Ratio	Lower	Upper
63	100		
41	85.8	61.7	92.5
62	67.7	57.6	86.4

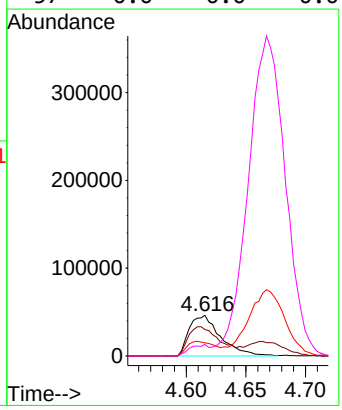


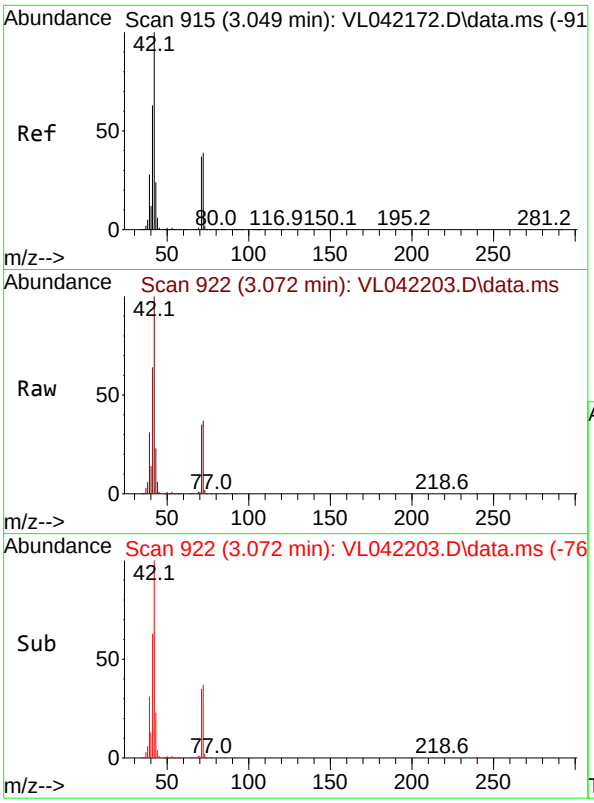


#40
1,4-Dioxane
Concen: 8.872 ppbv
RT: 4.616 min Scan# 1399
Delta R.T. 0.039 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 88 Resp: 84833

Ion	Ratio	Lower	Upper
88	100		
58	71.2	62.7	94.1
43	34.3	23.0	34.4
57	0.0	0.0	0.0



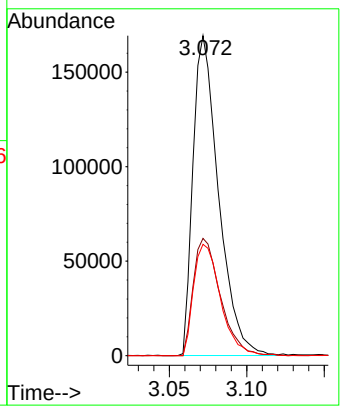


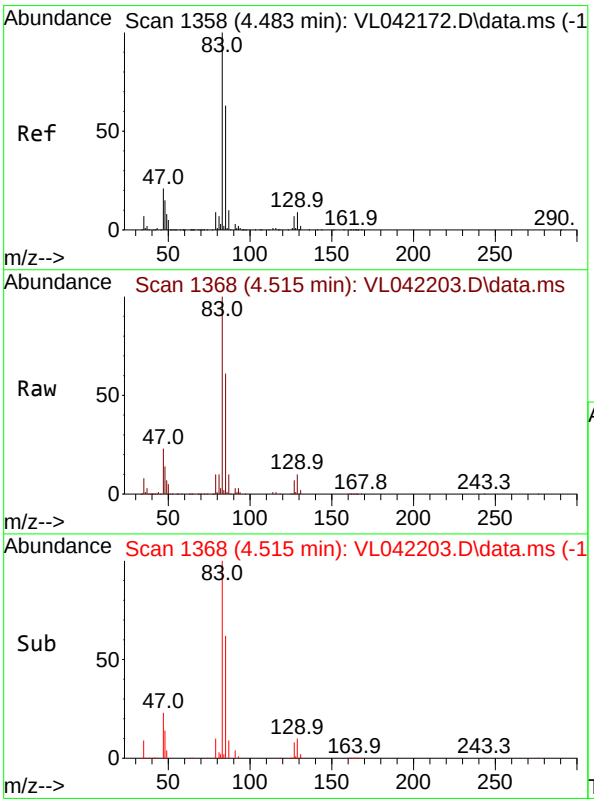
#41
Tetrahydrofuran
Concen: 9.318 ppbv
RT: 3.072 min Scan# 9
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 42 Resp: 194140

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	36.9	30.2	45.4

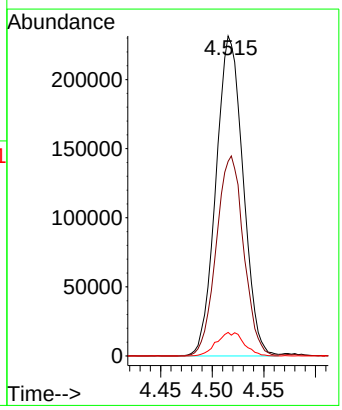


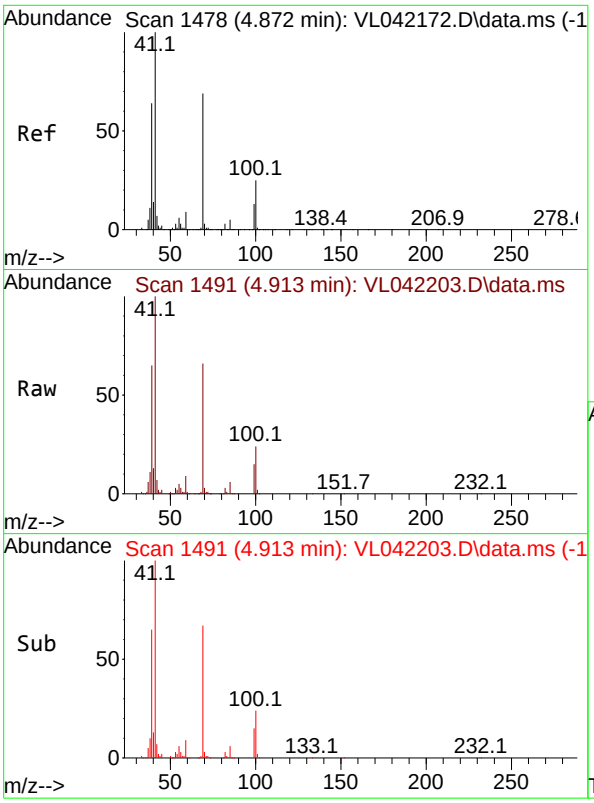


#42
Bromodichloromethane
Concen: 10.831 ppbv
RT: 4.515 min Scan# 1368
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 83 Resp: 422881

Ion	Ratio	Lower	Upper
83	100		
85	60.8	50.5	75.7
127	7.4	5.9	8.9



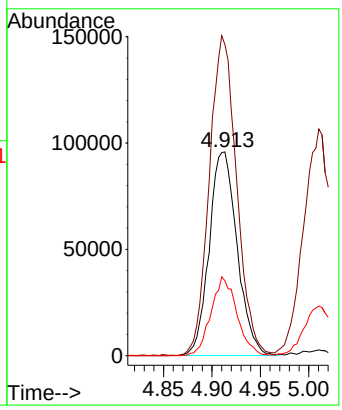


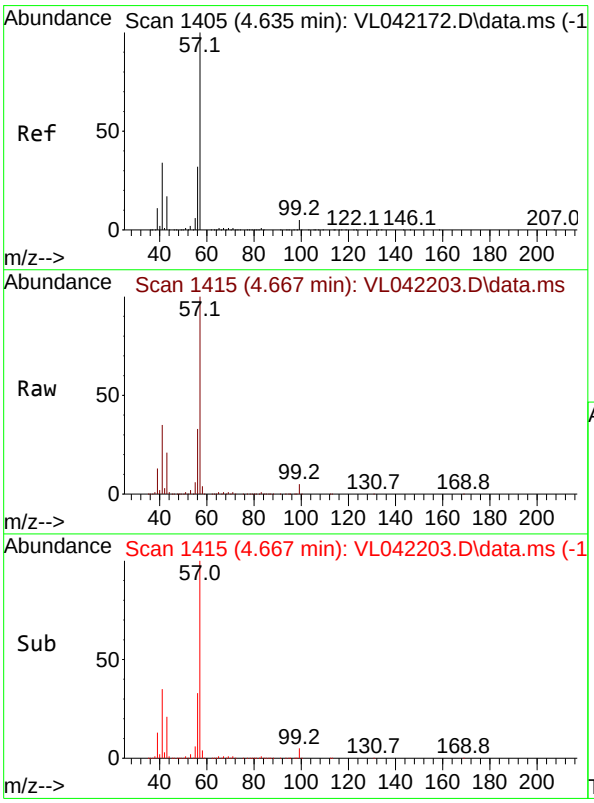
#43
Methyl Methacrylate
Concen: 9.163 ppbv
RT: 4.913 min Scan# 14
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 69 Resp: 191894

Ion	Ratio	Lower	Upper
69	100		
41	154.2	123.8	185.6
100	36.0	28.4	42.6

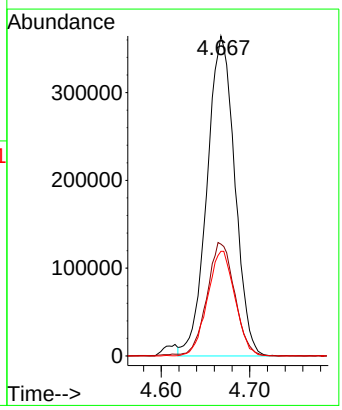


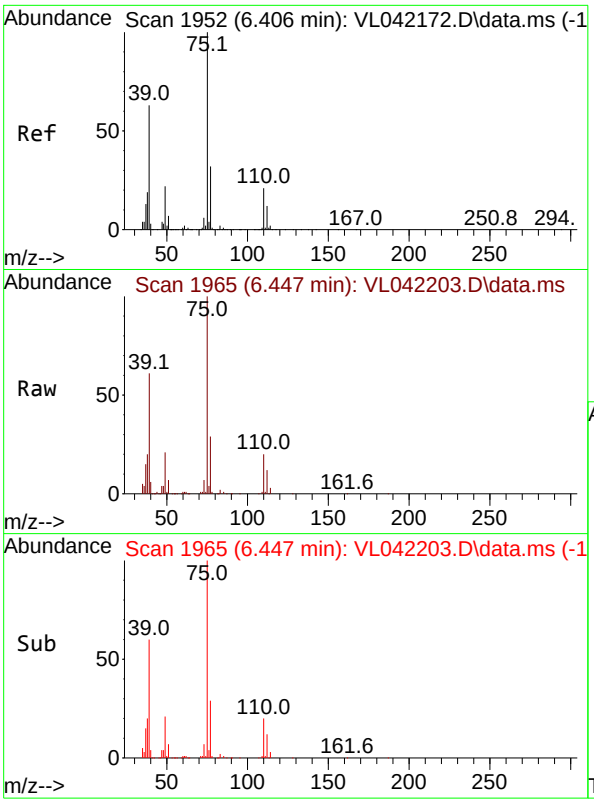


#44
2,2,4-Trimethylpentane
Concen: 9.483 ppbv
RT: 4.667 min Scan# 1415
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 57 Resp: 792762

Ion	Ratio	Lower	Upper
57	100		
41	35.5	26.8	40.2
56	32.6	25.6	38.4



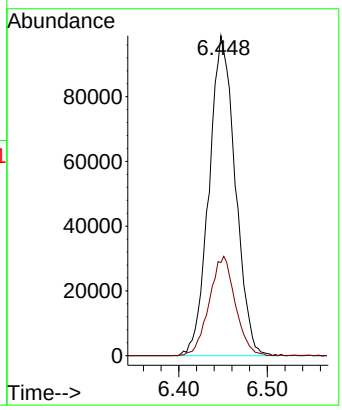


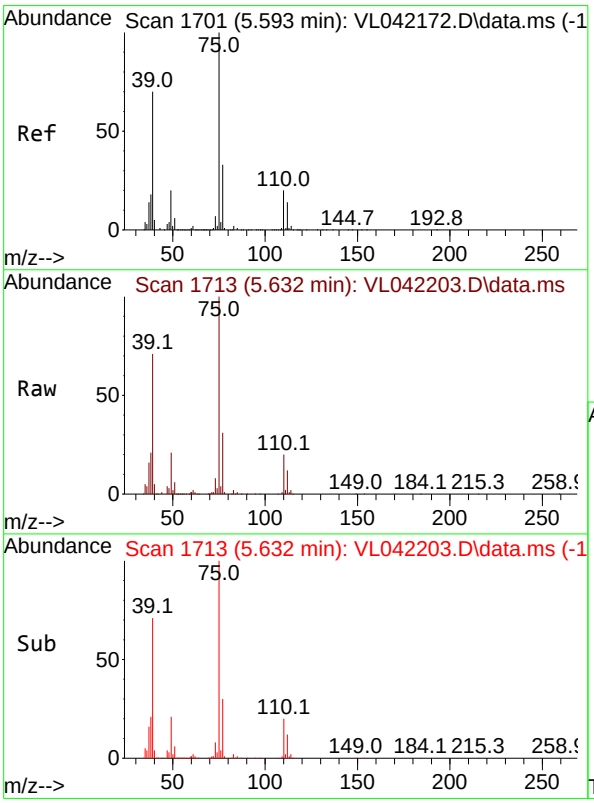
#45
t-1,3-Dichloropropene
Concen: 9.071 ppbv
RT: 6.447 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 75 Resp: 203792

Ion	Ratio	Lower	Upper
75	100		
77	29.1	26.0	39.0

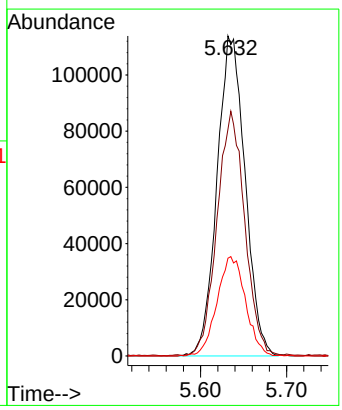


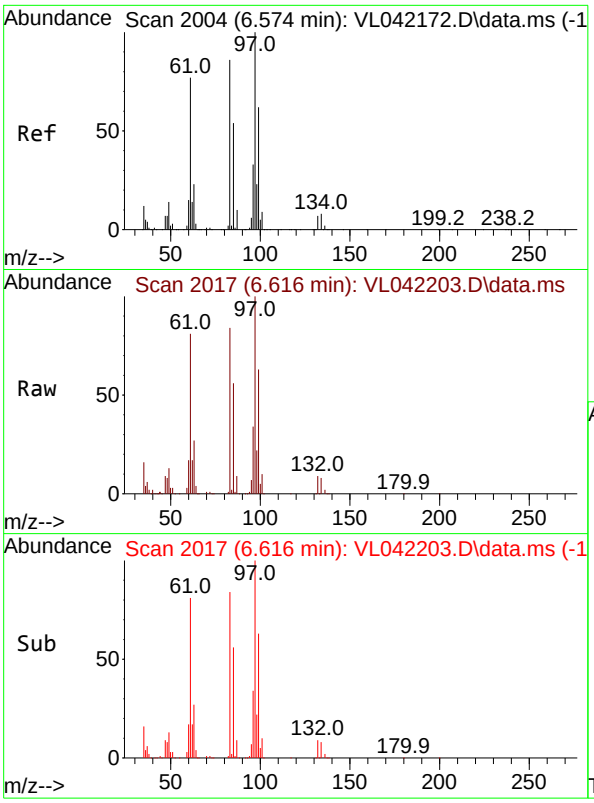


#46
cis-1,3-Dichloropropene
Concen: 9.371 ppbv
RT: 5.632 min Scan# 1713
Delta R.T. 0.039 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 75 Resp: 258084

Ion	Ratio	Lower	Upper
75	100		
39	70.4	55.8	83.6
77	30.5	26.0	39.0



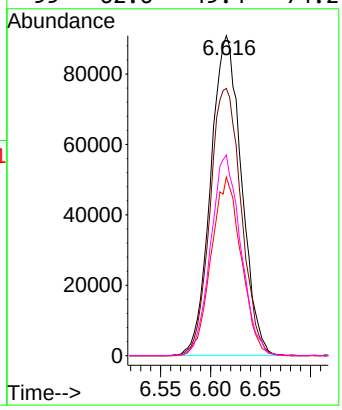


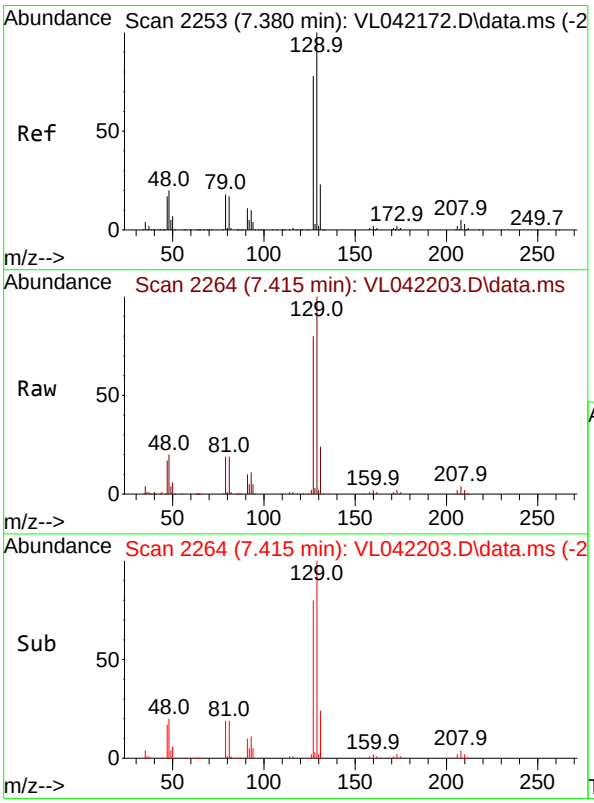
#47
1,1,2-Trichloroethane
Concen: 10.197 ppbv
RT: 6.616 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 97 Resp: 194204

Ion	Ratio	Lower	Upper
97	100		
83	83.4	69.2	103.8
85	55.8	43.1	64.7
99	62.6	49.4	74.2

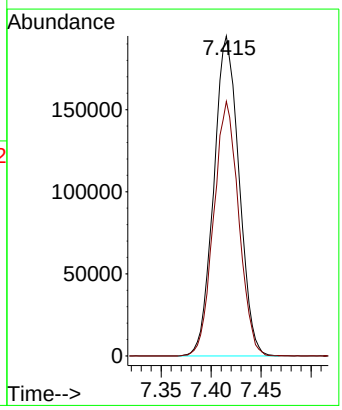


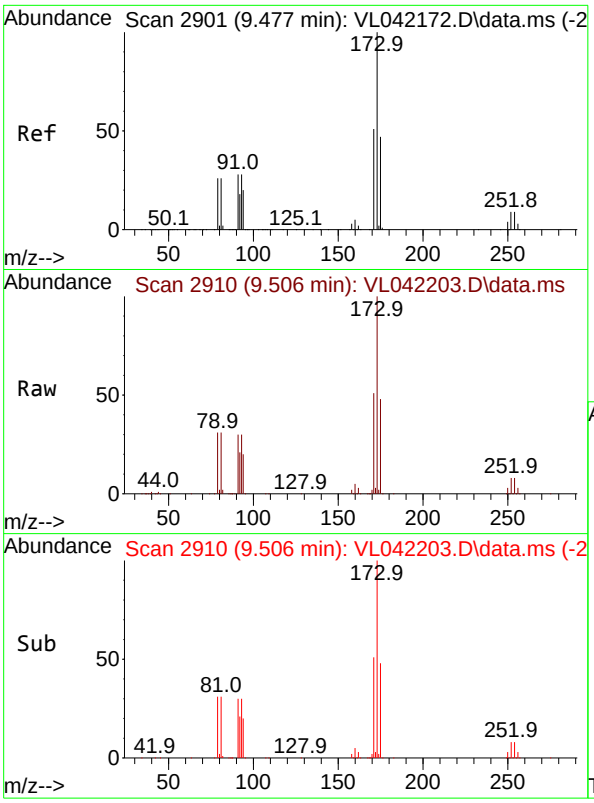


#48
Dibromochloromethane
Concen: 10.604 ppbv
RT: 7.415 min Scan# 2264
Delta R.T. 0.035 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:129 Resp: 342254

Ion	Ratio	Lower	Upper
129	100		
127	78.7	39.1	117.2



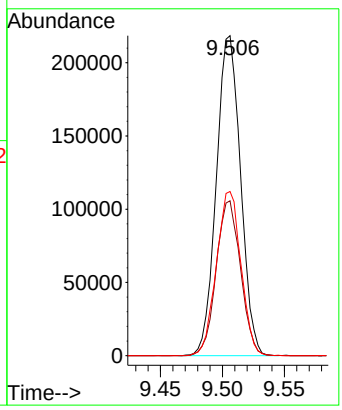


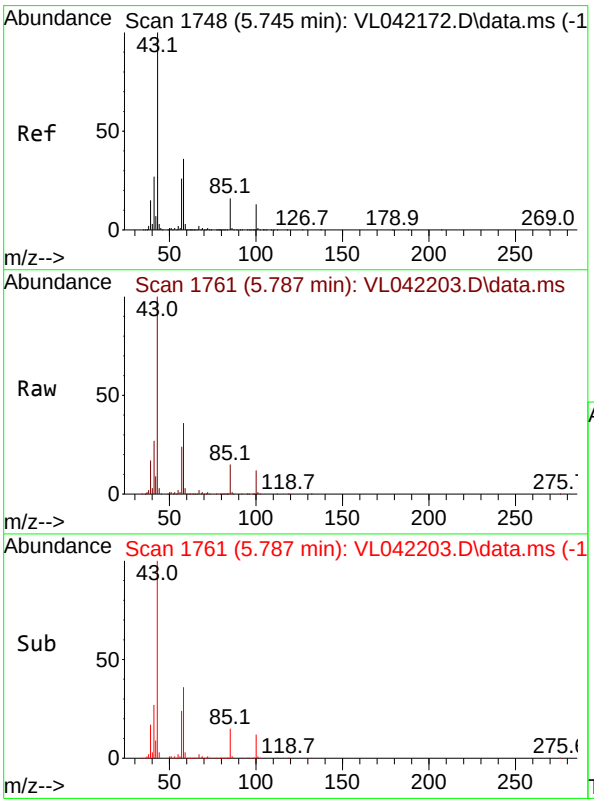
#49
Bromoform
Concen: 10.296 ppbv
RT: 9.506 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:173 Resp: 298349

Ion	Ratio	Lower	Upper
173	100		
175	48.6	38.6	57.8
171	52.0	41.8	62.6

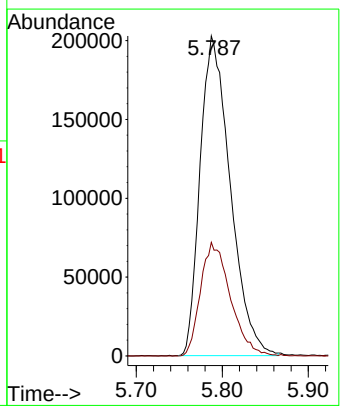


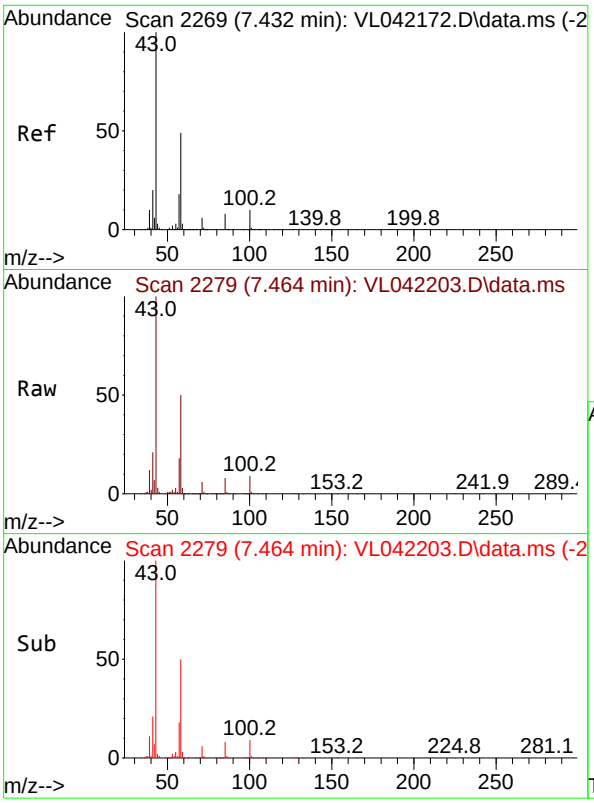


#50
4-Methyl-2-Pentanone
Concen: 8.603 ppbv
RT: 5.787 min Scan# 1761
Delta R.T. 0.042 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 43 Resp: 493320

Ion	Ratio	Lower	Upper
43	100		
58	35.2	29.0	43.6



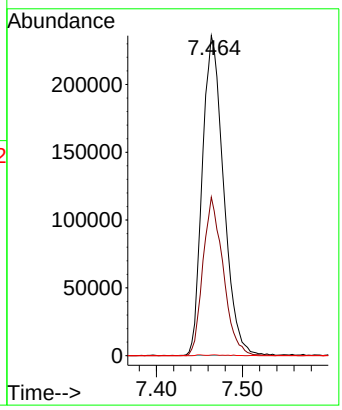


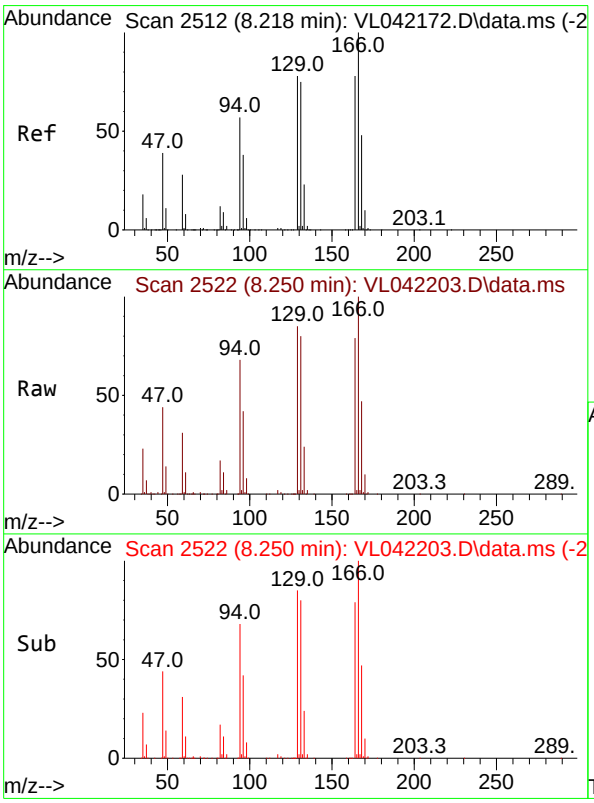
#51
2-Hexanone
Concen: 8.613 ppbv
RT: 7.464 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 43 Resp: 405558

Ion	Ratio	Lower	Upper
43	100		
58	47.4	39.7	59.5
98	0.1	0.1	0.1

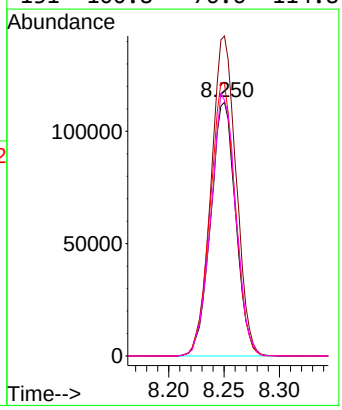


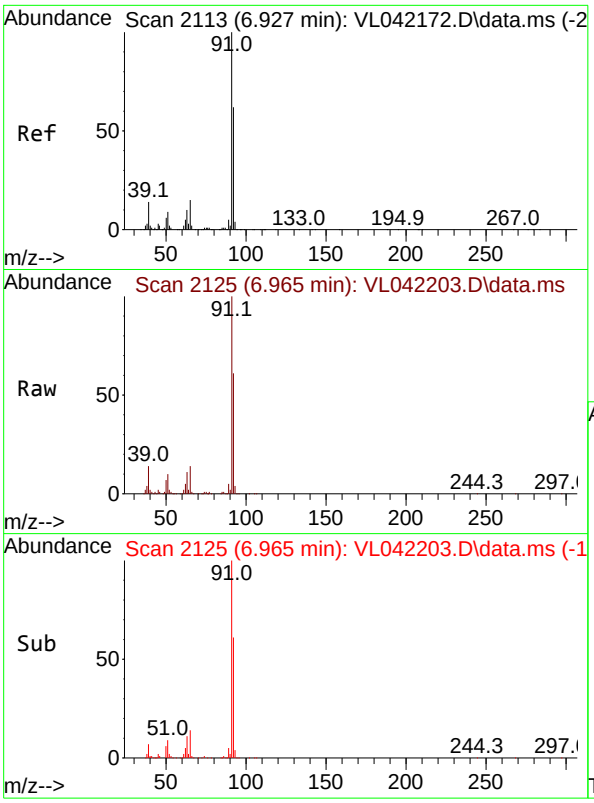


#52
Tetrachloroethene
Concen: 9.012 ppbv
RT: 8.250 min Scan# 2522
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:164 Resp: 176804

Ion	Ratio	Lower	Upper
164	100		
166	126.1	102.5	153.7
129	107.5	79.8	119.8
131	100.8	76.6	114.8



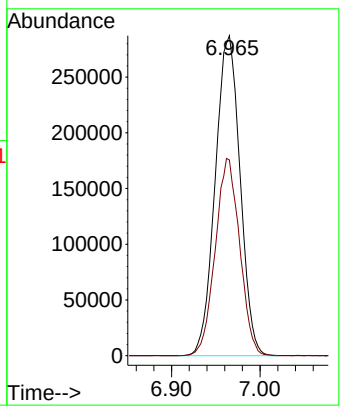


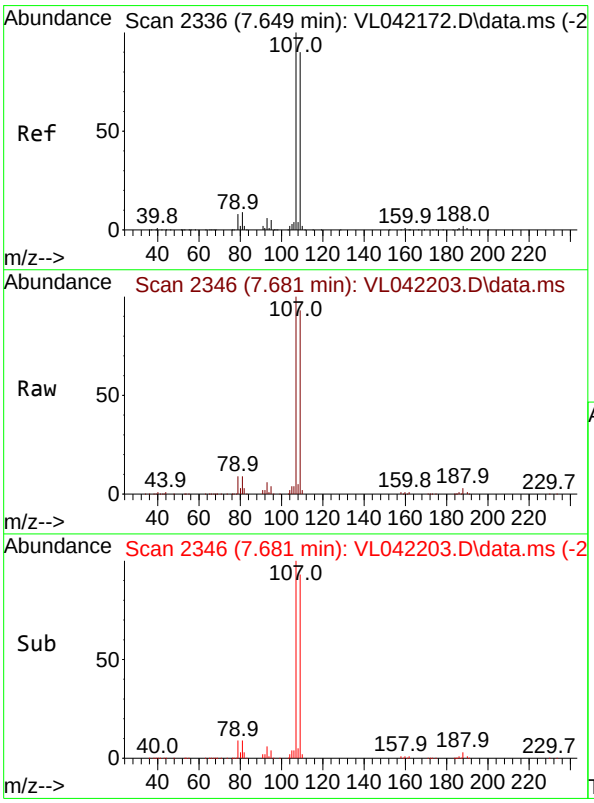
#53
Toluene
Concen: 9.555 ppbv
RT: 6.965 min Scan# 21
Delta R.T. 0.039 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 91 Resp: 560307

Ion	Ratio	Lower	Upper
91	100		
92	60.5	48.4	72.6

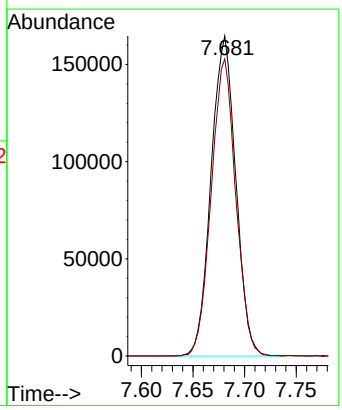


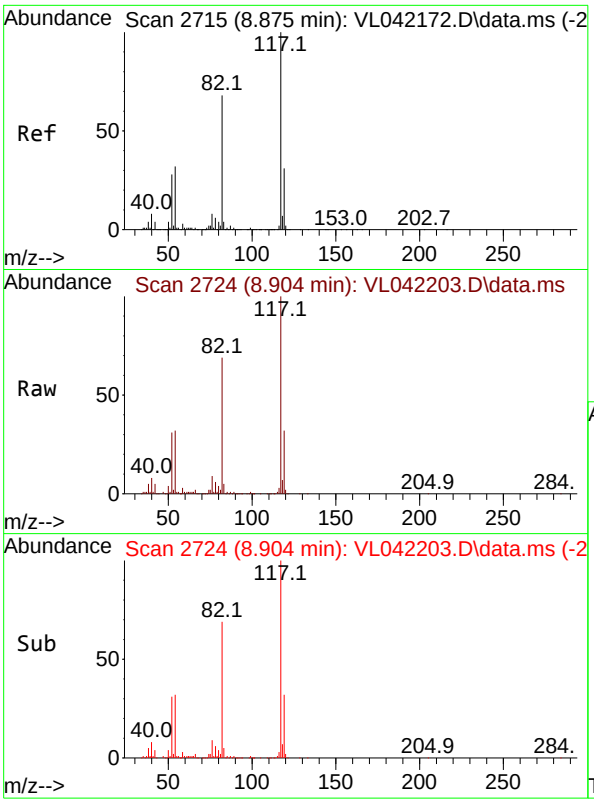


#54
1,2-Dibromoethane
Concen: 10.298 ppbv
RT: 7.681 min Scan# 2346
Delta R.T. 0.032 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:107 Resp: 273381

Ion	Ratio	Lower	Upper
107	100		
109	92.7	72.2	108.4



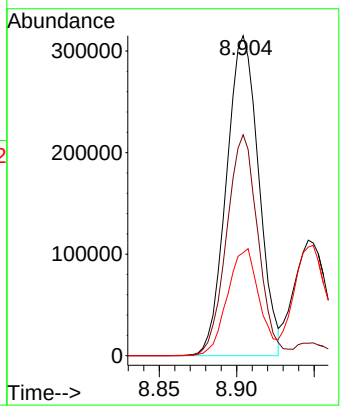


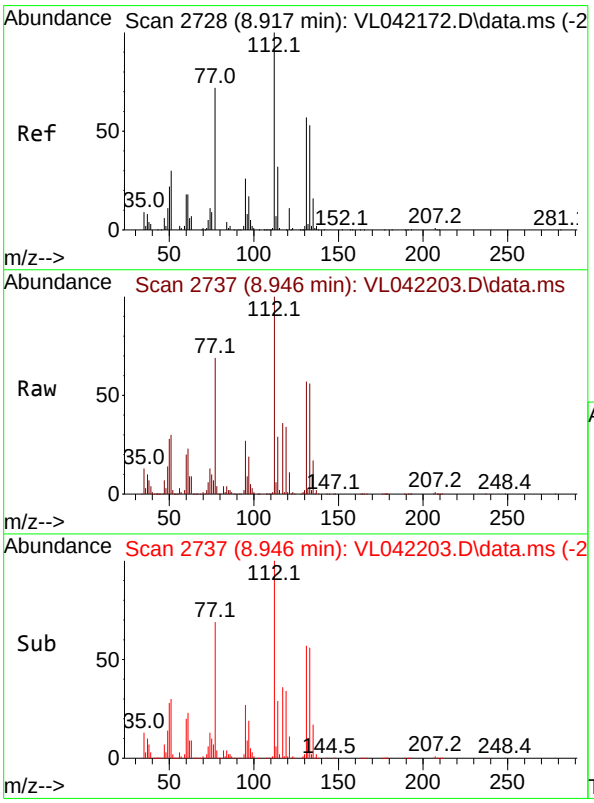
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.904 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:117 Resp: 456400

Ion	Ratio	Lower	Upper
117	100		
82	70.9	55.8	83.6
119	34.4	25.5	38.3

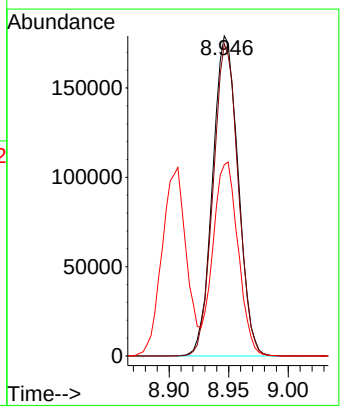


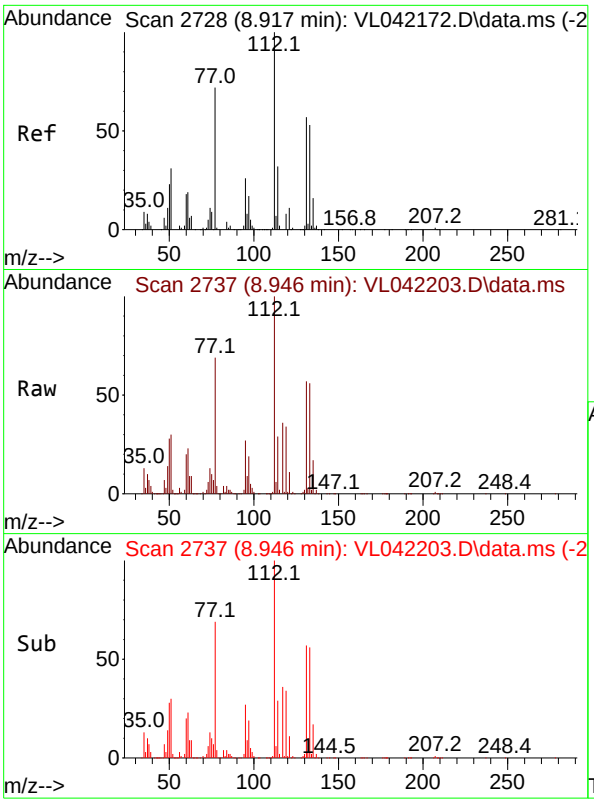


#56
1,1,1,2-Tetrachloroethane
Concen: 10.607 ppbv
RT: 8.946 min Scan# 2737
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:131 Resp: 266468

Ion	Ratio	Lower	Upper
131	100		
133	95.6	76.6	114.8
119	57.5	49.8	74.6



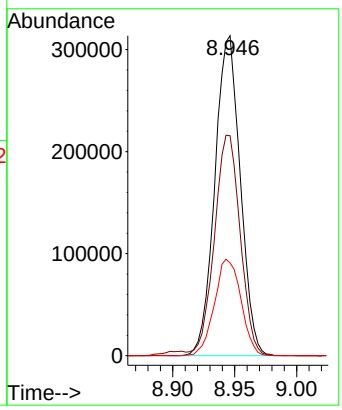


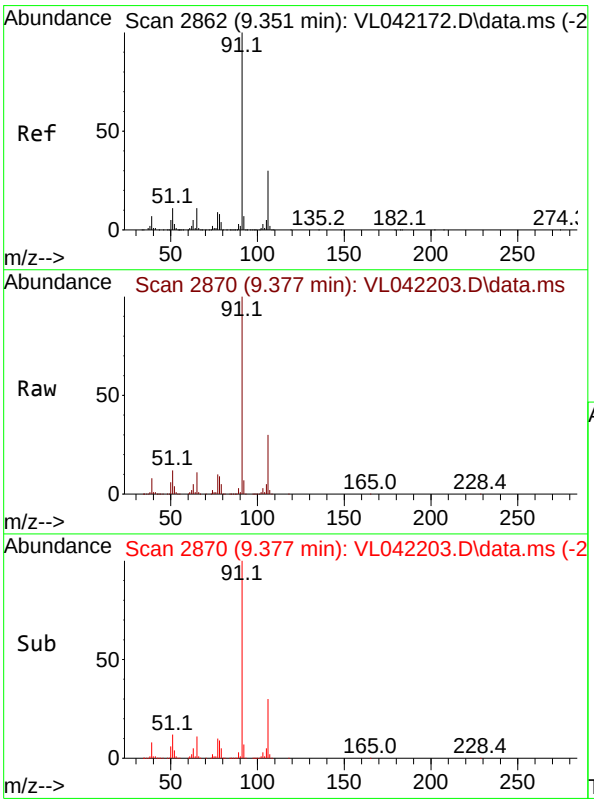
#57
Chlorobenzene
Concen: 10.368 ppbv
RT: 8.946 min Scan# 2
Delta R.T. 0.029 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:112 Resp: 448854

Ion	Ratio	Lower	Upper
112	100		
77	68.7	58.2	87.2
114	29.0	29.1	35.5#

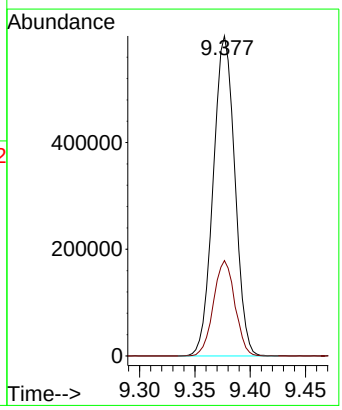


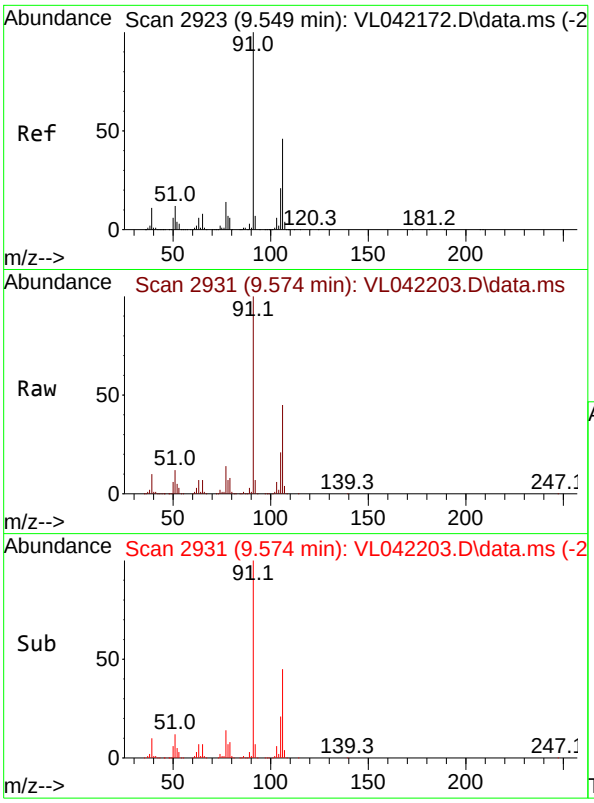


#58
Ethyl Benzene
Concen: 10.059 ppbv
RT: 9.377 min Scan# 2870
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 815513

Ion	Ratio	Lower	Upper
91	100		
106	29.8	24.2	36.2



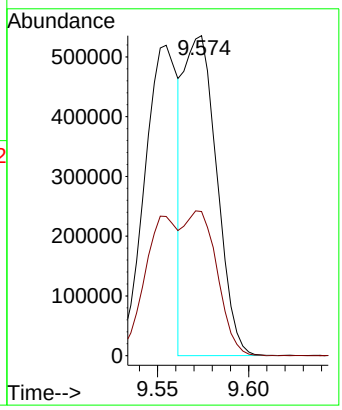


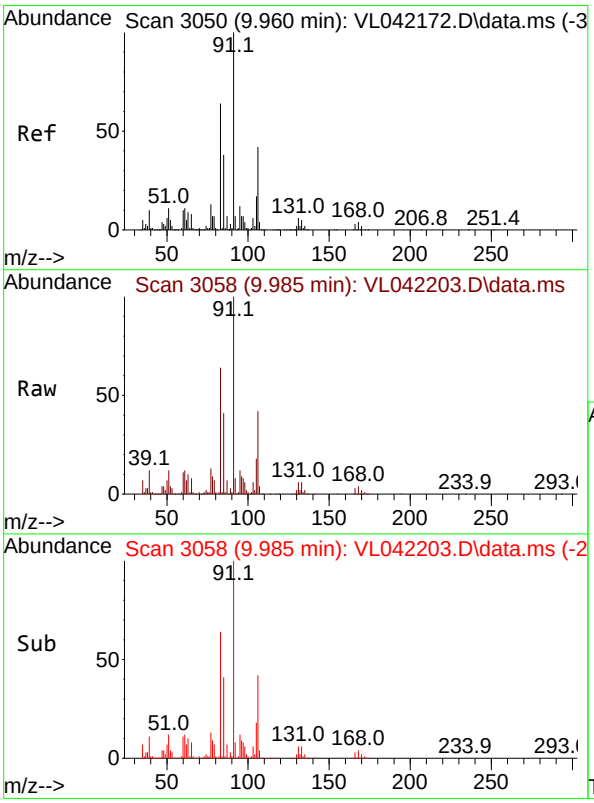
#59
m/p-Xylene
Concen: 10.395 ppbv
RT: 9.574 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 91 Resp: 672913

Ion	Ratio	Lower	Upper
91	100		
106	90.0	36.4	54.6#

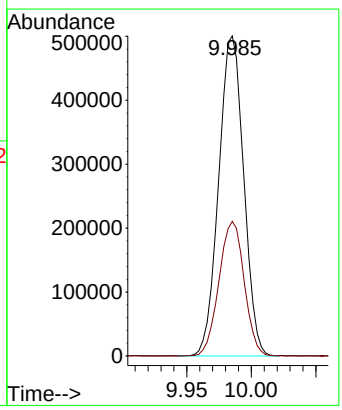


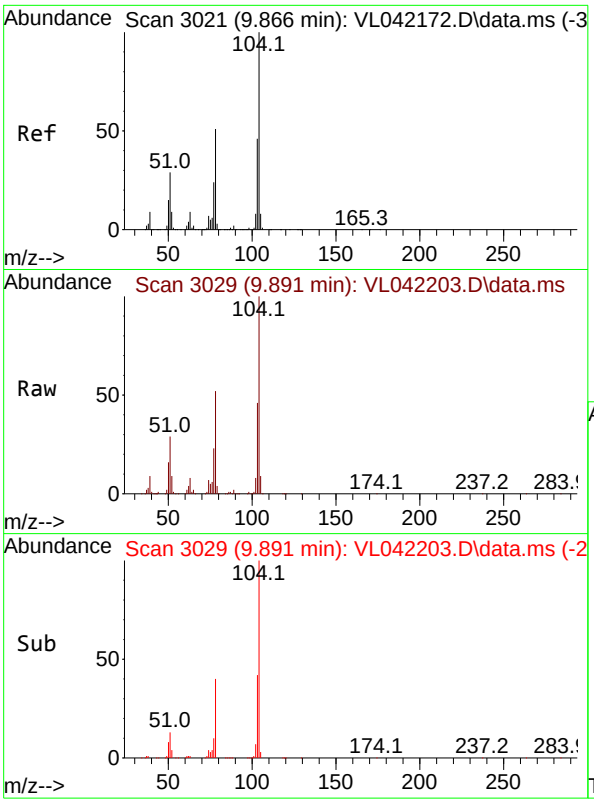


#60
o-Xylene
Concen: 10.379 ppbv
RT: 9.985 min Scan# 3058
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 673552

Ion	Ratio	Lower	Upper
91	100		
106	42.4	20.8	62.5



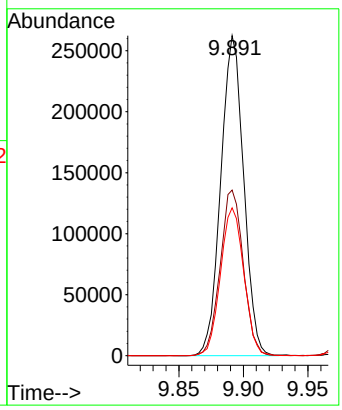


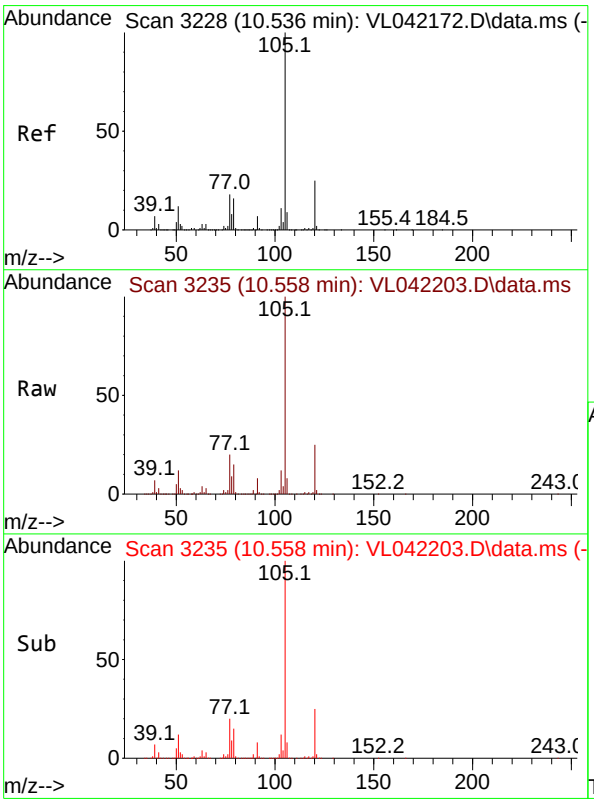
#61
Styrene
Concen: 10.060 ppbv
RT: 9.891 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:104 Resp: 322981

Ion	Ratio	Lower	Upper
104	100		
78	52.3	41.8	62.6
103	47.2	37.0	55.4

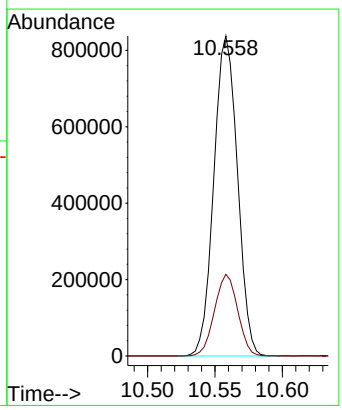


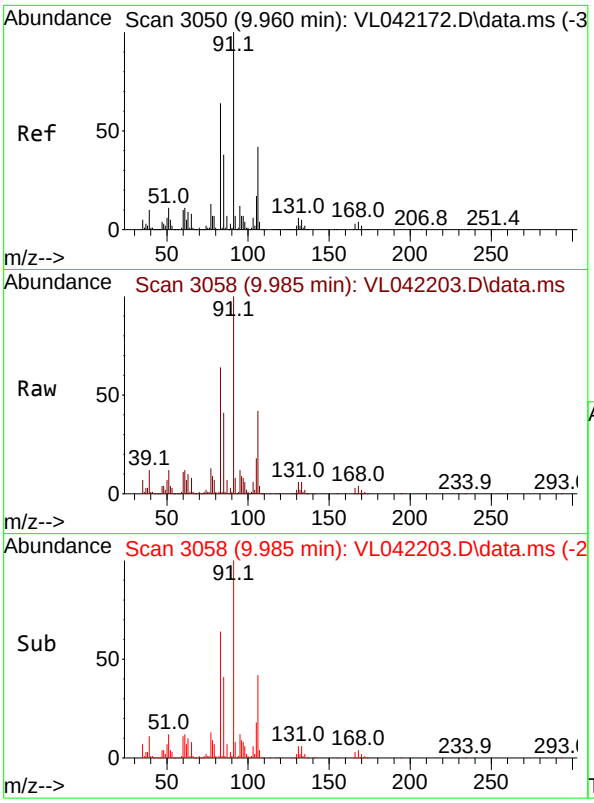


#62
Isopropylbenzene
Concen: 10.524 ppbv
RT: 10.558 min Scan# 3235
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 1021273

Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.9	29.9



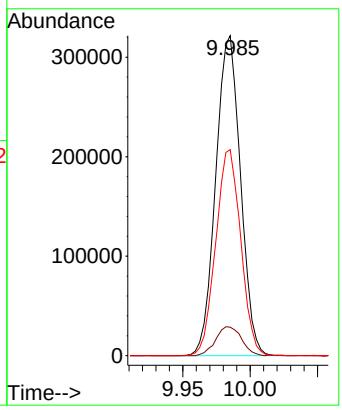


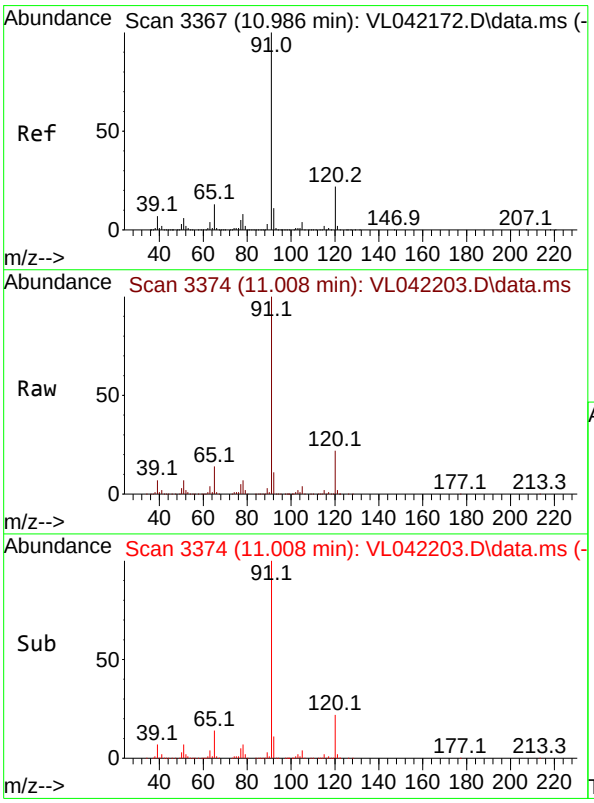
#63
1,1,2,2-Tetrachloroethane
Concen: 10.440 ppbv
RT: 9.985 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 83 Resp: 411620

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.9	32.5	97.5

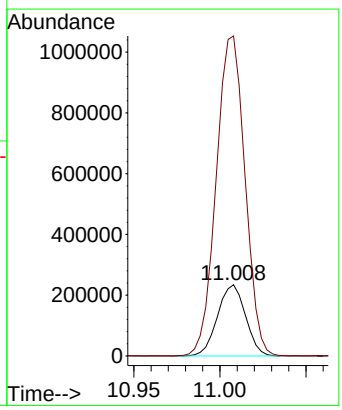


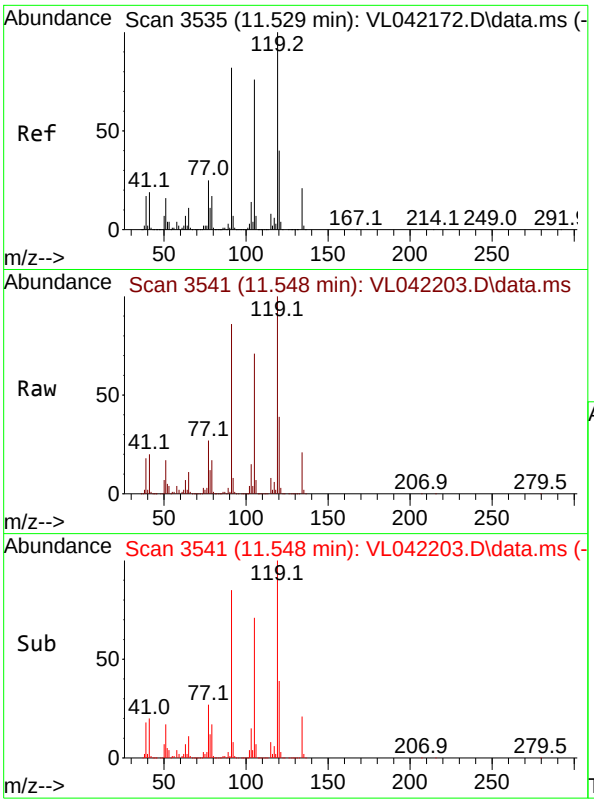


#64
n-propylbenzene
Concen: 10.596 ppbv
RT: 11.008 min Scan# 3374
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:120 Resp: 264706

Ion	Ratio	Lower	Upper
120	100		
91	463.0	376.9	565.3



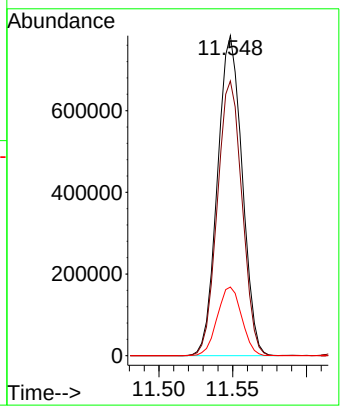


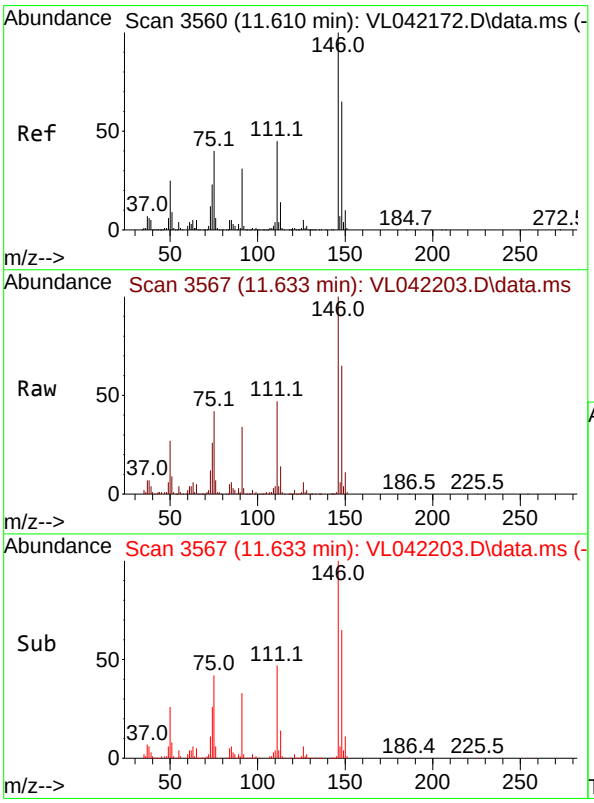
#65
tert-Butylbenzene
Concen: 10.173 ppbv
RT: 11.548 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:119 Resp: 913025

Ion	Ratio	Lower	Upper
119	100		
91	85.8	66.0	99.0
134	21.2	16.7	25.1

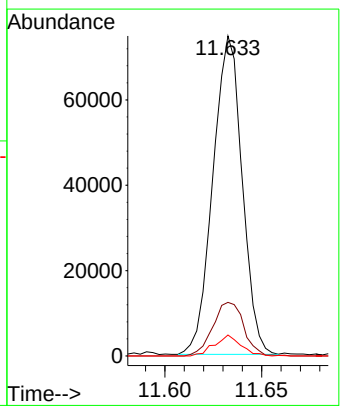


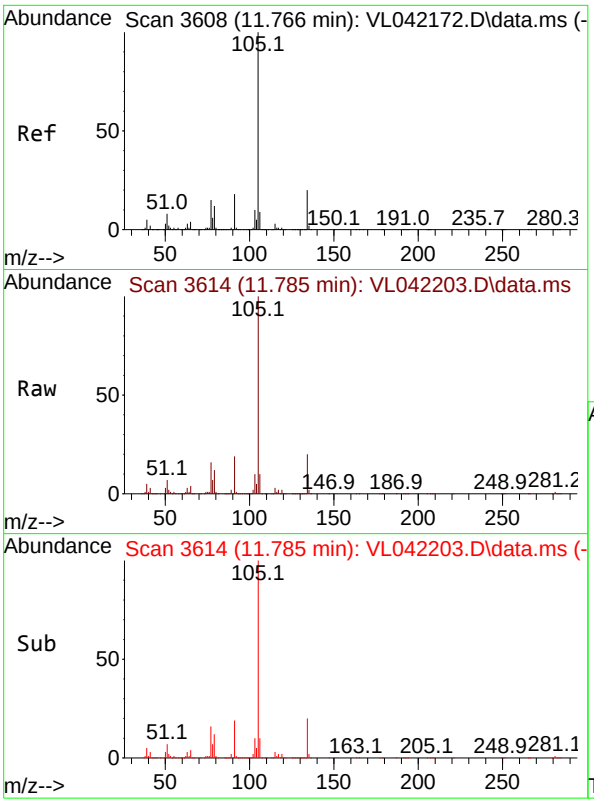


#66
Benzyl Chloride
Concen: 8.232 ppbv
RT: 11.633 min Scan# 3567
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 78394

Ion	Ratio	Lower	Upper
91	100		
126	17.8	13.8	20.6
128	6.0	4.5	6.7



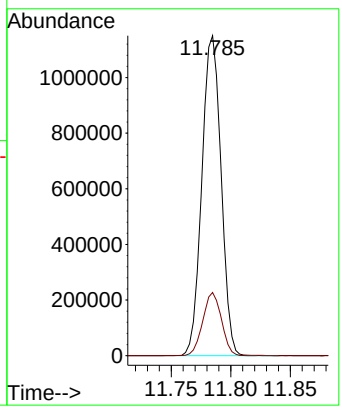


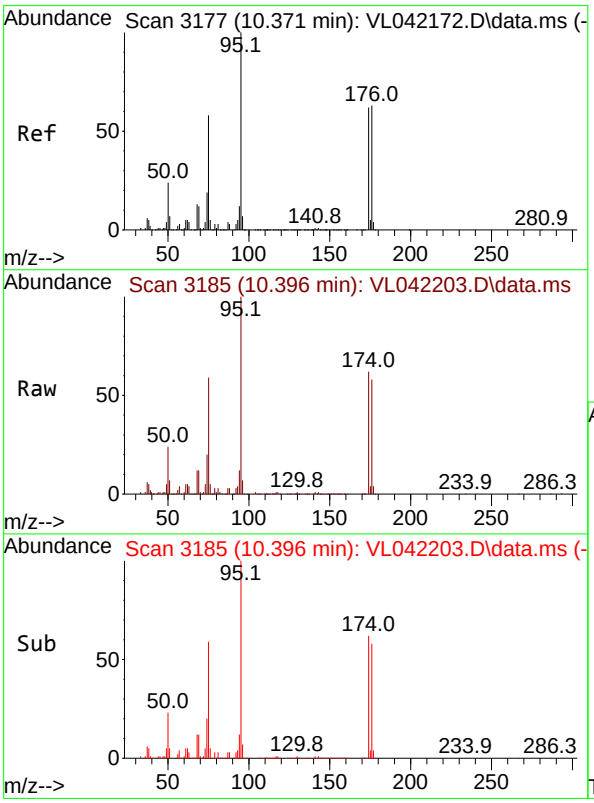
#67
sec-Butylbenzene
Concen: 10.360 ppbv
RT: 11.785 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:105 Resp: 1292454

Ion	Ratio	Lower	Upper
105	100		
134	19.3	15.5	23.3

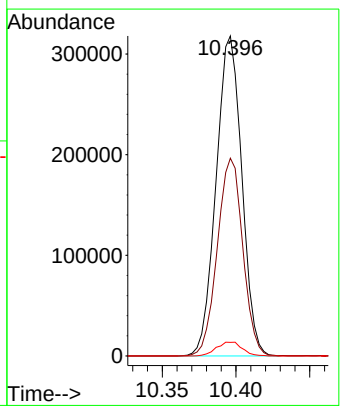


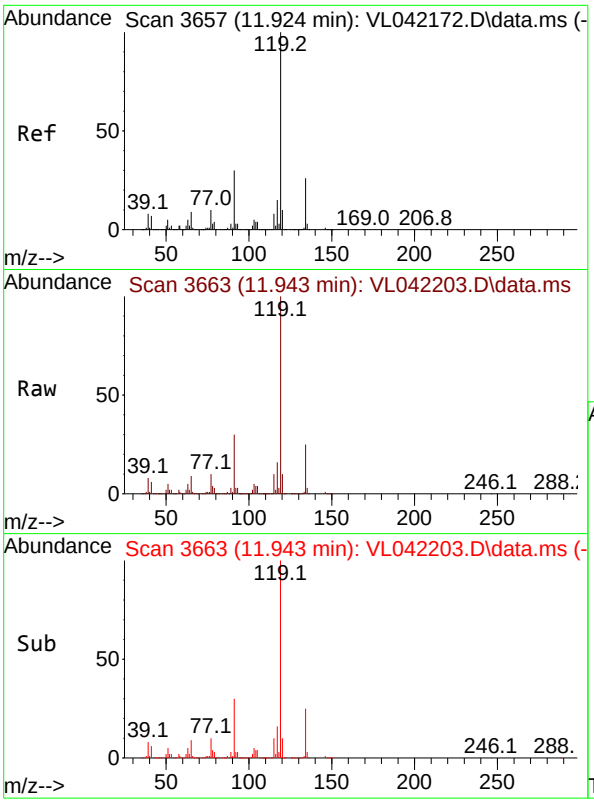


#68
1-Bromo-4-Fluorobenzene
Concen: 10.281 ppbv
RT: 10.396 min Scan# 3185
Delta R.T. 0.026 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 95 Resp: 385330

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.4	3.8	5.6



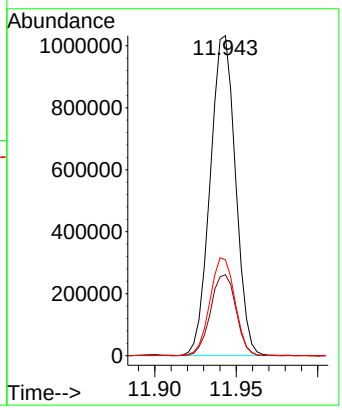


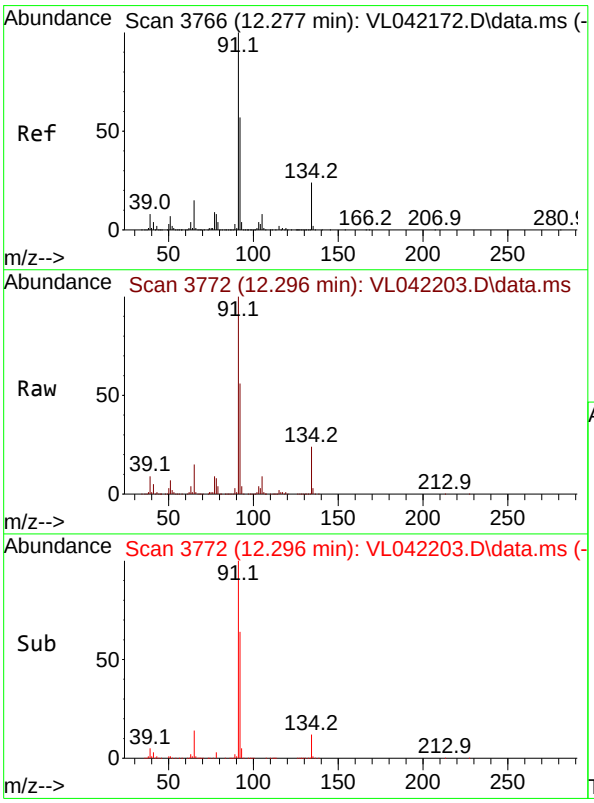
#69
p-Isopropyltoluene
Concen: 10.362 ppbv
RT: 11.943 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:119 Resp: 1113087

Ion	Ratio	Lower	Upper
119	100		
134	25.6	20.4	30.6
91	30.4	23.7	35.5

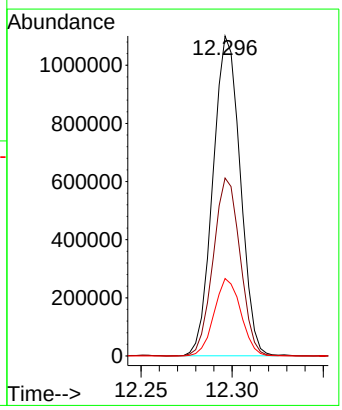


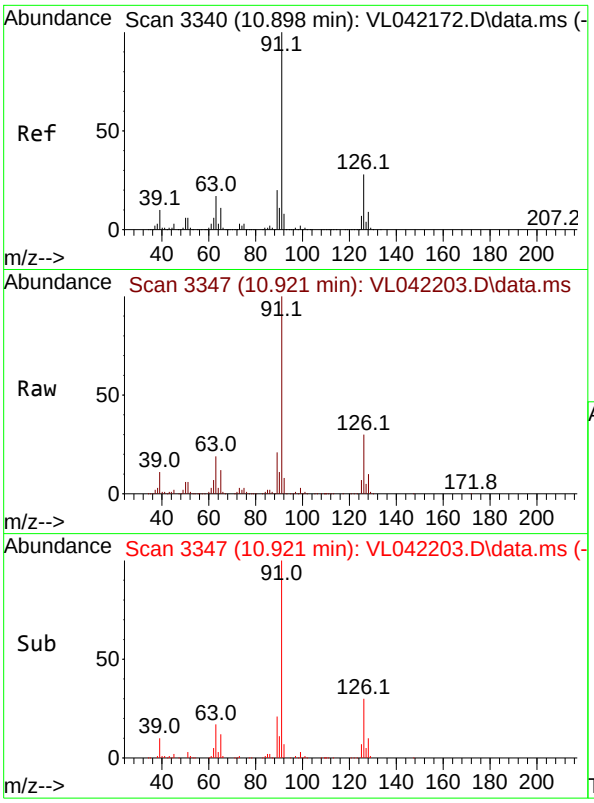


#70
n-Butylbenzene
Concen: 10.422 ppbv
RT: 12.296 min Scan# 3772
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion: 91 Resp: 1144962

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.7	19.2	28.8



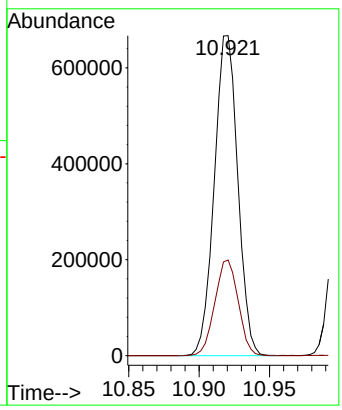


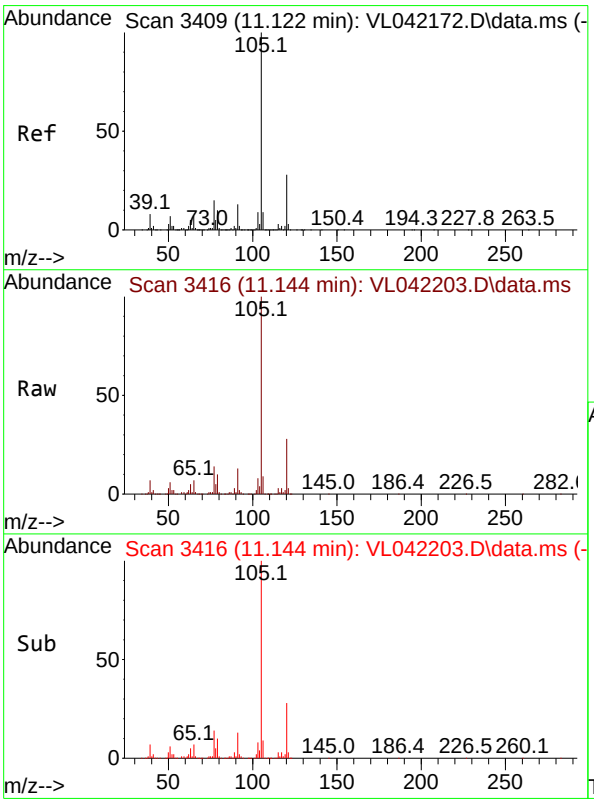
#71
2-Chlorotoluene
Concen: 10.295 ppbv
RT: 10.921 min Scan# 3
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion: 91 Resp: 775424

Ion	Ratio	Lower	Upper
91	100		
126	29.7	11.6	46.4

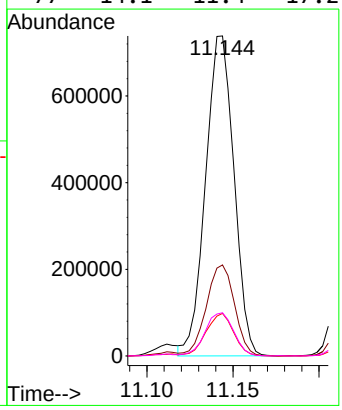


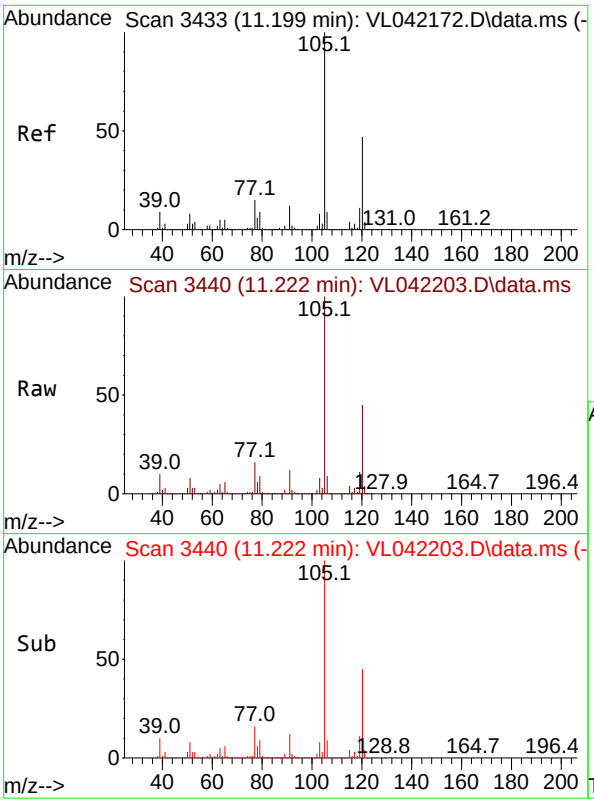


#72
4-Ethyltoluene
Concen: 10.500 ppbv
RT: 11.144 min Scan# 3416
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 848380

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	13.4	10.3	15.5
77	14.1	11.4	17.2



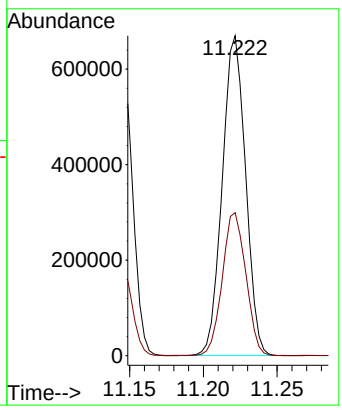


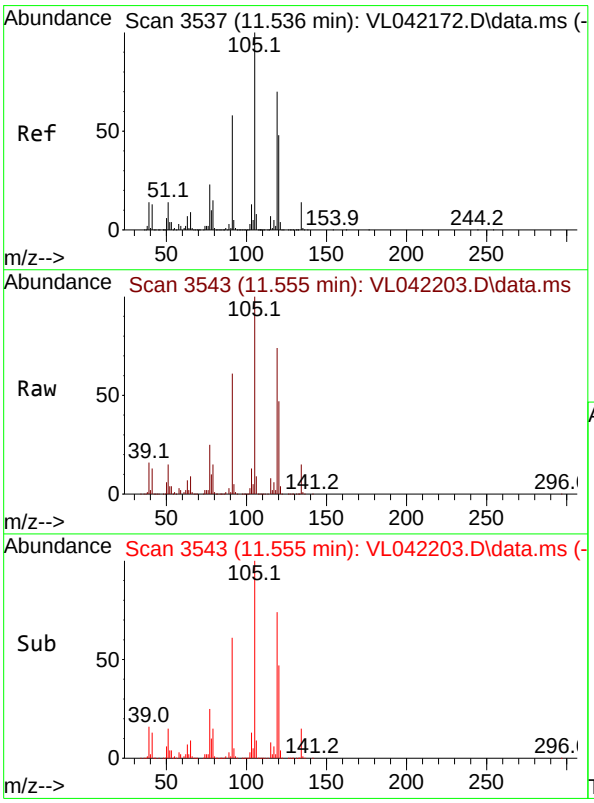
#73
1,3,5-Trimethylbenzene
Concen: 10.441 ppbv
RT: 11.222 min Scan# 34
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:105 Resp: 736772

Ion	Ratio	Lower	Upper
105	100		
120	44.7	37.4	56.0

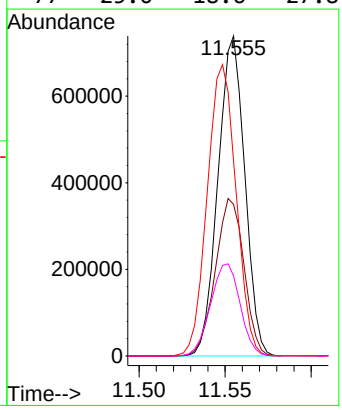


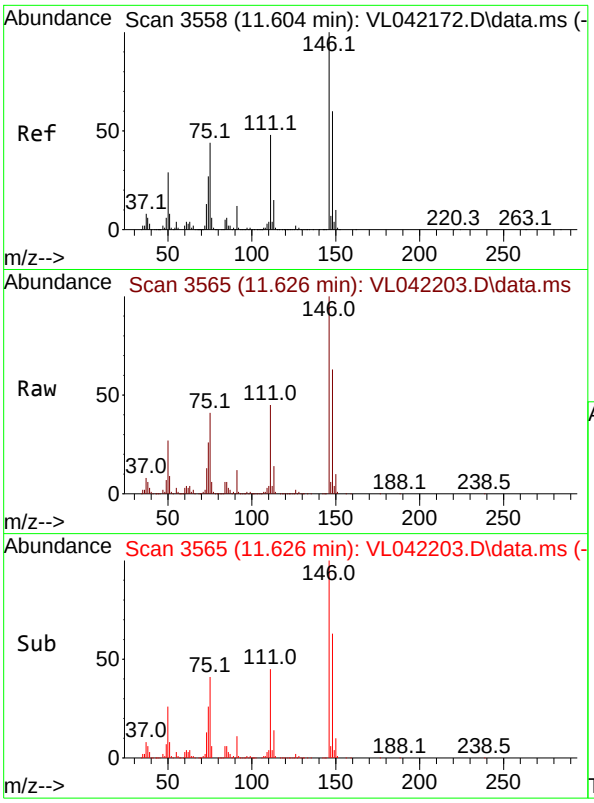


#74
1,2,4-Trimethylbenzene
Concen: 9.841 ppbv
RT: 11.555 min Scan# 3543
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:105 Resp: 800063

Ion	Ratio	Lower	Upper
105	100		
120	47.3	38.6	58.0
91	60.8	46.2	69.2
77	25.0	18.6	27.8



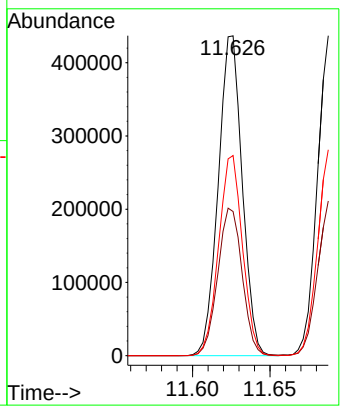


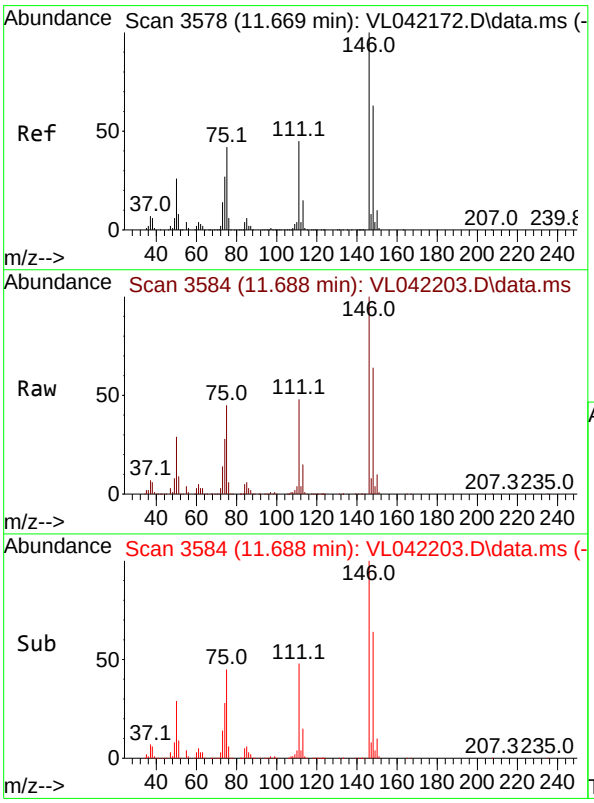
#75
1,3-Dichlorobenzene
Concen: 10.548 ppbv
RT: 11.626 min Scan# 3
Delta R.T. 0.022 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:146 Resp: 470306

Ion	Ratio	Lower	Upper
146	100		
111	46.9	23.8	71.2
148	62.4	31.9	95.9

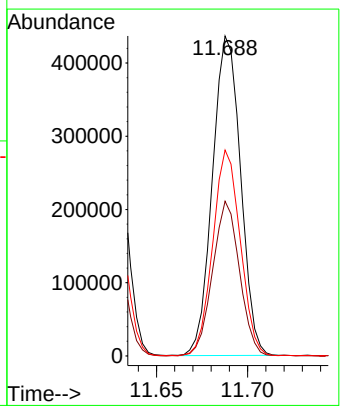


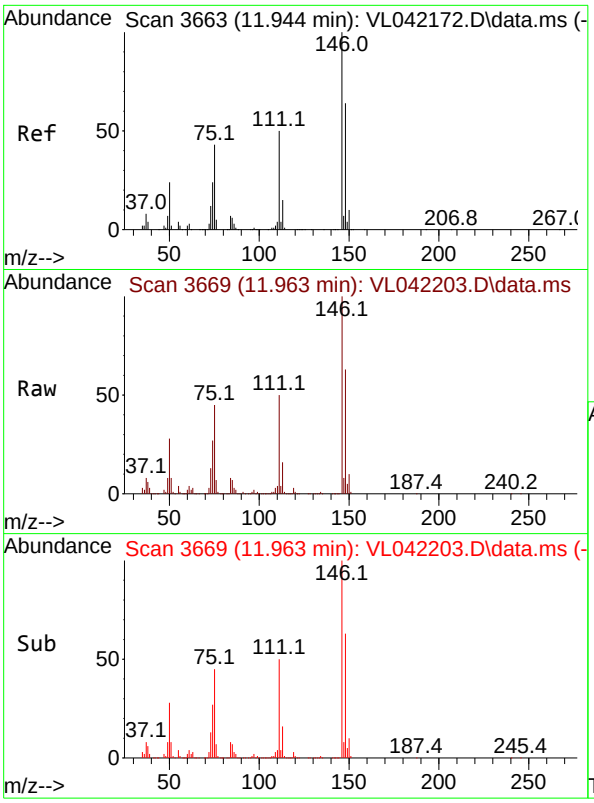


#76
1,4-Dichlorobenzene
Concen: 10.538 ppbv
RT: 11.688 min Scan# 3584
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:146 Resp: 467631

Ion	Ratio	Lower	Upper
146	100		
111	46.6	23.0	69.0
148	63.4	31.9	95.7



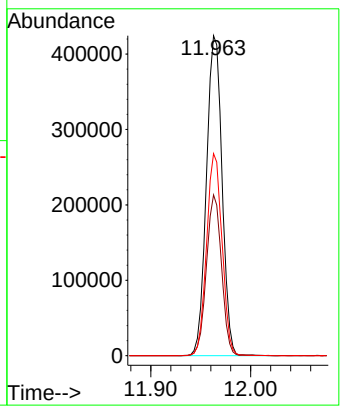


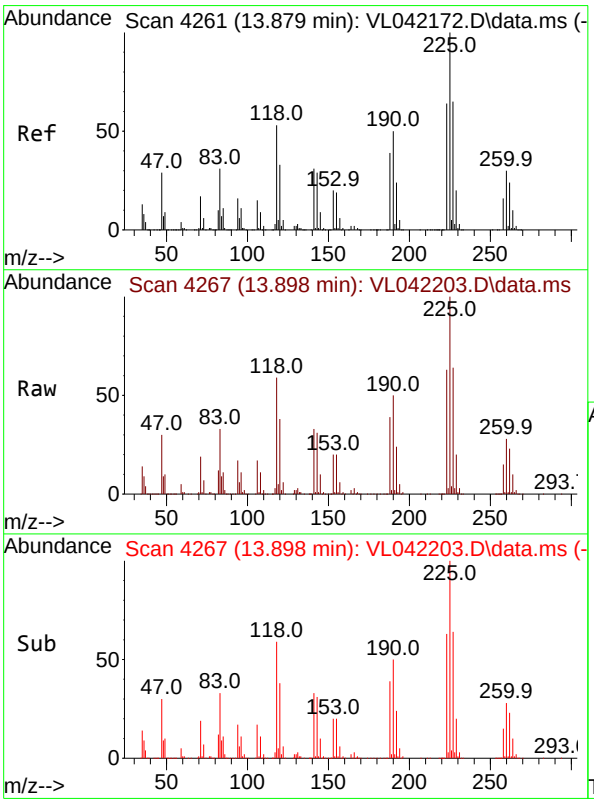
#77
1,2-Dichlorobenzene
Concen: 10.617 ppbv
RT: 11.963 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:146 Resp: 460911

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.8	74.3
148	62.4	31.6	94.8

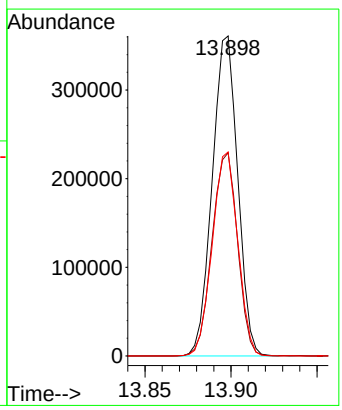


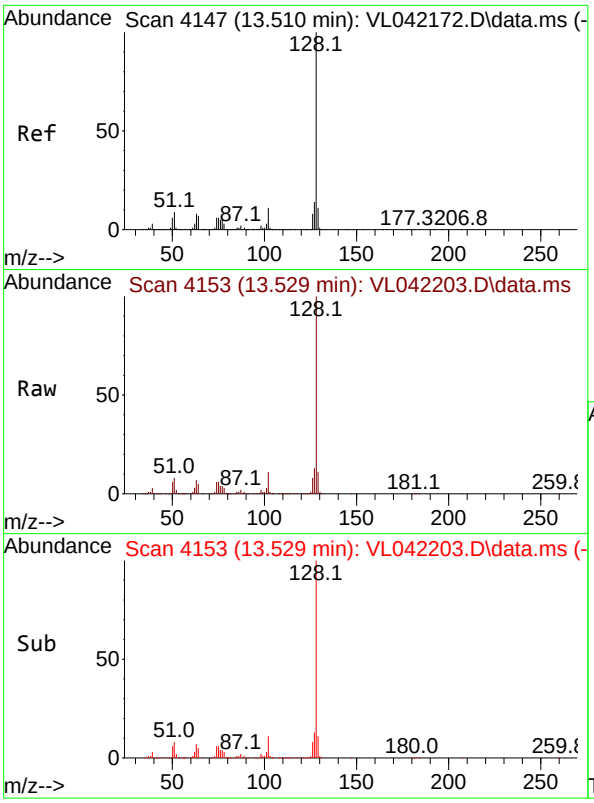


#78
Hexachloro-1,3-Butadiene
Concen: 8.418 ppbv
RT: 13.898 min Scan# 4267
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:225 Resp: 371995

Ion	Ratio	Lower	Upper
225	100		
223	63.6	50.6	76.0
227	63.7	51.2	76.8



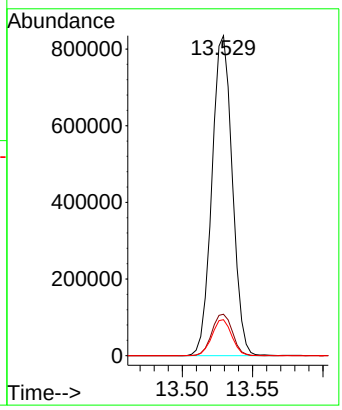


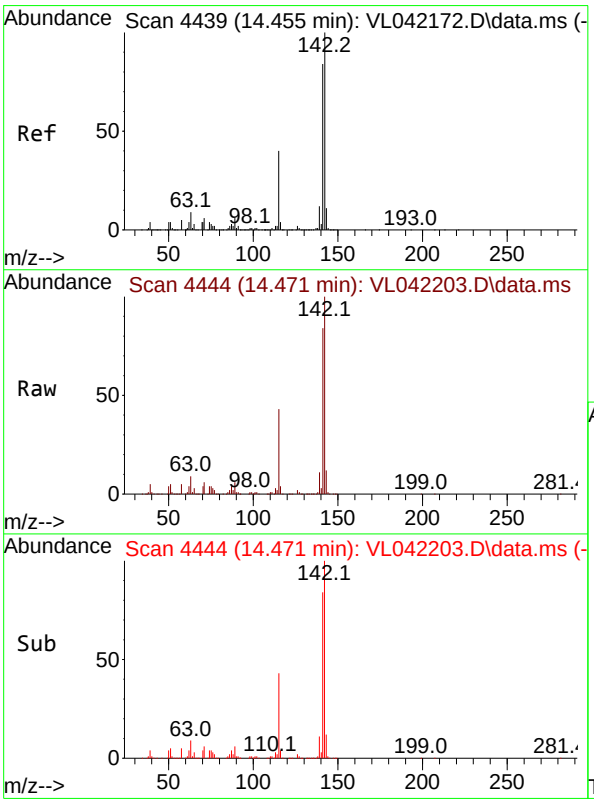
#79
Naphthalene
Concen: 9.455 ppbv
RT: 13.529 min Scan# 4
Delta R.T. 0.019 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:128 Resp: 840768

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.8	16.2
129	11.2	9.0	13.4

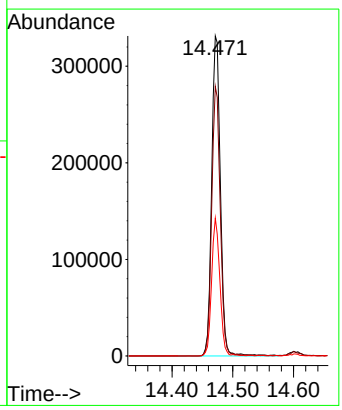


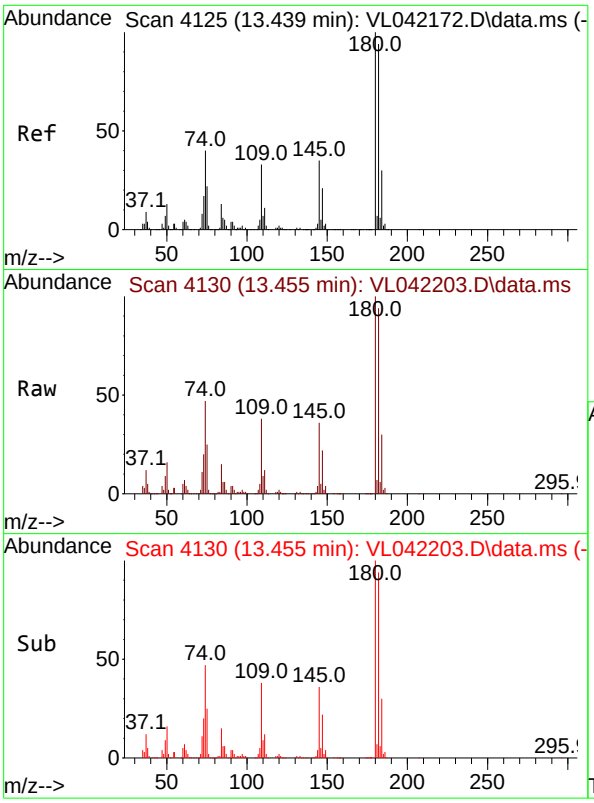


#80
Naphthalene,2-methyl-
Concen: 7.541 ppbv
RT: 14.471 min Scan# 4444
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Tgt Ion:142 Resp: 328839

Ion	Ratio	Lower	Upper
142	100		
141	83.3	66.3	99.5
115	41.4	31.6	47.4



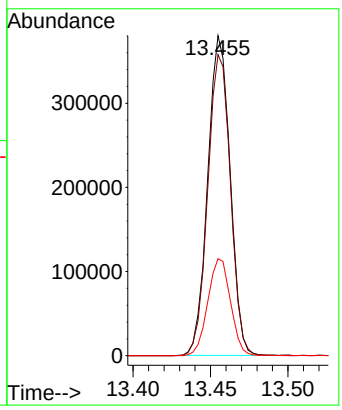


#81
1,2,4-Trichlorobenzene
Concen: 9.313 ppbv
RT: 13.455 min Scan# 4
Delta R.T. 0.016 min
Lab File: VL042203.D
Acq: 31 Mar 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VL0331ABS01

Tgt Ion:180 Resp: 381981

Ion	Ratio	Lower	Upper
180	100		
182	95.6	75.1	112.7
184	30.8	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Time: Apr 01 01:36:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.806	49	184538	10.000	ppbv		0.02
33) 1,4-Difluorobenzene	3.984	114	528809	10.000	ppbv		0.03
55) Chlorobenzene-d5	8.907	117	477707	10.000	ppbv		0.03
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.399	95	395364	10.078	ppbv		0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.505	85	12624	0.463	ppbv		99
3) Chlorodifluoromethane	1.483	51	8664	0.311	ppbv		99
4) Chloromethane	1.538	50	4783	0.430	ppbv	#	87
9) Propene	1.489	41	219989	17.243	ppbv		96
10) Heptane	5.017	43	54482	1.605	ppbv		97
11) Trichlorofluoromethane	1.890	101	5277	0.199	ppbv		85
12) 1,1,2-Trichlorotrifluo...	2.149	101	1240	0.057	ppbv		94
13) Ethanol	1.732	45	129111	107.052	ppbv		83
15) Acetone	1.845	43	721044	27.938	ppbv	#	85
16) 1,3-Butadiene	1.628	39	49448	3.923	ppbv		83
17) tert-Butyl alcohol	2.059	59	5884	0.183	ppbv	#	71
19) Isopropyl Alcohol	1.900	45	20570	1.413	ppbv	#	1
20) Methylene Chloride	2.075	84	4857	0.505	ppbv	#	91
21) Allyl Chloride	2.091	41	10903	0.599	ppbv	#	1
23) Vinyl Acetate	2.489	43	197581	17.688	ppbv	#	45
25) Ethyl Acetate	2.845	43	80261	1.198	ppbv	#	79
26) Hexane	2.845	57	114579	4.428	ppbv	#	34
30) Cyclohexane	3.887	84	33602	1.496	ppbv		93
34) 2-Butanone	2.577	43	238611	6.223	ppbv		98
35) Carbon Tetrachloride	3.793	117	2894	0.070	ppbv	#	45
36) Benzene	3.683	78	295232	5.632	ppbv		98
39) 1,2-Dichloropropane	3.988	63	136761	7.163	ppbv	#	22
41) Tetrahydrofuran	3.081	42	44873	2.032	ppbv		99
42) Bromodichloromethane	4.538	83	1622	0.039	ppbv	#	25
44) 2,2,4-Trimethylpentane	4.677	57	203749	2.300	ppbv	#	86
50) 4-Methyl-2-Pentanone	5.810	43	11036	0.182	ppbv	#	22
51) 2-Hexanone	7.487	43	2034	0.041	ppbv	#	100
53) Toluene	6.969	91	601582	9.680	ppbv		99
58) Ethyl Benzene	9.380	91	112145	1.322	ppbv		97
59) m/p-Xylene	9.555	91	343493	5.070	ppbv		99
60) o-Xylene	9.988	91	127965	1.884	ppbv		100
61) Styrene	9.895	104	46841	1.394	ppbv		98
62) Isopropylbenzene	10.565	105	8374	0.082	ppbv		96
64) n-propylbenzene	11.011	120	6017	0.230	ppbv		89
65) tert-Butylbenzene	11.905	119	6664	0.071	ppbv		94
66) Benzyl Chloride	11.636	91	366	0.037	ppbv	#	66
67) sec-Butylbenzene	11.785	105	4619	0.035	ppbv	#	90
72) 4-Ethyltoluene	11.144	105	37267	0.441	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.222	105	31497	0.426	ppbv		93
74) 1,2,4-Trimethylbenzene	11.555	105	117257	1.378	ppbv	#	63
79) Naphthalene	13.529	128	40082	0.431	ppbv		96
80) Naphthalene,2-methyl-	14.474	142	14485	0.317	ppbv	#	85

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Time: Apr 01 01:36:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

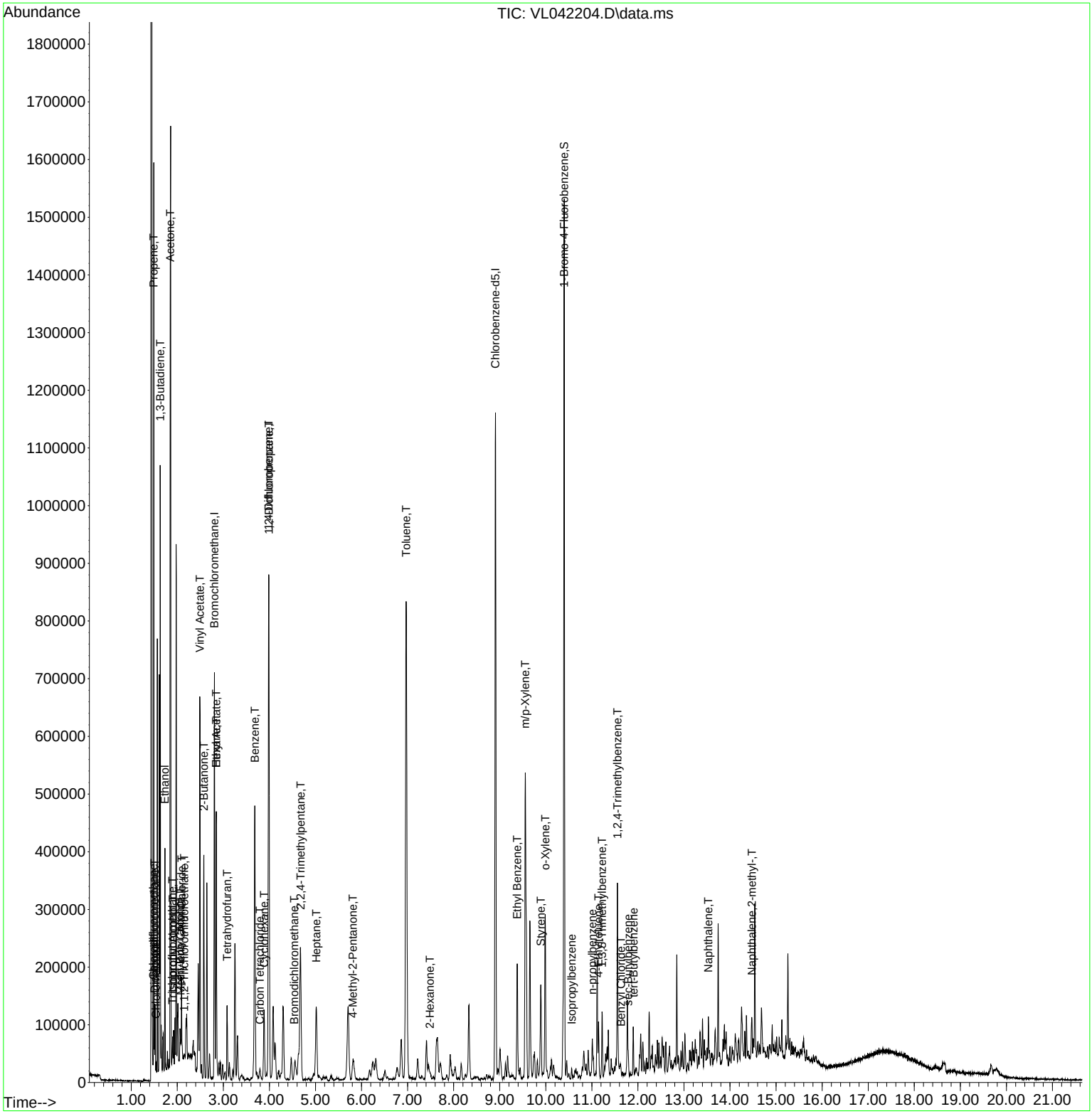
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

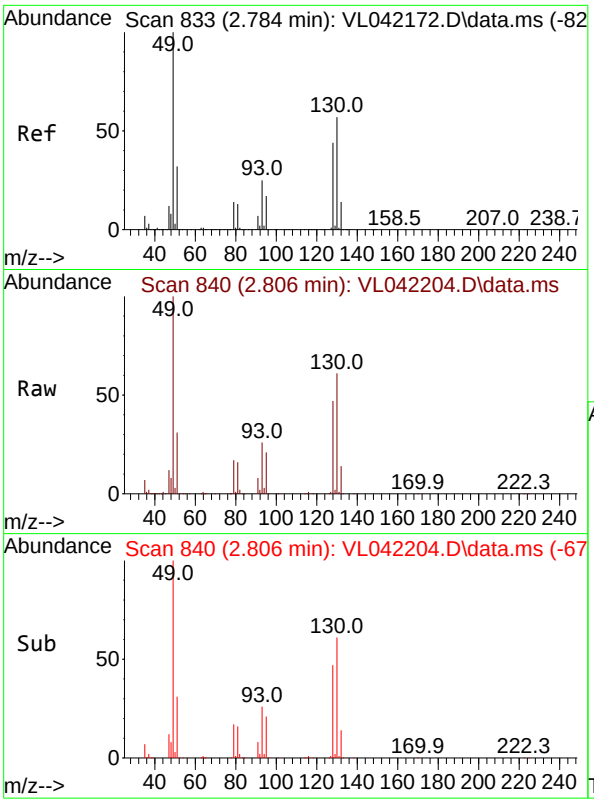
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042204.D
Acq On : 31 Mar 2025 11:06
Operator : SY/MD
Sample : Q1669-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Quant Time: Apr 01 01:36:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



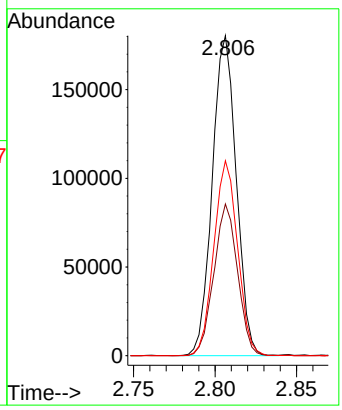


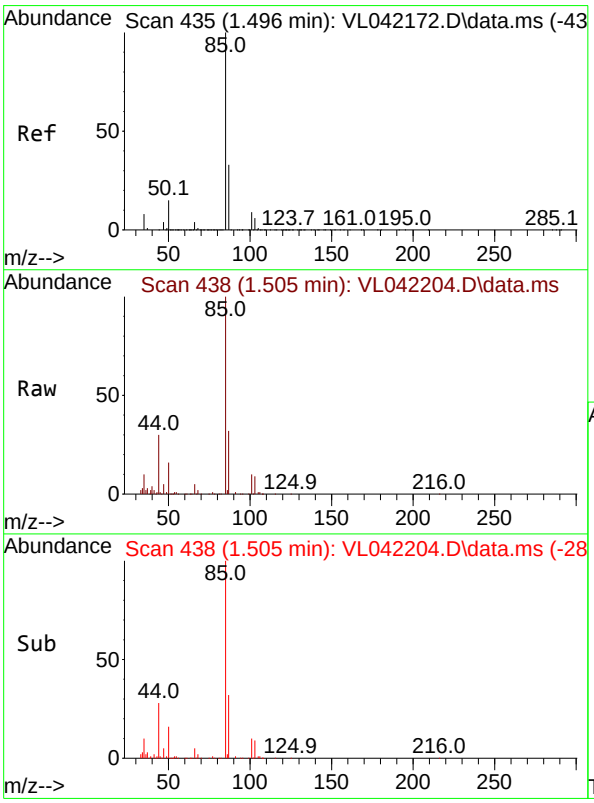
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.806 min Scan# 84
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 49 Resp: 184538

Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	60.3	28.8	86.4

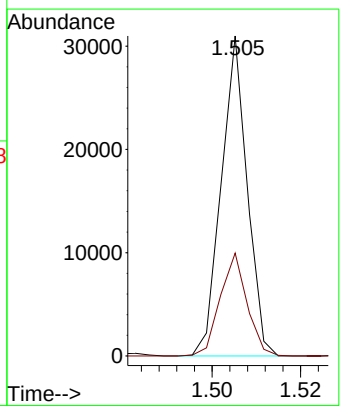


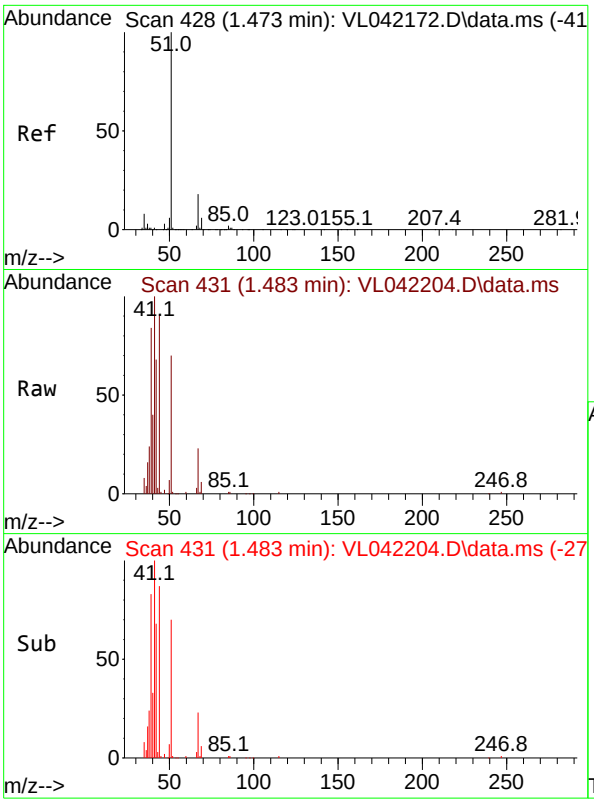


#2
Dichlorodifluoromethane
Concen: 0.463 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.009 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 85 Resp: 12624

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1



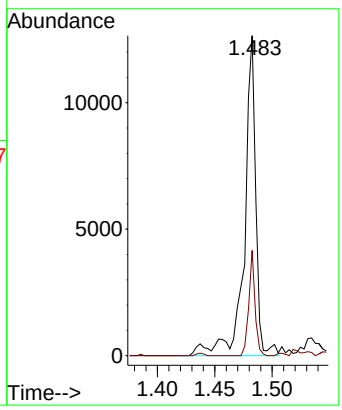


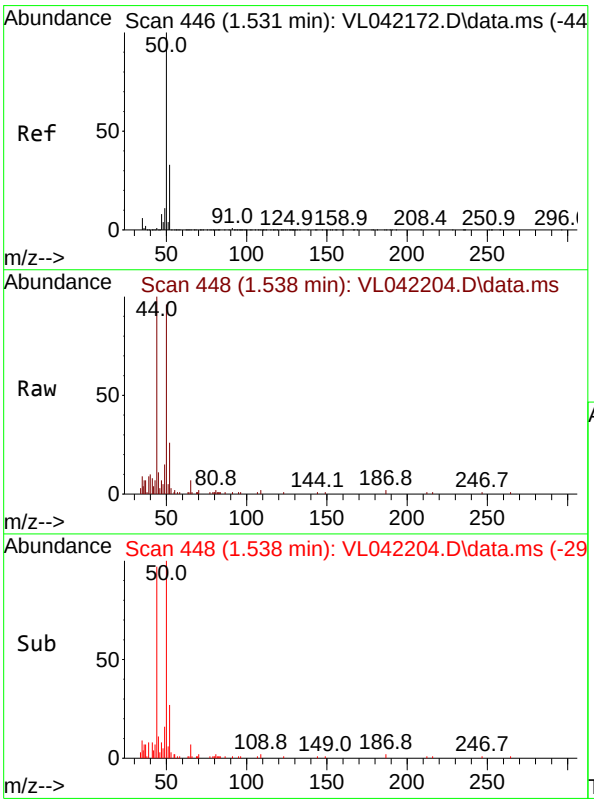
#3
Chlorodifluoromethane
Concen: 0.311 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 51 Resp: 8664

Ion	Ratio	Lower	Upper
51	100		
67	18.5	15.0	22.6

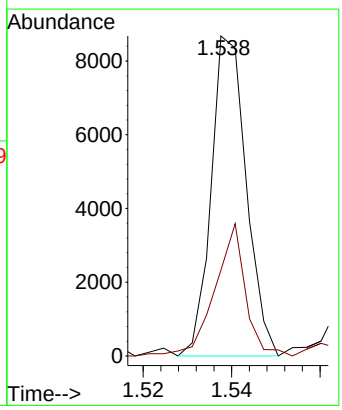


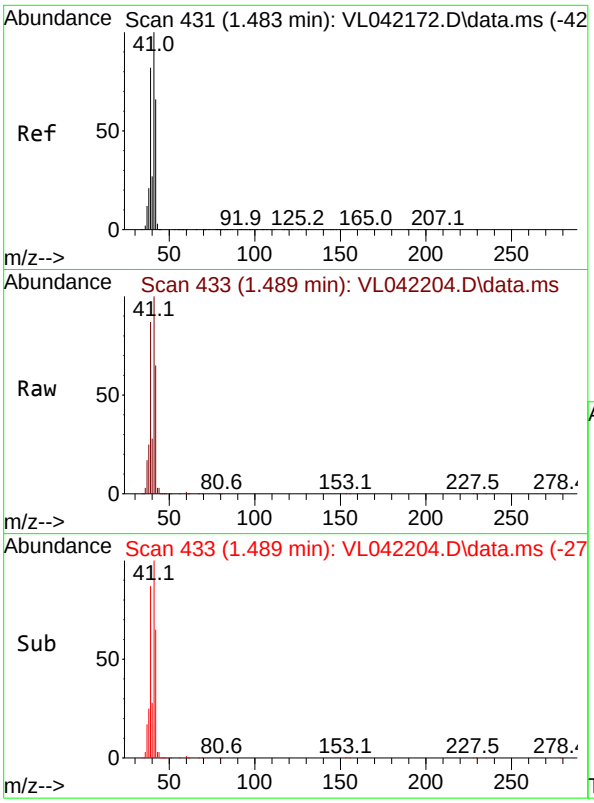


#4
Chloromethane
Concen: 0.430 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 50 Resp: 4783

Ion	Ratio	Lower	Upper
50	100		
52	25.3	26.1	39.1#



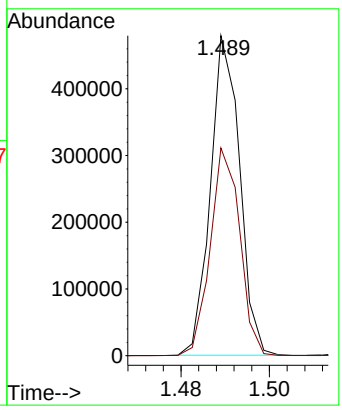


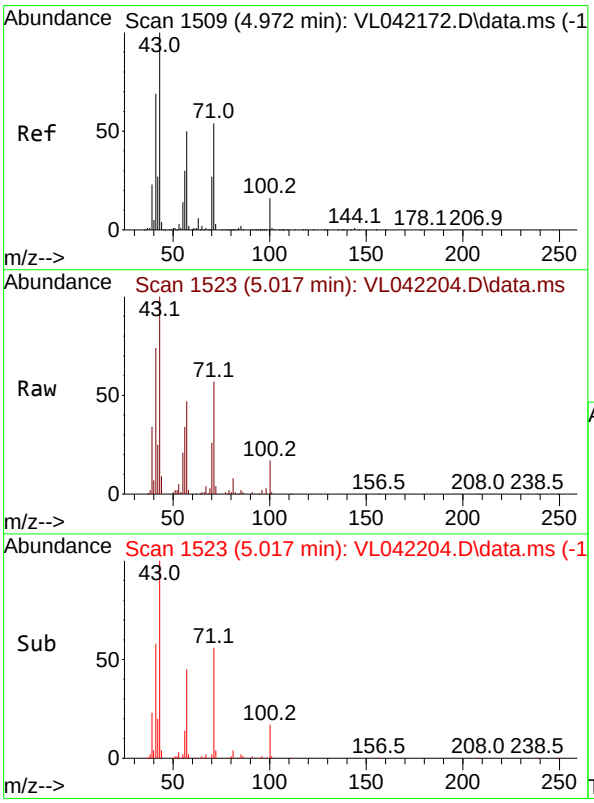
#9
Propene
Concen: 17.243 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 41 Resp: 219989

Ion	Ratio	Lower	Upper
41	100		
42	66.0	55.4	83.2

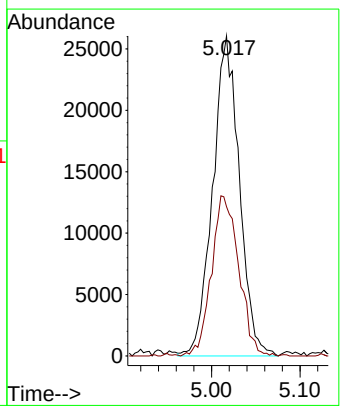


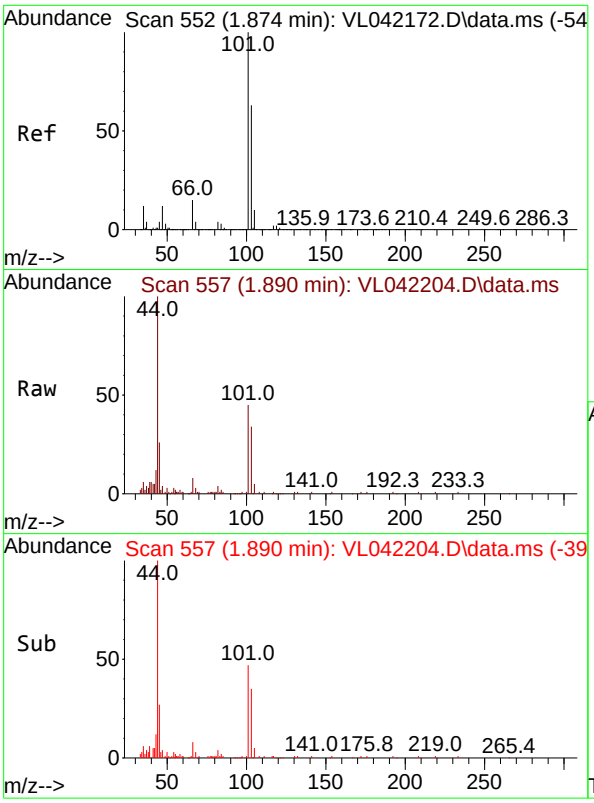


#10
Heptane
Concen: 1.605 ppbv
RT: 5.017 min Scan# 1523
Delta R.T. 0.045 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 54482

Ion	Ratio	Lower	Upper
43	100		
57	51.4	39.4	59.2



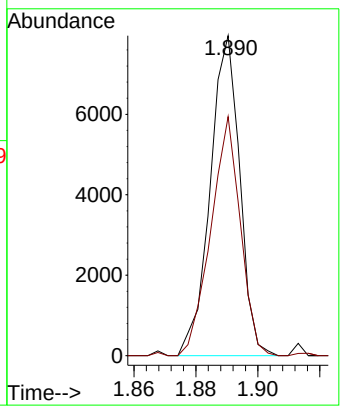


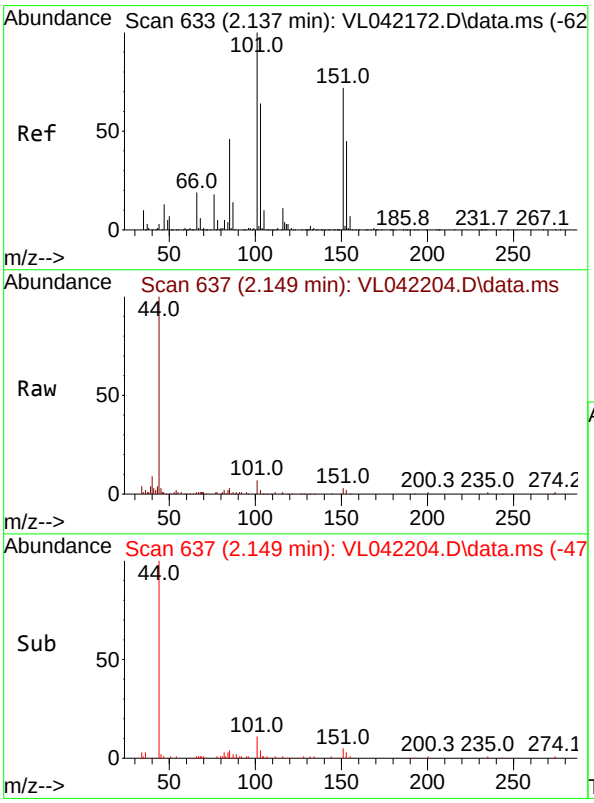
#11
Trichlorofluoromethane
Concen: 0.199 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion:101 Resp: 5277

Ion	Ratio	Lower	Upper
101	100		
103	74.7	50.2	75.2

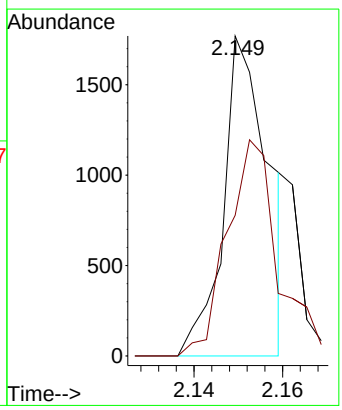


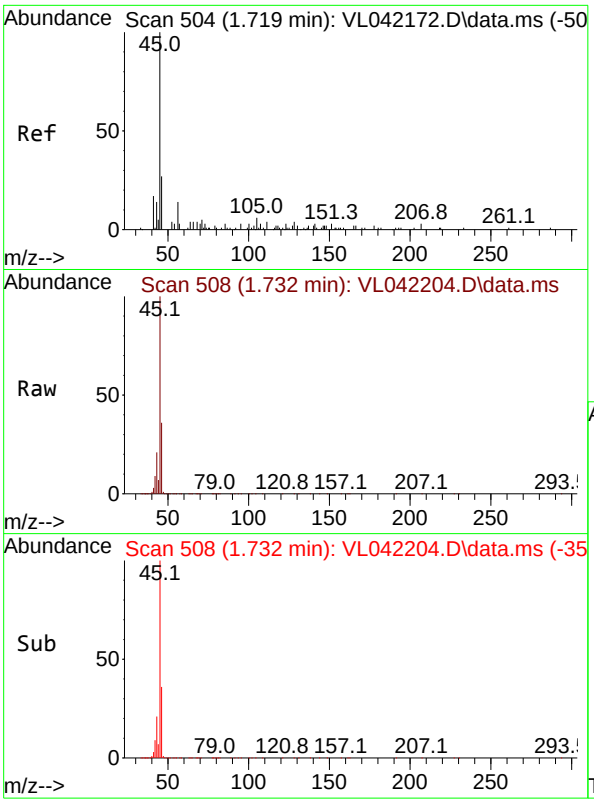


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.057 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:101 Resp: 1240

Ion	Ratio	Lower	Upper
101	100		
151	76.1	57.1	85.7



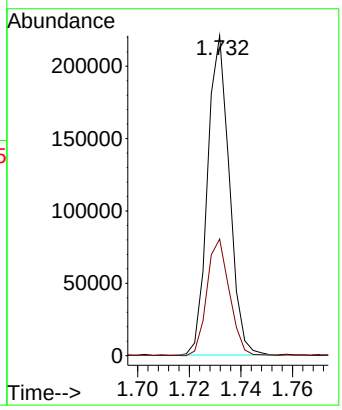


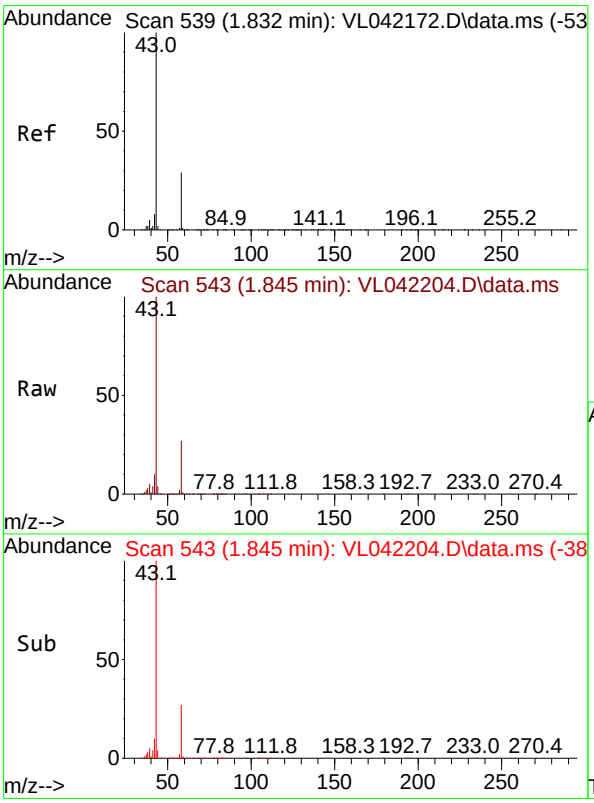
#13
Ethanol
Concen: 107.052 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 45 Resp: 129111

Ion	Ratio	Lower	Upper
45	100		
46	38.6	20.2	80.8

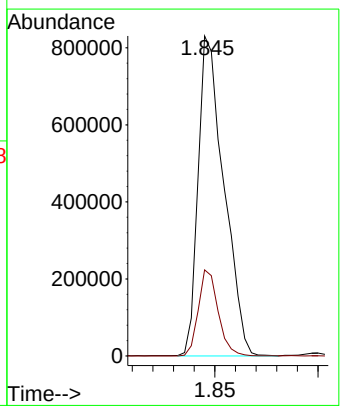


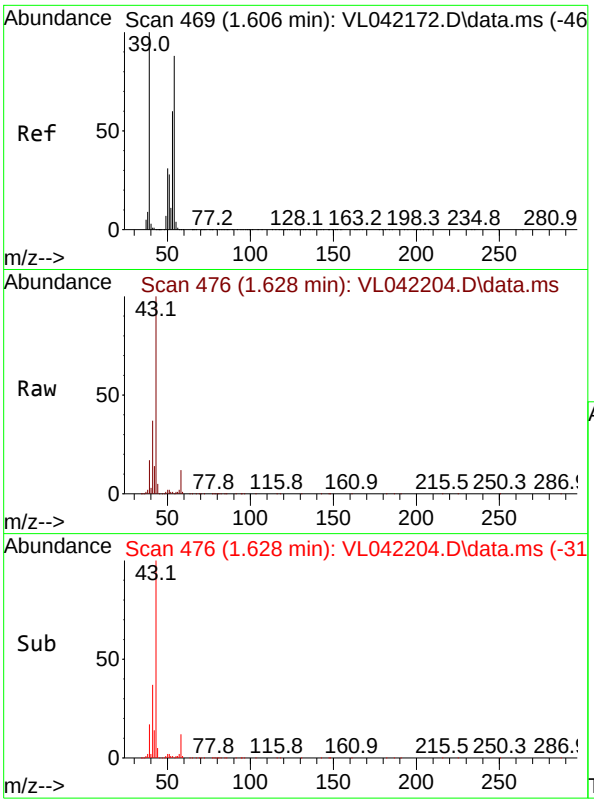


#15
Acetone
Concen: 27.938 ppbv
RT: 1.845 min Scan# 543
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 721044

Ion	Ratio	Lower	Upper
43	100		
58	20.8	23.2	34.8#



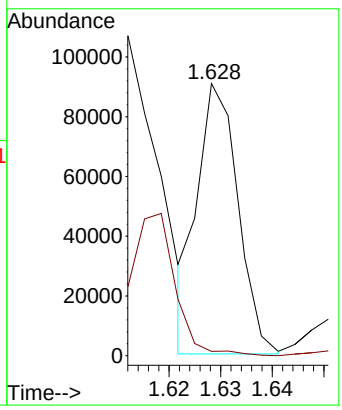


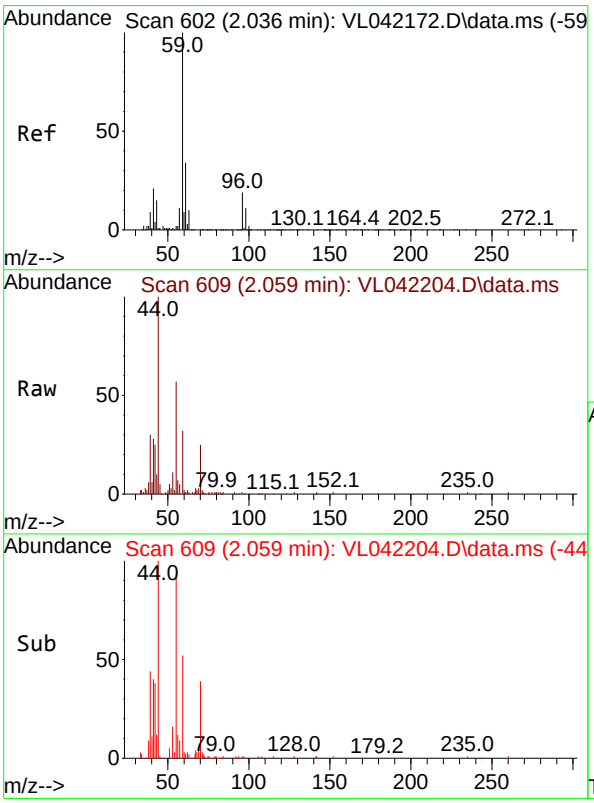
#16
1,3-Butadiene
Concen: 3.923 ppbv
RT: 1.628 min Scan# 4
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 39 Resp: 49448

Ion	Ratio	Lower	Upper
39	100		
54	61.6	60.7	91.1

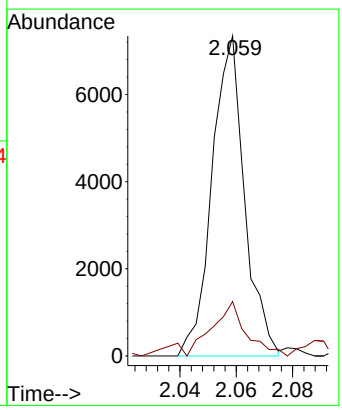


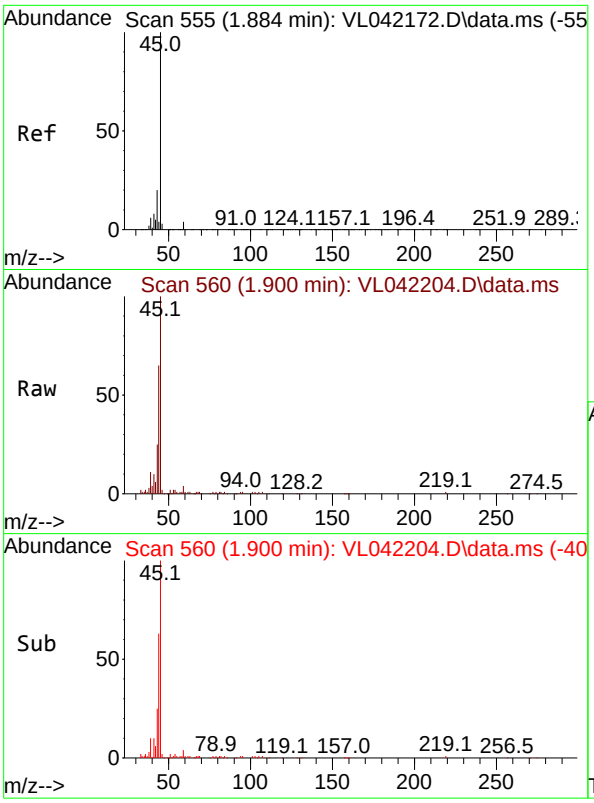


#17
tert-Butyl alcohol
Concen: 0.183 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 59 Resp: 5884

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.9	13.3#



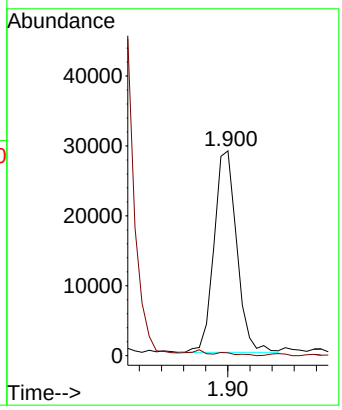


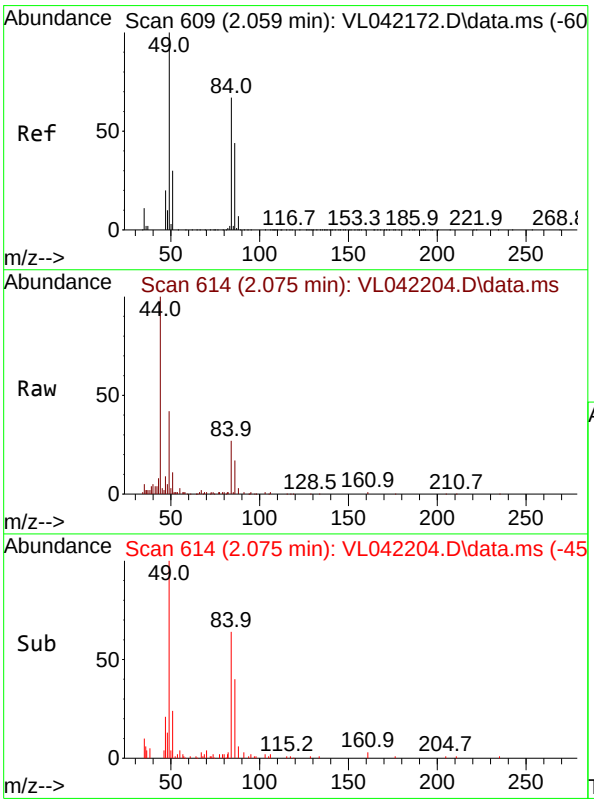
#19
Isopropyl Alcohol
Concen: 1.413 ppbv
RT: 1.900 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 45 Resp: 20570

Ion	Ratio	Lower	Upper
45	100		
58	731.7	36.9	55.3#

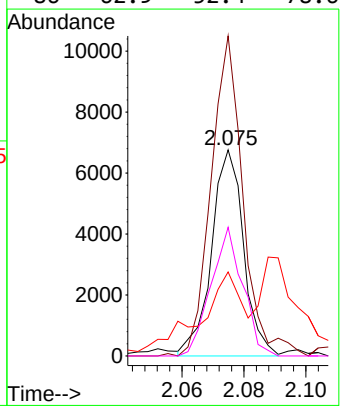


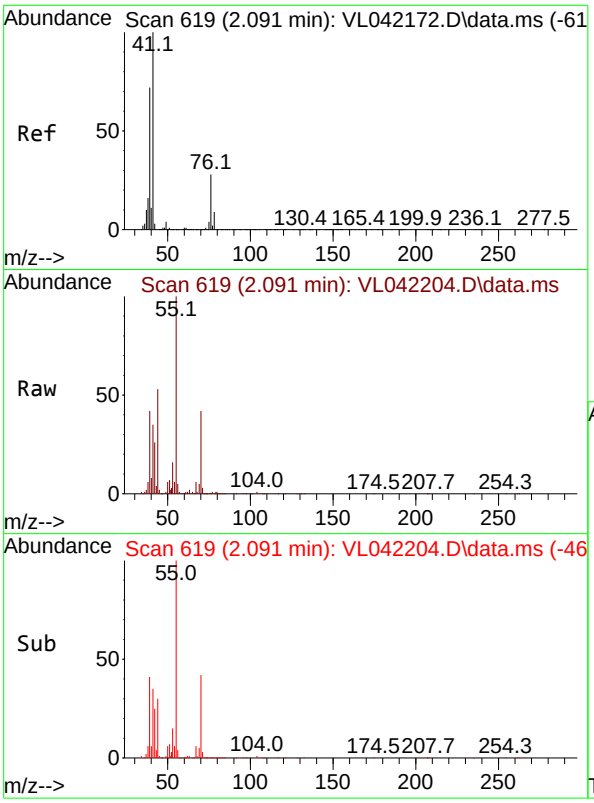


#20
Methylene Chloride
Concen: 0.505 ppbv
RT: 2.075 min Scan# 614
Delta R.T. 0.016 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 84 Resp: 4857

Ion	Ratio	Lower	Upper
84	100		
49	156.5	120.2	180.4
51	27.1	37.4	56.0#
86	62.9	52.4	78.6



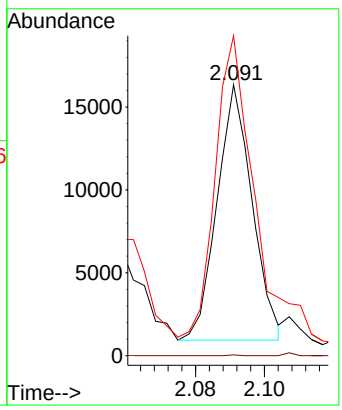


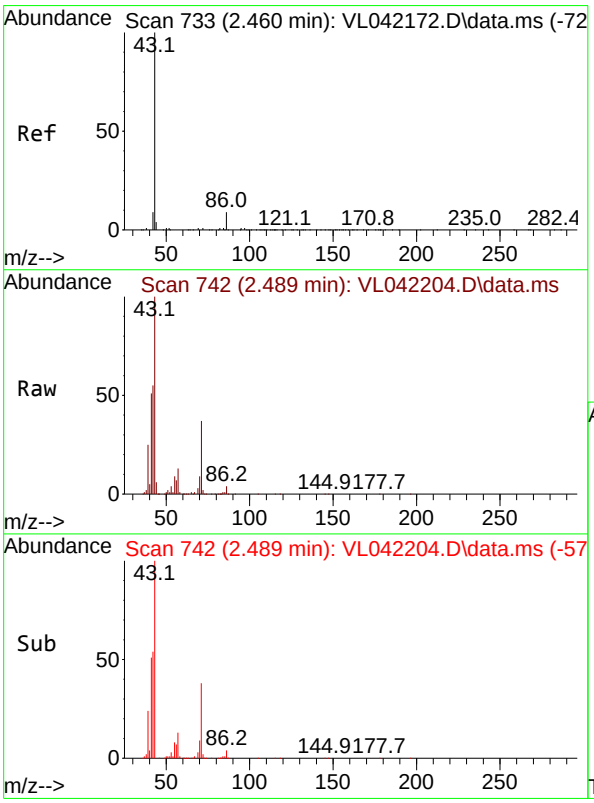
#21
Allyl Chloride
Concen: 0.599 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 41 Resp: 10903

Ion	Ratio	Lower	Upper
41	100		
76	0.4	24.1	36.1#
39	197.7	61.1	91.7#

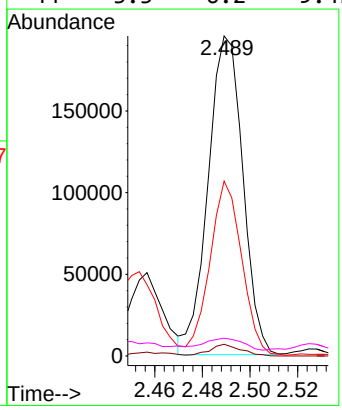


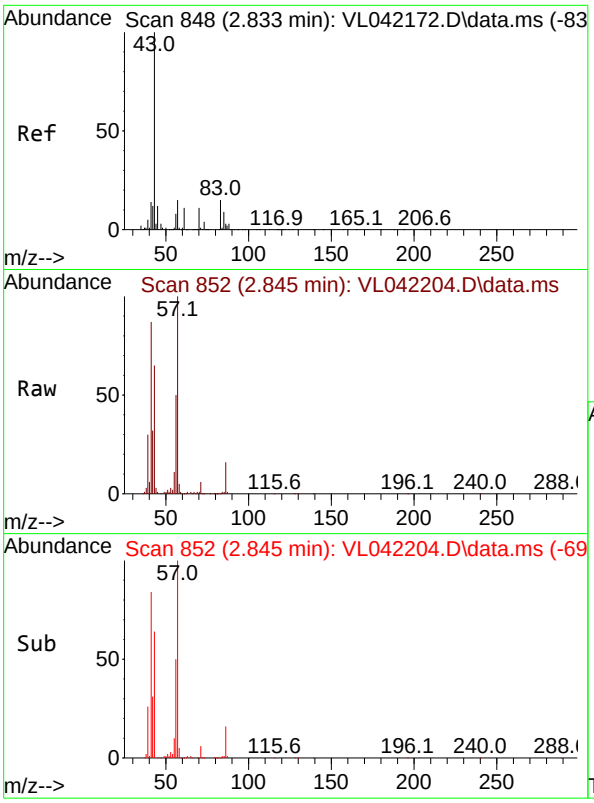


#23
Vinyl Acetate
Concen: 17.688 ppbv
RT: 2.489 min Scan# 742
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 197581

Ion	Ratio	Lower	Upper
43	100		
86	3.7	5.5	8.3#
42	54.4	8.6	13.0#
44	3.3	6.2	9.4#



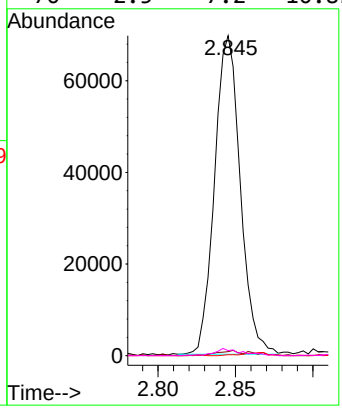


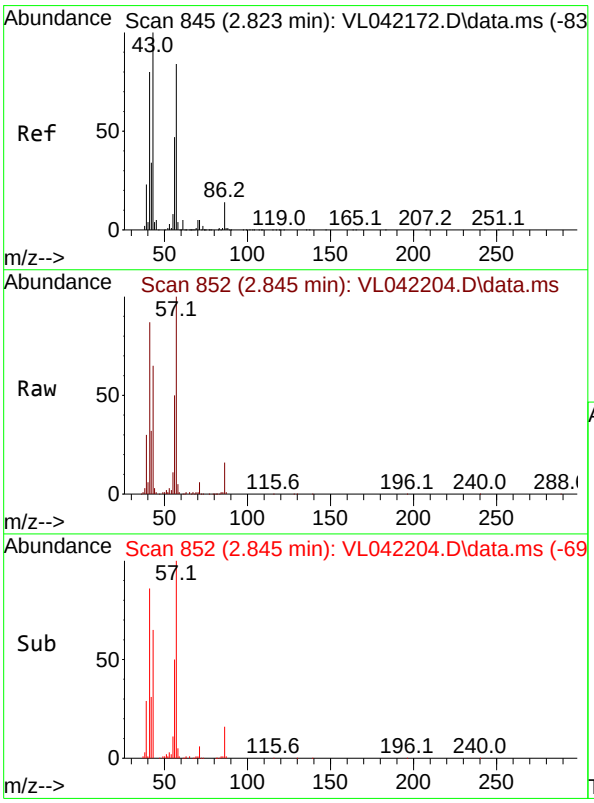
#25
Ethyl Acetate
Concen: 1.198 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.013 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 43 Resp: 80261

Ion	Ratio	Lower	Upper
43	100		
45	2.2	8.2	12.2#
61	1.0	7.3	10.9#
70	2.5	7.2	10.8#

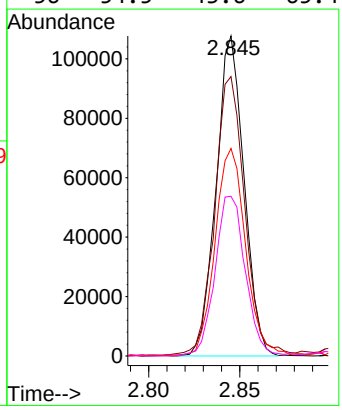


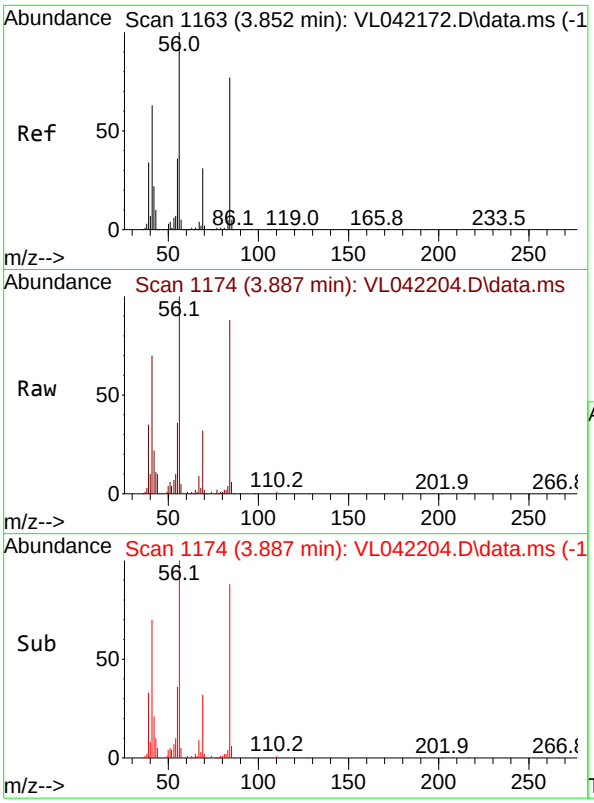


#26
Hexane
Concen: 4.428 ppbv
RT: 2.845 min Scan# 852
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 57 Resp: 114579

Ion	Ratio	Lower	Upper
57	100		
41	95.4	76.6	114.8
43	73.9	207.8	311.8#
56	54.5	43.6	65.4



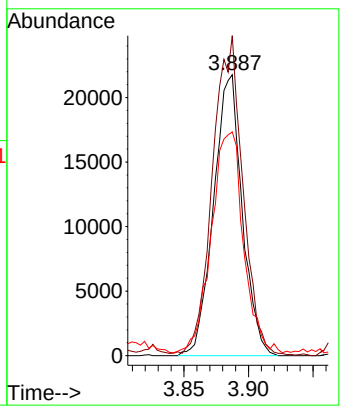


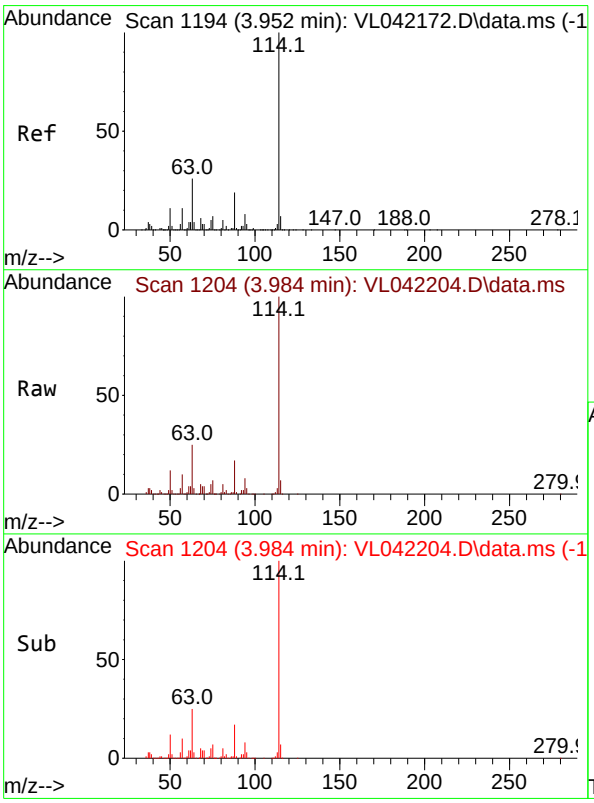
#30
Cyclohexane
Concen: 1.496 ppbv
RT: 3.887 min Scan# 11
Delta R.T. 0.035 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 84 Resp: 33602

Ion	Ratio	Lower	Upper
84	100		
56	118.8	102.8	154.2
41	87.3	66.5	99.7

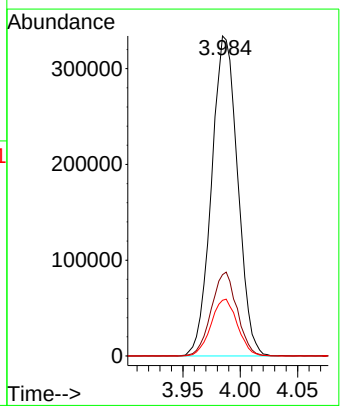


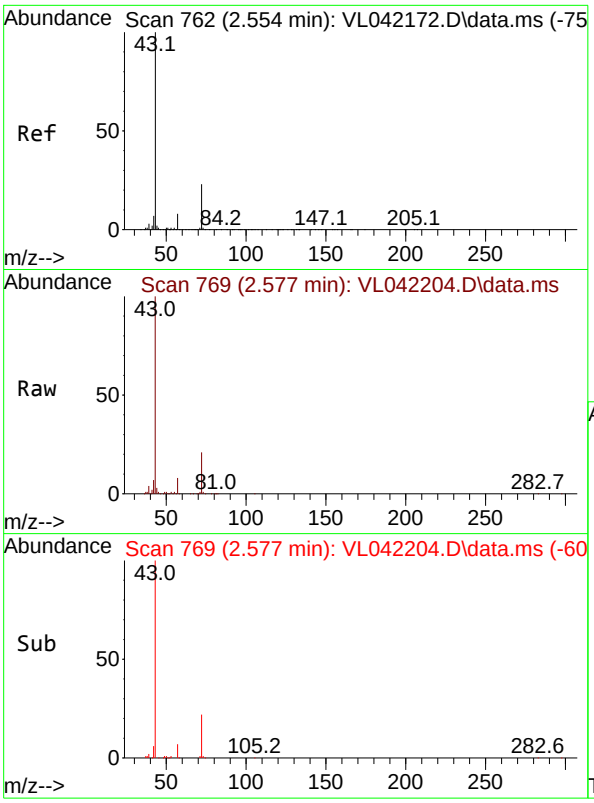


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.984 min Scan# 1204
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:114 Resp: 528809

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	17.9	15.0	22.4



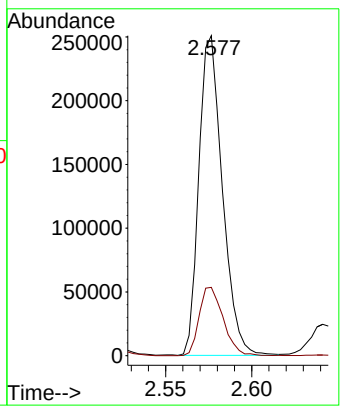


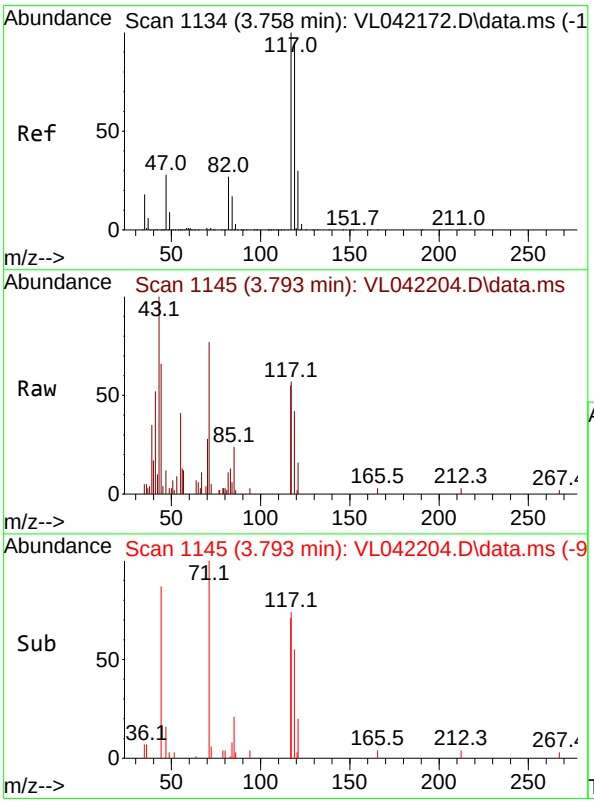
#34
2-Butanone
Concen: 6.223 ppbv
RT: 2.577 min Scan# 7
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 43 Resp: 238611

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2

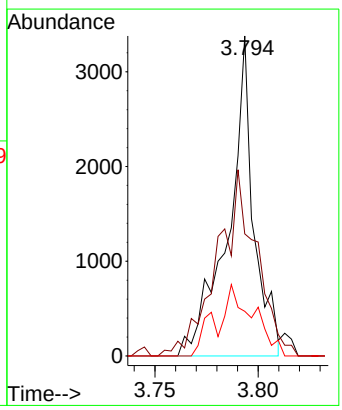


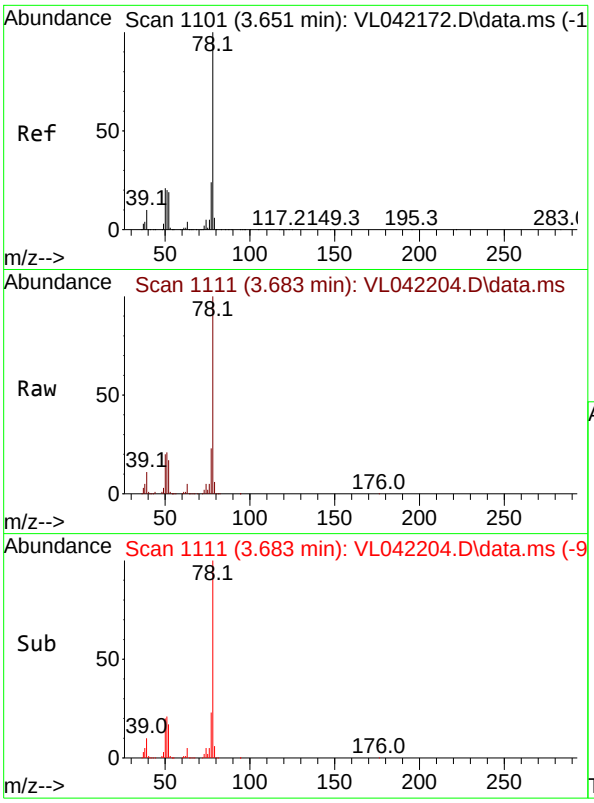


#35
Carbon Tetrachloride
Concen: 0.070 ppbv
RT: 3.793 min Scan# 1145
Delta R.T. 0.035 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:117 Resp: 2894

Ion	Ratio	Lower	Upper
117	100		
119	33.5	76.2	114.2#
121	14.0	24.2	36.4#



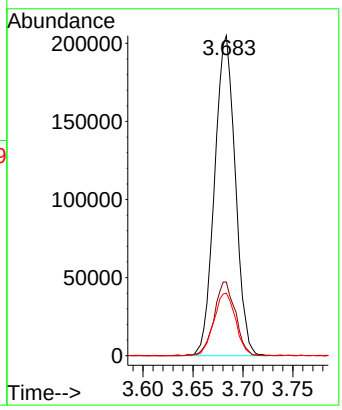


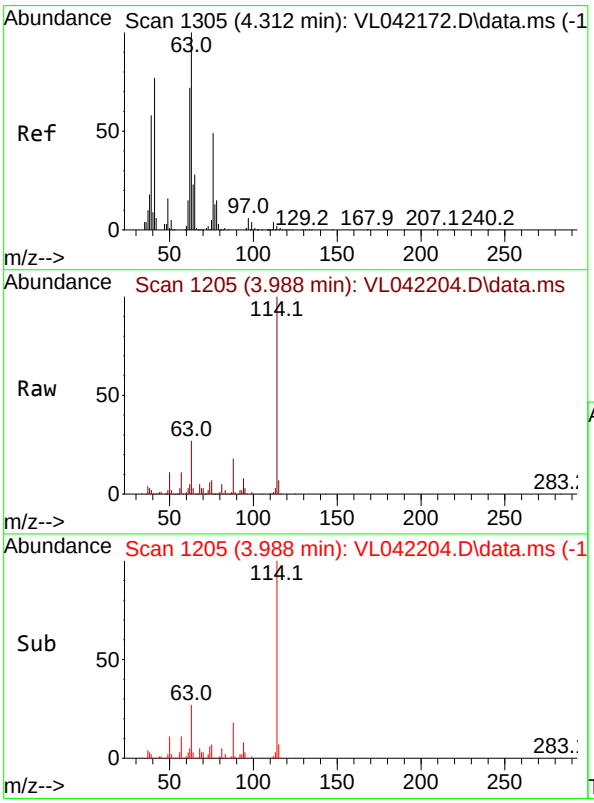
#36
Benzene
Concen: 5.632 ppbv
RT: 3.683 min Scan# 11
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 78 Resp: 295232

Ion	Ratio	Lower	Upper
78	100		
77	22.8	19.1	28.7
50	19.5	16.6	24.8

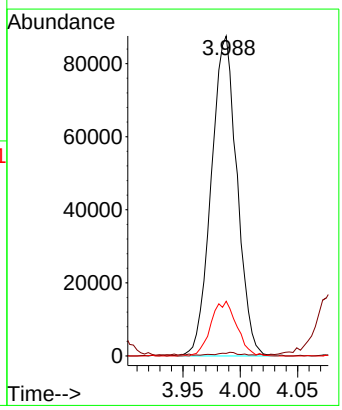


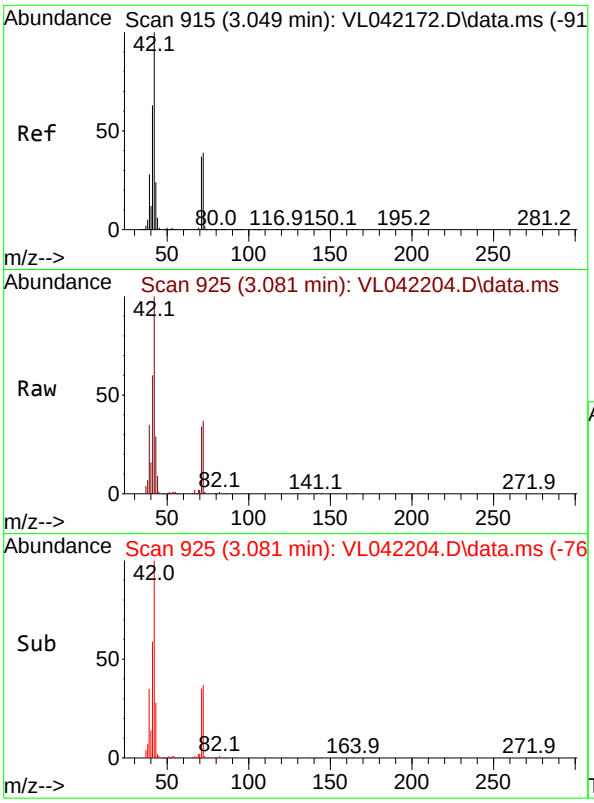


#39
1,2-Dichloropropane
Concen: 7.163 ppbv
RT: 3.988 min Scan# 1205
Delta R.T. -0.324 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 63 Resp: 136761

Ion	Ratio	Lower	Upper
63	100		
41	0.4	61.7	92.5#
62	17.1	57.6	86.4#



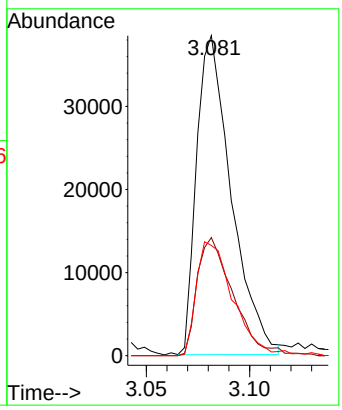


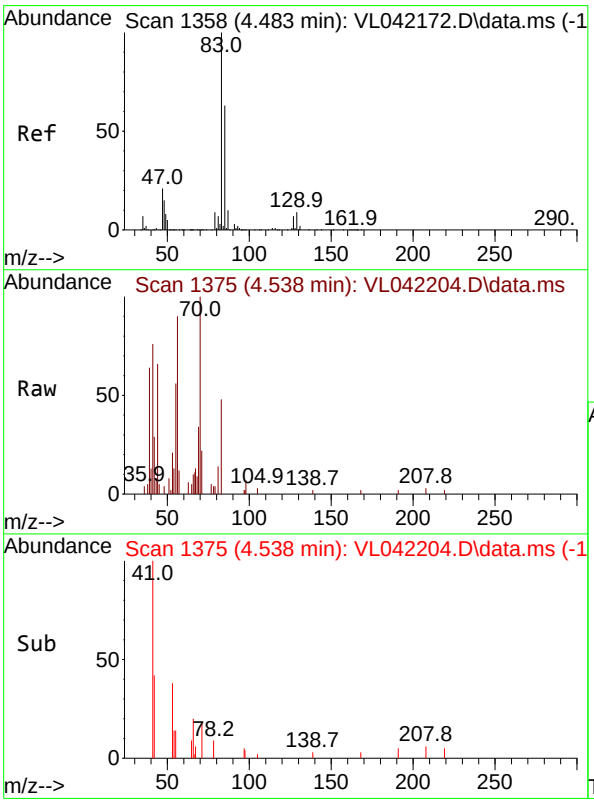
#41
Tetrahydrofuran
Concen: 2.032 ppbv
RT: 3.081 min Scan# 9
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 42 Resp: 44873

Ion	Ratio	Lower	Upper
42	100		
72	38.6	31.4	47.0
71	37.9	30.2	45.4

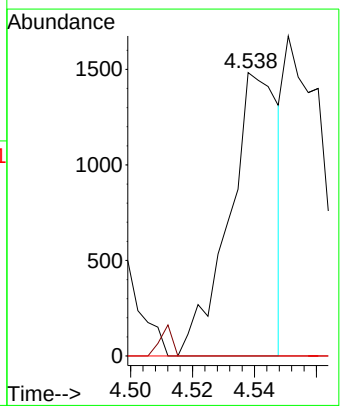


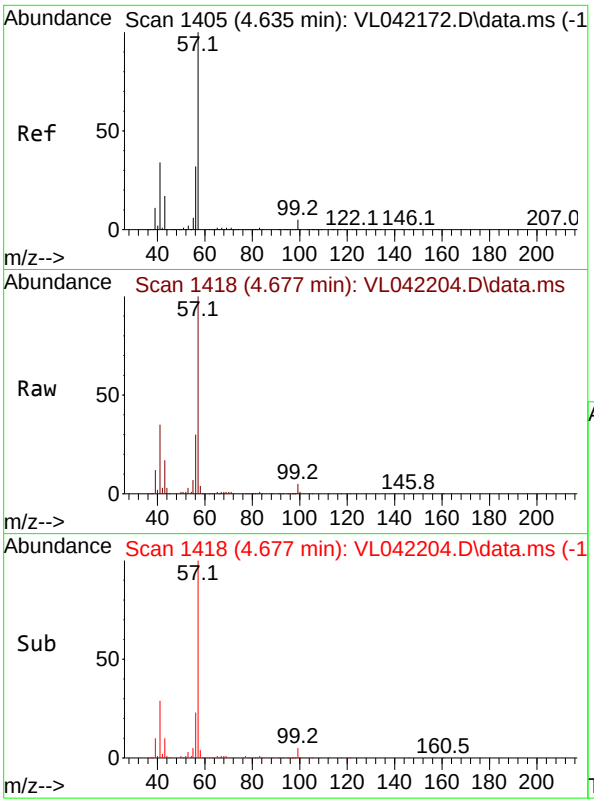


#42
Bromodichloromethane
Concen: 0.039 ppbv
RT: 4.538 min Scan# 1375
Delta R.T. 0.055 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 83 Resp: 1622

Ion	Ratio	Lower	Upper
83	100		
85	0.0	50.5	75.7#
127	0.0	5.9	8.9#



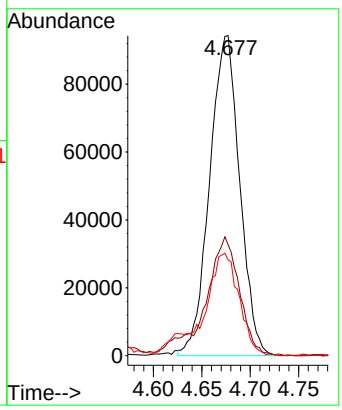


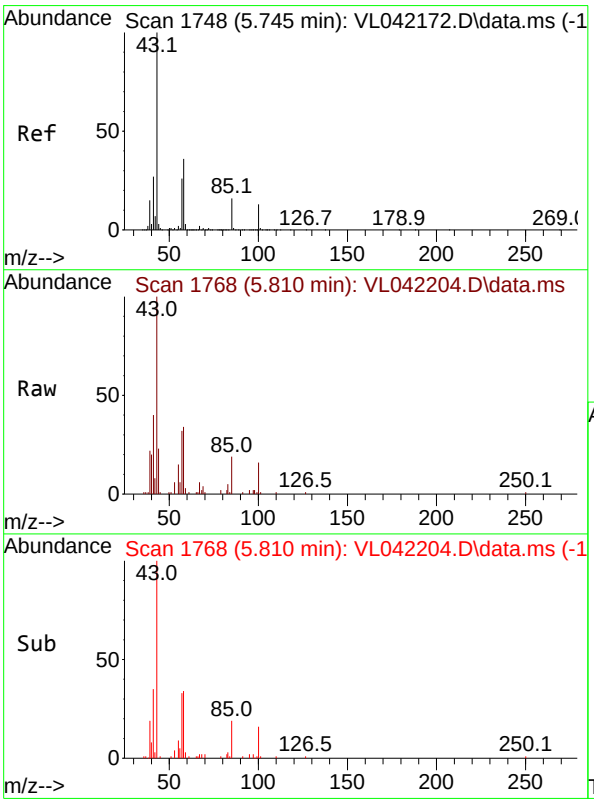
#44
2,2,4-Trimethylpentane
Concen: 2.300 ppbv
RT: 4.677 min Scan# 14
Delta R.T. 0.042 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 57 Resp: 203749

Ion	Ratio	Lower	Upper
57	100		
41	42.2	26.8	40.2#
56	38.6	25.6	38.4#

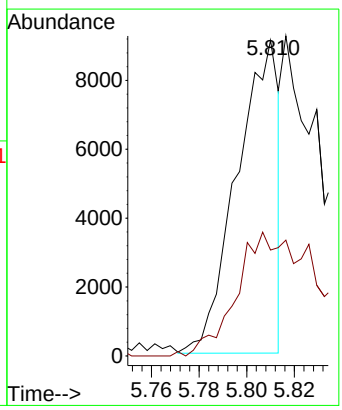


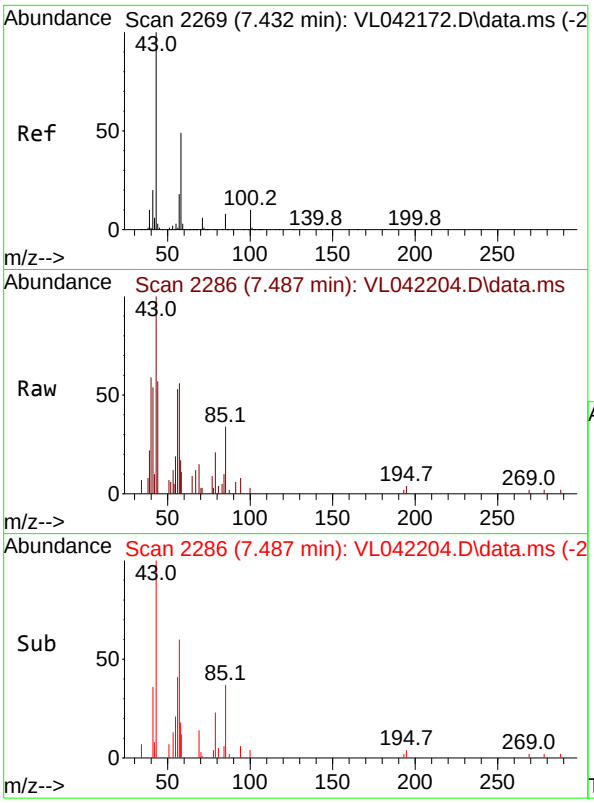


#50
4-Methyl-2-Pentanone
Concen: 0.182 ppbv
RT: 5.810 min Scan# 1768
Delta R.T. 0.064 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 43 Resp: 11036

Ion	Ratio	Lower	Upper
43	100		
58	82.6	29.0	43.6#



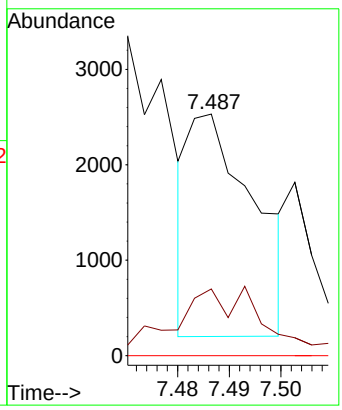


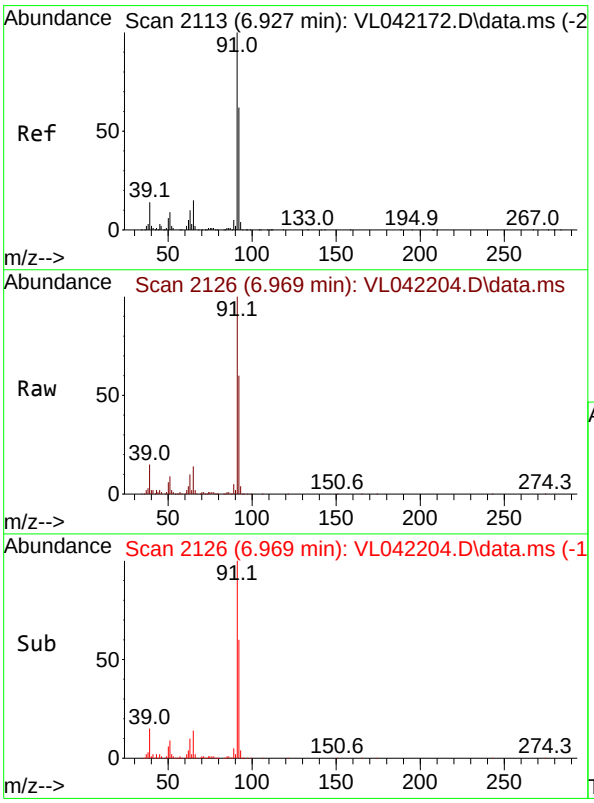
#51
2-Hexanone
Concen: 0.041 ppbv
RT: 7.487 min Scan# 2
Delta R.T. 0.055 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 43 Resp: 2034

Ion	Ratio	Lower	Upper
43	100		
58	49.6	39.7	59.5
98	0.0	0.1	0.1#

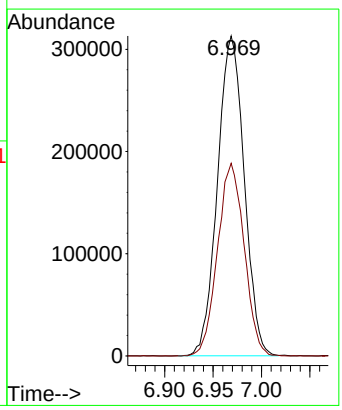


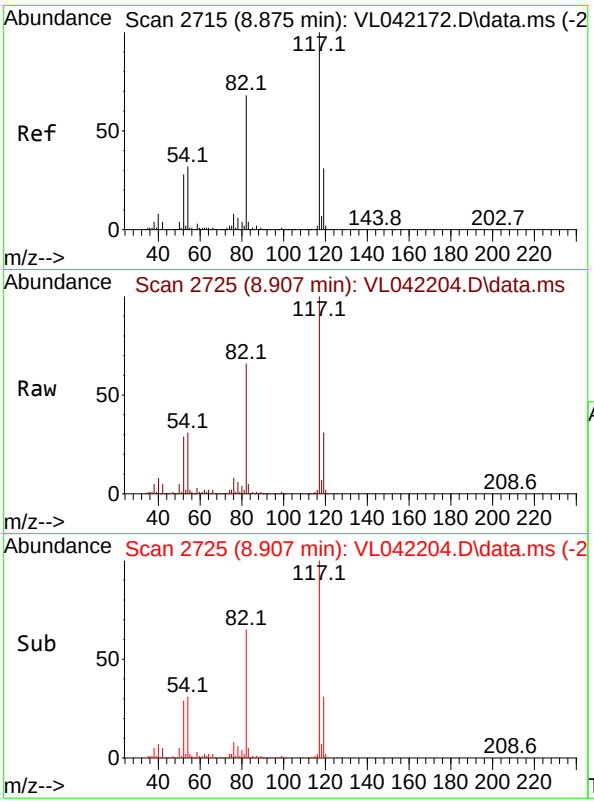


#53
Toluene
Concen: 9.680 ppbv
RT: 6.969 min Scan# 2126
Delta R.T. 0.042 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 601582

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.4	72.6



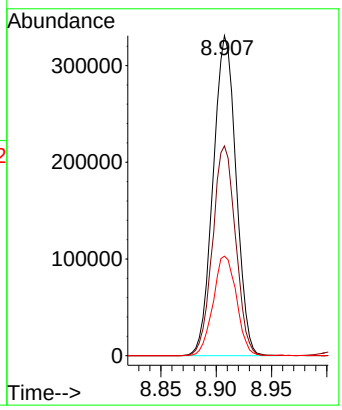


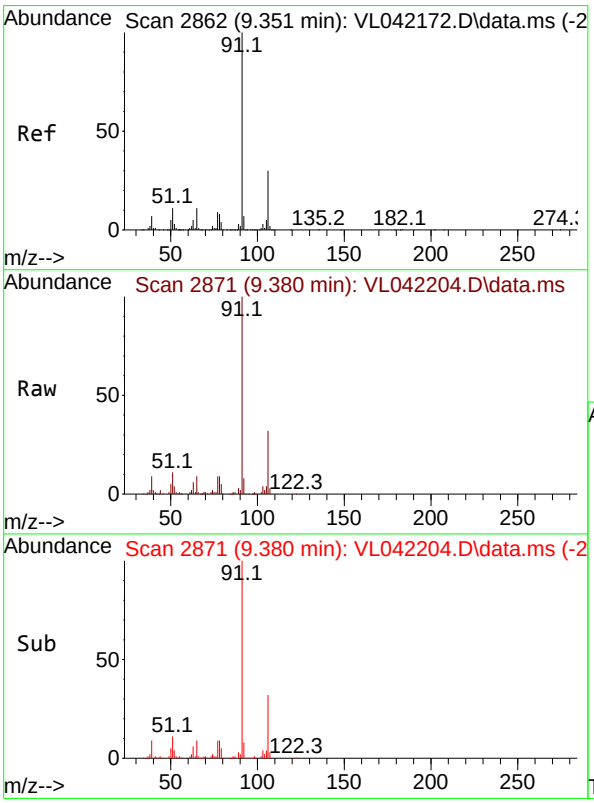
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.907 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion:117 Resp: 477707

Ion	Ratio	Lower	Upper
117	100		
82	65.6	55.8	83.6
119	31.7	25.5	38.3

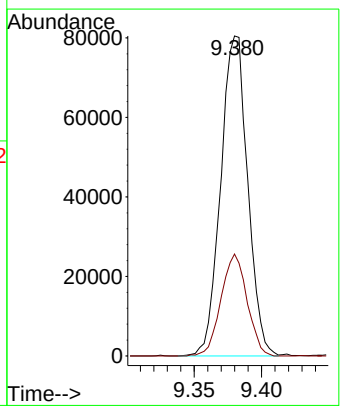


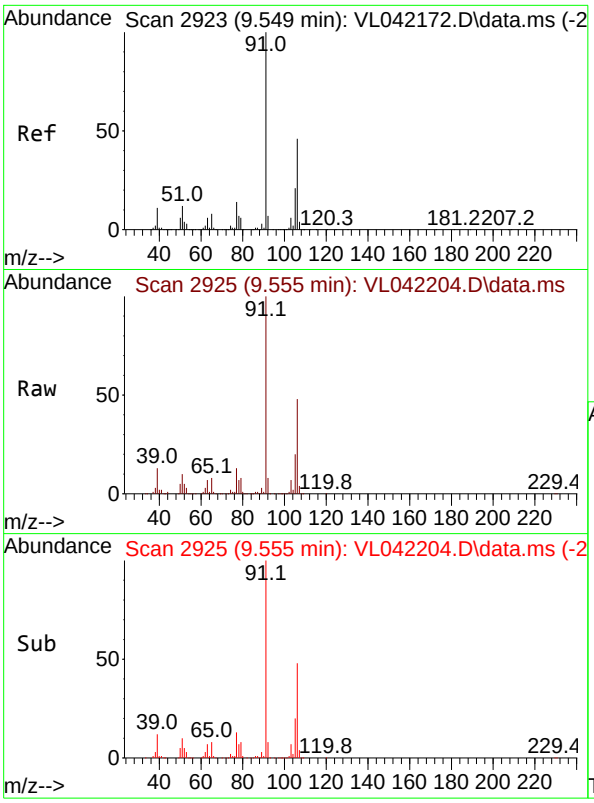


#58
Ethyl Benzene
Concen: 1.322 ppbv
RT: 9.380 min Scan# 2871
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 112145

Ion	Ratio	Lower	Upper
91	100		
106	31.9	24.2	36.2



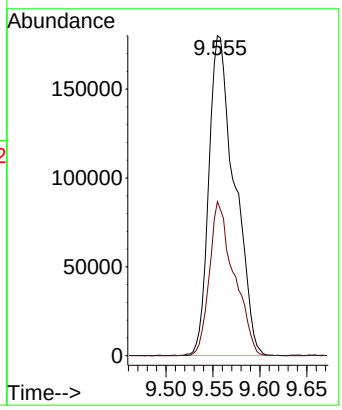


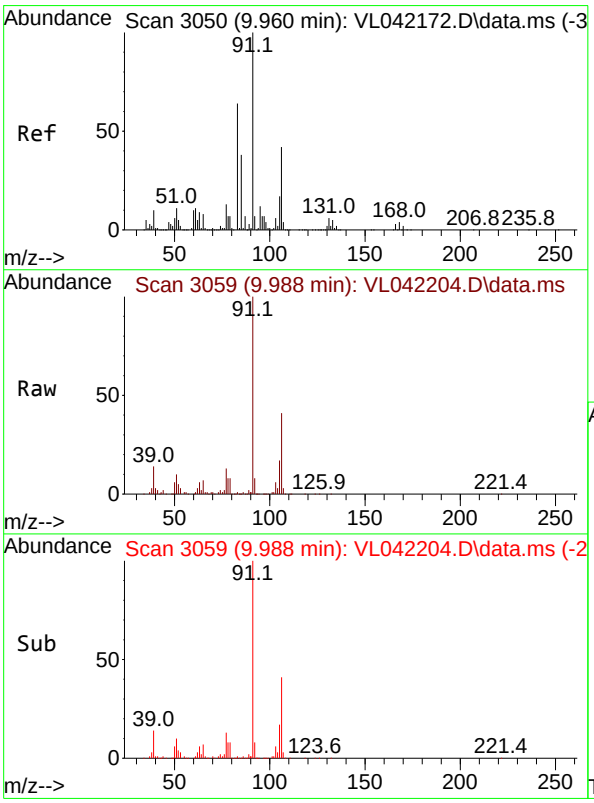
#59
m/p-Xylene
Concen: 5.070 ppbv
RT: 9.555 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 91 Resp: 343493

Ion	Ratio	Lower	Upper
91	100		
106	46.1	36.4	54.6

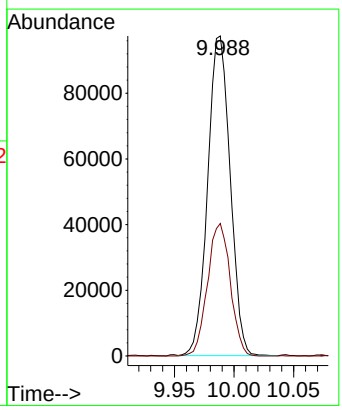


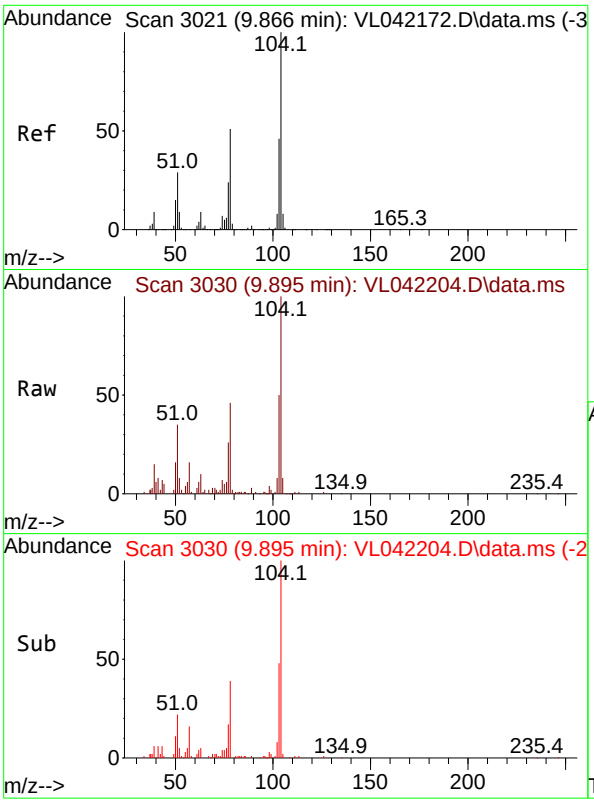


#60
o-Xylene
Concen: 1.884 ppbv
RT: 9.988 min Scan# 3059
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion: 91 Resp: 127965

Ion	Ratio	Lower	Upper
91	100		
106	41.9	20.8	62.5



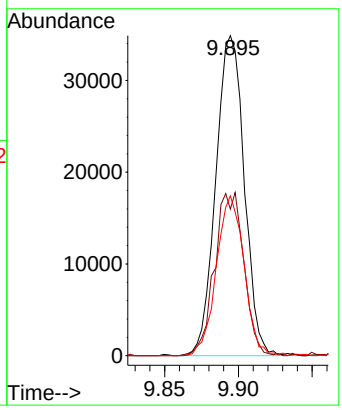


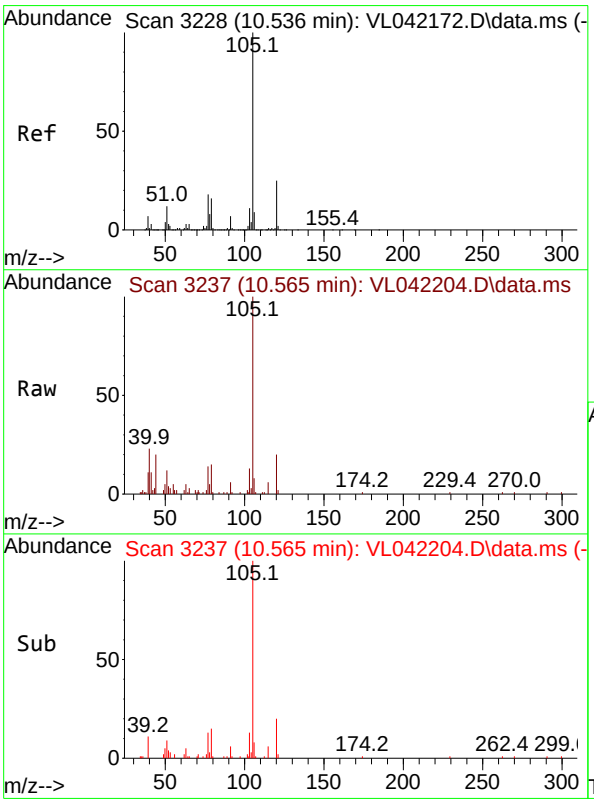
#61
Styrene
Concen: 1.394 ppbv
RT: 9.895 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion:104 Resp: 46841

Ion	Ratio	Lower	Upper
104	100		
78	52.3	41.8	62.6
103	48.8	37.0	55.4

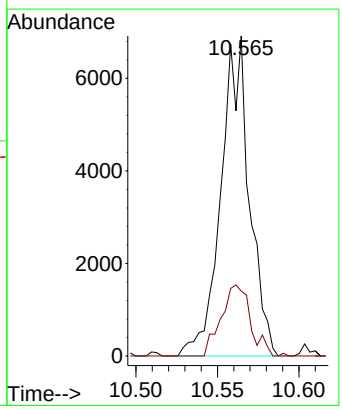


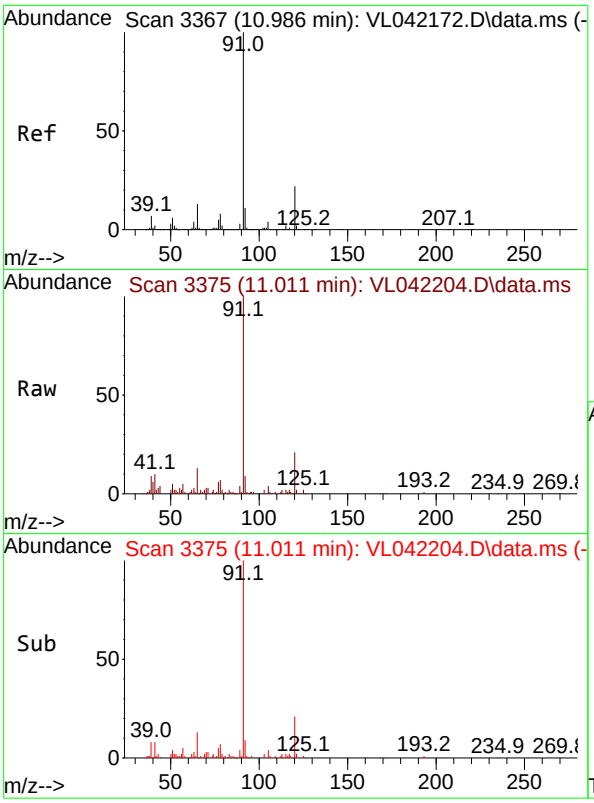


#62
Isopropylbenzene
Concen: 0.082 ppbv
RT: 10.565 min Scan# 3237
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 8374

Ion	Ratio	Lower	Upper
105	100		
120	23.0	19.9	29.9



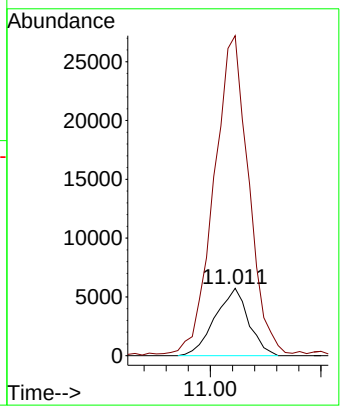


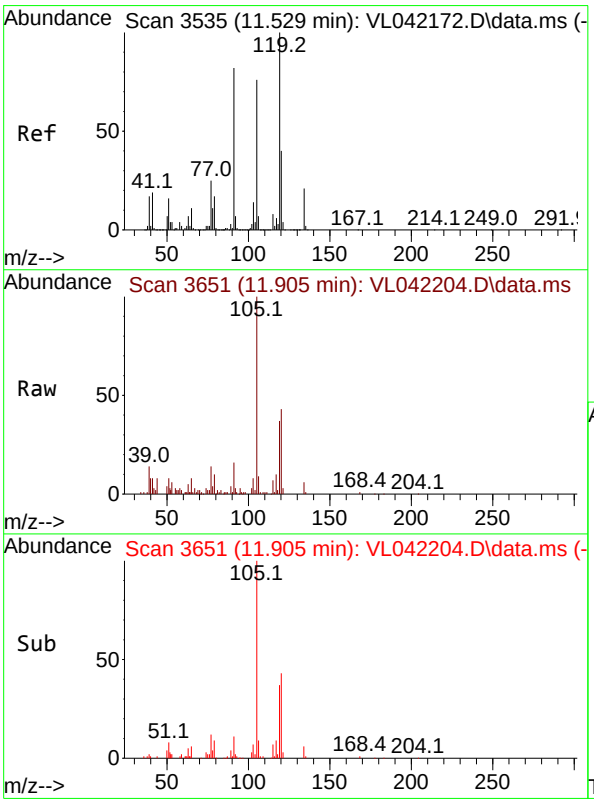
#64
n-propylbenzene
Concen: 0.230 ppbv
RT: 11.011 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion:120 Resp: 6017

Ion	Ratio	Lower	Upper
120	100		
91	499.2	376.9	565.3

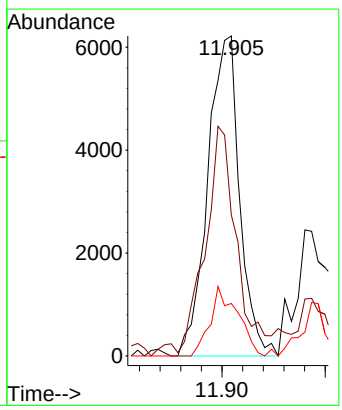


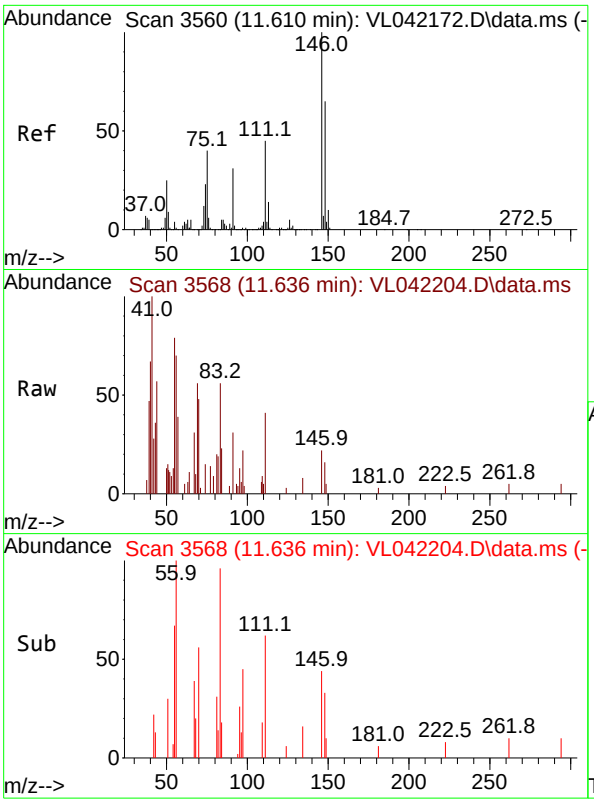


#65
tert-Butylbenzene
Concen: 0.071 ppbv
RT: 11.905 min Scan# 3651
Delta R.T. 0.375 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:119 Resp: 6664

Ion	Ratio	Lower	Upper
119	100		
91	76.7	66.0	99.0
134	19.1	16.7	25.1



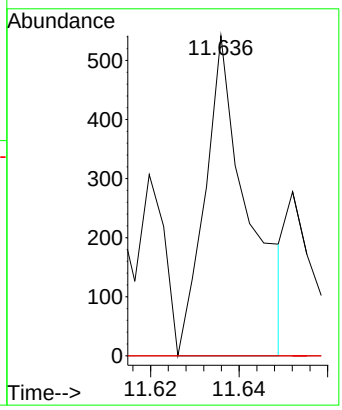


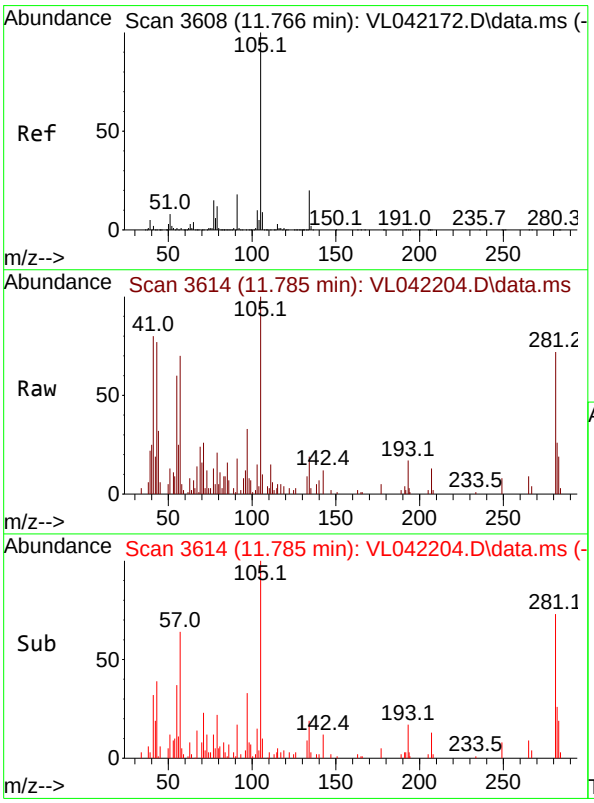
#66
Benzyl Chloride
Concen: 0.037 ppbv
RT: 11.636 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 91 Resp: 366

Ion	Ratio	Lower	Upper
91	100		
126	0.0	13.8	20.6#
128	0.0	4.5	6.7#

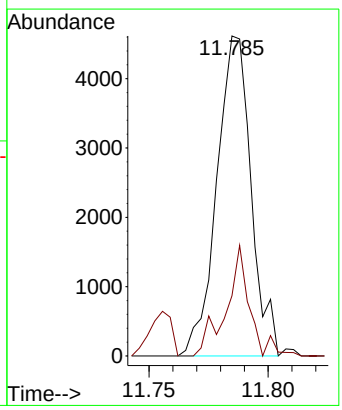


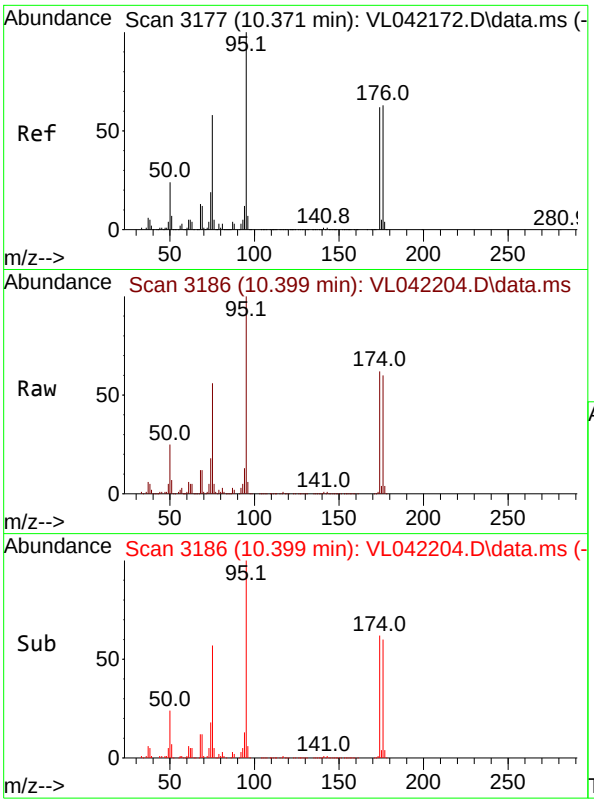


#67
sec-Butylbenzene
Concen: 0.035 ppbv
RT: 11.785 min Scan# 3614
Delta R.T. 0.019 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 4619

Ion	Ratio	Lower	Upper
105	100		
134	24.0	15.5	23.3#



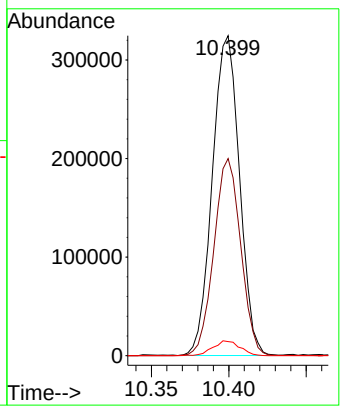


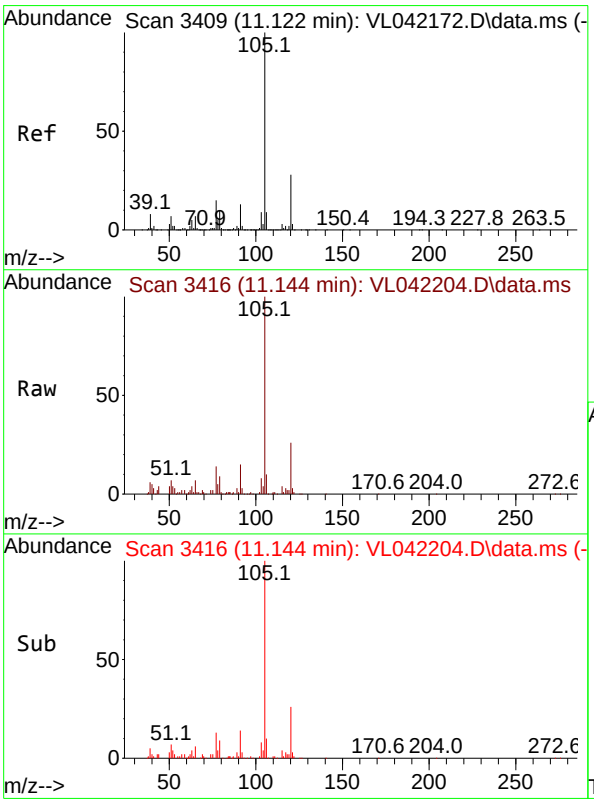
#68
1-Bromo-4-Fluorobenzene
Concen: 10.078 ppbv
RT: 10.399 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion: 95 Resp: 395364

Ion	Ratio	Lower	Upper
95	100		
174	61.0	50.6	76.0
175	4.6	3.8	5.6

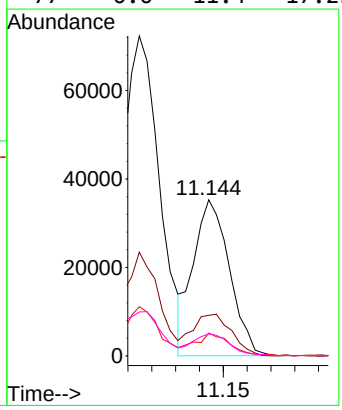


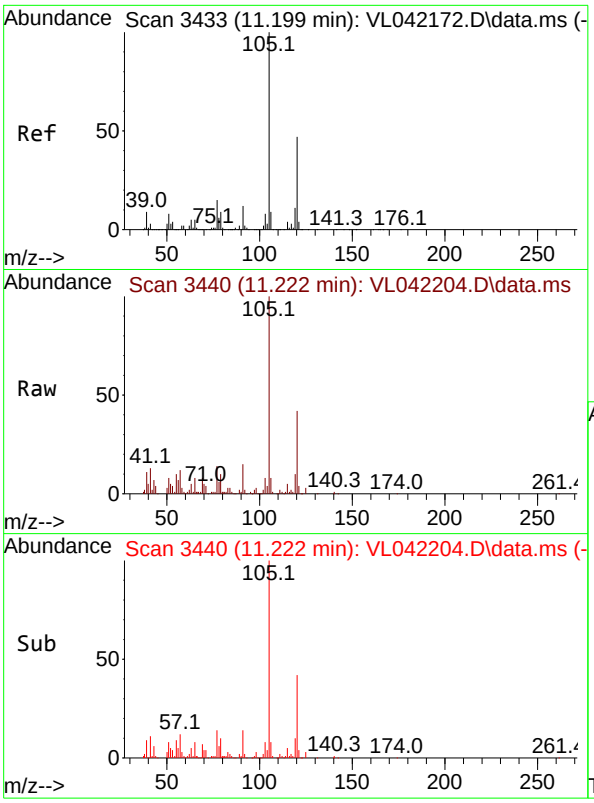


#72
4-Ethyltoluene
Concen: 0.441 ppbv
RT: 11.144 min Scan# 3416
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 37267

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#



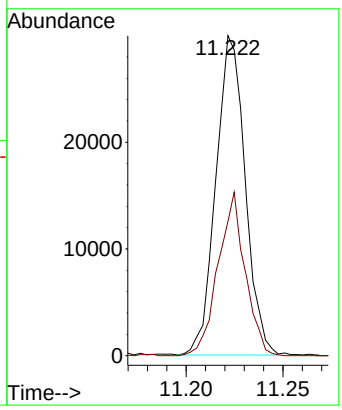


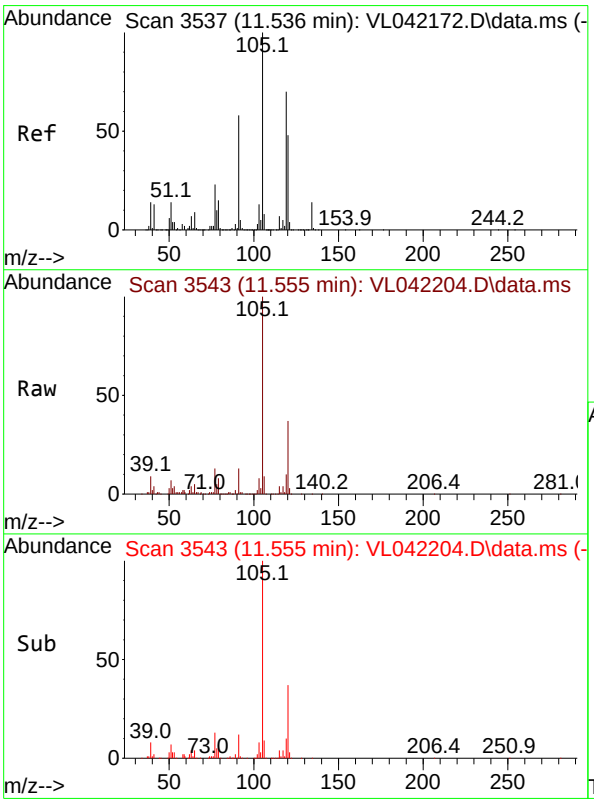
#73
1,3,5-Trimethylbenzene
Concen: 0.426 ppbv
RT: 11.222 min Scan# 34
Delta R.T. 0.022 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion:105 Resp: 31497

Ion	Ratio	Lower	Upper
105	100		
120	42.0	37.4	56.0

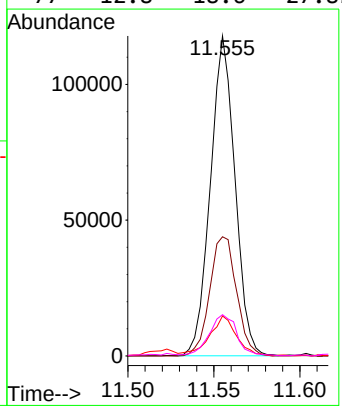


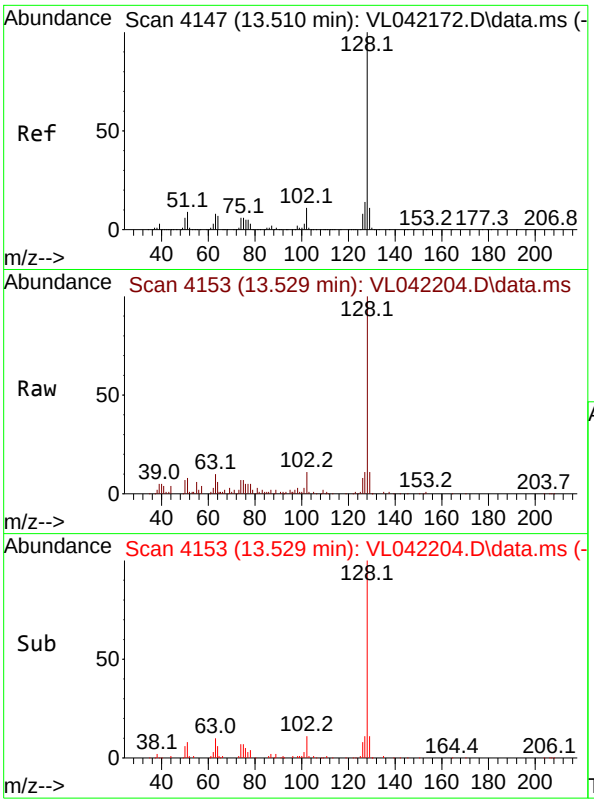


#74
1,2,4-Trimethylbenzene
Concen: 1.378 ppbv
RT: 11.555 min Scan# 3543
Delta R.T. 0.019 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:105 Resp: 117257

Ion	Ratio	Lower	Upper
105	100		
120	37.3	38.6	58.0#
91	12.2	46.2	69.2#
77	12.8	18.6	27.8#



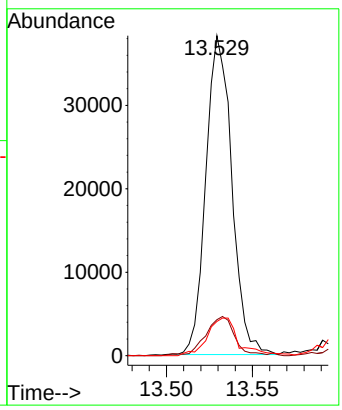


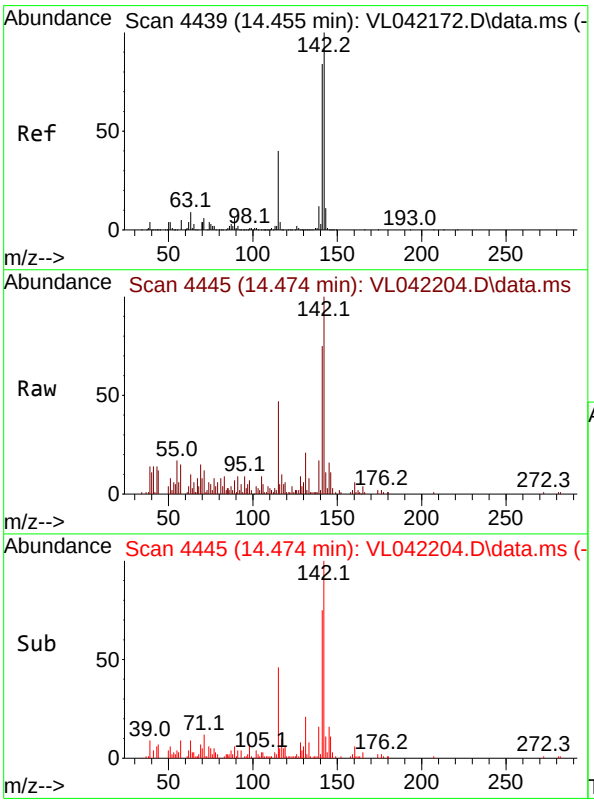
#79
Naphthalene
Concen: 0.431 ppbv
RT: 13.529 min Scan# 4
Delta R.T. 0.019 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025

Tgt Ion:128 Resp: 40082

Ion	Ratio	Lower	Upper
128	100		
127	11.0	10.8	16.2
129	10.8	9.0	13.4

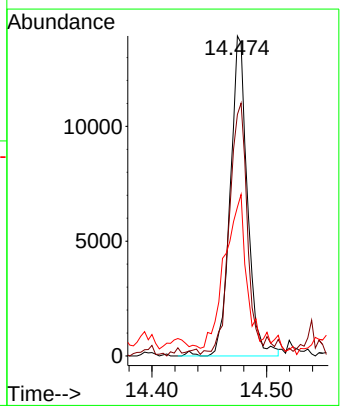




#80
Naphthalene,2-methyl-
Concen: 0.317 ppbv
RT: 14.474 min Scan# 4445
Delta R.T. 0.019 min
Lab File: VL042204.D
Acq: 31 Mar 2025 11:06

Tgt Ion:142 Resp: 14485

Ion	Ratio	Lower	Upper
142	100		
141	85.6	66.3	99.5
115	64.9	31.6	47.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042205.D
Acq On : 31 Mar 2025 11:52
Operator : SY/MD
Sample : Q1669-06DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Quant Time: Apr 01 01:37:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.803	49	188934	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.985	114	537109	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.908	117	480959	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.397	95	388692	9.841	ppbv	0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	3598	0.129	ppbv #	84
3) Chlorodifluoromethane	1.483	51	2993	0.105	ppbv #	84
4) Chloromethane	1.538	50	1536	0.135	ppbv #	82
9) Propene	1.489	41	58893	4.509	ppbv	95
10) Heptane	5.014	43	10399	0.299	ppbv #	28
11) Trichlorofluoromethane	1.884	101	1386	0.051	ppbv	86
13) Ethanol	1.732	45	32574	26.380	ppbv	84
15) Acetone	1.845	43	190475	7.209	ppbv #	85
16) 1,3-Butadiene	1.609	39	26963	2.089	ppbv #	50
17) tert-Butyl alcohol	2.062	59	1819	0.055	ppbv #	71
19) Isopropyl Alcohol	1.897	45	5660	0.380	ppbv #	1
20) Methylene Chloride	2.075	84	2549	0.259	ppbv #	93
21) Allyl Chloride	2.088	41	2790	0.150	ppbv #	1
23) Vinyl Acetate	2.489	43	50576	4.422	ppbv #	52
25) Ethyl Acetate	2.846	43	20526	0.299	ppbv #	79
26) Hexane	2.842	57	29019	1.095	ppbv #	33
30) Cyclohexane	3.884	84	8868	0.386	ppbv	96
34) 2-Butanone	2.577	43	62430	1.603	ppbv	99
36) Benzene	3.681	78	76263	1.432	ppbv	98
39) 1,2-Dichloropropane	3.985	63	136854	7.057	ppbv #	22
44) 2,2,4-Trimethylpentane	4.671	57	50242	0.558	ppbv #	79
50) 4-Methyl-2-Pentanone	5.810	43	2646	0.043	ppbv #	14
53) Toluene	6.966	91	150266	2.381	ppbv	98
58) Ethyl Benzene	9.377	91	27471	0.322	ppbv	95
59) m/p-Xylene	9.555	91	81487	1.195	ppbv	99
60) o-Xylene	9.986	91	28632	0.419	ppbv	92
61) Styrene	9.895	104	9837	0.291	ppbv	92
64) n-propylbenzene	11.012	120	1291	0.049	ppbv	96
72) 4-Ethyltoluene	11.148	105	7817	0.092	ppbv #	55
73) 1,3,5-Trimethylbenzene	11.222	105	7557	0.102	ppbv	89
74) 1,2,4-Trimethylbenzene	11.555	105	24393	0.285	ppbv #	70
79) Naphthalene	13.530	128	6586	0.070	ppbv	97

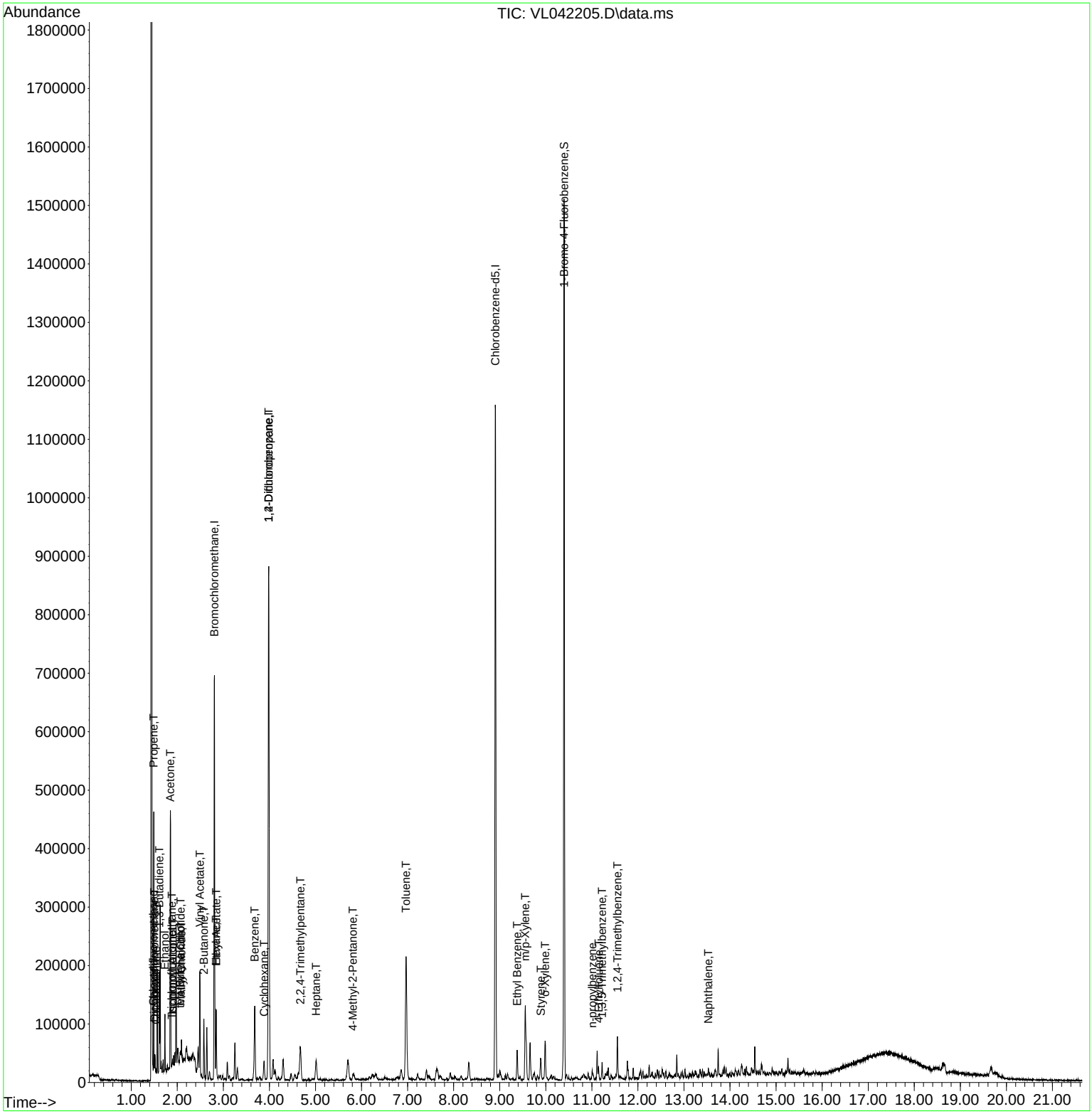
(#) = qualifier out of range (m) = manual integration (+) = signals summed

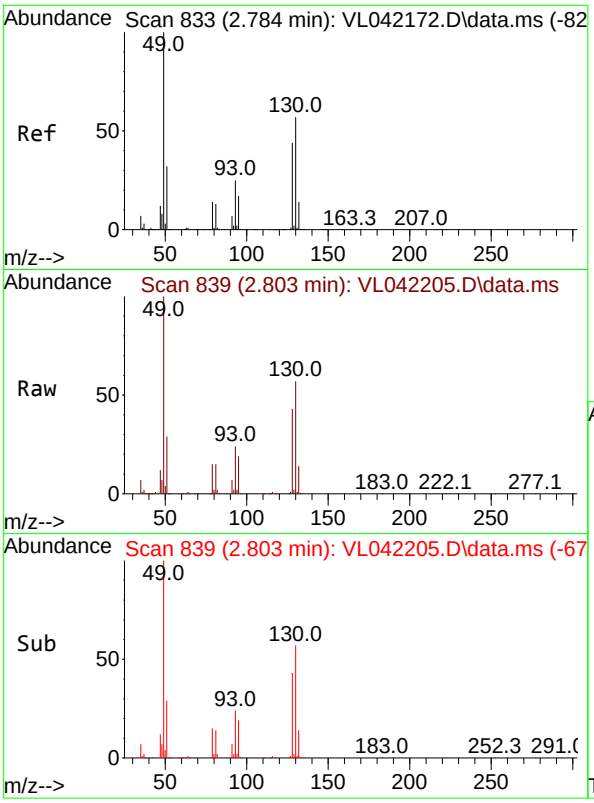
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042205.D
Acq On : 31 Mar 2025 11:52
Operator : SY/MD
Sample : Q1669-06DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Quant Time: Apr 01 01:37:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



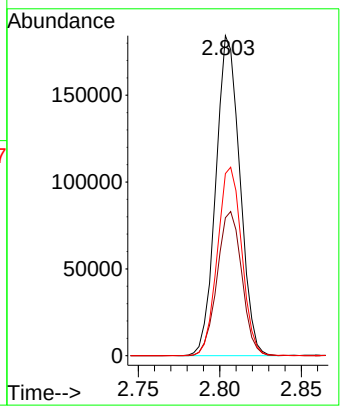


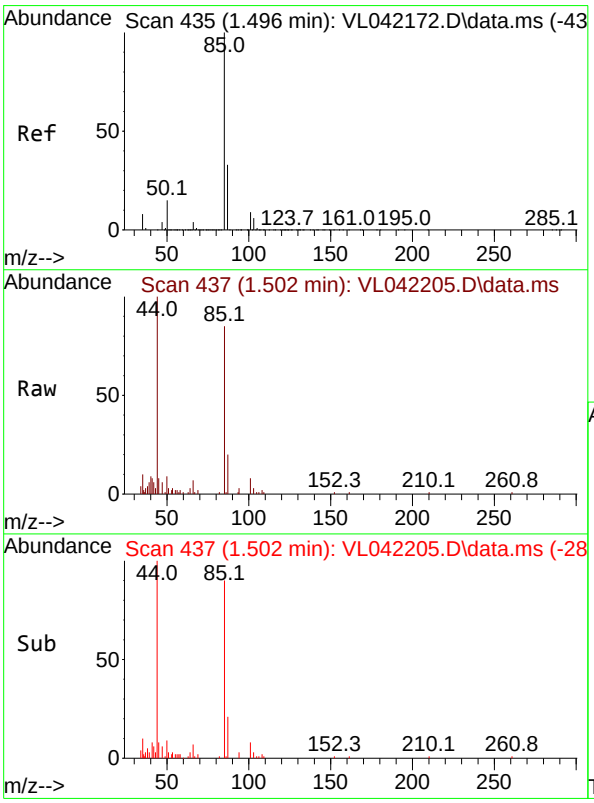
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.803 min Scan# 8
Delta R.T. 0.019 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 49 Resp: 188934

Ion	Ratio	Lower	Upper
49	100		
128	46.3	22.9	68.5
130	59.5	28.8	86.4

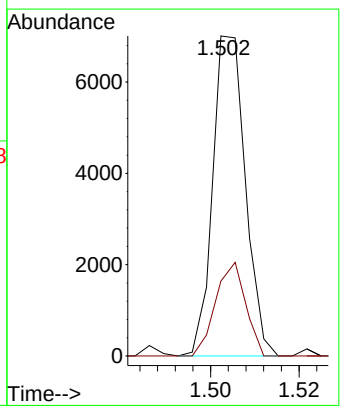


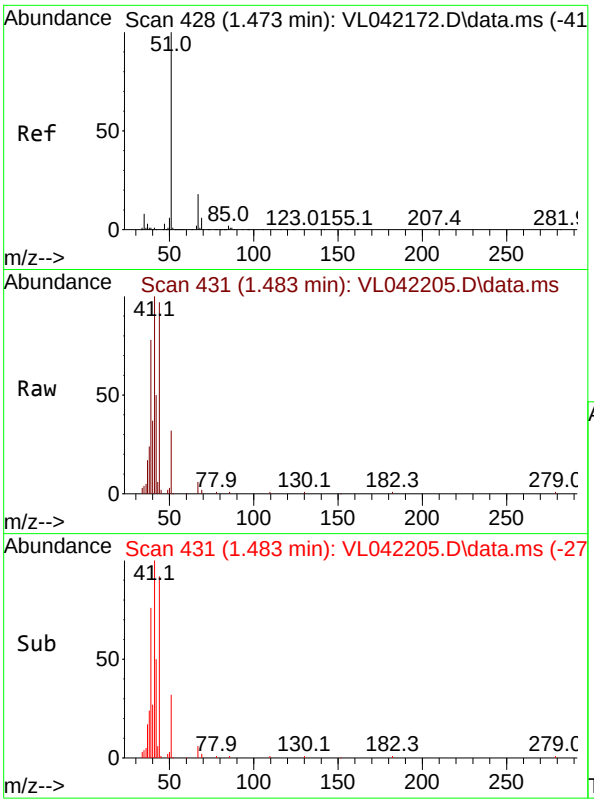


#2
Dichlorodifluoromethane
Concen: 0.129 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 85 Resp: 3598

Ion	Ratio	Lower	Upper
85	100		
87	23.4	26.1	39.1#



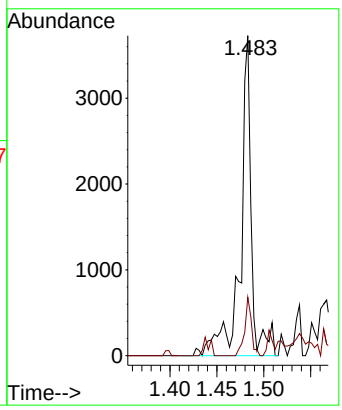


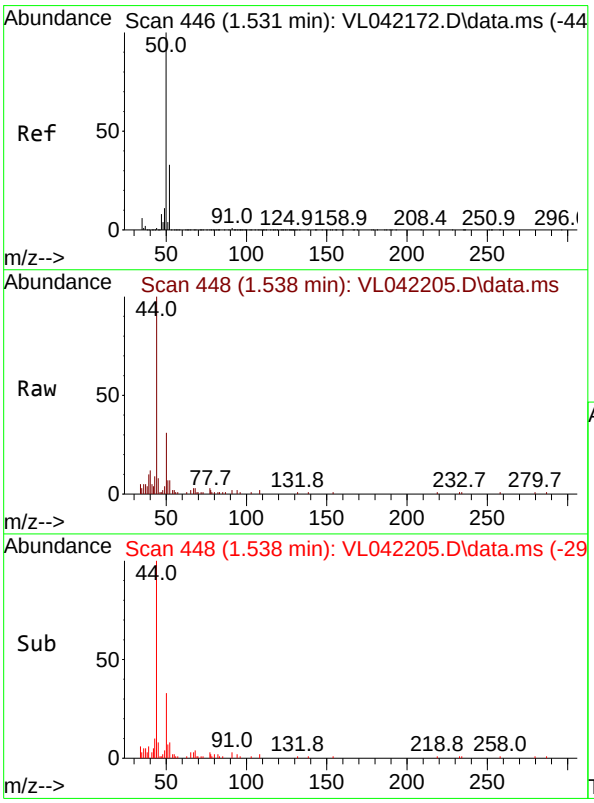
#3
Chlorodifluoromethane
Concen: 0.105 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 51 Resp: 2993

Ion	Ratio	Lower	Upper
51	100		
67	11.4	15.0	22.6#

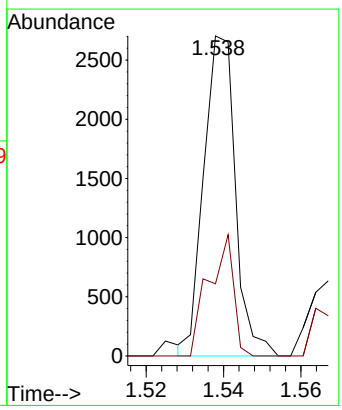


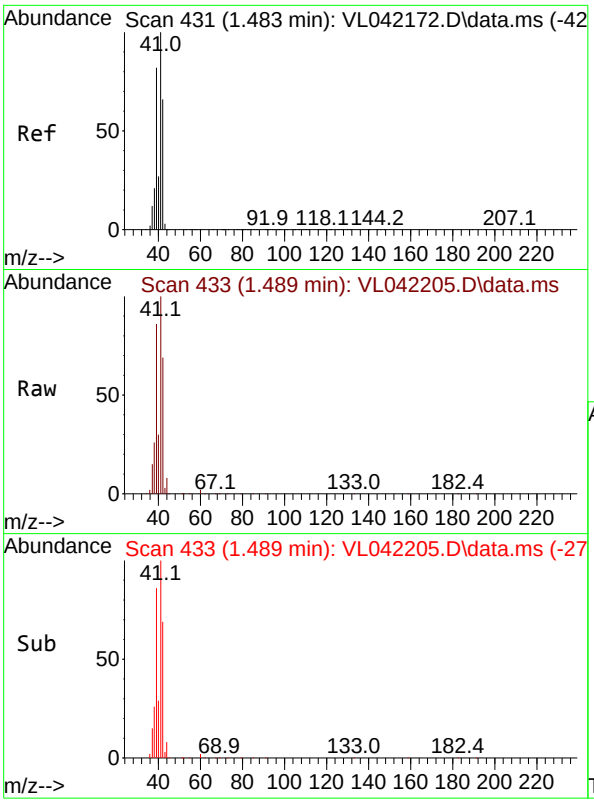


#4
Chloromethane
Concen: 0.135 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 50 Resp: 1536

Ion	Ratio	Lower	Upper
50	100		
52	22.6	26.1	39.1#



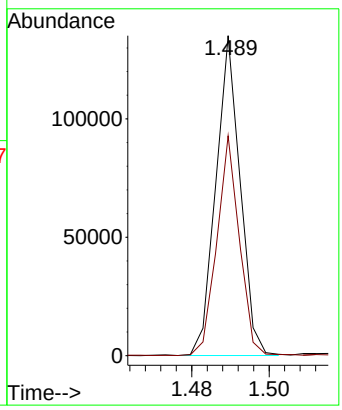


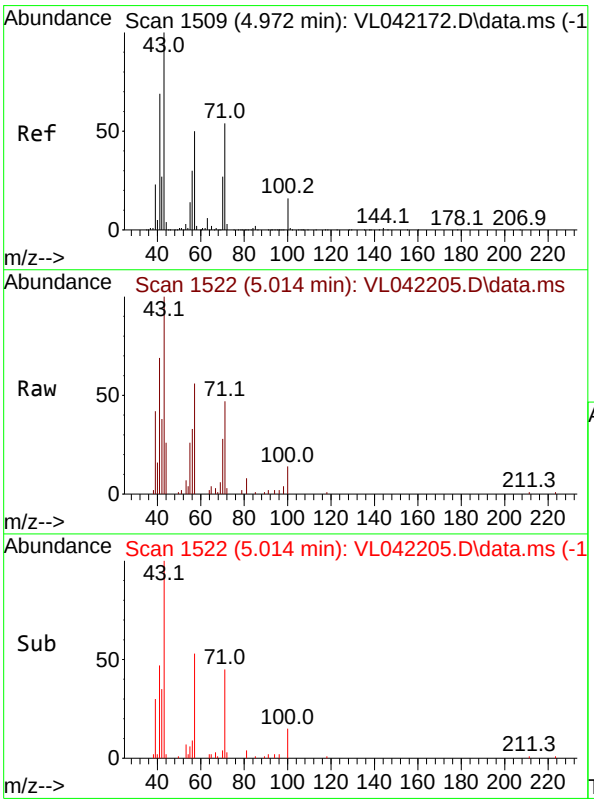
#9
Propene
Concen: 4.509 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 41 Resp: 58893

Ion	Ratio	Lower	Upper
41	100		
42	65.3	55.4	83.2

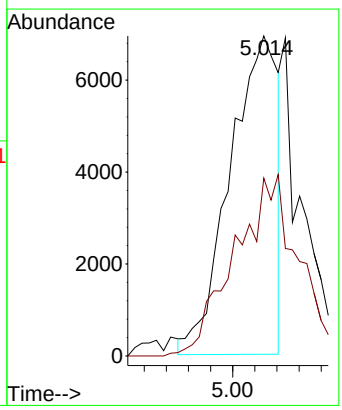


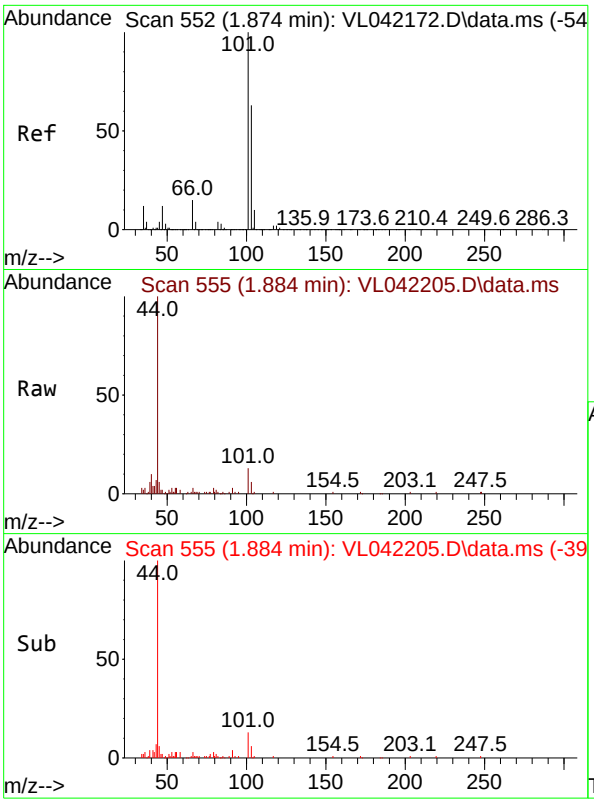


#10
Heptane
Concen: 0.299 ppbv
RT: 5.014 min Scan# 1522
Delta R.T. 0.042 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 43 Resp: 10399

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#



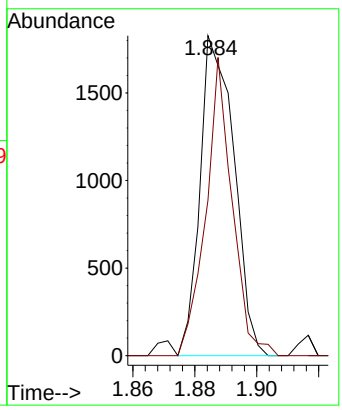


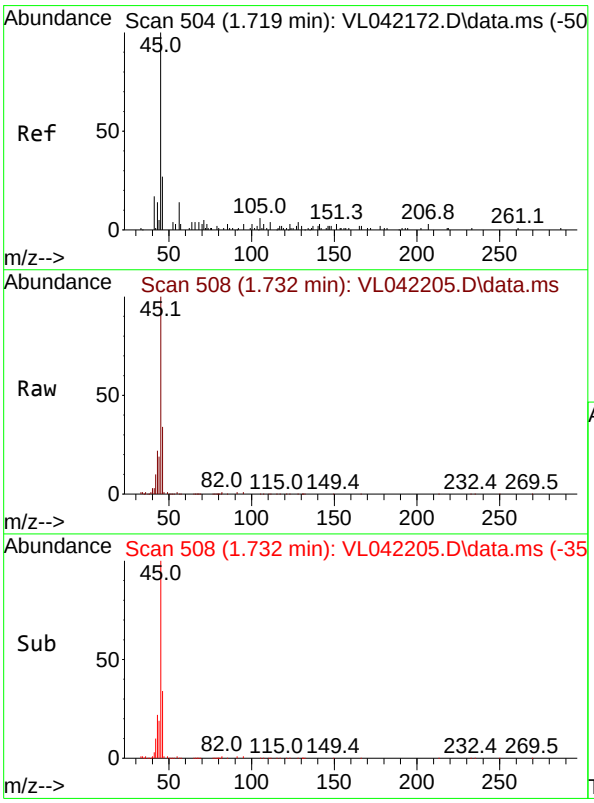
#11
Trichlorofluoromethane
Concen: 0.051 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion:101 Resp: 1386

Ion	Ratio	Lower	Upper
101	100		
103	52.1	50.2	75.2

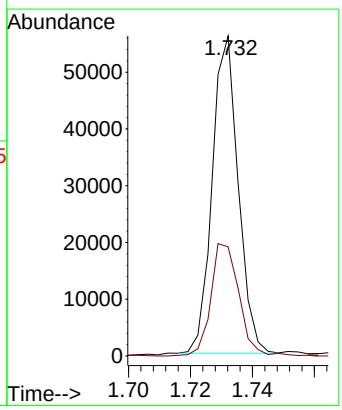


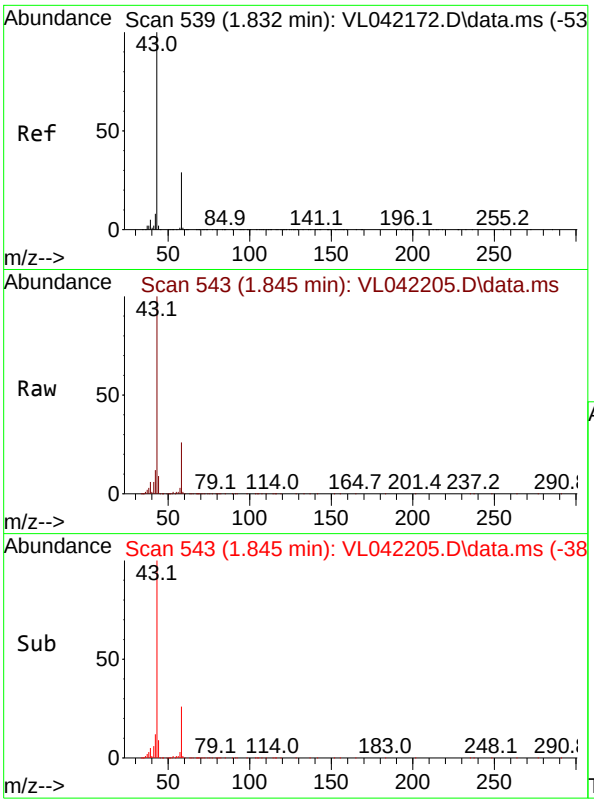


#13
Ethanol
Concen: 26.380 ppbv
RT: 1.732 min Scan# 508
Delta R.T. 0.013 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 45 Resp: 32574

Ion	Ratio	Lower	Upper
45	100		
46	39.1	20.2	80.8



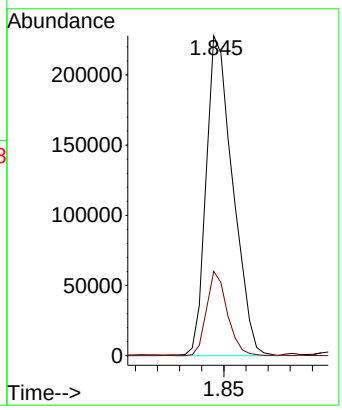


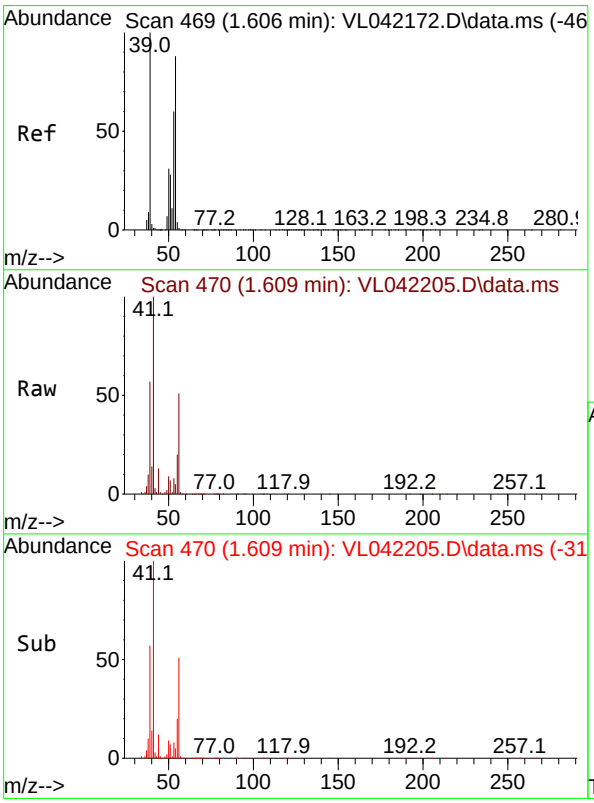
#15
Acetone
Concen: 7.209 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 43 Resp: 190475

Ion	Ratio	Lower	Upper
43	100		
58	20.7	23.2	34.8#

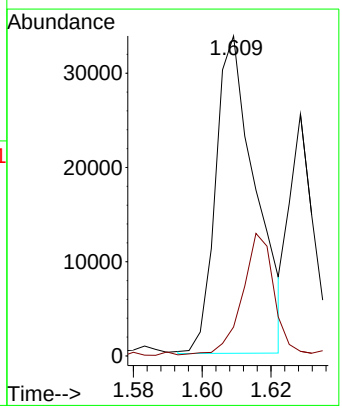


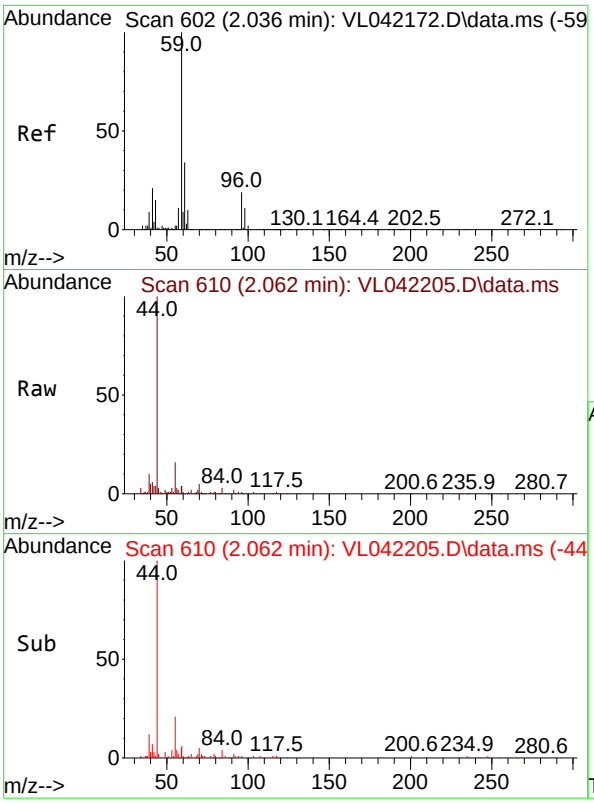


#16
1,3-Butadiene
Concen: 2.089 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 39 Resp: 26963

Ion	Ratio	Lower	Upper
39	100		
54	33.3	60.7	91.1#



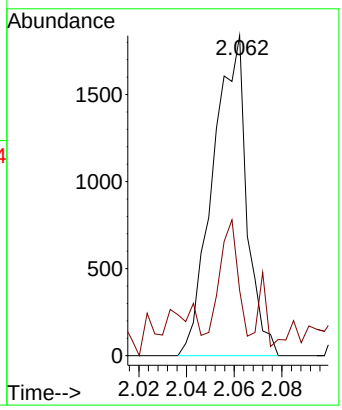


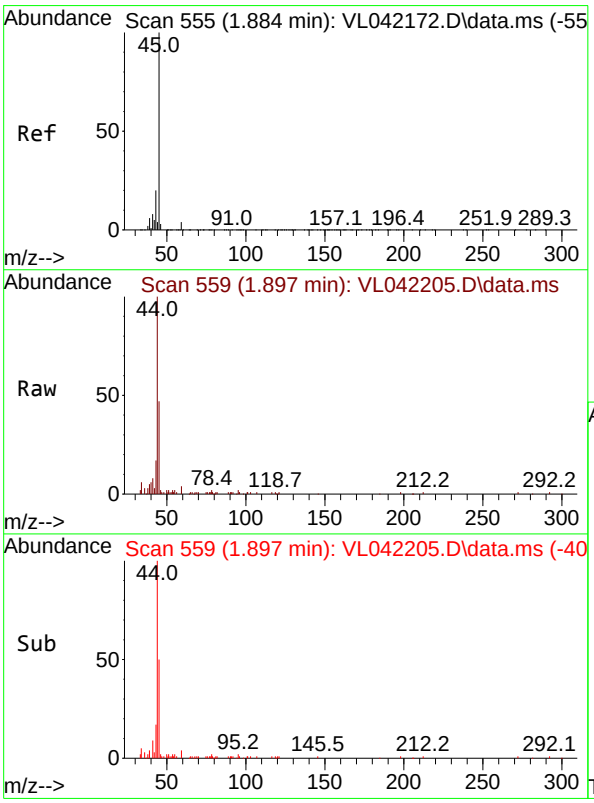
#17
tert-Butyl alcohol
Concen: 0.055 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 59 Resp: 1819

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.9	13.3#

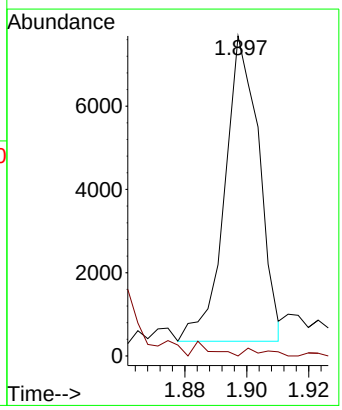


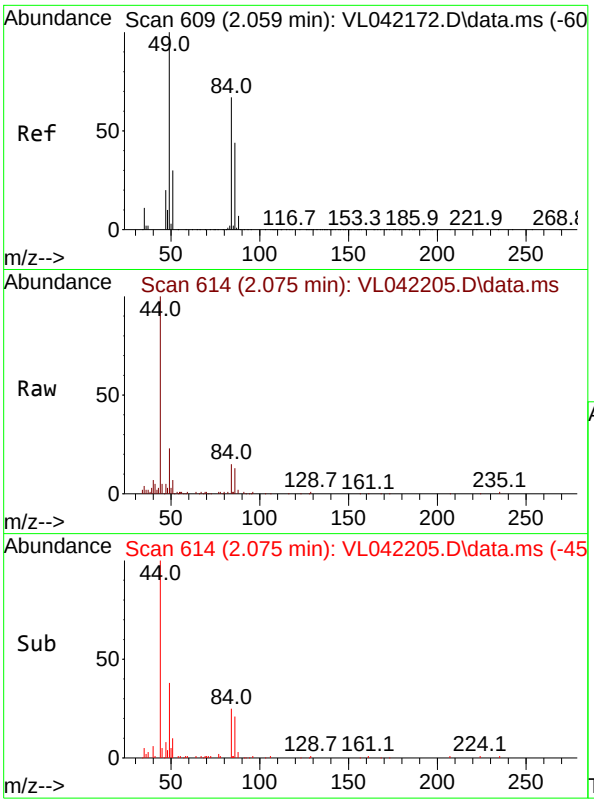


#19
Isopropyl Alcohol
Concen: 0.380 ppbv
RT: 1.897 min Scan# 559
Delta R.T. 0.013 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 45 Resp: 5660

Ion	Ratio	Lower	Upper
45	100		
58	698.4	36.9	55.3#



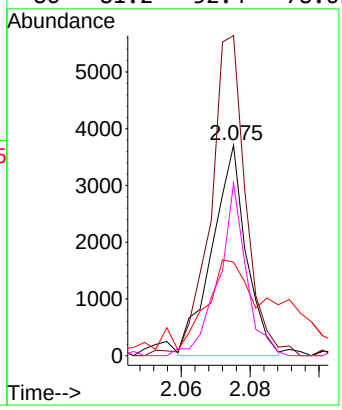


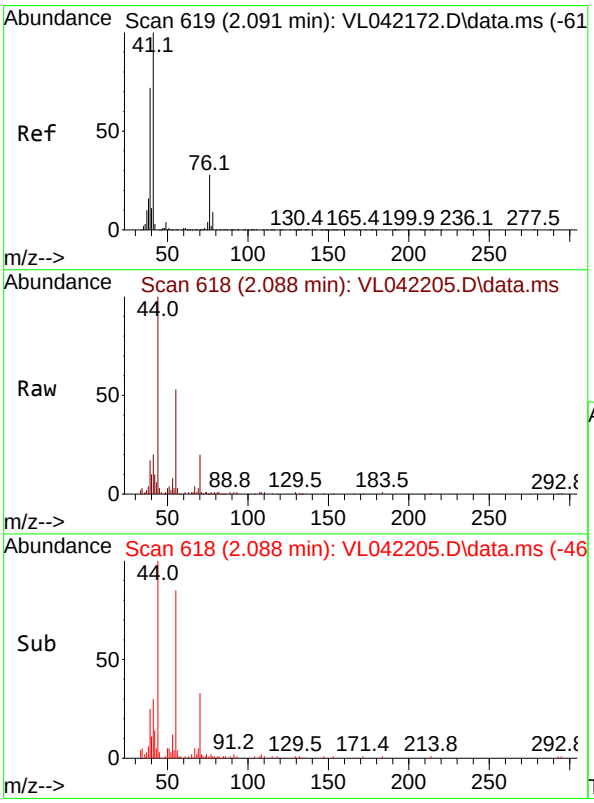
#20
Methylene Chloride
Concen: 0.259 ppbv
RT: 2.075 min Scan# 61
Delta R.T. 0.016 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 84 Resp: 2549

Ion	Ratio	Lower	Upper
84	100		
49	152.5	120.2	180.4
51	43.9	37.4	56.0
86	81.2	52.4	78.6#

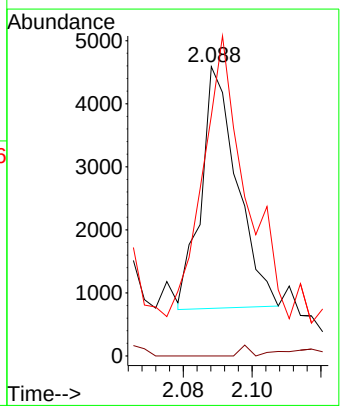


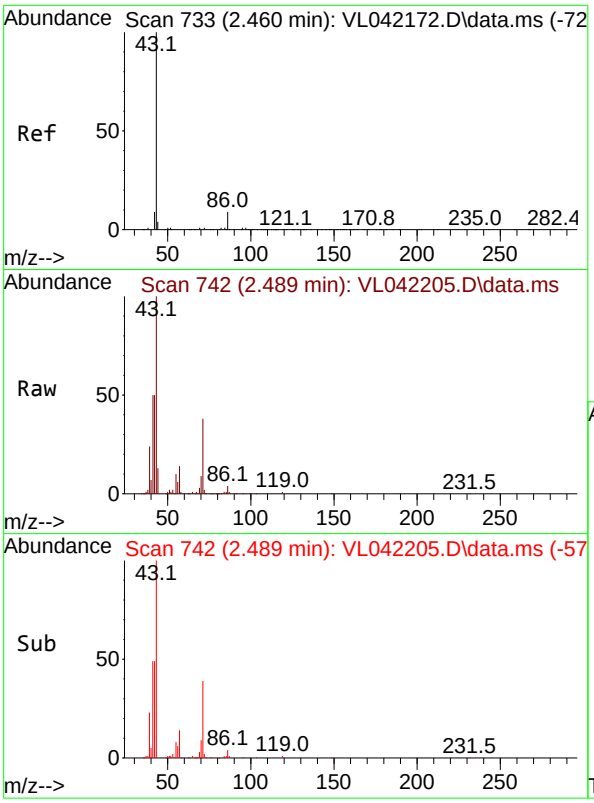


#21
Allyl Chloride
Concen: 0.150 ppbv
RT: 2.088 min Scan# 618
Delta R.T. -0.003 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 41 Resp: 2790

Ion	Ratio	Lower	Upper
41	100		
76	9.9	24.1	36.1#
39	204.9	61.1	91.7#



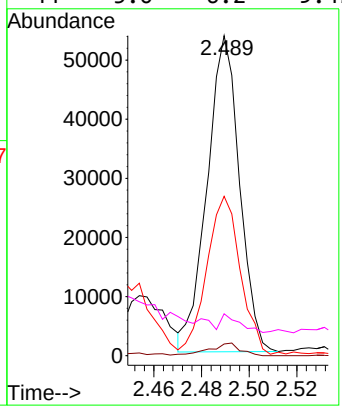


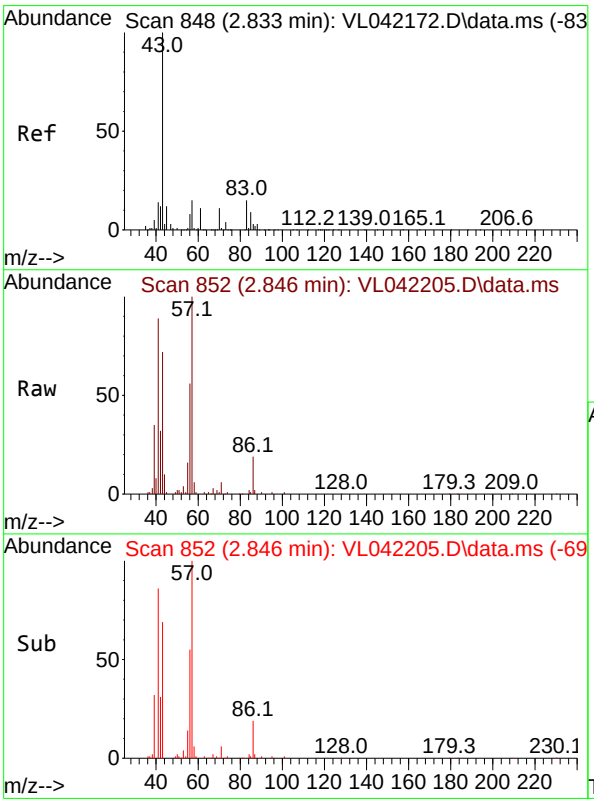
#23
Vinyl Acetate
Concen: 4.422 ppbv
RT: 2.489 min Scan# 74
Delta R.T. 0.029 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 43 Resp: 50576

Ion	Ratio	Lower	Upper
43	100		
86	3.7	5.5	8.3#
42	49.3	8.6	13.0#
44	5.0	6.2	9.4#

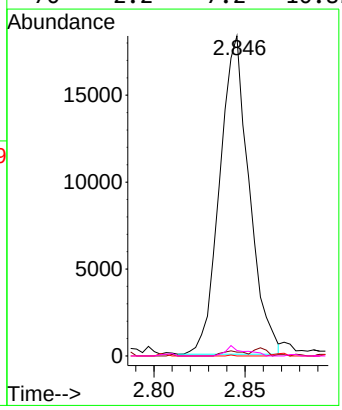


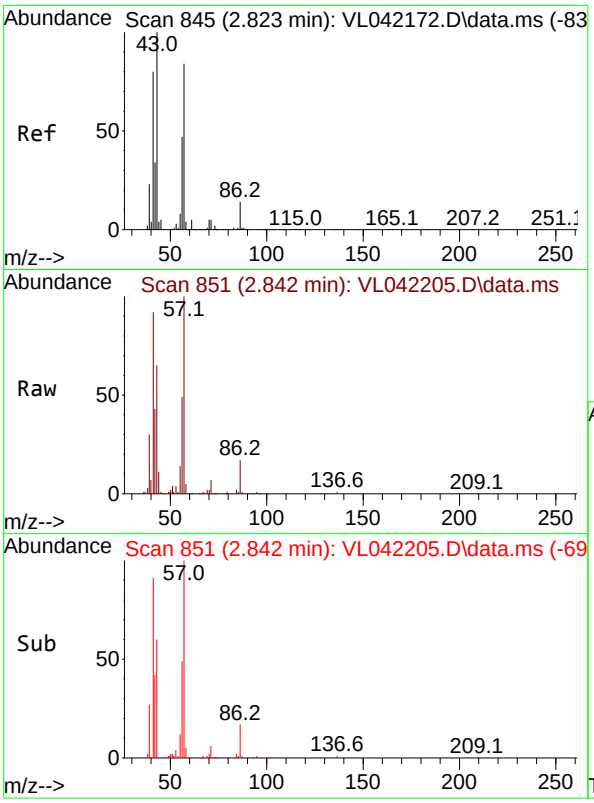


#25
Ethyl Acetate
Concen: 0.299 ppbv
RT: 2.846 min Scan# 852
Delta R.T. 0.013 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 43 Resp: 20526

Ion	Ratio	Lower	Upper
43	100		
45	2.4	8.2	12.2#
61	0.3	7.3	10.9#
70	2.2	7.2	10.8#



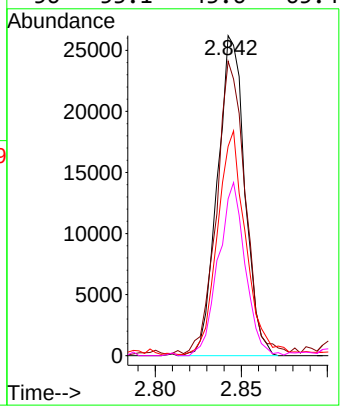


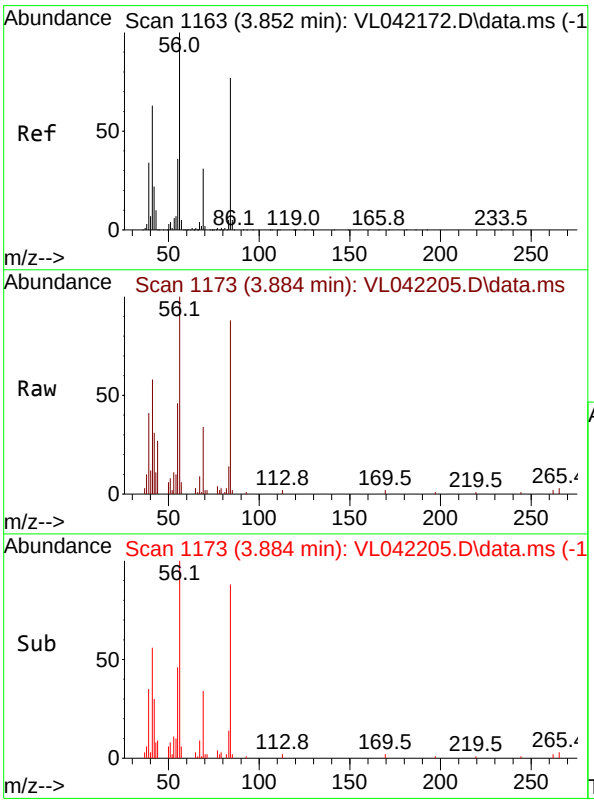
#26
Hexane
Concen: 1.095 ppbv
RT: 2.842 min Scan# 8
Delta R.T. 0.020 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 57 Resp: 29019

Ion	Ratio	Lower	Upper
57	100		
41	96.6	76.6	114.8
43	72.3	207.8	311.8#
56	53.1	43.6	65.4

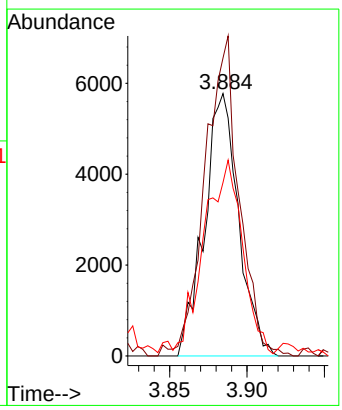


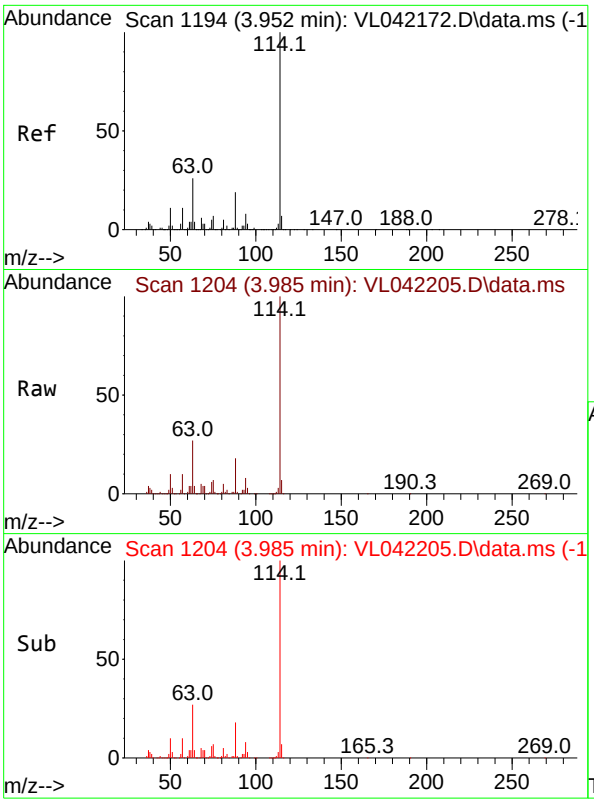


#30
Cyclohexane
Concen: 0.386 ppbv
RT: 3.884 min Scan# 1173
Delta R.T. 0.032 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 84 Resp: 8868

Ion	Ratio	Lower	Upper
84	100		
56	121.7	102.8	154.2
41	84.5	66.5	99.7



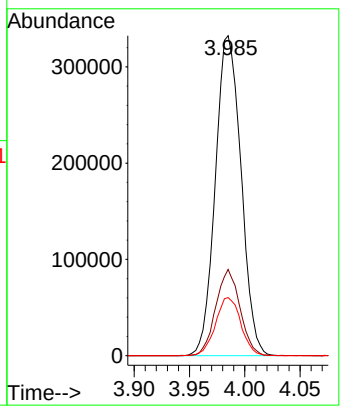


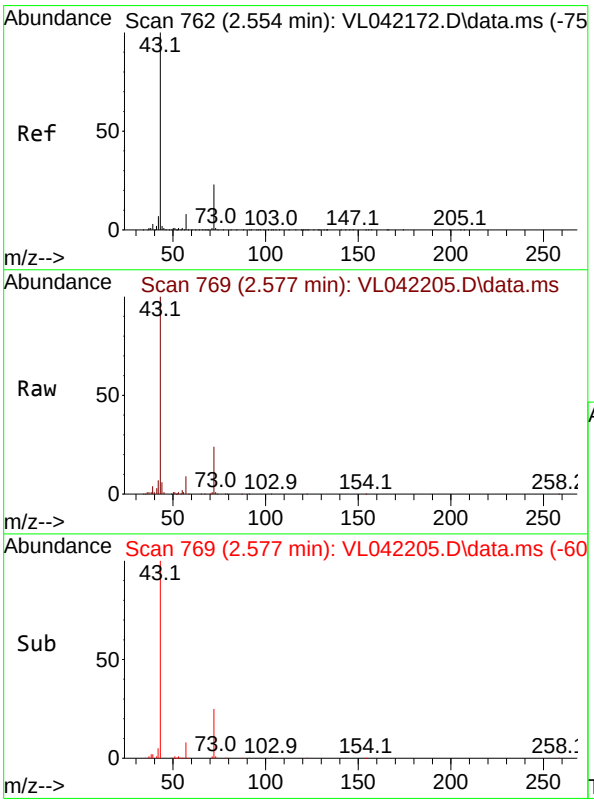
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.985 min Scan# 1
Delta R.T. 0.032 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion:114 Resp: 537109

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	17.9	15.0	22.4

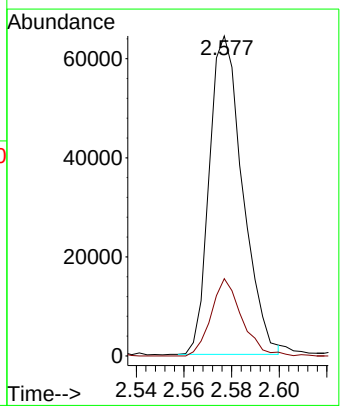


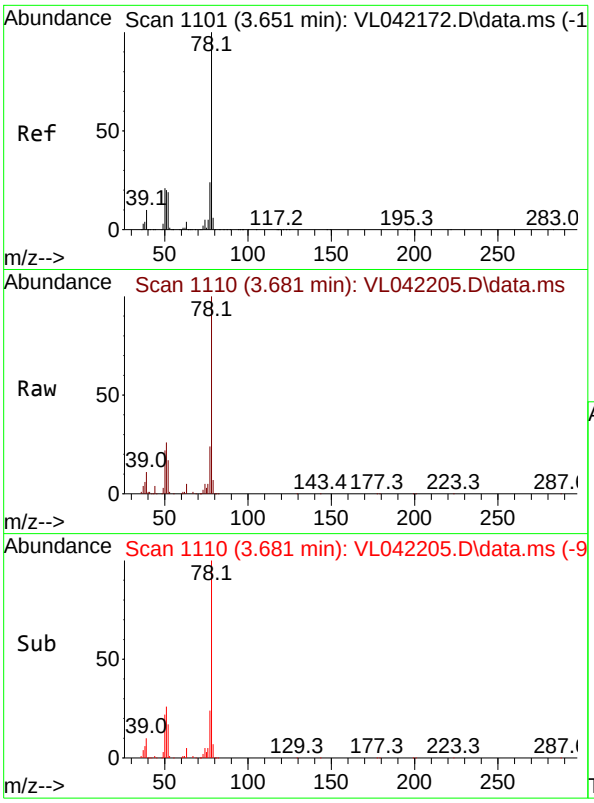


#34
2-Butanone
Concen: 1.603 ppbv
RT: 2.577 min Scan# 769
Delta R.T. 0.023 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 43 Resp: 62430

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2



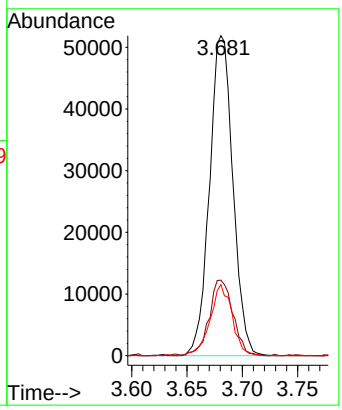


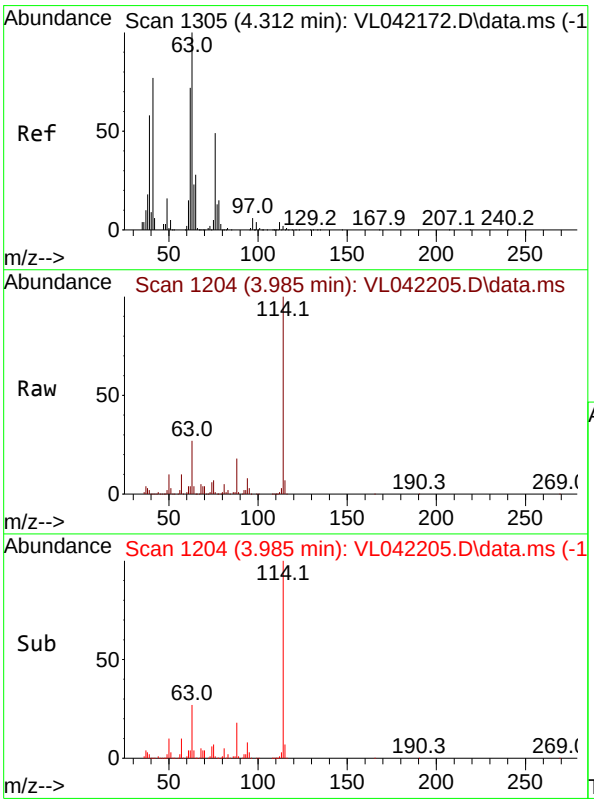
#36
Benzene
Concen: 1.432 ppbv
RT: 3.681 min Scan# 11
Delta R.T. 0.029 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 78 Resp: 76263

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	22.2	16.6	24.8

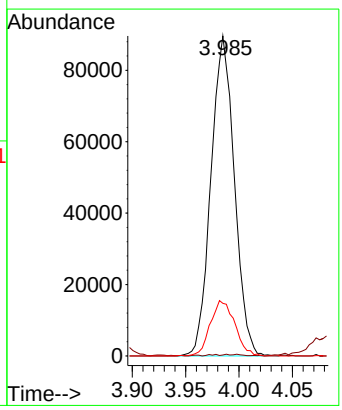


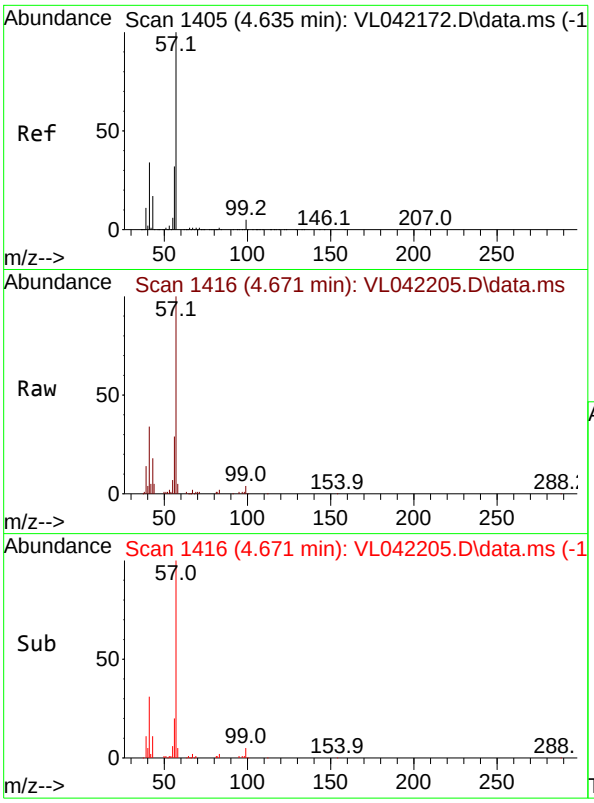


#39
1,2-Dichloropropane
Concen: 7.057 ppbv
RT: 3.985 min Scan# 1204
Delta R.T. -0.327 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 63 Resp: 136854

Ion	Ratio	Lower	Upper
63	100		
41	0.2	61.7	92.5#
62	16.4	57.6	86.4#



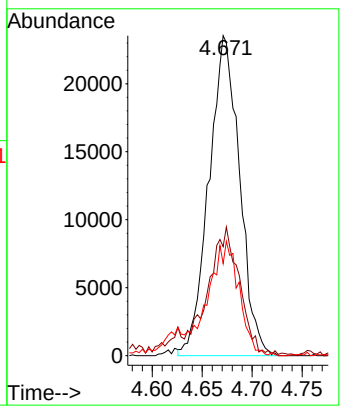


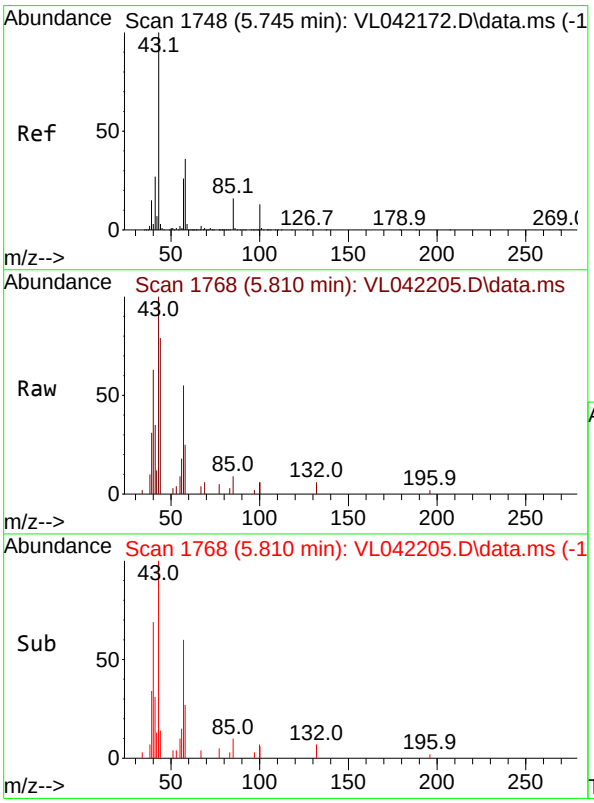
#44
2,2,4-Trimethylpentane
Concen: 0.558 ppbv
RT: 4.671 min Scan# 14
Delta R.T. 0.036 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 57 Resp: 50242

Ion	Ratio	Lower	Upper
57	100		
41	47.6	26.8	40.2#
56	41.9	25.6	38.4#

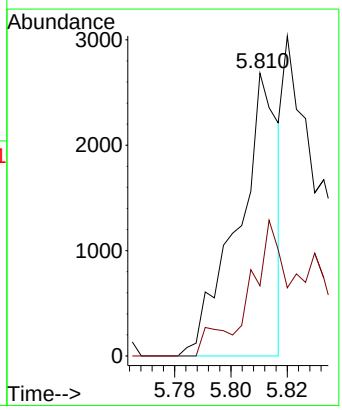


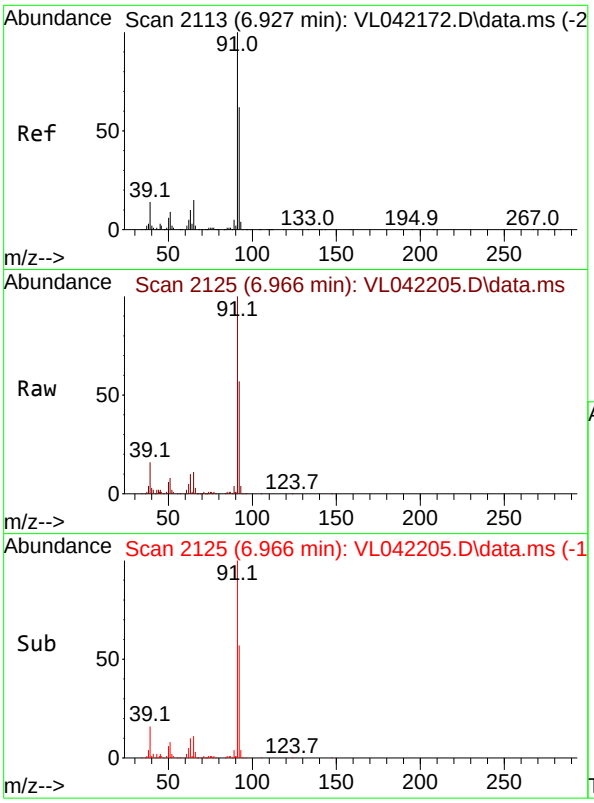


#50
4-Methyl-2-Pentanone
Concen: 0.043 ppbv
RT: 5.810 min Scan# 1768
Delta R.T. 0.065 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 43 Resp: 2646

Ion	Ratio	Lower	Upper
43	100		
58	86.8	29.0	43.6#



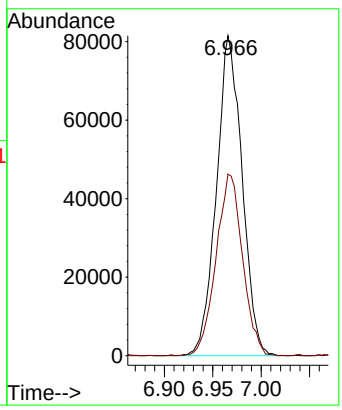


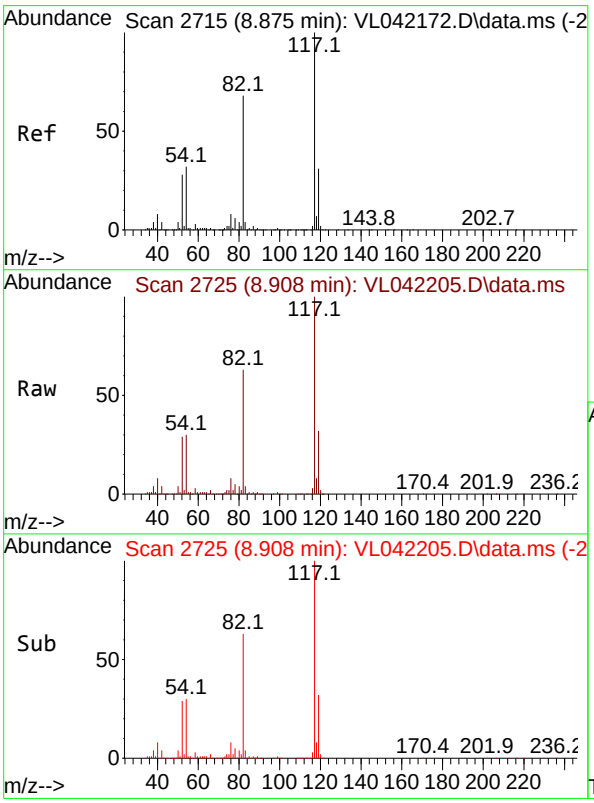
#53
Toluene
Concen: 2.381 ppbv
RT: 6.966 min Scan# 21
Delta R.T. 0.039 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 91 Resp: 150266

Ion	Ratio	Lower	Upper
91	100		
92	58.7	48.4	72.6

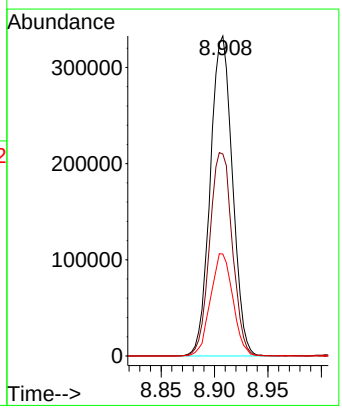


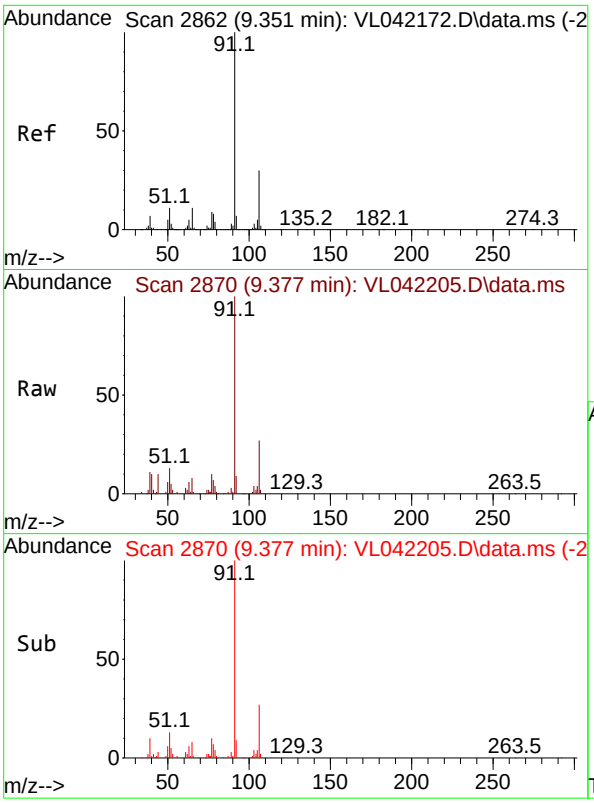


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.908 min Scan# 2725
Delta R.T. 0.032 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:117 Resp: 480959

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	32.3	25.5	38.3



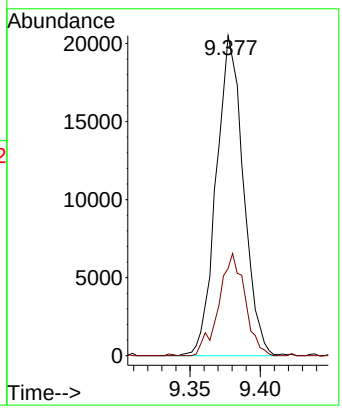


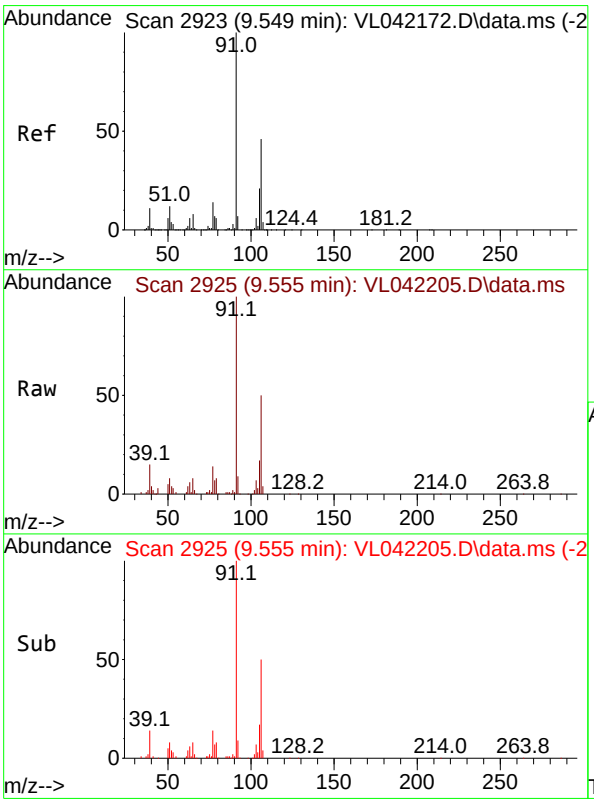
#58
Ethyl Benzene
Concen: 0.322 ppbv
RT: 9.377 min Scan# 2
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 91 Resp: 27471

Ion	Ratio	Lower	Upper
91	100		
106	27.3	24.2	36.2

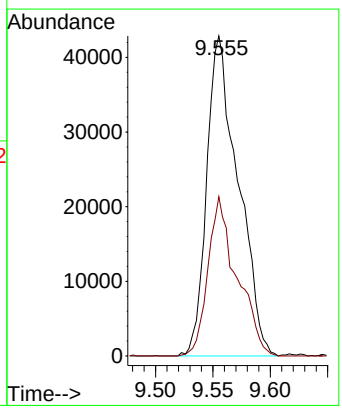


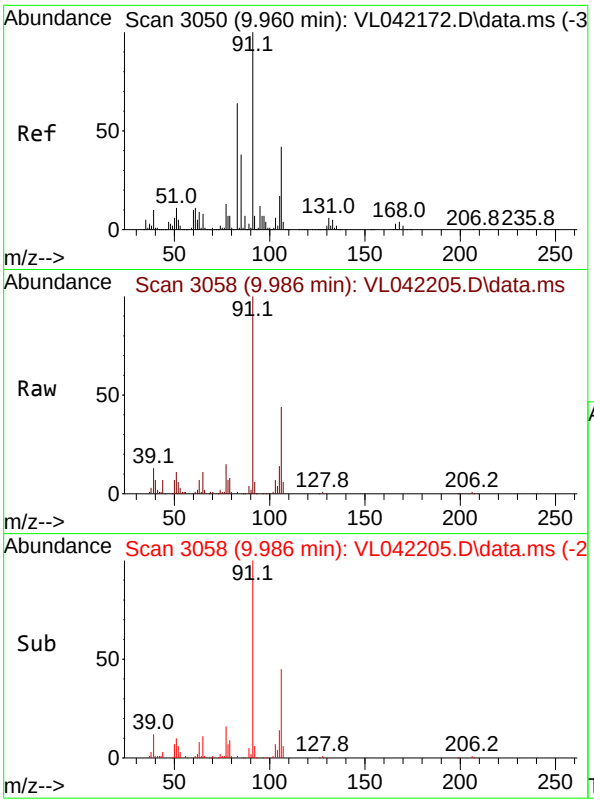


#59
m/p-Xylene
Concen: 1.195 ppbv
RT: 9.555 min Scan# 2925
Delta R.T. 0.007 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 91 Resp: 81487

Ion	Ratio	Lower	Upper
91	100		
106	46.0	36.4	54.6



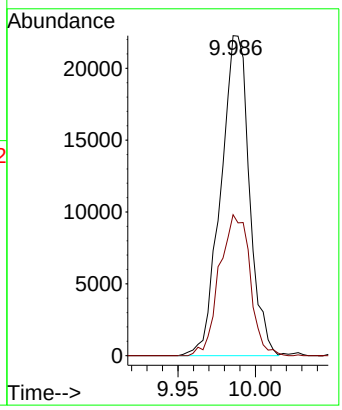


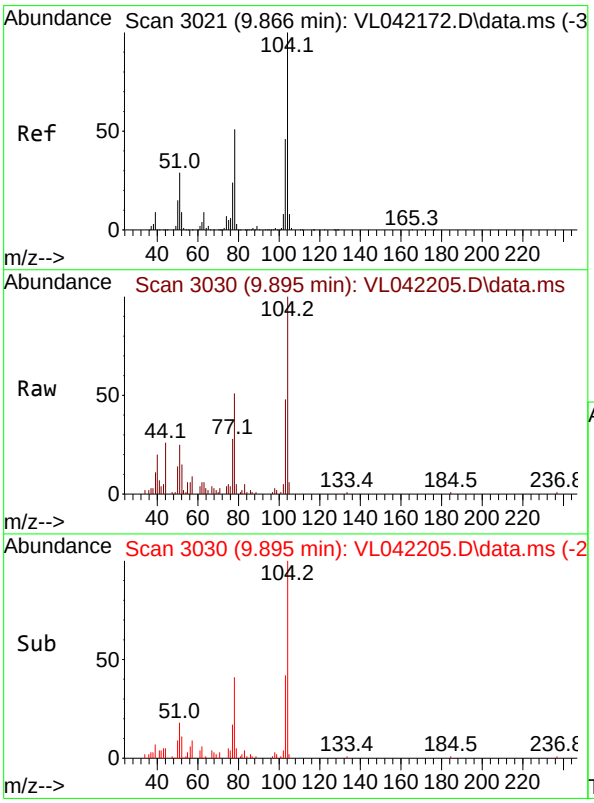
#60
o-Xylene
Concen: 0.419 ppbv
RT: 9.986 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion: 91 Resp: 28632

Ion	Ratio	Lower	Upper
91	100		
106	47.0	20.8	62.5

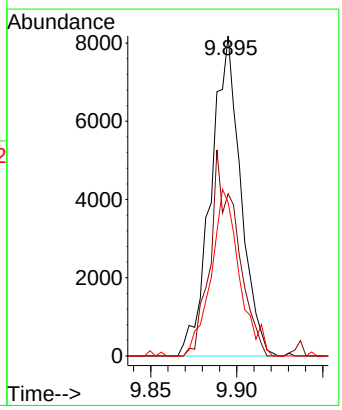


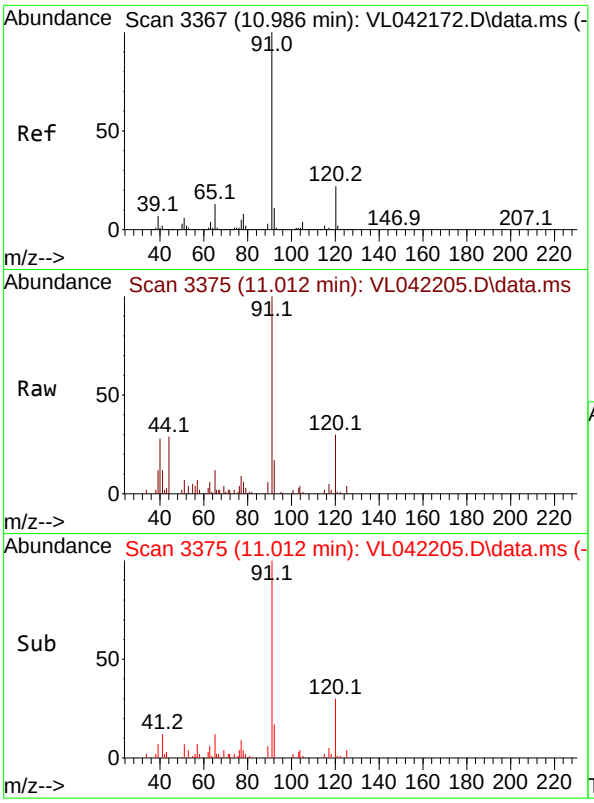


#61
Styrene
Concen: 0.291 ppbv
RT: 9.895 min Scan# 3030
Delta R.T. 0.029 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:104 Resp: 9837

Ion	Ratio	Lower	Upper
104	100		
78	59.0	41.8	62.6
103	50.2	37.0	55.4



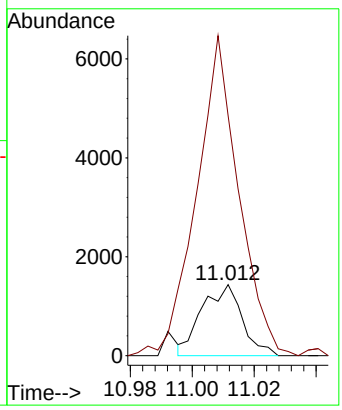


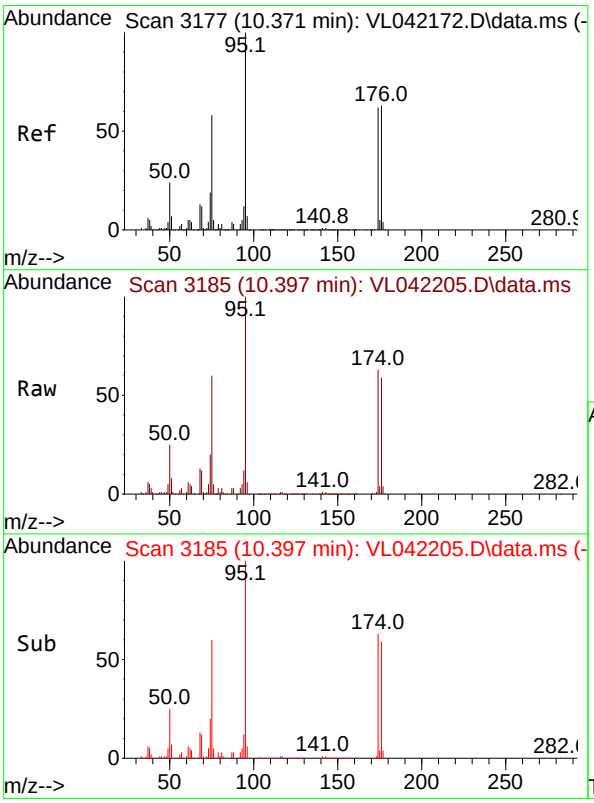
#64
n-propylbenzene
Concen: 0.049 ppbv
RT: 11.012 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion:120 Resp: 1291

Ion	Ratio	Lower	Upper
120	100		
91	483.0	376.9	565.3

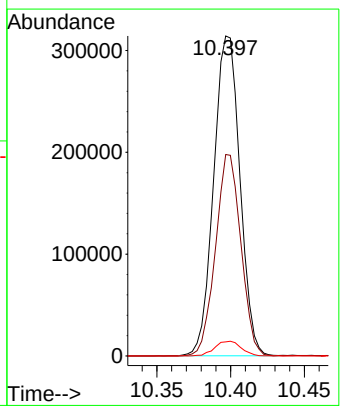


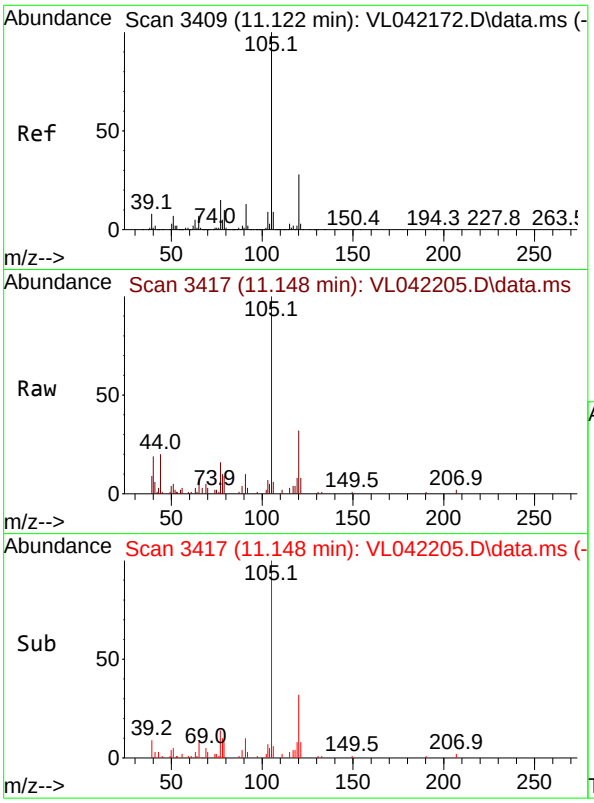


#68
1-Bromo-4-Fluorobenzene
Concen: 9.841 ppbv
RT: 10.397 min Scan# 3185
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion: 95 Resp: 388692

Ion	Ratio	Lower	Upper
95	100		
174	61.0	50.6	76.0
175	4.7	3.8	5.6



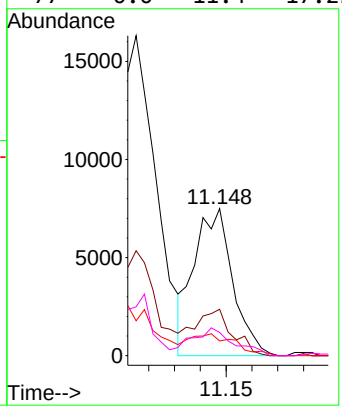


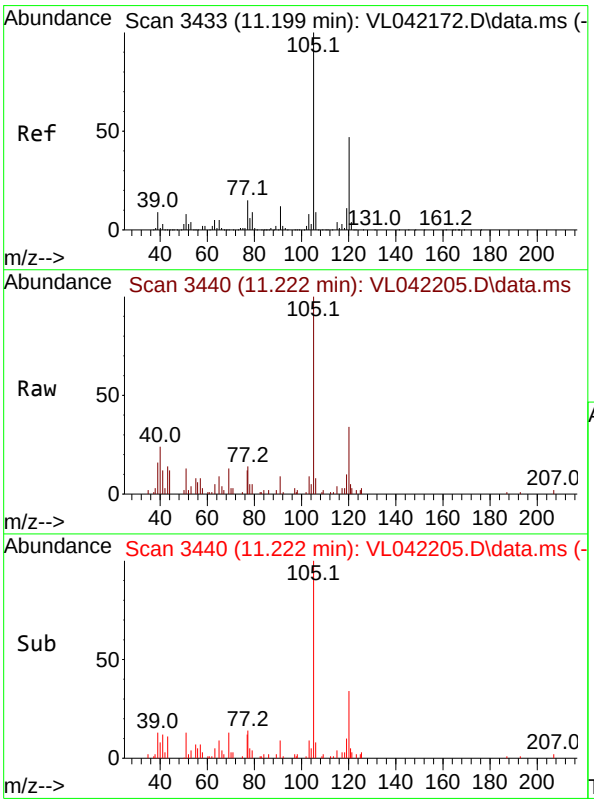
#72
4-Ethyltoluene
Concen: 0.092 ppbv
RT: 11.148 min Scan# 34
Delta R.T. 0.026 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion:105 Resp: 7817

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#

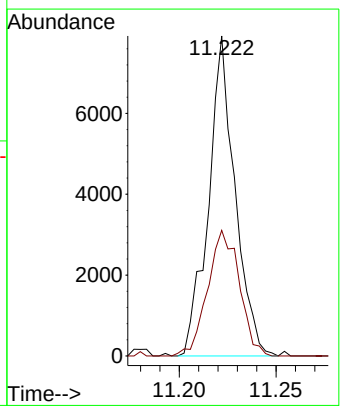


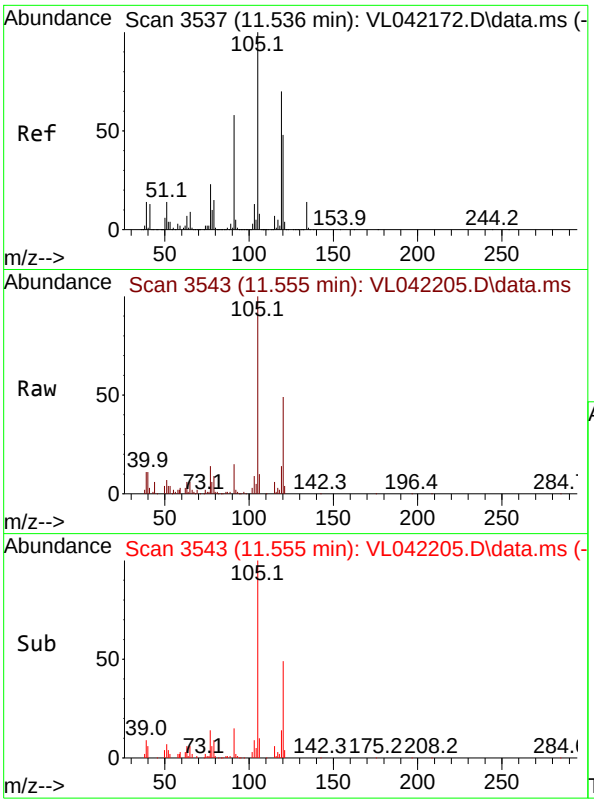


#73
1,3,5-Trimethylbenzene
Concen: 0.102 ppbv
RT: 11.222 min Scan# 3440
Delta R.T. 0.023 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:105 Resp: 7557

Ion	Ratio	Lower	Upper
105	100		
120	39.3	37.4	56.0



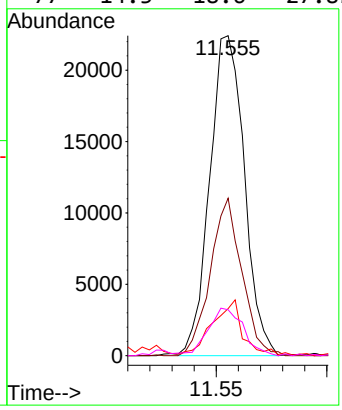


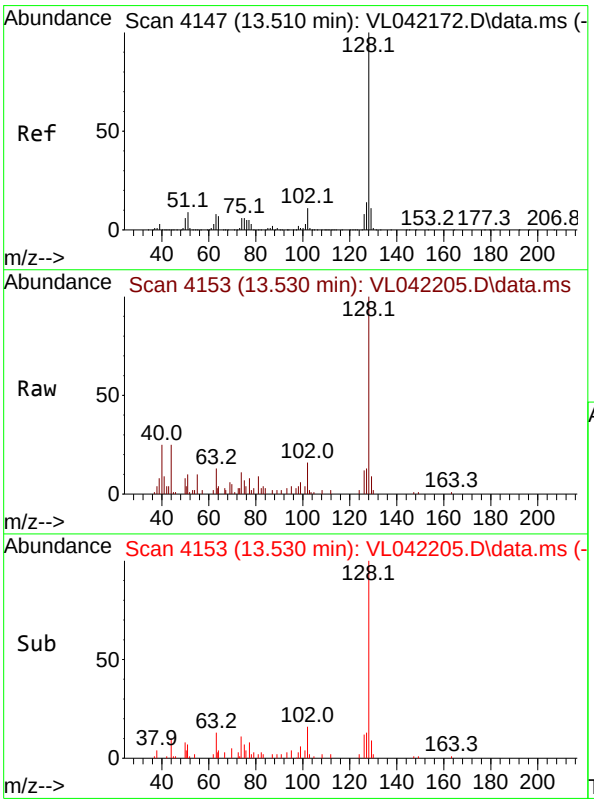
#74
1,2,4-Trimethylbenzene
Concen: 0.285 ppbv
RT: 11.555 min Scan# 3
Delta R.T. 0.019 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DL

Tgt Ion:105 Resp: 24393

Ion	Ratio	Lower	Upper
105	100		
120	49.2	38.6	58.0
91	14.3	46.2	69.2#
77	14.3	18.6	27.8#

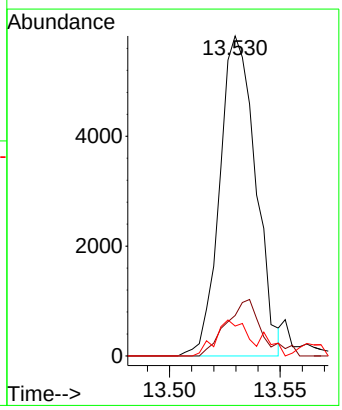




#79
Naphthalene
Concen: 0.070 ppbv
RT: 13.530 min Scan# 4153
Delta R.T. 0.020 min
Lab File: VL042205.D
Acq: 31 Mar 2025 11:52

Tgt Ion:128 Resp: 6586

Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.8	16.2
129	9.4	9.0	13.4



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042206.D
Acq On : 31 Mar 2025 12:26
Operator : SY/MD
Sample : Q1669-06DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Quant Time: Apr 01 01:38:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.807	49	184777	10.000	ppbv		0.02
33) 1,4-Difluorobenzene	3.985	114	533717	10.000	ppbv		0.03
55) Chlorobenzene-d5	8.908	117	486289	10.000	ppbv		0.03
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.397	95	393432	9.852	ppbv		0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.506	85	12317	0.451	ppbv		97
3) Chlorodifluoromethane	1.483	51	8722	0.313	ppbv		94
4) Chloromethane	1.538	50	4692	0.421	ppbv		92
7) Chloroethane	1.719	64	135	0.030	ppbv	#	69
9) Propene	1.489	41	224043	17.538	ppbv		96
10) Heptane	5.011	43	56357	1.659	ppbv		94
11) Trichlorofluoromethane	1.888	101	5051	0.190	ppbv		88
12) 1,1,2-Trichlorotrifluo...	2.153	101	1734	0.079	ppbv		87
13) Ethanol	1.732	45	130271	107.874	ppbv		84
15) Acetone	1.845	43	729874	28.244	ppbv	#	84
16) 1,3-Butadiene	1.609	39	104507	8.281	ppbv	#	46
17) tert-Butyl alcohol	2.056	59	5866	0.182	ppbv	#	71
19) Isopropyl Alcohol	1.897	45	19417	1.332	ppbv	#	1
20) Methylene Chloride	2.072	84	5120	0.532	ppbv		86
21) Allyl Chloride	2.088	41	12396	0.680	ppbv	#	39
23) Vinyl Acetate	2.490	43	200866	17.959	ppbv	#	48
25) Ethyl Acetate	2.842	43	83191	1.240	ppbv	#	79
26) Hexane	2.846	57	118243	4.564	ppbv	#	33
29) Chloroform	2.868	83	1254	0.033	ppbv		99
30) Cyclohexane	3.881	84	33679	1.497	ppbv		94
34) 2-Butanone	2.574	43	248177	6.413	ppbv		99
35) Carbon Tetrachloride	3.784	117	2736	0.066	ppbv	#	76
36) Benzene	3.681	78	309110	5.842	ppbv		100
39) 1,2-Dichloropropane	3.982	63	133506	6.928	ppbv	#	23
41) Tetrahydrofuran	3.079	42	43424	1.948	ppbv		96
44) 2,2,4-Trimethylpentane	4.674	57	209735	2.346	ppbv	#	85
50) 4-Methyl-2-Pentanone	5.801	43	7281	0.119	ppbv	#	39
53) Toluene	6.966	91	625978	9.980	ppbv		100
58) Ethyl Benzene	9.380	91	117204	1.357	ppbv		100
59) m/p-Xylene	9.555	91	353075	5.119	ppbv		99
60) o-Xylene	9.989	91	131916	1.908	ppbv		98
61) Styrene	9.892	104	47838	1.398	ppbv		98
62) Isopropylbenzene	10.558	105	8304	0.080	ppbv		94
64) n-propylbenzene	11.008	120	6104	0.229	ppbv		99
65) tert-Butylbenzene	11.902	119	6784	0.071	ppbv		89
70) n-Butylbenzene	12.303	91	8458	0.072	ppbv	#	36
72) 4-Ethyltoluene	11.144	105	36900	0.429	ppbv	#	55
73) 1,3,5-Trimethylbenzene	11.222	105	32118	0.427	ppbv		87
74) 1,2,4-Trimethylbenzene	11.552	105	115741	1.336	ppbv	#	64
79) Naphthalene	13.530	128	34692	0.366	ppbv		99
80) Naphthalene,2-methyl-	14.604	142	6448	0.139	ppbv		92

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042206.D
Acq On : 31 Mar 2025 12:26
Operator : SY/MD
Sample : Q1669-06DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Quant Time: Apr 01 01:38:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

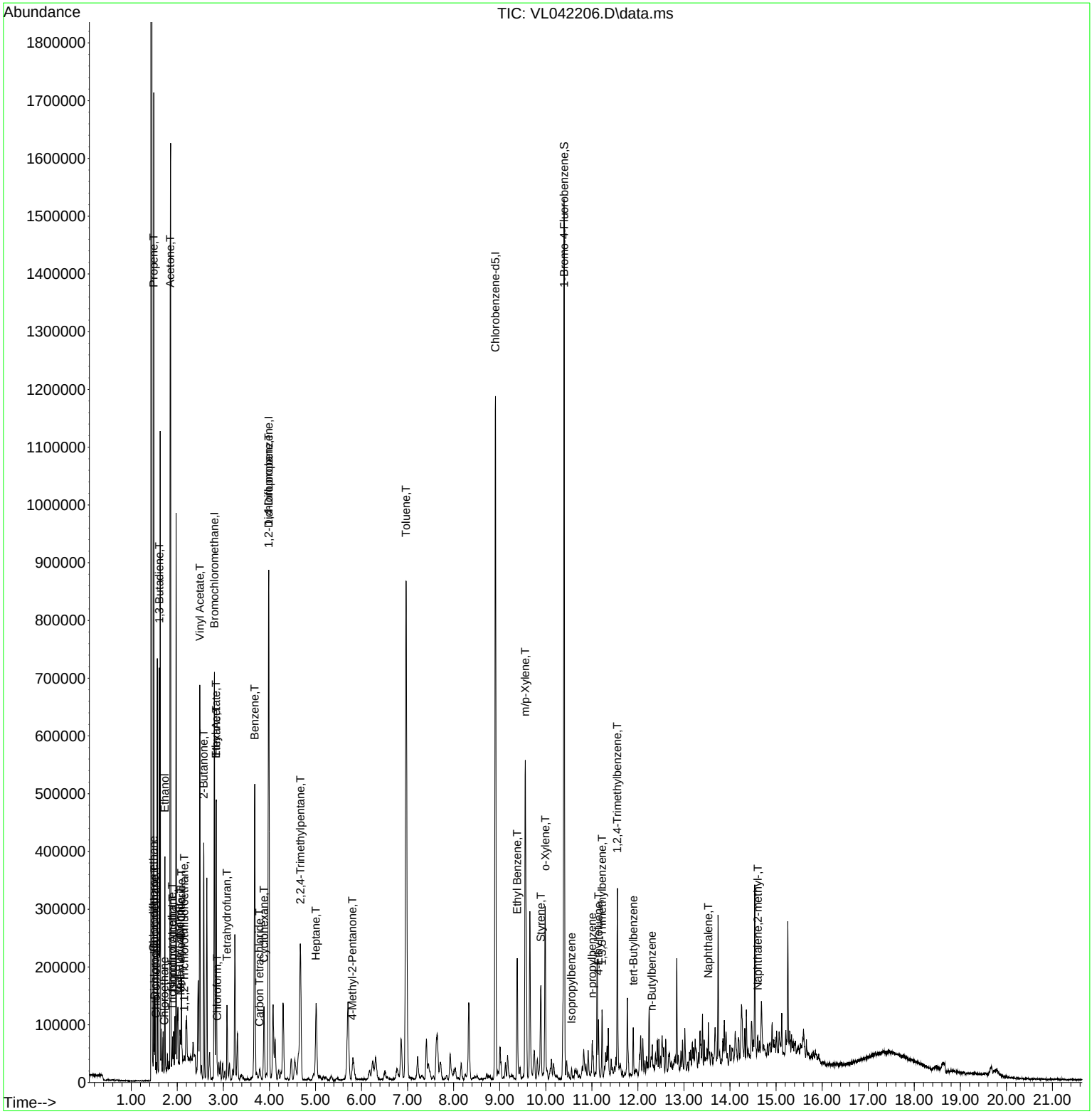
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

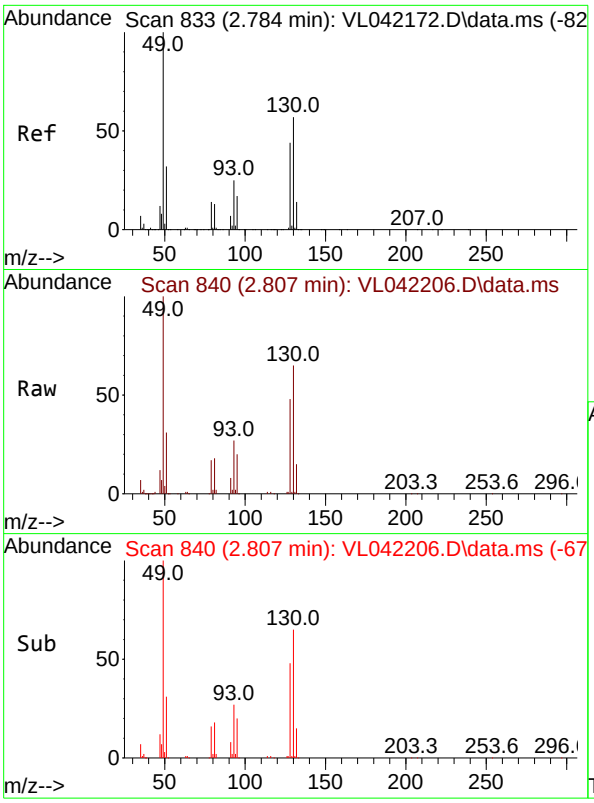
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL033125\
Data File : VL042206.D
Acq On : 31 Mar 2025 12:26
Operator : SY/MD
Sample : Q1669-06DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Quant Time: Apr 01 01:38:20 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



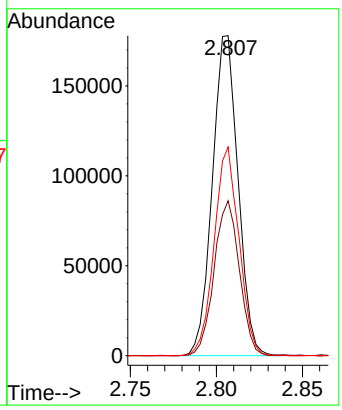


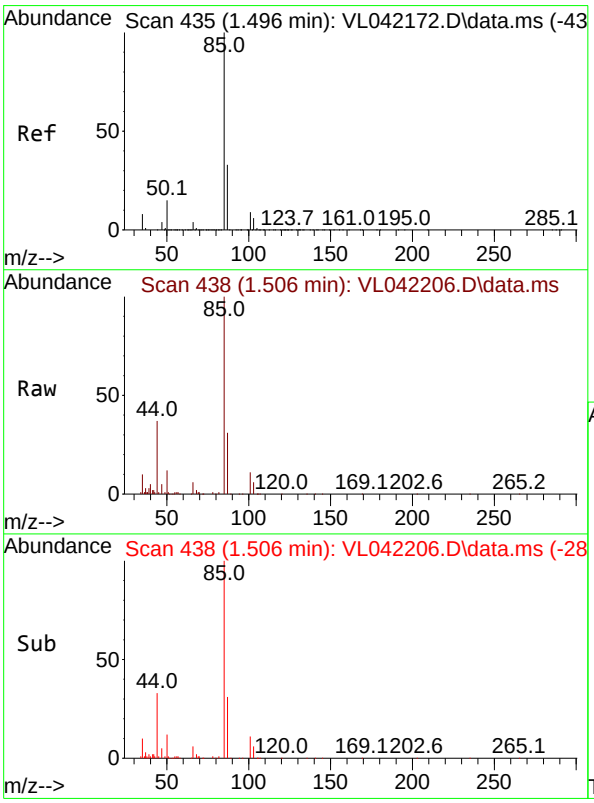
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.807 min Scan# 84
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 49 Resp: 184777

Ion	Ratio	Lower	Upper
49	100		
128	47.6	22.9	68.5
130	63.0	28.8	86.4

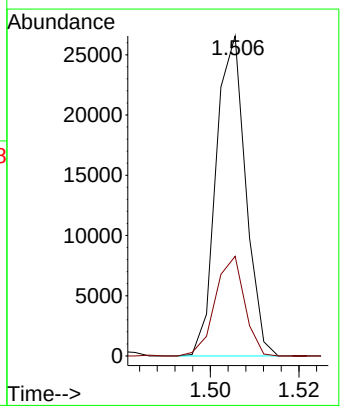


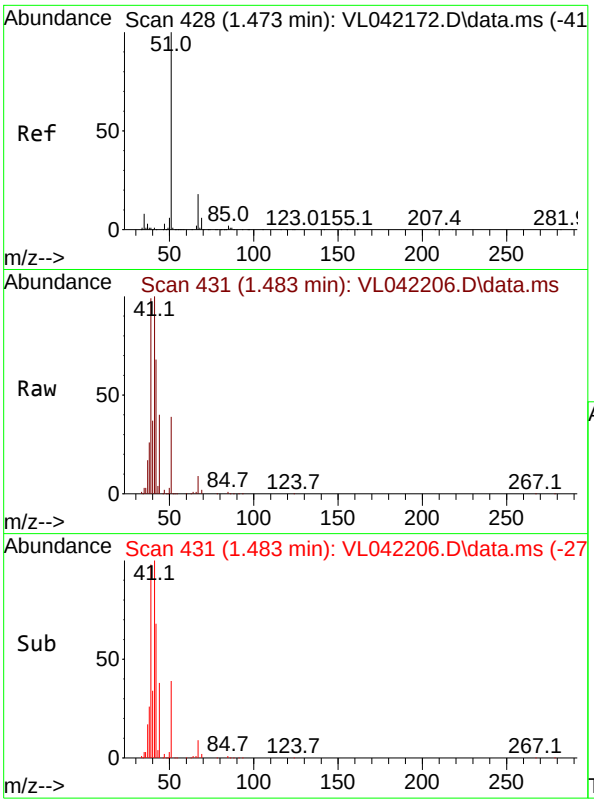


#2
Dichlorodifluoromethane
Concen: 0.451 ppbv
RT: 1.506 min Scan# 438
Delta R.T. 0.010 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 85 Resp: 12317

Ion	Ratio	Lower	Upper
85	100		
87	31.1	26.1	39.1



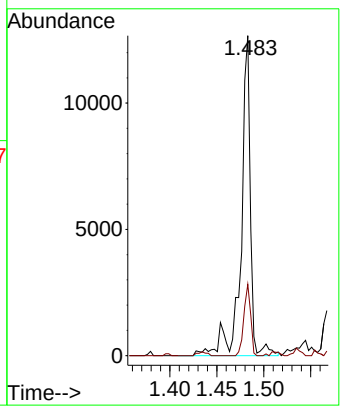


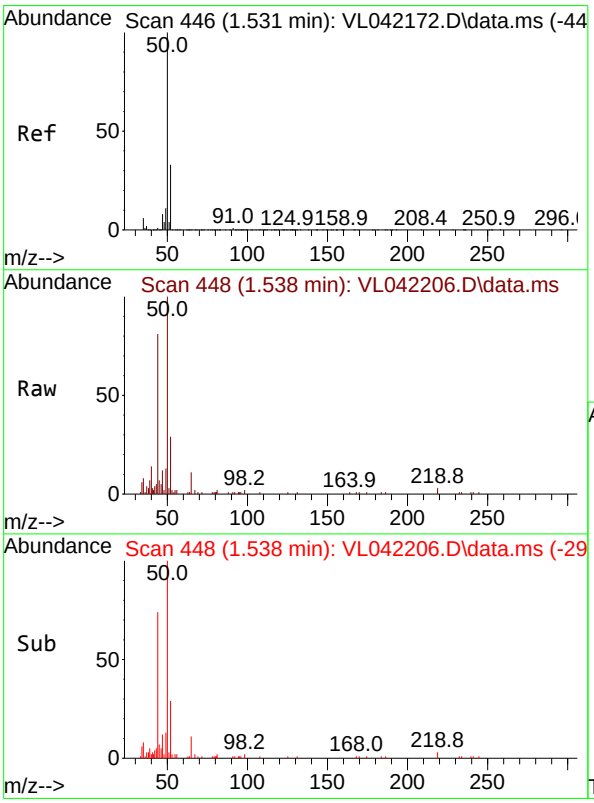
#3
Chlorodifluoromethane
Concen: 0.313 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 51 Resp: 8722

Ion	Ratio	Lower	Upper
51	100		
67	16.3	15.0	22.6

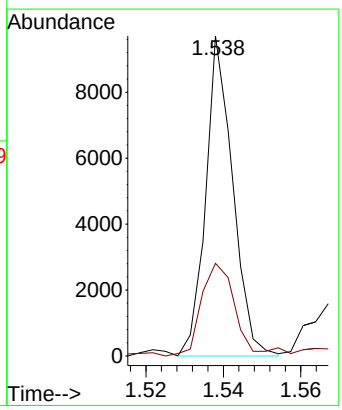


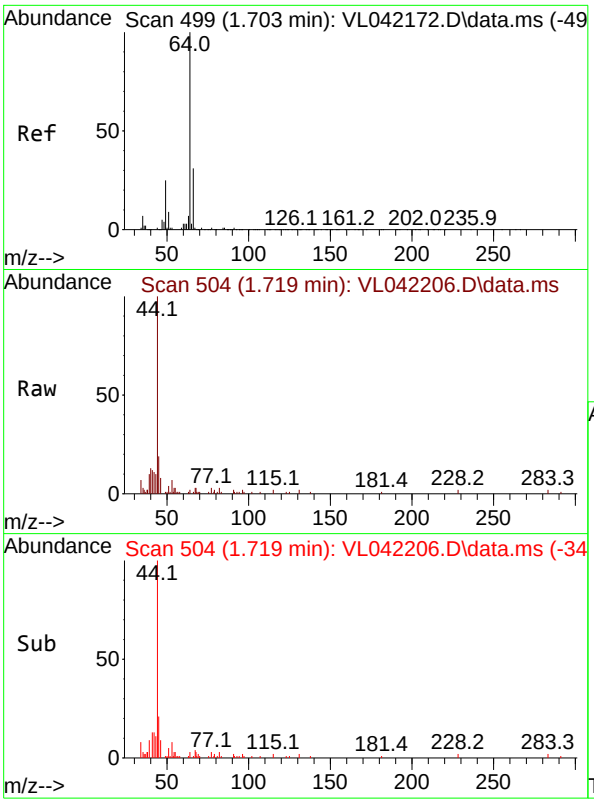


#4
Chloromethane
Concen: 0.421 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.007 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 50 Resp: 4692

Ion	Ratio	Lower	Upper
50	100		
52	28.2	26.1	39.1



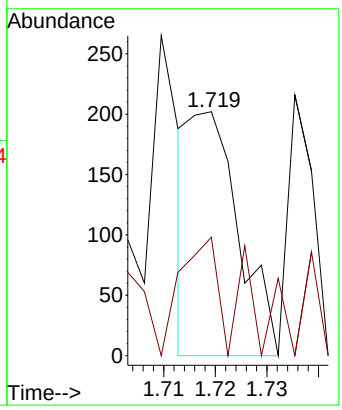


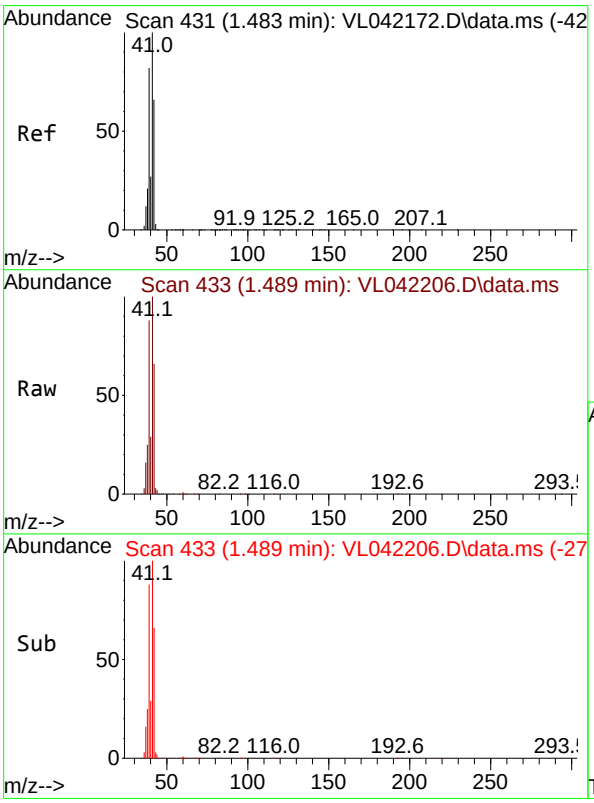
#7
Chloroethane
Concen: 0.030 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 64 Resp: 135

Ion	Ratio	Lower	Upper
64	100		
66	48.5	25.2	37.8#

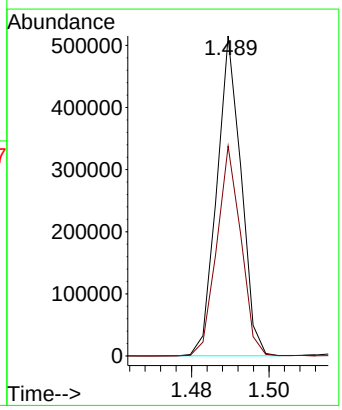


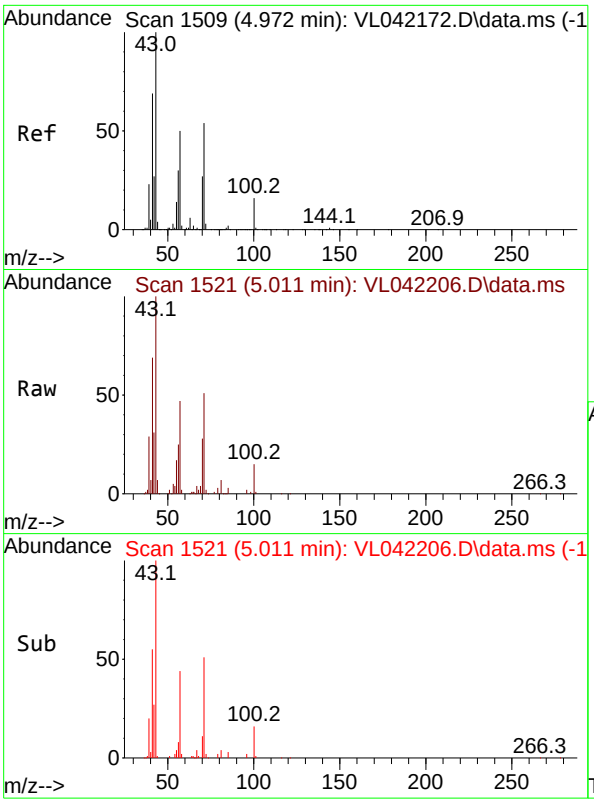


#9
Propene
Concen: 17.538 ppbv
RT: 1.489 min Scan# 433
Delta R.T. 0.007 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 41 Resp: 224043

Ion	Ratio	Lower	Upper
41	100		
42	65.9	55.4	83.2



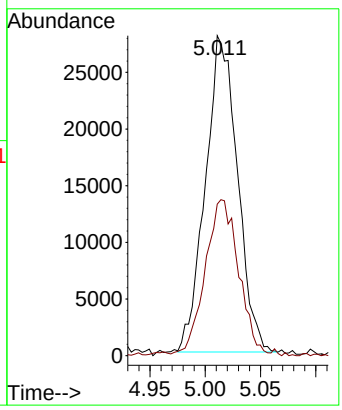


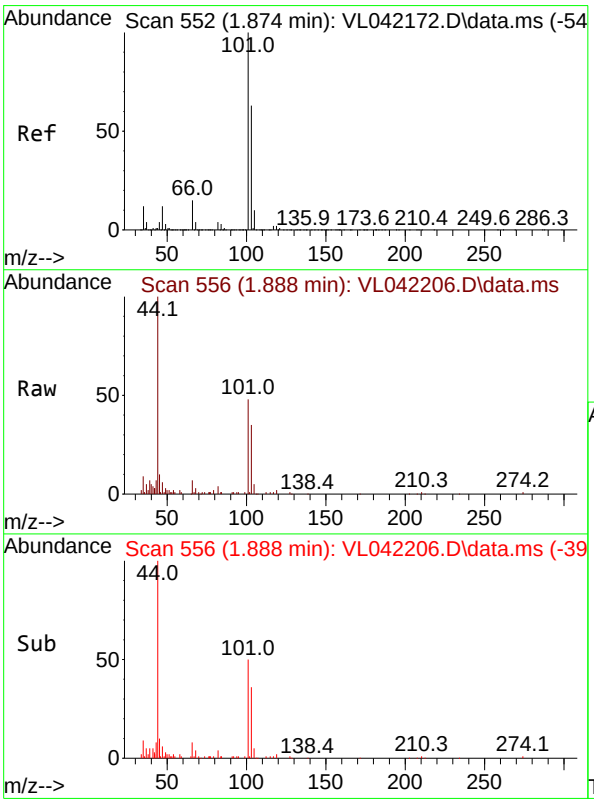
#10
Heptane
Concen: 1.659 ppbv
RT: 5.011 min Scan# 1
Delta R.T. 0.039 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 43 Resp: 56357

Ion	Ratio	Lower	Upper
43	100		
57	53.1	39.4	59.2

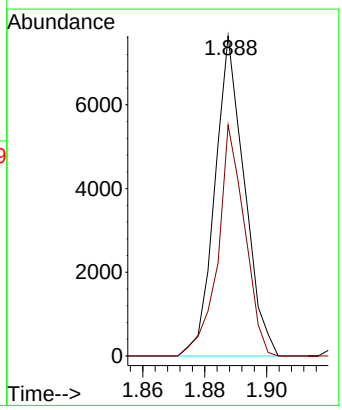


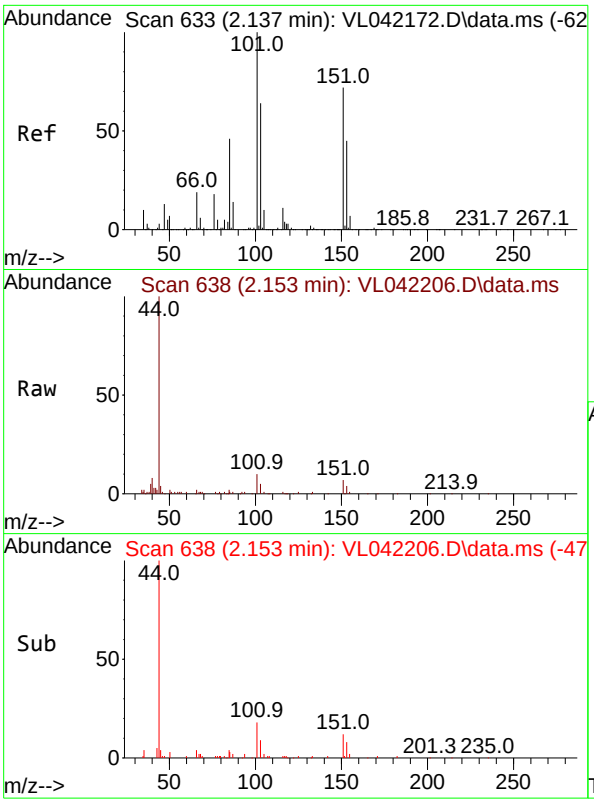


#11
Trichlorofluoromethane
Concen: 0.190 ppbv
RT: 1.888 min Scan# 556
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:101 Resp: 5051

Ion	Ratio	Lower	Upper
101	100		
103	72.2	50.2	75.2



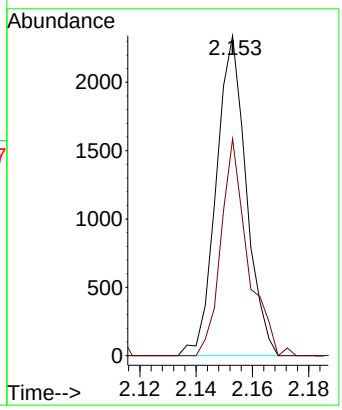


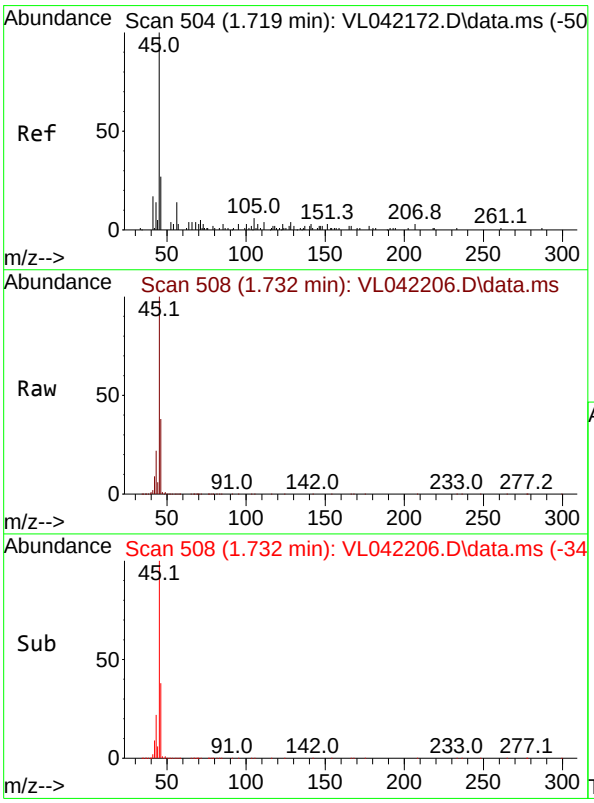
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.079 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion:101 Resp: 1734

Ion	Ratio	Lower	Upper
101	100		
151	60.3	57.1	85.7

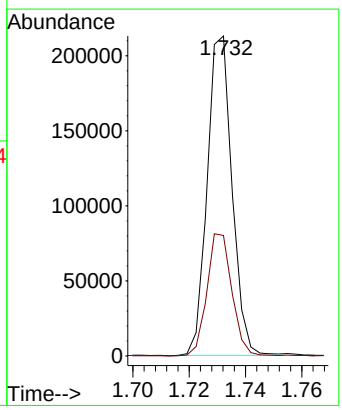


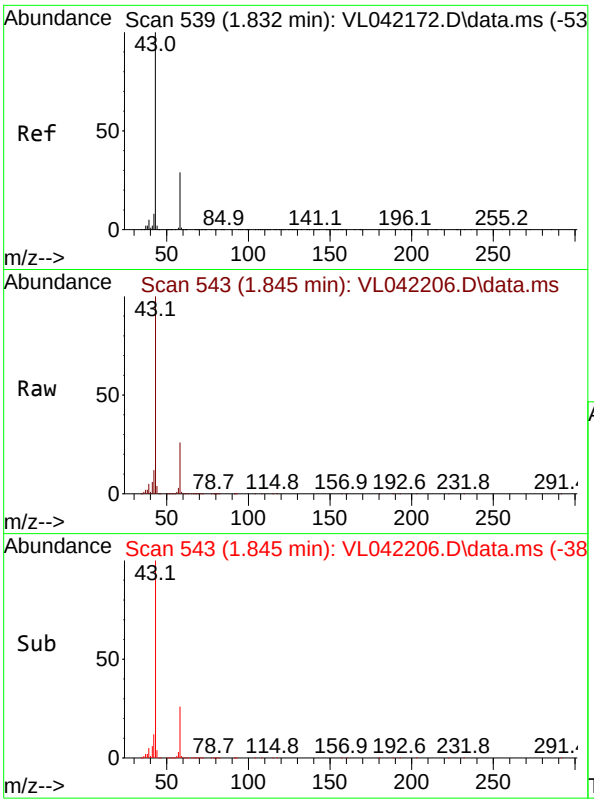


#13
Ethanol
Concen: 107.874 ppbv
RT: 1.732 min Scan# 508
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 45 Resp: 130271

Ion	Ratio	Lower	Upper
45	100		
46	39.2	20.2	80.8



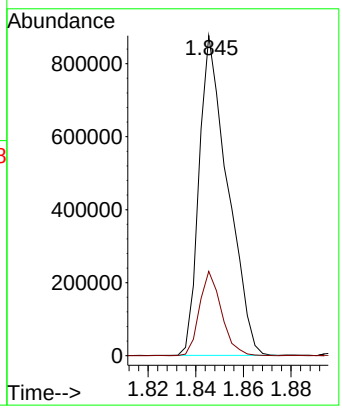


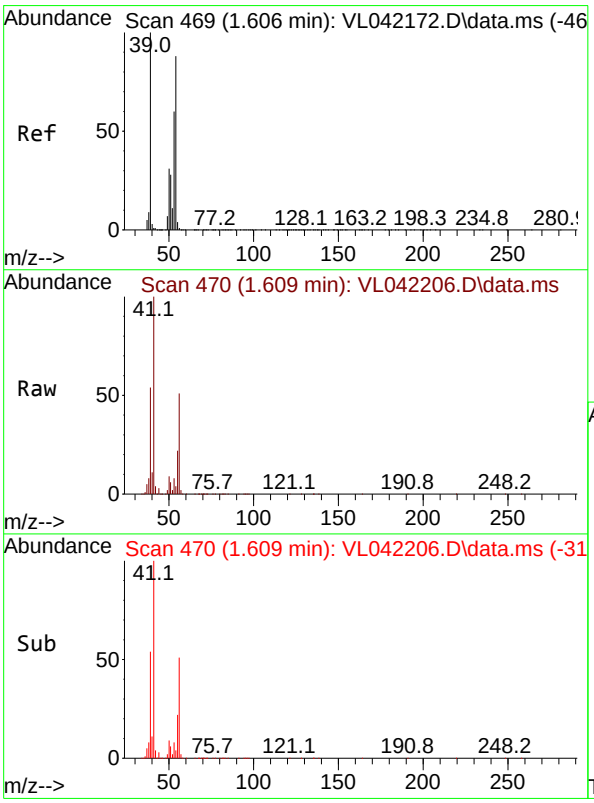
#15
Acetone
Concen: 28.244 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 43 Resp: 729874

Ion	Ratio	Lower	Upper
43	100		
58	20.6	23.2	34.8#

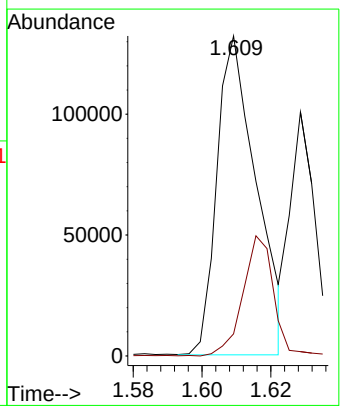


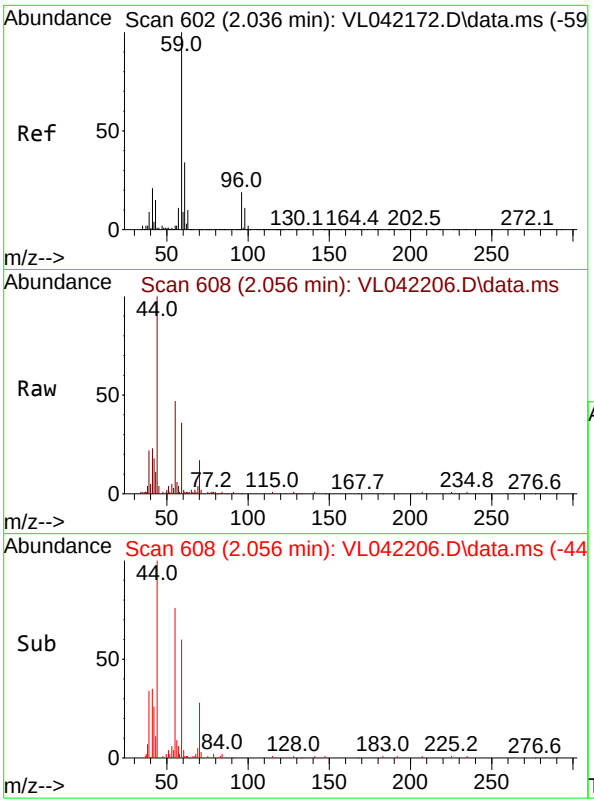


#16
1,3-Butadiene
Concen: 8.281 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 39 Resp: 104507

Ion	Ratio	Lower	Upper
39	100		
54	29.3	60.7	91.1#



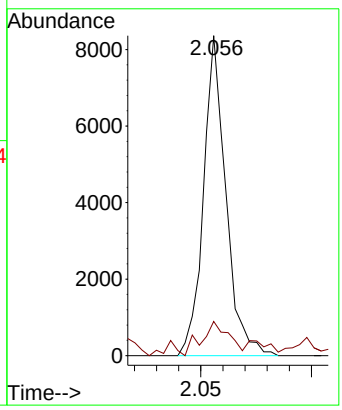


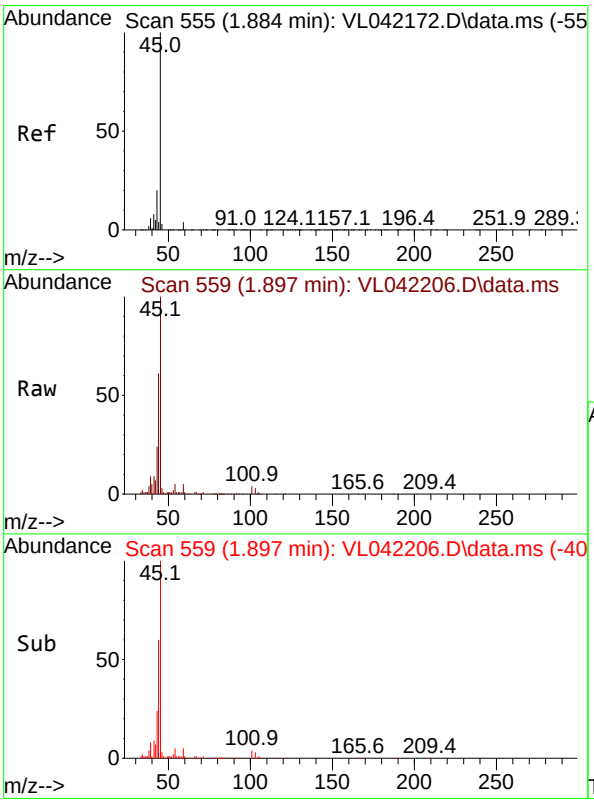
#17
tert-Butyl alcohol
Concen: 0.182 ppbv
RT: 2.056 min Scan# 6
Delta R.T. 0.020 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 59 Resp: 5866

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.9	13.3#

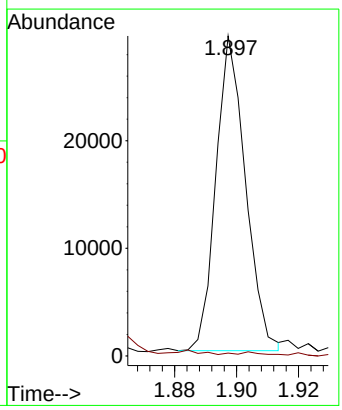


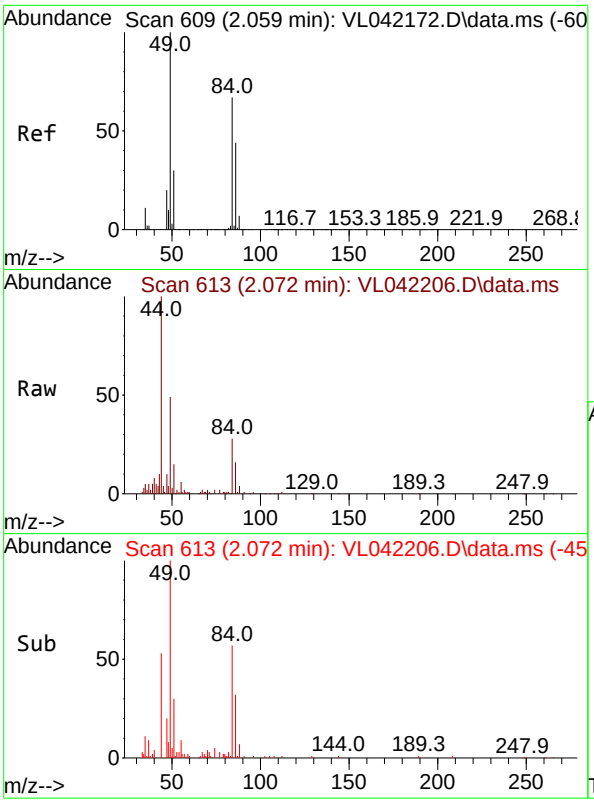


#19
Isopropyl Alcohol
Concen: 1.332 ppbv
RT: 1.897 min Scan# 559
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 45 Resp: 19417

Ion	Ratio	Lower	Upper
45	100		
58	772.1	36.9	55.3#



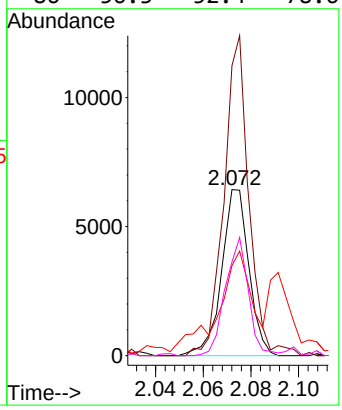


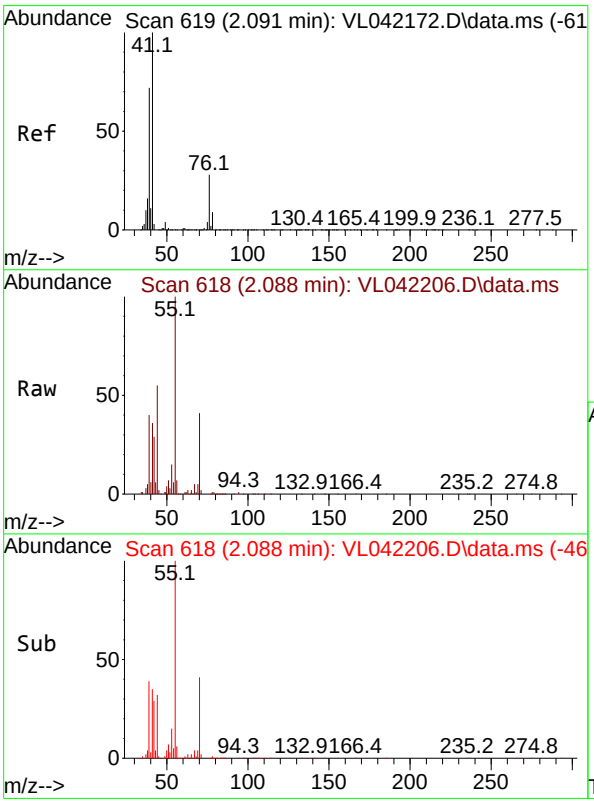
#20
Methylene Chloride
Concen: 0.532 ppbv
RT: 2.072 min Scan# 6
Delta R.T. 0.013 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 84 Resp: 5120

Ion	Ratio	Lower	Upper
84	100		
49	174.5	120.2	180.4
51	46.7	37.4	56.0
86	56.3	52.4	78.6

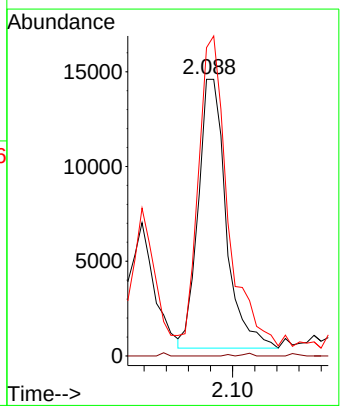


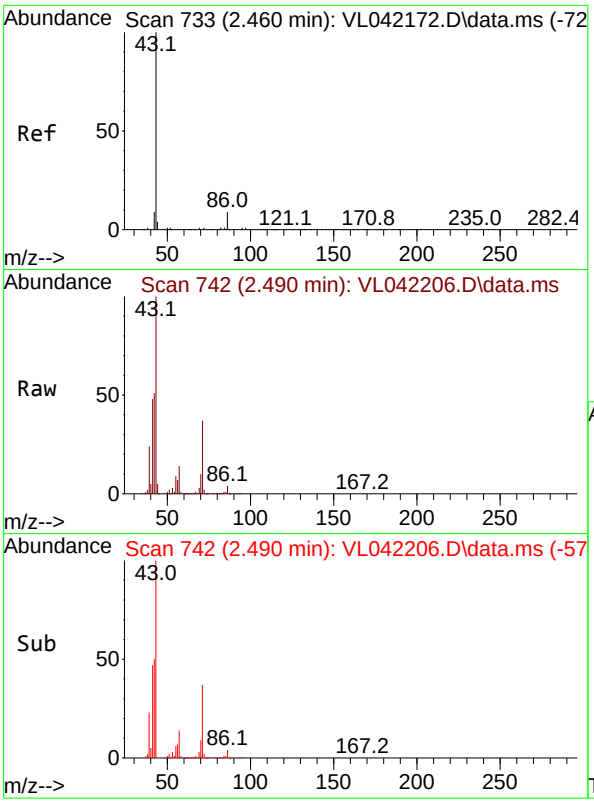


#21
Allyl Chloride
Concen: 0.680 ppbv
RT: 2.088 min Scan# 618
Delta R.T. -0.003 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 41 Resp: 12396

Ion	Ratio	Lower	Upper
41	100		
76	0.7	24.1	36.1#
39	130.9	61.1	91.7#



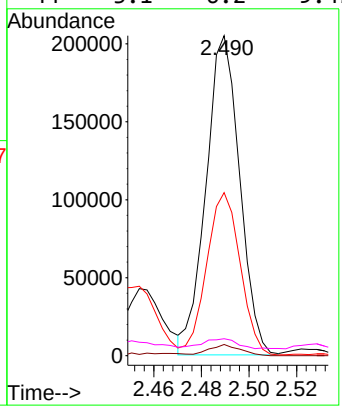


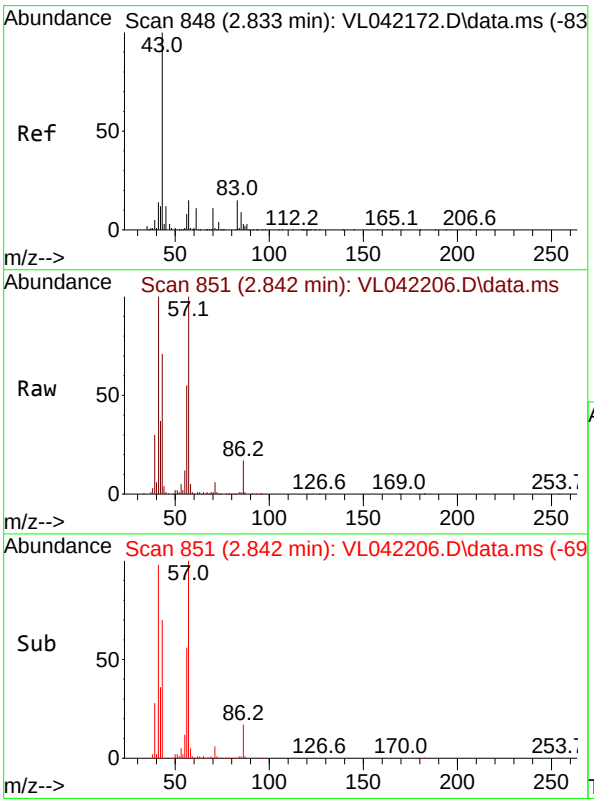
#23
Vinyl Acetate
Concen: 17.959 ppbv
RT: 2.490 min Scan# 7
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 43 Resp: 200866

Ion	Ratio	Lower	Upper
43	100		
86	3.5	5.5	8.3#
42	51.0	8.6	13.0#
44	3.1	6.2	9.4#

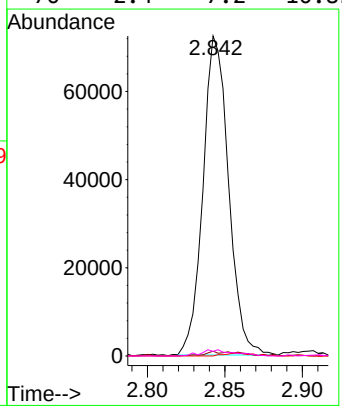


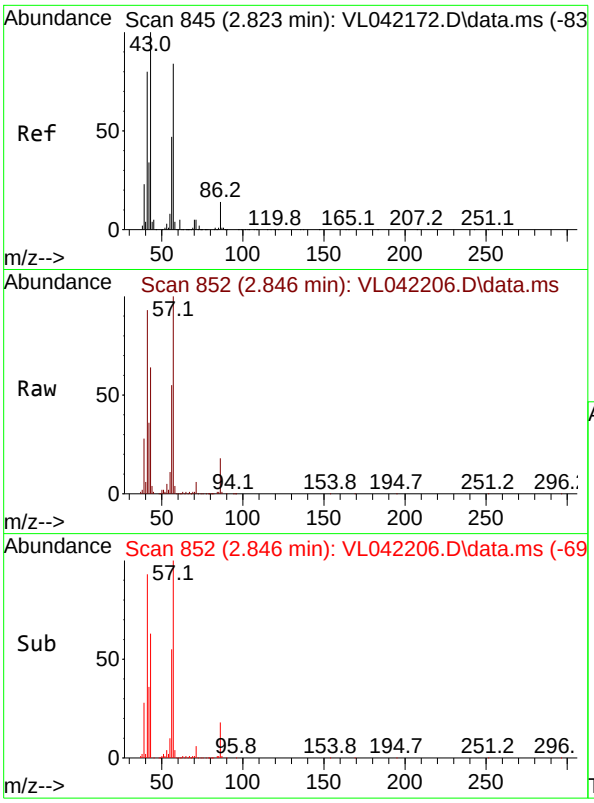


#25
Ethyl Acetate
Concen: 1.240 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.010 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 43 Resp: 83191

Ion	Ratio	Lower	Upper
43	100		
45	2.3	8.2	12.2#
61	1.0	7.3	10.9#
70	2.4	7.2	10.8#



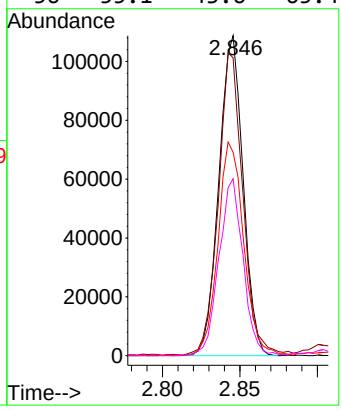


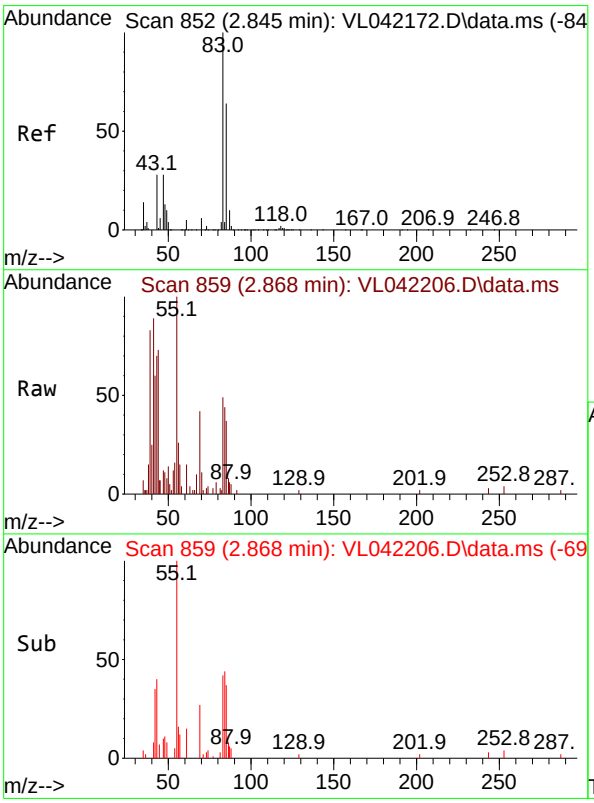
#26
Hexane
Concen: 4.564 ppbv
RT: 2.846 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 57 Resp: 118243

Ion	Ratio	Lower	Upper
57	100		
41	95.8	76.6	114.8
43	70.5	207.8	311.8#
56	55.1	43.6	65.4

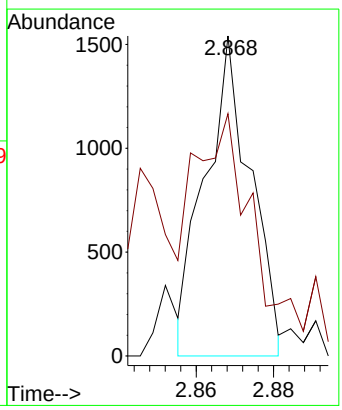


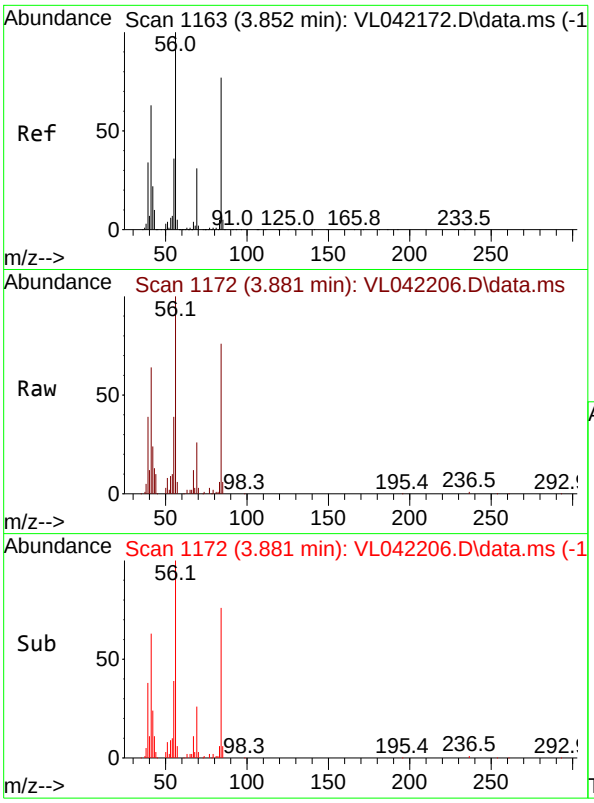


#29
Chloroform
Concen: 0.033 ppbv
RT: 2.868 min Scan# 859
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 83 Resp: 1254

Ion	Ratio	Lower	Upper
83	100		
85	63.6	51.4	77.2



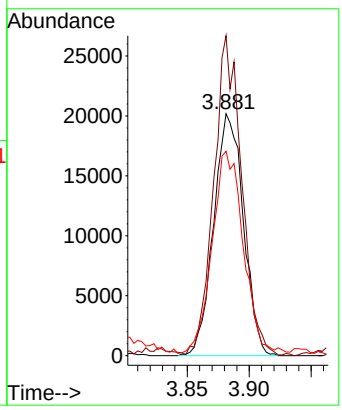


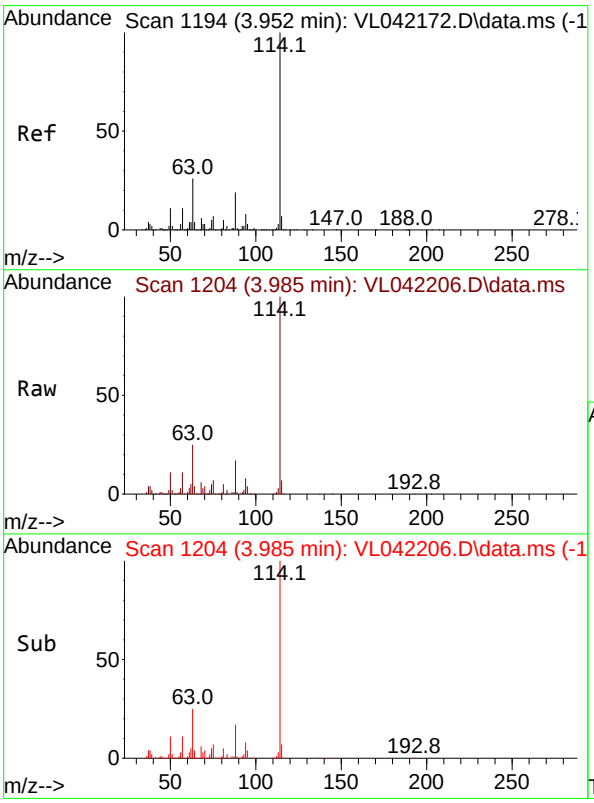
#30
Cyclohexane
Concen: 1.497 ppbv
RT: 3.881 min Scan# 11
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 84 Resp: 33679

Ion	Ratio	Lower	Upper
84	100		
56	122.5	102.8	154.2
41	89.4	66.5	99.7

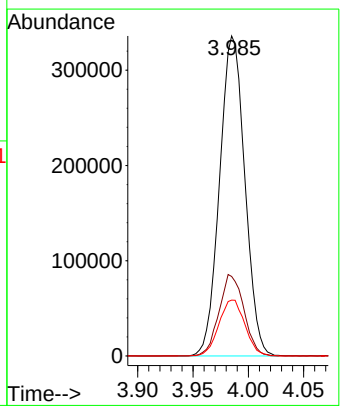


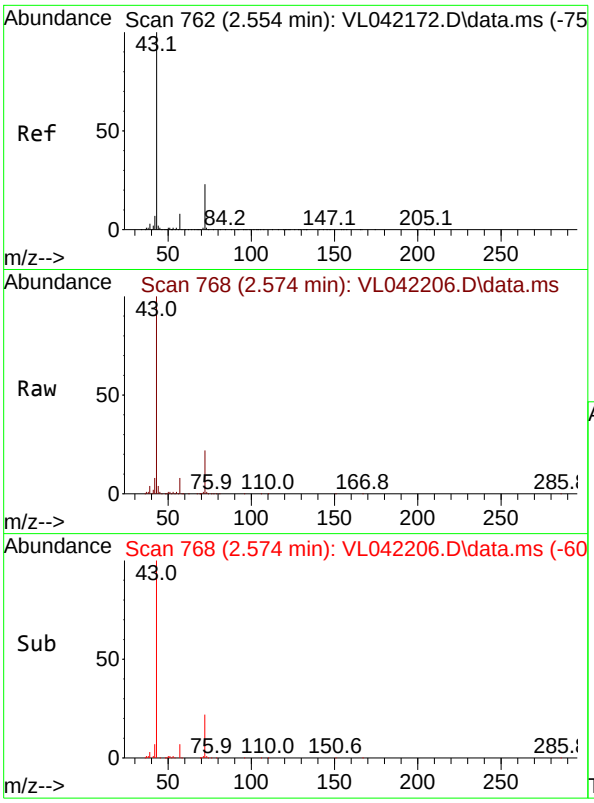


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.985 min Scan# 1204
Delta R.T. 0.032 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:114 Resp: 533717

Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.7	31.1
88	18.0	15.0	22.4



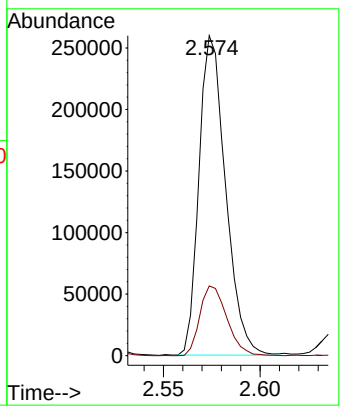


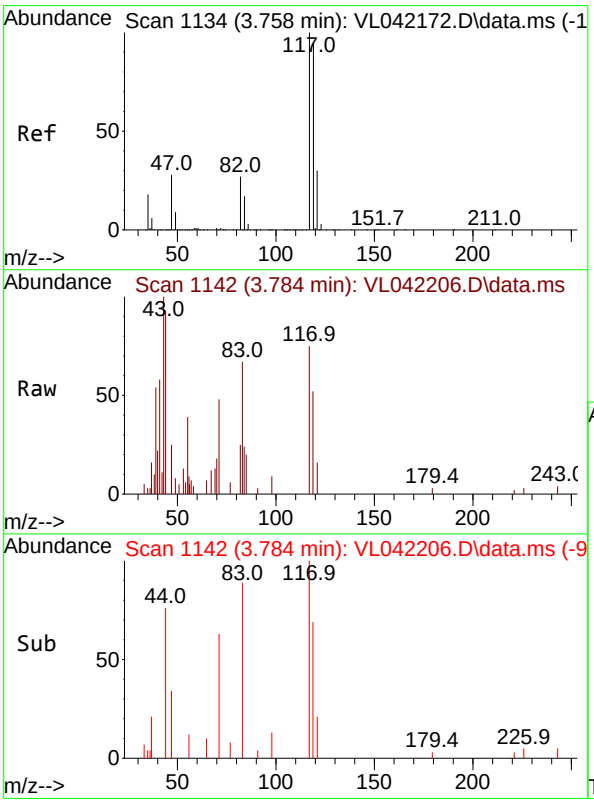
#34
2-Butanone
Concen: 6.413 ppbv
RT: 2.574 min Scan# 7
Delta R.T. 0.020 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 43 Resp: 248177

Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.2	27.2

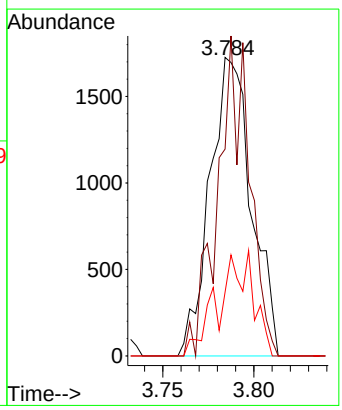


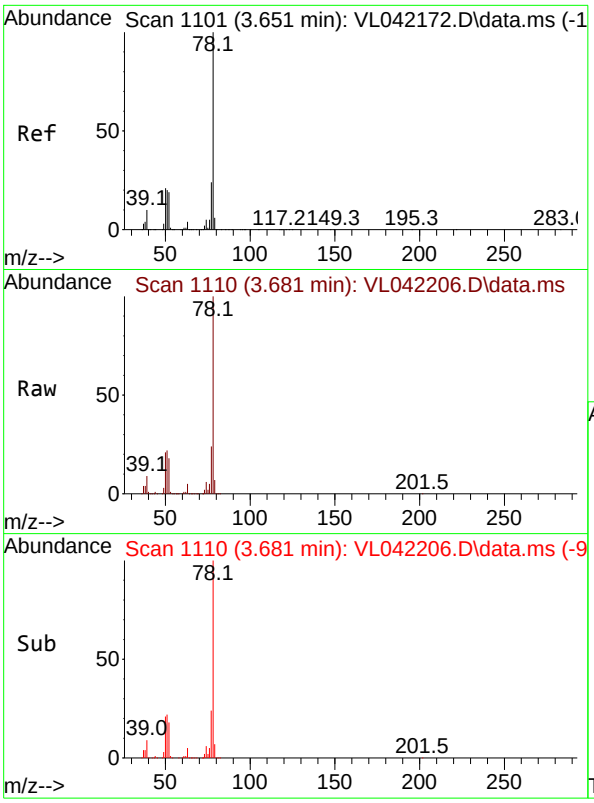


#35
Carbon Tetrachloride
Concen: 0.066 ppbv
RT: 3.784 min Scan# 1142
Delta R.T. 0.026 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:117 Resp: 2736

Ion	Ratio	Lower	Upper
117	100		
119	69.3	76.2	114.2#
121	21.4	24.2	36.4#



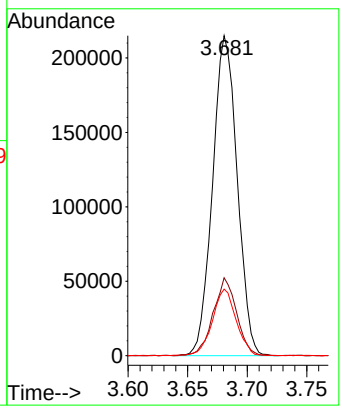


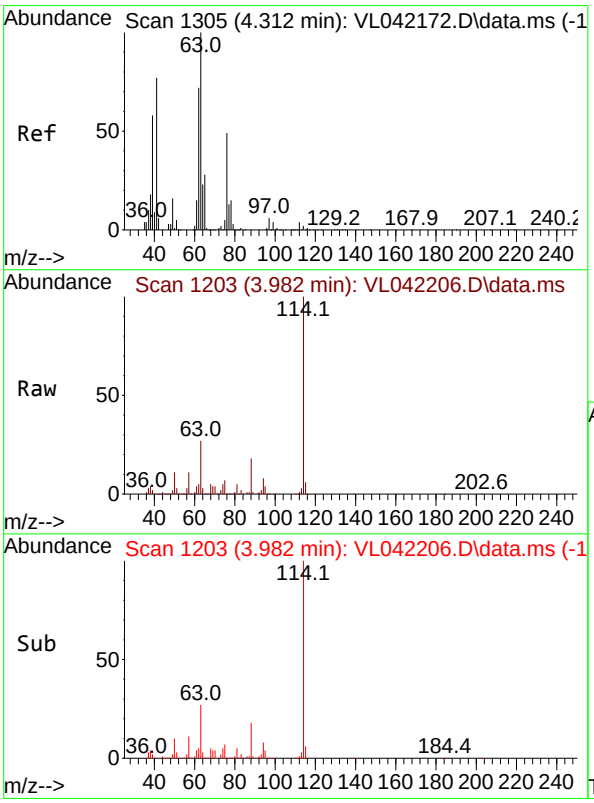
#36
Benzene
Concen: 5.842 ppbv
RT: 3.681 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 78 Resp: 309110

Ion	Ratio	Lower	Upper
78	100		
77	24.3	19.1	28.7
50	20.8	16.6	24.8

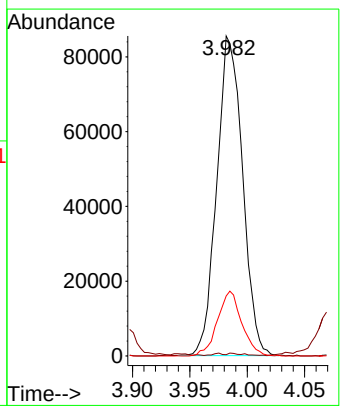


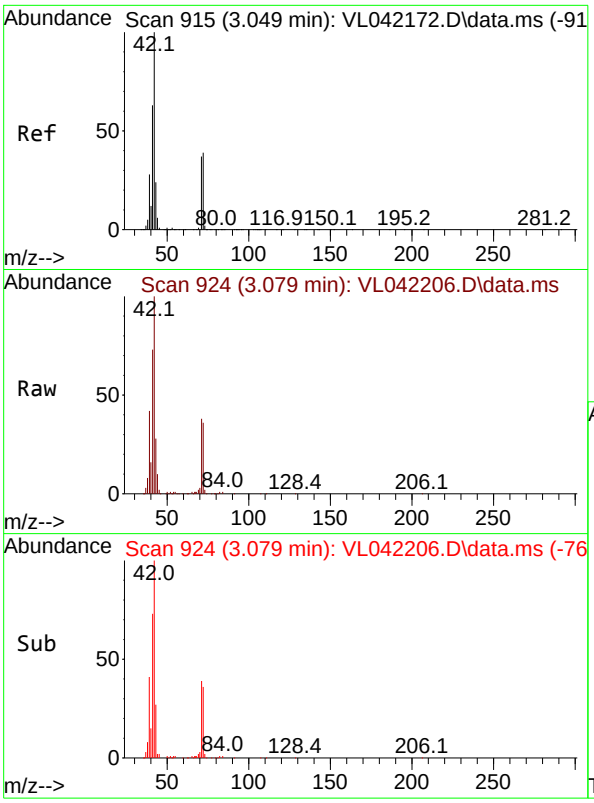


#39
1,2-Dichloropropane
Concen: 6.928 ppbv
RT: 3.982 min Scan# 1203
Delta R.T. -0.330 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 63 Resp: 133506

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	18.7	57.6	86.4#



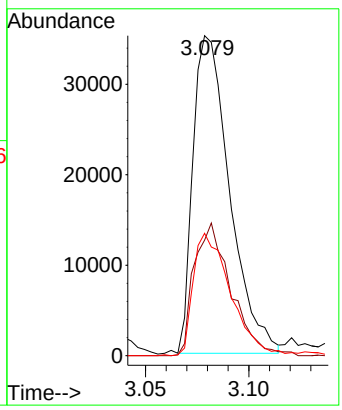


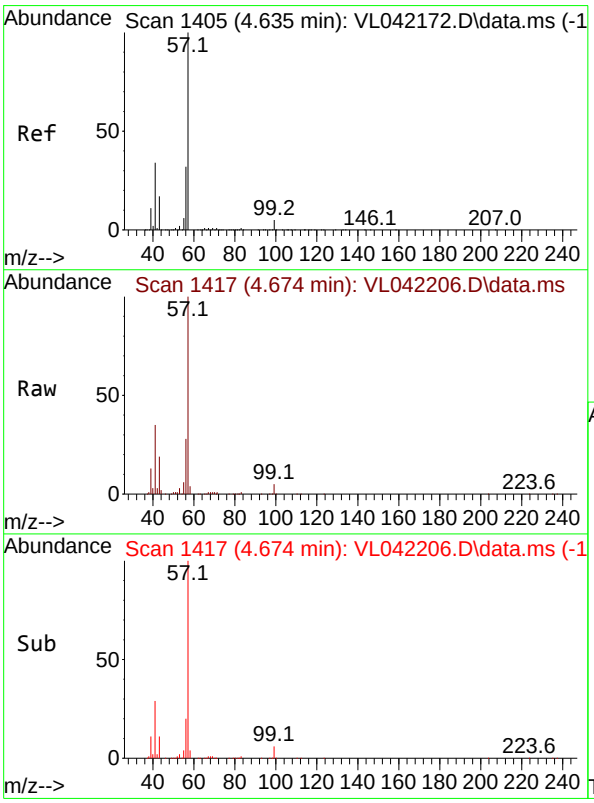
#41
Tetrahydrofuran
Concen: 1.948 ppbv
RT: 3.079 min Scan# 9
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 42 Resp: 43424

Ion	Ratio	Lower	Upper
42	100		
72	42.0	31.4	47.0
71	39.9	30.2	45.4

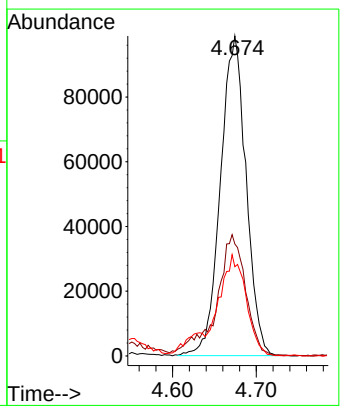


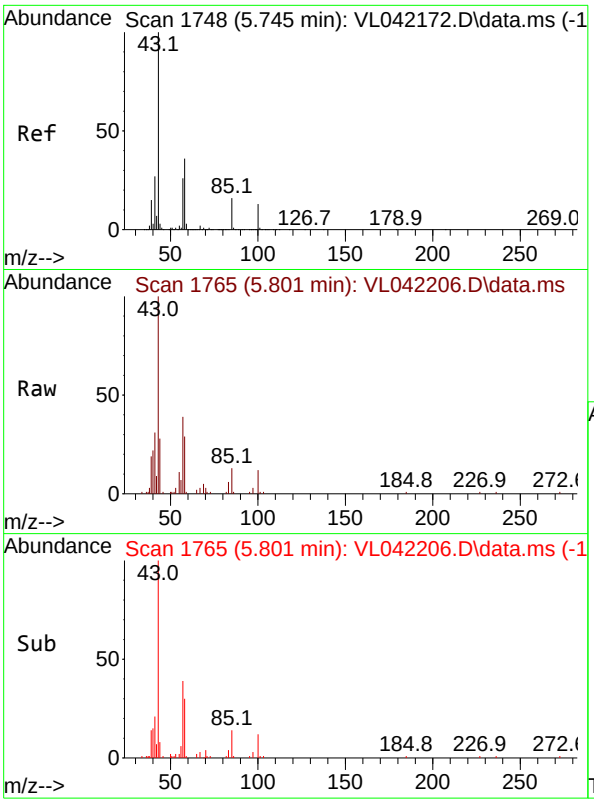


#44
2,2,4-Trimethylpentane
Concen: 2.346 ppbv
RT: 4.674 min Scan# 1417
Delta R.T. 0.039 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 57 Resp: 209735

Ion	Ratio	Lower	Upper
57	100		
41	43.9	26.8	40.2#
56	38.4	25.6	38.4#



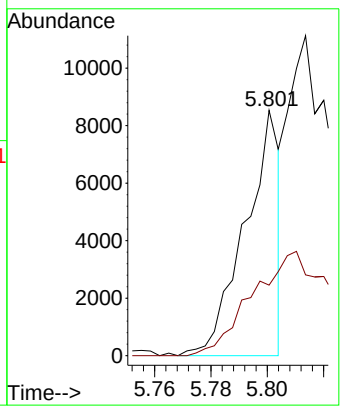


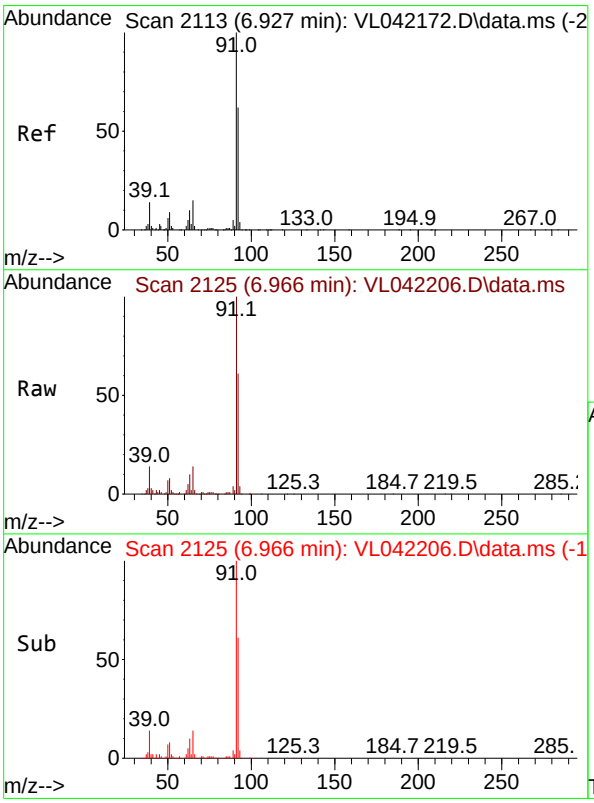
#50
4-Methyl-2-Pentanone
Concen: 0.119 ppbv
RT: 5.801 min Scan# 1
Delta R.T. 0.055 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 43 Resp: 7281

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#

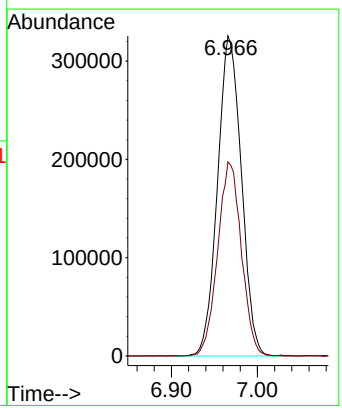


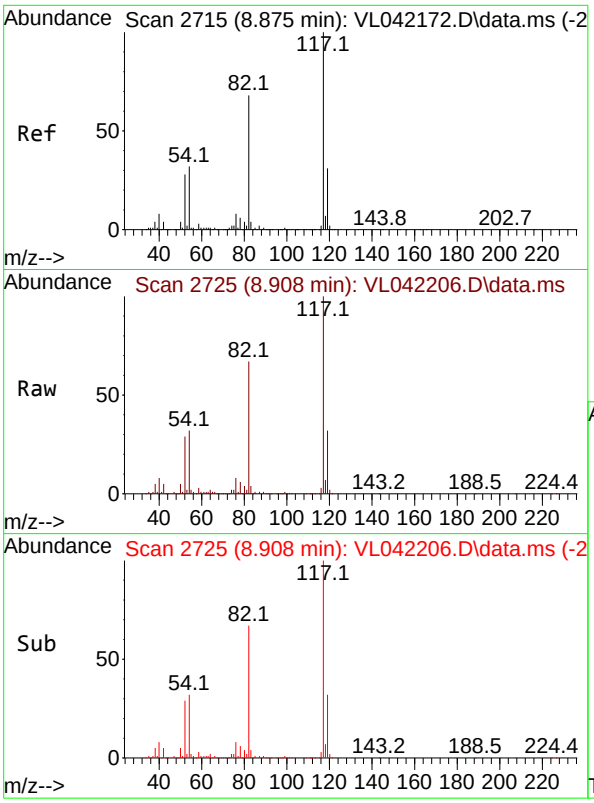


#53
Toluene
Concen: 9.980 ppbv
RT: 6.966 min Scan# 2125
Delta R.T. 0.039 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 625978

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.4	72.6



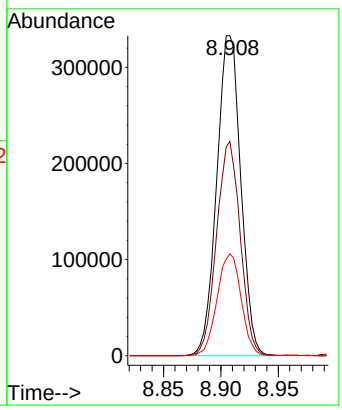


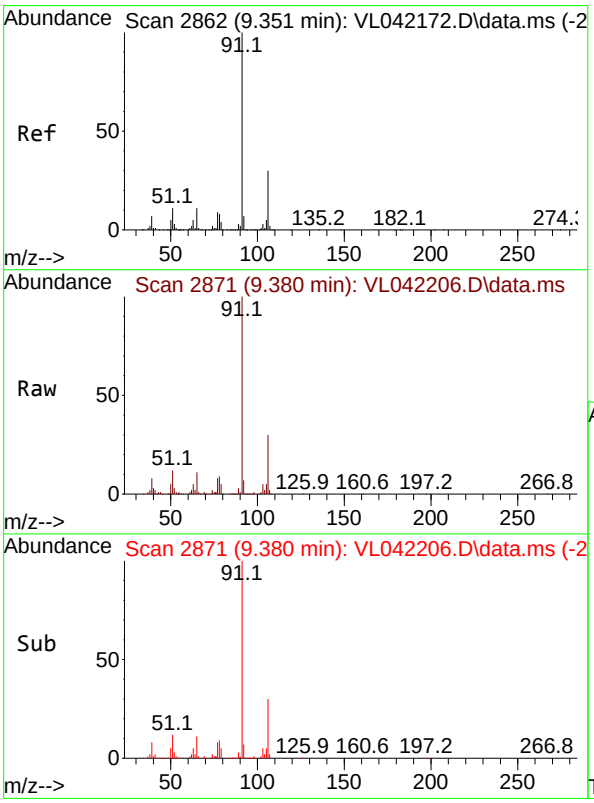
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.908 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion:117 Resp: 486289

Ion	Ratio	Lower	Upper
117	100		
82	65.8	55.8	83.6
119	31.9	25.5	38.3

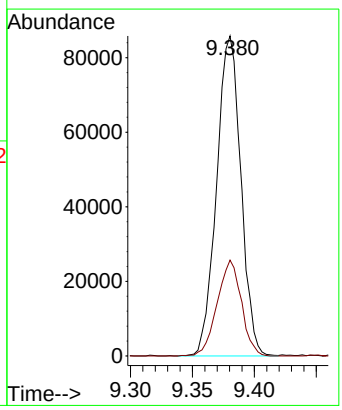


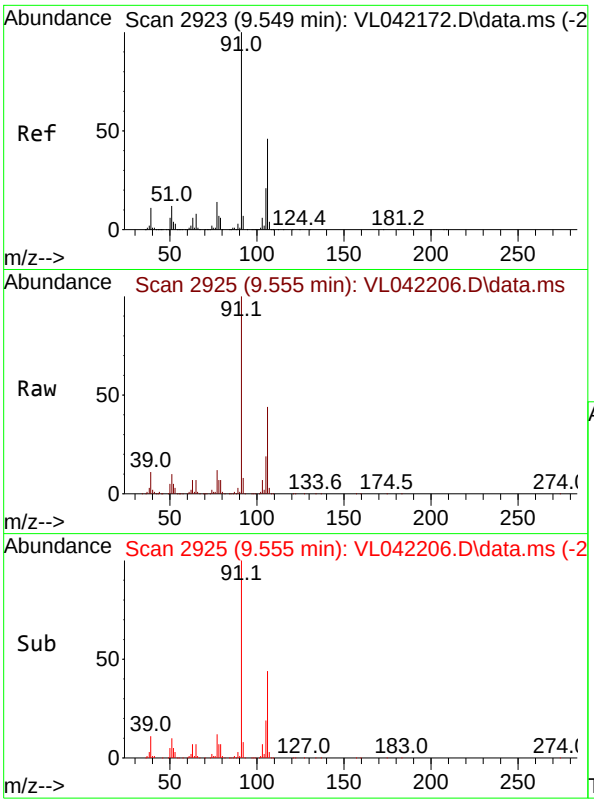


#58
Ethyl Benzene
Concen: 1.357 ppbv
RT: 9.380 min Scan# 2871
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 117204

Ion	Ratio	Lower	Upper
91	100		
106	30.0	24.2	36.2



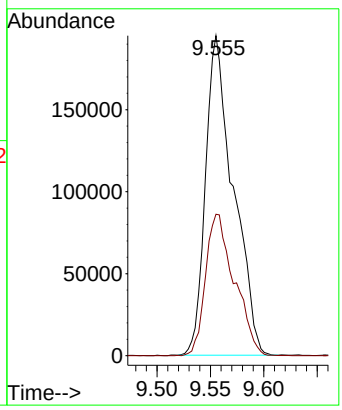


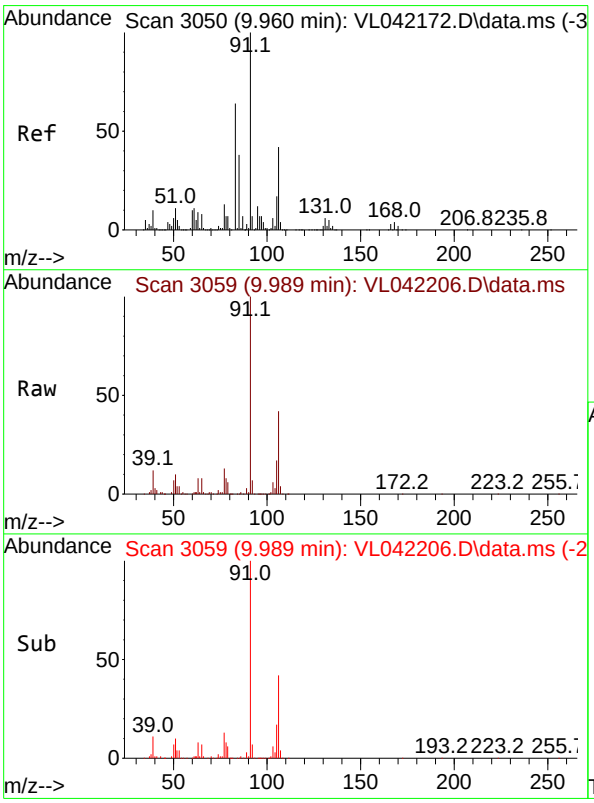
#59
m/p-Xylene
Concen: 5.119 ppbv
RT: 9.555 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 91 Resp: 353075

Ion	Ratio	Lower	Upper
91	100		
106	45.9	36.4	54.6

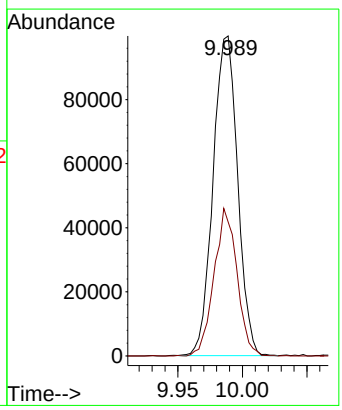


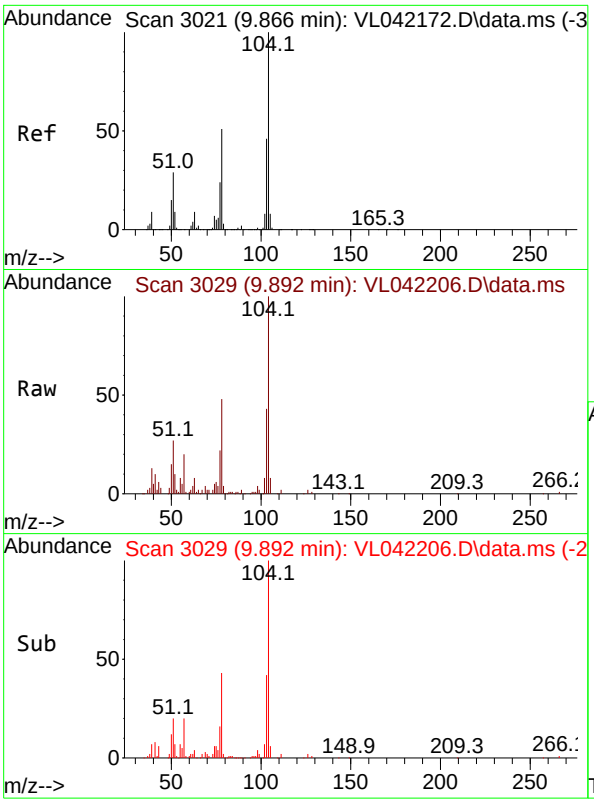


#60
o-Xylene
Concen: 1.908 ppbv
RT: 9.989 min Scan# 3059
Delta R.T. 0.029 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 131916

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5



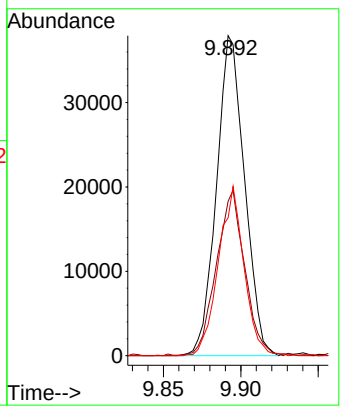


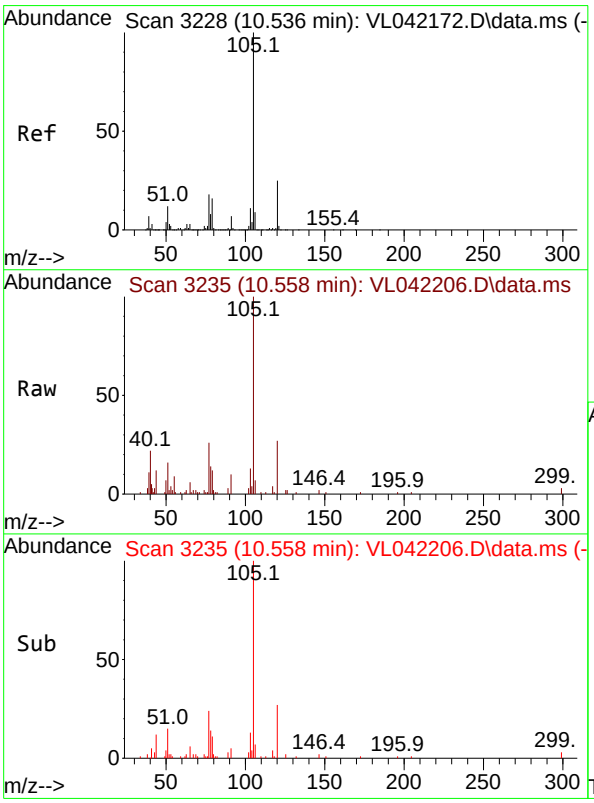
#61
Styrene
Concen: 1.398 ppbv
RT: 9.892 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion:104 Resp: 47838

Ion	Ratio	Lower	Upper
104	100		
78	52.6	41.8	62.6
103	48.6	37.0	55.4

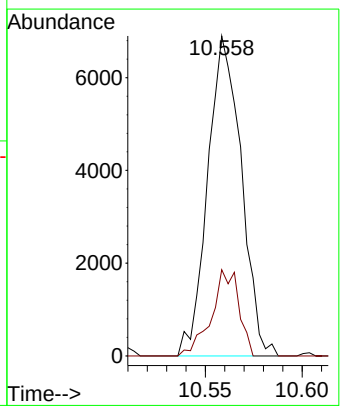


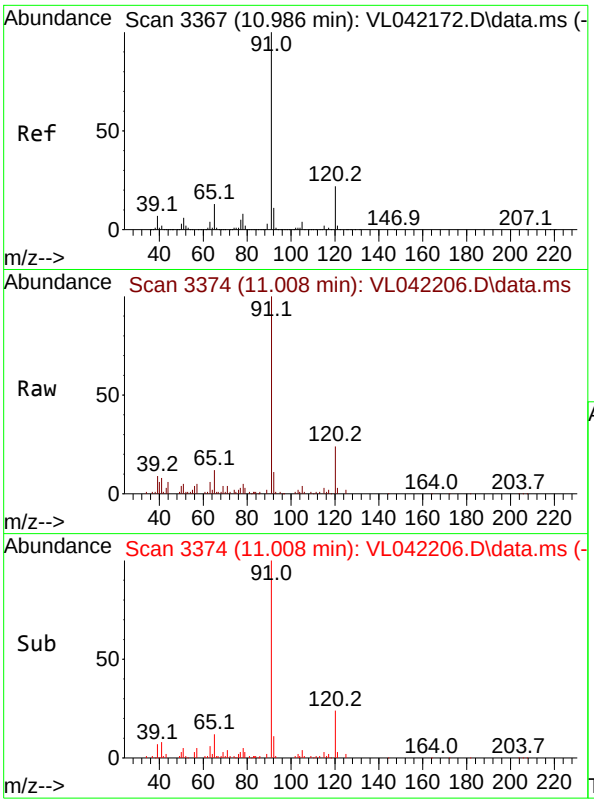


#62
Isopropylbenzene
Concen: 0.080 ppbv
RT: 10.558 min Scan# 3235
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:105 Resp: 8304

Ion	Ratio	Lower	Upper
105	100		
120	22.0	19.9	29.9



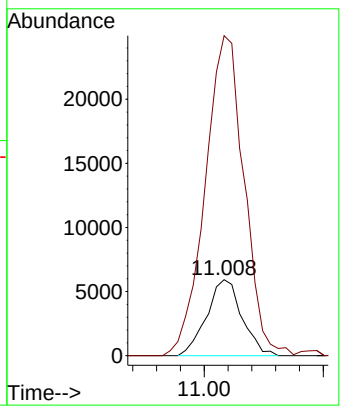


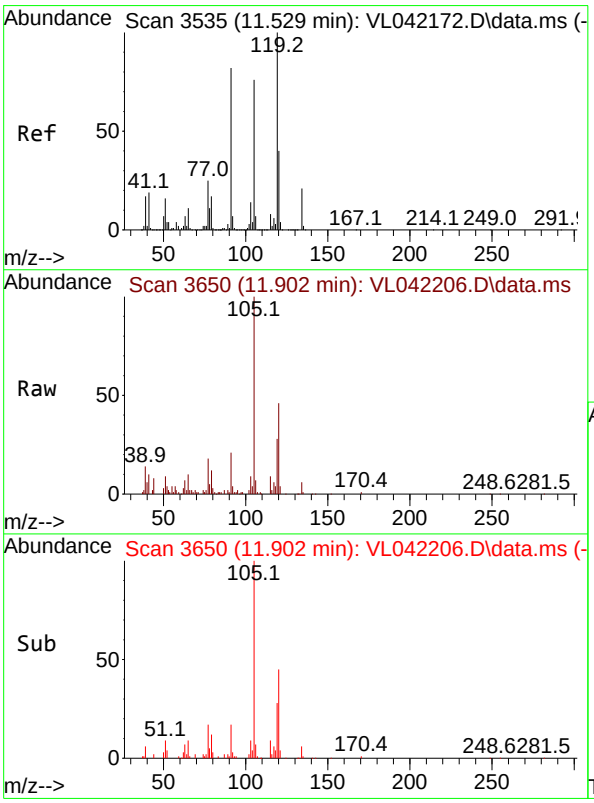
#64
n-propylbenzene
Concen: 0.229 ppbv
RT: 11.008 min Scan# 3
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion:120 Resp: 6104

Ion	Ratio	Lower	Upper
120	100		
91	469.0	376.9	565.3

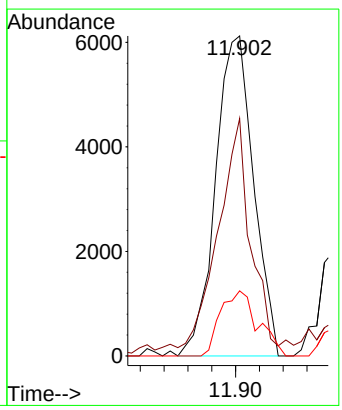


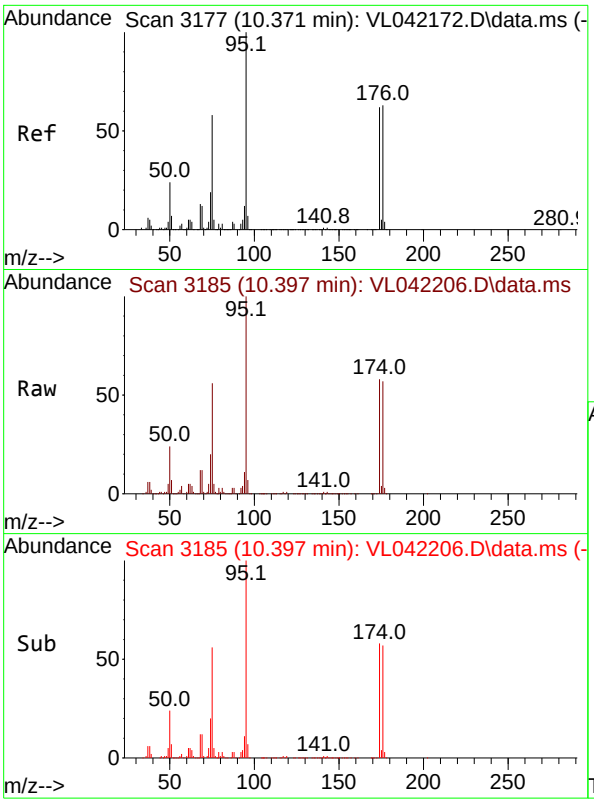


#65
tert-Butylbenzene
Concen: 0.071 ppbv
RT: 11.902 min Scan# 3650
Delta R.T. 0.372 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:119 Resp: 6784

Ion	Ratio	Lower	Upper
119	100		
91	70.1	66.0	99.0
134	20.0	16.7	25.1



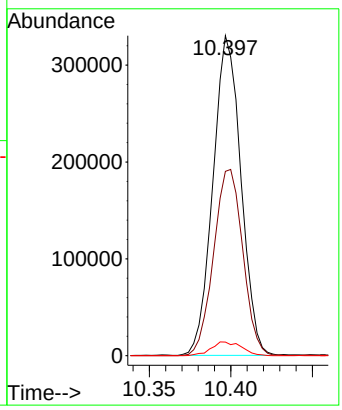


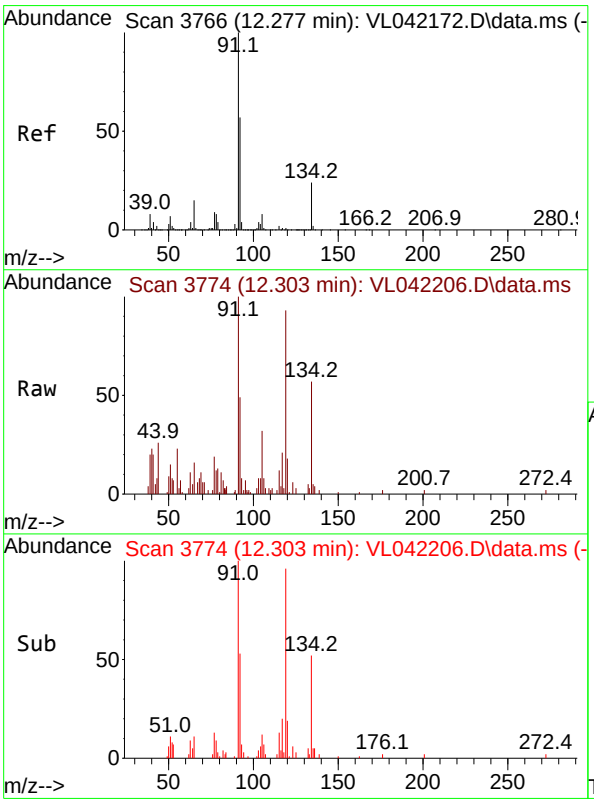
#68
1-Bromo-4-Fluorobenzene
Concen: 9.852 ppbv
RT: 10.397 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion: 95 Resp: 393432

Ion	Ratio	Lower	Upper
95	100		
174	60.9	50.6	76.0
175	4.7	3.8	5.6

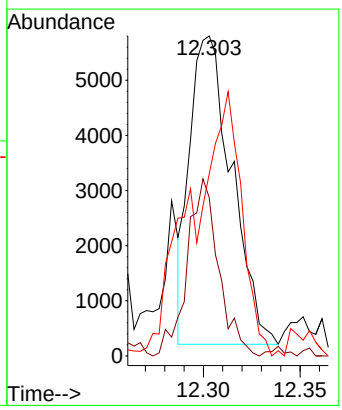


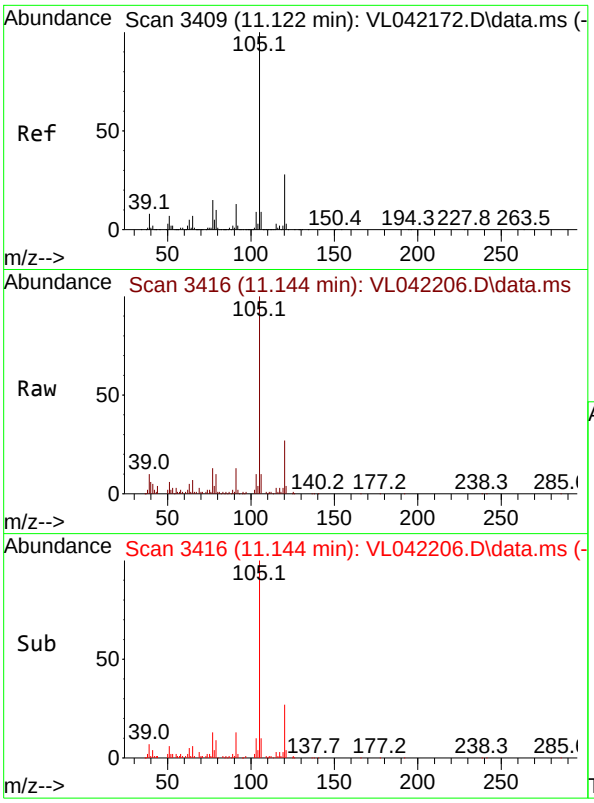


#70
n-Butylbenzene
Concen: 0.072 ppbv
RT: 12.303 min Scan# 3774
Delta R.T. 0.026 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion: 91 Resp: 8458

Ion	Ratio	Lower	Upper
91	100		
92	41.3	44.9	67.3#
134	106.0	19.2	28.8#



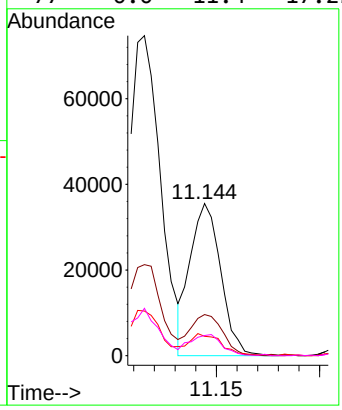


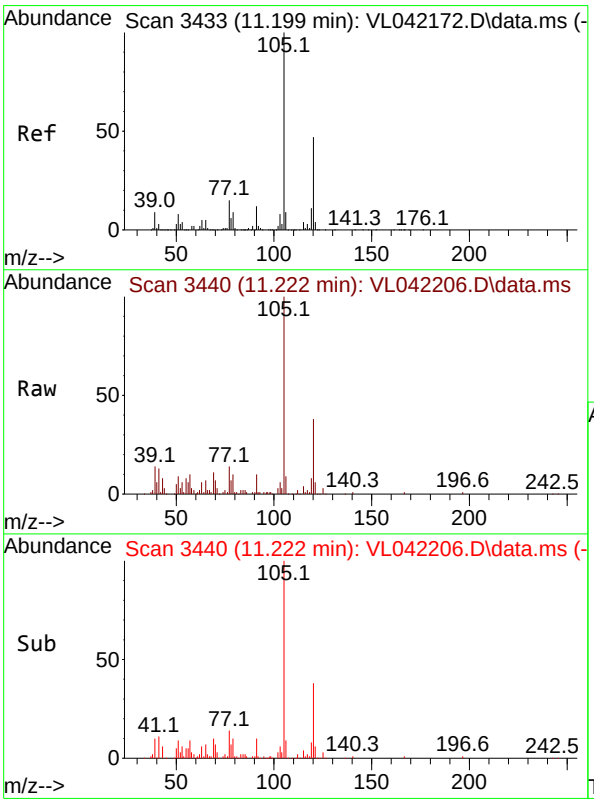
#72
4-Ethyltoluene
Concen: 0.429 ppbv
RT: 11.144 min Scan# 34
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion:105 Resp: 36900

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	0.0	11.4	17.2#

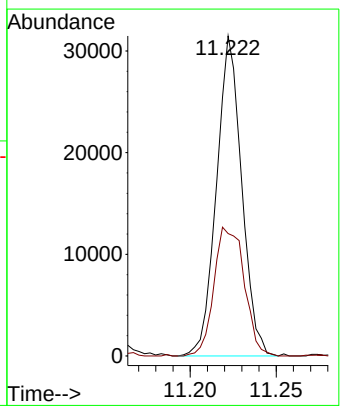


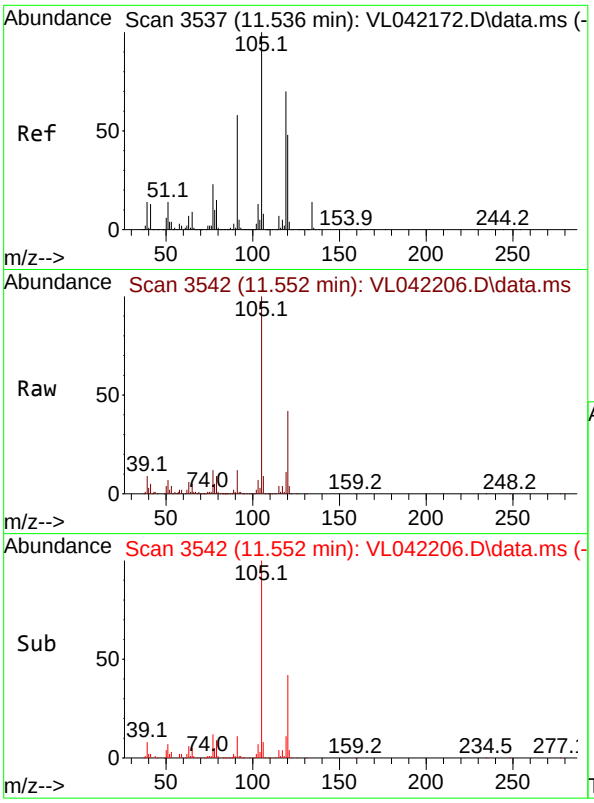


#73
1,3,5-Trimethylbenzene
Concen: 0.427 ppbv
RT: 11.222 min Scan# 3440
Delta R.T. 0.023 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:105 Resp: 32118

Ion	Ratio	Lower	Upper
105	100		
120	38.2	37.4	56.0



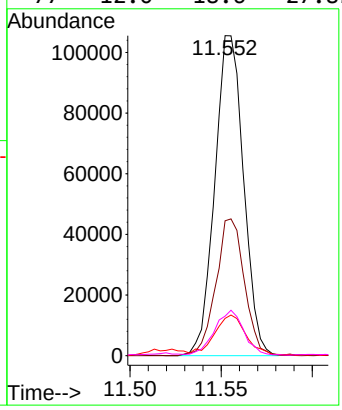


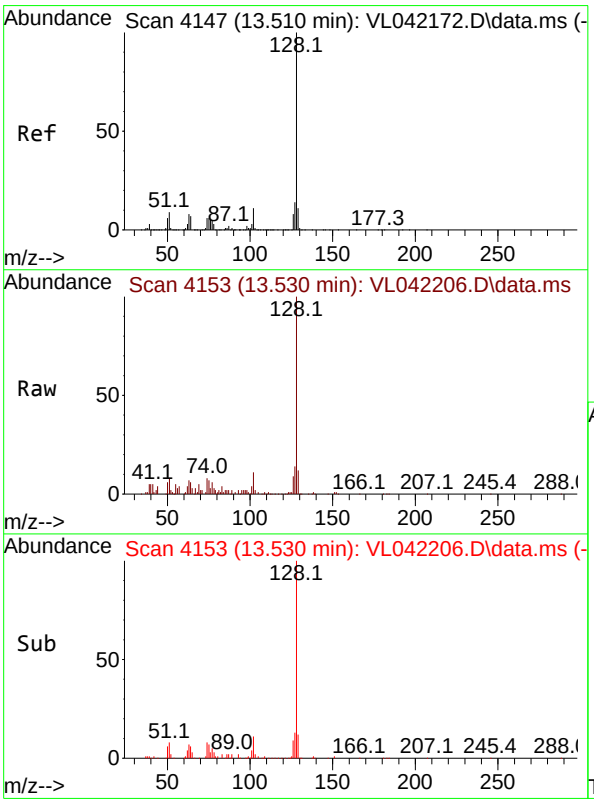
#74
1,2,4-Trimethylbenzene
Concen: 1.336 ppbv
RT: 11.552 min Scan# 3
Delta R.T. 0.016 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion:105 Resp: 115741

Ion	Ratio	Lower	Upper
105	100		
120	42.1	38.6	58.0
91	11.2	46.2	69.2#
77	12.0	18.6	27.8#

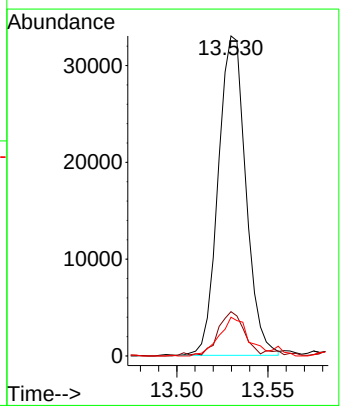


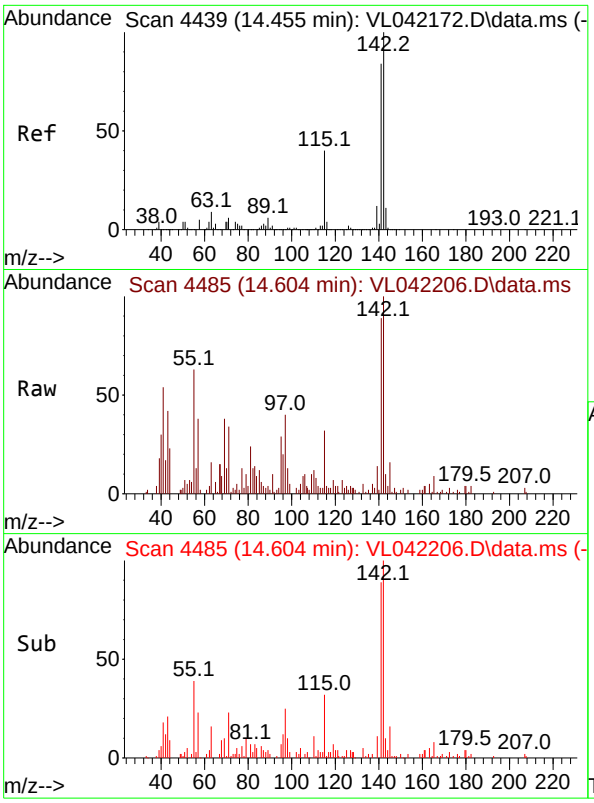


#79
Naphthalene
Concen: 0.366 ppbv
RT: 13.530 min Scan# 4153
Delta R.T. 0.020 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Tgt Ion:128 Resp: 34692

Ion	Ratio	Lower	Upper
128	100		
127	13.6	10.8	16.2
129	12.1	9.0	13.4





#80
Naphthalene,2-methyl-
Concen: 0.139 ppbv
RT: 14.604 min Scan# 44
Delta R.T. 0.149 min
Lab File: VL042206.D
Acq: 31 Mar 2025 12:26

Instrument :
MSVOA_L
ClientSampleId :
SSSG-DUP-1-3262025DUP

Tgt Ion:142 Resp: 6448

Ion	Ratio	Lower	Upper
142	100		
141	90.1	66.3	99.5
115	45.2	31.6	47.4